Hamburg Township
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10405 Merrill Road
P.O. Box 157
Hamburg, MI 48139
(810) 231-1000
www.hamburg.mi.us

Supervisor Jason Negri **Clerk** Mike Dolan **Treasurer** Jennifer Daniels **Trustees** Chuck Menzies, Patricia Hughes, Nick Miller, Joanna Hardesty

BOARD OF TRUSTEES REGULAR MEETING

Tuesday, July 15, 2025 at 7:00 PM
Hamburg Township Hall Board Room

AGENDA

CALL TO ORDER

PLEDGE TO THE FLAG

ROLL CALL OF THE BOARD

CALL TO THE PUBLIC

CONSENT AGENDA

1. 07-01-2025 Regular Board Meeting Minutes
2. Approved MUC Minutes - June 10 2025
3. DPW Monthly Report - June 2025
4. 2024-2025 FY Sewer REU & Tap Tracker Report
5. Public Safety Monthly Report, June 2025
6. Bills List(s) 07.15.2025

APPROVAL OF THE AGENDA

UNFINISHED BUSINESS

7. Lake Shan-Gri-La Aquatic Weed Control SAD - 2nd Public Hearing
8. Grant TF22-0107 – Bennett Park & Water Trail Access Improvements – Authorization Sign Contract with L.J. Construction, Inc.
9. Consulting Agreement

CURRENT BUSINESS

10. Riverside, Century, Lagoon & Radial Drive - Road Maintenance Bid Results
11. WWTP Muffin Monster Purchase Request
12. Treasury phone stipends
13. Vehicle Purchase - Township Pool
14. Microsoft Software Licenses
15. New AC/Furnace - Township hall

CALL TO THE PUBLIC

BOARD COMMENTS

ADJOURNMENT

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Supervisor Jason Negri **Clerk** Mike Dolan **Treasurer** Jennifer Daniels **Trustees** Chuck Menzies, Patricia Hughes, Nick Miller, Joanna Hardesty

BOARD OF TRUSTEES REGULAR MEETING

Tuesday, July 01, 2025 at 2:30 PM
Hamburg Township Hall Board Room

MINUTES

DRAFT

CALL TO ORDER

Negri called the meeting to order at 2:30 pm.

PLEDGE TO THE FLAG

ROLL CALL OF THE BOARD

PRESENT
Jason Negri
Mike Dolan
Jennifer Daniels
Joanna Hardesty
Patricia Hughes
Chuck Menzies
Nick Miller

CALL TO THE PUBLIC

A call was made with no response.

CONSENT AGENDA

Motion made by Menzies, Seconded by Hardesty, to approve the consent agenda as presented.
Voting Yea: Negri, Dolan, Daniels, Hardesty, Hughes, Menzies, Miller

1. 6-11-2025 Board of Trustees Special Meeting
2. 06-17-25 Board of Trustees Special Meeting
3. 06-17-25 Shan-Gri-La Aquatic Weed Control SAD Public Hearing
4. 06-17-2025 Board of Trustees Regular Meeting Minutes
5. Township Coordinator - Clean Up Day(s) 2025 - Final Report
6. Parks & Recreation - Approved Meeting Minutes - May 27, 2025
7. Township Coordinator Report - June 2025
8. Bills List(s) 07.01.2025

APPROVAL OF THE AGENDA

Motion made by Hardesty, Seconded by Hughes, to approve the amended agenda with the addition of item #19 Consulting Agreement.
Voting Yea: Negri, Dolan, Daniels, Hardesty, Hughes, Menzies, Miller

UNFINISHED BUSINESS

9. MNRTF #22-0107 - Manly Bennett Improvements Grant - Proposed Change Order
   Motion made by Hardesty, Seconded by Miller, to award the contract for Manly Bennett Improvements to L.J. Construction Inc in the maximum amount of $583,110.00 contingent upon DNR approval and grant.
   Voting Yea: Negri, Dolan, Daniels, Hardesty, Hughes, Menzies, Miller

CURRENT BUSINESS

10. Park Ranger Hirings
    Motion made by Hardesty, Seconded by Daniels, to approve the hiring of Matthew Kuzner for the position of part-time Park Ranger at a starting rate of $20.10 per hour (Grade 2, Step 1) effective July 7, 2025 and Rebecca Irla for the position of part-time Park Ranger at a starting rate of $20.10 per hour (Grade 2, Step 1) effective upon successful completion of her medical examination/drug screening not before July 7, 2025.
    Voting Yea: Negri, Dolan, Daniels, Hardesty, Hughes, Menzies, Miller

11. Purchase of Police Radios
    Motion made by Hardesty, Seconded by Menzies, to approve the purchase of two (2) Kenwood VP8000BKF2 portable radios and two (2) Kenwood VM5930BF in-car mobile radios, with accessories, as outlined in the attached quote from Digicom Global, Inc of Troy, MI for a total cost of $13,800.88.
    Voting Yea: Negri, Dolan, Daniels, Hardesty, Hughes, Menzies, Miller

12. Purchase of Police Vehicle
    Motion made by Miller, Seconded by Hardesty, to approve the purchase of a 2026 Dodge Durango, as outlined in the attached quote, from LaFontaine CJDR of Lansing, Mi for the price of $38,782.00.
    Voting Yea: Negri, Dolan, Daniels, Hardesty, Hughes, Menzies, Miller

13. Sale of Police Vehicles
    Motion made by Dolan, Seconded by Hughes, to approve the sale of a 2020 Ford Expedition and a 2017 Dodge Charger via the MIBID auction system.
    Voting Yea: Negri, Dolan, Daniels, Hardesty, Hughes, Menzies, Miller

14. Fire Station 11 Roof Repairs
    Motion made by Hughes, Seconded by Miller, to approve the hiring of CEI Michigan, LLC of Hamburg Township to perform remedial repairs to the roof of Hamburg Township Fire Station 11, as outlined in the attached proposal, at a total cost of $12,940.00.
    Voting Yea: Negri, Dolan, Daniels, Hardesty, Hughes, Menzies, Miller

DRAFT

15. Treasury Department Hirings
Motion made by Daniels, Seconded by Dolan, to approve the compensation of a Deputy Treasurer at a grade 7, step 4, at $34.86, full-time status with 80 hours of vacation at the time of hire, effective July 2, 2025 contingent upon completion of all pre-hiring requirements and taking the oath of the appointment of Deputy Treasurer.
Voting Yea: Negri, Dolan, Daniels, Hardesty, Hughes, Menzies, Miller

Motion made by Dolan, Seconded by Menzies, to approve the posting of the part-time Treasurer's Clerk with compensation at grade 4, step 1 - 5 depending upon experience.
Voting Yea: Negri, Dolan, Daniels, Hardesty, Hughes, Menzies, Miller

16. Committee Reassignments
Motion made by Dolan, Seconded by Daniels, to appoint Supervisor Negri to Public Safety, Road Committee, and LCWA and appoint Treasurer Daniels to the MUC committee.
Voting Yea: Negri, Dolan, Daniels, Hardesty, Hughes, Menzies, Miller

17. FCB March 2025
Motion made by Negri, Seconded by Hughes, to receive, file and publish the Finance Control Book for March 2025.
Voting Yea: Negri, Dolan, Daniels, Hardesty, Hughes, Menzies, Miller

18. FCB April 2025
Motion made by Negri, Seconded by Miller, to receive, file and publish the Finance Control Book for April 2025.
Voting Yea: Negri, Dolan, Daniels, Hardesty, Hughes, Menzies, Miller

19. Consulting Agreement
Motion made by Dolan, Seconded by Hardesty, to request all Board Members to forward to Negri any points of concerns or anything they would like to see in the Supervisor consulting agreement by July 7, 2025 and that for Negri to work with Township counsel and bring back an agreement that addresses these concerns.
Voting Yea: Negri, Dolan, Daniels, Hardesty, Hughes, Menzies, Miller

CALL TO THE PUBLIC

A call was made with no response.

BOARD COMMENTS

Negri stated that with the upcoming Independence Day Holiday that our fireworks policy defaults to the State's policy and that fireworks are allowed from 11:00 am to 11:45 pm through July 5.

Dolan stated that it might be advisable to call a special meeting for Administrative Policies and Procedure Manual Updates and the Consulting Agreement.

ADJOURNMENT

Motion made by Menzies, Seconded by Miller, to adjourn.
Voting Yea: Negri, Dolan, Daniels, Hardesty, Hughes, Menzies, Miller

The meeting was adjourned at 3:29 pm.

Respectfully submitted,





Courtney Paton	Mike Dolan
Recording Secretary	Township Clerk

DRAFT

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EXCERPT FROM HAMBURG TOWNSHIP MUNICIPAL UTILITIES COMMITTEE MEETING MINUTES

To the attention of: Jason B. Negri, Supervisor
Hamburg Township Board of Trustees

Re: **Approved Municipal Utilities Committee Minutes**

Please be apprised of this excerpt from the [**X**]Unapproved [_]Approved Minutes of the Meeting of the Hamburg Township Sewer Committee:

Date of Meeting: July 8th, 2025

Sewer Committee Members Present: Negri, Menzies, Daniels

Sewer Committee Members Absent: None

Text of Motion: MOTION BY NEGRI, SECONDED BY MENZIES TO APPROVE THE MINUTES OF THE JUNE 10th, 2025 MUNICIPAL UTILITIES COMMITTEE MEETING AS PRESENTED.

Ayes: Negri, Menzies, Daniels Absent: None Nays: None

MOTION CARRIED.

State of Michigan }
County of Livingston }
Township of Hamburg}

I, BRITTANY K. CAMPBELL, Hamburg Township Utilities Coordinator and recording secretary to the Municipal Utilities Committee, do hereby certify that the foregoing is a true and correct excerpt of the Minutes of the aforementioned Regular/~~Special~~ Meeting of the Hamburg Township Municipal Utilities Committee.

Brittany K. Campbell Date: July 8th, 2025
BRITTANY K. CAMPBELL
HAMBURG TOWNSHIP UTILITIES COORDINATOR

HAMBURG TOWNSHIP MUNICIPAL UTILITIES COMMITTEE
TUESDAY, JUNE 10th, 2025 – 2:30 P.M.
10405 MERRILL ROAD, HAMBURG, MI 48139

1. CALL TO ORDER

The meeting was called to order by Hohl at 2:30 p.m.

Roll Call of the Committee:
Present: Hohl, Menzies, Negri
Absent: None
Also Present: Tony Randazzo, Brittany Campbell and Ryan Ward

2. CALL TO THE PUBLIC

Hohl opened the call to the public and seeing no response, closed the call to the public.

3. CORRESPONDENCE

There was no correspondence to be addressed at this meeting.

4. APPROVAL OF THE AGENDA

MOTION BY HOHL, SECONDED BY MENZIES TO APPROVE THE AGENDA AS PRESENTED.
Ayes: Hohl, Menzies, Negri Absent: None Nays: None
Motion passed.

Unfinished Business:

A. PFAS/PFOS Discussion
B. Manhole Inspection Program
C. 200 Series Grinder Pump Replacements

Current Business:

A. DPW Monthly Report – May 2025 Statistics
B. T.J. Smith Sewer Connection Cost Review – 9057 Riverside Dr.
C. Kozdron Direct Sewer Connection Agreement – 8527 Mystic Pines Ct.
D. Maxfield Sewer Connection Invoice Dispute – 7573 Hamburg Rd.
E. Purdy Sewer Connection Cost Review – 9155 Riverside Dr.

5. APPROVAL OF THE MINUTES

MOTION BY HOHL, SECONDED BY NEGRI TO APPROVE THE MINUTES OF THE MAY 13th, 2025 MUNICIPAL UTILITIES COMMITTEE MEETING AS PRESENTED.

Ayes: Hohl, Menzies, Negri Absent: None Nays: None
Motion passed.

6. UNFINISHED BUSINESS

A. PFAS/PFOS Discussion.

MOTION BY HOHL, SECONDED BY NEGRI TO TABLE ALL UNFINISHED BUSINESS UNTIL NEW INFORMATION IS AVAILABLE.

Ayes: Hohl, Menzies, Negri Absent: None Nays: None
Motion passed.

B. Manhole Inspection Program.

MOTION BY HOHL, SECONDED BY NEGRI TO TABLE ALL UNFINISHED BUSINESS UNTIL NEW INFORMATION IS AVAILABLE.

Ayes: Hohl, Menzies, Negri Absent: None Nays: None
Motion passed.

C. 200 Series Grinder Pump Replacements.

MOTION BY HOHL, SECONDED BY NEGRI TO TABLE ALL UNFINISHED BUSINESS UNTIL NEW INFORMATION IS AVAILABLE.

Ayes: Hohl, Menzies, Negri Absent: None Nays: None
Motion passed.

7. CURRENT BUSINESS

A. DPW Monthly Report – May 2025 Statistics. Randazzo reported that the wastewater treatment plant was in compliance for the month of May. The DPW staff has begun to install the odor control system at the Rustic Drive pump station, however staff is still waiting on the blower fan to be delivered. Hohl asked if the DPW staff planned to install the odor control system at any other pump stations and suggested ordering the blower fan now so it will be available when they need it. Randazzo stated that Ward and Sharp sampled three pump stations for PFAS as part of the grant requirement. Three additional stations were sampled earlier this week. Lastly, Randazzo noted that four new monitoring wells are being installed this well as well.

Ward provided the Committee with his report and noted that the muffin monster at the wastewater treatment plant was causing the heat exchanger to pump a lot harder and staff discovered the teeth of the muffin monster were gapping allowing large pieces of rags to pass through.

Ward explained that the life of a muffin monster is approximately 5 years with the last replacement completed in 2017. Staff have requested quotes for replacing just the teeth and stack of the existing muffin monster versus purchasing a who new unit. Ward noted that new teeth alone can cost up to $17,000.00. Hohl stated that the manufacturer should be using carbide for the teeth. Randazzo stated that the teeth were in fact carbide. Ward also noted that the new radar level sensor system was being installed at the wastewater treatment plant. Ward stated that the plant received 2500 gallons of Alum for use in the summer.

Ward included in his monthly report a concern received from a neighbor about the recent grinder pump installation completed at 9057 Riverside Drive. The neighbor owns a vacant lot next door and believes the new grinder pump station may have been installed on the property line or slightly onto his property but does not have a survey. His concern is that the grinder pump location may interfere with his ability to build a garage in the future. Campbell noted that the property owner would have to meet all of the zoning set-back requirements to be able to build a garage and that the grinder pump location will not interfere with his garage setbacks. Ward wanted to note the matter with the Committee so that it is documented if any issues or concerns arise in the future.

MOTION BY HOHL, SECONDED BY MENZIES TO NOTE THE DPW MONTHLY REPORT AS RECEIVED AND TO BE FILED AND TO ALSO FORWARD A COPY TO THE TOWNSHIP BOARD AS AN AGENDA ITEM FOR THEIR REVIEW.

Ayes: Hohl, Menzies, Negri Absent: None Nays: None
Motion passed.

B. T.J. Smith Sewer Connection Cost Review – 9057 Riverside Dr. Campbell reported that the estimated construction charges under the bid proposal were $9,307.26. The actual construction charges were $8,990.79 a difference of $316.47. The originally estimated sewer lateral footage was 75 feet whereas only 58 feet of pipe was installed at $20.25 per foot for a savings of $344.25 (17 ft. x $20.25/ft.). Actual footage for the 4” building sewer pipe connection was 13 feet resulting in the installation of 1-foot more than estimated footage of 12 feet for an additional charge of $27.78 ($344.25 - $27.78 = $316.47). As a result, a refund of $316.47 should be issued to the property owner.

MOTION BY HOHL, SECONDED BY NEGRI TO DIRECT THE ACCOUNTING DEPARTMENT TO REFUND THE OVERPAYMENT FROM THE T.J. SMITH SEWER FEE DEPOSIT IN THE AMOUNT OF $316.47 TO THE PROPERTY OWNER AS NOTED IN THE UTILITIES COORDINATOR’S COST REVIEW MEMO.

Ayes: Hohl, Menzies, Negri Absent: None Nays: None
Motion passed.

C. Kozdron Direct Sewer Connection Agreement – 8527 Mystic Pines Ct.

MOTION BY HOHL, SUPPORTED BY MENZIES TO APPROVE THE KOZDRON AGREEMENT FOR SEWER CONNECTION AS PRESENTED, AS ALL OF THE ESTIMATED SEWER FEES WERE PAID UP-FRONT IN CASH.

Ayes: Hohl, Menzies, Negri Absent: None Nays: None
Motion passed.

D. Maxfield Sewer Connection Invoice Dispute – 7573 Hamburg Rd. Hohl stated that Mr. Maxfield was given the opportunity and invitation to attend today's meeting both by Hohl and Campbell to discuss his opposition to the additional sewer connection charges for his property. The homeowner failed to attend the meeting or provide any documentation for the Committee's review. Hohl stated that the homeowner was already billed for the additional charges in the amount of $567.00 and if not paid by September 1, 2025 that the balance would be added to their December 1, 2025 winter tax bill.

MOTION BY HOHL, SECONDED BY NEGRI TO CLOSE THE MATTER AS THE PROPERTY OWNER WAS A "NO SHOW" AT THE MUNICIPAL UTILTIES COMMITTEE MEETING.

Ayes: Hohl, Menzies, Negri Absent: None Nays: None
Motion passed.

E. Purdy Sewer Connection Cost Review – 9155 Riverside Dr. Campbell reported that the estimated construction charges were $9,682.35. The actual construction charges totaled $10,740.10, a difference of $1,057.75. The actual footage for the sewer service lateral was 155 feet, a total of 17 feet more than the estimated length. In addition, the footage installed for the 4" building sewer pipe was 17 feet resulting in the installation of 3 feet less than estimated footage of 20 feet. The Blanket Contract pricing increased by 5% annually on the 15th of January, 2025. The actual sewer connection work was not completed until the next contract pricing year which resulted in higher construction charges. The annual Contract pricing increase of 5% for the overall sewer installation costs, and the addition length of the sewer service lateral, resulted in a balance due of $1,057.75. As a result, the total shortage of $1,057.75 should be billed to the property owner.

MOTION BY HOHL, SECONDED BY MENZIES TO REQUEST THE ACCOUNTING DEPARTMENT TO INVOICE THE PROPERTY OWNER IN THE AMOUNT OF $1,057.75 FOR ADDITIONAL SEWER CONSTRUCTION CHARGES AS OUTLINED IN THE SEWER CONNECTION AGREEMENT.

Ayes: Hohl, Menzies, Negri Absent: None Nays: None
Motion passed.

8. CALL TO THE PUBLIC

Seeing no requests to address the Sewer Committee, Hohl closed the call to the public.

9. INFORMATIONAL/EDUCATIONAL MATERIAL

There was no information and/or educational material available for this meeting.

10. ADJOURNMENT

MOTION BY HOHL, SECONDED BY MENZIES TO ADJOURN THE MEETING.
Ayes: Hohl, Menzies, Negri Absent: None Nays: None
Motion passed.

The meeting was adjourned at 2:41 p.m.

The foregoing is considered to be a true and accurate record of all items discussed. If any discrepancies or inconsistencies are noted, please contact the writer immediately.

Respectfully submitted,

Brittany K. Campbell

Brittany K. Campbell
Hamburg Twp. Utilities/Special Projects Coordinator

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EXCERPT FROM HAMBURG TOWNSHIP MUNICIPAL UTILITIES COMMITTEE MEETING MINUTES

To the attention of: Jason B. Negri, Supervisor
Hamburg Township Board of Trustees

Re: **DPW Monthly Report – June 2025 Statistics**

Please be apprised of this excerpt from the [X]Unapproved [_]Approved Minutes of the Meeting of the Hamburg Township Sewer Committee:

Date of Meeting: July 8th, 2025

Sewer Committee Members Present: Negri, Menzies, Daniels

Sewer Committee Members Absent: None

Text of Motion: MOTION BY NEGRI, SECONDED BY MENZIES TO NOTE THE DPW MONTHLY REPORT AS RECEIVED AND TO BE FILED AND TO ALSO FORWARD A COPY TO THE TOWNSHIP BOARD AS AN AGENDA ITEM FOR THEIR REVIEW.

Ayes: Negri, Menzies, Daniels Absent: None Nays: None

MOTION CARRIED.

State of Michigan }
County of Livingston }
Township of Hamburg}

I, BRITTANY K. CAMPBELL, Hamburg Township Utilities Coordinator and recording secretary to the Municipal Utilities Committee, do hereby certify that the foregoing is a true and correct excerpt of the Minutes of the aforementioned Regular/~~Special~~ Meeting of the Hamburg Township Municipal Utilities Committee.

Brittany K. Campbell Date: July 8th, 2025
BRITTANY K. CAMPBELL
HAMBURG TOWNSHIP UTILITIES COORDINATOR

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To: Municipal Utilities Committee
From: Tony Randazzo
Date: 07-02-2025
Re: DPW Monthly Report

---

1. The wastewater treatment plant was in compliance for June.

2. The new odor control system at the Kress Rd. pump station continues to function well. The recent heat wave has provided a good test, and we have not noticed any problems. In fact, we have not received any odor complaints from residents this year about any of our stations.

3. We sampled another group of three pump stations for PFAS as part of the grant work. Another three will be sampled this month as well as the four new monitoring wells that were installed last month.

4. Residential PFAS testing will also begin this month for thirty four homes in the Buck Lake area as part of the grant work.

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Hamburg Township Monthly Field Report

June 2025

Ryan Ward

Grinder Calls: 38 Total / 14 OT

Plant Calls: 0 OT

Station Calls: 0 Hamburg/ 1 Portage

Pump Rebuilds: 28 Hamburg / 2 Portage / 2 Highland

Miss Digs: 245 Hamburg / 44 Portage

Startups: 2 (1 gravity)

Deactivations/Reactivations: 2 (reactivations)

Replacements: 6

Grinder Stations in Stock: 35 simplex / 2 duplex

Grinder Locations: 0

Grinder Pump Cores in Stock: 18 + 2 for Duplex

Field Jobs for the Month: This month we have completed our normal monthly checks along with the water meter readings and grease trap inspections. The 4 new monitoring wells have been installed (2 shallow & 2 deep). The odor control bed structure has been completed and now we are waiting on the blower to remove the H2S

gases and a timer to be installed for the well that is onsite.







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EXCERPT FROM HAMBURG TOWNSHIP MUNICIPAL UTILITIES COMMITTEE MEETING MINUTES

To the attention of: Jason B. Negri, Supervisor
Hamburg Township Board of Trustees

Re: **2024/2025 Fiscal Year Sewer REU/Tap Tracker**

Please be apprised of this excerpt from the [X]Unapproved [_]Approved Minutes of the Meeting of the Hamburg Township Sewer Committee:

Date of Meeting: July 8th, 2025

Sewer Committee Members Present: Negri, Menzies, Daniels

Sewer Committee Members Absent: None

Text of Motion: MOTION BY MENZIES, SUPPORTED BY NEGRI TO NOTE THE UTILITIES COORDINATOR'S REPORT AS RECEIVED AND TO BE FILED AND TO ALSO FORWARD A COPY TO THE TOWNSHIP BOARD AS AN AGENDA ITEM FOR THEIR REVIEW.

Ayes: Hahn, Michniewicz Absent: Hohl Nays: None

MOTION CARRIED.

State of Michigan }
County of Livingston }
Township of Hamburg}

I, BRITTANY K. CAMPBELL, Hamburg Township Utilities Coordinator and recording secretary to the Municipal Utilities Committee, do hereby certify that the foregoing is a true and correct excerpt of the Minutes of the aforementioned Regular/~~Special~~ Meeting of the Hamburg Township Municipal Utilities Committee.

Brittany K. Campbell Date: July 8th, 2025
BRITTANY K. CAMPBELL
HAMBURG TOWNSHIP UTILITIES COORDINATOR

2024/2025 Hamburg Township REU Tap Fee Review Tracker

No. of REUs and Tap Fees Collected for Fiscal Year July 1, 2024 through June 30, 2025	Sewer Connection Fees & REUs for FY 2024/2025					
	# of REUs	Amount of Tap Fee	Amount of Pre-paid Credit	Property Address	Date Tap Fee Paid	Total Amount of Connection Fees
Sewer Connection Fees:						
Jeffrey & Jacqueline Roder	1.00	$ 2,500.00	$ 2,500.00	6335 Pinemont Dr.	3-Jul-24	$ -
Daniel & Joan Dombrowski	1.00	$ 7,500.00	$ -	7424 Hamburg Rd.	21-Aug-24	$ 7,500.00
Freedom River, Inc. - Farmhouse	1.00	$ 7,500.00	$ 7,500.00	6716 Winans Lake Rd.	9-Sep-24	$ -
Robert & Rhonda Coker	1.00	$ 4,000.00	$ -	8732 Pettyville Rd.	17-Sep-24	$ 4,000.00
Mitch Harris Building Co.	1.00	$ 2,500.00	$ 2,500.00	6017 Pinemont Dr.	22-Oct-24	$ -
Gordon Telford	1.00	$ 7,500.00	$ -	9855 Galatian Dr.	4-Nov-24	$ 7,500.00
Brenton & Andrea Lyon	1.00	$ 7,500.00	$ -	7797 Venice Ct.	18-Nov-24	$ 7,500.00
Peter V. & Nichole Maxfield	1.00	$ 7,500.00	$ -	7573 Hamburg Rd.	7-Jan-25	$ 7,500.00
Richard & Anne Stone	1.00	$ 7,500.00	$ -	10434 Langley Dr.	23-Jan-25	$ 7,500.00
Jeffrey R. Street	1.00	$ 7,500.00	$ -	9400 Roland Dr.	6-Feb-25	$ 7,500.00
Peter D Shanahan	1.00	$ 7,500.00	$ -	8665 Sunrise Mist Dr.	25-Mar-25	$ 7,500.00
Norfolk Development Corp.	1.00	$ 7,500.00	$ -	5676 Trail Side Ln.	16-Apr-25	$ 7,500.00
Norfolk Development Corp.	1.00	$ 7,500.00	$ -	5660 Trail Side Ln.	16-Apr-25	$ 7,500.00
Jacob Kozdron	1.00	$ 7,500.00	$ -	8527 Mystic Pines Ct.	15-May-25	$ 7,500.00
David & Grace Griese	1.00	$ 2,500.00	$ -	4305 Cornwell Ln.	24-Jun-25	$ 2,500.00
Total Number of New REUs:	**15.00**					
Total Amount of 2024/2025 Connection Fees:	**$81,500.00**					
REFUNDS of Tap Fees						
					Board Approved	
* Sewer Connections include Commercial properties						
***** Contract S.A.D. Sewer Connection***						

Hamburg Township
Public Safety Department
MONTHLY REPORT

June, 2025

COMMUNITY INVOLVEMENT

- FF Thomas Pawley and FF Chris Birk conducted smoke detector installations at a residence on June 5, 2025.
- Sgt. Megan Paul was a guest speaker at the Kensington Woods Commencement Ceremony on June 6, 2025.
- Officer Kim Leeds and Officer Kelly Kozowicz participated in the annual All Nations Veterans Pow Wow June 7, 2025 and June 8, 2025 at the Brighton State Rec Area.
- Sgt. Megan Paul participated in the Wind Turbine Community Bench Project June 9, 2025 – June 12, 2025 on the Lakelands Trail.
- FF Thomas Pawley and FF Chris Birk conducted smoke detector installations at a residence on June 12, 2025.
- The Hamburg Family Fun Fest was held June 11, 2025 through June 15, 2025 at Bennett Park with Public Safety personnel on location all five days.
- Officer Kim Leeds conducted a safety presentation at the Hamburg Township Senior Center on June 20, 2025.
- Administrative Assistant Karen Castleman performed a child car safety seat inspection on June 23, 2025.
- FF Thomas Pawley and FF Chris Birk conducted smoke detector installations at two residences on June 25, 2025.
- Sgt. Megan Paul participated in the Pinckney Cheerleading Car Show & Cruise at Country Elementary School on June 28, 2025.

PERSONNEL

- Park Ranger Kevin Deadman resigned from the department effective June 11, 2025.
- Park Ranger Emma Mossing resigned from the department effective June 16, 2025.

TRAINING

POLICE

- Officer Kim Leeds attended a Cryptocurrency Investigations webinar on June 5, 2025 and June 6, 2025.
- Officer Joshua Pedersen attended Drone training in Green Oak Township on June 17, 2025.

Hamburg Township
Public Safety Department
MONTHLY REPORT

- Sgt. Anthony Wallace participated in SWAT training on June 17, 2025.
- Sgt. Alysha Garbacik participated in Negotiators training in Howell on June 18, 2025.
- Sgt. Daniel Bromley participated in Dive Team training in Howell on June 19, 2025.
- Sgt. Anthony Wallace attended Subject Control Techniques training in Green Oak Township on June 24, 2025.

FIRE

- Monthly department-wide training topics for June: Long Board Splinting/Trauma Care and Vector Training.
- Lt. David Girard, FF Dan Hill and FF Jonathan Lusk attended Dive Team training on June 8, 2025.
- AFF Nolan Janeski, AFF Blake Kasprzak, AFF Nicholas Hamel & AFF Randall Porras participated in Physical Agility Testing on June 10, 2025.
- AFF Nolan Janeski, AFF Blake Kasprzak, AFF Nicholas Hamel & AFF Randall Porras participated in SCBA Staging Setup training on June 11, 2025.
- FF Jonathan Lusk attended Dive Team training on June 11, 2025.
- AFF Nolan Janeski, AFF Blake Kasprzak, AFF Nicholas Hamel & AFF Randall Porras participated in Medical and Med Bag training on June 18, 2025.
- FF Dan Hill attended Dive Team training on June 19, 2025.
- AFF Nolan Janeski, AFF Blake Kasprzak, AFF Nicholas Hamel & AFF Randall Porras participated in MCA Test/CAD/Radios/Report training on June 25, 2025.

POLICE OPERATIONS

MONTHLY ARREST SUMMARY

06/05/25 – 5:11pm:
A 37-year-old female Milford resident was arrested at M-36 & Hamburg Road for *Possession of Methamphetamines*. Her vehicle was impounded and she was released pending further invest.

06/05/25 – 5:11pm:
A 35-year-old male Putnam Township resident was arrested at M-36 & Hamburg Road for *Violation of Conditional Bond*. He was lodged in the Livingston County Jail.

06/08/25 – 12:49am:
A 30-year-old male Township resident was arrested at Chambers Road near Swarthout Road for *Operating While Intoxicated-2nd Offense*. His vehicle was impounded and he was lodged in the Livingston County Jail.

Hamburg Township
Public Safety Department
MONTHLY REPORT

06/08/25 – 5:38pm:
A 63-year-old female Township resident was arrested at her home for *Domestic Assault & Battery*. She was lodged in the Livingston County Jail.

06/11/25 – 7:00pm:
A 28-year-old male Township resident was arrested at his home on a misdemeanor warrant out of Hamburg Township for *Domestic Assault & Battery*. He was lodged in the Livingston County Jail.

06/14/25 – 7:26am:
A 30-year-old female Portage resident was arrested at Merrill Road & Sheldon Road for *Domestic Assault & Battery* and *Obstructing Justice*. She was released to the care of University of Michigan Hospital.

06/15/25 – 1:06pm:
A 67-year-old male Township resident was arrested at his home on a misdemeanor warrant out of the Village of Pinckney for *Failure to Appear for Arraignment-Threats*. He was lodged in the Livingston County Jail.

06/21/25 – 12:36am:
A 40-year-old male Green Oak Township resident was arrested at Winans Lake Road near Nature Trail for *Violation of Controlled Substance Act, Driving While License Suspended* and *Reckless Driving*. His vehicle was impounded and he was lodged in the Livingston County Jail.

06/24/25 – 3:44pm:
A 37-year-old male Pinckney resident was arrested at Pettysville Road & M-36 for *Violation of Controlled Substance Act, Driving While License Suspended* and *No Insurance*. His vehicle was impounded and he was lodged in the Livingston County Jail.

06/29/25 – 11:18pm:
A 42-year-old male Township resident was arrested at his home for *Domestic Assault & Battery.* He was lodged in the Livingston County Jail.

06/29/25 – 7:20pm:
A 27-year-old male Ann Arbor resident was arrested at M-36 near Campbell Court on two warrants out of Washtenaw County for *Probation Violation-Domestic Violence* and *Failure to Appear-Child Support*. He was lodged in the Livingston County Jail.

Hamburg Township
Public Safety Department
MONTHLY REPORT

06/30/25 – 6:30am:
A 37-year-old male Waterford resident was arrested by the Oakland County Sheriff's Department on an outstanding Hamburg Township warrant for *Indecent Exposure*. He was turned over to Hamburg Township officers and lodged in the Livingston County Jail.

06/30/25 – 10:30am:
A 56-year-old male Holly resident was arrested by the White Lake Police Department on an outstanding Hamburg Township warrant for *Failure to Appear-Driving While License Suspended*. He was turned over to Hamburg Township officers and lodged in the Livingston County Jail.

Police Calls for Service Summary, June 2025

CALLS FOR SERVICE	#		CALLS FOR SERVICE	#
911 HANG UP	4		LARCENY	7
ALARM	34		LITTERING/DUMPING	1
ANIMAL COMPLAINT	15		LIQUOR INVESTIGATION/ZERO TOLERANCE	0
AREA CHECK	358		LOST/FOUND PROPERTY	6
ARRESTS	30		MALICIOUS DESTRUCTION PROPERTY	4
ASSAULTS	3		MISSING PERSON/RUN-A-WAY	3
ASSIST EMS	104		NOISE COMPLAINTS	4
ASSIST FIRE DEPARTMENT	32		ORDINANCE INVESTIGATIONS	0
ASSIST OTHER AGENCY	17		OVERDOSE/INGESTION	0
ATV COMPLAINT	0		PERSONAL PROTECTION ORDER VIOL	0
BOATING COMPLAINTS	1		RETAIL FRAUD	2
BREAKING & ENTERING	4		SCHOOL PATROLS/GROUNDS CHECK	184
BUILDING/PROPERTY/VACATION CHECK	72		SHOTS FIRED/WEAPONS OFFENSE	2
CHASE/PURSUIT	0		SOLICITOR COMPLAINT	1
CHILD OR ADULT ABBUSE/NEGLECT	0		STALKING	0
CIVIL COMPLAINT	4		STOLEN / RECOVERED PROPERTY	0
COMMUNITY POLICING	16		SUBDIVISION PATROL/RESIDENTIAL CHECKS	771
CRIMINAL SEXUAL CONDUCT	0		SUICIDAL SUBJECT/MENTAL/PSYCH	6
DEATH INVESTIGATIONS	0		SUSPICIOUS-PERSON/VEH/SITUATION	27
DEPT HUMAN SERVICES REFERRALS	4		TRAFFIC CITATIONS ISSUED	39
DISTURBANCE/TROUBLE	6		TRAFFIC/PARKING COMPLAINT	26
DOMESTIC - PHYSICAL/VERBAL	9		TRAFFIC CRASH - PDA/PIA	29
DRUGS / VIOL CONTROLED SUB ACT	2		TRAFFIC DETAIL	92
FIREWORKS COMPLAINT	2		TRAFFIC STOP	125
FRAUD/EMBESSLEMENT	6		TRAFFIC VIO/ARREST	9
GENERAL NON-CRIMINAL	226		TRESSPASSING/LOITERING	0
INDECENT EXPOSURE	0		VEHICLE UDAA/STOLEN VEHICLE	0
INTIMIDATION THREATS/HARASSMENT	10		WATER RESCUE INCIDENTS	2
JUVENILE COMPLAINT	1		WARRANT: ATTEMPT/SEARCH/ARREST	3
KIDNAPPING	0		WELFARE CHECK	14
			TOTAL	**2317**

Hamburg Township
Public Safety Department
MONTHLY REPORT

GENERAL POLICE INFORMATION:

Marine Patrol: No marine patrols were conducted during the month of June.

Lakelands Trail Patrol: Regular patrols on the Lakelands Trail continued this month. No reported incidents.

Red Barrel: 32 pounds of prescription drugs were removed from the red barrel in front of the police station on June 4, 2025.

FIRE OPERATIONS

MONTHLY INCDENT SUMMARY:

INCIDENT COUNT	
INCIDENT TYPE	**# INCIDENTS**
EMS	81
FIRE	117
TOTAL	198

MAJOR INCIDENT TYPE	# INCIDENTS	% of TOTAL
Fires	5	2.53%
Rescue & Emergency Medical Service	81	40.91%
Hazardous Condition (No Fire)	19	9.60%
Service Call	61	30.81%
Good Intent Call	6	3.03%
False Alarm & False Call	26	13.13%
TOTAL	198	100%

June, 2025 Total Runs by District

North West	22	11.11%
North East	29	14.65%
South West	50	25.25%
Southeast	83	41.92%
Mutual Aid	14	7.07%
Totals	***198***	***100.00%***
Multiple Calls	57	28.79%

Hamburg Township
Public Safety Department
MONTHLY REPORT

Comparative Statistics - 2024 vs 2025 by Month

	June, 2024	June, 2025	% Change
Fire	3	5	66.7% Increase
Medical	71	81	14.1% Increase
Hazardous Condition	14	19	35.7% Increase
Service	42	61	45.2% Increase
Good Intent	9	6	33.3% Decrease
False Alarm / Cancel	12	26	116.7% Increase
Totals	**151**	**198**	**31.1% Increase**
Mutual Aid	7	14	100.0% Increase

Year-to-Date Comparative Statistics - 2024 vs 2025

	2024	2025	% Change
Fire	19	26	36.8% Increase
Medical	415	512	23.4% Increase
Hazardous Condition	45	51	13.3% Increase
Service	247	295	19.4% Increase
Good Intent	40	30	25.0% Decrease
False Alarm / Cancel	99	104	5.1% Increase
Totals	**865**	**1018**	**17.7% Increase**
Mutual Aid	40	57	42.5% Increase

FIRE PREVENTION INFORMATION:

Inspections: There were 24 commercial building inspections conducted during the month of June bringing the total for 2025 to 56.

Site Plan Reviews: One plan review was completed during the month of June.

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Due Date	Amount	heck #
Fund 101 General Fund							
Dept 000.000							
101-000.000-073.003	07/08/25	ALERUS RETIREMENT SOLUTIONS	401A	07082025	07/15/25	1,376.40	
101-000.000-222.100	07/09/25	LIVINGSTON COUNTY TREASURER	TRAILER FEES REC'D 07.08.25 JUNE 20	07092025	07/15/25	855.00	
101-000.000-228.010	07/09/25	MICHIGAN STATE DISBURSEMENT UI	CASE# 810013564 PAYROLL 06/16-06/29	07092025	07/15/25	59.08	
101-000.000-228.010	07/09/25	MICHIGAN STATE DISBURSEMENT UI	CASE #912854739 PAYROLL 06/16-06/29	07092025	07/15/25	380.46	
101-000.000-228.010	07/09/25	MICHIGAN STATE DISBURSEMENT UI	CASE# 912516502 PAYROLL 06/16-06/29	07092025	07/15/25	625.25	
101-000.000-231.100	07/03/25	POLICE OFFICER LABOR COUNCIL	JULY 2025	07022025	07/15/25	795.00	
101-000.000-231.500	07/08/25	ALERUS RETIREMENT SOLUTIONS	457	07082025	07/15/25	16,193.33	
101-000.000-239.000	07/01/25	AMAZON CAPITAL SERVICES	JUNE 2025	16CT-LJDX-QDR9	07/15/25	684.44	
101-000.000-239.300	07/01/25	AMAZON CAPITAL SERVICES	JUNE 2025	16CT-LJDX-QDR9	07/15/25	402.04	
101-000.000-239.300	06/30/25	HAMBURG TWP-SC-PETTY CASH	SEN CTR REPLENISH PETTY CASH	06302025	07/15/25	154.43	
101-000.000-239.400	06/26/25	EAST MICHIGAN FC	SPRING 2025 SEASON SCHOLARSHIP	06262025	07/15/25	150.00	
101-000.000-279.973	07/08/25	IMEG CONSULTANTS CORP	FOREST CREEK COURT ROAD REVIEW	23008696.03-2	07/15/25	585.00	
101-000.000-279.977	07/08/25	IMEG CONSULTANTS CORP	FOX POINT BEACH ROAD REVIEW	23008696.02-2	07/15/25	292.50	
101-000.000-279.980	07/08/25	IMEG CONSULTANTS CORP	ORCHARD VILLAGE ROAD REVIEW	23008696.00-3	07/15/25	195.00	
101-000.000-279.986	07/08/25	IMEG CONSULTANTS CORP	RIVER RUN ROAD REVIEW	23008696.07-2	07/15/25	195.00	
			Total For Dept 000.000			22,942.93	
Dept 101.000 Township Board							
101-101.000-826.000	06/11/25	ROSATI, SCHULTZ, JOPPICH &	GENERAL MATTERS	1083617	07/15/25	391.00	
101-101.000-826.000	06/11/25	ROSATI, SCHULTZ, JOPPICH &	LABOR & EMPLOYMENT LAW	1083619	07/15/25	234.00	
101-101.000-826.000	06/11/25	ROSATI, SCHULTZ, JOPPICH &	MARY ANN LAMKIN & STEVE LAMKIN	1083620	07/15/25	17.50	
101-101.000-826.000	06/30/25	SHIFMAN FOURNIER, PLO	SERVICES THROUGH JUNE 30 25-CAREER	07012025	07/15/25	2,682.50	
101-101.000-900.000	06/30/25	GANNETT MICHIGAN LOCALIQ	LEGAL ADS 06/01-06/30/25	0007184379	07/15/25	526.20	
101-101.000-958.000	06/18/25	HURON RIVER WATERSHED COUNCIL	2025 MEMBERSHIP DUES	2025.01.056	07/15/25	2,093.70	
			Total For Dept 101.000 Township Board			5,944.90	
Dept 171.000 Township Supervisor							
101-171.000-716.000	07/08/25	ALERUS RETIREMENT SOLUTIONS	401A	07082025	07/15/25	478.49	
101-171.000-861.000	06/30/25	PAT HOHL	REIMBURSE MILAGE 2024-2025	07022025	07/15/25	359.58	
			Total For Dept 171.000 Township Supervisor			838.07	
Dept 201.000 ACCOUNTING							
101-201.000-716.000	07/08/25	ALERUS RETIREMENT SOLUTIONS	401A	07082025	07/15/25	1,090.43	
			Total For Dept 201.000 ACCOUNTING			1,090.43	
Dept 215.000 CLERK'S OFFICE							
101-215.000-716.000	07/08/25	ALERUS RETIREMENT SOLUTIONS	401A	07082025	07/15/25	879.61	
101-215.000-955.000	06/30/25	HAMBURG HARDWARE	JUNE 2025	06302025	07/15/25	6.49	
			Total For Dept 215.000 CLERK'S OFFICE			886.10	
Dept 228.000 TECHNICAL/UTILITIES SERVICES							
101-228.000-716.000	07/08/25	ALERUS RETIREMENT SOLUTIONS	401A	07082025	07/15/25	550.40	
			Total For Dept 228.000 TECHNICAL/UTILITIES SERVICI			550.40	
Dept 229.000 COMPUTER/CABLE							
101-229.000-933.000	07/01/25	THE HOLDEN GROUP, LLC	ZIX ENCRYTION RENEWAK (3 USERS)/ZIX	ESTHJAR25I	07/15/25	2,487.30	
			Total For Dept 229.000 COMPUTER/CABLE			2,487.30	
Dept 253.000 Treasurer							
101-253.000-716.000	07/08/25	ALERUS RETIREMENT SOLUTIONS	401A	07082025	07/15/25	509.39	
101-253.000-851.000	06/30/25	KCI	TREASURY SUMMER TAX BILLS 2025	348148	07/15/25	2,578.54	
101-253.000-955.000	07/01/25	AMAZON CAPITAL SERVICES	JUNE 2025	16CT-LJDX-QDR9	07/15/25	1,549.00	
101-253.000-955.000	07/02/25	MICHIGAN TOWNSHIPS ASSOCIATIO	CLASSIFIED AD0 TREASURER	443110	07/15/25	15.00	

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Due Date	Amount	check #
Fund 101 General Fund							
Dept 253.000 Treasurer							
			Total For Dept 253.000 Treasurer			4,651.93	
Dept 262.000 Elections							
101-262.000-716.000	07/08/25	ALERUS RETIREMENT SOLUTIONS	401A	07082025	07/15/25	666.98	
			Total For Dept 262.000 Elections			666.98	
Dept 265.000 Township Buildings							
101-265.000-716.000	07/08/25	ALERUS RETIREMENT SOLUTIONS	401A	07082025	07/15/25	580.44	
101-265.000-752.000	06/30/25	HAMBURG HARDWARE	JUNE 2025	06302025	07/15/25	550.47	
101-265.000-758.000	06/17/25	CORRIGAN TOWING	DYED ULTRA LOW SULFUR	8400581-IN	07/15/25	165.00	
101-265.000-759.000	06/23/25	WEX BANK	05.24.25-06.23.2025	105508584	07/16/25	551.58	
101-265.000-917.000	06/30/25	HAMBURG TOWNSHIP TREASURER	PACKER STATION 04/01-06/30/25	06302025	07/15/25	167.00	
101-265.000-917.000	06/30/25	HAMBURG TOWNSHIP TREASURER	TWP 04/01-06/30/25	06302025	07/15/25	1,035.40	
101-265.000-921.000	06/10/25	CONSUMERS ENERGY	10675 MERRILL 05/14-06/10/2025	202343954557	07/07/25	28.07	
101-265.000-921.000	06/10/25	CONSUMERS ENERGY	1030 4914 3862 10405 MERRILL 05/14-	201721005907	07/07/25	125.06	
101-265.000-921.000	06/10/25	CONSUMERS ENERGY	1030 4914 1155 10675 MERRILL 05/14-	202343954559	07/07/25	30.82	
101-265.000-930.000	07/01/25	HIGHLAND TREATMENT INC	JULY 2025 BACTERIAL SAMPLING	153130	07/15/25	60.00	
101-265.000-930.008	07/01/25	HIGHLAND TREATMENT INC	JULY 2025 BACTERIAL SAMPLING	153130	07/15/25	60.00	
101-265.000-932.000	06/27/25	BOB MAXEY FORD OF HOWELL, INC.	B&G STEERING REP FORD F350 50068	296667	07/15/25	612.54	
			Total For Dept 265.000 Township Buildings			3,966.38	
Dept 275.000 OTHER EXPENSES							
101-275.000-752.000	07/02/25	ADVANCED WATER TREATMENT, INC.	TWP BOTTLED WATER (4)	60048345	07/15/25	23.96	
101-275.000-752.000	07/01/25	AMAZON CAPITAL SERVICES	JUNE 2025	16CT-LJDX-QDR9	07/15/25	74.85	
101-275.000-752.000	06/20/25	APPLIED INNOVATION	CONTRACT BASE 06/12-07/11/25	2860893	07/15/25	835.53	
101-275.000-752.000	06/26/25	OFFICE EXPRESS, INC.	DESK SIGN-DANIELS	577319	07/15/25	22.64	
101-275.000-752.000	06/30/25	STAPLES ADVANTAGE	JUNE SUPPLIES	7005907530	07/15/25	1,929.86	
101-275.000-752.000	07/01/25	APPLIED INNOVATION	CONTRACT BASE 07/05-08/04/25	2867467	07/16/25	175.29	
101-275.000-759.000	06/23/25	WEX BANK	05.24.25-06.23.2025	105508584	07/16/25	155.82	
101-275.000-853.000	07/01/25	TELNET WORLDWIDE	07/01-07/31/25	110769	07/15/25	170.23	
101-275.000-955.000	07/01/25	ELECTROCYCLE, INC.	ONSITE DESTRUCTION (2) 95 GAL TOTER	65425	07/15/25	53.00	
101-275.000-955.000	07/01/25	HAMBURG TOWNSHIP TREASURER	STAX 4715-13-305-058	07012025	07/15/25	269.62	
101-275.000-955.000	07/01/25	HAMBURG TOWNSHIP TREASURER	STAX 4715-25-101-088	07012025	07/15/25	140.94	
101-275.000-955.000	07/01/25	HAMBURG TOWNSHIP TREASURER	STAX 4715-23-306-108	07012025	07/15/25	46.35	
101-275.000-955.000	07/01/25	HAMBURG TOWNSHIP TREASURER	STAX 4715-13-305-061	07012025	07/15/25	371.11	
101-275.000-955.000	06/26/25	STATE OF MICHIGAN	TWP SLOW, NO WAKE SIGNS (20)	121519	07/15/25	640.00	
			Total For Dept 275.000 OTHER EXPENSES			4,909.20	
Dept 448.000 Street Lighting							
101-448.000-926.000	05/31/25	DTE ENERGY - STREET LIGHTS	9100 4056 2340 STREET LIGHTS	200415615799	07/10/25	1,579.63	
			Total For Dept 448.000 Street Lighting			1,579.63	
Dept 567.000 CEMETERY							
101-567.000-801.000	07/01/25	A2Z LAWN SERVICES, LLC	CEMETERY MOWING AND TRIMMING JUNE 2	003357	07/15/25	5,350.00	
101-567.000-801.000	07/01/25	WHITEWOOD TREE SERVICE INC	CEMETERY TREE SERVICE	INV0276	07/15/25	1,200.00	
			Total For Dept 567.000 CEMETERY			6,550.00	
Dept 702.000 PLANNING AND ZONING							
101-702.000-716.000	07/08/25	ALERUS RETIREMENT SOLUTIONS	401A	07082025	07/15/25	820.42	
101-702.000-826.000	06/11/25	ROSATI, SCHULTZ, JOPPICH &	GRIESE PLAR AMENDMENT	1083618	07/15/25	68.00	
101-702.000-900.000	06/30/25	GANNETT MICHIGAN LOCALIQ	LEGAL ADS 06/01-06/30/25	0007184379	07/15/25	159.78	
			Total For Dept 702.000 PLANNING AND ZONING			1,048.20	
Dept 703.000 LAKES, RIVERS & STREAMS							

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Due Date	Amount	heck #
Fund 101 General Fund							
Dept 703.000 LAKES, RIVERS & STREAMS							
101-703.000-967.000	06/24/25	LIVINGSTON CO. DRAIN COMMISSI(	PHASE II IMPLEMENTATION LIV CO WATE	3989	07/15/25	225.12	
			Total For Dept 703.000 LAKES, RIVERS & STREAMS			225.12	
Dept 751.000 Recreation Board							
101-751.000-716.000	07/08/25	ALERUS RETIREMENT SOLUTIONS	401A	07082025	07/15/25	204.36	
101-751.000-758.000	06/17/25	CORRIGAN TOWING	DYED ULTRA LOW SULFUR	8400581-IN	07/15/25	165.00	
101-751.000-917.000	06/30/25	HAMBURG TOWNSHIP TREASURER	WEST BENNETT PARK 04/01-06/30/25	06302025	07/15/25	167.00	
101-751.000-930.020	07/04/25	A-TEAM POWER CLEAN LLC	SOCCER FIELD LINE STRIPING SM(18) M	0003	07/15/25	1,336.00	
101-751.000-942.000	07/06/25	PORTABLE TOILET SERVICES LLC	07/06-08/02/2025	106297	07/15/25	2,135.62	
101-751.000-943.000	06/30/25	HAMBURG HARDWARE	JUNE 2025	06302025	07/15/25	86.31	
101-751.000-967.962	07/01/25	AMAZON CAPITAL SERVICES	JUNE 2025	16CT-LJDX-QDR9	07/15/25	130.92	
101-751.000-967.962	06/30/25	SIGN STUFF, INC.	P&R SIGN AND PLAQUES WITH LOGO	25462	07/15/25	9,904.00	
101-751.000-975.300	06/22/25	SPICER GROUP, INC.	PROF SERV THROUGH 05/31/25	238418	07/15/25	565.00	
			Total For Dept 751.000 Recreation Board			14,694.21	
Dept 800.000 LAKELAND TRAIL							
101-800.000-938.000	06/17/25	CORRIGAN TOWING	DYED ULTRA LOW SULFUR	8400581-IN	07/15/25	165.00	
101-800.000-942.000	07/06/25	PORTABLE TOILET SERVICES LLC	07/06-08/02/2025	106297	07/15/25	1,701.96	
			Total For Dept 800.000 LAKELAND TRAIL			1,866.96	
Dept 820.000 SENIOR CENTER							
101-820.000-716.000	07/08/25	ALERUS RETIREMENT SOLUTIONS	401A	07082025	07/15/25	339.66	
101-820.000-801.000	05/21/25	APPLIED INNOVATION	BASE RATE 05/21-06/20/25	2834562	07/15/25	228.90	
101-820.000-853.000	06/22/25	CHARTER COMMUNICATIONS	SEN CTR 06/22-07/21/2025	0103913062225	07/15/25	177.36	
101-820.000-853.000	07/01/25	TELNET WORLDWIDE	07/01-07/31/25	110769	07/15/25	22.20	
101-820.000-917.000	06/30/25	HAMBURG TOWNSHIP TREASURER	SEN CTR 04/01-06/30/25	06302025	07/15/25	470.94	
101-820.000-921.000	06/10/25	CONSUMERS ENERGY	1030 4914 0694 10407 MERRILL 05/14-	202343954556	07/07/25	52.79	
101-820.000-955.000	06/30/25	HAMBURG HARDWARE	JUNE 2025	06302025	07/15/25	27.96	
101-820.000-955.000	07/01/25	THE HOLDEN GROUP, LLC	ZIX ENCRYTION RENEWAK (3 USERS)/ZIX	ESTHJAR25I	07/15/25	120.40	
			Total For Dept 820.000 SENIOR CENTER			1,440.21	
			Total For Fund 101 General Fund			76,338.95	
Fund 204 Road Fund							
Dept 000.000							
204-000.000-802.000	06/30/25	LIVINGSTON COUNTY ROAD COMMIS(	459.0082AW STRAWBERRY LAKE DOUBLE C	7407	07/15/25	96,591.95	
204-000.000-802.000	06/30/25	LIVINGSTON COUNTY ROAD COMMIS(	459.0080AW HAMBURG LCRC PORTION DOU	7405	07/15/25	25,858.55	
204-000.000-802.000	06/30/25	LIVINGSTON COUNTY ROAD COMMIS(	459.0018AW WHITEWOOD/SHEHAN DOUBLE	7404	07/15/25	80,790.40	
204-000.000-802.000	06/30/25	LIVINGSTON COUNTY ROAD COMMIS(	489.07.5139BW PETTYS DOUBLE CHIP SE	7403	07/15/25	19,221.53	
204-000.000-802.000	06/30/25	LIVINGSTON COUNTY ROAD COMMIS(	489.07.514BW HALL DOUBLE CHIP SEAL	7406	07/15/25	22,171.06	
204-000.000-805.000	07/05/25	CHLORIDE SOLUTIONS, LLC	DUST CONTROL-MERRILL, SCHAFER, CHAM	HAM070525	07/15/25	3,339.51	
204-000.000-805.000	06/27/25	CHLORIDE SOLUTIONS, LLC	DUST CONTROL CHAMBERS/RICHARDSON	HAM062725	07/15/25	2,413.20	
			Total For Dept 000.000			250,386.20	
			Total For Fund 204 Road Fund			250,386.20	
Fund 206 Fire Fund							
Dept 000.000							
206-000.000-716.000	07/08/25	ALERUS RETIREMENT SOLUTIONS	401A	07082025	07/15/25	3,535.97	
206-000.000-752.000	06/30/25	HAMBURG HARDWARE	JUNE 2025	06302025	07/15/25	180.27	
206-000.000-752.000	06/30/25	PETTY CASH - FIRE FUND	FD REPLENISH PETTY CASH	06302025	07/15/25	36.99	
206-000.000-759.000	06/30/25	WEX BANK	FD - FUEL CHARGES #105703248 06/01-	105703248	07/15/25	2,232.26	
206-000.000-768.000	06/30/25	KING KLEANERS	FD - STA 11 DRY CLEANING JUNE 2025	07012025	07/15/25	58.00	
206-000.000-768.000	06/30/25	KING KLEANERS	FD - STA 12 DRY CLEANING JUNE 2025	07012025	07/15/25	265.00	

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Due Date	Amount	heck #
Fund 206 Fire Fund							
Dept 000.000							
206-000.000-853.000	06/11/25	AT&T MOBILITY	PD/FD CELL PHONE CHARGES 05/12-06/1	X06192025	07/04/25	189.85	
206-000.000-853.000	07/01/25	TELNET WORLDWIDE	07/01-07/31/25	110769	07/15/25	118.40	
206-000.000-914.000	07/08/25	RICHARD DUFFANY	PD/FD TUITION REIMBURSEMENT	07082025	07/15/25	1,302.00	
206-000.000-917.000	06/30/25	HAMBURG TOWNSHIP TREASURER	FD #12 04/01-06/30/25	06302025	07/15/25	668.00	
206-000.000-921.000	06/09/25	CONSUMERS ENERGY	1000 3979 7285 FD#12 05/10-06/09/20	201987991905	07/07/25	153.43	
206-000.000-930.003	06/30/25	PETTY CASH - FIRE FUND	FD REPLENISH PETTY CASH	06302025	07/15/25	25.00	
206-000.000-930.003	07/01/25	RESCOM DOOR LLC	FD - STA 12 REPAIR TO DOOR 1	6411	07/15/25	360.00	
206-000.000-931.000	06/16/25	LAKELAND ACE HARDWARE, INC.	FD - OIL CHANGE FOR SMOKE HOUSE GEN	13267	07/15/25	13.98	
206-000.000-932.000	06/30/25	HOLLAND MOTOR HOMES & BUS CO	FD - VEH MAINTENANCE PARTS #021987	021987	07/15/25	383.64	
206-000.000-932.000	07/09/25	MID AMERICAN AEL, LLC	FD - VEH LIGHTS #01215	01215	07/15/25	439.20	
206-000.000-933.000	07/01/25	THE HOLDEN GROUP, LLC	ZIX ENCRYTION RENEWAK (3 USERS)/ZIX	ESTHJAR25I	07/15/25	2,495.00	
206-000.000-955.000	06/30/25	PETTY CASH - FIRE FUND	FD REPLENISH PETTY CASH	06302025	07/15/25	5.86	
206-000.000-958.000	07/09/25	NFPA	FD - NPFA ANNUAL MEMBERSHIP FEES -	07092025	07/15/25	225.00	
206-000.000-967.000	06/30/25	UNMANNED VEHICLE TECHNOLOGIES	PD/FD THREE DRONE CLASS 1 & CLASS 2	SO222889	07/15/25	3,750.00	
			Total For Dept 000.000			16,437.85	
			Total For Fund 206 Fire Fund			16,437.85	
Fund 207 Police Fund							
Dept 000.000							
207-000.000-716.000	07/08/25	ALERUS RETIREMENT SOLUTIONS	401A	07082025	07/15/25	3,266.77	
207-000.000-752.000	07/01/25	AMAZON CAPITAL SERVICES	JUNE 2025	16CT-LJDX-QDR9	07/15/25	773.57	
207-000.000-752.000	06/30/25	HAMBURG HARDWARE	JUNE 2025	06302025	07/15/25	16.27	
207-000.000-752.000	06/30/25	HAMBURG-PD PETTY CASH	PD PETTY CASH REPLENISH	06302025	07/15/25	5.08	
207-000.000-759.000	06/30/25	WEX FLEET UNIVERSAL	PD FUEL CHARGES FOR PATROL CARS JUN	105727061	07/15/25	4,116.53	
207-000.000-759.000	06/19/25	WONDERLAND MARINE WEST, INC.	PD BOAT FUEL MAY 2025	72627	07/15/25	64.70	
207-000.000-768.500	06/30/25	KING KLEANERS	PD UNIFORM CLEANING JUNE 2025 CHARG	07012025	07/15/25	326.00	
207-000.000-801.000	06/30/25	TRANSUNION RISK AND ALTERNATI	PD MONTHLY USAGE CHARGES 06/01-06/3	378853-202506-1	07/15/25	75.00	
207-000.000-826.000	06/11/25	ROSATI, SCHULTZ, JOPPICH &	GENERAL MATTERS	1083617	07/15/25	306.00	
207-000.000-826.000	06/11/25	ROSATI, SCHULTZ, JOPPICH &	MARY ANN LAMKIN & STEVE LAMKIN	1083620	07/15/25	35.00	
207-000.000-851.000	06/30/25	HAMBURG-PD PETTY CASH	PD PETTY CASH REPLENISH	06302025	07/15/25	6.10	
207-000.000-853.000	06/11/25	AT&T MOBILITY	PD NEGOT TEAM BRIC BALL SIM CARD SE	X06192025	07/04/25	131.37	
207-000.000-853.000	06/11/25	AT&T MOBILITY	PD/FD CELL PHONE CHARGES 05/12-06/1	X06192025	07/04/25	597.17	
207-000.000-853.000	07/01/25	CHARTER COMMUNICATIONS	PD SPECTRUM CABLE MONTHLY CHARGES 0	005447501070125	07/15/25	261.48	
207-000.000-853.000	07/01/25	TELNET WORLDWIDE	07/01-07/31/25	110769	07/15/25	162.80	
207-000.000-914.000	07/08/25	RICHARD DUFFANY	PD/FD TUITION REIMBURSEMENT	07082025	07/15/25	1,302.00	
207-000.000-917.000	06/30/25	HAMBURG TOWNSHIP TREASURER	PD 04/01-06/30/25	06302025	07/15/25	1,185.70	
207-000.000-921.000	06/10/25	CONSUMERS ENERGY	1030 4914 2971 PD 05/14-06/10/25	202343954561	07/07/25	77.30	
207-000.000-930.002	07/03/25	ADVANCE AUTO PARTS	PD GENERATOR BATTERY	2749-526343	07/15/25	167.69	
207-000.000-930.002	07/01/25	HIGHLAND TREATMENT INC	JULY 2025 BACTERIAL SAMPLING	153130	07/15/25	60.00	
207-000.000-933.000	07/01/25	THE HOLDEN GROUP, LLC	ZIX ENCRYTION RENEWAK (3 USERS)/ZIX	ESTHJAR25I	07/15/25	1,337.80	
207-000.000-967.000	06/30/25	HAMBURG-PD PETTY CASH	PD PETTY CASH REPLENISH	06302025	07/15/25	89.78	
207-000.000-967.000	06/30/25	UNMANNED VEHICLE TECHNOLOGIES	PD/FD THREE DRONE CLASS 1 & CLASS 2	SO222889	07/15/25	3,750.00	
			Total For Dept 000.000			18,114.11	
			Total For Fund 207 Police Fund			18,114.11	
Fund 252 HAMBURG TWP AQUATIC WEED CONTROL SAD							
Dept 000.000							
252-000.000-803.000	07/07/25	PROGRESSIVE AE, INC.	2023-2032 CONTRACT THROUGH 07/2025	00204191	07/15/25	3,687.50	
			Total For Dept 000.000			3,687.50	
			Total For Fund 252 HAMBURG TWP AQUATIC WEED CONTR			3,687.50	

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Due Date	Amount	check #
Fund 273 Scott Drive ROAD SAD							
Dept 000.000							
273-000.000-802.000	06/30/25	BIG BARNEY'S ROAD MAINTENANCE	SUMMER HOWELL SCOTT DR	4105	07/15/25	300.00	
273-000.000-802.000	06/30/25	BOB MYERS EXCAVATING INC	SCOTT DR	2024-440	07/15/25	350.00	
			Total For Dept 000.000			650.00	
			Total For Fund 273 Scott Drive ROAD SAD			650.00	
Fund 276 Community Dr SAD - Road Maint							
Dept 000.000							
276-000.000-802.000	06/30/25	BIG BARNEY'S ROAD MAINTENANCE	SUMMER HOWELL COMMUNITY DR	4082	07/15/25	325.00	
276-000.000-802.000	06/30/25	BOB MYERS EXCAVATING INC	COMMUNITY DR	2024-443	07/15/25	300.00	
			Total For Dept 000.000			625.00	
			Total For Fund 276 Community Dr SAD - Road Maint			625.00	
Fund 279 Riverside/Century/Lagoon SAD							
Dept 000.000							
279-000.000-802.000	06/30/25	BIG BARNEY'S ROAD MAINTENANCE	SUMMER HOWELL RIVERSIDE, CENTURY, L.	4083	07/15/25	2,400.00	
279-000.000-802.000	06/30/25	BOB MYERS EXCAVATING INC	RIVERSIDE, CENTURY, LAGOON AND RADI.	2024-436	07/15/25	2,690.00	
			Total For Dept 000.000			5,090.00	
			Total For Fund 279 Riverside/Century/Lagoon SAD			5,090.00	
Fund 280 Island Shore/Schlenker SAD							
Dept 000.000							
280-000.000-802.000	07/03/25	BIG BARNEY'S ROAD MAINTENANCE	SUMMER HOWELL-ISLAND SHORE & SCHLEN.	4114	07/15/25	1,100.00	
280-000.000-802.000	06/30/25	BOB MYERS EXCAVATING INC	ISLAND SHORE & SCHLENKER	2024-438	07/15/25	750.00	
			Total For Dept 000.000			1,850.00	
			Total For Fund 280 Island Shore/Schlenker SAD			1,850.00	
Fund 281 Campbell Drive SAD							
Dept 000.000							
281-000.000-802.000	06/30/25	BIG BARNEY'S ROAD MAINTENANCE	SUMMER HOWELL CAMPBELL DR	4104	07/15/25	250.00	
281-000.000-802.000	06/30/25	BOB MYERS EXCAVATING INC	CAMPBELL DR	2024-444	07/15/25	325.00	
			Total For Dept 000.000			575.00	
			Total For Fund 281 Campbell Drive SAD			575.00	
Fund 283 KINGSTON DRIVE MAINTENANCE SAD							
Dept 000.000							
283-000.000-802.000	06/30/25	BIG BARNEY'S ROAD MAINTENANCE	SUMMER HOWELL KINGSTON DR AREA	4103	07/15/25	1,200.00	
283-000.000-802.000	06/30/25	BOB MYERS EXCAVATING INC	KINGSTON DR AREA	2024-439	07/15/25	1,250.00	
			Total For Dept 000.000			2,450.00	
			Total For Fund 283 KINGSTON DRIVE MAINTENANCE SAD			2,450.00	
Fund 284 Winans Drive SAD							
Dept 000.000							
284-000.000-802.000	06/30/25	BIG BARNEY'S ROAD MAINTENANCE	SUMMER HOWELL WINANS DR	4081	07/15/25	575.00	
284-000.000-802.000	06/30/25	BOB MYERS EXCAVATING INC	WINANS DR	2024-442	07/15/25	475.00	
			Total For Dept 000.000			1,050.00	
			Total For Fund 284 Winans Drive SAD			1,050.00	
Fund 286 SHAN-GRI-LA AQUATIC WEED CONTROL							

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Fund 286 SHAN-GRI-LA AQUATIC WEED CONTROL							
Dept 000.000							
286-000.000-900.000	06/30/25	GANNETT MICHIGAN LOCALIQ	LEGAL ADS 06/01-06/30/25	0007184379	07/15/25	1,031.32	
			Total For Dept 000.000			1,031.32	
			Total For Fund 286 SHAN-GRI-LA AQUATIC WEED CONTR(			1,031.32	
Fund 590 SEWER FUND							
Dept 000.000							
590-000.000-198.083	06/26/25	C & E CONSTRUCTION CO., INC.	GRINDER PUMP INSTALLATION 6335 PINE	3072	07/15/25	5,005.77	
			Total For Dept 000.000			5,005.77	
Dept 527.000 SEWER OPERATING							
590-527.000-716.000	07/08/25	ALERUS RETIREMENT SOLUTIONS	401A	07082025	07/15/25	2,687.32	
590-527.000-751.100	07/02/25	CUSTOM TOOL & MACHINE	E-ONE CASTINGS (9)/PUMP HEADS (12)	3075	07/15/25	2,565.00	
590-527.000-751.100	07/07/25	DUBOIS-COOPER & ASSOCIATES	DPW MOTOR CONTROL BD(10)/MCB ADAPT(	294732	07/15/25	7,240.00	
590-527.000-751.100	07/07/25	DUBOIS-COOPER & ASSOCIATES	DPW VALVE ASSY(3)/SUPPORT PLATE (3)	294441	07/15/25	3,894.00	
590-527.000-751.100	07/08/25	REDMOND ENVIRONMENTAL INC.	DPW STATOR W. LINER (25)	11277	07/15/25	1,653.85	
590-527.000-752.000	06/25/25	ADVANCED WATER TREATMENT, INC.	DPW BOTTLED WATER (4)	59937776	07/15/25	23.96	
590-527.000-752.000	07/01/25	AMAZON CAPITAL SERVICES	JUNE 2025	16CT-LJDX-QDR9	07/15/25	34.32	
590-527.000-752.000	06/20/25	ED BOCK FEEDS & STUFF, L.L.C.	DPW HYDRATED LIME	619534	07/15/25	79.96	
590-527.000-752.000	06/27/25	FASTENAL COMPANY	DPW 10-24X1 (100)/ 10-24 S/S NUT (1	NIDE6172149	07/15/25	61.60	
590-527.000-752.000	06/30/25	HAMBURG HARDWARE	JUNE 2025	06302025	07/15/25	110.80	
590-527.000-759.000	06/23/25	WEX BANK	05.24.25-06.23.2025	105508584	07/16/25	900.39	
590-527.000-851.000	06/30/25	KCI	OTH APRIL MAY JUNE UB BILLS	348523	07/15/25	397.48	
590-527.000-853.000	07/01/25	OMNISITE	DPW STANDARD MONITORING SERV	101373	07/15/25	758.00	
590-527.000-853.000	06/22/25	VERIZON WIRELESS	DPW ON CALL 05/23-06/22/25	6116731596	07/15/25	50.67	
590-527.000-921.000	06/09/25	CONSUMERS ENERGY	1030 4914 5271 6414 WINANS 05/13-06	204924649602	07/07/25	21.66	
590-527.000-921.000	06/10/25	CONSUMERS ENERGY	1030 4914 5248 4320 CORDLEY LAKE 05	201721005908	07/07/25	56.44	
590-527.000-921.000	06/10/25	CONSUMERS ENERGY	1030 4914 1148 9251 REGENCY 05/14-0	202343954558	07/07/25	19.83	
590-527.000-921.000	06/10/25	CONSUMERS ENERGY	1030 4914 1213 6400 E M-36 05/14-06	202343954560	07/07/25	18.92	
590-527.000-933.000	07/01/25	THE HOLDEN GROUP, LLC	ZIX ENCRYTION RENEWAK (3 USERS)/ZIX	ESTHJAR25I	07/15/25	548.50	
590-527.000-934.100	07/01/25	CUMMINS SALES AND SERVICE	DPW KOHLER GEN REP	S6-250744082	07/15/25	524.13	
590-527.000-934.200	06/26/25	C & E CONSTRUCTION CO., INC.	GRINDER PUMP REPLACEMENT 8251 HILLP	3071	07/15/25	5,397.00	
590-527.000-955.000	06/30/25	LIVINGSTON COUNTY REGISTER OF	EASEMENT GRANT FLANERY	06302025	07/15/25	30.00	
			Total For Dept 527.000 SEWER OPERATING			27,073.83	
Dept 537.000							
590-537.000-752.000	06/25/25	ADVANCED WATER TREATMENT, INC.	WWTP BOTTLED WATER (1)	59936350	07/15/25	5.99	
590-537.000-752.000	06/30/25	HAMBURG HARDWARE	JUNE 2025	06302025	07/15/25	19.99	
590-537.000-752.000	06/23/25	HD SUPPLY, INC.	WWTP HACH NITRITE 25 PK/HACH NITRAT	INV00746794	07/15/25	740.33	
590-537.000-853.000	07/01/25	TELNET WORLDWIDE	07/01-07/31/25	110769	07/15/25	14.80	
590-537.000-921.000	06/10/25	CONSUMERS ENERGY	1030 4914 7939 WWTP 05/14-06/10/25	201721005909	07/07/25	296.20	
590-537.000-930.007	06/30/25	LAKESIDE SERVICE COMPANY	WWTP MINI SPLIT REPAIR	218832272	07/15/25	332.00	
590-537.000-931.000	06/24/25	ADVANCE AUTO PARTS	WWTP ROLOC DISK	2749-525866	07/15/25	45.25	
590-537.000-952.000	06/30/25	AQUAFIX	WWTP MICRO-ANLYSIS	IN019344	07/15/25	400.00	
590-537.000-952.000	06/30/25	MERIT LABORATORIES	HAMBURG	75032	07/15/25	536.00	
590-537.000-952.100	06/30/25	MERIT LABORATORIES	PORTAGE LAKE	75033	07/15/25	544.00	
590-537.000-952.200	06/30/25	MERIT LABORATORIES	HAMBURG	75032	07/15/25	4,200.00	
			Total For Dept 537.000			7,134.56	
Dept 539.000							
590-539.000-993.000	06/01/25	HUNTINGTON NATIONAL BANK	ACCT#3584259801 ANNUAL ADMIN FEE SP	74573	07/15/25	5.15	
			Total For Dept 539.000			5.15	

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Fund 590 SEWER FUND							
Dept 540.000							
590-540.000-917.900	06/30/25	CITY OF BRIGHTON	004738-000 04/01-06/30/25	06302025	07/15/25	11,733.72	
590-540.000-917.900	06/30/25	CITY OF BRIGHTON	003055-000 04/01-06/30/25	06302025	07/15/25	44,917.34	
			Total For Dept 540.000			56,651.06	
			Total For Fund 590 SEWER FUND			95,870.37	
Fund 854 2020-ROAD SAD FUND							
Dept 000.000							
854-000.000-993.000	06/01/25	HUNTINGTON NATIONAL BANK	ACCT#3584259801 ANNUAL ADMIN FEE SP	74573	07/15/25	494.85	
			Total For Dept 000.000			494.85	
			Total For Fund 854 2020-ROAD SAD FUND			494.85	
Fund 855 BOB WHITE BEACH NORTH RD IM SAD							
Dept 000.000							
855-000.000-802.000	06/23/25	ALLIED CONSTRUCTION CO., INC.	BOB WHITE BEACH NORTH IMPROVEMENT	25-0014	07/15/25	183,868.63	
			Total For Dept 000.000			183,868.63	
			Total For Fund 855 BOB WHITE BEACH NORTH RD IM SAI			183,868.63	
Fund 858 FOX POINTE BEACH SUBDIVISION RD IM SAD							
Dept 000.000							
858-000.000-826.000	06/11/25	ROSATI, SCHULTZ, JOPPICH &	MICHIGAN TAX TRIBUNAL	1083621	07/15/25	1,360.00	
			Total For Dept 000.000			1,360.00	
			Total For Fund 858 FOX POINTE BEACH SUBDIVISION RI			1,360.00	
Fund 870 BUHL DRIVE RD IM SAD							
Dept 000.000							
870-000.000-802.000	06/30/25	LIVINGSTON COUNTY ROAD COMMIS	789.07.5187BW BUHL DRIVE SINGLE CHI	7402	07/15/25	13,473.00	
			Total For Dept 000.000			13,473.00	
			Total For Fund 870 BUHL DRIVE RD IM SAD			13,473.00	

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Due Date	Amount	heck #
		Fund Totals:					
			Fund 101 General Fund			76,338.95	
			Fund 204 Road Fund			250,386.20	
			Fund 206 Fire Fund			16,437.85	
			Fund 207 Police Fund			18,114.11	
			Fund 252 HAMBURG TWP AQUATIC WEED CON			3,687.50	
			Fund 273 Scott Drive ROAD SAD			650.00	
			Fund 276 Community Dr SAD - Road Main			625.00	
			Fund 279 Riverside/Century/Lagoon SAD			5,090.00	
			Fund 280 Island Shore/Schlenker SAD			1,850.00	
			Fund 281 Campbell Drive SAD			575.00	
			Fund 283 KINGSTON DRIVE MAINTENANCE S			2,450.00	
			Fund 284 Winans Drive SAD			1,050.00	
			Fund 286 SHAN-GRI-LA AQUATIC WEED CON			1,031.32	
			Fund 590 SEWER FUND			95,870.37	
			Fund 854 2020-ROAD SAD FUND			494.85	
			Fund 855 BOB WHITE BEACH NORTH RD IM			183,868.63	
			Fund 858 FOX POINTE BEACH SUBDIVISION			1,360.00	
			Fund 870 BUHL DRIVE RD IM SAD			13,473.00	
			Total For All Funds:			673,352.78	
--- TOTALS BY GL DISTRIBUTION ---							
		101-000.000-073.003	RETIREMENT - LIBRARY			1,376.40	
		101-000.000-222.100	DUE TO COUNTY TRAILER FEES			855.00	
		101-000.000-228.010	MI CHILD SUPPORT WITHHOLDING			1,064.79	
		101-000.000-231.100	DUE TO UNION DUES			795.00	
		101-000.000-231.500	DEFERRED COMPENSATION/457			16,193.33	
		101-000.000-239.000	SENIOR CENTER DONATIONS			684.44	
		101-000.000-239.300	SENIOR CENTER ACTIVITY FUND			556.47	
		101-000.000-239.400	EVERY CHILD SHALL PLAY SCHOLARSHIP			150.00	
		101-000.000-279.973	FOREST CREEK COURT SAD			585.00	
		101-000.000-279.977	FOX POINT BEACH SUBDIVISION			292.50	
		101-000.000-279.980	ORCHARD VILLAGE SUBDIVISION SAD			195.00	
		101-000.000-279.986	RIVER RUN SUBDIVISION RD IM SAD			195.00	
		101-101.000-826.000	LEGAL FEES			3,325.00	
		101-101.000-900.000	LEGAL NOTICES/ADVERTISING			526.20	
		101-101.000-958.000	DUES/SUBSCRIP/RECERTIFICATION			2,093.70	
		101-171.000-716.000	DEFINED CONTRIBUTION			478.49	
		101-171.000-861.000	MILEAGE			359.58	
		101-201.000-716.000	DEFINED CONTRIBUTION			1,090.43	
		101-215.000-716.000	DEFINED CONTRIBUTION			879.61	
		101-215.000-955.000	SUNDRY			6.49	
		101-228.000-716.000	DEFINED CONTRIBUTION			550.40	
		101-229.000-933.000	SOFTWARE MAINTENANCE			2,487.30	
		101-253.000-716.000	DEFINED CONTRIBUTION			509.39	
		101-253.000-851.000	POSTAGE			2,578.54	
		101-253.000-955.000	SUNDRY			1,564.00	
		101-262.000-716.000	DEFINED CONTRIBUTION			666.98	
		101-265.000-716.000	DEFINED CONTRIBUTION			580.44	
		101-265.000-752.000	SUPPLIES & SMALL EQUIPMENT			550.47	
		101-265.000-758.000	DIESEL FUEL			165.00	
		101-265.000-759.000	VEHICLE FUEL			551.58	
		101-265.000-917.000	SEWER USAGE			1,202.40	
		101-265.000-921.000	NATURAL GAS/HEAT			183.95	
		101-265.000-930.000	MAINTENANCE TWP HALL			60.00	
		101-265.000-930.008	MAINTENANCE LIBRARY			60.00	
		101-265.000-932.000	VEHICLE MAINTENANCE			612.54	
		101-275.000-752.000	SUPPLIES & SMALL EQUIPMENT			3,062.13	

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Due Date	Amount	heck #
		101-275.000-759.000	VEHICLE FUEL			155.82	
		101-275.000-853.000	PHONE/COMM/INTERNET			170.23	
		101-275.000-955.000	SUNDRY			1,521.02	
		101-448.000-926.000	STREET LIGHTING			1,579.63	
		101-567.000-801.000	CONTRACTUAL SERVICES			6,550.00	
		101-702.000-716.000	DEFINED CONTRIBUTION			820.42	
		101-702.000-826.000	LEGAL FEES			68.00	
		101-702.000-900.000	LEGAL NOTICES/ADVERTISING			159.78	
		101-703.000-967.000	SPECIAL PROJECTS			225.12	
		101-751.000-716.000	DEFINED CONTRIBUTION			204.36	
		101-751.000-758.000	DIESEL FUEL			165.00	
		101-751.000-917.000	SEWER USAGE			167.00	
		101-751.000-930.020	SPORTS FIELD MAINTENANCE			1,336.00	
		101-751.000-942.000	PORTABLE TOILETS			2,135.62	
		101-751.000-943.000	TOWNSHIP COMMUNITY EVENTS			86.31	
		101-751.000-967.962	SPECIAL PROJECTS - MISC IMPROVEMENT			10,034.92	
		101-751.000-975.300	GRANT MATCH			565.00	
		101-800.000-938.000	LAKELAND TRAIL MAINTENANCE			165.00	
		101-800.000-942.000	PORTABLE TOILETS			1,701.96	
		101-820.000-716.000	DEFINED CONTRIBUTION			339.66	
		101-820.000-801.000	CONTRACTUAL SERVICES			228.90	
		101-820.000-853.000	PHONE/COMM/INTERNET			199.56	
		101-820.000-917.000	SEWER USAGE			470.94	
		101-820.000-921.000	NATURAL GAS/HEAT			52.79	
		101-820.000-955.000	SUNDRY			148.36	
		204-000.000-802.000	ROAD IMPROVEMENT			244,633.49	
		204-000.000-805.000	CHLORIDING			5,752.71	
		206-000.000-716.000	DEFINED CONTRIBUTION			3,535.97	
		206-000.000-752.000	SUPPLIES & SMALL EQUIPMENT			217.26	
		206-000.000-759.000	VEHICLE FUEL			2,232.26	
		206-000.000-768.000	UNIFORMS/ACCESSORIES			323.00	
		206-000.000-853.000	PHONE/COMM/INTERNET			308.25	
		206-000.000-914.000	TUITION REIMBURSEMENT			1,302.00	
		206-000.000-917.000	SEWER USAGE			668.00	
		206-000.000-921.000	NATURAL GAS/HEAT			153.43	
		206-000.000-930.003	MAINTENANCE FIRE HALL			385.00	
		206-000.000-931.000	EQUIPMENT MAINT/REPAIR			13.98	
		206-000.000-932.000	VEHICLE MAINTENANCE			822.84	
		206-000.000-933.000	SOFTWARE MAINTENANCE			2,495.00	
		206-000.000-955.000	SUNDRY			5.86	
		206-000.000-958.000	DUES/SUBSCRIP/RECERTIFICATION			225.00	
		206-000.000-967.000	SPECIAL PROJECTS			3,750.00	
		207-000.000-716.000	DEFINED CONTRIBUTION			3,266.77	
		207-000.000-752.000	SUPPLIES & SMALL EQUIPMENT			794.92	
		207-000.000-759.000	VEHICLE FUEL			4,181.23	
		207-000.000-768.500	UNIFORM CLEANING			326.00	
		207-000.000-801.000	CONTRACTUAL SERVICES			75.00	
		207-000.000-826.000	LEGAL FEES			341.00	
		207-000.000-851.000	POSTAGE			6.10	
		207-000.000-853.000	PHONE/COMM/INTERNET			1,152.82	
		207-000.000-914.000	TUITION REIMBURSEMENT			1,302.00	
		207-000.000-917.000	SEWER USAGE			1,185.70	
		207-000.000-921.000	NATURAL GAS/HEAT			77.30	
		207-000.000-930.002	MAINTENANCE POLICE BUILDING			227.69	
		207-000.000-933.000	SOFTWARE MAINTENANCE			1,337.80	
		207-000.000-967.000	SPECIAL PROJECTS			3,839.78	
		252-000.000-803.000	AQUATIC WEED CONTROL			3,687.50	
		273-000.000-802.000	ROAD IMPROVEMENT			650.00	
		276-000.000-802.000	ROAD IMPROVEMENT			625.00	

GL Number	Invoice Date	Vendor	Invoice Desc.	Invoice	Due Date	Amount	heck #
		279-000.000-802.000	ROAD IMPROVEMENT			5,090.00	
		280-000.000-802.000	ROAD IMPROVEMENT			1,850.00	
		281-000.000-802.000	ROAD IMPROVEMENT			575.00	
		283-000.000-802.000	ROAD IMPROVEMENT			2,450.00	
		284-000.000-802.000	ROAD IMPROVEMENT			1,050.00	
		286-000.000-900.000	LEGAL NOTICES/ADVERTISING			1,031.32	
		590-000.000-198.083	6335 PINEMONT DR 1501101036			5,005.77	
		590-527.000-716.000	DEFINED CONTRIBUTION			2,687.32	
		590-527.000-751.100	GRINDER PUMP PARTS			15,352.85	
		590-527.000-752.000	SUPPLIES & SMALL EQUIPMENT			310.64	
		590-527.000-759.000	VEHICLE FUEL			900.39	
		590-527.000-851.000	POSTAGE			397.48	
		590-527.000-853.000	PHONE/COMM/INTERNET			808.67	
		590-527.000-921.000	NATURAL GAS/HEAT			116.85	
		590-527.000-933.000	SOFTWARE MAINTENANCE			548.50	
		590-527.000-934.100	PUMP & MAIN REPAIR/MAINTENANCE			524.13	
		590-527.000-934.200	GRINDER PUMP REPLACEMENT			5,397.00	
		590-527.000-955.000	SUNDRY			30.00	
		590-537.000-752.000	SUPPLIES & SMALL EQUIPMENT			766.31	
		590-537.000-853.000	PHONE/COMM/INTERNET			14.80	
		590-537.000-921.000	NATURAL GAS/HEAT			296.20	
		590-537.000-930.007	BUILDING MAINTENANCE - WWTP			332.00	
		590-537.000-931.000	EQUIPMENT MAINT/REPAIR			45.25	
		590-537.000-952.000	LAB ANALYSIS - WWTP			936.00	
		590-537.000-952.100	LAB ANALYSIS FEES - PORTAGE			544.00	
		590-537.000-952.200	PFAS			4,200.00	
		590-539.000-993.000	AGENT FEES			5.15	
		590-540.000-917.900	WATER PURCHASE CITY OF BRIGHTON			56,651.06	
		854-000.000-993.000	AGENT FEES			494.85	
		855-000.000-802.000	ROAD IMPROVEMENT			183,868.63	
		858-000.000-826.000	LEGAL FEES			1,360.00	
		870-000.000-802.000	ROAD IMPROVEMENT			13,473.00	

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
A2ZLWNSERV	A2Z LAWN SERVICES, LLC	07/09/2025	003357	GEN	CEMETERY MOWING AND TRIMMING JUNE 25	
81312	2531 JACKSON AVE SUITE 336	07/15/2025		N		5,350.00
07/01/2025	ANN ARBOR MI, 48103	/ /	0.0000	N		0.00
		07/15/2025		Y		5,350.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-567.000-801.000	CONTRACTUAL SERVICES	5,350.00

VENDOR TOTAL: 5,350.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
ADVANCAUTO	ADVANCE AUTO PARTS	07/09/2025	2749-525866	GEN	WWTP ROLOC DISK	
81313	P.O. BOX 404875	07/15/2025		N		45.25
06/24/2025	ATLANTA GA, 30384-4875	/ /	0.0000	N		0.00
		07/15/2025		Y		45.25
Open						

GL NUMBER	DESCRIPTION	AMOUNT
590-537.000-931.000	EQUIPMENT MAINT/REPAIR	45.25

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
ADVANCAUTO	ADVANCE AUTO PARTS	07/09/2025	2749-526343	GEN	PD GENERATOR BATTERY	
81416	P.O. BOX 404875	07/15/2025		N		167.69
07/03/2025	ATLANTA GA, 30384-4875	/ /	0.0000	N		0.00
		07/15/2025		Y		167.69
Open						

GL NUMBER	DESCRIPTION	AMOUNT
207-000.000-930.002	MAINTENANCE POLICE BUILDING	167.69

VENDOR TOTAL: 212.94

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
ADVANCED02	ADVANCED WATER TREATMENT, INC.	07/09/2025	59936350	GEN	WWTP BOTTLED WATER (1)	
81314	PO BOX 339	07/15/2025		N		5.99
06/25/2025	HAMBURG MI, 48139	/ /	0.0000	N		0.00
		07/15/2025		N		5.99
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
590-537.000-752.000	SUPPLIES & SMALL EQUIPMENT				5.99	
ADVANCED02	ADVANCED WATER TREATMENT, INC.	07/09/2025	59937776	GEN	DPW BOTTLED WATER (4)	
81315	PO BOX 339	07/15/2025		N		23.96
06/25/2025	HAMBURG MI, 48139	/ /	0.0000	N		0.00
		07/15/2025		N		23.96
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
590-527.000-752.000	SUPPLIES & SMALL EQUIPMENT				23.96	
ADVANCED02	ADVANCED WATER TREATMENT, INC.	07/09/2025	60048345	GEN	TWP BOTTLED WATER (4)	
81316	PO BOX 339	07/15/2025		N		23.96
07/02/2025	HAMBURG MI, 48139	/ /	0.0000	N		0.00
		07/15/2025		N		23.96
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
101-275.000-752.000	SUPPLIES & SMALL EQUIPMENT				23.96	
					VENDOR TOTAL:	53.91

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
ALERUSRETR	ALERUS RETIREMENT SOLUTIONS	07/08/2025	07082025	GEN	457	
81310	P.O. BOX 64535	07/15/2025		N		16,193.33
07/08/2025	SAINT PAUL MN, 55164	/ /	0.0000	N		0.00
		07/15/2025		N		16,193.33

Open

GL NUMBER	DESCRIPTION	AMOUNT
101-000.000-231.500	DEFERRED COMPENSATION/457	16,193.33

ALERUSRETR	ALERUS RETIREMENT SOLUTIONS	07/08/2025	07082025	GEN	401A	
81311	P.O. BOX 64535	07/15/2025		N		16,986.64
07/08/2025	SAINT PAUL MN, 55164	/ /	0.0000	N		0.00
		07/15/2025		N		16,986.64

Open

GL NUMBER	DESCRIPTION	AMOUNT
101-000.000-073.003	RETIREMENT - LIBRARY	1,376.40
101-171.000-716.000	DEFINED CONTRIBUTION	478.49
101-201.000-716.000	DEFINED CONTRIBUTION	1,090.43
101-262.000-716.000	DEFINED CONTRIBUTION	666.98
101-215.000-716.000	DEFINED CONTRIBUTION	879.61
101-228.000-716.000	DEFINED CONTRIBUTION	550.40
101-253.000-716.000	DEFINED CONTRIBUTION	509.39
101-265.000-716.000	DEFINED CONTRIBUTION	580.44
101-702.000-716.000	DEFINED CONTRIBUTION	820.42
101-751.000-716.000	DEFINED CONTRIBUTION	204.36
101-820.000-716.000	DEFINED CONTRIBUTION	339.66
206-000.000-716.000	DEFINED CONTRIBUTION	3,535.97
207-000.000-716.000	DEFINED CONTRIBUTION	3,266.77
590-527.000-716.000	DEFINED CONTRIBUTION	2,687.32
		16,986.64

VENDOR TOTAL: 33,179.97

ALLIEDCONS	ALLIED CONSTRUCTION CO., INC.	07/09/2025	25-0014	GEN	BOB WHITE BEACH NORTH IMPROVEMENT	
81317	9633 NORTHWEST COURT	07/15/2025		N		183,868.63
	P.O. BOX 1290					
06/23/2025	CLARKSTON MI, 48347-1290	/ /	0.0000	N		0.00
		07/15/2025		N		183,868.63

Open

GL NUMBER	DESCRIPTION	AMOUNT
855-000.000-802.000	ROAD IMPROVEMENT	183,868.63

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
					VENDOR TOTAL:	183,868.63
AMAZONCO01	AMAZON CAPITAL SERVICES	07/09/2025	16CT-LJDX-QDR9	GEN	JUNE 2025	
81318	P.O BOX 035184	07/15/2025		N		3,649.14
07/01/2025	SEATTLE WA, 98124-5184	/ /	0.0000	N		0.00
		07/15/2025		N		3,649.14

Open

GL NUMBER	DESCRIPTION	AMOUNT
101-275.000-752.000	SUPPLIES & SMALL EQUIPMENT	13.99
101-000.000-239.000	SENIOR CENTER DONATIONS	684.44
101-000.000-239.300	SENIOR CENTER ACTIVITY FUND	402.04
101-253.000-955.000	SUNDRY	1,549.00
101-275.000-752.000	SUPPLIES & SMALL EQUIPMENT	60.86
101-751.000-967.962	SPECIAL PROJECTS - MISC IMPROVEMENT	130.92
207-000.000-752.000	SUPPLIES & SMALL EQUIPMENT	773.57
590-527.000-752.000	SUPPLIES & SMALL EQUIPMENT	34.32
		3,649.14

	VENDOR TOTAL:	3,649.14

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
AMERICAN02	APPLIED INNOVATION	06/30/2025	2834562	GEN	BASE RATE 05/21-06/20/25	
81417	7718 SOLUTION CENTER	07/15/2025		N		228.90
05/21/2025	CHICAGO IL, 60677-7007	/ /	0.0000	N		0.00
		07/15/2025		N		228.90
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-820.000-801.000	CONTRACTUAL SERVICES	228.90

AMERICAN02	APPLIED INNOVATION	07/09/2025	2860893	GEN	CONTRACT BASE 06/12-07/11/25	
81320	7718 SOLUTION CENTER	07/15/2025		N		835.53
06/20/2025	CHICAGO IL, 60677-7007	/ /	0.0000	N		0.00
		07/15/2025		N		835.53
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-275.000-752.000	SUPPLIES & SMALL EQUIPMENT	835.53

AMERICAN02	APPLIED INNOVATION	07/09/2025	2867467	GEN	CONTRACT BASE 07/05-08/04/25	
81319	7718 SOLUTION CENTER	07/16/2025		N		175.29
07/01/2025	CHICAGO IL, 60677-7007	/ /	0.0000	N		0.00
		07/16/2025		N		175.29
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-275.000-752.000	SUPPLIES & SMALL EQUIPMENT	175.29

VENDOR TOTAL: 1,239.72

AQUAFIX	AQUAFIX	07/09/2025	IN019344	GEN	WWTP MICRO-ANLYSIS	
81321	P.O. BOX 8682	07/15/2025		N		400.00
06/30/2025	MADISON WI, 53708-8682	/ /	0.0000	N		0.00
		07/15/2025		N		400.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
590-537.000-952.000	LAB ANALYSIS - WWTP	400.00

VENDOR TOTAL: 400.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
ATTMOBILIT	AT&T MOBILITY	06/23/2025	X06192025	GEN	PD NEGOT TEAM BRIC BALL SIM CARD SER	
81277	P.O. BOX 6463	07/04/2025	20250477	N		131.37
06/11/2025	CAROL STREAM IL, 60197-6463	/ /	0.0000	N		0.00
		07/04/2025		N		131.37
Open						

GL NUMBER	DESCRIPTION	AMOUNT	AMT RELIEVED
207-000.000-853.000	HAMBURG BRINC BALL	86.04	86.04
207-000.000-853.000	LAPTOP UNLIMITED PLAN	45.33	45.33
		131.37	131.37

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
ATTMOBILIT	AT&T MOBILITY	06/25/2025	X06192025	GEN	PD/FD CELL PHONE CHARGES 05/12-06/11	
81296	P.O. BOX 6463	07/04/2025	20250479	N		787.02
06/11/2025	CAROL STREAM IL, 60197-6463	/ /	0.0000	N		0.00
		07/04/2025		N		787.02
Open						

GL NUMBER	DESCRIPTION	AMOUNT	AMT RELIEVED
207-000.000-853.000	PD CELL PHONE CHARGES	597.17	597.17
206-000.000-853.000	FD CELL PHONE CHARGES	189.85	189.85
		787.02	787.02

VENDOR TOTAL: 918.39

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
ATEAMPWRCL	A-TEAM POWER CLEAN LLC	07/09/2025	0003	GEN	SOCCER FIELD LINE STRIPING SM(18) ME	
81322	7890 VAN RADEN STREET	07/15/2025		N		1,336.00
07/04/2025	PINCKNEY MI, 48169	/ /	0.0000	N		0.00
		07/15/2025		Y		1,336.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-751.000-930.020	SPORTS FIELD MAINTENANCE	1,336.00

VENDOR TOTAL: 1,336.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
BIGBARNE01	BIG BARNEY'S ROAD MAINTENANCE INC.	06/30/2025	4081	GEN	SUMMER HOWELL WINANS DR	
81329		07/15/2025		N		575.00
	PO BOX 483					
06/30/2025	HOWELL MI, 48844-0483	/ /	0.0000	N		0.00
		07/15/2025		Y		575.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
284-000.000-802.000	ROAD IMPROVEMENT	575.00

BIGBARNE01	BIG BARNEY'S ROAD MAINTENANCE INC.	06/30/2025	4082	GEN	SUMMER HOWELL COMMUNITY DR	
81323		07/15/2025		N		325.00
	PO BOX 483					
06/30/2025	HOWELL MI, 48844-0483	/ /	0.0000	N		0.00
		07/15/2025		Y		325.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
276-000.000-802.000	ROAD IMPROVEMENT	325.00

BIGBARNE01	BIG BARNEY'S ROAD MAINTENANCE INC.	06/30/2025	4083	GEN	SUMMER HOWELL RIVERSIDE, CENTURY, LA	
81328		07/15/2025		N		2,400.00
	PO BOX 483					
06/30/2025	HOWELL MI, 48844-0483	/ /	0.0000	N		0.00
		07/15/2025		Y		2,400.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
279-000.000-802.000	ROAD IMPROVEMENT	2,400.00

BIGBARNE01	BIG BARNEY'S ROAD MAINTENANCE INC.	06/30/2025	4103	GEN	SUMMER HOWELL KINGSTON DR AREA	
81326		07/15/2025		N		1,200.00
	PO BOX 483					
06/30/2025	HOWELL MI, 48844-0483	/ /	0.0000	N		0.00
		07/15/2025		Y		1,200.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
283-000.000-802.000	ROAD IMPROVEMENT	1,200.00

BIGBARNE01	BIG BARNEY'S ROAD MAINTENANCE INC.	06/30/2025	4104	GEN	SUMMER HOWELL CAMPBELL DR	
81325		07/15/2025		N		250.00
	PO BOX 483					
06/30/2025	HOWELL MI, 48844-0483	/ /	0.0000	N		

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
		07/15/2025		Y		250.00
Open						
GL NUMBER	DESCRIPTION			AMOUNT		
281-000.000-802.000	ROAD IMPROVEMENT			250.00		
BIGBARNE01	BIG BARNEY'S ROAD MAINTENANCE INC.	06/30/2025	4105	GEN	SUMMER HOWELL SCOTT DR	
81327		07/15/2025		N		300.00
	PO BOX 483					
06/30/2025	HOWELL MI, 48844-0483	/ /	0.0000	N		0.00
		07/15/2025		Y		300.00
Open						
GL NUMBER	DESCRIPTION			AMOUNT		
273-000.000-802.000	ROAD IMPROVEMENT			300.00		
BIGBARNE01	BIG BARNEY'S ROAD MAINTENANCE INC.	07/09/2025	4114	GEN	SUMMER HOWELL-ISLAND SHORE & SCHLENK	
81324		07/15/2025		N		1,100.00
	PO BOX 483					
07/03/2025	HOWELL MI, 48844-0483	/ /	0.0000	N		0.00
		07/15/2025		Y		1,100.00
Open						
GL NUMBER	DESCRIPTION			AMOUNT		
280-000.000-802.000	ROAD IMPROVEMENT			1,100.00		
					VENDOR TOTAL:	6,150.00
BOBMAXFORD	BOB MAXEY FORD OF HOWELL, INC.	06/30/2025	296667	GEN	B&G STEERING REP FORD F350 50068	
81330		07/15/2025		N		612.54
	2798 E. GRAND RIVER AVE.					
06/27/2025	HOWELL MI, 48843-8545	/ /	0.0000	N		0.00
		07/15/2025		N		612.54
Open						
GL NUMBER	DESCRIPTION			AMOUNT		
101-265.000-932.000	VEHICLE MAINTENANCE			612.54		
					VENDOR TOTAL:	612.54

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
MYERSEXC01	BOB MYERS EXCAVATING INC	06/30/2025	2024-436	GEN	RIVERSIDE, CENTURY, LAGOON AND RADIA	
81386	8111 HAMMEL ROAD	07/15/2025		N		2,690.00
06/30/2025	BRIGHTON MI, 48116	/ /	0.0000	N		0.00
		07/15/2025		N		2,690.00
Open						
GL NUMBER	DESCRIPTION			AMOUNT		
279-000.000-802.000	ROAD IMPROVEMENT			2,690.00		
MYERSEXC01	BOB MYERS EXCAVATING INC	06/30/2025	2024-438	GEN	ISLAND SHORE & SCHLENKER	
81384	8111 HAMMEL ROAD	07/15/2025		N		750.00
06/30/2025	BRIGHTON MI, 48116	/ /	0.0000	N		0.00
		07/15/2025		N		750.00
Open						
GL NUMBER	DESCRIPTION			AMOUNT		
280-000.000-802.000	ROAD IMPROVEMENT			750.00		
MYERSEXC01	BOB MYERS EXCAVATING INC	06/30/2025	2024-439	GEN	KINGSTON DR AREA	
81385	8111 HAMMEL ROAD	07/15/2025		N		1,250.00
06/30/2025	BRIGHTON MI, 48116	/ /	0.0000	N		0.00
		07/15/2025		N		1,250.00
Open						
GL NUMBER	DESCRIPTION			AMOUNT		
283-000.000-802.000	ROAD IMPROVEMENT			1,250.00		
MYERSEXC01	BOB MYERS EXCAVATING INC	06/30/2025	2024-440	GEN	SCOTT DR	
81387	8111 HAMMEL ROAD	07/15/2025		N		350.00
06/30/2025	BRIGHTON MI, 48116	/ /	0.0000	N		0.00
		07/15/2025		N		350.00
Open						
GL NUMBER	DESCRIPTION			AMOUNT		
273-000.000-802.000	ROAD IMPROVEMENT			350.00		
MYERSEXC01	BOB MYERS EXCAVATING INC	06/30/2025	2024-442	GEN	WINANS DR	
81381	8111 HAMMEL ROAD	07/15/2025		N		475.00
06/30/2025	BRIGHTON MI, 48116	/ /	0.0000	N		0.00
		07/15/2025		N		475.00
Open						
GL NUMBER	DESCRIPTION			AMOUNT		
284-000.000-802.000	ROAD IMPROVEMENT			475.00		

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
MYERSEXC01	BOB MYERS EXCAVATING INC	06/30/2025	2024-443	GEN	COMMUNITY DR	
81380	8111 HAMMEL ROAD	07/15/2025		N		300.00
06/30/2025	BRIGHTON MI, 48116	/ /	0.0000	N		0.00
		07/15/2025		N		300.00
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
276-000.000-802.000	ROAD IMPROVEMENT				300.00	
MYERSEXC01	BOB MYERS EXCAVATING INC	06/30/2025	2024-444	GEN	CAMPBELL DR	
81382	8111 HAMMEL ROAD	07/15/2025		N		325.00
06/30/2025	BRIGHTON MI, 48116	/ /	0.0000	N		0.00
		07/15/2025		N		325.00
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
281-000.000-802.000	ROAD IMPROVEMENT				325.00	
					VENDOR TOTAL:	6,140.00
C&ECONTR01	C & E CONSTRUCTION CO., INC.	06/30/2025	3071	GEN	GRINDER PUMP REPLACEMENT 8251 HILLPO	
81333	P.O. BOX 1359	07/15/2025		N		5,397.00
06/26/2025	HIGHLAND MI, 48357	/ /	0.0000	N		0.00
		07/15/2025		N		5,397.00
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
590-527.000-934.200	GRINDER PUMP REPLACEMENT				5,397.00	
C&ECONTR01	C & E CONSTRUCTION CO., INC.	06/30/2025	3072	GEN	GRINDER PUMP INSTALLATION 6335 PINEM	
81332	P.O. BOX 1359	07/15/2025		N		5,005.77
06/26/2025	HIGHLAND MI, 48357	/ /	0.0000	N		0.00
		07/15/2025		N		5,005.77
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
590-000.000-198.083	6335 PINEMONT DR 1501101036				5,005.77	
					VENDOR TOTAL:	10,402.77

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
CHARTERC01	CHARTER COMMUNICATIONS	07/09/2025	005447501070125	GEN	PD SPECTRUM CABLE MONTHLY CHARGES 07	
81335	PO BOX 223085	07/15/2025	20250501	N		261.48
07/01/2025	PITTSBURGH PA, 15251-2085	/ /	0.0000	N		0.00
		07/15/2025		N		261.48
Open						

GL NUMBER	DESCRIPTION	AMOUNT	AMT RELIEVED
207-000.000-853.000	JUNE 2025 CABLE BILL	261.48	261.48

CHARTERC01	CHARTER COMMUNICATIONS	06/30/2025	0103913062225	GEN	SEN CTR 06/22-07/21/2025	
81336	PO BOX 223085	07/15/2025		N		177.36
06/22/2025	PITTSBURGH PA, 15251-2085	/ /	0.0000	N		0.00
		07/15/2025		N		177.36
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-820.000-853.000	PHONE/COMM/INTERNET	177.36

VENDOR TOTAL:	438.84

CHLORIDESO	CHLORIDE SOLUTIONS, LLC	06/30/2025	HAM062725	GEN	DUST CONTROL CHAMBERS/RICHARDSON	
81340	672 N. M-52	07/15/2025		N		2,413.20
06/27/2025	WEBBERVILLE MI, 48892	/ /	0.0000	N		0.00
		07/15/2025		Y		2,413.20
Open						

GL NUMBER	DESCRIPTION	AMOUNT
204-000.000-805.000	CHLORIDING	2,413.20

CHLORIDESO	CHLORIDE SOLUTIONS, LLC	07/09/2025	HAM070525	GEN	DUST CONTROL-MERRILL, SCHAFER, CHAMB	
81337	672 N. M-52	07/15/2025		N		3,339.51
07/05/2025	WEBBERVILLE MI, 48892	/ /	0.0000	N		0.00
		07/15/2025		Y		3,339.51
Open						

GL NUMBER	DESCRIPTION	AMOUNT
204-000.000-805.000	CHLORIDING	3,339.51

VENDOR TOTAL:	5,752.71

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
BRIGHTON01	CITY OF BRIGHTON	06/30/2025	06302025	GEN	004738-000 04/01-06/30/25	
81338	200 N. FIRST ST.	07/15/2025		N		11,733.72
06/30/2025	BRIGHTON MI, 48116	/ /	0.0000	N		0.00
		07/15/2025		N		11,733.72
Open						

GL NUMBER	DESCRIPTION	AMOUNT
590-540.000-917.900	WATER PURCHASE CITY OF BRIGHTON	11,733.72

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
BRIGHTON01	CITY OF BRIGHTON	06/30/2025	06302025	GEN	003055-000 04/01-06/30/25	
81339	200 N. FIRST ST.	07/15/2025		N		44,917.34
06/30/2025	BRIGHTON MI, 48116	/ /	0.0000	N		0.00
		07/15/2025		N		44,917.34
Open						

GL NUMBER	DESCRIPTION	AMOUNT
590-540.000-917.900	WATER PURCHASE CITY OF BRIGHTON	44,917.34

VENDOR TOTAL: 56,651.06

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
CONSUMER01	CONSUMERS ENERGY	06/19/2025	201721005907	GEN	1030 4914 3862 10405 MERRILL 05/14-0	
81262	PO BOX 740309	07/07/2025		N		125.06
	PAYMENT CENTER					
06/10/2025	CINCINNATI OH, 45274-0309	/ /	0.0000	N		0.00
		07/07/2025		N		125.06
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-265.000-921.000	NATURAL GAS/HEAT	125.06

CONSUMER01	CONSUMERS ENERGY	06/19/2025	201721005908	GEN	1030 4914 5248 4320 CORDLEY LAKE 05/	
81264	PO BOX 740309	07/07/2025		N		56.44
	PAYMENT CENTER					
06/10/2025	CINCINNATI OH, 45274-0309	/ /	0.0000	N		0.00
		07/07/2025		N		56.44
Open						

GL NUMBER	DESCRIPTION	AMOUNT
590-527.000-921.000	NATURAL GAS/HEAT	56.44

CONSUMER01	CONSUMERS ENERGY	06/19/2025	201721005909	GEN	1030 4914 7939 WWTP 05/14-06/10/25	
81260	PO BOX 740309	07/07/2025		N		296.20
	PAYMENT CENTER					
06/10/2025	CINCINNATI OH, 45274-0309	/ /	0.0000	N		0.00
		07/07/2025		N		296.20
Open						

GL NUMBER	DESCRIPTION	AMOUNT
590-537.000-921.000	NATURAL GAS/HEAT	296.20

CONSUMER01	CONSUMERS ENERGY	06/16/2025	201987991905	GEN	1000 3979 7285 FD#12 05/10-06/09/202	
81221	PO BOX 740309	07/07/2025		N		153.43
	PAYMENT CENTER					
06/09/2025	CINCINNATI OH, 45274-0309	/ /	0.0000	N		0.00
		07/07/2025		N		153.43
Open						

GL NUMBER	DESCRIPTION	AMOUNT
206-000.000-921.000	NATURAL GAS/HEAT	153.43

CONSUMER01	CONSUMERS ENERGY	06/19/2025	202343954556	GEN	1030 4914 0694 10407 MERRILL 05/14-0	
81263	PO BOX 740309	07/07/2025		N		52.79
	PAYMENT CENTER					
06/10/2025	CINCINNATI OH, 45274-0309	/ /	0.0000	N		

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
		07/07/2025		N		52.79
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
101-820.000-921.000	NATURAL GAS/HEAT				52.79	
CONSUMER01	CONSUMERS ENERGY	06/19/2025	202343954557	GEN	10675 MERRILL 05/14-06/10/2025	
81261	PO BOX 740309	07/07/2025		N		28.07
	PAYMENT CENTER					
06/10/2025	CINCINNATI OH, 45274-0309	/ /	0.0000	N		0.00
		07/07/2025		N		28.07
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
101-265.000-921.000	NATURAL GAS/HEAT				28.07	
CONSUMER01	CONSUMERS ENERGY	06/19/2025	202343954558	GEN	1030 4914 1148 9251 REGENCY 05/14-06	
81265	PO BOX 740309	07/07/2025		N		19.83
	PAYMENT CENTER					
06/10/2025	CINCINNATI OH, 45274-0309	/ /	0.0000	N		0.00
		07/07/2025		N		19.83
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
590-527.000-921.000	NATURAL GAS/HEAT				19.83	
CONSUMER01	CONSUMERS ENERGY	06/19/2025	202343954559	GEN	1030 4914 1155 10675 MERRILL 05/14-0	
81267	PO BOX 740309	07/07/2025		N		30.82
	PAYMENT CENTER					
06/10/2025	CINCINNATI OH, 45274-0309	/ /	0.0000	N		0.00
		07/07/2025		N		30.82
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
101-265.000-921.000	NATURAL GAS/HEAT				30.82	
CONSUMER01	CONSUMERS ENERGY	06/19/2025	202343954560	GEN	1030 4914 1213 6400 E M-36 05/14-06/	
81268	PO BOX 740309	07/07/2025		N		18.92
	PAYMENT CENTER					
06/10/2025	CINCINNATI OH, 45274-0309	/ /	0.0000	N		0.00
		07/07/2025		N		18.92
Open						
GL NUMBER	DESCRIPTION				AMOUNT	

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
590-527.000-921.000	NATURAL GAS/HEAT				18.92	
CONSUMER01	CONSUMERS ENERGY	06/19/2025	202343954561	GEN	1030 4914 2971 PD 05/14-06/10/25	
81266	PO BOX 740309	07/07/2025		N		77.30
	PAYMENT CENTER					
06/10/2025	CINCINNATI OH, 45274-0309	/ /	0.0000	N		0.00
		07/07/2025		N		77.30
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
207-000.000-921.000	NATURAL GAS/HEAT				77.30	
CONSUMER01	CONSUMERS ENERGY	06/16/2025	204924649602	GEN	1030 4914 5271 6414 WINANS 05/13-06/	
81231	PO BOX 740309	07/07/2025		N		21.66
	PAYMENT CENTER					
06/09/2025	CINCINNATI OH, 45274-0309	/ /	0.0000	N		0.00
		07/07/2025		N		21.66
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
590-527.000-921.000	NATURAL GAS/HEAT				21.66	
					VENDOR TOTAL:	880.52
CORRIGAN01	CORRIGAN TOWING	06/30/2025	8400581-IN	GEN	DYED ULTRA LOW SULFUR	
81341	775 N. SECOND STREET	07/15/2025		N		495.00
06/17/2025	BRIGHTON MI, 48116	/ /	0.0000	N		0.00
		07/15/2025		N		495.00
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
101-800.000-938.000	LAKELAND TRAIL MAINTENANCE				165.00	
101-265.000-758.000	DIESEL FUEL				165.00	
101-751.000-758.000	DIESEL FUEL				165.00	
					495.00	
					VENDOR TOTAL:	495.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
CUMMINSBD1 81342 07/01/2025	CUMMINS SALES AND SERVICE P.O. BOX 772639 DETROIT MI, 48277-2639	07/09/2025 07/15/2025 / / 07/15/2025	S6-250744082 0.0000	GEN N N Y	DPW KOHLER GEN REP	524.13 0.00 524.13
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
590-527.000-934.100	PUMP & MAIN REPAIR/MAINTENANCE				524.13	
					VENDOR TOTAL:	524.13
CUSTTOOL01 81418 07/02/2025	CUSTOM TOOL & MACHINE 603 E. WALNUT STREET OAKWOOD OH, 45873	07/09/2025 07/15/2025 / / 07/15/2025	3075 0.0000	GEN N N Y	E-ONE CASTINGS (9)/PUMP HEADS (12)	2,565.00 0.00 2,565.00
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
590-527.000-751.100	GRINDER PUMP PARTS				2,565.00	
					VENDOR TOTAL:	2,565.00
DETROITE02 81177 05/31/2025	DTE ENERGY - STREET LIGHTS PO BOX 740786 CINCINNATI OH, 45274-0786	06/09/2025 07/10/2025 / / 07/10/2025	200415615799 0.0000	GEN N N N	9100 4056 2340 STREET LIGHTS	1,579.63 0.00 1,579.63
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
101-448.000-926.000	STREET LIGHTING				1,579.63	
					VENDOR TOTAL:	1,579.63

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
DUBOISCO01	DUBOIS-COOPER & ASSOCIATES	07/09/2025	294441	GEN	DPW VALVE ASSY(3)/SUPPORT PLATE (3)/	
81420		07/15/2025		N		3,894.00
	PO BOX 6161					
07/07/2025	PLYMOUTH MI, 48170	/ /	0.0000	N		0.00
		07/15/2025		Y		3,894.00
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
590-527.000-751.100	GRINDER PUMP PARTS				3,894.00	
DUBOISCO01	DUBOIS-COOPER & ASSOCIATES	07/09/2025	294732	GEN	DPW MOTOR CONTROL BD(10)/MCB ADAPT(1	
81419		07/15/2025		N		7,240.00
	PO BOX 6161					
07/07/2025	PLYMOUTH MI, 48170	/ /	0.0000	N		0.00
		07/15/2025		Y		7,240.00
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
590-527.000-751.100	GRINDER PUMP PARTS				7,240.00	
					VENDOR TOTAL:	11,134.00
EASTMICHIG	EAST MICHIGAN FC	06/30/2025	06262025	GEN	SPRING 2025 SEASON SCHOLARSHIP	
81344	5574 RICHARDSON RD.	07/15/2025		N		150.00
06/26/2025	HOWELL MI, 48843	/ /	0.0000	N		0.00
		07/15/2025		N		150.00
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
101-000.000-239.400	EVERY CHILD SHALL PLAY SCHOLARSHIP				150.00	
					VENDOR TOTAL:	150.00
EDBOCKFE01	ED BOCK FEEDS & STUFF, L.L.C.	06/30/2025	619534	GEN	DPW HYDRATED LIME	
81331	1360 EAST M-36	07/15/2025		N		79.96
06/20/2025	PINCKNEY MI, 48169	/ /	0.0000	N		0.00
		07/15/2025		Y		79.96
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
590-527.000-752.000	SUPPLIES & SMALL EQUIPMENT				79.96	
					VENDOR TOTAL:	7

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
ELECTROCYC	ELECTROCYCLE, INC.	07/09/2025	65425	GEN	ONSITE DESTRUCTION (2) 95 GAL TOTERS	
81421	23953 RESEARCH DR.	07/15/2025		N		53.00
07/01/2025	FARMINGTON HILLS MI, 48335	/ /	0.0000	N		0.00
		07/15/2025		N		53.00

Open

GL NUMBER	DESCRIPTION	AMOUNT
101-275.000-955.000	SUNDRY	53.00

VENDOR TOTAL: 53.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
FASTENAL01	FASTENAL COMPANY	06/30/2025	NIDE6172149	GEN	DPW 10-24X1 (100)/ 10-24 S/S NUT (10	
81345	P.O. BOX 1286	07/15/2025		N		61.60
06/27/2025	WINONA MN, 55987-1286	/ /	0.0000	N		0.00
		07/15/2025		Y		61.60

Open

GL NUMBER	DESCRIPTION	AMOUNT
590-527.000-752.000	SUPPLIES & SMALL EQUIPMENT	61.60

VENDOR TOTAL: 61.60

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
GANNETMI02	GANNETT MICHIGAN LOCALIQ	06/30/2025	0007184379	GEN	LEGAL ADS 06/01-06/30/25	
81346	PO BOX 630491	07/15/2025		N		1,717.30
06/30/2025	CINCINNATI OH, 45263-0491	/ /	0.0000	N		0.00
		07/15/2025		Y		1,717.30

Open

GL NUMBER	DESCRIPTION	AMOUNT
286-000.000-900.000	LEGAL NOTICES/ADVERTISING	1,031.32
101-101.000-900.000	LEGAL NOTICES/ADVERTISING	240.64
101-702.000-900.000	LEGAL NOTICES/ADVERTISING	159.78
101-101.000-900.000	LEGAL NOTICES/ADVERTISING	285.56
		1,717.30

VENDOR TOTAL: 1,717.30

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
HAMBURGHAR	HAMBURG HARDWARE	06/30/2025	06302025	GEN	JUNE 2025	
81347	6458 M-36	07/15/2025		N		998.56
06/30/2025	WHITMORE LAKE MI, 48189	/ /	0.0000	N		0.00
		07/15/2025		N		998.56

Open

GL NUMBER	DESCRIPTION	AMOUNT
207-000.000-752.000	SUPPLIES & SMALL EQUIPMENT	16.27
206-000.000-752.000	SUPPLIES & SMALL EQUIPMENT	180.27
101-265.000-752.000	SUPPLIES & SMALL EQUIPMENT	550.47
590-527.000-752.000	SUPPLIES & SMALL EQUIPMENT	110.80
590-537.000-752.000	SUPPLIES & SMALL EQUIPMENT	19.99
101-751.000-943.000	TOWNSHIP COMMUNITY EVENTS	86.31
101-215.000-955.000	SUNDRY	6.49
101-820.000-955.000	SUNDRY	27.96
		998.56

VENDOR TOTAL: 998.56

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
HAMBURGT02	HAMBURG TOWNSHIP TREASURER	06/30/2025	06302025	GEN	WEST BENNETT PARK 04/01-06/30/25	
81348		07/15/2025		N		167.00
06/30/2025	,	/ /	0.0000	N		0.00
		07/15/2025		N		167.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-751.000-917.000	SEWER USAGE	167.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
HAMBURGT02	HAMBURG TOWNSHIP TREASURER	06/30/2025	06302025	GEN	SEN CTR 04/01-06/30/25	
81349		07/15/2025		N		470.94
06/30/2025	,	/ /	0.0000	N		0.00
		07/15/2025		N		470.94
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-820.000-917.000	SEWER USAGE	470.94

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
HAMBURGT02	HAMBURG TOWNSHIP TREASURER	06/30/2025	06302025	GEN	PACKER STATION 04/01-06/30/25	
81350		07/15/2025		N		167.00
06/30/2025	,	/ /	0.0000	N		0.00
		07/15/2025		N		167.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-265.000-917.000	SEWER USAGE	167.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
HAMBURGT02	HAMBURG TOWNSHIP TREASURER	06/30/2025	06302025	GEN	FD #12 04/01-06/30/25	
81351		07/15/2025		N		668.00
06/30/2025	,	/ /	0.0000	N		0.00
		07/15/2025		N		668.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
206-000.000-917.000	SEWER USAGE	668.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
HAMBURGT02	HAMBURG TOWNSHIP TREASURER	06/30/2025	06302025	GEN	PD 04/01-06/30/25	
81352		07/15/2025		N		1,185.70
06/30/2025	,	/ /	0.0000	N		0.00
		07/15/2025		N		1,185.70
Open						

GL NUMBER	DESCRIPTION	AMOUNT
207-000.000-917.000	SEWER USAGE	1,185.70

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
HAMBURGT02	HAMBURG TOWNSHIP TREASURER	06/30/2025	06302025	GEN	TWP 04/01-06/30/25	
81353		07/15/2025		N		1,035.40
06/30/2025	,	/ /	0.0000	N		0.00
		07/15/2025		N		1,035.40
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-265.000-917.000	SEWER USAGE	1,035.40

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
HAMBURGT02	HAMBURG TOWNSHIP TREASURER	07/09/2025	07012025	GEN	STAX 4715-13-305-058	
81354		07/15/2025		N		269.62
07/01/2025	,	/ /	0.0000	N		0.00
		07/15/2025		N		269.62
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-275.000-955.000	SUNDRY	269.62

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
HAMBURGT02	HAMBURG TOWNSHIP TREASURER	07/09/2025	07012025	GEN	STAX 4715-25-101-088	
81355		07/15/2025		N		140.94
07/01/2025	,	/ /	0.0000	N		0.00
		07/15/2025		N		140.94
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-275.000-955.000	SUNDRY	140.94

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
HAMBURGT02	HAMBURG TOWNSHIP TREASURER	07/09/2025	07012025	GEN	STAX 4715-23-306-108	
81356		07/15/2025		N		46.35
07/01/2025	,	/ /	0.0000	N		0.00
		07/15/2025		N		46.35
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-275.000-955.000	SUNDRY	46.35

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
HAMBURGT02	HAMBURG TOWNSHIP TREASURER	07/09/2025	07012025	GEN	STAX 4715-13-305-061	
81357		07/15/2025		N		371.11
07/01/2025	,	/ /	0.0000	N		0.00
		07/15/2025		N		371.11
Open						

GL NUMBER	DESCRIPTION	AMOUNT

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
101-275.000-955.000	SUNDRY				371.11	
					VENDOR TOTAL:	4,522.06
PETTYSRC01	HAMBURG TWP-SC-PETTY CASH	06/30/2025	06302025	GEN	SEN CTR REPLENISH PETTY CASH	
81393		07/15/2025		N		154.43
06/30/2025	,	/ /	0.0000	N		0.00
		07/15/2025		N		154.43
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
101-000.000-239.300	SENIOR CENTER ACTIVITY FUND				154.43	
					VENDOR TOTAL:	154.43
PETTYPOL01	HAMBURG-PD PETTY CASH	06/30/2025	06302025	GEN	PD PETTY CASH REPLENISH	
81334		07/15/2025		N		100.96
06/30/2025	,	/ /	0.0000	N		0.00
		07/15/2025		N		100.96
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
207-000.000-851.000	POSTAGE				6.10	
207-000.000-967.000	SPECIAL PROJECTS				89.78	
207-000.000-752.000	SUPPLIES & SMALL EQUIPMENT				5.08	
					100.96	
					VENDOR TOTAL:	100.96
USABLUEB01	HD SUPPLY, INC.	06/30/2025	INV00746794	GEN	WWTP HACH NITRITE 25 PK/HACH NITRATE	
81409	PO BOX 9004	07/15/2025		N		740.33
06/23/2025	GURNEE IL, 60031	/ /	0.0000	N		0.00
		07/15/2025		N		740.33
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
590-537.000-752.000	SUPPLIES & SMALL EQUIPMENT				740.33	
					VENDOR TOTAL:	740.33

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
HIGHTREATM	HIGHLAND TREATMENT INC	07/09/2025	153130	GEN	JULY 2025 BACTERIAL SAMPLING	
81362	P.O. BOX 1089	07/15/2025		N		180.00
07/01/2025	HIGHLAND MI, 48357-1089	/ /	0.0000	N		0.00
		07/15/2025		N		180.00

Open

GL NUMBER	DESCRIPTION	AMOUNT
101-265.000-930.000	MAINTENANCE TWP HALL	60.00
207-000.000-930.002	MAINTENANCE POLICE BUILDING	60.00
101-265.000-930.008	MAINTENANCE LIBRARY	60.00
		180.00

VENDOR TOTAL: 180.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
EMERGENC06	HOLLAND MOTOR HOMES & BUS CO	06/30/2025	021987	GEN	FD - VEH MAINTENANCE PARTS #021987	
81343	DBA EMERGENCY VEHICLES PLUS	07/15/2025	20250485	N		383.64
	670 E. 16TH STREET					
06/30/2025	HOLLAND MI, 49423	/ /	0.0000	N		0.00
		07/15/2025		Y		383.64

Open

GL NUMBER	DESCRIPTION	AMOUNT	AMT RELIEVED
206-000.000-932.000	2.5 TON BLOCK EXPANSION VALVE	133.22	133.22
206-000.000-932.000	TEE FLOW DRIER 3/8" T7	124.10	124.10
206-000.000-932.000	HI/LO PRESSURE SWITCH	99.20	99.20
206-000.000-932.000	FREIGHT CHARGE	27.12	27.12
		383.64	383.64

VENDOR TOTAL: 383.64

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
HUNTINGTON	HUNTINGTON NATIONAL BANK	06/30/2025	74573	GEN	ACCT#3584259801 ANNUAL ADMIN FEE SP	
81423	PO BOX 1558-GW4E64	07/15/2025		N		500.00
06/01/2025	COLUMBUS OH, 43216	/ /	0.0000	N		0.00
		07/15/2025		N		500.00

Open

GL NUMBER	DESCRIPTION	AMOUNT
590-539.000-993.000	AGENT FEES	5.15
854-000.000-993.000	AGENT FEES	494.85
		500.00

VENDOR TOTAL: 50

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
HURONRIV01	HURON RIVER WATERSHED COUNCIL	06/30/2025	2025.01.056	GEN	2025 MEMBERSHIP DUES	
81363	117 N.1ST ST STE 100	07/15/2025		N		2,093.70
06/18/2025	ANN ARBOR MI, 48104	/ /	0.0000	N		0.00
		07/15/2025		N		2,093.70
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-101.000-958.000	DUES/SUBSCRIP/RECERTIFICATION	2,093.70

VENDOR TOTAL: 2,093.70

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
IMEGCORP#1	IMEG CONSULTANTS CORP	07/09/2025	23008696.00-3	GEN	ORCHARD VILLAGE ROAD REVIEW	
81358	ATTN: ACCOUNTS RECEIVABLE PO BOX 182094	07/15/2025		N		195.00
07/08/2025	COLUMBUS OH, 43218	/ /	0.0000	N		0.00
		07/15/2025		Y		195.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-000.000-279.980	ORCHARD VILLAGE SUBDIVISION SAD	195.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
IMEGCORP#1	IMEG CONSULTANTS CORP	07/09/2025	23008696.02-2	GEN	FOX POINT BEACH ROAD REVIEW	
81359	ATTN: ACCOUNTS RECEIVABLE PO BOX 182094	07/15/2025		N		292.50
07/08/2025	COLUMBUS OH, 43218	/ /	0.0000	N		0.00
		07/15/2025		Y		292.50
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-000.000-279.977	FOX POINT BEACH SUBDIVISION	292.50

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
IMEGCORP#1	IMEG CONSULTANTS CORP	07/09/2025	23008696.03-2	GEN	FOREST CREEK COURT ROAD REVIEW	
81360	ATTN: ACCOUNTS RECEIVABLE PO BOX 182094	07/15/2025		N		585.00
07/08/2025	COLUMBUS OH, 43218	/ /	0.0000	N		0.00
		07/15/2025		Y		585.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-000.000-279.973	FOREST CREEK COURT SAD	585.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
IMEGCORP#1	IMEG CONSULTANTS CORP	07/09/2025	23008696.07-2	GEN	RIVER RUN ROAD REVIEW	
81361	ATTN: ACCOUNTS RECEIVABLE PO BOX 182094	07/15/2025		N		195.00
07/08/2025	COLUMBUS OH, 43218	/ /	0.0000	N		0.00
		07/15/2025		Y		195.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-000.000-279.986	RIVER RUN SUBDIVISION RD IM SAD	195.00

VENDOR TOTAL: 1,267.50

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
KENTCOMMNC	KCI	06/30/2025	348148	GEN	TREASURY SUMMER TAX BILLS 2025	
81364	3901 EAST PARIS AVE. S.E.	07/15/2025		N		2,578.54
06/30/2025	GRAND RAPIDS MI, 49512	/ /	0.0000	N		0.00
		07/15/2025		Y		2,578.54
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-253.000-851.000	POSTAGE	2,578.54

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
KENTCOMMNC	KCI	06/30/2025	348523	GEN	OTH APRIL MAY JUNE UB BILLS	
81422	3901 EAST PARIS AVE. S.E.	07/15/2025		N		397.48
06/30/2025	GRAND RAPIDS MI, 49512	/ /	0.0000	N		0.00
		07/15/2025		Y		397.48
Open						

GL NUMBER	DESCRIPTION	AMOUNT
590-527.000-851.000	POSTAGE	397.48

VENDOR TOTAL: 2,976.02

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
KINGKLEA01	KING KLEANERS	06/30/2025	07012025	GEN	PD UNIFORM CLEANING JUNE 2025 CHARGE	
81365	5589 E. M-36 SUITE B3	07/15/2025	20250502	N		326.00
06/30/2025	PINCKNEY MI, 48169	/ /	0.0000	N		0.00
		07/15/2025		Y		326.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT	AMT RELIEVED
207-000.000-768.500	UNIFORM CLEANING JUNE CHARGES	326.00	326.00

KINGKLEA01	KING KLEANERS	06/30/2025	07012025	GEN	FD - STA 11 DRY CLEANING JUNE 2025	
81366	5589 E. M-36 SUITE B3	07/15/2025	20250495	N		58.00
06/30/2025	PINCKNEY MI, 48169	/ /	0.0000	N		0.00
		07/15/2025		Y		58.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT	AMT RELIEVED
206-000.000-768.000	STA 11 DRY CLEANING JUNE 2025	58.00	58.00

KINGKLEA01	KING KLEANERS	06/30/2025	07012025	GEN	FD - STA 12 DRY CLEANING JUNE 2025	
81367	5589 E. M-36 SUITE B3	07/15/2025	20250496	N		265.00
06/30/2025	PINCKNEY MI, 48169	/ /	0.0000	N		0.00
		07/15/2025		Y		265.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT	AMT RELIEVED
206-000.000-768.000	STA 12 DRY CLEANING JUNE 2025	265.00	265.00

VENDOR TOTAL: 649.00

LAKELAND01	LAKELAND ACE HARDWARE, INC.	06/19/2025	13267	GEN	FD - OIL CHANGE FOR SMOKE HOUSE GENE	
81241	PO BOX 1000	07/15/2025	20250467	N		13.98
06/16/2025	PINCKNEY MI, 48169	/ /	0.0000	N		0.00
		07/15/2025		N		13.98
Open						

GL NUMBER	DESCRIPTION	AMOUNT	AMT RELIEVED
206-000.000-931.000	OIL CHANGE SMOKE HOUSE GENERATOR	13.98	13.98

VENDOR TOTAL: 1

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
LAKESIDESV	LAKESIDE SERVICE COMPANY	06/30/2025	218832272	GEN	WWTP MINI SPLIT REPAIR	
81368	4367 S. OLD US HWY 23	07/15/2025		N		332.00
06/30/2025	BRIGHTON MI, 48114	/ /	0.0000	N		0.00
		07/15/2025		Y		332.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
590-537.000-930.007	BUILDING MAINTENANCE - WWTP	332.00

VENDOR TOTAL: 332.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
LIVINGST16	LIVINGSTON CO. DRAIN COMMISSIONER	06/30/2025	3989	GEN	PHASE II IMPLEMENTATION LIV CO WATER	
81369	2300 E. GRAND RIVER	07/15/2025		N		225.12
	SUITE 105					
06/24/2025	HOWELL MI, 48843-7581	/ /	0.0000	N		0.00
		07/15/2025		N		225.12
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-703.000-967.000	SPECIAL PROJECTS	225.12

VENDOR TOTAL: 225.12

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
LIVINGST12	LIVINGSTON COUNTY REGISTER OF DEEDS	06/30/2025	06302025	GEN	EASEMENT GRANT FLANERY	
81370	200 E. GRAND RIVER AVE.	07/15/2025		N		30.00
	SUITE 3					
06/30/2025	HOWELL MI, 48843	/ /	0.0000	N		0.00
		07/15/2025		N		30.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
590-527.000-955.000	SUNDRY	30.00

VENDOR TOTAL: 30.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
LIVINGST09	LIVINGSTON COUNTY ROAD COMMISSION	06/30/2025	7402	GEN	789.07.5187BW BUHL DRIVE SINGLE CHIP	
81371		07/15/2025		N		13,473.00
	3535 GRAND OAKS DRIVE					
06/30/2025	HOWELL MI, 48843	/ /	0.0000	N		0.00
		07/15/2025		N		13,473.00
Open						
GL NUMBER	DESCRIPTION			AMOUNT		
870-000.000-802.000	ROAD IMPROVEMENT			13,473.00		
LIVINGST09	LIVINGSTON COUNTY ROAD COMMISSION	06/30/2025	7403	GEN	489.07.5139BW PETTYS DOUBLE CHIP SEA	
81375		07/15/2025		N		19,221.53
	3535 GRAND OAKS DRIVE					
06/30/2025	HOWELL MI, 48843	/ /	0.0000	N		0.00
		07/15/2025		N		19,221.53
Open						
GL NUMBER	DESCRIPTION			AMOUNT		
204-000.000-802.000	ROAD IMPROVEMENT			19,221.53		
LIVINGST09	LIVINGSTON COUNTY ROAD COMMISSION	06/30/2025	7404	GEN	459.0018AW WHITEWOOD/SHEHAN DOUBLE C	
81374		07/15/2025		N		80,790.40
	3535 GRAND OAKS DRIVE					
06/30/2025	HOWELL MI, 48843	/ /	0.0000	N		0.00
		07/15/2025		N		80,790.40
Open						
GL NUMBER	DESCRIPTION			AMOUNT		
204-000.000-802.000	ROAD IMPROVEMENT			80,790.40		
LIVINGST09	LIVINGSTON COUNTY ROAD COMMISSION	06/30/2025	7405	GEN	459.0080AW HAMBURG LCRC PORTION DOUB	
81373		07/15/2025		N		25,858.55
	3535 GRAND OAKS DRIVE					
06/30/2025	HOWELL MI, 48843	/ /	0.0000	N		0.00
		07/15/2025		N		25,858.55
Open						
GL NUMBER	DESCRIPTION			AMOUNT		
204-000.000-802.000	ROAD IMPROVEMENT			25,858.55		
LIVINGST09	LIVINGSTON COUNTY ROAD COMMISSION	06/30/2025	7406	GEN	489.07.514BW HALL DOUBLE CHIP SEAL A	
81376		07/15/2025		N		22,171.06
	3535 GRAND OAKS DRIVE					
06/30/2025	HOWELL MI, 48843	/ /	0.0000	N		

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
		07/15/2025		N		22,171.06
Open						

GL NUMBER	DESCRIPTION	AMOUNT
204-000.000-802.000	ROAD IMPROVEMENT	22,171.06

LIVINGST09	LIVINGSTON COUNTY ROAD COMMISSION	06/30/2025	7407	GEN	459.0082AW STRAWBERRY LAKE DOUBLE CH	
81372		07/15/2025		N		96,591.95
	3535 GRAND OAKS DRIVE					
06/30/2025	HOWELL MI, 48843	/ /	0.0000	N		0.00
		07/15/2025		N		96,591.95
Open						

GL NUMBER	DESCRIPTION	AMOUNT
204-000.000-802.000	ROAD IMPROVEMENT	96,591.95

VENDOR TOTAL: 258,106.49

LIVINGST02	LIVINGSTON COUNTY TREASURER	07/09/2025	07092025	GEN	TRAILER FEES REC'D 07.08.25 JUNE 202	
81309	LIVINGSTON COUNTY COURT HOUSE	07/15/2025		N		855.00
	200 E. GRAND RIVER					
07/09/2025	HOWELL MI, 48843-2398	/ /	0.0000	N		0.00
		07/15/2025		N		855.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-000.000-222.100	DUE TO COUNTY TRAILER FEES	684.00
101-000.000-222.100	DUE TO COUNTY TRAILER FEES	171.00
		855.00

VENDOR TOTAL: 855.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
MERITLAB01	MERIT LABORATORIES	06/30/2025	75032	GEN	HAMBURG	
81379	2680 EAST LANSING DRIVE	07/15/2025		N		4,736.00
06/30/2025	EAST LANSING MI, 48823	/ /	0.0000	N		0.00
		07/15/2025		Y		4,736.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
590-537.000-952.200	PFAS	4,200.00
590-537.000-952.000	LAB ANALYSIS - WWTP	536.00
		4,736.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
MERITLAB01	MERIT LABORATORIES	06/30/2025	75033	GEN	PORTAGE LAKE	
81378	2680 EAST LANSING DRIVE	07/15/2025		N		544.00
06/30/2025	EAST LANSING MI, 48823	/ /	0.0000	N		0.00
		07/15/2025		Y		544.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
590-537.000-952.100	LAB ANALYSIS FEES - PORTAGE	544.00

VENDOR TOTAL: 5,280.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
MICHIGANST 81306 07/09/2025	MICHIGAN STATE DISBURSEMENT UNIT P.O. BOX 30350 LANSING MI, 48909-7850	07/09/2025 07/15/2025 / / 07/15/2025	07092025 0.0000	GEN N Y N	CASE# 810013564 PAYROLL 06/16-06/29/	59.08 0.00 59.08
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
101-000.000-228.010	MI CHILD SUPPORT WITHHOLDING				59.08	
MICHIGANST 81307 07/09/2025	MICHIGAN STATE DISBURSEMENT UNIT P.O. BOX 30350 LANSING MI, 48909-7850	07/09/2025 07/15/2025 / / 07/15/2025	07092025 0.0000	GEN N N N	CASE #912854739 PAYROLL 06/16-06/29/	380.46 0.00 380.46
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
101-000.000-228.010	MI CHILD SUPPORT WITHHOLDING				380.46	
MICHIGANST 81308 07/09/2025	MICHIGAN STATE DISBURSEMENT UNIT P.O. BOX 30350 LANSING MI, 48909-7850	07/09/2025 07/15/2025 / / 07/15/2025	07092025 0.0000	GEN N Y N	CASE# 912516502 PAYROLL 06/16-06/29/	625.25 0.00 625.25
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
101-000.000-228.010	MI CHILD SUPPORT WITHHOLDING				625.25	
					VENDOR TOTAL:	1,064.79
MITOWNSH01 81377 07/02/2025	MICHIGAN TOWNSHIPS ASSOCIATION P.O. BOX 80078 LANSING MI, 48908-0078	07/09/2025 07/15/2025 / / 07/15/2025	443110 0.0000	GEN N N N	CLASSIFIED AD0 TREASURER	15.00 0.00 15.00
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
101-253.000-955.000	SUNDRY				15.00	
					VENDOR TOTAL:	15.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
MIDAMERICA	MID AMERICAN AEL, LLC	07/09/2025	01215	GEN	FD - VEH LIGHTS #01215	
81405	1375 RICKETT ROAD	07/15/2025	20250506	N		439.20
07/09/2025	BRIGHTON MI, 48116	/ /	0.0000	N		0.00
		07/15/2025		Y		439.20
Open						

GL NUMBER	DESCRIPTION	AMOUNT	AMT RELIEVED
206-000.000-932.000	600 SERIES SUPER LED, RED W/RED LENS	439.20	439.20

VENDOR TOTAL: 439.20

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
NFPAINTL01	NFPA	07/09/2025	07092025	GEN	FD - NPFA ANNUAL MEMBERSHIP FEES - C	
81388	NATIONAL FIRE PROTECTION ASSOC.	07/15/2025	20250499	N		225.00
	PO BOX 9689					
07/09/2025	MANCHESTER NH, 03108-9689	/ /	0.0000	N		0.00
		07/15/2025		Y		225.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT	AMT RELIEVED
206-000.000-958.000	NFPA MEMBERSHIP FEES, CPT YOST	225.00	225.00

VENDOR TOTAL: 225.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
OFFICEXP01	OFFICE EXPRESS, INC.	06/30/2025	577319	GEN	DESK SIGN-DANIELS	
81389	1280 E BIG BEAVER SUITE A	07/15/2025		N		22.64
06/26/2025	TROY MI, 48083	/ /	0.0000	N		0.00
		07/15/2025		N		22.64
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-275.000-752.000	SUPPLIES & SMALL EQUIPMENT	22.64

VENDOR TOTAL: 22.64

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
OMNISITE01	OMNISITE	07/09/2025	101373	GEN	DPW STANDARD MONITORING SERV	
81390	203 WEST MORRIS STREET	07/15/2025		N		758.00
07/01/2025	INDIANAPOLIS IN, 46225	/ /	0.0000	N		0.00
		07/15/2025		N		758.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
590-527.000-853.000	PHONE/COMM/INTERNET	758.00

VENDOR TOTAL: 758.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
HOHLPATR01	PAT HOHL	06/30/2025	07022025	GEN	REIMBURSE MILAGE 2024-2025	
81391	8207 CHAMBERS	07/15/2025		N		359.58
06/30/2025	PINCKNEY MI, 48169	/ /	0.0000	N		0.00
		07/15/2025		N		359.58
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-171.000-861.000	MILEAGE	359.58

VENDOR TOTAL: 359.58

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
PETTYFIR01	PETTY CASH - FIRE FUND	06/30/2025	06302025	GEN	FD REPLENISH PETTY CASH	
81394		07/15/2025		N		67.85
06/30/2025	,	/ /	0.0000	N		0.00
		07/15/2025		N		67.85
Open						

GL NUMBER	DESCRIPTION	AMOUNT
206-000.000-955.000	SUNDRY	5.86
206-000.000-930.003	MAINTENANCE FIRE HALL	25.00
206-000.000-752.000	SUPPLIES & SMALL EQUIPMENT	36.99
		67.85

VENDOR TOTAL: 67.85

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
POLABORCOU	POLICE OFFICER LABOR COUNCIL	07/09/2025	07022025	GEN	JULY 2025	
81392	EXECUTIVE OFFICES	07/15/2025		N		795.00
	667 E. BIG BEAVER, SUITE 205					
07/03/2025	TROY MI, 48083	/ /	0.0000	N		0.00
		07/15/2025		N		795.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-000.000-231.100	DUE TO UNION DUES	795.00

VENDOR TOTAL: 795.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
PORTTOILTS	PORTABLE TOILET SERVICES LLC	07/09/2025	106297	GEN	07/06-08/02/2025	
81425	4900 MCCARTHY DRIVE	07/15/2025		N		3,837.58
07/06/2025	MILFORD MI, 48381	/ /	0.0000	N		0.00
		07/15/2025		Y		3,837.58

Open

GL NUMBER	DESCRIPTION	AMOUNT
101-800.000-942.000	PORTABLE TOILETS	1,701.96
101-751.000-942.000	PORTABLE TOILETS	2,135.62
		3,837.58

VENDOR TOTAL: 3,837.58

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
PROGRSIVAE	PROGRESSIVE AE, INC.	07/09/2025	00204191	GEN	2023-2032 CONTRACT THROUGH 07/2025	
81395	1811 4 MILE ROAD NE	07/15/2025		N		3,687.50
07/07/2025	GRAND RAPIDS MI, 49525	/ /	0.0000	N		0.00
		07/15/2025		Y		3,687.50

Open

GL NUMBER	DESCRIPTION	AMOUNT
252-000.000-803.000	AQUATIC WEED CONTROL	3,687.50

VENDOR TOTAL: 3,687.50

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
REDMONDJ01	REDMOND ENVIRONMENTAL INC.	07/09/2025	11277	GEN	DPW STATOR W. LINER (25)	
81424	1355 N. 7TH STREET	07/15/2025		N		1,653.85
07/08/2025	LAKE CITY MN, 55041	/ /	0.0000	N		0.00
		07/15/2025		N		1,653.85

Open

GL NUMBER	DESCRIPTION	AMOUNT
590-527.000-751.100	GRINDER PUMP PARTS	1,653.85

VENDOR TOTAL: 1,653.85

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
RESCOM 81396 07/01/2025	RESCOM DOOR LLC 4088 E M 36 PINCKNEY MI, 48169	07/09/2025 07/15/2025 / / 07/15/2025	6411 20250497 0.0000	GEN N N N	FD - STA 12 REPAIR TO DOOR 1	360.00 0.00 360.00

Open

GL NUMBER	DESCRIPTION	AMOUNT	AMT RELIEVED
206-000.000-930.003	COMM SVC CALL-REPLACE CABLE ON DOOR 1	195.00	195.00
206-000.000-930.003	HEAVY DUTY COMMERCIAL CABLE	125.00	125.00
206-000.000-930.003	COMMERCIAL 3 IN ROLLER	40.00	40.00
		360.00	360.00

VENDOR TOTAL: 360.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
DUFFANYRIC 81415 07/08/2025	RICHARD DUFFANY ,	07/09/2025 07/15/2025 / / 07/15/2025	07082025 0.0000	GEN N N N	PD/FD TUITION REIMBURSEMENT	2,604.00 0.00 2,604.00

Open

GL NUMBER	DESCRIPTION	AMOUNT
206-000.000-914.000	TUITION REIMBURSEMENT	1,302.00
207-000.000-914.000	TUITION REIMBURSEMENT	1,302.00
		2,604.00

VENDOR TOTAL: 2,604.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
JOHNSNRO01	ROSATI, SCHULTZ, JOPPICH &	06/30/2025	1083617	GEN	GENERAL MATTERS	
81397	AMTSBUECHLER, P.C.	07/15/2025		N		697.00
	27555 EXECUTIVE DRIVE, SUITE 250					
06/11/2025	FARMINGTON HILLS MI, 48331	/ /	0.0000	N		0.00
		07/15/2025		Y		697.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-101.000-826.000	LEGAL FEES	391.00
207-000.000-826.000	LEGAL FEES	306.00
		697.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
JOHNSNRO01	ROSATI, SCHULTZ, JOPPICH &	06/30/2025	1083618	GEN	GRIESE PLAR AMENDMENT	
81398	AMTSBUECHLER, P.C.	07/15/2025		N		68.00
	27555 EXECUTIVE DRIVE, SUITE 250					
06/11/2025	FARMINGTON HILLS MI, 48331	/ /	0.0000	N		0.00
		07/15/2025		Y		68.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-702.000-826.000	LEGAL FEES	68.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
JOHNSNRO01	ROSATI, SCHULTZ, JOPPICH &	06/30/2025	1083619	GEN	LABOR & EMPLOYMENT LAW	
81399	AMTSBUECHLER, P.C.	07/15/2025		N		234.00
	27555 EXECUTIVE DRIVE, SUITE 250					
06/11/2025	FARMINGTON HILLS MI, 48331	/ /	0.0000	N		0.00
		07/15/2025		Y		234.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-101.000-826.000	LEGAL FEES	234.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
JOHNSNRO01	ROSATI, SCHULTZ, JOPPICH &	06/30/2025	1083620	GEN	MARY ANN LAMKIN & STEVE LAMKIN	
81400	AMTSBUECHLER, P.C.	07/15/2025		N		52.50
	27555 EXECUTIVE DRIVE, SUITE 250					
06/11/2025	FARMINGTON HILLS MI, 48331	/ /	0.0000	N		0.00
		07/15/2025		Y		52.50
Open						

GL NUMBER	DESCRIPTION	AMOUNT
207-000.000-826.000	LEGAL FEES	35.00
101-101.000-826.000	LEGAL FEES	17.50
		52.50

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
JOHNSNRO01 81401 06/11/2025	ROSATI, SCHULTZ, JOPPICH & AMTSBUECHLER, P.C. 27555 EXECUTIVE DRIVE, SUITE 250 FARMINGTON HILLS MI, 48331	06/30/2025 07/15/2025 / / 07/15/2025	1083621 0.0000	GEN N N Y	MICHIGAN TAX TRIBUNAL	 1,360.00 0.00 1,360.00
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
858-000.000-826.000	LEGAL FEES				1,360.00	
					VENDOR TOTAL:	2,411.50
SHIFFMAN 81402 06/30/2025	SHIFMAN FOURNIER, PLO 31600 TELEGRAPH RD SUITE 100 BINGHAM FARMS MI, 48025	06/30/2025 07/15/2025 / / 07/15/2025	07012025 0.0000	GEN N N Y	SERVICES THROUGH JUNE 30 25-CAREER F	 2,682.50 0.00 2,682.50
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
101-101.000-826.000	LEGAL FEES				2,682.50	
					VENDOR TOTAL:	2,682.50
SIGNSTUFF1 81403 06/30/2025	SIGN STUFF, INC. 13604 MERRIMAN RD. LIVONIA MI, 48150	06/30/2025 07/15/2025 / / 07/15/2025	25462 0.0000	GEN N N N	P&R SIGN AND PLAQUES WITH LOGO	 9,904.00 0.00 9,904.00
Open						
GL NUMBER	DESCRIPTION				AMOUNT	
101-751.000-967.962	SPECIAL PROJECTS - MISC IMPROVEMENT				9,904.00	
					VENDOR TOTAL:	9,904.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
SPICERGRUP	SPICER GROUP, INC.	06/30/2025	238418	GEN	PROF SERV THROUGH 05/31/25	
81426	230 SOUTH WASHINGTON AVENUE	07/15/2025		N		565.00
06/22/2025	SAGINAW MI, 48607	/ /	0.0000	N		0.00
		07/15/2025		N		565.00

Open

GL NUMBER	DESCRIPTION	AMOUNT
101-751.000-975.300	GRANT MATCH	565.00

VENDOR TOTAL: 565.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
STAPLESI02	STAPLES ADVANTAGE	06/30/2025	7005907530	GEN	JUNE SUPPLIES	
81404	P.O. BOX 660409	07/15/2025		N		1,929.86
06/30/2025	DALLAS TX, 75266-0409	/ /	0.0000	N		0.00
		07/15/2025		N		1,929.86

Open

GL NUMBER	DESCRIPTION	AMOUNT
101-275.000-752.000	SUPPLIES & SMALL EQUIPMENT	203.08
101-275.000-752.000	SUPPLIES & SMALL EQUIPMENT	74.98
101-275.000-752.000	SUPPLIES & SMALL EQUIPMENT	92.20
101-275.000-752.000	PALLET-PAPER	1,559.60
		1,929.86

VENDOR TOTAL: 1,929.86

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
MISTATEI01	STATE OF MICHIGAN	06/30/2025	121519	GEN	TWP SLOW, NO WAKE SIGNS (20)	
81383	MICHIGAN STATE INDUSTRIES 206 E. MICHIGAN AVE.	07/15/2025		N		640.00
06/26/2025	LANSING MI, 48933	/ /	0.0000	N		0.00
		07/15/2025		N		640.00

Open

GL NUMBER	DESCRIPTION	AMOUNT
101-275.000-955.000	SUNDRY	640.00

VENDOR TOTAL: 640.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
TELNETWORL	TELNET WORLDWIDE	07/09/2025	110769	GEN	07/01-07/31/25	
81407	8020 SOLUTIONS CENTER	07/15/2025		N		488.43
07/01/2025	CHICAGO IL, 60677-8000	/ /	0.0000	N		0.00
		07/15/2025		N		488.43

Open

GL NUMBER	DESCRIPTION	AMOUNT
590-537.000-853.000	PHONE/COMM/INTERNET	14.80
101-275.000-853.000	PHONE/COMM/INTERNET	170.23
206-000.000-853.000	PHONE/COMM/INTERNET	118.40
207-000.000-853.000	PHONE/COMM/INTERNET	162.80
101-820.000-853.000	PHONE/COMM/INTERNET	22.20
		488.43

VENDOR TOTAL: 488.43

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
HOLDENGROU	THE HOLDEN GROUP, LLC	07/10/2025	ESTHJAR25I	GEN	ZIX ENCRYTION RENEWAK (3 USERS)/ZIX	
81427	1463 AUSTON LANE	07/15/2025		N		6,989.00
07/01/2025	CHELSEA MI, 48118	/ /	0.0000	N		0.00
		07/15/2025		Y		6,989.00

Open

GL NUMBER	DESCRIPTION	AMOUNT
590-527.000-933.000	SOFTWARE MAINTENANCE	548.50
101-229.000-933.000	SOFTWARE MAINTENANCE	2,487.30
206-000.000-933.000	SOFTWARE MAINTENANCE	2,495.00
207-000.000-933.000	SOFTWARE MAINTENANCE	1,337.80
101-820.000-955.000	SUNDRY	120.40
		6,989.00

VENDOR TOTAL: 6,989.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
TLOLLC	TRANSUNION RISK AND ALTERNATIVE	06/30/2025	378853-202506-1	GEN	PD MONTHLY USAGE CHARGES 06/01-06/30	
81408	DATA SOLUTIONS, INC.	07/15/2025	20250493	N		75.00
	P.O. BOX 209047					
06/30/2025	DALLAS TX, 75320-9047	/ /	0.0000	N		0.00
		07/15/2025		N		75.00

Open

GL NUMBER	DESCRIPTION	AMOUNT	AMT RELIEVED
207-000.000-801.000	MONTHLY USAGE CHARGES - JUNE 2025	75.00	75.00

VENDOR TOTAL: 75.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
UNMANNED 81406 06/30/2025	UNMANNED VEHICLE TECHNOLOGIES LLC 1722 N COLLEGE AVE, SUITE D FAYETTEVILLE AR, 72703	06/30/2025 07/15/2025 / / 07/15/2025	SO222889 20250500 0.0000	GEN N N Y	PD/FD THREE DRONE CLASS 1 & CLASS 2	7,500.00 0.00 7,500.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT	AMT RELIEVED
207-000.000-967.000	PD'S DRONESENSE CLASS ANNUAL LICENSES	3,750.00	3,750.00
206-000.000-967.000	FD'S PORTION	3,750.00	3,750.00
		7,500.00	

VENDOR TOTAL: 7,500.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
VERIZONW01 81410 06/22/2025	VERIZON WIRELESS PO BOX 15062 ALBANY NY, 12212-5062	06/30/2025 07/15/2025 / / 07/15/2025	6116731596 0.0000	GEN N N N	DPW ON CALL 05/23-06/22/25	50.67 0.00 50.67
Open						

GL NUMBER	DESCRIPTION	AMOUNT
590-527.000-853.000	PHONE/COMM/INTERNET	50.67

VENDOR TOTAL: 50.67

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
SUNOCOFI01 81411 06/30/2025	WEX BANK P.O. BOX 4337 CAROL STREAM IL, 60197-4337	06/30/2025 07/15/2025 / / 07/15/2025	105703248 20250494 0.0000	GEN N N N	FD - FUEL CHARGES #105703248 06/01-0	2,232.26 0.00 2,232.26
Open						

GL NUMBER	DESCRIPTION	AMOUNT	AMT RELIEVED
206-000.000-759.000	FD FUEL CHARGES - JUNE 2025	2,232.26	2,232.26

VENDOR TOTAL: 2,232.26

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
SUNOCOTO01	WEX BANK	06/25/2025	105508584	GEN	05.24.25-06.23.2025	
81298	P.O. BOX 6293	07/16/2025		N		1,607.79
06/23/2025	CAROL STREAM IL, 60197	/ /	0.0000	N		0.00
		07/16/2025		N		1,607.79
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-265.000-759.000	VEHICLE FUEL	551.58
590-527.000-759.000	VEHICLE FUEL	900.39
101-275.000-759.000	VEHICLE FUEL	110.45
101-275.000-759.000	VEHICLE FUEL	45.37
		1,607.79

VENDOR TOTAL: 1,607.79

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
WRIGHTEX01	WEX FLEET UNIVERSAL	06/30/2025	105727061	GEN	PD FUEL CHARGES FOR PATROL CARS JUNE	
81412	WEX BANK PO BOX 6293	07/15/2025	20250492	N		4,116.53
06/30/2025	CAROL STREAM IL, 60197-6293	/ /	0.0000	N		0.00
		07/15/2025		N		4,116.53
Open						

GL NUMBER	DESCRIPTION	AMOUNT	AMT RELIEVED
207-000.000-759.000	MONTHLY FUEL CHARGES JUNE 2025	4,116.53	4,116.53

VENDOR TOTAL: 4,116.53

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
WHITEWOOD	WHITEWOOD TREE SERVICE INC	07/09/2025	INV0276	GEN	CEMETERY TREE SERVICE	
81413	9855 CARRUTHERS DR.	07/15/2025		N		1,200.00
07/01/2025	PINCKNEY MI, 48169	/ /	0.0000	N		0.00
		07/15/2025		N		1,200.00
Open						

GL NUMBER	DESCRIPTION	AMOUNT
101-567.000-801.000	CONTRACTUAL SERVICES	1,200.00

VENDOR TOTAL: 1,200.00

Vendor Code / Ref # / Invoice Date	Vendor name / Address / City/State/Zip	Post Date / CK Run Date / Disc. Date / Due Date	Invoice / PO / Disc. %	Bank / Hold / Sep CK / 1099	Invoice Description	Gross Amount / Discount / Net Amount
WONDERMARN	WONDERLAND MARINE WEST, INC.	06/30/2025	72627	GEN	PD BOAT FUEL MAY 2025	
81414	8789 MCGREGOR RD	07/15/2025	20250484	N		64.70
06/19/2025	PINCKNEY MI, 48169	/ /	0.0000	N		0.00
		07/15/2025		N		64.70

Open

GL NUMBER	DESCRIPTION	AMOUNT	AMT RELIEVED
207-000.000-759.000	DOCKSIDE GAS FILL 05-24-25	26.47	26.47
207-000.000-759.000	DOCKSIDE GAS FILL 05-26-25	38.23	38.23
		64.70	64.70

VENDOR TOTAL: 64.70

TOTAL - ALL VENDORS: 673,352.78

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Township Board Cover Sheet

Lake Shan-Gri-La – Aquatic Weed Control S.A.D.

Second Public Hearing to Re-Establish S.A.D. &
Resolution to Adopt Assessment Roll

Information Packet:

Hamburg Township has received petitions from property owners requesting to re-establish the aquatic weed and algae treatment special assessment district for Lake Shan-Gri-La for a 10-year period. After the first public hearing it was determined that there was enough support to proceed with establishing the S.A.D.

- The maintenance district will be a "**self-funded**" S.A.D. that will pay for the services annually through an assessment on the winter tax bills.

The following items have been included for the Board's review:

1. **Notice of Second Public Hearing:**
   - A. Affidavit of Mailing
   - B. Hearing Cover Letter
   - C. Notice of Improvement Hearing – per Public Act 188 requirements
   - D. Mailing List of Property Owners included in S.A.D.
   - E. Supervisor's Assessment Roll Certification
   - F. Proposed Special Assessment Roll for Lake Shan-Gri-La Aquatic Weed Control S.A.D.

2. **Project Resolution:**
   - **Resolution No. 3** – Resolution Confirming the Special Assessment Roll

NOTE: Property owners will have thirty (30) days to appeal their assessment with the Michigan Tax Tribunal once the Board confirms the Assessment Roll. The expiration date of the 30-day period to challenge the special assessment shall be August 14, 2025.

Drafted: June 23rd, 2025

Hamburg Township
a great place to grow
10405 Merrill Road ♦ P.O. Box 157
Hamburg, MI 48139
Phone: 810.231.1000 ♦ Fax: 810.231.4295
www.hamburg.mi.us

AFFIDAVIT OF MAILING

STATE OF MICHIGAN)
)ss
COUNTY OF LIVINGSTON)

BRITTANY K. CAMPBELL, being first duly sworn, deposes and says that she personally prepared for mailing, and did on July 2nd, 2025, send by first-class mail, the proposed **Lake Shan-Gri-La – Aquatic Weed Control Special Assessment District** notice of second public hearing, a true copy of which is attached hereto, to each record owner of or party in interest in all property to be assessed for the improvement described therein, as shown on the last local tax assessment records of the Township of Hamburg; that she personally compared the address on each envelope against the list of property owners as shown on the current tax assessment rolls of the Township; that each envelope contained therein such notice and was securely sealed with postage fully prepaid for first-class mail delivery and plainly addressed; and that she personally placed all of such envelopes in a United States Post Office receptacle on the above date.

Brittany K. Campbell

Brittany K. Campbell
Hamburg Township Utilities Coordinator

Subscribed and sworn to before me
this 2nd day of July, 2025

Courtney L Paton

, Notary Public
Jackson County, MI
My commission expires: January 17, 2030
Acting in Livingston County

COURTNEY L. PATON
NOTARY PUBLIC, STATE OF MICHIGAN
COUNTY OF JACKSON
My Commission Expires 01/17/2030
Acting in the County of Livingston

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10405 Merrill Road ♦ P.O. Box 157
Hamburg, MI 48139
Phone: 810.231.1000 ♦ Fax: 810.231.4295
www.hamburg.mi.us

July 2nd, 2025

Re: Lake Shan-Gri-La – Aquatic Weed Control Special Assessment District
2nd Public Hearing Notice – July 15th, 2025 @ 6:30 P.M.

Dear Property Owner:

The Hamburg Township Board of Trustees has scheduled the second public hearing for the Lake Shan-Gri-La aquatic weed control special assessment district to be held on Tuesday, **July 15th, 2025** at **6:30 p.m.** at the Township Offices located at 10405 Merrill Road to discuss the assessment roll to be adopted by the Board. The assessment roll lists those properties included in the special assessment district and the amount to be assessed.

Enclosed please find the notice of public hearing and a map of the proposed special assessment district. The special assessment roll for the District has been prepared and is now on file in the offices of the Township Clerk and the Utilities Coordinator. The Roll is available for public examination during regular business hours at the Township Hall. This hearing is being held for the purpose of confirming the Assessment Roll.

The amount of the assessment for the first year to re-establish the district shall be **$345.18** per parcel. The district will run over a ten (**10**) year period with the annual assessment to be included on the property taxes. The actual assessment amount will vary each year depending upon the amount of services provided under the prior budget year. Any money left over in the fund will be applied toward the money needed each year to furnish the requested aquatic weed treatment services. The assessment charge will appear annually on the winter tax bill.

The owner or other person having an interest in property that is assessed is entitled to file a written appeal with the Michigan Tax Tribunal within 30 days after confirmation of the Roll. However, appearance and protest at the public hearing are required by law in order to appeal the special assessment to the Michigan Tax Tribunal. An owner or other party in interest or his or her agent must file an objection in writing with the Township Clerk, Michael Dolan, before the closing of the hearing. The deadline to file an appeal if the Board adopts the Assessment Roll at the July 15, 2025 regularly scheduled Board meeting is August 14th, 2025. For more information regarding the special assessment district please contact Brittany Campbell, at (810) 231-1000 Ext. 210 or via email at bcampbell@hamburg.mi.us.

Sincerely,

Brittany K. Campbell

Brittany K. Campbell
Hamburg Twp. Utilities/Special Projects Coordinator

FAX (810) 231-4295
TELEPHONE: (810) 231-1000

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P.O. Box 157
10405 Merrill Road
Hamburg, MI 48139

Hamburg Township
Livingston County, Michigan

NOTICE OF PUBLIC HEARING
UPON SPECIAL ASSESSMENT ROLL FOR THE
LAKE SHAN-GRI-LA AQUATIC WEED CONTROL
SPECIAL ASSESSMENT DISTRICT

NOTICE IS HEREBY GIVEN:

(1) The Township Board of the Township of Hamburg, Livingston County, Michigan (the "Township") has determined to levy special assessments against lands in the LAKE SHAN-GRI-LA AQUATIC WEED CONTROL SPECIAL ASSESSMENT DISTRICT (the "District") that will be benefited by the aquatic weed and algae treatment services to be provided for the District. The District consists of the lands identified in the map attached to this notice and is more specifically identified by the following permanent parcel numbers:

15-21-404-001	15-21-404-002	15-21-404-008	15-21-404-009
15-21-404-014	15-21-404-015	15-21-404-020	15-21-404-021
15-21-404-022	15-21-404-023	15-21-404-024	15-21-404-025
15-21-404-029	15-21-404-030	15-21-404-031	15-21-404-032
15-21-404-033	15-21-404-034	15-21-404-035	15-21-404-036
15-21-405-004	15-21-405-007	15-21-405-011	15-21-405-012
15-21-405-017	15-21-405-018	15-12-405-019	15-21-405-020
15-21-405-021			

(2) The proposed special assessment roll for the District (the "Roll) has been prepared and is now on file in the office of the Township Clerk and is available at such office for public examination during the hours the Township Hall is regularly open to the public for business.

(3) The Township Board will conduct a public hearing beginning at 6:30 p.m., local time on Tuesday, July 15, 2025, at the Hamburg Township Hall, 10405 Merrill Road, Hamburg, Michigan to explain and answer questions pertaining to the Roll and to hear objections to the Roll. Any person objecting to the Roll must file his or her objections in writing before the close of the public hearing or within such additional time (if any) as the Township Board may grant.

(4) The owner or other person having an interest in property that is specially assessed is entitled to file a written appeal with the Michigan Tax Tribunal within 30 (thirty) days after confirmation of the Roll. However, appearance and protest at the public hearing are required by law in order to appeal the special assessment to the Michigan Tax Tribunal. An owner or other party in interest or his or her agent must file an objection in writing with the Township Clerk before the close of the hearing.

The Township Board will maintain a record of the persons who appear and protest at the hearing. If the hearing is terminated or adjourned for the day before a party is provided the opportunity to be heard, a party whose appearance was so recorded shall be considered to have protested the special assessment in person.

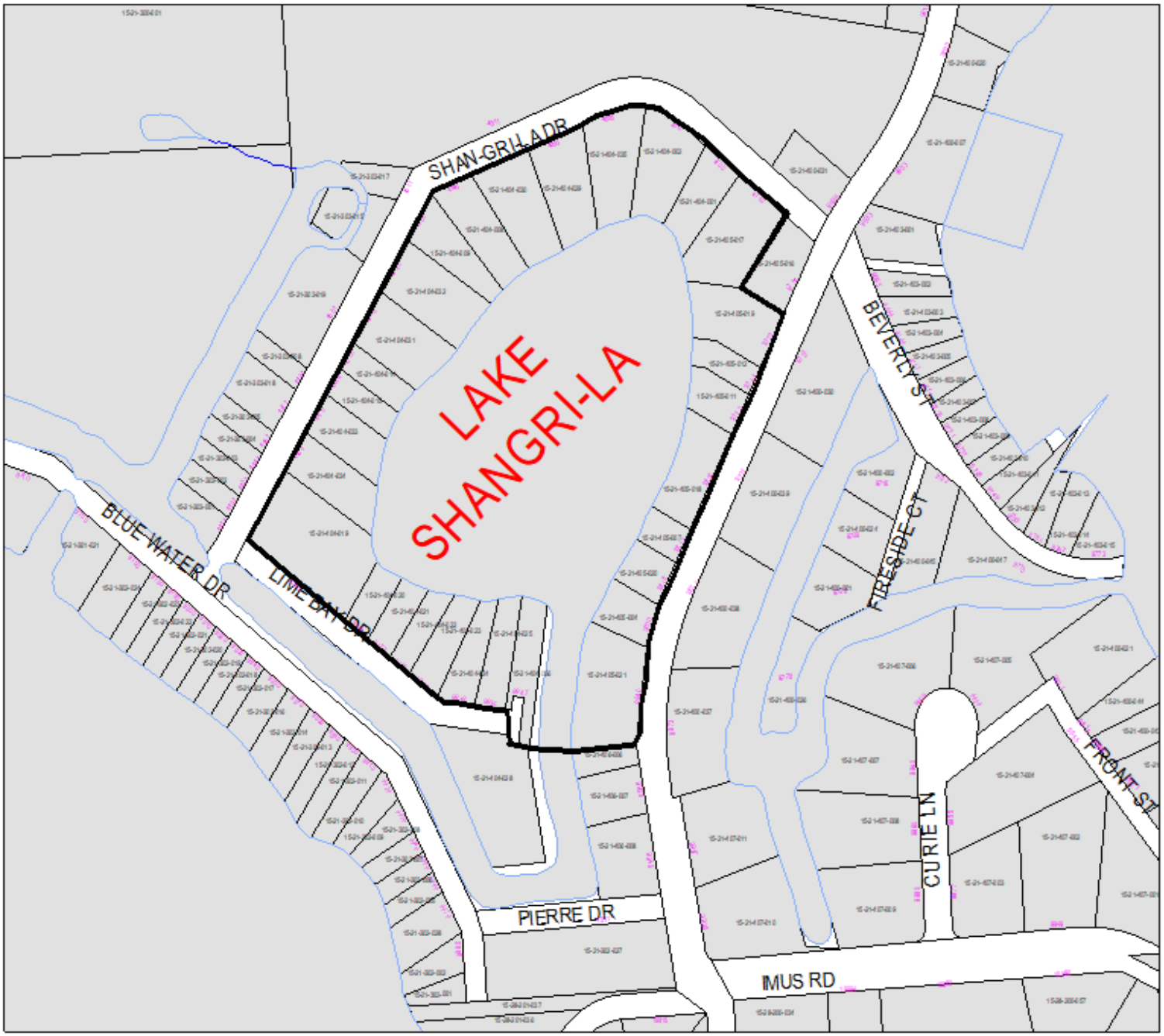
This notice is given by order of the Hamburg Township Board.

Dated: July 2nd, 2025
July 9th, 2025

Michael Dolan
Hamburg Township Clerk
10405 Merrill Rd. P.O. Box 157
Hamburg, MI 48139

LAKE SHAN-GRI-LA – AQUATIC WEED CONTROL
SPECIAL ASSESSMENT DISTRICT
Hamburg Township, Livingston County, Michigan

The general service area in which a proposed special assessment district is to be designated. The Hamburg Township Board of Trustees may adjust the district boundaries based upon property owner response in support of creating an aquatic weed control special assessment district.



General service area establishing the Lake Shan-Gri-La Aquatic Weed Control Special Assessment District. **Proposed special assessment district boundary shown within thick black-lined area**.

15-21-404-001
Robert B. Schmidt Revocable Trust
1619 E. Bolingridge Dr.
Orange, CA 92865

15-21-404-002
Rodney & Elizabeth Howell
4678 Shan-Gri-La Dr.
Pinckney, MI 48169

15-21-404-008
Eric S. & Dana N. St. Pierre
4566 Shan-Gri-La Dr.
Pinckney, MI 48169

15-21-404-009
Michael Bollman
6100 Oak Valley Dr.
Whitmore Lake, MI 48189

15-21-404-014
Janet Leggat
4500 Shan-Gri-La Dr.
Pinckney, MI 48169

15-21-404-015
Nancy L. Bassett
4484 Shan-Gri-La Dr.
Pinckney, MI 48169

15-21-404-020
Patricia Hicks
9861 Lime Bay Dr. P.O. Box 561
Lakeland, MI 48143

15-21-404-021
Bradley & Michelle Fleenor
9873 Lime Bay Dr. P.O. Box 804
Lakeland, MI 48143

15-21-404-022
James L. & Teresa Ford
910 Savannah Rd.
Lewes, DE 19958

15-21-404-023
Jason Mackenzie
9901 Lime Bay Dr. P.O. Box 654
Lakeland, MI 48143

15-21-404-024
Deborah Kooperman
9919 Lime Bay Dr. P.O. Box 262
Lakeland, MI 48143

15-21-404-025
John P. Strauss
9935 Lime Bay Dr. P.O. Box 27
Lakeland, MI 48143

15-21-404-029
Michael G. & Angela M. Cesar
4636 Shan-Gri-La Dr.
Pinckney, MI 48169

15-21-404-030
Michael & Tammera Bollman
6100 Oak Valley Dr.
Whitmore Lake, MI 48189

15-21-404-031
Cynthia E. Voigtman
4518 Shan-Gri-La Dr.
Pinckney, MI 48169

15-21-404-032
Mary-Jelisse Bonello
4540 Shan-Gri-La Dr.
Pinckney, MI 48169

15-21-404-033
Gerald & Kathy Lilly
4476 Shan-Gri-La Dr. P.O. Box 369
Lakeland, MI 48143

15-21-404-034
Anthony T. & Elaine Rypkowski
2064 S. Cavalier Dr.
Canton, MI 48188

15-21-404-035
Pang Cheng-Xeng Hang
4666 Shan-Gri-La Dr.
Pinckney, MI 48169

15-21-404-035B
Pang Cheng-Xeng Hang
3370 Bauer Rd.
Brighton, MI 48116

15-21-404-036
John P. Strauss
9935 Lime Bay Dr. P.O. Box 27
Lakeland, MI 48143

15-21-405-004
John Morys III
9830 Kress Rd.
Pinckney, MI 48169

15-21-405-007
Virginia L. Maturen
9810 Kress Rd.
Pinckney, MI 48169

15-21-405-011
Larry P. Laughlin
9750 Kress Rd.
Pinckney, MI 48169

15-21-405-012
Kyle Jones & Tabitha Howk
9744 Kress Rd.
Pinckney, MI 48169

15-21-405-017
Dennis & Kathleen Down
4710 Shan-Gri-La Dr.
Pinckney, MI 48169

15-21-405-018
Donald R. & Dorothy Rogowski
9806 Kress Rd. P.O. Box 408
Lakeland, MI 48143

15-21-405-019
Rodney Marlow & Jill L. Love
9732 Kress Rd. P.O. Box 916
Lakeland, MI 48143

15-21-405-020
Cindy Clouse
9818 Kress Rd.
Pinckney, MI 48169

15-21-405-021
Kitty C. Campbell Trust
9840 Kress Rd.
Pinckney, MI 48169

FAX (810) 231-4295
TELEPHONE: (810) 231-1000

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P.O. Box 157
10405 Merrill Road
Hamburg, MI 48139

CERTIFICATE

Lake Shan-Gri-La Aquatic Weed Control S.A.D.

I, the undersigned, Supervisor of Hamburg Township, Livingston County, Michigan (the "Township"), acting pursuant to a resolution duly adopted by the Board of the Township on June 17th, 2025 (the "Resolution") certify that (1) the attached special assessment roll for the Hamburg Township **Lake Shan-Gri-La** Aquatic Weed Control Special Assessment District, to which this Certificate is affixed, was made pursuant to the Resolution and (2) in making such roll, I have, according to my best judgment, conformed in all respects to the directions contained in the Resolution and the statutes of the State of Michigan, including Act No. 188, Public Acts of Michigan, 1954, as amended.

Dated: 6-23-2025

Patrick J. Hohl
Hamburg Township Supervisor

HAMBURG TOWNSHIP
LAKE SHAN-GRI-LA – AQUATIC WEED CONTROL DISTRICT
PROPOSED SPECIAL ASSESSMENT ROLL
EXHIBIT "B"

Tax I.D. #	Property Owner Name & Address	Legal Description	True Cash Value	Vacant/Occupied	Assessment
15-21-404-001	Robert B. Schmidt Revocable Trust 1619 E. Bolingridge Dr. Orange, CA 92865	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 LOT 84.	$ 365,400.00	Occupied	$ 345.18
15-21-404-002	Rodney & Elizabeth Howell 4678 Shan-Gri-La Dr. Pinckney, MI 48169	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 LOT 85 & E 1/2 LOT 86.	668,120.00	Occupied	345.18
15-21-404-008	Eric S. & Dana N. St. Pierre 4566 Shan-Gri-La Dr. Pinckney, MI 48169	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 OUTLET E.	546,100.00	Occupied	345.18
15-21-404-009	Michael Bollman 6100 Oak Valley Dr. Whitmore Lake, MI 48189	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 LOT 91.	148,020.00	Vacant	345.18
15-21-404-014	Janet Leggat 4500 Shan-Gri-La Dr. Pinckney, MI 48169	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 LOT 96.	380,580.00	Occupied	345.18
15-21-404-015	Nancy L. Bassett 4484 Shan-Gr-La Dr. Pinckney, MI 48169	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 LOT 97.	367,060.00	Occupied	345.18
15-21-404-020	Patricia Hicks 9861 Lime Bay, P.O. Box 561 Lakeland, MI 48143	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 LOT 101.	281,400.00	Occupied	345.18
15-21-404-021	Bradley & Michelle Fleenor 9873 Lime Bay, P.O. Box 804 Lakeland, MI 48143	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 LOT 102.	421,680.00	Occupied	345.18

HAMBURG TOWNSHIP
LAKE SHAN-GRI-LA – AQUATIC WEED CONTROL DISTRICT
PROPOSED SPECIAL ASSESSMENT ROLL
JULY 15, 2025

Tax I.D. #	Property Owner Name & Address	Legal Description	True Cash Value	Vacant/Occupied	Assessment
15-21-404-022	James L. & Teresa Ford 910 Savannah Rd. Lewes, DE 19958	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 LOT 103.	$ 334,220.00	Occupied	$ 345.18
15-21-404-023	Jason Mackenzie 9901 Lime Bay, P.O. Box 654 Lakeland, MI 48143	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 LOT 104.	431,420.00	Occupied	345.18
15-21-404-024	Daryl A. & Deborah Kooperman 9919 Lime Bay, P.O. Box 262 Lakeland, MI 48143	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 LOT 105.	449,200.00	Occupied	345.18
15-21-404-025	John P. Strauss 9935 Lime Bay, P.O. Box 27 Lakeland, MI 48143	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 LOT 106.	342,300.00	Occupied	345.18
15-21-404-029	Michael G. & Angela M. Cesar 4636 Shan-Gri-La Dr. Pinckney, MI 48169	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 LOT 88 & NELY 1/2 LOT 89.	538,880.00	Occupied	345.18
15-21-404-030	Michael & Tammera Bollman 6100 Oak Valley Dr. Whitmore Lake, MI 48189	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 THE SWLY 1/2 LOT 89 & LOT 90.	187,340.00	Vacant	345.18
15-21-404-031	Cynthia E. Voigtman 4518 Shan-Gri-La Dr. Pinckney, MI 48169	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 LOTS 94 & 95.	491,920.00	Occupied	345.18
15-21-404-032	Mary-Jelisse Bonello 4540 Shan-Gri-La Dr. Pinckney, MI 48169	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 LOTS 92 & 93.	542,700.00	Occupied	345.18

HAMBURG TOWNSHIP
LAKE SHAN-GRI-LA – AQUATIC WEED CONTROL DISTRICT
PROPOSED SPECIAL ASSESSMENT ROLL
JULY 15, 2025

Tax I.D. #	Property Owner Name & Address	Legal Description	True Cash Value	Vacant/Occupied	Assessment
15-21-404-033	Gerald & Kathy Lilly 4476 Lime Bay, P.O. Box 369 Lakeland, MI 48143	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 LOT 98 & NLY 1/2 LOT 99.	$ 729,120.00	Occupied	$ 345.18
15-21-404-034	Anthony T. & Elaine Rypkowski 2064 S. Cavalier Dr. Canton, MI 48188	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 LOT 100 & SLY 1/2 LOT 99.	323,040.00	Occupied	345.18
15-21-404-035	Pang Cheng-Xeng Hang 4666 Shan-Gri-La Dr. Pinckney, MI 48169	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 LOT 87 & W 1/2 LOT 86.	499,980.00	Occupied	345.18
15-21-404-036	John P. Strauss 9935 Lime Bay, P.O. Box 27 Lakeland, MI 48143	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 5 LOT 107 & OUTLOT G.	130,780.00	Occupied	345.18
15-21-405-004	John Morys III 9830 Kress Rd. Pinckney, MI 48169	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 4 LOT 72 & S 25.15 FT OF LOT 73.	366,440.00	Occupied	345.18
15-21-405-007	Virginia L. Maturen 9810 Kress Rd. Pinckney, MI 48169	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 4 LOT 75 & S 15 FT LOT 76.	346,780.00	Occupied	345.18
15-21-405-011	Larry P. Laughlin 9750 Kress Rd. Pinckney, MI 48169	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 4 LOT 80 & N 1/2 LOT 79.	328,340.00	Occupied	345.18
15-21-405-012	Kyle Jones & Tabitha Howk 9744 Kress Rd. Pinckney, MI 48169	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 4 LOT 81.	605,000.00	Occupied	345.18

HAMBURG TOWNSHIP
LAKE SHAN-GRI-LA – AQUATIC WEED CONTROL DISTRICT
PROPOSED SPECIAL ASSESSMENT ROLL
JULY 15, 2025

Tax I.D. #	Property Owner Name & Address	Legal Description	True Cash Value	Vacant/Occupied	Assessment
15-21-405-017	Dennis & Kathleen Down 4710 Shan-Gri-La Dr. Pinckney, MI 48169	SEC 21 T1N R5E PART OF OUTLOT D SHAN GRI LA SUB ANNEX 4 BEG AT PT N 58*W 119.05 FT FROM THE SE COR OUTLOT D TH N78*W 118.10 FT TH N 12*W 50 FT TH N 43*E 211.26 FT TH S 51*E 121.30 FT ALG THE SLY ROW SHAN GRI LA DR TH S 37*W 186.85 FT TO POB 0.66 AC PARCEL 1.	$ 394,600.00	Occupied	$ 345.18
15-21-405-018	Donald R. & Dorothy Rogowski 9806 Kress Rd., P.O. Box 408 Lakeland, MI 48143	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 4 LOT 76 EXC S 15 FT LOT 77 OUTLOT E LOT 78 & S 1/2 LOT 79.	422,620.00	Occupied	345.18
15-21-405-019	Rodney Marlow & Jill S. Love 9732 Kress Rd., P.O. Box 916 Lakeland, MI 48143	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 4 LOTS 82 & 83.	594,800.00	Occupied	345.18
15-21-405-020	Cindy Clouse 9818 Kress Rd. Pinckney, MI 48169	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 4 LOTS 73 EXC S 25.15 FT THEREOF & LOT 74.	300,540.00	Occupied	345.18
15-21-405-021	Kitty C. Campbell Trust 9840 Kress Rd. Pinckney, MI 48169	SEC 21 T1N R5E SHAN GRI LA SUBN ANNEX NO. 4 LOTS 69, 70 & 71.	402,660.00	Occupied	345.18

Total Project Assessments: $ 10,010.00

TOTAL ESTIMATED PROJECT COST: $ 10,010.00

LAKE SHAN-GRI-LA – AQUATIC WEED CONTROL
SPECIAL ASSESSMENT DISTRICT RESOLUTION
(Resolution #3)

TOWNSHIP OF HAMBURG

At a regular meeting of the Township Board of the Township of Hamburg, Livingston County, Michigan, (the "Township") held at the Hamburg Township Hall on Tuesday, July 15th, 2025, at 7:30 p.m., there were

PRESENT: _____

ABSENT: _____

The following preamble and resolution were offered by _____ and seconded by _____.

RESOLUTION CONFIRMING SPECIAL ASSESSMENT ROLL
FOR THE LAKE SHAN-GRI-LA
AQUATIC WEED CONTROL SPECIAL ASSESSMENT DISTRICT

WHEREAS, the Township Board of the Township of Hamburg, Livingston County, Michigan, after due and legal notice, has conducted a public hearing upon a proposed Special Assessment Roll prepared by the Supervisor and Assessing Officer of the Township for the purpose of defraying the costs of aquatic weed control services to be performed within the Special Assessment District as requested by petitions received from the property owners for such project;

WHEREAS, the Township Board has acknowledged that the Township Supervisor has filed the proposed Special Assessment Roll with the Township Clerk;

WHEREAS, such public hearing was preceded by proper notice in the Livingston County Press & Argus, a newspaper of general circulation in the township, and by First Class Mail notice to each property owner of record within said district and upon said assessment roll;

WHEREAS, comments were received from those present at such public hearing concerning said assessment roll and opportunity to all present to be heard in the matter;

WHEREAS, written objections, if any, were received to said roll and levy;

WHEREAS, the oral comments received indicated the reasonableness of the following assessment roll and any amendments thereto;

WHEREAS, a record of those present to protest, and of written protests submitted at or before the public hearing was made a part of the minutes of the hearing;

WHEREAS, The Township Board has duly inspected the proposed Assessment Roll and has considered all comments and proposed amendments thereto, and has found the proposed Assessment Roll to be correct, just and reasonable;

NOW, THEREFORE, BE IT RESOLVED THAT:

1. Roll Confirmed. In accordance with Act No. 188, Michigan Public Acts of 1954, as amended, and the laws of the State of Michigan, the Township Board hereby confirms the Special Assessment Roll in the form of Exhibit "B" for the Lake Shan-Gri-La Aquatic Weed Control Special Assessment District (the "Roll").

2. Future Installments - Principal. The Township Board determines that each Special Assessment may be paid in 10 annual installments. The first installment shall be due on December 1, 2025. Each subsequent installment shall be due at intervals 12 months from the due date of the first installment.

3. Warrant. The Township Clerk is hereby directed to attach a warrant (in the form of Exhibit A to this resolution) to the Roll and to deliver such warrant and the Roll to the Township Treasurer, who shall thereupon collect the special assessments in accordance with the terms of this Resolution, the Clerk's warrant and the statutes of the State of Michigan.

5. Ratification of Notice. The form and content of the notice published and mailed to property owners in the special assessment district by the Township Clerk with respect to the public hearing held on July 15th, 2025, and all action of Township officials in scheduling such hearing, are hereby approved, ratified and confirmed.

6. Inconsistent Prior Resolutions. All previously adopted resolutions that are in conflict with this resolution are repealed to the extent of such conflict.

A vote on the foregoing resolution was taken and was as follows:

YES: _____

NO: _____

ABSENT: _____

Resolution _____.

CLERK'S CERTIFICATE

The undersigned, being the duly elected Clerk of the Township, hereby certifies that (1) the foregoing is a true and complete copy of a resolution duly adopted by the Township Board at a regular meeting at which meeting a quorum was present and remained throughout, (2) the original thereof is on file in the records in my office, (3) the meeting was conducted, and public notice thereof was given, pursuant to and in full compliance with the Open Meetings Act (Act No. 267, Public Acts of Michigan, 1976, as amended) and (4) minutes of such meeting were kept and will be or have been made available are required thereby.

Michael Dolan
Hamburg Township Clerk

EXHIBIT A

Public Act 188 of 1954 Proceedings

Warrant for Collection of Hamburg Township Special Assessment Roll No. X4499

TO: The Treasurer of Hamburg Township, Livingston County, Michigan

In accordance with the attached resolution of the Hamburg Township Board of Trustees adopted on July 15, 2025, you are hereby directed to collect the special assessments set forth in the attached Hamburg Township **Lake Shan-Gri-La – Aquatic Weed Control** Special Assessment Roll No. X4499 from the owners of the properties described in said assessment roll, together with such interest and penalties as set forth in said resolution and prescribed by statute.

Any sums due after December 1, 2025 shall bear interest at the rate of 0 percent per annum. Any assessments or portions thereof paid prior to December 1, 2025 shall not bear any interest.

In any installment of a special assessment is not paid when due, there shall be collected, in addition to interest, a penalty at the rate of 10 percent for each month or fraction of a month that the installment remains unpaid before being reported to the Township Board for reassessment upon the township tax roll under the provisions of PA 188 of 1954, as amended.

Township Clerk signature: _____

Dated: _____ Township: Hamburg

Hamburg Township
a great place to grow

10405 Merrill Road
P.O. Box 157
Hamburg, MI 48139
(810) 231-1000
www.hamburg.mi.us

TO: Hamburg Township Board of Trustees

FROM: Deby Henneman, Township Coordinator

DATE: July 10, 2025

AGENDA ITEM TOPIC: Grant TF22-0107 – Bennett Park & Water Trail Access Improvements – Authorization to Proceed with L.J. Construction, Inc.
Number of Supporting Documents: **6 – Contract, EGLE Permit, Bond, Certificate of Insurance, Timeline, Sign**

Requested Action

Motion to proceed with project as outlined in contract documents prepared by our Prime Professional on Grant Project TF22-0107, Spicer Group, Inc., and authorize the Clerk to sign the contract in order to proceed with the construction. Motion should also authorize the Clerk to negotiate and approve change orders, as needed, which do not exceed the approved project total of $583,110.00.

Background

We have received the final approvals from the MDNR and EGLE, and are ready to proceed with the contract with L.J. Construction for the Manly Bennett Park & Water Trail Access Improvements. Based on the Grant Agreement signed with the MDNR on 10/8/23 and as amended 4/16/25, the expected improvements are as follows:

- Trail 8’ wide or more (Around the Soccer Fields & grade/slope replacement near Launch)
- Access Pathway 6’ or more (to access Kayak Launch from trail)
- Bench(es) (one near launch, one near playground – Township Provides)
- Canoe/Kayak Launch or Ramp
- Landscaping (Hardscape by contractor, plantings adopted by Hamburg Garden Club)
- Paved ADA Parking Space(s) (Completed by Hamburg Township in 2024)
- Play Equipment
- Playground Safety Surfacing
- Rain Garden with Native Plants (Hardscape by contractor, plantings by Hamburg Garden Club)
- Signage (Finalized and Attached – QR Code to go to our website)

Once the contract is signed the work will proceed as outlined in the timeline, weather permitting, and staff members who will be communicating directly with the contractors will be Mike Dolan, Tony Randazzo, and Duane Hoeppner. As I have done with other projects, I will ensure that all paperwork is filed properly with the MDNR and will act as liaison between the Spicer Group and the Township.

Motion made at July 1, 2025 Township Board Meeting:

MNRTF #22-0107 - Manly Bennett Improvements Grant - Proposed Change Order

Motion made by Hardesty, Seconded by Miller, to award the contract for Manly Bennett Improvements to L.J. Construction Inc in the maximum amount of $583,110.00 contingent upon DNR approval and grant.

Voting Yea: Negri, Dolan, Daniels, Hardesty, Hughes, Menzies, Miller

I have started a project page accessible from the Home Page of Parks & Recreation where I will house all permits, plans, and project timelines/announcements. You can find the link here:

https://cms7.revize.com/revize/hamburgmi/departments/parks_and_recreation/index.php

Direct link from that page is:

https://cms7.revize.com/revize/hamburgmi/departments/parks_and_recreation/learn_more_about_this_amazing_project_here!.php

EGLE

NOTICE OF AUTHORIZATION

Permit Number: WRP045480 v. 1
Site Name: 47-10405 Merill Rd -Manly Bennet Park

Date Issued: July 3, 2025
Expiration Date: July 3, 2030

The Michigan Department of Environment, Great Lakes, and Energy (EGLE), Water Resources Division, P.O. Box 30458, Lansing, Michigan 48909-7958, under provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; specifically:

☒ Part 31, Floodplain Regulatory Authority of the Water Resources Protection.

☒ Part 301, Inland Lakes and Streams.

☒ Part 303, Wetlands Protection.

Authorized activity:

Install a replacement, pre-cast concrete kayak ramp, 12 feet wide and 24 feet long.

Dredge a total of five (5) cubic yards of material from emergent wetland and bottomland of Hall Creek.

Install approximately five (5) cubic yards of fill material to facilitate construction of the boat ramp.

Install two (2) cubic yards of riprap within Hall Creek.

Replacement of a currently existing timber kayak launch within the 100-year floodway and floodplain of the Huron River. Project will result in approximately 15 cubic yards of cut and 6 cubic yards of fill within the 100-year floodplain. Construction within the floodway is within existing grade and or within the existing footprint of the timber kayak launch.

To be conducted at property located in: Livingston County, Waterbody: Hall Creek, Emergent Wetland, Section 26, Town 01N, Range 05E, Hamburg Township

Permittee:
Deby Henneman
10405 Merill Road
P.O. Box 157
Hamburg, MI 48139

Matthew Rogers
Lansing District Office
Water Resources Division
517-388-6869

This notice must be displayed at the site of work.
Laminating this notice or utilizing sheet protectors is recommended.
Please refer to the above permit number with any questions or concerns.

EGLE
WRP045480 v. 1.0
Approved
Issued On:07/03/2025
Expires On:07/03/2030

Michigan Department of Transportation
1130A (04/2024)

PROGRESS SCHEDULE - 2020 SPEC BOOK

Information required by MDOT in order to establish a construction schedule. This form is not required when an alternate schedule submittal or platform is used (i.e. CPM, Bar Chart). Please refer to the "MDOT Construction Scheduling website" for a user-friendly spreadsheet template of this form along with additional guidance and reference material.

Attachments: 0

Distribution: Original - Project Files

CONTRACT ID		WORK DESCRIPTION	
133809SG2023		Park and Trail Improvements	
CONTRACTOR		SCHEDULE TYPE	DATE SUBMITTED
L.J. Construction Inc		☒ Initial ☐ Update	07/08/2025
LETTING DATE	AWARD DATE	ESTIMATED START	ESTIMATED COMPLETION
04/17/2025	07/03/2025	09/02/2025	10/17/2025
PLANNED WORK DAYS ☒ Monday ☒ Tuesday ☒ Wednesday ☒ Thursday ☒ Friday ☐ Saturday ☐ Sunday			PLANNED WORK HOURS 7:00 am to 5:00 pm

ACTIVITY / ITEM OF WORK / MILESTONE	START DATE	FINISH DATE	DURATION (work days)	% COMPLETE	REMAINING DURATION	CONTROLLING OPERATION
SESC	09/02/2025	09/03/2025				☐
Clearing/Removals	09/03/2025	09/05/2025				☐
Path Work	09/08/2025	09/26/2025				☐
Paving	09/29/2025	09/30/2025				☐
Playgrounds	09/24/2025	10/02/2025				☐
Pads	10/01/2025	10/02/2025				☐
Canoe Launch	10/01/2025	10/06/2025				☐
Concrete Work	10/06/2025	10/08/2025				☐
Restoration	10/08/2025	10/14/2025				☐
Cleanup	10/14/2025	10/16/2025				☐
Project Complete	10/16/2025	10/17/2025				☐
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DESCRIPTION OF PLANNED WORK CREWS *(Major/specialty subcontractors, major pieces of equipment, plants, etc. Reference 108.05.A.2.e)*

Grading Crew - L.J. Construction Inc; Concrete Work - GM and Sons; HMA Work - American Asphalt

OTHER COMMENTS *(Weather considerations, seasonal suspensions, non-work periods, night work, third-party operations, etc. Reference 108.05A.2.e&f)*

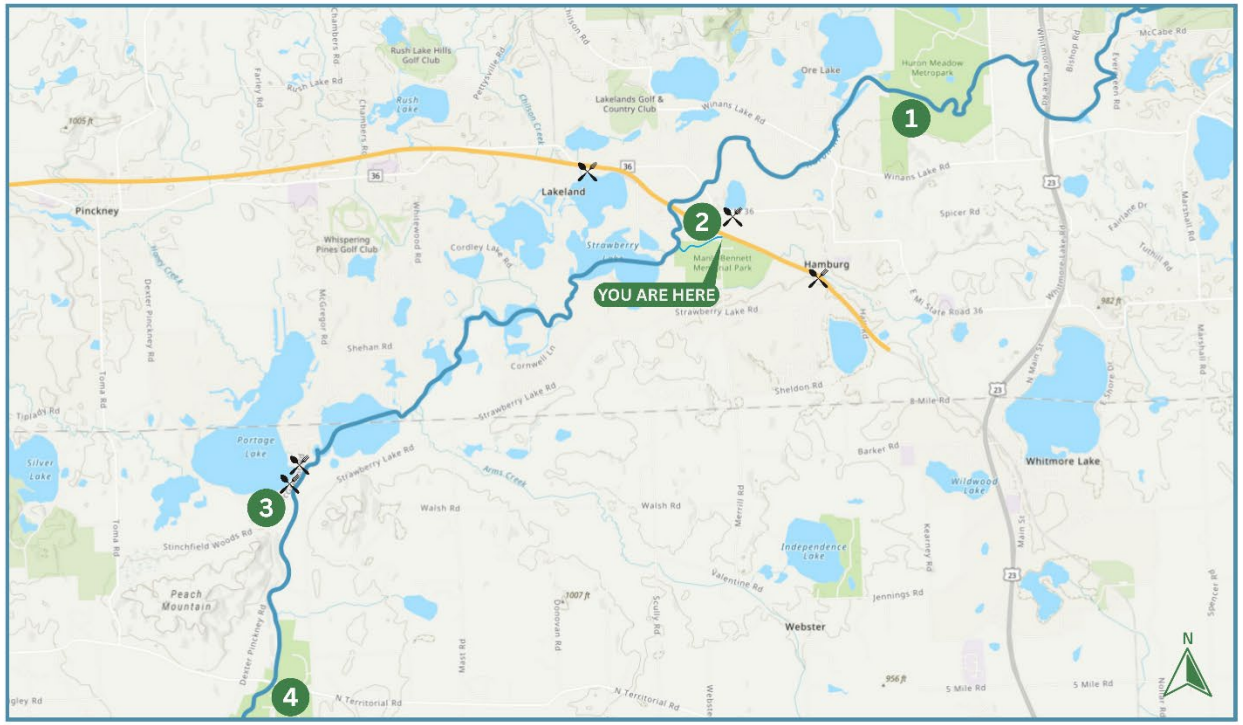
Overlapping dates due to multiple crews working simultaneously. All work is weather dependent. Schedule is based on material and crew availbility.

APPROVAL - Approval can be designated through direct documented correspondence with the Contractor, otherwise electronic signatures or PDF stamps may be used in the field below to indicate approval. Refer to section 108.05 Progress Schedule of the Construction Manual for additional guidance. This is to be completed by the project engineer.

Local Agency/Consultant Managed Project: As applicable, confer with the Local Public Agency Responsible Charge (LRC) and/or the MDOT Responsible Charge (MRC; typically the MDOT Construction Engineer) prior to approval.

MANLY W. BENNETT MEMORIAL PARK

HURON RIVER WATER TRAIL ACCESS



WATER ACCESS POINTS

1. **Cedar Ridge Picnic Area - Huron Meadows Metropark**
   Located at 8765 Hammel Rd, Brighton
2. **Merrill Trailhead**
   You are here
3. **Portage Lake DNR Boat Launch**
   Located at 6360 Chilson Rd, Howell
4. **Rapids View Picnic Area - Hudson Mills Metropark**
   Located at 8801 N Territorial Rd, Dexter

Huron River
Horseshoe (Hall) Creek
Mike Levine Lakelands Trail State Park
Food Near the Huron River

SCAN ME

Scan here to listen to this sign's content or to find more information about area amenities, access points, and the Huron River Water Trail.

Huron River WATER TRAIL

Hamburg Township
a great place to grow

WILDLIFE ALONG THE HURON RIVER


American Beaver
Castor canadensis


Mayfly
Ephemeroptera


Northern Map Turtle
Graptemys geographica


Great Blue Heron
Ardea herodias


Smallmouth Bass
Micropterus dolomieu


Bald Eagle
Haliaeetus leucocephalus

EXPLORE THE HURON RIVER WATER TRAIL

From Manly W. Bennett Park, kayak Horseshoe (Hall) Creek into the Huron River, which is part of the 125-mile water trail that winds through forests, wetlands, and towns on its way to Lake Erie. Enjoy a peaceful trip and connect with Michigan's natural beauty. Visit our website to learn more about our area amenities and respites.

PROTECT OUR WATERS & WILDLIFE

The Huron River supports fish, turtles, birds, and more—and provides clean water and recreation for communities. The Huron River was designated as the 18th trail of the National Water Trail System in 2015.

DO YOUR PART

- Respect wildlife – Watch from a distance
- Help prevent erosion - Stay on designated path and launches
- Leave no trace – Keep our parks and waters clean

WATER LEVELS/WOODY DEBRIS MAY AFFECT ACCESS.

Learn more about the Huron River and water access points at **HURONRIVERWATERTRAIL.ORG**

PERFORMANCE BOND

CONTRACTOR *(name and address)*:
L. J. Construction Inc.
5863 S. Kingston Road
Clifford, MI 48727

SURETY *(name and address of principal place of business)*:

Nationwide Mutual Insurance Company
1100 Locust St.
Des Moines, IA 50391

OWNER *(name and address)*:
Hamburg Township
P.O. Box 157
Hamburg, MI 48139

CONSTRUCTION CONTRACT
Effective Date of the Agreement: **July 9, 2025**
Amount: **$583,110.00**
Description: **Manly Bennett Park & Water Trail Access Improvement**
Hamburg Township, MI

BOND
Bond Number: 7901264129
Date *(not earlier than the Effective Date of the Agreement of the Construction Contract)*: 7/9/2025
Amount: $583,110.00
Modifications to this Bond Form: ☑ None ☐ See Paragraph 16

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL	**SURETY**
L.J. Construction, Inc. *(seal)*	Nationwide Mutual Insurance Company *(seal)*
Contractor's Name and Corporate Seal	Surety's Name and Corporate Seal
By: _____	**By:** _____
Signature	Signature *(attach power of attorney)*
_____	James S. Kurowski
Print Name	Print Name
_____	Attorney in fact
Title	Title
Attest: _____	**Attest:** _____
Signature	Signature
_____	Gail A. Kurowski, Attorney in fact
Title	Title

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after:

3.1 The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;

3.2 The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

3.3 The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:

7.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

7.2 additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and

7.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.

9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.

10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

11. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

14. Definitions

14.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

14.2 Construction Contract: The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

14.3 Contractor Default: Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

14.4 Owner Default: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

14.5 Contract Documents: All the documents that comprise the agreement between the Owner and Contractor.

15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

16. Modifications to this Bond are as follows:

PAYMENT BOND

CONTRACTOR *(name and address)*:
L. J. Construction Inc.
5863 S. Kingston Road
Clifford, MI 48727

SURETY *(name and address of principal place of business)*:
Nationwide Mutual Insurance Company
1100 Locust St.
Des Moines, IA 50391

OWNER *(name and address)*:
Hamburg Township
P.O. Box 157
Hamburg, MI 48139

CONSTRUCTION CONTRACT
Effective Date of the Agreement: **July 9, 2025**
Amount: **$583,110.00**
Description: **Manly Bennett Park & Water Trail Access Improvement**
Hamburg Township, MI

BOND
Bond Number: 7901264129
Date *(not earlier than the Effective Date of the Agreement of the Construction Contract)*: 7/9/2025
Amount: $583,110.00
Modifications to this Bond Form: ☑ None ☐ See Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

L.J. Construction, Inc. *(seal)*
Contractor's Name and Corporate Seal

By: _____
Signature

_____
Print Name

_____
Title

Attest: _____
Signature

_____
Title

SURETY

Nationwide Mutual Insurance Company *(seal)*
Surety's Name and Corporate Seal

By: _____
Signature *(attach power of attorney)*

James S. Kurowski
Print Name

Attorney in fact
Title

Attest: _____
Signature

Gail A. Kurowski, Attorney in fact
Title

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.

4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.

5. The Surety's obligations to a Claimant under this Bond shall arise after the following:

   5.1 Claimants who do not have a direct contract with the Contractor,

      5.1.1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and

      5.1.2 have sent a Claim to the Surety (at the address described in Paragraph 13).

   5.2 Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).

6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.

7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

   7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

   7.2 Pay or arrange for payment of any undisputed amounts.

   7.3 The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

8. The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

9. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this

Bond, subject to the Owner's priority to use the funds for the completion of the work.

10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.

11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

12. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

13. Notice and Claims to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

16. **Definitions**

16.1 **Claim:** A written statement by the Claimant including at a minimum:

1. The name of the Claimant;
2. The name of the person for whom labor was done, or materials or equipment furnished;
3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
4. A brief description of the labor, materials, or equipment furnished;
5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
7. The total amount of previous payments received by the Claimant; and
8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.

16.2 **Claimant:** An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

16.3 **Construction Contract:** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

16.4 **Owner Default**: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS THAT:

Nationwide Mutual Insurance Company, an Ohio corporation

hereinafter referred to severally as the "Company" and collectively as "the Companies" does hereby make, constitute and appoint:

GAIL A KUROWSKI; JAMES S KUROWSKI;

each in their individual capacity, its true and lawful attorney-in-fact, with full power and authority to sign, seal, and execute on its behalf any and all bonds and undertakings, and other obligatory instruments of similar nature, in penalties not exceeding the sum of

UNLIMITED

and to bind the Company thereby, as fully and to the same extent as if such instruments were signed by the duly authorized officers of the Company; and all acts of said Attorney pursuant to the authority given are hereby ratified and confirmed.

This power of attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the board of directors of the Company:

"RESOLVED, that the president, or any vice president be, and each hereby is, authorized and empowered to appoint attorneys-in-fact of the Company, and to authorize them to execute and deliver on behalf of the Company any and all bonds, forms, applications, memorandums, undertakings, recognizances, transfers, contracts of indemnity, policies, contracts guaranteeing the fidelity of persons holding positions of public or private trust, and other writings obligatory in nature that the business of the Company may require; and to modify or revoke, with or without cause, any such appointment or authority; provided, however, that the authority granted hereby shall in no way limit the authority of other duly authorized agents to sign and countersign any of said documents on behalf of the Company."

"RESOLVED FURTHER, that such attorneys-in-fact shall have full power and authority to execute and deliver any and all such documents and to bind the Company subject to the terms and limitations of the power of attorney issued to them, and to affix the seal of the Company thereto; provided, however, that said seal shall not be necessary for the validity of any such documents."

This power of attorney is signed and sealed under and by the following bylaws duly adopted by the board of directors of the Company.

Execution of Instruments. Any vice president, any assistant secretary or any assistant treasurer shall have the power and authority to sign or attest all approved documents, instruments, contracts, or other papers in connection with the operation of the business of the company in addition to the chairman of the board, the chief executive officer, president, treasurer or secretary; provided, however, the signature of any of them may be printed, engraved, or stamped on any approved document, contract, instrument, or other papers of the Company.

IN WITNESS WHEREOF, the Company has caused this instrument to be sealed and duly attested by the signature of its officer the 1st day of April, 2024.

Antonio C. Albanese, **Vice President** of Nationwide Mutual Insurance Company

ACKNOWLEDGMENT

STATE OF NEW YORK COUNTY OF KINGS: ss
On this 1st day of April, 2024, before me came the above-named officer for the Company aforesaid, to me personally known to be the officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, deposes and says, that he is the officer of the Company aforesaid, that the seal affixed hereto is the corporate seal of said Company, and the said corporate seal and his signature were duly affixed and subscribed to said instrument by the authority and direction of said Company.

Sharon Laburda
Notary Public, State of New York
No. 01LA6427697
Qualified in Kings County
Commission Expires January 3, 2026

Notary Public
My Commission Expires
January 3, 2026

CERTIFICATE

I, Lezlie F. Chimienti, Assistant Secretary of the Company, do hereby certify that the foregoing is a full, true and correct copy of the original power of attorney issued by the Company; that the resolution included therein is a true and correct transcript from the minutes of the meetings of the boards of directors and the same has not been revoked or amended in any manner; that said Antonio C. Albanese was on the date of the execution of the foregoing power of attorney the duly elected officer of the Company, and the corporate seal and his signature as officer were duly affixed and subscribed to the said instrument by the authority of said board of directors; and the foregoing power of attorney is still in full force and effect.

IN WITNESS WHEREOF, I have hereunto subscribed my name as Assistant Secretary, and affixed the corporate seal of said Company this 9th day of July, 2025.

Assistant Secretary

CONTRACT DOCUMENTS
FOR

MANLY BENNETT PARK & WATER TRAIL ACCESS IMPROVEMENTS

Prepared for:

HAMBURG TOWNSHIP,
MICHIGAN

Prepared By:
SPICER GROUP, INC.
JULY 2025



Plans Included:

DPL-1214-01-13

Project I.D. Number 133809SG2023

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MANLY BENNETT PARK & WATER TRAIL
ACCESS IMPROVEMENTS

ADVERTISEMENT FOR BIDS

Bids for the construction of the **Manly Bennett Park & Water Trail Access Improvements** will be received by Hamburg Township via QUEST CDN until **2:00 p.m.** local time on **April 17, 2025.** There will be a Virtual Bid Letting only, and bids will only be accepted when submitted through Quest CDN. Call-in information for the Bid Opening will be provided in an addendum.

The Project involves **developing and enhancing Hamburg Township's 384-acre Manly W. Bennett Memorial Park to improve accessibility and site conditions. Planned upgrades include site grading, replacing 700 linear feet of HMA path and 3250 linear feet of linear crushed limestone path, adding three new playground pods, and removing and replacing the existing canoe and kayak launch. A crushed limestone path will be constructed to Hall's Creek, a tributary of the Huron River, ensuring ADA access to the Huron River Water Trail. The improvements will also feature interpretive signage, safety surfacing (poured-in-place and engineered wood fiber), a rain garden, native plantings, a bench, and landscaping.**

This project is funded with a Michigan DNR Trust Fund Grant. All relevant State and/or Federal requirements will apply.

The Issuing Office for the Bidding Documents is Spicer Group, Inc. Contact: Cindy Todd, Project Manager, 410-490-0413, or cynthia.todd@spicergroup.com. The contract documents for bidding purposes are available beginning **March 4, 2025,** on the Bidding section of the Spicer Group website at www.spicergroup.com, Bidding tab. You may view the digital project bidding documents at no cost by entering Quest project number **9485042** on the website's project search page. To be considered a Planholder for bids, a contractor must register with QuestCDN.com and purchase the contract documents in digital form at a cost of $42. Registering as a Planholder is recommended for all prime contractors and subcontractors as Planholders will receive automatic notice of addendums and other contract document updates via QuestCDN. Contact QuestCDN Customer Support at 952-233-1632 or info@questcdn.com for assistance in membership registration, downloading digital project information and vBid online bid submittal questions. For this project, bids will ONLY be received and accepted via the online electronic bid service through QuestCDN.com. To access the electronic bid form, download the project documents and click on the online bid button on the bid posting page. Prospective bidders must be on the Planholder list through QuestCDN for bids to be accepted.

Bid security shall be furnished in accordance with the Instructions to Bidders.

Submitting an Online Bid:

1. Proceed to our company website, www.spicergroup.com, Bidding tab. You will then be directed to our QUESTCDN electronic bidding project list.
2. Select the project listed in this advertisement from the list of projects.
3. You will be asked to sign into your account or create a free QUESTCDN account by clicking the 'join' link. Contact QUESTCDN at 952-233-1632 or info@questcdn.com for assistance in membership registration, downloading the project and bid online bid submittal.
4. The QUESTCDN doc number for this project is **9485042.**
5. To access the bid form, click the online bidding button at the top of bid advertisement. The on-line bid button will be available when the project is published and open for bidding.
6. All addendums will be issued through our QUESTCDN electronic bidding site. You must download the bid documents to be a plan holder and receive any addenda. It is the sole responsibility of the contractor, subcontractor, vendor and/or any individual and/or corporation to review all addendums twenty-four (24) hours prior to bid.

INSTRUCTIONS TO BIDDERS

ARTICLE 1 – DEFINED TERMS

1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:

A. *Issuing Office* – The office from which the Bidding Documents are to be issued.

ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

2.01 Complete sets of the Bidding Documents may be obtained from the Issuing Office in the number and format stated in the advertisement or invitation to bid.

2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

3.01 To demonstrate Bidder's qualifications to perform the Work, after submitting its Bid and within 3 days of Owner's request, Bidder shall submit (a) written evidence establishing its qualifications such as financial data, previous experience, and present commitments.

3.02 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.

3.03 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.

3.04 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

ARTICLE 4 – SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

4.01 *Site and Other Areas*

A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

4.02 *Existing Site Conditions*

A. Subsurface and Physical Conditions; Hazardous Environmental Conditions

1. The Supplementary Conditions identify:

a. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.

b. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).

c. reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.

d. Technical Data contained in such reports and drawings.

2. Owner will make copies of reports and drawings referenced above available to any Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.

B. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site are set forth in the Contract Documents and are based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.

C. Adequacy of Data: Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 5.03, 5.04, and 5.05 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 5.06 of the General Conditions.

4.03 *Site Visit and Testing by Bidders*

A. Bidder shall conduct the required Site visit during normal working hours, and shall not disturb any ongoing operations at the Site.

B. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site.

C. Bidder shall comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.

D. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

4.04 *Owner's Safety Program*

A. Site visits and work at the Site may be governed by an Owner safety program. As the General Conditions indicate, if an Owner safety program exists, it will be noted in the Supplementary Conditions.

4.05 *Other Work at the Site*

A. Reference is made to Article 8 of the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

ARTICLE 5 – BIDDER'S REPRESENTATIONS

5.01 It is the responsibility of each Bidder before submitting a Bid to:

A. examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;

B. visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;

C. become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work;

D. carefully study all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings;

E. consider the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs;

F. agree, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;

G. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;

H. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;

I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and

J. agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 6 – PRE-BID CONFERENCE

6.01 A pre-Bid conference will be held at the time and location stated in the invitation or advertisement to bid. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference. Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

ARTICLE 7 – INTERPRETATIONS AND ADDENDA

7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing **via email only** to cynthia.todd@spicergroup.com. All email questions must be received by **5:00 P.M. on Thursday, April 10, 2025.** Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all parties recorded as having received the Bidding Documents. Questions received after **5:00 P.M. on Thursday, April 10, 2025,** may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

7.02 Addenda may be issued to clarify, correct, supplement, or change the Bidding Documents.

ARTICLE 8 – BID SECURITY

8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of 5 percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a certified check, bank money order, or a Bid bond issued by a surety meeting the requirements of Paragraphs 6.01 and 6.02 of the General Conditions.

8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract Documents, furnished the required contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults.

8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Contract or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.

8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within seven days after the Bid opening.

ARTICLE 9 – CONTRACT TIMES

9.01 The number of days within which, or the dates by which, the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

ARTICLE 10 – LIQUIDATED DAMAGES

10.01 Provisions for liquidated damages, if any, for failure to timely attain a Milestone, Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Agreement.

ARTICLE 11 – SUBSTITUTE AND "OR-EQUAL" ITEMS

11.01 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration during the bidding and Contract award process of possible substitute or "or-equal" items. In cases in which the Contract allows the Contractor to request that Engineer authorize the use of a substitute or "or-equal" item of material or equipment, application for such acceptance may not be made to and will not be considered by Engineer until after the Effective Date of the Contract.

11.02 All prices that Bidder sets forth in its Bid shall be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of "or-equal" or substitution requests are made at Bidder's sole risk.

ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS

12.01 A Bidder shall be prepared to retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of the Work if required by the Bidding Documents (most commonly in the Specifications) to do so. If a prospective Bidder objects to retaining any such Subcontractor, Supplier, or other individual or entity, and the concern is not relieved by an Addendum, then the prospective Bidder should refrain from submitting a Bid.

12.02 Subsequent to the submittal of the Bid, Owner may not require the Successful Bidder or Contractor to retain any Subcontractor, Supplier, or other individual or entity against which Contractor has reasonable objection.

12.03 The apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of the Subcontractors or Suppliers proposed for the following project.

If requested by Owner, such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, or other individual or entity. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder shall submit a substitute, Bidder's Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.

12.04 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, or other individuals or entities. Declining to make requested substitutions will constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the

Notice of Award will be deemed acceptable to Owner and Engineer subject to subsequent revocation of such acceptance as provided in Paragraph 7.06 of the General Conditions.

ARTICLE 13 – PREPARATION OF BID

13.01 Bids will be submitted electronically via Quest CDN vBid™. See Article 15 for instructions on electronic bid submission.

ARTICLE 14 – BASIS OF BID

14.01 *Lump Sum*

A. Bidders shall submit a Bid on a lump sum basis as set forth in the Bid Form.

14.02 *Unit Price*

A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the unit price section of the Bid Form.

B. The "Bid Price" (sometimes referred to as the extended price) for each unit price Bid item will be the product of the "Estimated Quantity" (which Owner or its representative has set forth in the Bid Form) for the item and the corresponding "Bid Unit Price" offered by the Bidder. The total of all unit price Bid items will be the sum of these "Bid Prices"; such total will be used by Owner for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with Paragraph 13.03 of the General Conditions.

C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

14.03 *Allowances*

A. For cash allowances the Bid price shall include such amounts as the Bidder deems proper for Contractor's overhead, costs, profit, and other expenses on account of cash allowances, if any, named in the Contract Documents, in accordance with Paragraph 13.02.B of the General Conditions.

ARTICLE 15 – SUBMITTAL OF BID

15.01 With each copy of the Bidding Documents, a Bidder is furnished one Affidavit of Compliance – Iran Economic Sanctions Act (C210) This form must be signed, notarized and included with the submitted bid package.

15.02 With each copy of the Bidding Documents, a Bidder is furnished one Bid Form (C410). Article 9 of the Bid Form must be completed, signed, and included with the submitted bid package

15.03 A Bid shall be received no later than the date and time prescribed. For this project bids will **ONLY** be received and accepted via the online electronic bid service through QuestCDN.com. To access the electronic bid form, download the project documents and click the online bidding button at the top of the advertisement. Prospective bidders must be on the plan holders list through Quest CDN for bids to be accepted. No paper bids will be accepted.

A. Proceed to our company web site www.spicergroup.com, Bidding tab. You then will be directed to our QUESTCDN electronic bidding project list.

B. Select the project listed in this advertisement from the list of projects.

C. You will be asked to sign into your account or create a free QUESTCDN account by clicking the 'join' link. Contact QUESTCDN at 952-233-1632 or info@questcdn.com for assistance in membership registration.

D. The QUESTCDN ebid doc number for this project is **9485042.**

E. To access the bid form, click the online bidding button at the top of bid advertisement. The on-line bid button will be available when the project is published and open for bidding.

F. All addendums will be issued through our QUESTCDN electronic bidding site. You must download the bid documents to be a plan holder and receive any addenda. It is the sole responsibility of the contractor, subcontractor, vendor and/or any individual and/or corporation to review all addendums twenty-four (24) hours prior to bid

15.04 Bids received after the date and time prescribed for the opening of bids, or not submitted in the designated manner, will not be accepted.

ARTICLE 16 – MODIFICATION AND WITHDRAWAL OF BID

16.01 A Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.

16.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 16.01 and submit a new Bid prior to the date and time for the opening of Bids.

16.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

ARTICLE 17 – OPENING OF BIDS

17.01 Bids will be opened at the time and place indicated in the advertisement or invitation to bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

ARTICLE 18 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE

18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT

19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible. If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, then the Owner will reject the Bid as nonresponsive; provided that Owner also reserves the right to waive all minor informalities not involving price, time, or changes in the Work.

19.02 If Owner awards the contract for the Work, such award shall be to the responsible Bidder submitting the lowest responsive Bid.

19.03 Evaluation of Bids

A. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.

B. For the determination of the apparent low Bidder when unit price bids are submitted, Bids will be compared on the basis of the total of the products of the estimated quantity of each item and unit price Bid for that item, together with any lump sum items.

19.04 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.

19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

ARTICLE 20 – BONDS AND INSURANCE

20.01 Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the Agreement (executed by Successful Bidder) to Owner, it shall be accompanied by required bonds and insurance documentation.

ARTICLE 21 – SIGNING OF AGREEMENT

21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 15 days thereafter, Successful Bidder shall execute and deliver the required number of counterparts of the Agreement (and any bonds and insurance documentation required to be delivered by the Contract Documents) to Owner. Within ten days thereafter, Owner shall deliver one fully executed counterpart of the Agreement to Successful Bidder, together with printed and electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

ARTICLE 22 – EQUAL EMPLOYMENT

22.01 Attention of Bidders is particularly called to the requirement for ensuring that employees and applicants for employment are not discriminated against on any illegal basis with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex, height, weight, marital status, partisan considerations, genetic information, or a disability that is unrelated to the individual's ability to perform the duties of a particular job or position as required by Public Act 453 of 1976 (Elliot-Larsen Civil Rights Act), Public Act 220 of 1976 (Persons with Disabilities Act), as amended and Executive Directive 2019-09.

AFFIDAVIT OF COMPLIANCE-IRAN ECONOMIC SANCTIONS ACT
MICHIGAN PUBLIC ACT 517 OF 2012

The undersigned, as owner or authorized officer of the below named CONTRACTOR, pursuant to the compliance certification requirement by the State of Michigan, and as referenced by OWNER in the BIDDING DOCUMENTS, hereby certifies, represents and warrants that the CONTRACTOR (including its Officers, Directors and Employees) is not an "Iran linked business" as defined by the Iran Economic Sanctions Act, Michigan Public Act 517 of 2012 (THE ACT). And, that in the event CONTRACTOR is awarded a contract as a result of the aforementioned BIDDING DOCUMENTS, the Contractor will not become an "Iran linked business" at any time during the course of preforming the work or any services under the contract.

The CONTACTOR further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than $250,000.00 or 2 times the amount of the contract or proposed contract for which the false certification was made, whichever is greater. The cost of the OWNER'S investigation and reasonable attorney fees may also be added in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on any other of the OWNER'S projects for three (3) years from the date that it is determined that the person has submitted the false certification.

CONTRACTOR:
L.J. Construction Inc
Name of Contractor
By: [signature]
Its: Secretary
Date: 4/16/25

STATE OF Michigan }
ss.
COUNTY OF Tuscola }

This instrument was acknowledged before me on the 16th day of April, 2025
by Danielle McClellan

[signature]
, Notary Public
Tuscola County, State of Michigan
My Commission expires: 9/28/27
Acting in the County of: Tuscola

Danielle M. McClellan
Notary Public, State of Michigan
County of Tuscola
My Commission Expires Sep. 28, 2027
Acting in the County of Tuscola

BID FORM
FOR CONSTRUCTION CONTRACTS

ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

Hamburg Township, MI via Quest vBid

The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents. **The Owner reserves the right to accept or reject any and all bids for any reason.**

ARTICLE 2 – BIDDER'S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER'S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and any addenda.

B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

1. Bidder is notified that State or Federal funds are being used to assist in construction of this project. All relevant State or Federal requirements will apply.

D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.

F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.

G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.

H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.

I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.

J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 – BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;

B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;

C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and

D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:

1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;

2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and

4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the e execution of the Contract.

ARTICLE 5 – BASIS OF BID

5.01 Bidder will perform the following Work at the unit prices submitted electronically via Quest CDN vBid™. The bid item list that follows is provided for information only:

SEE ATTACHED *EXHIBIT A*

Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 6 – TIME OF COMPLETION

6.01 Bidder agrees that the Work will be substantially complete on or before **October 24, 2025,** and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before **November 21, 2025.**

6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

7.01 The following documents are submitted with and made a condition of this Bid:

A. Required Bid security;

B. Affidavit of Compliance – Iran Economic Sanctions Act;

ARTICLE 8 – DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

BIDDER: *[Indicate correct name of bidding entity]*

L. J. Construction inc

By: *[Signature]* Daniel Jocham

[Printed name] Daniel Jocham

(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: *[Signature]* Michael Jocham

[Printed name] Michael Jocham

Title: President

Submittal Date: 4-17-2025

Address for giving notices:

5863 S. Kingston Rd, Clifford, MI 48727

ljconstructionmi@gmail.com

Telephone Number: 989-761-0131

Fax Number: 989-761-0132

Contact Name and e-mail address: L. J. Construction inc

ljconstructionmi@gmail.com

Bidder's License No.: *(where applicable)*

NOTE TO USER: Use in those states or other jurisdictions where applicable or required.

BID FORM - EXHIBIT A
MANLY BENNETT PARK & WATER TRAIL ACCESS IMPROVEMENTS
HAMBURG TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

Item No.	Estimated Quantity	Unit	Description	Unit Price	Amount
DEMOLITION & SITE PREPARATION					
1.	1	LS	Mobilization, Max 10%	Lump Sum	$ 53,010.00
2.	1	LS	Soil Erosion and Sedimentation Control Measures	Lump Sum	$ 9,500.00
3.	1	LS	Demolition & Site Clearing	Lump Sum	$ 19,000.00
4.	1	LS	Excavation & Rough Grading	Lump Sum	$ 36,000.00
5.	1	LS	Permit Fees	Lump Sum	$ 2,000.00
PATHS & TRAILS					
6.	1	LS	8' Wide Accessible Path, HMA, C.I.P. *(approx. 700 Ln. Ft)*	Lump Sum	$ 72,000.00
7.	1	LS	6' Wide Path, 22A Crushed Limestone & Limestone Fines, C.I.P. *(approx. 700 Ln. Ft)*	Lump Sum	$ 40,000.00
8.	1	LS	8' Wide Path, 22A Crushed Limestone & Limestone Fines, C.I.P. *(approx. 2,550 Ln. Ft.)*	Lump Sum	$ 93,000.00
9.	1	LS	Rip-Rap Slope Stabilization *(approx. 5 Cu. Yds.)*	Lump Sum	$ 4,400.00
PLAYGROUND					
10.	1	LS	6" Reinforced Concrete Edging *(approx. 210 Ln. Ft.)*	Lump Sum	$ 21,500.00
11.	1	LS	Play Structure(s)	Lump Sum	$ 70,000.00
12.	1	LS	Safety Surface, Poured-In-Place (PIP) *(approx. 270 Sq. Ft.)* *(Includes subsurface drainage - Fabric, 4" Perforated Pipe in Pea Stone)*	Lump Sum	$ 32,000.00
13.	1	LS	Safety Surface, Engineered Wood Fiber (EWF), C.I.P. *(approx. 1500 Sq. Ft.)* *(Includes subsurface drainage - Fabric, 4" Perforated Pipe in Pea Stone)*	Lump Sum	$ 11,000.00
14.	1	LS	Play Surface, Crushed Stone *(approx. 380 Sq. Ft.)* *(Includes subsurface drainage - Fabric, 4" Perforated Pipe in Pea Stone)*	Lump Sum	$ 9,000.00
15.	1	LS	Drywell	Lump Sum	$ 3,700.00
OTHER ITEMS					
16.	1	LS	Canoe/Kayak Launch	Lump Sum	$ 54,000.00
17.	1	EA	Transfer Station at Launch	EA	$ 3,500.00
18.	1	LS	Bench Concrete Pad, Non-Reinforced, 4" *(approx. 70 Sq. Ft.)*	Lump Sum	$ 2,500.00
19.	1	EA	6' Bench w/ (1) Armrest & Backrest, Surface Mount	EA	$ 2,200.00
20.	1	LS	Interpretive Signage	Lump Sum	$ 1,800.00
21.	1	LS	Site Restoration & Cleanup	Lump Sum	$ 28,000.00
22.	1	LS	Construction Staking & Material Testing	Allowance	$15,000
TOTAL BID AMOUNT					$ 583,110.00

MDOT 1313 (07/21)

PERSONS AUTHORIZED TO EXECUTE CONTRACTS

All partners must sign contracts, unless a power of attorney modifying this is supplied.
In case of a corporation, only those signatures listed below will be accepted.

The following persons are duly authorized to execute contracts and related documents on behalf of:

LEGAL COMPANY NAME (BIDDER)
L.J. Construction, Inc.

NOTE: In addition, CORPORATIONS shall complete the Certificate of Secretary listing those persons authorized to execute contracts.

NAME (Printed or typed, must match authorized signature exactly)	AUTHORIZED SIGNATURE	DATE
Laurence F. Jocham		3/26/24
John Jocham		3/26/24
Daniel Jocham		3/26/24
Troy Townsend		3/26/24
Danielle McClellan		3/26/24
Michael Jocham		3/26/24

EQUAL EMPLOYMENT OPPORTUNITY/EQUAL ACCESS PROGRAM

The bidder named below has initiated and intends to continue an equal employment opportunity policy designed to eliminate any discrimination in employment because of religion, race, color, national origin, age, sex, marital status, physical or mental handicap, weight or arrest record.

The bidder named below will not discriminate in providing its programs or services to the public because of religion, race, color, national origin, age, sex, marital status or physical or mental handicap. The bidder will also provide reasonable accommodation to the needs of individuals with disabilities consistent with state and federal law.

LEGAL COMPANY NAME (BIDDER)
L.J. Construction, Inc.

MDOT 1313 (07/21)

CERTIFICATE OF SECRETARY
(Corporations only)

The undersigned, being the duly elected secretary of L.J. Construction, Inc., a corporation, hereby certifies that the following resolution was duly adopted by the Board of Directors of said corporation at a meeting on _____ and that this resolution is in full force and effect:

"RESOLVED, That the following listed person are hereby authorized to execute, on behalf of L.J. Construction, Inc, any and all contracts with the State of Michigan or other governmental entity."

NOTE: The names typed or printed below must exactly match the names on page 22. Titles and signatures are not required on this page.

Laurence F. Jocham	Michael Jocham
John Jocham	
Daniel Jocham	
Troy Townsend	
Danielle McClellan	

SIGNATURE OF SECRETARY	DATE
	3-26-2024

EXHIBIT A

Manly Bennett Park & Water Trail Access Improvements (#9485042)
Owner: Hamburg Township
Solicitor: Spicer Group - Saginaw - HQ
04/17/2025 02:00 PM EDT

				L.J. Construction, Inc.	
Line Item	Item Description	UofM	Quantity	Unit Price	Extension
1	Mobilization, Max 10%	LSUM	1	$53,010.00	$53,010.00
2	Soil Erosion and Sedimentation Control Measures	LSUM	1	$9,500.00	$9,500.00
3	Demolition & Site Clearing	LSUM	1	$19,000.00	$19,000.00
4	Excavation & Rough Grading	LSUM	1	$36,000.00	$36,000.00
5	Permit Fees	LSUM	1	$2,000.00	$2,000.00
6	8' Wide Accessible Path, HMA, C.I.P. (approx. 700 Ln. Ft)	LSUM	1	$72,000.00	$72,000.00
7	6' Wide Path, 22A Crushed Limestone & Limestone Fines, C.I.P. (approx. 700 Ln. Ft)	LSUM	1	$40,000.00	$40,000.00
8	8' Wide Path, 22A Crushed Limestone & Limestone Fines, C.I.P. (approx. 2,550 Ln. Ft.)	LSUM	1	$93,000.00	$93,000.00
9	Rip-Rap Slope Stabilization (approx. 5 Cu. Yds.)	LSUM	1	$4,400.00	$4,400.00
10	6" Reinforced Concrete Edging (approx. 210 Ln. Ft.)	LSUM	1	$21,500.00	$21,500.00
11	Play Structure(s)	LSUM	1	$70,000.00	$70,000.00
12	Safety Surface, Poured-In-Place (PIP) (approx. 270 Sq. Ft.) Includes subsurface drainage - Fabric, 4" Perforated Pipe in Pea Stone	LSUM	1	$32,000.00	$32,000.00
13	Safety Surface, Engineered Wood Fiber (EWF), C.I.P. (approx. 1500 Sq. Ft.) Includes subsurface drainage - Fabric, 4" Perforated Pipe in Pea Stone	LSUM	1	$11,000.00	$11,000.00
14	Play Surface, Crushed Stone (approx. 380 Sq. Ft.) Includes subsurface drainage - Fabric, 4" Perforated Pipe in Pea Stone	LSUM	1	$9,000.00	$9,000.00
15	Drywell	LSUM	1	$3,700.00	$3,700.00
16	Canoe/Kayak Launch	LSUM	1	$54,000.00	$54,000.00
17	Transfer Station at Launch	EA	1	$3,500.00	$3,500.00
18	Bench Concrete Pad, Non-Reinforced, 4" (approx. 70 Sq. Ft.)	LSUM	1	$2,500.00	$2,500.00
19	6' Bench w/ (1) Armrest & Backrest, Surface Mount	EA	1	$2,200.00	$2,200.00
20	Interpretive Signage	LSUM	1	$1,800.00	$1,800.00
21	Site Restoration & Cleanup	LSUM	1	$28,000.00	$28,000.00
22	Construction Staking & Material Testing (Allowance)	LSUM	1	$15,000.00	$15,000.00
	Bid Total				**$583,110.00**

NOTICE OF AWARD

Date of Issuance: July 3, 2025

Owner: Hamburg Township
Owner's Contract No.:

Engineer: Spicer Group, Inc.
Engineer's Project No.: 133809SG2023

Project: Manly Bennett Park & Water Trail Access Improvements
Contract Name: Manly Bennett Park & Water Trail Access Improvements

Bidder: L. J. Construction Inc.

Bidder's Address: 5863 S. Kingston Rd.
Clifford, MI 48727

TO BIDDER:

You are notified that Owner has accepted your Bid dated April 17, 2025, for the above Contract, and that you are the Successful Bidder and are awarded a Contract for: Manly Bennett Park & Water Trail Access Improvements.

The Contract Price of the awarded Contract is: Five Hundred Eighty-Three Thousand, One Hundred Ten Dollars and Zero Cents ($583,110.00).

4 unexecuted counterparts of the Agreement accompany this Notice of Award, and one copy of the Contract Documents accompanies this Notice of Award or has been transmitted or made available to Bidder electronically.

☒ a set of the Drawings will be delivered separately from the other Contract Documents.

You must comply with the following conditions precedent within 15 days of the date of receipt of this Notice of Award:

1. Deliver to Owner 4 counterparts of the Agreement, fully executed by Bidder.
2. Deliver with the executed Agreement(s) the Contract security *[e.g., performance and payment bonds]* and insurance documentation as specified in the Instructions to Bidders and General Conditions, Articles 2 and 6.
3. Other conditions precedent (if any):

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within ten days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Agreement, together with any additional copies of the Contract Documents as indicated in Paragraph 2.02 of the General Conditions.

Owner**:** Hamburg Township

Authorized Signature – on behalf of Hamburg Township

By: Cynthia A. Todd

Title: Director of Planning, Spicer Group

Date Issued: July 2, 2025

Copy: Engineer

AGREEMENT

THIS AGREEMENT is by and between Hamburg Township ("Owner") and L. J. Construction Inc. ("Contractor").

Owner and Contractor hereby agree as follows:

ARTICLE 1 – WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows: **Manly Bennett Park & Water Trail Access Improvements.**

ARTICLE 2 – THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: Manly Bennett Park & Water Trail Access Improvements.

ARTICLE 3 – ENGINEER

3.01 The Project has been designed by Spicer Group, Inc.

3.02 The Owner has retained Spicer Group, Inc. ("Engineer") to act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 – CONTRACT TIMES

4.01 *Time of the Essence*

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Contract Times: Dates*

A. The Work will be substantially completed on or before **October 24, 2025**, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before **November 21, 2025.**

4.03 *Liquidated Damages*

A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):

1. Substantial Completion: Contractor shall pay Owner $1,500 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 4.02.A above for Substantial Completion until the Work is substantially complete.
2. Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner $1,500 for each day that expires after such time until the Work is completed and ready for final payment.
3. Liquidated damages for failing to timely attain Substantial Completion and final completion are not additive and will not be imposed concurrently.
4. Milestones: Contractor shall pay Owner $1,500 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above for achievement of Milestone 1, until Milestone 1 is achieved.

4.04 *Special Damages*

A. In addition to the amount provided for liquidated damages, Contractor shall reimburse Owner (1) for any fines or penalties imposed on Owner as a direct result of the Contractor's failure to attain Substantial Completion according to the Contract Times, and (2) for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Substantial Completion (as duly adjusted pursuant to the Contract), until the Work is substantially complete.

B. After Contractor achieves Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times, Contractor shall reimburse Owner for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Work to be completed and ready for final payment (as duly adjusted pursuant to the Contract), until the Work is completed and ready for final payment.

ARTICLE 5 – CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:

A. For all Unit Price Work, an amount equal to the sum of the extended prices (established for each separately identified item of Unit Price Work by multiplying the unit price times the actual quantity of that item):

The extended prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. As provided in Paragraph 13.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer.

B. Total of Lump Sum Amount and Unit Price Work (subject to final Unit Price adjustment) **Five Hundred Eighty-Three Thousand, One Hundred Ten Dollars and Zero Cents ($583,110.00)**.

C. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit A.

ARTICLE 6 – PAYMENT PROCEDURES

6.01 *Submittal and Processing of Payments*

A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 *Progress Payments; Retainage*

A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the 25th day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.

1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract

a. 95 percent of Work completed (with the balance being retainage). If the Work has been 50 percent completed as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, there will be no additional retainage; and

B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 100 percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less 200 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

6.03 *Final Payment*

A. Upon final completion and acceptance of the Work in accordance with Paragraph 15.06 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 15.06.

ARTICLE 7 – INTEREST

7.01 All amounts not paid when due shall bear interest at the rate as allowed by law at the place of the project.

ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS

8.01 In order to induce Owner to enter into this Contract, Contractor makes the following representations:

A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.

B. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

E. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs.

F. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.

G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.

H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.

I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

J. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

ARTICLE 9 – CONTRACT DOCUMENTS

9.01 *Contents*

A. The Contract Documents consist of the following:

1. This Agreement.
2. Performance bond.
3. Payment bond.
4. General Conditions.
5. Supplementary Conditions.
6. Specifications as listed in the table of contents of the Project Manual.
7. The Drawings are listed on the document title page.
8. Addenda.
9. Exhibits to this Agreement (enumerated as follows):
    a. Contractor's Bid.

10. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:

    a. Notice to Proceed.

    b. Work Change Directives.

    c. Change Orders.

    d. Field Orders.

B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).

C. There are no Contract Documents other than those listed above in this Article 9.

D. The Contract Documents may only be amended, modified, or supplemented as provided in the General Conditions.

ARTICLE 10 – MISCELLANEOUS

10.01 *Terms*

A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

10.02 *Assignment of Contract*

A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 *Successors and Assigns*

A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 *Severability*

A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.05 *Contractor's Certifications*

A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:

1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;

2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and

4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

10.06 *Other Provisions*

A. Owner stipulates that if the General Conditions that are made a part of this Contract are based on EJCDC® C-700, Standard General Conditions for the Construction Contract, published by the Engineers Joint Contract Documents Committee®, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or "track changes" (redline/strikeout), or in the Supplementary Conditions.

B. Equal Opportunity

Contractor shall not discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex, height, weight, marital status, or because of a handicap that is unrelated to the person's ability to perform the duties of a particular job or position.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on **July 9, 2025,** (which is the Effective Date of the Contract).

OWNER: Hamburg Township	CONTRACTOR: L.J. Construction Inc.
By:	By:
Title:	Title:
Attest:	Attest:
Title:	Title:
Address for giving notices:	Address for giving notices:
Hamburg Township	L.J. Construction Inc.
P.O. Box 157	5863 S. Kingston Road
Hamburg, MI 48139	Clifford, MI 48727

NOTICE TO PROCEED

Owner: Hamburg Township	**Owner's Contract No.:**
Contractor: L. J. Construction Inc.	**Contractor's Project No.:**
Engineer: Spicer Group, Inc.	**Engineer's Project No.:** 133809SG2023
Project: Manly Bennett Park & Water Trail Access Improvements	**Contract Name:** Manly Bennett Park & Water Trail Access Improvements
	Effective Date of Contract: July 9, 2025

TO CONTRACTOR:

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on **July 9, 2025**. *[see Paragraph 4.01 of the General Conditions]*

On that date, Contractor shall start performing its obligations under the Contract Documents. No Work shall be done at the Site prior to such date. In accordance with the Agreement, the date of Substantial Completion is **October 24, 2025**, and the date of readiness for final payment is **November 21, 2025.**

Before starting any Work at the Site, Contractor must comply with the following:
[Note any access limitations, security procedures, or other restrictions]

Owner**:** Hamburg Township

Authorized Signature – on behalf of Hamburg Township

By: Cynthia A. Todd

Title: Director of Planning, Spicer Group

Date Issued: July 9, 2025

Copy: Engineer

PERFORMANCE BOND

CONTRACTOR *(name and address)*:
L. J. Construction Inc.
5863 S. Kingston Road
Clifford, MI 48727

SURETY *(name and address of principal place of business)*:

OWNER *(name and address)*:
Hamburg Township
P.O. Box 157
Hamburg, MI 48139

CONSTRUCTION CONTRACT
Effective Date of the Agreement: **July 9, 2025**
Amount: **$583,110.00**
Description: **Manly Bennett Park & Water Trail Access Improvement**
Hamburg Township, MI

BOND
Bond Number:
Date *(not earlier than the Effective Date of the Agreement of the Construction Contract)*:
Amount:
Modifications to this Bond Form: ☐ None ☐ See Paragraph 16

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL	**SURETY**
_____ *(seal)*	_____ *(seal)*
Contractor's Name and Corporate Seal	Surety's Name and Corporate Seal
By: _____	**By:** _____
Signature	Signature *(attach power of attorney)*
_____	_____
Print Name	Print Name
_____	_____
Title	Title
Attest: _____	**Attest:** _____
Signature	Signature
_____	_____
Title	Title

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after:

3.1 The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;

3.2 The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

3.3 The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:

7.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

7.2 additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and

7.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.

9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.

10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

11. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

14. Definitions

14.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

14.2 Construction Contract: The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

14.3 Contractor Default: Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

14.4 Owner Default: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

14.5 Contract Documents: All the documents that comprise the agreement between the Owner and Contractor.

15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

16. Modifications to this Bond are as follows:

PAYMENT BOND

CONTRACTOR *(name and address)*:
L. J. Construction Inc.
5863 S. Kingston Road
Clifford, MI 48727

SURETY *(name and address of principal place of business)*:

OWNER *(name and address)*:
Hamburg Township
P.O. Box 157
Hamburg, MI 48139

CONSTRUCTION CONTRACT
Effective Date of the Agreement: **July 9, 2025**
Amount: **$583,110.00**
Description: **Manly Bennett Park & Water Trail Access Improvement**
Hamburg Township, MI

BOND
Bond Number:
Date *(not earlier than the Effective Date of the Agreement of the Construction Contract)*:
Amount:
Modifications to this Bond Form: ☐ None ☐ See Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL	**SURETY**
_____ *(seal)*	_____ *(seal)*
Contractor's Name and Corporate Seal	Surety's Name and Corporate Seal
By: _____	**By:** _____
Signature	Signature *(attach power of attorney)*
_____	_____
Print Name	Print Name
_____	_____
Title	Title
Attest: _____	**Attest:** _____
Signature	Signature
_____	_____
Title	Title

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.

4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.

5. The Surety's obligations to a Claimant under this Bond shall arise after the following:

    5.1 Claimants who do not have a direct contract with the Contractor,

        5.1.1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and

        5.1.2 have sent a Claim to the Surety (at the address described in Paragraph 13).

    5.2 Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).

6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.

7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

    7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

    7.2 Pay or arrange for payment of any undisputed amounts.

    7.3 The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

8. The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

9. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this

Bond, subject to the Owner's priority to use the funds for the completion of the work.

10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.

11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

12. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

13. Notice and Claims to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

16. **Definitions**

16.1 **Claim:** A written statement by the Claimant including at a minimum:

1. The name of the Claimant;
2. The name of the person for whom labor was done, or materials or equipment furnished;
3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
4. A brief description of the labor, materials, or equipment furnished;
5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
7. The total amount of previous payments received by the Claimant; and
8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.

16.2 **Claimant:** An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

16.3 **Construction Contract:** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

16.4 **Owner Default**: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

16.5 **Contract Documents:** All the documents that comprise the agreement between the Owner and Contractor.

17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

18. Modifications to this Bond are as follows:

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.

2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.

3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

5. *Bidder*—An individual or entity that submits a Bid to Owner.

6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.

7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.

8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.

9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.

10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer has declined to address. A demand for money or services by a third party is not a Claim.

11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. ("CERCLA"); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. ("RCRA"); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents. .
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
20. *Engineer*—The individual or entity named as such in the Agreement.
21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
22. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.
23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.

26. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.

27. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.

28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.

29. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.

30. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.

31. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.

32. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or "RPR" includes any assistants or field staff of Resident Project Representative.

33. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.

34. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals and the performance of related construction activities.

35. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

36. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.

37. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.

38. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.

39. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.

40. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part

thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

41. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.

42. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.

43. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.

44. *Technical Data*—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.

45. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

46. *Unit Price Work*—Work to be paid for on the basis of unit prices.

47. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

48. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 *Terminology*

A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.

B. *Intent of Certain Terms or Adjectives*:

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered," "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in

general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.

C. *Day*:

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

D. *Defective*:

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:

a. does not conform to the Contract Documents; or

b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or

c. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or 15.04).

E. *Furnish, Install, Perform, Provide*:

1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words "furnish," "install," "perform," or "provide," then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

A. *Bonds*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.

B. *Evidence of Contractor's Insurance*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or elsewhere

in the Contract), the certificates and other evidence of insurance required to be provided by Contractor in accordance with Article 6.

C. *Evidence of Owner's Insurance*: After receipt of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or otherwise), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.

B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise specifically required by the Contract Documents), Contractor shall submit to Engineer for timely review:

1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;

2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.

B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Initial Acceptance of Schedules*

A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.03.A. Contractor shall have an additional 10 days to make corrections and

adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.

2.06 *Electronic Transmittals*

A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through access to a secure Project website.

B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.

C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

A. The Contract Documents are complementary; what is required by one is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents.

C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall govern.

D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.

E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.

3.02 *Reference Standards*

A. Standards Specifications, Codes, Laws and Regulations

1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the

standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard specification, manual, reference standard, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*:

1. *Contractor's Verification of Figures and Field Measurements*: Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.

2. *Contractor's Review of Contract Documents*: If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies*:

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:

a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or

b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.

B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.

C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

A. Contractor and its Subcontractors and Suppliers shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or

2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.

B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to such date.

4.03 *Reference Points*

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.

1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.

B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.

C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:

1. severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;

2. abnormal weather conditions;

3. acts or failures to act of utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and

4. acts of war or terrorism.

D. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5.

E. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor.

G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *Availability of Lands*

A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.

B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas*:

1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.

2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.12, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or at law; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers,

directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

B. *Removal of Debris During Performance of the Work*: During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

C. *Cleaning*: Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. *Loading of Structures*: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

A. *Reports and Drawings*: The Supplementary Conditions identify:

1. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site;

2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); and

3. Technical Data contained in such reports and drawings.

B. *Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

A. *Notice by Contractor*: If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site either:

1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate; or
2. is of such a nature as to require a change in the Drawings or Specifications; or
3. differs materially from that shown or indicated in the Contract Documents; or
4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

B. *Engineer's Review*: After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.

C. *Owner's Statement to Contractor Regarding Site Condition*: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.

D. *Possible Price and Times Adjustments*:

1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
    a. such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
    b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
    c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:

   a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise; or

   b. the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or

   c. Contractor failed to give the written notice as required by Paragraph 5.04.A.

3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.

4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

5.05 *Underground Facilities*

A. *Contractor's Responsibilities*: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

   1. Owner and Engineer do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; and

   2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:

      a. reviewing and checking all information and data regarding existing Underground Facilities at the Site;

      b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;

      c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and

      d. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.

B. *Notice by Contractor*: If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.

C. *Engineer's Review*: Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents,

or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the Underground Facility in question; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and advise Owner in writing of Engineer's findings, conclusions, and recommendations. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

D. *Owner's Statement to Contractor Regarding Underground Facility*: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.

E. *Possible Price and Times Adjustments*:

1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, or both, to the extent that any existing Underground Facility at the Site that was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

a. Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question;

b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;

c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times; and

d. Contractor gave the notice required in Paragraph 5.05.B.

2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.

3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

5.06 *Hazardous Environmental Conditions at Site*

A. *Reports and Drawings*: The Supplementary Conditions identify:

1. those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and

2. Technical Data contained in such reports and drawings.

B. *Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the

accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.

D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.

E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.

F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.

G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off.

H. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special

conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.

I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.H shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6 – BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.

B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority

shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.

C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.

D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the bond and surety requirements above.

E. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.

F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

6.02 *Insurance—General Provisions*

A. Owner and Contractor shall obtain and maintain insurance as required in this Article and in the Supplementary Conditions.

B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.

C. Contractor shall deliver to Owner, with copies to each named insured and additional insured (as identified in this Article, in the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

D. Owner shall deliver to Contractor, with copies to each named insured and additional insured (as identified in this Article, the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Owner has obtained and is maintaining the policies, coverages, and endorsements required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

E. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.

F. If either party does not purchase or maintain all of the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.

G. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 16.

H. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price shall be adjusted accordingly.

I. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.

J. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.

6.03 *Contractor's Insurance*

A. *Workers' Compensation*: Contractor shall purchase and maintain workers' compensation and employer's liability insurance for:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts.

2. United States Longshoreman and Harbor Workers' Compensation Act and Jones Act coverage (if applicable).

3. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees (by stop-gap endorsement in monopolist worker's compensation states).

4. Foreign voluntary worker compensation (if applicable).

B. *Commercial General Liability—Claims Covered*: Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against:

1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.

2. claims for damages insured by reasonably available personal injury liability coverage.

3. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.

C. *Commercial General Liability—Form and Content*: Contractor's commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:

1. Products and completed operations coverage:

a. Such insurance shall be maintained for three years after final payment.

b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.

2. Blanket contractual liability coverage, to the extent permitted by law, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
3. Broad form property damage coverage.
4. Severability of interest.
5. Underground, explosion, and collapse coverage.
6. Personal injury coverage.
7. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.
8. For design professional additional insureds, ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.

D. *Automobile liability*: Contractor shall purchase and maintain automobile liability insurance against claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy shall be written on an occurrence basis.

E. *Umbrella or excess liability*: Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the paragraphs above. Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.

F. *Contractor's pollution liability insurance*: Contractor shall purchase and maintain a policy covering third-party injury and property damage claims, including clean-up costs, as a result of pollution conditions arising from Contractor's operations and completed operations. This insurance shall be maintained for no less than three years after final completion.

G. *Additional insureds*: The Contractor's commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements.

H. *Contractor's professional liability insurance*: If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. If such professional design services are performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.

I. *General provisions*: The policies of insurance required by this Paragraph 6.03 shall:

1. include at least the specific coverages provided in this Article.

2. be written for not less than the limits of liability provided in this Article and in the Supplementary Conditions, or required by Laws or Regulations, whichever is greater.

3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.

4. remain in effect at least until final payment (and longer if expressly required in this Article) and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract Documents.

5. be appropriate for the Work being performed and provide protection from claims that may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable.

J. The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.

6.04 *Owner's Liability Insurance*

A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

B. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

6.05 *Property Insurance*

A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."

2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required

by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.

3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.
4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).
5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
6. extend to cover damage or loss to insured property while in transit.
7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
8. allow for the waiver of the insurer's subrogation rights, as set forth below.
9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.
10. not include a co-insurance clause.
11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.
12. include performance/hot testing and start-up.
13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.

B. *Notice of Cancellation or Change*: All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.

C. *Deductibles*: The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.

D. *Partial Occupancy or Use by Owner*: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide notice of such occupancy or use to the builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or

occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder's risk insurance.

E. *Additional Insurance*: If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.

F. *Insurance of Other Property*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.

6.06 *Waiver of Rights*

A. All policies purchased in accordance with Paragraph 6.05, expressly including the builder's risk policy, shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all Subcontractors, all individuals or entities identified in the Supplementary Conditions as insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.

B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for:

1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and

2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06.

C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 6.06.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.

D. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary

Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by builder's risk insurance and any other property insurance applicable to the Work.

6.07 *Receipt and Application of Property Insurance Proceeds*

A. Any insured loss under the builder's risk and other policies of insurance required by Paragraph 6.05 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.

B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.05 shall distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.

C. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

7.01 *Supervision and Superintendence*

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.02 *Labor; Working Hours*

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.03 *Services, Materials, and Equipment*

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for

the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.

B. All materials and equipment incorporated into the Work shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.04 *"Or Equals"*

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment, or items from other proposed suppliers under the circumstances described below.

1. If Engineer in its sole discretion determines that an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer shall deem it an "or equal" item. For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment Engineer determines that:

1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;

3) it has a proven record of performance and availability of responsive service; and

4) it is not objectionable to Owner.

b. Contractor certifies that, if approved and incorporated into the Work:

1) there will be no increase in cost to the Owner or increase in Contract Times; and

2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

B. *Contractor's Expense*: Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.

C. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal", which will be

evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.

D. *Effect of Engineer's Determination*: Neither approval nor denial of an "or-equal" request shall result in any change in Contract Price. The Engineer's denial of an "or-equal" request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents.

E. *Treatment as a Substitution Request*: If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer considered the proposed item as a substitute pursuant to Paragraph 7.05.

7.05 *Substitutes*

A. Unless the specification or description of an item of material or equipment required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment under the circumstances described below. To the extent possible such requests shall be made before commencement of related construction at the Site.

1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of material or equipment from anyone other than Contractor.

2. The requirements for review by Engineer will be as set forth in Paragraph 7.05.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.

3. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:

a. shall certify that the proposed substitute item will:

1) perform adequately the functions and achieve the results called for by the general design,

2) be similar in substance to that specified, and

3) be suited to the same use as that specified.

b. will state:

1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times,

2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and

3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.

c. will identify:

1) all variations of the proposed substitute item from that specified, and

2) available engineering, sales, maintenance, repair, and replacement services.

d. shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.

B. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.

C. *Special Guarantee*: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

D. *Reimbursement of Engineer's Cost*: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.

F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.05.D, by timely submittal of a Change Proposal.

7.06 *Concerning Subcontractors, Suppliers, and Others*

A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.

B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so.

C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.

D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within five days.

E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the

identity of certain Subcontractors, Suppliers, or other individuals or entities for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.

F. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, or both, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.

G. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.

H. On a monthly basis Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.

I. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions.

J. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.

K. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.

L. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

M. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.

N. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.

O. Nothing in the Contract Documents:

1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier, or other individual or entity; nor

2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

7.07 *Patent Fees and Royalties*

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design,

process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.

C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.08 *Permits*

A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work

7.09 *Taxes*

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.10 *Laws and Regulations*

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such

Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

C. Owner or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.11 *Record Documents*

A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.12 *Safety and Protection*

A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:

1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.

C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.

D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.

E. All damage, injury, or loss to any property referred to in Paragraph 7.12.A.2 or 7.12.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

F. Contractor's duties and responsibilities for safety and protection shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

G. Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.13 *Safety Representative*

A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

7.14 *Hazard Communication Programs*

A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

7.16 *Shop Drawings, Samples, and Other Submittals*

A. *Shop Drawing and Sample Submittal Requirements*:

1. Before submitting a Shop Drawing or Sample, Contractor shall have:

a. reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;

b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

c. determined and verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and

d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.

2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.

3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.

B. *Submittal Procedures for Shop Drawings and Samples*: Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.

1. *Shop Drawings*:

a. Contractor shall submit the number of copies required in the Specifications.

b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.D.

2. *Samples*:

a. Contractor shall submit the number of Samples required in the Specifications.

b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 7.16.D.

3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. *Other Submittals*: Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.

D. *Engineer's Review*:

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.

3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

4. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for any variation from the requirements of the Contract

Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order.

5. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 7.16.A and B.

6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.

7. Neither Engineer's receipt, review, acceptance or approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.

8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.D.4.

E. *Resubmittal Procedures*:

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

2. Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than three submittals. Engineer will record Engineer's time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.

3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

7.17 *Contractor's General Warranty and Guarantee*

A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor's warranty and guarantee.

B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or

2. normal wear and tear under normal usage.

C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:

1. observations by Engineer;
2. recommendation by Engineer or payment by Owner of any progress or final payment;
3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
4. use or occupancy of the Work or any part thereof by Owner;
5. any review and approval of a Shop Drawing or Sample submittal;
6. the issuance of a notice of acceptability by Engineer;
7. any inspection, test, or approval by others; or
8. any correction of defective Work by Owner.

D. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 *Indemnification*

A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.

B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

C. The indemnification obligations of Contractor under Paragraph 7.18.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:

1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

7.19 *Delegation of Professional Design Services*

A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such

services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable Laws and Regulations.

B. If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.

D. Pursuant to this paragraph, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 7.16.D.1.

E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

ARTICLE 8 – OTHER WORK AT THE SITE

8.01 *Other Work*

A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.

B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any utility work at or adjacent to the Site, Owner shall provide such information to Contractor.

C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.

D. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 8, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's

Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

8.02 *Coordination*

A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:

1. the identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;

2. an itemization of the specific matters to be covered by such authority and responsibility; and

3. the extent of such authority and responsibilities.

B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

A. If, in the course of performing other work at or adjacent to the Site for Owner, the Owner's employees, any other contractor working for Owner, or any utility owner causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment shall take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract. When applicable, any such equitable adjustment in Contract Price shall be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due to Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this paragraph.

C. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due to Contractor.

D. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9 – OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents shall be that of the former Engineer.

9.03 *Furnish Data*

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 *Pay When Due*

A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

9.05 *Lands and Easements; Reports, Tests, and Drawings*

A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.

B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.

C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 *Insurance*

A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 *Change Orders*

A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.08 *Inspections, Tests, and Approvals*

A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 *Limitations on Owner's Responsibilities*

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.10 *Undisclosed Hazardous Environmental Condition*

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 *Evidence of Financial Arrangements*

A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents (including obligations under proposed changes in the Work).

9.12 *Safety Programs*

A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.

B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.08. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Project Representative*

A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress

and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

10.04 *Rejecting Defective Work*

A. Engineer has the authority to reject Work in accordance with Article 14.

10.05 *Shop Drawings, Change Orders and Payments*

A. Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.

B. Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, are set forth in Paragraph 7.19.

C. Engineer's authority as to Change Orders is set forth in Article 11.

D. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.06 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.07 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.08 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 15.06.A will only be to determine generally that their content complies with the

requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 10.08 shall also apply to the Resident Project Representative, if any.

10.09 *Compliance with Safety Program*

A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs (if any) of which Engineer has been informed.

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

11.01 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.

1. *Change Orders*:

a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.

b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.

2. *Work Change Directives*: A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.

3. *Field Orders*: Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.02 *Owner-Authorized Changes in the Work*

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Such changes shall

be supported by Engineer's recommendation, to the extent the change involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work shall be performed under the applicable conditions of the Contract Documents. Nothing in this paragraph shall obligate Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.03 *Unauthorized Changes in the Work*

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.

11.04 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.

B. An adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.2); or

3. where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.04.C).

C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. for costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 15 percent;

b. for costs incurred under Paragraph 13.01.B.3, the Contractor's fee shall be five percent;

c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.01.C.2.a and 11.01.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the

Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the maximum total fee to be paid by Owner shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;

d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;

e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and

f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 11.04.C.2.a through 11.04.C.2.e, inclusive.

11.05 *Change of Contract Times*

A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.

B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.

11.06 *Change Proposals*

A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.

1. *Procedures*: Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event. Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal.

2. *Engineer's Action*: Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.

3. *Binding Decision*: Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.

B. *Resolution of Certain Change Proposals*: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

11.07 *Execution of Change Orders*

A. Owner and Contractor shall execute appropriate Change Orders covering:

1. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;

2. changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;

3. changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.02, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and

4. changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.

B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.

11.08 *Notification to Surety*

A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12 – CLAIMS

12.01 *Claims*

A. *Claims Process*: The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:

1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;

2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and

3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.

B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.

C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.

D. *Mediation*:

1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.

2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.

3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.

E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.

F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.

G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:

1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or

2. To determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.

B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall include only the following items:

1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.

3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.

4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.

5. Supplemental costs including the following:

   a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

   b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

c. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 6.05), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

g. The cost of utilities, fuel, and sanitary facilities at the Site.

h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.

i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

C. *Costs Excluded*: The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.

2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.

3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. *Contractor's Fee*: When the Work as a whole is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 11.04.C.

E. *Documentation*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

13.02 *Allowances*

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. *Cash Allowances*: Contractor agrees that:

1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

C. *Contingency Allowance*: Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.

D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

13.03 *Unit Price Work*

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.

B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.

C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of the following paragraph.

E. Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:

1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
2. there is no corresponding adjustment with respect to any other item of Work; and
3. Contractor believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price, and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.

14.02 *Tests, Inspections, and Approvals*

A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.

B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:

1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
3. by manufacturers of equipment furnished under the Contract Documents;
4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.

F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

A. *Contractor's Obligation*: It is Contractor's obligation to assure that the Work is not defective.

B. *Engineer's Authority*: Engineer has the authority to determine whether Work is defective, and to reject defective Work.

C. *Notice of Defects*: Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.

D. *Correction, or Removal and Replacement*: Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.

E. *Preservation of Warranties*: When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

F. *Costs and Damages*: In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

A. Engineer has the authority to require special inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.

B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.

C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.

1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.

2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 *Owner May Correct Defective Work*

A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, then Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.

B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.

C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include

but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 *Progress Payments*

A. *Basis for Progress Payments*: The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.

B. *Applications for Payments*:

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens, and evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. *Review of Applications*:

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

a. the Work has progressed to the point indicated;

b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and

c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.

3. By recommending any such payment Engineer will not thereby be deemed to have represented that:

a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or

b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:

a. to supervise, direct, or control the Work, or

b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or

c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or

d. to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price, or

e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.

5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.

6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:

a. the Work is defective, requiring correction or replacement;

b. the Contract Price has been reduced by Change Orders;

c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;

d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or

e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. *Payment Becomes Due*:

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. *Reductions in Payment by Owner*:

1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:

   a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;

   b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;

   c. Contractor has failed to provide and maintain required bonds or insurance;

   d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;

   e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;

   f. the Work is defective, requiring correction or replacement;

   g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;

   h. the Contract Price has been reduced by Change Orders;

   i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;

   j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;

   k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;

   l. there are other items entitling Owner to a set off against the amount recommended.

2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01.C.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

15.03 *Substantial Completion*

A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.

B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.

D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.

E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.

F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately

functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:

1. At any time Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through E for that part of the Work.
2. At any time Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.05 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

A. *Application for Payment*:

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.11), and other documents, Contractor may make application for final payment.
2. The final Application for Payment shall be accompanied (except as previously delivered) by:
    a. all documentation called for in the Contract Documents;
    b. consent of the surety, if any, to final payment;
    c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
    d. a list of all disputes that Contractor believes are unsettled; and

e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

B. *Engineer's Review of Application and Acceptance*:

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to the provisions of Paragraph 15.07. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. *Completion of Work*: The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.

D. *Payment Becomes Due*: Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer (less any further sum Owner is entitled to set off against Engineer's recommendation, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

15.07 *Waiver of Claims*

A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.

B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.

15.08 *Correction Period*

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

1. correct the defective repairs to the Site or such other adjacent areas;
2. correct such defective Work;
3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting therefrom.

B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).

C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.

D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

E. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:

1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule);

2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;

3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or

4. Contractor's repeated disregard of the authority of Owner or Engineer.

B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the contract, Owner may proceed to:

1. declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and

2. enforce the rights available to Owner under any applicable performance bond.

C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.

D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.

E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.

G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate For Convenience*

A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):

1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and

3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.

B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

A. *Disputes Subject to Final Resolution*: The following disputed matters are subject to final resolution under the provisions of this Article:

1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full; and

2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising after final payment has been made.

B. *Final Resolution of Disputes*: For any dispute subject to resolution under this Article, Owner or Contractor may:

1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions; or

2. agree with the other party to submit the dispute to another dispute resolution process; or

3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18 – MISCELLANEOUS

18.01 *Giving Notice*

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:

1. delivered in person, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or

2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.

18.02 *Computation of Times*

A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

18.07 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Headings*

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

Supplementary Conditions

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract, EJCDC® C-700 (2013 Edition). All provisions that are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added thereto.

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

SC-5.03 Subsurface and Physical Conditions

SC-5.03 Delete Paragraphs 5.03.A and 5.03.B in their entirety and insert the following:

A. No reports of exploration or test of subsurface conditions at or adjacent to the Site, or drawings of physical conditions relating to existing surface or subsurface structures at the Site, are known to the Owner.

SC-5.06 Hazardous Environmental Conditions

SC 5.06 Delete Paragraphs 5.06.A and 5.06.B in their entirety and insert the following:

A. No reports or drawings related to Hazardous Environmental Conditions at the Site are known to Owner.

B. Not Used.

ARTICLE 6 – BONDS AND INSURANCE

SC-6.03 Contractor's Liability Insurance

SC 6.03 Add the following new paragraph immediately after Paragraph 6.03.J:

K. The limits of liability for the insurance required by Paragraph 6.03 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

1. Workers' Compensation, and related coverages under Paragraphs 6.03.A.1 and A.2 of the General Conditions:

Part One: Compensation	Statutory
	(In Thousands)
Part Two: Employers' Liability:	
accident	$ 100
disease	$ 100
aggregate disease	$ 500
Other: _____	
_____	

2. Contractor's Commercial General Liability under Paragraphs 6.03.B and 6.03.C of the General Conditions:

General Aggregate Limit	$1,000
Products/Completed Operations Aggregate Limit	$1,000
Personal/Adverse Injury	$1,000
Each Occurrence Limit	$1,000

3. Automobile Liability under Paragraph 6.03.D of the General Conditions:

Bodily Injury-Each Occurrence Limit	$ 500
Property Damage-Each Occurrence Limit	$ 250

OR

Combined Single Limit	$1,000
No Fault	Statutory

4. Excess or Umbrella Liability:

Per Occurrence	**$1,000,000**

5. Additional Insureds: In addition to Owner and Engineer, include as additional insureds the following: Spicer Group. Inc. and Hamburg Township

6. Owner's and Contractor's Protective Liability

Contractor shall purchase and maintain OWNER'S and Contractor's Protective Liability Insurance which shall:

(1) Be a separate policy to protect OWNER, ENGINEER, their consultants, agents, employees, and such public corporations in whose jurisdiction the Work is located for their liability for work performed by Contractor or Subcontractors under this contract.
(2) Name OWNER as the insured.
(3) Include any specific insurance language requirements for the following named insured.
(4) Name the following as additional insured which will be held harmless and indemnified: Spicer Group, Inc., and others.

Separate:

Each Occurrence	**$1,000**
General Aggregate	**$1,000**

In lieu of the Owner's and Contractor's Protective Liability, the Contractor may provide an endorsement to their policy for a per project aggregate coverage with the following limits:

Aggregate Limit	$1,000
Each Occurrence Limit	$1,000
(ISO form CG2503 or it's equivalent)	

A copy of this endorsement must accompany the Certificate of Insurance, the Certificate will clearly state the additional insured requirement and the policy contains the per project aggregate endorsement.

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

SC-7.02 Labor; Working Hours

SC-7.02.B. Add the following new subparagraphs immediately after Paragraph 7.02.B:

1. Regular working hours will be *7 A.M to 7 P.M.*

2. Owner's legal holidays shall be defined as U.S. Federal Holidays.

SC-7.02.B. Amend the first and second sentences of Paragraph 7.02.B to state "…all Work at the Site shall be performed during regular working hours, Monday through Saturday. Contractor will not perform Work on a Sunday or any legal holiday."

SC-7.08 Permits

SC 7.08 Add the following new subparagraphs immediately after Paragraph 7.08.A:

B. A Soil Erosion and Sedimentation Control (SESC) Permit is not required since the Owner is an Authorized Public Agency (APA). However, the Contractor will need to construct the project in accordance with SESC measures as described in the bidding plans and specifications.

C. An environmental permit application has been submitted for this project to EGLE and is currently under review. The permit will be included with the project documents once issued.

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

SC-10.03 Project Representative

SC-10.03 Add the following new paragraphs immediately after Paragraph 10.03.A:

B. The Resident Project Representative (RPR) will be Engineer's representative at the Site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding RPR's actions.

1. General: RPR's dealings in matters pertaining to the Work in general shall be with Engineer and Contractor. RPR's dealings with Subcontractors shall only be through or with the full knowledge and approval of Contractor. RPR shall generally communicate with Owner only with the knowledge of and under the direction of Engineer.

2. Schedules: Review the progress schedule, schedule of Shop Drawing and Sample submittals, and Schedule of Values prepared by Contractor and consult with Engineer concerning acceptability.

3. Conferences and Meetings: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings, and prepare and circulate copies of minutes thereof.

4. Liaison:

a. Serve as Engineer's liaison with Contractor. Working principally through Contractor's authorized representative or designee, assist in providing information regarding the provisions and intent of the Contract Documents.

b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.

c. Assist in obtaining from Owner additional details or information, when required for proper execution of the Work.

5. Interpretation of Contract Documents: Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.

6. Shop Drawings and Samples:

a. Record date of receipt of Samples and Contractor-approved Shop Drawings.

b. Receive Samples which are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.

c. Advise Engineer and Contractor of the commencement of any portion of the Work requiring a Shop Drawing or Sample submittal for which RPR believes that the submittal has not been approved by Engineer.

7. Modifications: Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report such suggestions, together with RPR's recommendations, if any, to Engineer. Transmit to Contractor in writing decisions as issued by Engineer.

8. Review of Work and Rejection of Defective Work:

a. Conduct on-Site observations of Contractor's work in progress to assist Engineer in determining if the Work is in general proceeding in accordance with the Contract Documents.

b. Report to Engineer whenever RPR believes that any part of Contractor's work in progress is defective, will not produce a completed Project that conforms generally to the Contract Documents, or will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Engineer of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.

9. Inspections, Tests, and System Start-ups:

a. Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate Owner's personnel, and that Contractor maintains adequate records thereof.

b. Observe, record, and report to Engineer appropriate details relative to the test procedures and systems start-ups.

10. Records:

a. Prepare a daily report or keep a diary or log book, recording Contractor's hours on the Site, Subcontractors present at the Site, weather conditions, data relative to questions of Change Orders, Field Orders, Work Change Directives, or changed conditions, Site visitors, deliveries of equipment or materials, daily activities, decisions, observations in general, and specific observations in more

detail as in the case of observing test procedures; and send copies to Engineer.

b. Record names, addresses, fax numbers, e-mail addresses, web site locations, and telephone numbers of all Contractors, Subcontractors, and major Suppliers of materials and equipment.

c. Maintain records for use in preparing Project documentation.

11. Reports:

a. Furnish to Engineer periodic reports as required of progress of the Work and of Contractor's compliance with the Progress Schedule and schedule of Shop Drawing and Sample submittals.

b. Draft and recommend to Engineer proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.

c. Immediately notify Engineer of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, force majeure or delay events, damage to property by fire or other causes, or the discovery of any Constituent of Concern or Hazardous Environmental Condition.

12. Payment Requests: Review applications for payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the Schedule of Values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.

13. Certificates, Operation and Maintenance Manuals: During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Contract Documents to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work.

14. Completion:

a. Participate in Engineer's visits to the Site to determine Substantial Completion, assist in the determination of Substantial Completion and the preparation of a punch list of items to be completed or corrected.

b. Participate in Engineer's final visit to the Site to determine completion of the Work, in the company of Owner and Contractor, and prepare a final punch list of items to be completed and deficiencies to be remedied.

c. Observe whether all items on the final list have been completed or corrected and make recommendations to Engineer concerning acceptance and issuance of the notice of acceptability of the work.

C. The RPR shall not:

1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).

2. **Exceed limitations of Engineer's authority as set forth in the Contract Documents.**
3. **Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers.**
4. **Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of Contractor's work.**
5. **Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.**
6. **Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.**
7. **Accept Shop Drawing or Sample submittals from anyone other than Contractor.**
8. **Authorize Owner to occupy the Project in whole or in part.**

Work Change Directive No.

Date of Issuance: **Effective Date:**

Owner: Hampton Township **Owner's Contract No.:**

Contractor: L. J. Construction Inc. **Contractor's Project No.:**

Engineer: Spicer Group, Inc. **Engineer's Project No.:** 133809SG2023

Project: Manly Bennett Park & Water Trail Access Improvements **Contract Name:** Manly Bennett Park & Water Trail Access Improvements

Contractor is directed to proceed promptly with the following change(s):

Description:

Attachments: *[List documents supporting change]*

Purpose for Work Change Directive:

Directive to proceed promptly with the Work described herein, prior to agreeing to changes on Contract Price and Contract Time, is issued due to: *[check one or both of the following]*

☐ Non-agreement on pricing of proposed change.

☐ Necessity to proceed for schedule or other Project reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price $ [increase] [decrease].

Contract Time days [increase] [decrease].

Basis of estimated change in Contract Price:

☐ Lump Sum ☐ Unit Price

☐ Cost of the Work ☐ Other

RECOMMENDED:	AUTHORIZED BY:	RECEIVED:
By:	By:	By:
Engineer (Authorized Signature)	*Owner (Authorized Signature)*	*Contractor (Authorized Signature)*
Title:	Title:	Title:
Date:	Date:	Date:

Approved by Funding Agency (if applicable)

By: Date:

Title:

Change Order No. _____

Date of Issuance:	**Effective Date:**
Owner: Hamburg Township	**Owner's Contract No.:**
Contractor: L. J. Construction Inc.	**Contractor's Project No.:**
Engineer: Spicer Group, Inc.	**Engineer's Project No.:** 133809SG2023
Project: Manly Bennett Park & Water Trail Access Improvements	**Contract Name:**

The Contract is modified as follows upon execution of this Change Order:

Description:

Attachments: *[List documents supporting change]*

CHANGE IN CONTRACT PRICE	**CHANGE IN CONTRACT TIMES** *[note changes in Milestones if applicable]*
Original Contract Price: $_____	Original Contract Times: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
[Increase] [Decrease] from previously approved Change Orders No. ___ to No. ___: $_____	[Increase] [Decrease] from previously approved Change Orders No. ___ to No. ___: Substantial Completion: _____ Ready for Final Payment: _____ days
Contract Price prior to this Change Order: $_____	Contract Times prior to this Change Order: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
[Increase] [Decrease] of this Change Order: $_____	[Increase] [Decrease] of this Change Order: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
Contract Price incorporating this Change Order: $_____	Contract Times with all approved Change Orders: Substantial Completion: _____ Ready for Final Payment: _____ days or dates

RECOMMENDED:	ACCEPTED:	ACCEPTED:
By: _____	By: _____	By: _____
Engineer (if required)	*Owner (Authorized Signature)*	*Contractor (Authorized Signature)*
Title: _____	Title: _____	Title: _____
Date: _____	Date: _____	Date: _____

Approved by Funding Agency (if applicable)

By: _____ Date: _____

Title: _____

Field Order No. _____

Date of Issuance:		**Effective Date:**	
Owner:	Hamburg Township	**Owner's Contract No.:**	
Contractor:	L. J. Construction Inc.	**Contractor's Project No.:**	
Engineer:	Spicer Group, Inc.	**Engineer's Project No.:**	133809SG2023
Project:	Manly Bennett Park & Water Trail Access Improvements	**Contract Name:**	Manly Bennett Park & Water Trail Access Improvements

Contractor is hereby directed to promptly execute this Field Order, issued in accordance with General Conditions Paragraph III "Changes in the Work", for minor changes in the Work without changes in Contract Price or Contract Times. If Contractor considers that a change in Contract Price or Contract Times is required, submit a Change Proposal before proceeding with this Work.

Reference: _____ _____

Specification(s) Drawing(s) / Detail(s)

Description:

Attachments:

ISSUED:	RECEIVED:
By: _____	By: _____
Engineer (Authorized Signature)	Contractor (Authorized Signature)
Title: _____	Title: _____
Date: _____	Date: _____

Copy to: Owner

PROJECTS UNDER ACT NO. 524 OF PUBLIC ACTS OF 1980

General Information

1. Interest will be paid on retainage in accordance with the Act.

2. The Contractor may request reasonable interest on accounts past due on prior progress payments which can be included in the next request for payment.

3. Retainage will be in accordance with the Act, Subsections 3 and 4.

4. All matters described in Subsection 3 of the Act shall be submitted to the decision of an agent at the option of the Owner.

Retainage. The retainage for the project shall be as follows:

1. For projects with Payment Schedule No. 1, the retainage shall be in accordance with Act No. 524.

2. For projects with Payment Schedule No. 2, the retainage shall be ten percent (10%) of the contract price.

Payment. All requests for payment shall be in compliance with Act No. 524 of Public Acts of 1980. Construction contracts having a dollar value of less than $30,000 or a contract that provides for three or fewer payments shall be exempt from the Act.

The requests for payments shall be made in accordance with one of the following Payment Schedules:

Payment Schedules

1. Not later than the 25th day of each calendar month, the Owner will make partial payment to the Contractor on the basis of a duly certified, approved estimate of the work performed during the preceding calendar month by the Contractor, but the Owner will retain a percentage as stated in Act No. 524 of the amount of each such estimate until final completion and acceptance of all work covered by this contract.

2. Payment requests shall be limited to three or fewer payments less ten percent (10%) retained on each payment request, except for the final payment which shall include all amounts previously retained. Payment requests will only be permitted after completion of fifty percent (50%) of the project, after seventy-five percent (75%) of the project and after one hundred percent (100%) of the project is completed and accepted. No payment request will be made within 30 consecutive days of a previous request.

Act No. 524

Public Acts of 1980

Approved by Governor

January 29, 1981

STATE OF MICHIGAN

80TH LEGISLATURE

REGULAR SESSION OF 1980

Introduced by Rep. Ryan

ENROLLED HOUSE BILL NO. 5541

AN ACT to provide for the terms of certain construction contracts with certain public agencies; to regulate the payment and retainage of payments on construction contracts with certain public agencies; and to provide for the resolution of certain disputes.

The People of the State of Michigan enact:

Sec. 1. As used in this act:

(a) "Agent" means the person or persons agreed to or selected by the contractor and the public agency pursuant to section 4(2).

(b) "Architect or professional engineer" means an architect or professional engineer licensed under Act No. 299 of the Public Acts of 1980, being sections 339.10 to 339.2601 of the Michigan Compiled Laws, and designated by a public agency in a construction contract to recommend progress payments.

(c) "Construction contract" or "contract" means a written agreement between a contractor and a public agency for the construction, alternation, demolition, or repair of a facility, other than a contract having a dollar value of less than $30,000.00 or a contract that provides for 3 or fewer payments.

(d) "Contract documents" means the construction contract; instructions to bidders, proposal; conditions of the contract; performance bond; labor and material bond; drawings; specifications; all addenda issued before execution of the construction contract and all modifications issued subsequently.

(e) "Contractor" means an individual, sole proprietorship, partnership, corporation, or joint venture, that is a party to a construction contract with a public agency.

(f) "Facility" means a building, utility, road, street, boulevard, parkway, bridge, ditch, drain, levee, dike, sewer, park, playground, or other structure or work that is paid for with public funds or a special assessment.

(g) "Progress payment" means a payment by a public agency to a contractor work in place under the terms of a construction contract.

(h) "Public agency" means this state, or a county, city, township, village, assessment district, or other political subdivision, corporation, commission, agency, or authority created by law. However, public agency does not include the state transportation department, a school district, junior or community college, the Michigan state housing development authority created in Act No. 346 of the Public Acts of 1966, as amended, beings sections 125.1401 to 125.1496 of the Michigan Compiled Laws, and a municipal electric utility or agency. "Assessment district" means the real property within a distinct area upon which special assessments are levied or imposed for the construction, reconstruction, betterment, replacement or repair of a facility to be paid for by funds derived from those special assessments imposed or levied on the benefitted real property.

(i) "Retainage" or "retained funds" means the amount withheld from a progress payment to a contractor pursuant to section 3.

Sec. 2

(1) The construction contract shall designate a person representing the contractor who will submit written requests for progress payments, and a person representing the public agency to whom requests for progress payments are to be submitted. The written requests for progress payments shall be submitted to the designated person in a manner and at such times as provided in the construction contract.

(2) The processing of progress payments by the public agency may be deferred by the public agency until work having a prior sequence, a provided in the contract documents, is in place and is approved.

(3) Each progress payment requested, including reasonable interest if requested under subsection (4), shall be paid within 1 of the following time periods, whichever is later.

(a) Thirty days after the architect or professional engineer has certified to the public agency that work is in place in the portion of the facility covered by the applicable request for payment in accordance with the contract documents.

(b) Fifteen days after the public agency has received the funds with which to make the progress payment from a department or agency of the federal or state government, if any funds are to come from either of those sources.

(4) Upon failure of a public agency to make a timely progress payment pursuant to this section, the person designated to submit requests for progress payments may include reasonable interest on amounts past due in the next request for payment.

Sec. 3

(1) To assure proper performance of a construction contract by the contractor, a public agency may retain a portion of each progress payment otherwise due as provided in this section.

(2) The retainage shall be limited to the following:

(a) Not more than 10% of the dollar value of all work in place until work is 50% in place.

(b) After the work is 50% in place, additional retainage shall not be withheld unless the public agency determines that the contractor is not making satisfactory progress, or for other specific cause relating to the contractor's performance under the contract. If the public agency so determines, the public agency may retain not more than 10% of the dollar value of work more than 50% in place.

(3) The retained funds shall not exceed the pro rata share of the public agency's matching requirement under the construction contract and shall not be commingled with other funds of the public agency and shall be deposited in an interest bearing account in a regulated financial institution in this state wherein all such retained funds are kept by the public agency which shall account for both retainage and interest on each construction contract separately. A public agency is not required to deposit retained funds in an interest bearing account if the retained funds are to be provided under a state or federal grant and the retained funds have not been paid to the public agency.

(4) Except as provided in section 4(7) and (8), retainage and interest earned on retainage shall be released to a contractor together with the final progress payment.

(5) At any time after 94% of work under the contract is in place and at the request of the original contractor, the public agency shall release the retainage plus interest to the original contractor only if the original contractor provides to the public agency an irrevocable letter of credit in the amount of the retainage plus interest, issued by a bank authorized to do business in this state, containing terms mutually acceptable to the contractor and the public agency.

Sec. 4

(1) The construction contract shall contain an agreement to submit those matters described in subsection (3) to the decision of an agent at the option of the public agency.

(2) If a dispute regarding a matter described in subsection (3) arises, the contractor and the public agency shall designate an agent who has background, training, and experience in the construction of facilities similar to that which is the subject of the contract, as follows:

(a) In an agreement reached within 10 days after a dispute arises.

(b) If an agreement cannot be reached within 10 days after a dispute arises, the public agency shall designate an agent who has background, training, and experience in the construction of facilities similar to that which is the subject of the contract and who is not an employee of the agency.

(3) The public agency may request dispute resolution by the agent regarding the following:

(a) At any time during the term of the contract, to determine whether there has been a delay for reasons that were within the control of the contractor, and the period of time that delay has been caused, continued, or aggravated by actions of the contractor.

(b) At any time after 94% of work under the contract is in place, whether there has been an unacceptable delay by the contractor in performance of the remaining 6% of work under the contract. The agent shall consider the terms of the contract and the procedures normally followed in the industry and shall determine whether the delay was for failure to follow reasonable and prudent practices in the industry for completion of the project.

(4) This dispute resolution process shall be used only for the purpose of determining the rights of the parties to retained funds and interest earned on retained funds and is not intended to alter, abrogate, or limit any rights with respect to remedies that are available to enforce or compel performance of the terms of the contract by either party.

(5) The agent may request and shall receive all pertinent information from the parties and shall provide an opportunity for an informal meeting to receive comments, documents, and other relevant information in order to resolve the dispute. The agent shall determine the time, place and procedure for the informal meeting. A written decision and reasons for the decision shall be given to the parties within 14 days after the meeting.

(6) The decision of the agent shall be final and binding upon all parties. Upon application of either party, the decision of the agent may be vacated by order of the circuit court only upon a finding by the court that the decision was procured by fraud, duress, or other illegal means.

(7) If the dispute resolution results in a decision.

(a) That there has been a delay as described in subsection (3)(a), all interest earned on retained funds during the period of delay shall become the property of the public agency.

(b) That there has been unacceptable delay as described in subsection (3)(b), the public agency may contract with a subsequent contractor to complete the remaining 6% of work under the contract, and interest earned on retained funds shall become the property of the public agency. A subsequent Contractor under this subdivision shall be paid by the public agency from the following sources until each source is depleted, in the order listed below:

(i) The dollar value of the original contract, less the dollar value of funds already paid to the original contractor and the dollar value of work for which the original contractor has not received payment.

(ii) Retainage from the original contractor, or funds made available under a letter of credit provided under section 3(5).

(iii) Interest earned on retainage from the original contractor, or funds made available under a letter of credit provided under section 3(5).

(8) If the public agency contracts with a subsequent contractor as provided in subsection (7)(b), the final progress payment shall be payable to the original contractor within the time period specified in section 2(3). The amount of the final progress payment to the original contractor shall not include interest earned on retained funds. The public agency may deduct from the final progress payment all expenses of contracting with the subsequent contractor. This act shall not impair the right of the public agency to bring an action or to otherwise enforce a performance bond to complete work under a construction contract.

Sec. 5

(1) Except as provided in subsection (2), this act shall apply only to a construction contract entered into after the effective date of this act.

(2) For a construction contract entered into before the effective date of this act, the provisions of this act may be implemented by a public agency, through a contract amendment, upon the written request of the contractor, with such consideration as the public agency considers adequate.

Sec. 6

This act shall take effect January 1, 1983.

SECTION 32 92 19

SEEDING

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Fertilizing.
   2. Seeding.
   3. Mulching.
   4. Maintenance.

B. Related Sections:
   1. Section 31 05 13 - Soils for Earthwork.
   2. Section 32 91 19 - Landscape Grading.

1.2 REFERENCES

A. ASTM International:
   1. ASTM C602 - Standard Specification for Agricultural Liming Materials.

B. FS 0-F-241 – Fertilizers, Mixed, Commercial.

1.3 DEFINITIONS

A. Weeds: Include Dandelion, Jimsonweed, Quackgrass, Horsetail, Morning Glory, Rush Grass, Mustard, Lambsquarter, Chickweed, Cress, Crabgrass, Canadian Thistle, Nutgrass, Poison Oak, Blackberry, Tansy Ragwort, Bermuda Grass, Johnson Grass, Poison Ivy, Nut Sedge, Nimble Will, Bindweed, Bent Grass, Wild Garlic, Perennial Sorrel, and Brome Grass.

1.4 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Product Data: Submit data for seed mix, fertilizer, mulch, and other accessories.

C. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.

1.5 CLOSEOUT SUBMITTALS

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for submittals.

B. Operation and Maintenance Data: Include maintenance instructions, cutting method and maximum grass height; types, application frequency, and recommended coverage of fertilizer.

1.6 QUALITY ASSURANCE

A. Provide seed mixture in containers showing percentage of seed mix, germination percentage, inert matter percentage, weed percentage, year of production, net weight, date of packaging, and location of packaging.

B. Perform Work in accordance with State of Michigan Department of Transportation Standards.

C. Provide signed affidavit stating the amount and type of seed, fertilizer, and mulch applied per acre.

D. Maintain one copy of document on site.

1.7 REGULATOR REQUIREMENTS

A. Comply with regulatory agencies for fertilizer and herbicide composition.

1.8 QUALIFICATIONS

A. Seed Supplier: Company specializing in manufacturing Products specified in this section with minimum three years documented experience.

B. Installer: Company specializing in performing work of this section with minimum 3 years documented experience.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.

B. Deliver grass seed mixture in sealed containers. Seed in damaged packaging is not acceptable.

C. Deliver fertilizer in waterproof bags showing weight, chemical analysis, and name of manufacturer.

1.10 MAINTENANCE SERVICE

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for maintenance service.

B. Maintain seeded and sodded areas immediately after placement until grass is well established, exhibits a vigorous growing condition and is accepted by Owner. Guarantee replacement of dead material for one year from date of substantial completion.

C. Contractor shall be responsible for maintaining adequate seedbed moisture until the sodbed is established.

PART 2 PRODUCTS

2.1 SEED MIXTURE

A. Furnish materials in accordance with Municipal, Federal and State Standards.

B. Grass Seed Mixture:

Kentucky Blue Grass	30 percent
Creeping Red Fescue Grass	40 percent
Perennial Rye Grass (Manhattan)	30 percent

C. Bio-Swale Seed Mixture: Native plantings, by others.

2.2 ACCESSORIES

A. Mulch:
1. Straw Mulch: All seeding must be mulched at 1 ½ to 2 tons per acre, no less than 3" in depth, with a tie down asphalt tackifier net binding.
2. Conwed Fibers® Hydro Mulch® 2000

B. Fertilizer: FS 0-F-241, Commercial Grade A with 19 19 19 analysis.

C. Water: Clean, fresh and free of substances or matter which could inhibit vigorous growth of grass.

D. Lime: ASTM C602, Class T agricultural limestone containing a minimum 80 percent calcium carbonate equivalent.

E. Erosion Fabric: Jute matting, open weave.

F. Stakes: Softwood lumber, chisel pointed.

G. String: Inorganic fiber.

2.3 SOURCE QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Testing, inspection and analysis requirements.

B. Analyze to ascertain percentage of nitrogen, phosphorus, potash, soluble salt content, organic matter content, and pH value.

C. Provide recommendation for fertilizer and lime application rates for specified seed mix as result of testing.

D. Testing is not required when recent tests and certificates are available for imported topsoil. Submit these test results to testing laboratory. Indicate, by test results, information necessary to determine suitability.

E. Notify Engineer 72 hours prior to hydroseeding and fertilizing for approval to proceed.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 - Administrative Requirements: Verification of existing conditions before starting work.

B. Verify prepared soil base is ready to receive the Work of this section.

C. Landscape Seeding: Verify that prepared soil base is read to receive the work of this section. See Section 32 91 19 – Landscape Grading.

3.2 FERTILIZING

A. Apply fertilizer at application rate 500 lbs per acre.

B. Apply after smooth raking of topsoil and prior to roller compaction.

C. Do not apply fertilizer at same time or with same machine used to apply seed.

D. Mix fertilizer thoroughly into upper 2 inches of topsoil.

E. Lightly water soil to aid dissipation of fertilizer. Irrigate top level of soil uniformly.

3.3 SEEDING

A. Apply seed at rate of 500 lbs per acre evenly in two intersecting directions. Rake in lightly.

B. Do not seed areas in excess of that which can be mulched on same day.

C. Planting Season: May 1 to October 10 unless otherwise approved by the Engineer.

D. Do not sow immediately following rain, when ground is too dry, or when winds are over 12 mph.

E. Roll seeded area with roller not exceeding 112 lbs/linear foot.

F. Immediately following seeding and compacting, apply mulch to thickness of 1/8 inches. Maintain clear of shrubs and trees.

G. Apply water with fine spray immediately after each area has been mulched. Saturate to 4 inches of soil.

3.4 HYDROSEEDING

A. Apply seed, fertilizer and mulch slurry with a hydraulic seeder at a rate of 200 lbs. per acre of seed, 500 lbs per acre of fertilizer and 14,000 lbs per acre of mulch, evenly on prepared seedbed. Do not apply slurry on shrubs or trees.

B. Apply water with fine spray immediately after each area has been hydroseeded. Saturate to 3 inches of soil and maintain moisture levels two to four inches.

C. Planting Season: May 1, to October 15, unless otherwise approved by the Engineer.

3.5 SEED PROTECTION

A. Cover seeded slopes where grade is 6 inches per foot or greater with erosion fabric. Roll fabric onto slopes without stretching or pulling.

B. Lay fabric smoothly on surface, bury top end of each section in 6 inch deep excavated topsoil trench. Overlap edges and ends of adjacent rolls minimum 12 inches. Backfill trench and rake smooth, level with adjacent soil.

C. Secure outside edges and overlaps at 36 inch intervals with stakes.

D. Lightly dress slopes with topsoil to ensure close contact between fabric and soil.

E. At sides of ditches, lay fabric laps in direction of water flow. Lap ends and edges minimum 6 inches.

3.6 MAINTENANCE

A. Immediately reseed areas which show bare spots.

B. Repair any eroded areas and reseed immediately.

C. Contractor shall guarantee a uniform grass growth over the entire project and shall reseed bare and thin areas until this is accomplished at no additional cost to the project.

D. Water to prevent grass and soil from drying out.

E. Roll surface to remove minor depressions or irregularities.

F. Control growth of weeds. Apply herbicides. Remedy damage resulting from improper use of herbicides.

G. Repair washouts or gullies.

H. Protect seeded areas with warning signs during maintenance period.

END OF SECTION

SECTION 01 10 00

SUMMARY

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Contract description.
2. Owner-Furnished Products
3. Contractor's use of Site
4. Work sequence.
5. Owner occupancy.
6. Permits.

1.2 CONTRACT DESCRIPTION

A. The Contractor shall furnish all the labor, material and construction equipment and perform all the work for this project as shown on the Drawings and described in the specifications prepared by Spicer Group, Inc. Contractor shall be responsible for the entire work until completed and accepted by the Owner.

1.3 CONTRACTOR'S USE OF SITE

A. Limit use of Site to allow:
1. Owner occupancy.
2. Use of site by Public.

B. Construction Operations: Limited to right-of-way limits and the immediate area of work as directed by the Engineer.

C. Time Restrictions for Performing Work: 7am – 7pm

D. Utility Outages and Shutdowns:
1. Coordinate and schedule utility outages with the Owner’s operating staff.

1.4 WORK SEQUENCE

A. Construct Work in a positive direction during the construction period, coordinate construction schedule and operations with Owner and Engineer.

B. Coordinate construction schedule and operations with Engineer and operating staff.

1.5 OWNER OCCUPANCY

A. Schedule and substantially complete designated portions of the Work for occupancy before Substantial Completion of the entire Work.

B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.

1.6 PERMITS

The Contractor is responsible for obtaining all necessary permits for the proposed work.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 01 20 00

PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Cash allowances.

B. Application for Payment.

C. Change procedures.

D. Defect assessment.

E. Unit prices.

1.2 CASH ALLOWANCES

A. Costs Not Included in Cash Allowances but Included in Contract Sum/Price: Product handling at Site including unloading, uncrating, and storage; protection of products from elements and from damage; and labor for installation and finishing unless stated otherwise in Allowance Schedule.

B. Engineer Responsibilities:
   1. Consult with Contractor for consideration and selection of products suppliers and installers.
   2. Select products in consultation with Owner and transmit decision to Contractor.
   3. Prepare Change Order.

C. Contractor Responsibilities:
   1. Assist Engineer in selection of products, suppliers.
   2. Obtain proposals from suppliers and installers and offer recommendations.
   3. Upon notification of selection by Engineer and Owner execute purchase agreement with designated supplier.
   4. Arrange for and process Shop Drawings, Product Data, and Samples. Arrange for delivery.
   5. Promptly inspect products upon delivery for completeness, damage, and defects. Submit claims for transportation damage.

D. Differences in costs will be adjusted by Change Order.

1.3 APPLICATION FOR PAYMENT

A. Engineer will prepare progress payments in accordance with the Payment Schedule shown in the Agreement.

B. Format will follow the itemized bid in the Proposal.

C. Contractor shall submit waivers for each progress payment in accordance with the General Conditions.

D. Payment will be subject to retainage as set forth in Public Act No. 524.

1.4 CHANGE PROCEDURES

A. Submittals: Submit name of individual who is authorized to receive change documents and is responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.

B. Carefully study and compare Contract Documents before proceeding with fabrication and installation of Work. Promptly advise Engineer of any error, inconsistency, omission, or apparent discrepancy.

C. Requests for Interpretation (RFI) and Clarifications: Allot time in construction scheduling for liaison with Engineer; establish procedures for handling queries and clarifications.

D. Engineer will advise of minor changes in the Work not involving adjustment to Contract Sum/Price or Contract Time by issuing a field order.

E. Engineer may issue a Bulletin or Notice of Changer including a detailed description of proposed change with supplementary or revised Drawings and Specifications. Contractor will prepare and submit estimate within (2) two days.

F. Contractor may propose changes by submitting a request for change to Engineer, describing proposed change and its full effect on the Work. Include a statement describing reason for the change and the effect on Contract Sum/Price and Contract Time with full documentation and a statement describing effect on the Work.

G. Stipulated Sum/Price Change Order: Based on Bulletin or Notice of Change and Contractor’s price quotation and Contractor’s request for Change Order as approved by Engineer.

H. Unit Price Change Order: For Contract unit prices and quantities, the Change Order will be executed on a fixed unit price basis. For unit costs or quantities of units of that which are not predetermined, execute Work under Work Directive Change. Changes in Contract Sum/Price or Contract Time will be computed as specified for Time and Material Change Order.

I. Work Directive Change: Engineer may issue directive, signed by Owner, instructing Contractor to proceed with change in the Work, for subsequent inclusion in a Change Order. Document will describe changes in the Work and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute change.

J. Time and Material Change Order: Submit itemized account and supporting data after completion of change, within time limits indicated in Conditions of the Contract. Engineer will determine change allowable in Contract Sum/Price and Contract Time as provided in Contract Documents.

K. Maintain detailed records of Work done on time and material basis. Provide full information required for evaluation of proposed changes and to substantiate costs for changes in the Work.

L. Document each quotation for change in Project Cost or Time with sufficient data to allow evaluation of quotation.

M. Change Order Forms: Architects/Engineer’s Form.

N. Execution of Change Orders: Engineer will issue Change Orders for signatures of parties as provided in Conditions of the Contract.

1.5 DEFECT ASSESSMENT

A. Replace the Work, or portions of the Work, not conforming to specified requirements.

B. If, in the opinion of Engineer, it is not practical to remove and replace the Work, Engineer will direct appropriate remedy or adjust payment.

C. Authority of Engineer and Owner to assess defects and identify payment adjustments is final.

D. Nonpayment for Rejected Products: Payment will not be made for rejected products.

1.6 UNIT PRICES

A. Authority: Measurement methods are delineated in individual Specification Sections.

B. Measurement methods delineated in individual Specification Sections complement criteria of this Section. In event of conflict, requirements of individual Specification Section govern.

C. Engineer will take measurements and compute quantities accordingly. Provide assistance in taking of measurements.

D. Unit Quantities: Quantities and measurements indicated on Bid Form are for Contract purposes only. Actual quantities provided shall determine payment.

E. Payment Includes: Full compensation for required labor, products, tools, equipment, plant and facilities, transportation, services and incidentals; erection, application, or installation of item of the Work; overhead and profit.

F. Final payment for Work governed by unit prices will be made on basis of actual measurements and quantities accepted by Engineer multiplied by unit sum/price for Work incorporated in or made necessary by the Work.

G. Measurement of Quantities:
   1. Weigh Scales: Inspected, tested, and certified by applicable State weights and measures department within past year.
   2. Platform Scales: Of sufficient size and capacity to accommodate conveying vehicle.
   3. Measurement by Weight: Concrete reinforcing steel, rolled or formed steel, or other metal shapes will be measured by handbook weights. Welded assemblies will be measured by handbook or scale weight.
   4. Measurement by Volume: Measured by cubic dimension using mean length, width, and height or thickness.
   5. Measurement by Area: Measured by square dimension using mean length and width or radius.
   6. Linear Measurement: Measured by linear dimension, at item centerline or mean chord.
   7. Stipulated Sum/Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as completed item or unit of the Work.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 01 22 00

MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 SCOPE

A. This section describes the method of measurement and basis of payment for all items of the work included in the Contract and indicated in the Bid Proposal. Provide all labor, material, tools, equipment and services required to complete the Work included in the Contract Documents. Items described in the Specifications and indicated on the Drawings, but not shown in this specification section, are considered incidental to the Project.

B. Each bid item on the bid form includes all work items required to construct the work as shown on the drawings and indicated in the specifications, including those items not specifically stated below in this section.

C. From time to time. Contractor may receive written authorization to perform additions to or deletions from the Work, on a Unit Rate Price basis; the costs of Changes shall be calculated in accordance with the Unit Rate Pricing or "Add/Deduct" indicated on this Bid Form.

Unless otherwise noted, each Unit Rate Price includes all direct and indirect costs for labor, equipment, transportation, testing services, general work expenses, applicable taxes, overhead, and other costs required to complete the work.

1. The all-inclusive Unit Rate Prices are fixed for the duration of this Contract, and not subject to escalation.
2. The Unit Rate Prices shall include all Work the Contractor is required to perform without regard to the quantities involved, difficulty in performing the Work, materials or equipment required, and specific handling of materials and equipment.
3. All Unit Rate Prices shall apply at 100% of their value for both additions and deletions to the Scope of Work, unless mutually agreed to otherwise in accordance with the Contract Documents.

1.2 UNIT PRICE – MEASUREMENT AND PAYMENT

A. Section 01 20 00 – Price and Payment Procedures Contract Sum/Price.

B. Mobilization, Max 10%:
1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
2. Basis of Payment: Includes all associated labor, material, and equipment for Mobilization for the project.

C. Soil Erosion and Sedimentation Control Measures:
1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
2. Basis of Payment: Includes all associated labor, material and equipment, permit fees, temporary SESC measures, and other items required for soil erosion prevention and sedimentation control required for this project. Additional control measures shall be employed as required by site conditions and applicable enforcing agencies having project jurisdiction at no additional cost.

D. Demolition & Site Clearing:
   1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, material, and equipment for removal and proper disposal for Demolition & Site Clearing, as shown on the drawings.

E. Excavation & Rough Grading:
   1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, material, and equipment for Excavation & Rough Grading, for a complete installation as shown on the drawings.

F. Permit Fees
   1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, material, and equipment for Permit Fees for a complete installation as shown on the drawings.

G. 8' Wide Accessible Path, HMA, C.I.P.:
   1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, materials, equipment, and all base and subbase materials for a complete installation of 8' Wide Accessible Path, HMA, C.I.P., as shown on drawings.

H. 6' Wide Path, 22A Crushed Limestone & Limestone Fines, C.I.P.:
   1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, materials, equipment, and all base and subbase materials for a complete installation of 6' Wide Path, 22A Crushed Limestone & Limestone Fines, C.I.P., as shown on drawings.

I. 8' Wide Path, 22A Crushed Limestone & Limestone Fines, C.I.P.:
   1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, materials, equipment, and all base and subbase materials for a complete installation of 8' Wide Path, 22A Crushed Limestone & Limestone Fines, C.I.P., as shown on drawings.

J. Rip-Rap Slope Stabilization:
   1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, material, and equipment for slope stabilization, including but not limited to grading and rip-rap, for a complete installation of Rip Rap Slope Stabilization, as shown on drawings.

K. 6” Reinforced Concrete Edging:
   1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, material, and equipment for a complete installation of 6” Reinforced Concrete Edging, as shown on drawings.

L. Play Structure(s):
   1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, materials, and equipment for a complete installation of Play Structure(s) per manufacturer's instruction, as shown on drawings.

M. Safety Surface, Poured-In-Place (PIP):
   1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, materials, equipment, filter fabric, subsurface drainage, and subsurface base materials for a complete installation of Safety Surface, Poured-In-Place (PIP), as shown on drawings.

N. Safety Surface, Engineered Wood Fiber (EWF), C.I.P.:
   1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, materials, equipment, filter fabric, subsurface drainage, and subsurface base materials for a complete installation of Safety Surface, Engineered Wood Fiber (EWF), C.I.P., as shown on drawings.

O. Play Surface, Crushed Stone:
   1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, materials, equipment, filter fabric, subsurface drainage, and subsurface base materials for a complete installation of Play Surface, Crushed Stone, as shown on drawings.

P. Drywell:
   1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, materials, fabric, and equipment for a complete installation of the Drywell, as shown on drawings.

Q. Canoe/Kayak Launch:
   1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, material, stone, concrete planks, and equipment required for the complete installation of a Canoe/Kayak Launch per the manufacturer's instructions and as shown on the drawings.

R. Transfer Station at Launch:
   1. Basis of Measurement: At the unit price bid per each as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, material, and equipment for a transfer station at launch, including security anchor, for a complete installation.

S. Bench Concrete Pad, Non-Reinforced, 4":
   1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, materials, equipment, and all base and subbase materials for a complete installation of a Bench Concrete Pad, Non-Reinforced, 4", as shown on the drawings.

T. 6’ Bench w/ 1 Armrest & Backrest, Surface Mount:
   1. Basis of Measurement: At the unit price bid per each, as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, material, and equipment for a 6’ Bench w/ 1 Armrest & Backrest, Surface Mount, for a complete installation.

U. Interpretive Signage:
   1. Basis of Measurement: At the lump sum bid, as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, material, and equipment required for a complete installation of Interpretive Signage per manufacturer's instruction and as shown on the drawings.

V. Site Restoration & Cleanup:
   1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
   2. Basis of Payment: Include all associated labor, material, and equipment for site restoration, cleanup, soil preparation, landscape grading, and seeding for a complete installation.

W. Construction Staking & Material Testing:
   1. Basis of Measurement: At the lump sum price bid, as stated in the Proposal.
   2. Basis of Payment: Includes all associated labor, material, and equipment for construction staking and material testing for a complete installation. This work will be provided by Spicer Group and paid by the Contractor.

X. Dewatering:
   1. Basis of Measurement: Included in the other pay items of the project.
   2. Basis of Payment: Includes pump, power unit, fuel, discharge header pipe, connections, fittings, pump operation and maintenance, and all other equipment and labor for a complete dewatering.

Y. Landscape Preparation:
   1. Basis of Measurement: Included in the lump sum price bid for site restoration and cleanup.
   2. Basis of Payment: Includes all labor, excavation, fill for landscape grading and grading necessary to obtain the required contours and replacement of necessary fences, trees, shrubs, guard rail, mailboxes, and other landscaping necessary to return work area to preconstruction conditions.

Z. Landscaping Grading:
   1. Basis of Measurement: Included in the lump sum price bid for site restoration and cleanup.
   2. Basis of Payment: Includes all labor, material and equipment required for landscape grading necessary for this project.

AA. Seedings:
   1. Basis of Measurement: Included in the lump sum price bid for site restoration and cleanup.
   2. Basis of Payment: Includes all excavation, labor, materials, fertilizer, mulch, landscape grading, topsoil, seeding, watering and maintenance to provide for uniform grass growth and any reseeing and erosion repair to provide for a uniform grass growth at the completion of the project.

END OF SECTION

SECTION 01 25 00

SUBSTITUTION PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Quality assurance.

B. Product options.

C. Product substitution procedures.

1.2 QUALITY ASSURANCE

A. Contract is based on products and standards established in Contract Documents without consideration of proposed substitutions.

B. Products specified define standard of quality, type, function, dimension, appearance, and performance required.

C. Substitution Proposals: Permitted for specified products except where specified otherwise. Do not substitute products unless substitution has been accepted and approved in writing by Owner.

1.3 PRODUCT OPTIONS

A. See Section 01 60 00 - Product Requirements.

1.4 PRODUCT SUBSTITUTION PROCEDURES

A. Engineer will consider requests for substitutions only within **15** days after date of Owner-Contractor Agreement.

B. Substitutions may be considered when a product becomes unavailable through no fault of Contractor.

C. Document each request with complete data, substantiating compliance of proposed substitution with Contract Documents, including:
   1. Manufacturer's name and address, product, trade name, model, or catalog number, performance and test data, and reference standards.
   2. Itemized point-by-point comparison of proposed substitution with specified product, listing variations in quality, performance, and other pertinent characteristics.
   3. Reference to Article and Paragraph numbers in Specification Section.
   4. Cost data comparing proposed substitution with specified product and amount of net change to Contract Sum.
   5. Changes required in other Work.
   6. Availability of maintenance service and source of replacement parts as applicable.
   7. Certified test data to show compliance with the local jurisdiction’s performance characteristics specified.
   8. Samples when applicable or requested.

9. Other information as necessary to assist Engineer's evaluation.

D. A request constitutes a representation that Contractor:
   1. Has investigated proposed product and determined that it meets or exceeds quality level of specified product.
   2. Will provide same warranty for substitution as for specified product.
   3. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
   4. Waives claims for additional costs or time extension that may subsequently become apparent.
   5. Will coordinate installation of the accepted substitute, making such changes as may be required for the Work to be complete in all respects.
   6. Will reimburse Owner for review or redesign services associated with reapproval by authorities having jurisdiction.

E. Substitutions will not be considered when they are indicated or implied on Shop Drawing or Product Data submittals without separate written request or when acceptance will require revision to Contract Documents.

F. Substitution Submittal Procedure:
   1. Submit requests for substitutions.
   2. Submit three copies of Request for Substitution for consideration. Limit each request to one proposed substitution.
   3. Submit Shop Drawings, Product Data, and certified test results attesting to proposed product equivalence. Burden of proof is on proposer.
   4. Engineer will notify Contractor in writing of decision to accept or reject request.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 01 30 00

ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Coordination and Project conditions.

B. Field Engineering.

C. Cutting and Patching.

D. Preconstruction meeting.

E. Site mobilization meeting.

F. Progress meetings.

G. Preinstallation meetings.

H. Closeout meeting.

I. Alteration procedures.

1.2 COORDINATION AND PROJECT CONDITIONS

A. Coordinate scheduling, submittals, and Work of various Sections of Owner Contract Agreement to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later. Coordinate utility work performed on site outside of this contract.

B. Verify that utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate Work of various Sections having interdependent responsibilities for installing, connecting to, and placing operating equipment in service.

C. Coordination Meetings: In addition to other meetings specified in this Section, hold coordination meetings with personnel and Subcontractors to ensure coordination of Work.

D. Coordinate completion and clean-up of Work of separate Sections in preparation for Substantial Completion and for portions of Work designated for Owner's partial occupancy.

E. After Owner's occupancy of premises, coordinate access to Site for correction of defective Work and Work not complying with Contract Documents, to minimize disruption of Owner's activities.

1.3 ALLOWANCES

A. MATERIAL TESTING
   1. The Contractor will provide, through the Professional (Spicer Group), testing of materials. The following general classifications of Work require testing and/or certificates of inspection:
      a. Backfilling for Compaction and Density
      b. Concrete Testing
   2. Additional materials may be requested for testing by the Professional at any time.

B. CONSTRUCTION STAKING
   1. The Contractor will provide, through the Professional (Spicer Group), reference points for construction, and the Professional will be responsible for laying out (staking) the Work. Staking by the Professional will be limited to the following:
      a. Marking the Control Points.
      b. Proposed improvements for location and grade, with offsets.
      c. Staking grade with proposed cut/fill elevations, based on the grading plan.
      d. The contract allowance lump sum price accounts for one (1) site visit to complete all necessary staking for this project.
      e. Any additional staking requested beyond these limits will be at the Contractor's expense.
   2. Contractor to locate and protect survey control, reference points, and construction staking. Restaking will be at the Contractor's expense.
   3. Coordinate schedule for staking a minimum of ten (10) days before staking is needed.

C. Control datum for survey is that established by Owner provided survey shown on Drawings.

D. Engineer will provide construction staking. Call the Engineer to request staking at least 3 working days in advance of the time needed for the work.

E. Construction stakes removed or damaged by Contractor shall be replaced at Contractor's expense.

F. When finished surfaces are cut so that a smoother transition and new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Engineer.

G. Where a change of plane of 1/4 inch or more occurs, submit recommendation for providing a smooth transition for Engineer review and request instructions from Engineer.

H. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.

I. Finish surfaces as specified in individual product sections.

J. Where there are changes in open drain cross sections, excavate a 20-foot smooth transition between sections.

1.4 CUTTING AND PATCHING

A. Coordinate with Engineer 48 hours prior to cutting and patching.

B. Employ skilled and experienced installer to perform cutting and patching.

C. Submit written request in advance of cutting or altering elements which affects:
   1. Structural integrity of element.
   2. Integrity of weather-exposed or moisture-resistant elements.
   3. Efficiency, maintenance, or safety of element.
   4. Visual quantities of sight-exposed elements.
   5. Work of Owner or separate contractor.

D. Execute cutting, fitting, and patching including excavation and fill, to complete Work, and to:
   1. Fit the several parts together, to integrate with other Work.
   2. Uncover Work to install or correct ill-timed Work.
   3. Remove and replace defective and non-conforming Work.
   4. Remove samples of installed Work for testing.

E. Execute work by methods which will avoid damage to other Work, and provide proper surfaces to receive patching and finishing.

F. Cut rigid materials using masonry saw or core drill.

G. Restore Work with new products in accordance with requirements of Contract Documents.

H. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.

I. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for an assembly, refinish entire unit.

J. Identify any hazardous substance or condition exposed during the Work to the Engineer for decision or remedy.

1.5 PRECONSTRUCTION MEETING

A. Engineer will schedule and preside over meeting after Notice of Award.

B. Attendance Required: Engineer, Owner, appropriate governmental agency representatives, applicable public and private utility companies and Contractor, subcontractors to be utilized on the project.

1.6 PROGRESS MEETINGS

A. Schedule and administer meetings throughout progress of the Work, if required.

B. Engineer will make arrangements for meetings, prepare agenda with copies for participants, and preside over meetings.

C. Attendance Required: Job superintendent, major Subcontractors, Contractors and suppliers, and Engineer, Owner, as appropriate to agenda topics for each meeting.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION

3.1 ALTERATION PROCEDURES

A. Entire facility will be occupied for normal operations during progress of construction. Cooperate with Owner in scheduling operations to minimize conflict and to permit continuous usage.
   1. Perform Work not to interfere with operations of occupied areas.
   2. Keep utility and service outages to a minimum and perform only after written approval of Owner.
   3. Clean Owner-occupied areas daily. Clean spillage, overspray, and heavy collection of dust in Owner-occupied areas immediately.

B. Materials: As specified in product Sections.

C. Employ skilled and experienced installer to perform alteration and renovation Work.

D. Cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion. Comply with Section 01 70 00 - Execution and Closeout Requirements

E. Remove unsuitable material not marked for salvage, including rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished Work.

F. Remove debris and abandoned items from area and from concealed spaces.

G. Prepare surface and remove surface finishes to permit installation of new Work and finishes.

H. Close openings in exterior surfaces to protect existing Work from weather and extremes of temperature and humidity.

I. Remove, cut, and patch Work to minimize damage and to permit restoring products and finishes to original or specified condition.

J. Refinish existing visible surfaces to remain in renovated rooms and spaces, to specified or new condition for each material, with neat transition to adjacent finishes.

K. Where new Work abuts or aligns with existing Work, provide smooth and even transition. Patch Work to match existing adjacent Work in texture and appearance.

L. When finished surfaces are cut so that smooth transition with new Work is not possible, terminate existing surface along straight line at natural line of division and submit recommendation to Engineer for review.

M. Where change of plane of 1/4 inch or more occurs, submit recommendation for providing smooth transition to Engineer for review.

N. Patch or replace portions of existing surfaces that are damaged, lifted, discolored, or showing other imperfections.

O. Finish surfaces as specified in individual product Sections.

END OF SECTION

SECTION 01 32 16

CONSTRUCTION PROGRESS SCHEDULE

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Submittals.

B. Review and evaluation.

C. Updating schedules.

D. Distribution.

1.2 SUBMITTALS

A. 5 days prior to the pre-construction meeting the Contractor shall submit a construction work schedule laying out the progress of the project for the Engineer's review.

B. Schedule Updates:
1. Overall percent complete, projected and actual.
2. Completion progress by listed activity and subactivity, to within five days prior to submittal.
3. Changes in Work scope and activities modified since submittal.
4. Delays in submittals or resubmittals, deliveries, or Work.
5. Adjusted or modified sequences of Work.
6. Other identifiable changes.
7. Revised projections of progress and completion.

1.3 REVIEW AND EVALUATION

A. Participate in joint review and evaluation of schedules with Engineer at each submittal.

B. Evaluate Project status to determine Work behind schedule and Work ahead of schedule.

C. After review, revise schedules incorporating results of review, and resubmit within 10 days.

1.4 UPDATING SCHEDULES

A. Maintain schedules to record actual start and finish dates of completed activities.

B. Indicate progress of each activity to date of revision, with projected completion date of each activity. Update schedules to depict current status of Work.

C. Identify activities modified since previous submittal, major changes in Work, and other identifiable changes.

D. Upon approval of a Change Order, include the change in the next schedule submittal.

E. Indicate changes required to maintain Date of Substantial and Total Completion.

F. Submit sorts as required to support recommended changes.

G. Prepare narrative report to define problem areas, anticipated delays, and impact on schedule. Report corrective action taken or proposed and its effect.

1.5 DISTRIBUTION

A. Following joint review, distribute copies of updated schedules to Contractor's Project site file, to Subcontractors, suppliers, Engineer, Owner, and other concerned parties.

B. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedules.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 01 33 00

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Definitions.

B. Submittal procedures.

C. Construction progress schedules.

D. Proposed product list.

E. Product data.

F. Shop Drawings.

G. Samples.

H. Other submittals.

I. Test reports.

J. Certificates.

K. Manufacturer's instructions.

L. Manufacturer's field reports.

M. Erection Drawings.

N. Contractor review.

O. Engineer review.

1.2 DEFINITIONS

A. Action Submittals: Written and graphic information and physical samples that require Engineer's responsive action.

B. Informational Submittals: Written and graphic information and physical Samples that do not require Engineer's responsive action. Submittals may be rejected for not complying with requirements.

1.3 SUBMITTAL PROCEDURES

A. Transmit each submittal with Engineer-accepted form.

B. Sequentially number transmittal forms. Mark revised submittals with original number and sequential alphabetic suffix.

C. Identify: Project, Contractor, Subcontractor and supplier, pertinent Drawing and detail number, and Specification Section number appropriate to submittal.

D. Apply Contractor's stamp, signed or initialed, certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is according to requirements of the Work and Contract Documents.

E. Schedule submittals to expedite Project, and deliver to Engineer. Coordinate submission of related items.

F. For each submittal for review, allow 15 days excluding delivery time to and from Contractor.

G. Revise and resubmit submittals as required, identify all changes made since precious submittal.

H. Identify variations in Contract Documents and product or system limitations that may be detrimental to successful performance of completed Work.

I. Allow space on submittals for Contractor and Engineer review stamps.

J. When revised for resubmission, identify changes made since previous submission.

K. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report inability to comply with requirements.

1.4 CONSTRUCTION PROGRESS SCHEDULES

A. Submit initial progress schedule in duplicate within 15 days after date established in Notice to Proceed for Engineer and Owner review.

B. Revise and resubmit as required.

C. Submit revised schedules with each Application for Payment, identifying changes since previous version.

D. Submit horizontal bar chart with separate line for each major section of Work or operation, identifying first workday of each week.

E. Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate the early and late start, early and late finish, float dates, and duration.

F. Indicate estimated percentage of completion for each item of Work at each submission.

G. Indicate submittal dates required for shop drawings, product data, samples, and product delivery dates, including those furnished by Owner and under Allowances.

1.5 PROPOSED PRODUCT LIST

A. Within 5 days after date of Owner-Contractor Agreement, submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.

B. For products specified only by reference standards, indicate manufacturer, trade name, model or catalog designation, and reference standards.

1.6 PRODUCT DATA

A. Product Data: Action Submittal: Submit to Engineer for review for assessing conformance with information given and design concept expressed in Contract Documents.

B. Submit number of copies Contractor requires, plus three copies Engineer will retain.

C. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.

D. After review, produce copies and distribute according to "Submittal Procedures" Article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.

1.7 SHOP DRAWINGS

A. Shop Drawings: Action Submittal: Submit to Engineer for assessing conformance with information given and design concept expressed in Contract Documents.

B. Indicate special utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

C. When required by individual Specification Sections, provide Shop Drawings signed and sealed by a professional Engineer responsible for designing components shown on Shop Drawings.
   1. Include signed and sealed calculations to support design.
   2. Submit Shop Drawings and calculations in form suitable for submission to and approval by authorities having jurisdiction.
   3. Make revisions and provide additional information when required by authorities having jurisdiction.

D. Submit number of opaque reproductions Contractor requires, plus two copies Engineer will retain.

E. After review, produce copies and distribute according to "Submittal Procedures" Article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.

1.8 SAMPLES

A. Samples: Action Submittal: Submit to Engineer for assessing conformance with information given and design concept expressed in Contract Documents.

B. Samples for Selection as Specified in Product Sections:
   1. Submit to Engineer for aesthetic, color, and finish selection.
   2. Submit Samples of finishes, textures, and patterns for Engineer selection.

C. Submit Samples to illustrate functional and aesthetic characteristics of products, with integral parts and attachment devices. Coordinate Sample submittals for interfacing work.

D. Include identification on each Sample, with full Project information.

E. Submit number of Samples specified in individual Specification Sections; Engineer will retain one Sample.

F. Reviewed Samples that may be used in the Work are indicated in individual Specification Sections.

G. Samples will not be used for testing purposes unless specifically stated in Specification Section.

H. After review, produce copies and distribute according to "Submittal Procedures" Article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.

1.9 OTHER SUBMITTALS

A. Closeout Submittals: Comply with Section 01 70 00 - Execution and Closeout Requirements.

B. Informational Submittal: Submit data for Engineer's knowledge for Owner.

C. Submit information for assessing conformance with information given and design concept expressed in Contract Documents.

1.10 TEST REPORTS

A. Informational Submittal: Submit reports for Engineer's knowledge for Owner.

B. Submit test reports for information for assessing conformance with information given and design concept expressed in Contract Documents.

1.11 CERTIFICATES

A. Informational Submittal: Submit certification when specified in individual specification sections from manufacturer, installation/application Subcontractor, or Contractor to Engineer, in quantities specified for Product Data.

B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

C. Certificates may be recent or previous test results on material or product but must be acceptable to Engineer.

1.12 MANUFACTURER'S INSTRUCTIONS

A. Informational Submittal: Submit manufacturer's installation instructions for Engineer's knowledge as Contract administrator or for Owner.

B. Submit printed instructions for delivery, storage, assembly, installation, startup, adjusting, and finishing, to Engineer in quantities specified for Product Data.

C. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

1.13 MANUFACTURER'S FIELD REPORTS

A. Informational Submittal: Submit reports for Engineer's knowledge for Owner.

B. Submit report in duplicate within 5 days of observation to Engineer for information.

C. Submit reports for information for assessing conformance with information given and design concept expressed in Contract Documents.

D. Identify conflicts between manufacturer’s instructions and Contract Documents.

1.14 ERECTION DRAWINGS

A. Informational Submittal: Submit Drawings for Engineer's knowledge for Owner.

B. Submit Drawings for information assessing conformance with information given and design concept expressed in Contract Documents.

C. Data indicating inappropriate or unacceptable Work may be subject to action by Engineer or Owner.

1.15 CONTRACTOR REVIEW

A. Review for compliance with Contract Documents and approve submittals before transmitting to Engineer.

B. Contractor: Responsible for:
1. Determination and verification of materials including manufacturer's catalog numbers.
2. Determination and verification of field measurements and field construction criteria.
3. Checking and coordinating information in submittal with requirements of Work and of Contract Documents.
4. Determination of accuracy and completeness of dimensions and quantities.
5. Confirmation and coordination of dimensions and field conditions at Site.
6. Construction means, techniques, sequences, and procedures.
7. Safety precautions.
8. Coordination and performance of Work of all trades.

C. Stamp, sign or initial, and date each submittal to certify compliance with requirements of Contract Documents.

D. Do not fabricate products or begin Work for which submittals are required until approved submittals have been received from Engineer.

1.16 ENGINEER REVIEW

A. Do not make "mass submittals" to Engineer. "Mass submittals" are defined as six or more submittals or items in one day or 15 or more submittals or items in one week. If "mass submittals" are received, Engineer's review time stated above will be extended as necessary to

perform proper review. Engineer will review "mass submittals" based on priority determined by Engineer after consultation with Owner and Contractor.

B. Informational submittals and other similar data are for Engineer's information, do not require Engineer's responsive action, and will not be reviewed or returned with comment.

C. Submittals made by Contractor that are not required by Contract Documents may be returned without action.

D. Submittal approval does not authorize changes to Contract requirements unless accompanied by Change Order.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 01 40 00

QUALITY REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Quality control.

B. Tolerances.

C. References.

D. Field Samples.

E. Labeling.

F. Testing and inspection services.

G. Bench marks and control elevations.

H. Manufacturers' field services.

1.2 QUALITY CONTROL

A. Monitor quality control over suppliers, manufacturers, products, services, Site conditions, and workmanship, to produce Work of specified quality.

B. Comply fully with manufacturers' instructions, including each step in sequence.

C. Should manufacturer's instructions conflict with Contract Documents, requires clarification form Engineer before proceeding.

D. Comply with specified standards as the minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

E. Perform Work using persons qualified to produce required and specified quality.

F. Products, materials, and equipment may be subject to inspection by Engineer and Owner at place of manufacture or fabrication. Such inspections shall not relieve Contractor of complying with requirements of Contract Documents.

G. Supervise performance of Work in such manner and by such means to ensure that Work, whether completed or in progress, will not be subjected to harmful, dangerous, damaging, or otherwise deleterious exposure during construction period.

H. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

1.3 TOLERANCES

A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.

B. Comply with manufacturers' recommended tolerances and tolerance requirements in reference standards. When such tolerances conflict with Contract Documents, request clarification from Engineer before proceeding.

C. Adjust products to appropriate dimensions; position before securing products in place.

1.4 REFERENCES

A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of standard except when more rigid requirements are specified or are required by applicable codes.

B. Conform to reference standard by date of issue current as of date of Contract Documents except where specific date is established by code.

C. Obtain copies of standards and maintain on Site when required by product Specification Sections.

D. When requirements of indicated reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.

E. Neither contractual relationships, duties, or responsibilities of parties in Contract nor those of Engineer shall be altered from Contract Documents by mention or inference in reference documents.

1.5 FIELD SAMPLES

A. Acceptable samples represent a quality level for the Work.

1.6 LABELING

A. Attach label from agency approved by authorities having jurisdiction for products, assemblies, and systems required to be labeled by applicable code.

B. Label Information: Include manufacturer's or fabricator's identification, approved agency identification, and the following information, as applicable, on each label:
   1. Model number.
   2. Serial number.
   3. Performance characteristics.

C. Manufacturer's Nameplates, Trademarks, Logos, and Other Identifying Marks on Products: Not allowed on surfaces exposed to view in public areas, interior or exterior.

1.7 TESTING AND INSPECTION SERVICES

A. Contractor will employ and pay for services of Engineer to perform materials inspection and testing including compaction.

B. Then Engineer will perform inspections, tests, and other services specified in individual specification sections and as required.

C. Reports will be submitted by Engineer, indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.

D. Cooperate with the Engineer; furnish samples of materials, design mix, equipment, tools, storage and assistance as requested.
   1. Make arrangements with the Engineer and pay for additional samples and tests required for Contractor's use.

E. Retesting required because of non-conformance to specified requirements shall be performed by the same Engineer. Payment for retesting will be charged to the Contractor.

1.8 BENCHMARKS AND CONTROL ELEVATIONS

A. Elevations for proposed work shall be from bench marks established for this project.

B. Verify elevations of existing features against project benchmarks.

C. Notify Engineer of conflicts in elevations, which affect the proposed work.

1.9 MANUFACTURER'S FIELD SERVICES

A. When specified in individual Specification Sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe Site conditions, conditions of surfaces and installation, quality of workmanship, startup of equipment, testing, adjusting, and balancing of equipment commissioning and as applicable, and to initiate instructions when necessary.

B. Submit qualifications of observer to Engineer 30 days in advance of required observations. Observer is subject to approval of Engineer.

C. Report observations and Site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturer's written instructions.

D. Refer to Section 01 33 00 - Submittal Procedures, "Manufacturer's Field Reports" Article.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Temporary Utilities:
   1. Temporary electricity.
   2. Temporary lighting for construction purposes.
   3. Temporary ventilation.
   4. Temporary water service.
   5. Temporary sanitary facilities.

B. Construction Facilities:
   1. Field offices and sheds.
   2. Temporary driveways.
   3. Vehicular access.
   4. Parking.
   5. Progress cleaning and waste removal.
   6. Fire-prevention facilities.

C. Temporary Controls:
   1. Barriers.
   2. Enclosures and fencing.
   3. Security.
   4. Water control.
   5. Dust control.
   6. Erosion and sediment control.
   7. Noise control.
   8. Pest and rodent control.
   9. Pollution control.

D. Removal of utilities, facilities, and controls.

E. Protection of Installed Work.

F. Protection of Existing.

G. Progress Cleaning.

1.2 TEMPORARY ELECTRICITY

A. Provide and pay for power service required from utility source as needed for construction operation.

B. Complement existing power service capacity and characteristics as required for construction operations.

C. Provide power outlets with branch wiring and distribution boxes located as required for construction operations. Provide suitable, flexible power cords as required for portable construction tools and equipment.

D. Provide main service disconnect and overcurrent protection at convenient location switch at source distribution equipment meter.

E. Permanent convenience receptacles may be used during construction.

1.3 TEMPORARY LIGHTING FOR CONSTRUCTION PURPOSES

A. Provide and maintain lighting for construction operations, and to exterior staging and storage areas after dark for security purposes.

B. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, lamps, and the like, for specified lighting levels.

C. Maintain lighting and provide routine repairs.

1.4 TEMPORARY VENTILATION

A. Ventilate enclosed areas to achieve curing of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.

1.5 TEMPORARY WATER SERVICE

1. Provide and pay for suitable quality water service as needed to maintain specified conditions for construction operations.

1.6 TEMPORARY SANITARY FACILITIES

1. Provide and maintain required facilities and enclosures. Provide facilities at time of Project mobilization.

1.7 FIELD OFFICES AND SHEDS

1. Designated existing spaces may be used for field offices and for storage:
2. Provide locks and temporary chain link fencing during construction to prevent unauthorized entry.

1.8 TEMPORARY DRIVEWAYS

1. Temporary driveways shall be constructed to provide safe, stable, and smooth access.
2. Driveways shall be finished and accepted by Owner before 100% completion of Work is accepted.

1.9 VEHICULAR ACCESS

1. Construct temporary all-weather access roads from public thoroughfares to serve construction area, of width and load-bearing capacity to accommodate unimpeded traffic for construction purposes.
2. Extend and relocate vehicular access as Work progress requires and provide detours as necessary for unimpeded traffic flow.
3. Locate as approved by Owner.
4. Provide unimpeded access for emergency vehicles.
5. Provide and maintain access to fire hydrants and control valves free of obstructions.

6. Provide means of removing mud from vehicle wheels before entering streets.

1.10 PARKING

A. Maintenance:
   1. Maintain traffic and parking areas in sound condition free of excavated material, construction equipment, products, mud, snow, ice, and the like.
   2. Maintain existing and permanent paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original condition.

B. Removal, Repair:
   1. Remove temporary materials and construction at Substantial Completion.
   2. Remove underground Work and compacted materials to depth of 2 feet fill and grade Site as indicated.
   3. Repair existing and permanent facilities damaged by use, to original condition.

C. Mud from Site vehicles: Provide means of removing mud from vehicle wheels before entering streets.

1.11 PROGRESS CLEANING AND WASTE REMOVAL

A. Maintain areas free of waste materials, debris, and rubbish. Maintain Site in clean and orderly condition.

B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, before enclosing spaces.

C. Broom and vacuum clean interior areas before starting surface finishing, and continue cleaning to eliminate dust.

D. Collect and remove waste materials, debris, and rubbish from Site and dispose of off-Site.

E. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

1.12 FIRE-PREVENTION FACILITIES

A. Prohibit smoking within buildings under construction and demolition. Designate area on Site where smoking is permitted. Provide approved ashtrays in designated smoking areas.

B. Establish fire watch for cutting, welding, and other hazardous operations capable of starting fires. Maintain fire watch before, during, and after hazardous operations until threat of fire does not exist.

C. Standpipes: Maintain existing standpipes in usable condition to height within one floor of floor being demolished.

D. Portable Fire Extinguishers: NFPA 10; 10-pound capacity, 4A-60B: C UL rating.
   1. Provide one fire extinguisher at each stairway on each floor of buildings under construction and demolition.

2. Provide minimum of one fire extinguisher in every construction trailer and storage shed.
3. Provide minimum of one fire extinguisher on roof during roofing operations using heat-producing equipment.

1.13 BARRIERS

A. Provide barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations and demolition.

B. Provide barricades and covered walkways required by authorities having jurisdiction for public rights-of-way and for public access to existing building.
   1. Barricade Construction: As indicated on Drawings.
   2. Covered Walkway Construction: As indicated on Drawings.

C. Tree and Plant Protection: Preserve and protect existing trees and plants designated to remain.
   1. Protect areas within drip lines from traffic, parking, storage, dumping, chemically injurious materials and liquids, ponding, and continuous running water.
   2. Provide 6 foot-high barriers around drip line, with access for maintenance.
   3. Replace trees and plants damaged by construction operations.

D. Protect non-owned vehicular traffic, stored materials, Site, and structures from damage.

E. Provide access to all adjacent buildings for use during construction.

1.14 WATER CONTROL

A. Grade Site to drain. Maintain excavations free of water. Provide, operate, and maintain necessary pumping equipment.

B. Protect Site from puddles or running water. Provide water barriers as required to protect Site from soil erosion.

C. Trenches shall be dewatered to provide a stable base for structures and piping.

1.15 DUST CONTROL

A. Execute Work by methods that minimize raising dust from construction operations.

B. Provide positive means to prevent airborne dust from dispersing into atmosphere and into Owner-occupied areas.

1.16 EROSION AND SEDIMENT CONTROL

A. Conform to Part 91 of Public Act 451 of 1994, relative to Soil Erosion and Sedimentation Control for the life of the project.

B. Minimize amount of bare soil exposed at one time.

C. Provide temporary measures such as berms, dikes, and drains to prevent sediment from entering adjacent waterways.

D. Do not deposit trash, debris, or sediment in tile or open drains.

E. Immediately repair trenches located within the traveled surface of roadways.

F. Landscape construction areas as soon as practical after work is complete according to Sections 32 91 19 – Landscape Grading, 32 92 19 – Seeding.

1.17 NOISE CONTROL

A. Provide methods, means, and facilities to minimize noise produced by construction operations.

1.18 PEST AND RODENT CONTROL

A. Provide methods, means, and facilities to prevent pests and insects from damaging the Work and entering facility.

B. Provide methods, means, and facilities to prevent rodents from accessing or invading premises.

1.19 POLLUTION CONTROL

A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances and pollutants produced by construction operations.

B. Comply with pollution and environmental control requirements of authorities having jurisdiction.

1.20 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

A. Remove temporary utilities, equipment, facilities, and materials before Substantial Completion inspection.

B. Remove underground installations to minimum depth of 4 feet. Grade Site as indicated on Drawings.

C. Clean and repair damage caused by installation or use of temporary Work.

D. Restore existing and permanent facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

E. A sufficient sum of money to remove and replace or repair any utilities damaged or relocated during the construction of the project shall be included in total contract amount.

1.21 PROTECTION OF INSTALLED WORK

A. Protect installed work and provide special protection where specified in individual specification Sections.

B. Provide temporary and removable protection for installed Products. Control activity in immediate work area to minimize damage.

C. Prohibit traffic from landscaped areas.

1.22 PROTECTION OF EXISTING

A. CALL “MISS DIG” 811 or (1-800-482-7171) A MINIMUM OF THREE WORKING DAYS PRIOR TO CONSTRUCTION.

B. Obtain a copy of Positive Response. Contact Miss Dig for additional assistance if there are any utilities not marked or cleared through the Positive Response System.

C. Contact Miss Dig for additional assistance if there is a discrepancy in the field from the Positive Response System.

D. Contact Miss Dig for additional assistance if utility is not found within the applicable “approximate locations” marked in the field.

E. Protect landscaped areas. Damaged areas shall be replaced in kind.

F. Protect utilities encountered during the work. Replace or repair damaged utilities.

G. Protect drives, roadways, and sidewalks. Repair as required in following sections.

H. Protect mailboxes. Relocate temporarily until mailboxes can be returned to original location. All mail boxes and posts must be returned to their original condition or better at no additional cost to the project.

I. Protect trees, shrubs, and bushes:
   1. Where trees, shrubs, and bushes are too large to be replaced in kind, the proposed utility shall be installed in a boring or tunneling operation unless written consent is given by the property owner for removal. Owner and Engineer shall each be given one copy of consent letters.
   2. Where requested by the Property Owner, timber from removed trees shall be cut into 6 foot lengths and stockpiled along the work or as specified in the consent letter.
   3. Proper disposal of removed trees or sections of removed trees not wanted by the property owner shall become the responsibility of the Contractor.
   4. Trees, shrubs, and bushes that are removed and replaced shall be transplanted by an established nursery.

J. Utilities must remain in service. If it becomes necessary to interrupt a utility service, the utility authority must be notified immediately and steps taken to restore temporary or permanent service as soon as possible.

K. Maintain outlets for drains. Provide temporary pumping if necessary.

L. Expose utility mains and services by hand in the trench.

M. Where utility and drainage piping crosses the trench, support he piping according to the utility authority’s standards and backfill to the top with compacted sand.

1.23 PROGRESS CLEANING

A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.

B. Clean road surface daily to the Owner's and/or Engineer's satisfaction.

C. Complete leveling, remove excess material and debris and restore drainage not more than 1000 feet behind construction.

D. A sufficient sum of money to remove and replace or repair any utilities damaged or relocated during the construction of the project shall be included in total contract amount.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 01 60 00

PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Products.

B. Product delivery requirements.

C. Product storage and handling requirements.

D. Product options.

1.2 PRODUCTS

A. At minimum, comply with specified requirements and reference standards.

B. Specified products define standard of quality, type, function, dimension, appearance, and performance required.

C. Furnish products of qualified manufacturers that are suitable for intended use. Furnish products of each type by single manufacturer unless specified otherwise. Confirm that manufacturer's production capacity can provide sufficient product, on time, to meet Project requirements.

D. Domestic Products: Except where specified otherwise, domestic products are required and interpreted to mean products mined, manufactured, fabricated, or produced in United States or its territories.

E. Do not use materials and equipment removed from existing premises except as specifically permitted by Contract Documents.

F. Furnish interchangeable components from same manufacturer for components being replaced.

1.3 PRODUCT DELIVERY REQUIREMENTS

A. Transport and handle products according to manufacturer's instructions.

B. Promptly inspect shipments to ensure products comply with requirements, quantities are correct, and products are undamaged.

C. Provide equipment and personnel to handle products; use methods to prevent soiling, disfigurement, or damage.

1.4 PRODUCT STORAGE AND HANDLING REQUIREMENTS

A. Store and protect products according to manufacturer's instructions.

B. Store products with seals and labels intact and legible.

C. Store sensitive products in weathertight, climate-controlled enclosures in an environment suitable to product.

D. For exterior storage of fabricated products, place products on sloped supports aboveground.

E. Provide off-Site storage and protection when Site does not permit on-Site storage or protection.

F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.

G. Store loose granular materials on solid flat surfaces in well-drained area. Prevent mixing with foreign matter.

H. Provide equipment and personnel to store products; use methods to prevent soiling, disfigurement, or damage.

I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

1.5 PRODUCT OPTIONS

A. Products Specified by Reference Standards or by Description Only: Products complying with specified reference standards or description.

B. Products Specified by Naming One or More Manufacturers: Products of one of manufacturers named and complying with Specifications; no options or substitutions allowed.

C. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit Request for Substitution for any manufacturer not named, according to Section 01 25 00 - Substitution Procedures.

PART 2 PRODUCTS – Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 01 70 00

EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Field engineering.

B. Closeout procedures.

C. Project record documents.

D. Maintenance service.

E. Warranties.

F. Progress Payments.

G. Examination.

H. Preparation.

I. Execution.

J. Cutting and patching.

K. Protecting installed construction.

L. Final cleaning.

1.2 FIELD ENGINEERING

A. Engineer will locate and Contractor shall protect survey control and reference points. Promptly notify Engineer of discrepancies discovered.

B. Control datum for survey is established by Owner-provided survey indicated on Drawings.

C. Prior to beginning Work, verify and establish floor elevations of existing facilities to ensure that new Work will meet existing elevations in smooth and level alignment except where specifically detailed or indicated otherwise.

D. Verify setbacks and easements; confirm Drawing dimensions and elevations.

E. Field engineering services provided by Engineer includes: Establish elevations, lines, and levels using recognized engineering survey practices.

F. Maintain complete an accurate log of control and survey Work as Work progresses.

G. Protect survey control points prior to starting Site Work; preserve permanent reference points during construction.

H. Promptly report to Engineer loss or destruction of reference point or relocation required because of changes in grades or other reasons.

I. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Engineer.

1.3 CLOSEOUT PROCEDURES

A. Submit written certification that Contract Documents have been reviewed. Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Engineer’s inspection.

B. Provide submittals to Engineer that are required by governing or other authorities.

C. Provide Consent of Surety and all Final Waivers.

1.4 FINAL CLEANING

A. Execute final cleaning prior to final inspection.

B. Remove sediment from storm sewers, and catch basins.

C. Clean site; sweep paved areas, rake clean landscaped surfaces.

D. Remove waste and surplus materials, rubbish, and construction facilities from the site.

E. Landscape areas as required in documents.

F. Restore roads, driveways, parking areas, lawns, drainage, and other items disturbed during construction to original condition or as required by the documents.

1.5 PROJECT RECORD DOCUMENTS

A. Maintain on Site one set of the following record documents; record actual revisions to the Work:
   1. Drawings.
   2. Specifications.
   3. Addenda.
   4. Change Orders and other modifications to the Contract.
   5. Reviewed Shop Drawings, product data, and Samples.
   6. Manufacturer's instruction for assembly, installation, and adjusting.

B. Store record documents separate from documents used for construction.

C. Record information concurrent with construction progress.

D. Specifications: Legibly mark and record, at each product Section, description of actual products installed, including the following:
   1. Manufacturer's name and product model and number.
   2. Product substitutions or alternates used.

3. Changes made by Addenda and modifications.

E. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction as follows:
   1. Include Contract modifications such as Addenda, supplementary instructions, change directives, field orders, minor changes in the Work, and change orders.
   2. Include locations of concealed elements of the Work.
   3. Identify depth of buried utility lines and provide dimensions showing distances from permanent facility components that are parallel to utilities.
   4. Dimension ends, corners, and junctions of buried utilities to permanent facility components using triangulation.
   5. Identify and locate existing buried or concealed items encountered during Project.
   6. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
   7. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
   8. Field changes of dimension and detail.
   9. Details not on original Drawings.

F. Submit marked-up paper copy documents to Engineer before Substantial Completion.

1.6 MAINTENANCE SERVICE

A. Furnish service and maintenance of components indicated in Specification Sections for 1 year from date of Substantial Completion.

B. Examine system components at frequency consistent with reliable operation. Clean, adjust, and lubricate as required.

C. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by manufacturer of original component.

D. Do not assign or transfer maintenance service to agent or Subcontractor without prior written consent of Owner.

1.7 WARRANTIES

A. Execute and assemble documents from Sub-contractors, suppliers, and manufacturers.

B. Provide Table of Contents and assemble in three D size ring three ring binder with durable plastic cloth cover.

C. Submit prior to final Application for Payment.

D. Warranty all work for a period of one year from the date of the final progress payment.

1.8 PROGRESS PAYMENTS

A. The Owner may request from the Contractor waivers for proof of payment to all sub-contractors and suppliers utilized on this project prior to issuing payments.

B. The Owner may request from the Contractor a Sworn Statement listing all sub-contractors and suppliers, their involvement with the project, their subcontracted amount, amount paid to date, and balance due prior to issuing payment.

C. Failure to provide this information may result in not receiving payments or payments not being issued in a timely manner.

1.9 CORRECTION PERIOD

A. For the period of one year from the date of final payment, promptly correct work or replace materials that are found to be defective.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify that existing Site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.

B. Verify that existing substrate is capable of structural support or attachment of new Work being applied or attached.

C. Examine and verify specific conditions described in individual Specification Sections.

D. Verify that utility services are available with correct characteristics and in correct locations.

3.2 PREPARATION

A. Clean substrate surfaces prior to applying next material or substance according to manufacturer's instructions.

B. Seal cracks or openings of substrate prior to applying next material or substance.

C. Apply manufacturer-required or -recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

3.3 EXECUTION

A. Comply with manufacturer's installation instructions, performing each step in sequence. Maintain one set of manufacturer's installation instructions at Project Site during installation and until completion of construction.

B. When manufacturer's installation instructions conflict with Contract Documents, request clarification from Engineer before proceeding.

C. Verify that field measurements are as indicated on approved Shop Drawings or as instructed by manufacturer.

D. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.
   1. Secure Work true to line and level and within specified tolerances, or if not specified, industry-recognized tolerances.
   2. Physically separate products in place, provide electrical insulation, or provide protective coatings to prevent galvanic action or corrosion between dissimilar metals.
   3. Exposed Joints: Provide uniform joint width and arrange to obtain best visual effect. Refer questionable visual-effect choices to Engineer for final decision.

E. Allow for expansion of materials and building movement.

F. Climatic Conditions and Project Status: Install each unit of Work under conditions to ensure best possible results in coordination with entire Project.
   1. Isolate each unit of Work from incompatible Work as necessary to prevent deterioration.
   2. Coordinate enclosure of Work with required inspections and tests to minimize necessity of uncovering Work for those purposes.

G. Mounting Heights: Where not indicated, mount individual units of Work at industry recognized standard mounting heights for particular application indicated.
   1. Refer questionable mounting heights choices to Engineer for final decision.
   2. Elements Identified as Accessible to Handicapped: Comply with applicable codes and regulations.

H. Adjust operating products and equipment to ensure smooth and unhindered operation.

I. Clean and perform maintenance on installed Work as frequently as necessary through remainder of construction period. Lubricate operable components as recommended by manufacturer.

3.4 PROTECTING INSTALLED CONSTRUCTION

A. Protect installed Work and provide special protection where specified in individual Specification Sections.

B. Provide temporary and removable protection for installed products. Control activity in immediate Work area to prevent damage.

C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.

D. Use durable sheet materials to protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects.

E. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.

F. Prohibit traffic from landscaped areas.

END OF SECTION

SECTION 03 10 00

CONCRETE FORMING AND ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Formwork for cast-in-place concrete.
   2. Shoring, bracing, and anchorage.
   3. Form accessories.
   4. Form stripping.

B. Related Requirements:
   1. Section 03 20 00 - Concrete Reinforcing.
   2. Section 03 30 00 - Cast-in-Place Concrete.
   3. Section 32 33 00 - Site Furnishings.

1.2 REFERENCE STANDARDS

A. American Concrete Institute:
   1. ACI 117 - Specification for Tolerances for Concrete Construction and Materials.
   2. ACI 301 - Specifications for Structural Concrete.
   3. ACI 318 - Building Code Requirements for Structural Concrete.
   4. ACI 347 - Guide to Formwork for Concrete.

B. American Forest & Paper Association:
   1. AF&PA - National Design Specification (NDS) for Wood Construction.

C. American Society of Mechanical Engineers:
   1. ASME A17.1 - Safety Code for Elevators and Escalators.

D. APA - The Engineered Wood Association:
   1. APA/EWA PS 1 - Voluntary Product Standard - Structural Plywood.

E. ASTM International:
   1. ASTM D1751 - Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Non-extruding and Resilient Bituminous Types).
   2. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials.

F. West Coast Lumber Inspection Bureau:
   1. WCLIB - Standard No. 17 Grading Rules for West Coast Lumber.

1.3 COORDINATION

A. Section 01 30 00 - Administrative Requirements: Requirements for coordination.

B. Coordinate Work of this Section with other Sections of Work in forming and placing openings, slots, reglets, recesses, sleeves, bolts, anchors, other inserts, and components of other Work.

1.4 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Product Data: Submit manufacturer information on void form materials and installation requirements.

C. Shop Drawings:
   1. Indicate:
      a. Formwork, shoring, and reshoring.
      b. Pertinent dimensions, openings, methods of construction, types of connections, materials, joint arrangement and details, ties and shores, location of framing, studding and bracing, and temporary supports.
      c. Means of leakage prevention for concrete exposed to view in finished construction.
      d. Sequence and timing of erection and stripping, assumed compressive strength at time of stripping, height of lift, and height of drop during placement.
      e. Vertical, horizontal, and special loads according to ACI 347, and camber diagrams when applicable.
      f. Notes to formwork erector showing size and location of conduits and piping embedded in concrete according to ACI 318.
      g. Procedure and schedule for removal of shores and installation and removal of reshores.

D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

E. Delegated Design Submittals:
   1. Submit signed and sealed Shop Drawings with design calculations and assumptions for formwork, shoring, and reshores.
   2. Indicate loads transferred to structure during process of concreting, shoring, and reshoring.
   3. Include structural calculations to support design.

F. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.

G. Qualifications Statement:
   1. Coordinate following Subparagraph with requirements specified in QUALIFICATIONS Article.
   2. Submit qualifications for licensed professional.

1.5 QUALITY ASSURANCE

A. Perform Work according to ACI 347, 301, and 318.

B. For wood products furnished for Work of this Section, comply with AF&PA.

C. Perform Work according to Municipal, State, and Federal standards.

1.6 QUALIFICATIONS

A. Licensed Professional: Professional engineer experienced in design of specified Work and licensed in State of Michigan.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Section 01 60 00 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.

B. Inspection: Accept void forms on Site in manufacturer's original packaging and inspect for damage.

C. Store materials off ground in ventilated and protected manner to prevent deterioration from moisture.

PART 2 - PRODUCTS

2.1 PERFORMANCE AND DESIGN CRITERIA

A. Design, engineer, and construct formwork, shoring, and bracing according to ACI 318 to conform to design and applicable code requirements to achieve concrete shape, line, and dimension as indicated on Drawings.

2.2 WOOD FORM MATERIALS

A. Form Materials: At discretion of Contractor.

2.3 PREFABRICATED FORMS

A. Manufacturers:
   1. Sonoco Products Co.
   2. Substitutions: As specified in Section 01 60 00 - Product Requirements.

B. Preformed Steel Forms:
   1. Description: Matched, tightly fitted, and stiffened to support weight of concrete without deflection detrimental to tolerances and appearance of finished surfaces.

C. FRP Forms: Matched, tightly fitted, and stiffened to support weight of concrete without deflection detrimental to tolerances and appearance of finished concrete surfaces.

D. Pan:
   1. Material: Steel.
   2. Configuration: Size and profile as required.

E. Tubular Column:
   1. Description: Round spirally wound laminated fiber.
   2. Surface Treatment: Release agent, non-reusable.
   3. Sizes: As indicated on Drawings.

F. Steel Forms:
   1. Description: Sheet steel, suitably reinforced.
   2. Design: For particular use as indicated on Drawings.

G. Form Liners: Smooth, durable, grainless, and non-staining hardboard unless otherwise indicated on Drawings.

H. Framing, Studding, and Bracing: Stud or No. 3 structural light-framing grade.

2.4 FORMWORK ACCESSORIES

A. Form Ties:
1. Type: Removable.
2. Material: Galvanized.
3. Length: Adjustable.
4. Furnish waterproofing washer.
5. Free of defects capable of leaving holes larger than 1 inch in concrete surface.

B. Spreaders:
1. Description: Standard, non-corrosive metal-form clamp assembly, of type acting as spreaders and leaving no metal within 1 inch of concrete face.
2. Wire ties, wood spreaders, or through bolts are not permitted.

C. Form Release Agent:
1. Description: Colorless mineral oil that will not stain concrete or absorb moisture [or impair natural bonding or color characteristics of coating intended for use on concrete].

D. Corners:
1. Type: Chamfer,.
2. Size: 3/4 by 3/4 inches.
3. Lengths: Maximum possible.

E. Dovetail Anchor Slot:
1. Material: Galvanized steel.
2. Thickness: 22 gage.
3. Filling: Foam.
4. Fasten slot to concrete formwork according to manufacturer instructions, and insert foam filler to prevent concrete from entering slot during pour.

F. Flashing Reglets:
1. Material: Galvanized steel.
2. Thickness: 22 gage.
3. Lengths: Maximum possible.
4. Furnish alignment splines for joints.
5. Filling: Foam.
6. Fasten flashing reglet to concrete formwork according to manufacturer instructions, and insert foam to prevent concrete from entering reglet during pour.

G. Vapor Retarder:
1. Description: Polyethylene sheet.
2. Thickness: 6 mils.

H. Bituminous Joint Filler: Comply with ASTM D1751.

I. Nails, Spikes, Lag Bolts, Through Bolts, Anchorages: Size, strength, and character to maintain formwork in place while placing concrete.

J. Waterstop:
   1. Description: Flexible strip of bentonite waterproofing compound in coil form for joints in concrete construction.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for installation examination.

B. Verify lines, levels, and centers before proceeding with formwork.

C. Verify that dimensions agree with Shop Drawings.

D. If formwork is placed after reinforcement resulting in insufficient concrete cover over reinforcement, request instructions from Engineer before proceeding.

3.2 INSTALLATION

A. Earth Forms: Not permitted.

B. Formwork:
   1. Provide top form for sloped surfaces steeper than 1.5 horizontal to 1 vertical to hold shape of concrete during placement, unless it can be demonstrated that top forms can be omitted.
   2. Construct forms to correct shape and dimensions, mortar-tight, braced, and of sufficient strength to maintain shape and position under imposed loads from construction operations.
   3. Camber forms where necessary to produce level finished soffits unless indicated otherwise on Drawings.
   4. Positioning:
      a. Carefully verify horizontal and vertical positions of forms.
      b. Correct misaligned or misplaced forms before placing concrete.
   5. Complete wedging and bracing before placing concrete.
   6. Erect formwork, shoring, and bracing to achieve design requirements according to ACI 318.
   7. Stripping:
      a. Arrange and assemble formwork to permit dismantling and stripping.
      b. Do not damage concrete during stripping.
      c. Permit removal of remaining principal shores.
   8. Obtain approval of Engineer before framing openings in structural members not indicated on Drawings.
   9. Install fillet and chamfer strips on external corners of beams, joists, and columns.
   10. Install void forms according to manufacturer instructions.
   11. Do not reuse wood formwork more than 2 times for concrete surfaces to be exposed to view.
   12. Do not patch formwork.
   13. Leave forms in place for minimum number of days according to ACI 347.

C. Form Removal:

1. Do not remove forms or bracing until concrete has gained sufficient strength to carry its own weight and imposed loads, and removal has been approved by Engineer.
2. Loosen forms carefully; do not wedge pry bars, hammers, or tools against finish concrete surfaces scheduled for exposure to view.
3. Store removed forms in manner that surfaces to be in contact with fresh concrete will not be damaged.
4. Discard damaged forms.
5. Form Release Agent:
    a. Apply according to manufacturer instructions.
    b. Apply prior to placement of reinforcing steel, anchoring devices, and embedded items.
    c. Do not apply form release agent if concrete surfaces are indicated to receive special finishes or applied coverings that may be affected by agent.
    d. Soak inside surfaces of untreated forms with clean water, and keep surfaces coated prior to placement of concrete.
6. Form Cleaning:
    a. Clean forms as erection proceeds to remove foreign matter within forms.
    b. Clean formed cavities of debris prior to placing concrete.
    c. Flush with water or use compressed air to remove remaining foreign matter.
    d. Ensure that water and debris drain to exterior through cleanout ports.
    e. Cold Weather:
        1) During cold weather, remove ice and snow from within forms.
        2) Do not use de-icing salts.
        3) Do not use water to clean out forms, unless formwork and concrete construction proceed within heated enclosure; use compressed air or other dry method to remove foreign matter.
7. Reuse and Coating of Forms:
    a. Thoroughly clean forms and reapply form coating before each reuse.
    b. For exposed Work, do not reuse forms with damaged faces or edges.
    c. Apply form coating to forms according to manufacturer instructions.
    d. Do not coat forms for concrete indicated to receive "scored finish."
    e. Apply form coatings before placing reinforcing steel.

D. Forms for Smooth Finish Concrete:
1. Use steel, plywood, or lined-board forms.
2. Use clean and smooth plywood and form liners, uniform in size, and free from surface and edge damage capable of affecting resulting concrete finish.
3. Install form lining with close-fitting square joints between separate sheets without springing into place.
4. Use full-sized sheets of form liners and plywood wherever possible.
5. Tape joints to prevent protrusions in concrete.
6. Apply forming and strip wood forms in a manner to protect corners and edges.
7. Level and continue horizontal joints.
8. Keep wood forms wet until stripped.

E. Architectural Form Liners:
1. Erect architectural side of formwork first.
2. Attach form liner to forms before installing form ties.
3. Install form liners square, with joints and pattern aligned.
4. Seal form liner joints to prevent grout leaks.
5. Dress joints and edges to match form liner pattern and texture.

F. Forms for Surfaces to Receive Membrane Waterproofing:
   1. Use plywood or steel forms.
   2. After erection of forms, tape form joints to prevent protrusions in concrete.

G. Framing, Studding, and Bracing:
   1. Maximum Spacing of Studs:
      a. Boards: Maximum 16 inches o.c.
      b. Plywood: 12 inches o.c.
   2. Size framing, bracing, centering, and supporting members for sufficient strength to maintain shape and position under imposed loads from construction operations.
   3. Construct beam soffits of material minimum 2 inches thick.
   4. Distribute bracing loads over base area on which bracing is erected.
   5. When placed on ground, protect against undermining, settlement, and accidental impact.

H. Form Anchors and Hangers:
   1. Do not use anchors and hangers leaving exposed metal at concrete surface.
   2. Symmetrically arrange hangers supporting forms from structural-steel members to minimize twisting or rotation of member.
   3. Penetration of structural-steel members is not permitted.

I. Inserts, Embedded Parts, and Openings:
   1. Install formed openings for items to be embedded in or passing through concrete Work.
   2. Locate and set in place items required to be cast directly into concrete.
   3. Install accessories straight, level, and plumb, and ensure that items are not disturbed during concrete placement.
   4. Joints:
      a. Install waterstops continuous without displacing reinforcement.

   5. Openings:
      a. Provide temporary ports or openings in formwork as required to facilitate cleaning and inspection.
      b. Locate openings at bottom of forms to allow flushing water to drain.
   6. Close temporary openings with tight-fitting panels, flush with inside face of forms, and neatly fitted such that joints will not be apparent in exposed concrete surfaces.

J. Form Ties:
   1. Provide sufficient strength and quantity to prevent spreading of forms.
   2. Place ties at least 1 inch away from finished surface of concrete.
   3. Leave inner rods in concrete when forms are stripped.
   4. Space form ties equidistant, symmetrical, and aligned vertically and horizontally unless indicated otherwise on Drawings.

K. Arrange formwork to allow proper erection sequence and to permit form removal without damage to concrete.

L. Construction Joints:
   1. Install surfaced pouring strip where construction joints intersect on exposed surfaces to provide straight line at joints.
   2. Just prior to subsequent concrete placement, remove strip and tighten forms to conceal shrinkage.

3. Appearance:
    a. Show no overlapping of construction joints.
    b. Construct joints to present same appearance as butted plywood joints.
4. Arrange joints in continuous line straight, true, and sharp.

M. Embedded Items:
1. Make provisions for pipes, sleeves, anchors, inserts, reglets, anchor slots, nailers, waterstops, and other features.
2. Do not embed wood or uncoated aluminum in concrete.
3. Obtain installation and setting information for embedded items furnished under other Sections.
4. Securely anchor embedded items in correct location and alignment prior to placing concrete.
5. Ensure that conduits and pipes, including those made of coated aluminum, meet requirements of ACI 318 regarding size and location limitations.

N. Openings for Items Passing through Concrete:
1. Frame openings in concrete where indicated on Drawings.
2. Establish exact locations, sizes, and other conditions required for openings and attachment of Work specified under other Sections.
3. Coordinate Work to avoid cutting and patching of concrete after placement.
4. Perform cutting and repairing of concrete required as result of failure to provide required openings.

O. Screeds:
1. Set screeds and establish levels for tops of and finish on concrete slabs.
2. Slope slabs to drain where required or as indicated on Drawings.
3. Before depositing concrete, remove debris from space to be occupied by concrete and thoroughly wet forms; remove freestanding water.

P. Screed Supports:
1. For concrete over waterproof membranes and vapor retarder membranes, use cradle-, pad-, or base-type screed supports that will not puncture membrane.
2. Staking through membrane is not permitted.

Q. Cleanouts and Access Panels:
1. Provide removable cleanout sections or access panels at bottoms of forms to permit inspection and effective cleaning of loose dirt, debris, and waste material.
2. Clean forms and surfaces against which concrete is to be placed.
3. Remove chips, sawdust, and other debris.
4. Thoroughly blow out forms with compressed air just before concrete is placed.

3.3 TOLERANCES

A. Tolerances: Construct formwork to produce completed concrete surfaces within construction tolerances according to ACI 117.

3.4 FIELD QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Requirements for inspecting and testing.

B. Inspection:
   1. Inspect erected formwork, shoring, and bracing to ensure that Work complies with formwork design and that supports, fastenings, wedges, ties, and items are secure.
   2. Notify Engineer after placement of reinforcing steel in forms but prior to placing concrete.
   3. Schedule concrete placement to permit formwork inspection before placing concrete.

END OF SECTION

SECTION 03 20 00

CONCRETE REINFORCING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
1. Reinforcing bars.
2. Welded wire fabric.
3. Reinforcement accessories.

B. Related Requirements:
1. Section 03 10 00 - Concrete Forming and Accessories.
2. Section 03 30 00 - Cast-in-Place Concrete.
3. Section 03 39 00 - Concrete Curing.

1.2 REFERENCE STANDARDS

A. American Concrete Institute:
1. ACI 301 - Specifications for Structural Concrete.
2. ACI 318 - Building Code Requirements for Structural Concrete.
3. ACI 530/530.1 - Building Code Requirements and Specification for Masonry Structures.
4. ACI SP-66 - ACI Detailing Manual.

B. American Welding Society:

1. AWS D1.4 - Structural Welding Code - Reinforcing Steel.

C. ASTM International:
1. ASTM A184 - Standard Specification for Welded Deformed Steel Bar Mats for Concrete Reinforcement.
2. ASTM A615 - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement.
3. ASTM A704 - Standard Specification for Welded Steel Plain Bar or Rod Mats for Concrete Reinforcement.
4. ASTM A706 - Standard Specification for Deformed and Plain Low-Alloy Steel Bars for Concrete Reinforcement.
5. ASTM A767 - Standard Specification for Zinc-Coated (Galvanized) Steel Bars for Concrete Reinforcement.
6. ASTM A775 - Standard Specification for Epoxy-Coated Steel Reinforcing Bars.
7. ASTM A884 - Standard Specification for Epoxy-Coated Steel Wire and Welded Wire Reinforcement.
8. ASTM A934 - Standard Specification for Epoxy-Coated Prefabricated Steel Reinforcing Bars.
9. ASTM A996 - Standard Specification for Rail-Steel and Axle-Steel Deformed Bars for Concrete Reinforcement.

10. ASTM A1064 - Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete.

D. Concrete Reinforcing Steel Institute:
   1. CRSI 10-MSP - Manual of Standard Practice.
   2. CRSI 10PLACE - Placing Reinforcing Bars.

1.3 COORDINATION

A. Section 01 30 00 - Administrative Requirements: Requirements for coordination.

B. Coordinate Work of this Section with placement of formwork, formed openings, and other Work.

1.4 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Shop Drawings:
   1. Indicate bar sizes, spacings, locations, splice locations, and quantities of reinforcing steel.
   2. Indicate bending and cutting schedules.
   3. Indicate supporting and spacing devices.

C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

D. Submit certified copies of mill test report of reinforcement materials analysis.

E. Welder Certificates: Certify welders and welding procedures employed on Work, verifying AWS qualification within previous 12 months.

F. Source Quality-Control Submittals: Indicate results of factory tests and inspections.

G. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.

H. Qualifications Statement:
   1. Welders: Qualify procedures and personnel according to AWS D1.1.

1.5 QUALITY ASSURANCE

A. Perform Work according to ACI 301 ACI 318.

B. Prepare Shop Drawings according to ACI SP-66.

C. Perform Work according to Municipal, State, and Federal standards.

1.6 QUALIFICATIONS

A. Welders: AWS qualified within previous 12 months for employed weld types.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Section 01 60 00 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.

B. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.

C. Store materials according to manufacturer instructions.

D. Protection:
   1. Protect materials from moisture by storing in clean, dry location remote from construction operations areas.
   2. Provide additional protection according to manufacturer instructions.

1.8 EXISTING CONDITIONS

A. Field Measurements:
   1. Verify field measurements prior to fabrication.
   2. Indicate field measurements on Shop Drawings.

PART 2 - PRODUCTS

2.1 REINFORCEMENT

A. Reinforcing Steel:
   1. Comply with ASTM A615.
   2. Yield Strength: 60 ksi.
   3. Billet Bars: Deformed.
   4. Finish: Uncoated.

2.2 FABRICATION

A. Fabricate concrete reinforcement according to ACI 318.

B. Form standard hooks for, 90-degree bends, stirrups and tie hooks as indicated on Drawings.

C. Form reinforcement bends with minimum diameters according to ACI 318.

D. Fabricate column reinforcement with offset bends at reinforcement splices.

E. Form ties and stirrups from following:
   1. Bars No. 10 and Smaller: No. 3 deformed bars.
   2. Bars No. 11 and Larger: No. 4 deformed bars.

F. Splicing:
   1. If not indicated on Drawings, locate reinforcement splices at point of minimum stress.
   2. Obtain approval of splice locations from Engineer.

2.3 ACCESSORY MATERIALS

A. Tie Wire:
   1. Minimum 16 gage, annealed type.

B. Chairs, Bolsters, Bar Supports, and Spacers:

C. Size and Shape: To strengthen and support reinforcement during concrete placement conditions.

D. Epoxy Coating Patching Material: Type as recommended by coating manufacturer.

2.4 SOURCE QUALITY CONTROL

A. Provide shop inspection and testing of completed assembly.

B. Section 01 40 00 - Quality Requirements: Requirements for testing, inspection, and analysis.

C. Certificate of Compliance:
   1. If fabricator is approved by authorities having jurisdiction, submit certificate of compliance indicating Work performed at fabricator's facility conforms to Contract Documents.
   2. Specified shop tests are not required for Work performed by approved fabricator.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Place, support, and secure reinforcement against displacement.

B. Do not deviate from required position beyond specified tolerance.

C. Do not weld crossing reinforcement bars for assembly except as permitted by Engineer.

D. Do not displace or damage vapor retarder.

E. Accommodate placement of formed openings.

F. Spacing:
   1. Space reinforcement bars with minimum clear spacing according to ACI 318.
   2. If bars are indicated in multiple layers, place upper bars directly above lower bars.

G. Maintain minimum concrete cover around reinforcement according to ACI 318 or as shown on the plans.

3.2 TOLERANCES

A. Section 01 40 00 - Quality Requirements: Requirements for tolerances.

B. Install reinforcement within following tolerances for flexural members, walls, and compression members:
   1. Reinforcement Depth Greater Than 8 Inches:
      a. Depth Tolerance: Plus or Minus 3/8 inch
      b. Minus 3/8 inch
   2. Reinforcement Depth Less Than or Equal to 8 Inches:
      a. Depth Tolerance: Plus or Minus 1/2 inch
      b. Minus 1/2 inch

3.3 FIELD QUALITY CONTROL

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for testing, adjusting, and balancing.

B. Perform field inspection and testing according to ACI 318.

C. Provide unrestricted access to Work and cooperate with appointed inspection and testing firm.

D. Reinforcement Inspection:
   1. Placement Acceptance: Inspect specified and ACI 318 material requirements and specified placement tolerances.
   2. Welding: Inspect welds according to AWS D1.1.
   3. Periodic Placement Inspection: Inspect for correct materials, fabrication, sizes, locations, spacing, concrete cover, and splicing.
   4. Weldability Inspection: Inspect for reinforcement weldability if formed from steel other than ASTM A706.
   5. Continuous Weld Inspection: Inspect reinforcement according to ACI 318.
   6. Periodic Weld Inspection: Inspect other welded connections.

END OF SECTION

SECTION 03 30 00

CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes Cast-in-Place Concrete for Following Items:
   1. Footings.
   2. Slabs on grade.

B. Related Requirements:
   1. Section 03 10 00 - Concrete Forming and Accessories.
   2. Section 03 20 00 - Concrete Reinforcing.
   3. Section 03 39 00 - Concrete Curing.
   4. Section 31 23 23 - Fill.
   5. Section 32 33 00 – Site Furnishings.

1.2 REFERENCE STANDARDS

A. American Concrete Institute:
   1. ACI 301 - Specifications for Structural Concrete.
   2. ACI 305R - Guide to Hot Weather Concreting.
   3. ACI 306.1 - Standard Specification for Cold Weather Concreting.
   4. ACI 308.1 - Specification for Curing Concrete.
   5. ACI 318 - Building Code Requirements for Structural Concrete.

B. ASTM International:
   1. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
   2. ASTM C31 - Standard Practice for Making and Curing Concrete Test Specimens in the Field.
   3. ASTM C33 - Standard Specification for Concrete Aggregates.
   4. ASTM C39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
   5. ASTM C42 - Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete.
   6. ASTM C94 - Standard Specification for Ready-Mixed Concrete.
   7. ASTM C143 - Standard Test Method for Slump of Hydraulic-Cement Concrete.
   8. ASTM C150 - Standard Specification for Portland Cement.
   9. ASTM C172 - Standard Practice for Sampling Freshly Mixed Concrete.
   10. ASTM C173 - Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method.
   11. ASTM C231 - Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method.
   12. ASTM C260 - Standard Specification for Air-Entraining Admixtures for Concrete.
   13. ASTM C330 - Standard Specification for Lightweight Aggregates for Structural Concrete.

14. ASTM C494 - Standard Specification for Chemical Admixtures for Concrete.
15. ASTM C595 - Standard Specification for Blended Hydraulic Cements.
16. ASTM C618 - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete.
17. ASTM C685 - Standard Specification for Concrete Made by Volumetric Batching and Continuous Mixing.
18. ASTM C845 - Standard Specification for Expansive Hydraulic Cement.
19. ASTM C989 - Standard Specification for Slag Cement for Use in Concrete and Mortars.
20. ASTM C1017 - Standard Specification for Chemical Admixtures for Use in Producing Flowing Concrete.
21. ASTM C1064 - Standard Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete.
22. ASTM C1107 - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink).
23. ASTM C1116 - Standard Specification for Fiber-Reinforced Concrete.
24. ASTM C1157 - Standard Performance Specification for Hydraulic Cement.
25. ASTM C1218 - Standard Test Method for Water-Soluble Chloride in Mortar and Concrete.
26. ASTM C1240 - Standard Specification for Silica Fume Used in Cementitious Mixtures.
27. ASTM D994 - Standard Specification for Preformed Expansion Joint Filler for Concrete (Bituminous Type).
28. ASTM D1751 - Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
29. ASTM D1752 - Standard Specification for Preformed Sponge Rubber Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction.
30. ASTM D6690 - Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.
31. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials.
32. ASTM E119 - Standard Test Methods for Fire Tests of Building Construction and Materials.
33. ASTM E1643 - Standard Practice for Selection, Design, Installation, and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs.
34. ASTM E1745 - Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs.

1.3 COORDINATION

A. Section 01 30 00 - Administrative Requirements: Requirements for coordination.

B. Coordinate placement of joint devices with erection of concrete formwork and placement of form accessories.

1.4 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Product Data: Submit data on joint devices, attachment accessories, admixtures, and mix design.

C. Design Data:

1. Submit concrete mix design for each concrete strength.
2. Submit separate mix designs if admixtures are required for following:
   a. Hot and cold weather concrete Work.
   b. Air entrained concrete Work.
3. Identify mix ingredients and proportions, including admixtures.
4. Identify chloride content of admixtures and whether or not chlorides were added during manufacture.

D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

E. Manufacturer Instructions: Submit installation procedures and interfacing required with adjacent Work.

F. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.

1.5 CLOSEOUT SUBMITTALS

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for submittals.

B. Project Record Documents: Record actual locations of embedded utilities and components concealed from view in finished construction.

1.6 QUALITY ASSURANCE

A. Perform Work according to ACI 301.

B. Comply with ACI 305R when pouring concrete during hot weather.

C. Comply with ACI 306.1 when pouring concrete during cold weather.

D. Acquire cement and aggregate from one source for Work.

E. Perform Work according to Municipal, State, and Federal standards.

1.7 AMBIENT CONDITIONS

A. Section 01 50 00 - Temporary Facilities and Controls: Requirements for ambient condition control facilities for product storage and installation.

B. Maintain concrete temperature after installation at minimum 50 degrees F for minimum seven days.

PART 2 - PRODUCTS

2.1 PERFORMANCE AND DESIGN CRITERIA

A. Vapor Retarder Permeance: Maximum 1 perm when tested according to ASTM E96, water method.

2.2 MATERIALS

A. Concrete:
   1. Cement:
      a. Comply with ASTM C150, Type IIA - Air Entraining.
      b. Type: Portland.
   2. Normal Weight Aggregates:
      a. Comply with ASTM C33.
      b. Coarse Aggregate Maximum Size: According to ACI 301.
   3. Water:
      a. Comply with ACI 318.
      b. Potable, without deleterious amounts of chloride ions.

B. Admixtures:
   1. Air Entrainment: Comply with ASTM C260.
   2. Chemical:
      a. Comply with ASTM C494.
      b. Type A - Water Reducing.
      c. Type B - Retarding.
      d. Type C - Accelerating.
      e. Type D - Water Reducing and Retarding.
      f. Type E - Water Reducing and Accelerating.
      g. Type F - Water Reducing, High Range.
      h. Type G - Water Reducing, High Range, and Retarding.
   3. Fly Ash: Comply with ASTM C618, Class F or C.
   4. Silica Fume: Comply with ASTM C1240.
   5. Slag:
      a. Description: Ground-granulated blast-furnace slag.
      b. Comply with ASTM C989.
      c. Grade 100 or 120.
   6. Plasticizing:
      a. Comply with ASTM C1017.
      b. Type II, plasticizing and retarding.

2.3 CONCRETE MIX

A. Select proportions for normal weight concrete according to ACI 301, Method 1.

B. Concrete mixtures, general
   1. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both.
   2. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than Portland cement in concrete as follows:
      a. Fly Ash: 25%
      b. Ground Granulated Blast-Furnace Slag: 50%
      c. Combined Fly Ash and Ground Granulated Blast-Furnace Slag: 50%
      d. Portland cement minimum, with fly ash not exceeding 25%
   3. Limit water-soluble, chloride-ion content in hardened concrete to 0.15% by weight of cement.

4. Admixtures: Use admixtures according to manufacturer's written instructions.
   a. Use water-reducing, high-range water-reducing or plasticizing admixture in concrete, as required, for placement and workability.
   b. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
   c. Use water-reducing admixture in pumped concrete, concrete for heavy-use industrial slabs and parking structure slabs, concrete required to be watertight, and concrete with a water-cementitious materials ratio below 0.50.
   d. Use air-entraining admixture in exterior exposed concrete unless otherwise indicated. Add air-entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having a total air content with a tolerance of plus or minus 1-1/2 percent within the following limits:
      1) Concrete structures and slabs exposed to freezing and thawing, deicer chemicals, or hydraulic pressure: 5.0 percent.
      2) Other concrete not exposed to freezing, thawing, or hydraulic pressure, or to receive a surface hardener: 2 to 4 percent.

C. Concrete mixtures for building elements:
   1. Class A – Structural Concrete:
      a. Minimum Compressive Strength: 3500 psi at 7 days.
      b. Minimum Compressive Strength: 4000 psi at 28 days.
      c. Slump Limit: 4-1 inches.

D. Admixtures:
   1. Include admixture types and quantities indicated in concrete mix designs only if approved by Engineer.
   2. Cold Weather:
      a. Use accelerating admixtures in cold weather.
      b. Use of admixtures will not relax cold-weather placement requirements.
   3. Hot Weather: Use set-retarding admixtures.
   4. Use calcium chloride only if approved by Engineer.
   5. Add air entrainment admixture to concrete mix for Work exposed to freezing and thawing or deicing chemicals.
   6. For concrete exposed to deicing chemicals, limit fly ash, pozzolans, silica fumes, and slag content as required.

E. Average Compressive Strength Reduction: Not permitted.

F. Ready-Mixed Concrete: Mix and deliver concrete according to ASTM C685.

G. Site-Mixed Concrete: Mix concrete according to ACI 318.

2.4 ACCESSORIES

A. Bonding Agent:
   1. Description: Two-component modified epoxy resin.

B. Non-shrink Grout:
   1. Description: Premixed compound consisting of non-metallic aggregate, cement, and water-reducing and plasticizing agents.
   2. Comply with ASTM C1107.

3. Minimum Compressive Strength: 2,400 psi.

C. Bentonite Waterstops: Continuous 1 inch x ¾ inch strips, containing 75% bentonite by weight. Proper care and construction procedures shall be used to avoid damaging or displacing the strip while placing concrete. If the material exhibits considerable swelling prior to confinement in the joint, it must be replaced as directed by the Engineer. Joint shall be cleaned from debris and dry prior to replacement. Install per manufacturer's instructions as approved by the Engineer.

D. Wall Sleeves: HDPE thermoplastic sleeves, "CS" model, used for non-concrete pipe penetrations requiring "Link-seals".

E. Expansion Joints: ANSI/ASTM D1751, fiber type; 1/4 inch to 1 inch thick.

F. Form Release Agent: Colorless material which will not stain concrete, absorb moisture or impair natural bonding or color characteristics of coating intended for use on concrete.

G. Corners: Chamfered, wood strip type 3/4" x 3/4" size.

H. Vapor Retarder: Clear polyethylene film, 6 mils thick, with joint tape. Joint tape as recommended by manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for installation examination.

B. Verify requirements for concrete cover over reinforcement.

C. Verify that anchors, seats, plates, reinforcement, and other items to be cast into concrete are accurately placed, positioned securely, and will not interfere with placing concrete.

3.2 PREPARATION

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for installation preparation.

B. Previously Placed Concrete:
1. Prepare previously placed concrete by cleaning with steel brush and applying bonding agent.
2. Remove laitance, coatings, and unsound materials.

C. In locations where new concrete is doweled to existing work, drill holes in existing concrete, insert steel dowels, and pack solid with non-shrink grout.

D. Remove debris and ice from formwork, reinforcement, and concrete substrates.

E. Remove water from areas receiving concrete before concrete is placed.

3.3 INSTALLATION

A. Placing Concrete:
   1. Place concrete according to ACI 301.
   2. Notify testing laboratory and Engineer minimum 48 hours prior to commencement of operations.
   3. Ensure that reinforcement, inserts, embedded parts, formed expansion and contraction joints, and existing utilities are not disturbed during concrete placement.
   4. Install vapor retarder under interior slabs on grade according to ASTM E1643.
   5. Lap joints minimum 6 inches and seal watertight by taping edges and ends.
   6. Repairs:
      a. Repair vapor retarder damaged during placement of concrete reinforcement.
      b. Using vapor retarder material, lap over damaged areas minimum 6 inches and seal watertight.
   7. Joint Filler:
      a. Separate slabs on grade from vertical surfaces with joint filler.
      b. Place joint filler in floor slab pattern placement sequence; set top to required elevations; secure to resist movement by wet concrete.
      c. Extend joint filler from bottom of slab to within 1/2 inch of finished slab surface.
   8. Joint Devices:
      a. Coordination: Install construction joint devices in coordination with floor slab pattern placement sequence; set top to required elevations; secure to resist movement by wet concrete.
      b. Install joint device anchors, maintaining correct position to allow joint cover to be flush with floor and wall finish.
      c. Install joint covers in longest practical length when adjacent construction activity is complete.
   9. Deposit concrete at final position, preventing segregation of mix.
   10. Place concrete in continuous operation for each panel or section as determined by predetermined joints.
   11. Consolidate concrete.
   12. Maintain records of concrete placement, including date, location, quantity, air temperature, and test samples taken.
   13. Place concrete continuously between predetermined expansion, control, and construction joints.
   14. Do not interrupt successive placement and do not permit cold joints to occur.
       Place floor slabs in indicated checkerboard or saw-cut pattern.
   15. Saw-Cut Joints:
       a. Saw-cut joints within 12 hours after placing.
       b. Use 3/16 inch thick blade.
       c. Cut into 1/4 depth of slab thickness.
   16. Screeding:
       a. Screed floors and slabs on grade level.
       b. Surface Flatness: maximum 1/4 inch in 10 feet.

B. Separate Floor Toppings:
   1. Prior to placing floor topping, remove deleterious material, roughen substrate concrete surface, and broom and vacuum clean.
   2. Place required dividers and reinforcement and other items to be cast in concrete.
   3. Apply bonding agent to substrate.

C. Concrete Finishing:
   1. Provide formed concrete surfaces to be left exposed with smooth finish.

D. Curing and Protection:
   1. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
   2. Protect concrete footings from freezing for minimum of five days.
   3. Maintain concrete with minimal moisture loss at relatively constant temperature for period as necessary for hydration of cement and hardening of concrete.

3.4 FIELD QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Requirements for inspecting and testing.

B. Inspection and Testing: Performed by Owner's testing laboratory according to ACI 318.

C. Provide unrestricted access to Work and cooperate with appointed testing and inspection firm.

D. Submit proposed mix design of each class of concrete to inspection and testing firm for review prior to commencement of Work.

E. Concrete Inspections:
   1. Continuous Placement Inspection: Inspect for proper installation procedures.
   2. Periodic Curing Inspection: Inspect for specified curing temperature and procedures.

F. Strength Test Samples:
   1. Sampling Procedures: Comply with ASTM C172.
   2. Cylinder Molding and Curing Procedures:
      a. Comply with ASTM C31.
      b. Cylinder Specimens: Field cured.
   3. Sample concrete and make one set of three cylinders for every 75 cu. yd. or less of each class of concrete placed each day, and for every 5,000 sq. ft. of surface area for slabs and walls.
   4. If volume of concrete for a class of concrete would provide less than five sets of cylinders, take samples from five randomly selected batches, or from every batch if less than five batches are used.
   5. Make one additional cylinder during cold weather concreting and field cure.

G. Field Testing:
   1. Slump Test Method: Comply with ASTM C143.
   2. Air Content Test Method: Comply with ASTM C173.
   3. Temperature Test Method: Comply with ASTM C1064.
   4. Compressive Strength Concrete:
      a. Measure slump and temperature for each sample.
      b. Measure air content in air-entrained concrete for each sample.

H. Cylinder Compressive Strength Testing:
   1. Test Method: Comply with ASTM C39.
   2. Test Acceptance: According to ACI 318.
   3. Test one cylinder at seven days.
   4. Test one cylinder at 28 days.

5. Retain one cylinder for 30 days for testing when requested by Engineer.
6. Dispose of remaining cylinders if testing is not required.

I. Core Compressive Strength Testing:
   1. Sampling and Testing Procedures: Comply with ASTM C42.
   2. Test Acceptance: According to ACI 318.
   3. Drill three cores for each failed strength test from failed concrete.

J. Patching:
   1. Allow Engineer to inspect concrete surfaces immediately upon removal of forms.
   2. Honeycombing or Embedded Debris in Concrete:
      a. Not acceptable.
      b. Notify Engineer upon discovery.
   3. Patch imperfections according to ACI 301.

K. Defective Concrete:
   1. Description: Concrete not conforming to required lines, details, dimensions, tolerances, or specified requirements.
   2. Repair or replacement of defective concrete will be determined by Engineer.
   3. Do not patch, fill, touch up, repair, or replace exposed concrete except upon express direction of Engineer for each individual area.

END OF SECTION

SECTION 03 39 00

CONCRETE CURING

1. PART 1 GENERAL

1.1 SECTION INCLUDES

A. Initial and final curing of horizontal concrete surfaces.

1.2 RELATED SECTIONS

A. Section 03 30 00 – Cast-In-Place Concrete.

1.3 REFERENCES

A. ACI 301 – Structural Concrete for Buildings.

B. ACI 302 - Recommended Practice for Concrete Floor and Slab Construction.

C. ACI 308 - Standard Practice for Curing Concrete.

D. ASTM C171 - Sheet Materials for Curing Concrete.

E. ASTM C309 - Liquid Membrane-Forming Compounds for Curing Concrete.

1.4 SUBMITTALS

A. Submit under provisions of Section 01 33 00.

B. Product Data: Provide data on curing compounds, product characteristics, compatibility and limitations.

C. Manufacturer's Installation Instructions: Indicate criteria for preparation and application.

1.5 QUALITY ASSURANCE

A. Perform Work in accordance with ACI 301 and 308.

B. Maintain one copy of document on site.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, protect and handle products under provisions of Section 01 60 00.

B. Deliver curing materials in manufacturer's packaging including application instructions.

2. PART 2 PRODUCTS

2.1 MATERIALS

A. Liquid Membrane Forming Curing Compound ASTM C309 Type 1 Class B, liquid acrylate type, clear, without fugitive dye; curing compounds shall not contain ingredients which might stain through, injure the concrete or prevent a good bond for subsequent coatings or finishes; manufactured by Sonneborn Building Products or equal.

B. Absorptive Mats ASTM C171, cotton fabric or burlap-polyethylene, minimum 8 oz/sq yd. bonded to prevent separation during handling and placing.

C. Water: Potable and not detrimental to concrete.

3. PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 70 00 – Execution and closeout requirements for application examination.

B. Verify that substrate surfaces are ready to be cured.

3.2 EXECUTION - HORIZONTAL SURFACES

A. Cure slabs in accordance with ACI 308.

B. Spraying: Spray water over floor slab areas and maintain wet for 7 days.

C. Membrane Curing Compound: Apply curing compound in accordance with manufacturer's instructions.

3.3 EXECUTION - VERTICAL SURFACES

A. Cure surfaces in accordance with ACI 308.

B. Spraying: Spray water over surfaces and maintain wet for 7 days.

C. Membrane Curing Compound: Apply curing compound in accordance with manufacturer's instructions.

3.4 PROTECTION OF FINISHED WORK

A. Protect finished Work under provisions of Section 01 50 00.

END OF SECTION

SECTION 03 41 00

PRECAST CONCRETE PLANKS

1. PART 1 GENERAL

1.1. SCOPE

A. This Section includes furnishing and installing all concrete boat launch ramp planks as shown on the plans, as herein specified and/or as required for a complete job.

1.2. RELATED SECTIONS

A. Section 01 30 00 – Submittals.

B. Section 32 11 23 – Aggregate Base Course.

1.3 SUBMITTALS

A. Refer to Section 01300.

B. Submit concrete mix design.

C. Comply with the submittal requirements specified in Section 03 20 00, Concrete Reinforcement, and Section 03 30 00, Cast in Place Concrete.

1.4 DELIVERY, STORAGE AND HANDLING

A. Transport, handle and store precast units in a manner that will prevent damage to the units. Units shall be handled such that the points of the support and direction of the reactions with respect to the unit are approximately the same during transportation and storage as when the unit is in the final position.

B. Store units in a manner that will prevent cracking, distortion, staining or other damage. Units shall be stored above ground on skids or other supports to keep items free of dirt and other foreign debris.

C. Units damaged by improper storage or handling shall be replaced or repaired to the satisfaction of the Owner/Engineer.

2 PART 2 MATERIALS

2.1. CONCRETE PLANKS

A. Concrete planks shall be constructed as shown on the drawing and as specified herein.

B. The method of forming the planks shall be at the option of the contractor but shall generally conform to Michigan Department of Transportation Standard Specifications for Construction (herein referred to as "MDOT Standard Specifications".) Forms shall be of such thickness that planks will remain true to the shape and dimensions shown on the drawing(s).

C. Steel reinforcing bars shall meet MDOT Standard Specifications requirements and shall be handled and placed in accordance with MDOT Standard Specifications, Subsection 706.03 and as shown on the drawing(s).

D. Concrete used for the planks shall be in conformance with MDOT Standard Specifications, except that materials shall be Type III Portland Cement, 2NS fine aggregate, 6A coarse aggregate and water. The proportion of cement, fine aggregate and coarse aggregate, by dry, loose volume, shall be approximately 1:1-3/4:3. Cement content shall be at least 6.5 sacks per cubic yard of concrete, with a compressive strength for the concrete mix of not less than 4000 psi at 28 days. Slump shall be 3-5 inches as measured by ASTM specification C-143 – standard Method of Test for Slump of Portland Cement Concrete. Use air-entraining admixture, but no other admixtures are to be used. Air-entrainment shall conform to the MDOT Standard Specifications for Construction, and shall be measured at 6.5 +/- 1.5 percent, by volume, as measured by ASTM specification C-173 – Air content, as determined by the Volumetric Method.

E. The wearing surface of the planks shall be 1/8" wide grooves as noted on the drawings formed in accordance with MDOT Standard Specifications.

F. Planks shall be straight with no bow over their total length and width as measured along either the top or bottom line of the plank and they shall be square. The diagonal dimensions of each finished plank shall measure within ¼" of one another.

G. For each concrete batch mixture or each 50 cubic yards, whichever is less, collect 4 test cylinders according to ASTM C-31. One specimen to be tested at 7 days, two specimens tested at 28 days and one specimen for later testing if required. Testing shall be according to ASTM C-39 – Method of Test for Compressive Strength of Molded Concrete Cylinders. Test results to be provided to the owner in writing on the same day tests are made. In addition, one test cylinder from each concrete batch mixture or each 50 cubic yards, whichever is lesser shall be taken, with the batch number and the date taken marked on the test cylinder. Test cylinders shall conform to ASTM C31 and shall be available to the owner at the end of 21 days from the pour, for performing 28-day strength tests. The batch number shall be indicated directly on each plank.

H. Planks, in quantities stated, shall be delivered, FOB (Freight On Board), to the location(s) designated by the contractor by the date(s) specified by the contractor. Unloading of planks by the contractor will be required.

I. Spacers used for stacking planks at the designated delivery location(s) shall be high density extruded polystyrene with a minimum unit weight of 2 lbs per cubic foot. Spacers shall be a minimum of 1" thick, 6" wide, and a length to extend the

width of the planks. Spacers for 18 foot planks shall be placed 1 foot from the plank ends and 4 feet on center, for a total of 5 spacers.

J. Planks shall be stored for a minimum of 30 days before delivery. Any delivered planks that are broken, have excessive cracking, or are not constructed to the plan shape and dimensions, or do not conform to the above specifications, will not be accepted. Replacement of such planks will be the responsibility of the contractor. Removal of such planks from the site shall be requested by the owner and shall be done so at no additional cost.

3 PART 3 EXECUTION

3.1. PREPARATION

A. Verify acceptability and location of the area to receive the precast concrete planks.

B. Examine all conditions under which the precast units are to be installed.

3.2. INSTALLATION

A. Perform excavation and backfill operations to the grades required on the drawings.

B. Several types of ramp construction are used to provide proper launching facilities at different locations throughout the state. The ramp base is rough graded. Two skids (either pipe or timber) are set on the base in the stone, and a one-foot pad of A.R.E.A.4 Stone, AS SPECIFIED IN 32 11 23, is placed level with the top of the skids. (The use of A.R.E.A.4 Stone in ramp construction is essential for a permanent installation. This larger grade crushed stone interlocks and is not easily displaced by water action.)

C. The concrete planks are then placed and pushed down the skids. The skids can either remain in place or be removed.

END OF SECTION

SECTION 11 68 13

PLAYGROUND EQUIPMENT

PART 1 GENERAL

1.1 WORK INCLUDED

A. This section covers supplying, assembling and installing all playground equipment as shown on the drawings and as herein specified and/or required for a complete job. The Work shall include all equipment, signage, installation, inspection, and guaranties.

1.2 RELATED SECTIONS

A. Section 01 33 00 – Submittals

B. Section 03 30 00 – Cast-In-Place Concrete

C. Section 31 22 13 – Rough Grading

D. Section 31 23 16 – Excavation

E. Section 31 23 17 – Trenching

F. Section 32 11 23 – Aggregate Base Courses

G. Section 32 13 13 – Concrete Paving

H. Section 32 18 16.33 – Playground Protective Surfaces

1.3 REFERENCES

A. CPSC – Consumer Product Safety Commission, Public Playground Safety Handbook.

B. ASTM F1487 – American Society for Testing and Materials, Playgrounds for Public Use.

C. ADAAG – Americans with Disabilities Act Accessibility Guidelines for Play Areas.

D. ASTM C67 – Standard Test Method for Weathering and Aging of Surface Systems and Materials and Standard Test Method for Rubber – Deterioration in an Air Over.

E. ASTM D412 – Standard Test Method for Vulcanized Rubber and Thermoplastic rubbers and Thermoplastic Elastomers-tension.

F. ASTM D624 – Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers.

G. ASTM D2047 – Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull Meter Method.

H. ASTM D2434 – Standard Test Method for Permeability of Granular Soils (Constant Head).

I. ASTM D2859 – Standard Test Method for the Surface Flammability of Products (Burn Pill Test).

J. ASTM D3776 – Standard Test Methods for Mass Per Unit Area (Weight) of Fabric.

K. ASTM D3786 – Standard Test Method for Bursting Strength of Textile Fabrics - Diaphragm Bursting Strength Tester Method.

L. ASTM D4491 – Standard Test Methods for Water Permeability of Geotextiles by Permittivity.

M. ASTM D4533 – Standard Test Method for Trapezoid Tearing Strength of Geotextiles.

N. ASTM D4632 – Standard Test Method for Grab Breaking Load and Elongation of Geotextiles.

O. ASTM D4716 – Standard Test Method for Determining the (In plane) Flow rate per Unit Width and Hydraulic Transmissivity of a Geosynthetic Using a Constant Head.

P. ASTM D4751 – Standard Test Method for Determining Apparent Opening Size of a Geotextile. ASTM D4833 – Standard Test Method for Index Puncture Resistance of Geomembranes, and Related Products.

Q. ASTM D5199 – Standard Test Method for Measuring the Nominal Thickness of Geosynthetics.

R. ASTM E108 – Standard Test Method for Fire Tests of Surface Systems and Materials.

S. ASTM E303 – Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester.

T. ASTM F1292 and F355-95 – Standard Test Method for Impact Attenuation of Surface Systems Under and Around Playground Equipment.

U. ASTM F1951 – Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.

V. ASTM F2075 – Standard Specification for Engineered Wood Fiber for Use as a Playground Safety Surface Under and Around Playground Equipment.

W. ASTM F2223 – Standard Guide for ASTM Standards on Playground Surfacing.

X. ASTM F2479 – Standard Guide for Specification, Purchase, Installation, and Maintenance of Poured-In-Place Playground Surfacing.

Y. 16 CFR 1500.44 – Method for Determining Extremely Flammable and Flammable Solids.

1.4 SUBSTITUTIONS

A. The material, products and equipment specified establish a standard of required materials, required play activities, dimension, appearance, durability, quality, and warranty to be met by any proposed substitution.

B. No substitution will be considered unless such request includes complete drawings, cuts, performance and test data, and any other information which demonstrates that the equipment meets the specifications and conforms to the playground plans.

1.5 SUBMITTALS

A. Furnish complete installation product information for all play equipment to the Owner's Representative for approval.

B. At the completion of the project, the contractor must provide the Owner with:
   1. A written maintenance plan which describes in detail all requirements for maintenance and inspections.
   2. A maintenance kit containing, at a minimum, tools, touch-up paint, hardware, and graffiti remover.

1.6 STANDARDS

A. All play equipment shall be installed to meet or exceed the Consumer Product Safety Commission (CPSC) Guidelines, the American Society for Testing and Materials (ASTM F1487) Standards, the Americans with Disabilities Act (ADA), Uniform Federal Accessibility Standards (UFAS) and Michigan's Barrier Free Design Law.

B. All play equipment and components shall be IPEMA certified.

C. If a conflict occurs between any two or more of the above listed standards, guidelines and/or data, the stricter shall take precedence.

1.7 DELIVERY, STORAGE AND HANDLING

A. All shipments shall include a packing list for each skid/container, specifying the part numbers and quantities on each skid or within each container.

B. Play structure posts shall be individually packaged in sturdy, water-resistant, mar-resistant cardboard boxes. Other components shall be individually wrapped, or bulk wrapped to provide protection during shipment. Small parts and hardware packages will be placed in crates for shipment. The components and crates are then shrink-wrapped to skids (pallets) to ensure secure shipping.

1.8 WARRANTY

A. LIMITED LIFETIME WARRANTY: On all uprights, hardware, connections, and bolt-through connections against material or manufacturing defects.

B. 20-YEAR LIMITED WARRANTY: On all Timbers recycled plastic timber.

C. 15-YEAR LIMITED WARRANTY: On all metal decks, pipes, rungs, rails, loops, braces, footbucks, rotationally molded products, nylon bearings, and ring junction pieces against material or manufacturing defects.

D. 10-YEAR LIMITED WARRANTY: On all site furnishings against structural failure, fiberglass, DHPL signage, and cables.

E. 5-YEAR LIMITED WARRANTY: On all nylon-covered cable net climbers and components, TuffForms products, seats, and premature wear of cables.

F. 3-YEAR LIMITED WARRANTY: On rubber and "c" springs.

G. 1-YEAR LIMITED WARRANTY: On all other products.

H. This warranty does not include any cosmetic issues or wear and tear from normal use, or vandalism or abuse. It is valid only if the play structures and/or equipment are erected to conform with manufacturers installation instructions and maintained according to the maintenance procedures furnished by the manufacturer.

PART 2 PRODUCTS

2.1 MANUFACTURER

A. Game Time, represented by Sinclair Recreation, (800) 444-4954, www.sinclair-rec.com., Or approved equal.

B. Percussion Play, Representative: Snider Recreation, Phone (800) 888-2889, www.cvsnider.com, or approved equal.

2.2 MATERIAL

A. Material: All materials shall be structurally sound and suitable for safe play. Durability shall be ensured on all steel parts using time-tested coatings such as zinc plating, galvanizing etc.

B. Fasteners: Primary fasteners shall be tamperproof in design. All primary fasteners shall include a locking patch-type material that will meet the minimum torque requirements of IFI-125. Manufacturer to provide special tools for tamperproof fasteners.

C. Footings: Unless otherwise specified, the bury on all footings shall be a minimum of 34" below Finished Grade (FG) on all in-ground play events/posts.

D. Hardware Packages: All shipments shall include individual component-specific hardware packages. Each hardware package shall be labeled with the part number, description, a component diagram showing the appropriate component, package weight, a bar code linking the hardware package to the job number, assembler's name, date, and time the package was assembled, work center number, and work order number.

E. Installation Documentation: All shipments shall include a notebook or packet of order-specific, step-by-step instructions for assembly of each component, including equipment assembly diagrams, estimated hours for assembly, footing dimensions, concrete quantity for direct bury components, fall height information, area required information and detailed material specifications.

F. Maintenance Kit: An order-specific maintenance kit shall be provided for each structure order. The kit will include a notebook or packet with a second set of installation documents and order-specific maintenance documentation with recommendations on how often to inspect, what to look for and what to do to keep the equipment in like-new condition. The kit also includes touch-up primer, appropriate color touch-up paint, sandpaper, appropriate color touch-up PVC, graffiti remover and additional installation tools for the tamperproof fasteners.

G. General Equipment Specifications:
   1. Posts: The posts shall be factory drilled to ensure accurate placement of components and ease of installation. Field drilling and measuring are not required. All posts shall receive a factory installed aluminum post cap and shall be shipped with a factory applied label indicating proper surfacing level (finish grade line for safety surfacing). All posts shall be coated with a custom formula TGIC polyester powder coating in conformance with the specifications outlined herein.
   2. Bolt-Through Connection: Each component shall be bolted directly into the upright post. Minimum yield strength of the connection shall be 45,000 psi, minimum yield strength shall be be 22,000 psi. All necessary connectors shall be engineered, manufactured and factory installed as an integral part of the upright post. For added protection against corrosion, cold galvanizing shall be applied to the edges of each drilled hole.
      a. Aluminum: All aluminum posts shall be 5" O.D. tubing, 1/8” wall thickness, extruded from 6005A-T61 aluminum alloy conforming to ASTM B221. Minimum yield strength shall be 35,000 psi and minimum tensile strength shall be 38,000 psi.
      b. Steel: All steel posts shall have a 5” O.D., 11 gauge (.120”) galvanized round tubing, manufactured to ASTM A-1011 Grade B tolerances from cold-formed steel conforming to ASTM A-569 Sheet Spec for steel coil. Minimum yield strength shall be 45,000 psi and minimum tensile strength shall be 48,000 psi. The exterior surface is hot dip galvanized, chromate conversion coated, and a clear high performance organic polymer is applied. The inside diameter has 81% minimum zinc rich primer capable of providing excellent rust protection and fabrication characteristics. All coatings applied inside and out after welding for superior corrosion protection throughout. Exterior surface galvanizing zinc purity is 99% as per ASTM B-6 high grade and special high grade. Galvanizing coverage shall demonstrate the ability to exceed 1000 hours salt spray corrosion exposure in accordance with ASTM B-117. Internal surface zinc rich 91% minimum zinc dust content in organic resin, as per ASTM F-1043. All upright posts shall be coated with a custom formula TGIC.
   3. Post Caps: The standard upright cap shall be an aluminum cap, cast from a 383 alloy, powder coated to match the upright. Every upright cap shall be anodized for maximum protection. All upright caps are permanently installed at the factory using aluminum self-sealing rivets.
   4. Plastisol Coated Steel: Products including decks, platforms, steps, and bridges shall be fabricated from 11-gauge perforated steel with a 0.08” minimum thickness, textured slip-resistant polyvinyl chloride plastisol dipped coating.
      a. Square Deck Size: Minimum 49”x49” (2,401 square inches) and bolt through the uprights.
      b. Triangular Deck Size: Must be equally 49” on all sides (1,040 square inches) minimum, and bolt through the uprights.
      c. Coated products shall consist of a welded assembly with an oven cured matte finish polyvinyl chloride (PVC) coating with a minimum coating thickness of .080". The PVC coating shall have a hardness of Shore A 83 +/-5 normal durometer range. This material is classed as "Self Extinguishing", meets or exceeds automotive specifications NVSS302, and contains ultraviolet inhibitors to help prolong the life of the coating. The

PVC coating shall contain pthalate levels in concentrations of 1/10 of 1% or lower. For ADA Ramp Accessible decks and ramps, the hole shall measure 1/4" diameter after coating. For standard decks and ramps, the hole size shall measure 1-1/4" diameter after coating.

5. Hardware: All nuts, bolts, screws, inserts, and lockwashers used in the assembly of all play equipment shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 304 alloy stainless steel. Fasteners with yellow dichromate treatment have an electro-deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate topcoat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than hot-dip galvanizing. All primary stainless-steel fasteners shall be button pin-in head, socket cap screws with a two-part epoxy resin and one part catalyst which are activated during installation. After curing, the material shall require a minimum of five times the installation torque to remove the fastener. Special tools shall be provided to the Owner for pinned fasteners.
6. Galvanized Finish: All components shall have a galvanized finish prior to powder coating and shall be protectively coated with ZRP, a zinc primer that forms a rust-resistant barrier
7. Powder Coat Finish: Shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a four-stage solvent / zirconium-based bath system (free of iron phosphate), as a rust inhibitor, and a zirconium conversion coating to prevent flash rusting before coating. In addition, all welds shall be protectively coated with ZRP, a zinc rich primer that forms a rust-resistant barrier layer over each weld prior to application of the powder coating. The paint process must adhere to the Powder Coat Institute 4000 Certification.
8. Molded Polyethylene: Products are to be rotationally molded plastic with a ¼" nominal wall thickness. All plastic is to be U.V. stabilized with optional graphics molded into the component during the molding process. Molded products shall have an anti-static additive.
9. High-Density Polyethylene: Shall be made from either ½" or ¾" thick (depending on application) high density, UV-stabilized and color impregnated polyethylene.
10. Metal Climbers and Enclosures: Products fabricated from 1 5/16" O.D. x 0.083" (14 gauge) wall galvanized steel tubing with vertical members fabricated of 1 1/16" x 0.075" (15 gauge) wall galvanized steel tubing. All tubing used to manufacture components shall be an electrical resistance welded, cold rolled, high strength steel tubing. The exterior coating will consist of an in line hot-dipped uniform zinc galvanizing, chromate conversion, and acrylic over-coating. The interior coating will consist of a special organic acrylic modified polyester.
11. Cables: Shall be 18mm polyester twisted type with the following properties: calculated tensile strength of >60kN, quantity 6 strands 2.8mm diameter each, steel strands shall have QTY 19 steel wires diameter 0.62mm each, quantity 3 fiber core 2.7 mm diameter each, UV protected polyester impregnated. Terminations shall be made of the following materials: Aluminum forks, stainless steel D-shackles, stainless steel lifting eye nuts. Connections shall be made of the following: Aluminum connector eggs, aluminum 2-piece T-joints, aluminum T-joints, aluminum-line connector, or aluminum ferrules.

B. Age-Appropriate Sign
   1. Frame: Fabricated from 2-3/8" x 0.95 wall galvanized pipe with 3/16" thick stainless steel mounting bars and a 3/16" thick x 1-1/2" x 1-1/2" stainless steel mounting tab in an all welded assembly. The frame shall be coated with a custom formula of TGIC polyester powder coating, in conformance with the specifications, after fabrication.

2. Fiberglass Panels: Panels shall be 35-7/8" x 14/13/16" x 1/8" thick fiberglass-embedded material. Panel shall be single faced with a glossy finish. Panel shall have (5) mounting holes for mounting to frame assembly.

C. Recycled Content:

TYPE OF MATERIAL	FOUND IN THESE PRODUCTS	% PRE-CONSUMER	% POST-CONSUMER
Aluminum	Structural Uprights	40%	5%
Aluminum Castings	Post Caps, Castings	40%	0%
Cardboard Packaging	Packing, Shipping	0%	40-50%
Injection Molded Plastics	Handles, Handholds, Small Components	15%	Black 100%
Poly Tubing	Packing, Shipping	0%	Clear 50%
Recycled Plastics	Triangle Deck, Square Deck, Rectangular Deck, Roofs	0%	100%
Rotation Molded Plastics - All rotation molded plastic components made from 100% recyclable resins.	Bigfoot Slide, Wallcano, Tubes, Slides, Panels, Cruisin' Mates	0%	0%
	PlayCurbs	Black 100%	0%
Rubber Products	GT Impax Poured in Place, Shredded Rubber, Bonded Shredded Rubber Surfacing	0%	100%
Steel Plates and Sheets	Slides, Decking, Steps, Roofs, Site Furniture, Mirror Panel, Grills, Whirls	30%	68%
Stainless Steel	Mirror Panels, Slides, Tabs	0%	65%
Steel Tubing	Play Structure Uprights, Center Supports, Ladders, Climbers, Railings	0%	50%
Steel Wire	Sky Bridge, Balustrade	0%	100%
Thermoformed Plastic	Roof Panels	50%	0%

PART 3 EXECUTION

3.1 PREPARATION

A. Prior to any excavation, installation of any other related work, the contractor will verify the conditions of the site.

3.2 ASSEMBLY AND INSTALLATION

A. To avoid transport damage, All Playground Equipment shall be unpacked and assembled at the installation site.

B. All play equipment shall be assembled and installed in accordance with each manufacturer's recommendations.

C. The Contractor shall be responsible for any assembly requirements and installation of all play equipment including concrete footers.

3.3 CONSTRUCTION INSPECTION

A. Once the installation is complete, the manufacturer shall certify in writing to the Owner that the installation has been completed in strict accordance with the manufacturers specifications and requirements.

3.4 DISPOSAL OF EXCESS AND WASTE MATERIALS

A. Remove excess excavated material, trash, debris and waste materials and legally dispose of such off the property, except as otherwise specifically noted.

END OF SECTION

SECTION 31 05 13

SOILS FOR EARTHWORK

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Subsoil materials.
2. Topsoil materials.

B. Related Sections:
1. Section 31 05 16 - Aggregates for Earthwork.
2. Section 31 22 13 - Rough Grading.
3. Section 31 23 16 - Excavation.
4. Section 31 23 17 - Trenching.
5. Section 31 25 00 - Erosion and Sedimentation Controls.
6. Section 32 91 19 - Landscape Grading.
7. Section 32 92 19 - Seeding.

1.2 REFERENCES

A. American Association of State Highway and Transportation Officials:
1. AASHTO T180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.

B. ASTM International:
1. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3)).
2. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3)).
3. ASTM D2487 - Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).

1.3 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Materials Source: Submit name of imported materials source.

C. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.

1.4 QUALITY ASSURANCE

A. Furnish each subsoil and topsoil material from single source throughout the Work.

B. Perform Work in accordance with State of Michigan’s Department of Transportation and the Local Jurisdiction’s standards for construction.

PART 2 PRODUCTS

2.1 SUBSOIL MATERIALS

A. Subsoil Type S1: Conforming to State of Michigan's Department of Transportation and the Local Jurisdiction's standards for construction.

B. Subsoil Type S2:
   1. Excavated and re-used material.
   2. Graded.
   3. Free of lumps larger than 3 inches, rocks larger than 2 inches, and debris.
   4. Conforming to ASTM D2487 Group Symbol CL.

2.2 TOPSOIL MATERIALS

A. Topsoil Type S3: Conforming to State of Michigan's Department of Transportation and the Local Jurisdiction's Standards for construction.

B. Topsoil Type S4:
   1. Excavated and reused material.
   2. Graded.
   3. Free of roots, rocks larger than 1/2 inch, subsoil, debris, large weeds and foreign matter.
      a. Screening: Single screened.
   4. Conforming to ASTM D2487 Group Symbol OH.

C. Topsoil Type S5:
   1. Imported borrow.
   2. Friable loam.
   3. Reasonably free of roots, rocks larger than 1/2 inch, subsoil, debris, large weeds, and foreign matter.
      a. Screening: Single screened.
   4. Acidity range (pH) of 5.5 to 7.5.
   5. Containing minimum of 4 percent and maximum of 25 percent inorganic matter.
   6. Conforming to ASTM D2487 Group Symbol OH.

2.3 SOURCE QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Testing and Inspection Services Testing and analysis of soil material.

B. Testing and Analysis of Subsoil Material: Perform in accordance with ASTM D698.

C. Testing and Analysis of Topsoil Material: Perform in accordance with ASTM D698.

D. When tests indicate materials do not meet specified requirements, change material and retest.

E. Furnish materials of each type from same source throughout the Work.

PART 3 EXECUTION

3.1 EXCAVATION

A. Excavate subsoil and topsoil from areas designated. Strip topsoil to full depth of topsoil in designated areas.

B. Stockpile excavated material meeting requirements for subsoil materials and topsoil materials.

C. Remove excess excavated subsoil and topsoil not intended for reuse, from site.

D. Remove excavated materials not meeting requirements for subsoil materials and topsoil materials from site.

3.2 STOCKPILING

A. Stockpile materials on site at locations designated by Engineer.

B. Stockpile in sufficient quantities to meet Project schedule and requirements.

C. Separate differing materials with dividers or stockpile apart to prevent mixing.

D. Stockpile topsoil 8 feet high maximum.

E. Prevent intermixing of soil types or contamination.

F. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.

G. Stockpile hazardous materials on impervious material and cover to prevent erosion and leaching, until disposed of.

3.3 STOCKPILE CLEANUP

A. Remove stockpile, leave area in clean and neat condition. Grade site surface to prevent free standing surface water.

B. When borrow area is indicated, leave area in clean and neat condition. Grade site surface to prevent free standing surface water.

END OF SECTION

SECTION 31 05 16

AGGREGATES FOR EARTHWORK

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Coarse aggregate materials.
   2. Fine aggregate materials.

B. Related Sections:
   1. Section 31 05 13 - Soils for Earthwork.
   2. Section 31 22 13 - Rough Grading.
   3. Section 31 23 16 - Excavation.
   4. Section 31 23 17 - Trenching.
   5. Section 31 25 00 - Erosion and Sedimentation Controls.
   6. Section 32 11 23 - Aggregate Base Courses.
   7. Section 32 12 16 - Asphalt Paving.
   8. Section 32 15 00 – Crushed Stone Path

1.2 REFERENCES

A. American Association of State Highway and Transportation Officials:
   1. AASHTO M147 - Standard Specification for Materials for Aggregate and Soil-Aggregate Subbase, Base and Surface Courses.
   2. AASHTO T180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.

B. ASTM International:
   1. ANSI/ASTM C117 – Test Method for Materials finer than 75 mm (No. 200) Sieve in Mineral Aggregates by Washing.
   2. ASTM C136 - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
   3. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3)).
   4. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3)).
   5. ASTM D2487 - Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).
   6. ASTM D2992 – Test Methods of Density of Soil and Soil – Aggregate in Place by the Nuclear Method (Shallow Depth).
   7. ASTM D4318 - Standard Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
   8. Test method for density of soil in place with loss by wash less than 15% - One Point Michigan Cone Test.
   9. Test method for density of soil in place with loss by was greater than 15% - One Point T-99 Test.
   10. MDOT Standard Specifications for Construction.

1.3 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Materials Source: Submit name of imported materials suppliers.

C. Manufacturer's Certificate: Certify Products meet or exceed specified requirements of the Michigan Department of Transportation Construction standards for 6A or 22A crushed limestone.

1.4 QUALITY ASSURANCE

A. Furnish each aggregate material from single source throughout the Work.

B. Perform Work in accordance with State of Michigan's Department of Transportation and the Local Jurisdiction's standards for construction.

C. Maintain one copy of each document on site.

PART 2 PRODUCTS

2.1 COARSE AGGREGATE MATERIALS

A. Coarse Aggregate Type A1:
   1. Conforming to State of Michigan's Department of Transportation the Local Jurisdiction's standards for construction.
   2. MDOT 6A compacted crushed limestone within the following limits:

Sieve Size	Percent Passing
1-1/2 inches	100
1 inch	95 to 100
1/2 inch	30 to 60
No. 200	2 to 1

B. Coarse Aggregate Type A2:
   1. Conforming to State of Michigan's Department of Transportation and the Local Jurisdiction's standards for construction.
   2. MDOT 22A compacted crushed limestone within the following limits:

Sieve Size	Percent Passing
1 inch	100
3/4 inch	90 to 100
3/8 inch	65 to 85
No. 8	30 to 50
No. 200	4 to 8

2.2 GRANULAR MATERIALS

A. Fine Aggregate Type A3:
   1. Conforming to State of Michigan's Department of Transportation the Local Jurisdiction's standards for construction.
   2. MDOT Class II (Sand) within the following limits:

Sieve Size	Percent Passing
3 inches	95 to 100
1 inch	60 to 100
No. 4	50 to 100
No. 100	0 to 30
No. 200	0 to 7

B. Fine Aggregate Type A4:
   1. Conforming to State of Michigan's Department of Transportation and the Local Jurisdiction's standards for construction.
   2. Used for sanitary sewer backfill
      a. 1ft over top of pipe only
   3. MDOT Class III A (Sand) within the following limits:

Sieve Size	Percent Passing
3/8 inches	100
No. 4	50 to 100
No. 100	0 to 30
No. 200	0 to 15

2.3 SOURCE QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Testing and inspection services.

B. Coarse Aggregate Material - Testing and Analysis: Perform in accordance with MTM 108 and MTM 109 and other applicable MDOT testing standards.

C. Fine Aggregate Material - Testing and Analysis: Perform in accordance with MTM 108 and MTM 109 and other applicable MDOT testing standards.

D. When tests indicate materials do not meet specified requirements, change material and retest.

PART 3 EXECUTION

3.1 EXCAVATION

A. Excavate aggregate materials from on-site locations designated by Engineer as specified in Section 31 22 13.

B. Stockpile excavated material meeting requirements for coarse aggregate materials and fine aggregate materials.

C. Remove excess excavated materials not intended for reuse, from site.

D. Remove excavated materials not meeting requirements for coarse aggregate materials and fine aggregate materials from site.

3.2 STOCKPILING

A. Stockpile materials on site at locations designated by Engineer.

B. Stockpile in sufficient quantities to meet Project schedule and requirements.

C. Separate different aggregate materials with dividers or stockpile individually to prevent mixing.

D. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.

E. Stockpile hazardous materials on impervious material and cover to prevent erosion and leaching, until disposed of.

3.3 STOCKPILE CLEANUP

A. Remove stockpile, leave area in clean and neat condition. Grade site surface to prevent free standing surface water.

B. When borrow area is indicated, leave area in clean and neat condition. Grade site surface to prevent free standing surface water.

END OF SECTION

SECTION 31 10 00

SITE CLEARING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
1. Removing surface debris.
2. Removing designated paving.
3. Removing/Relocating designated trees, shrubs, and other plant life.
4. Removing abandoned utilities.
5. Excavating topsoil.
6. Removing existing playground equipment.

B. Related Sections:
1. Section 31 22 13 - Rough Grading
2. Section 31 23 16 – Excavation
3. Section 31 23 23 - Fill
4. Section 32 91 19 – Landscape Grading

1.2 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Product Data: Submit data for herbicide. Indicate compliance with applicable codes for environmental protection.

1.3 QUALITY ASSURANCE

A. Conform to applicable code for disposal of debris.

B. Perform Work in accordance with State of Michigan and Hamburg Township standard.

C. Coordinate cleaning work with utility companies.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 - Administrative Requirements: Verification of existing conditions before starting work.

B. Verify existing plant life designated to remain is tagged or identified.

C. Identify waste area for placing removed materials.

D. Identify salvage area for plants to be salvaged and relocated.

3.2 PREPARATION

A. Call Miss Dig not less than three working days before performing Work.
   1. Request underground utilities to be located and marked within and surrounding construction areas.

3.3 PROTECTION

A. Locate, identify, and protect from damage utilities indicated to remain.

B. Protect trees, plant growth, and features designated to remain, as final landscaping as specified in 01 50 00 – Temporary Facilities and Controls.

C. Protect benchmarks, survey control points and existing structures from damage or displacement.

D. All trees, shrubs, and bushes which are too large to be replace in kind, shall be left undisturbed, with the utility being installed in a boring and/or tunneling operation, unless written consent from the property owner to remove the tree is obtained.

3.4 CLEARING

A. Clear areas required for access to site and execution of Work.

B. Remove trees and shrubs indicated on the plans. Remove stumps

C. Clear undergrowth and deadwood, without disturbing subsoil.

D. Apply herbicide to remaining stumps to inhibit growth.

E. Fill all depressions made by removal of stumps or roots with material suitable for backfill, as specified in Section 31 23 23.

3.5 REMOVAL

A. Remove debris, rock, and extracted plant life from site.

B. Remove paving, curbs, and as indicated on the plans.

C. Remove abandoned utilities. Indicated removal termination point for underground utilities on Record Documents.

D. Continuously clean-up and remove waste materials from site. Do not allow materials to accumulate on site.

E. Do not burn or bury materials on site. Leave site in clean condition.

3.6 TOPSOIL EXCAVATION

A. Excavate topsoil from areas to be further excavated, relandscaped, or regraded, without mixing with foreign materials for use in finish grading.

B. Do not excavate wet topsoil.

C. Stockpile in area designated on site and protect from erosion

D. Remove excess topsoil not intended for reuse, from Site.

3.7 PLANT REMOVAL

A. Tree Removal Within Property Limits: Remove or salvage trees and shrubs within the (limits of the right-of-way) (property limits) as indicated on the plans.
   1. Avoid damage to trees and shrubs designated to remain.
   2. Grub and remove tree stumps and shrubs felled within the (property limits) (right-of-way) to an authorized disposal site. Fill depressions created by such removal and material suitable for backfill as specified in Section 31 23 23.

END OF SECTION

SECTION 31 22 13

ROUGH GRADING

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Excavating topsoil.
2. Excavating subsoil.
3. Cutting, grading, filling, rough contouring, and compacting the site for site structures.

B. Related Sections:
1. Section 01 40 00 – Quality Requirements
2. Section 31 05 13 – Soils for Earthwork
3. Section 31 05 16 – Aggregates for Earthwork
4. Section 31 10 00 – Site Clearing
5. Section 31 23 16 – Excavation
6. Section 31 23 17 – Trenching
7. Section 31 23 18 – Rock Removal
8. Section 31 23 23 – Fill
9. Section 32 91 19 – Landscape Grading

1.2 REFERENCES

A. American Association of State Highway and Transportation Officials:
1. AASHTO T180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.

B. ASTM International:
1. ASTM C136 - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
2. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3)).
3. ASTM D1556 - Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method.
4. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3)).
5. ASTM D2419 - Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregate.
6. ASTM D2922 - Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
7. ASTM D3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).

1.3 CLOSEOUT SUBMITTALS

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for submittals.

B. Project Record Documents: Accurately record actual locations of utilities remaining by horizontal dimensions, elevations or inverts, and slope gradients.

1.4 QUALITY ASSURANCE

A. Perform Work in accordance with State of Michigan Department of Transportation standard specifications for construction.

PART 2 PRODUCTS

2.1 MATERIALS

A. Topsoil: Municipal Topsoil as specified in Section 31 05 13.

B. Subsoil Fill: Municipal Subsoil as specified in Section 31 05 13.

C. Structural Fill: MDOT 22A Compacted Crushed Limestone as specified in Section 31 05 16.

D. Granular Fill: MDOT Class II Sand as specified in Section 31 05 16.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 - Administrative Requirements: Verification of existing conditions before starting work.

B. Verify site conditions under provisions of Section 01 30 00.

C. Verify survey benchmark and intended elevations for the Work are as indicated on Drawings.

D. Verify fill materials are acceptable.

3.2 PREPARATION

A. Call Miss Dig at 811 not less than three working days before performing Work.
   1. Request underground utilities to be located and marked within and surrounding construction areas.

B. Identify required lines, levels, contours, and datum.

C. Notify utility company to remove and relocate utilities.

D. Protect utilities indicated to remain from damage.

E. Protect plant life, lawns, rock outcropping and other features remaining as portion of final landscaping.

F. Protect benchmarks, survey control point, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.

3.3 FILLING

A. Fill areas to contours and elevations with unfrozen materials.

B. Place fill material in continuous layers and compact in accordance with schedule at end of this section.

C. Maintain optimum moisture content of fill materials to attain required compaction density.

D. Slope grade away from building minimum 2 percent slope for minimum distance of 10 ft, unless noted otherwise.

E. Make grade changes gradual. Blend slope into level areas.

F. Repair or replace items indicated to remain damaged by excavation or filling.

G. The Owner may have a use for the surplus excess excavated material. If they do it shall be their property and the Contractor's responsibility to transport said material to the Owner's stockyard. All cost associated with transporting, hauling, and loading said material shall be included in other pay items of this project.

3.4 TOLERANCES

A. Section 01 40 00 - Quality Requirements: Tolerances.

B. Top Surface of Subgrade: Plus or minus 1/10 foot from required elevation.

3.5 SPOIL LEVELING

A. As indicated on Drawings, or as directed by Engineer.

B. Contractor shall be responsible for loading, hauling and spreading of all excess excavated material generated from this project.

C. Place no excavated materials on roads without written permission of the authorities having jurisdiction of said road.

D. Remove excavation in areas adjacent to yards where there is not suitable place to deposit spoils and dispose of as indicated on the drawings or off site as directed by the Engineer.

E. Place no spoils in a watercourse or drain.

3.6 FIELD QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Field inspecting, testing, adjusting, and balancing.

B. Test and analysis of fill material will be performed in accordance with MDOT Standards and with Section 01 40 00.

C. Compaction testing will be performed in accordance with MDOT Standards and with Section 01 40 00.

D. If testes indicate Work does not meet specified requirement, remove Work, replace and retest at no cost to the Owner.

E. Frequency of Tests: As directed by the Engineer.

3.7 SCHEDULES

A. Structural Fill:
   1. Fill Type MDOT 22A Compacted Crushed Limestone: To subgrade elevation.
   2. Compact uniformly to minimum 98 percent of maximum density.

B. Subsoil Fill:
   1. Fill Type MDOT Class II Sand within the 1 on 1 influence of the road: To subgrade elevation.
   2. Fill Type Native Fill within the green belt outside the road influence.
   3. Compact uniformly to minimum 95 percent of maximum density.

C. Topsoil Fill:
   1. Fill Type Municipal Topsoil: Proposed elevation, 4 inches thick.
   2. Compact uniformly to minimum 95 percent of maximum density.

END OF SECTION

SECTION 31 23 16

EXCAVATION

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Soil densification.
   2. Excavating for paving, roads, and parking areas.
   3. Excavating for slabs-on-grade.
   4. Excavating for structures.

B. Related Sections:
   1. Section 01 40 00 - Quality Requirements
   2. Section 01 50 00 - Temporary Facilities and Controls
   3. Section 31 05 13 – Soils for Earthwork
   4. Section 31 05 16 – Aggregates for Earthwork
   5. Section 31 10 00 - Site Clearing
   6. Section 31 22 13 - Rough Grading
   7. Section 31 23 17 – Trenching
   8. Section 31 23 18 – Rock Removal
   9. Section 31 23 23 - Fill
   10. Section 31 25 00 - Erosion and Sedimentation Controls

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 PREPARATION

A. Call MISS DIG at 811 not less than three working days before performing Work.
   1. Request underground utilities to be located and marked within and surrounding construction areas.

B. Identify required lines, levels, contours, and datum.

C. Notify utility company when specified to remove and relocate utilities.

D. Identify known underground, above ground, and aerial utilities, stake, and flag locations.

E. Protect above and below ground utilities indicated to remain from damage.

F. Protect plant life, lawns, rock outcroppings and other features remaining as portion of final landscaping.

G. Protect benchmarks, survey control points, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.

H. Protect grade and slope stakes.

3.2 OPEN CHANNEL RELOCATION AND RESTORATION

A. Clear site in accordance with Section 31 10 00 – Site Clearing.

B. Excavate drain to dimensions and cross sections specified on drawings.

C. Contractor shall check flow line elevations every 100 ft. (grade stakes will be provided by Engineer). Over excavation of 0.3 ft or greater will be filled with Type A1 – 6A compacted crushed limestone to the proposed flow line as incidental cost to the Contractor.

D. Contractor shall remove all sediment from existing culverts to remain.

E. When drain parallels a road, all excavation will be on field side slope unless stated on drawing or required by Engineer.

F. Underpin adjacent structures which may be damaged by excavation work, including utilities and pipe chases.

G. Machine slope banks to required slopes.

H. Notify Engineer of unexpected subsurface conditions and discontinue affected Work in area until notified to resume work.

I. Correct unauthorized excavation at no extra cost to Owner.

J. Seed excavated areas daily in accordance with Section 32 92 19 – Seeding.

K. Repair and replace field tile outlets as directed by Engineer.

L. Match existing side slopes in reaches identified channel cleanout.

M. Excess spoils on road sides and lawn areas are to be hauled away.

N. When excavating one side slope of drain. The opposite ditch bank shall be cleared in accordance with Section 31 10 00 – Site Clearing. Grass vegetation should not be removed on opposite side slopes.

3.3 SPOIL LEVELING

A. Seed spoils in accordance with Section 32 92 19 – Seeding.

B. Place soil erosion and sedimentation control measures per SESC plan.

C. Spoils placed on tillable land shall be spread evenly to allow for tilling.

D. Spoils in wooded areas shall be stockpiled as shown on plans.

E. Spoils are to be kept a minimum 3 feet from excavation area.

F. No excavated materials shall be placed on roads without written permission of the authorities having jurisdiction of said road.

G. Spoils excavated in areas adjacent to residential or lawn areas are to be removed from the area unless directed by the Engineer, shown on plans, or Contractor receives written permission from Landowner to level in area.

H. No spoils are to be placed in any watercourse or drain.

I. Side grade outs for watercourse and ditches shall be done at the time of open drain excavation or channel cleanout.

J. Non-combustible items (i.e. roots and stumps), brush, or debris shall not be mixed with leveled spoil material.

K. Shape leveled spoils to prevent the ponding of water behind spoil pile.

L. Level spoils on the same side of the drain which excavation occurs. If excavation occurs from both sides of drain then made even spoil piles on both sides of drain unless otherwise directed by the Engineer.

M. In agricultural areas, root rake and hand pick sticks and rocks so that foreign debris 1’ in length and/or 6” in diameter is disposed of.

3.4 ROAD SHOULDER CONSTRUCTION

A. Construct road shoulder and construct 2 horizontal to 1 vertical side slope to drain and valley shaped ditches.

B. Prior to filling for shoulder construction, remove existing sediment, top soil, and vegetation from area to be filled.

C. Fill and compact native material for road shoulder. Fill material shall be placed in 12”-24” lifts. Contractor will be responsible for the construction of stable side slopes.

D. Fill materials must be dry and must be approved by Engineer. Fill materials will be native excavated material.

3.5 EXCAVATION

A. Underpin adjacent structures which may be damaged by excavation work.

B. Excavate subsoil to accommodate building foundations, paving and site structures, construction operations, and utility trenches.

C. Slope banks with machine to angle of repose or less until shored.

D. Grade top perimeter of excavation to prevent surface water from draining into excavation.

E. Trim excavation. Remove loose matter.

F. Remove lumped subsoil, boulders, and rock up to 0.5 cu ft measured by volume. Remove larger material as specified in Section 31 23 18.

G. Notify Engineer of unexpected subsurface conditions.

H. Correct areas over excavated with structural fill type A2 as directed by Engineer.

I. Remove excess and unsuitable material from site.

3.6 FIELD QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Field inspecting, testing, adjusting, and balancing.

B. Request visual inspection of bearing surfaces by Engineer before installing subsequent work.

3.7 PROTECTION

A. Prevent displacement or loose soil from falling into excavation; maintain soil stability.

B. Protect bottom of excavations and soil adjacent to and beneath foundation from freezing.

C. Protect structures, utilities and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth operations.

3.8 DUST CONTROL

A. The Contractor shall implement measures to minimize dust, especially near residents, upon the Engineers request.

END OF SECTION

SECTION 31 23 17

TRENCHING

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Excavating trenches for utilities within municipal right-of-way or easement.
2. Excavating trenches for utilities from 5 feet outside building to utility service.
3. Compacted fill from top of utility bedding to subgrade elevations.
4. Backfilling and compaction.

B. Related Sections:
1. Section 03 30 00 - Cast-In-Place Concrete
2. Section 31 05 13 - Soils for Earthwork
3. Section 31 05 16 - Aggregates for Earthwork
4. Section 31 22 13 - Rough Grading
5. Section 31 23 16 – Excavation
6. Section 31 23 18 – Rock Removal
7. Section 31 23 23 – Fill
8. Section 32 91 19 – Landscape Grading

1.2 REFERENCES

A. American Association of State Highway and Transportation Officials:
1. AASHTO T180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.

B. ASTM International:
1. ASTM A-328 – Standard Specifications for Sheet Piling.
2. ASTM A-572 – Grades 60, High Strength.
3. ASTM A-690 – High Strength Corrosion Resistant.
4. ASTM C117 – Test Method for Materials Finer than 75mm (No. 200) Sieve in Mineral Aggregates by Washing.
5. ASTM C12 – Standard Practice for Installing Vitrified Clay Pipe Lines.
6. ASTM D-245-62T – Timber and lumber requirement.
7. ASTM C136 – Method for Sieve Analysis of Fine and Coarse Aggregates.
8. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3)).
9. ASTM D1556 - Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method.
10. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3)).
11. ASTM D2167 - Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
12. ASTM D2321 – Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity – Flow Applications.

13. ASTM D2922 - Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
14. ASTM D3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).

1.3 DEFINITIONS

A. Utility: Any buried pipe, duct, conduit, or cable.

1.4 REGULATORY REQUIREMENTS

A. Conform to applicable OSHA regulations.

1.5 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Excavation Protection Plan: Describe sheeting, shoring, and bracing materials and installation required to protect excavations and adjacent structures and property; include structural calculations to support plan.

C. Product Data: Submit data for geotextile fabric indicating fabric and construction.

D. Materials Source: Submit name of imported fill materials suppliers.

E. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.

1.6 QUALITY ASSURANCE

A. Perform Work in accordance with State of Michigan and the local Jurisdiction’s standards.

1.7 FIELD MEASUREMENTS

A. Verify field measurements prior to fabrication.

1.8 COORDINATION

A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.

B. Verify Work associated with lower elevation utilities is complete before placing higher elevation utilities.

PART 2 PRODUCTS

2.1 FILL MATERIALS

A. Subsoil Fill: Type S2 as specified in Section 31 05 13.

B. Structural Fill: Type A1 as specified in Section 31 05 13.

C. Granular Fill: Type A3 as specified in Section 31 05 16.

D. Concrete: Structural concrete as specified in Section 03 30 00 Cast-in-Place Concrete with compressive strength of 3500 psi.

2.2 EXCAVATION SUPPORT MATERIALS

A. Timber and lumber for shoring and bracing shall be new, merchantable pine. Douglas Fir or Spruce, unless otherwise shown or specified. Secondhand timber or lumber shall not be used where strength and/or appearance are important considerations.

B. Steel for sheeting, shoring, and bracing shall be as per the referenced ASTM specifications.

C. Temporary Sheeting: Select section modulus, embedment depth and bracing required to complete the work.

PART 3 EXECUTION

3.1 LINES AND GRADES

A. Lay pipes to lines and grades indicated on Drawings.
   1. Engineer reserves right to make changes in lines, grades, and depths of utilities when changes are required for Project conditions.

B. Use laser-beam instrument with qualified operator to establish lines and grades.

3.2 PREPARATION

A. Call Miss Dig not less than three working days before performing Work.
   1. Request underground utilities to be located and marked within and surrounding construction areas.

B. Identify required lines, levels, contours, and datum locations.

C. Protect plant life, lawns, rock outcropping and other features remaining as portion of final landscaping.

D. Protect benchmarks, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.

E. Maintain and protect above and below grade utilities indicated to remain.

F. Establish temporary traffic control and detours when trenching is performed in public right-of-way. Relocate controls and reroute traffic as required during progress of Work.

3.3 TRENCHING

A. Excavate subsoil required for utilities as shown on the plan, and as stated in the proposal.

B. Excavate subsoil for utility piping and accessories as indicated on the drawings.

C. Excavate on the required line to the depth required below the pipe grade for bedding thickness required.

D. Remove lumped subsoil, boulders, and rock up of 1/6 cubic yard, measured by volume. Remove larger material as specified in Section 31 23 18.

E. Do not advance open trench more than one pipe length ahead of installed pipe.

F. Cut trenches to width indicated on Drawings. Remove water or materials that interfere with Work.

G. Excavate bottom of trenches in accordance with trench details or specifications.

H. Excavate trenches to depth indicated on Drawings. Provide uniform and continuous bearing and support for bedding material and utilities being installed.

I. Excavate trench widths exceed the maximum specified above, the Owner's representative may require special bedding or the use of extra strength pipe at the Contractor's expense.

J. Do not interfere with 45 degree bearing splay of foundations.

K. When Project conditions permit, slope side walls of excavation starting 1 foot above top of pipe. When side walls cannot be sloped, provide sheeting and shoring to protect excavation as specified in this section.

L. When subsurface materials at bottom of trench are loose or soft, excavate to greater depth as directed by Engineer until suitable material is encountered.

M. Cut out soft areas of subgrade not capable of compaction in place. Backfill with Fill Type A and compact to density equal to or greater than requirements for subsequent backfill material.

N. Trim excavation. Hand trim for bell and spigot pipe joints. Remove loose matter.

O. Correct areas over excavated areas with compacted backfill as specified for authorized excavation or replace with fill concrete as directed by Engineer.

P. Remove excess subsoil not intended for reuse, from site.

Q. Grade top perimeter of excavation to prevent surface water from draining into excavation.

R. Notify Owner's representative of unexpected subsurface conditions and discontinue affected work in area until notified to resume work.

S. Protect excavation by methods required to prevent cave-in or loose soil from failing into excavation.

T. Provide, operate, and maintain pumping equipment to keep trench free of water.

U. Use trench boxes or other form of temporary protection when required by OSHA Standards or when protection of existing utilities is necessary.

V. Stockpile excavated material in area designated on site in accordance with Section 31 05 13.

3.4 SHEETING AND SHORING

A. Sheet, shore, and brace excavations to prevent danger to persons, structures and adjacent properties and to prevent caving, erosion, and loss of surrounding subsoil.

B. Support trenches more than 5 feet deep excavated through unstable, loose, or soft material. Provide sheeting, shoring, bracing, or other protection to maintain stability of excavation.

C. Design sheeting and shoring to be removed at completion of excavation work.

D. The Contractor is responsible for the design and location of all sheeting, shoring, and bracing.

E. When required to properly support the surfaces of excavations and to protect the construction work and workmen, sheeting, bracing and shoring shall be provided.

F. If the Owner's representative is of the opinion that at any point sufficient or proper supports have not been provided, he may order additional supports at the expense of the Contractor, but neither the placing of such additional supports by the order of the Owner's representative nor the failure of the Owner's representative to order such additional supports placed shall release the Contractor from his responsibility for the sufficiency of such supports and the integrity of the work.

G. Damage to new or existing structures occurring through settlements due to failure or lack of sheeting or bracing shall be repaired by the Contractor at his own expense.

H. Conflict of opinion as to whether the settlement is due to the work of the Contractor or to any other cause will be determined by the Owner's representative.

I. In general, the sheeting and bracing shall be removed, as the trench or excavation is refilled, in such a manner as to avoid the caving in of the work.

J. Fill voids left by the withdrawal of the sheeting by ramming, or otherwise as directed.

K. Obtain permission of the Owner's representative prior to the removal of any shoring, sheeting or bracing.

L. When sheeting and bracing is removed, the Contractor shall assume full responsibility for injury to structures or to other property or persons arising from failure to leave in place such sheeting or bracing.

M. For the purpose of preventing injury to the structures, or to other property or to persons, the Contractor shall leave in place any sheeting or bracing shown on the plans or ordered in writing by the Owner's representative.

N. Cutoff sheeting left in place at the elevation ordered but not be less than 18" below the final ground surface.

O. Bracing remaining in place shall be driven up tight.

P. Measurements and payment for sheeting and bracing ordered left in place will be made as extra work, unless noted otherwise.

Q. The right of the Owner's representative to order sheeting and bracing left in place shall not be construed as creating any obligation on his part to issue such orders.

R. Repair damage caused by failure of the sheeting, shoring, or bracing and for settlement of filled excavations or adjacent soil.

S. Repair damage to new and existing Work from settlement, water or earth pressure or other causes resulting from inadequate sheeting, shoring, or bracing.

3.5 BACKFILLING

A. Verify all materials to be reused as acceptable.

B. Backfill trenches to proposed contours and elevations with unfrozen fill materials.

C. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen, or spongy subgrade surfaces.

D. Place geotextile fabric over Fill Type A1 prior to placing subsequent fill materials.

E. Place material in continuous layers as follows:
   1. Subsoil Fill: Maximum 8 inches compacted depth.
   2. Structural Fill: Maximum 6 inches compacted depth.
   3. Granular Fill: Maximum 8 inches compacted depth.

F. Place geotextile fabric over Type A1 fill bedding prior to placing last lift of bedding.

G. Employ placement method that does not disturb or damage, utilities in trench, pavement, sidewalk, and driveways.

H. Maintain optimum moisture content of fill materials to attain required compaction density.

I. Do not leave more than 20 feet of trench open at end of working day.

J. Protect open trench to prevent danger to Owner.

K. Backfill against supported foundation walls.

L. Make grade changes gradual. Blend slope into level areas.

M. Slope fill away from structures a minimum 2 inches in 10 feet.

N. Leave fill material stockpile areas completely free of excess fill materials.

O. Employ a compaction method for trench backfill that does not disturb or damage installed utilities and existing utilities in the trench. Compact backfill to specified density. If required compaction is not achieved and verified using mechanical methods, settling or spiking the trench with water may be used as a compaction method in conformance with ASTM C13 and D2321, as approved by the Engineer.

P. Backfill simultaneously around all sides of structures, manholes and catch basins.

3.6 TOLERANCES

A. Top Surface of Backfilling under Paved Areas: Plus or minus 1/2 inch from required elevations.

B. Top surface of fill for building pads plus or minus 1/4 inch form required elevations.

C. Top Surface of General Backfilling: Plus or minus 1 inch from required elevations.

3.7 FIELD QUALITY CONTROL

A. Field inspection and testing will be performed under provisions of Section 01 40 00.

B. Tests and analysis of fill material will be performed in accordance with MDOT Standard Requirements and with Section 01 40 00.

C. Compaction testing will be performed in accordance with MDOT Standard Requirements and with Section 01 40 00.

D. If tests indicate Work does not meet specified requirements, remove Work, replace and retest at no cost to Owner.

E. Frequency of Tests: As directed by Soils Engineer.

F. Proof roll compacted fill surfaces under paving.

3.8 PROTECTION OF FINISHED WORK

A. Section 01 70 00 - Execution and Closeout Requirements: Protecting finished work.

B. Reshape and re-compact fills subjected to vehicular traffic during construction.

3.9 SCHEDULE

A. Fill Under Grass Area:
   1. Subsoil Type S2 fill, to 6 inches below finish grade, compacted to 95 percent maximum dry density as determined by MDOT Standard Requirements.

B. Fill Under Asphalt Paving:
   1. A3 to underside of aggregate base course elevation, compacted to 95 percent maximum dry density as determined by MDOT Standard Requirements.

C. Fill Under Concrete Building Pads, Concrete Pads, Concrete Curb and Gutter and Sidewalks:
   1. A3 to within 4” of underside of concrete slab. All fill to be compacted to 95 percent maximum dry density as determined by MDOT Standard Requirements.

D. Backfill for Utility Trenches:
   1. Bedding as specified in individual water and sewer utility standard detail sheets.

E. Fill for Subgrade and Undercutting:
   1. A1 – (6A Compacted Crushed Limestone) fill to proposed subgrade elevation, compacted to 95 percent maximum dry density as determined by MDOT Standard Requirements.

END OF SECTION

SECTION 31 23 18

ROCK REMOVAL

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Removing identified and discovered rock during excavation.
   2. Expansive tools to assist rock removal.

B. Related Sections:
   1. Section 31 22 13 - Rough Grading
   2. Section 31 23 16 - Excavation
   3. Section 31 23 17 - Trenching

1.2 DEFINITIONS

A. Trench Rock: Solid mineral material with volume in excess of 0.5 cu ft or solid material that cannot be removed with 1/2 cu yd capacity excavator without drilling or blasting.

1.3 SCHEDULING

A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.

B. Schedule Work to avoid disruption to occupied buildings nearby.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.

B. Verify site conditions and note subsurface irregularities affecting Work of this section.

3.2 PREPARATION

A. Identify required lines, levels, contours, and datum.

3.3 ROCK REMOVAL BY MECHANICAL METHOD

A. Excavate and remove rock by mechanical method.
   1. Drill holes and use wedges or mechanical disintegration compound to fracture rock.

B. Cut away rock at bottom of excavation to form level bearing.

C. Remove all lumped subsoil, boulders, and rocks 6 inches below bottom of pipe.

D. In utility trenches, excavate to 6 inches below invert elevation of pipe and 18 inches wider than pipe diameter.

E. Remove excavated materials from site.

F. Correct unauthorized rock removal in accordance with backfilling and compacting requirements of Section 31 23 17.

3.4 FIELD QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Field inspecting, testing, adjusting, and balancing.

B. Request visual inspection of utility bearing surfaces by Engineer before bedding, install, and backfilling utility.

END OF SECTION

SECTION 31 23 19

DEWATERING

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Dewatering system.
2. System operation and maintenance.
3. Water disposal.

B. Related Sections:
1. Section 31 05 16 - Aggregates for Earthwork.
2. Section 31 23 16 - Excavation.
3. Section 31 23 17 - Trenching.
4. Section 31 25 00 - Erosion and Sedimentation Controls.

1.2 REFERENCES

A. ASTM International:
1. ASTM C33 - Standard Specification for Concrete Aggregates.

1.3 DEFINITIONS

A. Dewatering includes the following:
1. Lowering of ground water table, intercepting horizontal water seepage, and water from utilities to prevent water from entering excavations trenches.
2. Disposing of removed water.

B. Surface Water Control: Removal of surface water within open excavations.

1.4 SYSTEM DESCRIPTION

A. Provide dewatering and surface water control systems to permit Work to be completed on dry and stable subgrade.

1.5 PERFORMANCE REQUIREMENTS

A. Design dewatering systems to:
1. Lower water table within areas of excavation to below bottom of excavation to permit Work to be completed on dry and stable subgrade.
2. Relieve hydrostatic pressures in confined water bearing strata below excavation to eliminate risk of uplift or other instability of excavation.
3. Prevent damage to adjacent properties, buildings, structures, utilities, and facilities from construction operations.
4. Prevent loss of fines, quick condition, or softening of foundation subgrade.
5. Maintain stability of sides and bottoms of excavations and trenches.

B. Design surface water control systems to:
   1. Collect and remove surface water and seepage entering excavation.

1.6 QUALITY ASSURANCE

A. Comply with authorities having jurisdiction for the following:
   1. Water discharge and disposal from pumping operations.

B. Obtain permit from EPA under National Pollutant Discharge Elimination System (NPDES), for storm water discharge from construction sites.

C. Perform Work in accordance with Municipal, State and Federal Standards.

1.7 QUALIFICATIONS

A. Installer: Company specializing in performing work of this section with minimum 3 years' experience and responsible for design, operation, and maintenance of dewatering system.
   1. Assume sole responsibility for dewatering and surface water control systems and for loss or damage resulting from partial or complete failure of protective measures and settlement or resultant damage caused by ground water control operations.

1.8 SEQUENCING

A. Section 01 10 00 - Summary: Requirements for sequencing.

B. Sequence work to obtain required permits before start of dewatering operations.

C. Sequence work to install and test dewatering and surface water control systems minimum 1 day before starting excavation trenching.

1.9 COORDINATION

A. Section 01 30 00 - Administrative Requirements: Requirements for coordination.

B. Coordinate work to permit the following construction operations to be completed on dry stable substrate.
   1. Excavation for structures specified in Section 31 23 16.
   2. Trenching for utilities specified in Section 31 23 17.

PART 2 PRODUCTS

2.1 DEWATERING EQUIPMENT

A. Select dewatering equipment to meet specified performance requirements.

2.2 ACCESSORIES

A. Filter Sand: Fine aggregate Type MDOT Class II Sand as specified in Section 31 05 16.

B. Filter Aggregates: Course aggregate type MDOT 6A Compacted Crushed Limestone as specified in Section 31 05 16.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 - Administrative Requirements: Verification of existing conditions before starting work.

B. Call Local Utility Line Information service at 811 not less than three working days before performing Work.
   1. Request underground utilities to be located and marked within and surrounding construction areas.

3.2 PREPARATION

A. Protect existing adjacent buildings, structures, and improvements from damage caused by dewatering operations.

B. Maintain monitoring wells until groundwater is allowed to return to normal level.

3.3 DEWATERING SYSTEM

A. Install dewatering system as required to complete work stated in the proposal.

B. Locate system components to allow continuous dewatering operations without interfering with installation of permanent Work and existing public rights-of-way, sidewalks, and adjacent buildings, structures, and improvements.

C. Install sand filter and aggregate surrounding the pump as required for dewatering.

D. Use pumps in accordance with manufacturer’s instructions.

E. Connect pumps to discharge header. Install valves to permit pump isolation.

3.4 SURFACE WATER CONTROL SYSTEM

A. Provide ditches, berms, and other devices to divert and drain surface water from excavation area as specified in Section 31 25 00.

B. Divert surface water and seepage water within excavation areas into sumps and pump water into drainage channels storm drains settling basins in accordance with requirements of agencies having jurisdiction.

C. Control and remove unanticipated water seepage into excavation.

3.5 SYSTEM OPERATION AND MAINTENANCE

A. Operate dewatering system continuously until backfill is minimum 2 feet above normal ground water table elevation.

B. Provide 24-hour supervision of dewatering system by personnel skilled in operation, maintenance, and replacement of system components.

C. Conduct daily observation of dewatering system and monitoring system. Make required repairs and perform scheduled maintenance.

D. Fill fuel tanks before tanks reach 25 percent capacity.

E. Start emergency generators at least twice each week to check operating condition.

F. When dewatering system cannot control water within excavation, notify Architect/Engineer and stop excavation work.
   1. Supplement or modify dewatering system and provide other remedial measures to control water within excavation.
   2. Demonstrate dewatering system operation complies with performance requirements before resuming excavation operations.

G. Modify dewatering and surface water control systems when operation causes or threatens to cause damage to new construction, existing site improvements, adjacent property, or adjacent water wells.

H. Correct unanticipated pressure conditions affecting dewatering system performance.

I. Do not discontinue dewatering operations without Engineer's approval.

3.6 WATER DISPOSAL

A. Discharge water into existing storm sewer system drainage channels settling basins specified in Section 31 25 00.

3.7 SYSTEM REMOVAL

A. Remove dewatering and surface water control systems after dewatering operations are discontinued.

B. Repair damage caused by dewatering and surface water control systems or resulting from failure of systems to protect property.

3.8 FIELD QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Field inspecting, testing, adjusting, and balancing.

B. After dewatering system is installed, perform pumping test to determine when selected pumping rate lowers water level in well below pump intake. Adjust pump speed, discharge volume, or both to ensure proper operation of each pump.

C. Submit weekly monitoring reports including the following:
   1. Dewatering flow rates.
   2. Piezometer readings.
   3. Test reports of discharge water analysis.
   4. Maintenance records for dewatering and surface water control systems.

END OF SECTION

SECTION 31 23 23

FILL

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
1. Backfilling building perimeter to subgrade elevations.
2. Backfilling site structures to subgrade elevations.
3. Fill under slabs-on-grade.
4. Fill under paving.
5. Fill for over-excavation.

B. Related Sections:
1. Section 01 40 00 - Quality Requirements
2. Section 03 30 00 – Cast-In-Place Concrete
3. Section 31 05 13 – Soils for Earthwork
4. Section 31 05 16 – Aggregates for Earthwork
5. Section 31 05 17 – Trenching
6. Section 31 22 13 – Rough Grading
7. Section 31 23 16 - Excavation
8. Section 32 11 23 - Aggregate Base Course
9. Section 32 91 19 – Landscape Grading

1.2 REFERENCES

A. American Association of State Highway and Transportation Officials:
1. AASHTO T180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.

B. ASTM International:
1. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3).
2. ASTM D1556 - Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method.
3. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3).
4. ASTM D2167 - Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
5. ASTM D2922 - Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
6. ASTM D3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).

1.3 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Product Data: Submit data for geotextile fabric indicating fabric and construction.

C. Materials Source: Submit name of imported fill materials suppliers.

D. Manufacturer's Certificate: Certify Products meet or exceed Michigan Department of Transportation construction standards.

1.4 QUALITY ASSURANCE

A. Perform Work in accordance with Michigan Department of Transportation construction standards.

B. Maintain one copy of each document on site.

PART 2 - PRODUCTS

2.1 FILL MATERIALS

A. Structural Fill: MDOT Class I for lower area of excess excavation over 24”, compacted to 97 percent of maximum density in accordance with MDOT standards.

B. Granular Fill: MDOT Class II for dry excavation and backfill under structure compacted to 95 percent of maximum density in accordance with MDOT standards.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.

3.2 PREPARATION

A. Compact subgrade to density requirements for subsequent backfill materials.

B. Cut out soft areas of subgrade not capable of compaction in place. Backfill with structural fill and compact to density equal to or greater than requirements for subsequent fill material.

C. Proof roll to identify soft spots; fill and compact to density equal to or greater than requirements for subsequent fill material.

3.3 BACKFILLING

A. Backfill areas to contours and elevations with unfrozen materials.

B. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen or spongy subgrade surfaces.

C. Place material in continuous layers as follows:
   1. Structural Fill: Maximum 6 inches compacted depth.
   2. Granular Fill: Maximum18 inches compacted depth.

D. Employ placement method that does not disturb or damage other work.

E. Maintain optimum moisture content of backfill materials to attain required compaction density.

F. Make gradual grade changes. Blend slope into level areas.

G. Remove surplus backfill materials from site.

H. Leave fill material stockpile areas free of excess fill materials.

I. Slope grade away from structures or paved surfaces.

3.4 TOLERANCES

A. Section 01 40 00 - Quality Requirements: Tolerances.

B. Top Surface of Backfilling Under Paved Areas: Plus or minus 1/2 inch from required elevations.

3.5 FIELD QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Field inspecting, testing, adjusting, and balancing.

B. Perform laboratory material tests in accordance with ASTM D1557.

C. Perform in place compaction tests in accordance with the following:
   1. Density Tests: ASTM D2922.
   2. Moisture Tests: ASTM D3017.

D. When tests indicate Work does not meet specified requirements, remove Work, replace and retest.

3.6 PROTECTION OF FINISHED WORK

A. Section 01 70 00 - Execution and Closeout Requirements: Protecting finished work.

B. Reshape and re-compact fills subjected to vehicular traffic.

3.7 SCHEDULE

A. Fill Under Grass Area:
   1. Subsoil Type S2 fill, to 6 inches below finish grade, compacted to 95 percent maximum dry density as determined by MDOT Standard Requirements.

B. Fill Under Asphalt Paving:
   1. A3 to underside of aggregate base course elevation, compacted to 95 percent maximum dry density as determined by MDOT Standard Requirements.

C. Fill Under Concrete Building Pads, Concrete Pads, Concrete Curb and Gutter and Sidewalks:
   1. A3 to within 4” of underside of concrete slab. All fill to be compacted to 95 percent maximum dry density as determined by MDOT Standard Requirements.

D. Backfill for Utility Trenches:
   1. Bedding as specified in individual water and sewer utility standard detail sheets.

E. Fill for Subgrade and Undercutting:
   1. A1 – (6A Compacted Crushed Limestone) fill to proposed subgrade elevation, compacted to 95 percent maximum dry density as determined by MDOT Standard Requirements.

END OF SECTION

SECTION 31 25 00

EROSION AND SEDIMENTATION CONTROLS

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Erosion Control Blanket.
2. Sediment Ponds.
3. Sediment Traps.
4. Sit Stabilization.
5. Silt Fence.

B. Related Sections:
1. Section 03 10 00 - Concrete Forming and Accessories
2. Section 03 30 00 - Cast-In-Place Concrete
3. Section 31 05 13 – Soils for Earthwork
4. Section 31 05 16 – Aggregates for Earthwork
5. Section 31 10 00 - Site Clearing
6. Section 31 22 13 – Rough Grading
7. Section 31 23 16 – Excavation
8. Section 31 23 17 - Trenching
9. Section 32 91 19 - Landscape Grading
10. Section 32 92 19 - Seeding

1.2 REFERENCES

A. American Association of State Highway and Transportation Officials:
1. AASHTO T88 - Standard Specification for Particle Size Analysis of Soils.
2. AASHTO T180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.

B. ASTM International:
1. ASTM C127 - Standard Test Method for Density, Relative Density (Specific Gravity), and Absorption of Coarse Aggregate.
2. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3)).
3. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3)).
4. ASTM D2922 - Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
5. ASTM D3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).
6. ASTM D-4632 – Test Method for Tensile Strength and Elongation.
7. ASTM D-3786 – Test Method for Mullen Burst.
8. ASTM D-4533 – Test Method for Puncture Strength.
9. ASTM D-4751 – Test Method for Apparent Opening Size.
10. ASTM D-4491 – Test Method for Coefficient of Permeability.

1.3 CLOSEOUT SUBMITTALS

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for submittals.

1.4 QUALITY ASSURANCE

A. Perform Work in accordance with the Soil Erosion and Sedimentation Control, Part 91 of Act 451 of 1994, and corresponding rules of the Michigan Department of Environment, Great Lakes, and Energy.

B. CONTRACTOR shall obtain Act 451 Permit.

C. CONTRACTOR shall obtain soil erosion permit.

D. Maintain one copy of each document on site.

1.5 REGULATORY REQUIREMENTS

A. Contractor shall obtain all permits and pay all fees for plan review and inspection as required by applicable enforcing agency having jurisdiction.

B. Submit installation time schedule for temporary and permanent soil erosion and sedimentation control measures to applicable enforcing agency having jurisdiction, as well as to Engineer. Make submittals prior to start of construction.

1.6 METHOD OF PAYMENT

A. All fees required by applicable enforcing agency shall be included in the other pay items for the project.

PART 2 PRODUCTS

2.1 SOIL EROSION AND SEDIMENT CONTROLS

A. Permanent Measures: In accordance with applicable Section for specified materials.

B. Temporary Measures: In accordance with standards and specifications for soil erosion and sediment control with approved plans and requirements of applicable enforcing agency.

2.2 PLANTING MATERIALS

A. Seeding and Soil Supplements: Material, as specified in Section 32 92 19 Seeding.

B. Mulch: Material, as specified in Section 32 92 19 Seeding.

2.3 SOURCE QUALITY CONTROL (AND TESTS)

A. Section 01 40 00 - Quality Requirements: Testing, inspection and analysis requirements.

B. Perform tests as required to ensure conformance with specified requirements.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 - Administrative Requirements: Verification of existing conditions before starting work.

B. Verify compacted subgrade is acceptable and ready to support devices and imposed loads.

C. Verify gradients and elevations of required lines, levels, contours, and datum are correct.

D. Field locate known utilities locations. Notify Engineer of conflicts and attain removal or relocation instructions prior to continuing installation activities.

E. Maintain and protect existing utilities to remain.

F. Verify the correct fabric is specified for the specific site.

G. Beginning of installation means acceptance of existing conditions.

H. Remove large stones or other debris which could damage the filter fabric and other erosion control material.

3.2 PROTECTION OF ADJACENT WORK

A. Protect adjacent structures, and property, which may be damaged by execution of work.

B. Protect existing trees, shrubs, landscaping, and lawn areas designated to remain.

3.3 STORAGE

A. All geotextile material shall be stored in a wrap that protects it from ultraviolet radiation and abrasion.

3.4 SOIL EROSION AND SEDIMENTATION CONTROL INSTALLATION AND MAINTENANCE

A. Construct soil erosion and sedimentation control measures in accordance with approved plans and requirements of applicable enforcing agency.

B. Schedule planned control measures with construction operations to limit the area of any disturbed land to the shortest possible period of exposure.

C. Permanent and minimum temporary control measures as scheduled on Drawings.

D. Additional temporary measures (over and above those scheduled on Drawings) due to site grading/construction activities that any way differs from that shown on drawings.

E. Conduct all earth changes so as to effectively reduce accelerated soil erosion and resulting sedimentation.

F. Remove all sediment from runoff water before it leaves the site.

G. Inspect, maintain, and repair temporary control measures until permanent control measures are implemented.

3.5 EROSION CONTROL BLANKET

A. Repair washouts in area to be seeded.

B. Prepare side slopes as shown on plans.

C. Over excavate area equal to thickness of required topsoil and protection.

D. Place topsoil as shown on plans.

E. Rake in fertilizer; apply at the rate of 15 lbs per 1,000 sq. ft.

F. Seed topsoil with ditch bank seeding mix at a rate of 6 lbs per 1,000 sq. ft.

G. Place erosion control blanket over seeded areas.

H. Place metal pins over seeded areas 2.0 ft on centers. As approved by Engineer.

3.6 SEDIMENTATION POND

A. Clear and grub storage area and embankment foundation area site as specified in Section 31 10 00.

B. Excavate key trench for full length of dam. Excavate emergency spillway in natural ground.

C. Install pipe spillway, with anti-seep collar attached, at location indicated.

D. Place forms, and reinforcing for concrete footing at bottom of riser pipe with trash rack and anti-vortex device, as specified in Section 03 10 00, and Section 03 20 00. Construction of embankment and trench prior to placing pipe is not required.

E. Mix, place, finish, and cure concrete, as specified in Section 03 30 00.

F. Do not use coarse aggregate as backfill material around pipe. Backfill pipe with suitable embankment material to prevent dam leakage along pipe.

G. Construct rock basin at outlet end of pipe, as specified in this Section. Place embankment material, as specified in Section 31 23 17. When required, obtain borrow excavation for formation of embankment, as specified in Section 31 23 17.

H. On entire sedimentation pond area, apply soil supplements and sow seed as specified in Section 32 92 19.

I. Mulch seeded areas with hay as specified in Section 32 92 19.

3.7 SEDIMENT TRAPS

A. Clear site, as specified in Section 31 10 00.

B. Construct trap by excavating and forming embankments as specified in Section 31 23 16, and Section 31 23 17.

C. Place coarse aggregate or rock at outlet as indicated on Drawings.

D. Place geotextile fabric, as specified for rock energy dissipater.

E. When required, obtain borrow excavation for formation of embankment, as specified in Section 31 23 16.

F. On entire sediment trap area, apply soil supplements and sow seed as specified in Section 32 92 19.

G. Mulch seeded areas with hay as specified in Section 32 92 19.

3.8 SITE STABILIZATION

A. Incorporate erosion control devices indicated on the Drawings into the Project at the earliest practicable time.

B. Construct, stabilize and activate erosion controls before site disturbance within tributary areas of those controls.

C. Stockpile and waste pile heights shall not exceed 35 feet. Slope stockpile sides at 2: 1 or flatter.

D. Stabilize any disturbed area of affected erosion control devices on which activity has ceased and which will remain exposed for more than 20 days.
   1. During non-germinating periods, apply mulch at recommended rates.
   2. Stabilize disturbed areas which are not at finished grade and which will be disturbed within one year in accordance with Section 32 92 19.
   3. Stabilize disturbed areas which are either at finished grade or will not be disturbed within one year in accordance with Section 32 92 19 permanent seeding specifications.

E. Stabilize diversion channels, sediment traps, and stockpiles immediately.

3.9 FIELD QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Field inspecting, testing, adjusting, and balancing.

B. Inspect erosion control devices on a weekly basis and after each runoff event. Make necessary repairs to ensure erosion and sediment controls are in good working order.

C. Field test concrete in accordance with Section 03 30 00.

D. Compaction Testing: As specified in Section 31 23 17.

E. When tests indicate Work does not meet specified requirements, remove Work, replace and retest.

3.10 CLEANING

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for cleaning.

B. When sediment accumulation in sedimentation structures has reached a point one-third depth of sediment structure or device, remove and dispose of sediment.

C. Do not damage structure or device during cleaning operations.

D. Do not permit sediment to erode into construction or site areas or natural waterways.

E. Clean channels when depth of sediment reaches approximately one half channel depth.

3.11 PROTECTION

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for protecting finished Work.

B. Protect temporary soil erosion control from elements, flowing water, or other disturbance until construction is complete.

END OF SECTION

SECTION 31 32 21

FILTER FABRIC

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
1. Filter Fabric for Groundwater Infiltration Applications.
2. Filter Fabric for Cobblestone Applications.
3. Filter Fabric for Plain Riprap Applications and Concrete Box Culvert Joints.
4. Filter Fabric for Heavy Riprap Applications.
5. Filter Fabric for Articulated Concrete Mat Applications.

B. Related Sections:
1. Section 31 22 13 – Rough Grading
2. Section 31 25 00 – Erosion and Sedimentation Controls
3. Section 31 35 21 – Slope Protection and Erosion Control

1.2 REFERENCES

A. ASTM International:
1. ASTM D-4632 - Test method for Tensile Strength and Elongation
2. ASTM D-3786 - Test method for Mullen Burst.
3. ASTM D-4533 - Test method for Trapezoidal Tear Strength.
4. ASTM D-3787 - Test method for Puncture Strength.
5. ASTM D-4751 - Test method for Apparent Opening Size.
6. ASTM D-4491 - Test method for Coefficient of Permeability

1.3 SUBMITTALS

A. Section 01 70 00 – Execution and Closeout Requirements: Requirements for Submittals.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Mechanically bonded, non-woven, long-chain polymeric fibers or yarns.
1. Filter fabric for groundwater infiltration (french drains, trench drains, pipe joint wrap, etc.) and embankment filter fabric is to have, at minimum, the following properties:

Tensile Strength	100 lbs
Tensile Elongation (max)	100%
Mullen Burst	200 psi
Trapezoidal Tear Strength	40 lbs
Puncture Strength	65 lbs
Apparent Opening Size (max)	0.210 mm
Coef. Of Permeability	0.15 cm/sec

2. Filter fabric for cobblestone grade and bank protection shall have, at minimum the following properties:

Tensile Strength	120 lbs
Tensile Elongation (max)	100%
Mullen Burst	230 psi
Trapezoidal Tear Strength	45 lbs
Puncture Strength	70 lbs
Apparent Opening Size (max)	0.210 mm
Coef. Of Permeability	0.15 cm/sec

3. Filter fabric for plain riprap grade and bank protection shall have, a minimum, the following properties:

Tensile Strength	155 lbs
Tensile Elongation (max)	100%
Mullen Burst	315 psi
Trapezoidal Tear Strength	65 lbs
Puncture Strength	90 lbs
Apparent Opening Size (max)	0.210 mm
Coef. Of Permeability	0.15 cm/sec
Open Area	

4. Filter fabric for heavy rip-rap grade and bank protection to have, at minimum, the following properties:

Tensile Strength	200lbs
Tensile Elongation (max)	100%
Mullen Burst	350 psi
Trapezoidal Tear Strength	75 lbs
Puncture Strength	100 lbs
Apparent Opening Size (max)	0.210 mm
Coef. Of Permeability	0.15 cm/sec
Open Area	

5. Filter fabric for rock ford crossings to have, at minimum, the following properties:

Tensile Strength	265 lbs
Tensile Elongation (max)	120%
Mullen Burst	470 psi
Trapezoidal Tear Strength	130 lbs
Puncture Strength	160 lbs
Apparent Opening Size (max)	0.149 mm
Coef. Of Permeability	0.25 cm/sec
Open Area	

PART 3 - EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 – Administrative Requirements: Verification of Existing Conditions before Starting Work.

B. Verify compacted subgrade is acceptable and ready to support devices and imposed loads.

C. Verify gradients and elevations of required lines, levels, contours, and datum are correct.

D. Verify the correct fabric is specified for the specific use.

E. At the time of installation, the filter fabric may be rejected at the discretion of the Engineer if it has been removed from its protective cover for over 72 hours or has defects, tears, punctures, flow deterioration, or damage incurred during manufacture, transportation or storage.

F. No torn, punctured, or otherwise damaged fabric shall be installed.

3.2 PREPARATION

A. Section 01 70 00 - Execution and Closeout Requirements specifies requirements for installation preparation.

B. Remove large stones or other debris, which could damage the filter fabric.

C. Adjacent Surfaces: Protect adjacent surfaces.

3.3 STORAGE

A. During all periods of shipment and storage, the filter fabric shall be protected from abrasion, direct sunlight, ultraviolet rays, and temperatures greater than 140 degrees Fahrenheit (or as directed by the manufacturer). To the extent possible, the fabric shall be maintained wrapped in its protective covering.

3.4 INSTALLATION

A. Install according to manufacturer’s instructions.

B. All joints/overlaps in material shall be a minimum of 2 feet.

C. Any damaged material shall be repaired by placing a piece of fabric that is sufficiently large to cover the damaged area plus 2 feet of adjacent undamaged geotextile in all directions.

D. Finish according to specific use requirements.

E. Edges of filter fabric shall be toed in 12 inches unless specified otherwise. Work will not pass inspection if filter fabric is not "toed in.”

F. Maintain permanent control measures until final acceptance by Owner.

G. Install silt fences around all catchbasin inlets, to be removed after final inspection of the project.

H. Construct trap by excavating and forming embankments as specified in Section 31 23 16, and Section 31 23 17.

I. Place coarse aggregate or rock at outlet as indicated on Drawings.

J. Place geotextile fabric, as specified for rock energy dissipater.

K. When required, obtain borrow excavation for formation of embankment, as specified in Section 31 23 16.

L. On entire sediment trap area, apply soil supplements and sow seed as specified in Section 32 92 19.

M. Mulch seeded areas with hay as specified in Section 32 92 19.

3.5 PROTECTION

A. Section 01 70 00 - Execution and Closeout Requirements specifies requirements for protecting finished Work.

B. Do not permit Traffic over unprotected surface.

C. Take care placing material over filter fabric so as not to damage the material.

END OF SECTION

SECTION 31 35 21

SLOPE PROTECTION AND EROSION CONTROL

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
1. Live Wattles (soft shore engineering).
2. Live Stakes (soft shore engineering).
3. Rip-rap – see Section 31 37 00.

1.2 RELATED SECTIONS

A. Related Sections
1. Section 31 05 13 – Soils for Earthwork
2. Section 31 05 16 – Aggregates for Earthwork
3. Section 31 10 00 – Site Clearing
4. Section 31 22 13 - Rough Grading
5. Section 31 23 16 - Excavation
6. Section 31 23 17 - Trenching
7. Section 31 23 23 – Backfill
8. Section 31 25 00 – Soil Erosion and Sedimentation Controls
9. Section 31 32 21 - Filter Fabric
10. Section 31 37 00 - Riprap
11. Section 32 91 19 - Landscape Grading
12. Section 32 92 19 – Seeding

1.3 REFERENCES

A. ASTM D-4595 - Test Method for geo-grid tensile strength.

B. Part 91 of Act No. 451, of 1994, relative to Soil Erosion and Sedimentation Control Act.

C. National Crushed Stone Association (N.C.S.A.).

D. Michigan Department of Transportation: Standard Specifications for Construction.

E. ANSI Z60.1 - Nursery Stock; current edition

F. American Standard for Nursery Stock; current edition

G. Hortus III - current edition. Bailey Horatium, Cornell University

1.6 SUBMITTALS

A. Submit under provisions of Section 01300 - Submittals.

B. Submit shop drawings and product data for all items to be installed and/or constructed within this Section.

1.7 REGULATORY REQUIREMENTS

A. Plant Materials: Certified by State Department of Agriculture as described by ANSI-Z60.1 to be free of disease or hazardous insects.

B. Comply with state agencies for plant material certification and inspection.

1.8 ENVIRONMENTAL REQUIREMENTS

A. All planting of woody vegetation shall be accomplished during the dormant season between October 1st and May 15th. Any planting outside of this must take proper care with regular watering for plant survival.

1.9 COORDINATION

A. Coordinate work under provisions of Section 01 03 9.

B. Perform Planting as other construction activities allow.

C. Do not install plant materials prior to acceptance of final grades.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Plain Rip-rap - Sound, tough, durable rock or crushed limestone free from structural defects. Sound pieces of concrete may be used in place of plain rip-rap when approved by the Engineer. Material to be uniform in size and not less than 8 inches in the least dimension. MDOT 8.19.02.

B. Heavy Rip-rap - Sound, tough, durable rock or crushed limestone free from structural defects. Material to be uniform in size and not less than 16 inches in the least dimension. MDOT 8.19.03.

C. Filter Fabric - In accordance with Section 31 32 21 - Filter Fabric.

D. Geo-Grid Netting - For reinforced grass spillways shall meet or exceed the following requirements as per ASTM D-4595:

Tensile Strength 2,000 lbs/ft
Tensile Modules at 5% Strain14,900 lbs/ft
Maximum Aperture Area 1 sq. inch

E. Metal Pins - Shall be those specified by the manufacturer to use with geo-grid netting and as approved by the Engineer.

F. Straw Mulch - 2" thickness of oat or wheat straw or an erosion control blanket that uses straw or straw/coconut mulch at the rate of 0.5 lbs. per sq. yd.

PART 3 - EXECUTION

3.1 PREPARATION

A. Implement temporary controls under provisions of Section 01 50 00 - Temporary Controls.

END OF SECTION

SECTION 31 37 00

RIPRAP

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Riprap placed loose.

B. Related Sections:
   1. Section 31 22 13 - Rough Grading.
   2. Section 31 23 16 – Excavation.
   3. Section 31 23 23 - Fill.
   4. Section 32 91 19 - Landscape Grading.

1.2 QUALITY ASSURANCE

A. Furnish each aggregate material from a single source throughout the Work.

B. Perform Work in accordance with MDOT Standard Specifications for Construction, current edition.

PART 2 - PRODUCTS

2.1 MATERIALS

A. In accordance with Section 31 35 21.

B. All materials must be approved by Owner before use on project.

C. Filter Fabric – As specified in Section 31 32 21 – Filter Fabric.

PART 3 - EXECUTION

3.1 PREPARATION

A. Exact location of plain riprap, plain riprap spillways, and riprap cross vanes, shall be determined by Engineer during construction.

3.2 RIPRAP AND RIPRAP TOE OF SLOPE

A. Clear topsoil and rough grade to required contours. Over excavate protection area equal to the thickness of the protection.

B. Place filter fabric with all edges "toed in" a minimum of 12 inches. Riprap will not pass inspection if filter fabric is not "toed in."

C. Place protection on filter fabric; tamp protection until individual pieces are firmly bedded.

D. Hand place stone, if necessary, to assure that there are no void spaces in protection. Upon completion the filter fabric should not be visible.

E. Bank and grade protection shall be installed as needed per location as directed by the Engineer.

F. Toe of slope protection shall be installed along the bank to a height of 3 feet vertically above the flow line of the drain.

END OF SECTION

SECTION 32 11 23

AGGREGATE BASE COURSES

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Aggregate subbase.
2. Aggregate base course.

B. Related Sections:
1. Section 31 05 16 – Aggregates for Earth Work
2. Section 31 22 13 - Rough Grading
3. Section 31 23 17 - Trenching
4. Section 32 11 23 - Aggregates Base Course
5. Section 32 12 16 - Asphalt Paving
6. Section 32 13 13 - Concrete Paving
7. Section 32 15 00 – Crushed Stone Path
8. Section 32 91 19 - Landscape Grading
9. Section 33 40 00 – Storm Sewerage Systems

1.2 REFERENCES

A. American Association of State Highway and Transportation Officials:
1. AASHTO M288 - Standard Specification for Geotextile Specification for Highway Applications.

B. ASTM International:
1. ANSI/ASTM C117 – Test Method for Materials Finer than 75 mm (No. 200) Sieve in Mineral Aggregates by Washing.
2. ANSI/ASTM C136 – Method for Sieve Analysis of Fine and Coarse Aggregates.
3. Test method for density of soil in place with loss by wash less than 15% - One Point Michigan Cone Test.
4. Test method for density of soil in place with loss by wash greater than 15% - One Point T-99 Test.
5. ASTM D1556 - Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method.
6. ASTM D2167 - Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
7. ASTM D2922 - Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
8. ASTM D3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).
9. MDOT Standard Specifications for Construction.

1.3 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Product Data:
   1. Submit data for geotextile fabric and herbicide.

C. Samples may be requested by the Engineer: Submit, in air-tight containers, 10 lb sample of each type of aggregate fill to testing laboratory.

D. Materials Source: Submit name of aggregate materials suppliers.

E. Manufacturer's Certificate: Certify Products meet or exceed specified requirements for MDOT 22A.

1.4 QUALITY ASSURANCE

A. Furnish each aggregate material from single source throughout the Work.

B. Perform Work in accordance with the local County Road Commission standards.

PART 2 PRODUCTS

2.1 AGGREGATE MATERIALS

A. Coarse Aggregate: Fill type MDOT 6A crushed limestone as specified in Section 31 05 16. Compacted to 98 percent density.

B. Coarse Aggregate: Fill Type MDOT 22A crushed limestone as specified in Section 31 05 16. Compacted to 98 percent density.

C. Fine Aggregate: Fill Type MDOT Class II Sand as specified in Section 31 05 16. Compacted to 98 percent density.

D. A.R.E.A. 4A Stone: 2” Sieve opening – 100% passing, 1-1/2” Sieve opening – 90-100% passing, 1” Sieve opening – 20-55% passing, ¾” Sieve opening – 0-15% passing, 3/8” Sieve opening – 0-5% passing.

2.2 ACCESSORIES

A. Geotextile Fabric: AASHTO M288; non-woven, polypropylene. Maybe required for winter construction.

B. Herbicide:
   1. Use Arsenal as manufactured by American Cyanamid Company, or approved equal.
   2. See the Material Safety Data sheets at: https://www.nemassmosquito.org/sites/g/files/vyhlif4751/f/uploads/arsenal-sds.pdf
   3. Herbicide shall be guaranteed to keep the paths weed free for a minimum of 1 year.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 - Administrative Requirements: Verification of existing conditions before starting work.

B. Verify compacted substrate is dry and ready to support paving and imposed loads.
   1. Proof roll substrate with 3 ton in minimum two perpendicular passes to identify soft spots.
   2. Remove soft substrate and replace with compacted fill as specified in Section 31 23 23.

C. Verify substrate has been inspected, gradients and elevations are correct.

3.2 PREPARATION

A. Correct irregularities in substrate gradient and elevation by scarifying, reshaping, and re-compacting.

B. Do not place fill on soft, muddy, or frozen surfaces.

3.3 AGGREGATE PLACEMENT

A. Install geotextile fabric over subgrade in accordance with manufacturer's instructions.
   1. Lap ends and edges minimum 12 inches.
   2. Anchor fabric to subgrade when required to prevent displacement until aggregate is installed.

B. Gradation of Aggregate: In accordance with ASTM C136.

C. Spread aggregate over prepared substrate to total compacted thickness as indicated on drawings and stated in the proposal.

D. Roller compact aggregate to 98 percent maximum density.

E. Level and contour surfaces to elevations, profiles, and gradients indicated.

F. Add small quantities of fine aggregate to coarse aggregate when required to assist compaction.

G. Maintain optimum moisture content of fill materials to attain specified compaction density. Add water to assist compaction. If excess water is apparent, remove aggregate and aerate to reduce moisture content.

H. Use mechanical tamping equipment in areas inaccessible to compaction equipment.

3.4 TOLERANCES

A. Section 01 40 00 - Quality Requirements: Tolerances.

B. Maximum Variation From Flat Surface: 1/4 inch measured with 10 foot straight edge.

C. Maximum Variation From Thickness: 1/4 inch.

D. Maximum Variation From Elevation: 1/2 inch.

3.5 FIELD QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Field inspecting, testing, adjusting, and balancing.

B. Compaction testing will be performed in accordance with ASTM D2922.

C. When tests indicate Work does not meet specified requirements, remove Work, replace and retest at no cost to the Owner.

D. Frequency of Tests: As determined by the Engineer in the field with a minimum of one test for every 500 square yards of each layer compacted aggregate.

3.6 COMPACTION

A. Compact materials to 98 percent of maximum density as determined from test strip, in accordance with ASTM D2940.

3.7 SCHEDULES

A. Asphalt Paving Base Course: Thickness varies as stated in the proposal, placed in one or two equal layers.

B. Concrete Paving Base Course: Thickness varies as stated in the proposal, placed in single layer.

END OF SECTION

SECTION 32 12 16

ASPHALT PAVING

1.1 SUMMARY

A. Section Includes:
1. Asphalt materials.
2. Asphalt paving base course, binder course, and wearing course.
3. Asphalt paving overlay for existing paving.

B. Related Requirement:
1. Section 31 05 16 - Aggregates for Earthwork.
2. Section 31 22 13 - Rough Grading.
3. Section 31 23 16 - Excavation
4. Section 31 23 17 - Trenching.
5. Section 32 11 23 - Aggregate Base Courses.

1.2 REFERENCE STANDARDS

A. American Association of State Highway and Transportation Officials:
1. AASHTO M17 - Standard Specification for Mineral Filler for Bituminous Paving Mixtures.
2. AASHTO M29 - Standard Specification for Fine Aggregate for Bituminous Paving Mixtures.
3. AASHTO M140 - Standard Specification for Emulsified Asphalt.
4. AASHTO M208 - Standard Specification for Cationic Emulsified Asphalt.
5. AASHTO M288 - Standard Specification for Geotextile Specification for Highway Applications.
6. AASHTO M320 - Standard Specification for Performance-Graded Asphalt Binder.
7. AASHTO M324 - Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.
8. AASHTO MP1a - Standard Specification for Performance-Graded Asphalt Binder.

B. Asphalt Institute:
1. AI MS-2 - Mix Design Methods for Asphalt Concrete and Other Hot- Mix Types.
2. AI MS-19 - Basic Asphalt Emulsion Manual.
3. AI SP-2 - Superpave Mix Design.

C. ASTM International:
1. ASTM C1371 - Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers.
2. ASTM C1549 - Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer.
3. ASTM D242 - Standard Specification for Mineral Filler For Bituminous Paving Mixtures.
4. ASTM D692 - Standard Specification for Coarse Aggregate for Bituminous Paving Mixtures.
5. ASTM D946 - Standard Specification for Penetration-Graded Asphalt Cement for Use in Pavement Construction.

6. ASTM D977 - Standard Specification for Emulsified Asphalt.
7. ASTM D1073 - Standard Specification for Fine Aggregate for Bituminous Paving Mixtures.
8. ASTM D1188 - Standard Test Method for Bulk Specific Gravity and Density of Compacted Bituminous Mixtures Using Coated Samples
9. ASTM D2027 - Standard Specification for Cutback Asphalt (Medium-Curing Type).
10. ASTM D2397 - Standard Specification for Cationic Emulsified Asphalt.
11. ASTM D2726 - Standard Test Method for Bulk Specific Gravity and Density of Non-Absorptive Compacted Bituminous Mixtures.
12. ASTM D2950 - Standard Test Method for Density of Bituminous Concrete in Place by Nuclear Methods.
13. ASTM D3381 - Standard Specification for Viscosity-Graded Asphalt Cement for Use in Pavement Construction.
14. ASTM D3515 - Standard Specification for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures.
15. ASTM D3549 - Standard Test Method for Thickness or Height of Compacted Bituminous Paving Mixture Specimens.
16. ASTM D3910 - Standard Practices for Design, Testing, and Construction of Slurry Seal.
17. ASTM D6690 - Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.
18. ASTM E408 - Standard Test Methods for Total Normal Emittance of Surfaces Using Inspection-Meter Techniques.
19. ASTM E903 - Standard Test Method for Solar Absorptance, Reflectance, and Transmittance of Materials Using Integrating Spheres.
20. ASTM E1918 - Standard Test Method for Measuring Solar Reflectance of Horizontal and Low-Sloped Surfaces in the Field.
21. ASTM E1980 - Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces.
22. MDOT 2012 Standard Specifications for Construction.

1.3 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Product Data:
   1. Submit product information for asphalt and aggregate materials.
   2. Submit mix design with laboratory test results supporting design.

C. Manufacturer's Certificate: Certify Products meet or exceed specified requirements for MDOT Standard Construction Specifications.

1.4 QUALITY ASSURANCE

A. Mixing Plant: Conform to State of Michigan Department of Transportation Standard.

B. Obtain materials from same source throughout.

C. Perform Work in accordance with State of Michigan Department of Transportation standard.

D. Maintain one copy of each document on site.

1.5 REGULATORY REQUIREMENTS

A. Conform to applicable local codes for paving work.

1.6 QUALIFICATIONS

A. Installer: Company specializing in performing work of this section with minimum 3 years documented experience.

1.7 AMBIENT CONDITIONS

A. Section 01 50 00 - Temporary Facilities and Controls: Ambient conditions control facilities for product storage and installation.

B. Do not place asphalt mixture when ambient air or base surface temperature is less than 40 degrees F, or surface is wet or frozen.

C. Place asphalt mixture when temperature is not more than 15 degrees F less than initial mixing temperature.

PART 2 PRODUCTS

2.1 MATERIALS

A. Asphalt Cement: In accordance with MDOT standards.

B. Aggregate for Leveling Course Mix: In accordance with MDOT standards.

C. Aggregate for Wearing Course Mix: In accordance with MDOT standards.

D. Fine Aggregate: In accordance with MDOT standards.

E. Mineral Filler: In accordance with MDOT standards.

2.2 ACCESSORIES

A. Primer: Homogeneous, medium curing, liquid asphalt in accordance with MDOT standards.

B. Tack Coat: Homogeneous, medium curing, liquid asphalt in accordance with MDOT standards.

2.3 ASPHALT PAVING MIX

A. Use dry material to avoid foaming. Mix uniformly.

B. Base Course: provide mix in accordance with MDOT uniformity tolerances for bituminous mixtures.

C. Leveling Course: provide mix in accordance with MDOT uniformity tolerances for bituminous mixtures.

D. Wearing Course: provide mix in accordance with MDOT uniformity tolerances for bituminous mixtures.

2.4 SOURCE QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Testing, inspection and analysis requirements.

B. Submit proposed mix design of each class of mix for review prior to beginning of Work.

C. Submit MDOT approved job mix formula (JMF) of each mix for review 14 days prior to commencement of work.

D. Test samples in accordance with AI MS-2 and MDOT standards.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for installation examination.

B. Verify utilities indicated under paving are installed with excavations and trenches backfilled and compacted.

C. Verify compacted subgrade and subbase is dry and ready to support paving and imposed loads.
1. Proof roll subbase with 7 ton in minimum two perpendicular passes to identify soft spots.
2. Remove soft subbase and replace with compacted fill as specified in Section 32 11 23.

D. Verify gradients and elevations of base are correct.

E. Verify gutter drainage grilles and frames manhole frames and valve boxes are installed in correct position and elevation.

3.2 PREPARATION

A. Prepare subbase in accordance with State of Michigan Department of Transportation standards.

3.3 DEMOLITION

A. Saw cut and notch existing paving, saw cutting shall be paid for as part of pavement removal.

B. Clean existing paving to remove foreign material, excess joint sealant and crack filler from paving surface.

C. Repair surface defects in existing paving to provide uniform surface to receive new paving.

3.4 INSTALLATION

A. Subbase:
   1. Aggregate Subbase: Install as specified in Section 32 11 23.

B. Primer:
   1. Apply primer in accordance with AI MS-2. State of Michigan Department of Transportation standards.
   2. Use clean sand to blot excess primer.

C. Tack Coat:
   1. Apply bond coat on existing, abutting asphalt and concrete surfaces according to manufacturer's instructions and MDOT standards.
   2. Apply bond coat to contact surfaces of curbs, gutters, building walls and sidewalks. Prevent overspray from reaching adjacent surfaces.
   3. Coat surfaces of manhole and catch basin frames with oil to prevent bond with asphalt pavement. Do not bond coat these surfaces.
   4. Use clean sand to blot excess primer.

D. Single Course Asphalt Paving:
   1. Install Work in accordance with State of Michigan Department of Transportation standards.
   2. Place asphalt within 24 hours of applying primer or tack coat.
   3. Place asphalt wearing course to compacted thickness as indicated on the drawings and stated in the proposal.
   4. Compact paving by rolling to specified density. Do not displace or extrude paving from position. Hand compact in areas inaccessible to rolling equipment.
   5. Perform rolling with consecutive passes to achieve even and smooth finish without roller marks.

E. Double Course Asphalt Paving:
   1. Place asphalt binder course within 24 hours of applying primer or tack coat.
   2. Place binder course to compacted thickness indicated on drawings and as stated in the proposal.
   3. Place wearing course within 24 hours of placing and compacting binder course. When binder course is placed more than 24 hours before placing wearing course, clean surface and apply tack coat before placing wearing course.
   4. Place wearing course to compacted thickness indicated on drawings and as stated in the proposal.
   5. Install gutter drainage grilles and frames, manhole frames, valve and monument boxes in correct position and elevation.
   6. Compact each course by rolling to specified density. Do not displace or extrude paving from position. Hand compact in areas inaccessible to rolling equipment.
   7. Perform rolling with consecutive passes to achieve even and smooth finish, without roller marks.

F. Asphalt Paving Overlay
   1. Apply asphalt cement tack coat to existing paving surface at rate recommended by geotextile fabric manufacturer.

2. Install geotextile fabric in accordance with manufacturer's instructions to permit asphalt saturation of fabric. Lap fabric edge and end joints 4 inches.
3. Place wearing course to compacted thickness indicated on drawings and as stated in the proposal.
4. Compact overlay by rolling to specified density. Do not displace or extrude paving from position. Hand compact in areas inaccessible to rolling equipment.
5. Perform rolling with consecutive passes to achieve even and smooth finish, without roller marks.

G. Hand Patching
1. Install uniform thickness surface slurry over existing paving in accordance with ASTM Install work according to current MDOT standards.
2. Place to compacted thickness as specified on plans.
3. Compact in maximum lifts by use of a machine vibrator or approved roller according to current MDOT standards.

H. Curbs
1. Install extruded asphalt curbs of profile as indicated on Drawings.

3.5 TOLERANCES

A. Section 01 40 00 - Quality Requirements: Tolerances.

B. Flatness: Maximum variation of 1/4 inch measured with 10 foot straight edge.

C. Scheduled Compacted Thickness: Within 1/4 inch.

D. Variation from Indicated Elevation: Within 1/4 inch.

3.6 FIELD QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Requirements for inspecting, testing.

B. Take samples and perform tests in accordance with State of Michigan Department of Transportation Standards.

C. Asphalt Paving Mix Temperature: Measure temperature at time of placement.

D. Asphalt Paving Thickness: ASTM D3549; test one core sample from every 1000 square yards compacted paving.

E. Asphalt Paving Density: ASTM D2950 nuclear method; density testing shall be performed at the discretion of the Engineer.

3.7 PROTECTION

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for protecting finished Work.

B. Immediately after placement, protect paving from mechanical injury for 3 days.

END OF SECTION

SECTION 32 13 13

CONCRETE PAVING

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Concrete paving for:
      a. Concrete sidewalks.
      b. Concrete curbs and gutters.
      c. Concrete parking areas and roads.

B. Related Requirements:
   1. Section 03 10 00 – Concrete Forming Accessories.
   2. Section 03 20 00 – Concrete Reinforcing.
   3. Section 03 30 00 – Cast-In-Place Concrete.
   4. Section 03 39 00 – Concrete Curing.
   5. Section 32 33 00 – Site Furnishings.

1.2 REFERENCE STANDARDS

A. American Association of State Highway and Transportation Officials:
   1. AASHTO M324 - Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.

B. American Concrete Institute:
   1. ACI 301 - Specifications for Structural Concrete.
   2. ACI 304 - Guide for Measuring, Mixing, Transporting, and Placing Concrete.

C. ASTM International:
   1. ASTM A184/A184M - Standard Specification for Fabricated Deformed Steel Bar Mats for Concrete Reinforcement.
   2. ASTM A185/A185M - Standard Specification for Steel Welded Wire Fabric, Plain, for Concrete Reinforcement.
   3. ASTM A497/A497M - Standard Specification for Steel Welded Wire Fabric, Deformed, for Concrete Reinforcement.
   4. ASTM A615/A615M - Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.
   5. ASTM A706/A706M - Standard Specification for Low-Alloy Steel Deformed and Plain Bars for Concrete Reinforcement.
   6. ASTM A767/A767M - Standard Specification for Zinc-Coated (Galvanized) Steel Bars for Concrete Reinforcement.
   7. ASTM A775/A775M - S Standard Specification for Epoxy-Coated Steel Reinforcing Bars.
   8. ASTM A884/A884M - Standard Specification for Epoxy-Coated Steel Wire and Welded Wire Reinforcement.

9. ASTM A934/A934M - Standard Specification for Epoxy-Coated Prefabricated Steel Reinforcing Bars.
10. ASTM C31/C31M - Standard Practice for Making and Curing Concrete Test Specimens in the Field.
11. ASTM C33 - Standard Specification for Concrete Aggregates.
12. ASTM C39/C39M - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
13. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete.
14. ASTM C143/C143M - Standard Test Method for Slump of Hydraulic Cement Concrete.
15. ASTM C150 - Standard Specification for Portland Cement.
16. ASTM C172 - Standard Practice for Sampling Freshly Mixed Concrete.
17. ASTM C173/C173M - Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method.
18. ASTM C231 - Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method.
19. ASTM C260 - Standard Specification for Air-Entraining Admixtures for Concrete.
20. ASTM C309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.
21. ASTM C494/C494M - Standard Specification for Chemical Admixtures for Concrete.
22. ASTM C595 - Standard Specification for Blended Hydraulic Cements.
23. ASTM C618 - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Concrete.
24. ASTM C979 - Standard Specification for Pigments for Integrally Colored Concrete.
25. ASTM C989 - Standard Specification for Ground Granulated Blast-Furnace Slag for Use in Concrete and Mortars.
26. ASTM C1017/C1017M - Standard Specification for Chemical Admixtures for Use in Producing Flowing Concrete.
27. ASTM C1064/C1064M - Standard Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete.
28. ASTM C1116 - Standard Specification for Fiber-Reinforced Concrete and Shotcrete.
29. ASTM C1315 - Standard Specification for Liquid Membrane-Forming Compounds Having Special Properties for Curing and Sealing Concrete.
30. ASTM C1371 - Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers.
31. ASTM C1549 - Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer.
32. ASTM D1751 - Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
33. ASTM D1752 - Standard Specification for Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction.
34. ASTM D6690 - Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.
35. ASTM E408 - Standard Test Methods for Total Normal Emittance of Surfaces Using Inspection-Meter Techniques.
36. ASTM E903 - Standard Test Method for Solar Absorptance, Reflectance, and Transmittance of Materials Using Integrating Spheres.
37. ASTM E1918 - Standard Test Method for Measuring Solar Reflectance of Horizontal and Low-Sloped Surfaces in the Field.

38. ASTM E1980 - Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces.

1.3 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Product Data:
   1. Submit data on concrete materials, joint filler and admixtures curing compounds.

C. Design Data:
   1. Submit concrete mix design for each concrete strength. Submit separate mix designs when admixtures are required for the following:
      a. Hot and cold weather concrete work.
   2. Identify mix ingredients and proportions, including admixtures.
   3. Identify chloride content of admixtures and whether or not chloride was added during manufacture.

D. Source Quality Control Submittals: Indicate results of shop tests and inspections.

1.4 QUALITY ASSURANCE

A. Perform Work in accordance with ACI 301.

B. Obtain cementitious materials from same source throughout.

C. Perform Work in accordance with State of Michigan Department of Transportation standard.

D. Maintain one copy of each document on site.

1.5 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing Products specified in this section with minimum three years documented experience.

B. Installer: Company specializing in performing work of this section with minimum 3 years documented experience.

1.6 AMBIENT CONDITIONS

A. Section 01 50 00 - Temporary Facilities and Controls: Ambient conditions control facilities for product storage and installation.

B. Do not place concrete when base surface temperature is less than 40 degrees F, or surface is wet or frozen.

PART 2 PRODUCTS

2.1 AGGREGATE BASE COURSE

A. Aggregate Base Course: As specified in Section 32 11 23.

2.2 CONCRETE PAVING

A. Performance / Design Criteria:
   1. In accordance with Municipal, State, and Federal standards.

B. Form Materials:
   1. Form Materials: As specified in Section 03 10 00.
   2. Wood or Steel form material, profiled to suit conditions.
   3. Joint Filler: ASTM D1751; Asphalt impregnated fiberboard or felt, 1/2 inch thick.
   4. ANSI/ASTM D1751, performed type; 1/2 inch thick, full depth of concrete manufactured by ACD International, W.R. Meadows or equal.

C. Reinforcement:
   1. Reinforcing Steel and Wire Fabric: Conform to Municipal, State and Federal Standards. All reinforcement steel shall be epoxy coated.

D. Concrete Materials:
   1. Concrete Materials: As specified in Section 03 30 00.

2.3 MIXES

A. Concrete Mix - By Performance Criteria:
   1. Mix concrete in accordance with ACI 304. Deliver concrete in accordance with ASTM C94/C94M.
   2. Select proportions for normal weight concrete in accordance with ACI 301 Method 2.
   3. Provide concrete to the following criteria:
      a. As specified in 03 30 00 Concrete Cast in Place.
   4. Limit the following cementitious materials to maximum percentage by mass of all cementitious materials:
      a. As specified in 03 30 00.
   5. Use accelerating admixtures in cold weather only when approved by the Architect/Engineer in writing. Use of admixtures will not relax cold weather placement requirements.
   6. Use calcium chloride only when approved by the Engineer in writing.
   7. Use set retarding admixtures during hot weather only when approved by the Engineer in writing.

2.4 FINISHES

A. Shop Finishing - Reinforcement:
   1. Galvanized Finish for Steel Bars: ASTM A767/A767M, Class I, hot dip galvanized after fabrication.
   2. Epoxy Coated Finish for Steel Bars: ASTM A775/A775M.

B. Epoxy Coated Finish for Steel Wire: ASTM A884/A884M; Class A, using ASTM A775/A775M.

2.5 ACCESSORIES

A. Curing Compound: ASTM C309, Type 1, FS TT-C-800, 30 percent solids manufactured by ACD International or equal.

B. Liquid Surface Sealer: Son-No-Mar manufactured by Sonneborn Building Products or equal.

C. Joint Sealers: Type II or Type III; hot applied type.

2.6 SOURCE QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Testing and Inspection Services.

B. Submit proposed mix design of each class of concrete to appointed firm for review prior to commencement of work. Engineer will then submit to MDOT in accordance with Section 01 30 00.

C. Tests on cement, aggregates, and mixes will be performed to ensure conformance with specified requirements.

D. Test samples in accordance with ACI 301.

E. Provide certification that materials conform with specified requirements.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for installation examination.

B. Verify compacted subgrade and granular subbase is dry and ready to support paving and imposed loads.
   1. Remove soft subbase and replace with compacted fill as specified in Section 32 11 23.

C. Verify gradients and elevations of base are correct.

3.2 PREPARATION

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for installation preparation.

B. Moisten substrate to minimize absorption of water from fresh concrete.

C. Coat surfaces of manhole and catch basin frames with oil to prevent bond with concrete paving.

D. Verify correct line and grade of base.

E. Firmly stake forms to the required line and grade and provide for a finish transverse slope of 1/4 inch per foot towards the center of the road.

F. Notify Engineer minimum 48 hours prior to commencement of concreting operations.

G. Form sub-grade by excavating or filling to the required line and grade for bottom of concrete.

H. Make fills with granular material.

I. Remove unstable material from sub-grade.

J. Compact sub-grade to insure stability.

3.3 INSTALLATION

A. Subbase:
   1. Aggregate Subbase: Install as specified in Section 32 11 23.

B. Forms:
   1. Place and secure forms and screeds to correct location, dimension, profile, and gradient.
   2. Assemble formwork to permit easy stripping and dismantling without damaging concrete.

C. Removal:
   1. Provide curb cut by saw-cutting and removing the full curb section and gutter pan at locations where the proposed sidewalk adjoins existing curb and gutter at roadways and drives.
   2. Remove concrete curb full depth as shown on the drawings.
   3. Remove rubble, place compacted granular fill to correct line and grade.
   4. Leave existing reinforcement to extend 6 inches into proposed gutter pan.

D. Reinforcement:
   1. Place two #4 bars the entire length of the proposed concrete, lapped and tied to the existing reinforcement, or as shown on the plans.
   2. Dowel proposed #4 bars 12 inches into existing concrete where existing bars were cut off or are absent.
   3. Place reinforcing at mid-height of paving.
   4. Interrupt reinforcing at contraction expansion joints.
   5. Place dowels to achieve paving and curb alignment as detailed.
   6. Provide doweled joints as specified in MDOT Standard Specifications for Construction.
   7. Repair damaged galvanizing or epoxy coating to match shop finish.

E. Placing Concrete:
   1. Place concrete using the slip form technique.
   2. Ensure reinforcing, inserts, embedded parts, and formed joints are not disturbed during concrete placement.
   3. Place concrete continuously over the full width of the panel and between predetermined construction joints. Do not break or interrupt successive pours such that cold joints occur.
   4. Thickness:
      a. Sidewalks: 4 inches normal and 6 inches at driveways, ramps, and parking areas.

b. Curb cut and Gutter: Match existing.

5. Width:
   a. Sidewalks: Match existing (minimum of 4').
   b. Cut curb and Gutter: As shown on the drawings.
6. Place concrete in accordance with the Township and MDOT current Standards for Construction.

F. Joints
1. Place expansion joints at 20 foot intervals. Align curb, gutter, and sidewalk joints.
2. Place joint filler between paving components and building or other appurtenances.
3. Cut joints shall be not less than 1/8 inch nor more than 1/4 inch in width and shall be finished smooth and true to line. Cut 1/4 minimum into depth of slab.
4. Seal joints as in accordance with MDOT Standard Specification for Construction.
5. Place expansion joints between sidewalk and back of abutting parallel curb or gutter and between sidewalk and buildings or other rigid structures.
6. Place expansion joints between sidewalk approaches and back of curb or gutter or edge of pavement.
7. Place expansion joint filler the full length of the sidewalk with the top flush with the finished surface of the sidewalk.
8. Contraction Joints: Divide sidewalk into square unit areas of nor more than 36 square feet nor less than 16 square feet.
9. Place joint over culvert.

G. Finishing:
1. After concrete has been struck off to finish grade, float surface with a steel float to produce a smooth surface.
2. Area Paving: Light broom.
3. Sidewalk Paving: Light broom.
4. Median Barrier: Light broom.
5. Curbs and Gutters: Light broom.
6. Direction of Texturing: Lightly broom transversely across the surface to create a slightly rough surface. Round edges and joint to a radius of 1/4 inch with an approved finishing tool.
7. Place curing compound on exposed concrete surfaces immediately after finishing. Apply in accordance with manufacturer's instructions.

H. Curing and Protection
1. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
2. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.
3. During cold weather, protect concrete from freezing for a period of 3 days.
4. Protect concrete from traffic for a minimum of 7 days.

I. Finish Grading
1. Place surplus excavation in outlawn and level to existing contours.
2. Remove excess excavation unable to be used in outlawn.
3. Spread 4 inches minimum topsoil over entire disturbed area.
4. Furnish and install embankment in accordance with MDOT Standard Specifications, Section 2.08.11.

3.4 TOLERANCES

A. Section 01 40 00 - Quality Requirements: Tolerances.

B. Maximum Variation of Surface Flatness: 1/4 inch in 10 ft.

C. Maximum Variation From True Position: 1/4 inch.

3.5 FIELD QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Requirements for inspecting, testing.

B. Engineer will take cylinders and perform slump and air entrainment tests in accordance with ACI 301. The frequency the tests are taken, shall be at the Engineer's discretion.

C. Strength Test Samples:
   1. Sampling Procedures: ASTM C172.
   2. Cylinder Molding and Curing Procedures: ASTM C31/C31M, cylinder specimens, standard cured.
   3. Sample concrete and make one set of three cylinders for every 75 cu yds or less of each class of concrete placed each day.
   4. Make one additional cylinder during cold weather concreting, and field cure.

D. Field Testing:
   1. Slump Test Method: ASTM C143/C143M.
   2. Air Content Test Method: ASTM C173/C173M.
   3. Temperature Test Method: ASTM C1064/C1064M.
   4. Measure slump and temperature for each compressive strength concrete sample.
   5. Measure air content in air entrained concrete for each compressive strength concrete sample.

E. Cylinder Compressive Strength Testing:
   1. Test Method: ASTM C39/C39M.
   2. Test Acceptance: In accordance with State of Michigan Department of Transportation's Standards.
   3. Test one cylinder at 7 days.
   4. Test three cylinders at 28 days.
   5. Dispose remaining cylinders when testing is not required.

F. Maintain records of placed concrete items. Record date, location of pour, quantity, air temperature, and test samples taken.

3.6 PROTECTION

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for protecting finished Work.

B. Immediately after placement, protect paving from premature drying, excessive hot or cold temperatures, and mechanical injury.

C. Do not permit pedestrian vehicular traffic over paving for 7 days minimum after finishing.

END OF SECTION

SECTION 32 15 00

CRUSHED STONE PATH

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Crushed stone limestone mix for path topping.

B. Aggregate base course.

1.2 RELATED SECTIONS

A. Section 31 22 13 - Rough Grading.

B. Section 32 11 23 – Aggregate Base Course.

C. Section 32 91 19 - Landscape Grading.

1.3 REFERENCES

A. ANSI/ASTM C117 - Test Method for Materials Finer than 75 mm (No. 200) Sieve in Mineral Aggregates by Washing.

B. ANSI/ASTM C136 - Method for Sieve Analysis of Fine and Coarse Aggregates.

C. Test method for density of soil in place with loss by wash less than 15% - One Point Michigan Cone Test.

D. Test method for density of soil in place with loss by wash greater than 15% - One Point T-99 Test.

E. MDOT Standard Specifications for Construction.

F. ASTM D2992 - Test Methods of Density of Soil and Soil - Aggregate in Place by the Nuclear Method (Shallow Depth).

1.4 SUBMITTALS

A. Submit under provisions of Section 01 30 00.

PART 2 PRODUCTS

2.1 MATERIALS

A. Crushed limestone fines.

Limestone fines shall meet the following specifications:

100%	3/8”
100%	#4
85-95%	#8
60-70%	#16
45-55%	#30
40-50%	#40
35-45%	#50
35-45%	#60
25-35%	#100
15-25%	Loss By Wash (LBW)

B. Aggregate for base course: MDOT 22A compacted crushed limestone.

C. Subbase: MDOT Class II, as specified in drawings.

D. Binder: Binder Organic Lock; By Envirobond Products Corp., (866) 636-8476, www.organic-look.com/ or approved equal.
1. Powdered organic binder designed to be blended with aggregate.
2. Made from 100% naturally occurring materials
3. Install per manufacturers instructions.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify subbase and base have been inspected, gradients and elevations are correct, and are dry.

3.2 AGGREGATE PLACEMENT

A. Mix the binder into the aggregate thoroughly evenly.

B. Spread aggregate mix to a total compacted thickness as shown on detail sheet.

C. Place aggregate mix in 1-2" layers and roller compact.

D. Level and contour surfaces to elevations and gradients indicated.

E. Compact placed aggregate materials to achieve compaction to 95 percent of its maximum dry density in accordance with MDOT Standard requirements.

F. Add water to assist compaction. If excess water is apparent, remove aggregate and aerate to reduce moisture content.

G. Use mechanical vibrating tamping in areas inaccessible to compaction equipment.

3.3 TOLERANCES

A. Flatness: Maximum variation of 1/4 inch measured with 10 foot straight edge.

B. Scheduled Compacted Thickness: Within 1/4 inch.

C. Variation from True Elevation: Within 1/2 inch.

3.4 FIELD QUALITY CONTROL

A. Field inspection and testing will be performed under provisions of Section 01 40 00.

B. Gradation of Aggregate: In accordance with ASTM C136.

C. Compaction testing will be performed as specified.

D. If tests indicate Work does not meet specified requirements, remove Work, replace and retest at no cost to Owner.

E. Frequency of Tests: At the discretion of Engineer.

END OF SECTION

SECTION 32 18 16.33

PLAYGROUND PROTECTIVE SURFACES

PART 1 GENERAL

1.1 WORK INCLUDED

A. Playground Surfacing; typed as indicated on the drawings and in this section.

1.2 RELATED SECTIONS

A. Section 01 33 00 – Submittals

B. Section 03 30 00 – Cast-In-Place Concrete

C. Section 11 68 13 – Playground Equipment

D. Section 31 22 13 – Rough Grading

E. Section 31 23 16 – Excavation

F. Section 31 23 17 – Trenching

G. Section 32 11 23 – Aggregate Base Courses

H. Section 32 13 13 – Concrete Paving

1.3 REFERENCES

A. CPSC – Consumer Product Safety Commission, Public Playground Safety Handbook.

B. ASTM F1487 – American Society for Testing and Materials, Playgrounds for Public Use.

C. ADAAG – Americans with Disabilities Act Accessibility Guidelines for Play Areas.

D. ASTM C67 – Standard Test Method for Weathering and Aging of Surface Systems and Materials and Standard Test Method for Rubber – Deterioration in an Air Over.

E. ASTM D412 – Standard Test Method for Vulcanized Rubber and Thermoplastic rubbers and Thermoplastic Elastomers-tension.

F. ASTM D624 – Standard Test Method for Tear Strength of Conventional Bulcanized Rubber and Thermoplastic Elastomers.

G. ASTM D2047 – Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull Meter Method.

H. ASTM D2434 – Standard Test Method for Permeability of Granular Soils (Constant Head).

I. ASTM D2859 – Standard Test Method for the Surface Flammability of Products (Burn Pill Test).

J. ASTM D3776 – Standard Test Methods for Mass Per Unit Area (Weight) of Fabric.

K. ASTM D3786 – Standard Test Method for Bursting Strength of Textile Fabrics - Diaphragm Bursting Strength Tester Method.

L. ASTM D4491 – Standard Test Methods for Water Permeability of Geotextiles by Permittivity.

M. ASTM D4533 – Standard Test Method for Trapezoid Tearing Strength of Geotextiles.

N. ASTM D4632 – Standard Test Method for Grab Breaking Load and Elongation of Geotextiles.

O. ASTM D4716 – Standard Test Method for Determining the (In plane) Flow rate per Unit Width and Hydraulic Transmissivity of a Geosynthetic Using a Constant Head.

P. ASTM D4751 – Standard Test Method for Determining Apparent Opening Size of a Geotextile. ASTM D4833 – Standard Test Method for Index Puncture Resistance of Geomembranes, and Related Products.

Q. ASTM D5199 – Standard Test Method for Measuring the Nominal Thickness of Geosynthetics.

R. ASTM E108 – Standard Test Method for Fire Tests of Surface Systems and Materials.

S. ASTM E303 – Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester.

T. ASTM F1292 and F355-95 – Standard Test Method for Impact Attenuation of Surface Systems Under and Around Playground Equipment.

U. ASTM F1951 – Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.

V. ASTM F2075 – Standard Specification for Engineered Wood Fiber for Use as a Playground Safety Surface Under and Around Playground Equipment.

W. 16 CFR 1500.44 – Method for Determining Extremely Flammable and Flammable Solids.

1.4 QUALITY ASSURANCE

A. Manufacturer Qualifications:
   1. Member of International Play Equipment Manufacturer's Association (IPEMA).
   2. Total Liability Insurance Coverage: $11,000,000.
   3. Sales Representatives Installers trained by National Playground Safety Institute (NPSI).

B. Installer Qualifications:
   1. A firm or individual certified, licensed, or otherwise qualified by surfacing manufacturer as experienced and with sufficient trained staff to install manufacturer's products according to specified requirements.
   2. Certified installers who have successfully completed a Certified Installers Training Program.

C. Workmanship: The Contractor is responsible for correction of work which does not conform to the specified requirements.

1.5 SUBMITTALS

A. Submit under the provision of Section 01 33 00.

B. Product Data: Submit manufacturer's product data, specifications, warranty, detailed drawings, maintenance, and installation instructions, ASTM F 1292 test results, ASTM F1951 Accessibility test results, ASTM F2075 test results, and IPEMA Certificates of Compliance, where applicable.

C. Samples: Submit manufacturer’s samples of each specified material.

D. Manufacturer’s / Installer’s Certificates: Certify products meet or exceed the specified requirements.

E. Quality Assurance / Control: Certificate of qualifications of the surfacing installer.

F. Maintenance Instructions: Submit manufacturer’s maintenance and cleaning instructions for playground surfacing.

G. Warranty: Submit manufacturer’s standard warranty.

H. References: Submit at least 3 customers that have been using the product for at least 3 years.

1.6 DELIVERY, STORAGE AND HANDLING

A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer. Deliver engineered wood fiber playground surfacing to site in bulk.

B. Storage: Store materials in a clean, dry area in accordance with manufacturer's instructions. Store engineered wood fiber playground surfacing to prevent contamination.

C. Handling: Protect materials during handling and installation to prevent damage. Handle engineered wood fiber playground surfacing to prevent contamination.

1.7 COORDINATION

A. Coordinate work with the work of other trades on the project.

1.8 WARRANTY

A. Warranty covers Playground Surfacing for the following periods:
   1. Poured-In-Place Rubber:
      a. Aromatic Urethane: 7 years.
      b. Aliphatic Urethane: 10 years.
   2. Engineered Wood Fiber: 15 years.
   3. Wear Mats: 5 years.

B. Operation Data: Submit for continuing Owner maintenance.

C. Maintenance Data: Include methods for cleaning, replacement, and repair.

PART 2 PRODUCTS

2.1 MANUFACTURER / PRODUCT

A. Poured-In-Place Rubber Safety Surfacing:
   1. Acceptable Manufacturer(s):
      a. Vitriturf (represented by Penchura), 889 S. Old US 23, Brighton, MI 48114, 810-229-6245, www.penchura.com.
      b. GT Impax Poured, Gametime represented by Sinclair Recreation), 128 East Lakewood Blvd, Ste 40, Holland, MI 48424, (800) 444-4954, www.sinclair-rec.com.
      c. Or approved equal.

B. Engineered Wood Fiber Safety Surfacing:
   1. Acceptable Manufacturer(s):
      a. Wood carpet, Zeager Bros., Inc. (represented by Penchura), 889 S. Old US 23, Brighton, MI 48114, 810-229-6245, www.penchura.com
      b. GT Impax Fiber, Gametime represented by Sinclair Recreation), 128 East Lakewood Blvd, Ste 40, Holland, MI 48424, (800) 444-4954, www.sinclair-rec.com.
      c. Or approved equal.

C. Rubber Wear Mats:
   1. Acceptable Manufacturer(s):
      a. DynaCushion Beveled Wear Mat, Pierceton Rubber Products, Inc., 3076 South 900 East, Pierceton, IN 46562, 574-265-1996, www.dynacushion.com
      b. Or approved equal.
   2. Wear Mats installation shall not create a trip hazard.
   3. Wear Mats will be installed in per the manufacturer's specifications and will be required in the following locations:
      a. Swings – Wear mat shall be placed directly beneath the swing seat, minimum size four (4) feet by six (6) feet for each swing
      b. Slides – Wear mat shall be placed directly under the slide exit, minimum size three (3) feet by three (3) feet.
      c. Merry-go-rounds – Wear mat shall extend a minimum of three (3) feet beyond the outside edge of the merry-go-round, in all directions.

D. GEOTEXTILE FABRIC
1. Geotextile fabric shall be a polyester drainage fabric, non-woven, meeting or exceeding the following:

PROPERTIES	STANDARD	AMOCO 4546
Physical		*(or approved equal)*
• Grab Tensile Strength	• ASTM-D 4632	• 90 oz/yd^2
• Grab Tensile Elongation	• ASTM- D 4632	• 50%
• Mullen Burst	• ASTM- D 3786	• 185 lb/in^2
• Puncture	• ASTM- D 4833	• 55lbs.
• Trapezoidal Tear	• ASTM- D 4533	• 40 lbs.
• UV Resistance	• ASTM- D 4355	• 70/500 (%@_hr)
Hydraulic		
• Apparent Opening Size	• ASTM- D 4751	• 70 (US std. Sieve no.)
• Permittivity	• ASTM- D 4491	
• Flow Rate	• ASTM- D 4491	• 145 gal/min/feet^2

E. PEASTONE
1. Peastone shall be natural smooth rock material. Supply sample of peastone to the Owner for approval prior to delivery to site.
2. Peastone is not an acceptable safety surfacing; it is only to be used in the drainage layer as indicated on the drawings.

PART 3 EXECUTION

3.1 INSPECTION

A. Contractor shall thoroughly examine the areas and conditions under which excavation, filling, and grading are to be performed. Architect is to be notified, in writing, of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner.

3.2 PREPARATION

A. Excavate play area as indicated on the drawings and to ensure proper safety use zones of play equipment.

B. The subgrade shall be graded to a minimum of 1% and a maximum of 5% to insure positive drainage throughout the site.

C. Remove foreign materials, weeds and undesirable plants and their roots. Remove contaminated subsoil.

D. The subgrade shall be compacted to 95% of the dry density, as determined by the provisions of AASHTO or T 205.

E. Drainage Trenches
1. Dig trenches and construct the drainage as indicated on the drawings.

2. Fabric and stone shall be placed in the trenches, to depths indicated on the drawings.
3. Four (4) inch perforated pipe shall be placed in the trenches, as indicated on the drawings. Unless otherwise indicated on the plans, pipe shall have a minimum slope of 0.5%.
4. All installation sites shall have positive grade to facilitate drainage away from the playground area and other active areas within the park.

F. Install the playground equipment.

G. Install the edging around the play area.

H. Rubber Poured-In-Place Surfacing:
   1. Aggregate Subbase:
      a. Compacted irregular aggregate sized 0.75 inches or less in size with a
      b. Minimum depth: 4 inches, or as indicated on the drawings.
      c. Tolerance: 0.5".
   2. Concrete Subbase:
      a. Shall meet the requirements of Section 03 30 00.
      b. Minimum Depth: Per manufacturer's recommenations.
      c. Tolerance: 0.125 inches per 10 feet.
      d. Cure Time: 7-21 days, per the manufacturer's recommendations.
   3. Asphalt Subbase:
      a. Shall meet the requirements of Section 32 12 16.
      b. Cure Time: 21-28 days, per the manufacturer's recommendations.
      c. New asphalt must be pressure washed prior to installation of rubber surfacing.
      d. The Contractor shall flood the asphalt surface to ensure proper slope and tolerance.
         i. Any areas holding water to cover a flat nickel shall be patched prior to installation of the rubber surfacing.

3.3 INSTALLATION

A. Begin the safety surfacing only after the play equipment and edging have been installed.

B. All surfacing types shall be installed to the proper depth with the finish surface elevation at the finish grade markers on the play equipment.

C. Geotextile Fabric
   1. Geotextile fabric shall be used as separation between the subsoil and safety surfacing.
   2. In areas where equipment exists, it is necessary to cut the fabric to fit. Once fitted, any cuts should be overlapped with fabric wherever possible.
   3. Geotextile fabric shall be placed on smooth subgrade and all wrinkles removed. All seams shall overlap a minimum of six (6) inches.
   4. Machinery shall not disturb or travel on the geotextile fabric.

D. Wear Mats
   1. Place all wear mats in the required areas per this specification, Part 2, 2.1, B.1.
   2. All wear mats shall be installed as per the manufacturer's specifications to assure maximum impact protection for proposed equipment fall heights.

E. Engineered Wood Fiber (EWF) Safety Surfacing
   1. Place Engineered Wood Fiber Safety Surfacing in all remaining areas, as indicated on the plans.
   2. Rake the EWF level.
   3. All material must be installed to allow for settling and natural compaction.

F. Poured-In-Place Rubber Surfacing
   1. Thoroughly mix materials on site with a rotating tumbler.
   2. The surfacing thickness throughout the playground equipment use zone shall be required to meet the impact attenuation requirements of the manufacturer.
   3. Whenever practical, surfacing material shall be installed in one continuous pour on the same day of up to 2,000 square feet.
      a. Where seams are required a step configuration will be constructed to maintain surfacing integrity.
         i. Step the seam and fully coat the step of the previous work with polyurethane binder to ensure 100% bond with the new work.
      b. Surfaces with multiple seams shall have a topcoat of urethane before being placed into use.
      c. Butt joint seams are not acceptable, except for repairs.
   4. Apply adhesive in small quantities material can be placed before the adhesive dries.
   5. Primer will be used between the attenuation cushion layer and the wear course layer.
   6. Material shall cover all foundations and fill around all elements penetrating the surface.
   7. Minimize excessibe adhesive on adjacent surfaces or play equipment. Spills of adhesive shall be promptly cleaned.
   8. The surface shall be allowed to cure in accordance with the manufacturer's instructions.
      a. The surface shall be protected from all traffic during the curing period, or for a minimum of 48 hours.

3.4 GUARANTEE and MAINTENANCE

A. All Materials and Installations shall be guaranteed by the manufacturer/supplier for a period of one year beyond the date of final acceptance by the Owner. The manufacturer/supplier shall provide a written maintenance plan to the Owner which describes, in detail, any, and all maintenance requirements which will need to be accomplished during the life of the safety surfacing.

3.5 DISPOSAL OF EXCESS AND WASTE MATERIALS

A. Remove excess excavated material, trash, debris and waste materials and legally dispose of such off the property, except as otherwise specifically noted.

3.6 ACCEPTANCE

A. Inspection will be made jointly by the Contractor, Engineer, and the Owner's representative.

B. Upon acceptance of the work by the Engineer and owner, the project will be approved for final payment.

END OF SECTION

SECTION 32 33 00

SITE FURNISHINGS

PART 1 GENERAL

1.1 SUMMARY

A. This section covers supplying and installing all items of site furnishings or amenities, as shown on the drawings, as herein specified, and/or as required for a complete job.

1.2 RELATED SECTIONS

A. Section 01 33 00 - Submittal Procedures.

B. Section 01 60 66 – Product Requirements.

C. Section 03 30 00 – Cast-in-Place Concrete.

D. Submit shop drawings and product data for all items to be installed within this section.

1.3 SUBMITTALS

A. Provide complete product information for all items of site furnishings required for the project to the Engineer for approval.

PART 2 PRODUCTS

2.1 MATERIALS

A. Interpretive Signage “Specialty Viewing Center” Model MCP-SV by Belson Outdoors, 800-323-5664, www.belson.com, or approved equal. Color by owner.

B. Playground Equipment: As specified in Section 11 68 13.

C. Musical Equipment: As specified in Section 11 68 13.

D. Surface Mounted Bench Model PB6-JAM w/ PB1178 (1) armrest, by Belson Outdoors, 800-323-5664, www.belson.com, or approved equal. Color by owner.

E. Transfer Platform (1 ea): Rehabmart, LLC, www.rehabmart.com (800) 827-8283; Aqua Trek Pool Transfer Platform with three steps, model #RS-TP-1000, or approval equal.

PART 3 EXECTION

3.1 INSTALLATION

A. The contractor shall be responsible for any assembly requirements and installation of the site furnishings including concrete footings. Assemble and install per manufacturer’s instructions.

B. Field locate with Owner/Engineer prior to installation, unless noted otherwise.

END OF SECTION

SECTION 32 91 13

SOIL PREPARATION

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Preparation of subsoil.
   2. Soil testing.
   3. Placing topsoil.

B. Related Sections:
   1. Section 31 05 13 – Soils for Earthwork
   2. Section 31 22 13 - Rough Grading
   3. Section 31 23 17 - Trenching
   4. Section 32 91 19 - Landscape Grading
   5. Section 32 92 19 – Seeding

1.2 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Submit minimum 10 lb sample of topsoil proposed. Forward sample to approved testing laboratory in sealed containers to prevent contamination.

C. Test Reports: Indicate topsoil nutrient and pH levels with recommended soil supplements and application rates.

D. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.

E. Disregard sample submission of recent test results are available for type of fill.

1.3 QUALITY ASSURANCE

A. Perform Work in accordance with State of Michigan Department of Transportation’s Standard.

B. Maintain one copy of each document on site.

PART 2 PRODUCTS

2.1 PROTECTION

A. Protect landscaping and other features remaining as final work.

B. Protect existing structures, fences, roads, sidewalks, paving, mailboxes, and curbs.

2.2 SOIL MATERIALS

A. As specified in Section 32 91 19.

2.3 ACCESSORIES

A. Mulching Material: Conwed Verdoyl #2000.

B. Fertilizer: FS O-F-241, Commercial Grade with 12-12-12 analysis.

C. Water: Clean, fresh and free of substances or matter which could inhibit vigorous growth of grass.

D. Erosion Fabric: Jute matting, open weave.

E. Stakes: softwood lumber, chisel pointed.

2.4 SOURCE QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Testing, inspection and analysis requirements.

B. Analyze to ascertain percentage of nitrogen, phosphorus, potash, soluble salt content, organic matter content, and pH value.

C. Provide recommendation for fertilizer and lime application rates for specified seed mix as result of testing.

D. Testing is not required when recent tests and certificates are available for imported topsoil. Submit these test results to testing laboratory. Indicate, by test results, information necessary to determine suitability.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 - Administrative Requirements: Verification of existing conditions before starting work.

B. Verify prepared soil base is ready to receive the Work of this section.

3.2 PREPARATION OF SUBSOIL

A. Prepare sub-soil to eliminate uneven areas and low spots. Maintain lines, levels, profiles and contours. Make changes in grade gradual. Blend slopes into level areas.

B. Remove foreign materials, weeds and undesirable plants and their roots. Remove contaminated sub-soil.

C. Eliminate uneven areas and low spots. Remove debris, roots, branches, stones, in excess of 1/2 inch in size. Remove subsoil contaminated with petroleum products.

D. Scarify subsoil to depth of 3 inches where topsoil is to be placed. Repeat cultivation in areas where equipment, used for hauling and spreading topsoil, has compacted sub-soil.

3.3 PLACING TOPSOIL

A. Spread topsoil to minimum compacted depth of 4 inches over area to be seeded. Rake until smooth.

B. Place topsoil during dry weather and on dry unfrozen subgrade.

C. Remove vegetable matter and foreign non-organic material from topsoil while spreading.

D. Fine grade topsoil to eliminate rough, low or soft areas, and to ensure positive drainage.

E. Install edging at periphery of seeded areas in straight lines to consistent depth.

F. Remove stone, roots, grass, weeds, debris, and foreign material while spreading.

G. Manually spread topsoil around trees and plants to prevent damage.

H. Lightly compact. Roll placed topsoil.

I. Remove surplus subsoil and topsoil from site.

J. Leave stockpile area and site clean and raked, ready to receive landscaping.

K. Place required trees shrubs, fences, and mail boxes in their proper locations.

L. Reconstruct and place guard rails in proper locations to meet MDOT and Municipal specifications.

END OF SECTION

SECTION 32 91 19

LANDSCAPE GRADING

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Final grade topsoil for finish landscaping.

B. Related Sections:
   1. Section 01 40 00 - Quality Requirements
   2. Section 31 05 13 – Soils for Earthwork
   3. Section 31 22 13 - Rough Grading
   4. Section 31 23 23 – Fill
   5. Section 32 92 19 – Seeding
   6. Section 32 93 00 – Plants

1.2 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Submittal procedures

B. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.

1.3 QUALITY ASSURANCE

A. Perform Work in accordance with State of Michigan Department of Transportation Standards.

PART 2 PRODUCTS

2.1 MATERIAL

A. Topsoil: Imported, fabric loam; free of subsoil, roots, grass, excessive amounts of weeds, stone, and foreign matter; acidity range (pH) of 5.5 to 7.5; containing a minimum of 4 percent and a maximum of 25 percent organic matter.

B. Topsoil: Fertile, agricultural soil, typical for locality, capable of sustaining vigorous plant growth, taken from drained site; free of subsoil, clay or impurities, plants, weeds and roots; pH value of 5.5 to 7.5.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 - Administrative Requirements: Verification of existing conditions before starting work.

B. Verify building and trench backfilling have been inspected.

C. Verify substrate base has been contoured and compacted.

3.2 PREPARATION

A. Protect landscaping and other features remaining as final Work.

B. Protect existing structures, fences, sidewalks, utilities, paving, and curbs.

3.3 SUBSTRATE PREPARATION

A. Eliminate uneven areas and low spots.

B. Remove debris, roots, branches, stones, in excess of 1/2 inch in size. Remove contaminated subsoil.

C. Scarify surface to depth of 3 inches where topsoil is scheduled. Scarify in areas where equipment used for hauling and spreading topsoil has compacted subsoil.

3.4 PLACING TOPSOIL

A. Place topsoil in areas where seeding, sodding or planting, is required to minimum depth of 3 inches. Place topsoil during dry weather.

B. Fine grade topsoil to eliminate rough or low areas. Maintain profiles and contour of subgrade.

C. Remove roots, weeds, rocks, and foreign material while spreading.

D. Manually spread topsoil close to plant material, building, utilities and curbs to prevent damage.

E. Roll placed topsoil.

F. Remove surplus subsoil and topsoil from site.

G. Leave stockpile area and site clean and raked, ready to receive landscaping.

3.5 TOLERANCES

A. Section 01 40 00 - Quality Requirements: Tolerances.

B. Top of Topsoil: Plus or minus 1/2 inch.

3.6 PROTECTION OF INSTALLED WORK

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for protecting finished Work.

B. Prohibit construction traffic over topsoil.

3.7 SCHEDULES

A. Compacted topsoil thicknesses: Minimum four inches (4”) thickness.
   1. Seeded Grass: 4 inches
   2. Sod: 4 inches
   3. Shrub Beds: 18 inches
   4. Flower Beds: 12 inches

END OF SECTION

CERTIFICATE OF LIABILITY INSURANCE

DATE (M 7/7

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Red Cedar Insurance Agency
4970 Cascade Road SE
Grand Rapids MI 49546

License#: 0652179

CONTACT NAME: Red Cedar Insurance Agency
PHONE (A/C, No, Ext): 844-733-2332 **FAX (A/C, No):**
E-MAIL ADDRESS: certificates@redcedaragency.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : The Phoenix Insurance Company	25623
INSURER B : Travelers Property Casualty Co. Of America	25674
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
LJCONST-01
LJ Construction, Inc.
5863 South Kingston Rd
Clifford MI 48727

COVERAGES **CERTIFICATE NUMBER:** 1734078937 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X **COMMERCIAL GENERAL LIABILITY** CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC OTHER:	Y	Y	4T-CO-9X538338-PHX-25	4/8/2025	4/8/2026	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG 	$ 1,000,000 $ 1,000,000 $ 10,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $
B	**AUTOMOBILE LIABILITY** X ANY AUTO OWNED AUTOS ONLY HIRED AUTOS ONLY SCHEDULED AUTOS NON-OWNED AUTOS ONLY	Y	Y	BA-B1755317-25-2S-G	4/8/2025	4/8/2026	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) 	$ 1,000,000 $ $ $ $
B	X **UMBRELLA LIAB** X OCCUR **EXCESS LIAB** CLAIMS-MADE DED RETENTION $	Y	Y	CUP-B1765568-25-2S	4/8/2025	4/8/2026	EACH OCCURRENCE AGGREGATE 	$ 8,000,000 $ 8,000,000 $
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A					PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ $ $
B	Inland Marine			QT-630-9T260847-TIL-25	4/8/2025	4/8/2026	Rented/Leased Equip Installation Floater	500,000 350,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Project: Manly Bennett Park & Water Trail Access Improvement - Hamburg Township, MI Project #133809SG2023
Hamburg Township and Spicer Group, Inc. and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all are Additional Insured on General Liability and Auto Liability as required by written contract. Primary and Non-contributory on General Liability and Auto Liability applies per the attached. A Waiver of Subrogation applies in favor of Hamburg Township and Spicer Group, Inc. and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all on the above General Liability and Auto Liability as required by written contract. The above Umbrella policy follows form over the above General Liability and Auto Liability except where limited by policy provisions. Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions attached.

CERTIFICATE HOLDER

Hamburg Township
P.O. Box 157
Hamburg, MI 48139

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DESIGNATED PERSON OR ORGANIZATION – NOTICE OF CANCELLATION PROVIDED BY US

This endorsement modifies insurance provided under the following:
ALL COVERAGE PARTS INCLUDED IN THIS POLICY

SCHEDULE

CANCELLATION: **Number of Days Notice:** 30

PERSON OR ORGANIZATION: ANY PERSON OR ORGANIZATION TO WHOM YOU HAVE AGREED IN A WRITTEN CONTRACT THAT NOTICE OF CANCELLATION OF THIS POLICY WILL BE GIVEN, BUT ONLY IF:

1. YOU SEND US A WRITTEN REQUEST TO PROVIDE SUCH NOTICE, INCLUDING THE NAME AND ADDRESS OF SUCH PERSON OR ORGANIZATION, AFTER THE FIRST NAMED INSURED RECEIVES NOTICE FROM US OF THE CANCELLATION OF THIS POLICY; AND
2. WE RECEIVE SUCH WRITTEN REQUEST AT LEAST 14 DAYS BEFORE THE BEGINNING OF THE APPLICABLE NUMBER OF DAYS SHOWN IN THIS SCHEDULE.

ADDRESS:
THE ADDRESS FOR THAT PERSON OR ORGANIZATION INCLUDED IN SUCH WRITTEN REQUEST FROM YOU TO US.

PROVISIONS

If we cancel this policy for any legally permitted reason other than nonpayment of premium, and a number of days is shown for Cancellation in the Schedule above, we will mail notice of cancellation to the person or organization shown in such Schedule. We will mail such notice to the address shown in the Schedule above at least the number of days shown for Cancellation in such Schedule before the effective date of cancellation.

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

BUSINESS AUTO EXTENSION ENDORSEMENT

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

GENERAL DESCRIPTION OF COVERAGE – This endorsement broadens coverage. However, coverage for any injury, damage or medical expenses described in any of the provisions of this endorsement may be excluded or limited by another endorsement to the Coverage Part, and these coverage broadening provisions do not apply to the extent that coverage is excluded or limited by such an endorsement. The following listing is a general coverage description only. Limitations and exclusions may apply to these coverages. Read all the provisions of this endorsement and the rest of your policy carefully to determine rights, duties, and what is and is not covered.

A. BROAD FORM NAMED INSURED

B. BLANKET ADDITIONAL INSURED

C. EMPLOYEE HIRED AUTO

D. EMPLOYEES AS INSURED

E. SUPPLEMENTARY PAYMENTS – INCREASED LIMITS

F. HIRED AUTO – LIMITED WORLDWIDE COVERAGE – INDEMNITY BASIS

G. WAIVER OF DEDUCTIBLE – GLASS

H. HIRED AUTO PHYSICAL DAMAGE – LOSS OF USE – INCREASED LIMIT

I. PHYSICAL DAMAGE – TRANSPORTATION EXPENSES – INCREASED LIMIT

J. PERSONAL PROPERTY

K. AIRBAGS

L. NOTICE AND KNOWLEDGE OF ACCIDENT OR LOSS

M. BLANKET WAIVER OF SUBROGATION

N. UNINTENTIONAL ERRORS OR OMISSIONS

PROVISIONS

A. BROAD FORM NAMED INSURED

The following is added to Paragraph **A.1.**, **Who Is An Insured**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

Any organization you newly acquire or form during the policy period over which you maintain 50% or more ownership interest and that is not separately insured for Business Auto Coverage. Coverage under this provision is afforded only until the 180th day after you acquire or form the organization or the end of the policy period, whichever is earlier.

B. BLANKET ADDITIONAL INSURED

The following is added to Paragraph **c.** in **A.1.**, **Who Is An Insured**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

Any person or organization who is required under a written contract or agreement between you and that person or organization, that is signed and executed by you before the "bodily injury" or "property damage" occurs and that is in effect during the policy period, to be named as an additional insured is an "insured" for Covered Autos Liability Coverage, but only for damages to which this insurance applies and only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured provision contained in Section **II**.

C. EMPLOYEE HIRED AUTO

1. The following is added to Paragraph **A.1.**, **Who Is An Insured**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

An "employee" of yours is an "insured" while operating an "auto" hired or rented under a contract or agreement in an "employee's" name, with your permission, while performing duties related to the conduct of your business.

2. The following replaces Paragraph **b.** in **B.5.**, **Other Insurance**, of **SECTION IV – BUSINESS AUTO CONDITIONS**:

b. For Hired Auto Physical Damage Coverage, the following are deemed to be covered "autos" you own:

(1) Any covered "auto" you lease, hire, rent or borrow; and

(2) Any covered "auto" hired or rented by your "employee" under a contract in an "employee's" name, with your

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permission, while performing duties related to the conduct of your business.

However, any "auto" that is leased, hired, rented or borrowed with a driver is not a covered "auto".

D. EMPLOYEES AS INSURED

The following is added to Paragraph **A.1.**, **Who Is An Insured**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

Any "employee" of yours is an "insured" while using a covered "auto" you don't own, hire or borrow in your business or your personal affairs.

E. SUPPLEMENTARY PAYMENTS – INCREASED LIMITS

1. The following replaces Paragraph **A.2.a.(2)**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

(2) Up to $3,000 for cost of bail bonds (including bonds for related traffic law violations) required because of an "accident" we cover. We do not have to furnish these bonds.

2. The following replaces Paragraph **A.2.a.(4)**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

(4) All reasonable expenses incurred by the "insured" at our request, including actual loss of earnings up to $500 a day because of time off from work.

F. HIRED AUTO – LIMITED WORLDWIDE COVERAGE – INDEMNITY BASIS

The following replaces Subparagraph **(5)** in Paragraph **B.7.**, **Policy Period, Coverage Territory**, of **SECTION IV – BUSINESS AUTO CONDITIONS**:

(5) Anywhere in the world, except any country or jurisdiction while any trade sanction, embargo, or similar regulation imposed by the United States of America applies to and prohibits the transaction of business with or within such country or jurisdiction, for Covered Autos Liability Coverage for any covered "auto" that you lease, hire, rent or borrow without a driver for a period of 30 days or less and that is not an "auto" you lease, hire, rent or borrow from any of your "employees", partners (if you are a partnership), members (if you are a limited liability company) or members of their households.

(a) With respect to any claim made or "suit" brought outside the United States of America, the territories and possessions of the United States of America, Puerto Rico and Canada:

(i) You must arrange to defend the "insured" against, and investigate or settle any such claim or "suit" and keep us advised of all proceedings and actions.

(ii) Neither you nor any other involved "insured" will make any settlement without our consent.

(iii) We may, at our discretion, participate in defending the "insured" against, or in the settlement of, any claim or "suit".

(iv) We will reimburse the "insured" for sums that the "insured" legally must pay as damages because of "bodily injury" or "property damage" to which this insurance applies, that the "insured" pays with our consent, but only up to the limit described in Paragraph **C.**, Limits Of Insurance, of SECTION **II** – COVERED AUTOS LIABILITY COVERAGE.

(v) We will reimburse the "insured" for the reasonable expenses incurred with our consent for your investigation of such claims and your defense of the "insured" against any such "suit", but only up to and included within the limit described in Paragraph **C.**, Limits Of Insurance, of SECTION **II** – COVERED AUTOS LIABILITY COVERAGE, and not in addition to such limit. Our duty to make such payments ends when we have used up the applicable limit of insurance in payments for damages, settlements or defense expenses.

(b) This insurance is excess over any valid and collectible other insurance available to the "insured" whether primary, excess, contingent or on any other basis.

(c) This insurance is not a substitute for required or compulsory insurance in any country outside the United States, its territories and possessions, Puerto Rico and Canada.

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You agree to maintain all required or compulsory insurance in any such country up to the minimum limits required by local law. Your failure to comply with compulsory insurance requirements will not invalidate the coverage afforded by this policy, but we will only be liable to the same extent we would have been liable had you complied with the compulsory insurance requirements.

(d) It is understood that we are not an admitted or authorized insurer outside the United States of America, its territories and possessions, Puerto Rico and Canada. We assume no responsibility for the furnishing of certificates of insurance, or for compliance in any way with the laws of other countries relating to insurance.

G. WAIVER OF DEDUCTIBLE – GLASS

The following is added to Paragraph **D.**, **Deductible**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

No deductible for a covered "auto" will apply to glass damage if the glass is repaired rather than replaced.

H. HIRED AUTO PHYSICAL DAMAGE – LOSS OF USE – INCREASED LIMIT

The following replaces the last sentence of Paragraph **A.4.b.**, **Loss Of Use Expenses**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

However, the most we will pay for any expenses for loss of use is $65 per day, to a maximum of $750 for any one "accident".

I. PHYSICAL DAMAGE – TRANSPORTATION EXPENSES – INCREASED LIMIT

The following replaces the first sentence in Paragraph **A.4.a.**, **Transportation Expenses**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

We will pay up to $50 per day to a maximum of $1,500 for temporary transportation expense incurred by you because of the total theft of a covered "auto" of the private passenger type.

J. PERSONAL PROPERTY

The following is added to Paragraph **A.4.**, **Coverage Extensions**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

Personal Property

We will pay up to $400 for "loss" to wearing apparel and other personal property which is:

(1) Owned by an "insured"; and

(2) In or on your covered "auto".

This coverage applies only in the event of a total theft of your covered "auto".

No deductibles apply to this Personal Property coverage.

K. AIRBAGS

The following is added to Paragraph **B.3.**, **Exclusions**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

Exclusion **3.a.** does not apply to "loss" to one or more airbags in a covered "auto" you own that inflate due to a cause other than a cause of "loss" set forth in Paragraphs **A.1.b.** and **A.1.c.**, but only:

a. If that "auto" is a covered "auto" for Comprehensive Coverage under this policy;

b. The airbags are not covered under any warranty; and

c. The airbags were not intentionally inflated.

We will pay up to a maximum of $1,000 for any one "loss".

L. NOTICE AND KNOWLEDGE OF ACCIDENT OR LOSS

The following is added to Paragraph **A.2.a.**, of **SECTION IV – BUSINESS AUTO CONDITIONS**:

Your duty to give us or our authorized representative prompt notice of the "accident" or "loss" applies only when the "accident" or "loss" is known to:

(a) You (if you are an individual);

(b) A partner (if you are a partnership);

(c) A member (if you are a limited liability company);

(d) An executive officer, director or insurance manager (if you are a corporation or other organization); or

(e) Any "employee" authorized by you to give notice of the "accident" or "loss".

M. BLANKET WAIVER OF SUBROGATION

The following replaces Paragraph **A.5.**, **Transfer Of Rights Of Recovery Against Others To Us**, of **SECTION IV – BUSINESS AUTO CONDITIONS** :

5. Transfer Of Rights Of Recovery Against Others To Us

We waive any right of recovery we may have against any person or organization to the extent required of you by a written contract signed and executed prior to any "accident" or "loss", provided that the "accident" or "loss" arises out of operations contemplated by

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such contract. The waiver applies only to the person or organization designated in such contract.

N. UNINTENTIONAL ERRORS OR OMISSIONS

The following is added to Paragraph **B.2.**, **Concealment, Misrepresentation, Or Fraud**, of **SECTION IV – BUSINESS AUTO CONDITIONS**:

The unintentional omission of, or unintentional error in, any information given by you shall not prejudice your rights under this insurance. However this provision does not affect our right to collect additional premium or exercise our right of cancellation or non-renewal.

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BLANKET ADDITIONAL INSURED – PRIMARY AND NON-CONTRIBUTORY WITH OTHER INSURANCE – CONTRACTORS

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

PROVISIONS

1. The following is added to Paragraph **c.** in **A.1.**, **Who Is An Insured**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

   This includes any person or organization who you are required under a written contract or agreement, that is signed by you before the "bodily injury" or "property damage" occurs and that is in effect during the policy period, to name as an additional insured for Covered Autos Liability Coverage, but only for damages to which this insurance applies and only to the extent of that person's or organization's liability for the conduct of another "insured".

2. The following is added to Paragraph **B.5.**, **Other Insurance** of **SECTION IV – BUSINESS AUTO CONDITIONS**:

   Regardless of the provisions of paragraph **a.** and paragraph **d.** of this part **5. Other Insurance**, this insurance is primary to and non-contributory with applicable other insurance under which an additional insured person or organization is a named insured when a written contract or agreement with you, that is signed by you before the "bodily injury" or "property damage" occurs and that is in effect during the policy period, requires this insurance to be primary and non-contributory.

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DESIGNATED PERSON OR ORGANIZATION – NOTICE OF CANCELLATION PROVIDED BY US

This endorsement modifies insurance provided under the following:

ALL COVERAGE PARTS INCLUDED IN THIS POLICY

SCHEDULE

CANCELLATION: **Number of Days Notice:** 30

PERSON OR ORGANIZATION:
ANY PERSON OR ORGANIZATION
CONTINUED ON IL T8 03

ADDRESS:
CONTINUED ON IL T8 03

CLIFFORD
MI
48727

PROVISIONS

If we cancel this policy for any legally permitted reason other than nonpayment of premium, and a number of days is shown for Cancellation in the Schedule above, we will mail notice of cancellation to the person or organization shown in such Schedule. We will mail such notice to the address shown in the Schedule above at least the number of days shown for Cancellation in such Schedule before the effective date of cancellation.

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BLANKET ADDITIONAL INSURED
(Includes Products-Completed Operations If Required By Contract)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

PROVISIONS

The following is added to **SECTION II – WHO IS AN INSURED**:

Any person or organization that you agree in a written contract or agreement to include as an additional insured on this Coverage Part is an insured, but only:

a. With respect to liability for "bodily injury" or "property damage" that occurs, or for "personal injury" caused by an offense that is committed, subsequent to the signing of that contract or agreement and while that part of the contract or agreement is in effect; and

b. If, and only to the extent that, such injury or damage is caused by acts or omissions of you or your subcontractor in the performance of "your work" to which the written contract or agreement applies. Such person or organization does not qualify as an additional insured with respect to the independent acts or omissions of such person or organization.

The insurance provided to such additional insured is subject to the following provisions:

a. If the Limits of Insurance of this Coverage Part shown in the Declarations exceed the minimum limits required by the written contract or agreement, the insurance provided to the additional insured will be limited to such minimum required limits. For the purposes of determining whether this limitation applies, the minimum limits required by the written contract or agreement will be considered to include the minimum limits of any Umbrella or Excess liability coverage required for the additional insured by that written contract or agreement. This provision will not increase the limits of insurance described in Section **III** – Limits Of Insurance.

b. The insurance provided to such additional insured does not apply to:

(1) Any "bodily injury", "property damage" or "personal injury" arising out of the providing, or failure to provide, any professional architectural, engineering or surveying services, including:

(a) The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders or change orders, or the preparing, approving, or failing to prepare or approve, drawings and specifications; and

(b) Supervisory, inspection, architectural or engineering activities.

(2) Any "bodily injury" or "property damage" caused by "your work" and included in the "products-completed operations hazard" unless the written contract or agreement specifically requires you to provide such coverage for that additional insured during the policy period.

c. The additional insured must comply with the following duties:

(1) Give us written notice as soon as practicable of an "occurrence" or an offense which may result in a claim. To the extent possible, such notice should include:

(a) How, when and where the "occurrence" or offense took place;

(b) The names and addresses of any injured persons and witnesses; and

(c) The nature and location of any injury or damage arising out of the "occurrence" or offense.

(2) If a claim is made or "suit" is brought against the additional insured:

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(a) Immediately record the specifics of the claim or "suit" and the date received; and

(b) Notify us as soon as practicable and see to it that we receive written notice of the claim or "suit" as soon as practicable.

(3) Immediately send us copies of all legal papers received in connection with the claim or "suit", cooperate with us in the investigation or settlement of the claim or defense against the "suit", and otherwise comply with all policy conditions.

(4) Tender the defense and indemnity of any claim or "suit" to any provider of other insurance which would cover such additional insured for a loss we cover. However, this condition does not affect whether the insurance provided to such additional insured is primary to other insurance available to such additional insured which covers that person or organization as a named insured as described in Paragraph **4.**, Other Insurance, of Section **IV** – Commercial General Liability Conditions.

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

XTEND ENDORSEMENT FOR CONTRACTORS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

GENERAL DESCRIPTION OF COVERAGE – This endorsement broadens coverage. However, coverage for any injury, damage or medical expenses described in any of the provisions of this endorsement may be excluded or limited by another endorsement to this Coverage Part, and these coverage broadening provisions do not apply to the extent that coverage is excluded or limited by such an endorsement. The following listing is a general coverage description only. Read all the provisions of this endorsement and the rest of your policy carefully to determine rights, duties, and what is and is not covered.

A. Who Is An Insured – Unnamed Subsidiaries

B. Blanket Additional Insured – Governmental Entities – Permits Or Authorizations Relating To Operations

C. Incidental Medical Malpractice

D. Blanket Waiver Of Subrogation

E. Contractual Liability – Railroads

F. Damage To Premises Rented To You

PROVISIONS

A. WHO IS AN INSURED – UNNAMED SUBSIDIARIES

The following is added to **SECTION II – WHO IS AN INSURED**:

Any of your subsidiaries, other than a partnership, joint venture or limited liability company, that is not shown as a Named Insured in the Declarations is a Named Insured if:

a. You are the sole owner of, or maintain an ownership interest of more than 50% in, such subsidiary on the first day of the policy period; and

b. Such subsidiary is not an insured under similar other insurance.

No such subsidiary is an insured for "bodily injury" or "property damage" that occurred, or "personal and advertising injury" caused by an offense committed:

a. Before you maintained an ownership interest of more than 50% in such subsidiary; or

b. After the date, if any, during the policy period that you no longer maintain an ownership interest of more than 50% in such subsidiary.

For purposes of Paragraph **1.** of Section **II** – Who Is An Insured, each such subsidiary will be deemed to be designated in the Declarations as:

a. An organization other than a partnership, joint venture or limited liability company; or

b. A trust;

as indicated in its name or the documents that govern its structure.

B. BLANKET ADDITIONAL INSURED – GOVERNMENTAL ENTITIES – PERMITS OR AUTHORIZATIONS RELATING TO OPERATIONS

The following is added to **SECTION II – WHO IS AN INSURED**:

Any governmental entity that has issued a permit or authorization with respect to operations performed by you or on your behalf and that you are required by any ordinance, law, building code or written contract or agreement to include as an additional insured on this Coverage Part is an insured, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" arising out of such operations.

The insurance provided to such governmental entity does not apply to:

a. Any "bodily injury", "property damage" or "personal and advertising injury" arising out of operations performed for the governmental entity; or

b. Any "bodily injury" or "property damage" included in the "products-completed operations hazard".

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C. INCIDENTAL MEDICAL MALPRACTICE

1. The following replaces Paragraph **b.** of the definition of "occurrence" in the **DEFINITIONS** Section:

b. An act or omission committed in providing or failing to provide "incidental medical services", first aid or "Good Samaritan services" to a person, unless you are in the business or occupation of providing professional health care services.

2. The following replaces the last paragraph of Paragraph **2.a.(1)** of **SECTION II – WHO IS AN INSURED**:

Unless you are in the business or occupation of providing professional health care services, Paragraphs **(1)(a)**, **(b)**, **(c)** and **(d)** above do not apply to "bodily injury" arising out of providing or failing to provide:

(a) "Incidental medical services" by any of your "employees" who is a nurse, nurse assistant, emergency medical technician or paramedic; or

(b) First aid or "Good Samaritan services" by any of your "employees" or "volunteer workers", other than an employed or volunteer doctor. Any such "employees" or "volunteer workers" providing or failing to provide first aid or "Good Samaritan services" during their work hours for you will be deemed to be acting within the scope of their employment by you or performing duties related to the conduct of your business.

3. The following replaces the last sentence of Paragraph **5.** of **SECTION III – LIMITS OF INSURANCE**:

For the purposes of determining the applicable Each Occurrence Limit, all related acts or omissions committed in providing or failing to provide "incidental medical services", first aid or "Good Samaritan services" to any one person will be deemed to be one "occurrence".

4. The following exclusion is added to Paragraph **2.**, **Exclusions**, of **SECTION I – COVERAGES – COVERAGE A – BODILY INJURY AND PROPERTY DAMAGE LIABILITY**:

Sale Of Pharmaceuticals

"Bodily injury" or "property damage" arising out of the violation of a penal statute or ordinance relating to the sale of pharmaceuticals committed by, or with the knowledge or consent of, the insured.

5. The following is added to the **DEFINITIONS** Section:

"Incidental medical services" means:

a. Medical, surgical, dental, laboratory, x-ray or nursing service or treatment, advice or instruction, or the related furnishing of food or beverages; or

b. The furnishing or dispensing of drugs or medical, dental, or surgical supplies or appliances.

6. The following is added to Paragraph **4.b.**, **Excess Insurance**, of **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**:

This insurance is excess over any valid and collectible other insurance, whether primary, excess, contingent or on any other basis, that is available to any of your "employees" for "bodily injury" that arises out of providing or failing to provide "incidental medical services" to any person to the extent not subject to Paragraph **2.a.(1)** of Section **II** – Who Is An Insured.

D. BLANKET WAIVER OF SUBROGATION

The following is added to Paragraph **8.**, **Transfer Of Rights Of Recovery Against Others To Us**, of **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**:

If the insured has agreed in a contract or agreement to waive that insured's right of recovery against any person or organization, we waive our right of recovery against such person or organization, but only for payments we make because of:

a. "Bodily injury" or "property damage" that occurs; or

b. "Personal and advertising injury" caused by an offense that is committed;

subsequent to the execution of the contract or agreement.

E. CONTRACTUAL LIABILITY – RAILROADS

1. The following replaces Paragraph **c.** of the definition of "insured contract" in the **DEFINITIONS** Section:

c. Any easement or license agreement;

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2. Paragraph **f.(1)** of the definition of "insured contract" in the **DEFINITIONS** Section is deleted.

F. DAMAGE TO PREMISES RENTED TO YOU

The following replaces the definition of "premises damage" in the **DEFINITIONS** Section:

"Premises damage" means "property damage" to:

a. Any premises while rented to you or temporarily occupied by you with permission of the owner; or

b. The contents of any premises while such premises is rented to you, if you rent such premises for a period of seven or fewer consecutive days.

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c. Method Of Sharing

If all of the other insurance permits contribution by equal shares, we will follow this method also. Under this approach each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first.

If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.

d. Primary And Non-Contributory Insurance If Required By Written Contract

If you specifically agree in a written contract or agreement that the insurance afforded to an insured under this Coverage Part must apply on a primary basis, or a primary and non-contributory basis, this insurance is primary to other insurance that is available to such insured which covers such insured as a named insured, and we will not share with that other insurance, provided that:

(1) The "bodily injury" or "property damage" for which coverage is sought occurs; and

(2) The "personal and advertising injury" for which coverage is sought is caused by an offense that is committed;

subsequent to the signing of that contract or agreement by you.

5. Premium Audit

a. We will compute all premiums for this Coverage Part in accordance with our rules and rates.

b. Premium shown in this Coverage Part as advance premium is a deposit premium only. At the close of each audit period we will compute the earned premium for that period and send notice to the first Named Insured. The due date for audit and retrospective premiums is the date shown as the due date on the bill. If the sum of the advance and audit premiums paid for the policy period is greater than the earned premium, we will return the excess to the first Named Insured.

c. The first Named Insured must keep records of the information we need for premium computation, and send us copies at such times as we may request.

6. Representations

By accepting this policy, you agree:

a. The statements in the Declarations are accurate and complete;

b. Those statements are based upon representations you made to us; and

c. We have issued this policy in reliance upon your representations.

The unintentional omission of, or unintentional error in, any information provided by you which we relied upon in issuing this policy will not prejudice your rights under this insurance. However, this provision does not affect our right to collect additional premium or to exercise our rights of cancellation or nonrenewal in accordance with applicable insurance laws or regulations.

7. Separation Of Insureds

Except with respect to the Limits of Insurance, and any rights or duties specifically assigned in this Coverage Part to the first Named Insured, this insurance applies:

a. As if each Named Insured were the only Named Insured; and

b. Separately to each insured against whom claim is made or "suit" is brought.

8. Transfer Of Rights Of Recovery Against Others To Us

If the insured has rights to recover all or part of any payment we have made under this Coverage Part, those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the insured will bring "suit" or transfer those rights to us and help us enforce them.

9. When We Do Not Renew

If we decide not to renew this Coverage Part, we will mail or deliver to the first Named Insured shown in the Declarations written notice of the nonrenewal not less than 30 days before the expiration date.

If notice is mailed, proof of mailing will be sufficient proof of notice.

SECTION V – DEFINITIONS

1. "Advertisement" means a notice that is broadcast or published to the general public or specific market segments about your goods, products or services for the purpose of attracting customers or supporters. For the purposes of this definition:

a. Notices that are published include material placed on the Internet or on similar electronic means of communication; and

b. Regarding websites, only that part of a website that is about your goods, products or services for the purposes of attracting customers or supporters is considered an advertisement.

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POLICY NUMBER: 4T-CO-9X538338-PHX-25 ISSUE DATE: 05-21-24

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY

DESIGNATED PROJECT(S) GENERAL AGGREGATE LIMIT

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Designated Project(s):	Designated Project General Aggregate(s):
EACH "PROJECT" FOR WHICH YOU HAVE AGREED, IN A WRITTEN CONTRACT THAT IS IN EFFECT DURING THIS POLICY PERIOD, TO PROVIDE A SEPARATE GENERAL AGGREGATE LIMIT; PROVIDED THAT, THE CONTRACT IS SIGNED BY YOU BEFORE THE "BODILY INJURY" OR "PROPERTY DAMAGE" OCCURS.	GENERAL AGGREGATE LIMIT SHOWN ON THE DECLARATIONS

A. For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under **COVERAGE A. (SECTION I)**, and for all medical expenses caused by accidents under **COVERAGE C (SECTION I)**, which can be attributed only to operations at a single designated "project" shown in the Schedule above:

1. A separate Designated Project General Aggregate Limit applies to each designated "project", and that limit is equal to the amount of the General Aggregate Limit shown in the Declarations, unless separate **Designated Project General Aggregate(s)** are scheduled above.

2. The Designated Project General Aggregate Limit is the most we will pay for the sum of all damages under **COVERAGE A.**, except damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard", and for medical expenses under **COVERAGE C**, regardless of the number of:

a. Insureds;

b. Claims made or "suits" brought; or

c. Persons or organizations making claims or bringing "suits".

3. Any payments made under **COVERAGE A.** for damages or under **COVERAGE C.** for medical expenses shall reduce the Designated Project General Aggregate Limit for that designated "project". Such payments shall not reduce the General Aggregate Limit shown in the Declarations nor shall they reduce any other Designated Project General Aggregate Limit for any other designated "project" shown in the Schedule above.

4. The limits shown in the Declarations for **Each Occurrence, Damage To Premises Rented To You and Medical Expense** continue to apply. However, instead of being subject to the General Aggregate Limit shown in the Declarations, such limits will be subject to the applicable Designated Project General Aggregate Limit.

B. For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under **COVERAGE A. (SECTION I)**, and for all medical expenses caused by accidents under **COVERAGE C. (SECTION I)**, which cannot be attributed only to operations at a single designated "project" shown in the Schedule above:

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1. Any payments made under **COVERAGE A.** for damages or under **COVERAGE C.** for medical expenses shall reduce the amount available under the General Aggregate Limit or the Products-Completed Operations Aggregate Limit, whichever is applicable; and
2. Such payments shall not reduce any Designated Project General Aggregate Limit.

C. Part **2.** of **SECTION III – LIMITS OF INSURANCE** is deleted and replaced by the following:

2. The General Aggregate Limit is the most we will pay for the sum of:
   a. Damages under **Coverage B**; and
   b. Damages from "occurrences" under **COVERAGE A (SECTION I)** and for all medical expenses caused by accidents under **COVERAGE C (SECTION I)** which cannot be attributed only to operations at a single designated "project" shown in the **SCHEDULE** above.

D. When coverage for liability arising out of the "products-completed operations hazard" is provided, any payments for damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard" will reduce the Products-Completed Operations Aggregate Limit, and not reduce the General Aggregate Limit nor the Designated Project General Aggregate Limit.

E. For the purposes of this endorsement the **Definitions Section** is amended by the addition of the following definition:

"Project" means an area away from premises owned by or rented to you at which you are performing operations pursuant to a contract or agreement. For the purposes of determining the applicable aggregate limit of insurance, each "project" that includes premises involving the same or connecting lots, or premises whose connection is interrupted only by a street, roadway, waterway or right-of-way of a railroad shall be considered a single "project".

F. The provisions of **SECTION III – LIMITS OF INSURANCE** not otherwise modified by this endorsement shall continue to apply as stipulated.

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DESIGNATED PERSON OR ORGANIZATION – NOTICE OF CANCELLATION PROVIDED BY US

This endorsement modifies insurance provided under the following:
ALL COVERAGE PARTS INCLUDED IN THIS POLICY

SCHEDULE

CANCELLATION: **Number of Days Notice:** 30

PERSON OR ORGANIZATION:
ANY PERSON OR ORGANIZATION TO WHOM YOU HAVE AGREED IN A WRITTEN CONTRACT THAT NOTICE OF CANCELLATION OF THIS POLICY WILL BE GIVEN, BUT ONLY IF:

1. YOU SEND US A WRITTEN REQUEST TO PROVIDE SUCH NOTICE, INCLUDING THE NAME AND ADDRESS OF SUCH PERSON OR ORGANIZATION, AFTER THE FIRST NAMED INSURED RECEIVES NOTICE FROM US OF THE CANCELLATION OF THIS POLICY; AND
2. WE RECEIVE SUCH WRITTEN REQUEST AT LEAST 14 DAYS BEFORE THE BEGINNING OF THE APPLICABLE NUMBER OF DAYS SHOWN IN THIS SCHEDULE.

ADDRESS:
THE ADDRESS FOR THAT PERSON OR ORGANIZATION INCLUDED IN SUCH WRITTEN REQUEST FROM YOU TO US.

PROVISIONS

If we cancel this policy for any legally permitted reason other than nonpayment of premium, and a number of days is shown for Cancellation in the Schedule above, we will mail notice of cancellation to the person or organization shown in such Schedule. We will mail such notice to the address shown in the Schedule above at least the number of days shown for Cancellation in such Schedule before the effective date of cancellation.

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EXCESS FOLLOW-FORM AND UMBRELLA LIABILITY INSURANCE

THIS POLICY, INPART, PROVIDES FOLLOW-FORM LIABILITY COVERAGE.

COVERAGE WILL APPLY ON A CLAIMS-MADE BASIS WHEN FOLLOWING CLAIMS-MADE UNDERLYING INSURANCE.

COVERAGE WILL APPLY ON A DEFENSE-WITHIN-LIMITS BASIS WHEN FOLLOWING UNDERLYING INSURANCE UNDER WHICH DEFENSE EXPENSES ARE PAYABLE WITHIN, AND NOT IN ADDITION TO, THE LIMITS OF INSURANCE. WHEN FOLLOWING SUCH UNDERLYING INSURANCE, PAYMENT OF DEFENSE EXPENSES UNDER THIS POLICY WILL REDUCE, AND MAY EXHAUST, THE LIMITS OF INSURANCE OF THIS POLICY.

PLEASE READ THE ENTIRE POLICY CAREFULLY.

Various provisions in this policy restrict coverage. Read the entire policy carefully to determine rights, duties and what is and is not covered.

Throughout this policy, the words "you" and "your" refer to the Named Insured shown in the Declarations and any other person or organization qualifying as a Named Insured under this policy. The words "we", "us" and "our" refer to the company providing this insurance.

The word "insured" means any person or organization qualifying as such under **SECTION II – WHO IS AN INSURED**.

Other words and phrases that appear in quotation marks have special meaning. Refer to **SECTION VI – DEFINITIONS**.

SECTION I – COVERAGES

A. COVERAGE A – EXCESS FOLLOW-FORM LIABILITY

1. We will pay on behalf of the insured those sums, in excess of the "applicable underlying limit", that the insured becomes legally obligated to pay as damages to which Coverage **A** of this insurance applies, provided that the "underlying insurance" would apply to such damages but for the exhaustion of its applicable limits of insurance. If a sublimit is specified in any "underlying insurance", Coverage **A** of this insurance applies to damages that are in excess of that sublimit only if such sublimit is shown for that "underlying insurance" in the Schedule Of Underlying Insurance.

2. Coverage **A** of this insurance is subject to the same terms, conditions, agreements, exclusions and definitions as the "underlying insurance", except with respect to any provisions to the contrary contained in this insurance.

3. The amount we will pay for damages is limited as described in **SECTION III – LIMITS OF INSURANCE**.

4. For the purposes of Paragraph **1.** above:

a. The applicable limit of insurance stated for the policies of "underlying insurance" in the Schedule Of Underlying Insurance will be considered to be reduced or exhausted only by the following payments:

(1) Payments of judgments or settlements for damages that are covered by that "underlying insurance". However, if such "underlying insurance" has a policy period which differs from the policy period of this Excess Follow-Form And Umbrella Liability Insurance, any such payments for damages that would not be covered by this Excess Follow-Form And Umbrella Liability

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Insurance because of its different policy period will not reduce or exhaust the applicable limit of insurance stated for such "underlying insurance";

(2) Payments of "medical expenses" that are covered by that "underlying insurance" and are incurred for "bodily injury" caused by an accident that takes place during the policy period of this Excess Follow-Form And Umbrella Liability Insurance; or

(3) Payments of defense expenses that are covered by that "underlying insurance", only if such "underlying insurance" includes such payments within the limits of insurance. However, if such "underlying insurance" has a policy period which differs from the policy period of this Excess Follow-Form And Umbrella Liability Insurance, any such payments for defense expenses that would not be covered by this Excess Follow-Form And Umbrella Liability Insurance because of its different policy period will not reduce or exhaust the applicable limit of insurance stated for such "underlying insurance".

If the applicable limit of insurance stated for the policies of "underlying insurance" in the Schedule Of Underlying Insurance is actually reduced or exhausted by other payments, Coverage **A** of this insurance is not invalidated. However, in the event of a loss, we will pay only to the extent that we would have paid had such limit not been actually reduced or exhausted by such other payments.

b. If any "underlying insurance" has a limit of insurance greater than the amount shown for that insurance in the Schedule of Underlying Insurance, this insurance will apply in excess of that greater amount. If any "underlying insurance" has a limit of insurance, prior to any reduction or exhaustion by payment of damages, "medical expenses" or defense expenses described in Paragraph **a.** above, that is less than the amount shown for that insurance in the Schedule Of Underlying Insurance, this insurance will apply in excess of the amount shown for such insurance in the Schedule Of Underlying Insurance.

5. When the "underlying insurance" applies on a claims-made basis and includes a retroactive date provision, the retroactive date for Coverage **A** of this insurance is the same as the retroactive date of that "underlying insurance".

B. COVERAGE B – UMBRELLA LIABILITY

1. We will pay on behalf of the insured those sums in excess of the "self-insured retention" that the insured becomes legally obligated to pay as damages because of "bodily injury", "property damage", "personal injury" or "advertising injury" to which Coverage **B** of this insurance applies.

2. Coverage **B** of this insurance applies to "bodily injury" or "property damage" only if:

a. The "bodily injury" or "property damage" is caused by an "occurrence" that takes place anywhere in the world;

b. The "bodily injury" or "property damage" occurs during the policy period; and

c. Prior to the policy period, no insured listed under Paragraph **1.** in Paragraph **B.**, **COVERAGE B – UMBRELLA LIABILITY**, of **SECTION II – WHO IS AN INSURED** and no "employee" authorized by you to give or receive notice of an "occurrence" or claim, knew that the "bodily injury" or "property damage" had occurred, in whole or in part. If such a listed insured or authorized "employee" knew, prior to the policy period, that the "bodily injury" or "property damage" occurred, in whole or in part, then any continuation, change or resumption of such "bodily injury" or "property damage" during or after the policy period will be deemed to have been known prior to the policy period.

3. Coverage **B** of this insurance applies to "personal injury" or "advertising injury" caused by an offense arising out of your business, but only if the offense was committed during the policy period anywhere in the world.

4. The amount we will pay for damages is limited as described in **SECTION III – LIMITS OF INSURANCE**.

5. "Bodily injury" or "property damage":

a. Which occurs during the policy period; and

b. Which was not prior to, but was during, the policy period known to have occurred by any insured listed under Paragraph **1.** in Paragraph **B.**, **COVERAGE B – UMBRELLA LIABILITY** of **SECTION II – WHO IS AN INSURED**, or any "employee" authorized by you to give notice of an "occurrence" or claim;

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includes any continuation, change or resumption of the "bodily injury" or "property damage" after the end of the policy period.

6. "Bodily injury" or "property damage" will be deemed to have been known to have occurred at the earliest time when any insured listed under Paragraph **1.** in Paragraph **B.**, **COVERAGE B – UMBRELLA LIABILITY**, of **SECTION II – WHO IS AN INSURED** or any "employee" authorized by you to give or receive notice of an "occurrence" or claim:

a. Reports all, or any part, of the "bodily injury" or "property damage" to us or any other insurer;

b. Receives a written or verbal demand or claim for damages because of the "bodily injury" or "property damage"; or

c. Becomes aware by any other means that the "bodily injury" or "property damage" has occurred or has begun to occur.

7. Damages because of "bodily injury" include damages claimed by any person or organization for care, loss of services or death resulting at any time from the "bodily injury".

8. Coverage **B** of this insurance does not apply to damages covered by any "underlying insurance" or that would have been covered by any "underlying insurance" but for the exhaustion of its applicable limit of insurance.

C. COVERAGE C – CRISIS MANAGEMENT SERVICE EXPENSES

1. We will reimburse the insured, or pay on the insured's behalf, "crisis management service expenses" to which Coverage **C** applies.

2. Coverage **C** of this insurance applies to "crisis management service expenses" that:

a. Arise out of a "crisis management event" that first commences during the policy period;

b. Are incurred by the insured, after a "crisis management event" first commences and before such event ends; and

c. Are submitted to us within 180 days after the "crisis management advisor" advises you that the "crisis management event" no longer exists.

3. A "crisis management event" will be deemed to:

a. First commence at the time when any "executive officer" first becomes aware of an "event" or "occurrence" that leads to that "crisis management event"; and

b. End when we decide that the crisis no longer exists or when the Crisis Management Service Expenses Limit has been exhausted, whichever occurs first.

4. The amount we will pay for "crisis management service expenses" is limited as described in **SECTION III – LIMITS OF INSURANCE**.

5. A "self-insured retention" does not apply to "crisis management service expenses".

6. Any payment of "crisis management service expenses" that we make will not be determinative of our obligations under this insurance with respect to any claim or "suit" or create any duty to defend or indemnify any insured for any claim or "suit".

D. DEFENSE AND SUPPLEMENTARY PAYMENTS

1. We will have the right and duty to defend the insured:

a. Under Coverage **A**, against a "suit" seeking damages to which such coverage applies, if:

(1) The "applicable underlying limit" is the applicable limit of insurance stated for a policy of "underlying insurance" in the Schedule Of Underlying Insurance and such limit has been exhausted solely due to payments as permitted in Paragraphs **4.a.(1)**, **(2)** and **(3)** of **COVERAGE A – EXCESS FOLLOW-FORM LIABILITY** of **SECTION I – COVERAGES**; or

(2) The "applicable underlying limit" is the applicable limit of any "other insurance" and such limit has been exhausted by payments of judgments, settlements or medical expenses, or related costs or expenses (if such costs or expenses reduce such limits).

For any "suit" for which we have the right and duty to defend the insured under Coverage **A**, defense expenses will be within the limits of insurance of this policy when such expenses are within the limits of insurance of the applicable "underlying insurance"; or

b. Under Coverage **B**, against a "suit" seeking damages to which such coverage applies.

2. We have no duty to defend any insured against any "suit":

a. Seeking damages to which this insurance does not apply; or

b. If any other insurer has a duty to defend.

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CONTRACT FOR PROFESSIONAL SERVICES
(SUPERVISOR CONSULTANT)

THIS CONTRACT FOR PROFESSIONAL SERVICES ("Contract"), shall be considered as made and entered into as of the date of the last signature ("Effective Date"), and is between **Hamburg Township**, a Michigan municipal corporation, whose address is 10405 Merrill Road, P.O. Box 157, Hamburg, Michigan 48139 (hereinafter referred to as "Client"), and **Patrick J. Hohl**, whose address is _____ (hereinafter referred to as "Consultant").

THE CLIENT AND CONSULTANT AGREE AS FOLLOWS:

Article I. Statement and Performance of Work.

For payment by the Client as provided under this Contract, Consultant shall perform the work, duties and responsibilities described on and in Schedule A (Fees and Scope of Work), which is attached hereto and made a part of this Contract by this reference, in a competent, accurate, efficient, timely, good, professional, thorough, complete and responsible manner, and in compliance with the terms and conditions set forth below.

Article II. Timing of Performance.

Performance of this Contract shall commence on July 15, 2025 for six (6) months, with a possible extension of an additional 6 months (at the approval of the Township Board).

Article III. Contract Price and Payment.

A. Subject to the terms and conditions of this Contract, the Client agrees to pay Consultant in the amount, manner, and according to the timing for making such payments set forth in Exhibit A (referred to in this Contract as "payments"). Payments shall be made within 30-days upon verification and approval of invoices received by the Township. All payments to Consultant shall be submitted by mail at Consultant's address first listed above, unless Consultant provides written notice of a change in the address to which such payments are to be sent. Such payments are in exchange for and consideration of the timely and satisfactory performance and completion of the work required under and pursuant to this Contract.

B. The Client agrees to pay Consultant amounts due within thirty (30) days of receipt of an itemized billing/invoice from Consultant detailing all work performed and provided in connection with the billing and the hours and charges applicable to each such item of work. Such itemized billings shall be submitted and shall be paid only upon satisfactory completion of the work itemized in the billing.

C. All costs and expenses incurred by Consultant in the course of performing the work under this Contract are deemed to be included in the hourly fees and amounts set forth in Schedule A, unless specifically identified in Schedule A as reimbursable expenses and such expenses have been approved by the Client or its designee.

D. Payments shall be made upon verification of invoices received by the Client. All payments to Consultant shall be submitted by mail at Consultant's address first listed above, unless Consultant provides written notice of a change in the address to which such payments are to be sent.

Article IV: Termination.

A. This Contract, including any extension or amendment of this Contract, may be terminated at any time, with or without cause, by either party upon thirty (30) calendar days' written notice to the other party. In such event, the effective date of such termination shall be the 30th calendar day following the date of the written notice of such termination.

B. In the event this Contract is terminated prior to completion of the work, the Client shall not be responsible to make any further payments for work performed after the effective date of such termination, and shall pay Consultant for such work as has been completed and is eligible for payment under the terms of this Contract through the date of such termination. In all events, the Client shall only be responsible to make the payments described in the preceding sentence if, at the Client's request, Consultant continues to fully perform its duties and obligations in full compliance with the terms of this Contract through the effective date of the termination.

C. Prior to the effective date of any termination or prior to the completion of the work (including any extension of the timing for completion), whichever is the first to occur, Consultant shall deliver to the Client all reports, opinions, compilations, research work, studies, data, materials, artifacts, samples, documents, plans, drawings, specifications, correspondence, ledgers, permits, applications, manuals, contracts, accountings, schedules, maps, logs, invoices, billings, photographs, videotapes and other materials in its possession or control that is gathered or generated in the course of performing the work or that relates to the work in any way. The Client shall be permitted to withhold any payments and reimbursements otherwise owing to Consultant under the terms of this Contract until all such materials are delivered to the Client in accordance with the terms and conditions of this Contract.

Article V: Independent Contractor Relationship.

A. In the performance of this Contract, the relationship of Consultant to the Client shall be that of an independent contractor and not that of an employee or agent of Client. Consultant is and shall perform under this Contract as an independent contractor, and no liability or responsibility with respect to benefits of any kind, including without limitation, medical benefits, worker's compensation, pension rights, or other rights or liabilities arising out of or related to a contract for hire or employer/employee relationship shall arise or accrue to either party as a result of the performance of this Contract.

B. Consultant, as an independent contractor, is not authorized to enter into or sign any agreements on behalf of the Client or to make any representations to third parties that are binding upon the Client.

Article VI: Liability and Insurance.

A. Consultant agrees to indemnify and hold harmless the Client, its elected and appointed officials and employees, from and against any and all claims, demands, suits, losses and settlements, including actual attorney fees incurred and all costs connected therewith, for any damages which may be asserted, claimed or recovered against the Client by reason of professional liability which arises out of or is in any way connected or associated with the actions or inactions of Consultant in performing or failing to perform the work, or civil damages which arise out of any dispute between Consultant and its subcontractors, affiliates, employees or other private third parties in connection with this Contract, and personal injury or property damage arising out of the Consultants operation of a motor vehicle in connection with this Contract.

B. Client agrees to indemnify and hold harmless the Consultant, from and against any and all claims, demands, suits, losses and settlements, including actual attorney fees incurred and all costs connected therewith, for any damages which may be asserted, claimed or recovered against the Consultant which arises out of or is in any way connected or associated with the actions or inactions of Client, in connection with the activities performed pursuant to this Contract.

C. Consultant is not an employee or agent of Client, and no liability or other benefits of any kind, such as unemployment or workers compensation, retirement, insurance benefits, tenure rights or tax withholdings shall be made by or accrue to Consultant. In the event that Consultant is a sole proprietor and has not purchased Workers Compensation Insurance, Consultant hereby accepts full responsibility for any accidents or injuries to himself/herself while operating on or about the premises of the Client as an independent contractor. Furthermore, Consultant hereby acknowledges and accepts that if Consultant has any employees that will be working on-site on or about the premises of the Client, Consultant has an obligation to purchase and maintain Workers Compensation Insurance, and in the event that he/she does not, hereby accepts full responsibility for any accidents or injuries to his or her employees while operating on or about the premises of the Client

Article VII: Information.

It is expressly acknowledged and agreed that all reports, opinions, compilations, research work, studies, data, materials, artifacts, samples, documents, plans, drawings, specifications, correspondence, ledgers, permits, manuals, applications, contracts, accountings, schedules, maps, logs, invoices, billings, photographs, videotapes and all other materials generated by and/or coming into the possession of Consultant during the term of this Contract, and any extension thereof, that in any way relate to the

performance of work by Consultant under this Contract or that are otherwise related or relevant to the work, belong exclusively to the Client and shall be promptly delivered to the Client upon the termination of this Contract or, at any time, upon the Client's request.

Article VIII: Accuracy.

Consultant promises that the information it provides in the work to be performed under this Contract will be accurate, excepting only inaccuracies resulting from incorrect information provided by the Client, the Township, other consultants and/or other public sources. Consultant will not charge Client for necessary corrections to its work and will be responsible for any increased cost incurred by the Client as a result of any inaccuracies in the work, excepting inaccuracies resulting from incorrect information provided by the Client, the Township, other consultants and/or other public sources.

Article IX: General Provisions.

A. *Entire Agreement*. This instrument, together with the attached Schedules, contains the entire Contract between the Client and Consultant. No verbal agreement, conversation, or representation by or between any officer, agent, or employee of the parties hereto, either before or after the execution of this Contract, shall affect or modify any of the terms or obligations herein contained.

B. *Compliance with Laws*. This Contract and all of Consultant's work and practices shall be subject to all applicable state, federal and local laws, ordinances, rules or regulations, including without limitation, those which apply because Client is a public governmental agency or body. Consultant represents that it is in compliance with all such laws and eligible and qualified to enter into this Contract.

C. *Governing Law*. This Contract shall be governed by the laws of the State of Michigan.

D. *Assignment*. Consultant shall not assign this Contract or any part thereof without the written consent of the Client. This Contract shall be binding on the parties, their successors, assigns and legal representatives.

E. *Third Parties*. It is the intention of the parties hereto that this Agreement is not made for the benefit of any private third party. It is acknowledged that Client may receive a portion of the funding for the payments under this Contract from one or more private sources, and it is understood by Consultant that it is hired by Client to work exclusively for Client (and by extension for the City should the work be accepted and implemented by the City) and Consultant agrees that no private party or parties will be allowed to hold sway or influence, in any way, over Consultant's performance of the work.

F. *Notices*. Written notices under this Contract shall be given to the parties at their addresses contained in this Contract by personal or registered mail delivery to the attention of the following persons:

Client: Jason Negri, Township Supervisor, 10405 Merrill Road, P.O. Box 157, Hamburg, Michigan 48139
Consultant: Patrick J. Hohl: _____

G. *Changes*. Any changes in the provisions of this Contract must be in writing and signed by the Client and Consultant.

H. *Waivers*. No waiver of any term or condition of this Contract shall be binding and effective unless in writing and signed by all parties, with any such waiver being limited to that circumstance only and not applicable to subsequent actions or events.

I. *Jurisdiction and Venue of Contract*. This Contract shall be considered for all purposes, including the establishment of jurisdiction and venue in any court action between the parties, as having been entered into and consummated in Hamburg Township, Livingston County, Michigan.

J. *Conflict*. In the event of any conflict or inconsistency between the above provisions of this Contract and either or both of the attached Schedules, the provisions in the above text shall govern.

K. *Anti-Discrimination*. The Contractor shall not discriminate against any employee, or applicant for employment because of religion, race, color, national origin, age, sex, height, weight, handicap, ancestry, place of birth, sexual preference or marital status. The Contractor further covenants that it will comply with the Civil Rights Act of 1973, as amended; and the Michigan Civil Rights Act of 1976 (78. Stat. 252 and 1976 PA 453) and will require a similar covenant on the part of any consultant or subcontractor employed in the performance of this contract.

L. *Severability; Construction*. In case any one or more of the provisions contained in this Contract shall for any reason be held to be invalid, illegal or unenforceable in any respect, this invalidity, illegality, or unenforceability shall not affect the enforceability of any other provision of this Contract. This Contract shall be construed as if the invalid, illegal or enforceable provision had never been contained in it. The remainder of the Contract shall remain in full force and effect. The fact that one of the parties to this Contract may be deemed to have drafted or structured any provision of this Contract shall not be considered in construing or interpreting any particular provision of this Contract, either in favor of or against such party.

IN WITNESS WHEREOF, the Client and the Consultant have executed this Contract in Livingston County, Michigan, as of the date first listed above.

Hamburg Township ("Client"):

By: _____
Jason Negri, Township Supervisor
Date:

By: _____
Mike Dolan, Its Clerk
Date:

("Consultant"):

By: _____
Patrick J. Hohl

Date:

SCHEDULE A
FEES AND SCOPE OF WORK

- Consultant will be available to the Supervisor for consultation and assistance up to 8 hours/week for 6 months, with a possible extension of an additional 6 months (at the approval of the board);

- Consultant will be paid $1880/month for his services;

- The Supervisor will determine when consultation is needed and work with Consultant to schedule the in-person time or phone calls;

- At no time is the consulting service to include representation by Consultant that he is acting on behalf of Hamburg Township in any way. This agreement is not authorization for Consultant to act as an agent for Hamburg Township with legal counsel, consultants, contractors, staff, residents, etc.;

- This consulting agreement does not include or grant access to Hamburg Township Staff, Township secured facilities, Township owned equipment, etc., except to the extent requested by the Township Supervisor, as needed.

SERVICE PROVIDER OR VENDOR

WAIVER OF LIABILITY & WORKERS' COMPENSATION

Service Provider:_____

_____

I, Patrick J. Hohl, hereby acknowledge and agree that Service Provider's relationship with Hamburg Township is and shall continue to be that of an independent contractor. Service Provider is not an employee or agent of Hamburg Township, and no liability or other benefits of any kind, such as unemployment or workers compensation, retirement, insurance benefits, tenure rights or tax withholdings shall be made by or accrue to Service Provider. In the event that Service Provider is a sole proprietor and has not purchased Workers Compensation Insurance, Service Provider hereby accepts full responsibility for any accidents or injuries to himself/herself while operating on or about the premises of Hamburg Township as an independent contractor. Furthermore, Service Provider hereby acknowledges and accepts that if Service Provider has any employees that will be working on-site on or about the premises of Hamburg Township, Service Provider has an obligation to purchase and maintain Workers Compensation Insurance, and in the event that he/she does not, hereby accepts full responsibility for any accidents or injuries to his or her employees while operating on or about the premises of Hamburg Township. Service Provider is not authorized to enter into or sign any agreements or make any representations to third parties that are binding upon Hamburg Township.

By:_____
Patrick J. Hohl

Date:

FAX (810) 231-4295
TELEPHONE: (810) 231-1000

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P.O. Box 157
10405 Merrill Road
Hamburg, MI 48139

MEMORANDUM

To: Jason B. Negri, Supervisor
Hamburg Township Board of Trustees

From: Brittany K. Campbell, Utilities Coordinator

Date: July 15th, 2025

Re: **Bid Results for Riverside, Century, Lagoon & Radial - Road Maintenance S.A.D.**
ROAD MAINTENANCE CONTRACT

The current road maintenance contract for this special assessment district will expire on August 15th, 2025. Twelve (12) requests for bid were mailed out to qualified road maintenance contractors. I received a total of two (2) responses from Contractors wishing to bid on providing road maintenance services for the Riverside, Century, Lagoon & Radial Drive road maintenance special assessment district. The results are as follows:

Annual Pricing for Services to be Rendered	Bob Myers Excavating, Inc.
Gradings – up to six (6) times per year.	$ 8,850.00
Gravel – Up to 370 cubic yards of 21AA gravel annually as necessary.	$ 13,320.00
Snow Removal – up to eight (8) times per year @ 4" or more of accumulation.	$ 6,800.00
Sanding – up to eight (8) times per year or not to exceed 25 hoppers as needed.	$ 1,840.00
Subtotal:	**$ 30,810.00**
Dust Control Spraying Services	**Big Barney's**
Dust Control – Annual application of dust control spray – 4 times per year to coincide with holidays.	$ 9,800.00
Total Annual Cost:	**$ 40,610.00**

** Dust control services are provided under separate contract.

Based upon the bids received for this SAD I would recommend that the Board award the new two (**2**) year service contracts to **Bob Myers Excavating, Inc.** and **Big Barney's Dust Control** beginning on August 16th, 2025 and ending on August 15th, 2027 to for the Riverside, Century, Lagoon and Radial Drive special assessment district.

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www.hamburg.mi.us

BID SPECIFICATION FORM
PRIVATE ROAD MAINTENANCE DISTRICT
HAMBURG TOWNSHIP, MICHIGAN

****

COMPANY NAME: Bob Myers Excavating, Inc.

CONTACT PERSON: Mike Myers

ADDRESS: 8111 Hammel Road

Brighton, MI 48116

PHONE: 810-231-2044

RECEIVED
MAY 14 2025
BY: BKar

Signature of Bidder's Authorized Agent: Michael E Myers

****

Project Location **Riverside, Century, Lagoon & Radial Drives**
East of Hamburg Rd./North off of Ore Lake Rd.

NOTE: The road maintenance service area has been changed. The road maintenance district also includes that portion of Riverside Drive located in Green Oak Township. The total additional footage for Green Oak portion of Riverside Drive is approximately 2,795 linear feet.

1.) Gradings – Up to Six (6) gradings per year as necessary, and with prior approval of the Township and to correspond with chloride applications in May, July, August and September.

Per Grading Charge $ 1,475.00
Total $ 8,850.00

2.) Gravel – Up to Three Hundred Seventy (**370**) cubic yards of road quality (**21AA**) gravel to be applied as necessary on an annual basis.

Material Charge (Per cubic yard) $ 18.00
Labor Charge $ 18.00
Total $ 13,320.00

3.) Snow Removal – Up to Eight (8) per year, as necessary, for the removal of four (4) inches or more of snow accumulation.

Charge Per Plowing $ 850.00
Total $ 6,800.00

4.) Sandings – Up to Eight (8) times per year, or not to exceed Twenty-five (25) hoppers per year, when icy conditions make it necessary for road safety.

Charge Per Application $ _____
or Charge Per Hopper $ 230.00
Total $ 1,840.00

Chloride applications will be scheduled by the Township through an independent firm. This will not be the responsibility of the Contractor providing the above listed road maintenance services.

CONTRACT INFORMATION:
The Contract will run for a period of two (2) years beginning on August 16th, 2025 and continuing through August 15th, 2027. Incremental increases in the cost of gravel may be negotiated between the Contractor and Hamburg Township on an annual review basis. Contractor shall remain an independent agent and does not become an employee of the Township. As such, the Contractor shall purchase and maintain worker's comp, personal injury and liability insurance in a minimum amount of $1,000,000.00 as required by the Township.

AWARDING OF CONTRACTS: On February 15, 2011 the Township Board of Trustees adopted the new Administrative Policies and Procedures for Expenditures Control regarding all Township Purchasing, Contracts and Sales. As a result, the Township will now consider the following in the awarding of road maintenance contracts:

(1) The character, integrity, reputation, judgment, experience and efficiency of the bidder;
   (a) The Township shall require the bidder to provide proof that they are responsible in paying their property taxes; both real and personal; whether it be in this township or other municipalities.

NOTE: Bid amounts must reflect costs as outlined above. Bid proposals shall also include all attachments or submittals confirming that Contractor is current in the payment of any personal and/or property taxes owed by the Contractor. Any proposed additional services may be recommended on a separate sheet and attached to the bid form.

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TELEPHONE: (810) 231-1000

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10405 Merrill Road
Hamburg, MI 48139

DUST CONTROL BID SPECIFICATION FORM

PRIVATE ROAD MAINTENANCE DISTRICT
HAMBURG TOWNSHIP, MICHIGAN

****

COMPANY NAME: BIL-BARNEY'S ROAD MAINTENANCE, INC.

CONTACT PERSON: BYRON MYER

ADDRESS: P.O. BOX 483
HOWELL, MI 48844-0483

PHONE: 517-546-8755

RECEIVED
MAY 28 2025
BY: BKL

Signature of Bidder's Authorized Agent: BKL

****

Project Location **Riverside, Century, Lagoon & Radial Drives**
East of Hamburg Rd./North off of Ore Lake Rd.

NOTE: The road maintenance service area has been changed. The road maintenance district also includes that portion of Riverside Drive located in Green Oak Township. The total additional footage for Green Oak portion of Riverside Drive is approximately 2,795 linear feet.

1.) **Dust Control** – Application of brine spray for the purpose of dust control at the following schedule – One week prior to or after the Memorial Day holiday, one week prior to or after the 4th of July holiday, the first week of August, and one week prior to or after the Labor Day holiday not to exceed four (**4**) times per year.

Material Charge (per Spray) $ 2,450.00

Labor Charge (per Spray) $ —

Total Annual Cost $ 9,800.00

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www.hamburg.mi.us

EXCERPT FROM HAMBURG TOWNSHIP MUNICIPAL UTILITIES COMMITTEE MEETING MINUTES

To the attention of: Jason B. Negri, Supervisor
Hamburg Township Board of Trustees

Re: **Muffin Monster for WWTP Purchase Request**

Please be apprised of this excerpt from the [**X**]Unapproved [_]Approved Minutes of the Meeting of the Hamburg Township Sewer Committee:

Date of Meeting: July 8th, 2025

Sewer Committee Members Present: Negri, Menzies, Daniels

Sewer Committee Members Absent: None

Text of Motion: MOTION BY NEGRI, SECONDED BY MENZIES FORWARD TO THE BOARD WITH THE RECOMMENDATION TO AUTHORIZE RANDAZZO AND WARD TO PROCEED WITH THE VOGELSANG QUOTE FOR THE PURCHASE OF A NEW GRINDER UNIT FOR THE WWTP NOT TO EXCEED $19,812.00 PLUS THE ADDITIONAL LABOR/INSTALLATION CHARGES NOT INCLUDED WITH THIS QUOTE.

Ayes: Negri, Menzies, Daniels Absent: None Nays: None

MOTION CARRIED.

State of Michigan }
County of Livingston }
Township of Hamburg}

I, BRITTANY K. CAMPBELL, Hamburg Township Utilities Coordinator and recording secretary to the Municipal Utilities Committee, do hereby certify that the foregoing is a true and correct excerpt of the Minutes of the aforementioned Regular/~~Special~~ Meeting of the Hamburg Township Municipal Utilities Committee.

Brittany K. Campbell Date: July 8th, 2025
BRITTANY K. CAMPBELL
HAMBURG TOWNSHIP UTILITIES COORDINATOR

Quote

Customer:
Hamlett Environmental Technolo
Nathan Hunter
714 E Grand River Ave, Ste 1
Howell, MI 48843
United States
(517) 545-2500
nathanh@hamlettenvironmental.co

Bill To:
Hamburg Twp

VOGELSANG
ENGINEERED TO WORK

Quote #: **061925NH1**

Date: 06.19.2025
No. of Pages: 2
Valid To: 07.12.2025
Delivery Terms: PPA (PrePay and Add)
Credit Terms: Net 30
Project Name: Hamburg, MI JWC Replacement
Ship Via: CH Robinson (Vogelsang Acct)

Revision Remark

Comment

Any item not specifically listed in the quotation will not be supplied by Vogelsang.

Line #	P/N# / Description		Qty		Ext. Net Price	Delivery ARO
Hamburg, MI JWC Replacement / Raw Sewage - Municipal Wastewater / 1 % Solids / 1500 gpm						
1.0	# 10.4032	$	1	$	19,520.00	12 Week(s)
	XRP186-260 12 inch AssemblyX-Ripper Assembly					

```
XRipper .....................: XRB0000347 (Model XRP186-260Q)
Ripper Rotor.................: High Wear Resistant Special Steel 7.9 mm
Mechanical Seals.............: Cartridge Single - Block Ring SS304 Cr2O3/Duronite
Cartridge O-Rings............: NBR
Wear Plate Material..........: High Wear Resistant Special Steel
Flange Left..................: Mild Steel Galvanized, Inspection Port, 12 inch
Flange Right.................: Mild Steel Galvanized, Inspection Port, 12 inch
Drive Type...................: Geared Motor
Motor Part Number............: US.GM0047
Motor........................: Nord 5 HP, 460 V, 60 HZ, 1755 RPM
Motor Frame Size.............: 112MP
Motor Enclosure..............: TEFC
```

Quote

Quote #:**138821** v.**01**



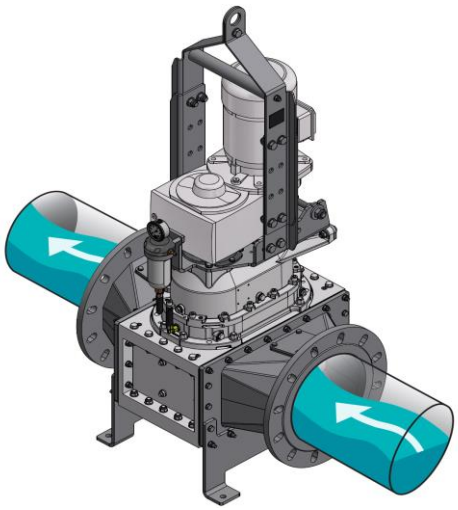
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Line #	P/N# Description	Net Price Each	Qty	Ext. Net Price	Delivery ARO
	Project Discount			**-4,476.10**	**$**
2.1			1		12 Week(s)

Net Total with 0.00% Sales Tax	Subtotal:	$	19,520.00
	Freight:		267.00
	Packaging:		25.00
	Taxes:		0.00
	Quote Total:	**$**	**19,812.00**

XRP186-260Q

The XRipper® is perfect for inline applications where solids are suspended in a liquid and must be reduced to a specific size suitable for downstream pumps and processing equipment. The compact twin-shaft design provides an economic option for many solids reduction applications.



Vogelsang is pleased to present you with a quote for our revolutionary XRipper® INLINE TWIN SHAFT GRINDER. From our monolithic rotor design, oversized shafts, cartridge mechanical seals, and in-line repair, without costly cartridge exchanges, Vogelsang will be the clear choice for your grinding needs.

XRipper® INLINE TWIN SHAFT GRINDER

Operations:
The XRipper® Cutting Rotors work together to reduce the solids in the liquid to the desired size. Adjusting the rotation of the XRipper® influences the maceration effect as well. The sharp saw-like tips slice and cut while the rough surface grind objects. This combination dramatically improves efficiency and solids reductions.

Complete Wet-End Rebuilds Inline:
Unlike typical inline twin-shafted grinders, our Quick Service design provides easy access to the wet end without removing the unit from service or disturbing the connected piping. The cutting elements can be serviced or replaced inline without sending them back for factory reconditioning.

Maximum Mechanical Seal Life:
XRipper® uses a pressurized oil canister to maintain pressure inside a buffer chamber between the wetend and gearbox. This pressure reduces the wear on the mechanical seals and maintains optimum performance.

Drive Options:
The XRP series is driven by an inline electric geared motor. It is also available with Submersible Motor, Explosion Proof Motor or Hydraulic Drive.

Compact Size Reduces Expense:
Small footprints equate to reduced construction and fabrication expenses.

Run Dry Without Damage:
The XRipper® is designed to run dry indefinitely because the cutting rotors do not contact against each other.

Specification Sheet (1/2)

VOGELSANG

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PROCESS CONDITIONS

Customer Number	136112	Solid Content	Not Provided
Customer Name	Hamlett Environmental Technologies	% Solids	1.00%
Project	Hamburg, MI JWC Replacement	Incoming Solids Max Size	
Quote Number	13882101	Desired Output Solid Size	
Quote Position Number	1	Pumping Temperature	100 °F
Number of Units	1	Liquid pH	7
Required Capacity	1500 gpm	Hours running per day	24 hrs
Maximum Pressure	58.0 psi	Pressure Loss	0.7 psi
Medium	Raw Sewage - Municipal Wastewater	XRipper Speed	33 RPM
Abrasiveness (1-10)	7 - very Abrasive like FOG, Raw Sewage	Tag Number 1	Not Specified

XRIPPER INFORMATION

XRipper Part Number	XRB0000347	Wear Plate Material	High Wear Resistant Special Steel
XRipper Model	XRP186-260Q	Top Shaft	Parallel Shaft Geared Motor SK4282
Material of Construction	Grey Cast Iron	Bottom Shaft	Shaft Short
Cover Type	Q	Drain Hose	No
Ripper Rotor Material	Steel	Scraper	No
Ripper Rotor Blade Width	7.9 mm	Oil Bottle	Standard Pressurized Oil Bottle
Stack Height	10.2 inch	Buffer Chamber Fluid	Titan Gear MP90 Gear Oil
Cartridge Stationary Ring Pairing	Steel - Duronit	Top Shaft Diameter	
Cartridge O-Rings	NBR	Top Shaft Length	
Wetted O-Ring Material	NBR		
Flange Gasket Material	N/A		

GEARED MOTOR INFORMATION

Manufacturer	Nord Gear Corp.	Shaft / Mounting	Hollow Shaft / B14 Flange
Vendor Part Number	SK4282AZGH-112MP/4 CUS TF	Shaft Diameter	50 mm
Motor Material	Aluminum	Reducer Options	Rubber Buffers, Hollow Shaft Cover
Gearbox Material	Cast Iron	Efficiency Class	Premium Efficiency
Class I Div I	No	Protection Class	IP55
Class I Div II	Yes	Gearbox Mounting Position	M4
Voltage	230/460	Terminal Box Position	2
Full Load Amps	13/6.5	Terminal Box Cable Entry	I
Frequency	60 Hz	Insulation Class	F
HP	5 HP	Thermistors	Yes
Motor Speed	1755 RPM	Thermostats	No
RPM (Output)	34 RPM	Overall Length	
Gear Ratio	52.2		

FLANGE CONFIGURATION

Left Flange Part Number	CON2673	Right Flange Part Number	CON2673
Left Flange Type	Straight	Right Flange Type	Straight
Left Flange Material	Hot Dipped Galvanized Steel	Right Flange Material	Hot Dipped Galvanized Steel
Left Flange Size	12.0 inch	Right Flange Size	12.0 inch

WARRANTY INFORMATION

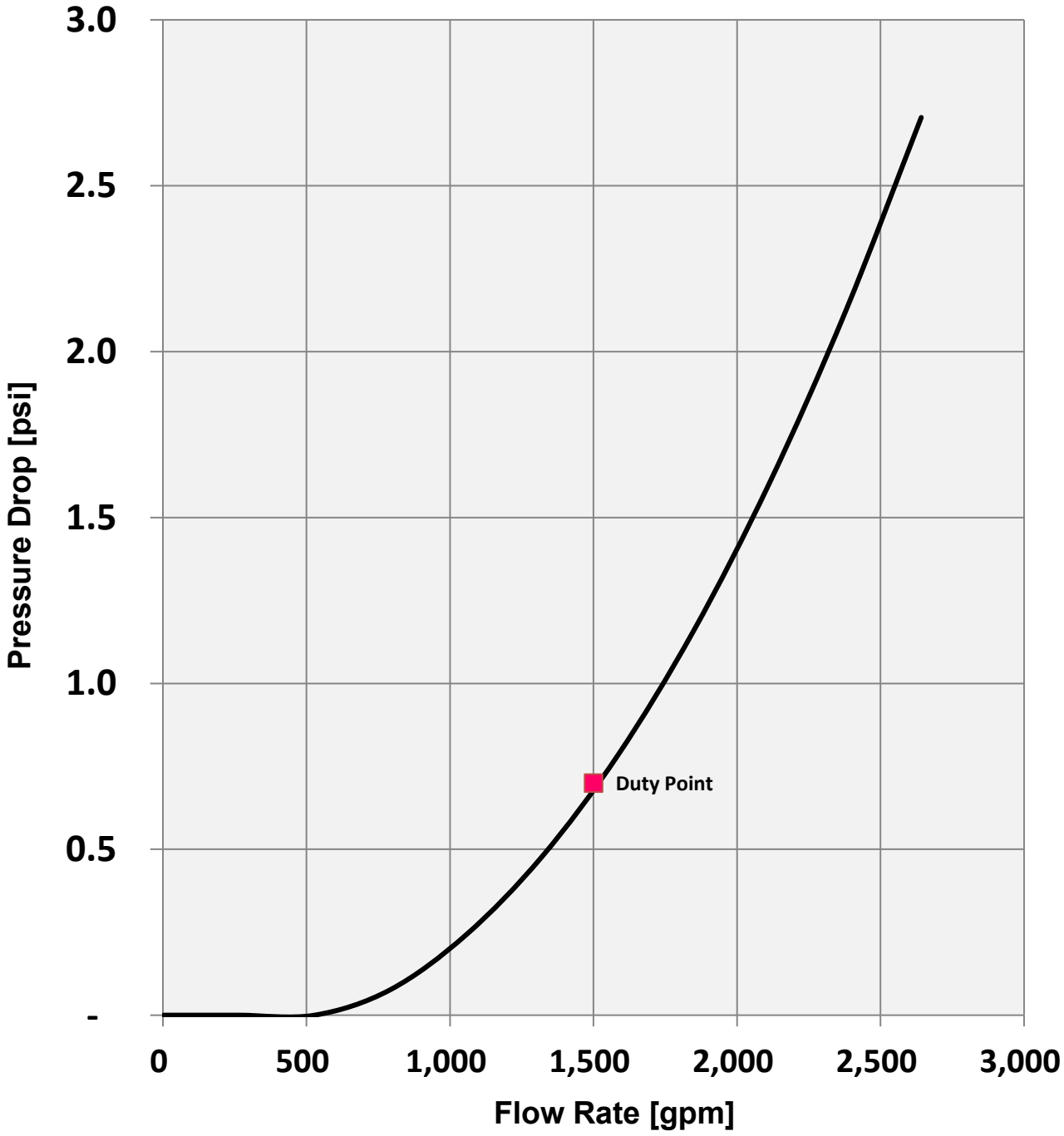
Warranty Type	Municipal Warranty - Standard

Pressure Loss Curve

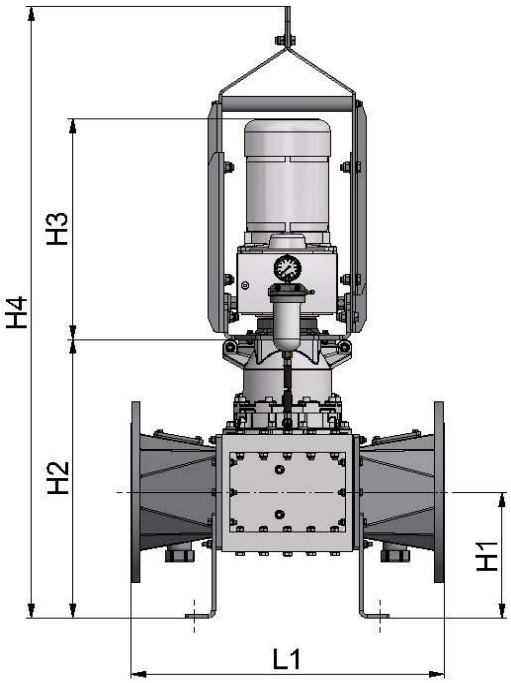
VOGELSANG

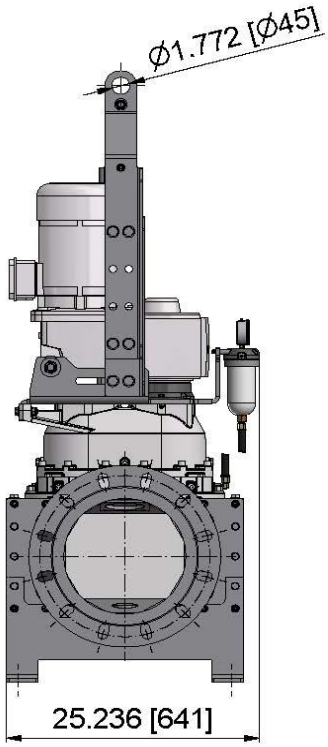
ENGINEERED TO WORK

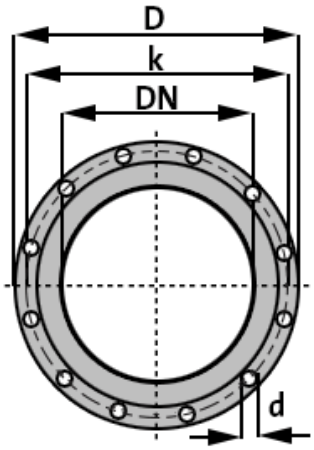
XRipper: XRP186-260Q
Project Name: Hamburg, MI JWC Replacemer
Quote #: 13882101
Medium: Raw Sewage - Municipal Wastewater
Solids: 1% Dry Solids
Equipment Tag(s):

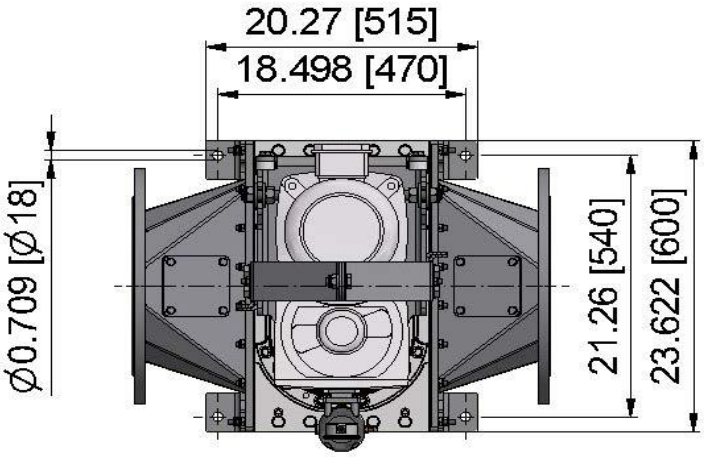


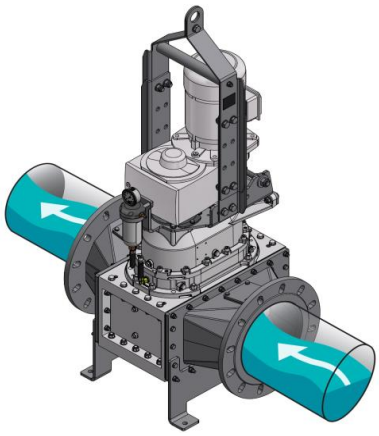
Raised-Face Flange D	
Norm	ANSI (ASA) B 16.5
DN	12
D	19
k	17
d	1
Hole number	12











Flow Direction

Vogelsang Data	
Customer	Hamlett Environmental Technologie
Quote ID	13882101
Sales Order No	
Position No	1
Project	Hamburg, MI JWC Replacement

XRipper	XRB0000347
Motor	US.GM0047
Flange Left	CON2673
Flange Right	CON2673
Mounting	PAS0106
Total Weight	1158 lbs

All dimensions are shown in inch [mm]
Scale: NTS

Dimension	inch	mm
L1	31.26	794.00
H1	13.27	337.00
H2	29.37	746.00
H3	22.33	567.16
H4	66.40	1,686.60

sales@vogelsangusa.com
7966 SR 44, Ravenna, OH 44266
Phone: 330-296-3820

Date 6/2/2025 © copyright

VOGELSANG
ENGINEERED TO WORK

LIMITED WARRANTY

For the benefit of the original purchaser only. Vogelsang warrants all products of its manufacture to be free from defects in workmanship and materials for 5 years, and failure from wear for a period of 2 years from the date of substantial completion , provided the purchaser gives prompt notice of any such defect to Vogelsang, and upon request, furnishes any defective parts or product to Vogelsang for its inspection, freight pre-paid, at its facility in Ravenna, Ohio. Provided such notice is received, and authorization is given by Vogelsang in writing, to commence work on its behalf, Vogelsang, at its option, will either repair or replace, without charge, **F.O.B. original shipping point**, any parts of products to have been found defective at shipment or during the warranty period, or credit to the account of purchaser the price paid for such product. No reimbursement shall be allowed for any expense incurred for repairs or alterations made by others without **prior** written authorization from Vogelsang.

The warranty does not cover any product failures arising from abnormal use, improper or other than approved applications or installations, neglect or accident. Our products are not designed nor intended for use with every known substance. Vogelsang does not warrant against chemical incompatibility.

The foregoing expressed limited warranty and remedy are exclusive of all other warranties and remedies, including, but not limited to, all implied warranties of merchantability or fitness for particular purpose, and all other remedies and damages for breach of such warranties are specifically excluded.

The warranties of Vogelsang do not cover and Vogelsang makes **NO Warranty** with respect to:

A. Materials of construction offered by Vogelsang are recommended based of previous Vogelsang experience. Verifications and acceptance of the materials of construction recommended are the sole responsibility of the buyer;
B. Failures not reported to Vogelsang within the warranty period specified above;
C. Failures or damage due to misapplication, abuse, improper installation;
D. Failures due to operation above the rated capacities or in an otherwise improper manner;
E. Products which have been in any way tampered with or altered by anyone other than an authorized representative of Vogelsang
F. Products damaged in shipment or storage or otherwise without fault of Vogelsang;
G. Loss associated with pumping medium
H. Labor and/or material expense incurred by buyer which relates in any manner to any alleged defective products, unless the Buyer incurs such expenses under expressed written authorization, from Vogelsang, **PRIOR TO THE COMMENCEMENT OF WORK.**
I. Unless a freight carrier is noted on the buyer's purchase order, Vogelsang will send all shipments at its own discretion, using fully insured commercial carriers.

Any equipment manufactured by others, included in the sale is sold only with such warranties as may be provided by the original manufacturer.

This information supersedes all previously published information.

Hamburg Township
a great place to grow

10405 Merrill Road
P.O. Box 157
Hamburg, MI 48139
(810) 231-1000
www.hamburg.mi.us

TO: Board of Trustees

FROM: Michelle DeLancey, Director of Accounting and Human Resources

DATE: July 9, 2025

AGENDA ITEM TOPIC: Treasury department phone stipends

Number of Supporting Documents: 0

Requested Action

Motion to approve an administrative cell phone stipend in the amount of $50.00 per month for Treasurer Daniels, effective July 1, 2025, and a supervisory cell phone stipend in the amount of $35.00 per month for Deputy Treasurer Thornton, effective July 2, 2025.

Background

Per the Administrative Policies and Procedures Manual section 4.14(d) cell phone stipends will be established by a majority vote of the Township Board. It has been Township practice, and is budgeted for, that the Treasurer receives the administrative stipend in the amount of $50.00/month, and that the Deputy Treasurer receives the supervisory stipend in the amount of $35.00/month.

1. **Administrative Stipend;** an executive level or critical employee that "must have" cellular phone service for emergency contact. This position or work assignment has a high level of responsibility and accountability for delivery of government services. This employee requires an extremely high volume of demand for communication with subordinates, business partners, and citizens.
2. **Supervisory Stipend;** = a management or supervisory level employee who "needs to have" ce11ular phone service while either on call or in a position to give 24-hour work direction to others. These employee responsibilities require regular and ongoing need for accessibility and communication either throughout the workday and while off duty.
3. **Staff Stipend;** a front-line employee where it is convenient to have cellular services to enhance the productivity and efficiency of Township services.

Employee Owned Cell Phones

Stipend Level	Monthly Stipend Rate
Administrative	$50.00
Supervisory	$35.00
Staff	$20.00

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10405 Merrill Road
P.O. Box 157
Hamburg, MI 48139
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www.hamburg.mi.us

TO: Board of Trustees

FROM: Michael Dolan, Township Clerk

DATE: July 10, 2025

AGENDA ITEM TOPIC: Vehicle Purchase - Township Pool

Requested Action

- Motion to approve a budget amendment from reserves to Capital Equipment (101-101.000-980.000) in the amount of $37,587.00.
- Motion to approve the purchase of a 2026 Dodge Durango, as outlined in the attached quote, from LaFontaine CJDR of Lansing, Mi for the price of $37,587.00

Background

This vehicle will serve as a township pool vehicle replacing the high millage explorer currently being used. Bob Maxey Ford determined the explorer is need of a new transmission and other repairs totaling more than $5000 which far exceeds the value of the vehicle.

LaFontaine CDJR-Lansing
6131 S. Pennsylvania Ave.
Lansing, MI 48911
517-394-1022-Direct
517-394-1205-Fax
mdeacon@lafontaine.com

Name: Hamburg Township
Address:
City: State: Zip:
Contact: Dariusz Nisenbaum
Phone: 810.231.9391
Email: dnisenbaum@hamburg.mi.us

Date: 7/2/2025
Quote 070225

State of Michigan Contract 240000001206		
WDEH75	2026 Dodge Durango GT AWD	$37,192.00
2BD	3.6L V6	
PAS	Vapor Gray	$395.00
C5X9	Black Cloth Seats	
	Per contract delivery is $2.00 a mile one way mileage.	
	By signing the purchase agreement you agree to purchase of the vehicle or	
	vehicles X_____	
	Total Cost:	$37,587.00

Signed *Michelle Deacon*

Please note payment is due within 30 days of delivery. Any invoices paid after 30 days may be subject to a 1.5% late fee

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a great place to grow
10405 Merrill Road ♦ P.O. Box 157
Hamburg, MI 48139
Phone: 810.231.1000 ♦ Fax: 810.231.4295
www.hamburg.mi.us

07/07/25

To: Hamburg Township Board
From: Tony Randazzo

Re: Microsoft License Renewal

I request approval to renew our Office 365 licenses as well as our Exchange (email) licenses through CDW. These are essential programs that we use daily. This is also a yearly renewal and was anticipated in the new fiscal year. The total amount is $11,410. I also seek approval to purchase twenty new licenses of Office 2024 to replace our existing Office 2019 licenses which will stop being supported this fall. The total cost of both purchases will be $18,422.20.

Thank you for choosing CDW. We have received your quote.

QUOTE CONFIRMATION

TONY RANDAZZO,

Thank you for considering CDW•G for your technology needs. The details of your quote are below. **If you are an eProcurement or single sign on customer, please log into your system to access the CDW site.** You can search for your quote to retrieve and transfer back into your system for processing.

For all other customers, click below to convert your quote to an order.

Convert Quote to Order

QUOTE #	QUOTE DATE	QUOTE REFERENCE	CUSTOMER #	GRAND TOTAL
PMBC443	6/17/2025	MS RNWL + OFFICE	7101576	$18,422.20

QUOTE DETAILS

ITEM	QTY	CDW#	UNIT PRICE	EXT. PRICE
Microsoft 365 Apps - subscription license - 1 user Mfg. Part#: AAA-11674-CCD-12MO UNSPSC: 43231513 Electronic distribution - NO MEDIA Contract: Standard Pricing	40	3901311	$141.64	$5,665.60
Microsoft Exchange Online Plan 1G - subscription license - 1 user Mfg. Part#: AAA-11624-CCD-12MO UNSPSC: 43233501 Electronic distribution - NO MEDIA Contract: Standard Pricing	120	3678998	$47.87	$5,744.40
Microsoft Office Standard Edition - license - 1 device Mfg. Part#: AAA-03499-CCF UNSPSC: 43231513 Electronic distribution - NO MEDIA Contract: MARKET	20	3916633	$350.61	$7,012.20

SUBTOTAL	$18,422.20
SHIPPING	$0.00
SALES TAX	$0.00
GRAND TOTAL	**$18,422.20**

PURCHASER BILLING INFO	DELIVER TO

Hamburg Township
a great place to grow
10405 Merrill Road ♦ P.O. Box 157
Hamburg, MI 48139
Phone: 810.231.1000 ♦ Fax: 810.231.4295
www.hamburg.mi.us

07/10/25

To: Hamburg Township Board
From: Tony Randazzo

Re: New HVAC Unit- Township Hall

I request approval to replace one of the AC/Furnace units at Township Hall. The air conditioning on this unit currently needs nearly $1,000 worth of repairs for a short-term fix. This is not economical, especially since the unit is twenty-five years old. I have obtained two quotes for replacement and I recommend ordering the new unit from Lakeside Service for a total price of $11,303.64, which is roughly $1,000 lower than the other quote.

We anticipated replacing an AC/Furnace unit this year at Township Hall, but we did not include enough for the full amount in the budget. However, we will make up the difference through building reserves/and or savings from other line items in the Buildings and Grounds budget.

LAKESIDE SERVICE COMPANY, INC.
HEATING • COOLING • PLUMBING
"Where customer satisfaction always comes first!"

Lakeside Service Company
4367 S Old Us Highway 23
Brighton, MI 48114
810-227-2719
www.lakesideservice.com

Estimate 218527509
Project 218504158
Estimate Date 6/18/2025
Customer PO

Billing Address
Hamburg Township
P.O. Box 157
Hamburg, MI 48139 USA

Job Address
Hamburg Township Hall
10405 Merrill Road
Whitmore Lake, MI 48189 USA

Estimate Details

Township Hall System #2 - Replace Furnace & AC with Daikin/Goodman System:

HAMBURG TOWNSHIP HALL
Replacing the existing Trane, 3-Ton AC unit and Trane 100,000 BTU/h high efficiency furnace

EQUIPMENT:
Goodman GR9S96 96%, Single-Stage Multi-Speed ECM Gas Furnace, 100,000 BTU/h
Daikin DC3SEA3630, 13.4 SEER2, A2L compliant R32 refrigerant, 3-Ton 208/230V 3-Phase electrical
Goodman 3-Ton cased matching indoor evaporator coil with factory installed TXV
Install surge protectors on both appliances

SCOPE OF WORK
Remove and dispose of the existing furnace, condenser, and coil
EPA-certified recovery and recycling of the existing refrigerant
Tie into the existing control wiring
Replace condensate drains and install EZ-trap with a cleanout at the evaporator coils
New refrigeration piping
Tie into the existing PVC vents
New condenser pad and 3" feet under the condensing unit
Tie into the existing electrical utilities
Tie into the existing ductwork, including any fabricated duct transitions, for a perfect fit
Reuse the existing thermostat
Perform detailed equipment commissioning and start-ups by NATE-certified technicians
All labor and necessary materials to perform the installation
Mechanical Permits

WARRANTY: 20-year warranty on the heat exchanger parts, 5-year warranty on the compressor parts, 5-year warranty on all system components, and 1-year warranty on all labor

Service #	Description	Quantity	Your Price	Your Total
TIP	Total install price:	1.00	$11,143.64	$11,143.64
CPN-M	Membership Discount 5%	0.00	-$557.18	$0.00
MECH PRMT	Mechanical permit for a replacement HVAC system. Includes the permit application fee, inspection fee and costs associated with inspections. Some system require an additional electrical permit which is not included.	1.00	$160.00	$160.00

Potential Savings	$8.00
Sub-Total	$11,303.64
Tax	$0.00
Total	$11,303.64

Buyer hereby declares that buyer holds title to property at 10405 Merrill Road, Whitmore Lake, MI 48189 USA in which merchandise is being installed, and/or service is being performed, and has legal authority to order the work outlined above. The Seller retains title to all materials and property listed herein until payments have been made in full.
Signor agrees to pay Lakeside Service Co. Inc., $11,303.64 for the products and/or services named on this agreement.

Payment of $11,303.64 balance is due in full at the time of service. Settlement of the balance is to be payed with U.S. Dollars (USD), unless a finance agreement has been approved before work for named service has begun. If a finance agreement has been approved a signature is to be provided on all required financing documents at the time of service.

Settlement of contract is due upon completion of work on the scheduled date regardless of status of municipal permits and inspections. If a municipal inspection on work performed by Lakeside Service Co. Inc. requires additional work to pass inspection, and the additional work is included in the products and/or services named in this agreement, Lakeside Service Co Inc. promises to perform work at no charge to buyer within a reasonable amount of time from the notice provided by the municipality. If additional work required by municipality is not included in the products and/or services named in this agreement, then the authorized signor on this agreement agrees to pay current retail labor rates and retail list price for the additional products and/or services at 10405 Merrill Road, Whitmore Lake, MI 48189 USA.

Accounts not paid within thirty days of notice of invoice are in default and a late payment charge computed by "periodic rate" per month will be added. Buyer agrees to any reasonable attorney or collection fees incurred by Seller in securing payment for this contract.

BJ's HEATING & COOLING
3481 E M-36
Pinckney, MI 48169
(734)878-9890

PROPOSAL

Hamburg Township Hall
10405 Merrill Rd
Hamburg Township, MI

June 26, 2025

Attn: Tony Randazzo

We hereby propose to furnish the materials and perform the work necessary to replace the furnace and a/c system as follows:

- Install Bryant model 916, single-stage, 96% efficient natural gas furnace with DC drive blower motor as per specs
- Install Bryant model 134, single stage, 15.2 SEER2, 3-ton a/c system complete with condenser, coil, and pad as per specs
- Use existing line set
- Connect into existing supply and return duct work
- Duct seal all new duct fittings
- Upgrade gas, electrical and PVC venting
- Use existing 2" filter box
- Use existing Ecobee thermostats
- Remove and dispose of old equipment
- Includes labor and materials
- 5-year parts and labor warranty

PRICE: $12,840.00

All material is guaranteed to be as specified, and the above work to be performed in accordance with the drawings and specifications submitted for above work and completed in a substantial workmanlike manner for the sum above with payments to be made as follows:

Payment upon completion

Any alteration or deviation from the above specifications involving extra costs, will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents, or delays beyond our control. Owner to carry fire, tornado, and other necessary insurance upon above work. Workmen's Compensation and Public Liability Insurance on above work to be taken out by B.J.'s Heating & Cooling Inc.

Respectfully submitted **B.J.'s Heating & Cooling Inc.**

Doug Smith, President

Note - this proposal may be withdrawn by us if not accepted within 30 days.

Acceptance of Proposal

The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Signature _____ Date_____