



PLANNING COMMISSION MEETING

LOCATION: TOWNSHIP ANNEX, 7527 HIGHLAND ROAD, WHITE LAKE, MI 48383
THURSDAY, SEPTEMBER 21, 2023 – 7:00 PM

White Lake Township | 7525 Highland Rd | White Lake, MI 48383 | Phone: (248) 698-3300 | www.whitelaketwp.com

AGENDA

1. CALL TO ORDER
2. ROLL CALL
3. PLEDGE OF ALLEGIANCE
4. APPROVAL OF AGENDA
5. APPROVAL OF MINUTES
 - A. [September 7, 2023](#)
6. CALL TO THE PUBLIC (FOR ITEMS NOT ON THE AGENDA)
7. PUBLIC HEARING
 - A. [Carter's Plumbing](#)
[Location: located south of Highland Road, and east of Teggerdine Road, consisting of 1.38 acres. Currently zoned Light Manufacturing \(LM\). Identified as parcel 12-22-252-022 \(10431 Highland Road\)](#)
[Request: Special Land Use approval](#)
[Applicant: Kieft Engineering](#)
[5852 S. Main Street, Ste. 1](#)
[Clarkston, MI 48346](#)
8. CONTINUING BUSINESS
9. NEW BUSINESS
10. OTHER BUSINESS
 - A. [Oakland Harvesters - FSP & SLU extension request](#)
 - B. [Master Plan update](#)
11. LIAISONS' REPORT
12. DIRECTOR'S REPORT
13. COMMUNICATIONS
14. NEXT MEETING DATE: October 5, 2023
15. ADJOURNMENT

Procedures for accommodations for persons with disabilities: The Township will follow its normal procedures for individuals with disabilities needing accommodations for effective participation in this meeting. **Please contact the Township Clerk's office at (248) 698-3300 X-164 at least two days in advance of the meeting.** An attempt will be made to make reasonable accommodations.

**WHITE LAKE TOWNSHIP
PLANNING COMMISSION
SEPTEMBER 7, 2023**

Item A.

CALL TO ORDER

Chairperson Seward called the meeting to order at 7:00 P.M.

ROLL CALL

Present:

T. Joseph Seward, Chairperson
Matt Slicker
Steve Anderson (arrival at 7:02 P.M.)
Merrie Carlock, Vice Chairperson
Pete Meagher
Robert Seeley
Debby Dehart

Absent:

Mark Fine
Scott Ruggles, Township Board Liaison

Others:

Sean O'Neil, Community Development Director
Justin Quagliata, Staff Planner
Rowan Brady, BRI
Hannah Micallef, Recording Secretary

APPROVAL OF AGENDA

MOTION by Commissioner Seeley, seconded by Commissioner Carlock to approve the agenda as presented. The motion carried with a voice vote: (6 yes votes).

APPROVAL OF MINUTES

A. August 17, 2023

MOTION by Commissioner Meagher, seconded by Commissioner Seeley to approve the minutes of 7:05 P.M. The motion carried with a voice vote: (6 yes votes).

CALL TO THE PUBLIC (FOR ITEMS NOT ON THE AGENDA)

Josh Lantto, 2729 Cloverdale, Highland, spoke regarding being "trepassed" at Oxbow Elementary.

Steve Woodard, 953 Schuyler, spoke regarding the increased rainfall and the damage it had caused to Brendel Lake. He wanted ideas to manage the lake levels.

Chairperson Seward closed the public hearing at 7:07 P.M.

PUBLIC HEARING

A. 2024-2029 Capital Improvement Plan (CIP)

Staff Planner Quagliata said the document had not been changed since the Planning Commission last met. Grammatical and clerical errors were changed. The plan included the draft resolution for the Township Board provided the plan was recommended for approval this evening.

Staff Planner Quagliata briefly went over the Capital Improvement Plan background and process for the audience.

Chairperson Seward opened the public hearing at 7:19 P.M.

Pamela Barckholtz, 5055 Grass Lake, asked about the length of a long-range plan and added that it was difficult to make five year plans due to the economy. Her concern was adopting a plan so big when the environment was ever changing. She wanted the Planning Commission to consider the length of the CIP.

Staff Planner Quagliata added that while the plan was adopted for a six-year process, the plan received annual updates.

Director O'Neil thanked Staff Planner Quagliata for all his work on this year's CIP.

Chairperson Seward closed the public hearing at 7:23 P.M.

**MOTION by Commissioner Seeley, seconded by Commissioner Anderson to adopt the 2024-2029 Capital Improvement Plan. The motion carried with a roll call vote: (7 yes votes)
(Seeley/yes, Anderson/yes, Meagher/yes, Dehart/yes, Carlock/yes, Seward/yes, Slicker/yes).**

CONTINUING BUSINESS

None.

NEW BUSINESS

None.

OTHER BUSINESS

A. Master Plan update

Mr. Brady went over the results from the Master Plan workshop last month. Three out of the five redevelopment areas would be included in the Master Plan; the Planning Commission would decide which three sites to include.

The Planning Commission chose Pontiac Lake Gateway, Cedar Island Road and Bogie Lake Road, and the Town Center area to further refine for inclusion in and concepts for the Master Plan. The feedback from the community would be used to redevelop the site concepts for the Master Plan. The Planning Commission discussed what they would like to see as allowable use and amenities at each site.

Mr. Brady covered the Community Facilities chapter, which served as an inventory of services within the Township.

LIAISONS' REPORT

The ZBA met last month; four cases were heard. Two cases were postponed, one was denied, and one was approved.

DIRECTOR'S REPORT

The Board approved the Panera project. There was a discussion in closed session regarding the Black Rock lawsuit. There was a scheduled public hearing at the Township Board this month for the first phase of the CIA plan approval. The Avalon project was still stalled; there were certain parts of the site undergoing reengineering. Hypershine Car Wash opened a few weeks ago.

COMMUNICATIONS

Carter's Plumbing would requesting a special land use approval at the September 21 meeting.

NEXT MEETING DATE: September 21, 2023

ADJOURNMENT

MOTION by Commissioner Carlock, seconded by Commissioner Dehart to adjourn at 8:44 P.M. The motion carried with a voice vote: (7 yes votes).

Director's Report

Project Name: Carter's Plumbing

Description: Special land use approval

Date on Agenda this packet pertains to: September 21, 2023

☒ Public Hearing☒ Special Land Use☒ Initial Submittal☐ Rezoning☐ Revised Plans☐ Other:☐ Preliminary Approval☐ Final Approval

Contact	Consultants & Departments	Approval	Denial	Approved w/Conditions	Other	Comments
Sean O'Neil	Planning Director	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Per Staff Planner's comments
DLZ	Engineering Consultant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DLZ	Traffic Engineer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Justin Quagliata	Staff Planner	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See letter dated 09/12/2023.
John Holland	WLT Fire Chief	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

WHITE LAKE TOWNSHIP PLANNING COMMISSION

REPORT OF THE COMMUNITY DEVELOPMENT DEPARTMENT

TO: Planning Commission

FROM: Sean O'Neil, AICP, Community Development Director
Justin Quagliata, Staff Planner

DATE: September 12, 2023

RE: Carter's Plumbing
Special Land Use Approval – Review #1

Kieft Engineering, Inc., on behalf of CAMQ Properties, LLC, has requested special land use approval in accordance with Section 4.39 of the Zoning Ordinance to allow outdoor storage of pallets, containers, materials, or products at 10431 Highland Road (Parcel Number 12-22-252-022), located on the south side of Highland Road, east of Teggerdine Road. The 1.38-acre subject site is zoned LM (Light Manufacturing) and currently occupied by Carter's Plumbing. A gravel yard on the west side of the site is the location of the proposed storage area.

At its meeting on July 19, 2022 the Township Board approved a Performance Guarantee Agreement, which established conditions needing to be met in order for Carter's Plumbing to occupy the property. The Township Board packet item regarding the Performance Guarantee Agreement is attached for reference. On September 12, 2023 the Community Development Department granted administrative site plan review approval to facilitate the required improvements. Also, on May 25, 2023 the Zoning Board of Appeals granted variances (staff report attached for reference) to allow certain improvements to be implemented as proposed.

Master Plan

The Future Land Use Map from the Master Plan designates the subject site in the Satellite Business category, which is intended to provide locations for mixed retail, office, and personal services convenient to residential neighborhood concentrations. Satellite locations are not intended for intensive businesses that would be more appropriately located elsewhere. Typical Satellite Business uses would operate during standard business hours, with the majority of patrons coming from pass-by traffic.

FUTURE LAND USE MAP



Zoning

Outdoor storage of pallets, containers, materials, or products is permitted with special land use approval in the LM zoning district, which requires a minimum lot area of one acre and 175 feet of lot width. The subject site contains 290 feet of frontage along Highland Road and 1.38 acres of lot area.

Access

The site fronts on Highland Road, which along the subject property is a five-lane (center turn lane) public road with curb and gutter designated as a principal arterial by the National Functional Classification System (NFCS) utilized by the Michigan Department of Transportation (MDOT). An eight-foot-wide concrete sidewalk will be installed along the property frontage in and the westerly driveway will be eliminated in accordance with the administrative site plan. A reduction in driveways would bring the nonconforming site access closer to compliance with the Zoning Ordinance access management standards; however, access to this site will remain nonconforming after improvements.

Utilities

Municipal water and sanitary sewer serve the site.

Staff Analysis

Special land uses for outdoor storage of pallets, containers, materials, or products are evaluated using the general standards for all special land uses listed in Article 6, Section 10 of the Zoning Ordinance and the specific use standards found in Section 4.39 of the Zoning Ordinance. The property will be screened with an eight-foot-tall vertical slat wood fence on the east, west, and south property lines. An eight-foot-tall black vinyl fence is proposed along the portion of the north property line adjacent to the storage area. The Zoning Ordinance also requires equipment/materials to be completely screened (not visible above fencing) if stored within 20 feet of the fencing.

Note outdoor storage of fleet vehicles is not being proposed. Carter's Plumbing employees take business vehicles home as the company offers emergency service seven days a week. Also, special land use approval for outdoor storage of fleet vehicles, if requested in the future, would be subject to receiving a variance as minimum lot area of two acres is required for such use.

Planning Commission Options / Recommendation

The Planning Commission may approve, approve with conditions, or deny the special land use. **Staff recommends approval of the special land use subject to compliance with staff and consultants' administrative site plan review comments and requirements.**

Attachments:

1. Special land use application dated August 23, 2023.
2. DLZ administrative site plan review letter #5 dated September 12, 2023.
3. Administrative site plan review letter #5 dated August 30, 2023.
4. Administrative site plan review letter #3 dated June 27, 2023.
5. Zoning Board of Appeals staff report dated May 25, 2023.
6. Performance Guarantee Agreement staff report and attachments dated July 15, 2022.
7. Administrative site plan (revision date August 25, 2023).

CHARTER TOWNSHIP OF WHITE LAKE
SITE PLAN REVIEW APPLICATION
Community Development Department, 7525 Highland
Road, White Lake, Michigan 48383
(248) 698-3300 x5

Item A.

APPLICANT AND PROPERTY INFORMATION

Applicant: Kieft Engineering - Casey Leach, P.E.
Phone: (248) 884-8224 Email Address: cleach@kiefteng.com
Address: 5852 S. Main Street, Ste. 1, Clarkston, MI 48346
(Street) (City) (State) (Zip)
Applicant's Legal Interest in Property: Engineer
Property Owner: CAMQ Properties, LLC - c/o Matthew Carter Phone: (248) 795-0914
Address: 10431 Highland Road, White Lake, MI 48386
(Street) (City) (State) (Zip)

PROJECT INFORMATION

Project Name: Carter's Plumbing Parcel I.D. No.: 12-22-252-022
Proposed Use: Outdoor Storage - ZO Sec. 4.37 & 4.39 Current Zoning: LM: Light Manufacturing
Existing Use: Plumbing Contractor's Office/Yard/Storage Parcel Size: 1.38 Acres Floor Area / No. of Units See Sheet C1.01

TYPE OF DEVELOPMENT


☐ Subdivision ☐ Site Condominium ☐ Commercial
☐ Multiple Family ☒ Special Land Use ☐ Industrial
☐ Adult Entertainment

SITE PLAN SUBMITTAL CHECKLIST

- ☒ PDF File **and** One Paper Copy (sealed and no larger than 24x36)
☒ Application Review Fees (to be calculated by the Community Development Department)

* PLANS WILL NOT BE ACCEPTED UNLESS FOLDED *

REQUIRED SIGNATURES

(Signature of Property Owner) Matthew Carter 08/23/2023
(Date)


(Signature of Applicant) Casey Leach, P.E. 08/23/2023
(Date)

SIGNATURES TO BE VERIFIED BY THE TOWNSHIP



INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

September 12, 2023

Sean O' Neil
Community Development Department
Charter Township of White Lake
7525 Highland Road
White Lake, Michigan 48383

RE: Carter's Plumbing- Administrative Site Plan Review – 5th Review

Ref: DLZ No. 2245-7382-13

Design Professional: Kieft Engineering, Inc.

Dear Mr. O' Neil,

Our office has performed an Administrative Site Plan review for the above-mentioned plan dated August 25, 2023. The plans were reviewed for feasibility and for conformance with the Township Engineering Design Standards.

General Site Information

This 1.38 acre site is located south of M-59 and east of Teggerdine Road.

Site Improvement Information:

- Paving, curbing, and striping of parking area and internal circulation lanes, including two (2) ADA parking spaces. Buildings on site are existing and shall remain.
- Main building is serviced by existing connection to 12" diameter watermain along M-59.
- Connection to existing sanitary sewer along M-59.
- Storm water to be pretreated and routed via proposed storm sewer to existing wetlands to the south.

Comments

We note that comments from our August 21, 2023 review are in *italics*. Responses to those comments are in **bold**. New comments are in standard font.

1. *Ordinance requires the proposed 8' wide sidewalk along the M-59 frontage should be extended all the way to the west property line and should transition to the existing walk; currently it is shown to end short of the property line and not connect to existing. The proposed sidewalk is now shown to extend to the western property line, however there is not a connection to the existing shoulder along Highland Road. We defer to White Lake Township if it shall be a requirement to make this connection to avoid the gap in the pathway. **Comment addressed. A connection between the proposed concrete sidewalk and the existing asphalt shoulder is now shown.***
2. *ADA parking spaces will need to meet ADA standards in terms of slopes and dimensions; further details will be required at the time of Final Engineering Plan submittal. Comment remains as a notation. Comment outstanding. Although detailed grading information has now been provided for the ADA parking spaces, there are several new comments in response to this additional information. Please refer to new comments. **Comment addressed; new comments have been addressed.***
3. *The proposed ADA parking space at the front of the building does not meet ADA parking layout requirements as a loading space is required on the side of the ADA space and not in the rear. In addition, the location relative to the narrow one way drive does not lend itself to safe vehicle access for persons with disabilities. Per the design engineer, the Township has determined this location is acceptable and that the adjacent walk will serve as the loading area for this ADA space. We defer to White Lake Township Planning Department for concurrence. **Comment remains.***
4. *A flush curb is proposed between the asphalt parking area and the gravel yard. If a flush curb is proposed, it could be assumed that the gravel area will ultimately be used for vehicle storage or parking. If the intent is vehicle storage or parking, then Township Zoning Ordinance 5.11 Q. xi. would require the gravel area to the west to be paved. If the intent is not parking, then a standard duty curb and gutter shall be required in order to delineate parking and non-parking areas and would be required to extend north/south all the way to the recycle and scrap storage area wall. Per the design engineer the intent of the gravel area is as a lay-down area as well as an area for storage of plowed snow hence the flush curb. We defer to the Township Planning Department if this is acceptable or if a full curb section shall be used to further delineate between parking and storage areas. **Comment remains. Per the design engineer review response letter, Carter's Plumbing has applied for a Special Land Use for use of a flush curb.***
5. *The plan proposes two traffic circulation aisles as one way and at widths of 12' and 13' respectively. Zoning Ordinance 5.11 Q.v. requires a minimum of 20' width for one way drives. Comment addressed. The 13' wide drive is now shown as 20' in width. The 12' wide drive remains per allowable drive width where parallel parking spaces are proposed. We also note that per the Township Planning review dated May 10, 2023 that the 12' wide drive is only allowed if MDOT approves a license agreement for the portion of the access aisle in the ROW. If the agreement is not provided, then the parallel parking spaces would not be permitted. **Comment remains as a notation.***
6. *Is a cross access easement existing for the eastern on-site drive? If no, will the Township or MDOT require one? Comment remains as a notation. There is currently no existing cross access easement for the existing drive. Design engineer states that an easement agreement will be provided for review*

with the next plan submittal. The easement agreement was received and reviewed separate from this submittal. Our 8/15/2023 review letter requested revisions to the easement submittal. **The revised reciprocal access easement agreement was reviewed by our office under separate cover. Please reference our letter dated 9/11/2023 to identify if any outstanding items exist.**

7. The Environmental Notes provided indicate that a Due Care Plan has been developed for the site to address construction within the NAPL contamination and plume area of the site. We defer to EGLE regarding approval of the Due Care Plan. Comment addressed. An email from EGLE RRD has been received indicating that the plans appear to comply with the requirements of the restrictive covenant on the property and that no recommended changes are required. **Comment remains as a notation.**
8. Indicate if there is an easement over the existing 42" storm sewer that traverses the property from north to south and whether the easement contains any restrictions. In addition, verify with Oakland County as to whether this sewer is part of a County Drain. Comment addressed. Per the engineer response letter dated April 28, 2023, no easement has been found for this sewer and OCWRC has responded that this sewer is not part of a County Drain. **Comment remains as a notation.**
9. Is Glynn Road now under White Lake Township jurisdiction since it appears to have been vacated by the County? Is there a drainage easement or conservation easement over the wetlands to the south of the site? If so, does the easement allow for discharge from the Carter's site to this area? Please clarify as proposed end section is also shown off site in this area. Comment addressed. Per the design engineer, Glynn Road and the wetlands that lie within the Glynn Road ROW are under RCOC jurisdiction; a permit for work in the Glynn Road ROW shall be required from RCOC. **Comment remains as a notation.**
10. We defer to the Township Fire Department regarding hydrant coverage. **Comment remains as a notation.**
11. Sheet C1.01- Provide retaining wall detail for proposed wall along sidewalk, including cross section. Comment remains. Retaining wall detail will be submitted by Lopez Engineering at a later date. **Comment addressed. A retaining wall detail has now been submitted.**
12. Sheet C1.21- please describe the ADA access to the office/garage building; it appears the adjacent concrete walk is raised and would not allow access. Comment partially addressed. Concrete ramp that is described to be used for ADA access to the rear of the building measures to be 16.7% which does not meet ADA requirements. The max slope for a ramp can only be 1:12. **Comment addressed. ADA access to building shall be at front of building.**
13. Sheet C4.01- Provide grades for the western most corners of the proposed parallel ADA parking space. In addition, the slopes for the adjacent ramps do not appear to calculate to ADA requirements and appear to exceed maximum allowable slope. Comment remains. Based off scaling on the plans the slopes for adjacent ramps are 10% and the max slope allowed for ADA requirements is 8.33%. **Comment addressed. Ramp slopes are now within ADA slope requirements.**

Required Permits and Approvals

1. A permit from MDOT shall be required for work within the M-59 right of way.



INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

WLT-Carter's Plumbing- Administrative Site Plan Review.05

September 12, 2023

Page 4 of 4

2. A permit from RCOC shall be required for work within the Glynn Road right of way.
3. Approved license agreement from MDOT for the portion of the access aisle (in the M-59 right of way) north of the existing office building.
4. A SESC permit shall be required from OCWRC.
5. Reciprocal access easement agreement for the eastern on site drive.
6. A Storm Water Maintenance Agreement shall be required

Recommendation

All of our comments have been addressed and we are now recommending approval of the Site Plan.

Please feel free to contact our office should you have any questions.

Sincerely,

DLZ Michigan

Michael Leuffgen, P.E.
Department Manager

Victoria Loemker, P.E.
Senior Engineer

Cc: Justin Quagliata, Community Development, *via email*
Hannah Micallef, Community Development, *via email*
Aaron Potter, DPS Director, White Lake Township, *via email*
Jason Hanifen, Fire Marshall, White Lake Township, *via email*

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Rik Kowall, Supervisor
Anthony L. Noble, Clerk
Mike Roman, Treasurer



Item A.
Scott Ruggles
Liz Fessler Smith
Andrea C. Voorheis
Michael Powell

WHITE LAKE TOWNSHIP

7525 Highland Road • White Lake, Michigan 48383-2900 • (248) 698-3300 • www.whitelaketwp.com

June 27, 2023

Kieft Engineering
5852 South Main Street, Suite 1
Clarkston, MI 48346

ATTN: Casey Leach

**RE: Carter's Plumbing
Administrative Site Plan – Review #3**

Dear Mr. Leach:

Staff reviewed the revised site plan prepared by Kieft Engineering (revision date June 23, 2023). The following comments from the first review letter dated March 23, 2023 and second review letter dated May 10, 2023 are listed below. Responses to the comments are provided in **(red)**.

- The property address listed on the Coversheet is incorrect. Revise accordingly. **(Comment addressed. The address has been corrected on the revised plans).**
- The parcel number listed on the Coversheet, Site Plan Review application, and Letter of Authorization is incorrect. Revise accordingly. **(Comment partially addressed. The parcel number has been corrected on the revised plans and letter of authorization, but a corrected site plan review application has not been provided). (Comment addressed. The parcel number has been corrected on the application).**
- The two preliminary site plan approval rows and the final site plan approval row on the Coversheet shall be removed and replaced with “White Lake Township – Community Development Department” and “Administrative Site Plan.” Also revise the Revision Index on the Coversheet accordingly. **(Comment addressed. The approvals listing and revision index have been corrected on the revised plans).**
- Submit a copy of the Wetland Delineation and Determination Report referenced on Sheet V1.01. **(Comment addressed. A copy of the report has been submitted).**
- Submit a copy of the Due Care Plan referenced on the Coversheet. **(Comment addressed. A copy of the report has been submitted).**
- Remove the reference to City Laws within Note 1 of Soil Erosion and Sedimentation Control notes on Sheet C0.01. **(Comment addressed – corrected by replacing “City” with “Township” on the revised plans).**

- Add the words “following receipt of Final Completion Notice from the Oakland County Water Resources Commissioner’s Office” at the end of Note 7 of Soil Erosion and Sedimentation Control notes on Sheet C0.01. **(Comment addressed. Text added on revised plans).**
- The frontage sidewalk along Highland Road shall be constructed to the east and west property lines and through the driveways (concrete sections through the approaches). If the sidewalk is not constructed to the east and west property lines, a variance is required from the Zoning Board of Appeals. **(Comment addressed. The frontage sidewalk is shown to the east and west property lines, and through the drive, on the revised plans).**
- Modification of the nonconforming driveway may require variances from the Zoning Board of Appeals. Driveways must have a minimum of 455 feet of spacing provided from other driveways along the same side of the street, measured centerline to centerline. The proposed driveway must also be aligned with the existing driveway on the opposite side of the street or offset 455 feet, measured centerline to centerline. Note the Access Management Plan suggests the two easterly site driveways be closed, with access to the site provided by the westerly driveway. Staff recommends closure of the two easterly driveways, improvement of the westerly driveway, and construction of a between-site service drive (required) across the property frontage. The number of driveways permitted for a site shall be the minimum number necessary to provide safe and efficient access for regular traffic and emergency vehicles. **(Comment rescinded. The westerly driveway is proposed to be eliminated. While contrary to the Access Management Plan, a reduction in driveways would bring the nonconforming site access closer to compliance with the Zoning Ordinance access management standards; however, access to this site would remain nonconforming after improvements).**
- Vehicle parking and storage areas shall be surfaced with asphalt or concrete. Gravel surfacing requires a variance from the Zoning Board of Appeals. **(Comment outstanding. The Applicant is requesting a variance from the Zoning Board of Appeals). (Comment addressed. A variance has been granted).**
- A variance shall be requested from the Zoning Board of Appeals (variance application submitted) to allow parking within the required northerly setback. **(Comment outstanding. The Applicant is requesting a variance from the Zoning Board of Appeals). (Comment addressed. A variance has been granted).**
- Each individual parking space shall be delineated by dual stripes, two feet apart centered on the dividing lines and painted white. The site plan shall be revised to indicate the required striping. Additionally, a parking stall striping detail shall be provided for the barrier-free space and access aisle as well as the standard space. **(Comment addressed. A note indicating the required striping has been added to Sheet C1.01 and a detail has been added to Sheet C5.01).**
- Width of the proposed parallel parking spaces shall be labeled on the site plan. See Item g, Page 2 of the DLZ review letter dated March 14, 2023 for further comment relative to the parallel parking. **(Comment addressed. The width dimension has been added to the revised plans, and the five-foot-wide sidewalk adjacent to the barrier-free parking space may serve as the access aisle).**

- One-way drives shall be a minimum of 20-feet-wide. The site plan shall be revised accordingly, or a variance is required from the Zoning Board of Appeals. Note curb and gutter (including gutter pan) shall not be included in depth or width measurements – revise accordingly. **(Comment partially addressed. The previous 13-foot drive width has been increased to 20 feet on the revised plans. The required 12-foot-wide drive adjacent to the parallel parking spaces is only permitted if the Michigan Department of Transportation (MDOT) approves a license agreement for the portion of the access aisle in the right-of-way. If a license agreement is not provided, the parallel parking spaces shall not be permitted). (Comment remains as a notation).**
- DLZ deferred compliance regarding the width of the sidewalk on the west side of the building (Item j, Page 2 of the DLZ review letter dated March 14, 2023) to the Community Development Department. If the parking spaces adjacent to the aforementioned sidewalk are 18-feet in depth, the sidewalk will not be required to be increased to 7-feet in width. Bumper blocks will not be required if the parking spaces adjacent to the aforementioned sidewalk are 18-feet in depth. **(Comment addressed. The parking spaces along the aforementioned sidewalk are proposed with 18-foot depth).**
- If a reciprocal access easement does not exist for the cross-access to the east, an easement shall be established at this time and submitted to the Township for review and approval. **(Comment remains as a notation. A proposed access easement has been added to the revised plans, and the Applicant stated an easement description and sketch would be prepared and submitted to the Township for review and approval if the Zoning Board of Appeals grants a variance to allow parking within the required front yard setback). (Comment partially addressed. A variance has been granted and a draft copy of the easement exhibit has been provided. However, an easement agreement has not yet been submitted for review).**
- Retaining wall with guardrail details shall be provided for review and approval. **(Comment remains as a notation. The Applicant stated structural engineering and detailing will be prepared and submitted to the Township for review following a decision being rendered on the variance requests). (Comment remains as a notation. The response letter provided to the previous review states structural detailing for this retaining wall will be submitted under a separate cover).**
- Masonry repair/support wall with guardrail details shall be provided for review and approval. **(Comment remains as a notation. The Applicant stated structural engineering and detailing will be prepared and submitted to the Township for review following a decision being rendered on the variance requests). (Comment rescinded. The wall height has been reduced so a guardrail is no longer required).**
- The Symbols Legend on Sheet C0.01 does not provide for existing and proposed fencing. Revise accordingly. **(Comment addressed. Fencing has been added to the legend on the revised plans).**

- The site plan shall denote proposed locations for demolition of existing fencing and construction of new fencing. **(Comment remains as a notation. The Applicant stated a demolition plan will be prepared and submitted to the Township for review following a decision being rendered on the variance requests). (Comment addressed. A demolition plan has been provided).** Fence details for both proposed fencing types shall be provided. **(Comment addressed. Fence details have been added to the revised plans).** The site plan notes an 8-foot-tall dogear privacy fence is proposed – verify dogear means vertical slat wood fencing. **(Comment addressed. The Applicant stated dog-ear indicates 1"x6" vertical slat, pressure-treated wood).** If one side of a fence has a more finished appearance, the more finished side shall face the exterior of the lot. **(Comment addressed. A note has been added on the landscape plan).** A fence permit is required from the Building Official prior to fence installation. **(Comment remains as a notation. The Applicant stated a fence permit will be obtained prior to installation). (Comment remains).**
- A variance shall be requested from the Zoning Board of Appeals (variance application submitted) to allow fencing to encroach into the Glynn Road right-of-way. Prior to this variance request being considered, approval/permit from the Road Commission for Oakland County shall be obtained and a copy of such approval/permit shall be provided to the Township. **(Comment rescinded. The requested variance, if approved, would be conditioned upon obtainment of a RCOC permit for the fence in the right-of-way).**
- A 30-foot (opening) single sliding power gate is proposed at the driveway. Gated vehicular access is subject to review and approval by the Fire Department, and a permit is required from the Building Official. **(Comment remains as a notation. The Applicant stated required approvals and permits will be obtained prior to construction).**
- A photometric plan drawn to a scale of not less than 1 inch = 30 feet shall be submitted for review and approval. **(Comment addressed. A photometric plan has been added to the revised plan set).** The photometric plan shall be sealed by the person of prepared the plan. **(Comment partially addressed. In 2022 the Community Development Director indicated a certified letter from the photometric plan design company could suffice in lieu of an engineer's seal on the drawings. However, the provided certification letter does not verify the Property Owner's compliance with the photometric plan. Upon completion of the installation of all outdoor light fixtures and prior to release of the Performance Guarantee, a registered engineer or architect shall verify in writing to the Community Development Department the outdoor lighting was installed in accordance with the approved lighting (photometric) plan and in accordance with the LM (Light Manufacturing) outdoor lighting standards found in Section 5.18.G of the Zoning Ordinance).** Footcandles shall be measured at five feet above grade (the photometric plan shall contain a note confirming footcandles are measured at five feet above grade) **(comment addressed; a note is included on the photometric plan)** and only the area of illumination shall be used to calculate footcandles. Complete catalog details (lighting fixture specification sheets) for all luminaries shall also be provided. **(Comment addressed. Cut sheets have been provided).**
 - **Revise the Statistics table to include footcandle information at the building, driveway, and parking area.**
 - **The footcandle average for the general site exceeds 0.5 footcandle. Therefore, a variance is required from the Zoning Board of Appeals. The Applicant did not request a variance for outdoor lighting, and it is unlikely such a request would be granted. The photometric plan shall be revised so the footcandle average for the general site does not exceed 0.5.**

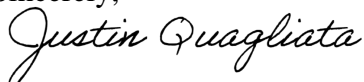
Outdoor lighting comments outstanding. The response letter provided to the previous review states a photometric plan with required updates will be provided in a separate submittal.

- Lighting shall be shielded from adjacent properties and designed to reflect continuity with the pedestrian orientation of the area. Floodlights, wall pack units, and other types of unshielded lights, and lights where the lens or bulb is visible outside of the light fixture are not permitted except in service areas where the lights will not generally be visible by the public or adjacent residential properties. Lights underneath canopies must be fully recessed into the canopy to minimize glare from the light source. **(Comment remains as a notation. The Applicant acknowledged complying with the aforementioned standards).**
- A variance shall be requested from the Zoning Board of Appeals as the required parking lot landscaping is not proposed to be installed. Revise the parking lot landscaping note on Sheet L1.01 to reference the required variance. **(Comment rescinded. The Applicant incorrectly utilized the commercial/office use schedule for parking lot landscaping. The industrial use schedule applies to this site. Therefore, sufficient parking lot landscaping is proposed).**
- A snow storage plan was not provided. Information on method of snow storage shall be provided (denote snow storage areas on the site plan). Winter maintenance of parking lot landscape islands shall be required where heavy applications of salt and de-icing products occur through the use of salt tarps which minimize soil absorption and ultimately reduce plant disorders. **(Comment addressed. Snow storage areas (gravel area along west and south side of site) have been indicated on the revised plans).**
- No more than two planted trees in a row shall be of the same species. **(Comment addressed. No required trees are planted more than two in a row).**
- Within the Highland Road greenbelt, evergreen trees shall be required. **(Comment addressed. Three White Fir trees are proposed in the front greenbelt).**
- Note 15 and the tree and shrub planting details on Sheet C5.01 mention mulch. Per the Zoning Ordinance, the mulch product itself shall be at least double-shredded quality. Revise accordingly. **(Comment outstanding. Contrary to the Applicant's response letter to the first review, the notes on Sheet L5.01 have not been revised). (Comment addressed. The note and details have been updated accordingly).**
- All required landscape areas in excess of 200 square feet shall be irrigated to assist in maintaining a healthy condition for all plantings and lawn areas. An irrigation plan shall be provided. The irrigation notes on Sheet L1.01 shall be relocated to the irrigation plan. **(Comments addressed. An irrigation plan has been added to the revised plan set, and notes have been relocated accordingly).**
- A variance shall be requested from the Zoning Board of Appeals as no irrigation is proposed to be installed along the east property line. **(Comment outstanding. The Applicant is requesting a variance from the Zoning Board of Appeals). (Comment addressed. A variance has been granted).** Revise irrigation note 1.4 to reference the required variance. **(Comment addressed. The note has been modified on the revised plans).**
- Remove note 2.3 under required screening on Sheet L1.01. **(Comment outstanding. As previously stated, this is not a required variance). (Comment addressed. The note has been removed).**
- Lawn in the Highland Road front yard shall be sod and lawn elsewhere shall be hydroseed or sod. **(Comment addressed. A note has been added to the landscape specifications on Sheet L5.01).**

- Turfstone permeable pavers shall not be permitted. If the aforementioned area is intended to provide access to the grinder pump, asphalt or concrete surfacing shall be required. Revise accordingly. **(Comment rescinded. Note turfstone pavers are not considered permeable by the Township).**
- The Landscape Schedule on Sheet C5.01 identifies a certain number of White Flowering Dogwoods with inconsistent symbols for those plantings depicted on Sheet L1.01. Revise accordingly. **(Comment addressed. The planting call-outs have been corrected on the landscape plan).**
- The sheet number on the landscape details sheet is intended to be labeled L5.01 but is labeled C5.01. Revise accordingly. **(Comment addressed. The sheet number has been corrected on the revised plans).**
- Tree stakes, guy wires, and tree wrap shall be removed after 1 year. Add note to landscape plan. **(Comment addressed. A note has been added to the landscape specifications on Sheet L5.01).**
- Regarding Item u, Page 2 of the DLZ review letter dated March 14, 2023 – all grading details are required at this time as this project is an administrative site plan, so there is not preliminary site plan/final site plan/final engineering plan. **(Comment remains as a notation. The Applicant stated final engineering will be prepared and submitted to the Township for review following a decision being rendered on the variance requests).** **(Comment addressed. A grading plan has been provided).**
- Pursuant to the Performance Guarantee Agreement and Zoning Ordinance, connection to the Township sanitary sewer system is required. **(Comment addressed. The site has been connected to the Township sanitary sewer system).**
- Pursuant to the Performance Guarantee Agreement, the site plan is subject to concurrence by the Michigan Department of Environment, Great Lakes, and Energy. **(Comment remains as a notation. The Applicant has acknowledged complying with the aforementioned requirement).** **(Comment remains).**
- Pursuant to the Performance Guarantee Agreement, the site plan must comply with the Declaration of Restrictive Covenant for a Restricted Non-Residential Corrective Action relating to the property. **(Comment remains as a notation. The Applicant has acknowledged complying with the aforementioned requirement).** **(Comment remains).**

The Community Development Director or his designee may approve, approve with conditions, or deny the site plan. Based on the items identified in this letter, the site plan shall be revised and resubmitted. All site plan review submittals following the initial review shall include a response letter detailing the changes made to the plan since the previous submittal. If you have any questions regarding this matter, please contact me at (248) 698-3300 ext. 177 or by email at justinq@whitelaketwp.com.

Sincerely,



Justin Quagliata
Staff Planner

cc: Sean O'Neil, AICP, Community Development Director
Hannah Micallef, Community Development
Michael Leuffgen, DLZ
Victoria Loemker, DLZ

Rik Kowall, Supervisor
Anthony L. Noble, Clerk
Mike Roman, Treasurer



Item A.
Scott Ruggles
Liz Fessler Smith
Andrea C. Voorheis
Michael Powell

WHITE LAKE TOWNSHIP

7525 Highland Road • White Lake, Michigan 48383-2900 • (248) 698-3300 • www.whitelaketwp.com

August 30, 2023

Kieft Engineering
5852 South Main Street, Suite 1
Clarkston, MI 48346

ATTN: Casey Leach

**RE: Carter's Plumbing
Administrative Site Plan – Review #5**

Dear Mr. Leach:

Staff reviewed the revised site plan prepared by Kieft Engineering (revision date August 25, 2023). The following comments from the fourth review letter dated August 21, 2023 are listed below. Responses to the comments are provided in **(red)**.

- The reciprocal access easement (agreement and exhibit) shall be resubmitted for administrative review and approval. The response letter provided to the previous review indicated this would be a separate submittal. **(Comment addressed. The revised agreement and exhibit have been provided and are under a separate review by the Township Attorney and Engineering Consultant).**
- Retaining wall with guardrail details shall be provided for review and approval. (Comment remains as a notation. The response letter provided to the previous review states structural detailing for this retaining wall will be submitted under a separate cover). **(Comment remains as a notation. A plan for the retaining wall has been provided and is under review by the Township Engineering Consultant).**
- A 30-foot (opening) **(now 24-foot opening)** single sliding power gate is proposed at the driveway. Gated vehicular access is subject to review and approval by the Fire Department, and a permit is required from the Building Official. (Comment remains as a notation. The Applicant stated required approvals and permits will be obtained prior to construction). **(Comment remains as a notation. A revised fire safety plan has been provided as directed by the Fire Marshal, and a fence permit application has been submitted to the Community Development Department. A fence permit will be issued when administrative site plan approval is granted).**

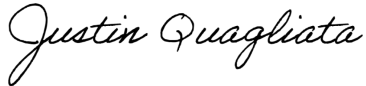
- DLZ deferred compliance regarding the sidewalk configuration to the west (Item 1, Page 2 of the DLZ review letter dated August 21, 2023) to the Planning Division. The proposed sidewalk is now shown to extend to the west property line; however, there is not a connection to the existing paved shoulder along Highland Road. **The plan shall be revised to connect the proposed sidewalk to the paved shoulder in order to avoid a gap in the pathway. (Comment addressed. A connection between the paved shoulder and the proposed sidewalk has been added to the revised plans).**
- DLZ deferred compliance regarding the barrier-free parking configuration in front of the building (Item 3, Page 2 of the DLZ review letter dated August 21, 2023) to the Planning Division. The Planning Division informed the Applicant the five-foot concrete sidewalk next to the building could serve as the loading area.
- DLZ deferred compliance regarding the curb type between the asphalt parking area and gravel yard (Item 4, Page 2 of the DLZ review letter dated August 21, 2023) to the Planning Division. **Six-inch straight-faced (vertical) curb of concrete construction shall be used where flush curb is currently proposed. While the gravel yard may be used for snow storage, in the LM (Light Manufacturing) zoning district outdoor storage of fleet vehicles and outdoor storage of pallets, containers, materials, or products requires special land use approval from the Planning Commission. Flush curbing would further enable those uses in the gravel yard and therefore shall not be permitted. (Comment outstanding. However, a special land use application has been submitted to allow outdoor storage).**

Prior to scheduling a pre-construction meeting, the following items shall be addressed:

- Provide documentation evidencing ownership of the property. **(Comment addressed. A copy of the warranty deed has been provided).**
- Administrative site plan review and approval (completed administratively). **(Comment remains as a notation).**
- Revise and resubmit the reciprocal access easement agreement and exhibit. **(See first comment on previous page).**
- Review and approval of the retaining wall design. **(See second comment on previous page).**
- Provide site inspection fees (payable at the pre-construction meeting).
 - In order to calculate the required escrow deposit for site inspection fees, provide a construction cost estimate sealed by the design engineer or the signed construction contract for the improvements. **(Comment addressed. Copies of signed construction contracts have been provided).**
- Provide Certificates of Insurance listing DLZ and the Township as Additional Insured. **(Comment addressed. Copies of Certificates of Insurance have been provided).**
 - XCU (Explosion, Collapse, and Underground) coverage must be provided.
- Five (5) hard copies of the final plans must be brought to the pre-construction meeting for signing/stamping. **(Comment remains as a notation).**

The Community Development Director or his designee may approve, approve with conditions, or deny the site plan. Based on the items identified in this letter, there are still outstanding items needing to be addressed prior to taking action on the administrative site plan and scheduling a pre-construction meeting. All site plan review submittals following the initial review shall include a response letter detailing the changes made to the plan since the previous submittal. If you have any questions regarding this matter, please contact me at (248) 698-3300 ext. 177 or by email at justinq@whitelaketwp.com.

Sincerely,



Justin Quagliata
Staff Planner

cc: Sean O'Neil, AICP, Community Development Director
Hannah Micallef, Community Development
Michael Leuffgen, DLZ
Victoria Loemker, DLZ

WHITE LAKE TOWNSHIP ZONING BOARD OF APPEALS

REPORT OF THE COMMUNITY DEVELOPMENT DEPARTMENT

TO: Zoning Board of Appeals
FROM: Justin Quagliata, Staff Planner
DATE: May 25, 2023

Agenda item: 8f

Appeal Date: May 25, 2023

Applicant: Kieft Engineering – Casey Leach, P.E.

Address: 5852 S. Main Street, Suite 1
Clarkston, MI 48346

Zoning: LM Light Manufacturing

Location: 10431 Highland Road
White Lake, MI 48386

Property Description

The approximately 1.38-acre parcel identified as 10431 Highland Road is located on the south side of Highland Road, east of Teggerdine Road, and zoned LM (Light Manufacturing).

Applicant's Proposal

Kieft Engineering – Casey Leach, P.E., the Applicant, on behalf of property owner CAMQ Properties, LLC, is proposing to complete site improvements.

Planner's Report

The requested variances are listed in the following table.

Variance #	Ordinance Section	Subject	Standard	Requested Variance	Result
1	Article 5.11.A.iv	Parking setback	20 feet (front yard)	13 feet	7 feet
2	Article 5.11.Q.xi	Off-Street Parking Space Surface Standards	Asphalt or concrete	Gravel surfacing along the west and south property lines	Gravel surfacing along the west and south property lines
3	Article 5.19.B.iii.a	Irrigation Requirements	All required landscape areas in excess of 200 square feet	Forgo irrigation in all lawn along the east property line	No irrigation in all lawn along the east property line
4	Article 5.12	Fences, Walls and Other Protective Barriers	No fencing within road right-of-way	Construct approximately 40 linear feet of fencing within the Glynn Road right-of-way	Approximately 40 linear feet of fencing within the Glynn Road right-of-way

The variances are being processed concurrently with the administrative site plan review. The review letter for the administrative site plan (attached) may be referenced for a more complete overview of the project. At its July 19, 2022 meeting the Township Board approved a Performance Guarantee Agreement, which established conditions needing to be met in order for Carter's Plumbing to occupy the property. The Township Board packet item regarding the Performance Guarantee Agreement is attached for reference.

Variance #1: Off-street parking for nonresidential uses may be permitted in a required front yard setback except for the first 20 feet which must be landscaped in conformance with the standards of the Zoning Ordinance. A 13-foot variance is requested to allow three parking spaces within the setback.

Variance #2: Vehicle parking and storage areas must be surfaced with asphalt or concrete. Gravel surfacing is proposed along the west and south sides of the property.

Variance #3: All required landscape areas in excess of 200 square feet must be irrigated. A variance is requested to waive installation of irrigation in all lawn along the east property line.

Variance #4: A privacy fence along Glynn Road is proposed to be replaced. Fencing cannot be installed in road right-of-way without approval by the Road Commission for Oakland County (RCOC) and a variance from the Zoning Board of Appeals. The Applicant acknowledged if this variance request is approved it must be conditioned on obtaining a permit from the RCOC to allow the fence encroachment. Approximately 40 linear feet of fencing is proposed within the Glynn Road right-of-way.

Zoning Board of Appeals Options:

Approval: I move to approve the variances requested by Kieft Engineering – Casey Leach, P.E. from Article 5.11.A.iv, Article 5.11.Q.xi, Article 5.19.B.iii.a, and Article 5.12 of the Zoning Ordinance for Parcel Number 12-22-252-022, identified as 10431 Highland Road, in order to allow parking 13 feet within the required setback from the front property line, gravel surfacing along the west and south property lines, no irrigation in all lawn along the east property line, and fence encroachment in the Glynn Road right-of-way. This approval will have the following conditions:

- The Applicant shall obtain all necessary permits from the White Lake Township Building Division.
- The Applicant shall receive administrative site plan approval from the Township.
- Prior to the provision of parking within the required setback from the front property line, the Applicant shall receive a license agreement from the Michigan Department of Transportation (MDOT) and provide a copy of said license agreement to the Community Development Department.
- Prior to the installation of fencing in the Glynn Road right-of-way, the Applicant shall obtain the required Road Commission for Oakland County (RCOC) permit and provide a copy of said permit to the Community Development Department.
- The Glynn Road access point/driveway shall be removed and converted to lawn and landscaped in accordance with the site plan.
- Any future modification to site access, except for modification in compliance with the Zoning Ordinance, shall require approval of the Zoning Board of Appeals.

Denial: I move to deny the variances requested by Kieft Engineering – Casey Leach, P.E. for Parcel Number 12-22-252-022, identified as 10431 Highland Road, due to the following reason(s):

Postpone: I move to postpone the appeal of Kieft Engineering – Casey Leach, P.E. *to a date certain or other triggering mechanism* for Parcel Number 12-22-252-022, identified as 10431 Highland Road, to consider comments stated during this hearing.

Attachments:

1. Variance application dated March 3, 2023.
2. Applicant's written statement dated April 28, 2023.
3. Administrative site plan review letter dated May 10, 2023.
4. Performance Guarantee Agreement staff report and attachments dated July 15, 2022.
5. Administrative site plan (revision date April 28, 2023).

7.37 STANDARDS

General variances: The Zoning Board of Appeals may authorize a variance from the strict application of the area or dimensional standard of this Ordinance when the applicant demonstrates all of the following conditions "A - E" or condition F applies.

- A. Practical difficulty: A practical difficulty exists on the subject site (such as exceptional narrowness, shallowness, shape or area; presence of floodplain; exceptional topographic conditions) and strict compliance with the zoning ordinance standards would unreasonably prevent the owner from using of the subject site for a permitted use or would render conformity unnecessarily burdensome. Demonstration of a practical difficulty shall have a bearing on the subject site or use of the subject site, and not to the applicant personally. Economic hardship or optimum profit potential are not considerations for practical difficulty.
- B. Unique situation: The demonstrated practical difficult results from exceptional or extraordinary circumstances or conditions applying to the subject site at the time the Ordinance was adopted or amended which are different than typical properties in the same zoning district or the vicinity.
- C. Not self created: The applicants problem is not self created.
- D. Substantial justice: The variance would provide substantial justice by granting the property rights similar to those enjoyed by the majority of other properties in the vicinity, and other properties in the same zoning district. The decision shall not bestow upon the property special development rights not enjoyed by other properties in the same district, or which might result in substantial adverse impacts on properties in the vicinity (such as the supply of light and air, significant increases in traffic, increased odors, an increase in the danger of fire, or other activities which may endanger the public safety, comfort, morals or welfare).
- E. Minimum variance necessary: The variance shall be the minimum necessary to grant relief created by the practical difficulty.
- F. Compliance with other laws: The variance is the minimum necessary to comply with state or federal laws, including but not necessarily limited to:
 - i. The Michigan Right to Farm Act (P.A. 93 of 1981) and the farming activities the Act protects;
 - ii. The Americans with Disabilities Act of 1990 (as amended), and the needs of handicapped individuals the Act protects, including accessory facilities, building additions, building alterations, and site improvements which may not otherwise meet a strict application of the standards of this Ordinance.

Under no circumstances shall the Board of Appeals grant a variance to allow a use not permissible under the terms of this Ordinance in the district involved, or any use expressly or by implication prohibited by the terms of this Ordinance in said district.

WHITE LAKE TOWNSHIP TOWNSHIP BOARD

REPORT OF THE COMMUNITY DEVELOPMENT DEPARTMENT

TO: Township Board

FROM: Justin Quagliata, Staff Planner

DATE: July 15, 2022

RE: Performance Guarantee Agreement – Carter’s Plumbing

CAMQ Properties LLC (CAMQ) owns the property addressed as 10431 Highland Road, and the building and site are proposed to be occupied by Carter’s Plumbing. In April 2022 the Township was made aware of unpermitted construction activity within the building. The Building Official, after a site visit, required Carter’s Plumbing to apply for the necessary permits for such work. On June 9, 2022 the Director of Public Services witnessed excavation of the ground and the installation of a stormwater system. Such improvements were being made without site plan review and approval by the Township, and without the proper agency permits. Piping, structures, and other elements of the drain system were ordered removed. The site is a registered contaminated facility and a Declaration of Restrictive Covenant (DRC) for a Restricted Non-Residential Corrective Action relating to the property is in effect. Enforcement of the DRC is completed by the Michigan Department of Environment, Great Lakes, and Energy (EGLE).

Any change of use/new occupancy must be reviewed and approved by the Township. Completion of required site improvements – including, but not limited to, parking lot paving, utilities, exterior lighting, landscaping, sidewalks, and fencing – is a requirement for a Certificate of Occupancy. Carter’s Plumbing is requesting Township Board approval to occupy the building and site prior to the completion of the following:

- Submission of an engineered site plan for the parking lot which includes the layout, design and construction including paving, stormwater drainage, wetlands protection, landscaping and screening and fencing (subject to approval by the Township and concurrence by the Michigan Department of Environment, Great Lakes, and Energy per applicable law).
- Connection to the municipal sanitary sewer system.
- Compliance with the Township’s code of ordinances and zoning ordinances, the DRC, and other applicable laws.

Carter's Plumbing is also proposing the temporary placement of gravel (see attached gravel plan) to serve as a parking area on the west side of the building. The gravel plan does not meet the requirements of the zoning ordinance to even be reviewed by the Township. Additionally, the zoning ordinance requires the entire parking area, including parking spaces and maneuvering lanes, to be provided with asphalt or concrete surfacing; gravel parking lots are prohibited. In the short-term, filling the trench dug on the property with the removed soils, disposing of the stockpiled broken pavement at a landfill, and covering the site in gravel is acceptable to EGLE. The long-term solution is repaving with asphalt in a manner that would encapsulate the contamination/prevent it from migrating and manage stormwater. When a site plan is submitted, the Township Engineering Consultant will have to consider whether managing parking lot runoff by sheet flow rather than subgrade stormwater structures is appropriate given the requirements of the DRC. However, the proposed improvements must be completed in compliance with Township ordinances and other applicable requirements, including the Oakland County stormwater engineering design standards. Although there are restrictions associated with the former underground storage tank regulated by EGLE, those restrictions do not eliminate the need for compliance with requirements from any other entities, nor does the DRC supersede any other entities' authority, regardless of level. EGLE's concurrence with the proposed gravel plan and related activities is not a substitute for compliance with other requirements.

In order to occupy the building and site prior to the completion of required site improvements, Carter's Plumbing is requesting Township Board approval of a Performance Guarantee Agreement (attached). As outlined in the Agreement, a \$100,000 guarantee would be deposited with the Township to ensure completion of the improvements. The Agreement was prepared by the Petitioner's legal counsel, and reviewed by the Township Attorney and staff. **If the Township Board approves the Agreement, as a condition the Board must also prescribe the period of time within which the improvements must be completed. Exhibit C will also need to be updated with a clean certificate of insurance (photo of the certificate is unacceptable).**

Attachments

1. Declaration of Restrictive Covenant for a Restricted Non-Residential Corrective Action (State I.D.# RC-RRD-213-10-042).
2. Site photos taken on June 9, 2022.
3. Performance Guarantee Agreement.

RECEIVED
OAKLAND COUNTY
REGISTER OF DEEDS

2015 AUG 18 PM 2:20

Item A.

166901
LIBER 48510 PAGE 245
\$46.00 MISC RECORDING
\$4.00 REMONUMENTATION
08/18/2015 02:25:28 P.M. RECEIPT# 98494
PAID RECORDED - OAKLAND COUNTY
LISA BROWN, CLERK/REGISTER OF DEEDS

**DECLARATION OF RESTRICTIVE COVENANT
FOR A RESTRICTED NON-RESIDENTIAL CORRECTIVE ACTION**

MDEQ Reference No: RC-RRD-213-10-042

This Declaration of Restrictive Covenant (Restrictive Covenant) has been recorded with the Oakland County Register of Deeds to protect public health, safety, and welfare, and the environment by prohibiting or restricting activities that could result in unacceptable exposure to regulated substances present at the Property located at 10431 Highland Road, Charter Township of White Lake, Oakland County, Michigan and legally described in the attached Exhibit 2 (Legal Description of the Property). Exhibit 3 (Survey of Property) provides a survey of the Property that is subject to the land and/or resource use restrictions specified in this Restrictive Covenant.

The Property is associated with the Former Oscar W. Larson Company Property (Facility ID Number 00013183 for which a Closure Report (CR) was completed under Part 213, Leaking Underground Storage Tanks, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), MCL 324.21301 *et seq.* Corrective actions that were implemented to address environmental contamination are fully described in the CR dated August 19, 2015. A copy of the CR is available from the Michigan Department of Environmental Quality (MDEQ), Remediation and Redevelopment Division (RRD) District Office.

The Property described contains regulated substances in excess of the concentrations developed as the unrestricted residential cleanup criteria under Section 21304a(2) of the NREPA. The MDEQ recommends that prospective purchasers or users of this Property undertake appropriate due diligence prior to acquiring or using this Property, and undertake appropriate actions to comply with the requirements of Section 21304c of the NREPA.

Part 213 requires the recording of this Restrictive Covenant with the Oakland County Register of Deeds based upon the corrective action measures for the site to: 1) restrict unacceptable exposures to regulated substances located on the Property; 2) assure that the use of the Property is consistent with the exposure assumptions used to develop cleanup criteria under Section 21304a(2) of the NREPA; and 3) assure the exposure control measures relied upon in the CR are effective.

The restrictions contained in this Restrictive Covenant are based upon information available at the time the corrective action was implemented by the Oscar W. Larson Company. Failure of the corrective action to achieve and maintain the cleanup criteria, exposure controls, and requirements specified in the CR; future changes in the environmental condition of the Property; changes in the cleanup criteria developed under Section 21304a(2) of the NREPA; the discovery of environmental conditions at the Property that were not accounted for in the CR; or use of the Property in a manner inconsistent with the restrictions described herein may result in this Restrictive Covenant not being protective of public health, safety, and welfare, and the environment. The adequacy of the corrective action undertaken pursuant to the CR may not have been reviewed by the MDEQ.

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OK - AN

Definitions

For the purposes of this Restrictive Covenant, the following definitions shall apply:

"MDEQ" means the Michigan Department of Environmental Quality, its successor entities, and those persons or entities acting on its behalf.

"Owner" means at any given time the then-current title holder of all or any portion of the Property.

"Property" means the real property as described in Exhibit 2 (Legal Description of the Property) of this Restrictive Covenant that is subject to the restrictions, terms and conditions described herein.

All other terms used in this document which are defined in Part 3, Definitions, of the NREPA and Part 213 of the NREPA, shall have the same meaning in this document as in Part 3 and Part 213 of the NREPA, as of the date this Restrictive Covenant is filed.

Summary of Environmental Conditions and Corrective Action.

Hazardous substances including benzene, toluene, ethyl benzene, xylenes, naphthalene and trimethylbenzenes were released from an underground storage tank system resulting in contamination of the Property. Soil and groundwater contamination remain present at levels that do not allow for an unrestricted use of the Property. Specifically, concentrations of regulated substances remain present in the groundwater in excess of the nonresidential drinking water cleanup criteria. This potential exposure risk has been addressed by preventing the use of the groundwater for ingestion and irrigation.

Residual (or mobile) Light Nonaqueous-Phase Liquid (LNAPL), including gasoline were properly characterized using a Conceptual Site Model in accordance with American Society for Testing and Materials (ASTM) designation E 2531-06 E1, and will remain in place. The LNAPL exists below the ground surface at a depth of 1.5 to 4 feet. The location of the LNAPL in the attached Exhibit 3 (Survey of the Property and Limits of Land or Resource Use Restrictions) describes and provides the location of the institutional control and the horizontal and vertical extent of the LNAPL is shown in Exhibit 3-1. The restrictions provided for in this Restrictive Covenant serve to prevent unacceptable exposure to hazardous substances as a result of the conditions created by the presence of the LNAPL soil and/or groundwater contaminant concentrations that exceed the unrestricted residential criteria under Section 21304a(2) of the NREPA.

NOW THEREFORE,

1. Declaration of Land or Resource Use Restrictions.

The Oscar W. Larson Company, with the express written permission of the Owner of the Property hereby declares and covenants that the Property shall be subject to the following restrictions and conditions:

- a. Prohibited Land Uses: The Owner shall prohibit all uses of the Property as described in Exhibit 3 (Survey of Property and Limits of Land or Resource Use Restrictions) that are not compatible with or are inconsistent with the assumptions and basis for the nonresidential cleanup criteria established pursuant to Section 21304a(2) of the NREPA. Uses that are compatible with nonresidential cleanup criteria are generally described in Exhibit 4 (Description of Allowable Uses). At the time of recording of this Restrictive Covenant, the Charter Township zoning code designation allowed for the following residential uses that are not compatible with the nonresidential cleanup criteria and are therefore prohibited by this Restrictive Covenant (Special Land Uses - Nursery School, Group Adult and Child Care Centers). Cleanup criteria for land-use based response activities are located in the Government Documents Section of the State of Michigan Library.
- b. Prohibited Activities to Eliminate Unacceptable Exposures to Regulated Substances. The Owner shall prohibit activities on the Property that may result in exposures above levels established in the CR. These prohibited activities include
 - 1) The construction and use of wells or other devices on the Property to extract groundwater for consumption, irrigation, or any other purpose, except as provided below:
 - a) Wells and other devices constructed for the purpose of evaluating groundwater quality or to remediate subsurface contamination associated with a release of regulated substances into the environment are permitted provided the construction of the wells or devices complies with all applicable local, state, and federal laws and regulations and does not cause or result in a new release, exacerbation of existing contamination, or any other violation of local, state, or federal laws or regulations.
 - b) Short-term dewatering for construction purposes is permitted provided the dewatering, including management and disposal of the groundwater, is conducted in accordance with all applicable local, state, and federal laws and regulations and does not cause or result in a new release, exacerbation of existing contamination, or any other violation of local, state, and federal environmental laws and regulations.
 - 2) The construction of new structures, unless such construction incorporates engineering controls designed to eliminate the potential for subsurface vapor phase hazardous substances to migrate into the new structure at concentrations greater than applicable criteria; or, unless prior to construction of any structure, an evaluation of the potential for any hazardous substance to volatilize into indoor air assures the protection of persons who may be present in the buildings and is in compliance with Section 21304c of the NREPA.
- c. Prohibited Activities to Ensure Effectiveness and Integrity of the Corrective Action. The Owner shall prohibit activities on the Property that may interfere with any element of the CR, including the performance of operation and maintenance activities, monitoring, or other measures necessary to ensure the effectiveness and integrity of the CR.

2. Contaminated Soil Management. The Owner shall manage all soils, media, and/or debris located on the Property in accordance with the applicable requirements of Sections 21304b of the NREPA; Part 111, Hazardous Waste Management, of the NREPA; Subtitle C of the Resource Conservation and Recovery Act, 42 USC Section 6901 *et seq.*; the administrative rules promulgated thereunder; and all other relevant state and federal laws.

3. Access. The Owner grants to the MDEQ and the Oscar W. Larson Company, and their designated representatives, the right to enter the Property at reasonable times for the purpose of determining and monitoring compliance with the CR, including the right to take samples, inspect the operation and maintenance of the corrective action measures and inspect any records relating to them, and to perform any actions necessary to maintain compliance with Part 213 and the CR. The right of access provided to the Oscar W. Larson Company above is not required under Part 213 for the corrective action to be considered approved. This provision was agreed to by the Owner at the time the Restrictive Covenant was recorded. Accordingly, The MDEQ will not enforce the Owner's obligation to provide access to Oscar W. Larson Company.

4. Conveyance of Property Interest. A conveyance of title, easement, or other interest in the Property shall not be consummated by the Owner without adequate and complete provision for compliance with the terms of the CR, and this Restrictive Covenant. A copy of this Restrictive Covenant shall be provided to all future owners, heirs, successors, lessees, easement holders, assigns, and transferees by the person transferring the interest in accordance with Section 21310a(2)(c) of the NREPA.

5. Audits Pursuant to Section 21315 of the NREPA. This Restrictive Covenant is subject to audits in accordance with the provisions of Section 21315 of the NREPA, and such an audit may result in a finding by the MDEQ that this Restrictive Covenant is not protective of the public health, safety, and welfare, and the environment.

6. Term of Restrictive Covenant. This Restrictive Covenant shall run with the Property and is binding on the Owner; future owners; and their successors and assigns, lessees, easement holders, and any authorized agents, employees, or persons acting under their direction and control. This Restrictive Covenant shall continue in effect until it is determined that the regulated substances no longer present an unacceptable risk to the public health, safety, or welfare, or the environment. Improper modification or rescission of any restriction necessary to prevent unacceptable exposure to regulated substances may result in the need to perform additional corrective actions by those parties responsible for performing corrective action at the Property or to comply with Section 21304c of the NREPA.

7. Enforcement of Restrictive Covenant. The State of Michigan, through the MDEQ, and the Oscar W. Larson Company may individually enforce the restrictions set forth in this Restrictive Covenant by legal action in a court of competent jurisdiction

8. Severability. If any provision of this Restrictive Covenant is held to be invalid by any court of competent jurisdiction, the invalidity of that provision shall not affect the validity of any other provision of this Restrictive Covenant, which shall continue unimpaired and in full force and effect.

9. Authority to Execute Restrictive Covenant. The undersigned person executing this Restrictive Covenant is the Owner, or has the express written permission of the Owner Amcomm Telecommunications, and represents and certifies that he or she is duly authorized and has been empowered to execute and record this Restrictive Covenant.

IN WITNESS WHEREOF, the Oscar W. Larson Company has caused this Restrictive Covenant, RC-RRD-213-10-042, to be executed on this 17th day of August, 2015.

Oscar W. Larson Company

By: James C. Lintol
Signature

Name: James C. Lintol
Print or Type Name

Its: EVP
Title

STATE OF MICHIGAN
COUNTY OF OAKLAND

The foregoing instrument was acknowledged before me this date, August 17, 2015 by Mr. James Lintol, EVP of the Oscar W. Larson Company, a corporation within the State of Michigan, on behalf of the corporation.

Stacy Anne Roberts
Notary Public Signature
STACY ANNE ROBERTS Printed Name

STACY ANNE ROBERTS
Notary Public, Oakland County, Michigan
My Commission Expires Oct. 12, 2016

Prepared by:
Jerome Meyer - Senior Project Scientist - Innovative Environmental Solutions, Inc.

When recorded return to:
Jerome Meyer - Innovative Environmental Solutions, Inc. - 510 Brighton Rd, Howell, MI 48843

EXHIBIT 1

CONSENT OF OWNER

I, John Ramonaitis, Member of High-Five Investments, LLC, the current and legal Owner of the Property, do hereby consent to the recording of this Restrictive Covenant, **RC-RRD-213-10-042**, and authorize the Oscar W. Larson Company to file the Restrictive Covenant with the Oakland County Register of Deeds for recording.

High-Five Investments, LLC

By:

Signature

Name:

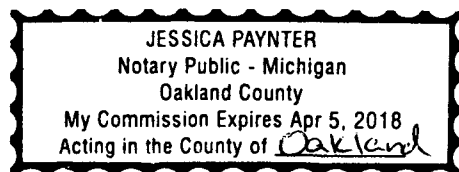
Print or Type Name

Its:

Title

STATE OF MICHIGAN
COUNTY OF OAKLAND

The foregoing instrument was acknowledged before me this date, August 17, 2015 by Mr. John Ramonaitis VP of High-Five Investments, LLC, a Limited Liability Corporation within the State of Michigan, on behalf of the corporation.

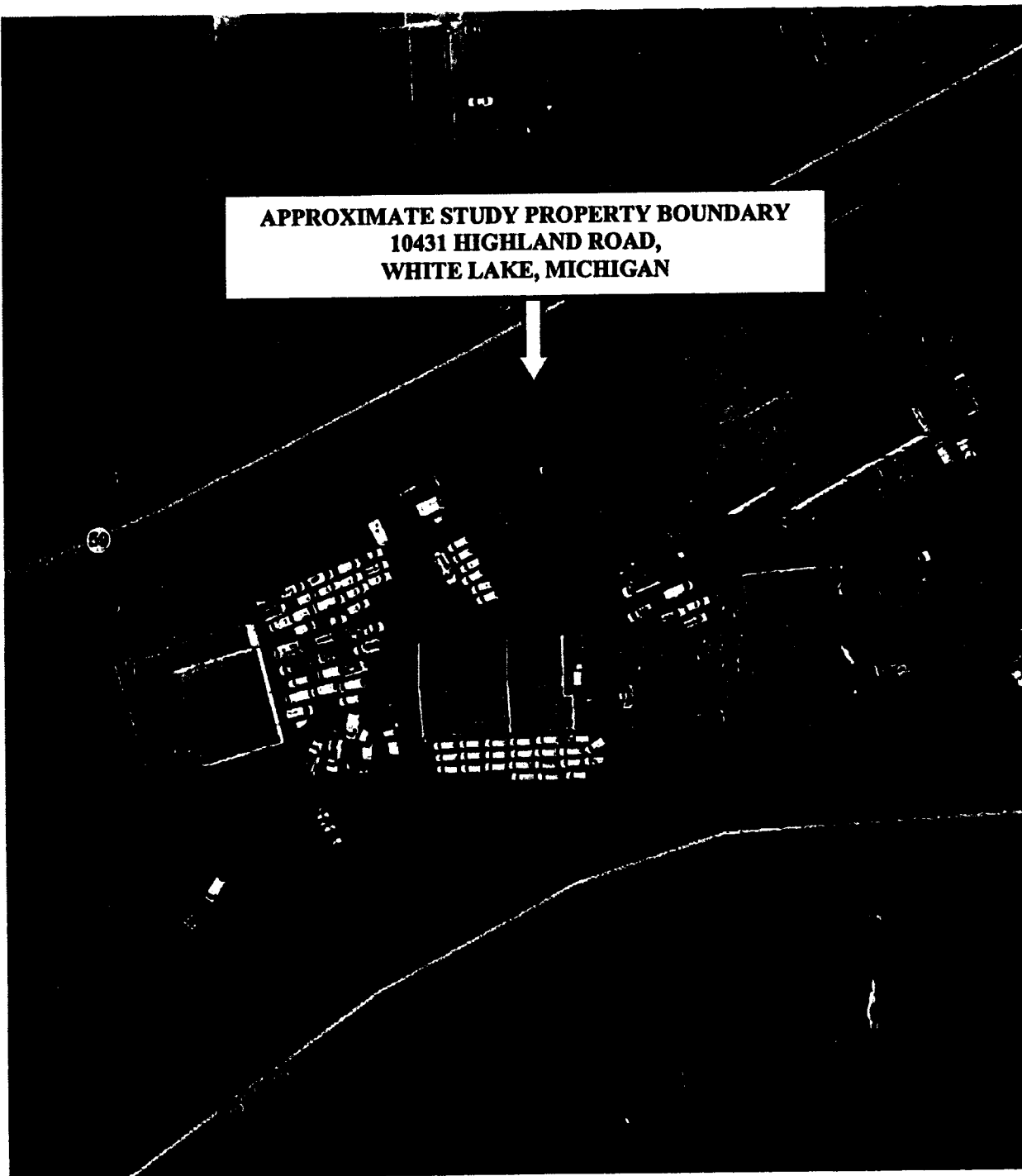


Jessica Paynter
Notary Public Signature
Jessica Paynter Printed Name

EXHIBIT 2

LEGAL DESCRIPTION OF PROPERTY

**APPROXIMATE STUDY PROPERTY BOUNDARY
10431 HIGHLAND ROAD,
WHITE LAKE, MICHIGAN**



SCALE UNKNOWN



INNOVATIVE
ENVIRONMENTAL SOLUTIONS, INC.

PROJECT:
20131079

DATE:
7/XX/15

PLATE:
1

SCALE:
SEE ABOVE

**2015 AERIAL PHOTOGRAPH WITH
PLAT MAP OVERLAY**

AMCOMM TELECOMMUNICATIONS
(FORMER OSCAR W. LARSON PROPERTY)
10431 HIGHLAND ROAD
WHITE LAKE, MICHIGAN

LEGAL DESCRIPTION FOR THE
AMCOMM TELECOMMUNICATION, INC. PROPERTY
10431 HIGHLAND ROAD, WHITE LAKE, MICHIGAN

The legal description of the property is as follows:

T3N, R8E, SEC 22 LARSON ACRES LOTS 3, 4 & 5, ALSO LOTS 13 & 14, ALSO PART OF
LOT 15 BEG AT SW LOT COR, TH E 3.70 FT, TH N 07-35-41 W 30.41 FT, TH S 31.20 FT
TO BEG 6-7-01 FR003,004,005,012&013

The parcel identification number for the property, according to the White Lake Township
Assessor's Office, is as follows: 12-22-252022.

EXHIBIT 3

SURVEY OF THE PROPERTY

OR

**SURVEY OF THE PROPERTY
AND LIMITS OF LAND OR RESOURCE USE RESTRICTIONS**

AND LIMITS OF LAND OR RESOURCE USE RESTRICTIONS

JUL 10 01 09:59a

Jim Lintol

248 620 7369

p. 2

CERTIFICATE OF SURVEY

Thomas M. Smith
7559 Olde Sturbridge
Clarkston, MI 48016

PHONE 625-3276

SURVEY FOR OSCAR W. LARSON Co.
ADDRESS DIXIE HIGHWAY
SPRINGFIELD TWP., MI

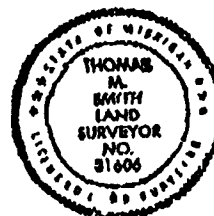
DATE 9-4-97
JOB NO. 97-0904
REV. 9-16-97 (Add Bldgs)

I hereby certify that I surveyed and mapped the land described and delineated hereon. I have fully complied with the requirements of act 132 of 1970. The error of closure is no greater than 1 in 5000 and the bearings were established by: Recorded Plat. Field error of Closure 1:15,800.

THOMAS M. SMITH
L.L.S. NO. 31606

LEGEND

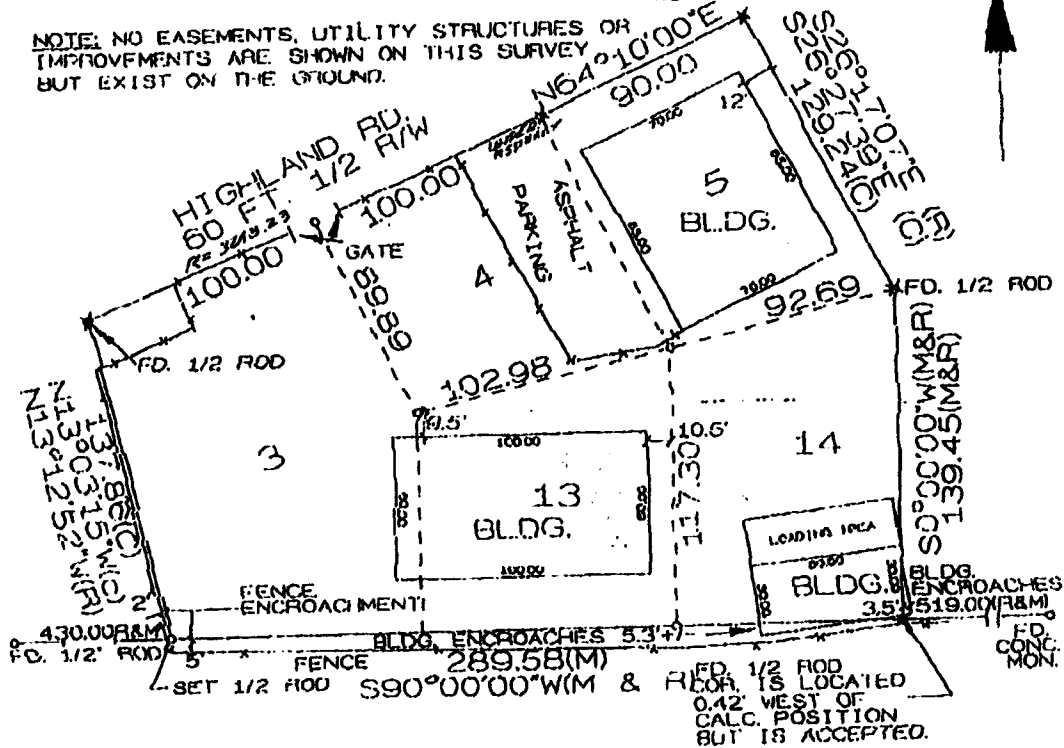
⊙ = IRON FOUND	M = MEASURED
⊙ = IRON SET	*X* = FENCE
⊙ = MONUMENT FOUND	● = P.K. NAIL SET
R = RECORDED	P.R. = PRORATED DISTANCE



SCALE: 1"=50'

LOTS 3,4,5,13,14 LARSON ACRES, WHITE LAKE TWP.,
OAKLAND COUNTY, MICHIGAN, AS RECORDED IN LIBER
58, PAGE 12 OF PLATS, OAKLAND COUNTY RECORDS.

NOTE: NO EASEMENTS, UTILITY STRUCTURES OR
IMPROVEMENTS ARE SHOWN ON THIS SURVEY
BUT EXIST ON THE GROUND.



SD - **STORM DRAIN**



INNOVATIVE ENVIRONMENTAL SOLUTIONS, INC.

**AMCOMM TELECOMMUNICATIONS
(FORMER OSCAR W LARSON PROPERTY)
10431 HIGHLAND ROAD
WHITE LAKE, MICHIGAN**

SCALE:
UNKNOWN

EXHIBIT 4**DESCRIPTION OF ALLOWABLE USES**

Nonresidential Land Use: This land use is characterized by any use which is not residential in nature and is primarily characterized by industrial and commercial uses. Industrial uses typically involve manufacturing operations engaged in processing and manufacturing of materials or products. Other examples of industrial uses are utility companies, industrial research and development, and petroleum bulk storage. Commercial uses include any business or income-producing use such as commercial warehouses, lumber yards, retail gas stations, auto dealerships and service stations, as well as office buildings, banks, and medical/dental offices (not including hospitals). Commercial uses also include retail businesses whose principal activity is the sale of food or merchandise within an enclosed building and personal service establishments which perform services indoors such as health clubs, barber/beauty salons, photographic studios, etc.

Any residential use is specifically prohibited from the non-residential land use category. This would include the primary use of the property for human habitation and includes structures such as single family dwellings, multiple family structures, mobile homes, condominiums, and apartment buildings. Residential use is also characterized by any use which is intended to house, educate, or provide care for children, the elderly, the infirm, or other sensitive populations, and therefore could include day care centers, educational facilities, hospitals, elder care facilities, and nursing homes. The use of any accessory building or portion of an existing building as a dwelling unit permitted for a proprietor or storekeeper and their families, located in the same building as their place of occupation, or for a watchman or caretaker is also prohibited. Any authority that allows for residential use of the Property as a legal non-conforming is also restricted per the prohibitions contained in this restrictive covenant.



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
REMEDATION AND REDEVELOPMENT DIVISION
PO BOX 30426, LANSING, MI 48909-7926, Phone 517-284-5087, Fax 517-241-9581

NOTICE TO LOCAL UNIT(S) OF GOVERNMENT OF LAND USE RESTRICTIONS

This information and form is required under Sections 21310a(5) and 21316 of Part 213, Leaking Underground Storage Tanks, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

INSTRUCTIONS: A person that implements corrective action activities that relies on land use restrictions shall provide notice of the land use restrictions that are part of the corrective action plan to the local unit of government in which the site is located within 30 days of filing of the land use restrictions with the county register of deeds.

- (1) Use this form to provide notice of land use restrictions that are part of the corrective action plan to the Local Unit(s) of Government (LUG).
- (2) Send the notice to the city, village, or township clerk. Provide a copy to the County/District Health Department if groundwater exceeds Tier 1 residential screening levels.
- (3) Submit a copy of the notice and proof of providing the notice with the Closure Report (EQP4452) to the appropriate RRD District Office. See www.michigan.gov/deqrrd_officemap for a complete list of RRD District and Field Offices.

This notice does not constitute a warranty or representation of any kind by the State of Michigan that the corrective actions performed in accordance with this notice will result in the achievement of the remedial criteria established by law, or that the property is suitable for any particular use.

OAKLAND COUNTY HEALTH DIVISION

Name of Local Unit of Government Name of Local Unit of Government Name of Local Unit of Government

Notice to the Local Unit of Government Receiving this Form:

A corrective action plan for the site named below has been developed as a result of a release of regulated substances from an underground storage tank. This form and the attachments are to provide the local unit(s) of government notice of the land use restrictions that are part of the corrective action plan. A copy of the institutional control mechanism(s) in the form of a Corrective Action Notice to Register of Deeds, and/or Restrictive Covenant, and/or alternate mechanism is/are attached. The attached institutional control mechanism(s) describes the land use restrictions and the land where the restrictions apply.

Facility ID: 00013183

Owner or Operator: HIGH FIVE INVESTMENTS, LLC

Site Name: FORMER OSCAR W. LARSON COMPANY PROPERTY

Site Address: 10431 HIGHLAND ROAD City: WHITE LAKE TWP State: MI Zip: 48386

Contact Person: MATT SCHULTZ

Phone Number: 248-698-8868 email: MSCHULTZ@AMCONN.COM

Mailing Address: 10431 HIGHLAND ROAD

City: WHITE LAKE TWP State: MI Zip: 48386

Qualified Underground Storage Tank Consultant: INNOVATIVE ENVIRONMENTAL SOLUTIONS, INC.

Address: 516 BRIGHTON ROAD

City: HOWELL State: MI Zip: 48843

Contact Person: JEROME MEYER

Phone Number: 517-548-7613 email: JMEYER@IES-ENVIRONMENTAL.COM

I hereby attest to the accuracy of the statements in this document and all attachments. I further certify that the language on this form has not been modified.

James C. Gintol

Owner or Operator Signature

8/17/15

Date









PERFORMANCE GUARANTEE AGREEMENT

THIS PERFORMANCE GUARANTEE AGREEMENT (this “Guarantee”) is made as of the 20th day of July 2022 (the “Effective Date”) by and between the Charter Township of White Lake (the “Township”), whose address is 7525 Highland Road, White Lake, Michigan 48383 and CAMQ Properties LLC, a Michigan limited liability company, whose address is 10431 Highland Road, White Lake, Michigan 48386 (“CAMQ”) (collectively referred to as the “Parties”).

RECITALS

WHEREAS CAMQ owns certain commercial property commonly known as 10431 Highland Road, White Lake, Michigan 48386 (the “Property”), as more particularly described on attached Exhibit A, which will be occupied by Carter’s Plumbing LLC (“Carter”) and has applied for various permits from the Township; and

WHEREAS CAMQ has contracted with Carter’s Plumbing LLC to make certain improvements to the Property as provided herein; and

WHEREAS CAMQ through Carter has applied for various permits to improve the Property, passed all inspections related to the main building and is seeking a temporary certificate of occupancy; and

WHEREAS CAMQ through Carter has hired KIEFT Engineering to prepare an engineered site plan for improvements to the Property; and

WHEREAS the parties acknowledge the existence of a Declaration of Restrictive Covenant for a Restricted Non-Residential Corrective Action relating to the Property which has been recorded with the Oakland County Register of Deeds on August 18, 2015 in Liber 48510 Page 245 (the “DRC”); and

WHEREAS the Township requires this Guarantee and a One Hundred Thousand Dollar (\$100,000.00) Cash Deposit to be delivered into escrow with the Township (the “Deposit”), before the issuance of a temporary certificate of occupancy, to ensure CAMQ completes the following improvements: 1) temporary placement of gravel in the parking area, if approved by the Township Board; 2) obtains an engineered site plan for the parking lot layout, design and construction, including paving, stormwater drainage, wetlands protection, landscaping and screening and fencing; 3) connects to the municipal sanitary sewer system; and 4) complies with the Township code of ordinances and zoning ordinances and other applicable law applicable to the improvements required under this Agreement; and

WHEREAS the Township has issued a Temporary Certificate of Occupancy to CAMQ for the Property on July____, 2022 conditioned upon the execution of this Guarantee by the Parties and delivery of the Deposit to the Township.

NOW THEREFORE, in consideration of the foregoing recitals and the mutual obligations of the Parties hereto, each of them does hereby covenant and agree as follows:

AGREEMENT

1. Obligations. CAMQ shall comply with the provisions of and perform and discharge the obligations contained in or arising from this Guarantee, as supplemented and amended from time to time by agreement of the Parties, including without limitation: 1) depositing in escrow with the Township the sum of One Hundred Thousand Dollars (\$100,000.00) via certified or cashier's check or their equivalent; 2) if approved by the Township Board, the temporary placement of gravel in the parking area as more fully described in attached Exhibit C (Temporary Gravel Plan); 3) submission of an engineered site plan for the Property's parking lot which includes the layout, design and construction including paving, stormwater drainage, wetlands protection, landscaping and screening and fencing (subject to approval by the Township and concurrence by the Michigan Department of Environment, Great Lakes, and Energy per applicable law); 4) connection to the municipal sanitary sewer system; and 5) compliance with the Township's code of ordinances and zoning ordinances, the DRC and other applicable laws. CAMQ shall complete all work identified in this Paragraph 1 within the time period established by the Township Board.

2. Default; Right to Cure. If CAMQ defaults in the performance of its obligations under this Guarantee, the Township shall notify CAMQ in writing that it is in default, provided such notice details the specific reasons for the default and is delivered to CAMQ in accordance with the notice provisions contained in this Guarantee. If CAMQ fails to cure such claimed default or provide proof that it is not in default within thirty (30) days of receipt of such notice, then the Township shall have the right to pursue all legal or equitable remedies available to it, including but not limited to, the use of the Deposit to complete the improvements through contracts with third parties in accordance with applicable law, including specifically the right to enter upon the Property to make the improvements. In the event the Township uses the Guarantee to complete the required improvements, any amounts remaining after completion of the improvement(s) shall be applied first to the Township's administrative costs in completing the work. Any balance remaining after the cost of the improvement(s) and the Township's administrative costs, along with any interest earned on the Guarantee, shall be refunded to CAMQ. In the event of a default and the Guarantee is not sufficient to cover the cost of the incomplete improvement(s), CAMQ shall be required to pay to the Township the difference between the Guarantee and the cost of the completing the improvement(s) plus an administrative fee. An invoice shall be sent by the Township to CAMQ outlining the deficiency, and CAMQ shall pay to the Township the full balance within 30 days of receipt of such invoice.

3. Force Majeure. No party shall be liable or responsible to the other party, nor be deemed to have defaulted under or breached this Guarantee, for any failure or delay in fulfilling or performing any term of this Guarantee when and to the extent such failure or delay is caused by or results from acts beyond the affected party's reasonable control, including, without limitation: (1) acts of God; (2) flood, fire, earthquake, or explosion; (3) war, invasion, hostilities (whether war is declared or not), terrorist threats or acts, riot, or other civil unrest; (4) government order or law other than one related to enforcement of this Guarantee; (5) actions, embargoes, or blockades in effect on or after the date of this Guarantee; (6) action by any federal, state or county governmental authority; (7) national or regional emergency; (8) strikes, labor stoppages or slowdowns, or other industrial disturbances; and (9) pandemic, disease, or viral outbreak.

4. Indemnification. CAMQ agrees to indemnify, defend and hold harmless the Township including its trustees, directors, officials, agents and employees from and against any third party claims or damages involving bodily injury or property damage to the extent caused by CAMQ's negligent acts or omissions relating to performance of any work required by this Guarantee.

5. Insurance. CAMQ's contractor shall maintain the insurance specified in its Certificate of Insurance, which is attached as Exhibit D, and is required to name the Township as an additional insured on an endorsement to the policy of commercial general liability insurance. The Parties also agree to waive any rights of subrogation with respect to workers compensation, employer's liability and commercial general liability insurance. Insurance as required in this Guarantee shall be maintained by CAMQ until a Final Certificate of Occupancy is obtained for the improvements covered by this Guarantee.

6. Other Rights. This Guarantee shall be in addition to, and not in substitution for, any rights or remedies that the Township may have relating to CAMQ arising under this Guarantee or otherwise, and CAMQ shall not be released from the obligations hereunder by reason of any time or forbearance granted by the Township.

7. Authority. The authorized representative executing this Guarantee on behalf of CAMQ hereby represents that s/he has full power and authority to bind CAMQ and acknowledges that s/he is making this representation with the understanding that the Township is relying on the representation.

8. Notice. Any notices or demands, consents required or allowed under this Agreement shall be in writing and shall be addressed as follows, or at such other address as CAMQ or Township may specify hereafter in writing by notice to the other party:

NOTICE TO THE TOWNSHIP

Sean O'Neil, AICP
Community Development Director
White Lake Township
7525 Highland Rd
White Lake, MI 48383
Phone: (248) 698 3300 x 172
Email: soneil@whitelaketwp.com

With a copy to:

Lisa J. Hamameh, Esq.
Rosati Schultz Joppich & Amtsbuechler
27555 Executive Drive Suite 250
Farmington Hills, MI 48331
Main Phone: 248.489.4100
Direct Dial: 248-482-8777
Fax: 248.489.1726
Email: Lhamameh@rsjalaw.com

NOTICE TO CAMQ

CAMQ Properties LLC
 c/o Jessica Carter/Matthew Carter
 6146 Windstone Lane
 Clarkston, MI 48346
jessicac@callcartersplumbing.com
 (248)376-0801

With a copy to:

Harvey W. Berman, Esq.
 Bodman PLC
 201 South Division Street
 Suite 400
 Ann Arbor, MI 48104
hberman@bodmanlaw.com
 Direct Phone: (734) 930-2493
 Fax: (734) 930-2494

Such notice or other communication may be (i) mailed by United States registered or certified mail, postage and charges prepaid, and may be deposited in a United States Post Office or a depository for the receipt of mail regularly maintained by the post office, (ii) sent by electronic mail i.e. email; or sent by national overnight delivery service like Federal Express. For purposes of this Guarantee, notices shall be deemed to have been “given” or “delivered” (a) upon personal delivery thereof or the third (3rd) Business Day after having been deposited in the United States mails or with a national overnight carrier as provided herein, or (b) if sent by electronic mail, on the next date following the transmission date so long as followed up with one of the other methods of notice.

9. Miscellaneous. This Guarantee shall be governed by the laws of the State of Michigan. This Guarantee constitutes the full, final and entire understanding of the parties and supersedes any oral statements or agreements to the contrary. This Guarantee shall not be modified unless agreed upon by the parties in a separate writing executed subsequent to this Agreement and may only be modified in a writing signed by the Parties. This Guarantee may be executed in multiple counterparts, each of which shall constitute an original agreement, but all of which shall constitute only one agreement. The signatures may be electronic and/or facsimiles rather than originals and shall be fully as effective as though all signatures were originals on the same copy. In the event any or a portion of the provisions of this Guarantee shall be held invalid, illegal or otherwise unenforceable by a Court, the remaining provisions of this Guarantee shall remain in full force and effect as if the invalid provision were not in existence.

IN WITNESS WHEREOF, the undersigned hereby execute this Agreement as of the Effective Date set forth above.

CAMQ, LLC, a Michigan limited liability company,

Name: Matthew Carter
Its: Authorized Representative

Charter Township of White Lake

Name: Rik Kowall
Its: Township Supervisor

Approved:

Lisa Hamameh, Township Attorney

EXHIBIT A**LEGAL DESCRIPTION OF PROPERTY**

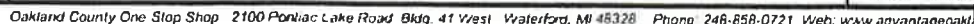
Land situated in the Township of White Lake, County of Oakland, State of Michigan, described as follows:

Lots 3, 4 and 5, ALSO Lots 13 and 14, ALSO part of Lot 15 of LARSON ACRES according to the plat thereof recorded in Liber 58 of Plats, page 12 of Oakland County Records: Beginning at the Southwest Lot corner, thence East 3.70 feet, thence North 07 degrees 35 minutes 41 seconds West 30.41 feet, thence South 31.20 feet to the Point of Beginning.

Tax Parcel Number: 12-22-252-022

EXHIBIT B
GRAVEL PLAN
(SEE ATTACHED)

Item A.



10431 HIGHLAND ROAD GRAVEL PLAN NOTES

Purpose: To lay gravel to allow access and use of the main entrance to the premises. Following approval by White Lake Township of owner's forthcoming Engineered Site Plan, asphalt over the gravel base.

Materials: 21AA Limestone aggregate (gravel) base

Depth: Compact gravel base to 3"

Location: West side of the main office building where the asphalt was deteriorated and removed as more fully described on the Gravel Plan Map.

Dimensions: The dimensions of the area are 90' x 49' or 4,410 sq ft.

Other: See also a picture of location as existing as well as picture of the apron





EXHIBIT C
CERTIFICATE OF INSURANCE
(SEE ATTACHED)

new

ACORD **CERTIFICATE OF LIABILITY INSURANCE** DATE (MM/DD/YYYY): 04/07/2022

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 Brent Kigore Agency 1658 Mayfield Rd Lapeer, MI 48840	CONTACT Name: Brent Kigore Phone: 810-664-4773 FAX: 810-664-7181 E-Mail: Brent.Kigore@briam.com Address:
--	---

INSURED Carter's Plumbing LLC 8148 Windstone Ln Clarkston, MI 48348	INSURANCE AFFORDING COVERAGE INSURER 1: Farm Bureau General Insurance of MI 215AT INSURER 2: INSURER 3: INSURER 4: INSURER 5:
---	---

COVERAGES **CERTIFICATE NUMBER:** **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.

TYPE OF INSURANCE	POLICY NUMBER	POLICY PERIOD	POLICY LIMIT	LIMITS
<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> AGGREGATE LIMIT APPLIES PER <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PER <input type="checkbox"/> LOC <input type="checkbox"/> OTHER	N N S-3144757	05/03/2022	05/03/2023	EACH OCCURRENCE \$ 1,000,000 AGGREGATE LIMIT \$ 50,000 MED EXP (Per Person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP OF AGG \$ 2,000,000
<input type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED VEH ONLY <input type="checkbox"/> HIRE ONLY <input type="checkbox"/> AUTOES ONLY	N N S-3144757	05/03/2022	05/03/2023	OWNED SINGLE UNIT \$ 1,000,000 BODILY INJURY (Per Person) \$ BODILY INJURY (Per Accident) \$ PROPERTY DAMAGE (Per Accident) \$
<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> RETENTION \$				EACH OCCURRENCE \$ AGGREGATE \$ RETENTION \$
<input type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS LIABILITY ASSUMING OTHER INSURANCE EXCLUSIVE OFFICER/INSURER EXCLUDED Mandatory in MI If yes, describe your DESCRIPTION OF OPERATIONS below	Y/N N/A			E.S. EMP/ACCIDENT \$ E.S. DISEASE - EX EMPLOYER \$ E.S. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER **CANCELLATION**

Carter's Plumbing LLC 8148 Windstone Ln Clarkston, MI 48348	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE SHALL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED SIGNATURE: <i>Clairne L Lucile</i>
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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

07/13/2022

Item A.

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 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 AUTOMATIC DATA PROCESSING INS AGCY 76250871 1 ADP BLVD M/S 625 ROSELAND NJ 07068	CONTACT NAME:	
	PHONE (800) 524-7024 (A/C, No, Ext):	FAX (A/C, No):
	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	
	INSURER A: Trumbull Insurance Company	
	NAIC#: 27120	
INSURED CARTERS PLUMBING LLC 2482 ORCHARD LAKE RD SYLVAN LAKE MI 48320-1532	INSURER B:	
	INSURER C:	
	INSURER D:	
	INSURER E:	
	INSURER F:	

COVERAGES

CERTIFICATE NUMBER:

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 INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/Y YYYY)	LIMITS	
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	
	UMBRELLA LIAB EXCESS LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE AGGREGATE	
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	76 WEG AK3MM9	02/24/2022	02/24/2023	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT E.L. DISEASE -EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	\$500,000 \$500,000 \$500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Those usual to the Insured's Operations.

CERTIFICATE HOLDER

For Informational Purposes
 2482 ORCHARD LAKE RD
 SYLVAN LAKE MI 48320-1532

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

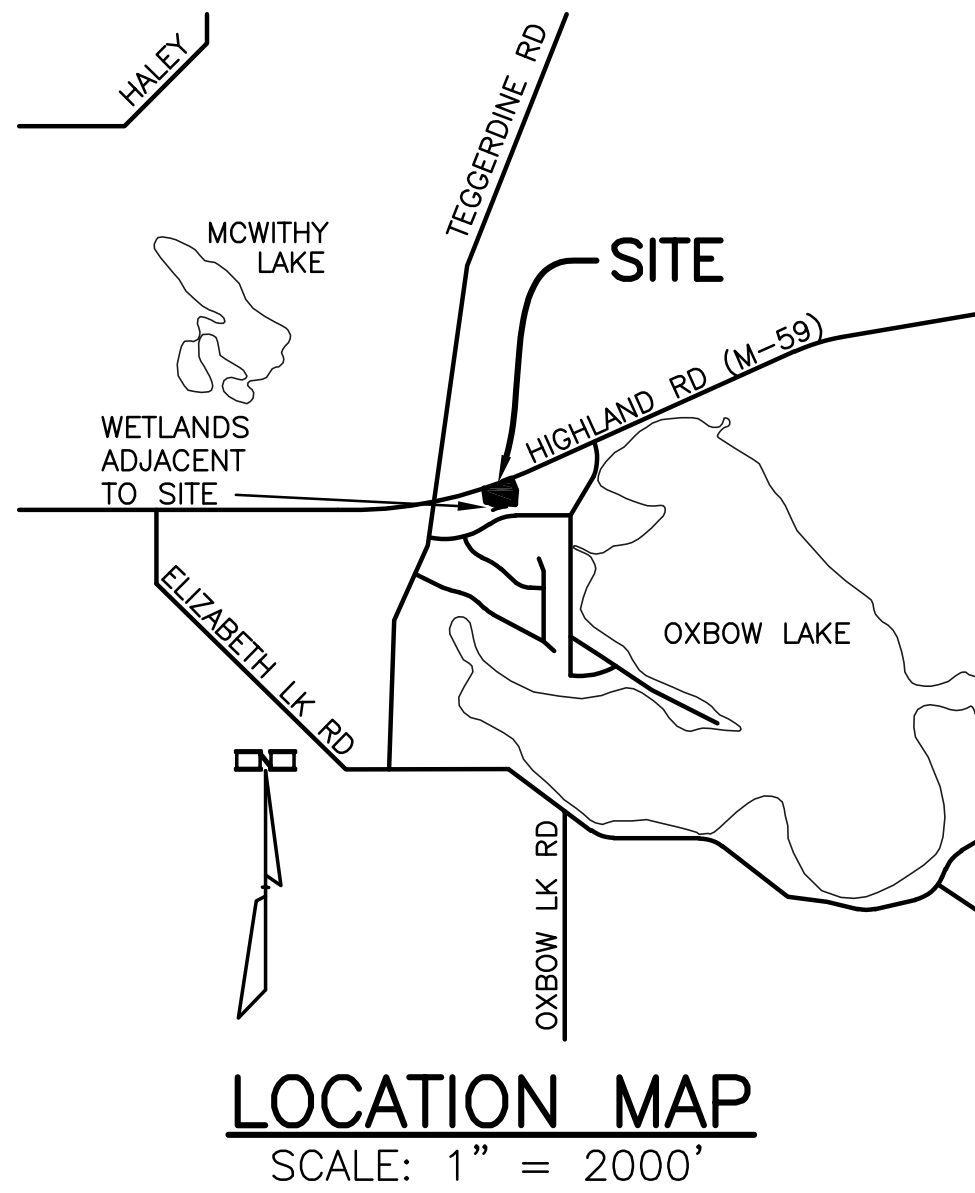
Susan L. Castaneda

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CONSTRUCTION PLANS

CARTER'S PLUMBING

PART OF SECTION 22, T3N, R8E,
WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN
ADDRESS: 10431 HIGHLAND ROAD, WHITE LAKE, MI 48386
PARCEL: 12-22-252-022



- ENVIRONMENTAL NOTES:**
1. A DUE CARE PLAN HAS BEEN DEVELOPED FOR THE SITE BY ASTI ENVIRONMENTAL, DATED FEBRUARY 24, 2023.
 2. A SITE-SPECIFIC HEALTH AND SAFETY PLAN WILL BE DEVELOPED PRIOR TO CONSTRUCTION ACTIVITIES.
 3. ALL CONTRACTORS, INSPECTORS, AND ANY OTHER SITE VISITORS SHALL BE REQUIRED TO READ THE HEALTH AND SAFETY PLAN, AND SIGN A NOTIFICATION FORM INDICATING SUCH PRIOR TO BEGINNING ANY WORK.
 4. ALL SITE CONSTRUCTION SHALL ABIDE BY THE DUE CARE PLAN AND THE HEALTH AND SAFETY PLAN.

- WHITE LAKE TOWNSHIP STANDARD SITE CONSTRUCTION NOTES:**
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF WHITE LAKE CHARTER TOWNSHIP.
 2. THE DEVELOPER SHALL CONTACT THE TOWNSHIP PLANNING DEPARTMENT, AT (248) 698-3300, TO SCHEDULE A PRE-CONSTRUCTION MEETING. THE DEVELOPER'S PRIME SITE CONTRACTOR SHALL ATTEND. A COPY OF ALL PERMITS MUST BE SUBMITTED TO THE PLANNING DEPARTMENT PRIOR TO SCHEDULING THE MEETING.
 3. THE CONTRACTOR SHALL CONTACT THE TOWNSHIP ENGINEER, AT (248) 681-7800, 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION. THE CONTRACTOR SHALL KEEP THE INSPECTOR APPRAISED OF THE NEED FOR INSPECTION ON A DAY BY DAY BASIS. LACKING SPECIFIC SCHEDULING WITH THE INSPECTOR, THE CONTRACTOR SHALL GIVE 48 HOURS NOTICE TO THE TOWNSHIP ENGINEER PRIOR TO RE-COMMENCING WORK REQUIRING INSPECTION. FAILURE TO INFORM THE INSPECTOR OR THE TOWNSHIP ENGINEER OF A WORK CANCELLATION MAY RESULT IN A ONE HALF DAY INSPECTION CHARGE TO THE DEVELOPER. THE CONTRACTOR SHALL CALL (248) 844-5400 TO SCHEDULE SANITARY SEWER MAIN LINE INSPECTION.
 4. ALL WATER MAIN OR SANITARY SEWER WORK WILL REQUIRE FULL TIME INSPECTION. FULL TIME INSPECTION WILL GENERALLY BE REQUIRED FOR UNDERGROUND STORM SEWER CONSTRUCTION, CONCRETE CURBING, AND PAVING OPERATIONS. SITE GRADING AND DETENTION BASIN CONSTRUCTION WILL GENERALLY BE INSPECTED ON AN INTERMITTENT BASIS.
 5. THE CONTRACTOR SHALL CONTACT MISS DIG, AT (800) 482-7171, 72 HOURS IN ADVANCE OF CONSTRUCTION TO HAVE EXISTING UNDERGROUND FACILITIES LOCATED. CONTRACTOR SHALL CONTACT THE WHITE LAKE TOWNSHIP WATER DEPARTMENT, AT (248) 698-3300 EXT 165, SEPARATELY 72 HOURS IN ADVANCE OF CONSTRUCTION TO HAVE WATER UTILITIES LOCATED.
 6. ALL OFF-SITE IMPROVEMENTS WILL BECOME PUBLIC PROPERTY.



SHEET INDEX

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V1.01	TOPOGRAPHIC & BOUNDARY SURVEY
C0.01	GENERAL NOTES & LEGENDS
CD1.01	DEMOLITION PLAN
C1.01	SITE PLAN
C1.02	FIRE SAFETY SITE PLANS
C1.21	GRADING PLAN
C1.31	UTILITY PLAN
C1.41	SOIL EROSION & SEDIMENTATION CONTROL PLAN
C3.31	STORM SEWER PROFILES & CALCULATIONS
C4.01	ENLARGED ENTRANCE & RIGHT-OF-WAY PLA
C5.01	DETAILS - PAVING, SIGNS, & WALK
C5.02	DETAILS - FLAGPOLE & DUMPSTER ENCLOSURE
C5.31	DETAILS & CALCULATIONS - STORMWATER MANAGEMENT
L1.01	LANDSCAPE PLAN
L1.02	IRRIGATION PLAN
L5.01	DETAILS - LANDSCAPE
1 OF 1	PHOTOMETRIC PLAN
N/A	WHITE LAKE TWP. - STORM SEWER STANDARD DETAILS
1 OF 1	OCWRC SOIL EROSION & SEDIMENTATION CONTROL DETAILS

APPROVALS

AGENCY

DESCRIPTION

PERMIT NO.

DATE

EXPIRATION DATE

WHITE LAKE TOWNSHIP - PLANNING & ENGINEERING	PRE-APPLICATION MEETING			
WHITE LAKE TOWNSHIP - PLANNING COMMISSION	SPECIAL LAND USE			
WHITE LAKE TOWNSHIP - ZONING BOARD OF APPEALS	VARIANCE REQUESTS			
WHITE LAKE TOWNSHIP - COMMUNITY DEVELOPMENT DEPARTMENT	ADMINISTRATIVE SITE PLAN			
WHITE LAKE TOWNSHIP - DLZ	ADMINISTRATIVE ENGINEERING APPROVAL			
WHITE LAKE TOWNSHIP - BUILDING DEPARTMENT	FENCE PERMIT			
OAKLAND COUNTY - WATER RESOURCE COMMISSIONER	PART 91 SESC PERMIT			
OAKLAND COUNTY - ROAD COMMISSION FOR OAKLAND COUNTY	GLYNN ROAD ROW PERMIT - UNDERGROUND			
OAKLAND COUNTY - ROAD COMMISSION FOR OAKLAND COUNTY	GLYNN ROAD ROW PERMIT - APPROACH			
STATE OF MICHIGAN - EGLE	N.P.D.E.S. NOTICE TO COVER			
STATE OF MICHIGAN - EGLE	JOINT PERMIT - PARTS 301 LARKES, RIVERS & STREAMS, & 303 WETLANDS			
STATE OF MICHIGAN - EGLE	HAZARDOUS MATERIAL PLAN REVIEW			
STATE OF MICHIGAN - MDOT	HIGHLAND ROAD ROW PERMIT			

REVIEW ONLY	01/05/2023	
BY VOTE	05/25/2023	11/25/2023
000849-2023-CO	07/13/2023	07/15/2024
APPLIC. # 23-0929	07/25/2023	
APPLIC. # 23-0930	07/25/2023	
NOT REQUIRED FOR DISTURBANCE < 5 ACRES		
BY EMAIL	07/10/2023	N/A
APP. REF. #91638		

PROPRIETOR

CARTER'S PLUMBING
10431 HIGHLAND ROAD
WHITE LAKE, MI 48386
PH: (248) 830-0362
CONTACT: MATT CARTER
EMAIL: MATTO@CALLCARTERSPLUMBING.COM

ENGINEER & SURVEYOR

KIEFT ENGINEERING, INC.
5852 S. MAIN ST., STE. 1
CLARKSTON, MI 48346
PH: (248) 884-8224
CONTACT: CASEY LEACH, P.E.
EMAIL: CLEACH@KIEFTENG.COM

REVISION INDEX																			
REV.	DESCRIPTION	DATE	SHEET NUMBERS																
			G0.01	V1.01	C0.01	CD1.01	C1.01	C1.02	C1.21	C1.31	C1.41	C3.31	C4.01	C5.01	C5.02	C5.31	L1.01	L1.02	L5.01
0	SURVEY ISSUED	11/29/2022		X															
1	CONCEPT TO OWNER	12/08/2022					X												
2	OWNER APPROVAL	12/15/2022					X												
3	PRE-APP. MEETING	12/16/2022					X												
4	ADMIN. SITE PLAN	03/03/2023	X		X		X							X	X		X	X	
5	ADMIN. SITE PLAN REV. 1	04/28/2023	X	X	X		X							X	X		X	X	X
6	ADMIN. SITE PLAN REV. 2	06/23/2023	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X
7	ADMIN. SITE PLAN REV. 3	08/02/2023	X	X		X	X	X	X	X	X	X	X			X	X	X	
8	ADMIN. SITE PLAN REV. 4	08/25/2023	X			X	X	X	X	X	X	X	X				X	X	

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KIEFT ENGINEERING, INC.

PROFESSIONAL ENGINEERS AND PROFESSIONAL SURVEYORS
5852 SOUTH MAIN STREET, SUITE 1, CLARKSTON, MICHIGAN 48346
PHONE (248) 625-5251 www.kiefteng.com FAX (248) 625-7110

DATE: 11/29/22	CKD. BY:	DATE:
DRAWN: CL	CL	03/03/23
DESIGN: CL		
SECTION: 22	T- 3 -N. R- 8 -E.	



COVER SHEET
CARTER'S PLUMBING
PART OF THE SW 1/4 OF THE NE 1/4 OF SECTION 22, T3N, R8E
WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN

SCALE: AS SHOWN
SHEET NO: G0.01
KE 2022.226

CIVIL GENERAL NOTES

1. PRIOR TO SUBMITTING PROPOSAL, VERIFY ALL CONDITIONS GOVERNING OR AFFECTING THE CIVIL WORK; OBTAIN & VERIFY ALL DIMENSIONS TO ENSURE THE PROPER FIT & LOCATION OF THE CIVIL WORK, TAKE ADDITIONAL DIMENSIONS AS REQUIRED; REPORT TO THE ENGINEER ANY & ALL CONDITIONS WHICH MAY INTERFERE WITH OR OTHERWISE AFFECT OR PREVENT THE PROPER EXECUTION & COMPLETION OF THE WORK; FAMILIARIZE YOURSELF WITH THE ACTUAL CONDITIONS OF THE CIVIL WORK, ACCESS TO THE SITE, AVAILABLE STORAGE SPACE, FACILITIES & OBSTRUCTIONS THAT MAY BE ENCOUNTERED DURING THE PROGRESS OF WORK.
2. CONTRACTOR TO FURNISH ALL NECESSARY LABOR, MATERIAL, EQUIPMENT & FACILITIES TO FURNISH, FABRICATE & PERFORM THE REQUIRED CIVIL WORK.
3. ANY EXISTING CONSTRUCTION TO BE MODIFIED AS A PART OF THIS CONTRACT SHALL BE REBUILT AS REQUIRED TO THE SATISFACTION OF THE OWNER/ENGINEER.
4. EXISTING CONSTRUCTION NOT UNDERGOING ALTERATION IS TO REMAIN UNDISTURBED. WHERE SUCH CONSTRUCTION IS DISTURBED AS A RESULT OF THE OPERATIONS OF THIS CONTRACT, THE EXISTING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AS REQUIRED & TO THE SATISFACTION OF THE OWNER/ENGINEER.
5. ALL WORK SHOWN ON THESE DRAWINGS MAY BE CHECKED BY AN INDEPENDENT TESTING AGENCY RETAINED BY OWNER TO ENSURE COMPLIANCE WITH THE REQUIREMENTS SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL PROVIDE ACCESS AS REQUIRED FOR TESTING PURPOSES.
6. CONTRACTOR SHALL MAKE ALL NECESSARY FIELD VISITS FOR INSPECTION, MEASUREMENTS & VERIFICATION OF EXISTING CONDITIONS.
7. THE GENERAL CIVIL NOTES ARE INTENDED TO AUGMENT THE DRAWINGS & SPECIFICATIONS. SHOULD CONFLICTS EXIST BETWEEN THE DRAWINGS, SPECIFICATION, &/OR THE GENERAL CIVIL NOTES, THE STRICTEST PROVISION AS DETERMINED BY THE ENGINEER SHALL GOVERN.
8. WORK THE CIVIL DRAWINGS IN CONJUNCTION WITH ANY ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, LANDSCAPING, & ELECTRICAL DRAWINGS.
9. ALL WORK SHALL CONFORM TO APPLICABLE STATE & LOCAL CODES.
11. THE CONTRACTOR SHALL COMPLY WITH THE CONSTRUCTION SAFETY STANDARDS & THE OCCUPATIONAL SAFETY STANDARDS (OSHA) AS ISSUED BY THE U.S. DEPARTMENT OF LABOR & THE MICHIGAN DEPARTMENT OF LABOR (MIOSHA). THE CONTRACTOR SHALL ALSO COMPLY TO REQUIREMENTS OF THE CARTER'S PLUMBING SPECIFIC SAFETY PLAN.
12. MATERIALS & WORKMANSHIP SHALL COMPLY WITH APPLICABLE CODES, SPECIFICATIONS, LOCAL ORDINANCES, INDUSTRY STANDARDS, & UTILITY COMPANY REGULATIONS.
13. THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH ALL THE EXISTING CONDITIONS AT THE SITE INCLUDING UTILITIES, SERVICES, ETC. & SHALL BE FULLY RESPONSIBLE FOR ANY DAMAGES THEY CAUSE TO BOTH EXISTING, NEW CONSTRUCTION, PROPERTY & ANY UNAUTHORIZED DISRUPTION TO ADJACENT OWNERS NORMAL USE OF UTILITIES, SERVICES & THE SURROUNDING FACILITIES.
14. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION PRIOR TO MAKING CHANGES TO, OR INTERRUPTIONS OF UTILITIES & SHALL COMPLY WITH SPECIAL INSTRUCTIONS FROM THE OWNER TO MINIMIZE THE EFFECT ON THEIR OPERATIONS. PRIOR TO ANY EXCAVATION, EARTH MOVING WORK OR REMOVAL OF ANY PIPE FROM SERVICE, THE CONTRACTOR SHALL REVIEW WITH THE OWNER'S REPRESENTATIVE THE LOCATION OF THE UNDERGROUND UTILITIES, SERVICE & STRUCTURES IN THE AREA WHERE THE WORK IS BEING PERFORMED. PROVIDE FULL TIME SUPERVISION DURING ALL EXCAVATION & EARTH MOVING OPERATIONS & TAKE ALL RESPONSIBLE PRECAUTIONS TO PROTECT EXISTING UTILITIES, SERVICES & OPERATIONS FROM DAMAGE OR DISRUPTION.
15. PROVIDE BARRIER PROTECTION FOR VEHICULAR & PEDESTRIAN TRAFFIC AT EXCAVATIONS. TEMPORARY FENCING, BARRICADING & PEDESTRIAN ROUTING SHALL BE COORDINATED WITH & APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
16. FOR PROTECTION OF UNDERGROUND UTILITIES THE CONTRACTOR SHALL CALL "MISS DIG" AT 800-482-7171 OR 811, A MINIMUM OF THREE DAYS PRIOR TO EXCAVATION ON THE SITE. ALL "MISS DIG" PARTICIPATING MEMBERS WILL THIS ROUTINELY BE NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF NOTIFYING UTILITY OWNER'S WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.
17. DISPOSE OF ALL EXCAVATED SOILS & WASTE MATERIALS (NEW & EXISTING) OFF SITE IN A LEGAL MANNER. SPECIAL CARE IS REQUIRED FOR SOILS ON SITE THAT MAY CONTAIN HAZARDOUS MATERIALS. SEE "HAZARDOUS MATERIAL CARE" HEADING ON THIS SHEET FOR MORE DETAILS.
18. PERFORM FINAL CLEANUP OF WORK AREAS TO THE SATISFACTION OF THE OWNER.

CONTROL

1. TOPOGRAPHIC INFORMATION: EXISTING INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY BY KIEFT ENGINEERING, INC. DATED NOVEMBER 29, 2022. SUPPLEMENTED BY RECORD DRAWINGS & FIELD OBSERVATIONS.
2. VERTICAL CONTROL: ELEVATIONS SHOWN ARE BASED ON NAVD 88 DATUM. THE BENCH MARKS USED ARE SHOWN ON THE TOPOGRAPHIC SURVEY.
3. LAYOUT: LOCATE NEW CONSTRUCTION BY MEASUREMENTS FROM CONNECTING AREAS OF EXISTING BUILDINGS & ENGAGE THE SERVICES OF A PROFESSIONAL SURVEYOR TO ASSIST IN LAYOUT, & CONSTRUCTION STAKING. CONFIRM HORIZONTAL & VERTICAL CONTROL POINTS PRIOR TO CONSTRUCTION.

CLEARING, GRUBBING, & EARTHWORK - SEE "HAZARDOUS MATERIAL CARE" THIS SHEET

1. AT THE START OF EARTHWORK OPERATIONS, ALL SURFACE VEGETATION SHALL BE CLEARED & THE EXISTING TOPSOIL & ANY OTHER ORGANIC SOILS SHALL BE REMOVED IN THEIR ENTIRETY FROM BELOW THE PROPOSED BUILDING & PAVEMENT AREAS. EXISTING RANDOM CONCRETE & OTHER DEBRIS SHALL BE REMOVED FROM WITHIN THE BUILDING AREA. REMOVE STUMPS TO 12 INCHES BELOW FINAL GRADE IN FUTURE LAWN AREAS, & REMOVE STUMPS ENTIRELY FROM FUTURE PAVED & BUILDING AREAS. DISPOSE OF VEGETATIVE MATTER & DEBRIS OFFSITE.
2. THE SUB-GRADE SHALL BE THOROUGHLY PROOF-ROLLED WITH A HEAVY RUBBER-TIRED VEHICLE SUCH AS A LOADED SCRAPER OR LOADED DUMP TRUCK. ANY AREAS THAT EXHIBIT EXCESSIVE PUMPING & YIELDING DURING PROOF-ROLLING SHALL BE STABILIZED BY AERATION, DRYING & COMPACTION IF WEATHER CONDITIONS ARE FAVORABLE, OR REMOVAL & REPLACEMENT WITH ENGINEERED FILL.
3. ALL EXCAVATIONS ARE SUBJECT TO THE APPROVAL OF THE OWNER'S REPRESENTATIVE WHO SHALL BE CONSULTED WHEN POOR SOIL, WATER, OBSTRUCTIONS, PIPING, EXISTING FOOTINGS, EXCAVATIONS, ETC., ARE ENCOUNTERED.
4. CONTRACTOR SHALL FURNISH ALL REQUIRED DEWATERING EQUIPMENT TO MAINTAIN A DRY EXCAVATION UNTIL BACKFILL IS COMPLETE. ANY DEWATERING ACTIVITY AND/OR DISCHARGE FROM THE SITE SHALL BE PROPERTY PERMITTED THROUGH THE AUTHORITIES HAVING JURISDICTION DUE TO COVENANT RESTRICTIONS & ENVIRONMENTAL CONCERNS.
5. MATERIAL FOR BACKFILL OR ENGINEERED FILL REQUIRED TO ACHIEVE DESIGN GRADES SHOULD CONSIST OF NON-ORGANIC SOILS. THE ON-SITE SOILS THAT ARE FREE OF ORGANIC MATTER & DEBRIS MAY BE USED FOR ENGINEERED FILL WITH ENGINEER'S APPROVAL.
6. BACKFILL MATERIAL SHALL BE COMPACTED TO 95% OF ITS' MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR METHODS (ASTM D1557), IN LIFTS NOT EXCEEDING 12-INCHES IN LOOSE THICKNESS.

CLEARING, GRUBBING, & EARTHWORK CONT.

7. FROZEN MATERIAL SHALL NOT BE USED AS FILL, NOR SHALL FILL BE PLACED ON FROZEN SUB-GRADE.
8. SLOPE SMOOTHLY BETWEEN INDICATED ELEVATIONS TO ACHIEVE POSITIVE DRAINAGE. SLOPE ALL EARTH BANKS 4:1 OR FLATTER.
9. NEW GRADES SHOWN ARE FINISHED GRADES & INCLUDES TOP OF TOPSOIL OR SURFACES SUCH AS PAVEMENTS & WALKS.
11. PROVIDE 4 INCHES OF PREPARED TOPSOIL (REUSE EXISTING), SEED, FERTILIZE, & STRAW MULCH /W NETTING AT DISTURBED LAWN AREAS, EXCEPT AS NOTED OTHERWISE. SECURE MULCH NETTING BY USING AN APPROPRIATE PINNING PATTERN PER MANUFACTURER'S SPECIFICATIONS. PROVIDE IRRIGATION & MAINTENANCE (MOWING, TRIMMING, ETC.) UNTIL 80% OF LAWN IS ESTABLISHED AS DETERMINED BY THE ENGINEER OR OWNER. SEE LANDSCAPING PLANS & SPECIFICATIONS IF AVAILABLE.
12. TREES: TREES NOT INDICATED TO BE REMOVED OR TRANSPLANTED SHALL BE FENCED OFF WITH 4' HIGH ORANGE CONSTRUCTION FENCE 10' FROM THE DRIP LINE OF THE TREE. TREES INDICATED TO BE REMOVED, SHALL BE TRANSPLANTED WHERE SHOWN ON THE PLANS & AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
13. GREAT CARE SHALL BE TAKEN BY CONTRACTORS TO AVOID DAMAGE TO VEGETATION OUTSIDE THE LIMITS OF CONSTRUCTION & TO KEEP THE CONSTRUCTION AREAS TO A MINIMUM. DRIVING SHALL NOT BE PERMITTED OUTSIDE THE LIMITS OF CONSTRUCTION.

UTILITIES

1. MINIMUM COVER OF UNDERGROUND UTILITIES:

WATER	6.0 FT
NATURAL GAS	2.5 FT
SANITARY SEWERS	4.0 FT
ALL OTHERS	2.5 FT

PRESSURE UTILITIES MAY BE LAID APPROXIMATELY PARALLEL TO FINISH GRADE WITH NO HIGH POINTS, EXCEPT AS INDICATED, WITH LOCAL DEEPENING TO AVOID OTHER UTILITIES OR OBSTRUCTIONS. MAINTAIN COVER BELOW DITCHES & SURFACE DEPRESSIONS. PROVIDE TEMPORARY PROTECTION AS REQUIRED UNTIL COVER IS COMPLETED. INFORM OWNER'S REPRESENTATIVE IF AVAILABLE COVER, AT INDICATED ELEVATIONS, IS LESS THAN MINIMUM. VERTICAL CLEARANCE FOR ALL PIPES SHALL BE 18" MINIMUM FROM THE OUTSIDE OF PIPE.

2. EXISTING UTILITIES: INFORMATION HAS BEEN OBTAINED FROM EXISTING AVAILABLE DRAWINGS & SURFACE FEATURES SHOWN ON THE TOPOGRAPHIC SURVEY. VERIFY THE INFORMATION BEFORE CONSTRUCTION. NOTIFY THE OWNER'S REPRESENTATIVE OF DISCREPANCIES OR INTERFERENCES.
3. EXISTING UNDERGROUND ELECTRICAL LINES: THE CONTRACTOR SHALL BE RESPONSIBLE TO TRACE, FLAG, & MARK ALL UNDERGROUND ELECTRICAL LINES IN THE VICINITY OF THE AREA OF WORK PRIOR TO BEGINNING ANY DEMOLITION, EARTH MOVING, OR EXCAVATION. ALL BUILDING & UNDERGROUND STRUCTURES, ELECTRICAL MANHOLES, HAND HOLES, LIGHTS, PARKING METERS, GATES, SIGNS, MONUMENTS, & ALL OTHER SITE ITEMS THAT CAN REASONABLY BE OBSERVED FROM THE SURFACE SHALL BE INVESTIGATED TO DETERMINE THE PRESENCE OF ELECTRICAL LINES. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR OR REPLACE ANY ELECTRICAL LINES DAMAGED DUE TO CONTRACT OPERATIONS TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
4. WATER MAIN RESTRAINTS: PROVIDE ANCHORAGE AS INDICATED & AS REQUIRED TO RESTRAIN PIPING & APPURTENANCES DURING PRESSURE TEST & SERVICE. RODS & CLAMPS SHALL BE PROVIDED AS INDICATED & MAY BE USED ELSEWHERE FOR OPTIONAL ANCHORAGE, BUT SHALL NOT BE SUBSTITUTED FOR THRUST BLOCKS & ANCHORED DEFLECTIONS.
5. ADJUST THE FRAME & COVER OF CATCH BASINS & MANHOLES THAT ARE NOT INDICATED TO BE ABANDONED OR REMOVED, TO FINISH GRADE ELEVATION. ADJUSTMENTS SHALL BE MADE USING PRECAST GRADE RINGS.
6. THE LOCATIONS & ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS & ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.
7. PRIOR TO CONSTRUCTION, EXISTING UTILITIES AT PROPOSED CONNECTIONS & CROSSINGS SHALL BE FIELD EXCAVATED TO VERIFY LOCATIONS, ELEVATION & SIZE. THE OWNER'S REPRESENTATIVE MAY CONFIRM, ADJUST OR REVERSE DESIGN ELEVATIONS OF THE PROPOSED UTILITIES.
8. UNDERDRAIN: DUE TO RESTRICTIVE COVENANT & CONTAMINATED GROUNDWATER CONCERS, DO NOT PROVIDE TYPICAL UNDERDRAIN UNDER PAVEMENT AT NEW CATCH BASINS, INLETS & OUTLET CONTROL STRUCTURES RECEIVING SURFACE DRAINAGE.

GENERAL PAVING NOTES

1. ALL HOT MIX ASPHALT & CONCRETE PAVEMENT SHALL CONFORM TO THE 2012 MDOT SPECIFICATIONS FOR CONSTRUCTION.
2. SURFACE RESTORATION: RESTORE PAVEMENT & OTHER SURFACES DISTURBED BY CONTRACT OPERATIONS TO THEIR ORIGINAL CONDITION OR BETTER.
3. PAVEMENT STRIPING: PROVIDE 4 INCH WIDE WHITE PAINT STRIPING FOR STANDARD PARKING STRIPING, & 4 INCH WIDE HANDICAP BLUE FOR ALL ACCESSIBLE PARKING STRIPING. SPACES SHALL BE DELINEATED BY DUEL STRIPES, TWO (2) FEET APART CENTERED ON THE DIVIDING LINES PER THE WHITE LAKE TOWNSHIP ZONING ORDINANCE. ALL PAINT SHALL BE APPLIED PER MANUFACTURERS RECOMMENDATIONS.
4. EXISTING PAVEMENT TO BE REMOVED SHALL BE SAW CUT, FULL DEPTH, & RECTANGULAR.
5. WHEN PLACING NEW PAVEMENTS, MAINTAIN SLOPE OF EXISTING SURROUNDING SURFACES.

ASPHALT

1. AFTER FINAL ROLLING, PROTECT PAVEMENT FROM VEHICULAR TRAFFIC UNTIL THE SURFACE HAS COOLED SUFFICIENTLY TO ELIMINATE SURFACE ABRASION.
2. PAVEMENT SEALER
- A. PAVEMENT SEALER SHALL BE TARCONITE BY NEYRA INDUSTRIES, INC., OR APPROVED SUBSTITUTE. SEALER SHALL MEET FS R-P-355e PITCH, COAL TAR EMULSION (COATING FOR BITUMINOUS PAVEMENTS).
- ALTERNATE NO. 1: PAVEMENT SEALER SHALL BE JENNITE BY NEYRA INDUSTRIES INC. OR APPROVED SUBSTITUTE SEALER SHALL BE MIXED WITH 6 POUNDS OF SAND PER GALLON OF SEALER. SURFACE CLEANING, PRIMING & NUMBER OF APPLICATIONS SHALL BE AS SPECIFIED FOR BASE BID. SEALER SHALL EXCEED FS R-P-355e.
- B. PRIMER SHALL BE POLYPRIME PENETRATING PRIMER BY NEYRA INDUSTRIES, INC. OR APPROVED SUBSTITUTE.
- C. CLEAN EXISTING SURFACES FREE FROM ALL LOOSE OR FOREIGN MATTER. COAT OIL SPOTS WITH ACRYLIC OIL SPOT PRIMER.
- D. APPLY PRIMER AT MINIMUM RATE OF .015 GAL. OF CONCENTRATED POLYPRIMER PER SQUARE YARD. ALLOW PRIMER TO CURE FOR A MINIMUM OF ONE HOUR PRIOR TO APPLICATION OF TARCONITE.
- E. SEALER SHALL BE FIELD MIXED WITH 5 POUNDS OF SAND PER 1 GALLON OF TARCONITE TO FORM HOMOGENEOUS SLURRY. SAND SHALL BE WASHED DRY SILICA SAND.
- F. APPLICATION SYSTEM FOR MODERATE TRAFFIC: ONE COAT OF POLYPRIME PENETRATING PRIMER & TWO SAND-SLURRY COATS OF TARCONITE. APPLICATION SPECIFICATION JV-S2.
- G. NEW PAVEMENTS SHALL BE ALLOWED TO CURE AT LEAST 30 DAYS PRIOR TO APPLICATION.
- H. APPLICATION OF PAVEMENT SEALER SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- I. BARRICADE COATED AREAS UNTIL COATING IS DRIED SUFFICIENTLY FOR TRAFFIC.

CAST-IN-PLACE CONCRETE & CONCRETE PAVING

1. ALL CAST IN PLACE CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 301-LATEST REVISION, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDING", EXCEPT AS NOTED ON THE DRAWINGS.
2. ALL CONCRETE PAVEMENT WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 330- LATEST REVISION, "GUIDE FOR THE DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS", EXCEPT AS NOTED ON THE DRAWINGS.
3. ALL CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 psi.
4. ALL EXTERIOR CONCRETE INCLUDING WALLS SHALL BE AIR ENTRAINED 5% +/- 1%.
5. ALL EXTERIOR CONCRETE EXPOSED TO WEATHER SHALL HAVE A MAXIMUM WATER TO CEMENTITIOUS RATIO OF 0.45.
6. UNLESS NOTED OTHERWISE, MINIMUM CONCRETE COVER SHALL BE:
CONCRETE CAST AGAINST EARTH 3 IN
CONCRETE EXPOSED TO EARTH OR WEATHER 2 IN
7. THE CONTRACTOR SHALL SUBMIT THE CONCRETE MIX DESIGN(S) TO THE ENGINEER FOR REVIEW. PROPORTION MIX DESIGNS AS DEFINED IN ACI 301 SECTION 4. THE SUBMITTAL SHALL INCLUDE AS A MINIMUM CEMENT TYPE & SOURCE, CEMENT CUBE STRENGTH, AGGREGATE GRADATIONS, WATER TESTS, AD-MIXTURE CATALOG INFORMATION & CYLINDER STRENGTH TEST RESULTS FOR THE CONCRETE.
8. ALL REINFORCEMENT TO BE DETAILED, FABRICATED & ERECTED ACCORDING TO THE ACI STANDARDS: "DETAILS & DETAILING OF CONCRETE REINFORCEMENT", ACI 315 - LATEST REVISION & "MANUAL OF ENGINEERING & PLACING DRAWINGS FOR REINFORCED CONCRETE STRUCTURES", ACI 315R - LATEST REVISION.
9. LAPS, ANCHORAGES & SPLICES SHALL COMPLY WITH THE REQUIREMENTS OF ACI 318-LATEST REVISION, SECTIONS 12.2 & 12.15. LOCATIONS & SPLICES SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION JOINT LOCATIONS, DETAILS & AS SHOWN ON THE REINFORCING STEEL SHOP DRAWINGS.

SOIL EROSION & SEDIMENTATION CONTROL

1. COMPLY WITH THE REQUIREMENTS OF THE OAKLAND COUNTY WATER RESOURCE COMMISSIONER EROSION & SEDIMENTATION CONTROL PERMIT ALONG WITH ALL APPLICABLE FEDERAL, STATE, COUNTY, & TOWNSHIP LAWS, CODES, & REGULATIONS PERTAINING TO THE IMPLEMENTATION, MAINTENANCE, & DOCUMENTATION OF SEDIMENTATION & EROSION CONTROL PRACTICES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION, MAINTENANCE, & DOCUMENTATION OF SEDIMENTATION & EROSION CONTROL & STORM WATER QUALITY ISSUES RELATED TO THE PROJECT, AS REQUIRED & AS NECESSARY TO COMPLY WITH APPLICABLE LAWS, CODES, & REGULATIONS.
3. INSPECTIONS SHALL BE MADE WEEKLY & AFTER RAIN EVENTS TO DETERMINE THE EFFECTIVENESS OF EROSION & SEDIMENT CONTROL MEASURES. ANY NECESSARY IMPROVEMENTS OR REPAIRS SHALL BE PERFORMED WITHOUT DELAY.
4. SEDIMENT & EROSION FROM ALL WORK AREAS SHALL BE CONTAINED ON THE SITE, AWAY FROM WETLANDS, OUTFALLS, WATERWAYS, & ENVIRONMENTALLY SENSITIVE AREAS. WATERWAYS INCLUDE BOTH NATURAL & MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES, & PONDS.

5. MAINTAIN EROSION CONTROL MEASURES UNTIL CONSTRUCTION IS COMPLETE & LAWN AREAS ARE FULLY DEVELOPED.
6. PROVIDE JUTE MATTING OR NETTED MULCH ON TEMPORARY SLOPES 2:1 OR STEEPER. SEED & MULCH OTHER SLOPES TO REMAIN UNFINISHED FOR MORE THAN 14 DAYS.
7. REMOVE SEDIMENTATION & EROSION CONTROL MEASURES UPON COMPLETION OF PROJECT FOLLOWING RECEIPT OF FINAL COMPLETION NOTICE FROM THE OAKLAND COUNTY WATER RESOURCE COMMISSIONER'S OFFICE.

SEQUENCE OF EROSION & SEDIMENTATION CONTROL OPERATIONS:

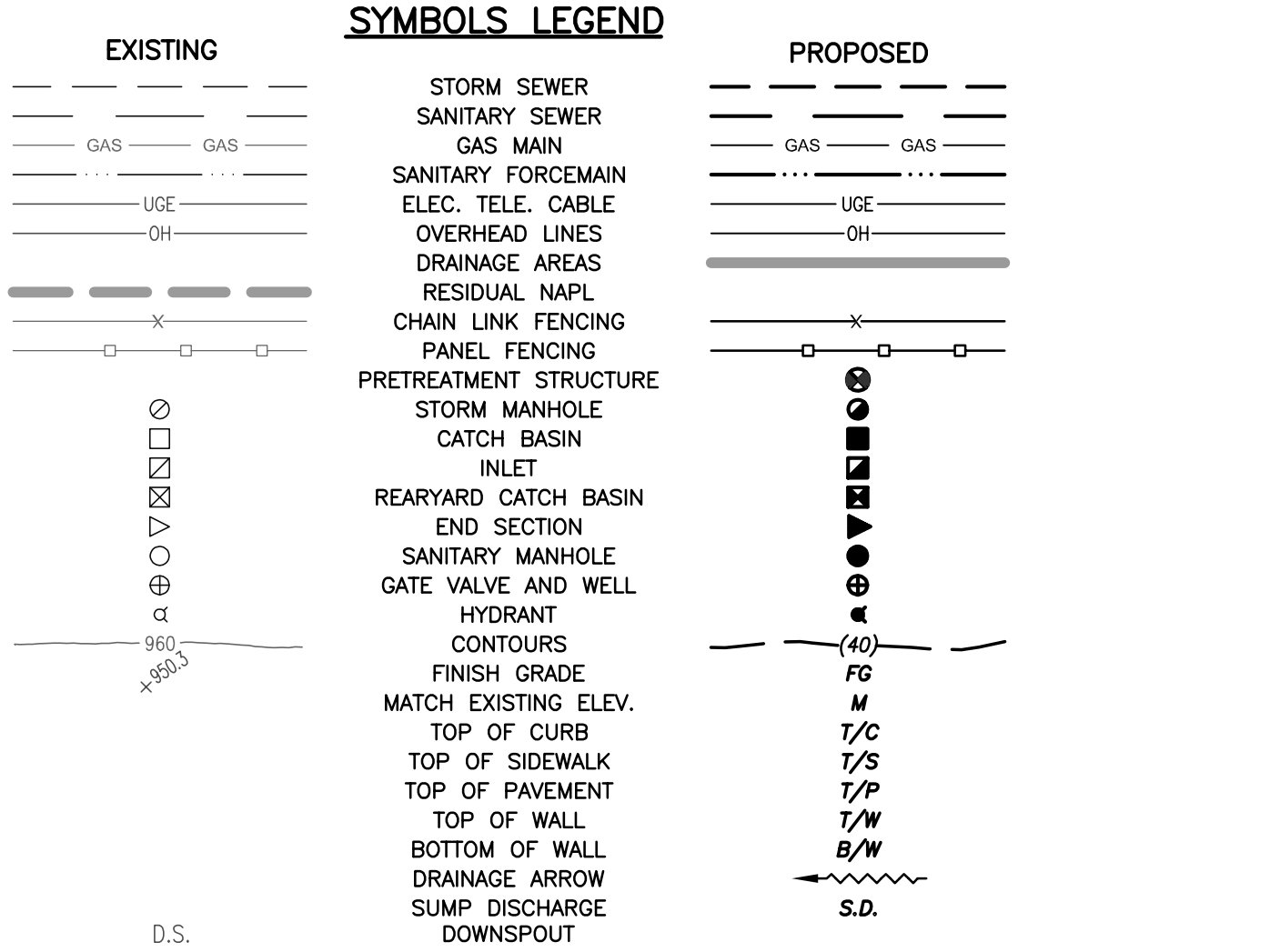
1. A PERIMETER DEFENSE WILL BE INSTALLED PRIOR TO CONSTRUCTION TO CONTAIN RUNOFF FROM ALL PROPOSED DISTURBED AREAS. SEDIMENT CONTROL WILL BE INITIATED WHICH WILL CONSIST OF MAINTAINING ALL EXISTING VEGETATION & DIRECTING ALL RUNOFF ON SITE.
2. DURING CONSTRUCTION THE ENDS OF ALL OPEN PIPES WILL BE PROTECTED BY FILTER FABRIC, STONE FILTERS OR OTHER APPROVED MEANS.
3. ANY REMAINING DENUDED AREA SHALL BE SEEDED & MULCHED DAILY, UPON COMPLETION OF FINAL GRADING.
4. AT THE COMPLETION OF THE CONSTRUCTION, TEMPORARY CONTROL MEASURES WILL BE REMOVED & CONVERTED TO PERMANENT CONTROLS. FINAL GRADING WILL BE COMPLETED & THE GROUND WILL BE PERMANENTLY STABILIZED. FILTER FABRIC FENCES SHALL BE REMOVED & ANY BARE SPOTS WILL BE SEEDED. CATCH BASINS & DRAIN INLETS WILL BE CAREFULLY UNCOVERED & ANY SEDIMENT OR DEBRIS WILL BE REMOVED.
5. CONTRACTOR IS TO SEED CRITICAL AREAS IDENTIFIED BY OWNER OR OWNER'S REPRESENTATIVE DAILY, WHEN THOSE AREAS ARE SUBJECT TO EARTH CHANGES. CONTRACTOR IS ALSO RESPONSIBLE FOR REGULAR MAINTENANCE OF PLANT COVER IN THESE AREAS. COVER SHALL BE MAINTAINED SO AS TO CONTROL SOIL EROSION.
6. AT THE CONCLUSION OF CONSTRUCTION, THE OWNER WILL ASSUME THE RESPONSIBILITY FOR PERMANENT MAINTENANCE OF THE EROSION & SEDIMENTATION CONTROL MEASURES.
7. PROVIDE DUST CONTROL WITH AN ON-SITE WATER WAGON. WATER SHALL BE IMPLEMENTED AS NEEDED & AT THE DIRECTION OF THE CITY AGENT.

GUARDRAIL (OSHA)

1. GUARDRAILS SHALL BE 1 1/2" SCHEDULE 40 STEEL PIPE ASTM A53 GRADE B (FY = 35 KSI).
2. INTERMEDIATE RAILINGS SHALL BE PROVIDED SUCH THAT A 21-INCH DIAMETER SPHERE CANNOT PASS THROUGH ANY OPENING.
3. POSTS SHALL NOT INTERRUPT THE CONTINUATION OF THE TOP RAIL AT ANY POINT ALONG THE RAILING, INCLUDING CORNERS & END TERMINATIONS. THE TOP SURFACE OF THE TOP RAILING SHALL BE SMOOTH & SHALL NOT BE INTERRUPTED BY PROJECTED FITTINGS.
4. ALL WELDS ARE TO BE GROUND SMOOTH.
5. ALL RETURNS & TRANSITIONS SHALL BE CONTINUOUSLY SMOOTH & FLOWING.
6. ALL GUARDRAIL SHALL BE PAINTED "SAFETY YELLOW".

HAZARDOUS MATERIALS

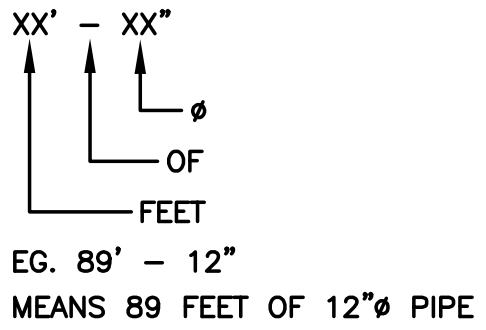
1. PER THE RESTRICTIVE COVENANT, A DUE CARE PLAN (DCP), DATED FEBRUARY 24, 2023, HAS BEEN DEVELOPED BY ASTI ENVIRONMENTAL FOR CARTER'S PLUMBING FOR OPERATING THE FACILITY.
2. AS PART OF THE DCP A HEALTH & SAFETY PLAN (HSP) FOR THE CONSTRUCTION PROJECTS THAT DISRUPT THE SITE WAS DEVELOPED. THE HEALTH & SAFETY PLAN SHALL BE REVIEWED BY ALL PERSONS (INCLUDING BUT NOT LIMITED TO CARTER'S PLUMBING EMPLOYEES, CONTRACTORS, SUB-CONTRACTORS, INSPECTORS, ENGINEERS, & REPRESENTATIVES OF ANY AUTHORITIES HAVING JURISDICTION) ENTERING THE FACILITY DURING CONSTRUCTION.
3. PERSONS ENTERING THE FACILITY SHALL SIGN A CONTAMINATED SOIL & GROUNDWATER NOTIFICATION FORM.



LEGEND OF ABBREVIATIONS

⊙	- AT	MAX.	- MAXIMUM
~	- APPROXIMATELY	MH	- MANHOLE
ASPH.	- ASPHALT	MIN.	- MINIMUM
B/B	- BACK TO BACK	N	- NORTH
B/R	- BOTTOM OF RAMP	O.C.	- ON CENTER
B/W	- BOTTOM OF WALL	P.C.	- POINT OF CURVATURE
B.O.C.	- BACK OF CURB	P.T.	- POINT TANGENT
B.O.P.	- BOTTOM OF PIPE	PR.	- PROPOSED
CB	- CATCH BASIN	PROP.	- PROPOSED
CL	- CENTERLINE	R	- RADIUS OR RIM ELEVATION
CL	- CLASS	RC	- RAIN/ROOF CONDUCTOR
CMP	- CORRUGATED METAL PIPE	RCP	- REINFORCED CONCRETE PIPE
C.O.	- CLEAN OUT	R.O.W.	- RIGHT OF WAY
CONC.	- CONCRETE	RR	- RAIL ROAD
C.P.	- CENTER POINT	S	- SOUTH
CPPP	- CORRUGATED PERFORATED PLASTIC PIPE	s	- ARC LENGTH
DEMO.	- DEMOLITION OR DEMOLISH	SAN	- SANITARY SEWER
DS	- DOWNSPOUT	S.D.	- SUMP DISCHARGE
E	- EAST	SESC	- SOIL EROSION & SEDIMENTATION CONTROL
EL.	- ELEVATION	SP.	- SPACED
ELE	- ELECTRICAL	STN	- ROAD STATION
EQ.	- EQUAL	STM	- STORM SEWER
ES	- END SECTION	T/W	- TOP OF WALL
E.W.	- EACH WAY	T/C	- TOP OF CURB
EX.	- EXISTING	T/P	- TOP OF PAVEMENT
EXIST.	- EXISTING	T/R	- TOP OF RAMP
F	- HYDRANT FLANGE BREAK ELEVATION	T/S	- TOP OF SIDEWALK
FF	- FINISHED FLOOR	TD	- TRENCH DRAIN
F/F	- FACE TO FACE	T.O.P.	- TOP OF PIPE
FG	- FINISHED GRADE ELEVATION	TYP.	- TYPICAL
F.O.C.	- FACE OF CURB	U.P.	- UTILITY POLE
G	- GUTTER ELEVATION	U.G.	- UNDERGROUND
GV&W	- GATE VALVE & WELL	U.N.O.	- UNLESS NOTED OTHERWISE
H.P.	- HIGH POINT	W	- WEST
HY.	- HYDRANT	W/W	- WITH
IN	- INLET	WM	- WATER MAIN
I.E.	- INVERT ELEVATION	WS	- WATER SERVICE
LOC.	- LOCATION(S)	Ø	- DIAMETER
L.P.	- LOW POINT		
(M)	- MATCH EXIST. ELEVATION		

PIPE SIZE DESIGNATION



DATE	ISSUE
03/05/23	ADMINISTRATIVE SITE PLAN
04/28/23	ADMINISTRATIVE SITE PLAN REV. 1
06/23/23	ADMINISTRATIVE SITE PLAN REV. 2

PROPRIETOR:
CARTER'S PLUMBING
10431 HIGHLAND ROAD
WHITE LAKE, MICHIGAN 48386
(248) 830-0362

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KIEFT ENGINEERING, INC.
PROFESSIONAL ENGINEERS AND PROFESSIONAL SURVEYORS
5852 SOUTH MAIN STREET, SUITE 1, CLARKSTON, MICHIGAN 48346
PHONE (248) 625-5251 www.kiefteng.com FAX (248) 625-7110

DATE: 01/23/23	CKD. BY	DATE
DRAWN: CL	CL	
DESIGN: CL		
SECTION: 22	T- 3 -N- R- 8 -E-	



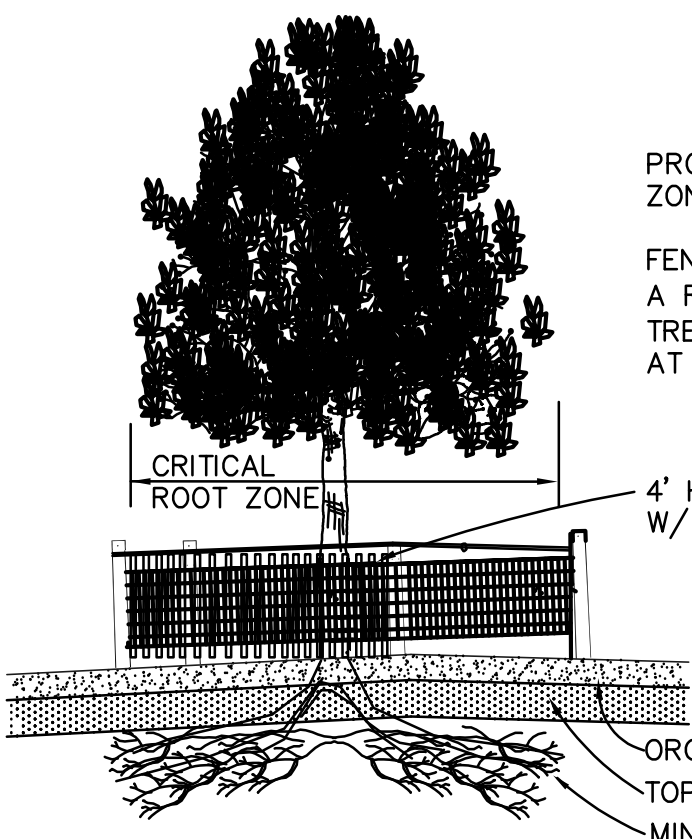
GENERAL NOTES & LEGENDS
CARTER'S PLUMBING
PART OF THE SW 1/4 OF THE NE 1/4 OF SECTION 22, T3N, R8E
WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN

SCALE: NONE
SHEET NO: C0.01
KE 2022.226

PROVIDE TREE PROTECTION
PER DETAIL THIS SHEET

DEMOLISH SITE FEATURE

DEMOLISH CONCRETE OR ASPHALT PAVEMENT, CURB WALK, LAWN, LANDSCAPING ETC., U.N.O.



PROVIDE FENCE AROUND CRITICAL ROOT
ZONE OF TREE.

FENCE SHALL BE PLACED IN A CIRCLE WITH A RADIUS OF 1' PER 1" DIAMETER OF THE TREE MEASURED AT 4.5' ABOVE GROUND, AT A MINIMUM.

4' HIGH PLASTIC SNOW FENCE
W/ STEEL POST - 10' O.C..

- ORGANIC LAYER
- TOPSOIL
- MINERAL SOIL

TREE PROTECTION DETAIL

TREE PROTECTION NOTES:

TREE PROTECTION SHALL BE ERECTED PRIOR TO START OF CONSTRUCTION ACTIVITIES, AND SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE.

NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE DRIP LINE OF ANY TREE DESIGNATED TO REMAIN; INCLUDING, BUT NOT LIMITED TO PLACING SOLVENTS, BUILDING MATERIAL, CONSTRUCTION EQUIPMENT, OR SOIL DEPOSITS WITHIN DRIP LINES.

GRADE CHANGES MUST BE MINIMAL WITHIN THE DRIP LINE OF PROTECTED TREES.

DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY DEVICE OR WIRE TO ANY REMAINING TREE.

ALL UTILITY SERVICE REQUESTS MUST INCLUDE NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES MUST BE AVOIDED. ALL TRENCHING SHALL OCCUR OUTSIDE OF THE PROTECTIVE FENCING, WHERE POSSIBLE.

REGULATED TREES LOCATED ON ADJACENT PROPERTY THAT MAY BE AFFECTED BY
CONSTRUCTION ACTIVITIES MUST BE PROTECTED.

DEMOLITION NOTES:

1. EXISTING UTILITIES SHOWN HAVE BEEN TAKEN FROM RECORD MAPPING, WHERE AVAILABLE. NO GUARANTEE IS MADE, OR SHOULD BE ASSUMED, AS TO THE COMPLETENESS OR ACCURACY OF THE UTILITIES SHOWN HERE. PARTIES UTILIZING THIS INFORMATION SHALL FIELD VERIFY THE ACCURACY AND COMPLETENESS OF OVERHEAD AND UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION ACTIVITIES.
2. DEMOLITION SHALL FOLLOW THE GENERAL NOTES, LEGENDS, TOPOGRAPHIC & BOUNDARY SURVEY, & SITE PLAN - SEE SHEETS V/01, C/01, & C/1.0.
3. DEMOLITION SHALL INCLUDE REMOVAL & DISPOSAL, U.N.O.
4. COORDINATE DEMOLITION WORK W/ OWNER TO LIMIT IMPACT TO OWNER'S OPERATIONS.

HAZARDOUS MATERIALS NOTE

HAZARDOUS MATERIAL (FUEL) EXISTS ON THE SITE IN THE SOIL, SEE HAZARDOUS MATERIALS NOTES ON SHEET C0.01 FOR FURTHER DETAIL ON SAFETY & HANDLING.

BENCHMARKS

BM-1 - MAG NAIL IN EAST FACE OF POWER POLE LOCATED
ALONG THE SOUTH LINE OF PROPERTY.
ELEVATION 950.11 NAVD '88

BM-2 - CHISELED "X" ON E. RIM OF BELL MANHOLE
ON S. SIDE OF M-59 @ 28'+/- NORTH AND 28'+/
EAST OF NW CORNER BUILDING #10415.
ELEVATION 951.42 NAVD '88

DATE	ISSUE
06/23/23	ADMINISTRATIVE SITE PLAN REV. 2
08/02/23	ADMINISTRATIVE SITE PLAN REV. 3
08/25/23	ADMINISTRATIVE SITE PLAN REV. 4

PROPRIETOR:
CARTER'S PLUMBING
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(248) 830-0362

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5852 SOUTH MAIN STREET, SUITE 1, CLARKSTON, MICHIGAN 48346
(248) 625-5251 www.kiefteng.com FAX (248) 625-5252

DATE: 06/01/23	CKD. BY	DATE
DRAWN: GF	WJN	11/22/22
DESIGN: CL		
SECTION: 22	T- 3 -N. R- 8 -E.	



DEMOLITION PLAN

CARTER'S PLUMBING

PART OF THE SW 1/4 OF THE NE 1/4 OF SECTION 22, T3N, R8E
WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN

SCALE: 1" = 20'

SHEET NO: CD1.01

KE 2022.226

THE SOIL, SEE HAZARDOUS
LIL ON SAFETY & HANDLING.

ED

NOT FOR CONSTRUCTION

SEAL OF THE CITY OF MICHIGAN
CASEY M. LEACH
NO.
6201058383
JAN 25 2019

EXIST. ENTRANCE
TO BE REMOVED
PER MDOT

24' (OPENING) SINGLE
SLIDING POWER GATE.
SEE SHEET C1.02 FOR
ENLARGED PLAN. —

N 64°10'00" E
89.39' (M) 90' (R)

BM-2

G-E-M-INC.
#10415 HIGHLAND ROAD

12-22-252-019
LM

A = 200.55' (M) 200' (R)
R = 3243.23'
D = 03°32'35"
LC = N 65°54'00" E
200.52'

RETAINING WALL
W/ GUARDRAIL ↗

100.00'(R)

-22-252-023
LM

(VACATED GLYNN ROAD)

33' STRIP ABANDONED BY BOARD OF COUNTY ROAD
COMMISSIONER, L. 7821, P.659, O.C.R.

VACATED
GLYNN ROAD

C/L GLYNN ROAD

REMOVE EXIST.
DRIVE INCLUDING
CULVERT. GRADE
NEW DITCH. —

REPAIR EX. FOUNDATION WALL BY CUTTING BACK CONC. SLAB 8" MIN. REMOVE BLOCK DOWN TO FOOTING. REPLACE W/ STANDARD SIZE CMU. CORE EX. FOOTING & EPOXY #5 BARS, VERTICALLY, INTO FOOTING 6" FROM BOTTOM OF FOOTING, SPACED AT 32" O.C., & FILL SOLID W/ GROUT. BACKFILL WEST SIDE OF WALL TO ACHIEVE DESIGN GRADES. NEW GRADING WILL REDUCE SITE WALL HEIGHT. ELEVATION DIFFERENTIAL WILL BE ~1". REPLACE CONC. SLAB IN KIND. SEE DETAIL ON C5.02 FOR WALL DETAIL.

SITE & BUILDING INFORMATION:

LOT GROSS AREA: 1.38 ACRES
PRIMARY BUILDING GROSS FLOOR AREA: 11,970 SF (INCLUDES BOTH FLOORS)
ACCESSORY BUILDING GROSS FLOOR AREA: 6,154 SF
ACCESSORY BUILDING GROSS FLOOR AREA: 1,824 SF
TOTAL GROSS FLOOR AREA OF ALL BUILDINGS ON SITE: 19,948 SF

ZONING INFORMATION:

ZONING DISTRICT: LM LIGHT MANUFACTURING
PROPOSED USE: PLUMBING CONTRACTOR'S OFFICE/YARD/STORAGE
MINIMUM LOT SIZE: 1 ACRE, CONFORMS
MINIMUM LOT WIDTH: 175 FT, CONFORMS
MAXIMUM BUILDING HEIGHT: 40 FT OR 2 STORIES, CONFORMS

SETBACKS

<i>FRONT</i>	<i>REAR</i>	<i>SIDES</i>	<i>PARKING</i>
70 FT	50 FT	50FT	20 FT*

**OFF-STREET PARKING LOCATED WITHIN ANY SETBACK SHALL CONFORM TO SCREENING & LANDSCAPING REQUIREMENTS OF THE ZONING ORDINANCE*

PARKING SPACE SIZE: 90° 9 FT X 18 FT W/ 24 FT LANE
45° 9 FT X 18 FT W/ 15 FT LANE

REQUIRED PARKING SPACES: 1 SPACE/800 SF USABLE FLOOR AREA + 1 SPACE/2EMPLOYEES
PRIMARY BUILDING USABLE FLOOR AREA = 11,970 SF (80%) = 9,576 SF
ON SITE EMPLOYEES = 13 EMPLOYEES
 $9,576 \text{ SF} / (1 \text{ SPACE} / 800 \text{ SF}) + 13 \text{ EMPLOYEES} (1 \text{ SPACE} / 2 \text{ EMPLOYEES}) = 18.47 \text{ SPACES REQUIRED}$
19 TOTAL PARKING SPACES PROVIDED, OF WHICH (2) ARE ACCESSIBLE

REQUIRED LOADING ZONE: 1 SPACE REQUIRED FOR 2,000 - 20,000 SF OF GROSS FLOOR AREA
19,948 SF REQUIRES (1) 10 FT X 50 FT LOADING SPACE, 1 SPACE PROVIDED

BENCHMARKS:

*BM-1 - MAG NAIL IN EAST FACE OF POWER POLE LOCATED
ALONG THE SOUTH LINE OF PROPERTY.
ELEVATION 950.11 NAVD '88*

BM-2 - CHISELED "X" ON E. RIM OF BELL MANHOLE
ON S. SIDE OF M-59 @ 28'+/- NORTH AND 28'+/-
EAST OF NW CORNER BUILDING #10415.
ELEVATION 951.42 NAVD '88

GENERAL NOTES:

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2. SEE SHEET C.01 FOR GENERAL NOTES & LEGENDS.
3. SEE SHEET C1.01, C1.31, & C1.41 FOR GRADING, UTILITY, & SESC PLANS, RESPECTIVELY.
4. SEE SHEET C3.01 FOR SITE DETAILS & C5.02 FOR FLAGPOLE AND DUMPSTER ENCLOSURE DETAILS.
5. SEE SHEETS L1.01 FOR LANDSCAPING.

SITE LIGHTING NOTE:

SEE GBA PROJECT #22-78823 V2, SHEET 1 OF 1 FOR THE PHOTOMETRIC PLAN. FIXTURES AND MOUNTING HEIGHTS MAY NOT BE SUBSTITUTED OR MODIFIED AFTER APPROVAL BY WHITE LAKE TOWNSHIP WITHOUT RESUBMISSION AND APPROVAL OF A REVISED PHOTOMETRIC PLAN.

HAZARDOUS MATERIALS NOTE:

HAZARDOUS MATERIAL (FUEL) EXISTS ON THE SITE IN THE SOIL, SEE HAZARDOUS MATERIALS NOTES ON SHEET C0.01 FOR FURTHER DETAIL ON SAFETY & HANDLING.

DATE	ISSUE
12/15/22	OWNER APPROVAL
12/16/22	PRE-APPLICATION MEETING
03/03/23	ADMINISTRATIVE SITE PLAN
04/28/23	ADMINISTRATIVE SITE PLAN REV. 1
06/23/23	ADMINISTRATIVE SITE PLAN REV. 2
08/02/23	ADMINISTRATIVE SITE PLAN REV. 3
08/25/23	ADMINISTRATIVE SITE PLAN REV. 4

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SECTION: 22	T- 3 -N. R- 8 -	



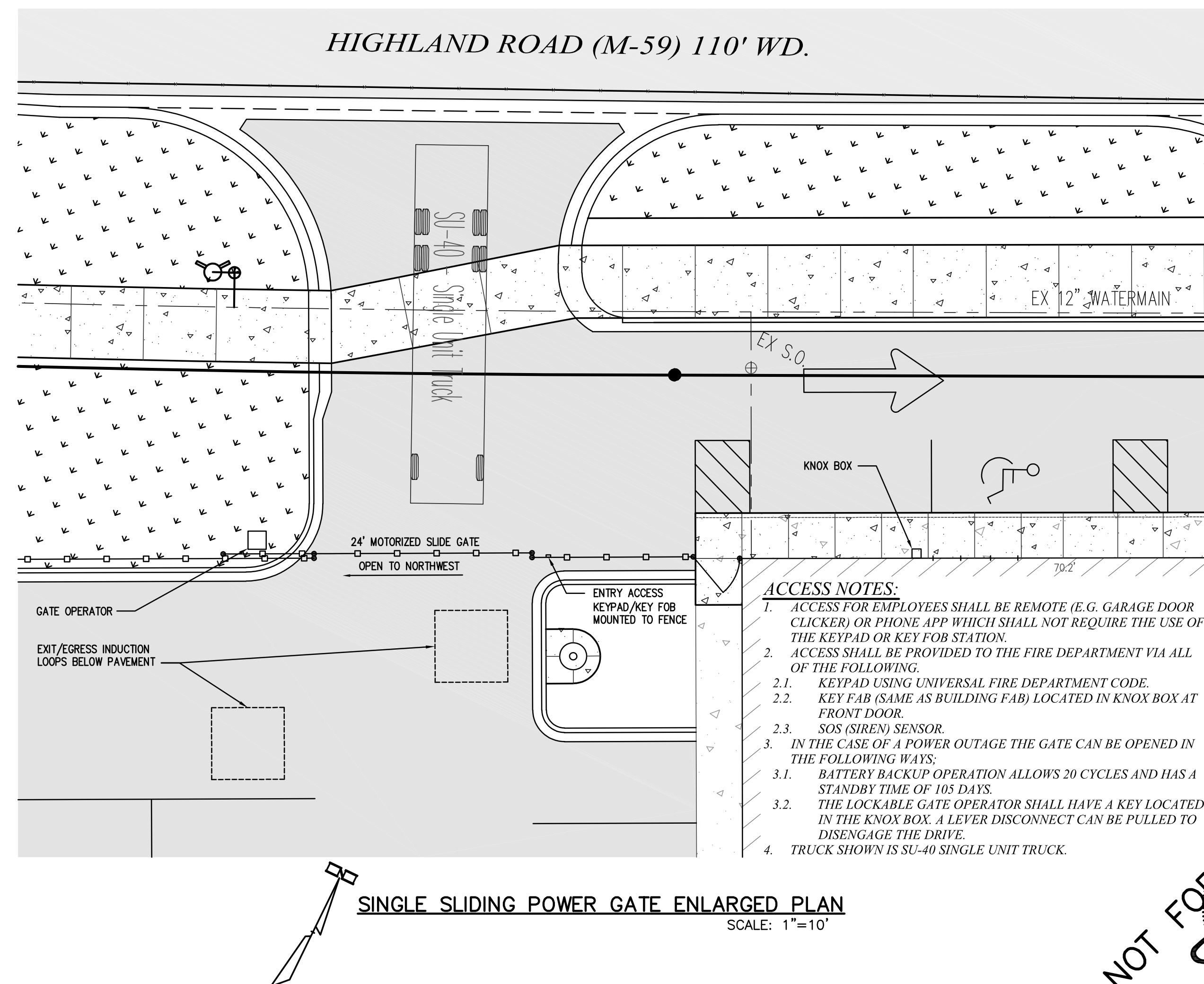
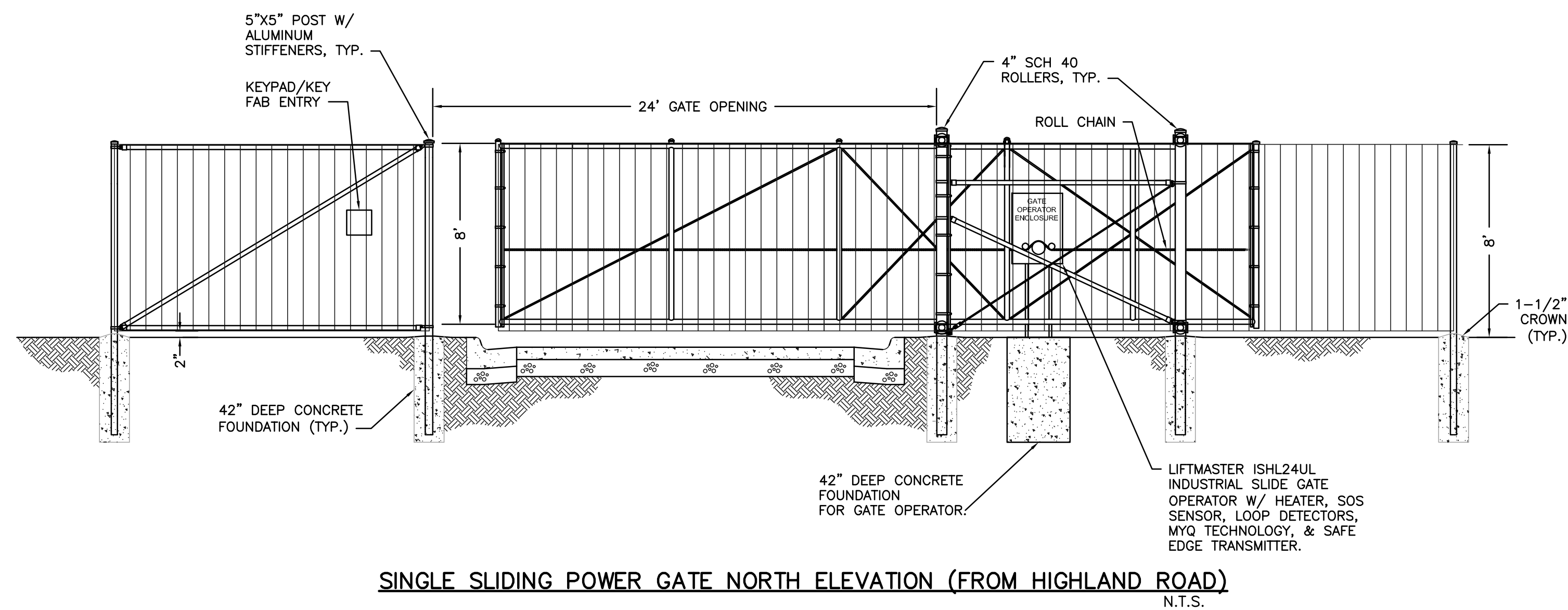
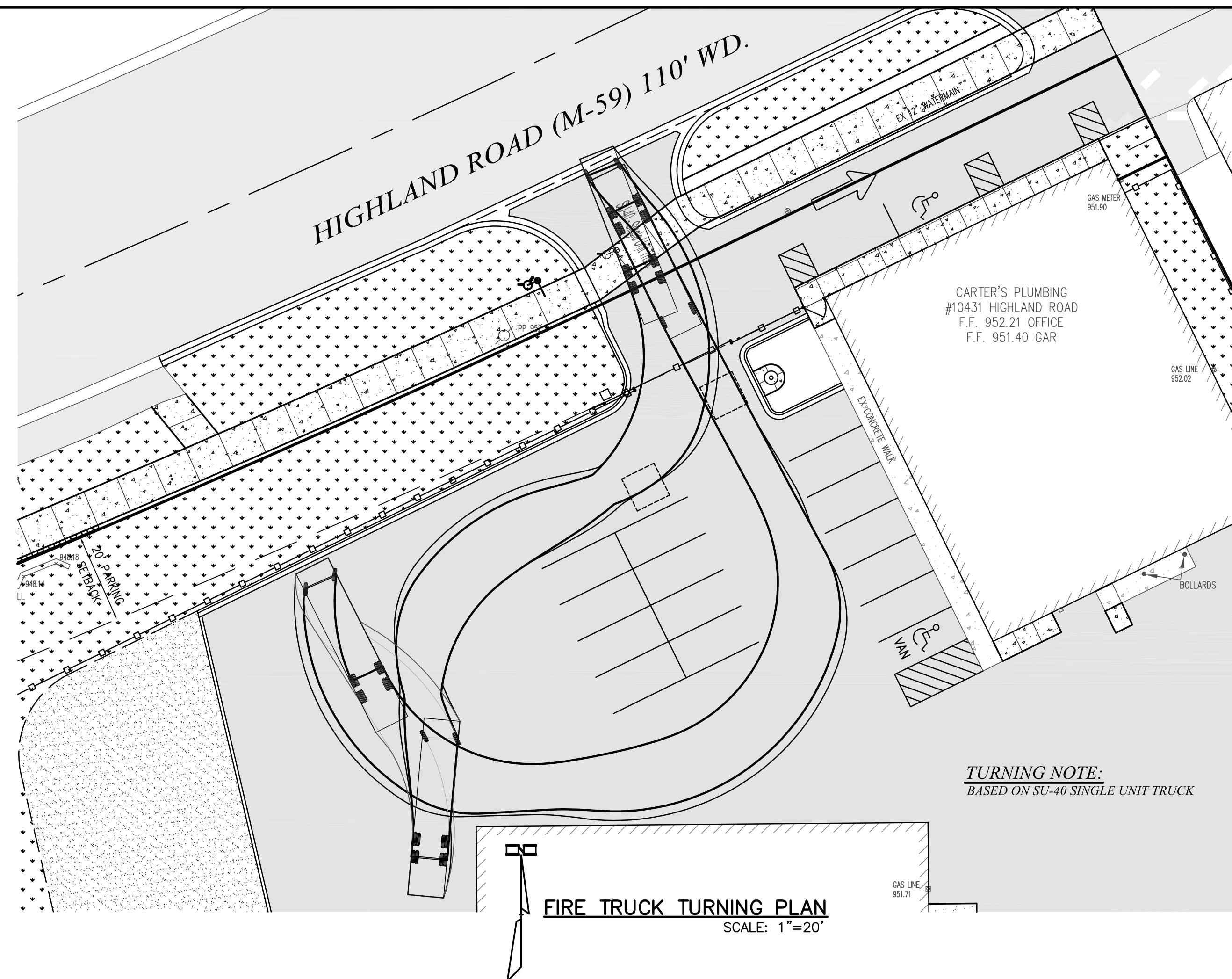
SITE PLAN
CARTER'S PLUMBING
PART OF THE SW 1/4 OF THE NE 1/4 OF SECTION 22, T3N, R8E
WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN

SCALE:	1" = 20'
SHEET NO:	C1.01
<i>KE 2022.226</i>	

NOT FOR CONSTRUCTION

STATE OF MICHIGAN
CASEY M. LEACH
NOV 1 2010
6201058383
PROFESSIONAL





DATE	ISSUE
06/23/23	ADMINISTRATIVE SITE PLAN REV. 2
08/02/23	ADMINISTRATIVE SITE PLAN REV. 3
08/25/23	ADMINISTRATIVE SITE PLAN REV. 4

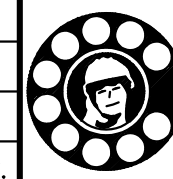
PROPRIETOR:
CARTER'S PLUMBING
10431 HIGHLAND ROAD
WHITE LAKE, MICHIGAN 48386
(248) 830-0362

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SECTION: 22	T- 3 -N, R- 8 -E.	



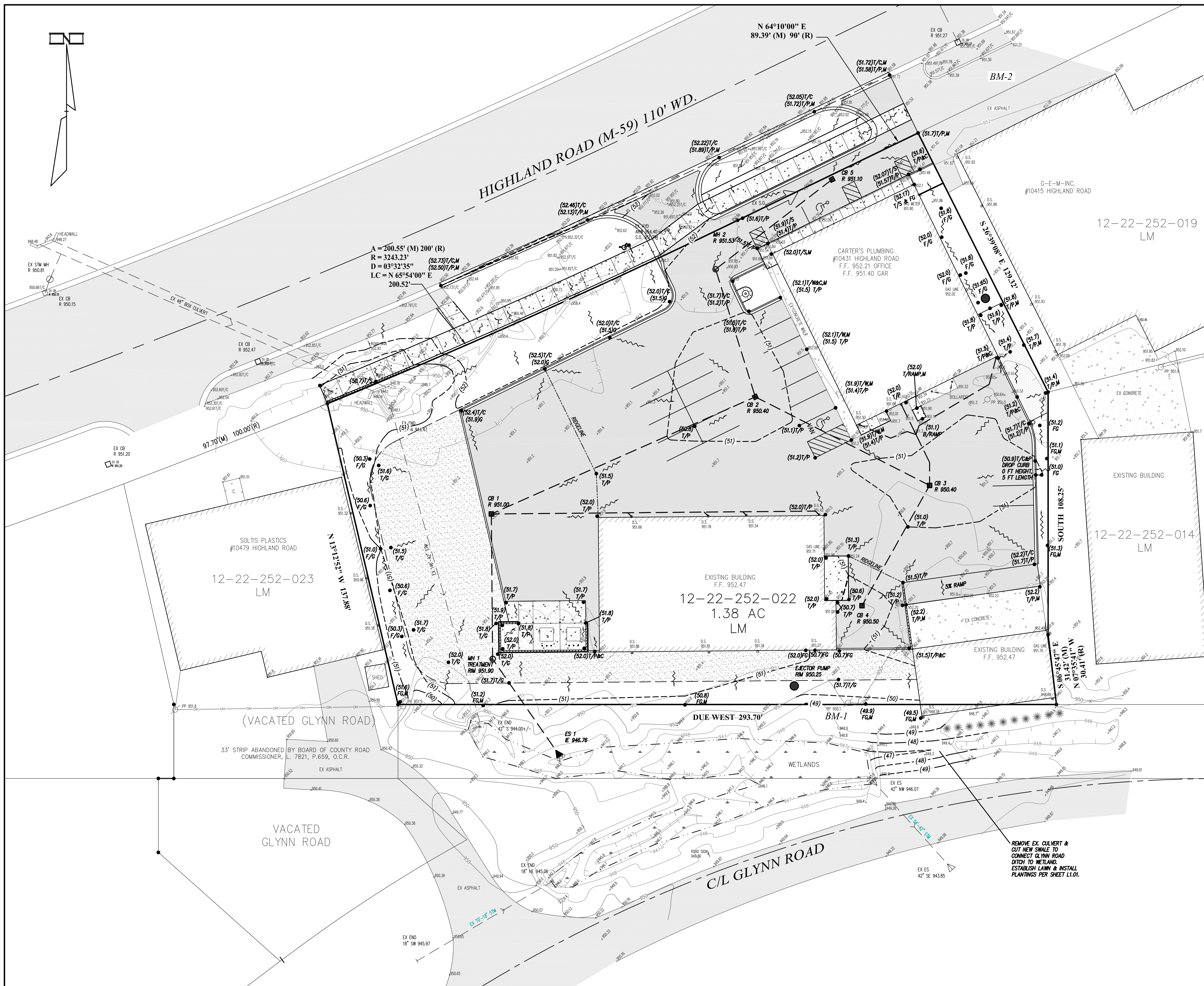
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FIRE SAFETY SITE PLANS
CARTER'S PLUMBING

PART OF THE SW 1/4 OF THE NE 1/4 OF SECTION 22, T3N, R8E
WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN

SCALE: AS SHOWN
SHEET NO: C1.02
KE 2022.226

NOT FOR CONSTRUCTION

**BENCHMARKS:**

BM-1 - MAG NAIL IN EAST FACE OF POWER POLE LOCATED ALONG THE SOUTH LINE OF PROPERTY. ELEVATION 950.11 NAVD '88

BM-2 - CHISELED "X" ON E. RIM OF BELL MANHOLE ON S. SIDE OF M-59 @ 28'+/- NORTH AND 28'+/- EAST OF NW CORNER BUILDING #10415. ELEVATION 951.42 NAVD '88

GENERAL NOTES:

- EXISTING UTILITIES SHOWN HAVE BEEN TAKEN FROM VISUAL OBSERVATION AND RECORD MAPPING. WHERE AVAILABLE, NO GUARANTEE IS MADE, OR SHOULD BE ASSUMED, AS TO THE COMPLETENESS OR ACCURACY OF THE UTILITIES SHOWN ON THIS DRAWING. PARTIES UTILIZING THIS INFORMATION SHALL FIELD VERIFY THE ACCURACY AND COMPLETENESS OF OVERHEAD AND UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION ACTIVITIES.
- SEE SHEET C0.01 FOR GENERAL NOTES & LEGENDS.
- SEE SHEET C4.01 FOR ENLARGED ENTRANCE & RIGHT-OF-WAY PLAN WITH ADDITIONAL GRADING DETAIL.
- SEE SHEET C5.01 FOR SITE DETAILS & C5.02 FOR FLAGPOLE AND DUMPSTER ENCLOSURE DETAILS.

HAZARDOUS MATERIALS NOTE:

HAZARDOUS MATERIAL (FUEL) EXISTS ON THE SITE IN THE SOIL. SEE HAZARDOUS MATERIALS NOTES ON SHEET C0.01 FOR FURTHER DETAIL ON SAFETY & HANDLING.

REMOVE EX. CULVERT & CUT NEW SWALE TO CONNECT GLYNN ROAD DITCH TO WETLAND. ESTABLISH LAWN & INSTALL PLANTINGS PER SHEET L1.01.

NOT FOR CONSTRUCTION

DATE	ISSUE
06/23/23	ADMINISTRATIVE SITE PLAN REV. 2
08/02/23	ADMINISTRATIVE SITE PLAN REV. 3
08/25/23	ADMINISTRATIVE SITE PLAN REV. 4

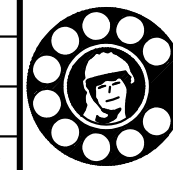
PROPRIETOR:
CARTER'S PLUMBING
10431 HIGHLAND ROAD
WHITE LAKE, MICHIGAN 48386
(248) 830-0362

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SHEET: 22	T - 3 - N, R - 8 - E	

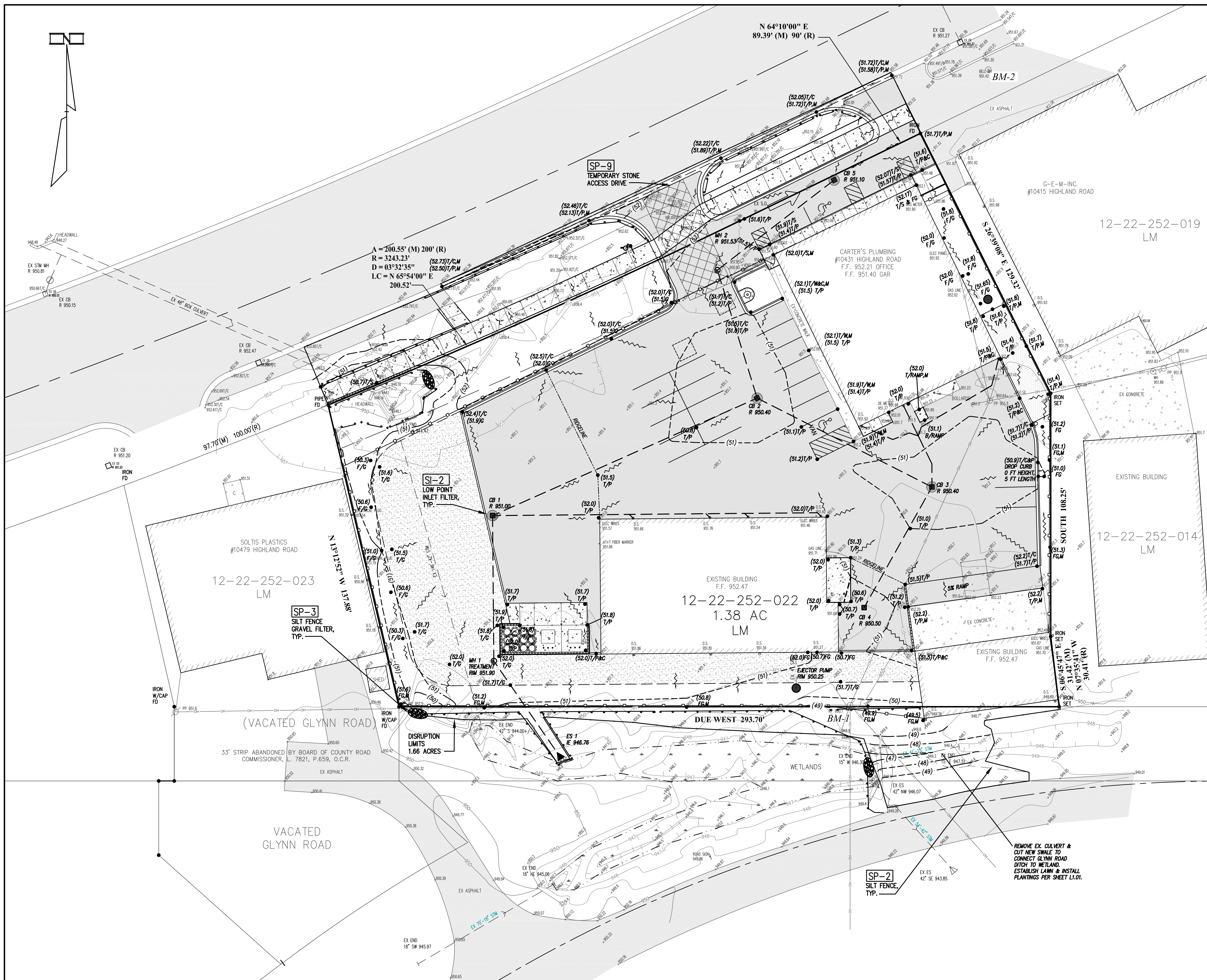


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GRADING PLAN
CARTER'S PLUMBING

PART OF THE SW 1/4 OF THE NE 1/4 OF SECTION 22, T3N, R8E
WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN

SCALE: 1" = 20'
SHEET NO: C1.21
KE 2022.226

**SITE & BUILDING INFORMATION:**

LOT GROSS AREA: 1.38 ACRES
 PRIMARY BUILDING GROSS FLOOR AREA: 11,970 SF (INCLUDES BOTH FLOORS)
 ACCESSORY BUILDING GROSS FLOOR AREA: 6,154 SF
 ACCESSORY BUILDING GROSS FLOOR AREA: 1,824 SF
 TOTAL GROSS FLOOR AREA OF ALL BUILDINGS ON SITE: 19,948 SF

BENCHMARKS:

BM-1 - MAG NAIL IN EAST FACE OF POWER POLE LOCATED
 ALONG THE SOUTH LINE OF PROPERTY.
 ELEVATION 950.11 NAVD '88

BM-2 - CHISELED "X" ON E. RIM OF BELL MANHOLE
 ON S. SIDE OF M-59 @ 28'± NORTH AND 28'±
 EAST OF NW CORNER BUILDING #10415.
 ELEVATION 951.42 NAVD '88

GENERAL NOTES:

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- SEE SHEET C0.01 FOR GENERAL NOTES & LEGENDS.
- SEQUENCE OF SOIL EROSION & SESC NOTES ON THIS SHEET.
- SEE OCWRC STANDARD DETAIL SHEET.
- OBTAIN A SOIL EROSION PERMIT FROM THE OAKLAND COUNTY WATER RESOURCE COMMISSIONER (OCWRC) PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTION, MAINTENANCE, AND REPAIRS TO SESC MEASURES DURING CONSTRUCTION.
- ANY CORRECTIVE ACTIONS OR FINES ASSOCIATED WITH THE SESC PERMIT SHALL BE PAID BY THE CONTRACTOR.

HAZARDOUS MATERIALS NOTE:

HAZARDOUS MATERIAL (FUEL) EXISTS ON THE SITE IN THE SOIL, SEE HAZARDOUS MATERIALS NOTES ON SHEET C0.01 FOR FURTHER DETAIL ON SAFETY & HANDLING.

SESC LEGEND

- SP-2 OCWRC BMP DESIGNATION (SEE STANDARD DETAIL SHEET)
- SP-2 SILT FENCE (SP-2)
- SP-3 SILT FENCE GRAVEL FILTER (SP-3)
- SI-2 LOW POINT INLET FILTER (SI-2)
- DISRUPTION LIMITS
- RIP RAP

REMOVE EX. CULVERT &
 CUT NEW SWALE TO
 CONNECT GLYNN ROAD
 DITCH TO WETLAND.
 ESTABLISH LAWN & INSTALL
 PLANTINGS PER SHEET L1.01.

NOT FOR CONSTRUCTION

DATE	ISSUE
06/23/23	ADMINISTRATIVE SITE PLAN REV. 2
08/02/23	ADMINISTRATIVE SITE PLAN REV. 3
08/25/23	ADMINISTRATIVE SITE PLAN REV. 4

PROPRIETOR:
 CARTER'S PLUMBING
 10431 HIGHLAND ROAD
 WHITE LAKE, MICHIGAN 48386
 (248) 830-0362

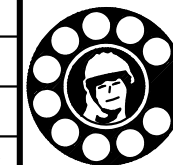
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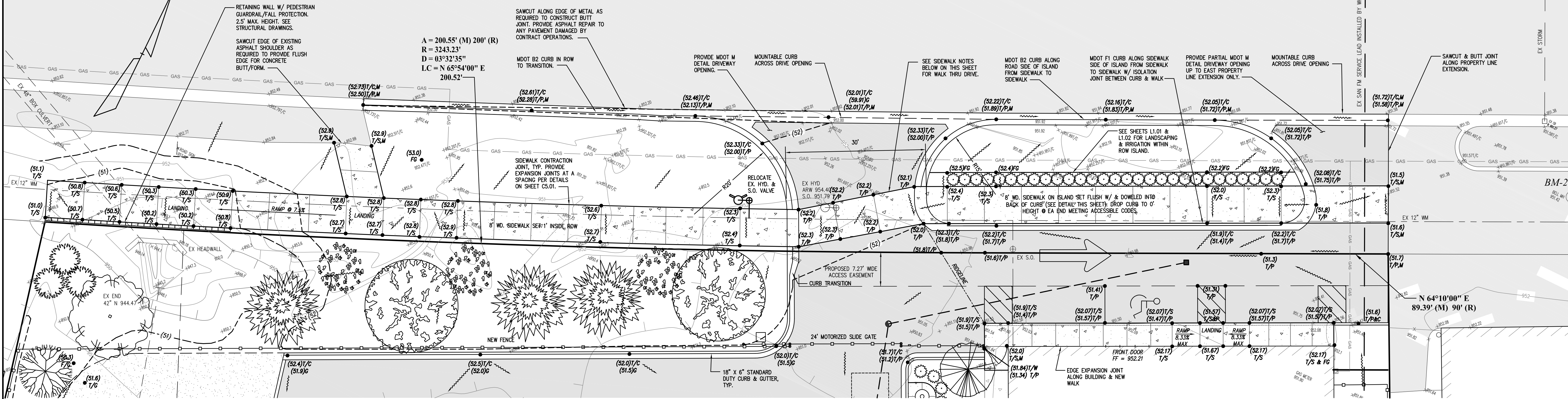
SOIL EROSION & SEDIMENTATION CONTROL PLAN

CARTER'S PLUMBING

PART OF THE SW 1/4 OF THE NE 1/4 OF SECTION 22, T3N, R8E
 WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN

SCALE: 1" = 20'
SHEET NO: C1.41
KE 2022.226

HIGHLAND ROAD (M-59) 110' WD.



BENCHMARKS:
BM-1 - MAG NAIL IN EAST FACE OF POWER POLE LOCATED
ALONG THE SOUTH LINE OF PROPERTY. (NOT SHOWN ON THIS SHEET)
ELEVATION 950.11 NAVD '88

BM-2 - CHISELED "X" ON E. RIM OF BELL MANHOLE
ON S. SIDE OF M-59 @ 28'+/- NORTH AND 28'+/-
EAST OF NW CORNER BUILDING #10415.
ELEVATION 951.42 NAVD '88

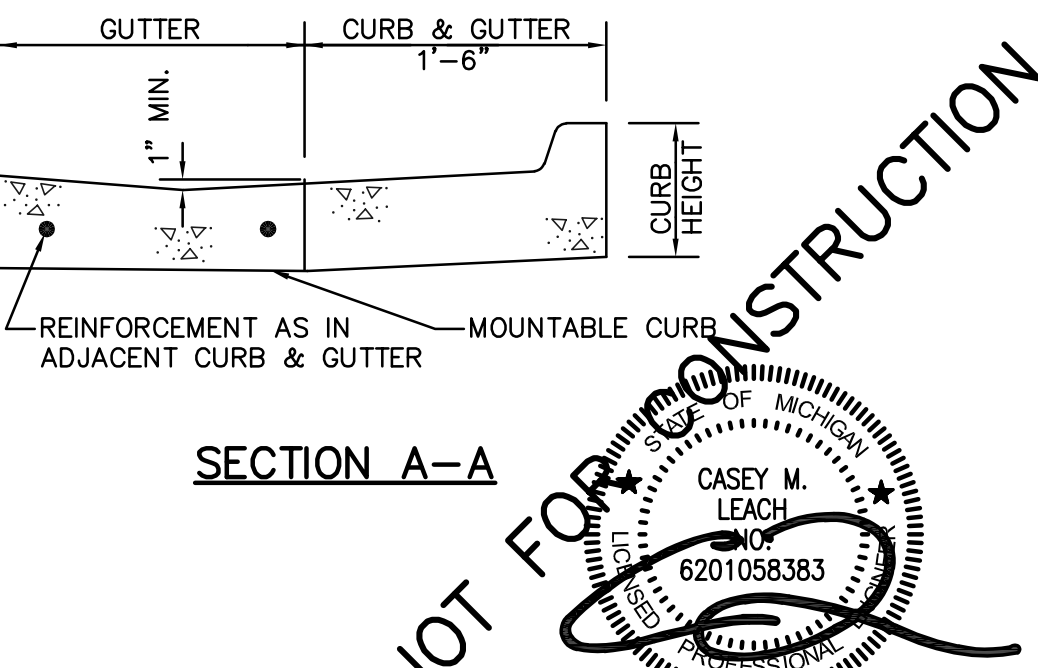
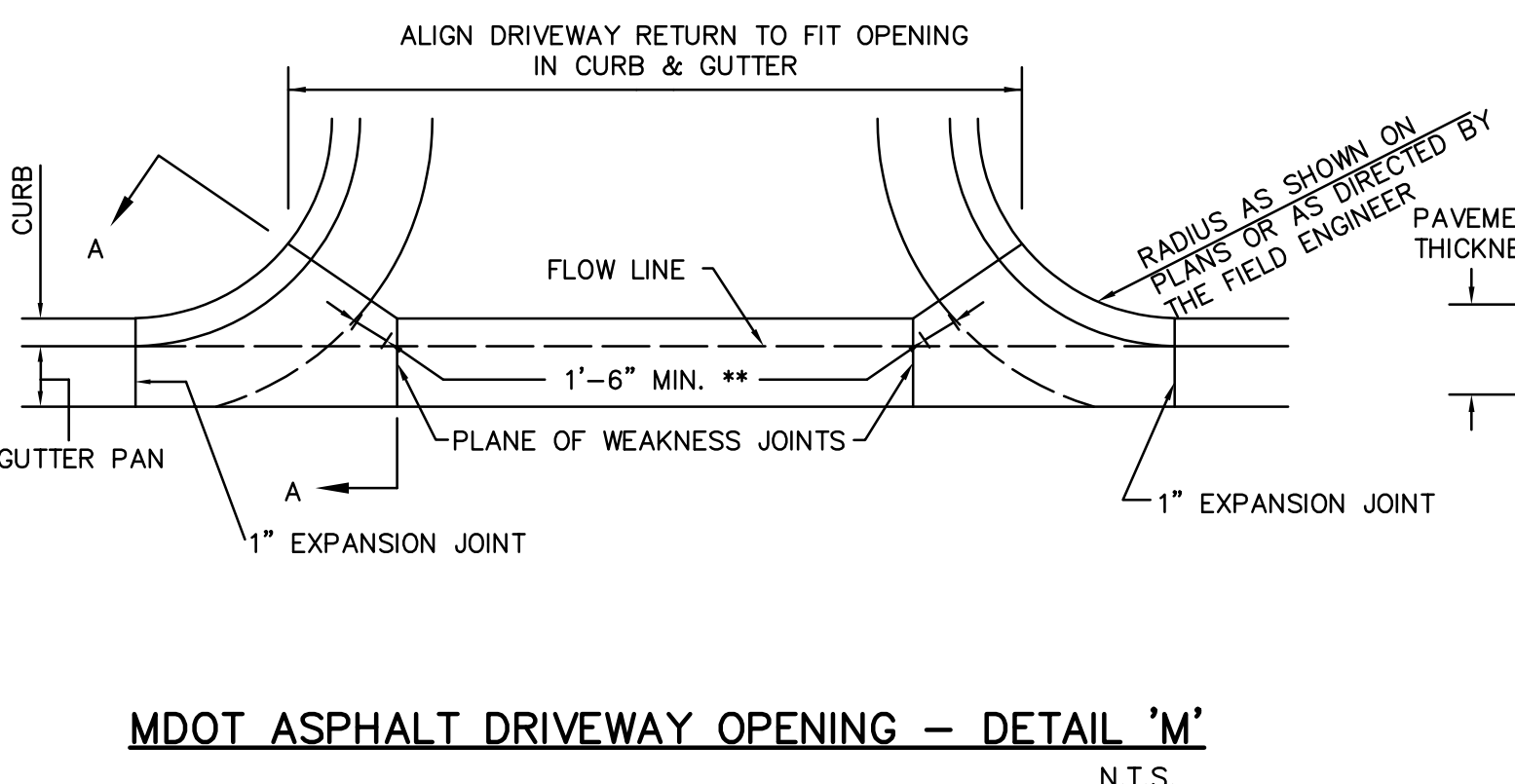
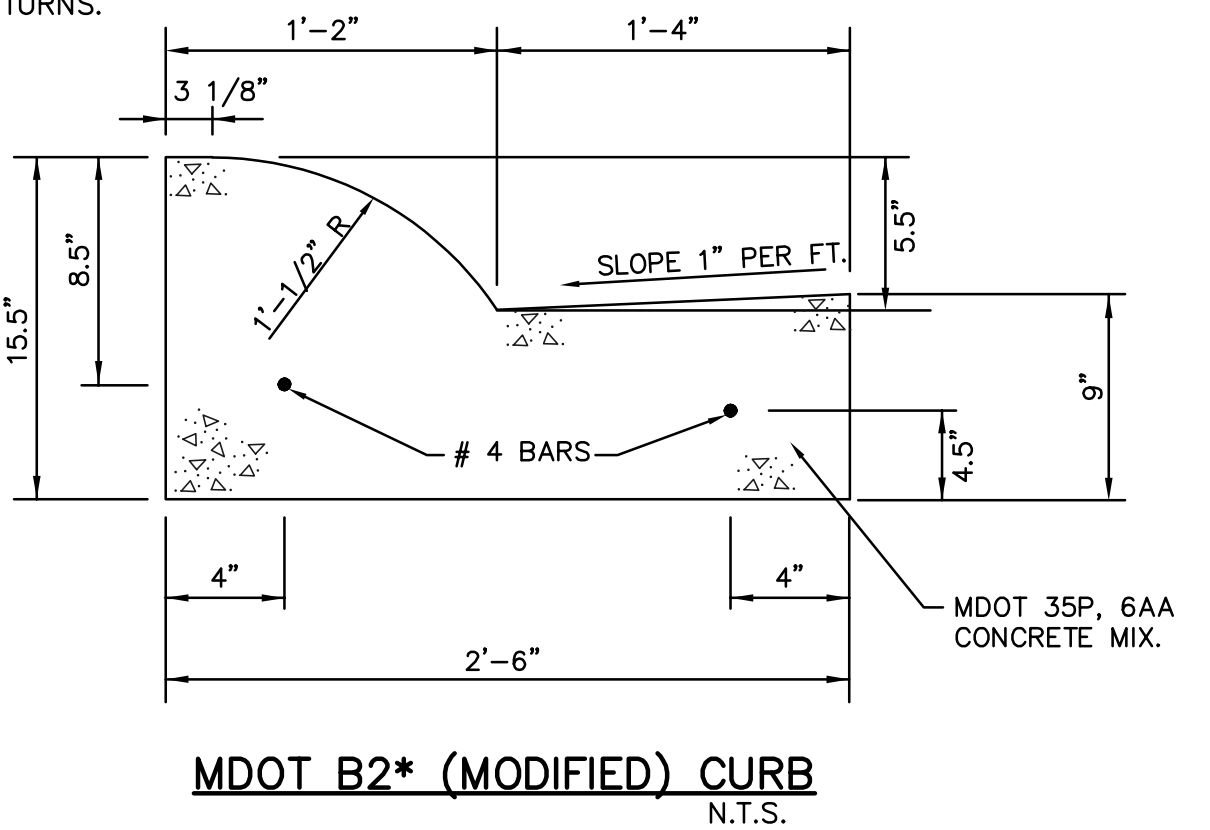
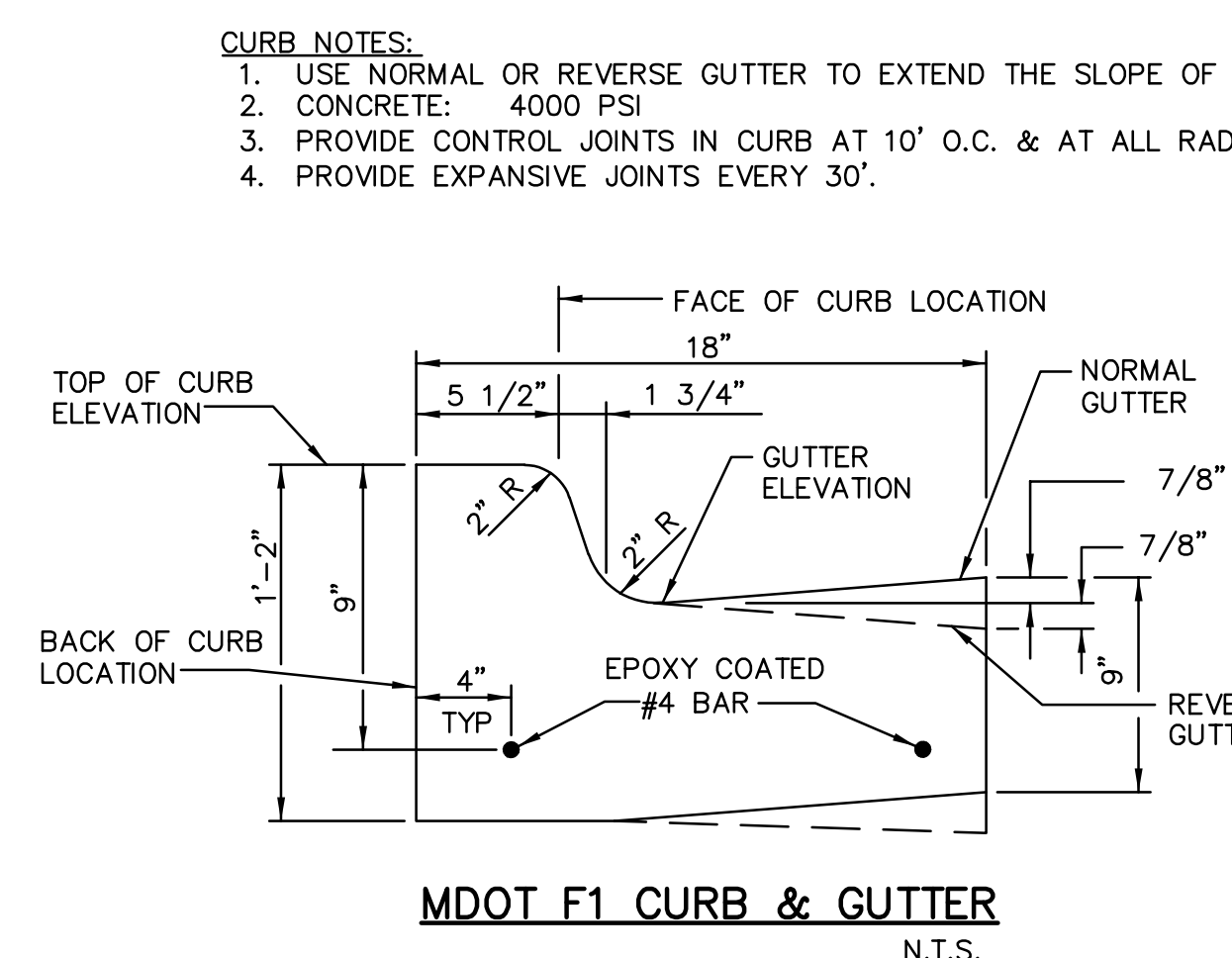
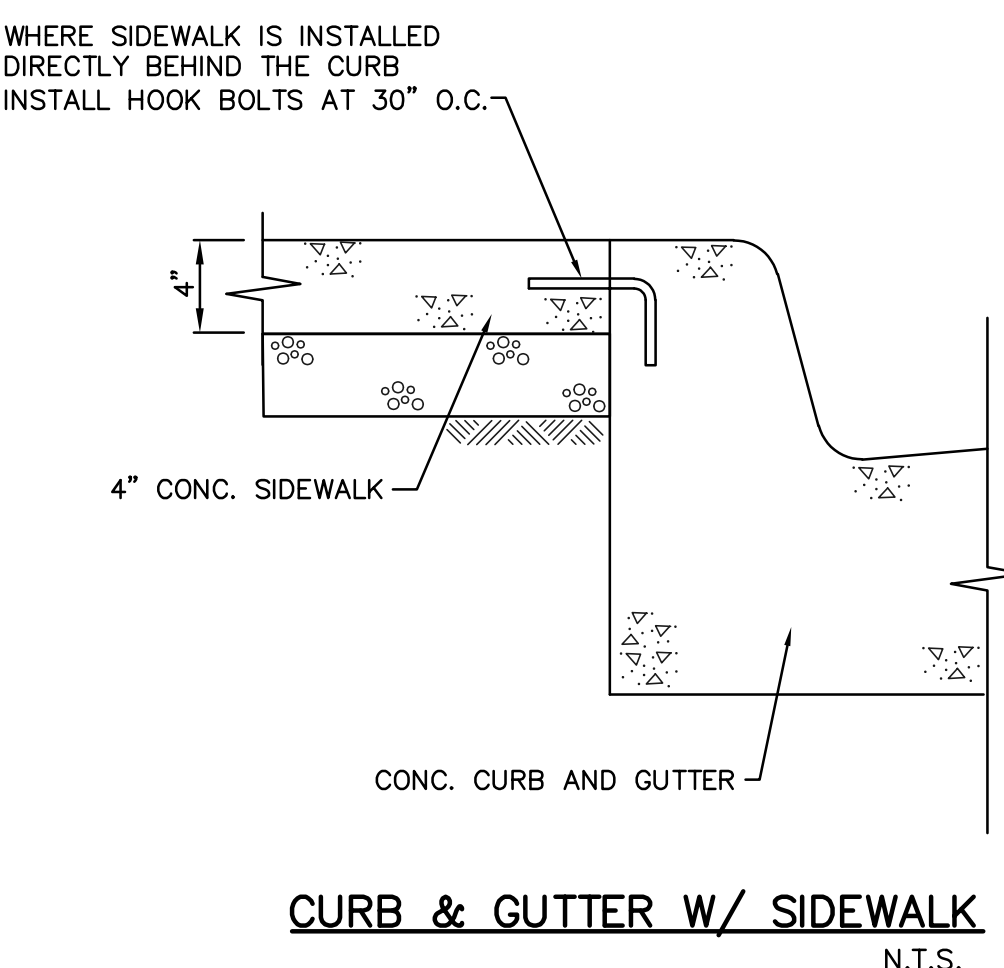
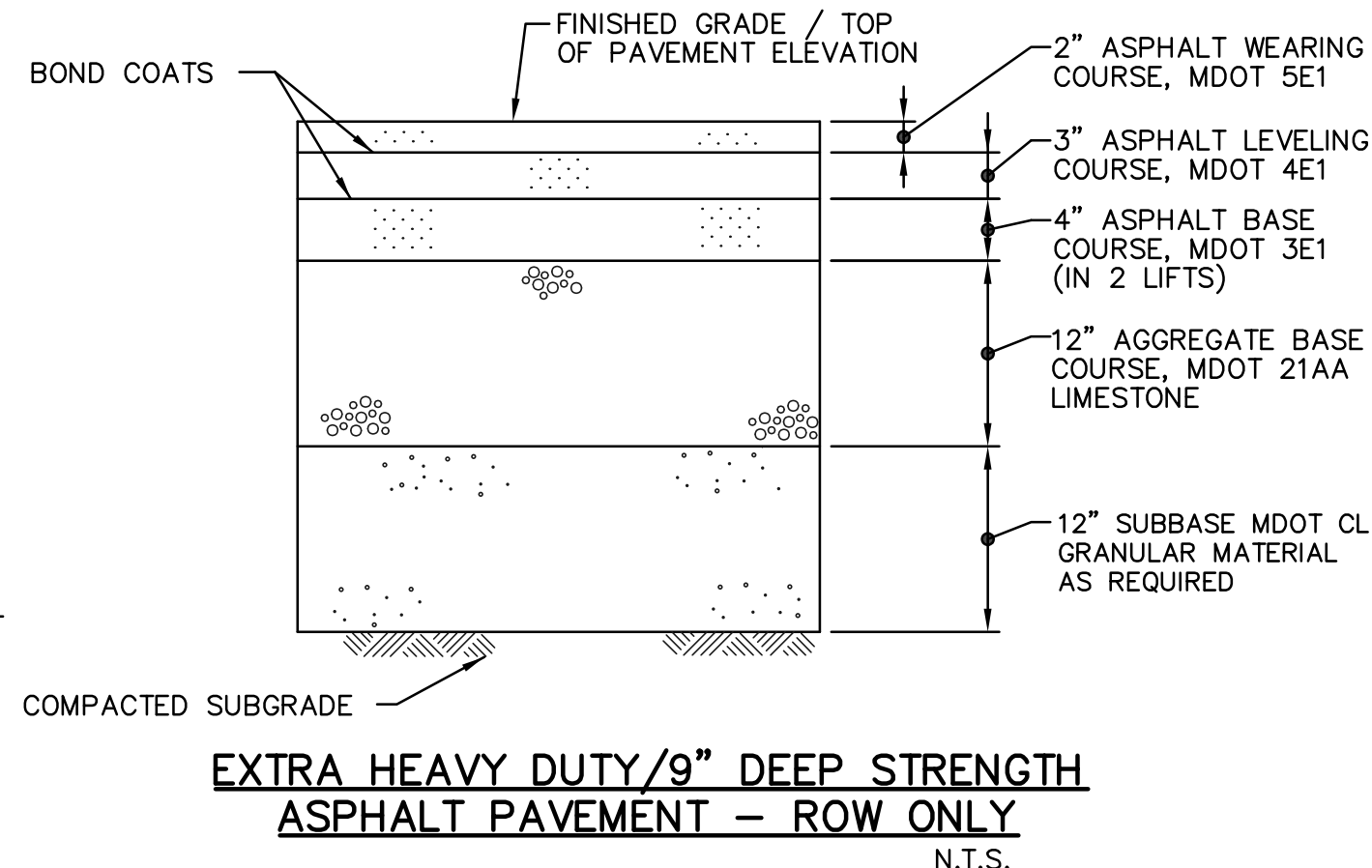
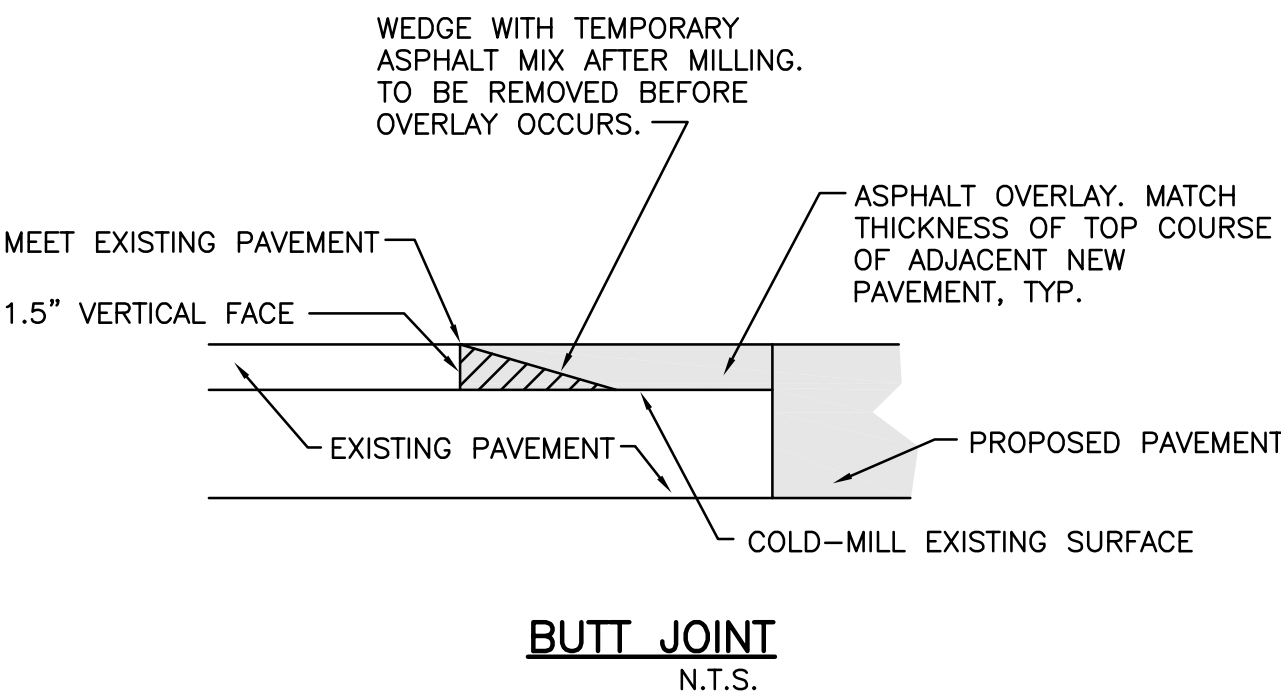
NOTE:
PROVIDE 2" EXTRA THICKNESS OF ASPHALT AT MANHOLES, CATCH
BASINS, ETC. TAPER TO NORMAL THICKNESS IN 3'-0".

- GENERAL NOTES:**
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 - SEE SHEET C0.01 FOR GENERAL NOTES & LEGENDS.
 - SEE SHEET C5.01 FOR ADDITIONAL PAVING, SIDEWALK, & SITE DETAILS.

- SIDEWALK NOTES:**
- THE SIDEWALK SHALL BE CONSTRUCTED THROUGH THE DRIVEWAY.
 - THE SIDEWALK PAVEMENT SECTION THROUGH THE DRIVEWAY SHALL BE THAT OF THE CONCRETE PAVEMENT SECTION SHOWN ON SHEET C5.01, & JOINING WITHIN THE DRIVEWAY SHALL BE THAT OF CONCRETE PAVEMENT, I.E. NOT SIDEWALK JOINING. CONCRETE PAVEMENT SHALL BE USED/EXTENDED ONE FLAG/LANDING OUTSIDE BEYOND THE BACK OF CURB (3 LOCATIONS).
 - SIDEWALK SHALL MEET ADA STANDARDS FOR ACCESSIBLE PATHWAY INCLUDING, BUT NOT LIMITED TO THE FOLLOWING:
 - SIDEWALK RAMP SLOPES SHALL NOT EXCEED 1:12 SLOPE (8.33%).
 - SIDEWALK LANDINGS AND CROSS SLOPES SHALL NOT EXCEED 2%.
 - SIDEWALK PANELS AND CURB TRANSITIONS SHALL NOT VARY MORE THAN 1/4" IN VERTICAL ELEVATIONS.

- MDOT NOTES:**
- ALL WORK WITHIN THE HIGHLAND ROAD (M-59) ROW IS UNDER THE JURISDICTION OF MDOT & REQUIRES A PERMIT.
 - PAVEMENT SECTION & MATERIALS SUBJECT TO CHANGE BASED ON MDOT REVIEW & APPROVAL.
 - THE CONTRACTOR SHALL FOLLOW THE DIRECTION OF THE MDOT FIELD INSPECTOR DURING CONSTRUCTION, & REPORT BACK TO THE ENGINEER ANY MODIFICATIONS MADE TO THE PLAN.

HAZARDOUS MATERIALS NOTE:
HAZARDOUS MATERIAL (FUEL) EXISTS ON THE SITE IN THE SOIL. SEE HAZARDOUS MATERIALS NOTES ON SHEET C0.01 FOR FURTHER DETAIL ON SAFETY & HANDLING.



DATE	ISSUE
06/23/23	ADMINISTRATIVE SITE PLAN REV. 2
08/02/23	ADMINISTRATIVE SITE PLAN REV. 3
08/25/23	ADMINISTRATIVE SITE PLAN REV. 4

PROPRIETOR:
CARTER'S PLUMBING
10431 HIGHLAND ROAD
WHITE LAKE, MICHIGAN 48386
(248) 830-0362



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DATE: 12/08/22	CKD. BY	DATE
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SECTION: 22	T - 3 - N, R - 8 - E	



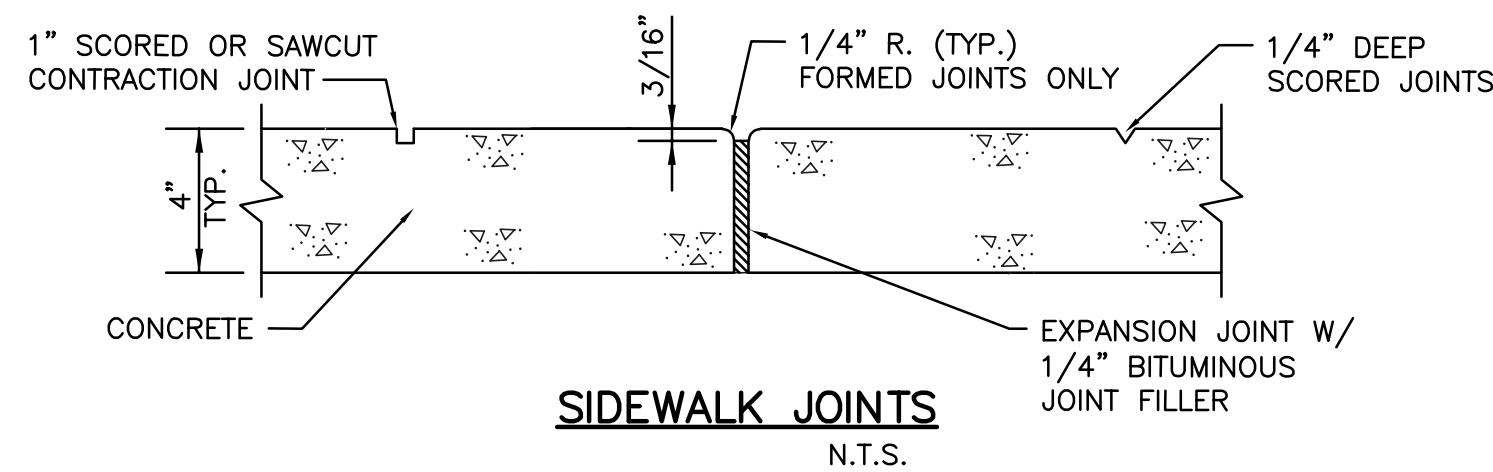
ENLARGED ENTRANCE & RIGHT-OF-WAY PLAN
CARTER'S PLUMBING
PART OF THE SW 1/4 OF THE NE 1/4 OF SECTION 22, T3N, R8E
WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN

SCALE: 1" = 10'
SHEET NO: C4.01
KE 2022.226

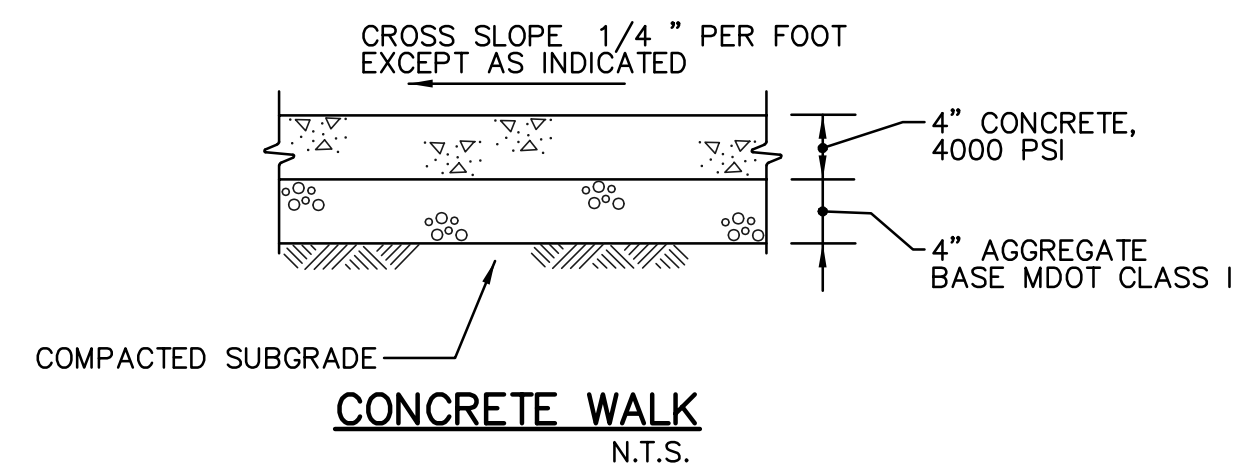
CARTER'S PLUMBING

NOTES:

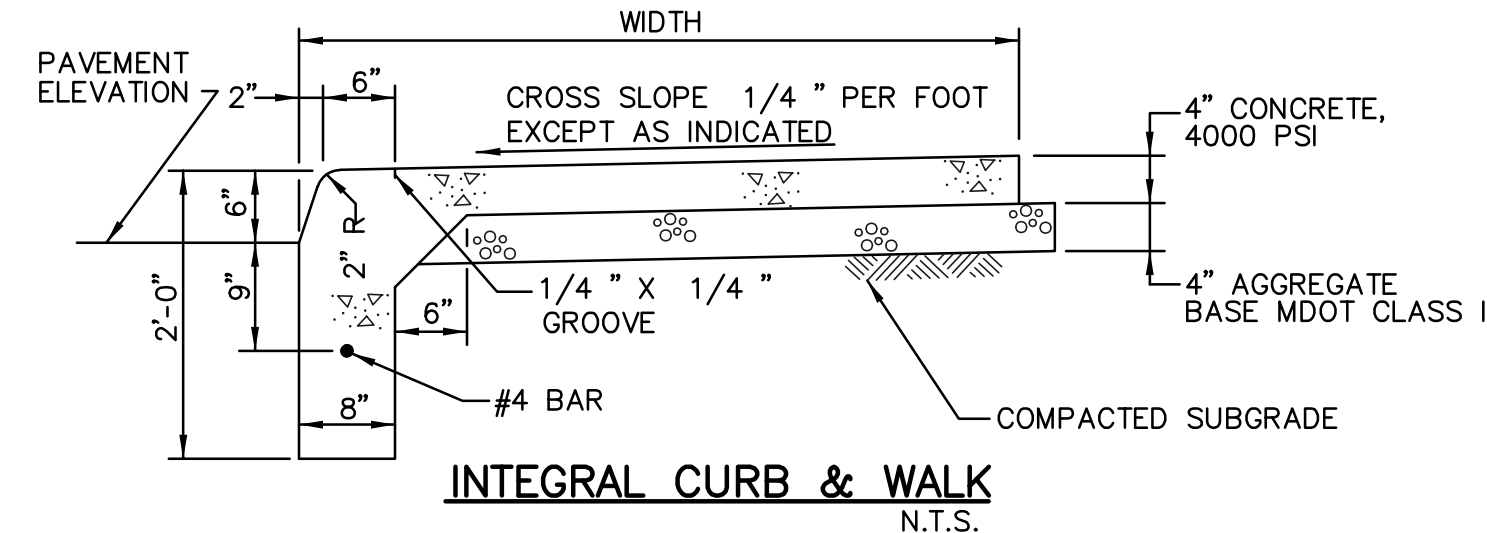
1. EXPANSION JOINTS SHALL BE LOCATED WHERE SIDEWALK ABUTS CONCRETE DRIVEWAYS, CURB, OR OTHER ADJACENT STRUCTURES.
2. 1/2" BITUMINOUS JOINT FILLER SHALL BE INSTALLED AT EXPANSION JOINT LOCATIONS & SHALL EXTEND THE FULL DEPTH OF THE CONCRETE.
3. 1" DEEP CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF APPROXIMATELY 15', OR AT A SPACING THAT MATCHES THE ADJACENT CURB.
4. FORMED CONTRACTION JOINTS SHALL BE FINISHED WITH A TOOL HAVING A 1/4" RADIUS.
5. SCORED JOINTS SHALL BE 1/4" DEEP & PLACED AT THE SPACING INDICATED FOR THE WIDTH OF SIDEWALK, OR MATCH SCORED JOINTS OF ADJACENT CURB.
6. CONCRETE SHALL BE FINISHED BY MEANS OF A FLOAT, STEEL TROWELLED AND BROOMED WITH A FINE BRUSH IN THE TRANSVERSE DIRECTION.
7. 1/4" DEEP SCORED JOINTS SHALL BE SPACED AT 6', EQUAL TO SIDEWALK WIDTH, OR PER PLAN.

**NOTES:**

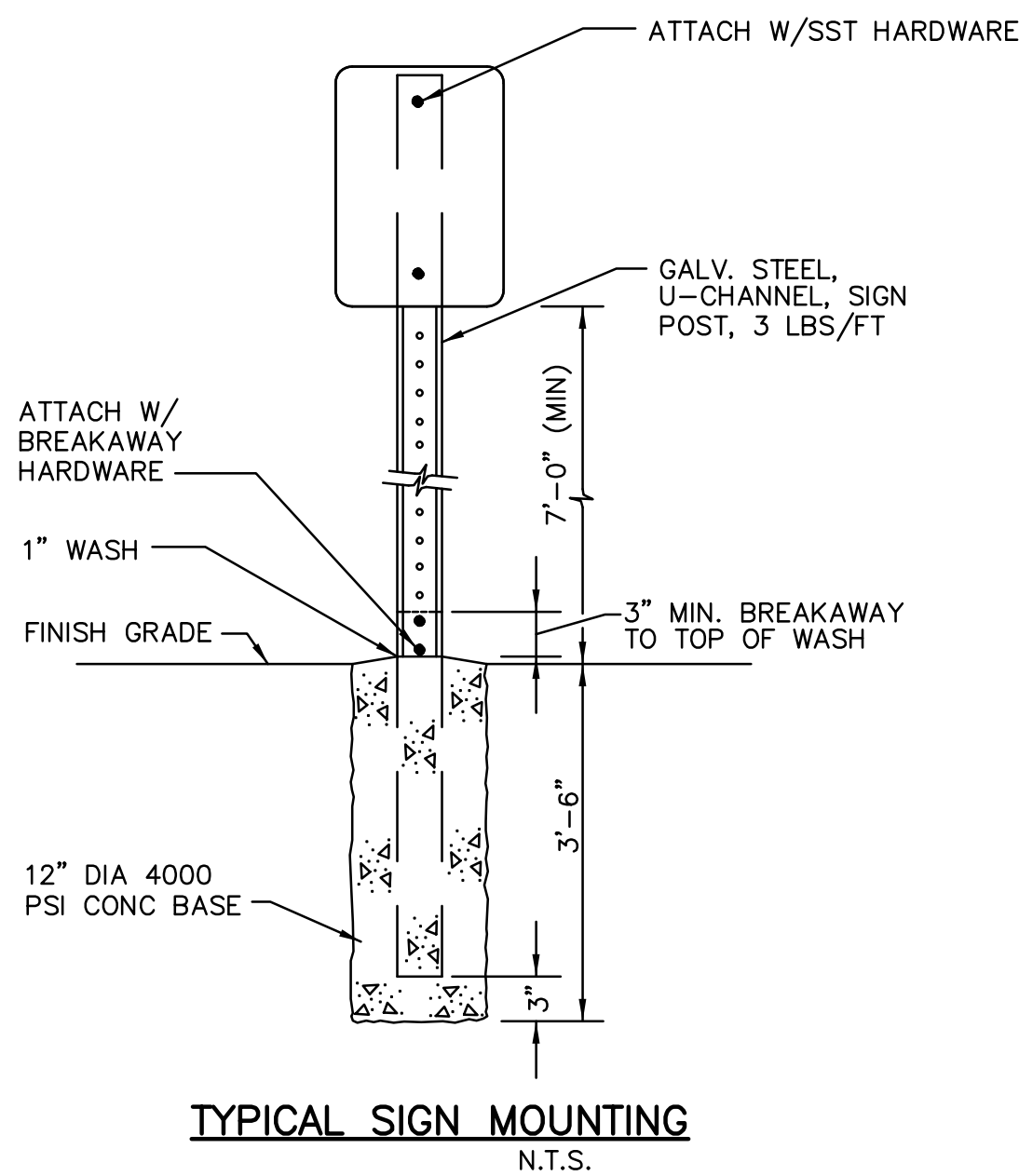
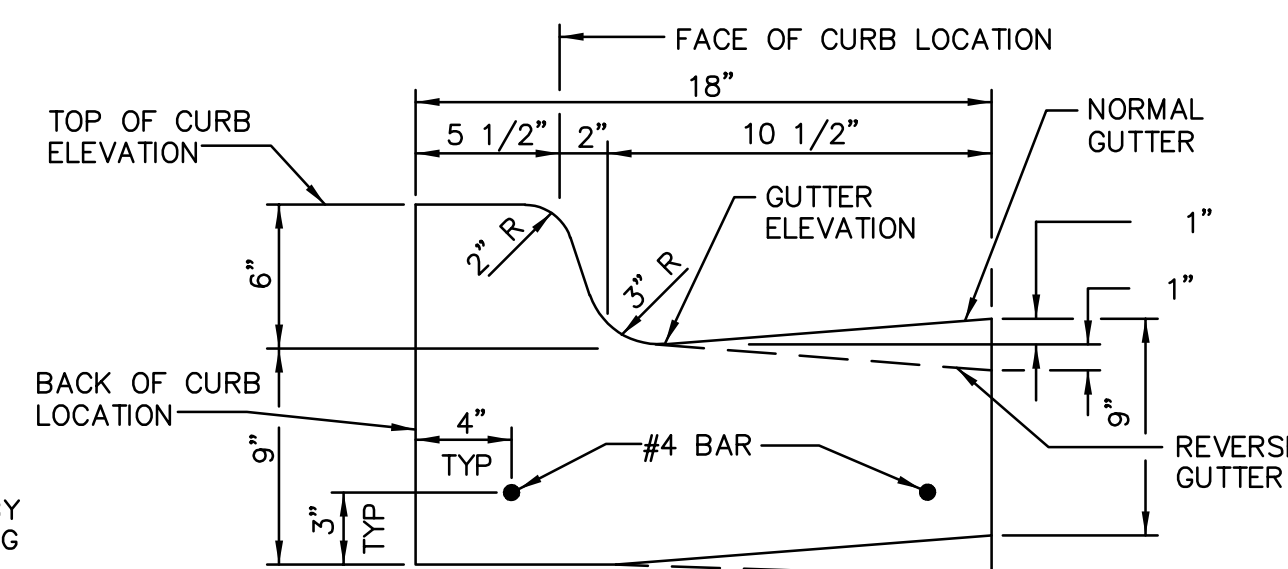
1. EXPANSION JOINTS: 1/2" WIDE BITUMINOUS JOINT FILLER, FULL DEPTH:
 - AT 50 FOOT INTERVALS TRANSVERSELY.
 - AROUND EMBEDDED ITEMS SUCH AS LIGHT BASES.
 - AT ABUTTING STRUCTURES SUCH AS BUILDINGS OR CURBS.
2. CONTRACTION JOINTS: FORMED 1/4" WIDE, 1" DEEP GROOVE W/ TOOL. ARRANGE TO FORM SQUARE PANELS, 6' MAXIMUM IN ANY DIRECTION. PLACE 1" DEEP JOINTS AT 15' INTERVALS OR AT SPACING THAT MATCHES CURB.
3. TACTILE WARNING TEXTURE: PROVIDE ON RAMPS AND NEAR TOP OF STAIRS.
4. FINISH CONCRETE BY MEANS OF A FLOAT, STEEL TROWEL, & BROOM FINISH W/ FINE BRUSH IN A TRANSVERSE DIRECTION.

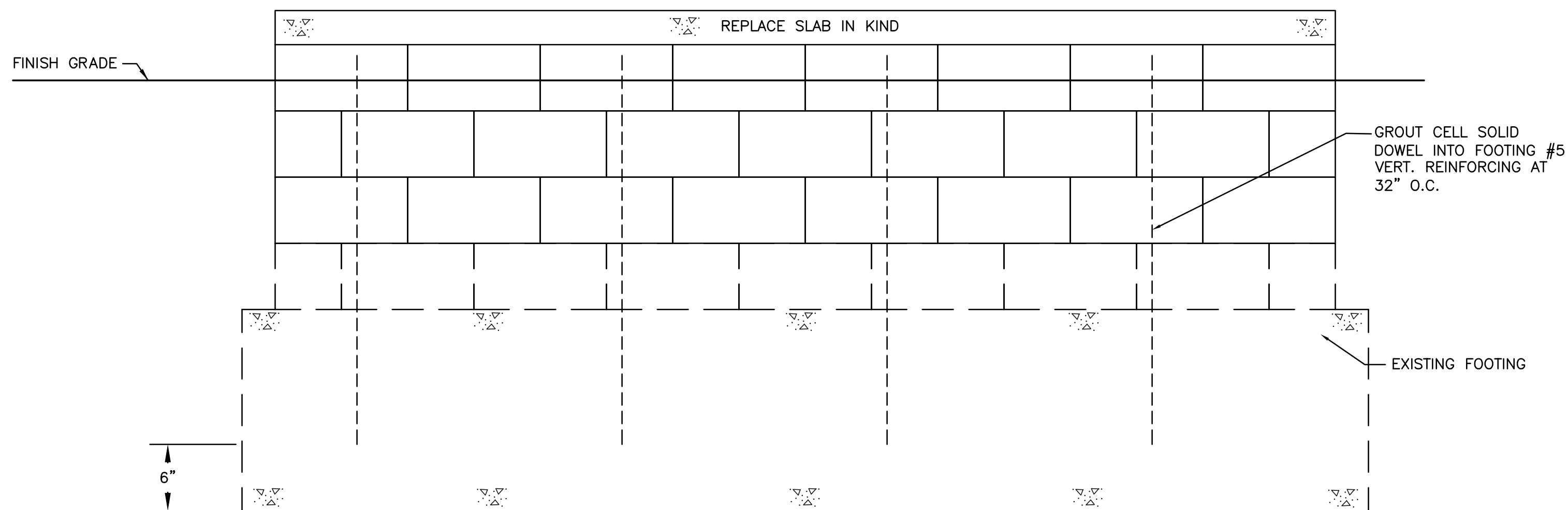
**NOTES:**

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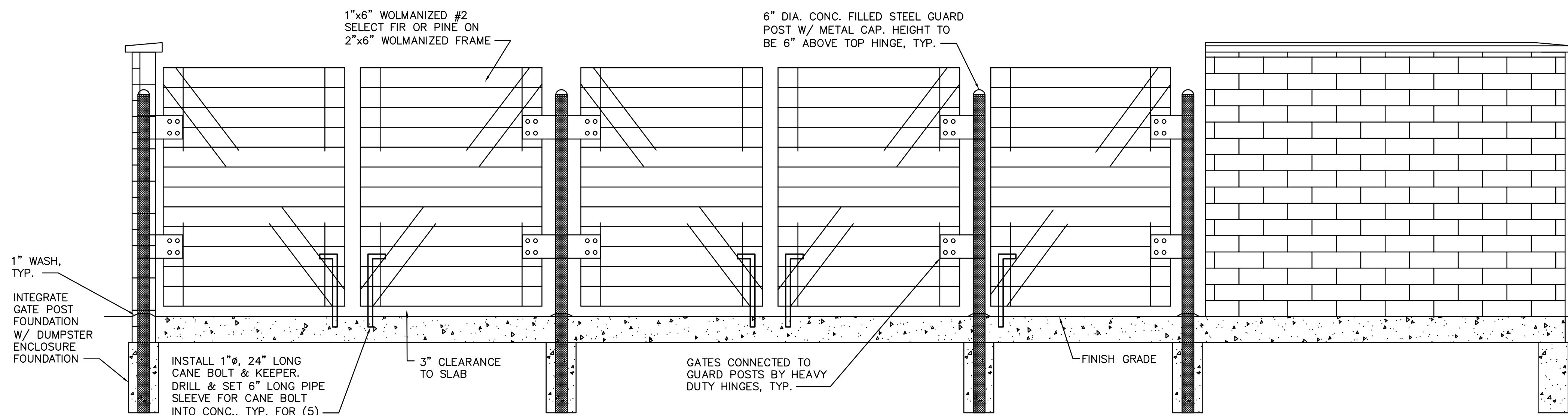
**NOTES:**

1. USE NORMAL OR REVERSE GUTTER TO EXTEND THE SLOPE OF THE ADJACENT PAVEMENT EXCEPT AS INDICATED.
2. CONCRETE: 4000 PSI
3. PROVIDE CONTROL JOINTS IN CURB AT 10' O.C. & AT ALL RADIUS RETURNS.
4. PROVIDE EXPANSIVE JOINTS EVERY 30'.

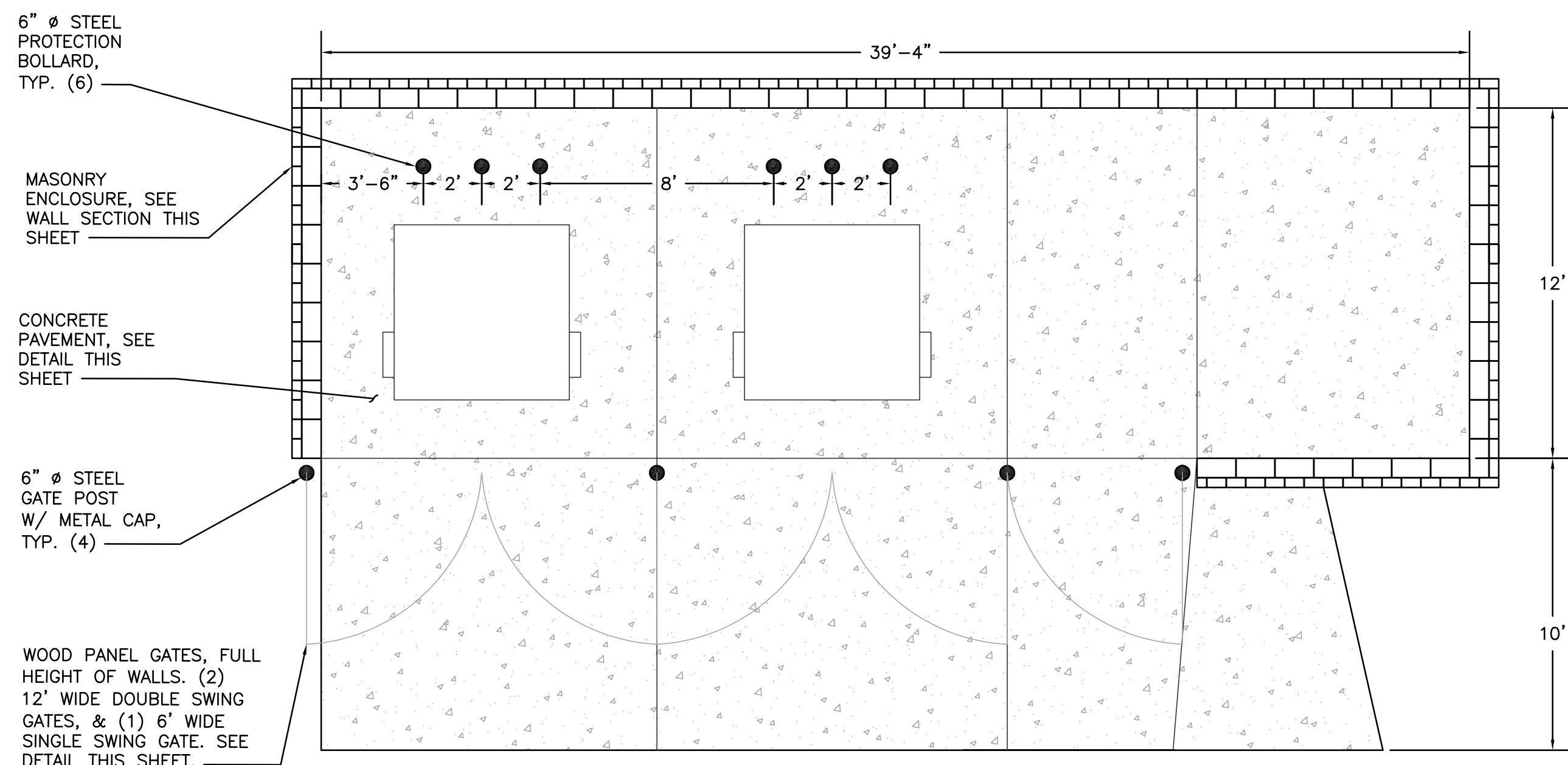




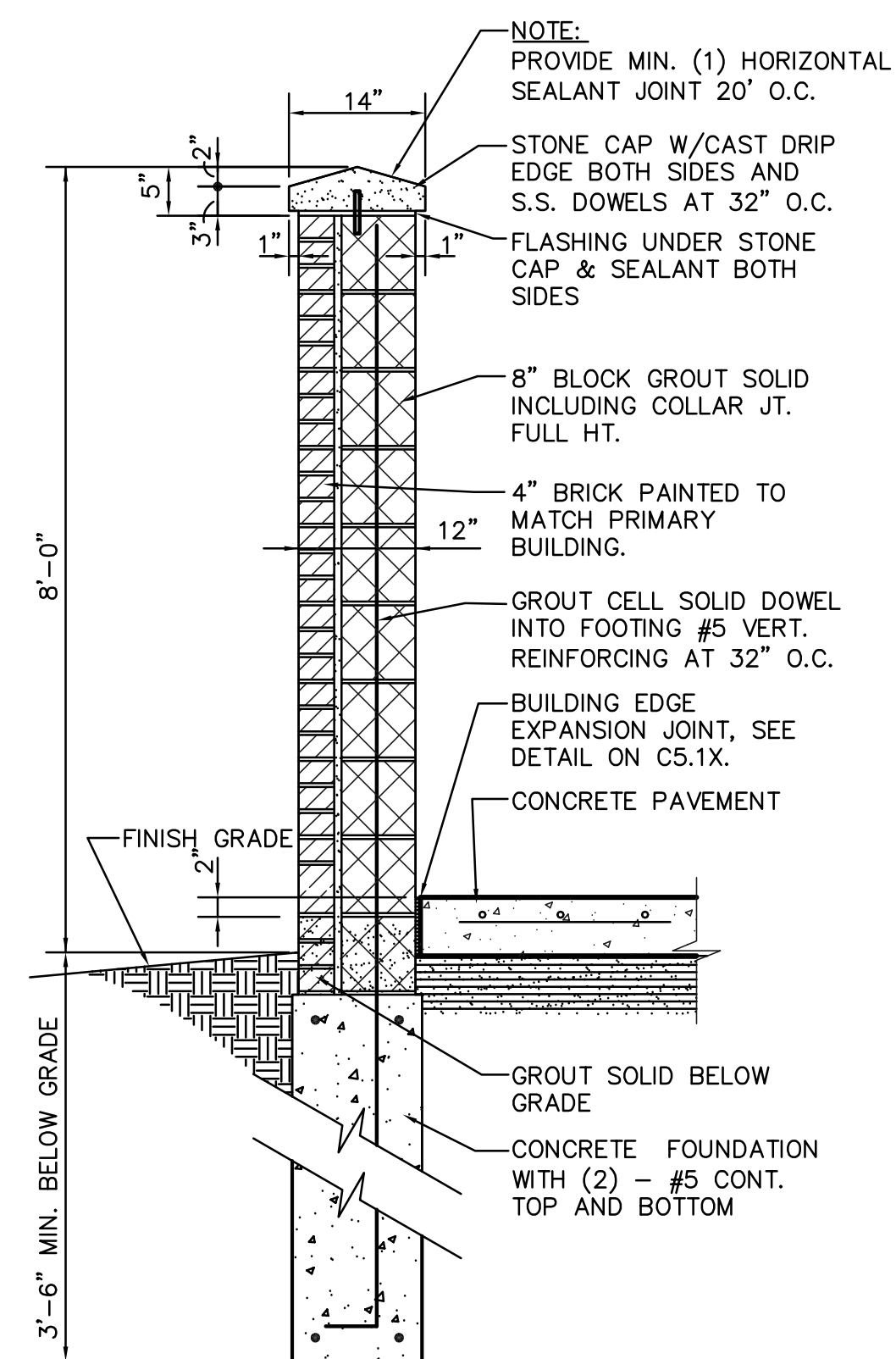
WALL REPAIR DETAIL
N.T.S.



ELEVATION AT DUMPSTER ENCLOSURE GATES
N.T.S.

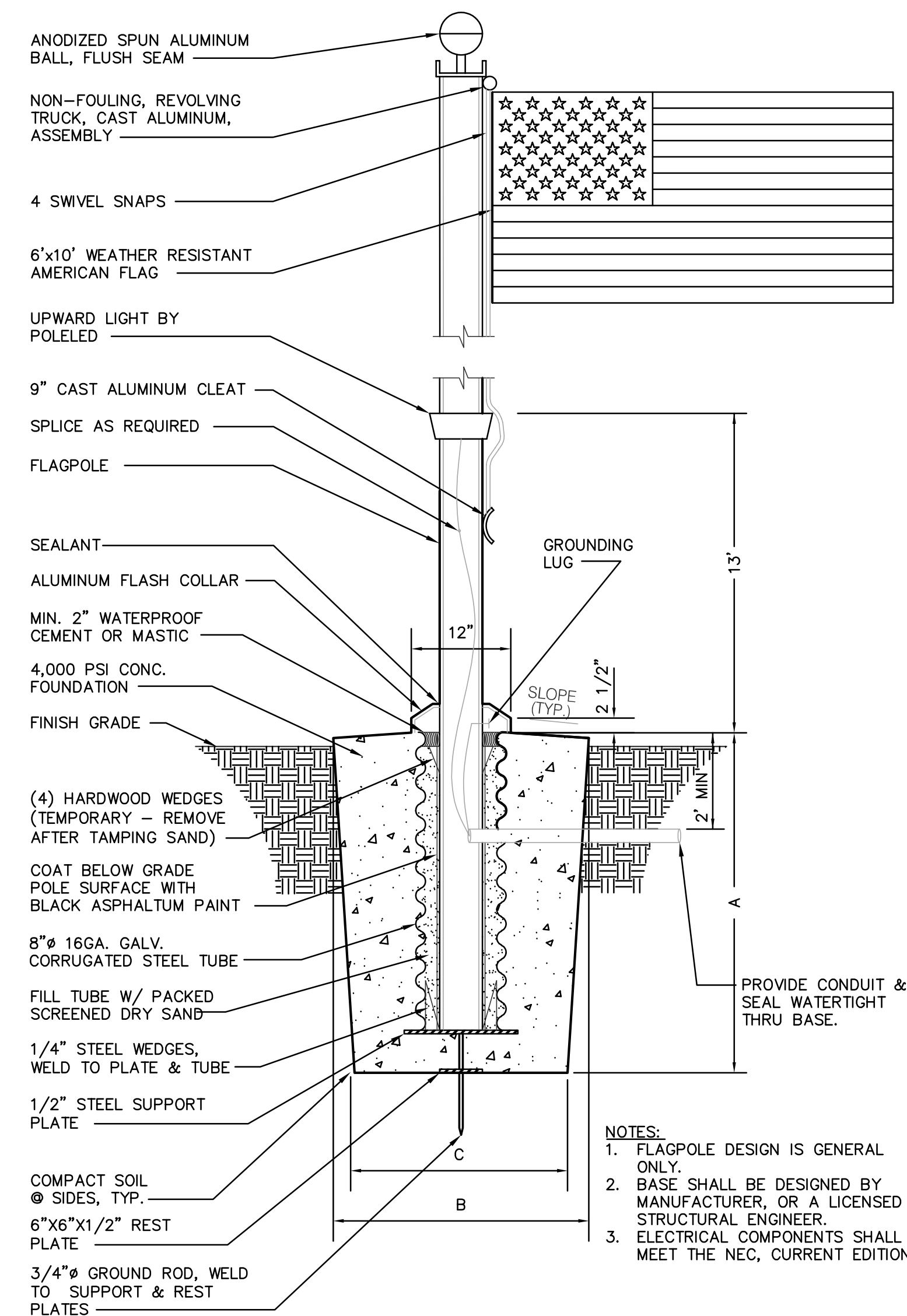


DUMPSTER ENCLOSURE PLAN
SCALE: 3"=1'-0"



DUMPSTER ENCLOSURE WALL SECTION
N.T.S.

GROUND SLEEVE SPECIFICATIONS					
SHAFT FOUNDATION DIMENSIONS					
HEIGHT	BUTT DIA.	SLEEVE DIA.	DEPTH A	DEPTH B	DEPTH C
20'	4"	6"	3'6"	30"	24"
20'	5"	8"	3'6"	30"	24"
25'	5"	8"	3'6"	30"	24"
25'	5.5"-6"	10"	3'6"	30"	24"
30'	5"	8"	3'6"	30"	24"
30'	6"	10"	3'6"	30"	24"
35'	5"	8"	4'0"	36"	30"
35'	6"-7"	10"	4'0"	36"	30"
40'	7"	10"	4'6"	42"	36"
40'	8"	12"	4'6"	42"	36"
45'	8"	12"	5'0"	48"	42"
50'	8"	12"	5'6"	48"	42"
50'	10"	15"	5'6"	48"	42"
60'	10"-12"	15"	6'10"	60"	42"
70'	10"-12"	15"	8'10"	60"	48"
80'	12"	15"	9'0"	60"	48"



FLAGPOLE & FOUNDATION W/ POLE MOUNT LIGHT

- NOTES:
1. FLAGPOLE DESIGN IS GENERAL ONLY.
 2. BASE SHALL BE DESIGNED BY MANUFACTURER, OR A LICENSED STRUCTURAL ENGINEER.
 3. ELECTRICAL COMPONENTS SHALL MEET THE NEC, CURRENT EDITION.

DATE	ISSUE
03/03/23	ADMINISTRATIVE SITE PLAN
04/28/23	ADMINISTRATIVE SITE PLAN REV. 1
06/23/23	ADMINISTRATIVE SITE PLAN REV. 2

PROPRIETOR:
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DATE: 03/01/23	CKD. BY	DATE
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SECTION: 22	T- 3 -N, R- 8 -E.	



DETAILS - FLAGPOLE & DUMPSTER ENCLOSURE
CARTER'S PLUMBING
PART OF THE SW 1/4 OF THE NE 1/4 OF SECTION 22, T3N, R8E
WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN

SCALE: AS SHOWN
SHEET NO: C5.02
KE 2022.226

SITE INFORMATION:

LOT GROSS AREA: 1.38 ACRES
 PRIMARY BUILDING GROSS FLOOR AREA: 11,970 SF
 ACCESSORY BUILDING GROSS FLOOR AREA: 6,154 SF
 ACCESSORY BUILDING GROSS FLOOR AREA: 1,824 SF

ZONING INFORMATION:

ZONING DISTRICT: LM LIGHT MANUFACTURING

GENERAL NOTES:

1. REVIEW ENTIRE SITE ENGINEERING DRAWING SET PRIOR TO INSTALLING LANDSCAPING.
2. SEE SHEET C0.01 FOR GENERAL NOTES.
3. SEE SHEET C1.01 FOR SITE PLAN.
4. SEE SHEET L1.02 FOR IRRIGATION PLAN. INSTALL IRRIGATED LAWN SEED MIXTURE IN AREAS RECEIVING IRRIGATION. & DROUGHT RESISTANT SEED MIXTURE IN AREAS NOT RECEIVING IRRIGATION PER THE IRRIGATION PLAN.
5. SEE SHEET L5.01 FOR LANDSCAPE DETAILS, SPECIFICATION, ADDITIONAL NOTES, AND PLANTING SCHEDULE.
6. NO TREES SHALL BE PLANTED WITHIN 4 FEET OF A PROPERTY LINE.
7. ALL FENCES SHALL BE CONSTRUCTED WITH THE FINISHED SIDE FACING OUT.

REQUIRED SCREENING PER TABLE 5.19D:

1. SUBJECT PARCEL ZONED LM ALL ADJACENT PARCELS ZONED LM: NONE REQUIRED BETWEEN SIMILAR USES.
2. SUBJECT PARCEL ZONED LM AND ROW: A-1 EXTENSIVE LAND FORM BUFFER REQUIRED.
 - 2.1. EXISTING NON-CONFORMING PRIMARY BUILDING IS LOCATED WITHIN THE FRONT SETBACK THAT DOES NOT ALLOW FOR AN A-1 BUFFER.
 - 2.1.1. A SCREENING HEDGE IS PROPOSED IN THE ROW TO PROVIDE SCREENING OF FRONT PARKING AND THE BUILDING.
 - 2.2. 110 FT OF ROW WEST OF THE MAIN DRIVE DOES NOT ALLOW FOR A-1 BUFFER DUE TO AN EXISTING DRAINAGE COURSE (HOLE) AND EXISTING IMPROVEMENTS.
 - 2.2.1. A 20 FOOT BUFFER STRIP INCLUDING 6 TREES, 6 SHRUBS, AND AN 8 FT TALL PRIVACY FENCE IS PROPOSED TO PROVIDE SCREENING.

REQUIRED INTERIOR LANDSCAPING PER ZO SECTION 5.19E:

REQUIREMENT: 15% OF TOTAL LOT AREA SHALL BE INTERNALLY LANDSCAPED.
 (1.38 ACRES)(43,360 SF/ACRE)(15%) = 9,017 SF INTERIOR LANDSCAPING REQUIRED
 LANDSCAPING ALONG FENCE (WEST & SOUTH PROPERTY LINE) AND ROW = 7,453 SF
 LANDSCAPING ALONG EAST FENCE = 848 SF + 609 SF = 2,265 SF
 7,453 SF + 2,265 SF = 9,718 SF PROVIDED > 9,017 SF REQUIRED

REQUIRED PARKING LOT LANDSCAPING PER ZO SECTION 5.19G:

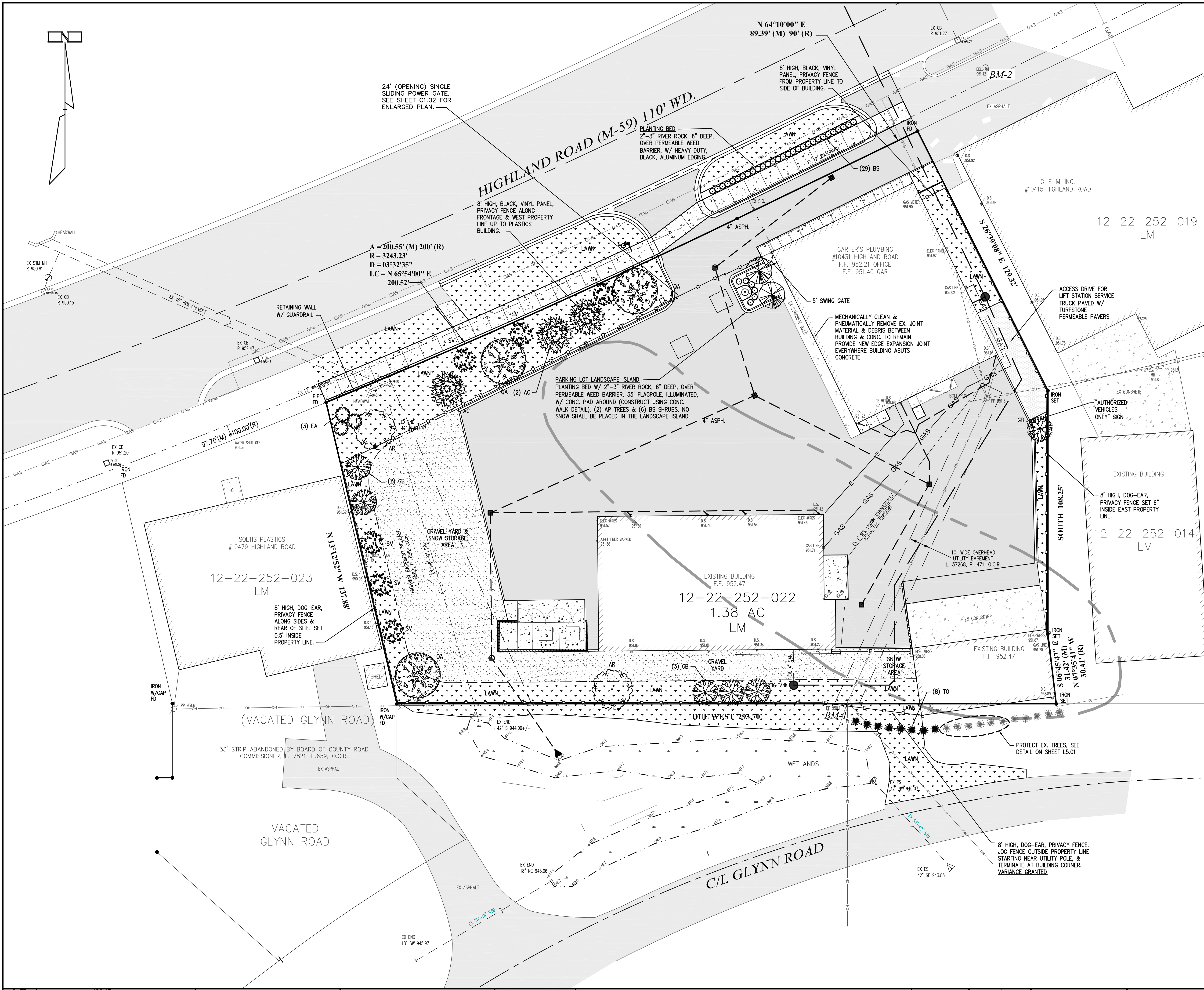
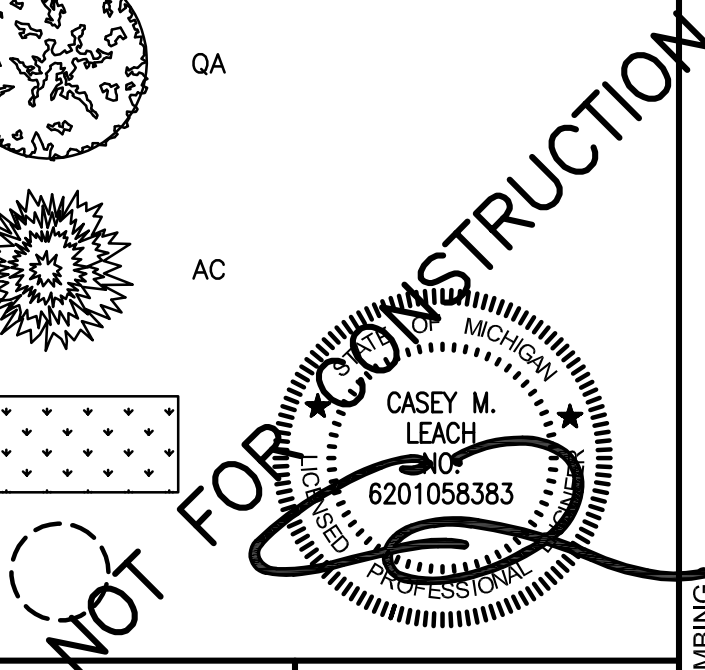
REQUIREMENT: INDUSTRIAL 10 SF PARKING SPACE
 REQUIREMENT: 1 TREE & 3 SHRUBS PER 100 SF OF REQUIRED PARKING LOT LANDSCAPING
 (19 SPACES)(10 SF/SPACE) = 190 SF PARKING LOT LANDSCAPING REQUIRED
 2 TREES & 6 SHRUBS REQUIRED
 (1) 259 SF ISLAND PROVIDED W/ 2 TREES, 6 SHRUBS, & 1 ILLUMINATED FLAGPOLE.

GENERAL UTILITY NOTE:

ALL EXISTING UTILITIES SHOWN HAVE BEEN TAKEN FROM VISUAL OBSERVATION AND RECORD MAPPING, WHERE AVAILABLE. NO GUARANTEE IS MADE, OR SHOULD BE ASSUMED, AS TO THE COMPLETENESS OR ACCURACY OF THE UTILITIES SHOWN ON THIS DRAWING. PARTIES UTILIZING THIS INFORMATION SHALL FIELD VERIFY THE ACCURACY AND COMPLETENESS OF OVERHEAD AND UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION ACTIVITIES.

LANDSCAPE LEGEND

AMERICAN BOXWOOD HEDGE	BS
ARBORVITAE	TO
BURNING BUSH	EA
LILAC, COMMON PURPLE	SV
WHITE FLOWERING DOGWOOD	CF
JAPANESE MAPLE	AP
GINKGO	GB
RED MAPLE	AR
WHITE OAK	QA
WHITE FIR	AC
NEW LAWN	
TREE PROTECTION	



DATE	ISSUE
03/03/23	ADMINISTRATIVE SITE PLAN
03/28/23	ADMINISTRATIVE SITE PLAN REV. 1
06/23/23	ADMINISTRATIVE SITE PLAN REV. 2
08/02/23	ADMINISTRATIVE SITE PLAN REV. 3
08/25/23	ADMINISTRATIVE SITE PLAN REV. 4

PROPRIETOR:
 CARTER'S PLUMBING
 10431 HIGHLAND ROAD
 WHITE LAKE, MICHIGAN 48386
 (248) 830-0362

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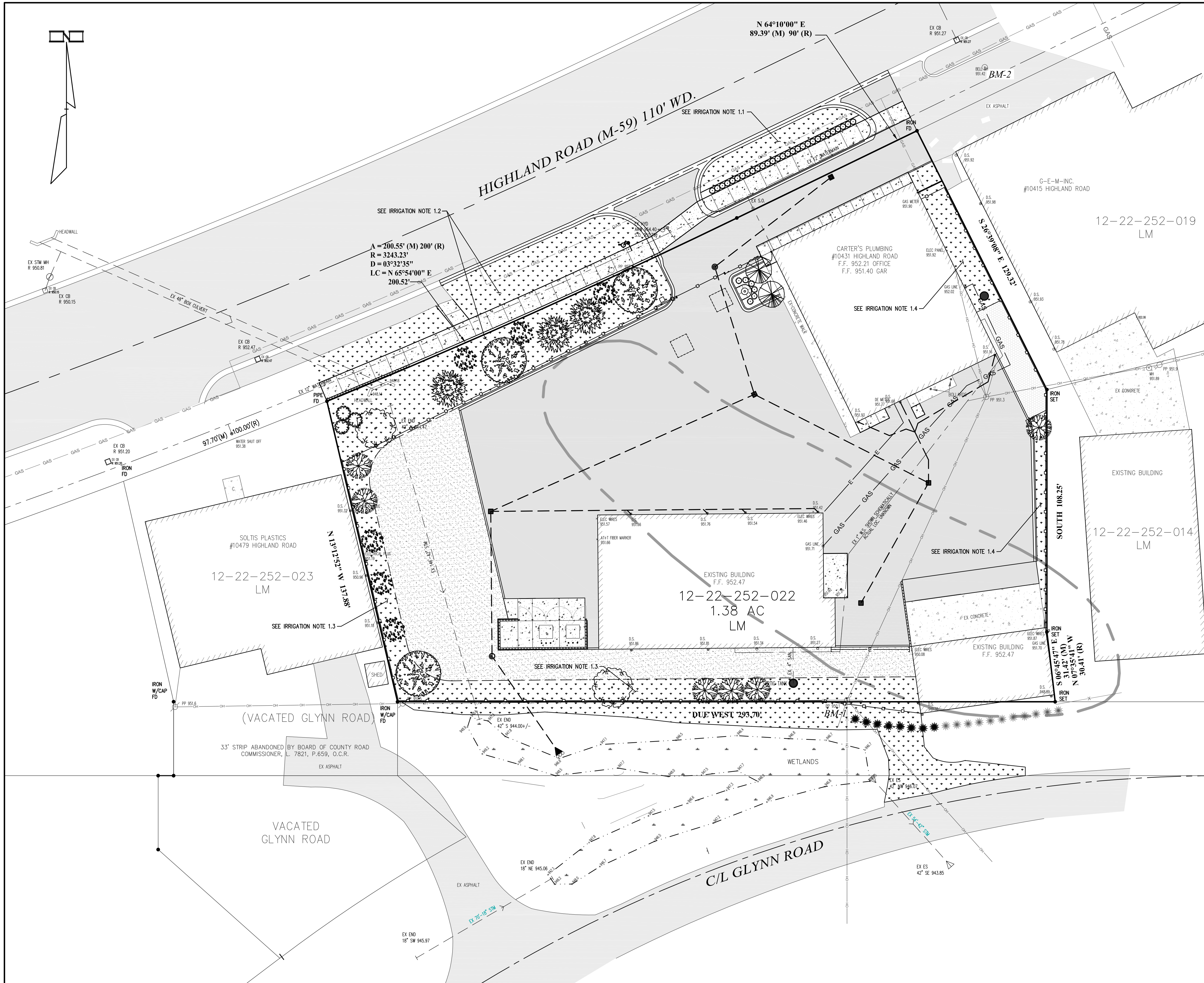
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DATE: 12/08/22	CKD. BY: CL	DATE:
DRAWN: CL		
DESIGN: CL		
SECTION: 22	T- 3 -N- R- 8 -E-	



LANDSCAPE PLAN
 CARTER'S PLUMBING
 PART OF THE SW 1/4 OF THE NE 1/4 OF SECTION 22, T3N, R8E
 WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN

SCALE: 1" = 20'
SHEET NO: L1.01
KE 2022.226



SITE INFORMATION:

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 PRIMARY BUILDING GROSS FLOOR AREA: 11,970 SF
 ACCESSORY BUILDING GROSS FLOOR AREA: 6,154 SF
 ACCESSORY BUILDING GROSS FLOOR AREA: 1,824 SF

ZONING INFORMATION:

ZONING DISTRICT: LM LIGHT MANUFACTURING

GENERAL NOTES:

1. REVIEW ENTIRE SITE ENGINEERING DRAWING SET PRIOR TO INSTALLING LANDSCAPING.
2. SEE SHEET C0.01 FOR GENERAL NOTES.
3. SEE SHEET C1.01 FOR SITE PLAN.
4. SEE SHEET L1.01 FOR LANDSCAPE PLAN & A LEGEND OF LANDSCAPING SYMBOLS.
5. SEE SHEET L5.01 FOR LANDSCAPE DETAILS, SPECIFICATION, ADDITIONAL NOTES, AND PLANTING SCHEDULE.
6. NO TREES SHALL BE PLANTED WITHIN 4 FEET OF A PROPERTY LINE.
7. ALL FENCES SHALL BE CONSTRUCTED WITH THE FINISHED SIDE FACING OUT.

IRRIGATION NOTES:

1. PROVIDE IRRIGATION TO LANDSCAPE AREAS AS FOLLOWS:
 - 1.1. ROW LANDSCAPING IN FRONT OF BUILDING SHALL HAVE MISTING HEADS AS REQUIRED TO PROVIDE IRRIGATION TO HEDGE ROW IN BED & LAWN BEYOND.
 - 1.2. FRONT LANDSCAPING, IN FRONT OF FENCE, WEST OF MAIN DRIVE SHALL HAVE SPRAY HEADS AND/OR MISTING HEADS AS REQUIRED TO PROVIDE IRRIGATION TO TREES AND LAWN ONSITE AND IN ROW. IRRIGATION COMPONENTS SHALL BE LOCATED OUTSIDE THE ROW.
 - 1.3. IRRIGATION ALONG THE WEST AND REAR PROPERTY LINES SHALL BE PROVIDED, AND COMPONENTS SHALL BE LOCATED ENTIRELY WITHIN THE PROPERTY LINES.
 - 1.4. NO IRRIGATION SHALL BE INSTALLED ALONG THE EAST PROPERTY LINE. A VARIANCE HAS BEEN GRANTED BY THE ZONING BOARD OF APPEALS ON 5/25/2023 FROM SECTION 5.19B.i.ii.d. THAT REQUIRES IRRIGATION TO ALL LANDSCAPED AREAS OVER 200 SF. DROUGHT RESISTANT LAWN IS PROPOSED IN THIS AREA.
2. IRRIGATION SYSTEM SHALL INCLUDE A RAIN SENSOR OR SIMILAR MEASURE TO ENSURE THAT IRRIGATION DOES NOT OCCUR DURING OR SHORTLY AFTER PRECIPITATION EVENTS.

GENERAL UTILITY NOTE:

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NOT FOR CONSTRUCTION

CASEY M. LEACH
 6201058383

DATE	ISSUE
04/28/23	ADMINISTRATIVE SITE PLAN REV. 1
06/23/23	ADMINISTRATIVE SITE PLAN REV. 2
08/02/23	ADMINISTRATIVE SITE PLAN REV. 3
08/29/23	ADMINISTRATIVE SITE PLAN REV. 4

PROPRIETOR:

CARTER'S PLUMBING
 10431 HIGHLAND ROAD
 WHITE LAKE, MICHIGAN 48386
 (248) 830-0362

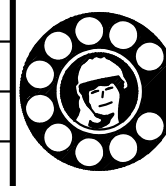
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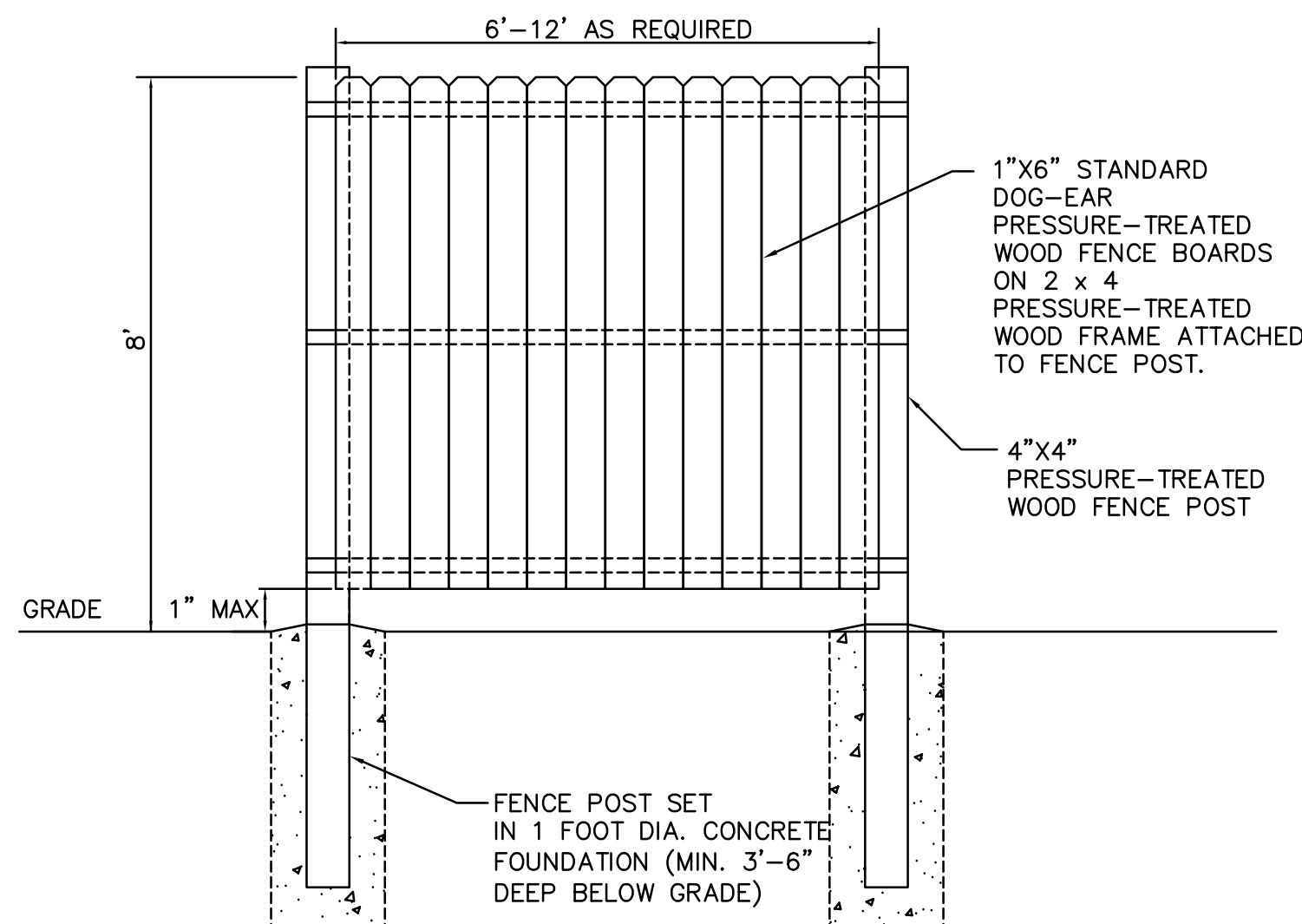
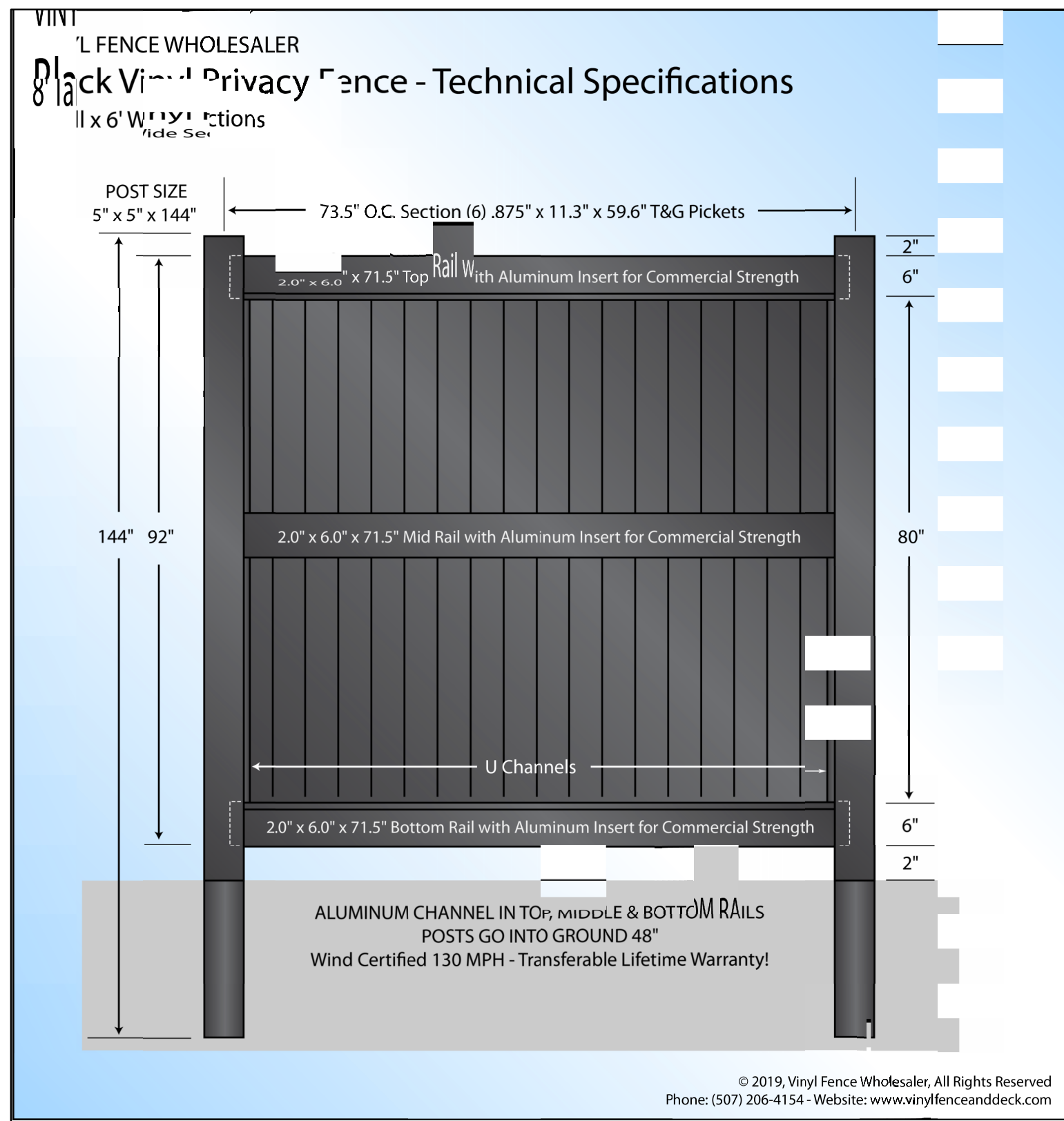


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IRRIGATION PLAN CARTER'S PLUMBING

PART OF THE SW 1/4 OF THE NE 1/4 OF SECTION 22, T3N, R8E
 WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN

SCALE: 1" = 20'
SHEET NO: L1.02
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DOG-EAR FENCE
N.T.S.

LANDSCAPE NOTES & SPECIFICATIONS:

1. IMPLEMENT THESE NOTES IN CONJUNCTION WITH THE GENERAL NOTES, & LEGENDS IN IN THE SITE ENGINEERING PLANS - SEE SHEET C0.01.
2. THE CONTRACTOR SHALL VISIT SITE, INSPECT EXISTING CONDITIONS & REVIEW PROPOSED PLANTING AND RELATED WORK. IN CASE OF DISCREPANCY BETWEEN PLAN & PLANT LIST, THE PLAN SHALL GOVERN QUANTITIES. CONTACT THE ENGINEER W/ ANY CONCERNS.
3. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON-SITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. THE CONTRACTOR SHALL COORDINATE ALL RELATED ACTIVITIES WITH OTHER TRADES, & SHALL REPORT ANY UNACCEPTABLE SITE CONDITIONS TO THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT.
5. PLANTS SHALL BE FULL, WELL-BRANCHED, & IN HEALTHY VIGOROUS GROWING CONDITION.
6. PLANTS SHALL BE WATERED BEFORE & AFTER PLANTING IS COMPLETE.
7. ALL TREES MUST BE STAKED, FERTILIZED & MULCHED & SHALL BE GUARANTEED TO EXHIBIT A NORMAL GROWTH CYCLE FOR AT LEAST ONE (1) YEAR FOLLOWING PLANTING.
8. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED IN THE MOST RECENT EDITION OF THE "AMERICAN STANDARDS FOR NURSERY STOCK".
9. CONTRACTOR WILL SUPPLY FINISHED GRADE & EXCAVATE AS NECESSARY TO SUPPLY PLANT MIX DEPTH IN ALL PLANTING BEDS AS INDICATED IN PLANT DETAILS & A DEPTH OF 4" IN ALL LAWN AREAS.
10. PROVIDE CLEAN BACKFILL SOIL, USING MATERIAL STOCKPILED ON-SITE. SOIL SHALL BE SCREENED & FREE OF DEBRIS, FOREIGN MATERIAL, & STONE.
11. SLOW-RELEASE FERTILIZER SHALL BE ADDED TO THE PLANT PITS BEFORE BEING BACKFILLED. APPLICATION SHALL BE AT THE MANUFACTURERS RECOMMENDED RATES.
12. PROVIDE 4 INCHES OF PREPARED TOPSOIL (REUSE EXISTING WHEN POSSIBLE), SEED, FERTILIZE, & STRAW MULCH W/ NETTING AT DISTURBED LAWN AREAS, EXCEPT AS NOTED OTHERWISE. SECURE MULCH NETTING BY USING AN APPROPRIATE PINNING PATTERN PER MANUFACTURER'S SPECIFICATIONS. PROVIDE IRRIGATION & MAINTENANCE (MOWING, TRIMMING, ETC.) UNTIL 80% OF LAWN IS ESTABLISHED AS DETERMINED BY THE ENGINEER OR OWNER. SEE LANDSCAPING PLANS & SPECIFICATIONS IF AVAILABLE.
13. PREPARED TOPSOIL SHALL CONSIST OF 1/3 SCREENED TOPSOIL, 1/3 SAND, & 1/3 "DAIRY DOO" COMPOST, MIXED WELL & SPREAD TO A DEPTH AS INDICATED IN PLANTING DETAILS.
14. LAWN IN THE HIGHLAND ROAD FRONT YARD SHALL BE SOD. ALL OTHER LAWN SHALL BE HYDROSEED.
15. LAWN SEED MIXTURE SHALL BE COMPRISED OF THE FOLLOWING VARIETIES, MIXED TO THE SPECIFIED PROPORTIONS BY WEIGHT AND TESTED TO MINIMUM PERCENTAGES OF PURITY AND GERMINATION.

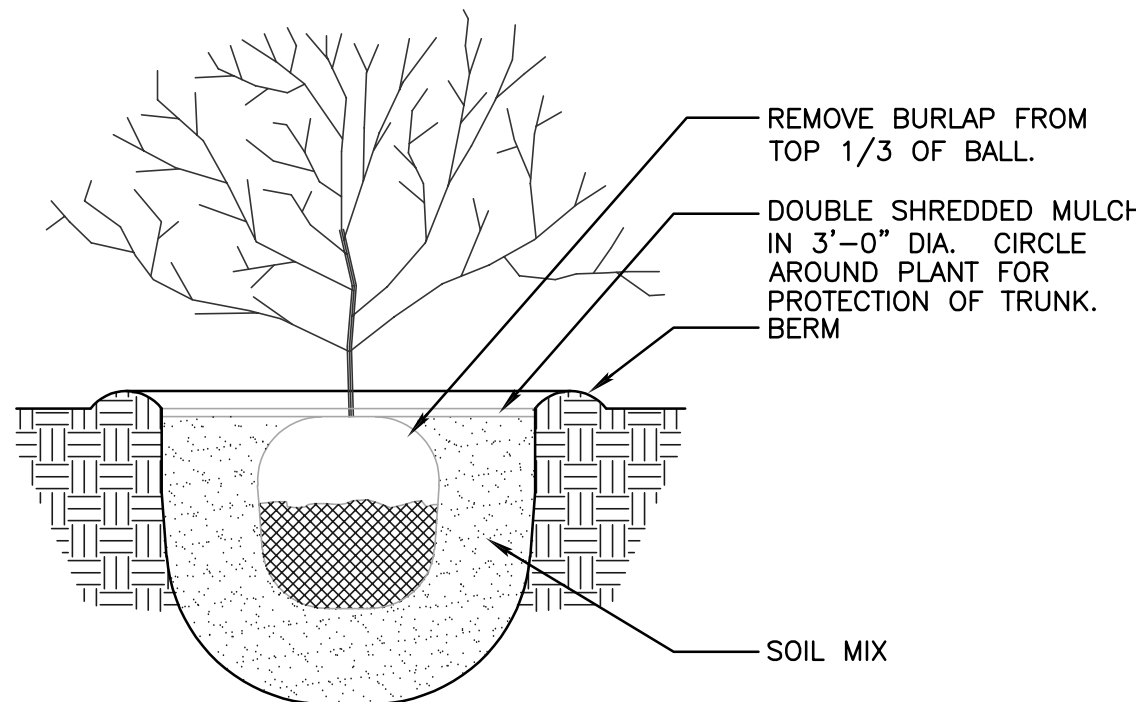
IRRIGATED SEED MIXTURE			
SEED TYPE	PROPORTION	PURITY	GERMINATION
KENTUCKY BLUEGRASS	50%	90%	75%
PENN LAWN FESCUE	30%	95%	80%
ANNUAL RYEGRASS	20%	95%	80%

DROUGHT RESISTANT SEED MIXTURE			
SEED TYPE	PROPORTION	PURITY	GERMINATION
PENN LAWN FESCUE	60%	90%	85%
KENTUCKY 28# COMMON BLUEGRASS	20%	90%	90%
PENNFINE PERENNIAL RYE	20%	90%	90%

16. ALL PLANTINGS SHALL BE MULCHED WITH DOUBLE SHREDDED HARDWOOD BARK, SPREAD TO A DEPTH OF 3" FOR TREES & SHRUBS, & 2" ON ANNUALS, PERENNIALS, & GROUND COVER PLANTINGS. MULCH SHALL BE DOUBLE SHREDDED QUALITY, FREE FROM DEBRIS & FOREIGN MATERIAL, & PIECES OF INCONSISTENT SIZE.
17. NO SUBSTITUTIONS OR CHANGES OF LOCATION, OR PLANT TYPE SHALL BE MADE WITHOUT THE APPROVAL OF THE ENGINEER OR OWNER'S REPRESENTATIVE.
18. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN THE PLANS & FIELD CONDITIONS PRIOR TO INSTALLATION.
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL PLANT MATERIAL IN A VERTICAL CONDITION THROUGHOUT THE GUARANTEED PERIOD.
20. TREES, TREES NOT INDICATED TO BE REMOVED OR TRANSPLANTED SHALL BE FENCED OFF WITH A 4' HIGH ORANGE CONSTRUCTION FENCE 10' FROM THE DRIP LINE OF THE TREE. TREES INDICATED TO BE REMOVED SHALL BE TRANSPLANTED WHERE SHOWN ON THE PLANS & AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
21. GREAT CARE SHALL BE TAKEN BY CONTRACTORS TO AVOID DAMAGE TO VEGETATION OUTSIDE THE LIMITS OF CONSTRUCTION & TO KEEP THE CONSTRUCTION AREAS TO A MINIMUM. DRIVING SHALL NOT BE PERMITTED OUTSIDE THE LIMITS OF CONSTRUCTION.
22. AS A CONDITION OF SITE PLAN APPROVAL THE PROPRIETOR AGREES TO REMOVE & REPLACE ALL DISEASED, DAMAGED, OR DEAD MATERIALS FOR A PERIOD OF TWO (2) YEARS IN ACCORDANCE WITH THE WHITE LAKE TOWNSHIP ZONING ORDINANCE.
23. TREE STAKES, GUY WIRES, & TREE WRAP SHALL BE REMOVED AFTER 1 YEAR.

CALL	QUANTITY	COMMON NAME	SPECIES	INSTALL SIZE	SYMBOL
BS	35 EA	AMERICAN BOXWOOD HEDGE	<i>BUXUS SEMPERVIRENS</i>	24" HT. #3 CONT.	
TO	8 EA	EMERALD GREEN ARBORVITAE	<i>THUJA OCCIDENTALIS 'EMERALD GREEN'</i>	3' HT. B&B	
EA	3 EA	BURNING BUSH	<i>EUONYMUS ALATUS</i>	30" HT. B&B	
SV	6 EA	LILAC, COMMON PURPLE	<i>SYRINGA VULGARIS</i>	1.5" CAL. @ 6' B&B	
CF	0 EA	WHITE FLOWERING DOGWOOD	<i>CORNUS FLORIDA</i>	1.5" CAL. @ 6' B&B	
AP	2 EA	JAPANESE MAPLE 'EMPEROR ONE'	<i>ACER PALMATUM 'EMPEROR ONE'</i>	1.5" CAL. @ 6' B&B	
GB	6 EA	GINKGO 'UPRIGHT MAIDENHAIR'	<i>GINKGO BILOBA 'FASTIGIATA'</i>	2.5" CAL. DBH B&B	
AR	2 EA	RED MAPLE	<i>ACER RUBRUM</i>	2.5" CAL. DBH B&B	
QA	3 EA	WHITE OAK	<i>QUERCUS ALBA</i>	2.5" CAL. DBH B&B	
AC	3 EA	WHITE FIR	<i>ABIES CONCOLOR</i>	7' HT. B&B	

LANDSCAPE SCHEDULE



SINGLE SHRUB PLANTING
N.T.S.

TREE PROTECTION NOTES:

TREE PROTECTION SHALL BE ERECTED PRIOR TO START OF CONSTRUCTION ACTIVITIES, AND SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE.

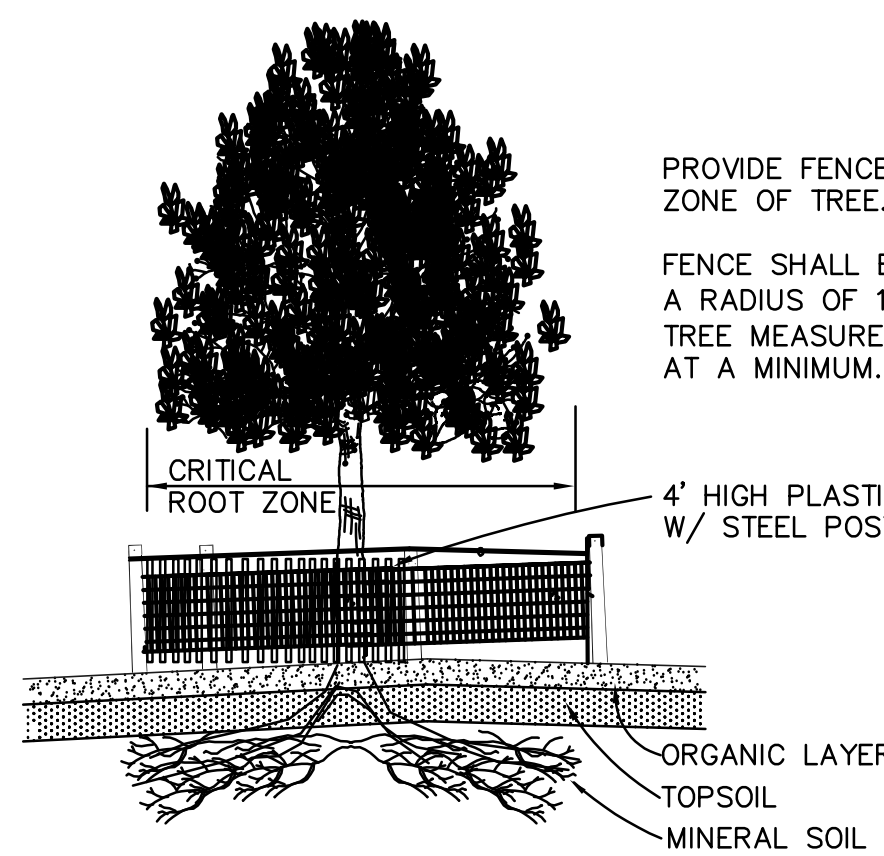
NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE DRIP LINE OF ANY TREE DESIGNATED TO REMAIN; INCLUDING, BUT NOT LIMITED TO PLACING SOLVENTS, BUILDING MATERIAL, CONSTRUCTION EQUIPMENT, OR SOIL DEPOSITS WITHIN DRIP LINES.

GRADE CHANGES MUST BE MINIMAL WITHIN THE DRIP LINE OF PROTECTED TREES.

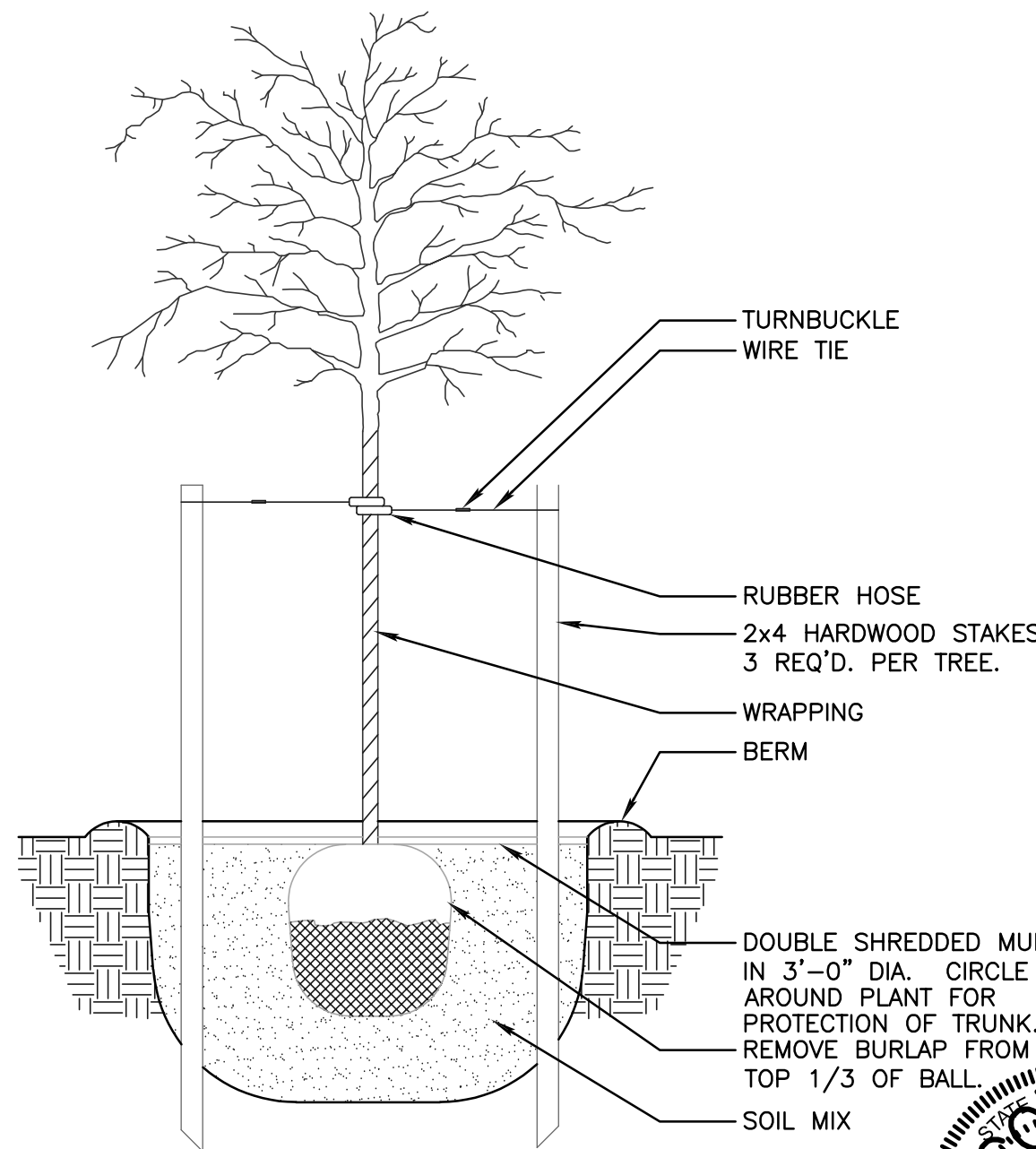
DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY DEVICE OR WIRE TO ANY REMAINING TREE.

ALL UTILITY SERVICE REQUESTS MUST INCLUDE NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES MUST BE AVOIDED. ALL TRENCHING SHALL OCCUR OUTSIDE OF THE PROTECTIVE FENCING, WHERE POSSIBLE.

REGULATED TREES LOCATED ON ADJACENT PROPERTY THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES MUST BE PROTECTED.



TREE PROTECTION
N.T.S.



TREE PLANTING
N.T.S.

DATE	ISSUE
03/03/23	ADMINISTRATIVE SITE PLAN
04/28/23	ADMINISTRATIVE SITE PLAN REV. 1
06/23/23	ADMINISTRATIVE SITE PLAN REV. 2

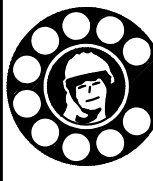
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WHITE LAKE, MICHIGAN 48386
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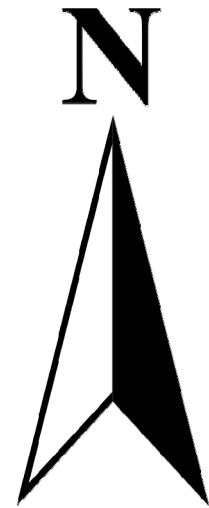


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DETAILS - LANDSCAPE
CARTER'S PLUMBING

PART OF THE SW 1/4 OF THE NE 1/4 OF SECTION 22, T3N, R8E
WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN

SCALE: AS SHOWN
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Statistics						
Description	Symbol	Avg	Max	Min	Avg/Min	Max/Min
North Building	+	0.5 fc	5.5 fc	0.0 fc	N/A	N/A
North Building	+	0.3 fc	2.5 fc	0.0 fc	N/A	N/A
North Building	+	0.2 fc	1.2 fc	0.0 fc	N/A	N/A
Overall	+	0.5 fc	17.2 fc	0.0 fc	N/A	N/A
Parking	X	0.8 fc	4.9 fc	0.0 fc	N/A	N/A
Property Line	+	0.0 fc	0.3 fc	0.0 fc	N/A	N/A
Residential Property Line	+	0.0 fc	0.0 fc	0.0 fc	N/A	N/A
South Building	+	0.1 fc	0.6 fc	0.0 fc	N/A	N/A
West Building	+	0.3 fc	1.0 fc	0.0 fc	N/A	N/A
West Building	+	0.2 fc	0.6 fc	0.0 fc	N/A	N/A
West Building	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
West Building	+	0.1 fc	0.6 fc	0.0 fc	N/A	N/A

- General Note**
- SEE DRAWING FOR LUMINAIRE MOUNTING HEIGHT.
 - CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 5' - 0"
 - LIGHTING ALTERNATES REQUIRE NEW PHOTOMETRIC CALCULATION AND RESUBMISSION TO CITY FOR APPROVAL.

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

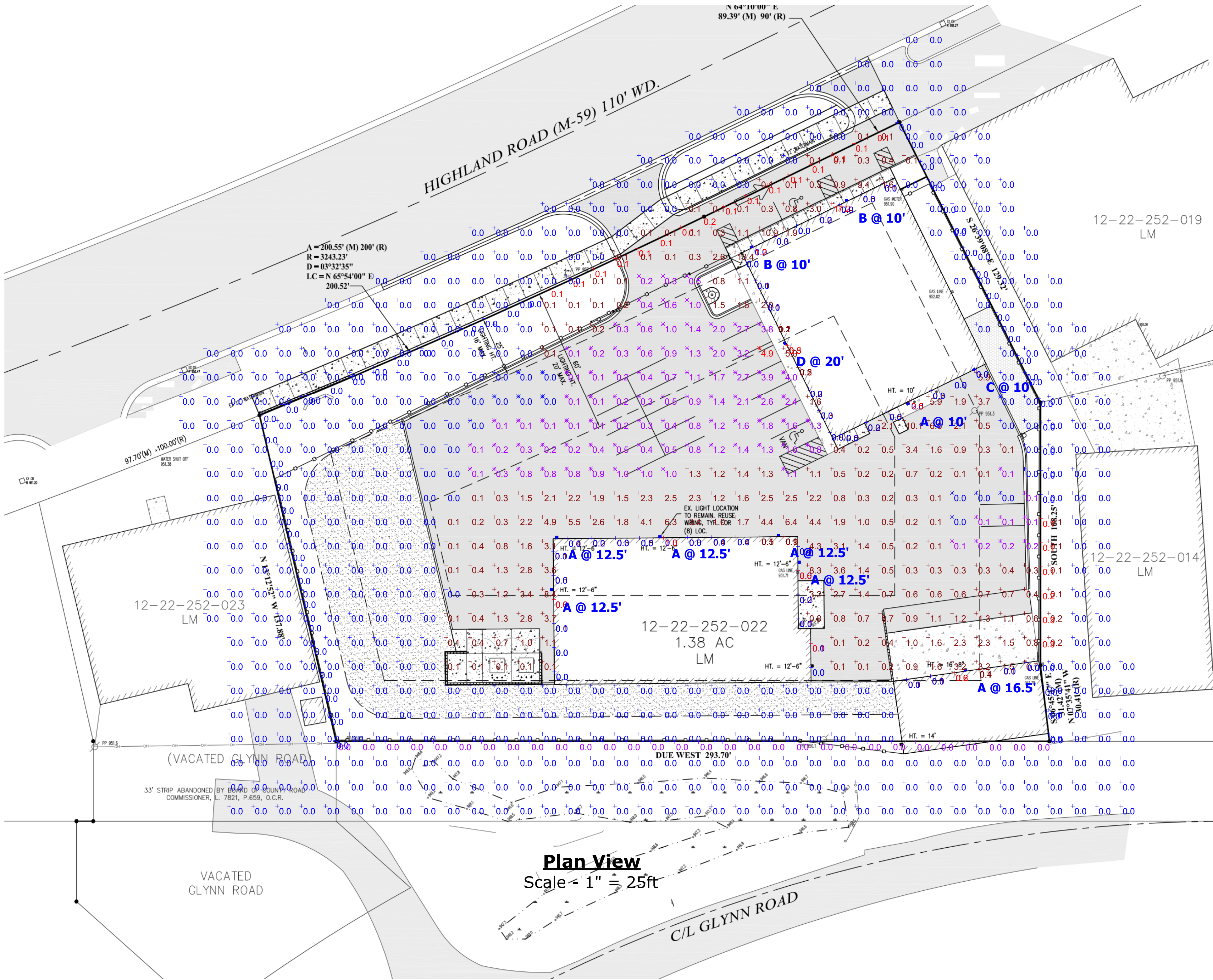
THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

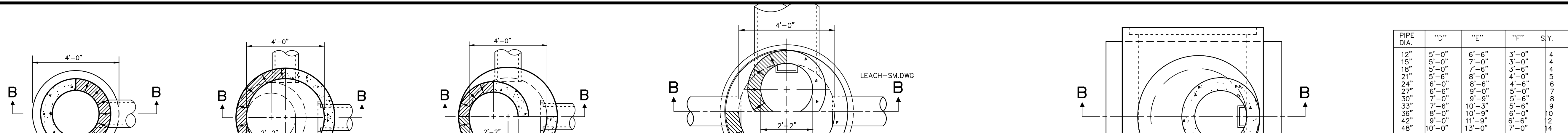
UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIRMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT ASG@GASSERBUSH.COM OR 734-266-6705.

FOR ORDERING INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

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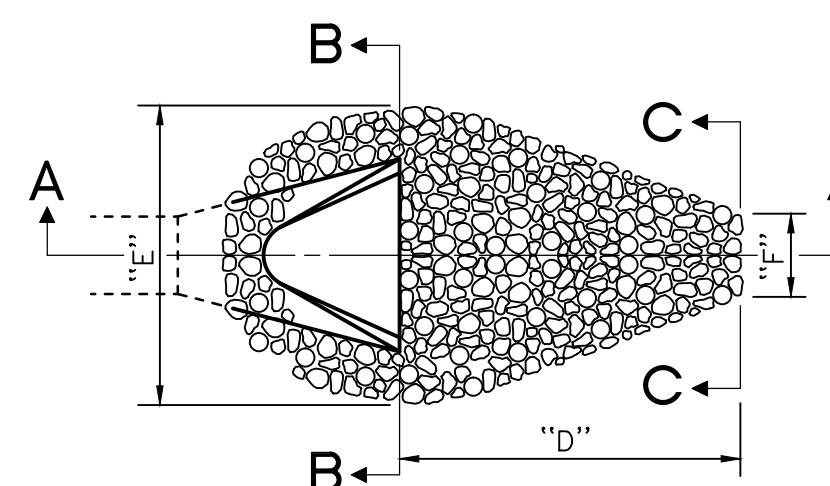
MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT.



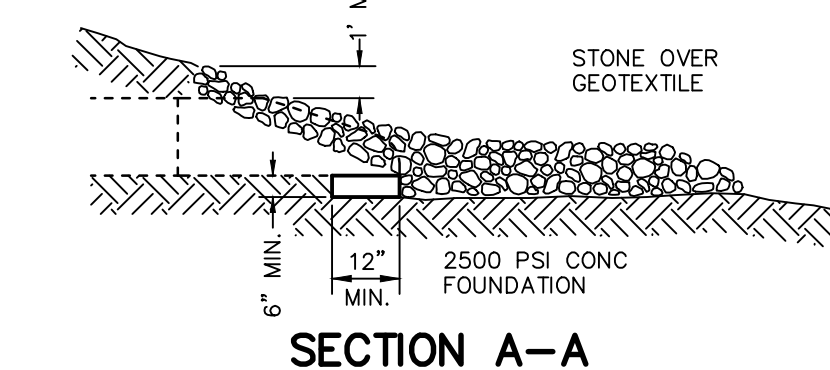


STORM SEWER NOTES

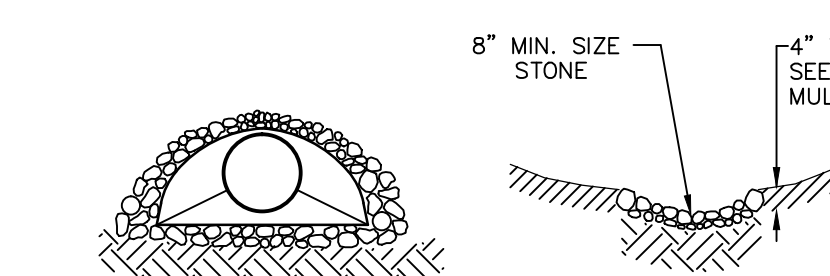
- PRECAST CONC. RISERS SHALL MEET A.S.T.M. C478
- DIAMETER OF CONC. BASE: I.D. + 2(WALL) + 8"
- MANHOLE STEP SPACING SHALL MEET MIOSHA REQUIREMENTS. NO MORE THAN 21" FROM RIM TO FIRST STEP. MAX. 16" O.C. STEPS SHALL BE CAST POLYPROPYLENE REINFORCED WITH A 1/2" STEEL ROD.
- WALL THICKNESS OF BLOCK STRUCTURES SHALL BE:
DEPTH THICKNESS
0-8' 8"
8-15' 8"
OVER 15' 12"
- MINIMUM I.D. OF STRUCTURE FOR: 36" to 42" = 5'-0"
48" to 54" = 6'-0"
LARGER DIAMETER STRUCTURES MAY BE REQUIRED DEPENDING ON PIPING CONFIGURATION.
- ALL LIFTING HOLES AND VOIDS IN INTERIOR JOINTS SHALL BE FILLED BY MORTAR.
- THE FINGER DRAIN DETAIL SHALL BE USED AT ALL LOW POINT CATCH BASINS IN PAVEMENT AREAS. THE DETAIL MAY BE OMITTED WITH THE APPROVAL OF THE TOWNSHIP ENGINEER IN AREAS WITH VERY POROUS SOILS AND NO GROUNDWATER PROBLEMS.
- PRECAST ONE-PIECE BASES AND RISERS ARE ACCEPTABLE FOR INLETS, CATCH BASINS AND MANHOLES
- FRAMES & COVERS WITH INLET CAPACITY (1.0 CFS/90 SQ IN) -TRAFFIC AND PARKING AREAS: MDOT "D" (EJW 5105) 1.9 CFS* -REAR YARD AND DITCH INLETS: (EJW 1040-02) 2.1 CFS* -MANHOLES: MDOT "A" (EJW 1060) -CURB AND GUTTER INLETS: MDOT "K" (EJW 7045) 1.8 CFS* -MOUNTABLE CURB & GUTTER: (EJW 7065) 2.2 CFS* -MAY VARY DUE TO MANUFACTURER CHANGES
- CONTACT THE TOWNSHIP ENGINEER 48 HOURS PRIOR TO CONSTRUCTION TO SCHEDULE INSPECTION. FULL TIME INSPECTION WILL BE REQUIRED FOR ALL UNDERGROUND STORM SEWER CONSTRUCTION. PHONE (248) 334-9901
- THE CONTRACTOR SHALL CONTACT MISS DIG 72 HOURS BEFORE CONSTRUCTION AT (800) 482-7171 TO LOCATE EXISTING UNDERGROUND UTILITIES.
- PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL HAVE IN HIS POSSESSION A CURRENT SOIL EROSION CONTROL PERMIT AS ISSUED BY WHITE LAKE TOWNSHIP.
- A 2' DEEP SUMP SHALL BE USED IN ANY STRUCTURE SUBJECT TO A WATER DROP GREATER THAN 2.0' FROM AN INLET PIPE.
- ALLOWABLE STORM SEWER PIPE TYPES:
-12" AND UP: RCP ASTM C-76 MIN CLASS 4 UNDER TRAFFIC AREAS, RUBBER JOINT
-6" TO 16": SCH 40 PVC OR SDR 23.5 PVC WITH RUBBER OR GLUE JOINT
-6" TO 48": SMOOTH BORE CORRUGATED HIGH DENSITY POLYETHYLENE WITH NEOPRENE LINED JOINTS OR BETTER
- THE MINIMUM PIPE SIZE IN PUBLIC RIGHT-OF-WAY OR EASEMENTS AND FOR PIPES CARRYING OFF-SITE STORM WATER SHALL BE 12"
- ALL PIPE ENDS NOT WITHIN A STRUCTURE SHALL HAVE A CONCRETE OR METAL FLARE END SECTION (FES) WITH A BAR SCREEN ON PIPES 18" AND LARGER EXCEPT THOSE WITHIN A SECURE FENCED AREA NEED NO BAR SCREEN.
- ALL DRAINAGE STRUCTURES WITHIN THE ROAD SHALL BE SEALED WITH WRAPPED GEOTEXTILE PER ROC STANDARDS



PLAN VIEW



SECTION A-A



SECTION B-B

SECTION C-C

PLAIN STONE RIP-RAP

PLAIN STONE RIP-RAP

PLAIN STONE RIP-RAP

PLAIN STONE RIP-RAP

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PLAIN STONE RIP-RAP

SECTION A-A

SECTION A-A

SECTION A-A

SECTION A-A

SECTION A-A

SECTION B-B
24" INLETSECTION B-B
STRUCTURE WITH
SLAB COVER
(CATCH BASIN SHOWN)SECTION B-B
STANDARD CATCH BASINSECTION B-B
STANDARD STORM MANHOLESECTION B-B
STANDARD PRECAST CONCRETE
MANHOLE TEE

STANDARD REAR YARD CATCH BASIN

TRAPPED CATCH BASIN

PIPE BEDDING
FOR PLASTIC PIPECLASS "B" BEDDING
FOR SEWER PIPE
LESS THAN 48"

BAR SCREEN DETAIL

EDGE DRAIN DETAIL

DETAIL
STANDARD LEACHING BASIN

1000 GALLON LEACHING/SETTLING BASIN

PROFILE VIEW

SO-2 DETENTION BASIN OUTLET FILTER (CMP)
(SEE ODDC STANDARD DETAILS FOR SEDIMENT BASIN OR FOREBAY OUTLET STRUCTURE)

DRAWN: CAD
DESIGN: OA
CHECKED: --

REVISION	MARK	ADDENDUM/CHANGE ORDER	DATE	MARK	ADDENDUM/CHANGE ORDER	DATE	MARK	ADDENDUM/CHANGE ORDER	DATE
		FIRST ISSUE	08/16/95		REVISE	10-03-02		REVISE	06-01-07
		ADD SO-1	06-17-96		REVISE	12-17-03		UPDATED TITLE BLOCK	04/30/13
		NEW BAR GRATE	11-03-97		SEC REFERENCE	05-17-05			

Johnson&Anderson

4494 Elizabeth Lake Road
Waterford, Michigan 48328
tel (248) 681-7800 fax (248) 681-2660

1060 W. Norton Avenue, Suite 7
Muskegon, Michigan 49441
tel (231) 780-3100 fax (231) 780-3115

3910 Lapeer Road
Port Huron, Michigan 48060
tel (810) 987-7820 fax (810) 987-7895

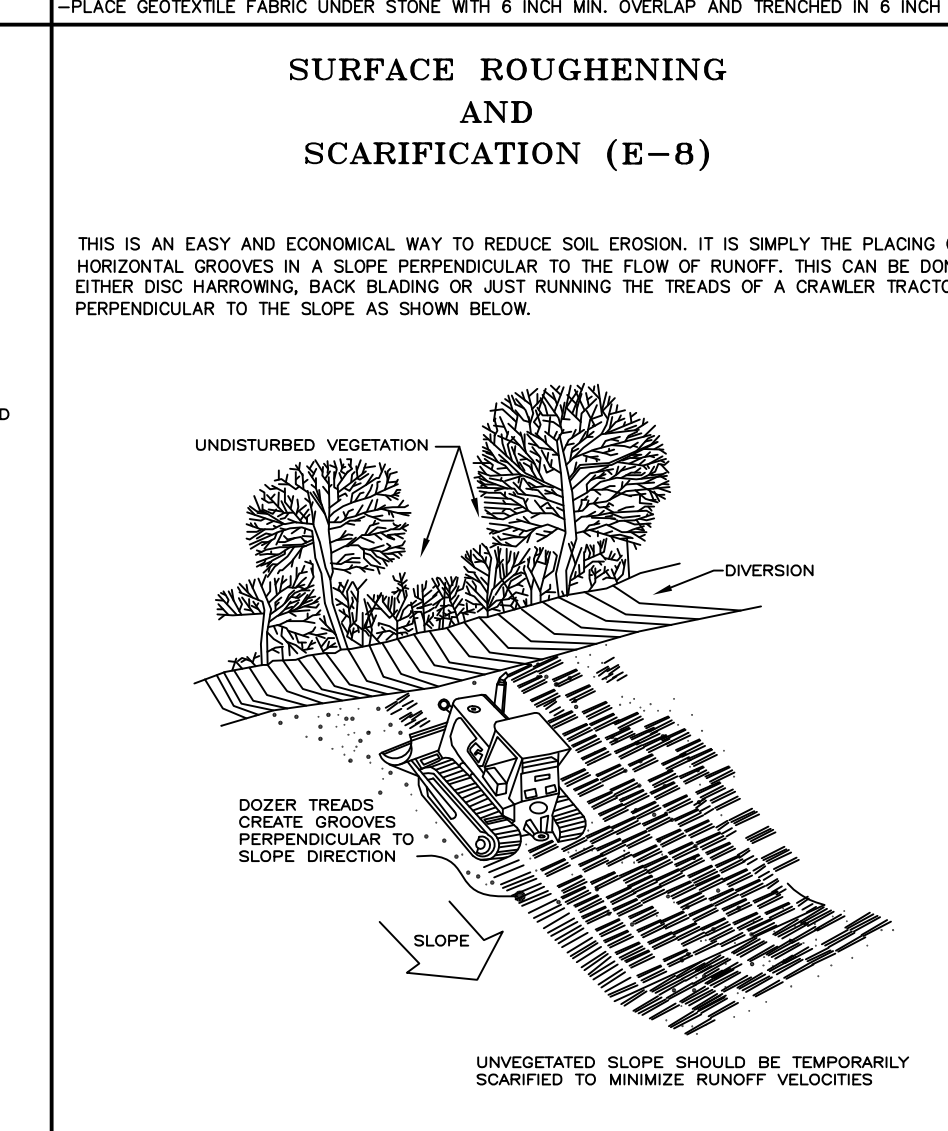
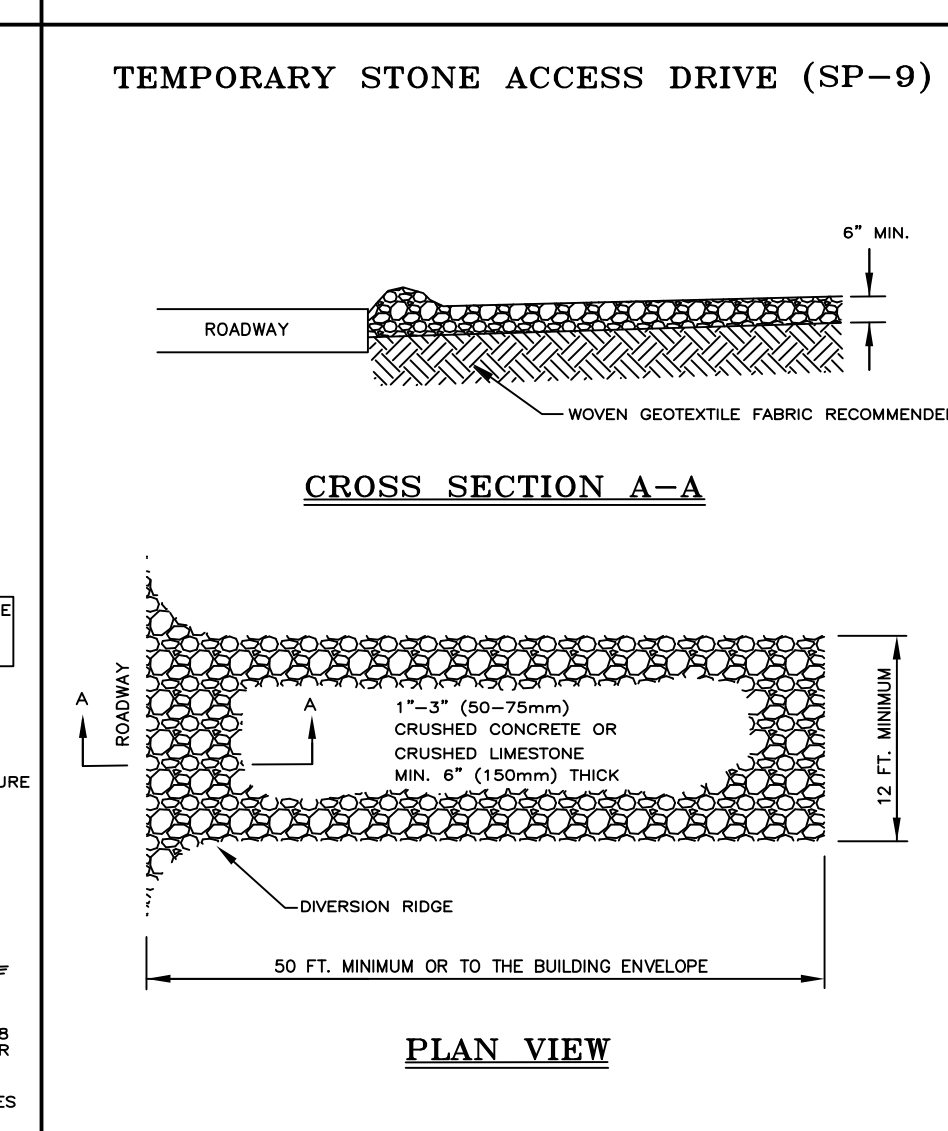
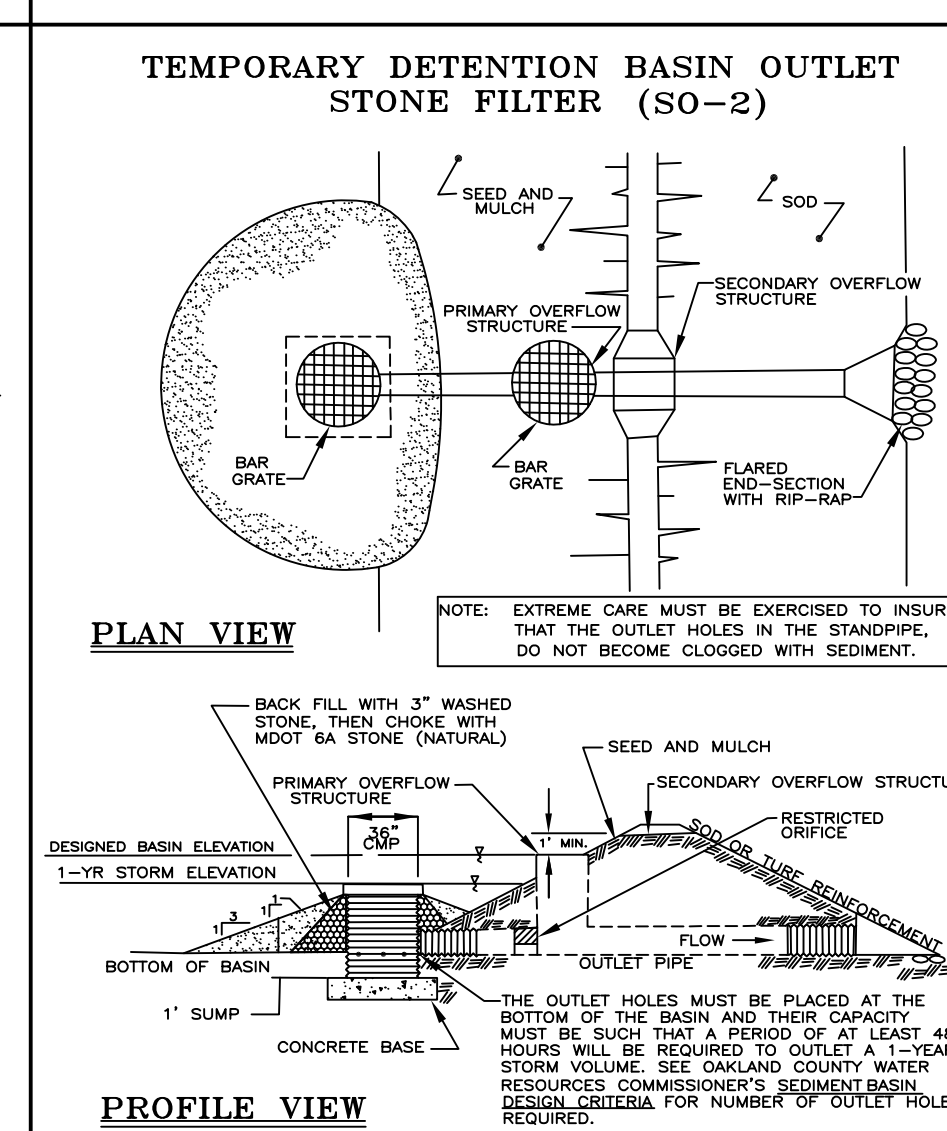
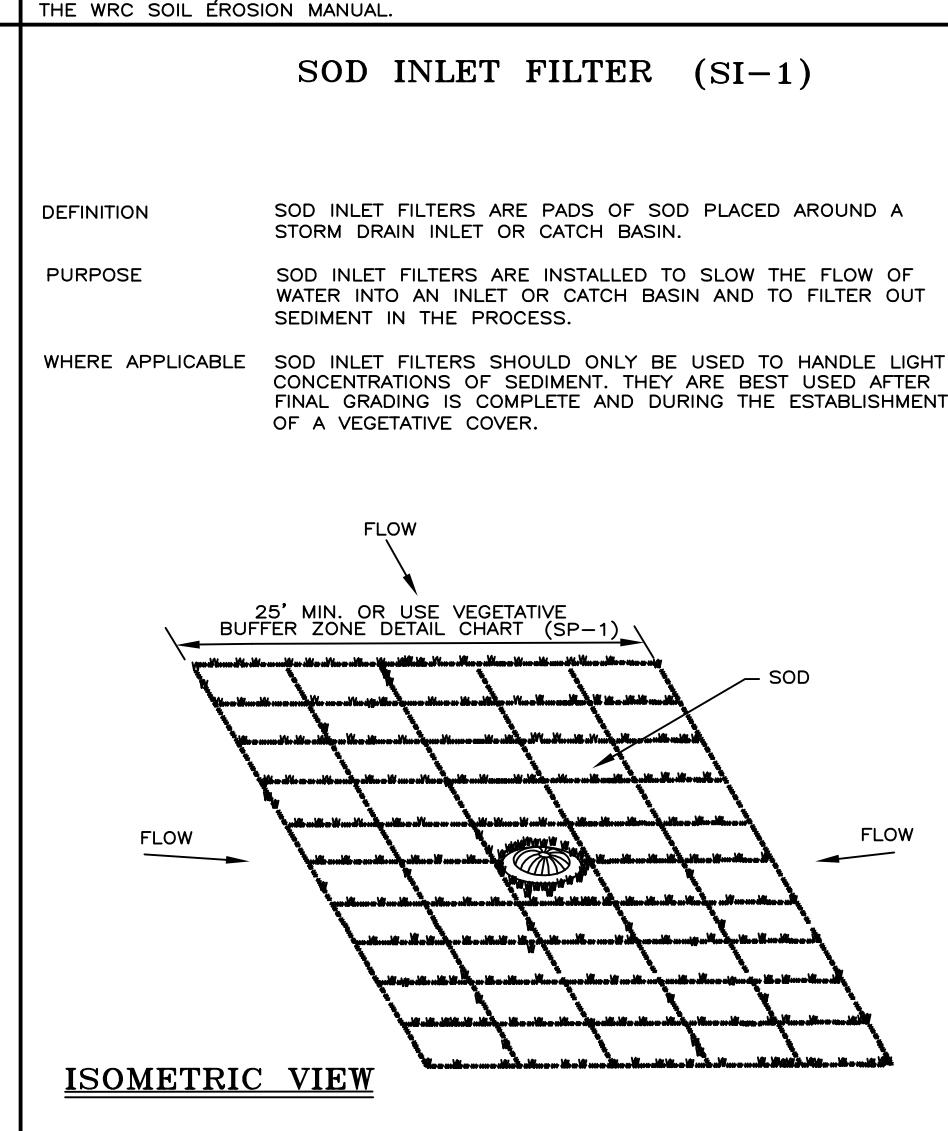
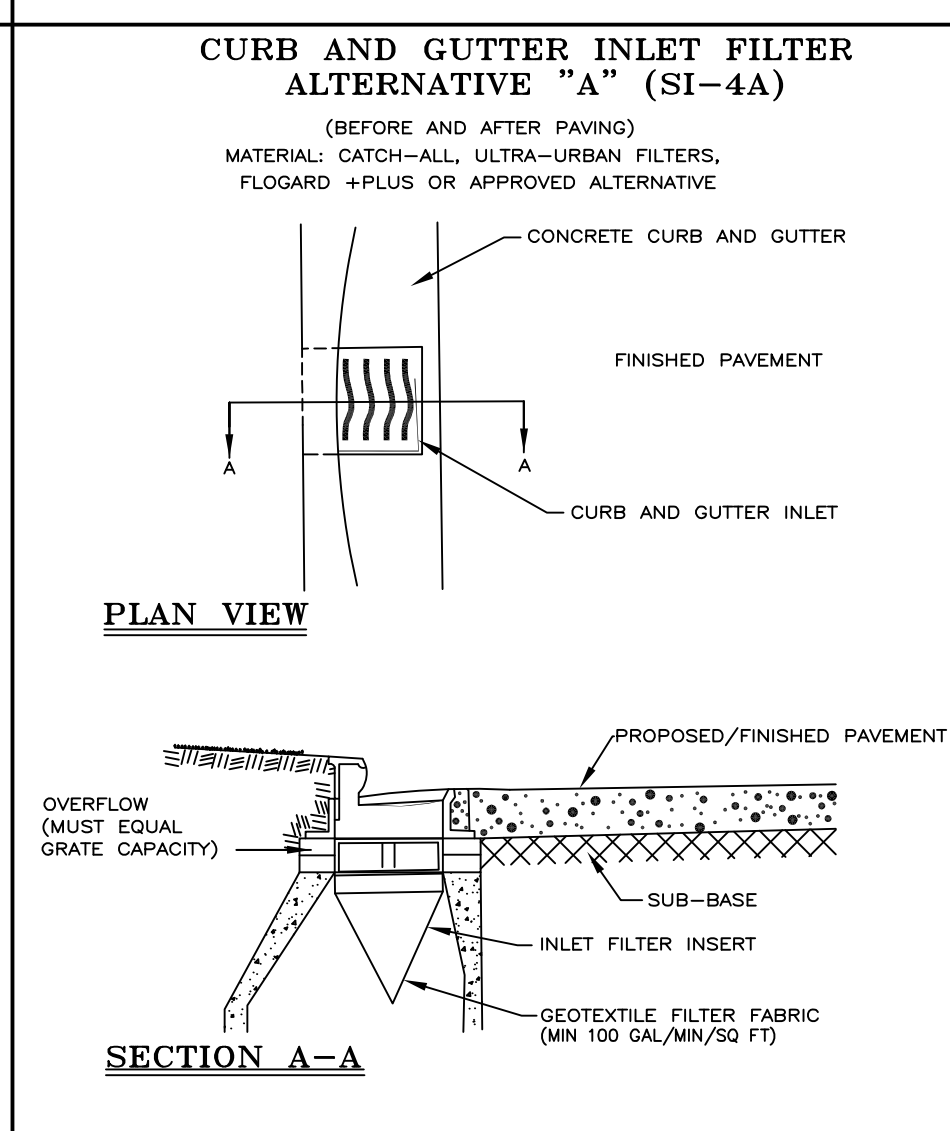
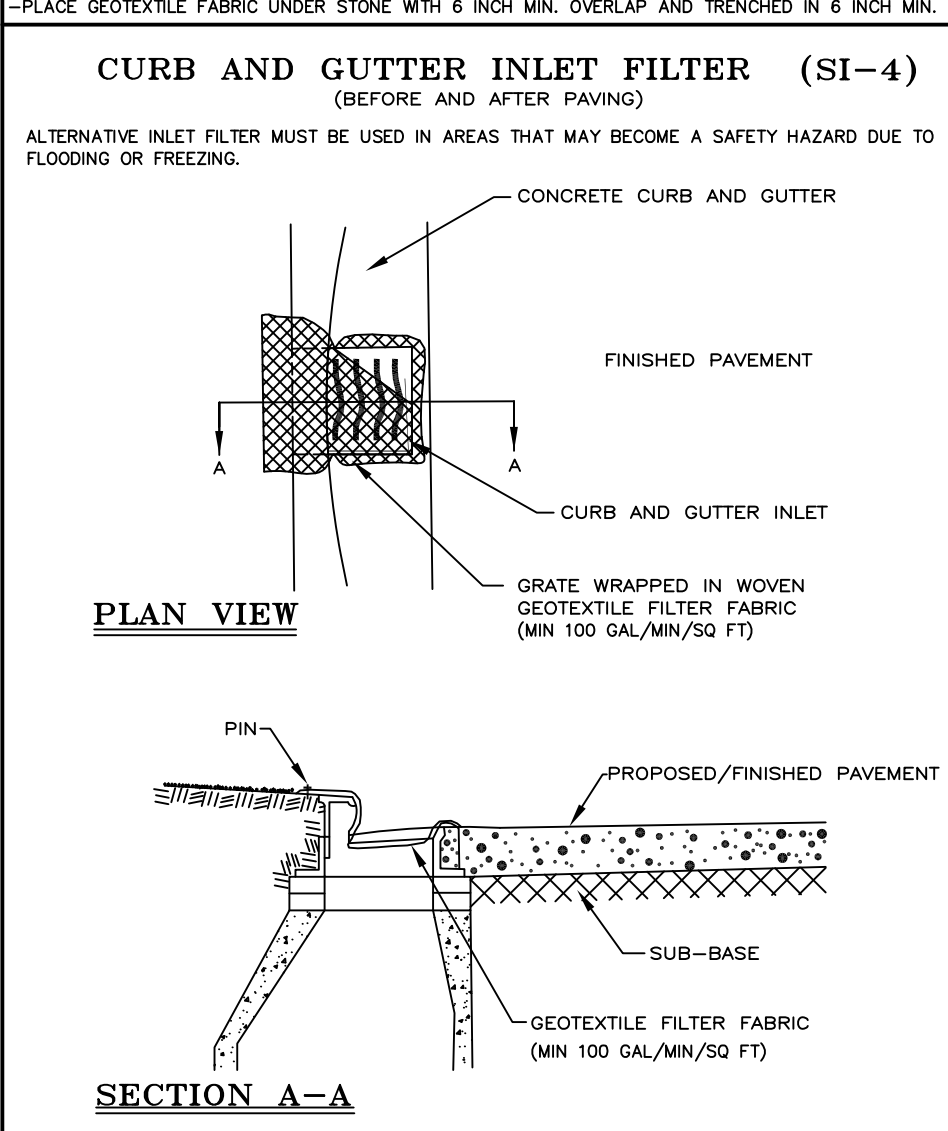
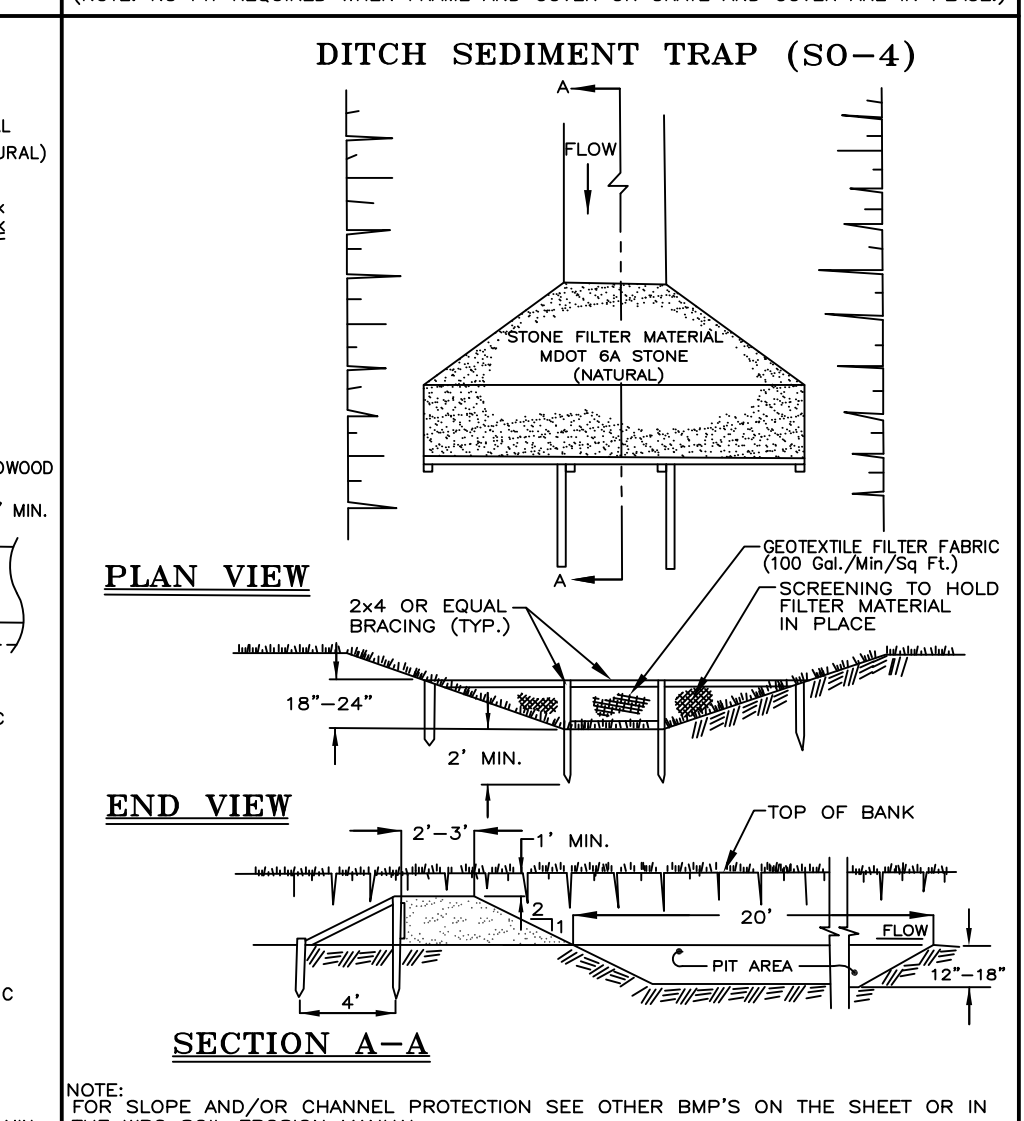
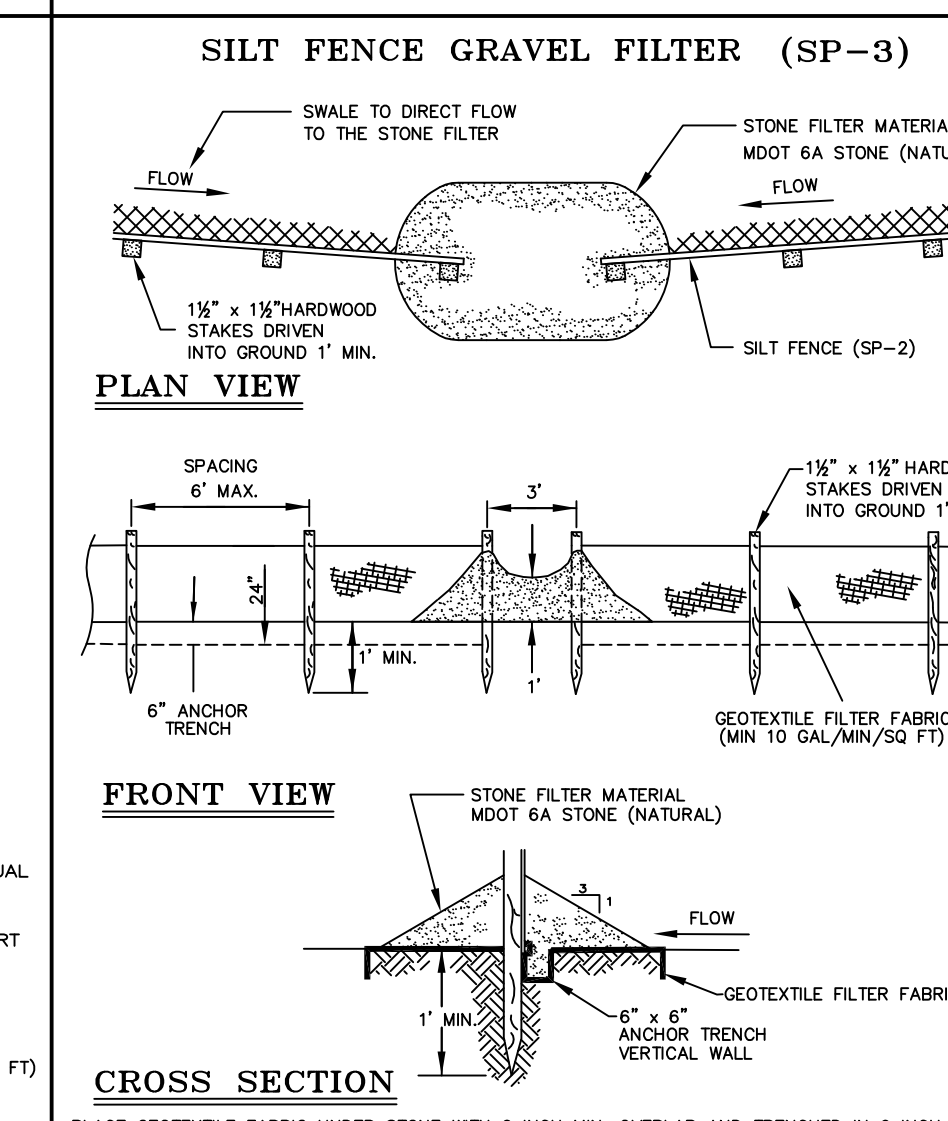
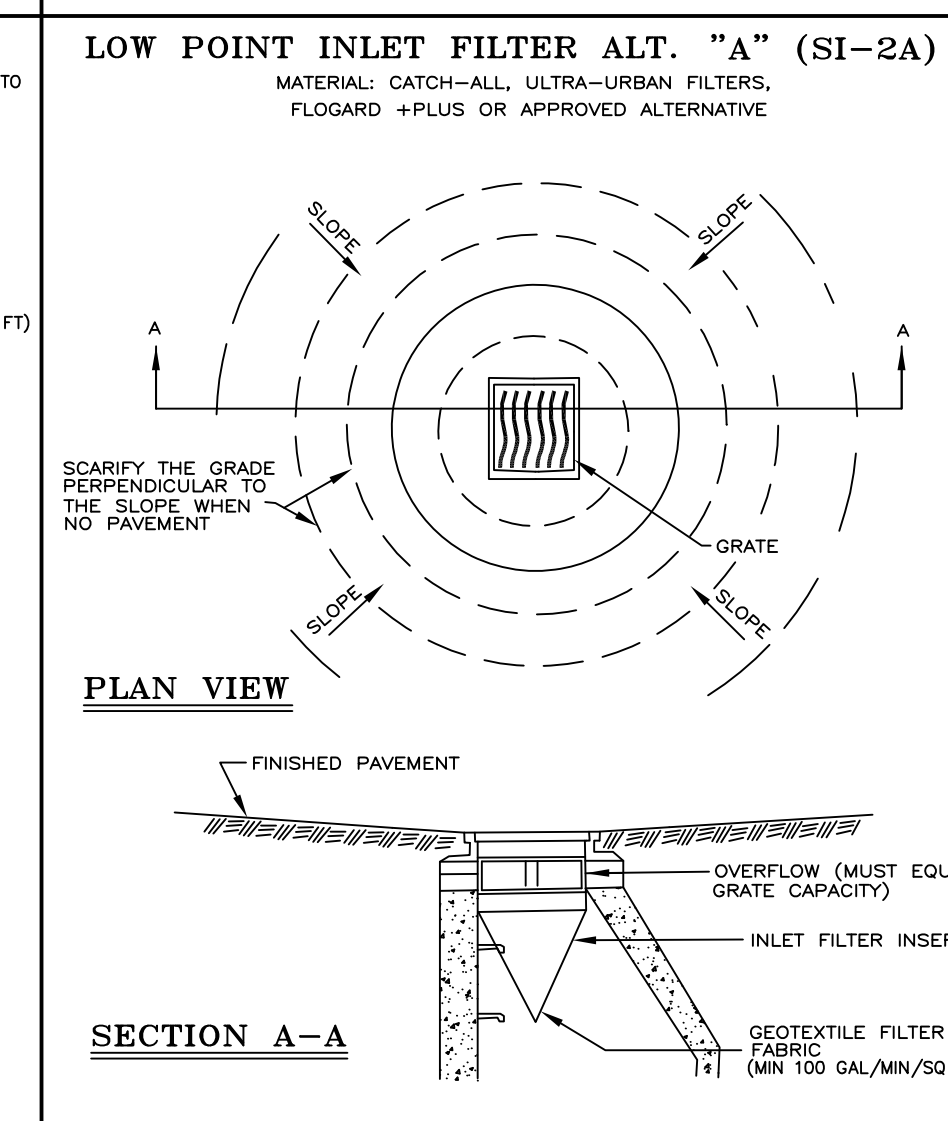
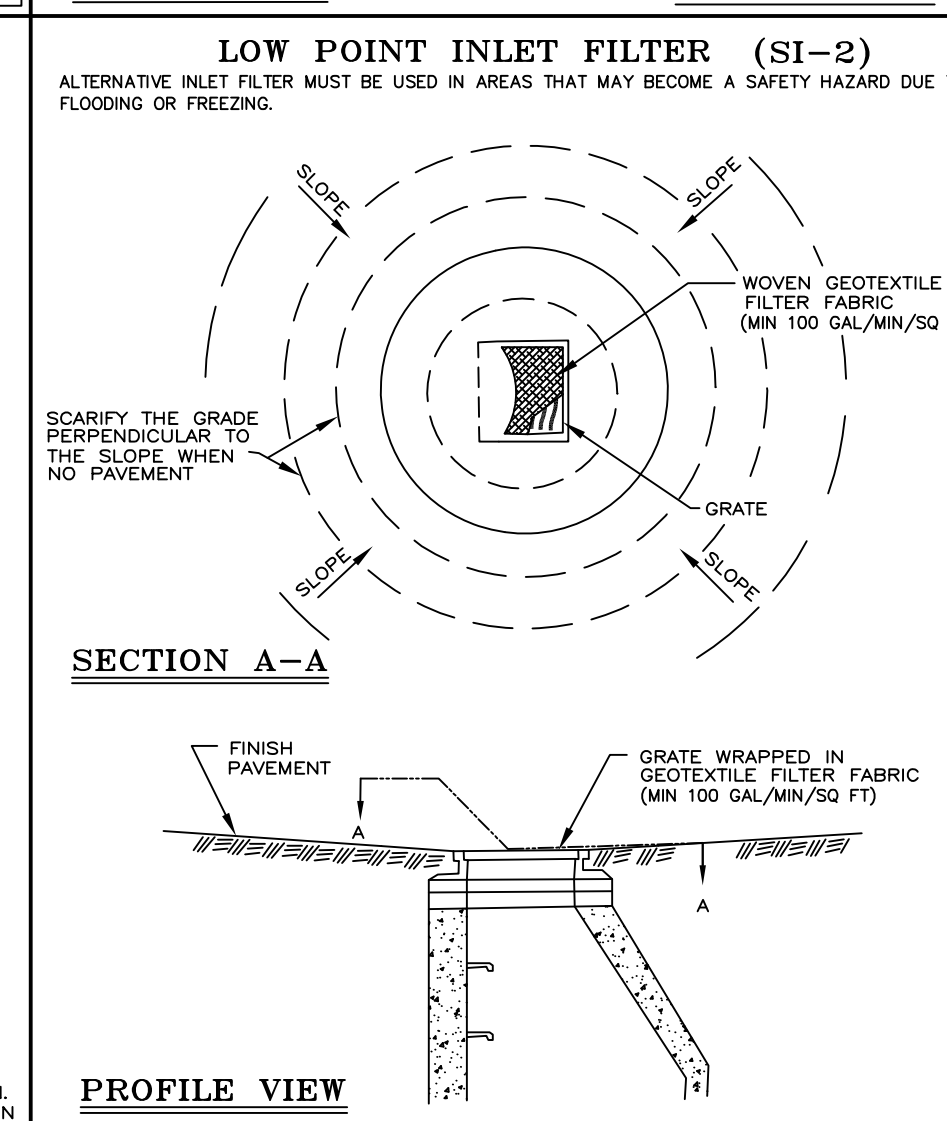
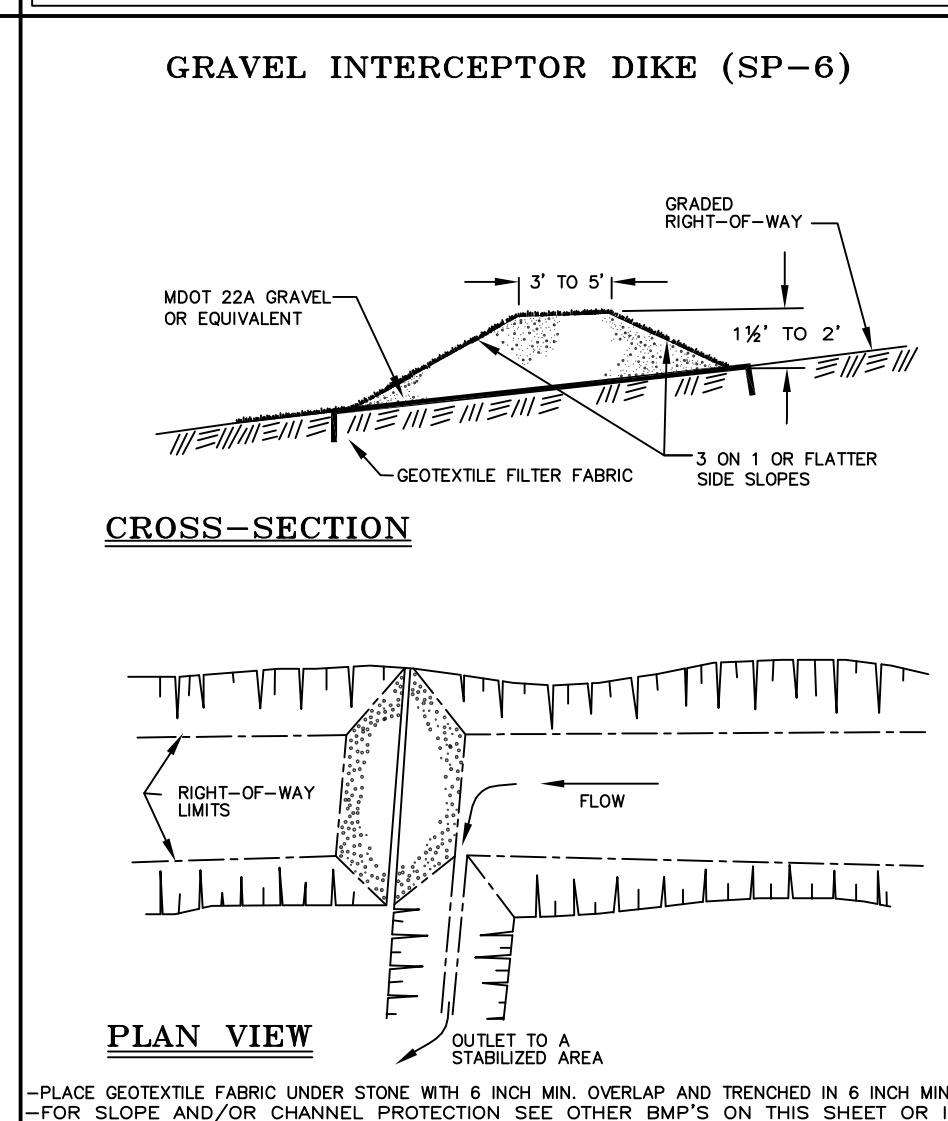
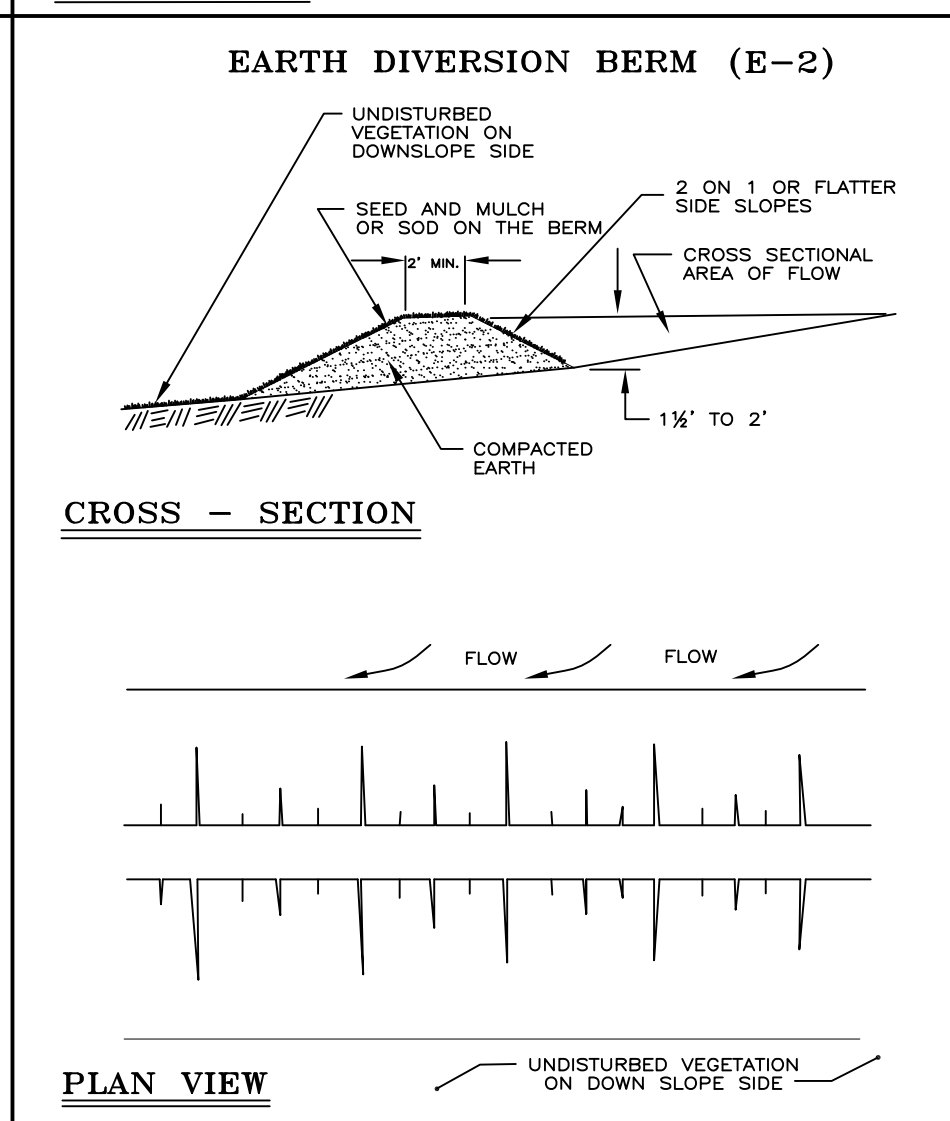
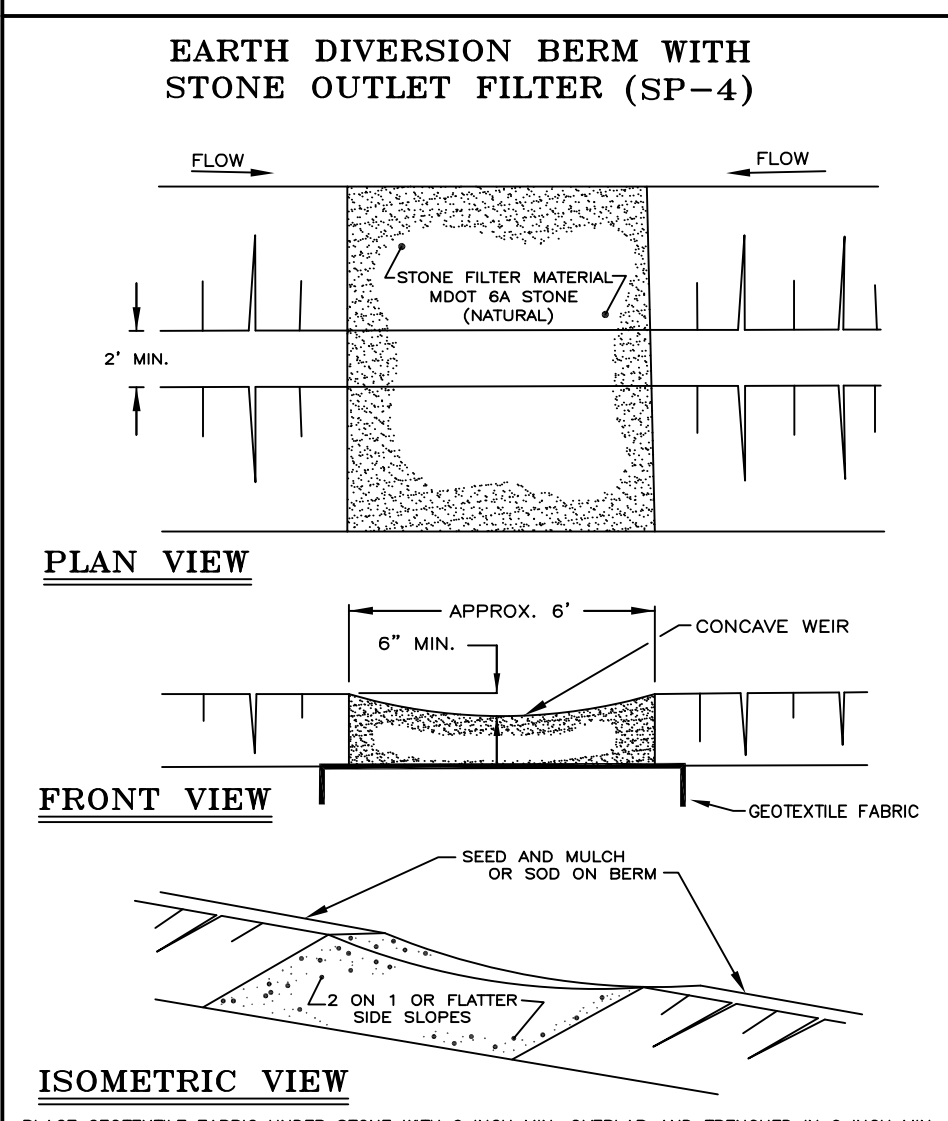
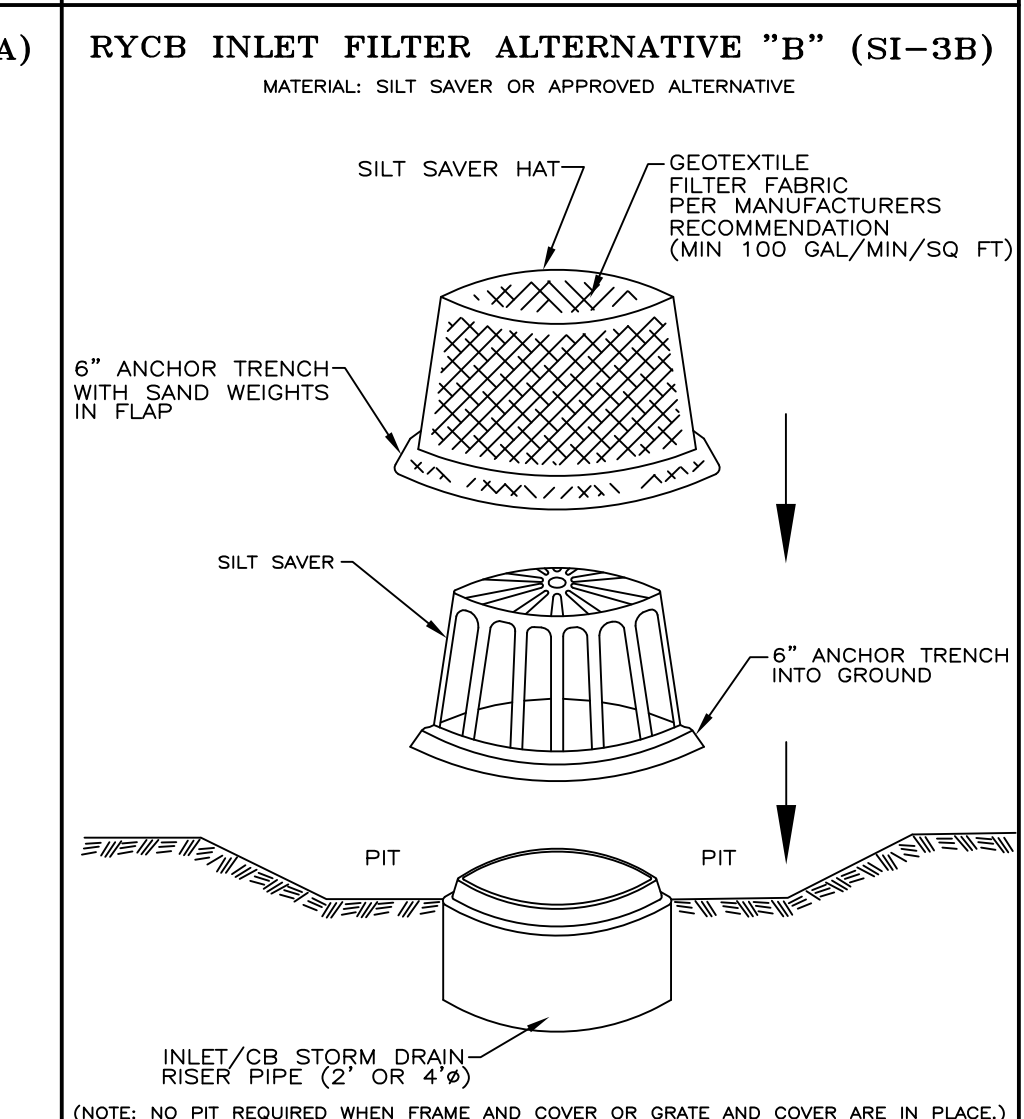
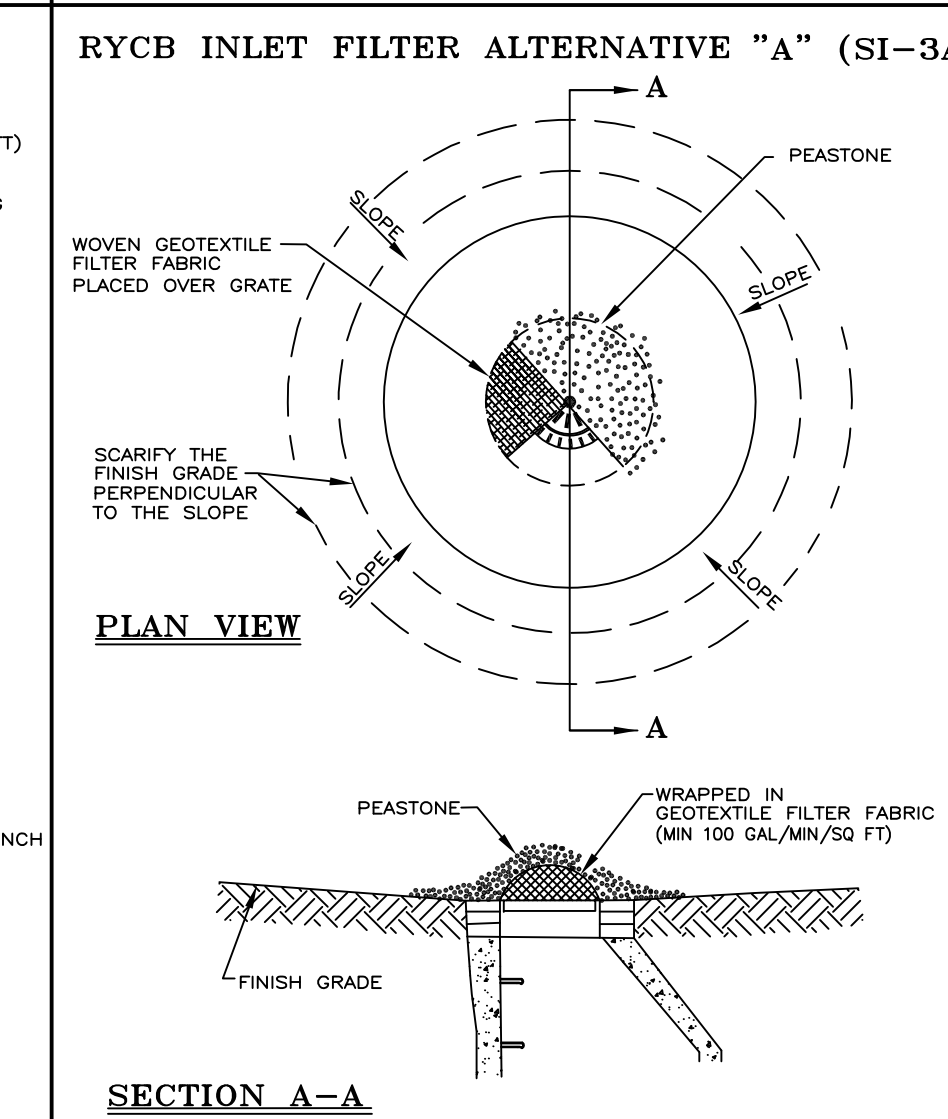
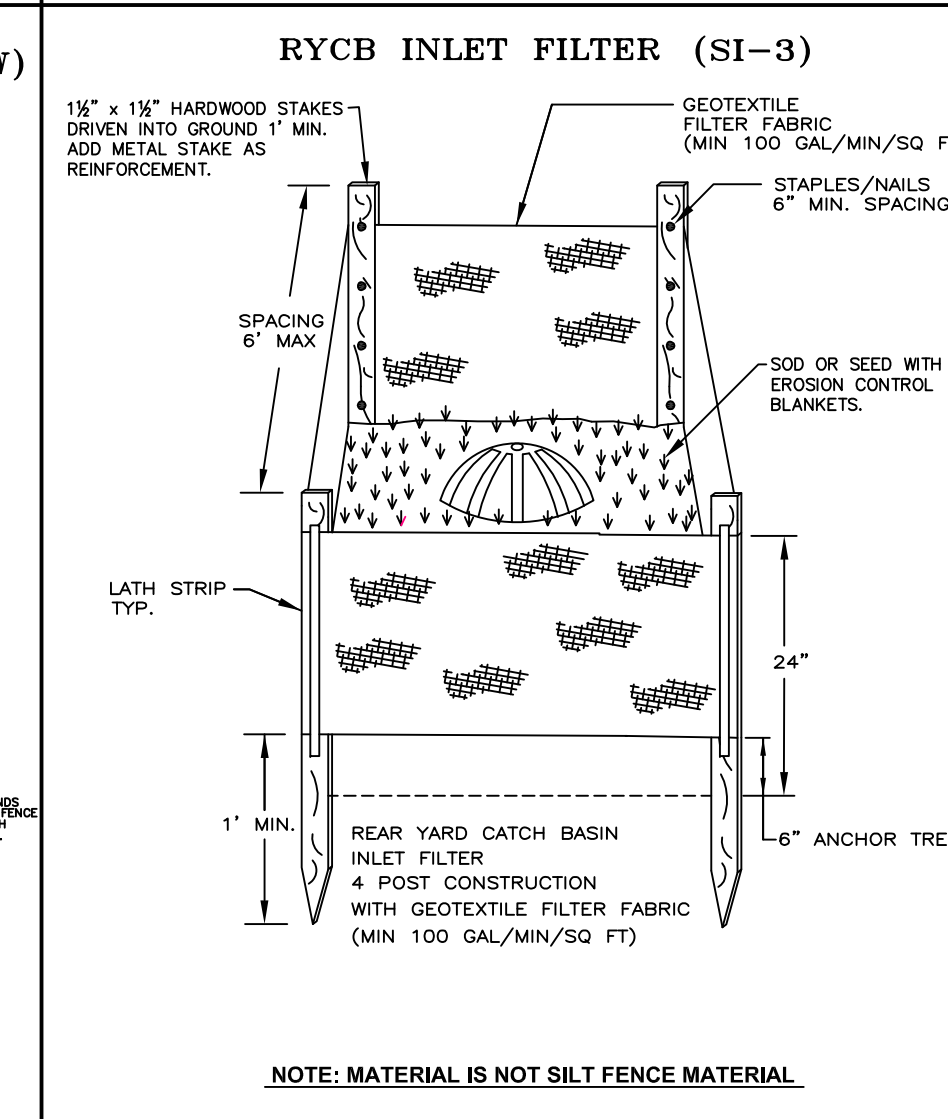
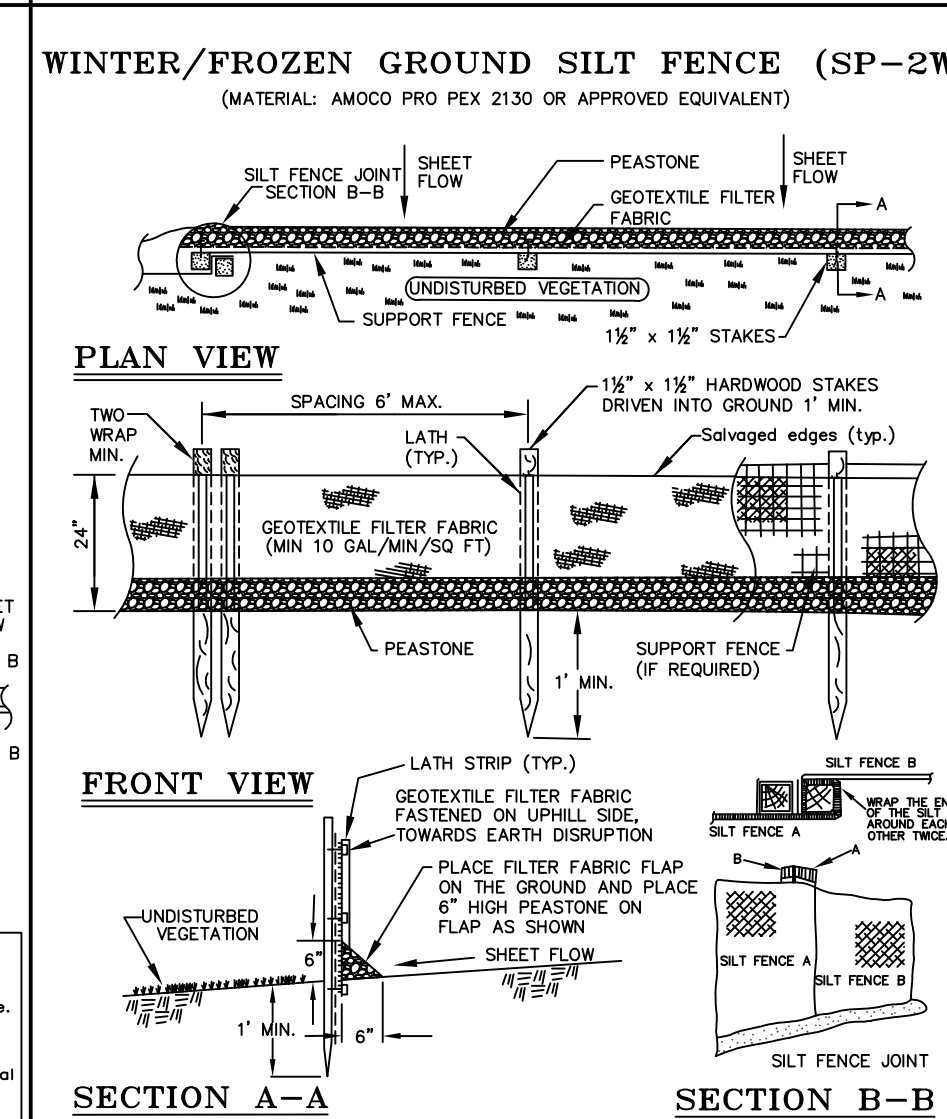
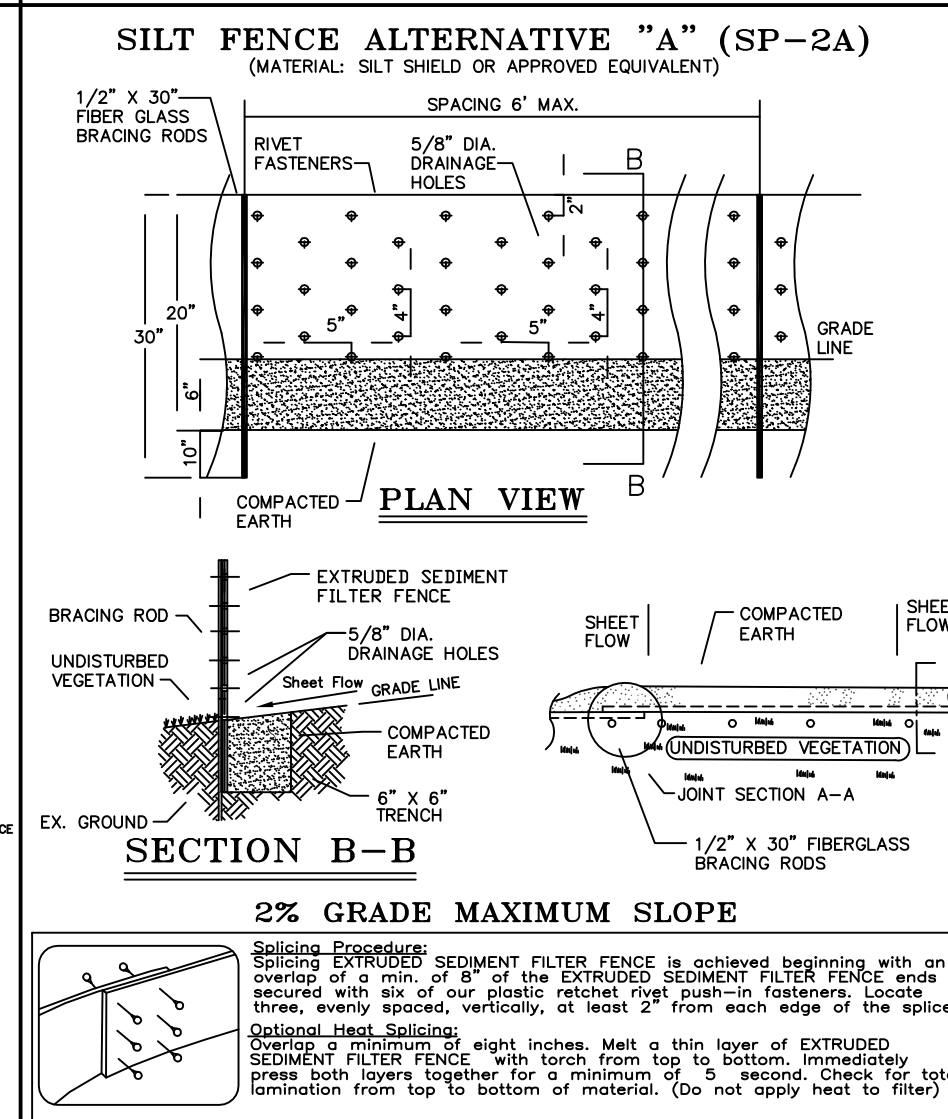
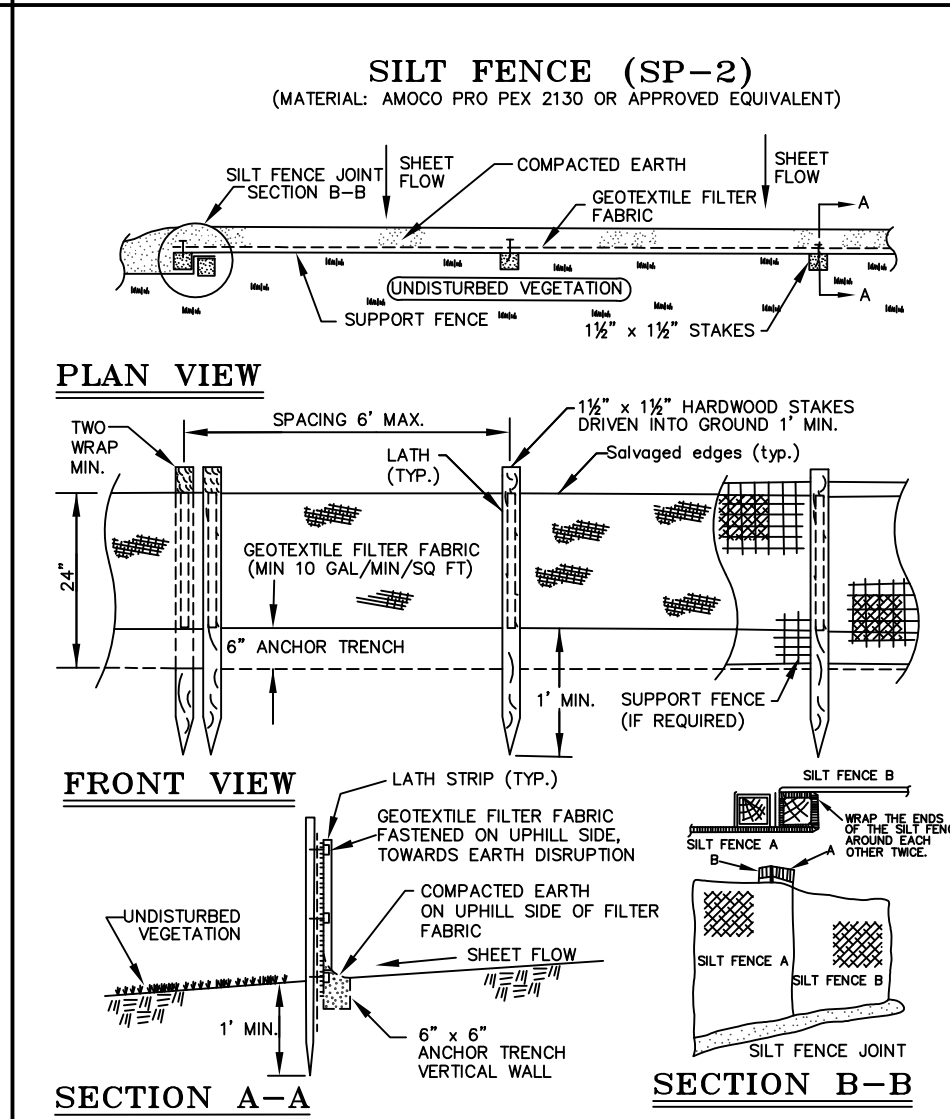
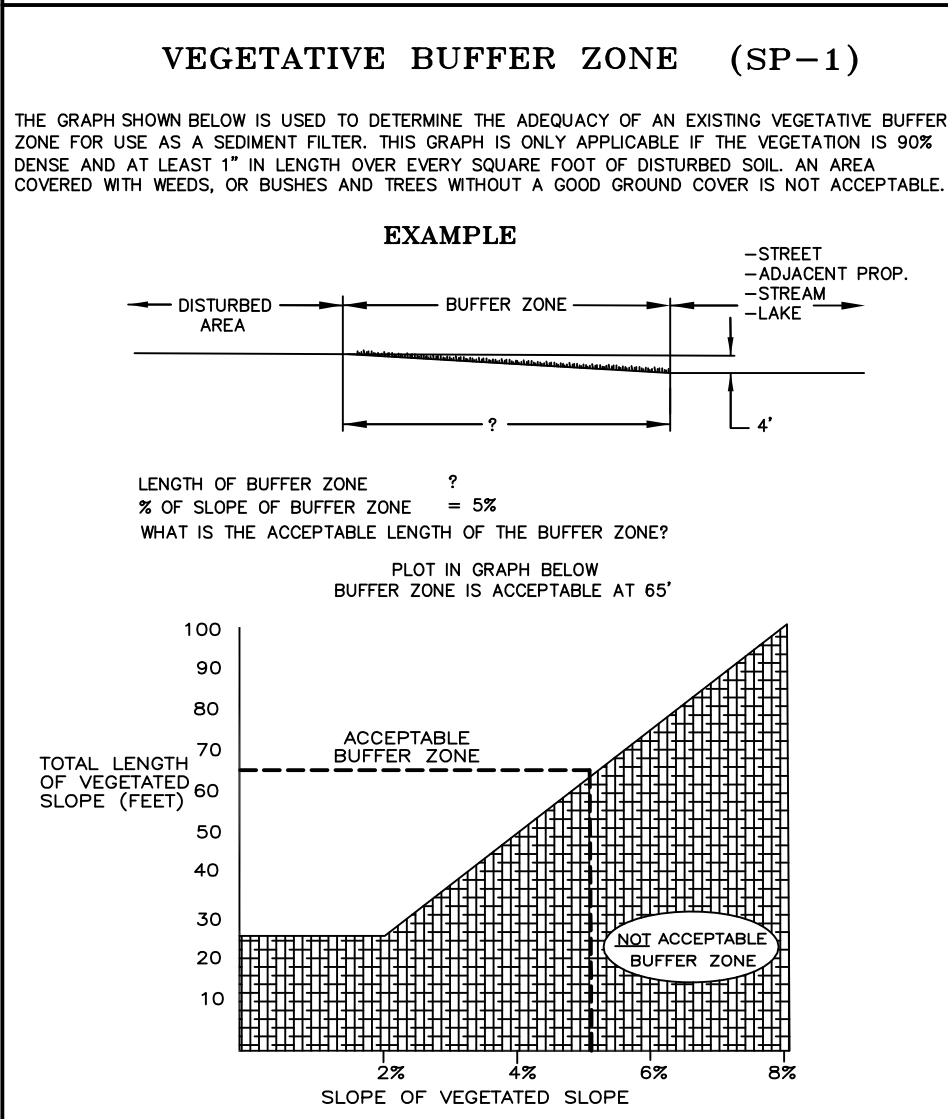
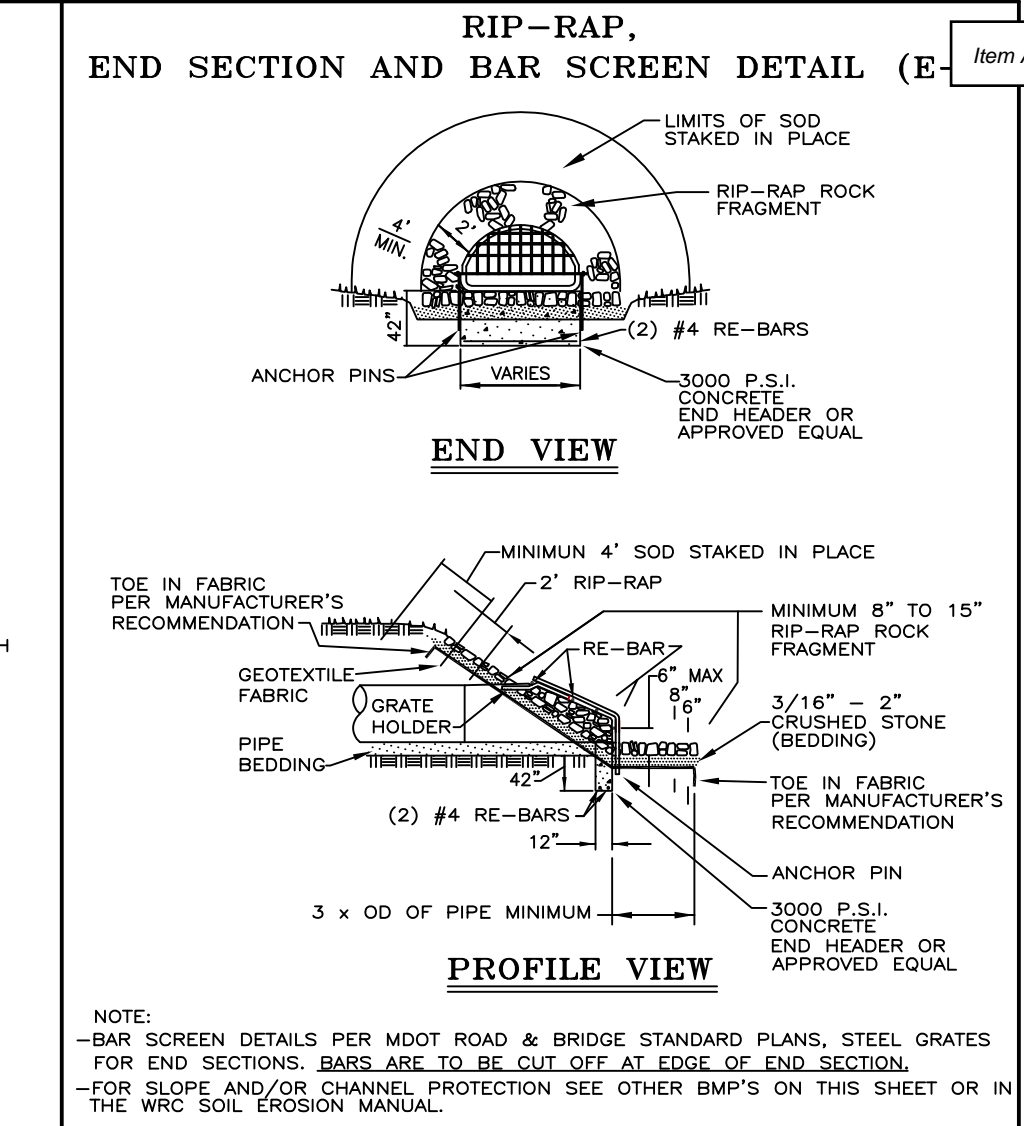
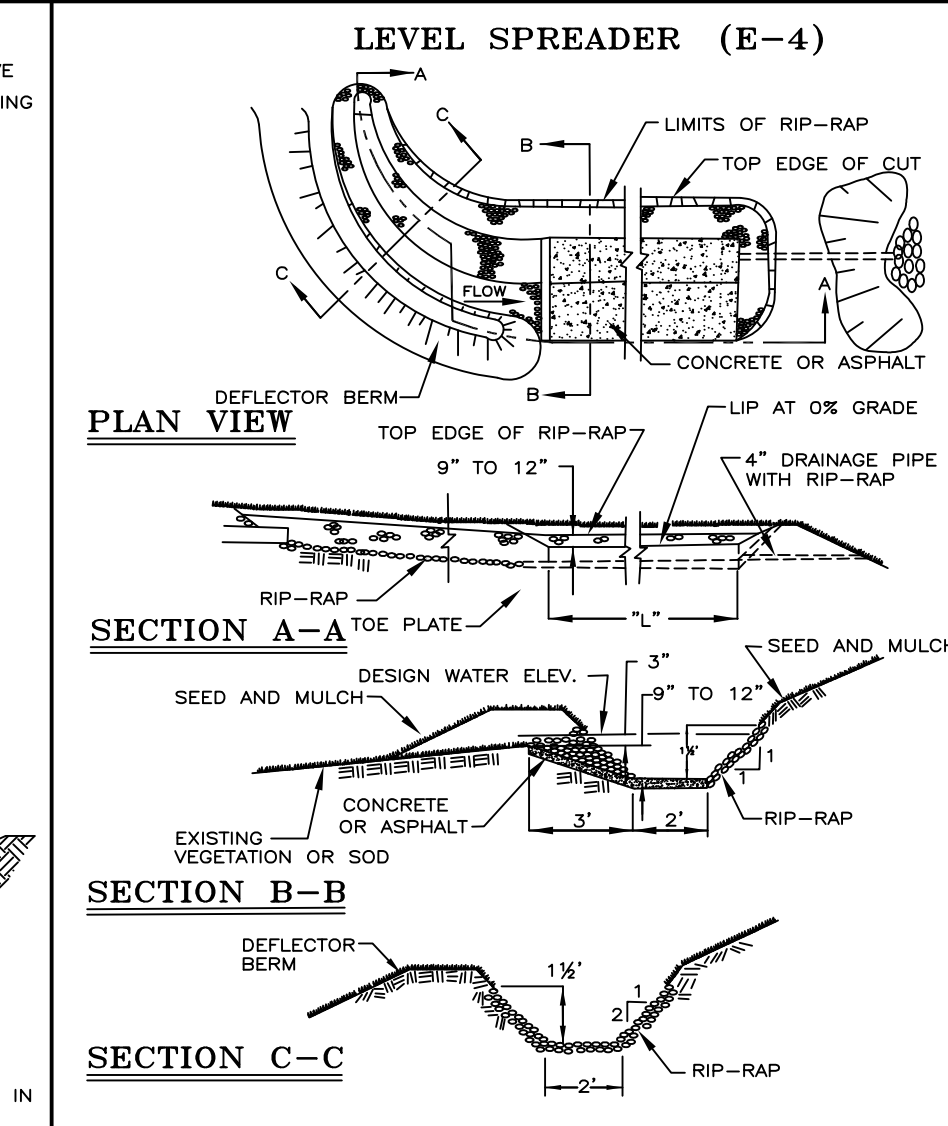
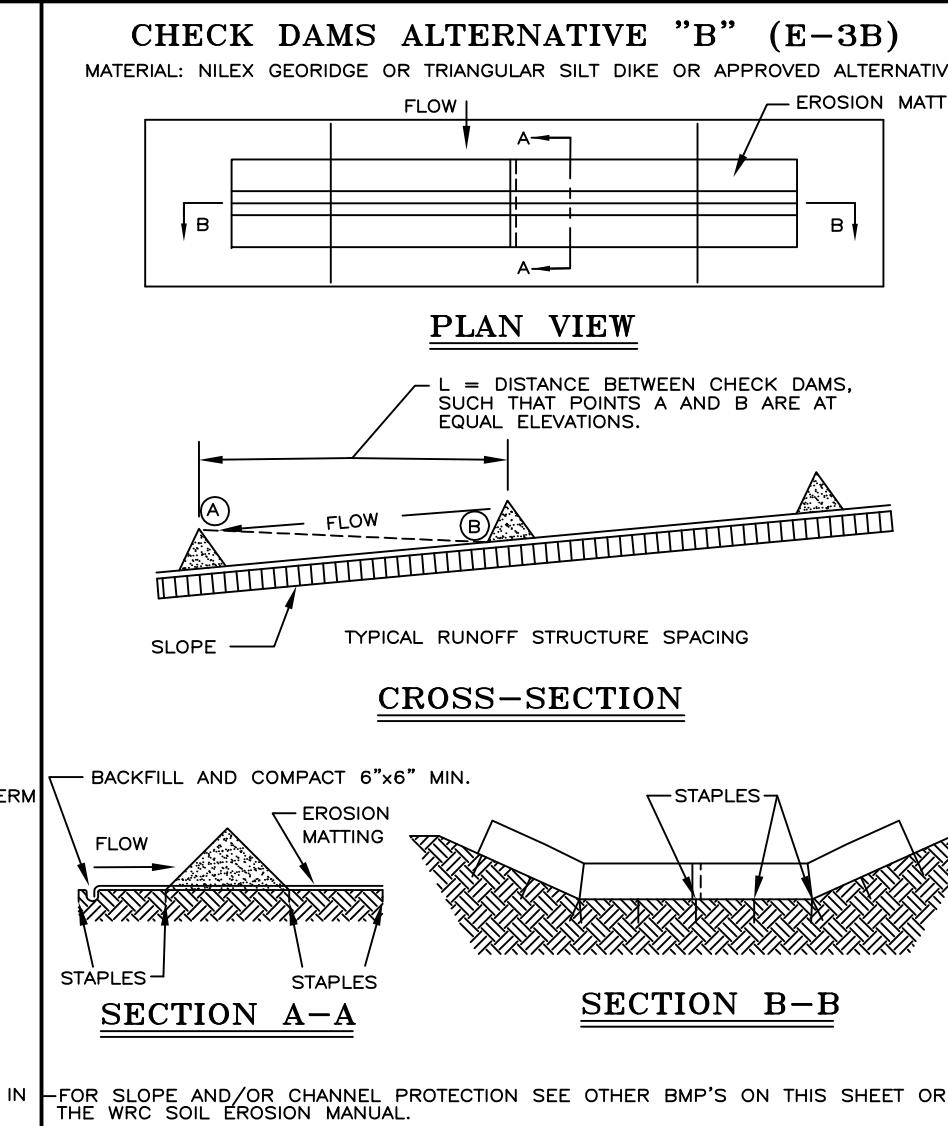
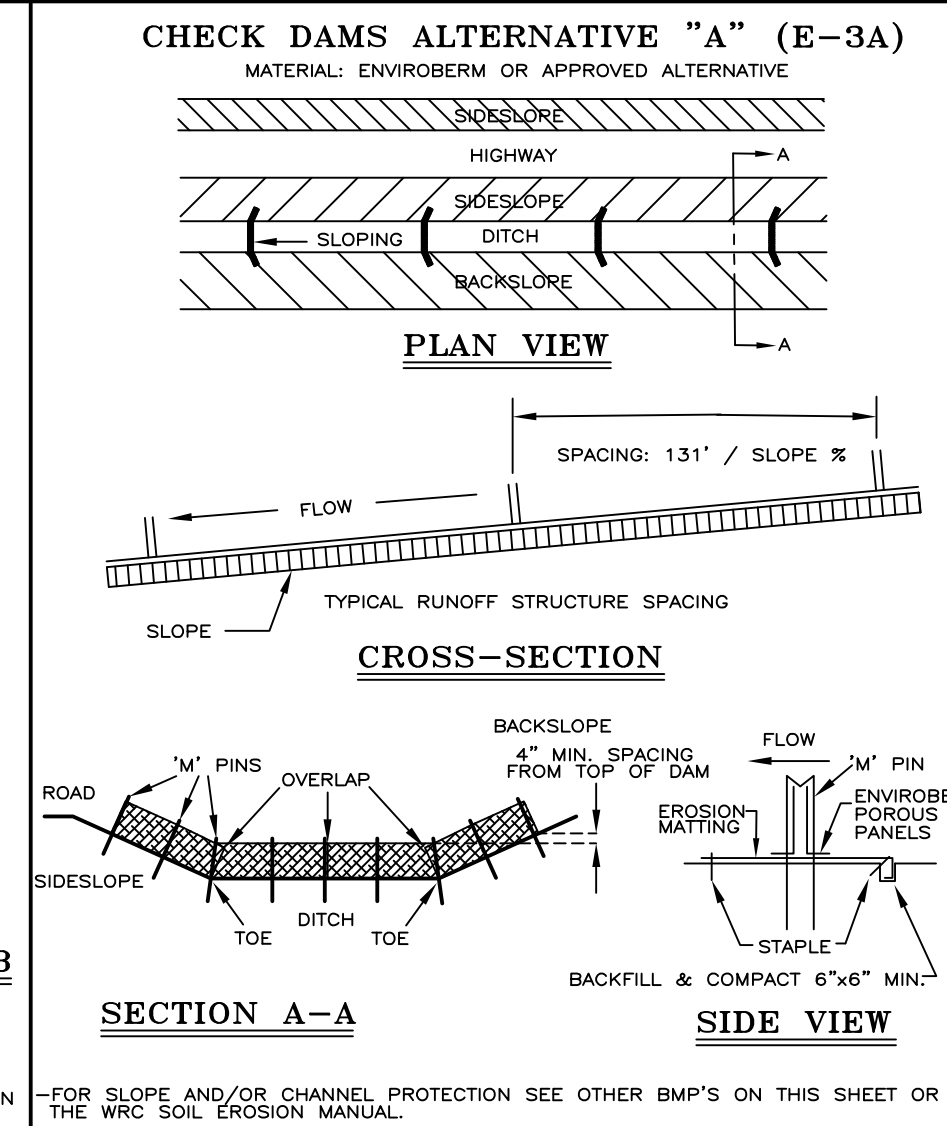
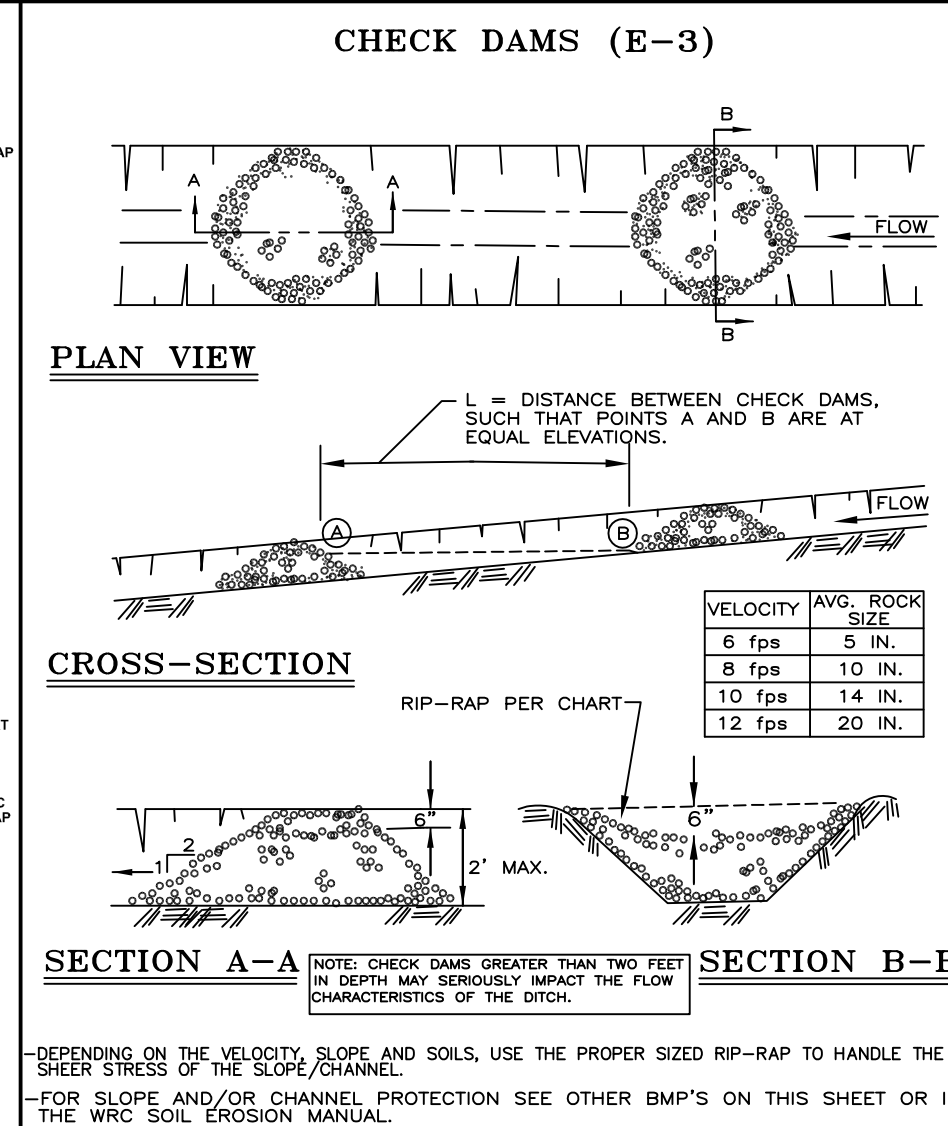
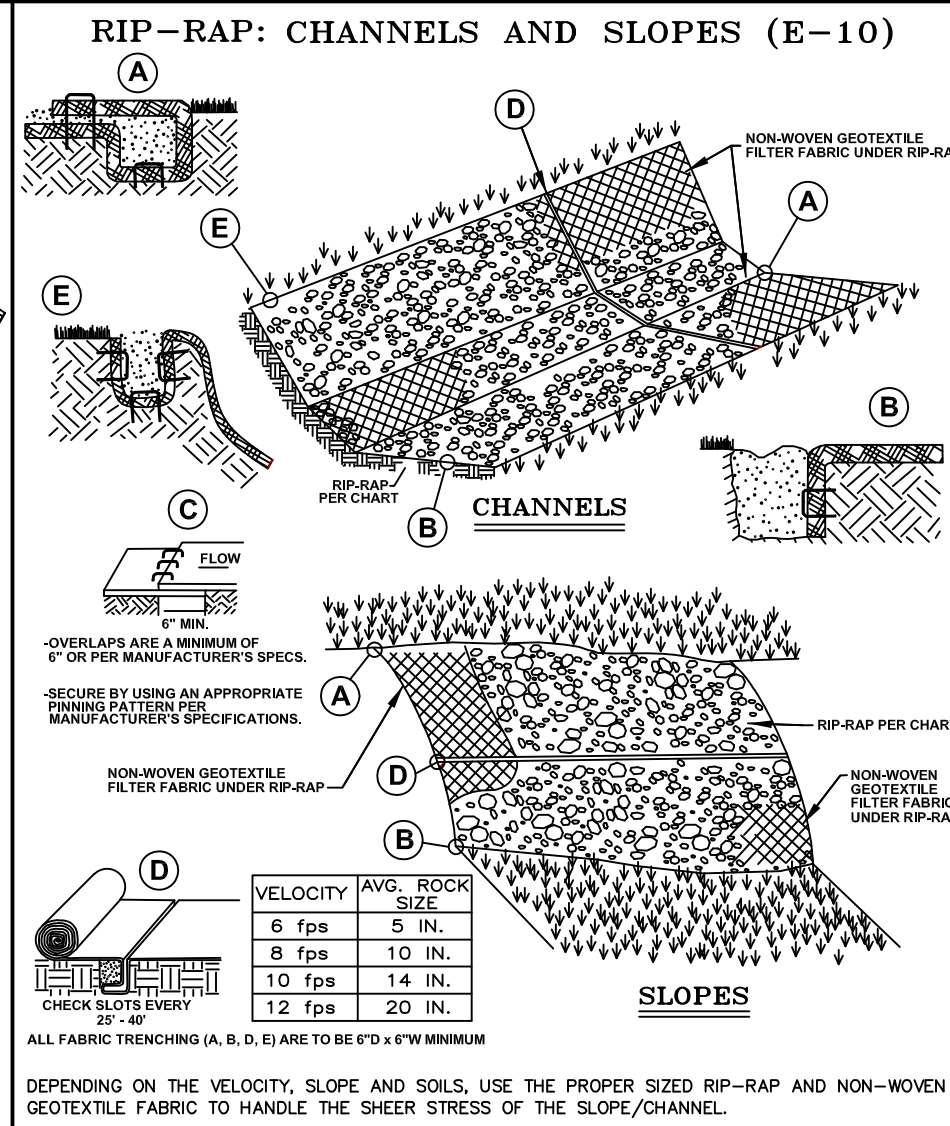
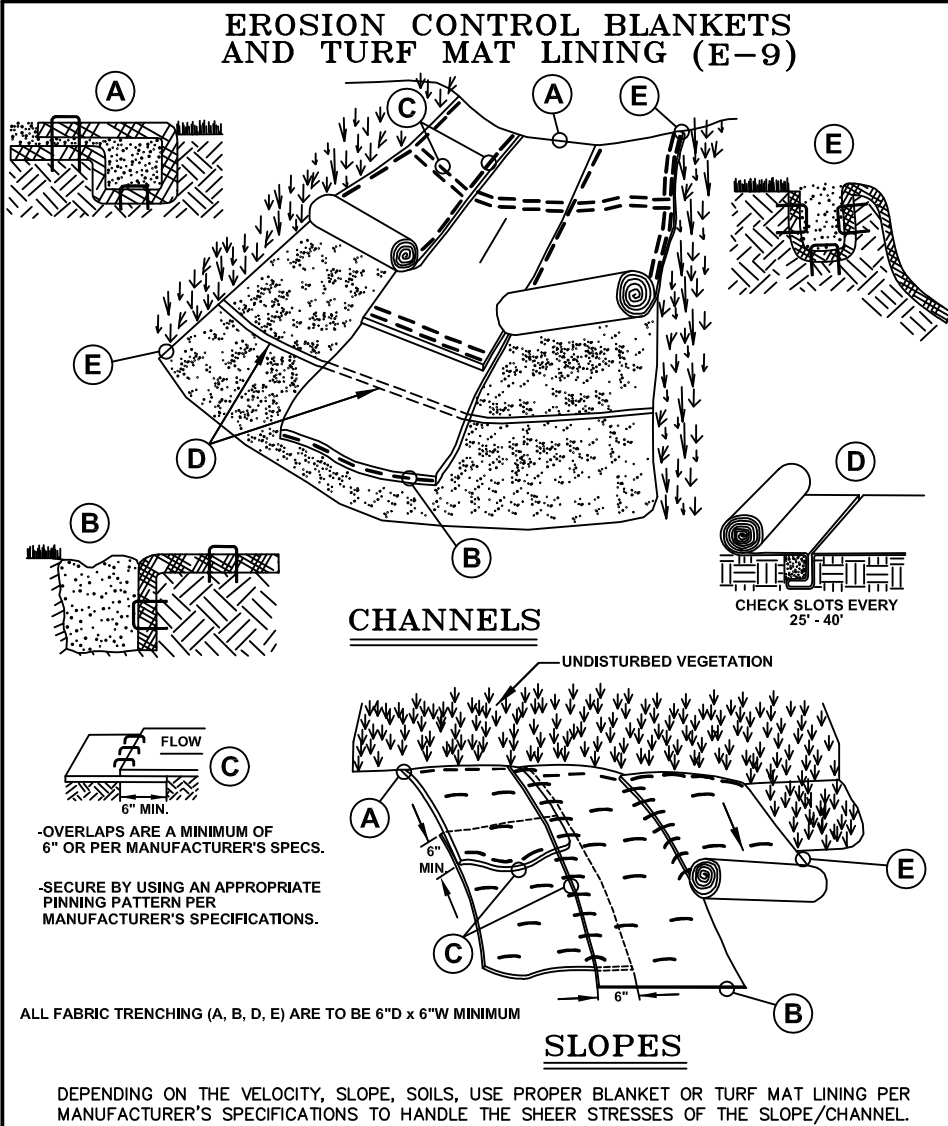
White Lake Township
7525 Highland Road (M-59)
White Lake, Michigan 48383
248-698-3300



STORM SEWER STANDARD DETAILS

JOB NO.
DATE ISSUED
08/16/95
SHEET NO.

VERT. -
SCALE: HORZ. AS NOTED



NOTE:

WHILE PERFORMING WORK INVOLVING GROUNDS MAINTENANCE AND/OR THE CONSTRUCTION/MAINTENANCE OF ANY INFRASTRUCTURE, INCLUDING ROADS, WATER MAINS, SANITARY SEWERS, STORM DRAINS AND STORM WATER BEST MANAGEMENT PRACTICES (BMPs), CONTRACTORS SHALL MINIMIZE POLLUTION FROM STORM WATER RUNOFF THAT CAN AFFECT WATER QUALITY RELATED TO WORK ACTIVITIES. POLLUTANTS THAT COULD IMPAIR WATER QUALITY MAY INCLUDE FUEL, GREASE AND OIL, NUTRIENTS, BACTERIA AND PATHOGENS, LITTER AND DEBRIS, AND SOIL EROSION AND SEDIMENTATION. APPLICABLE BMPs SHALL BE IMPLEMENTED BY THE CONTRACTOR TO THE MAXIMUM EXTENT PRACTICABLE TO PROTECT WATER QUALITY AND WILDLIFE HABITAT.

SOIL EROSION AND SEDIMENTATION CONTROL DETAILS

REVISION BLOCK

Rev.	By	Desc.
1	WRC	PROPOSED DETAIL
2	WRC	FOR CONSTRUCTION APPROVAL/NAME CHANGES
3	WRC	FOR CONSTRUCTION APPROVAL/NAME CHANGES
4	WRC	FOR CONSTRUCTION APPROVAL/NAME CHANGES

ORIG. DATE: 01/01/01

SCALE: NONE

DESIGNED BY: WRC

DRAWN BY: Mapping

WRC WATER RESOURCES COMMISSIONERS

ONE PUBLIC WORKS DRIVE, BLDG 95 WEST WATERFORD, MICHIGAN 48328-1907

SHEET NO.: 1 of 1

WHITE LAKE TOWNSHIP PLANNING COMMISSION

REPORT OF THE COMMUNITY DEVELOPMENT DEPARTMENT

TO: Planning Commission

FROM: Sean O'Neil, AICP, Community Development Director
Justin Quagliata, Staff Planner

DATE: September 11, 2023

RE: Oakland Harvesters final site plan/special land use extensions

Kieft Engineering, on behalf of Oakland Harvesters LLC, submitted a letter dated August 25, 2023 requesting extensions of the final site plan and special land use approvals for Oakland Harvesters. The Zoning Ordinance states the Planning Commission may grant an extension of special land use approvals for good cause, and the Zoning Ordinance allows the Applicant of a final site plan to request an extension in writing prior to the expiration date. The Oakland Harvesters property (Parcel Number 12-01-127-001) is located on the north side of White Lake Road, west of old White Lake Road and would contain a single-story 9,000 square foot building and outdoor storage.

On July 15, 2021 the Planning Commission granted special land use approvals for Oakland Harvesters, and on May 5, 2022 granted final site plan approval. The special land use approvals granted in 2021 expired on July 15, 2022. The Applicant submitted a new special land use application and received subsequent approvals on September 1, 2022. Approvals were subject to the Applicant obtaining a building permit and commencing construction by May 5, 2023. On April 6, 2023 the Planning Commission granted additional extensions of five months for both the final site plan and special land uses. Currently both the final site plan and special land use approvals expire on October 5, 2023. The Applicant is now requesting additional extensions for the project.

The Zoning Ordinance violations which prompted the Applicant's development requests date back to 2019 when the site began being utilized without development approvals and a Certificate of Occupancy. In the submitted letter requesting extensions, the reasons stated are to allow the Applicant time to coordinate a shared driveway with the property to the west, which received notice of Zoning Ordinance violations in August 2022 and remain uncorrected (outdoor storage without site plan and special land use review and approval). The Township should not have to wait months for the adjacent undeveloped property in violation to have a preliminary site plan prepared, submitted for review, and approved in order for Oakland Harvesters to commence construction on its project, which is needed to prevent its prior Zoning Ordinance violations from reoccurring on the site.

Planning Commission Options / Recommendation

The Planning Commission has the option to approve, approve with conditions, or deny the extension requests. If the extensions are denied, the Applicant must resubmit the final site plan and special land uses for Planning Commission consideration. **As the project previously received approval, re-approval following expiration, and an extension totaling 26 months since the initial special land use approvals, staff recommends a final four-month extension of both the final site plan and special land uses. If four-month extensions are approved, the new expiration date would be February 5, 2024.**

Attachment:

1. Letter from Kieft Engineering requesting extensions, dated August 25, 2023.



KIEFT ENGINEERING

5852 S. Main Street, Ste. 1
Clarkston, Michigan 48346CIVIL ENGINEERS &
LAND SURVEYORSTel: 248-625-5251
Fax: 248-625-7110
www.kiefteng.com

August 25, 2023

To: Justin Quagliata
Community Development Department
Charter Township of White Lake
7525 Highland Road
White Lake, Michigan 48383

Re: Oakland Harvesters – SPA & SLU Extension Request

Dear Mr. Quagliata,

Thank you for your ongoing assistance with the subject project. We understand that the Site Plan Approval (SPA) and Special Land Use (SLU) for this project are due to expire in early October. As you know Kieft Engineering has been retained for professional services by Mr. Nicolas Hopson of Lansing Impressions Landscaping (LIL), Oakland Harvesters' (OH) neighbor to the west. OH and LIL have come to an agreement, and have previously recorded easements to develop a shared drive on their shared property line. We recently completed our topographic survey of LIL parcel, and will soon begin work on a preliminary design for that development. We need to complete our preliminary design on LIL in order to finalize the shared drive for OH. Due to this new design direction, the time it took for our survey, and the time it will take for the preliminary design we have not been able to finalize the OH project. We kindly request that we be placed on the Planning Commission agenda in order to request an extension for the SPA and SLU for the OH project.

Thank you for your attention in this matter.

Sincerely,

Casey Leach, P.E.
Project Manager
Kieft Engineering, Inc.
cleach@kiefteng.com
248.884.8224

cc: Sean O'Neil – White Lake Township
Ty Nuottila – Oakland Harvesters

7. ECONOMIC DEVELOPMENT

REGIONAL CONTEXT

Economies are a web of relationships that span local, national, and global geographies. While municipalities have influence over economic development, they are beholden to laws, policies, and trends outside of their control that can have a negative or positive impact on local success. Due to its dependence on a larger system, economic development strategies are best conceived of and implemented with partners to strengthen the network and opportunities in which they operate.

Southeast Michigan is comprised of seven counties, including Oakland County. The Southeast Michigan Council of Governments, or SEMCOG, created a Comprehensive Economic Development Strategy for the region to reach economic success through strategies that emphasize collaboration, current conditions, and opportunities for growth and development.¹ By focusing on the three pillars of economic development (place, business, and talent), SEMCOG and the region endeavor to meet a vision of economic prosperity by ensuring communities have access to the following:

- Unique places that offer various housing choices for a large and diverse population;
- An educated and trained workforce that supports a multi-sector economy and provides opportunities for all;
- Healthy and clean lakes, streams, and air, as well as connected systems of trails, parks, and natural areas that support recreational and cultural amenities;
- Safe, efficient, and coordinated infrastructure systems that embrace advances in technology and focus on access for all; and
- Effective local government and engaged citizenry.

In local government, economic development is correlated to developing its land to accommodate its “highest and best use.” When land is used according to the analysis conducted in this Master Plan, the region’s need for housing, commercial, recreational, or industrial uses can be optimized for job creation, housing that is affordable for the workforce, or creating tourist destinations. This section will explore the region’s major employment sectors, partnerships, and opportunities for development/redevelopment.

¹ [Increasing Shared Prosperity for a Resilient Economy \(semcog.org\)](https://semcog.org/increasing-shared-prosperity-for-a-resilient-economy)

EMPLOYMENT INVENTORY

White Lake Township's rate of labor participation is reflective of employment patterns. Of the Township's population aged 16 years and older, 64.7% participate in the labor force. While Oakland County's rate of labor force participation is slightly higher at 66.2%, White Lake exceeds workforce participation in Michigan and the United States. As seen in the table below titled "Labor Force Participation, 2020," White Lake Township has experienced a lower unemployment rate than Oakland County, Michigan, and the United States; conversely, the Township has the highest percentage of households collect social security income (39.3%) compared to other scales of observation. White Lake Township also has the highest rate of self-employment when compared to the County and State.

Table XX: Labor Force Participation, 2020

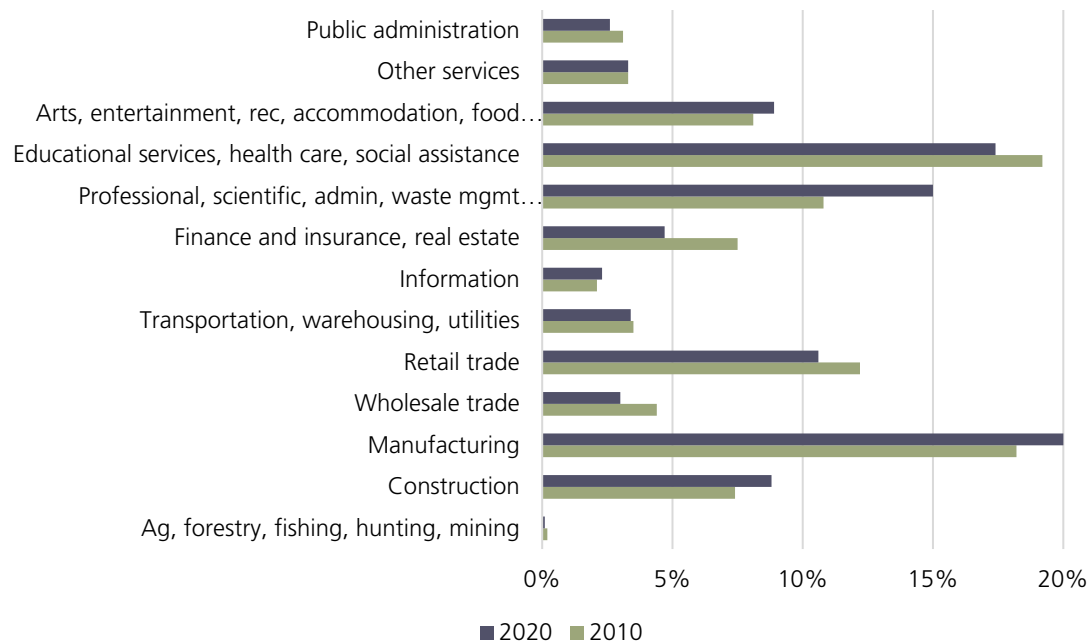
	White Lake Township	Oakland County	Michigan	United States
Labor Force Participation	64.7%	66.2%	61.5%	63.4%
Self-Employment Rate	5.6%	4.8%	5.0%	5.9%
Social Security Income	39.3%	30.9%	34.9%	31.4%
Unemployment Rate	4.6%	4.7%	6.0%	5.4%

Source: ACS 2020 5-Year Estimates, DP03

For residents of White Lake that are employed, the Census records the sectors of employment that residents participate in, regardless of where Township residents go to work. With the rise of remote work options, it is possible for residents of White Lake to work in sectors headquartered outside of the region; it is also possible for residents of White Lake to commute to places of work located outside of the township or county on a hybrid or daily basis.

The most prominent sectors of employment for White Lake residents in 2020 (not necessarily located within the Township) include: manufacturing (20%); educational services, health care, and social assistance (17.4%); and professional, scientific, administrative, and waste management services (15%). These sectors represent a little over half of all employers for residents of the Township. From 2010 to 2020, these three sectors have largely maintained the same prominence within White Lake they hold now. In 2010, retail trade included 12.2% of all White Lake workers, surpassing past levels of employment for those working in professional, scientific, administrative, and waste management services which was 10.8% that year. In 2020, workforce participation in retail services dropped slightly to 10.6% of the Township's working population, representing the fourth most prominent sector of employment.

Table XX: Industry Employment Over Time, 2010 and 2020

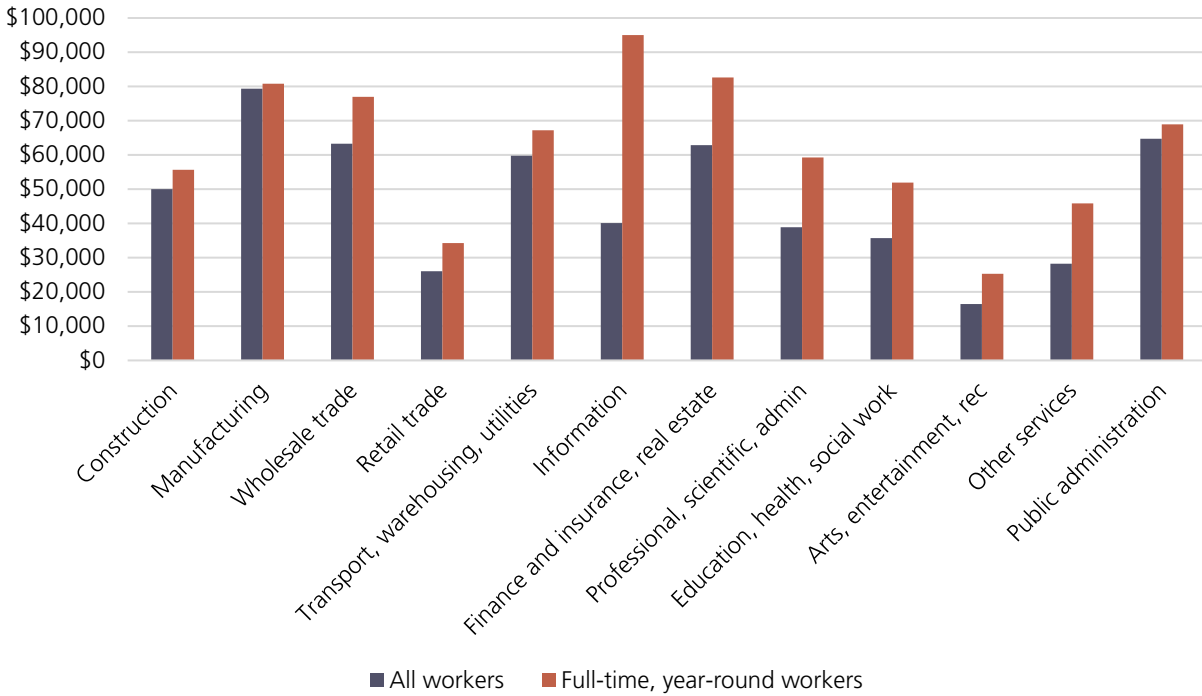


Source: ACS 2010 and 2020 5-Year Estimates, DP03

Median annual earnings vary across industries of employment, especially when distinguishing between all workers (including seasonal and part-time employment) and full-time, year-round participation in the workforce. In 2020, the median annual income for all workers in the Township was \$42,948, nearly \$20,000 less than the median income of full-time workers who are employed on a year-round basis and earn an average of \$60,794 annually.

Median incomes in the manufacturing sector did not vary greatly between different types of employment, likely indicating most employees in the industry work on a full-time basis. Additionally, manufacturing incomes come to approximately \$80,000 annually, the highest for “all workers” and the third greatest for “full-time, year-round workers,” which bodes well for the Township as the greatest portion of residents are employed in this sector. The two other most prevalent sectors of employment have median annual incomes notably less than manufacturing. Full-time, year-round employees of “educational services, health care, and social assistance” and “professional, scientific, administrative, and waste management services” earn \$51,952 and \$59,271, respectively.

Table XX: Median Annual Earnings by Industry, 2020

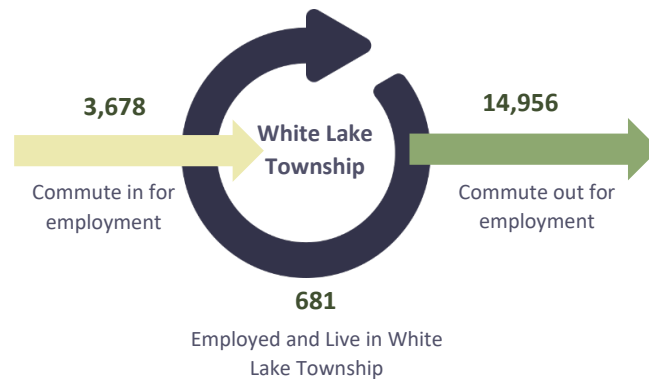


Source: ACS 2020 5-Year Estimates, S2413 and S2414

SECTOR ANALYSIS

With nearly 96% of all Township residents commuting to places of employment located out of White Lake, relevant industry trend analyses are most appropriate when conducted at the county level. While commuter patterns and the prevalence of employment outside of White Lake render the township a “bedroom community,” employment opportunities across Oakland County are relevant to Township residents in terms of current and future employment prospects. Subsequent patterns of growth, decline, and the extent of an industry’s presence at the county-level offer important information for residents of the Township. For these reasons, the following section of various sector analyses will center around Oakland County.

Figure XX: Commute Patterns, White Lake Township, 2019



Source: OnTheMap, United States Census Bureau

Products often go through multiple stages of manufacturing, processing, distribution, and sales before they get to the consumer. All of these stages are important economic links and form the broader economy. IMPLAN, an input-output economic modeling tool, was used to illustrate interdependence between industries and sectors in Oakland County. IMPLAN data is sourced from various governmental agencies including the Bureau of Economic Analysis, Census Bureau, and Internal Revenue Service. IMPLAN models upstream economic activity, or the activities and labor that take place on the supply side of production. This includes the resources, supply, and manufacturing of goods and services. IMPLAN does not model sales, use, and disposal activity, also known as downstream economic activity. IMPLAN models several elements of economic output, including labor income, intermediate output, and value added. The elements discussed in this section are described below.

- “Value Added” represents the contribution to the gross domestic product.
- “Total Economic Output” is the combined value of labor income, value added, and intermediate outputs.

The analysis was performed at a County scale to capture a regional economy while staying relevant to White Lake. Of the 546 industries modeled by IMPLAN, 433 are active in Oakland County. By looking at each industries’ change in economic output, size of economic output, and concentration in the County between 2014 and 2019, the industries are each categorized as mature, growing, emerging, or declining. These categorizations are determined by the industry’s *location quotient*, a statistical metric that measures a region’s industrial specialization compared to a larger geography, typically the state or nation. Location quotients (or LQs) greater than one indicate that industry

Declining: industries that have a small presence and declining economic activity; negative change

Emerging: industries that are expanding but have yet to establish a strong presence; trending towards positive change

Growing: industries with a strong regional presence that are expanding; positive change

Mature: industries that have been a specialty for the region but are now declining; trending towards negative change

contributes to a greater share of that community's economic activity. The table titled "Economic Base" shows how industries are categorized based on their location quotient and change in economic output.

Table XX: Economic Base

Industry Categorization	Description	Location Quotient	2014 – 2019 Economic Output
Growth Industry	Industries that have a strong presence in the region and are expanding.	LQ > 1	Positive Change
Emerging Industry	Industries that are expanding but have yet to establish a strong presence.	LQ < 1	Positive Change
Mature Industry	Industries that have been a specialty for the region but are declining.	LQ > 1	Negative Change
Declining Industry	Industries with a small presence and declining economic activity.	LQ < 1	Negative Change

The table titled "Growth and Decline Spectrum" provides an overview of the County's economy based on trends in industry presence and growth. In Oakland County, positive change has exceeded negative change. Emerging and growing industries have outperformed declining and mature industries in terms of the total numbers of businesses, dollars of economic output, and percentage of workers across employment sectors.

- 86.4% of workers in Oakland County are in growth or emerging industries
- Growth and emerging industries produce about six times the amount of economic input compared to mature or declining industries
- Almost 60% of all businesses have seen positive change in economic output between 2014 and 2019

Table XX: Growth and Decline Spectrum

Stage	Industry Count	Economic Output		Employment	
	Number	Dollars	Percent of Total	Count	Percent of Total
Declining	133	\$11,173,508,723	5.75%	49,207	5.1%
Emerging	141	\$53,146,244,804	27.36%	287,657	29.7%
Growth	115	\$113,452,604,314	58.40%	549,193	56.7%

Mature	44	\$16,494,517,420	8.49%	82,632	8.5%
Total	433	\$194,266,875,261	100%	968,689	100%

Source: IMPLAN, 2019

Regardless of an industry's classification as growth, emerging, mature, or declining, economic contributions take place at all stages of development. The table titled "Top Industry Trends" compiles the top five industries under each stage based on their economic output for 2019. Notably, Oakland County's growth industries have made the greatest economic contributions to the SEMCOG area, indicating promise and stability among the drivers of the regional economy. The County's highest producing growth industries follow themes of real estate, housing, and the design and engineering of spaces as well as insurance provision and company management. The top five emerging industries similarly exhibit high totals of economic activity – while these areas are not yet regional specialties, the extent of their productivity provides an indication the County should invest in these areas to solidify their position within the region.

Both mature and declining industries exhibit trends in terms of the sectors that have experienced declines in production despite their current contributions to the County's economy. Oakland County's most productive declining industries are dominated by manufacturing specific to automobile production, illustrating Michigan-specific trends relating to the exodus of mass car production. The County's top mature industries share characteristics in terms of wholesale products and technical activities related to financial investments, computer services, and wireless telecommunications. While the presence of these industries is more prevalent in Oakland County than in the State and Country, their contributions are diminishing.

Table XX: Top Industry Trends

Top Industries	Growth Industries	Emerging Industries	Mature Industries	Declining Industries
#1	Real Estate \$11,699.65M	Owner-occupied dwellings \$7,353.44M	Wholesale – Professional and commercial equipment and supplies \$1,960.48M	Automobile manufacturing \$1,914.44M
#2	Architectural, engineering, and related services \$9,746.54M	Hospitals \$6,578.91M	Wholesale – Drugs and druggists sundries (pharmacies) \$1,771.59M	Motor vehicle transmission and power train parts manufacturing \$1,358.63M
#3	Insurance carriers, except direct life \$6,351.68M	Scientific research and development services \$2,183.40M	Other financial investment activities \$1,585.70M	Retail – general merchandise stores \$1,019.16M
#4	Tenant-occupied housing \$5,326.29M	Other motor vehicle parts manufacturing \$1,962.76M	Computer systems design services \$1,511.07M	Motor vehicle seating and interior trim manufacturing \$851.82M
#5	Management of companies and enterprises \$5,026.89M	Electric power transmission and distribution \$1,641.77M	Wireless telecoms carriers, except satellite \$1,411.87M	Motor vehicle metal stamping \$833.11M

Source: IMPLAN, 2019

LARGEST SECTORS

This section analyzes industries by their regional advantage, economic output, and number of employees to inventory the County's strengths and areas for improvement.

Industries: Regional Advantage

A base sector analysis was performed to identify industries in Oakland County that are the largest exporters of goods and services as well as the industries that typically import goods and services. Exporting industries are important to identify because they inform the "base" of a municipality's economy. Exporting sectors draw money into the region across a broad geographical area, indicating which industries provide a competitive advantage for the region. The location quotient is used to pinpoint the County's major exporters in comparison to the presence of each industry in a broader geographic setting – location quotients greater than one indicate the presence of an exporting industry. The greater the location quotient, the more that industry exports and/or specializes in goods and services compared to a broader, national context.

As shown in the table titled "Top Five Export Industries in Oakland County, 2019," manufacturing industries remain a regional specialty for Oakland County; 19 of the top 20 export industries in Oakland County are in the manufacturing sector. However, the top 20 export industries only account for 4% of Oakland County's total economic activity, indicating regional specialties are not as productive as other industries. Of the top five export industries, all but "photographic and photocopying equipment manufacturing" showed positive growth between 2014 and 2019. "Photographic and photocopying equipment manufacturing" did not show growth nor decline over these five years, placing it in the "mature" stage.

Table XX: Top Five Export Industries in Oakland County, 2019

Export Industry	Location Quotient	Total Economic Output	Employment	Stage
Propulsion units and parts for space vehicles and guided missiles manufacturing	4.87	\$180,701,821	473	Growth
Nonferrous metal smelting and refining	4.19	\$18,832,477	13	Growth
Broadwoven fabric mills	4.05	\$13,344,963	36	Growth
Communications equipment manufacturing	3.91	\$80,511,164	207	Growth
Photographic and photocopying equipment manufacturing	3.71	\$8,358,414	20	Mature

Source: IMPLAN, 2019

Biggest Employers

The biggest employers in Oakland County are determined by the number of employees in each industry. In 2019, the County's most prominent sectors of employment spanned a variety of sectors; interestingly, none of the County's top employers were categorized in a manufacturing profession, likely a function of the fact the County is home to 254 separate manufacturing sub-industries. The table titled "Top Five Employers in Oakland County, 2019" details the most prevalent employers of the County. These employers comprise 20.9% of the County's total employment.

Table XX: Top Five Employers in Oakland County, 2019

Industry	Employment	Economic Output (millions)	Average Employee Compensation	Stage
Architectural, engineering, and related services	52,468	\$9,746.54	\$120,638.49	Growth
Real estate	50,696	\$11,699.65	\$74,848.87	Growth
Employment services	37,143	\$3,755.64	\$62,789.31	Growth
Hospitals	35,354	\$6,578.91	\$83,404.84	Emerging
Full-service restaurants	26,436	\$1,681.40	\$26,529.35	Emerging

Source: IMPLAN, 2019

In 2019, the average employee compensation for two of the five industries, by employment, is greater than Oakland County's average annual income (\$79,698) for the same year. Beyond the region's average annual income, the Asset Limited, Income Constrained, and Employed (ALICE) suggested survival and stability budgets provide greater context for whether these compensation figures are appropriate for employees in these sectors. A "survival budget" accounts for all necessary expenditures related to housing, food, transportation, childcare, etc. A "stability budget" estimates expenditures in these same essential categories while also incorporating a savings category and accounting for higher costs that contribute to greater financial stability over time.

About four out of the County's five largest employers provide average employee compensation fulfilling suggested survival budgets for the three selected household sizes, with the average compensation for the employment services industry just below the survival budget for a family of four. Additionally, four out of five of these industries fulfill the stability budget suggestion for a single adult in Oakland County. However, full-service restaurant employee compensation does not satisfy any suggested budgeting parameters – while a greater portion of employees in this industry may be employed on a seasonal and/or part-time basis, compensation in this industry is not sufficient to support even a single adult. Moreover, positions with predominantly part-time or seasonal employers are unlikely to include benefits, putting employees in a precarious situation should they have an accident and are not covered by an employer's insurance plan.

Table XX: ALICE Budget

	Single Adult	Two Adults	Two Adults, Two Children
ALICE Survival Budget	\$31,344	\$45,588	\$66,252
ALICE Stability Budget	\$54,792	\$76,836	\$133,872

Source: ALICE United, 2021

Greatest Economic Output

The table titled “Top Five Largest Industries in Oakland County by Economic Output” highlights the five industries with the largest economic output in 2019. Real estate, which includes leasing, appraisal services, and financing, has the highest economic output in Oakland County, totaling over \$11 billion. One third of Michigan’s total economic output from the real estate industry originates from Oakland County.² The real estate industry employs the second most individuals in the county behind the architecture, engineering, and related services industry which employs roughly 52,000 people.

Table XX: Top Five Largest Industries in Oakland County by Economic Output

Industry	Total Economic Output (millions)	Intermediate Outputs (millions)	Value Added (millions)	Labor Income (millions)	Employment
Real Estate	\$11,700	\$5,957	\$5,742	\$2,341	50,696
Architecture, Engineering, and related services	\$9,747	\$3,551	\$6,196	\$5,768	52,468
Hospitals	\$6,579	\$3,144	\$3,435	\$2,960	35,344
Insurance Carriers	\$6,352	\$3,265	\$3,087	\$1,015	10,429
Management of Companies and Enterprises	\$5,027	\$1,936	\$3,091	\$2,741	21,241

Source: IMPLAN, 2019

COVID IMPACTS

While Oakland County has shown signs of bouncing back from the economic impacts of COVID-19, the pandemic has had a lasting effect on the County’s overall economy. Using a similar economic base analysis for the years 2019 and 2021, the IMPLAN model helps explain the recovery process for the County’s industries in comparison to industry activity across all of Michigan. In 2021, the County’s economic output was about \$187 billion dollars less than its output prior to the pandemic (\$201,588,679,429.64 in 2021 vs. \$388,533,750,520.74 in 2019).

The table titled “COVID Impacts” details the distribution of industry growth between 2019 and 2021, stating how industries have grown or declined over this period of time and to what extent these changes have taken place in comparison to Michigan. The total number of industries whose output has declined or increased over these two years is nearly the same – in total, 216 industries experienced a decrease in their total economic output while 217 experienced an increase in economic activity. However, the greatest portion of industries (40.2%) fall in the category of “decline and underperform,” meaning the economic activity of these industries in Oakland County declined over these two years and to a greater extent than they did across the rest of the State. The second most

² IMPLAN, 2019

prominent category of industries are those in the category of “increase and outperform,” meaning economic activity increased between 2019 and 2021, and to a greater extent than the State.

Table XX: COVID Impacts

Industry Status	Description	# of Industries	% of Total	Example Sector
Decline and Underperform	Industry declined after COVID to a greater extent than it did across Michigan	174	40.2%	Automobile manufacturing; custom computer programming services; overhead cranes, hoists, and monorail systems manufacturing; turbine and turbine generator set units manufacturing
Decline but Outperform	Industry declined after COVID but to a lesser extent than it did across Michigan	42	9.7%	Breweries; plastics material and resin manufacturing; cutting tool and machine tool accessory manufacturing; tenant-occupied housing
Increase and Outperform	Industry increased after COVID to a greater extent than it did across Michigan	150	34.6%	Air conditioning, refrigeration, and warm air heating equipment manufacturing; custom architectural woodwork and millwork; satellite, telecommunications resellers, and all other telecommunications; upholstered household furniture manufacturing
Increase but Underperform	Industry increased after COVID but to a lesser extent than it did across Michigan	67	15.5%	Curtain and linen mills; natural gas distribution; retail - food and beverage stores; women's and girls' cut and sew apparel manufacturing

Source: IMPLAN, 2019 and 2021

DEVELOPMENT OPPORTUNITIES

Analysis of the Township’s economic position, prominent industries, employment patterns, and barriers to growth can be considered alongside community engagement results to determine the “highest and best” use of available land. Determining the highest and best use of parcels prime for development or redevelopment matches these spaces with the land uses and businesses in highest demand within the community. However, due to the size, shape, and surroundings of each parcel, sites may not be suitable for the most requested types of uses.

Community Insights

The White Lake Township community survey assessed resident perceptions of the local economy, including their preferences regarding commercial developments and how their economic needs fit in with other Township goals and priorities such as the preservation of natural and open spaces. It is worth emphasizing “undesirable commercial development” ranked fourth out of 11 options for respondents to identify the top three challenges facing the Township over the next decade. To address the prospect of appropriate commercial development, respondents overwhelmingly supported approaching commercial development through the revitalization of former commercial buildings that have become vacant and/or retrofitting strip malls to support new commercial activities. The preference for these approaches aligns with respondent concerns about the potential loss of open and/or natural spaces as new commercial areas are developed – revitalizing vacant spaces presents the opportunity to utilize existing sites instead of developing new ones. Increased traffic was also a prominent concern in the discussion of additional commercial development.

When asked about the types of retail establishments respondents would like to see in the Township, food and beverage stores and restaurant and drinking establishments received the greatest support as uses that respondents would visit on a daily or weekly basis. Respondents specifically expressed support for the Township’s development of additional restaurants and bars, farm-to-table eating establishments, family-friendly restaurants, cafes, and breweries, with each eating and drinking option receiving support from 50% or more of all survey takers.

Redevelopment Sites

On August 17, 2023 the Planning Commission hosted a workshop to gather public input on five sites of possible redevelopment. The workshop was held between 5pm and 7pm in the Township Annex, and approximately 100 members of the public attended.

The central aim of the workshop was to begin a conversation among residents about the potential of five sites selected for consideration by the Planning Commission. Though some sites identified for this workshop are currently vacant, two sites were part of the Township's Master Plan update in 2012. Concepts for future development and use at both sites were developed during the last planning process, and both concepts were presented again during the workshop. The other three sites provided blank slates for residents to share their ideas based on the site surroundings as well as general desires for development in the area. The full results from the workshop can be found in the appendix. The Planning Commission picked three of the sites as prime redevelopment opportunities for evaluation in this Master Plan.

Pontiac Lake Gateway

The Pontiac Lake Gateway concept plan was developed during the 2012 update to the Master Plan. Pontiac Lake Gateway offers an opportunity to showcase White Lake Township at its only major entry from the east by enhancing lake views, removing blighted structures, and improving connectivity for pedestrians. The 2012 concept proposed retail and service uses, multi-family residential, plazas and spaces for public art, a hotel and/or conference center, and a pedestrian walkway. Workshop participants resoundingly rejected the 2012 concept; 66% said it did not fit with their vision of the area.

Comments, suggestions, and concerns about this concept were provided by attendees on sticky notes and are summarized below. While just 6% of all comments suggested this concept should be rethought in its entirety, all other suggestions coalesce around a few themes that should be the focus of any revisions to the existing concept to align with the vision of the community.

- **Support for the concept** as a way to utilize the lake setting, create a community space, and remove deteriorating structures.
- **Support for the pedestrian walkway.** Respondents shared they would support a biking/walking path around Pontiac Lake.
- **Support for the development of restaurants/bars along the waterfront.** Attendees specified they would like to see a nice, affordable restaurant in the area and also suggested boat docks be provided.
- **Opposition to multi-family residences.** This was the most common takeaway from the concept with about 37% of all comments sharing this sentiment.
- **Opposition to the hotel and conference center.** While there is evidence of some support for this development, attendees expressed they would prefer uses specific to the wellbeing and use of permanent residents rather than visitors.
- **Some opposition to retail.** While some respondents expressed their support for retail and shopping as a compliment to restaurants, bars, and other dining areas, others shared

concerns about M-59 traffic as a challenge to utilizing these retail spaces, as well as a preference to keep the Township's retail in the M-59 and Elizabeth Lake Road area.

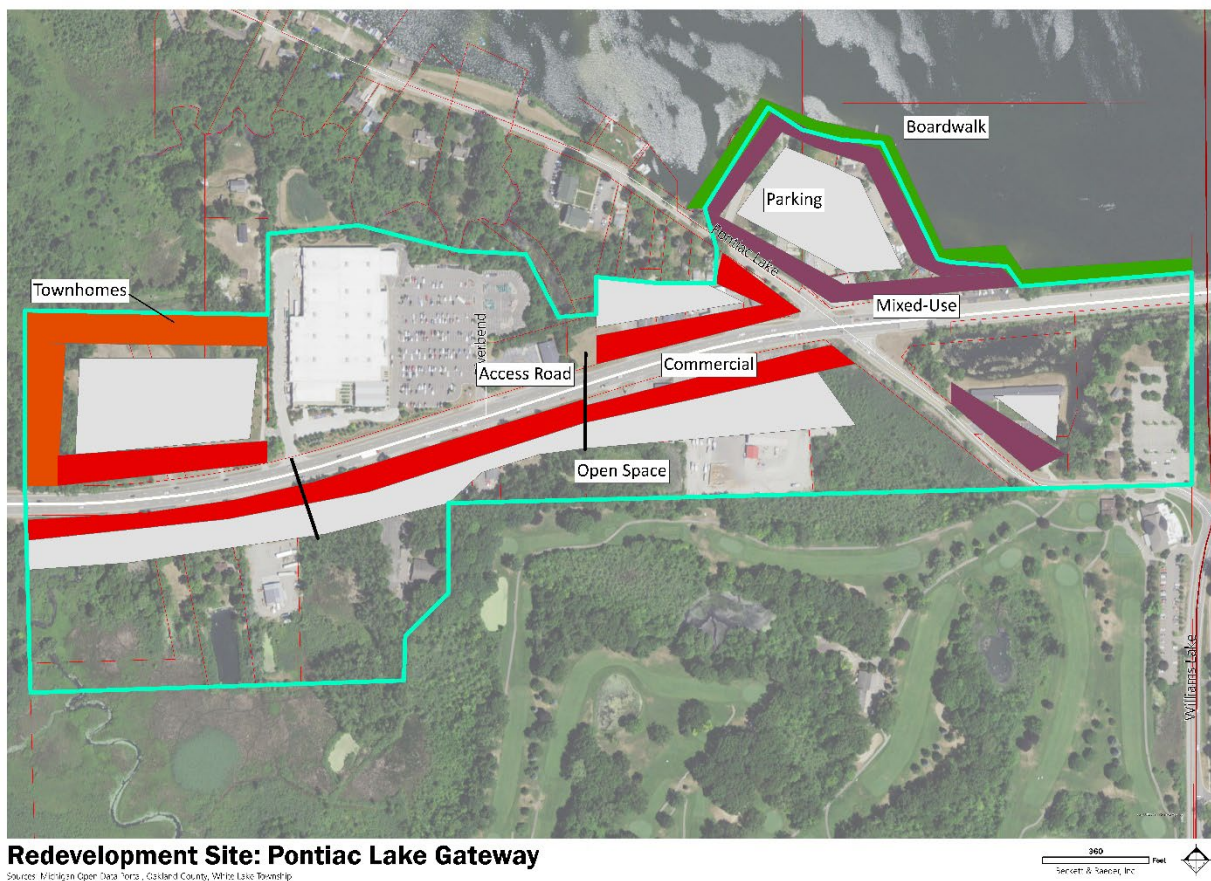
The following concept envisions the area as a key and welcoming gateway into the community. At the northern intersection of Pontiac Lake Rd and Highland Rd/M-59 is a two-story mixed-use concept with frontage along the roads and the lake, with parking located in the middle. The mixed-use concept includes restaurants, retail, and residential on the second floor. This area is intended to be walkable and integrated into the shoreline of Pontiac Lake. People can access this area via foot, bike, car, or boat. Boaters can dock along the boardwalk and walk to restaurants or shops. Along Highland Rd/M-59 is traditional commercial development but an emphasis is placed on fronting buildings on M-59 and locating parking in the rear. There are limited curb cuts and the properties are served by access roads at the rear. At the western edge of the gateway is a cluster of townhomes tucked. The southern end of the gateway is maintained as undeveloped open space. This area is not intended to be initially used for recreation but could be developed with walking trails in the future. However, as this is intended to be privately owned open space doing so would require easements or other dedications.

Table XX: Sample Images

Mixed-Use	
Commercial	



Figure XX: Pontiac Lake Gateway Redevelopment Concept



Cedar Island and Bogie Lake Rd

This redevelopment site is located in the southern part of the Township and is in close proximity to three primary/secondary schools (Lakewood Elementary School, White Lake Middle School, and Lakeland High School) as well as the Brentwood Golf Club and Banquet Center. This site's location on Bogie Lake Road provides a direct connection to M-59, making it accessible from across the Township.

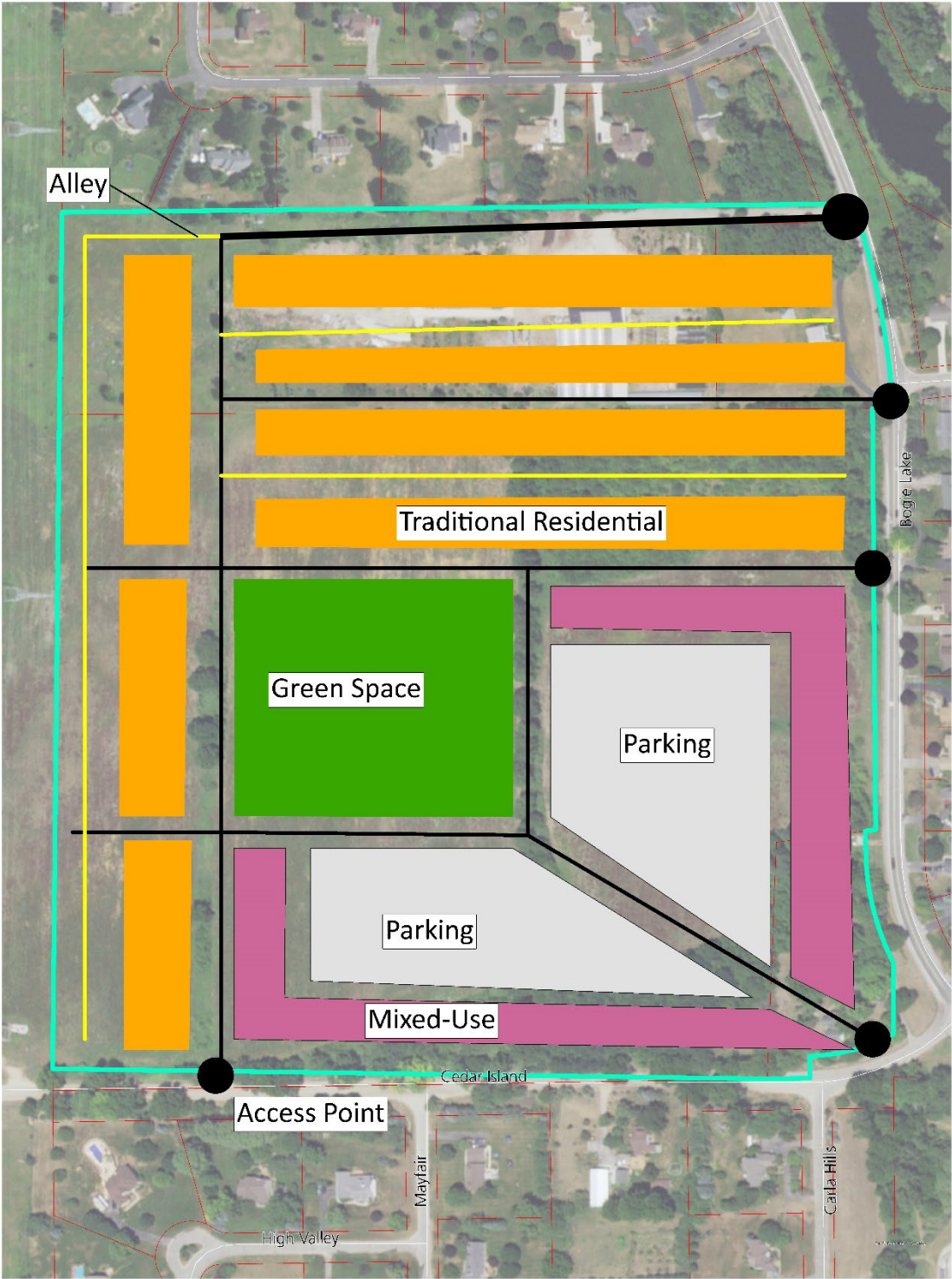
The two most common responses supporting the development of single-family homes and a community gathering space/pavilion complement each other and provide a vision for development that aligns with the area's current landscape of schools and neighborhoods. Developing homes near the schools presents a wise pattern of development that enables access for families with school aged children. This alongside a community space, park, and/or outdoor pavilion presents an opportunity for utilization by a wide range of users, such as students, families, and nearby residents. While less aligned with the two most popular choices, the support for mixed-used development in this area also provides a complimentary use to nearby schools as the activity in the area is likely to support new businesses.

The redevelopment concept envisions this area as a community anchor in the southwest section of the Township. The main entrance to the site is along Cedar Island Road, near the intersection of Bogie Lake Road. This entrance is flanked by two-story mixed-use development which leads to the central greenspace at the heart of the site. The greenspace is envisioned as a place for active recreation (soccer, pickleball, etc.) with nearby shops and restaurants. Parking is located between the mixed-use developments and the roads. Traditional single-family residential units are located at the rear of the site with frontage on the internal circulation streets. Access to garages is provided via alleys so the main face of the residential blocks is unbroken by driveways.

Table XX: Sample Images

Mixed-Use	 
Traditional Residential	 

Figure XX: Cedar Island and Bogie Lake Road Redevelopment Concept



Redevelopment Site: Cedar Island Road

Sources: Michigan Open Data Portal, Oakland County, White Lake Township

160 Feet
Beckett & Raeder, Inc.

Lakes Town Center

This redevelopment site is located in the center of the Township at the southwest corner of Highland Road (M-59) and Elizabeth Lake Road, which contributes to its accessibility from across White Lake. The lot is just yards away from the proposed Civic Center and across Elizabeth Lake Road from Village Lakes. Amid this access to public institutions, shopping, and dining, recreational spaces like Hawley Park and Stanley Park are in close proximity.

The two most popular uses for this site (restaurant/shopping district and mixed-use) complement each other well. Developing a restaurant and shopping district to support community entertainment and commercial interests is compatible with mixed-use developments that incorporate residential units in commercial buildings. The site's location across from Lakes Village provides a natural expansion with similar uses that emphasize leisure and entertainment.

This redevelopment concept envisions a mixed-use/commercial district that focuses on entertainment with restaurants, retail, and other destination venues. The district is intended to build on the Civic Center and connect that development to M-59. This mixed-use development is fronted on both an internal street and greenspace. The courtyard created around the greenspace creates a social environment where people can patronize an individual business but be in a collective space. The concept envisions the businesses in the mixed-use development using the greenspace for outdoor dining and entertainment.

Table XX: Sample Images

Mixed-Use	 
Commercial	 



Figure XX: Lakes Town Center Redevelopment Concept



Redevelopment Site: Lakes Town Center

Sources: Michigan Open Data Portal, Oakland County, White Lake Township

250 Feet
Beckett & Raeder, Inc.

Placemaking

Building a sense of place starts with defining borders, a core, hubs of activity, and landmarks in the public realm so that passers-by understand where the district begins and ends. Place, by definition, should be distinct enough for people to immediately distinguish it from other neighborhoods or districts.

Placemaking's main charge is to create desirable places with a focus on physical improvements. As so much of the economy is impacted by activity that takes place outside of the Township, the focus on investing in beauty through landscaping, amenities, art, and events helps to create a distinguishable "place" that entices residents and tourists to visit. Public investment signals to developers the Township is ready and willing to support business establishments, simultaneously setting the tone for how they should fit in. It takes the coordination of public and private dollars to create a place that people want to be. Placemaking's connection to economic development is straightforward. One study found "people are 50% more likely to spend time in spaces with creative placemaking."³ Related to this, people will also be more likely to recommend this place and spend more money there.

Within White Lake Township, the majority of placemaking efforts prioritize natural features, parks, and recreational spaces as a testament to the Township's commitment to natural space preservation.

Stanley Park

Located on Elizabeth Lake Road just southeast of the Civic Center, Stanley Park provides beach access to Brendel Lake as well as a system of trails. Stanley Park and its placemaking efforts are unique in that the Township's 5-Year Recreation Plan for 2023-2027 focused on redevelopment plans for the park to improve facilities while also maintaining and preserving its natural features.

Corridor Improvement Authority

The White Lake Township Corridor Improvement Authority (CIA) aims to promote private development and redevelopment, highlighting the Township's position as a "Four Seasons Playground" and offering world-class recreational opportunities for residents and visitors alike. The Authority's focus is on the Highland Road corridor with the intention to promote the area's natural amenities, non-motorized connectivity, and nodes of retail, dining, entertainment, and lodging to round out the corridor experience.

In 2023, the CIA recommended the Township Board adopt a development plan and tax increment financing (TIF) plan. The plan outlines a TIF funding mechanism which captures increases in tax revenue from a portion of properties in the CIA which are not taxed at a higher rate; the TIF diverts future revenues to the CIA. Between 2024 and 2043, the TIF is estimated to capture \$12,273,133.

For CIA programs and projects, redevelopment encompasses the physical, economic, and social elements of place. Projects the CIA has proposed include branding and marketing efforts, wayfinding

³ Real Estate News. "New Research Reveals the Impact of Creative Placemaking." November 2016. <https://storeys.com/new-research-reveals-the-impact-of-creative-placemaking/>

signage, streetscape improvements (including beautification efforts and area branding), and various improvements to traffic flow, non-motorized connections, and transit-oriented development.⁴

Table XX: Proposed CIA Projects

Project	Description	Timeline
Branding	A branding process creates a distinct identity to be established for the District and the Township. The CIA will promote the area as a community center and area of regional appeal and business attraction. Branding the district will also set the themes of other visual improvements, gateway signage, marketing, and wayfinding.	2024 – 2025
Entryway and Wayfinding Signage	Include wayfinding that would direct visitors within the district to the Town Center, Gateway District, parks, community buildings, and other points of interest.	2027 – 2029
Streetscape Improvements	Includes enhancements to the streetscaping, landscaping, public art, seasonal displays, and other design elements. Provide a visual connection between M-59 and other corridors.	2030 – 2032
Pathway Extensions and Improvements	Improve non-motorized transportation throughout the District. Connect M-59 with residential, commercial, and recreational areas. Complete the Township Triangle Trail to connect Town Center and Library to M-59 and Teggerdine Road.	2028 – 2035
Traffic Safety Improvements	Build intersection capacity and additional safety improvements throughout the District. Add safe pedestrian and non-motorized crossings.	2025 – 2035
Enhanced Transit Stops and Transit-Oriented Development	In conjunction with the expansion of WOTA along M-59, enhance transit stops with cover and seating. Promote transit-oriented development.	2028 – 2035
Sewer Extensions	Expand sanitary sewer to underserved and unserved areas of the District.	2028 – 2034
Water Extension / System Improvement	Expand water service to underserved and unserved areas of the District.	2028 – 2034
Property/Easement Acquisition	Potentially acquire property through fee simple or by easement.	2025 – 2035

ECONOMIC DEVELOPMENT PARTNERSHIPS

As forces both inside and outside of White Lake play a role in the Township's overall economic health, the Township itself is not solely responsible for its continued development and economic prosperity. As a part of a network, White Lake will have to cooperate with agencies and organizations that have a larger scope of operation and connections to resources such as funding, expertise, talent, and

⁴ [MEET-Packet-197320c748a24e679194674cc23a15f8.pdf \(usgovcloudapi.net\)](#)

program management. Economic partnerships could include cross promotion, regularly scheduled meetings, joint projects, and other opportunities for mutual support as needed. Below is an inventory of local and regional partners to support the Township's economic development.

Table XX: Economic Development Partners

Organization	Focus Area/Expertise
Advantage Oakland	Oakland County's economic development department, connecting jurisdictions across the County to resources to support businesses with capital acquisition, workforce development, entrepreneurial endeavors, and more. ⁵
Community Foundation for Southeast Michigan – New Economy Initiative	The New Economy Initiative is a special project of the Community Foundation for Southeast Michigan committed to regional economic development to encourage further investment. The initiative focuses on supporting service providers by providing technical assistance through business planning, providing capital to new and growing businesses, and connecting businesses to each other and their community. ⁶
Oakland Chamber Network	Oakland Chamber Network seeks to cultivate a collaborative business environment across the region where member chambers can access resources that support each individual chamber's mission.
Lakes Area Chamber of Commerce	The regional chamber for western Oakland County that serves the communities of Commerce, Walled Lake, Waterford, White Lake, Wixom, Wolverine Lake, and the Union Lake Business District since 1950. With approximately 400 members, the Chamber represents a diversified group of businesses, drives economic progress, and facilitates valuable connections through networking and other initiatives. ⁷
Southeast Michigan Council of Governments	The Southeast Michigan Council of Governments (SEMCOG) supports local planning by providing technical services, data analysis, and intergovernmental resources. SEMCOG's technical assistance in the region's economic development covers many facets, including a recently published report titled Increasing Shared Prosperity for a Resilient Economy (semcog.org) .

⁵ [Business Development | Oakland County, MI \(oakgov.com\)](https://oakgov.com/business-development)

⁶ [New Economy Initiative • CFSEM](#)

⁷ [Lakes Area Chamber of Commerce](#)

9. Goals and Implementation

Good planning uses data and community preferences to shape a preferred course of action. In this section, findings from previous chapters of the Master Plan and series of community engagements are used to build an Action Plan of strategies. This Action Plan is intended to advance White Lake Township towards its goals by providing guidance for future planning efforts.

The following vision from the 2012 Master Plan was shared through the community survey at the start of the master planning process:

“Strive for a sustainable White Lake Township that balances the community’s economic, environmental, and social needs. Promote the identity of White Lake Township as a small country town with big city amenities by protecting and preserving natural features, encouraging redevelopment of obsolete properties, and directing growth and development to a central community core.”

When asked if this vision still aligned with their vision of white lake, 77% of respondents stated that it did. The 2012 vision is carried forward with this Master Plan. In addition to the 2012 vision, the following 10 goals were identified and shared through the community survey at the start of the master planning process. The survey asked respondents to select their top three goals, the results are detailed in the table titled “Goal Survey Results.”

Table XX: Goal Survey Results

Goal	All Survey Respondents	White Lake Residents
Preserve and protect natural features including wetlands, floodplains, lakes, woodlands, and other natural features	69%	69%
Maintain the small-town rural character of existing single family residential areas	49%	49%
Provide adequate infrastructure that preserves and protects White Lake Township’s natural features	46%	46%
Address the community’s needs for efficient and safe multi-modal access (walking, biking, auto)	31%	32%
Enhance the quality of life and make the community more appealing by providing a variety of recreational facilities	26%	26%
Provide goods and services that meet the current and future needs of Township residents	22%	22%
Address the community’s needs for sewer and water systems	20%	20%

Provide efficient public services that adequately and safely support the existing and future population of White Lake Township	17%	17%
Encourage high tech, research, and light industrial developments to improve the tax base and provide job opportunities	7%	7%
Provide a variety of housing opportunities	3%	3%

Based on community feedback, the goals were revised to the following:

- a. Invest in infrastructure and implement appropriate regulations and policy measures to preserve and protect natural features, including wetlands, floodplains, lakes, woodlands, and other natural features.
- b. Enhance the quality of life and make the community more appealing by providing a variety of recreational facilities.
- c. Maintain the small-town rural character of existing single-family residential areas while pursuing opportunities to meet the Township's housing needs.
- d. Address the community's needs for efficient and safe multi-modal access (walking, biking, automobile, etc).
- e. Provide goods, services, infrastructural upgrades, and public services systems to meet the current and future needs of Township residents.
- f. Improve the Township's tax base and provide job opportunities by encouraging beneficial development/redevelopment projects.

Table XX: Action Plan

Action Item	Applicable Goal(s)	Timeframe
Retain residents between the ages of 25 and 34 by responding to demand for more housing units, including affordable housing options.	E	Medium term
Support an increasing senior population by assessing and responding to the demand for additional assisted living facilities, nursing homes, and appropriate healthcare facilities.	C, E	Medium term
Accommodate the needs of the Township's disabled population by enforcing ADA compliant design.	E	Ongoing
Recognize the economic hardship that faces households earning below the ALICE threshold by encouraging affordable housing and economic opportunities.	E, F	Short term
Encourage protection of wetlands and installation of green infrastructure along FEMA zones to mitigate harm caused by flooding.	A	Short term
Designate areas around floodplain as conservation areas to limit development and impervious surfaces.	A, B	Short term

Regulate lakefront development by mandating greenbelts with native vegetation in a buffer zone between the setback and the water's edge to reduce flooding impacts.	A	Medium term
Provide information about voluntary conservation easements to residents, especially those living in the environmentally sensitive designated areas.	A	Short term
Encourage green infrastructure placement during the site plan review process and/or planned development process.	A	Ongoing
Preserve natural and open spaces by pursuing commercial development in formerly vacant, revitalized commercial buildings and/or retrofitting strip malls to support new commercial activities.	A, B	Medium term
Increase housing supply to meet demand for residence in the Township.	C	Medium term
Ensure aging housing stock receives appropriate maintenance and renovation to promote its habitability to the greatest extent and to avoid deterioration and demolition.	C, E	Medium term
Address increasing housing costs and the limited availability of starter homes valued between \$150k and \$250k by increasing the Township's supply of housing to match the demand.	C	Medium term
Accommodate future community housing preferences by matching the size and types of housing construction to needs. For example, while single-family homes remain the most prominent preference for Township residents, support attached single-family structures (such as duplexes).	C	Short term
Pursue CDBG funds to support the revitalization of housing units that are deteriorating and/or uninhabitable in order to put them back into the housing market.	C, E	Ongoing
Rezone commercial districts and corridors to allow for mixed-use developments.	C, F	Ongoing
Support commercial development by revitalizing buildings that have become vacant and/or retrofitting strip malls to support new commercial activities.	F	Medium term
Ensure redevelopment plans align with community-guided ideas at Pontiac Lake Gateway, Cedar Island and Bogie Lake, and around Lakes Town Center.	F	Long term

Support efforts of White Lake Corridor Improvement Authority to promote a sense of place, connectivity, and various activities in commercial corridors across the Township.	E, F	Ongoing
Implement traffic calming techniques along Cooley Lake Road and M-59 (east of Teggerdine Road) to ease commuter congestion in route to outside communities.	D	Ongoing
Address the volume of crashes that take place at intersections along M-59 by improving road safety measures and implementing biking and pedestrian infrastructure.	D	Ongoing
Educate and share information with Township residents about implementation plans for non-motorized infrastructure that includes a signed bicycle route, bicycle lanes, and shared-use paths.	D	Ongoing
Educate and share information with Township residents about public transportation options, including upcoming changes in operation.	D, E	Ongoing

Future Land Use

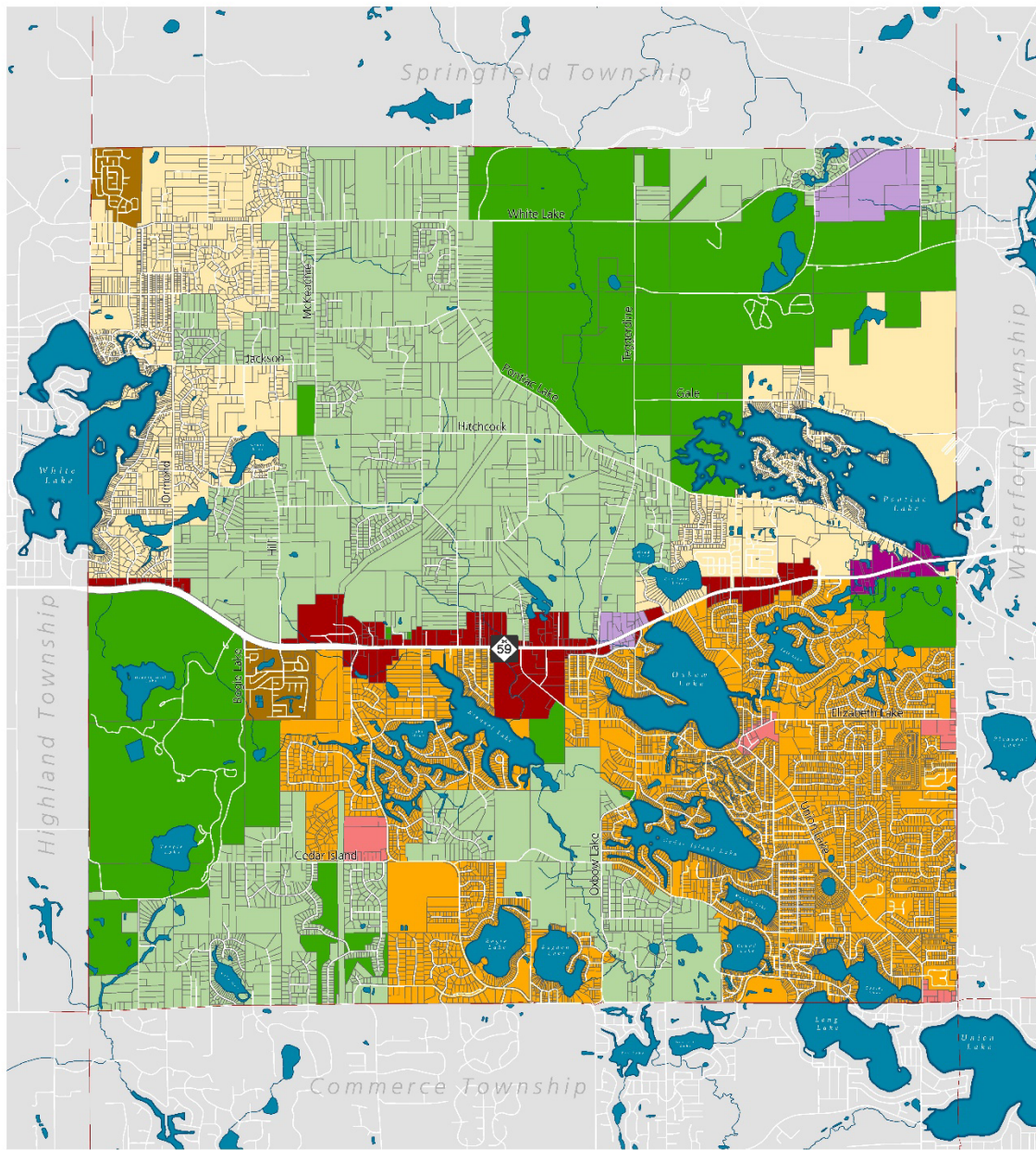
The Future Land Use Map (FLUM) identifies preferred future land uses in the Township. It is a general framework, a land-use visualization of intended future uses, that guide land use and policy decisions within the Township over the next 10-20 years. It should drive changes to the Zoning Ordinance and inform development review decisions. In the FLUM, preferred locations for future development types are displayed, allowing the community to identify where certain land uses should expand or contract without committing to it by law.

Future Land Use	Description	Examples of Use*	Residential Density (DU/Acre)	Corresponding Zoning District(s)
Recreation / Open Space	Large recreation spaces including the Highland State Recreation Area, White Lakes Oaks Golf Course, Pontiac Lake State Recreation Area, and Township parks.	Parks, golf courses, ski resorts, conservation areas	n/a	ROS
Agriculture / Rural Residential	Maintains agricultural land and rural living through large lots and limited residential development. Subdivision residential development is discouraged.	Large-lot single family, agriculture, farm-stands, cider mills	0.2	AG, SF
Suburban Residential	Provides large lot, low density residences with open space preservation in residential subdivisions. Residential lots tend to be smaller than those in the agriculture / rural residential future land use classification.	Large-lot single family, parks, churches, public facilities or institutions (e.g., schools)	0.5 – 3.0	R1-A, R1-B
Neighborhood Residential	Maintains existing neighborhoods and provides for denser residential development in places where there is infrastructure to support the density and ensuring density is within context of the surrounding neighborhood.	Small-lot single family, duplexes, multi-family, parks, convalescent or nursing homes	2.0 – 8.0	R1-C, R1-D, RM-1, RM-2, PD
Manufactured Residential	Includes existing manufactured housing developments.	Manufactured housing	3.0 – 6.0	MHP
Neighborhood Commercial	Provides neighborhood scale commercial establishments that have daily goods and services for residents. Creates centers of neighborhood life, encouraging a mix of compatible retail, service, office, and residential uses in a walkable environment.	Professional services/office, personal care, restaurants, mixed-use	Varies based on development	LB, RB, NB-O, NMU
Commercial Corridor	Provides regional goods and services to residents and non-residents. Includes large box stores and drive throughs.	Large grocery, outlet, mixed-use, restaurants	Varies based on development	PB, GB, LB, PD, TC, NMU

Pontiac Lake Gateway	Creates a welcoming gateway offering a mix of local and regional goods and services. Uniform development and design standards create a defined sense of place.	Professional services, multi-family, personal care, restaurants, entertainment	Varies based on development	PG, GB, PB, RM-1, RM-2
Production / Technology	Serve community's need for research facilities and light industrial opportunities.	Light manufacturing	n/a	LM, ROP

*Not an exhaustive list

Figure XX: Future Land Use



Future Land Use Framework

Sources: Michigan Open Data Portal, Oakland County, White Lake Township

3,000 Feet
Beckett & Raeder, Inc.

- | | |
|---|---|
| ■ Recreation / Open Space | ■ Neighborhood Commercial |
| ■ Agriculture / Rural Residential | ■ Commercial Corridor |
| ■ Suburban Residential | ■ Pontiac Lake Gateway |
| ■ Neighborhood Residential | ■ Production / Technology |
| ■ Manufactured Residential | |