

PLAN COMMISSION

December 11, 2023 at 5:30 PM

Council Chambers - City Hall, 3rd Floor 1717 E. Park Street, Two Rivers, WI 54241

AGENDA

1. CALL TO ORDER

2. ROLL CALL

Commission Members: Greg Buckley, Rick Inman, Kay Koach, Kristin Lee, Matt Heckenlaible, Eric Pangburn, Adam Wachowski

3. ACTION ITEMS

- A. Review of Site and Architectural Plan for 1509 Washington Street, submitted by Adam Stein of Logic Design & Architecture, Inc.
- B. Review of additional materials submitted for Conditional Use Permit application for use of self-storage units on 15th Street, for parcel 053-000-076-015.03, submitted by Alliance Construction and Design and Eric Burrows (owner).
- C. Review of request to change the sign ordinance to permit signs placed onto sidewalks.

4. ADJOURNMENT

Please note, upon reasonable notice, efforts will be made to accommodate the needs to disabled individuals through appropriate aids and services. For additional information or to request this service, please contact the Office of the City Manager by calling 793-5532.

It is possible that members of and possibly a quorum of governmental bodies of the municipality may be in attendance at the above stated meeting to gather information; no other action will be taken by any governmental body at the above-stated meeting other than the governmental body specifically referred to above in this notice.



LAND DEVELOPMENT APPLICATION

APPLICANT				TELEPHONE					
MAILIN									
IVIAILIIV	IG ADDRESS	(Street)	(City)	(State)	(Zip)				
PROPE	ERTY OWNER			TELEPHONE					
MAILIN	IG ADDRESS								
		(Street)	(City)	(State)	(Zip)				
REQUE	EST FOR:								
		Comprehensive Plan An	nendment	Conditional Use					
		Site/Architectural Plan A	pproval	Annexation Request					
		Subdivision Plat or CSM	Review	Variance/Board of A	ppeals				
		Zoning District Change		Other					
STATU	IS OF APPLICAN	T: Owner	Agent	Buyer Other					
PROJE	CT LOCATION_		TYPE 0	F STRUCTURE					
PRESE	ENT ZONING		REQUE	STED ZONING					
PROP	OSED LAND USE								
PARCE	EL #			ACREAGE					
LEGAL	DESCRIPTION								
		IOTE: Attach a one-page			t.				
Th	-li	that had be had been formilled							
		that he/she has familiarize ersigned further hereby ce							
		1 1 1							
Signed	(Prope	rty Owner)		Date					
	· ·	• ,							
Fee Re	<u>quired</u>		Sch	<u>edule</u>					
\$ 350	Comprehensive P	lan Amendment	App	olication Submittal Date					
\$ t/b/d Site/Architectural P		Plan Approval (Listed in Sec 1	-2-1)						
\$ t/b/d	CSM Review (\$10 Subdivision Plat (1	fee to be determined)	Dat	e Fee(s) Paid					
\$ 350	Zoning District Ch Conditional Use	ange	Pla	n(s) Submittal Date					
\$ 350 \$ t/b/d	Annexation Reque	est (State Processing Fees Ap	pply) Pla	n Comm Appearance					
\$ 350 \$ t/b/d	Variance/Board of Other								
¢	TOTAL	EEE DAID ADDUM	CATION DIANG & FEE DE	CEIVED BY					
\$	TOTAL I	FEE PAID APPLI	JATION, PLANS & FEE RE	CEIVED BY					



11/20/2023

Letter of Intent Village of Two Rivers Inspections, Zoning & Planning 1717 E. Park Street P.O. Box 87 Two Rivers, WI 54241-0087

To whom it may concern,

It is our pleasure to submit this letter of intent to pursue land use and related approvals for the development of the vacant lot and removal of an existing building on a 0.64 acre property located at 1509 Washington Street. This submittal is for building shell only, Starbucks will submit interior buildout drawings, occupancy applications, signage approvals, etc. under separate covers.

The included proposal is for an approximate 2,448 square foot Starbucks café with drive thru and approximately +/-580 square foot outdoor patio area. The café will provide an indoor seating capacity of 55 patrons and outdoor seating capacity of 25 patrons. Proposed business hours will be daily from 5am-9pm (may vary on weekends). The café anticipates employing 25-30 persons.

Currently zoned B-1 Business District, we are requesting conditional approval for a coffee shop with drive-thru and outdoor patio use on the site. The site is bordered by Washington Street and 15th Street.

The building will be situated with the main entrance facing the parking area, an outdoor seating area to the East, and drive thru facing West. Driveway access will be along the south side of the parking coming from the 15th Street. Off-street parking will be provided for approximately 23 vehicles (2 ADA stalls). The trash enclosure will be located near the driveway access on the south east and will incorporate a brick enclosure and landscape screening.

As presented, this design is consistent with Starbuck's new prototype but also includes several upgrades (raised parapets, façade articulation, materials in contrasting yet complimentary colors and textures).

The project schedule anticipates construction start in late Spring 2023 with completion in Fall 2023.

Project Team:

Architect: Logic Design & Architecture, Inc.

Civil Engineer/Landscape Design: Pinnacle Engineering Group

Structural Engineer: TBD Mechanical Engineer: TBD

We look forward to working with the city throughout the approval process to transform this site and believe that the proposed site layout, new building, parking, and landscaping all contribute to a better use, circulation, and substantial improvement to the overall aesthetic of the parcel and surrounding environment.

Warm regards,

Adam J. Stein

Principal, Architect, NCARB



1717 E. Park Street P.O. BOX 87 Two Rivers, WI 54241-0087

PLAN COMMISSION

Action: Site and Architectural Review, 1509 Washington Street, 0.643 acres

Current Zoning: (B-1) Business District

1. Background

The location of 1509 Washington Street previously operated as restaurant and bar.

The current owners submitted a Conditional Use Permit (CUP) for a drive-through operation in September 2023 which has been approved by the Two Rivers City Council. This Site Plan proposal is for an approximate 2,448 square foot Starbucks café and a 580 square foot outdoor patio.

2. Demolition

Demolition of the existing building will be done to clear the site. The city has a demolition permit with requirements outlined in **Section 11-1-30**.

Additional information related to the demolition is needed regarding:

- The demolition of the existing building and the structural stability of the 'party wall'.
- How will the demolition take place to ensure that the party wall for the adjoining building is structurally stable?
- The final exterior finishes the party wall. Is there any proposed 'finish' to be applied?
- The Erosion Control Plan shown on plan sheet C-5 depicts conditions post razing of the of the project. Provide an erosion control plan that addresses the demolition phase of the project.

3. Access and Transportation

Pedestrian, Parking and Drive through Access via 15th Street

The access to parking at the café and the drive through is from 15th Street. There is pedestrian access via the sidewalk on Washington and 15th Streets.

The proposed pedestrian ramp adjacent to the Washington Street public sidewalk is approximately 4-inches higher than the public sidewalk and the northerly portion of the ramp. Additional information is needed as to how this will be addressed - such as a railing to prevent individuals from traversing off the edge of the ramp to the public sidewalk or other solutions to prevent tripping over the edge.

The space along the south perimeter of the building and parking spaces appears to be very close for the clearance of wheelchairs or walking assistance devices. Confirmation that this space is ADA compliant is



1717 E. Park Street P.O. BOX 87 Two Rivers, WI 54241-0087

needed. The elevations show bumpers at the parking stalls in this location which will assist with a separation of the parked cars and any encroachment into that space.

There is some concern about the potential of cars queuing for the drive-through and extending into 15th Street, but there is no recommendation to modify the plans as presented.

There is a question about the logistics of deliveries. The parking lot does not appear very large so more information is needed about the delivery process in this parking lot with possible drive-through queues that are lengthy.

Utilities and Drainage/Stormwater Management

The details of the proposed work are to be coordinated with Public Works, Electric and Water Departments. The plan shows:

- Water proposed 2-inch service tapping onto the existing 6-inch service off of 15th Street;
- Sanitary sewer will be serviced as shown off the northwesterly portion of the proposed
- building; and
- Storm sewer plan shows connection to an existing catch basin. The connection is to be "cored and booted" in 15th Street.

Building

The elevations show a 580 square foot outdoor patio space. Is this space going to be heated? If so, there may be additional building code questions.

The elevations show a ladder. The ladder itself is a concern. As shown, there does not appear to be any restriction of access to it and to the roof. The need for the ladder as a fixture on the building is a concern for safety reasons.

Fire Department

The fire department has reviewed and does not have any significant concerns once the building is constructed and operational.

Trash Collection

The plan shows an enclosure for a dumpster and is located to the east of the building in the parking lot.

Landscaping and Lighting Plan

The landscaping plan as presented shows plantings within the five-foot perimeter and in the parking lot. The lighting plan meets the Site and Architectural Plan requirements.



1717 E. Park Street P.O. BOX 87 Two Rivers, WI 54241-0087

Recommended Action:

This proposed development supports the Comprehensive Plan goals to support development and investment in downtown. Staff recommends the approval of this proposal with the **conditions** below.

- 1. Any additional requirements identified by city engineering, utility, and/or water department director(s).
- 2. Complete the demolition (wrecking) permit procedures prior to removal of building.
- 3. Provide an erosion control plan that addresses the demolition phase of the project and the construction process.
- 4. A separate sign permit(s) and approval, in accord with the city's sign code, is necessary.
- 5. Driveway access onto 15th Street is to be designed in accordance with Public Work Section 4-1-11 B.(2)
- 6. Any additional requirements from the state of Wisconsin.
- 7. All required permits are obtained prior to construction.











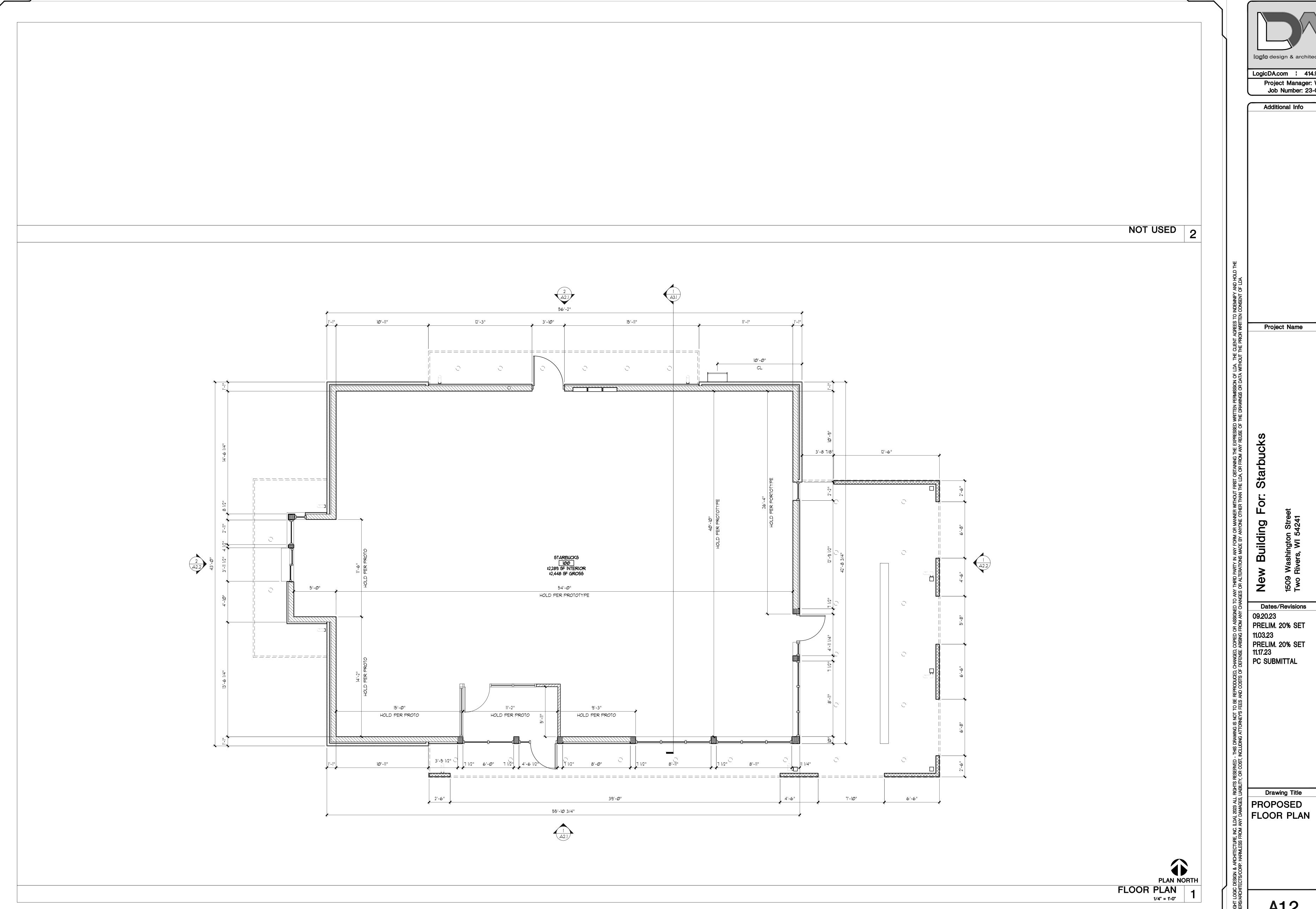


COPYRIGHT 2023

LOGIC DESIGN & ARCHITECTURE, INC.

Proposed Outlot Building @ Washington St.



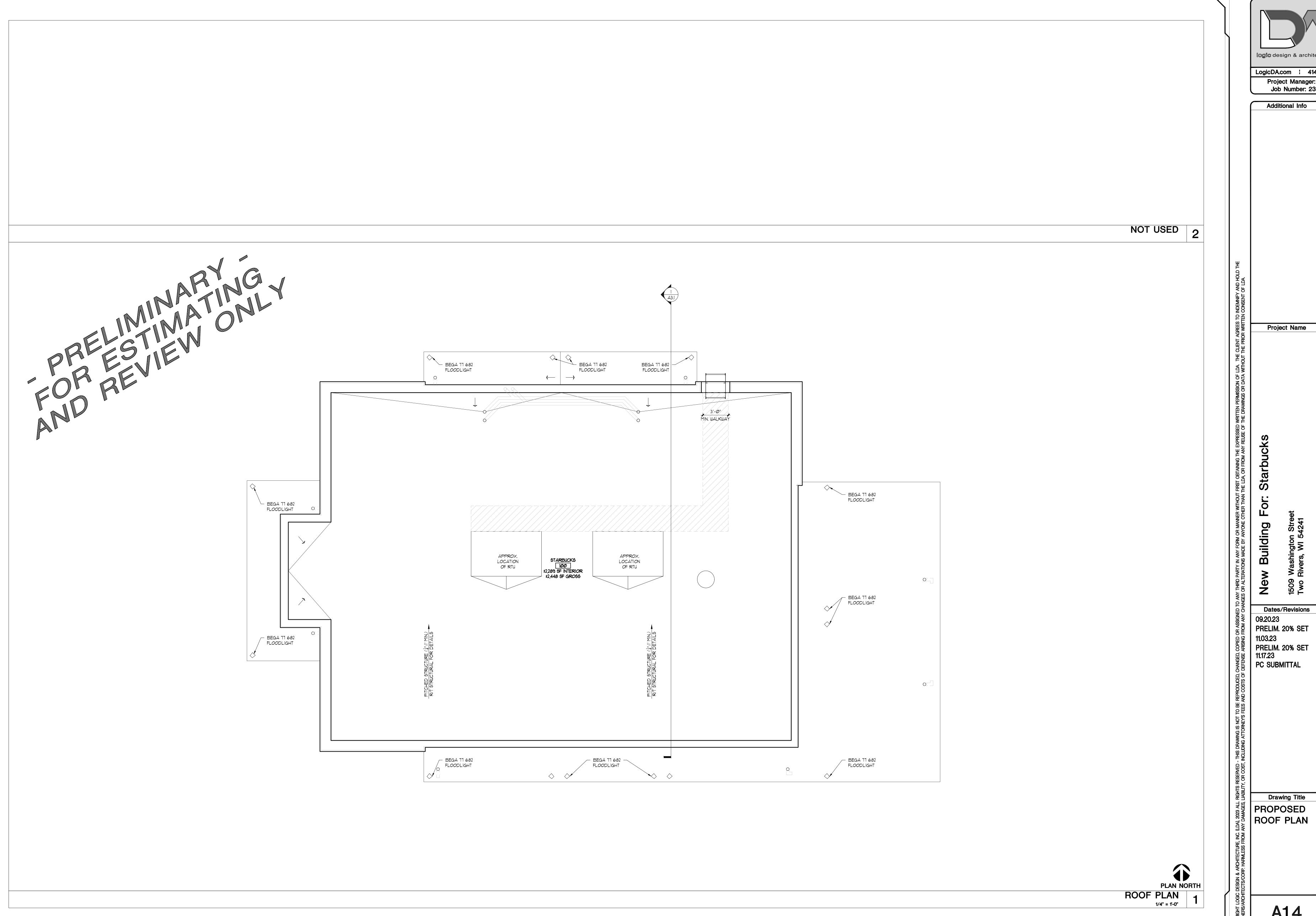




Additional Info Project Name

Dates/Revisions 11.03.23 PRELIM. 20% SET 11.17.23 PC SUBMITTAL

A1.2





Additional Info THIRD PARTY IN ANY FORM OR MANNER WITHOUT FIRST OBTAINING THE EXPRESSED WRITTEN PERMISSION OF LDA. THE CLIENT AGREE! OR ALTERATIONS MADE BY ANYONE OTHER THAN THE LDA, OR FROM ANY REUSE OF THE DRAWINGS OR DATA WITHOUT THE PRIOR WRI Project Name Building

Dates/Revisions 09.20.23 PRELIM. 20% SET 11.03.23 PRELIM. 20% SET 11.17.23 PC SUBMITTAL

A1.4





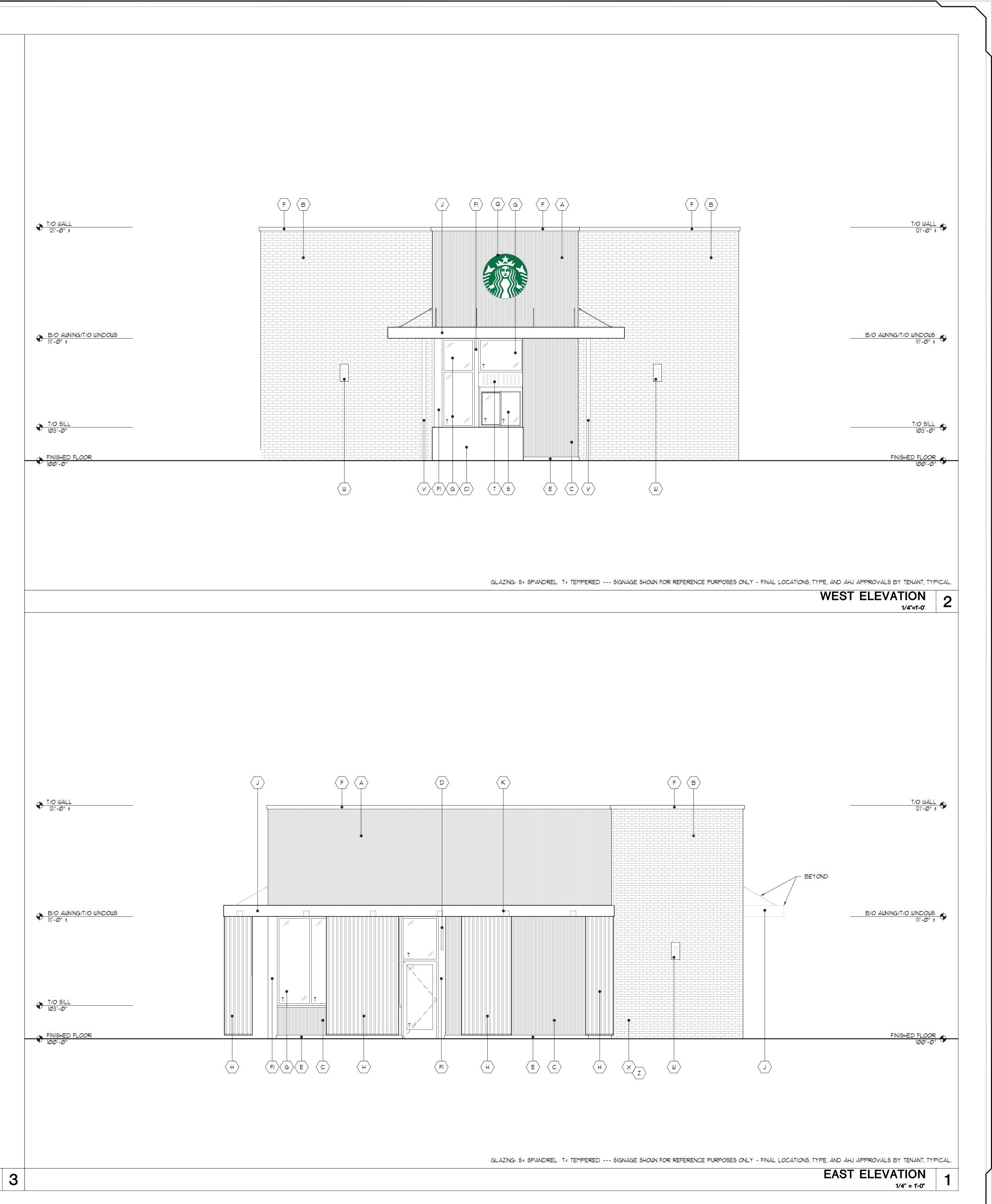
Additional Info

Project Name er without first obtaining the expressed Ther than the LDA, or from any reuse of Building Dates/Revisions 09.20.23 PRELIM. 20% SET PRELIM. 20% SET 11.17.23 PC SUBMITTAL

A2.1

Notes: Refer to sections and wall A15:E26types for additional information. GC to install all products per industry standards and manufacturer's recommendations. Design/Build Contractors and GC to coordinate Knox Box, Security Camera, and all other AHJ required items not shown on elevations,

EXTERIOR MATERIAL SCHEDULE 3



Project Manager: WBM

Job Number: 23-042

Additional Info

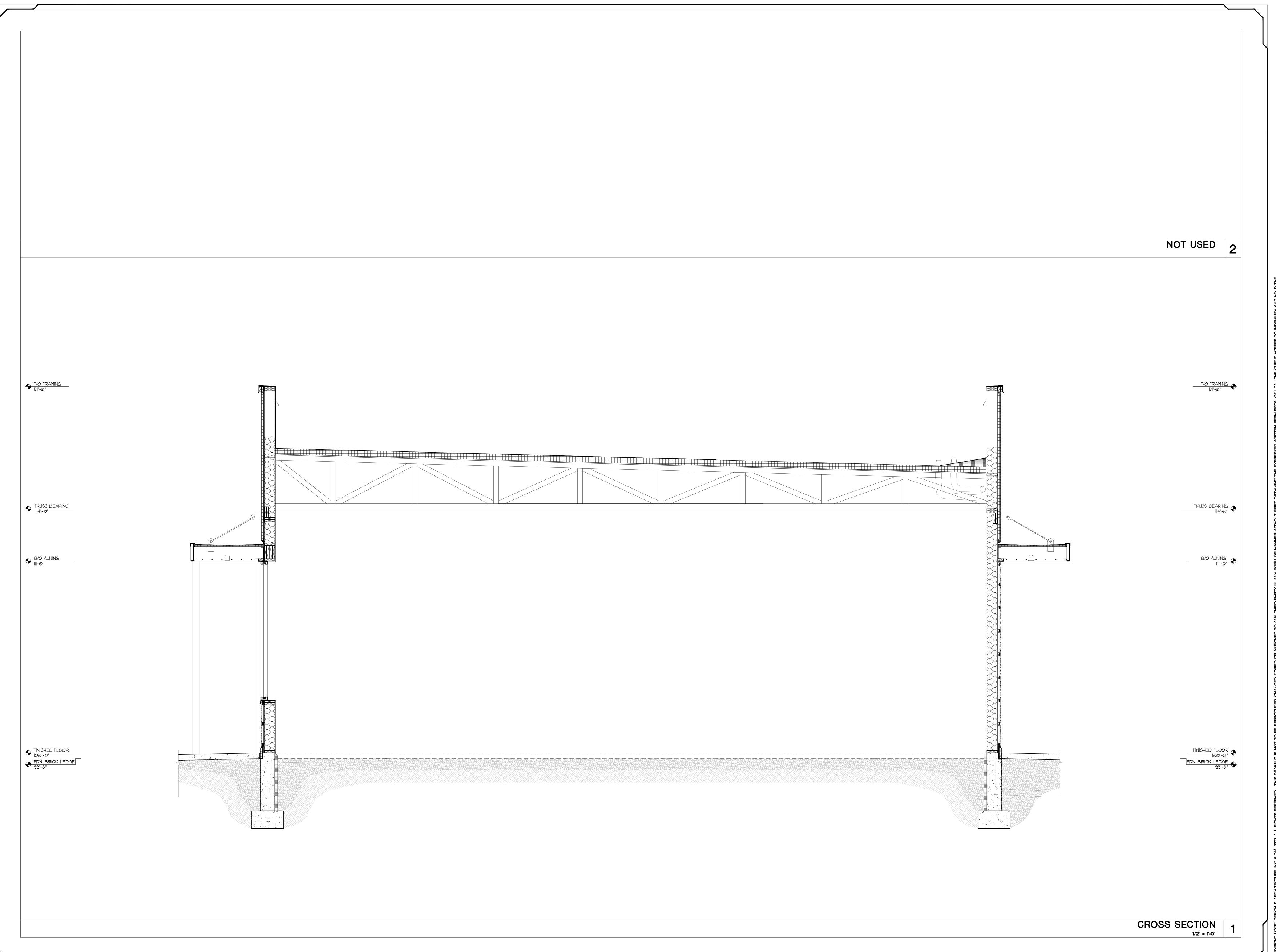
Project Name PARTY IN ANY FORM OR MANNER WITHOUT FIRST OBTAINING THE EXPRESSED ERATIONS MADE BY ANYONE OTHER THAN THE LDA, OR FROM ANY REUSE OF Building Dates/Revisions 09.20.23 PRELIM. 20% SET

PRELIM. 20% SET

Drawing Title PROPOSED ELEVATIONS

PC SUBMITTAL

RIGHTS RESERVED - THIS DRAWING IS NOT TO BE REPROLIABILITY, OR COST, INCLUDING ATTORNEY'S FEES AND C





Additional Info Project Name Building Dates/Revisions

Dates/Revisions

O9.20.23
PRELIM. 20% SET

11.03.23
PRELIM. 20% SET

11.17.23
PC SUBMITTAL

OB COST, INCLUDING ATTORNEYS FEES AND COSTS OF DEFENSE ARISING FROM ANY CHAP

11.17.23
PC SUBMITTAL

ALL BIGHTS RESERVE THECTS/CORP. HARMLESS FROM ANY DAWAGES, LIABILITY, OR CONTRIBUTION OF CONTR

A3.1

LEGEND SANITARY SEWER MANHOLE STORM SEWER MANHOLE STORM SEWER AREA DRAIN STORM SEWER INLET (ROUND CASTING) STORM SEWER INLET (RECTANGULAR CASTING) PRECAST FLARED END SECTION CONCRETE HEADWALI VALVE VAULT VALVE BOX FIRE HYDRANT **BUFFALO BOX** CLEANOUT SANITARY SEWER FORCE MAIN STORM SEWER DRAIN TILE WATER MAIN UTILITY CROSSING LIGHTING ELECTRICAL CABLE OVERHEAD WIRES CAUTION EXISTING UTILITIES NEARBY ELECTRICAL TRANSFORMER POWER POLE POWER POLE WITH LIGHT STREET SIGN GAS MAIN _____G_____**_____G**_____ TELEPHONE LINE CONTOUR SPOT ELEVATION $\times (750.00)$ WETLANDS __._._. FLOODWAY ____ **FLOODPLAIN** HIGH WATER LEVEL (HWL) NORMAL WATER LEVEL (NWL) DIRECTION OF SURFACE FLOW GRASS PAVEMENT DITCH OR SWALE **—**⊳ \longrightarrow **DIVERSION SWALE** OVERFLOW RELIEF ROUTING TREE WITH TRUNK SIZE SOIL BORING TOPSOIL PROBE FENCE LINE, TEMPORARY SILT _____SF______ FENCE LINE, WIRE ____o___**___o___** FENCE LINE, CHAIN LINK OR IRON _____**___**____ FENCE LINE, WOOD OR PLASTIC ___X___ _____ CONCRETE SIDEWALK _____ CURB AND GUTTER DEPRESSED CURB REVERSE PITCH CURB & GUTTER EASEMENT LINE _____

ABBREVIATIONS									
BL	BASE LINE	NWL	NORMAL WATER LEVEL						
C C&G	LONG CHORD OF CURVE CURB AND GUTTER	PC PT	POINT OF CURVATURE POINT OF TANGENCY						
CB	CATCH BASIN	PVI	POINT OF VERTICAL INTERSECTION						
CL	CENTERLINE	R	RADIUS						
D	DEGREE OF CURVE	ROW	RIGHT-OF-WAY						
EP	EDGE OF PAVEMENT	SAN	SANITARY SEWER						
FF	FINISHED FLOOR	ST	STORM SEWER						
FG	FINISHED GRADE	T	TANGENCY OF CURVE						
FL	FLOW LINE	ТВ	TOP OF BANK						
FP	FLOODPLAIN	TC	TOP OF CURB						
FR	FRAME	TF	TOP OF FOUNDATION						
FW	FLOODWAY	TP	TOP OF PIPE						
HWL	HIGH WATER LEVEL	TS	TOP OF SIDEWALK						
INV	INVERT	TW	TOP OF WALK						
L	LENGTH OF CURVE	WM	WATER MAIN						
MH NTS	MANHOLE NOT TO SCALE	Δ	INTERSECTION ANGLE						

BENCHMARKS

NAVD88 | VERTICAL DATUM:

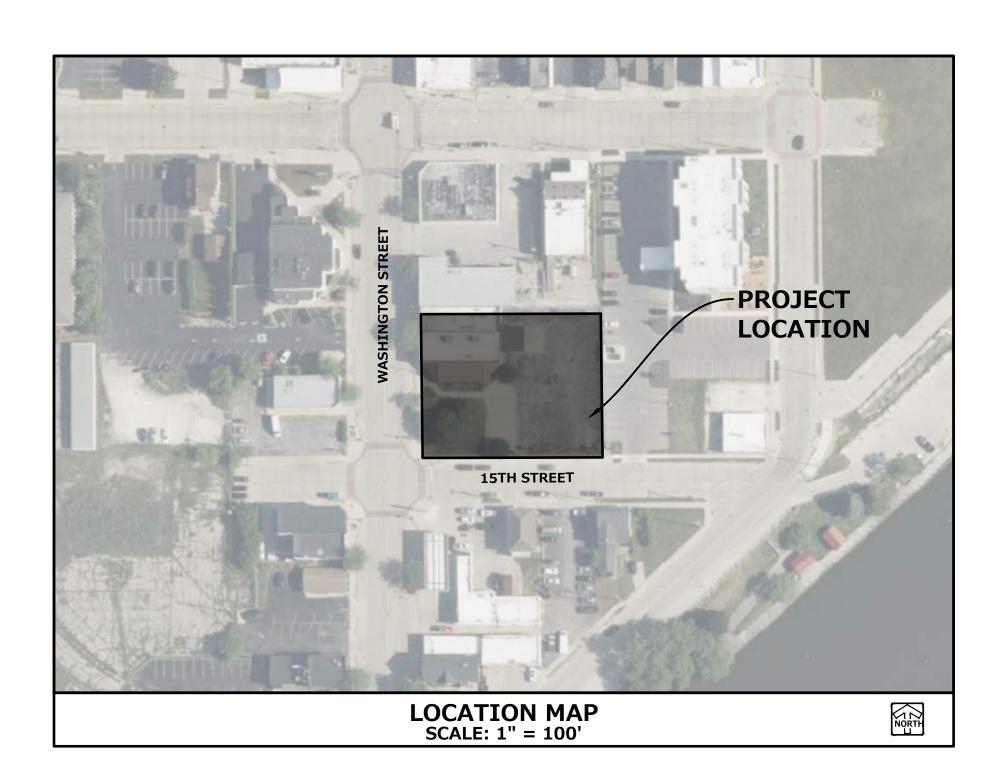
REF BM: Reference Benchmark: Bronze Wisconsin Division of Highways Survey Disk, PID=DQ9054, Stamped = 36 117 A 597.18 2018, Elevation = 597.22

ONSITE CIVIL ENGINEERING INFRASTRUCTURE PLANS

SBX TWO RIVERS

1509 WASHINGTON ST, CITY OF TWO RIVERS, WI **PLANS PREPARED**

LOGIC DESING & ARCHITECTURE, INC.



GENERAL NOTES

- THE INTENTION OF THE PLANS AND SPECIFICATIONS IS TO SET FORTH PERFORMANCE AND 8. COMMENCEMENT OF CONSTRUCTION SHALL EXPLICITLY CONFIRM THAT THE CONTRACTOR HAS CONSTRUCTION MATERIAL STANDARDS FOR THE PROPER EXECUTION OF WORK. ALL WORKS CONTAINED WITHIN THE PLANS AND SPECIFICATIONS SHALL BE COMPLETED IN ACCORDANCE WITH ALL REQUIREMENTS FROM LOCAL, STATE, FEDERAL OR OTHER GOVERNING AGENCY'S LAWS, REGULATIONS, JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., AND THE OWNER'S
- A GEOTECHNICAL REPORT DATED SEPTEMBER 27, 2023 HAS BEEN PREPARED FOR THE PROJECT SITE. THE DATA ON SUB-SURFACE SOIL CONDITIONS IS NOT INTENDED AS A REPRESENTATION OR WARRANTY OF THE CONTINUITY OF SUCH CONDITIONS BETWEEN BORINGS OR INDICATED SAMPLING LOCATIONS. IT SHALL BE EXPRESSLY UNDERSTOOD THAT OWNER WILL NOT BE RESPONSIBLE FOR ANY INTERPRETATIONS OR CONCLUSIONS DRAWN THERE FROM BY THE CONTRACTOR. DATA IS MADE AVAILABLE FOR THE CONVENIENCE OF THE CONTRACTOR. THE FEEL IS NECESSARY FOR THE PROPER EVALUATION OF THE SITE FOR PURPOSES OF PLANNING,
- BIDDING, OR CONSTRUCTING THE PROJECT AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR IS RESPONSIBLE TO REVIEW AND UNDERSTAND ALL COMPONENTS OF THE
- THE CONTRACTOR SHALL PROMPTLY REPORT ANY ERRORS OR AMBIGUITIES LEARNED AS PART OF THEIR REVIEW OF PLANS, SPECIFICATIONS, REPORTS AND FIELD INVESTIGATIONS.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE COMPUTATION OF QUANTITIES AND WORK REQUIRED TO COMPLETE THIS PROJECT. THE CONTRACTOR'S BID SHALL BE BASED ON ITS OWN
- QUESTIONS/CLARIFICATIONS WILL BE INTERPRETED BY ENGINEER/OWNER PRIOR TO THE AWARD OF CONTRACT. ENGINEER/OWNER WILL SUBMIT OFFICIAL RESPONSES IN WRITING. INTERPRETATIONS PRESENTED IN OFFICIAL RESPONSES SHALL BE BINDING ON ALL PARTIES ASSOCIATED WITH THE CONTRACT. IN NO WAY SHALL WORD-OF-MOUTH DIALOG CONSTITUTE AN

COMPUTATIONS AND IN NO SUCH INSTANCE RELY ON THE ENGINEER'S ESTIMATE.

PRIOR TO START OF WORK, CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH ALL CONDITIONS OF THE SITE, AND SHALL ACCOUNT FOR CONDITIONS THAT AFFECT, OR MAY AFFECT CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, LIMITATIONS OF WORK ACCESS, SPACE LIMITATIONS, OVERHEAD OBSTRUCTIONS, TRAFFIC PATTERNS, LOCAL REQUIREMENTS, ADJACENT ACTIVITIES, ETC. FAILURE TO CONSIDER SITE CONDITIONS SHALL NOT BE CAUSE FOR CLAIM OF JOB EXTRAS.

- REVIEWED THE PLANS AND SPECIFICATIONS IN ENTIRETY AND CERTIFIES THAT THEIR SUBMITTED BID PROPOSAL CONTAINS PROVISIONS TO COMPLETE THE PROJECT, WITH THE EXCEPTION OF UNFORESEEN FIELD CONDITIONS; ALL APPLICABLE PERMITS HAVE BEEN OBTAINED; AND CONTRACTOR UNDERSTANDS ALL OF THE REQUIREMENTS OF THE PROJECT.
- SHOULD ANY DISCREPANCIES OR CONFLICTS IN THE PLANS OR SPECIFICATIONS BE DISCOVERED AFTER THE AWARD OF CONTRACT, ENGINEER SHALL BE NOTIFIED IN WRITING IMMEDIATELY AND CONSTRUCTION OF ITEMS AFFECTED BY THE DISCREPANCIES/CONFLICTS SHALL NOT COMMENCE, OR CONTINUE, UNTIL A WRITTEN RESPONSE FROM ENGINEER/OWNER IS DISTRIBUTED. IN THE EVENT OF A CONFLICT BETWEEN REFERENCED CODES, STANDARDS, SPECIFICATIONS AND PLANS, THE ONE ESTABLISHING THE MOST STRINGENT REQUIREMENTS SHALL BE FOLLOWED.
- CONTRACTOR IS RESPONSIBLE FOR PERFORMING ANY ADDITIONAL SOILS INVESTIGATIONS THEY 10. THE CONTRACTOR SHALL, AT ITS OWN EXPENSE, OBTAIN ALL NECESSARY PERMITS AND LICENSES TO COMPLETE THE PROJECT. OBTAINING PERMITS, OR DELAYS, IS NOT CAUSE FOR DELAY OF THE CONTRACT OR SCHEDULE. CONTRACTOR SHALL COMPLY WITH ALL PERMIT
- PLANS AND SPECIFICATIONS, INCLUDING FIELD VERIFYING SOIL CONDITIONS, PRIOR TO 11. THE CONTRACTOR SHALL NOTIFY ALL INTERESTED GOVERNING AGENCIES, UTILITY COMPANIES AFFECTED BY THIS CONSTRUCTION PROJECT, AND DIGGER'S HOTLINE IN ADVANCE OF CONSTRUCTION TO COMPLY WITH ALL JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., PERMIT STIPULATIONS, AND OTHER APPLICABLE STANDARDS.
 - 12. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO INITIATE, INSTITUTE, ENFORCE, MAINTAIN, AND SUPERVISE ALL SAFETY PRECAUTIONS AND JOB SITE SAFETY PROGRAMS IN CONNECTION WITH THE WORK.
 - 13. CONTRACTOR SHALL KEEP THE JOBSITE CLEAN AND ORDERLY AT ALL TIMES. ALL LOCATIONS OF THE SITE SHALL BE KEPT IN A WORKING MANNER SUCH THAT DEBRIS IS REMOVED CONTINUOUSLY AND ALL RESPECTIVE CONTRACTORS OPERATE UNDER GENERAL "GOOD
 - 14. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, ENGINEER, AND THEIR AGENTS FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON

INDEX OF SHEETS COVER SHEET GENERAL NOTES EXISTING CONDITIONS & DEMO PLAN SITE DIMENSIONAL & PAVING PLAN **GRADING & EROSION CONTROL PLAN** C-6 STORM SEWER PLAN **SANITARY & WATERMAIN PLAN CONSTRUCTION DETAILS** LANDSCAPE PLAN

GOVERNMENT CONTACTS							
MATTHEW HECKENLAIBLE, P.E. CITY OF TWO RIVERS CITY ENGINEER/PUBLIC WORKS DIRECTOR (920) 793-5540 E-MAIL: mathec@two-rivers.org							

LANDSCAPE GENERAL NOTES & DETAILS

PROJECT TEAM CONTACTS **CIVIL ENGINEER: SURVEYOR:** JOHN KONOPACKI, P.L.S. MARK T. SEIDL, P.E. PINNACLE ENGINEERING GROUP PINNACLE ENGINEERING GROUP 20725 WATERTOWN RD, SUITE 100 20725 WATERTOWN RD, SUITE 100 BROOKFIELD, WI 53186 BROOKFIELD, WI 53186 MAIN: (262) 754-8888 MAIN: (262) 754-8888 E-MAIL: mseidl@pinnacle-engr.com E-MAIL: john.konopacki@pinnacle-engr.com APPLICANT/OWNER: ADAM J. STEIN LOGIC DESIGN & ARCHITECTURE, INC. 10400 INNOVATION DRIVE, SUITE 300 MILWAUKEE, WI 53226 MAIN: (414) 900-0080 E-MAIL: astein@logicda.com



www.DiggersHotline.com

PINNACLE ENGINEERING GROUP, LLC

PINNACLE ENGINEERING GROUP, LLC AND THEIR CONSULTANTS DO NOT WARRANT OR GUARANTEE THE ACCURACY AND COMPLETENESS OF THE DELIVERABLES HEREIN BEYOND A REASONABLE DILIGENCE. IF ANY MISTAKES, OMISSIONS, OR ISCREPANCIES ARE FOUND TO EXIST WITHIN THE DELIVERABLES, THE ENGINEER SHALL BE PROMPTLY NOTIFIED PRIOR TO BID SO THAT HE MAY HAVE THE OPPORTUNITY TO TAKE WHATEVER STEPS NECESSARY TO RESOLVE THEM. FAILURE TO PROMPTLY NOTIFY THE ENGINEER OF SUCH CONDITIONS SHALL ABSOLVE THE ENGINEER FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES OF SUCH FAILURE. ACTIONS TAKEN WITHOUT THE KNOWLEDGE AND CONSENT OF THE ENGINEER, OR IN CONTRADICTION TO THE ENGINEER'S DELIVERABLES OR RECOMMENDATIONS, SHALL BECOME THE RESPONSIBILITY NOT OF THE ENGINEER BUT OF THE PARTIES RESPONSIBLE FOR TAKING SUCH ACTION.

FURTHERMORE, PINNACLE ENGINEERING GROUP, LLC IS NOT RESPONSIBLE FOR CONSTRUCTION SAFETY OR THE MEANS AND

METHODS OF CONSTRUCTION.

ogic design & architecture, inc.
gicDA.com 414.909.0080
Project Manager: WBM Job Number: 23—042

Additional Info

THE DRAWINGS OR DATA WITHOUT THE PRIOR WRITTEN CONSENT OF LDA.	Proj	ect Name	
S OF DEFENSE ARISING FROM ANY CHANGES OR ALTERATIONS MADE BY ANYONE OTHER THAN THE LDA, OR FROM ANY REUSE OF THE DRAWINGS	3X TWO RIVERS	39 WASHINGTON ST, CITY OF TWO RIVERS, WI	
G FROM ANY CHANGES OR AL	SBX TWC	1509 WASHIN	
ARISIN	Dates	s/Revision	S
S OF DEFENSE ARISING FROM			

PINNACLE ENGINEERING GROUP ENGINEERING I NATURAL RESOURCES I SURVEYING PLAN I DESIGN I DELIVER **WISCONSIN OFFICE:** 20725 WATERTOWN RD BROOKFIELD, WI 53186 (262) 754-8888 CHICAGO I MILWAUKEE : NATIONWIDE

N.T.S.

C-1

Drawing Title

COVER SHEET

PEG JOB #: 5123.00-WI

GENERAL SPECIFICATIONS FOR CONSTRUCTION ACTIVITIES

- 1. THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION, THE STANDARD SPECIFICATIONS FOR SEWER & WATER IN WISCONSIN, AND WISCONSIN ADMINISTRATIVE CODE, SPS 360, 382-383, AND THE LOCAL ORDINANCES AND SPECIFICATIONS.
- THE STANDARD SPECIFICATIONS FOR SEWER & WATER IN WISCONSIN, AND WISCONSIN ADMINISTRATIVE CODE, SPS 360, 382-383, AND THE LOCAL ORDINANCES AND SPECIFICATIONS.

 2. THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR EXECUTION OF THE WORK. THE CONTRACTOR SHALL CONDUCT THEIR WORK ACCORDING TO THE REQUIREMENTS OF THE PERMITS.

 3. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE MUNICIPALITY FORTY- EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION.
- 4. THE MUNICIPALITY SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF THE PUBLIC PORTIONS OF THE WORK. THE OWNER SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF ALL PRIVATE PORTIONS OF THE WORK.
- 5. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER, AND THE MUNICIPALITY, THEIR AGENTS, ETC, FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.
- 6. SITE SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL UTILITY INFORMATION SHOWN ON THE PLANS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL CALL DIGGER'S HOTLINE AT 1-800-242-8511 TO NOTIFY THE UTILITIES OF HIS INTENTIONS, AND TO REQUEST FIELD STAKING OF EXISTING UTILITIES.
- 8. SILT FENCE AND OTHER EROSION CONTROL FACILITIES MUST BE INSTALLED PRIOR TO CONSTRUCTION OR ANY OTHER LAND DISTURBING ACTIVITY. FOLLOW THE SEQUENCE OF CONSTRUCTION ON THE GRADING & EROSION CONTROL PLAN FOR MORE DETAILS. INSPECTIONS SHALL BE MADE WEEKLY OR AFTER EVERY RAINFALL OF 0.5" OR MORE. REPAIRS SHALL BE MADE IMMEDIATELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EROSION CONTROL FACILITIES ONCE THE THREAT OF EROSION HAS PASSED WITH THE APPROVAL OF THE GOVERNING AGENCY.
- 9. ANY ADJACENT PROPERTIES OR ROAD RIGHT-OF-WAYS WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR.

THERE IS GOOD CAUSE TO DO SO. AN EXPLANATION MUST BE SUBMITTED TO THE ENGINEER IN WITTING BEFORE ANY DEVIATIONS ARE MADE.

- 10. TRASH AND DEBRIS SHALL BE NOT BE ALLOWED TO ACCUMULATE ON THIS SITE AND THE SITE SHALL BE CLEAN UPON COMPLETION OF WORK.11. THE OWNER SHALL HAVE THE RIGHT TO HAVE ALL MATERIALS USED IN CONSTRUCTION TESTED FOR COMPLIANCE WITH THESE SPECIFICATIONS.
- 12. SPOT ELEVATIONS REPRESENT THE GRADE ON PAVEMENT SURFACE OR FLOW LINE UNLESS OTHERWISE NOTED.
- 13. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER/OWNER IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION.
- 14. WORK WITHIN ANY ROADWAY RIGHT-OF-WAY SHALL BE COORDINATED WITH THE APPROPRIATE MUNICIPAL OFFICIAL PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FEES. GRADING WITHIN RIGHT-OF-WAY IS SUBJECT TO APPROVAL BY SAID OFFICIALS. RESTORATION OF RIGHT-OF-WAY IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE COST OF GRADING. RESTORATION SHALL INCLUDE ALL ITEMS NECESSARY TO RESTORE RIGHT-OF-WAY IN-KIND INCLUDING LANDSCAPING.
- 15. CONTRACTOR SHALL COMPLY WITH ALL CITY OF TWO RIVERS CONSTRUCTION STANDARDS/ORDINANCES.

SPECIFICATIONS FOR GRADING & EROSION CONTROL

16. LANDSCAPE AND TURF AREAS SHALL HAVE A MINIMUM OF 4-INCH TOPSOIL REPLACEMENT.

- 1. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATIONS OF ALL GRADING AND FOR ACTUAL LAND BALANCE, INCLUDING UTILITY TRENCH SPOIL. THE CONTRACTOR SHALL IMPORT OR EXPORT MATERIAL AS NECESSARY TO COMPLETE THE PROJECT. CONTRACTOR SHALL NOTIFY OWNER OF THE NEED TO IMPORT OR HAUL OFF SOIL. ON-SITE LOCATIONS SUITABLE FOR BORROW OR FILL MAY BE PRESENT. COORDINATE WITH OWNER.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A GEOTECHNICAL REPORT MAY BE AVAILABLE FROM THE OWNER.

 3. SITE SHALL BE CLEARED TO THE LIMITS SHOWN ON THE PLANS. REMOVE VEGETATION FROM THE SITE. BURNING IS NOT PERMITTED. PROTECT TREES AND OTHER FEATURES FROM DAMAGE WITH
- FENCING. STOCKPILES SHALL NOT BE LOCATED CLOSER THAN 25' TO A DRAINAGE STRUCTURE OR FEATURE AND SHALL BE SURROUNDED WITH SILT FENCE.

 4. THE GEOTECHNICAL ENGINEER IS RESPONSIBLE FOR VERIFYING COMPACTION AND FILL PLACEMENT IN THE FIELD. THE GEOTECHNICAL ENGINEER MAY SUPERCEDE THESE SPECIFICATIONS IF
- 5. IF NO GEOTECHNICAL RECOMMENDATION IS AVAILABLE, THEN THE FOLLOWING SPECIFICATIONS SHALL APPLY. ALL FILL SHALL BE CONSIDERED STRUCTURAL FILL AND SHALL BE PLACED IN ACCORDANCE WITH THE FOLLOWING: THE COMPACTED FILL SUBGRADE SHALL CONSIST OF AND SHALL BE UNDERLAIN BY SUITABLE BEARING MATERIALS, FREE OF ALL ORGANIC, FROZEN OR OTHER DELETERIOUS MATERIAL AND INSPECTED AND APPROVED BY THE RESIDENT GEOTECHNICAL ENGINEER. PREPARATION OF THE SUBGRADE, AFTER STRIPPING, SHALL CONSIST OF PROOF-ROLLING TO DETECT UNSTABLE AREAS THAT MIGHT BE UNDERCUT, AND COMPACTING THE SCARIFIED SURFACE TO THE SAME MINIMUM DENSITY INDICATED BELOW. THE COMPACTED FILL MATERIALS SHALL BE FREE OF ANY DELETERIOUS, ORGANIC OR FROZEN MATTER AND SHALL HAVE A MAXIMUM LIQUID LIMIT (ASTM-D-423) AND PLASTICITY INDEX (ASTM D-424) IF 30 AND 10 RESPECTFULLY. UNLESS SPECIFICALLY TESTED AND FOUND TO HAVE LOW EXPANSIVE PROPERTIES AND APPROVED BY AN EXPERIENCED SOILS ENGINEER. THE TOP TWELVE (12") INCHES OF COMPACTED FILL SHOULD HAVE A MAXIMUM THREE (3") INCH PARTICLE DIAMETER AND ALL UNDERLYING COMPACTED FILL A MAXIMUM SIX (6") INCH PARTICLE DIAMETER UNLESS SPECIFICALLY APPROVED BY AN EXPERIENCED SOILS ENGINEER. ALL FILL MATERIAL MUST BE TESTED AND APPROVED UNDER THE DIRECTION AND SUPERVISION OF AN EXPERIENCED SOILS ENGINEER PRIOR TO PLACEMENT. IF THE FILL IS TO PROVIDE NON-FROST SUSCEPTIBLE CHARACTERISTICS. IT MUST BE CLASSIFIED AS A CLEAN GW. GP. SW. OR SP PER UNITED SOIL CLASSIFICATION SYSTEM (ASTM D-2487). FOR STRUCTURAL FILL THE DENSITY OF THE STRUCTURAL COMPACTED FILL AND SCARIFIED SUBGRADE AND GRADES SHALL NOT BE LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR (ASTM D-698) WITH THE EXCEPTION TO THE TOP 12 INCHES OF PAVEMENT SUBGRADE WHICH SHALL A MINIMUM IN-SITU DENSITY OF 100 PERCENT OF THE MAXIMUM DRY DENSITY, OR 5 PERCENT HIGHER THAN UNDERLYING FILL MATERIALS. THE MOISTURE CONTENT OF COHESIVE SOIL SHALL NOT VARY BY MORE THAN -1 TO +3 PERCENT AND GRANULAR SOIL ±3 PERCENT OF OPTIMUM WHEN PLACED AND COMPACTED OR RECOMPACTED. UNLESS SPECIFICALLY APPROVED BY THE SOILS ENGINEER TAKING INTO CONSIDERATION THE TYPE OF MATERIALS AND COMPACTION FOUIPMENT BEING USED. THE COMPACTION FOUIPMENT SHOULD CONSIST OF SUITABLE MECHANICAL FOUIPMENT SPECIFICALLY. DESIGNED FOR SOIL COMPACTION. BULLDOZERS OR SIMILAR TRACKED VEHICLES ARE TYPICALLY NOT SUITABLE FOR COMPACTION. MATERIAL THAT IS TOO WET TO PERMIT PROPER COMPACTION MAY BE SPREAD ON THE FILL AND PERMITTED TO DRY. DISCING, HARROWING OR PULVERIZING MAY BE NECESSARY TO REDUCE THE MOISTURE CONTENT TO A SATISFACTORY VALUE, AFTER WHICH
- IT SHALL BE COMPACTED. THE FINISHED SUBGRADE AREAS OF THE SITE SHALL BE COMPACTED TO 100 PERCENT OF THE STANDARD PROCTOR (ASTM D-398) MAXIMUM DENSITY.

 6. NO FILL SHALL BE PLACED ON A WET OR SOFT SUBGRADE. THE SUBGRADE SHALL BE PROOF-ROLLED AND INSPECTED BY THE GEOTECHNICAL ENGINEER BEFORE ANY MATERIAL IS PLACED.
- 6. NO FILL SHALL BE PLACED ON A WET OR SOFT SUBGRADE. THE SUBGRADE SHALL BE PROOF-ROLLED AND INSPECTED BY THE GEOTECHNICAL ENGINEER BEFORE ANY I

 7. SUBGRADE TOLERANCES ARE +/-1" FOR LANDSCAPE AREAS AND +/-½" FOR ALL PAVEMENT AND BUILDING AREAS.
- TOPSOIL SHALL BE FREE OF DELETERIOUS MATERIALS, ROOTS, OLD VEGETATION, ROCKS OVER 2" DIAMETER AND SHALL NOT BE EXCESSIVELY CLAYEY IN NATURE. NO CLUMPS LARGER THAN 4"
 ARE ACCEPTABLE. TOPSOIL MAY BE AMENDED AS NEEDED WITH SAND OR COMPOST TO BE LOOSE WHEN SPREAD.
- 9. THE CONTRACTOR SHALL MAINTAIN SITE DRAINAGE THROUGHOUT CONSTRUCTION. THIS MAY INCLUDE THE EXCAVATION OF TEMPORARY DITCHES OR PUMPING TO ALLEVIATE WATER PONDING ANY DEWATERING SHALL NOT GO DIRECTLY TO STREAMS, CREEKS, WETLANDS OR OTHER ENVIRONMENTALLY SENSITIVE AREAS WITHOUT BEING TREATED FIRST. A DIRT BAG OR OTHER DEWATERING TREATMENT DEVICE MAY BE USED TO CAPTURE SEDIMENT FROM THE PUMPED WATER.
- 10. CONTRACTOR IS ADVISED THAT ALL MUD AND DEBRIS MUST NOT BE DEPOSITED ONTO THE ADJACENT ROADWAYS PER THE REQUIREMENT OF THE MUNICIPALITY OR OTHER APPROPRIATE GOVERNMENT AGENCIES. IN THE EVENT THIS OCCURS, THE ROADWAYS SHALL BE POWER SWEPT IMMEDIATELY AND ALL SEDIMENT REMOVED FROM DOWNSTREAM FACILITIES.

SPECIFICATIONS FOR PRIVATE UTILITIES

- 1. BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE EACH EXISTING LATERAL OR POINT OF CONNECTION AND VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES. IF ANY EXISTING UTILITIES ARE NOT AS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.
- ALL CONNECTIONS TO EXISTING PIPES AND MANHOLES SHALL BE CORED CONNECTIONS. CONNECTIONS TO WATERMAIN SHALL BE WET TAPED WITH A STAINLESS STEEP TAPPING SLEEVE.
 PROPOSED SANITARY SEWER AND INTERNALLY CONNECTED STORM SEWER SHOWN ON THIS PLAN SHALL TERMINATE AT A POINT FIVE (5) FEET FROM THE EXTERIOR BUILDING WALL. THE EXACT LOCATION OF ALL DOWN SPOUTS CONNECTIONS SHALL BE PER THE ARCHITECTURAL PLANS.
- 4. CONTRACTOR SHALL NOT SHUT OFF WATER OR PLUG SANITARY SEWER IN MUNICIPAL LINES WITHOUT PRIOR APPROVAL.

BENDS AND TEES. DISINFECT ALL NEW LINES AND OBTAIN SAFE WATER SAMPLE PRIOR TO USE.

- 5. MATERIALS FOR STORM SEWER SHALL BE AS FOLLOWS: STORM SEWER PIPE 48" OR LESS SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) CORRUGATED PIPE WITH AN INTEGRALLY FORMED SMOOTH WATERWAY SUCH AS ADS N-12. FOR PIPE 10" OR LESS IN DIAMETER, PVC, ASTM D-3034, SDR-26, MAY ALSO BE USED. WHERE SPECIFICALLY REQUIRED, REINFORCED CONCRETE PIPE (RCP), ASTM C-76, CLASS III OR HIGHER, MAY BE USED. TRENCH SECTION SHALL BE CLASS "B" FOR PVC AND HDPE AND CLASS "C" FOR CONCRETE (PER STANDARD SPECIFICATIONS). MANHOLES, INLETS AND CATCH BASINS SHALL BE PRE CAST REINFORCED CONCRETE, ASTM C-478. CASTINGS SHALL BE HEAVY DUTY CAST IRON. AREA DRAINS SHALL BE PER DETAIL ON PLAN OR EQUIVALENT AND SHALL BE A MINIMUM OF 24" IN DIAMETER. CONNECTIONS TO EXISTING PIPES SHALL BE MADE WITH INSERTA WYE OR EQUIVALENT, LAST (3) THREE JOINTS SHALL BE RESTRAINED WITH RODS.
- 6. MATERIALS FOR SANITARY SEWER SHALL BE AS FOLLOWS: SANITARY SEWER SHALL BE PVC, ASTM D-3034, SDR-35 WITH RUBBER GASKETED JOINTS, CONFORMING TO ASTM D-3212. TRENCH SECTIONS SHALL BE CLASS "B" BEDDING (PER STANDARD SPECIFICATIONS). CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL. CONNECTIONS SHALL BE MAD WITH A INSERTA WYE
- OR EQUIVALENT. A MINIMUM OF 6' OF COVER IS REQUIRED FOR ALL SANITARY SEWER.

 7. MATERIALS FOR WATER SERVICES AND PRIVATE HYDRANTS SHALL BE AS FOLLOWS: WATER SERVICES SHALL BE PVC, HDPE, OR DI AS ALLOWED BY MUNICIPAL CODE, PVC SHALL BE AWWA C-900. DI SHALL BE AWWA C151, CLASS 52 (OR AS REQUIRED BY LOCAL CODE). TRENCH SECTIONS SHALL BE CLASS "B" BEDDING (PER STANDARD SPECIFICATIONS). CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL. CONNECTION SHALL BE MADE WITH A WET TAP, CORPORATE STOP AND VALVE BOX PER MUNICIPAL STANDARDS. A MINIMUM OF 6' COVER IS REQUIRED FOR ALL WATERMAIN. VALVES SHALL BE NONRISING STEM, RESILIENT SEATED GATE VALVES COMPLYING WITH AWWA C509 WITH A THREE PIECE CAST IRON VALVE BOX. INSTALL THRUST BLOCKS AT ALL
- 8. EXTREME CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. MECHANICALLY COMPACTED GRANULAR BACKFILL IS REQUIRED UNDER & WITHIN 5 FEET OF ALL PAVEMENT INCLUDING SIDEWALKS. FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED.
- 9. TRACER WIRE (NO. 12 SINGLE STRAND COPPER) AND WARNING TAPE SHALL BE INSTALLED ON ALL UTILITIES IN ACCORDANCE WITH THE LOCAL AND STATE CODES. TRACER WIRE SHALL TERMINATE IN A VALVECO TERMINAL BOX AT EACH END.
- 10. MANDREL TESTING ON SANITARY LINES AND PRESSURE TESTING ON WATERMAIN MAY BE REQUIRED BY THE OWNER OR MUNICIPALITY.

 11. LIPON COMPLETION OF FINAL PAVING OPERATIONS. THE LITH ITY CONTRACTOR SHALL ADJUST ALL MANHOLE AND INLET PIMS AND VALVE BOXES TO FINISHED (
- 11. UPON COMPLETION OF FINAL PAVING OPERATIONS, THE UTILITY CONTRACTOR SHALL ADJUST ALL MANHOLE AND INLET RIMS AND VALVE BOXES TO FINISHED GRADE.

 12. 45° BENDS SHALL BE USED IN PLACE OF 90° BENDS WHEREVER POSSIBLE

TYPE LT IS REQUIRED UNLESS NOTED OTHERWISE. A COMMERCIAL GRADE MIX MAY BE SUBSTITUTED ONLY WITH APPROVAL FROM THE OWNER.

SPECIFICATIONS FOR PAVING

- 1. ALL DIMENSIONS ARE TO FACE OF CURB OR FACE OF BUILDING UNLESS NOTED OTHERWISE. ALL UTILITY DIMENSIONS ARE TO OUTSIDE OF PIPE OR CENTER OF STRUCTURE UNLESS OTHERWISE NOTED. ALL PAVING DIMENSIONS ARE TO FACE OF CURB OR TO EDGE OF PAVEMENT; EXCEPT FOR THE SETBACK FROM PARKING LOTS, MANEUVERING LANES AND FIRE ACCESS LANES, WHERE THE SETBACK IS MEASURED FROM THE BACK OF CURB TO THE PROPERTY LINE.
- 2. AGGREGATES USED IN THE CRUSHED STONE BASE SHALL CONFORM TO THE GRADATION REQUIREMENTS SECTIONS 301.2 AND 305.2.2 OF THE STANDARD SPECIFICATIONS. THICKNESS SHALL BE PER THE DETAIL ON THE PLANS. BASE SHALL BE 1¼ INCH DIAMETER LIMESTONE UNLESS NOTED OTHERWISE. RECYCLED MATERIALS MAY BE ALLOWED WITH APPROVAL FROM THE OWNER.
 3. SUBGRADE SHALL BE PROOFROLLED AND APPROVED BY A GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF STONE BASE. EXCAVATE UNSUITABLE AREAS AND REPLACE WITH BREAKER RUN STONE AND RECOMPACT. REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL SPECIFICATIONS.
- 4. EXISTING PAVEMENT SHALL BE SAWCUT IN NEAT STRAIGHT LINES TO FULL DEPTH AT ANY POINT WHERE EXISTING PAVEMENT IS REMOVED. CURB AND WALK SHALL BE REMOVED TO THE NEAREST JOINT. REMOVED PAVEMENT SHALL BE REPLACED WITH THE SAME SECTION AS EXISTING. MUNICIPAL STANDARDS MAY REQUIRE ADDITIONAL WORK.
- JOINT. REMOVED PAVEMENT SHALL BE REPLACED WITH THE SAME SECTION AS EXISTING. MUNICIPAL STANDARDS MAY REQUIRE ADDITIONAL WORK.

 5. ASPHALT FOR PARKING AREAS AND THE PRIVATE ROAD SHALL BE PER THE DETAILS. MATERIALS AND PLACEMENT SHALL CONFORM TO THE DOT STANDARD SPECIFICATIONS, SECTION 450 AND 460
- 6. CONCRETE FOR CURB, DRIVEWAY, WALKS AND NON-FLOOR SLABS SHALL CONFORM TO THE SECTION 415 OF THE STANDARD SPECIFICATIONS, GRADE A, ASTM C-94, 6 BAG MIX, WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI. JOINTING SHALL BE PER SECTION 415.3.7 OF THE STANDARD SPECIFICATION WITH CONSTRUCTION JOINTS HAVING A MAXIMUM SPACING OF 10'. EXPANSION JOINTS SHALL BE PROVIDED EVERY 50'. CONCRETE SHALL BE FINISHED PER SECTION 415.3.8 WITH A MEDIUM BROOM TEXTURE. A CURING MEMBRANE IN CONFORMANCE WITH SECTION 415.3.12 IS REQUIRED.
- 7. PROVIDE CONTRACTOR GRADE ACRYLIC, STRIPING PAINT FOR NEW ASPHALT OR COATED ASPHALT. APPLY MARKING PAINT AT A RATE OF ONE (1) GALLON PER THREE TO FOUR HUNDRED (300-400) LINEAL FEET OF FOUR (4) INCH WIDE STRIPES OR TO MANUFACTURER'S SPECIFICATION, WHICHEVER IS GREATER.
- LINEAL FEET OF FOUR (4) INCH WIDE STRIPES OR TO MANUFACTURER'S SPECIFICATION, WHICHEVER IS GREATER.

 8. THOROUGHLY CLEAN SURFACES FREE OF DIRT, SAND, GRAVEL, OIL AND OTHER FOREIGN MATTER. CONTRACTOR RESPONSIBLE TO INSPECT EXISTING PAVEMENT SURFACES FOR CONDITIONS AND DEFECTS THAT WILL ADVERSELY AFFECT QUALITY OF WORK, AND WHICH CANNOT BE PUT INTO AN ACCEPTABLE CONDITION THROUGH NORMAL PREPARATORY WORK AS SPECIFIED.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

- 1. ALL CONSTRUCTION SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN EPA'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER GENERAL PERMIT FOR CONSTRUCTION SITE LAND DISTURBANCE ACTIVITIES. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL TECHNICAL STANDARDS AND PROVISIONS IN EFFECT AT THE TIME OF CONSTRUCTION. THESE PROCEDURES AND STANDARDS SHALL BE REFERRED TO AS BEST MANAGEMENT PRACTICES (BMP'S). IT IS THE RESPONSIBILITY OF ALL CONTRACTORS ASSOCIATED WITH THE PROJECT TO OBTAIN A COPY OF, AND UNDERSTAND, THE BMP'S PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
- THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL CONTROL MEASURES AS DIRECTED BY OWNER/ENGINEER OR GOVERNING AGENCIES SHALL BE INSTALLED WITHIN 24 HOURS OF REQUEST.
- MODIFICATIONS TO THE APPROVED SWPPP IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS ARE ALLOWED IF MODIFICATIONS CONFORM TO BMP'S. ALL MODIFICATIONS MUST BE APPROVED BY OWNER/ENGINEER/GOVERNING AGENCY PRIOR TO DEVIATION OF THE APPROVED PLAN.
- 4. INSTALL PERIMETER EROSION CONTROL MEASURES (SUCH AS CONSTRUCTION ENTRANCES, SILT FENCE AND EXISTING INLET PROTECTION) PRIOR TO ANY SITE WORK, INCLUDING GRADING OR DISTURBANCE OF EXISTING SURFACE COVER, AS SHOWN ON PLAN IN ORDER TO PROTECT ADJACENT PROPERTIES/STORM SEWER SYSTEMS FROM SEDIMENT TRANSPORT.
- 5. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL LOCATIONS OF VEHICLE INGRESS/EGRESS POINTS. CONTRACTOR IS RESPONSIBLE TO COORDINATE LOCATION(S) WITH THE PROPER AUTHORITIES, PROVIDE NECESSARY FEES AND OBTAIN ALL REQUIRED APPROVALS OR PERMITS. ADDITIONAL CONSTRUCTION ENTRANCES OTHER THAN AS SHOWN ON THE PLANS MUST BE APPROVED BY THE APPLICABLE GOVERNING AGENCIES PRIOR TO
- 6. PAVED SURFACES ADJACENT TO CONSTRUCTION ENTRANCES SHALL BE SWEPT AND/OR SCRAPED TO REMOVE ACCUMULATED SOIL, DIRT AND/OR DUST IMMEDIATELY AND AS REQUESTED BY THE GOVERNING AGENCIES.
- 7. ALL EXISTING STORM SEWER FACILITIES THAT WILL COLLECT RUNOFF FROM DISTURBED AREAS SHALL BE PROTECTED TO TO PREVENT SEDIMENT DEPOSITION WITHIN STORM SEWER SYSTEMS. INLET PROTECTION SHALL BE IMMEDIATELY FITTED AT THE INLET OF ALL INSTALLED STORM SEWER AND SILT FENCE SHALL BE IMMEDIATELY FITTED AT ALL INSTALLED CULVERT INLETS. ALL INLETS, STRUCTURES, PIPES, AND SWALES SHALL BE KEPT CLEAN AND FREE OF SEDIMENTATION AND DEBRIS.
- 8. EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, WATER MAIN, ETC.) OUTSIDE OF THE PERIMETER CONTROLS SHALL INCORPORATE THE FOLLOWING:
 - PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.
 - BACKFILL, COMPACT AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.
 - DISCHARGE TRENCH WATER INTO A SEDIMENTATION BASIN OR FILTERING TANK IN ACCORDANCE WITH BMP'S PRIOR TO RELEASE INTO STORM SEWER OR DITCHES.
- 9. AT A MINIMUM, SEDIMENT BASINS AND NECESSARY TEMPORARY DRAINAGE PROVISIONS SHALL BE CONSTRUCTED AND OPERATIONAL BEFORE BEGINNING OF SIGNIFICANT MASS GRADING OPERATIONS TO PREVENT OFFSITE

DISCHARGE OF UNTREATED RUNOFF.

- 10. IF APPLICABLE, ALL WATERCOURSES AND WETLANDS SHALL BE PROTECTED WITH DOUBLE ROW OF SILT FENCE TO PREVENT ANY DIRECT DISCHARGE FROM DISTURBED SOILS.
- 11. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR INSPECTION AND REPAIR DURING CONSTRUCTION. THE OWNER WILL BE RESPONSIBLE IF EROSION CONTROL IS REQUIRED AFTER THE CONTRACTOR HAS COMPLETED THE
- 12. TOPSOIL STOCKPILES SHALL HAVE A BERM OR TRENCH AROUND THE CIRCUMFERENCE AND PERIMETER SILT FENCE TO CONTROL SILT. IF TOPSOIL STOCKPILE REMAINS UNDISTURBED FOR MORE THAN SEVEN (7) DAYS, TEMPORARY SEEDING AND STABILIZATION IS REQUIRED.
- 13. EROSION CONTROL MEASURES TEMPORARILY REMOVED FOR UNAVOIDABLE CONSTRUCTION ACTIVITIES SHALL BE IN WORKING ORDER IMMEDIATELY FOLLOWING COMPLETION OF SUCH ACTIVITIES OR PRIOR TO THE COMPLETION OF EACH WORK DAY, WHICH EVER OCCURS FIRST.
- 14. MAINTAIN SOIL EROSION CONTROL DEVICES THROUGH THE DURATION OF THIS PROJECT. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. DISTURBANCES ASSOCIATED WITH

EROSION CONTROL REMOVAL SHALL BE IMMEDIATELY STABILIZED.

- 15. PUMPS MAY BE USED AS BYPASS DEVICES. IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS. PUMP DISCHARGE SHALL BE DIRECTED INTO AN APPROVED FILTER BAG OR APPROVED SETTLING DEVICE.
- 16. GRADING EFFORTS SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. EROSION AND SEDIMENT CONTROL MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS, AND THE USE OF TEMPORARY OR PERMANENT MEASURES. ALL DISTURBED AREAS THAT WILL NOT BE WORKED FOR A PERIOD OF FOURTEEN (14) DAYS REQUIRE TEMPORARY SEEDING FOR EROSION CONTROL. SEEDING FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH TECHNICAL STANDARDS.
- 17. ALL DISTURBED SLOPES EXCEEDING 4:1, SHALL BE STABILIZED WITH NORTH AMERICAN GREEN S75BN EROSION MATTING (OR APPROVED EQUAL) AND ALL CHANNELS SHALL BE STABILIZED WITH NORTH AMERICAN GREEN C125BN (OR APPROVED EQUAL) OR APPLICATION OF AN APPROVED POLYMER SOIL STABILIZATION TREATMENT OR A COMBINATION THEREOF, AS REQUIRED. EROSION MATTING AND/OR NETTING USED ONSITE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
- 18. DURING PERIODS OF EXTENDED DRY WEATHER, THE CONTRACTOR SHALL KEEP A WATER TRUCK ON SITE FOR THE PURPOSE OF WATERING DOWN SOILS WHICH MAY OTHERWISE BECOME AIRBORNE.THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING WIND EROSION (DUST) DURING CONSTRUCTION AT HIS/HER EXPENSE.
- 19. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE VISUALLY INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM ON A DAILY BASIS.
- 20. QUALIFIED PERSONNEL (PROVIDED BY THE GENERAL/PRIME CONTRACTOR) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED AND EROSION AND SEDIMENT CONTROLS WITHIN 24 HOURS OF ALL 0.5-INCH, OR MORE, PRECIPITATION EVENTS WITH A MINIMUM INSPECTION INTERVAL OF ONCE EVERY SEVEN (7) CALENDAR DAYS IN THE ABSENCE OF A QUALIFYING RAIN OR SNOWFALL EVENT. REPORTING SHALL BE IN ACCORDANCE WITH OF THE GENERAL PERMIT. CONTRACTOR SHALL IMMEDIATELY ARRANGE TO HAVE ANY DEFICIENT ITEMS REVEALED DURING INSPECTIONS REPAIRED/REPLACED.
- 21. SEE ADDITIONAL DETAILS AND NOTES ON SITE STABILIZATION AND CONSTRUCTION DETAILS.

DEMOLITION NOTES

- PERIMETER SILT FENCING AND CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO ANY DEMOLITION. PLEASE REFER TO GRADING AND EROSION AND SEDIMENT CONTROL PLAN SHEETS FOR FURTHER DETAILS.
- 2. EXISTING FEATURES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE TYPE, LOCATION, SIZE AND ELEVATION OF UNDERGROUND UTILITIES AS THEY DEEM NECESSARY TO AVOID DAMAGE THERETO. CONTRACTOR/OWNER SHALL CALL "MISS DIG" PRIOR TO ANY
- CONTRACTOR SHALL PERFORM ALL DEMOLITION WORK IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- 4. COORDINATE WITH ALL APPLICABLE UTILITY COMPANIES AND THE MUNICIPALITY TO PROTECT EXISTING FUNCTIONING UTILITIES, BULKHEAD/REMOVE CONNECTIONS AS NECESSARY, AND TO ENSURE ALL UTILITIES ARE INACTIVE PRIOR TO ANY DEMOLITION ACTIVITIES. CONTRACTOR SHALL TAKE ADEQUATE PRECAUTIONS TO ENSURE PROTECTION OF EXISTING UTILITIES THAT ARE NOT TO BE IMPACTED. THE CONTRACTOR IS RESPONSIBLE FOR REPAIR OF ANY EXISTING
- 5. VOIDS LEFT BY REMOVAL OF FEATURES SHALL BE MODIFIED/FILLED TO PREVENT

UTILITIES DAMAGED AS A RESULT OF THE DEMOLITION.

PUBLIC UTILITY CONNECTIONS TO SITE.

- 6. DEMOLISH AND DISPOSE EXISTING PIPING, CABLE/WIRES, STRUCTURES, OR OTHER SURFACE FEATURES INDICATED ON THE PLANS TO BE REMOVED.
- 7. CLEARING AND GRUBBING DESIGNATIONS SHALL INCLUDE CLEARING, GRUBBING, REMOVING, AND DISPOSING OF ALL VEGETATION AND DEBRIS WITHIN THE LIMITS OF CONSTRUCTION, AS DESIGNATED ON THE PLANS. CONTRACTOR SHALL REMOVE ONLY THOSE TREES ABSOLUTELY NECESSARY TO ALLOW FOR CONSTRUCTION
- 8. CONTRACTOR SHALL REMOVE EXISTING FENCING IN A MANNER TO ALLOW REUSE.
 ANY FENCING MATERIAL TO BE REUSED IN THE CONSTRUCTION OF RELOCATED
 FENCE LINES SHALL BE PRESENTED TO ENGINEER FOR INSPECTION AND
 PROPOSED CONTRACT DEDUCT ASSOCIATED WITH REUSE OF THE SALVAGED
 MATERIAL. ENGINEER OR OWNER WILL PROVIDE WRITTEN ACCEPTANCE OF THE
- PROPOSED SALVAGED MATERIAL.

 9. CONTRACTOR SHALL COORDINATE WITH THE MUNICIPALITY FOR TERMINATION OF
- 10. CONTRACTOR SHALL COORDINATE STOCKPILE LIMITS AND LOCATIONS WITH ENGINEER/OWNER PRIOR TO DEMOLITION.



GENERAL NOTES

logic design & architecture, inc.

ogicDA.com | 414.909.008

Project Manager: WBM

Job Number: 23-042

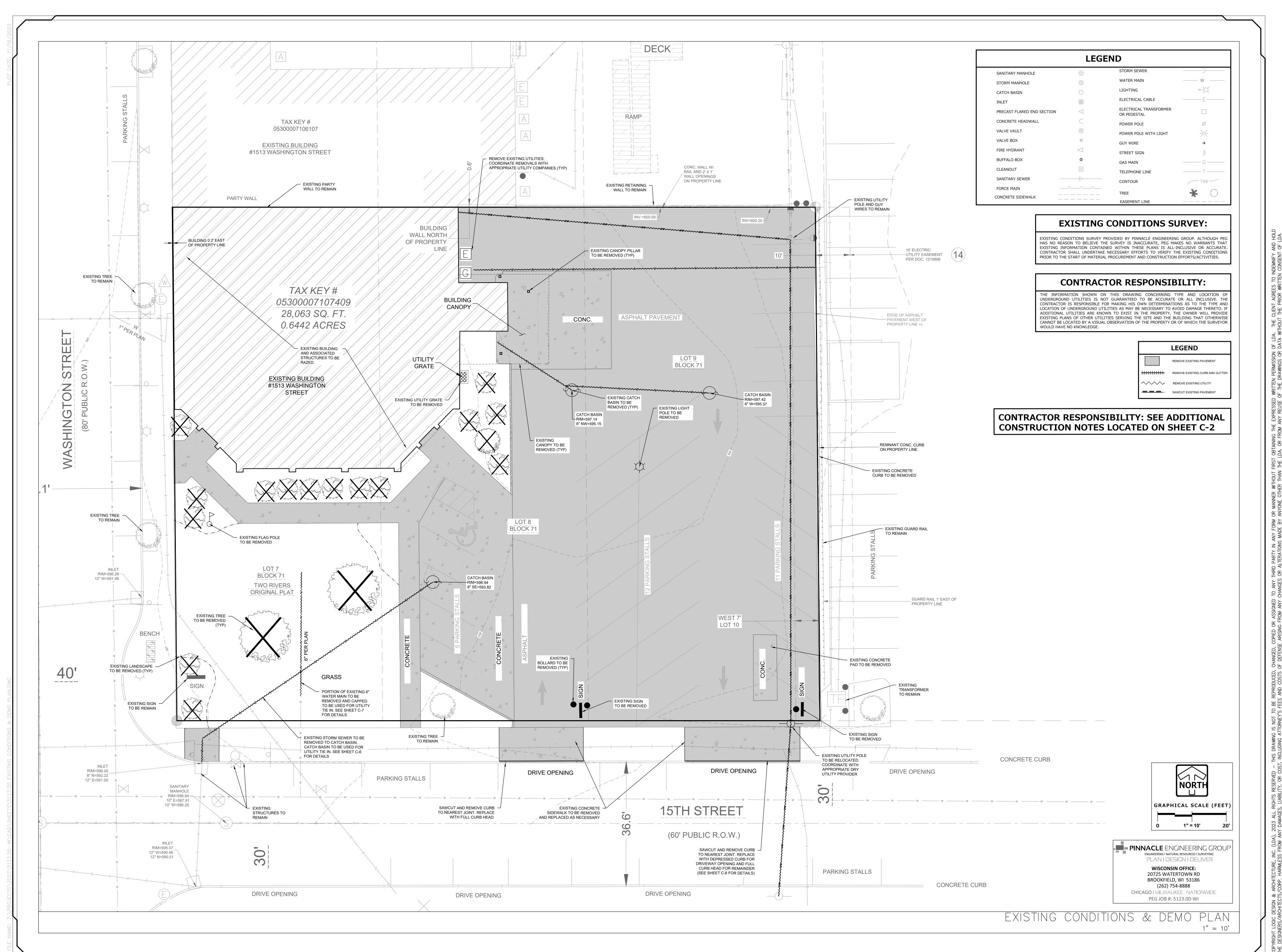
Additional Info

T OF LDA.		
M ANY DAMAGES, LIABILITY, OR COST, INCLUDING ATTORNEY'S FEES AND COSTS OF DEFENSE ARISING FROM ANY CHANGES OR ALTERATIONS MADE BY ANYONE OTHER THAN THE LDA, OR FROM ANY REUSE OF THE DRAWINGS OR DATA WITHOUT THE PRIOR WRITTEN CONSENT OF LDA.		
r the prior w		
DATA WITHOU ⁻		
AWINGS OR I	Project Name	
OF THE DR		
ANY REUSE		
A, OR FROM	ÆRS, 1	
HAN THE LD,	WO RIV	
NE OTHER TI	, OF T	
DE BY ANYO	FRS r, city	
RATIONS MA	RIV TON S	
SES OR ALTE	X TWO RIVERS 9 WASHINGTON ST, CITY OF TWO RIVERS, WI	
ANY CHANO	× 60°	
RISING FROM	○ ← Dates/Revisions	
· DEFENSE A		
ND COSTS OF		
:Y'S FEES AI		
ING ATTORNI		1 1
SOST, INCLUE		
ABILITY, OR (
JAMAGES, LI,	Drawing Title	
M ANY I	GENERAL NOTES	

SN & ARCHITECTURE, INC. (LDA), 2023 ALL RIGHTS RESERVED — THIS DI ECTS/CORP. HARMLESS FROM ANY DAMAGES. LIABILITY, OR COST. INCLU

.

C-2





ogicDA.com | 414.909.0080 Project Manager: WBM Job Number: 23-042

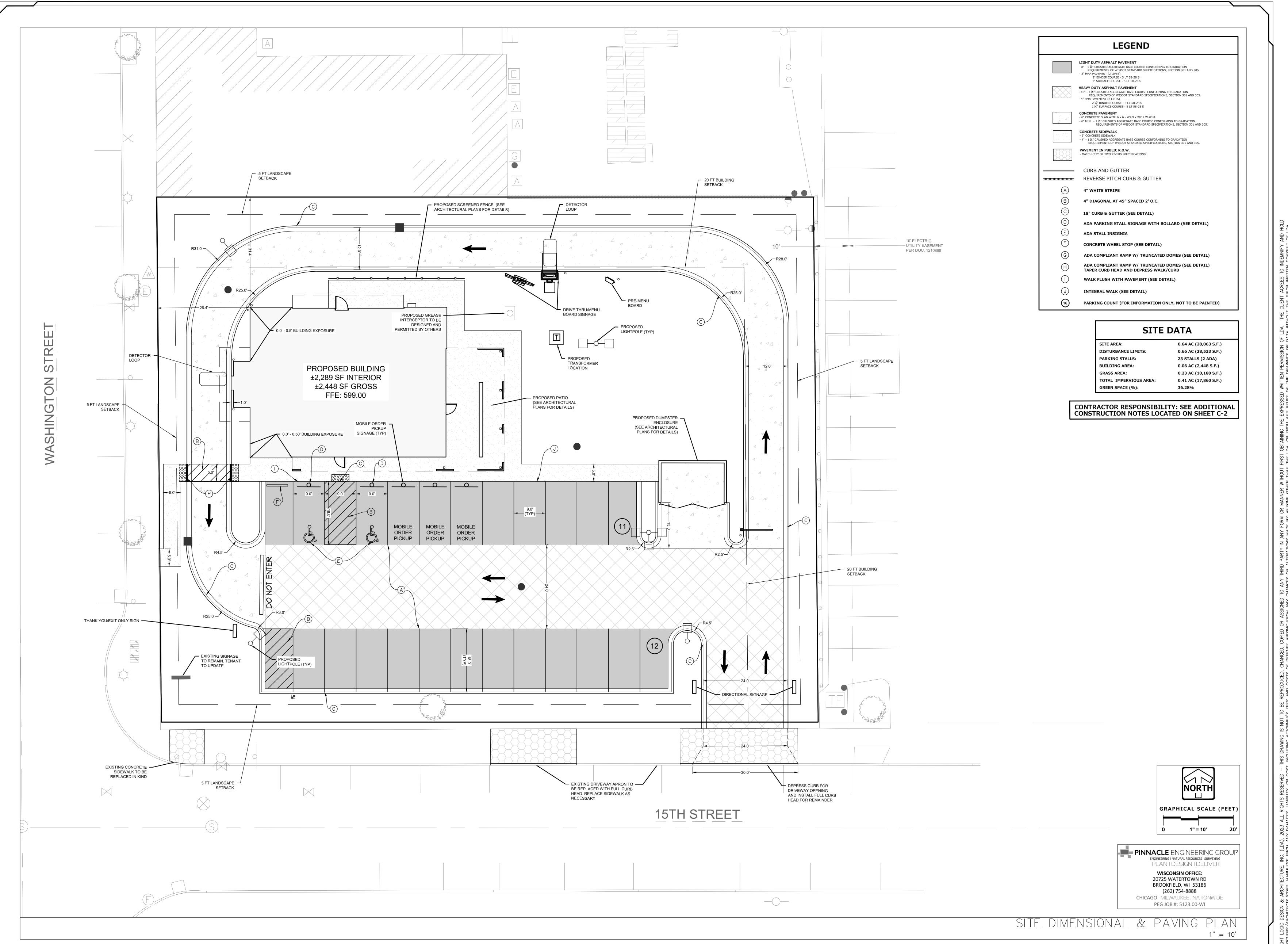
Additional Info

Project Name

Dates/Revisions

Drawing Title
EXISTING CONDITIONS &

DEMO PLAN





_ogicDA.com | 414.909.008(Project Manager: WBM Job Number: 23-042

Additional Info

Project Name

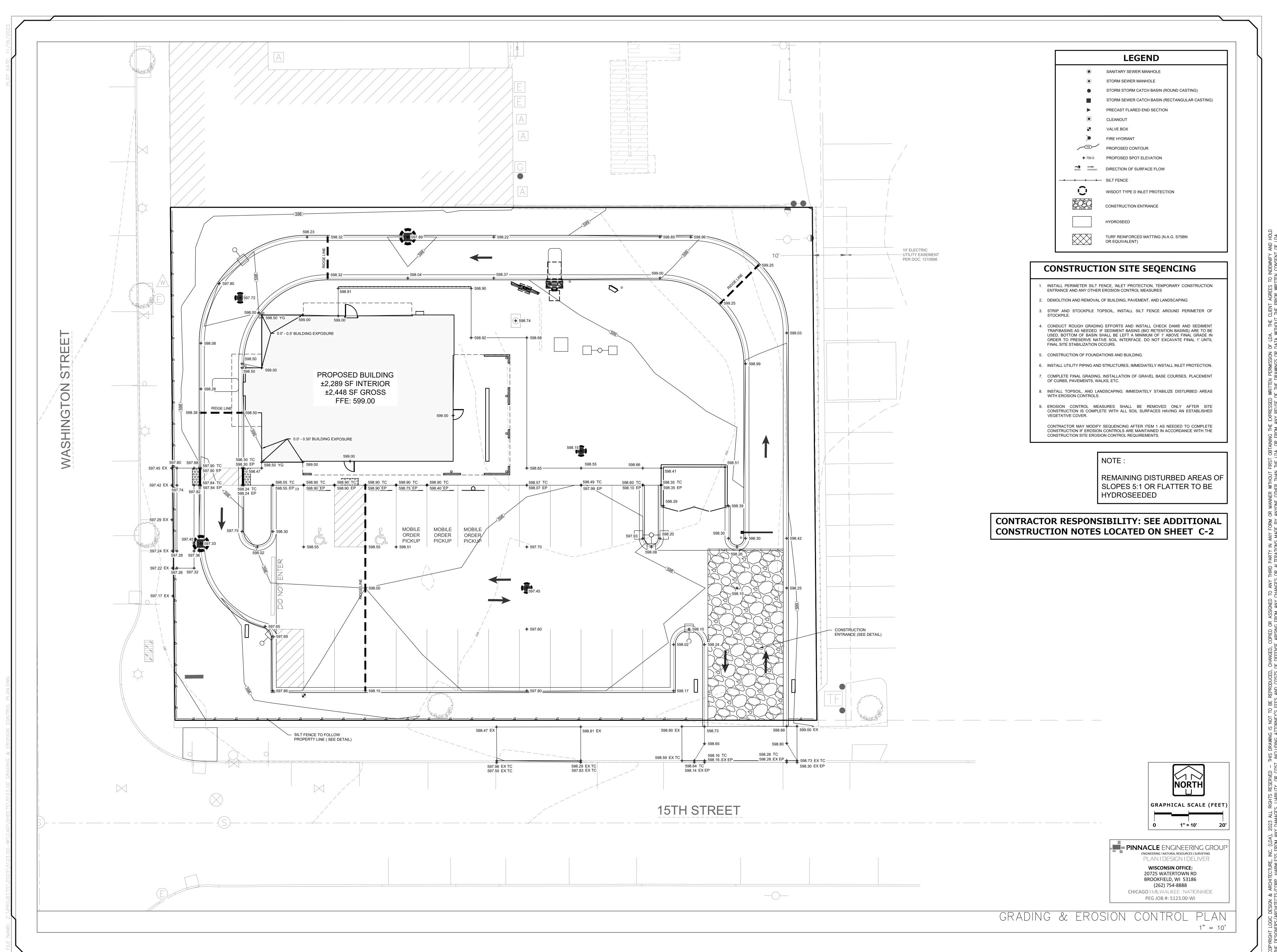
Dates/Revisions

Drawing Title

SITE DIMENSIONAL

& PAVING PLAN

C-4





ogicDA.com | 414.909.0080 Project Manager: WBM Job Number: 23—042

Additional Info

Project Name

CITY OF TWO RIVE

SB 1509

Dates/Revisions

FOR CONSTRUCT

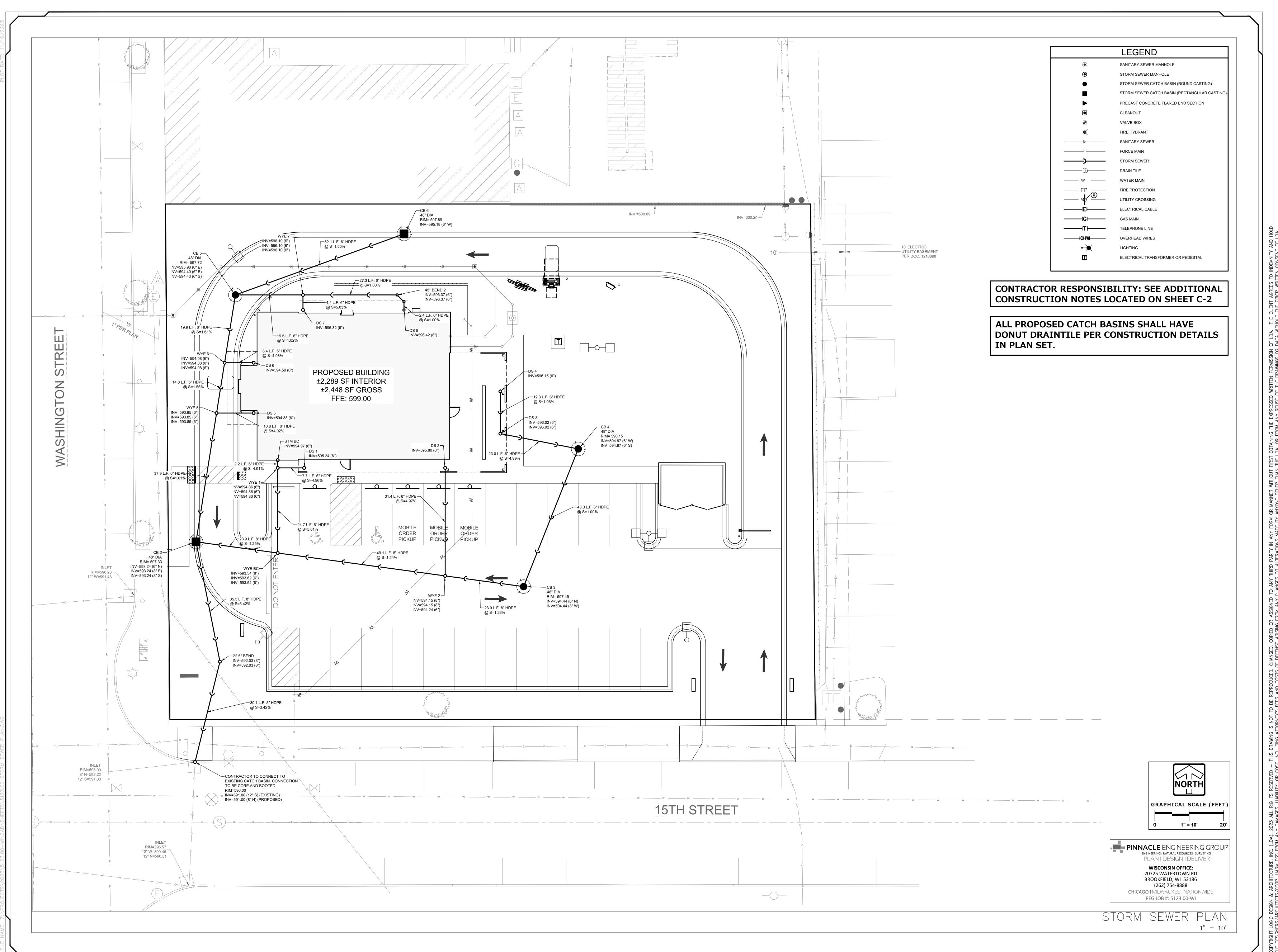
rawing Title

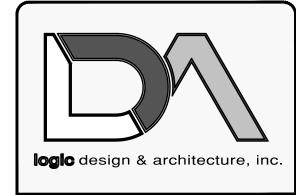
Drawing Title

GRADING & EROSION

CONTROL PLAN

C-5





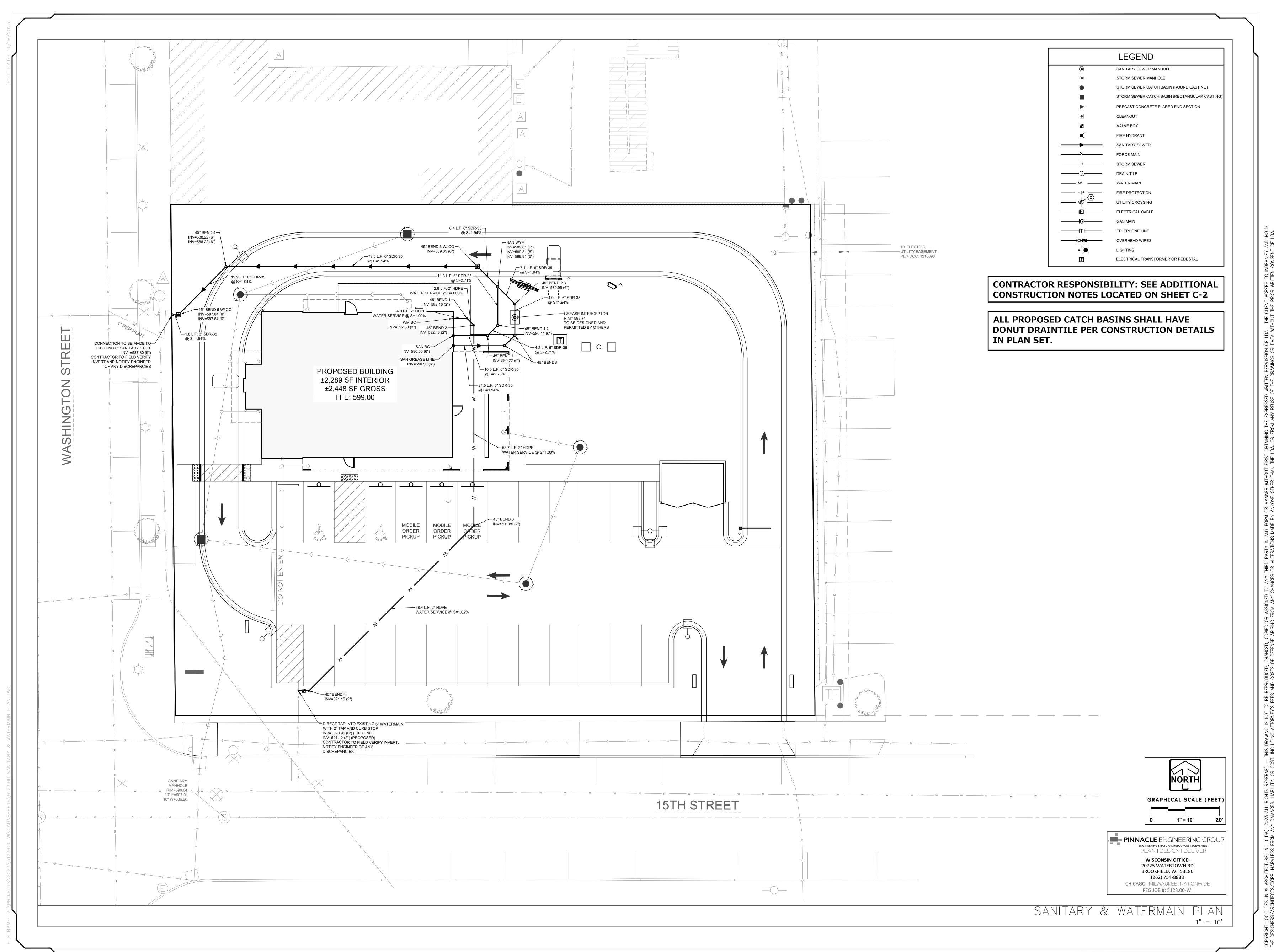
LogicDA.com | 414.909.0080 Project Manager: WBM Job Number: 23-042

Additional Info

Project Name

Dates/Revisions

Drawing Title STORM SEWER





LogicDA.com | 414.909.008 Project Manager: WBM Job Number: 23-042

Additional Info

Project Name

Dates/Revisions

Drawing Title
SANITARY &

WATERMAIN PLAN

1.0 POTENTIAL POLLUTANT SOURCES

GIVEN THE PROPOSED ACTIVITY ON THE PROJECT SITE, THE PRIMARY POTENTIAL POLLUTANT SOURCE ASSOCIATED WITH THIS CONSTRUCTION PROJECT IS SOIL EROSION AND TRANSPORTATION; REFER TO SECTION 4 OF THIS PLAN. ADDITIONAL POTENTIAL SOURCES OF POLLUTION MAY INCLUDE: FUEL TANKS, WASTE CONTAINERS, OIL OR OTHER PETROLEUM PRODUCTS, DETERGENTS, PAINTS, CONSTRUCTION DEBRIS, SANITARY STATIONS, FERTILIZERS, AND DUST: REFER TO SECTION 5 OF THIS PLAN.

2.0 EROSION AND SEDIMENT CONTROL IMPLEMENTATION

THE FOLLOWING ARE DESCRIPTIONS OF THE EROSION AND SEDIMENT CONTROL PRACTICES THAT SHALL BE IMPLEMENTED DURING CONSTRUCTION OF THIS PROJECT. IN ADDITION TO THESE MEASURES, CONTRACTOR SHALL DISTURB ONLY AREAS NECESSARY TO COMPLETE THE CONSTRUCTION PROJECT. ALL PRACTICES SHALL BE CONDUCTED IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES (BMP).

2.1 CONSTRUCTION AND EROSION CONTROL SEQUENCING CONSTRUCTION SEQUENCING WILL BE UTILIZED AS A MEANS OF CONTROLLING EROSION AND LIMITING SEDIMENT TRANSPORT. SEQUENCING AS LISTED

RESTORATION PRACTICES AS NECESSARY, TO THE SATISFACTION OF THE OWNER.

SUBMIT A DETAILED SITE SEQUENCING PLAN TO OWNER FOR APPROVAL AT LEAST 5 BUSINESS DAYS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR MAY MODIFY SEQUENCING AFTER ITEM 6 AS NEEDED TO COMPLETE CONSTRUCTION ONLY IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL REQUIREMENTS.

BELOW IS GENERAL IN NATURE AND MAY VARY DEPENDING ON WEATHER CONDITIONS AND/OR PHASING OF CONSTRUCTION. THE CONTRACTOR SHALL

- 1. INSTALL TEMPORARY CONSTRUCTION ENTRANCES, INLET PROTECTION ON EXISTING STORM SEWER AND CULVERT INLET LOCATIONS, AND PERIMETER SILT FENCING.
- 2. INSTALL SILT FENCING ALONG THE PERIMETER OF PROPOSED TOPSOIL STOCKPILE LOCATIONS. THE FIRST TOPSOIL DEPOSITED WITHIN THE STOCKPILE LIMITS SHALL BE PLACED TO CREATE TEMPORARY BERMING ALONG THE SILT FENCE TO PREVENT DIRECT STORMWATER RUNOFF AGAINST SILT FENCING. CONTRACTOR SHALL LIMIT LAND DISTURBING ACTIVITIES ASSOCIATED WITH TEMPORARY BERMING TO A MINIMUM.
- 3. STRIP TOPSOIL WITHIN THE LIMITS OF THE SEDIMENT TRAPS THAT WILL BE USED FOR TEMPORARY SEDIMENT CONTROL. STRIPPED TOPSOIL SHALL BE PLACED TO CONSTRUCT DIVERSION BERMING OR PLACED WITHIN THE STOCKPILE LIMITS. 4. STRIP TOPSOIL ALONG THE REMAINDER OF DIVERSION BERMING AND IMMEDIATELY PLACE TOPSOIL TO CREATE THE BERMING. MASS TOPSOIL
- STRIPPING SHALL NOT OCCUR UNTIL ALL DOWNSTREAM SEDIMENT CONTROLS ARF IN PLACE 5. CONDUCT ROUGH GRADING OPERATIONS AND UTILITY PIPING INSTALLATION. DRAIN TILE SHALL NOT BE INSTALLED UNTIL UPLAND AREAS CONTRIBUTING STORMWATER RUNOFF ARE STABILIZED. DITCH CHECKS SHALL BE INSTALLED WITHIN DRAINAGE DITCHES IMMEDIATELY FOLLOWING CREATION OF DITCHES AND INLET PROTECTION SHALL BE INSTALLED TO PROTECT ANY STORM SEWER OR CULVERTS THAT WILL
- FUNCTION DURING CONSTRUCTION 6. FINE GRADE SUB-GRADE SOILS WITHIN PAVEMENT AND BUILDING LIMITS. PLACE STONE BASE MATERIAL AS SOON AS POSSIBLE FOLLOWING
- COMPLETION OF FINE GRADING EFFORTS. 7. FINE GRADE REMAINING DISTURBED AREAS. PLACE SALVAGED TOPSOIL, EROSION BLANKETS/MATTING, AND SEED/MULCH AS SOON AS POSSIBLE
- FOLLOWING COMPLETION OF FINE GRADING EFFORTS. 8. EROSION CONTROLS SHALL NOT BE REMOVED UNTIL SITE IS FULLY STABILIZED OR 70% VEGETATIVE COVER IS ESTABLISHED. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF SILT FENCE, TEMPORARY FENCING/PRETECTION, DITCH CHECKS, AND OTHER TEMPORARY CONTROLS, AND

2.2 STABILIZATION PRACTICES

THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR. WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, AND WHEN STABILIZATION MEASURES ARE INITIATED, SHALL BE RECORDED ON THE STABILIZATION SCHEDULE FOR MAJOR GRADING ACTIVITIES.

STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE

TEMPORARILY OR PERMANENTLY CEASED. NO MORE THAN SEVEN (7) DAYS SHALL PASS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS PERMANENTLY CEASED UNLESS: THE INITIATION OF STABILIZATION MEASURES BY THE SEVENTH (7) DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASE IS

PRECLUDED BY SNOW COVER. IN THAT EVENT, STABILIZATION MEASURE SHALL BE INITIATED AS SOON AS PRACTICABLE. CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN FOURTEEN (14) DAYS FROM WHEN ACTIVITIES CEASED, (I.E. THE TOTAL TIME PERIOD THAT THE CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN FOURTEEN (14) DAYS). IN THAT EVENT, STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE SEVENTH (7) DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY

CEASED. SEE THE SOIL PROTECTION CHART PRESENTED IN THE CONSTRUCTION DOCUMENTS FOR RATES OF PERMANENT AND TEMPORARY VEGETATION. STABILIZATION MEASURES SHALL BE DETERMINED BASED ON SITE CONDITIONS AT THE TIME CONSTRUCTION ACTIVITY HAS CEASED. INCLUDING BUT NOT LIMITED TO WEATHER CONDITIONS AND LENGTH OF TIME MEASURE MUST BE EFFECTIVE. THE FOLLOWING ARE ACCEPTABLE STABILIZATION MEASURES.

PERMANENT SEEDING; IN ACCORDANCE WITH APPROVED LANDSCAPING PLAN TEMPORARY SEEDING MAY CONSIST OF SPRING OATS (100LBS/ACRE) AND/OR WHEAT OR CEREAL RYE (150LBS/ACRE) HYDRO-MUI CHING WITH A TACKIFIER GEOTEXTILE EROSION MATTING

SODDING 2.3 STRUCTURAL PRACTICES

FABRIC ONLY

SILT FENCE SHALL BE STAPLED, USING AT

WITH EQUIVALENT OPENING SIZE OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN.

4. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.

6. SILT FENCE TO EXTEND ABOVE THE TOP OF PIPE, WHERE APPLICABLE.

5. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1.125-INCHES x 1.125-INCHES OF DRIED OAK OR HICKORY.

ALL SILT FENCE MATERIALS AND INSTALLATION SHALL BE IN CONFORMANCE WITH WI DNR TECHNICAL STANDARD 1056.

SILT FENCE SHALL BE ANCHORED BY SPREADING AT LEAST 8-INCHES OF FABRIC IN A 4-INCH WIDE AND 6-INCH DEEP TRENCH OR 6-INCH DEEP V-TRENCH ON THE UPSLOPE SIDE OF THE FENCE. TRENCHES SHALL NOT BE EXCAVATED WIDER OR DEEPER THAN NECESSARY FOR PROPER INSTALLATION.

7. POST SPACING SHALL BE SELECTED BASED ON GEOTEXTILE FABRIC (8-FEET FOR WOVEN AND 3-FEET FOR NON-WOVEN).

REVERSE STYLE

4. REVERSE STYLE CURB LOCATIONS ARE NOTED ON THE PLANS.

18" VERTICAL FACE CURB

INTEGRAL CURB AND SIDEWALK

1. LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 15 FEET NOR LESS THAN 6 FEET. THE JOINTS SHALL BE A MINIMUM OF 3

DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE 0.5 INCH THICK. IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED CRUSHED STONE.

CURVES OF RADIUS 200 FEET OR LESS, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER OF RECORD. THE EXPANSION JOINTS FILLER SHALL BE A ONE PIECE FIBERBOARD OR THE APPROVED EQUIVALENT MATERIAL HAVING THE SAME

COMPACTED GRANULAR BACKFILL -

SILT FENCE

THE FOLLOWING ARE DESCRIPTIONS OF STRUCTURAL PRACTICES TO BE IMPLEMENTED TO DIVERT FLOWS FROM EXPOSED SOILS, STORE FLOWS, OR OTHERWISE LIMIT THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE INCLUDING THE PROPOSED AND EXISTING WETLAND AREAS SUCH PRACTICES COULD INCLUDE SILT FENCE, PROTECTION FENCE, CONSTRUCTION ENTRANCE, DITCH CHECK, EROSION CONTROL MATTING, DIVERSION

5.0 INSPECTION BERM/SWALE, SEDIMENT TRAP, LEVEL SPREADER, INLET PROTECTION, OUTLET PROTECTION, AND TEMPORARY OR PERMANENT SEDIMENT BASIN. THE FOLLOWING STRUCTURAL PRACTICES ARE TO BE UTILIZED DURING THIS PROJECT.

BACKS MAY BE REQUIRED IN UNSTABLE

TRENCH DETAIL

- CONCRETE CURB

— CONCRETE CURB

NLET SPECIFICATION: AS PER PLAN

4" x 6" OVAL HOLE -SHALL BE HEAT

T INTO ALL FOUR SIDE PANELS

FRONT, BACK, AND

TTOM TO BE MADE ROM SINGLE PIECE

MINIMUM DOUBLE

INSTALLATION NOTES

MINIMUM 5" COMPACTED BASE AGGREGATE UNDER CURB

BASE AGGREGATE UNDER CURB

OF FABRIC.

<u>SILT FENCE</u> SHALL BE PLACED DOWN SLOPE OF DISTURBED AREAS OF THE CONSTRUCTION SITE AND AROUND THE PERIMETER OF THE TOPSOIL STOCKPILE. THIS INCLUDES PROTECTION OF EXISTING WETLAND AREAS TO BE MAINTAINED. SILT FENCE MAY ALSO BE USED AS A TEMPORARY CONTROL DEVICE WHERE SEDIMENTATION RUNOFF IS DISCOVERED.

- CONSTRUCTION ENTRANCE SHALL BE INSTALLED TO REDUCE SOIL EROSION POLLUTANTS FROM LEAVING THE SITE DURING CONSTRUCTION ACTIVITIES. IF THE CRUSHED STONE DOES NOT ADEQUATELY REMOVE MUD FROM VEHICLE TIRES, THEY SHALL BE HOSED OFF BEFORE ENTERING A PAVED ROADWAY. ANY SOIL DEPOSITED ON THE PUBLIC PAVED ROAD WAY SHALL BE REMOVED IMMEDIATELY. <u>DITCH CHECK (STRAW BALES)</u> SHALL BE INSTALLED IN DRAINAGE CHANNELS AS NEEDED.
- EROSION CONTROL MATTING SHALL BE PLACED ON AREAS OR EMBANKMENTS HAVING SLOPES GREATER THAN OR EQUAL TO 3H:1V, BEFORE
- DIVERSION BERM/SWALE SHALL BE CONSTRUCTED TO DIVERT RUNOFF AROUND THE SITE AND TO DIVERT RUNOFF FROM THE DISTURBED AREA TO A SEDIMENT TRAP OR OTHER CONTROL. BERMS/SWALES SHALL BE STABILIZED WITH EQUIPMENT TRACKING AND TEMPORARY SEEDING. <u>SEDIMENT TRAPS/BASIN</u> SHALL BE CONSTRUCTED TO COLLECT RUNOFF AND RUNOFF FROM SITE DIVERSION BERMS/SWALES.

INLET PROTECTION SHALL BE INSTALLED AT STORMWATER DRAINAGE INLETS TO REDUCE SEDIMENT WITHIN STORM SEWER CONVEYANCE

<u>OUTLET SCOUR PROTECTION</u> SHALL BE INSTALLED AT STORMWATER DRAINAGE OUTLETS TO DIFFUSE FLOWS.

3.0 ADDITIONAL PRACTICES

ADDITIONAL POLLUTANT CONTROL MEASURES TO BE IMPLEMENTED DURING CONSTRUCTION ACTIVITIES SHALL INCLUDE, BUT NOT BE LIMITED TO THE CONSTRUCTION WASTE SHALL BE PROPERLY DISPOSED OF. THIS INCLUDES ALL CONSTRUCTION SITE WASTE MATERIAL, SANITARY WASTE, AND

WASTE FROM VEHICLE TRACKING OF SEDIMENTS. THE CONTRACTOR SHALL ENSURE THAT NO MATERIAL WASTES OR UNUSED BUILDING MATERIALS

- SHALL BE BURIED, DUMPED, BURNED, OR DISCHARGED TO THE WATERS OF THE STATE. VEHICLES HAULING MATERIAL AWAY FROM THE SITE SHALL BE COVERED WITH A TARPAULIN TO PREVENT BLOWING DEBRIS. $\underline{\textit{DUST CONTROL}}$ SHALL BE ACCOMPLISHED BY ONE OR MORE OF THE FOLLOWING METHODS:
- COVERING 30% OR MORE OF THE SOIL SURFACE WITH A NON-ERODIBLE MATERIAL.
- ROUGHENING (EQUIPMENT TRACKING) THE SOIL TO PRODUCE RIDGES PERPENDICULAR TO THE PREVAILING WIND. RIDGES SHALL BE AT LEAST SIX (6) INCHES IN HEIGHT. FREQUENT WATERING OF EXCAVATION AND FILL AREAS.
- PROVIDING GRAVEL OR PAVING AT ENTRANCE/EXIT DRIVES, PARKING AREAS AND TRANSIT PATHS. STREET SWEEPING SHALL BE PERFORMED TO IMMEDIATELY REMOVE ANY SEDIMENT TRACKED ON PAVEMENTS.

4.0 EROSION AND SEDIMENT STRUCTURAL PRACTICE MAINTENANCE

THE FOLLOWING MAINTENANCE PRACTICES SHALL BE USED TO MAINTAIN, IN GOOD AND EFFECTIVE OPERATING CONDITIONS, VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES, AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THIS PLAN, UPON IDENTIFICATION, DEFICIENCIES IN STORMWATER CONTROLS SHALL BE ADDRESSED IMMEDIATELY. THE MAINTENANCE PROCEDURES FOR THIS DEVELOPMENT SHALL INCLUDE, BUT NOT BE LIMITED TO THE

<u>SILT FENCE</u> - REPAIR OR REPLACE ANY DAMAGED FILTER FABRIC AND/OR STAKES. REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE-HALF THE ABOVE GROUND HEIGHT OF THE FENCE. CONSTRUCTION ENTRANCE - AS NEEDED, ADD STONE TO MAINTAIN CONSTRUCTION ENTRANCE DIMENSIONS AND EFFECTIVENESS.

DITCH CHECK (STRAW BALES) - RE-SECURE STAKES; ADJUST OR REPOSITION BALES TO ADDRESS PROPER FLOW OF STORMWATER; AND REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE-HALF THE HEIGHT OF THE BALE. <u>EROSION CONTROL MATTING</u> - REPAIR MATTING IMMEDIATELY IF INSPECTION REVEALS BREACHED OR FAILED CONDITIONS. REPAIR AND

RE-GRADE SOIL WHERE CHANNELIZATION HAS OCCURRED. $\underline{\textit{DIVERSION BERM/SWALE}}$ - REPLACE OR RE-COMPACT THE CONSTRUCTION MATERIALS AS NECESSARY.

<u>SEDIMENT TRAP</u> - REMOVE AND DISPOSE OF THE ACCUMULATED SEDIMENT WHEN IT HAS REACHED THE SEDIMENT STORAGE ELEVATION. INLET PROTECTION - CLEAN, REPAIR OR REPLACE FILTER FABRIC AND/OR STONE WHEN CONTROL MEASURE IS CLOGGED. INLET FILTER BAGS SHALL BE REPLACED ONCE ONE-HALF FULL OF SEDIMENT.

<u>OUTLET PROTECTION</u> - CLEAN, REPAIR OR REPLACE FILTER FABRIC, TURF REINFORCEMENT MATTING AND/OR STONE WHEN CONTROL MEASURE IS ONE-HALF FULL OF SEDIMENT. <u>SEDIMENT BASIN</u> - AT THE END OF CONSTRUCTION, CONTRACTOR SHALL REMOVE AND DISPOSE OF THE ACCUMULATED SEDIMENT AND RESTORE BASIN AREA TO INTENDED POST-CONSTRUCTION DESIGN GRADES.

USE REBAR OR STEEL ROD FOR REMOVAL

OR INLETS WITH CAST CURB BOX USE WOOD

2"x4", EXTEND 10" BEYOND GRATE WIDTH ON

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND

ACCEPTABILITY LIST MAY BE SUBSTITUTED.

OOES NOT FALL INTO THE INLET, ANY MATERIA

MAINTENANCE OR REMOVAL.

DO NOT INSTALL INLET PROTECTION TYPE "D" IN INLETS SHALLOWER THAN 30 INCHES, MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOI OF THE OVERFLOW HOLES, OF 3 INCHES. WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3 INCHES CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4 INCHES FROM THE BOTTOM OF THE BAG.

TYPE D INLET PROTECTION

REVERSE STYLE

LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 15 FEET NOR LESS THAN 6 FEET. THE JOINTS SHALL BE A MINIMUM OF 3 INCHES IN DEPTH.

DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE 0.5 INCH THICK.

IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED CRUSHED STONE.

18" DEPRESSED CURB

WALK FLUSH WITH PAVEMENT

4. REVERSE STYLE CURB LOCATIONS ARE NOTED ON THE PLANS.

CURVES OF RADIUS 200 FEET OR LESS, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER OF RECORD. THE EXPANSION JOINTS FILLER SHALL BE A ONE PIECE FIBERBOARD OR THE APPROVED EQUIVALENT MATERIAL HAVING THE SAME

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3 INCHES OF THE GRATE.

2 FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2 INCH X 4 INCH.

LLING INTO THE INLET SHALL BE REMOVED MEDIATELY.

FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10 INCHES AROUND THE PERIMETER TO FACILITATE

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE

GRATE WITH WIRE OR PLASTIC TIES

INSPECTIONS SHALL BE COMPLETED WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A RAINFALL EVENT THAT IS ONE-HALF INCH OR GREATER OR

ALL TRACKING PAD MATERIALS AND INSTALLATION SHALL BE IN CONFORMANCE WITH WI DNR TECHNICAL STANDARD 1057.

IRACKING PADS SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE SITE. CONTRACTOR SHALL VERIFY LOCATION

THE AGGREGATE FOR TRACKING PADS SHALL BE 3 TO 6 INCH CLEAR OR WASHED STONE. ALL MATERIALS TO BE RETAINED ON

THE AGGREGATE SHALL BE PLACED IN A LAYER AT LEAST 12-INCHES THICK. ON SITES WHERE SATURATED CONDITIONS ARE EXPECTED DURING THE LIFE OF THE PAD, THE PAD SHALL BE UNDERLAIN WITH GEOTEXTILE FABRIC WHICH MEETS MATERIAL SPECIFICATION 592 GEOTEXTILE, TABLE 1 OR 2, CLASS I, II OR IV, TO PREVENT MIGRATION OF UNDERLYING SOILS INTO THE

. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT. MINIMUM WIDTH IS 14 FEET FOR ONE-WAY TRAFFIC AND 20 FEET FOR TWO-WAY TRAFFIC, WITH AN ADDITIONAL INCREASE OF 4 FEET FOR TRAILER TRAFFIC. THE TRACKING PAD SHALL BE A MINIMUM 50-FEET LONG.

ANY SEDIMENT TRACKED ONTO A PUBLIC OR PRIVATE ROAD SHOULD BE REMOVED BY STREET CLEANING, NOT FLUSHING, AT THE END OF EACH WORKING DAY.

THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED BY SCRAPING OR TOP-DRESSING WITH ADDITIONAL AGGREGATE

CONSTRUCTION ENTRANCE

CONCRETE WHEEL STOP

TAPER CURB HEAD

1. CONTRACTION JOINTS SHALL BE PLACED EVERY 10 FEET

2. EXPANSION JOINTS (3/4" EXPANSION FIBER MATERIAL) SHALL BE PLACED EVERY 300 FEET AND AT EVERY PC/PT AND 3 FEET FROM STRUCTURES

1" DIA. HOLE FOR ¾" x 30" LG. STEEL ANCHOR - 2 PER BUMPER

CONTRACTION JOINT -

EQUIVALENT SNOWFALL, OR AT A MINIMUM ONCE EVERY SEVEN (7) CALENDAR DAYS. INSPECTIONS SHALL BE UNDERTAKEN BY QUALIFIED PERSONNEL PROVIDED BY THE CONTRACTOR, AND SHALL INCLUDE: DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. A STORMWATER POLLUTION PREVENTION PLAN INSPECTION REPORT SHALL BE COMPLETED AND ADDED TO THE SWPPP. RAINFALL SHALL BE RECORDED ON THE SWPPP RAINFALL LOG. CONTRACTOR SHALL IMMEDIATELY ARRANGE FOR REPAIR OR REPLACEMENT OF ANY DAMAGED OR DEFICIENT CONTROL MEASURES OBSERVED DURING THE

QUALIFIED PERSONNEL MEANS A PERSON KNOWLEDGEABLE IN THE PRINCIPLES AND PRACTICES OF EROSION AND SEDIMENT CONTROL MEASURES, SUCH AS A LICENSED PROFESSIONAL ENGINEER, A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL, A CERTIFIED EROSION SEDIMENT OR STORMWATER INSPECTOR, OR OTHER TRAINED INDIVIDUAL.

6.0 SPILL PREVENTION

6.1 GENERAL MATERIAL MANAGEMENT PRACTICES

- THE GOOD HOUSEKEEPING PRACTICES LISTED BELOW SHALL BE FOLLOWED THROUGHOUT THE CONSTRUCTION PROJECT.
- 1. CONTRACTOR SHALL STORE ONLY ENOUGH PRODUCTS REQUIRED TO COMPLETE THIS PROJECT. 2. ALL MATERIAL SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR ORIGINAL CONTAINERS CONTAINING MANUFACTURER'S LABEL.
- 3. MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED. 4. MATERIALS REQUIRED TO HAVE A MATERIAL SAFETY DATA SHEET (MSDS) SHALL HAVE A COPY STORED IN THE PROJECT'S MSDS DATABASE. 6.2 SPILL CONTROL PRACTICES
- THE PRACTICES LISTED BELOW SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP.
- MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE MAINTAINED ONSITE. IMMEDIATELY UPON DISCOVERY, ALL SPILLS SHALL BE CLEANED UP ACCORDING TO THE MANUFACTURERS' RECOMMENDED METHODS.
- PERSONNEL CLEANING UP A SPILL SHALL USE PERSONAL PROTECTIVE EQUIPMENT. IMMEDIATELY UPON DISCOVERY, SPILLS OF TOXIC OR HAZARDOUS MATERIALS SHALL BE REPORTED TO THE OWNER AND GENERAL CONTRACTOR. NOTIFICATION AND REPORTING TO THE APPROPRIATE FEDERAL, STATE, AND LOCAL GOVERNMENT AGENCIES SHALL BE MADE AS REQUIRED.

THIS STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN DEVELOPED TO FULFILL ONE OF THE REQUIREMENTS OF THE GENERAL ENVIRONMENTAL PROTECTION AGENCY (EPA) NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (WISCONSIN POLLUTION DISCHARGE ELIMINATION SYSTEM "WPDES" PERMIT NO. WI-S067831-4) FOR THE DISCHARGE OF STORMWATER ASSOCIATED WITH CONSTRUCTION PROJECTS DISTURBING ONE ACRE OR MORE. THE OWNER AND CONTRACTORS SHALL COMPLY WITH ALL REQUIREMENTS OF THE WPDES FOR ALL SUCH CONSTRUCTION PROJECTS. THE STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY FROM THIS SITE ARE SUBJECT TO THE CONDITIONS AND REQUIREMENTS OF

THE EXECUTED OWNER CERTIFICATION AND THE CONTRACTOR CERTIFICATIONS SHALL BE KEPT ONSITE WITH THE APPROVED PLANS.

THE OWNER SHALL RETAIN A COPY OF THE SWPPP AT THE CONSTRUCTION SITE FROM THE DATE OF THE PROJECT INITIATION TO THE DATE OF FINAL

THE CONTRACTOR SHALL AMEND THE PLAN WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE AND WHICH HAS NOT OTHERWISE BEEN ADDRESSED IN THE PLAN OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SITE ACTIVITY. IN ADDITION, THE THE PLAN SHALL BE AMENDED TO IDENTIFY ANY NEW CONTRACTOR AND/OR SUBCONTRACTOR THAT WILL IMPLEMENT A MEASURE OF THE PLAN. AMENDMENTS TO THE PLAN MAY BE REQUIRED BY THE MUNICIPALITY, OWNER, OR OTHER REVIEWING AGENCY. COPIES OF THE AMENDMENTS SHALL BE KEPT ONSITE AS PART OF THE SWPPP.

RETENTION OF RECORDS:

CEMENT MORTAR

5" PRECAST CONC. WALLS

PARKING AREA (SEE PLANS

THE OWNER SHALL RETAIN COPIES OF THIS AND ALL REPORTS AND NOTICES REQUIRED BY THIS PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT, FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE PERMIT COVERAGE EXPIRES OR IS TERMINATED. THIS PERIOD MAY BE EXTENDED BY THE REQUEST OF THE AGENCY AT ANY TIME. IN ADDITION, THE OWNER SHALL RETAIN A COPY OF THE PLAN REQUIRED BY THIS PERMIT AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION. A NOTICE OF INTENT (NOI) APPLICATION MUST BE COMPLETED AND INCORPORATED INTO THE SWPPP.

WPDES NOTICE OF TERMINATION GUIDANCE:

WHEN A SITE HAS BEEN FINALLY STABILIZED AND ALL STORMWATER DISCHARGES FROM CONSTRUCTION SITES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED. THE OWNER OF THE FACILITY MUST SUBMIT A COMPLETED NOTICE OF TERMINATION THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT. CONTRACTOR SHALL SUBMIT A COMPLETED NOTICE OF TERMINATION TO OWNER FOR EXECUTION PRIOR TO THEIR FINAL PAY APPLICATION REQUEST.

VITH TYPE R GRATE FOR STRUCTURES IN VERTICAL CURB. IEENAH R-3339 FRAME AND GRATE

R STRUCTURES IN DEPRESSI

URB UNLESS OTHERWISE NOTE

6" PRECAST, REINF'D CONC. TOP

APER CURB & GUTTER 5' FACH:

(ALIGN WITH OPENING)

5 REBAR @ 12" EA. WAY

PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)**

ELEVATION VIEW

EASY STICK, RUBBER GASKET OR APPROVED EQUIVALENT SHALL BE PLACED AT ALL JOINTS BETWEEN ADJUSTING RINGS FOR STORM CATCH BASINS.

3. STRUCTURES TO BE 4' DIA. OR AS INDICATED ON THE PLANS.

CATCH BASIN - CURB

DETECTABLE WARNING FIELDS TO BE NEENAH FOUNDRY
 DETECTABLE WARNING FIELDS (OR APPROVED EQUAL), UNPAINTED

NATURAL COLOR AND FIELD WEATHERED PRIOR TO INSTALLATION (VERIFY COLOR WITH OWNER PRIOR TO INSTALLATION.

DETECTABLE WARNING TRUNCATED DOMES

THE FLAT TOP MAY BE USED IN LIEU OF THE TAPERED TOP WHEN FIELD CONDITIONS PROHIBIT USE OF A TAPERED TOP.

ADD ADJUSTING RINGS

5" PRECAST CONC. WALLS

11 1/2"

1. EASY STICK, RUBBER GASKET OR APPROVED EQUIVALENT SHALL BE PLACED AT ALL JOINTS BETWEEN ADJUSTING RINGS FOR STORM CATCH BASINS.

3. STRUCTURE TO BE 4.0' DIA. OR AS INDICATED ON THE PLANS.

CATCH BASIN

SANITARY SEWER CLEANOUT STRUCTURE

2. THE FLAT TOP MAY BE USED IN LIEU OF THE TAPERED TOP WHEN FIELD CONDITIONS PROHIBIT USE

W/ #5 RE-BAR @ 12" EA. WA

CONTROL MEASURE GROUP	CONTROL MEASURE	CONTROL MEASURE CHARACTERISTICS					
VEGETATIVE SOIL	TEMPORARY SEEDING	PROVIDES QUICK TEMPORARY COVER TO CONTROL EROSION WHEN PERMANENT SEEDING IS NOT DESIRED OR TIME OF YEAR IS INAPPROPRIATE.					
COVER	PERMANENT SEEDING	PROVIDES PERMANENT VEGETATIVE COVER TO CONTROL EROSION, FILTERS SEDIMENT FROM WATER. MAY BE PART OF FINAL LANDSCAPE PLAN.					
NON VEGETATIVE SOIL COVER	AGGREGATE COVER	PROVIDES TEMPORARY COVER ON ROADS AND PARKING LOTS AND AREAS WHERE VEGETATION CANNOT BE ESTABLISHED. PREVENTS MUD FROM BEING PICKED UP AND TRANSPORTED OFF-SITE.					
	PAVING	PROVIDES PERMANENT COVER ON PARKING LOTS AND ROADS OR OTHER AREAS WHERE VEGETATION CANNOT BE ESTABLISHED.					
DIVERSIONS	DIVERSION BERM / SWALE	DIVERTS RUNOFF TO A SEDIMENT TRAP OR OTHER CONTROL.					
ENCLOSED DRAINAGE	STORM SEWER	CONVEYS SEDIMENT LADEN WATER TO A SEDIMENT BASIN.					
OUTLETS	APRON ENDWALL OR RIPRAP	PROTECTS DOWNSTREAM CHANNEL FROM HIGH VELOCITY OF FLOW DISCHARGING FROM STRUCTURE.					
SEDIMENT BASINS	TEMPORARY SEDIMENT TRAP	CONSTRUCTED TO REMOVE SILTATION FROM RUNOFF FROM SITE DIVERSION BERMS/SWALES AND IN OVERLAND FLOOD ROUTE. CAN BE CONVERTED TO PERMANENT SEDIMENT BASIN.					
	SILT FENCE	PLACED DOWN SLOPE OF DISTURBED AREA TO KEEP RUNOFF CONTAINED ON-SITE.					
SEDIMENT FILTERS	INLET PROTECTION	INSTALLED IN OPEN GRATE STRUCTURES TO COLLECT SEDIMENT.					
TILTERS	DITCH CHECK	PLACED IN DRAINAGE CHANNELS TO FILTER SEDIMENT FROM RUNOFF.					
MUD AND	CONSTRUCTION ENTRANCE	REDUCES SOIL EROSION POLLUTANTS BEING TRANSPORTED OFF-SITE.					
DUST	STREET SWEEPING	REDUCES POLLUTANTS TRACKED FROM CONSTRUCTION SITE.					
CONTROL	DUST CONTROL	PREVENTS DUST FROM LEAVING CONSTRUCTION SITE.					

STABILIZATION EFFECTIVENESS (TIME OF YEAR)

STABILIZATION TYPE		STABILIZATION UTILIZATION PERIODS										
STABILIZATION TYPE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
PERMANENT SEEDING			Ą	*	*	*	*	*	* \			
T E TANK ATELYT GEEDING												
DORMANT SEEDING	В										В	\longrightarrow
	<u> </u>										·	
TEMPORARY SEEDING			ç	*	*	* \	P *	*				
TEMI STURY SEEDING			•]					
SODDING			토	*	*	*	*	*	* \			
SODDING			-							1		1

A. KENTUCKY BLUEGRASS 90 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 30 LBS/ACRE. B. KENTUCKY BLUEGRASS 135 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 45 LBS/ACRE + 2 TONS STRAW MULCH/ACRE.

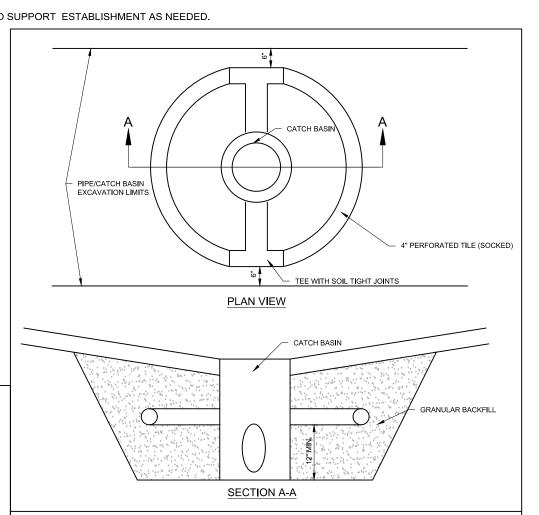
C. SPRING OATS 100 LBS/ACRE. D. WHEAT OR CEREAL RYE 150 LBS/ACRE.

F. STRAW MULCH 2 TONS/ACRE.

GRATE, UNLESS OTHERWISE NOTED ON THE PLANS

- PLUG IF AT END OF LINE

* IRRIGATION/WATERING REQUIRED TO SUPPORT ESTABLISHMENT AS NEEDED.



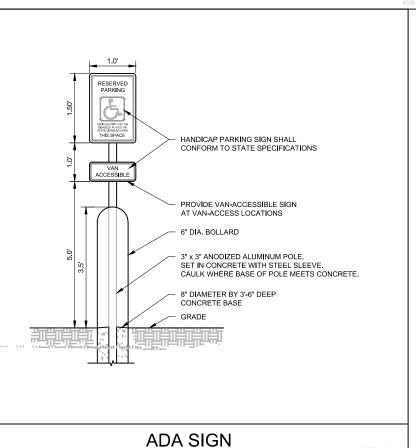
CATCH BASIN - UNDERDRAIN "WATER" CAST ON COVER VALVE BOX

WATER SERVICE

THE VALVE IN BOTH DIRECTION

THE CONTRACT UNIT PRICE EACH FOR VALVES OF THE SIZE AND TYPE SPECIFIED SHALL INCLUDE PROVIDING & INSTALLING THE

SERVICE VALVE



PINNACLE ENGINEERING GROUP ENGINEERING I NATURAL RESOURCES I SURVEYING PLAN I DESIGN I DELIVER **WISCONSIN OFFICE:** 20725 WATERTOWN RD BROOKFIELD, WI 53186 (262) 754-8888 CHICAGO I MILWAUKEE : NATIONWIDE PEG JOB #: 5123.00-WI

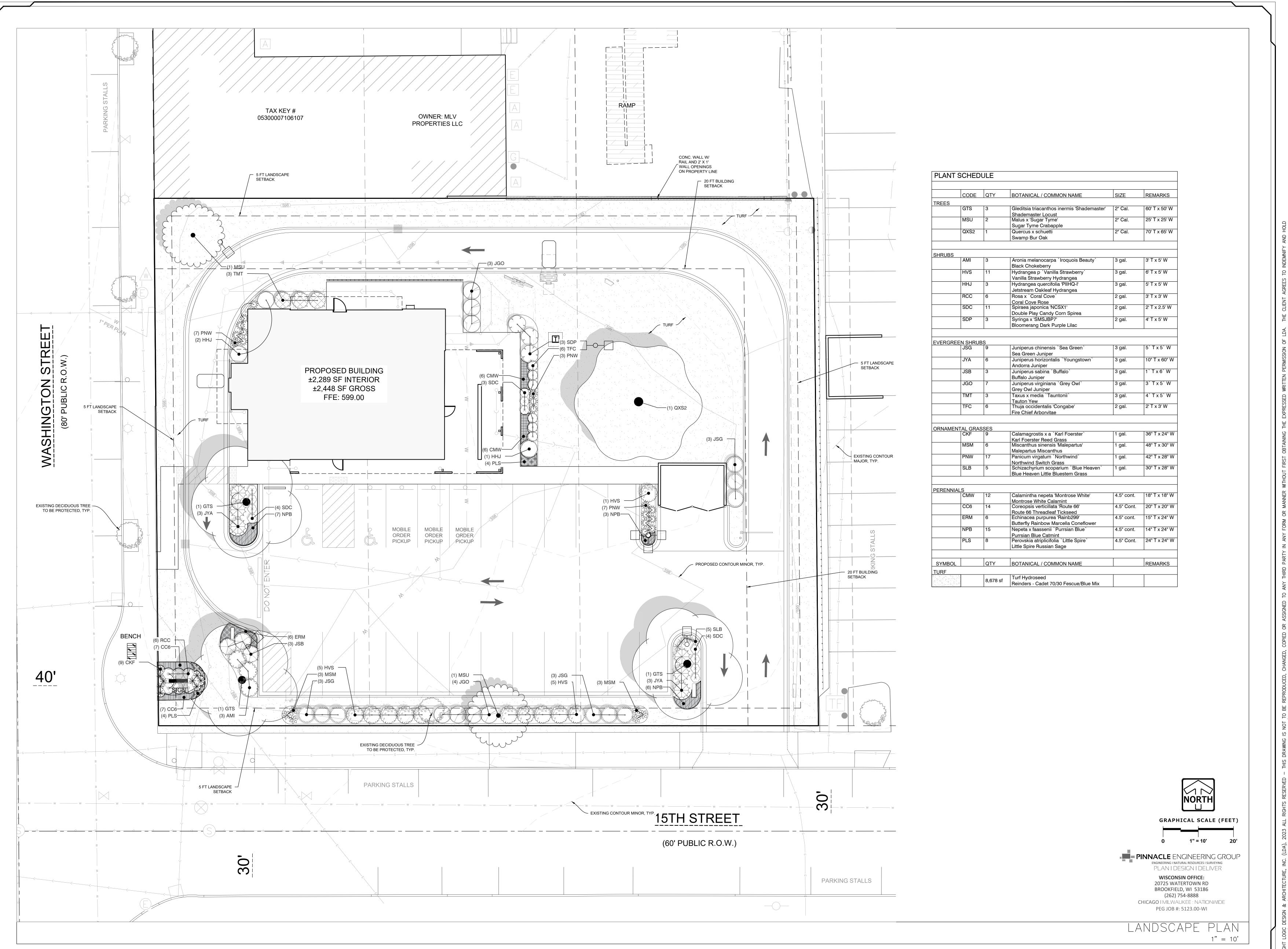
N.T.S.

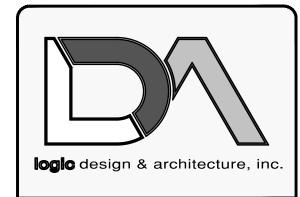
logic design & architecture, ir ogicDA.com | 414.909.008 Job Number: 23-042

Additional Info

Project Name Dates/Revisions

Drawing Title CONSTRUCTION





.ogicDA.com | 414.909.0080 Project Manager: WBM Job Number: 23-042

Additional Info

Project Name

Dates/Revisions

Drawing Title LANDSCAPE PLAN

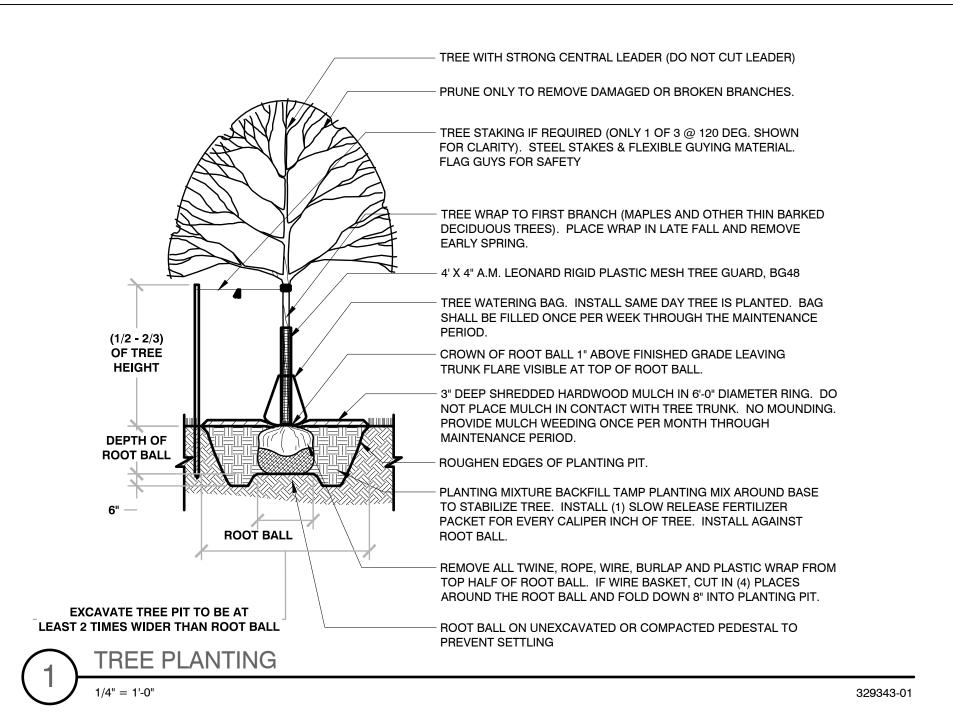
L-1

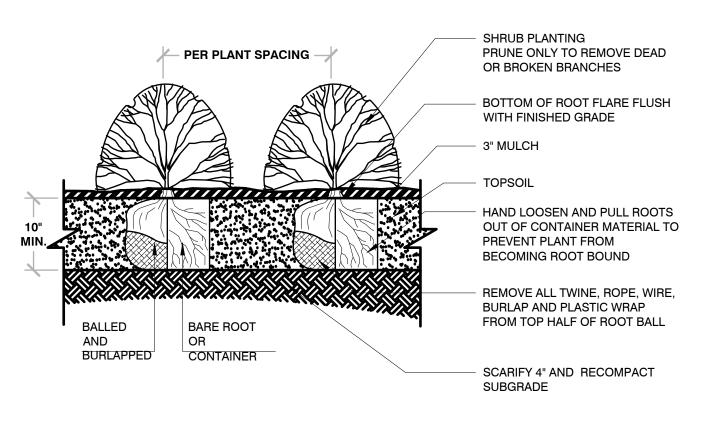
GENERAL PLANTING NOTES

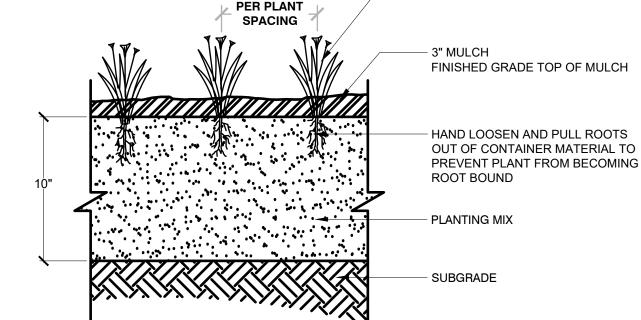
- 1. THE LAYOUT OF ALL PLANTING BEDS AND INDIVIDUAL TREES AND SHRUBS SHALL BE STAKED BY THE CONTRACTOR IN ADVANCE OF INSTALLATION. FLAGGING, STAKES, OR PAINT MAY BE USED TO DELINEATE LOCATIONS AS SCALED FROM THE PLANS. AN APPROVED REPRESENTATIVE WILL REVIEW THESE LOCATIONS WITH THE CONTRACTOR AND MAKE MINOR ADJUSTMENTS AS NECESSARY. BED LAYOUT SHALL ALSO INCLUDE PERENNIAL GROUPINGS BY SPECIES.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR INDEPENDENTLY DETERMINING THE PLANT MATERIAL QUANTITIES REQUIRED BY THE LANDSCAPE PLANS. REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT.
- 3. NO PLANT MATERIAL OR PLANT SIZE SUBSTITUTIONS WILL BE ACCEPTED WITHOUT APPROVAL BY THE LANDSCAPE ARCHITECT. ANY CHANGES SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT IN WRITING PRIOR TO INSTALLATION.
- 4. ALL BNB STOCK SHALL BE NURSERY GROWN IN A CLAY LOAM SOIL FOR A MINIMUM OF THREE GROWING SEASONS WITHIN 200 MILES OF PROJECT LOCATION, IN A ZONE COMPATIBLE WITH USDA HARDINESS ZONE 5A. SEED SHALL BE PROVIDED FROM A NURSERY (WITHIN 200 MILES) WITH A SIMILAR PLANT HARDINESS ZONE AS PROJECT LOCATION. EXISTING SOIL SHALL BE AMENDED PER SOIL ANALYSIS REPORT TO ENSURE A PROPER GROWING MEDIUM IS ACHIEVED.
- 5. ALL PLANT MATERIAL SHALL COMPLY WITH STANDARDS DESCRIBED IN AMERICAN STANDARD OF NURSERY STOCK - Z60.1 ANSI. LANDSCAPE ARCHITECT OR OWNERS AUTHORIZED REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND POTENTIALLY REJECT ANY PLANT MATERIAL DEEMED TO NOT MEET THE REQUIRED STANDARDS.
- 6. ALL STOCK SHALL BE FREE OF DISEASES AND HARMFUL INSECTS, DAMAGE, DISORDERS AND DEFORMITIES.
- 7. TREES SHALL HAVE SINGLE, STRAIGHT TRUNKS AND WELL BALANCED BRANCH SYSTEMS. MUTLI-STEM TREES SHALL HAVE 3-4 STRAIGHT TRUNKS AND WELL BALANCED BRANCH SYSTEMS. HEIGHT-TO-CALIPER RATIOS SHALL BE CONSISTENT WITH THE LATEST EDITION OF ANSI Z60.1.
- 8. ROOT SYSTEMS SHALL BE LARGE ENOUGH TO ALLOW FOR FULL RECOVERY OF THE TREE, AND SHALL CONFORM TO STANDARDS AS THEY APPEAR IN THE MOST CURRENT REVISION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S AMERICAN STANDARD OF NURSERY STOCK ANSI
- 9. BNB TREES SHALL BE DUG WITH A BALL OF SOIL, NOT SOFT BALLED OR POTTED AND SHALL BE FIRM IN THEIR ROOTBALL. ROOT BALL SHALL BE WRAPPED (WITH BIODEGRADABLE MATERIAL). THE TREE ROOT FLARE, OR COLLAR, SHALL BE AT OR WITHIN THE TOP THREE INCHES OF GRADE.
- 10. ALL SPRING TREES MUST BE FRESHLY DUG IN THE MOST RECENT SPRING.
- 11. ALL AUTUMN TREES MUST BE FRESHLY DUG IN THE MOST RECENT AUTUMN.
- 12. TREES SHALL BE ALIVE, HEALTHY AND APPROPRIATELY MOIST, AT TIME OF DELIVERY. TREES SHALL BE SUBJECT TO INSPECTION FOR CONFORMITY TO SPECIFICATION REQUIREMENTS AND APPROVAL BY THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE. THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY TREES THAT DO NOT MEET THE SPECIFICATIONS OR THAT HAVE BEEN DAMAGED DURING SHIPMENT. THE LANDSCAPE INSTALLER MUST RECEIVE APPROVAL FROM LANDSCAPE ARCHITECT FOR ANY SUBSTITUTIONS OR ALTERATIONS.
- 13. ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH PLANTING DETAILS.
- 14. ALL PLANTING BEDS SHALL HAVE A MINIMUM 10" DEPTH OF PREPARED SOIL. WITH APPROVAL. EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 10" OF SOIL. REFER TO SOIL PLACEMENT NOTES.
- 15. WHILE PLANTING TREES AND SHRUBS, BACKFILL ²/₃ OF PLANTING HOLE AND WATER TREE THOROUGHLY BEFORE INSTALLING THE REMAINDER OF SOIL MIXTURE. AFTER ALL SOIL HAS BEEN PLACED INTO THE PLANTING HOLE WATER THOROUGHLY AGAIN.
- 16. THE CONTRACTOR MUST LABEL ALL TREES WITH THE COMMON AND BOTANICAL NAMES PRIOR TO FINAL INSPECTION.
- 17. ALL PLANTING BEDS SHALL BE MULCHED WITH 3" DEEP SHREDDED HARDWOOD MULCH, AND ALL TREES PLANTED IN TURF AREAS SHALL RECEIVE A 3" DEEP SHREDDED HARDWOOD MULCHED RING AS SHOWN IN PLANTING DETAILS.
- 18. ALL PLANTING BEDS AND TREE RINGS SHALL HAVE A 4" DEEP TRENCHED BED EDGE CREATED BY EITHER A FLAT LANDSCAPE SPADE OR MECHANICAL EDGER. BED EDGES ARE TO BE CUT CLEAN AND SMOOTH AS SHOWN ON LANDSCAPE PLANS WITH A CLEAN DEFINITION BETWEEN TURF AND PLANTING AREAS.
- 19. ALL TURF SEED AREAS SHALL RECEIVE A MINIMUM OF 6" DEPTH OF TOPSOIL. WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 6" OF SOIL AS INDICATED IN THE SOIL PLACEMENT NOTES. REQUIRED AMENDMENTS SHALL BE DETERMINED BASED ON A SOIL ANALYSIS TO BE PERFORMED. ALL TOPSOIL AMENDMENT SHALL BE AGED WEED FREE MANURE OR CLASS 1 ORGANIC MATTER.
- 20. FOR LAWN SEEDING, APPLY A STARTER FERTILIZER AND SEED UNIFORMLY AT THE RATE RECOMMENDED BY MANUFACTURER, AND PROVIDE A MULCH COVERING THAT IS SUITABLE TO PROMOTE SEED GERMINATION AND TURF ESTABLISHMENT. CONTRACTOR TO PROVIDE FERTILIZER, SEED, AND MULCH SPECIFICATIONS TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. EROSION CONTROL MEASURES ARE TO BE INSTALLED IN THOSE AREAS REQUIRING STABILIZATION (SWALES, SLOPES EXCEEDING 1:3, AND THOSE LOCATIONS INDICATED IN CIVIL DRAWINGS).
- 21. THE CONTRACTOR TO ENSURE A SMOOTH, UNIFORM QUALITY TURF IS ACHIEVED WITH NO BARE SPOTS LARGER THAN 6" X 6". ANY BARE SPOTS LARGER THAN 6" X6" AT THE END OF ESTABLISHMENT PERIOD SHALL BE RESEEDED AT THE CONTRACTORS EXPENSE TO OBTAIN A DENSE, UNIFORM LAWN.
- 22. ALL FINISH GRADING AND LAWN AREAS TO BE INSTALLED BY LANDSCAPE CONTRACTOR.
- 23. ALL DISTURBED AREAS WITHIN THE PROJECT SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.
- 24. ALL DISTURBED AREAS OUTSIDE THE LIMITS OF WORK SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- 25. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, INCLUDING ANY IRRIGATION LINES, PRIOR TO DIGGING. CONSULT DIGGERS HOTLINE.
- 26. TREES SHALL BE INSTALLED NO CLOSER THAN:
 - -10 FEET FROM ANY FIRE HYDRANT
- 7 FEET FROM STORM SEWER, SANITARY SEWER LATERALS, AND WATER SERVICE
- 27. THE CONTRACTOR SHALL ENSURE THAT SOIL CONDITIONS AND COMPACTION ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AROUND THE CONSTRUCTION SITE. UNDESIRABLE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING OF WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE PROPER SURFACE AND SUBSURFACE DRAINAGE IN ALL AREAS
- 28. THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, FEES, AND LICENSES NECESSARY FOR THE INSTALLATION OF THIS PLAN.
- 29. THE CONTRACTOR IS TO REVIEW ALL SITE ENGINEERING DOCUMENTS PRIOR TO INSTALLATION. ANY CONFLICTS MUST BE REPORTED TO THE LANDSCAPE ARCHITECT. THESE LANDSCAPE DRAWINGS ARE FOR THE INSTALLATION OF PLANT MATERIALS ONLY UNLESS OTHERWISE STATED.
- 30. THE CONTRACTOR SHALL PROVIDE WATERING AND MAINTENANCE SERVICES FOR A PERIOD OF 60 DAYS TO ENSURE VEGETATIVE ESTABLISHMENT. UPON COMPLETION OF THE PROJECT. CONTRACTOR SHALL SUPPLY THE OWNER IN WRITING WITH ONGOING WATERING AND MAINTENANCE INSTRUCTIONS.
- 31. PLANT MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM TIME OF OWNER ACCEPTANCE. ONLY ONE REPLACEMENT PER PLANT WILL BE REQUIRED DURING THE WARRANTY PERIOD EXCEPT IN THE EVENT OF FAILURE TO COMPLY WITH THE SPECIFIED REQUIREMENTS.
- 32. THE CONTRACTOR IS RESPONSIBLE TO CONDUCT A FINAL WALK THROUGH WITH THE LANDSCAPE ARCHITECT AND OR OWNERS REPRESENTATIVE TO ANSWER QUESTIONS, PROVIDE INSTRUCTIONS, AND ENSURE THAT PROJECT REQUIREMENTS HAVE BEEN MET.

SOIL PLACEMENT NOTES

- 1. LOOSEN SUBGRADE TO A MINIMUM DEPTH INDICATED IN PLANTING NOTES USING A CULTI-MULCHER OR SIMILAR EQUIPMENT, AND REMOVE STONES MEASURING OVER 1-1/2 INCHES IN ANY DIMENSION, STICKS, RUBBISH AND OTHER EXTRANEOUS MATTER. AREAS ADJACENT TO WALKS AND PAVEMENT SHALL BE FREE OF EXCESS STONE AND PAVING MATERIALS SO AS TO PROVIDE AN UNINTERRUPTED CROSS SECTION OF SOIL. INTERNAL PARKING ISLANDS SHALL BE LOOSENED TO A DEPTH OF 30".
- 2. THOROUGHLY BLEND PLANTING SOIL MIX FOR PLANTING BED AREAS. (1 PART EXISTING SOIL, 1 PART TOPSOIL, 1 PART ORGANIC SOIL AMENDMENT, 2.9 POUNDS PER CUBIC YARD OF 4-4-4 ANALYSIS SLOW-RELEASE FERTILIZER)
- 3. TREE AND SHRUB HOLES SHALL BE FILLED WITH A PREPARED PLANTING MIXTURE OF 1 PART TOPSOIL, 2 PARTS PLANTING SOIL MIX.
- 4. SPREAD SOIL AND SOIL AMENDMENTS TO DEPTH INDICATED ON DRAWINGS, BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. (FINISH GRADE OF PLANTING BEDS SHALL BE 3" BELOW ALL ADJACENT SURFACES. FINISH GRADE OF TURF SEEDING AREAS SHALL BE 1" BELOW ALL ADJACENT HARD SURFACES, WALKS, AND CURBS.)
- 5. PLACE APPROXIMATELY 1/2 OF TOTAL AMOUNT OF SOIL REQUIRED. WORK INTO TOP OF LOOSENED SUBGRADE TO CREATE A TRANSITION LAYER, THEN PLACE REMAINDER OF THE SOIL. SOIL TRANSITION LAYER SHALL BE TILLED TO A MINIMUM DEPTH OF 6" BELOW THE DEPTH OF NEWLY PLACED SOIL. PARKING LOT ISLANDS SHALL BE CROWNED TO A HEIGHT OF 6" TO PROVIDE PROPER DRAINAGE UNLESS OTHERWISE NOTED.
- 6. DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN. MUDDY. OR EXCESSIVELY WET.
- 7. FINISH GRADING: GRADE SOIL TO A SMOOTH, UNIFORM SURFACE PLANE WITH A LOOSE, UNIFORMLY FINE TEXTURE.
- 8. ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES.
- 9. RESTORE PLANTING BEDS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING AND BEFORE PLANTING.







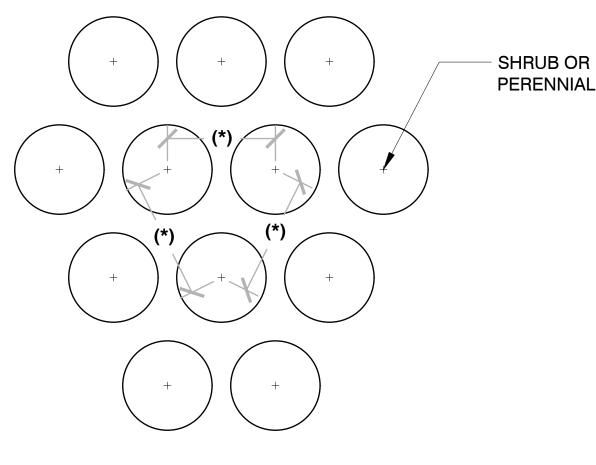
PERENNIAL PLANTING

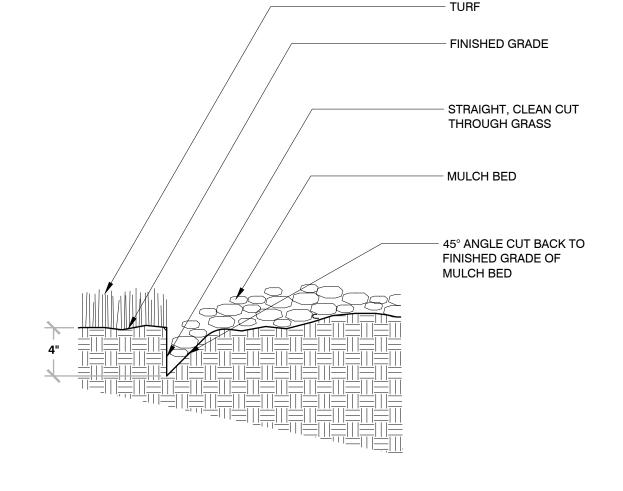
BAREROOT PLANTING NOTES: SOAK ROOTS IN WATER FOR AT LEAST ONE HOUR BUT NOT MORE THAN 24 HOURS PRIOR TO PLANTING.

- SCARIFY SIDES AND BOTTOMS OF HOLE. PROCEED WITH CORRECTIVE PRUNING OF THE TOP AND BOTTOM ROOTS.
- 4. TRANSFER PLANT DIRECTLY FROM WATER TO HOLE. SET PLANT SO THE ROOT FLARE IS APPROXIMATELY AT THE FINISHED SOIL ELEVATION. SPREAD ROOTS OUT EVENLY. PLUMB AND IMMEDIATELY BACKFILL WITH PLANTING SOIL MIX.
- 5. WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS. 6. BACKFILL VOIDS AND WATER SECOND TIME. 7. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE

SHRUB PLANTING

PERENNIAL PLANTING





(*) = SPECIFIED PLANT SPACING PER PLANTING LIST

PINNACLE ENGINEERING GROUP ENGINEERING I NATURAL RESOURCES I SURVEYING PLAN I DESIGN I DELIVER WISCONSIN OFFICE:

> 20725 WATERTOWN RD BROOKFIELD, WI 53186 (262) 754-8888 CHICAGO I MILWAUKEE : NATIONWIDE PEG JOB #: 5123.00-WI

LANDSCAPE GENERAL NOTES & DETAILS

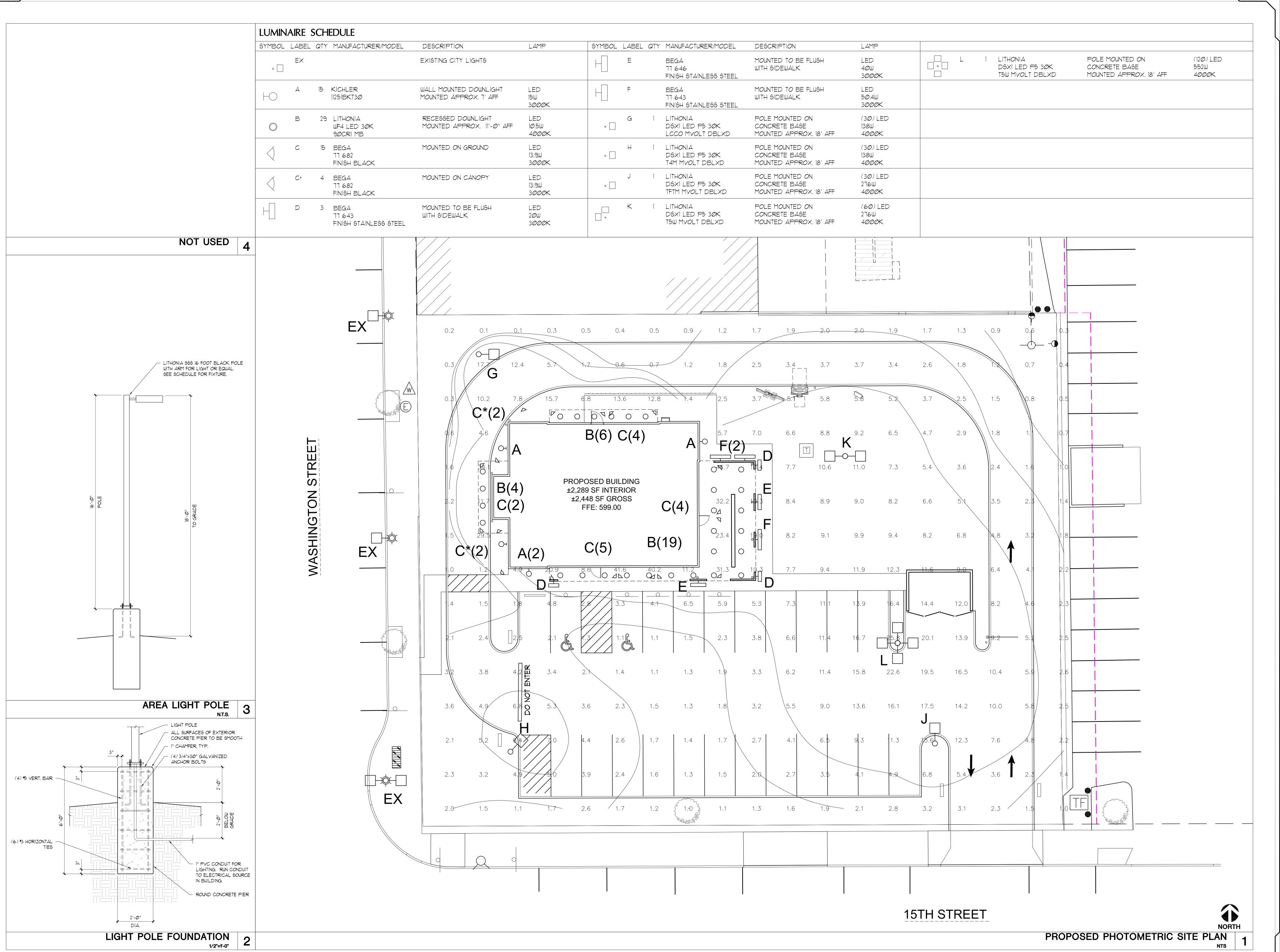
logic design & architecture, inc ogicDA.com | 414.909.008.

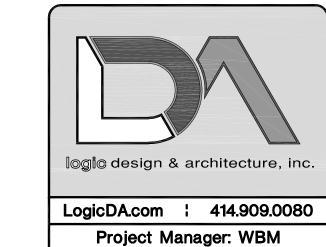
Project Manager: WBM

Job Number: 23-042

Additional Info

Project Name Dates/Revisions Drawing Title LANDSCAPE GENERAL NOTES & DETAILS L-2





Job Number: 23-042 Additional Info Project Name OF LDA THE \TA WITHOUT | Dates/Revisions 09.20.23 PRELIM. 20% SET PRELIM. 20% SET 11.17.23

PC SUBMITTAL

Drawing Title PHOTOMETRIC SITE PLAN

PSP1.1



December 1, 2023

RE: Review of Conditional Use Permit application for use of self-storage units on 15th street, for parcel 05300007601503

Alliance Construction & Design in conjunction with Eric Burrows with B&B Metals submit this written narrative to answer the questions and comments presented at the November 13, 2023, plan commission meeting. We have revised the site plan in response to the items in question and in need of clarification. Please see the revised site plan and supporting documents submitted with this narrative.

The supporting documents include renderings of the proposed development from the driveway of the site and from the river on pages 4 and 5, a survey of the existing site from Stantec on page 6, the revised site plan on page 7 (sheet A050), a site plan with fire truck turning and maneuvering on page 8 (sheet A052), the largest fire truck turning radius for the City of Two Rivers on page 9, a site plan with truck and trailer turning and maneuvering on page 10 (sheet A053), an area map that shows the proposed development site and neighboring sites with their uses and zoning on page 11, a "before and after" view of the existing property from the proposed driveway on page 12, and images of neighboring properties on the waterfront on pages 13 - 16.

The questions/ items for clarification include:

- 1. The proximity to the CN Trestle Bridge and the impact of this proximity to the ability of boats to maneuver within this area.
- 2. What type and size of boats this project is seeking to attract to use the ramp and to store.
- 3. The slope of the boat ramp itself and its condition.
- 4. The existence or status of a boat ramp permit with the WI DNR.
- 5. The preliminary plan layout does not appear to show enough area for vehicles with boats or trailers to turn or maneuver to access the storage units or to maneuver to access the boat ramp. This is also the case for fire trucks to access the site and boat launch area.
- 6. The site plan does not show the 25-foot setback requirement from the Planned Unit Development (PUD) zoned parcels to the north.
- 7. The number of storage units, and the proposal overall, will necessitate a stormwater management plan for review and approval by the City of Two Rivers and the state.
- 8. A grading plan will also be required for review and approval by the City of Two Rivers.
- 9. A vegetative screen specifically to screen Building 4 and the width of the waterfront frontage is a recommended condition. The vegetative screen is to be at least as tall as the eaves of Building 4. A landscaping plan is a requirement of the Site and Architectural review process, and this vegetative screening is a condition of the CUP review.



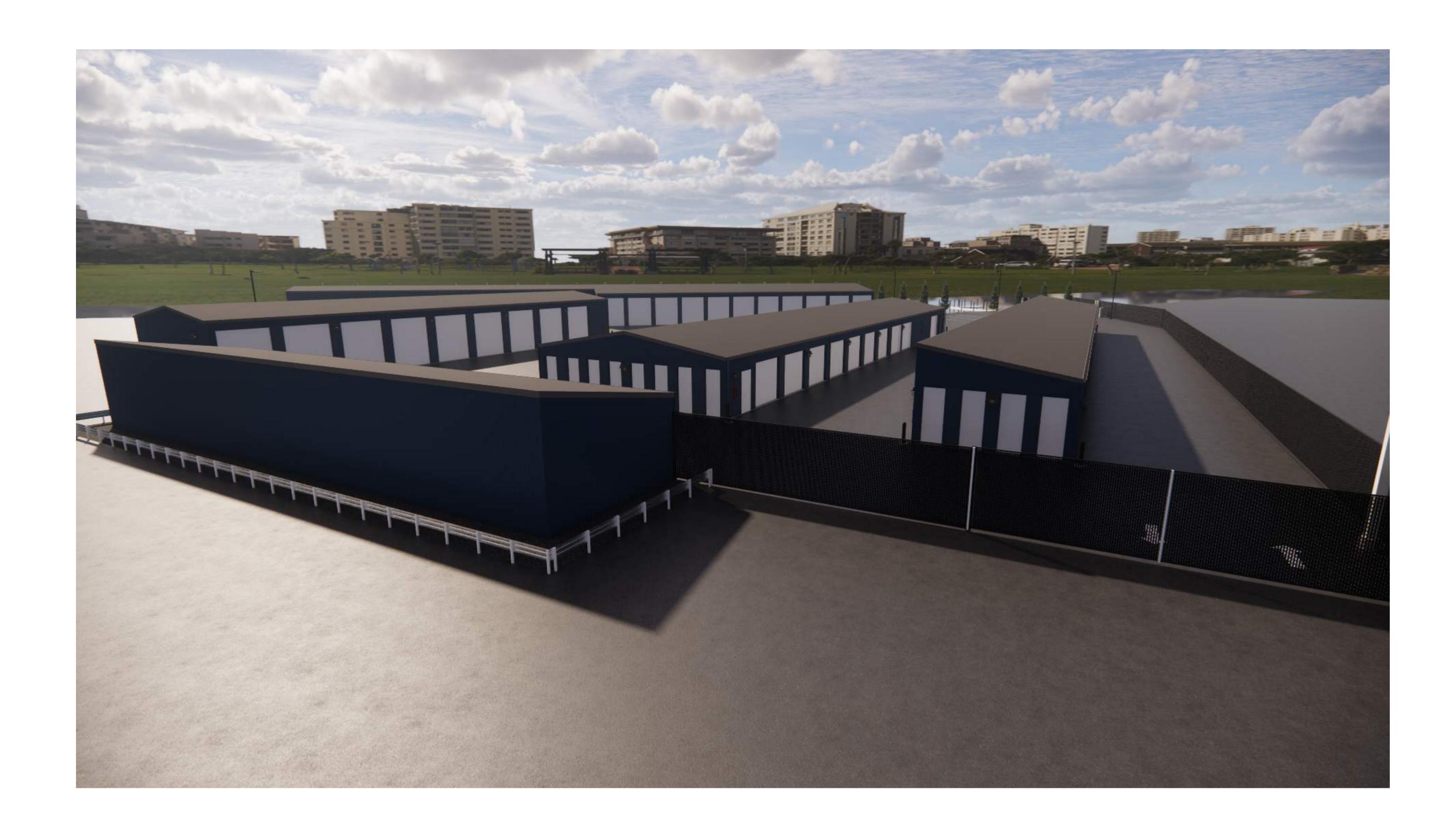
- 1. Due to the proximity of the CN Trestle Bridge, we are proposing to close and remove the existing boat ramp near the CN Trestle Bridge and open a new boat ramp to the north.
- 2. The boats that we are proposing be stored in units are small to large sized boats. The length can range from an 8'-0" Jon boat to a 30'-0" fishing boat. Although we have designed units large enough to house boats, the units are not limited to only boat storage. Similar in nature to other self-storage facilities, customers are able to store various personal items in the units.
- 3. Per our civil engineer, Christian Moring, PE, with Stantec, the targeted slope for the boat launch will be 12% 15% per industry standard. Less than 12% risks bringing the vehicles axle into the water by the time the boat is far enough into the water. A slope steeper than 15% will be avoided as it can create a slip/ fall hazard for people. The ramp will be wide enough to accommodate 1 lane. The dock will have the ability to accommodate space for 1 boat loading or unloading with a space for 1 boat to wait.
- 4. Per Kathi Kramasz, Waterways Program staff for Manitowoc County with the WI DNR, a DNR individual permit will be needed for the new boat ramp. The boat ramp is proposed to be private and only to be used by those who are storing their boats in the self-storage units on site. All necessary permits will be obtained with the WI DNR, the City of Two Rivers, and any other applicable state permits. We will apply for permits after we have CUP approval to move forward with this development.
- 5. The site plan was altered to provide a 30'-0" drive aisle between buildings 1 and 2 due to the smaller size of the units that are off of that 30'-0" drive aisle. The 30'-0" is industry standard for aisles between storage unit buildings housing units with sizes of 12'x20' and smaller. This similar condition is proposed between buildings 2 and 5. 60'-0" of space is provided between buildings 2 and 3 for adequate maneuvering of vehicles with trailers. A minimum of 90.86' is provided in front of the 2 large, 12'x40' storage units in building 2. A minimum of 57.01' is provided in front of the 6 large, 12'x40' storage units in building 4. The truck with trailer turning and maneuvering on site is shown on sheet A053 in the documents included with this narrative. The fire truck turning radius is based off the largest truck the City of Two Rivers Fire Department has. The turning radius information was received from Chad Kakes, Assistant Chief of Fire Operations for the City of Two Rivers Fire Department, and is also included with the submitted documents.



- 6. The site plan was revised to meet the 25'-0" building setbacks from the PUD zoned parcels to the north.
- 7. A stormwater management plan for review and approval by the City of Two Rivers and the state will be prepared by Christian Moring, PE, from Stantec for the site plan approval after we have CUP approval to move forward with this development.
- 8. A grading plan for review and approval by the City of Two Rivers and the state will be prepared by Christian Moring, PE, from Stantec for the site plan approval after we have CUP approval to move forward with this development.
- The site plan was revised to show a vegetative screen at the waterfront. A site plan will be completed for the site and architectural review process after we have CUP approval to move forward with this development.

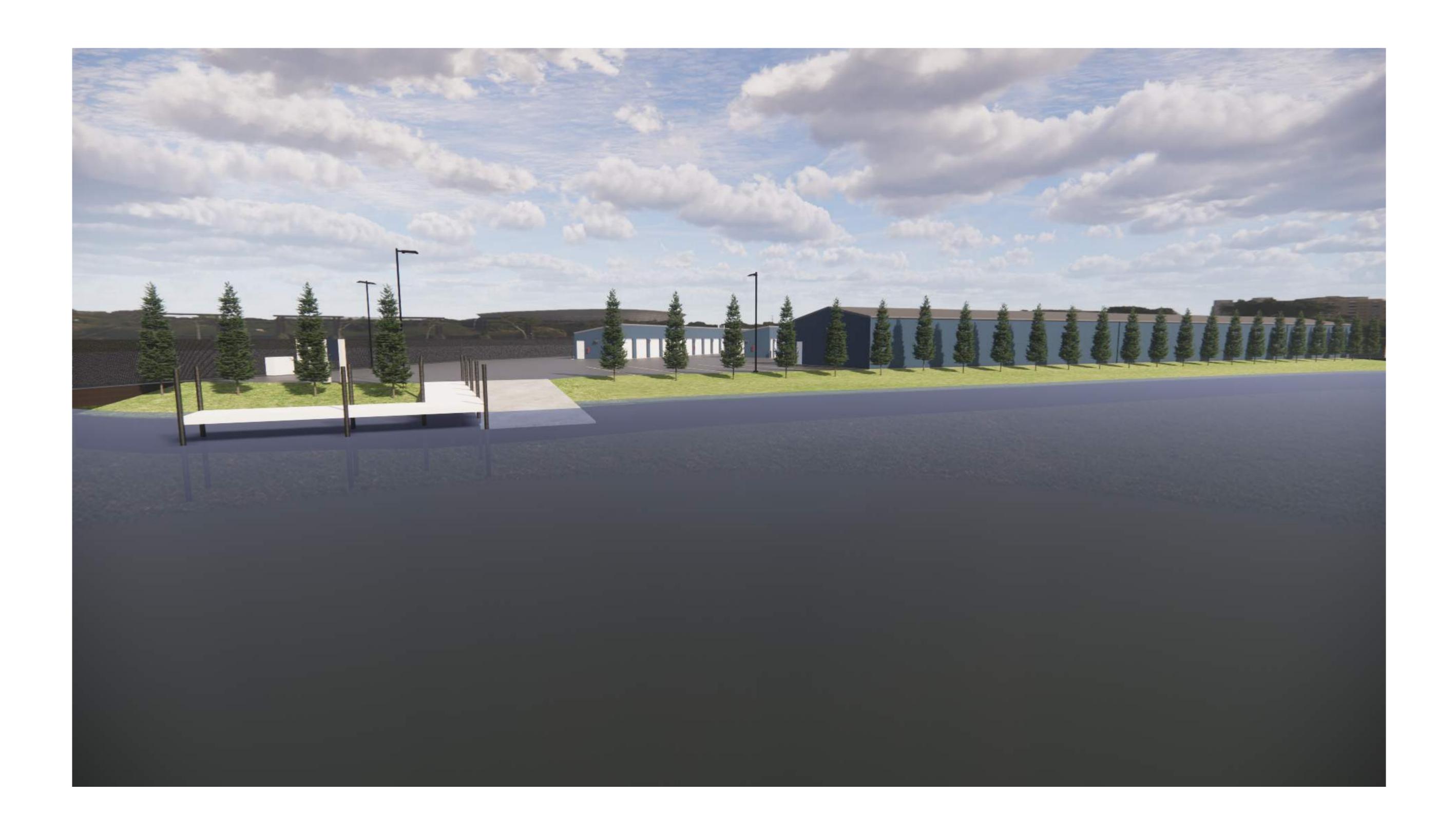
We feel that the proposed development is an improvement to the existing site conditions. It is a development that aligns with the City of Two Rivers zoning code. The parcel is zoned I-1 (industrial district) and a self-storage facility can be permitted as a conditional use per section 10-1-28.A(3) of the zoning code.

Included with this narrative, there is a map and images of the existing site and neighboring sites along the waterfront. There is also a rendering of what we are proposing. In comparison to some of the neighboring properties, we feel this development will be an improvement to this area. In completing the construction of the buildings as well as the sitework we will be making a positive impact on the waterfront in comparison to its existing state.



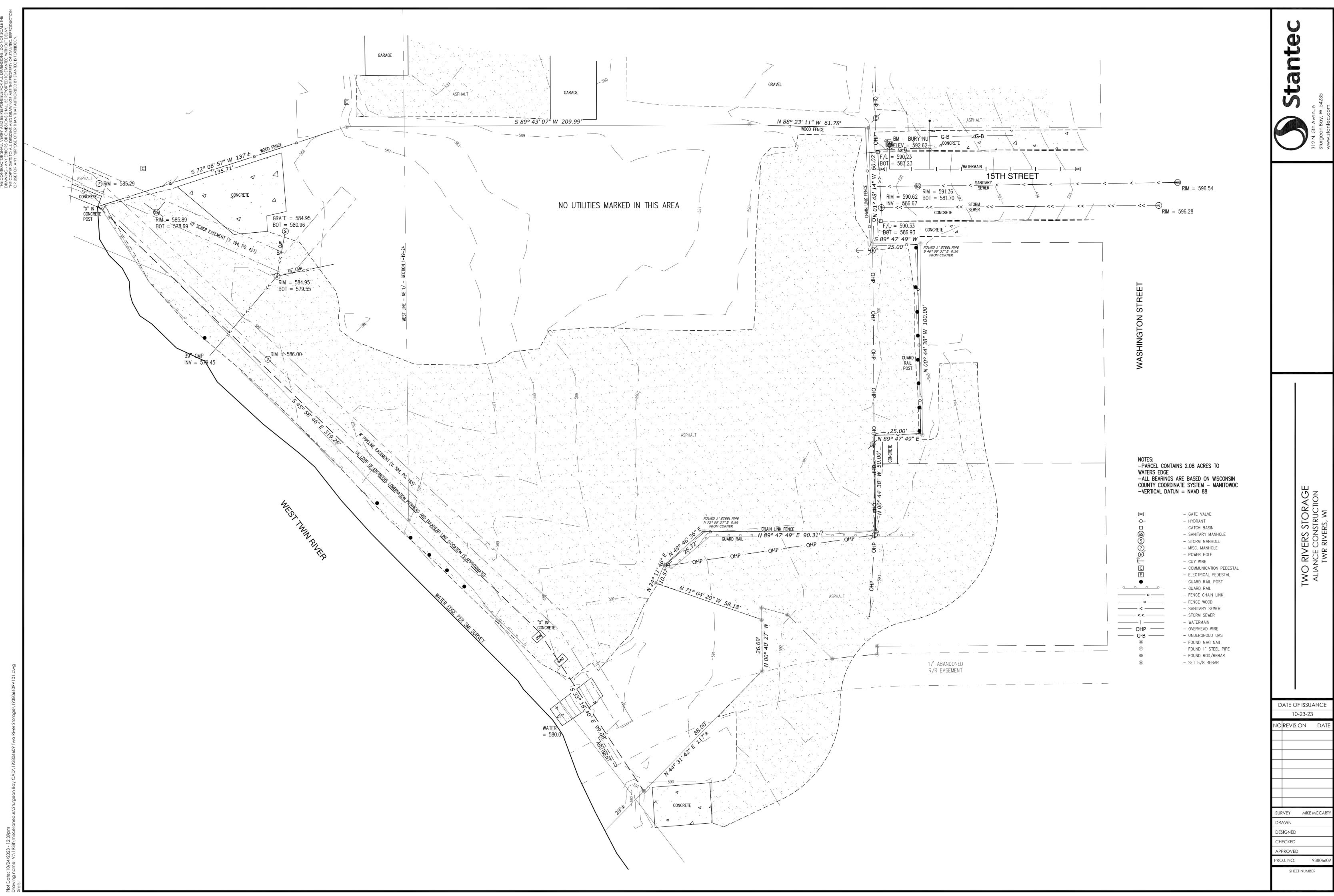


B&B STORAGE TWO RIVERS





B&B STORAGE TWO RIVERS



GENERAL NOTES

- 1. COORDINATE ALL STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING DISCIPLINES AND ANY ADDITIONAL SUPPORTING DOCUMENTS. CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR PRIOR TO START OF CONSTRUCTION.
- 2. DOWNSPOUTS TO DRAIN TO STORM WATER COLLECTION ON SITE. VERIFY W/ CIVIL
- 3. ALL UTILITY LOCATIONS AND SCOPE OF WORK SHALL BE COORDINATED PRIOR TO START OF CONSTRUCTION.
- 4. LANDSCAPING SHALL MEET LOCAL MUNICIPALITY REQUIREMENTS.
 THIS IS AN ARCHTITECTURAL SITE PLAN ONLY. FINAL SITE PLAN AND DETAILS BY CIVIL ENGINEER

Aliancebuilds.com
Phone: (920)-336-3401

PHONE: (920)-336-3400 | FAX: (920)-336-3401 1050 BROADWAY ST., WRIGHTSTOWN, WI 54180 PROFESSIONAL SEAL:

DESIGN PROFESSIONAL

RIVERS, WI 54241

NOT FOR CONSTRUCTION

REVISIONS

STATUS:

FOR CUP

SHEET ISSUE DATE: 03/01/2023 CURRENT AS OF: 12/1/2023 8:50:20 AM

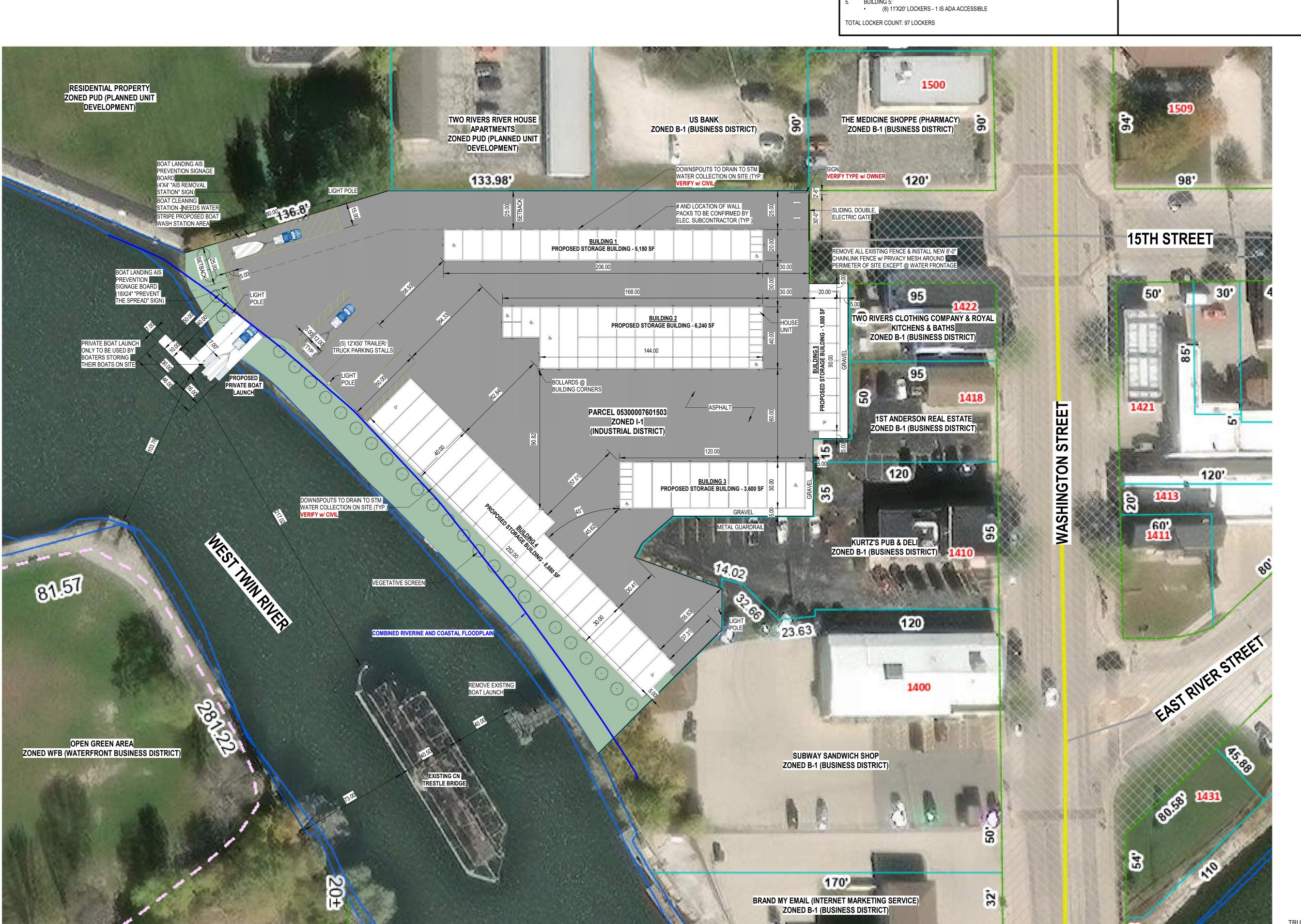
DRAWN BY:

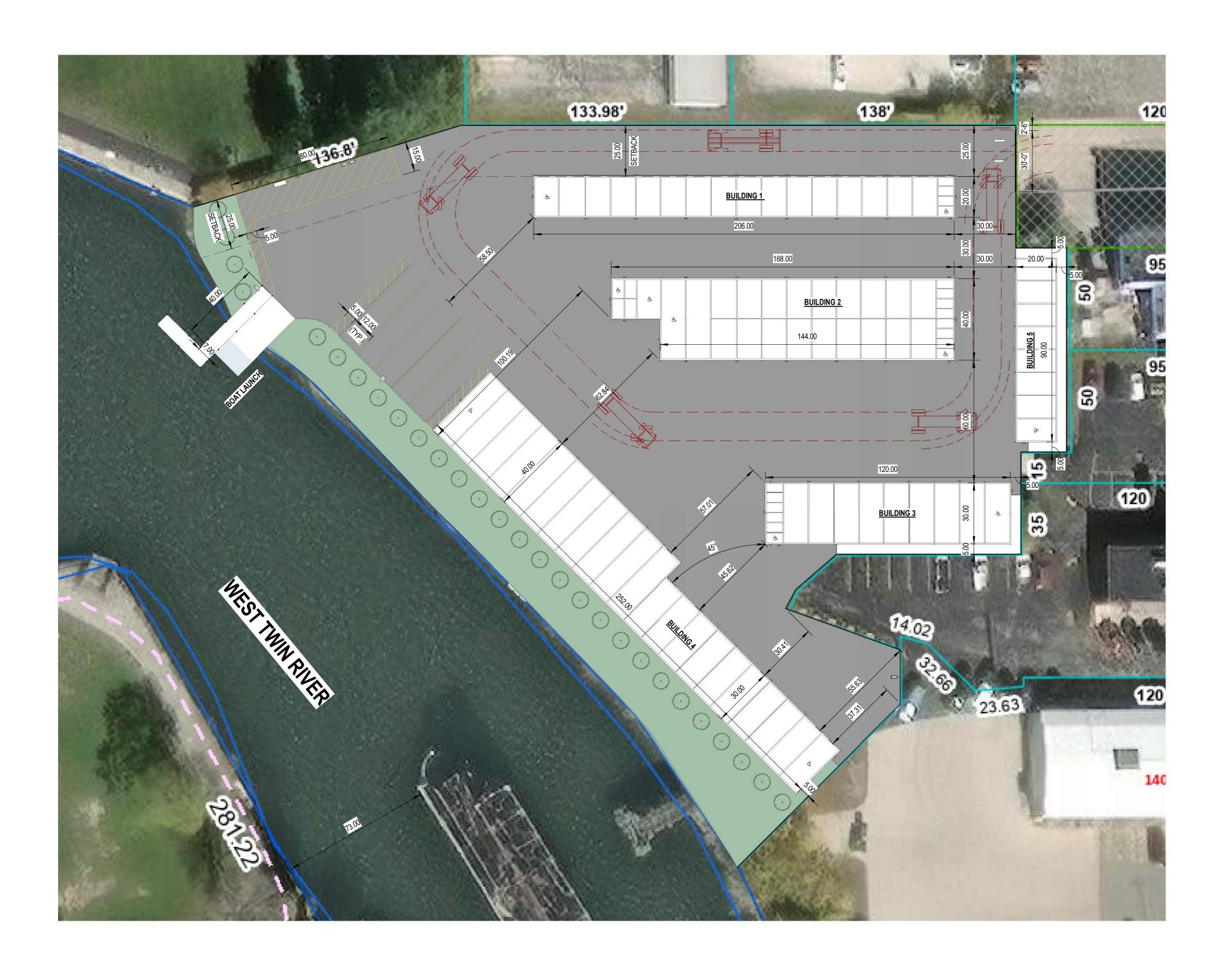
SCALE:

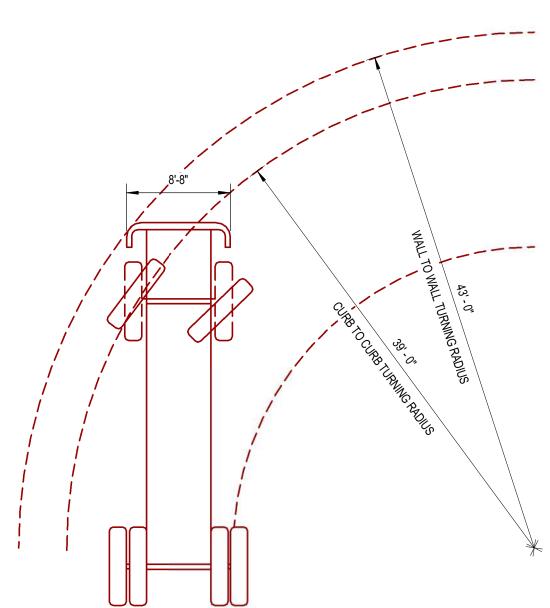
ARCHITECTURAL SITE PLAN

A050

As indicated

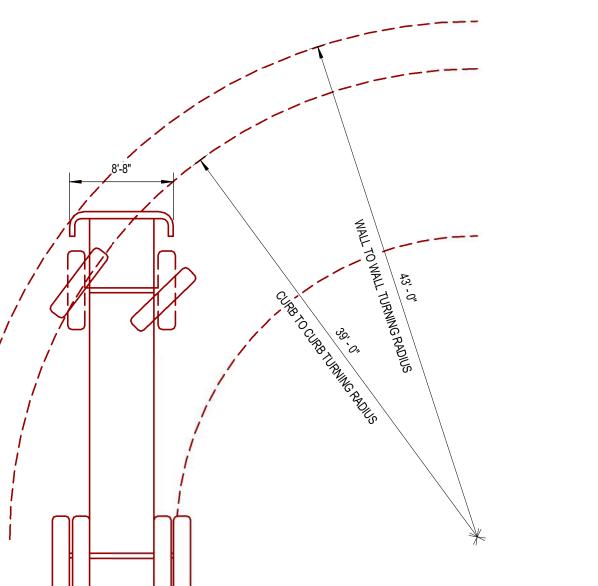






PIRE TRUCK TURNING

1/8" = 1'-0"



ALLIANCEBUILDS.COM PHONE: (920)-336-3400 | FAX: (920)-336-3401 1050 BROADWAY ST., WRIGHTSTOWN, WI 54180

PROFESSIONAL SEAL:

DESIGN PROFESSIONAL

15TH STREET, TWO RIVERS, WI 54241

NOT FOR CONSTRUCTION

FOR CUP

SHEET ISSUE DATE: 11/28/23 CURRENT AS OF: 12/1/2023 8:50:24 AM

DRAWN BY:

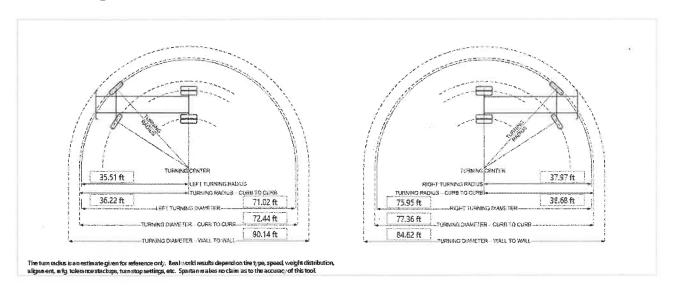
FIRE TRUCK TURNING

As indicated

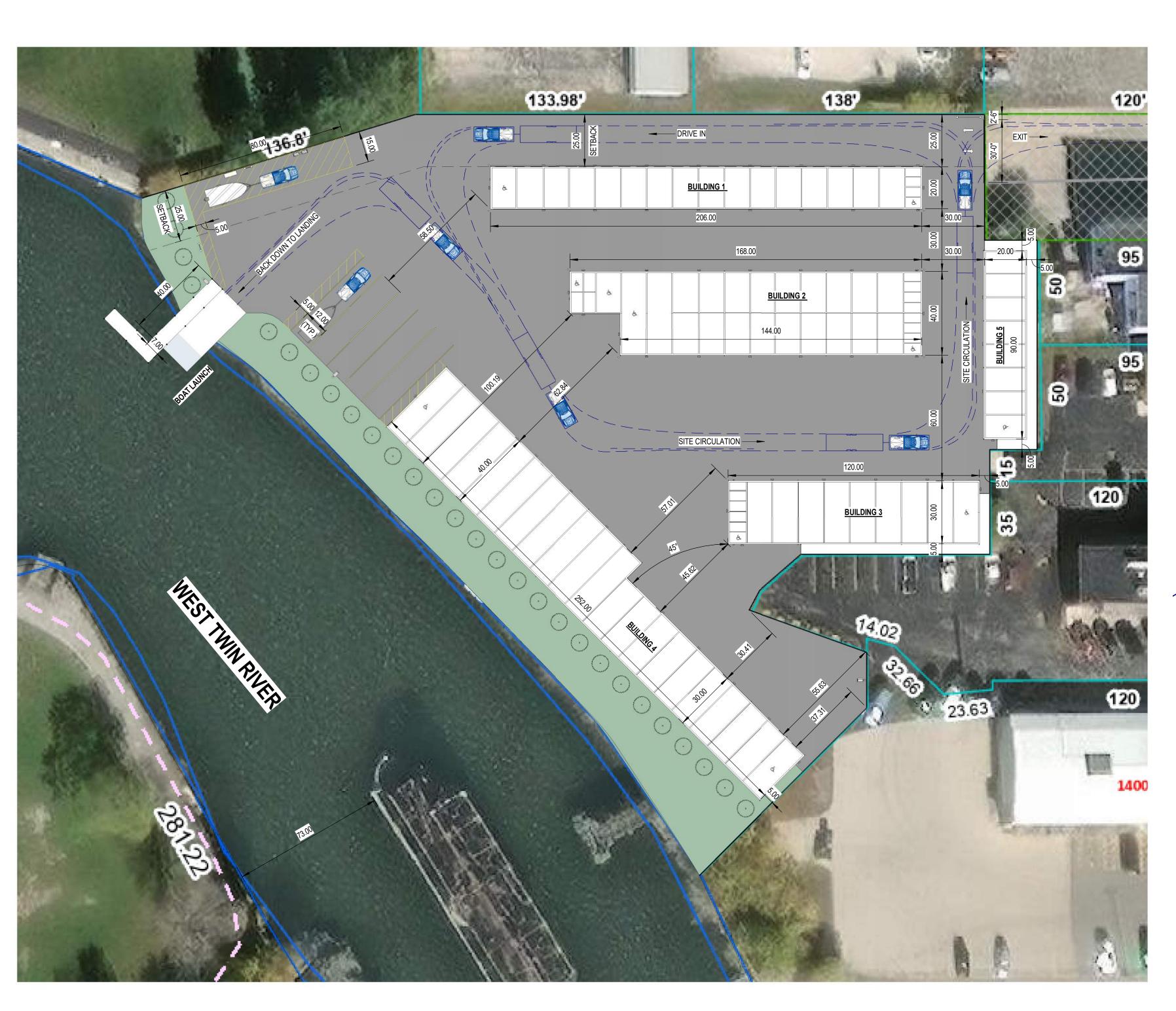
1 FIRE TRUCK TURNING
1" = 30'-0"

Largest fire truck turning radius per Chad Kakes (Assistant Chief of Fire Operations) 11-28-2023

Turning Radius



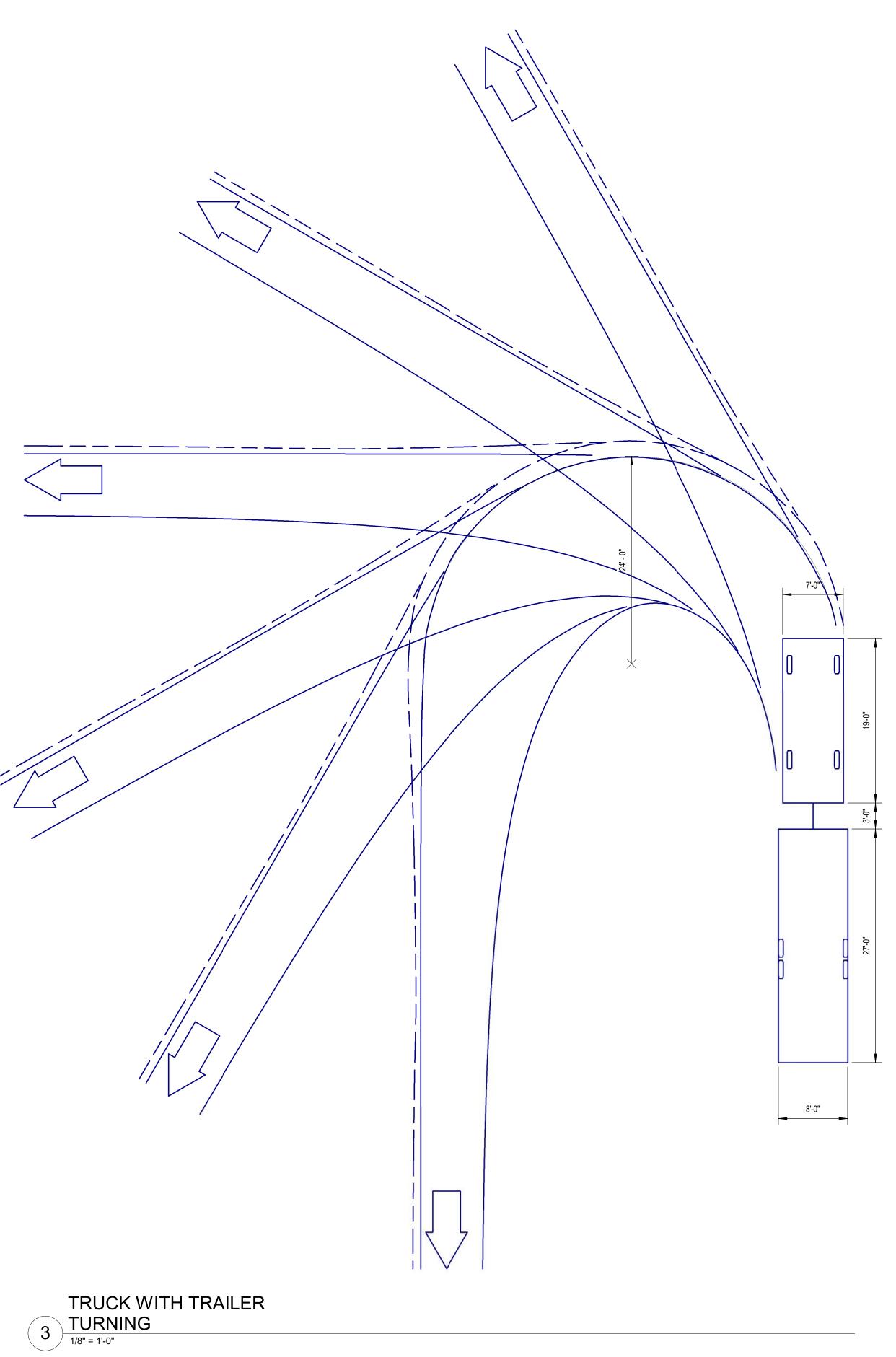
End User Name Chassis Model 0100-012 Gladiator Wheelbase 250.00 in **Bumper Extension** 6.00 in Bumper Width 104.40 in Left hand outside tire turn angle 33.50 deg Right hand outside tire turn angle 31.00 deg Left hand Curb-to-Curb turning radius 36.22 ft, 11.04 m Right hand Curb-to-Curb turning radius 38.68 ft, 11.79 m Left hand Wall-to-Wall turning radius 40.07 ft, 12.21 m Right hand Wall-to-Wall turning radius 42.31 ft, 12.90 m



TRUCK WITH TRAILER
TURNING (ENTERING,
EXISTING, &

MANUEVERING ON SITE

1" = 30'-0"



Aliance Builds. Com
Phone: (920)-336-3400 | FAX: (920)-336-3401
1050 BROADWAY ST., WRIGHTSTOWN, WI 54180

PROFESSIONAL SEAL:

DESIGN PROFESSIONAL

RIVERS, WI 54241

NOT FOR CONSTRUCTION

/#	REVISIONS	

STATUS:

FOR CUP

 SHEET ISSUE DATE:
 11/28/23

 CURRENT AS OF:
 12/1/2023 8:50:28 AM

 DRAWN BY:
 O.R.V.

SCALE:

TRUCK WITH TRAILER TURNING

A053

As indicated







View 1 of the Existing Waterfront Properties from the Madison Street Bridge



View 2 of the Existing Waterfront Properties from the Madison Street Bridge



View of the Existing Waterfront Properties from the Washington Street Bridge



View of Property and Neighboring Properties from across the River





1717 E. Park Street P.O. BOX 87 Two Rivers, WI 54241-0087

PLAN COMMISSION

REQUEST: A change to the sign ordinance to allow signage to be placed onto sidewalks for

advertising purposes.

From: WEICHERT, Realtors CornerStone

Overview

Chapter 10-4-1 regulates signs and awnings. The purpose is "...to create the legal framework to administer and enforce outdoor sign and awning regulations within the City of Two Rivers. This chapter recognizes the need to protect the safety and welfare of the public; the need for well-maintained and attractive sign displays within the community, and the need for adequate business identification, advertising, and communication."

Within this chapter, **Sec. 10-4-12**, prohibits the attachment of signs to public "appurtenance or sidewalk":

Prohibited signs.

- (e) Signs in the B-1 and waterfront business districts may:
 - [3] Not be attached by any means to a public appurtenance or sidewalk (signs must be portable).

STAFF RECOMMENDATION:

- **A.** Staff does not recommend modifying the sign ordinance to expand additional locations to place signs for advertising.
- 1. The ordinance provides several options for sign placement that are permanent and temporary sign opportunities.
- **2.** These options for businesses include building signs, window signs, multi-tenant signs, sandwich board signs and flag signs.
- **3.** However, there is a right-of-way (ROW) privilege agreement that has been used in situations when a business needs to use a portion of a sidewalk or street ROW for the purpose of their business. The ROW privilege is granted upon a recommendation of the Plan Commission. These agreements include liability requirements, removal timelines, and other clauses.