Edgewater resources

518 Broad Street, Suite 200
St Joseph, Michigan 49085
269 932 4502

ADDENDUM #1

Date: April 17, 2025

Project: Tierney Park Improvements Project
Owner: Village of Lexington, Michigan
Bid Due Date: April 30, 2025, 1:00PM **NOTE BID DUE DATE EXTENSION**

The following are changes, eliminations, and clarifications to project plans and specifications, and shall be considered by the contractor in their estimate. All these items shall be considered as part of the contract documents. ALL BIDDERS MUST ACKNOWLEDGE RECIEPT OF THIS ADDENDUM ON BID FORMS.

Addendum #1 Includes the Following:

Revised Drawings:

1. **GP-1.02** Construction Sequencing Plan
    a. Date for Marina Access extended to 10/15/25
2. **UD-1.01** Utility Demolition Plan
    a. Fuel line label clarification
3. **U-1.01** Utility Plan
    a. Label removed regarding hydrant (no hydrant in contract)
4. **LS-1.01**, **LS-1.02, LS-1.03** Site Plan and Control Points Plans
    a. Width of drive aisle between parking bays increased by 2’
    b. Striping for handicap parking spaces added in southwest parking bay
    c. Regulatory sign locations added
5. **LS-5.01** Site Plan Details
    a. Asphalt mix clarified
6. **LS-5.02** Site Plan Details
    a. Allowable walkway cross-slope note added
7. **LS-5.04** Site Plan Details
    a. Revised to show boardwalk plan view. Structural details moved, see New Drawings.
8. **E1.1** Electrical Plan
    a. Conduit added to parking areas for potential future parking lot gates (gates NIC)
9. **LP-5.01** Planting Details
    a. Updated bioswale detail title for clarity
10. **P-1.00** Restroom Underground Plumbing Plan
    a. Modified notes about the underground depth and sleeve requirements for the following underground pipes leaving the building: 6” Sanitary, 1-1/2” Cold Water to foot showers and 2” Cold Water for the new building service.

11. **P-1.01** Restroom Mechanical Plan (Not Reissued)
    a. Add “WINTERIZATION NOTE: 4. INSULATE H&CW PIPING ROUTED WITHIN INTERIOR WALLS BETWEEN STORAGE AND CONCESSIONS AND INDIVIDUAL RESTROOMS.”
12. **M-1.01** Restroom Mechanical Plan (Not Reissued)
    a. Add “WINTERIZATION NOTE: 4. INSULATE H&CW PIPING ROUTED WITHIN INTERIOR WALLS BETWEEN STORAGE AND CONCESSIONS AND INDIVIDUAL RESTROOMS.”
    b. Add “WINTERIZATION NOTE: 4. INSULATE H&CW PIPING ROUTED WITHIN INTERIOR WALLS BETWEEN STORAGE AND CONCESSIONS AND INDIVIDUAL RESTROOMS.”
13. **F0.1**, **F1.1**, **FE1.1** Fuel Sheets
    a. Fuel Tank Sizes Revised, Notes and Schedule Revised

New Drawings:

1. **SM-5.01, SM-5.02, SM-5.03** Structural Marine Details
    a. Boardwalk structural details moved to these sheets and information added

Revised Specifications:

1. Section **000400** Bid Form
    a. Changes highlighted in yellow and underlined

New Specifications:

1. Section **081113** Hollow Metal Doors and Frames Specification from DNR Boater’s Building
2. Section **087100** Hardware Specification from DNR Boater’s Building
3. Section **074113** Sheet Metal Roofing Specification from DNR Boaters Building
4. Section **102800** Toilet Bath Accessories Specification
5. Section **230700** HVAC Insulation

Questions, Clarifications and Responses:

General

1. Q: What are allowable hours for active construction work?
   A: 7AM-7PM, M-F. Requests for operations outside of allowed hours must be submitted in writing for Village approval.

2. Q: What is the tax status for this project?
   A: The Village is tax exempt, per Invitation to Bid, Item #18. Note that in General Requirements, Item #4, the tax statement is a broad statement covering all project types.

3. Q: Shall Contractor include the cost of all testing in bid, or will the Village cover that cost?
   A: Project Engineer will hire third-party testing agency and will cover testing fees. Scheduling of material testing at appropriate milestones during work completion is the responsibility of the Contractor, as is providing documentation of testing results to meet requirements of specifications. The one exception is soil contamination testing at existing fuel tank, see Question/Answer 4, below.

4. Q: Do costs for soil contamination testing and removal need to be included in the bid or will this be by change order.
   A: Soil must be tested for contamination per fuel system demolition specification. This testing is to be paid for by Contractor and included in bid. If contamination is found, disposal cost shall be submitted as project Change Order.

5. Q: Are prevailing wages or Davis Bacon wages required?
   A: No prevailing wage or Davis Bacon wages required.

6. Q: Is there an estimated project cost? For bonding purposes.
   A: No estimated project cost is being released at this time. Bond shall be based on bid price.

7. Q: Can any work take place before September 15, 2025.
   A: A Notice to Proceed with project planning, submittals, materials ordering,etc may be issued after contract award. Construction must not commence until after Labor Day 2025, due to demands of park and marina use.

8. Q: Does Contractor pay permit fees, or will fees be covered by Village.
   A: Securing required permits will be responsibility of the Contractor. Permit fees may be submitted as a reimbursable expense, which the Owner will pay. Land Use fees will be waived by Village. Sanilac County provides permitting and inspection services.

Fuel Tank

1. Q: Is the new fuel tanks excavation soils to be considered clean soils for disposal?
   A: Yes, the proposed location of the fuel tanks is to be considered clean soils.

2. Q: Where will be dumping the ground water to that the dewatering company will be generating?
   A: Allowable dewatering discharge areas will be dependent upon the Contractor's dewatering permit from EGLE. We anticipate this either being in a temporary upland location and allowed to infiltrate or directly into the marina basin but will be dependent upon the dewatering permit conditions.

3. Q: Will there be a source of water on site that can be used for well pointing or do we need to haul water into the site?
   A: It would be up to the Contractor to either import well point jetting water or use lake water from the adjacent marina basin.

4. Q: Is there a source for power to run 110 current pumps or do we need to supply a generator?
   A: The adjacent building is not staffed in the off season and continuous power cannot be guaranteed, the Contractor would need to provide their own temporary power supply.

5. Q: Soils from around the existing tanks, will that be used as backfill or does the soils need to be removed and replaced?
   A: This material would be considered clean and to be used for backfill. If this material deemed to be contaminated following the required environmental testing during removal, a contract change order would be pursued to remove and replace this material.

6. Q: Does the city have an environmental company that will be on site to take soil samples during the tank removal?
   A: The Contractor is responsible for retaining an independent environmental firm to perform the required testing during removal per Specification Section 33 20 00.

7. Q: Will the city be responsible for getting landfill approval through our environmental company or do we need to apply for that approval?
   A: Approval from any landfills to accept the demolished fuel materials will be the responsibility of the Contractor.

8. Q: Will the city pay directly to the landfill, or will it be on the contractor to pay up front for the tipping fees?
   A: Any associated disposal fees shall be included in the Marine Fuel System Demolition pay item.

9. Q: Who will be responsible for pumping out the existing tanks and disposing of any remaining fuels?
   A: The Contractor will be responsible for the removal of any existing fuel from the tanks per the specifications.

10. Q: Plans call for underground gasoline and diesel fuel tanks. The Modern Welding Co. Fireguard tanks specified are above ground fuel tanks. Are the fuel tanks above ground or below ground? Is there a different specified tank model?
    A: The tanks are below ground and drawing sheet F0.1 has been updated to clarify this.

11. Q: Single compartment tank cross section notes 6 (deadmans anchors see structural) and 16 (overburden slab see structural) on F.01 are not shown on the structural pages. Provide clarification on what these need to be.
    A: Tank deadman anchors shall be precast reinforced concrete or cast-in-place reinforced concrete slabs, sized to anchor the tank during groundwater elevations up to 582.6' NAVD88. Anchors shall extend beyond the outer limits of the tank by a minimum of 2', be constructed from 4,000 psi concrete at minimum, have a minimum thickness of 18", and contain #4 rebar at 12" c-c spacing at minimum. Overburden slabs must have a minimum thickness of 6", be constructed with 4,000 psi concrete at minimum, include #4 rebar at 12" c-c spacing at minimum, and have a broomed finish with rounded edges.

Utilities

1. Q: On the Utility Plan sheet 1.01 it shows us putting in a new hydrant, but it doesn't clearly show us what we are tying it into.
   A: No new hydrant is proposed. Label will be removed from sheet.

2. Q: Will EV chargers be added to the parking lot?
   A: No, if EV charging parking spaces are added in the Village, they will be near downtown area, not in Tierney Park.

Sitework

1. Q: Sheet LS-5.06 calls for grate infill panel for the dumpster enclosure. Provide specifications for this panel.
   A: The panel from the existing dumpster enclosure is to be salvaged and reused for the new dumpster enclosure.

2. Q: Sheet LS-5.04 shows the timber piles 30' in length (boardwalk section and elevation) and 10' in length (boardwalk plan). Provide clarification on timber pile length.
   A: See new Sheets SM-5.01, 5.02, 5.03 for clarification.

3. Q: We need some guidelines to assume what that length / depth of the water is at the location of the boardwalk. Please advise.
   A: See new Sheets SM-5.01, 5.02, 5.03 for clarification.

4. Q: What should be assumed for the estimated pier length for boardwalk?
   A: See modification on Sheet LS-5.04 for clarification.

5. Q: The limited boardwalk information in the drawings is for the timber piles. If the project changes to helical piers, would it be acceptable to use an "L" bracket type cap to receive the beams? What would the width of the beam be?

A: The boardwalk shall be constructed with timber piles. See new Sheet SM-5.01, 5.02, and 5.03 for drawings. See Specification 31 62 29 which pertains to these piles.

6. Q: We need working loads to be able to determine the capacity required for the helicals. Helical engineering is not done until contract award. Does the EOR believe the boardwalk will require either battered piers or cross-bracing? Can lateral load values be provided as well for consideration?
   A: The foundation system for the boardwalk is fully designed and is not delegated. Helical piers are not part of the boardwalk design. Lateral loads have already been accounted for in the structural drawings and details, and no additional lateral load information will be issued. For the staircase, the foundation system is delegated to the contractor's Engineer of Record, and may include helicals or cast-in-place options. Working load values for helical piles in the staircase scope shall be determined by the contractor's design engineer as part of the design-build submission.

7. Q: Should the project carry an allowance for any of these undefined components to be reconciled once engineered?
   A: The project has an allowance, listed at the bottom of bid form.

8. Q: Is a load test required onsite? If so, can that be done on a production pier?
   A: No load test is required under the contract documents for the timber boardwalk. The boardwalk foundation system is fully designed and is not delegated. The staircase section (Section 06 91 00), which is design-build, includes helical piers as an option and may require testing per the Engineer of Record for that scope. The load test requirement, if any, would be defined by the contractor's delegated design engineer for the staircase, not for the boardwalk.

9. Q: Should all material be galvanized?
   A: See new Sheets SM-5.01, 5.02, 5.03 for clarification. Boardwalk fasteners to be hot-dipped galvanized. Boardwalk steel sections such as channel members to be bare steel.

10. Q: We are trying to navigate the recent tariffs and still in a holding pattern to see the impacts. When does the project team foresee this boardwalk being installed, if it moves forward?
    A: The current plan is to install boardwalk with Tierney Park improvements, fall 2025-spring 2026. If item is deducted as an alternate, the construction would be delayed to 2026-2027, to be installed with marina improvement project.

11. Q: Timber staircase - Is there a section cut showing the footings/ foundations required?
    A: See Specification Section 069100, Contractor shall provide engineered foundation systems to be submitted to Engineer for shop drawing approval.

12. Q: Timber staircase - Is there a section cut showing the framing and handrail?

A: Similar to above question, see Specification Section 069100, Contractor shall provide handrails at stairs as required by Michigan Building Code and/or local ordinance, to be submitted to Engineer for shop drawing approval.

13. Q: There are three curbs on this project. Type F3 curb. Type D1 curb. Flush curb. F3 and D1 are on the bid form, but there is no spot on the bid form for the flush curb. Where would you like the cost of this curb on the bid form?
    A: Flush curb and adjacent stone should be included in unit price for bioswale. See updated bid form.

14. Q: Please clarify items to include with unit price for bioswale and rain garden. Are plants included?
    A: Plants have separate line items on bid form, and are not included in the unit price for bioswale and rain garden. Bioswale unit price shall include flush curb, riprap stone, planting mix and subbase, per drawings and detail. Rain garden unit price shall include riprap stone and planting mix, per drawings.

15. Q: Should the cost of plugs be included in that line item or will a separate line item be added to the bid form?
    A: Container plants are revised to item #329300.041 and quantity has been revised on bid form. Plugs are now item #329300.042 with quantity as shown on revised bid form.

16. Q: Detail 6 on sheet LS-5.01 shows HMA 36A and HMA 13A, however the bid form shows 5E and 3E (would it be 3E1/5E1, 3EL/5EL or 3EML/5EML). Can you clarify which mix is to be used along with the preferred asphalt binder?
    A: Detail will be revised to match bid form. 3EL/5EL is the correct mix.

17. Q: Please clarify paint color for parking lot striping.
    A: Striping to be white paint, typical, with Handicap Parking striping to be blue.

18. Q: Is there a tree to be saved located at the base of the south staircase?
    A: Yes, the tree symbol did not print on sheet GP-1.01, but tree protection fencing is correct on this sheet. The tree removals shown on sheet SD-1.01 are also correct, as are the tree removal quantities in the bid form. If it is determined prior to construction that it will be impossible to avoid severe damage during construction operations, pending Owner and Engineer review and approval, then additional tree removals may be added via Change Order.

19. Q: There are exterior trench drains, shown on sheet U-1.01 and detailed on LS-5.01 but no size is specified. What is the width of the exterior trench drains?
    A: Trench drains to be 8” internal width.

20. Q: What diameter is the stainless steel tubing at the concrete steps and concrete ramp on LS-5.02.
    A: Steel tubing to be 2" outside diameter.

Architecture

1. Q: Window type F is not on the window schedule for the bathroom building but is called out for the two windows at the concession room.
   A: Window F is CMU with LP Smart Side trim wrapped opening (plan #1/Sheet A-1.102) with a metal roll down, locking shutter mounted on the inside (Note 1/Special Equipment /Sheet A-1.01).

2. Q: No hollow metal door specifications are provided.
   A: Sheet A-3.01, noted under Door and Frame color swatch: "Hollow Metal Doors and Frames to Match DNR Boater's Building in Standard Blue". Newly added Section 081113 Hollow Metal Doors and Frames Specification from the DNR Boater's Building Attached.

3. Q: No door hardware sets or schedule are provided.
   A: Sheet A-1.01 Hardware Notes and Sheet A-1.02, Door Schedule note "Hardware: ADA compliant, Match owner locking system w/ satin stainless finish". Hardware sets to match existing restroom and storage room keyed locks. Newly added Section 087100 Hardware Specification from DNR Boater's Building attached.

4. Q: No standing seam metal roof specifications are provided.
   A: Sheet A-3.01, noted under Metal Roof color Swatch "Pac-Clad, Kynar 500 standing seam metal roof in Slate Blue to match Boaters Building. Newly added: Section 074113 Sheet Metal Roofing Specification from DNR Boaters Building attached.

5. Q: No toilet accessory specifications are provided.
   A: Sheet A-1.01 Accessories for each Restroom are noted. Newly added Section 102800 Toilet, Bath Accessories Specification Attached.

6. Q: Are masonry corners and stub walls to be bullnose block?
   A: Exterior building masonry corners, no. Interior masonry walls, yes, include bullnose CMU corners.

7. Q: What is the insulation value for the pre-insulated masonry?
   A: Sheet A-1.00, R-Value noted for "Mass Wall" under Michigan Energy Efficiency as R-13.3 c.i. for Zone 6.

8. Q: Is the sign on the restroom perspective view on A-2.00 to be included in our bid? If yes, can details on this sign be provided.
   A: No, the sign in the perspective is (NIC) not in this contract and not included in the bid.

9. Q: Are the beverage coolers installed by owner or contractor?
   A: Beverage coolers are Owner supplied, and Owner installed.

10. Q: It has come to our attention that there isn't a specification for the coiling shutters in the concession area, will one be issued in the addendum? Or are we to select a shutter system on our own?
    A: Sheet A-1.01, Roll up Shutter specification is Note #1 under Special Equipment.

11. Q: Is there going to be a specification issued for doors, frames lockset and hardware?
    A: Yes, see answers to Questions 2 and 3 and Attachments #1 and #2

12. Q: Will architectural-related product alternates be accepted?
    A: Yes, as follows:
    Add Zurn to list of acceptable plumbing fixtures, faucets, drains, cleanouts, and shock absorbers.
    Add Wilkins to list of acceptable backflow preventers.
    Add Calefactio to list of acceptable expansion tanks.
    Add World Dryer products to the list of acceptable hand dryers.
    Note: All fixture alternates are dependent on final approval via construction submittal.

Attachments:

1. Prebid Meeting Agenda
2. Prebid Meeting Attendance List

END OF ADDENDUM #1

TIERNEY PARK IMPROVEMENTS PROJECT

5451 Dallas Street, Lexington, MI 48450

DRAWING SET FOR BIDDING ADDENDUM #1, 4/16/25

PERMIT & REVIEWS				
PERMIT SCOPE	AGENCY	PERMIT NO.	DATE AUTHORIZED	EXPIRATION DATE
BOARDWALK	EGLE		PENDING	PENDING
SANITARY	EGLE		PENDING	PENDING
BREAKWATER CONNECTION WALK	USACE		REVIEW 11/26/24	PENDING
PLAN REVIEW	LAND USE		11/13/24	NONE
PLAN REVIEW	FIRE		12/12/24	NONE
BUILDING INSPECTION	SANILAC COUNTY		BY CONTRACTOR	
SOIL EROSION & SEDIMENTATION CONTROL	SANILAC COUNTY		BY CONTRACTOR	
SANITARY REVIEW	SANILAC COUNTY		BY CONTRACTOR	
FUEL TANK	LARA, EGLE		BY CONTRACTOR	

UTILITY CONTACTS		
UTILITY	AGENCY	CONTACT
WATER & SEWER	Village of Lexington Water Department	Chris Heiden (810) 359-5901
ELECTRIC	DTE Energy	Joseph Burghardt (734) 347-1189
GAS	SEMCo Energy Gas Company	Colleen Starring (800) 624-2019
TELE-COMMUNICATIONS	ATT (phone) Agri-Valley Services (fiber and internet)	(800) 331-0500 (888) 282-4932
ROADS	Village of Lexington Department of Public Works	Jerry Scott (810) 359-8536
FIRE DEPT	Village of Lexington Fire Department	Keefe Radke (810) 359-5221

VILLAGE OF LEXINGTON
7227 HURON AVE., STE. 100
LEXINGTON, MI 48450

CONTACT:
LORI FISHER, VILLAGE MANAGER
(810) 359 - 8631

EDGEWATER RESOURCES, LLC
518 BROAD ST, STE. 200.
ST. JOSEPH, MI 49085

CONTACT:
SUZANNE FROMSON, PLA., PROJECT MANAGER
(269) 408-6387

LANDSCAPE ARCHITECTURE

I CERTIFY THAT THESE DRAWINGS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND CONTROL.

STATE OF MICHIGAN — SUZANNE FROMSON — LANDSCAPE ARCHITECT — No. 3901001353 — LICENSED LANDSCAPE ARCHITECT

SEAL

Suzanne M. Fromson, PLA — NAME:

3/25/25 — DATE:

ARCHITECTURE

I CERTIFY THAT THESE DRAWINGS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND CONTROL.

STATE OF MICHIGAN — MICHELLE M RUMSA — ARCHITECT — No. 1301044073 — LICENSED ARCHITECT

SEAL

Michelle Rumsa, RA — NAME:

3/25/25 — DATE:

CIVIL ENGINEERING

I CERTIFY THAT THESE DRAWINGS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND CONTROL.

STATE OF MICHIGAN — DARYL J. VELDMAN — ENGINEER — No. 39582 — LICENSED PROFESSIONAL ENGINEER

SEAL

Daryl Veldman, PE — NAME:

3/25/25 — DATE:

ARCHITECTURE: MECHANICAL/ELECTRIAL/PLUMBING

I CERTIFY THAT THESE DRAWINGS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND CONTROL.

STATE OF MICHIGAN — ERIC J. SCHIPPERS — ENGINEER — No. 6201065967 — LICENSED PROFESSIONAL ENGINEER

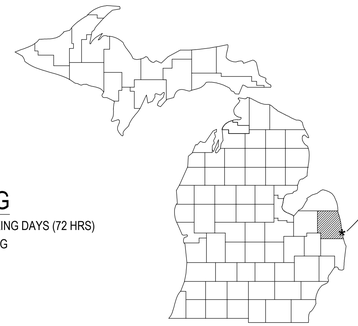
SEAL

Eric Schippers, PE — NAME:

3/25/25 — DATE:

MISS DIG

CALL 811 AT LEAST 3 FULL WORKING DAYS (72 HRS) BEFORE YOU DIG



SANILAC COUNTY, MICHIGAN

Sheet List Table	
Sheet Number	Sheet Title
G-0.01	COVER SHEET
G-0.02	GENERAL NOTES
V-1.01	EXISTING CONDITIONS
GP-1.01	SESC & SITE PREP PLAN
GP-1.02	CONSTRUCTION SEQUENCING PLAN
SD-1.01	SITE DEMOLITION PLAN
UD-1.01	UTILITY DEMOLITION PLAN
U-1.01	UTILITY PLAN
LG-1.01	GRADING PLAN
LS-1.01	SITE PLAN
LS-1.02	SITE PLAN - CONTROL POINTS
LS-1.03	CONTROL POINTS
LS-3.01	SITE SECTIONS
LS-3.02	SITE SECTIONS
LS-3.03	SITE SECTIONS
LS-4.01	SITE PLAN ENLARGEMENTS
LS-4.02	SITE PLAN ENLARGEMENTS
LS-4.03	SITE PLAN ENLARGEMENTS
LS-5.01	SITE PLAN DETAILS
LS-5.02	SITE PLAN DETAILS
LS-5.03	SITE PLAN DETAILS
LS-5.04	SITE PLAN DETAILS
LS-5.05	SITE PLAN DETAILS
LS-5.06	SITE PLAN DETAILS
LS-5.07	SITE PLAN DETAILS
LS-5.08	SITE PLAN DETAILS
SM-5.01	STRUCTURAL MARINE DETAILS
SM-5.02	STRUCTURAL MARINE DETAILS
SM-5.03	STRUCTURAL MARINE DETAILS
U-5.01	UTILITY DETAILS
U-5.02	UTILITY DETAILS
E0.1	SITE ELECTRICAL NOTES & LEGENDS
E1.1	SITE ELECTRICAL PLAN
E2.1	SITE ELECTRICAL PHOTOMETRIC PLAN
LP-1.01	PLANTING PLAN
LP-5.01	PLANTING DETAILS
A-1.01	RESTROOM BUILDING DATA & NOTES
A-1.02	RESTROOM FLOOR PLAN & SCHEDULES
A-2.00	RESTROOM EXTERIOR ELEVATIONS
A-3.00	RESTROOM BUILDING SECTIONS AND DETAILS
A-3.01	RESTROOM INTERIOR ELEVATIONS & FINISHES
A-1.01pav	PAVILION BUILDING DATA AND NOTES
A-1.02pav	PAVILION FLOOR PLANS & SCHEDULES
A-2.00pav	PAVILION EXTERIOR ELEVATIONS
A-3.00pav	PAVILION BUILDING SECTIONS AND DETAILS
P-1.00	RESTROOM UNDERGROUND PLUMBING PLAN
P-1.01	RESTROOM PLUMBING PLAN
M-1.01	RESTROOM & PAVILION MECHANICAL PLAN
E-1.00	RESTROOM ELECTRICAL PLAN
E-1.01	RESTROOM LIGHTING PLAN
E-10.00	ARCHITECTURE - ELECRICAL SCHEDULE
E-2.00	PAVILION ELECTRICAL PLAN
E-2.01	PAVILION LIGHTING PLAN
E-10.01	ELECTRICAL SCHEDULES & DETAILS
S001	STRUCTURAL NOTES
S101	RESTROOM FOUNDATION PLAN
S102	RESTROOM FRAMING PLAN
S301	RESTROOM FOUNDATION DETAILS
S401	RESTROOM FRAMING DETAILS
S103	PAVILION FOUNDATION PLAN
S104	PAVILION FRAMING PLAN
S302	PAVILION FOUNDATION DETAILS
S402	PAVILION FRAMING DETAILS
F0.1	FUEL-NOTES, SCHEDULES, & DETAILS
F1.1	FUEL-SITE PLAN
FE0.1	FUEL-ELECTRICAL NOTES & LEGENDS
FE0.2	FUEL-ELECTRICAL DETAILS
FE0.3	FUEL-ELECTRICAL DETAILS
FE1.1	FUEL-ELECTRICAL PLAN

EDGEWATER RESOURCES PROJECT #23-028
IMPROVEMENTS PROJECT - DATE: 3/25/25

NOTES:

1. SITE ACCESS PLAN TO BE REVIEWED AND FINALIZED WITH OWNER, OWNER'S REPRESENTATIVE, REPRESENTATIVE OF WINDJAMMER PROPERTY, MDNR, AND CONTRACTOR AT PRE-CONSTRUCTION MEETING ESTIMATED TO BE SEPTEMBER 2, 2026 ON SITE.
2. OWNER TO COORDINATE WITH RESIDENTIAL NEIGHBOR'S TO THE NORTH OF PROJECT SITE.

Edgewater resources
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PROJECT TITLE:
TIERNEY PARK
IMPROVEMENTS PROJECT
VILLAGE OF LEXINGTON, MI

SHEET TITLE:
CONSTRUCTION SEQUENCING PLAN

DATE	REVISION
4/16/25	1. ADD. 1

ISSUED FOR:

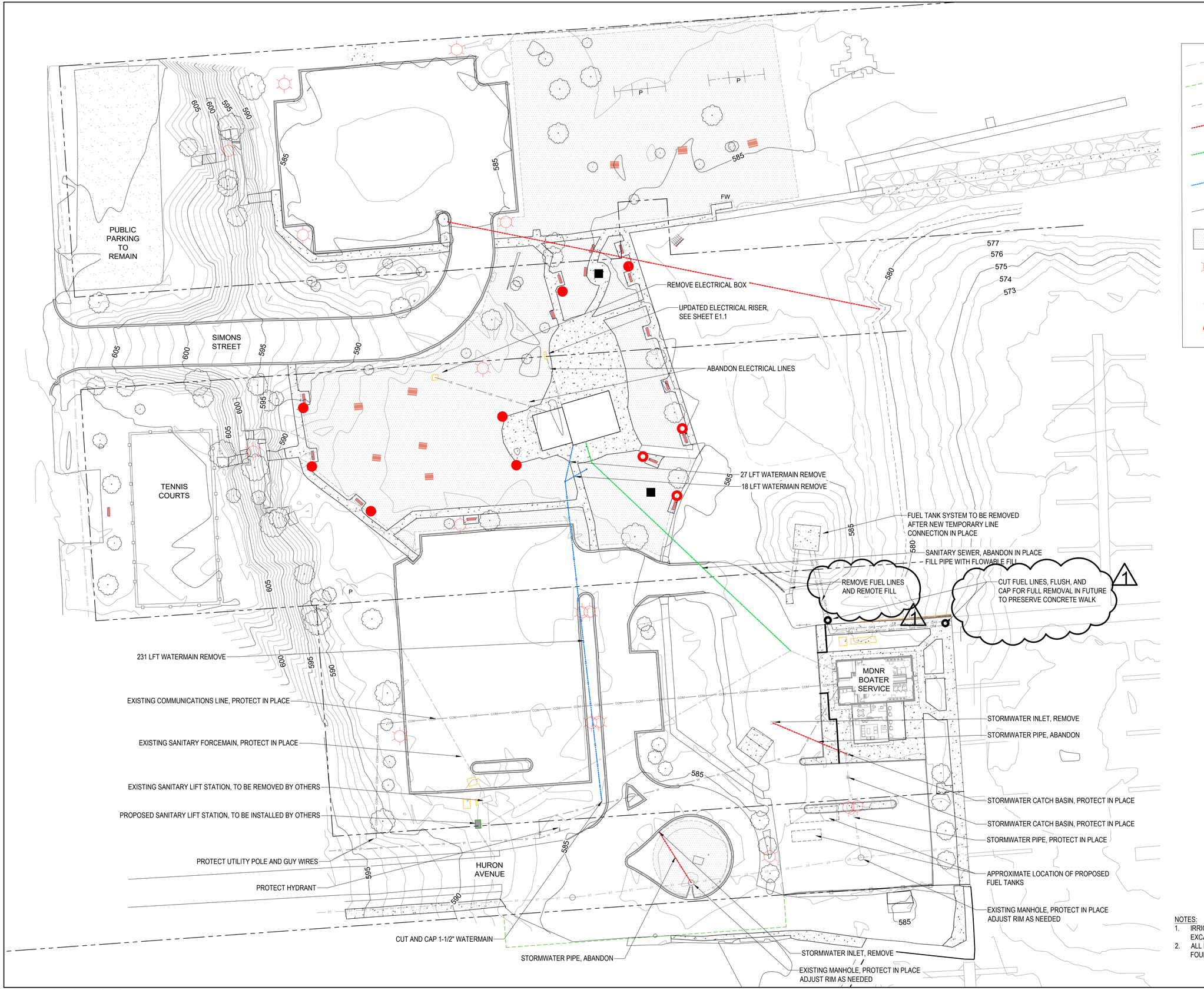
BIDDING

DATE: 3/25/25
PROJ NO.: 23-028
NORTH

0 40 80
SCALE: 1" = 40 (AT 24"x36")

DESIGNED BY:	SF
DRAWN BY:	SF
REVIEWED BY:	DV

SHEET NUMBER:
GP-1.02



UTILITY REMOVALS LEGEND

- PROPERTY LINE
- EASEMENT
- OHWM
- STORM LINE - REMOVE
- SANITARY LINE (ABANDON)
- WATER LINE (ABANDON)
- ELECTRIC LINE (ABANDON)
- IRRIGATION ZONE
- LIGHT: PARKING LOT FIXTURE (REMOVAL BY DTE)
- LIGHT: PEDESTRIAN LIGHT
- LIGHT: BOLLARD

NOTES:

1. IRRIGATION DEMO TO BE REMOVED DURING SITE EXCAVATION, NO SALVAGE REQUIRED.
2. ALL PARKING LOT LIGHT FIXTURES AND FOUNDATIONS TO BE REMOVED BY OTHERS (DTE).

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PROJECT TITLE:
TIERNEY PARK
IMPROVEMENTS PROJECT
VILLAGE OF LEXINGTON, MI

SHEET TITLE:
UTILITY DEMOLITION PLAN

DATE	REVISION
4/16/25	1. ADD. 1

ISSUED FOR:

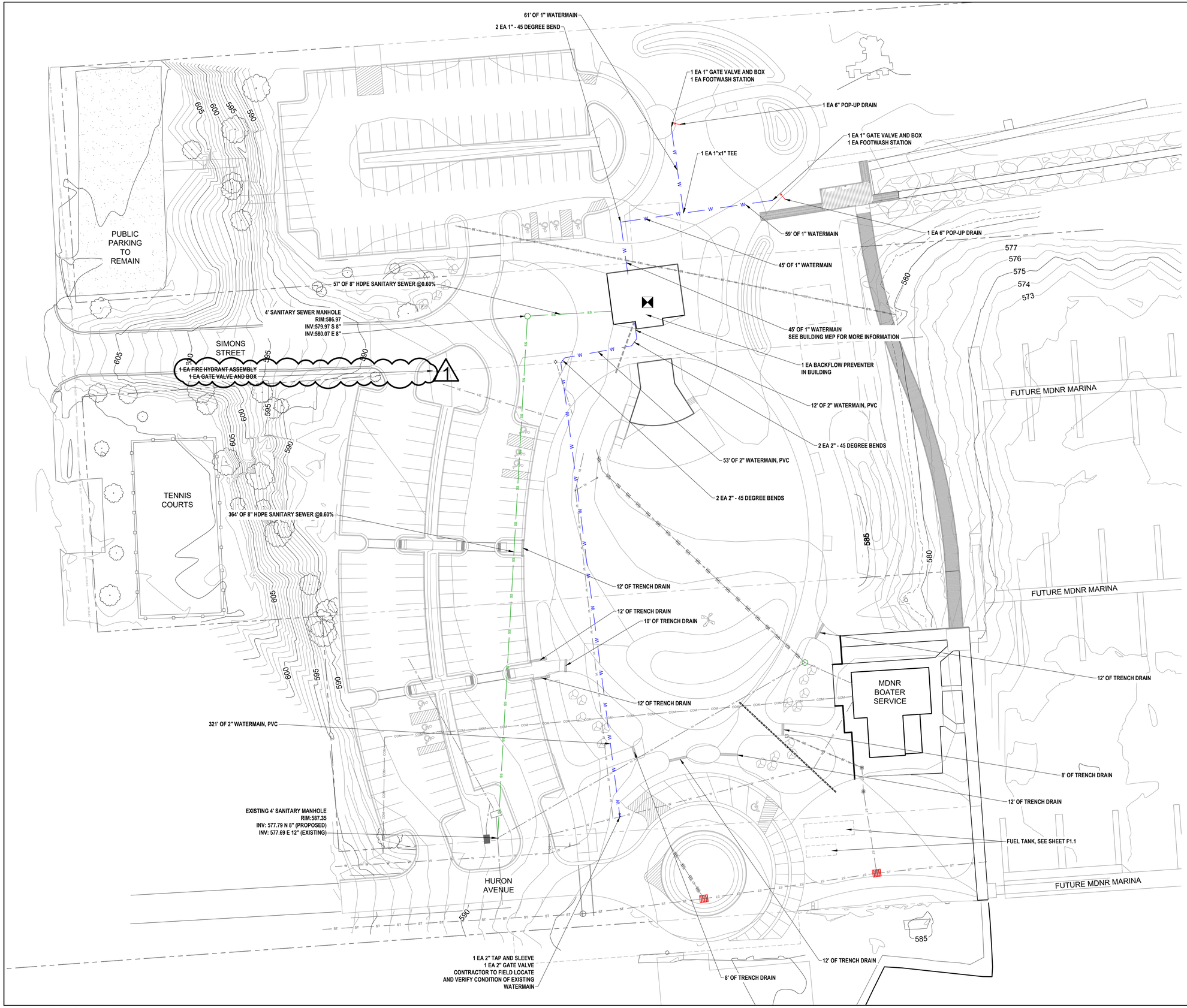
BIDDING

DATE: 3/25/25
PROJ NO.: 23-028
NORTH

SCALE: 1" = 30 (AT 24"x36")

DESIGNED BY:	SF
DRAWN BY:	CJ
REVIEWED BY:	DV

SHEET NUMBER:
UD-1.01



UTILITIES PLAN LEGEND

- PROPERTY LINE
- EASEMENT
- OHWM
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER LINE
- ABANDONED SANITARY SEWER LINE
- REMOVED STORM SEWER LINE
- PROPOSED CATCH BASIN
- IRRIGATION MAIN LINE
- IRRIGATION SLEEVE
- IRRIGATION METER IN RESTROOM UTILITY ROOM
- 6" POP-UP DRAIN

NOTES:
1. IRRIGATION TO BE COMPLETED AS DESIGN-BUILD.
2. FOR SITE ELECTRICAL, SEE SHEET E1.1.

Edgewater resources
518 Broad Street, Suite 200
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P: 269.932.4502
edgewaterresources.com

PROJECT TITLE:
TIERNEY PARK
IMPROVEMENTS PROJECT
VILLAGE OF LEXINGTON, MI

SHEET TITLE:
UTILITY PLAN

DATE	REVISION
4/16/25	1. ADD. 1

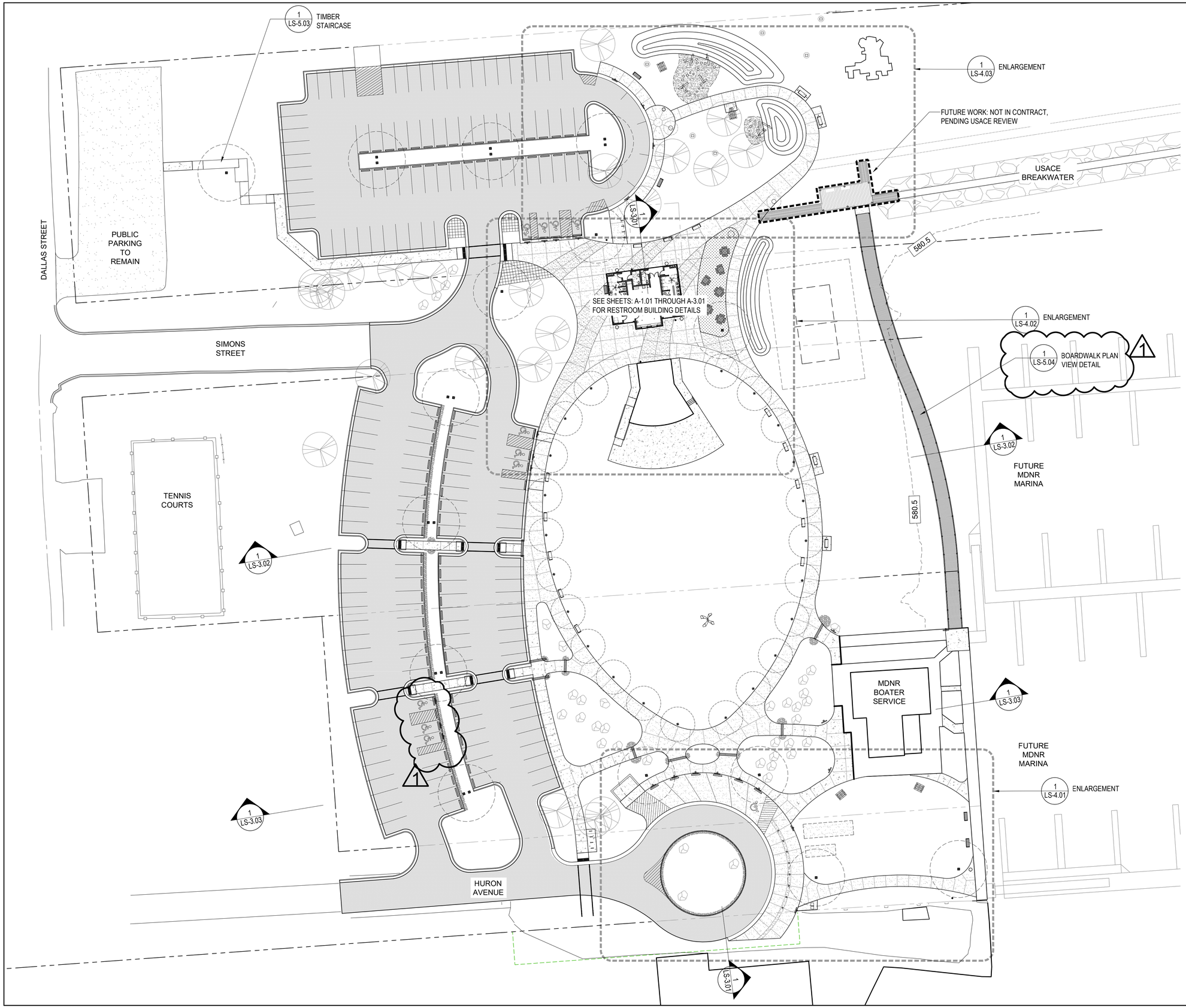
ISSUED FOR:
BIDDING

DATE: 3/25/25
PROJ NO.: 23-028
NORTH

0 30 60
SCALE: 1" = 30 (AT 24"x36")

DESIGNED BY: SF
DRAWN BY: CJ
REVIEWED BY: ----

SHEET NUMBER:
U-1.01



SITE PLAN LEGEND OF PROPOSED FEATURES

- PROPERTY LINE
- EASEMENT
- OHWM
- 4" CONCRETE, TYP.
- 6" CONCRETE, TYP.
- 6" CONCRETE, W/ COLOR & EXPOSED AGGREGATE
- TYPE F3 CURB
- TYPE D1 CURB
- FLUSH CURB
- ASPHALT PAVING
- CRUSHED STONE PAVING
- REINFORCED TURF RINGS
- ENGINEERED WOOD FIBER MULCH
- BENCH
- RELOCATED BENCH
- FIXED PICNIC TABLE/ADA
- FREE-STANDING PICNIC TABLE/ADA
- GRILL
- SWING BENCH
- DUMPSTER ENCLOSURE
- FOOTWASH
- FOOTWASH WITH SHOWER
- BIKE RACKS
- LITTER RECEPTACLE
- ASH URN / DOG BAG DISPENSER
- RELOCATED SCULPTURE
- RELOCATED TIERNEY BUST
- LIGHT POLE (NIC: UNDER SEPARATE DTE CONTRACT)
- BOLLARD LIGHT: SEE SHEET E1.1
- BOLLARD AT CIRCLE DRIVE
- RELOCATED LANDSCAPE BOULDERS
- TRENCH DRAIN IN SIDEWALKS
- REGULATORY SIGN 1

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PROJECT TITLE:
TIERNEY PARK
IMPROVEMENTS PROJECT
VILLAGE OF LEXINGTON, MI

SHEET TITLE:
SITE PLAN

DATE	REVISION
4/16/25	1. ADD. 1

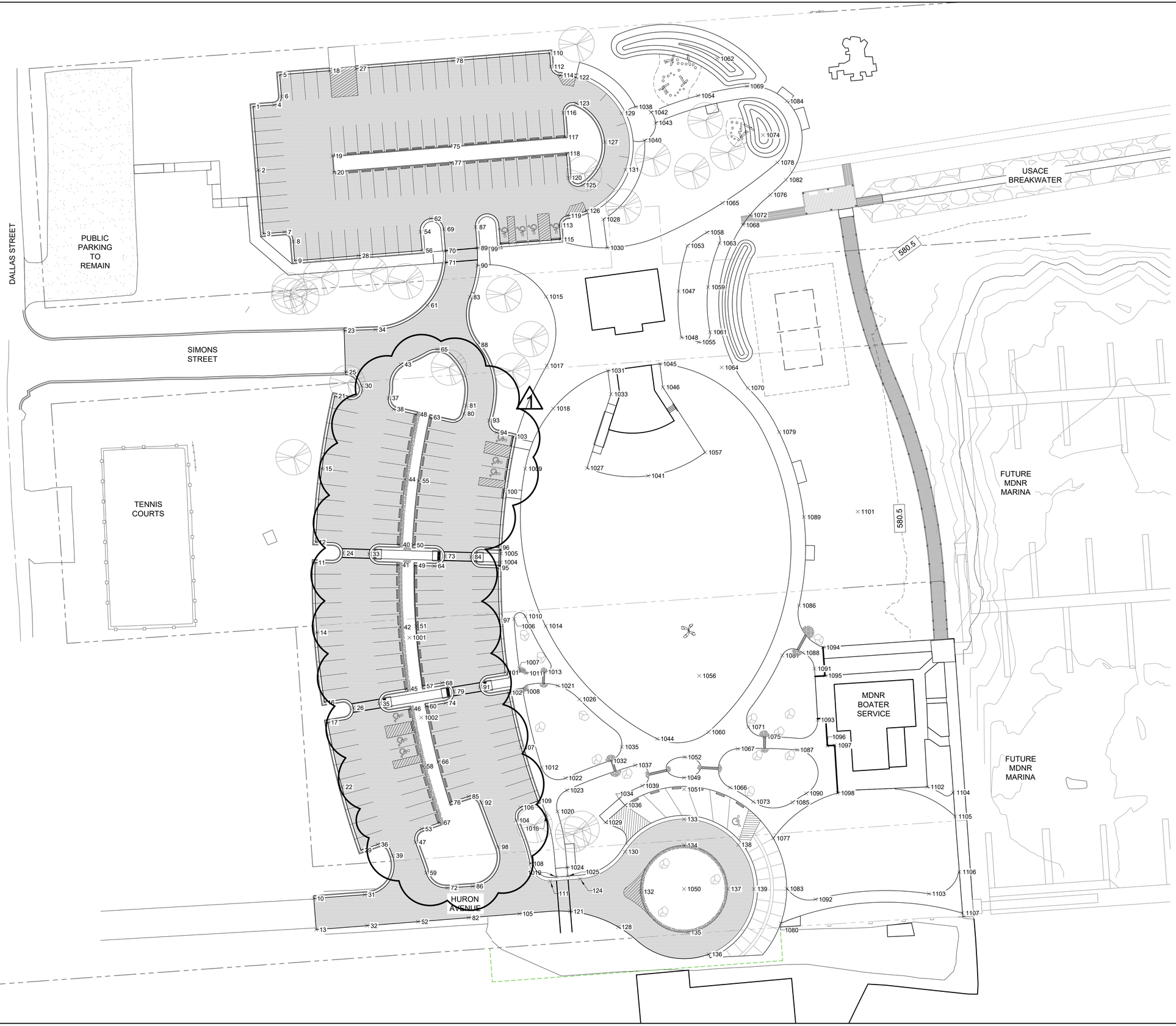
ISSUED FOR:
BIDDING

DATE: 3/25/25
PROJ NO.: 23-028
NORTH

0 30 60
SCALE: 1" = 30' (AT 24"x36")

DESIGNED BY:	SF
DRAWN BY:	CJ
REVIEWED BY:	DV

SHEET NUMBER:
LS-1.01



NOTES:
1. SEE SHEET LS-1.03 FOR POINT TABLE.

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PROJECT TITLE:
TIERNEY PARK
IMPROVEMENTS PROJECT
VILLAGE OF LEXINGTON, MI

SHEET TITLE:
SITE PLAN - CONTROL POINTS

DATE	REVISION
4/16/25	1. ADD. 1

ISSUED FOR:

BIDDING

DATE: 3/25/25
PROJ NO.: 23-028
NORTH

0 30 60
SCALE: 1" = 30 (AT 24"x36")

DESIGNED BY:	SF
DRAWN BY:	CJ
REVIEWED BY:	DV

SHEET NUMBER:
LS-1.02

1

EDGE OF PAVEMENT			
Point #	Northing	Easting	Elevation
1	650393.2772	13613168.7698	585.10
2	650349.5626	13613172.3016	585.39
3	650305.8479	13613175.8333	586.30
4	650394.4449	13613183.2227	585.22
5	650415.1695	13613187.0663	585.11
6	650400.3699	13613188.2619	585.23
7	650307.0156	13613190.2862	586.26
8	650300.6070	13613196.3219	586.36
9	650287.2709	13613197.3993	586.14
10	649848.9212	13613210.5300	596.77
11	650079.8892	13613211.3825	590.79
12	650093.8923	13613211.7972	590.79
13	649827.4979	13613212.1691	596.70
14	650031.6868	13613212.5738	590.81
15	650144.4102	13613216.1569	590.53
16	649983.7552	13613217.8135	590.84
17	649969.9412	13613220.0880	591.10
18	650417.9478	13613221.4542	584.89
19	650359.3962	13613223.1749	585.05
20	650348.1176	13613224.0861	585.24
21	650194.3539	13613224.9676	590.30
22	649925.5626	13613229.7815	591.24
23	650239.2992	13613231.4196	589.34
24	650086.3252	13613230.5386	590.68
25	650210.7705	13613232.2783	589.74

EDGE OF PAVEMENT			
Point #	Northing	Easting	Elevation
26	649979.9276	13613237.6537	590.65
27	650419.4026	13613239.4609	584.93
28	650290.8085	13613241.1862	585.95
29	649882.0913	13613242.9600	591.38
30	650201.3160	13613243.3138	589.77
31	649851.5914	13613245.4280	594.18
32	649830.2254	13613247.0627	593.88
33	650085.7926	13613248.5307	590.31
34	650240.0024	13613252.7219	588.58
35	649982.8523	13613255.4170	590.30
36	649886.0742	13613254.3673	592.36
37	650192.9464	13613261.8250	590.28
38	650185.2536	13613265.2141	589.28
39	649878.3769	13613264.5593	592.54
40	650092.1613	13613269.2755	590.11
41	650078.1877	13613268.8621	590.11
42	650035.5247	13613269.9456	590.11
43	650216.0010	13613270.2764	588.87
44	650137.0083	13613273.1623	589.76
45	649993.0976	13613274.5543	590.10
46	649979.2835	13613276.8288	590.11
47	649887.6648	13613280.3113	591.31
48	650181.6780	13613281.0534	589.41
49	650077.8626	13613279.8425	586.95
50	650091.9224	13613278.7539	588.75

EDGE OF PAVEMENT			
Point #	Northing	Easting	Elevation
51	650036.2594	13613280.9210	586.78
52	649832.9528	13613281.9563	592.42
53	649896.7046	13613284.5564	590.70
54	650307.2153	13613283.8251	585.57
55	650135.9757	13613282.5406	588.82
56	650294.3461	13613284.9730	585.73
57	649994.8848	13613285.4093	586.81
58	649939.8072	13613285.4898	590.37
59	649866.5759	13613287.7391	591.00
60	649981.0708	13613287.6837	586.47
61	650256.7380	13613288.4224	587.10
62	650316.2689	13613290.8757	585.41
63	650179.5776	13613290.2600	588.90
64	650077.4645	13613293.2923	587.91
65	650226.4398	13613295.3486	588.00
66	649942.9903	13613296.0277	587.04
67	649901.1306	13613297.2168	590.42
68	649997.0686	13613298.6730	587.91
69	650308.9609	13613299.7229	585.47
70	650294.1297	13613300.9211	585.70
71	650286.1050	13613300.9376	585.96
72	649856.2055	13613302.1261	589.94
73	650084.2309	13613300.4974	587.78
74	649983.2547	13613300.9480	587.95
75	650365.9174	13613303.8923	584.78

EDGE OF PAVEMENT			
Point #	Northing	Easting	Elevation
76	649914.9359	13613304.2642	587.39
77	650354.6420	13613304.8426	584.88
78	650424.7778	13613305.9941	585.09
79	649991.2989	13613306.7173	587.60
80	650182.2048	13613313.5628	587.83
81	650187.7336	13613315.0119	587.60
82	649835.6803	13613316.8498	589.98
83	650262.3311	13613317.6666	587.10
84	650083.7216	13613318.4902	587.42
85	649919.0287	13613316.8121	588.39
86	649857.3325	13613319.6881	588.58
87	650310.3953	13613321.6920	585.29
88	650229.5562	13613323.0020	587.34
89	650296.0622	13613322.8363	585.45
90	650284.0339	13613322.8419	585.57
91	649994.2233	13613324.4781	587.28
92	649914.7992	13613325.5461	588.54
93	650177.6331	13613330.9292	586.90
94	650169.2028	13613336.1994	586.62
95	650076.1608	13613337.3332	585.92
96	650090.1545	13613337.7498	585.94
97	650040.0953	13613338.2782	585.63
98	649884.3977	13613337.1022	588.50
99	650298.6849	13613338.6769	585.32
100	650128.5779	13613341.1599	586.07

EDGE OF PAVEMENT			
Point #	Northing	Easting	Elevation
101	650004.2232	13613342.1253	585.36
102	649990.4093	13613344.4007	585.29
103	650166.5648	13613347.8661	586.45
104	649902.7362	13613349.3612	587.52
105	649838.4077	13613351.7434	587.32
106	649911.5261	13613352.4956	587.11
107	649952.7861	13613352.9164	586.06
108	649872.8850	13613359.1152	586.71
109	649916.0321	13613364.6281	586.83
110	650430.1531	13613372.5273	585.19
111	649860.8505	13613372.9936	586.83
112	650420.7784	13613373.2847	585.13
113	650311.7298	13613379.2794	585.23
114	650414.8025	13613379.6707	585.07
115	650302.0268	13613380.0422	585.30
116	650388.9862	13613381.8072	584.56
117	650372.3210	13613383.1536	584.52
118	650361.0522	13613384.1856	584.54
119	650318.1799	13613384.9755	585.17
120	650344.3773	13613385.4112	584.58
121	649839.9691	13613386.6609	586.40
122	650413.4153	13613390.5141	585.00
123	650395.5422	13613390.7065	584.59
124	649862.4149	13613393.4396	586.09
125	650339.3349	13613395.2475	584.64

EDGE OF PAVEMENT			
Point #	Northing	Easting	Elevation
126	650321.6628	13613397.9269	585.60
127	650368.8441	13613410.3747	584.47
128	649829.3464	13613419.7202	584.99
129	650388.7081	13613421.9940	584.56
130	649881.0189	13613424.2580	584.61
131	650349.9213	13613424.6250	584.73
132	649853.5878	13613434.9621	583.94
133	649903.4835	13613464.9021	584.43
134	649885.4835	13613464.9021	583.94
135	649825.5810	13613467.3842	583.94
136	649810.5610	13613481.8128	584.37
137	649855.4835	13613494.9021	583.94
138	649885.8496	13613502.0760	584.43
139	649855.4835	13613512.9021	584.43

MISC. POINTS			
Point #	Northing	Easting	Elevation
1001	650028.2095	13613276.1922	586.80
1002	649973.2634	13613284.3515	586.77
1004	650080.1013	13613338.9303	586.44
1005	650086.1136	13613339.1170	586.41
1006	650041.1663	13613348.1535	585.96
1007	650007.1371	13613351.6698	585.67
1008	649991.1688	13613354.2501	585.61
1009	650144.3199	13613355.7312	586.57
1010	650042.9352	13613355.8482	585.79
1011	650003.7895	13613356.4594	585.54
1012	649939.0345	13613366.9846	586.70
1013	650004.6108	13613369.2607	585.28
1014	650036.2015	13613369.8187	585.47
1015	650262.6694	13613370.0739	586.05
1016	649906.3113	13613370.2837	587.22
1017	650215.1243	13613370.5717	586.50
1018	650185.7068	13613374.9885	586.42
1019	649863.6697	13613377.0700	586.69
1020	649908.7555	13613377.9069	587.06
1021	649995.1858	13613378.0827	585.24
1022	649931.6466	13613383.3764	586.29
1023	649923.2880	13613384.3255	586.20
1024	649870.2581	13613384.5302	586.60
1025	649864.3193	13613385.0433	586.53
1026	649985.8956	13613392.9517	585.42

MISC. POINTS			
Point #	Northing	Easting	Elevation
1027	650144.8241	13613398.1591	583.82
1028	650315.7837	13613409.4458	585.60
1029	649901.1577	13613410.7373	585.03
1030	650296.2442	13613411.9574	585.50
1031	650211.7897	13613412.5244	585.94
1032	649943.6212	13613414.0343	585.63
1033	650195.6390	13613414.6608	585.94
1034	649917.5995	13613420.2496	585.22
1035	649953.1808	13613422.1039	585.59
1036	649913.0425	13613424.2559	585.10
1037	649940.5421	13613431.2977	585.29
1038	650393.0625	13613431.5619	584.42
1039	649926.3694	13613436.1370	585.06
1040	650370.0721	13613437.8568	584.32
1041	650139.4545	13613440.1885	583.73
1042	650389.3426	13613442.1742	584.31
1043	650382.0837	13613445.3285	584.29
1044	649958.6334	13613446.4427	585.47
1045	650216.4350	13613448.2095	585.94
1046	650200.3780	13613450.3476	585.94
1047	650266.3572	13613461.0643	585.87
1048	650234.5109	13613463.0936	585.43
1049	649931.9849	13613464.7239	585.35
1050	649855.4835	13613464.9021	582.66
1051	649923.9697	13613464.9207	585.06

MISC. POINTS			
Point #	Northing	Easting	Elevation
1052	649946.0940	13613465.2662	585.06
1053	650297.6657	13613467.2357	585.30
1054	650400.7331	13613474.4120	584.01
1055	650231.3557	13613474.9924	584.98
1056	650002.0238	13613475.3402	587.21
1057	650155.5297	13613479.3918	583.70
1058	650306.8267	13613480.6754	584.50
1059	650269.2473	13613481.3824	584.85
1060	649963.3244	13613481.6863	585.18
1061	650238.2142	13613482.7483	584.79
1062	650426.2893	13613487.6993	587.00
1063	650299.2974	13613489.2509	584.50
1064	650213.9386	13613490.7200	584.43
1065	650326.9439	13613491.1722	584.27
1066	649925.1060	13613496.6032	585.20
1067	649951.8329	13613501.7701	585.00
1068	650311.9041	13613505.2126	584.10
1069	650407.2586	13613507.9745	583.71
1070	650199.9440	13613508.5564	583.90
1071	649966.9220	13613509.0342	584.53
1072	650318.7810	13613510.3157	583.96
1073	649915.4868	13613512.3559	585.05
1074	650373.6545	13613519.1116	587.00
1075	649960.1360	13613519.7066	584.58
1076	650332.5595	13613524.0768	583.64

MISC. POINTS			
Point #	Northing	Easting	Elevation
1077	649890.2885	13613526.2143	584.92
1078	650354.8258	13613528.9822	583.85
1079	650169.6158	13613530.1769	583.66
1080	649831.9505	13613531.3623	584.89
1081	650015.8949	13613532.3240	584.28
1082	650342.9457	13613534.8517	583.61
1083	649855.6490	13613535.4066	584.73
1084	650397.0277	13613535.4334	583.47
1085	649915.0302	13613539.3653	584.31
1086	650050.2465	13613543.8847	584.25
1087	649951.0543	13613542.3770	584.48
1088	650017.8660	13613546.3375	584.21
1089	650111.1018	13613547.2243	583.58
1090	649921.1389	13613548.8368	584.50
1091	650006.8997	13613554.4725	583.69
1092	649848.3264	13613555.2368	584.54
1093	649971.6718	13613556.6879	583.99
1094	650021.6156	13613560.3867	583.67
1095	650002.0907	13613561.6795	583.76
1096	649953.9187	13613563.3847	584.12
1097	649954.2356	13613568.3746	584.23
1098	649921.4253	13613570.4394	584.05
1101	650114.7944	13613584.2473	581.00
1102	649925.6130	13613632.0270	584.00
1103	649852.1738	13613633.0368	584.06

MISC. POINTS			
Point #	Northing	Easting	Elevation
1104	649921.7711	13613649.7944	583.84
1105	649905.3270	13613651.0633	583.79
1106	649867.1330	13613654.0103	583.75
1107	649838.9109	13613656.1355	584.06

SEE SHEET LS-1.02 FOR POINTS THAT HAVE CHANGED

Edgewater resources
518 Broad Street, Suite 200
Saint Joseph, MI 49085
P: 269.932.4502
edgewaterresources.com

PROJECT TITLE:
TIERNEY PARK
IMPROVEMENTS PROJECT
VILLAGE OF LEXINGTON, MI

SHEET TITLE:
CONTROL POINTS

DATE	REVISION
4/16/25	1. ADD. 1

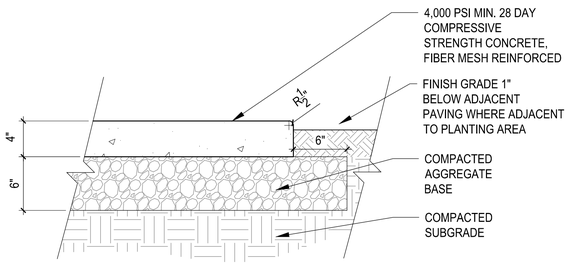
ISSUED FOR:
BIDDING

DATE: 3/25/25
PROJ NO.: 23-028
NORTH

0 30 60
SCALE: 1" = 30 (AT 24"x36")

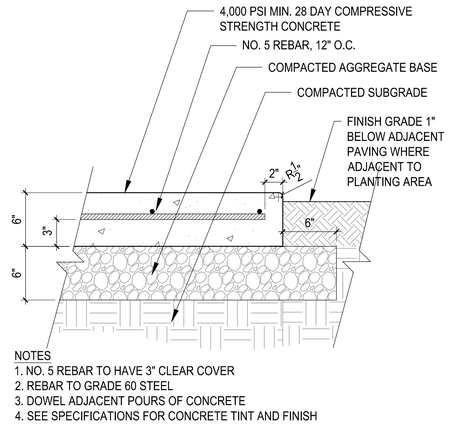
DESIGNED BY: SF
DRAWN BY: CJ
REVIEWED BY: DV

SHEET NUMBER:
LS-1.03



1 4" CONCRETE

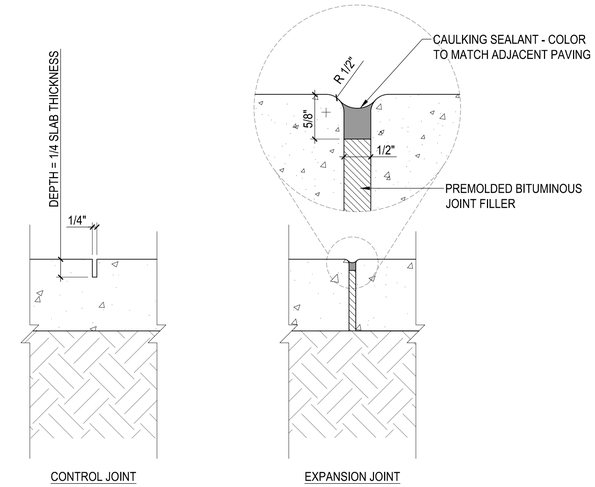
SCALE: 1 1/2"=1'-0" DT-CONC WALK



NOTES
1. NO. 5 REBAR TO HAVE 3" CLEAR COVER
2. REBAR TO GRADE 60 STEEL
3. DOWEL ADJACENT POURS OF CONCRETE
4. SEE SPECIFICATIONS FOR CONCRETE TINT AND FINISH

2 6" REINFORCED CONCRETE

SCALE: 1 1/2"=1'-0" DT-CONC VEHIC

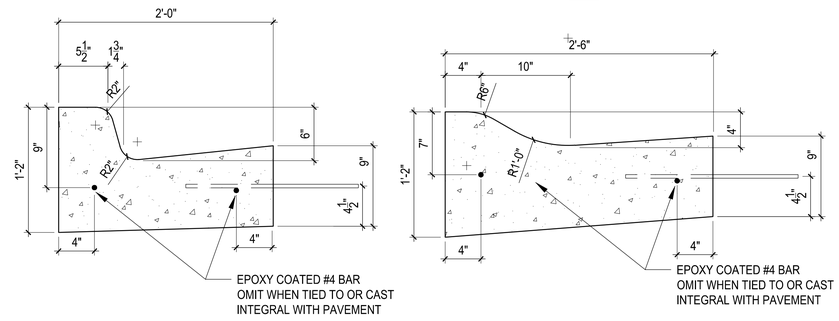


3 CONCRETE CONTROL & EXPANSION JOINTS

SCALE: 3"=1'-0" DT-CJ and EJ

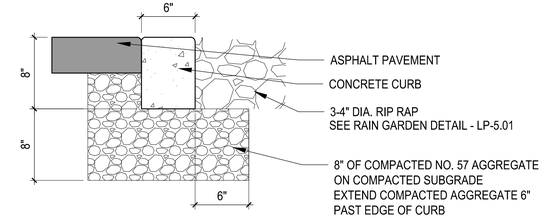
A: RAISED TYPE F3 CURB

B: FLUSH ROADWAY TYPE D1 CURB



4 ROADWAY CURBS

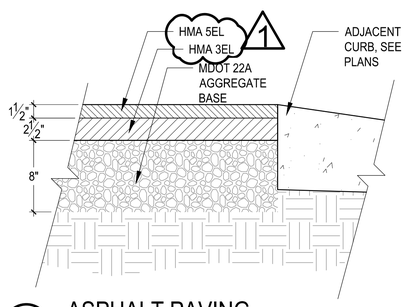
SCALE: 1 1/2"=1'-0" DT-ROAD CURBS



CONTRACTION JOINTS MUST BE PLACED EVERY 10' . EXPANSION JOINTS MUST BE PLACED A MINIMUM OF 350' APART AND AT ALL RADIUS POINTS ON CURVES.

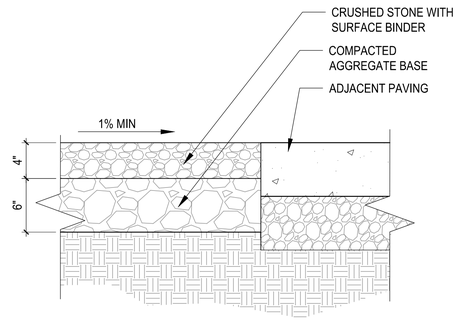
5 BIOSWALE: UPSLOPE EDGE TREATEMENT

SCALE: 1 1/2"=1'-0" DT-FLUSH CURB



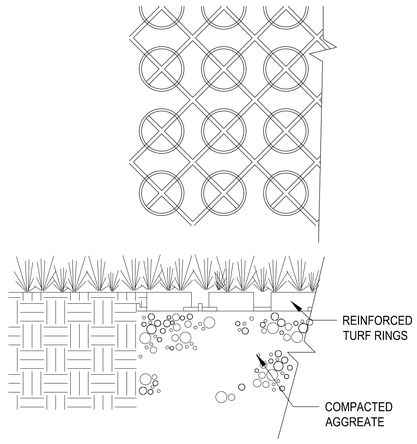
6 ASPHALT PAVING

SCALE: 1 1/2"=1'-0" DT-ASPHALT TYP



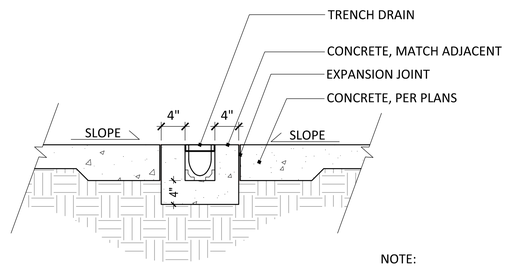
7 CRUSHED STONE PAVING

SCALE: 1 1/2"=1'-0" DT-CRUSHED STONE WALK



8 REINFORCED TURF

SCALE: 1 1/2"=1'-0" DT-TURF GRID



NOTE:
1. HARDSCAPE CONDITION VARIES, SEE PLANS

9 TRENCH DRAIN IN CONCRETE

SCALE: 1"=1'-0" DT-TRENCH DRAIN

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TIERNEY PARK
IMPROVEMENTS PROJECT
VILLAGE OF LEXINGTON, MI

SHEET TITLE:
SITE PLAN DETAILS

DATE	REVISION
4/16/25	1. ADD. 1

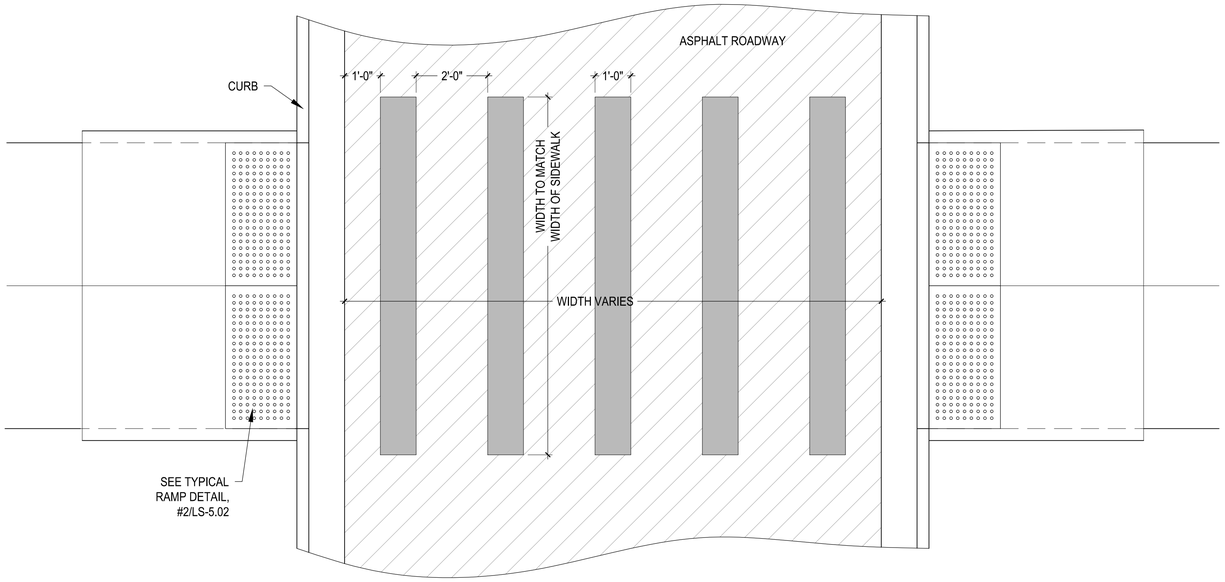
ISSUED FOR:
BIDDING

DATE: 3/25/25
PROJ NO.: 23-028

SCALE: 1" = - (AT 24"x36")

DESIGNED BY: SF
DRAWN BY: SA
REVIEWED BY: DV

SHEET NUMBER:
LS-5.01

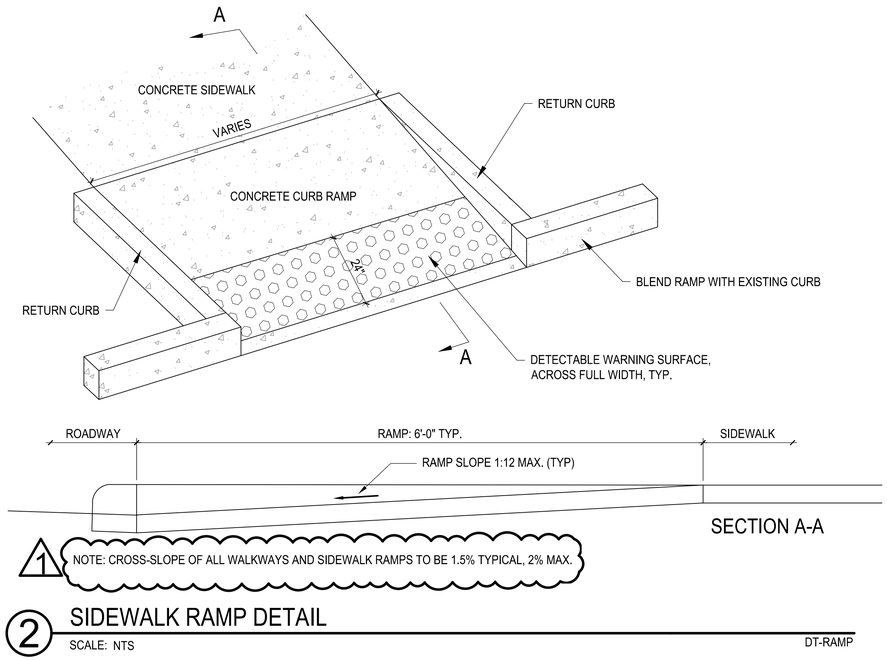


NOTE: ALL ROADWAY STRIPING/MARKINGS TO MEET MDOT STANDARD

1 TYP. CROSSWALK

SCALE: 1/2"=1'-0"

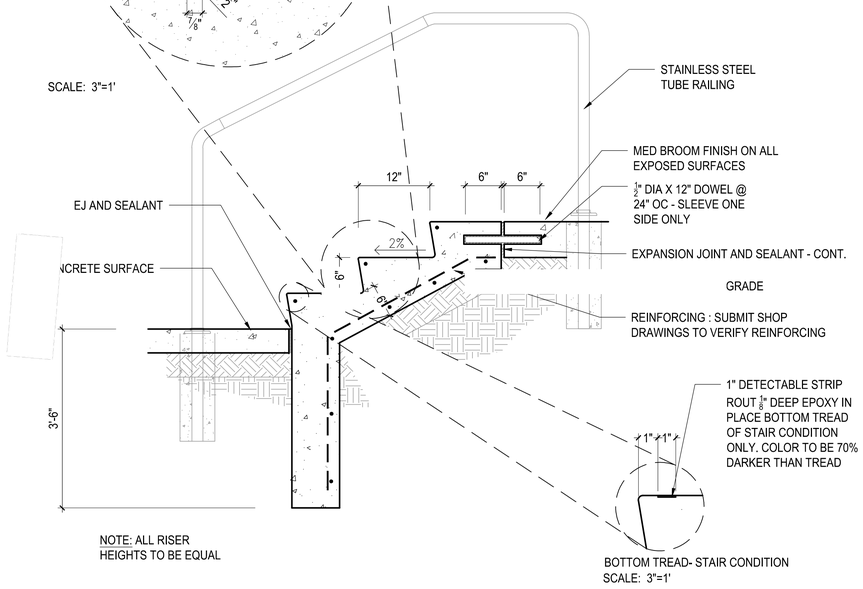
DT-CROSSWALK



2 SIDEWALK RAMP DETAIL

SCALE: NTS

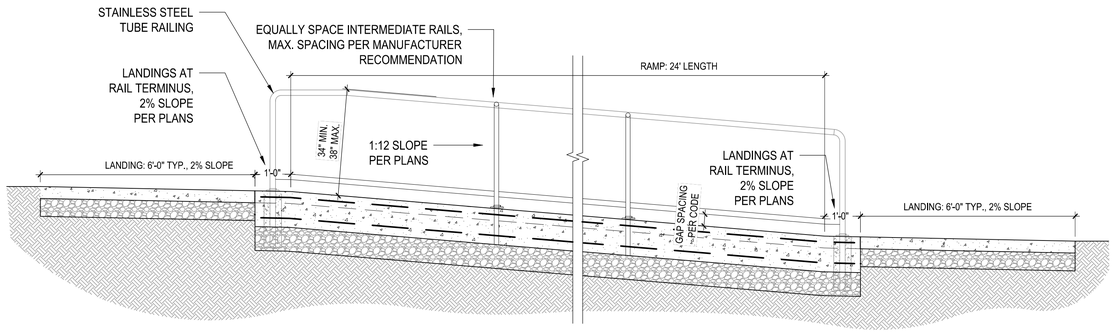
DT-RAMP



3 CONCRETE STAIRS AT PAVILION

SCALE: 1"=1'-0"

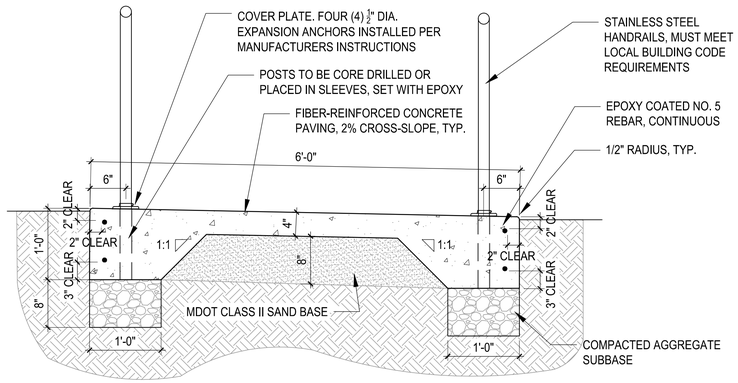
HARDSCAPE/DT-CONC STAIRS



4 CONCRETE RAMP AT PAVILION

SCALE: 1/2"=1'-0"

DT-RAMP AT PAVILION



5 ADA RAMP SECTION

SCALE: 1"=1'-0"

DT-ADA RAMP SECTION3

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DESIGNED BY:	SF
DRAWN BY:	SA
REVIEWED BY:	DV

SHEET NUMBER:
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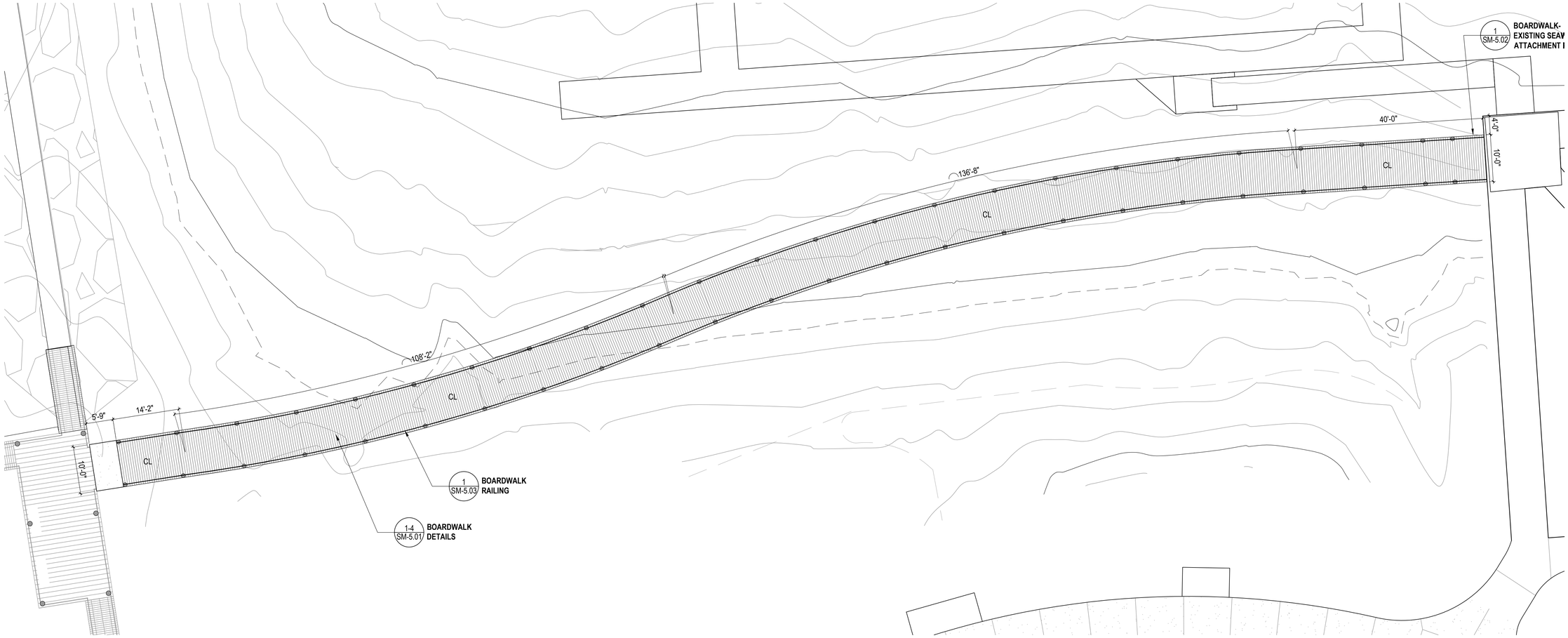

NOTE: DIMENSIONS ARE APPROXIMATE FOR REFERENCE, SUBJECT TO FINAL SHOP DRAWINGS.

1 BOARDWALK PLAN VIEW DETAIL

SCALE: NOT TO SCALE

DT-BOARDWALK PLAN

NORTH

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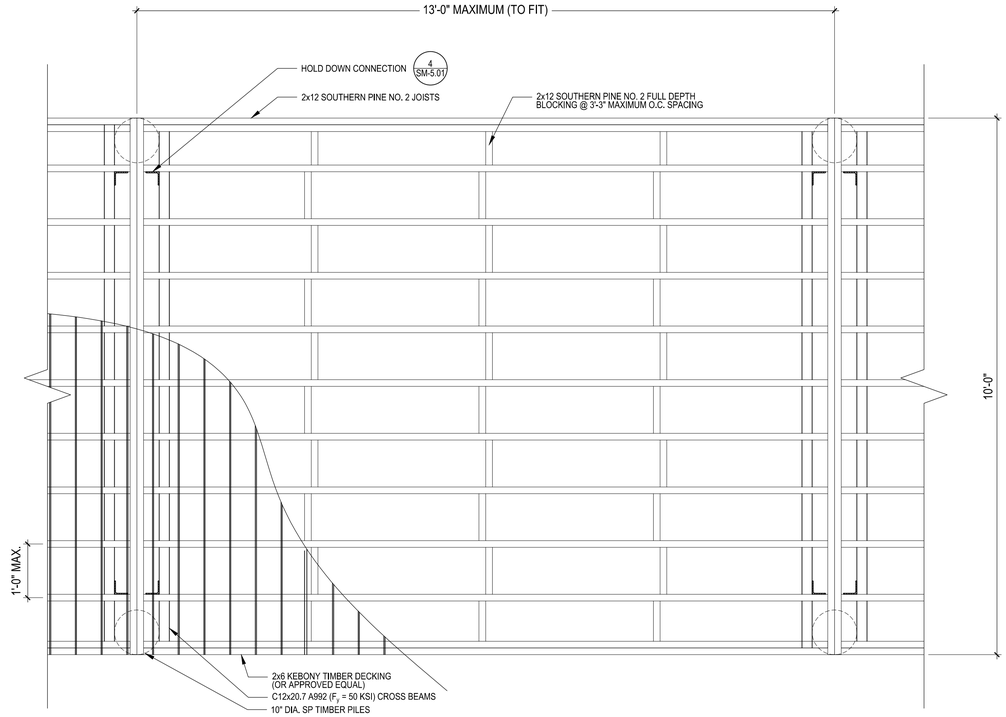
SCALE: 1" = - (AT 24"x36")

DESIGNED BY:	SF
DRAWN BY:	CJ
REVIEWED BY:	DV

SHEET NUMBER:

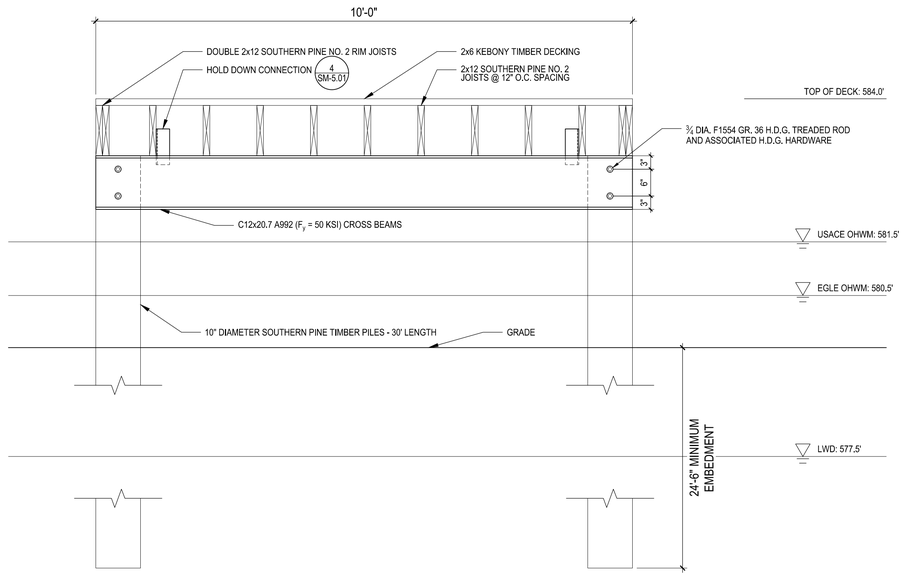
LS-5.04 1

P:\2023\23-028 LXUP\CAD\SHEETS\LS-5.XX SITE DETAILS.DWG



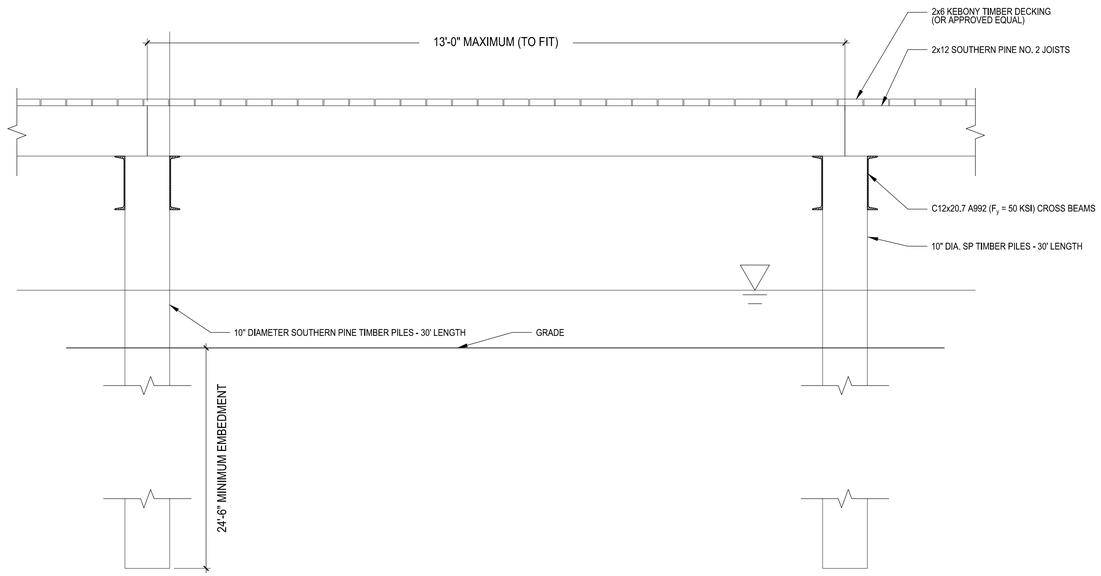
1 BOARDWALK PLAN

SCALE: 3/4"=1'-0" DT-BOARDWALK PLAN



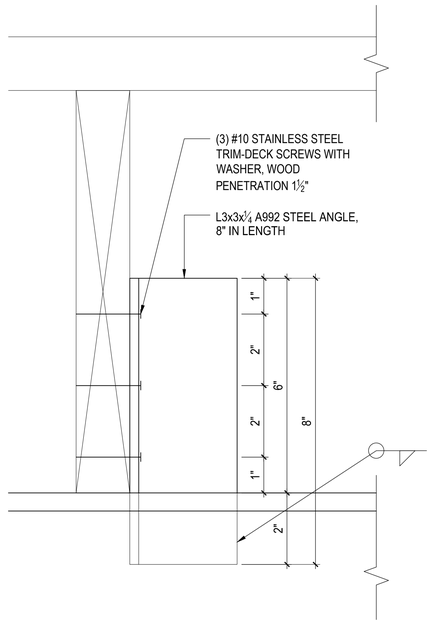
2 BOARDWALK SECTION

SCALE: 3/4"=1'-0" DT-BOARDWALK SECT



3 BOARDWALK ELEVATION

SCALE: 3/4"=1'-0" DT-BOARDWALK ELE



4 HOLD DOWN CONNECTION

SCALE: HALF (6"=1'-0") DT-HOLD DWN

NOTES (APPLY TO ALL DETAILS ON THIS SHEET):

1. PROVIDE PERPENDICULAR FULL DEPTH BLOCKING BETWEEN JOISTS AT THE MAXIMUM SPACING SHOWN. BLOCKING SHALL BE INSTALLED WITH TIGHT BEARING AND FACE-NAILED USING (3) 10d STAINLESS STEEL COMMON NAILS PER END. ALL NAILS SHALL BE TYPE 316 STAINLESS STEEL, FULL ROUND HEAD, RING-SHANK, MINIMUM 3" LONG. INSTALL BLOCKING FLUSH WITH TOP OF JOISTS. ALTERNATE BLOCKING SIDE TO SIDE FOR EASE OF NAILING.
2. ATTACH DECKING USING #10 STAINLESS STEEL TRIM-DECK SCREWS THROUGH NAILERS, WITH A MINIMUM OF TWO SCREWS PER BOARD-TO-NAILER INTERFACE. ALL SCREWS SHALL BE INSTALLED IN PREDRILLED HOLES. FASTENER SPACING SHALL FOLLOW MANUFACTURER'S RECOMMENDATIONS AND SHALL BE NO LESS THAN THE FOLLOWING MINIMUMS (BASED ON SCREW SHANK DIAMETER OF 0.190 INCHES):
   - EDGE DISTANCE: ½ INCH
   - END DISTANCE: 1 INCH
   - SPACING BETWEEN FASTENERS IN A ROW (PARALLEL TO GRAIN): 2 INCHES
   - SPACING BETWEEN FASTENERS IN A ROW (PERPENDICULAR TO GRAIN): 1 INCH
   - SPACING BETWEEN ROWS OF FASTENERS (IN-LINE): 1/16 INCH
3. ALL WELDS TO BE 70 KSI FILLER MATERIAL.
4. ALL CONNECTIONS TO BE DETAILED IN SHOP DRAWINGS. SHOP DRAWINGS AND FASTENER PRODUCT INFORMATION TO BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PROCUREMENT.
5. SUBMIT FOR ENGINEER APPROVAL: SHOP DRAWINGS; STEEL MILL CERTIFICATES; AWS CERTIFICATIONS; WELDING METHODOLOGY; AND FASTENER/HARDWARE PRODUCT INFORMATION.
6. ALL MEMBERS SHOWN ARE CONTINUOUS.
7. ALL SUPERSTRUCTURE TIMBER ELEMENTS TO BE SOUTHERN PINE NO. 2 CONFORMING TO SPIB & AWC NDS REQUIREMENTS. THEY SHALL MEET TREATMENT REQUIREMENTS OF USE CATEGORY UC4A OR BETTER.
8. PILE TIMBER ELEMENTS TO BE SOUTHERN PINE AND CONFORM TO ASTM D25. PILES SHALL MEET TREATMENT REQUIRES OF USE CATEGORY UC4C.

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REVIEWED BY:	----

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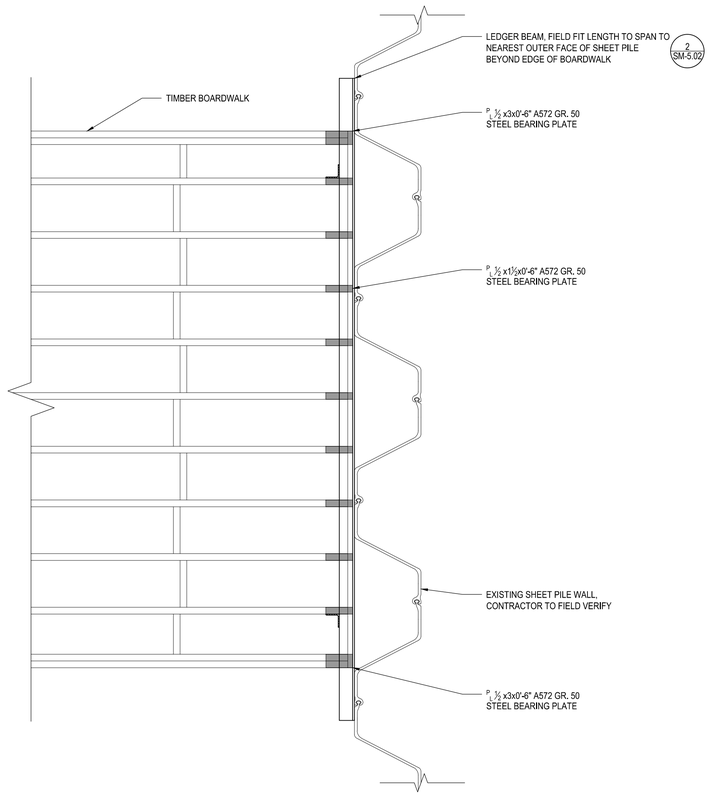
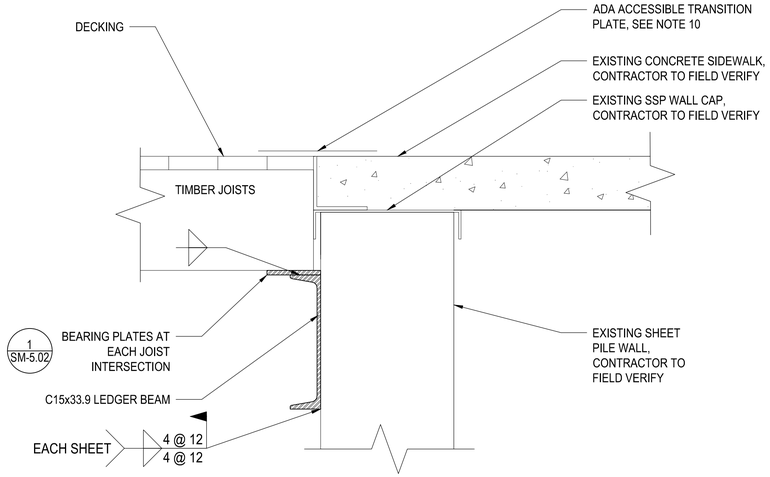


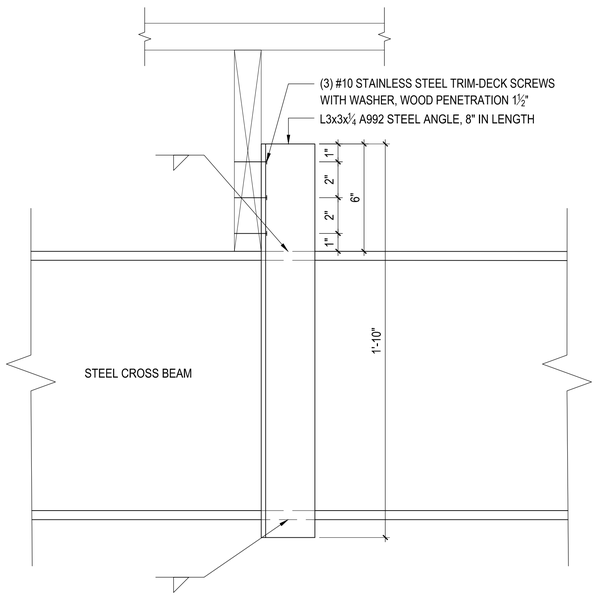
1 BOARDWALK-EXISTING SEAWALL ATTACHMENT PLAN

SCALE: 3/4"=1'-0" DT-BOARDWALK PLAN



2 BOARDWALK-EXISTING SEAWALL ATTACHMENT SECTION

SCALE: 1 1/2"=1'-0" DT-BOARDWALK PIER ATTACH SECT



3 HOLD DOWN NEAR BOARDWALK-EXISTING SEAWALL

SCALE: 3"=1'-0" DT-HOLD DWN PIER ATTACH

NOTES (APPLY TO ALL DETAILS ON THIS SHEET):

1. PROVIDE PERPENDICULAR FULL DEPTH BLOCKING BETWEEN JOISTS AT THE MAXIMUM SPACING SHOWN. BLOCKING SHALL BE INSTALLED WITH TIGHT BEARING AND FACE-NAILED USING (3) 10d STAINLESS STEEL COMMON NAILS PER END. ALL NAILS SHALL BE TYPE 316 STAINLESS STEEL, FULL ROUND HEAD, RING-SHANK, MINIMUM 3" LONG. INSTALL BLOCKING FLUSH WITH TOP OF JOISTS. ALTERNATE BLOCKING SIDE TO SIDE FOR EASE OF NAILING.
2. ATTACH DECKING USING #10 STAINLESS STEEL TRIM-DECK SCREWS THROUGH NAILERS, WITH A MINIMUM OF TWO SCREWS PER BOARD-TO-NAILER INTERFACE. ALL SCREWS SHALL BE INSTALLED IN PREDRILLED HOLES. FASTENER SPACING SHALL FOLLOW MANUFACTURER'S RECOMMENDATIONS AND SHALL BE NO LESS THAN THE FOLLOWING MINIMUMS (BASED ON SCREW SHANK DIAMETER OF 0.190 INCHES):
   - EDGE DISTANCE: ½ INCH
   - END DISTANCE: 1 INCH
   - SPACING BETWEEN FASTENERS IN A ROW (PARALLEL TO GRAIN): 2 INCHES
   - SPACING BETWEEN FASTENERS IN A ROW (PERPENDICULAR TO GRAIN): 1 INCH
   - SPACING BETWEEN ROWS OF FASTENERS (IN-LINE): 1⅛ INCH
3. ALL WELDS TO BE 70 KSI FILLER MATERIAL.
4. ALL CONNECTIONS TO BE DETAILED IN SHOP DRAWINGS. SHOP DRAWINGS AND FASTENER PRODUCT INFORMATION TO BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PROCUREMENT.
5. SUBMIT FOR ENGINEER APPROVAL: SHOP DRAWINGS; STEEL MILL CERTIFICATES; AWS CERTIFICATIONS; WELDING METHODOLOGY; AND FASTENER/HARDWARE PRODUCT INFORMATION.
6. ALL MEMBERS SHOWN ARE CONTINUOUS.
7. ALL SUPERSTRUCTURE TIMBER ELEMENTS TO BE SOUTHERN PINE NO. 2 CONFORMING TO SPIB & AWC NDS REQUIREMENTS. THEY SHALL MEET TREATMENT REQUIREMENTS OF USE CATEGORY UC4A OR BETTER.
8. PILE TIMBER ELEMENTS TO BE SOUTHERN PINE AND CONFORM TO ASTM D25. PILES SHALL MEET TREATMENT REQUIRES OF USE CATEGORY UC4C.
9. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO FABRICATION OR INSTALLATION. THIS INCLUDES, BUT IS NOT LIMITED TO, DIMENSIONS AND ELEVATION OF EXISTING SHEET PILE WALL AND CONCRETE SIDEWALK, GEOMETRY AND CONDITION OF THE EXISTING STEEL SHEET PILE CAP, CLEARANCE AND ALIGNMENT FOR LEDGER BEAM CONNECTION, AND PRESENCE OF ANY CONFLICTING ANCHORAGES, EMBEDDED ITEMS, OR DETERIORATED MATERIALS. ANY DISCREPANCIES OR UNCERTAIN CONDITIONS SHALL BE REPORTED TO THE ENGINEER. CONTRACTOR SHALL NOT CUT OR MODIFY STRUCTURAL STEEL MEMBERS WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
10. INSTALL A PREMANUFACTURED TRANSITION PLATE SUITABLE FOR MARINE ENVIRONMENTS AND ADA COMPLIANT. CONTRACTOR SHALL SUBMIT MANUFACTURER'S PRODUCT INFORMATION AND INSTALLATION REQUIREMENTS TO THE ENGINEER FOR REVIEW PRIOR TO PROCUREMENT. INSTALL PER MANUFACTURER'S INSTRUCTIONS OR AS DIRECTED BY THE ENGINEER.

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REVIEWED BY: ---

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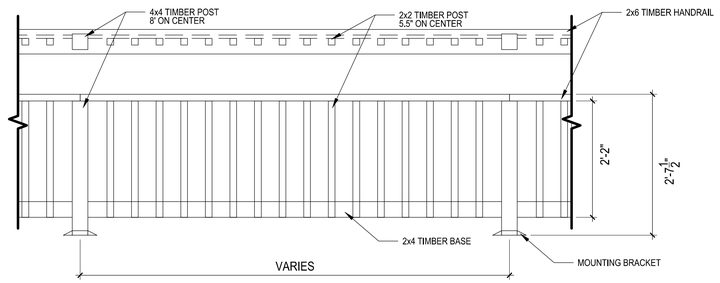

1 BOARDWALK RAILING

SCALE: 3/4"=1'-0"

DT-BOARDWALK RAIL

NOTES (APPLY TO ALL DETAILS ON THIS SHEET):

1. PROVIDE PERPENDICULAR FULL DEPTH BLOCKING BETWEEN JOISTS AT THE MAXIMUM SPACING SHOWN. BLOCKING SHALL BE INSTALLED WITH TIGHT BEARING AND FACE-NAILED USING (3) 10d STAINLESS STEEL COMMON NAILS PER END. ALL NAILS SHALL BE TYPE 316 STAINLESS STEEL, FULL ROUND HEAD, RING-SHANK, MINIMUM 3" LONG. INSTALL BLOCKING FLUSH WITH TOP OF JOISTS. ALTERNATE BLOCKING SIDE TO SIDE FOR EASE OF NAILING.
2. ATTACH DECKING USING #10 STAINLESS STEEL TRIM-DECK SCREWS THROUGH NAILERS, WITH A MINIMUM OF TWO SCREWS PER BOARD-TO-NAILER INTERFACE. ALL SCREWS SHALL BE INSTALLED IN PREDRILLED HOLES. FASTENER SPACING SHALL FOLLOW MANUFACTURER'S RECOMMENDATIONS AND SHALL BE NO LESS THAN THE FOLLOWING MINIMUMS (BASED ON SCREW SHANK DIAMETER OF 0.190 INCHES):
   - EDGE DISTANCE: ½ INCH
   - END DISTANCE: 1 INCH
   - SPACING BETWEEN FASTENERS IN A ROW (PARALLEL TO GRAIN): 2 INCHES
   - SPACING BETWEEN FASTENERS IN A ROW (PERPENDICULAR TO GRAIN): 1 INCH
   - SPACING BETWEEN ROWS OF FASTENERS (IN-LINE): 1 1/16 INCH
3. ALL WELDS TO BE 70 KSI FILLER MATERIAL.
4. ALL CONNECTIONS TO BE DETAILED IN SHOP DRAWINGS. SHOP DRAWINGS AND FASTENER PRODUCT INFORMATION TO BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PROCUREMENT.
5. SUBMIT FOR ENGINEER APPROVAL: SHOP DRAWINGS; STEEL MILL CERTIFICATES; AWS CERTIFICATIONS; WELDING METHODOLOGY; AND FASTENER/HARDWARE PRODUCT INFORMATION.
6. ALL MEMBERS SHOWN ARE CONTINUOUS.
7. ALL SUPERSTRUCTURE TIMBER ELEMENTS TO BE SOUTHERN PINE NO. 2 CONFORMING TO SPIB & AWC NDS REQUIREMENTS. THEY SHALL MEET TREATMENT REQUIREMENTS OF USE CATEGORY UC4A OR BETTER.
8. PILE TIMBER ELEMENTS TO BE SOUTHERN PINE AND CONFORM TO ASTM D25. PILES SHALL MEET TREATMENT REQUIRES OF USE CATEGORY UC4C.

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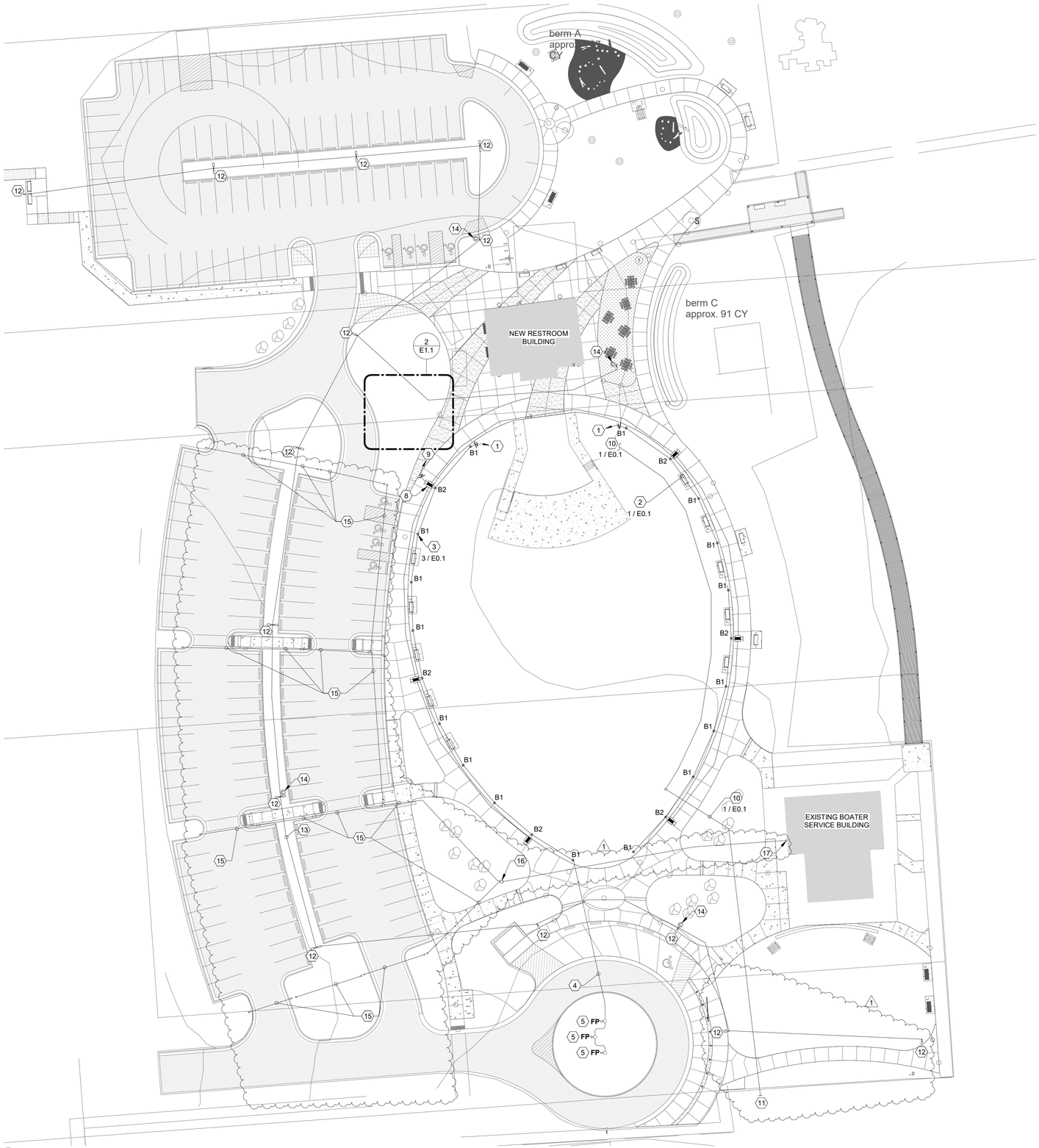


1 E1.1 ELECTRICAL PLAN - PARK SITE

SCALE: 1" = 30'-0" (WHEN PRINTED FULL SCALE ON 24"X36")

0' 15' 30' 60' 120'

NORTH

ELECTRICAL NOTES

NUMBERED NOTES

1. LIGHTING SHALL BE FED FROM PANEL LOCATED INSIDE NEW RESTROOM BUILDING. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND CONTROLS WITH RESTROOM BUILDING ELECTRICAL DESIGNER. INSTALL 120V 'A30' CIRCUITRY FOR LIGHTING BRANCH CIRCUIT.
2. TYPICAL, UNDERGROUND BRANCH CIRCUITS FOR PARK LIGHTING. SEE REFERENCED DITCH DETAIL FOR ADDITIONAL INFORMATION.
3. TYPICAL, SEE REFERENCED LIGHT BOLLARD DETAIL FOR ADDITIONAL INFORMATION.
4. CONNECT FLAG POLE LIGHTING TO NEW PARK LIGHTING CIRCUIT. DESIGN INTENT IS FOR THE EXISTING CONDUIT AND CIRCUITRY TO BE REUSED AS PRACTICAL. COORDINATE WITH EXISTING CONDITIONS. CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF THE CONDUCTORS AND CONDUIT THAT IS INTENDED TO BE REUSED. CONTRACTOR SHALL PERFORM INSULATION INTEGRITY TESTING (I.E. MEGGER TESTING) OF THE CONDUCTORS THAT ARE INTENDED TO BE REUSED. CONTRACTOR SHALL REPORT ALL FINDINGS TO THE ENGINEER FOR APPROVAL TO REUSE THE EXISTING CONDUCTORS AND CONDUIT.
5. NEW FLAG POLE LIGHT MOUNTED TO RELOCATED FLAG POLE. REWORK EXISTING CIRCUITRY TO NEW POLES AS PRACTICAL. COORDINATE EXACT LOCATIONS AND MOUNTING HEIGHTS WITH SITE DESIGNER AND EXISTING FLAG POLES.
6. INSTALL NEW WALL-MOUNT RV POWER PEDESTALS TO THE BACKSIDE OF EXISTING MOUNTING STRUCTURE. INSTALL NEW 'B50' CIRCUITRY FROM EXISTING PANEL TO EACH PEDESTAL. CONTRACTOR SHALL REPLACE ALL EXISTING BRANCH BREAKERS WITH NEW 50A, 2-POLE GFCI BREAKERS. COORDINATE WITH EXISTING PANELBOARD. SEE REFERENCED DETAIL FOR ADDITIONAL INFORMATION.
7. EXISTING EQUIPMENT TO REMAIN.
8. TYPICAL, RECEPTACLES INTEGRAL TO LIGHT BOLLARD 'B2'. RECEPTACLES SHALL BE FED SEPARATE FROM BOLLARD LIGHTING CIRCUIT. COORDINATE LOCATIONS WITH SITE DESIGNER.
9. RECEPTACLES SHALL BE FED FROM PANEL LOCATED INSIDE NEW RESTROOM BUILDING. CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ELECTRICAL PANEL WITH RESTROOM BUILDING ELECTRICAL DESIGNER. INSTALL 120V 'A30' CIRCUITRY FOR RECEPTACLE BRANCH CIRCUIT.
10. INSTALL (1) 2" PVC CONDUIT AS SHOWN FOR FUTURE USE. SEE REFERENCED DITCH DETAIL FOR ADDITIONAL INFORMATION.
11. CONDUIT SHALL STUB OUT BFG A MINIMUM OF 6'-0" FROM ANY NEW OR EXISTING HARDSCAPES.
12. SITE LIGHT AND CONCRETE BASE PROVIDED AND INSTALLED BY DETROIT EDISON (DTE). COORDINATE EXCT LOCATIONS WITH DTE.
13. TYPICAL, INSTALL (1) 1-1/2" CONDUIT 24" BFG TO SITE LIGHTS. COORDINATE EXACT ROUTING WITH DTE PRIOR TO INSTALLATION. INSTALL PULL STRING IN ALL CONDUITS.
14. SECURITY CAMERA BY OTHERS. ROUTE (1) 1" CONDUIT 24" BFG FROM CAMERA LOCATION TO NEW BATHHOUSE. INSTALL PULL STRING IN CONDUIT.
15. ROUTE (1) 1" CONDUIT BELOW GRADE FOR FUTURE GATE POWER. STUB CONDUIT UP 12" AFG AND CAP. COORDINATE EXACT ROUTING AND STUB UP LOCATIONS WITH SITE DESIGNER.
16. INSTALL (1) 12" X 12" X 12" IN-GRADE QUAZITE PULL BOX. ROUTE CONDUITS TO BOX AS SHOWN. COORDIANTE EXACT LOCATION WITH SITE DESIGNER PRIOR TO INSTALLATION.
17. ROUTE (1) 1" CONDUIT BELOW GRADE FROM NEW PULL BOX TO EXTERIOR OF EXISTING BOATER SERVICES BUILDING. STUB CONDUIT UP 48" AFG AND CAP. CONDUIT SHALL BE SECURED TO EXTERIOR OF BUILDING. COORDINATE EXACT LOCATION OF STUB UP WITH EXISTING BUILDING SUCH THAT CONDUIT IS NOT AN OBSTRUCTION TO DOORS, WINDOWS, ETC..

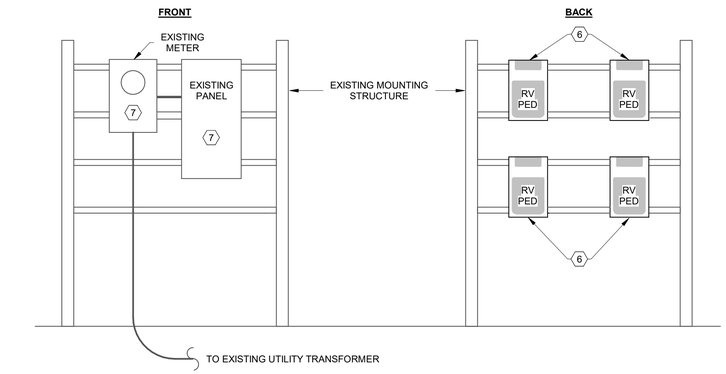
GENERAL NOTES

- A COORDINATE WITH EXISTING CONDITIONS.
- B COORDINATE EXACT LOCATIONS OF LIGHT FIXTURES WITH CIVIL.
- C POLE MOUNTED SITE LIGHTING AND BUILDING MOUNTED LIGHTING BY OTHERS.
- D COORDINATE ROUTING OF CONDUITS WITH SITE. CONDUITS SHALL BE ROUTED IN A MANNER TO MINIMIZE THE LENGTH OF CONDUIT LOCATED UNDERNEATH HARDSCAPES.

RV PEDESTAL LEGEND

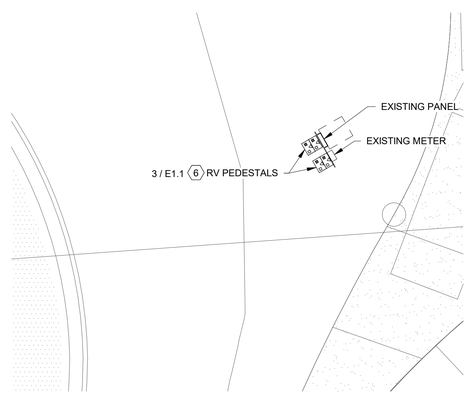
OTHER NOTES:
- PEDESTALS SHALL HAVE A CLEAR LENS.
- PEDESTALS SHALL HAVE (1) INTEGRAL kWH METER.

SYMBOL	SIDE 1	SIDE 2	LIGHTING	OTHER UTILITIES	MOUNTING	MODEL #
	(1) 50A 240V & (1) 30A 120V UNMETERED RV RECEPTACLES - 120V GFCI MAINTENANCE OUTLET	N/A	9W LED W/ INTEGRAL PHOTOCELL	N/A	POST MOUNTED	HYPOWER ENERGYMATE RV OR APPROVED EQUAL



3 E1.1 ELECTRICAL RISER DIAGRAM - RV PEDESTALS

NOT TO SCALE



2 E1.1 ENLARGED ELECTRICAL PLAN - RV PEDESTAL

SCALE: 1/8" = 1'-0" (WHEN PRINTED FULL SCALE ON 24"X36")

0' 15' 30' 60' 120'

NORTH

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P: 269.932.4502
edgewaterresources.com

MAFFETT LOFTIS ENGINEERING, LLC
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COOKEVILLE, TN 38501
TEL: (931) 526-5143
www.maffett-loftis.com

PROJECT TITLE:
LEXINGTON HARBOR
PARK UPGRADES
LEXINGTON, MI

SHEET TITLE:
ELECTRICAL PLAN - PARK SITE

DATE	REVISION
4/16/25	1. Add. 1

ISSUED FOR:

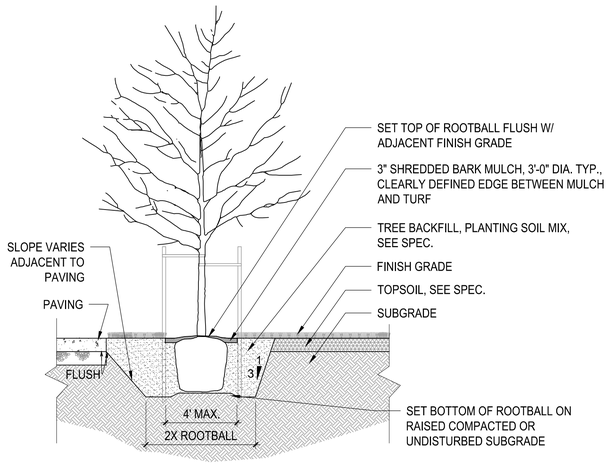
STATE OF MICHIGAN — ANDREW J. GATES — ENGINEER — No. 6201314176 — LICENSED PROFESSIONAL ENGINEER — 03/24/25

DATE:	03/24/25
PROJ NO.:	20-040
MLE PROJ NO.:	24060

NORTH

DESIGNED BY:	AJG
DRAWN BY:	AJG
REVIEWED BY:	AJG

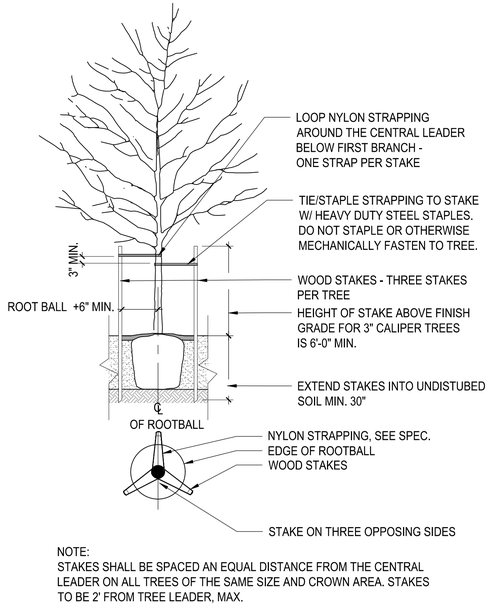
SHEET NUMBER:
E1.1



1 TREE PLANTING DETAIL, TYP.

SCALE: NTS

PLANTING/DT-PLANTING DETAILS

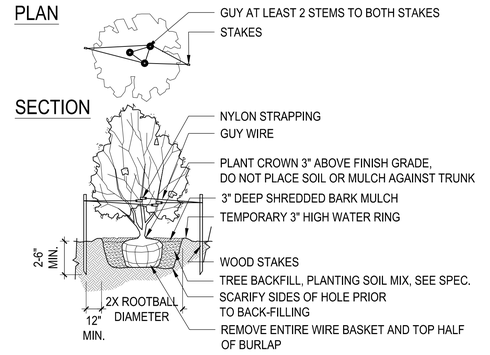


NOTE:
STAKES SHALL BE SPACED AN EQUAL DISTANCE FROM THE CENTRAL LEADER ON ALL TREES OF THE SAME SIZE AND CROWN AREA. STAKES TO BE 2' FROM TREE LEADER, MAX.

2 TREE STAKING DETAIL

SCALE: NTS

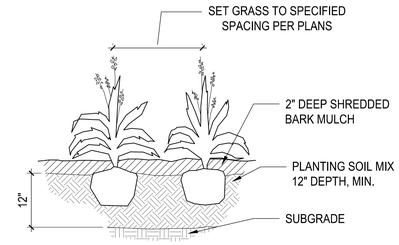
PLANTING/DT-PLANTING DETAILS



3 MULTI-STEM & SHRUB PLANTING DETAIL

SCALE: NTS

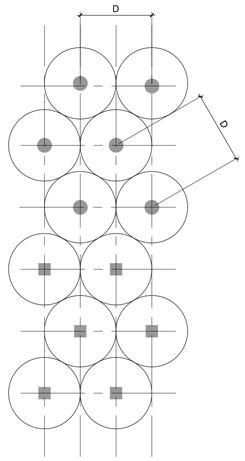
PLANTING/DT-PLANTING DETAILS



4 PERENNIAL & ORNAMENTAL GRASS PLANTING DETAIL

SCALE: NTS

PLANTING/DT-PLANTING DETAILS

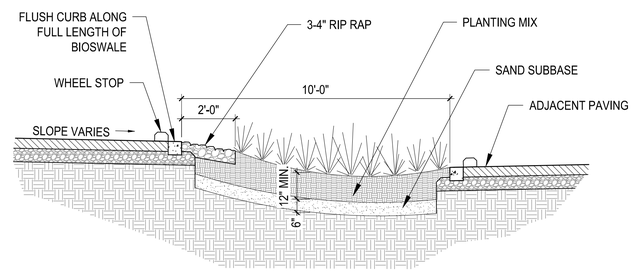


D = DIMENSION OF ON-CENTER PLANT SPACING AS INDICATED IN PLANS (PERENNIALS AND GRASSES)

5 PLANT SPACING PLAN DETAIL

SCALE: NTS

DT-BIOSWALE-PLANTING



6 BIOSWALE CROSS-SECTION 1

SCALE: 3/8"=1'-0"

DT-BIOSWALE PLANTING

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PROJECT TITLE:
TIERNEY PARK
IMPROVEMENTS PROJECT
VILLAGE OF LEXINGTON, MI

SHEET TITLE:
PLANTING DETAILS

DATE	REVISION
4/16/25	1. ADD. 1

ISSUED FOR:
BIDDING

DATE: 3/25/25
PROJ NO.: 23-028

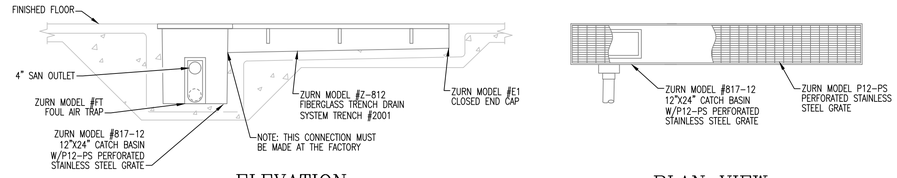
SCALE: 1" = ---- (AT 24"x36")

DESIGNED BY: SF
DRAWN BY: CJ
REVIEWED BY: DV

SHEET NUMBER:
LP-5.01

PLUMBING FIXTURE SCHEDULE

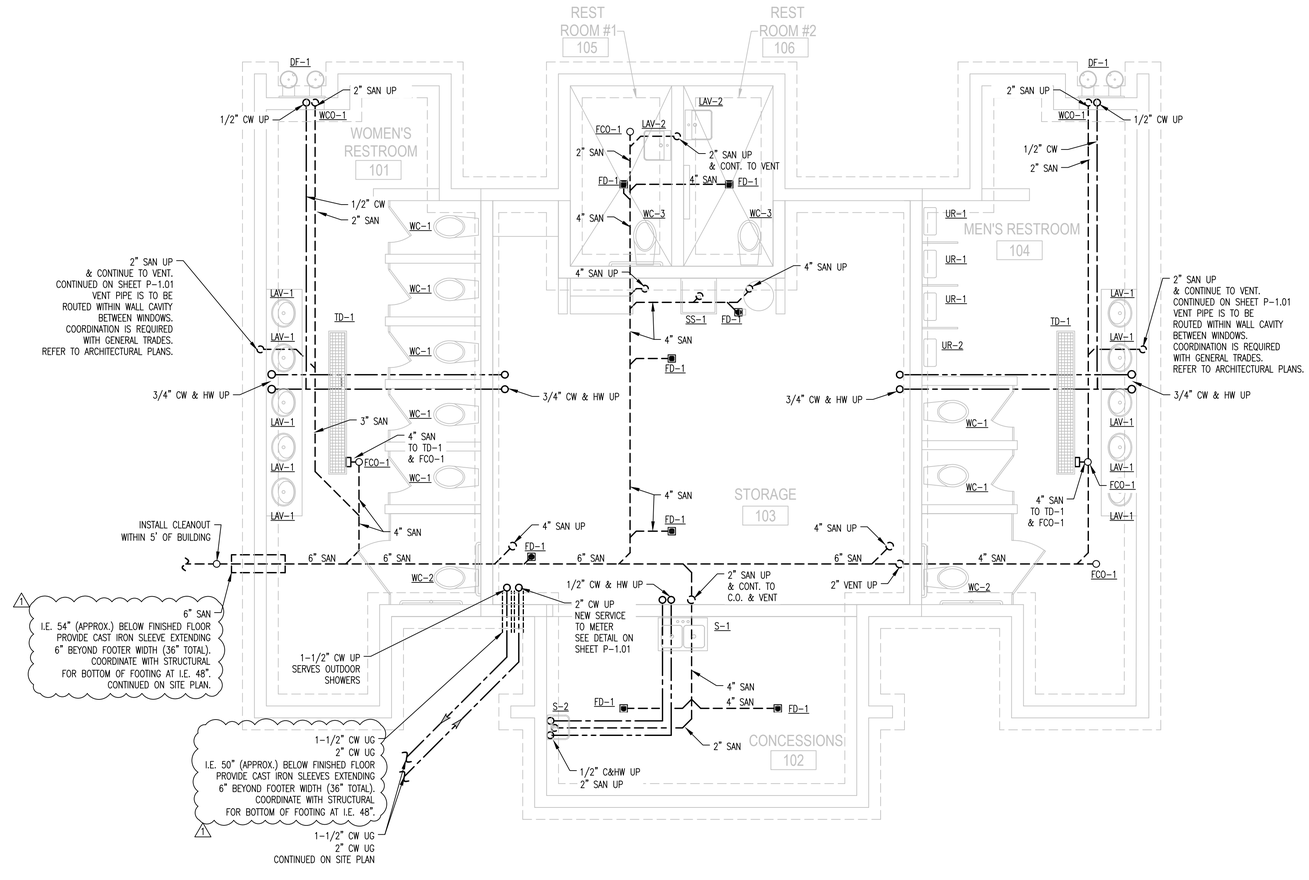
MARK	FIXTURE	MANUF	MODEL	DESCRIPTION	FAUCET TYPE	MIN CONNECTION CW	HW	DRAIN
BFPV-1	MAIN BACKLOW PREVENTER VALVE	WATTS	LF009-QT-S	REDUCED PRESSURE ZONE ASSEMBLY BACKFLOW PREVENTER. ASSE 1013 COMPLIANT. INCLUDES TWO IN-LINE, INDEPENDENT CHECK VALVES, CAPTURED SPRINGS, AND REPLACEABLE CHECK SEATS WITH INTERMEDIATE RELIEF VALVE, SINGLE ACCESS COVER, BALL VALVE TEST COCKS, TWO ISOLATION VALVES, AND STRAINER. PROVIDE WITH AIR GAP FITTING.		2"		
WC-1	WALL MOUNTED WATER CLOSET	AMERICAN STANDARD	3353.101	VITREOUS CHINA WALL MOUNT TOILET. BACK SPUD, ELONGATED BOWL. OLSONITE 10CC OPEN FRONT SEAT. WHITE. PROVIDE WITH HORIZONTAL CARRIER ZURN Z1201 OR EQUAL WITH COUPLING FOR 8" CMU WALL.	SLOAN MODEL 152-1.6 ES-S. CONCEALED HARD WIRED SENSOR OPERATED FLUSH VALVE WITH OVERRIDE BUTTON, 1.6 GPF (120 VOLT WITH 24 VOLT TRANSFORMER).	1"	-	4"
WC-2	ADA WALL MOUNTED WATER CLOSET	AMERICAN STANDARD	3353.101	VITREOUS CHINA WALL MOUNT TOILET. BACK SPUD, ELONGATED BOWL. INSTALL TO ADA HEIGHT. OLSONITE 10CC OPEN FRONT SEAT. WHITE. PROVIDE WITH HORIZONTAL CARRIER ZURN Z1201 OR EQUAL WITH COUPLING FOR 8" CMU WALL.	SLOAN MODEL 115-1.6 ES-S. CONCEALED HARD WIRED SENSOR OPERATED FLUSH VALVE WITH OVERRIDE BUTTON, 1.6 GPF (120 VOLT WITH 24 VOLT TRANSFORMER).	1"	-	4"
WC-3	ADA WALL MOUNTED WATER CLOSET	AMERICAN STANDARD	3353.101	VITREOUS CHINA WALL MOUNT TOILET. BACK SPUD, ELONGATED BOWL. INSTALL TO ADA HEIGHT. OLSONITE 10CC OPEN FRONT SEAT. WHITE. PROVIDE WITH VERTICAL CARRIER ZURN Z1202 OR EQUAL WITH COUPLING FOR 8" CMU WALL.	SLOAN MODEL 115-1.6 ES-S. CONCEALED HARD WIRED SENSOR OPERATED FLUSH VALVE WITH OVERRIDE BUTTON, 1.6 GPF (120 VOLT WITH 24 VOLT TRANSFORMER).	1"	-	4"
UR-1	WALL MOUNTED WATER URINAL	AMERICAN STANDARD	6515.001.020	VITREOUS CHINA WALL HUNG URINAL. FLUSHING RIM, BACK SPUD. PROVIDE WITH CARRIER BY JR SMITH OR EQUAL WITH COUPLING FOR 8" CMU WALL.	SLOAN MODEL 195-1.0 ES-S. CONCEALED HARD WIRED SENSOR OPERATED FLUSH VALVE WITH OVERRIDE BUTTON, 0.5 GPF (120 VOLT WITH 24 VOLT TRANSFORMER).	3/4"	-	2"
UR-2	ADA WALL MOUNTED WATER URINAL	AMERICAN STANDARD	6515.001.020	VITREOUS CHINA WALL HUNG URINAL. FLUSHING RIM, BACK SPUD. INSTALL TO ADA HEIGHT. PROVIDE WITH CARRIER BY JR SMITH OR EQUAL WITH COUPLING FOR 8" CMU WALL.	SLOAN MODEL 195-1.0 ES-S. CONCEALED HARD WIRED SENSOR OPERATED FLUSH VALVE WITH OVERRIDE BUTTON, 0.5 GPF (120 VOLT WITH 24 VOLT TRANSFORMER).	3/4"	-	2"
LAV-1	DROP IN COUNTERTOP LAVATORY SINK	AMERICAN STANDARD	AQUALYN	VITREOUS CHINA COUNTERTOP SINK, SELF RIMMING WITH FAUCET LEDGE AND FRONT OVERFLOW. BARRIER FREE AND 4" CENTER FAUCET HOLES. NOMINAL DIMENSIONS: 20.375x17.375. PROVIDE OFFSET GRID DRAIN, CHROME PLATED BRASS BODY AND TAILPIECE . TRUEBRO UNDERSINK PIPING COVER ON WASTE AND SUPPLY PIPING.	T&S BRASS MODEL B-0831. 4" CENTER SET DECK MOUNT, PUSH BUTTON METERING CARTRIDGES. PROVIDE WITH THERMOSTATIC MIXING VALVE, WATTS USG-B, ASSE 1016 LISTED.	1/2"	1/2"	1-1/4"
LAV-2	ADA WALL MOUNTED LAVATORY SINK	AMERICAN STANDARD	LUCERNE	VITREOUS CHINA WALL-HUNG LAVATORY WITH D-SHAPED BOWL. BARRIER FREE AND 4" CENTER FAUCET HOLES. NOMINAL DIMENSIONS: 20.5x18.25. PROVIDE WITH WALL MOUNTED CARRIER, FRONT OVERFLOW, AND OFFSET GRID DRAIN. TRUEBRO UNDERSINK PIPING COVER ON WASTE AND SUPPLY PIPING.	T&S BRASS MODEL B-0831. 4" CENTER SET DECK MOUNT, PUSH BUTTON METERING CARTRIDGES. PROVIDE WITH THERMOSTATIC MIXING VALVE, WATTS USG-B, ASSE 1016 LISTED.	1/2"	1/2"	1-1/4"
S-1	DOUBLE BOWL SINK	ELKAY	LR3322	STAINLESS STEEL 2-BASIN COUNTERTOP SINK. 18 GAUGE TYPE 304 STAINLESS STEEL, SELF-RIMMING, 13.5x16x8 BOWLS, WITH SOUND GUARD UNDERCOATING, 3.5 INCH DRAIN OPENINGS. PROVIDE WITH STRAINERS EQUAL TO JOMAR MODEL SS-305.	DELTA DECK MOUNTED SINK FAUCET MODEL 27C4933, GOOSENECK SPOUT, LEVER HANDLES, CHROME FINISH, 1.5 GPM FLOW RATE. PROVIDE WITH REMOVABLE GRID STRAINER.	1/2"	1/2"	1-1/2"
S-2	WALL MOUNTED HAND WASH SINK	ELKAY	CHS17162	STAINLESS STEEL SINGLE BOWL WALL HUNG HANDWASH SINK. 20 GAUGE TYPE 304 STAINLESS STEEL, 12x9.25x6 INCH BOWL, 2 INCH DRAIN OPENING. FAUCET: PROVIDE WITH 304 STAINLESS STEEL BODY DRAIN FITTING, GRID STRAINER AND TAILPIECE, AND CHROME FINISHED P-TRAP WITH CLEANOUT PLUG. PROVIDE WITH WALL HANGER.	ELKAY LK940GN WALL MOUNTED, GOOSENECK SPOUT, LEVER HANDLES, CHROME FINISH, 0.5 GPM LOW FLOW AERATOR.	1/2"	1/2"	1-1/2"
SS-1	FLOOR MOUNTED MOP SERVICE SINK	MUSTEE	63M	MOP BASIN. ONE-PIECE MOLDED DURASTONE MATERIAL, 24x24x10 BASIN, INTEGRALLY MOLDED CENTER DRAIN WITH SEAL, 3" OUTLET.	8" WALL MOUNT MIXING FAUCET WITH POLISHED CHROME PLATED BRASS BODY, SPOUT WITH VACUUM BREAKER, PAIL HOOK AND GARDEN HOSE MALE OUTLET, CERAMIC CARTRIDGES WITH CHECK VALVES, LEVER HANDLES, BUILT-IN SERVICE STOPS IN BODY AND UPPER SUPPORT ROD.	1/2"	1/2"	3"
WH-1	ANTI-SIPHON CLOSE COUPLED WALL HYDRANT	WOODFORD	84		ANTI-SIPHON WALL FAUCET FOR MILD CLIMATE USE. BRASS FINISH, LOOSE TEE KEY, ASSE 1011 VACUUM BREAKER. VERIFY INLET TYPE AND WALL THICKNESS WHEN ORDERING.	3/4"	-	-
HB-1	HOSE BIBB SILL FAUCET WITH VACUUM BREAKER	T&S BRASS	B-0722		SINGLE TEMPERATURE, WALL MOUNT FAUCET WITH POLISHED CHROME PLATED BRASS BODY, GARDEN HOSE MALE OUTLET, ATMOSPHERIC VACUUM BREAKER, COMPRESSION CARTRIDGE WITH SPRING CHECK, KEY OR SCREWDRIVER CONTROLLED HANDLE	3/4"	-	-
HB-2	DRAIN VALVE WITH HOSE BIBB	WATTS	LFBD-QT		QUARTER-TURN BOILER DRAIN VALVE WITH FORGED BRASS BODY AND ALUMINUM TEE HANDLE. PROVIDE WITH WATTS LF8 HOSE CONNECTION VACUUM BREAKER.	-	-	3/4"
DF-1	WALL MOUNTED DRINKING FOUNTAIN AND BOTTLE FILLER	MDF	10485 WM	BI-LEVEL ADA DRINKING FOUNTAIN WITH BOTTLE FILLER, POWDER COATED STAINLESS STEEL, ONE PIECE WELDED CONSTRUCTION, INCLUDE WALL MOUNT PLATE & SEASONAL BOWL COVERS.		1/2"	-	1-1/2"
OSH-1	OUTDOOR FOOT SHOWER	MDF	525-8 SMSS	FOOT SHOWER WITH 2 SPRAY HEADS & TWO BUTTONS, ONE ON EITHER SIDE OF PEDESTAL. ONE PIECE WELDED CONSTRUCTION. POWDER COATED SCHEDULE 10 STAINLESS STEEL, TEXTURED SAPPHIRE FINISH. PROVIDE WITH STAINLESS STEEL SURFACE CARRIER.		1/2"	-	-
OSH-2	OUTDOOR ADA SHOWER TOWER & FOOT WASH	MDF	565-SMSS	ADA SHOWER WITH 1 METERED HEAD AT 72", 1 METERED ADA HEAD AT 49" AND FOOT WASH ON ONE SIDE, WITH 2 GRAB BARS. ONE PIECE WELDED CONSTRUCTION. POWDER COATED SCHEDULE 10 STAINLESS STEEL, TEXTURED SAPPHIRE FINISH. PROVIDE WITH STAINLESS STEEL SURFACE CARRIER.		1/2"	-	-
FD-1	FLOOR DRAIN	JR SMITH	2005	CAST IRON FLOOR DRAIN WITH FLASHING COLLAR AND ADJUSTABLE STRAINER HEAD, 5 INCH ROUND NICKEL BRONZE STRAINER AND 3 INCH OUTLET. PROVIDE WITH JR SMITH MODEL 2692 TRAP SEAL DEVICE.		-	-	3"
TD-1	TRENCH DRAIN	ZURN	Z882-8201	TRENCH DRAIN: 8 FEET LONG, 12 INCH WIDE, HDPE CHANNEL WITH CARBON STEEL FRAME AND E1 CLOSED END CAP. CATCH BASIN: Z887-12-HD, HDPE CATCH BASIN 12"X24" WITH FOUL AIR TRAP. GRATE: P12-PS PERFORATED		-	-	4"
FCO-1	FLOOR CLEANOUT	JR SMITH	4020	CAST IRON FLOOR CLEANOUT FOR FINISHED FLOOR AREAS WITH ADJUSTABLE TOP, SECURED SCORIATED NICKEL BRONZE COVER, BRONZE GASKETED PLUG, AND BOTTOM OUTLET.		-	-	SEE PLANS
WCO-1	WALL CLEANOUT	JR SMITH	4710	ROUND STAINLESS STEEL CLEANOUT COVER AND SCREW FOR WALL CLEANOUT CONCEALMENT AND ACCESS.		-	-	SEE PLANS
SA-1	SHOCK ABSORBER	JR SMITH	HYDROTROL	WATER HAMMER ARRESTOR SERIES 5000 WITH PERMANENTLY SEALED CUSHION OF AIR. ALL STAINLESS STEEL. SIZE PER PDI INSTITUTE RECOMMENDATIONS.		SEE PLANS	-	-
DWH-1	DOMESTIC WATER HEATER	BRADFORD WHITE	LE340S3	UPRIGHT ELECTRIC WATER HEATER, 40 GALLON TANK. PROVIDE WITH T&P RELIEF VALVE AND PIPE TO ADJACENT SERVICE SINK. PROVIDE DRAIN PAN. ELECTRICAL: 240/1/60 WITH 4500W ELEMENT.		3/4"	3/4"	-
ET-1	EXPANSION TANK	AMTROL	ST-5-C	DOMESTIC HOT WATER DIAPHRAGM THERMAL EXPANSION TANK, ASME CONSTRUCTION, 4 GALLON VOLUME, 0.9 GALLON ACCEPTANCE. 3/4 INCH STAINLESS STEEL CONNECTION, BUTYL DIAPHRAGM.		-	3/4"	-



ELEVATION PLAN VIEW

6' TRENCH DRAIN WITH CATCH BASIN DETAIL

NOT TO SCALE



RESTROOM UNDERGROUND PLUMBING PLAN

SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. REFER TO SECTION 22 00 00 – SUMMARY OF WORK FOR ADDITIONAL INFORMATION AND WORK REQUIREMENTS.
2. DRAWINGS ARE SCHEMATIC IN NATURE. NOT ALL WORK IS SHOWN. ASSUME ADDITIONAL FITTINGS, OFFSETS, ACCESSORIES ETC. ARE REQUIRED.
3. COORDINATE WORK WITH ALL TRADES.
4. FIELD VERIFY ALL DIMENSIONS.
5. SLOPE ALL SANITARY AND VENT PIPING PER CODE.

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Facilities Design
277 Crahen Avenue NE - Grand Rapids, MI 49525
Telephone: (616) 456-5227 / Fax: (616) 456-5228 / Web: www.centuryae.com

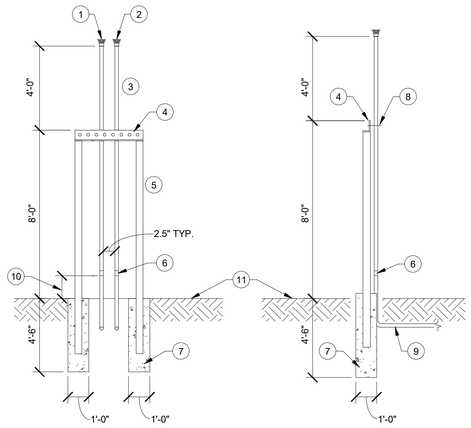
NO	DATE	BY	REVISIONS
3	04/16/25	EJS	ADDENDUM #1
2	03/25/25	EJS	BIDS AND CONSTRUCTION
1	02/13/25	EJS	90% REVIEW

TIERNEY PARK
IMPROVEMENTS PROJECT
VILLAGE OF LEXINGTON, MI

RESTROOM UNDERGROUND PLUMBING PLAN

DESIGN BY: S. TYLER
DRAWN BY: S. TYLER
DWG. SCALE: AS NOTED
PROJECT NO:

P-1.00
SHEET NO.



NUMBERED NOTES:

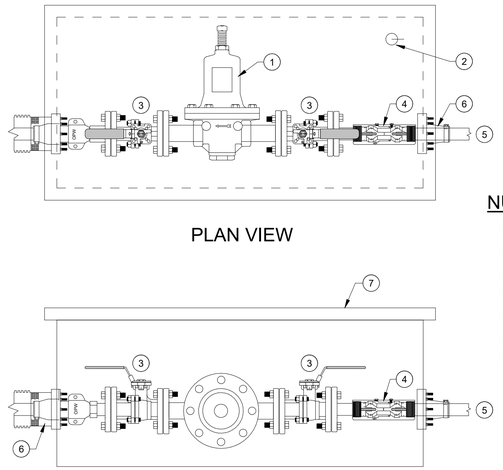
1. STANDARD DIESEL VENT CAP
2. GASOLINE PRESSURE / VACUUM VENT
3. 2" SCHEDULE 40 GALV. STEEL PIPE
4. 4" x 4" x 1/4" A-36 ANGLE
5. 4" x 4" x 3/16" A-500 BOX STEEL HOT DIP GALVANIZED
6. COUPLING SPIGOT & TEST PORT (TYP)
7. 12"Ø x 54" SONOTUBE, CONCRETE FILLED, TYP.
8. SST "U" CLAMP 3PL
9. DW UL-971 ELECTRO FUSION COAXIAL PIPE TO VAPOR EXTRACTOR
10. 1' ABOVE GRADE (TYP)
11. GRADE

NOTE:

A. THE VENT SUPPORT STRUCTURE SHALL BE WELDED AND HOT DIP GALVANIZED PRIOR TO INSTALLATION. FIELD WELDING ON THIS STRUCTURE AFTER GALVANIZING IS PROHIBITED.

1 F0.1 TANK VENT

NOT TO SCALE

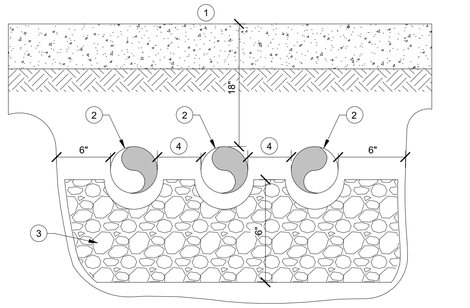


NUMBERED NOTES:

1. PRESSURE REDUCING REGULATOR WHERE NOTED
2. VEEDER ROOT
3. BALL VALVE
4. OPW 66SP HIGH VOLUME BREAKAWAY
5. DOCK CONNECTOR
6. OPW BOOT
7. LIFT OFF COVER

4 F0.1 TRANSITION BOX

NOT TO SCALE



NUMBERED NOTES:

1. PAVING
2. DW FUEL PIPE
3. CLEAN 95% COMPACTED BACK FILL
4. MINIMUM SPACING SHALL BE 2X EXTERIOR PIPE DIAMETER

NOTE:

A. ALL UNDERGROUND PIPING SHALL SLOPE 1/8" / 1'-0" TO EITHER ONSHORE TRANSITION SUMP WITH LIQUID SENSOR.

2 F0.1 TRENCH EXCAVATION - MULTIPLE FUEL PIPES

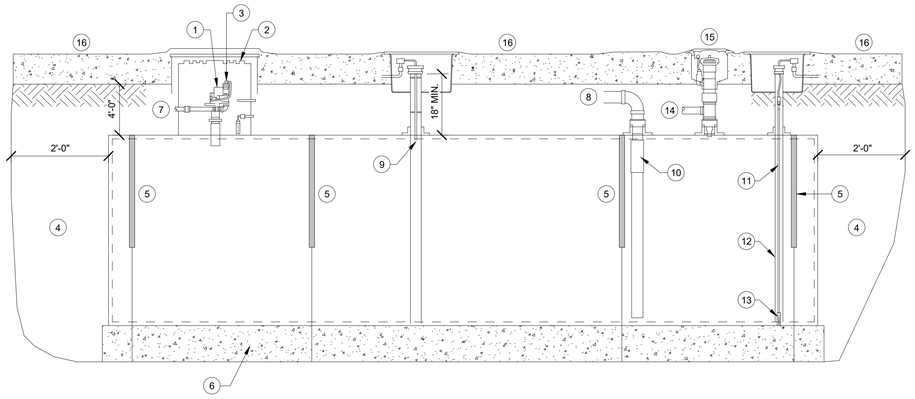
NOT TO SCALE

NUMBERED NOTES:

1. REMOTE SPILL CONTAINER (FRANKLIN FUEL SYSTEMS, MODEL: RFBP OR EQUAL)
2. VAPOR RECOVERY ADAPTOR WITH CAP (GASOLINE ONLY)
3. CONCRETE SLAB
4. CHECK VALVE
5. ADAPTOR WITH DUST CAP
6. GASOLINE / DIESEL PIPING
7. TO UNDERGROUND STORAGE TANK
8. VAPOR RECOVERY PIPING (GASOLINE ONLY) (NOT USED FOR DIESEL REMOTE FILL BOX)

5 F0.1 REMOTE FILL BOX

NOT TO SCALE



NUMBERED NOTES:

1. SUBMERGED TURBINE PUMP WITH SUMP
2. MODERN WELDING FACTORY INSTALLED FIBERGLASS COLLAR AND SUMP
3. MECHANICAL LINE LEAK DETECTOR
4. BACKFILL SHALL BE PEA GRAVEL OR FDEP APPROVED MATERIAL
5. HOLD DOWN STRAPS. REFERENCE TANK MANUFACTURER'S INSTRUCTIONS FOR QUANTITY & RECOMMENDED SPACING
6. DEADMAN ANCHORS (SEE STRUCTURAL)
7. TO DISPENSERS
8. TO REMOTE FILL BOX. SEE DETAIL.
9. LIQUID LEVEL SENSOR OMNTEC MTG PROBE ALARM SHALL BE SET TO 90% OF THE TOTAL TANK VOLUME. PROBE SHALL COMMUNICATE WITH OMNTEC PANEL & THE AUDIO / VISUAL ALARM. OVERFILL VALVE MAXIMUM ALLOWABLE SETTING IS 95% OF THE TOTAL TANK VOLUME.
10. EMCO WHEATON OVERFILL PROTECTION VALVE & DROP TUBE A1100 EQ-414 OVERFILL VALVE SHALL BE SET TO 90% OF THE TOTAL TANK VOLUME
11. INTERSTITIAL MONITOR OMNTEC BX-PDWS SYSTEM
12. INTERSTITIAL MONITORING COLUMN
13. SENSOR, LOCATED AT BOTTOM OF TANK WITHIN INTERSTITIAL COLUMN
14. TO VENT
15. (GASOLINE) STAGE 1 DRY BREAK COVER = ORANGE (FOR DIESEL) EXTRACTOR MANHOLE COVER = BLACK
16. OVERBURDEN SLAB (SEE STRUCTURAL)

NOTES:

A. COMPLIANCE MONITORING WELLS SHALL BE POSITIONED WITHIN THE BACKFILL AT EACH CORNER OF UNDERGROUND STORAGE TANK EXCAVATION.

B. PAVEMENT OVER THE UNDERGROUND STORAGE TANKS (UST'S) SHALL BE SLOPED AT A MINIMUM OF 1% AWAY FROM ALL MANHOLE ASSEMBLIES.

C. COORDINATE WITH ELECTRICAL CONTRACTOR FOR BONDING OF ALL STRUCTURAL STEEL.

3 F0.1 SINGLE COMPARTMENT TANK CROSS SECTION

NOT TO SCALE

GENERAL FUEL SYSTEM NOTES:

1. APPLICABLE CODE INCLUDE BUT ARE NOT LIMITED TO THE LATEST ADOPTED VERSIONS OF:

   FLORIDA BUILDING CODE
   NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 30 AND 30A
   COAST GUARD REGULATIONS
   ARMY CORPS OF ENGINEERS REGULATIONS
   NATIONAL ELECTRIC CODE (NEC) NFPA 70

2. INSTALL FUEL SYSTEMS IN ACCORDANCE WITH PEI - RECOMMENDED PRACTICES FOR THE INSTALLATION OF MARINA FUEL SYSTEMS.
3. FUEL SYSTEMS SHALL BE INSTALLED COMPLETE WITH ALL WORK, MATERIALS, AND EQUIPMENT CUSTOMARILY CONSIDERED PART OF SUCH WORK FOR FULLY OPERATIONAL, COMPLETE, AND CODE COMPLIANT SYSTEMS. PROVIDE AND INSTALL ALL PIPING, CONNECTIONS, VALVES, FITTINGS, AND FIXTURES AS REQUIRED FOR A COMPLETE SYSTEM.
4. PLANS ARE DIAGRAMMATIC AND ARE PROVIDED ONLY TO SHOW GENERAL SYSTEMS. CONTRACTOR SHALL CONSIDER ACTUAL FIELD CONDITIONS DURING INSTALLATION. ANY GROSS INTERFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE CONTINUING.
5. PLAN SCALES NOTED, IF ANY, ARE ONLY APPLICABLE TO PLANS PLOTTED AT FULL SIZE. CONTRACTOR IS CAUTIONED WHEN USING PLANS PLOTTED AT REDUCED SIZES. REGARDLESS, CONTRACTOR SHALL NOT SCALE PLANS, BUT SHALL REFER TO ACTUAL FIELD CONDITIONS AND/OR DIMENSIONED ARCHITECTURAL, STRUCTURAL, OR CIVIL PLANS.
6. SUBMITTAL REQUIREMENTS: CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER FOR REVIEW AND APPROVAL DETAILED PRODUCT INFORMATION ON ALL EQUIPMENT PROPOSED FOR USE. SUBMITTAL SHALL BE APPROVED, AND ENGINEER SHALL REVIEW AND APPROVE PRIOR TO EQUIPMENT PURCHASE. SUBMITTALS SHALL BE SUBMITTED IN ELECTRONIC (PDF) FORMAT WITH THE FILES NAMED WITH THE RELEVANT SPEC SECTION NUMBERING. PRIOR TO SUBMITTAL CONTRACTOR SHALL REVIEW AND CERTIFY BY SIGNATURE THE SUBMITTED EQUIPMENT MEET SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DIMENSIONS, FITTINGS, AND CONSTRUCTION FEATURES RELATIVE TO EQUIPMENT. APPROVAL OF SUBMITTAL INFORMATION BY THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR'S OBLIGATION TO PROVIDE CODE COMPLIANT SYSTEMS.
7. LOCATE AND INSTALL ALL EQUIPMENT CONSIDERING MANUFACTURER'S RECOMMENDED CLEARANCES, MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND LISTING AGENCY CERTIFICATIONS.
8. INSTALL ALL SERVICEABLE EQUIPMENT, VALVES, UNIONS, ETC. IN ACCESSIBLE LOCATIONS.
9. VERIFY ALL ELECTRICAL REQUIREMENTS WITH EQUIPMENT MANUFACTURERS. COORDINATE WITH ELECTRICAL CONTRACTOR.
10. PROVIDE AND INSTALL ALL HANGERS AND SUPPORTS AS REQUIRED BY CODE CONSISTENT WITH THE MATERIAL OR EQUIPMENT SUPPORTED.
11. SLEEVE ALL PENETRATIONS THROUGH CONCRETE SLABS AND WALLS.
12. THE PLANS AND SPECIFICATIONS FOR THIS WORK HAVE BEEN PREPARED WITH THE INTENT TO BE AS ACCURATE AND COMPLETE AS PRACTICAL, BUT ERRORS, OMISSIONS, AND CONFLICTS MAY EXIST. PRIOR TO SUBMITTING A BID FOR CONSTRUCTION THE WORK, THE CONTRACTOR SHALL REVIEW THE PLANS AND SPECIFICATIONS IN DETAIL. ANY QUESTIONS OR COMMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO SUBMITTING A BID. BY SUBMITTAL A BID FOR THE WORK, THE CONTRACTOR ACKNOWLEDGES THAT HE HAS REVIEWED THE PLANS AND SPECIFICATIONS, UNDERSTANDS THE DESIGN INTENT, AND DOES NOT HAVE ANY FURTHER QUESTIONS OR COMMENTS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS ASSOCIATED WITH THE INSTALLATION OF THE FUEL SYSTEMS.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REQUIRED DEWATERING ASSOCIATED WITH THE INSTALLATION OF THE UNDERGROUND TANKS.

PIPE MATERIAL SCHEDULE - FUEL SYSTEM

ALL SIZES:
- MANUFACTURER: FRANKLIN FUEL SYSTEMS, APT XP, OR EQUAL
- DOUBLE WALL, UL 971 LISTED PRODUCT PIPE
- SIZE PER PLAN

FLEX PIPE, ALL SIZES:
- MANUFACTURER: MIDWEST HOSE & SPECIALTY, INC.; TANK TRUCK 150 PSI HOSE, OR EQUAL
- TUBE: NITRILE (NBR), COVER: NEOPRENE (CR), REINFORCEMENT: TEXTILE PILES, DUAL HELIX WIRE
- SIZE PER PLAN

FUEL TANK SCHEDULE

IDENTIFICATION	FT-1	FT-2
TYPE	DOUBLE WALL	DOUBLE WALL
MANUFACTURER	MODERN WELDING CO.	MODERN WELDING CO.
MODEL	GLASTEEL II	GLASTEEL II
FUEL TYPE	DIESEL	GASOLINE
ENCLOSURE	UL-58, UL-1746 PART III	UL-58, UL-1746 PART III
VOLUME (Gal.)	10,000	15,000
ACCESSORIES	1,2	1,2

ACCESSORIES:
1. ALL REQUIRED CONNECTIONS, VENTS, VALVES, CONTROLS, ETC. FOR COMPLETE GASOLINE/DIESEL FUEL SYSTEM.
2. PROVIDE WITH A 2 HP REDJACKET (OR EQUAL) SUBMERSIBLE TURBINE PUMP.

1

Edgewater resources
518 Broad Street, Suite 200
Saint Joseph, MI 49085
P: 269.932.4502
edgewaterresources.com

MAFFETT LOFTIS ENGINEERING, LLC
1 S JEFFERSON AVE, STE 101
COOKEVILLE, TN 38501
TEL: (931) 526-5143
www.maffett-loftis.com

PROJECT TITLE:
LEXINGTON HARBOR
PARK UPGRADES
LEXINGTON, MI

SHEET TITLE:
FUEL NOTES, SCHEDULES, & DETAILS

DATE	REVISION
4/16/25	1. Add. 1

ISSUED FOR:

STATE OF MICHIGAN
GARY D. LOFTIS
ENGINEER
No. 6201309092
LICENSED PROFESSIONAL ENGINEER
03/24/2025

DATE: 03/24/2025
PROJ NO.: 20-040
NORTH
MLE PROJ NO.: 24060

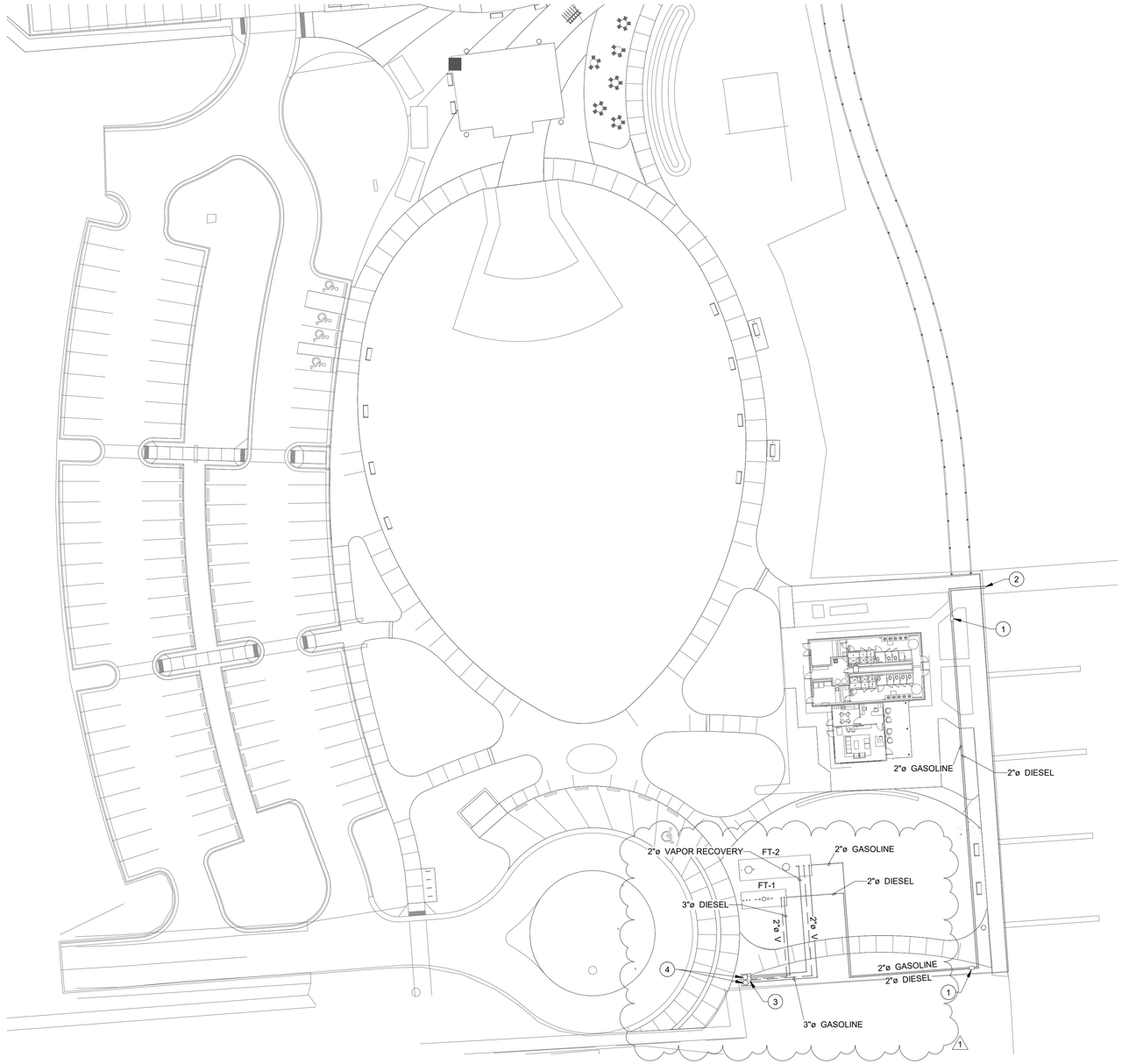
DESIGNED BY: JBN
DRAWN BY: BAE
REVIEWED BY: JBN

SHEET NUMBER:
F0.1

(#) FUEL NOTES

NUMBERED NOTES

1 TRANSITION BOX, WITH LIFT OFF COVER. REFER TO DETAIL 4 / F0.1
2 CONNECT TO EXISTING. COORDINATE WITH SITE PLAN.
3 FUEL TANK VENT PIPING. REFER TO DETAIL 1 / F0.1
4 REMOTE FILL BOX. REFER TO DETAIL 5 / F0.1



1 / F1.1 FUEL SITE PLAN

SCALE: 1" = 30'-0" (WHEN PRINTED FULL SCALE ON 24"X36")

0' 15' 30' 60' 120'

NORTH

CALL BEFORE YOU DIG

www.call811.com

THE CONTRACTOR SHALL NOTIFY ALL UTILITIES INCLUDING AND NOT LIMITED TO GAS, WATER, ELECTRIC, CABLE, AND TELEPHONE COMPANIES PRIOR TO ANY EXCAVATION. THE CONTRACTOR SHALL NOTIFY ONE-CALL SERVICE (CALL 811) SEVENTY-TWO (72) HOURS AS REQUIRED BY LAW BEFORE ANY EXCAVATION, AT ANY LOCATION.

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PROJECT TITLE:
LEXINGTON HARBOR
PARK UPGRADES
LEXINGTON, MI

SHEET TITLE:
FUEL SITE PLAN

DATE	REVISION
4/16/25	1. Add. 1

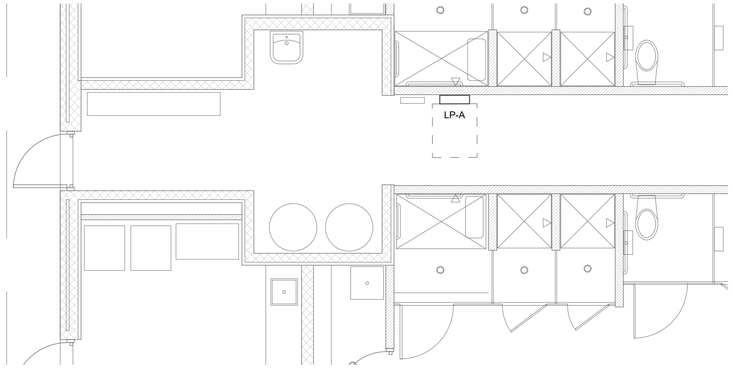
ISSUED FOR:

STATE OF MICHIGAN
GARY D. LOFTIS
ENGINEER
No. 6201309092
LICENSED PROFESSIONAL ENGINEER
03/24/2025

DATE: 03/24/2025
PROJ NO.: 20-040
NORTH
MLE PROJ NO.: 24060

DESIGNED BY: JBN
DRAWN BY: BAE
REVIEWED BY: JBN

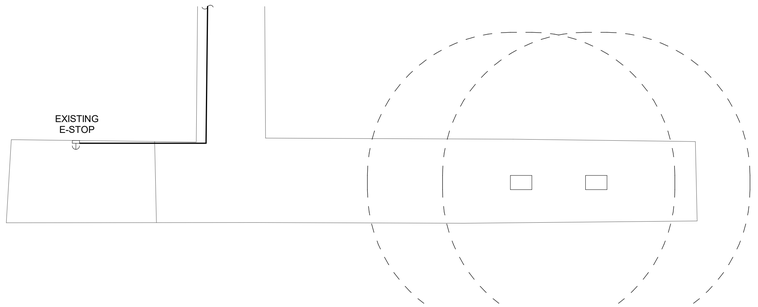
SHEET NUMBER:
F1.1



1 FE1.1 ENLARGED ELECTRICAL PLAN - BOATERS LOUNGE

SCALE: 1/4" = 1'-0" (WHEN PRINTED FULL SCALE ON 24"X36")

0' 2' 4' 8' 16'



ELECTRICAL NOTES

NUMBERED NOTES

1 EXTEND EXISTING E-STOP CIRCUITRY FROM EXISTING ATTENDANT BUILDING TO NEW UPLAND FUEL CONTACTOR PANEL. ROUTE (1) 1G35 CABLE UNDERNEATH EXISTING FIXED DOCK STRUCTURE. SUPPORT CABLE AS REQUIRED. COORDINATE ROUTING OF NEW CABLING AND CONDUIT WITH EXISTING DOCK STRUCTURE AND UTILITIES.

GENERAL NOTES

A VEEDER-ROOT SYSTEM SHALL BE TLS-450+ WITH REMOTE MONITORING. CONTRACTOR SHALL BUY AND INSTALL ALL EQUIPMENT AS REQUIRED FOR THE REMOTE MONITORING. CONTRACTOR SHALL PROVIDE AND INSTALL ANY SOFTWARE AND PROVIDE TRAINING TO THE OWNER.

3 FE1.1 FUEL PIER ENLARGEMENT

SCALE: 1" = 10'-0" (WHEN PRINTED FULL SCALE ON 24"X36")

0' 5' 10' 20' 40'

2 FE1.1 ELECTRICAL PLAN - FUEL

SCALE: 1" = 20'-0" (WHEN PRINTED FULL SCALE ON 24"X36")

0' 10' 20' 40' 80'

NORTH

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www.maffett-loftis.com

PROJECT TITLE:
LEXINGTON HARBOR
PARK UPGRADES
LEXINGTON, MI

SHEET TITLE:
ELECTRICAL PLAN - FUEL

DATE	REVISION
4/16/25	1. Add. 1

ISSUED FOR:

STATE OF MICHIGAN
GARY D. LOFTIS
ENGINEER
No. 6201309092
LICENSED PROFESSIONAL ENGINEER
03/24/2025

DATE: 03/24/2025
PROJ NO.: 20-040
NORTH
MLE PROJ NO.: 24060

DESIGNED BY: AJG
DRAWN BY: AJG
REVIEWED BY: AJG

SHEET NUMBER:
FE1.1

TIERNEY PARK IMPROVEMENTS PROJECT

SECTION 00 04 00 – BID FORM

I. ARTICLE(S) and SERVICE

Having carefully examined the bid specifications contained herein; having carefully read the "REQUEST FOR PROPOSAL, GENERAL CONDITIONS, INSTRUCTIONS, AND INFORMATION: The Bidder proposes to provide the specified material(s), article(s), good(s), and service(s) at the prices listed in this proposal subject to all instructions, conditions, specifications and all attachments hereto.

Variances

_____

_____

_____

_____

II. BID PRICES

The proposal shall contain a completed price schedule and all information requested within this Request for Proposals, including any project variances. The contract will be awarded based on the criteria listed in the specifications, the variances, and the results of the completed price schedule.

Unit prices must be provided for the following (Contractor is responsible for verifying quantities):

BASE BID Unit Price Work					
Item	**Description**	**Unit**	**Estimated Quantity**	**Unit Price**	**Extended Price**
013100.01	Mobilization, Max 4%	LS	1	$	$
013100.02	General Conditions	LS	1	$	$
015526.01	Traffic Control	LS	1	$	$
020120.01	Tree Protection	FT	1,135	$	$
024100.01	Sidewalk Removal	SYD	1,384	$	$

024100.02	Curb and Gutter, Rem	FT	2,870	$	$
024100.03	Restroom Removal, Complete	LS	1	$	$
024100.04	Timber Stairs, Rem	EA	2	$	$
024100.05	Boardwalk, Rem (FUTURE: NIC)	LS	1	$ ---	$ ---
024100.06	Steel Grate Path, Rem (FUTURE: NIC)	LS	1	$ ---	$ ---
024100.07	Timber Sidewalk, Rem	SYD	170	$	$
024100.08	Electrical Boxes, Rem	LS	1	$	$
024100.09	Light: Pedestrian, Rem	EA	7		
024100.10	Light: Bollard, Rem	EA	3	$	$
024100.11	Irrigation System, Rem	LS	1	$	$
024100.12	Regulatory Signs, Rem	LS	1	$	$
024100.13	Dumpster Enclosure, Rem (Salvage doors)	EA	1	$	$
024100.14	Fence, Rem	FT	30	$	$
024100.15	Footwash, Rem	EA	1	$	$
024100.16	HMA Surface Mill, Rem	SYD	3,808	$	$
024100.17	HMA, Rem	SYD	5,416	$	$
024100.18	Sanitary Line, Abandon	LS	1	$	$
024100.19	Structure, Rem	EA	2	$	$
024100.20	DR Structure Cover, Adj, Case 1	EA	4	$	$
024100.21	Steel Sculpture, Relocate	EA	1	$	$
024100.22	Tierney Bust, Relocate	EA	1	$	$

024100.23	Flagpoles, Relocate	EA	3	$	$
024100.24	Landscape Boulders, Relocate	LS	1	$	$
024100.25	Tree, Rem 6 inch to 18 Inch	EA	25	$	$
024100.26	Tree, Rem 19 Inch to 30 Inch	EA	23	$	$
024100.27	Stump, Rem 6 inch to 18 Inch	EA	25	$	$
024100.28	Stump, Rem 19 Inch to 30 Inch	EA	23	$	$
024100.29	Topsoil Surface, Salv, 5 Inch (Approx 3,245 cyds)	LS	1	$	$
033000.01	Curb and Gutter, Conc, Det F3	FT	2,725	$	$
033000.02	Curb and Gutter, Conc, Det D1	FT	393	$	$
033000.03	Sidewalk, Conc, 4 Inch	SF	8,812	$	$
033000.04	Conc Pavt, Reinf, 6 Inch	SF	23,912	$	$
033000.05	Conc Pavt, Reinf, 6 Inch - Color with Exposed Agg	SF	3,325	$	$
033000.06	Sidewalk ADA Ramp Conc, 6 Inch	EA	9	$	$
033000.07	Detectable Warning Surface	EA	9	$	$
033000.08	Concrete Ramp at West Pavilion	EA	1	$	$
033000.09	Concrete Stairs at East Pavilion	EA	1	$	$
033000.10	Trench Drain	FT	102	$	$
033000.11	Footwash Drain	EA	2	$	$
055200.01	Steel Railing – Ramp at Pavilion, West	LS	1	$	$
055200.02	Steel Railing – Stairs at Pavilion, East	LS	1	$	$
069100.01	Timber Staircase	LS	1	$	$

069100.04	Boardwalk Landing at Breakwater Connection (FUTURE: NIC)	SF	1,035	$ ----	$ ---
129300.01	Bench, New	EA	6	$	$
129300.02	Bench, Relocated (stored by Village)	EA	15	$	$
129300.03	Swing Bench	EA	4	$	$
129300.04	Picnic Table, Fixed	EA	6	$	$
129300.05	Picnic Table, Free-standing	EA	4	$	$
129300.06	Litter Receptacle	EA	6	$	$
129300.07	Grill	EA	6	$	$
129300.08	Ash Urn	EA	2	$	$
129300.09	Bike Rack	EA	8	$	$
129300.10	Dog Bag Dispenser	EA	2	$	$
129300.11	Dumpster Enclosure	LS	1	$	$
129300.12	Wheel Stop	EA	105	$	$
129300.13	ADA Parking Sign and Post	EA	9	$	$
129300.14	Regulatory Signs (11 HC parking signs, 6 loading zone signs, 5 DNR parking signs, and 4 Village/DNR demarcation signs)	EA	26	$	$
129300.15	Bollard	EA	8	$	$
129300.16	RV Pedestal	EA	4	$	$
129300.17	Bollard Lights	EA	16	$	$
129300.18	Bollard Lights w/120V power	EA	6	$	$
129300.19	Flagpole Uplight	EA	3	$	$
310000.01	Topsoil, 4 Inch	SYD	8,200	$	$

312213.01	Machine Grading, Modified	LS	1	$	$
312500.01	Soil Erosion and Sediment Control	LS	1	$	$
321123.01	Aggregate Base, 8" depth	SYD	7,960	$	$
321216.01	HMA, 5EL, 1 ½ Inch	TON	667	$	$
321216.02	HMA, 3EL, 2 ½ Inch	TON	1,098	$	$
321216.03	Parking Lot Striping	FT	5,000	$	$
321216.04	Crosswalk	EA	6	$	$
321413.01	Crushed Stone Paving	SF	1,465	$	$
321420.01	Reinforced Turf Rings	SF	710	$	$
328400.01	Irrigation System, Complete	LS	1	$	$
329200.01	Seed, Fertilizer and Mulch	SYD	4,549	$	$
329210.01	Slope Restoration	SYD	450	$	$
329220.01	Shoreline Seed	SF	5,800	$	$
329300..01	Trees: 3" Caliper	EA	18	$	$
329300.02	Trees: Ornamental	EA	13	$	$
329300.03	Shrubs	EA	70	$	$
329300.041	Container Plants: Ornamental Grasses	EA	110	$	$
329300.042	Plugs: Perennials and Ornamental Grasses	EA	1,440	$	$
329300.05	Mulch	SYD	91	$	$
329312.01	Rain Garden: Riprap Stone per drawings, Planting Mix (plants listed separately)	SF	13,200	$	$
329312.02	Bio-Swale: Flush Curb, Riprap Stone per drawings, Planting Mix and Subbase (plants listed separately)	FT	288	$	$

330010.01	Utility Conduit	LS	1	$	$
330040.01	Bollard Lights, Foundation	EA	16	$	$
330040.02	Bollard Lights w/120V Power, Foundation	EA	6	$	$
331100.01	Site Electrical System, Complete	LS	1	$	$
331220.01	Water Service, 2 Inch	FT	390	$	$
331210.02	Water Service Connection, 2 Inch	EA	1	$	$
333000.01	8" Sanitary Sewer	FT	364	$	$
331310.01	Sanitary Sewer Leads and Cleanouts	FT	57	$	$
331320.01	Sanitary Manhole w/ Frame & Cover	EA	1	$	$
331320.02	Sanitary Manhole, Patch	EA	1	$	$
331320.03	Core and Seal, Sanitary Manhole	EA	1	$	$
331500.01	Restroom Building, Complete (includes Footwash and Footwash w Shower)	LS	1	$	$
331600.01	Pavilion Building, Complete	LS	1	$	$
332000.01	Marine Fuel Landside System Demolition	LS	1	$	$
332010.01	Marine Fuel System, Complete	LS	1	$	$
332010.02	Marine Fuel Connector, Complete	LS	1	$	$
Contingency Allowance		LS	1	$75,000.00	$75,000.00
TOTAL Base Bid Price (subject to final adjustment based on actual quantities)					$

ALTERNATE #1 Unit Price Work					
Item	**Description**	**Unit**	**Estimated Quantity**	**Unit Price**	**Extended Price**
069200.01	Timber Boardwalk, Complete	LS	1	$	$
TOTAL Alternate #1 Bid Price (subject to final adjustment based on actual quantities)					$

ALTERNATE #2 Unit Price Work					
Item	**Description**	**Unit**	**Estimated Quantity**	**Unit Price**	**Extended Price**
129300.20	Play Zone Trees	LS	1	$	$
129300.21	Play Zone EWF Fall Surface	CY	30	$	$
129300.22	Play Zone Concrete Curb	LF	160	$	$
TOTAL Alternate #2 Bid Price (subject to final adjustment based on actual quantities)					$

The extended prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. As provided in Paragraph 5.01 of the Agreement Stipulated Price, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer.

III. SIGNATURE PAGE

The undersigned, having familiarized themselves with the local conditions and the Contract Documents, agrees to enter into an agreement with the Village of Lexington to provide the services required for the Village of Lexington's Construction Project as describe herein and as noted in the Contract Documents including the plans, specifications and permits, including:

Addendum No. _____, Dated _____
Addendum No. _____, Dated _____
Addendum No. _____, Dated _____
Addendum No. _____, Dated _____

TOTAL BID $ _____ _____
(Numerals) (Words)

Base Bid Project Start and Duration

If awarded the contract on or before May 15, 2025, the BIDDER agrees to achieve Substantial Completion by June 30, 2026 as described in the Instructions to Bidders. If Contractor cannot complete project by this date, please fill in an alternate date here _____.

Signature Date	Company Name
Print Name	Company Address
Title	City State Zip
Telephone # Fax #	Purchase Order Email Address
Federal Tax ID #	

The above individual is authorized to sign on behalf of the company submitting proposal. This bid is valid for 90 days from the date of the above signature.

PART 1 GENERAL

1.1 SUMMARY

A. Provide steel doors and frames.

1.2 SUBMITTALS

A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.

B. Shop Drawings: Submit shop drawings indicating material characteristics, details of construction, connections, and relationship with adjacent construction.

1.3 QUALITY ASSURANCE

A. Comply with governing codes and regulations. Provide products of acceptable manufacturers, which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

B. Standards: ANSI/SDI-100, Recommended Specifications for Standard Steel Doors and Frames.

C. Performance Standards:

1. Fire-Rated Assemblies: NFPA 80, and acceptable testing agency listing.
2. Thermal-Rated Assemblies at Exterior: ASTM C 236 or ASTM C 976.
3. Sound-Rated Assemblies at Mechanical Rooms: ASTM E 1408, and ASTM E 413.

PART 2 PRODUCTS

2.1 MATERIALS

A. All Doors to match existing Owner type and keying

B. Manufacturer and Product Equal Substitutions are permitted with Owner and Architect approval

C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

D. Interior Steel Doors:

1. Manufacturers: TBD
2. Material: Minimum 18 gauge steel sheet.
3. Thickness: 1-3/4 inches.
4. Finish: Factory primed, and field painted.
5. Accessories:
   a. Sight proof stationary louvers, located in drawings
   b. Silencers.

E. Interior Steel Frames:

1. Manufacturers: TBD
2. Material: Minimum 16 gauge steel sheet.
3. Corners: Mitered or coped.
4. Type: Welded.

5. Type: Knockdown.
6. Finish: Factory primed, and field painted.

F. Exterior Steel Doors:
1. Manufacturers: LIMITED; Products; MITTEN; THERMA-TRU DOORS.
2. Material: Minimum 16 gauge galvanized steel sheet.
3. Door Thickness: 1-3/4 inches, thermally insulated.
4. Finish: Factory primed and field painted.
5. Accessories:
a. Sight proof stationary louvers per drawings
b. Silencers.

G. Exterior Steel Frames:
1. Manufacturers: AMBICO LIMITED; Corporation; Galaxy; THERMA-TRU DOORS.
2. Material: Minimum 14 gauge galvanized steel sheet.
3. Corners: Mitered or coped.
4. Type: Welded.
5. Type: Knockdown.
6. Finish: Factory primed, and field painted.

H. Interior Preassembled Steel Doors and Frames:
1. Manufacturers: TBD
2. Material: Minimum 22 gauge steel sheet.
3. Door Thickness: 1-3/4 inches.
4. Door Faces: Flush.
5. Finish: Factory finished.

I. Exterior Preassembled Steel Doors and Frames:
1. Manufacturers: TBD
2. Material: Minimum 22 gage galvanized steel sheet.
3. Door Thickness: 1-3/4 inches, thermally insulated.
4. Type: Two-piece adjustable split jamb.
5. Finish: Factory finished.

PART 3 EXECUTION

3.1 INSTALLATION

A. Fabricate work to be rigid, neat and free from seams, defects, dents, warp, buckle, and exposed fasteners. Install doors and frames in compliance with SDI-100, NFPA 80, and requirements of authorities having jurisdiction.

B. Provide thermally improved doors with maximum U-value of 0.24 BTU/hr./sq. ft. degree F (ASTM C 236) for all exterior doors and elsewhere as noted.

C. Provide acoustically improved doors with minimum STC of 33 (ASTM E 90 and ASTM E 413) where indicated.

D. Hardware: Prepare doors and frames to receive hardware on final schedule. Provide for 3 silencers on single doorframes; 2 on double doorframes.

E. Shop Finish: Clean, treat and prime paint all work with rust-inhibiting primer comparable with finish paint specified in Division 9 section. Provide asphalt emulsion sound deadening coating on concealed frame interiors.

F. Touch-up damaged coatings ready to receive finish painting.

PART 4 – METHOD OF MEASUREMENT

4.01 GENERAL

A. The work associated with Hollow Metal Doors and Frames shall be incidental to Specification 02800 and will not be measured separately for payment. The Contractor must be responsible for the various tasks noted in this section and as shown on the plans.
B. Prior to acceptance and final payment, the Engineer/Architect shall observe site conditions with the owner for approval.

PART 5 – BASIS OF PAYMENT

5.01 PAYMENT

A. Hollow Metal Doors and Frames shall be included as part of Pay Item 2800.01 Existing Building Renovation

B. Hollow Metal Doors and Frames shall be included as part of Pay Item 2800.02 New Construction Building Addition.

END OF SECTION

DOOR HARDWARE SECTION 08 71 00

PART 1 – GENERAL

1.01 GENERAL

A. Refer to Division 1 of Specifications. Requirements of these Sections and the project drawings shall govern work in this section.

1.02 WORK INCLUDED

A. Furnish all items of Finish Hardware specified, scheduled, shown or required herein except those items specifically excluded from this section of the specification.
B. Related work:
   a. Division 00 00 00 - Procurement and Contracting Requirements
   b. Division 01 00 00 - General Requirements

1.03 QUALITY ASSURANCE

A. Requirements of Regulatory Agencies:
   a. Furnish finish hardware to comply with the requirements of laws, codes, ordinances, and regulations of the governmental authorities having jurisdiction where such requirements exceed the requirements of the Specifications.
   b. Furnish finish hardware to comply with the requirements of the regulations for public building accommodations for physically handicapped persons of the governmental authority having jurisdiction and to comply with Americans with Disabilities Act.
   c. Provide hardware for fire-rated openings in compliance with NFPA 80 and state and local building code requirements. Provide only hardware that has been tested and listed by UL for types and sizes of doors required and complies with requirements of door and door frame labels.
   d. All hardware to be commercial grade-heavy duty.
   e. Provide all locking deadbolts on restroom doors with occupancy indicator.
B. Hardware Supplier:
   a. Shall be an established firm dealing in contract builders' hardware. He must have adequate inventory and qualified personnel on staff. The distributor must be a factory-authorized dealer for all materials required. The supplier shall be or have in employment an Architectural Hardware Consultant (AHC).
C. Manufacturer:
   a. Obtain each type of hardware (latch and locksets, hinges, closers, etc.) from a single manufacturer, although several may be indicated as offering products complying with requirements.

1.04 SUBMITTALS

A. Hardware Schedule
   a. Submit Hardware Schedule as directed in Division 1.
   b. Follow guidelines established in Door & Hardware Institute Handbook (DHI) Sequence and Format for the Hardware Schedule unless noted otherwise.

c. Schedule will include the following:
    i. Door Index including opening numbers and the assigned Finish Hardware set.
    ii. Preface sheet listing category only and manufacturer's names of items being furnished as follows:
    iii. Hardware Locations: See drawings
    iv. Opening Description: Single or pair, number, room locations, hand, active leaf, degree of swing, size, door material, frame material, and UL listing.
    v. Hardware Description: Quantity, category, product number, fasteners, and finish.
    vi. Headings that refer to the specified Hardware Set Numbers.
    vii. Scheduling Sequence shown in Hardware Sets.
    viii. Product data of each hardware item, and shop drawings where required, for special conditions and specialty hardware.
    ix. "Vertical" scheduling format only. "Horizontal" schedules will be returned "Not Approved."
    x. Typed Copy.
    xi. Double-Spacing.
    xii. 8-1/2 x 11-inch sheets
    xiii. U.S. Standard Finish symbols or BHMA Finish symbols.

1.05 PRODUCT DATA

A. Submit, in booklet form Manufacturers Catalog cut sheets of scheduled hardware.
B. Submit product data with hardware schedule.
C. New doors to match existing type and standard to match existing

1.06 KEY SCHEDULE

A. Submit detailed schedule indicating clearly how the Owner's final keying instructions have been followed.
B. All keys to match existing locking system
C. Submit as a separate schedule.

1.07 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Product Delivery, Storage, and Handling:
    a. Label each item of hardware with the appropriate door number and Hardware Schedule heading number and deliver to the installer so designated by the contractor.

1.08 WARRANTIES

A. Special Warranty: During the warranty period, replace defective work, including labor, materials and other costs incidental to the work. Failures include, but not limited to the following;
    a. Structural failures including excessive deflection, cracking or breakage.
    b. Faulty operation of operators and door hardware.
    c. Deterioration of metals, metal finishes and other materials beyond normal weathering and use.
B. Warranty Period: Two years from Substantial Completion.

PART 2 – PRODUCT

2.01 GENERAL

A. Furnish each category with the products of only one manufacturer unless specified otherwise; this requirement is mandatory whether various manufacturers are listed or not.
B. Provide the products of manufacturer designated or if more than one manufacturer is listed, the comparable product of one of the other manufacturers listed. Where only one manufacturer or product is listed, it is understood that this is the owner's Building Standard and "no substitution" is allowed.

2.02 HINGES

A. Furnish hinges of class and size as listed in sets.
B. Numbers used are Ives (IVE).
C. Products of a BHMA member are acceptable with the approval of the architect

2.03 CONTINUOUS GEAR HINGE – installed on all hollow metal doors as located on drawings

A. 6063-T6 aluminum alloy, anodized finish (cap on entire hinge painted if specified). Manufacture to template, uncut hinges non-handed, pinless assembly, three interlocking extrusions, full height of door and frame, lubricated polyacetal thrust bearing, fasteners 410 stainless steel plated and hardened. All hinge profiles to be manufactured to template bearing locations, with standard duty bearing configurations at 5-1/8” spacing with a minimum of 16 bearings: and heavy duty at 2-9/16” spacing with a minimum of 32 bearings. Anodizing of material shall be done after fabrication of components so that all bearing slots are anodized.
B. Length: 1" less than door opening height. Fastener 12-24 x 1/2" #3 Phillips keen form stainless steel self-tapping at aluminum and hollow metal doors, 12-1/2" #3 Philips, flathead full thread at wood doors.
C. Numbers used are Ives.
    a. Equal products by Hager & Select will also be accepted.

2.04 CLOSERS

A. Door closers shall have fully hydraulic, full rack and pinion action with a high strength cast iron cylinder. Cylinder body shall be 1%” in diameter, and double heat-treated pinion shall be 11/16” in diameter with double D slab drive arm connection.
B. Hydraulic fluid shall be of a type requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
C. Spring power shall be continuously adjustable over the full range of closer sizes, and allow for reduced opening force for the physically handicapped. Hydraulic regulation shall be by tamper-proof, non-critical valves. Closers shall have separate adjustment for latch speed, general speed, and back check.
D. All closers shall have solid forged steel main arms (and forged forearms for parallel arm closers).

E. All surface mounted mechanical closers shall be certified to exceed ten million (10,000,000) full load cycles by a recognized independent testing laboratory.
F. Closers will have Powder coating finish certified to exceed 100 hours salt spray testing by ETL, an independent testing laboratory used by BHMA for ANSI certification.
G. Refer to door and frame details and furnish accessories such as drop plates, panel adapters, spacers and supports as required to correctly install door closers. State degree of door swing in the hardware schedule.

2.05 KICK PLATES

A. Furnish .050 inches thick, beveled three sides, 10" high x door width less 2" at single doors and less 1" at pairs. Where glass or louvers prevent this height, supply with height equal to height of bottom rail less 2”.
B. Any BHMA manufacturing product meeting above is acceptable with approval from the architect

2.06 WALL STOPS

A. Length to exceed projection of all other hardware. Provide with threaded studs and expansion shields for masonry wall construction. Install with slope at top.
    a. IR-Ives WS447
    b. BHMA manufacturing product meeting the standard is acceptable with approval from the architect

2.07 THRESHOLDS

A. 1/2" high -5" wide. Cope at jambs.
B. Furnish full wall opening width when frames are recessed.
C. Cope in front of mullions if thresholds project beyond door faces.
D. Furnish with non-ferrous Stainless-Steel Screws and Lead Anchors.
    a. National Guard as listed in sets
    b. Equal of Zero or Reese

2.08 DOOR SWEEPS

A. Surface Sweeps:
    a. National Guard as listed in sets
    b. Equal by Zero or Reese

2.09 WEATHER-STRIPPING

A. Apply to head and jamb stops.
B. Solid Bar stock all sides
    a. National Guard as listed in sets
    b. Equal by Zero or Reese

2.10 MISCELLANEOUS

A. Furnish items not categorized in the above descriptions but specified by manufacturer's names in Hardware Sets.

2.11 FASTENERS

A. Furnish fasteners of the proper type, size, quantity and finish. Use machine screws and expansion shields for attaching hardware to concrete or masonry, and wall grip inserts at hollow wall construction. Furnish machine screws for attachment to reinforced hollow metal doors and frames and reinforced aluminum doors and frames. Furnish full thread wood screws for attachment to solid wood doors and frames. "TEK" type screws are not acceptable.
B. Sex bolts will not be permitted on reinforced metal doors or wood doors where blocking is specified.

2.12 FINISHES

A. Color to match door and frame, per Drawings. Provide finish for each item as indicated in sets, verify with Architect if a color is in question.

2.13 TEMPLATES AND HARDWARE LOCATION

A. Furnish hardware made to template. Supply required templates and hardware locations to the door and frame manufacturers.
B. Furnish metal template to frame/door supplier for continuous hinge.
C. Refer to Article 3.1 B.2, Locations, and coordinate with templates.

2.14 CYLINDERS AND KEYING

A. All cylinders for this project will be supplied by one supplier regardless of door type and location.
B. Provide a cylinder for all hardware components capable of being locked.
C. Provide cylinders master and grand master keyed to existing system according to Owner's instructions. Provide two change keys for each cylinder, master and grand master keys as required by Owner.
D. Provide cylinders with construction cores or keying for use during the construction period. When so directed, and in the presence of the Owner's security department or representative, convert construction cores or keying to the final system.
    a. Supplier shall include the cost of this service in his proposal.

PART 3 – EXECUTION

3.01 INSTALLATION

A. General:
    a. Install hardware according to manufacturer's installations and template dimensions. Attach all items of finish hardware to doors, frames, walls, etc. with fasteners furnished and required by the manufacture of the item.
    b. Provide blocking/reinforcement for all wall mounted Hardware.

c. Reinforced hollow metal doors and frames and reinforced aluminum door and frames will be drilled and tapped for machine screws.
d. Solid wood doors and frames: full thread wood screws. Drill pilot holes before inserting screws.
e. Continuous gear hinges attached to hollow metal doors and frames and aluminum doors and frames: 12-24 x 1/2" #3 Phillips Keenform self-tapping. Use #13 or 3/16 drill for pilot.
f. Continuous Gear Hinges require continuous mortar guards of foam or cardboard 1/2" thick x frame height, applied with construction adhesive.
g. Install weather-strip gasket prior to parallel arm closer bracket, rim exit device or any stop mounted hardware. Gasket to provide a continuous seal around perimeter of door opening. Allow for gasket when installing finish hardware. Door closers will require special templating. Exit devices will require adjustment in backset.

B. Locations:
a. Dimensions are from finish floor to center line of items.
b. Include this list in Hardware Schedule.

CATEGORY	DIMENSION
Hinges	Door Manufacturer's Standard 72"
Flush Bolt Levers	12"
Levers	Door Manufacturer's Standard
Exit Device Touch bar	Per Template
Deadlatch Cylinder	43" unless conflicting with push-pull.
Deadlock MS Cylinder	43" unless conflicting with push-pull
Hospital Push-Pull	Manufacturer's Template At Head
Roller Latch Push-Pull	42" to centerline of Pull Suitable for
Units Offset Pulls	Exit Devices 46"
Flush Cup Pulls	46"
(BTB)	46"
Push-Pulls Push	52"
Plates Pull Plates Wire	42"
Pulls Wall	42"
Stops/Holders	At Head
Astragals	NA
Trim Protector Bars	Push side of door below lever handle
Lock Protectors	Pull side of door

3.02 FIELD QUALITY INSPECTION

A. Provide the services of a representative to inspect material furnished and its installation and is adjustment, and to instruct the Owner's personnel in adjustment, care and maintenance of hardware.
B. Locksets and exit devices shall be inspected by the factory representative after installation and after the HVAC system is in operation and balanced, to insure correct installation and proper operation.

C. Closers shall be inspected by the factory representative after installation and after the HVAC system is in operation and balanced, to insure correct installation and proper operation.
D. The manufacturer's representative shall prepare a written report stating compliance, and also recording locations and kinds of noncompliance. The original report shall be forwarded to the Owner with copies to the Contractor, hardware distributor, and hardware installer.
   a. Technical and Warranty Information:
      i. At the completion of the project, the technical and warranty information coalesced and kept on file by the General Contractor/Construction Manager shall be given to the Owner or Owner's Agent. In addition to both the technical and warranty information, all factory order acknowledgement numbers supplied to the General Contractor/Construction Manager during the construction period shall be given to the Owner or Owner's Agent. The warranty information and factory order acknowledgement numbers shall serve to both expedite and properly execute any warranty work that maybe required on the various hardware items supplied on the project.
      ii. Submit to General Contractor / Construction Manager, two copies each of parts and service manuals and two each of any special installation or adjustment tools. Include for locksets, exit devices, door closers and any electrical products.

3.03 HARDWARE SETS

HARDWARE GROUP NO. 01: TOILET ROOMS, PLUMBING ALLEY AND STORAGE DOORS

3' 0" X 7' 0" X 1 3/4” x HOLLOW METAL NEW DOOR AND FRAME
For use on mark/door #(s): Per Plans
Provide each door(s) with the following:

1EA	CONT. HINGE	112HD	DB	IVE
1EA	DEAD BOLT LATCH	B663P	652	SC
1EA	CYLINDER	DEADLOCK	652	SAR
1EA	SURFACE CLOSER	4040XP-3077 EDA	72ME	LCN
2EA	KICK PLATE	8400 10” X 2” LDW	652	IVE
1EA	PULL PLATE	8305 4X16	652	IVE
1EA	PULL	8105 8”	652	IVE
1EA	PUSH	8200 4 x16	652	IVE
1EA	WEATHERSEAL	700NA	DB	NG
1EA	THRESHOLD	425HD	DB	NG
1EA	DOOR STOP	WS447	U526D	IVE

END OF SECTION

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Metal roofing, including flashing and accessories.
B. Metal wall and fascia panels.
C. Metal soffit panels.

1.2 RELATED SECTIONS

A. Section 07 62 00 - Sheet Metal Flashing and Trim [07 62 00] - Sheet Metal Flashing and Trim.
B. Section 07 71 13 - Manufactured Copings [07 71 00] - Manufactured Roof Specialties: Coping and gravel stops.
C. Section 07 90 00 - Joint Protection [07 92 00] - Joint Sealers.

1.3 REFERENCES

A. ASTM A 653/A 653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2001a.
B. ASTM A792 / A792M - Standard Specification for Steel Sheet, 55 percent Aluminum-Zinc Alloy-Coated by the Hot-Dip Process.
C. ASTM B 209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2001.
D. ASTM E 283 - Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen; 1991 (Reapproved 1999).
E. ASTM E 331 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference; 2000.
F. ASTM E 408/C - 1371: "Standard Test Method for Total Normal Emittance of Surfaces Using inspection - Meter Techniques.
G. ASTM E 903/C - 1549: Standard Test Method for Solar Absorbtance, using Integrating Spheres.
H. ASTM E 1646 - Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference; 1995.
I. ASTM E 1680 - Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems; 1995.
J. Dade County County (Florida) Acceptance Report Numbers: 01-1106-01 and 01-1106-02.
K. FM - Tests Requirements for Class 1 Panel roofs, Factory Mutual Research Corporation.
L. UL 580 - Standard for Tests for Uplift Resistance of Roof Assemblies; 1994.
M. UL2218: Class 4 Impact Resistance Rating.
N. SMACNA (ASMM) - Architectural Sheet Metal Manual; Sheet Metal and Air Conditioning Contractors National Association; 1993.

1.4 SUBMITTALS

A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
B. Product Data: Manufacturer's data sheets on each product to be used, including:
   1. Preparation instructions and recommendations.

2. Storage and handling requirements and recommendations.
3. Installation methods.

C. Shop Drawings: Submit shop drawings showing layout, profiles and product components, including anchorage, accessories, finish colors and textures.

D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.

E. Verification Samples: For each finish product specified, two samples, minimum size 6 inches square, representing actual product, color, and patterns.

F. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

G. Operation and Maintenance Data: Include methods for maintaining installed products and precautions relating to cleaning materials and methods that might be detrimental to finishes and performance.

H. Close Out: Warranty documents specified herein.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: Installer with documented experienced in performing work of this section who has specialized in the installation of work similar to that required for this project.

B. Pre-Installation Meeting: Conduct pre-installation meeting to acquaint installers of roofing and related work with project requirements, substrate conditions, manufacturer's installation instructions and manufacturer's warranty requirements.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging with identification labels intact until ready for installation.

B. Store materials protected from exposure to harmful conditions. Store material in dry, above ground location.

1. Stack pre-finished material to prevent twisting, bending, abrasion, scratching and denting. Elevate one end of each skid to allow for moisture to run off.
2. Prevent contact with material that may cause corrosion, discoloration or staining.
3. Do not expose to direct sunlight or extreme heat trim material with factory applied strippable film.

1.7 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.8 WARRANTY

A. Manufacturer's Warranty: Provide manufacturer's standard warranty document executed by authorized company official covering finish, including color, fade, chalking and film integrity.

B. Warranty Period: 20 years commencing on Date of Substantial Completion.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Petersen Aluminum Corporation Web:https://www.pac-clad.com

B. Substitutions: Permitted

C. Substitution Limitations: This Specification is based on Petersen Aluminum Corp. Products. Comparable Products from manufacturers listed herein will be accepted provided they meet requirements of this Specification.

D. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

2.2 SHEET METAL ROOFING

A. General: Factory fabricated panels; panels fabricated on site using portable roll former are prohibited.
   1. Performance Requirements: Provide sheet metal roofing that has been manufactured, fabricated and installed to achieve the following performance without defects, damage, failure or infiltration of water.
      a. Wind Uplift: Provide UL 580 Class 90 rated assembly.
      b. FM: Test Requirements for Class 1 panel roofs.
      c. Static Air Infiltration: 0.06 cu ft/min/sq ft (1.1 cu m/h/sq m) at 6.24 lb/sq ft (300 Pa) air pressure differential, maximum, when tested in accordance with ASTM E 283 or ASTM E 1680.
      d. Water Infiltration: No evidence of water penetration at inward static air pressure differential of 12.0 lb/sq ft (575 kPa), when tested in accordance with ASTM E 331 or ASTM E 1646.
      e. Thermal Movement: Accommodate movement expected due to ambient and surface temperature ranges likely to occur at project site.
   2. Panel Lengths: As indicated on drawings; panels 55 feet (16.76 m) and less fabricated in one continuous length.
   3. Texture: Smooth texture, dull matte specular gloss 25 to 35 percent at 60 degrees F (15.5 degrees C).
   4. Finish: Factory applied PAC-CLAD finish:
      a. Topside: Full-strength fluoropolymer, 70 percent Kynar 500 or Hylar resin, 1.0 mil (0.025 mm) total dry film thickness.
      b. Underside: Wash coat of 0.3 to 0.4 mil (0.076 to 0.1 mm) dry film thickness.
      c. Color: As selected by Architect from manufacturer's standard colors.
   5. Panel Fasteners: Non-penetrating type, as required to achieve wind uplift rating or otherwise as recommended by manufacturer.

B. Roof Panels: Petersen Aluminum PAC-CLAD SNAP-CLAD Panels; tension leveled flat panels with continuously interlocked standing seam; one-piece design without separate seam cover.
   1. Seam Height: 1-3/4 inches (44 mm) minimum.

2. Material: 24 gage, 0.024 inch (0.61 mm) ASTM A792 /A792M Galvalume steel, structural quality.
3. Material: 22 gage, 0.03 inch (0.76 mm) ASTM A792 /A792M Galvalume steel, structural quality.
4. Panel Width: 16 inch (406 mm), center to center.
5. Eave Notching: Factory produced eave notching for trimmed eave panels.
6. Sealant Bead: Factory applied sealant bead.

C. Flashing and Trim: Manufacturer's standard flashing and trim profiles, factory formed; fabricated as recommended in SMACNA Architectural Sheet Metal Manual.
1. Material: Same as roof panels.
2. Finish: To match roof panels.
3. Color: To match roof panels.
4. Color: per Drawings

2.3 ACCESSORY MATERIALS

A. Underlayment: ASTM D 226, Type II No. 30 asphalt saturated organic roofing felt.
B. Plywood Deck: 5/8 inch (16 mm) nominal thickness; as specified in Section 06 10 00 - Rough Carpentry.
C. Nailable Insulation: 1 inch (25 mm) minimum to 3-1/2 inch (89 mm) maximum nominal thickness classified polyisocyanurate foamed plastic, 2 pcf (32 kg/cu m) density, factory laminated to 7/16 inch (11 mm) thick APA rated oriented strand board (OSB).
D. Sealant: Elastomeric.
E. Bituminous Coating: Cold-applied asphaltic mastic, free of asbestos fibers, sulfur, and other harmful impurities.
F. Touch-Up Paint: Approved by panel manufacturer.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify that substrates are acceptable for roofing installation in accordance with manufacturer's instructions.
B. Do not begin installation until substrates have been properly prepared.
C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 INSTALLATION

A. Install in accordance with manufacturer's instructions.
B. Coordinate metal roofing with other work, including but not limited to drainage, flashing and trim, deck substrates, parapets, copings, walls, and other adjoining work.
C. Install metal roofing panels to profiles, patterns and drainage indicated, in accordance with manufacturer's instructions, and as necessary to achieve specified performance and a leak-free Installation. Allow for structural and thermal movement.
D. Separate dissimilar metals using bituminous coating to prevent galvanic action.
E. Use fasteners recommended by panel manufacturer; conceal fasteners wherever possible; cover and seal exposed fasteners.
F. Provide uniform, neat seams; provide sealant-type joint where indicated and form joints to

conceal sealant.

3.3 FIELD QUALITY CONTROL

A. Post Installation Testing: Owner reserves right to perform post installation testing of installed sheet metal roofing.

B. Manufacturer's Field Services: Upon Owner's request, provide manufacturer's field service consisting of product use recommendations and periodic site visit for inspection of product installation in accordance with manufacturer's instructions.

3.4 CLEANING

A. Remove temporary coverings and protection of adjacent work areas.

B. Touch-up, repair or replace damaged products.

C. Clean in accordance with manufacturer's instructions prior to Substantial Completion.

D. Remove construction debris from project site and legally dispose of debris.

3.5 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

TOILET, BATH ACCESSORIES SECTION 10 28 00

PART 1 – GENERAL

1.01 SECTION INCLUDES

A. Toilet accessories.
B. Attachment hardware.
C. Coordinate the work of this Section with the placement of internal wall reinforcement to receive anchor attachments.

1.02 REFERENCES

A. ANSI A117.1 -Specifications for Making Buildings and Facilities Accessible to and Usable by Physically Handicapped People.
B. ANSI/ASTM A123 -Zinc (Hot-Dip Galvanized) Coatings on Products Fabricated from Rolled, Pressed, and Forged Steel Shapes, Plates, Bars and Strips.
C. ANSI/ASTM A366 -Steel, Carbon, Cold-Rolled Sheet, Commercial Quality.
D. ANSI/ASTM A386 -Zinc Coating (Hot-Dip) on Assembled Steel Products.
E. ANSI/ASTM B456 -Electro deposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium.
F. ASTM A167 -Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet and Strip.
G. ASTM A269 -Seamless and Welded Austenitic Stainless-Steel Tubing for General Service.
H. NEMA LD-3 -High Pressure Decorative Laminates.
I. ADA -Americans with Disabilities Act
J. ANSI A117.1 -Specifications for Making Buildings and Facilities Accessible to and Usable by Physical Handicapped People.

1.03 SUBMITTALS

A. Provide Product Data on accessories describing size, finish, details of function, attachment methods.
B. Submit two samples chips of each specified color and finish.
C. Submit manufacturer's installation instructions for each product.

1.04 REGULATORY REQUIREMENTS

A. Conform to applicable code for installing work in conformance with ANSI A117.1 and ADA.

PART 2-PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS -TOILET ROOM ACCESSORIES

A. Bobrick
B. American Specialties Inc.
C. Bradley
D. McKinney
E. Liberty
F. Manufacturers of equivalent products submitted and approved in accordance with Section 01 60 00 -Product Requirements.

2.02 MATERIALS

A. Sheet Steel: ANSI/ASTM A366.
B. Stainless Steel Sheet: ASTM A167, Type 304.
C. Tubing: ASTM A269, stainless steel.
D. Adhesive: Contact type, waterproof.
E. Fasteners, Screws, and Bolts: Hot dip galvanized, tamperproof.
F. Expansion Shields: Fiber, lead, or rubber as recommended by accessory manufacturer for component and substrate.

2.03 FABRICATION

A. Weld and grind smooth joints of fabricated components.
B. Form exposed surfaces from single sheet of stock, free of joints.
C. Form surfaces flat without distortion. Maintain flat surfaces without scratches or dents.
D. Back paint components where contact is made with building finishes to prevent electrolysis.
E. Shop assemble components and package complete with anchors and fittings.
F. Provide steel anchor plates, adapters, and anchor components for installation.
G. Hot dip galvanize exposed and painted ferrous metal and fastening devices.

2.04 FACTORY FINISHING

A. Galvanizing: ANSI/ASTM A123 and A386 to 1.25 oz/sq. yd.
B. Shop Primed Ferrous Metals: Pre-treat and clean, spray apply one coat primer and bake.
C. Enamel: Pre-treat to clean conditions, apply one coat primer and a minimum of two coats electrostatic baked enamel.
D. Chrome/Nickel Plating: ANSI/ASTM B456, Type SC 2 satin finish.
E. Stainless Steel: No. 4 satin luster finish.

PART 3 -EXECUTION

3.01 PREPARATION

A. Verify that site conditions are ready to receive work.
B. Beginning of installation means acceptance of existing conditions.
C. Deliver inserts and rough-in frames to site at appropriate time for building-in.
D. Provide templates and rough-in measurements as required.
E. Verify exact location of accessories for installation.

3.02 INSTALLATION

A. Install fixtures, accessories and items in accordance with manufacturers' instructions.
B. Install plumb and level securely and rigidly anchored to substrate.
C. Protect products from damage caused by subsequent construction activities.
D. Field repair of damaged product finishes is prohibited; replace products having damaged finishes caused by subsequent construction activities.
E. Locate toilet accessories at heights and locations required for compliance with local accessibility regulations and the Americans with Disabilities Act.

3.03 SCHEDULE

A. Bobrick and American Specialties Inc. are used as a quality standard set to be expected on all items of this Section.
    a. Mirrors:

shall be one-piece roll formed 1/2" x 1/2", Type 304 stainless steel channel with satin finish; one-piece full width x 5 inches deep stainless-steel shelf.

ii. Provide concealed wall hangers for theft-proof mounting.

iii. Frame shall be mitered, welded, ground, and polished smooth.

iv. Mirrors shall be No. 1 quality, 1/4" polished tempered glass, electrolytically copper plated, or 1/4" polycarbonate or Lexan sheet. Mirrors shall be fabricated of minimum 4-layer coating consisting of silver, copper, and 2 heat-cured protective coats, tested in Accordance with FS-DD-M-411.

v. Mirrors shall be warranted against silver spoilage for a minimum of 10 years. Back of mirrors protected with 1/4" shock absorbing polystyrene padding and 20 gage galvanized steel back.

vi. Bobrick No. B-165-2436 or equal

b. Grab Bars

i. Grab bars shall be constructed of type 304 stainless steel with satin and peened non-slip finish. Wall thickness shall be 18-gage and outside diameter of 1-1/2". Stainless steel flanges shall be 11 gage, 3" minimum diameter snap on mounting cover with minimum of 3 concealed stainless-steel vandal-proof set screws. Concealed anchor plates shall be 11 gage, minimum, stainless steel.

ii. Bobrick B-6806.99: 18”, 24”, 36", 42", and 48” long straight bars. Or equal

c. Surface Mounted Horizontal Baby Changing Stations

i. Changing Station shall be horizontal format and shall protrude no more than 4 inches (102) from wall when in retracted position. Unit shall comply with 2010 ADA Accessibility Standards, ASTM F2285-04, and EN 12221-1. Unit shall support a static load of 300 lbs. (136.1 kg) and be tested in excess of 350 lbs.

ii. (158.8 kg). Unit shall be fabricated of non-porous plastic (FDA approved HDPE) tested according to ASTM G21 and ASTM G22. No parts of the operating mechanism shall be accessible when unit is open or closed to provide a tamper resistant and pinch proof user environment. Unit shall have a damped gas spring to assist user in opening and closing bed tray with the use of one hand. Unit shall be provided with one integral heavy-duty bag hook. Unit shall provide a bed-liner dispenser that may be easily converted to a multi-fold towel dispenser with no adapters. Unit shall provide graphics and instructions in four languages on interior back. Unit shall be provided with an adjustable two-part vinyl coated child protection safety-strap mounted with concealed fasteners on high walls of cradle. Entire unit shall be assembled of completely sealed components to provide easy cleaning and no penetration zones to harbor microbes or bacteria. Unit shall mount on standard concrete masonry unit dimensions and with proper anchoring may mount on all suitable wall constructions. Mounting fasteners shall be concealed after installation using color matched recess plug-covers supplied. Unit shall be light grey in color and shall be recyclable at end of usable life. Unit shall be warranted for five years against defects in material or workmanship.

iii. American Specialties, Inc.: Model No 9014

d. Custodial Accessories selection per owner

i. Utility Shelf with Mop Holders and Rag Hooks: Type 304 satin stainless. Shelf is 8 in (200 mm) deep with 3/4 in (19 mm) return for rigidity. Mop holders are riveted to strip, and rubber cam is ribbed for grasping. Rod and hooks for wet rags included.

ii. American Specialties, Inc.: Model 1315-4: 4 mop holders/3 rag hooks, 36 in long.

e. ~~Feminine Hygiene Disposals~~
   i. Surface Mounted Sanitary Napkin Disposal. S22 ga., Stainless Steel, Wall Mount Sloping cover with full length piano hinge.
   ii. Lavex, 430-series or approved equal
f. Wall Mounted Trash receptacle per owner if preferred
   i. Wall mounted, open top, Stainless Steel Waste Receptacle
   ii. Global Industries, 16 gallon, 312S, item # T9FB9563. Toilet Paper Dispenser
g. ADA, High Impact GP Georgia Pacific Translucent Smoke Jumbo Jr. Bathroom Tissue Dispenser with Stub Roll Feature and mandrel. Model 58150 or equal
h. ~~Sharps Needle Disposal~~
   i. Wall mount 13" H x 13" W x 5" D ABS plastic enclosure with lock and key for 5-quart sharps container
   ii. 5-quart Sharps container
   iii. Sharps Model # SA5QWM or approved equal
i. Wall Mounted Hand Dryer
   i. Motion sensor, low noise hand dryer
   ii. Fixture per Electrical Specification and drawings
j. Toilets ADA compliant and non- compliant Toilets
   i. Fixtures Per Plumbing Specification and drawings or approved equal
   ii. Flush valve per Plumbing specification and drawings or approved equal
k. Drinking Fountain
   i. Fixtures per Plumbing Specification and drawings or approved equal

END OF SECTIO

SECTION 23 07 00
INSULATION - HVAC

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the contract, including General and Supplementary Conditions and Division 01 Specification sections, apply to this section. If differing requirements are identified elsewhere (in these specifications or on drawings or separate instructions), the more stringent requirement shall be met.

1.2 SUMMARY

A. This section includes the furnishing and installation of thermal insulation for HVAC piping and equipment as indicated on the drawings, as specified herein, and as required for the proper and complete performance of the work.

B. Types of mechanical insulation specified in this section include the following:

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1. Ductwork System Insulation:
   a. Fiberglass.

C. Related Sections: The following sections contain requirements that relate to this section:
1. Section 23 00 10 - HVAC General Provisions
2. Section 23 01 00 - Basic Materials and Methods - HVAC

1.3 SUBMITTALS

A. Submit under provisions of Section 01 33 00.

B. Product Data: Submit manufacturer's technical product data and installation instructions for each type of mechanical insulation.

C. Submit a detailed schedule showing manufacturer's product number, k-value, thickness, r-factor, and furnished accessories for each mechanical system requiring insulation.

1.4 QUALITY ASSURANCE

A. Installer's Qualifications: Firm with at least 5 years successful installation experience on projects with mechanical insulation's similar to that required for this project.

B. Flame/Smoke Ratings: Provide composite mechanical insulation (insulation, jackets, coverings, sealers, mastics and adhesives) with flame-spread index of 25 or less, and smoke-developed index of 50 or less, as tested by ASTM E84 (NFPA 255) method and UL 723. Shipping containers for insulating materials shall bear the UL label.

C. Deliver insulation, coverings, cements, adhesives, and coatings to site in containers with manufacturer's stamp or label, affixed showing fire hazard indexes of products.

D. Protect insulation against dirt, water, and chemical and mechanical damage. Do not install damaged or wet insulation; remove from project site.

1.5 WARRANTY

A. Warrant replacement insulation installation for 1 year from date of final acceptance at no additional cost to Owner

PART 2 - PRODUCTS

2.1 DUCTWORK INSULATION MATERIALS

A. Flexible Fiberglass: Provide blanket material complying with ASTM C553, 1 pcf minimum density, 250°F rated, with factory-applied reinforced foil/Kraft vapor barrier facing equal to Owens-Corning SOFTR Duct Wrap FRK: All Service Duct Wrap Insulation.

B. Jackets for Ductwork Insulation:
   1. ASTM C921, Type II (water vapor permeable) for ductwork with temperatures above ambient.
   2. Two coats of vapor barrier mastic reinforced with fiberglass scrim cloth for ductwork exterior to building.

C. Ductwork Insulation Accessories: Provide staples, bands, wires, tape, anchors, corner angles and similar accessories as recommended by insulation manufacturer for applications indicated.

D. Ductwork Insulation Compounds: Provide cements, adhesives, coatings, sealers, protective finishes and similar compounds as recommended by insulation manufacturer for applications indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions under which mechanical insulation is to be installed. Do not proceed with work until unsatisfactory conditions have been corrected in manner acceptable to Installer.

3.2 INSTALLATION OF DUCTWORK INSULATION

A. Install insulation products in accordance with manufacturer's written instructions and in accordance with recognized industry practices to ensure that insulation serves its intended purpose.

B. Install insulation materials with smooth and even surfaces. Clean and dry ductwork prior to insulating. Do not insulate ductwork for which leakage testing has not been satisfactorily completed.

C. Butt insulation joints firmly together to ensure complete and tight fit over surfaces to be covered. Bevel and seal all exposed edges where access openings or other discontinuities occur in the installation.

D. Maintain integrity of vapor barrier on ductwork insulation and protect it to prevent puncture and other damage. Seal all jacket seams, exposed edges, and penetrations with UL listed tapes or vapor retardant adhesives comparable to insulation jacketing material.

E. Extend ductwork insulation without interruption through walls, floors, and similar ductwork penetrations, except where otherwise indicated or where codes prohibit.

3.3 PROTECTION AND REPLACEMENT

A. Insulation Installer shall advise Contractor of required protection for insulation work during remainder of construction period, to avoid damage and deterioration.

B. Replace damaged insulation which cannot be repaired satisfactorily, including units with vapor barrier damage and moisture saturated units.

C. Remove and replace all insulating materials on which mold or mildew has occurred or which have been discolored or stained due to mold, mildew, or condensation within one year of substantial completion.

3.4 SCHEDULES

A. Ductwork Insulation Schedule:

Service	Thickness & Type of Insulation
Exhaust Duct	1 " Duct Wrap

END OF SECTION

Edgewater resources

518 Broad Street, Suite 200
St Joseph, Michigan 49085
269 932 4502

Pre-Bid Meeting Agenda

Project Name:	Tierney Park Improvements Project
Project Manager:	Suzanne Fromson, PLA, Edgewater Resources
Project Engineer:	Matthew Derucki, PE
Project Architect:	Michelle Rumsa, RA
Date:	Tuesday, April 8, 1PM
Location:	Tierney Park Pavilion

AGENDA

1. INTRODUCTIONS
    a. Owner: Village of Lexington
    b. Owner's Representative/Project Professional: Edgewater Resources
    c. Project Partner: MDNR for fuel system review

2. PROJECT OVERVIEW
    a. Tierney Park Scope: The project includes complete renovation of the Village of Lexington's Tierney Public Park at the Lexington Harbor waterfront. It should be noted that the park is adjacent to an active public marina, a private marina, residential homes, and the Windjammer Bar and Grill, open year-round. Park improvements include:
        i. Improved roadways and drop-off zones
        ii. Improved parking for both park users and boaters
        iii. New restroom facility
        iv. New pavilion for picnic and entertainment use
        v. Network of concrete pathways and staircase connection to top of bluff
        vi. Site utilities: sanitary, water, electrical, stormwater, irrigation
        vii. Lighting: discuss Contractor vs DTE responsibility
        viii. Native planting and new shade trees (rain garden vs bioswale)
        ix. Site furniture: benches, tables, litter, bike racks, foot wash (2: one with shower), etc
        x. Sculptures and Art relocation
        xi. Dumpster enclosure
    b. Fuel Tank: Also included is removal of the existing marine fuel system, addition of new marine fuel system, and connection to existing marina fuel system. The marina is scheduled for renovation under separate contract, with anticipated schedule to follow Tierney Park improvements.

c. Alternates:
    i. Timber Boardwalk
    ii. Play Zone Trees
d. Future Work: the ramp and deck connection to the USACE breakwater pathway is under review and demolition/improvement of existing steel grate walkway will be determined prior to fall construction. The removal and improvements at this connection are not in current contract.
e. Permitting: pending permits include sanitary, EGLE boardwalk. Contractor to secure local SESC and building code reviews, fuel tank reviews/permits.
f. Submittals required prior to construction include, but are not limited to:
    i. Project Schedule
    ii. Traffic Control Plan and Site Access
    iii. SESC Plan
    iv. Coordination documentation with County inspector for public utilities

3. PROJECT SCHEDULE
    a. Site Access Coordination

4. BID SET CLARIFICATIONS
    a. Parking: gates for boater access
    b. Boardwalk: final structural details

5. BID SET QUESTIONS

6. PROJECT SITE TOUR

7. BIDDING KEY DATES
    a. Questions Due: Friday, April 11, 2025 5:00PM
    b. Proposal Due Date: Wednesday, April 23, 2025 1:00PM
    c. Target Date for Vendor Selection: on or about 5/8/25
    d. Target Date for Pre-Construction Meeting: on or about 9/2/25
    e. Date for fully operational fuel system: 6/1/26
    f. Date for remainder project Substantial Completion: on or about 6/30/26

Please direct questions to Edgewater Resources Project Contact:
Suzanne Fromson, Landscape Architect
sfromson@edgewaterresources.com
269-408-6387

Tierney Park Improvements Project - Meeting Attendance Record

Pre-Bid Meeting April 8, 2025, 1PM, Tierney Park Pavilion

Please Print Name	Firm You Represent	Email Address	Phone
Lisa Sherman	Sherman Nursery	Lisa@shermannurseryfarms.com	810 329 9466
Bailey Miller	Heldon Miller Trucking & Exc	Bailey.Miller@HMexcavating.com	810 712 8114
JAKE CARUFEL	Canopy Climber Tree Care	JAKE.CANOPYCLIMBER@GMAIL.COM	810 300 2387
Kevin Schultz	Schultz's Tree Removal	Schultzstreeremoval@gmail.com	(810)824-0757
ANDREW HENRY	SPENCE BROTHERS	andrewhenry@spencebrothers.com	734-786-3753
WILLIAM BOGAN	OSCAR LARSON	WILLIAM.BOGAN@OWLSERVICES.COM	248 212 2575
Travis Stevens	K&E Contracting LLC	Travis@ke-contracting.com	810-689-8895
Jack McLiver	Lighthouse Lawncare & Irrigation	jack@lighthouselci.com	810-434-3270
Craig Fenton	Lighthouse Lawncare & Irrigation	craig@lighthouselci.com	810-434-3270
Dakota Carie	~~dcarie@brencal.net~~ Brencal Contractors	dcarie@brencal.net	586-758-6000
Michael Jocham	L.J. Construction Inc	ljconstructionmi@gmail.com	989-761-0181
Jarred Ross	Cyrus Masonry	jarred@cyrusmasonry.com	810 441 0611

Tierney Park Improvements Project - Meeting Attendance Record

Pre-Bid Meeting April 8, 2025, 1PM, Tierney Park Pavilion

Please Print Name	Firm You Represent	Email Address	Phone
Randy Stebner	Progressive Companies	rstebner@wearepgressive.com	503 857 7041
SEAN JONES	BODDY CONSTRUCTION	seanJ@boddyconstruction.com	810 8370594
Derek Booms	Booms Construction	derek@boomsinc.com	989-269-8562
Kevin Martin	Martin Concrete	kemartinjr@sbcglobal.net	810-404-2223