

GENERAL NOTES:

1. The Contractor shall comply with all applicable safety regulations. All construction shall be completed following current City Standard Specifications and Special Provisions.

2. Contractor will be required to provide notice to utility companies a minimum of seventy-two (72) hours prior to any excavation, as follows:

Kansas One-Call 687-2470

The Contractor must notify the following in case of an emergency:

AT&T 1-800-246-8464
 Black Hills Energy 1-800-694-8989
 City of Wichita Water & Sewer 1-316-219-8921
 City of Wichita Stormwater 1-316-268-4090
 City of Wichita Traffic 1-316-268-4034
 Cox Communications 1-888-249-3530
 Kansas Gas Service 1-888-482-4950
 Energy 1-800-544-4857

3. Utility service lines, poles, etc. are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans, represent the best information available for design. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.

4. Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations, in the opinion of the Engineer, that will leave an unsightly appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain will require a Kansas Department of Agriculture Division of Water Resources permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps. of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits will require additional archaeological investigations unless buried in a previously approved borrow location.

5. Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the City Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.

6. The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days notice prior to start of construction.

7. The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws.

8. All elevations shown are NAVD88.

9. Connecting to Existing Manholes: Prior to laying sewer lines using existing stubs in existing manholes, the Contractor shall expose and verify the elevation, grade and alignment of existing stubs and notify the Engineer of any deviation from the plans. Where the stub is unusable due to elevation grade or alignment, the Contractor shall remove the stub and plug the hole, and reshape the existing manhole invert to provide smooth flow. Where connection to an existing manhole that does not have an existing stub, the Contractor shall core cut into existing manhole wall to make connection using approved water stop gasket, and reshape the existing manhole invert to provide smooth flow. The cost of connect to existing manholes is incidental to the project.

10. Contractor shall limit the extent of trench open overnight and weekends to less than 50 feet.

11. The Contractor shall prevent any construction debris from entering the existing sanitary sewer during construction.

12. The Contractor shall protect from damage and support existing utilities through construction as approved by the utility owner and the Engineer at the contractor's expense.

13. All areas disturbed during construction are to be seeded as follows:

Seed -- Rye grass; 5 lbs./1000 Sq. Ft.

All costs associated with seeding including mobilization, preparation of ground, seeding, fertilizing, mulching, etc. shall be included in the L.S. bid item "Seeding".

14. All existing and proposed erosion control measures including silt fencing, erosion control mat, straw bales, inlet barriers, and const. entrance shall be maintained throughout construction by the contractor and until project is accepted by the City of Wichita. The on-site engineer shall complete weekly reports on the status of erosion control measures. The contractor shall be required to comply with maintenance and/or replacement of erosion control measures as determined by the on-site engineer until project is accepted by City of Wichita. Maintenance and/or replacement of erosion control measures to be paid by L.S. bid item "Maintain Existing BMPs".

15. All excess excavation shall remain on-site and shall be stockpiled or spread at a location determined by the Engineer.

16. All bends of force main shall be blocked per City of Wichita waterline thrust block details.

17. Tracer wire, signs, and test stations with green caps shall be installed by the Contractor and to be paid for under pipe bid item.

18. Lift/Pump Station #70 Address: 1756 W 40th St. N., Wichita, KS 67204

SANITARY PUMP STATION #70 AND FORCE MAIN IMPROVEMENTS

to serve

HARBOR ISLE COMMERCIAL 1ST & 2ND ADDITIONS

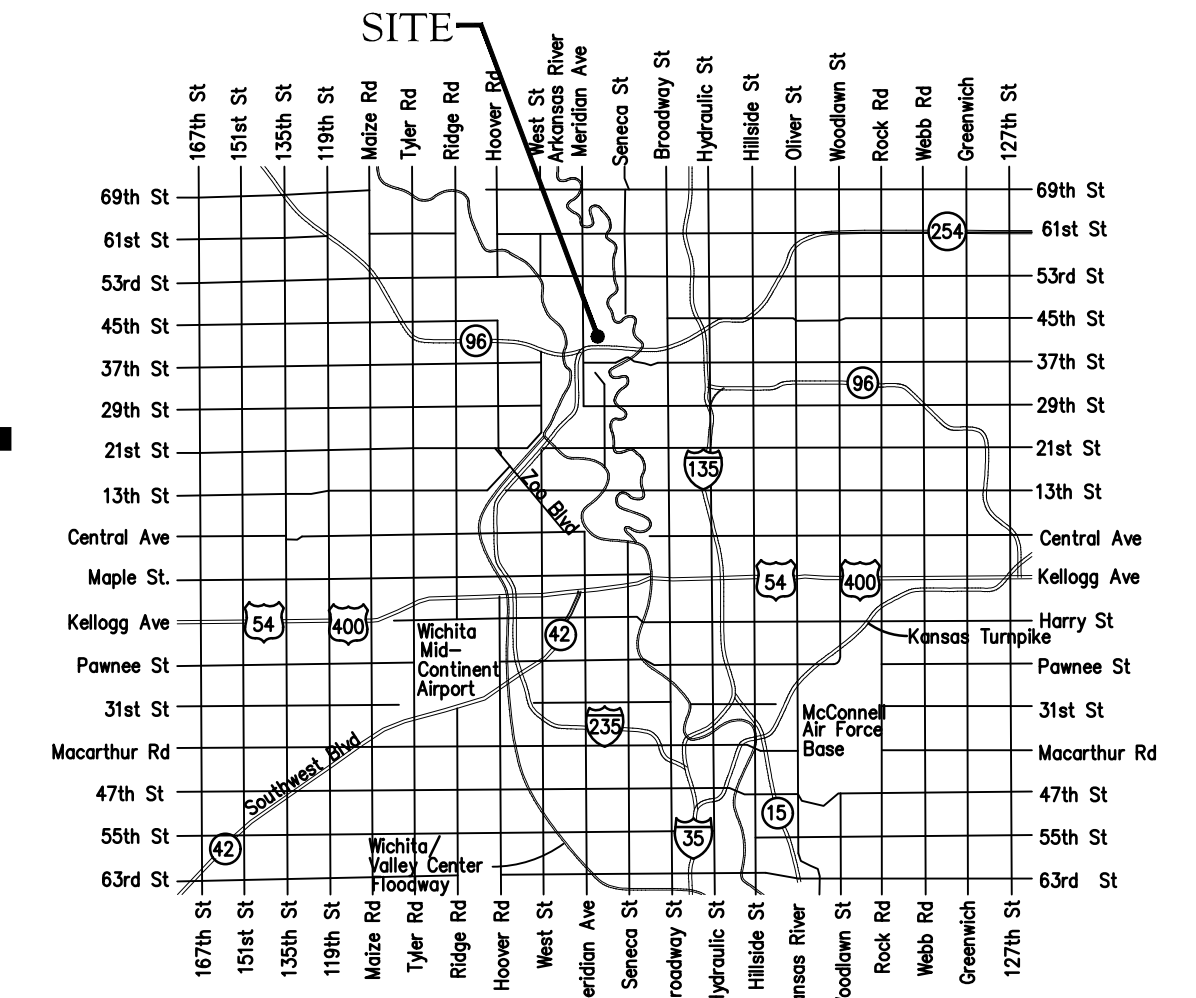
CITY OF WICHITA, KANSAS

Paul Gunzelman, P.E. City Engineer

Project Number 468-2023-005043

Org Code: 53200123

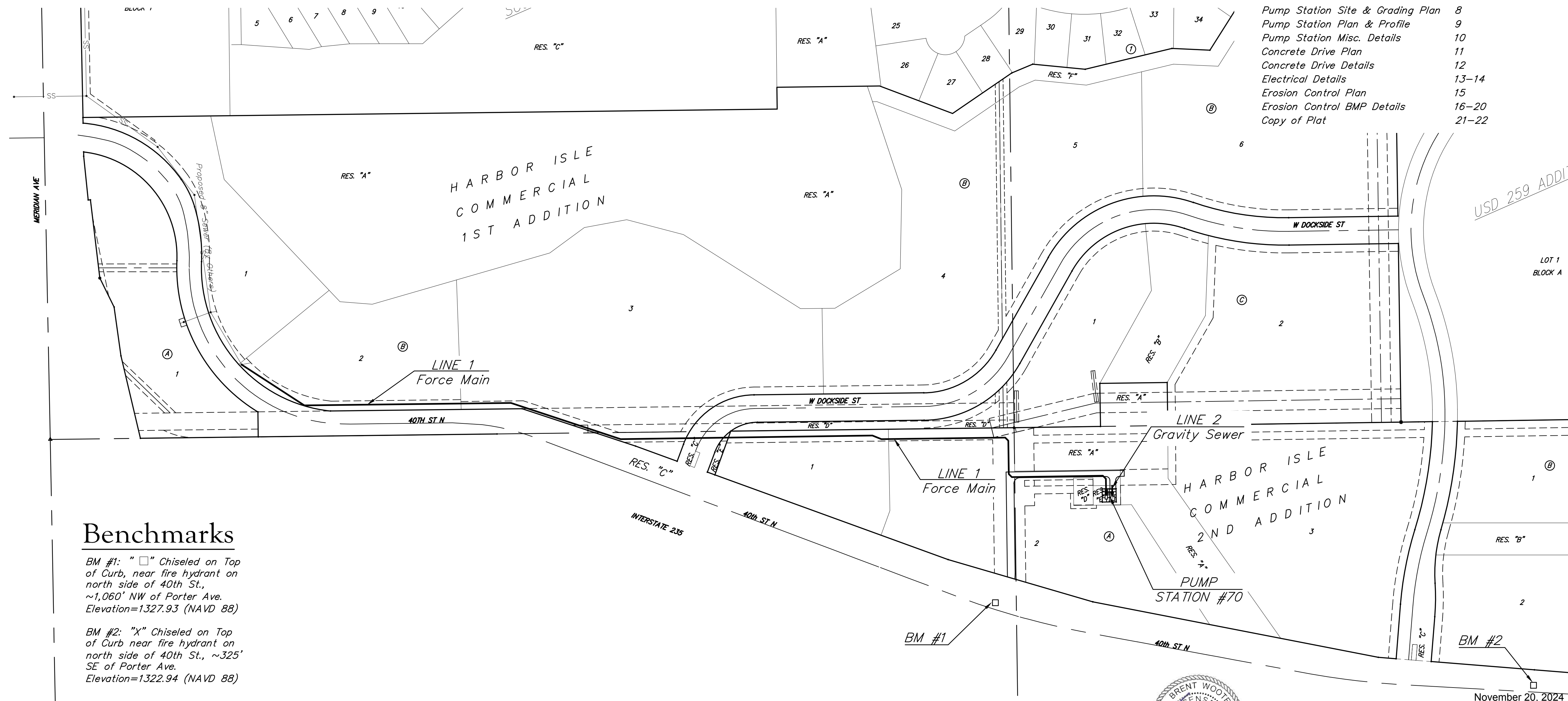
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Vicinity Map

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Benchmarks

BM #1: "□" Chiseled on Top of Curb, near fire hydrant on north side of 40th St., ~1,060' NW of Porter Ave. Elevation=1327.93 (NAVD 88)

BM #2: "X" Chiseled on Top of Curb near fire hydrant on north side of 40th St., ~325' SE of Porter Ave. Elevation=1322.94 (NAVD 88)



November 20, 2024

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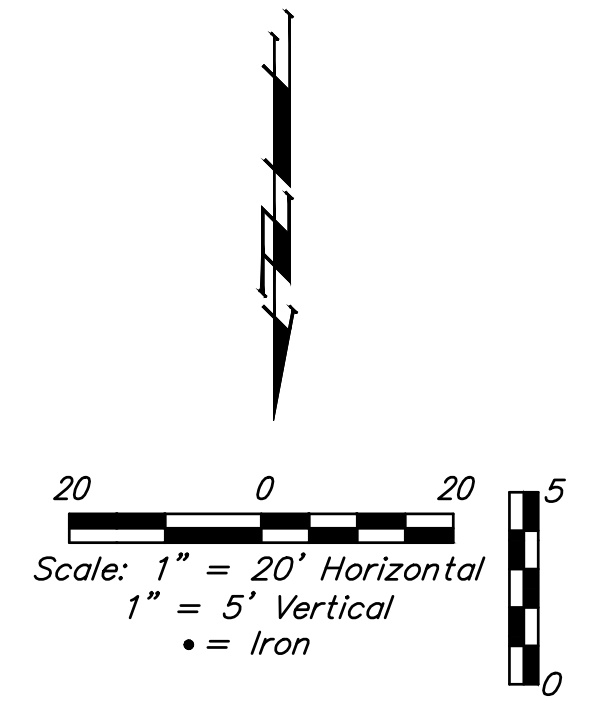
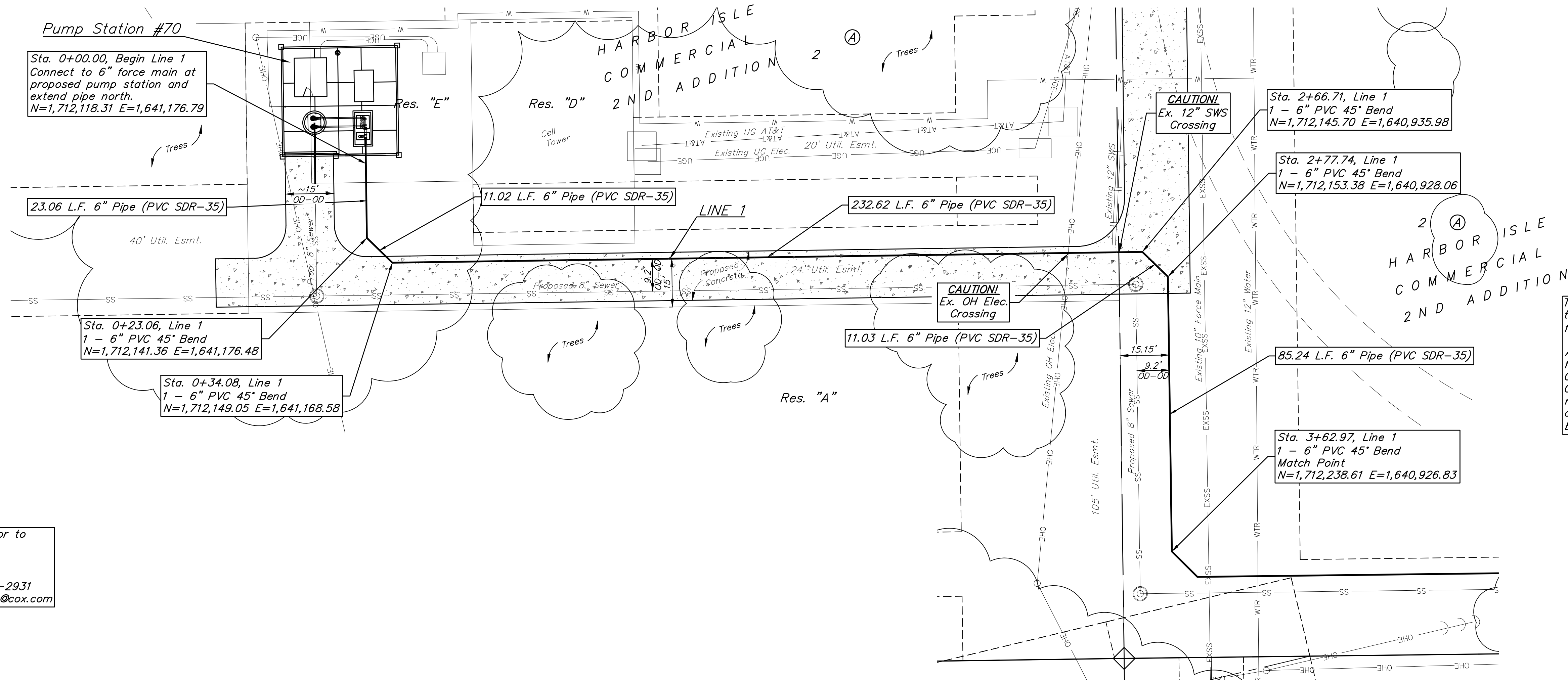
LOT 1 BLOCK A

BM #2

November 20, 2024

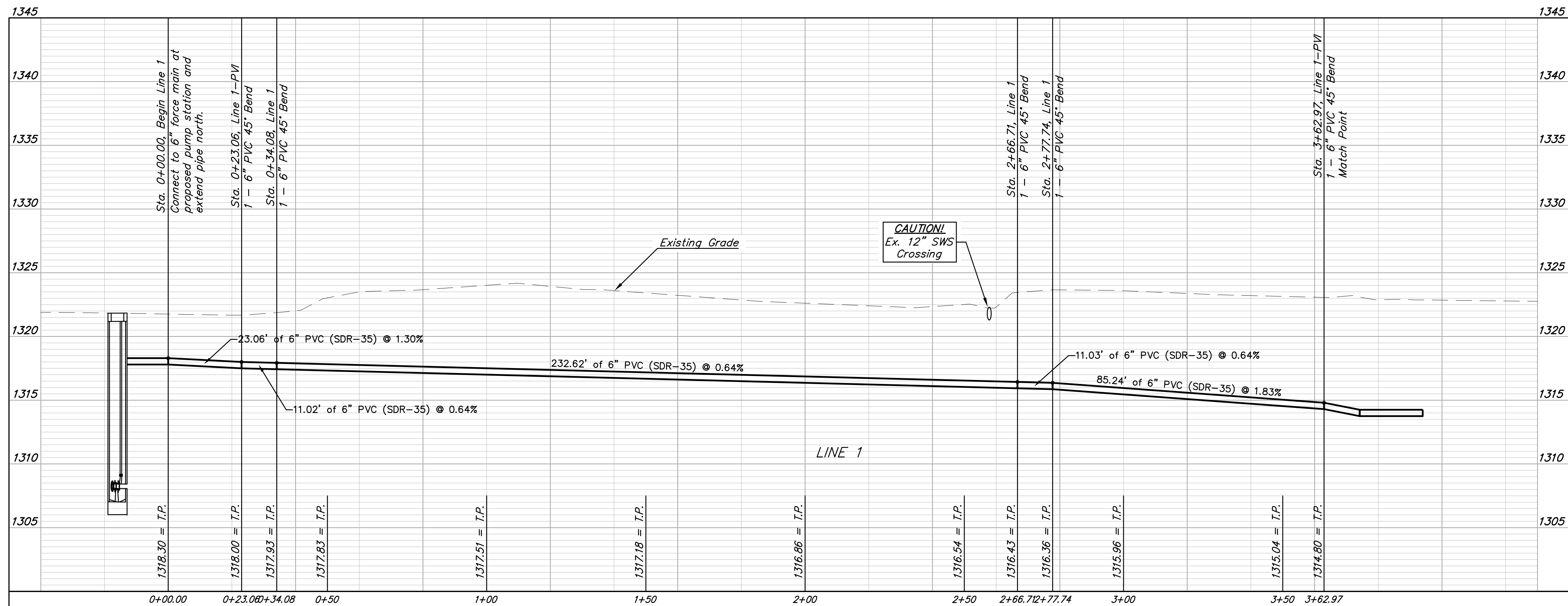
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Trees in conflict with force main construction to be removed by contractor. To be paid for as lump sum bid item "Site Clearing"
 All other trees shall remain and be protected from damage during construction. Overhanging limbs shall be trimmed by the Contractor using a chain saw only as necessary for construction and with approval of the Engineer. Cost of tree trimming to be included in bid item "Site Clearing"

Contact utility companies 3 weeks prior to construction to coordinate temporary removal/replacement.
 Heide Bryan, Evergy, (316) 261-6354
 Shannon Brinkmeyer, AT&T (316) 268-2931
 Travis Taylor, Cox Comm., Travis.taylor@cox.com





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HARBOR ISLE COMM.
 1ST & 2ND ADDITIONS

LINE 1

SANITARY SEWER IMPROVEMENTS

PROJECT NUMBER:
 22-08-E261

DESIGN: NBW DRAWN: TMS
 DATE: November 13, 2024

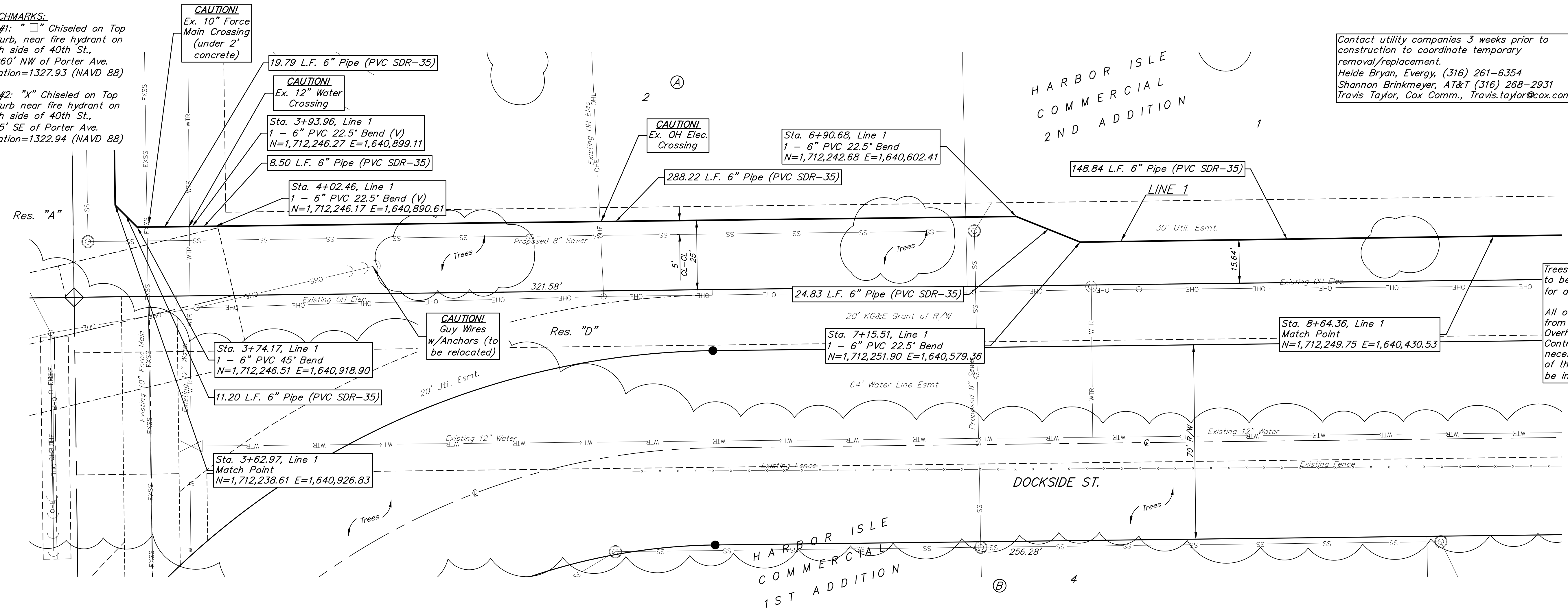
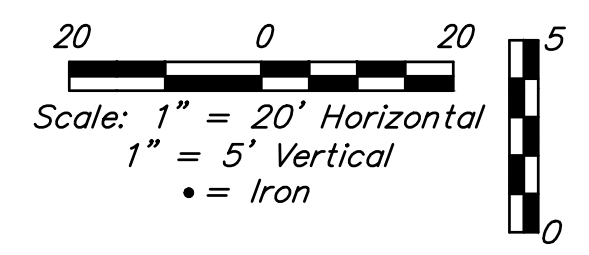
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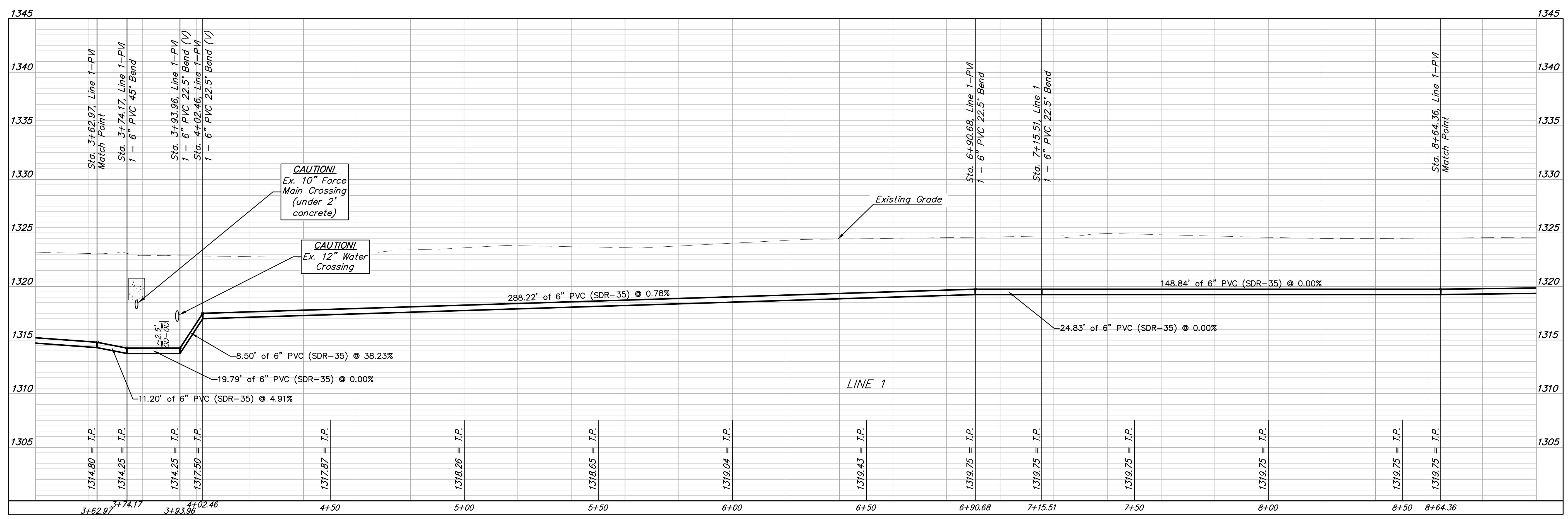
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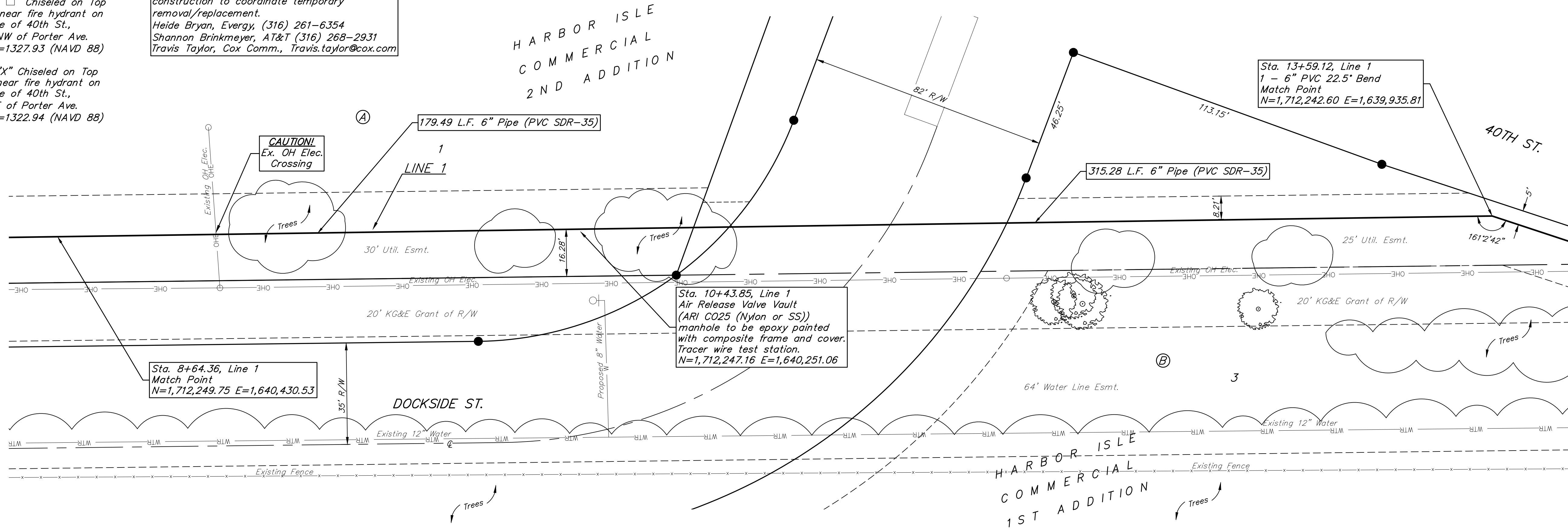
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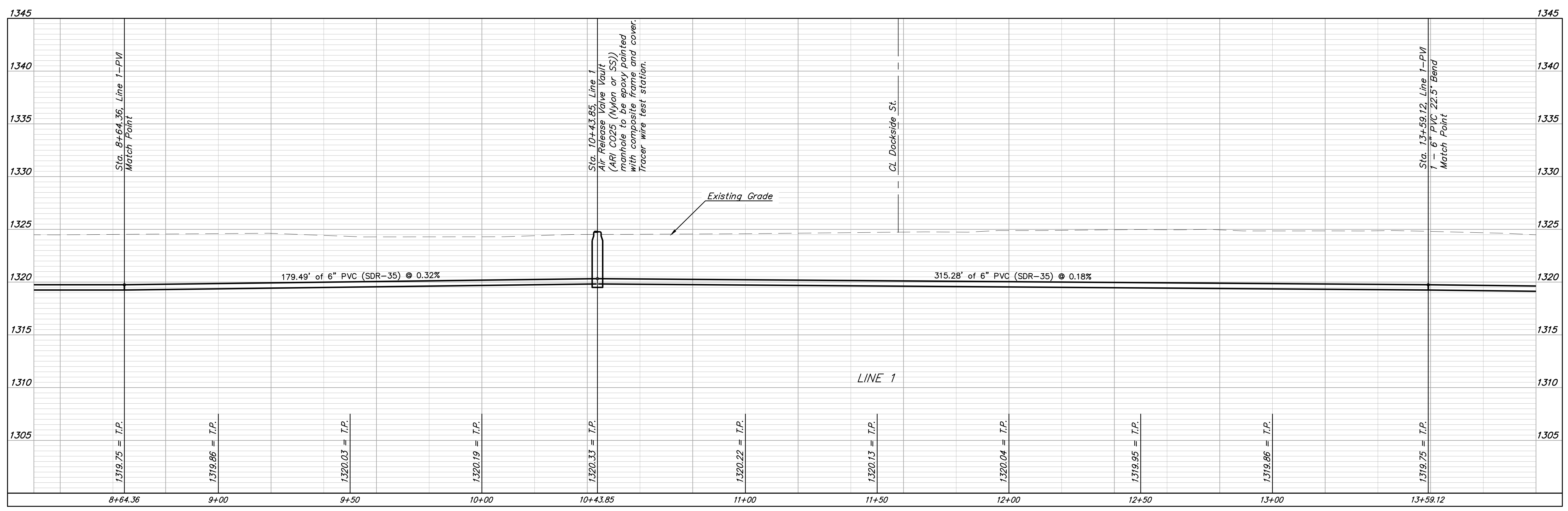
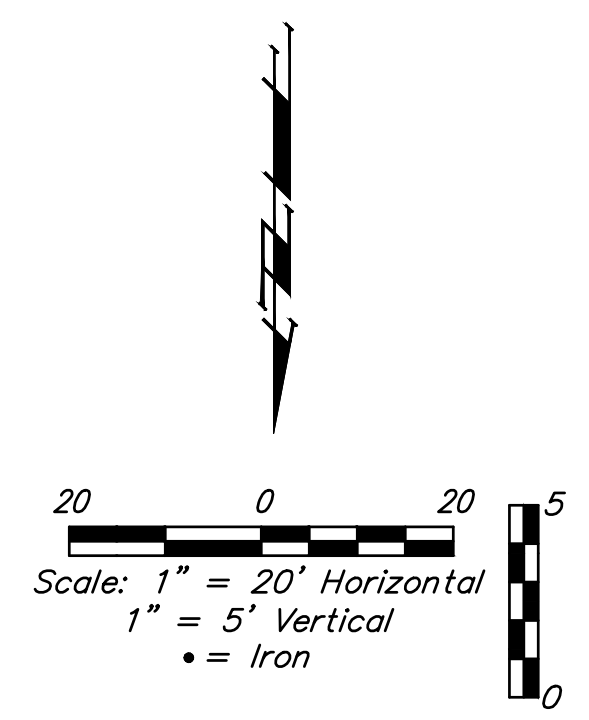
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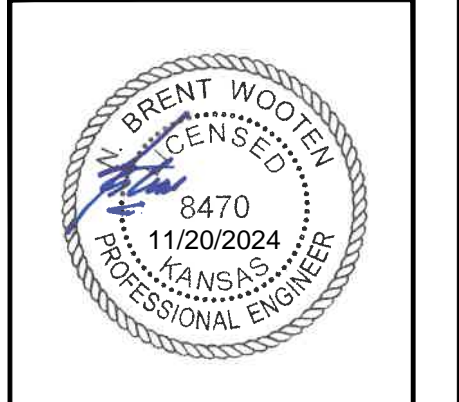


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 SHEET 4 OF 22

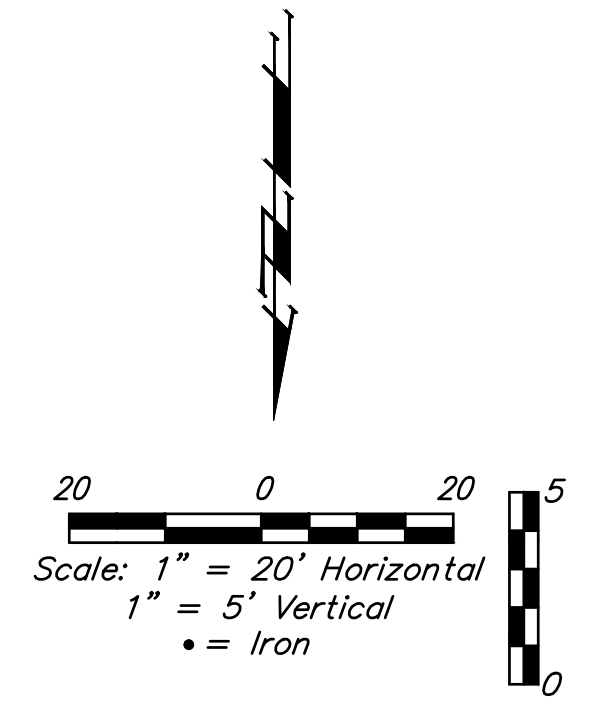
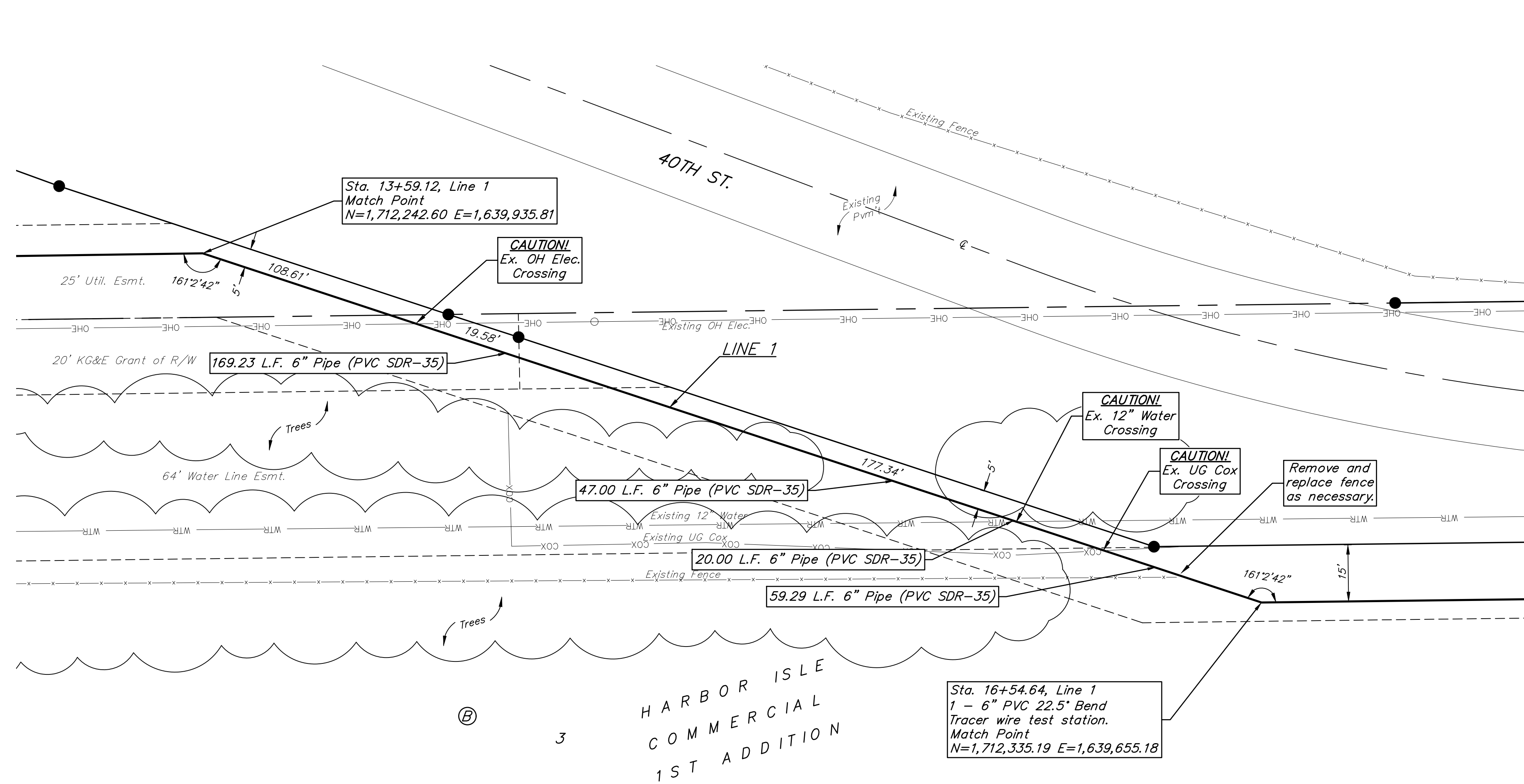


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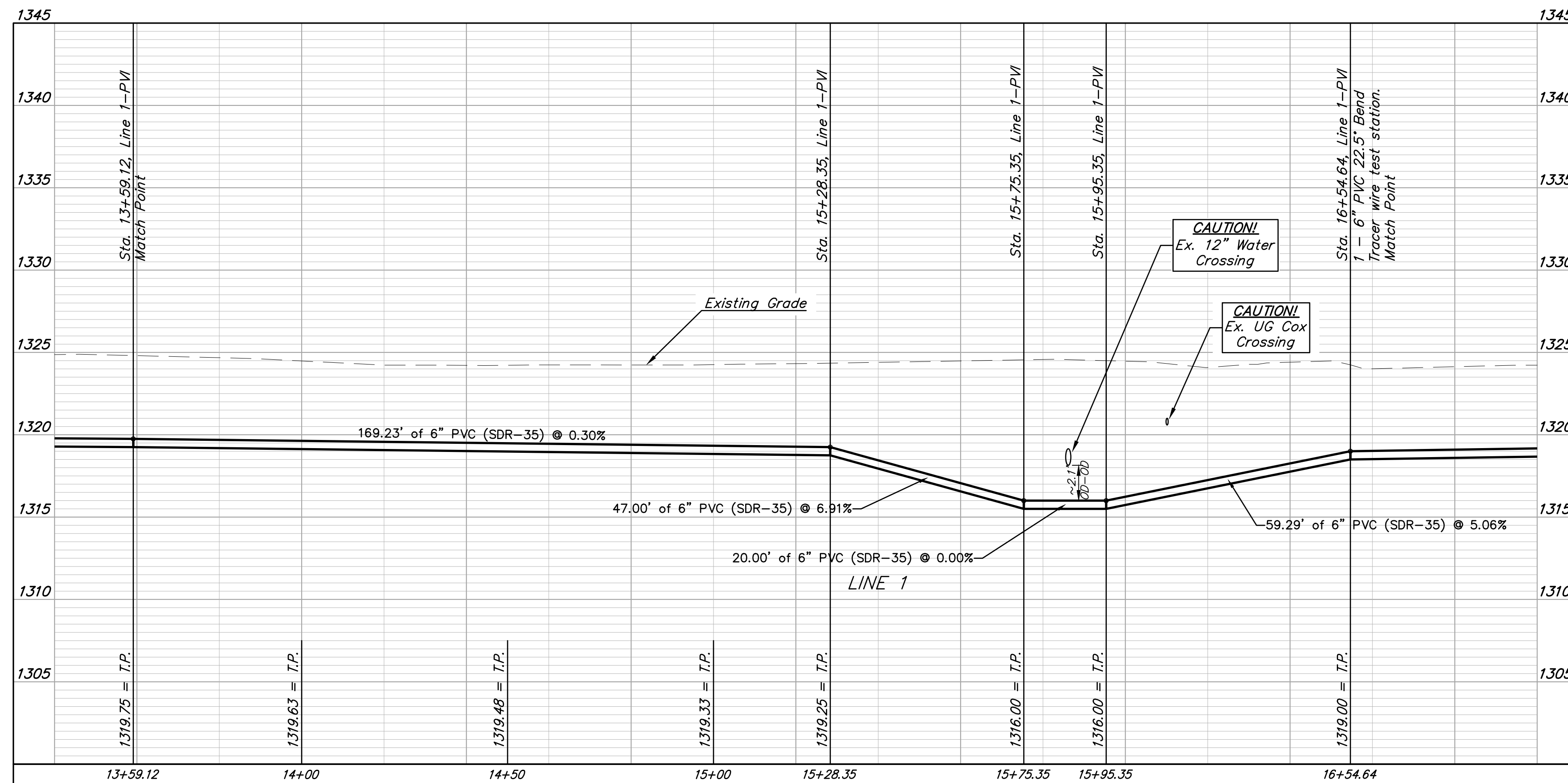
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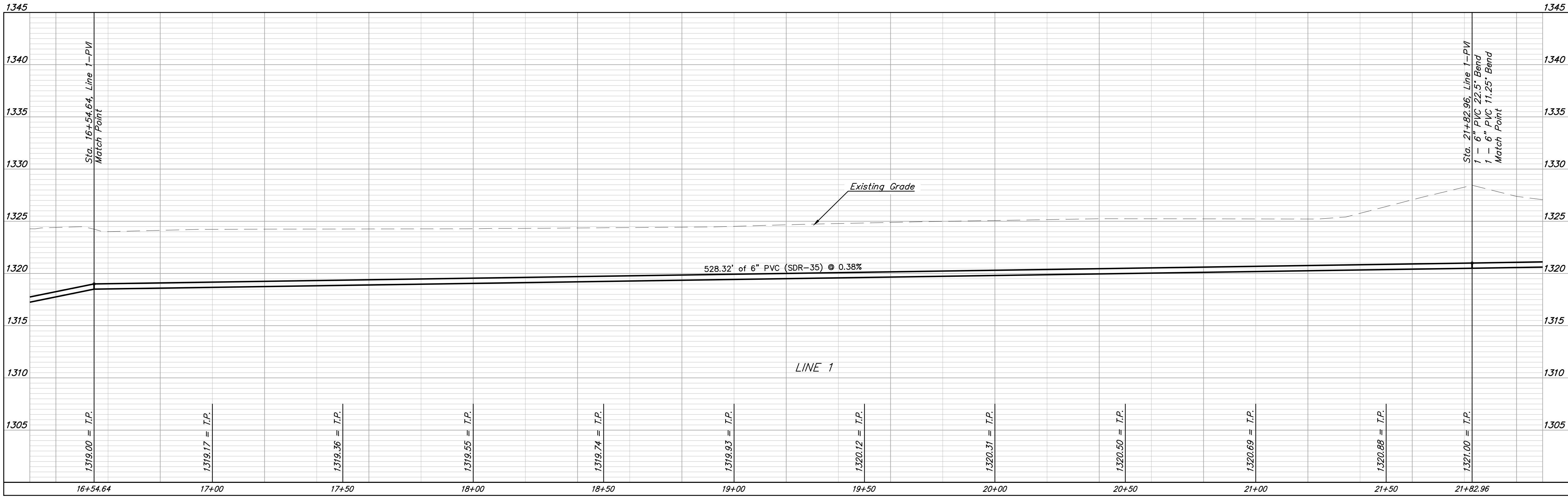
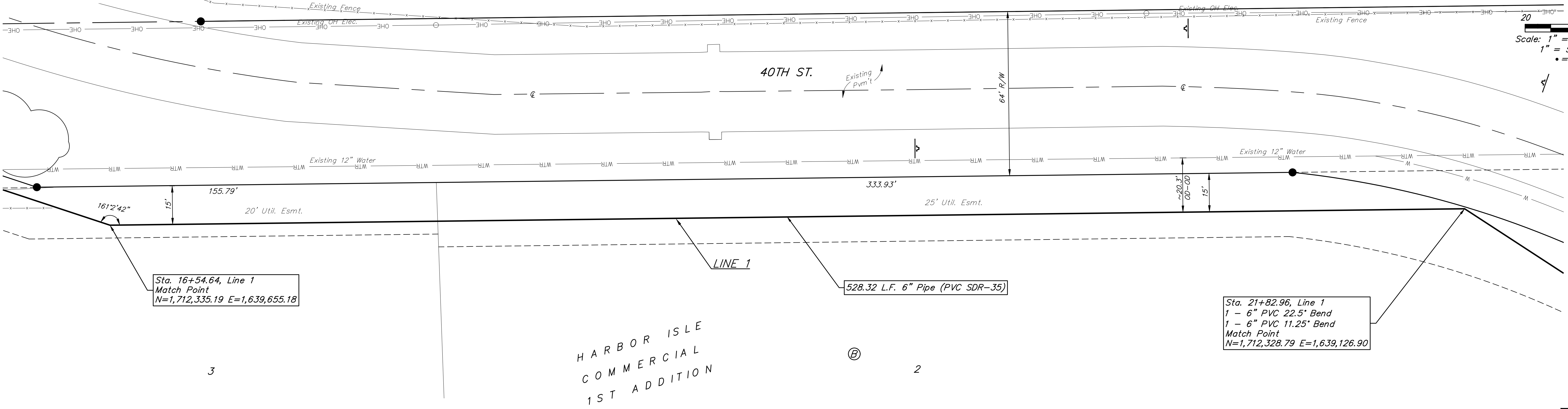
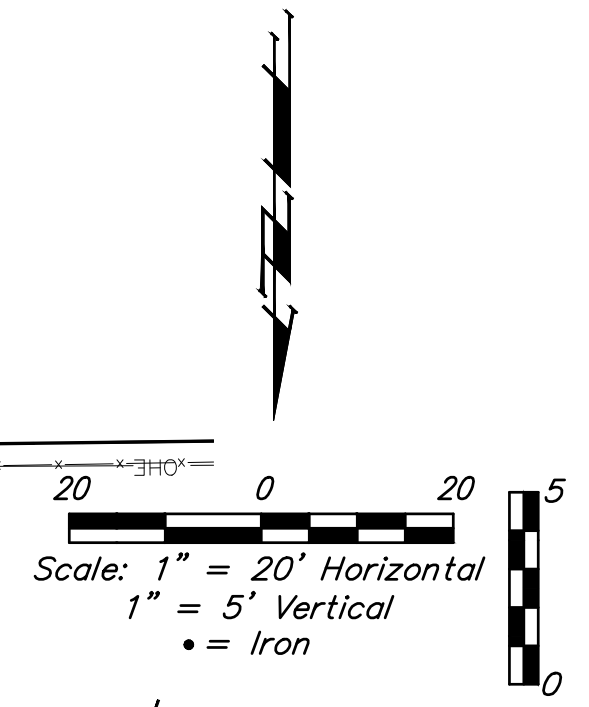
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HARBOR ISLE COMM. 1ST & 2ND ADDITIONS
LINE 1
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HARBOR ISLE COMM.
 1ST & 2ND ADDITIONS

LINE 1

SANITARY SEWER IMPROVEMENTS

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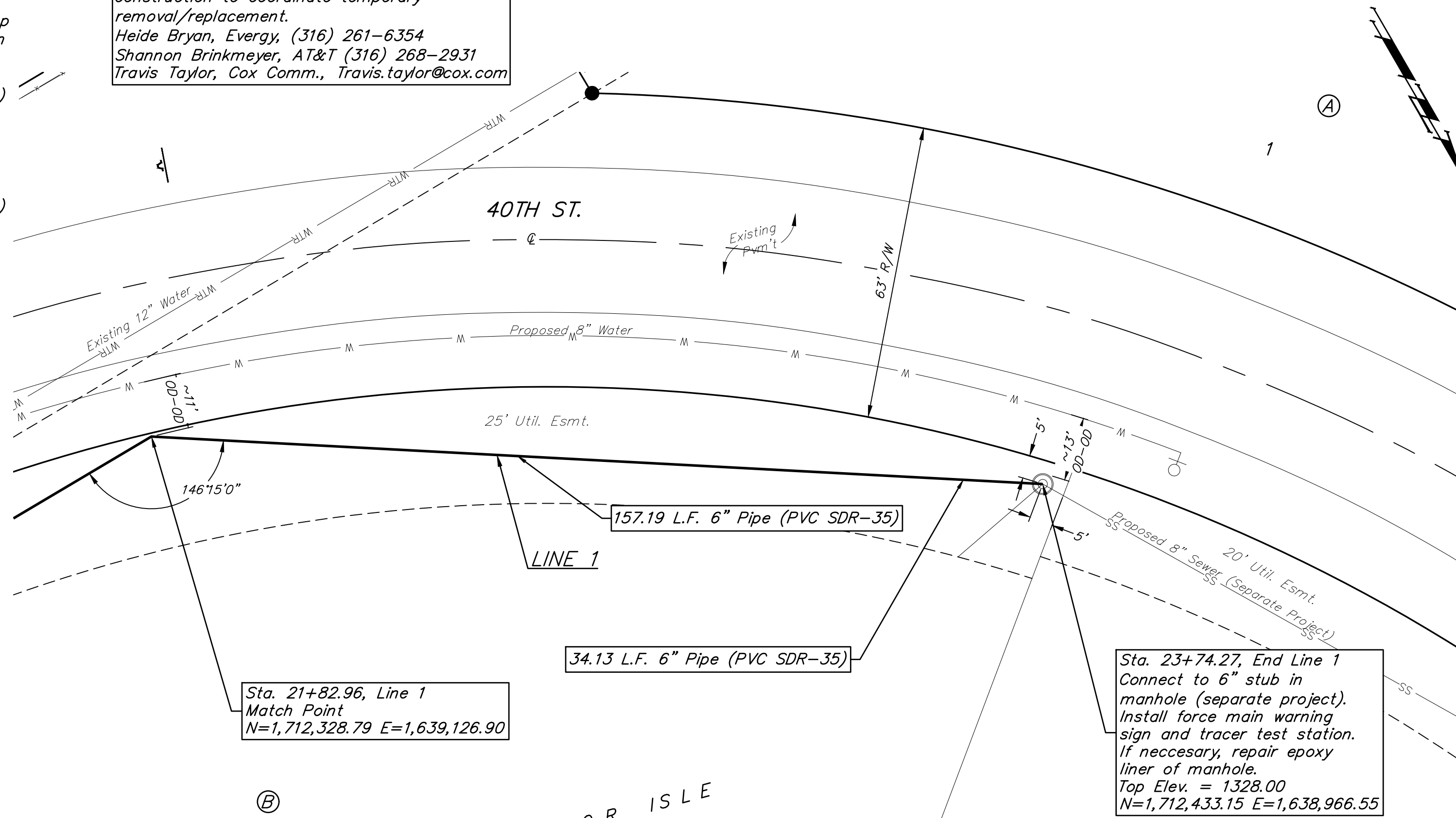
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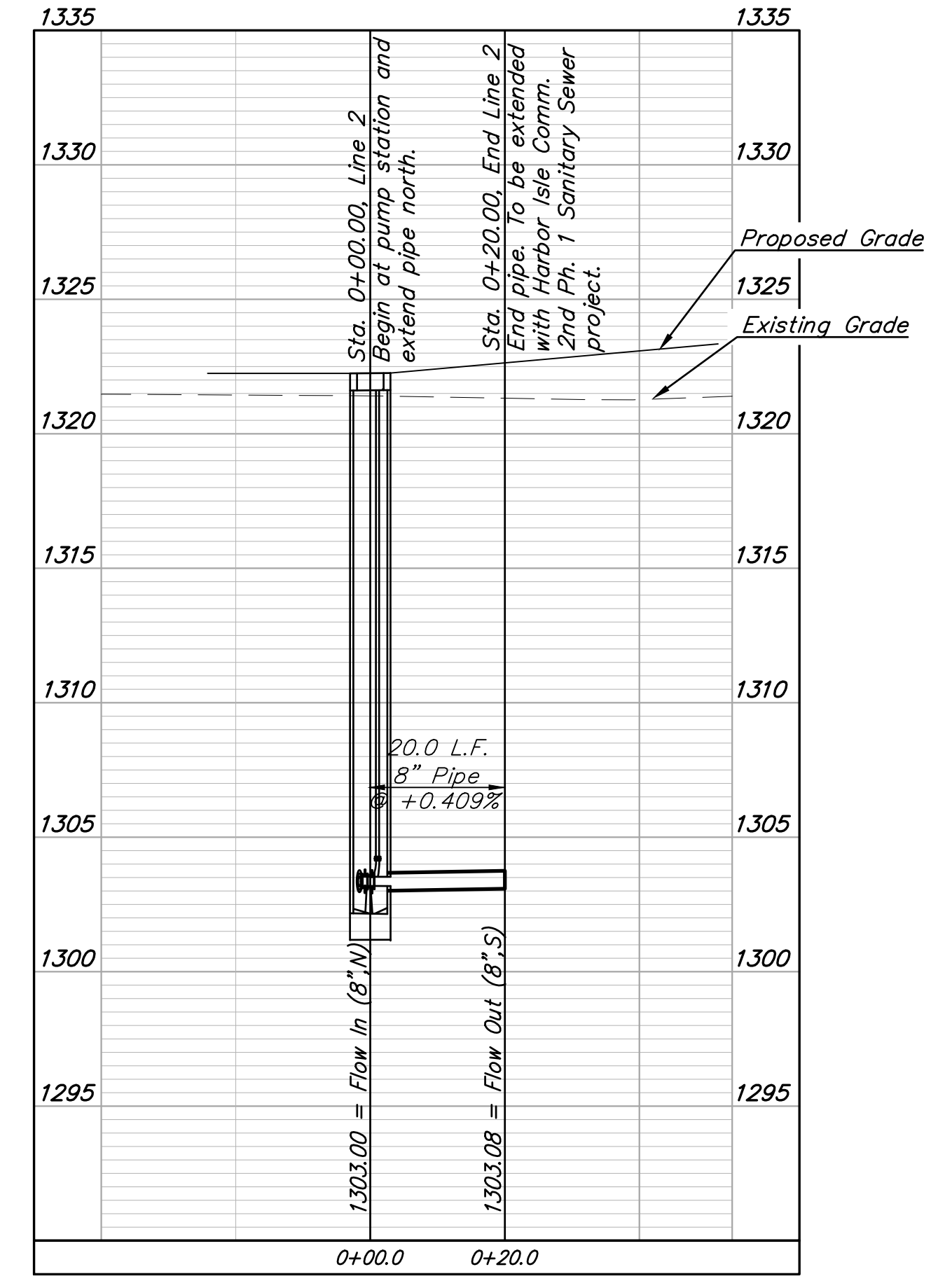
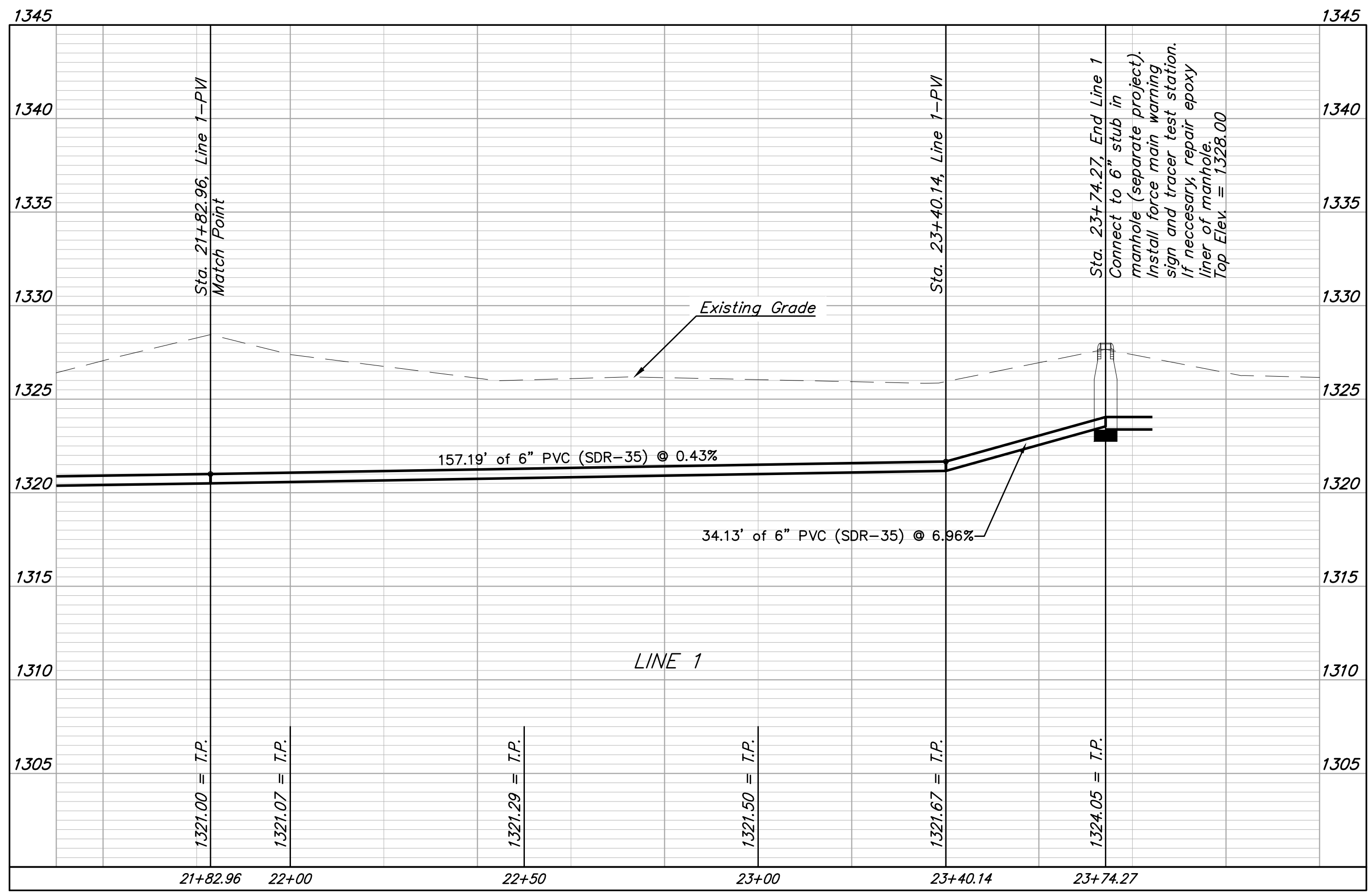
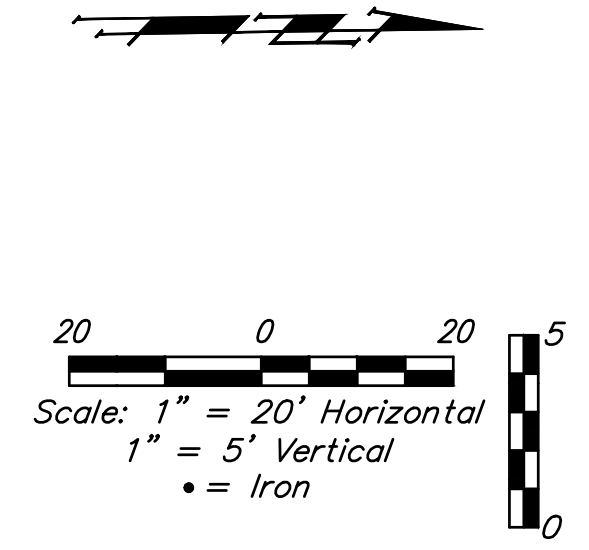
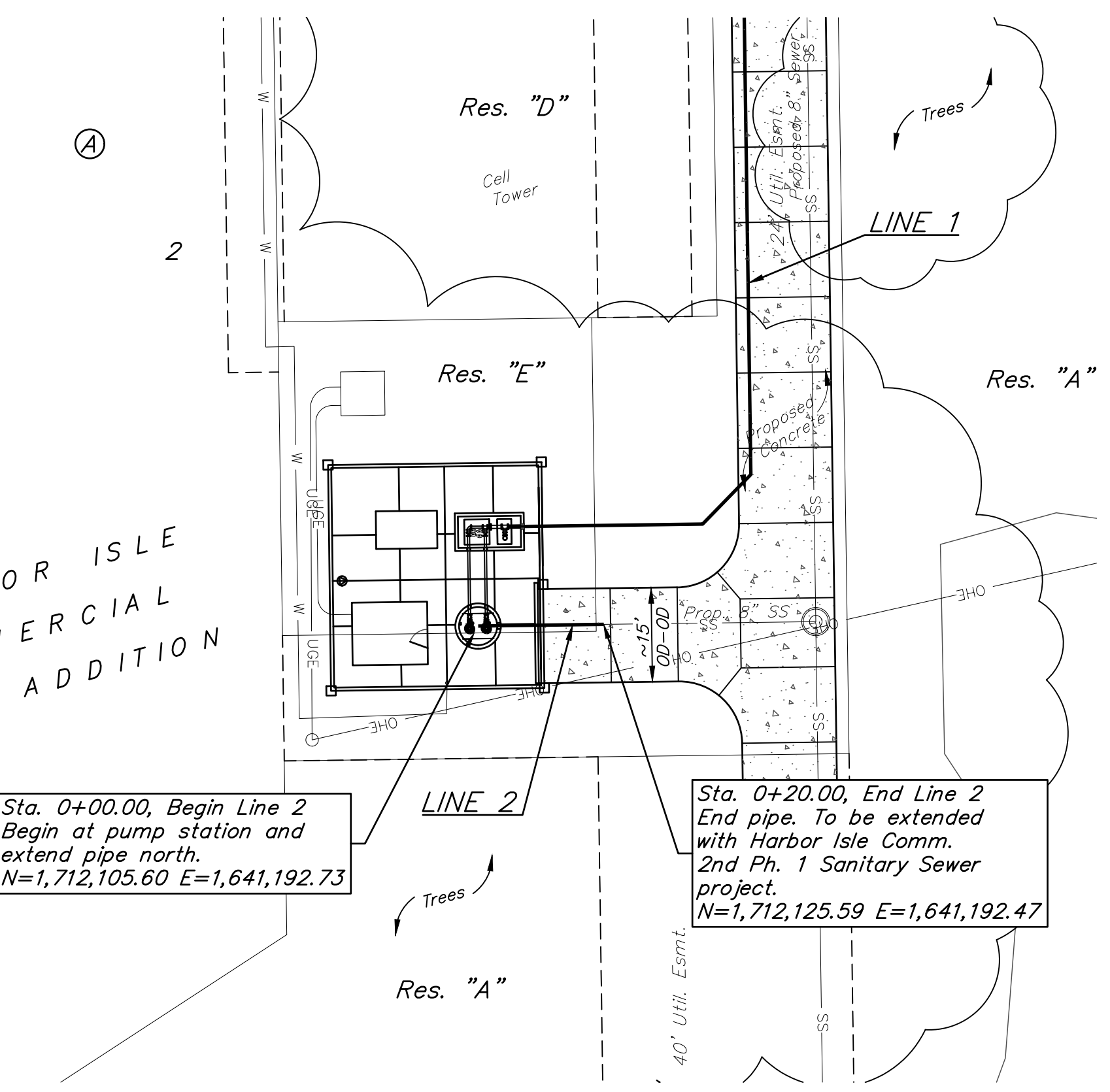
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HARBOR ISLE COMMERCIAL 1ST ADDITION

HARBOR ISLE COMMERCIAL 2ND ADDITION



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HARBOR ISLE COMM. 1ST & 2ND ADDITIONS

LINE 1 & 2

SANITARY SEWER IMPROVEMENTS

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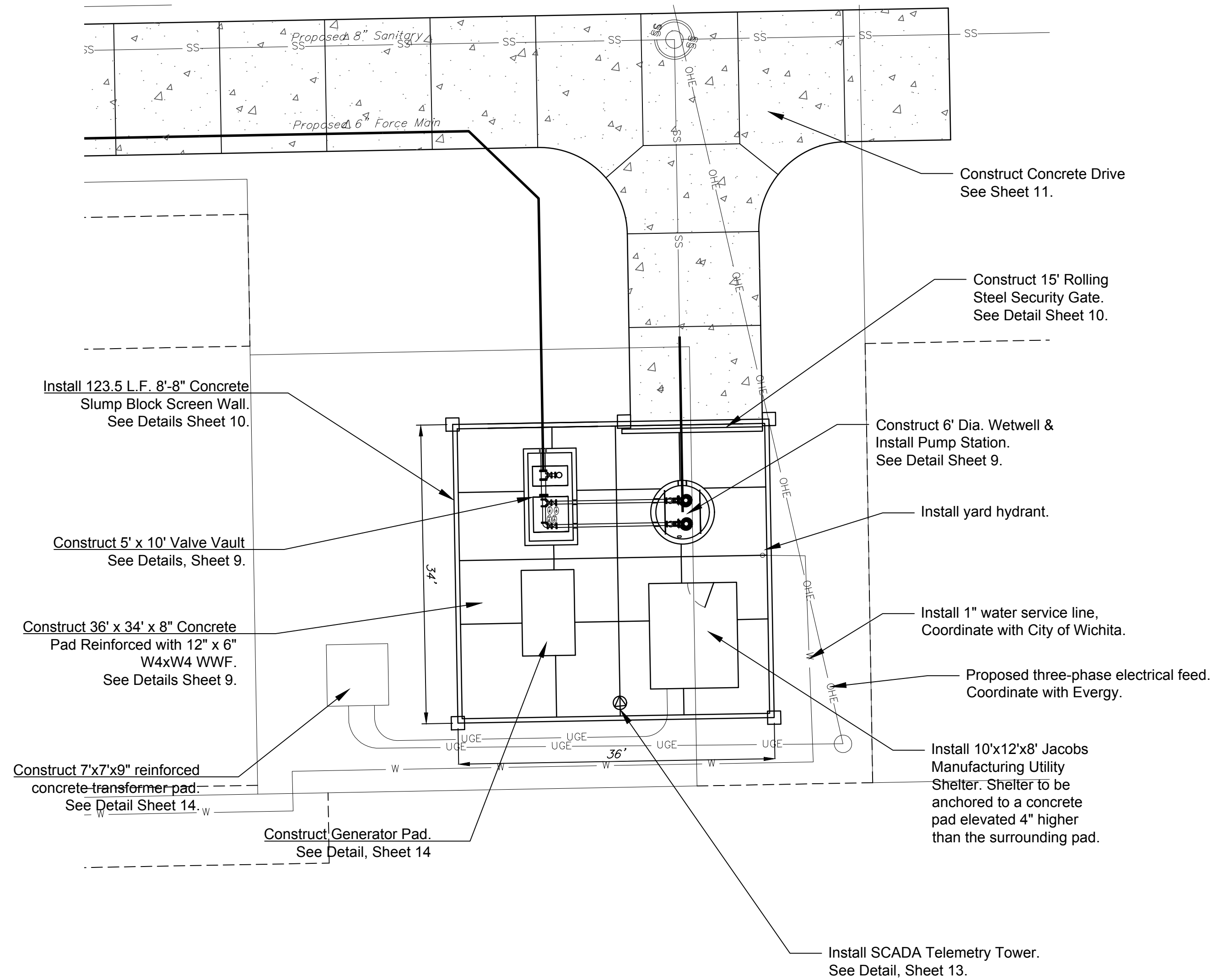
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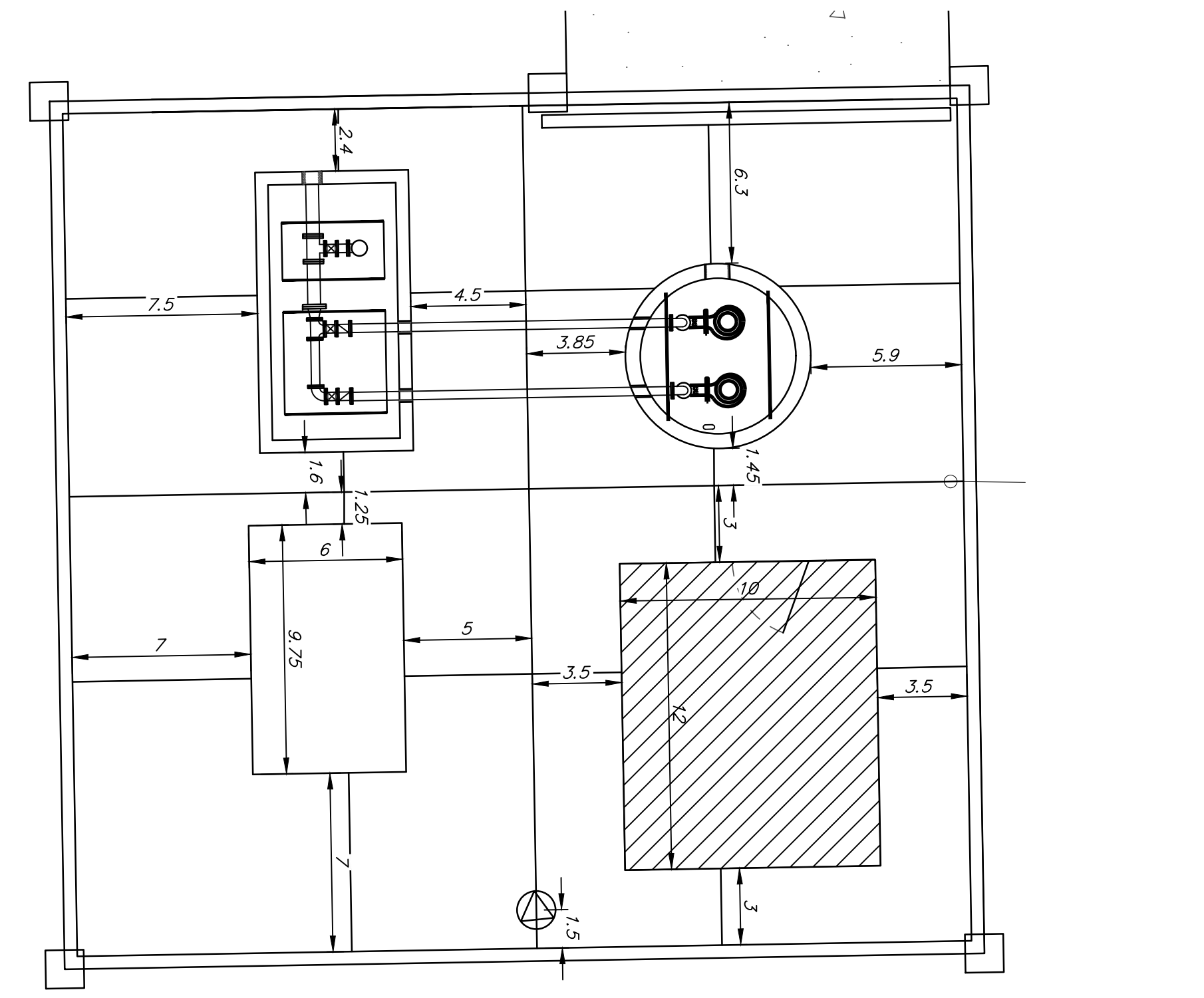
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Pump Station Site Plan

Scale: 1" = 10'

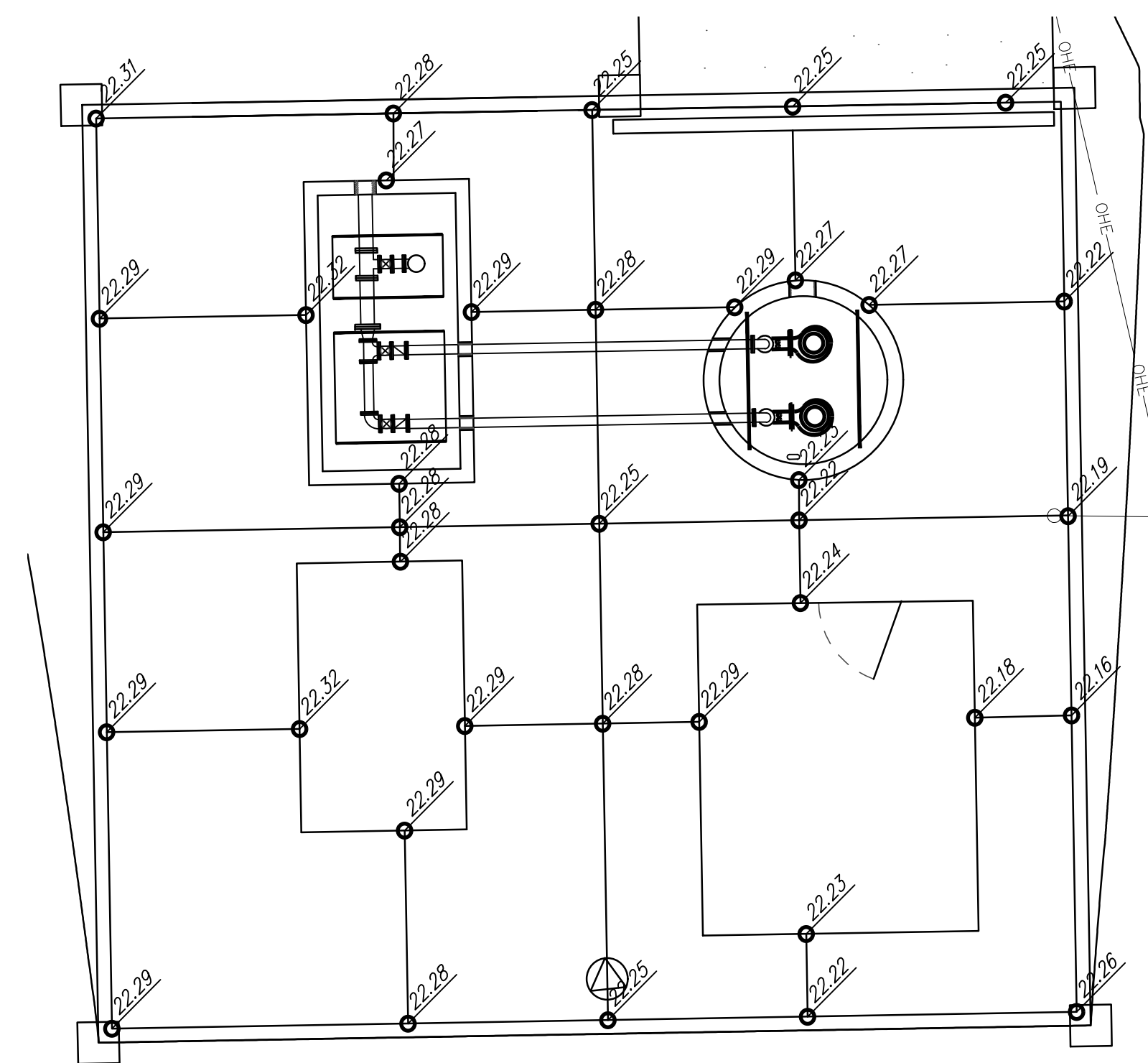
Note: The cost of all work required to construct the lift station, including the wet well and vault, pumps, valves, piping, shelter, screen walls, gate, concrete flat work, including lift station pad, transformer pad, and power supply and electronic controls shall be included in the Lump Sum Bid item "Lift Station."



Concrete Pad Joint Plan

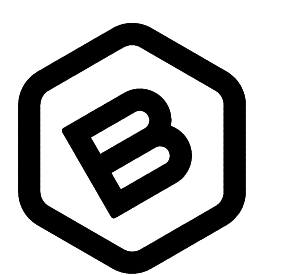
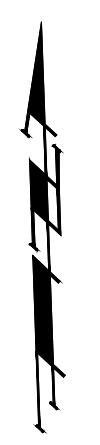
Scale: 1"=5'

Denotes area to have 4" thick concrete floor on top of 8" thick reinf. concrete pad.



Concrete Pad Grading Plan

Scale: 1"=5'



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HARBOR ISLE COMM.
1ST & 2ND ADDITIONS

Pump Station Site Plan

SANITARY SEWER IMPROVEMENTS

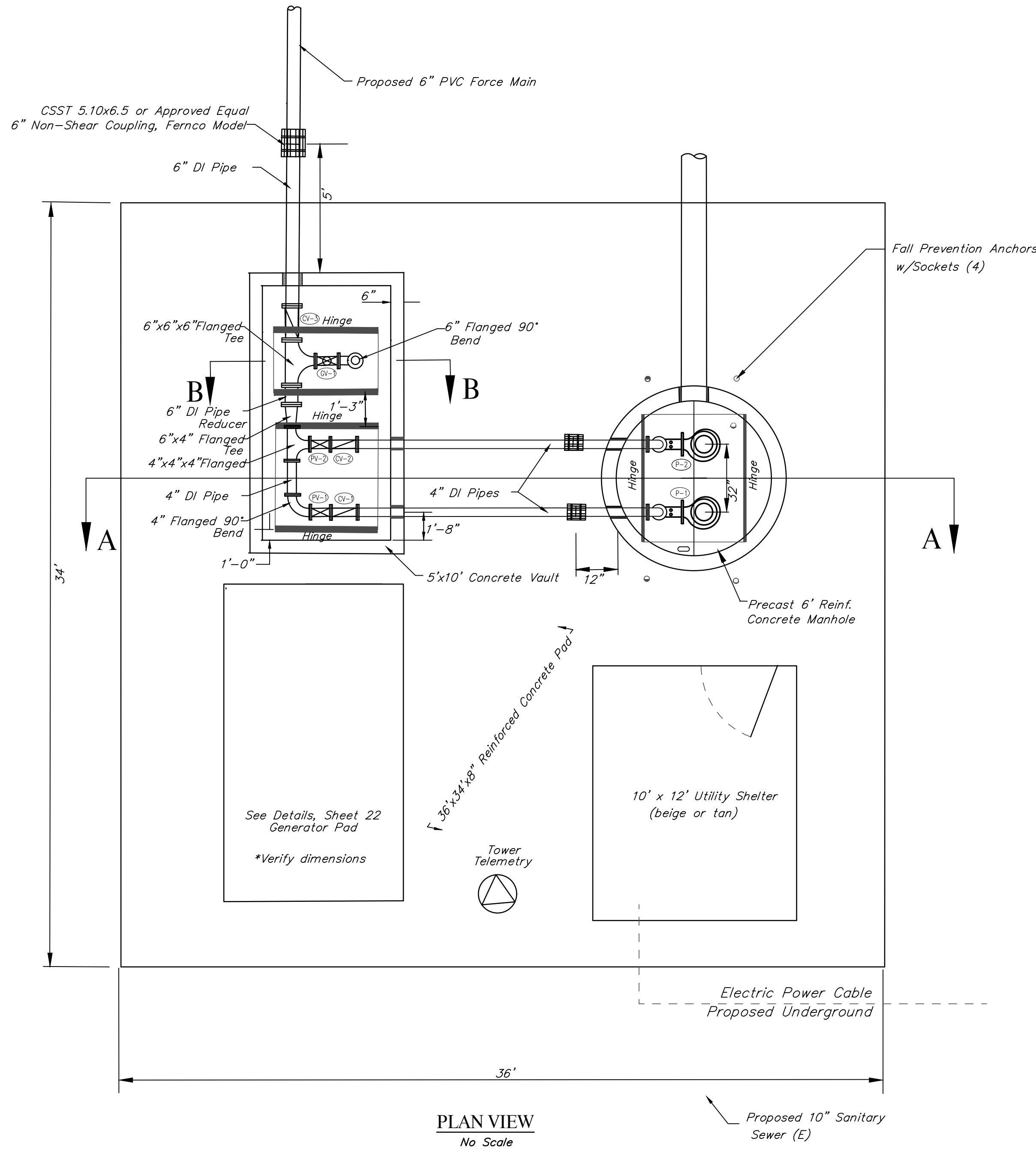
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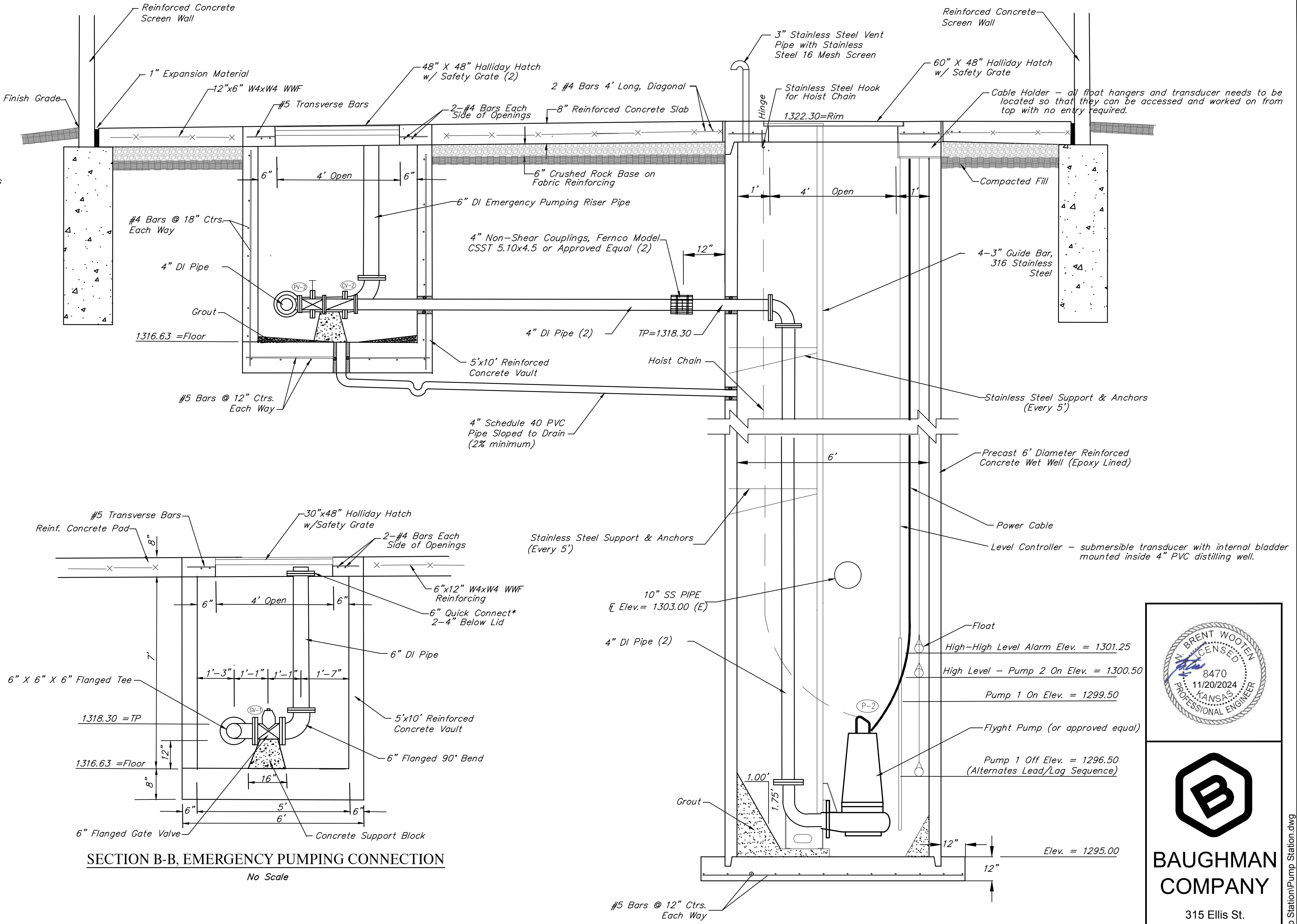
DATE: November 13, 2024

SHEET **8** OF **22**

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PLAN VIEW
No Scale



SECTION B-B, EMERGENCY PUMPING CONNECTION
No Scale

SECTION A-A
No Scale

- The price bid for Furnishing and Installing the Pump Station, including the Wet Well, Valve Vault, and Other Miscellaneous Appurtenances, Shall include all costs for Furnishing and Installing the Pump Station as indicated in the Plans Complete in Place and in Operation. This Price Shall include the Cost of Constructing and/or Installing Compacted Subgrade, Concrete Pavement, Electrical Conduit, Electrical Wiring, Disconnect Switch, Pump Controls, Electrical Power Supply, Generator, Finished Grading, Concrete Slump Block Wall, and any Other Incidentals Necessary to Complete the Work and Place the Lift Station into Satisfactory Operation. The Price Bid Shall include All Sanitary Sewer Pipe and Force Main Extended Outside the Slab as Shown in the Site Plan and Details.
- All Force Main Piping Shall be Ductile Iron (Flanged) to 5' Outside the Structures, Unless Otherwise Noted. All Interior Piping Shall be Epoxy Coated 401 Ductile Iron Pipe, or approved equal.
- Pipe Penetrations Thru the Wet Well, Valve Vault, and Concrete Pad Shall be Grouted Watertight With Non-Shrink Grout and Water Stop Gaskets as Required.
- The Contractor shall perform an Exfiltration Test on the complete Wet Well. The Wet Well shall be tested individually by securely plugging all inlet and outlet pipes. The Wet Well shall be filled to its full depth and then observed for at least six (6) hours. Exfiltration loss from the 6-foot diameter Wet Well shall not exceed the rate of 1.70 Gallons per foot of Wet Well depth per day. If exfiltration exceeds the maximum limits, the Contractor shall repair the leaks and defects, and then retest.
- The Contractor shall support all piping inside the Wet Well and Valve Vault as required.
- All hardware inside the Wet Well and Valve Vault, including but not limited to the Guide Bar, Hoist Chain, Chain Catch, etc. shall be stainless steel. 316 Stainless Steel shall be used when available, otherwise 304 Stainless Steel is acceptable. Nylon Rope will not be allowed in the Wet Well.
- Wet Well and Valve Vault design shall be subject to the same design requirements as Precast Manholes.
- The interior of the Wet Well shall be epoxy lined per City of Wichita's approved list.
- Backfill around the Wet Well and under the Valve Vault and Pad shall be a low volume change material compacted to 95% ASTM D-1557.
- The Contractor shall coordinate with Evergy Energy to extend electric services to the Pump Station Site. The Contractor shall verify the electrical service costs & requirements PRIOR to Bidding. ALL COST INCURRED TO EXTEND SERVICES TO THE SITE SHALL BE INCLUDED IN LUMP SUM BID ITEM "PUMP STATION MODULE".
- The Contractor shall verify all requirements and dimensions of the Generator Pad with the Generator Supplier prior to construction.

- No Electrical Connections will be Allowed within the Wetwell.
- Contractor shall install 4 Fall Prevention Anchors at locations as shown outside of Hatch on above drawing. Anchors shall be 3M/Sala Model 2100169 Pour-in-Place Detent Anchor w/ Socket or approved equal.
- Telemetry tower to be SCADA Pac per City Specifications. The antenna coaxial cable to be a weather head at the base of the tower. Antenna grounding rod to be located inside the triangle base to reduce trip hazards.

PLUG VALVE SCHEDULE

MARK	LOCATION	STATUS	SIZE	FITTINGS	OPERATOR
PV-1	VALVE VAULT	NEW	4"	FLANGE	GEARED OPERATOR W/ EXTENSION & 2" NUT
PV-2	VALVE VAULT	NEW	4"	FLANGE	GEARED OPERATOR W/ EXTENSION & 2" NUT

GATE VALVE SCHEDULE

MARK	LOCATION	STATUS	SIZE	FITTINGS	OPERATOR
GV-1	VALVE VAULT	NEW	4"	FLANGE	GEARED OPERATOR W/ EXTENSION & 2" NUT

CHECK VALVE SCHEDULE

MARK	LOCATION	STATUS	SIZE	FITTINGS	OPERATOR
CV-1	VALVE VAULT	NEW	4"	FLANGE	LEVER & SPRING
CV-2	VALVE VAULT	NEW	4"	FLANGE	LEVER & SPRING
CV-3	VALVE VAULT	NEW	6"	FLANGE	LEVER & SPRING

PUMP SCHEDULE

MARK	TYPE	GPM	HEAD (FT)	EFF. %	HP	RPM	ELECT.
P-1	SUBMERSIBLE	457	69.1	51.3	20	1763	460/60/3
P-2	SUBMERSIBLE	457	69.1	51.3	20	1763	460/60/3

Note: See Electrical Detail Sheets for Pump Control Wiring & Enclosures.

BAUGHMAN COMPANY

315 Ellis St.
Wichita, KS 67211
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BaughmanCo.com

HARBOR ISLE COMM.
1ST & 2ND ADDITIONS

Pump Station Plan & Profile

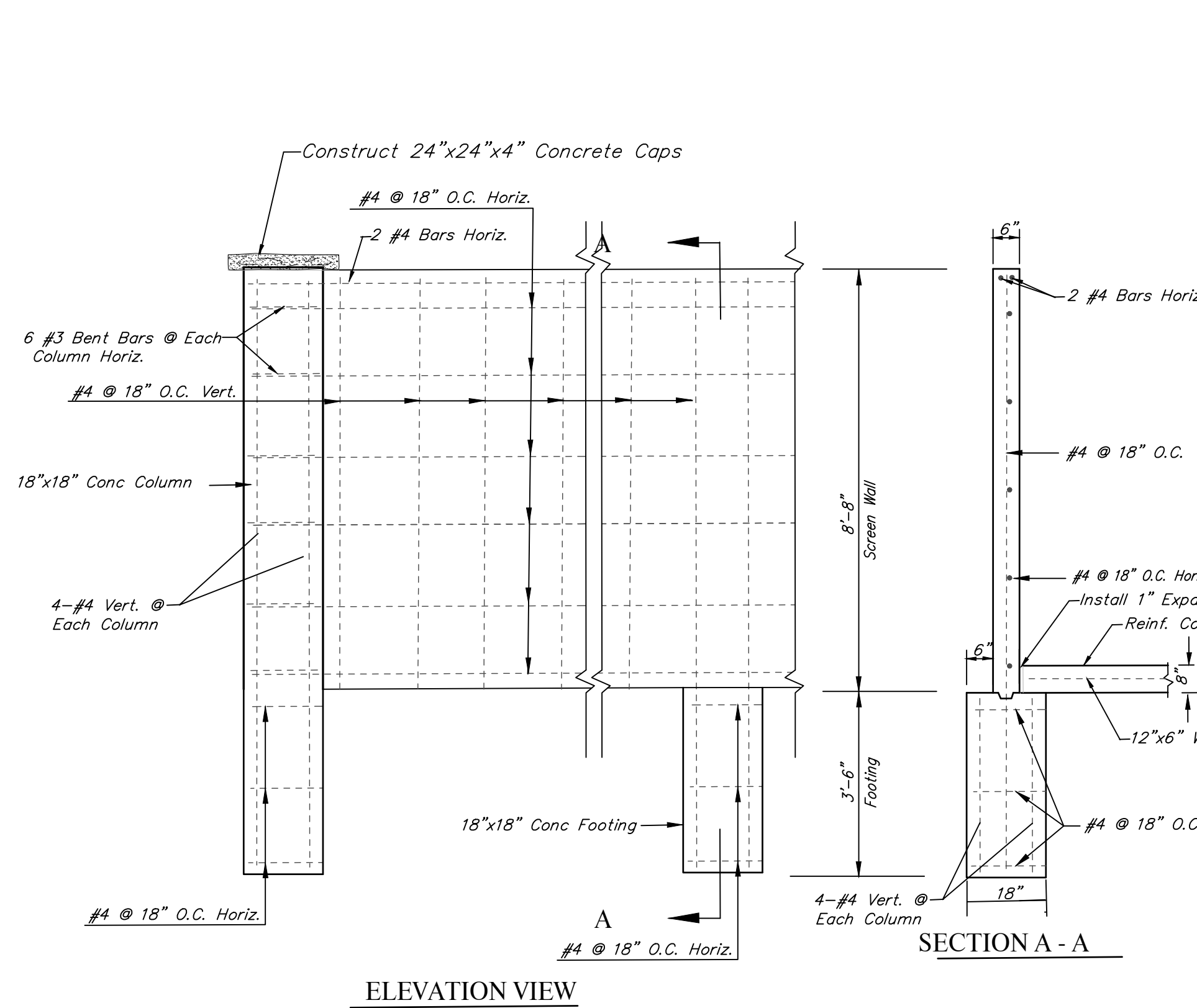
SANITARY SEWER IMPROVEMENTS

PROJECT NUMBER:
22-08-E261

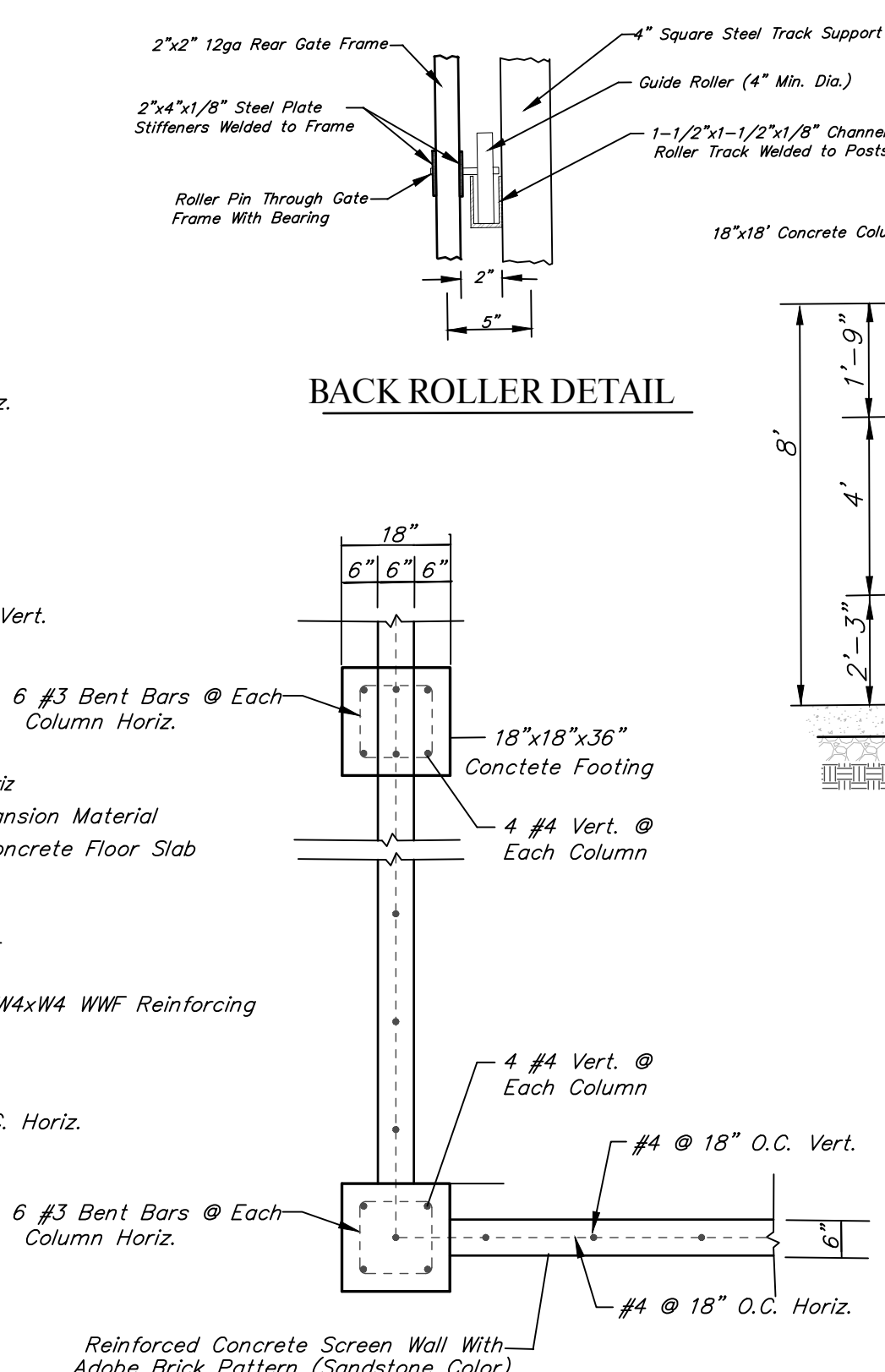
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DATE: November 18, 2024

SHEET OF
9 22

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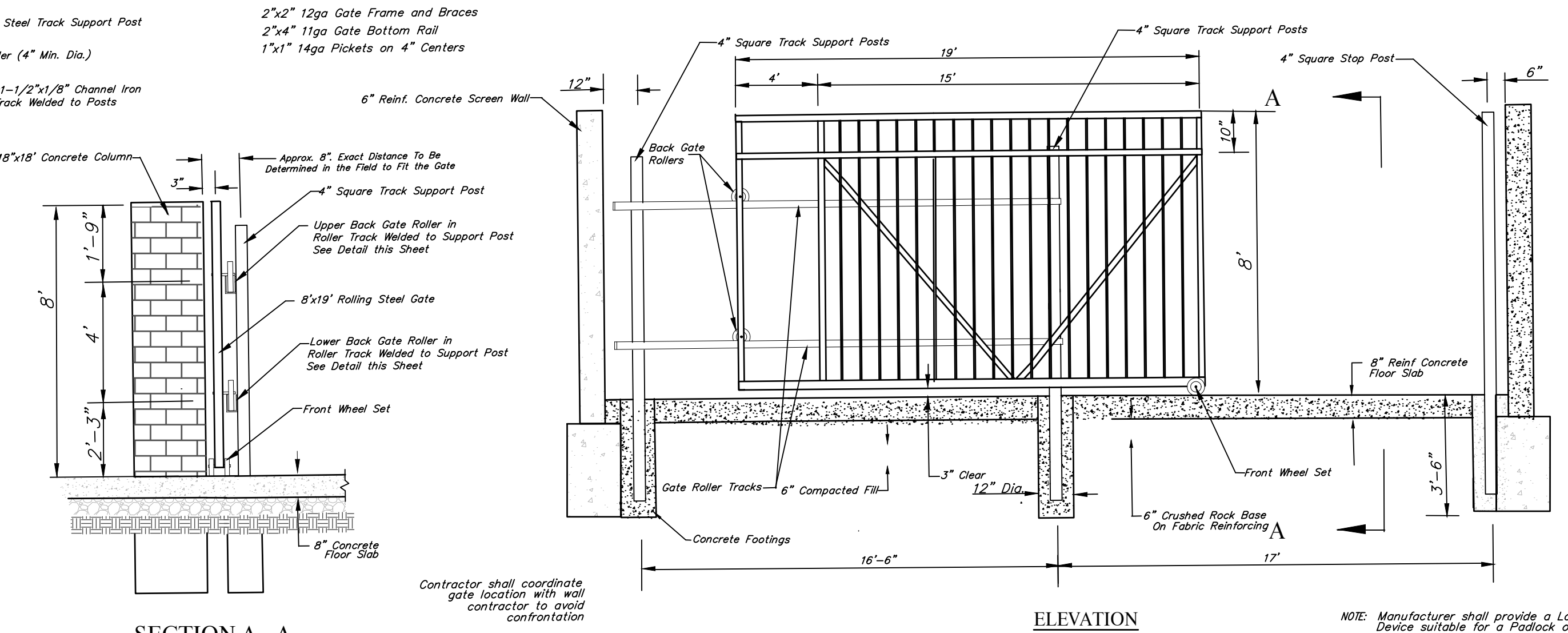


ELEVATION VIEW

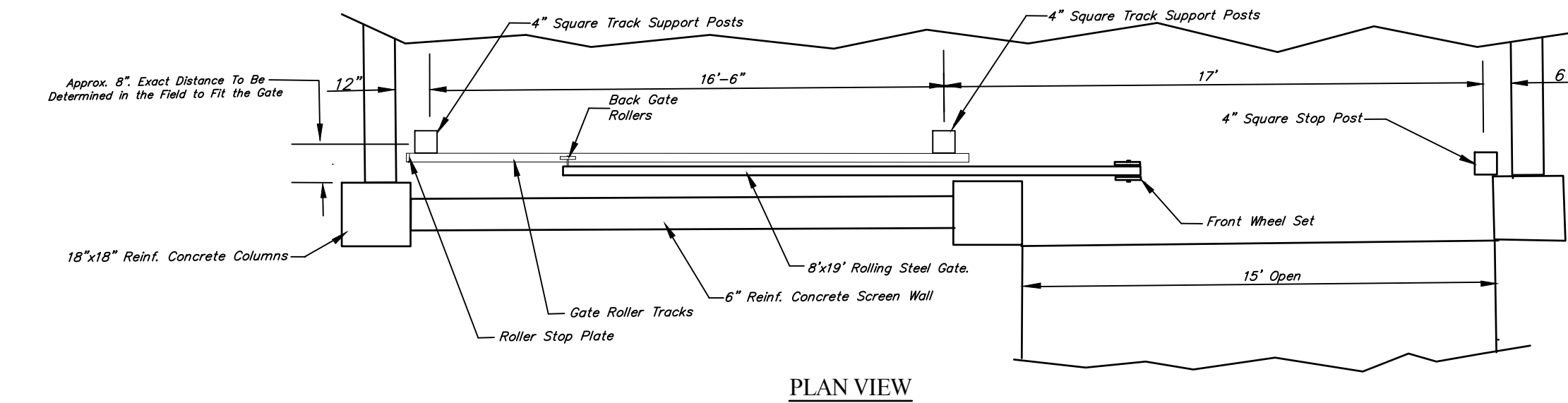


BACK ROLLER DETAIL

PLAN VIEW



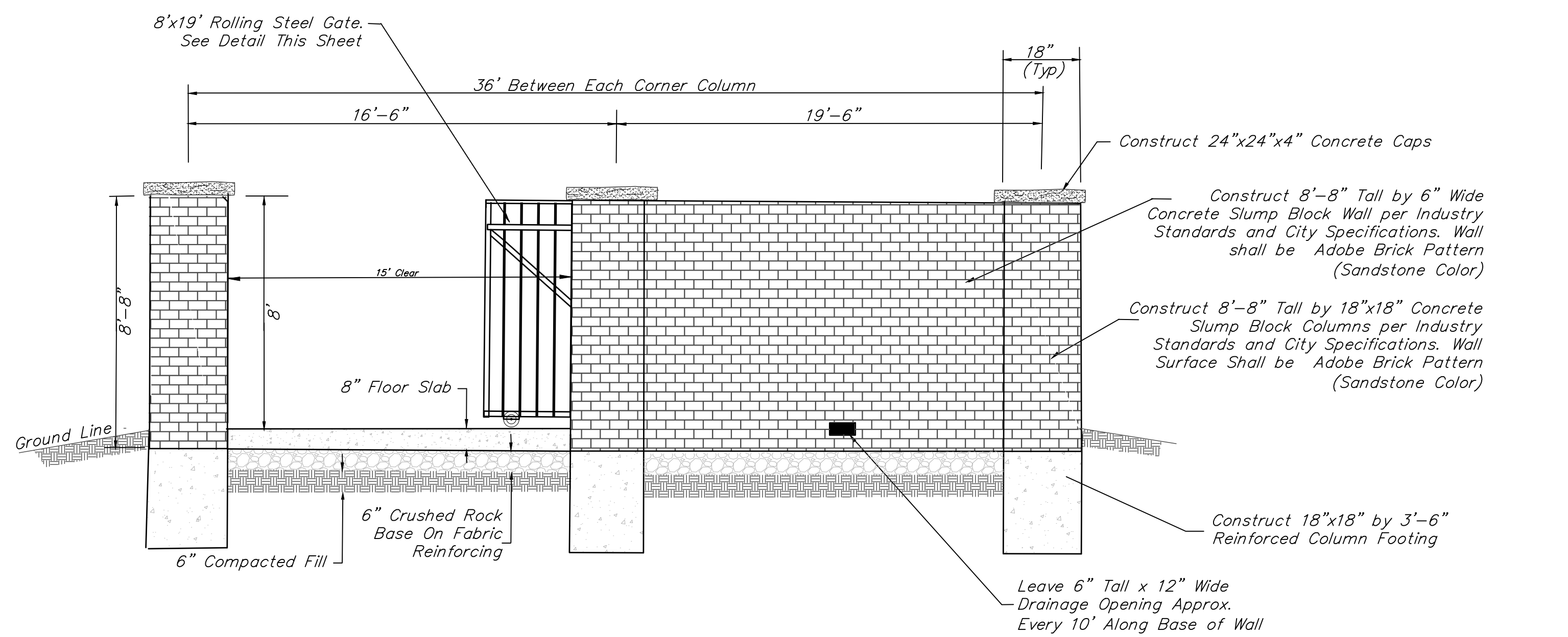
SECTION A - A



PLAN VIEW

8'-0" ROLLING GATE DETAIL

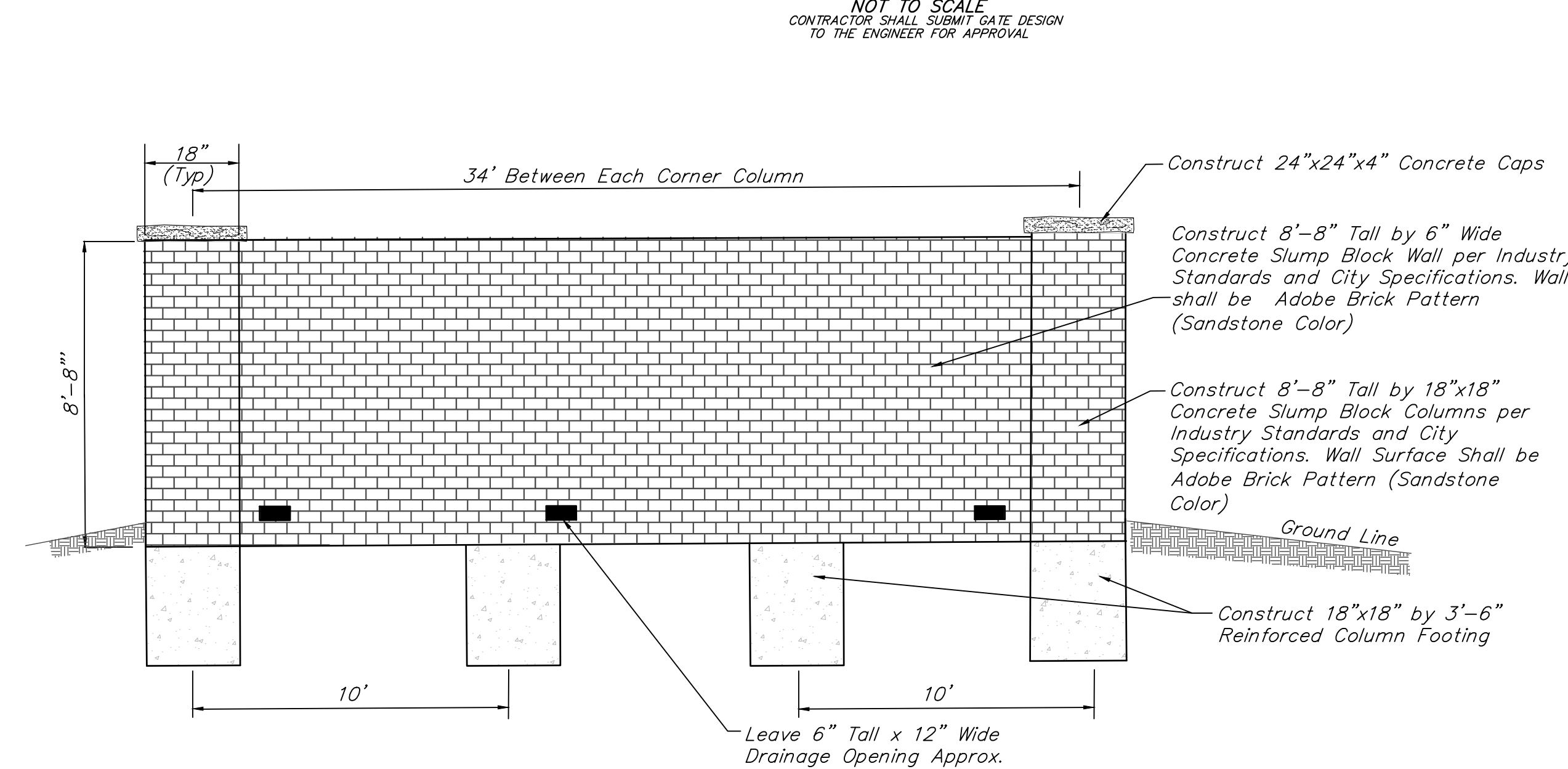
NOT TO SCALE
CONTRACTOR SHALL SUBMIT GATE DESIGN TO THE ENGINEER FOR APPROVAL



NORTH SIDE SCREEN WALL WITH GATE DETAIL

NOT TO SCALE

Note: Cost of 6' Concrete Slump Block Screening Wall shall be Included in L.S. Bid Item "Lift Station Module."

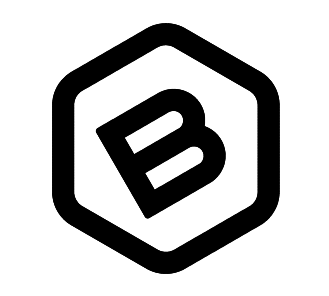


FRONT SCREEN WALL DETAIL

NOT TO SCALE

Note: Cost of 6' Concrete Slump Block Screening Wall shall be Included in L.S. Bid Item "Lift Station Module."

NOT TO SCALE
CONTRACTOR SHALL SUBMIT WALL DESIGN TO THE ENGINEER FOR APPROVAL



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HARBOR ISLE COMM.
1ST & 2ND ADDITIONS

Pump Station Misc. Details

SANITARY SEWER IMPROVEMENTS

PROJECT NUMBER:
22-08-E261

DESIGN: NBW DRAWN: TMS

DATE: November 13, 2024

SHEET OF
10 22

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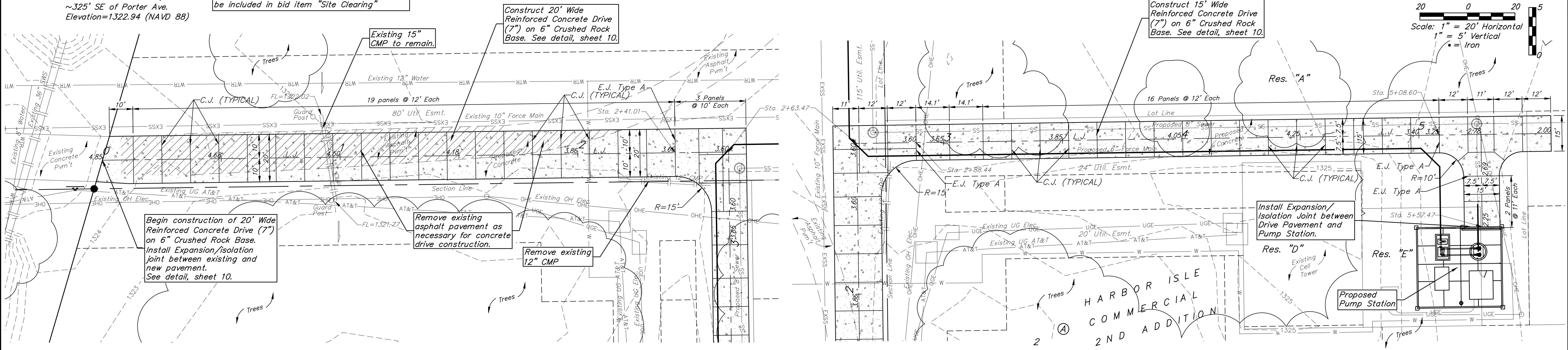
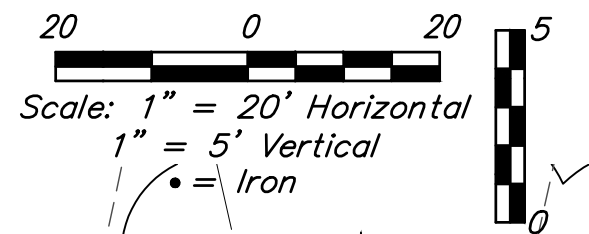
BENCHMARKS:

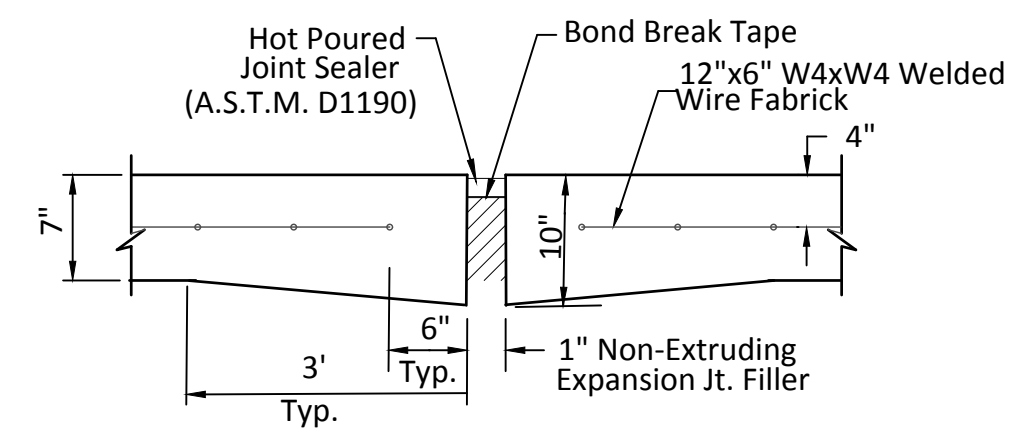
BM #1: "□" Chiseled on Top of Curb, near fire hydrant on north side of 40th St., ~1,060' NW of Porter Ave. Elevation=1327.93 (NAVD 88)

BM #2: "X" Chiseled on Top of Curb near fire hydrant on north side of 40th St., ~325' SE of Porter Ave. Elevation=1322.94 (NAVD 88)

Trees in conflict with force main construction to be removed by contractor. To be paid for as lump sum bid item "Site Clearing"
All other trees shall remain and be protected from damage during construction. Overhanging limbs shall be trimmed by the Contractor using a chain saw only as necessary for construction and with approval of the Engineer. Cost of tree trimming to be included in bid item "Site Clearing"

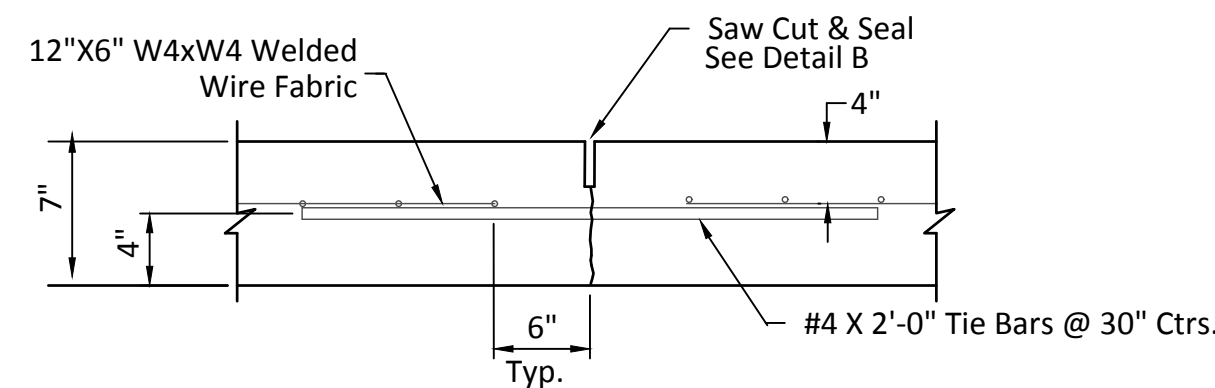
Contact utility companies 3 weeks prior to construction to coordinate temporary removal/replacement.
Heide Bryan, Evergy, (316) 261-6354
Shannon Brinkmeyer, AT&T (316) 268-2931
Travis Taylor, Cox Comm., Travis.taylor@cox.com





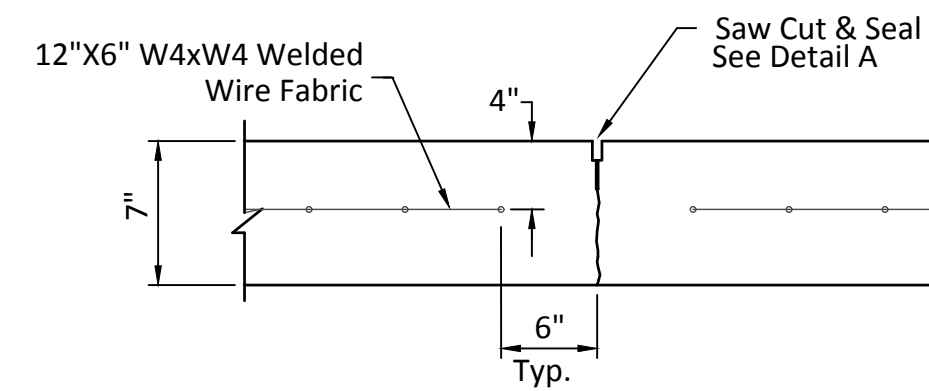
EXPANSION JOINT DETAIL

(E.J.)



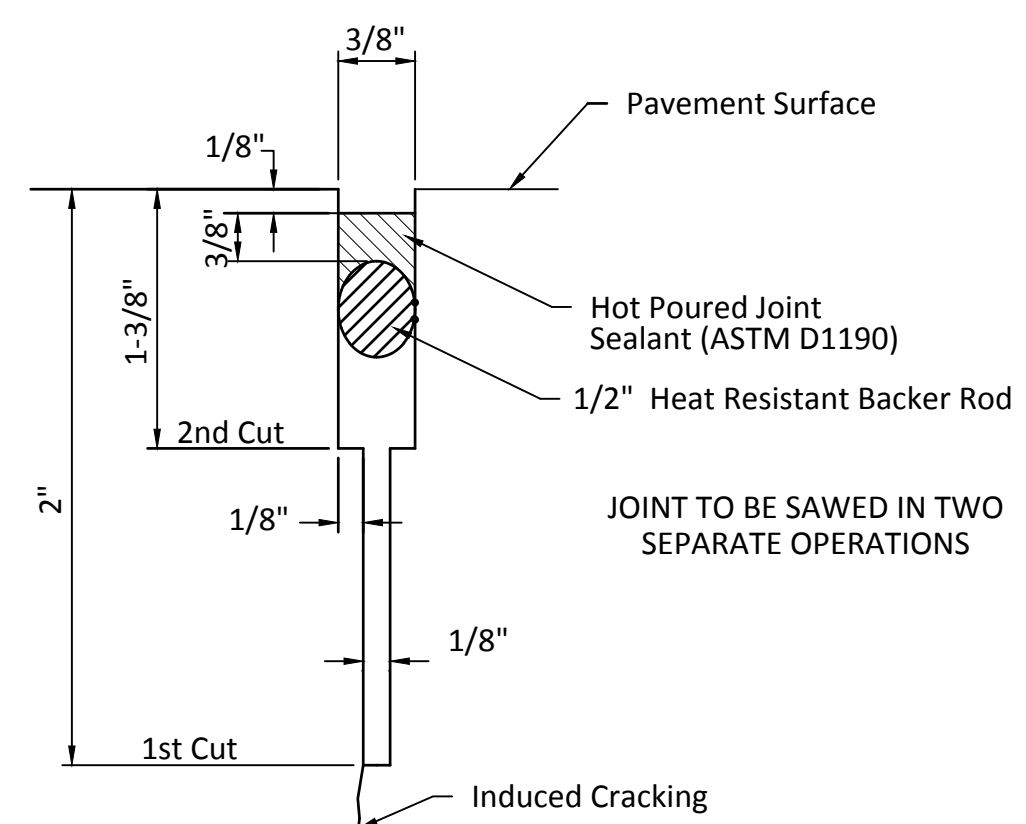
LONGITUDINAL JOINT DETAIL

(L.J.)

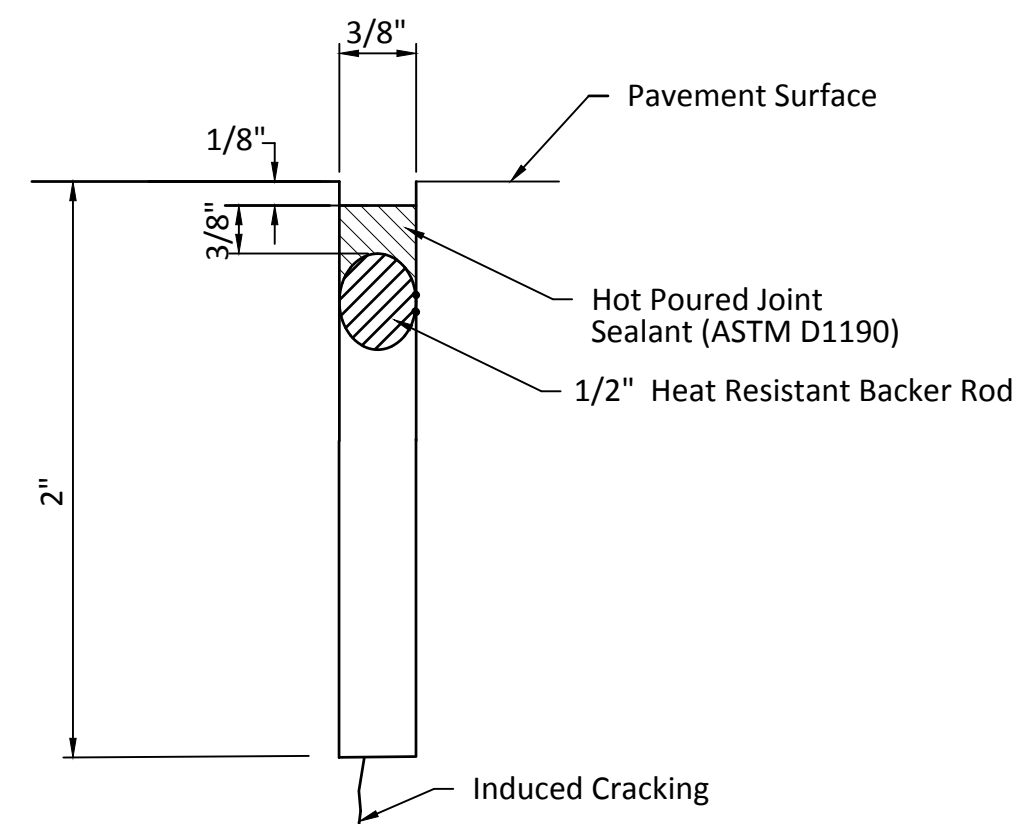


CONTRACTION JOINT DETAIL

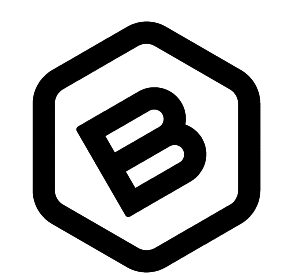
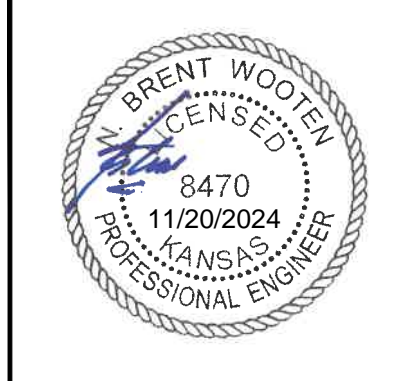
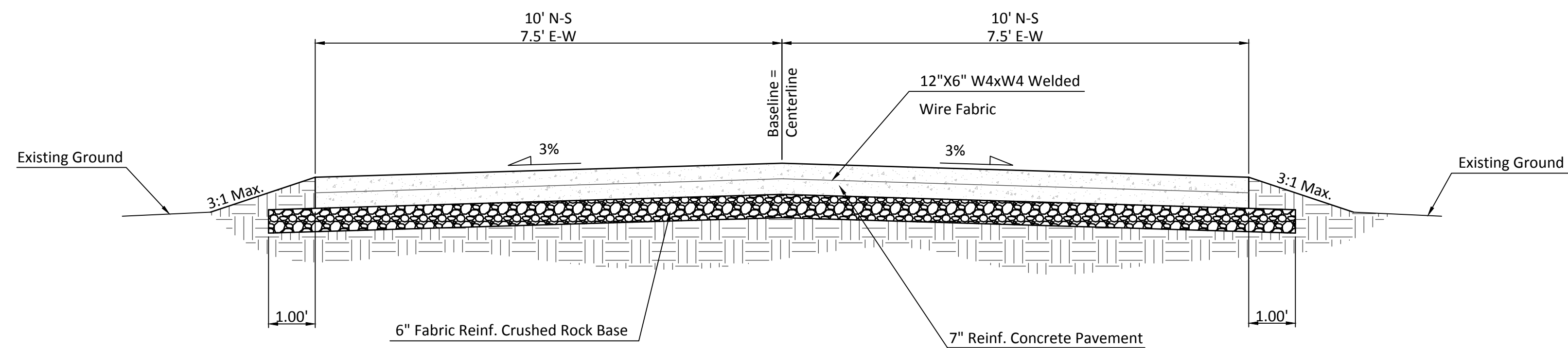
(C.J.)



DETAIL A



DETAIL B



BAUGHMAN COMPANY

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Wichita, KS 67211
316-262-7271
BaughmanCo.com

HARBOR ISLE COMM.
1ST & 2ND ADDITIONS

CONCRETE DRIVE DETAILS

SANITARY SEWER IMPROVEMENTS

PROJECT NUMBER:
22-08-E261

DESIGN: DRAWN:
DATE: November 13, 2024

SHEET OF
12 22

File: E:\Projects\Harbor Isle Pump Station(22-08-E261)\Engineering\Phase 1\Pump Station\Pump Station.dwg

PANEL H										
277/480V/3Ø/4W+GRD 100 AMP M.L.O. SURFACE MTD. 42,000 AIC LABELED										
CIRC. NO.	LOAD V.A.	LOAD DESCRIPTION	P.O.L.E.	P.H.A.S.E.	AMP SIZE	LOAD DESCRIPTION	LOAD V.A.	CIRC. NO.		
1	15,000	MINI ZONE L	3	25	A 100	CP-1	44800	2		
3	---	---	---	---	B	---	---	4		
5	---	---	---	---	C	---	---	6		
7	---	SPARE	1	20	A 20	3	UH-1	3300	8	
9	---	SPARE	1	20	B	---	---	---	10	
11	---	SPARE	1	20	C	---	---	---	12	
13	---	SPACE	1	20	A 20	1	SPARE	---	14	
15	---	SPACE	1	20	B	---	SPACE	---	16	
17	---	SPACE	1	20	C	---	SPACE	---	18	

MINI-POWER ZONE L										
120/208V/3Ø/4W+GRD 50 AMP BKR. WALL MTD. 42,000 AIC LABELED										
CIRC. NO.	LOAD V.A.	LOAD DESCRIPTION	P.O.L.E.	P.H.A.S.E.	AMP SIZE	LOAD DESCRIPTION	LOAD V.A.	CIRC. NO.		
1	140	PUMP LIGHTG	1	20	A 20	1	INT. RECEPT.	200	2	
3	300	EXT. LIGHTING	1	20	B 20	1	BATTERY CHRGR	1000	4	
5	200	EXT. RECEPT.	1	20	C 15	2	JACKET HTR	1500	6	
7	60	EF-1	1	20	A	---	---	---	8	
9	---	SPARE	1	25	B 15	2	COOLANT HTR	1500	10	
11	---	SPARE	1	20	C	---	---	---	12	
13	---	SPACE	1	20	A 20	1	SPARE	---	14	
15	---	SPACE	1	20	B	---	SPACE	---	16	
17	---	SPACE	1	20	C	---	SPACE	---	18	

- 15 KVA MINI-POWER ZONE COMBINATION PANEL/ TRANSFORMER, 480V. PRIMARY WITH 120/208V., 3-PHASE, 4-WIRE SECONDARY, 18 POLE PANEL.
- VERIFY CIRCUITING REQUIREMENTS WITH GENERATOR PROVIDED PRIOR TO ORDERING PANEL AND BREAKERS.

EQUIPMENT CONNECTION SCHEDULE															SCH. CODE								
ICE - HARBOR ISLE PUMP STATION															SW=DISC. SW CB=CIR.BKR. T=TOGGLE SW.								
UNIT DESIG.	20/80/1	20/80/01	80/80/03	80/80/03	200/3	H.P.	FLA	MCA	20/1	20/3	30/3	50/3	100/3	200/3	40/2	30/2	T	FUSE SIZE	STARTER (SIZE/POLE)	CIRC. NO.	FEEDER IDENT.		
CP-	DUPEX CONTROL PANEL																						
1						(2)	20	54	68												H-2	3#4& 3#8GRD-1 1/4" C	
P-	PUMP																						
1																						CP-1	3#6& 1#10GRD-2" C
2																						CP-1	3#6& 1#10GRD-2" C
EF-	EXHAUST FAN																						
1																						L-7	2#12& 1#12GRD-1/2" C
UH-	UNIT HEATER																						
1																						H-8	3#12& 1#12GRD-3/4" C

EQUIPMENT CONNECTION SCHEDULE NOTES

ICE - HARBOR ISLE PUMP STATION

- ALL CONNECTIONS AND ELECTRICAL EQUIPMENT LISTED IN SCHEDULE SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. FIELD VERIFY CONNECTION REQUIREMENTS AND EQUIPMENT PROVIDED BY OTHERS PRIOR TO ROUGH-IN.
- REFER TO DRAWINGS AND SPECIFICATIONS FOR THE REQUIREMENTS ASSOCIATED WITH WIRING AND CONNECTIONS OF INTERLOCKING, THERMOSTAT LOCATIONS, EXHAUST FAN CONTROL SWITCHES, AND OTHER CONTROLS OF MECHANICAL EQUIPMENT.
- NOT USED.
- PROVIDE A 30A, 1 POLE, 125V. HORSEPOWER RATED TOGGLE SWITCH WITH A 125V, 3/4 HP RATED FUSTAT (EQUAL TO BUSSMAN #50Y), SIZE FUSE PER MANUFACTURER'S RECOMMENDATION.
- STARTER AND POWER FACTOR CORRECTION CAPACITORS SHALL BE PROVIDED AS PART OF CP-1. CONTRACTOR TO PROVIDE WIRING FROM CP-1 TO DISTRIBUTION BLOCKS IN JUNCTION BOX LOCATED OUTSIDE BUILDING AND CONNECT PUMP SUPPLIED CABLING AS REQUIRED.
- PROVIDE CONNECTION TO EXHAUST FAN PROVIDED WITH UTILITY SHED AS REQUIRED. INSTALL A COOK MODEL GC-142 CABINET FAN OR EQUIVALENT, 75 CFM AT 0.25" E.S.P., 59 WATTS, 120V/1/60. INSTALL TIGHT TO CEILING OF UTILITY SHELTER, PROVIDE ALUMINUM GRILLE, WALL CAP PAINTED TO MATCH UTILITY SHELTER, CONTROL TRANSFORMER, AND 24V. THERMOSTAT TO TURN FAN ON ABOVE 80° (ADJUSTABLE). INSTALL A 12" X 12" WALL LOUVER WITH MOTORIZED DAMPER INTERLOCKED TO OPEN WITH FAN OPERATION.
- PROVIDE CONNECTION TO UNIT HEATER IN UTILITY SHED AS REQUIRED. VERIFY LOCATION PRIOR TO ROUGH-IN. INSTALL A MARKEL MODEL P3P5103CAIN ELECTRIC UNIT HEATER OR EQUIVALENT. HEATER SHALL BE 3.3 KW, 112 MBH, 4.0A, 480/3/60. PROVIDE WITH WALL MOUNTING BRACKET, CONTROL TRANSFORMER, AND 24 V LOW VOLTAGE THERMOSTAT TO START THE HEATER BELOW 50° (ADJUSTABLE).
- CONTRACTOR TO ADD TIME DELAY START TO CIRCUIT.

LIGHT FIXTURE SCHEDULE

ICE - HARBOR ISLE PUMP STATION

FIXT LTR	MANUFACTURER	CATALOG NUMBER	LAMPS		FINXT. VOLT.	FINISH	MOUNTING	REMARKS
			NO.	TYPE				
A	WILLIAMS	96-4-L62-HIAFR-DRV-UNV	---	LED	UNV	WHITE	SURFACE	ENCLOSED AND GASKETED.
B	WILLIAMS	WPL-L44/850-PG-WG-120	---	LED	120	STANDARD	WALL	(1)(2)

LIGHT FIXTURE SCHEDULE NOTES

ICE - HARBOR ISLE PUMP STATION

- PROVIDE FIXTURE WITH INTEGRAL PHOTOCCELL.
- MANUFACTURERS LISTED IN THIS SCHEDULE OR APPROVED BY WRITTEN ADDENDUM WILL BE THE ONLY APPROVED MANUFACTURERS TO BID THE LIGHTING FIXTURES FOR THIS PROJECT. CONTRACTORS AND SUPPLIERS USING PRICING FROM MANUFACTURERS NOT LISTED ON SCHEDULE OR BY ADDENDUM DO SO AT THEIR OWN RISK.

SYMBOL LIST

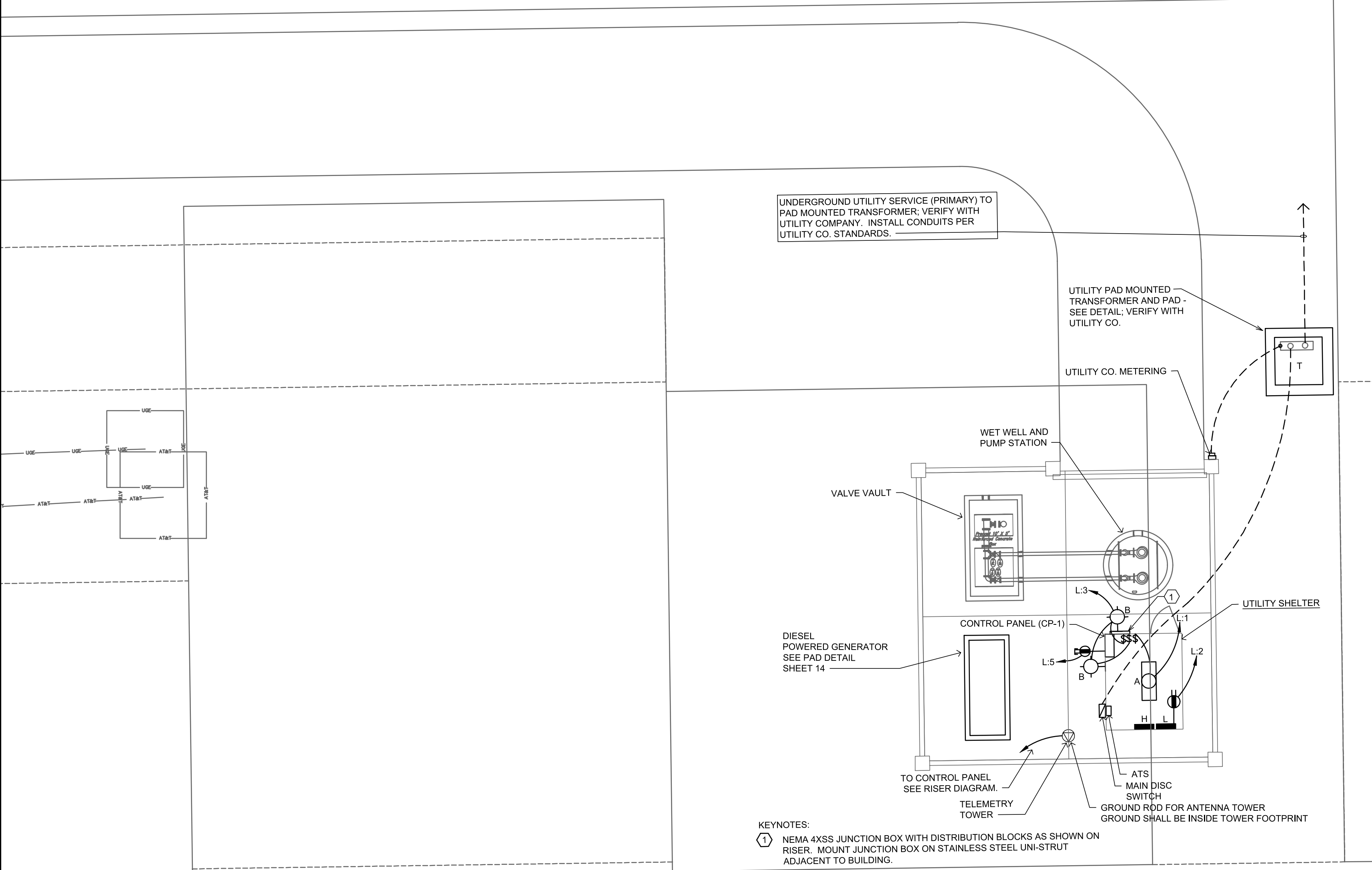
ICE - HARBOR ISLE PUMP STATION

SYMBOL	DESCRIPTION	MOUNTING
(A)	LED FIXTURE & FIXTURE LETTER	CEILING
(A)	LED FIXTURE & FIXT. LETTER	WALLBRACKET
(GFCI)	GFCI DUPLEX GROUNDED RECEPTACLE	1'-3" AFF
(D)	DUPLEX GROUNDED RECEPTACLE	1'-3" AFF
(E)	EXTERIOR GFCI RECEPT. WEATHERPROOF	1'-3" AFF
(S)	SWITCHES (1-POLE, 3-WAY, 4-WAY, PILOT, KEY)	4'-0" TO TOP
(J)	JUNCTION BOX	
(F)	FUSTAT	
(S)	SPECIAL DEVICE AS NOTED ON PLAN	
(A)	BRANCH CIRCUIT PANEL & PANEL DESIG.	6'-6" TO TOP
(30/3/240)	H.D. SAFETY SWITCH (AMPS, POLE, VOLTAGE)	6'-6" TO TOP
(0/3/240)	STARTER (SIZE, POLE, VOLTAGE)	6'-6" TO TOP
(T)	THERMOSTAT (BY M.C.)	4'-0" TO TOP
(M)	MOTOR	
(#)	CONDUIT RUN 2#12 & 1#12 GRD.-1/2" C.	CEIL./WALL
(#)	CONDUIT RUN 2 CIRCUIT, 3#12 & 1#12 GRD.-1/2" C.	EARTH/FLOOR
(#)	PARTIAL HOMERUN (MULTIPLE LOAD LOCATIONS)	
(#)	SEE NOTE #7	
(XXX)	FEEDER IDENTIFICATION, SEE SCHEDULE	
WP	WEATHERPROOF	
a,b,c	INDICATES SWITCHING SCHEME	

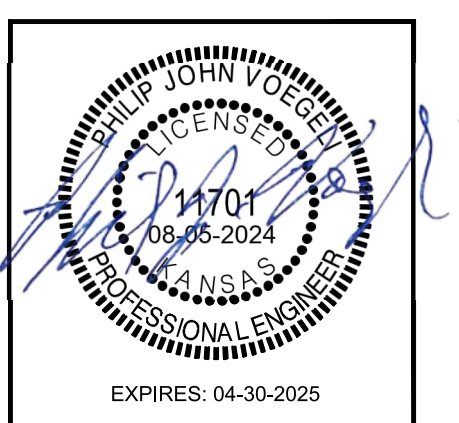
GENERAL NOTES

ICE - HARBOR ISLE PUMP STATION

- ALL ELECTRICAL WORK SHALL COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) & THE AMERICANS WITH DISABILITIES ACT (ADA).
- REFER TO RELATED ARCHITECTURAL, MECHANICAL, AND STRUCTURAL DRAWINGS FOR RELATED INFORMATION.
- REFER TO THE SPECIFICATIONS FOR DATA NOT ON THE DRAWINGS.
- E.C. SHALL REFER TO DRAWINGS AND SPECIFICATIONS FOR THE REQUIREMENTS ASSOCIATED WITH WIRING AND CONNECTION OF INTERLOCKING AND CONTROLS OF MECHANICAL UNITS AND THERMOSTAT LOCATIONS.
- COORDINATE OUTLET BOX LOCATIONS WITH MASONRY TO MINIMIZE CUTTING OF BRICK OR BLOCK.
- ALL MOUNTING HEIGHTS TO CENTERLINE OF ITEM UNLESS OTHERWISE NOTED. VERIFY ALL OUTLET LOCATIONS ON THE JOB PRIOR TO ROUGH-IN.
- CONDUIT RUN W/ CONDUCTORS AS INDICATED & GROUND WIRE SIZED PER N.E.C. 250-122 (2017); CONDUIT SIZE AS REQUIRED.
- WHEN INCREASED CONDUCTOR SIZES ARE SHOWN ON THE PLANS, THE LARGER CONDUCTOR SIZE SHALL BE USED THROUGHOUT THE LENGTH OF THE CIRCUIT, INCLUDING NEUTRAL AND GROUND.
- CONTRACTOR SHALL BUILD TO ALL CURRENT NATIONAL, STATE, AND LOCAL CODES.



A ELECTRICAL SITE PLAN LAYOUT DIAGRAM
SCALE: 1/8"=1'
NORTH



BAUGHMAN COMPANY

315 Ellis St.
Wichita, KS 67211
316-262-7271
BaughmanCo.com

Harbor Isle Regional
Pump Station
Electrical Plan

Sanitary Sewer Improvements

PROJECT NUMBER:

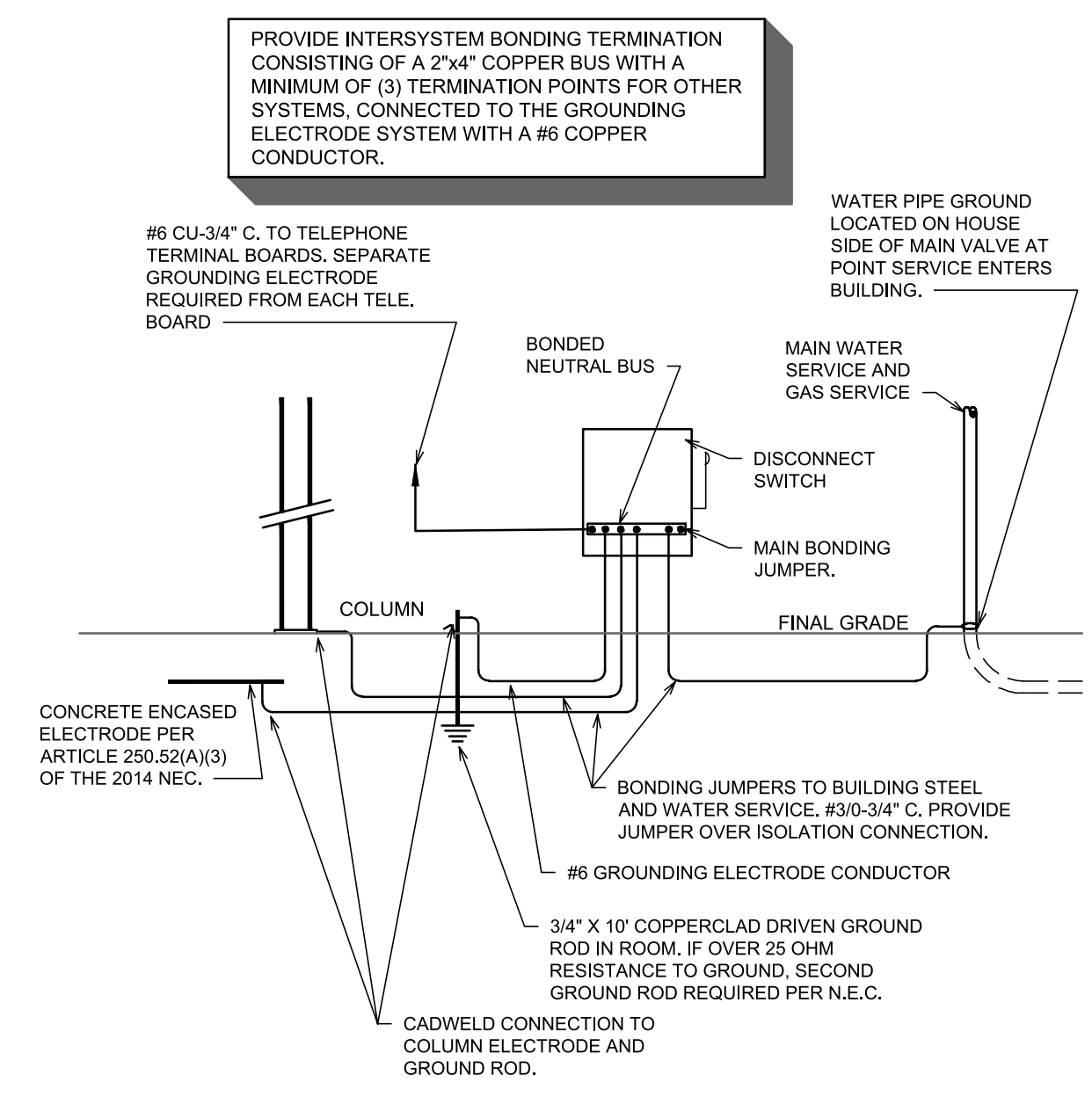
DESIGN: GS DRAWN: IK
DATE: 02/08/2024
SHEET 13 OF 22

Integrated Consulting Engineers, Inc.
849 South Hydraulic • Wichita, KS 67211
316.264.3588 • 316.264.3948 • www.icengr.com

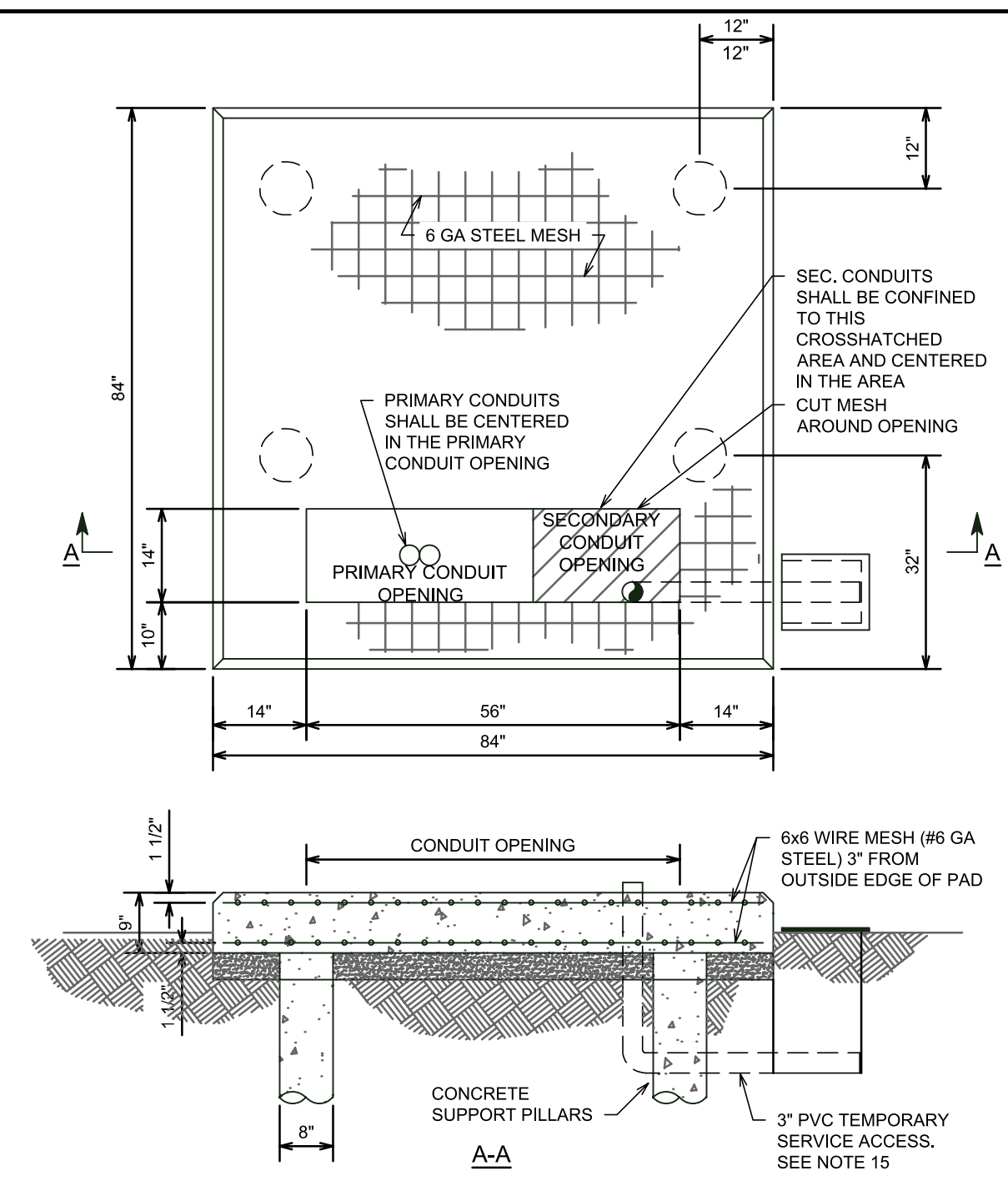
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3 SYSTEM GROUNDING DETAIL-DISCONNECT

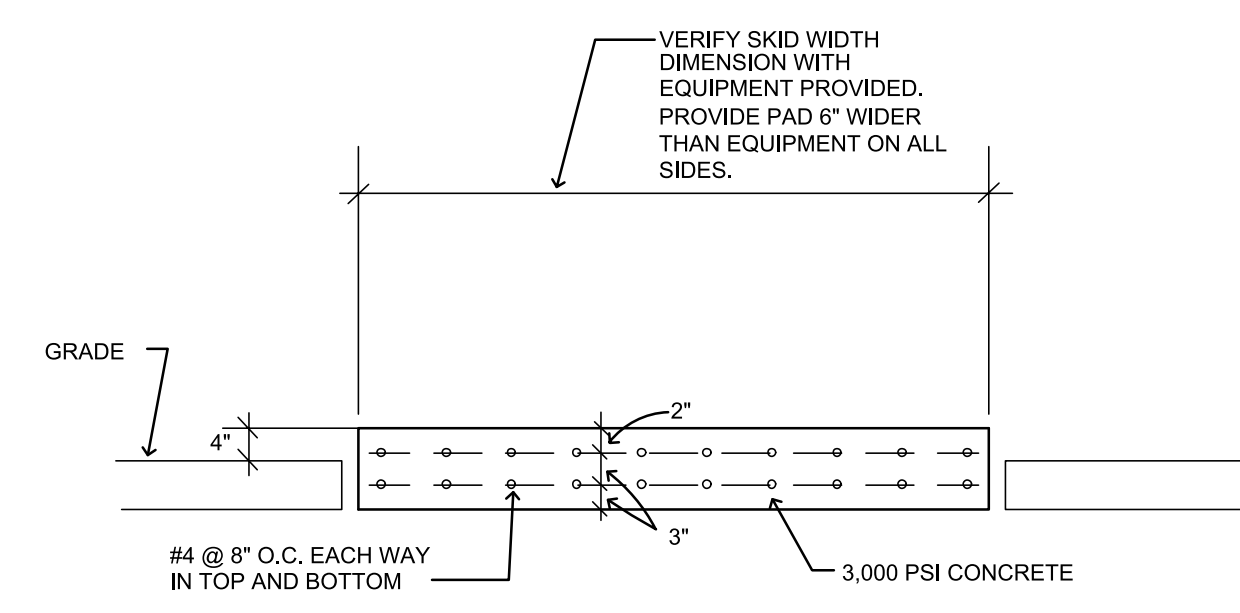
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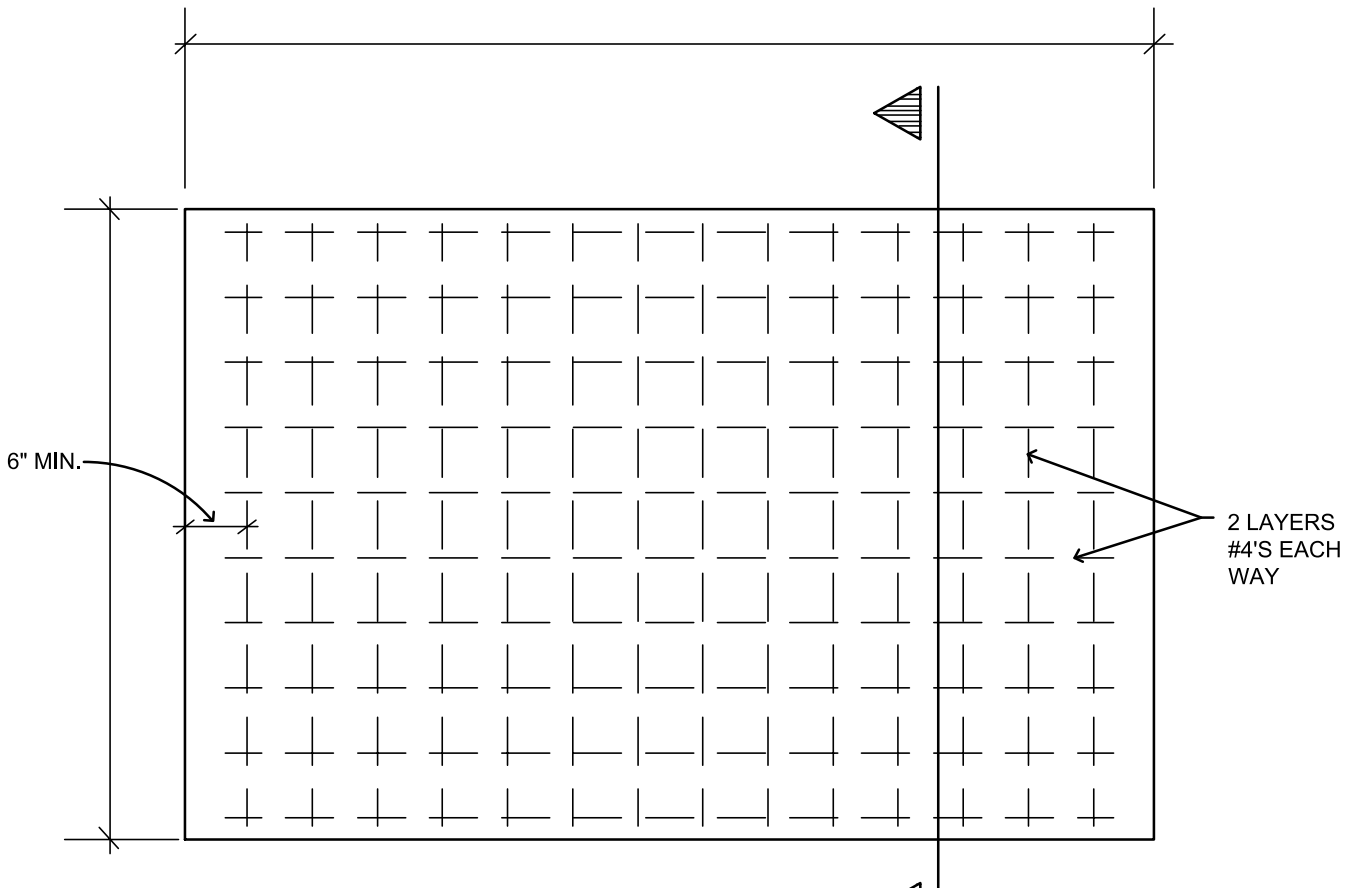
NOTE: PROVIDE OTHER GROUND CONNECTIONS AS SPECIFIED IN N.E.C. ARTICLE 250.50 (2014)



- NOTES:
- PAD LOCATION SHALL BE APPROVED BY LOCAL UTILITY COMPANY.
 - TRANSFORMER SHALL BE INSTALLED NEAR THE CUSTOMER'S SERVICE ENTRANCE.
 - IF TRANSFORMER PAD IS INSTALLED IN AN AREA SUBJECT TO VEHICULAR TRAFFIC, THE INSTALLATION SHALL BE PROTECTED WITH A PIPE-RAIL GUARD. (SEE SS-77.9)
 - FOR PROPER CLEARANCE AROUND THE TRANSFORMER, REFER TO SS-75.0.
 - CONTRACTOR SHALL EXTEND FORMS DOWN TO AT LEAST 3' BELOW AVERAGE GROUND LINE.
 - CONCRETE SHALL BE A MINIMUM OF 3,000 LB. MIX.
 - TOP OF TRANSFORMER PAD SHALL RECEIVE A SMOOTH TROWEL FINISH. CORNERS AND EDGES SHALL BE ROUNDED OR BEVELED.
 - CONDUIT OPENING SHALL BE FREE AND CLEAR OF CONCRETE.
 - TOPS OF THE CONDUIT SHALL BE FLUSH WITH THE TOP OF THE CONCRETE PAD.
 - NUMBER OF CONDUITS NECESSARY IS DEPENDENT ON THE MAXIMUM NUMBER OF SERVICE CONDUCTORS ALLOWED IN THE LOW-VOLTAGE COMPARTMENT OF THE TRANSFORMER. REFER TO SS-73.1 FOR MAXIMUM NUMBER. INSTALL 1" METERING CONDUIT FROM PAD TO METER ENCLOSURE WHEN TRANSFORMER RATED METERING IS SET ON ADJACENT BUILDING OR STAND & METERING TRANSFORMERS ARE IN THE PADMOUNT TRANSFORMER. (SEE SS-74.0)
 - PILLARS ARE FORMED BY AUGERING AND 8" DIAMETER HOLE TO A DEPTH OF UNDISTURBED EARTH. A SEPARATOR, SUCH AS TARPAPER, SHOULD BE PLACED BETWEEN THE PILLAR AND THE PAD SO THAT THE PAD CAN BE LEVELED AT A LATER TIME IF NECESSARY.
 - LOCAL UTILITY RESERVES THE RIGHT NOT TO ACCEPT THE CONDITION OF THE CONCRETE PAD IF IT FAILS TO MEET THE REQUIREMENTS STATED IN THIS STANDARD.
 - THE 6" ABOVE GRADE CAN BE REDUCED TO 4" ABOVE FINISHED PAVEMENT.
 - CONDUIT OPENING DIMENSIONS PERTAIN TO ABB & GE (1991 & NEWER) TRANSFORMERS. CHECK WITH LOCAL UTILITY SERVICE CENTER TO BE SURE THAT THE OPENING IS THE CORRECT SIZE FOR THE TRANSFORMER DESIGNATED FOR THE JOB. CALL LOCAL SERVICE CENTER TO CONFIRM PAD DIMENSIONS BEFORE PAD IS POURED.
 - CONDUIT TO EXTEND 1' TO 2' BEYOND EDGE OF PAD. DO NOT BACKFILL. USE MIN. 3/4" PLYWOOD OR COMPARABLE COVER TO SECURE THE HOLE.



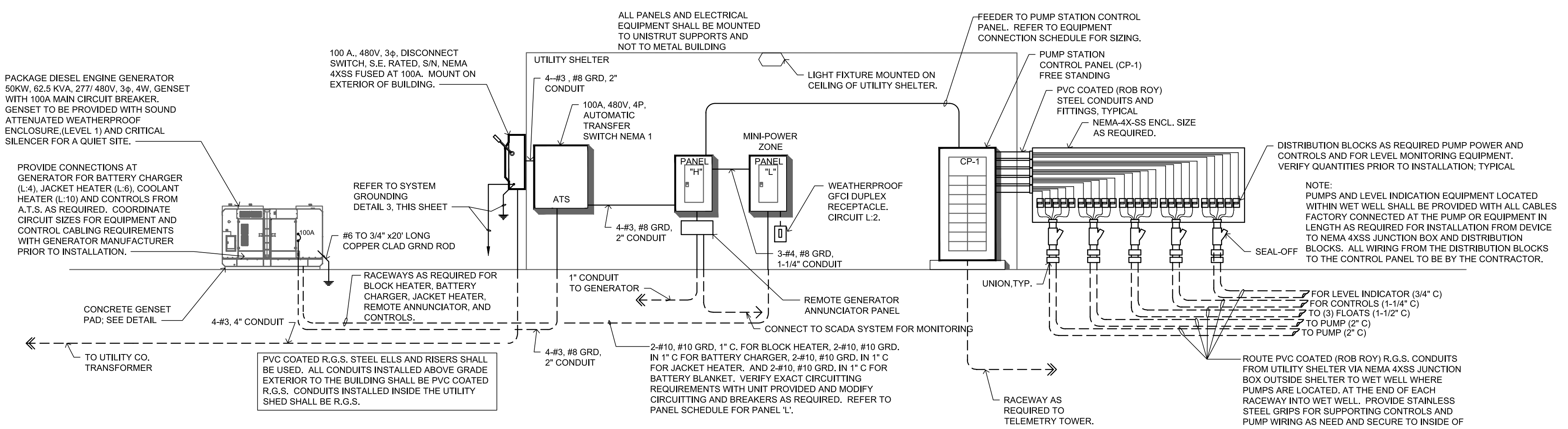
- NOTES:
- PAD BY G.C./E.C. TO VERIFY ALL REQUIREMENTS WITH EQUIPMENT PROVIDED PRIOR TO G.C. POURING PAD.
 - THICKNESS AND STEEL MUST BE SIZED PER GENERATOR SIZE.



- NOTES:
- INSTALL 1/4 X 1/4 REMOVABLE WIRE FENCING AROUND GENERATOR AND PAD AND ANY OPENINGS TO STOP RODENT ENTRY.

1 ENGINE GENERATOR PAD DETAIL

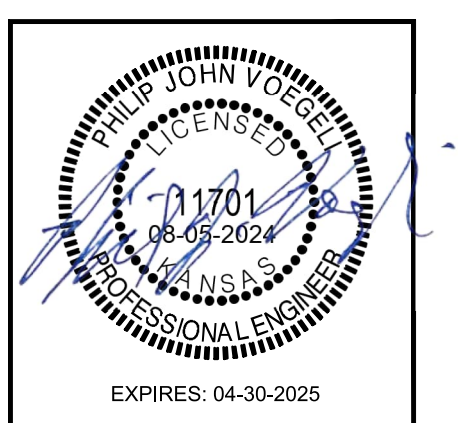
SCALE: N.T.S.



A ELECTRICAL RISER DIAGRAM

SCALE: NONE SERVICE VOLTAGE: 277/480 V, 3ø, 4W.

ELECTRICAL CONTRACTOR SHALL VERIFY CONDUIT QUANTITIES NEEDED. ALL CONDUITS REQUIRED MAY NOT BE SHOWN IN THIS RISER DIAGRAM.



BAUGHMAN COMPANY

315 Ellis St.
Wichita, KS 67211
316-262-7271
BaughmanCo.com

Harbor Isle Regional Pump Station Electrical Plan

Sanitary Sewer Improvements

PROJECT NUMBER:

DESIGN: GS DRAWN: IK

DATE: 02/08/2024

SHEET 14 OF 22

Integrated Consulting Engineers, Inc.

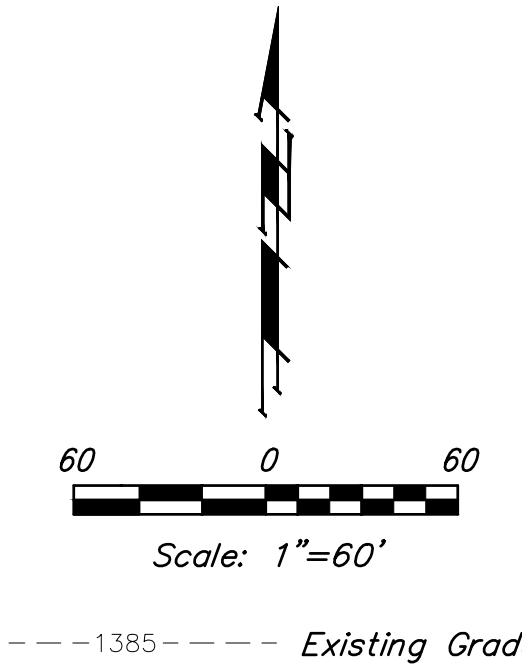
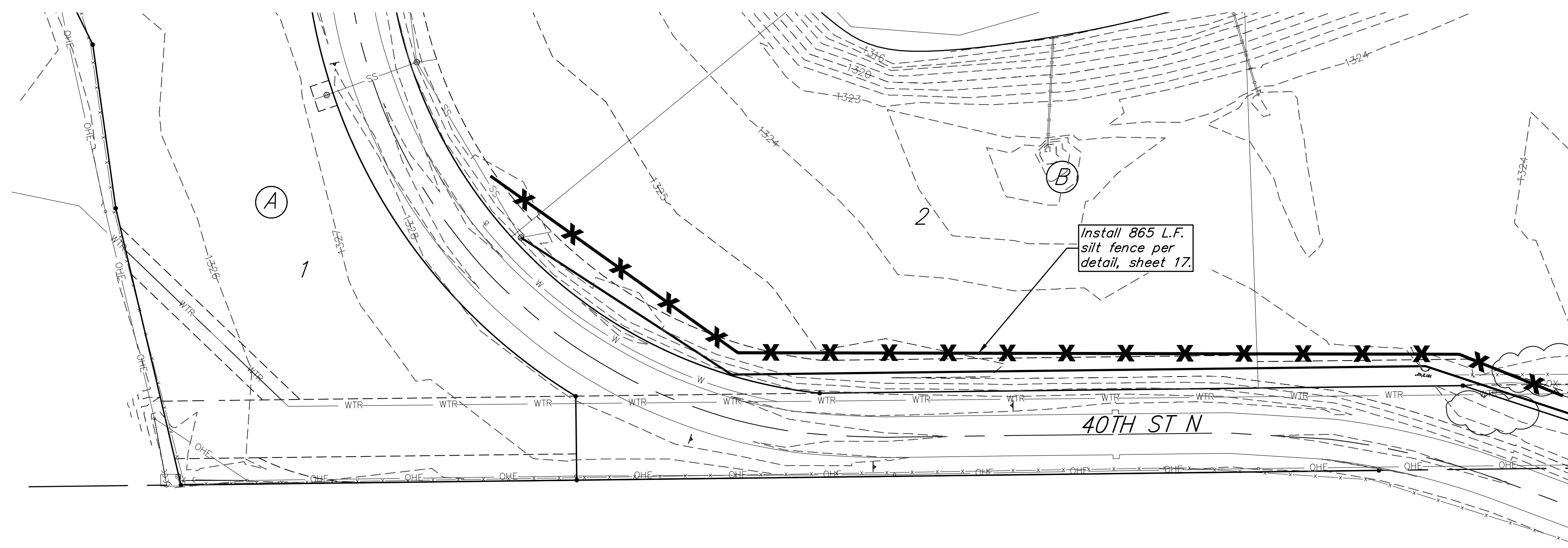
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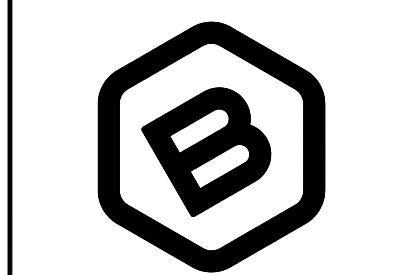
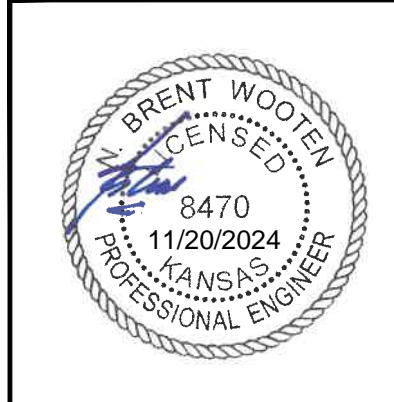
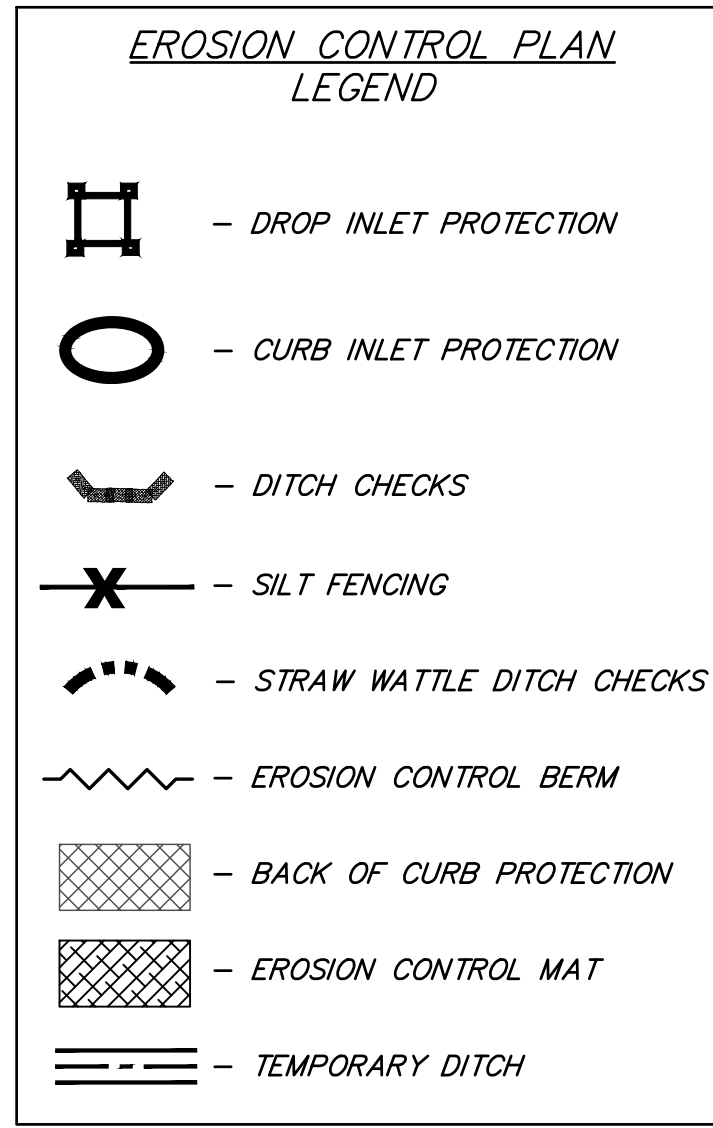
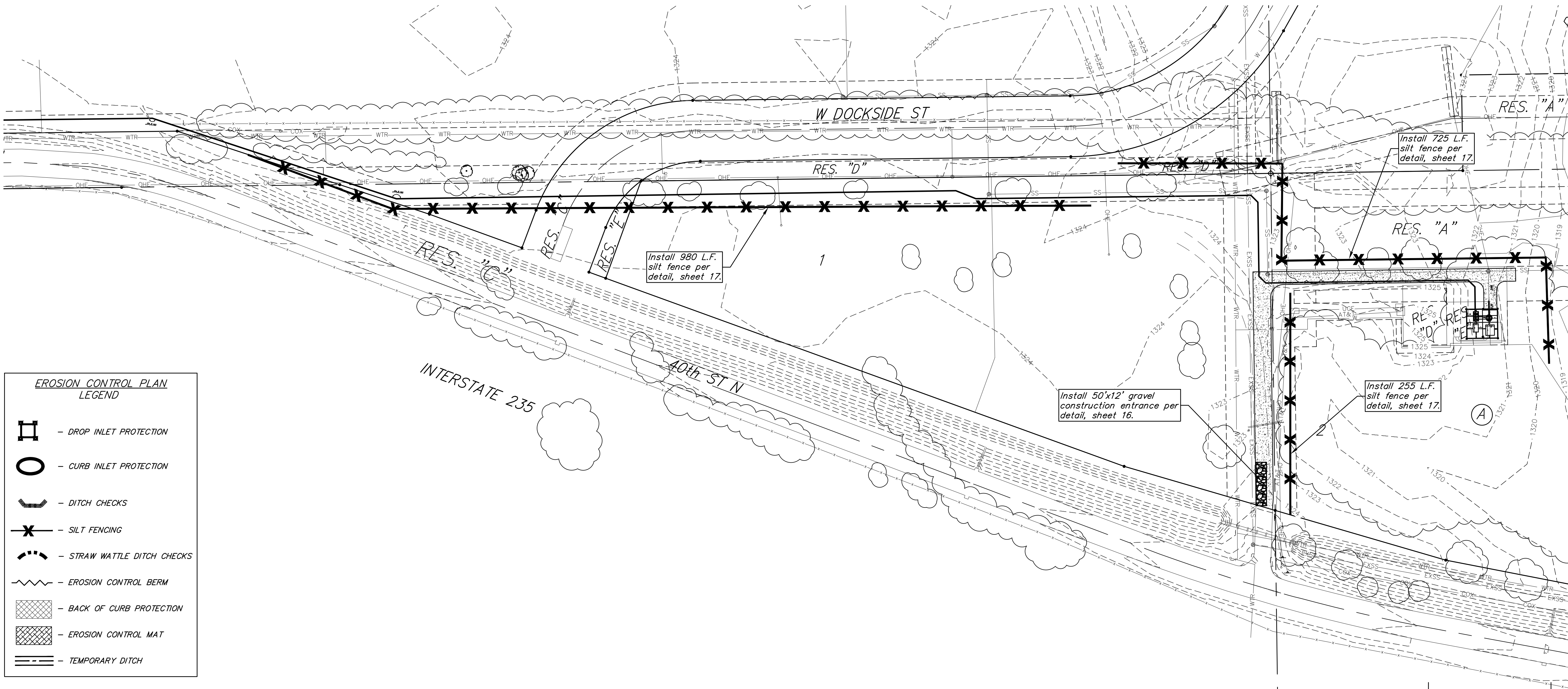
EROSION CONTROL MEASURE	INSTALL	MAINTAIN	REMOVE
BACK OF CURB PROTECTION (LF)	0	0	0
CONSTRUCTION ENTRANCE (EA)	1	0	0
CURB INLET BARRIER (EA)	0	0	0
DITCH CHECK (EA)	0	0	0
DROP INLET PROTECTION (EA)	0	0	0
EROSION CONTROL (LS)	0	0	0
EROSION CONTROL BERM (LF)	0	0	0
SILT FENCE (LF)	2,825	0	0
EROSION CONTROL MAT (SY)	0	0	0

QUANTITIES ARE FOR INFORMATION ONLY! CONTRACTOR SHALL VERIFY QUANTITIES PER FINAL BID QUANTITY SHEET.

* ALL EXISTING BMPs INCLUDING CONSTRUCTION ENTRANCE, SEDIMENT BARRIERS, SILT FENCE, EROSION CONTROL BERM, AND EROSION CONTROL MAT SHALL BE MAINTAINED AND REPAIRED IF NECESSARY. REPLACEMENT OR REMOVAL OF EROSION CONTROL MEASURES TO BE PAID FOR BY L.S. BID ITEM "MAINTAIN EXISTING BMPs"



Areas to be seeded as indicated on the cover sheet. The approximate seeding area is 2.7 acres. This area is based on 2,375 L.F. pipe at 50' wide and is for information only.



BAUGHMAN COMPANY
 315 Ellis St.
 Wichita, KS 67211
 316-262-7271
 BaughmanCo.com

HARBOR ISLE COMM.
 1ST & 2ND ADDITIONS

EROSION CONTROL PLAN

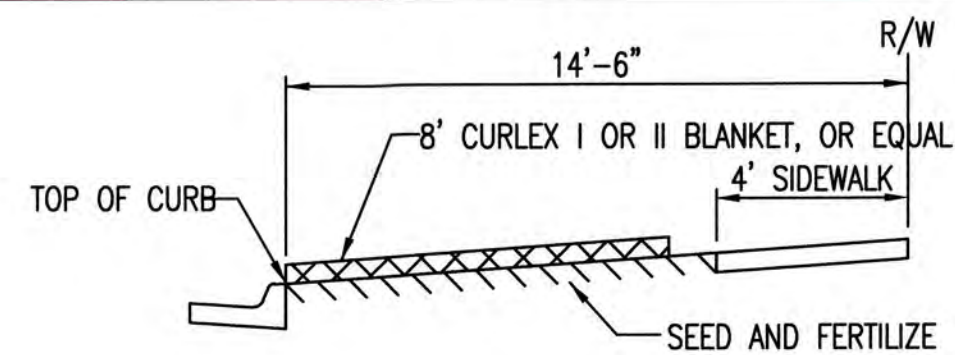
SANITARY SEWER IMPROVEMENTS

PROJECT NUMBER:
 22-08-E261

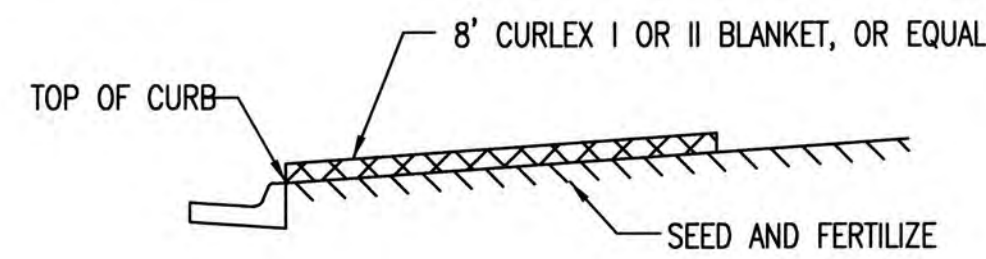
DESIGN: DRAWN:
 DATE: November 13, 2024

SHEET OF
15 22

File: E:\Projects\Harbor Isle Pump Station(22-08-E261)\Engineering\Phase 1\Pump Station\Pump Station.dwg

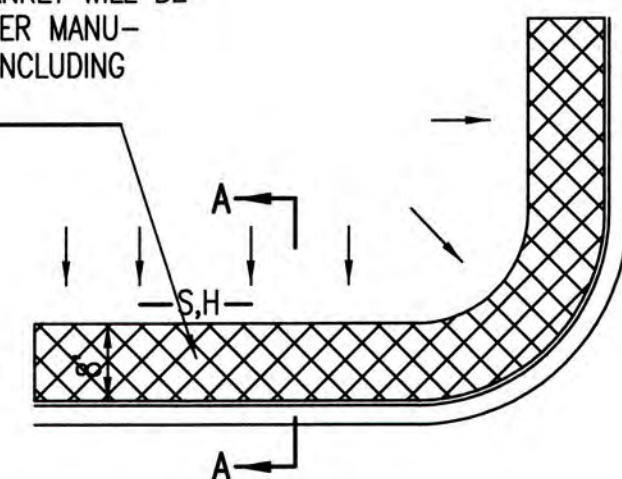


SECTION B-B

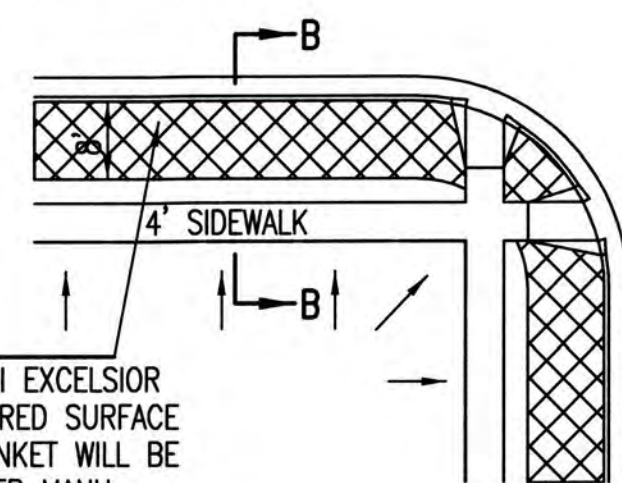


SECTION A-A

INSTALL 8" WIDE CURLEX I OR II EXCELSIOR BLANKET, OR EQUAL, ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURERS RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)



SOUTH STREET

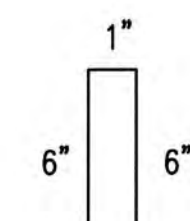
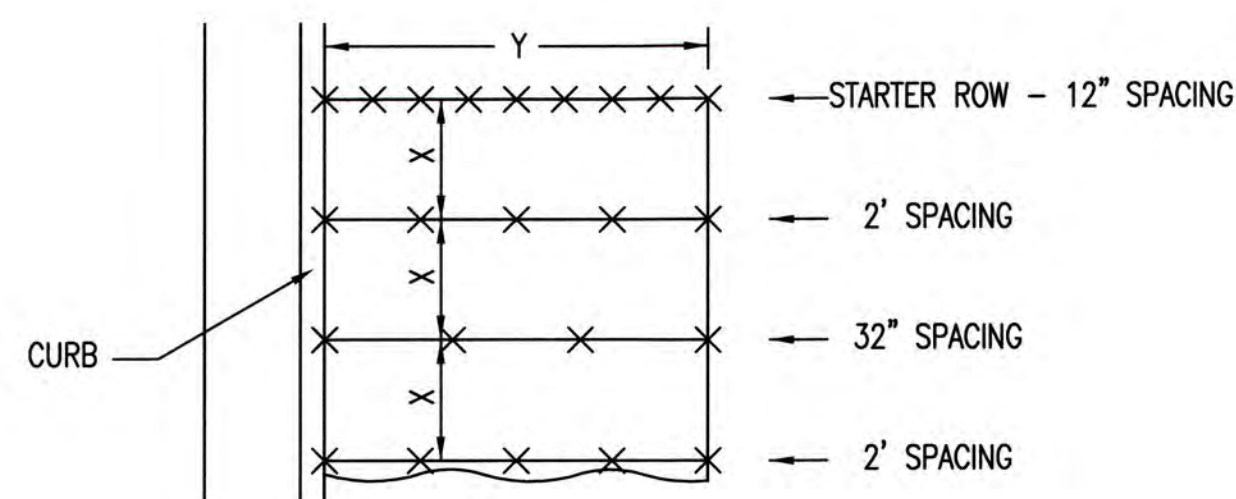


INSTALL 8" WIDE CURLEX I OR II EXCELSIOR BLANKET, OR EQUAL, ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURERS RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)

GENERAL NOTES

- EXCELSIOR MAT TO BE INSTALLED WHEN SOD IS NOT SPECIFIED ON PROJECT.
- EXCELSIOR BLANKET TO BE INSTALLED OVER SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
- AFTER INSTALLATION OF EXCELSIOR BLANKET, AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB AND INTO THE GUTTER, SUPPLEMENTAL EROSION CONTROL DEVICES WILL BE INSTALLED BY THE CONTRACTOR AS NEEDED, TO FIX THE PROBLEM.

BACK OF CURB PROTECTION DETAIL

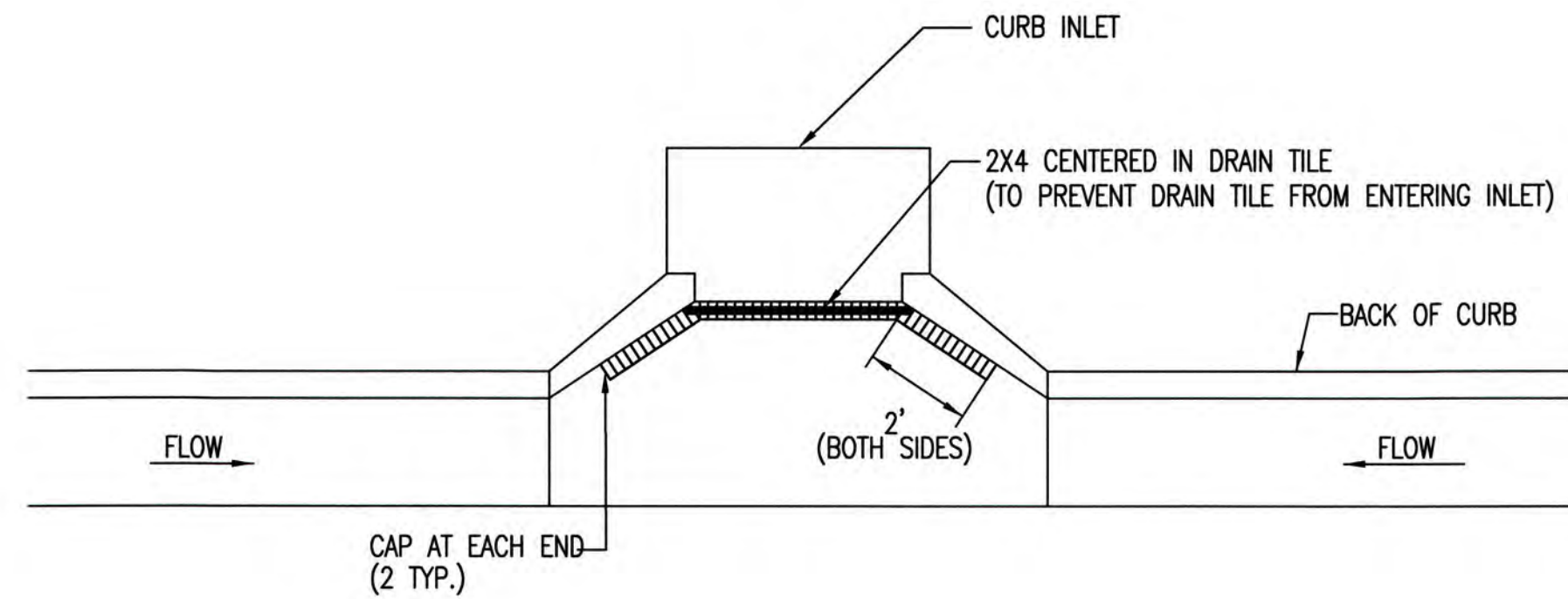


11 GA. WIRE

STAPLE

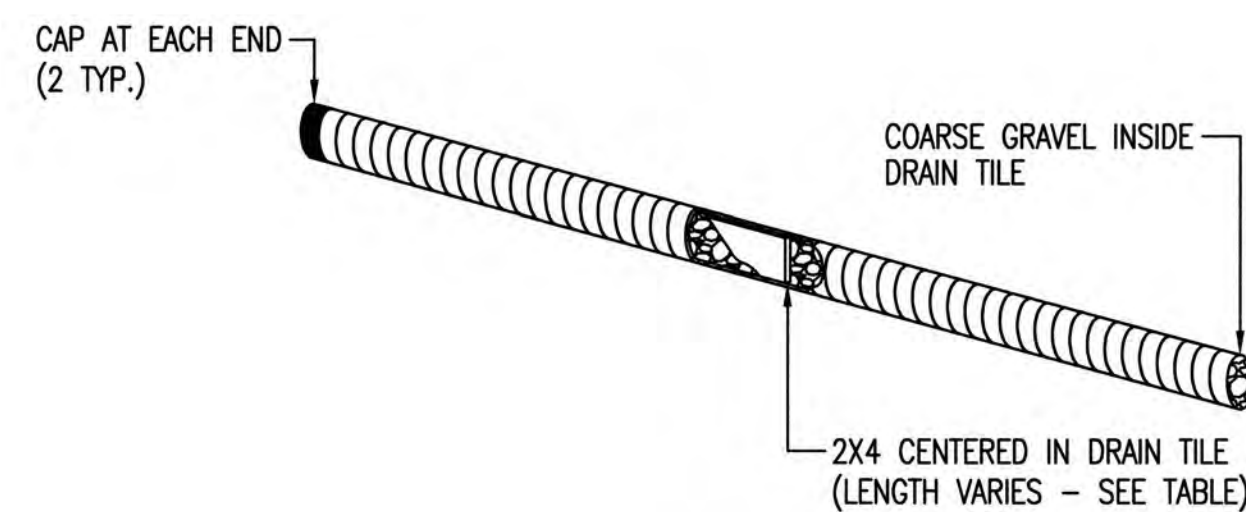
NOTES: USE 6" SEAM OVERLAP (X & Y = RECOMMENDED BY MANUFACTURE)

DETAILS FOR APPROVED EROSION CONTROL MAT



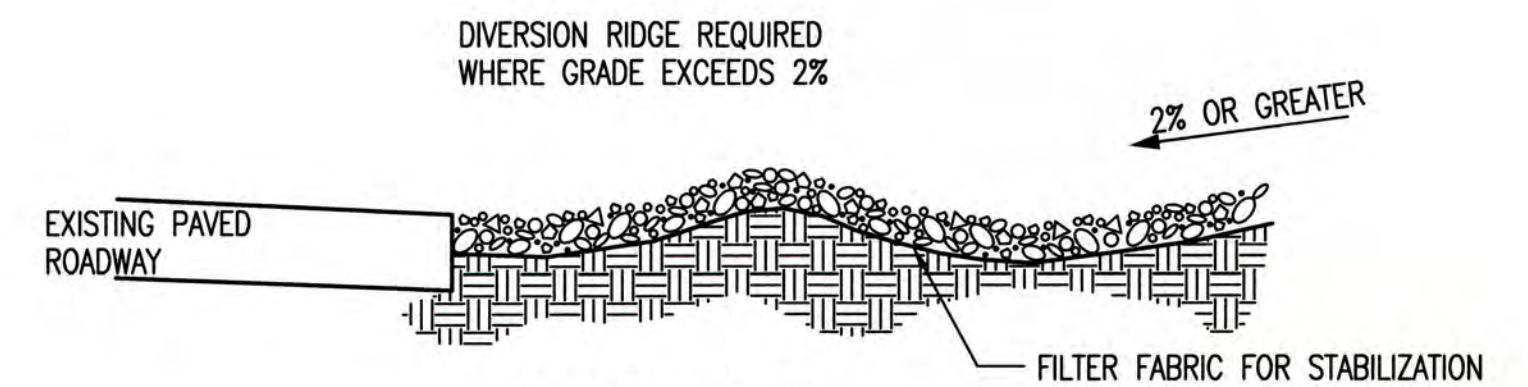
NOTE: PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"-1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

2X4 LENGTH	INLET TYPE	INLET OPENING
5'-6"	1-A	5'-0"
10'-6"	1-A	10'-0"
15'-6"	1-A	15'-0"

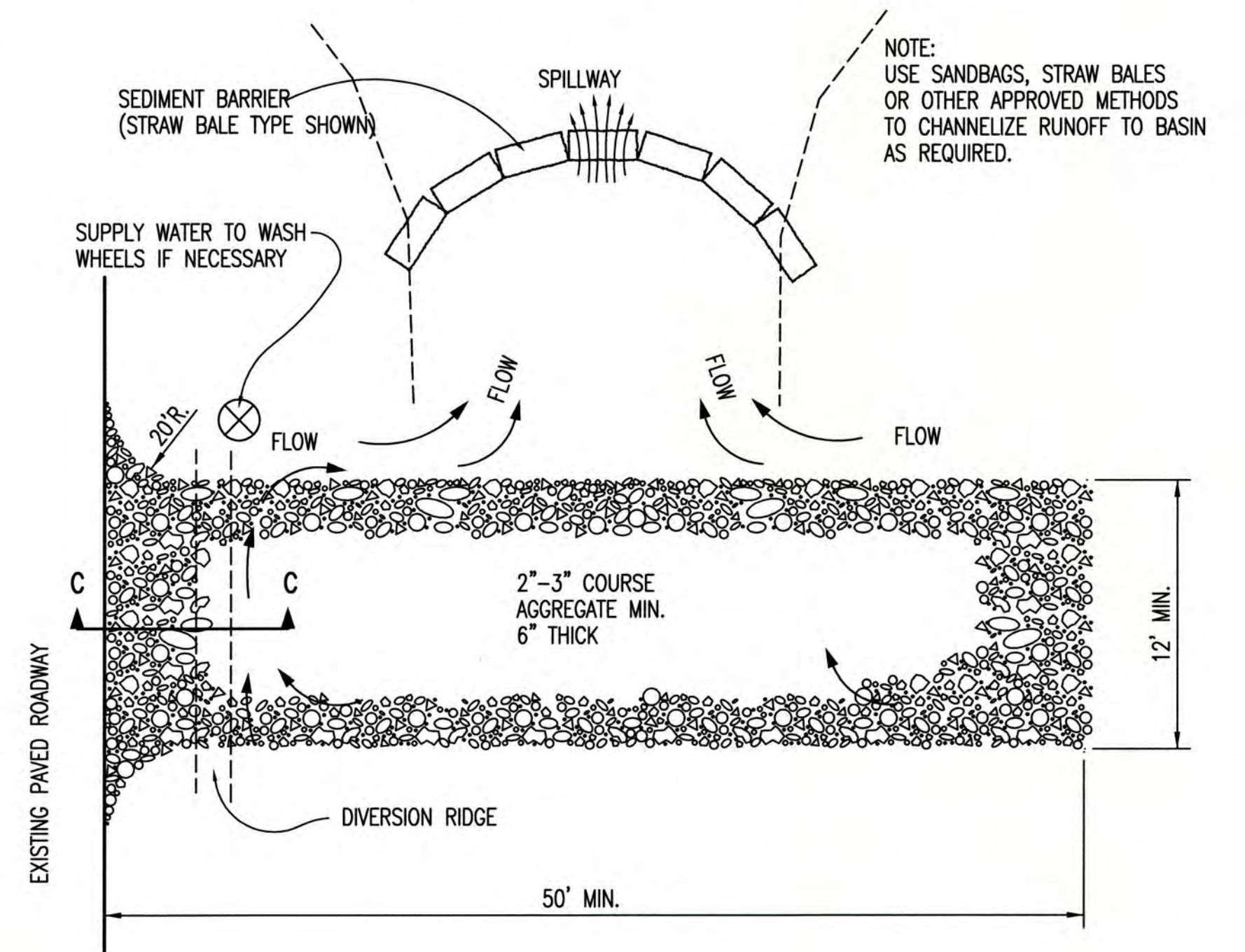


CURB INLET PROTECTION

4" PERFORATED PIPE W/ GRAVEL



SECTION C-C



STABILIZED CONSTRUCTION ENTRANCE

GENERAL NOTES

- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
- WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.
- DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.

REVISION DATE: MAY 2013

BACK OF CURB PROTECTION, CURB INLET PROTECTION AND CONSTRUCTION ENTRANCE

CITY ENGINEER
GARY JANZEN, P.E.

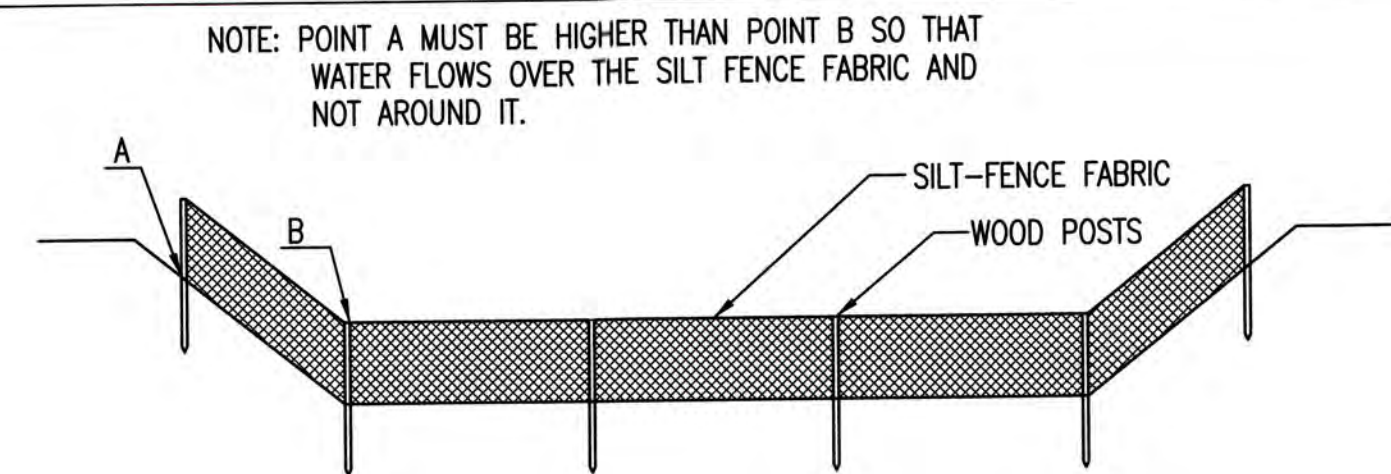
PROJECT NUMBER OCA NUMBER DATE
5/2013

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET
16 of 22



05/30/13



ELEVATION
SILT FENCE DITCH CHECKS
(STREAM PROTECTION)

MATERIAL SPECIFICATION:

SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. SILT FENCE FABRIC SHOULD BE ATTACHED TO THE WOODEN POSTS WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:

PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED. WATER SHOULD FLOW THROUGH A SILT FENCE DITCH CHECK, NOT OVER IT. SILT FENCE DITCH CHECKS OFTEN FAIL WHEN OVERTOPPED. SILT FENCE DITCH CHECKS SHOULD BE PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. THE SILT FENCE SHOULD EXTEND FAR ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE TOP OF THE LOW POINT OF THE FENCE. THIS PREVENTS WATER FROM FLOWING AROUND THE CHECK. SILT FENCE DITCH CHECKS SHOULD NOT BE PLACED IN DITCHES WHERE HIGH FLOWS ARE EXPECTED. ROCK CHECKS SHOULD BE USED INSTEAD. SILT FENCE SHOULD BE PLACED IN DITCHES WITH SLOPES OF 6% OR LESS. FOR SLOPES STEEPER THAN 6%, ROCK CHECKS SHOULD BE USED.

THE FOLLOWING TABLE PROVIDES CHECK SPACING FOR A GIVEN DITCH GRADE:

DITCH CHECK DITCH GRADE (%)	SPACING CHECK SPACING (FEET)
0.5	200
1.0	200
2.0	100
3.0	65
4.0	50
5.0	40
6.0	30

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS AT LEAST 12" DEEP BY 6" WIDE. EXTEND THE TRENCH IN A STRAIGHT LINE ALONG THE ENTIRE LENGTH OF THE PROPOSED DITCH CHECK. PLACE THE SOIL ON THE UPSTREAM SIDE OF THE TRENCH FOR LATER USE. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC ON THE DOWNSLOPE SIDE OF THE TRENCH. PLACE THE EDGE OF THE FABRIC IN THE TRENCH STARTING AT THE TOP UPSLOPE EDGE OF THE TRENCH. LINE TWO SIDES OF THE TRENCH WITH THE FABRIC AS SHOWN ON DETAIL. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED. LAY THE EXPOSED SILT FENCE ON THE UPSLOPE SIDE OF THE TRENCH TO CLEAR AN AREA FOR DRIVING IN THE POSTS. JUST DOWNSLOPE OF THE TRENCH, DRIVE POSTS INTO THE GROUND TO A DEPTH OF AT LEAST 24". PLACE POSTS NO MORE THAN 4' APART. ATTACH THE SILT FENCE TO THE ANCHORED POST WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

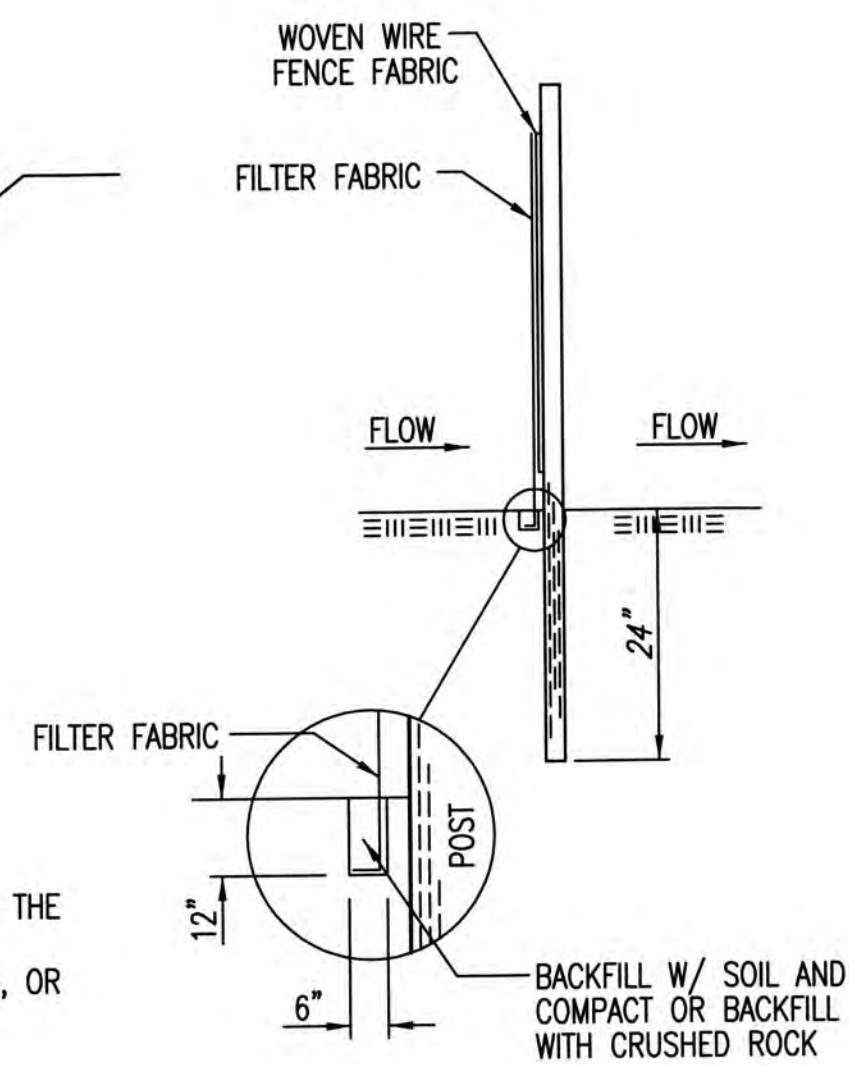
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WATER SHOULD FLOW THROUGH A SILT FENCE DITCH CHECK—NOT OVER IT. PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED. SILT FENCE INSTALLATIONS QUICKLY DETERIORATE WHEN WATER OVERTOPS THEM. DO NOT PLACE SILT FENCE POSTS ON THE UPSLOPE SIDE OF THE SILT FENCE FABRIC. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL. DO NOT PLACE A SILT FENCE DITCH CHECK DIRECTLY IN FRONT OF A CULVERT OUTLET. IT WILL NOT STAND UP TO THE CONCENTRATED FLOW. DO NOT PLACE SILT FENCE DITCH CHECKS IN DITCHES THAT WILL LIKELY EXPERIENCE HIGH FLOWS. THEY WILL NOT STAND UP TO CONCENTRATED FLOW. FOLLOW PRESCRIBED DITCH CHECK SPACING GUIDELINES. IF SPACING GUIDELINES ARE EXCEEDED, EROSION WILL OCCUR BETWEEN THE DITCH CHECKS. DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE LOW POINT ON THE TOP OF THE FENCE. DO NOT PLACE SILT FENCE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECK IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT.

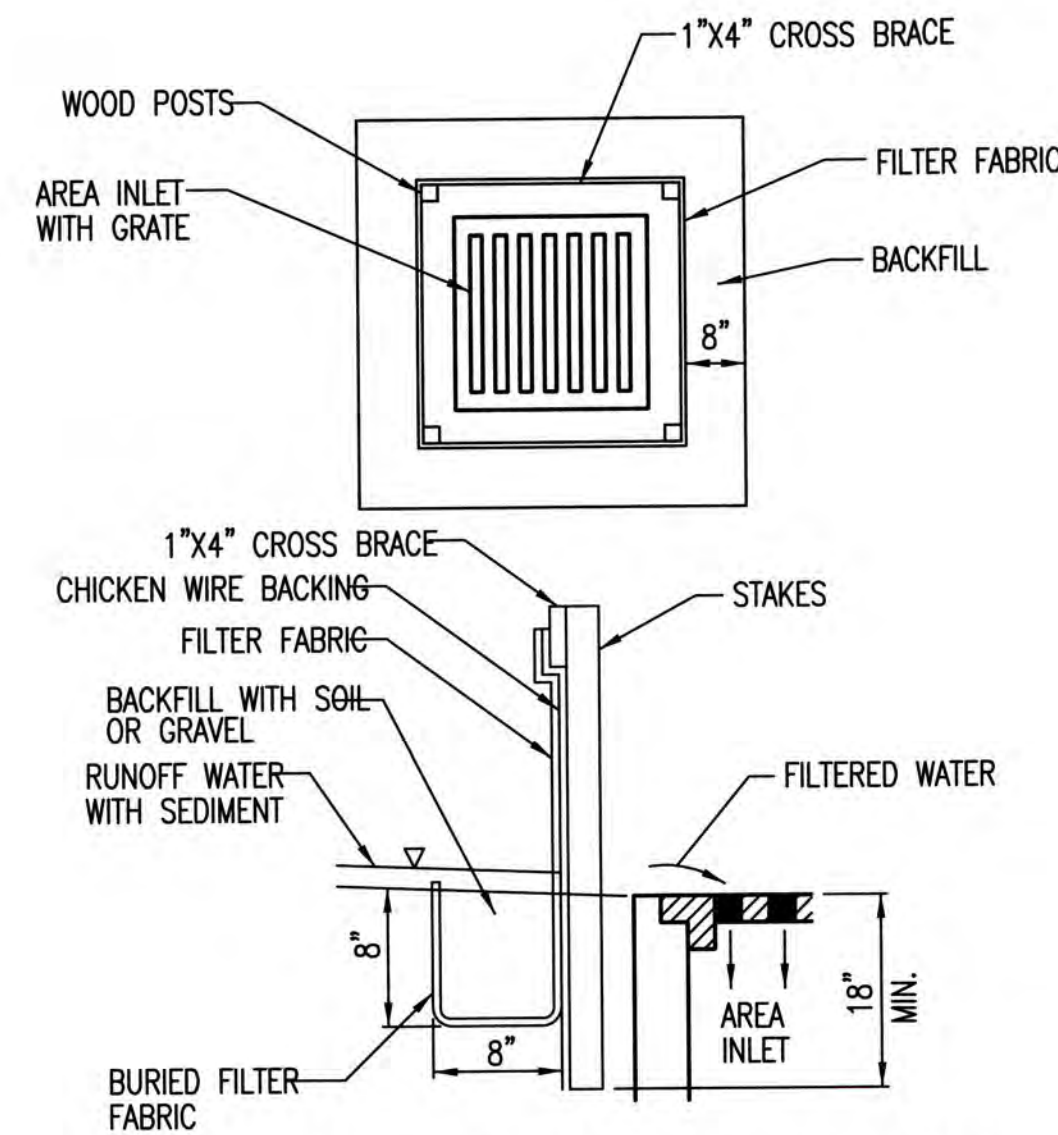
INSPECTION AND MAINTENANCE:

SILT FENCE DITCH CHECKS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- DOES WATER FLOW AROUND THE DITCH CHECK?
- DOES WATER FLOW UNDER THE DITCH CHECK?
- DOES THE SILT FENCE SAG EXCESSIVELY?
- HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?



ANCHOR TRENCH DETAIL



SILT FENCE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

MATERIAL SPECIFICATION:

SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE WIRE OR POLYMERIC MESH BACKING USED TO HELP SUPPORT THE SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. THE MATERIAL USED TO FRAME THE TOPS OF THE POSTS SHOULD BE 1" BY 4" BOARDS. SILT FENCE FABRIC AND SUPPORT BACKING SHOULD BE ATTACHED TO THE WOODEN POSTS AND FRAME WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:

PLACE A SILT FENCE DROP INLET BARRIER IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. WATER SHOULD FLOW THROUGH SILT FENCE, NOT OVER IT. SILT FENCE BARRIERS FOR AREA INLETS OFTEN FAIL WHEN REPEATEDLY OVERTOPPED. WHEN USED AS A BARRIER FOR AREA INLETS, SILT FENCE FABRIC AND POSTS MUST BE SUPPORTED AT THE TOP BY A WOODEN FRAME. WHEN A SILT FENCE BARRIER FOR AREA INLETS IS LOCATED NEAR AN INLET THAT HAS STEEP APPROACH SLOPES, THE STORAGE CAPACITY BEHIND THE BARRIER IS DRASTICALLY REDUCED. TIMELY REMOVAL OF SEDIMENT MUST OCCUR FOR A BARRIER TO OPERATE PROPERLY IN THIS LOCATION.

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH AROUND THE PERIMETER OF THE AREA INLET THAT IS AT LEAST 8" DEEP BY 8" WIDE. DRIVE POSTS TO A DEPTH OF AT LEAST 18" AROUND THE PERIMETER OF THE AREA INLET. THE DISTANCE BETWEEN POSTS SHOULD BE 4' OR LESS. IF THE DISTANCE BETWEEN TWO ADJACENT CORNER POSTS IS MORE THAN 4', ADD ANOTHER POST(S) BETWEEN THEM. CONNECT THE TOPS OF ALL THE POSTS WITH A WOODEN FRAME MADE OF 1" BY 4" BOARDS. USE NAILS OR SCREWS FOR FASTENING. ATTACH THE WIRE OR POLYMERIC-MESH BACKING TO THE OUTSIDE OF THE POST/FRAME STRUCTURE WITH STAPLES, WIRE, ZIP TIES, OR NAILS. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC LONG ENOUGH TO WRAP AROUND THE PERIMETER OF THE AREA INLET. ADD MORE LENGTH FOR OVERLAPPING THE FABRIC JOINT. PLACE THE EDGE OF THE FABRIC IN THE TRENCH, STARTING AT THE OUTSIDE EDGE OF THE TRENCH. LINE ALL THREE SIDES OF THE TRENCH WITH THE FABRIC. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED. ATTACH THE SILT FENCE TO THE OUTSIDE OF THE POST/FRAME STRUCTURE WITH STAPLES, WIRE, ZIP TIES, OR NAILS. THE JOINT SHOULD BE OVERLAPPED TO THE NEXT POST.

NOTE: WHEN A SILT FENCE BARRIER FOR AREA INLET IS PLACED IN A SHALLOW MEDIAN DITCH, MAKE SURE THAT THE TOP OF THE BARRIER IS NOT HIGHER THAN THE PAVED ROAD. IN THIS CONFIGURATION, WATER MAY SPREAD ONTO THE ROADWAY CAUSING A HAZARDOUS CONDITION.

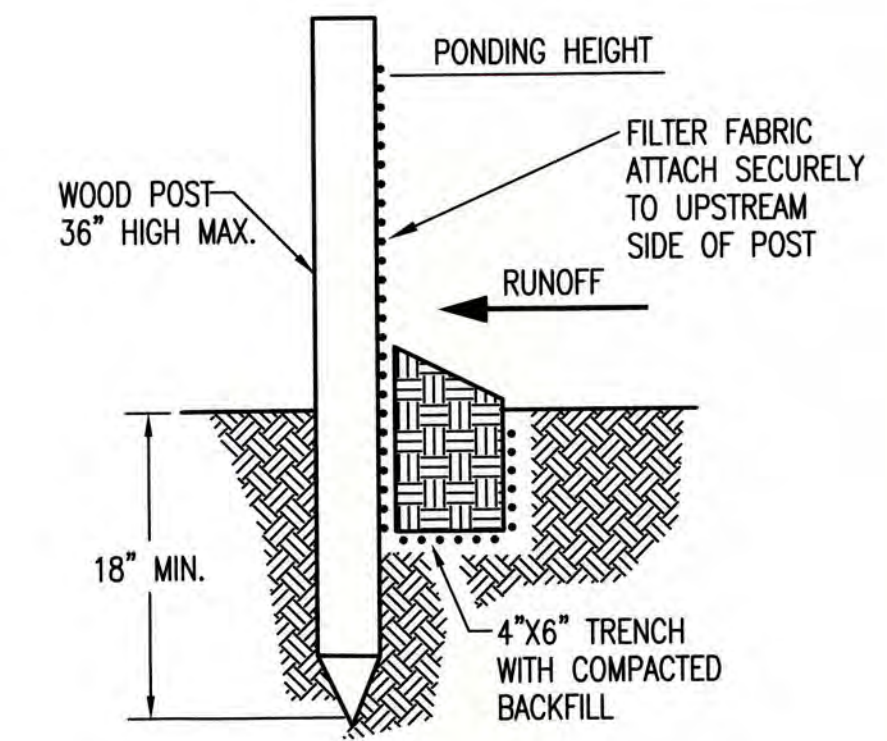
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WATER SHOULD FLOW THROUGH A SILT FENCE BARRIER FOR AREA INLET—NOT OVER IT. PLACE A SILT FENCE BARRIER FOR AREA INLET IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. SILT FENCE BARRIER FOR AREA INLETS OFTEN FAIL WHEN REPEATEDLY OVERTOPPED. DO NOT PLACE POSTS ON THE OUTSIDE OF THE SILT FENCE BARRIER FOR AREA INLET. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL. DO NOT INSTALL SILT FENCE BARRIER FOR AREA INLETS WITHOUT FRAMING THE TOP OF THE POSTS. THE CORNER POSTS AROUND AREA INLETS ARE STRESSED IN TWO DIRECTIONS WHEREAS A NORMAL SILT FENCE IS ONLY STRESSED IN ONE DIRECTION. THIS ADDED STRESS REQUIRES MORE SUPPORT.

INSPECTION AND MAINTENANCE:

SILT FENCE BARRIER FOR AREA INLETS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- DOES WATER FLOW UNDER THE SILT FENCE?
- DOES THE SILT FENCE SAG EXCESSIVELY?
- HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRIER?



SILT FENCE BARRIERS

MATERIAL SPECIFICATION:

SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. SILT FENCE FABRIC SHOULD BE ATTACHED TO THE WOODEN POSTS WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:

A SLOPE BARRIER SHOULD BE USED AT THE TOE OF A SLOPE WHEN A DITCH DOES NOT EXIST. THE SLOPE BARRIER SHOULD BE PLACED ON NEARLY LEVEL GROUND 5' TO 10' AWAY FROM THE TOE OF A SLOPE. THE BARRIER IS PLACED AWAY FROM THE TOE OF THE SLOPE TO PROVIDE ADEQUATE STORAGE FOR SETTLING OUT SEDIMENT. WHEN PRACTICABLE, SILT FENCE SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. SILT FENCE SLOPE BARRIERS CAN ALSO BE PLACED ALONG RIGHT-OF-WAY FENCE LINES TO KEEP SEDIMENT FROM CROSSING ONTO ADJACENT PROPERTY. WHEN PLACED IN THIS MANNER, THE SLOPE BARRIER WILL NOT LIKELY FOLLOW CONTOURS.

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH THE LENGTH OF THE PLANNED SLOPE BARRIER THAT IS 6" DEEP BY 4" WIDE. MAKE SURE THAT THE TRENCH IS EXCAVATED ALONG A SINGLE CONTOUR. WHEN PRACTICABLE, SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. PLACE THE SOIL ON THE UPSLOPE SIDE OF THE TRENCH FOR LATER USE. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC ON THE DOWNSLOPE SIDE OF THE TRENCH. PLACE THE EDGE OF THE FABRIC IN THE TRENCH STARTING AT THE TOP UPSLOPE EDGE. LINE ALL THREE SIDES OF THE TRENCH WITH THE FABRIC. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT-FENCE FABRIC SHOULD REMAIN EXPOSED. LAY THE EXPOSED SILT FENCE UPSLOPE OF THE TRENCH TO CLEAR AN AREA FOR DRIVING IN THE POSTS. JUST DOWNSLOPE OF THE TRENCH, DRIVE POSTS INTO THE GROUND TO A DEPTH OF AT LEAST 18". PLACE POSTS NO MORE THAN 4' APART. ATTACH THE SILT FENCE TO THE ANCHORED POST WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WHEN PRACTICABLE, DO NOT PLACE SILT FENCE SLOPE BARRIERS ACROSS CONTOURS. SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. WHEN THE FLOW CONCENTRATES, IT OVERTOPS THE BARRIER AND THE SILT FENCE SLOPE BARRIER QUICKLY DETERIORATES. DO NOT PLACE SILT-FENCE POSTS ON THE UPSLOPE SIDE OF THE SILT FENCE FABRIC. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL. DO NOT PLACE SILT FENCE BARRIERS IN AREAS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE BARRIER IS NOT SUFFICIENTLY ANCHORED, IT WILL WASH OUT. SILT FENCE SLOPE BARRIERS MUST BE DUG INTO THE GROUND—SILT FENCE AT GROUND LEVEL DOES NOT WORK BECAUSE WATER WILL FLOW UNDERNEATH.

INSPECTION AND MAINTENANCE:

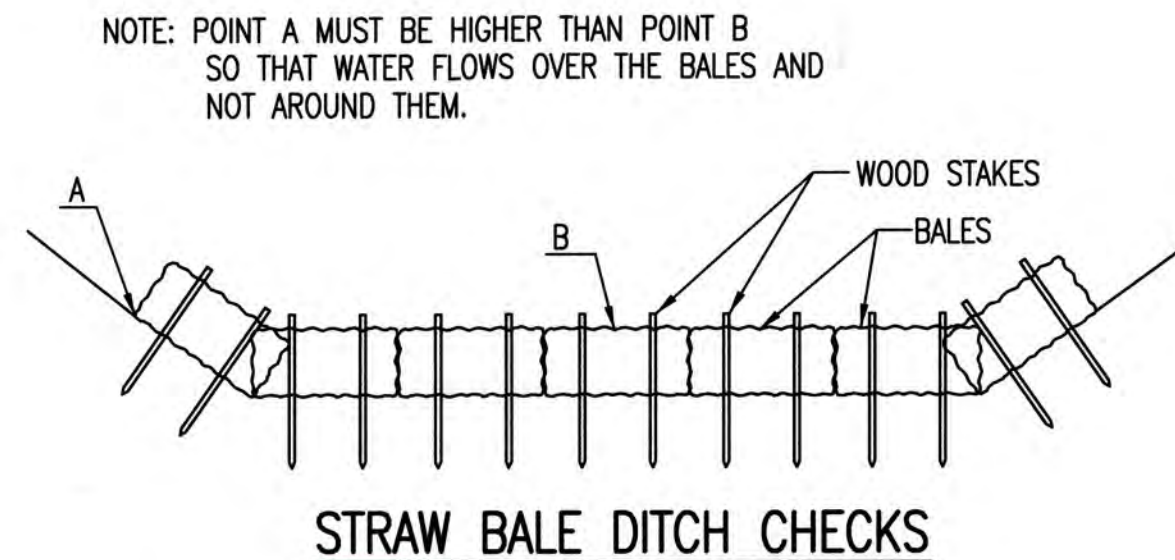
SILT FENCE SLOPE BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- ARE THERE ANY POINTS ALONG THE SLOPE BARRIER WHERE WATER IS CONCENTRATING?
- DOES WATER FLOW UNDER THE SLOPE BARRIER?
- DO THE SILT FENCES SAG EXCESSIVELY?
- HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE SLOPE BARRIER?

REVISION DATE: MAY 2013



SILT FENCE DITCH CHECK AND BARRIER DETAILS		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE 5/2013
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 17 of 22



MATERIAL SPECIFICATION:

BALE DITCH CHECKS MAY BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS HAY THAT IS FREE OF WEEDS DECLARED NOXIOUS BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. OPTIONAL: THE DOWNSTREAM SCOUR APRON SHOULD BE CONSTRUCTED OF A DOUBLE-NETTED STRAW EROSION-CONTROL BLANKET AT LEAST 6' WIDE. OPTIONAL: THE METAL LANDSCAPE STAPLES USED TO ANCHOR THE EROSION-CONTROL BLANKET SHOULD BE AT LEAST 8" LONG.

PLACEMENT:

BALE DITCH CHECKS SHOULD BE PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. THE DITCH CHECK SHOULD EXTEND FAR ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE CHECK IS HIGHER THAN THE TOP OF THE LOWEST CENTER BALE. THIS PREVENTS WATER FROM FLOWING AROUND THE CHECK. STRAW BALE DITCH CHECKS SHOULD NOT BE PLACED IN DITCHES WHERE HIGH FLOWS ARE EXPECTED. ROCK CHECKS SHOULD BE USED INSTEAD. BALES SHOULD BE PLACED IN DITCHES WITH SLOPES OF 6% OR LESS. FOR SLOPES STEEPER THAN 6%, ROCK CHECKS SHOULD BE USED. THE FOLLOWING TABLE PROVIDES CHECK SPACING FOR A GIVEN DITCH GRADE:

DITCH GRADE (%)	CHECK SPACING (FEET)
0.5	200
1.0	200
2.0	100
3.0	65
4.0	50
5.0	40
6.0	30

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS 4" DEEP AND A BALE'S WIDTH WIDE. EXTEND THE TRENCH IN A STRAIGHT LINE ALONG THE ENTIRE LENGTH OF THE PROPOSED DITCH CHECK. PLACE THE SOIL ON THE UPSTREAM SIDE OF THE TRENCH-IT WILL BE USED LATER. OPTIONAL: ON THE DOWNSTREAM SIDE OF THE TRENCH, ROLL OUT A LENGTH OF EROSION-CONTROL BLANKET (SCOUR APRON) EQUAL TO THE LENGTH OF THE TRENCH. PLACE THE UPSTREAM EDGE OF THE EROSION-CONTROL BLANKET ALONG THE BOTTOM UPSTREAM EDGE OF THE TRENCH. THE EROSION CONTROL BLANKET SHOULD BE ANCHORED IN THE TRENCH WITH ONE ROW OF 8" LANDSCAPE STAPLES PLACED ON 18" CENTERS. THE REMAINDER OF THE EROSION-CONTROL BLANKET (THE PORTION THAT IS NOT LYING IN THE TRENCH) WILL SERVE AS THE DOWNSTREAM SCOUR APRON. THIS SECTION OF THE BLANKET SHOULD BE ANCHORED TO THE GROUND WITH 8" LANDSCAPE STAPLES PLACED AROUND THE PERIMETER OF THE BLANKET ON 18" CENTERS. THE REMAINDER OF THE BLANKET SHOULD BE ANCHORED USING TWO EVENLY SPACED ROWS OF 8" LANDSCAPE STAPLES ON 18" CENTERS PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND. ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE UPSTREAM SIDE OF THE CHECK AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP AND EXTEND UPSTREAM NO MORE THAN 24".

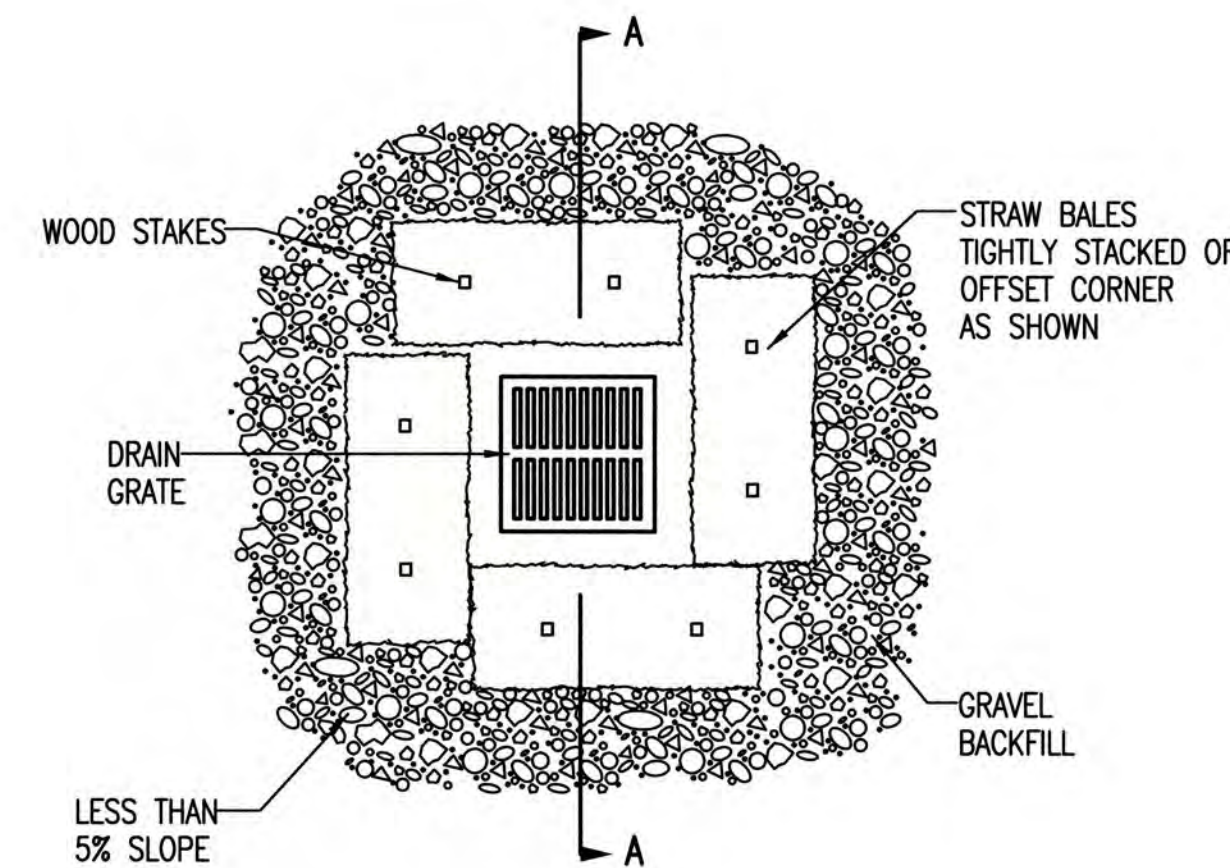
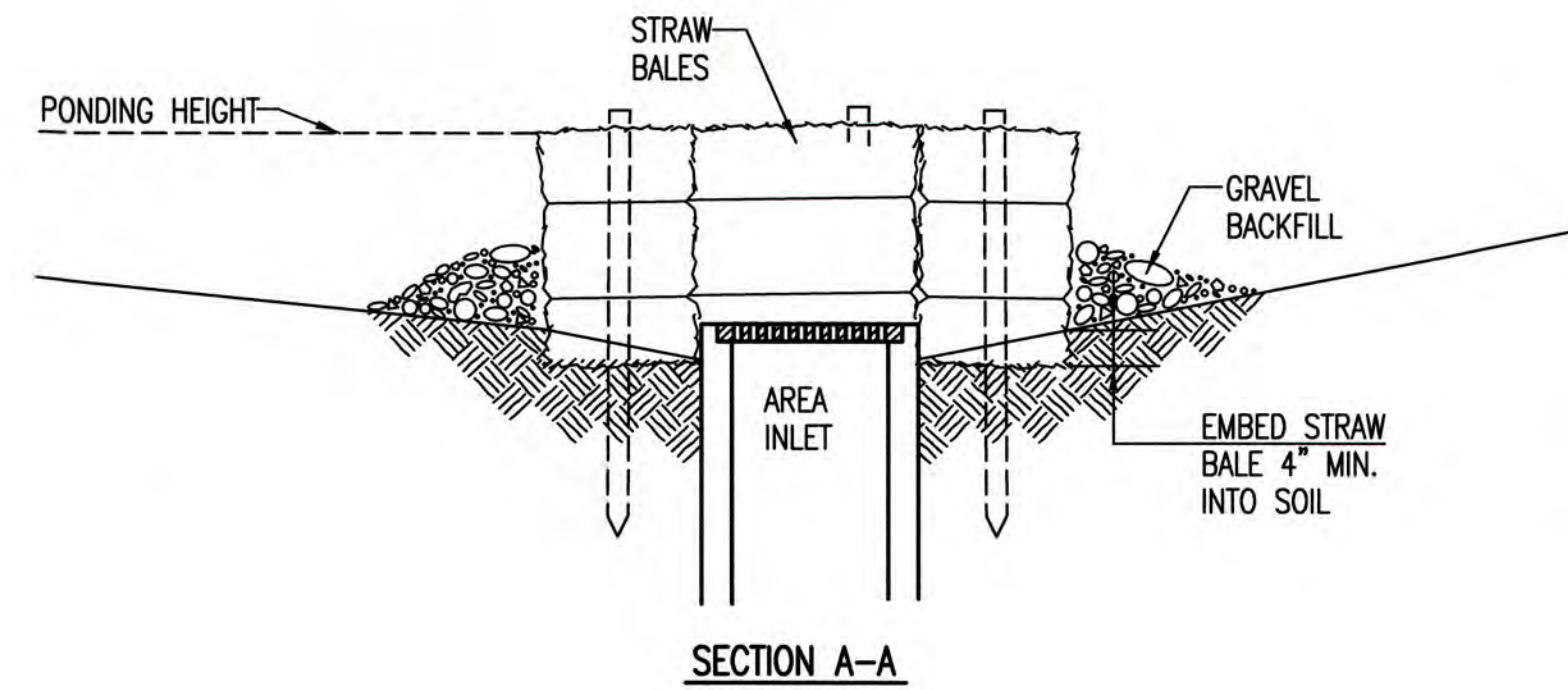
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

DO NOT PLACE A BALE DITCH CHECK DIRECTLY IN FRONT OF A CULVERT OUTLET. IT WILL NOT STAND UP TO THE CONCENTRATED FLOW. DO NOT PLACE BALE DITCH CHECKS IN DITCHES THAT WILL LIKELY EXPERIENCE HIGH FLOWS. THEY WILL NOT STAND UP TO CONCENTRATED FLOW. FOLLOW PRESCRIBED DITCH-CHECK SPACING GUIDELINES. IF SPACING GUIDELINES ARE EXCEEDED, EROSION WILL OCCUR BETWEEN THE DITCH CHECKS. DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE CHECK IS HIGHER THAN THE TOP OF THE LOWEST CENTER BALE. DO NOT PLACE BALE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECK IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT. BALE DITCH CHECKS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE CHECK.

INSPECTION AND MAINTENANCE:

BALE DITCH CHECKS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- DOES WATER FLOW AROUND THE DITCH CHECK?
- DOES WATER FLOW UNDER THE DITCH CHECK?
- DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?
- ARE ANY BALES AND/OR SCOUR APRONS (OPTIONAL) DISLODGED?
- ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?



STRAW BALE BARRIERS FOR AREA INLETS (INLET PROTECTION)

MATERIAL SPECIFICATION:

BALE AREA INLET BARRIERS SHOULD BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS HAY THAT IS FREE OF WEEDS DECLARED NOXIOUS BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. TWINE SHOULD BE USED TO BIND BALES. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

PLACEMENT:

BALE AREA INLET BARRIERS SHOULD BE PLACED DIRECTLY AROUND THE PERIMETER OF A DROP INLET. WHEN A BALE AREA INLET BARRIER IS LOCATED NEAR AN INLET THAT HAS STEEP APPROACH SLOPES, THE STORAGE CAPACITY BEHIND THE BARRIER IS DRASTICALLY REDUCED. TIMELY REMOVAL OF SEDIMENT MUST OCCUR FOR A BARRIER TO OPERATE PROPERLY IN THIS LOCATION.

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH AROUND THE PERIMETER OF THE AREA INLET THAT IS AT LEAST 4" DEEP BY A BALE'S WIDTH WIDE. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. SOME BALES MAY NEED TO BE SHORTENED TO FIT INTO THE TRENCH AROUND THE AREA INLET. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND. ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE RECEIVING SIDE OF THE BARRIER AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP. NOTE: WHEN A BALE AREA INLET BARRIER IS PLACED IN A SHALLOW MEDIAN DITCH, MAKE SURE THAT THE TOP OF THE BARRIER IS NOT HIGHER THAN THE PAVED ROAD. IN THIS CONFIGURATION, WATER MAY SPREAD ONTO THE ROADWAY CAUSING A HAZARDOUS CONDITION.

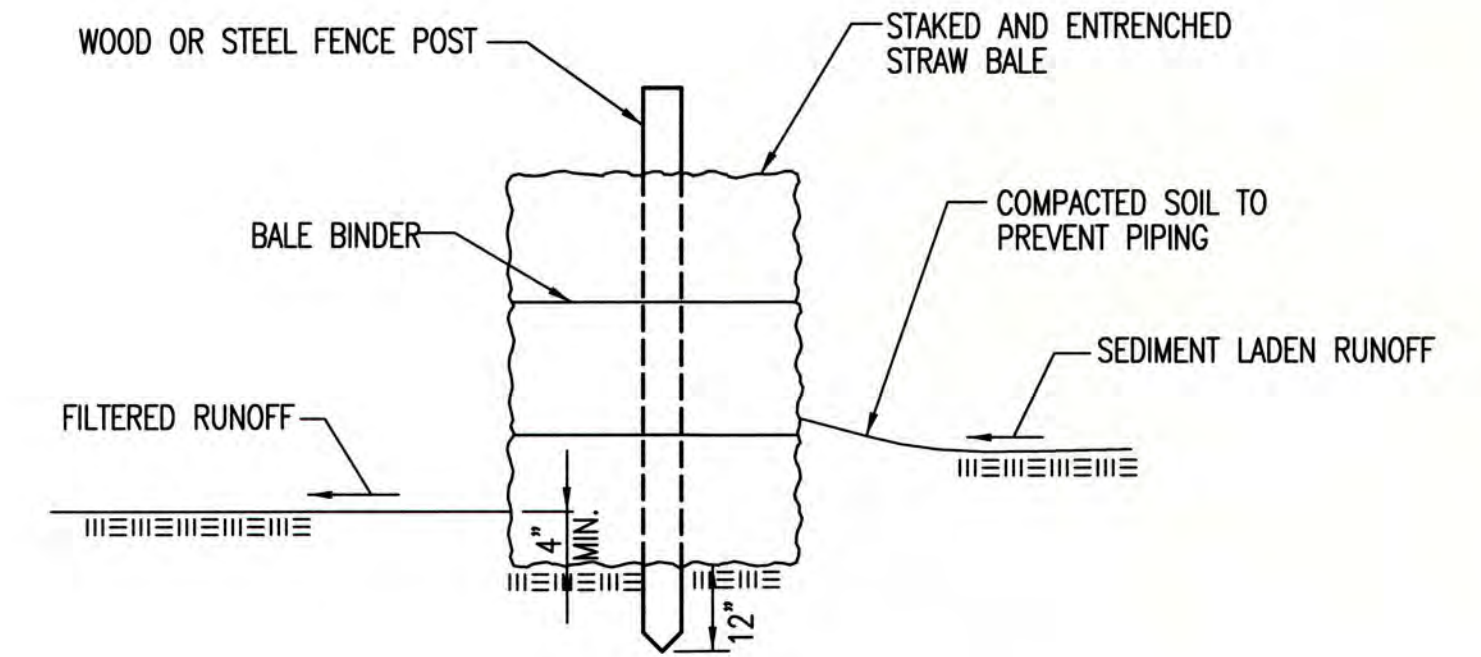
LIST OF COMMON PLACEMENT INSTALLATION MISTAKES TO AVOID:

BALES SHOULD BE PLACED DIRECTLY AGAINST THE PERIMETER OF THE AREA INLET. THIS ALLOWS OVERTOPPING WATER TO FLOW DIRECTLY INTO THE INLET INSTEAD OF ONTO NEARBY SOIL CAUSING SCOUR. BALE AREA INLET BARRIERS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE BARRIER.

INSPECTION AND MAINTENANCE:

BALE AREA INLET BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- DOES WATER FLOW UNDER THE AREA INLET BARRIER?
- DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?
- ARE ANY BALES DISLODGED?
- ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRIER?



STRAW BALE BARRIERS

MATERIAL SPECIFICATION:

BALE SLOPE BARRIERS MAY BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS HAY THAT IS FREE OF WEEDS DECLARED NOXIOUS BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. TWINE SHOULD BE USED TO BIND BALES. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

PLACEMENT:

A SLOPE BARRIER SHOULD BE USED AT THE TOE OF A SLOPE WHEN A DITCH DOES NOT EXIST. THE SLOPE BARRIER SHOULD BE PLACED ON NEARLY LEVEL GROUND 5' TO 10' AWAY FROM THE TOE OF A SLOPE. THE BARRIER IS PLACED AWAY FROM THE TOE OF THE SLOPE TO PROVIDE ADEQUATE STORAGE FOR SETTLING OUT SEDIMENT. WHEN PRACTICABLE, BALE SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. BALE SLOPE BARRIERS CAN ALSO BE PLACED ALONG RIGHT-OF-WAY FENCE LINES TO KEEP SEDIMENT FROM CROSSING ONTO ADJACENT PROPERTY. WHEN PLACED IN THIS MANNER, THE SLOPE BARRIER WILL NOT LIKELY FOLLOW CONTOURS.

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH THE LENGTH OF THE PLANNED SLOPE BARRIER THAT IS 4" DEEP AND A BALE'S WIDTH WIDE. MAKE SURE THAT THE TRENCH IS EXCAVATED ALONG A SINGLE CONTOUR. WHEN PRACTICABLE, SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. PLACE THE SOIL ON THE UPSLOPE SIDE OF THE TRENCH FOR LATER USE. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND. ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE UPSLOPE SIDE OF THE CHECK AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WHEN PRACTICAL, DO NOT PLACE BALE SLOPE BARRIERS ACROSS CONTOURS. SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. CONCENTRATED FLOW OVER A SLOPE BARRIER CREATES A SCOUR HOLE ON THE DOWNSLOPE SIDE OF THE BARRIER. THE SCOUR HOLE EVENTUALLY UNDERMINES THE BALES AND THE BARRIER FAILS. DO NOT PLACE BALE SLOPE BARRIERS IN AREAS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE BARRIER IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT. BALE SLOPE BARRIERS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE BARRIER.

INSPECTION AND MAINTENANCE:

BALE SLOPE BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- ARE THERE ANY POINTS ALONG THE SLOPE BARRIER WHERE WATER IS CONCENTRATING?
- DOES WATER FLOW UNDER THE SLOPE BARRIER?
- DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?
- ARE ANY BALES DISLODGED?
- ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE SLOPE BARRIER?

REVISION DATE: MAY 2013



STRAW BALE DITCH CHECK AND BARRIER DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

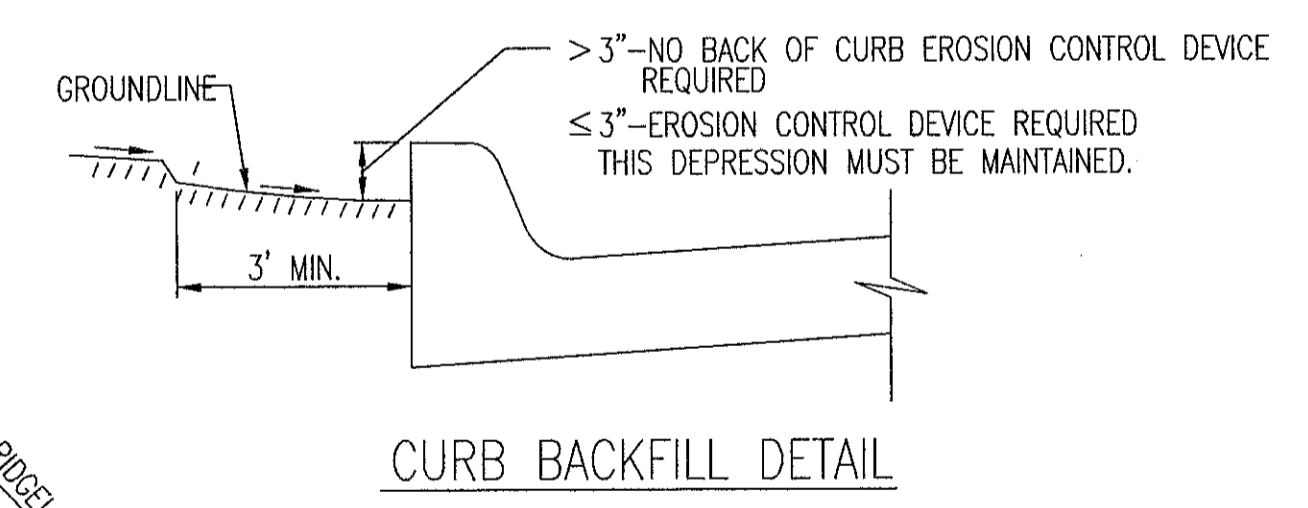
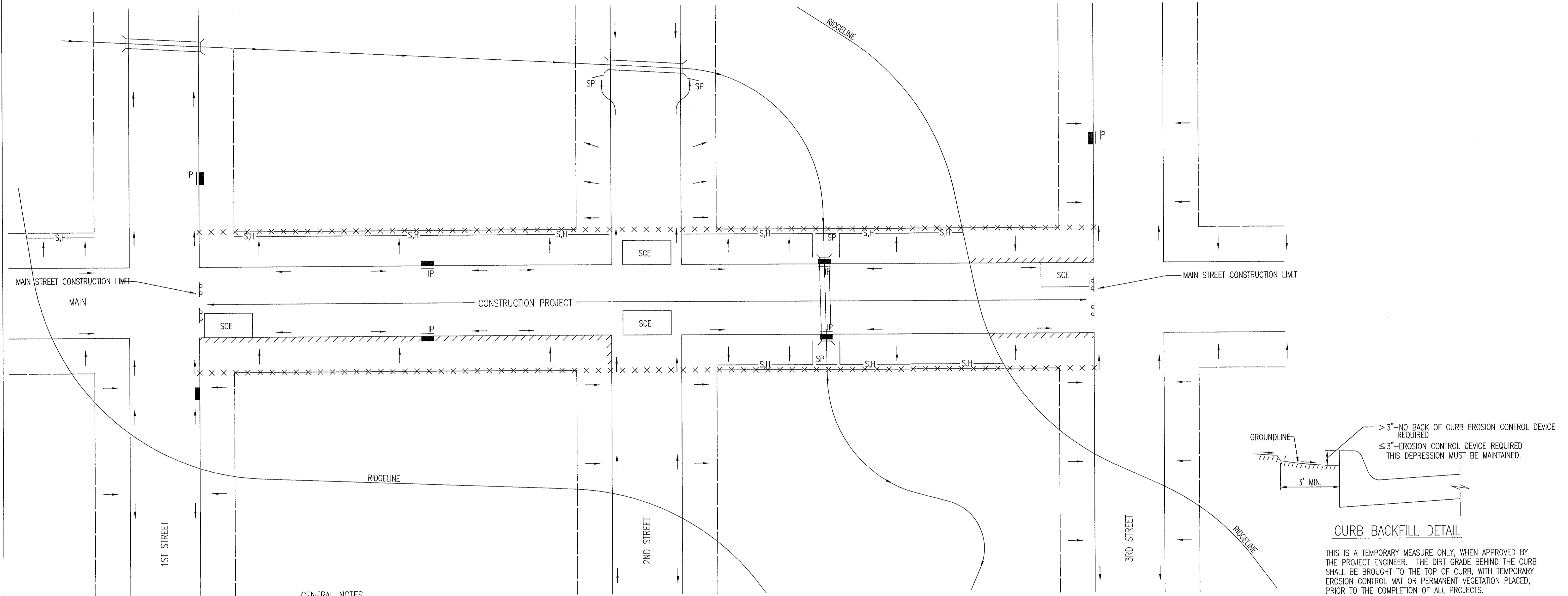
PROJECT NUMBER	OCA NUMBER	DATE
		5/2013

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET
18 of 22

GENERAL NOTES

- THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPES OF EROSION CONTROL DEVICES WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.
- EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.
- IF THE PROJECT WILL DISTURB 1 ACRE OR MORE, A FEDERAL/STATE NPDES STORMWATER PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN, IS REQUIRED. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SHOWN IN THE POLLUTION PREVENTION PLAN.
- FOR PROJECTS DISTURBING LESS THAN 1 ACRE, CONTRACTORS ARE ENCOURAGED TO PREPARE STORMWATER POLLUTION PREVENTION PLANS PRIOR TO CONSTRUCTION. EROSION CONTROL DEVICES MUST BE USED ON ALL PROJECTS.
- FAILURE TO USE AND MAINTAIN EROSION CONTROL DEVICES IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE CONTRACTOR TO THE PENALTIES PROVIDED FOR THEREIN.
- THE APPLICATION OF EROSION CONTROL DEVICES SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE A DIFFERENT DEVICE OTHER THAN THOSE SHOWN. EROSION CONTROL DEVICES, OTHER THAN THOSE SHOWN, MAY BE UTILIZED AS LONG AS THEY ARE EFFECTIVE AND MAINTAINED.



THIS IS A TEMPORARY MEASURE ONLY, WHEN APPROVED BY THE PROJECT ENGINEER. THE DIRT GRADE BEHIND THE CURB SHALL BE BROUGHT TO THE TOP OF CURB, WITH TEMPORARY EROSION CONTROL MAT OR PERMANENT VEGETATION PLACED, PRIOR TO THE COMPLETION OF ALL PROJECTS.


GENERAL NOTES

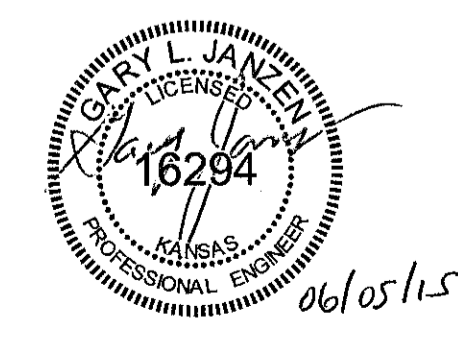
- THE INTENT OF ALL EROSION CONTROL DEVICES IS TO KEEP ALL SEDIMENT CONFINED TO THE CONSTRUCTION SITE, AND OUT OF ALL UNDERGROUND PIPES, DITCHES, LAKES, AND OTHER DRAINAGE FACILITIES, AND OFF OF STREETS.
- THE POINT OF COMPLIANCE IS GENERALLY THE RIGHT-OF-WAY LINES WITHIN THE LIMITS OF CONSTRUCTION.
- EROSION CONTROL DEVICES WILL BE REQUIRED AT ALL POINTS ALONG THE PROJECT WHERE DISTURBED EARTH CAN DRAIN ONTO PRIVATE PROPERTY.
- INLET PROTECTION DEVICES WILL BE REQUIRED WHEREVER WATER CAN DRAIN OFF THE PROJECT SITE INTO AN INLET, INCLUDING ANY SIDE STREET INLETS.
- EROSION CONTROL DEVICES SHALL BE INSTALLED AT CREEK CROSSINGS SO AS TO PREVENT SEDIMENT FROM ENTERING THEREIN.
- STABILIZED CONSTRUCTION ENTRANCES SHALL BE PROVIDED, AS NEEDED, TO PREVENT MUD FROM TRACKING ONTO STREETS NOT UNDER CONSTRUCTION AND ON STREETS WITHIN THE PROJECT LIMITS IF TRAFFIC IS BEING MAINTAINED THROUGH THE PROJECT.
- ANY MUD TRACKED ONTO STREETS MUST BE REMOVED AT THE END OF EACH WORK DAY.
- THE CONTRACTOR WILL BE REQUIRED TO PLACE EROSION CONTROL DEVICES BACK OF CURB, WHENEVER WATER CAN DRAIN OVER CURB, TO KEEP ERODED SOIL OUT OF THE GUTTERLINES, IN ACCORDANCE WITH THE FOLLOWING:
 - THE DEVICE REQUIRED WILL BE APPROVED EROSION CONTROL MAT LISTED ON THE CITY'S APPROVED MATERIAL LIST. SAID BLANKET SHALL BE PLACED OVER THE APPROPRIATE SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS. (SEE SOIL EROSION BMPs - BACK OF CURB SEDIMENT BARRIER DETAILS)
 - THIS DEVICE SHALL BE INSTALLED IMMEDIATELY WHENEVER THE CURB IS BACKFILLED TO WITHIN 3" OF THE TOP OF CURB. (SEE CURB BACKFILL DETAIL) OTHER BMP'S MAY BE REQUIRED AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB.
 - ADDITIONALLY, OTHER EROSION CONTROL DEVICES (HAY BALES, SILT FENCE, ETC.) WILL BE INSTALLED AT LOCATIONS OF CONCENTRATED FLOW RESULTING IN SEDIMENT OVERRUNNING THE MAT.
 - SHOULD THE PROJECT PLANS SPECIFY THAT THE RIGHT-OF-WAY IS TO BE SODDED, THE EXCELSIOR MAT WILL NOT BE REQUIRED SO LONG AS THE SOD IS PLACED WITHIN 48 HOURS AFTER CURB BACKFILL REACHES A HEIGHT OF 3" OR LESS FROM TOP OF CURB. (SEE CURB BACKFILL DETAIL)

LEGEND

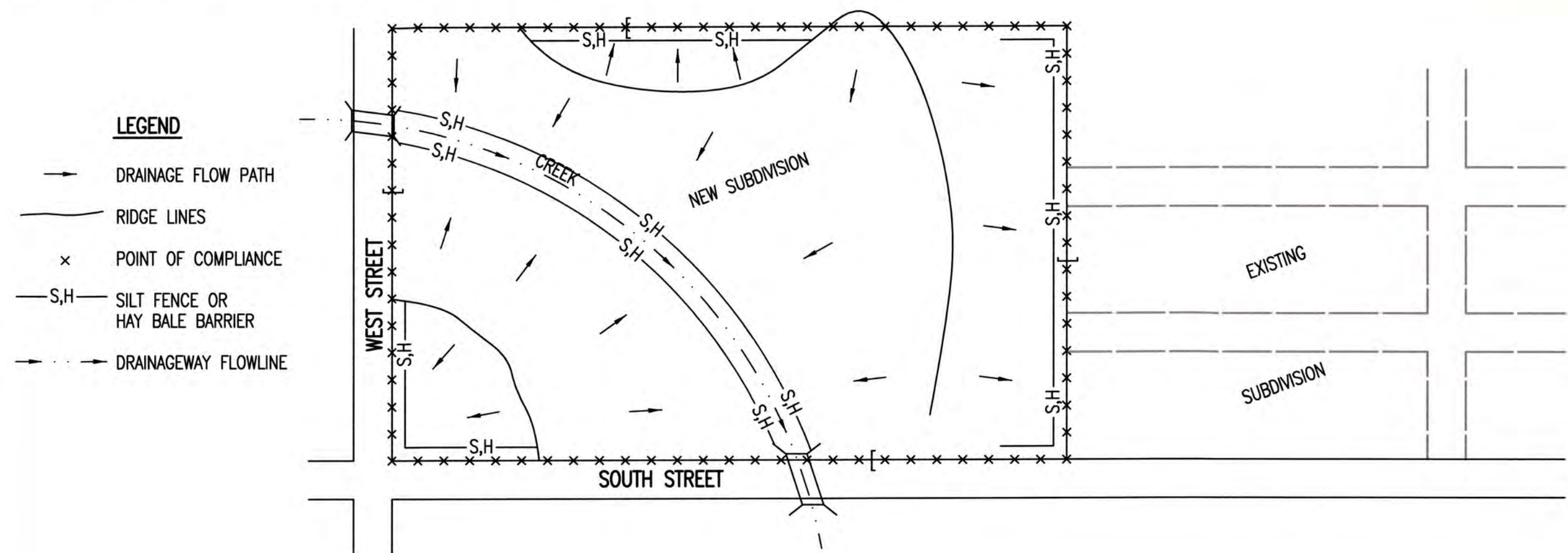
- R-O-W LIMITS
- DRAINAGE FLOW PATH
- × × × × R/W LIMIT WITHIN CONSTRUCTION LIMIT
- STORM WATER INLETS
- IP INLET PROTECTION
- S,H— SILT FENCE OR HAY BALE BARRIER
- SP STREAM PROTECTION
- SCE STABILIZED CONSTRUCTION ENTRANCE
- //// BACK OF CURB PROTECTION

REVISION: JUNE 2015

 CITY OF WICHITA PUBLIC WORKS & UTILITIES ENGINEERING DIVISION			STREET IMPROVEMENT PROJECTS		
CITY ENGINEER GARY JANZEN, P.E.					
PROJECT NUMBER	OCA NUMBER	DATE			
		11/2015			
CITY ENGINEER'S OFFICE					SHEET
CITY HALL - SEVENTH FLOOR					19 of 22
455 NORTH MAIN STREET					
WICHITA, KANSAS 67202-1620					
(316) 268-4501					

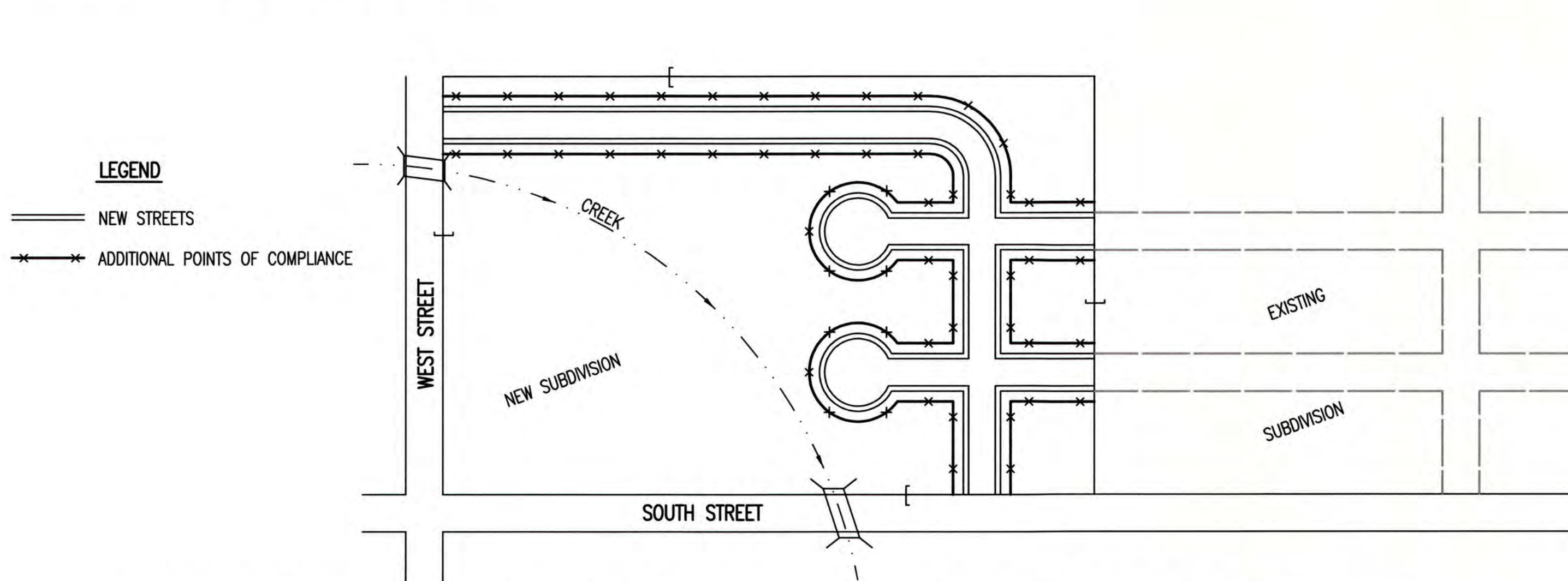


PHASE 1 – INITIAL EARTHWORK AND UTILITIES (EXCEPT STORM SEWER)



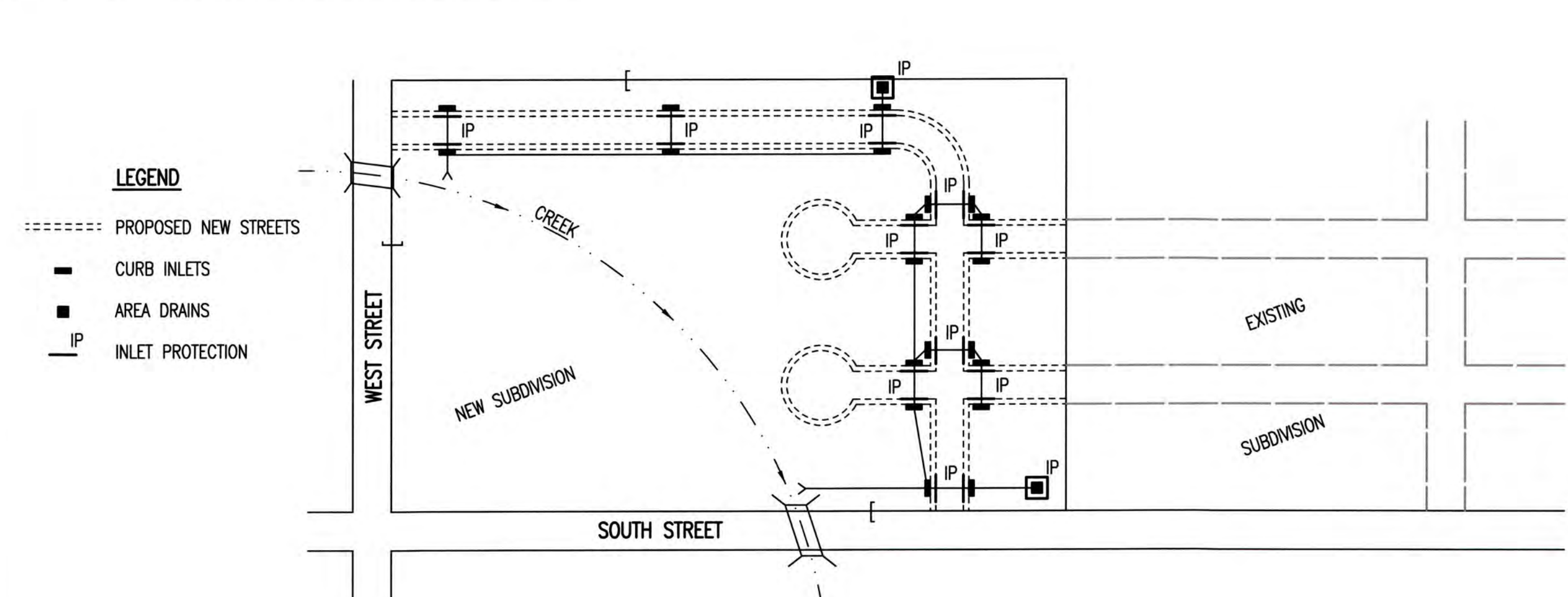
- DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
- HAY BALES OR SILT FENCE MUST BE CONSTRUCTED ALONG THE PROPERTY LINE WHERE ON SITE WATER CAN DRAIN OFF THE PROPERTY. THESE EROSION CONTROL DEVICES WILL ALSO BE INSTALLED ALONG ANY DRAINAGE DITCH OR LAKE THAT CAN DISCHARGE.
- SHOULD SILT OR SEDIMENT ENTER THE DITCHES OR STREETS ON THE ADJACENT BOUNDARY STREETS, APPROPRIATE EROSION CONTROL DEVICES WILL BE PLACED WITHIN THE SUBDIVISION TO PREVENT THIS.
- ANY MUD TRACKED ONTO ADJACENT STREETS WILL BE REMOVED WITHIN 48 HOURS OR BY FRIDAY AT 6:00 PM, WHICHEVER IS EARLIER.
- CONTRACTORS WORKING WITHIN THE SITE WILL NOT BE REQUIRED TO USE INDIVIDUAL EROSION CONTROL DEVICES AS LONG AS THOSE SPECIFIED ABOVE ARE IN PLACE AND EFFECTIVE. CONTRACTORS WORKING ON THE BOUNDARY LINE STREETS OR ON ADJACENT PROPERTIES TO EXTEND UTILITIES ARE EXPECTED TO USE EROSION CONTROL DEVICES AT THEIR WORK LOCATIONS, AS NEEDED.
- UTILIZE STABILIZED CONSTRUCTION ENTRANCE AT ENTRANCE AND EXIT ONTO ANY EXISTING PUBLIC STREETS.
- IF THE INITIAL EARTH WORK AND UTILITIES ARE DONE AS PART OF A PUBLIC IMPROVEMENT PROJECT, THESE EROSION CONTROL DEVICES WILL BE INSTALLED BY THE CONTRACTOR AS SPECIFIED IN THE INDIVIDUAL PROJECT CONTRACTS. THE CONTRACTOR WILL MAINTAIN THE DEVICES UNTIL COMPLETION OF THE CONTRACT, AT WHICH TIME THE DEVELOPER WILL ASSUME MAINTENANCE RESPONSIBILITIES. IF THESE CONTRACTS ARE NOT PUBLIC IMPROVEMENT PROJECTS, THE DEVELOPER WILL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THESE DEVICES.
- WITHIN 14 DAYS OF COMPLETION OF EARTHWORK ACTIVITIES IN ANY GIVEN AREA, THAT AREA SHALL BE TEMPORARILY OR PERMANENTLY SEEDED AND MULCHED.

PHASE 3 – STREET CONSTRUCTION



- DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, NEW STREETS ARE INSTALLED. ALL EROSION CONTROL DEVICES INSTALLED DURING PHASE 1 AND 2 MUST STILL BE MAINTAINED. THE POINT OF COMPLIANCE NOW SHIFTS TO THE BACK OF CURB ALONG EACH STREET.
- CURB OPENING INLET PROTECTION:
 - SUMP AREAS – INLET PROTECTION SHALL BE PROVIDED WHEN STREET SUBGRADE WORK IS COMPLETED.
 - NON-SUMP LOCATIONS – PROVIDE INLET PROTECTION AS SOON AS BASE COURSE ASPHALT IS INSTALLED, BEFORE THE SURFACE COURSE LIFT.
- EROSION CONTROL DEVICES WILL BE REQUIRED BACK OF CURB WHEREVER WATER CAN FLOW OVER THE CURB AND THE CURB HAS BEEN BACKFILLED TO WITHIN 3" OR LESS OF THE TOP OF CURB (SEE CURB BACKFILL DETAIL). FOR CURBS NOT YET ENTIRELY BACKFILLED (3" OR MORE BELOW TOP OF CURB), ADDITIONAL DEVICES WILL BE REQUIRED AT POINTS WHERE WATER BREAKS OVER CURB WHICH COULD RESULT IN THE PLACEMENT OF SEDIMENT IN THE GUTTER.
- SEE DETAIL SHEET FOR BACK OF CURB PROTECTION.
- THE BACK OF CURB PROTECTION SPECIFIED ON THIS PLAN MAY HAVE TO BE SUPPLEMENTED WITH HAY BALE OR SILT FENCE EROSION CONTROL DEVICES AT LOCATIONS WHERE CONCENTRATED FLOW RESULTS IN SEDIMENT BEING CARRIED OVER THE EXCELSIOR MATS.
- THE STREET CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING BACK OF CURB EROSION CONTROL DEVICES.
- THE INDIVIDUAL LOT OWNERS WILL BE RESPONSIBLE FOR MAINTAINING THE BACK OF CURB EROSION CONTROL DEVICES IN FRONT OF THEIR LOTS UNTIL SUCH TIME AS ADJACENT DISTURBED EARTH IS STABILIZED WITH GRASS OR SOD.

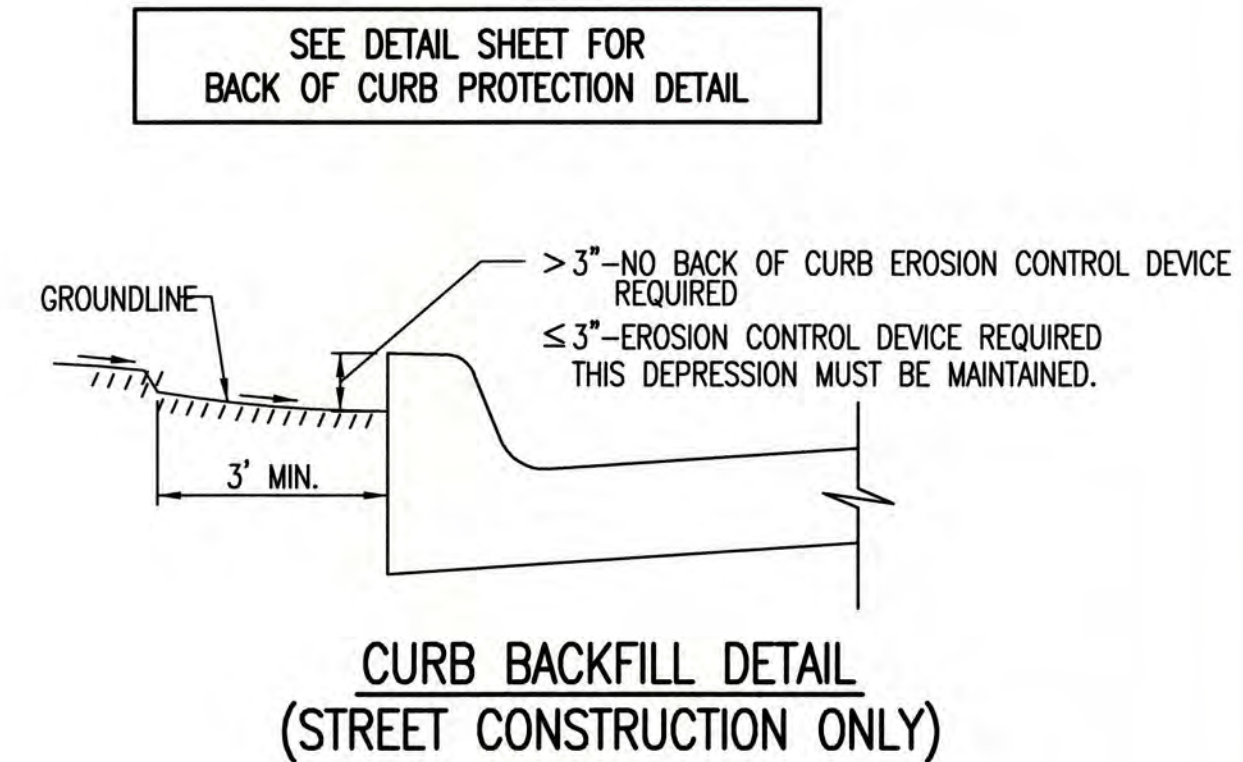
PHASE 2 – INSTALLATION OF STORM SEWER



- DURING THIS PHASE OF SUBDIVISION DEVELOPMENT, ALL EROSION CONTROL DEVICES REQUIRED IN PHASE 1 SHALL REMAIN IN PLACE AND BE MAINTAINED.
- AS NEW STORM SEWERS, WITH INLETS, ARE INSTALLED, THE STORM SEWERS MUST NOW BE PROTECTED SO ALL NEW INLETS BECOME POINTS OF COMPLIANCE.
- AREA DRAINS – AS SOON AS WATER CAN FLOW INTO THESE DRAINS, HAY BALE OR SILT FENCE PROTECTION WILL BE INSTALLED AROUND THEM.
- CURB OPENING INLETS – AS SOON AS WATER CAN FLOW INTO THESE DRAINS, INLET PROTECTION DEVICES MUST BE INSTALLED. IF WATER CANNOT FLOW INTO CURB INLETS UNTIL STREET CONSTRUCTION IS COMPLETE, THEN STREET CONTRACTOR WILL INSTALL INLET PROTECTION. SEE PHASE 3 – STREET CONSTRUCTION.
- THE STORM SEWER CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING THESE DEVICES.
- THE SUBDIVISION DEVELOPER WILL MAINTAIN THESE EROSION CONTROL DEVICES ONCE INSTALLED.
- ALL DISTURBED GROUND WILL BE FINAL GRADED AND TEMPORARILY OR PERMANENTLY SEEDED WITHIN 14 DAYS IF COMPLETION OF WORK IN ANY GIVEN PART OF THE SUBDIVISION.
- ONCE ALL DISTURBED GROUND DRAINING TO AN INLET HAS BEEN RESTABILIZED WITH GRASS OR SOD, THE SUBDIVISION DEVELOPER WILL BE RESPONSIBLE FOR PERMANENTLY REMOVING THE INLET PROTECTION.

GENERAL NOTES

- THE INTENT OF ALL EROSION CONTROL DEVICES IS TO PREVENT ERODED SOIL FROM ENTERING DITCHES, STORM SEWERS, LAKES, STREETS OR ANY OTHER OTHER DRAINAGE FEATURE.
- THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPE OF EROSION CONTROL DEVICES WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.
- EROSION CONTROL DEVICES SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS TO REMAIN EFFECTIVE. MAINTENANCE SHALL BE AS INDICATED ON SOIL EROSION BMP'S DETAIL SHEETS.
- PERSONS DESTROYING EROSION CONTROL DEVICES SHALL BE RESPONSIBLE FOR IMMEDIATELY REPAIRING THEM OR INSTALLING SUITABLE REPLACEMENT DEVICES.
- THE DEVELOPMENT OF ANY SUBDIVISION THAT DISTURBS 1 ACRE OR MORE WILL REQUIRE A FEDERAL/STATE NPDES STORMWATER PERMIT. THE PREPARATION OF A STORMWATER POLLUTION PREVENTION PLAN IS REQUIRED. EROSION CONTROL DEVICES ARE REQUIRED. THE DETAILS SHOWN ON THIS SHEET ARE THE MINIMUM STANDARDS TO BE SHOWN ON POLLUTION PREVENTION PLANS.
- FOR SUBDIVISIONS SMALLER THAN 1 ACRE, SOIL EROSION DEVICES ARE REQUIRED. ALSO, DEVELOPERS AND CONTRACTORS ARE ENCOURAGED TO DEVELOP POLLUTION PREVENTION PLANS FOR EACH PROJECT PRIOR TO CONSTRUCTION.
- FAILURE TO USE AND MAINTAIN SOIL EROSION DEVICES IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE SUBDIVISION DEVELOPER AND CONTRACTORS TO THE PENALTIES PROVIDED THEREIN.
- THE APPLICATION OF EROSION CONTROL DEVICES SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE DEVICES OTHER THAN THAT SHOWN. EROSION CONTROL DEVICES, OTHER THAN THOSE SHOWN, MAY BE UTILIZED SO LONG AS THEY ARE EFFECTIVE AND MAINTAINED.
- A STABILIZED EARTH SURFACE IS DEFINED AS ONE THAT IS HARD SURFACED WITH CONCRETE, ASPHALT, OR THE LIKE, OR ONE ON WHICH 70% OF THE GRASS HAS GERMINATED ON THE ENTIRE SURFACE.



THIS IS A TEMPORARY MEASURE ONLY, WHEN APPROVED BY THE PROJECT ENGINEER. THE DIRT GRADE BEHIND THE CURB SHALL BE BROUGHT TO THE TOP OF CURB, WITH TEMPORARY EROSION CONTROL MAT OR PERMANENT VEGETATION PLACED, PRIOR TO THE COMPLETION OF ALL PROJECTS.

REVISION DATE: MAY 2013

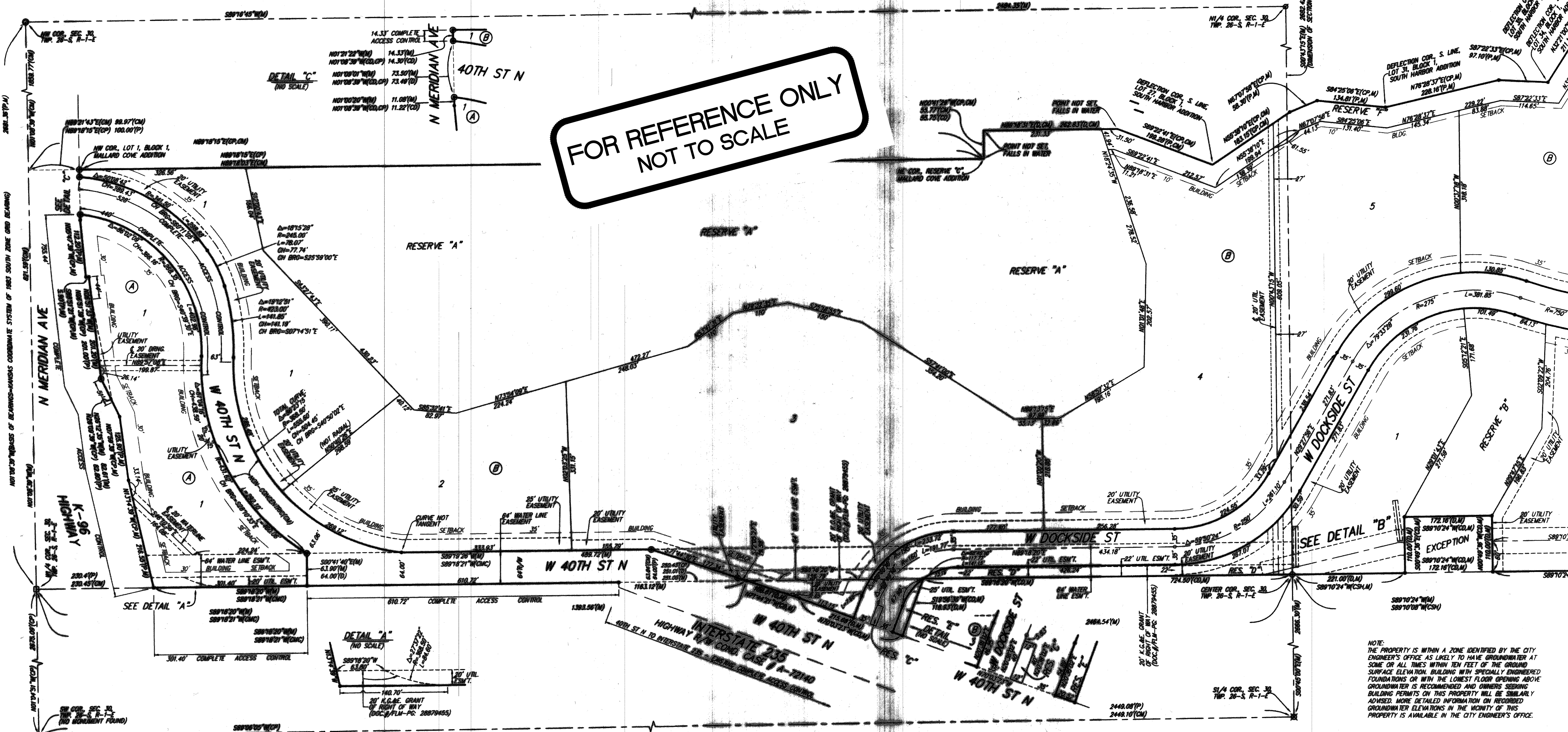


CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

SUBDIVISION DEVELOPMENT PROCESS		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE
		5/2013
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 20 of 22

HARBOR ISLE COMMERCIAL 1ST ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS



- #4 REBAR W/ "BAUGHMAN" CAP (SET)
 - #4 REBAR (FOUND)(ORIGIN UNKNOWN)
 - #4 REBAR IN THIMBLE (FOUND)(ORIGIN UNKNOWN)
 - 1/2" IRON PIPE (FOUND)(ORIGIN UNKNOWN)
 - REBAR W/ "SURVEY INC" METAL CAP (FOUND)
 - #4 REBAR W/ "PEC" CAP (FOUND)
 - 3/4" SQUARE BAR IN THIMBLE (FOUND)(ORIGIN UNKNOWN)
 - #4 REBAR W/ "BAUGHMAN" CAP (SET)
 - CHRY & STONE (FOUND)
 - 3/4" IRON PIPE (FOUND)(ORIGIN UNKNOWN)
- (M) = MEASURED
 (P) = PLATTED
 (D) = DESCRIBED
 (SN) = PLATTED INFO. FROM SOUTH HARBOR ADDITION
 (CM) = CALCULATED FROM MEASURED INFO.
 (CP) = CALCULATED FROM PLATTED INFO.
 (CD) = CALCULATED FROM DESCRIBED INFO.
 (CMC) = CALCULATED FROM INFO. FROM MALLARD CODE
 (CK) = CALCULATED FROM INFO. FROM KPTS ADDITION
 (CU) = CALCULATED FROM INFO. FROM USD 250 ADDITION
 (CSH) = CALCULATED FROM INFO. FROM SOUTH HARBOR ADDITION

LOT	BLOCK	MINIMUM BUILDING PAD ELEVATIONS FOR LOWEST OPENING TO THE STRUCTURES
1-4	B	1,322.0
1, 2	C	1,321.7

BENCHMARKS:
 "1" OUT ON TOP CENTER OF EAST SIDE OF CATCH BASIN W. SIDE OF W 40TH ST N, 18.5' S. & 16.1' E. OF P.R.C. E. LINE OF LOT 1, BLOCK A, HARBOR ISLE COMMERCIAL 1ST ADDITION. ELEV. = 1,327.85 NAVD83

CHISELED SQUARE ON TOP CENTER OF SOUTH SIDE OF CATCH BASIN W. SIDE OF W 40TH ST N, 100' W & 18.4' S. OF SE COR. OF LOT 2, BLOCK B, HARBOR ISLE COMMERCIAL 1ST ADDITION. ELEV. = 1,327.72 NAVD83

CHISELED SQUARE ON TOP OF CURB, N. SIDE OF W 40TH ST N, 80.4' S. & 53.3' W. OF INTERSECTION OF W. LINE, SE1/4, SEC. 30 WITH SOUTH LINE OF ADDITION, & S.W. OF FIRE HYDRANT. ELEV. = 1,327.83 NAVD83

CHISELED GROW'S FOOT, TOP OF CURB, N. SIDE OF W 40TH ST N, 41.5' S. OF DEFLECTION COR., S. LINE, LOT 2, BLOCK B, HARBOR ISLE COMMERCIAL 2ND ADDITION, 106.1' W. OF W. LINE OF CATCH BASIN, 11.5' S. OF FIRE HYDRANT. ELEV. = 1,322.80 NAVD83

NOTE:
 THE PROPERTY IS WITHIN A ZONE IDENTIFIED BY THE CITY ENGINEER'S OFFICE AS "LIKELY" TO HAVE GROUNDWATER AT SOME OR ALL TIMES WITHIN TEN FEET OF THE GROUND SURFACE ELEVATION. BUILDING WITH SPECIALLY ENGINEERED FOUNDATIONS OR WITH THE LOWEST FLOOR OPENING ABOVE GROUNDWATER IS RECOMMENDED AND GROUNDWATER BUILDING PERMITS ON THIS PROPERTY WILL BE SIMILARLY ADVISED. MORE DETAILED INFORMATION ON REQUIRED GROUNDWATER ELEVATIONS IN THE VICINITY OF THIS PROPERTY IS AVAILABLE IN THE CITY ENGINEER'S OFFICE.

NOTE:
 ADDITIONAL BUILDING SETBACK REQUIREMENTS AND RESTRICTIONS PER HARBOR ISLE COMMERCIAL 1 COMMUNITY UNIT PLAN DP-355.

Know all men by these presents that we, the undersigned, have caused the land in the surveyors certificate to be platted into Lots, Blocks, Streets, and Reserves, to be known as "HARBOR ISLE COMMERCIAL 1ST ADDITION", Wichita, Sedgwick County, Kansas. The utility easements are hereby granted to the public as indicated for the construction and maintenance of all public utilities. The drainage easements are hereby granted to the public as indicated for drainage purposes. The drainage and utility easements are hereby granted to the public as indicated for the construction and maintenance of all public utilities. No signs, light poles, private drainage systems, masonry fences, masonry trash enclosures or other structures shall be located within public utility easements unless a Use of Easement Permit is obtained from the City of Wichita Public Works & Utilities Department. The water line easements are hereby granted to the public as indicated for the construction and maintenance of public water lines and related appurtenances. The streets are hereby dedicated to and for the use of the public. Reserve "A" is hereby reserved for open space, landscaping, drainage purposes, lakes, berms, and sidewalks. Reserve "B" is hereby reserved for open space, landscaping, drainage purposes, berms, lakes, sidewalks, and utilities as confined to easement. Reserve "C" is hereby reserved for open space, landscaping, drainage purposes, streets, and signage. Reserve "D" is hereby reserved for open space, landscaping, drainage purposes, berms, utilities as confined to easements, electric lines and related appurtenances as confined to easements, and water lines and related appurtenances as confined to easements. Reserve "E" is hereby reserved for open space, landscaping, drainage purposes, entry monuments, signage, and utilities as confined to easement. Reserve "F" is reserved for open space, landscaping, drainage purposes, parking access drives, walls, berms, utilities as confined to easement, electric lines and related appurtenances as confined to easement, and a screening buffer. Reserves "A", "B", "C", "D", "E", and "F" shall be owned and maintained by the current owner and/or the lot owners association for the addition and/or any successors, heirs, or assigns. Compliance with any platted restrictions

and applicable restrictive covenants affecting said Reserves shall be binding on any owners, successors, heirs, or assigns. No regrading within allotted rights-of-way shall be allowed with the construction of the berms allowed within said Reserves "A", "B", "D", and "F". The berms cannot impact access to or bury manholes, water valves, and/or water meters. Access controls shall be as depicted on the face of the plat and are hereby granted to the City of Wichita, Kansas. Access controls shall be a depicted on the face of the plat and are hereby granted to the appropriate governing body. The Minimum Building Pad Elevations for the lowest opening to the structures shall be as indicated on the face of the plat.

South Harbor, L.L.C., a Kansas limited liability company
 Brad C. Bachman, Member
 Harbor Properties, L.L.C., a Kansas limited liability company
 Brad C. Bachman, Member

State of Kansas) SS The foregoing instrument acknowledged before me this 10th day of December, 2021, by Brad C. Bachman, Member of South Harbor, L.L.C., a Kansas limited liability company, on behalf of the limited liability company.
 Lynette A. Sauer, Notary Public
 My App'l. Exp. 09-20-2022

State of Kansas) SS The foregoing instrument acknowledged before me this 10th day of December, 2021, by Brad C. Bachman, Member of Harbor Properties, L.L.C., a Kansas limited liability company, on behalf of the limited liability company.
 Lynette A. Sauer, Notary Public
 My App'l. Exp. 09-20-2022

This plat of "HARBOR ISLE COMMERCIAL 1ST ADDITION", Wichita, Sedgwick County, Kansas has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.
 Dated this 4th day of March, 2021.
 Wichita-Sedgwick County Metropolitan Area Planning Commission

Wichita, Kansas
 Scott A. Wade, Secretary

This plat approved and all dedications shown hereon accepted by the City Council of the City of Wichita, Kansas, this 6th day of December, 2021.

Mayor, City of Wichita
 Kelly B. Arnold, County Clerk

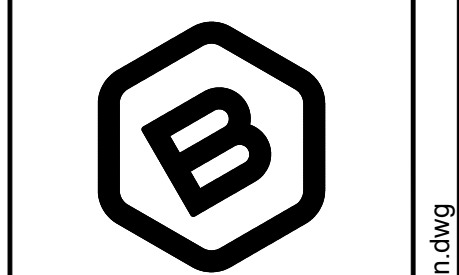
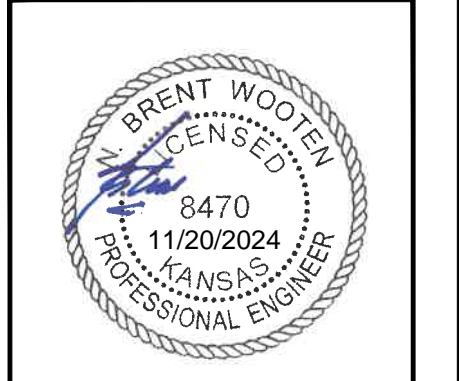
Reviewed in accordance with K.S.A. 58-2005 on this 3rd day of December, 2021.

Trick L. Robello, L.S. #1246
 Deputy County Surveyor
 Sedgwick County, Kansas

Entered on transfer record this 12th day of January, 2022.
 Kelly B. Arnold, County Clerk

State of Kansas) Sedgwick County) SS This is to certify that this plat has been filed for record in the office of the Register of Deeds, this 04th day of January, 2022, at 2:11:03 o'clock P.M. and is duly recorded.

Tonya Buckingham, Register of Deeds
 Kelly Zaring, Deputy



BAUGHMAN COMPANY
 315 Ellis St.
 Wichita, KS 67211
 316-262-7271
 BaughmanCo.com

HARBOR ISLE COMM. 1ST & 2ND ADDITIONS

COPY OF PLAT

SANITARY SEWER IMPROVEMENTS
 PROJECT NUMBER: 22-08-E261
 DRAWN: DATE: November 13, 2024
 SHEET 21 OF 22

HARBOR ISLE COMMERCIAL 2ND ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS

NOTE:
THE PROPERTY IS WITHIN A ZONE IDENTIFIED BY THE CITY ENGINEER'S OFFICE AS LIKELY TO HAVE GROUNDWATER AT SOME OF ALL TIMES WITHIN TEN FEET OF THE GROUND SURFACE ELEVATION. BUILDING WITH SPECIALLY ENGINEERED FOUNDATIONS OR WITH THE LOWEST FLOOR OPENING ABOVE GROUNDWATER IS RECOMMENDED AND OWNERS SEEKING BUILDING PERMITS ON THIS PROPERTY WILL BE SIMILARLY ADVISED. MORE DETAILED INFORMATION ON RECORDED GROUNDWATER ELEVATIONS IN THE VICINITY OF THIS PROPERTY IS AVAILABLE IN THE CITY ENGINEER'S OFFICE.

DRAINAGE PLAN NOTE:
A MASTER DRAINAGE PLAN HAS BEEN DEVELOPED FOR THIS PLAT. ALL DRAINAGE EASEMENTS, RIGHTS-OF-WAY, AND RESERVES SHALL REMAIN AT ESTABLISHED GRADES (UNLESS MODIFIED WITH THE APPROVAL OF THE CITY ENGINEER) AND SHALL BE UNOBSTRUCTED TO ALLOW FOR THE CONVEYANCE OF STORMWATER IN ACCORDANCE WITH THE STORMWATER MANUAL.

LOT	BLOCK	ELEVATION NAVD88
2, 3	A	1322.9
1, 2	B	1324.6

BENCHMARKS:
"X" CUT ON TOP CENTER OF EAST SIDE OF CATCH BASIN, N. SIDE OF W 40TH ST N, 18.5' S. & 16.1' E. OF P.R.C. E. LINE OF LOT 1, BLOCK A, HARBOR ISLE COMMERCIAL 1ST ADDITION.
ELEV. = 1327.65 NAVD88

CHEELED SQUARE ON TOP CENTER OF SOUTH SIDE OF CATCH BASIN, N. SIDE OF W 40TH ST N, 108' W & 18.4' S. OF SE COR. LOT 2, BLOCK B, HARBOR ISLE COMMERCIAL 1ST ADDITION.
ELEV. = 1327.72 NAVD88

CHEELED SQUARE ON TOP OF CURB, N. SIDE OF W 40TH ST N, 80.4' S. & 53.3' W. OF INTERSECTION OF W. LINE, SE 1/4, SEC. 30 WITH SOUTH LINE OF LOT 2, BLOCK A, HARBOR ISLE COMMERCIAL 2ND ADDITION, 8.4' S.W. OF FIRE HYDRANT.
ELEV. = 1327.83 NAVD88

CHEELED CROWN'S FOOT, TOP OF CURB, N. SIDE OF W 40TH ST N, 80.4' S. & 53.3' W. OF INTERSECTION OF W. LINE, SE 1/4, SEC. 30 WITH SOUTH LINE OF LOT 2, BLOCK B, HARBOR ISLE COMMERCIAL 2ND ADDITION, 106.1' W. OF W. LINE OF CATCH BASIN, 11.8' S. OF FIRE HYDRANT.
ELEV. = 1322.80 NAVD88

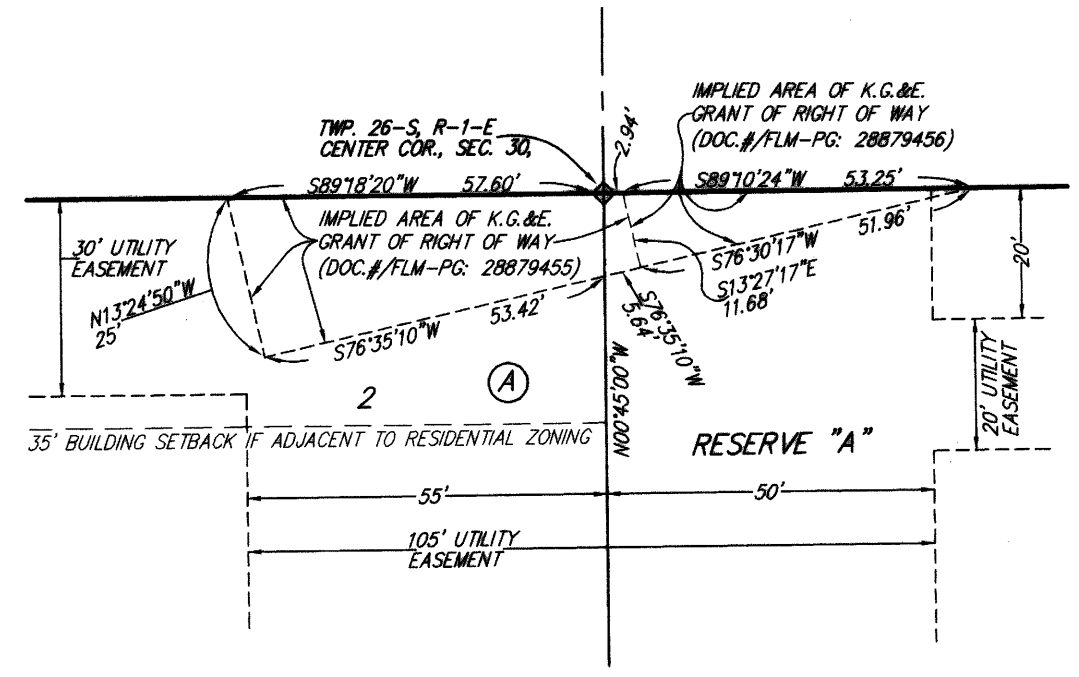
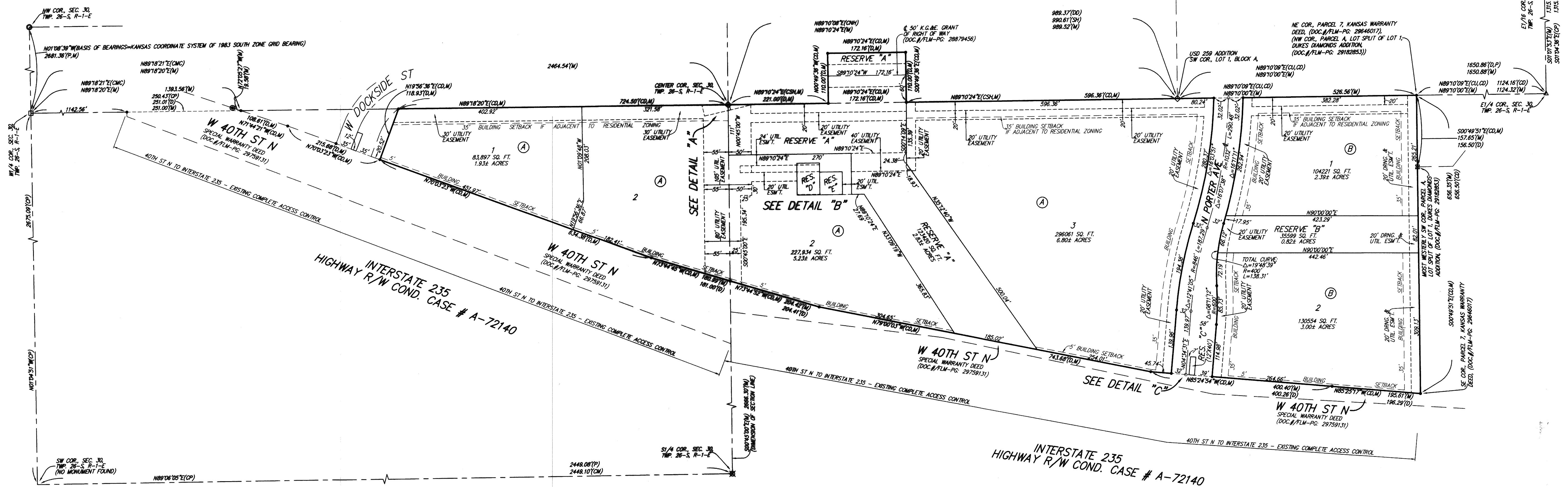
**FOR REFERENCE ONLY
NOT TO SCALE**

- = #4 REBAR W/ "BAUGHMAN" CAP (SET)
- = #4 REBAR W/ "BAUGHMAN" CAP (FOUND)
- = #4 REBAR (FOUND)(ORIGIN UNKNOWN)
- = #4 REBAR IN THIMBLE (FOUND)(ORIGIN UNKNOWN)
- = 1/2" IRON PIPE (FOUND)(ORIGIN UNKNOWN)
- = REBAR W/ "SURVEYS INC" METAL CAP (FOUND)
- = 3/4" SQUARE BAR W/ THIMBLE (FOUND)(ORIGIN UNKNOWN)
- = #4 REBAR W/ "BAUGHMAN" CAP (SET) OVER 6" STONE (FOUND)
- = 3/4" IRON PIPE (FOUND)(ORIGIN UNKNOWN)

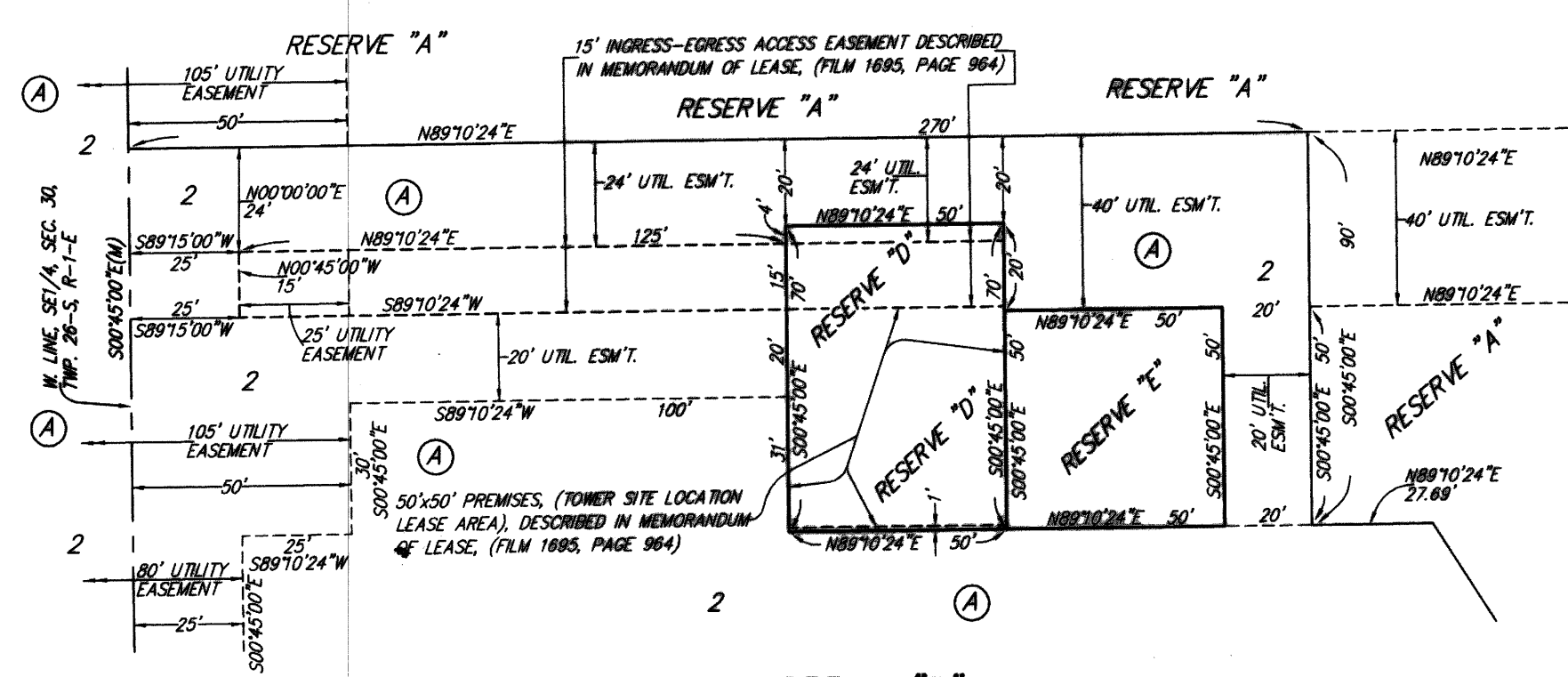
- (M) = MEASURED
- (P) = PLATTED
- (D) = DESCRIBED
- (SH) = PLATTED INFO. FROM SOUTH HARBOR ADDITION
- (CM) = CALCULATED FROM MEASURED INFO.
- (CP) = CALCULATED FROM PLATTED INFO.
- (CD) = CALCULATED FROM DESCRIBED INFO.
- (CWO) = CALCULATED FROM INFO. FROM MALLARD COVE
- (CU) = CALCULATED FROM INFO. FROM USD 259 ADDITION
- (CSH) = CALCULATED FROM INFO. FROM SOUTH HARBOR ADDITION



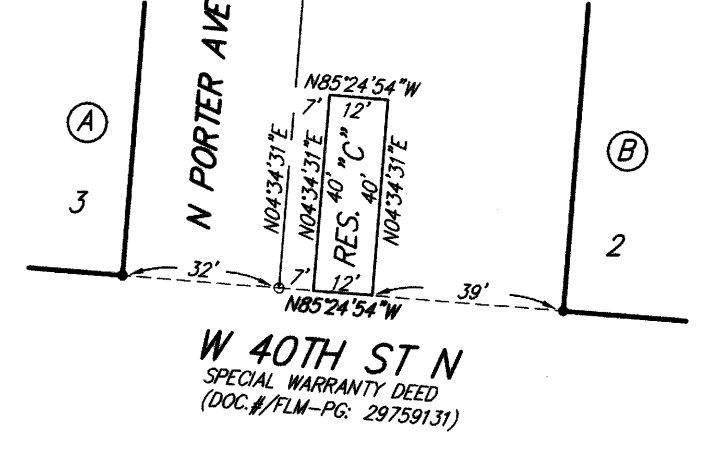
NOTE:
ADDITIONAL BUILDING SETBACK REQUIREMENTS AND RESTRICTIONS PER HARBOR ISLE COMMERCIAL 2 COMMUNITY UNIT PLAN DP-353.



DETAIL "A"
(NO SCALE)



DETAIL "B"
(NO SCALE)



DETAIL "C"
(NO SCALE)

NOTE:
EXISTING MOBE AFFIDAVIT, (FILM 395, PAGE 1281), FOR 10' MOBE RIGHT-OF-WAY EASEMENT TO SUPPLY SERVICE TO 1600 W. 40TH STREET NORTH IN LOT 1, KAN-AM ADDITION IS IN THE PROCESS OF BEING RELEASED THIS 12TH DAY OF MAY, 2021.

2 OF 2

Baughman Company, P.A.
315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149
Baughman ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE
E:\Projects\Harbor Isle Pump Station\22-08-E261\Harbor Isle Comm 2 - E.dwg

BRENT WOOLEY
LICENSED PROFESSIONAL ENGINEER
8470
11/20/2024
KANSAS
PROFESSIONAL ENGINEER

B

BAUGHMAN COMPANY

315 Ellis St.
Wichita, KS 67211
316-262-7271
BaughmanCo.com

HARBOR ISLE COMM.
1ST & 2ND ADDITIONS

COPY OF PLAT

SANITARY SEWER IMPROVEMENTS

PROJECT NUMBER:
22-08-E261

DESIGN: DRAWN:

DATE: November 13, 2024

SHEET OF
22 22