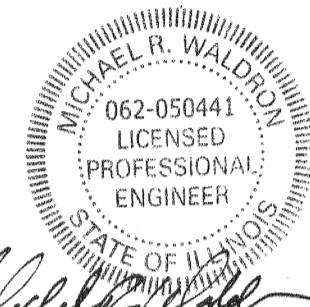


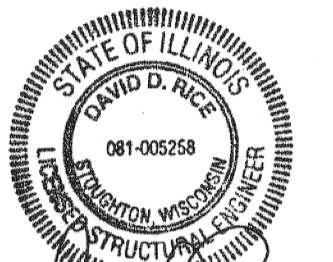
EAST SIDE WASTEWATER TREATMENT FACILITY UV DISINFECTION STRUCTURE AND OUTFALL PIPE TO THE DES PLAINES RIVER

THE CITY OF JOLIET WILL COUNTY, ILLINOIS

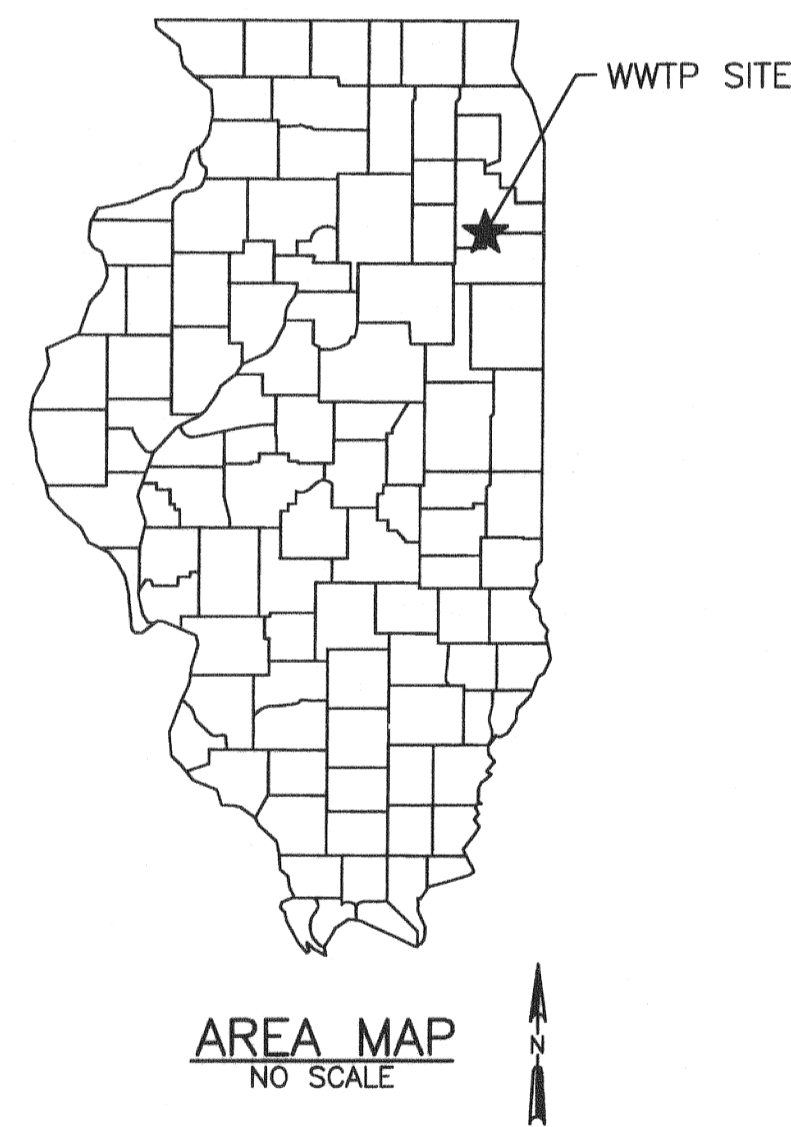
JANUARY 2011



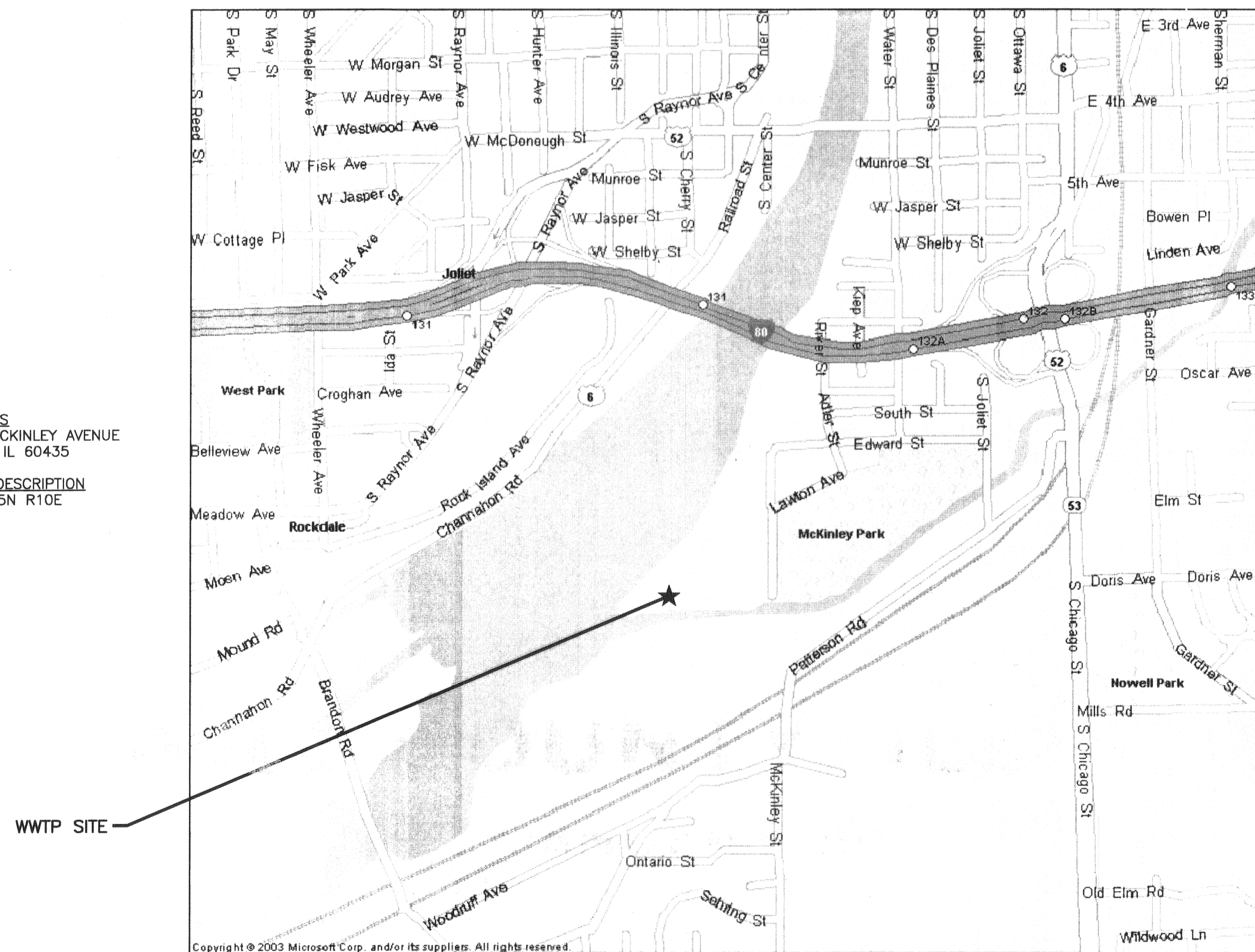
Michael R. Waldron
1/5/11



David D. Rice
1-5-11
Expires 11/30/12



ADDRESS
1021 MCKINLEY AVENUE
JOLIET, IL 60435
LEGAL DESCRIPTION
S21 T35N R10E



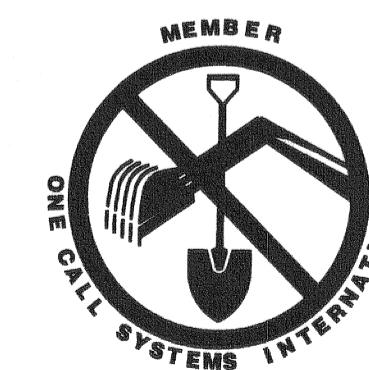
PROJECT LOCATION MAP
NO SCALE

SHEET NO.	DRAWING NO.	DESCRIPTION
00-GENERAL	1	00-G.01 TITLE SHEET, LOCATION PLAN AND DRAWING LIST
	2	00-G.02 DESIGN CRITERIA AND HYDRAULIC PROFILE
	3	00-G.03 STANDARD SYMBOLS
05-WWTW SITE	4	05-C1.01 OVERALL SITE PLAN
10-PRELIMINARY TREATMENT BUILDING	5	10-ASM1.01 UV STRUCTURE-FOUNDATION PLAN
	6	10-ASM1.02 UV STRUCTURE-FLOOR PLAN
	7	10-ASM3.01 UV STRUCTURE-SECTIONS-1
	8	10-ASM3.02 UV STRUCTURE-SECTIONS-2
	9	10-ASM3.03 UV STRUCTURE-SECTIONS-3
20-EXISTING JUNCTION BOX	10	20-ASM3.01 EXISTING JUNCTION BOX
99-SCHEDULES AND DETAILS	11	99-ASM5.01 ARCHITECTURAL AND STRUCTURAL DETAILS-1
	12	99-ASM5.02 ARCHITECTURAL AND STRUCTURAL DETAILS-2
	13	99-ASM5.03 ARCHITECTURAL AND STRUCTURAL DETAILS-3
	14	99-ASM5.04 BEAM DETAILS AND SCHEDULE

1170 South Houbolt Road
Joliet, IL 60431
815 744-4200
815 744-4215 FAX

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JOLIET CONTRACT NO. 1768-0511
CONTRACT 1-2009



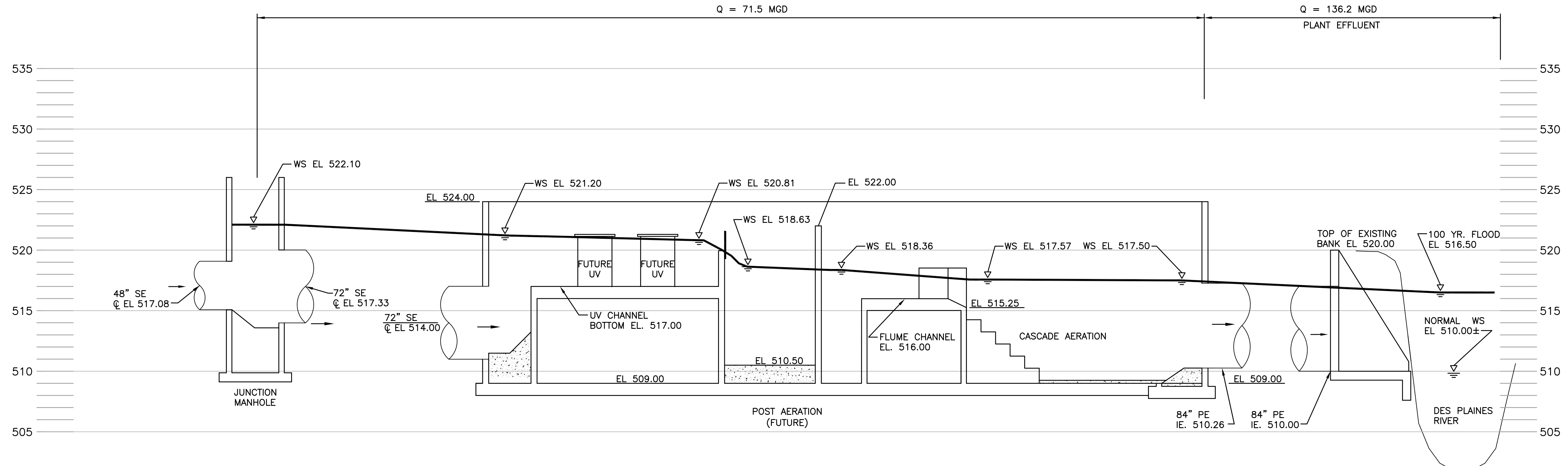
TO OBTAIN LOCATION OF
PARTICIPANTS' UNDERGROUND
FACILITIES BEFORE YOU
DIG IN ILLINOIS

CALL J.U.L.I.E.
1-800-892-0123
TOLL FREE

REQUIRES MIN. OF 48 HOURS
NOTICE BEFORE YOU EXCAVATE.
(EXCLUDING SAT., SUN., & HOL.)



SHEET
1
00-G.01
JOB NO. 1-255.013



HYDRAULIC PROFILE
NO SCALE

NOTES:

1. HYDRAULIC PROFILE SHOWN IS BASED ON THE FUTURE INFLUENT FLOW OF Q = 71.5 MGD AND CSO FLOW OF 64.7 MGD.

DESIGN CRITERIA

STP FLOW	
DESIGN AVERAGE FLOW (DAF)	18.2 MGD
PEAK HOURLY FLOW (PHF)	45.5 MGD
FUTURE PHF	71.5 MGD
WET WEATHER FACILITY FLOW (CSO)	
DESIGN PHF	64.7 MGD
STP COMBINED OUTFALL	
DESIGN PHF	110.2 MGD
FUTURE PHF	136.2 MGD

STRUCTURAL DESIGN CRITERIA			
DESIGN CODES	BUILDING CODE	IBC 2006	
	CONCRETE DESIGN CODE	ACI 350-89	
OTHER LOADS	LATERAL EARTH PRESSURE (PCF EQUIV. FLUID)	DRY - UNRESTRAINED TOP	50
		DRY - RESTRAINED TOP	65
	BELOW WATER TABLE		100
	LATERAL FLUID PRESSURE (PCF)		62.4
GEOTECHNICAL	NET ALLOWABLE SOIL BEARING PRESSURE		5000 PSF
	PLANNED SUBGRADE		1' BELOW BOT. OF BASE SLAB OR FOOTING

CLEAR COVER TO REINFORCING BARS	
ITEM	CLEAR COVER
BOTTOM MAT OF SLABS ON GRADE	3"
SLABS AND WALLS WITH TWO MATS OF REINFORCING AND EXPOSED TO WEATHER, LIQUID, OR GROUND, EXCEPT SLABS ON GRADE	2"
SLABS AND WALLS WITH TWO MATS OF REINFORCING AND NOT EXPOSED TO WEATHER, LIQUID, OR GROUND	1"
BEAMS AND COLUMNS NOT EXPOSED TO WEATHER LIQUID, OR GROUND	1 1/2"

NOTES:

1. CLEAR COVER IS MEASURED FROM MEMBER FACE TO NEAREST EDGE OF REINFORCING BAR
2. CLEAR COVER FOR BEAMS AND COLUMNS IS MEASURED TO NEAREST EDGE OF STIRRUPS.
3. FOR WALLS AND SLABS WITH SINGLE MAT OF REINFORCING, PLACE REBAR WHERE SHOWN ON THE DRWGS. WHERE COVER IS NOT INDICATED, CENTER SINGLE MAT OF REINFORCING IN WALL OR SLAB.

BAR SIZE	MINIMUM LAP LENGTHS FOR REINFORCING BARS			
	WALLS		SLABS	
	VERT. BARS	HORIZ. BARS	TOP MAT BARS	BOTTOM MAT BARS
#4	1'-6"	1'-10"	1'-10"	1'-6"
#5	1'-9"	2'-2"	2'-2"	1'-9"
#6	2'-0"	2'-7"	2'-7"	2'-0"
#7	2'-11"	3'-8"	3'-8"	2'-11"
#8	3'-3"	4'-2"	4'-2"	3'-3"
#9	4'-0"	5'-2"	5'-2"	4'-0"
#10	4'-11"	6'-4"	6'-4"	4'-11"

NOTES:

1. WHERE TWO BARS OF DIFFERENT SIZE ARE LAPPED, USE LAP
2. USE LAP LENGTHS IN THIS TABLE WHERE LAP LENGTH IS NOT SHOWN ON DRAWING.
3. TABLE DOES NOT APPLY FOR BEAMS AND COLUMNS.

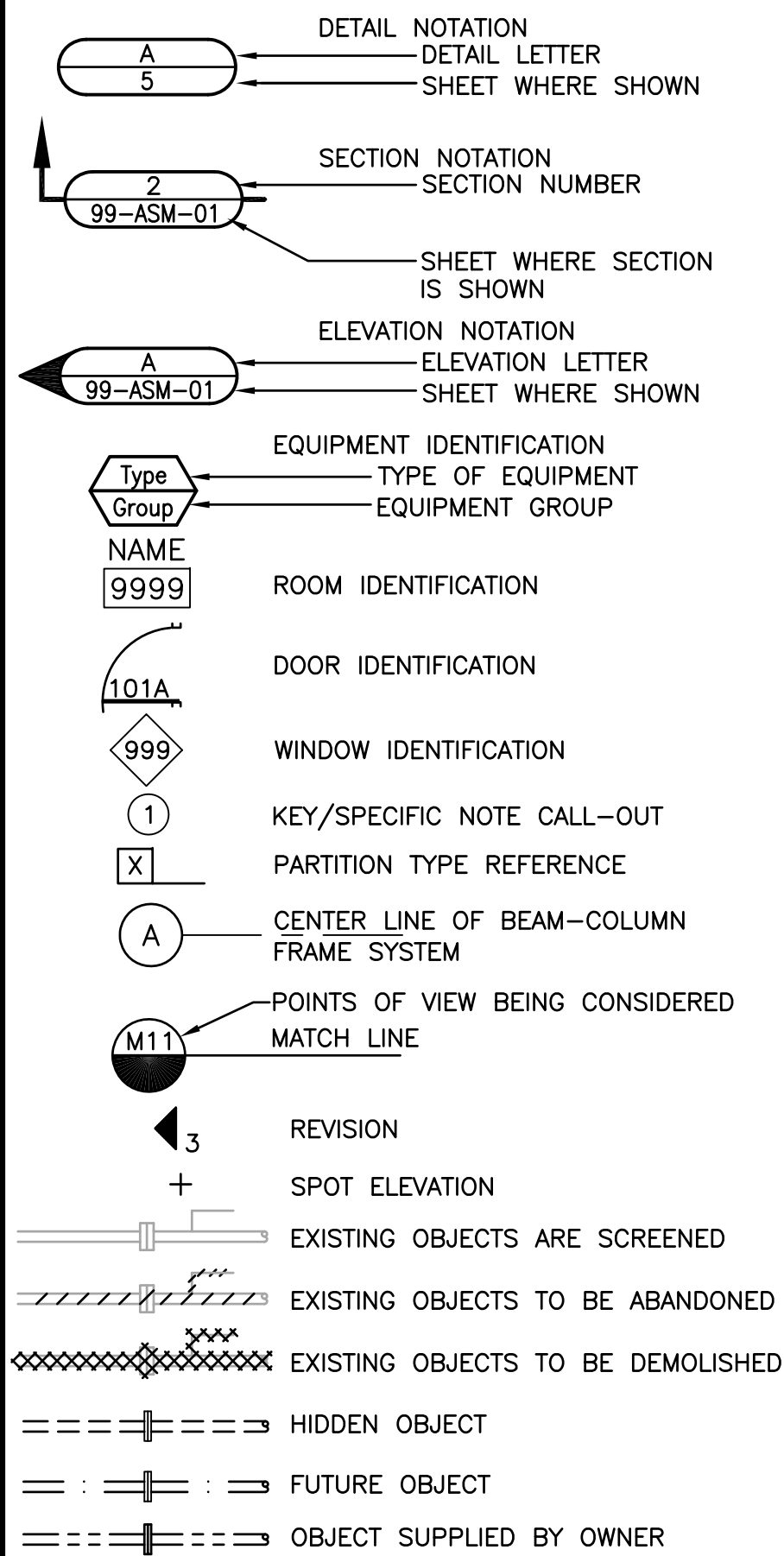
ALLOWABLE STRESSES AND LOADS	
MATERIAL	MATERIAL STRESS, DESIGNATION, OR ALLOWABLE LOAD
CIP CONCRETE	$f'_c = 4000$ psi
CONCRETE BLOCK	$f'_m = 1500$ psi
REINFORCING STEEL (GRADE 60)	$F_y = 60$ ksi
STRUCTURAL STEEL	$F_y = 36$ ksi or 50 ksi
STRUCTURAL ALUMINUM (6061-T6)	$F_y = 35$ ksi
WELDING ELECTRODES	E70XX
ANCHOR BOLTS	ASTM F1554 GRADE 36
CONNECTION BOLTS	ASTM A325
ALLOWABLE SOIL BEARING (NET):	
UV TANK	5000 PSF

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DATE: JANUARY 2011	DES BY: AXS CHK BY: MRW
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	BY: DATE: CONTRACTOR:

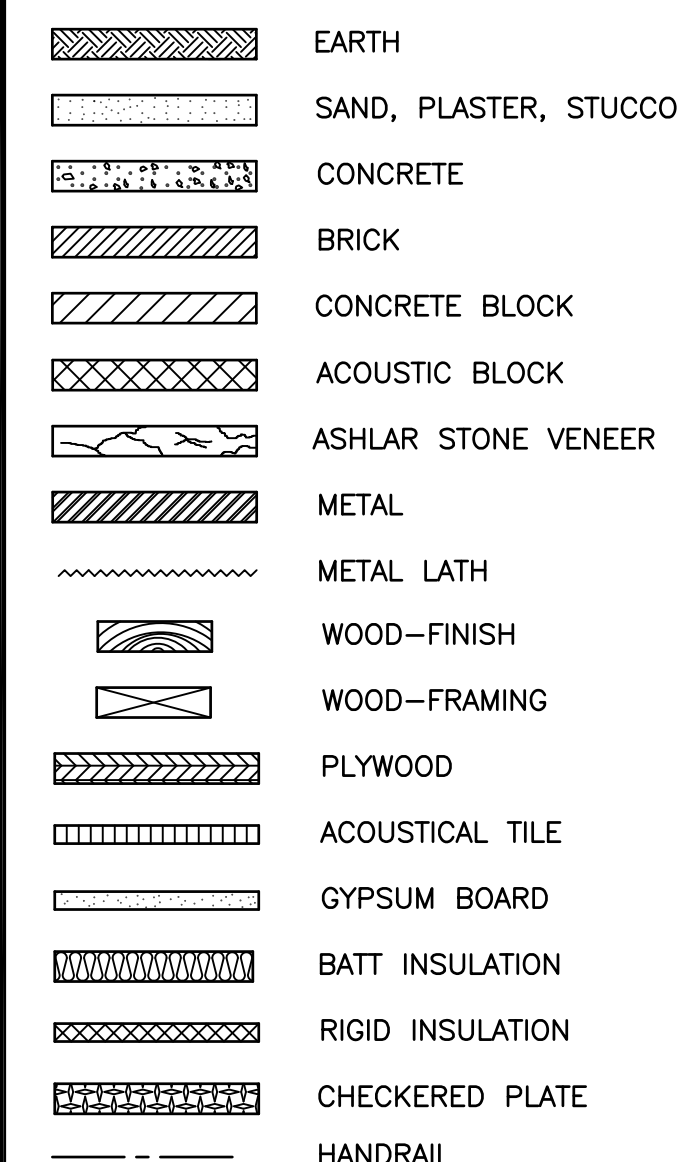
DESIGN CRITERIA AND HYDRAULIC PROFILE
EASTSIDE UV DISINFECTION STRUCTURE
AND OUTFALL PIPE TO DES PLAINES RIVER
CITY OF JOLIET
WILL COUNTY, ILLINOIS



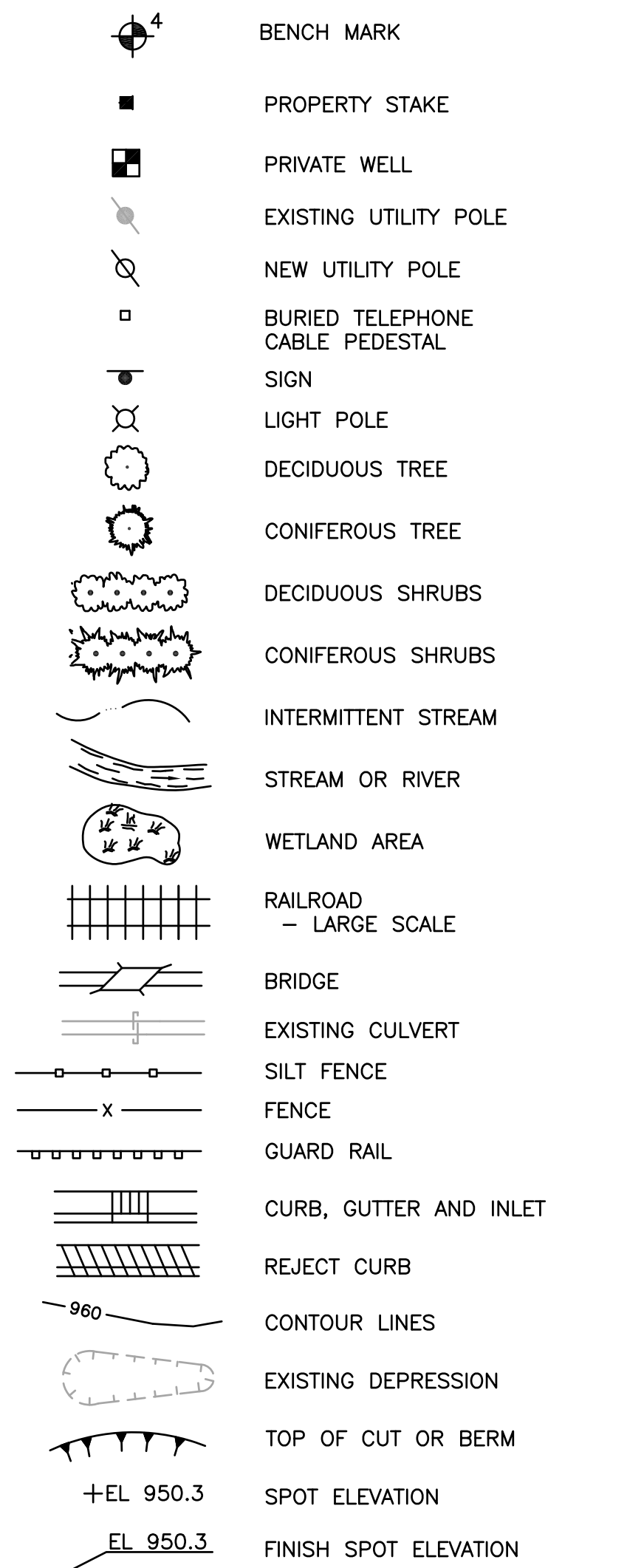
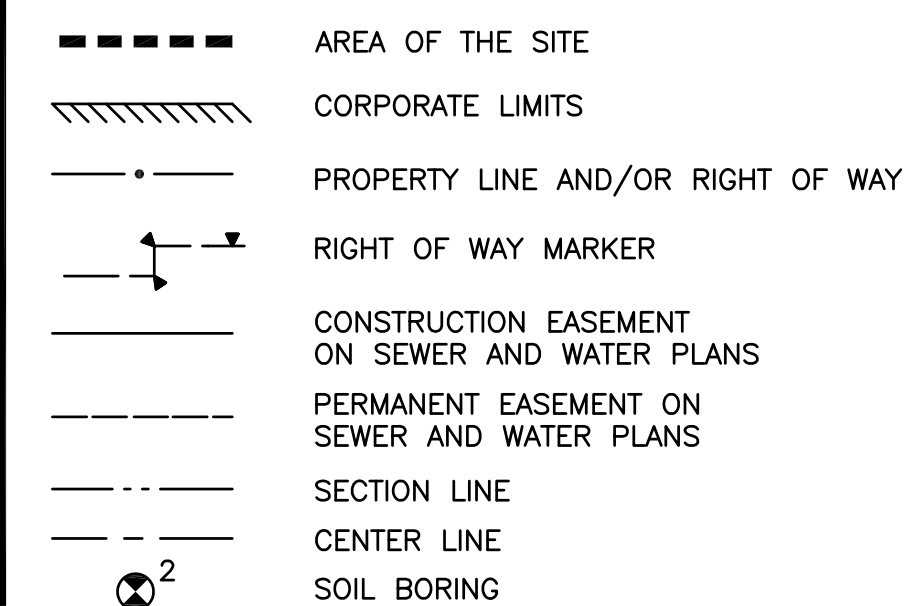
DRAFTING SYMBOLS



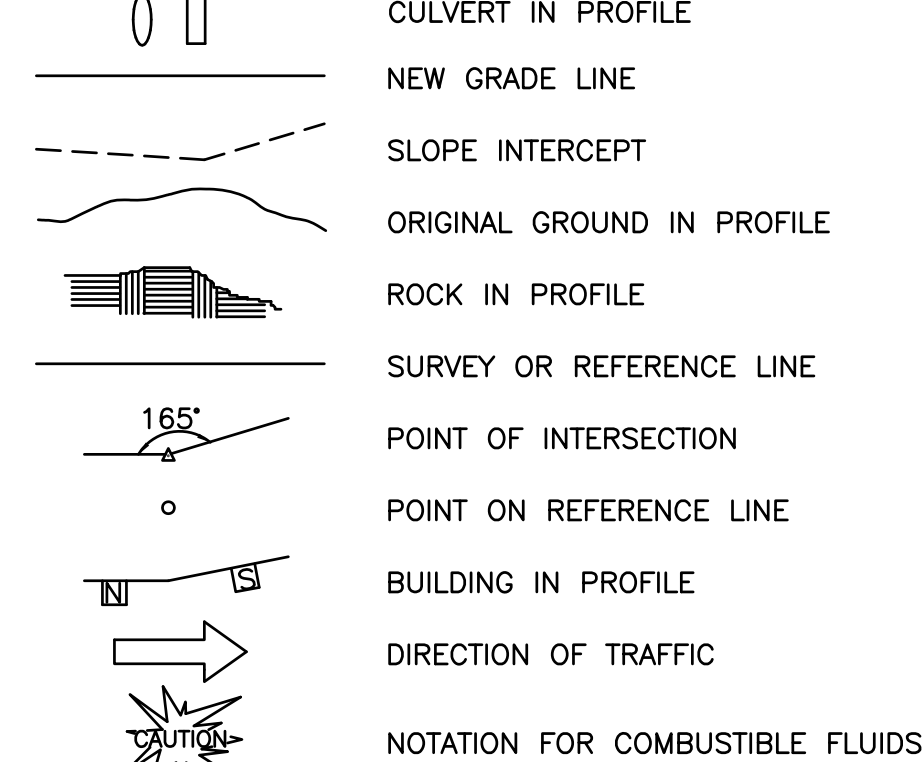
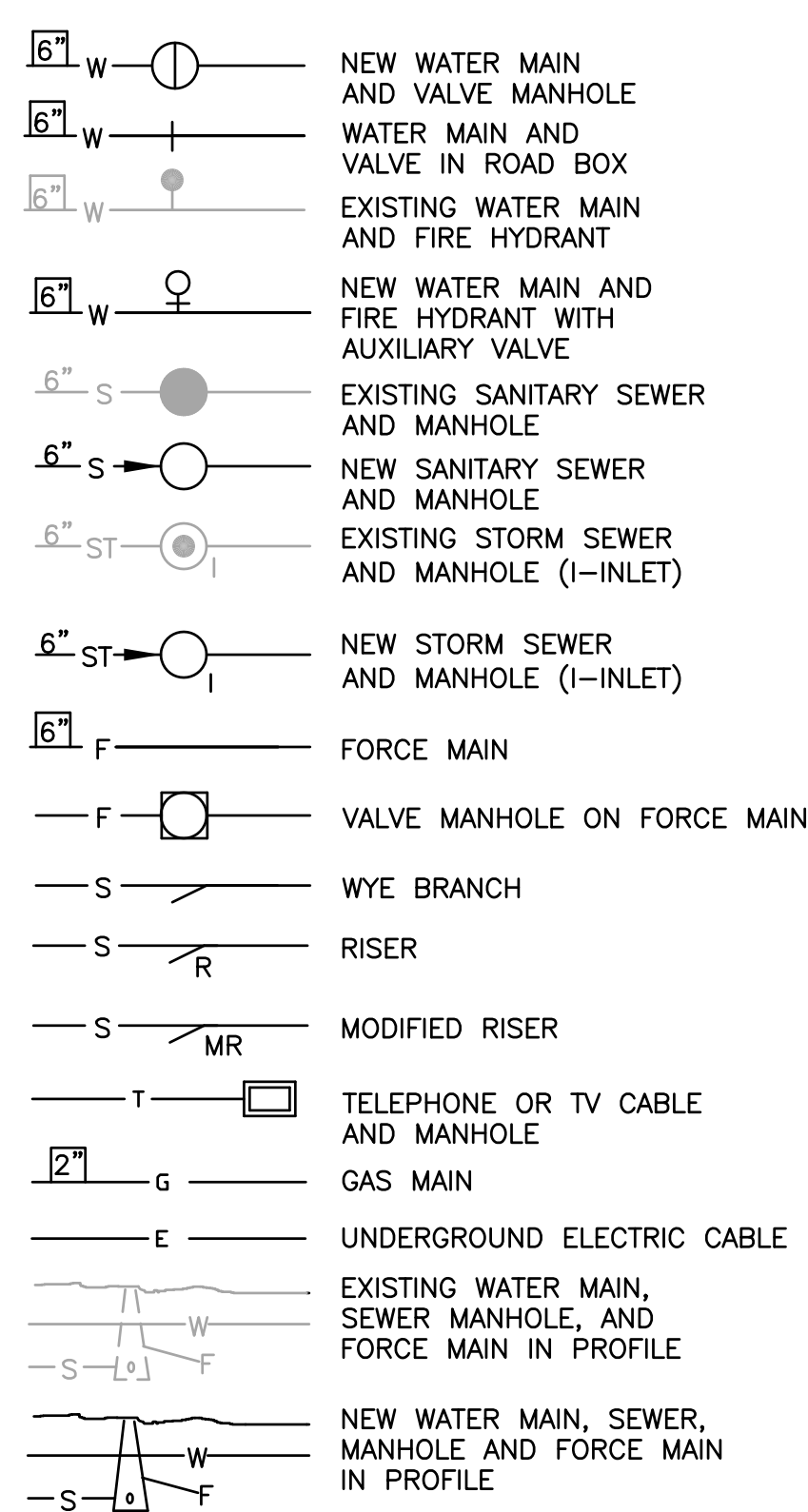
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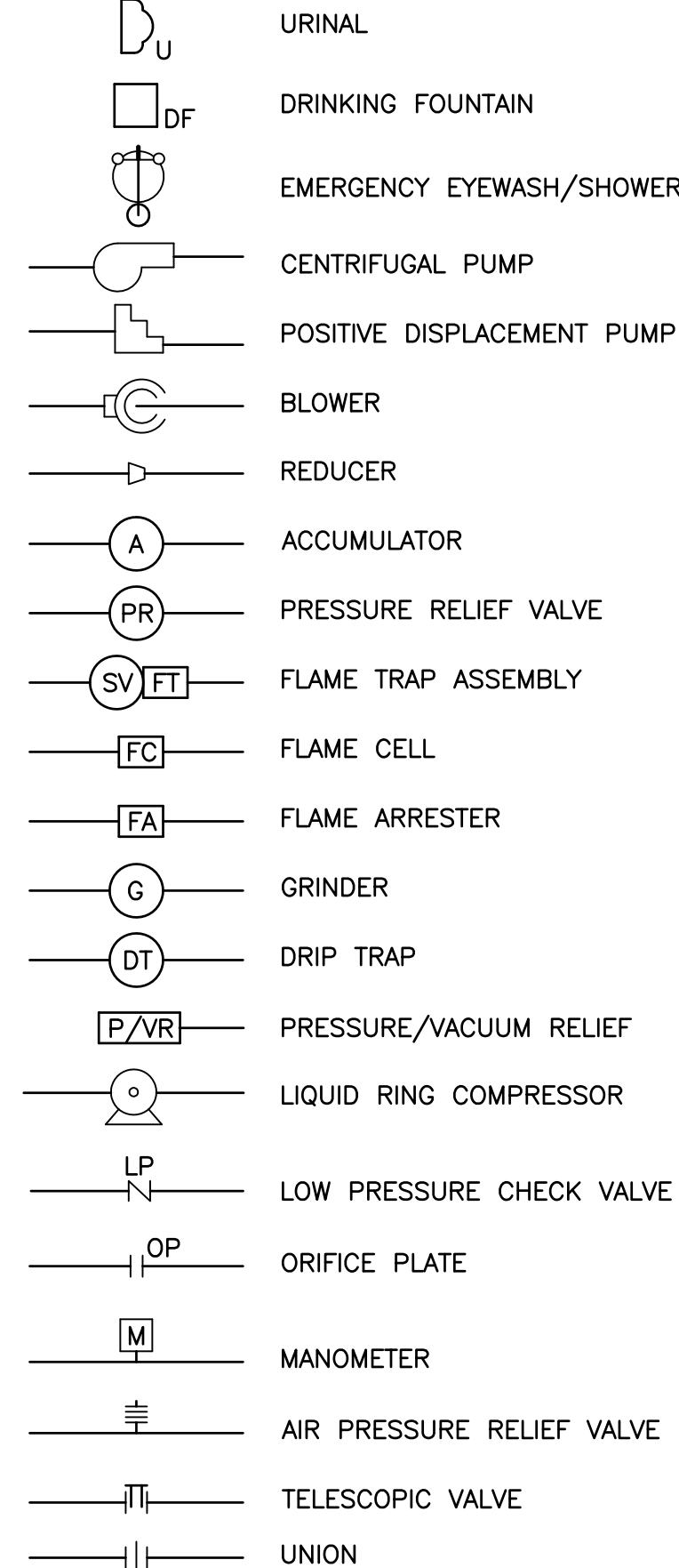
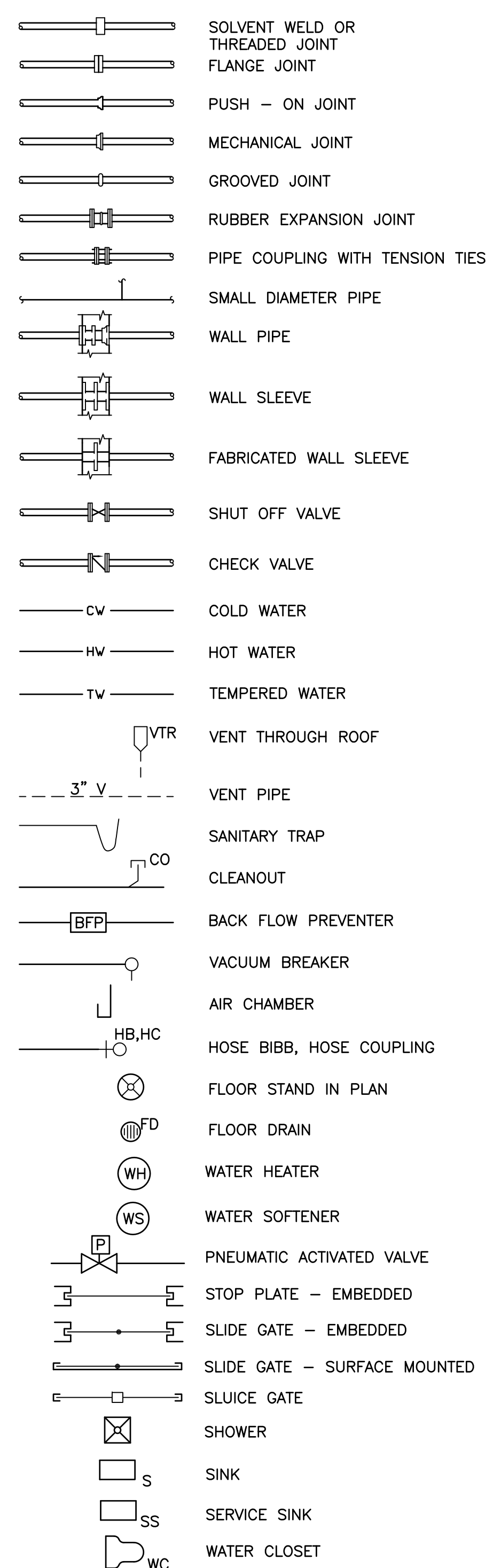
TOPOGRAPHICAL SYMBOLS



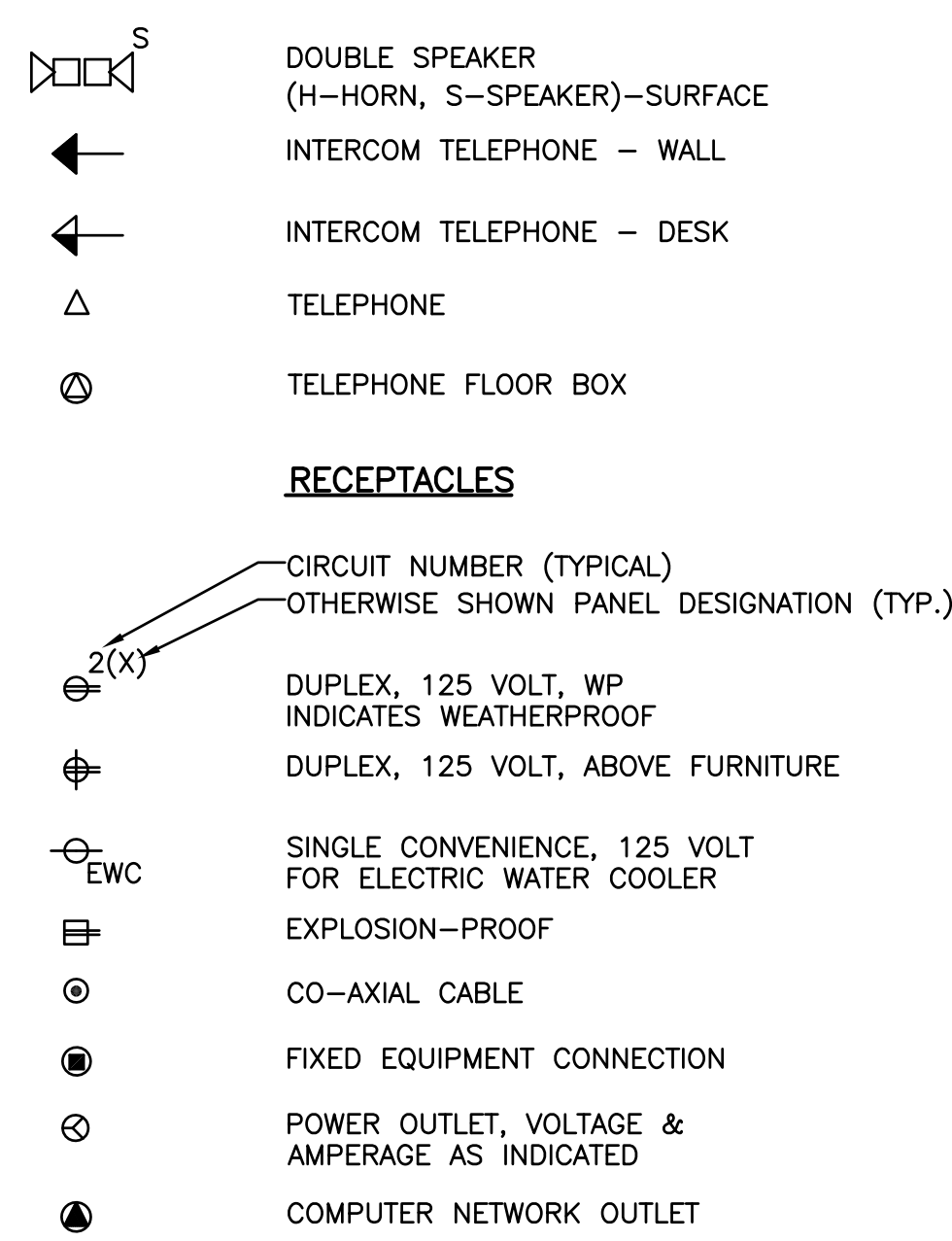
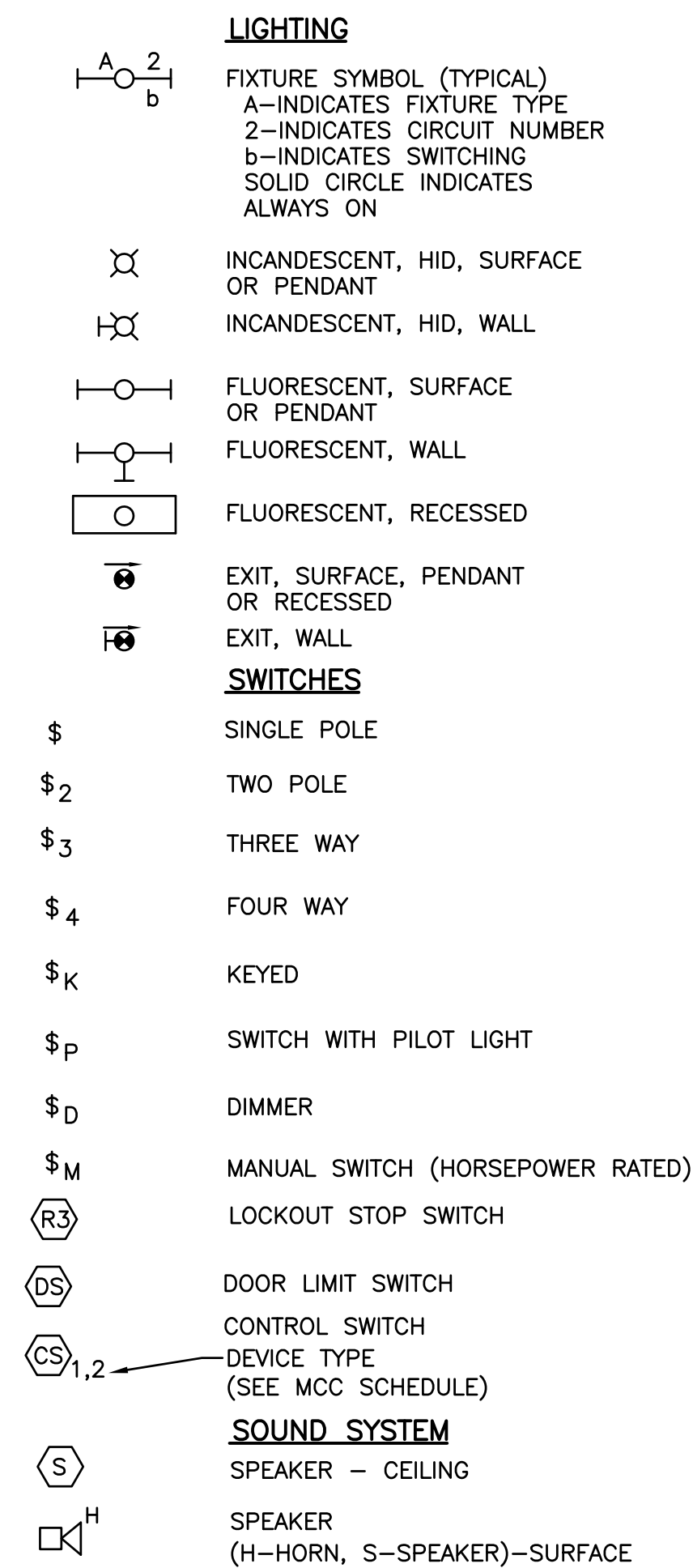
UNDERGROUND UTILITY SYMBOLS



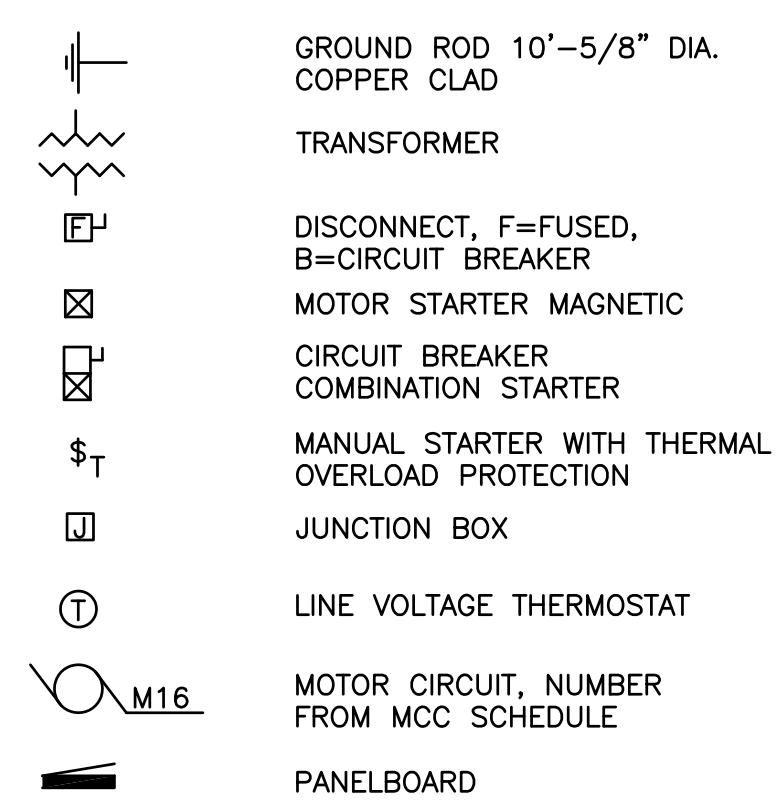
PIPING SYMBOLS



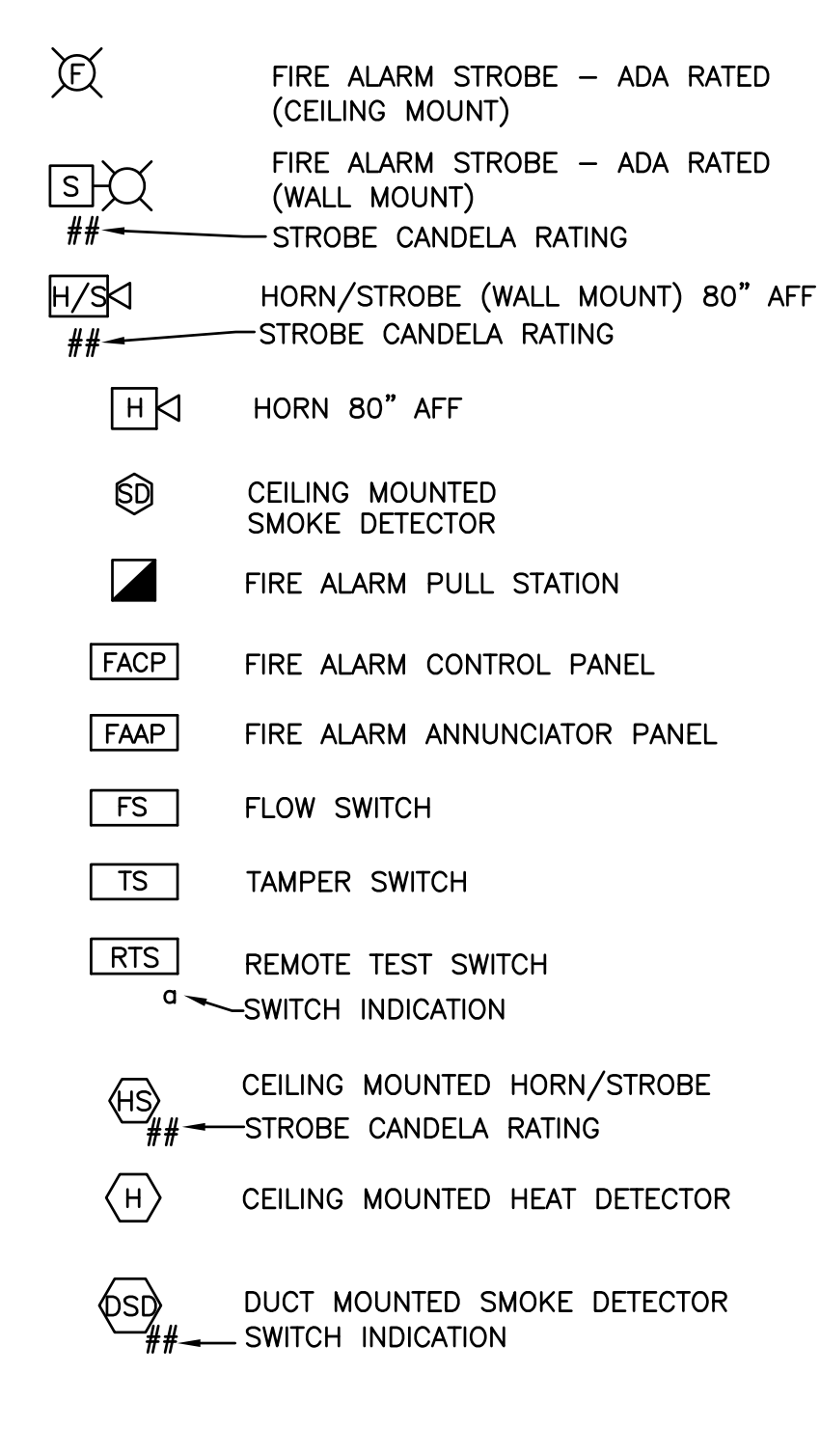
ELECTRICAL SYMBOLS



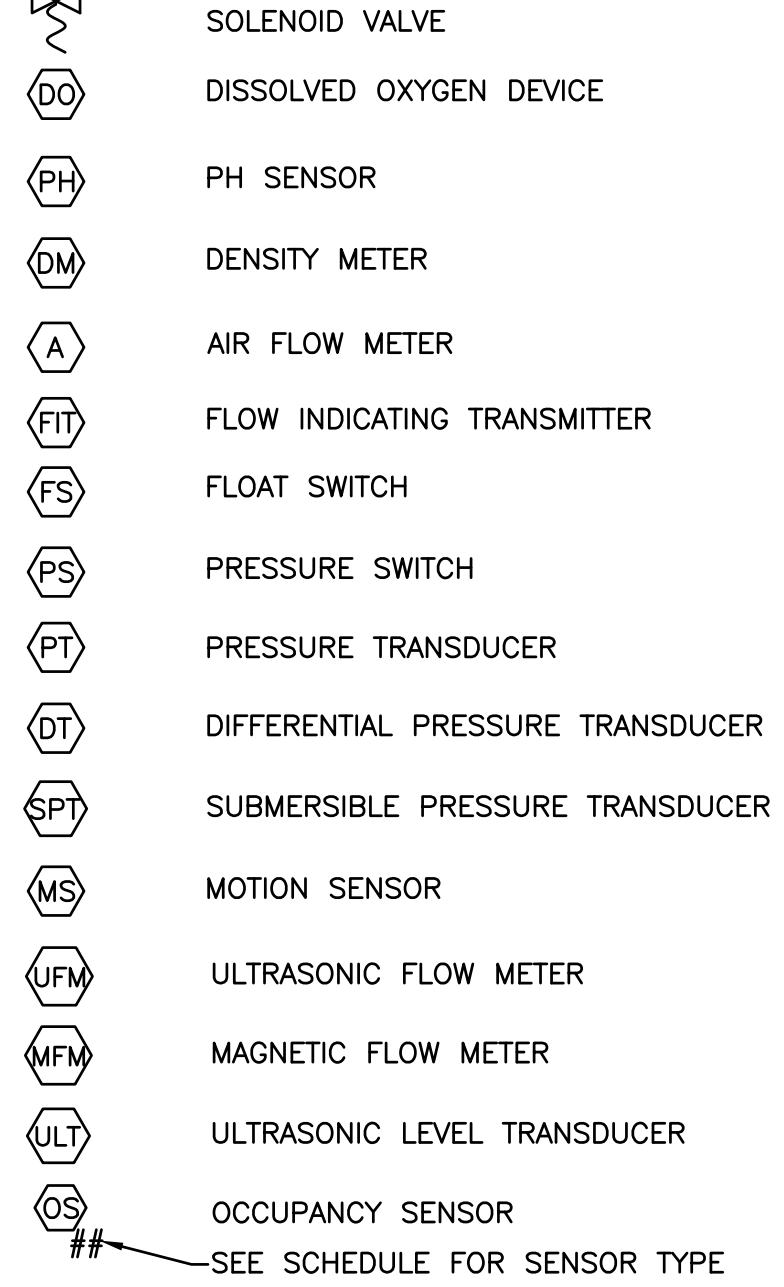
EQUIPMENT AND WIRING



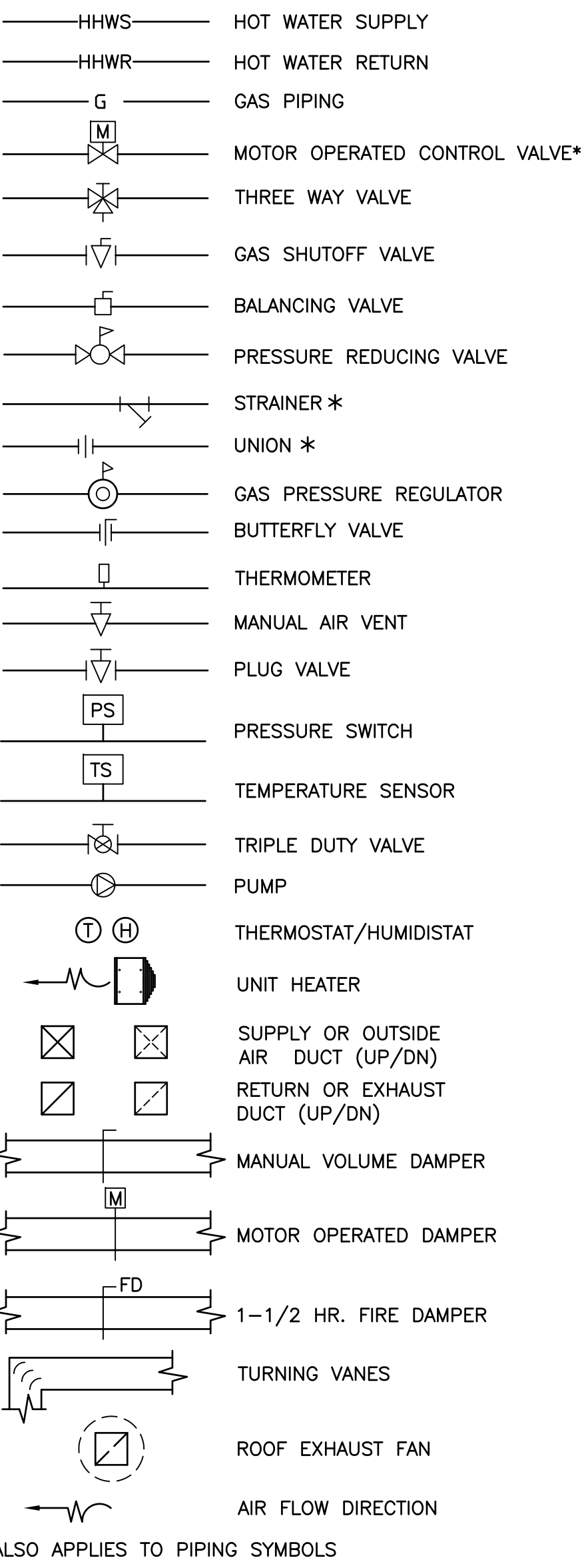
FIRE ALARM SYSTEM



INSTRUMENTATION EQUIPMENT



HEATING AND VENTILATING SYMBOLS



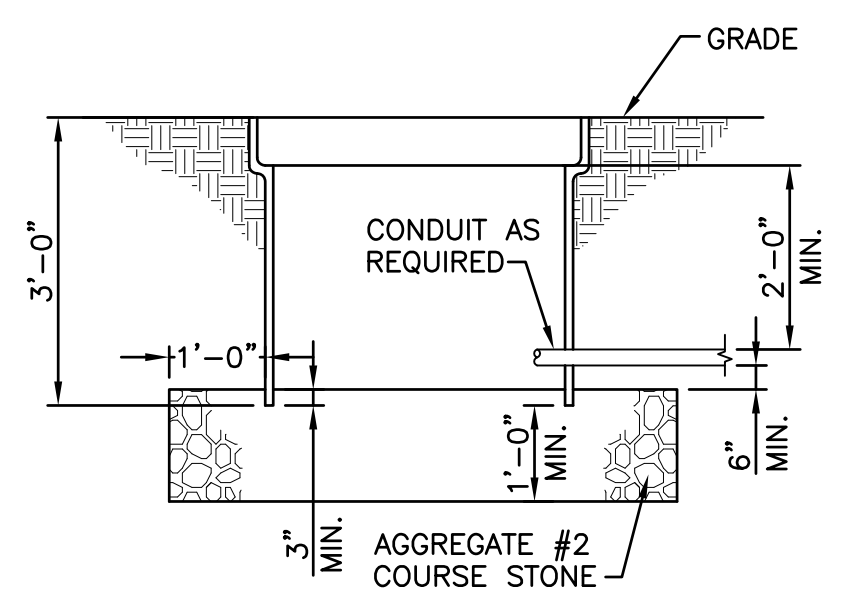
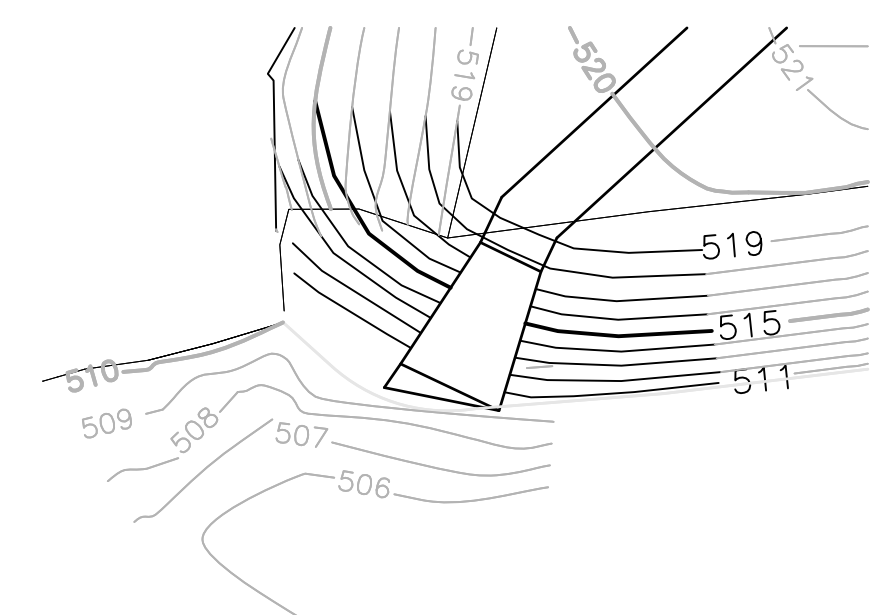
* ALSO APPLIES TO PIPING SYMBOLS

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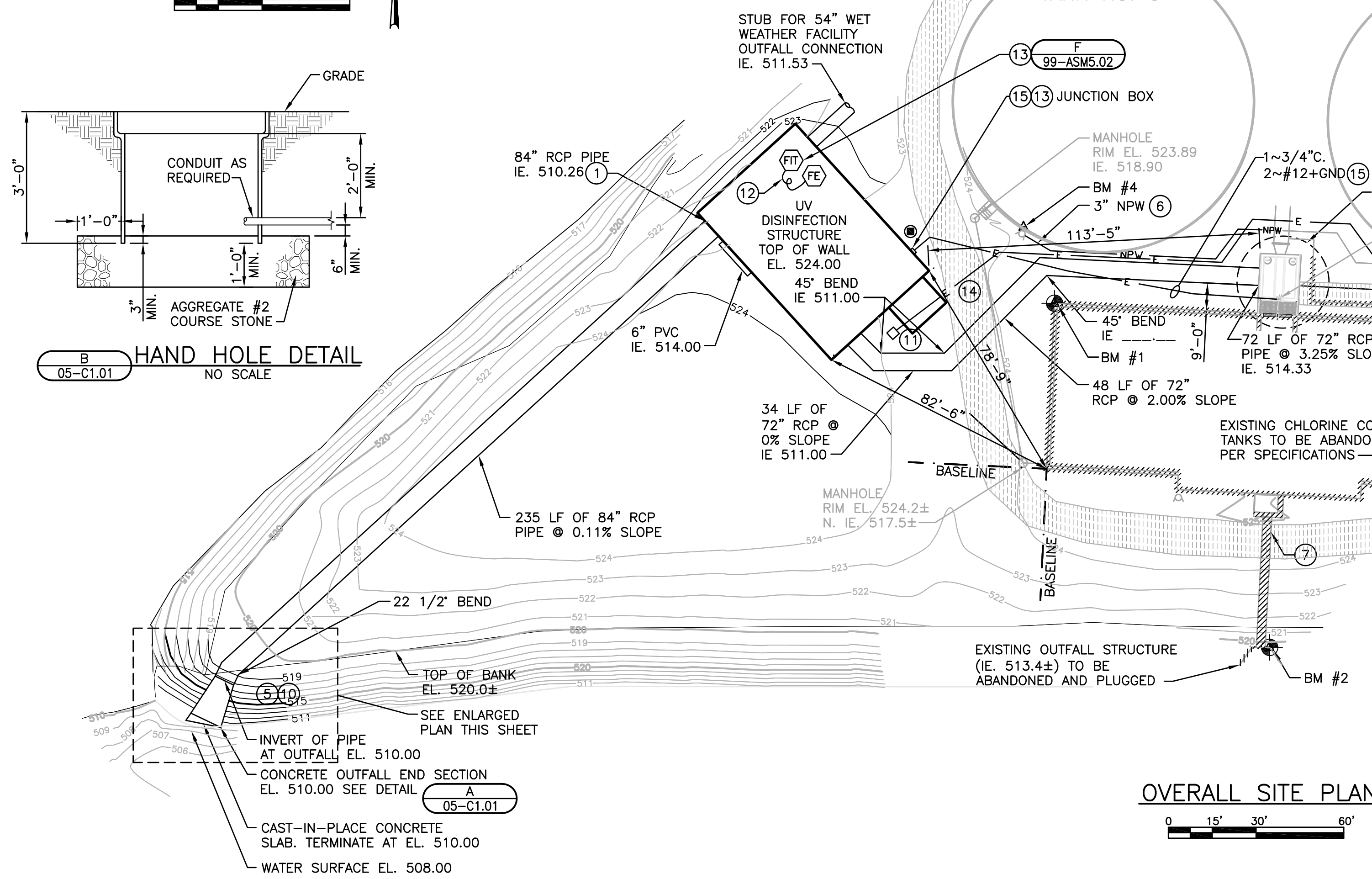
STANDARD SYMBOLS
EASTSIDE UV DISINFECTION STRUCTURE
AND OUTFALL PIPE TO DES PLAINES RIVER
CITY OF JOLIET
WILL COUNTY, ILLINOIS



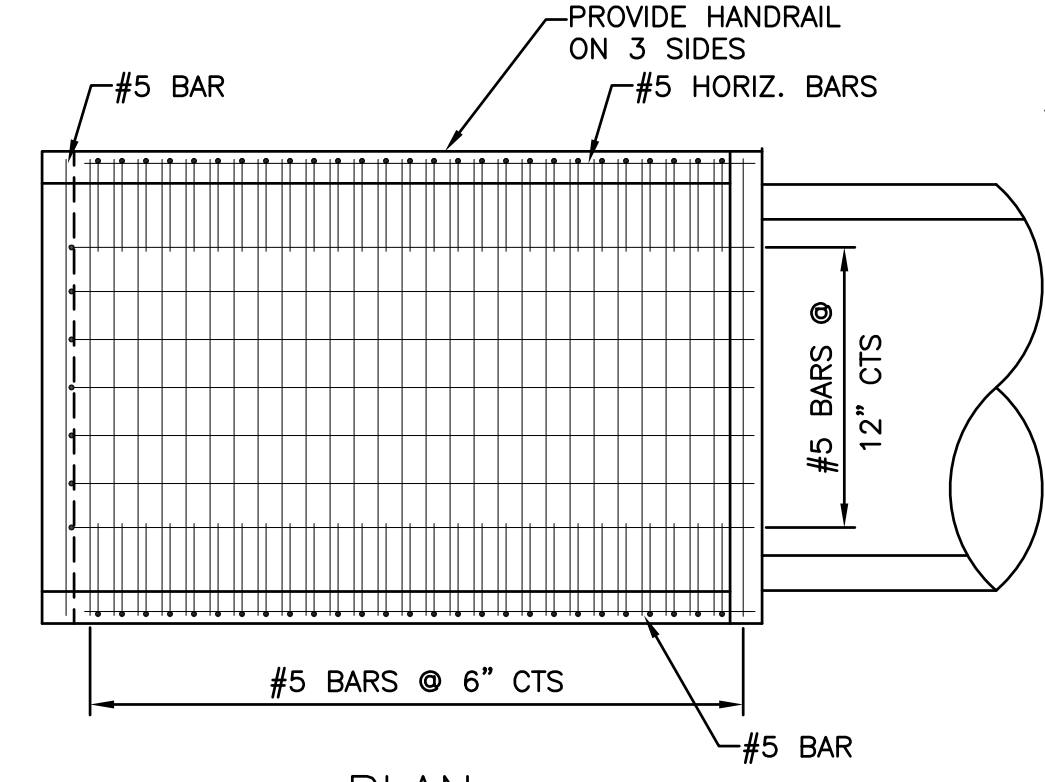
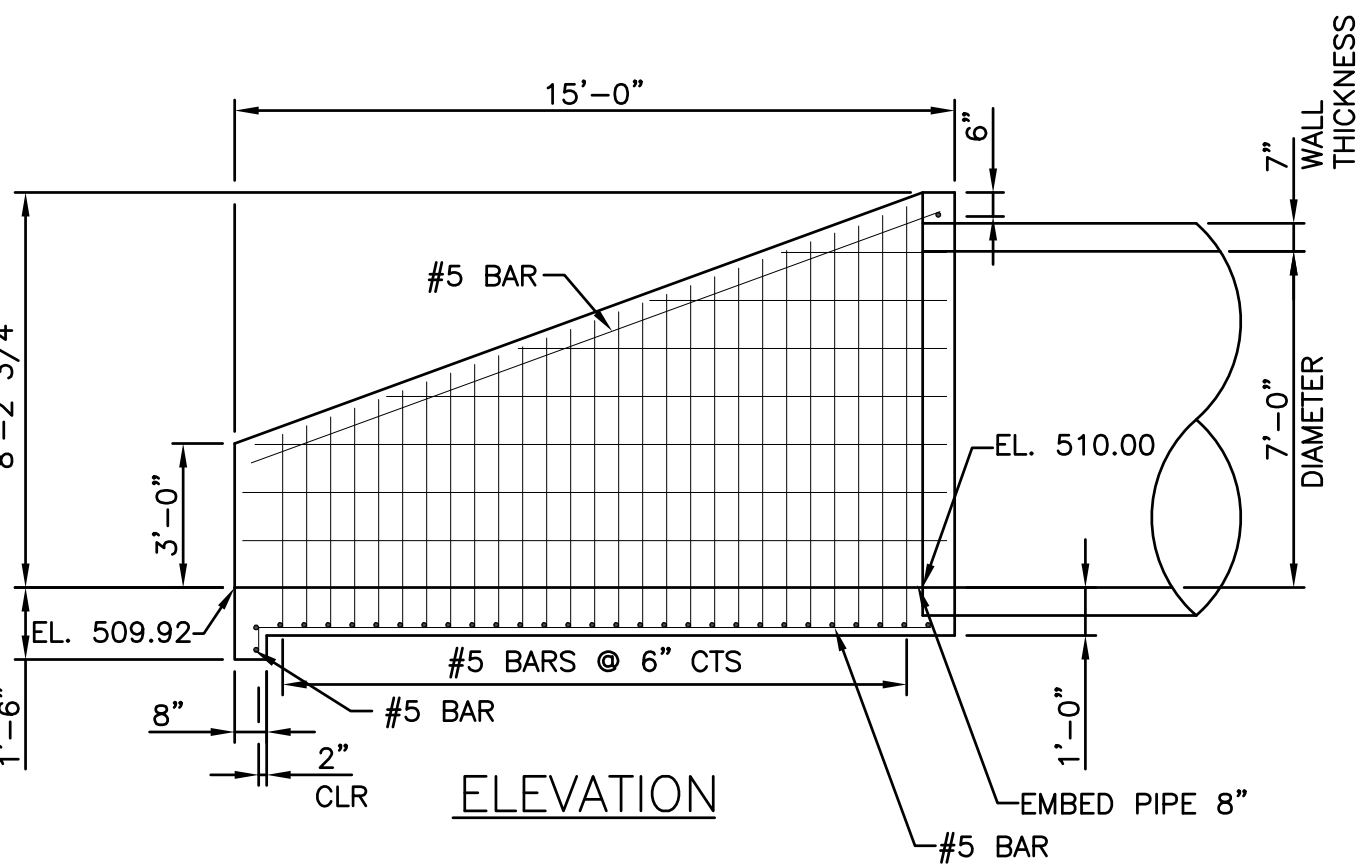


B HAND HOLE DETAIL
05-C1.01 NO SCALE

- LEGEND:**
- EXISTING ASPHALT PAVEMENT
 - EXISTING SIDEWALK/CONCRETE PAVEMENT
 - EXISTING GRAVEL
 - NEW ASPHALT PAVEMENT
 - NEW SIDEWALK/CONCRETE PAVEMENT
 - EROSION CONTROL MAT
 - STONE MULCH



OVERALL SITE PLAN
0 15' 30' 60'



A CAST-IN-PLACE CONCRETE OUTFALL END SECTION
05-C1.01

- GENERAL NOTES:**
1. ALL DIRECT BURIED AND EMBEDDED CONDUIT SHALL BE PVC SCHEDULE 80 UNLESS OTHERWISE SHOWN OR SPECIFIED. PROVIDE EXPANSION/DEFLECTION FITTING AT EACH CONTINUOUS 80' SEGMENT OF CONDUIT. PROVIDE EXPANSION/DEFLECTION FITTINGS WHERE CONDUITS TERMINATE AT HANDHOLES AND WHERE CONDUIT TRANSITIONS FROM BELOW GRADE TO ABOVE GRADE.
 2. PROVIDE PULL STRINGS AS SPECIFIED IN ALL SPARE CONDUIT.

- KEY NOTES:**
1. ALL RCP SHALL BE TYPE 2, CLASS 1.
 2. DEMOLISH 12" NPW TO THE EXTENT SHOWN.
 3. RELOCATE 12" NPW TO EFFLUENT JUNCTION BOX. SEE 20-ASM3.01 FOR DETAILS.
 4. DEMOLISH EXISTING CHLORINE CONTACT TANK PER SEQUENCE OF WORK DESCRIBED IN THE SPECIFICATIONS.
 5. EXISTING CONCRETE BANK PROTECTION TO BE RESTORED IN ALL AREAS DISTURBED DURING CONSTRUCTION.
 6. RELOCATE IDENTIFIED PORTION OF EXISTING 3" NON-POTABLE WATER LINE TO AVOID CONFLICT WITH NEW 72" RCP.
 7. CUT EXISTING 60" OUTFALL PIPE AND PLUG INLET.
 8. EXISTING 4" CHLORINE LINE.
 9. CONDUITS SHALL CROSS THE MIXED LIQUOR CHANNEL ABOVE GRADE. CONDUIT CROSSING MIXED LIQUOR CHANNEL SHALL BE PVC COATED RIGID STEEL.
 10. GRADING SHALL MATCH ELEVATION OF SIDEWALL OF THE OUTFALL SECTION SEE ENLARGED PLAN.
 11. TERMINATE SPARE CONDUITS IN HANDHOLE.
 12. INSTALL MANUFACTURER FURNISHED CABLE BETWEEN FLOW ELEMENT AND TRANSMITTER IN CONDUIT.
 13. PROVIDE ULTRASONIC TYPE OPEN CHANNEL FLOW INDICATING TRANSMITTER AND ASSOCIATED FLOW ELEMENT, SIEMENS MILLTRONICS MODEL HYDRORANGER, OR EQUAL. THE CABLE BETWEEN THE FLOW ELEMENT AND THE TRANSMITTER SHALL BE PROVIDED WITH THE FLOW ELEMENT AND RUN IN CONDUIT SEPARATE FROM ALL OTHER WIRES OR CABLES. PROVIDE NEMA 4X FIBERGLASS, INSULATED, AND HEATED ENCLOSURE EQUIPPED WITH VIEWING WINDOW AND QUICK-OPENING HASPS TO HOUSE THE TRANSMITTER AND ASSOCIATED ACCESSORIES. ENCLOSURE SHALL BE EQUIPPED WITH A CITEL M18-120 OR EQUAL SURGE SUPPRESSION DEVICE, HOFFMAN MODEL DAH601 OR EQUAL HEATER, HOFFMAN MODEL ATEM OR EQUAL SINGLE POLE FUSED DISCONNECT, TEMPERATURE CONTROL SWITCH, WIRELESS I/O TRANSMITTER, AND ALL REQUIRED POWER SUPPLIES AND WIRING REQUIRED TO POWER THE TRANSMITTER AND THE WIRELESS I/O TRANSMITTER. THE 4-20MA SIGNAL FROM THE OPEN FLOW INDICATING TRANSMITTER SHALL BE WIRED TO THE 4-20MA INPUT OF THE WIRELESS I/O TRANSMITTER. THE WIRELESS I/O TRANSMITTER ANTENNA SHALL BE MOUNTED ON THE OUTSIDE OF THE ENCLOSURE. PROVIDE PHOENIX CONTACT WIRELESS I/O INTERFACE TRANSMITTER/RECEIVER SET, MODEL RAD-ISM-900-SET-UD-ANT OR EQUAL AND USE THE TRANSMITTER DEVICE AS THE WIRELESS I/O TRANSMITTER. THE RECEIVER DEVICE SHALL BE MOUNTED IN SCC-D AS NOTED IN KEY NOTE 16. PROVIDE 120 V, SINGLE PHASE POWER TO ENCLOSURE FROM JUNCTION BOX. THE INSTRUMENTATION AND ENCLOSURE SHALL BE FURNISHED BY WUNDERLICH-MALEC ENVIRONMENTAL (CONTACT BILL GRAHAM 847-691-9542).
 14. CONDUITS UNDER DRIVEWAY SHALL BE CONCRETE ENCASED PER DETAIL H 99-ASM5.02.
 15. EXTEND EXISTING 120V, SINGLE PHASE LIGHTING CIRCUIT TO JUNCTION BOX AT UV STRUCTURE.
 16. INSTALL THE WIRELESS I/O RECEIVER INCLUDED WITH THE WIRELESS I/O INTERFACE TRANSMITTER/RECEIVER SET SPECIFIED IN KEY NOTE 13 IN SCC-D. PROVIDE A POWER SUPPLY TO POWER THE RECEIVER AND ALL WIRING REQUIRED. 120VAC SINGLE PHASE POWER IS AVAILABLE IN THE SCC. THE 4-20MA OUTPUT FROM THE RECEIVER SHALL BE WIRED TO THE EXISTING SCADA SYSTEM PLANT EFFLUENT FLOW PLC INPUT. THE RECEIVER ANTENNA SHALL BE MOUNTED ON THE TOP OF THE SCC. PROVIDE ANTENNA CABLE OF SUFFICIENT LENGTH TO REACH FROM THE RECEIVER TO THE ANTENNA LOCATION. ALL WORK IN SCC-D SHALL BE PREFORMED BY WUNDERLICH-MALEC ENVIRONMENTAL (CONTACT BILL GRAHAM 847-691-9542).

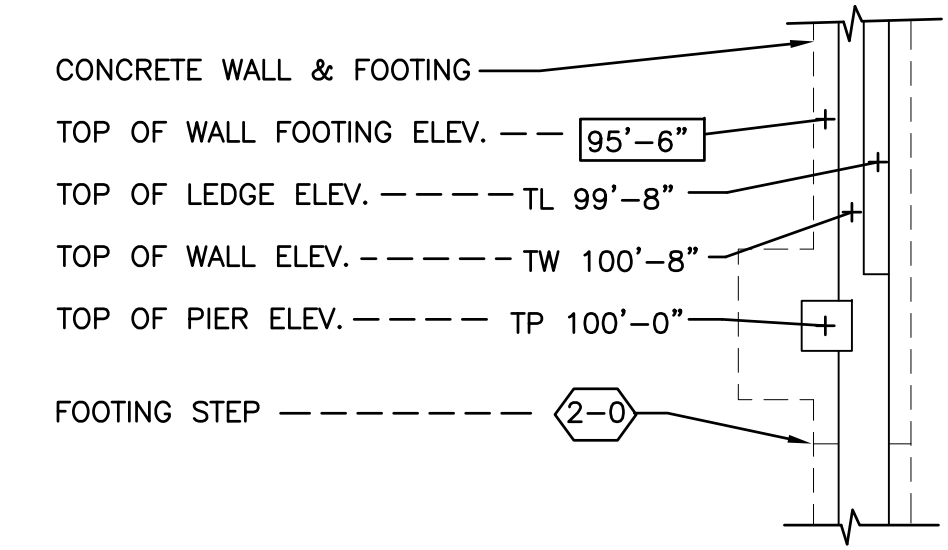
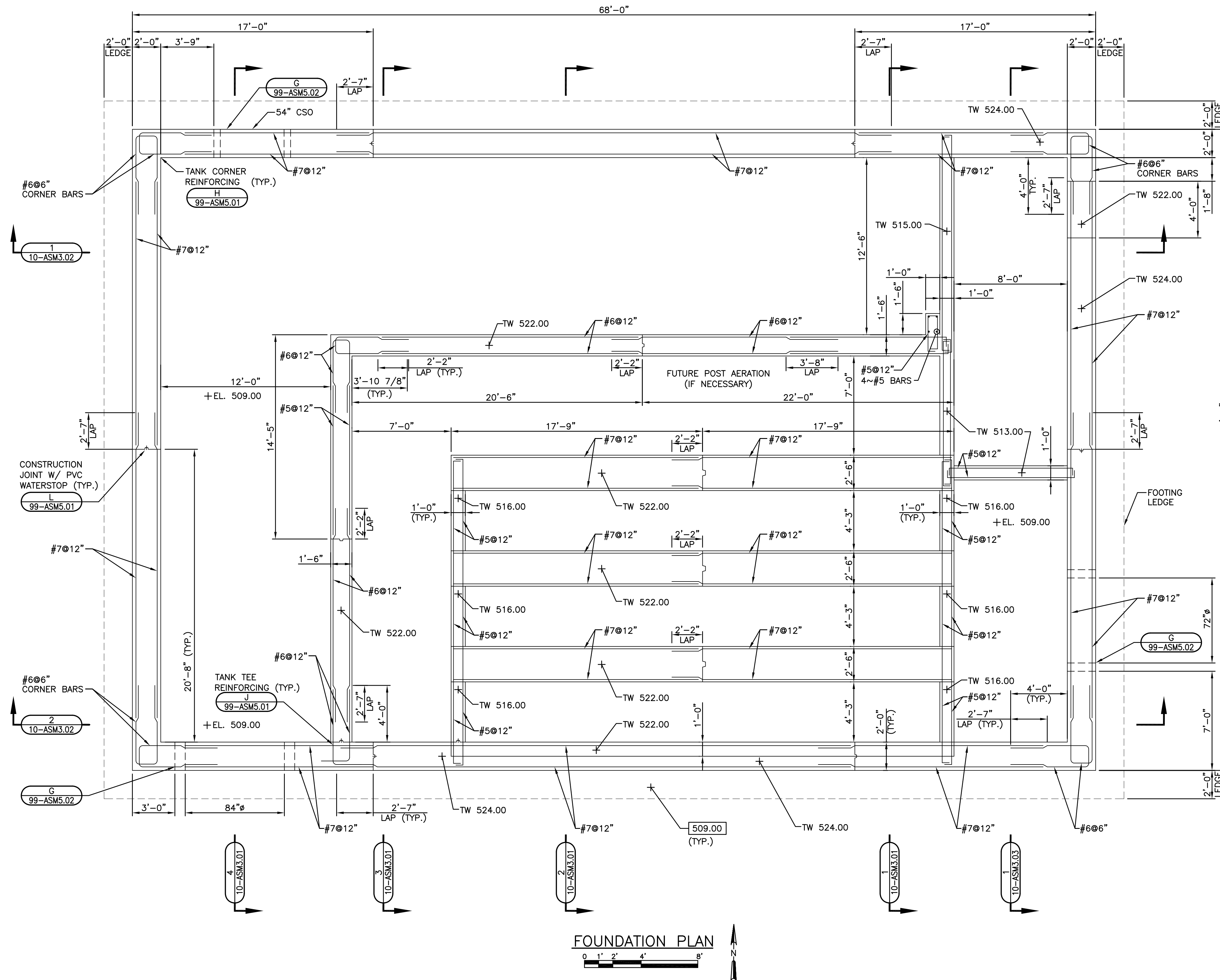
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BY:	DATE:
	CONTRACTOR:

OVERALL SITE PLAN
EASTSIDE UV DISINFECTION STRUCTURE
AND OUTFALL PIPE TO DES PLAINES RIVER
CITY OF JOLIET
WILL COUNTY, ILLINOIS



GENERAL NOTES:

1. PROVIDE EXTRA REINFORCING AT OPENINGS IN WALLS AND SLAB PER DETAIL F 99-ASM5.01

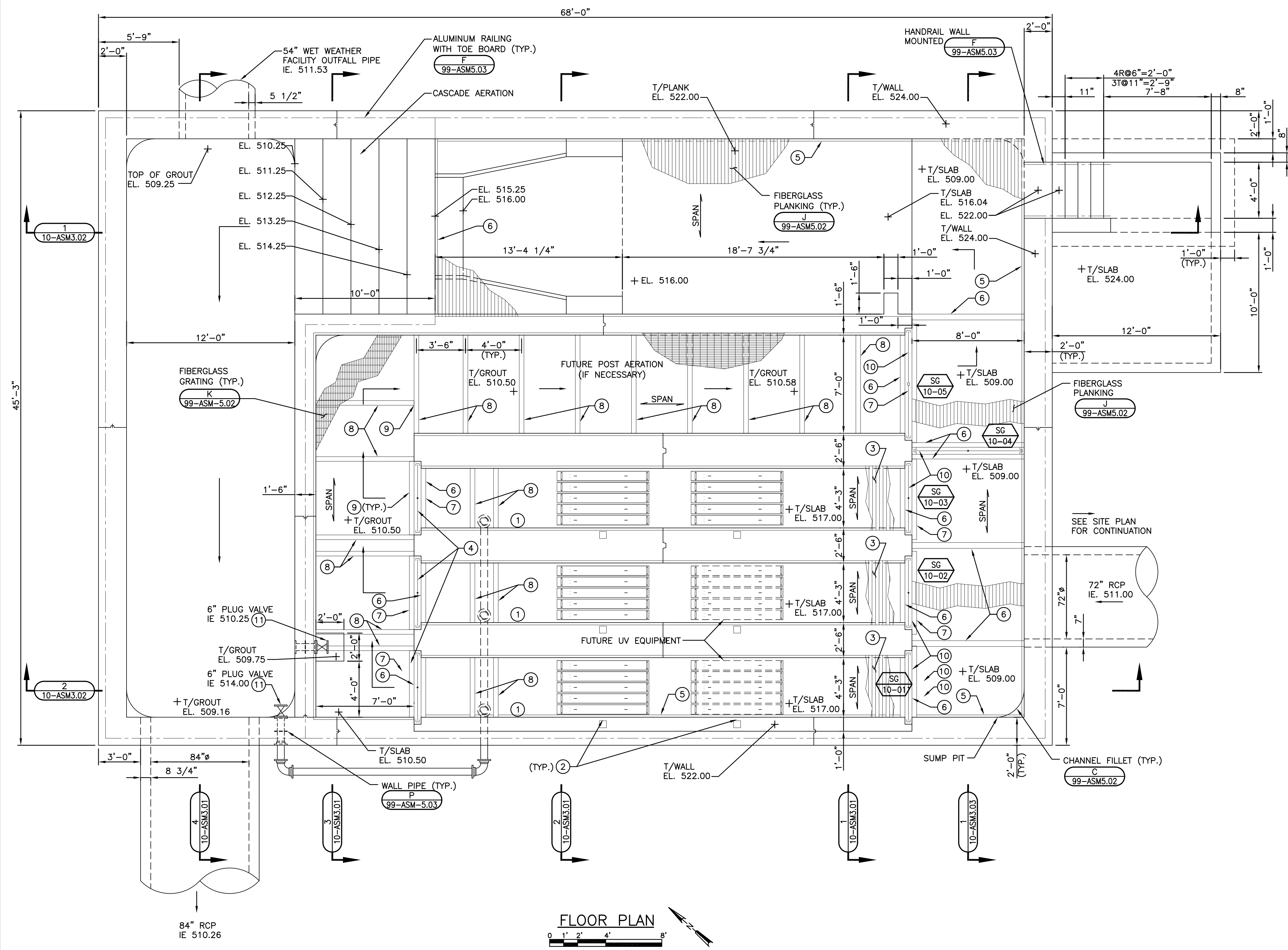


A 10-ASM1.01 FOUNDATION LEGEND
NO SCALE

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	CHK BY: MRW
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	BY:
	DATE:
	CONTRACTOR:

FOUNDATION PLAN
EASTSIDE UV DISINFECTION STRUCTURE
AND OUTFALL PIPE TO DES PLAINES RIVER
CITY OF JOLIET
WILL COUNTY, ILLINOIS





- GENERAL NOTES:**
1. PROVIDE ADDITIONAL REINFORCING AT WALL AND SLAB OPENINGS PER DETAIL **F** 99-ASM5.01
 2. **SPAN** INDICATES SPAN DIRECTION OF FIBERGLASS PLANKING/GRATING.
- KEY NOTES:**
1. PROVIDE 6" MUD DRAIN VALVE. EXTEND OPERATOR NUT TO EL. 522.00. PROVIDE REMOVABLE PLANKING FOR ACCESS. SEE DETAIL **P** 99-ASM5.03
 2. FUTURE DAVIT CRANE WITH PEDESTAL BASE. TYPICAL OF 2.
 3. CONTRACTOR TO PROVIDE FIBERGLASS PLANKING OVER UV CHANNELS. CONTRACTOR TO COORDINATE PLANKING LAYOUT WITH EQUIPMENT MANUFACTURER. PLANKING PANELS SHALL ALSO BE SIZED TO PERMIT EASE OF HANDLING DURING REMOVAL.
 4. FUTURE SURFACE-MOUNTED DOWNWARD OPENING WEIR GATES.
 5. 3x3x3/8 SURFACE MOUNTED FIBERGLASS ANGLE W/ 5/8" DIA. SS EXPANSION ANCHORS @ 18" O.C. EMBEDDED 4".
 6. PROVIDE FIBERGLASS SUPPORT I 10x5x3/8" ACROSS OPENING. CLIP ANGLE CONNECTION AT BOTH ENDS. FASTEN TO CONCRETE W/ 2~5/8" SS EXPANSION ANCHORS EACH END.
 7. 3x3x3/4" FIBERGLASS SUPPORT ACROSS OPENING. FASTEN TO CONCRETE W/ 2~5/8" SS EXPANSION ANCHORS EACH END.
 8. PROVIDE FIBERGLASS SUPPORT CHANNEL 8x2 3/16x3/8" ACROSS OPENING. CLIP ANGLE CONNECTION AT BOTH ENDS. FASTEN TO CONCRETE W/ 2~5/8" SS EXPANSION ANCHORS EACH END.
 9. PROVIDE L3"x3"x3/8"x6" LONG FRP CONNECTION ANGLE. 2~1/2" SS BOLTS EACH LEG.
 10. SURFACE MOUNTED SLIDE GATES. REFER TO **A** 99-ASM5.01
 11. EXTEND OPERATOR NUT TO EL. 522.00, SUPPORT AS REQUIRED.

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DATE: JANUARY 2011	DES BY: AXS CHK BY: MRW
	RECORD DRAWING
	BY: DATE: CONTRACTOR:

FLOOR PLAN
EASTSIDE UV DISINFECTION STRUCTURE
AND OUTFALL PIPE TO DES PLAINES RIVER
CITY OF JOLIET
WILL COUNTY, ILLINOIS

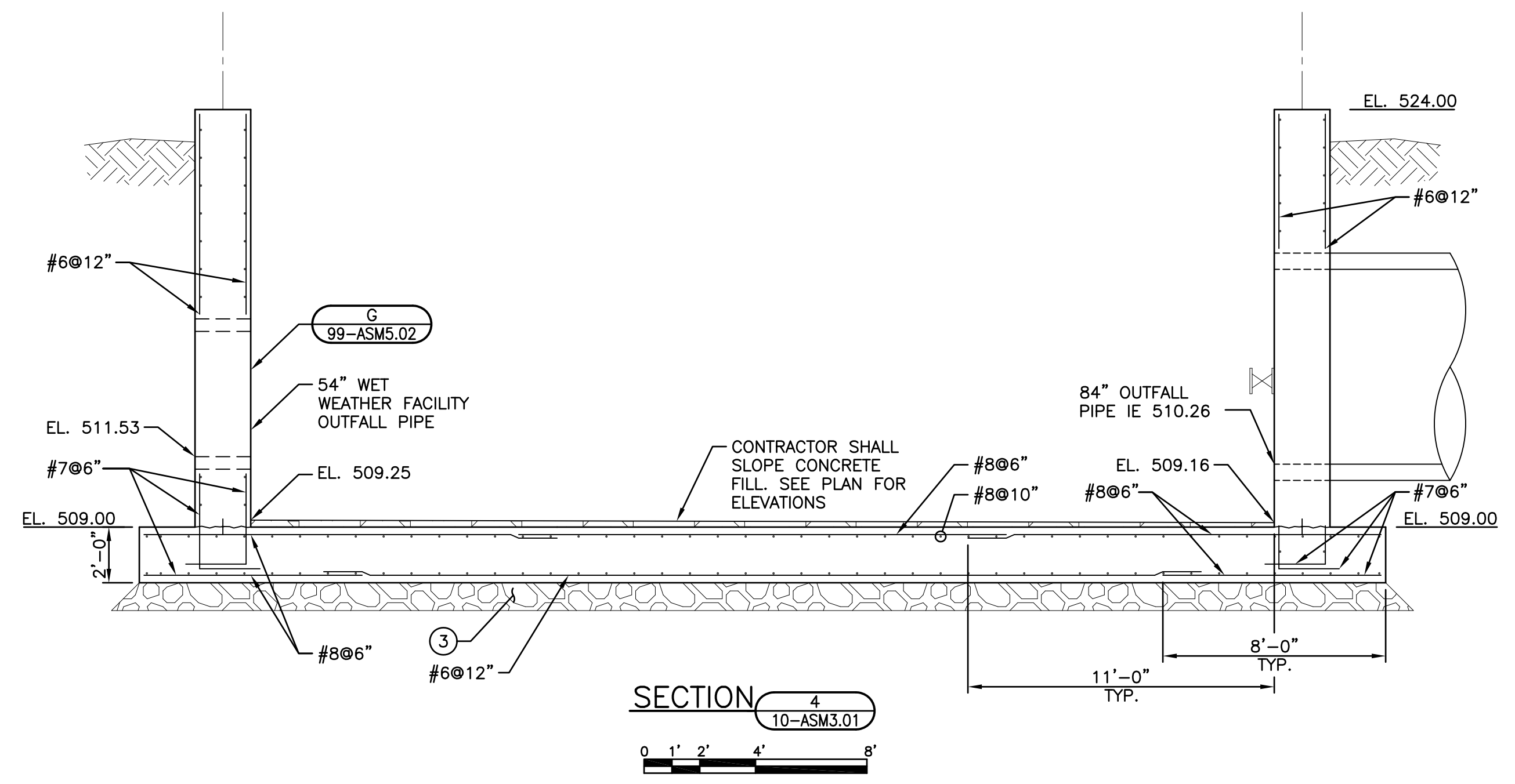
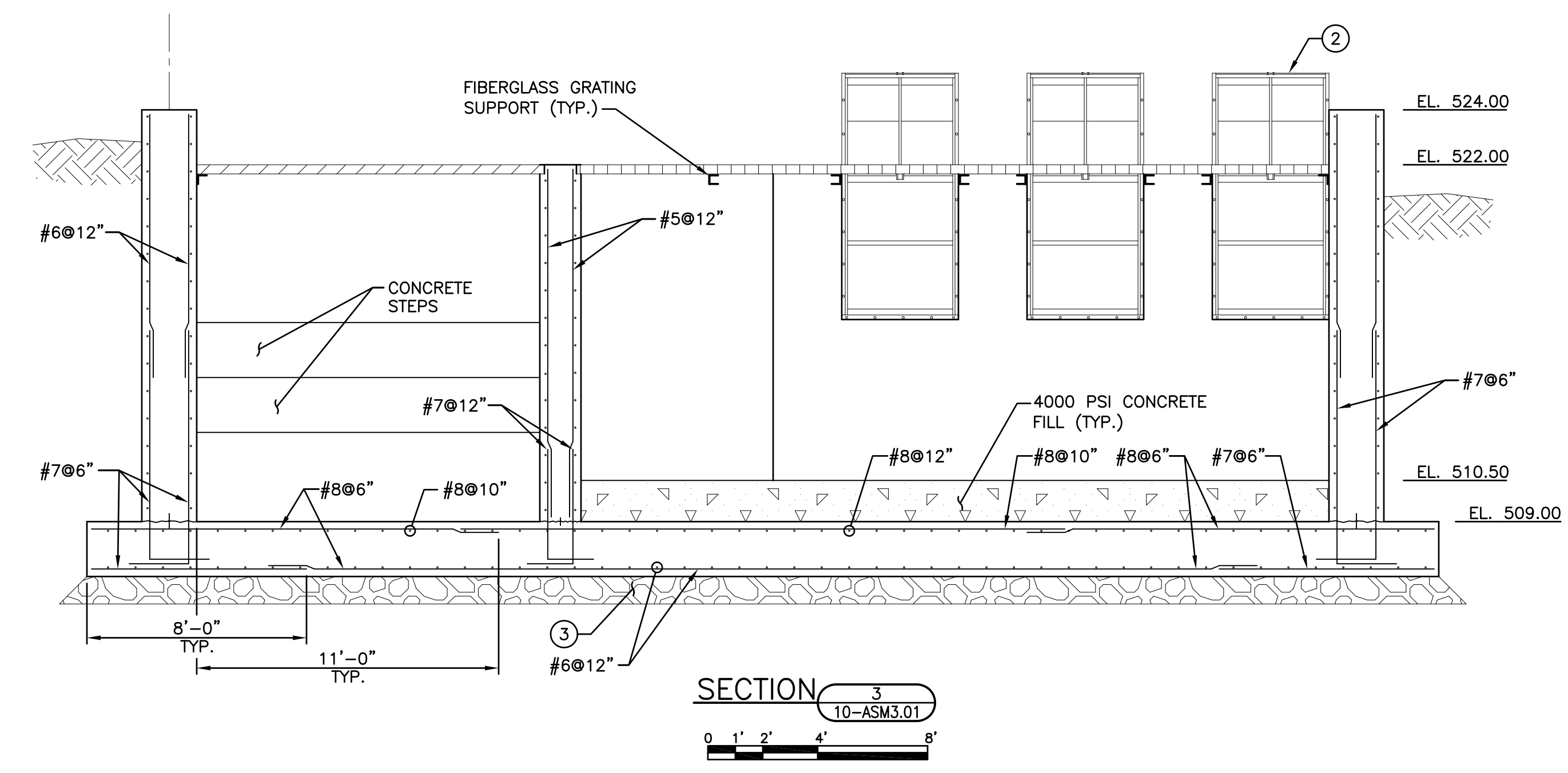
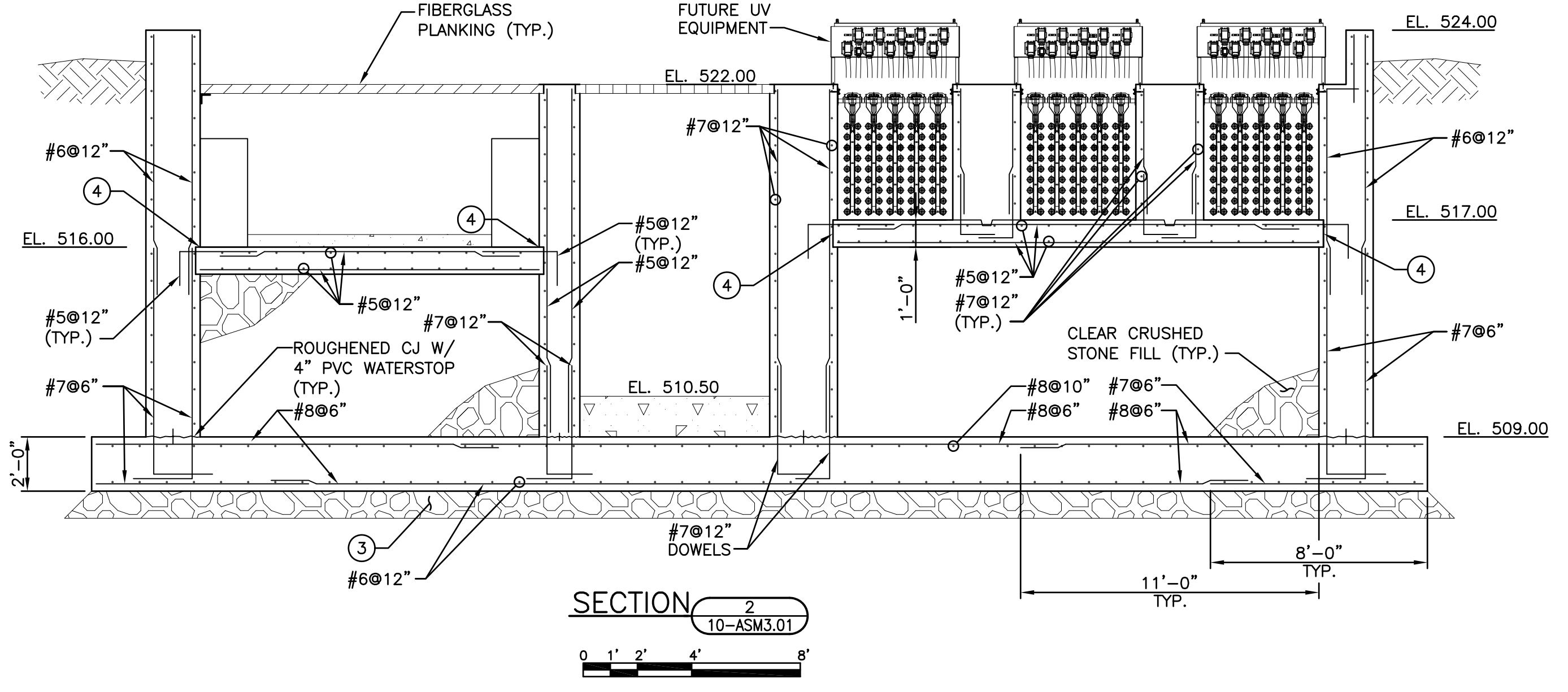
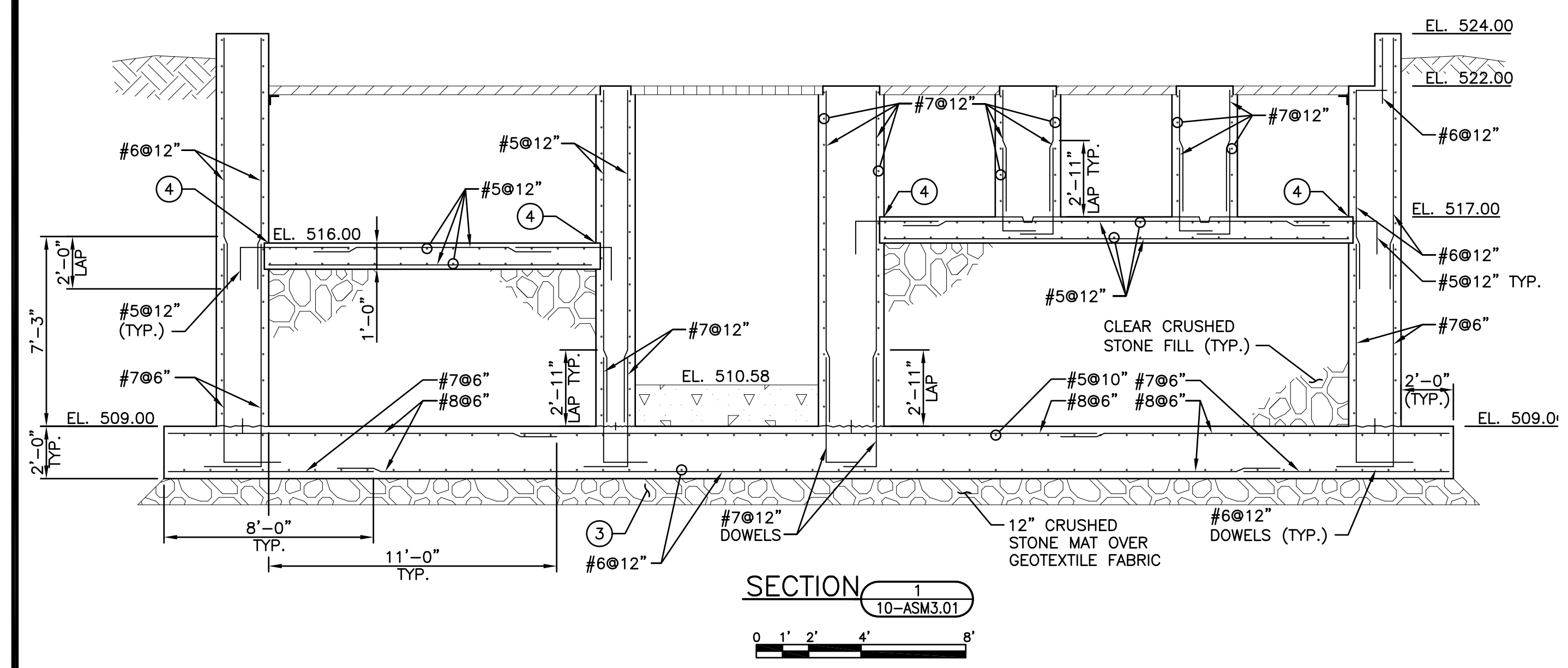


GENERAL NOTES:

1. PLACE HORIZONTAL BARS OUTSIDE OF VERTICAL BARS.

KEY NOTES:

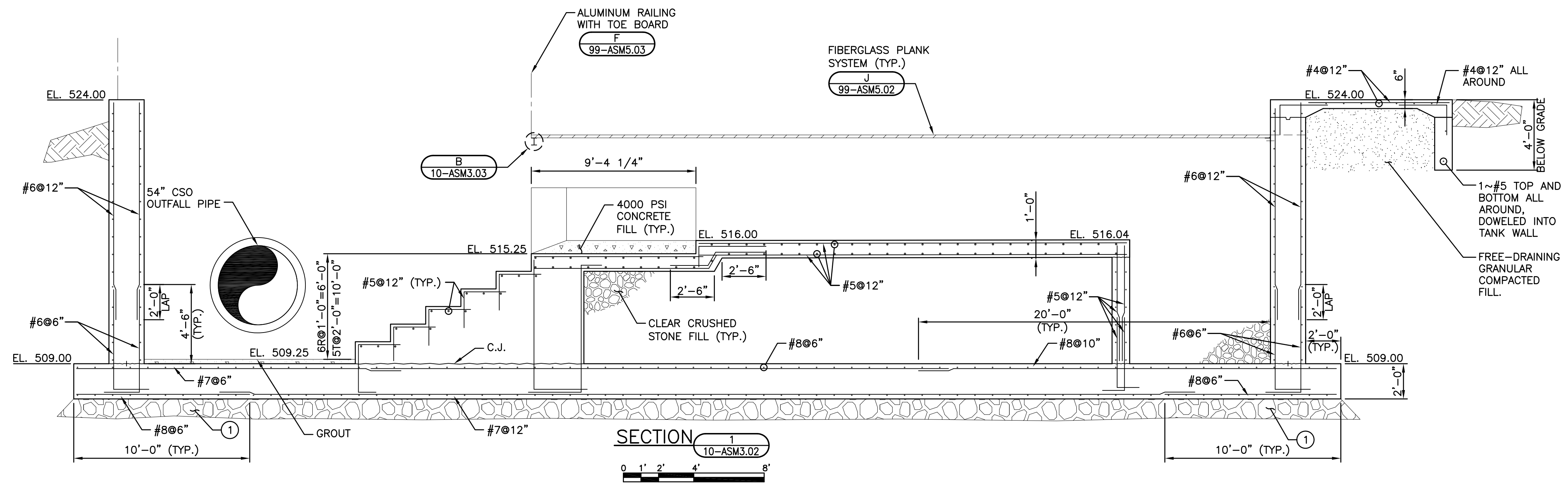
- ① SLIDE GATE FRAME TO ACT AS HANDRAIL ACROSS OPENING.
- ② FUTURE DOWNWARD OPENING WEIR GATES, IN BACKGROUND.
- ③ 12" CRUSHED STONE MAT OVER GEOTEXTILE FABRIC.
- ④ 2" BOXOUT IN WALL FOR SLAB.



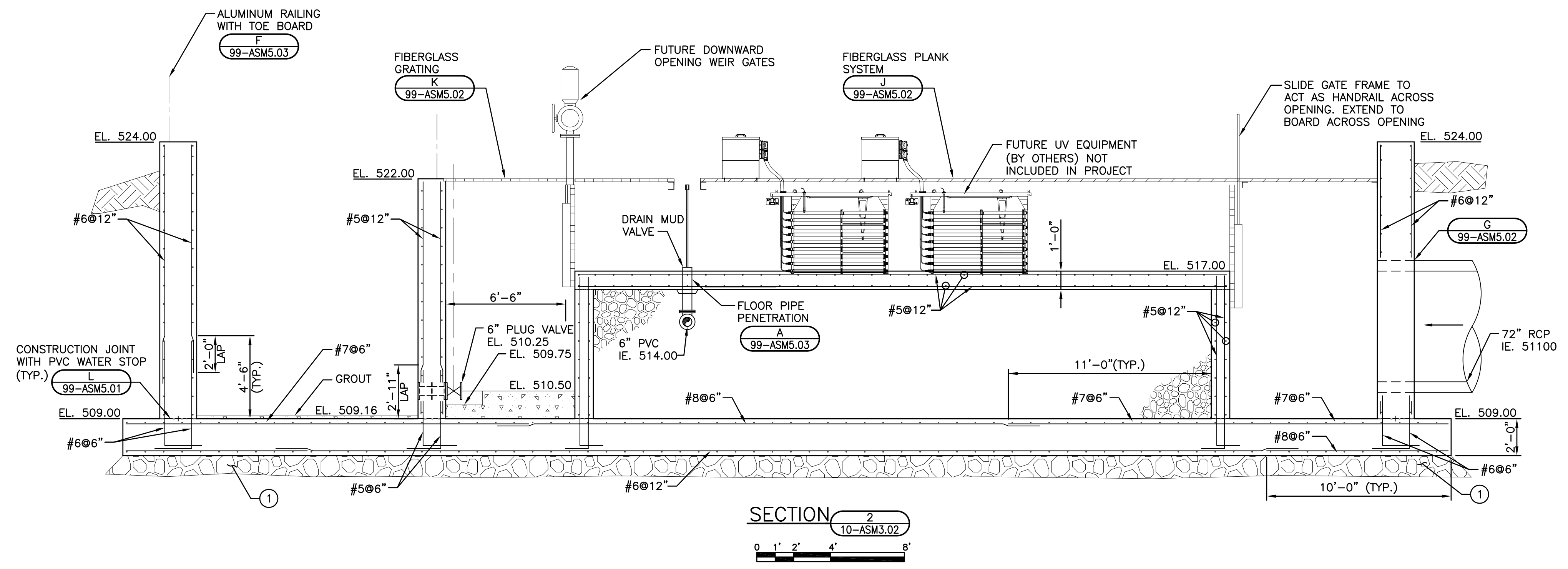
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DATE: JANUARY 2011	DES BY: AXS CHK BY: MRW
	RECORD DRAWING
	BY: DATE: CONTRACTOR:

SECTIONS - 1
EASTSIDE UV DISINFECTION STRUCTURE
AND OUTFALL PIPE TO DES PLAINES RIVER
CITY OF JOLIET
WILL COUNTY, ILLINOIS





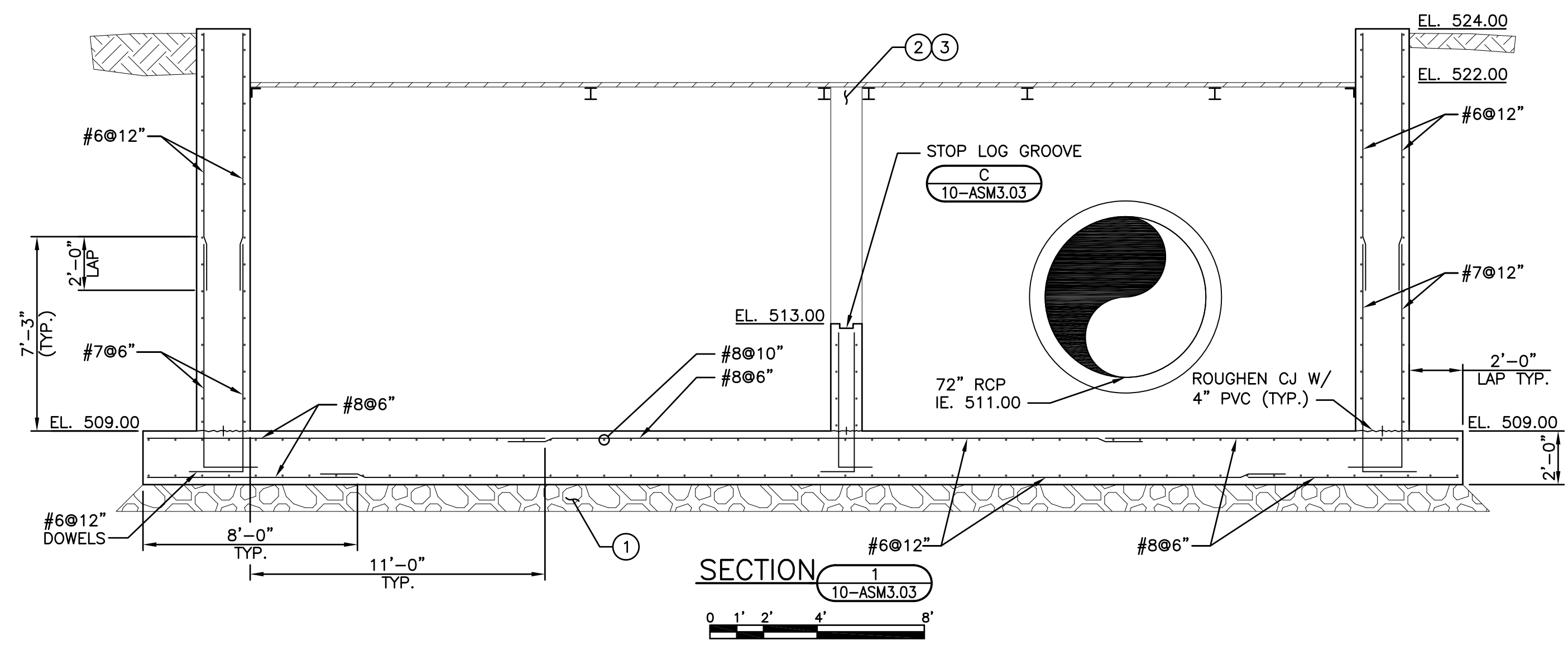
- KEY NOTES:
- ① 12" CRUSHED STONE MAT OVER GEOTEXTILE FABRIC.
 - ② EXTEND OPERATOR NUT TO EL. 522.00. SUPPORT AS REQUIRED.



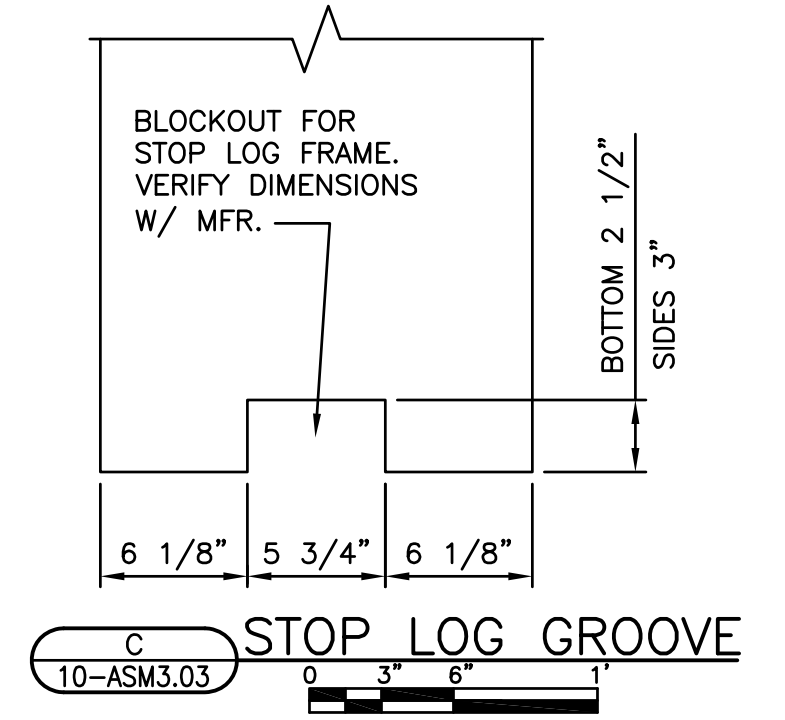
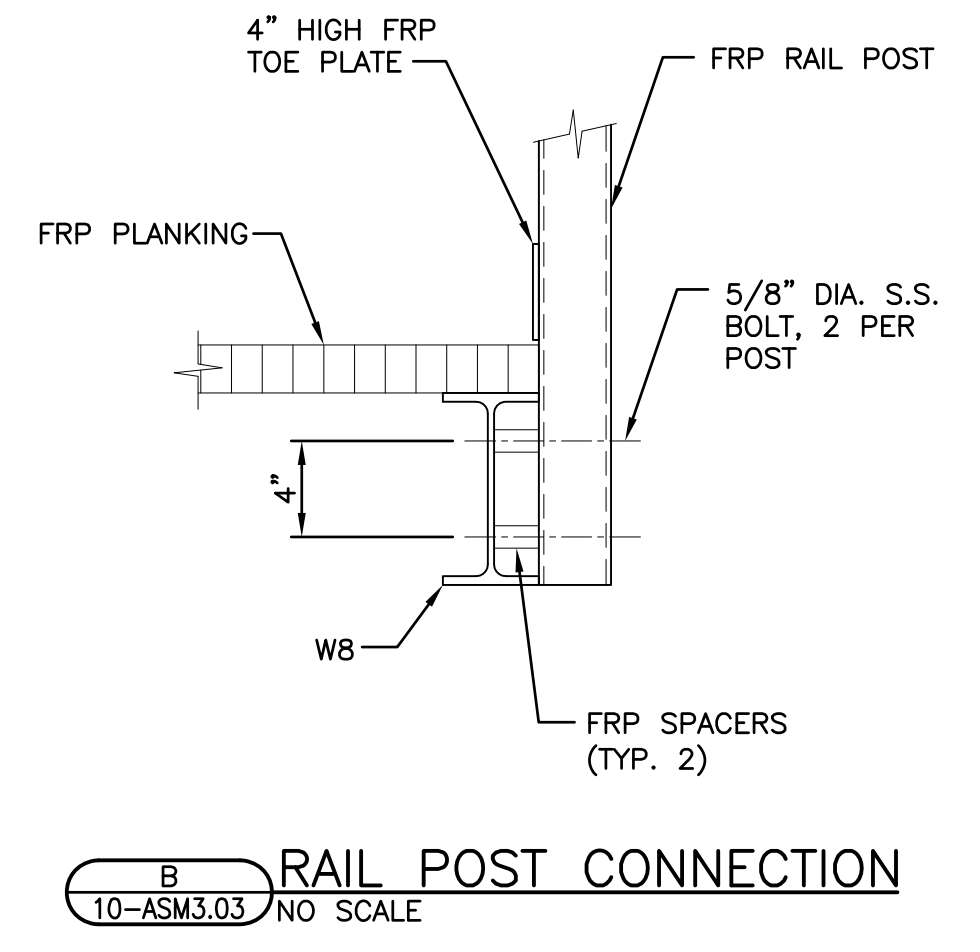
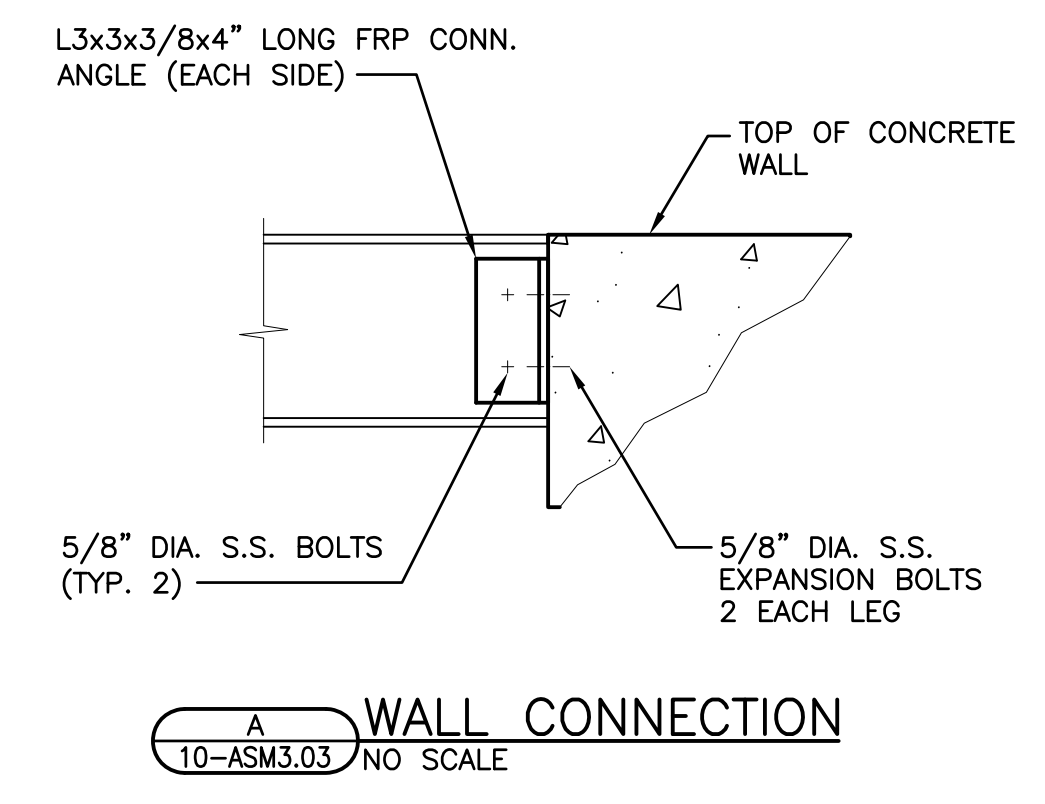
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DATE: JANUARY 2011	DES BY: AXS
	CHK BY: MRW
	RECORD DRAWING
BY:	
DATE:	
CONTRACTOR:	

SECTIONS - 2
EASTSIDE UV DISINFECTION STRUCTURE
AND OUTFALL PIPE TO DES PLAINES RIVER
CITY OF JOLIET
WILL COUNTY, ILLINOIS





- KEY NOTES:
- ① 12" CRUSHED STONE MAT OVER GEOTEXTILE FABRIC.
 - ② STAINLESS STEEL GATE WITH MANUAL ACTUATORS.
 - ③ PROVIDE REMOVABLE PLANKING AROUND SLIDE GATE (TYP.).



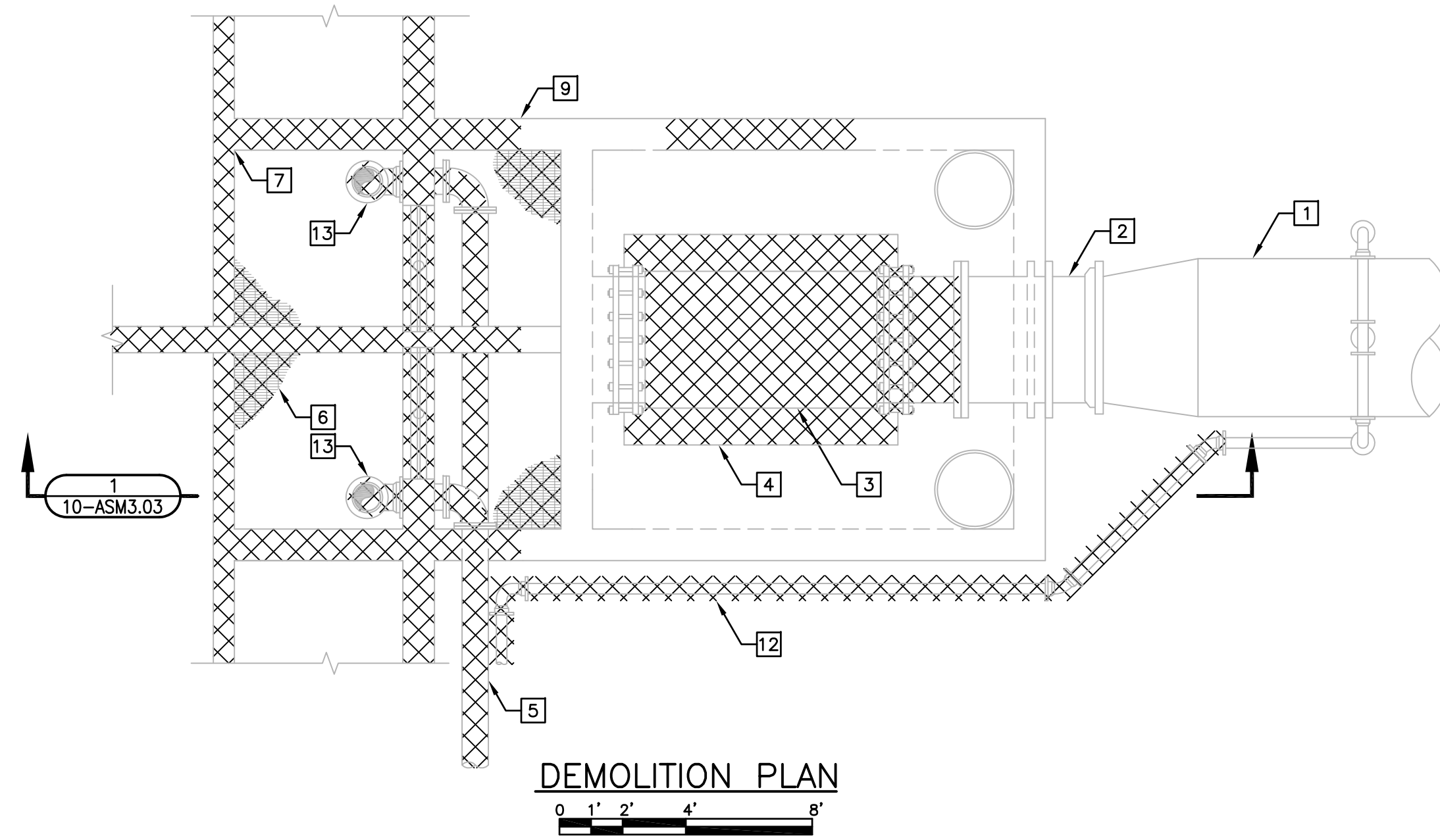
DATE: JANUARY 2011	NO.	REVISIONS	DATE:
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BY:	DATE:	CONTRACTOR:	

SECTIONS - 3
EASTSIDE UV DISINFECTION STRUCTURE
AND OUTFALL PIPE TO DES PLAINES RIVER
CITY OF JOLIET
WILL COUNTY, ILLINOIS

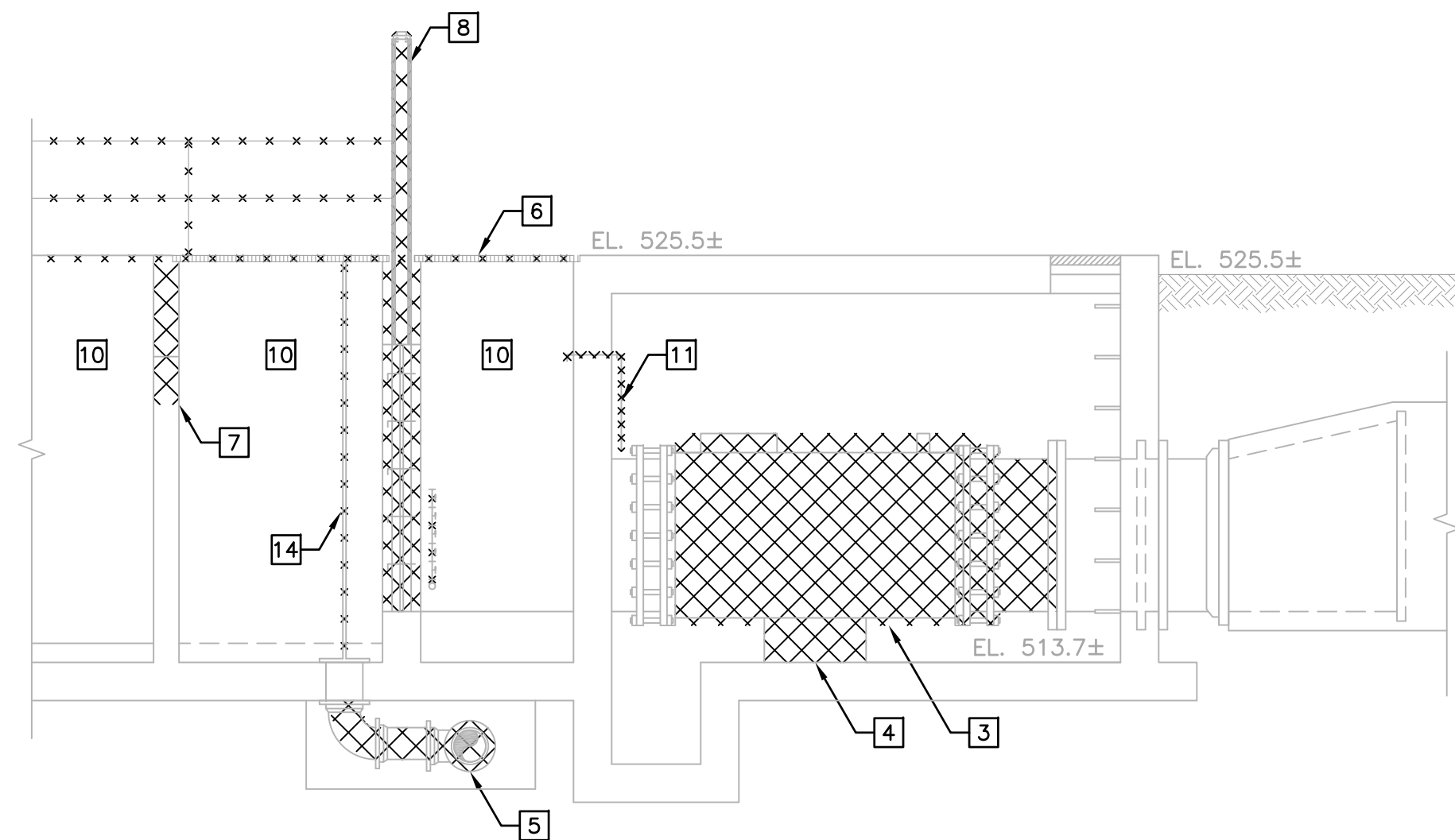


DEMOLITION KEY NOTES:

- 1 EXISTING 60" RCP PLANT EFFLUENT PIPING.
- 2 EXISTING 48" RCP PIPING IE. 515.15.
- 3 REMOVE MAGNETIC FLOW METER.
- 4 DEMOLISH CONCRETE SLAB.
- 5 ABANDON EXISTING 10" TANK DRAIN LINE.
- 6 REMOVE AND DISPOSE GRATING.
- 7 DEMOLISH EXISTING STRUCTURE AS SHOWN TO EL. 522.00.
- 8 REMOVE SLIDE GATES AND ASSOCIATED COMPONENTS.
- 9 SAW CUT AS SHOWN TO PRESSURE EXISTING JUNCTION BOX. CONTRACTOR SHALL MAINTAIN STRUCTURAL INTEGRITY OF THE JUNCTION BOX AT ALL TIMES.
- 10 FILL IN EMPTY STRUCTURE WITH STONE FILL AS SPECIFIED IN CONTRACT DOCUMENTS.
- 11 REMOVE SUMP DISCHARGE.
- 12 REMOVE 4" CHLORINE LINE TO THE EXTENT SHOWN.
- 13 PLUG OPENING.
- 14 REMOVE RISING STEM OPERATOR.



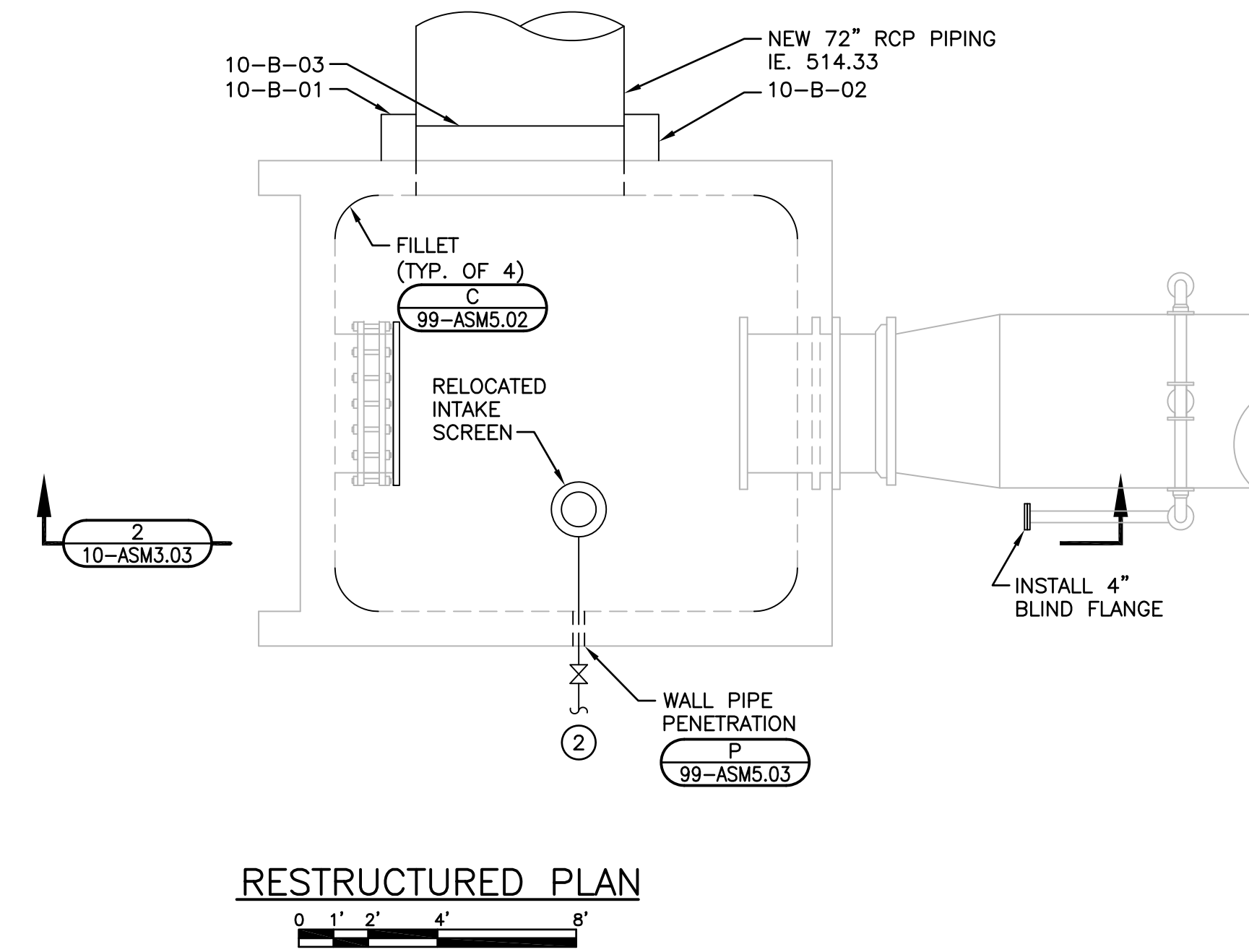
DEMOLITION PLAN



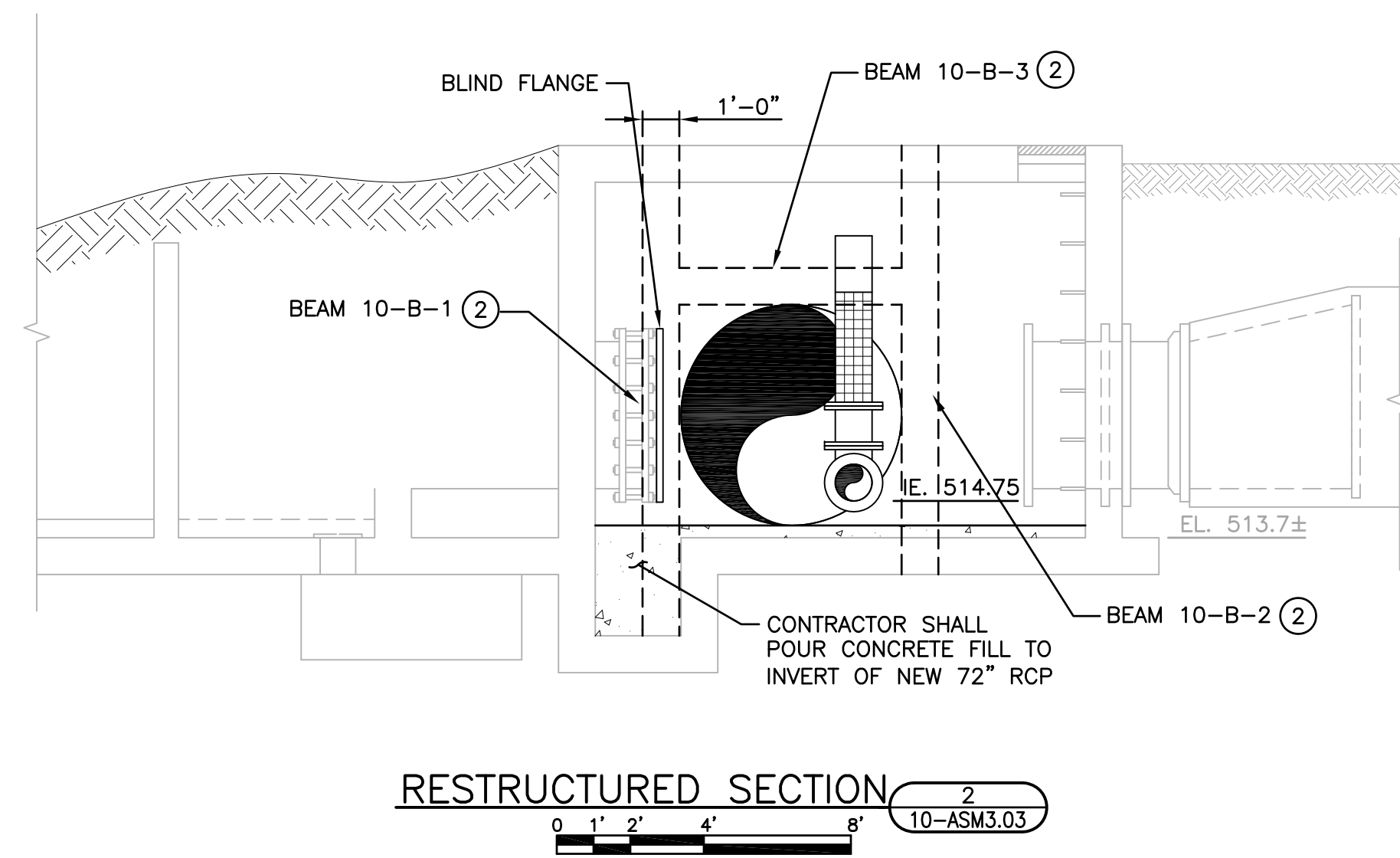
DEMOLITION SECTION

KEY NOTES:

- 1 NEW 12" NPW PIPING IE. 514.75. SEE SITE PLAN FOR CONTINUATION.
- 2 SEE DETAIL A
99-ASM5.04.



RESTRUCTURED PLAN



RESTRUCTURED SECTION

NO.	REVISIONS	DATE

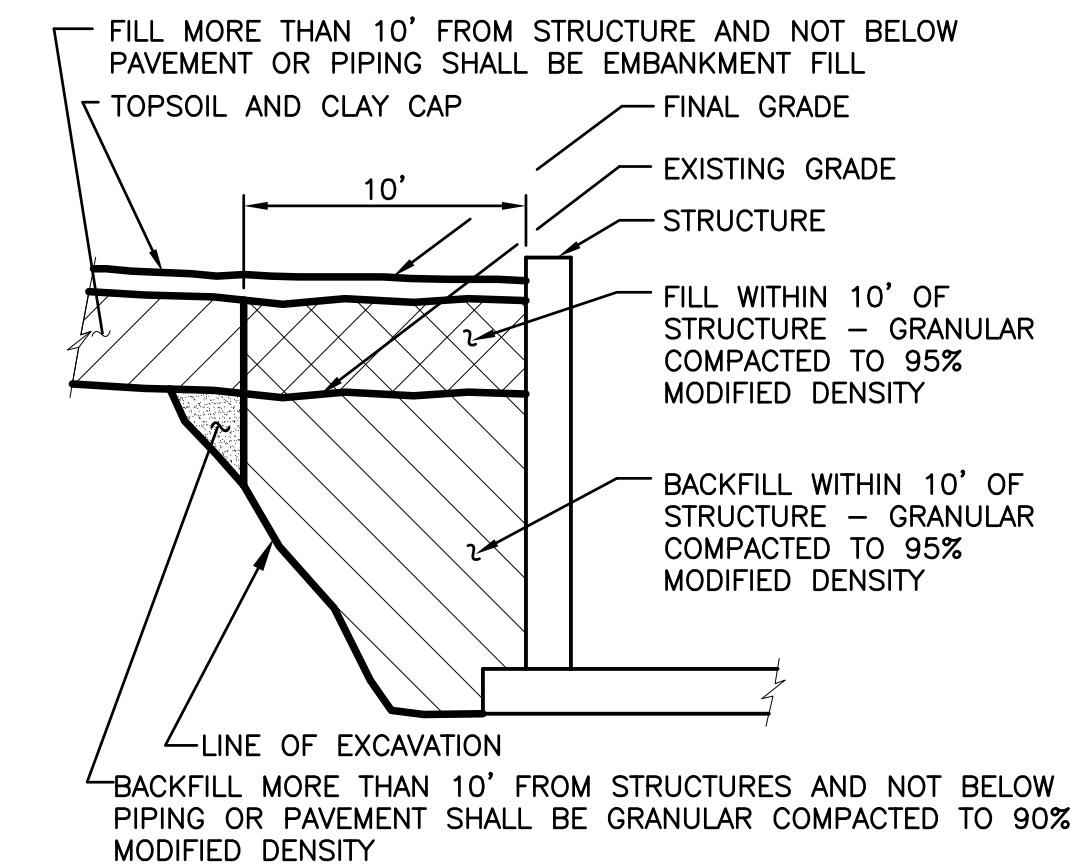
DATE: JANUARY 2011
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 BY: DATE: CONTRACTOR:

EXISTING JUNCTION BOX
 EASTSIDE UV DISINFECTION STRUCTURE
 AND OUTFALL PIPE TO DES PLAINES RIVER
 CITY OF JOLIET
 WILL COUNTY, ILLINOIS

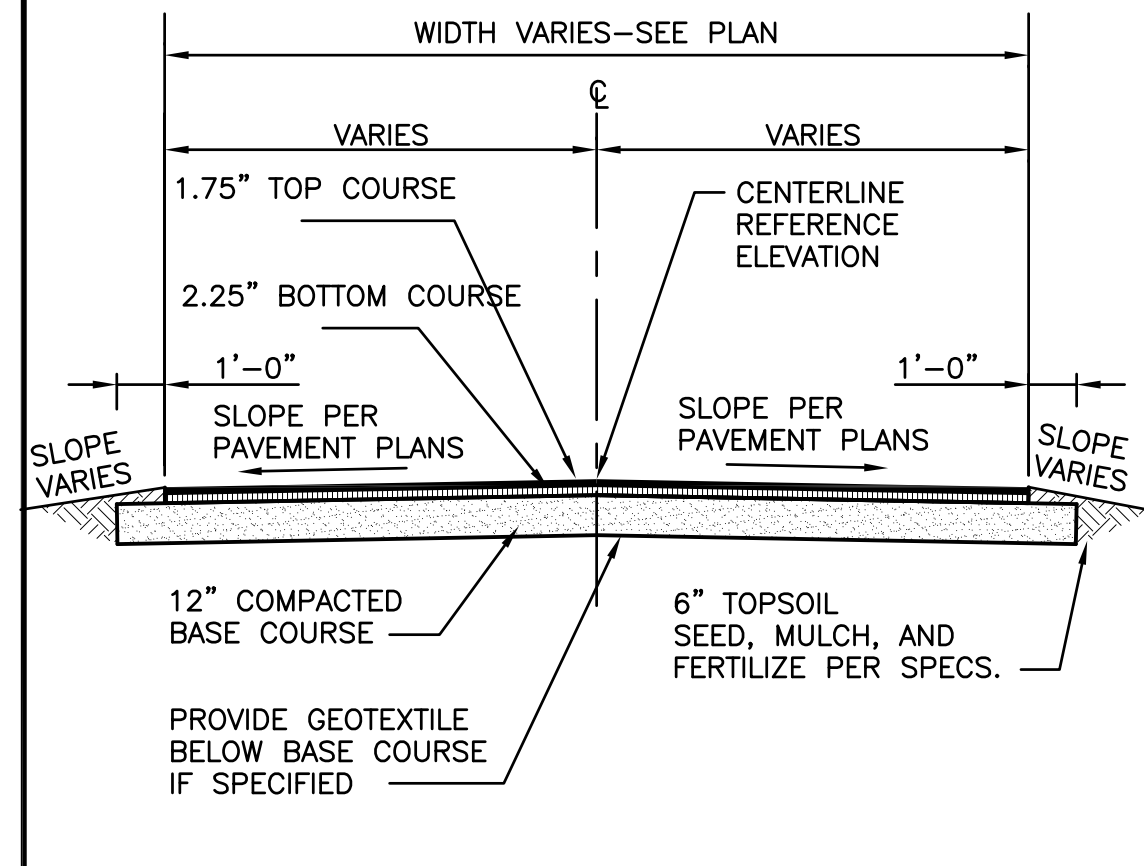


REFERENCE DWG. NUMBER	EQUIPMENT NUMBER	DIMENSION "X"	DIMENSION "Y"	DIMENSION "Z"	MOUNTING TYPE SIDES	MOUNTING TYPE INVERT *	OPERATOR TYPE	ELECTRICAL RATING	MOTOR (hp) †	CONTROL SERVICE	REMARKS
10-ASM-1.02	SG-10-01	4'-3"	4'-6"	5'-0"	A	A	C	-	-	-	Side-mount crank
10-ASM-1.02	SG-10-02	4'-3"	4'-6"	5'-0"	A	A	C	-	-	-	Side-mount crank
10-ASM-1.02	SG-10-03	4'-3"	4'-6"	5'-0"	A	A	C	-	-	-	Side-mount crank
10-ASM-1.02	SG-10-05	7'-0"	5'-0"	6'-0"	A	A	C	-	-	-	Side-mount crank
10-ASM-1.02	SG-10-04	7'-6"	5'-0"	8'-0"	A	B	C	-	-	-	Side-mount crank

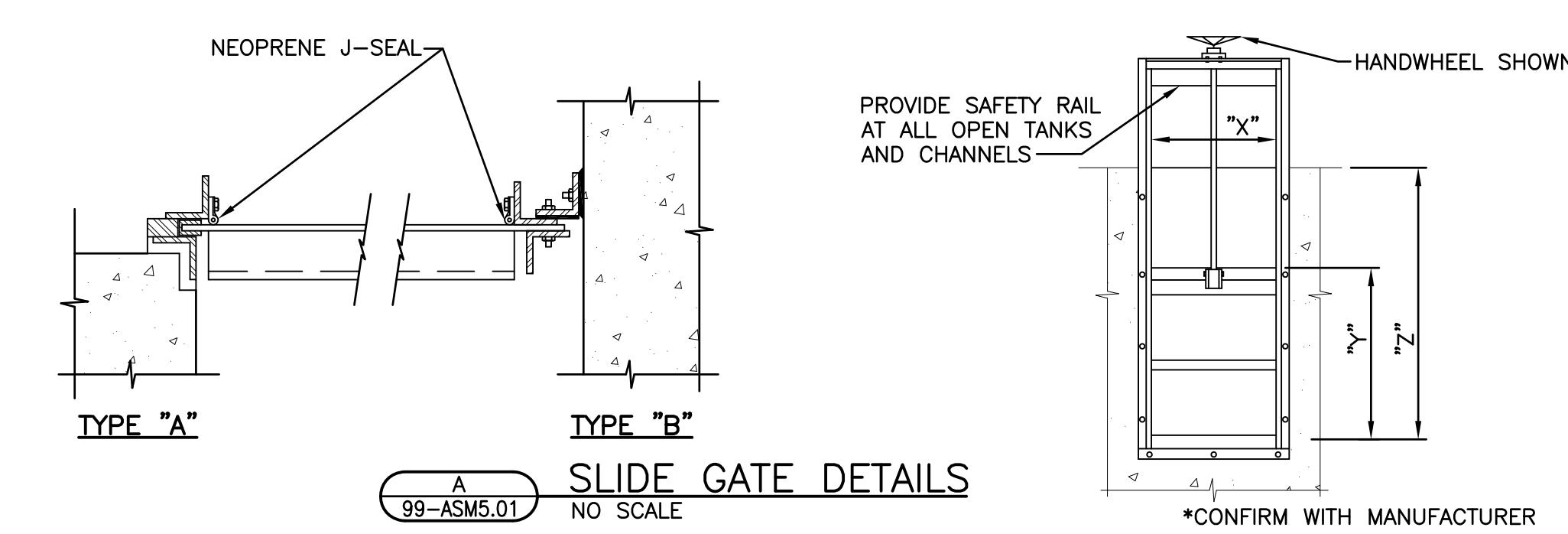
** H - HANDWHEEL
 C - CRANK
 M - MOTOR
 F.S. - FLOOR STAND
 E.P. - EXPLOSION PROOF
 CLASS 1, DIV. 1, GROUP D
 † - BY EQUIPMENT MANUFACTURER



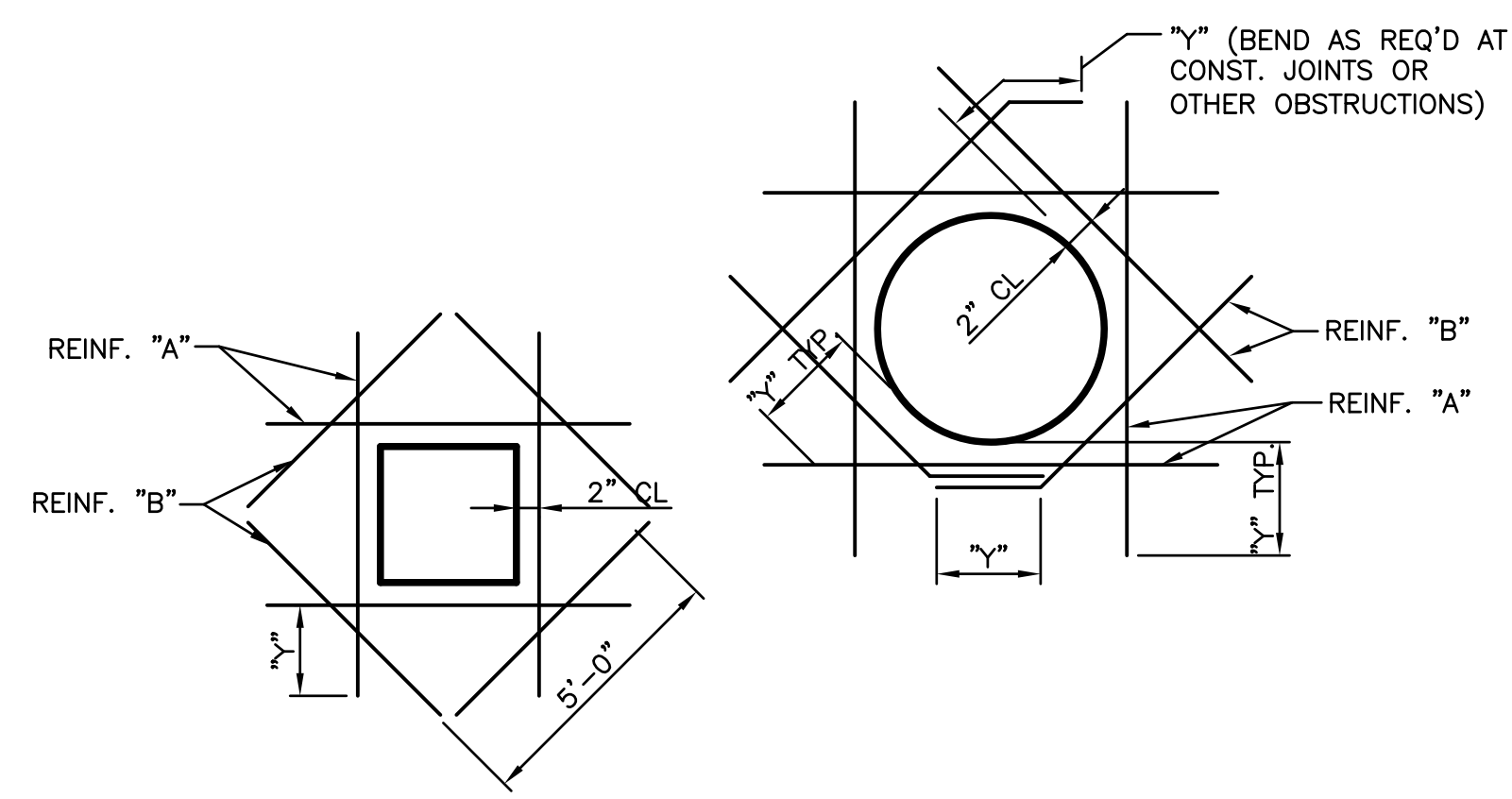
C FILL & BACKFILL REQUIREMENTS
 99-ASM5.01 NO SCALE



D NEW PAVEMENT SECTION
 99-ASM5.01 NO SCALE

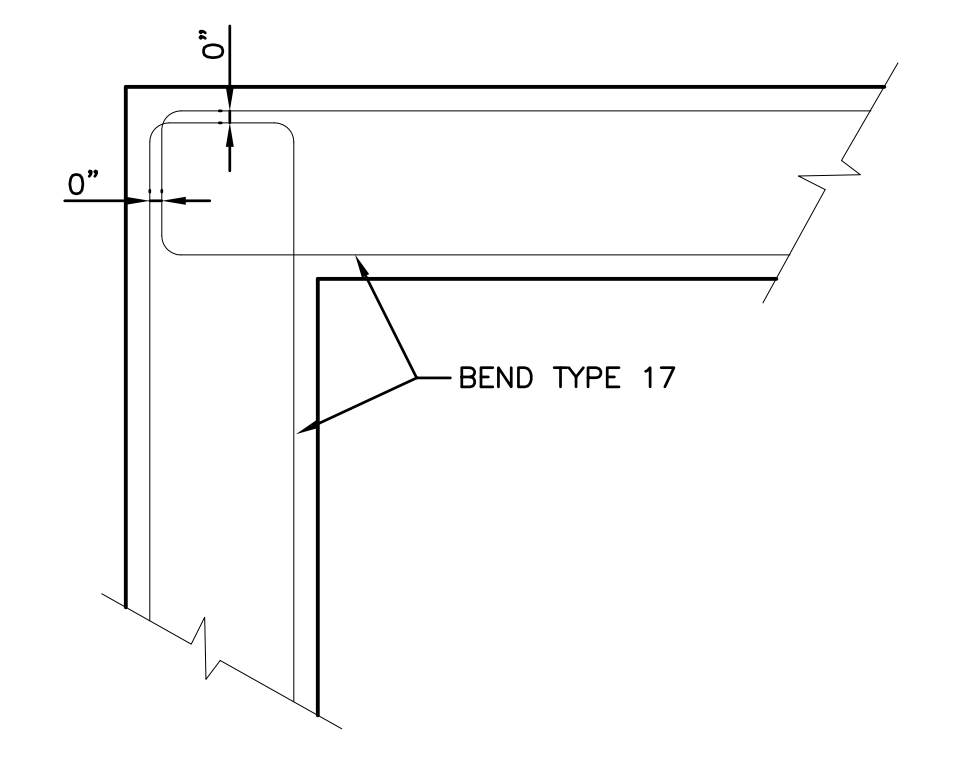


A SLIDE GATE DETAILS
 99-ASM5.01 NO SCALE

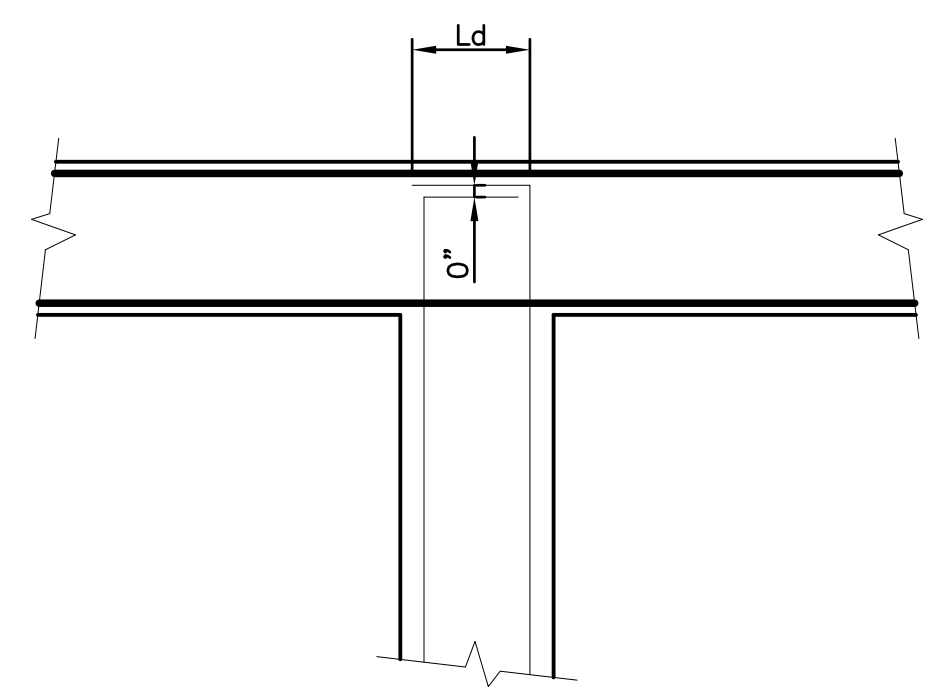


F REINFORCEMENT AT CONCRETE OPENINGS
 99-ASM5.01 NO SCALE

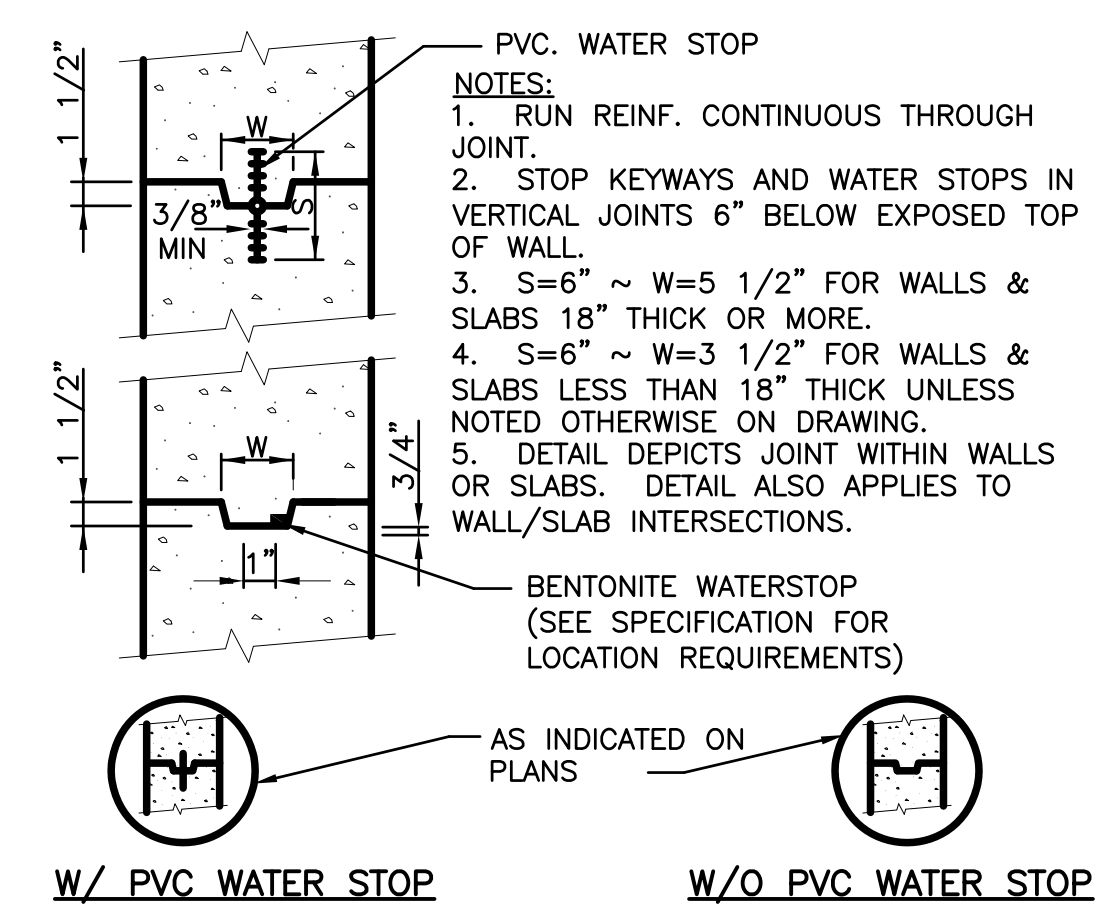
- NOTES:**
1. MOVE REINF. MAX. OF 2" TO CLEAR OPENING. CUT REMAINING BAR THROUGH OPENING. WHERE REINF. MUST BE CUT, ADD REINF. "A" AT LEAST EQUAL IN AREA TO THAT WHICH WAS CUT AND EXTEND BEYOND OPENING DISTANCE "Y".
 2. DIAGONAL BARS "B" TO BE PLACED: A. AT C. OF WALL WHERE ONE LAYER OF REINF. IS PROVIDED. B. AT EACH FACE OF WALL WHERE TWO LAYERS OF REINF. ARE PROVIDED. C. AT TOP & BOTTOM OF ALL SLABS.
 3. UNLESS OTHERWISE NOTED, SIZE OF REINF. "B" SHALL BE THE SIZE OF THE LARGEST REINF. BAR CUT.
 4. Y = CLASS B LAP
 5. THIS DETAIL IS TO BE USED WHEN NO OTHER DETAIL IS SPECIFIED.
 6. MINIMUM REINF. "A" & "B" AROUND ANY AND ALL OPENINGS SHALL BE #4.



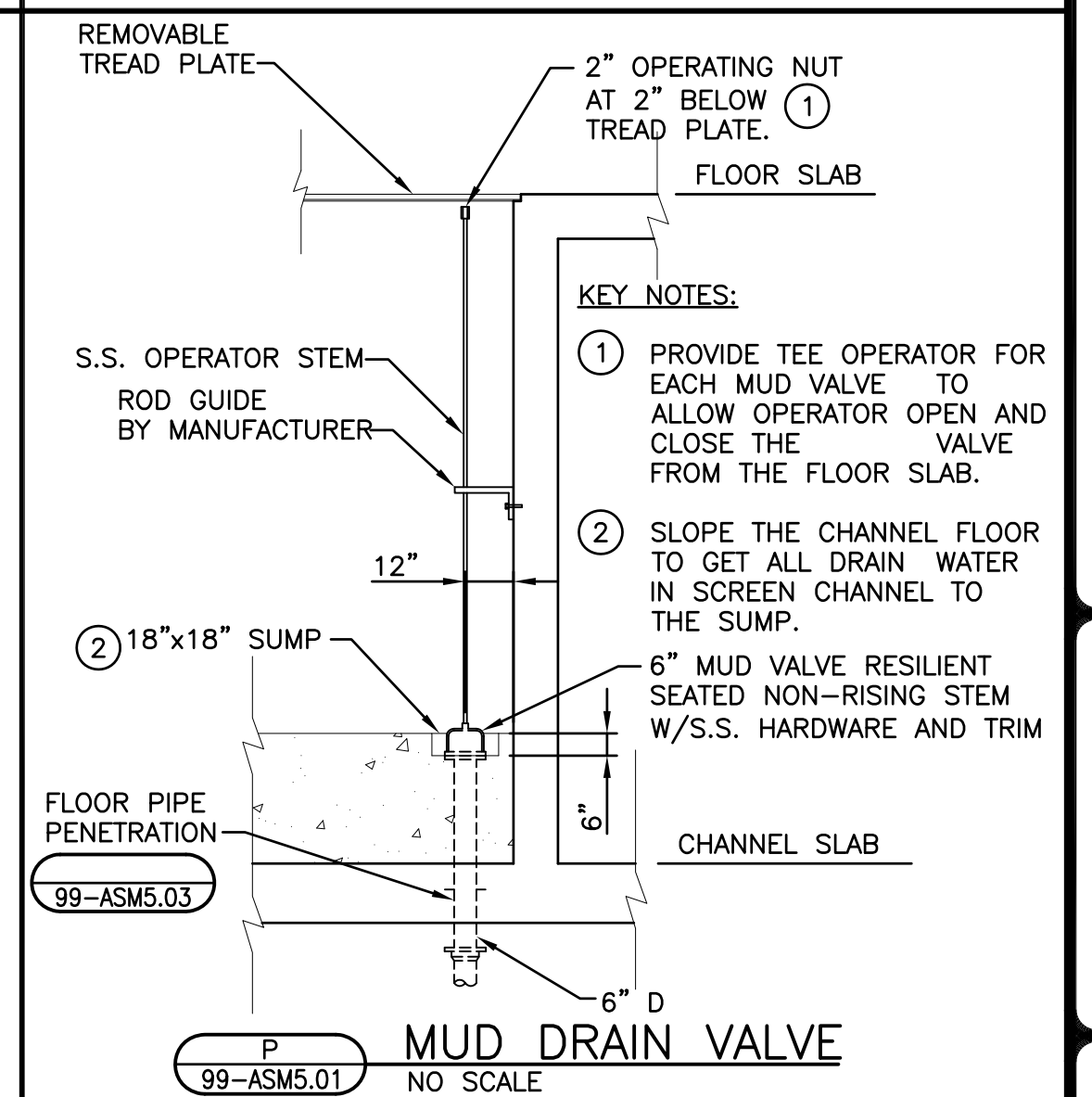
H TANK CORNER REINFORCING
 99-ASM5.01 NO SCALE



J TEE REINFORCING
 99-ASM5.01 NO SCALE



L CONSTRUCTION JOINT
 99-ASM5.01 NO SCALE

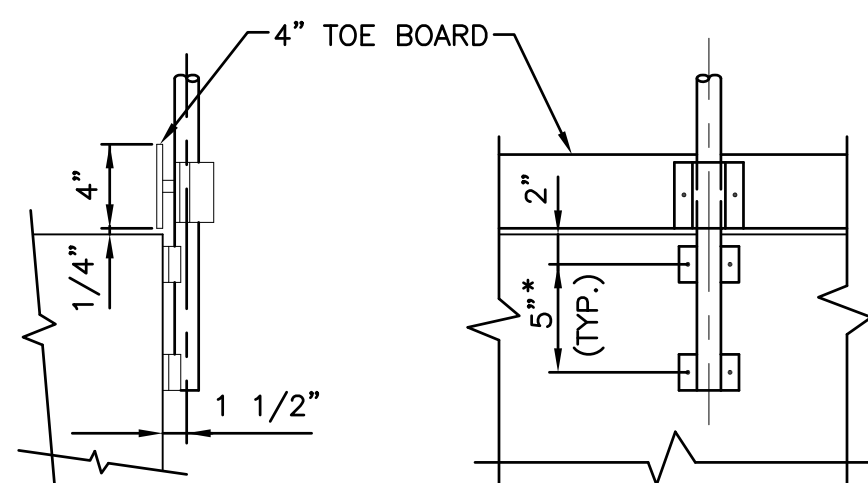


P MUD DRAIN VALVE
 99-ASM5.01 NO SCALE

DATE:	REVISIONS	NO.	DATE:	CONTRACTOR:
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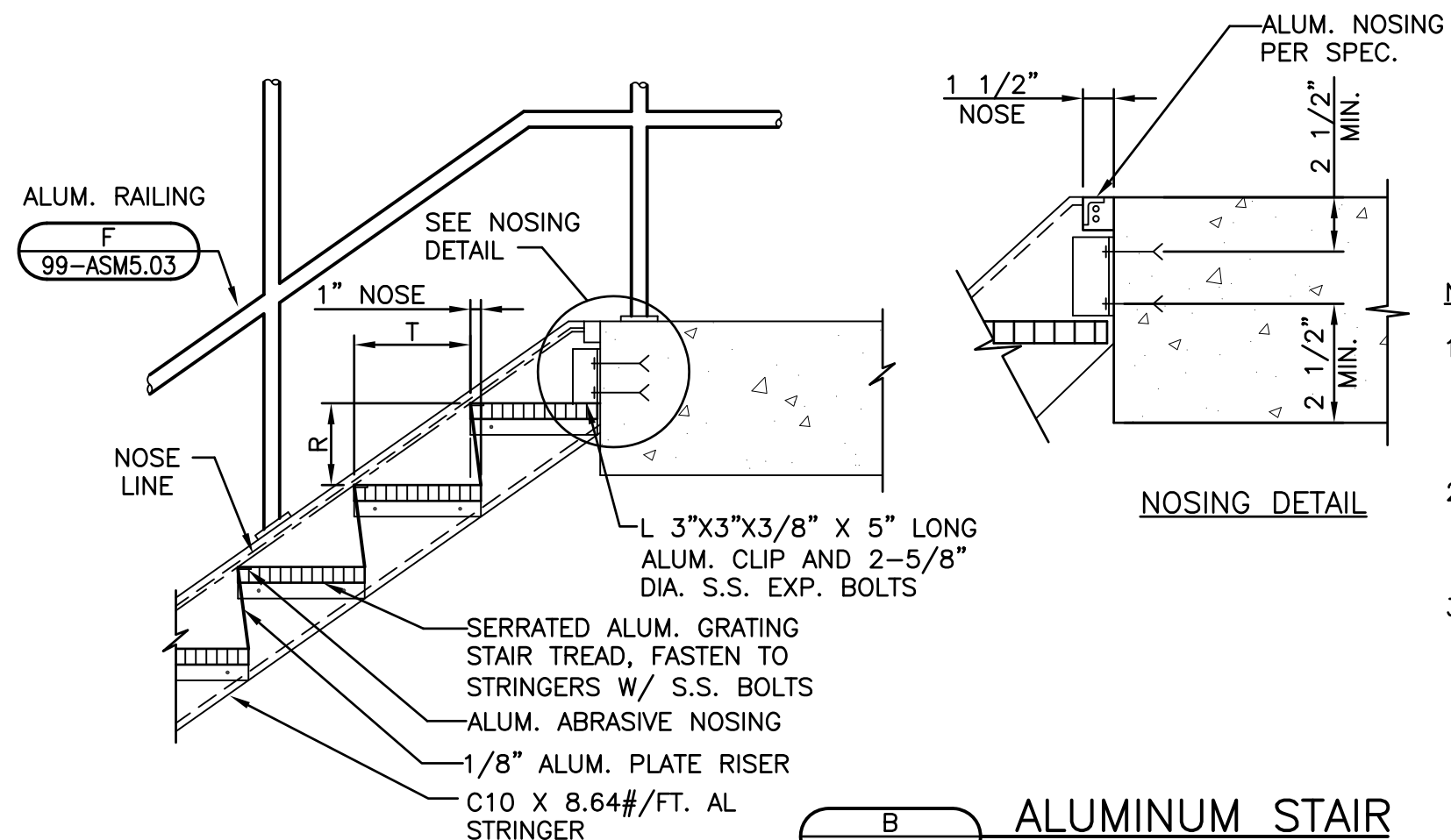
ARCHITECTURAL AND STRUCTURAL DETAILS-1
 EASTSIDE UV DISINFECTION STRUCTURE
 AND OUTFALL PIPE TO DES PLAINES RIVER
 CITY OF JOLIET
 WILL COUNTY, ILLINOIS





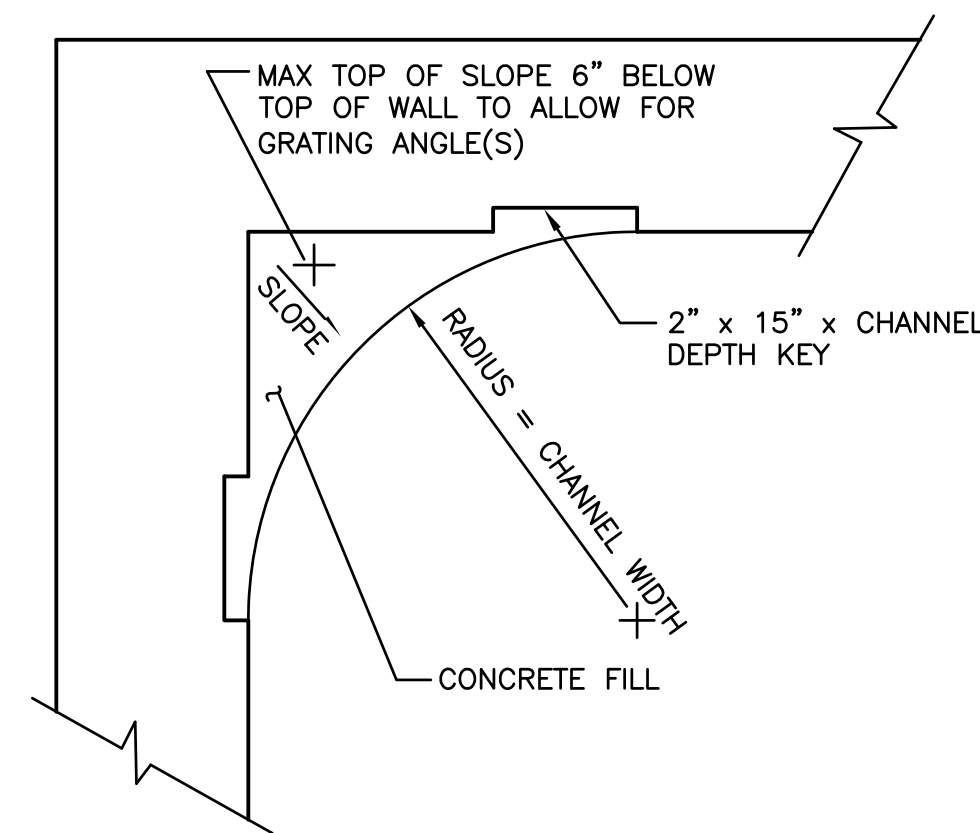
* 5" DIMENSION MAY BE REDUCED IF BEARING FACE IS LESS THAN 9" DEEP.

A HANDRAIL SIDE MOUNTING
99-ASM5.02 NO SCALE

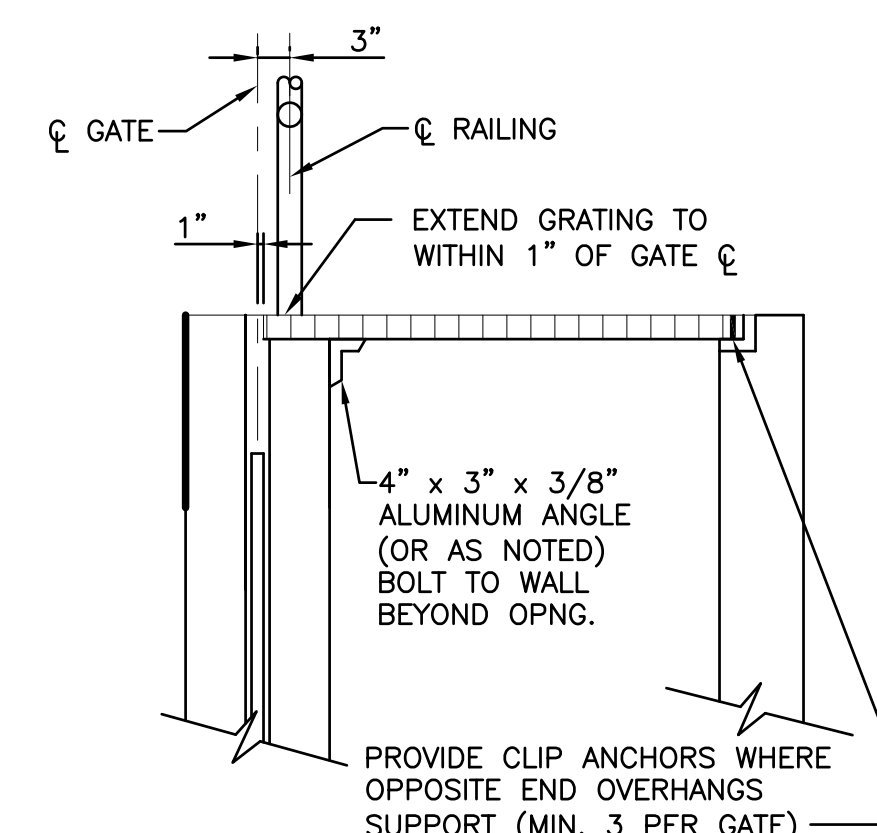


- NOTES:**
1. T=TREAD, R=RISE. SEE PLAN OR SECTION VIEWS(S) FOR DIMENSIONS AND NUMBER OF TREADS AND RISES.
 2. PROVIDE CLIP ANGLES AND EXPANSION BOLTS AT BOTTOM OF STAIR SIMILAR TO TOP OF STAIR.
 3. STAIR WIDTH = 3'-8" OUT-TO-OUT OF STRINGERS, UNLESS NOTED OTHERWISE.

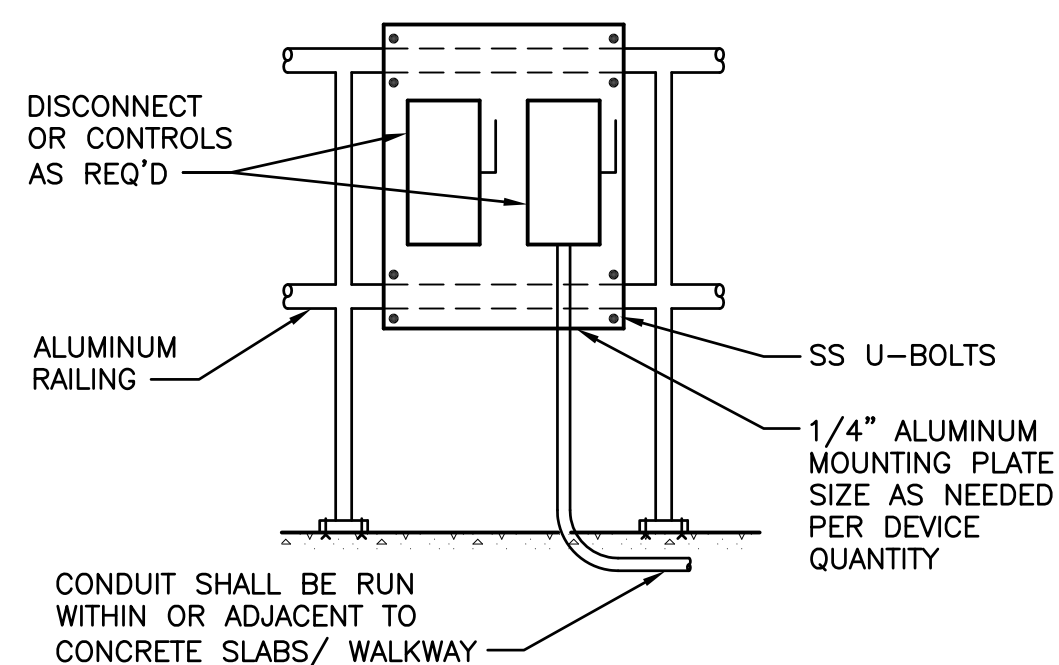
B ALUMINUM STAIR
99-ASM5.02 NO SCALE



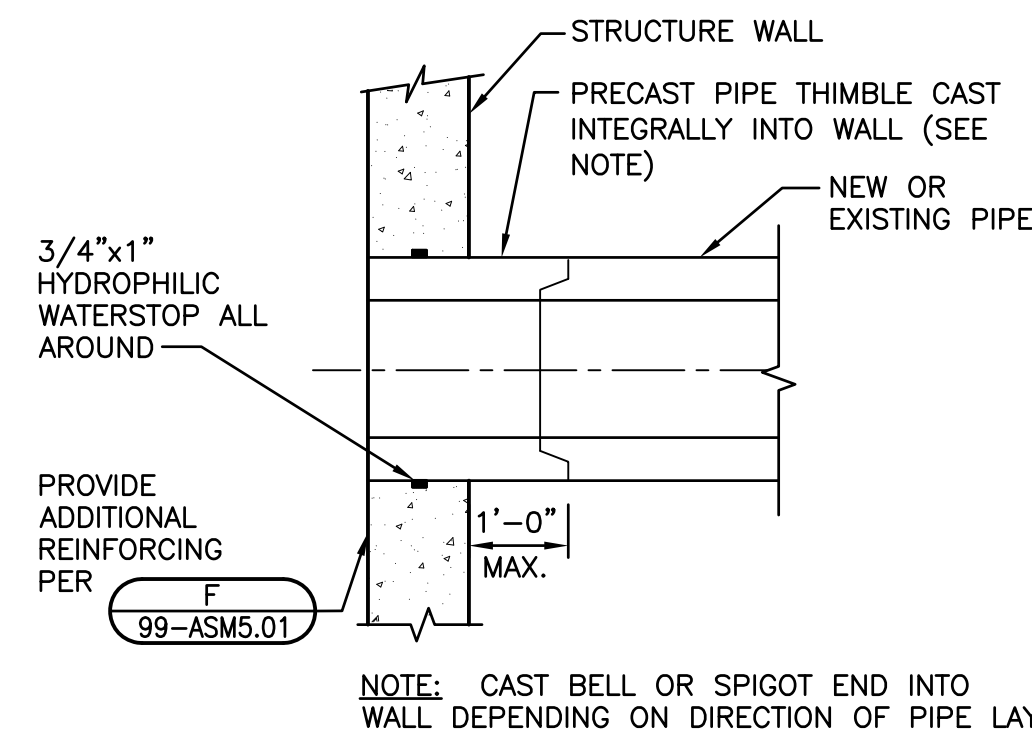
C TYPICAL CHANNEL FILLET
99-ASM5.02 NO SCALE



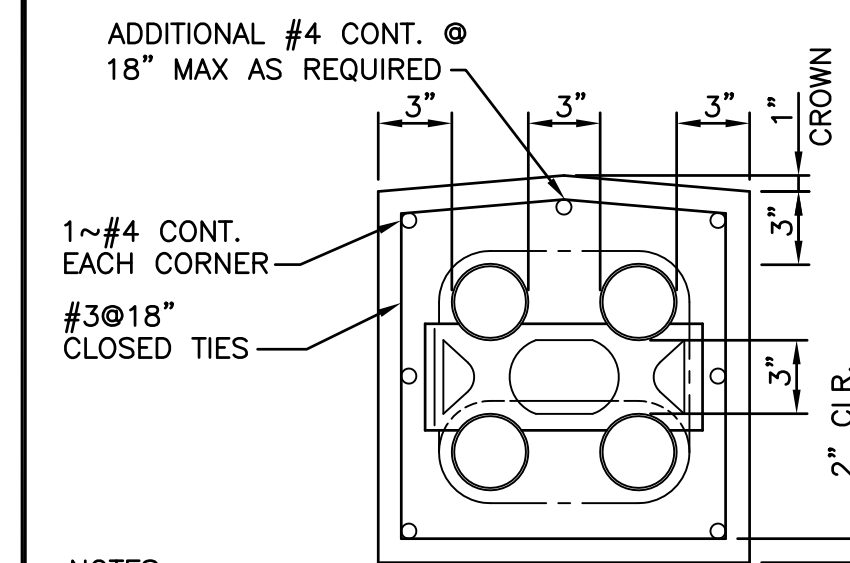
D GRATING AT GATES
99-ASM5.02 NO SCALE



F HANDRAIL MOUNTING
99-ASM5.02 NO SCALE

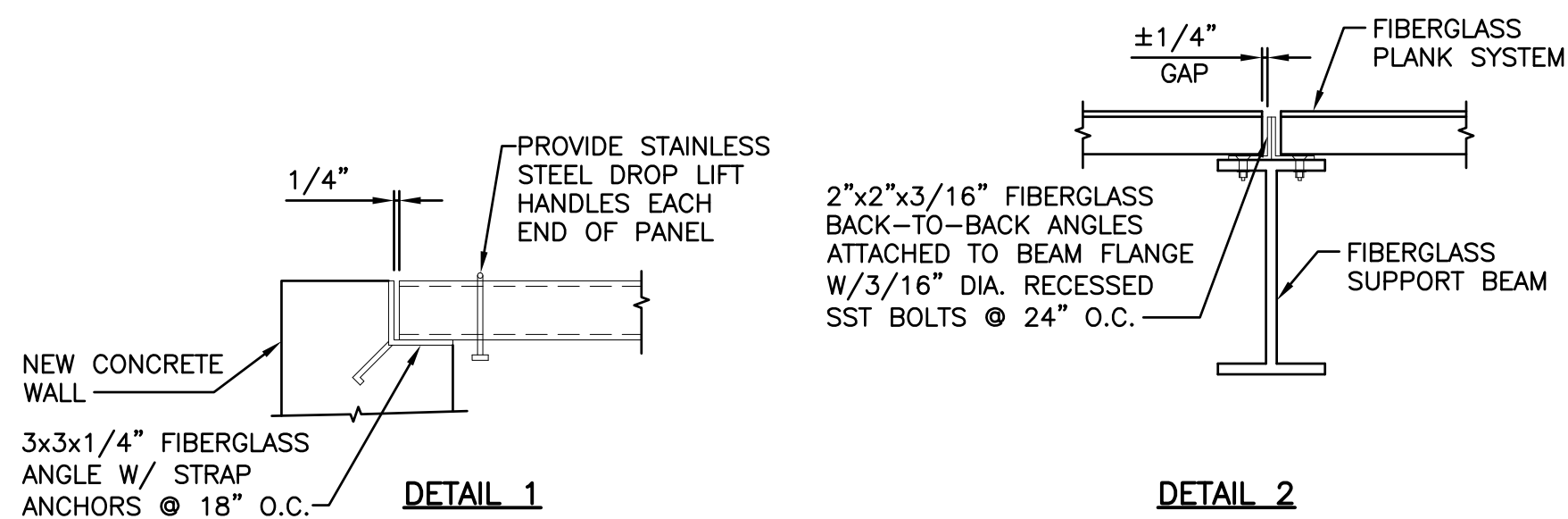


G CONCRETE-STRUCTURE JOINT
99-ASM5.02 NO SCALE

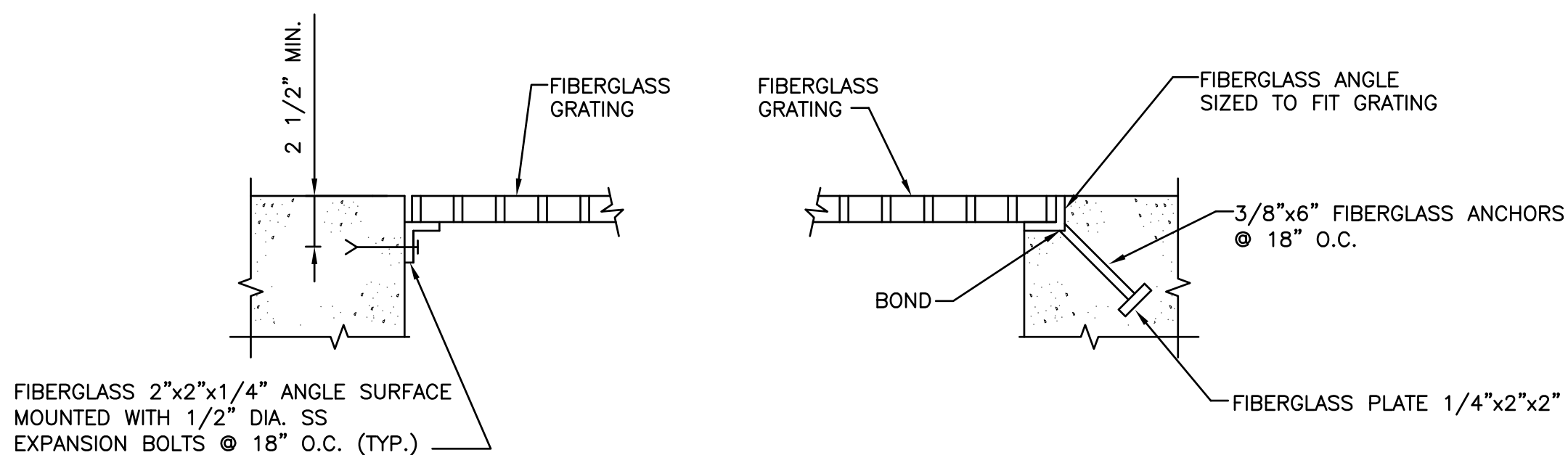
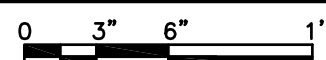


- NOTES:**
1. MINIMUM COVER TO TOP OF ENVELOPE SHALL BE 24"
 2. NON-FERROUS TIE WIRES TO BE EMBEDDED IN DUCT BED CONCRETE.
 3. PROVIDE CONDUIT QUANTITY AND SIZES AS INDICATED ON THE DRAWING. CONTRACTOR SHALL MAINTAIN 3" MIN. SPACING BETWEEN CONDUITS IN THE CONFIGURATION INDICATED ON THE PLANS.

H CONCRETE ENCASED DUCT BANK
99-ASM5.02 NO SCALE



J FIBERGLASS PLANK SYSTEM DETAILS
99-ASM5.02

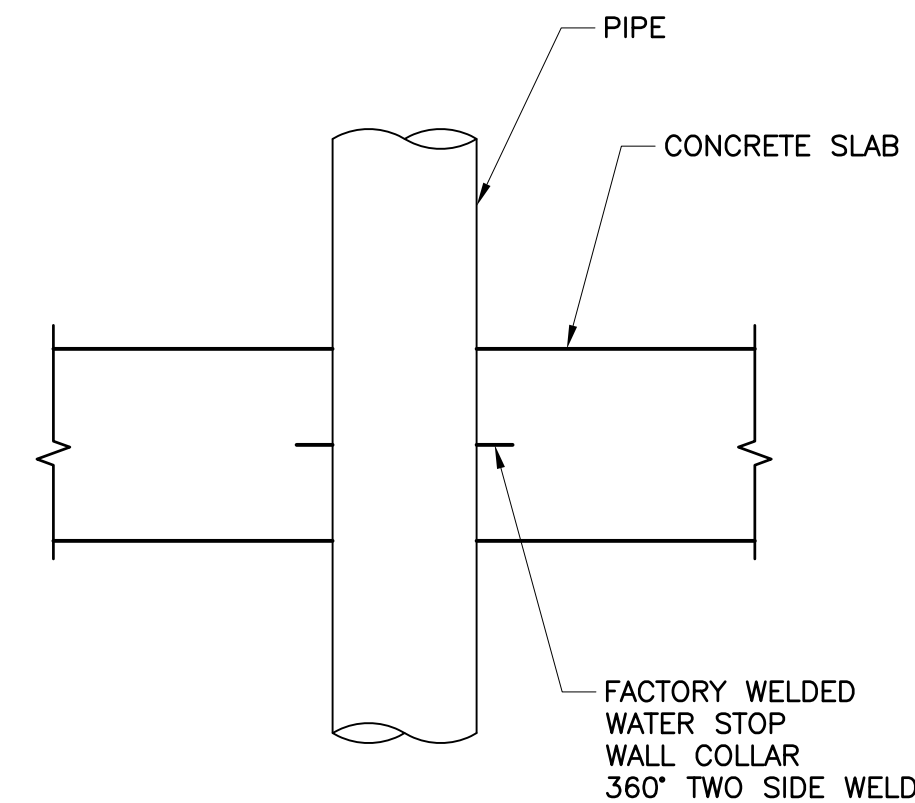


K FIBERGLASS GRATING
99-ASM5.02 NO SCALE

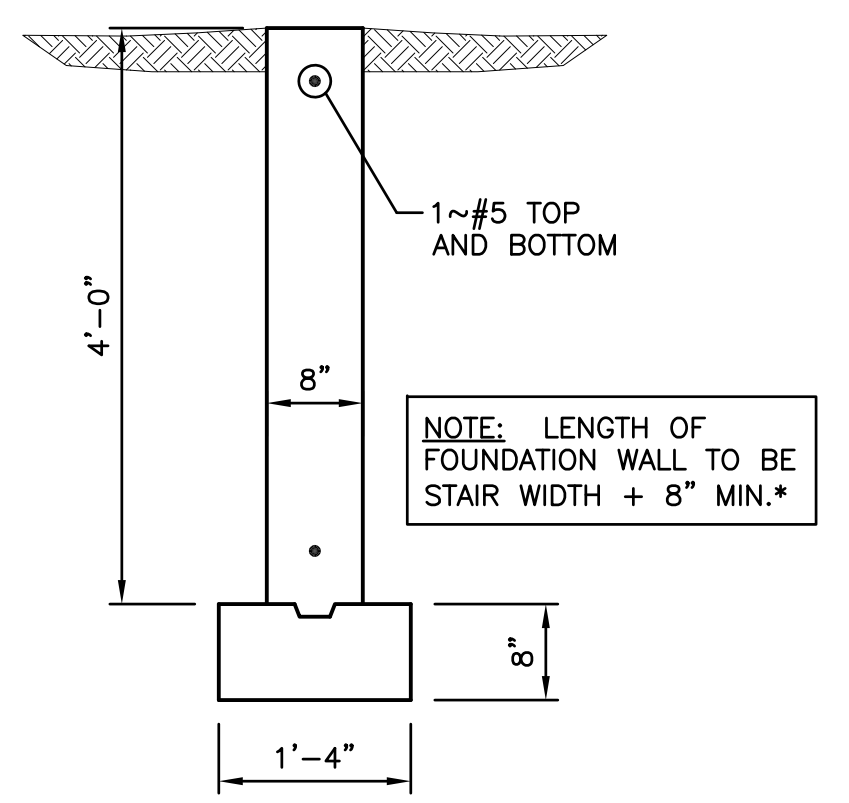
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ARCHITECTURAL AND STRUCTURAL DETAILS-2
EASTSIDE UV DISINFECTION STRUCTURE
AND OUTFALL PIPE TO DES PLAINES RIVER
CITY OF JOLIET
WILL COUNTY, ILLINOIS



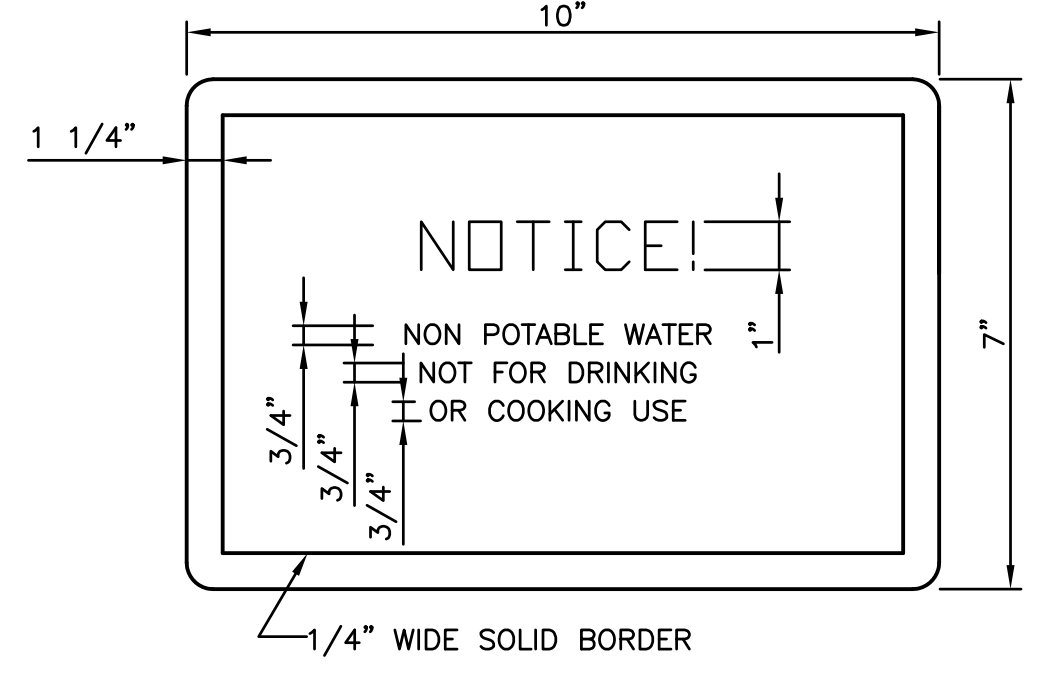


A FLOOR PIPE PENETRATION
99-ASM5.03 NO SCALE

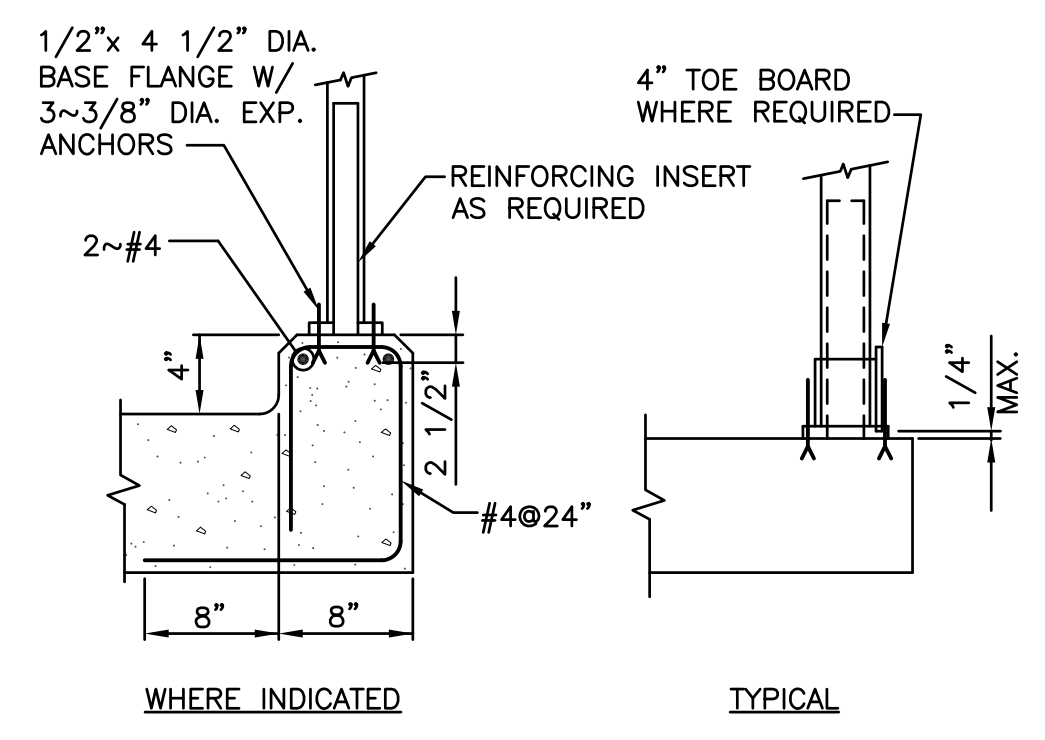


B EXTERIOR STAIR/
LANDING FOUNDATION
99-ASM5.03 NO SCALE

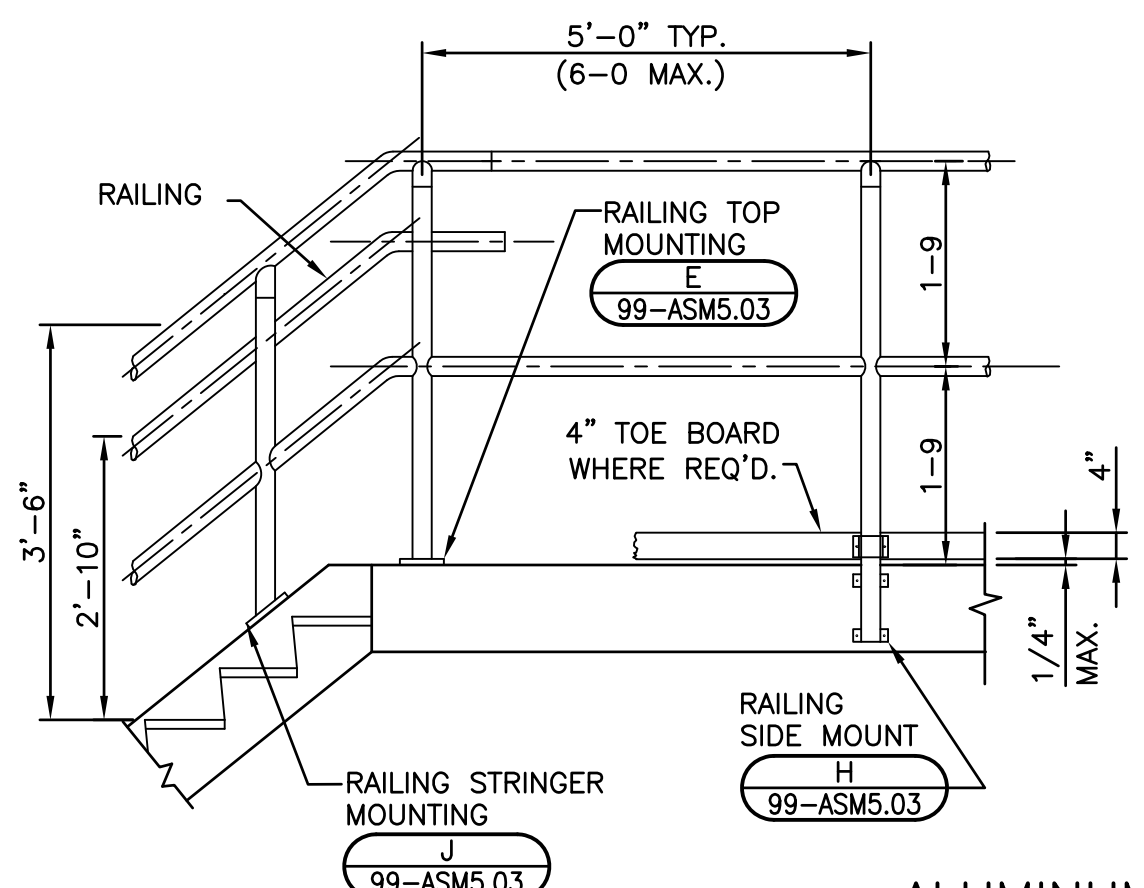
CONTRACTOR SHALL PROVIDE SIGN NEAR ALL NEW NONPOTABLE (NPW) AND DEW WATER HOSEBIBS. SIGN SHALL BE FIBERGLASS WITH BLACK LETTERS ON A YELLOW BACKGROUND AND MOUNTED TO MASONRY WALLS WITH 4~3/16" DIA. STAINLESS STEEL EXPANSION ANCHORS OR TO RAILING WITH STAINLESS STEEL HARDWARE.



C NON-POTABLE WATER SIGN
99-ASM5.03 NO SCALE

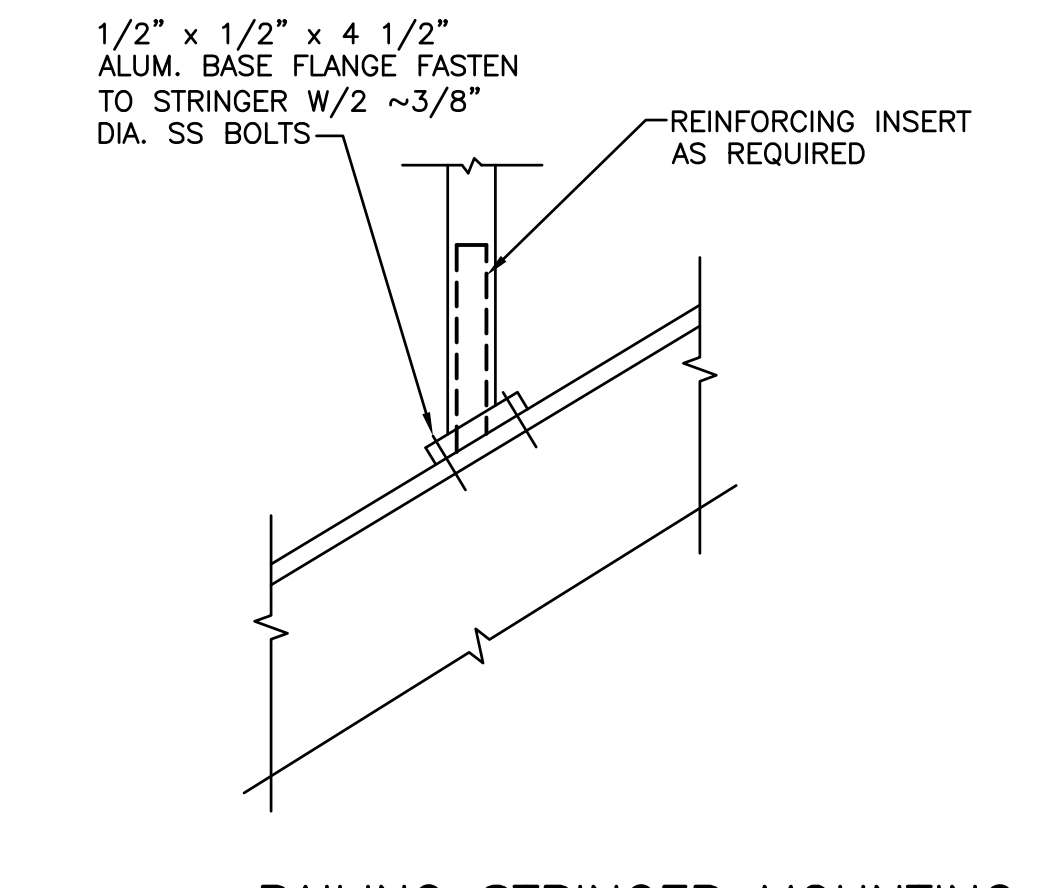


E RAILING TOP MOUNTING
99-ASM5.03 NO SCALE

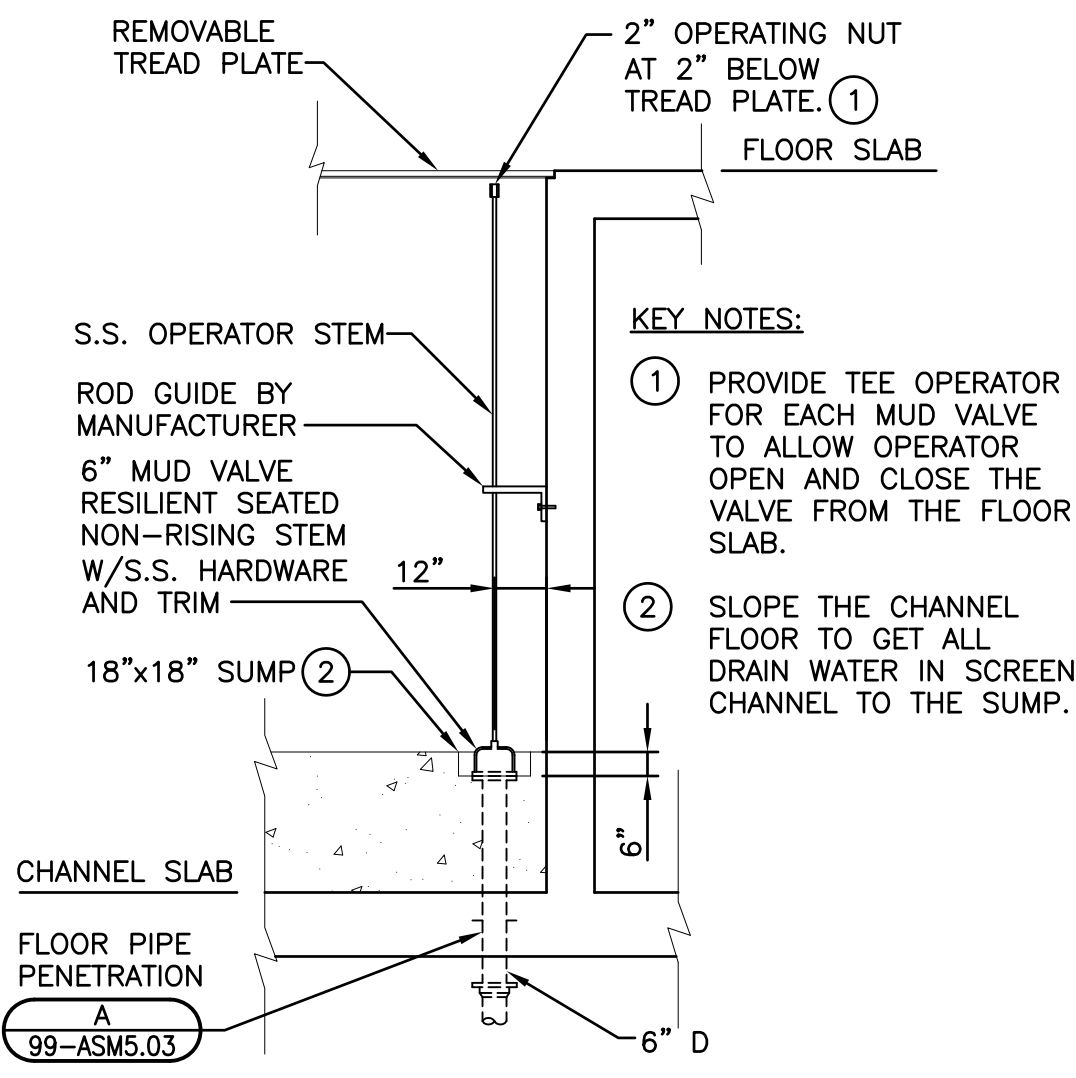


F ALUMINUM RAILING
99-ASM5.03 NO SCALE

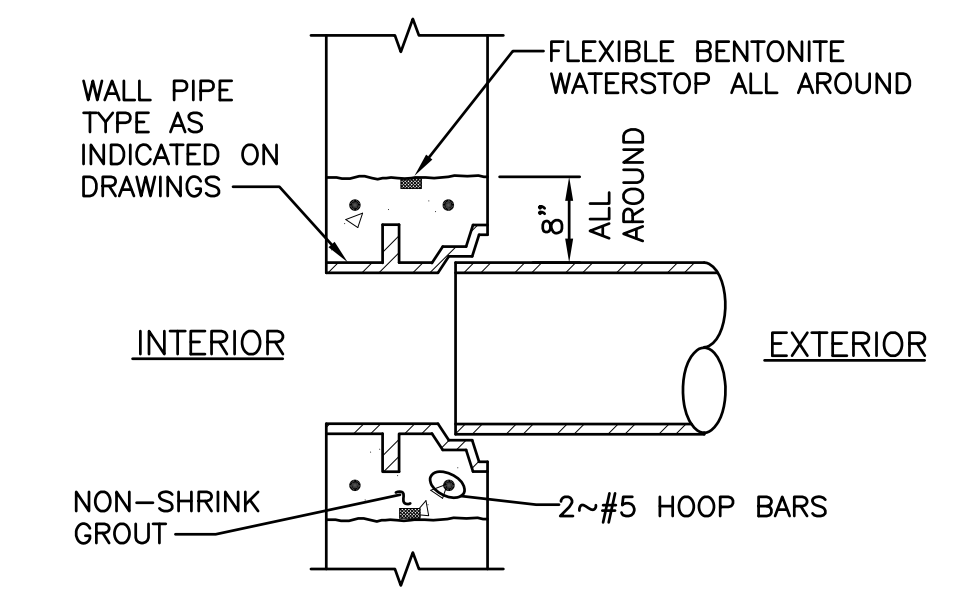
- NOTES:**
- 1 ALL RAILS & POSTS SHALL BE ALUMINUM. ALL ACCESSORIES SHALL BE ALUMINUM OR STAINLESS STEEL.
 - 2 ALL RAIL SYSTEMS SHALL MEET OSHA PERFORMANCE STANDARDS FOR PUBLIC AND INDUSTRIAL APPLICATIONS
 - 3 EXTEND HANDRAILS HORIZONTALLY A MIN. 1'-0" BEYOND TOP RISER AND SHALL CONTINUE TO SLOPE FOR THE DEPTH OF ONE TREAD BEYOND THE BOTTOM RISER.
 - 4 MOUNT RAILING TO WALLS OR GUARDRAIL POST PER **F** 99-AS5.02



J RAILING STRINGER MOUNTING
99-ASM5.03 NO SCALE



N MUD DRAIN VALVE
99-ASM5.03 NO SCALE



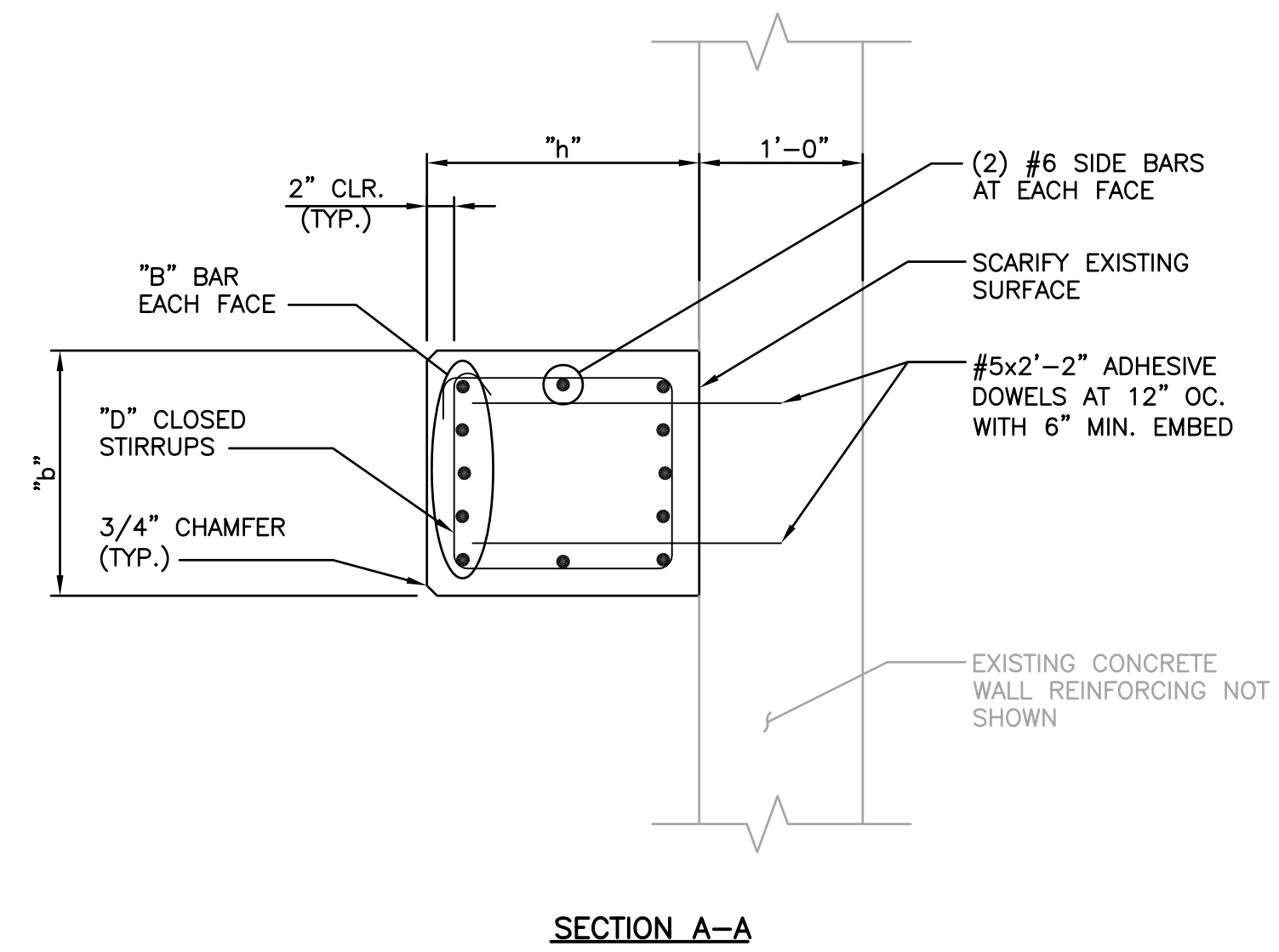
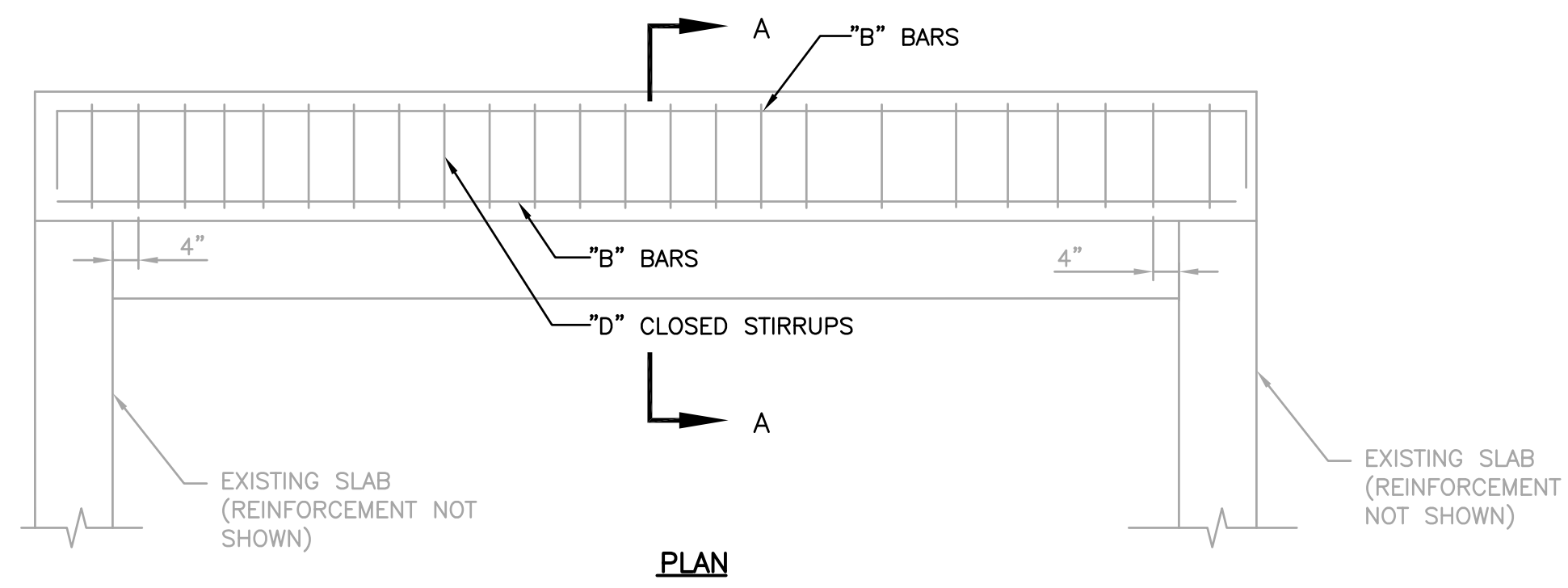
- NOTES:**
- 1 FOR 4-INCH AND LARGER PIPE THROUGH WATER TIGHT CONCRETE MEMBERS ONLY.
 - 2 REMOVE CONCRETE FROM EXISTING REINFORCING. BEND EXISTING REINF. AROUND NEW WALL PIPE IF POSSIBLE. IF BARS MUST BE CUT, CUT ONLY AT CENTER AND BEND.

P WALL PIPE PENETRATION
99-ASM5.03 NO SCALE

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	DATE:
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ARCHITECTURAL AND STRUCTURAL DETAILS-3
EASTSIDE UV DISINFECTION STRUCTURE
AND OUTFALL PIPE TO DES PLAINES RIVER
CITY OF JOLIET
WILL COUNTY, ILLINOIS





X BEAM DETAIL
99-ASM5.04 NO SCALE

BEAM SCHEDULE				
BEAM DESIGNATION	HEIGHT h	WIDTH b	BARS	CLOSED STIRRUPS
			B	D
10-B-1	1'-4"	1'-0"	3-#8	#4@6"
10-B-2	1'-4"	1'-0"	3-#8	#4@5"
10-B-3	1'-0"	1'-0"	2-#5	#3@12"

NO.	REVISIONS	DATE

DATE: JANUARY 2011
DES BY: KJL CHK BY: MRW
RECORD DRAWING
BY: DATE: CONTRACTOR:

BEAM DETAILS AND SCHEDULE
EASTSIDE UV DISINFECTION STRUCTURE
AND OUTFALL PIPE TO DES PLAINES RIVER
CITY OF JOLIET
WILL COUNTY, ILLINOIS

