

**CITY OF ROME
DEPARTMENT OF PUBLIC WORKS
ONEIDA COUNTY, NEW YORK**

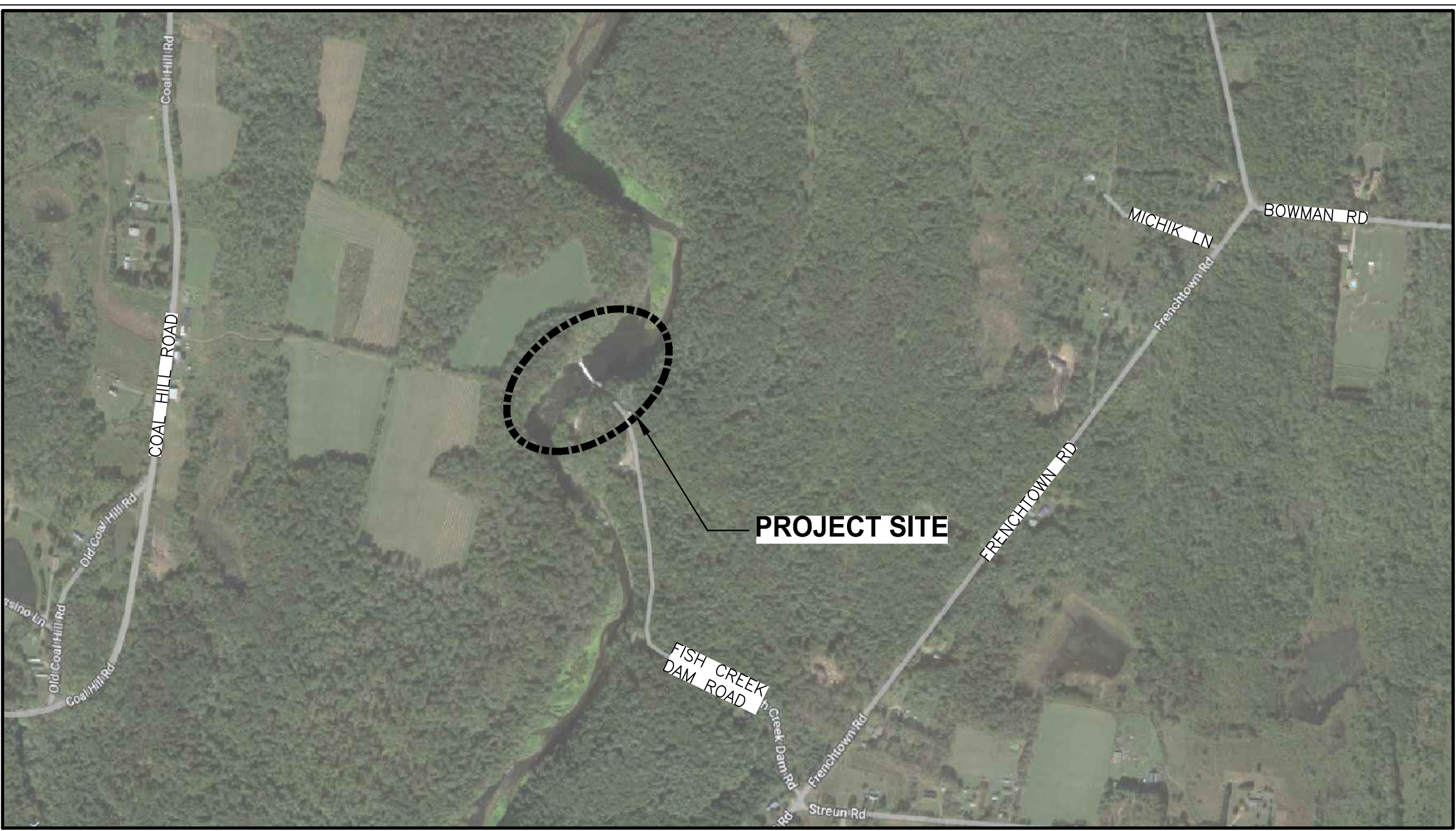


SOURCE: GOOGLE

VICINITY PLAN
NOT TO SCALE

KESSINGER DAM REHABILITATION

FEBRUARY 2025



LOCATION PLAN
NOT TO SCALE



NEW YORK

Water

Environment

Transportation

Energy

Facilities



WARNING
IT IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATES OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR HAS BEEN ATTACHED.

GENERAL NOTES

GENERAL INFORMATION AND REQUIREMENTS:

- WHERE RIGHT AND LEFT ARE REFERRED TO FOR THE DAM, THESE ARE DIRECTIONS LOOKING DOWNSTREAM FROM THE DAM CREST. EXAMPLE: THE LEFT NON-OVERFLOW SECTION IS THE GATEHOUSE.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PIPING, CULVERTS, STAIRS, SIDEWALKS, ETC. PRIOR TO CONSTRUCTION. IF ANY ITEM IS DAMAGED OR REMOVED, IT SHALL BE REPLACED IN KIND.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NEW WORK OF THIS CONTRACT (UNLESS OTHERWISE SPECIFICALLY NOTED):
 - THE OWNER, ITS REPRESENTATIVES, AND/OR THE ENGINEER IS NOT A GUARANTOR OF THE CONSTRUCTING CONTRACTOR'S OBLIGATIONS AND PERFORMANCE OF THE CONTRACT.
 - OBSERVATIONS OF WORK IN PROGRESS AND/OR SITE VISITS ARE NOT TO BE CONSIDERED AS A GUARANTEE BY THE OWNER OR ENGINEER OF THE CONTRACTORS CONTRACTUAL COMMITMENTS.
 - AS-BUILT RECORD DRAWINGS ARE REQUIRED AND SHALL BE SUBMITTED BY THE CONTRACTOR PRIOR TO ACCEPTANCE OF THE WORK AND AS PART OF MONTHLY PAY REQUEST APPROVALS. SEE SPECIFICATION DIVISION 1 FOR MORE INFORMATION.
 - THE TERM "ACCEPTABLE TO ENGINEER" SHALL MEAN WRITTEN ACCEPTANCE BY ENGINEER IS TO BE RECEIVED BY THE CONTRACTOR BEFORE WORK IS STARTED. "OWNER" MAY BE USED INTERCHANGEABLY FOR ENGINEER.
- THE CONTRACTOR AGREES THAT THEY SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY, AND NOT BE LIMITED TO NORMAL WORKING HOURS.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO EXCAVATION, SHORING, COFFERDAM CONSTRUCTION AND SECURITY. CONTRACTOR SHALL COMPLY WITH CURRENT FACILITY SAFETY PLAN, AND PROVIDE THEIR OWN HEALTH AND SAFETY PLANS AS SPECIFIED, AND REQUIRED BY REGULATIONS.
 - ALL HEALTH & SAFETY PROTECTION MEASURES SHALL BE INSTALLED AND FUNCTIONAL AT THE SITE PRIOR TO PERFORMING ANY WORK. THE CONTRACTOR SHALL MAINTAIN ALL HEALTH & SAFETY MEASURES UNTIL FINAL COMPLETION.
 - SPECIAL REFERENCE IS MADE TO WORK AROUND AND/OR ON EXISTING UTILITIES - SEE MINIMUM REQUIREMENTS NOTED.
- ADDITIONAL REGULATORY COMPLIANCE
 - CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL REGULATORY AND PERMIT REQUIREMENTS APPLICABLE TO THE WORK. SEE SPECIFICATION DIVISION 1 AND 2 FOR THE MAJOR PERMITTING REQUIREMENTS AND WORKING RESTRICTIONS NOT SHOWN ON DRAWINGS, BUT DO NOT PURPORT TO SHOW ALL THE APPLICABLE REGULATIONS OR REQUIRED PERMITS.
 - THE CONTRACTOR IS RESPONSIBLE FOR ALL EROSION, STORM WATER, SEDIMENTATION CONTROL AND ENVIRONMENTAL PROTECTION MEASURES IN ACCORDANCE WITH ALL RELATED CONTRACTOR DEVELOPED WORK PLANS AND APPLICABLE REGULATIONS. REFER TO DIVISION 1 AND 2 OF THE SPECIFICATIONS.
 - ALL PROTECTION MEASURES SHALL BE INSTALLED AND FUNCTIONAL AT THE SITE PRIOR TO PERFORMING ANY WORK, UNLESS NOTED. THE CONTRACTOR SHALL MAINTAIN ALL PROTECTION MEASURES UNTIL FINAL COMPLETION.
 - WHEREVER A CONSTRUCTION ACCESS ROAD INTERSECTS A PAVED ROAD OFFSITE TRACKING OF SEDIMENT BY CONSTRUCTION VEHICLES WILL NOT BE ALLOWED. CONTRACTOR SHALL MAINTAIN HAUL ROUTE ROADS IN CLEAN CONDITION UNTIL FINAL COMPLETION.
 - INSTALLATIONS OF EROSION AND CONTROL MEASURES SHALL BE INCORPORATED AS REQUIRED BY STORMWATER POLLUTION PREVENTION PLAN AND/OR ENGINEER.
 - CONCRETE MATERIALS REMOVED FROM THE DAM DURING DEMOLITION ACTIVITIES SHALL BE CAPTURED AND REMOVED FROM THE SITE. CONTRACTOR SHALL DEVELOP PLAN TO CAPTURE DEBRIS SO THAT IT DOES NOT GET INTO THE WATER.
 - DURING PLACEMENT OF NEW GROUT, CEMENTITIOUS PRODUCTS AND OTHER MATERIALS CONTRACTOR SHALL PROTECT THE WATERWAY BY PERFORMING WORK IN THE DRY AND PREVENT MATERIALS FROM BEING CARRIED DOWNSTREAM.
- CONTRACTOR SHALL PROTECT, OR WHERE SPECIFICALLY REQUIRED TO REMOVE AN ITEM FOR THE NEW WORK SHALL RESTORE ALL SURFACE AND SUBSURFACE UTILITIES, BUILDINGS, STRUCTURES, SIGNS, OTHER FACILITIES, AND ANY AREAS DAMAGED DURING CONSTRUCTION WHETHER OR NOT SHOWN ON THE DRAWINGS, ON PUBLIC AND PRIVATE PROPERTY TO THE SATISFACTION OF THE OWNER AND ENGINEER.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE STAGING AREAS DURING THIS CONTRACT. AT THE END OF PROJECT CONSTRUCTION, CLEAN THE STAGING AREAS, REGRADE, AND RESEED TO MATCH PRECONSTRUCTION CONDITIONS.
 - RETAIN AND PROTECT ALL TREES AND SHRUBS EXCEPT THOSE INDICATED ON THE DRAWINGS TO BE REMOVED.
 - ALL EXCESS MATERIALS AND SPOIL SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN OFFSITE LOCATION ACCEPTABLE TO THE OWNER.

- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND AND ABOVEGROUND FACILITIES AND UTILITIES WHETHER SHOWN ON THE DRAWINGS OR NOT.
 - DIG SAFE AND AFFECTED UTILITIES SHALL BE NOTIFIED IN ADVANCE OF CONSTRUCTION.
 - IF ANY UTILITY IS REQUIRED TO BE RELOCATED, THE CONTRACTOR SHALL NOTIFY UTILITY OWNER WELL IN ADVANCE OF CONTRACTOR'S APPROACH SO THAT ARRANGEMENTS WITH THE OWNER OF SUCH UTILITY CAN BE COMPLETED WITHOUT DELAYING THE WORK.
 - THE LOCATION AND ELEVATIONS SHOWN FOR UNDERGROUND OR EXPOSED EXISTING STRUCTURES AND UTILITIES ARE NOT WARRANTED TO BE EXACT, NOR IS IT WARRANTED THAT ALL UNDERGROUND OR EXPOSED STRUCTURES AND UTILITIES ARE SHOWN.

MAINTENANCE OF FLOW AND RESERVOIR PROTECTION NOTES:

- THE CITY OF ROME'S WATER SUPPLY IS CONVEYED FROM THE RESERVOIR THROUGH THE GATEHOUSE AND INTO A TUNNEL AND PIPING SYSTEM TO THE CITY OF ROME WATER FILTRATION PLANT (WFP). DURING CONSTRUCTION, FLOW MUST BE MAINTAINED TO THE WFP. A MAXIMUM FLOW RATE OF 20 MGD MUST BE MAINTAINED. CONTRACTOR MAY CHOOSE TO CONVEY FLOW TO THE TUNNEL BY GRAVITY OR BY BYPASS PUMPING. IF BYPASS PUMPING IS ELECTED, REDUNDANCY OF EQUIPMENT AND BACK-UP POWER MUST BE PROVIDED.
 - GRAVITY BYPASS COULD BE ACHIEVED BY ROUTING A PIPE THROUGH THE GATEHOUSE AND CREATING A BULKHEAD AT THE TUNNEL ENTRANCE. THE BASKETS ON THE SCREENS CAN BE REMOVED TO PROVIDE AN APPROXIMATELY 33-INCH WIDE OPENING. THE EXISTING BUTTERFLY VALVE WOULD REQUIRE REMOVAL FOR TEMPORARY BYPASSING AND WOULD NEED TO BE REINSTALLED AFTER BYPASS IS COMPLETE. CONTRACTOR TO CONFIRM OPERATION ONCE IT IS REINSTALLED. DRAWINGS S-7 AND S-8 SHOW THE APPROXIMATE ELEVATIONS OF THE LOWER LEVEL OF THE GATEHOUSE.
 - THE FLOW FOR THE WFP BYPASS SHALL PASS THROUGH A 3/4 INCH OR FINER SCREEN. LOCATION OF SCREENS TO BE INDICATED IN CONTRACTOR SUBMITTAL AND SHALL REQUIRE OWNER APPROVAL.
 - INSTALL ONE WATER LEVEL INDICATOR IN THE JUNCTION STRUCTURE OFF BOYD ROAD WITH CELLULAR SIGNAL TO THE CITY'S WFP TO CONTROL THE BUTTERFLY VALVE ON THE TEMPORARY BYPASS PIPE AT THE GATEHOUSE. THE LEVEL INDICATOR AND BUTTERFLY VALVE SHALL BE ACCESSIBLE BY OPERATIONS STAFF TO REVIEW AND CONTROL FLOW. REFER TO SPECIFICATION 015725.
 - CONTRACTOR TO HIRE A PROFESSIONAL SURVEYOR LICENSED IN NEW YORK STATE TO OBTAIN (INVERT, CROWN, TOP OF STRUCTURE AND ELEVATION OF THE LEVEL INSTRUMENT) ELEVATIONS AT THE JUNCTION STRUCTURE AND THE ENTRANCE OF THE TUNNEL TO ALLOW PROPER SETUP OF THE TEMPORARY CONTROL SYSTEM.
 - CONTRACTOR SHALL HAVE STAFF AVAILABLE TO RESPOND TO LOSS OF WATER TO THE TUNNEL WITHIN 2 HOURS AT ALL TIMES.
- IN COORDINATION WITH THE CITY, CONTRACTOR CAN STOP FLOW TO THE WFP FOR A PERIOD OF UP TO 12 HOURS TO PERFORM CERTAIN WORK ACTIVITIES. AFTER FLOW IS REINSTATED, CONTRACTOR CANNOT STOP FLOW TO THE WFP FOR A PERIOD OF AT LEAST 3 DAYS TO ALLOW THE CITY SUFFICIENT TIME TO REPLENISH STORAGE CAPACITY IN THEIR FINISHED WATER RESERVOIRS AT THE WFP.
- FLOW MUST BE MAINTAINED TO THE CREEK DOWNSTREAM. A MINIMUM FLOWRATE OF 6 MGD MUST BE MAINTAINED IN THE CREEK AT ALL TIMES. EQUIVALENT OF APPROXIMATELY 1 INCH OF WATER OVER THE SPILLWAY.
- CONTRACTOR MUST PHASE AND STAGE WORK TO MEET THE REQUIREMENTS FOR FLOW IN THE CREEK AND TO THE WFP AND BE PREPARED TO HANDLE VARYING FLOW RATES IN THE CREEK. REFER TO THE SPECIFICATIONS FOR HISTORIC DATA ON STREAM FLOWS.
- THE RESERVOIR IS THE DRINKING WATER SUPPLY FOR CITY OF ROME AND THEREFORE WHERE WORK IS OCCURRING IN THE RESERVOIR AREA, THE CONTRACTOR SHALL ENSURE THE FOLLOWING:
 - ALL OFF-ROAD HEAVY EQUIPMENT UTILIZES ENVIRONMENTALLY FRIENDLY, VEGETABLE OIL BASED, HYDRAULIC FLUIDS SUCH AS, EAL 224H AS MANUFACTURED BY MOBIL, OR APPROVED EQUAL.
 - ALL OFF-ROAD HEAVY EQUIPMENT UTILIZES ENVIRONMENTALLY FRIENDLY, PROPYLENE GLYCOL BASED, ANTIFREEZE SUCH AS, FLEET CHARGE PG AS MANUFACTURED BY OLD WORLD INDUSTRIES, OR APPROVED EQUAL.
 - ABSORBENT BOOMS SHALL BE READILY AVAILABLE ONSITE IN CASE OF A SPILL.
- MATERIALS IN CONTACT WITH WATER SHALL BE NSF STANDARD 61 APPROVED.

INDEX		
SET NO.	SHEET NO.	SHEET NAME
GENERAL		
1	G-C	COVER SHEET
2	G-1	SHEET INDEX AND GENERAL NOTES
3	G-2	EROSION CONTROL NOTES AND DETAILS
CIVIL		
4	C-1	GENERAL NOTES, LEGEND AND ABBREVIATIONS
5	C-2	EXISTING CONDITIONS - SITE SURVEY
6	C-3	PROPOSED SITE PLAN
7	C-4	DIVERSION PLANS
8	C-5	DIVERSION SECTIONS
STRUCTURAL		
9	S-1	GENERAL NOTES, LEGEND AND ABBREVIATIONS
10	S-2	KESSINGER DAM PLAN
11	S-3	UPSTREAM AND DOWNSTREAM ELEVATIONS
12	S-4	DEMOLITION AND MODIFICATION SECTIONS
13	S-5	REPAIR SECTIONS AND DETAILS
14	S-6	RETAINING WALL ELEVATION, SECTIONS AND DETAILS
15	S-7	KESSINGER GATEHOUSE PLANS
16	S-8	DEMOLITION AND MODIFICATION SECTIONS
17	S-9	GATEHOUSE DEMOLITION ELEVATIONS
18	S-10	GATEHOUSE MODIFICATION ELEVATIONS
19	S-11	GATEHOUSE GROUND FLOOR PLAN
20	SD-1	STANDARD CONCRETE REPAIR DETAILS
21	SD-2	CONCRETE AND GUARDRAIL DETAILS
22	SD-3	SPECIAL INSPECTION TABLES AND NOTES
MECHANICAL		
23	M-1	GENERAL NOTES, LEGEND AND ABBREVIATIONS
24	M-2	GATEHOUSE - DEMOLITION AND NEW WORK PLANS
25	M-3	GATEHOUSE - NEW WORK SECTIONS
26	MD-1	STANDARD MECHANICAL DETAILS I
ELECTRICAL		
27	E-1	ELECTRICAL NOTES
28	E-2	LEGEND I
29	E-3	LEGEND II
30	E-4	OVERALL SITE PLAN
31	E-5	EXISTING ONE LINE DIAGRAM AND PANELBOARD SCHEDULES
32	E-6	NEW WORK ONE LINE DIAGRAM, INSTRUMENTATION RISER DIAGRAM AND PANELBOARD SCHEDULES
33	E-7	ENLARGED SERVICE AREA PLAN
34	E-8	GATEHOUSE POWER AND INSTRUMENTATION PLANS

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CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

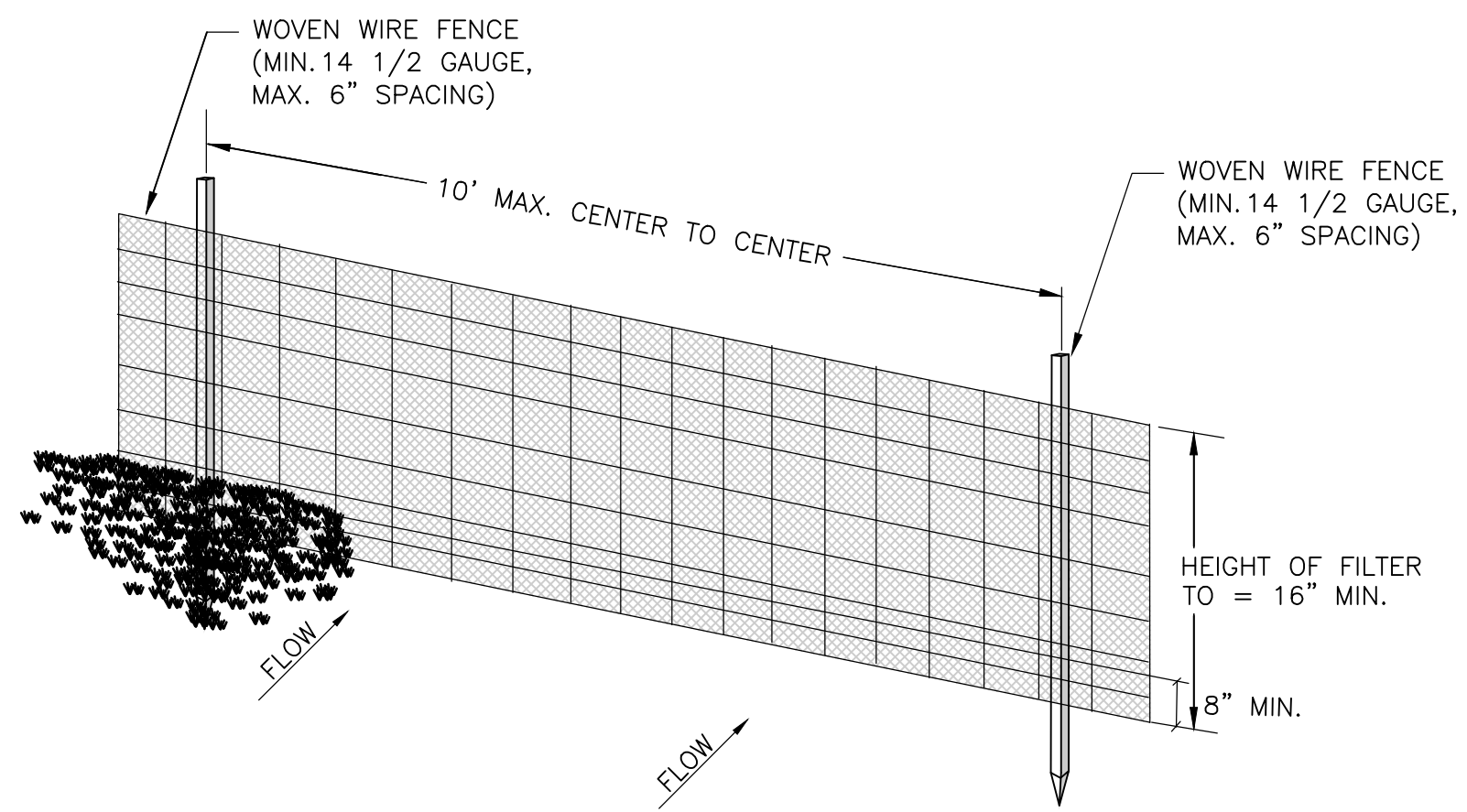
SHEET INDEX AND GENERAL NOTES



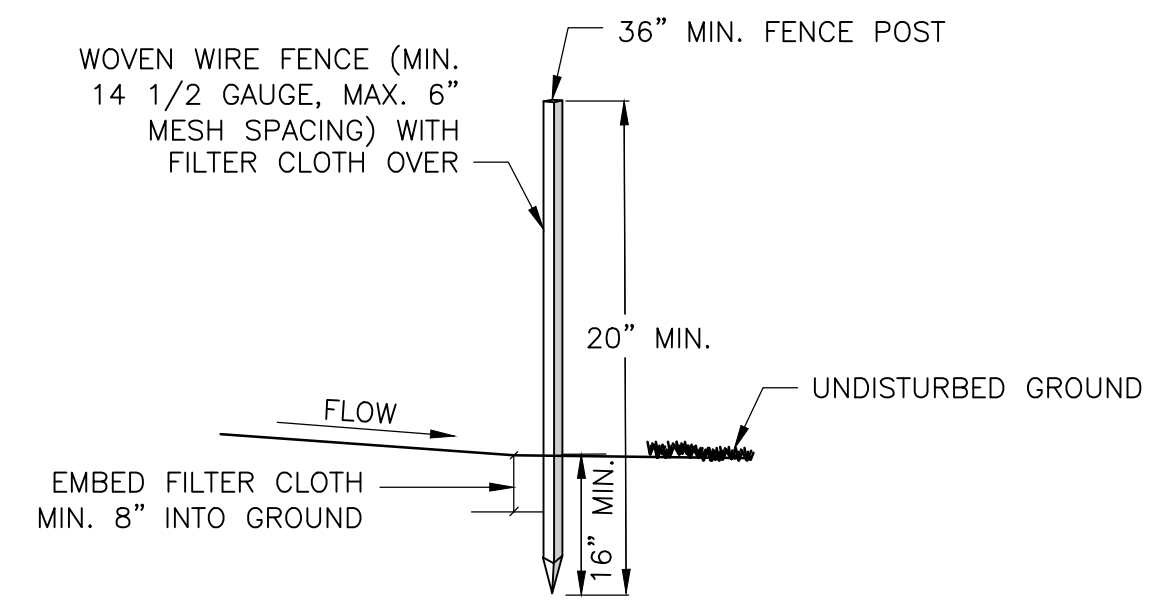
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FILE NAME: G001NFX.DWG
SHEET NO. 2 OF 34
G-1

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PERSPECTIVE VIEW



SECTION

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

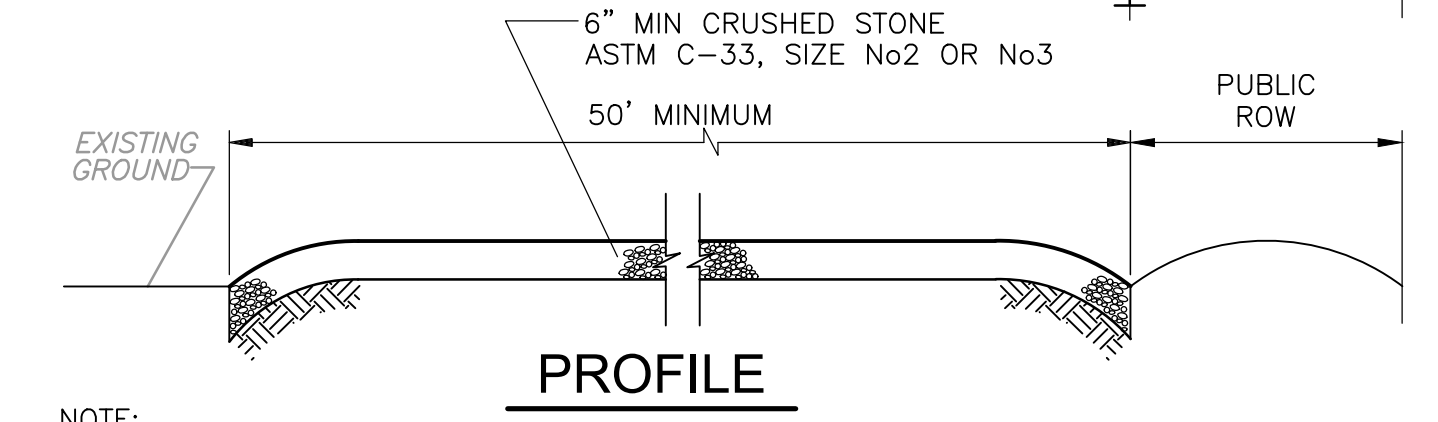
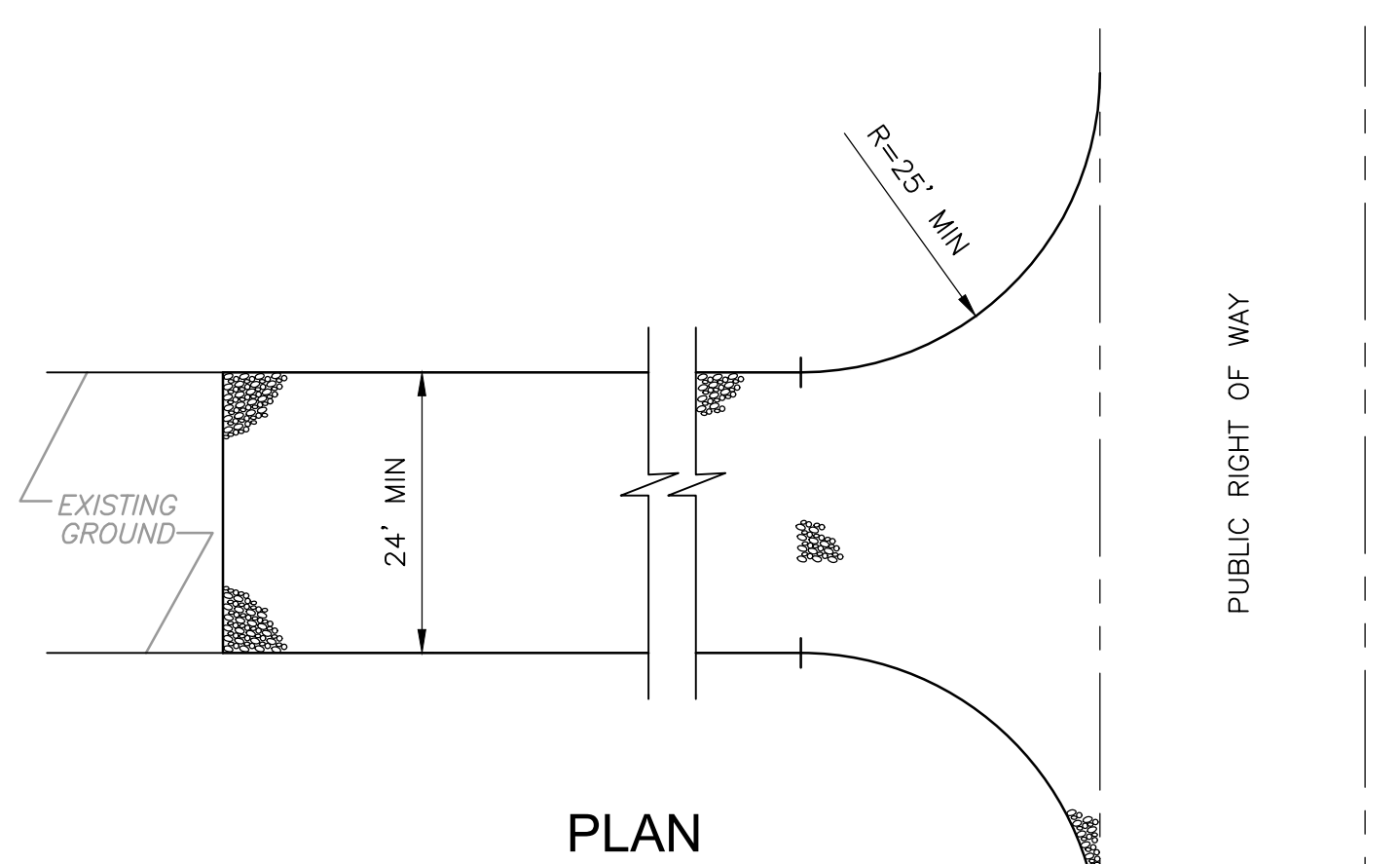
POSTS: STEEL EITHER "T" OR "U" TYPE OR 2" HARDWOOD

FENCE: WOVEN WIRE, 14 1/2 GAUGE 6" MAX. MESH OPENINGS.

FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

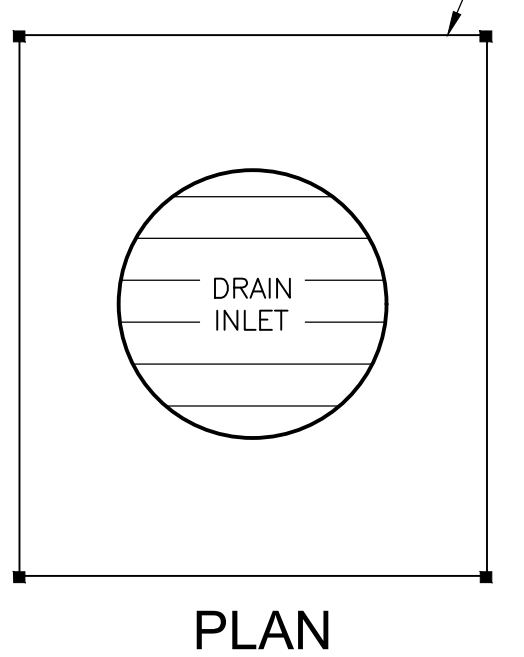
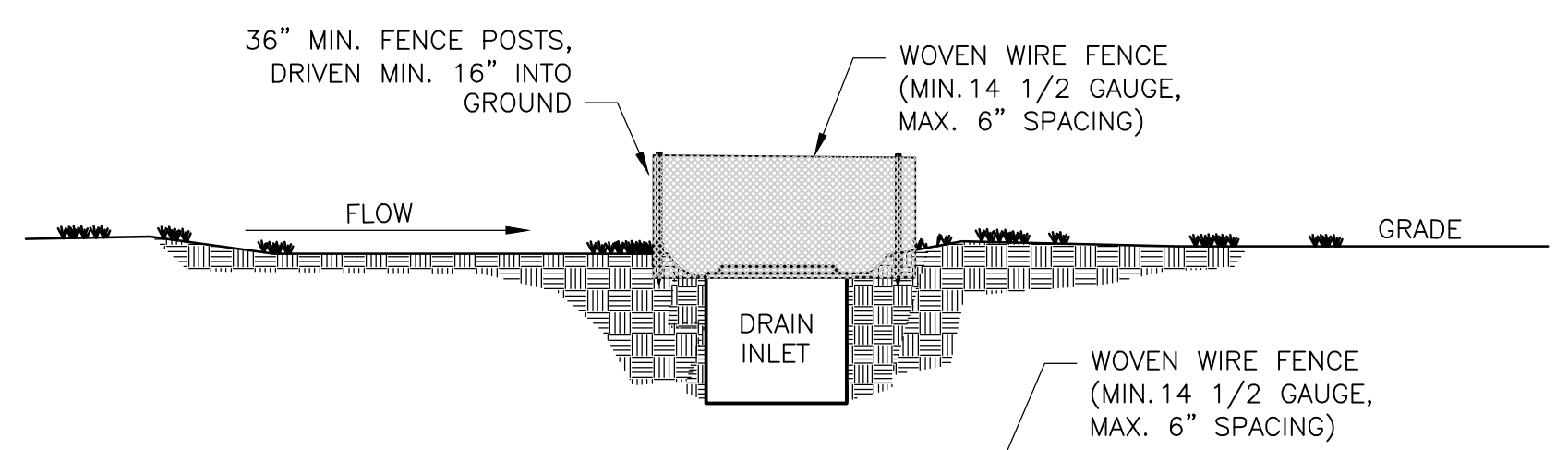
SILT FENCE
DETAIL A
NTS



NOTE:
 PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND PUBLIC RIGHT-OF-WAY
 THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY, THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENTS, ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY

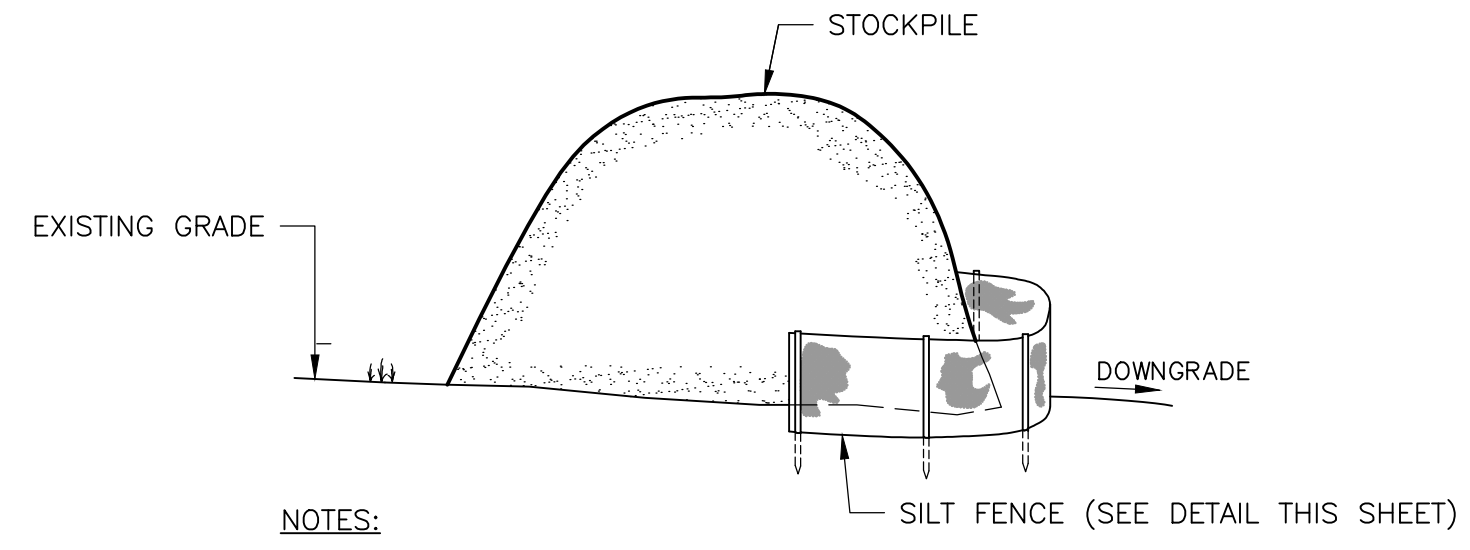
STABILIZED CONSTRUCTION ENTRANCE

DETAIL B
NTS



SILT FENCE INLET PROTECTION

DETAIL D
NTS



NOTES:
 1. SOIL STOCKPILES THAT WILL NOT BE USED WITHIN 30 DAYS SHALL HAVE TEMPORARY SEEDING IN ACCORDANCE WITH THE SPECIFICATIONS

TEMPORARY SOIL/GRANULAR MATERIAL STOCKPILE

DETAIL C
NTS

EROSION AND SEDIMENT CONTROL NOTES

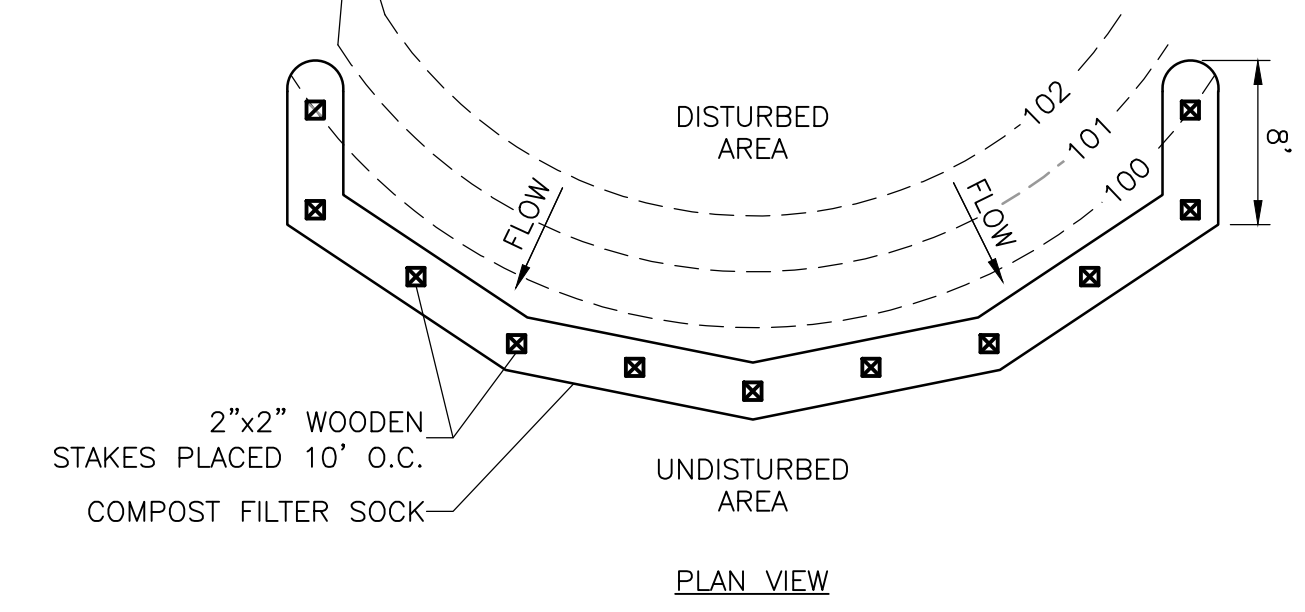
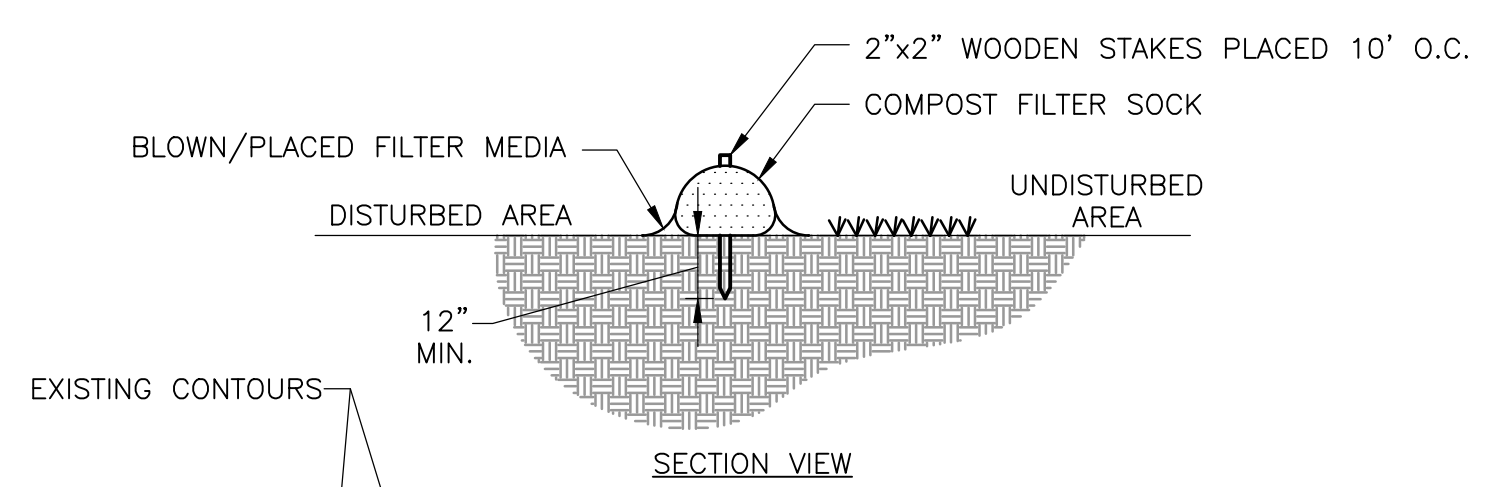
- THE CONTRACTOR SHALL COMPLY WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
- CONSTRUCTION SEQUENCE SHALL BE PHASED TO LIMIT SIZE OF DISTURBED AREA.
- STOCKPILE, ROUGH GRADED AREA AND ANY SOILS LEFT EXPOSED AND UNDISTURBED FOR MORE THAN 30 DAYS SHALL BE TEMPORARILY SEEDED.
- MULCH SHALL BE APPLIED ALONG WITH TEMPORARY AND PERMANENT SEEDING TO GRADED AREAS WHICH REMAIN EXPOSED OUTSIDE OF RECOMMENDED SEEDING DATES.
- SEDIMENT CONTROL MEASURES SHALL BE CHECKED WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT.

COMPOST FILTER SOCK NOTES:

- SOCK FABRIC SHALL MEET STANDARDS OF TABLE 5.1 OF THE NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (BLUE BOOK). COMPOST SHALL MEET THE STANDARDS LISTED ON TABLE 5.2.
- COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN IN THE TABLE BELOW. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.
- TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
- ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
- SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
- BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCKS, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

THE MAXIMUM SLOPE LENGTH (IN FEET) ABOVE A COMPOST FILTER SOCK SHALL NOT EXCEED THE FOLLOWING LIMITS:

DIA. (IN.)	SLOPE %						
	2	5	10	20	25	33	50
12	250	225	125	65	50	40	25
18	275	250	150	70	55	45	30
24	350	275	200	130	100	60	35
32	450	325	275	150	120	75	50



COMPOST FILTER SOCK

DETAIL E
NTS

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REV. NO.	DATE	DRWN	CHKD	REMARKS

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CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

EROSION CONTROL NOTES AND DETAILS

PROJECT NO. 21984-265075
 FILE NAME: G002NFX
 SHEET NO. 3 OF 34
G-2

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ABBREVIATIONS LIST:

BAPC	HCP- BRYANT ASSOCIATES, PC HORIZONTAL CONTROL POINT
CFS	CUBIC FEET PER SECOND
CJ	CONSTRUCTION JOINT
CONC	CONCRETE
EA	EACH
EL	ELEVATION
FIBC	FLEXIBLE INTERMEDIATE BULK CONTAINER
H	HORIZONTAL
HP	HIGH POINT
IN	INCHES
LP	LOW POINT
MAX	MAXIMUM
MIN	MINIMUM
NO.	NUMBER
O.C.	ON CENTER
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
SICPP	SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE
T/WALL	TOP OF WALL
TYP	TYPICAL
V	VERTICAL
VCP	VITRIFIED CLAY PIPE
VIF	VERIFY IN FIELD

UTILITY NOTES:

- EXISTING UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE PLANS, RECORDS AND SURVEYS. THEIR LOCATION MUST THEREFORE BE CONSIDERED APPROXIMATE & NO GUARANTEE IS MADE BY BRYANT ASSOCIATES, P.C. TO THE HORIZONTAL OR VERTICAL LOCATION OF SUCH FACILITIES, STRUCTURES AND UTILITIES. THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY UNKNOWN. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE HORIZONTAL & VERTICAL LOCATIONS OF ALL FACILITIES, STRUCTURES & UTILITIES IN THE FIELD PRIOR TO COMMENCING WORK.

SURVEY NOTES:

- SURVEY WAS PERFORMED BY BRYANT ASSOCIATES, P.C. IN MAY 2023.
- HORIZONTAL DATUM IS NAD 83 CENTRAL ZONE.
- VERTICAL DATUM IS NAVD 88.
- BENCHMARK ELEVATIONS SHOULD BE VERIFIED PRIOR TO CONSTRUCTION.

CONTROL

	EXIST. IRON PIPE
	EXIST. REBAR
	EXIST. DISK
	EXIST. HUB
	EXIST. NAIL
	EXIST. PK NAIL
	EXIST. RAILROAD SPIKE
	EXIST. STATION

SURVEY

	EXIST. BENCH MARK
	EXIST. BORING
	EXIST. MONITORING WELL
	EXIST. MONUMENT
	EXIST. IRON ROD
	EXIST. DRILL HOLE

SIGNS

	EXIST. 1 POLE SIGN
	EXIST. 2 POLE SIGN
	EXIST. DELINEATOR
	EXIST. MILE MARKER
	EXIST. STREET SIGN

SITE

	EXIST. BOLLARD
	EXIST. BUOY
	EXIST. PILE
	EXIST. POST
	EXIST. DRY WELL
	EXIST. FLAG POLE
	EXIST. MAIL BOX
	EXIST. PARKING METER
	EXIST. SATELLITE
	EXIST. WELL
	EXIST. WETLAND FLAG

VEGETATION

	EXIST. CONIFEROUS TREE
	EXIST. DECIDUOUS TREE
	EXIST. SHRUB
	EXIST. TREE STUMP

UTILITIES

	EXIST. UNKNOWN MANHOLE
	EXIST. BURIED UNKNOWN MANHOLE
	EXIST. UTILITY POLE
	EXIST. UTILITY POLE WITH DROP
	EXIST. LIGHT POLE
	EXIST. UTILITY POLE WITH LIGHT
	EXIST. HAND HOLE
	EXIST. CABLE PEDESTAL
	EXIST. ELECTRICAL MANHOLE
	EXIST. ELECTRICAL METER
	EXIST. ELECTRICAL RISER
	EXIST. AIR CONDITIONER UNIT
	EXIST. GAS CATHODIC PROTECTION TEST
	EXIST. GAS MANHOLE
	EXIST. GAS METER
	EXIST. GAS RISER
	EXIST. VALVE
	EXIST. FUEL PUMP
	EXIST. GAS FILLER
	EXIST. GUY WIRE
	EXIST. SANITARY SEWER MANHOLE
	EXIST. BURIED SANITARY SEWER MANHOLE
	EXIST. COMBINED SEWER MANHOLE
	EXIST. BURIED COMBINED SEWER MANHOLE
	EXIST. SANITARY SEWER CLEAN OUT
	EXIST. SANITARY SEWER VENT
	EXIST. STEAM MANHOLE
	EXIST. STEAM VENT
	EXIST. CATCH BASIN
	EXIST. ROUND CATCH BASIN
	EXIST. ROUND CATCH BASIN
	EXIST. STORM SEWER MANHOLE
	EXIST. BURIED STORM SEWER MANHOLE
	EXIST. STORM SEWER VENT
	EXIST. TELEPHONE HAND HOLE
	EXIST. TELEPHONE MANHOLE
	EXIST. TELEPHONE PEDESTAL
	EXIST. TELEPHONE RISER

	EXIST. TRAFFIC CONTROLLER
	EXIST. TRAFFIC HAND CONTROL
	EXIST. TRAFFIC MANHOLE
	EXIST. TRAFFIC POLE
	EXIST. TRAFFIC POLE WITH CONTROLLER
	EXIST. TELEPHONE PEDESTAL
	EXIST. WALK RIGHT
	EXIST. POST INDICATOR VALVE
	EXIST. HAYDRANT
	EXIST. WATER SERVICE
	EXIST. WATER METER PIT
	EXIST. WATER MANHOLE
	EXIST. WATER SPIGOT
	EXIST. WATER SPRINKLER
	EXIST. WATER VALVE
	EXIST. BURIED WATER VALVE
	EXIST. CHLORINE MANHOLE

RAILROAD

	EXIST. RAILROAD LIGHT
	EXIST. RAILROAD SWITCH
	EXIST. BRIDGE SCUPPER
	EXIST. CONCRETE ANCHOR
	EXIST. GATE POST

LEGEND

	BB	EXIST. BOTTOM OF BANK		UTR	EXIST. UNDERGROUND TRAFFIC
	TB	EXIST. TOP OF BANK		OTR	EXIST. OVERHEAD TRAFFIC
		EXIST. EDGE OF WOODS		OHW	EXIST. OVERHEAD WIRE
		EXIST. CONIFEROUS TREE ROW			EXIST. PROPERTY LINE
		EXIST. DECIDUOUS TREE ROW			EXIST. RIGHT OF WAY
		EXIST. HEDGE ROW			INDICATES FACILITIES, EQUIPMENT, PIPING/CONDUIT TO BE DEMOLISHED UNLESS OTHERWISE NOTED.
		EXIST. STONE WALL			
		EXIST. CHAIN LINK FENCE			
		EXIST. WOOD FENCE			
	X	EXIST. OTHER FENCE			
		EXIST. GUIDE RAIL			
	EOP	EXIST. EDGE OF PAVEMENT			
	ES	EXIST. EDGE OF SHOULDER			
	ST	EXIST. CULVERT			
	CS	EXIST. UNDERGROUND CABLE			
	OC	EXIST. OVERHEAD CABLE			
	UFO	EXIST. UNDERGROUND FIBER OPTIC			
	UT	EXIST. UNDERGROUND TELEPHONE			
	OT	EXIST. OVERHEAD TELEPHONE			
	X T X	EXIST. ABANDONED TELEPHONE			
	UE	EXIST. UNDERGROUND ELECTRICAL			
	SL	EXIST. UNDERGROUND STREET LIGHT			
	OHE	EXIST. OVERHEAD ELECTRICAL			
	X E X	EXIST. ABANDONED ELECTRICAL			
	CS	EXIST. COMBINED SEWER LINE			
	SA	EXIST. SANITARY LINE			
	X SA X	EXIST. ABANDONED SANITARY LINE			
	ST	EXIST. STORM LINE			
	X ST X	EXIST. ABANDONED STORM LINE			
	STM	EXIST. STEAM			
	STR	EXIST. STEAM RETURN			
		EXIST. UNDERGROUND GAS			
	X G X	EXIST. ABANDONED GAS			
	W	EXIST. WATER LINE			
	X W X	EXIST. ABANDONED WATER LINE			
	UU	EXIST. UNKNOWN UTILITY			
	X UU X	EXIST. ABANDONED UNKNOWN UTILITY			
	LW	EXIST. TRAFFIC LOOP WIRE			

WARNING
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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: N. VIGNEAULT
DRAWN BY: S. DHANGAR
SHEET CHK'D BY: M. CALVINO
CROSS CHK'D BY: P. DUFFANY
APPROVED BY: N. VIGNEAULT
DATE: FEBRUARY 2025

CDM Smith
 Camp Dresser McKee & Smith
 Salina Industrial Powerpark, One General Motors Drive
 Syracuse, NY 13206
 Tel: (315) 434-3200

CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

GENERAL NOTES, LEGEND AND ABBREVIATIONS

PROJECT NO. 21984-265075
FILE NAME: C001LGAB.DWG
SHEET NO. 4 OF 34
C-1



NOTES:
 1. THE AERIAL IMAGE BACKGROUND HAS BEEN ADDED FOR REFERENCE BUT DUE TO ANGLE OF IMAGE CAPTURE IT DOES NOT MATCH EXACTLY WITH THE SURVEY. PROJECT WORK SHOULD BE BASED ON THE TOPOGRAPHIC SURVEY.

PLAN
 1" = 30'

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: N. VIGNEAULT
 DRAWN BY: S. DHANGAR
 SHEET CHK'D BY: M. CALVINO
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 APPROVED BY: N. VIGNEAULT
 DATE: FEBRUARY 2025

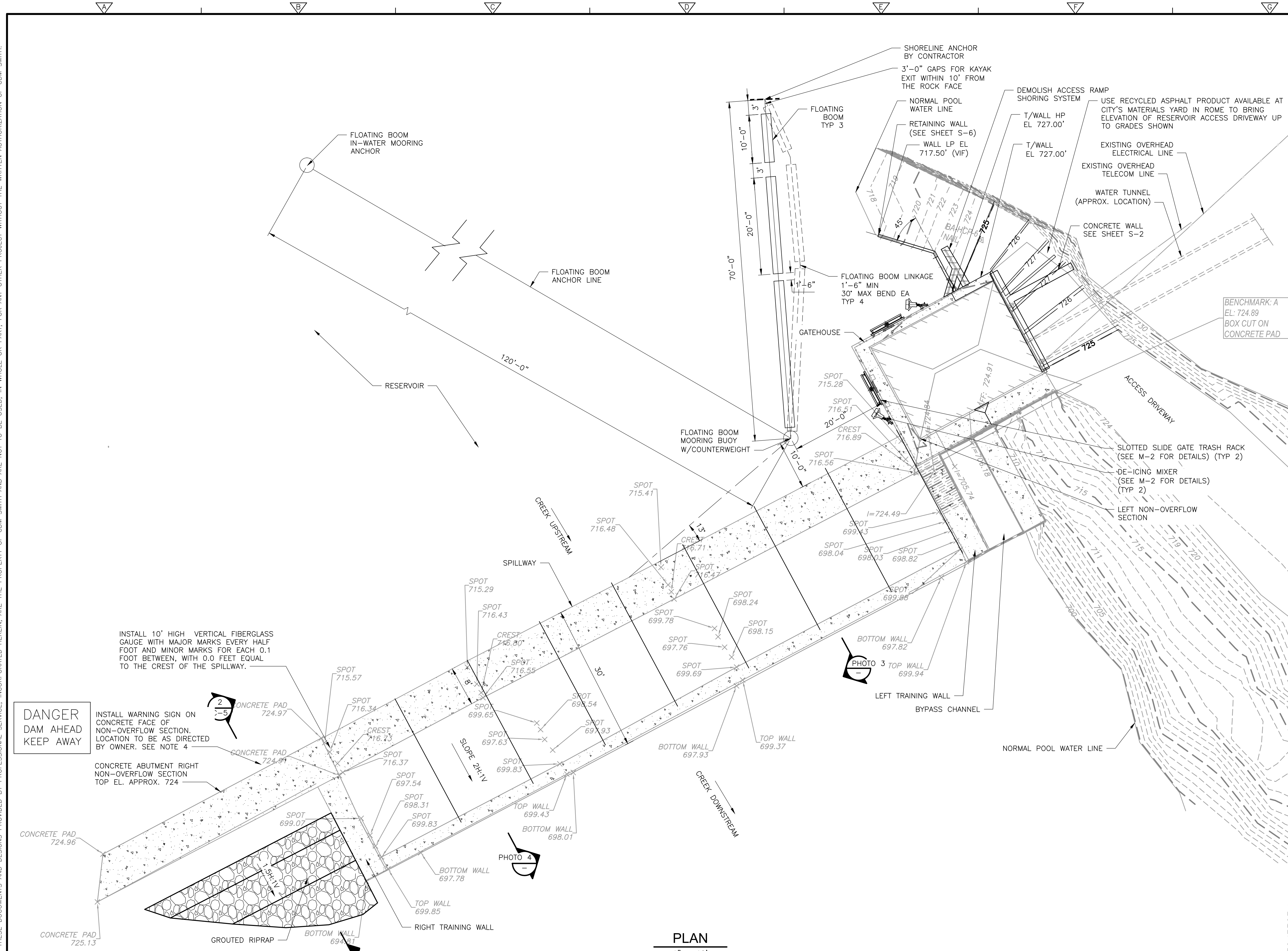


CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

EXISTING CONDITIONS - SITE SURVEY

PROJECT NO. 21984-265075
 FILE NAME: C002RVPL.DWG
 SHEET NO. 5 OF 34
C-2
 ISSUED FOR BID

XREFS: [DWG, SDWBS000, CDMS_2234, CWZ0001L_2D, MWFO01GH] Images: [Photo 1 site, Photo 2 gatehouse, Photo 3 - right non overflow section, Photo 4 site]
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NOTES:
 1. SEE SECTION 355100 FOR DELEGATED DESIGN OF ICE BOOM.
 2. SEE S-6 FOR ICE BOOM ANCHORAGE DETAILS.
 3. PHOTOS TAKEN AUGUST 3, 2022.
 4. INSTALL 4 FT HIGH X 6 FT WIDE WARNING SIGN. SIGN SHALL STATE "DANGER DAM AHEAD, KEEP AWAY" TEXT HEIGHT SHALL BE 10 INCHES MIN. FOR THE WORD "DANGER" AND 7 INCHES MIN. FOR THE OTHER WORDS. TEXT SHALL BE WHITE FONT ON RED BACKGROUND. SIGN SHALL BE CONSTRUCTED OF 0.08 INCH ALUMINUM WITH MULTIPLE LAYERED RETROREFLECTIVE GRAPHIC DECALS.



PHOTO 1 - SITE

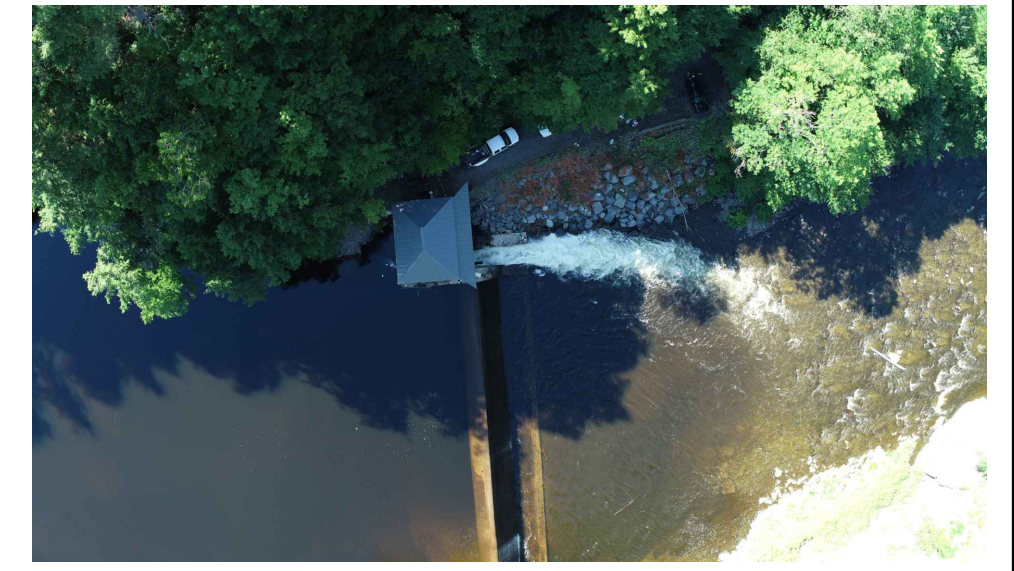


PHOTO 2 - GATEHOUSE AND SPILLWAY



PHOTO 3 - SPILLWAY AND RIGHT NON-OVERFLOW SECTION



PHOTO 4 - RIGHT TRAINING WALL AND DOWNSTREAM FACE OF SPILLWAY

PLAN
 1" = 10'

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: N. VIGNEAULT
 DRAWN BY: S. DHANGAR
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 DATE: FEBRUARY 2025

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 Syracuse, NY 13206
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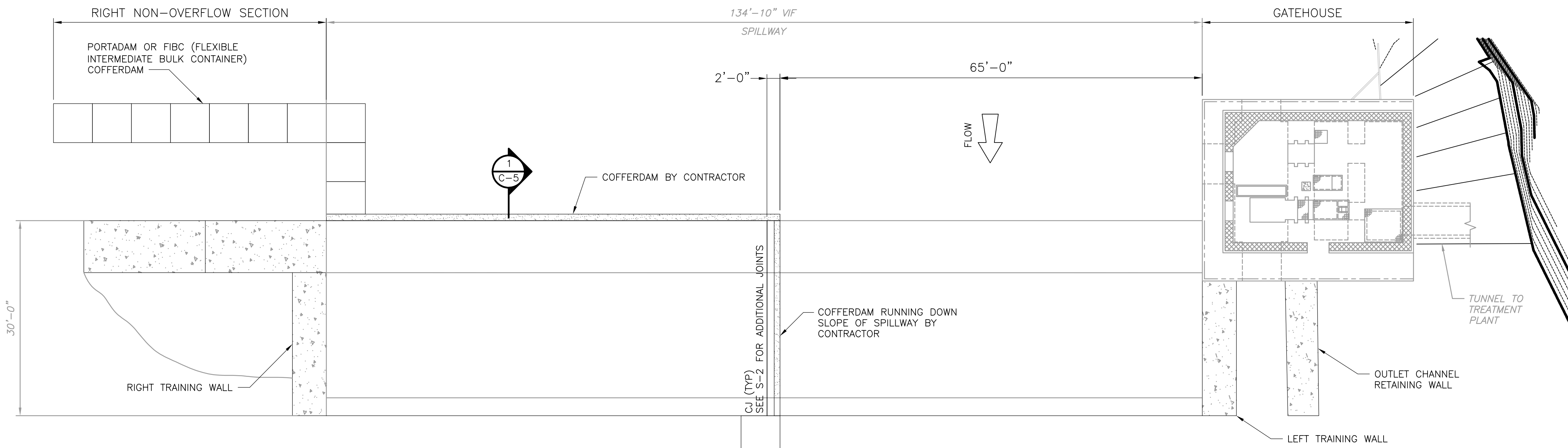
CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

PROPOSED SITE PLAN
 PROJECT NO. 21984-265075
 FILE NAME: CO03RVPL.DWG
 SHEET NO. 6 OF 34
C-3
 ISSUED FOR BID

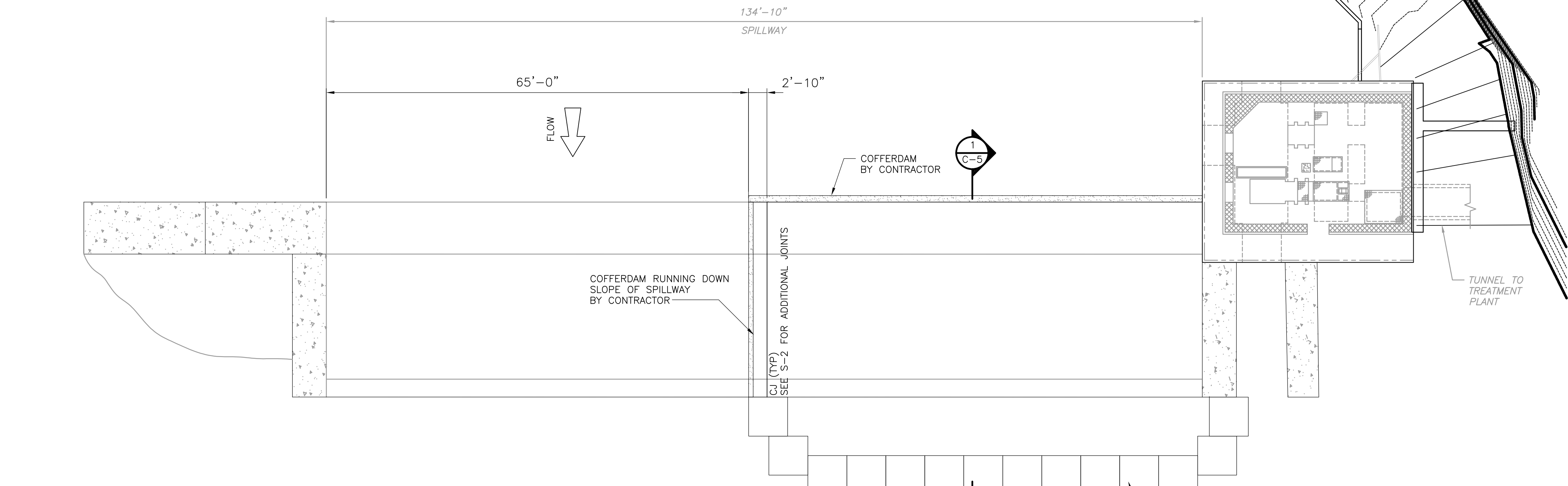
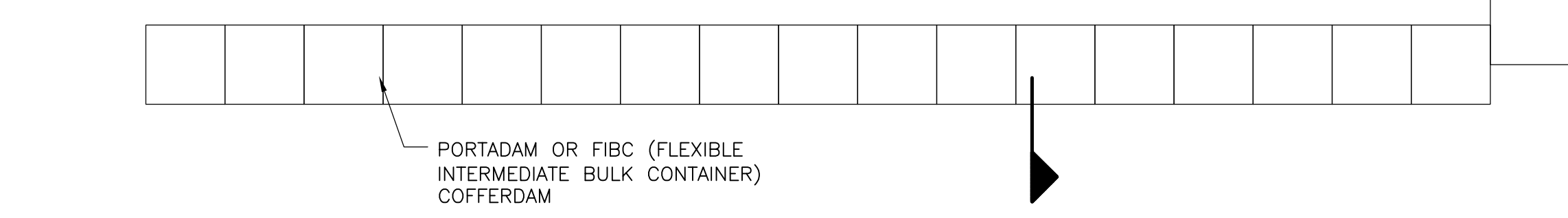
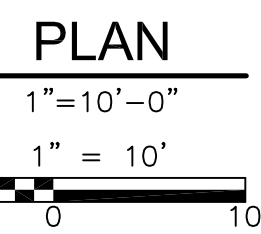


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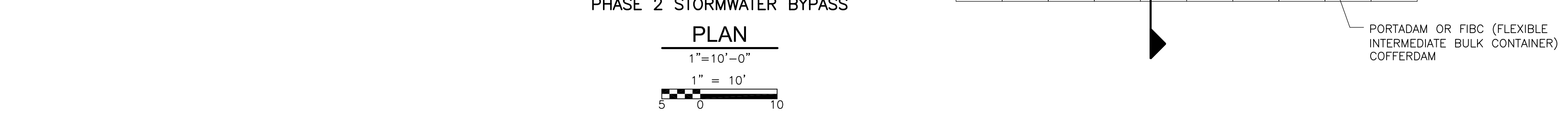
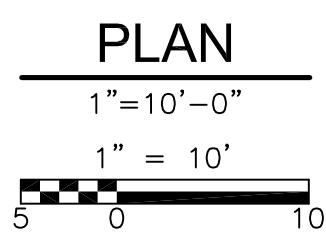
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PHASE 1 STORMWATER BYPASS



PHASE 2 STORMWATER BYPASS



- CREEK FLOW BYPASS SEQUENCE:**
1. THE FOLLOWING CREEK FLOW BYPASS PLAN WAS DEVELOPED TO SHOW A LOGICAL SEQUENCE OF CONSTRUCTION AND IS CONSISTENT WITH THE APPROVED PERMIT. IF ALTERNATE CREEK FLOW BYPASS PLANS ARE PROPOSED BY THE CONTRACTOR, CONTRACTOR WILL BE RESPONSIBLE TO OBTAIN THE REQUIRED PERMIT MODIFICATIONS WITHOUT IMPACTING THE COMPLETION DATE OF THE PROJECT.
 2. THE CREEK FLOW BYPASS PLAN REDUCES THE SPILLWAY CREST LENGTH TO 65-FOOT MINIMUM FOR EACH PHASE OF THE BYPASS ALLOWING WATER TO CONTINUOUSLY FLOW OVER THE NON-BYPASSED PORTION OF THE SPILLWAY DURING THE WORK.
 3. REFER TO SECTION 015725 FOR BYPASS STORMWATER FLOW CHARACTERISTICS.
 4. SEE S-7 FOR PHASE 3 CREEK FLOW BYPASS OF THE GATEHOUSE.
 5. CONTRACTOR TO CLEAN SEDIMENT BUILT UP IN ALL DRAINED AREAS WHICH BECOME ACCESSIBLE DURING CONSTRUCTION. ASSUME APPROXIMATELY 50 CY OF MATERIAL WILL REQUIRE REMOVAL AND STOCKPILED AT THE CITY FACILITY AT THE TOP OF THE HILL.
 6. DURING CONSTRUCTION THE CONTRACTOR SHALL PROVIDE OWNER ACCESS TO NEW WATER LEVEL GAUGE ON NORTH SIDE OF SPILLWAY AS REQUESTED OR PROVIDE OWNER WITH MEASUREMENT DAILY.

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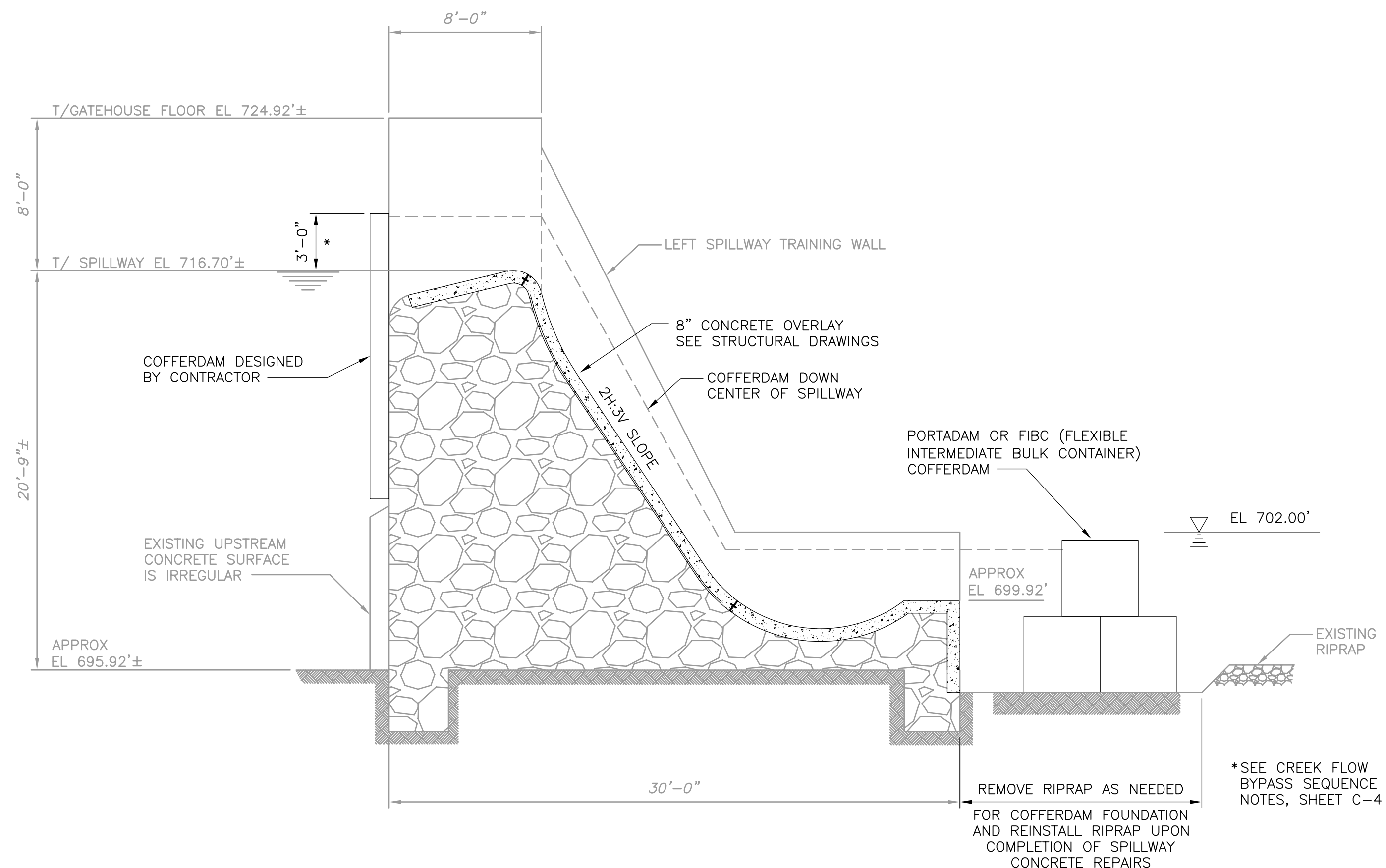
REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: M. CALVINO
 DRAWN BY: STAFF
 SHEET CHK'D BY: M. CALVINO
 CROSS CHK'D BY: N. VIGNEAULT
 APPROVED BY: N. VIGNEAULT
 DATE: FEBRUARY 2025

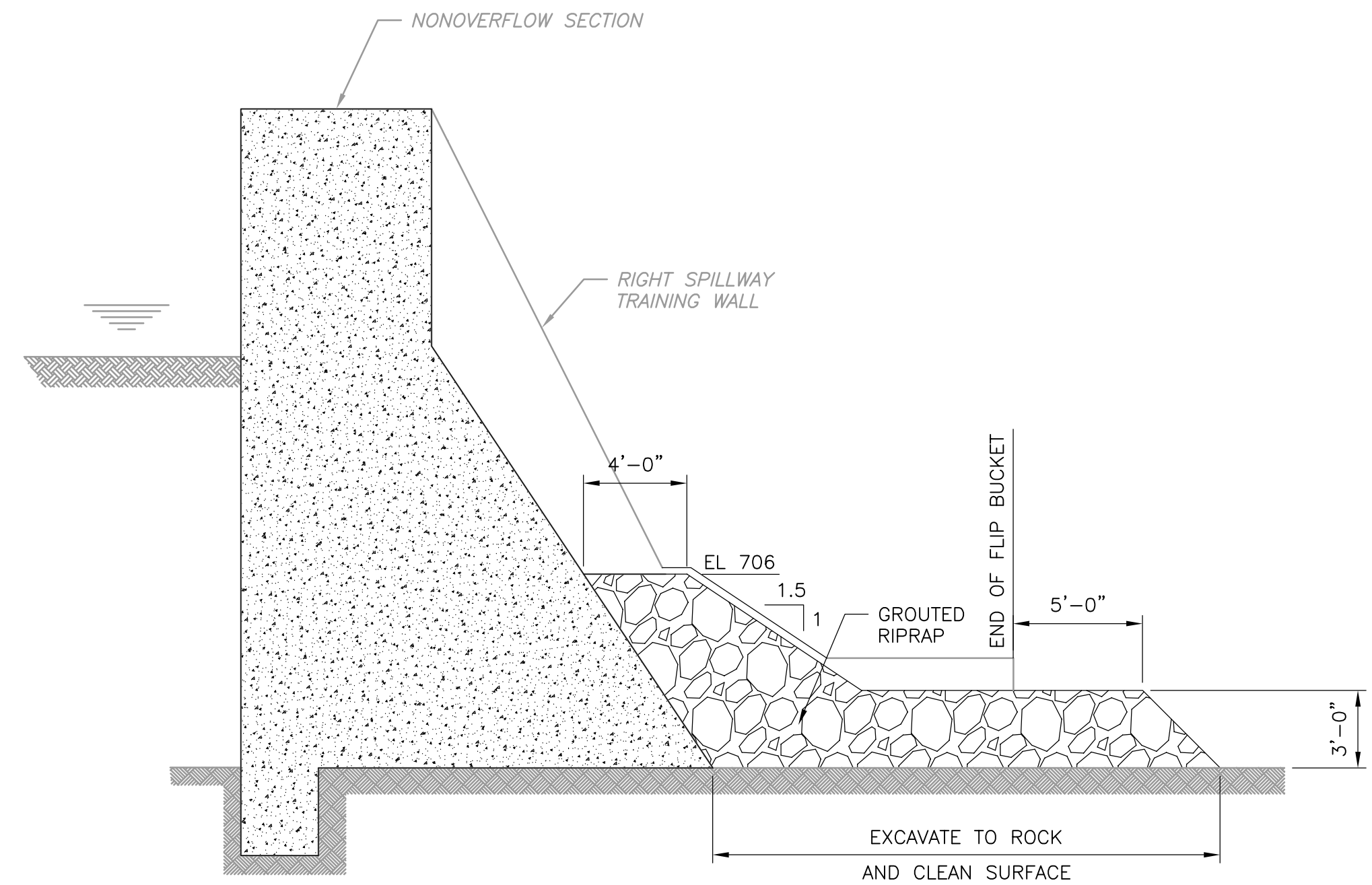
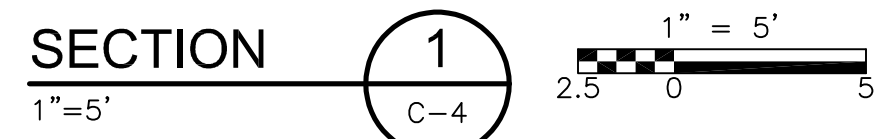
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CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

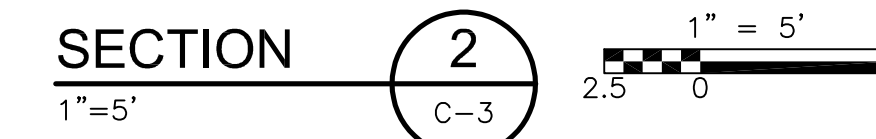
DIVERSION PLANS
 PROJECT NO. 21984-265075
 FILE NAME: C004DMPL.DWG
 SHEET NO. 7 OF 34
C-4



COFFERDAM AT SPILLWAY



GROUDED RIPRAP AT NON-OVERFLOW SECTION



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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: M. CALVINO
 DRAWN BY: STAFF
 SHEET CHK'D BY: M. CALVINO
 CROSS CHK'D BY: N. VIGNEAULT
 APPROVED BY: N. VIGNEAULT
 DATE: FEBRUARY 2025

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CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

DIVERSION SECTIONS
 SHEET NO. 8 OF 34
C-5



WARNING
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PROJECT NO. 21984-265075
 FILE NAME: C005DMSC.DWG
 SHEET NO. 8 OF 34
C-5

GENERAL NOTES

DESIGN CRITERIA:

- CODES:
- 2020 BUILDING CODE OF NEW YORK STATE
 - ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
 - AISC MANUAL OF STEEL CONSTRUCTION, FIFTEENTH EDITION

GENERAL CONDITIONS:

- ALL STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE MECHANICAL, CIVIL, ELECTRICAL AND SHOP DRAWINGS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL REVIEW AND VERIFY DIMENSIONS SHOWN IN ALL PLANS AND REVIEW ALL FIELD CONDITIONS THAT MAY AFFECT THE INSTALLATION OF THE FACILITY. SHOULD DISCREPANCIES APPEAR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING TO OBTAIN ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH THE WORK.
- FOR ALL ITEMS EMBEDDED IN OR PASSED THROUGH CONCRETE, THE CONTRACTOR SHALL INITIALLY REFER TO MECHANICAL DRAWINGS FOR TYPE, SIZE, LOCATION AND SPECIAL INSTALLATION REQUIREMENTS FOR THESE ITEMS.
- THE CONTRACTOR SHALL TAKE ANY AND ALL NECESSARY MEASURES TO PROTECT EXISTING STRUCTURES FROM DAMAGE WHEN WORKING IN AND AROUND EXISTING STRUCTURES PERFORMING WORK SUCH AS DEMOLITION, FOUNDATION EXCAVATION AND OTHERS.
- ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT, EXCEPT WHERE A DIFFERENT DETAIL IS SHOWN.
- STANDARD DETAILS APPLY TO ALL SIMILAR SITUATIONS ON THE PROJECT, EXCEPT WHERE A DIFFERENT DETAIL IS SHOWN AND UNLESS OTHERWISE NOTED.
- REFER TO SD-3 FOR STRUCTURAL SPECIAL INSPECTION REQUIREMENTS.
- SEE CIVIL SHEETS FOR SITE ELEVATIONS, SIDEWALKS, ROAD PAVING AND LANDSCAPING.
- DO NOT SCALE FROM THE DRAWINGS.
- NOTIFY ENGINEER IF CONSTRUCTION DOCUMENTS DIFFER FROM ACTUAL FIELD CONDITIONS PRIOR TO ANY DEMOLITION, FABRICATION OR NEW CONSTRUCTION.
- THIS DRAWING CONTAINS A GENERAL LIST OF SYMBOLS AND ABBREVIATIONS. NOT ALL ITEMS SHOWN HERE APPEAR ON THE CONTRACT DRAWINGS.

CONCRETE:

- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 318 REQUIREMENTS.
- CONCRETE 28-DAY STRENGTH:
 - CONCRETE FILL 2500 PSI
 - STRUCTURAL FILL 4500 PSI
- ALL CONCRETE SHALL BE AIR-ENTRAINED.
- WATER REDUCING AGENT SHALL BE IN ACCORDANCE WITH ASTM C494.
- ALL CONCRETE SURFACES EXPOSED TO AIR, UNLESS OTHERWISE NOTED IN SPECIFICATIONS, SHALL BE TREATED WITH AN APPROPRIATE CURING COMPOUND AS SOON AS CEMENT FINISHING IS COMPLETED OR FORMS ARE REMOVED.
- ALL EXPOSED CORNERS OF CONCRETE SHALL HAVE A MINIMUM CHAMFER OF 3/4" UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL OBTAIN ENGINEER'S APPROVAL FOR THE LOCATION OF CONSTRUCTION JOINTS THAT ARE NOT SHOWN ON THE DRAWING.

REINFORCING STEEL:

- REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60 REQUIREMENTS.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064 REQUIREMENTS.
- ALL ACCESSORIES SHALL BE IN CONFORMANCE WITH ACI 315 REQUIREMENTS.
- REINFORCING STEEL SHALL HAVE THE FOLLOWING CLEAR COVER UNLESS OTHERWISE NOTED:
 - CONCRETE CAST AGAINST EARTH 3"
 - FORMED SURFACES IN CONTACT WITH SOIL, SEWAGE, WATER OR EXPOSED TO WEATHER 2"
 - FORMED SURFACES NOT EXPOSED TO WEATHER OR IN CONTACT WITH SOIL:
 - SLABS, WALLS AND JOISTS 3/4"
 - BEAMS AND COLUMNS 1-1/2"
- LAP SPLICES SHALL BE AS SHOWN ON THE DRAWINGS. FOR LAP SPLICES NOT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL OBTAIN ENGINEER'S APPROVAL.
- THE CONTRACTOR SHALL PREPARE PLACING DRAWINGS AND SCHEDULES IN CONFORMANCE WITH ACI 315 REQUIREMENTS.

CONCRETE CRACK REPAIR:

- CRACKS ON HORIZONTAL SURFACES SHALL BE REPAIRED BY GRAVITY FEEDING CRACK SEALANT INTO CRACKS PER MANUFACTURER'S RECOMMENDATIONS. IF CRACKS ARE LESS THAN 1/8" IN THICKNESS THEY SHALL BE PRESSURE INJECTED.
- CRACKS ON VERTICAL SURFACES SHALL BE REPAIRED BY PRESSURE INJECTING CRACK SEALANT THROUGH VALVES SEALED TO SURFACE WITH CRACK REPAIR EPOXY ADHESIVE PER MANUFACTURER'S RECOMMENDATIONS.

MODIFICATION AND REPAIR TO EXISTING CONCRETE NOTES:

- SEE SPECIFICATION SECTION 030130.71 FOR EXPLANATION OF CONCRETE REMOVAL METHODS, CONNECTION METHODS AND MATERIALS USED.
- SEE SECTION 030100.61 FOR CONCRETE REPAIR MATERIALS AND INSTALLATION METHODS.
- AT LIMITS OF CONCRETE REMOVAL WHERE SURFACE WILL REMAIN EXPOSED MAKE SURFACE SMOOTH BY SAW CUTTING OR GRINDING. COAT ENTIRE SURFACE WITH COATING TO PROTECT EXPOSED REBAR.
- IF CONCRETE IS REMOVED BEYOND LIMITS, REBUILD TO DESIRED LIMITS WITH REPAIR MORTAR AND FINISH SMOOTH. COAT SURFACE WITH PROTECTIVE COATING WHERE THERE IS LESS THAN 2" OF COVER OVER REBAR.
- CONNECTION METHODS ARE DEFINED IN SPECIFICATION SECTION 030130.71
 - METHOD A - CEMENT SLURRY BOND
 - METHOD B - ADHESIVE BOND
 - METHOD C - EMBEDDED DOWELS (EMBED REBAR 10 DIAMETERS AND SMOOTH BAR 15 DIAMETERS, UNO)
 - METHOD D - COMBINATION OF METHODS B AND C

ROCK DOWEL MATERIALS:

- CEMENT GROUT SHALL CONFORM TO ASTM C1107. MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI.
- GROUTED ROCK DOWEL ALL THREADED REINFORCING BAR SHALL CONFORM TO ASTM A615. MINIMUM YIELD STRENGTH OF 60 KSI.

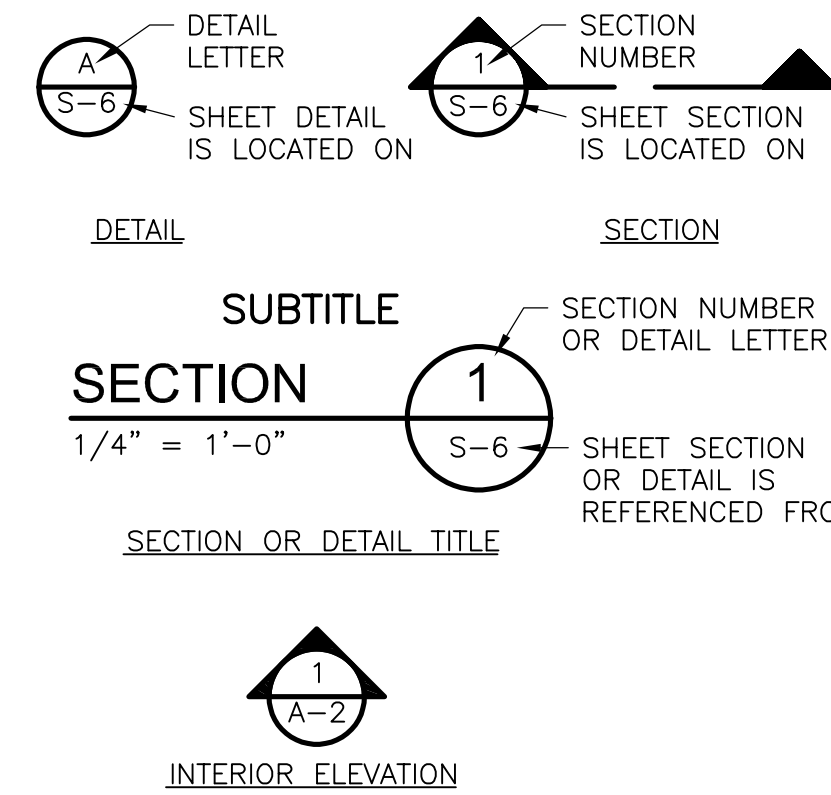
GROUTED ROCK DOWEL TEST:

- ONE VERIFICATION TEST SHALL BE PERFORMED ON IN THE AREA OF THE UPSTREAM RETAINING WALL ON A NON-PRODUCTION SACRIFICIAL DOWEL A MINIMUM OF TWO (2) DAYS FOLLOWING INSTALLATION (OR WHEN TESTS INDICATED GROUT STRENGTH EXCEEDS 2000 PSI).
- TEST SHALL BE PERFORMED IN THE PRESENCE OF CONTRACTING OFFICER OR HIS OR HER REPRESENTATIVE.
- VERIFICATION TEST SHALL BE PERFORMED BY TENSIONING TEST DOWEL TO MINIMUM 200% OF DESIGN TEST LOADS (DTL) USING A CALIBRATED HYDRAULIC JACKING SYSTEM WITH LOAD INCREMENTS OF 0.05, 0.25, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, AND 2.0 TIMES DTL OF GROUTED DOWELS.
- EACH LOAD SHALL BE HELD WITHIN 5% OF THE TEST LOAD FOR TEN (10) MINUTES, OR UNTIL THREE SUCCESSIVE READINGS ARE IDENTICAL, EXCEPT AT 1.5 x DTL AT WHICH A 10 MINUTE CREEP TEST WILL BE PERFORMED.
- DOWEL ELONGATION SHALL BE MEASURED WITH A DIAL GAGE CAPABLE OF MEASURING 0.001 INCH INCREMENTS AND RECORDED AT PERIODS OF 0.5, 1, 2, 3, 5, 6 AND 10 MINUTES AFTER APPLICATION OF THE TEST LOAD AND ALSO AT 20, 30, 50, AND 60 MINUTES DURING CREEP TEST, IF THE 1 MINUTE TO 10 MINUTE DISPLACEMENT IS GREATER THAN OR EQUAL TO 0.04 INCH.
- TEST RESULTS SHALL BE DELIVERED TO THE CONTRACTING OFFICER AT THE END OF THE DAY IN WHICH ANY TEST IS PERFORMED. THE TEST OF THE DOWEL SHALL BE CONSIDERED ACCEPTABLE IF MOVEMENT OF THE DOWEL AT 1.5 x THE DESIGN LOAD IS LESS THAN 0.04 INCHES BETWEEN THE 1 AND 10 MINUTE READINGS (OR LESS THAN 0.08 INCHES BETWEEN 6 AND 60 MINUTE READING).

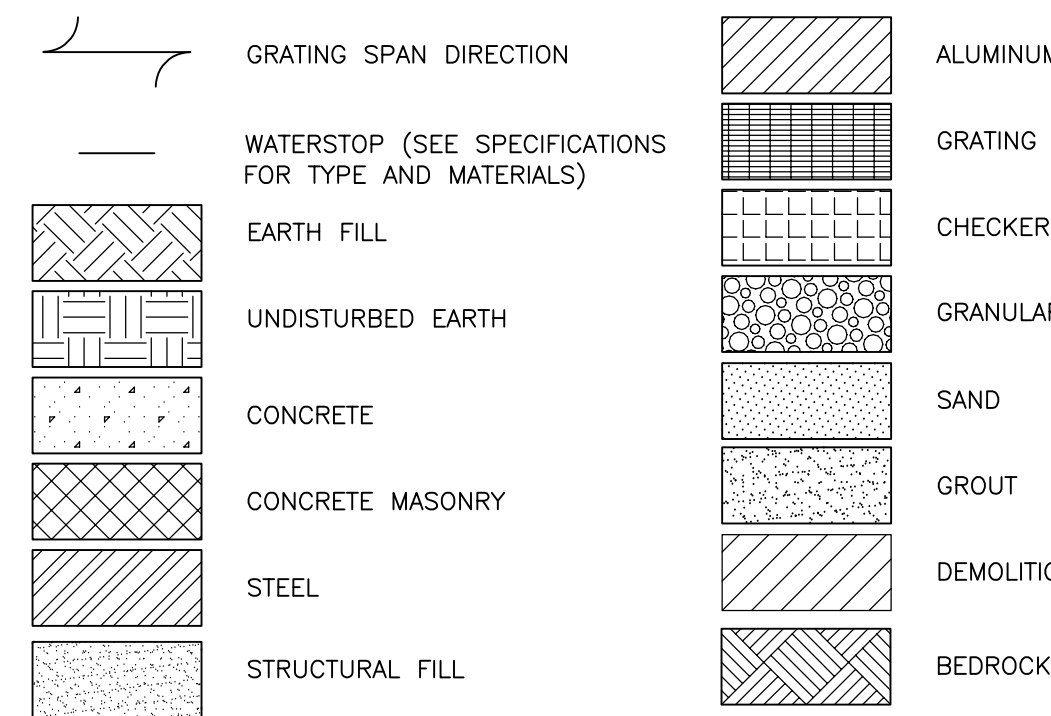
MASONRY RESTORATION NOTES:

- MASONRY REPOINTING WORK SHALL CONFORM TO SPECIFICATION 040120.64 MASONRY REPOINTING.
- PAINTING OF EXISTING MASONRY SHALL CONFORM TO SPECIFICATION 099679, ATMOSPHERIC PROTECTION AND PLANT SERVICE AREAS COATINGS.
- THE CONTRACTOR IS TO INSPECT THE EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF MASONRY RESTORATION WORK AND CONFIRM QUANTITIES INDICATED ON THE BID FORM ARE ACCURATE. THE CONTRACTOR IS TO VERIFY ALL QUANTITIES OF THE RESTORATION WORK AND SUBMIT THEM TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO BEGINNING OF WORK.
- NOTIFY ENGINEER OF UNFORESEEN DETRIMENTAL CONDITIONS INCLUDING VOIDS, CRACKS, BULGES, AND LOOSE UNITS IN EXISTING MASONRY AND ANY OTHER DETERIORATED ITEMS WHICH ARE UNCOVERED DURING THE WORK.
- REPOINT EXISTING MASONRY TO REPAIR ALL CRACKS IN MASONRY AND MORTAR JOINTS AS SPECIFIED.

LEGEND



LEGEND & SYMBOLS



STRUCTURAL STEEL:

- DESIGN, FABRICATION, ERECTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST AISC SPECIFICATIONS AND DESIGN DRAWINGS.
- ALL STRUCTURAL STEEL:
 - CHANNELS AND ANGLES ASTM A36
 - HSS (SQUARE, RECTANGULAR AND ROUND) ASTM A500
 - PLATES ASTM A36
 - HIGH-STRENGTH BOLTS ASTM A3125, GR A325
 - NUTS ASTM A563
 - HARDENED STEEL WASHER ASTM F436
 - ANCHOR RODS ASTM F1554, GR 36
 - THREADED RODS ASTM A36
- ALL PIPE: ASTM A53, GRADE B.

STRUCTURAL ALUMINUM:

- DESIGN, FABRICATION, ERECTION MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST "ALUMINUM DESIGN MANUAL" (ADM) SPECIFICATIONS AND DESIGN DRAWINGS.
- ALL STRUCTURAL ALUMINUM:
 - ALUMINUM EXTRUDED SHAPE ASTM B221, ALLOY 6061-T6
 - ALUMINUM SHEET AND PLATE ASTM B209, ALLOY 6061-T6
- SHOP AND ERECTION DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.
- WELDED CONNECTIONS SHALL BE IN ACCORDANCE WITH THE LATEST AWS D1.2/D1.2M "STRUCTURAL WELDING CODE - ALUMINUM".
- WHERE ALUMINUM CONTACTS A DISSIMILAR METAL, APPLY TO THE DISSIMILAR METAL A HEAVY BRUSH COAT OF ZINC-CHROMATE PRIMER FOLLOWED BY TWO COATS OF BITUMASTIC OR EPOXY PAINT.
- WHERE ALUMINUM CONTACTS MASONRY OR CONCRETE, APPLY A HEAVY COAT OF BITUMASTIC OR EPOXY PAINT.

ABBREVIATIONS	ABBREVIATIONS	ABBREVIATIONS
Ø DIAMETER	INT INTERIOR	INV INVERT
# NUMBER	JOINT JOINT	KT KNOCKOUT
& AND	LG LENGTH	LLH LONG LEG HORIZONTAL
⊕ AT	LLV LONG LEG VERTICAL	LNTL LINTEL
AB ANCHOR BOLT	LOC LOCATION/LOCATED	LONG. LONGITUDINAL
ABV ABOVE	LONG. LONGITUDINAL	LP LOW POINT
ADDL ADDITIONAL	LT LEFT	LW LIGHTWEIGHT
AL ALUMINUM	MAS MASONRY	MAX MAXIMUM
ALT ALTERNATE (ING)	MCJ MASONRY CONTROL JOINT	MB MACHINE BOLTS
APPROX APPROXIMATELY	MIN MINIMUM	MO MASONRY OPENING
B TO B BACK TO BACK	NF NEAR FACE	NSG NON-SHRINK GROUT
BEV BEVEL (ED)	OC ON CENTER	OD OUTSIDE DIAMETER
BLK BLOCKING	OF OUTSIDE FACE	OH OVERHANG
BOT BOTTOM	OPNG OPENING	OPF OPPOSITE
BRG BEARING	OPT OPTIONAL	PCJ PARTIAL CONTRACTION JOINT
CIRC CIRCUMFERENTIAL	PJF PREMOLDED JOINT FILLER	PLCS PLACES
CJ CONSTRUCTION JOINT	PLYWD PLYWOOD	PREFAB PREFABRICATED
CL CENTERLINE	PROJ PROJECTION	PROJ PROJECTION
CLJ CONTROL JOINT	PVMT PAVEMENT	R RISER(S)
CLR CLEAR	RAD RADIUS	RC REINFORCED CONCRETE
CMU CONCRETE MASONRY UNITS	REF REFERENCE/REFER	REINFORCE (D, ING)
COL COLUMN	REQD REQUIRED	REV REVISION
CONC CONCRETE	RLG RAILING	RO ROUGH OPENING
CONN CONNECTION	RT RIGHT	SCHD SCHEDULE
CONT CONTINUOUS	SCHD SCHEDULE	SCJ SLAB CONTROL JOINT
CPLG COUPLING	SECT SECTION	SECT SECTION
CRS COURSE (S)	SQ SQUARE FOOT	SIM SIMILAR
CSK COUNTERSINK	SP SPACE (S, ED)	SQ SQUARE
CTR CENTER(ED)	SS STAINLESS STEEL	STD STANDARD
d PENNY	STIF STIFFENER	STIR. STIRRUP (S)
DET DETAIL	SYM SYMMETRICAL	T TREAD(S)
DIA DIAMETER	T TOP OF	T&B TOP AND BOTTOM
DIAG DIAGONAL	TF TOP FACE	TF TOP FACE
DIR DIRECTION	THD THREADED	TOC TOP OF CONCRETE
DL DEAD LOAD	TRNSV TRANSVERSE	TYP TYPICAL
DO, D/S DOWNSTREAM	UNO UNLESS NOTED OTHERWISE	U/S UPSTREAM
DWG(S) DRAWING(S)	VB VAPOR BARRIER	VIF VERIFY IN FIELD
DWL DOWEL	W WIDE	W WITH
EB EXPANSION BOLT	W/O WITHOUT	WP WORKING POINT
EAF EACH FACE	WS WATERSTOP	WWF WELDED WIRE FABRIC
EL ELEVATION		
EQ EQUAL (LY)		
ES EACH SIDE		
EW EACH WAY		
EXT EXISTING		
EXP JT EXPANSION JOINT		
EXT EXTERIOR		
f'c CONCRETE COMPRESSION STRESS		
f'm MASONRY PRISM STRESS		
FAB FABRICATE (OR, ED)		
FDN FOUNDATION		
FE FIRE EXTINGUISHER		
FF FAR FACE		
FHMS FLATHEAD MACHINE SCREW		
FHWS FLATHEAD WOOD SCREW		
FL FLOOR		
FRP FIBERGLASS REINFORCED PLASTIC		
FTG FOOTING		
FV FIELD VERIFY		
GALV GALVANIZED		
GLB GLASS BLOCK		
GR GRADE		
GRTG GRATING		
H HIGH		
HAS. HEADED ANCHOR STUD		
HDR HEADER		
HOR HORIZONTAL		
HP HIGH POINT		
ID INSIDE DIAMETER		
I.E. INVERT ELEVATION		
IF. INSIDE FACE		

NOTE: ABBREVIATIONS SHOWN ON THIS SHEET APPLY ONLY TO THE S-SHEETS

ABBREVIATION NOTES:

- ABBREVIATIONS AND DESIGNATIONS FOR STEEL MEMBERS MAY BE FOUND IN THE CURRENT MANUAL OF STEEL CONSTRUCTION BY AISC.
- ABBREVIATIONS OF TECHNICAL SOCIETIES AND TRADE ASSOCIATIONS MAY BE FOUND IN THE SPECIFICATIONS.
- WELDING SYMBOLS AND ABBREVIATIONS MAY BE FOUND IN AWS 2.4.

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. BOGGS	 Camp Dresser McKee & Smith Salina Industrial Powerpark, One General Motors Drive Syracuse, NY 13206 Tel: (315) 434-3200
DRAWN BY: STAFF	
SHEET CHK'D BY: M. CALVINO	
CROSS CHK'D BY: N. VIGNEAULT	
APPROVED BY: J. ZANOTTI	
DATE: FEBRUARY 2025	

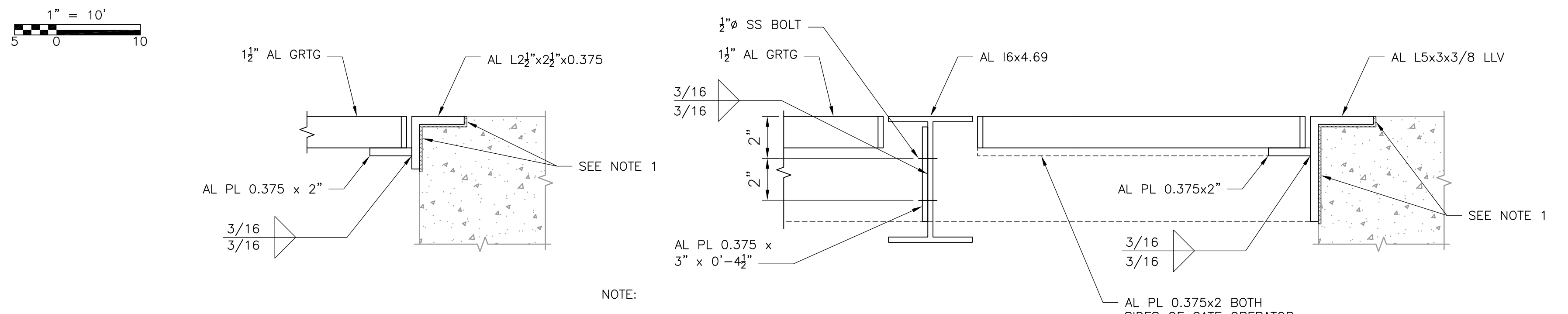
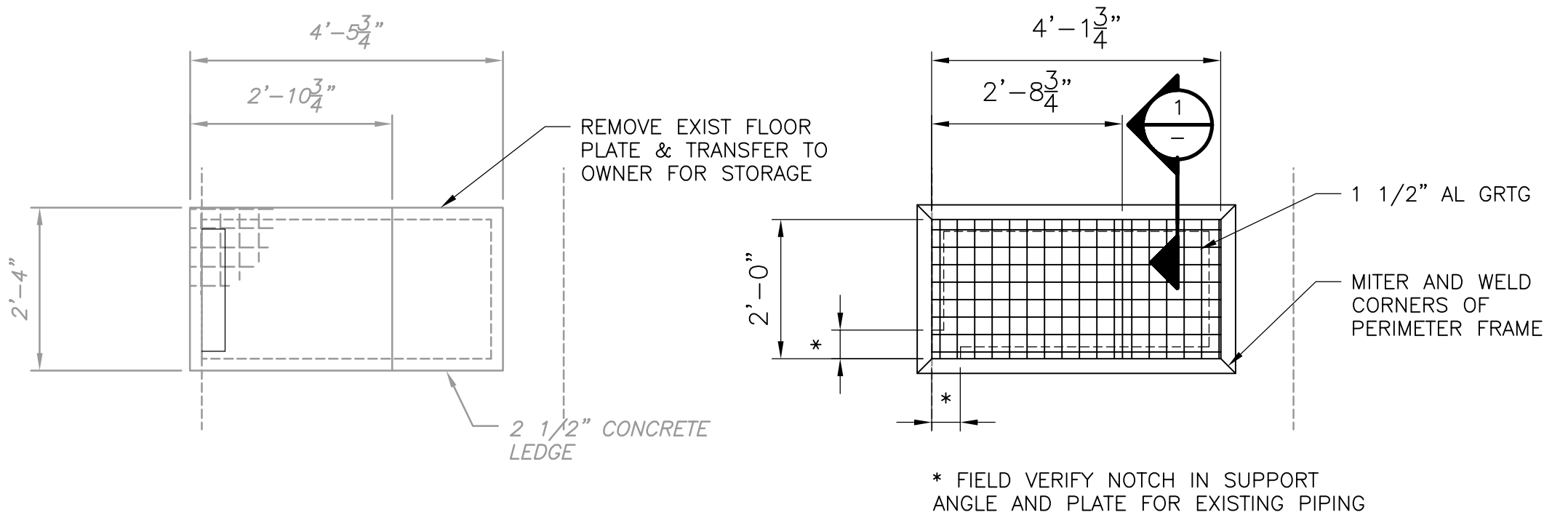
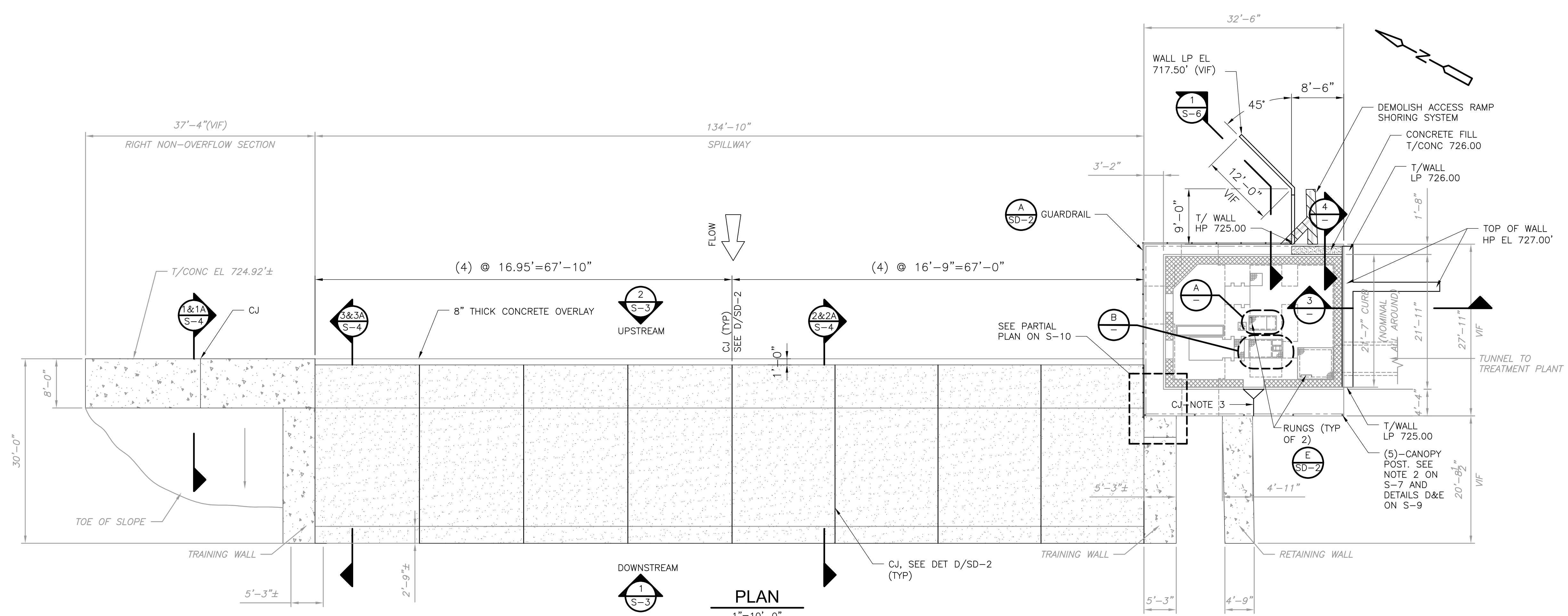
CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

GENERAL NOTES, LEGEND AND ABBREVIATIONS

PROJECT NO. 21984-265075
 FILE NAME: S001STNT.DWG
 SHEET NO. 9 OF 34
S-1

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- NOTES:**
- ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN FIELD AND RECORDED PRIOR TO ANY DEMOLITION OR REPAIR WORK.
 - REMOVE EXISTING STEEL GUARDRAIL AND ALL SUPPORTS.
 - JOINTING PROVIDED AS SHOWN TO ALLOW OWNER TO ACCESS GATEHOUSE WHEN NEEDED. TRIANGULAR SECTION OF SLAB IN FRONT OF DOORWAY TO BE PLACED LAST AND TIME OF PLACEMENT SHALL BE COORDINATED WITH AND APPROVED BY THE OWNER.
 - CITY WILL MAINTAIN POSSESSION OF THE REMOVED FLOOR PLATES AND GRATES.



- NOTE:**
- AL ANGLE TO BE BONDED TO EXISTING CONCRETE WITH SIKADUR-31 HI-MOD GEL. AL ANGLE SHALL BE FLUSH WITH SURROUNDING EXISTING CONCRETE.

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. BOGGS
 DRAWN BY: STAFF
 SHEET CHK'D BY: M. CALVINO
 CROSS CHK'D BY: N. VIGNEAULT
 APPROVED BY: J. ZANOTTI
 DATE: FEBRUARY 2025

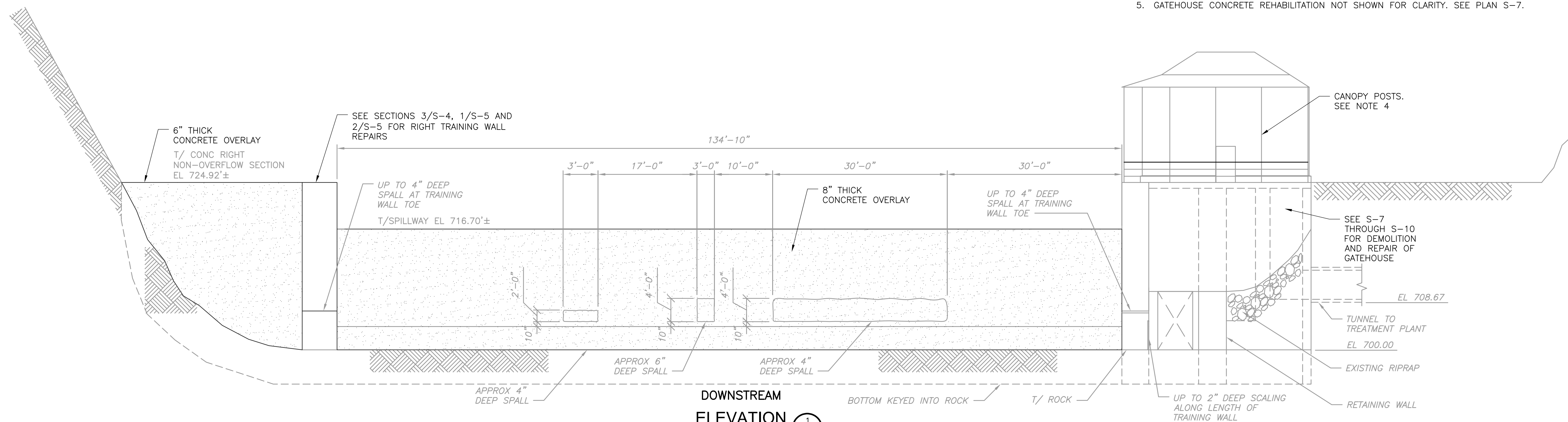
CDM Smith
 Camp Dresser McKee & Smith
 Salina Industrial Powerpark, One General Motors Drive
 Syracuse, NY 13206
 Tel: (315) 434-3200

CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

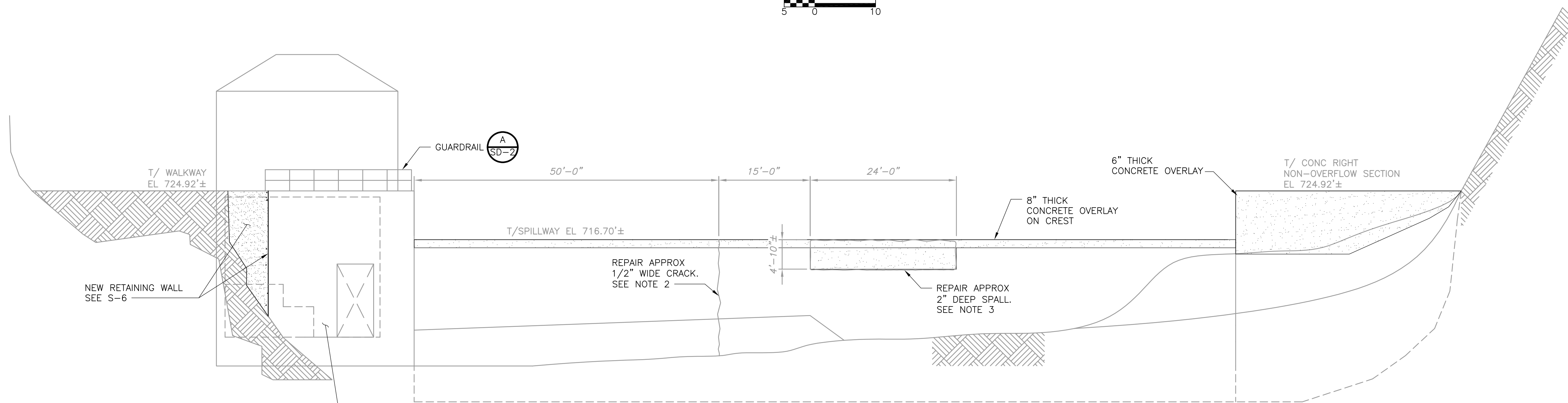
KESSINGER DAM PLAN
 PROJECT NO. 21984-265075
 FILE NAME: S02DMP000.DWG
 SHEET NO. 10 OF 34
S-2
 ISSUED FOR BID

NOTES:

1. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN FIELD AND RECORDED PRIOR TO ANY DEMOLITION OR REPAIR WORK.
2. REPAIR APPROX 1/2" WIDE CRACK WITH EPOXY RESIN GROUT INTENDED FOR UNDERWATER APPLICATION.
3. PERFORM SPALL REPAIR ON UPSTREAM SIDE OF DAM UNDERWATER, INCLUDING UNDERWATER HIGH PRESSURE JETTING FOR CLEANING AND PREPARATION AND USE OF AN UNDERWATER CEMENTITIOUS REPAIR MORTAR. REFER TO SECTION 030100.61.
4. TEMPORARILY SUPPORT CANOPY POSTS DURING CONSTRUCTION REPAIRS.
5. GATEHOUSE CONCRETE REHABILITATION NOT SHOWN FOR CLARITY. SEE PLAN S-7.



DOWNSTREAM
ELEVATION 1
1" = 10'
1" = 10'
5 0 10



UPSTREAM
ELEVATION 2
1" = 10'
1" = 10'
5 0 10

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. BOGGS	<p>Camp Dresser McKee & Smith Saline Industrial Powerpark, One General Motors Drive Syracuse, NY 13206 Tel: (315) 434-3200</p>
DRAWN BY: STAFF	
SHEET CHK'D BY: M. CALVINO	
CROSS CHK'D BY: N. VIGNEAULT	
APPROVED BY: J. ZANOTTI	
DATE: FEBRUARY 2025	

CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

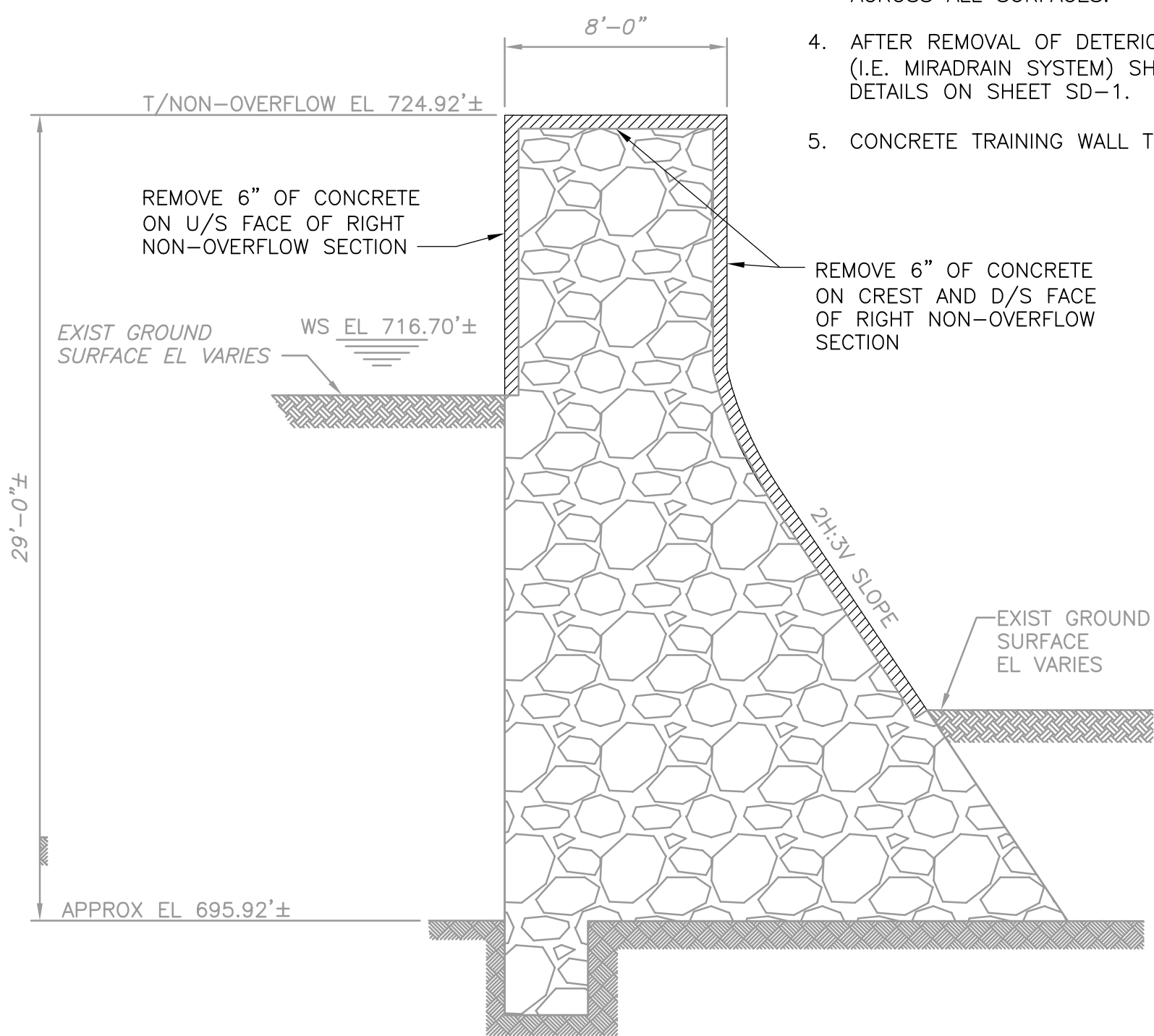
UPSTREAM AND DOWNSTREAM ELEVATIONS

PROJECT NO. 21984-265075
FILE NAME: S003DMEL.DWG
SHEET NO. 11 OF 34
S-3

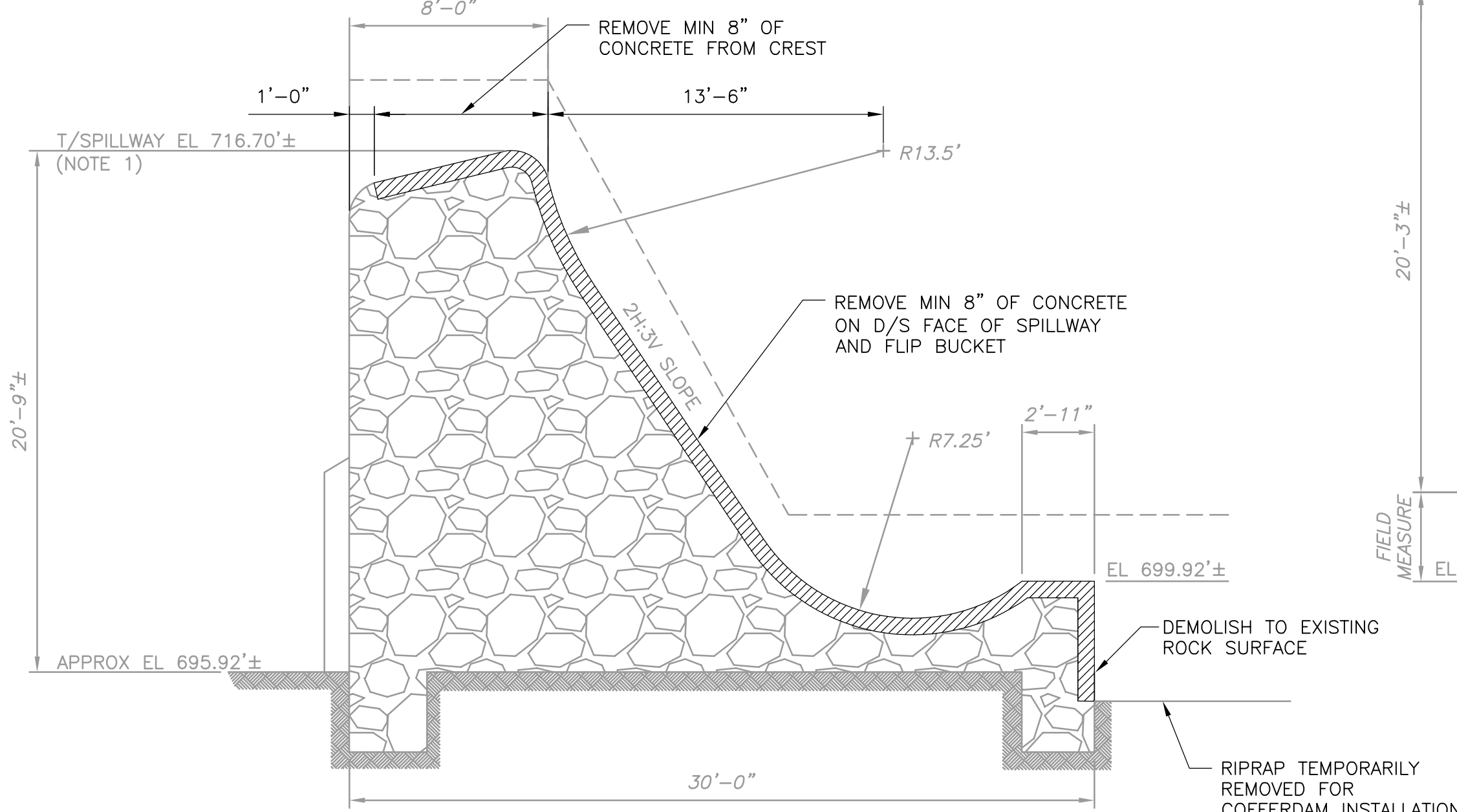
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NOTES:

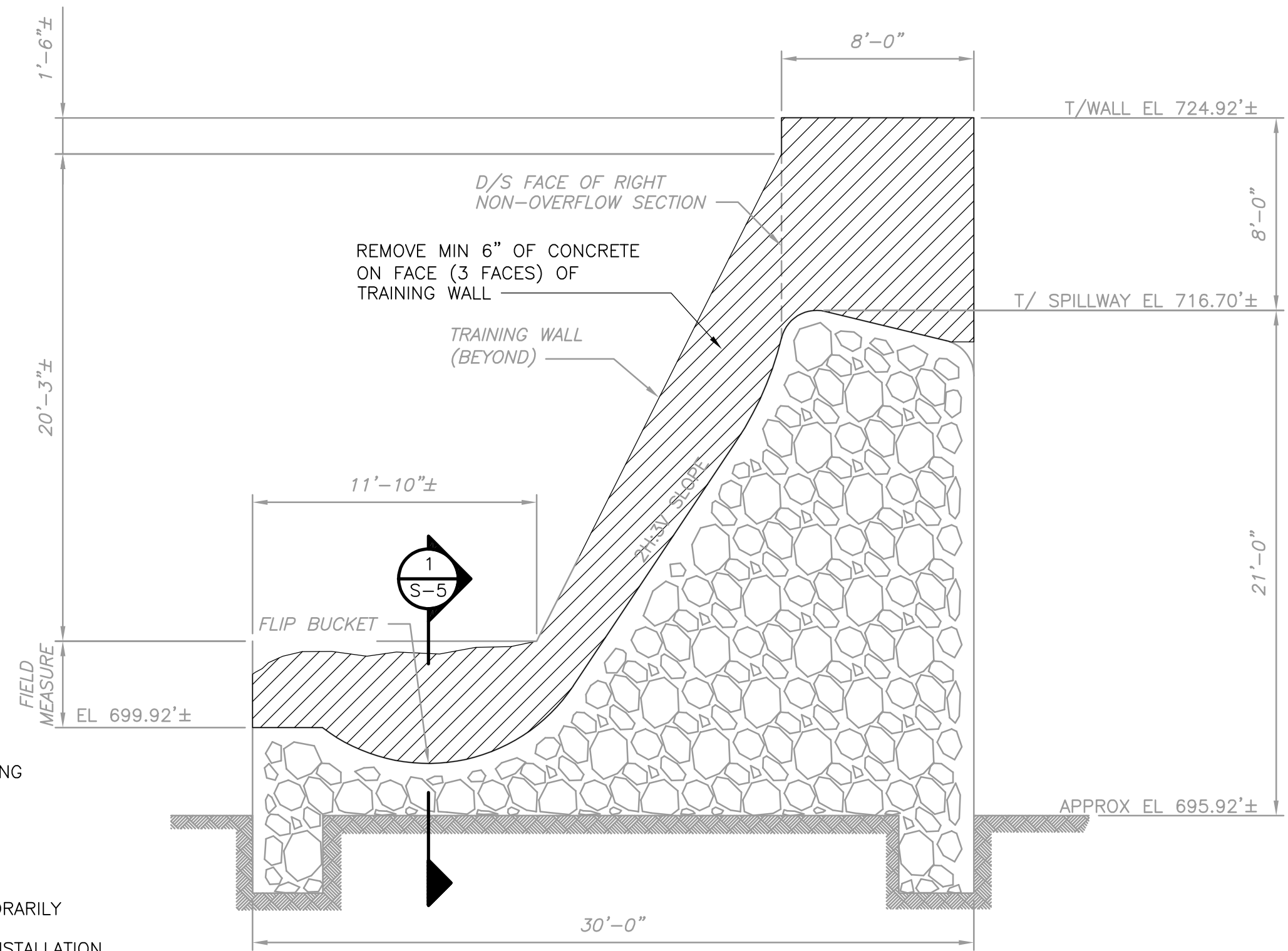
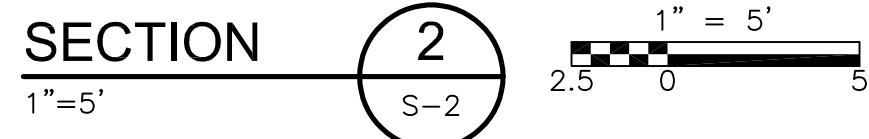
- ELEVATIONS SHOWN ARE APPROXIMATE. REFER TO C-3 FOR EXISTING ELEVATIONS OF SPILLWAY STRUCTURE.
- ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN FIELD AND RECORDED PRIOR TO ANY DEMOLITION OR REPAIR WORK.
- IT IS THE INTENT THAT ALL CONCRETE RESTORATION BRINGS THE CONCRETE SURFACE INTO CONSISTENT ALIGNMENT AND ELEVATION ACROSS ALL SURFACES.
- AFTER REMOVAL OF DETERIORATED CONCRETE, ANY SURFACE IRREGULARITIES WHICH INHIBITS THE INSTALLATION OF DRAINAGE MATERIAL (I.E. MIRADRAIN SYSTEM) SHOULD BE REPAIRED WITH CEMENTITIOUS REPAIR MATERIAL IN ACCORDANCE WITH THE CONCRETE REPAIR DETAILS ON SHEET SD-1.
- CONCRETE TRAINING WALL TO BE EXTENDED 4-INCHES MINIMUM ABOVE GROUTED RIP RAP AS SHOWN ON SECTION 2/C-5.



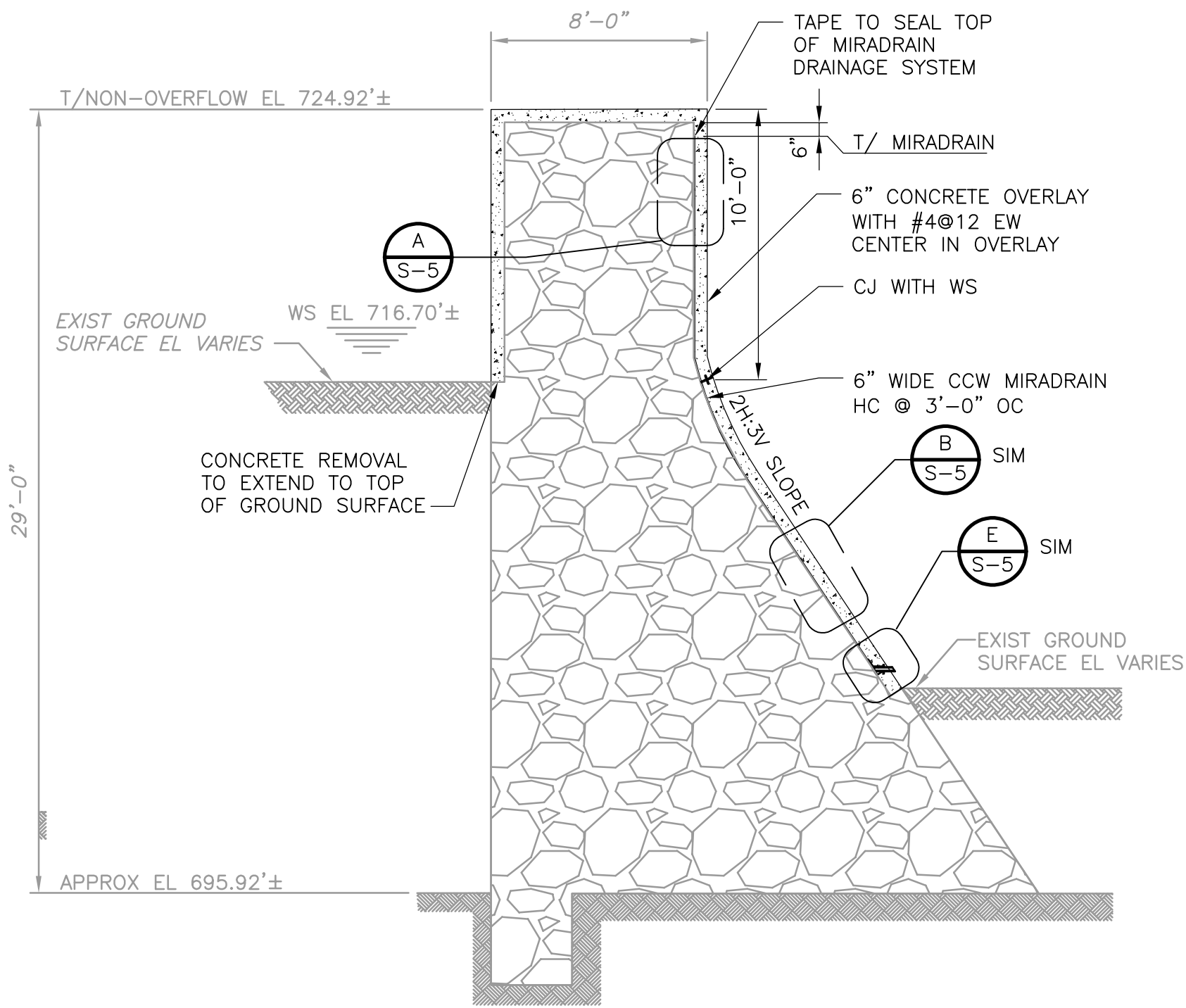
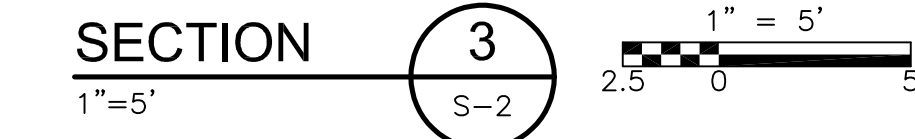
DEMOLITION-RIGHT NON-OVERFLOW SECTION



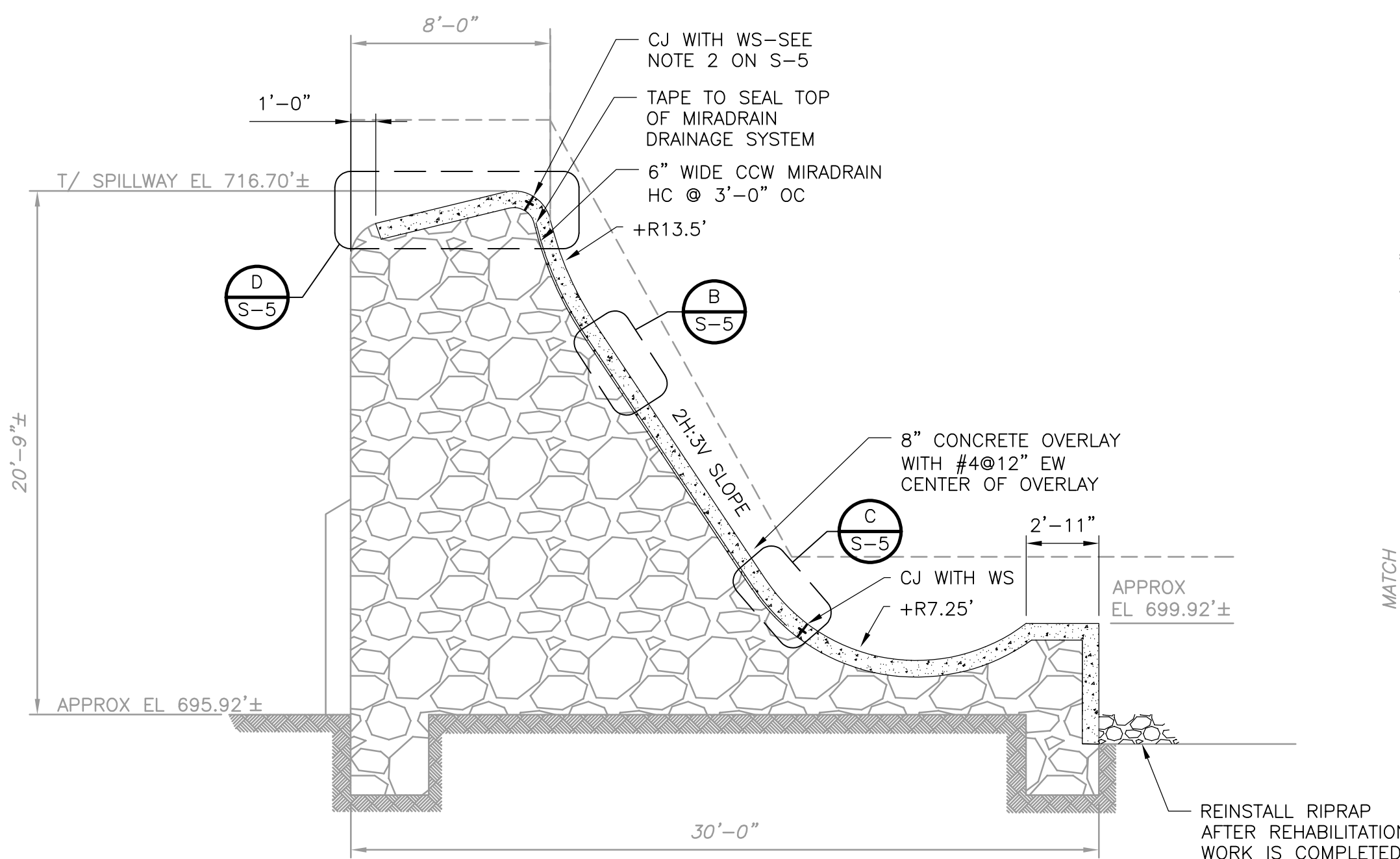
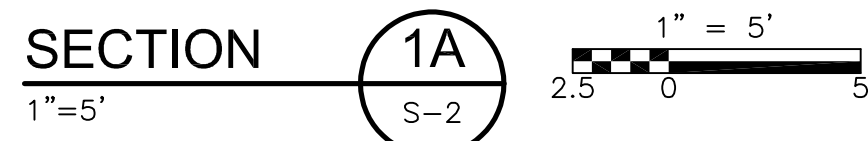
DEMOLITION-SPILLWAY SECTION



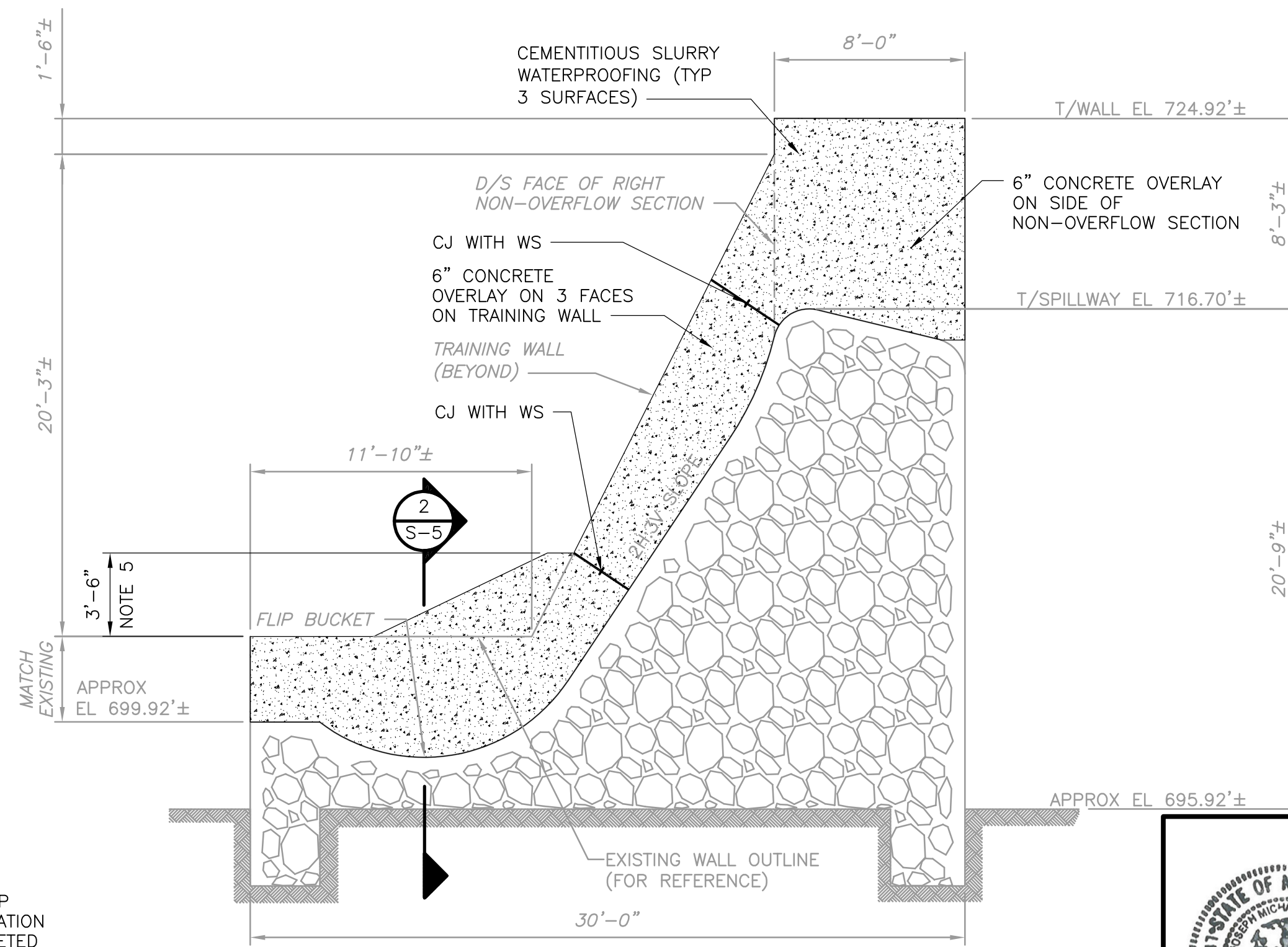
TRAINING WALL ELEVATION SECTION



MODIFICATION-RIGHT NON-OVERFLOW SECTION



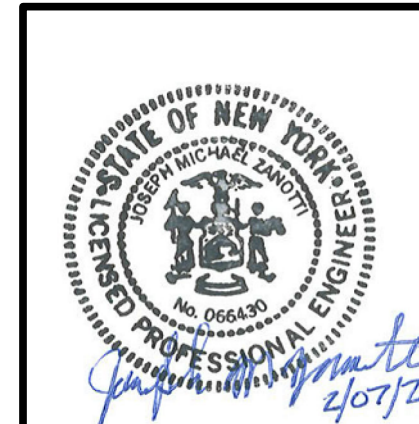
MODIFICATION-SPILLWAY SECTION



TRAINING WALL ELEVATION SECTION



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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. BOGGS
DRAWN BY: STAFF
SHEET CHK'D BY: M. CALVINO
CROSS CHK'D BY: N. VIGNEAULT
APPROVED BY: J. ZANOTTI
DATE: FEBRUARY 2025

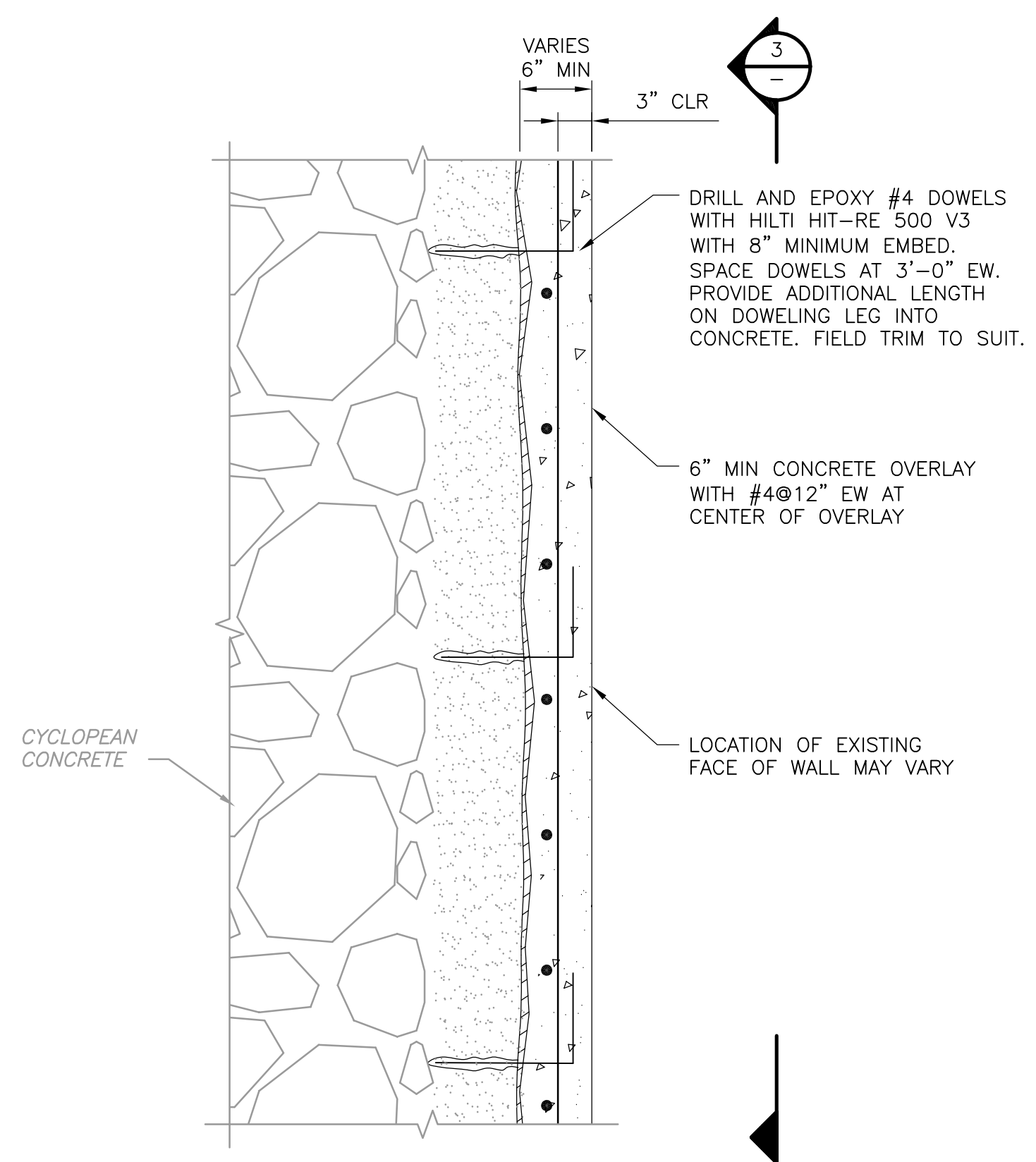
CDM Smith
Camp Dresser McKee & Smith
Salina Industrial Powerpark, One General Motors Drive
Syracuse, NY 13206
Tel: (315) 434-3200

CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

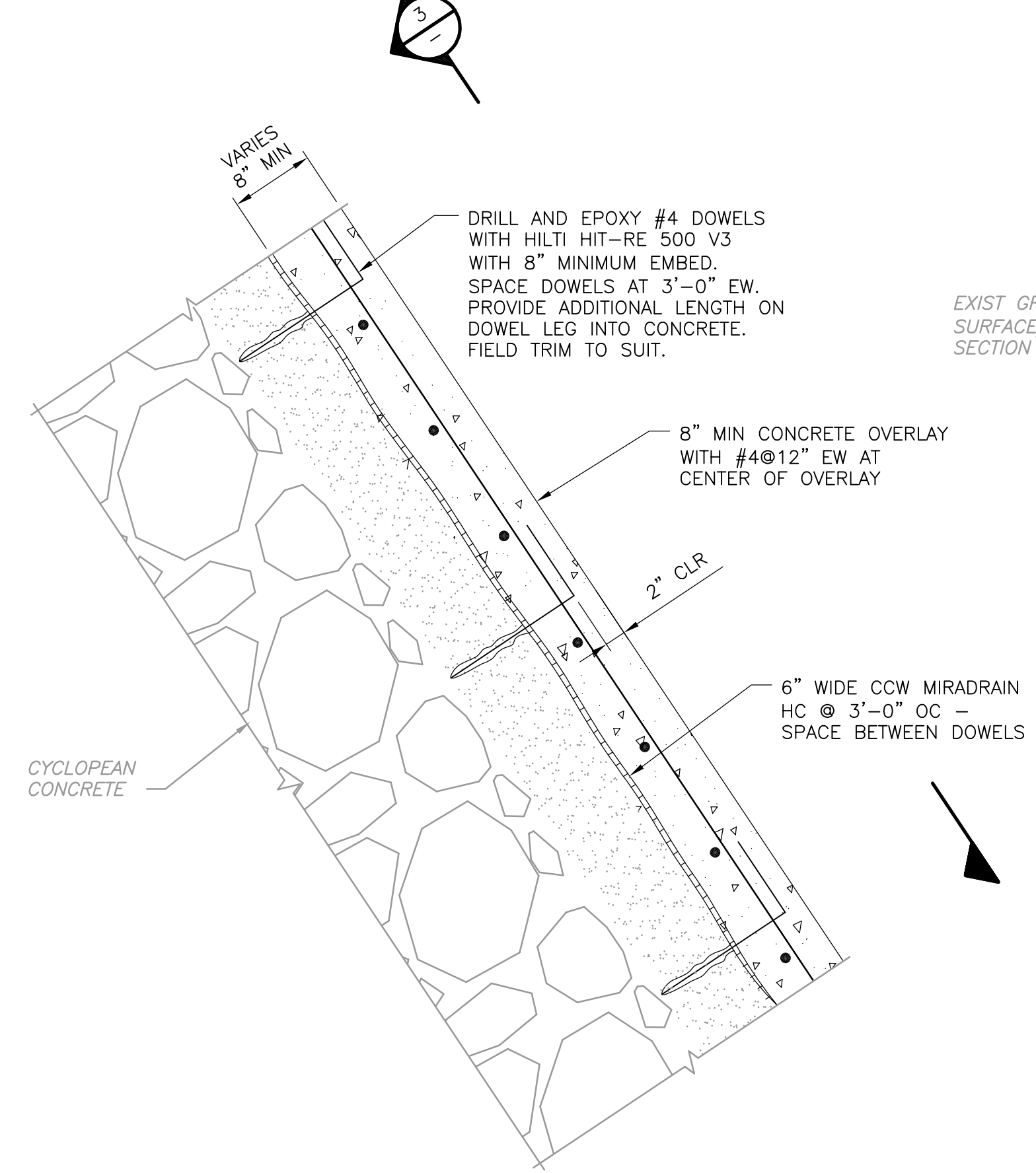
DEMOLITION AND MODIFICATION SECTIONS

PROJECT NO. 21984-265075
FILE NAME: SO04DMSC.DWG
SHEET NO. 12 OF 34
S-4
ISSUED FOR BID

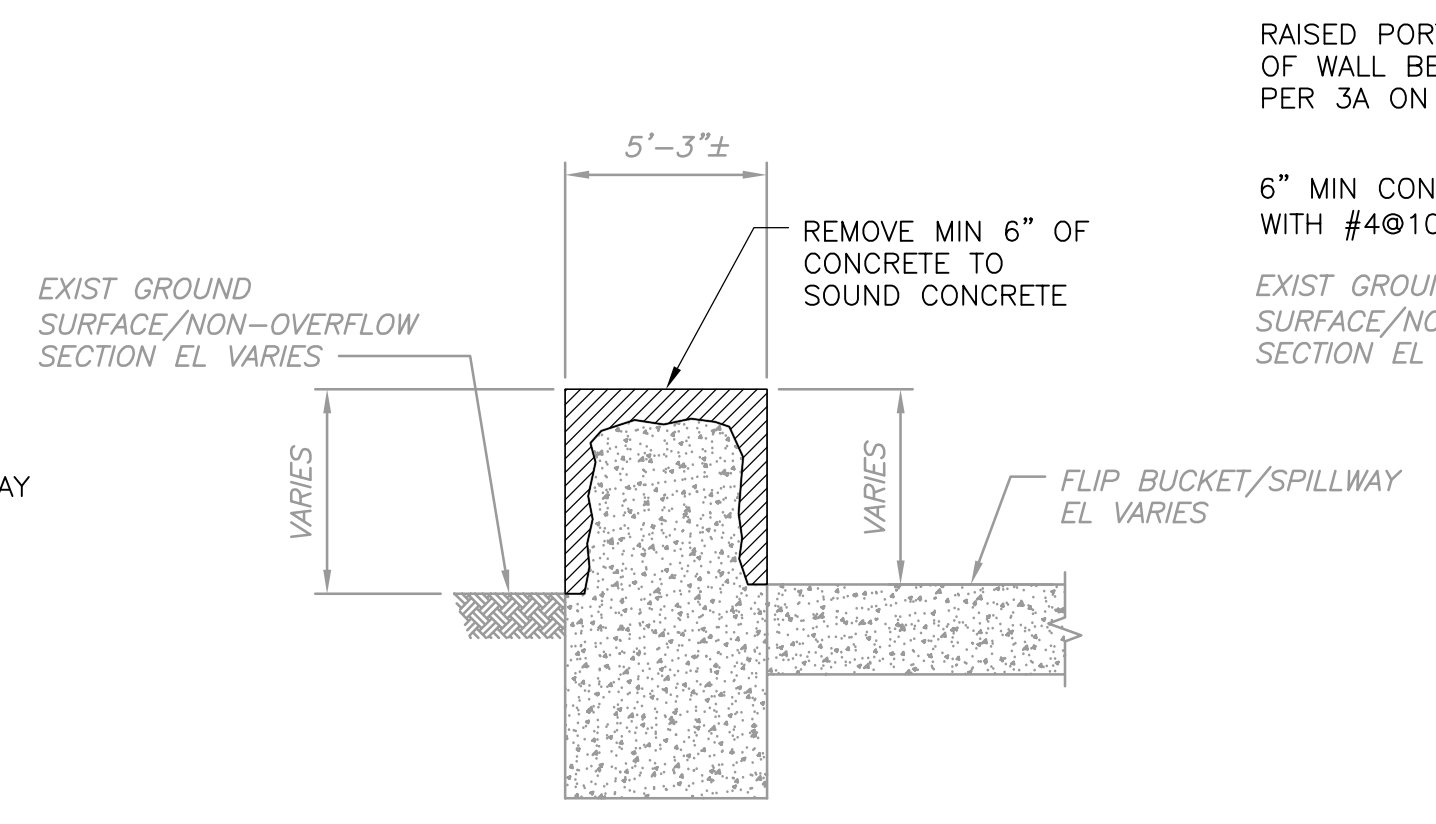
- NOTES:
1. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN FIELD AND RECORDED PRIOR TO ANY DEMOLITION OR REPAIR WORK.
 2. CONTRACTOR MAY ADJUST LOCATION OF THE CJ ONE FOOT IN EITHER DIRECTION DEPENDING ON CONCRETE PLACING METHODS. CONTRACTOR TO SUBMIT PROPOSED CJ LOCATIONS FOR APPROVAL ALONG WITH CONCRETE PLACING PLAN.



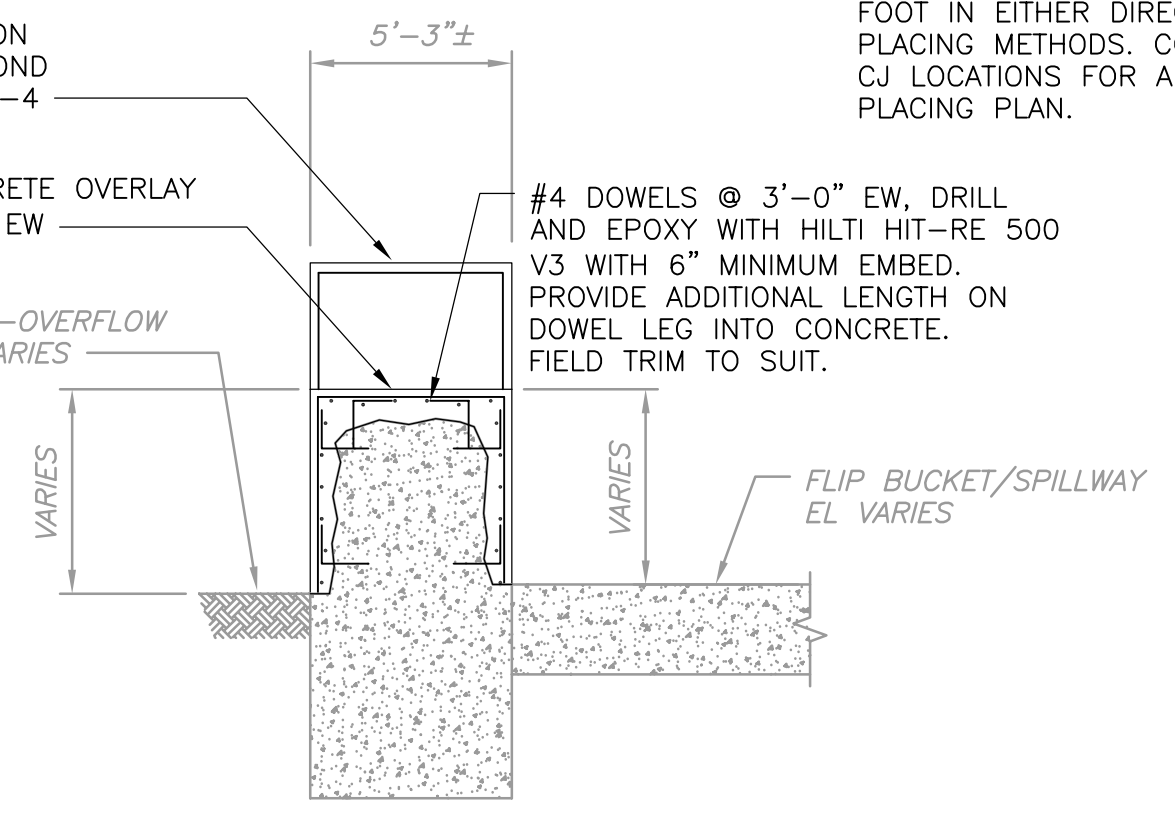
REPAIR AT RIGHT NON-OVERFLOW SECTION
DETAIL A
1" = 1'-0" S-4



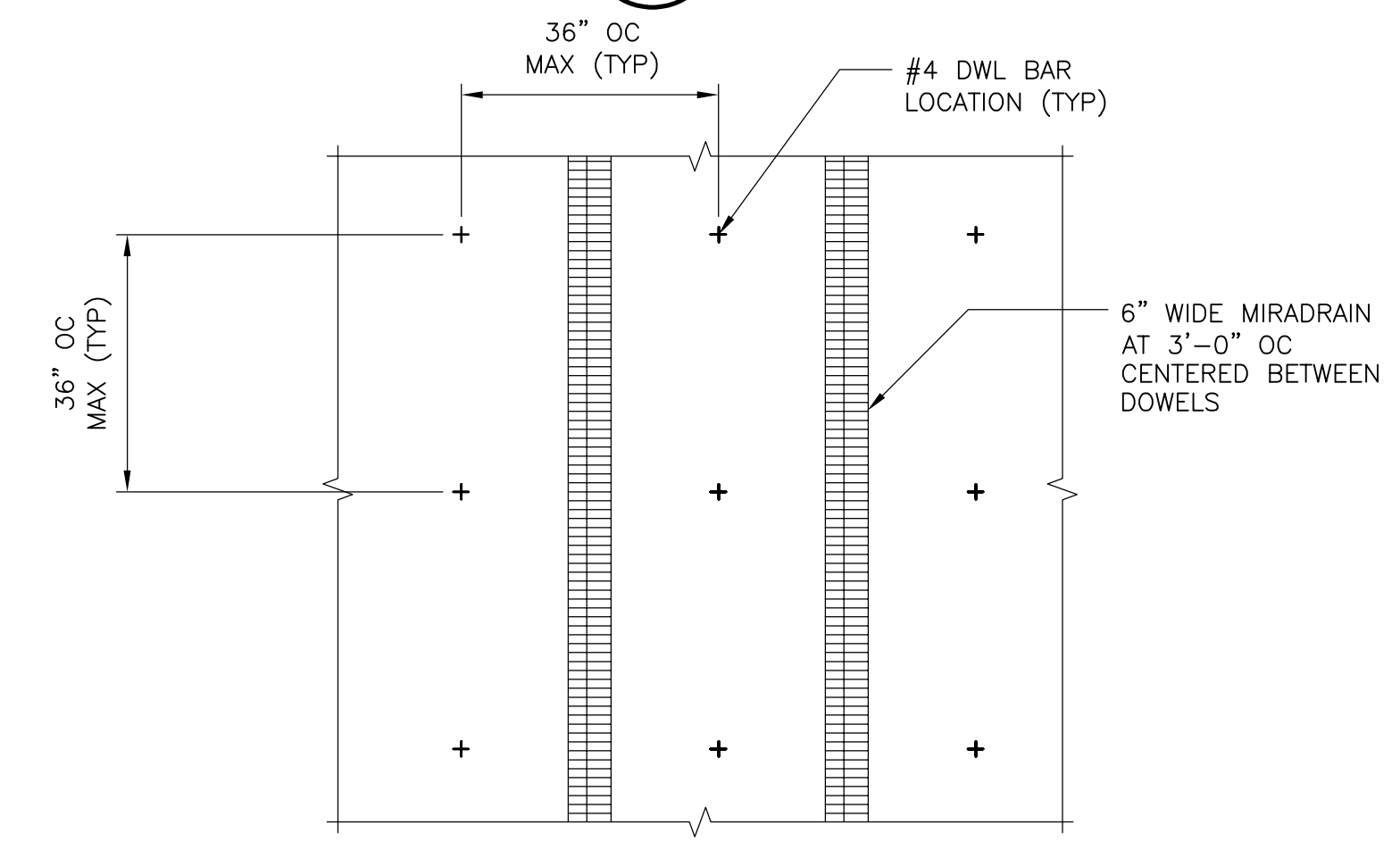
REPAIR AT SPILLWAY
DETAIL B
1" = 1'-0" S-4



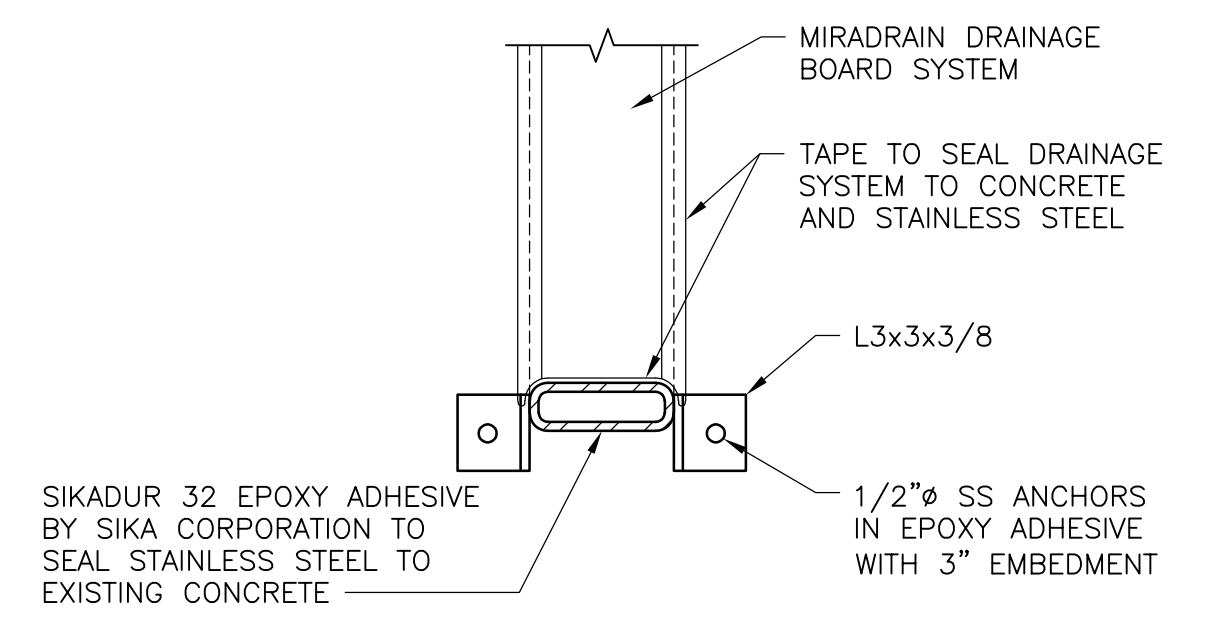
DEMOLITION - RIGHT TRAINING WALL
SECTION 1
1"=5' S-4



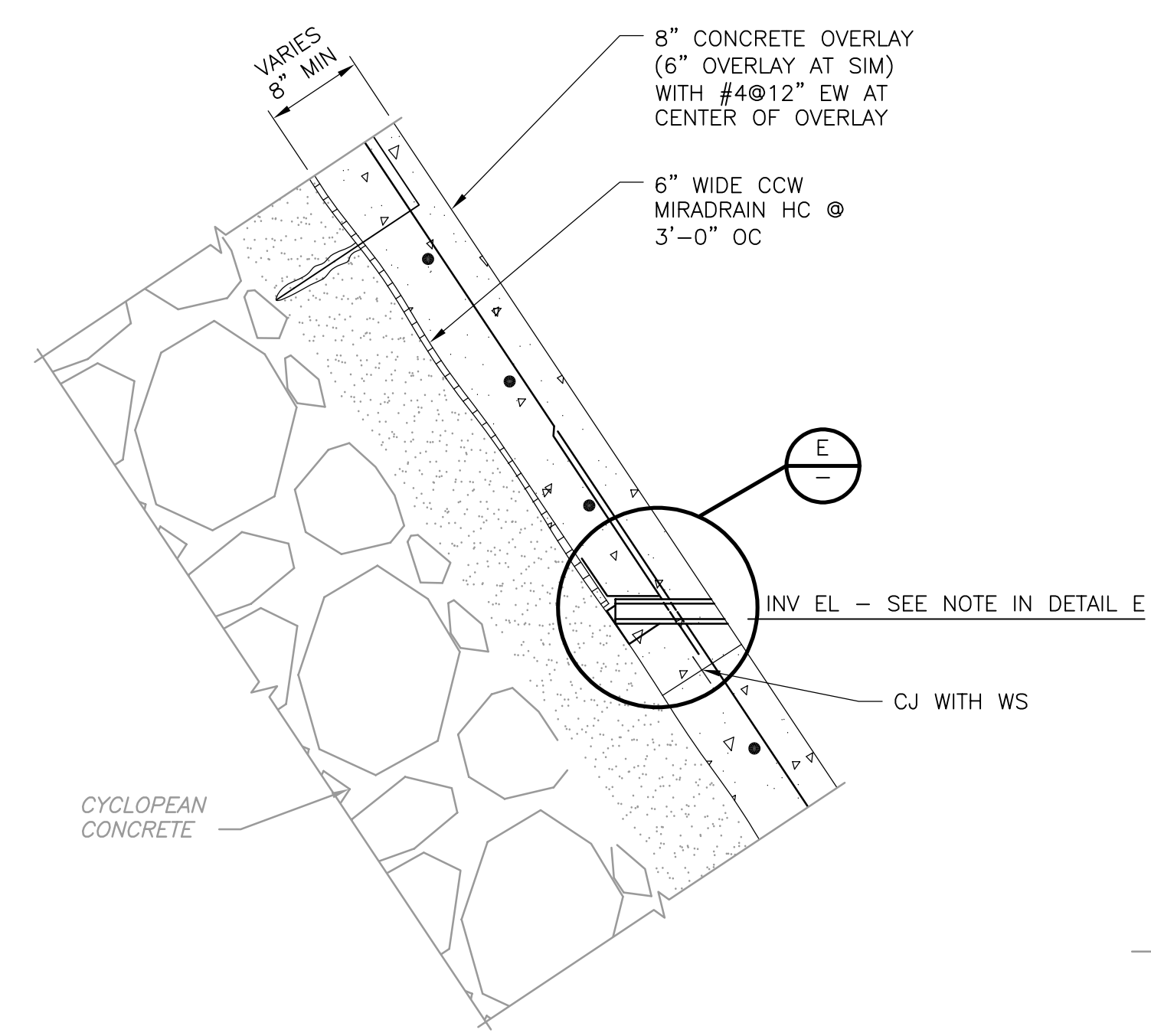
MODIFICATION - RIGHT TRAINING WALL
SECTION 2
1"=5' S-4



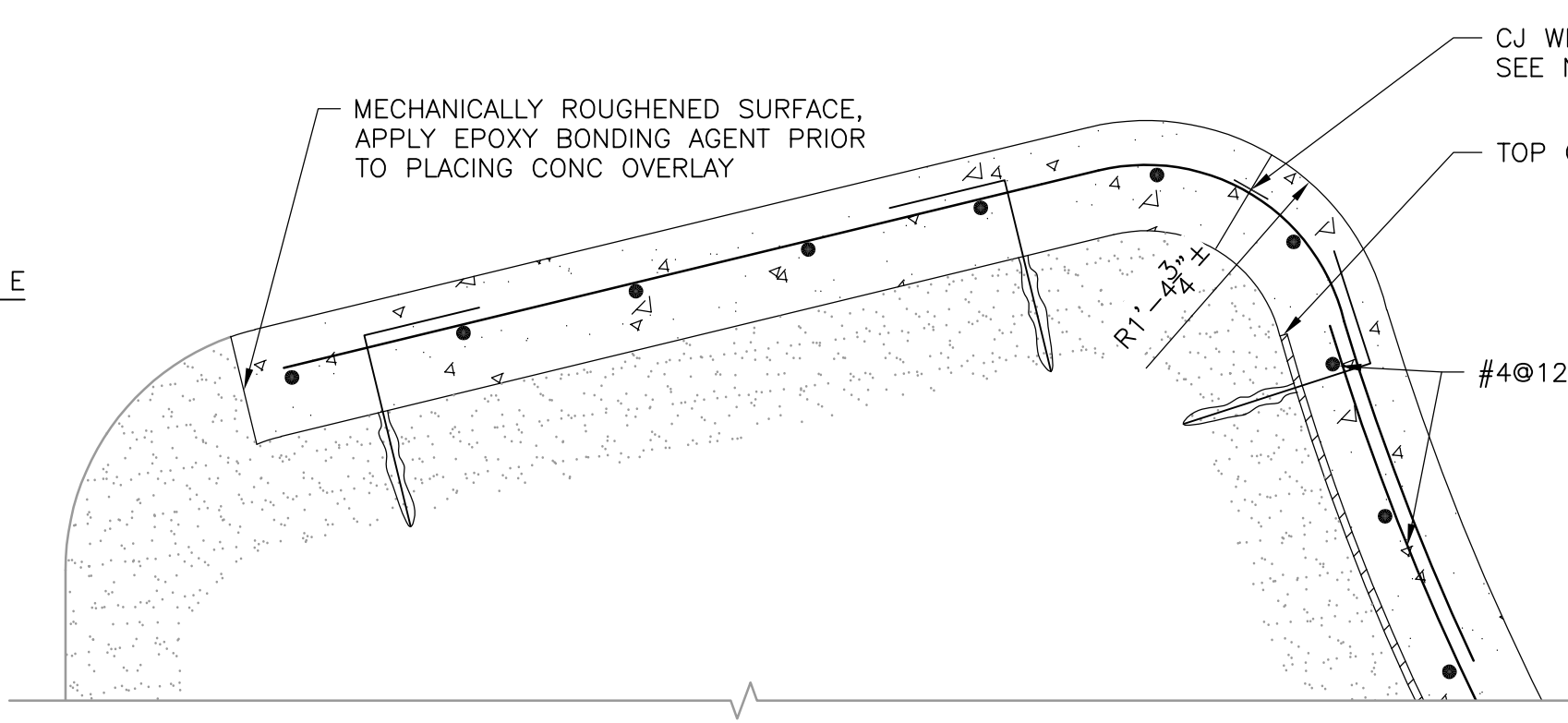
SECTION 3
1/2" = 1'-0" S-4



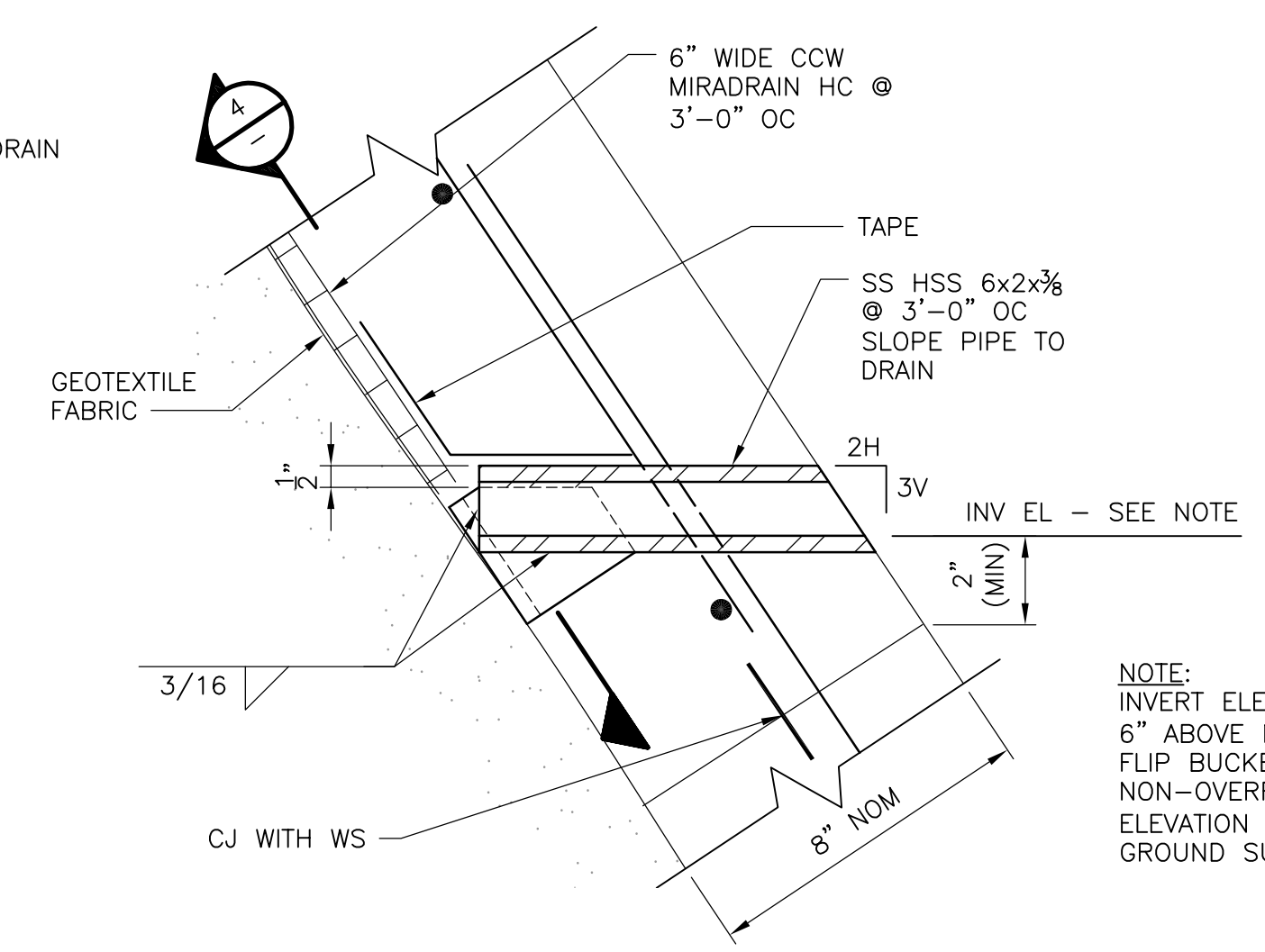
SECTION 4
1 1/2" = 1'-0" S-4



NOTE: SEE DETAIL B FOR ADDITIONAL INFORMATION.
REPAIR AT SPILLWAY (SIM)
DETAIL C
1" = 1'-0" S-4



NOTE: SEE DETAIL B FOR ADDITIONAL INFORMATION.
REPAIR AT SPILLWAY
DETAIL D
1" = 1'-0" S-4



DETAIL E
3" = 1'-0" S-5

NOTE: INVERT ELEVATION SHALL BE 6" ABOVE NEW TOP OF FLIP BUCKET ELEVATION. AT NON-OVERFLOW SECTIONS, INVERT ELEVATION SHALL BE 6" ABOVE GROUND SURFACE.

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REV. NO.	DATE	DRWN	CHKD	REMARKS

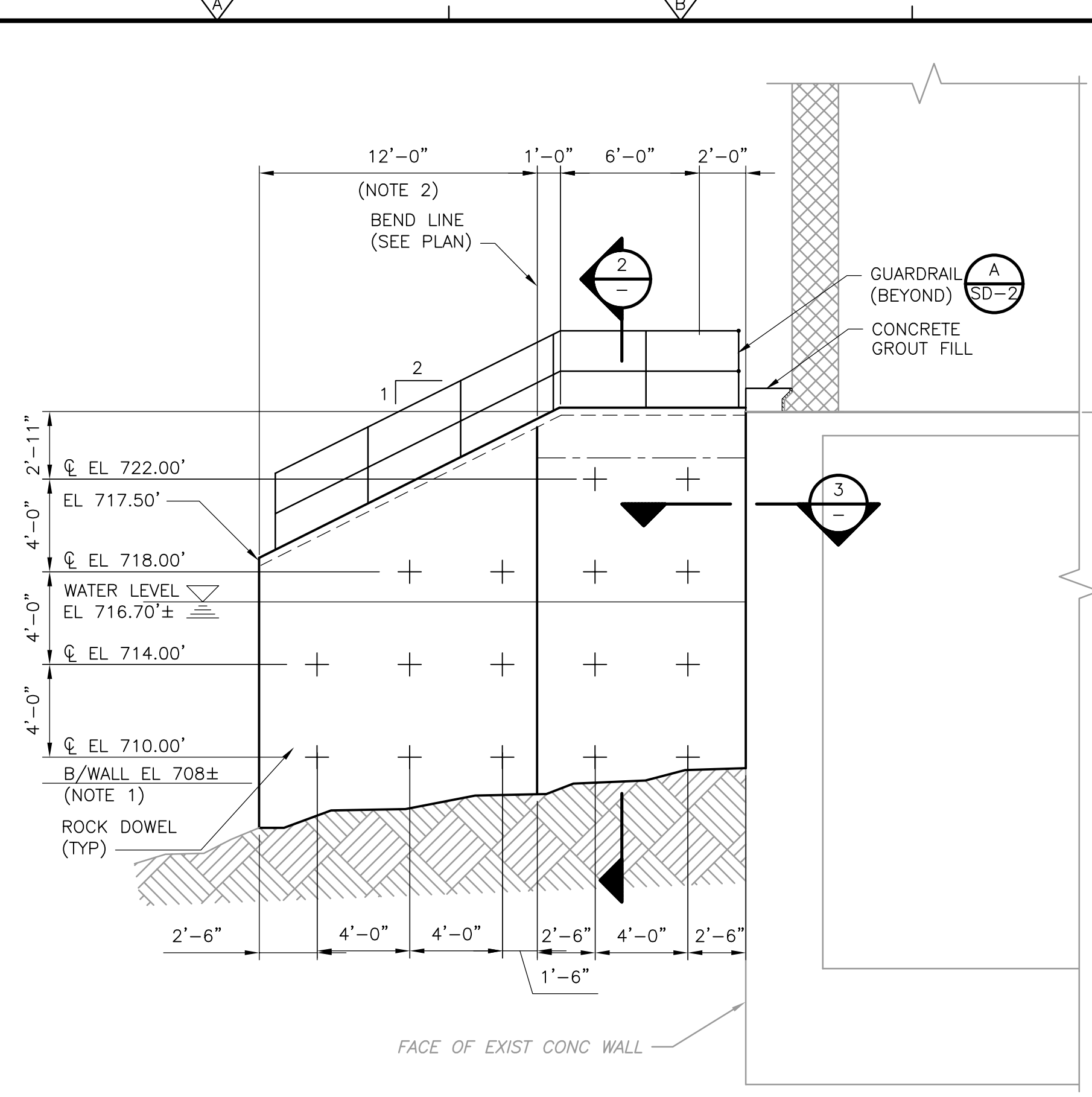
DESIGNED BY: J. BOGGS
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CDM Smith
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Tel: (315) 434-3200

CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

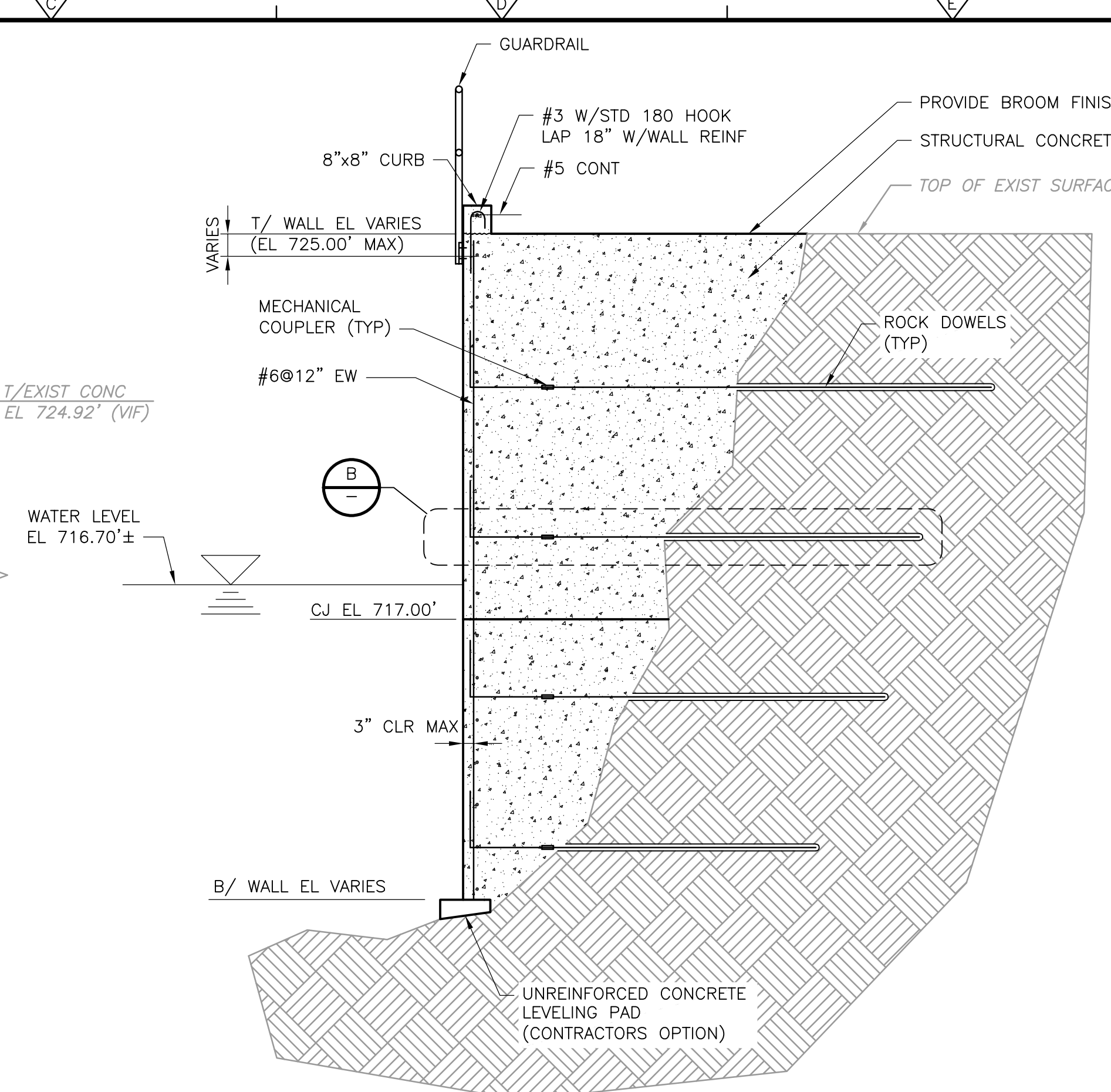
REPAIR SECTIONS AND DETAILS

PROJECT NO. 21984-265075
FILE NAME: S005DMSE.DWG
SHEET NO. 13 OF 34
S-5

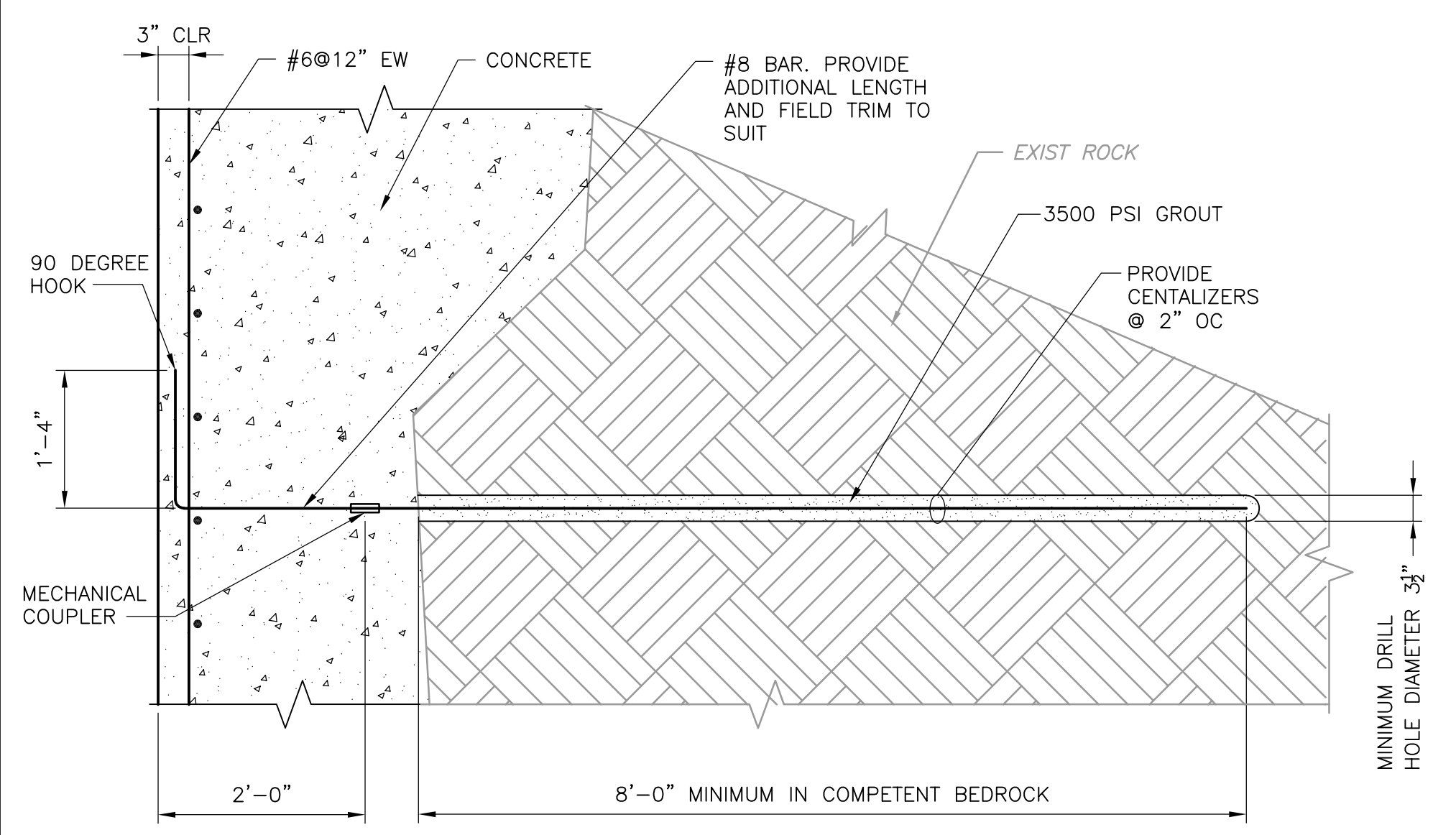


FLATTENED WALL ELEVATION
SECTION 1
1" = 5'

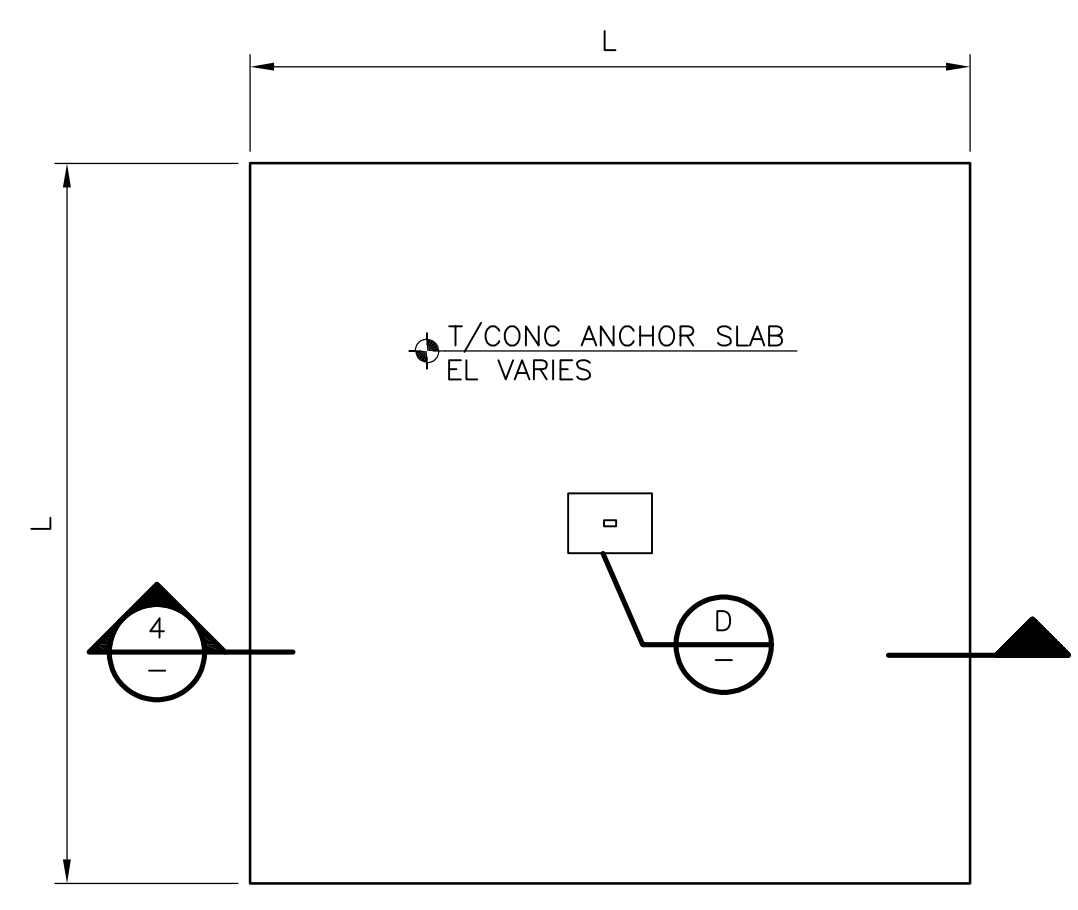
- NOTES:**
- BOTTOM OF WALL TO EXTEND TO TOP OF EXISTING GROUND SURFACE. IF BOTTOM OF WALL EXTENDS BELOW ELEVATION 706.00 FT, INSTALL ADDITIONAL ROCK DOWELS.
 - WALL LENGTH SELECTED AS NOT TO INTERFERE WITH THE COFFERDAM. EVALUATE WALL CONDITION IN FIELD AND DETERMINE IF THE EXTENTS SHOWN IN SECTION 1 ARE SUITABLE FOR SUPPORT OF THE ACCESS RAMP.
 - EXISTING ROCK FACE TO BE CHIPPED, POWER WASHED, AND CLEANED TO REMOVE ALL MOSS, SOIL, LOOSE DEBRIS, ETC TO PROVIDE A CLEAN FACE FOR ATTACHMENT AND PLACEMENT OF CONCRETE.



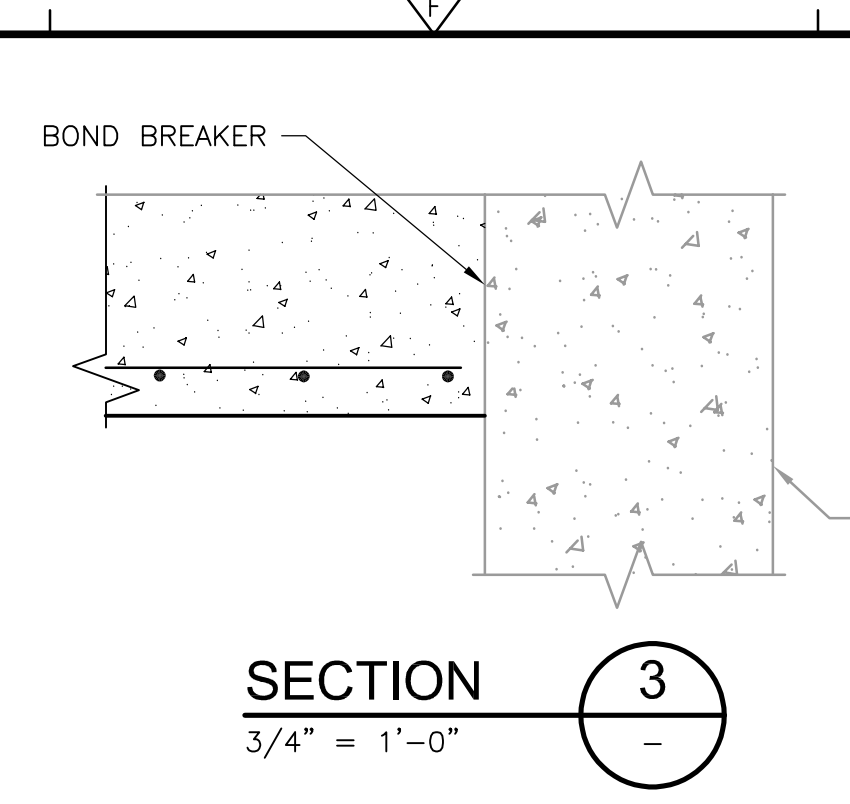
WALL
SECTION 2
3/8" = 1'-0"



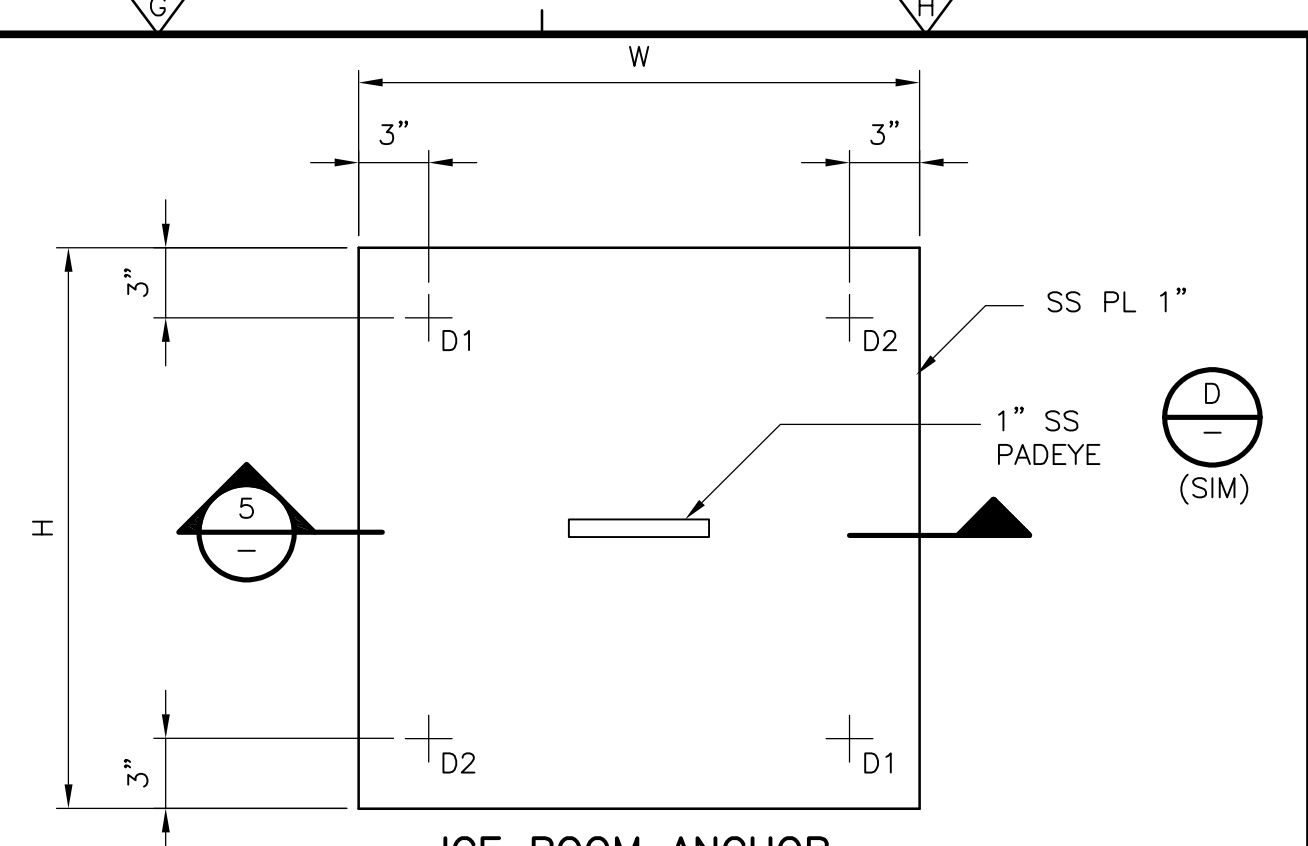
PERMANENT ROCK DOWEL
DETAIL B
3/4" = 1'-0"



ICE BOOM ANCHOR
DETAIL C
3/8" = 1'-0"

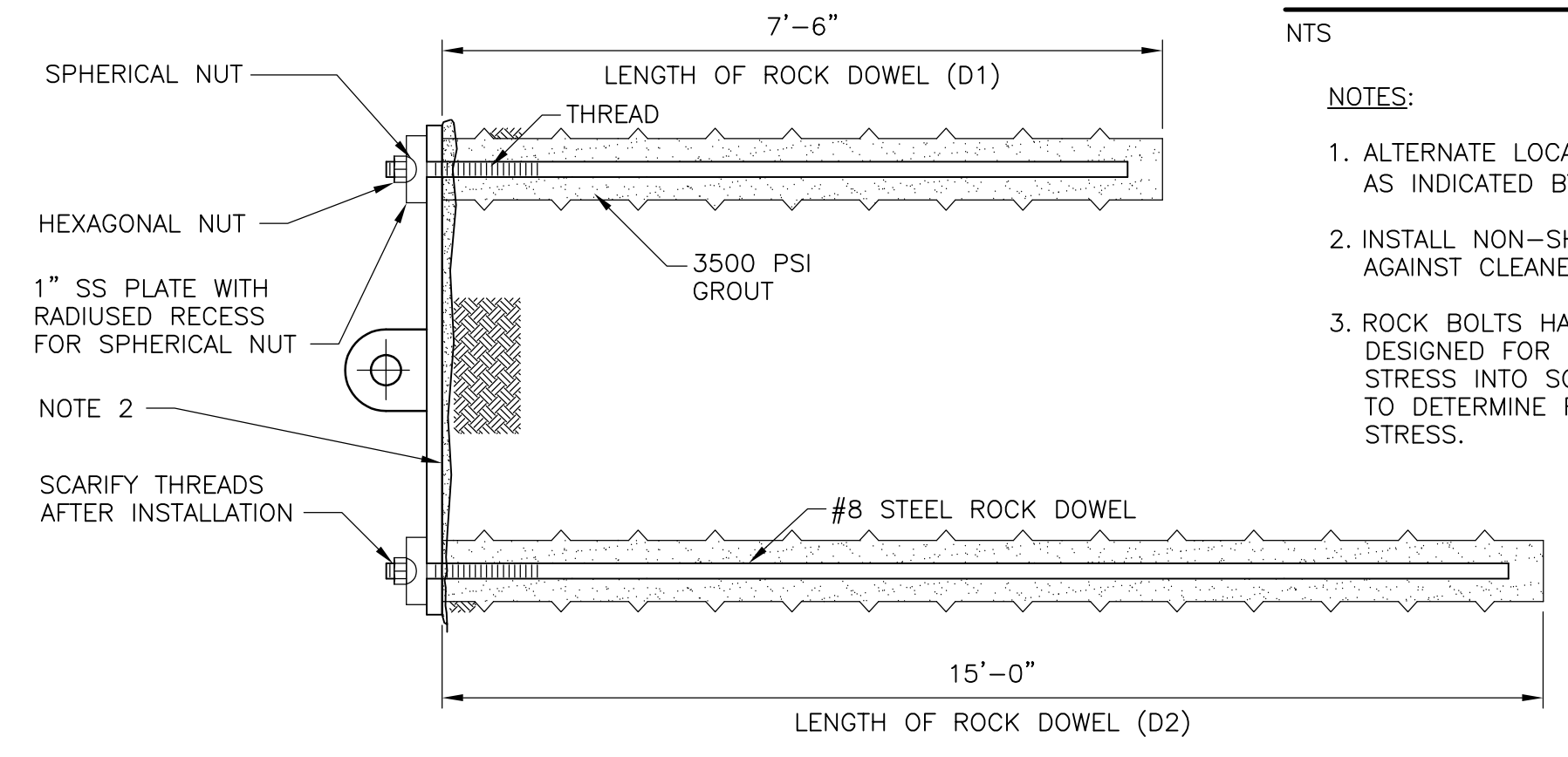


SECTION 3
3/4" = 1'-0"

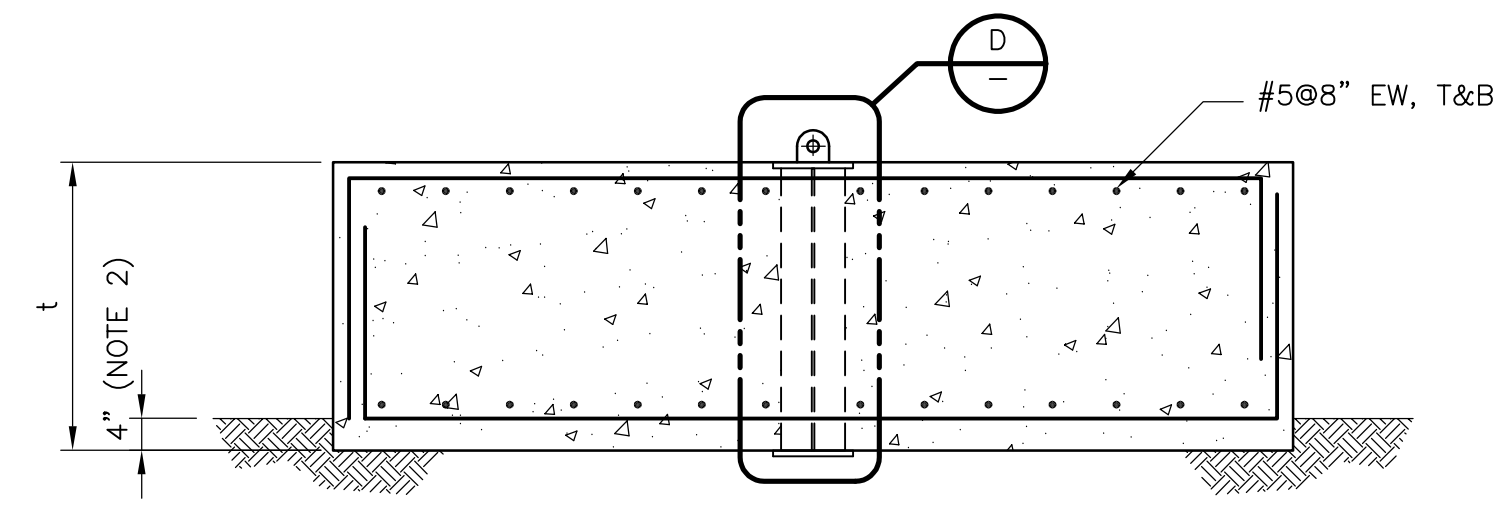


ICE BOOM ANCHOR
DETAIL A
NTS

- NOTES:**
- ALTERNATE LOCATION OF EMBEDDED DOWELS AS INDICATED BY "D1" AND "D2".
 - INSTALL NON-SHRINK GROUT BEHIND PLATE AGAINST CLEANED ROCK-FACE.
 - ROCK BOLTS HAVE BEEN PRELIMINARILY DESIGNED FOR 30 PSI ULTIMATE BOND STRESS INTO SOFT SHALE. CONTRACTOR TO DETERMINE FINAL VALUE FOR BOND STRESS.

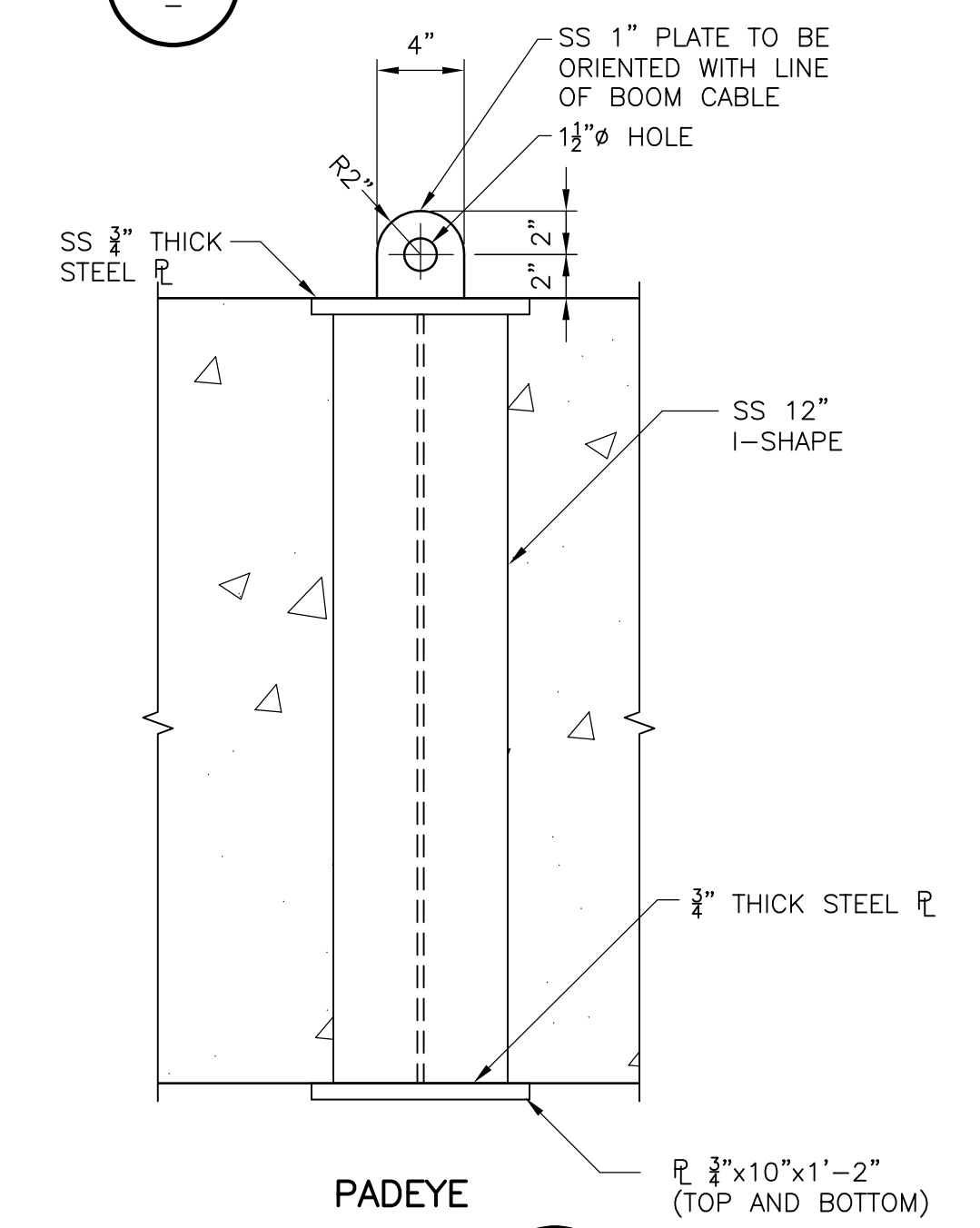


SECTION 5
NTS



SECTION 4
1/2" = 1'-0"

- ICE BOOM NOTES:**
- ICE BOOM SYSTEM MUST BE DESIGNED IN ACCORDANCE WITH SECTION 355100, INCLUDING ALL ANCHORAGES. ANCHORAGES SHOWN THIS SHEET ARE CONCEPTUAL. FINAL DESIGN OF ANCHORAGE IN RESERVOIR AND ANCHORAGE INTO ROCK AT SHORE TO BE PROVIDED BY BOOM MANUFACTURER.
 - EXCAVATE TO TOP OF COMPETENT ROCK AND REMOVE ROCK TO A DEPTH OF 4-INCHES, AS INDICATED, TO KEY FOUNDATION INTO ROCK. ROCK SURFACE SHALL BE LEFT AND CLEAN AND ROUGHENED FOR PLACEMENT OF CONCRETE FOUNDATION.



PADEYE
DETAIL D
1" = 1'-0"

WARNING
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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. BOGGS	 Camp Dresser McKee & Smith Salina Industrial Powerpark, One General Motors Drive Syracuse, NY 13206 Tel: (315) 434-3200
DRAWN BY: STAFF	
SHEET CHK'D BY: M. CALVINO	
CROSS CHK'D BY: N. VIGNEAULT	
APPROVED BY: J. ZANOTTI	
DATE: FEBRUARY 2025	

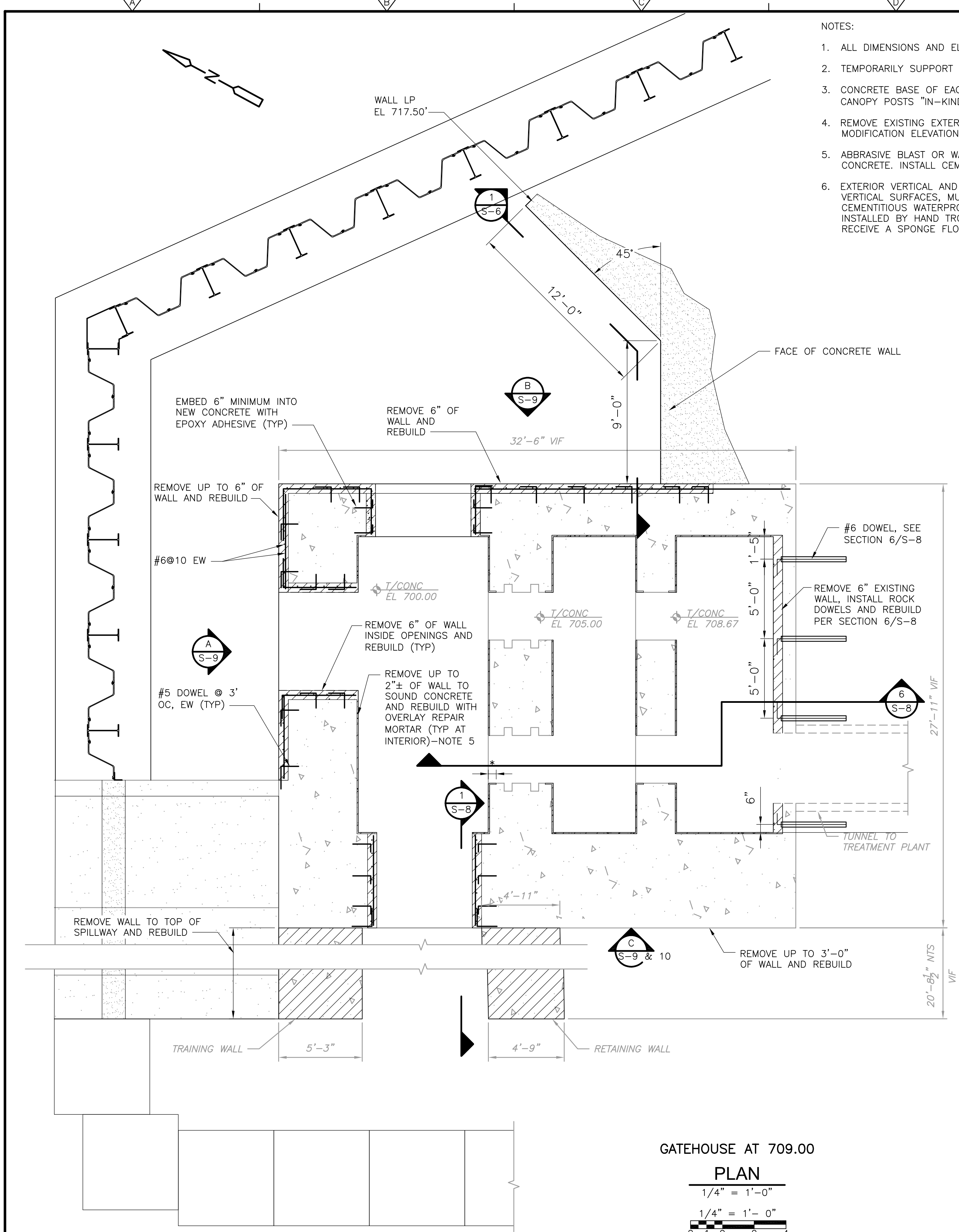
CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

RETAINING WALL
ELEVATION, SECTIONS, AND DETAILS

PROJECT NO. 21984-265075
FILE NAME: SO06DMSE.DWG
SHEET NO. 14 OF 34
S-6

NOTES:

1. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN FIELD AND RECORDED PRIOR TO ANY DEMOLITION OR REPAIR WORK.
2. TEMPORARILY SUPPORT CANOPY POSTS DURING CONSTRUCTION. SEE DETAILS D & E ON S-9.
3. CONCRETE BASE OF EACH CANOPY POSTS MUST BE CHIPPED AND REMOVED TO EXPOSE CANOPY CONNECTIONS. RE-ANCHOR CANOPY POSTS "IN-KIND" INTO NEWLY CONSTRUCTED CONCRETE, AND RE-POUR CONCRETE BASE PER DETAIL B/S-8.
4. REMOVE EXISTING EXTERIOR CONCRETE AND REBUILD CONCRETE SURFACE AS SHOWN THIS SHEET AND THE MODIFICATION ELEVATIONS ON S-9 AND S-10 PER CONNECTION METHOD D.
5. ABRASIVE BLAST OR WATER BLAST INTERIOR CONCRETE SURFACE ±2-INCH IN DEPTH TO SOUND CONCRETE. INSTALL CEMENTITIOUS OVERLAY REPAIR MATERIAL PER SECTION 030100.61.
6. EXTERIOR VERTICAL AND HORIZONTAL CONCRETE SURFACES, AND INTERIOR VERTICAL SURFACES, MUST RECEIVE TWO COATS OF POLYMER MODIFIED, CEMENTITIOUS WATERPROOFING MATERIAL. WATERPROOFING MUST BE INSTALLED BY HAND TROWEL. HORIZONTAL WALKING SURFACE SHALL RECEIVE A SPONGE FLOATED FINISH WITH SLIP RESISTANCE.

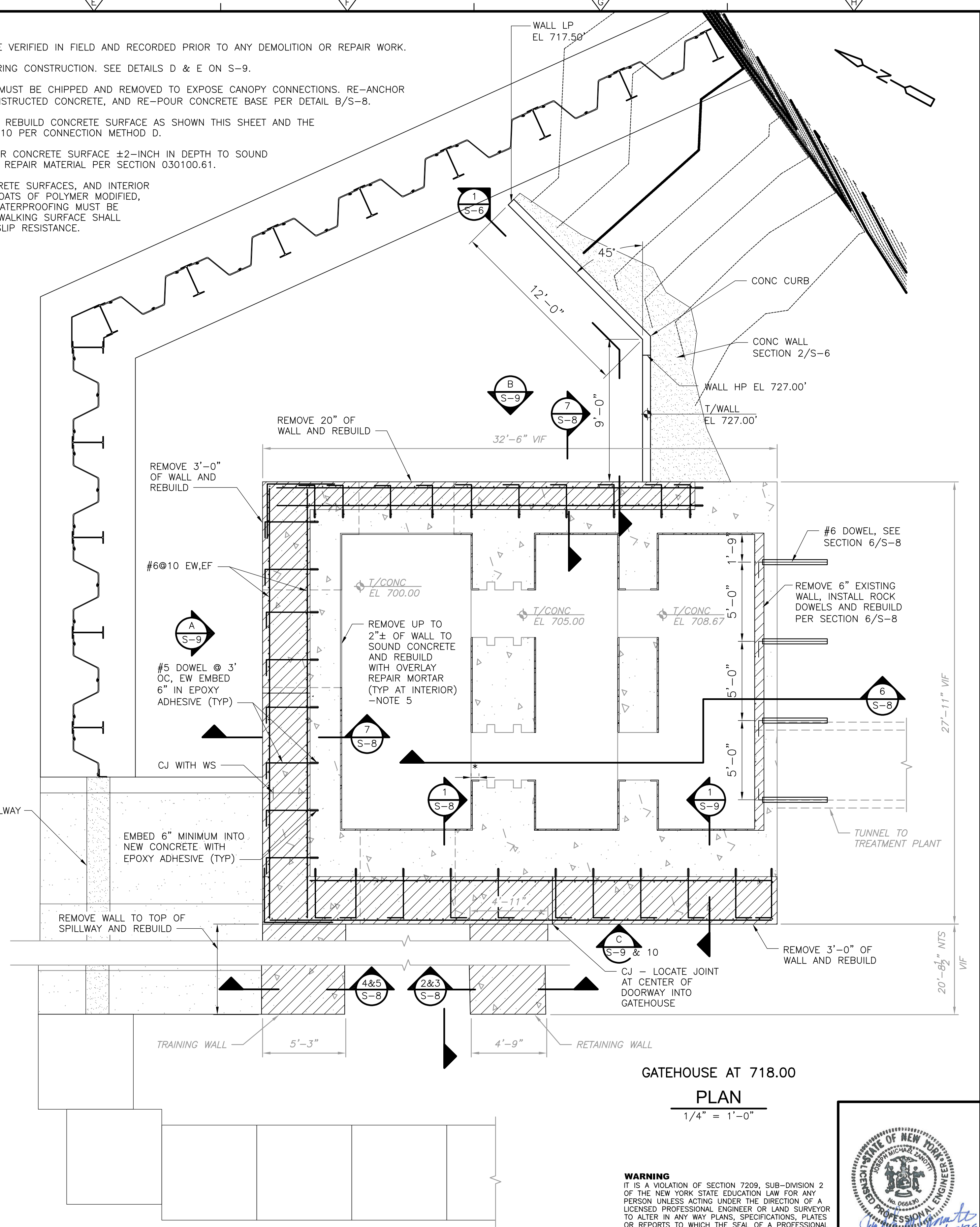


GATEHOUSE AT 709.00

PLAN

1/4" = 1'-0"

1/4" = 1'-0"



GATEHOUSE AT 718.00

PLAN

1/4" = 1'-0"

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY:	J. BOGGS
DRAWN BY:	STAFF
SHEET CHK'D BY:	M. CALVINO
CROSS CHK'D BY:	N. VIGNEAULT
APPROVED BY:	J. ZANOTTI
DATE:	FEBRUARY 2025

CDM Smith
Camp Dresser McKee & Smith
Salina Industrial Powerpark, One General Motors Drive
Syracuse, NY 13206
Tel: (315) 434-3200

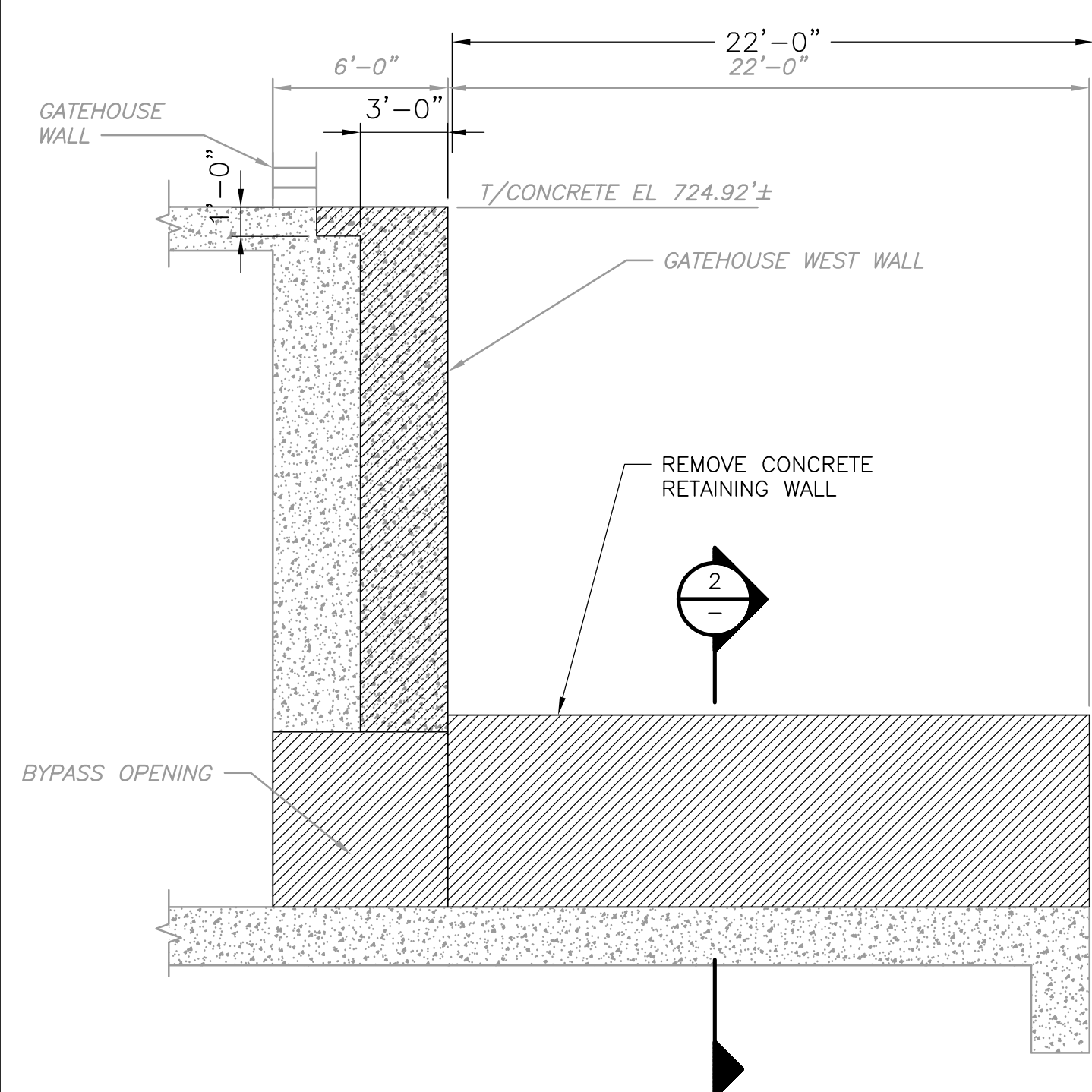
CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

KESSINGER GATEHOUSE PLANS

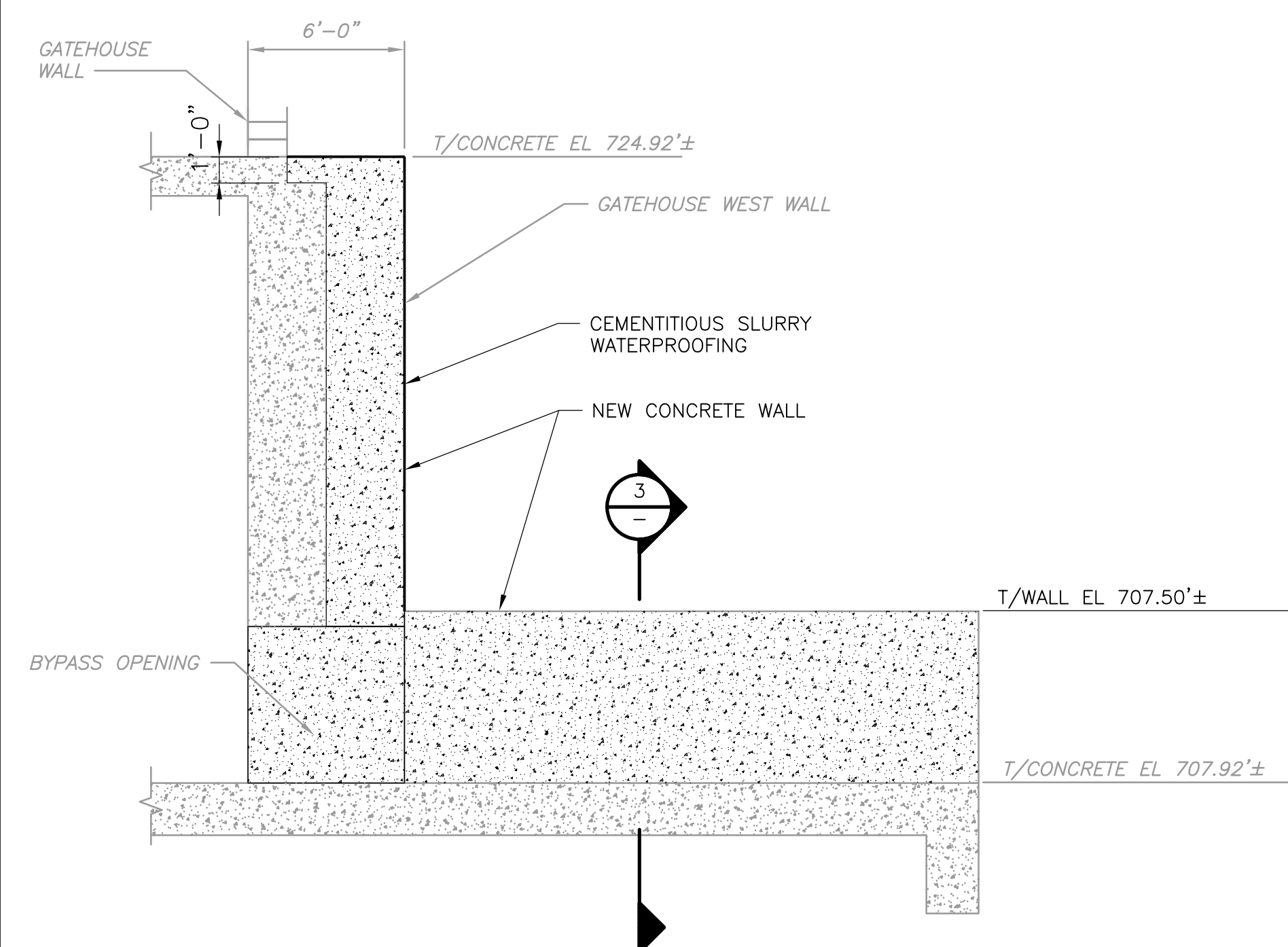
PROJECT NO.	21984-265075
FILE NAME:	S007DMPL.DWG
SHEET NO.	15 OF 34
S-7	

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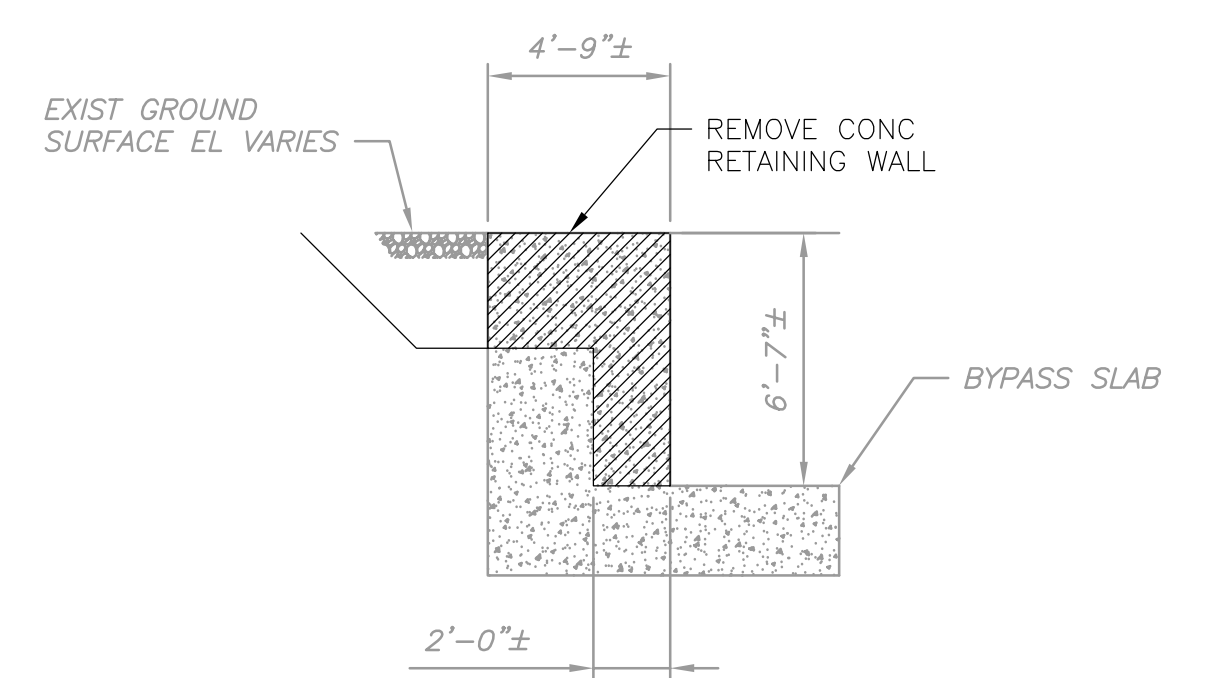
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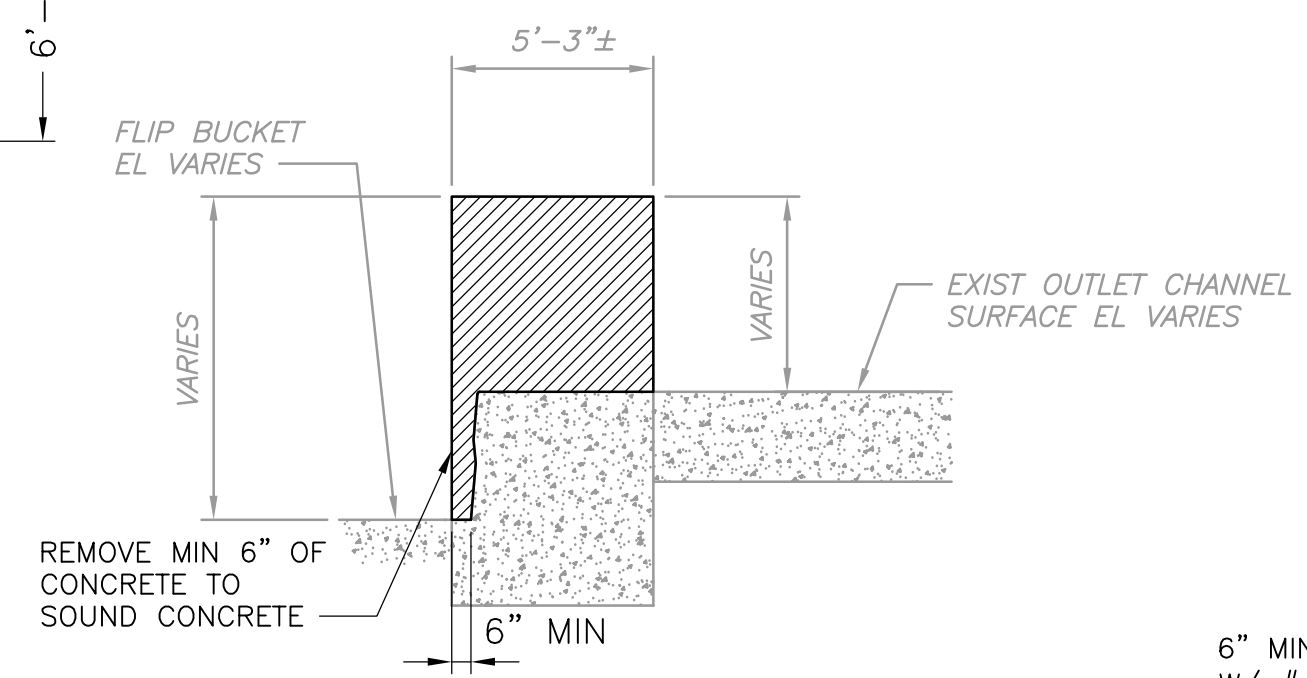
RETAINING WALL ELEVATION
SECTION 1
 1"=5'
 S-7
 1" = 5'
 2.5 0 5



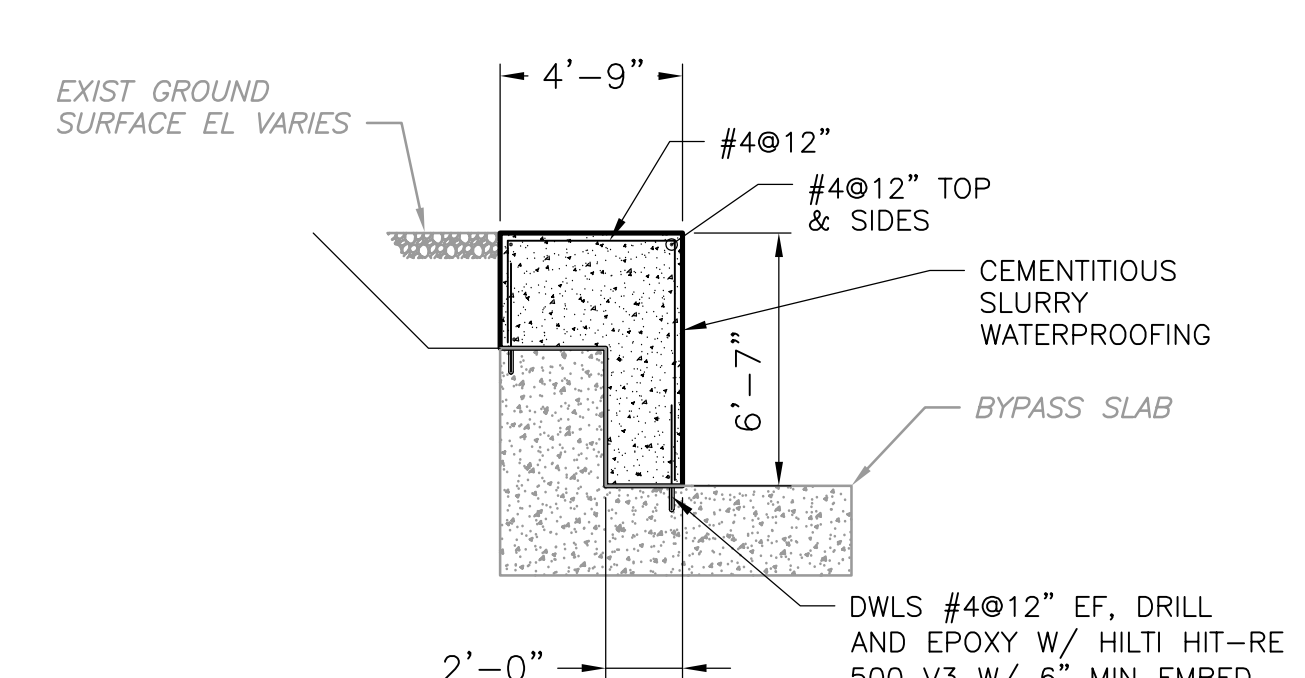
RETAINING WALL ELEVATION
SECTION 1A
 1"=5'
 S-7
 1" = 5'
 2.5 0 5



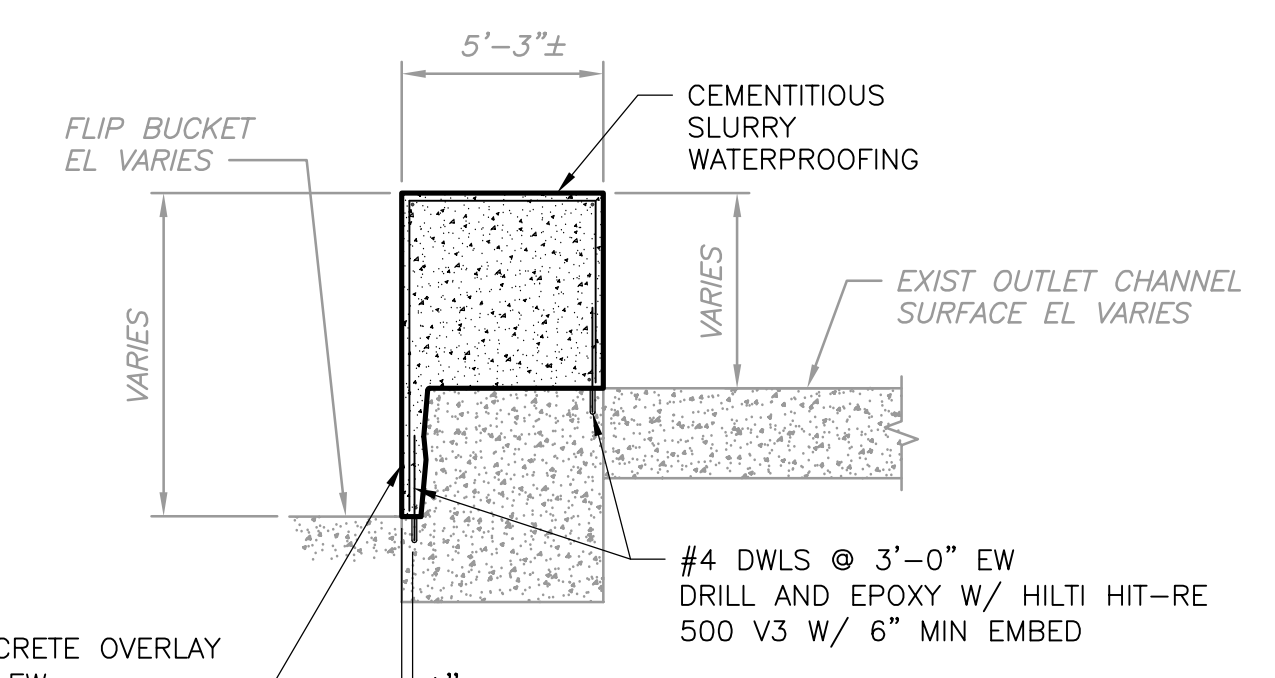
DEMOLITION - RETAINING WALL
SECTION 2
 1"=5'
 S-7



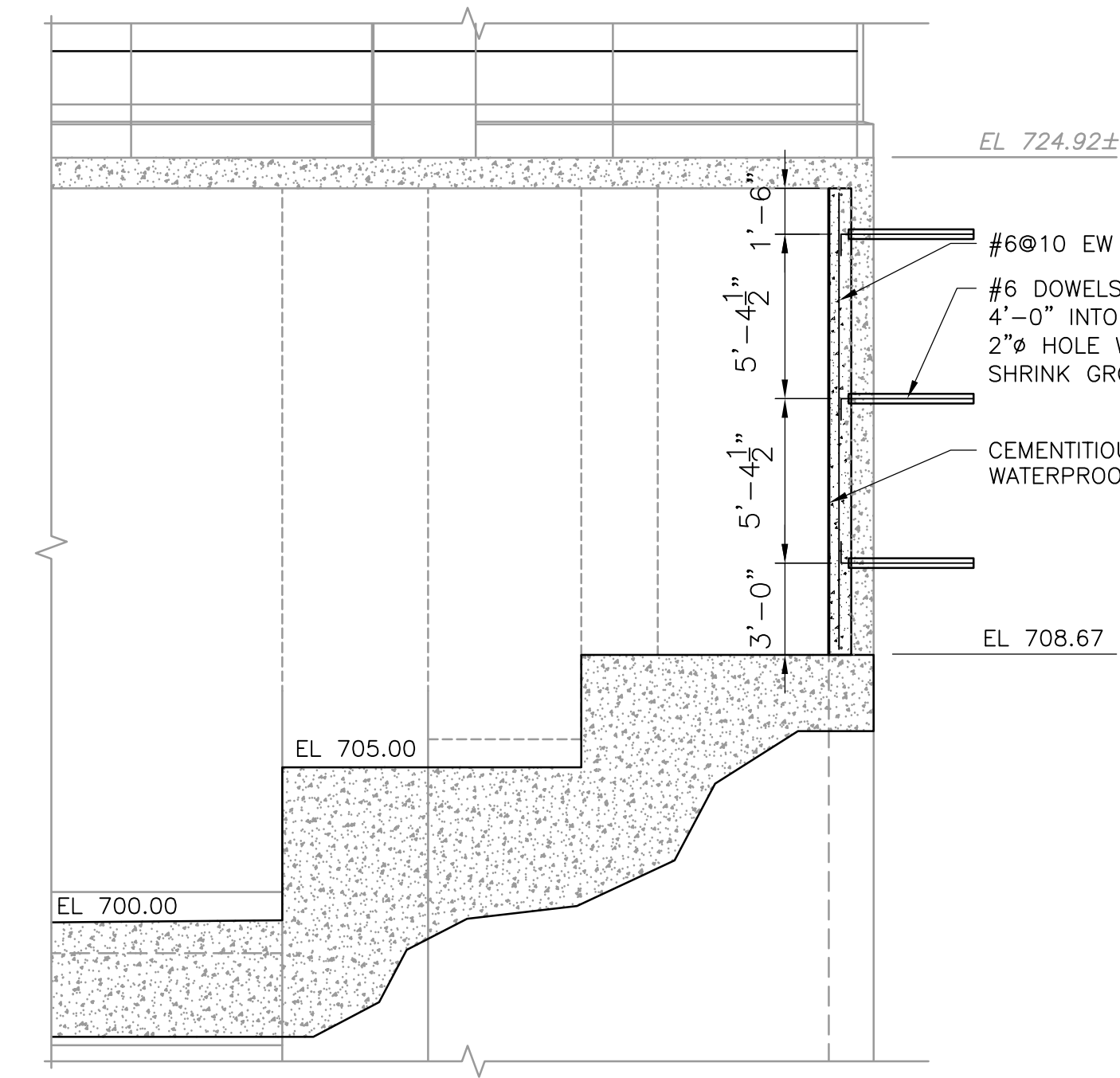
DEMOLITION - LEFT TRAINING WALL
SECTION 4
 1"=5'
 S-9



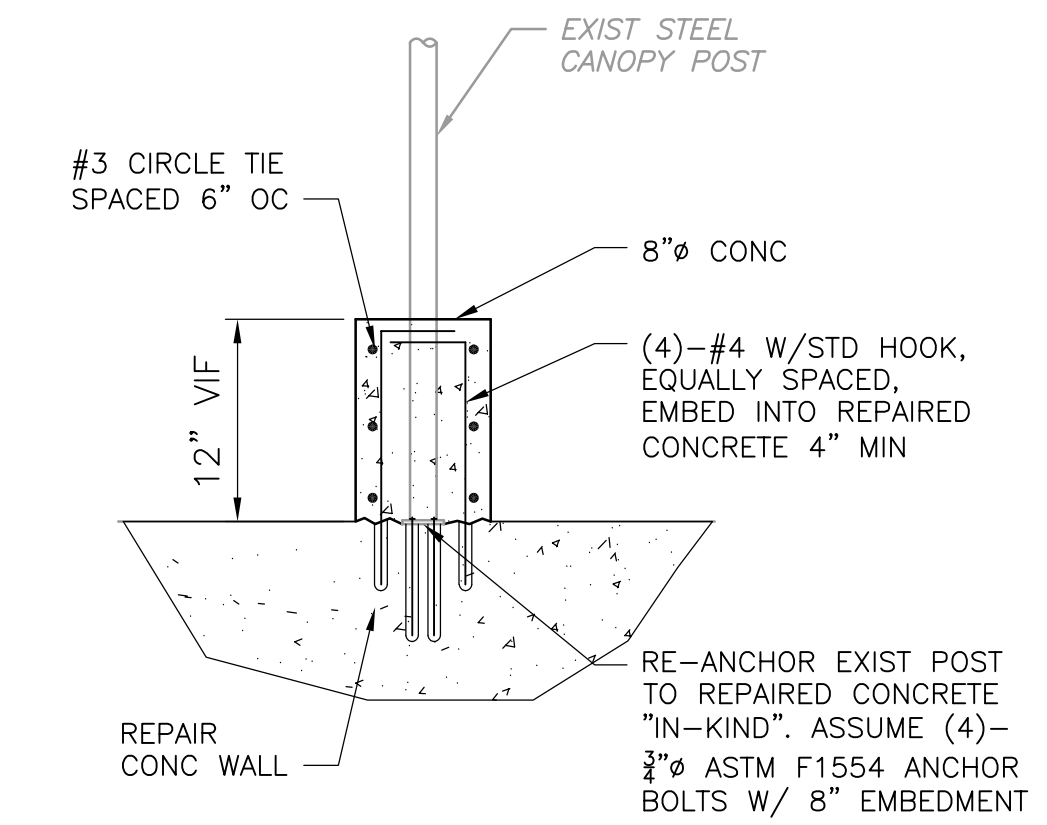
MODIFICATION - RETAINING WALL
SECTION 3
 1"=5'
 S-7



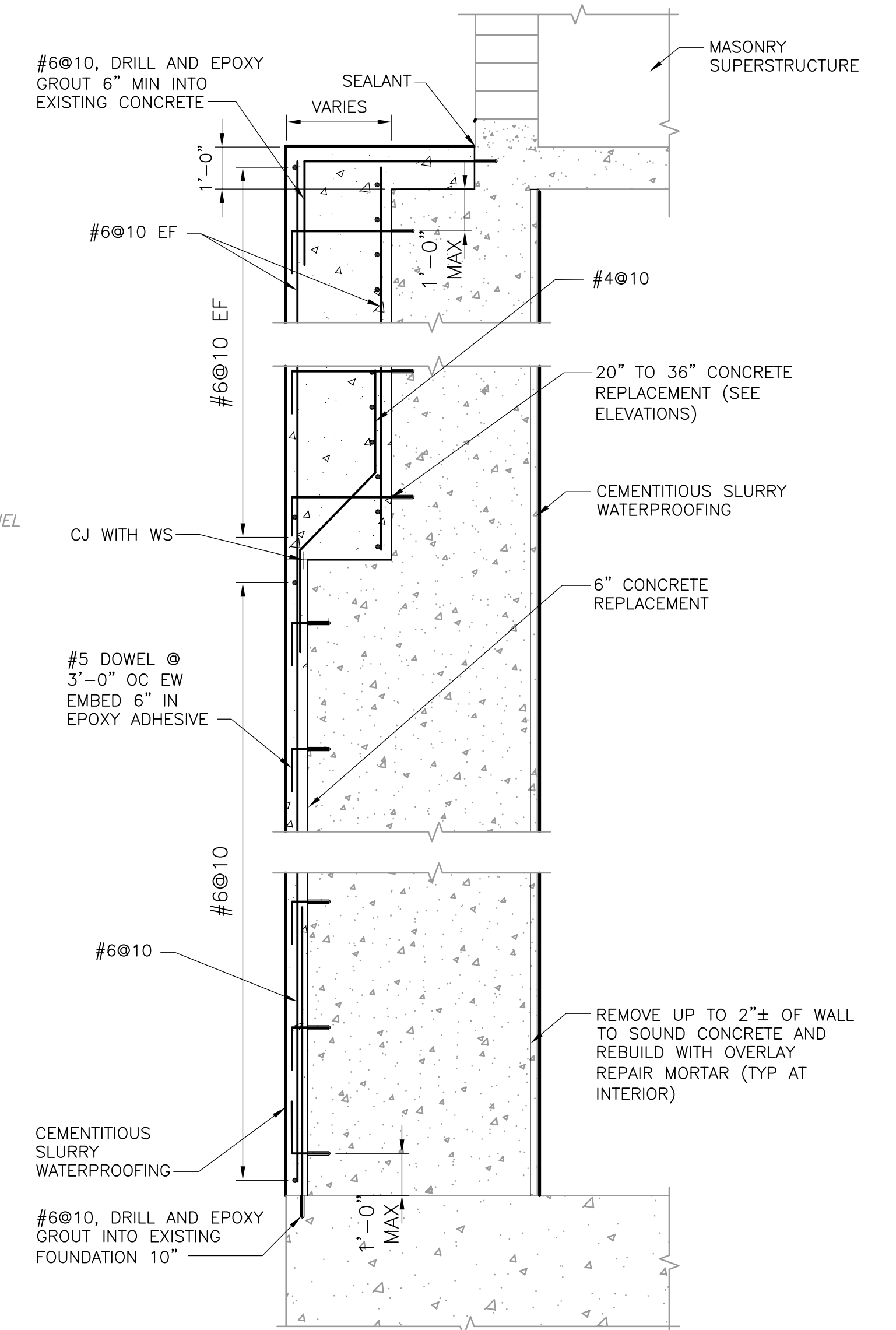
MODIFICATION - LEFT TRAINING WALL
SECTION 5
 1"=5'
 S-10



SECTION 6
 1"=5'
 S-7
 1" = 5'
 2.5 0 5



DETAIL B
 NTS



TYPICAL WALL SECTION
DETAIL 7
 3/8" = 1'-0"
 S-7

NOTES:
 1. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN FIELD AND RECORDED PRIOR TO ANY DEMOLITION OR REPAIR WORK.

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. BOGGS
 DRAWN BY: STAFF
 SHEET CHK'D BY: M. CALVINO
 CROSS CHK'D BY: N. VIGNEAULT
 APPROVED BY: J. ZANOTTI
 DATE: FEBRUARY 2025

CDM Smith
 Camp Dresser McKee & Smith
 Salina Industrial Powerpark, One General Motors Drive
 Syracuse, NY 13206
 Tel: (315) 434-3200

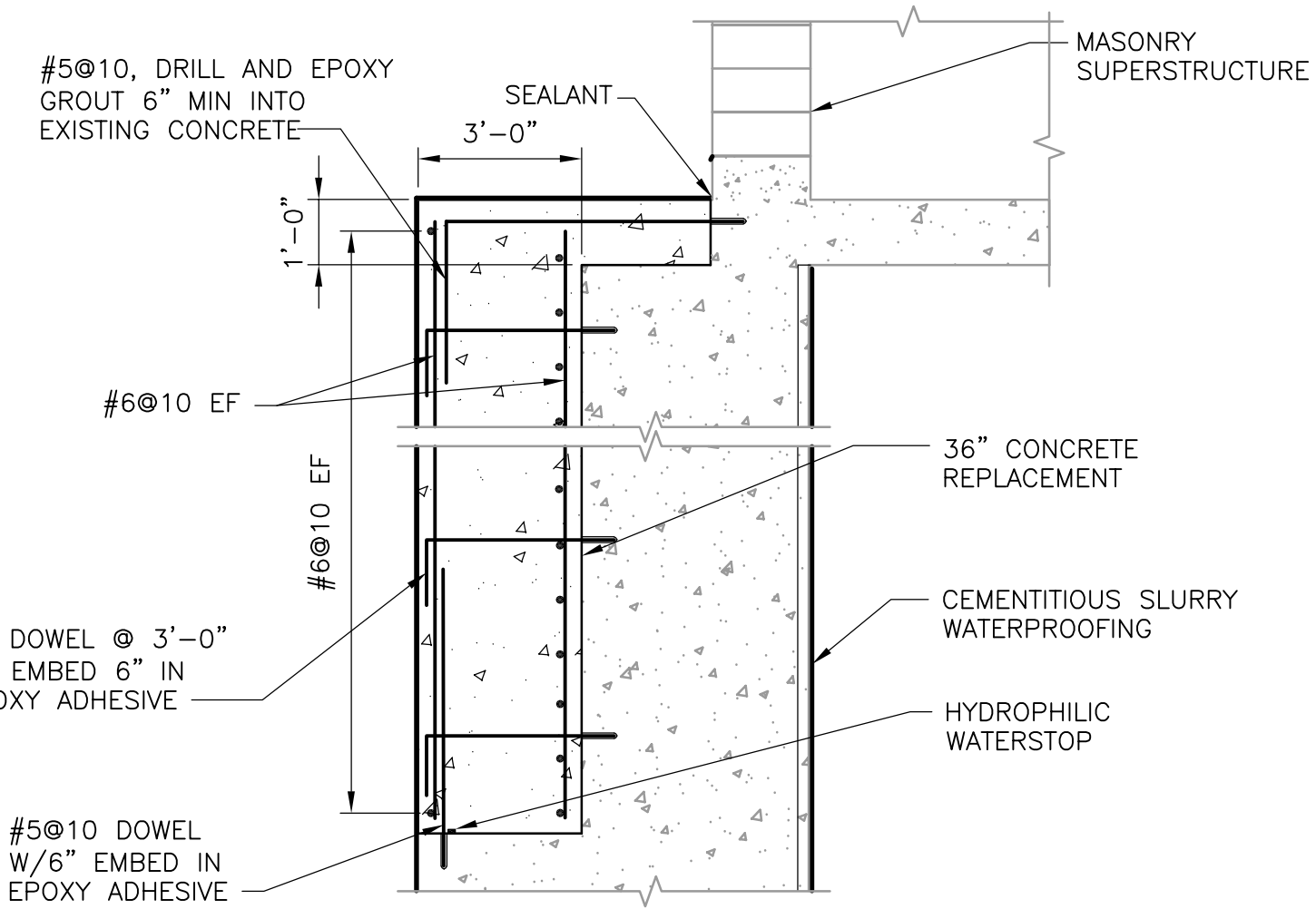
CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

DEMOLITION AND MODIFICATION SECTIONS

PROJECT NO. 21984-265075
 FILE NAME: SO08DMSC.DWG
 SHEET NO. 16 OF 34
S-8



SUPPORT/BRACE CANOPY WHILE CONCRETE FOUNDATION IS REPAIRED. CONTRACTOR TO DESIGN BRACING SYSTEM.



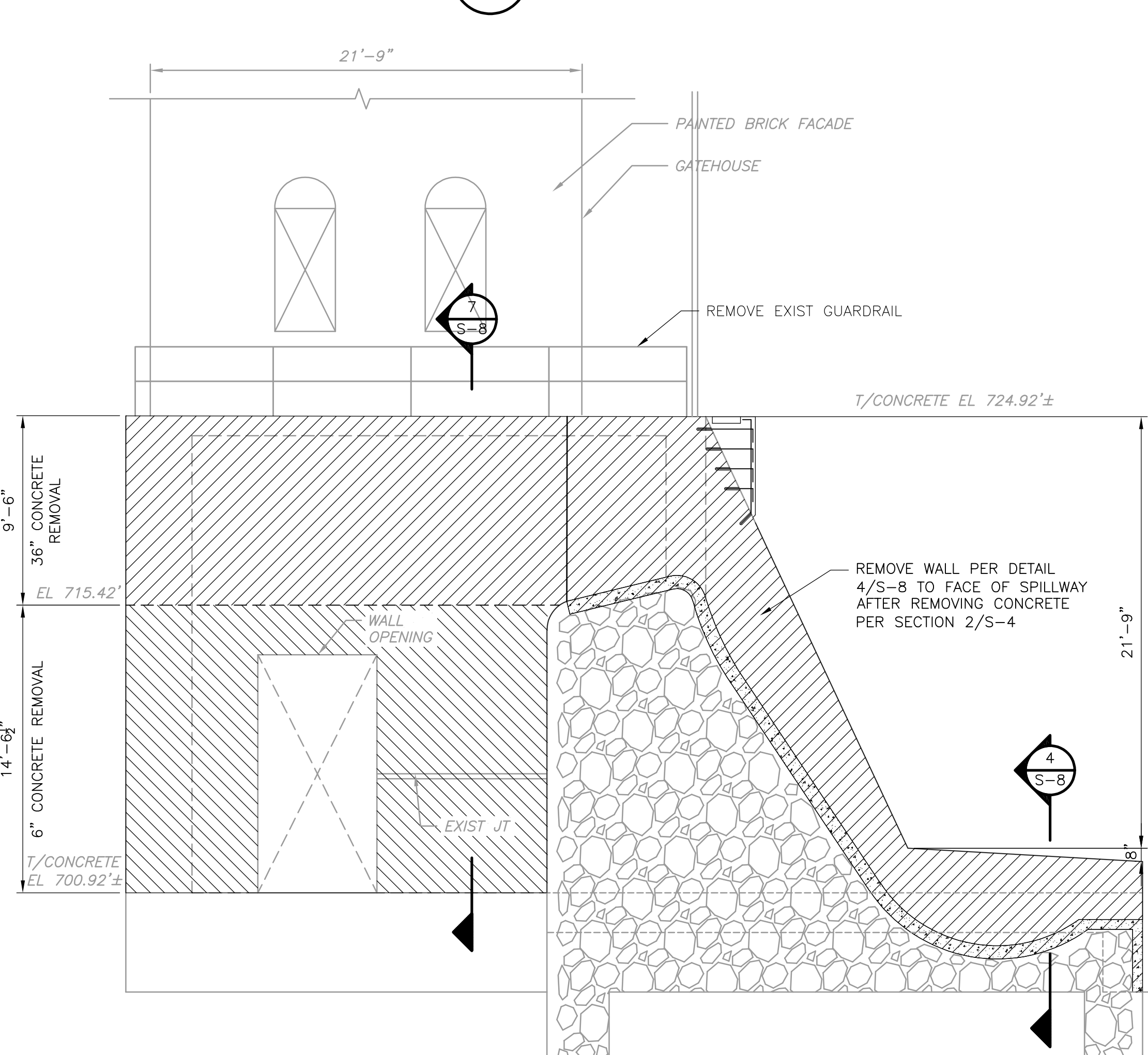
NOTES:

1. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN FIELD AND RECORDED PRIOR TO ANY DEMOLITION OR REPAIR WORK.
2. CJ IN FOUNDATION WALL TO BE LOCATED AT CENTER OF DOORWAY INTO GATEHOUSE TO FACILITATE ACCESS TO GATEHOUSE DURING FOUNDATION PHASES A AND B.

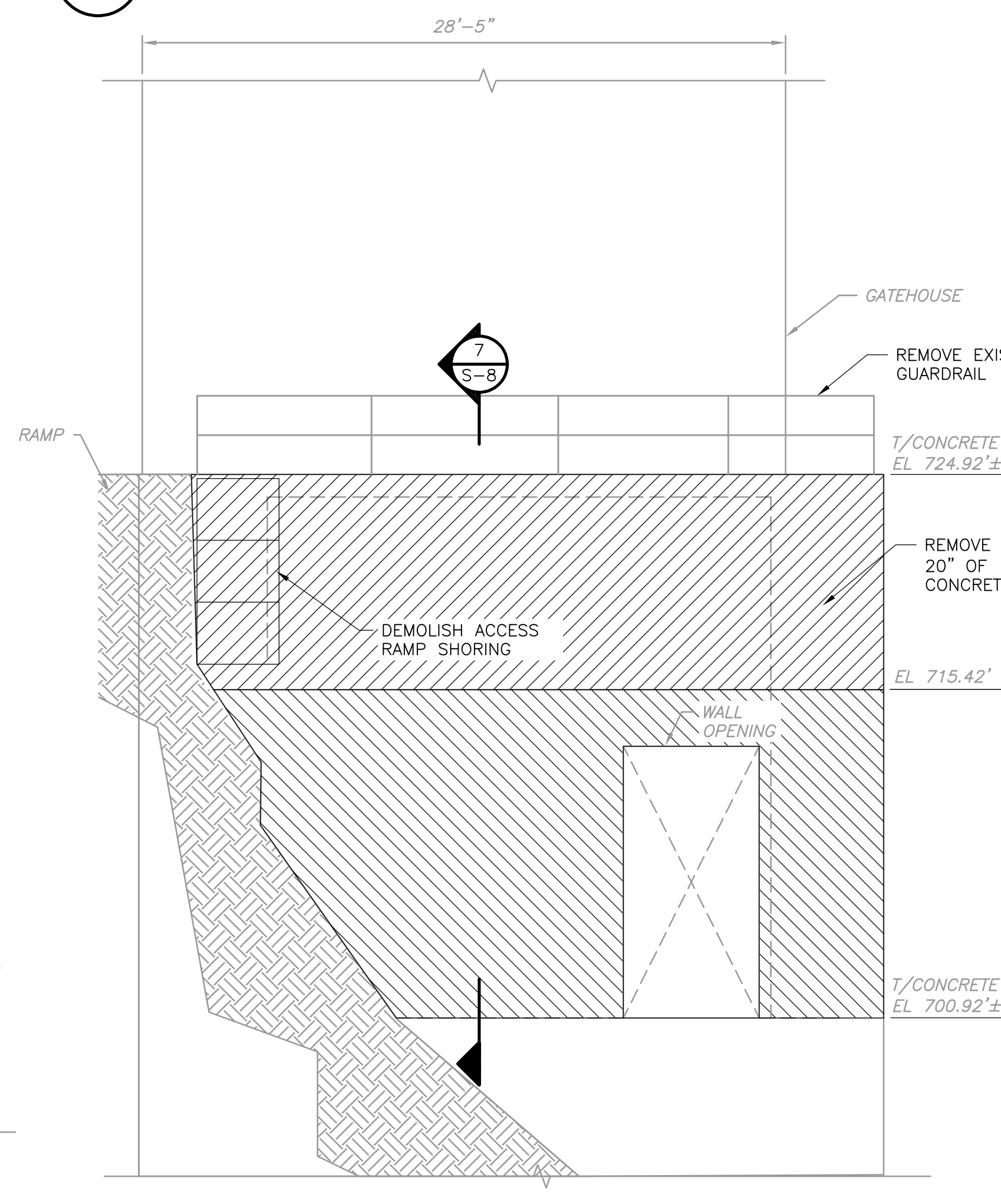
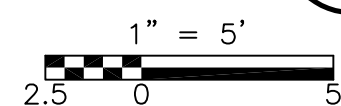
FOUNDATION REPAIR PHASE A
FOUNDATION REPAIR
DETAIL D
NTS

CANOPY BRACE
DETAIL E
NTS

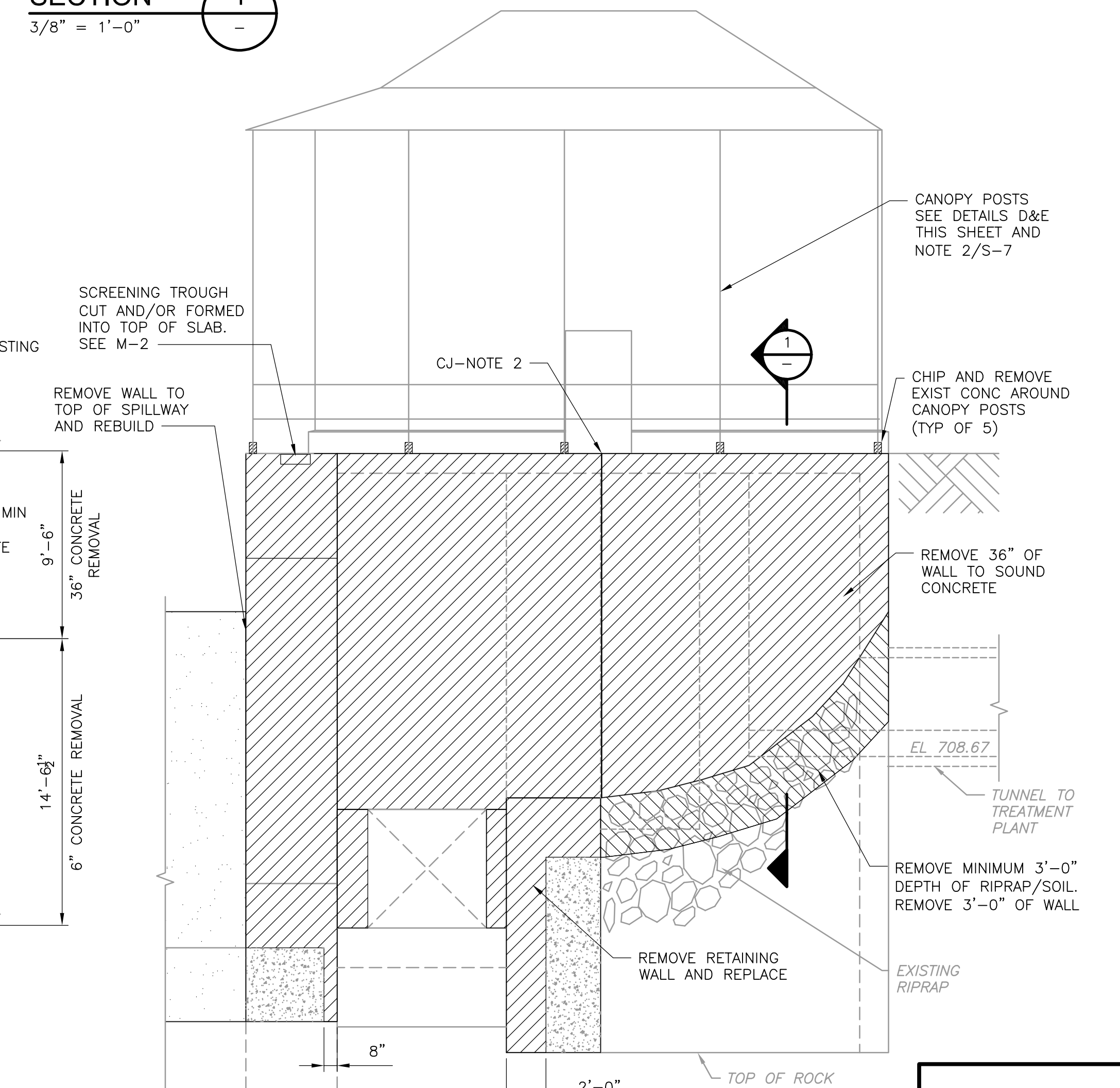
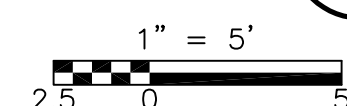
SECTION 1
3/8" = 1'-0"



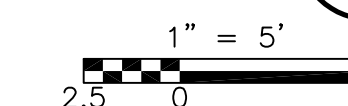
NORTH WALL ELEVATION
DETAIL A
1" = 5'



EAST WALL ELEVATION
DETAIL B
1" = 5'



WEST WALL ELEVATION
DETAIL C
1" = 5'



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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY:	J. BOGGS
DRAWN BY:	STAFF
SHEET CHK'D BY:	M. CALVINO
CROSS CHK'D BY:	N. VIGNEAULT
APPROVED BY:	J. ZANOTTI
DATE:	FEBRUARY 2025

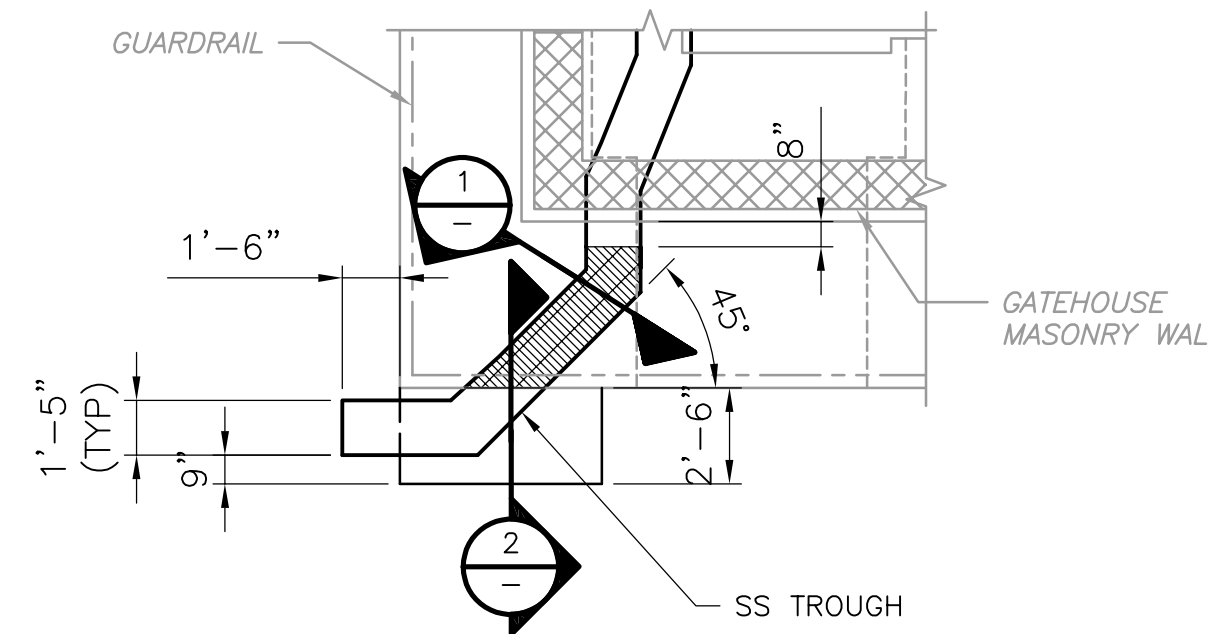
CDM Smith
Camp Dresser McKee & Smith
Salina Industrial Powerpark, One General Motors Drive
Syracuse, NY 13206
Tel: (315) 434-3200

CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

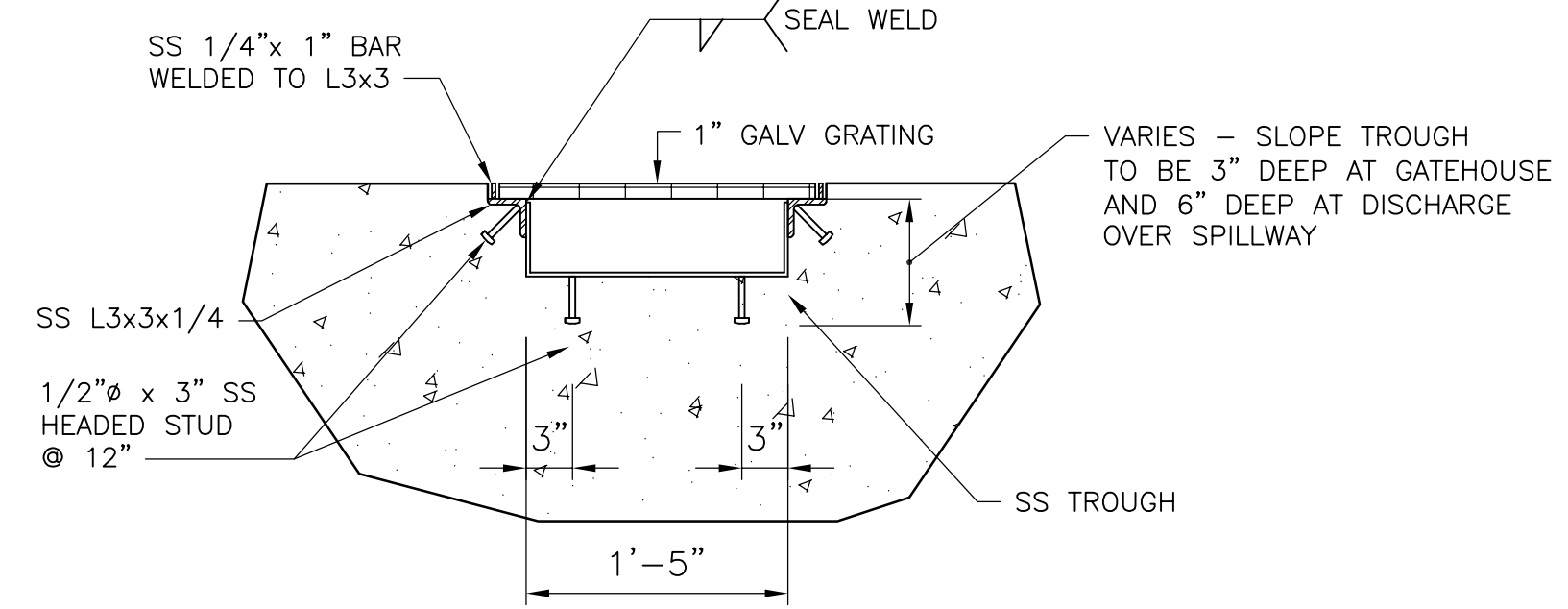
GATEHOUSE DEMOLITION ELEVATIONS

PROJECT NO.	21984-265075
FILE NAME:	SO09DMEL.DWG
SHEET NO.	17 OF 34
S-9	

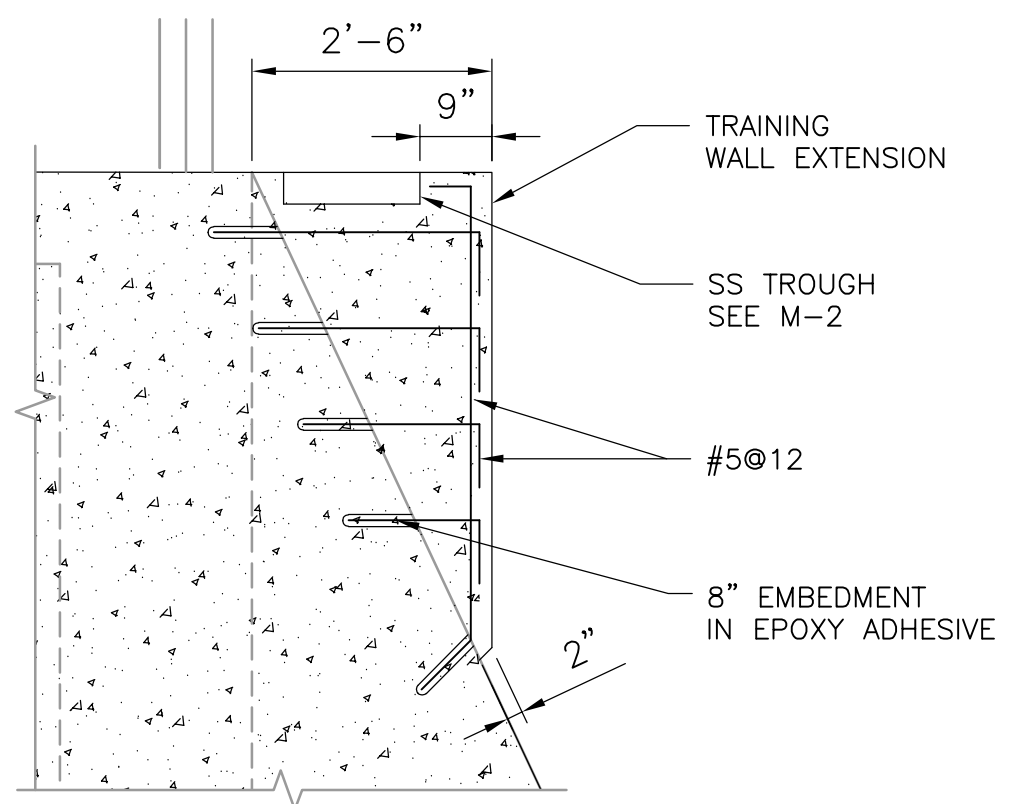
ISSUED FOR BID



PARTIAL PLAN
PLAN
 1" = 5'
 1" = 5'
 2.5 0 5

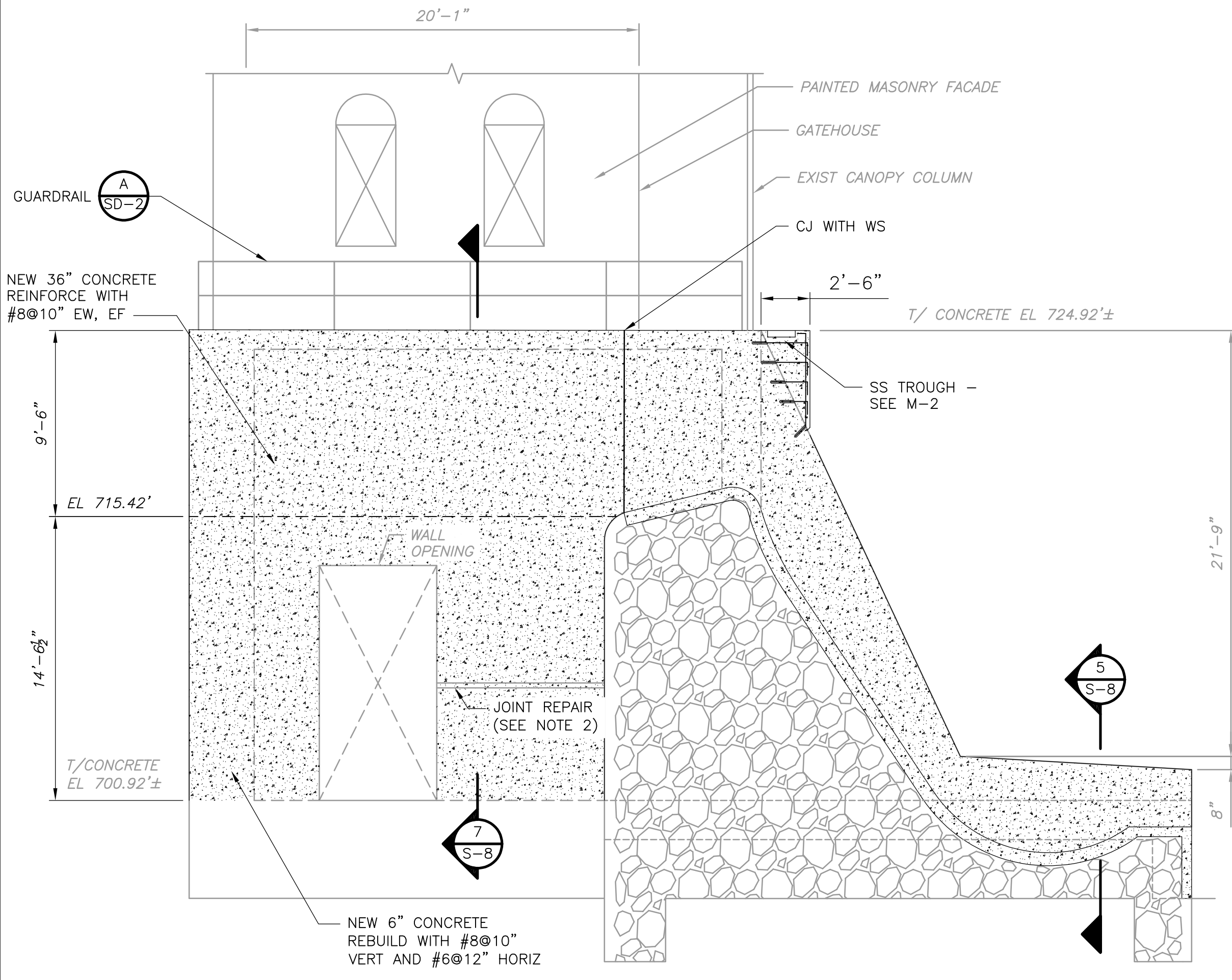


SECTION 1
 1" = 1'
 1" = 1'
 0.5 0 1

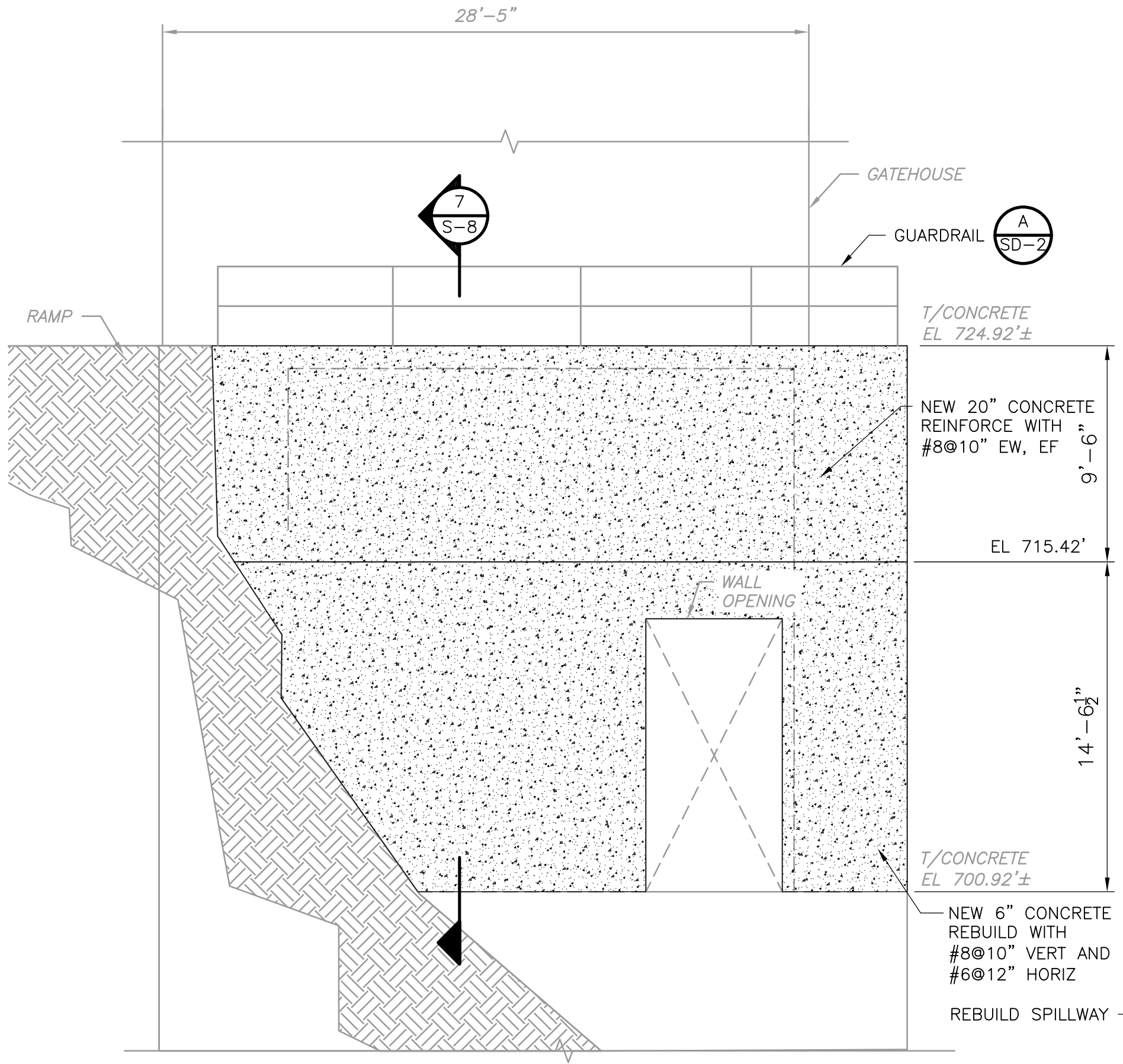


SECTION 2
 1/2" = 1'-0"

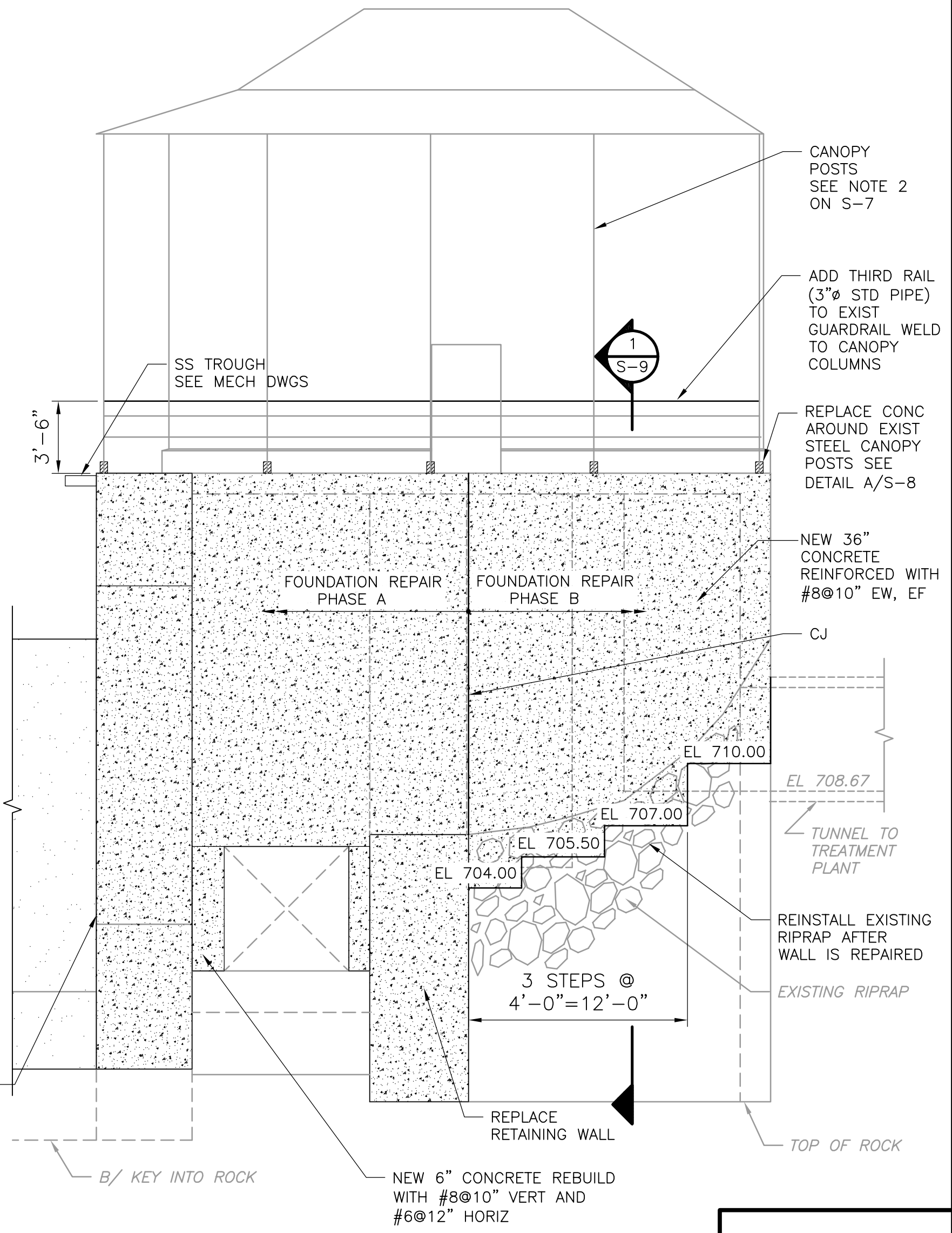
- NOTES:
- ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN FIELD AND RECORDED PRIOR TO ANY DEMOLITION OR REPAIR WORK.
 - AFTER REMOVAL OF EXTERIOR 3- FEET OF CONCRETE, IF JOINT IS STILL VISIBLE IN THE EXISTING CONCRETE, REPAIR BY EPOXY INJECTION PER DETAIL D/SD-1.



GATEHOUSE - NORTH VIEW
DETAIL A
 1" = 5'
 1" = 5'
 2.5 0 5



GATEHOUSE - EAST VIEW
DETAIL B
 1" = 5'
 1" = 5'
 2.5 0 5



WEST WALL ELEVATION
DETAIL C
 1" = 5'
 1" = 5'
 2.5 0 5

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. BOGGS
 DRAWN BY: STAFF
 SHEET CHK'D BY: M. CALVINO
 CROSS CHK'D BY: N. VIGNEAULT
 APPROVED BY: J. ZANOTTI
 DATE: FEBRUARY 2025

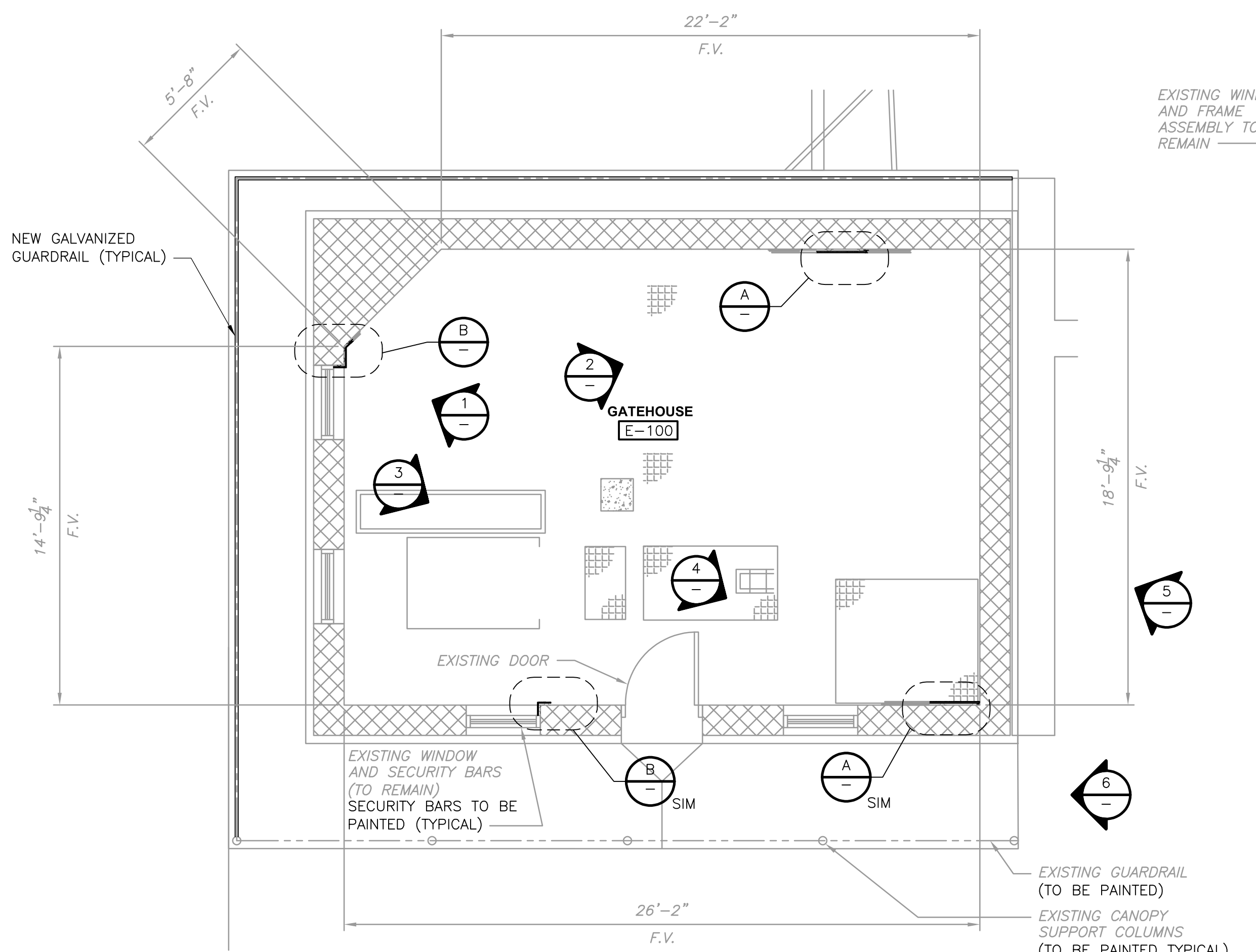
CDM Smith
 Camp Dresser McKee & Smith
 Salina Industrial Powerpark, One General Motors Drive
 Syracuse, NY 13206
 Tel: (315) 434-3200

CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

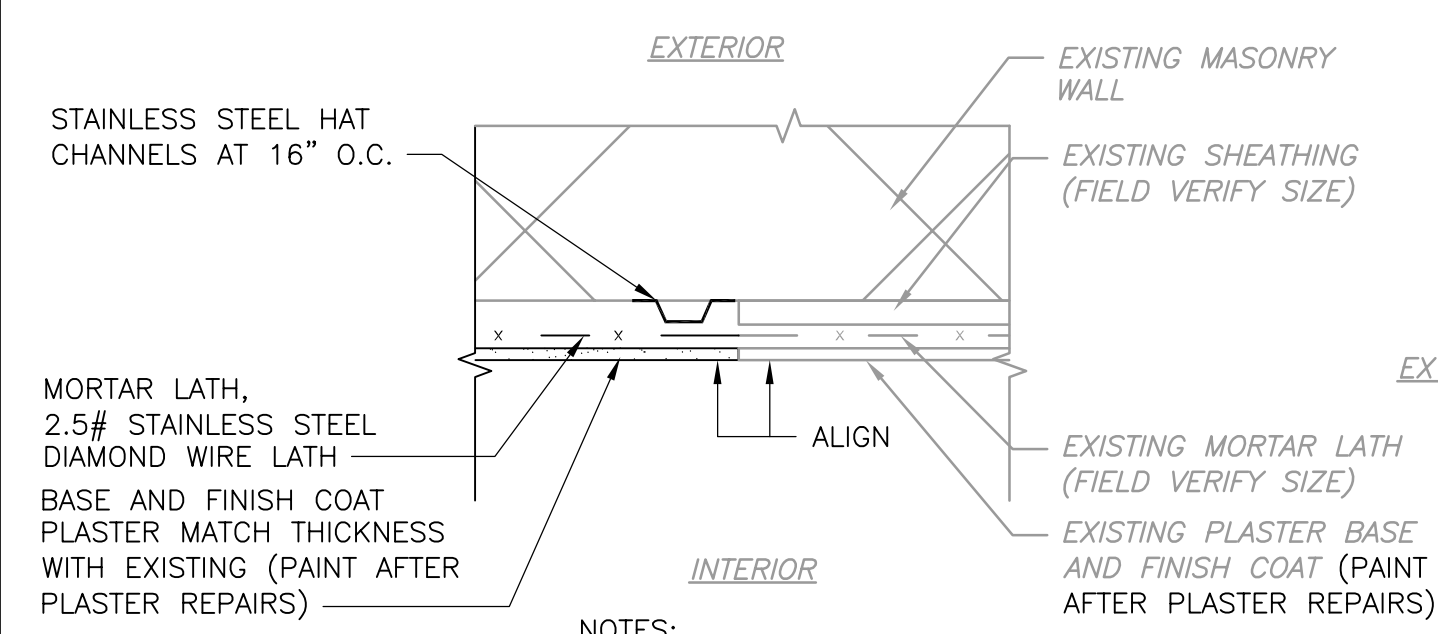
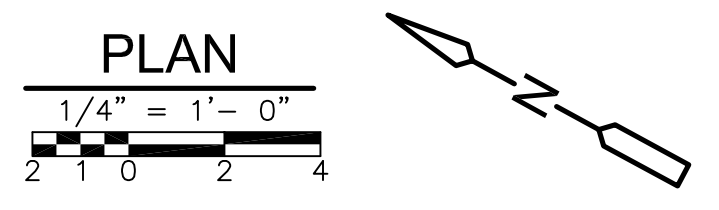
GATEHOUSE MODIFICATION ELEVATIONS
 PROJECT NO. 21984-265075
 FILE NAME: S010DMEL.DWG
 SHEET NO. 18 OF 34
S-10

ISSUED FOR BID

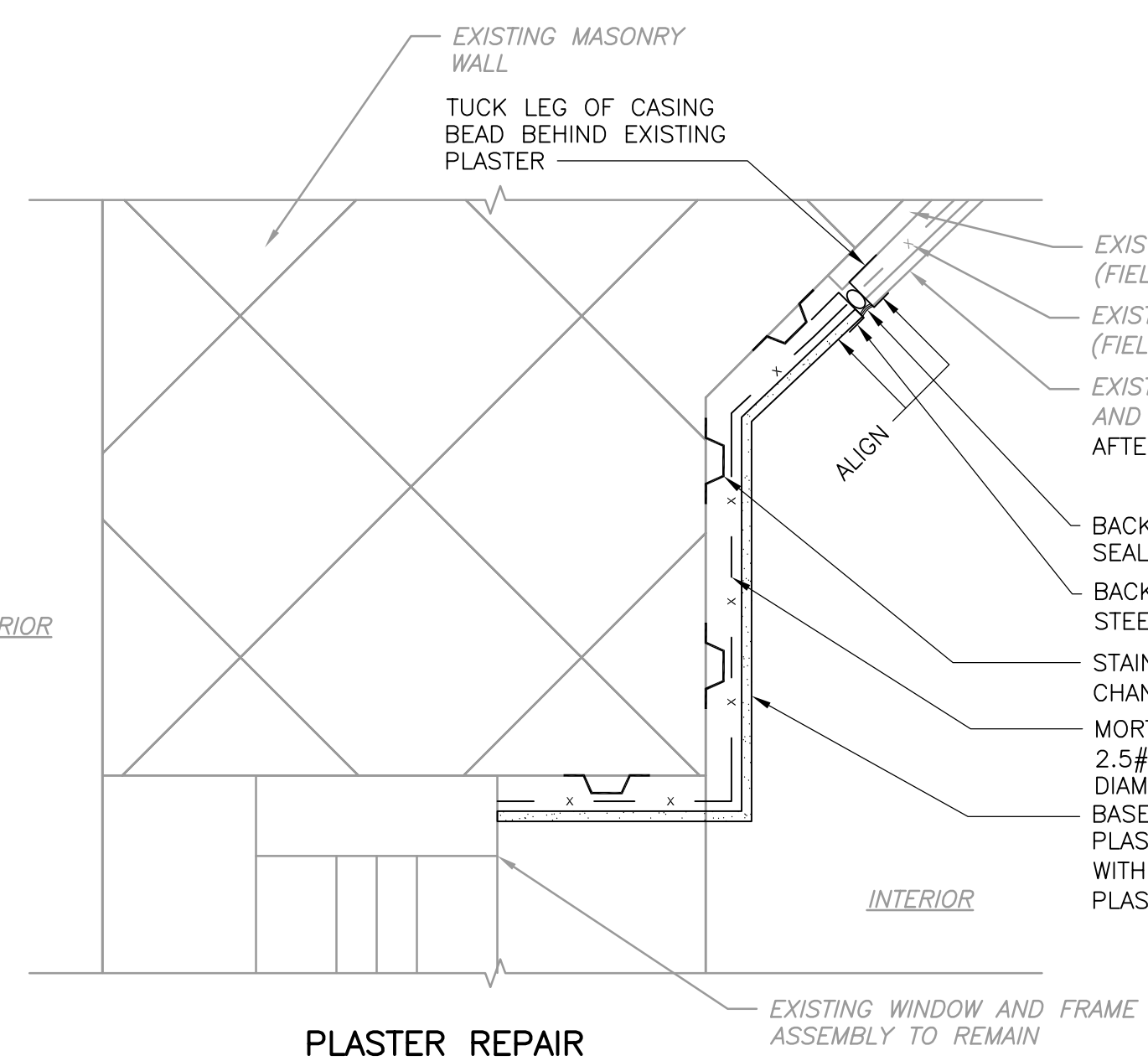
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 REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM SMITH AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM SMITH.



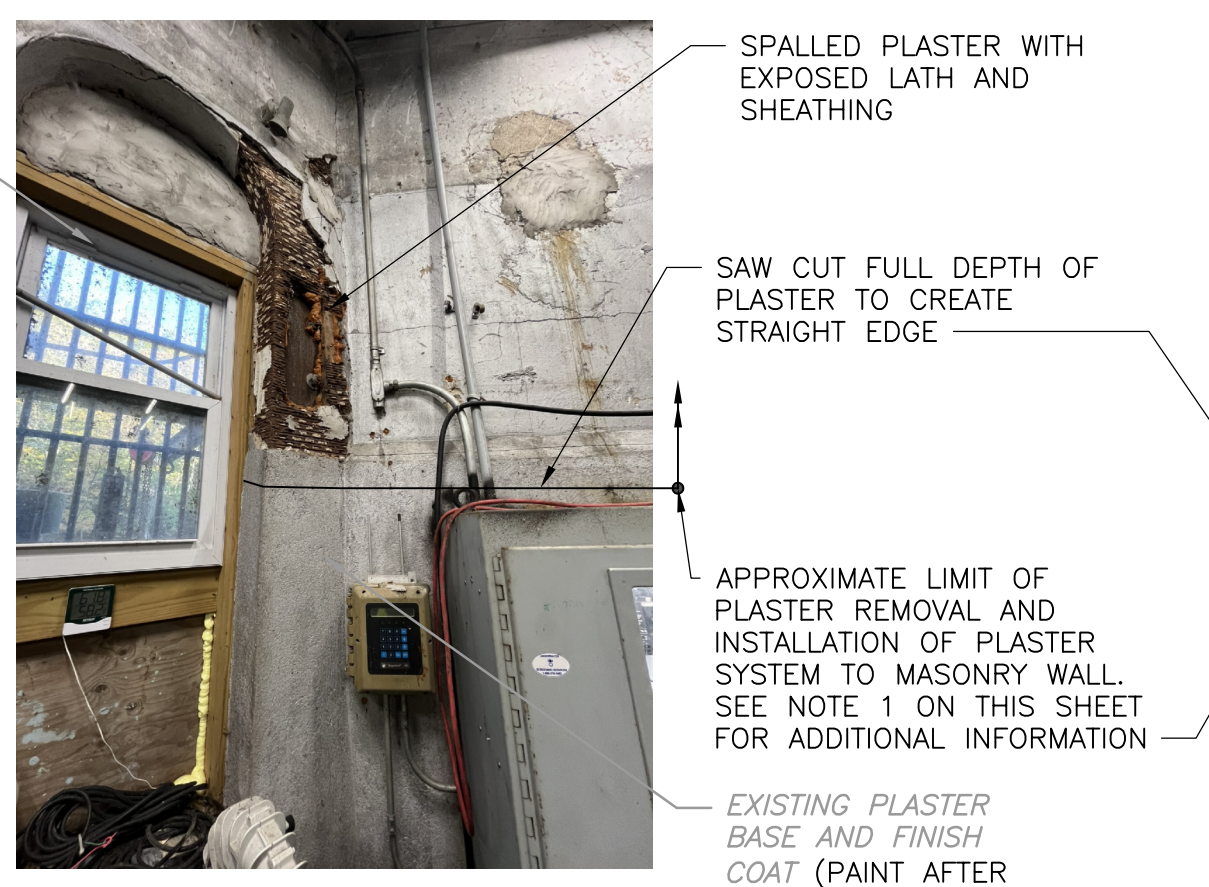
- GENERAL NOTES:**
- REMOVE DAMAGED PLASTER, LATH AND SHEATHING WHERE DIRECTED. APPROXIMATE REMOVAL AREA IS FROM THE CEILING TOWARD THE FLOOR FOR A DISTANCE OF ABOUT 7'-0" AROUND THE PERIMETER OF ROOM E-100. BASE BID QUANTITY IS 700 SF. UNIT PRICE WILL APPLY FOR FINAL AREA.
 - CONTRACTOR TO PREPARE ADJACENT SURFACES FOR NEW WORK.
 - PAINT INTERIOR WALLS AFTER COMPLETING PLASTER REPAIRS. PAINT CEILING AFTER VERIFYING CEILING SUBSTRATE MATERIAL.
 - PAINT EXTERIOR MASONRY WALLS, RAILINGS, WINDOW SECURITY BARS AND CANOPY SUPPORT COLUMNS AND BEAMS.



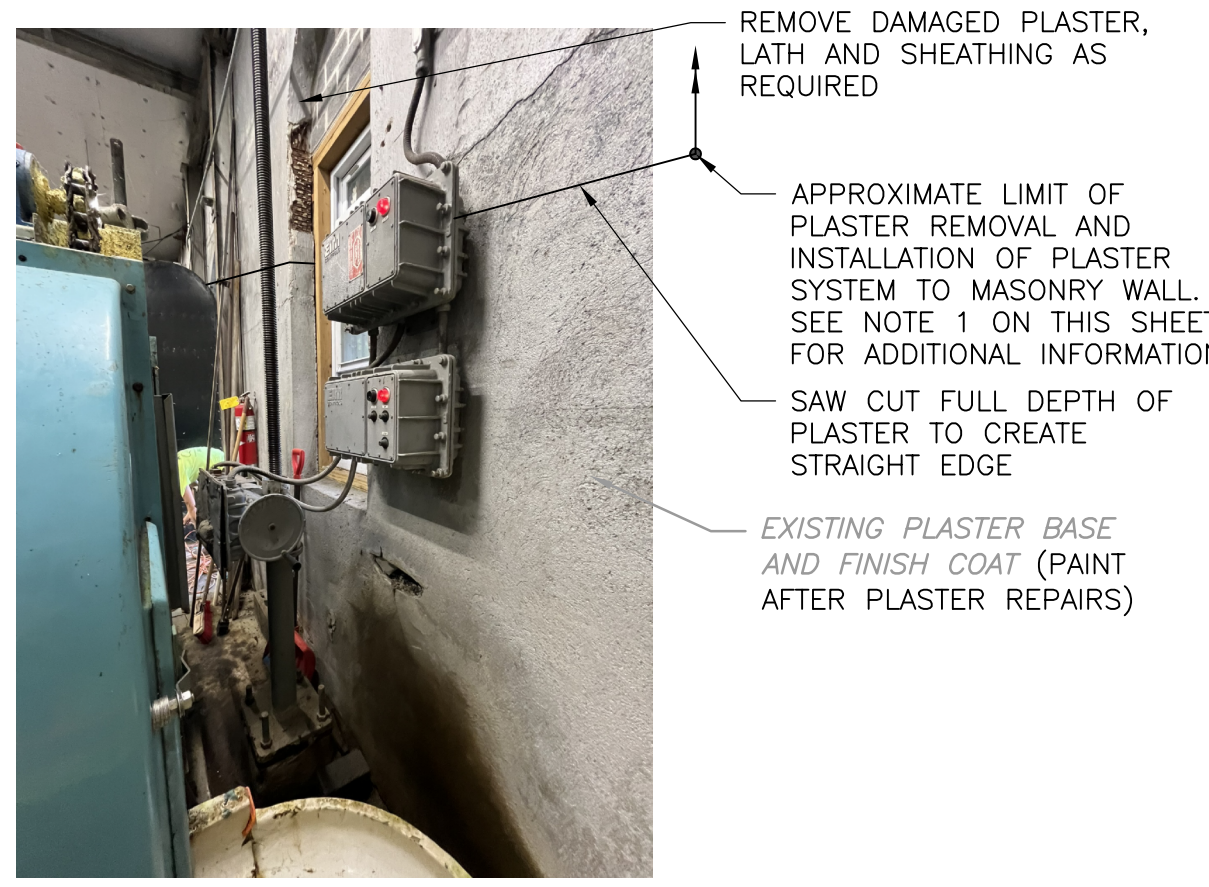
DETAIL A
 3" = 1'-0"



DETAIL B
 3" = 1'-0"



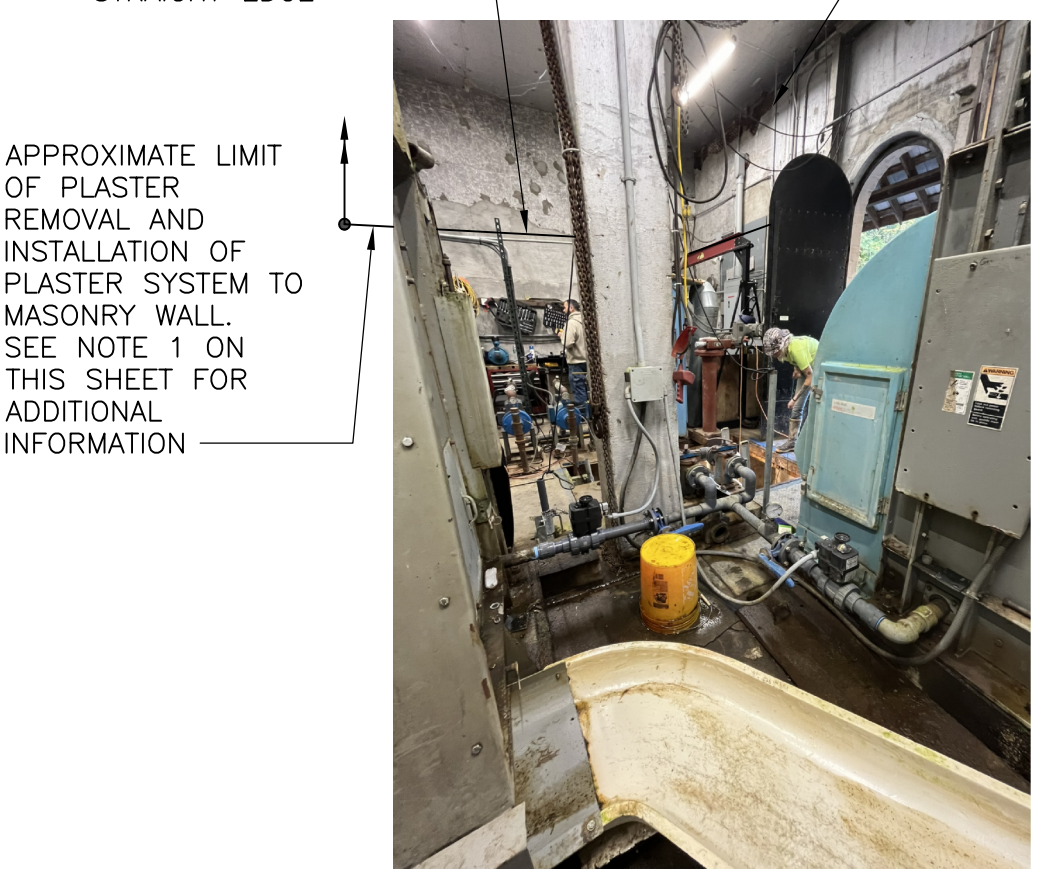
REFERENCE PHOTO
 DETAIL 1
 NTS



REFERENCE PHOTO
 DETAIL 4
 NTS



REFERENCE PHOTO
 DETAIL 2
 NTS



REFERENCE PHOTO
 DETAIL 3
 NTS



REFERENCE PHOTO
 DETAIL 5
 NTS

EXISTING CANOPY SUPPORT BEAMS (TO BE PAINTED TYPICAL)
 EXISTING MASONRY EXTERIOR WALL (TO BE PAINTED)
 EXISTING GUARDRAIL (TO BE PAINTED)
 EXISTING CANOPY SUPPORT COLUMNS (TO BE PAINTED TYPICAL)

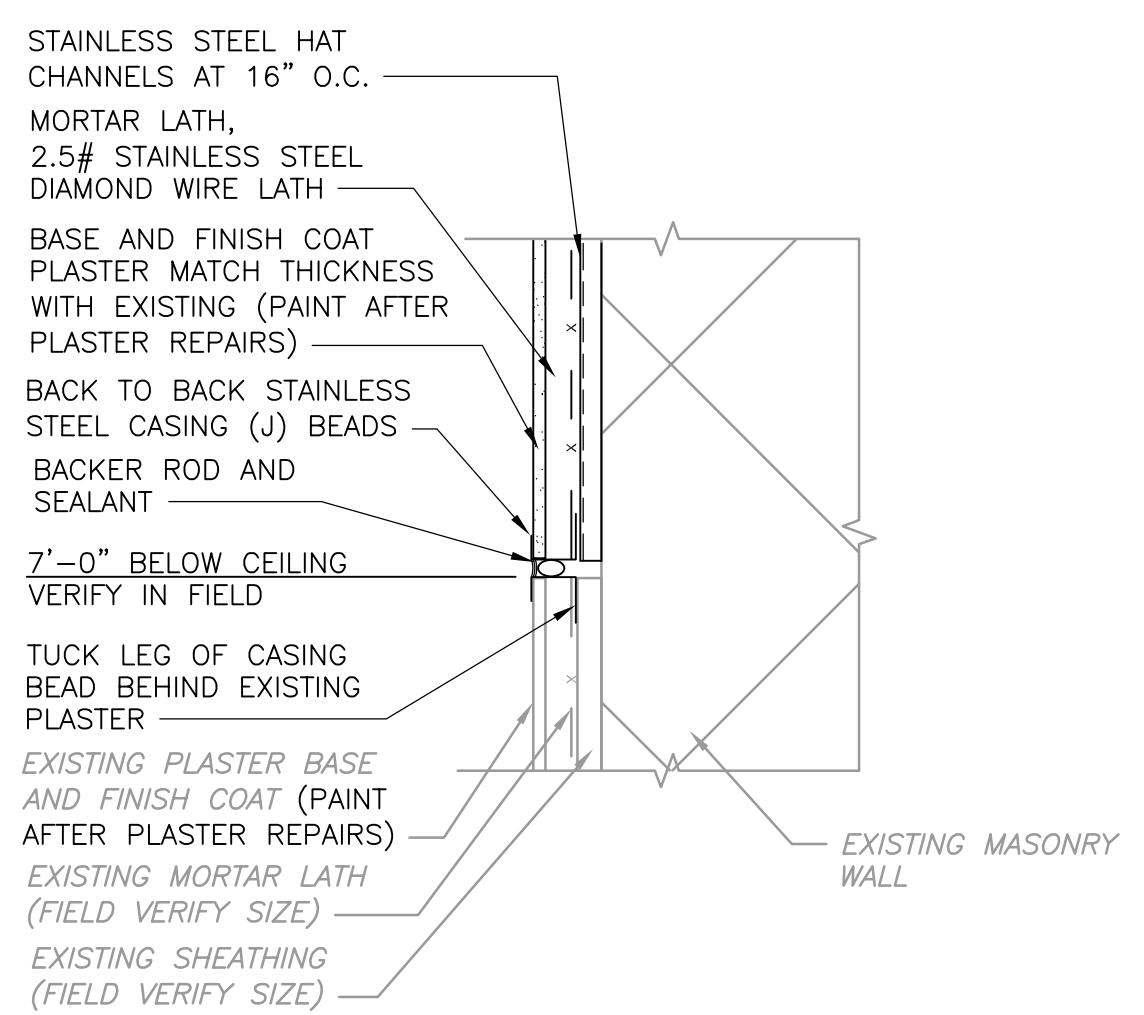
NOTE:
 REFERENCE PHOTO DETAIL 5 PROVIDED FOR REFERENCE. RESTORE MASONRY IN ACCORDANCE WITH THE MASONRY RESTORATION NOTES ON SHEET S-1.



REFERENCE PHOTO
 DETAIL 6
 NTS



REFERENCE PHOTO
 DETAIL 7
 NTS



DETAIL C
 3" = 1'-0"

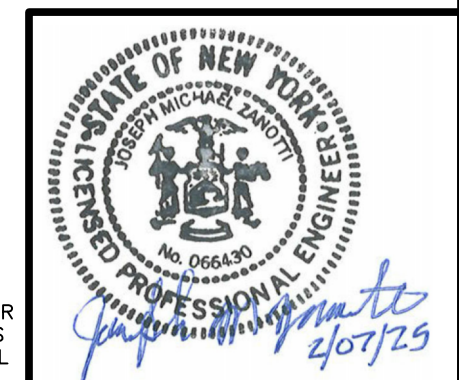
REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY:	J. HERNANDEZ
DRAWN BY:	A. SCHAAF
SHEET CHK'D BY:	T. KING
CROSS CHK'D BY:	M. CALVINO
APPROVED BY:	J. ZANOTTI
DATE:	FEBRUARY 2025

CDM Smith
 Camp Dresser McKee & Smith
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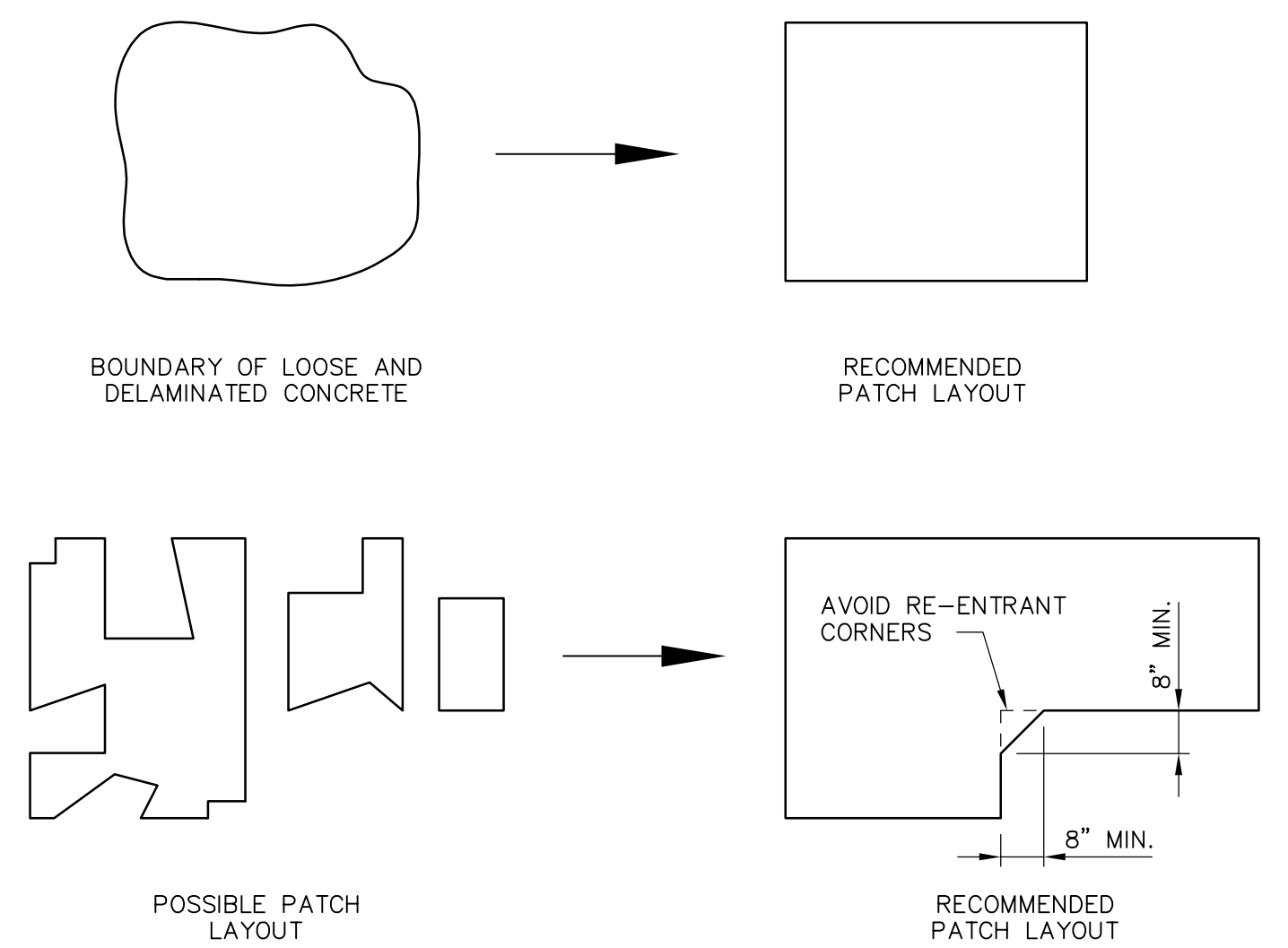
CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

KESSINGER DAM
GATEHOUSE GROUND FLOOR PLAN



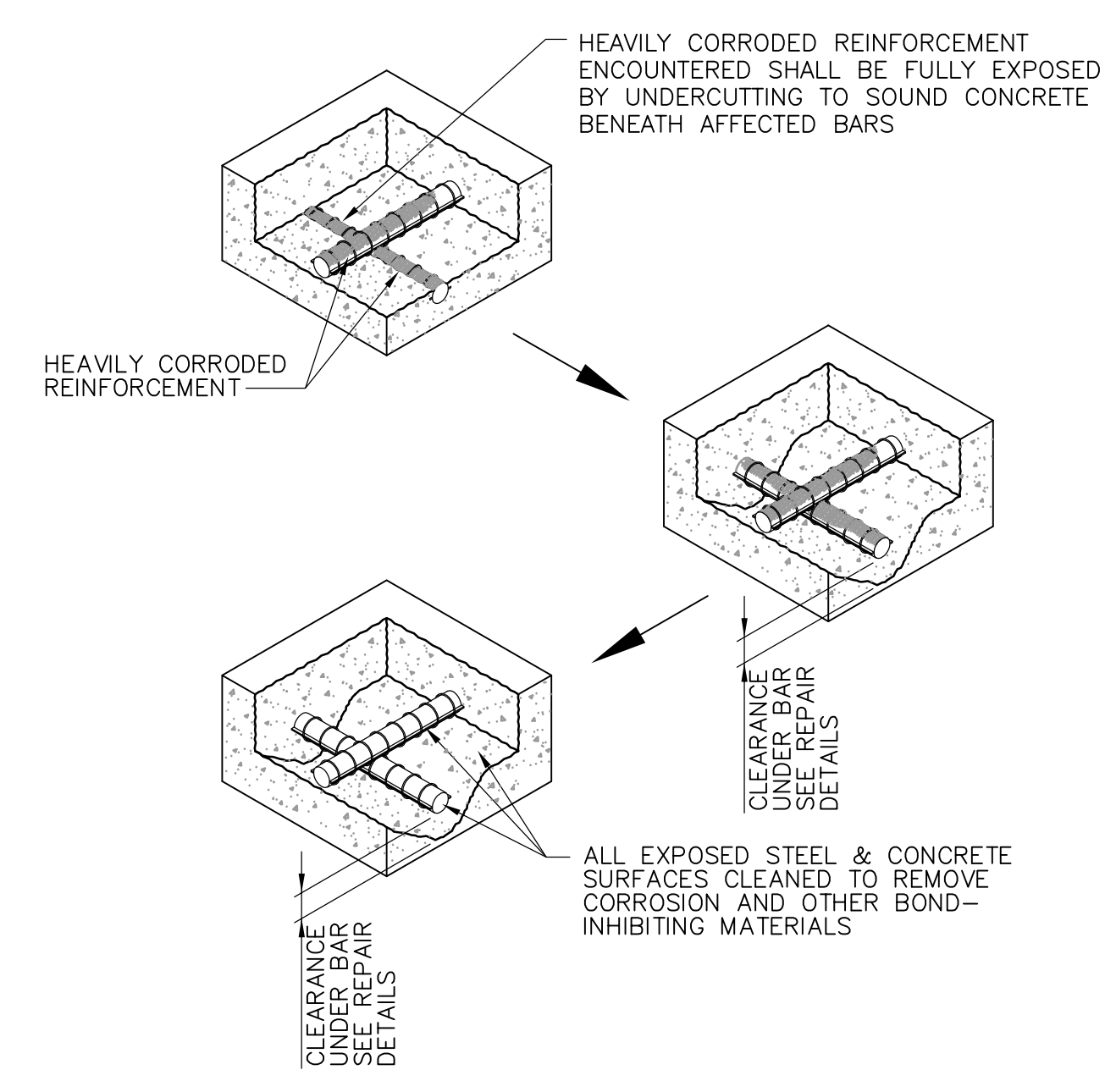
WARNING
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PROJECT NO.	21984-265075
FILE NAME:	S011DMP.DWG
SHEET NO.	19 OF 34
S-11	

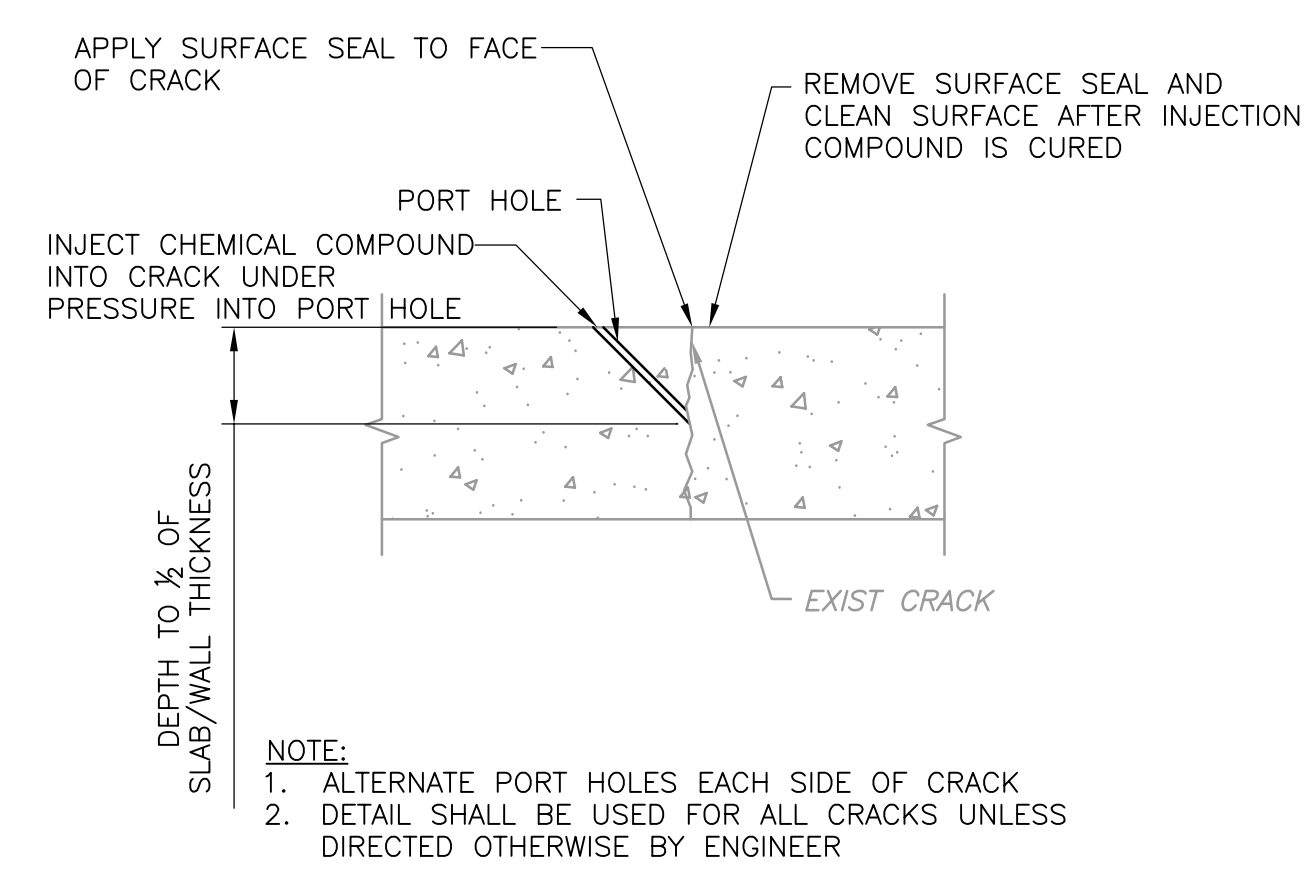


NOTES:
 1. PATCH LAYOUTS SHOULD BE MADE AS SIMPLE SQUARE OR RECTANGULAR SHAPES
 2. AVOID IRREGULAR SHAPED PATCHES.
 3. COMBINE ADJACENT SMALL PATCHES INTO LARGER SHAPES
 4. AVOID RECTANGULAR-ENTRANT CORNERS.

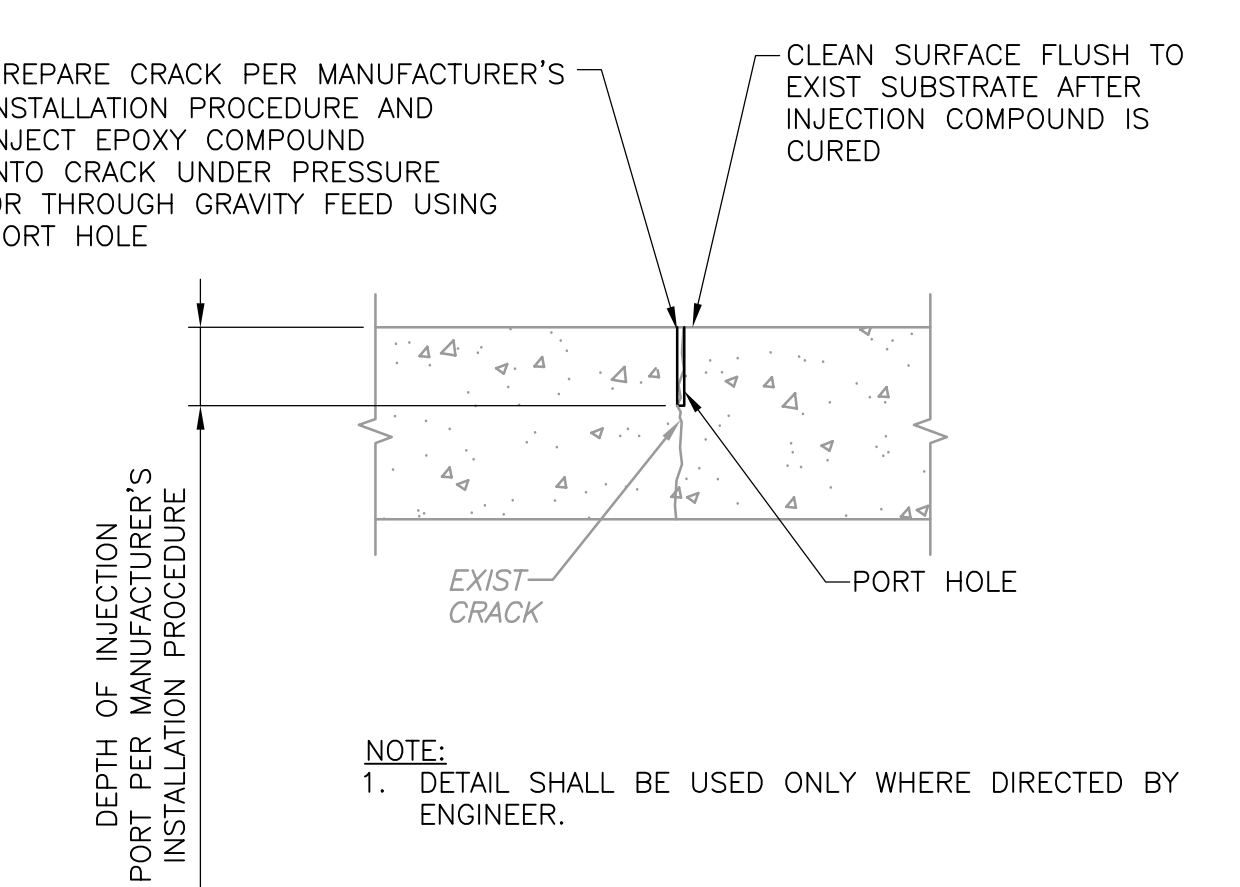
SURFACE REPAIR LAYOUTS
DETAIL A
 NTS



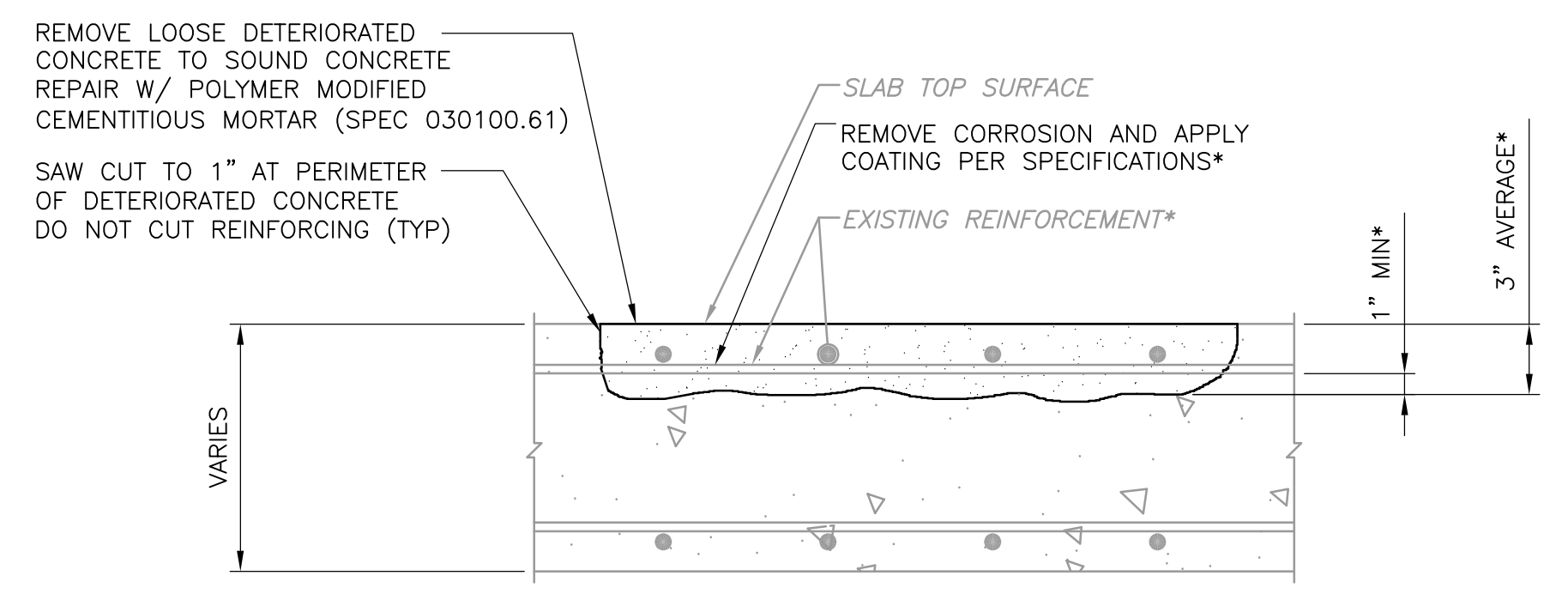
SURFACE PREPARATION
DETAIL B
 NTS



POLYURETHANE CRACK REPAIR
DETAIL C
 NTS

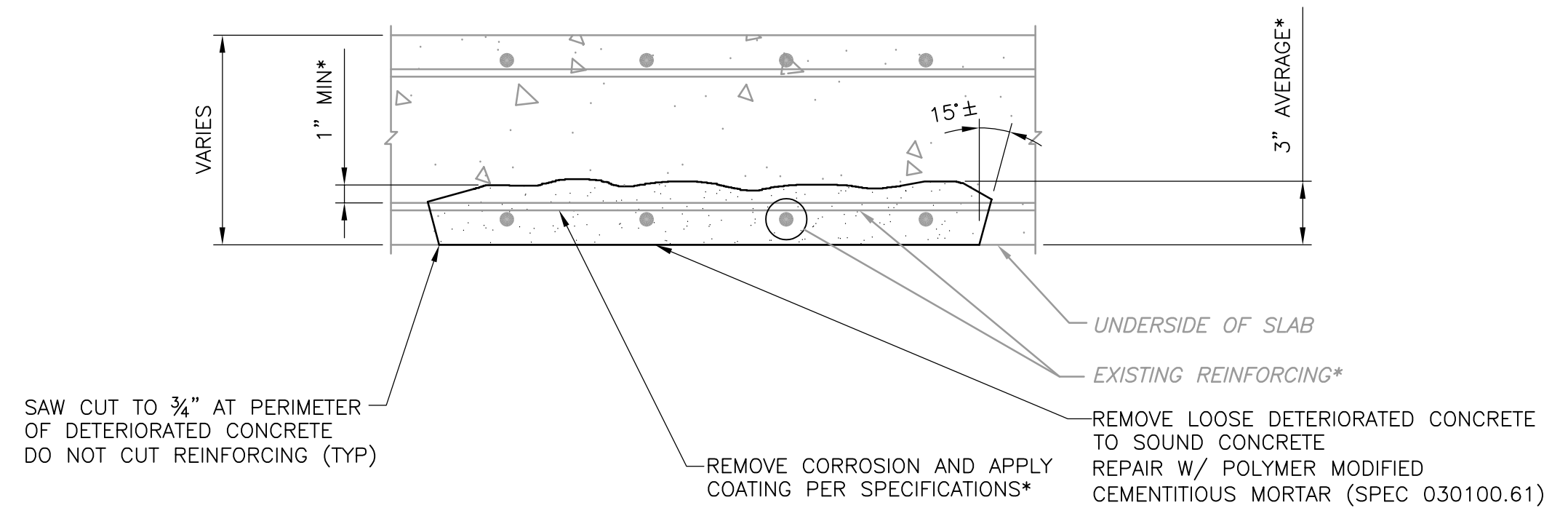


EPOXY CRACK REPAIR
DETAIL D
 NTS



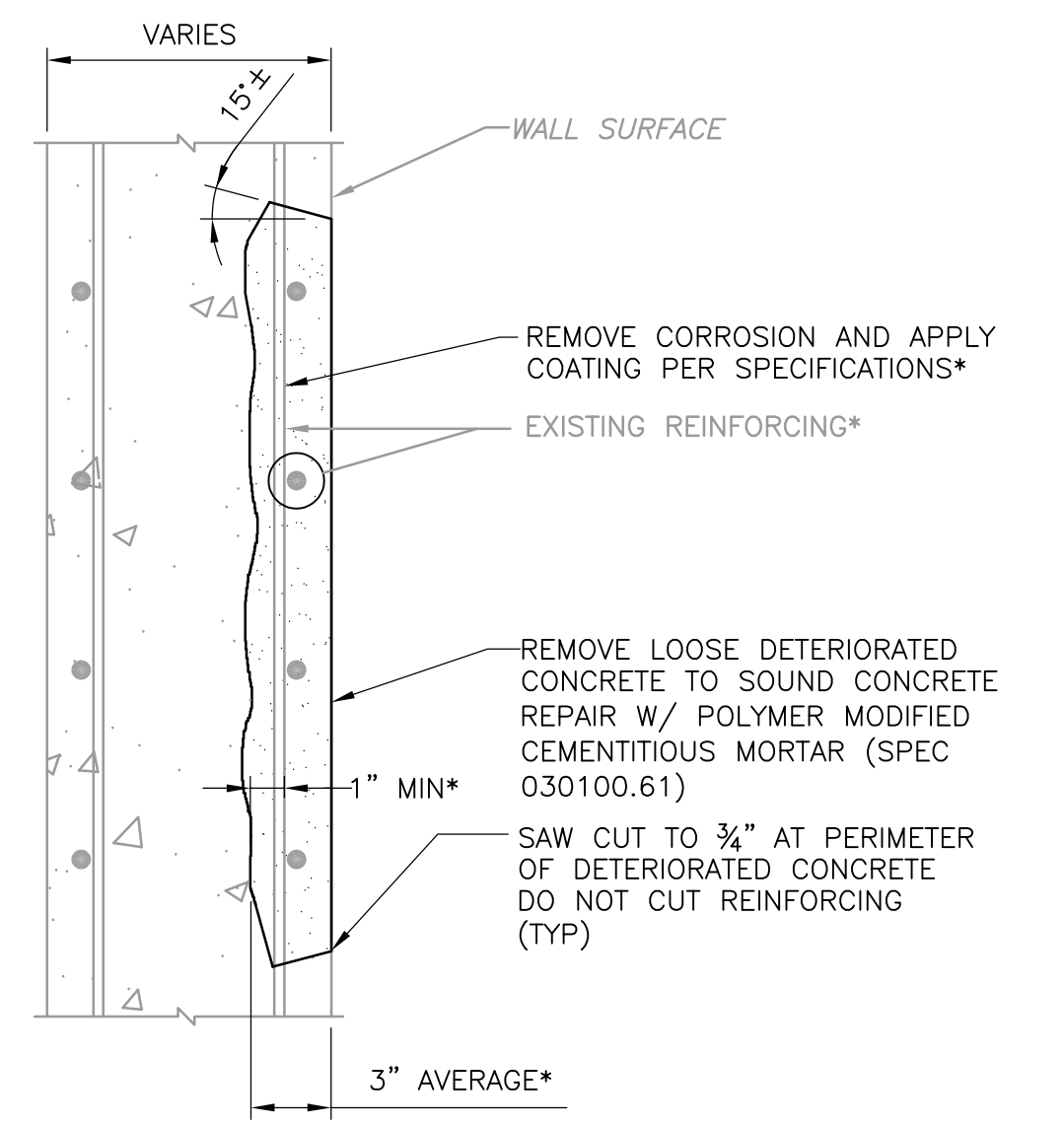
NOTES:
 1. THIS DETAIL APPLIES TO THE SLAB TOP SURFACE WHERE CONCRETE RESTORATION IS REQUIRED.
 2. AT LOCATIONS WHERE EXISTING REINFORCING HAS LESS THAN 3/4" COVER REMOVE CONCRETE AS SHOWN ABOVE, PREPARE EXISTING REINFORCING BARS, AND APPLY A BUILD-UP OF APPROPRIATE PATCHING MATERIAL TO PROVIDE A MINIMUM OF 1" COVER
 3. * WHERE REBAR IS ENCOUNTERED

SPALLED/DETERIORATED CONCRETE SURFACE REPAIR ON TOP SURFACES
DETAIL E
 NTS



NOTES:
 1. THIS DETAIL APPLIES TO THE SLAB UNDERSIDE WHERE CONCRETE RESTORATION IS REQUIRED.
 2. AT LOCATIONS WHERE EXISTING REINFORCING HAS LESS THAN 3/4" COVER, REMOVE CONCRETE AS SHOWN ABOVE, PREPARE EXISTING REINFORCING BARS, AND APPLY A BUILD-UP OF APPROPRIATE PATCHING MATERIAL TO PROVIDE A MINIMUM OF 1" COVER.
 3. * WHERE REBAR IS ENCOUNTERED

SPALLED/DETERIORATED CONCRETE SURFACE REPAIR ON SLAB UNDERSIDE
DETAIL F
 NTS



NOTES:
 1. THIS DETAIL APPLIES TO THE INTERIOR AND EXTERIOR WALLS.
 2. AT LOCATIONS WHERE EXISTING REINFORCING HAS LESS THAN 3/4" COVER REMOVE CONCRETE AS SHOWN ABOVE, PREPARE EXISTING REINFORCING BARS, AND APPLY A BUILD-UP OF APPROPRIATE PATCHING MATERIAL TO PROVIDE A MINIMUM OF 1" COVER
 3. * WHERE REBAR IS ENCOUNTERED

SPALLED/DETERIORATED CONCRETE SURFACE REPAIR ON VERTICAL SURFACES
DETAIL G
 NTS

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. BOGGS
 DRAWN BY: P. DOUGLAS
 SHEET CHK'D BY: M. CALVINO
 CROSS CHK'D BY: N. VIGNEAULT
 APPROVED BY: J. ZANOTTI
 DATE: FEBRUARY 2025

CDM Smith
 Camp Dresser McKee & Smith
 Salina Industrial Powerpark, One General Motors Drive
 Syracuse, NY 13206
 Tel: (315) 434-3200

CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

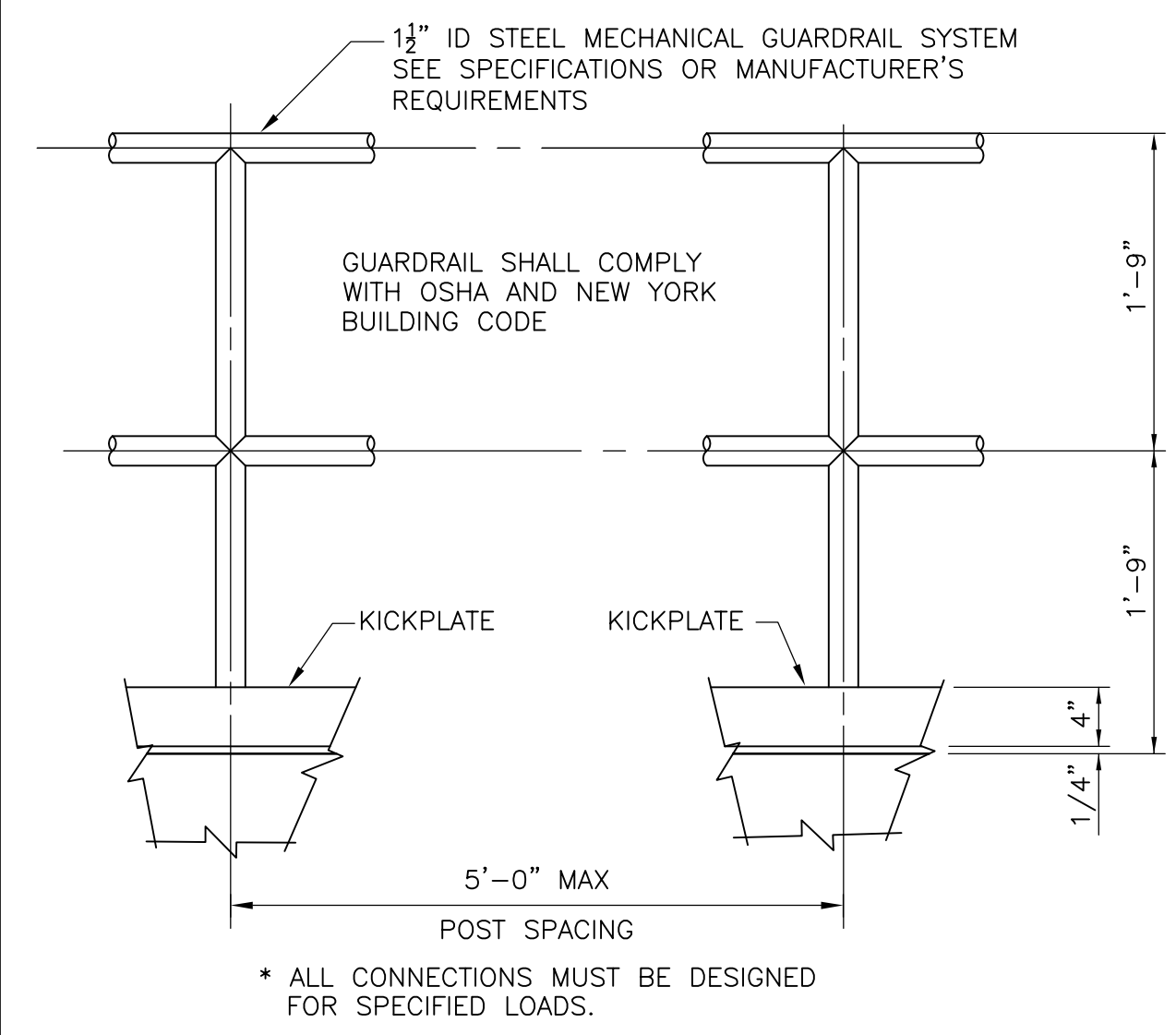
STANDARD CONCRETE REPAIR DETAILS
 SHEET NO. 20 OF 34
SD-1

WARNING
 IT IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATES OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR HAS BEEN ATTACHED.

PROJECT NO. 21984-265075
 FILE NAME: STD001.DWG
 SHEET NO. 20 OF 34

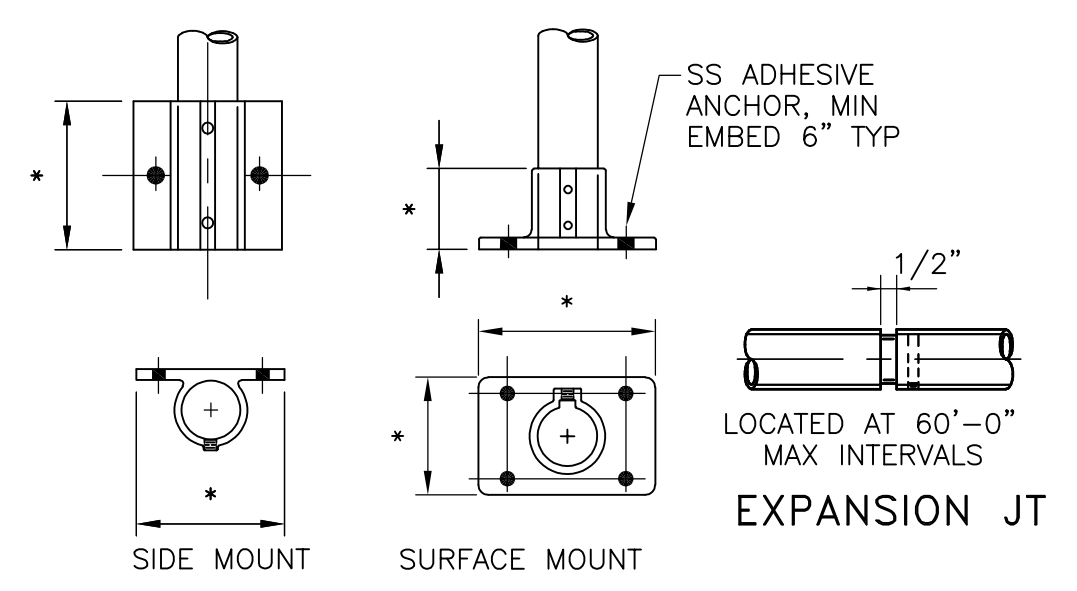
Professional Engineer Seal
 No. 066430
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GUARDRAIL NOTES:

- HANDRAILS, GUARDRAILS, POSTS, BRACKETS AND MOUNTINGS SHALL MEET THE NORTH CAROLINA BUILDING CODE AND OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) LOADING REQUIREMENTS.
- TOP OF ALL GUARDRAILS SHALL BE 42" HIGH ABOVE THE FINISH FLOOR OR WALKWAY. THE CLEAR DISTANCE BETWEEN THE TOP AND INTERMEDIATE RAILS MEASURED AT RIGHT ANGLES TO THE RAILS SHALL NOT EXCEED 21".



GUARDRAIL
DETAIL A
 NTS

STANDARD HOOKS AND SPLICE LENGTHS (INCHES)

BAR SIZE	TENSION (INCHES)				COMPRESSION ALL (INCHES)
	90° HOOK		STRAIGHT		
	ldh	A	TOP BARS	OTHER BARS	
3	7	6	14	12	12
4	9	8	19	14	15
5	12	10	23	18	19
6	14	12	28	21	23
7	16	14	40	31	27
8	18	16	46	35	30
9	21	19	57	44	34
10	23	22	70	54	39
11	26	24	84	65	43

2" COVER
6" OR GREATER SPACING
F_c=4,500 PSI
F_y=60,000 PSI

STANDARD HOOKS AND SPLICE LENGTHS (INCHES)

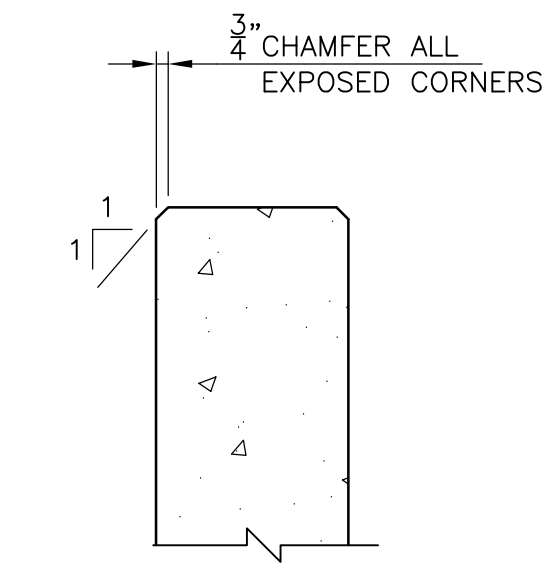
BAR SIZE	TENSION				COMPRESSION ALL
	90° HOOK		STRAIGHT		
	ldh	A	TOP BARS	OTHER BARS	
3	7	6	14	12	12
4	9	8	19	14	15
5	12	10	23	18	19
6	14	12	28	21	23
7	16	14	45	35	27
8	18	16	57	44	30
9	21	20	70	54	34
10	23	22	86	66	39
11	26	24	103	79	43

1 1/2" COVER
6" OR GREATER SPACING
F_c=4,500 PSI
F_y=60,000 PSI

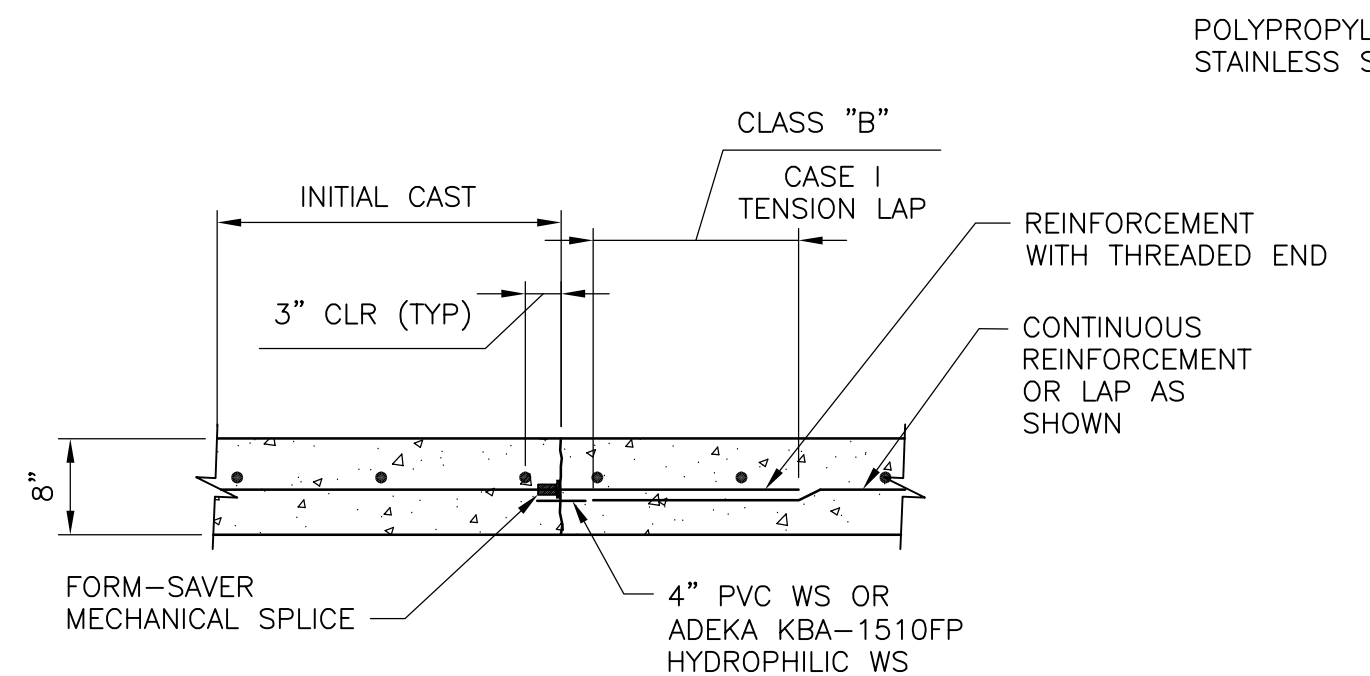
STANDARD HOOKS, LAP SPLICE AND DEVELOPMENT LENGTHS
(FOR UNCOATED BARS)

-
- TOP BARS ARE HOR BARS PLACED SUCH THAT MORE THAN 12" OF CONC IS CAST BELOW THE BAR. HORIZONTAL WALL BARS ARE TOP BARS.
 - 90° HOOKS SHALL BE LOCATED WITHIN THE CONFINED CORE OF A COLUMN OR BOUNDARY ELEMENT.
 - TABLE IS VALID FOR DESIGNS BASED ON ACI 318-08 AND 350-06.
 - TABLE IS BASED ON f_c = 4500 psi. LAP SPLICE AND DEVELOPMENT LENGTHS SHALL BE ADJUSTED FOR OTHER CONCRETE COMPRESSIVE STRENGTHS AS FOLLOWS:

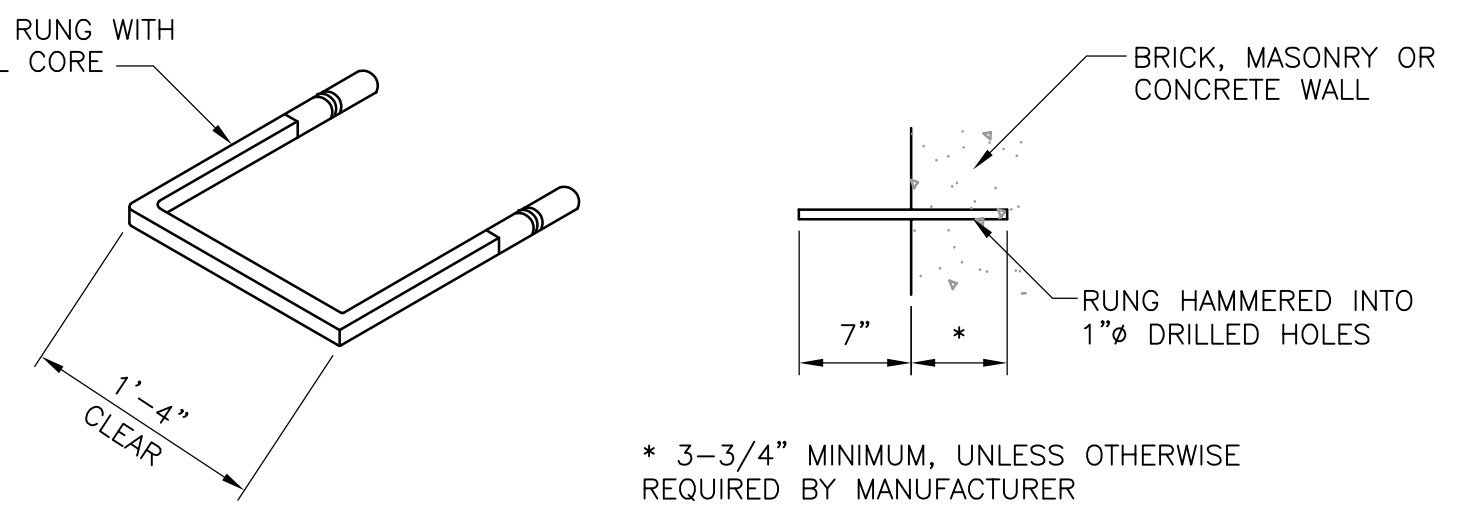
f _c	MULTIPLIER
3000 PSI	1.23
3500 PSI	1.14
4000 PSI	1.06
 - FOR COVER AND SPACING GEOMETRY NOT SHOWN ALL HOOKS, SPLICES AND DEVELOPMENT LENGTHS SHALL BE APPROVED IN WRITING BY THE ENGINEER OF RECORD.
 - LAPPED SPLICES SHALL NOT BE MADE AT POINTS OF MAXIMUM STRESS UNLESS NOTED OTHERWISE, INDICATED ON THE DRAWING OR DETERMINED BY ENGINEER.
 - UNO INDICATED ON DRAWINGS, THE BARS AT A LAP SPLICE SHALL BE IN CONTACT WITH EACH OTHER.



CHAMFER
DETAIL C
 NTS



OVERLAY CONSTRUCTION JOINT
DETAIL D
 NTS



NOTE:
 INSTALL LADDER RUNGS 12" ON CENTER, VERTICALLY

LADDER RUNG
DETAIL E
 NTS

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. BOGGS
 DRAWN BY: P. DOUGLAS
 SHEET CHK'D BY: M. CALVINO
 CROSS CHK'D BY: N. VIGNEAULT
 APPROVED BY: J. ZANOTTI
 DATE: FEBRUARY 2025



CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

CONCRETE AND GUARDRAIL DETAILS
 PROJECT NO. 21984-265075
 FILE NAME: STD002.DWG
 SHEET NO. 21 OF 34
SD-2

SCHEDULE OF SPECIAL INSPECTIONS AND TESTS

NOTES:

- THIS DRAWING IS PROVIDED TO OUTLINE THE MINIMUM LEVEL OF SPECIAL INSPECTIONS DURING CONSTRUCTION TO ENSURE CONFORMANCE TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. A STATEMENT OF SPECIAL INSPECTIONS WILL BE PREPARED BY A REGISTERED DESIGN PROFESSIONAL AND SUBMITTED WITH THE BUILDING PERMIT APPLICATION.
- SPECIAL INSPECTIONS WILL BE CONDUCTED IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH IN CHAPTER 17 OF THE 2020 NEW YORK STATE BUILDING CODE [2018 INTERNATIONAL BUILDING CODE (IBC)].
- IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE, THE OWNER WILL PROVIDE AN APPROVED AGENCY OR AGENCIES, INDEPENDENT FROM THE CONTRACTOR AND EMPLOYING QUALIFIED PERSONNEL TO PERFORM SPECIAL INSPECTIONS IDENTIFIED IN THE STATEMENT OF SPECIAL INSPECTIONS. THE APPROVED AGENCY WILL FURNISH INSPECTION REPORTS TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND BUILDING OFFICIAL.
- SPECIAL INSPECTIONS SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR QUALITY CONTROL OF THE WORK OR FOR CONFORMANCE TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. DETECTION, OR FAILURE TO DETECT, DEFECTS IN THE WORK SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO CORRECT ALL DEFECTS IN THE WORK, WHETHER DETECTED OR NOT, AND OF RESPONSIBILITY FOR CONFORMANCE TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- REMOVE AND REPLACE, OR REPAIR, DEFECTS IN THE WORK AND WORK NOT IN CONFORMANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL BEAR THE COSTS FOR THE INSPECTION AND/OR TESTS OF ANY REPLACED OR REPAIRED PORTIONS OF THE WORK.
- CONTRACTOR SHALL COOPERATE WITH SPECIAL INSPECTIONS BY PROVIDING SUFFICIENT NOTICE FOR THE SCHEDULING OF PERSONNEL AND BY ALLOWING FREE AND SAFE ACCESS TO THE WORK FOR OBSERVATION, VERIFICATION, SAMPLING AND INSPECTION. PROVIDE AND PERMIT THE USE OF LADDERS, SCAFFOLDING, INCIDENTAL EQUIPMENT, AND SAFETY EQUIPMENT AS MAY BE REQUIRED TO CONDUCT SPECIAL INSPECTIONS. ALL SUCH PROVISIONS FOR FREE AND SAFE ACCESS AND EQUIPMENT SHALL BE SAFE, IN GOOD WORKING CONDITION, AND ERECTED, MAINTAINED, AND HANDLED BY QUALIFIED PERSONNEL.
- SPECIAL INSPECTIONS DO NOT APPLY TO CONTRACTOR'S EQUIPMENT, TEMPORARY STRUCTURES USED FOR CONSTRUCTION, MEANS AND METHODS OF CONSTRUCTION, OR SITE SAFETY. CONTRACTOR SHALL REMAIN RESPONSIBLE FOR ADEQUACY AND SAFETY OF EQUIPMENT, TEMPORARY STRUCTURES USED FOR CONSTRUCTION, MEANS AND METHODS OF CONSTRUCTION AND SITE SAFETY.
- PROVIDE SPECIAL INSPECTIONS AND TESTS FOR THE FOLLOWING TYPES OF WORK:
 - CONCRETE CONSTRUCTION PER IBC SECTION 1705.3 AND TABLE 1705.3.
 - ROCK DOWELS PER TABLE 2.
 - FABRICATED ITEMS PER IBC SECTION 1705.10.

TABLE 1 – REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION (IBC, TABLE 1705.3)

TYPE	IBC REFERENCE	INSPECTION FREQUENCY		REFERENCE STANDARD
		CONTINUOUS	PERIODIC	
INSPECT REINFORCEMENT, AND VERIFY PLACEMENT	1705.3 1908.4		X	ACI 318: CH 20, 25.2, 25.3, 26.6.1–26.6.3
REINFORCING BAR WELDING: a. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706 b. INSPECT SINGLE PASS FILLET WELDS MAX 5/16" c. INSPECT ALL OTHER WELDS	1705.3		X	AWS D1.4 ACI 318: 26.6.4
INSPECT ANCHORS CAST IN CONCRETE	1705.3		X	ACI 318: 17.8.2
INSPECT ANCHORS AND DOWELS POST-INSTALLED IN HARDENED CONCRETE MEMBERS (NOTE a): a. ADHESIVE ANCHORS AND DOWELS INSTALLED HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS b. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN a	1705.3	X		ACI 318: 17.8.2.4
VERIFYING USE OF REQUIRED DESIGN MIX	1705.3 1904.1 1904.2 1908.2 1908.3		X	ACI 318: CH 19, 26.4.3, 26.4.4
PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	1705.3 1908.10	X		ASTM C31 ASTM C172 ACI 318: 26.5, 26.12
INSPECT CONCRETE, SHOTCRETE, AND REPAIR MORTAR PLACEMENT FOR PROPER APPLICATION TECHNIQUES	1705.3 1908.6 1908.7 1908.8	X		ACI 318: 26.5
VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	1705.3 1908.9		X	ACI 318: 26.5.3–26.5.5
INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED	1705.3		X	ACI 318: 26.11.1.2(b)

NOTES:

- SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH 17.8.2 IN ACI 318, OR OTHER QUALIFICATION PROCEDURES. WHERE SPECIFIC REQUIREMENTS ARE NOT PROVIDED, SPECIAL INSPECTION REQUIREMENTS SHALL BE SPECIFIED BY THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF THE WORK.

TABLE 2 – REQUIRED SPECIAL INSPECTIONS AND TESTS OF ROCK DOWELS

VERIFICATION AND INSPECTION	IBC REFERENCE	INSPECTION FREQUENCY		REFERENCE STANDARD	REMARKS
		CONTINUOUS	PERIODIC		
INSPECT DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT	1705.7	X		CONTRACT DOCUMENTS	
VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM ELEMENT DIAMETERS, LENGTHS, PLACEMENT WITH CENTRALIZERS, EMBEDMENT INTO ROCK (IF APPLICABLE), HOLE CLEANLINESS, AND RECORD CONCRETE OR GROUT VOLUMES PLACED.		X			
FOR CONCRETE ELEMENTS PERFORM TESTS AND ADDITIONAL SPECIAL INSPECTIONS IN ACCORDANCE WITH TABLE 1 AND IBC SECTION 1705.3					
OBSERVE TESTING OF ROCK DOWEL AND RECORD RESULTS OF TEST REQUIRED PER NOTES ON S-1		X			

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REV. NO.	DATE	DRWN	CHKD	REMARKS


DESIGNED BY: J. BOGGS
 DRAWN BY: STAFF
 SHEET CHK'D BY: M. CALVINO
 CROSS CHK'D BY: N. VIGNEAULT
 APPROVED BY: J. ZANOTTI
 DATE: FEBRUARY 2025



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CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

SPECIAL INSPECTION TABLES AND NOTES



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PROJECT NO. 21984-265075
 FILE NAME: SD03SPIN.DWG
 SHEET NO. 22 OF 34
SD-3

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PIPING SYMBOLS		
DOUBLE LINE SYMBOL	SINGLE LINE SYMBOL	FEATURE
		PLAIN END x PLAIN END PIPE COUPLING
		PLAIN END x PLAIN END PIPE COUPLING RESTRAINED
		FLANGE x PLAIN END PIPE COUPLING
		FLEXIBLE COUPLING OR EXPANSION JOINT (SLEEVE TYPE)
		FLEXIBLE COUPLING OR EXPANSION JOINT (BELLWS TYPE)
		COUPLING FOR GROOVED END JOINTS: (F) FLEXIBLE (R) RIGID
		FLANGE GUARD
		FLANGE FILLER
		UNION
		QUICK CONNECT COUPLING
		HOSE COUPLING
		WELDED JOINT
		FLANGED JOINT SIMPLIFIED REPRESENTATION.
		FLANGED JOINT COMPLEX REPRESENTATION.
		MECHANICAL JOINT SIMPLIFIED REPRESENTATION.
		MECHANICAL JOINT COMPLEX REPRESENTATION.
		MECHANICAL JOINT RESTRAINED
		PUSH ON JOINT OR CAULKED BELL & SPIGOT JOINT SIMPLIFIED REPRESENTATION
		PUSH ON JOINT OR CAULKED BELL & SPIGOT JOINT COMPLEX REPRESENTATION
		PUSH ON JOINT OR CAULKED BELL & SPIGOT JOINT RESTRAINED
		BALL JOINT
		DIRECTION OF FLOW

VALVE TAG	GATE TAG
NUMERICAL INDICATOR UNIQUE NUMBER ASSIGNED TO EACH VALVE USED	NUMERICAL INDICATOR UNIQUE NUMBER ASSIGNED TO EACH GATE USED
ABBREVIATION INDICATING TYPE OF VALVE, i.e. GATE, PLUG, BUTTERFLY, ETC	ABBREVIATION INDICATING TYPE OF GATE, i.e. SLIDE, SLUICE, WEIR SLUICE GATE, OR STOP PLATE

TYPICAL EQUIPMENT DESIGNATION	
	EQUIPMENT NUMBER
	TYPE OF EQUIPMENT

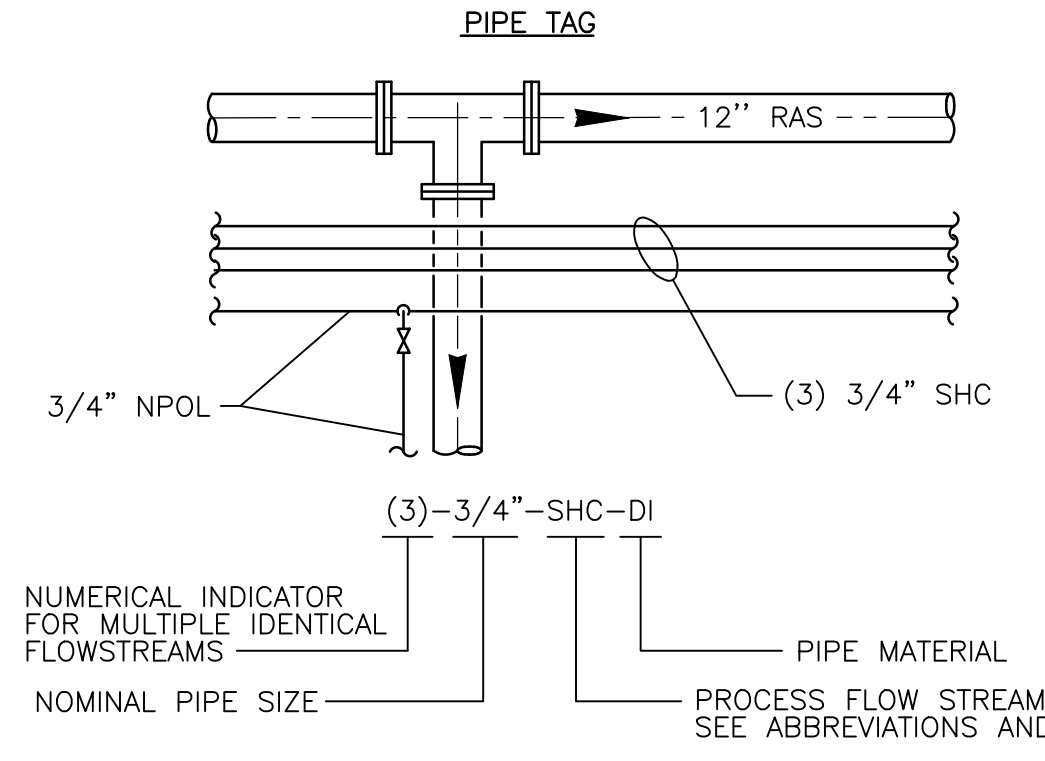
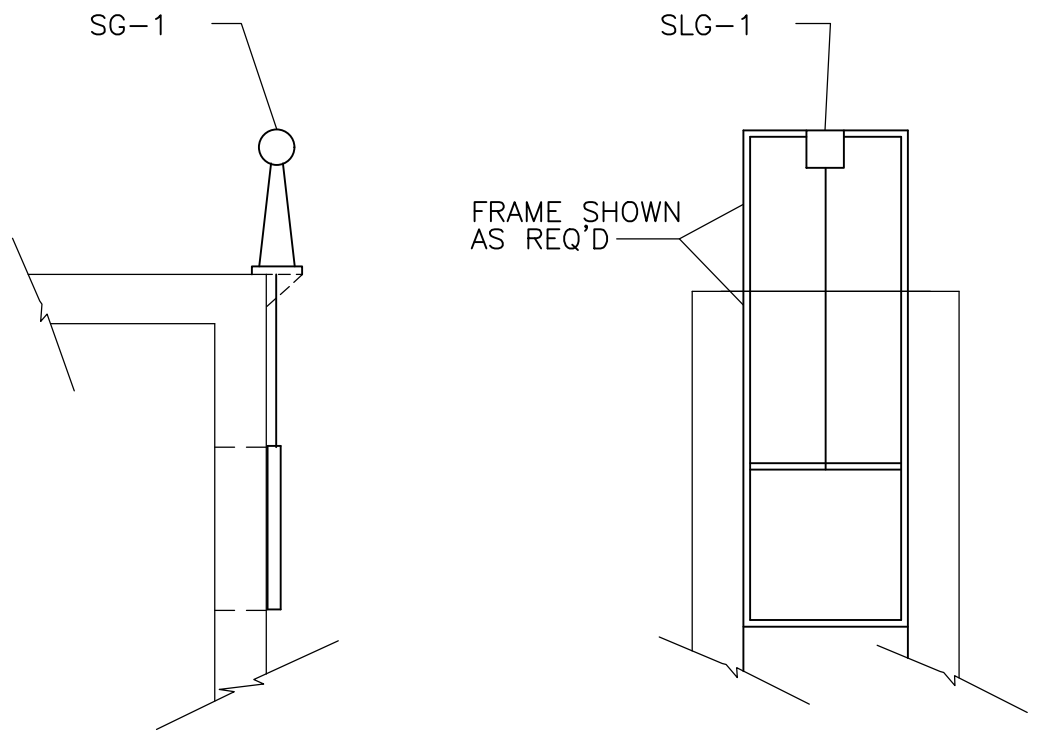
VALVE SYMBOLS	
SYMBOL	FEATURE
	UNCLASSIFIED, TYPE AS SHOWN ON THE DRAWINGS ADJACENT TO SYMBOL
	FLOW METER
	TELESCOPING VALVE
	VALVE WITH HOSE END
	GATE VALVE
	KNIFE GATE VALVE
	GLOBE VALVE
	BALL VALVE
	VENTED CAVITY BALL VALVE
	3-WAY BALL VALVE
	4-WAY BALL VALVE
	CONE VALVE
	NEEDLE VALVE
	PINCH VALVE
	DIAPHRAGM VALVE
	BUTTERFLY VALVE
	PLUG VALVE
	3-WAY PLUG VALVE
	4-WAY PLUG VALVE
	CHECK VALVE, GENERAL SYMBOL
	BALL CHECK VALVE
	DOUBLE DOOR CHECK VALVE
	ANGLE VALVE
	SOLENOID VALVE
	THREE WAY SOLENOID VALVE
	FOUR WAY SOLENOID VALVE
	MOTOR OPERATED VALVE
	FLAP VALVE
	SHEAR GATE
	MUD VALVE
	FLOOR DRAIN
	OPEN EQUIPMENT DRAIN
	ECCENTRIC REDUCER OR REDUCING BUSHING
	CONCENTRIC REDUCER OR REDUCING BUSHING
	Y-STRAINER
	CALIBRATION CYLINDER
	AIR RELEASE VALVE
	BACK PRESSURE REGULATOR VALVE

PIPE AND FITTING SYMBOL NOTES

1. UNLESS MODIFIED BY THE GENERAL PROJECT NOTES OR DETAILED ON THE LAYOUT AND SCHEMATIC DRAWINGS PIPE AND FITTING JOINT REQUIREMENTS FOR THE VARIOUS PIPE MATERIALS ARE DEFINED IN THE SPECIFICATIONS.

- NOTES:**
- THIS IS A STANDARD DRAWING AND NOT ALL ITEMS SHOWN MAY BE USED IN THIS CONTRACT.
 - SEE ALSO DISCIPLINE SECTIONS FOR ADDITIONAL ABBREVIATIONS.

GATE SYMBOLS	
PLAN	FEATURE
	SLUICE GATE (SLG)
	SLIDE GATE (SG)
	WEIR SLIDE GATE (WSG)
	STOP PLATE (SP)
	SLUICE GATE (SLG)
	SLIDE GATE (SG)
	WEIR SLIDE GATE (WSG)



ABBREVIATIONS			
VALVE NOMENCLATURE			
ARV	AIR RELEASE VALVE	KGV	KNIFE GATE VALVE
BCV	BALL CHECK VALVE	MV	MUD VALVE
BFV	BUTTERFLY VALVE	PRV	PRESSURE RELIEF VALVE
BPRV	BACK PRESSURE REGULATING VALVE	PV	PLUG VALVE
BV	BALL VALVE	PVRV	PRESSURE VACUUM RELIEF VALVE
CV	CHECK VALVE	SOLV	SOLENOID VALVE
GLV	GLOBE VALVE	TUBV	TIME UNION BALL VALVE
GV	GATE VALVE	TV	TELESCOPING VALVE
EQUIPMENT NOMENCLATURE			
ABA	AEROBIC BASIN AERATOR	PMT	POLYMER MIX TANK
AER	AERATOR	PSM	POLYMER STATIC MIXER
BLW	BLOWER	PVG	PIVOT GATE
BP	BOOSTER PUMP	RASP	RETURN ACTIVATED SLUDGE PUMP
CEN	CENTRIFUGE	RDT	ROTARY DRUM THICKENER
CP	CONTROL PANEL	ROT	ROTAMETER
CHL	CHLORINATOR	SAP	SAMPLE PUMP
DFP	DIGESTER FEED PUMP	SC	SECONDARY CLARIFIER
EFM	EFFLUENT FLOW METER	SCON	SCREW CONVEYOR
EMG	EMERGENCY GENERATOR	SCB	SCREENING CONVEYOR BELT
FE	FLOW ELEMENT	SCP	SCUM PUMP
FP	FEED PUMP	SG	SLIDE GATE
GR	GRIT WASHER	SGR	SLUDGE GRINDER
GRN	GRINDER	SLG	SLUICE GATE
HPU	HYDRAULIC POWER UNIT	SM	STATIC MIXER
HSC	HYDRAULIC SYSTEM CENTER	SMPP	SUMP PUMPS
IFM	INFLUENT FLOW METERS	SWC	SCREENING WASHER/COMPACTOR TANK
MS	MECHANICAL BAR SCREEN	T	TANK
MXR	MIXER	UV	ULTRAVIOLET DISINFECTION MODULE
OD	OXIDATION DITCH	UVSCC	UV SYSTEM CONTROL CENTER
PDC	POWER DISTRIBUTION CENTER	WSG	WEIR SLIDE GATE
PFU	POLYMER FEED UNIT	WSP	WASTE ACTIVATED SLUDGE PUMPS
PMP	PUMP	WWBP	WASHWATER BOOSTER PUMP
PROCESS FLOW STREAM			
A, AA	AERATION AIR	OF,OVF	OVERFLOW
BP,BYP	BYPASS	POT	POTABLE WATER
BWW	BACKWASH WASTE	PS	PRIMARY SLUDGE
CEN	CENTRATE	RAS	RETURN ACTIVATED SLUDGE
D,DR	DRAIN	RS	RAW SEWAGE
DPS	DRY POLYMER SOLUTION	RW	RAW WATER
DS	DIGESTED SLUDGE	SA	SAMPLE WATER
EBI	EQ BASIN INLET	SC	SCUM
EFF	EFFLUENT	SCE	SECONDARY CLARIFIER EFFLUENT TO UV/CHLORINE CONTACT BASINS
EPS	EMULSION POLYMER SOLUTION	SL	SLUDGE
FES	FINAL EFFLUENT SAMPLE	SMP	SUMP PUMP DISCHARGE
FIL	FILTRATE	SPRAY	TROUGH SPRAY LINE
FW	FLUSHING WATER	SN	SUPERNATANT
G	NATURAL GAS	SSW	SANITARY SEWER WATER
GS	GRIT SLURRY	SW	STORM WATER
INF	INFLUENT FLOW TO OXIDATION DITCHES	TD	TANK DRAIN
ML	MIXED LIQUOR	TS	THICKENED SLUDGE
MLDR	MIXED LIQUOR DRAIN	TWAS	THICKENED WASTE ACTIVATED SLUDGE
NP	NEAT POLYMER	V	VENT
NPW	NON POTABLE WATER	WAS	WASTE ACTIVATED SLUDGE
NPWD	NON POTABLE WATER DRAIN		
PIPE MATERIALS			
CCFRP	CENTRIFUGALLY CAST FIBERGLASS REINFORCED POLYMER MORTAR		
CI	CAST IRON		
CU	COPPER		
DI	DUCTILE IRON		
DIGL	DUCTILE IRON GLASS LINED		
GALVS	GALVANIZED STEEL		
PVCS	POLYVINYL CHLORIDE SEWER		
PVC	POLYVINYL CHLORIDE PRESSURE		
RCP	REINFORCED CONCRETE		
SST	STAINLESS STEEL		
STL	BLACK STEEL OR CARBON STEEL		
GENERAL NOTES:			
1. PROVIDE PIPE SUPPORTS AND ANCHORS AS REQUIRED. PIPING SUPPORTS, WHERE SHOWN, ARE MEANT ONLY TO CONVEY THE INTENT OF THE DESIGN FOR A PARTICULAR LOCATION AND ARE NOT INTENDED TO REPRESENT A COMPLETE SYSTEM. A COMPLETE SYSTEM SHALL BE DESIGNED, FURNISHED AND INSTALLED IN ACCORDANCE WITH SPECIFICATION SECTION 400507. SEE MISCELLANEOUS DETAIL SHEETS FOR PIPE SUPPORTS.			
2. CONTRACTOR SHALL FIELD VERIFY ALL CLEARANCES, DIMENSIONS AND ELEVATIONS REQUIRED FOR PROPER PIPING/EQUIPMENT REMOVAL AND INSTALLATION PRIOR TO ORDERING PIPING/EQUIPMENT AND/OR BEGINNING WORK.			
3. PROVIDE NECESSARY REDUCERS/TRANSITIONS FOR THE PIPING FOR ALL EQUIPMENT.			

WARNING

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. DIRR	 Camp Dresser McKee & Smith Salina Industrial Powerpark, One General Motors Drive Syracuse, NY 13206 Tel: (315) 434-3200
DRAWN BY: S. DHANGAR	
SHEET CHK'D BY: K. DIRR	
CROSS CHK'D BY: N. VIGNEAULT	
APPROVED BY: N. VIGNEAULT	
DATE: FEBRUARY 2025	

CITY OF ROME, N.Y.

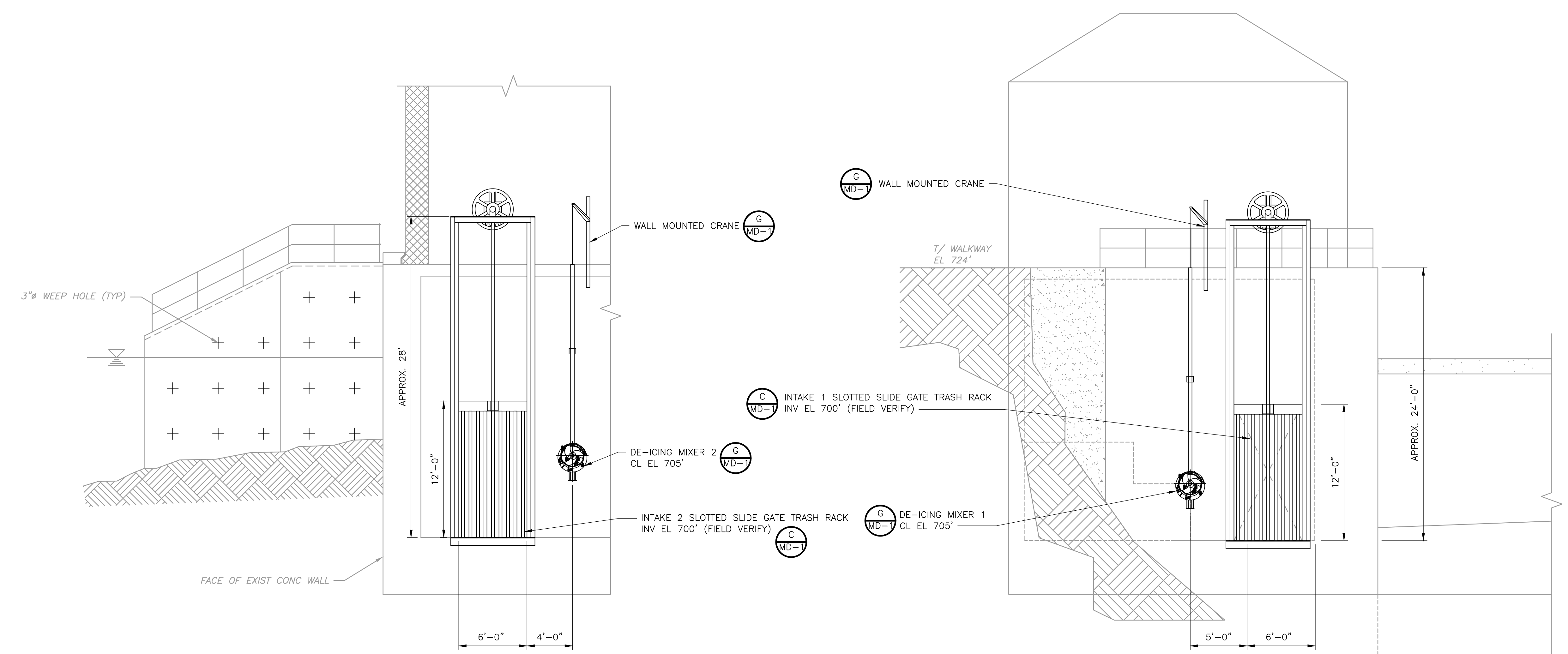
KESSINGER DAM REHABILITATION

GENERAL NOTES, LEGEND AND ABBREVIATIONS

PROJECT NO. 21984-265075
FILE NAME: MO01GNLN.DWG
SHEET NO. 23 OF 34
M-1

3/16" = 1'-0"

NOTES:
1. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN FIELD AND RECORDED PRIOR TO ANY WORK.



INTAKE 2
SECTION 1
3/16" = 1'-0"

INTAKE 1
SECTION 2
3/16" = 1'-0"

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DESIGNED BY: D. PATRICK
 DRAWN BY: M. SAGAS
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 APPROVED BY: N. VIGNEAULT
 DATE: FEBRUARY 2025



CITY OF ROME, N.Y.
 KESSINGER DAM REHABILITATION

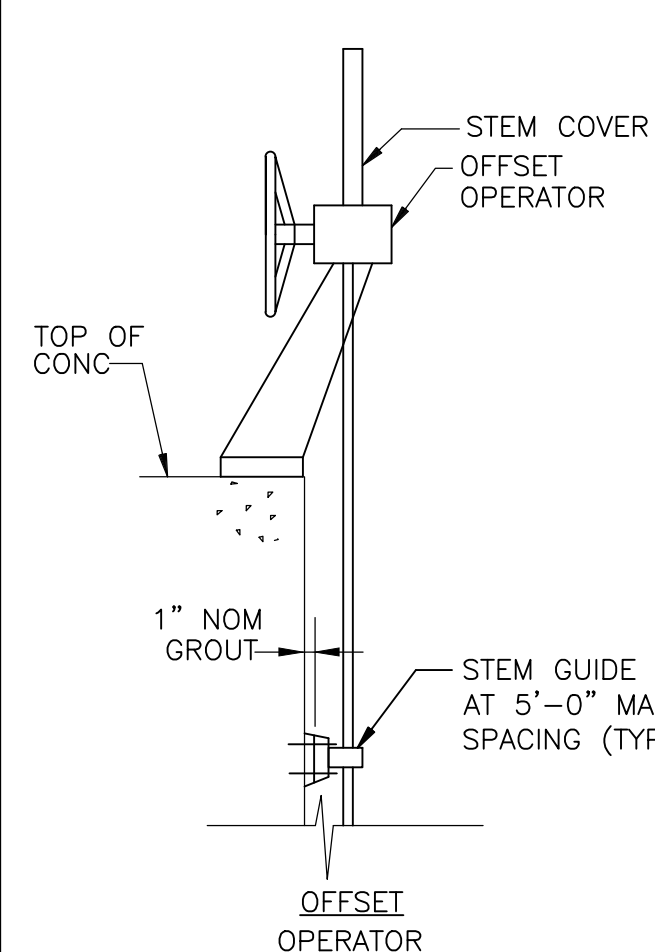
GATEHOUSE
 NEW WORK SECTIONS



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REV. NO.	DATE	DRWN	CHKD	REMARKS

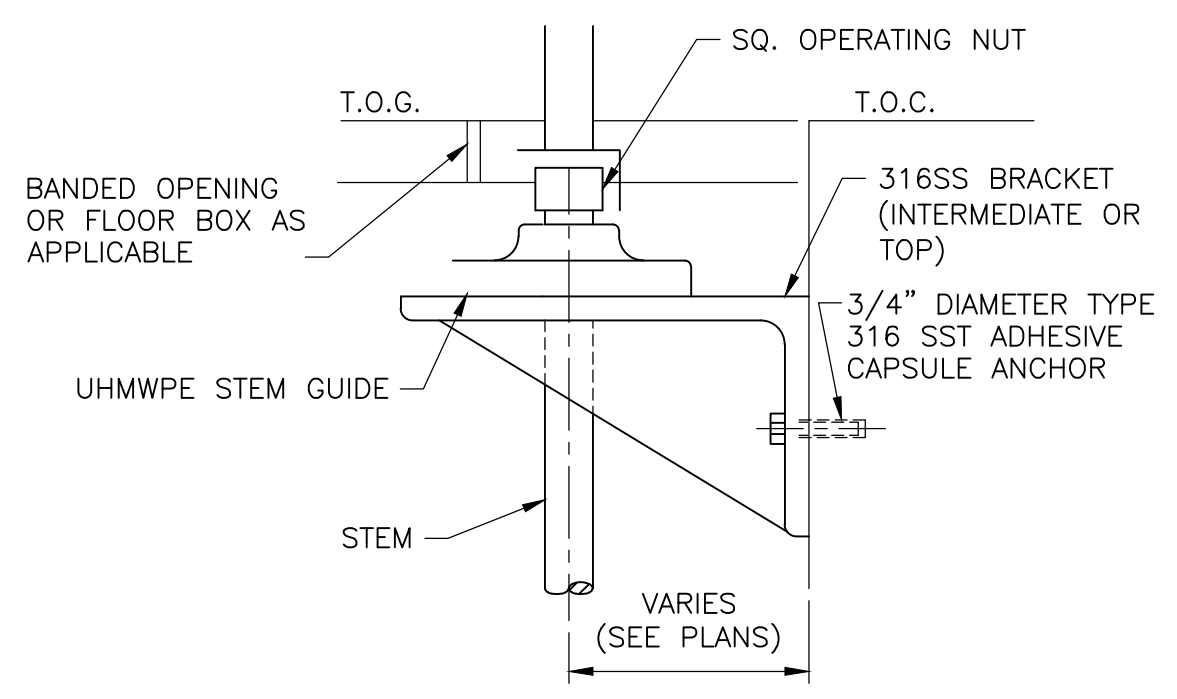
PROJECT NO. 21984-265075
 FILE NAME: M003GHSC.DWG
 SHEET NO. 25 OF 34
M-3
 ISSUED FOR BID



DETAIL A
NTS

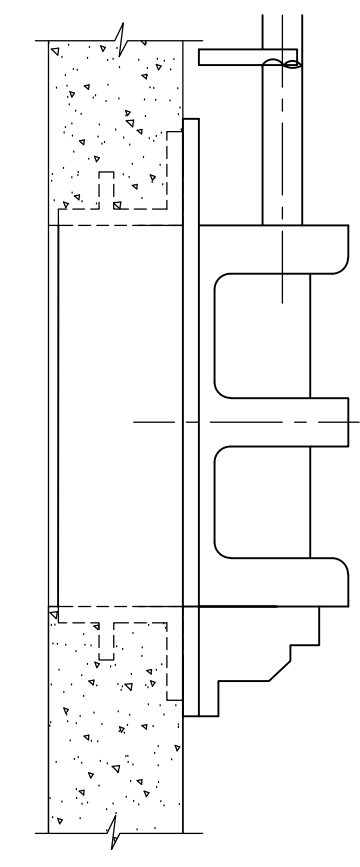
- NOTES:
- HANDWHEELS SHALL BE 18" MIN DIA. FOR HANDWHEEL POSITION, SEE MECHANICAL DRAWINGS.
 - WEIR SLIDE GATE TYPE SHALL ALSO BE ABLE TO SERVE AS A SHUT-OFF GATE. A RESILIENT P-SEAL PER SPECIFICATIONS SHALL BE PLACED ALONG THE INVERT OF THE OPENING AND UP BOTH SIDES SO THAT THE GATE WILL BE TIGHT IN THE FULLY RAISED POSITION.

SP = STOP PLATE
SG = SLIDE GATE
WSG = WEIR SLIDE GATE

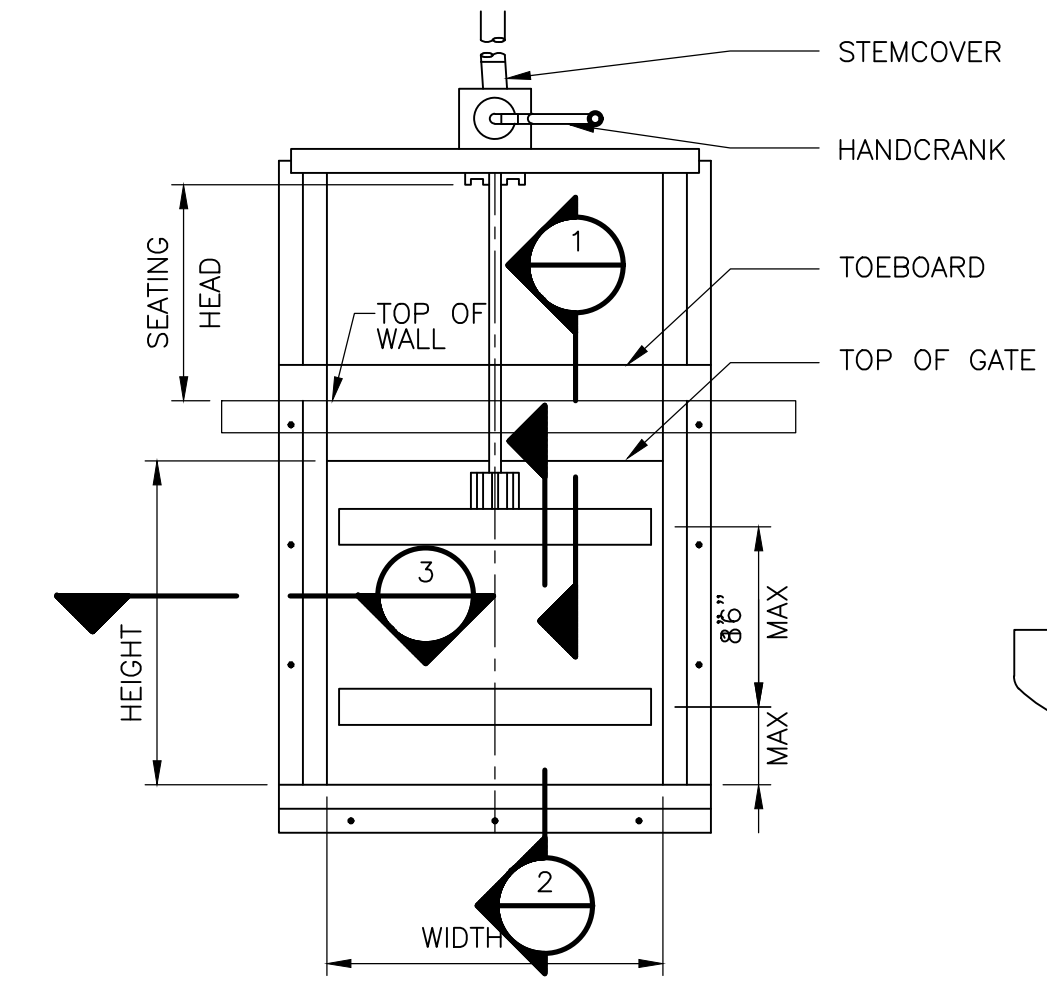


VALVE OR GATE STEM GUIDE
DETAIL B
NTS

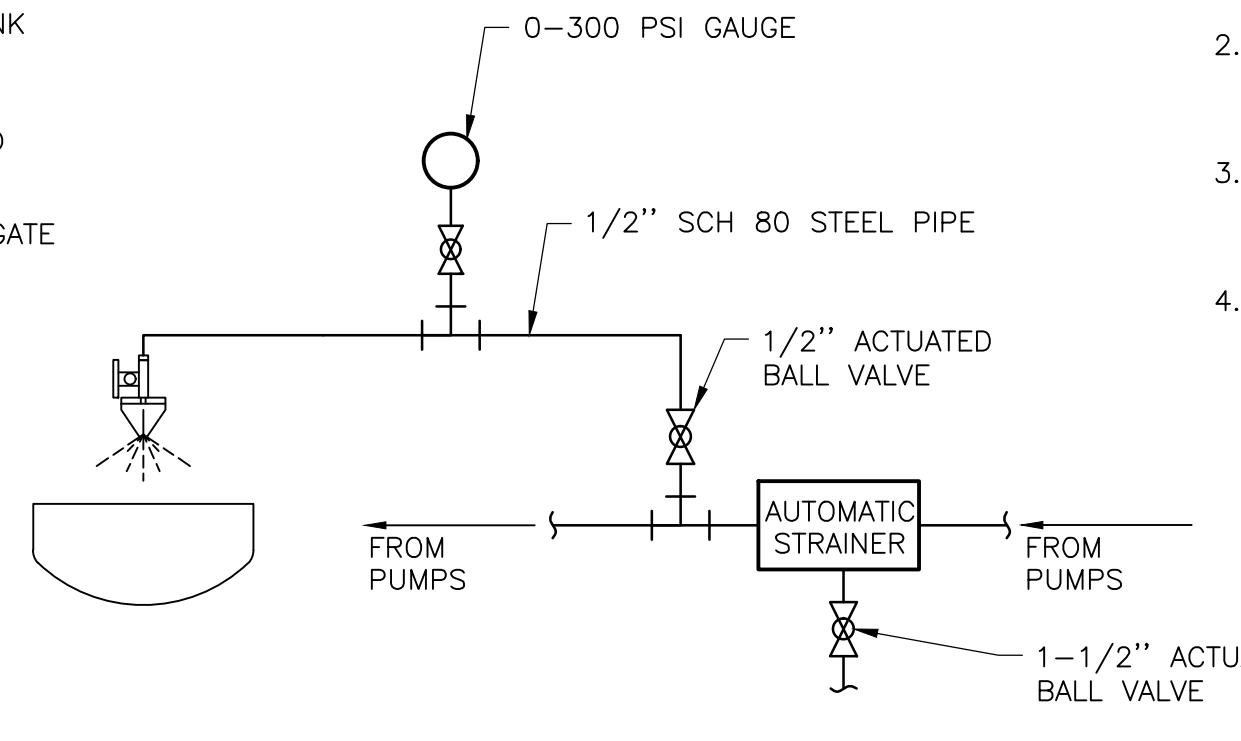
- NOTES:
- SPACE STEM GUIDES PER MANUFACTURER'S RECOMMENDATIONS.
 - IF WELL OUT OF PLUM BY MORE THAN 1/8", USE A NOMINAL 1" GROUT PAD.



SELF-CONTAINED SLIDE GATE
DETAIL C
NTS



FACE MOUNTED SS SLIDE GATE ELEVATION
DETAIL C
NTS

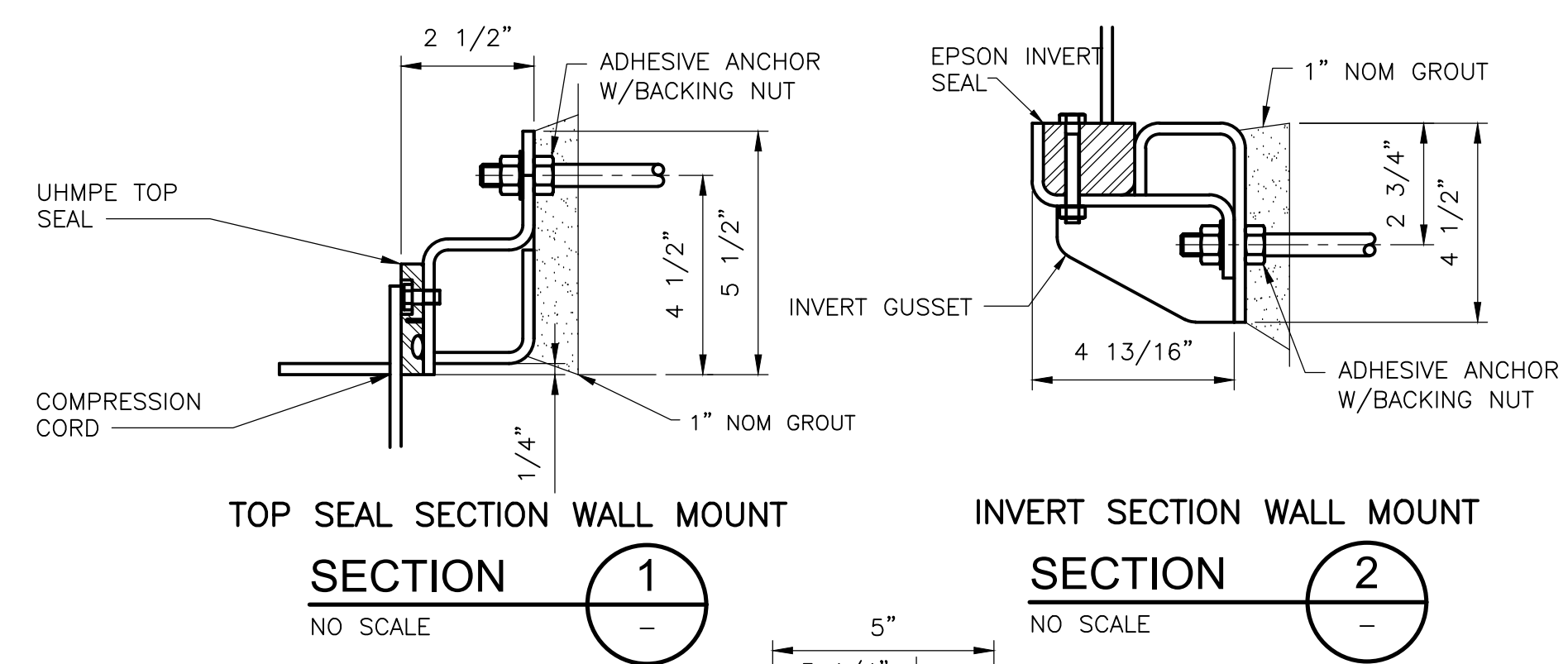


SPRAY NOZZLE AND APPURTENANCES
DETAIL D
NTS

- NOTES:
- FULLJET NOZZLE - 1/2HHSQ-SS29SQ, STAINLESS STEEL BY MINTECH OR EQUAL.
 - ACTUATED BALL VALVES FULL PORT, RATED TO 150 PSIG BY APOLLO VALVE OR EQUAL.
 - ADJUSTABLE BALL FITTING - 36275-1/2X1/2-SS, STAINLESS STEEL BY MINTECH OR EQUAL.

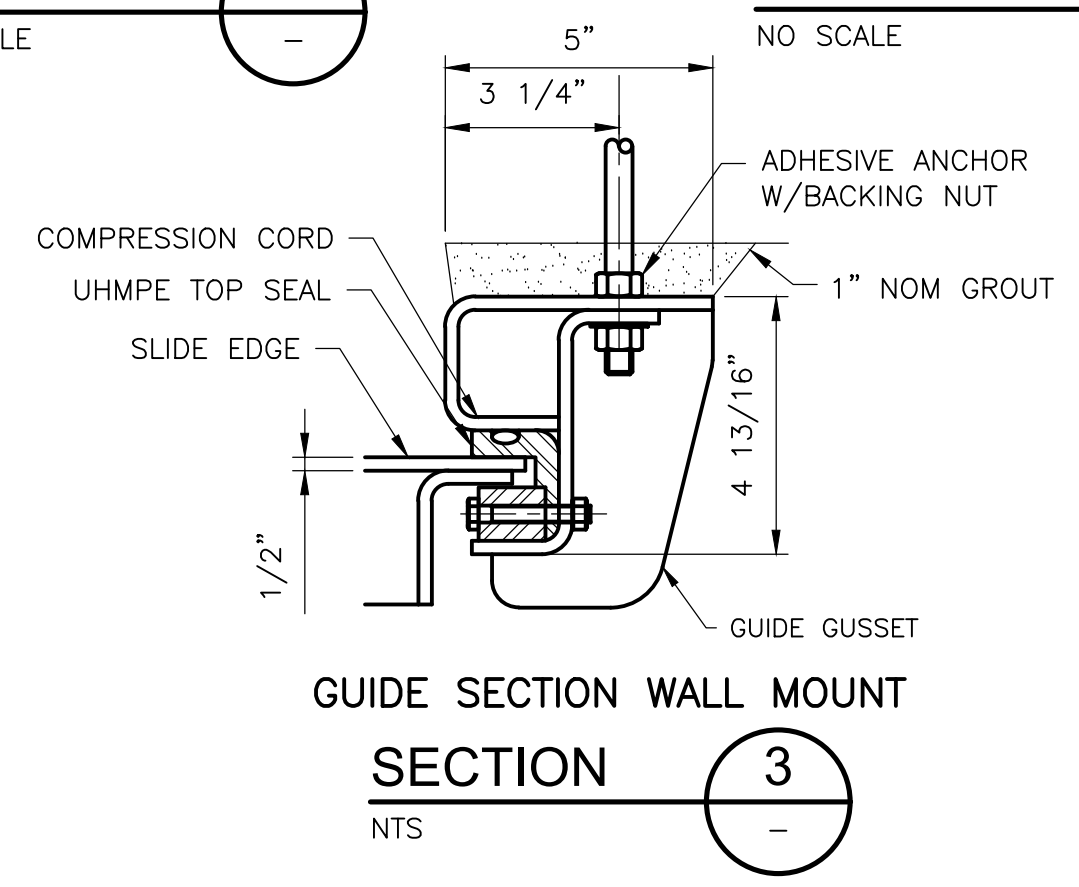
GATE ID	PROCESS	COMMENTS	TYPE	OPEN (WIDTH X HEIGHT)	MOUNTING/FRAME	TOP OF WALL EL.*	TOP OF GATE OPENING EL.*	INV EL. OF GATE OPENING*	MATERIAL	LIFT TYPE	OPENING DIRECTION	WALL THIMBLE AND TYPE
SG-201	INTAKE 1	RECTANGULAR WALL OPENING	SLOTTED SLIDE GATE	6'-0" X 12'-0"	FACE/SELF-CONTAINED	724	712	700	304SS	MANUAL	UP	N/A
SG-202	INTAKE 2	RECTANGULAR WALL OPENING	SLOTTED SLIDE GATE	6'-0" X 12'-0"	FACE/SELF-CONTAINED	724	712	700	304SS	MANUAL	UP	N/A

*ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN FIELD AND RECORDED PRIOR TO ANY WORK.



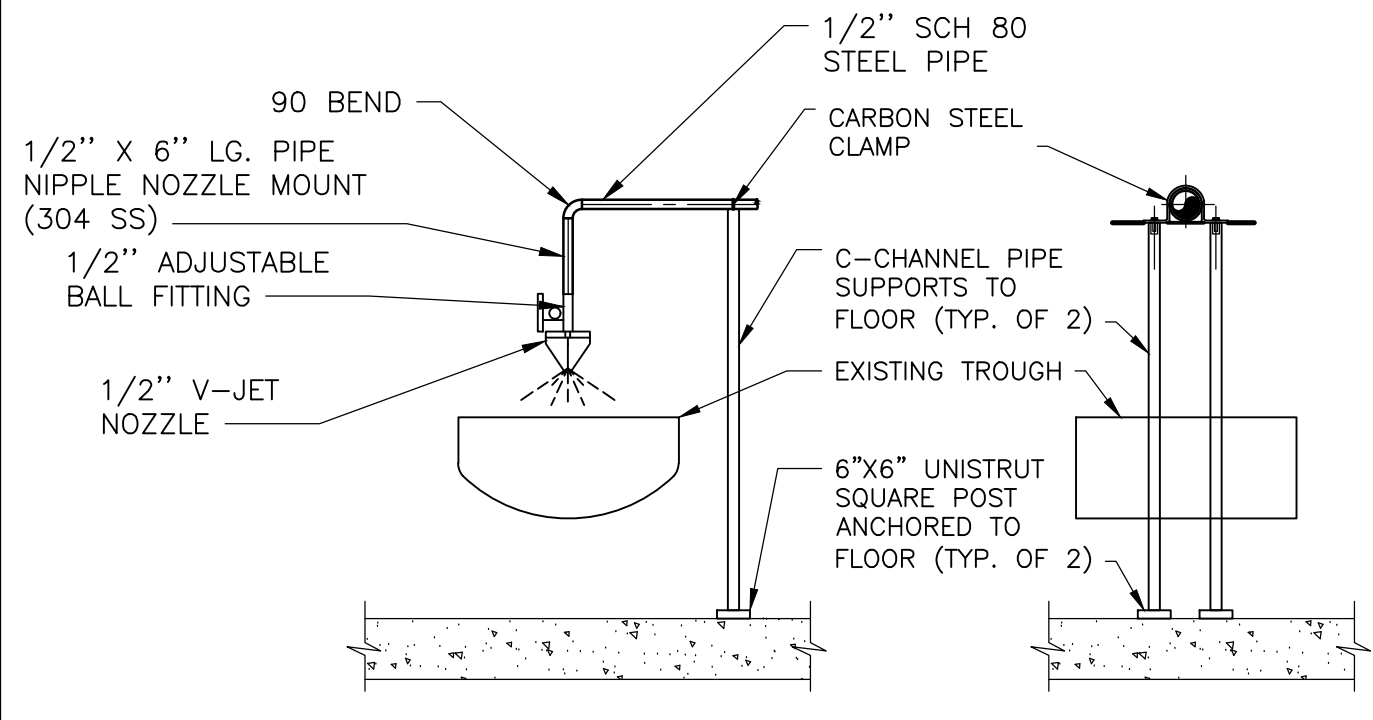
TOP SEAL SECTION WALL MOUNT
SECTION 1
NO SCALE

INVERT SECTION WALL MOUNT
SECTION 2
NO SCALE

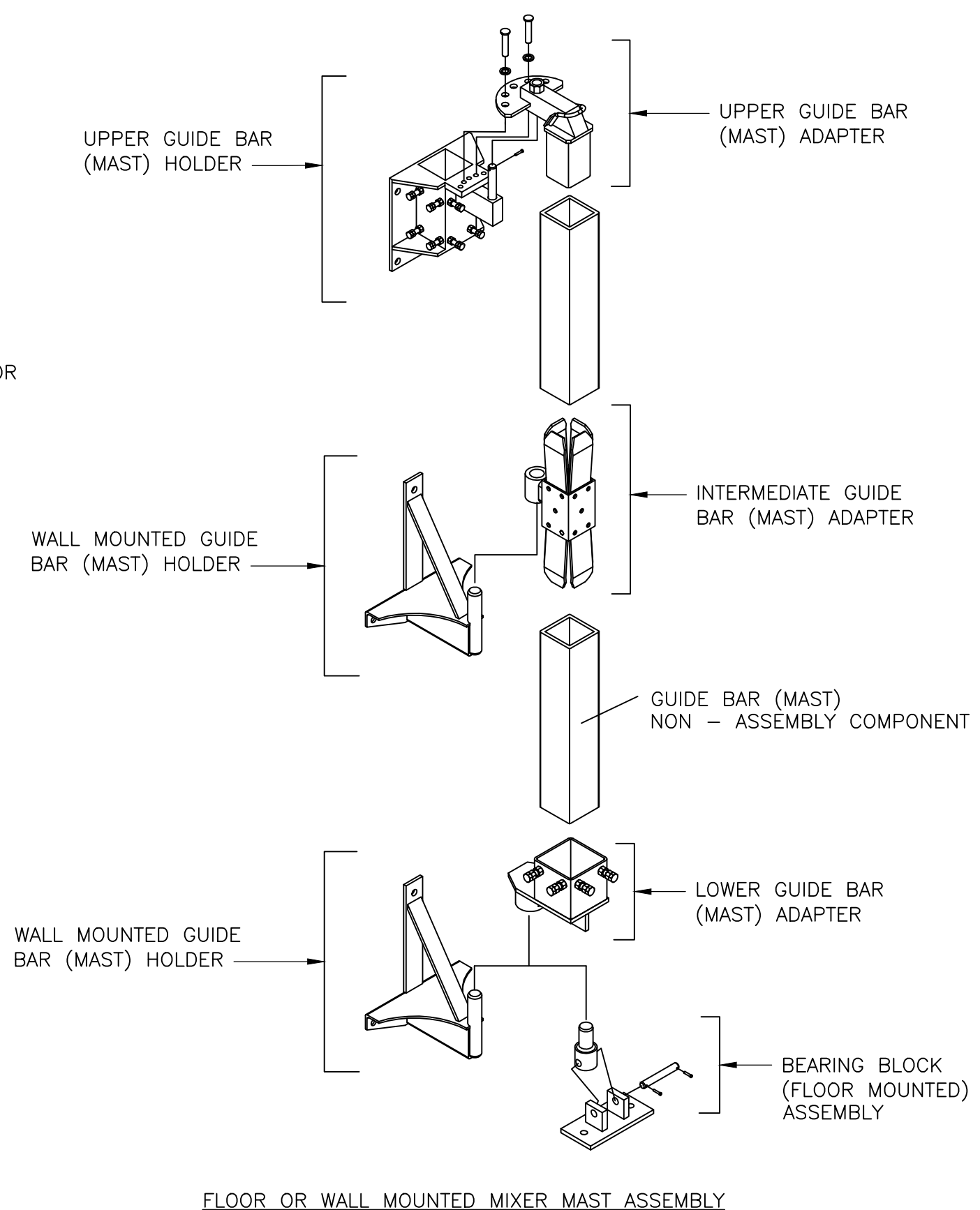


GUIDE SECTION WALL MOUNT
SECTION 3
NTS

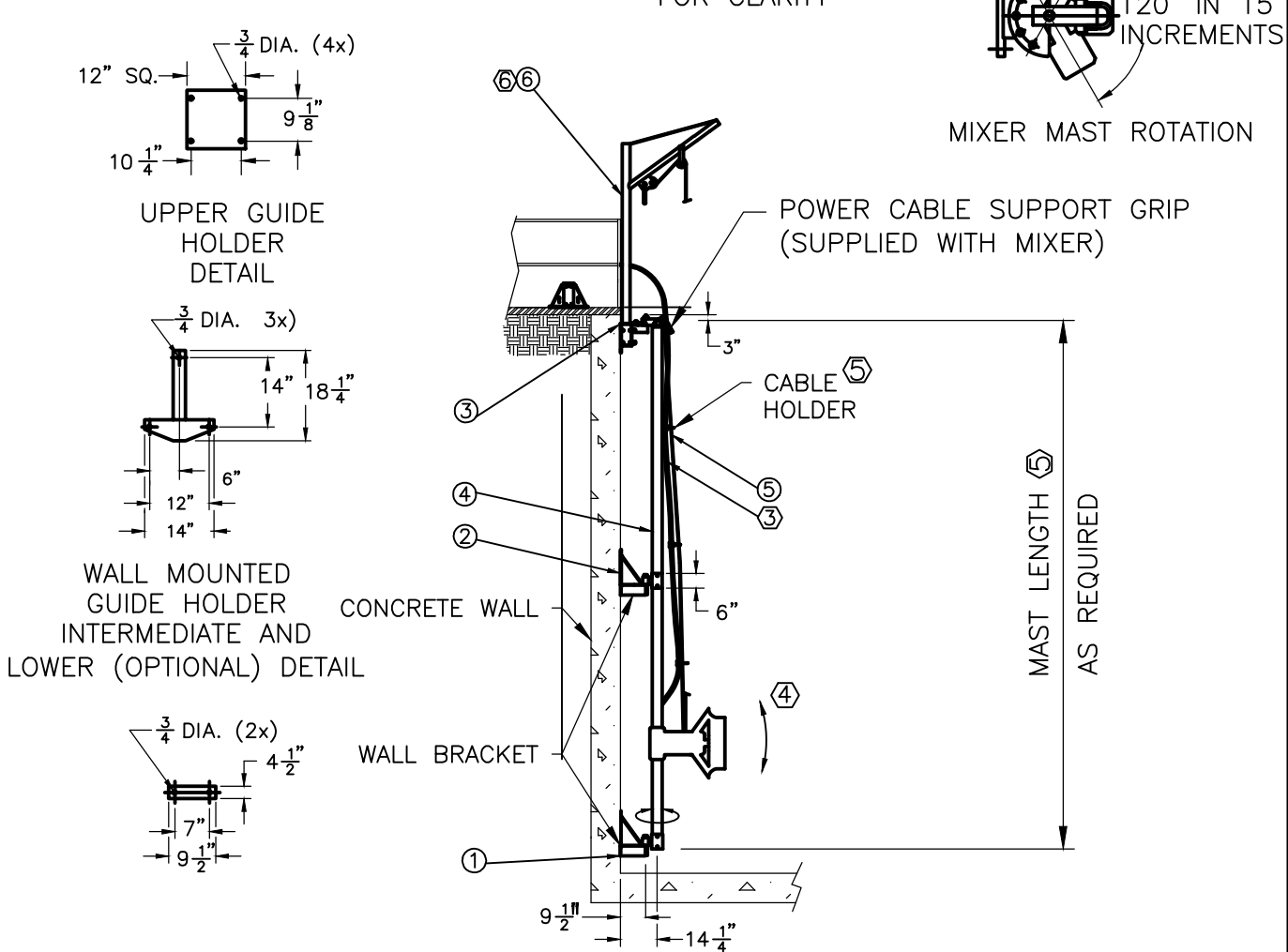
GATE FRAME SECTIONS W/O WALL THIMBLE
DETAIL F
NTS



TYPICAL NOZZLE MOUNTING
DETAIL E
NTS



FLOOR OR WALL MOUNTED MIXER MAST ASSEMBLY



WALL MOUNTED INSTALLATION

- NOTES:
- MAST TUBING 4" X 4" X 3/16" WALL THICKNESS TO BE SUPPLIED AND CUT TO APPROPRIATE LENGTH BY CONTRACTOR.
 - CONSULT MIXER MANUFACTURER'S GUIDANCE TO DETERMINE HOW MANY INTERMEDIATE SUPPORTS ARE NECESSARY, DEPENDING UPON LENGTH AND MIXER SELECTED.
 - POWER CABLE TO BE CLEAR OF ALL SHARP SURFACES.
 - MIXER MANUFACTURER TO PROVIDE FOR WEIGHTS, DIMENSIONS, AND ANGLE SETTINGS.
 - PLACE CABLE HOLDERS EVERY 5 FT.
 - MANUFACTURER TO SIZE CRANE BASED ON SELECTION.

ITEM NO.	DESCRIPTION	QUANTITY PER MIXER
①	GUIDE HOLDER (LOWER)	1
②	GUIDE HOLDER (MIDDLE)	1
③	GUIDE HOLDER (UPPER)	1
④	MAST 4" X 4" X 3/16	AS REQ.
⑤	CABLE ASSEMBLY (LOAD CARRYING)	1
⑥	POWER ASSISTED CRANE	1

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. DIRR
 DRAWN BY: S. DHANGAR
 SHEET CHK'D BY: K. DIRR
 CROSS CHK'D BY: N. VIGNEAULT
 APPROVED BY: N. VIGNEAULT
 DATE: FEBRUARY 2025

CDM Smith
 Camp Dresser McKee & Smith
 Salina Industrial Powerpark, One General Motors Drive
 Syracuse, NY 13206
 Tel: (315) 434-3200

CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

STANDARD MECHANICAL DETAILS I
 MD-1

PROJECT NO. 21984-265075
 FILE NAME: MD01MMDT.DWG
 SHEET NO. 26 OF 34
 ISSUED FOR BID

SCOPE OF WORK:

- PROJECT PROVIDES UPGRADES AT KESSINGER DAM FOR THE CITY OF ROME. MAJOR IMPROVEMENTS INCLUDE, BUT ARE NOT LIMITED TO:
 - UPGRADED ELECTRICAL SERVICE TO THE SITE.
 - NEW DE-ICING MIXER AND STRAINER AND ASSOCIATED CONTROL EQUIPMENT.
 - NEW PANELBOARD LP-GH FEEDING NEW GATEHOUSE LOADS AND REFEEDING ALL EXISTING GATEHOUSE LOADS.

GENERAL NOTES:

- ELECTRICAL DRAWINGS ARE INTENDED TO SHOW THE GENERAL LAYOUT OF WORK TO BE INSTALLED UNDER THIS CONTRACT WITHOUT ATTEMPTING TO SHOW ALL DETAILS. FURNISH LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS REQUIRED FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM AS SHOWN ON THE CONTRACT DOCUMENTS.
- COORDINATE WORK WITH OTHER TRADES AND THE OWNER.
- MAINTAIN EXISTING PROCESS OPERATIONS. POWER INTERRUPTIONS TO ELECTRICAL EQUIPMENT SHALL BE AT OWNER'S CONVENIENCE WITH 72 HOURS MINIMUM NOTICE. EACH INTERRUPTION SHALL HAVE PRIOR WRITTEN APPROVAL.
- FIELD VERIFY EXISTING UNDERGROUND ELECTRICAL CONDUIT, SURFACE MOUNTED CONDUIT, PULL BOXES, ETC. AND MECHANICAL PIPING. CONTRACTOR SHALL INCLUDE IN BID COSTS ASSOCIATED WITH RELOCATION OR REMOVAL OF EQUIPMENT AS REQUIRED BY THIS CONTRACT. USE DUE CARE IN CONGESTED AREAS TO AVOID DAMAGE TO EXISTING UNDERGROUND UTILITIES.
- CONTRACTOR'S WORK SHALL INCLUDE COMPLETE TESTING OF EQUIPMENT AND WIRING INCLUDING MAKING MINOR CORRECTIONS, CHANGES, OR ADJUSTMENTS NECESSARY FOR THE PROPER FUNCTIONING OF THE SYSTEM AND EQUIPMENT. WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY; SUBSTANDARD WORK WILL BE REJECTED.
- DO NOT SCALE ELECTRICAL DRAWINGS. REFER TO MECHANICAL, STRUCTURAL DRAWINGS, AND APPROVED MANUFACTURER'S SHOP DRAWINGS FOR EXACT LOCATION OF EQUIPMENT. EXCEPT WHERE DIMENSIONS ARE SHOWN, LOCATIONS OF EQUIPMENT, FIXTURES, OUTLETS, AND SIMILAR DEVICES ARE APPROXIMATE.
- WORK SHALL COMPLY WITH NEC AND LOCAL CODES.
- DO NOT SPLICE CONDUCTORS EXCEPT AS NOTED.
- POWER AND CONTROL CONDUITS SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR WIRE SIZED PER TABLE 250.122 OF THE NEC (UON).
- COORDINATE SEQUENCE OF CONSTRUCTION WITH CIVIL, MECHANICAL, AND STRUCTURAL DISCIPLINES. PROVIDE TEMPORARY POWER AND CONTROL CIRCUITS AS REQUIRED TO MAINTAIN FACILITY OPERATION. VERIFY EXISTING UTILITIES IN AREA OF CONSTRUCTION. REFER TO CIVIL DRAWINGS FOR ADDITIONAL UNDERGROUND INFORMATION.
- REPAIR, IN ACCORDANCE WITH SPECIFICATIONS, SIDEWALKS, WALLS, ROADWAYS, ETC. DISTURBED BY CONSTRUCTION ACTIVITIES WHETHER OR NOT SHOWN FOR REPAIR/REPAVING ON CIVIL DRAWINGS.
- CONCEAL CONDUITS TO GREATEST EXTENT PRACTICABLE. CONDUITS RUN AT EXISTING STRUCTURES SHALL BE RUN EXPOSED.
- WHERE LOCAL DISCONNECTS AND CONTROL PANELS ARE SHOWN ON PLAN VIEWS, LOCATIONS ARE APPROXIMATE. ADJUST LOCATION AS REQUIRED TO COMPLY WITH NEC ARTICLE 110 FOR WORKING CLEARANCES.
- DO NOT INSTALL MAJOR CONDUIT RUNS THROUGH AREAS DESIGNATED FOR FUTURE STRUCTURES.

SUBMITTALS:

- SUBMIT SHOP DRAWINGS FOR EQUIPMENT, MATERIALS AND OTHER ITEMS FURNISHED UNDER DIVISION 26.
- SUBMIT OPERATION AND MAINTENANCE MANUALS FOR EQUIPMENT FURNISHED UNDER DIVISION 26.
- SUBMIT STARTUP/COMMISSIONING PLANS FOR EQUIPMENT FURNISHED UNDER DIVISION 26.
- SUBMIT TESTING AND SERVICE REPORTS FOR EQUIPMENT AND MATERIALS FURNISHED UNDER DIVISION 26.
- SUBMIT TRAINING PLANS FOR EQUIPMENT FURNISHED UNDER DIVISION 26.
- SUBMIT RECORD DOCUMENTATION TO ACCURATELY SHOW COMPLETED INSTALLATION. INCLUDE MODIFICATIONS TO CONTRACT DOCUMENTS (ONE LINE POWER DIAGRAMS, EQUIPMENT ELEVATIONS, PANEL SCHEDULES, ELEMENTARY CONTROL DIAGRAMS, RISER DIAGRAMS, PLANS, CONDUIT AND DUCTBANK ROUTING, ETC) ALONG WITH ADDITIONAL DRAWINGS OR SKETCHES CREATED TO CONVEY COMPLETED INSTALLATION.

INTERPRETATION OF CONTRACT DOCUMENTS:

- IF DURING PERFORMANCE OF WORK, THERE IS A CONFLICT, ERROR, OR DISCREPANCY BETWEEN OR AMONG CONTRACT DOCUMENTS AND LAWS AND REGULATIONS, PROVIDE THE HIGHER PERFORMANCE STANDARD UNLESS OTHERWISE DIRECTED BY ENGINEER.
- PRIORITY OF DOCUMENTS: FIGURED DIMENSIONS GOVERN OVER SCALED DIMENSIONS, DETAILED DRAWINGS GOVERN OVER GENERAL DRAWINGS, LARGER SCALE DRAWINGS TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS, CHANGE ORDER DRAWINGS SUPERCEDE ORIGINAL CONTRACT DRAWINGS, AND CONTRACT DRAWINGS GOVERN SHOP DRAWINGS.
- IN GENERAL, DRAWINGS DO NOT SHOW CONDUIT ROUTING. PLAN AND ROUTE CONDUITS IN COMPLIANCE WITH SPECIFICATIONS AND DRAWING DETAILS. COORDINATE INSTALLATION WITH OTHER TRADES AND ACTUAL SUPPLIED EQUIPMENT.
- SEE ADDITIONAL NOTES ON ELECTRICAL LEGEND I SHEET.

ENCLOSURE TYPES:

PROVIDE THE FOLLOWING NEMA TYPE ELECTRICAL ENCLOSURES, UNLESS OTHERWISE NOTED:

- NEMA 1 IN DRY, NON-PROCESS INDOOR LOCATIONS.
- NEMA 12 IN "DUST" LOCATIONS SHOWN ON THE DRAWINGS.
- NEMA 4X IN OUTDOOR LOCATIONS, ROOMS BELOW GRADE INCLUDING BASEMENTS AND BURIED VAULTS AND "DAMP" OR "WET" LOCATIONS SHOWN ON THE DRAWINGS.
- NEMA 4X IN "CORROSIVE" LOCATIONS SHOWN ON THE DRAWINGS.

MATERIALS AND EQUIPMENT:

- PROVIDE NEW MATERIALS AND EQUIPMENT UNLESS SPECIFICALLY NOTED OTHERWISE.
- ELECTRICAL EQUIPMENT AND MATERIALS SHALL BE LISTED BY UNDERWRITER'S LABORATORIES, INC., AND SHALL BEAR APPROPRIATE UL LISTING MARK OR CLASSIFICATION MARKING. EQUIPMENT, MATERIALS, ETC. UTILIZED NOT BEARING A UL CERTIFICATION SHALL BE FIELD OR FACTORY UL CERTIFIED PRIOR TO EQUIPMENT ACCEPTANCE AND USE.
- PROVIDE MAJOR ELECTRICAL EQUIPMENT BY A SINGLE MANUFACTURER: I.E. UNIT SUBSTATIONS, SWITCHGEAR, MOTOR CONTROL CENTERS, DISCONNECT SWITCHES, TRANSFORMERS, PANELBOARDS, ETC.

EQUIPMENT SIZE, HANDLING AND STORAGE:

- COORDINATE WITH EQUIPMENT MANUFACTURER SHIPPING SPLITS TO PERMIT SAFE HANDLING AND PASSAGE OF EQUIPMENT TO FINAL INSTALLATION LOCATION.
- COMPLY WITH MANUFACTURER'S INSTRUCTIONS FOR UPRIGHT EQUIPMENT ORIENTATION DURING TRANSPORTATION.
- PROTECT EQUIPMENT FROM MECHANICAL INJURY, OR EXPOSURE TO MOISTURE, CHEMICALS, OR CORROSIVE GASES. DO NOT STORE ELECTRICAL EQUIPMENT OUTDOORS.
- PROVIDE AND ENERGIZE TEMPORARY SPACE HEATERS IF REQUIRED TO CONTROL MOISTURE DURING STORAGE.

CUTTING AND PATCHING:

- CUT AND PATCH IN A WORKMANLIKE MANNER AS REQUIRED TO INSTALL ELECTRICAL WORK.
- CUTTING OF STRUCTURAL MEMBERS SUCH AS JOISTS, BEAMS, GIRDERS OR COLUMNS IS PROHIBITED.
- PATCH SURFACES TO RESTORE TO ORIGINAL INTEGRITY (WATERPROOF OR FIREPROOF AS REQUIRED) AND APPEARANCE.

SERVICE AND METERING:

- ELECTRIC POWER COMPANY SERVING THIS PROJECT IS NATIONAL GRID. POWER COMPANY CONTACT IS RICH ALFONSECA, TELEPHONE 315-744-8609, EMAIL RICHARD.ALFONSECA@NATIONALGRID.COM. COMPLY WITH POWER COMPANY STANDARDS. ESO #30815828.
- COORDINATE WITH NATIONAL GRID FOR TEMPORARY POWER OR PROVIDE A TEMPORARY GENERATOR FOR FIELD TRAILERS AND ANCILLARY LOADS. PAY FOR FEES AND CHARGES AS REQUIRED FOR TEMPORARY/CONSTRUCTION POWER FOR CONTRACTOR'S USE.
- PAY FEES AND CHARGES FOR PERMANENT SERVICE VIA BID ALLOWANCE AND SUBMIT POWER COMPANY INVOICES TO OWNER FOR SUBSTANTIATION.
- POWER COMPANY WORK:
 - FURNISH MATERIALS FOR OVERHEAD SERVICE TO POLE-MOUNTED UTILITY TRANSFORMER.
 - PROVIDE OVERHEAD PRIMARY CONDUCTORS TO UTILITY TRANSFORMER.
 - PROVIDE POLE-MOUNTED UTILITY TRANSFORMER.
 - TERMINATE PRIMARY CABLES AT THE UTILITY TRANSFORMER.
 - TERMINATE SECONDARY CABLES AT THE UTILITY TRANSFORMER.
- CONTRACTOR WORK:
 - ARRANGEMENTS WITH POWER COMPANY TO OBTAIN SERVICE, PAY POWER COMPANY FEES, AND PROVIDE LABOR AND MATERIALS REQUIRED FOR ELECTRICAL SERVICE.
 - PROVIDE SECONDARY OVERHEAD CABLE FROM UTILITY TRANSFORMER TO SERVICE ENTRANCE EQUIPMENT.
 - PROVIDE POWER COMPANY APPROVED METERING CURRENT TRANSFORMER (CT) ENCLOSURE.
 - INSTALL METER BASE ENCLOSURE.

DEMOLITION AND DISPOSITION OF EQUIPMENT:

- DRAWING PLANS SHOWING REMOVAL OF MAJOR MECHANICAL AND ELECTRICAL EQUIPMENT IS NOT INTENDED TO SHOW ALL COMPONENTS TO BE DEMOLISHED. NOT ALL PIPING, CONDUITS, DUCTS, EQUIPMENT, ANCILLARY DEVICES, ETC. ARE SHOWN. THE CONTRACTOR IS TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO BID.
- UNLESS OTHERWISE SPECIFICALLY NOTED, REMOVE UNUSED EXPOSED CONDUIT AND SUPPORT SYSTEMS BACK TO SOURCE AND/OR POINT OF CONCEALMENT INCLUDING ABOVE ACCESSIBLE CEILING FINISHES. WIRING SHALL BE REMOVED.
- CUT FLUSH WITH SLAB, CEILING, OR WALL ABANDONED CONCEALED CONDUIT. SUITABLY PLUG CONDUITS.
- REPAIR AND RESTORE ADJACENT CONSTRUCTION AND FINISHES AFTER DEMOLITION IS COMPLETE.
- MATERIAL AND EQUIPMENT INDICATED FOR REMOVAL OR DEMOLITION IS TO BECOME CONTRACTOR'S PROPERTY UPON REMOVAL, UNLESS NOTED OTHERWISE. REMOVED MATERIAL TO BE PROPERLY HANDLED AND DISPOSED.

CLEANING:

- REMOVE ALL RUBBISH AND DEBRIS FROM INSIDE AND AROUND ELECTRICAL EQUIPMENT AND ENCLOSURES.
- REMOVE DIRT, DUST OR CONCRETE SPATTER FROM INTERIOR AND EXTERIOR OF EQUIPMENT USING BRUSHES, VACUUM CLEANER OR CLEAN LINT-FREE RAGS. DO NOT USE COMPRESSED AIR.

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: D. DEGENNARO
 DRAWN BY: D. DEGENNARO
 SHEET CHK'D BY: M. STARK
 CROSS CHK'D BY: N. VIGNEAULT
 APPROVED BY: M. STARK
 DATE: FEBRUARY 2025



Camp Dresser McKee & Smith
 Salina Industrial Powerpark, One General Motors Drive
 Syracuse, NY 13206
 Tel: (315) 434-3200

CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

ELECTRICAL NOTES

PROJECT NO. 21984-265075
 FILE NAME: E001NFNT.DWG
 SHEET NO. 27 OF 34
E-1



WARNING
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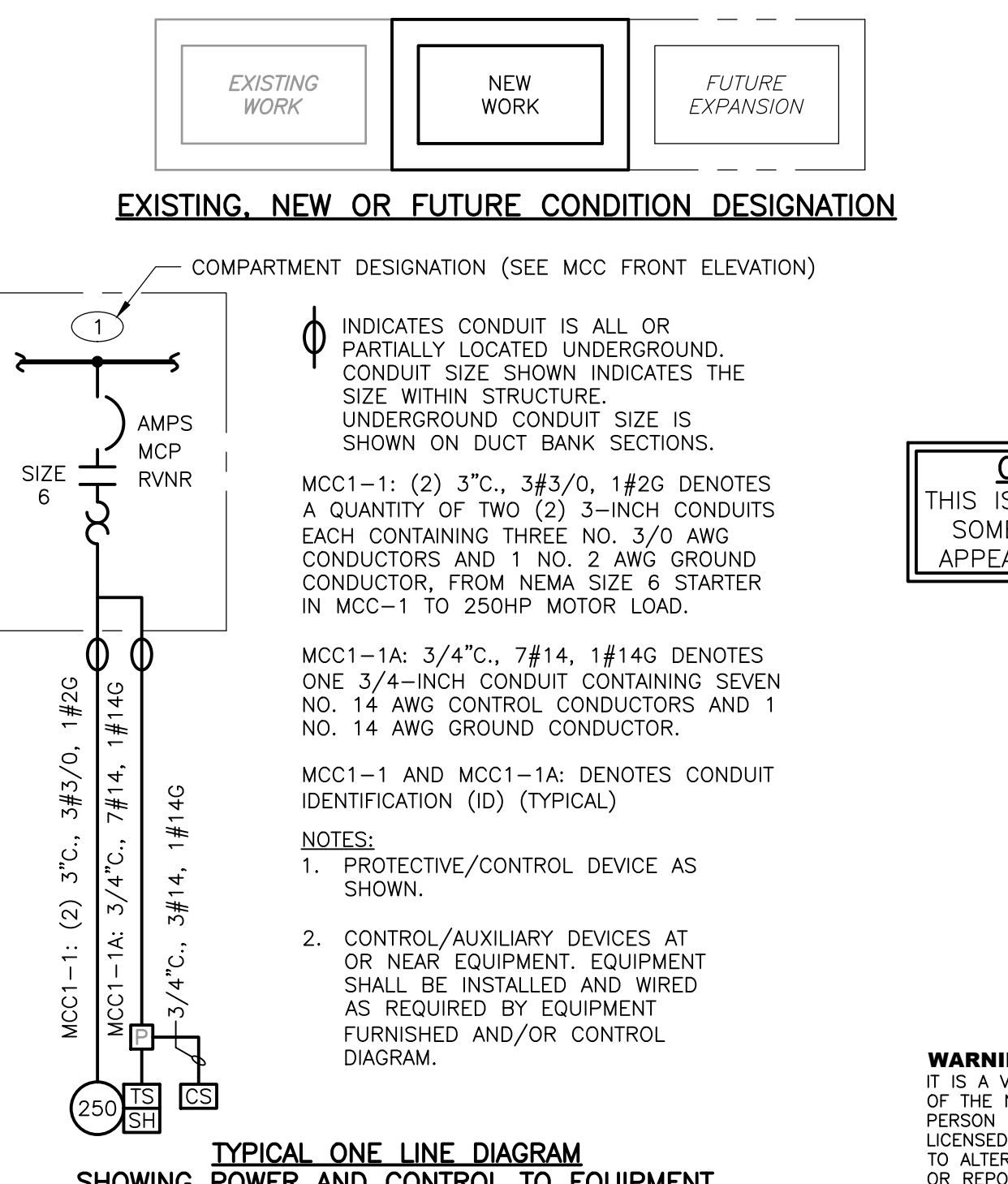
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ONE LINE OR CONTROL DIAGRAM	PLAN	DESCRIPTION
	CS	MEDIUM VOLTAGE DRAWOUT TYPE POWER CIRCUIT BREAKER CS=CONTROL SWITCH
	CB	LOW VOLTAGE AIR OR MOLDED CASE CIRCUIT BREAKER, 3 POLE UNLESS OTHERWISE NOTED.
	AMPS TYPE #	COMBINATION MOTOR CIRCUIT PROTECTOR AND MAGNETIC MOTOR STARTER, FULL VOLTAGE NON-REVERSING UNLESS OTHERWISE NOTED: * FVR - FULL VOLTAGE REVERSING RVNR - REDUCED VOLTAGE NON-REVERSING RVAT - REDUCED VOLTAGE AUTOTRANSFORMER RVSS - REDUCED VOLTAGE SOLID STATE 2S1W - TWO SPEED, ONE WINDING 2S2W - TWO SPEED, TWO WINDING (DIAGRAMMATICALLY SHOWN, CONTRACTOR SHALL FIELD LOCATE)
		NON-FUSIBLE DISCONNECT SWITCH, 600 VOLT, 3 POLE * AMPERE RATING NOTED IF OTHER THAN 30A (DIAGRAMMATICALLY SHOWN, CONTRACTOR SHALL FIELD LOCATE)
	F	FUSIBLE DISCONNECT SWITCH, 600 VOLT, 3 POLE, * AMPERE RATING AND FUSE SIZE AS NOTED * AMPERE RATING NOTED IF OTHER THAN 30A FUSE RATING (DIAGRAMMATICALLY SHOWN, CONTRACTOR SHALL FIELD LOCATE)
	P 2	MANUAL MOTOR STARTER WITH THERMAL OVERLOAD HEATER, 1 POLE UNLESS OTHERWISE NOTED "P" INDICATES WITH PILOT LIGHT "2" INDICATES TWO POLE (DIAGRAMMATICALLY SHOWN, CONTRACTOR SHALL FIELD LOCATE)
		DRAWOUT TYPE EQUIPMENT OR DEVICE
		MEDIUM VOLTAGE CABLE TERMINATION
		MEDIUM VOLTAGE AIR INTERRUPTER SWITCH
		MEDIUM VOLTAGE FUSED AIR INTERRUPTER SWITCH * FUSE RATING
		MEDIUM VOLTAGE FUSED MOTOR CONTROLLER
	T	TRANSFORMER, RATINGS AND CONNECTIONS AS NOTED, UNLESS OTHERWISE NOTED ON THE SINGLE LINE DIAGRAMS, ALL DRY TYPE TRANSFORMERS SERVICING ADMINISTRATIVE AND LABORATORY SPACES SHALL HAVE A K FACTOR OF 4. ISOLATION TRANSFORMERS SHALL HAVE A K-20 RATING
	A TO 5	CURRENT TRANSFORMER * QUANTITY A = PRIMARY AMPERES
	V TO 120	POTENTIAL TRANSFORMER * QUANTITY V = PRIMARY VOLTAGE
	G	GENERATOR, RATINGS AND CONNECTIONS AS NOTED
		AUTOMATIC OR MANUAL TRANSFER SWITCH NO.1 (ATS-1), (MTS-1) "N" INDICATES NORMAL OR PREFERRED SOURCE "S" INDICATES STANDBY OR ALTERNATE SOURCE 100A INDICATES CONTINUOUS CURRENT RATING
	*	VARIABLE SPEED DRIVE CONTROLLER * D.C. = D.C. DRIVE CONTROLLER SCR = SILICON CONTROLLED RECTIFIER VFD = VARIABLE FREQUENCY DRIVE
	#KW	UNIT HEATER - ELECTRIC HEATING COIL AND FAN # - RATING
	U	UNIT HEATER - GAS FIRED, STEAM OR WATER HEATING COIL AND FAN
	M	MOTOR, NUMERAL INDICATES HORSEPOWER
	VS	VOLTMETER WITH SWITCH, 3 PHASE
	AS	AMMETER WITH SWITCH, 3 PHASE

ONE LINE OR CONTROL DIAGRAM	PLAN	DESCRIPTION																
		METER * WM - WATTMETER WHM - WATTHOUR METER WHDM - WATTHOUR DEMAND METER WHDR - WATTHOUR DEMAND RECORDER PF - POWER FACTOR METER DMU - DIGITAL METERING UNIT																
		TRANSDUCER AX - CURRENT TRANSDUCER WX - WATT TRANSDUCER WHX - WATTHOUR TRANSDUCER																
		RELAY, NO. AS INDICATED 25 - SYNCHRONISM CHECK RELAY 27 - UNDERVOLTAGE RELAY 32 - DIRECTIONAL POWER RELAY 38 - BEARING PROTECTIVE DEVICE 40 - LOSS OF EXCITATION RELAY 42 - RUNNING CONTACTOR/PILOT RELAY 46 - REVERSE PHASE/PHASE BALANCE/CURRENT RELAY 47 - PHASE SEQUENCE VOLTAGE RELAY 49 - MACHINE OR TRANSFORMER THERMAL RELAY 50/51 - INSTANTANEOUS/TIME OVERCURRENT RELAY 50G - INSTANTANEOUS GROUND 51 - TIME OVERCURRENT RELAY 51G - TIME OVERCURRENT RELAY WITH VOLTAGE RESTRAINT 51N - TIME OVERCURRENT RELAY, RESIDUAL TYPE 51V - TIME OVERCURRENT RELAY WITH VOLTAGE RESTRAINT 51X - AUXILIARY RELAY (TRIPS CB AND ALARMS) 59 - OVERVOLTAGE RELAY 60 - NEGATIVE SEQUENCE VOLTAGE RELAY 62 - TIME DELAY RELAY 63 - OVERPRESSURE RELAY 64 - GENERATOR FIELD GROUND RELAY 67 - AC DIRECTIONAL OVERCURRENT RELAY 74 - ALARM LATCHING RELAY 83 - AUTOMATIC SELECTIVE CONTROL OR TRANSFER RELAY 86 - LOCKING-OUT RELAY 87 - DIFFERENTIAL PROTECTIVE RELAY B - SUFFIX INDICATES "BUS" G - SUFFIX INDICATES "GENERATOR" GF - GROUND FAULT ST - SHUNT TRIP T - SUFFIX INDICATES "TRANSFORMER" X - SUFFIX INDICATES "AUXILIARY"																
		SPECIAL CAPACITOR * SC - SURGE CAPACITOR PF - POWER FACTOR CORRECTION CAPACITOR																
		TUNED POWER FACTOR CORRECTION CAPACITOR																
		PUSHBUTTON, MOMENTARY CONTACT, SPRING RETURN, NORMALLY CLOSED																
		PUSHBUTTON, MOMENTARY CONTACT, SPRING RETURN, NORMALLY OPEN																
	ES	EMERGENCY STOP PUSHBUTTON WITH RED MUSHROOM HEAD OPERATOR (MAINTAINED CONTACT)																
	PBL	START-STOP PUSHBUTTON CONTROL STATION (MOMENTARY CONTACT) WITH LOCKOUT DEVICE ON STOP																
	PBM	START-STOP PUSHBUTTON CONTROL STATION, MAINTAINED CONTACT WITH LOCKOUT DEVICE ON STOP																
	S/S	OFF/ON SELECTOR SWITCH																
	LR	LOCAL/REMOTE SELECTOR SWITCH																
		3 POSITION SELECTOR SWITCH, MAINTAINED CONTACT O-OPEN X-CLOSED <table border="1"> <thead> <tr> <th>POSITION</th> <th>TOP CONTACT</th> <th>MIDDLE CONTACT</th> <th>BOTTOM CONTACT</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>X</td> <td>O</td> <td>O</td> </tr> <tr> <td>B</td> <td>O</td> <td>X</td> <td>O</td> </tr> <tr> <td>C</td> <td>O</td> <td>O</td> <td>X</td> </tr> </tbody> </table>	POSITION	TOP CONTACT	MIDDLE CONTACT	BOTTOM CONTACT	A	X	O	O	B	O	X	O	C	O	O	X
POSITION	TOP CONTACT	MIDDLE CONTACT	BOTTOM CONTACT															
A	X	O	O															
B	O	X	O															
C	O	O	X															
		NAMEPLATE (A/B/C) HOA - HAND/OFF/AUTO HOR - HAND/OFF/REMOTE LOR - LOCAL/OFF/REMOTE RSL - RAISE/STOP/LOWER TOA - TEST/OFF/AUTO																
	GD/VF	GAS DETECTOR / VENTILATION FAILURE ALARM # INDICATES TYPE OF UNIT 1=MASTER, 2=REMOTE																
		MOTOR STARTER COIL, NUMBER AS INDICATED TO DENOTE INTERLOCKING ONLY																
		CONTROL RELAY COIL, NUMBER AS INDICATED																

ONE LINE OR CONTROL DIAGRAM	PLAN	DESCRIPTION
		PILOT LIGHT, COLOR AS NOTED * R - RED G - GREEN B - BLUE W - WHITE A - AMBER
		PILOT LIGHT, PUSH-TO-TEST TYPE, COLOR AS NOTED ABOVE.
		TIME DELAY RELAY RANGE AS NOTED SETPOINT AS NOTED # NUMBER AS INDICATED * TDE - TIME DELAY AFTER ENERGIZATION ON DELAY TDD - TIME DELAY AFTER DE-ENERGIZATION OFF DELAY
	NOTC	NOTC - NORMALLY OPEN, TIMED CLOSING WHEN ENERGIZED
	NCTO	NCTO - NORMALLY CLOSED, TIMED OPENING WHEN ENERGIZED
	NOTO	NOTO - NORMALLY OPEN, TIMED OPENING WHEN DE-ENERGIZED
	NCTC	NCTC - NORMALLY CLOSED, TIMED CLOSING WHEN DE-ENERGIZED
	* - ##	FIELD INSTRUMENT, TAG NO. AS INDICATED * INDICATES INSTRUMENT TYPE DEFINED ON LOOP SHEETS OR P & ID ## INDICATES LOOP NO.
	LS	LIQUID LEVEL (FLOAT) SWITCH NORMALLY OPEN, CLOSSES ON RISING LEVEL
		NORMALLY CLOSED, OPENS ON RISING LEVEL
	PS	PRESSURE OR VACUUM SWITCH NORMALLY OPEN, CLOSSES ON RISING PRESSURE
		NORMALLY OPEN, CLOSSES ON DROPPING PRESSURE
		NORMALLY CLOSED, OPENS ON RISING PRESSURE
		NORMALLY CLOSED, OPENS ON DROPPING PRESSURE
	TS	TEMPERATURE SWITCH OR THERMOSTAT NORMALLY OPEN, CLOSSES ON RISING TEMPERATURE
		NORMALLY OPEN, CLOSSES ON DROPPING TEMPERATURE
		NORMALLY CLOSED, OPENS ON RISING TEMPERATURE
		NORMALLY CLOSED, OPENS ON DROPPING TEMPERATURE
	FS	FLOW SWITCH (AIR, WATER, ETC.) NORMALLY OPEN, CLOSSES ON INCREASED FLOW
		NORMALLY CLOSED, OPENS ON INCREASED FLOW
	ZS	POSITION (LIMIT) SWITCH NORMALLY OPEN - HELD CLOSED NORMALLY CLOSED
		NORMALLY OPEN
		NORMALLY CLOSED
		NORMALLY CLOSED - HELD OPEN
	WS	TORQUE SWITCH NORMALLY OPEN, CLOSSES ON HIGH TORQUE NORMALLY CLOSED, OPENS ON HIGH TORQUE
		UTILIZED IN CONJUNCTION WITH OTHER CONTROL SCHEMATIC SYMBOLS TO DEPICT THE PHYSICAL LOCATION OF THE DEVICE # REPRESENTS LOCATION SEE LOCATION LEGEND ON DRAWING
		CONDUCTORS OR CONDUITS CROSSING PATHS BUT NOT CONNECTED
		CONDUCTORS ELECTRICALLY CONNECTED
	S	SOLENOID VALVE

ONE LINE OR CONTROL DIAGRAM	PLAN	DESCRIPTION
		LIGHTNING ARRESTER
		GROUND OR GROUND ROD
	30A	FUSE, AMPERE RATING AS NOTED
	HTR	STRIP HEATER OR HEATING ELEMENT
		INDUCTOR
	TG	TACHOMETER GENERATOR
		CONTACT, NORMALLY OPEN (NO)
		CONTACT, NORMALLY CLOSED (NC)
		OVERLOAD RELAY HEATER
	TB	TERMINAL OR TEST BLOCK
	RTD	RESISTANCE TEMPERATURE DETECTOR
	VE	VIBRATION DETECTOR
	DM	DAMPER MOTOR
	ETM	ELAPSED TIME METER
	M	MOTOR OPERATED VALVE OR GATE
		INDICATES LIMITS OF ELECTRICAL EQUIPMENT OR WIRING ENCLOSURE



NOTES:

- IN GENERAL CONDUIT ROUTING FOR EQUIPMENT AND DEVICES IS NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING ALL CONDUITS WHICH SHALL INCLUDE CONDUITS SHOWN ON ONE-LINE AND RISER DIAGRAMS AND HOME-RUNS SHOWN ON PLAN DRAWINGS. REFER TO SPECIFICATIONS FOR MATERIALS AND INSTALLATION REQUIREMENTS.
- THE WIRING DIAGRAMS, QUANTITY AND SIZE OF WIRES AND CONDUITS REPRESENT A SUGGESTED ARRANGEMENT BASED UPON SELECTED STANDARD COMPONENTS OF ELECTRICAL EQUIPMENT. MODIFICATIONS ACCEPTABLE TO THE ENGINEER MAY BE MADE BY THE CONTRACTOR TO ACCOMMODATE EQUIPMENT ACTUALLY PURCHASED. THE BASIC SEQUENCE AND METHOD OF CONTROL MUST BE MAINTAINED AS INDICATED ON THE DRAWINGS AND/OR SPECIFICATIONS.
- SWITCHGEAR AND MOTOR CONTROL CENTER COMPARTMENT DESIGNATIONS AS INDICATED BELOW:
BLANK: NOT INTENDED FOR USE. PLATE ONLY
SPACE: EQUIPPED WITH REQUIRED BUS AND HARDWARE FOR THE FUTURE
ADDITION OF BREAKERS AND/OR STARTERS WITHIN THE SIZE AND RANGE SHOWN
SPARE: CONTAINS A COMPLETELY INSTALLED BREAKER AND/OR STARTER OF SIZE AND TYPE INDICATED FOR FUTURE USE.
- INTERPRETATION OF ELECTRICAL DRAWINGS: CIRCUIT IDENTIFICATION, ROUTING, AND SIZES OF CONDUITS AND WIRES ARE SHOWN ON THE FOLLOWING DRAWINGS:
A. ONE LINE POWER DIAGRAMS: POWER, CONTROL AND SIGNAL WIRING REQUIREMENTS FOR ELECTRICAL DISTRIBUTION EQUIPMENT AND UTILIZATION EQUIPMENT POWERED FROM SWITCHGEAR, SWITCHBOARDS, MOTOR CONTROL CENTERS AND MAJOR POWER DISTRIBUTION PANELBOARDS ARE TYPICALLY SHOWN ON THE ONE LINE DIAGRAMS. THE PARAMETERS IDENTIFIED ON THE ONE LINE DIAGRAMS ARE: CIRCUIT IDENTIFICATION, CIRCUIT ORIGIN AND DESTINATION, CONDUIT SIZE, WIRE SIZE AND QUANTITY FOR COMPLETE CIRCUIT LENGTH, AND AUXILIARY DEVICES ASSOCIATED WITH THE CONTROL/PROTECTION OF THE POWERED EQUIPMENT, AND SIZE OF THE GROUNDING ELECTRODE CONDUCTORS.
B. INSTRUMENTATION AND CONTROL RISER DIAGRAMS: POWER, CONTROL, SIGNAL AND DATA HIGHWAY WIRING REQUIREMENTS FOR INSTRUMENTS AND CONTROL DEVICES CONTROLLED/MONITORED FROM INSTRUMENTATION AND CONTROL PANELS SUCH AS RTUS, PLCs, TERMINAL CABINETS, AND REMOTE I/O PANELS ARE TYPICALLY SHOWN ON THE INSTRUMENTATION AND CONTROL ONE LINE DIAGRAMS. THE PARAMETERS IDENTIFIED ON THE ONE LINE DIAGRAMS ARE: CIRCUIT IDENTIFICATION, CIRCUIT ORIGIN AND DESTINATION, CONDUIT SIZE, WIRE SIZE, QUANTITY AND TYPE FOR COMPLETE CIRCUIT LENGTH, AND AUXILIARY DEVICES ASSOCIATED WITH THE CONTROL/PROTECTION OF THE POWERED EQUIPMENT.
C. FLOOR PLANS: FOR DETERMINING THE LENGTH OF CIRCUITS LOCATED WITHIN STRUCTURES, FLOOR PLANS SHOW THE LOCATION OF ELECTRICAL DISTRIBUTION EQUIPMENT, CONTROL PANELS, UTILIZATION EQUIPMENT, INSTRUMENTS, ANCILLARY EQUIPMENT AND DEVICES AND THE ANTICIPATED PENETRATION LOCATIONS WHERE CONDUITS EXIT/ENTER THE STRUCTURE. HOMERUNS MAY ALSO BE SHOWN FROM MISCELLANEOUS EQUIPMENT NOT SHOWN ON A ONE LINE OR RISER DIAGRAM.
D. SITE PLANS: FOR DETERMINING THE LENGTH OF CIRCUITS EXTERIOR TO STRUCTURES AND TO IDENTIFY THE SPECIFIC REQUIREMENTS OF THE UNDERGROUND CONDUITS OR DUCT BANKS, SITE PLANS SHOW THE GENERAL ROUTING OF UNDERGROUND CONDUITS AND DUCT BANKS WITH SECTIONS INDICATING THE CONDUIT SIZE, ARRANGEMENT AND CIRCUIT ROUTING.
E. NOTE THAT CONDUIT SIZE WITHIN THE STRUCTURE IS INDICATED ON ONE-LINE DIAGRAM AND UNDERGROUND SIZE IS INDICATED ON DUCT BANK SECTIONS.

REV. NO.	DATE	DRWN	CHKD	REMARKS

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 SHEET CHK'D BY: M. STARK
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 APPROVED BY: M. STARK
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CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

ELECTRICAL LEGEND I

PROJECT NO. 21984-265075
 FILE NAME: E002NFLG.DWG
 SHEET NO. 28 OF 34
E-2

ISSUED FOR BID



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SYMBOL	DESCRIPTION
	LIGHTING FIXTURE "a" - FIXTURE TYPE (SEE LIGHTING FIXTURE SCHEDULE) "b" - CONTROLLED BY SWITCH "b" "3" - CIRCUIT NUMBER
	LIGHTING FIXTURE, NOTATIONS SAME AS ABOVE
	WALL MOUNTED TYPE LIGHTING FIXTURE, NOTATIONS SAME AS ABOVE
	CROSS HATCH INDICATES LIGHTING FIXTURE THAT IS UNSWITCHED AND SHALL REMAIN ON AT ALL TIMES. NOTATIONS SAME AS ABOVE.
	SHADED AREA INDICATES LIGHTING FIXTURE THAT IS EQUIPPED WITH EMERGENCY BACKUP POWER SOURCE. NOTATIONS SAME AS ABOVE.
	POLE MOUNTED AREA TYPE LIGHTING FIXTURE, NOTATIONS SAME AS ABOVE
	POLE MOUNTED ROADWAY TYPE LIGHTING FIXTURE, NOTATIONS SAME AS ABOVE
	EMERGENCY LIGHTING BATTERY UNIT WITH TWO LAMP HEADS "EM" - FIXTURE TYPE (SEE LIGHTING FIXTURE SCHEDULE) "3" - SUPERVISORY CIRCUIT "3" - SUPERVISORY CIRCUIT * - FIXTURE TAG #
	REMOTE EMERGENCY ADJUSTABLE WALL LIGHTING FIXTURE WITH TWO LAMP HEADS "R-2" - FIXTURE TYPE (SEE LIGHTING FIXTURE SCHEDULE) "BU-1(+)" - HOME RUN TO BATTERY UNIT INDICATED. CONDUIT SHALL BE 3/4" AND CONTAIN (2) NO. 12 AWG BRANCH CIRCUIT CONDUCTORS AND (1) NO. 12 AWG GROUND CONDUCTOR UNLESS OTHERWISE INDICATED.
	COMBINATION BATTERY UNIT AND EXIT SIGN. FILLED QUADRANT REPRESENTS FACE SIDE OF SIGN.
	CEILING MOUNTED EXIT SIGN, NOTATIONS SAME AS ABOVE. WHEN USED, ARROW INDICATES DIRECTION OF EGRESS. FILLED QUADRANT REPRESENTS FACE SIDE OF SIGN. (DOUBLE FACE DOUBLE CHEVRONS SHOWN)
	WALL MOUNTED EXIT SIGN, NOTATIONS SAME AS ABOVE. WHEN USED, ARROW INDICATES DIRECTION OF EGRESS. FILLED QUADRANT REPRESENTS FACE SIDE OF SIGN.
	REMOTE EMERGENCY CEILING LIGHTING FIXTURE "RH-3" - FIXTURE TYPE (SEE LIGHTING FIXTURE SCHEDULE) "3" - SUPERVISORY CIRCUIT "3" - SUPERVISORY CIRCUIT * - HOME RUN TO BATTERY UNIT INDICATED. CONDUIT SHALL BE 3/4" AND CONTAIN (2) NO. 12 AWG BRANCH CIRCUIT CONDUCTORS AND (1) NO. 12 AWG GROUND CONDUCTOR UNLESS OTHERWISE INDICATED.
	HOME RUN TO DESIGNATED EQUIPMENT. BRANCH CIRCUIT CONDUIT WITH 2 NO. 12 AWG BRANCH CIRCUIT CONDUCTORS AND 1 NO. 12 AWG GROUND CONDUCTOR UNLESS OTHERWISE NOTED. NUMBER OF ARROWS INDICATE NUMBER OF CIRCUITS. FOR MINIMUM SIZE CONDUIT PERMITTED REFER TO THE SPECIFICATIONS.
	CONDUIT CONCEALED IN WALL, IN SLAB ABOVE, OR ABOVE CEILING.
	CONDUIT CONCEALED IN OR BELOW FLOOR OR UNDERGROUND.
	CONDUIT RUN EXPOSED. RUN PARALLEL OR PERPENDICULAR TO STRUCTURE OR WALL.
	"X" INDICATES EXPLOSION PROOF CONDUIT SEAL FITTING.
	CONCRETE ENCASED DUCTBANK. WIDTH VARIES, SEE DUCTBANK SECTION/DETAILS FOR REQUIREMENTS AND WIDTH
	CONDUIT STUBBED OUT AND CAPPED
	DENOTES A QUANTITY OF TWO (2) 3-INCH CONDUITS EACH CONTAINING THREE NO. 3/0 AWG CONDUCTORS AND 1 NO. 2 AWG GROUND CONDUCTOR.
	DENOTES A QUANTITY OF TWO INSTRUMENT CABLES. EACH CABLE TO CONSIST OF TWO NO. 16 AWG CONDUCTORS TWISTED TOGETHER AND COVERED WITH A METALLIC SHIELD AND AN OVERALL PROTECTIVE JACKET. REFER TO THE SPECIFICATIONS FOR THE EXACT CABLE TO BE PROVIDED.
	SAME AS ABOVE EXCEPT CABLE TO CONSIST OF THREE NO. 16 AWG CONDUCTORS TWISTED, SHIELDED AND COVERED WITH AN OVERALL PROTECTIVE JACKET. REFER TO THE SPECIFICATIONS FOR THE EXACT CABLE TO BE PROVIDED.
	THREE 4-INCH CONDUITS
	FLEXIBLE METAL CONDUIT "WHIP" (3/4" C., 2#12, 1#12G UNLESS OTHERWISE NOTED) FOR LIQUID TIGHT MOTOR CONNECTIONS
	"X" INDICATES CONDUIT SEAL FITTING IN OTHER THAN CODE REQUIRED LOCATIONS.
	INDICATES MOTOR STARTER AND/OR MOTOR CONTROL EQUIPMENT WITHIN THE ENCLOSURE.

SYMBOL	DESCRIPTION
	SINGLE POLE SWITCH "a" INDICATES FIXTURES CONTROLLED.
	DOUBLE POLE SWITCH "a" INDICATES FIXTURES CONTROLLED.
	THREE WAY SWITCH "c" INDICATES FIXTURES CONTROLLED.
	FOUR WAY SWITCH "a" INDICATES FIXTURES CONTROLLED.
	DIMMER SWITCH "a" INDICATES FIXTURES CONTROLLED
	SINGLE POLE SWITCH "OS" INDICATES A PASSIVE INFRARED OCCUPANCY SENSOR
	DOUBLE POLE SWITCH "OS" INDICATES PROGRAMMABLE OCCUPANCY SENSOR CAPABLE OF INBOARD/OUTBOARD SWITCHING
	SINGLE POLE SWITCH "DT" INDICATES DUAL TECHNOLOGY PROGRAMMABLE OCCUPANCY SENSOR CAPABLE OF SENSING MOTION AND SOUND
	LIGHTING CONTACTOR WITH NUMBER OF POLES AS INDICATED
	TIME SWITCH
	PUSH BUTTON STATION
	INDICATES ALL LIGHTING FIXTURES WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE TYPE "A" UNLESS OTHERWISE NOTED. SEE LIGHTING FIXTURE SCHEDULE FOR TYPES
	LIGHTING PANELBOARD (LP-#) SHOWN ON PLAN PER ACTUAL PANEL DIMENSIONS
	POWER PANELBOARD (PP-#) OR DISTRIBUTION PANELBOARD (DP-#) SHOWN ON PLAN PER ACTUAL PANEL DIMENSIONS
	LIGHTING CONTACTOR PANELBOARD (LCP-#) SHOWN ON PLAN PER ACTUAL PANEL DIMENSIONS
	DUPLEX RECEPTACLE, 20A, 120V, 2P, 3W * GFCI - GROUND FAULT CIRCUIT INTERRUPTER TYPE WP - WEATHERPROOF XP - EXPLOSION PROOF T - TRANSIENT VOLTAGE SURGE SUPPRESSOR I - ISOLATED GROUND 4 - CIRCUIT NUMBER
	DUPLEX RECEPTACLE, 20A, 120V, 2P, 3W MOUNTED ABOVE COUNTER-TOP OR 42" AFF * NOTATIONS SAME AS ABOVE
	SPECIAL PURPOSE RECEPTACLE * - VOLT RATING "3" - NUMBER OF POLES "60" - AMPERE RATING "4W" - 4 WIRES IN ADDITION TO GROUND
	MULTI-OUTLET ASSEMBLY, SYMBOL DENOTES RECEPTACLE TYPE
	FLUSH FLOOR OUTLET BOX WITH TYPE OUTLET INDICATED
	UNDER FLOOR DUCT SYSTEM WITH TYPE OUTLETS INDICATED
	THREE CELL UNDER FLOOR DUCT SYSTEM JUNCTION BOX
	JUNCTION BOX
	PULL BOX
	TERMINAL CABINET
	OCCUPANCY SENSOR
	PHOTOCELL
	EMERGENCY EYEWASH/SHOWER ALARM STATION WITH FLOW SWITCH(ES)
	INDICATED EQUIPMENT AND MATERIALS TO BE DEMOLISHED
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 12 CONSTRUCTION (OR GASKETED AND SUITABLE FOR USE IN A WET LOCATION WHERE NEMA STANDARDS DO NOT APPLY) UNLESS OTHERWISE NOTED.
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 4X CONSTRUCTION (OR GASKETED AND SUITABLE FOR USE IN A WET LOCATION WHERE NEMA STANDARDS DO NOT APPLY) UNLESS OTHERWISE NOTED.
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 4X CONSTRUCTION (OR CORROSION RESISTANT CONSTRUCTION SUITABLE FOR USE IN A WET LOCATION WHERE NEMA STANDARDS DO NOT APPLY) UNLESS OTHERWISE NOTED.
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL CONFORM TO N.E.C. REQUIREMENTS FOR THE HAZARDOUS AREA CLASSIFICATION SHOWN.

SYMBOL	DESCRIPTION
	GROUND SYSTEM GRID OR LOOP, 36" BELOW FINISHED GRADE UNLESS OTHERWISE NOTED.
	EXOTHERMIC WELD CONNECTION
	3/4" x 10'-0" GROUND ROD. UNLESS SPECIFIED OTHERWISE.
	GROUND ROD TEST WELL STATION (SEE DETAIL SHEET FOR REQUIREMENTS)
COMMUNICATION SYSTEMS	
	TELEPHONE OUTLET FOR DESK TYPE HANDSET K = KEY SYSTEM
	TELEPHONE OUTLET FOR WALL TYPE HANDSET (MOUNT UP 4'-6") K = KEY SYSTEM
	PAGE/PARTY TELEPHONE OUTLET FOR DESK TYPE HANDSET
	PAGE/PARTY TELEPHONE OUTLET FOR WALL TYPE HANDSET, MOUNT UP 4'-6"
	PAGING SPEAKER, WALL MOUNTED H = HORN TYPE W = WIDE ANGLE TYPE
	PAGING SPEAKER, WALL MOUNTED, BI-DIRECTIONAL, HORN TYPE W = WIDE ANGLE TYPE
	PAGING SPEAKER, FLUSH MOUNTED CEILING TYPE
	PAGING SPEAKER, SURFACE MOUNTED CEILING TYPE
	REMOTE WALL MOUNTED VOLUME CONTROL FOR CEILING SPEAKER, MOUNT UP 5'-0"
	PAGING SPEAKER AMPLIFIER ASSEMBLY
	TELEPHONE CABINET OR BACKBOARD AS NOTED
	"C" - DATA INPUT/OUTPUT CABLE OUTLET "P" - PROCESS COMPUTER SYSTEM (CAT6 RJ-45 JACK)
	GAS DETECTOR/VENTILATION FAILURE ALARM, # INDICATES TYPE OF UNIT. 1 = MASTER, 2 = REMOTE
	GAS DETECTION/VENTILATION FAILURE WEATHERPROOF DUAL-LITE BEACON MOUNT TOP OF DEVICE UP 6'-8" A.F.F.
	GAS DETECTION/VENTILATION FAILURE HORN/STROBE MOUNT TOP OF DEVICE UP 6'-8" A.F.F.
	GAS DETECTION/VENTILATION FAILURE HORN, MOUNT TOP OF DEVICE UP 6'-8" A.F.F.
	GAS DETECTION/VENTILATION FAILURE STROBE, MOUNT TOP OF DEVICE UP 6'-8" A.F.F.
SECURITY SYSTEMS	
	SECURITY ALARM CONTROL PANEL
	SECURITY ALARM DOOR SWITCH
	SECURITY ALARM KEY PAD
	SECURITY SYSTEM CARD ACCESS READER
	SECURITY ALARM WINDOW SWITCH
	SECURITY ALARM MOTION DETECTOR
	CLOSED CIRCUIT TV CAMERA
	PAN, TILT, ZOOM CAMERA LENS CONTROLS
	GLASS BREAK DETECTOR
FIRE ALARM SYSTEMS	
	FIRE ALARM HEAT DETECTOR 135 FIXED TEMPERATURE UNLESS OTHERWISE NOTED. "200" - 200 FIXED TEMPERATURE "R" - FIXED TEMPERATURE RATE-OF-RISE TYPE
	FIRE ALARM SMOKE DETECTOR PHOTOELECTRIC TYPE UNLESS OTHERWISE NOTED. "I" - IONIZATION TYPE.
	FIRE ALARM DUCT SMOKE DETECTOR
	FIRE ALARM CONTROL PANEL
	FIRE ALARM VENTILATION PANEL WITH GRAPHIC PANEL
	REMOTE FIRE ALARM ANNUNCIATOR PANEL

SYMBOL	DESCRIPTION
	FIRE ALARM MASTER BOX
	FIRE ALARM HORN, MOUNT UP 7'-6"
	FIRE ALARM STROBE, MOUNT UP 6'-8" 15 = CANDELA RATING
	FIRE ALARM HORN AND STROBE LIGHT COMBINATION, MOUNT UP 6'-8" 15 = CANDELA RATING
	FIRE ALARM MANUAL PULL STATION, MOUNT UP 4'-0"
	SPRINKLER VALVE SUPERVISORY SWITCH
	SPRINKLER FLOW ALARM SWITCH
	FIRE ALARM BELL
	WEATHERPROOF HI-INTENSITY FIRE ALARM STROBE LIGHT WITH HORN
	PASSIVE INFRARED DETECTOR
	SMOKE BEAM DETECTOR (RECEIVER)
	SMOKE BEAM DETECTOR (TRANSMITTER)
	FIRE ALARM SMOKE DETECTOR REMOTE INDICATOR AND TEST SWITCH

ABBREVIATIONS	
A	AMPS
AC	ALTERNATING CURRENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AL	ALUMINUM
AIC	AMPERE INTERRUPTING CAPACITY
AMP	AMPERE
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
BKR	BREAKER
BLDG	BUILDING
C	CONDUIT
CB	CIRCUIT BREAKER
CGD	COMBUSTIBLE GAS DETECTOR
CKT	CIRCUIT
CLB	CURRENT LIMITING BREAKER
CLF	CURRENT LIMITING FUSE
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CR	CONTROL RELAY
CS	CONTROL SWITCH/CONTROL STATION
CT	CURRENT TRANSFORMER
CU	COPPER
CWS	CONDUIT WALL SEAL
DC	DIRECT CURRENT
DIA	DIAMETER
DMU	DIGITAL METERING UNIT
DN	DOWN
EC	EMPTY CONDUIT
ELEC	ELECTRICAL

GENERAL NOTE
THIS IS A STANDARD LEGEND. SOME SYMBOLS MAY NOT APPEAR ON THE DRAWINGS.

SYMBOL WHERE THERE IS A DETAIL

 SHEET NO. WHERE DETAIL IS DRAWN

DETAIL SYMBOL

 SHEET NO. WHERE THERE IS A DETAIL
 1/4" = 1'-0"

SYMBOL WHERE THERE IS A SECTION

 SHEET NO. WHERE SECTION IS DRAWN

SECTION SYMBOL

 SHEET NO. WHERE SECTION IS TAKEN
 1/4" = 1'-0"

ABBREVIATIONS (CONTINUED)	
ELEV	ELEVATION
EM	EMERGENCY
ENCL	ENCLOSURE OR ENCLOSED
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EX	EXISTING
FO	FIBER OPTIC
FU	FUSE
GCP	GENERATOR CONTROL PANEL
GEN	GENERATOR
G, GND	GROUND
GFI	GROUND FAULT INTERRUPTER
GRS	GALVANIZED RIGID STEEL
HACR	HEATING & AIR CONDITIONING RATED
HH	HANDHOLE
HT	HEIGHT
HID	HIGH INTENSITY DISCHARGE
HP	HORSEPOWER
HZ	HERTZ
ID	IDENTIFICATION
INSTR	INSTRUMENT
K	KILO (PREFIX)
kcMil	1000 CIRCULAR MILS
KVA	KILOVOLT AMPERES
KW	KILOWATTS
LA	LIGHTNING ARRESTER
LCP	LOCAL CONTROL PANEL
LTG	LIGHTING
LP	LIGHTING PANEL
LV	LOW VOLTAGE
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MDP	MAIN DISTRIBUTION PANEL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MTD	MOUNTED
MTS	MANUAL TRANSFER SWITCH
MV	MEDIUM VOLTAGE
N	NEUTRAL
NC	NORMALLY CLOSED
NO	NORMALLY OPEN OR NUMBER
NTS	NOT TO SCALE
OH	OVERHEAD
OL	OVERLOAD
PB	PULL BOX
PCP	PUMP CONTROL PANEL
PH	PHASE
PMH	POWER MANHOLE
PNL	PANEL OR PANELBOARD
PR	PAIR
PTI	PRIMARY
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
RECP	RECEPTACLE
REQD	REQUIRED
QTY	QUANTITY
SA	SURGE ARRESTER
SEC	SECONDS OR SECONDARY
SH	SHIELDED OR SPACE HEATER
SHH	SIGNAL HANDHOLE
SPD	SURGE PROTECTIVE DEVICE
SS	STAINLESS STEEL
SV	SOLENOID VALVE
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TC	TIME TO CLOSE OR TRAY CABLE
TEL	TELEPHONE
TO	TIME TO OPEN
TS	TWISTED SHIELDED OR THERMAL SWITCH
TYP	TYPICAL
UG	UNDERGROUND
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLTS
VA	VOLT AMPS
VFD	VARIABLE FREQUENCY DRIVE
W	WATTS, WIDTH, WITH, WIRE
WP	WEATHERPROOF
XP	EXPLOSION PROOF
XFMR	TRANSFORMER

WARNING
IT IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATES OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR HAS BEEN ATTACHED.

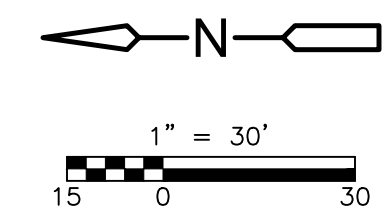


REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: D. DEGENNARO	 Camp Dresser McKee & Smith Salina Industrial Powerpark, One General Motors Drive Syracuse, NY 13206 Tel: (315) 434-3200
DRAWN BY: D. DEGENNARO	
SHEET CHK'D BY: M. STARK	
CROSS CHK'D BY: N. VIGNEAULT	
APPROVED BY: M. STARK	
DATE: FEBRUARY 2025	

CITY OF ROME, N.Y.	PROJECT NO. 21984-265075
KESSINGER DAM REHABILITATION	FILE NAME: E003NFLG.DWG
ELECTRICAL LEGEND II	SHEET NO. 29 OF 34
E-3	ISSUED FOR BID

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OVERALL SITE PLAN
 1" = 30'

WARNING
 IT IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATES OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR HAS BEEN ATTACHED.



REV. NO.	DATE	DRWN	CHKD	REMARKS

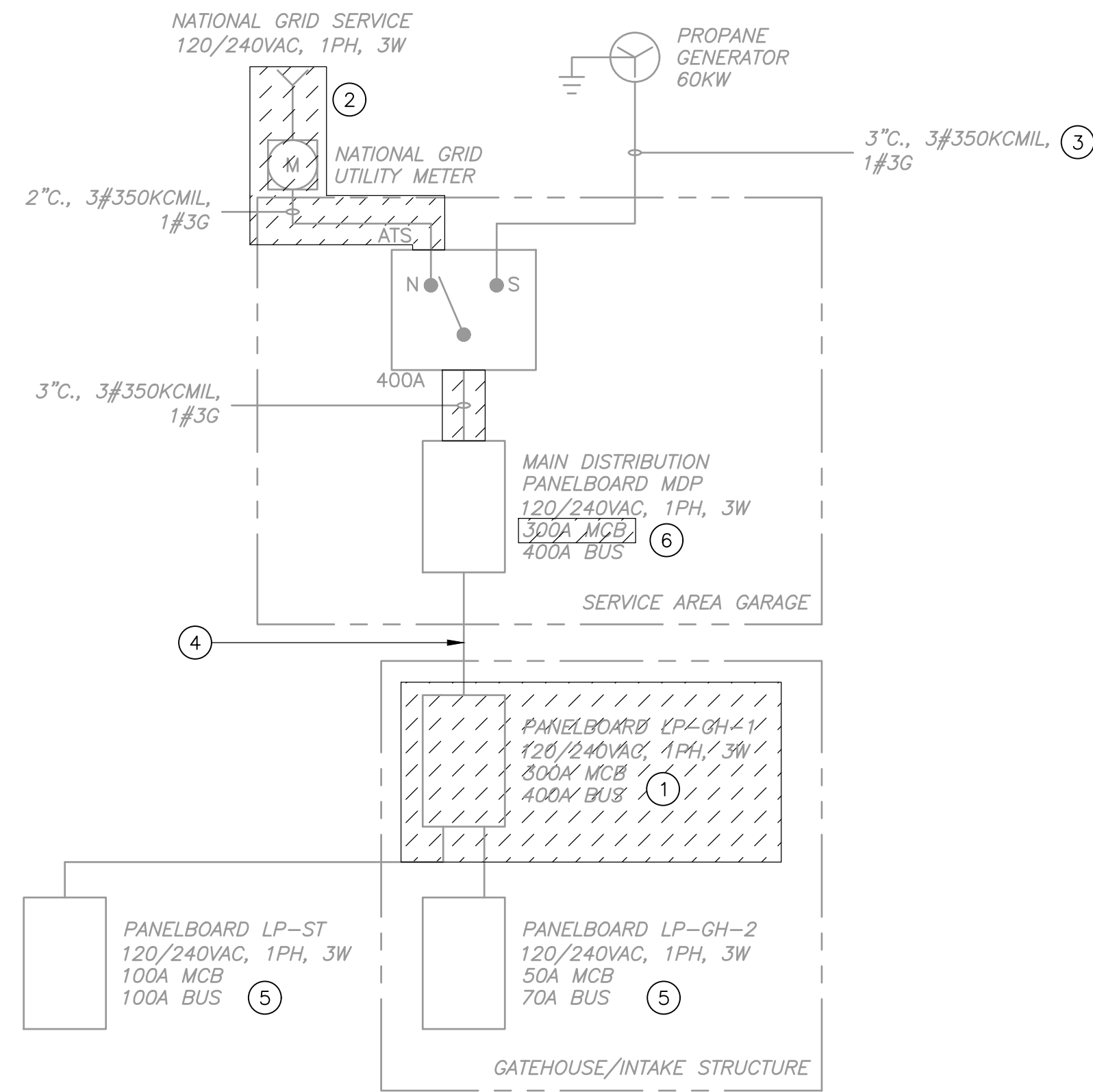
DESIGNED BY: D. DEGENNARO
 DRAWN BY: D. DEGENNARO
 SHEET CHK'D BY: M. STARK
 CROSS CHK'D BY: N. VIGNEAULT
 APPROVED BY: M. STARK
 DATE: FEBRUARY 2025

CDM Smith
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 Salina Industrial Powerpark, One General Motors Drive
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 Tel: (315) 434-3200

CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

ELECTRICAL OVERALL SITE PLAN

PROJECT NO. 21984-265075
 FILE NAME: E004STPL.DWG
 SHEET NO. 30 OF 34
E-4



KESSINGER DAM EXISTING ONE-LINE
DIAGRAM
NTS

300 AMP MAIN BREAKER (6)				PANELBOARD MDP				LOCATION: SERVICE AREA GARAGE			
400 AMP BUS RATING				10 POLES				KA SHORT CIRCUIT RATING			
120/240 VOLTS				1 PHASE 3 WIRE				ELECTRONIC GRADE: NO			
				60 Hz.							
CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES	CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES
		LINE 1	LINE 2					LINE 1	LINE 2		
1	LIGHTS			15 /1		2	RECEPTACLE	0.18		15 /1	
3	UNIT HEATER			60 /2		4	RECEPTACLE		0.18	20 /1	
5						6	BLK HEATER (IN PARKING LOT)	0.5		20 /1	
7	PANELBOARD LP-GH-1		13.31			8	SPACE			20 /2	
9		12.63				10					
TOTAL LINE KVA THIS SIDE		17.63	18.31			TOTAL LINE KVA THIS SIDE		0.68	0.18		
						TOTAL KVA PER LINE		18.31	18.49		
						TOTAL KVA		36.8			

NOTES:
 1. PROVIDE LOCKING HARDWARE
 2. 5 ma GROUND FAULT INTERRUPTER (GFI) CIRCUIT BREAKER
 3. 30 ma GFI CIRCUIT BREAKER FOR EQUIPMENT PROTECTION ONLY (HEAT TRACE)
 4. PROVIDE LOCKING HARDWARE & PAINT BREAKER HANDLE RED (FACP)
 5. BRANCH CIRCUIT WIRING: 3/4" C, 2#12 & 1#12G

300 AMP MAIN BREAKER (1)				PANELBOARD LP-GH-1				LOCATION: GATEHOUSE			
400 AMP BUS RATING				10 POLES				KA SHORT CIRCUIT RATING			
120/240 VOLTS				1 PHASE 3 WIRE				ELECTRONIC GRADE: NO			
				60 Hz.							
CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES	CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES
		LINE 1	LINE 2					LINE 1	LINE 2		
1	LIGHTING	0.1		15 /1		2	SPACE			15 /1	
3	LIGHTING		0.1	20 /1		4	TELEMETRY PANEL	0.1		20 /1	
5	SPACE					6	LIGHTING	0.1		20 /1	
7	SPACE					8	SPACE			20 /1	
9	FURNACE	1.1		20 /2		10	LIGHTING	0.1		20 /1	
11						12	SPACE			20 /2	
13	SLUICE GATE	0.1		30 /2		14					
15						16	SPACE			12 /1	
17	HOT WATER HEATER	0.3		15 /1		18					
19	FURNACE	0.1	0.1	20 /1		20	AIR BUBBLER			20 /2	
21	RECEPTACLES	0.16		20 /1		22					
23	WELL PUMP	0.1		20 /2		24	SORZEMS AND BOOSTER PUMPS	6.48		20 /2	
25		0.1				26		6.48			
27	PANELBOARD LP-GH-2		0.44	20 /2		28	PANELBOARD LP-ST	0.1		100 /2	
29		2.44				30					
TOTAL LINE KVA THIS SIDE		2.52	1.94			TOTAL LINE KVA THIS SIDE		10.79	20.89		
						TOTAL KVA PER LINE		13.31	22.83		
						TOTAL KVA		36.14			

NOTES:
 1. PROVIDE LOCKING HARDWARE
 2. 5 ma GROUND FAULT INTERRUPTER (GFI) CIRCUIT BREAKER
 3. 30 ma GFI CIRCUIT BREAKER FOR EQUIPMENT PROTECTION ONLY (HEAT TRACE)
 4. PROVIDE LOCKING HARDWARE & PAINT BREAKER HANDLE RED (FACP)
 5. BRANCH CIRCUIT WIRING: 3/4" C, 2#12 & 1#12G

50 AMP MAIN LUG ONLY				PANELBOARD LP-GH-2 (5)				LOCATION: GATEHOUSE			
70 AMP BUS RATING				12 POLES				KA SHORT CIRCUIT RATING			
120/240 VOLTS				1 PHASE 3 WIRE				ELECTRONIC GRADE: NO			
				60 Hz.							
CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES	CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES
		LINE 1	LINE 2					LINE 1	LINE 2		
1	SPACE			/1		2	DE-ICER OUTLET NO. 1	0.1		20 /1	
3	SPACE			/1		4	FAN NO. 1		0.18	20 /1	
5	SPACE			/1		6	FAN NO. 2	0.1		20 /1	
7	SPACE			/1		8	SPACE			/1	
9	DE-ICER OUTLET NO. 1	0.18		20 /1		10	SPACE			/1	
11	LIGHTS		0.1	20 /1		12	SPACE			/1	
TOTAL LINE KVA THIS SIDE		0.18	0.1			TOTAL LINE KVA THIS SIDE		0.2	0.28		
						TOTAL KVA PER LINE		0.38	0.38		
						TOTAL KVA		0.76			

NOTES:
 1. PROVIDE LOCKING HARDWARE
 2. 5 ma GROUND FAULT INTERRUPTER (GFI) CIRCUIT BREAKER
 3. 30 ma GFI CIRCUIT BREAKER FOR EQUIPMENT PROTECTION ONLY (HEAT TRACE)
 4. PROVIDE LOCKING HARDWARE & PAINT BREAKER HANDLE RED (FACP)
 5. BRANCH CIRCUIT WIRING: 3/4" C, 2#12 & 1#12G

100 AMP MAIN BREAKER				PANELBOARD LP-ST (5)				LOCATION: STAGING AREA			
100 AMP BUS RATING				20 POLES				KA SHORT CIRCUIT RATING			
120/240 VOLTS				1 PHASE 3 WIRE				ELECTRONIC GRADE: NO			
				60 Hz.							
CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES	CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES
		LINE 1	LINE 2					LINE 1	LINE 2		
1	SPACE			/1		2	SPACE			/1	
3	SPACE			/1		4	SPACE			/1	
5	SPACE			/1		6	LIGHTING	0.2		20 /1	
7	SPACE			/1		8	SPACE			/1	
9	SPACE			/1		10	SPACE			/1	
11	SPACE			/1		12	SPACE			/1	
13	SPACE			/1		14	SPACE			/1	
15	SPACE			/1		16	SPACE			/1	
17	SPACE			/1		18	SPACE			/1	
19	SPACE			/1		20	SPACE			/1	
TOTAL LINE KVA THIS SIDE		0	0			TOTAL LINE KVA THIS SIDE		0.2	0		
						TOTAL KVA PER LINE		0.2	0		
						TOTAL KVA		0.2			

NOTES:
 1. PROVIDE LOCKING HARDWARE
 2. 5 ma GROUND FAULT INTERRUPTER (GFI) CIRCUIT BREAKER
 3. 30 ma GFI CIRCUIT BREAKER FOR EQUIPMENT PROTECTION ONLY (HEAT TRACE)
 4. PROVIDE LOCKING HARDWARE & PAINT BREAKER HANDLE RED (FACP)
 5. BRANCH CIRCUIT WIRING: 3/4" C, 2#12 & 1#12G

KEYED NOTES:

- TEST ALL BRANCH CIRCUITS TO IDENTIFY ASSOCIATED LOADS. IF LOAD IS TO REMAIN, REFEED FROM NEW PANELBOARD LP-GH. IF LOAD IS NO LONGER NEEDED OR IS BEING REMOVED, DEMOLISH CIRCUIT BACK TO SOURCE.
- BASED ON FIELD MARKINGS AND OBSERVED CONDUCTOR SIZES ON TRANSFORMER SECONDARY, SERVICE IS UNDERSIZED FOR DOWNSTREAM ELECTRICAL SYSTEM. COORDINATE UPGRADED SERVICE WITH UTILITY.
- FIELD VERIFY CONDUCTOR SIZES BEFORE CONSTRUCTION.
- WORK TO BE PERFORMED BY OWNER PRIOR TO CONSTRUCTION OF THIS PROJECT: FEEDER UPSIZED TO A CABLE WITH A MINIMUM AMPACITY OF 450A FROM PANEL MDP COMPLETE TO PANEL LP-GH. MAINTAIN EXISTING FEEDER FOR RECONNECTION TO NEW PANEL.
- MAINTAIN EXISTING FEEDERS FOR RECONNECTION TO NEW PANEL.
- REPLACE EXISTING 300A MAIN CIRCUIT BREAKER WITH A 400A MAIN CIRCUIT BREAKER. REPLACE THE 300A FEEDER BREAKER WITH A 400A BREAKER TO FEED NEW PANEL LP-GH. COORDINATE WITH PANEL MDP MANUFACTURER.

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: D. DEGENNARO
 DRAWN BY: D. DEGENNARO
 SHEET CHK'D BY: M. STARK
 CROSS CHK'D BY: N. VIGNEAULT
 APPROVED BY: M. STARK
 DATE: FEBRUARY 2025

CDM Smith
 Camp Dresser McKee & Smith
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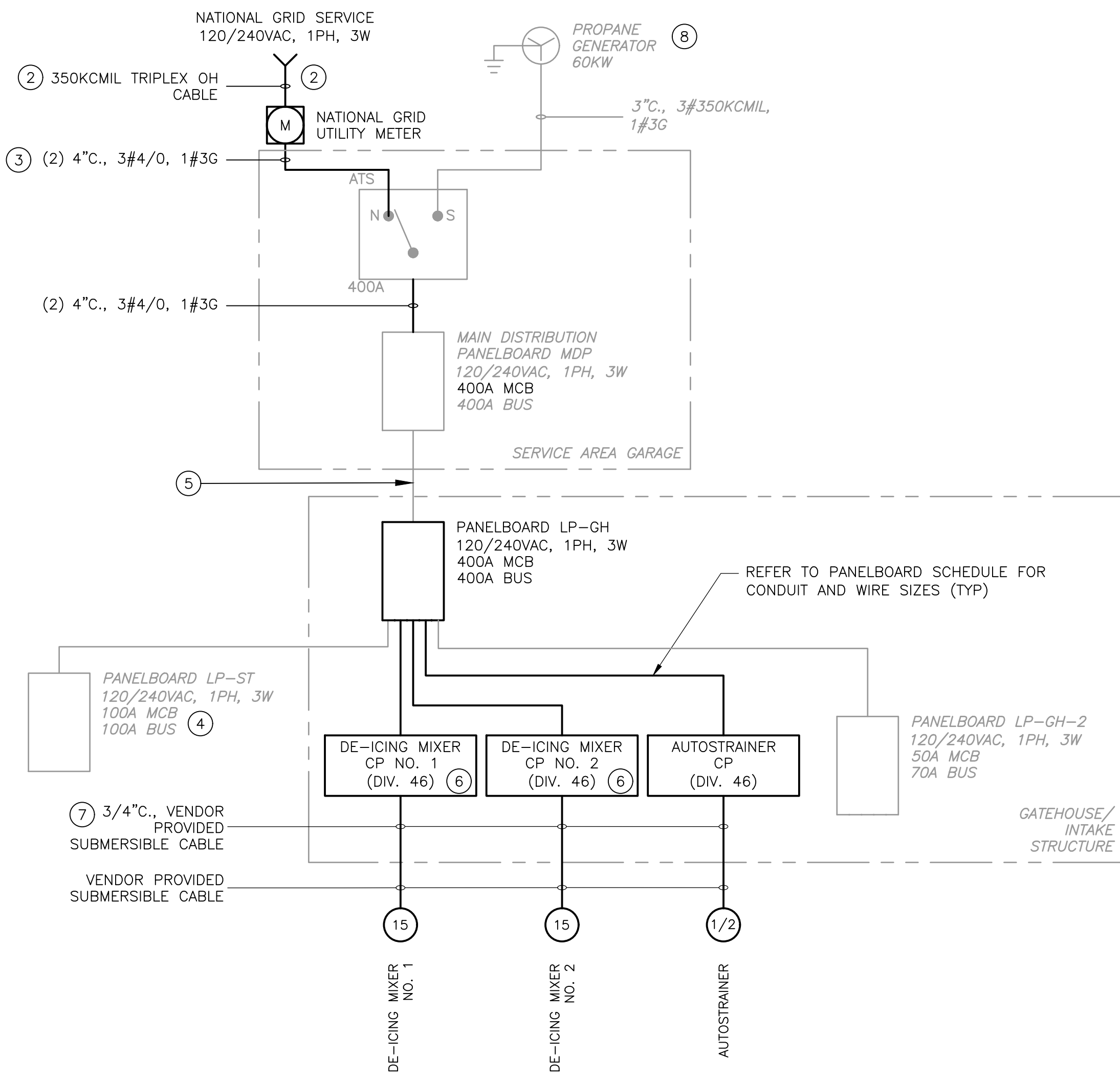
CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

**EXISTING ONE LINE DIAGRAM AND
 PANELBOARD SCHEDULES**
 E-5

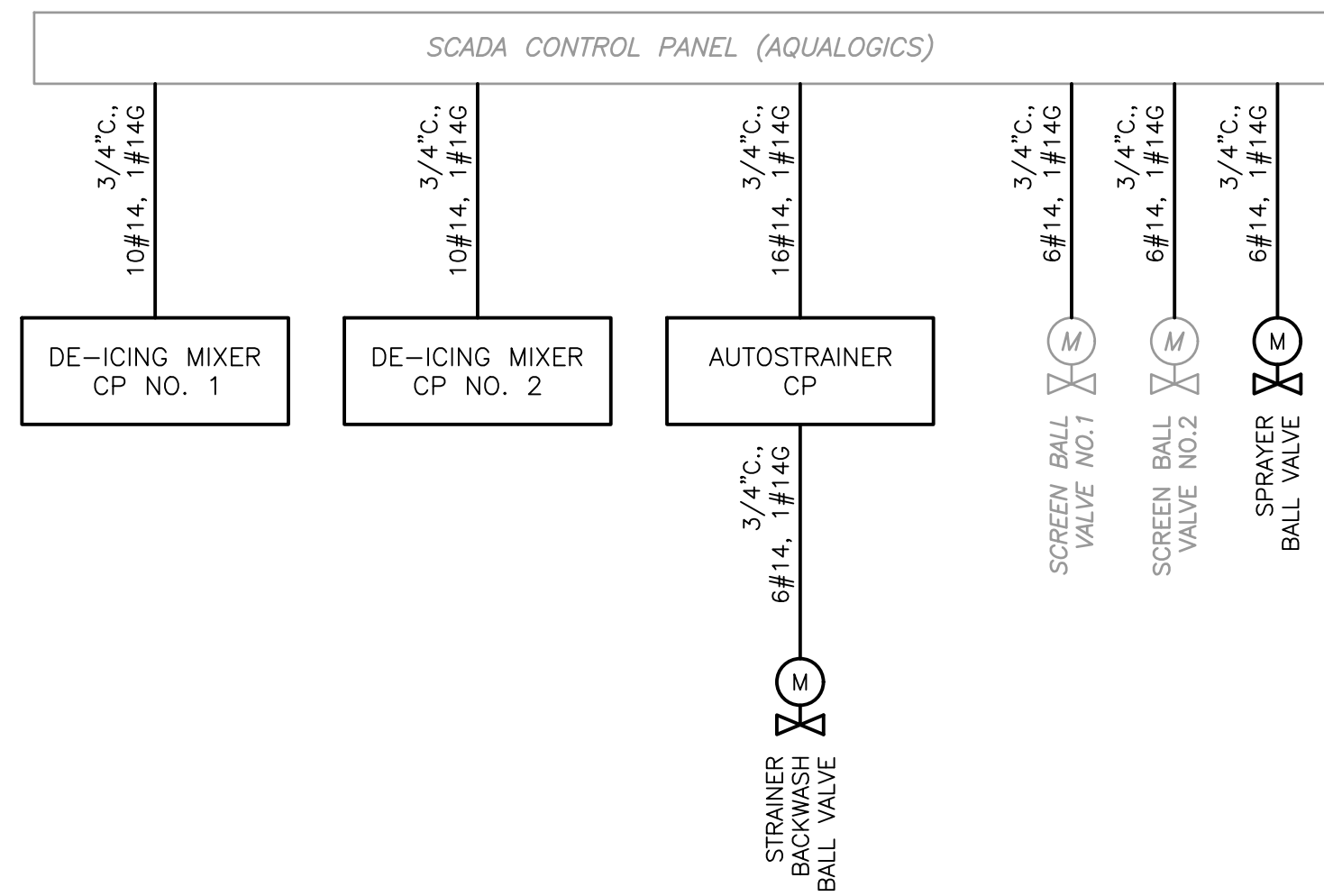


PROJECT NO. 21984-265075
 FILE NAME: E005NFOL.DWG
 SHEET NO. 31 OF 34
 ISSUED FOR BID

WARNING
 IT IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATES OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR HAS BEEN ATTACHED.



KESSINGER DAM NEW WORK ONE-LINE DIAGRAM
NTS



KESSINGER DAM RISER DIAGRAM
NTS

400 AMP MAIN BREAKER
400 AMP BUS RATING 10 POLES 22 KA SHORT CIRCUIT RATING
120/240 VOLTS 1 PHASE 3 WIRE 60 Hz. ELECTRONIC GRADE: NO

LOCATION: SERVICE AREA GARAGE
ENCLOSURE RATING: NEMA 1
MOUNTING: SURFACE

CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES	CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES
		LINE 1	LINE 2					LINE 1	LINE 2		
1	LIGHTS			15 /1		2	RECEPTACLE	0.18		15 /1	
3	UNIT HEATER		5	60 /2		4	RECEPTACLE		0.18	20 /1	
5		5				6	BLK HEATER (IN PARKING LOT)	1.08		20 /1	
7	PANELBOARD LP-GH		30.44	400 /2		8	SPACE			20 /2	
9						10					
TOTAL LINE KVA THIS SIDE				36.12	35.44	TOTAL LINE KVA THIS SIDE				1.26	0.18
TOTAL KVA PER LINE						TOTAL KVA PER LINE				37.38	35.62
TOTAL KVA						TOTAL KVA					73

NOTES:
1. PROVIDE LOCKING HARDWARE
3. 30 ma GFI CIRCUIT BREAKER FOR EQUIPMENT PROTECTION ONLY (HEAT TRACE)
5. BRANCH CIRCUIT WIRING: 3/4" C., 2#12 & 1#12G

NOTES CONT.:
2. 5 ma GROUND FAULT INTERRUPTER (GFI) CIRCUIT BREAKER
4. PROVIDE LOCKING HARDWARE & PAINT BREAKER HANDLE RED (FACP)
6. REFER TO ONE LINE DIAGRAM FOR CONDUIT AND WIRE SIZE.

400 AMP MAIN BREAKER
400 AMP BUS RATING 42 POLES 22 KA SHORT CIRCUIT RATING
120/240 VOLTS 1 PHASE 3 WIRE 60 Hz. ELECTRONIC GRADE: NO

LOCATION: GATEHOUSE
ENCLOSURE RATING: NEMA 4X
MOUNTING: SURFACE

CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES	CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES
		LINE 1	LINE 2					LINE 1	LINE 2		
1	LIGHTING	0.1		15 /1		2	TELEMETRY PANEL	0.1		15 /1	
3	LIGHTING		0.1	20 /1		4	LIGHTING		0.1	20 /1	
5	TUNNEL PUMP	1.1		20 /2		6	LIGHTING	0.1		30 /1	
7			1.1			8	LIGHTS		0.1	20 /1	
9	SLUICE GATE	0.1		30 /2		10	FANS	0.1		20 /1	
11			0.1			12	SCREENS AND BOOSTER PUMPS CP		6.6	70 /2	
13	HOT WATER HEATER	0.5		15 /1		14		6.6			
15	FURNACE		0.1	20 /1		16	PANELBOARD LP-ST	0.1	0.1	20 /2	
17	RECEPTACLES	0.18		20 /1		18		0.1			
19	AIR BUBBLER		4	50 /2		20	PANELBOARD LP-GH-2		0.34	50 /2	
21		4				22		0.34			
23	DE-ICING MIXER CP NO. 1	8.8	8.8	100 /2		24	DE-ICING MIXER CP NO. 2	8.8	8.8	100 /2	
25						26					
27	SPARE			20 /2		28	AUTOSTRAINER CP	0.1	0.1	20 /2	
29						30					
31	SPARE			20 /2		32	SPRAYER BALL VALVE		0.1	20 /1	
33						34	STRAINER BACKWASH BALL VALVE	0.1		20 /1	
35	SPARE			20 /1		36	SPARE			20 /1	
37	SPARE			20 /1		38	SPARE			20 /1	
39	SPARE			20 /1		40	SPD			20 /2	
41	SPARE			20 /1		42					
TOTAL LINE KVA THIS SIDE				14.78	14.2	TOTAL LINE KVA THIS SIDE				16.34	16.24
TOTAL KVA PER LINE						TOTAL KVA PER LINE				31.12	30.44
TOTAL KVA						TOTAL KVA					61.58

NOTES:
1. PROVIDE LOCKING HARDWARE
3. 30 ma GFI CIRCUIT BREAKER FOR EQUIPMENT PROTECTION ONLY (HEAT TRACE)
5. BRANCH CIRCUIT WIRING: 3/4" C., 2#12, 1#12G
7. BRANCH CIRCUIT WIRING: 1-1/2" C., 3#2, 1#8G
9. SIZED PER MANUFACTURERS RECOMMENDATIONS.

NOTES CONT.:
2. 5 ma GROUND FAULT INTERRUPTER (GFI) CIRCUIT BREAKER
4. PROVIDE LOCKING HARDWARE & PAINT BREAKER HANDLE RED (FACP)
6. BRANCH CIRCUIT WIRING: 3/4" C., 2#10, 1#10G
8. BRANCH CIRCUIT WIRING: 1" C., 3#6, 1#10G
10. RECONNECT EXISTING WIRING TO PANEL. SEE KEYED NOTE 1.

50 AMP MAIN LUG ONLY
70 AMP BUS RATING 12 POLES 10 KA SHORT CIRCUIT RATING
120/240 VOLTS 1 PHASE 3 WIRE 60 Hz. ELECTRONIC GRADE: NO

LOCATION: GATEHOUSE
ENCLOSURE RATING: NEMA 1
MOUNTING: SURFACE

CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES	CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES
		LINE 1	LINE 2					LINE 1	LINE 2		
1	SPACE			/1		2	DE-ICER OUTLET NO. 1	0.1		20 /1	
3	SPACE			/1		4	FAN NO. 1		0.18	20 /1	
5	SPACE			/1		6	FAN NO. 2	0.1		20 /1	
7	SPACE			/1		8	SPACE		0.1	/1	
9	DE-ICER OUTLET NO. 1	0.18		20 /1		10	SPACE			/1	
11	LIGHTS		0.1	20 /1		12	SPACE			/1	
TOTAL LINE KVA THIS SIDE				0.18	0.1	TOTAL LINE KVA THIS SIDE				0.2	0.28
TOTAL KVA PER LINE						TOTAL KVA PER LINE				0.38	0.38
TOTAL KVA						TOTAL KVA					0.76

NOTES:
1. PROVIDE LOCKING HARDWARE
3. 30 ma GFI CIRCUIT BREAKER FOR EQUIPMENT PROTECTION ONLY (HEAT TRACE)
5. BRANCH CIRCUIT WIRING: 3/4" C., 2#12, 1#12G

NOTES CONT.:
2. 5 ma GROUND FAULT INTERRUPTER (GFI) CIRCUIT BREAKER
4. PROVIDE LOCKING HARDWARE & PAINT BREAKER HANDLE RED (FACP)

100 AMP MAIN BREAKER
100 AMP BUS RATING 20 POLES 10 KA SHORT CIRCUIT RATING
120/240 VOLTS 1 PHASE 3 WIRE 60 Hz. ELECTRONIC GRADE: NO

LOCATION: STAGING AREA
ENCLOSURE RATING: NEMA 3R
MOUNTING: SURFACE

CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES	CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES
		LINE 1	LINE 2					LINE 1	LINE 2		
1	SPACE			/1		2	SPACE			/1	
3	SPACE			/1		4	SPACE			/1	
5	SPACE			/1		6	LIGHTING	0.2		20 /1	
7	SPACE			/1		8	SPACE			/1	
9	SPACE			/1		10	SPACE			/1	
11	SPACE			/1		12	SPACE			/1	
13	SPACE			/1		14	SPACE			/1	
15	SPACE			/1		16	SPACE			/1	
17	SPACE			/1		18	SPACE			/1	
19	SPACE			/1		20	SPACE			/1	
TOTAL LINE KVA THIS SIDE				0	0	TOTAL LINE KVA THIS SIDE				0.2	0
TOTAL KVA PER LINE						TOTAL KVA PER LINE				0.2	0
TOTAL KVA						TOTAL KVA					0.2

NOTES:
1. PROVIDE LOCKING HARDWARE
3. 30 ma GFI CIRCUIT BREAKER FOR EQUIPMENT PROTECTION ONLY (HEAT TRACE)
5. BRANCH CIRCUIT WIRING: 3/4" C., 2#12 & 1#12G

NOTES CONT.:
2. 5 ma GROUND FAULT INTERRUPTER (GFI) CIRCUIT BREAKER
4. PROVIDE LOCKING HARDWARE & PAINT BREAKER HANDLE RED (FACP)

- KEYED NOTES:
- OVERCURRENT PROTECTION AND BRANCH CIRCUIT CONDUIT AND WIRE SIZES REFEEDING EXISTING LOADS REFLECT FIELD CONDITIONS. FIELD VERIFY THAT BRANCH CIRCUIT AND BREAKER SIZES MEET ALL NEC REQUIREMENTS BASED ON THE REFEED LOAD. RECONNECT AND EXTEND EXISTING CONDUIT AND WIRE WHERE PRACTICABLE AFTER PROPER INSPECTION AND TESTING.
 - COORDINATE UPGRADED SERVICE WITH UTILITY. PROVIDE NEW OVERHEAD SECONDARY SERVICE AND UTILITY METER. COORDINATE EXACT SIZE OF SERVICE CABLE WITH UTILITY.
 - PROVIDE NEW WIRE AND CONDUIT FROM METER TO EXISTING ATS.
 - PROVIDE LABELING INDICATING LP-ST IS FOR LIGHTING ONLY. OVERCURRENT PROTECTION SIZE OF 20A IS PROVIDED AT SOURCE PANELBOARD.
 - WORK TO BE PERFORMED BY OWNER PRIOR TO CONSTRUCTION OF THIS PROJECT: FEEDER UPSIZED TO A CABLE WITH A MINIMUM AMPACITY OF 450A FROM PANEL MDP COMPLETE TO PANEL LP-GH. MAINTAIN EXISTING FEEDER FOR RECONNECTION TO NEW PANEL.
 - MIXER VENDOR PROVIDED CONTROL PANEL SHALL BE FURNISHED WITH VFD OR MOTOR STARTER AS REQUIRED TO MEET MIXER POWER INPUT REQUIREMENTS. PROVIDE SIGNAGE INDICATING NOT MORE THAN 1 DEICING MIXER MAY RUN WHILE ON GENERATOR POWER. MIXERS TO TURN OFF UPON LOSS OF UTILITY POWER AND BE MANUALLY OPERATED UNDER GENERATOR POWER.
 - COORDINATE EXACT CONDUIT SIZE WITH VENDOR CABLE SIZE PRIOR TO INSTALLATION.
 - ONLY ONE MIXER IS ALLOWED TO RUN WHEN GENERATOR IS OPERATING. PROVIDE SIGNAGE AT GENERATOR AND MIXER CONTROL PANELS. MIXERS TO TURN OFF UPON LOSS OF UTILITY POWER AND BE MANUALLY OPERATED UNDER GENERATOR POWER.
 - COORDINATE EXACT CIRCUIT BREAKER, CONDUIT AND WIRE SIZES WITH CONTROL PANEL BEING PROVIDED BY DIV. 46.

SERVICE LOAD CALCULATIONS:

PEAK DEMAND FROM 1 YEAR'S WORTH OF UTILITY BILLS (PROVIDED BY NATIONAL GRID ON FEBRUARY, 2024)	29.4KW
25% OF EXISTING PEAK DEMAND PER NEC	7.4KW
PROPOSED NEW LOADS	36.2KW
TOTAL PROPOSED CONNECTED LOAD	73KW

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: D. DEGENNARO
DRAWN BY: D. DEGENNARO
SHEET CHK'D BY: M. STARK
CROSS CHK'D BY: N. VIGNEAULT
APPROVED BY: M. STARK
DATE: FEBRUARY 2025

CDM Smith
Camp Dresser McKee & Smith
Salina Industrial Powerpark, One General Motors Drive
Syracuse, NY 13206
Tel: (315) 434-3200

CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

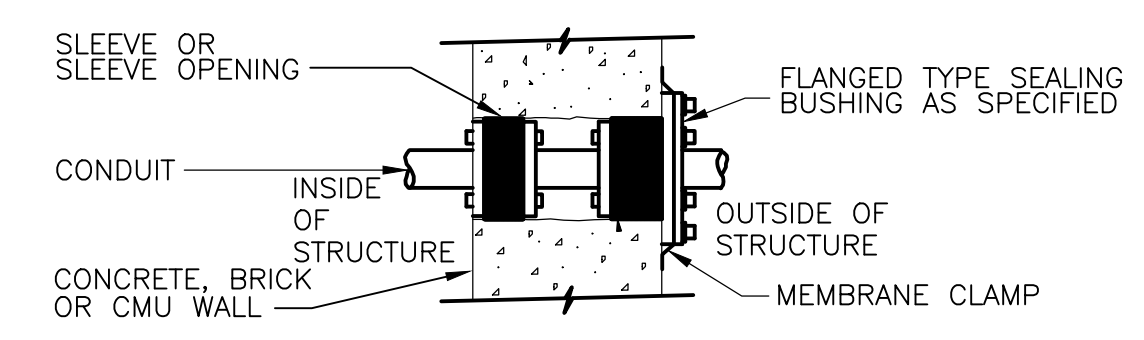
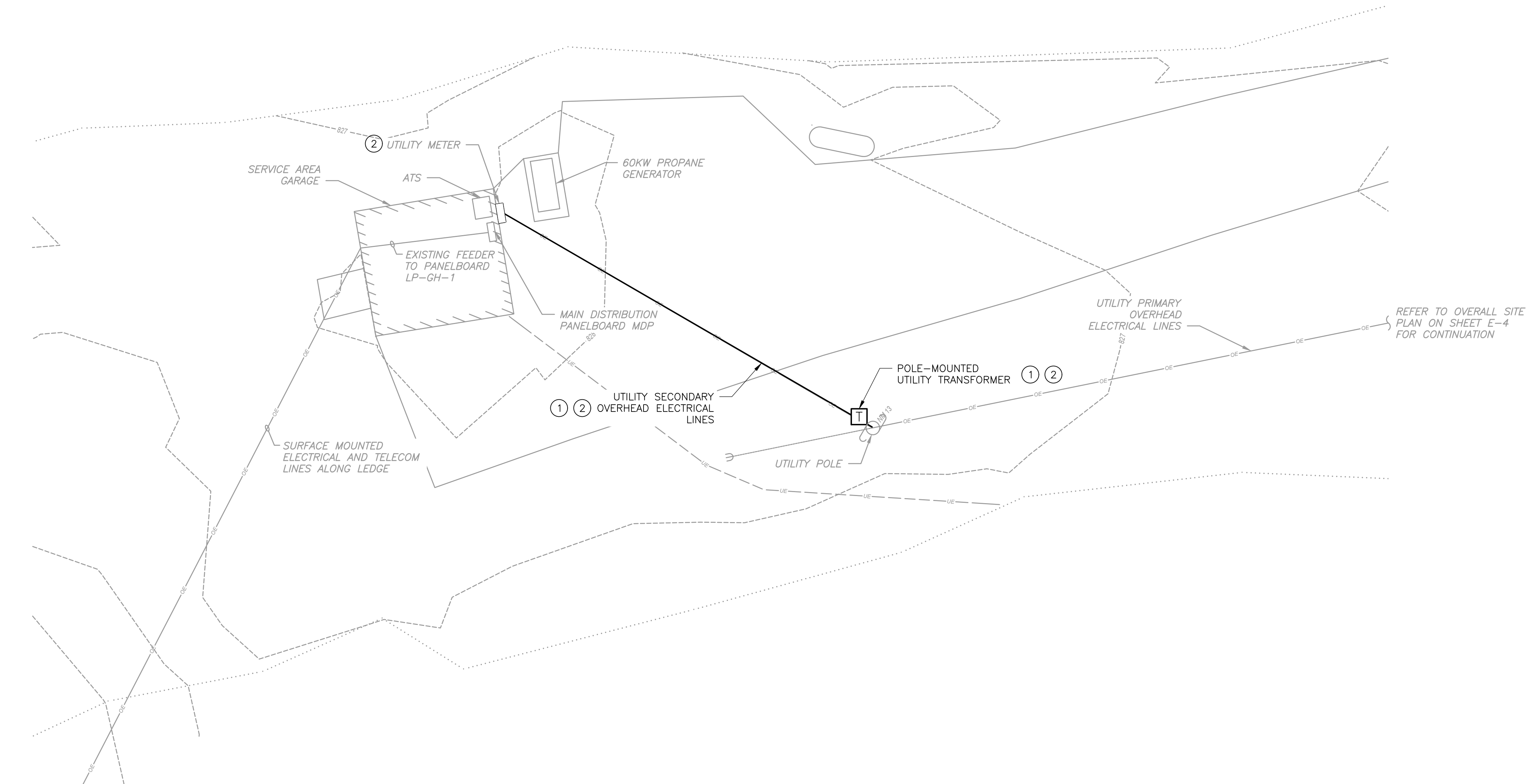
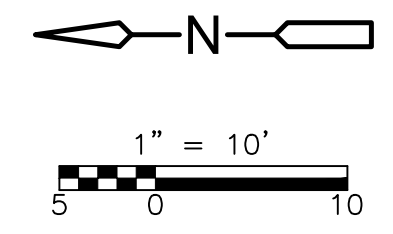
**NEW WORK ONE LINE DIAGRAM,
INSTRUMENTATION RISER DIAGRAM AND
PANELBOARD SCHEDULES**



PROJECT NO. 21984-265075
FILE NAME: E006NFOL.DWG
SHEET NO. 32 OF 34
E-6

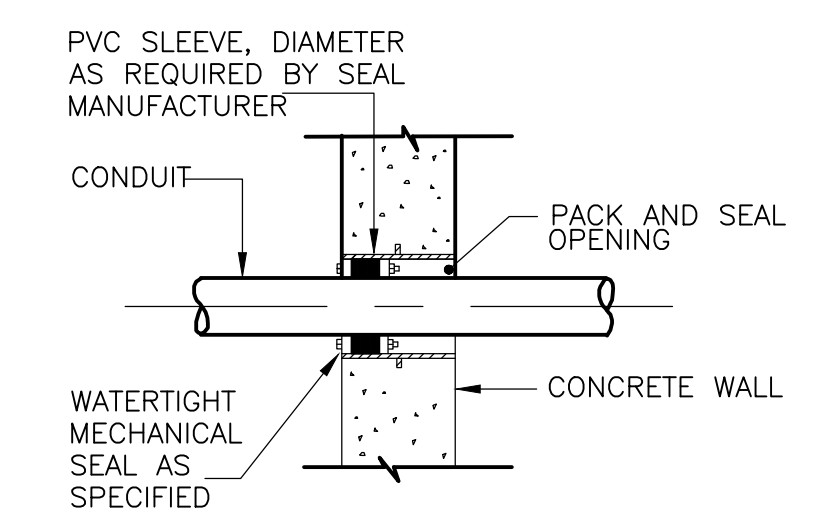
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- KEYED NOTES:**
- 1 BASED ON FIELD MARKINGS AND OBSERVED CONDUCTOR SIZES ON TRANSFORMER SECONDARY, EXISTING SERVICE IS UNDERSIZED FOR DOWNSTREAM ELECTRICAL SYSTEM. COORDINATE UPGRADE OF SERVICE WITH UTILITY.
 - 2 REMOVE EXISTING ELECTRIC SERVICE AND UTILITY METER. COORDINATE NEW SERVICE SIZE WITH NATIONAL GRID AND ONE-LINE DRAWINGS. PROVIDE NEW OVERHEAD UTILITY SERVICE INCLUDING ALL SECONDARY CABLE, SUPPORT CABLES, WEATHERHEAD, METERING, ETC. TO MEET NATIONAL GRID REQUIREMENTS FOR A SECONDARY OVERHEAD UTILITY SERVICE.



CONDUIT PENETRATION THROUGH EXISTING WALL

DETAIL A
NTS



WATERTIGHT CONDUIT PENETRATION

DETAIL B
NTS

ENLARGED SERVICE AREA SITE
PLAN
1" = 10'

WARNING
IT IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATES OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR HAS BEEN ATTACHED.



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: D. DEGENNARO
 DRAWN BY: D. DEGENNARO
 SHEET CHK'D BY: M. STARK
 CROSS CHK'D BY: N. VIGNEAULT
 APPROVED BY: M. STARK
 DATE: FEBRUARY 2025

CDM Smith
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 Salina Industrial Powerpark, One General Motors Drive
 Syracuse, NY 13206
 Tel: (315) 434-3200

CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

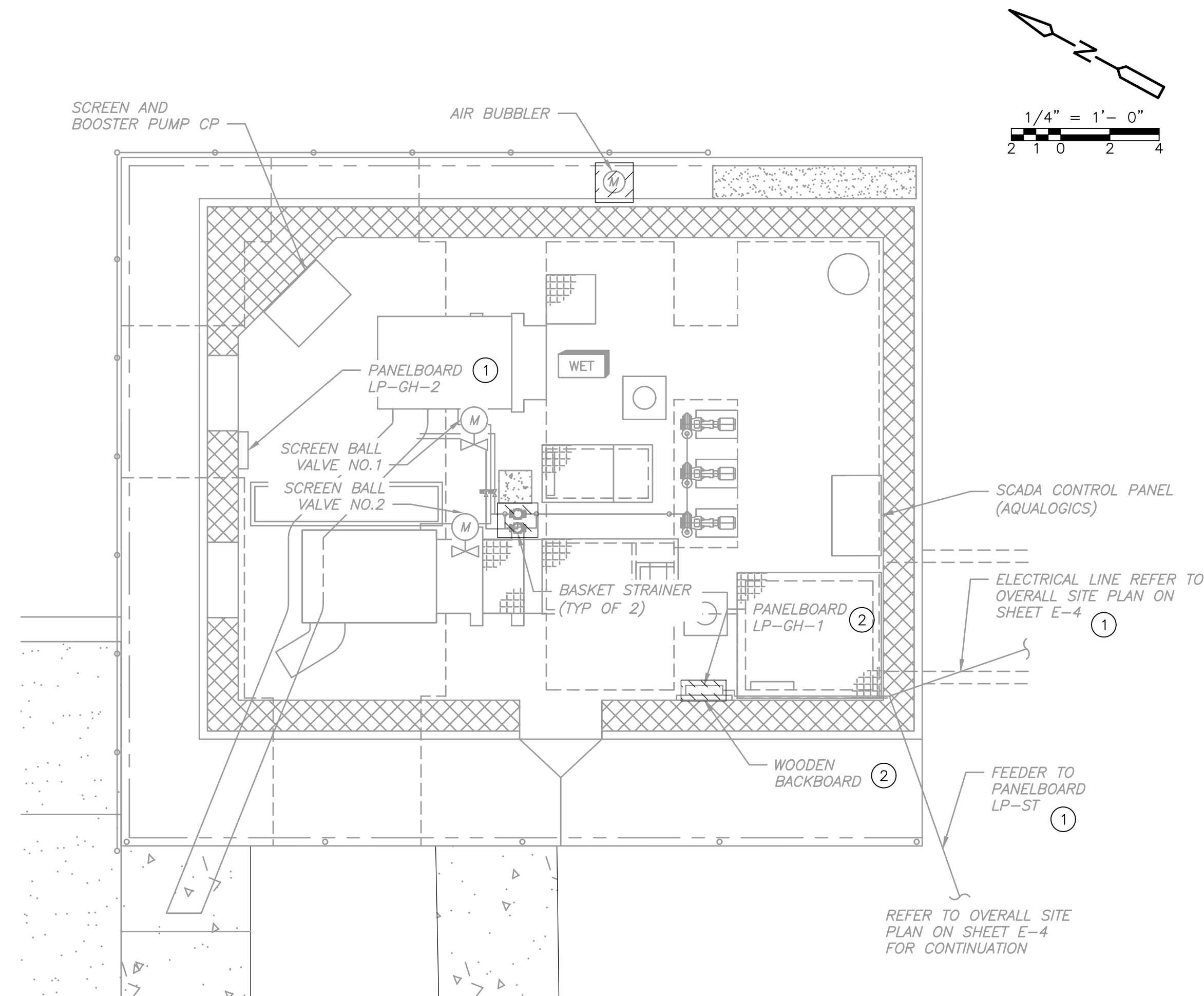
ENLARGED SERVICE AREA PLAN
 PROJECT NO. 21984-265075
 FILE NAME: E007STPL.DWG
 SHEET NO. 33 OF 34
E-7

GENERAL NOTES:

- POWER TO EXISTING DEVICES AND EQUIPMENT TO REMAIN UNLESS OTHERWISE NOTED.

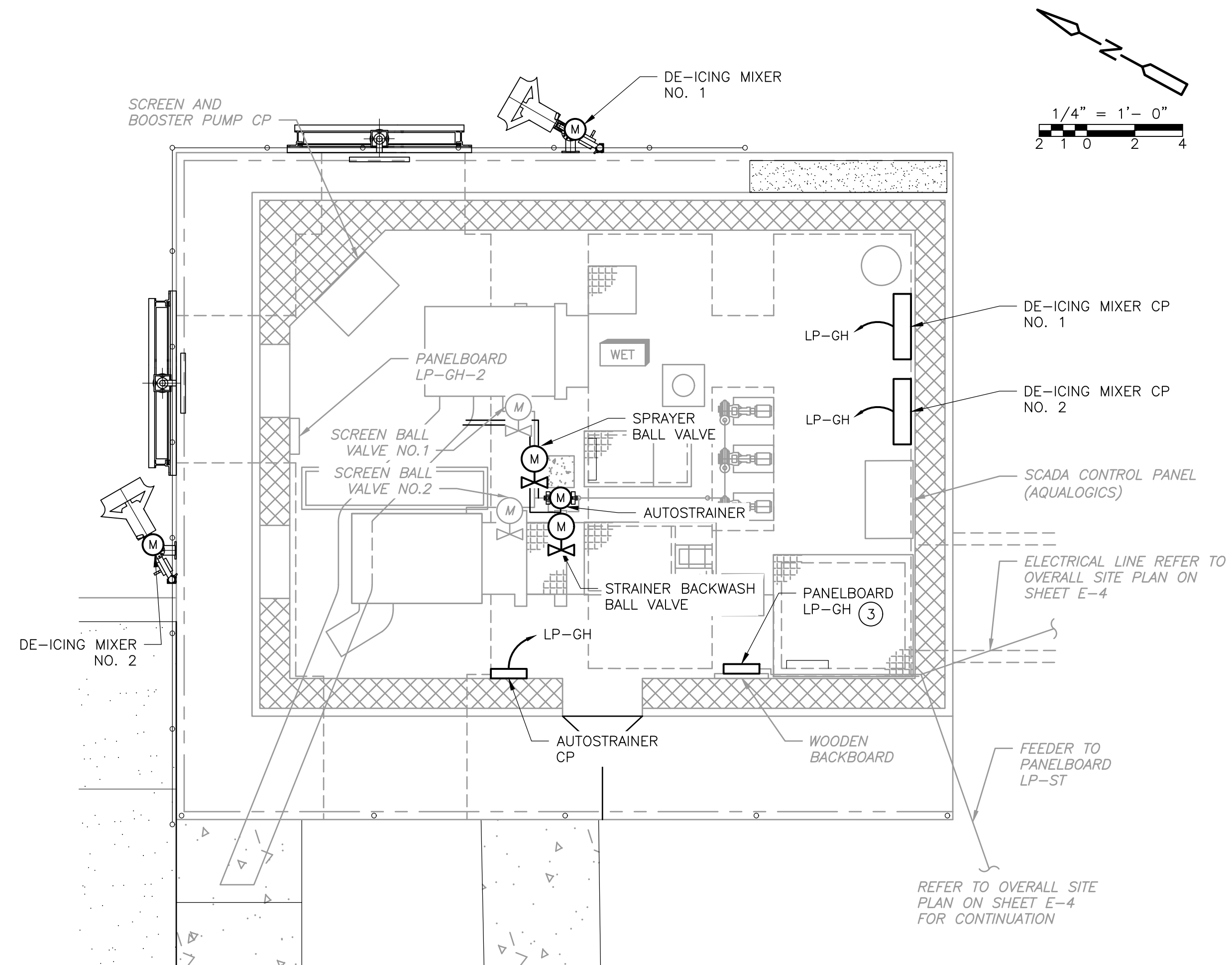
KEYED NOTES:

- MAINTAIN EXISTING FEEDER AND CONNECT TO NEW PANEL LP-GH.
- EXISTING PANEL TO BE REPLACED IN SAME LOCATION. MAINTAIN WOODEN BACKBOARD FOR REUSE.
- EXTEND AND RECONNECT EXISTING FEEDER WIRES TO NEW PANEL.



GATEHOUSE/INTAKE STRUCTURE DEMOLITION

PLAN
1/4" = 1'-0"



GATEHOUSE/INTAKE STRUCTURE NEW WORK

PLAN
1/4" = 1'-0"

WARNING
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CITY OF ROME, N.Y.
KESSINGER DAM REHABILITATION

**GATEHOUSE
POWER AND INSTRUMENTATION PLANS**

PROJECT NO. 21984-265075
FILE NAME: E008GHPL.DWG
SHEET NO. 34 OF 34
E-8