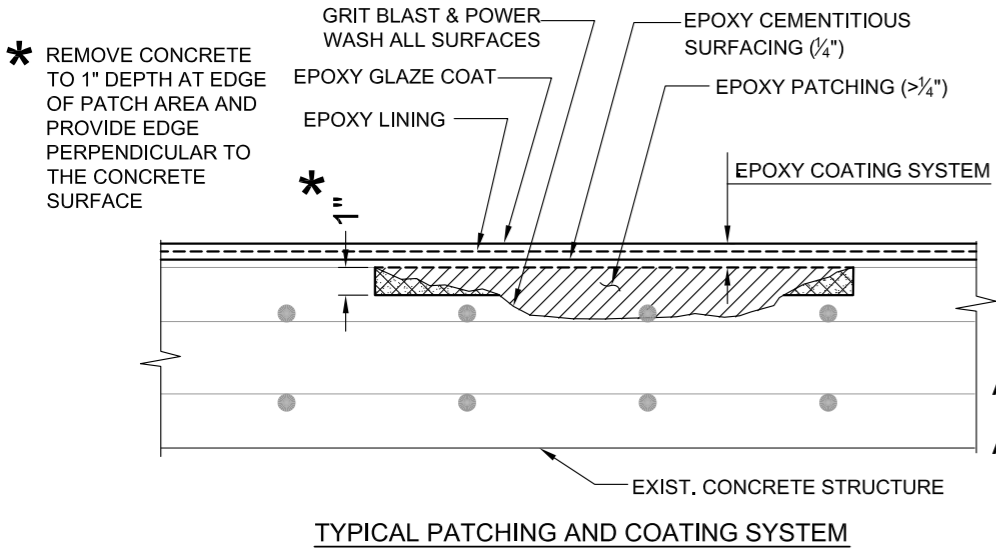


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GENERAL NOTES AND LEGEND		
PROJECT NO.	1401010275	
DATE	07/31/14	
SCALE	N.T.S.	
DESIGNED	DRAWN	CHECKED
KJS	DPG	KJS
0	ISSUED FOR CONSTRUCTION	09/18/14
NO.	REVISION	DATE
SHEET NO.		
3 OF 19		



SUMMARY OF ESTIMATED QUANTITIES										
ITEM	EPOXY PATCHING OF STRUCTURE (INCH SQ. FT.)	EPOXY COATING SYSTEM FOR STRUCTURE (SQ. FT.)	GROUT FILLET FLUME OUTLET (EACH)	INSTALL SLUICE GATE (EACH)	CONSTRUCT CONCRETE DECK @ ACCESS (EACH)	ACCESS HATCH (EACH)	REPLACE SAFETY GRATING (EACH)	CONSTRUCT REINFORCED CONCRETE WALL (EACH)	REFURBISH LADDER & CAGE, REINSTALL (EACH)	INSTALL 48 INCH CONTROL VALVE (EACH)
INFLUENT PIPE (60")	150	520								
INFLUENT WET WELL	700	1300		3	1	2				
PARSHALL FLUME & JUNCTION BOX #1	1200	2300	1				1			
JUNCTION BOX #2	600	2800	1					1		
CONTROL VALVE MANHOLE									1	1
TOTAL QUANTITY	2650	6750	2	3	1	2	1	1	1	1

BID ITEM NOTE:
CONSTRUCTION AND MATERIAL THAT IS CONSIDERED PART OF A CONSTRUCT OR INSTALL ITEM ARE SUBSIDIARY TO THAT BID ITEM.

GENERAL NOTES (STRUCTURAL)

- ALL DESIGN AND CONSTRUCTION WORK FOR THIS PROJECT SHALL CONFORM TO THE 2006 INTERNATIONAL BUILDING CODE.
- FURNISH ALL LABOR, MATERIAL AND EQUIPMENT NECESSARY TO COMPLETE THE WORK SHOWN OR INFERRED BY THESE DRAWINGS.
- DESIGN LOADS (SEE BUILDING DWGS. FOR BUILDING-SPECIFIC DESIGN LOADS)
 - WIND - 115 MPH EXPOSURE C, I = 1.0
 - SEISMIC ZONE 0 Z = 0.15 I = 1.0
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE PLANS, AND FOR COORDINATING ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS WITH THOSE SHOWN ON OTHER DRAWINGS. IF ERRORS OR DISCREPANCIES OCCUR, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BRING THE DISCREPANCY TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- SEE PROCESS, MECHANICAL AND ELECTRICAL PLANS FOR EMBEDDED ITEMS NOT SHOWN HEREIN AND TO VERIFY SIZE AND LOCATION OF ALL OPENINGS. REFER TO PROCESS, MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL OPENINGS AND SLEEVES REQUIRED IN STRUCTURES. VERIFY ALL OPENINGS AND OPENING SIZES, AND ASSOCIATED SURROUNDING FRAMING AND ANCHOR BOLT SIZES AND LOCATIONS WITH ACTUAL EQUIPMENT FURNISHED FOR THE PROJECT. OPENINGS LESS THAN 6 INCHES ARE NOT SHOWN.
- HOLES, PIPES, SLEEVES, ETC. NOT SHOWN ON THE DRAWINGS MUST BE REVIEWED BY THE ENGINEER BEFORE PLACEMENT THROUGH STRUCTURAL MEMBERS.
- NO ALUMINUM SHALL BE IMBEDDED IN OR ATTACHED TO ANY CONCRETE, EXCEPT WHERE SPECIFICALLY SHOWN AND COATED TO INSULATE FROM CONCRETE.
- TEMPORARY BRACING AND SHORING AGAINST WIND AND ERECTION CONDITIONS TO BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- CONCRETE:
 - ALL CONCRETE WORK SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE STANDARD BUILDING CODE REQUIREMENT FOR REINFORCED CONCRETE (ACI 318-08)
 - MATERIALS SHALL COMPLY WITH:
 - CEMENT - ASTM C150 TYPE II
 - AGGREGATE - ASTM C33
 - WATER - POTABLE
 - CONCRETE SHALL DEVELOP THE FOLLOWING 28 DAY COMPRESSIVE STRENGTHS:
 - GROUT SHALL BE CEMENT GROUT.
 - ALL GROUT AND CONCRETE - 4000 PSI
 - CONTRACTOR SHALL SUBMIT THREE COPIES OF THE MIX DESIGN FOR REVIEW.
 - ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER, UNLESS OTHERWISE NOTED.
 - ALL DRILL ANCHORS SHALL CONFORM TO THE EPOXY ADHESIVE ANCHOR SYSTEM.
- REINFORCING STEEL:
 - DETAIL, FABRICATE, ERECT, AND PLACE STEEL REINFORCING BARS PER ACI-301, AS SHOWN.
 - ALL REINFORCING STEEL SHALL BE ASTM A615 GRADE 60
 - ALL WELDED WIRE MESH REINFORCING SHALL BE ASTM A-185 COLD DRAWN WIRE. LAP A MINIMUM OF 8" OR ONE FULL MESH, WHICHEVER IS GREATER.
 - SHOP DRAWINGS OF ALL REINFORCING STEEL SHALL BE SUBMITTED FOR APPROVAL. REINFORCEMENT SHALL BE DETAILED IN ACCORDANCE WITH THE LATEST A.C.I. DETAILING MANUAL BY A QUALIFIED AND EXPERIENCED PERSON AND FIRM. PLACE AND SUPPORT REINFORCEMENT WITH ACCESSORIES: MAXIMUM SPACING - 48" CENTERS. USE 3" SBP SUPPORTS AT ALL FOOTINGS.
 - PROVIDE 500 LBS. EXTRA REINFORCING FOR FIELD USE AS DIRECTED BY THE ENGINEER. (LABOR FOR PLACING SAME TO BE INCLUDED).
- CAST-IN-PLACE CONCRETE - EXECUTION
 - ALL CONCRETE IS REINFORCED CONCRETE UNLESS SPECIFICALLY CALLED OUT AS "UNREINFORCED". REINFORCE ALL CONCRETE NOT OTHERWISE SHOWN WITH SAME STEEL AS IN SIMILAR SECTIONS OR AREAS.
 - SUPPLY CORNER BARS 4'-0" LONG (2'-0" EACH DIRECTION) TO MATCH SIZE AND SPACING OF HORIZONTAL BARS.
 - BARS MARKED CONTINUOUS AND ALL VERTICAL STEEL SHALL BE LAPPED 40 BAR DIAMETERS AT SPLICES (UNLESS NOTED OTHERWISE ON THE DRAWINGS). IN ADDITION, ALL REINFORCING SHALL BE LAPPED AS FOLLOWS (UNLESS NOTED OTHERWISE ON THE DRAWINGS):

BAR SIZE	MIN. LAP (IN.)
#9	72
#8	63
#7	55
#6	47
#5	39
#4	32
 - STANDARD CONCRETE COVER OF BARS UNLESS OTHERWISE NOTED:
 - UNFORMED SURFACE IN CONTACT WITH THE GROUND - 3"
 - FORMED SURFACE EXPOSED TO EARTH OR WEATHER
 - WALLS - 2"
 - SLABS - 2"
 - BEAMS, COLUMNS: PRIMARY REINFORCEMENT, TIES OR STIRRUPS - 2"
 - COORDINATE CONCRETE WORK WITH OTHER DRAWINGS AND SPECIFICATIONS FOR ANY ARCHITECTURAL FINISHED CONCRETE, RECESSED AREAS, EMBEDDED ITEMS, OR SPECIAL CONTROL JOINT PATTERNS.
 - FOOTINGS TO BE CAST AGAINST COMPACTED SOIL OR APPROVED BY ENGINEER.
- STRUCTURAL STEEL:
 - ALL STRUCTURAL STEEL SHALL BE ASTM A992 OR EQUIVALENT. FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), EXCEPT PARAGRAPH 4.2.1 OF THE CODE OF STANDARD PRACTICE SHALL BE DELETED.
 - ALL WELDING TO CONFORM TO THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY (AWS) SPECIFICATIONS D1.1 FOR STEEL AND D1.2 FOR ALUMINUM.
- ALL STRUCTURAL STEEL SHALL BE GALVANIZED UNLESS OTHERWISE NOTED. GALVANIZING TO CONFORM TO ASTM A-123 SPECIFICATIONS. A MINIMUM OF 2 OZ. PER SQ. FT. WILL BE REQUIRED. ALL AREAS CUT, DAMAGED OR MARRED SHALL BE TOUCHED UP WITH INORGANIC ZINC RICH PRIMER.
- ANCHOR BOLTS SHALL MEET ASTM F-1554 UNLESS OTHERWISE NOTED.
- ALL BACKFILL SHALL BE COMPACTED TO 95% OF ASTM D-698 MAXIMUM DRY DENSITY (STANDARD PROCTOR). GRANULAR BASE BENEATH FLOOR SLABS SHALL BE COMPACTED TO AT LEAST 100% OF MAX. DRY DENSITY.
- BRACE WALL CONSTRUCTION UNTIL ALL STRUCTURAL COMPONENTS ARE IN PLACE.
- HORIZONTAL REINFORCING IN CAST IN PLACE CONCRETE AND MASONRY SHALL BE CONTINUOUS AROUND CORNERS OR PROVIDE CORNER BARS.
- AT OPENINGS IN CONCRETE AND CONCRETE MASONRY WALLS, PROVIDE 2-#5 BARS AT JAMBS AND 2-#5 HEADER BARS AT TOP AND BOTTOM. EXTEND BARS A MINIMUM OF 2'-0" PAST EACH CORNER OF OPENING FOR HOOK IF EXTENSION IS NOT POSSIBLE.
- PROVIDE 2-#5 BARS OR NUMBER OF BARS AS NOTED ON DRAWINGS ON EACH SIDE OF SLAB OPENINGS. EXTEND BARS A MINIMUM OF 2'-0" PAST EACH CORNER OF OPENING OR HOOK IF EXTENSION IS NOT POSSIBLE.
- REFER TO CIVIL AND PROCESS DRAWINGS FOR LOCATIONS OF STRUCTURES ON SITE.
- EPOXY COATING SYSTEM:
 - THE CONCRETE SURFACE TO BE COATED SHALL BE GRIT BLASTED TO A CLEAN SURFACE. ANY EXISTING LAITANCE AND ALL FOREIGN MATERIAL WILL BE REMOVED. NO FURTHER REMOVAL IS REQUIRED OR DESIRED. REMOVAL OF THE CEMENT PASTE BETWEEN AGGREGATE PARTICLES WILL NOT BE DONE. THE DEBRIS FROM GRIT BLASTING WILL BE REMOVED BY THE CONTRACTOR.
 - ALL AREAS WILL BE POWER WASHED WITH POTABLE WATER. A HIGH PRESSURE WASHING SYSTEM WILL BE USED. ANY DEBRIS FROM THE POWER WASHING OPERATION WILL BE REMOVED BY THE CONTRACTOR.
 - ALL AREAS WILL BE INSPECTED BY THE ENGINEER AND AREAS FOR PATCHING DESIGNATED. THE EPOXY PATCHING WILL BE APPLIED TO THE AREAS DESIGNATED. THE EPOXY PATCHING WILL BE PAID PER SQUARE FOOT OF SURFACE AREA FOR PATCHES (1) INCHES IN THICKNESS. THE EPOXY PATCHING MATERIAL WILL BE APPROVED BY THE ENGINEER.
 - A TWO COAT SYSTEM OF EPOXY PAINT WILL BE APPLIED PER MANUFACTURES RECOMMENDATIONS TO ALL AREAS DESIGNATED AS "EPOXY COATING SYSTEM. THE TWO COAT EPOXY PAINT SYSTEM WILL BE APPROVED BY THE ENGINEER.
- THE EPOXY PATCH SHALL CONSIST OF TNEMEC SERIES 217 MORTAR CRETE OR ENGINEER PRE- APPROVED EQUAL AS DESCRIBED IN THE SPECIFICATION.
- THE EPOXY COATING SYSTEM SHALL CONSIST OF: TNEMEC SERIES 217 MORTAR CRETE, EPOXY CEMENTITIOUS RESURFACER; TNEMEC SERIES 434 PERMA-SHIELD FR, EPOXY LINING, AND TNEMEC SERIES 435 PERMA-GLAZE; GLAZE PROTECTIVE LINING, OR ENGINEER PRE-APPROVED EQUAL AS DESCRIBED IN THE SPECIFICATION.

