

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9166	33-T-1	ST. CLAIR	9	1
		ILLINOIS	CONTRACT NO. 76H86	

INDEX OF SHEETS

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- 2 GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4 TRAFFIC CONTROL AND PROTECTION
- 5-7 DEMOLITION PLANS
- 8 ELEVATIONS
- 9 STRUCTURAL DETAILS

HIGHWAY STANDARDS

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001001-02 AREAS OF REINFORCEMENT BARS
- 701101-04 OFF-ROAD OPERATIONS, MULTILANE, 15 (4.5 M) TO 24 (600 MM) FROM PAVEMENT EDGE
- 701106-02 OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15 (4.5 M) AWAY
- 701611 URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 701801-05 LANE CLOSURE, MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
- 701901-04 TRAFFIC CONTROL DEVICES
- 720011-01 METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
- 728001-01 TELESCOPING STEEL SIGN SUPPORT
- 729001-01 APPLICATIONS OF TYPES A AND B METAL POSTS (FOR SIGNS & MARKERS)

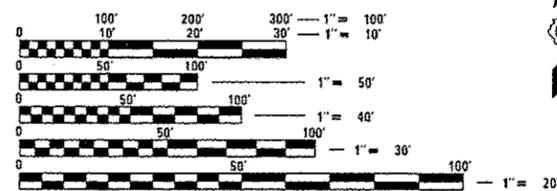
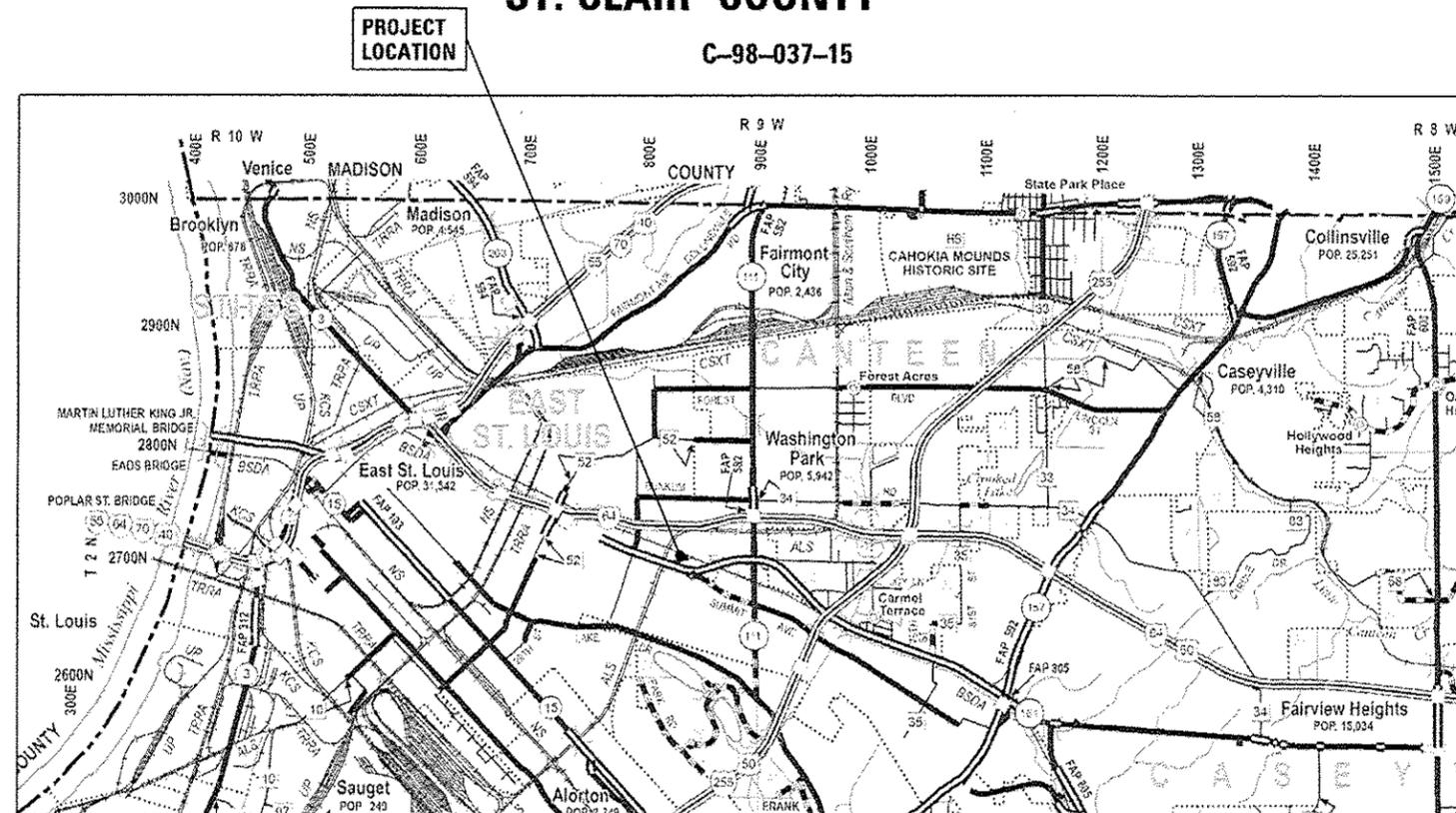
PROPOSED
HIGHWAY PLANS

FAU ROUTE 9166 (ST. CLAIR AVE.)
SECTION 33-T-1

PUMP STATION IMPROVEMENTS
ST. CLAIR COUNTY

C-98-037-15

D-98-042-15



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

GROSS LENGTH = N/A
NET LENGTH = N/A

PLANS PREPARED BY:

KLINGNER & ASSOCIATES, P.C.
Engineers • Architects • Surveyors

616 North 24th Street, Quincy, IL Ph (217)223-3670 • Fax (217)223-3603
4510 Parks Grand Road, Hannibal, MO Ph (573)221-0020 • Fax (573)221-0012
610 N. 4th Street, Suite 100, Burlington, IA Ph (319)253-1636 • Fax (319)252-3826
48 North Park Street, Galveston, IL Ph (309)342-4042 • Fax (309)341-3781

Internet Address: www.klingner.com
STATE OF ILLINOIS DESIGN FIRM # 1642738



ALAN D. LUKENS DATE 3-5-2015
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS NO. 081-005167
LICENSE EXPIRES NOVEMBER 30, 2016



AARON M. SCHAFER DATE 3/5/2015
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS NO. 062-065354
LICENSE EXPIRES NOVEMBER 30, 2015

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED March 19, 2015
John E. Kane
DEPUTY DIRECTOR OF HIGHWAYS, REGION 5 ENGINEER

May 8, 2015
John D. Bertanucci PE, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

May 8, 2015
Omer Aman PE, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

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DESIGN CRITERIA

1. DESIGN LOADS: (PER IBC 2012)
 - A. PLATFORM DEAD LOAD = 20PSF
 - B. PLATFORM LIVE LOAD = 40PSF

GENERAL NOTES

1. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD, AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING MATERIALS.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENFORCE ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
3. THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION FOR THE PROJECT IN A MANNER AND SEQUENCE THAT ARE BASED ON ACCEPTED INDUSTRY STANDARDS THAT RECOGNIZE THE INTERACTION OF THE COMPONENTS THAT COMPRISE THE STRUCTURE, WITHOUT CAUSING DISTRESS, UNANTICIPATED MOVEMENTS OR IRREGULAR LOAD PATHS AS A RESULT OF THE CONSTRUCTION MEANS AND METHODS EMPLOYED.
4. CONSTRUCTION LOADS SHALL NOT EXCEED DESIGN LIVE LOADS. THE CONTRACTOR IS RESPONSIBLE FOR ALL DESIGN REQUIRED TO SUPPORT CONSTRUCTION EQUIPMENT USED IN CONSTRUCTING THIS PROJECT. SHORING AND RESHORING IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE INCLUDED WITH COST OF FURNISHING AND ERECTING STRUCTURAL STEEL, SPECIAL.
5. ALL CONTRACTORS ARE REQUIRED TO EXAMINE THE DRAWINGS AND SPECIAL PROVISIONS CAREFULLY, VISIT THE SITE AND FULLY INFORM THEMSELVES AS TO ALL EXISTING CONDITIONS AND LIMITATIONS, PRIOR TO AGREEING TO PERFORM THE WORK. FAILURE TO VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS AND LIMITATIONS WILL IN NO WAY RELIEVE THE CONTRACTOR FROM FURNISHING ANY MATERIALS OR PERFORMING ANY WORK IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS WITHOUT ADDITIONAL COST TO THE OWNER.
6. DRAWINGS ARE NOT TO SCALE.
7. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE EXISTING PUMP STATION BUILDING.
8. TRAFFIC CONTROL SHALL BE IN PLACE AND THE EXISTING PUMP STATION SHALL BE BYPASSED PRIOR TO PERFORMING ANY WORK IN THE EXISTING PUMP STATION.
9. ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE TO BE GIVEN TO UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. (1-800-892-0123 OR 811) OR FOR NON-MEMBERS THE UTILITY COMPANY DIRECTLY.
10. THE DEPARTMENT STRONGLY ENCOURAGES THE PRIME CONTRACTOR AND THEIR APPROVED SUB-CONTRACTORS TO HIRE MINORITY, WOMEN A DISADVANTAGED INDIVIDUALS FROM ITS FEDERALLY FUNDED HIGHWAY CONSTRUCTION CAREERS TRAINING PROGRAM (HCCTP) TO HELP MEET WORKFORCE AND TRAINEE GOALS. THIS PROGRAM IS TRAINING MINORITIES, WOMEN AND DISADVANTAGED INDIVIDUALS IN HIGHWAY CONSTRUCTION-RELATED SKILLS, (E.G., MATH, FOR THE TRADES, JOB READINESS, TECHNICAL SKILLS COURSEWORK (CARPENTRY, CONCRETE FLAT WORK, BLUEPRINT READING, SITE PLANS SITE WORK, TOOLS, ETC.) AND OSHA 10 HOUR CERTIFICATION), TO PREPARE THEM FOR A CAREER IN THE HIGHWAY CONSTRUCTION TRADES. GRADUATES ARE WELL-TRAINED AND READY TO BECOME PRODUCTIVE ENTRY LEVEL CONSTRUCTION WORKERS. CONTACT THE DISTRICT 8 EED OFFICE AT 618-346-3360 AND/OR THE HCCTP COORDINATOR AT 616-874-6528 TO LEARN MORE ABOUT THE PROGRAM AND FOR ASSISTANCE IN MEETING WORKFORCE AND TRAINEE GOALS

STRUCTURAL STEEL

1. DETAILING, FABRICATION AND ERECTION SHALL CONFORM TO THE AISC SPECIFICATIONS AND STANDARD CODE OF PRACTICE.
2. STEEL FABRICATION AND ERECTION SHALL FOLLOW OSHA REQUIRMENTS.
3. ALL WELDING SHALL BE IN ACCORDANCE WITH THE "STRUCTURAL WELDING CODE", AWS D1.1, LATEST EDITION.
4. ALL STRUCTURAL STEEL, HANDRAILS AND POSTS, AND GRATING SHALL BE HOT DIPPED GALVANIZED. SEE SPECIAL PROVISION.
5. GRATING SHALL BE 1"X 3/16" GALVANIZED, TYPE 19-W-4, WELDED STEEL BAR GRATING. MATERIAL SHALL COMPLY WITH ASTM A-1011. ATTACH GRATING PANELS WITH TYPE H-3 GALVANIZED SADDLE CLIPS. EACH GRATING PANEL SHALL HAVE A MINIMUM OF TWO (2) CLIPS PER SUPPORTING MEMBER. GRATING SHALL BE FABRICATED SO THAT THE CROSS BARS OF ADJACENT PANELS ARE ALIGNED WHEN INSTALLED. EXPOSED ENDS OF THE GRATING SHALL HAVE WELDED BANDING.
6. REPAIR GALVANIZED SURFACES PER ASTM A780.
7. WEIGHT OF STRUCTURAL STEEL:
 - a. GRADE 36 STEEL = 150 lbs
 - b. GRADE A53 STEEL = 70 lbs
 - c. ASTM A-1011 GRATING = 30 lbs
8. WEIGHT OF STRUCTURAL STEEL REMOVAL = 670 lbs
9. ALL STEEL SHALL BE FURNISHED IN ACCORDANCE WITH ARTICLE 505 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WITH THE EXCEPTION OF THE GRATING AND HOIST NOTED IN THE SPECIAL PROVISION "FURNISHING AND ERECTING STRUCTURAL STEEL, SPECIAL"



USER NAME: r_wob
 PLOT SCALE: 20.0000' / 1" = 1'
 PLOT DATE: 3/5/2015

DESIGNED - AMS
 DRAWN - AMS
 CHECKED - ADL
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES
 VENICE DEEP WELL PUMP STATION IMPROVEMENTS**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9156	33-T-1	ST. CLAIR	9	2
CONTRACT NO. 76H86				

Engineers • Architects • Surveyors

NONE SHEET 1 OF 1 SHEETS STA. TO STA.

ILLINOIS FED. AID PROJECT

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE		
				100% STATE		
				0040		
				URBAN		
50102400	CONCRETE REMOVAL	CU YD	0.7	0.7		
67100100	MOBILIZATION	L SUM	1	1		
70102634	TRAFFIC CONTROL AND PROTECTION, STANDARD 701611	L SUM	1	1		
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1		
70107004	PAVEMENT MARKING BLACKOUT TAPE, 4"	FOOT	1230	1230		
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	410	410		
Z0001904	STRUCTURAL STEEL REMOVAL	L SUM	1	1		
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	1	1		
X5051200	FURNISHING AND ERECTING STRUCTURAL STEEL, SPECIAL	L SUM	1	1		
9						

SYMBOLS

-  ARROW BOARD
-  CHANNELIZER CONE
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  WORK AREA
-  BARRICADE OR DRUM WITH FLASHING LIGHT
-  TYPE III BARRICADE WITH FLASHING LIGHTS

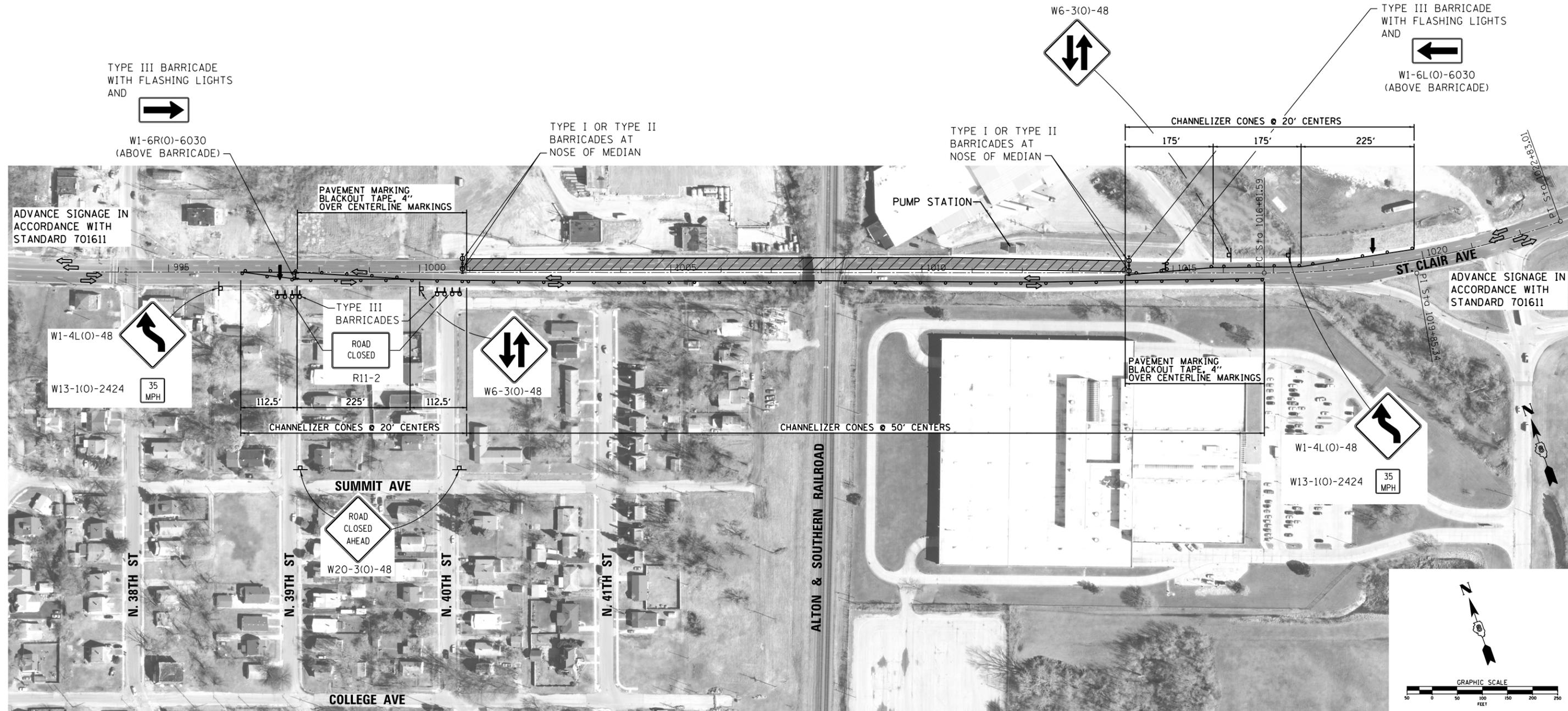
NOTES:

STATIONING BASED OFF OF EXISTING PLANS AND HAS NOT BEEN FIELD VERIFIED.

ALL VEHICULAR TRAFFIC CONTROL AND PROTECTION SHOWN SHALL BE PAID FOR AS "TRAFFIC CONTROL AND PROTECTION, STANDARD 701611".

CLOSE PEDESTRIAN ACCESS TO THE NORTH SIDEWALK ACCORDING TO HIGHWAY STANDARD 701801.

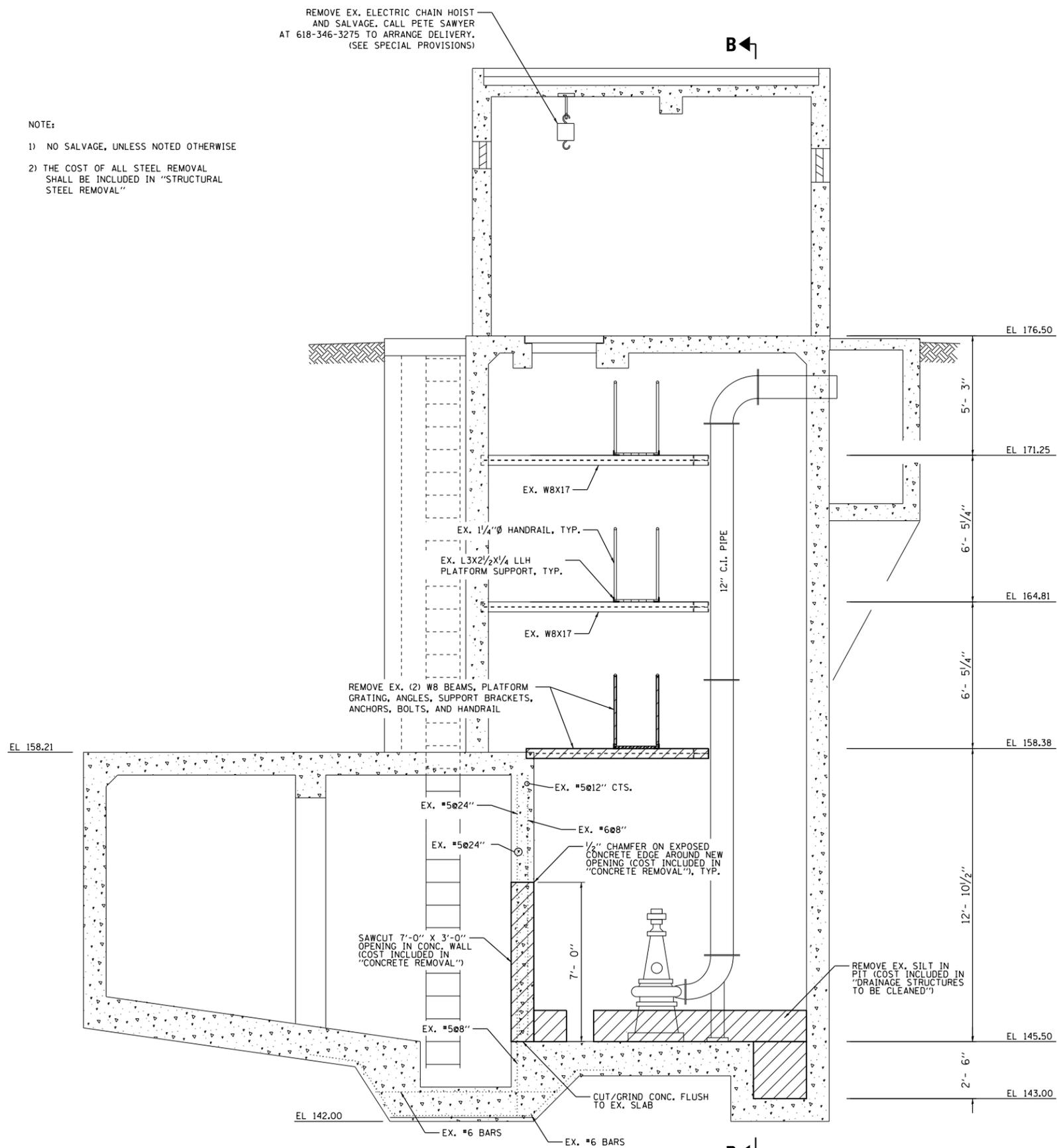
EXIST. CURVE A1
 PI STA. = 1022+59.24
 $\Delta = 36^\circ 48' 01''$ (LT)
 $D = 3^\circ 17' 58''$
 $R = 1,736.48'$
 $T = 577.66'$
 $L = 1,115.32'$
 $E = 95.56'$
 $e = \text{-----}$
 $T.R. = \text{-----}$
 $S.E. RUN = \text{-----}$
 P.C. STA. = 1016+81.59
 P.T. STA. = 1027+96.91



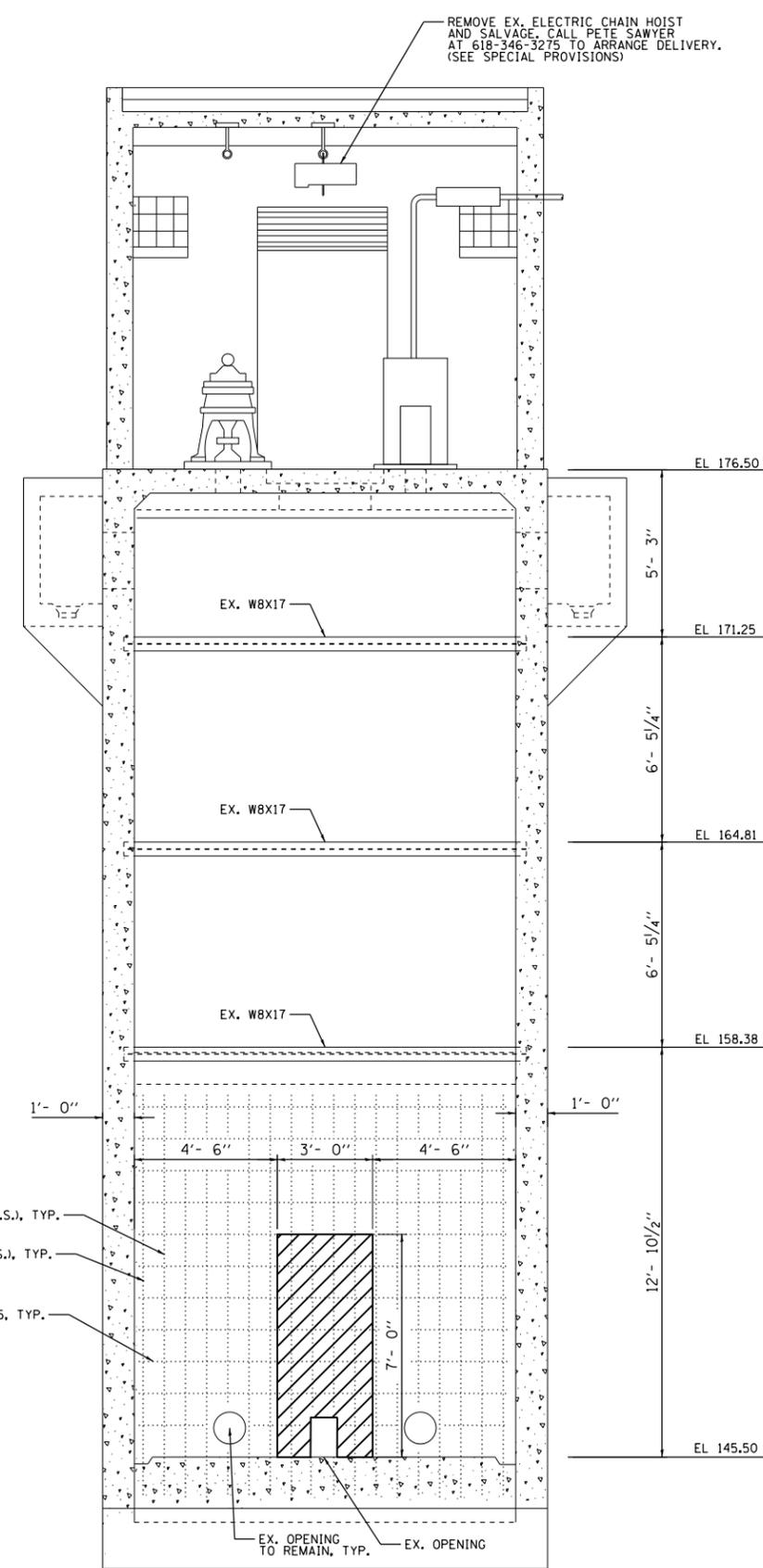
REMOVE EX. ELECTRIC CHAIN HOIST AND SALVAGE. CALL PETE SAWYER AT 618-346-3275 TO ARRANGE DELIVERY. (SEE SPECIAL PROVISIONS)

REMOVE EX. ELECTRIC CHAIN HOIST AND SALVAGE. CALL PETE SAWYER AT 618-346-3275 TO ARRANGE DELIVERY. (SEE SPECIAL PROVISIONS)

- NOTE:
- 1) NO SALVAGE, UNLESS NOTED OTHERWISE
 - 2) THE COST OF ALL STEEL REMOVAL SHALL BE INCLUDED IN "STRUCTURAL STEEL REMOVAL"



SECTION A-A (SHOWING DEMOLITION)
SCALE: 3/8"=1'-0"



SECTION B-B (SHOWING DEMOLITION)
SCALE: 3/8"=1'-0"

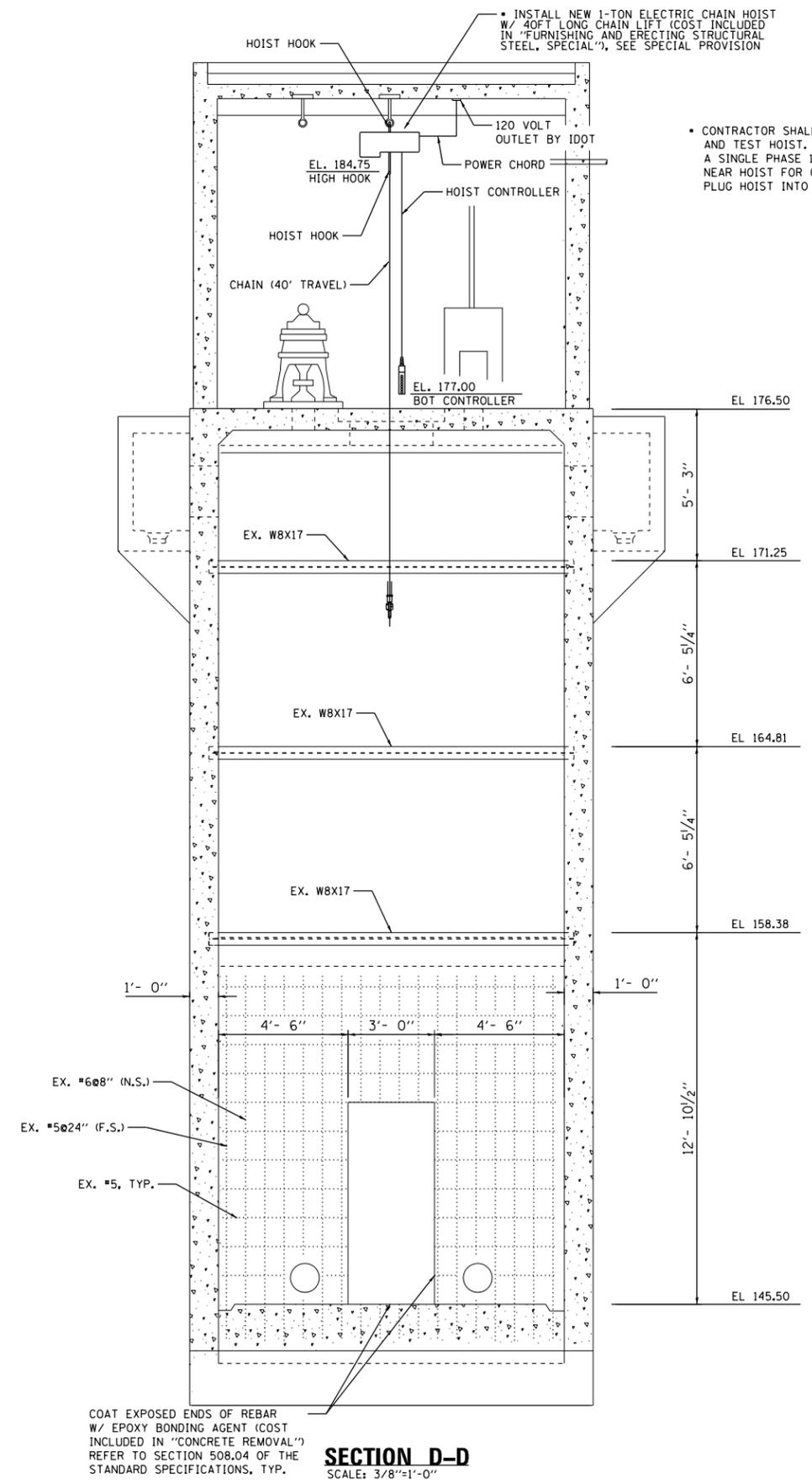
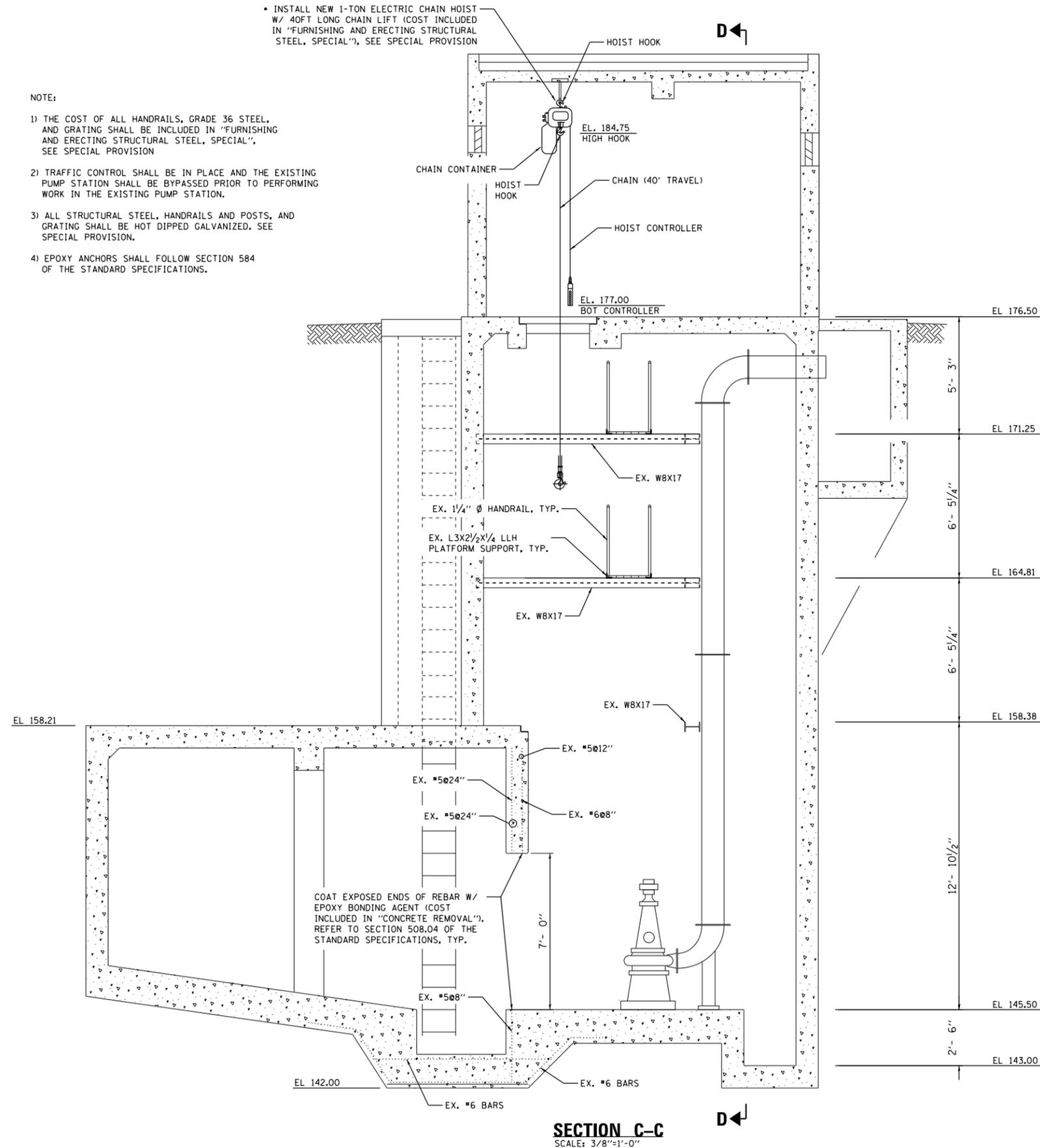
• INSTALL NEW 1-TON ELECTRIC CHAIN HOIST W/ 40FT LONG CHAIN LIFT (COST INCLUDED IN "FURNISHING AND ERECTING STRUCTURAL STEEL, SPECIAL"), SEE SPECIAL PROVISION

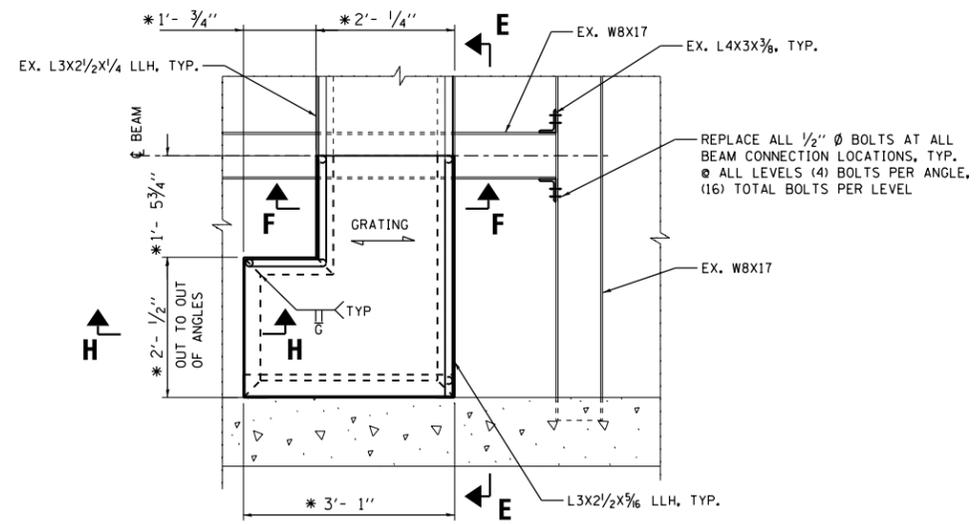
• INSTALL NEW 1-TON ELECTRIC CHAIN HOIST W/ 40FT LONG CHAIN LIFT (COST INCLUDED IN "FURNISHING AND ERECTING STRUCTURAL STEEL, SPECIAL"), SEE SPECIAL PROVISION

NOTE:

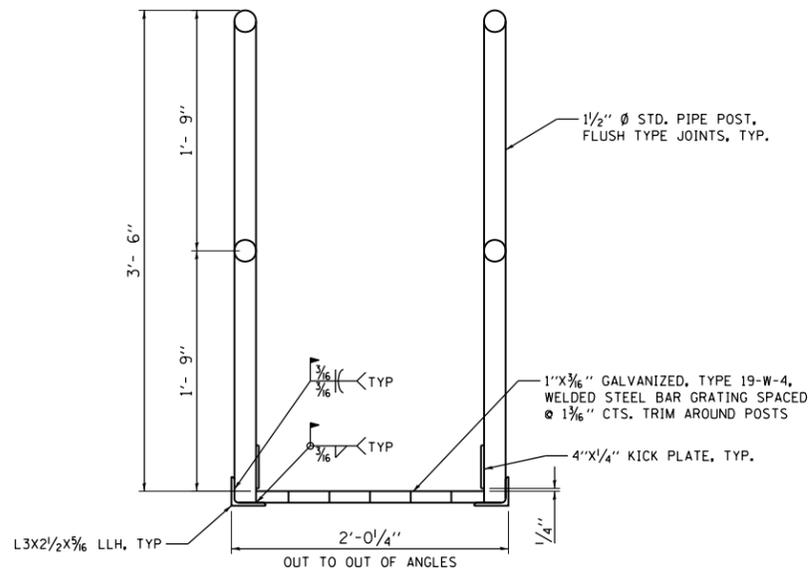
- 1) THE COST OF ALL HANDRAILS, GRADE 36 STEEL, AND GRATING SHALL BE INCLUDED IN "FURNISHING AND ERECTING STRUCTURAL STEEL, SPECIAL", SEE SPECIAL PROVISION
- 2) TRAFFIC CONTROL SHALL BE IN PLACE AND THE EXISTING PUMP STATION SHALL BE BYPASSED PRIOR TO PERFORMING WORK IN THE EXISTING PUMP STATION.
- 3) ALL STRUCTURAL STEEL, HANDRAILS AND POSTS, AND GRATING SHALL BE HOT DIPPED GALVANIZED, SEE SPECIAL PROVISION.
- 4) EPOXY ANCHORS SHALL FOLLOW SECTION 584 OF THE STANDARD SPECIFICATIONS.

• CONTRACTOR SHALL PROVIDE, INSTALL, AND TEST HOIST. IDOT WILL PROVIDE A SINGLE PHASE 120 VOLT OUTLET NEAR HOIST FOR CONTRACTOR TO PLUG HOIST INTO TO.

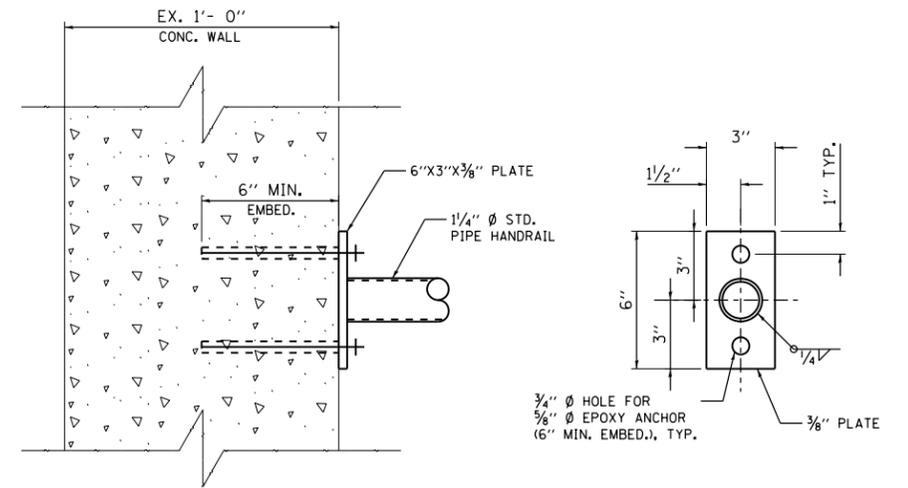




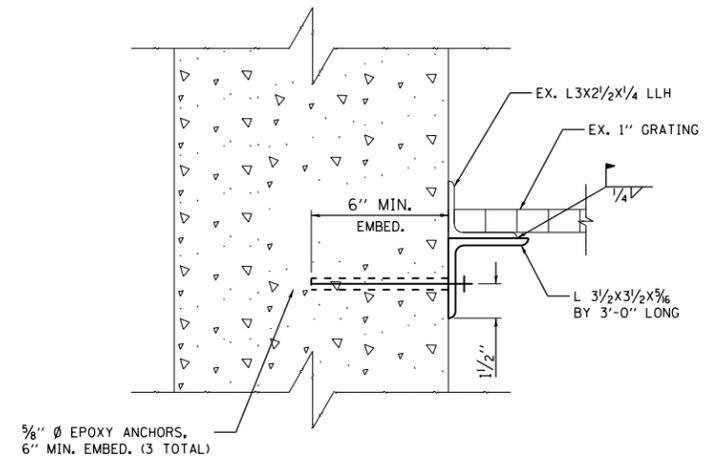
DETAIL 1
SCALE: 3/4"=1'-0"
* DIMENSIONS SHALL MATCH EXISTING DIMENSIONS



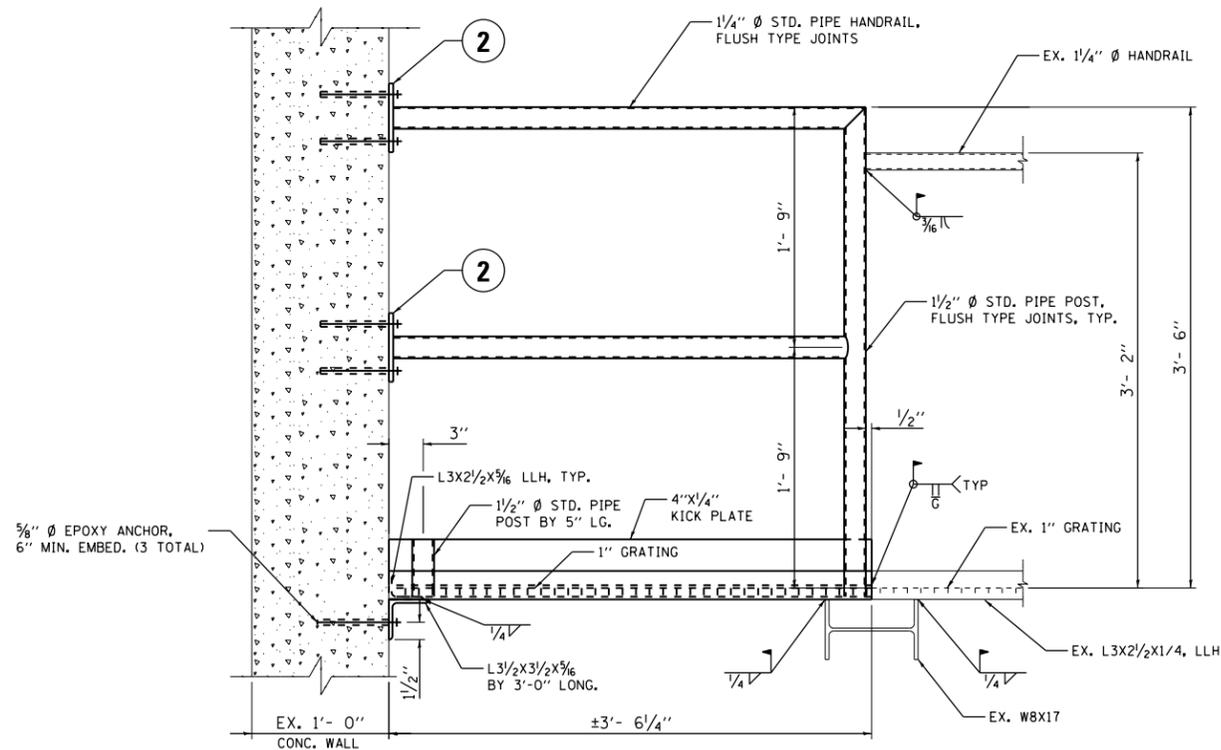
SECTION F-F
SCALE: 1 1/2"=1'-0"



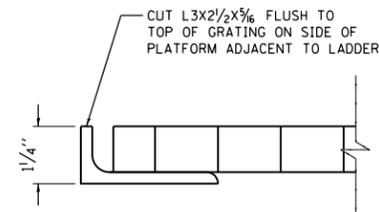
DETAIL 2 - TYPICAL RAILING CONN. TO WALL
SCALE: 3"=1'-0"



SECTION G-G
SCALE: 3"=1'-0"



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



SECTION H-H
SCALE: 6"=1'-0"

NOTE:

- 1) THE COST OF ALL HANDRAILS, GRADE 36 STEEL, AND GRATING SHALL BE INCLUDED IN "FURNISHING AND ERECTING STRUCTURAL STEEL, SPECIAL", SEE SPECIAL PROVISION
- 2) TRAFFIC CONTROL SHALL BE IN PLACE AND THE EXISTING PUMP STATION SHALL BE BYPASSED PRIOR TO PERFORMING WORK IN THE EXISTING PUMP STATION.
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