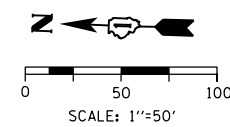
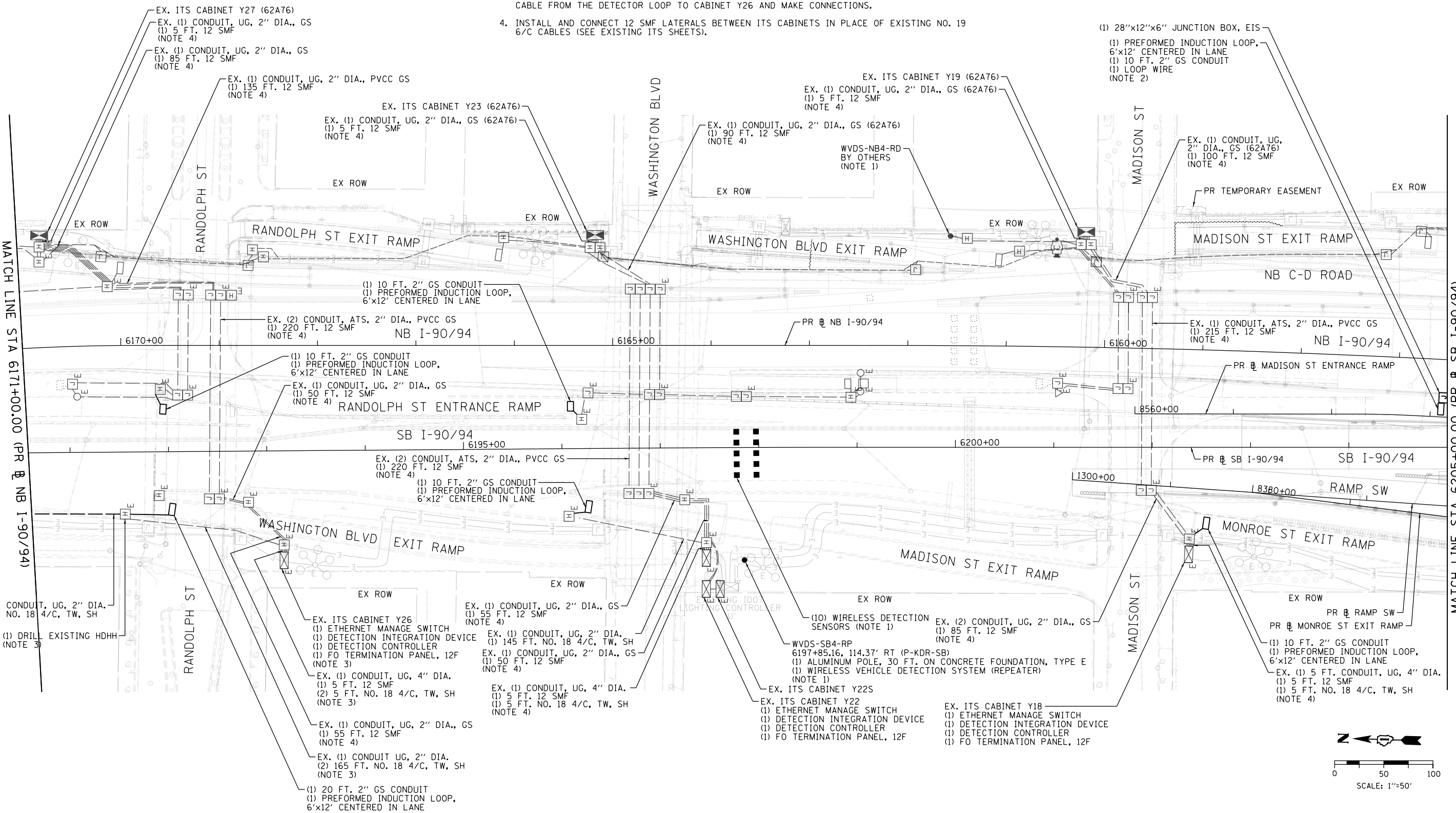


**NOTES:**

1. WIRELESS VEHICLE DETECTION SENSORS SHALL BE CENTERED IN LANE. SENSORS SHALL BE SPACED 20 FT. EACH LANE. COORDINATE WVDS REPEATER INSTALLATION WITH CONTRACT 62A76, WHICH INSTALLS THE RADIO SITE (WVDS-NB4-RD).
2. COIL LOOP WIRE IN JUNCTION BOX EMBEDDED IN RETAINING WALL 34 WALL. COMPLETE INSTALLATION OF DETECTION CABLE AFTER 62A76 INSTALLS CONDUIT EMBEDDED IN BARRIER WALL BETWEEN RETAINING WALL 34 AND MONROE ST. PIER.
3. INSTALL NEW CONDUIT FROM THE HANDHOLE NEAR CABINET Y30 TO THE HANDHOLE ADJACENT TO THE DETECTOR LOOP ON THE SOUTHBOUND WASHINGTON STREET EXIT RAMP. INSTALL NEW DETECTOR LOOP ON THE SOUTHBOUND RANDOLPH STREET EXIT RAMP AND RUN THE NEW LEAD-IN CABLE FROM THE DETECTOR LOOP TO CABINET Y26 AND MAKE CONNECTIONS.
4. INSTALL AND CONNECT 12 SMF LATERALS BETWEEN ITS CABINETS IN PLACE OF EXISTING NO. 19 6/C CABLES (SEE EXISTING ITS SHEETS).



ITS-12

FILE PATH = p:\V\AECOM-NB-AVSI\encom\line\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle\Phase 1\000\_CAD\006\_Roadway\_Sheets\62A77\_Contract\0162A77-SHT-ITS-12



D162A77-SHT-ITS-12
USER NAME = patrick.jordan
PLOT SCALE = 100.0000' / in.
PLOT DATE = 1/30/2020

DESIGNED - PTJ	REVISED -
DRAWN - CAM	REVISED -
CHECKED - MJL	REVISED -
DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

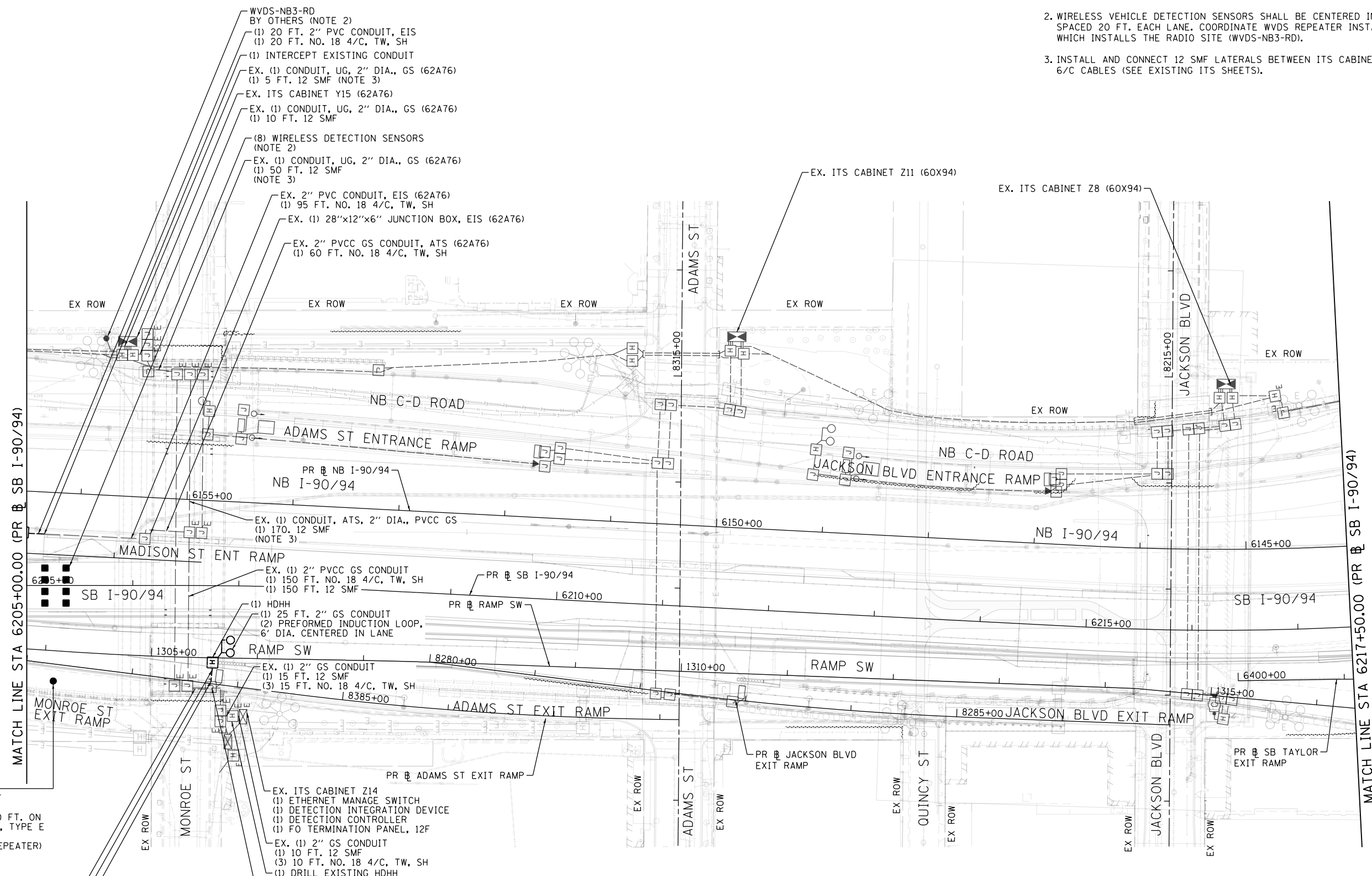
**PROPOSED ITS PLAN  
SB I-90/94**

SCALE: 1"=50'    SHEET 12 OF 46 SHEETS    STA. 6171+00(NB) TO STA. 6205+00(SB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	801
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

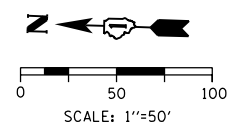
**NOTES:**

1. INTERCEPT EXISTING CONDUIT STUB INSTALLED UNDER CONTRACT 60X94 ROUTED FROM THE BARRIER WALL JUNCTION BOX UNDER ADAMS ST EXIT RAMP.
2. WIRELESS VEHICLE DETECTION SENSORS SHALL BE CENTERED IN LANE. SENSORS SHALL BE SPACED 20 FT. EACH LANE. COORDINATE WVDS REPEATER INSTALLATION WITH CONTRACT 62A76, WHICH INSTALLS THE RADIO SITE (WVDS-NB3-RD).
3. INSTALL AND CONNECT 12 SMF LATERALS BETWEEN ITS CABINETS IN PLACE OF EXISTING NO. 19 6/C CABLES (SEE EXISTING ITS SHEETS).



- WVDS-SB3-RP  
6205+25.00, 90.00' RT  
(P-KDR-SB)  
(1) ALUMINUM POLE, 30 FT. ON CONCRETE FOUNDATION, TYPE E  
(1) WIRELESS VEHICLE DETECTION SYSTEM (REPEATER) (NOTE 2)
- EX. (1) 2" PVCC GS CONDUIT, AT (60X94)  
(2) 45 FT. NO. 18 4/C, TW, SH
- (1) 5 FT. 2" GS CONDUIT  
(1) INTERCEPT EXISTING CONDUIT (NOTE 1)
- EX. (1) 2" GS CONDUIT (60X94)  
(2) 25 FT. NO. 18 4/C, TW, SH

- EX. ITS CABINET Z14  
(1) ETHERNET MANAGE SWITCH  
(1) DETECTION INTEGRATION DEVICE  
(1) DETECTION CONTROLLER  
(1) FO TERMINATION PANEL, 12F
- EX. (1) 2" GS CONDUIT  
(1) 10 FT. 12 SMF  
(3) 10 FT. NO. 18 4/C, TW, SH  
(1) DRILL EXISTING HDHH
- EX. (1) PVCC GS CONDUIT  
(3) 50 FT. NO. 18 4/C, TW, SH  
(1) 50 FT. 12 SMF (NOTE 3)



ITS-13



D162A77-SHT-ITS-13	DESIGNED - PTJ	REVISED -
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/30/2020	DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

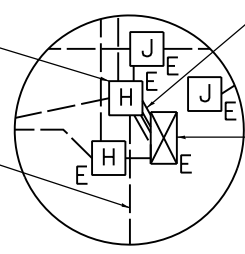
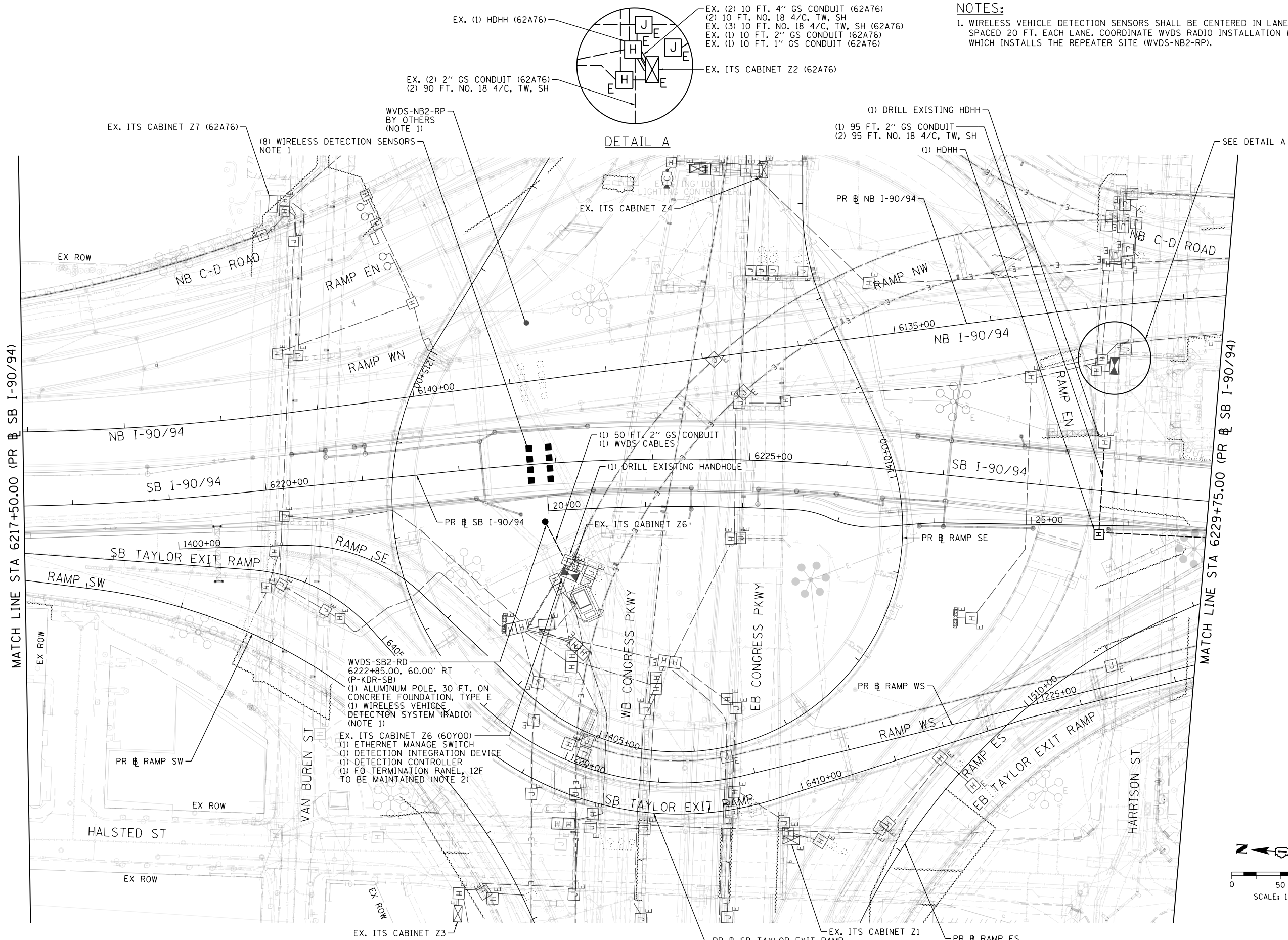
**PROPOSED ITS PLAN  
SB I-90/94**

SCALE: 1"=50' SHEET 13 OF 46 SHEETS STA. 6205+00(SB) TO STA. 6217+50(SB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	802
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\V\AECOM\NA\ANSI\ecomm\line\local\AECOM\_DSD2\_M\Documents\01\_Americas\Transportation\60269938\_Circle Phase\11\000\_CAD\006\_Roadway\Sheets\62A77\_Contract\1162A77-SHT-ITS-13

FILE PATH = p:\a\ecdm\m-n\m\si\ecdm\local\ecdm\0502\_MN\_Documents\01\_Americas\Transportation\60269938\_Circle Phase II\000\_CAD\006\_Roadway\Sheets\62A77\_Contracts\0162A77-SHT-ITS-14



**NOTES:**  
 1. WIRELESS VEHICLE DETECTION SENSORS SHALL BE CENTERED IN LANE. SENSORS SHALL BE SPACED 20 FT. EACH LANE. COORDINATE WVDS RADIO INSTALLATION WITH CONTRACT 62A76, WHICH INSTALLS THE REPEATER SITE (WVDS-NB2-RP).

WVDS-SB2-RD  
 6222+85.00, 60.00' RT  
 (P-KDR-SB)  
 (1) ALUMINUM POLE, 30 FT. ON CONCRETE FOUNDATION, TYPE E  
 (1) WIRELESS VEHICLE DETECTION SYSTEM (RADIO) (NOTE 1)  
 EX. ITS CABINET Z6 (60Y00)  
 (1) ETHERNET MANAGE SWITCH  
 (1) DETECTION INTEGRATION DEVICE  
 (1) DETECTION CONTROLLER  
 (1) FO TERMINATION PANEL, 12F TO BE MAINTAINED (NOTE 2)

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PROPOSED ITS PLAN  
 SB I-90/94**



D162A77-SHT-ITS-14  
 USER NAME = patrick.jordan  
 PLOT SCALE = 100.0000' / in.  
 PLOT DATE = 2/28/2020

DESIGNED - PTJ	REVISED -
DRAWN - CAM	REVISED -
CHECKED - MJL	REVISED -
DATE - 3/4/2020	REVISED -

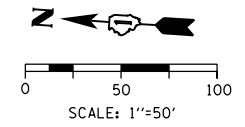
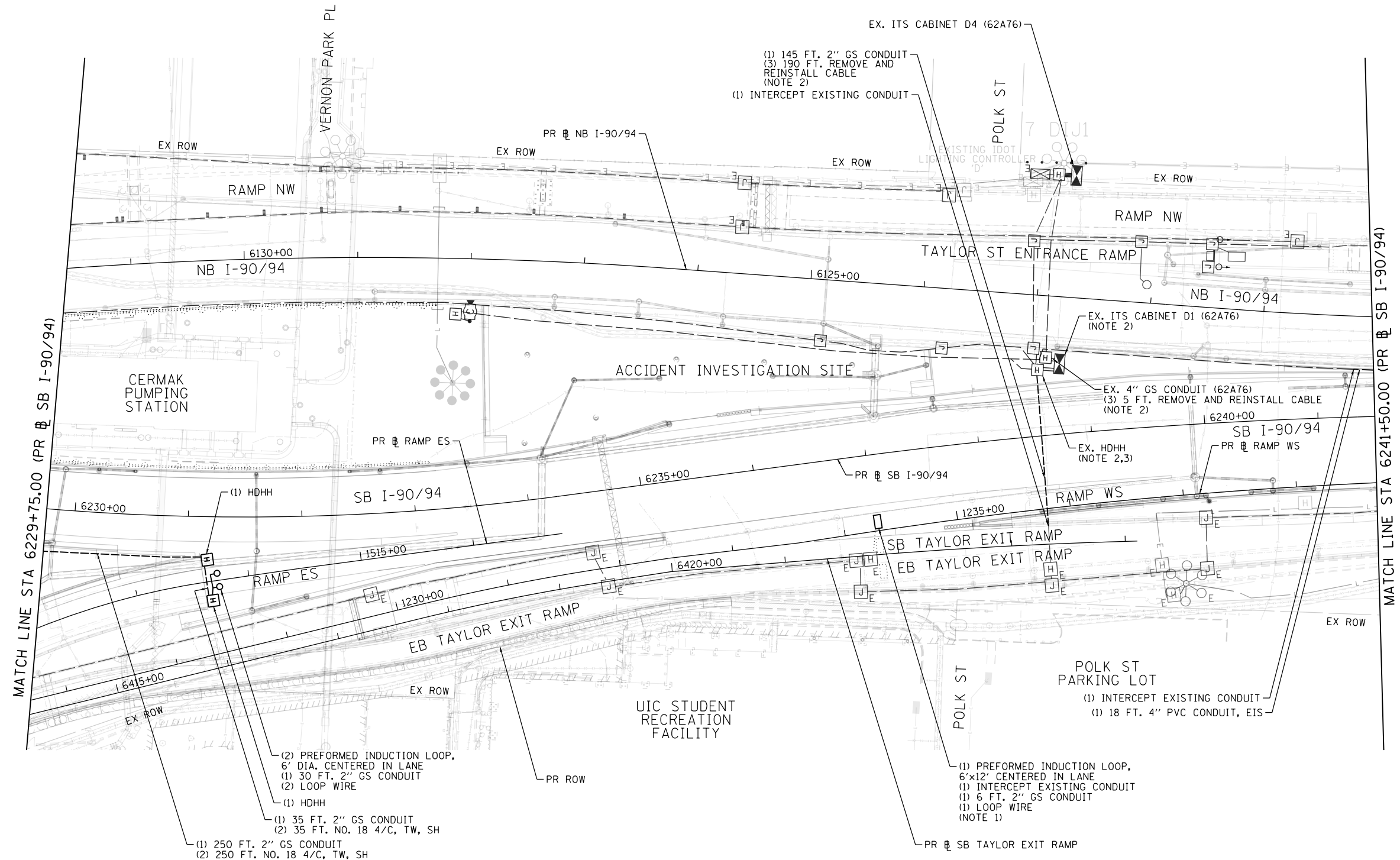
SCALE: 1"=50' SHEET 14 OF 46 SHEETS STA. 6217+50(SB) TO STA. 6217+50(SB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	803
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

ITS-14

**NOTES:**

1. SPLICE NEW LOOP WIRE TO EXISTING NO. 18 4/C CABLE IN THE EXISTING HANDHOLE.
2. PULL EXISTING DETECTOR LEAD-IN CABLES FROM HANDHOLE ON TAYLOR STREET RAMP TO CABINET D1 AND MAKE CONNECTIONS. THIS WORK REQUIRES COORDINATION WITH CONTRACT 62A76, WHICH INSTALLS THE CABINET AND ASSOCIATED CONDUIT AND HANDHOLES.
3. ENTER HANDHOLE THROUGH CONDUIT STUB-OUT PROVIDED IN CONTRACT 62A76.



ITS-15

FILE PATH = p:\aecom\m-n\si\encom\line\local\AECOM\_0502\_0A\000\_CAD\006\_Roadway\_Sheets\62A77\_Contracts\0162A77-SHT-ITS-15



D162A77-SHT-ITS-15  
 USER NAME = patrick.jordan  
 PLOT SCALE = 100.0000' / in.  
 PLOT DATE = 1/30/2020

DESIGNED - PTJ	REVISED -
DRAWN - CAM	REVISED -
CHECKED - MJL	REVISED -
DATE - 1/29/2019	REVISED -

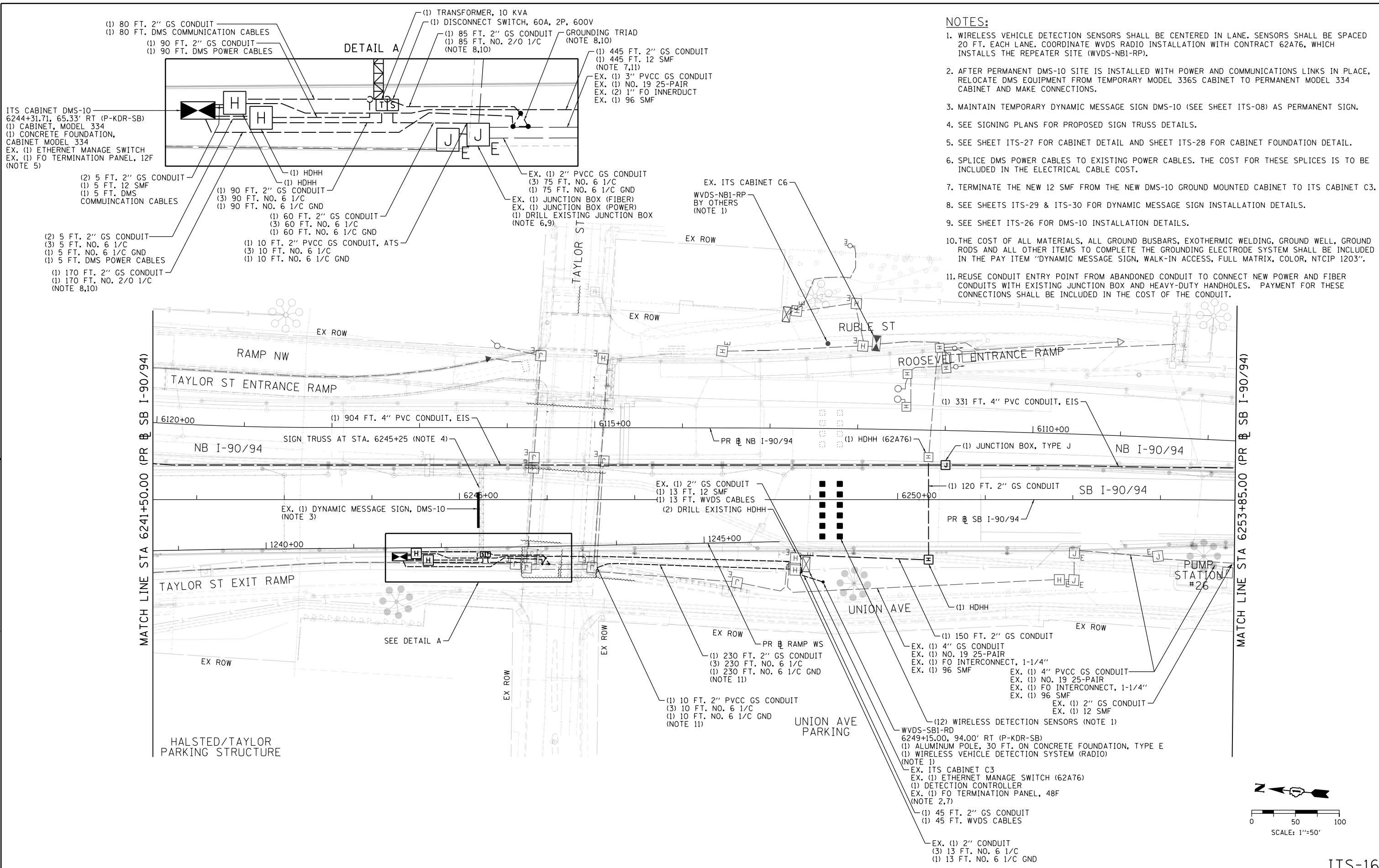
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PROPOSED ITS PLAN  
 SB I-90/94**

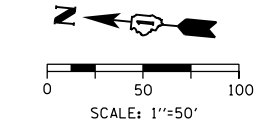
SCALE: 1"=50' SHEET 15 OF 46 SHEETS STA. 6229+75(SB) TO STA. 6241+50(SB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	804
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\naecdm-na-ansi\encom\line\local\itc\DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle Phase 1\1000\_CAD\006\_Roadway\Sheets\62A77\_Contract\0162A77-SHT-ITS-16



- NOTES:**
1. WIRELESS VEHICLE DETECTION SENSORS SHALL BE CENTERED IN LANE. SENSORS SHALL BE SPACED 20 FT. EACH LANE. COORDINATE WVDS RADIO INSTALLATION WITH CONTRACT 62A76, WHICH INSTALLS THE REPEATER SITE (WVDS-NB1-RP).
  2. AFTER PERMANENT DMS-10 SITE IS INSTALLED WITH POWER AND COMMUNICATIONS LINKS IN PLACE, RELOCATE DMS EQUIPMENT FROM TEMPORARY MODEL 336S CABINET TO PERMANENT MODEL 334 CABINET AND MAKE CONNECTIONS.
  3. MAINTAIN TEMPORARY DYNAMIC MESSAGE SIGN DMS-10 (SEE SHEET ITS-08) AS PERMANENT SIGN.
  4. SEE SIGNING PLANS FOR PROPOSED SIGN TRUSS DETAILS.
  5. SEE SHEET ITS-27 FOR CABINET DETAIL AND SHEET ITS-28 FOR CABINET FOUNDATION DETAIL.
  6. SPLICE DMS POWER CABLES TO EXISTING POWER CABLES. THE COST FOR THESE SPLICES IS TO BE INCLUDED IN THE ELECTRICAL CABLE COST.
  7. TERMINATE THE NEW 12 SMF FROM THE NEW DMS-10 GROUND MOUNTED CABINET TO ITS CABINET C3.
  8. SEE SHEETS ITS-29 & ITS-30 FOR DYNAMIC MESSAGE SIGN INSTALLATION DETAILS.
  9. SEE SHEET ITS-26 FOR DMS-10 INSTALLATION DETAILS.
  10. THE COST OF ALL MATERIALS, ALL GROUND BUSBARS, EXOTHERMIC WELDING, GROUND WELL, GROUND RODS AND ALL OTHER ITEMS TO COMPLETE THE GROUNDING ELECTRODE SYSTEM SHALL BE INCLUDED IN THE PAY ITEM "DYNAMIC MESSAGE SIGN, WALK-IN ACCESS, FULL MATRIX, COLOR, NTCIP 1203".
  11. REUSE CONDUIT ENTRY POINT FROM ABANDONED CONDUIT TO CONNECT NEW POWER AND FIBER CONDUITS WITH EXISTING JUNCTION BOX AND HEAVY-DUTY HANDHOLES. PAYMENT FOR THESE CONNECTIONS SHALL BE INCLUDED IN THE COST OF THE CONDUIT.



ITS-16



D162A77-SHT-ITS-16	DESIGNED - PTJ	REVISED -
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 2/28/2020	DATE - 3/4/2020	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

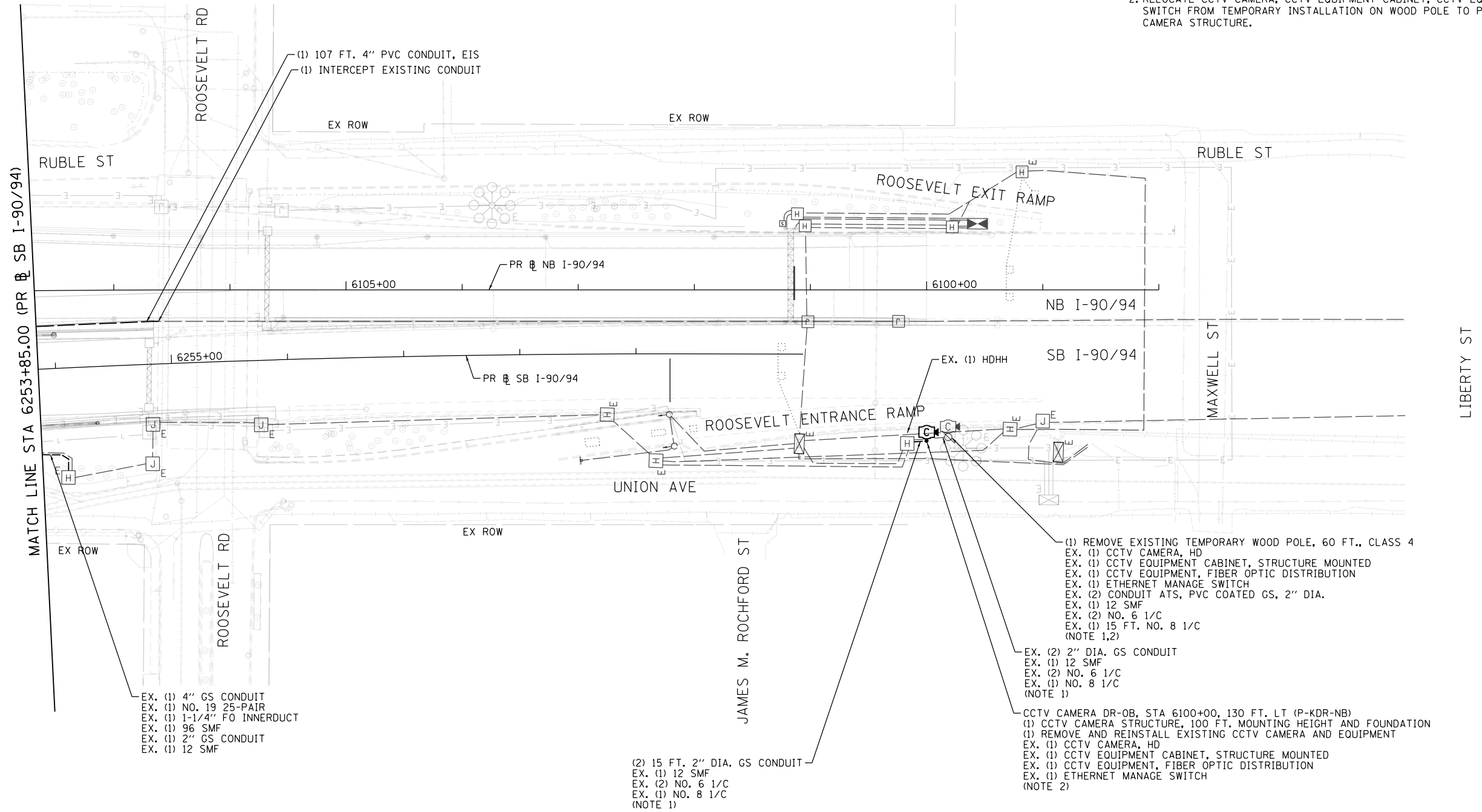
**PROPOSED ITS PLAN  
SB I-90/94**

SCALE: 1"=50' SHEET 16 OF 46 SHEETS STA. 6241+50(SB) TO STA. 6253+85(SB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	805
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

**NOTES:**

1. REMOVE AND REINSTALL CABLE FROM TEMPORARY CAMERA LOCATION TO PERMANENT CCTV CAMERA LOCATION.
2. RELOCATE CCTV CAMERA, CCTV EQUIPMENT CABINET, CCTV EQUIPMENT, AND ETHERNET MANAGE SWITCH FROM TEMPORARY INSTALLATION ON WOOD POLE TO PERMANENT LOCATION ON CCTV CAMERA STRUCTURE.



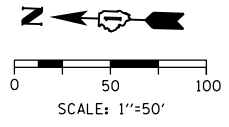
EX. (1) 4" GS CONDUIT  
 EX. (1) NO. 19 25-PAIR  
 EX. (1) 1-1/4" FO INNERDUCT  
 EX. (1) 96 SMF  
 EX. (1) 2" GS CONDUIT  
 EX. (1) 12 SMF

(2) 15 FT. 2" DIA. GS CONDUIT  
 EX. (1) 12 SMF  
 EX. (2) NO. 6 1/C  
 EX. (1) NO. 8 1/C  
 (NOTE 1)

(1) REMOVE EXISTING TEMPORARY WOOD POLE, 60 FT., CLASS 4  
 EX. (1) CCTV CAMERA, HD  
 EX. (1) CCTV EQUIPMENT CABINET, STRUCTURE MOUNTED  
 EX. (1) CCTV EQUIPMENT, FIBER OPTIC DISTRIBUTION  
 EX. (1) ETHERNET MANAGE SWITCH  
 EX. (2) CONDUIT ATS, PVC COATED GS, 2" DIA.  
 EX. (1) 12 SMF  
 EX. (2) NO. 6 1/C  
 EX. (1) 15 FT. NO. 8 1/C  
 (NOTE 1,2)

EX. (2) 2" DIA. GS CONDUIT  
 EX. (1) 12 SMF  
 EX. (2) NO. 6 1/C  
 EX. (1) NO. 8 1/C  
 (NOTE 1)

CCTV CAMERA DR-0B, STA 6100+00, 130 FT. LT (P-KDR-NB)  
 (1) CCTV CAMERA STRUCTURE, 100 FT. MOUNTING HEIGHT AND FOUNDATION  
 (1) REMOVE AND REINSTALL EXISTING CCTV CAMERA AND EQUIPMENT  
 EX. (1) CCTV CAMERA, HD  
 EX. (1) CCTV EQUIPMENT CABINET, STRUCTURE MOUNTED  
 EX. (1) CCTV EQUIPMENT, FIBER OPTIC DISTRIBUTION  
 EX. (1) ETHERNET MANAGE SWITCH  
 (NOTE 2)



ITS-17

FILE PATH = p:\AECOM\NA-AVSI\ecommon\line\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\1\000\_CAD\006\_Roadway\Sheets\62A77\_Contract\0162A77-SHT-ITS-17



D162A77-SHT-ITS-17	DESIGNED - PTJ	REVISED -
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/30/2020	DATE - 1/29/2019	REVISED -

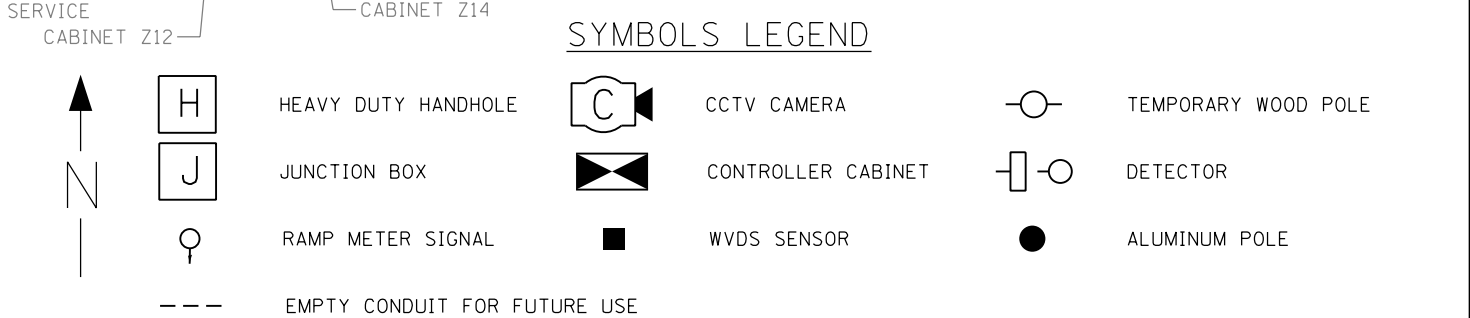
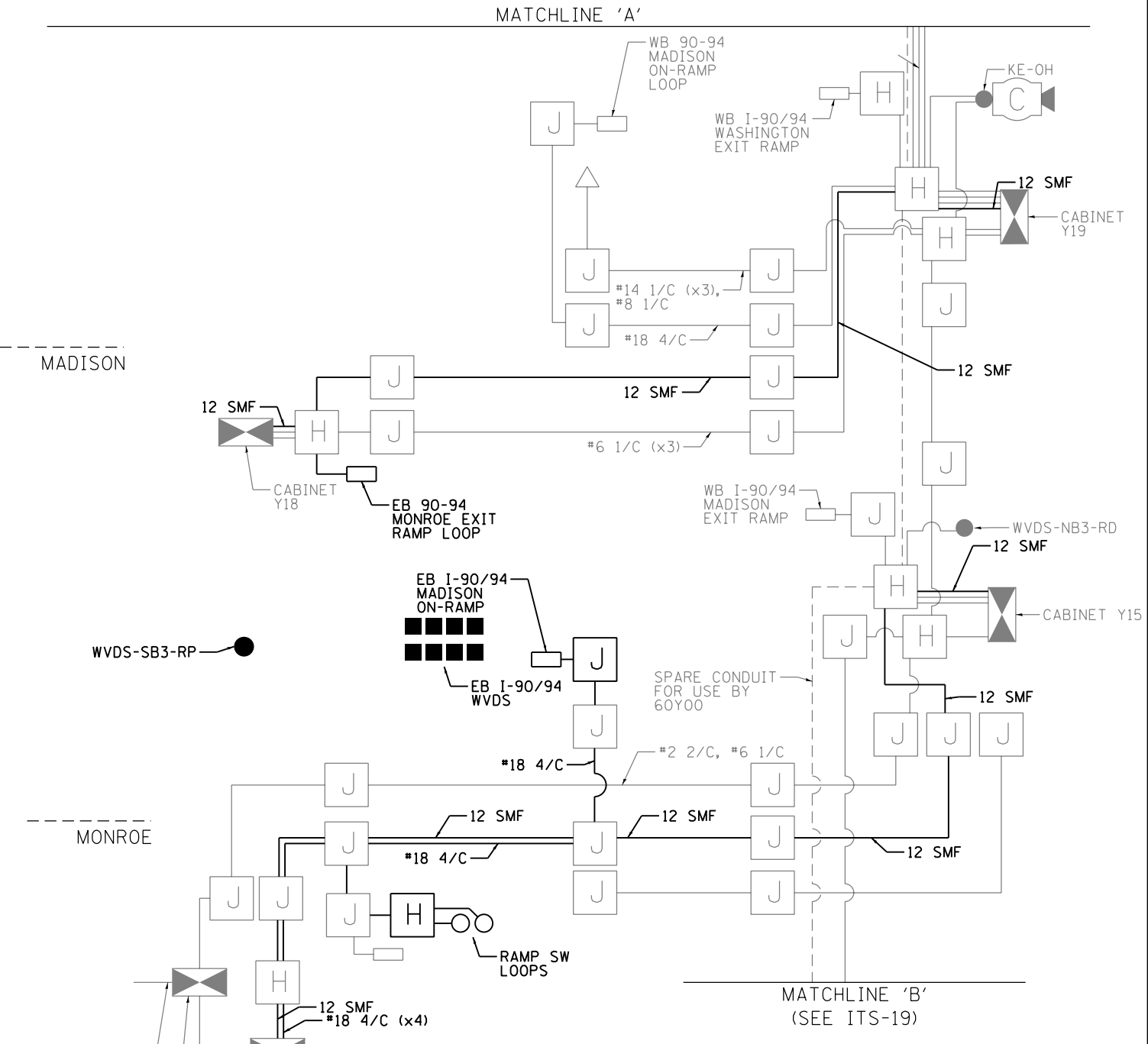
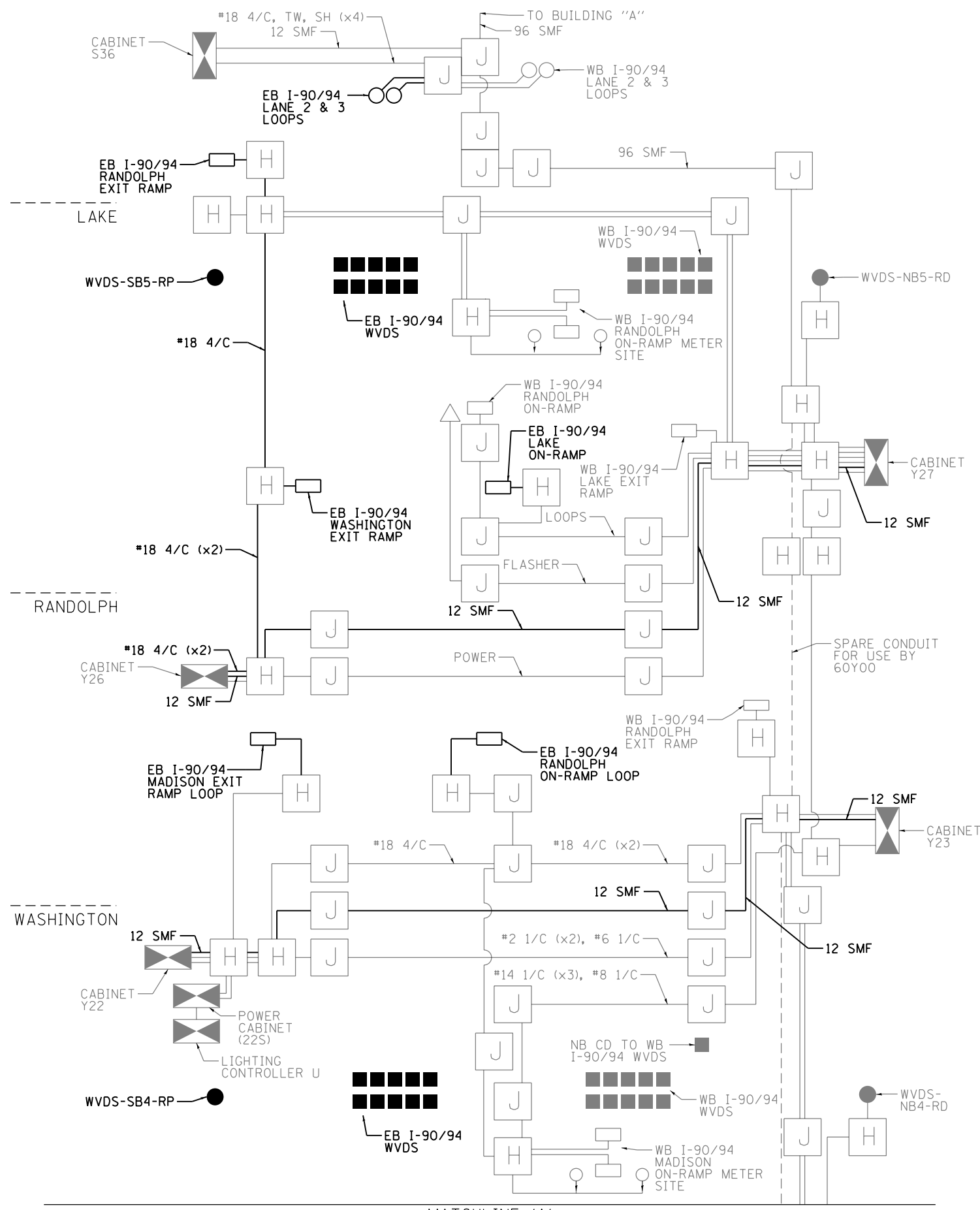
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PROPOSED ITS PLAN  
 SB I-90/94**

SCALE: 1"=50' SHEET 17 OF 46 SHEETS STA. 6253+85(SB) TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	806
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\NACOM\NA\ANSI\exchmon\line\local\AECOM\_D502\_MN\Documents\01\_Americas\Transportation\60269938\_Circle Phase II\000\_CAD\006\_Roadway\Sheets\62A77\_SHT-ITS-18



**NOTES:**  
1. CONTRACT RELATED LINEWORK APPEARS IN BOLD. ALL OTHER ITS INFRASTRUCTURE REPRESENTED ON THIS SHEET IS FOR INFORMATION ONLY.  
2. NOT TO SCALE



D162A77-SHT-ITS-18  
USER NAME = patrick.jordan  
PLOT SCALE = 100.0000' / IN.  
PLOT DATE = 1/30/2020

DESIGNED - PTJ  
DRAWN - CAM  
CHECKED - MJL  
DATE - 1/29/2019  
REVISED -  
REVISED -  
REVISED -  
REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

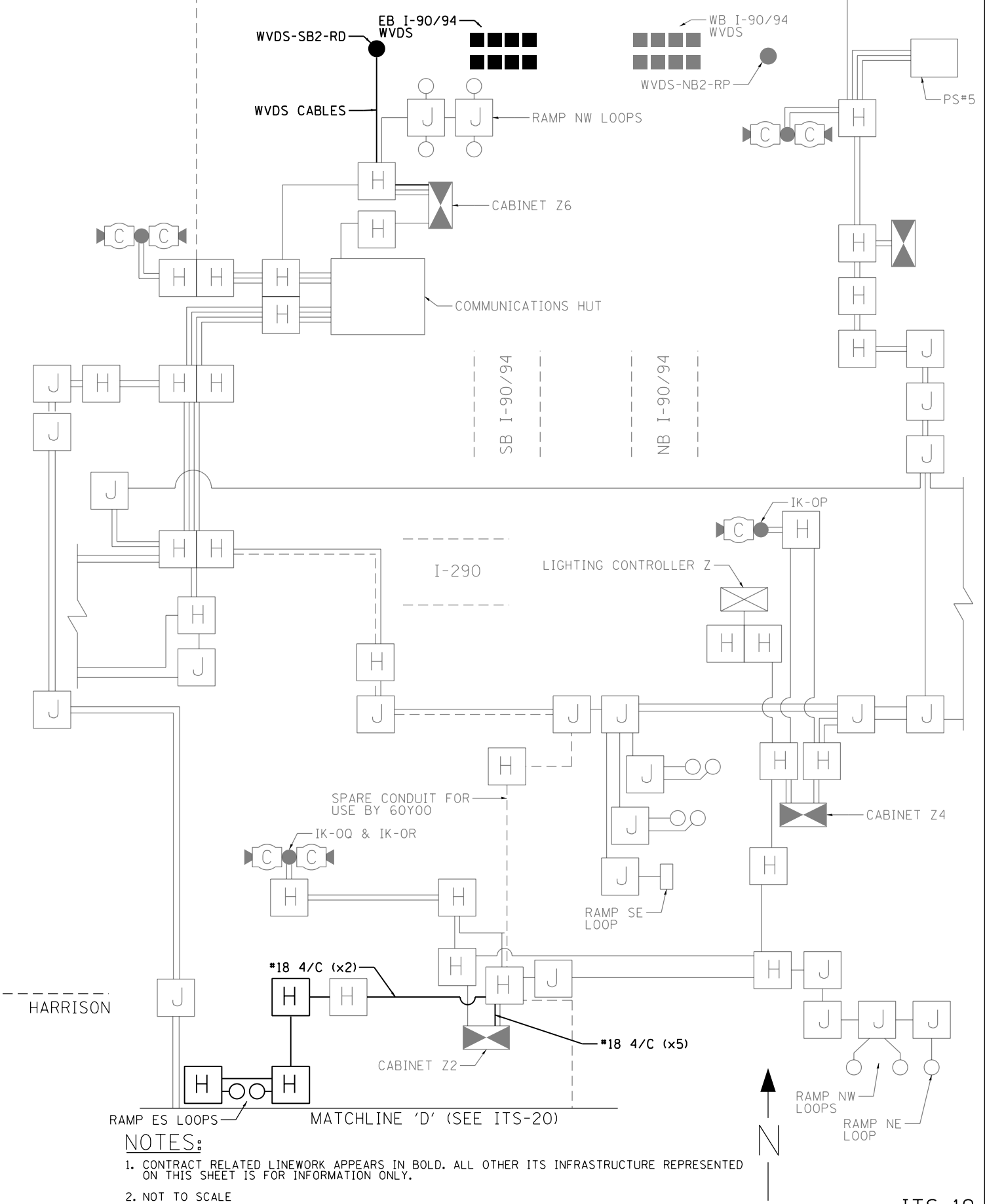
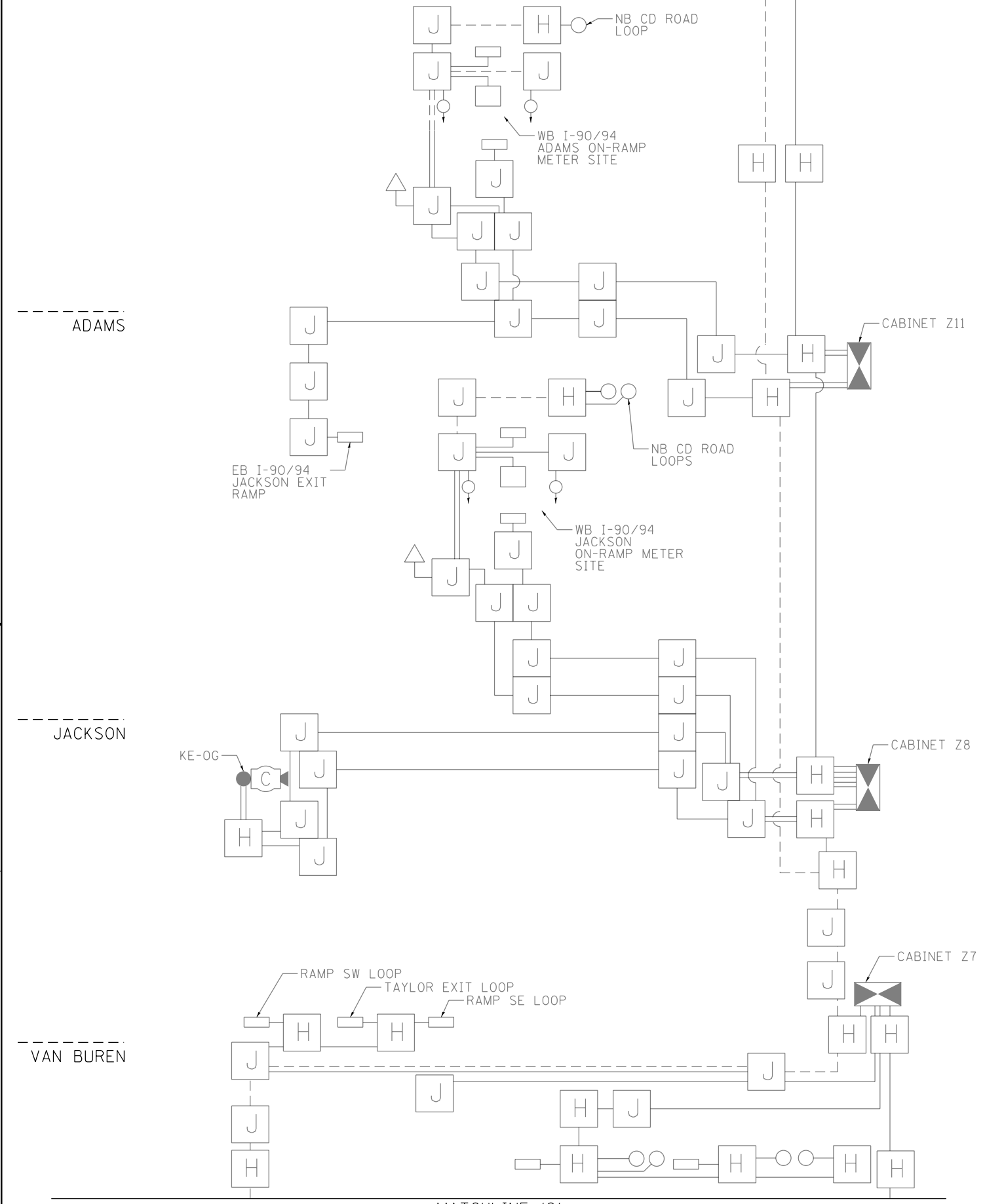
**ITS WIRE DIAGRAM**  
SCALE: NTS SHEET 18 OF 46 SHEETS STA. TO STA.

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	807
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

ITS-18

MATCHLINE 'B' (SEE ITS-18)

MATCHLINE 'C'



**NOTES:**

1. CONTRACT RELATED LINework APPEARS IN BOLD. ALL OTHER ITS INFRASTRUCTURE REPRESENTED ON THIS SHEET IS FOR INFORMATION ONLY.
2. NOT TO SCALE

FILE PATH = p:\AECOM\NA-AVSI\ecommon\line\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle Phase II\000\_CAD\006\_Roadway\Sheets\62A77\_Contract\0162A77-SHT-ITS-19



D162A77-SHT-ITS-19  
 USER NAME = patrick.jordan  
 PLOT SCALE = 100.0000' / in.  
 PLOT DATE = 1/30/2020

DESIGNED -	PTJ	REVISED -	
DRAWN -	CAM	REVISED -	
CHECKED -	MJL	REVISED -	
DATE -	1/29/2019	REVISED -	

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**ITS WIRE DIAGRAM**

SCALE: NTS      SHEET 19 OF 46 SHEETS      STA.      TO STA.

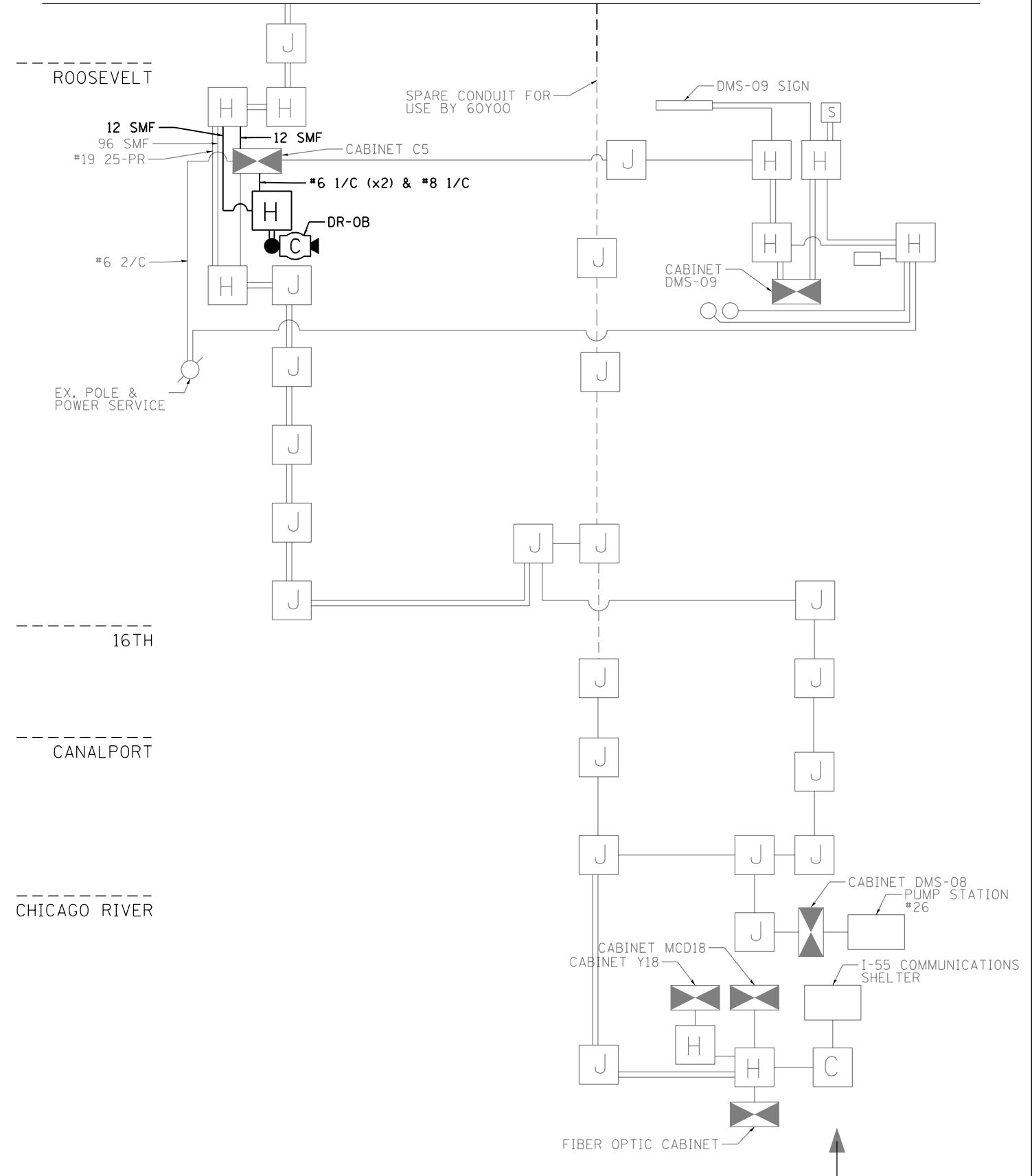
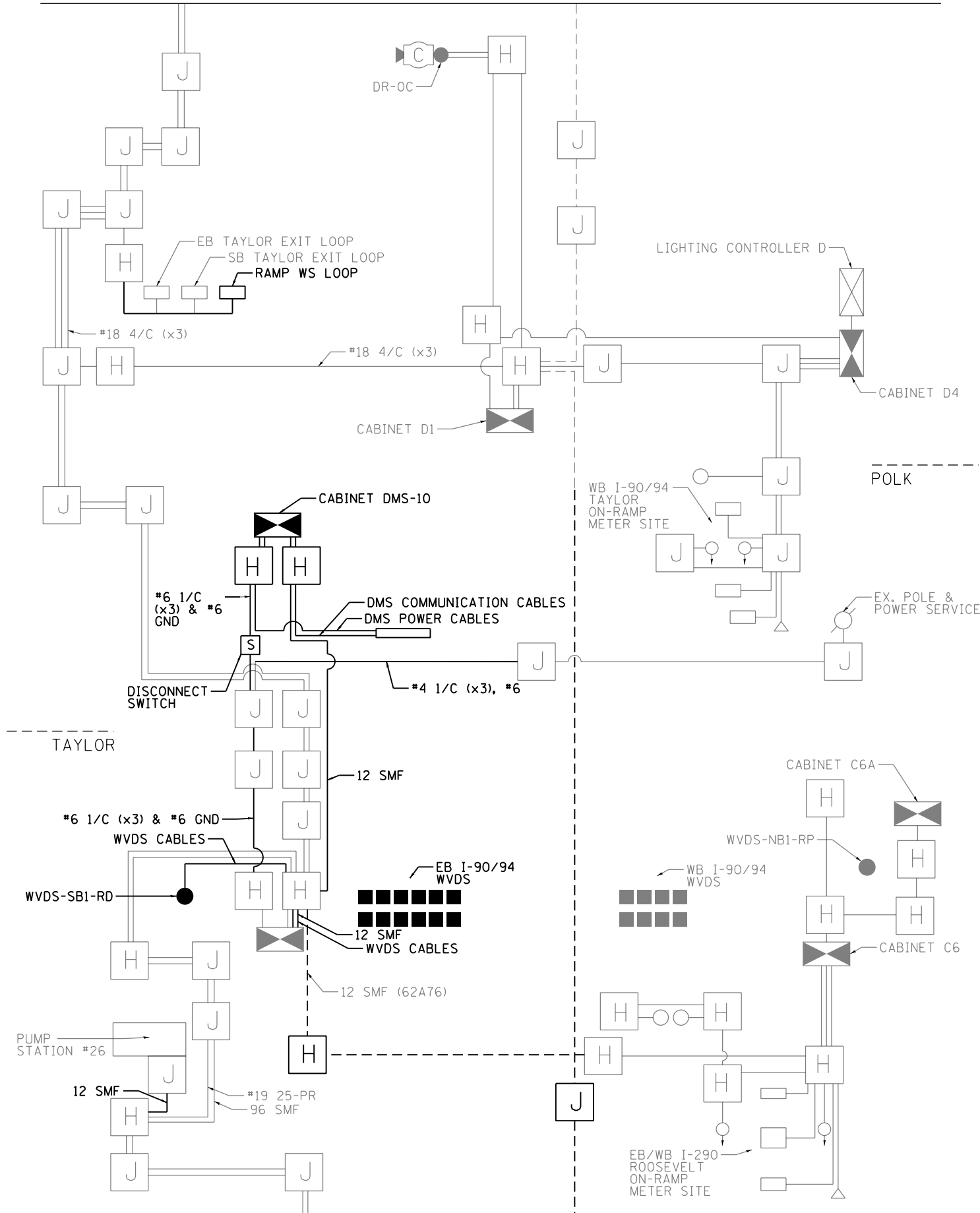
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	808
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

ITS-19



MATCHLINE 'D' (SEE ITS-19)

MATCHLINE 'E'



NOTES:

1. CONTRACT RELATED LINEWORK APPEARS IN BOLD. ALL OTHER ITS INFRASTRUCTURE REPRESENTED ON THIS SHEET IS FOR INFORMATION ONLY.
2. NOT TO SCALE



ITS-20

FILE PATH = p:\aecom\ms-ansi\electron\local\ecom\0502\MA\Documents\01\America\Transportation\60269938 Circle Phase II\000 CAD\006\_Roadway\_Sheets\62A77\_Contract\0162A77-SHT-ITS-20



D162A77-SHT-ITS-20  
USER NAME = patrick.jordan  
PLOT SCALE = 100.0000' / in.  
PLOT DATE = 1/30/2020

DESIGNED -	PTJ	REVISED -	
DRAWN -	CAM	REVISED -	
CHECKED -	MJL	REVISED -	
DATE -	1/29/2019	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ITS WIRE DIAGRAM

SCALE: NTS SHEET 20 OF 46 SHEETS STA. TO STA.

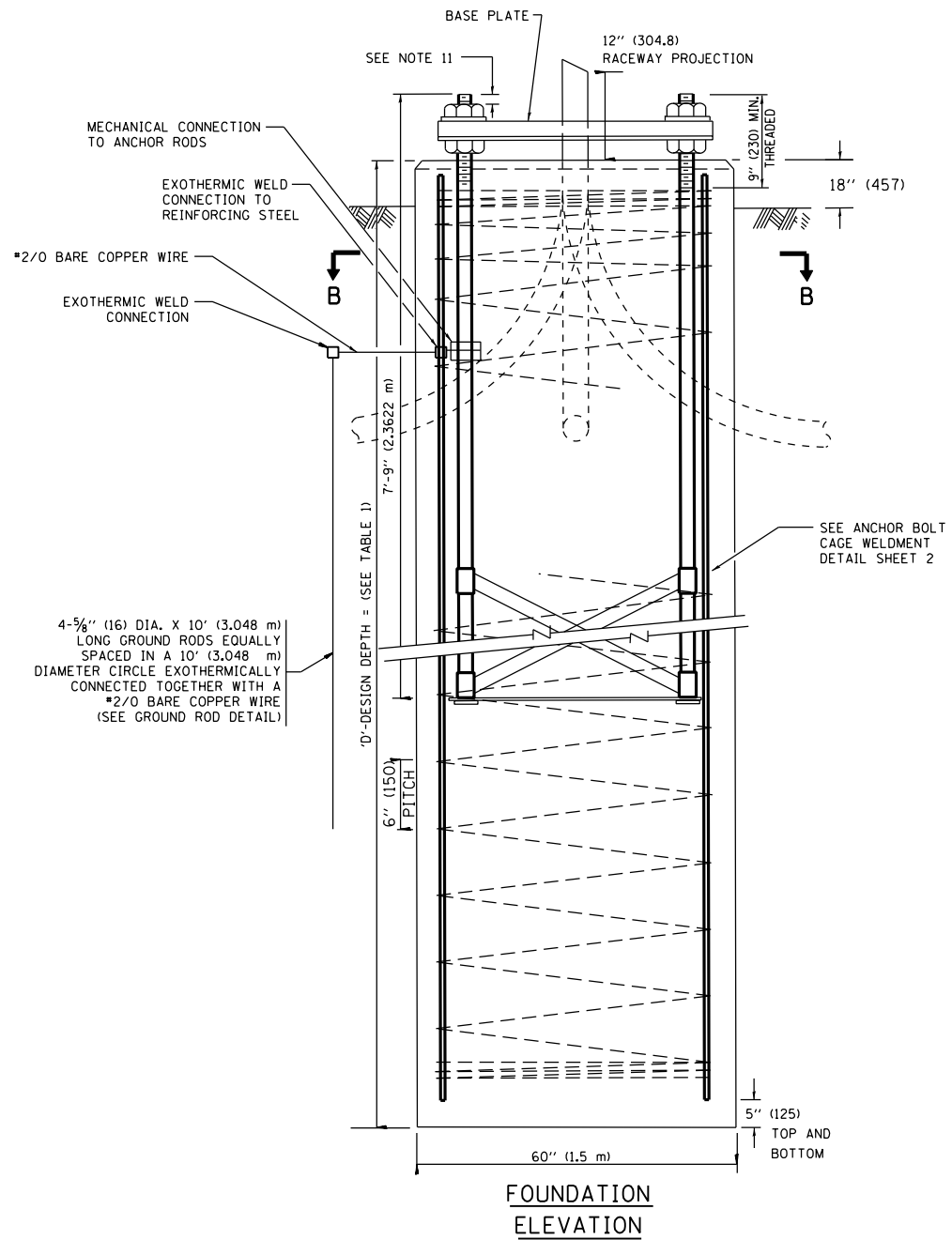
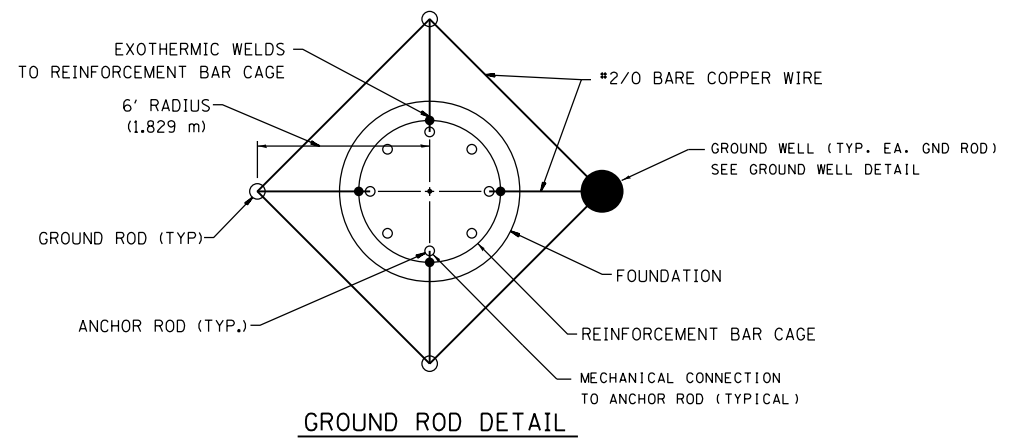
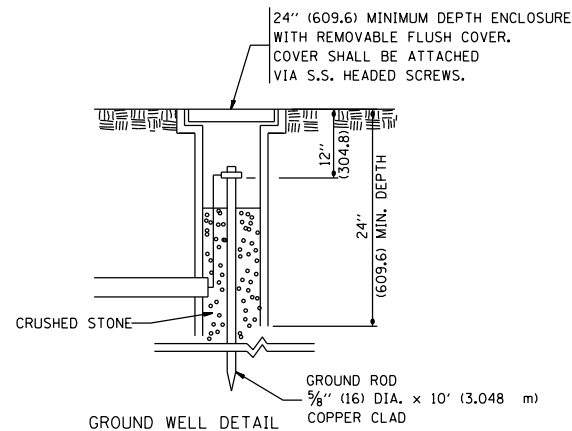
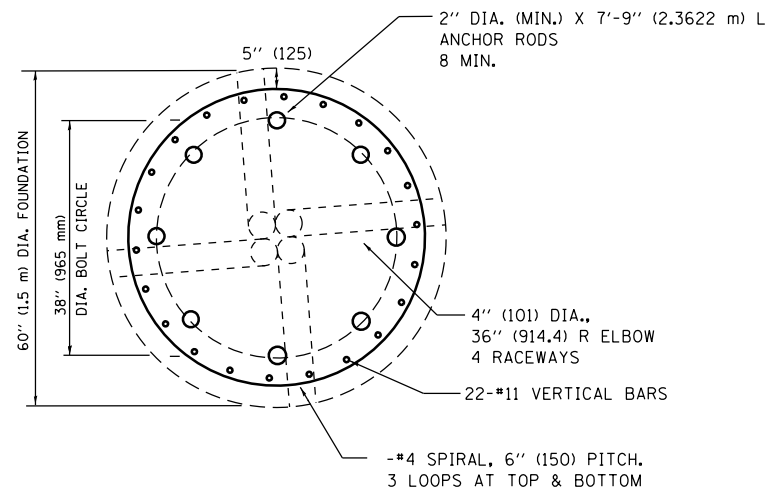
F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	809
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

TABLE 1. CCTV TOWER SCHEDULE

CCTV TOWER ID	LOCATION NOTES	CCTV LOCATION			TOWER HEIGHT (FT)	CCTV TOWER FOUNDATION ELEVATIONS		
		STATION	OFFSET	BASELINE		TOP ELEVATION	BOTTOM ELEVATION	DESIGN DEPTH (FT)
DR-0B	WEST OF SB I-90/94, NORTH OF ROOSEVELT RD.	6100+00.00	130.00 LT	P-KDR-NB	100	SEE NOTE (19)	SEE NOTE (19)	60

DESIGN NOTES

- (1) ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN
- (2) THE ANCHOR RODS SHALL BE VERTICAL NO ADJUSTMENT SHALL BE ALLOWED AFTER THE FOUNDATION IS PLACED.
- (3) THE GAP BETWEEN THE FOUNDATION AND THE BASE PLATE SHALL BE ENCLOSED WITH A STAINLESS STEEL SCREEN FASTENED WITH A STAINLESS STEEL BAND.
- (4) THE TOP OF THE FOUNDATION TO 18" (450) BELOW GRADE SHALL BE FORMED.
- (5) SURFACE WATER WILL NOT BE PERMITTED TO ENTER THE HOLE AND ALL WATER WHICH MAY HAVE INFILTRATED INTO THE HOLE SHALL BE REMOVED BEFORE PLACING CONCRETE.
- (6) STEEL ANCHOR ROD FORMS SHALL NOT BE REMOVED FOR A MINIMUM OF 3 DAYS AFTER CONCRETE IS POURED. THE CCTV CAMERA POLE SHALL NOT BE ERECTED UNTIL AFTER THE CONCRETE HAS BEEN CURED ACCORDING TO ARTICLE 1020.13.
- (7) ANCHOR RODS SHALL BE STRAIGHT AND SHALL BE ACCORDING TO AASHTO M 314 OR ASTM F1554, GRADE 725(GRADE 105) AND GALVANIZED ACCORDING TO ARTICLE 1006.9.
- (8) ANCHOR ROD INFORMATION SHALL BE SUBMITTED FOR APPROVAL AND SHALL BE FULLY COORDINATED FOR APPROVAL WITH CCTV CAMERA POLE MANUFACTURER REQUIREMENTS.
- (9) ALL FOUNDATION REINFORCEMENT STEEL SHALL BE EPOXY COATED. REINFORCEMENT BARS SHALL BE ACCORDING TO ARTICLE 1006.10
- (10) TWO ANCHOR RODS OPPOSITE EACH OTHER SHALL HAVE THE ANCHOR ROD THREADS PEENED AFTER NUTS ARE INSTALLED.
- (11) A MINIMUM OF THREE FULL THREADS SHALL REMAIN EXPOSED AFTER LIGHT TOWER IS INSTALLED.
- (12) ALL GROUNDING INDICATED IN THE PLANS SHALL BE INCLUDED IN THE COST OF THE CCTV CAMERA POLE FOUNDATION AND SHALL NOT BE PAID FOR SEPARATELY.
- (13) CUT NUTS, OR JAM NUTS, ARE NOT ALLOWED
- (14) ANCHOR ROD QUANTITY, DIAMETER, AND LENGTH SHALL BE DETERMINED BY THE TOWER MANUFACTURER AND APPROVED BY THE ENGINEER. EACH FOUNDATION SHALL HAVE A MINIMUM OF 8 ANCHOR RODS.
- (15) COORDINATE THE ROD CIRCLE DIAMETER OF THE TOWER WITH THE DIAMETER OF THE ANCHOR ROD CAGE.
- (16) THE FOUNDATION SHALL BE POURED MONOLITHICALLY AND SHALL HAVE NO CONSTRUCTION JOINTS.
- (17) THE SHAFT LENGTH(S) ARE BASED ON NEAREST AVAILABLE SOIL BORINGS. IF DIFFERENT SOILS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED TO PROVIDE A REVISED LENGTH.
- (18) THE COST OF THE FOUNDATION IS INCIDENTAL TO THE COST OF THE CCTV TOWER.
- (19) THE COST OF THE FOUNDATION IS INCIDENTAL TO THE COST OF THE CCTV TOWER.



FILE PATH = p:\aecom\ms-ansi\ecomm\line\local\ecom\_0502\_mn\documents\01\_america\transportation\60269938\_Circle Phase II\000\_CAD\006\_Roadway\_Sheets\62A77\_Contracts\0162A77-SHT-ITS-21



D162A77-SHT-ITS-21  
 USER NAME = patrick.jordan  
 PLOT SCALE = 60000.0000' / in.  
 PLOT DATE = 1/30/2020

DESIGNED - PTJ  
 DRAWN - CAM  
 CHECKED - MJL  
 DATE - 1/29/2019

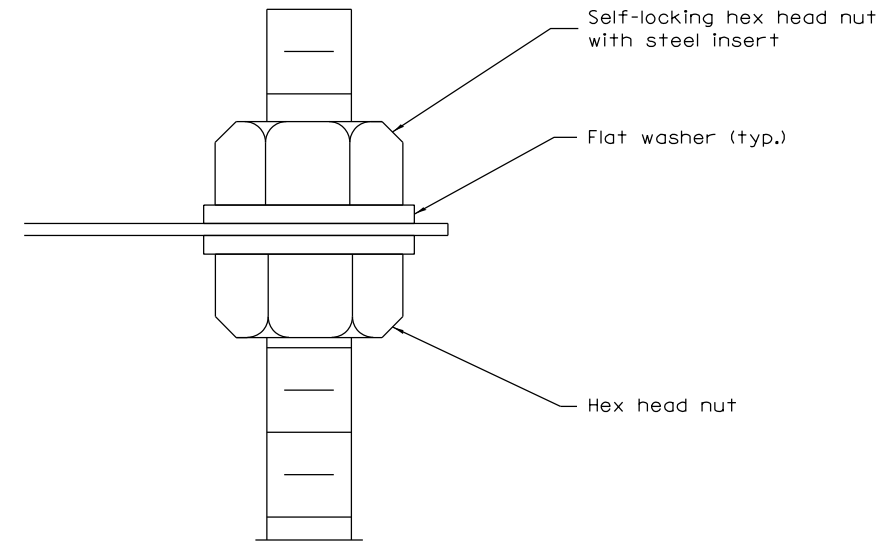
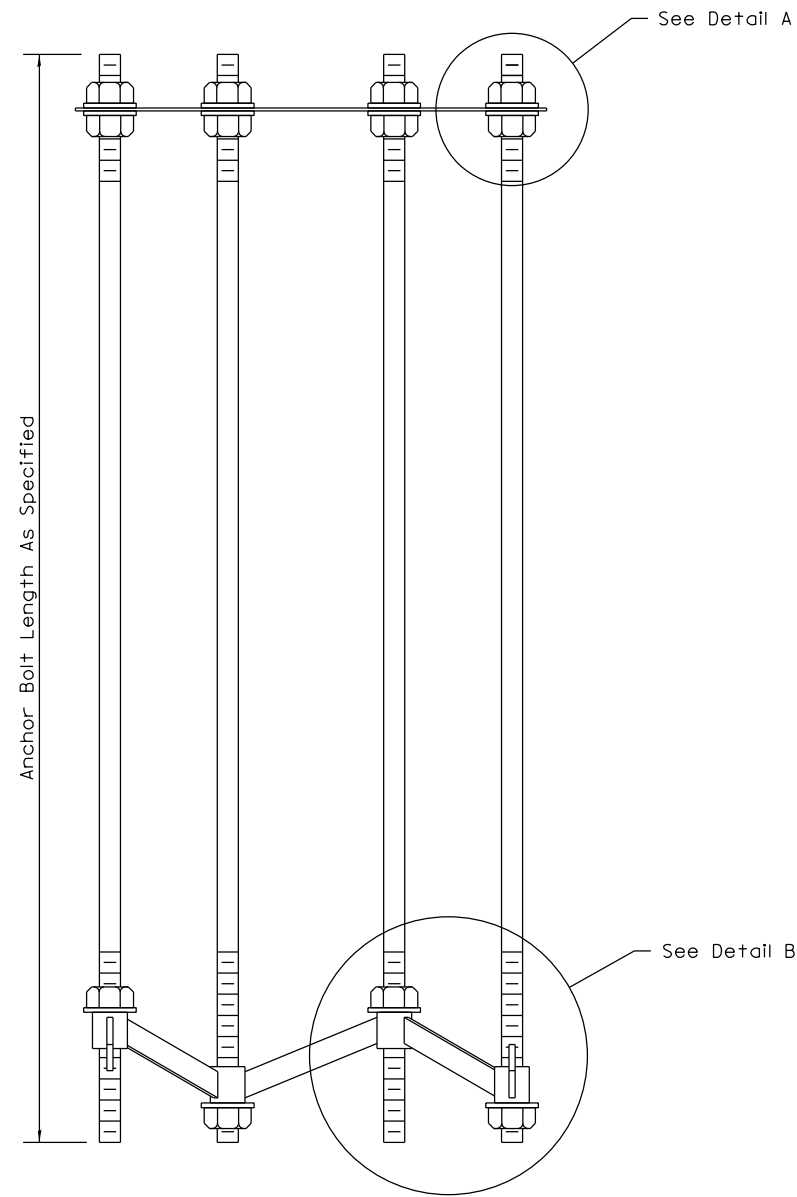
REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CCTV SYSTEM - 100 FOOT POLE FOUNDATION  
 PLANS 1 OF 2  
 SCALE: NTS SHEET 21 OF 46 SHEETS STA. TO STA.

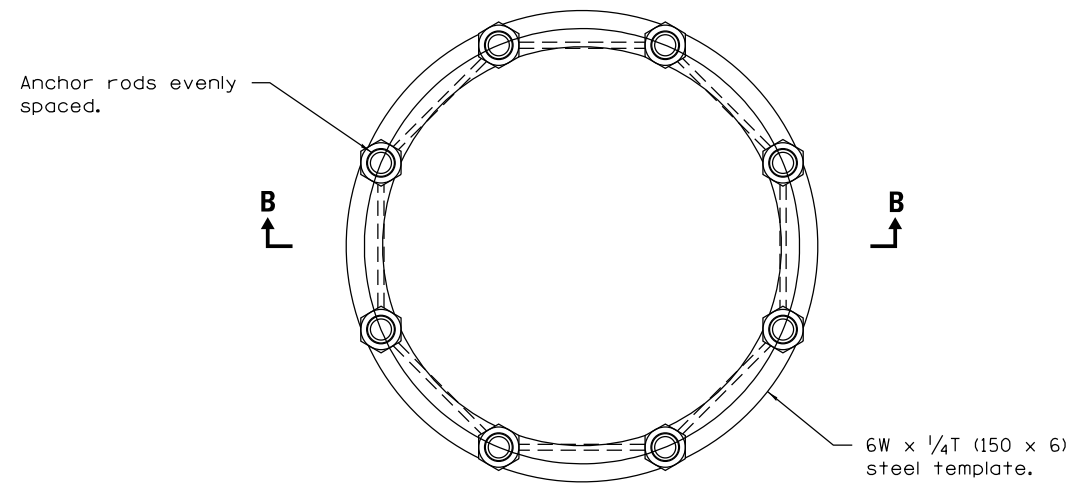
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	810
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\aecom\ms-ansi\ecommon\local\AECOM\_D502\_IL\000\_CAD\006\_Roadway\Sheets\62A77\_Contract\0162A77-SHT-ITS-22



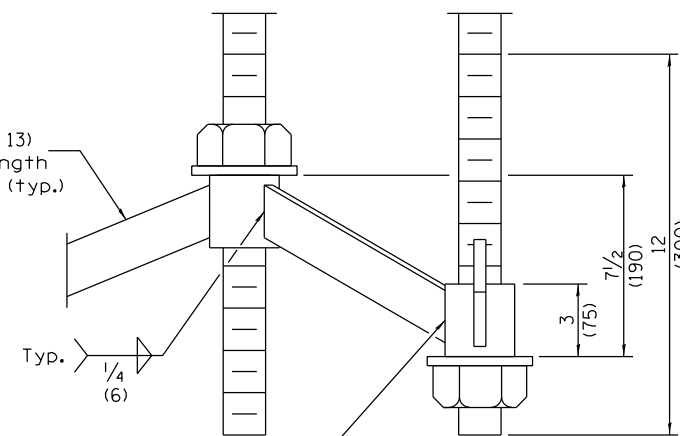
**DETAIL A**

**SECTION B-B**



**ANCHOR ROD CAGE (PLAN)**

2 x 1/2 (50 x 13)  
Steel bar, length  
as required. (typ.)



**DETAIL B**



D162A77-SHT-ITS-22  
 USER NAME = patrick.jordan  
 PLOT SCALE = 60000.0000' / in.  
 PLOT DATE = 1/30/2020

DESIGNED - PTJ  
 DRAWN - CAM  
 CHECKED - MJL  
 DATE - 1/29/2019

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

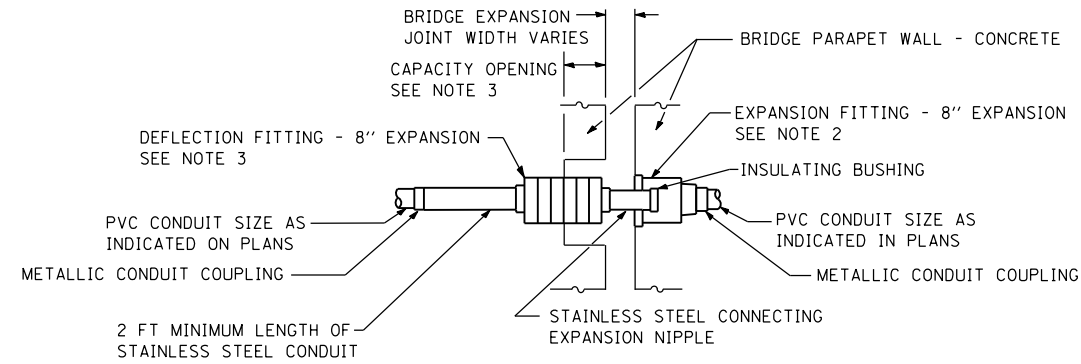
CCTV SYSTEM - 100 FOOT POLE FOUNDATION  
 PLANS 2 OF 2

SCALE: NTS    SHEET 22 OF 46 SHEETS    STA.    TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	811
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

ITS-22

FILE PATH = p:\AECOM\NA-AVSI\ecommon\line\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_1\000\_CAD\006\_Roadway\Sheets\62A77\_Contract\0162A77-SHT-ITS-23



**EXPANSION/DEFLECTION CONDUIT COUPLING DETAIL**  
 NOTES 1 AND 6

**NOTES:**

1. THE CONTRACTOR SHALL INSTALL A CONDUIT EXPANSION/DEFLECTION COUPLING AT THE JOINT LOCATIONS IN THE CONCRETE PARAPET ON THE BRIDGE CAPABLE OF ACCEPTING THE LONGITUDINAL MOVEMENT. ALL METALLIC PARTS OF THE COUPLING SHALL BE MADE OF STAINLESS STEEL OR AS APPROVED BY THE ENGINEER. ANY NON-STAINLESS METAL SHALL BE HOT DIP GALVANIZED AND COATED TO PREVENT REACTION WITH THE CONCRETE. THE COST OF THE COUPLING SHALL BE PART OF AND INCIDENTAL TO THE CONDUIT SYSTEM.
2. THE BARREL IN THE EXPANSION FITTING SHALL BE IN THE CONCRETE ON ONE SIDE OF THE EXPANSION JOINT. ONE HALF THE LENGTH OF THE DEFLECTION FITTING SHALL BE EMBEDDED IN THE CONCRETE ON THE OTHER SIDE OF THE COUPLING.
3. A CAVITY OPENING 3" LARGER IN DIAMETER THAN THE DEFLECTION FITTING SHALL BE PROVIDED IN THE CONCRETE TO ENSURE PROPER PERFORMANCE OF THE COUPLING.
4. CAREFUL ATTENTION TO JOINT MOVEMENT OVER A RANGE OF TEMPERATURES SHALL BE COORDINATED WITH THE SELECTION AND INSTALLATION OF THE COUPLING TO ENSURE THE RANGE OF MOVEMENT OF THE COUPLING IS NOT EXCEEDED AT TEMPERATURE EXTREMES.
5. ALL MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE CAREFULLY FOLLOWED TO ENSURE OPTIMUM PERFORMANCE OF THE EXPANSION/DEFLECTION COUPLING.
6. THE CONTRACTOR SHALL INSTALL COUPLINGS AT ALL BRIDGE EXPANSION JOINTS AND SHALL BE RESPONSIBLE TO DETERMINE THE PROPER NUMBER OF COUPLINGS REQUIRED. SEE STRUCTURAL DRAWINGS FOR THE EXPANSION JOINT LOCATIONS.
7. WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY SUBSTITUTE TWO (2) STAINLESS STEEL JUNCTION BOXES ATTACHED TO THE BACK OF THE WALL AND CONNECTED BY A HIGH GRADE OF FLEXIBLE METAL CONDUIT FOR ALL EXPANSION JOINTS. THIS SUBSTITUTION SHALL BE MADE AT NO ADDITIONAL COST TO THE DEPARTMENT.
8. EXPANSION/DEFLECTION COUPLINGS ARE INCIDENTAL TO THE COST OF THE CONDUIT.

ITS-23



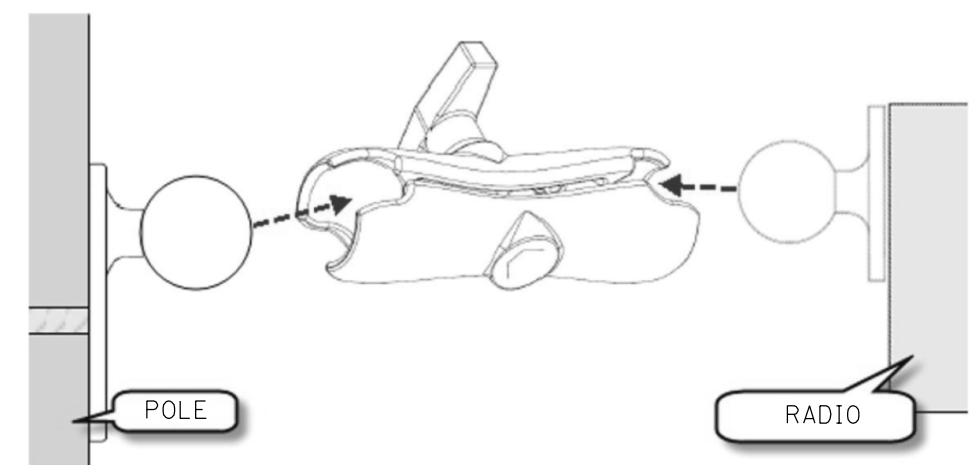
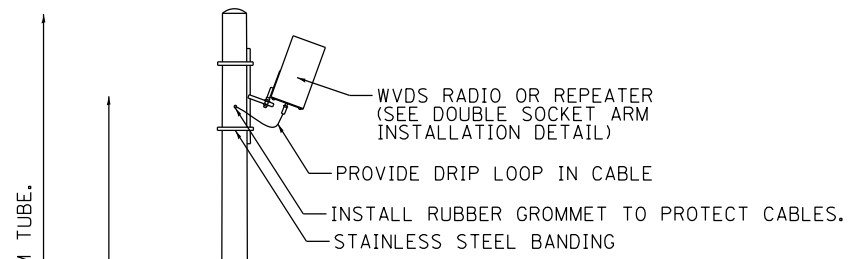
D162A77-SHT-ITS-23	DESIGNED - PTJ	REVISED -
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/30/2020	DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

<b>ITS DETAILS</b>			
SCALE: NTS	SHEET 23 OF 46 SHEETS	STA.	TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	812
<b>CONTRACT NO. 62A77</b>				
ILLINOIS FED. AID PROJECT				

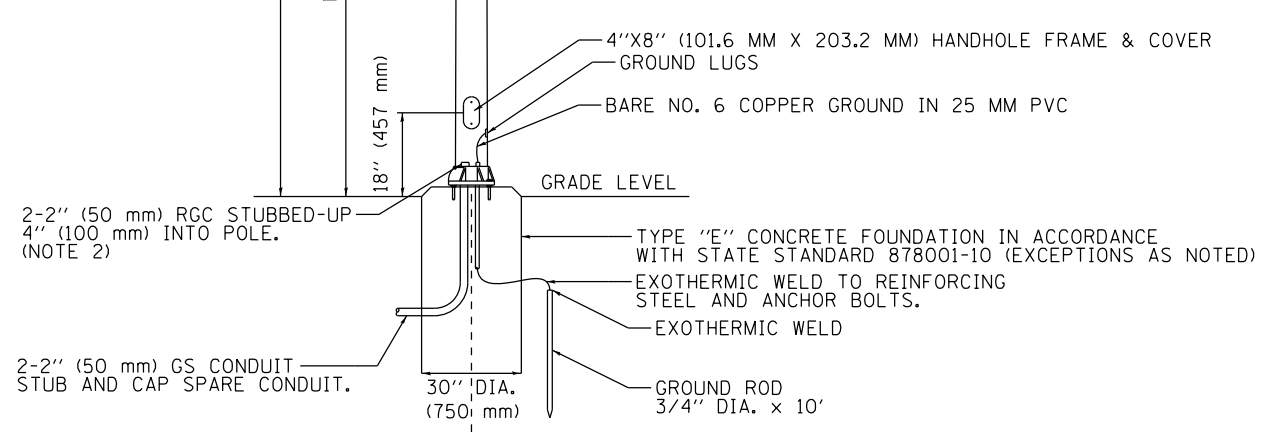
FILE PATH = p:\AECOM\NA-AVSI\ecommon\line\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle Phase\11000\_CAD\006\_Roadway\_Sheets\62A77\_Contracts\0162A77-SHT-ITS-24



**DOUBLE SOCKET ARM INSTALLATION DETAIL**

**WVDS SCHEDULE OF QUANTITIES**

LOCATION	STATION	OFFSET	BASELINE	LIGHT POLE, SPECIAL (EACH)	CONCRETE FDN, TYPE E (FEET)	WVDS RADIO (EACH)	WVDS REPEATER (EACH)	WVDS SENSOR (EACH)	WVDS ISOLATOR (EACH)	WVDS CONTROLLER (EACH)	WVDS INTEGRATION DEVICE (EACH)	ETHERNET SWITCH (EACH)
WVDS-SB1-RD	6249+15.00	94.00' RT	P-KDR-SB	1	10	1	0	12	1	1	1	1
WVDS-SB2-RD	6222+85.00	60.00' RT	P-KDR-SB	1	10	1	0	8	1	1	1	1
WVDS-SB3-RP	6205+25.00	90.00' RT	P-KDR-SB	1	10	0	1	8	0	0	0	0
WVDS-SB4-RP	6197+85.16	114.37' RT	P-KDR-SB	1	10	0	1	10	0	0	0	0
WVDS-SB5-RP	6188+27.51	112.72' RT	P-KDR-SB	1	10	0	1	10	0	0	0	0
<b>TOTAL:</b>				<b>5</b>	<b>50</b>	<b>2</b>	<b>3</b>	<b>48</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>



**POLE ELEVATION**

**NOTES:**

- REFER TO ITS PLAN SHEETS FOR PROPOSED WVDS SITES.
- SEE COMMUNICATIONS SCHEMATIC DETAILS FOR CABINET EQUIPMENT CONNECTIONS.

ITS-24



D162A77-SHT-ITS-24  
 USER NAME = patrick.jordan  
 PLOT SCALE = 100.0000' / 1" =  
 PLOT DATE = 1/30/2020

DESIGNED - PTJ  
 DRAWN - CAM  
 CHECKED - MJL  
 DATE - 1/29/2019

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

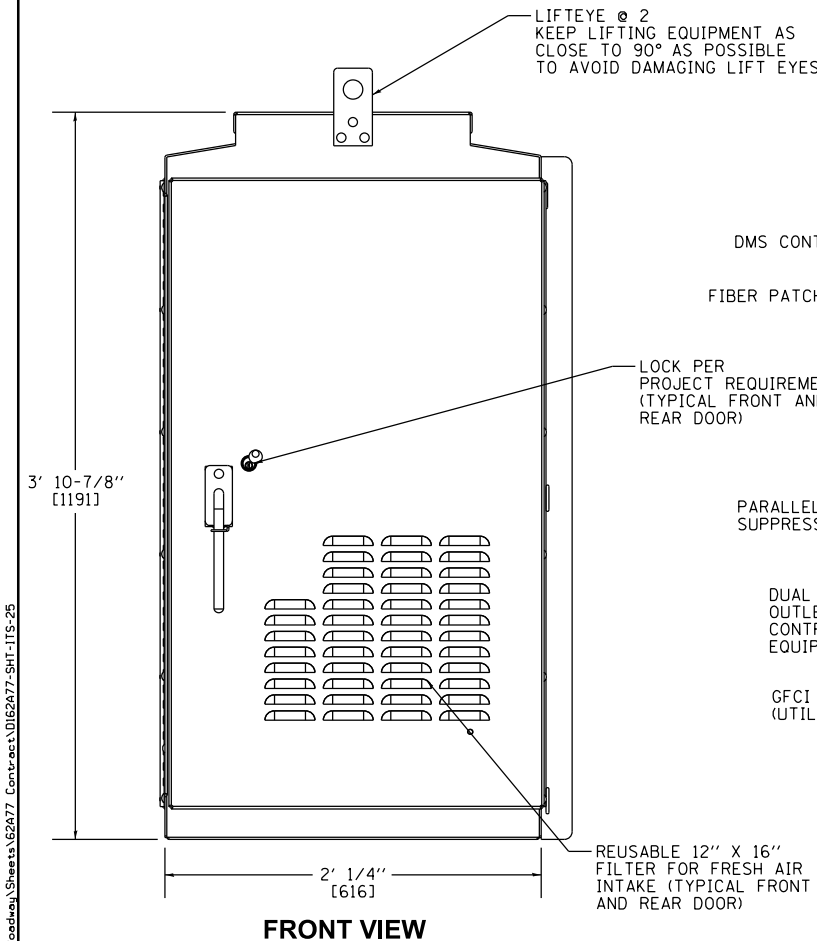
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**WIRELESS VEHICLE DETECTION SYSTEM DETAILS**

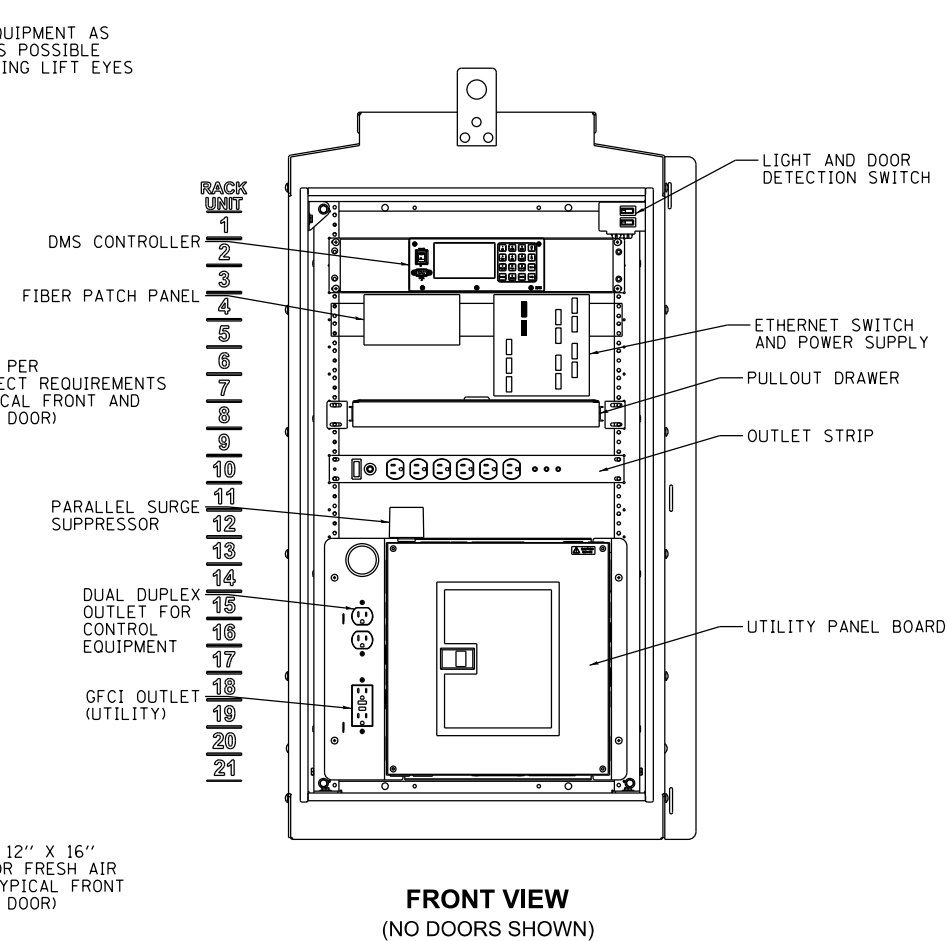
SCALE: NTS SHEET 24 OF 46 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	813
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

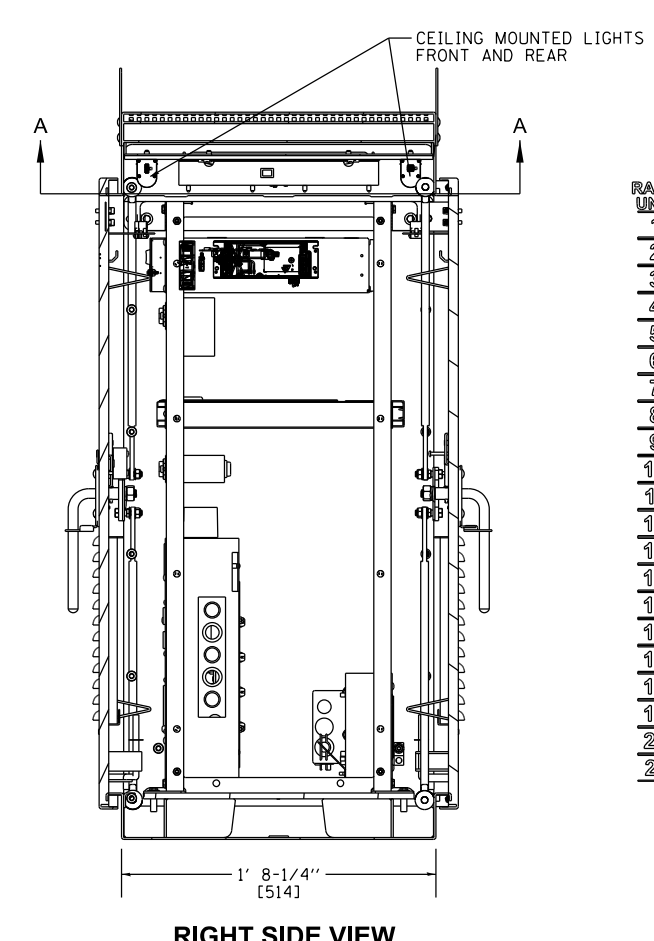
FILE PATH = p:\aecom\ms-ansi\encom\line\local\AECOM\_DS02\_MA\Documents\01\_Americas\Transportation\60269938\_Circle Phase\_1\000\_CAD\006\_Roadway\_Sheets\62A77\_Contract\0162A77-SHT-ITS-25



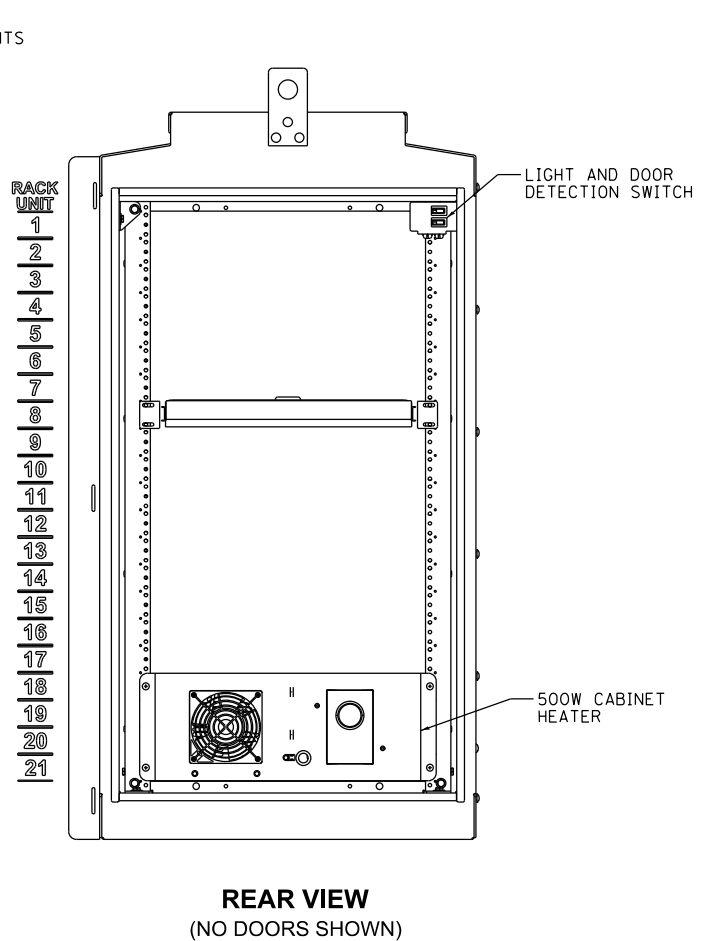
**FRONT VIEW**



**FRONT VIEW  
(NO DOORS SHOWN)**



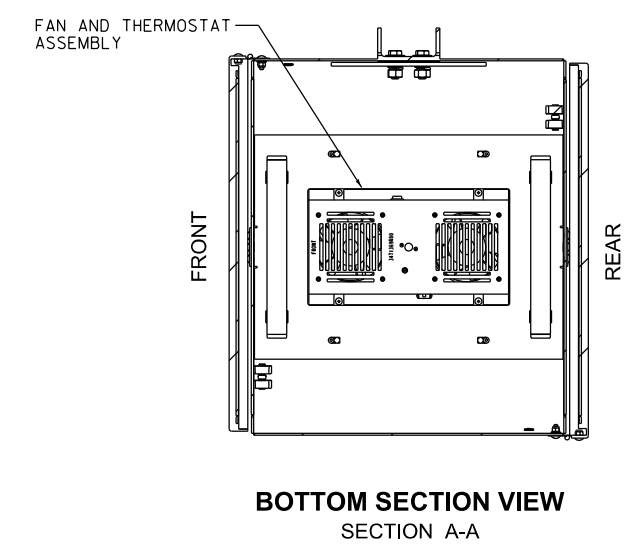
**RIGHT SIDE VIEW**



**REAR VIEW  
(NO DOORS SHOWN)**

**TRAFFIC CABINET NOTES:**

- CABINET SPECIFICATIONS:
  - CABINET TYPE: 336S POLE MOUNT
  - ALL DIMENSIONS IN FEET & INCHES [mm] UNLESS OTHERWISE SPECIFIED
  - 0.125" MILL FINISH ALUMINUM 5052-H32 CONSTRUCTION WITH CONTINUOUSLY WELDED EXTERNAL SEAMS
  - THREE POINT LATCH WITH SST HANDLE
  - DOUBLE FLANGED DOOR SEAL WITH 1/2" X 2" CLOSED CELL NEOPRENE GASKET
  - FULL LENGTH EIA GAGE FOR 19" EQUIPMENT
  - NEMA 3R ENCLOSURE
  - ALL STAINLESS STEEL HARDWARE WITH FULL LENGTH STAINLESS STEEL HINGE.
  - DOOR OPENING: 38.500" X 21.750"
- USE 1-1/4" WIDE STAINLESS STEEL BANDING TO ATTACH THE TRAFFIC CABINET.
  - POLE MOUNT BRACKET IS DESIGNED FOR USE ON A POLE WITH MINIMUM 6" DIAMETER.
  - FINAL REVIEW OF THE MOUNTING DETAILS ARE THE RESPONSIBILITY OF THE CUSTOMER AND THE CUSTOMER'S ENGINEERS.
- ALL MODIFICATIONS TO CABINET MUST MAINTAIN NEMA 3R RATING.
- AFTER PERMANENT DMS-10 SITE IS INSTALLED WITH POWER AND COMMUNICATIONS LINKS IN PLACE, RELOCATE DMS EQUIPMENT FROM TEMPORARY MODEL 336S CABINET TO PERMANENT MODEL 334 CABINET AND MAKE CONNECTIONS.



**BOTTOM SECTION VIEW  
SECTION A-A**

ITS-25



D162A77-SHT-ITS-25  
 USER NAME = patrick.jordan  
 PLOT SCALE = 100.0000' / 1".  
 PLOT DATE = 1/30/2020

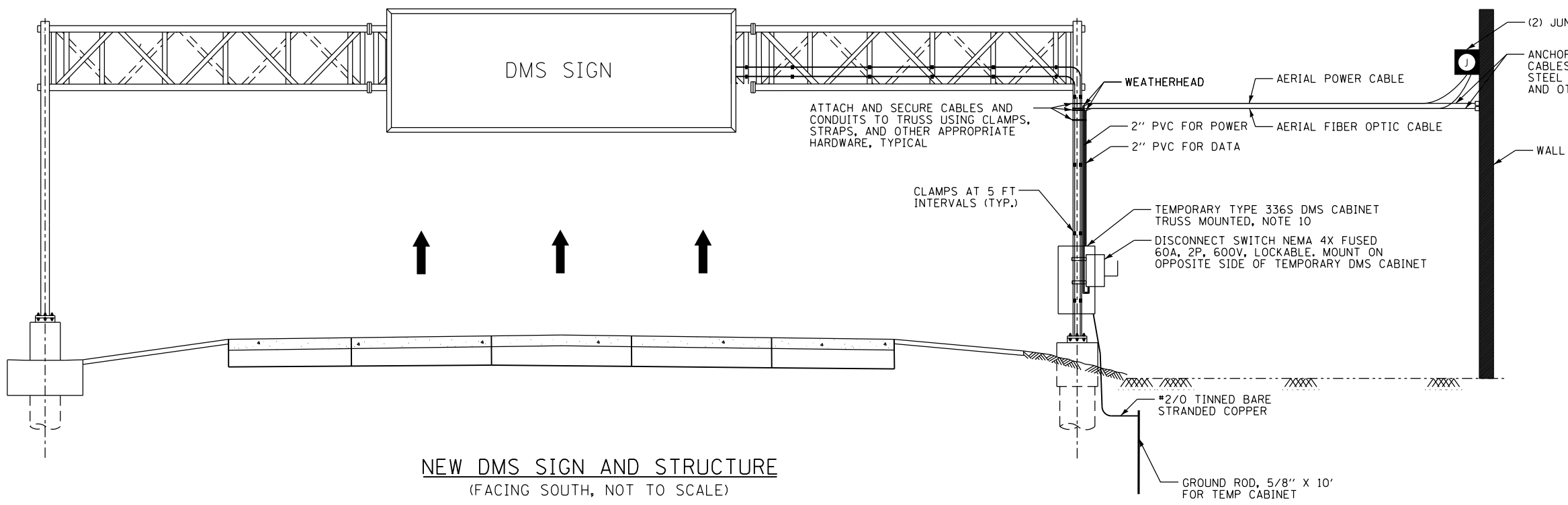
DESIGNED - PTJ	REVISED -
DRAWN - CAM	REVISED -
CHECKED - MJL	REVISED -
DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CABINET, MODEL 336S CABINET DETAIL**  
 SCALE: NTS SHEET 25 OF 46 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	814
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

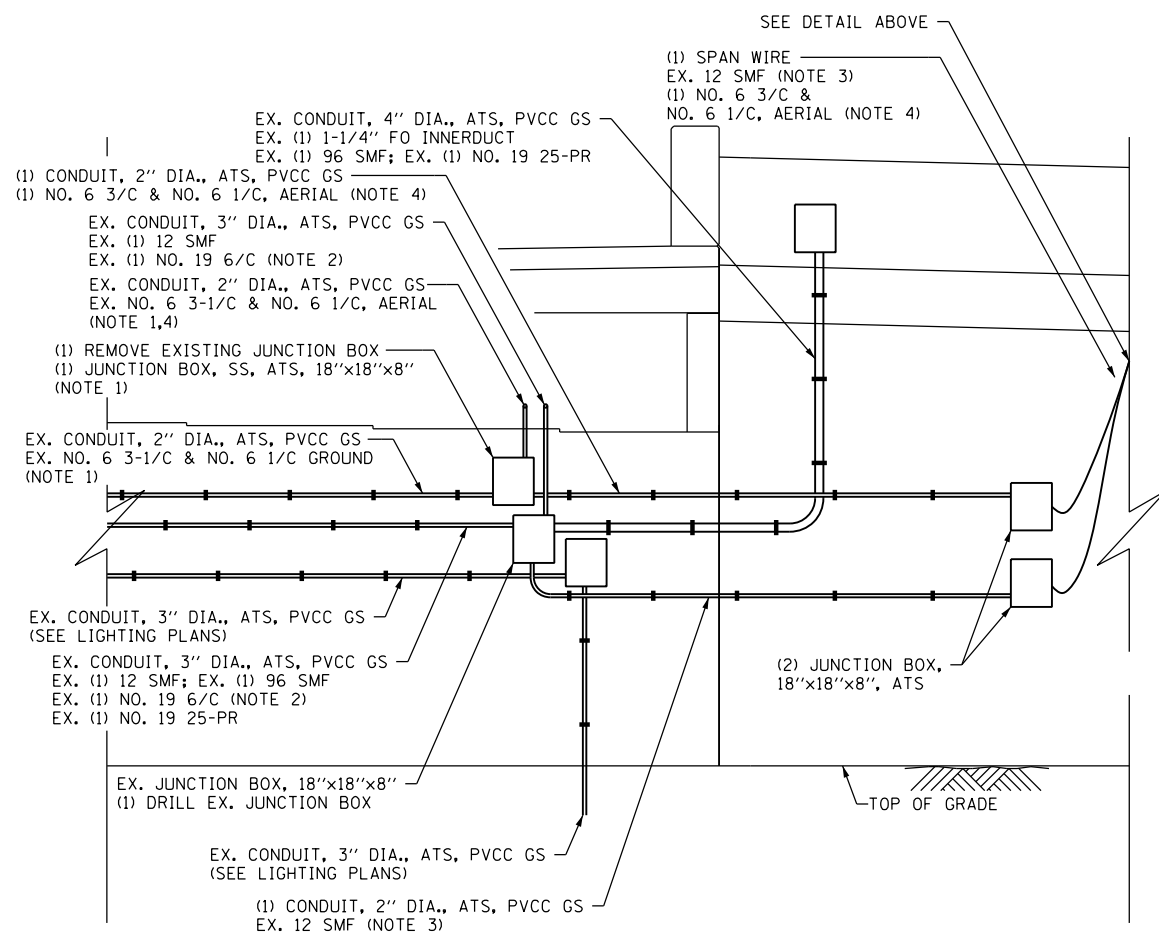
FILE PATH = p:\VACOM\NA-ANSI\encom\line\local\AECOM\_DS02\_NA\_Documents\01\_Americas\Transportation\60269938\_Circle Phase II\000\_CAD\006\_Roadway\Sheets\62A77\_Contract\0162A77-SHT-ITS-26



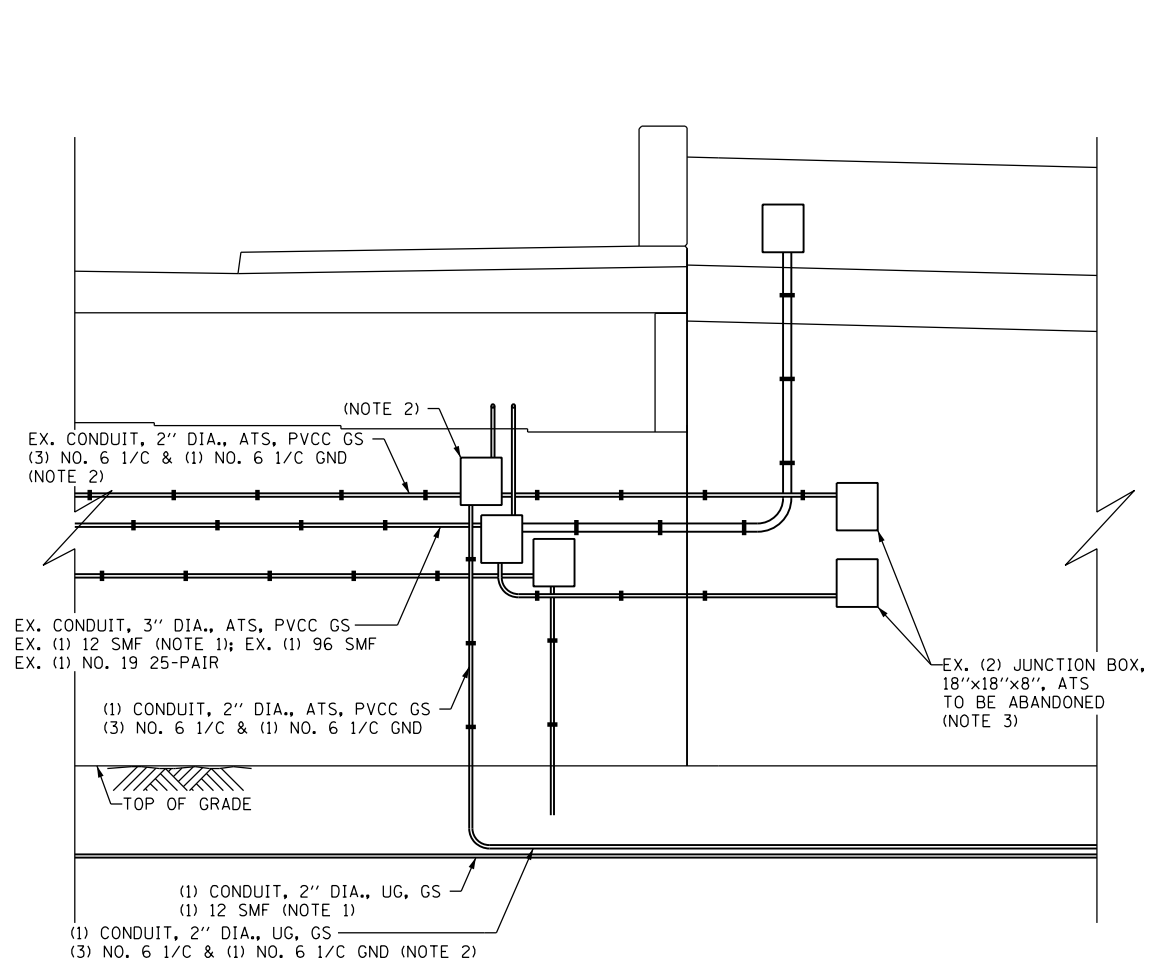
**NEW DMS SIGN AND STRUCTURE**  
(FACING SOUTH, NOT TO SCALE)

**GENERAL NOTES:**

- FURNISH AND INSTALL LOCKABLE SERVICE DISCONNECT ON SIGN STRUCTURE SUPPORT OPPOSITE THE ONE WITH THE DMS CABINET.
- FURNISH AND INSTALL STEEL MESSENGER WIRE, WALL ANCHORS, BRACKETS, STRAPS, AND ALL OTHER NECESSARY HARDWARE TO ATTACH AND INSTALL THE AERIAL CABLES AND OTHER EQUIPMENT SHOWN.
- ALL EQUIPMENT SHALL BE SIZED AND WIRED AS PER MANUFACTURER RECOMMENDATIONS.
- COORDINATE ALL WORK WITH CONTRACT 62A76 THAT INSTALLS THE AERIAL CABLES TO EXISTING DMS-10. THE STAGING AND PLANNING OF THE WORK TO TRANSITION FROM THE EXISTING DMS TO THE TEMPORARY DMS MUST TAKE INTO ACCOUNT MINIMAL DOWN TIME FOR THE DMS SIGN.
- ALL UNDERGROUND CONDUITS SHALL BE RGS AND ABOVE GRADE CONDUITS SHALL BE PVC COATED RGS, OR AS SHOWN ON THE PLANS. COUPLERS SHALL BE UTILIZED WHEN TRANSITIONING FROM RGS TO PVC COATED RIGID GALVANIZED STEEL (RGS).
- MOUNT CLAMPS ON 5'-0" ON CENTER MOUNTING. HARDWARE SHALL BE USED AS PER CONDUIT MANUFACTURER RECOMMENDATION.
- CONTRACTOR SHALL SUPPLY AND INSTALL CABLE REDUCER LUGS WHERE SIZE OF CABLE ENTERING THE DISCONNECT IS MORE THAN RECOMMENDED SIZE DUE TO VOLTAGE DROP.
- ALL ELECTRICAL WORK FOR TEMPORARY DMS SHALL BE PAID UNDER PAY ITEM "DYNAMIC MESSAGE SIGN, WALK-IN ACCESS, FULL MATRIX, COLOR, NTCIP 1203".
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND WIRE THE DMS CABINET AND OTHER EQUIPMENT IN FULL COMPLIANCE WITH EQUIPMENT MANUFACTURER RECOMMENDATIONS AND INDUSTRY STANDARDS.
- BEFORE REMOVAL OF EXISTING DMS-10 IN THE MEDIAN, INSTALL NEW OVERHEAD SIGN TRUSS WITH DMS AT STA 6245+25. INSTALL TEMPORARY DMS CABINET ON SIGN TRUSS. REROUTE AERIAL POWER AND COMMUNICATION CABLE FROM EXISTING DMS-10 IN THE MEDIAN TO TEMPORARY DMS ON SIGN TRUSS VIA ATTACHED AND AERIAL CONDUIT. EXISTING POWER AND COMMUNICATIONS SOURCES TO BE RETAINED.



**TEMPORARY DMS-10 INSTALLATION DETAIL**  
(FACING WEST AT TAYLOR STREET BRIDGE ABUTMENT, NOT TO SCALE)



**PERMANENT DMS-10 INSTALLATION DETAIL**  
(FACING WEST AT TAYLOR STREET BRIDGE ABUTMENT, NOT TO SCALE)

**TEMPORARY DMS-10 INSTALLATION NOTES:**

- REMOVE POWER CABLE TO CABINET C3 FROM EXISTING 2" CONDUIT ACROSS TAYLOR ST. WEST ABUTMENT BEFORE REPLACING THE POWER JUNCTION BOX AT THE NORTHWEST SIDE OF THE WEST ABUTMENT. ROADSIDE DETECTORS MUST BE INSTALLED UNDER CONTRACT 60Y00 BEFORE POWER CAN BE REMOVED FROM CABINET C3.
- REMOVE NO. 19 6/C COMMUNICATION AFTER POWER HAS BEEN DISCONNECTED FROM CABINET C3.
- REMOVE 12 STRAND FIBER OPTIC CABLE ROUTED TO THE EXISTING DMS-10 CABINET VIA 62A76 TEMPORARY INSTALLATION AND REINSTALL 12 STRAND FIBER OPTIC CABLE TO THE MODEL 336S CABINET INSTALLED ON THE PERMANENT SIGN TRUSS.
- SPLICE NEW POWER AND GROUND CABLES IN THE EXISTING POWER JUNCTION BOX ON THE TAYLOR STREET MEDIAN PIER (SEE SHEET ITS-08). ROUTE NEW CABLES TO THE MODEL 336S CABINET INSTALLED ON THE PERMANENT SIGN TRUSS.
- THE TEMPORARY INSTALLATION TO THE TRUSS MOUNTED CABINET SHALL REMAIN OPERATIONAL UNTIL PROPOSED ITS INFRASTRUCTURE IS IN PLACE TO TRANSFER DMS OPERATION TO THE PERMANENT GROUND MOUNTED CABINET.

**PERMANENT DMS-10 INSTALLATION NOTES:**

- INSTALL NEW 12 STRAND FIBER OPTIC CABLE FROM THE TERMINATION PANEL IN CABINET C3 TO THE TERMINATION PANEL IN THE PERMANENT GROUND MOUNTED DMS-10 CABINET BEFORE REMOVING THE TEMPORARY 12 STRAND FIBER OPTIC CABLE.
- INSTALL NEW POWER CABLES TO CABINET C3 AND THE PERMANENT GROUND MOUNTED DMS-10 CABINET. SPLICE NEW CABLES TO EXISTING CABLES IN THE JUNCTION BOX ATTACHED TO THE TAYLOR ST WEST ABUTMENT.
- SEAL AND PLUG ALL ABANDONED JUNCTION BOXES.

ITS-26



D162A77-SHT-ITS-26	DESIGNED - PTJ	REVISED -
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / 1"	CHECKED - MJL	REVISED -
PLOT DATE = 1/30/2020	DATE - 1/29/2019	REVISED -

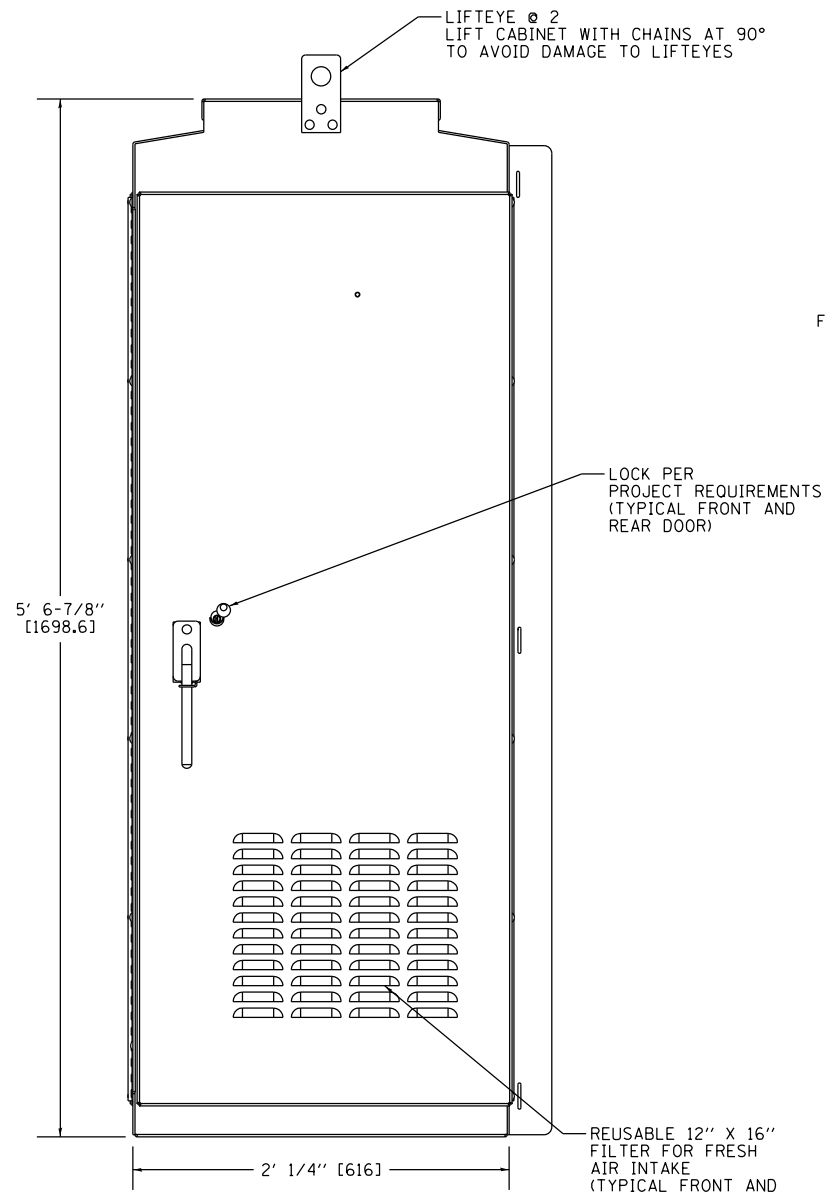
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY DMS-10 INSTALLATION DETAIL**

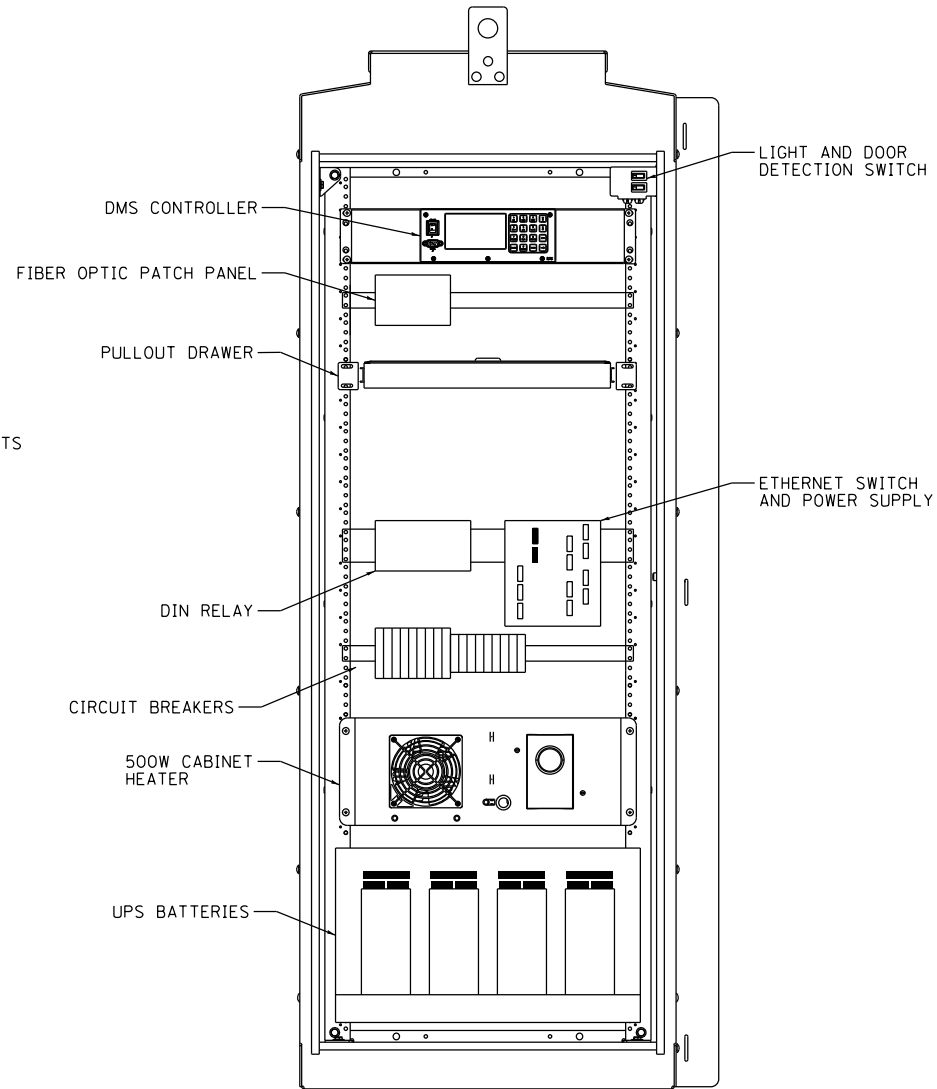
SCALE: NTS SHEET 26 OF 46 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	815
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

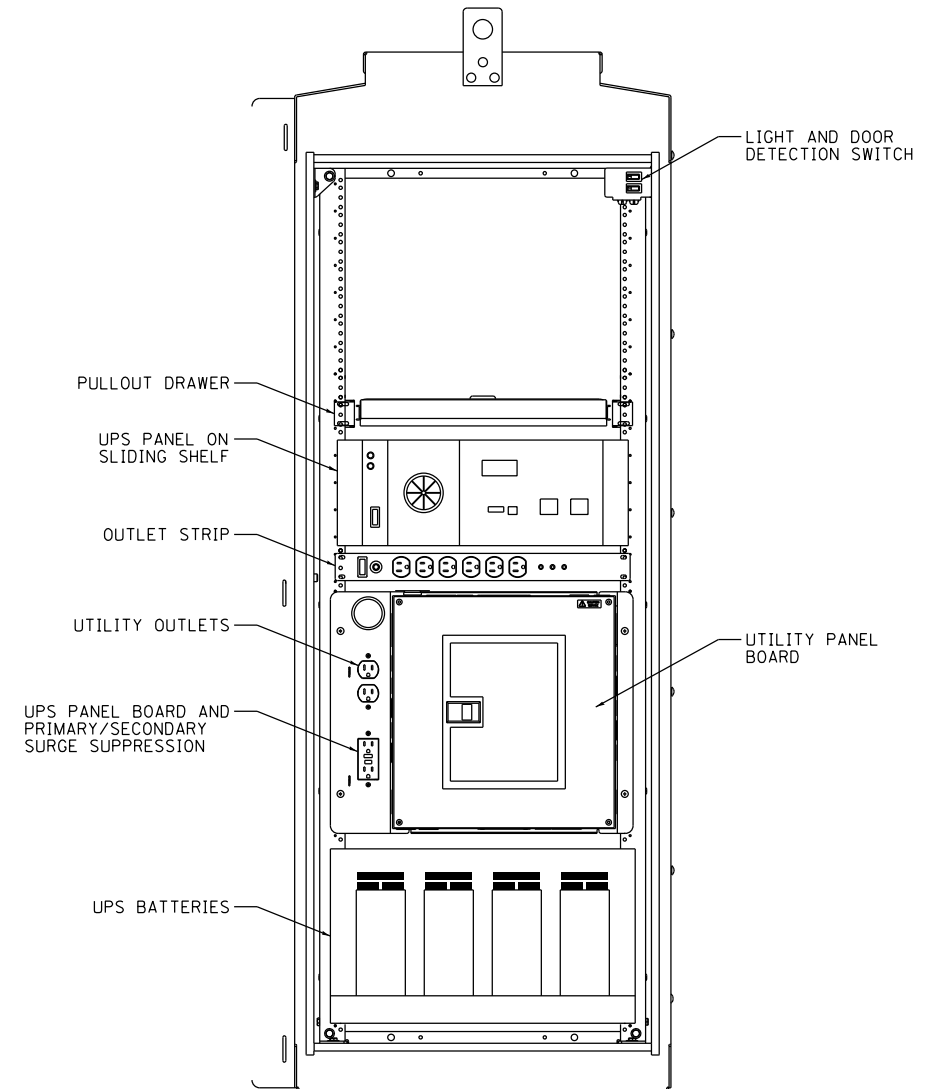
FILE PATH = p:\aecom\na-ansi\electrom\line\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle Phase\11\000\_CAD\006\_Roadway\Sheets\62A77\_Contract\0162A77-SHT-ITS-27



**FRONT VIEW**



**COMMUNICATIONS COMPARTMENT**  
(NO DOORS SHOWN)



**POWER COMPARTMENT**  
(NO DOORS SHOWN)

**TRAFFIC CABINET NOTES:**

- CABINET SPECIFICATIONS:
  - ALL DIMENSIONS IN FEET & INCHES [MM], UNLESS OTHERWISE SPECIFIED
  - 0.125" MILL FINISH ALUMINUM 5052-H32 CONSTRUCTION WITH CONTINUOUSLY WELDED EXTERNAL SEAMS
  - THREE POINT LATCH WITH SST HANDLE
  - DOUBLE FLANGED DOOR SEAL WITH 1/2" X 2" CLOSED CELL NEOPRENE GASKET
  - FULL LENGTH EIA GAGE FOR 19" EQUIPMENT
  - NEMA 3R ENCLOSURE
  - ALL STAINLESS STEEL HARDWARE WITH FULL LENGTH STAINLESS STEEL HINGE.
  - DOOR OPENING: 56.750" X 21.750"
- ALL MODIFICATIONS TO CABINET MUST MAINTAIN NEMA 3R RATING.
- AFTER PERMANENT DMS-10 SITE IS INSTALLED WITH POWER AND COMMUNICATIONS LINKS IN PLACE, RELOCATE DMS EQUIPMENT FROM TEMPORARY MODEL 336S CABINET TO PERMANENT MODEL 334 CABINET AND MAKE CONNECTIONS.

ITS-27



D162A77-SHT-ITS-27	DESIGNED - PTJ	REVISED -
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/30/2020	DATE - 1/29/2019	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

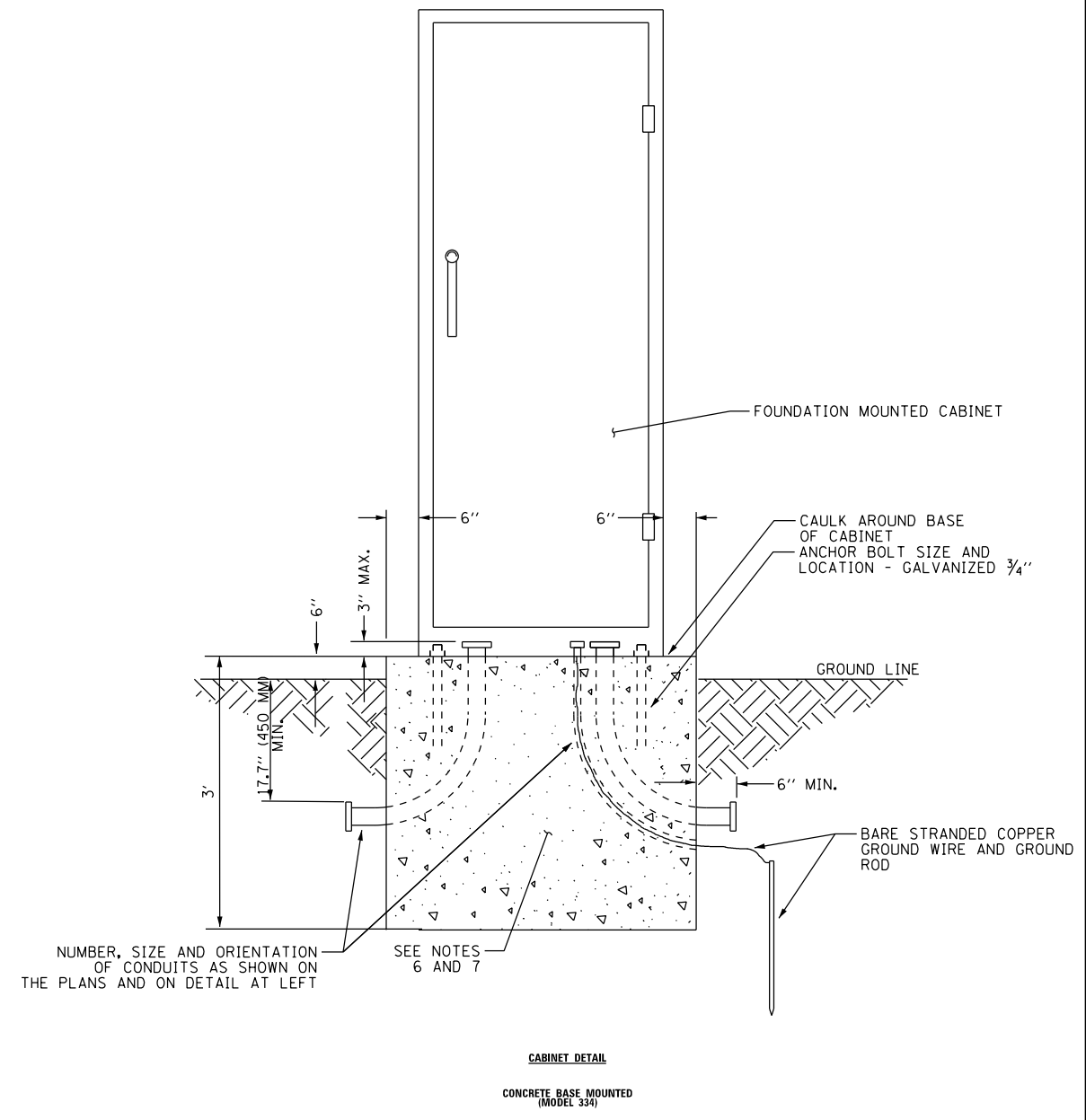
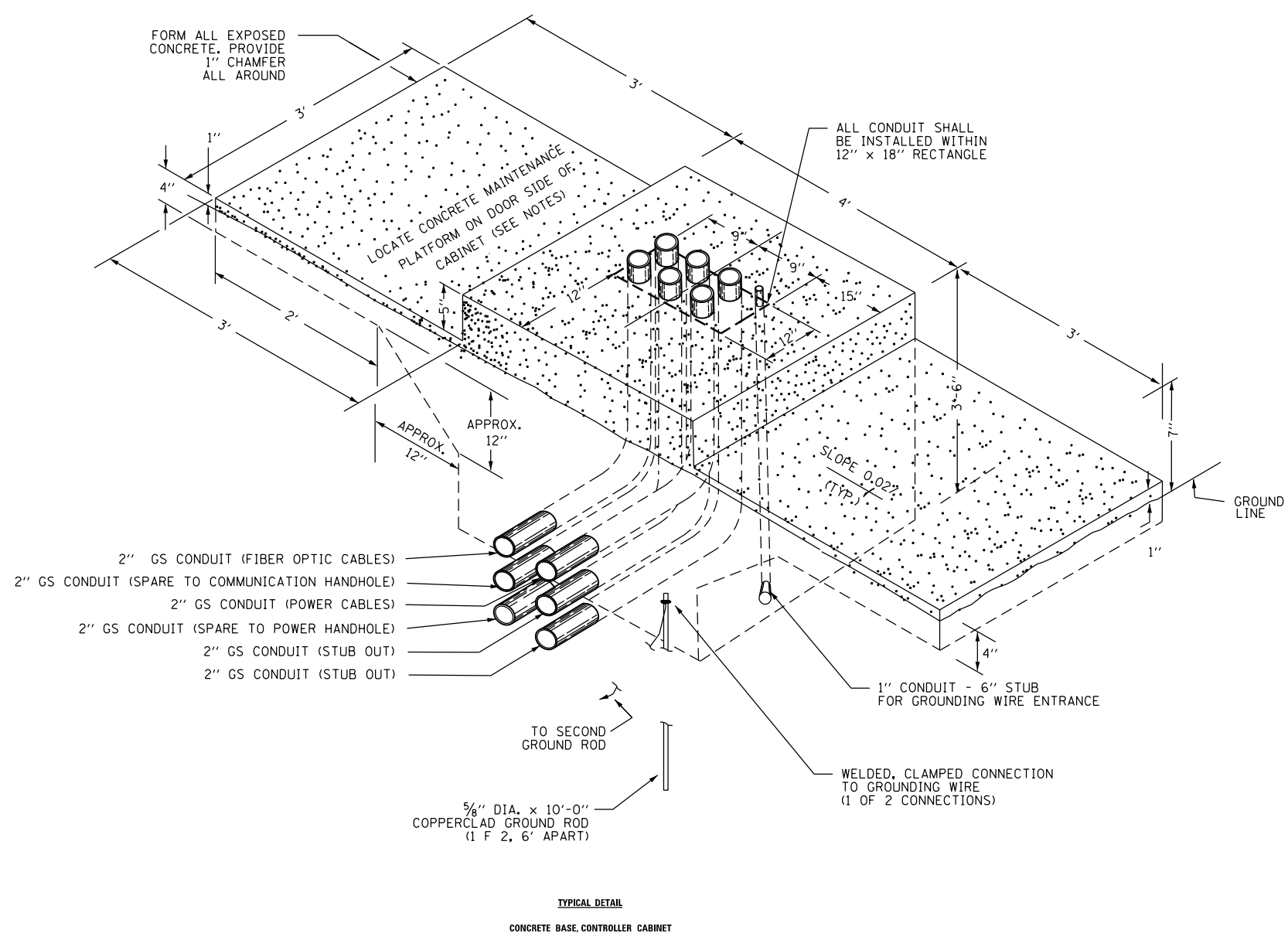
CABINET, MODEL 334 CABINET DETAIL

SCALE: N.T.S. SHEET 27 OF 46 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	816
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				



FILE PATH = p:\AECOM\NA-AVSI\encom\line\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle Phase II\000 CAD\006\_Roadway\Sheets\62A77\_Contract\0162A77-SHT-ITS-28



**NOTES:**

- INSTALL FOUR 3#4 INCH DIAMETER X 12 INCH MINIMUM LENGTH APPROVED J-BOLTS TO ANCHOR THE CABINET BASES. THE ANCHOR BOLTS SHALL BE GALVANIZED STEEL AND LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.
- CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED AND LEVEL, PRIOR TO CABINET INSTALLATION. LEVELING OF TOP SURFACES AFTER CONCRETE BASE HAS CURED SHALL ONLY BE ACCOMPLISHED BY GRINDING.
- MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.
- CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.
- CONCRETE MAINTENANCE PLATFORM AND CABINET FOUNDATION FOR CABINET SHALL BE MONOLITHIC POUR.
- WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.
- CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 3 INCH.
- MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.
- ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.
- CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.
- PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.
- ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.
- ALL METALLIC CONDUIT ENDS AT TOP OF CONCRETE BASES SHALL HAVE BUSHINGS AND ALL NON METALLIC CONDUIT ENDS AT TOP OF CONCRETE BASES SHALL HAVE END BELLS.
- REFER TO SPECIAL PROVISIONS FOR CABINET DETAILS AND ADDITIONAL REQUIREMENTS.
- CABINET ENTRIES INCLUDE VERTICAL ARRANGEMENT FOR MAJOR EQUIPMENT ITEMS ONLY.
- INSTALL ADDITIONAL ITEMS ON SIDE AND BACK PANELS PER THE SPECIAL PROVISIONS.
- THE CONTRACTOR SHALL INSTALL INSULATED BUSHINGS AND DUCT SEALANT AT ALL CONDUIT BEND TERMINATIONS IN FOUNDATIONS.
- CONCRETE BASE TO BE FORMED AT LEAST 6" ABOVE THE GROUND SURFACE.
- ALL WORK INDICATED SHALL BE PAID FOR UNDER ITEM CABINET, MODEL 334 EXCLUSIVE OF THE CONCRETE FOUNDATION.
- CABINET BOTTOM CONFIGURATION SHALL BE AS DIRECTED BY THE ENGINEER.

ITS-28



D162A77-SHT-ITS-28	DESIGNED - PTJ	REVISED -
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/30/2020	DATE - 1/29/2019	REVISED -

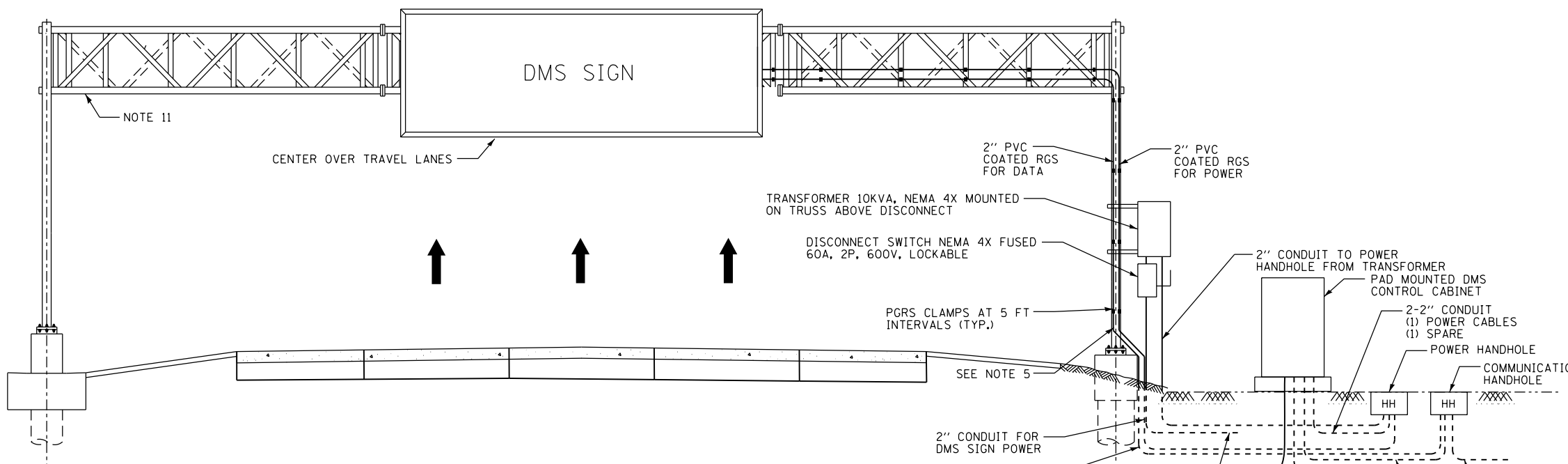
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CABINET, MODEL 334 FOUNDATION DETAIL**

SCALE: NTS SHEET 28 OF 46 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	817
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\na\ecom\na-ansi\ecom\line\local\il\COM\_D502\_NA\Documents\01\_Americas\Transportation\60269938\_Circle Phase II\000\_CAD\006\_Roadway\Sheets\62A77\_Contract\0162A77-SHT-ITS-29

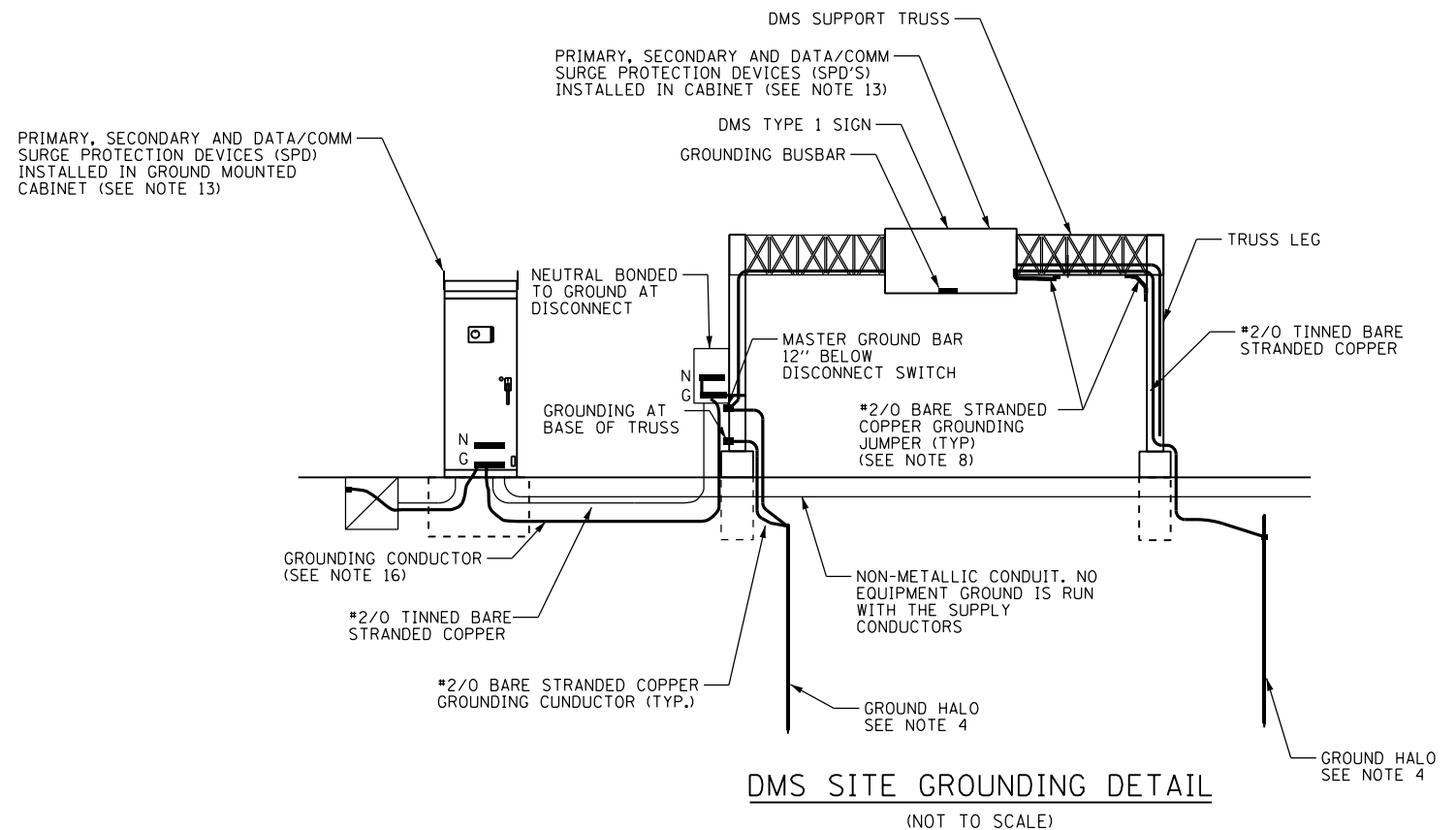


**GROUNDING NOTES:**

1. ADDITIONAL GROUND RODS SHALL BE ADDED TO GROUNDING ELECTRODE CONDUCTOR AS REQUIRED UNTIL RESISTANCE TO GROUND IS 5 OHMS OR LESS. FOR DEVICE AND POWER SERVICE LOCATIONS. IF ADDITIONAL GROUND ROD ELECTRODES ARE REQUIRED IN ORDER TO ACHIEVE REQUIRED RESISTANCE THEY SHALL RADIATE OUT FROM EXISTING GROUND ROD ELECTRODES. THESE SHALL BE CONNECTED WITH #2/0 TINNED BARE STRANDED CONDUCTOR, AND SHALL BE 20' FROM CONNECTED GROUND ROD. ALL COMMUNICATION EQUIPMENT GROUNDING SITES SHALL BE TESTED FOR RESISTANCE TO GROUND USING THE THREE-POINT FALL-OF-POTENTIAL TEST PER ANSI/IEEE STD 81. SEE ITS ELEMENT SITE GROUNDING SPECIAL PROVISION FOR PROCEDURES.
2. GROUND RODS SHALL NOT BE ROUTED THROUGH FOUNDATIONS.
3. FENCES, GUARDRAIL AND OTHER METALLIC STRUCTURES WITH PATHS TO GROUND SHALL BE CONNECTED TO EQUIPMENT GROUND IF THEY ARE LOCATED WITHIN 25' OF THE GROUNDING ELECTRODE SYSTEM OR ANY OBJECT GROUNDED TO THE GROUNDING ELECTRODE SYSTEM.
4. GROUND RODS SHALL BE INSTALLED IN GROUND WELLS IN FINISHED GRADE UNLESS INSTALLED IN MEDIAN, UNDER SHOULDERS OR PAVEMENT.
5. ALL EQUIPMENT GROUNDS SHALL BE PROPERLY CONNECTED TO A CHASSIS: ALL PAINT AND OTHER COATINGS, INCLUDING GALVANIZATION, SHALL BE REMOVED PRIOR TO TERMINATION OF A GROUND. AFTER THE GROUND IS TERMINATED A NON-OXIDIZING COATING SHALL BE PAINTED OVER THE EXPOSED METAL SURFACES.
6. GROUNDING ELECTRODE SYSTEM CONNECTIONS TO FENCING SHALL BE MADE USING HEAVY DUTY TINNED LISTED PIPE CLAMPS DESIGNED FOR GROUNDING AND STAINLESS STEEL HARDWARE.
7. ALL GROUNDING DIAGRAMS ARE SCHEMATIC ONLY.
8. ALL METALLIC MEMBERS OF THE DMS TRUSS AND THE DMS SIGN WITHIN 6 FEET OF EACH OTHER SHALL BE BONDED TOGETHER. WELDS SHALL BE CONSIDERED AN ACCEPTABLE BONDING METHOD. U-BOLT CONNECTIONS SHALL NOT BE CONSIDERED AN ACCEPTABLE BONDING METHOD.
9. AT LEAST AN 8 INCH MINIMUM BENDING RADIUS SHALL BE MAINTAINED ON ALL GROUNDING ELECTRODE CONDUCTORS. THE ANGLE OF ANY BENDING SHALL NOT BE LESS THAN 90 DEGREE.
10. GROUNDING CONDUCTORS SHALL ALWAYS ROUTE AS STRAIGHT AS POSSIBLE. "U" FORM JUMPERS SHALL BE ACCEPTABLE ONLY FOR GATES AND DOORS.
11. THE QUANTITY OF GROUNDING ELECTRODE CONDUCTORS CONNECTED TO A GROUND ROD ELECTRODE SHALL BE LIMITED TO THREE.
12. WHENEVER POSSIBLE, GROUND ROD ELECTRODES SHALL BE INSTALLED NO CLOSER THAN 11' FROM A FOUNDATION.
13. EVERY COPPER CONDUCTOR OR CABLE ENTERING OR LEAVING A DMS ENCLOSURE, THE DMS CONTROLLER, OR THE CCTV ELECTRONICS ENCLOSURE SHALL BE PROTECTED WITH A SURGE PROTECTION DEVICE (SPD).
14. DIAGRAM OMITTS EQUIPMENT GROUNDING INSIDE ENCLOSURES.
15. GROUNDING CONDUCTOR SHALL BE #2/0 TINNED BARE STRANDED COPPER. CONTRACTOR SHALL INSTALL GROUND RODS AS NECESSARY TO ENSURE GROUND RESISTANCE AT DMS CABINET IS 5 OHMS OR LESS.
16. IF THERE IS A METAL HANDRAIL WITHIN 20 FEET OF CONTROL CABINET CONNECT HANDRAIL TO GROUNDING SYSTEM WITH #2/0 TINNED BARE STRANDED COPPER CONDUCTOR.

**GENERAL NOTES:**

1. FURNISH AND INSTALL LOCKABLE SERVICE DISCONNECT AT EACH PROPOSED SIGN STRUCTURE LOCATION.
2. 10KVA, 480V-120/240V SINGLE PHASE TRANSFORMER SHALL BE MOUNTED ABOVE DISCONNECT.
3. THIS IS A DIAGRAMMATIC SCHEMATIC. ALL BREAKERS, TRANSFORMER LOAD CENTER SHALL BE SIZED AND WIRED AS PER MANUFACTURER RECOMMENDATIONS.
4. NEUTRAL AND GROUNDING SHALL BE BONDED AT SERVICE ENTRANCE DISCONNECT.
5. ALL UNDERGROUND CONDUITS SHALL BE RGS AND ABOVE GRADE CONDUITS SHALL BE PVC COATED RGS, OR AS SHOWN ON THE PLANS. COUPLERS SHALL BE UTILIZED WHEN TRANSITIONING FROM RGS TO PVC COATED RIGID GALVANIZED STEEL (RGS).
6. MOUNT CLAMPS ON 5'-0" ON CENTER MOUNTING. HARDWARE SHALL BE USED AS PER CONDUIT MANUFACTURER RECOMMENDATION.
7. CONTRACTOR SHALL SUPPLY AND INSTALL CABLE REDUCER LUGS WHERE SIZE OF CABLE ENTERING THE DISCONNECT IS MORE THAN RECOMMENDED SIZE DUE TO VOLTAGE DROP.
8. ALL ELECTRICAL WORK FOR DMS SHALL BE PAID UNDER PAY ITEM "DYNAMIC MESSAGE SIGN, WALK-IN ACCESS, FULL MATRIX, COLOR, NTCIP 1203".
9. THIS SCHEMATIC IS FOR GUIDANCE ONLY. CONTRACTOR SHALL WIRE THE DMS CABINET IN FULL COMPLIANCE WITH MANUFACTURER RECOMMENDATIONS AND INDUSTRY STANDARDS.
10. REFER TO IDOT STANDARD DRAWINGS FOR OVERHEAD SIGN STRUCTURE SPAN TYPE (STEEL) STRUCTURE DETAILS.
11. FIBER PATCH PANEL IN DMS SIGN HOUSING SHALL BE A FACTORY TERMINATED UNIT WITH A 12-STRAND PIGTAIL CONNECTING TO RACK MOUNTED FIBER PATCH PANEL IN DMS CONTROLLER CABINET.



**DMS SITE GROUNDING DETAIL**  
(NOT TO SCALE)

ITS-29



0162A77-SHT-ITS-29  
 USER NAME = patrick.jordan  
 PLOT SCALE = 100.0000' / in.  
 PLOT DATE = 1/30/2020

DESIGNED - PTJ  
 DRAWN - CAM  
 CHECKED - MJL  
 DATE - 1/29/2019

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

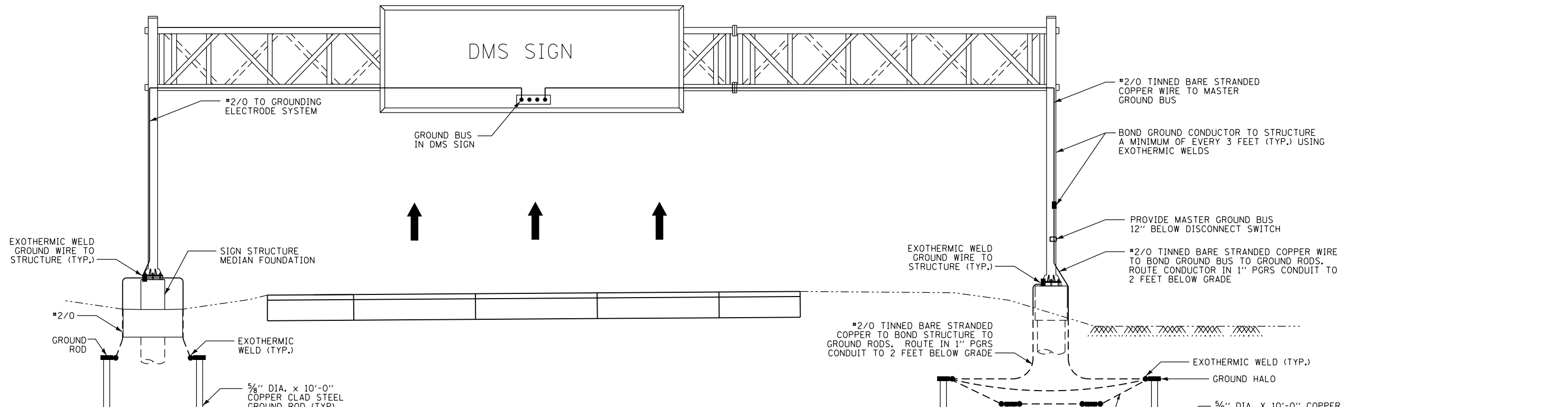
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**DYNAMIC MESSAGE SIGN SITE PLAN**

SCALE: NTS    SHEET 29 OF 46 SHEETS    STA.    TO STA.

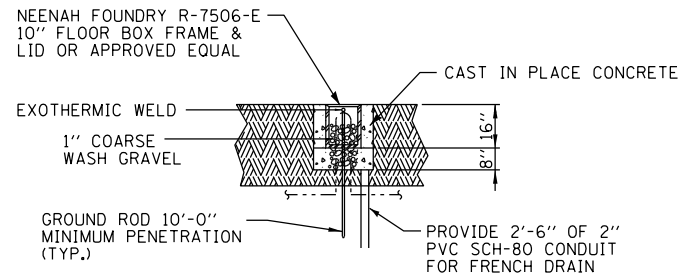
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	818
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\AECOM\NA\MSI\ecommon\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle Phase II\000 CAD\006\_Roadway\Sheets\62A77\_Contract\0162A77-SHT-ITS-30

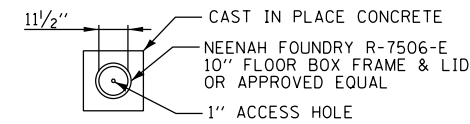


**GENERAL NOTES:**

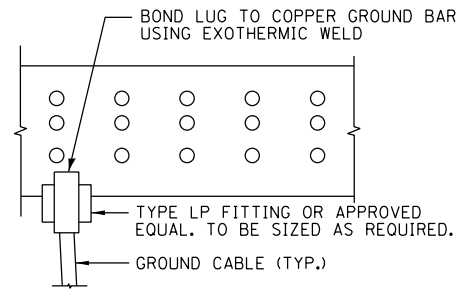
1. GROUNDING SYSTEM SHALL BE PLACED WITHIN IDOT RIGHT-OF-WAY.
2. GROUND MOUNTED CONTROL CABINETS SHALL BE PLACED UPSTREAM OF THE STRUCTURE AT THE LOCATION SHOWN ON THE PLAN VIEWS.
3. INSTALL MARKER TAPE DIRECTLY ABOVE GROUNDING ELECTRODE CONDUCTORS.
4. THE COST OF ALL MATERIALS, ALL GROUND BUSBARS, EXOTHERMIC WELDING, GROUND WELL, GROUND RODS AND ALL OTHER ITEMS TO COMPLETE THE GROUNDING ELECTRODE SYSTEM SHALL BE INCLUDED IN PAY ITEM "DYNAMIC MESSAGE SIGN, WALK-IN ACCESS, FULL MATRIX, COLOR, NTCIP 1203".
5. REFER TO SHEET ITS-31 FOR DMS TYPICAL SITE WIRING DETAIL.



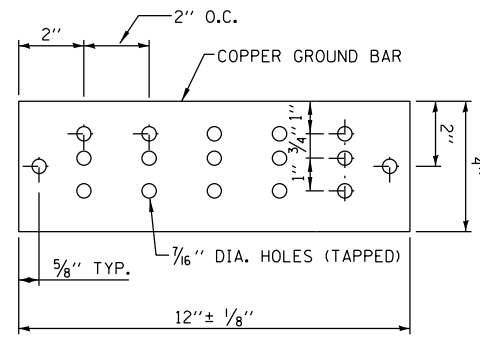
**GROUND WELL ELEVATION DETAIL**  
(NOT TO SCALE, NOTE 3)



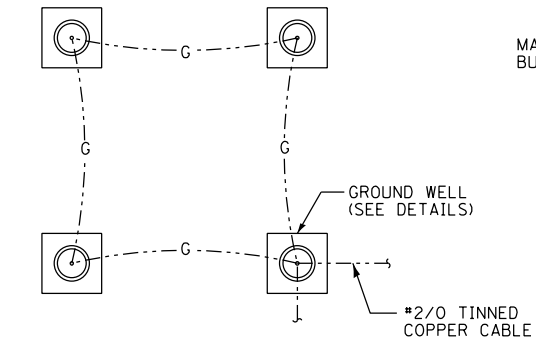
**GROUND WELL PLAN DETAIL**  
(NOT TO SCALE, NOTE 3)



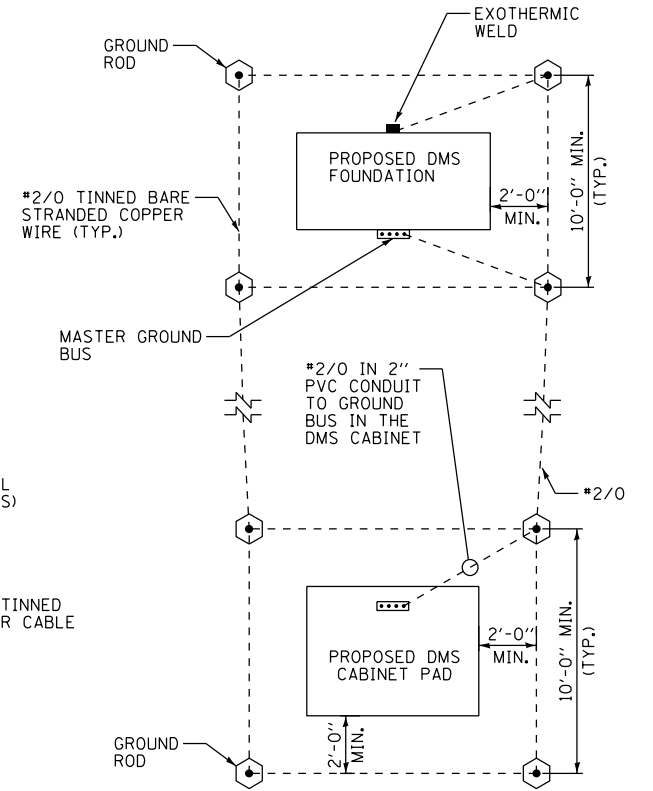
**MASTER GROUND BUSBAR CONNECTION DETAIL**  
(NOT TO SCALE)



**MASTER GROUND BUSBAR SUPPORT SPACING DETAIL**  
(NOT TO SCALE)



**GROUND HALO DETAIL**  
(NOT TO SCALE)



**GROUNDING SCHEMATIC**  
(NOT TO SCALE)



D162A77-SHT-ITS-30  
USER NAME = patrick.jordan  
PLOT SCALE = 100.0000' / in.  
PLOT DATE = 1/30/2020

DESIGNED - PTJ  
DRAWN - CAM  
CHECKED - MJL  
DATE - 1/29/2019

REVISED -  
REVISED -  
REVISED -  
REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

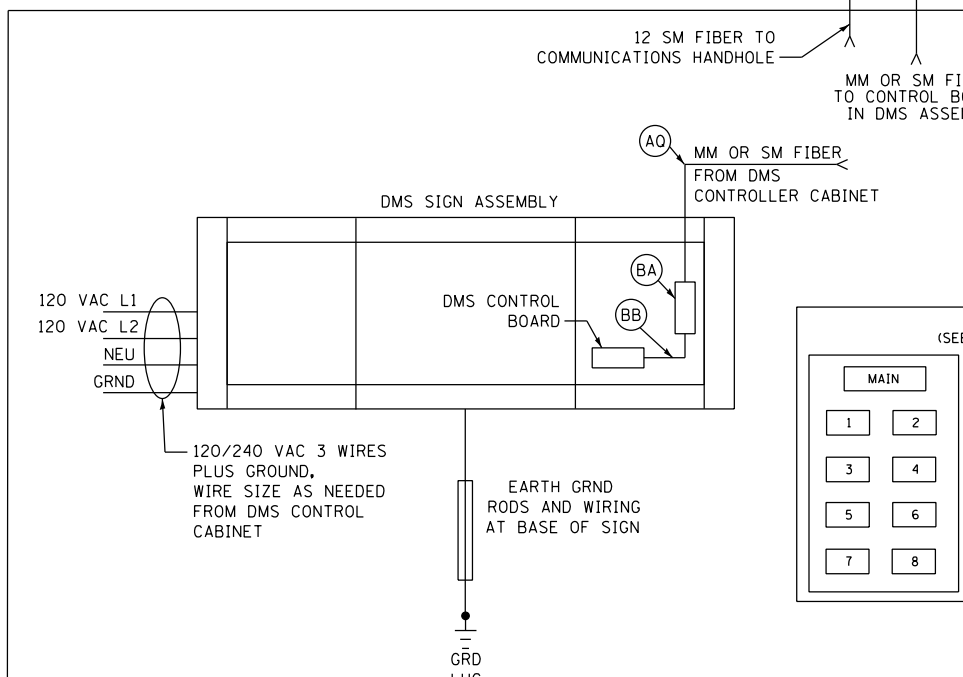
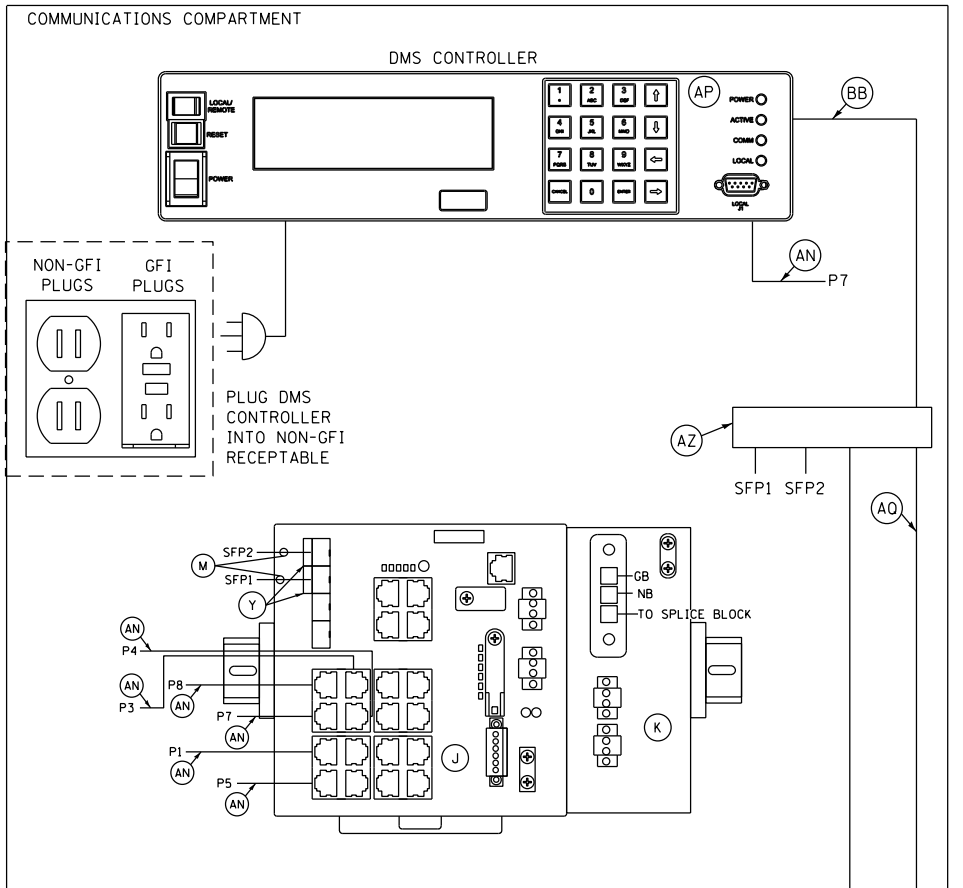
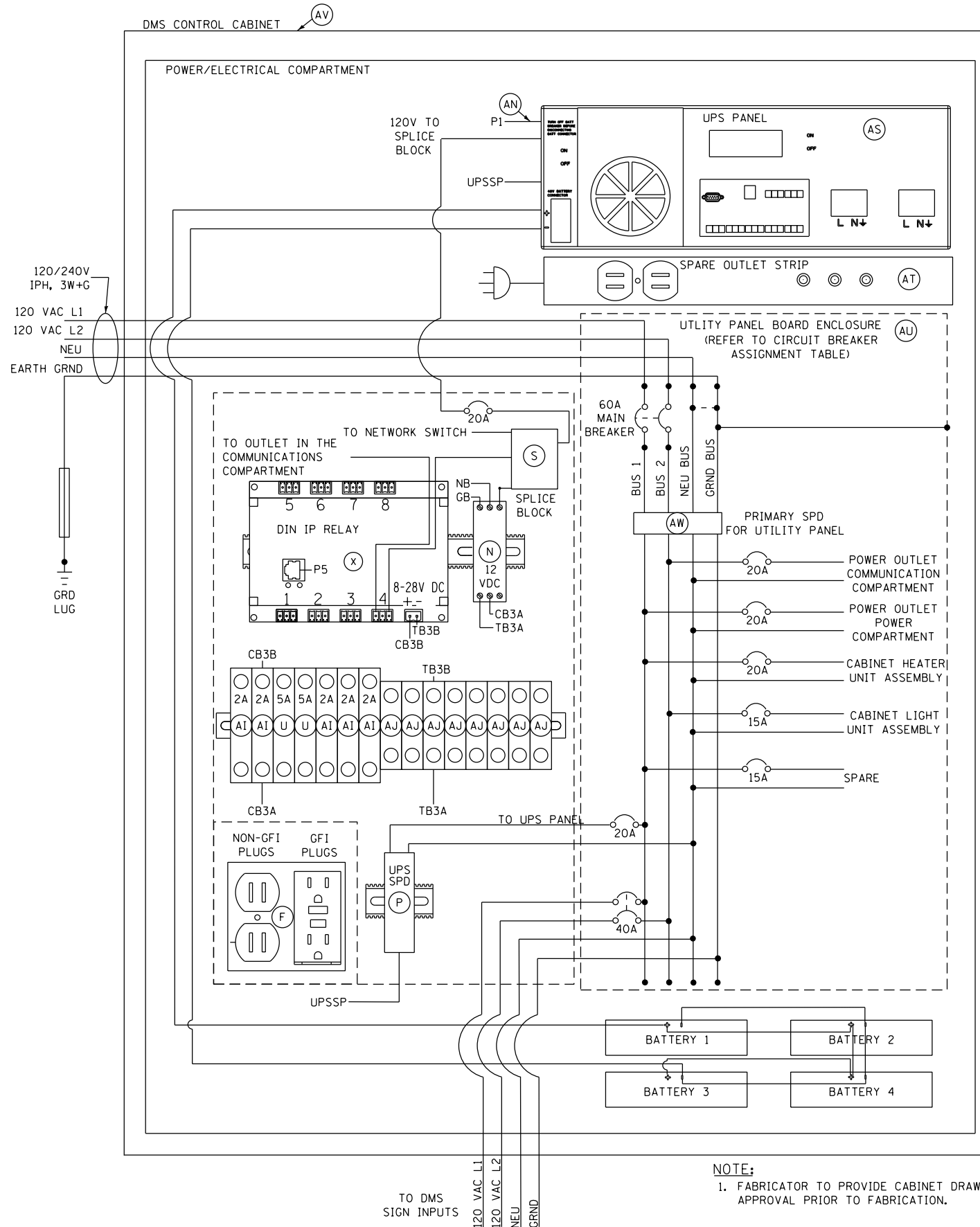
**DYNAMIC MESSAGE SIGN GROUNDING PLAN**

SCALE: N.T.S. SHEET 30 OF 46 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	819
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

ITS-30

FILE PATH = p:\VAC\CDM-Na-AVSI\electrical\local\AECOM\_DS02\_IL\000\_CAD\006\_Roadway\Sheets\62A77\_Contract\0162A77-SHT-ITS-31



- ITEM DESCRIPTION
- A-E NOT USED
  - F TWO DUPLEX 120V RECEPTACLES, ONE GFCI AND ONE STANDARD
  - G-I NOT USED
  - J NETWORK SWITCH
  - K POWER SUPPLY
  - L NOT USED
  - M 2 METER - SMFO LC-SC DUPLEX JUMPERS
  - N AC/DC POWER SUPPLY, 12VDC, 10 WATTS
  - O SMF PATCH PANEL WITH SC CONNECTORS FIBER CONNECTIONS G620U012 LAN-100-0
  - P 120VAC SURGE SUPPRESSOR, MOUNTED ON DIN RAIL
  - Q-R NOT USED
  - S SPLICE BLOCK
  - T NOT USED
  - U 5A CIRCUIT BREAKER
  - V-W NOT USED
  - X POWER CONTROLLER, 8-CHANNEL DIN ETHERNET RELAY
  - Y (2) GLC-LX-SM-RGD = 1 GBPS SM SFP MODULES
  - Z NOT USED
  - AA-AH NOT USED
  - AI 2A CIRCUIT BREAKER
  - AJ TERMINAL BLOCK
  - AK-AM NOT USED
  - AN INDOOR/OUTDOOR RATED CAT6 (1000MBS, TEMPERATURE HARDENED) THESE ARE THE CAT6 CABLES ROUTED INSIDE CABINET
  - AO NOT USED
  - AP DMS CONTROLLER
  - AQ 12-STRAND MULTI-MODE OR SINGLE-MODE FIBER OPTIC CABLE
  - AR NOT USED
  - AS UPS PANEL WITH BATTERIES
  - AT OUTLET STRIP
  - AU DMS MANUFACTURER UTILITY PANEL ENCLOSURE
  - AV DMS CONTROL CABINET TYPE 334 NEMA 3R
  - AW 120/240VAC SURGE PROTECTOR
  - AX NOT USED
  - AZ RACK MOUNTED FIBER PATCH PANEL
  - BA STAND ALONE FIBER PATCH PANEL
  - BB 2 METER FIBER JUMPER, (TYPE AND CONNECTION PER DMS MANUFACTURER)

NOTE:  
1. FABRICATOR TO PROVIDE CABINET DRAWINGS SUBMITTAL FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

CIRCUIT BREAKER ASSIGNMENT TABLE  
(SEE UTILITY PANEL BOARD CIRCUIT BREAKER LOCATIONS)

CIRCUIT BREAKER DESCRIPTION	AMPS	CIRCUIT BREAKER LOCATION
POWER OUTLET POWER COMPARTMENT	20	1
CABINET HEATER UNIT ASSEMBLY	20	2
POWER OUTLET COMMUNICATION COMPARTMENT	20	3
CABINET LIGHT UNIT ASSEMBLY	15	4
DMS SIGN	40	5
UPS PANEL	20	6
SPARE	15	8



D162A77-SHT-ITS-31  
USER NAME = patrick.jordan  
PLOT SCALE = 40.0000' / in.  
PLOT DATE = 1/30/2020

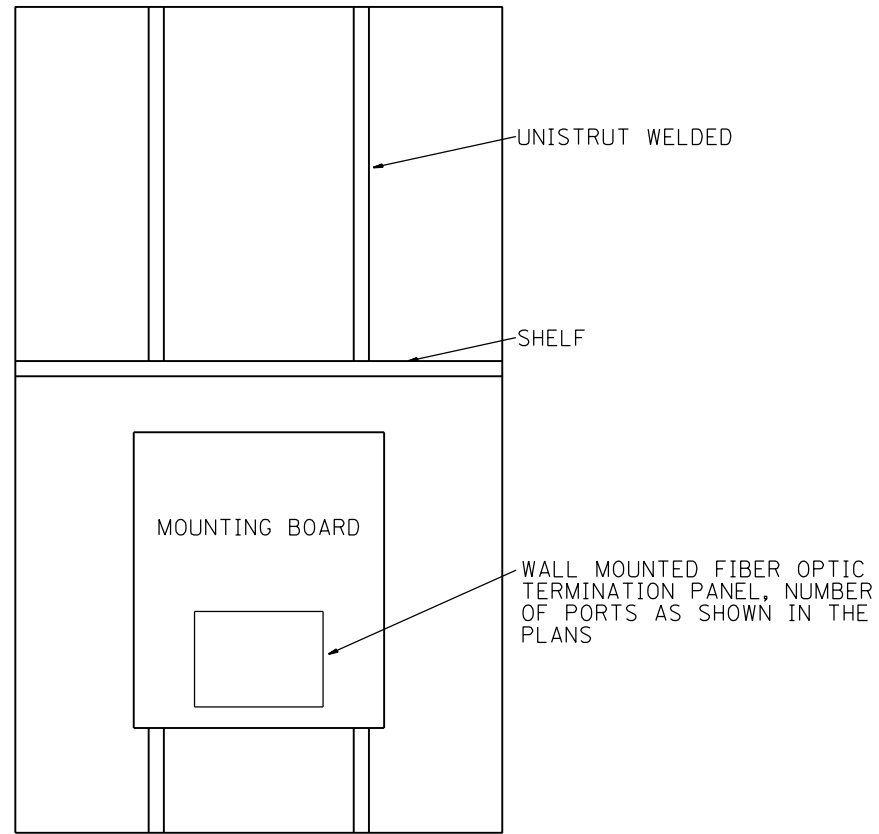
DESIGNED - PTJ  
DRAWN - CAM  
CHECKED - MJL  
DATE - 1/29/2019

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

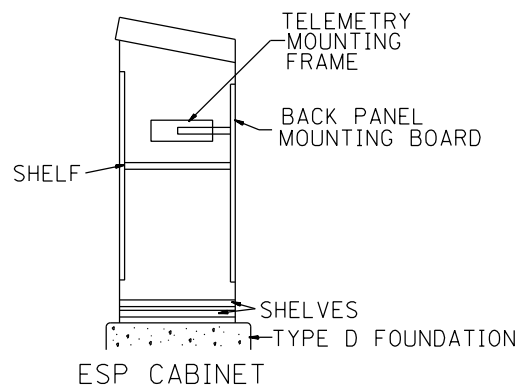
DYNAMIC MESSAGE SIGN CABINET WIRING DIAGRAM  
SCALE: N.T.S. SHEET 31 OF 46 SHEETS STA. TO STA.

F.A.I. R.T.E. 90/94/290  
SECTION 2015-018R  
COUNTY COOK  
TOTAL SHEETS 1360  
SHEET NO. 820  
CONTRACT NO. 62A77  
ILLINOIS FED. AID PROJECT

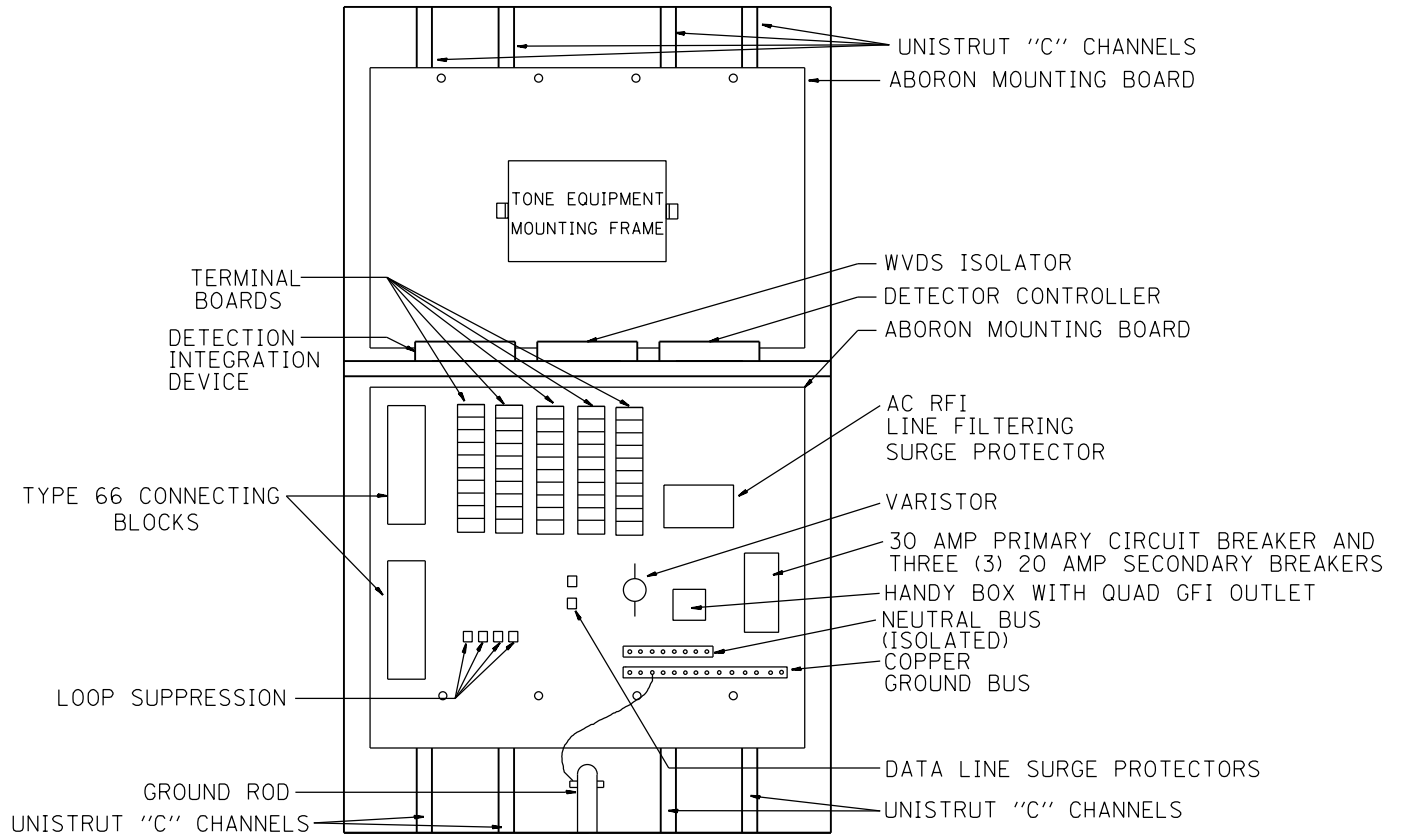
FILE PATH = p:\AECOM\NA-AVSI\ecommon\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_1\000\_CAD\006\_Roadway\Sheets\62A77\_Contract\0162A77-SHT-ITS-32



SIDE VIEW CABINET



PROFILE VIEW



FRONT VIEW CABINET

NOTES:

1. INSTALL NEW EQUIPMENT IN EXISTING CABINETS WHERE NOTED IN THE PLAN SHEETS.

ITS-32



D162A77-SHT-ITS-32	DESIGNED - PTJ	REVISED -
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 100.000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/30/2020	DATE - 1/29/2019	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

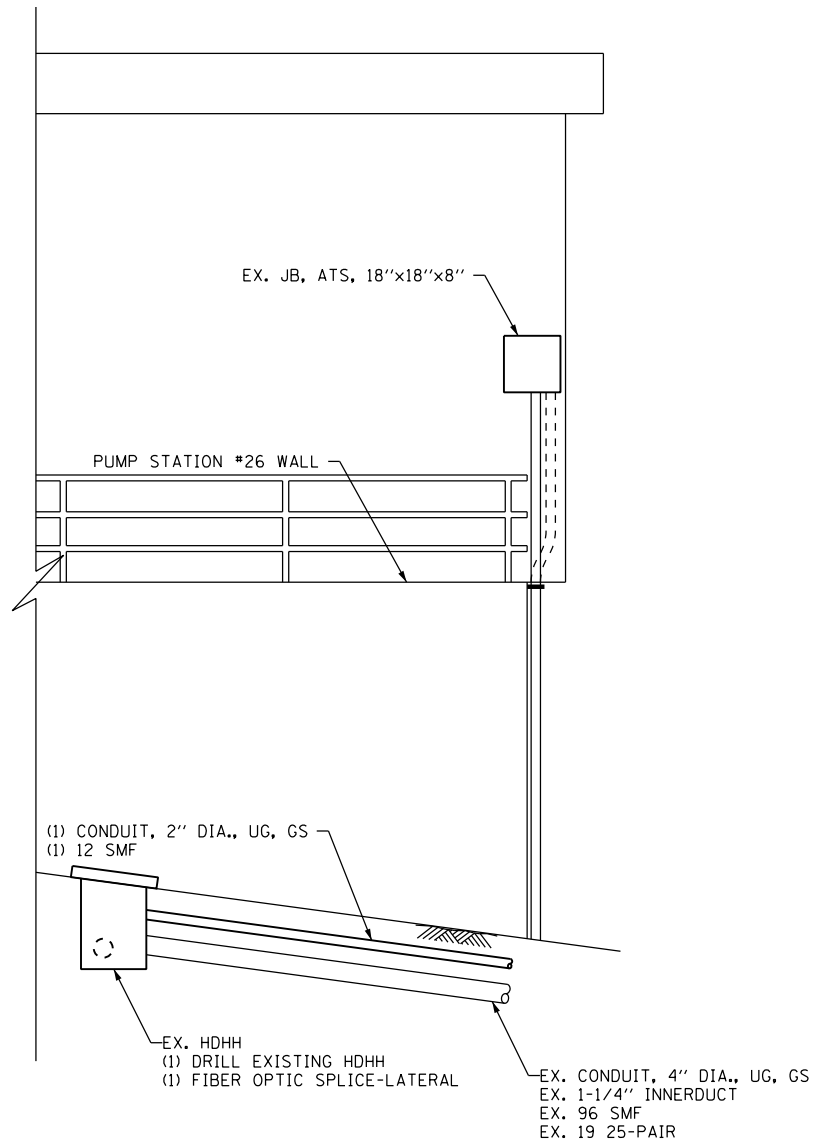
CABINET EQUIPMENT, SYSTEM DETECTOR DETAIL

SCALE: N.T.S. SHEET 32 OF 46 SHEETS STA. TO STA.

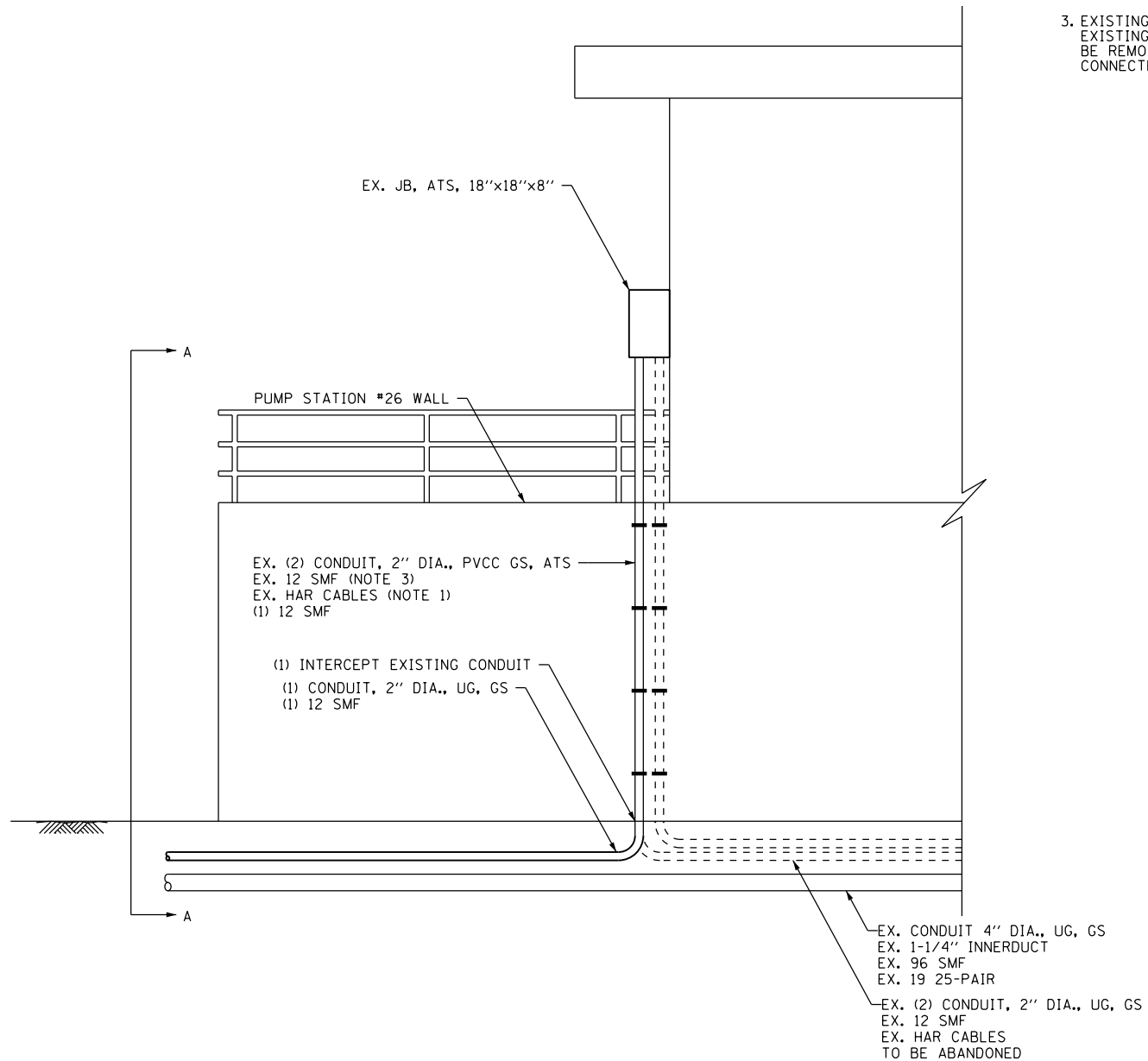
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	821
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

**NOTES:**

1. THE EXISTING HAR CABLE SHALL BE REMOVED FROM EXISTING CONDUIT ROUTED TO THE JUNCTION BOX ATTACHED TO PUMP STATION #26. THIS WORK WILL NOT BE PAID FOR SEPARATELY AND WILL BE INCLUDED IN THE COST OF THE "REMOVE EXISTING TRAFFIC SURVEILLANCE EQUIPMENT" PAY ITEM.
2. INTERCEPT THE EXISTING CONDUIT PREVIOUSLY OCCUPIED BY THE HAR CABLE AND ROUTE TO THE EXISTING HEAVY-DUTY HANDHOLE. INSTALL PROPOSED 12 FIBER OPTIC CABLE, SPLICE TO THE EXISTING 96 FIBER OPTIC CABLE IN THE HANDHOLE AND TERMINATE IN PUMP STATION #26.
3. EXISTING 12 FIBER OPTIC CABLE FROM PUMP STATION #26 TO THE EXISTING DMS-10 CABINET IN THE MEDIAN AT TAYLOR STREET SHALL BE REMOVED AFTER THE PROPOSED 12 FIBER OPTIC CABLE HAS BEEN CONNECTED.



**SECTION A-A**  
(LOOKING NORTH)



**PUMP STATION #26 ELEVATION**  
(LOOKING WEST)

FILE PATH = p:\aecom\ms-ansi\ecommon\local\ecom\0502\_NA\Documents\01\_Americas\Transportation\60269938\_Circle Phase\_1\000\_CAD\006\_Roadway\_Sheets\62A77\_Contract\0162A77-SHT-ITS-33



D162A77-SHT-ITS-33  
 USER NAME = patrick.jordan  
 PLOT SCALE = 100.0000' / in.  
 PLOT DATE = 1/30/2020

DESIGNED - PTJ  
 DRAWN - CAM  
 CHECKED - MJL  
 DATE - 1/29/2019

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

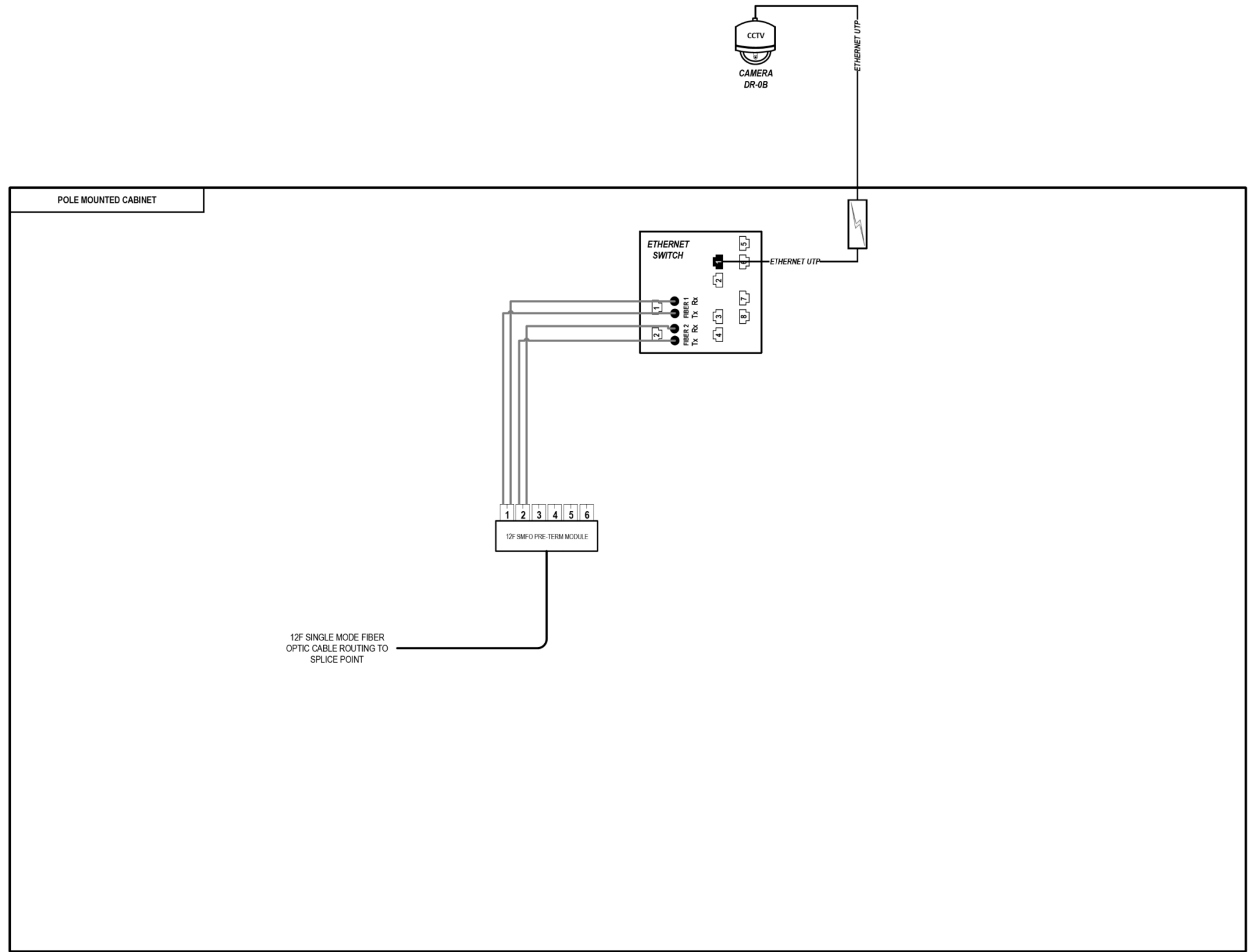
**PUMP STATION #26 CONDUIT INSTALLATION DETAIL**

SCALE: NTS SHEET 33 OF 46 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	822
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

ITS-33

FILE PATH = p:\AECOM\NA-AVSI\ecommon\line\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle Phase 1\000\_CAD\006\_Roadway\Sheets\62A77\_Contracts\0162A77-SHT-ITS-34



### LEGEND

- E238.2D DEVICE IDENTIFIER
- WIRELESS VEHICLE DETECTION SYSTEM
- EXISTING WIRELESS VEHICLE DETECTION SYSTEM
- CCTV CAMERA
- EXISTING CCTV CAMERA
- DMS DYNAMIC MESSAGE SIGN
- EXISTING DYNAMIC MESSAGE SIGN
- PATCH THROUGH FIBER OPTIC JUMPER
- FIBER OPTIC JUMPER, SINGLE MODE
- FIBER OPTIC PIGTAIL, SINGLE MODE
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPlice
- FIBER PATCH PANEL
- SURGE SUPPRESSION

NOTE: GRAYSCALE AND DASHED LINE WEIGHT DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

**STAGING OF WORK:**

**CONTRACT 62A77 - TEMPORARY**  
 INSTALL CCTV CAMERA, CCTV CABINET, AND CABINET EQUIPMENT WITH RELATED CABLING. INSTALL 12 SMF LATERAL TO TRUNKLINE AND SPLICE.

**CONTRACT 62A77 - PERMANENT**  
 PULL BACK EXISTING 12 SMF LATERAL TO HANDHOLE, RELOCATE CAMERA ELEMENTS TO PERMANENT POLE, RE-INSTALL 12 SMF LATERAL TO CABINET WHILE MAINTAINING TRUNKLINE SPLICE.

**CCTV CAMERA DR-0B  
(SOUTH OF ROOSEVELT RD.)**

ITS-34



D162A77-SHT-ITS-34  
 USER NAME = myersc  
 PLOT SCALE = 100.0000' / in.  
 PLOT DATE = 1/24/2020

DESIGNED - PTJ	REVISED -
DRAWN - CAM	REVISED -
CHECKED - MJL	REVISED -
DATE - 1/29/2019	REVISED -

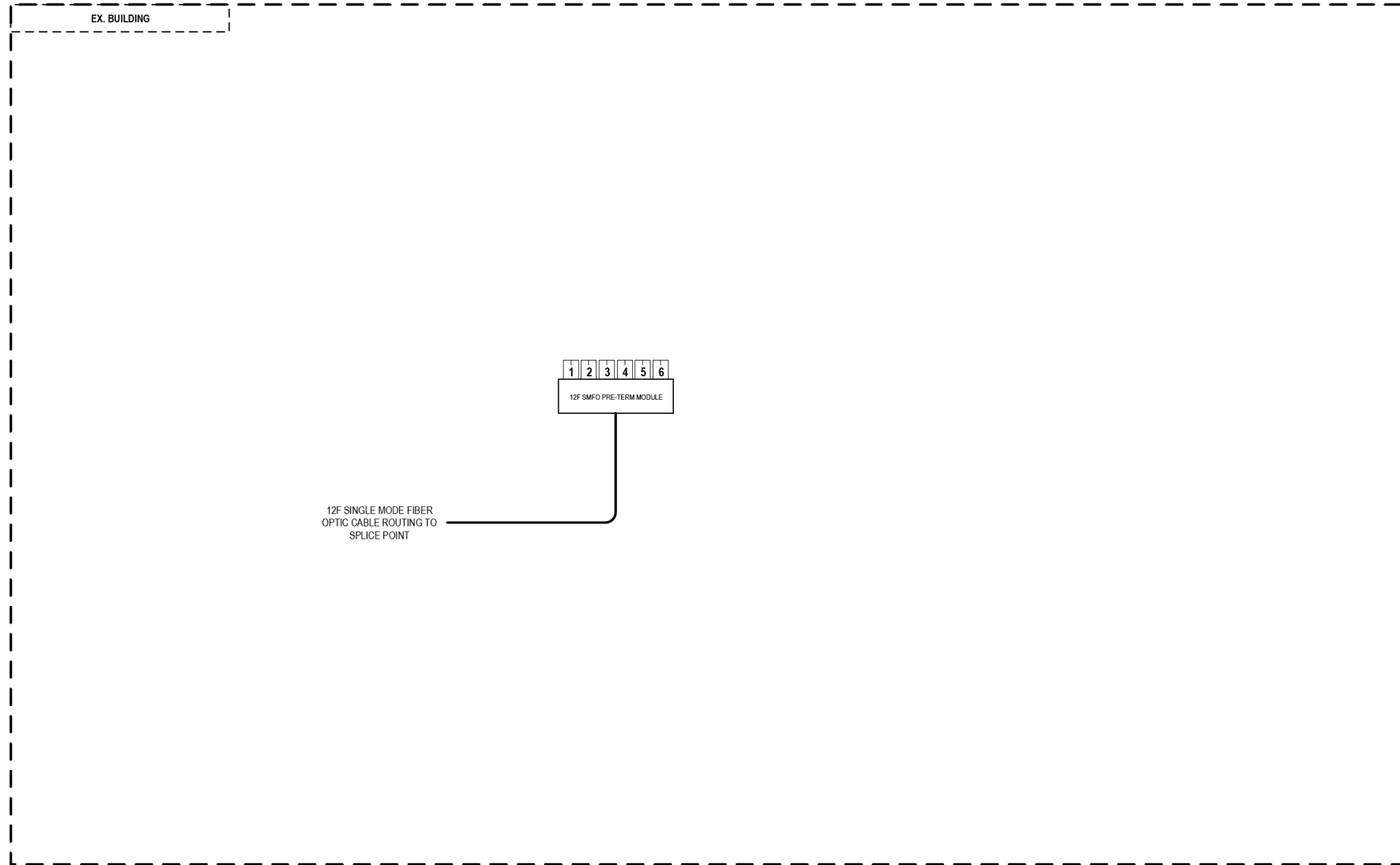
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**COMMUNICATION EQUIPMENT SCHEMATIC  
CCTV CAMERA DR-0B (SOUTH OF ROOSEVELT ROAD)**

SCALE: NTS SHEET 34 OF 46 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	823
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\AECOM\NA-AVSI\ecommon\line\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle Phase II\000\_CAD\006\_Roadway\Sheets\62A77\_Contract\0162A77-SHT-ITS-35



### LEGEND

- E238.2D DEVICE IDENTIFIER
- WIRELESS VEHICLE DETECTION SYSTEM
- EXISTING WIRELESS VEHICLE DETECTION SYSTEM
- CCTV CAMERA
- EXISTING CCTV CAMERA
- DMS DYNAMIC MESSAGE SIGN
- EXISTING DYNAMIC MESSAGE SIGN
- PATCH THROUGH FIBER OPTIC JUMPER
- FIBER OPTIC JUMPER, SINGLE MODE
- FIBER OPTIC PIGTAIL, SINGLE MODE
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL
- SURGE SUPPRESSION

NOTE: GRAYSCALE AND DASHED LINE WEIGHT DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

**STAGING OF WORK:**  
**CONTRACT 62A77**  
 INSTALL 12 SMF LATERAL TO TRUNKLINE AND SPLICE.

**PUMP STATION #26**  
**(1150 S. UNION AVENUE)**

ITS-35



D162A77-SHT-ITS-35	DESIGNED - PTJ	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/24/2020	DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

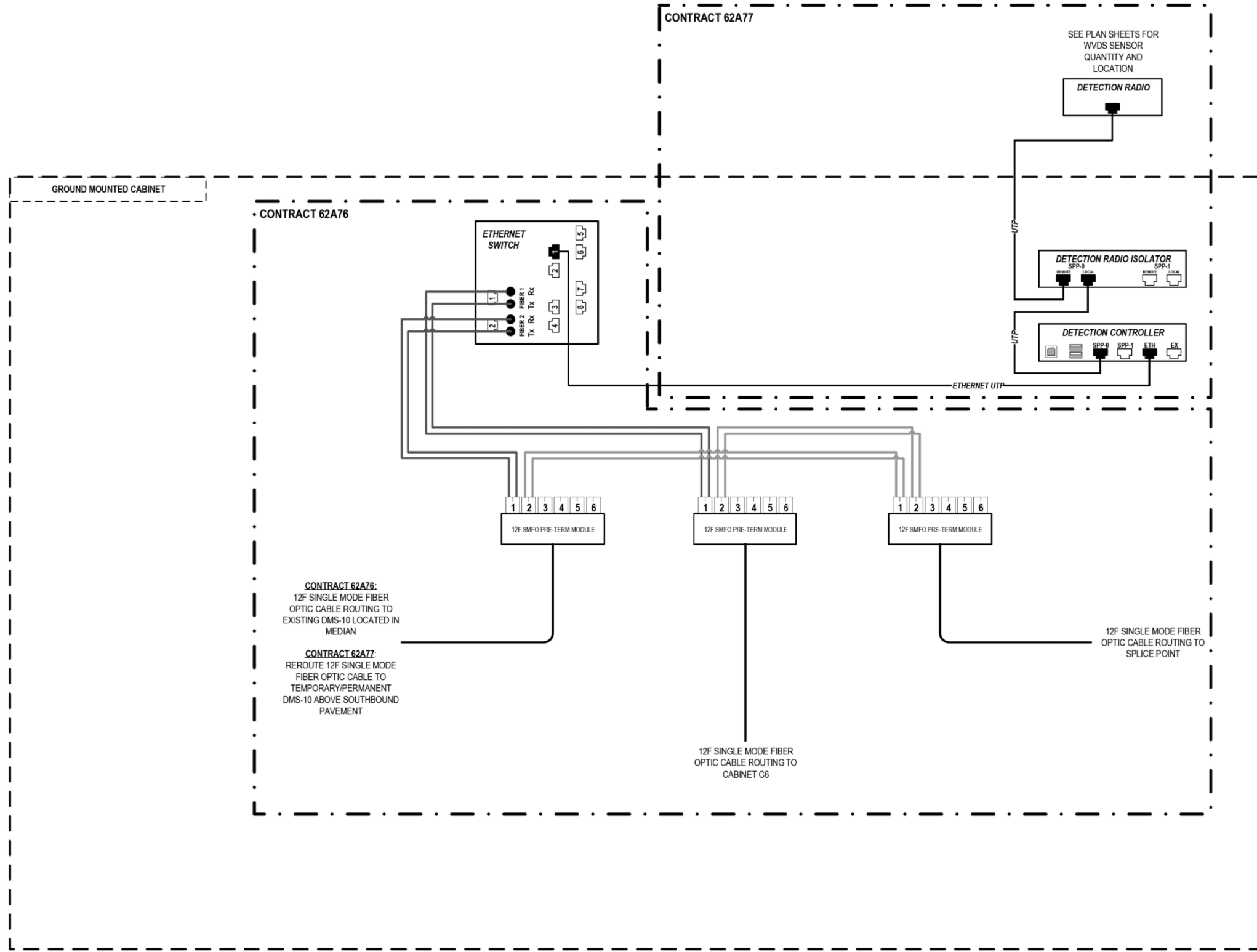
**COMMUNICATION EQUIPMENT SCHEMATIC**  
**PUMP STATION #26 (1150 S. UNION AVENUE)**

SCALE: NTS SHEET 35 OF 46 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	824
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62A77	



FILE PATH = p:\aecom\ms-ans\leecomon\line\local\AECOM\_DS02\_IL\000\_CAD\006\_Roadway\Sheets\62A77\_Contracts\0162A77-SHT-ITS-36



**CONTRACT 62A76:**  
12F SINGLE MODE FIBER OPTIC CABLE ROUTING TO EXISTING DMS-10 LOCATED IN MEDIAN

**CONTRACT 62A77:**  
REROUTE 12F SINGLE MODE FIBER OPTIC CABLE TO TEMPORARY/PERMANENT DMS-10 ABOVE SOUTHBOUND PAVEMENT

12F SINGLE MODE FIBER OPTIC CABLE ROUTING TO SPLICE POINT

12F SINGLE MODE FIBER OPTIC CABLE ROUTING TO CABINET C6

**LEGEND**

- E238.2D DEVICE IDENTIFIER
- WIRELESS VEHICLE DETECTION SYSTEM
- EXISTING WIRELESS VEHICLE DETECTION SYSTEM
- CCTV CAMERA
- EXISTING CCTV CAMERA
- DMS DYNAMIC MESSAGE SIGN
- EXISTING DYNAMIC MESSAGE SIGN
- PATCH THROUGH FIBER OPTIC JUMPER
- FIBER OPTIC JUMPER, SINGLE MODE
- FIBER OPTIC PIGTAIL, SINGLE MODE
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL
- SURGE SUPPRESSION

NOTE: GRAYSCALE AND DASHED LINE WEIGHT DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

**STAGING OF WORK:**

**CONTRACT 62A76**  
INSTALL ITS CABINET EQUIPMENT AND RELATED CABLING. TERMINATE 12 SMF LATERAL FROM CABINET C6 IN CABINET C3. INSTALL 12 SMF LATERAL TO EXISTING DMS-10 IN THE MEDIAN AND TERMINATE. INSTALL 12 SMF LATERAL TO TRUNKLINE AND SPLICE.

**CONTRACT 62A77**  
ITS CABINET, EQUIPMENT AND RELATED CABLING INSTALLED BY OTHERS IN CONTRACT 62A76. CONTRACT 62A77 TO INSTALL WVDS AND ASSOCIATED ITS CABINET EQUIPMENT AND RELATED CABLING. REROUTE EXISTING 12 SMF LATERAL FROM EXISTING DMS-10 IN THE MEDIAN TO TEMPORARY/PERMANENT DMS-10 CABINET AND TERMINATE.

**ITS CABINET C3  
(SOUTH OF TAYLOR STREET)**



D162A77-SHT-ITS-36	DESIGNED - PTJ	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/24/2020	DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

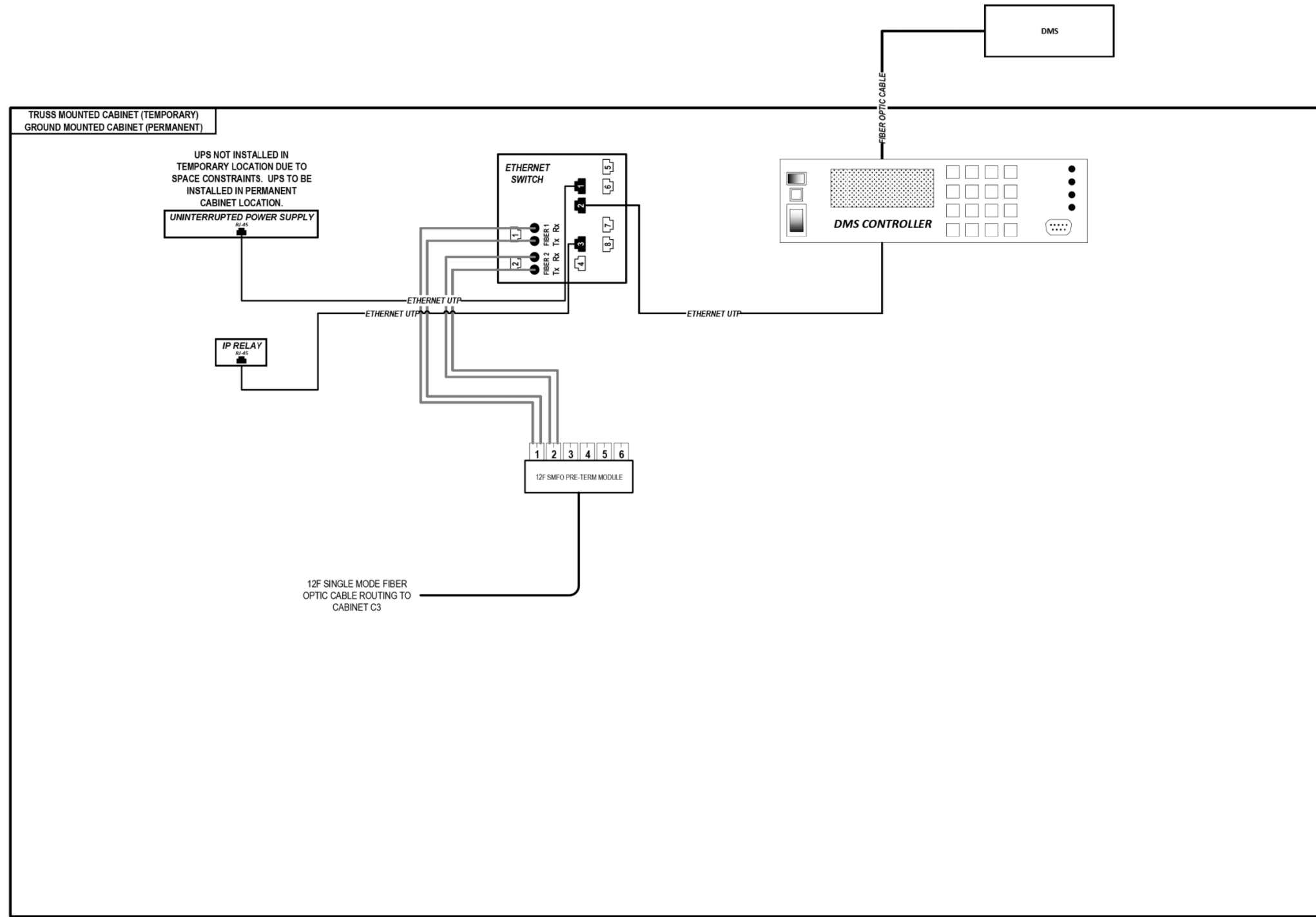
**COMMUNICATION EQUIPMENT SCHEMATIC  
ITS CABINET C3 (SOUTH OF TAYLOR STREET)**

SCALE: NTS SHEET 36 OF 46 SHEETS STA. TO STA.

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	825
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

ITS-36

FILE PATH = p:\aecom\ms-ans\electrom\local\AECOM\_DS02\_IL\000\_CAD\006\_Roadway\Sheets\62A77\_Contracts\0162A77-SHT-ITS-37



### LEGEND

- E238.2D DEVICE IDENTIFIER
- WIRELESS VEHICLE DETECTION SYSTEM
- EXISTING WIRELESS VEHICLE DETECTION SYSTEM
- CCTV CAMERA
- EXISTING CCTV CAMERA
- DMS DYNAMIC MESSAGE SIGN
- EXISTING DYNAMIC MESSAGE SIGN
- PATCH THROUGH FIBER OPTIC JUMPER
- FIBER OPTIC JUMPER, SINGLE MODE
- FIBER OPTIC PIGTAIL, SINGLE MODE
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL
- SURGE SUPPRESSION

NOTE: GRAYSCALE AND DASHED LINE WEIGHT DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

**STAGING OF WORK:**  
**CONTRACT 62A77**  
 INSTALL TEMPORARY/PERMANENT DMS CABINET, CABINET EQUIPMENT AND RELATED CABLING. RELOCATE EXISTING DMS CONTROLLER AND RELATED TO NEW CABINET. REROUTE EXISTING 12 SMF LATERAL FROM CABINET C3 AND TERMINATE.

## DYNAMIC MESSAGE SIGN DMS-10 (NORTH OF TAYLOR STREET)

ITS-37



D162A77-SHT-ITS-37  
 USER NAME = myersc  
 PLOT SCALE = 100.0000' / in.  
 PLOT DATE = 1/24/2020

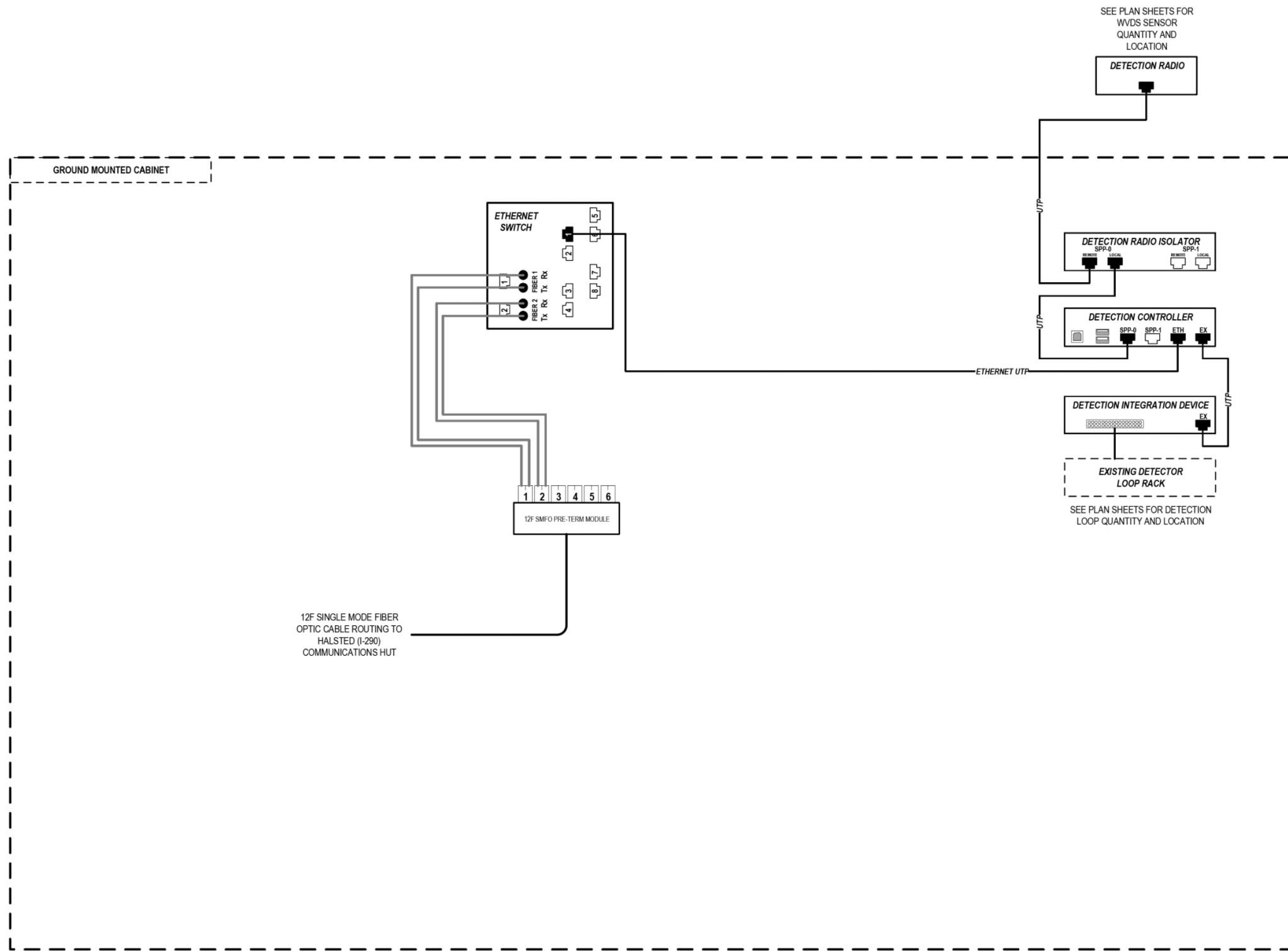
DESIGNED - PTJ	REVISED -
DRAWN - CAM	REVISED -
CHECKED - MJL	REVISED -
DATE - 1/29/2019	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

COMMUNICATION EQUIPMENT SCHEMATIC  
 DYNAMIC MESSAGE SIGN DMS-10 (NORTH OF TAYLOR STREET)  
 SCALE: NTS SHEET 37 OF 46 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	826
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\aecom\na-ans\electrom\local\AECOM\_DS02\_IL\000\_CAD\006\_Roadway\Sheets\62A77\_Contracts\0162A77-SHT-ITS-38



### LEGEND

- E238.2D DEVICE IDENTIFIER
- WIRELESS VEHICLE DETECTION SYSTEM
- EXISTING WIRELESS VEHICLE DETECTION SYSTEM
- CCTV CAMERA
- EXISTING CCTV CAMERA
- DMS DYNAMIC MESSAGE SIGN
- EXISTING DYNAMIC MESSAGE SIGN
- PATCH THROUGH FIBER OPTIC JUMPER
- FIBER OPTIC JUMPER, SINGLE MODE
- FIBER OPTIC PIGTAIL, SINGLE MODE
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL
- SURGE SUPPRESSION

NOTE: GRAYSCALE AND DASHED LINE WEIGHT DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

**STAGING OF WORK:**  
**CONTRACT 60Y00**  
 RELOCATE EXISTING ITS CABINET AND RELATED EQUIPMENT AND CABLING FROM INSIDE EXISTING HALSTED (I-290) COMMUNICATIONS HUT TO NEW EXTERIOR LOCATION. INSTALL 12 SMF LATERAL TO NEW COMMUNICATIONS HUT AND TERMINATE.  
**62A77**  
 ITS CABINET, CABINET EQUIPMENT, AND CABLING TO BE INSTALLED IN CONTRACT 60Y00. CONTRACT 62A77 TO INSTALL WVDS SYSTEM AND RELATED CABLING.

## ITS CABINET Z6 (FLYOVER RAMP)

ITS-38



D162A77-SHT-ITS-38	DESIGNED - PTJ	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/24/2020	DATE - 1/29/2019	REVISED -

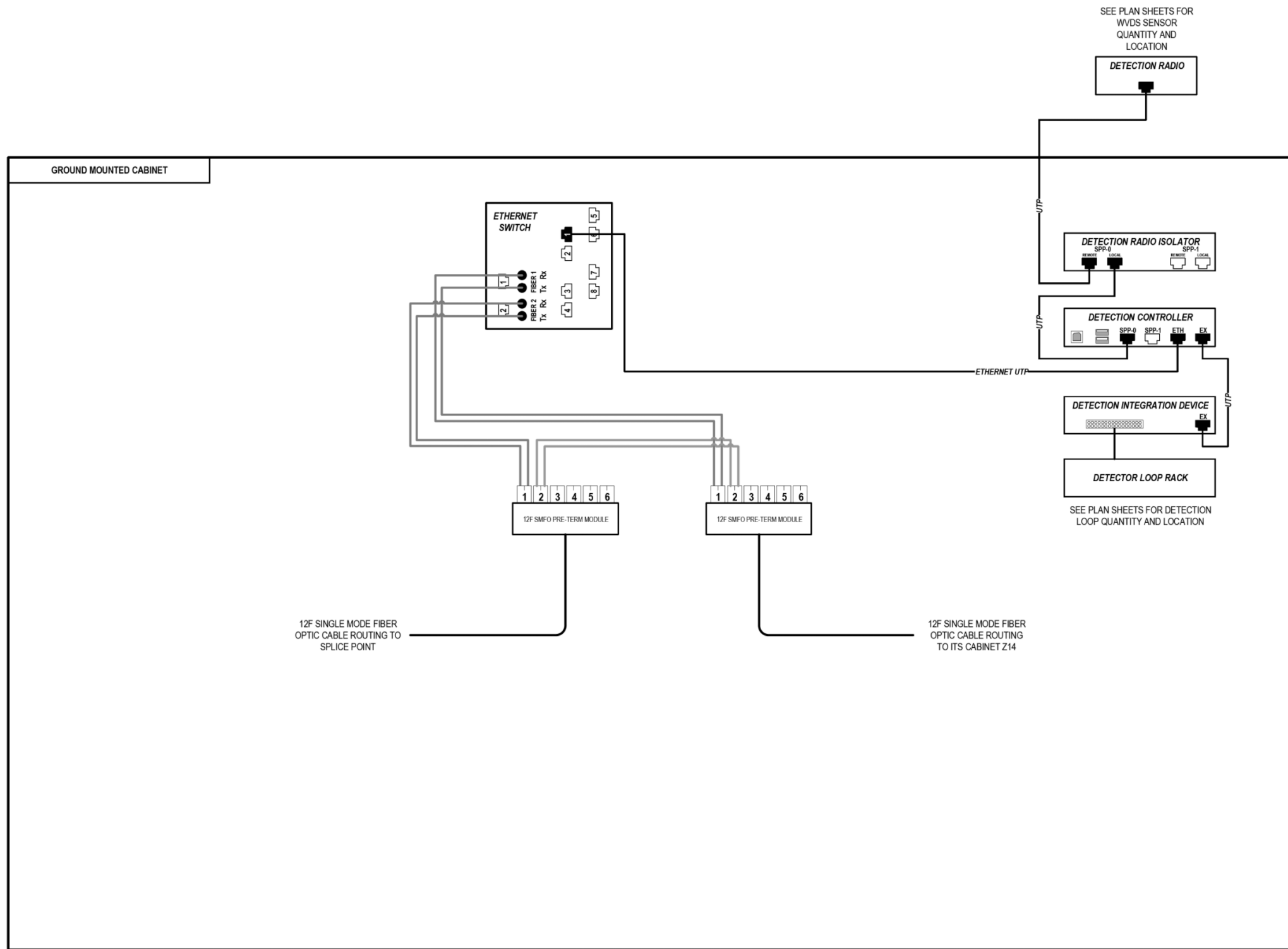
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

COMMUNICATION EQUIPMENT SCHEMATIC			
ITS CABINET Z6 (FLYOVER RAMP)			
SCALE: NTS	SHEET 38 OF 46 SHEETS	STA.	TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	827
ILLINOIS FED. AID PROJECT				

CONTRACT NO. 62A77

FILE PATH = p:\aecom\ms-nv\sl\ecommon\line\local\AECOM\_DS02\_ILA\Documents\01\_Americas\Transportation\60269938\_Circle Phase II\000\_CAD\006\_Roadway\Sheets\62A77\_Contracts\0162A77-SHT-ITS-39



### LEGEND

- E238.2D DEVICE IDENTIFIER
- WIRELESS VEHICLE DETECTION SYSTEM
- EXISTING WIRELESS VEHICLE DETECTION SYSTEM
- CCTV CAMERA
- EXISTING CCTV CAMERA
- DMS DYNAMIC MESSAGE SIGN
- EXISTING DYNAMIC MESSAGE SIGN
- PATCH THROUGH FIBER OPTIC JUMPER
- FIBER OPTIC JUMPER, SINGLE MODE
- FIBER OPTIC PIGTAIL, SINGLE MODE
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL
- SURGE SUPPRESSION

NOTE: GRAYSCALE AND DASHED LINE WEIGHT DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

**STAGING OF WORK:**

**CONTRACT 62A76**  
 INSTALL ITS CABINET, CABINET EQUIPMENT, AND RELATED CABLING. INSTALL 12 SMF LATERAL TO TRUNKLINE, CABLE TO BE SPLICED TO TRUNKLINE BY OTHERS IN CONTRACT 60Y00. 12 SMF LATERAL FROM CABINET Z14 INSTALLED BY OTHERS IN CONTRACT 62A77.

**CONTRACT 62A77**  
 ITS CABINET, CABINET EQUIPMENT, RELATED CABLING AND 12 SMF LATERAL TO TRUNKLINE INSTALLED BY OTHERS IN CONTRACT 62A76. 12 SMF LATERAL TO TRUNKLINE TO BE SPLICED TO TRUNKLINE BY OTHERS IN CONTRACT 60Y00. INSTALL 12 SMF LATERAL FROM CABINET Z14 AND TERMINATE.

**CONTRACT 60Y00**  
 ITS CABINET, CABINET EQUIPMENT, AND CABLING INSTALLED BY OTHERS IN CONTRACT 62A76 AND CONTRACT 62A77. CONTRACT 60Y00 TO SPLICE 12 SMF LATERAL TO TRUNKLINE.

## ITS CABINET Y15 (MONROE STREET)

ITS-39



D162A77-SHT-ITS-39	DESIGNED - PTJ	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/24/2020	DATE - 1/29/2019	REVISED -

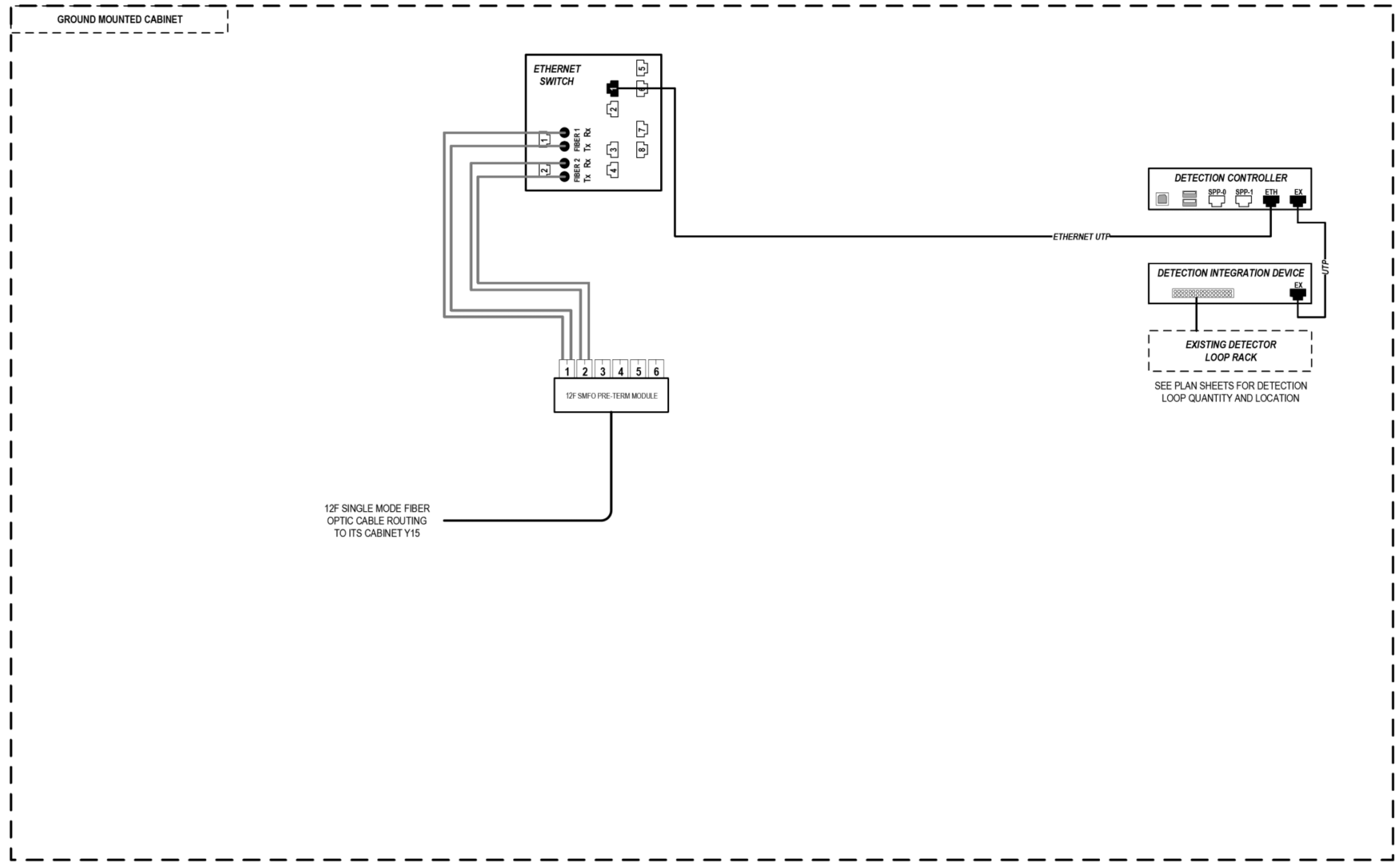
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

COMMUNICATION EQUIPMENT SCHEMATIC  
ITS CABINET Y15 (MONROE STREET)

SCALE: NTS SHEET 39 OF 46 SHEETS STA. TO STA.

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	828
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\AECOM\NA-AVSI\ecommon\local\AECOM\_DS02\_IL\000\_CAD\006\_Roadway\Sheets\62A77\_Contracts\0162A77-SHT-ITS-40



**LEGEND**

- E238.2D DEVICE IDENTIFIER
- WIRELESS VEHICLE DETECTION SYSTEM
- EXISTING WIRELESS VEHICLE DETECTION SYSTEM
- CCTV CAMERA
- EXISTING CCTV CAMERA
- DMS DYNAMIC MESSAGE SIGN
- EXISTING DYNAMIC MESSAGE SIGN
- PATCH THROUGH FIBER OPTIC JUMPER
- FIBER OPTIC JUMPER, SINGLE MODE
- FIBER OPTIC PIGTAIL, SINGLE MODE
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL
- SURGE SUPPRESSION

NOTE: GRAYSCALE AND DASHED LINE WEIGHT DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

**STAGING OF WORK:**  
**CONTRACT 62A77**  
 INSTALL ITS CABINET EQUIPMENT, RELATED CABLING AND 12 SMF LATERAL TO CABINET Y15 AND TERMINATE.

**ITS CABINET Z14  
 (MONROE STREET)**

ITS-40



D162A77-SHT-ITS-40	DESIGNED - PTJ	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/24/2020	DATE - 1/29/2019	REVISED -

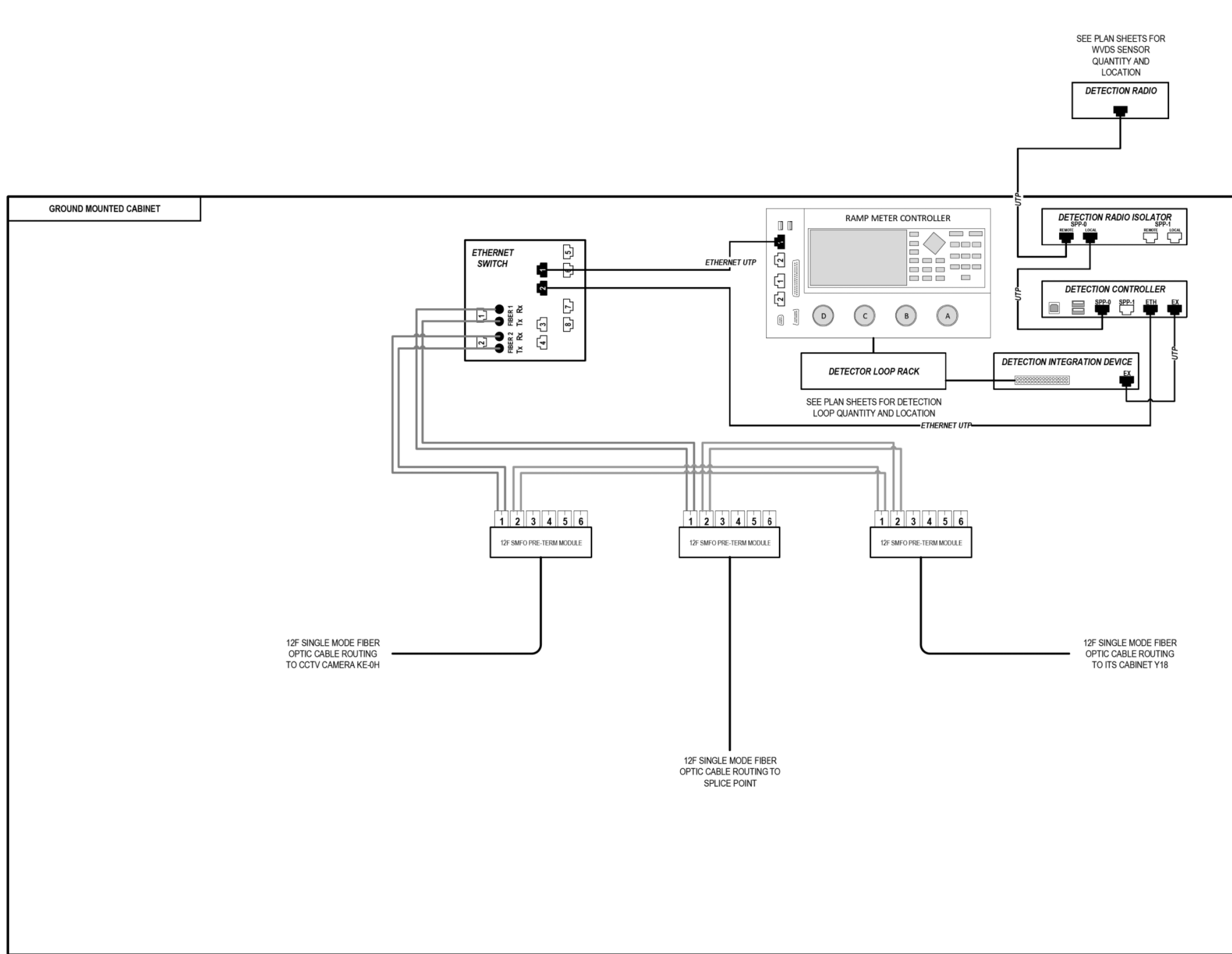
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**COMMUNICATION EQUIPMENT SCHEMATIC  
 ITS CABINET Z14 (MONROE STREET)**

SCALE: NTS SHEET 40 OF 46 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	829
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\aecom\na-ans\electrom\line\local\AECOM\_DS02\_IL\000\_CAD\006\_Roadway\Sheets\62A77\_Contracts\0162A77-SHT-ITS-41



### LEGEND

- E238.2D DEVICE IDENTIFIER
- WIRELESS VEHICLE DETECTION SYSTEM
- EXISTING WIRELESS VEHICLE DETECTION SYSTEM
- CCTV CAMERA
- EXISTING CCTV CAMERA
- DMS DYNAMIC MESSAGE SIGN
- EXISTING DYNAMIC MESSAGE SIGN
- PATCH THROUGH FIBER OPTIC JUMPER
- FIBER OPTIC JUMPER, SINGLE MODE
- FIBER OPTIC PIGTAIL, SINGLE MODE
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL
- SURGE SUPPRESSION

NOTE: GRAYSCALE AND DASHED LINE WEIGHT DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

**STAGING OF WORK:**

**CONTRACT 62A76**  
 INSTALL ITS CABINET, CABINET EQUIPMENT, AND RELATED CABLING. TERMINATE 12 SMF LATERAL FROM CAMERA KE-0H. INSTALL 12 SMF LATERAL TO TRUNKLINE. CABLE TO BE SPLICED TO TRUNKLINE BY OTHERS IN CONTRACT 60Y00. 12 SMF LATERAL FROM CABINET Y18 INSTALLED BY OTHERS IN CONTRACT 62A77.

**CONTRACT 62A77**  
 ITS CABINET, CABINET EQUIPMENT, AND CABLING INSTALLED BY OTHERS IN CONTRACT 62A76. INSTALL 12 SMF LATERAL TO CABINET Y18 AND TERMINATE.

**CONTRACT 60Y00**  
 ITS CABINET, CABINET EQUIPMENT, AND CABLING INSTALLED BY OTHERS IN CONTRACT 62A76 AND CONTRACT 62A77. CONTRACT 60Y00 TO SPLICE 12 SMF LATERAL TO TRUNKLINE.

## ITS CABINET Y19 (MADISON STREET)

ITS-41



D162A77-SHT-ITS-41  
 USER NAME = myersc  
 PLOT SCALE = 100.0000' / 1" / in.  
 PLOT DATE = 1/24/2020

DESIGNED - PTJ	REVISED -
DRAWN - CAM	REVISED -
CHECKED - MJL	REVISED -
DATE - 1/29/2019	REVISED -

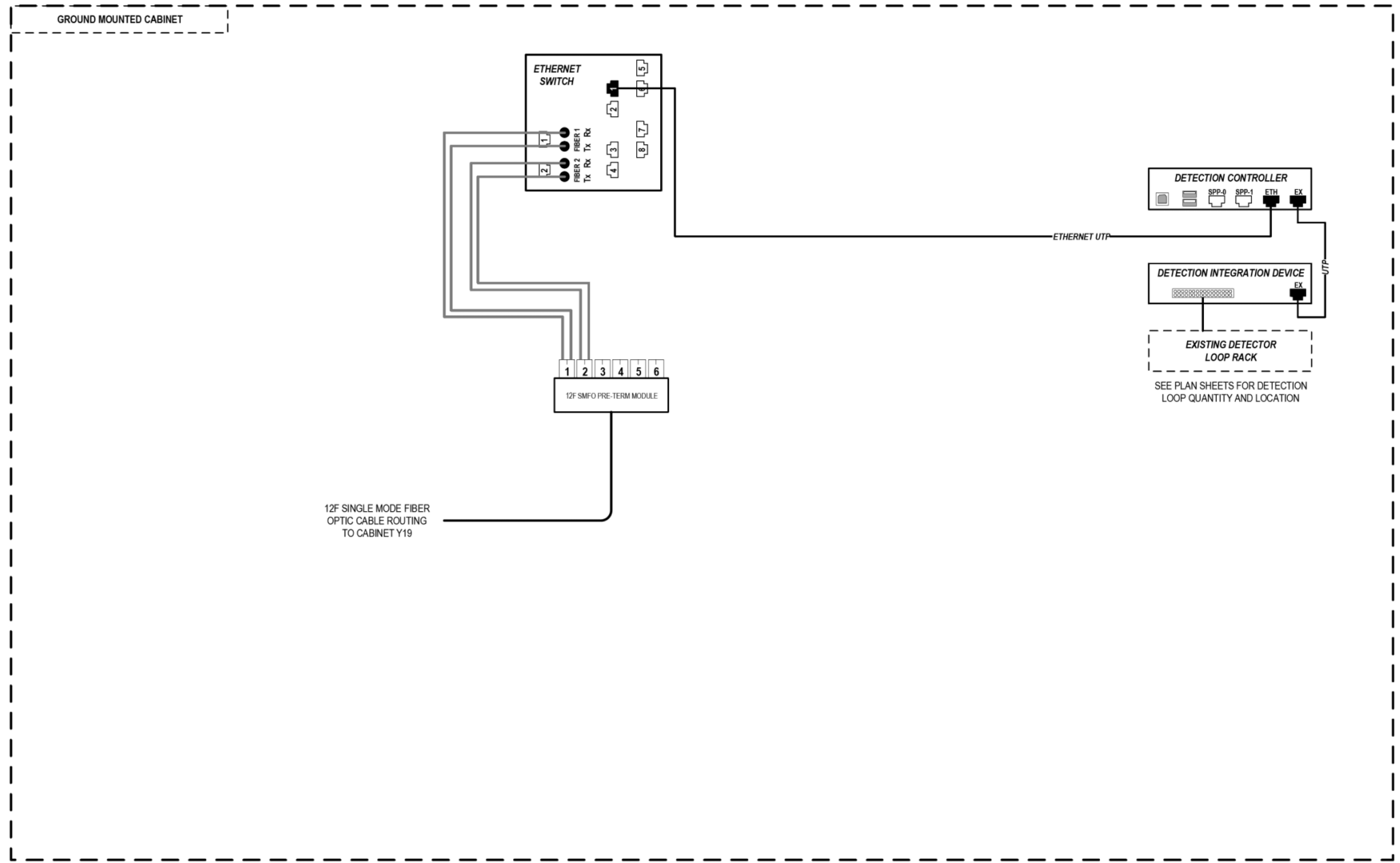
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

COMMUNICATION EQUIPMENT SCHEMATIC  
 ITS CABINET Y19 (MADISON STREET)

SCALE: NTS SHEET 41 OF 46 SHEETS STA. TO STA.

F.A.I. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	830
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\AECOM\NA-AVSI\ecommon\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle Phase\1\000\_CAD\006\_Roadway\Sheets\62A77\_Contracts\0162A77-SHT-ITS-42



### LEGEND

- E238.2D DEVICE IDENTIFIER
- WIRELESS VEHICLE DETECTION SYSTEM
- EXISTING WIRELESS VEHICLE DETECTION SYSTEM
- CCTV CAMERA
- EXISTING CCTV CAMERA
- DMS DYNAMIC MESSAGE SIGN
- EXISTING DYNAMIC MESSAGE SIGN
- PATCH THROUGH FIBER OPTIC JUMPER
- FIBER OPTIC JUMPER, SINGLE MODE
- FIBER OPTIC PIGTAIL, SINGLE MODE
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL
- SURGE SUPPRESSION

NOTE: GRAYSCALE AND DASHED LINE WEIGHT DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

**STAGING OF WORK:**  
**CONTRACT 62A77**  
 INSTALL ITS CABINET EQUIPMENT, RELATED CABLING AND 12 SMF LATERAL TO CABINET Y19 AND TERMINATE.

## ITS CABINET Y18 (MADISON STREET)

ITS-42



D162A77-SHT-ITS-42	DESIGNED - PTJ	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/24/2020	DATE - 1/29/2019	REVISED -

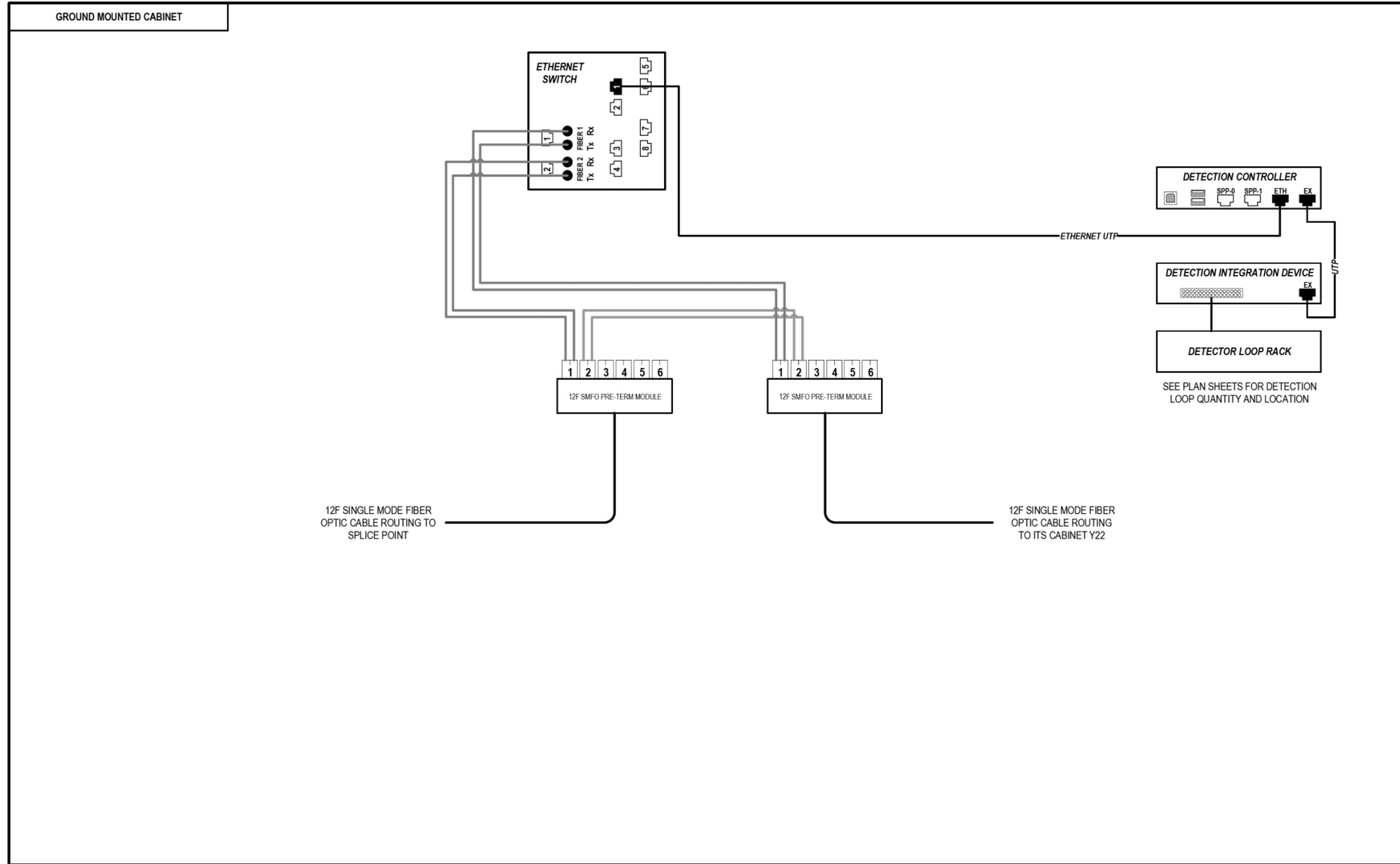
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**COMMUNICATION EQUIPMENT SCHEMATIC  
ITS CABINET Y18 (MADISON STREET)**

SCALE: NTS SHEET 42 OF 46 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	831
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\aecom\ms-ansi\ecommon\local\AECOM\_DS02\_ILA\Documents\01\_Americas\Transportation\60269938\_Circle Phase\11000\_CAD\006\_Roadway\Sheets\62A77\_Contracts\0162A77-SHT-ITS-43



### LEGEND

- E238.2D DEVICE IDENTIFIER
- WIRELESS VEHICLE DETECTION SYSTEM
- EXISTING WIRELESS VEHICLE DETECTION SYSTEM
- CCTV CAMERA
- EXISTING CCTV CAMERA
- DMS DYNAMIC MESSAGE SIGN
- EXISTING DYNAMIC MESSAGE SIGN
- PATCH THROUGH FIBER OPTIC JUMPER
- FIBER OPTIC JUMPER, SINGLE MODE
- FIBER OPTIC PIGTAIL, SINGLE MODE
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL
- SURGE SUPPRESSION

NOTE: GRAYSCALE AND DASHED LINE WEIGHT DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

**STAGING OF WORK:**

**CONTRACT 62A76**

INSTALL ITS CABINET, CABINET EQUIPMENT, AND RELATED CABLING. INSTALL 12 SMF LATERAL TO TRUNKLINE, CABLE TO BE SPLICED TO TRUNKLINE BY OTHERS IN CONTRACT 60Y00. 12 SMF LATERAL FROM CABINET Y22 INSTALLED BY OTHERS IN CONTRACT 62A77.

**CONTRACT 62A77**

ITS CABINET, CABINET EQUIPMENT, AND RELATED CABLING INSTALLED BY OTHERS IN CONTRACT 62A76. INSTALL 12 SMF LATERAL FROM CABINET Y22 AND TERMINATE.

**CONTRACT 60Y00**

ITS CABINET, CABINET EQUIPMENT, AND CABLING INSTALLED BY OTHERS IN CONTRACT 62A76 AND CONTRACT 62A77. CONTRACT 60Y00 TO SPLICE 12 SMF LATERAL TO TRUNKLINE.

**ITS CABINET Y23  
(WASHINGTON BOULEVARD)**

ITS-43



D162A77-SHT-ITS-43	DESIGNED - PTJ	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/24/2020	DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

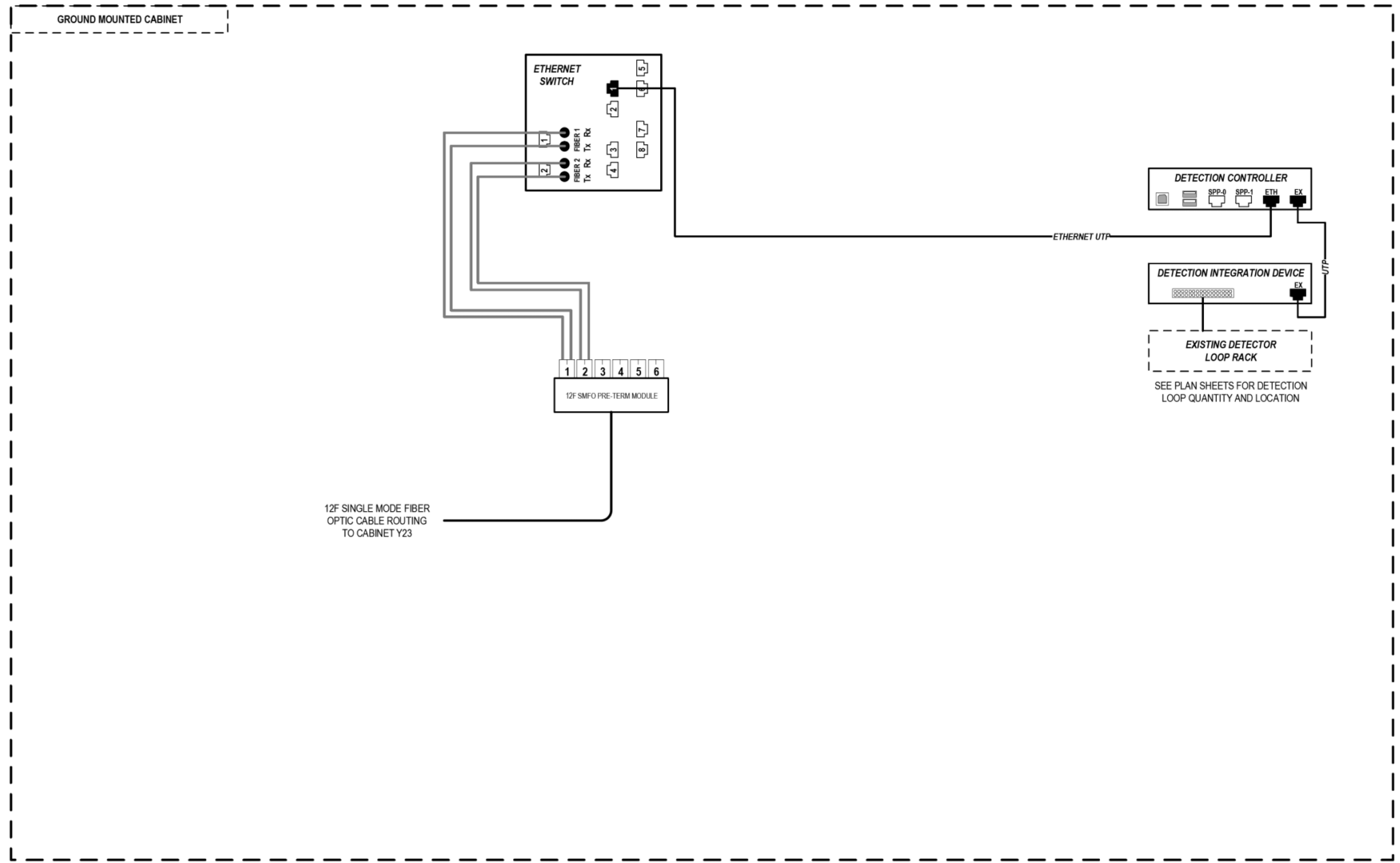
**COMMUNICATION EQUIPMENT SCHEMATIC  
ITS CABINET Y13 (WASHINGTON BOULEVARD)**

SCALE: NTS SHEET 43 OF 46 SHEETS STA. TO STA.

F.A.I. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	832
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				



FILE PATH = p:\AECOM\NA-AVSI\ecommon\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle Phase\1\000\_CAD\006\_Roadway\Sheets\62A77\_Contracts\0162A77-SHT-ITS-44



**LEGEND**

- E238.2D DEVICE IDENTIFIER
- WIRELESS VEHICLE DETECTION SYSTEM
- EXISTING WIRELESS VEHICLE DETECTION SYSTEM
- CCTV CAMERA
- EXISTING CCTV CAMERA
- DMS DYNAMIC MESSAGE SIGN
- EXISTING DYNAMIC MESSAGE SIGN
- PATCH THROUGH FIBER OPTIC JUMPER
- FIBER OPTIC JUMPER, SINGLE MODE
- FIBER OPTIC PIGTAIL, SINGLE MODE
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL
- SURGE SUPPRESSION

NOTE: GRAYSCALE AND DASHED LINE WEIGHT DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

**STAGING OF WORK:**  
**CONTRACT 62A77**  
 INSTALL ITS CABINET EQUIPMENT, RELATED CABLING AND 12 SMF LATERAL TO CABINET Y23 AND TERMINATE.

**ITS CABINET Y22  
 (WASHINGTON BOULEVARD)**

ITS-44



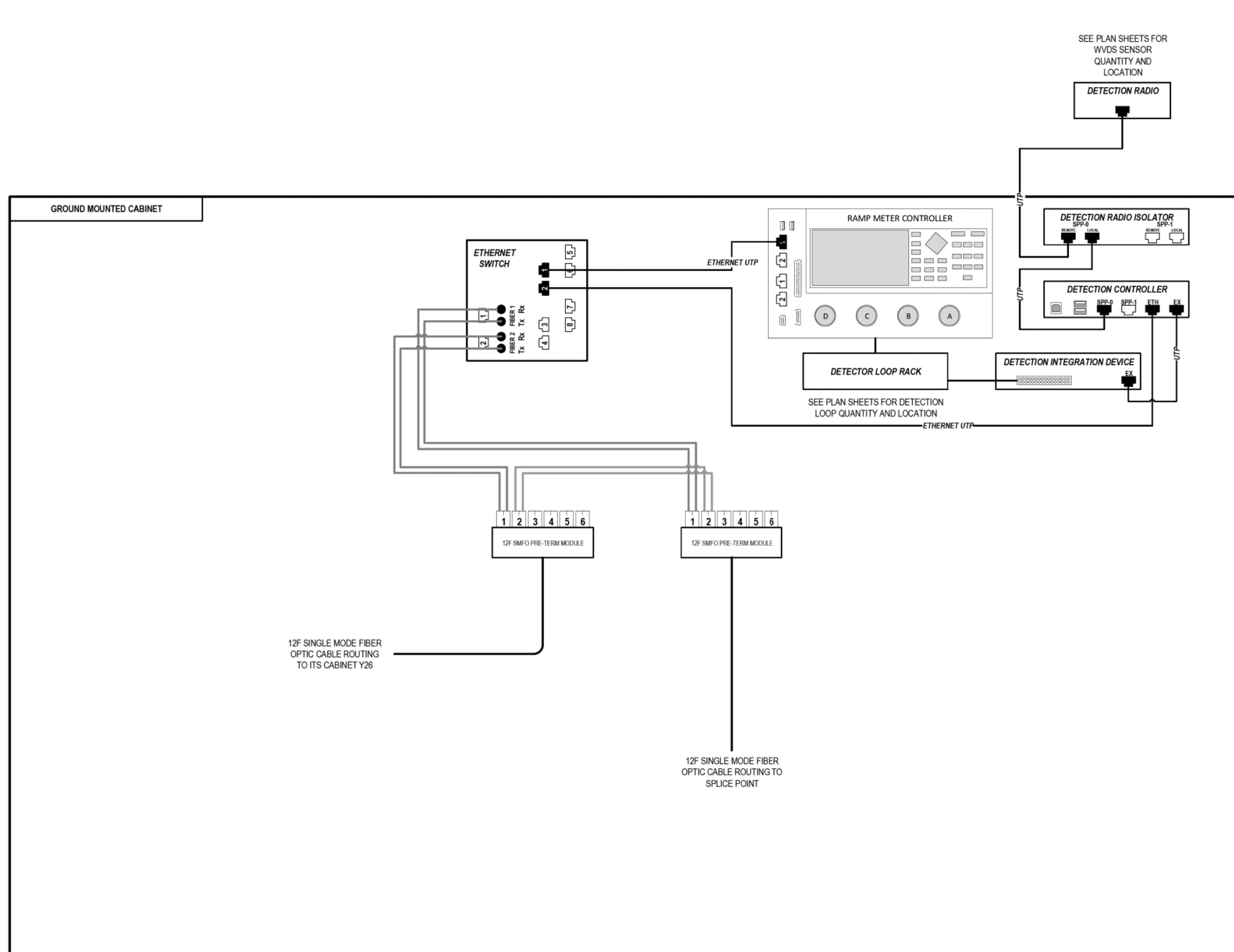
D162A77-SHT-ITS-44	DESIGNED - PTJ	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/24/2020	DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>COMMUNICATION EQUIPMENT SCHEMATIC</b>	
<b>ITS CABINET Y22 (WASHINGTON BOULEVARD)</b>	
SCALE: NTS	SHEET 44 OF 46 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	833
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\naecom\na-ans\leecomon\line\local\AECOM\_DS02\_IL\000\_CAD\006\_Roadway\Sheets\62A77\_Contracts\0162A77-SHT-ITS-45



### LEGEND

- E238.2D DEVICE IDENTIFIER
- WIRELESS VEHICLE DETECTION SYSTEM
- EXISTING WIRELESS VEHICLE DETECTION SYSTEM
- CCTV CAMERA
- EXISTING CCTV CAMERA
- DMS DYNAMIC MESSAGE SIGN
- EXISTING DYNAMIC MESSAGE SIGN
- PATCH THROUGH FIBER OPTIC JUMPER
- FIBER OPTIC JUMPER, SINGLE MODE
- FIBER OPTIC PIGTAIL, SINGLE MODE
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL
- SURGE SUPPRESSION

NOTE: GRAYSCALE AND DASHED LINE WEIGHT DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

**STAGING OF WORK:**

**CONTRACT 62A76**  
 INSTALL ITS CABINET, CABINET EQUIPMENT, AND RELATED CABLING. INSTALL 12 SMF LATERAL TO TRUNKLINE, CABLE TO BE SPLICED TO TRUNKLINE BY OTHERS IN CONTRACT 60Y00. 12 SMF LATERAL FROM CABINET Y26 INSTALLED BY OTHERS IN CONTRACT 62A77.

**CONTRACT 62A77**  
 ITS CABINET, CABINET EQUIPMENT, AND RELATED CABLING INSTALLED BY OTHERS IN CONTRACT 62A76. INSTALL 12 SMF LATERAL TO CABINET Y26 AND TERMINATE.

**CONTRACT 60Y00**  
 ITS CABINET, CABINET EQUIPMENT, AND CABLING INSTALLED BY OTHERS IN CONTRACT 62A76 AND CONTRACT 62A77. CONTRACT 60Y00 TO SPLICE 12 SMF LATERAL TO TRUNKLINE.

## ITS CABINET Y27 (RANDOLPH STREET)

ITS-45



D162A77-SHT-ITS-45	DESIGNED - PTJ	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/24/2020	DATE - 1/29/2019	REVISED -

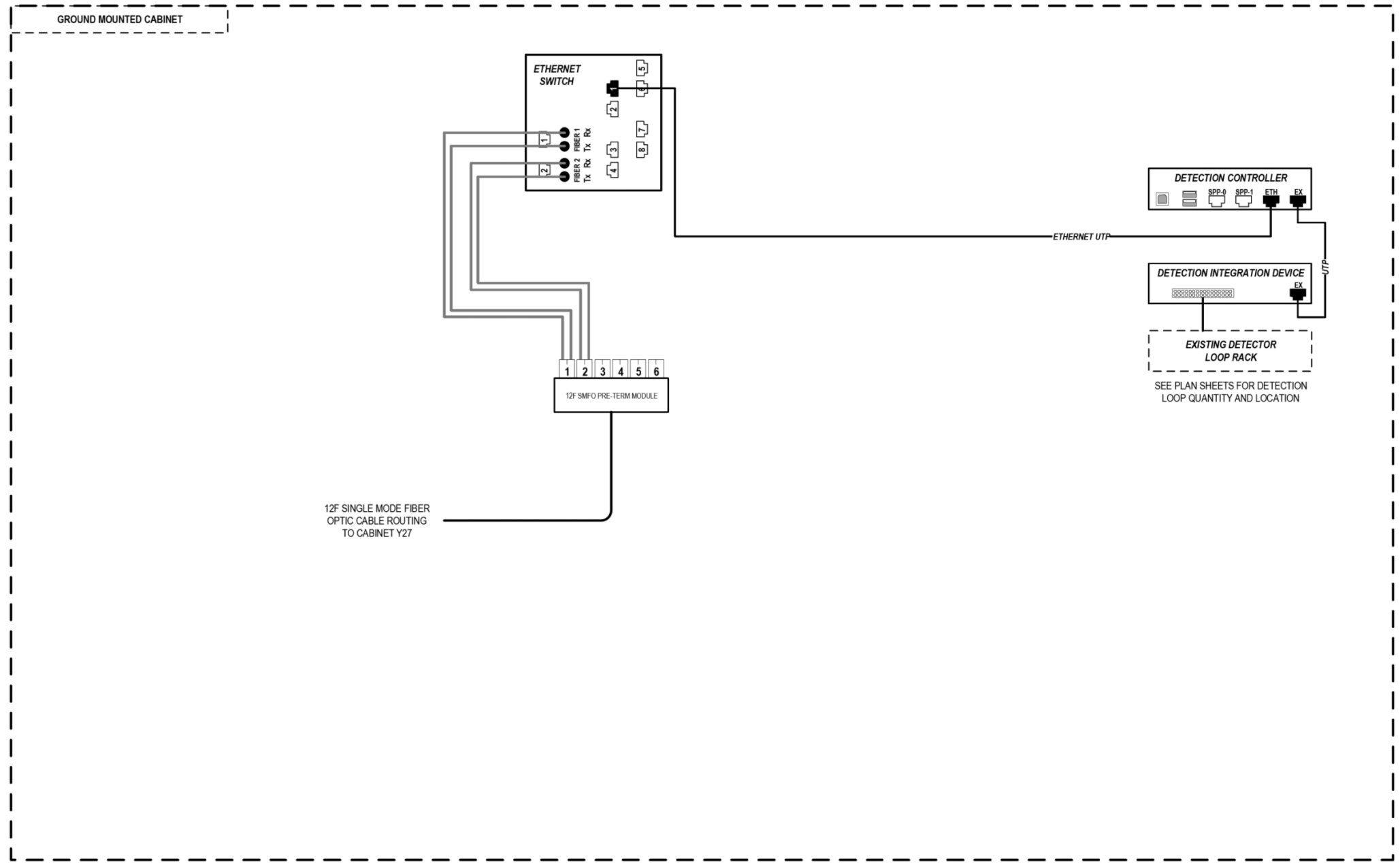
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

COMMUNICATION EQUIPMENT SCHEMATIC  
ITS CABINET Y27 (RANDOLPH STREET)

SCALE: NTS SHEET 45 OF 46 SHEETS STA. TO STA.

F.A.I. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	834
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\AECOM\NA-AVSI\ecommon\line\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle\_Phase\_1\000\_CAD\006\_Roadway\_Sheets\62A77\_Contracts\0162A77-SHT-ITS-46



### LEGEND

- E238.2D DEVICE IDENTIFIER
- WIRELESS VEHICLE DETECTION SYSTEM
- EXISTING WIRELESS VEHICLE DETECTION SYSTEM
- CCTV CAMERA
- EXISTING CCTV CAMERA
- DMS DYNAMIC MESSAGE SIGN
- EXISTING DYNAMIC MESSAGE SIGN
- PATCH THROUGH FIBER OPTIC JUMPER
- FIBER OPTIC JUMPER, SINGLE MODE
- FIBER OPTIC PIGTAIL, SINGLE MODE
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL
- SURGE SUPPRESSION

NOTE: GRAYSCALE AND DASHED LINE WEIGHT DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

**STAGING OF WORK:**  
**CONTRACT 62A77**  
 INSTALL ITS CABINET EQUIPMENT, RELATED CABLING AND 12 SMF LATERAL TO CABINET Y27 AND TERMINATE.

## ITS CABINET Y26 (RANDOLPH STREET)

ITS-46



D162A77-SHT-ITS-46	DESIGNED - PTJ	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/24/2020	DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>COMMUNICATION EQUIPMENT SCHEMATIC</b>	
<b>ITS CABINET Y26 (RANDOLPH STREET)</b>	
SCALE: NTS	SHEET 46 OF 46 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	835
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

Bench Mark: Chisel "X" on east side of I-90 ±80 feet South of Monroe Street on southeast corner of handhole on concrete. Elev. 578.58.

Existing Structure: Existing Retaining Walls 26 and 27. Cast-in-place retaining walls on spread footing and bin wall supported by piles that measure 69'-5" from existing Madison Entrance Ramp abutment (SN 016-2053). Maximum height from top of wall to bottom of footing measures 16'-3". The south portion of the existing retaining walls is to be removed and replaced with an MSE wall. The top part of the north portion of the wall is to be removed and replaced with a concrete slab and parapet.

The existing Madison SB Entrance Ramp will be closed and traffic will be detoured during construction. Existing Madison Street Bridge to remain open during construction. Traffic on I-90/94 will be maintained with stage construction.

No Salvage.

Notes:  
 Wall offsets are measured from the @ of Madison SB Entrance Ramp to the front face of Existing Wall or precast panels.  
 F.F. denotes Front Face.  
 B.F. denotes Back Face.

\* For elevations, see Table 1 on Sheet SI-03 of SI-16.  
 \*\* Partial Existing Retaining Wall Removal with Concrete Slab  
 \*\*\* Complete Existing Retaining Wall Removal with MSE Wall

**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition (Portion of Existing Wall to Remain)

2017 AASHTO LRFD Bridge Design Specifications 8th Edition

**DESIGN STRESSES**

**FIELD UNITS**

f'c = 4,000 psi  
 fy = 60,000 psi (Reinforcement)

**EXISTING UNITS**

fc = 1,200 psi  
 fs = 20,000 psi (Reinforcement)

**PRECAST UNITS**

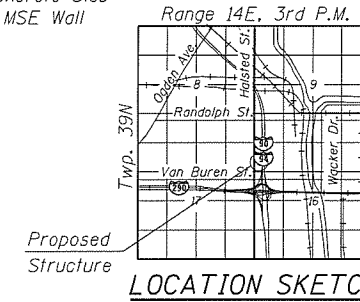
f'c = 4,500 psi

**CURVE DATA**

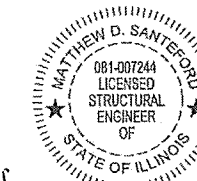
(I 90/94 NB)  
 Prop. Curve P-KDR-NB-5  
 P.I. Sta. = 6159+31.09  
 Δ = 2° 57' 23" (LT)  
 D = 0° 30' 55"  
 R = 11,122.00'  
 T = 286.99'  
 L = 573.86'  
 E = 3.70'  
 e = NA  
 T.R. = NA  
 S.E. Run = NA  
 P.C. Sta. = 6156+44.09  
 P.T. Sta. = 6162+17.96

**CURVE DATA**

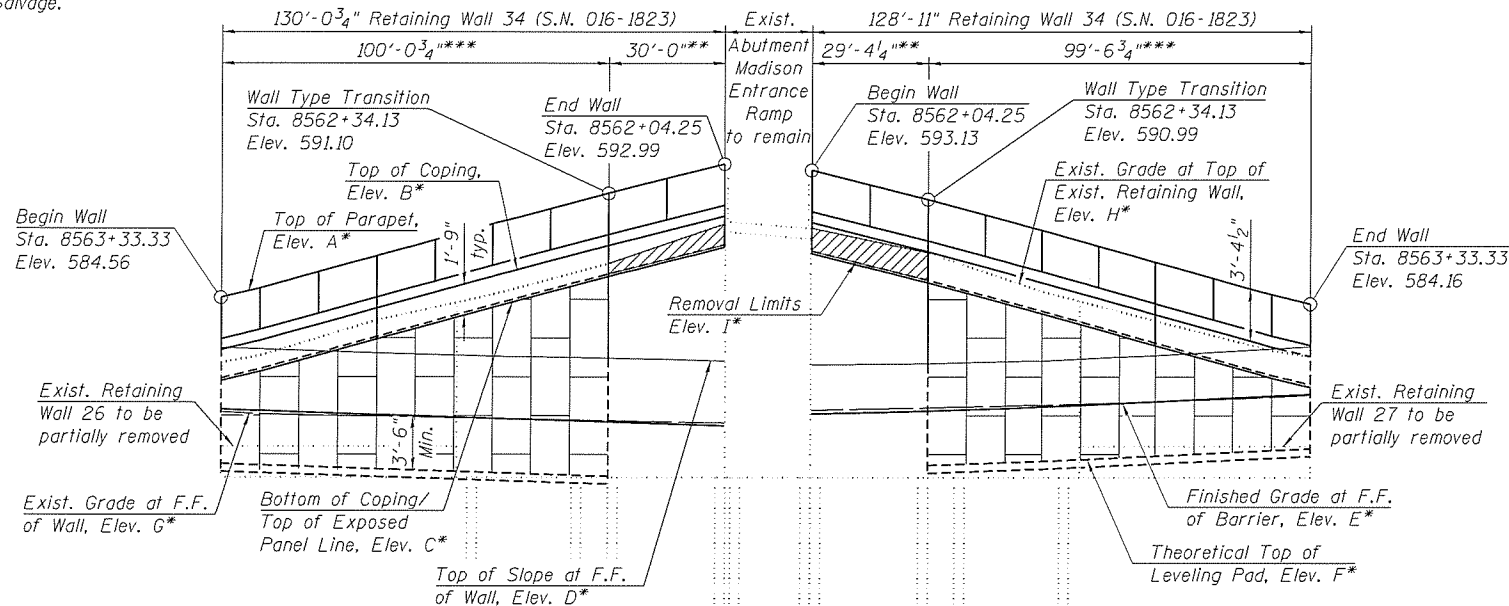
(Madison SB Entrance Ramp)  
 Prop. Curve P-MAD-ST-1  
 P.I. Sta. = 8562+54.22  
 Δ = 2° 53' 57" (RT)  
 D = 5° 24' 19"  
 R = 1,060.00'  
 T = 26.82'  
 L = 53.64'  
 E = 0.34'  
 e = NA  
 T.R. = NA  
 S.E. Run = NA  
 P.C. Sta. = 8562+27.39  
 P.T. Sta. = 8562+81.03



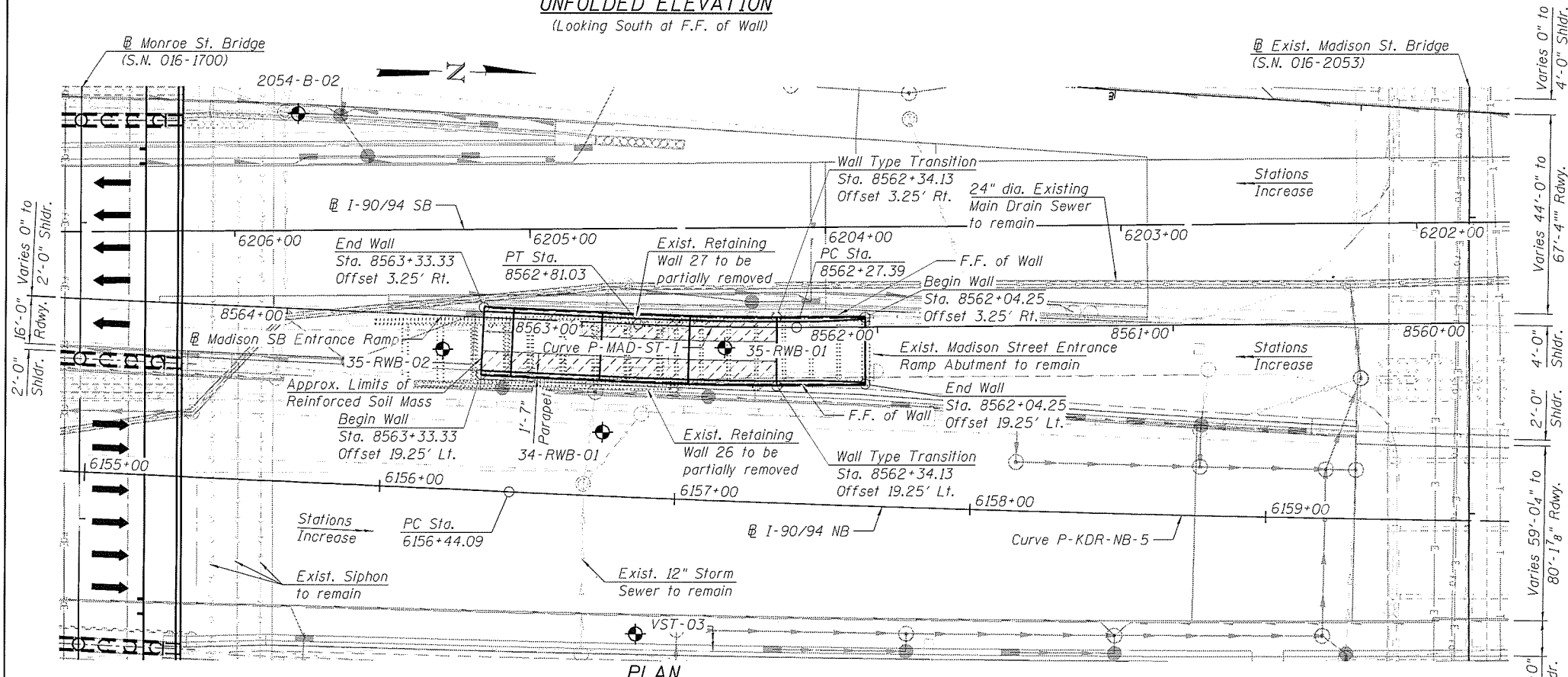
APPROVED  
 FOR STRUCTURAL ADEQUACY ONLY  
 [Signature]  
 ENGINEER OF BRIDGES & STRUCTURES



[Signature]  
 01/23/20  
 MATTHEW D. SANTEFORD, P.E., S.E.  
 NO. 081-007244  
 EXP. DATE 11/30/2020



**UNFOLDED ELEVATION**  
 (Looking South at F.F. of Wall)



**LEGEND:**

Ex. Chain Link Fence	— X — X —	Soil Boring	⊕
Combined Sewer	→→→→→	Existing Catch Basin	○
Electric	— E —	Proposed Catch Basin	●
Ex. Storm Sewer	→→→→→	Existing Manhole	⊙
Prop. Storm Sewer	→→→→→	Proposed Manhole	⊙
Ex. Fiber Optic	— FO —	Proposed Inlet	⊙
Ex. ITS Cable	— ITS —	Limits of Soil Reinforcement	▨
		Limits of Removal	▨

**GENERAL PLAN AND ELEVATION**  
**RETAINING WALL 34 ALONG MADISON SB ENTRANCE RAMP**  
**F.A.I. RTE. 90/94 (KENNEDY EXPRESSWAY)**  
**SECTION 2015-018R**  
**COOK COUNTY**  
**STATION 8562+04.25 TO STATION 8563+33.33**  
**STRUCTURE NO. 016-1823**

1:04:30 PM 01/23/2020 62A77-5001-GPE.dgn



USER NAME = wjcolletti	DESIGNED - TJA	REVISED -
PLOT SCALE = NTS	CHECKED - WJC/MDS	REVISED -
PLOT DATE = 1/23/2020	DRAWN - TJA	REVISED -
	CHECKED - WJC/MDS	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

SHEET NO. SI-01 OF SI-16 SHEETS

F.A.I. RTE. 90/94	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 836
CONTRACT NO. 62A77			ILLINOIS FED. AID PROJECT	

**GENERAL NOTES:**

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Plan dimensions and details relative to existing plans are subjected to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering materials. Such variations shall not be cause for additional compensation for a change in scope of work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
3. Concrete Sealer shall be applied to exposed front face surfaces of the precast concrete panels, concrete slab, parapet, and existing front face of retaining wall. Protective Coat shall be applied to the top and interior face of parapet and top of exposed concrete slab.
4. The Contractor shall exercise extreme caution during construction to make certain that construction activities, live load surcharge and other loads applied to the structures will not have detrimental effects on the adjacent building foundations. Any damage during construction shall be repaired by the Contractor at his expense and no charge to the department. Driving piles and temporary sheet piling is not allowed.
5. The Contractor shall provide vibration and displacement monitoring at the locations specified in the Special Provision for Construction Vibration Monitoring and Monitoring Adjacent Structures, to ensure that removal/construction activities in the vicinity of the structures do not have detrimental effects on building foundations. No additional compensation shall be provided to the Contractor for alternative means and methods, or additional precautionary measures, required during removal/ construction activities to satisfy these requirements. See Contract Special Provisions for details.
6. Slipforming of parapets is not allowed.
7. The Contractor shall field verify locations of existing underground utilities. The Contractor shall take all precautions to protect existing utilities during construction of the wall. Any damage to the existing utilities shall be responsibility of the Contractor.
8. MSE Wall supplier shall design the MSE Wall using granular reinforced mass with minimum effective internal friction angle of 34 degrees and unit weight of 120 lbs./cu. ft. For embankment behind granular reinforced mass, an embankment unit weight of 120 lbs./cu. ft and an effective friction angle of 30 degrees shall be used in the wall system design.
9. All Lightweight Cellular Concrete Fill shall be Class III. See Special Provisions.
10. Wall repair locations are approximate and were determined from field inspection performed at the time of plan preparation. The necessary adjustments based on current field conditions will be made at time of construction. Such variations shall not be cause for additional compensation for a change in the scope of work. However, the Contractor will be paid for the actual quantity furnished at the unit price bid for the work.
11. The Contractor shall take precautions not to damage existing retaining wall during the construction. Any damage to the existing retaining wall shall be repaired by the Contractor at no additional cost.

**INDEX OF SHEETS**

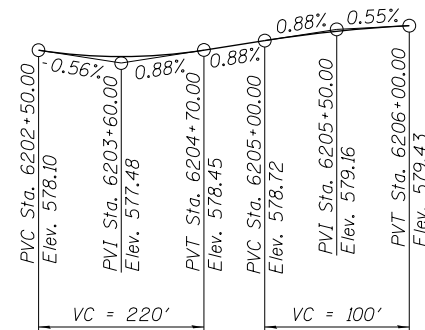
SI-01	General Plan and Elevation
SI-02	General Data
SI-03	Typical Cross Sections and Details
SI-04	Removal and Repair Plans
SI-05	Concrete Slab Plan 1
SI-06	Concrete Slab Plan 2
SI-07	Parapet Elevation
SI-08	Parapet and Concrete Slab Details
SI-09	Expansion Joint Details
SI-10	Architectural Details 1
SI-11	Architectural Details 2
SI-12	Boring Logs 1
SI-13	Boring Logs 2
SI-14	Boring Logs 3
SI-15	Boring Logs 4
SI-16	Boring Logs 5

**SUGGESTED SEQUENCE OF CONSTRUCTION**

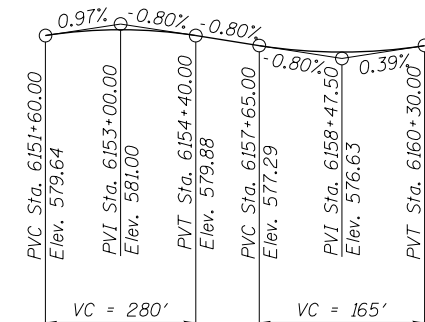
1. Locate existing utilities that are to remain. Contractor to coordinate any required improvements to or removals of existing utilities with utility owner(s). See Utility Location Plans and ITS Plans.
2. Remove pavement, approach slab, railing, cladding, and portions of Existing Retaining Walls 26 and 27. Existing Foundations will be cut to 1' below Bottom of Leveling Pad and buried.
3. Repair spalls, delaminated concrete, and cracks on the Front Face of Existing Wall and Abutment.
4. Construct MSE wall and lightweight cellular concrete fill.
5. Construct slab and parapet.
6. Install Roadway pavement (See Roadway Plans).
7. No portions of the wall shall be compromised by excavation for other elements of work, including the South abutment of Madison Street Ramp Bridge, under the contract, and adjacent structures. If the sequencing of work requires that the wall construction is staged, the stage line shall be located at a panel edge with any exposed lightweight fill protected from damage.

STATION 8562+04.25 TO 8563+33.33  
 BUILT 20-- BY  
 STATE OF ILLINOIS  
 F.A.I. RT. 90/94 SEC. 2015-018R  
 LOADING HL-93  
 STRUCTURE NO. 016-1823

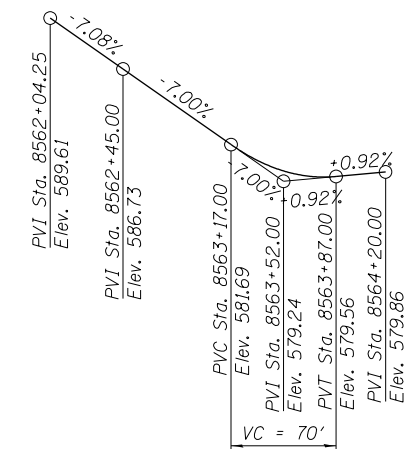
**NAME PLATE**  
 See Std. 515001



**PROFILE GRADE**  
 (I-90/94 SB)



**PROFILE GRADE**  
 (I-90/94 NB)



**PROFILE GRADE**  
 (Madison SB Entrance Ramp)

**TOTAL BILL OF MATERIAL**

Item	Unit	Total Quantity
Concrete Removal	Cu. Yd.	201
Structure Excavation	Cu. Yd.	898
Concrete Structures	Cu. Yd.	12.2
Concrete Superstructure	Cu. Yd.	144.7
Protective Coat	Sq. Yd.	419
Concrete Superstructure (Approach Slab)	Cu. Yd.	32.3
Reinforcement Bars, Epoxy Coated	Pound	46,870
Name Plates	Each	1
Concrete Sealer	Sq. Ft.	2,035
Epoxy Crack Injection	Foot	79
Lightweight Cellular Concrete Fill	Cu. Yd.	702
Steel Railing Removal	Foot	274
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	289
Structural Repair Of Concrete (Depth Equal To Or Less Than 5 Inches)	Sq. Ft.	50
Expansion Joint Repair	Foot	23
Mechanically Stabilized Earth Retaining Wall, Special	Sq. Ft.	1,663
Removal Of Ornamental Cladding	Foot	274

1:04:34 PM 0161823-62A77-5002-GenData.dgn



USER NAME = wjcolletti	DESIGNED - TJA	REVISED -
PLOT SCALE = NTS	CHECKED - WJC/MDS	REVISED -
PLOT DATE = 1/23/2020	DRAWN - TJA	REVISED -
	CHECKED - WJC/MDS	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA  
 RETAINING WALL 34 (STRUCTURE NO. 016-1823)**

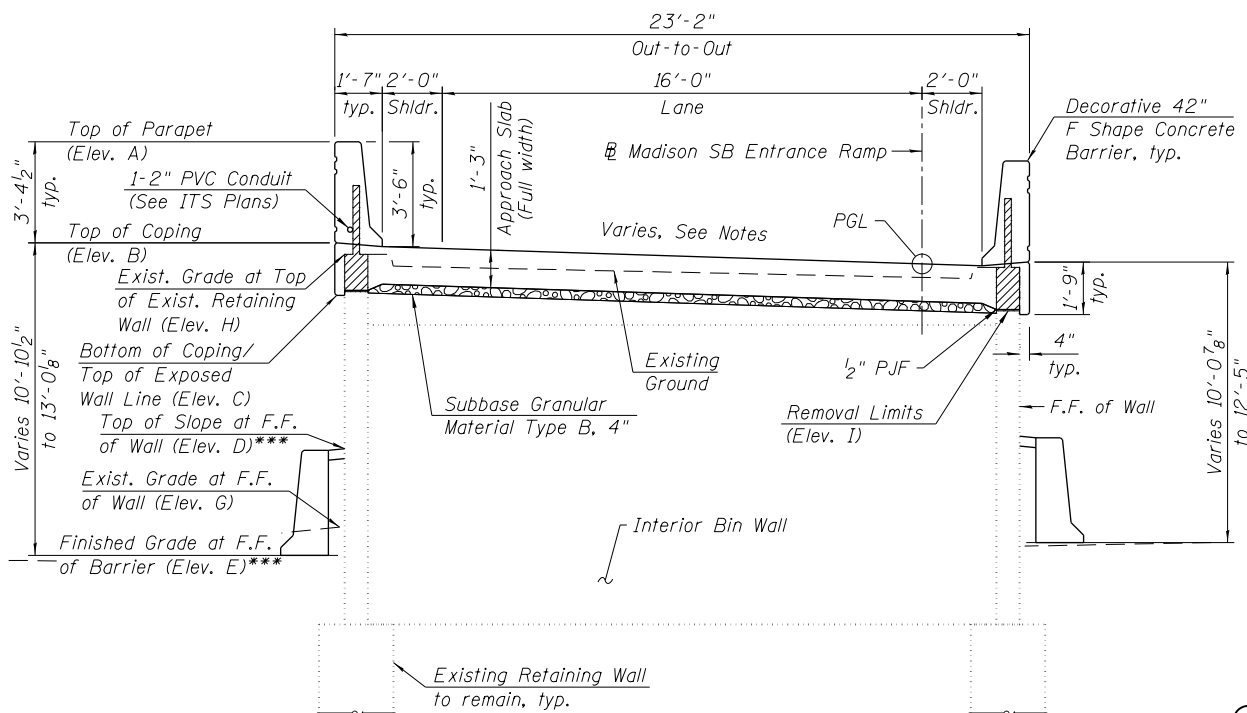
SHEET NO. SI-02 OF SI-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	837
CONTRACT NO.			62A77	
ILLINOIS FED. AID PROJECT				

TABLE 1 - WALL ELEVATIONS

Station	Offset	Elevation A	Elevation B	Elevation C	Elevation D	Elevation E	Elevation F	Elevation G	Elevation H	Elevation I	Wall Type
8563+33.33	19.25' Lt.	584.56	581.18	579.43	581.31	577.64	574.14	577.23	580.90	-	MSE Wall
8563+23.26	19.25' Lt.	585.13	581.76	580.01	581.23	577.56	574.06	577.07	581.36	-	
8562+93.26	19.25' Lt.	587.21	583.83	582.08	580.99	577.32	573.82	576.95	583.65	-	
8562+63.58	19.25' Lt.	589.24	585.87	584.12	580.75	577.08	573.58	576.80	585.30	-	
8562+34.13	19.25' Lt.	591.10	587.72	585.97	580.58	576.84	573.34	576.65	587.30	-	Exist. Wall with Concrete Slab
8562+34.13	19.25' Lt.	591.10	587.72	585.97	580.58	576.84	-	576.65	587.30	586.10	
8562+04.25	19.25' Lt.	592.99	589.61	587.86	580.47	576.60	-	576.50	589.85	587.99	Exist. Wall with Concrete Slab
8562+04.25	19.25' Lt.	593.13	589.75	588.00	580.96	577.34	-	577.33	589.57	588.13	Exist. Wall with Concrete Slab
8562+34.13	3.25' Rt.	590.99	587.61	585.86	581.33	577.54	-	577.49	588.00	585.99	MSE Wall
8562+34.13	3.25' Rt.	590.99	587.61	585.86	581.33	577.54	574.04	577.49	588.00	-	
8562+63.58	3.25' Rt.	588.89	585.52	583.77	581.58	577.85	574.35	577.66	585.50	-	
8562+93.26	3.25' Rt.	586.81	583.43	581.68	581.93	578.25	574.75	577.87	583.60	-	
8563+23.26	3.25' Rt.	584.73	581.36	579.61	582.30	578.67	575.17	578.16	581.70	-	
8563+33.33	3.25' Rt.	584.16	580.78	579.03	582.39	578.81	575.31	578.32	581.30	-	

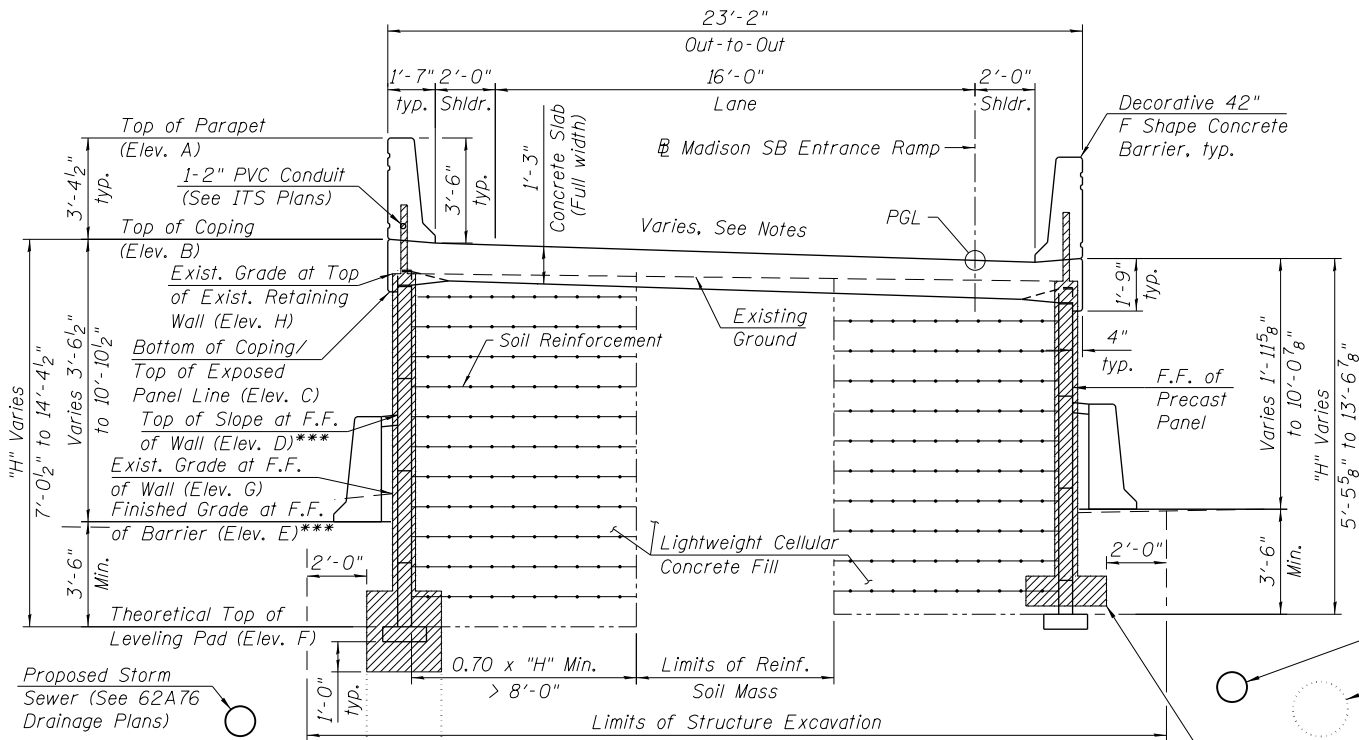
Elevation A - Top of Parapet  
 Elevation B - Top of Coping  
 Elevation C - Bottom of Coping / Top of Exposed Panel or Wall Line  
 Elevation D - Top of Slope at F.F. of Wall  
 Elevation E - Finished Grade at F.F. of Barrier  
 Elevation F - Theoretical Top of Leveling Pad  
 Elevation G - Exist. Grade at F.F. of Wall  
 Elevation H - Existing Grade at Top of Existing Retaining Wall  
 Elevation I - Removal Limits  
 \* Elevations just to the left of joint  
 \*\* Elevations just to the right of joint



CROSS SECTION

(Looking Upstation, Sta. 8562+04.25 to Sta. 8562+34.13)

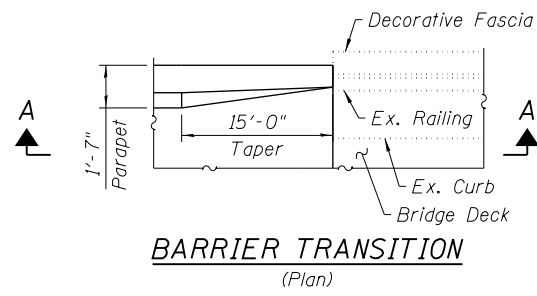
\*\*\*Barrier, backfill, and cap in front of left wall will be installed as part of Contract 62A76



CROSS SECTION

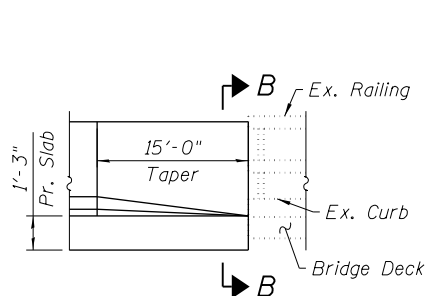
(Looking Upstation, Sta. 8562+34.13 to Sta. 8563+33.33)

Existing Bin Wall supported by piles Sta. 8562+34.13 to Sta. 8562+72.18

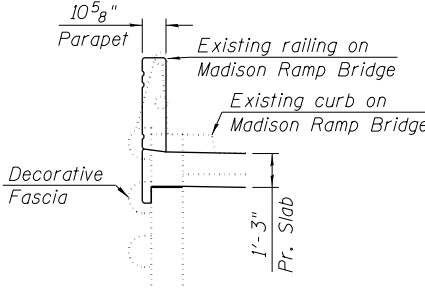


BARRIER TRANSITION

(Plan)



SECTION A-A



SECTION B-B

LEGEND:

B.F. - denotes Back Face.  
 F.F. - denotes Front Face.  
 [Hatched Box] - Concrete Removal

Notes:  
 Lane and shoulders share a single cross slope. Looking upstation, positive cross slope indicates a slope up to the left from the PGL.  
 Slope Transition (-0.70% to 2.00%) Sta. 8562+04.25 to Sta. 8562+69.25  
 Constant Slope (2.00%) Sta. 8562+69.25 to Sta. 8564+32.26

1:04:45 PM 0161823-62A77-S003-Typical\_X5.dgn



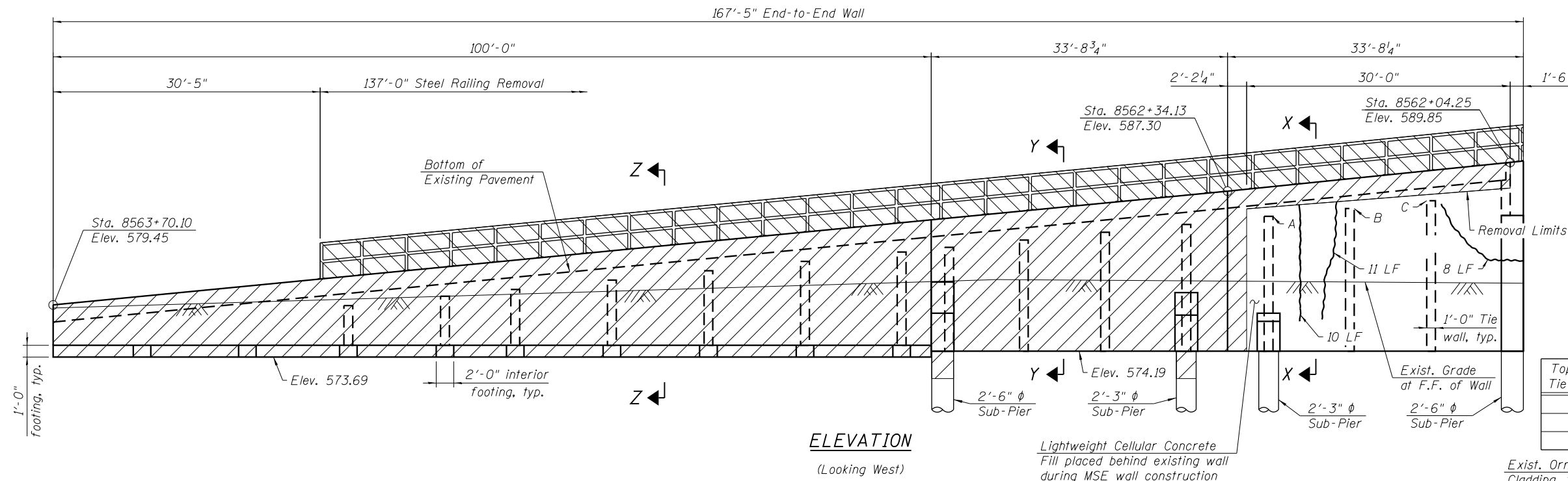
USER NAME = wjcolletti	DESIGNED - TJA	REVISED -
PLOT SCALE = NTS	CHECKED - WJC/MDS	REVISED -
PLOT DATE = 1/23/2020	DRAWN - TJA	REVISED -
	CHECKED - WJC/MDS	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

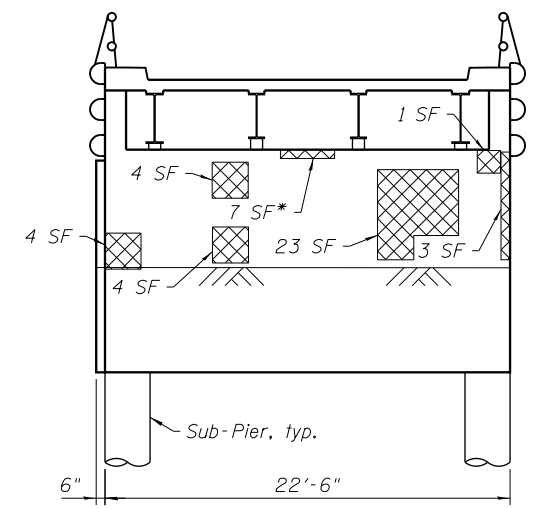
TYPICAL CROSS SECTIONS AND DETAILS  
 RETAINING WALL 34 (STRUCTURE NO. 016-1823)

SHEET NO. S1-03 OF S1-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	838
CONTRACT NO.			62A77	
ILLINOIS FED. AID PROJECT				

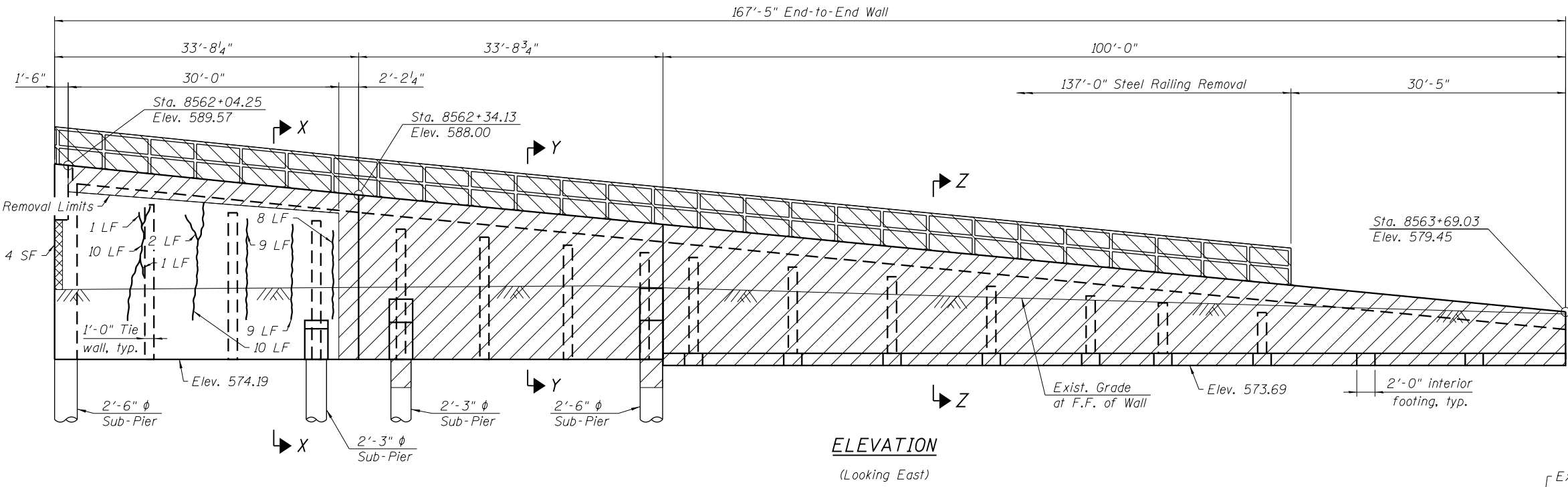


**ELEVATION**  
(Looking West)

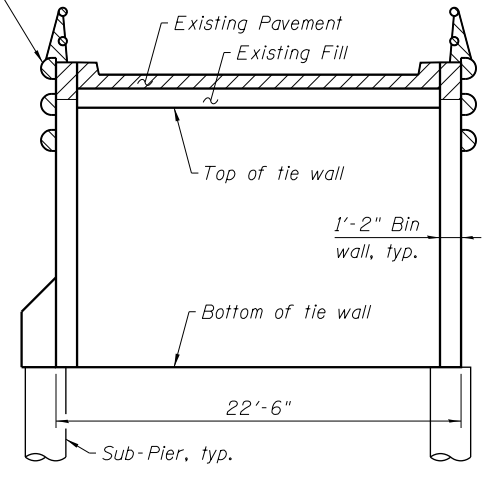


**ABUTMENT ELEVATION**  
(Looking South)  
\*Extends full width of beam seat

Top of Tie Wall	Elev.
A	585.71
B	586.38
C	587.05



**ELEVATION**  
(Looking East)



**SECTION X-X**

Notes:  
Ornamental Cladding not shown for clarity.  
Dimensions are measured along Front Face of wall.  
For Removal Elevations, see sheet S1-03 of S1-16.

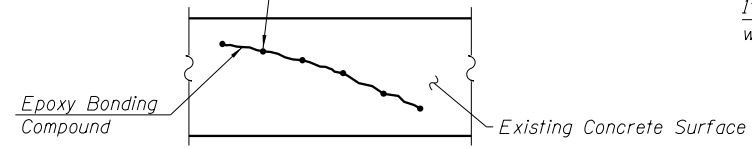
**LEGEND**

- Limits of Steel Railing Removal SF - Square Foot
- Limits of Concrete Removal LF - Linear Foot
- Area of Structural Repair of Concrete (Depth Equal to or Less Than 5 in)
- Epoxy Crack Injection

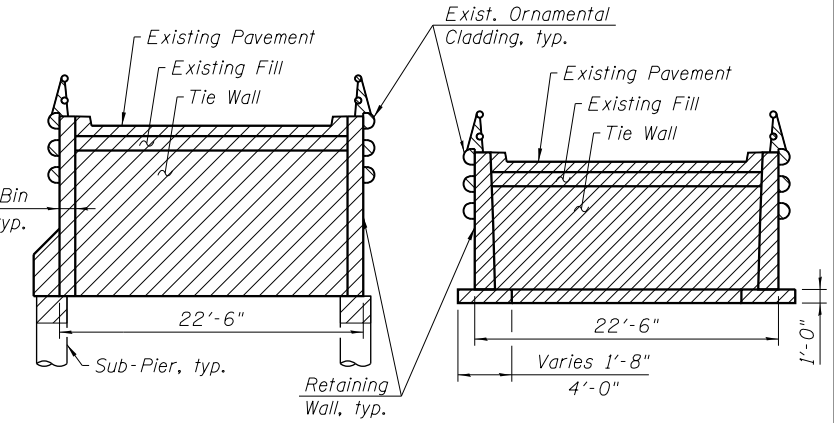
**BILL OF MATERIAL**

Item	Unit	Total
Concrete Removal	Cu. Yd.	201
Concrete Sealer	Sq. Ft.	364
Epoxy Crack Injection	Foot	79
Steel Railing Removal	Foot	274
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.	50
Removal of Ornamental Cladding	Foot	274

Horizontal and vertical cracks shall have one way injection points installed in accordance with Section 590 of Standard Specifications.



**EPOXY CRACK INJECTION**



**SECTION Y-Y**

**SECTION Z-Z**

1:04:53 PM 0161823-62A77-S004-Removal\_Repair.dgn



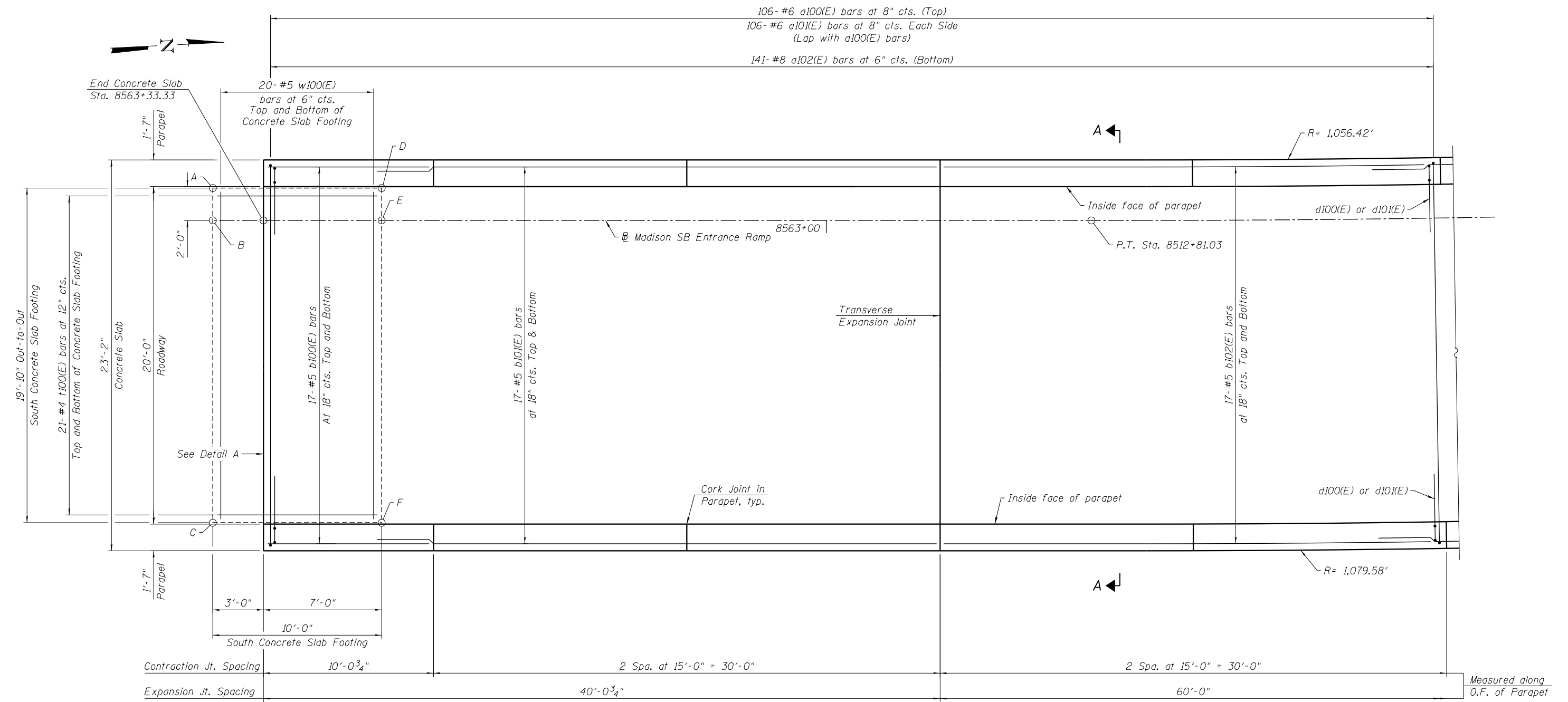
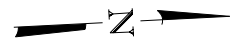
USER NAME = wjcollett	DESIGNED - TJA	REVISED -
PLOT SCALE = NTS	CHECKED - WJC/MDS	REVISED -
PLOT DATE = 1/23/2020	DRAWN - TJA	REVISED -
	CHECKED - WJC/MDS	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**REMOVAL AND REPAIR PLANS**  
**RETAINING WALL 34 (STRUCTURE NO. 016-1823)**

SHEET NO. S1-04 OF S1-16 SHEETS

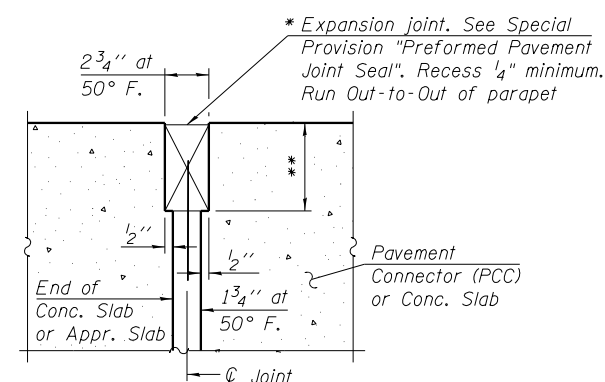
F.A.I. RTE. 90/94	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 839
CONTRACT NO. 62A77			ILLINOIS FED. AID PROJECT	



**CONCRETE SLAB PLAN**

**TOP AND BOTTOM ELEVATIONS FOR SOUTH CONCRETE SLAB FOOTING**

Concrete Slab Footing		
Point	Top	Bottom
A	579.26	578.43
B	579.30	578.47
C	579.65	578.82
D	579.80	578.97
E	579.83	579.00
F	580.19	579.36



**DETAIL A**

**MIN. BAR LAPS**

- #4 = 2'-8"
- #5 = 3'-4"
- #6 = 4'-4"
- #8 = 6'-8"

\* Cost included with Concrete Superstructure (Approach Slab)      \*\* Per manufacturer recommendations

Notes:  
For Section A-A, Bar Diagram, Expansion and Contraction Joint Details and Bill of Material, see Sheet S1-08 of S1-16.

1:05:01\_PM 0161823-62A77-S005-SlabPlan1.dgn



USER NAME = wjcolletti	DESIGNED - TJA	REVISED -
PLOT SCALE = NTS	CHECKED - WJC/MDS	REVISED -
PLOT DATE = 1/23/2020	DRAWN - TJA	REVISED -
	CHECKED - WJC/MDS	REVISED -

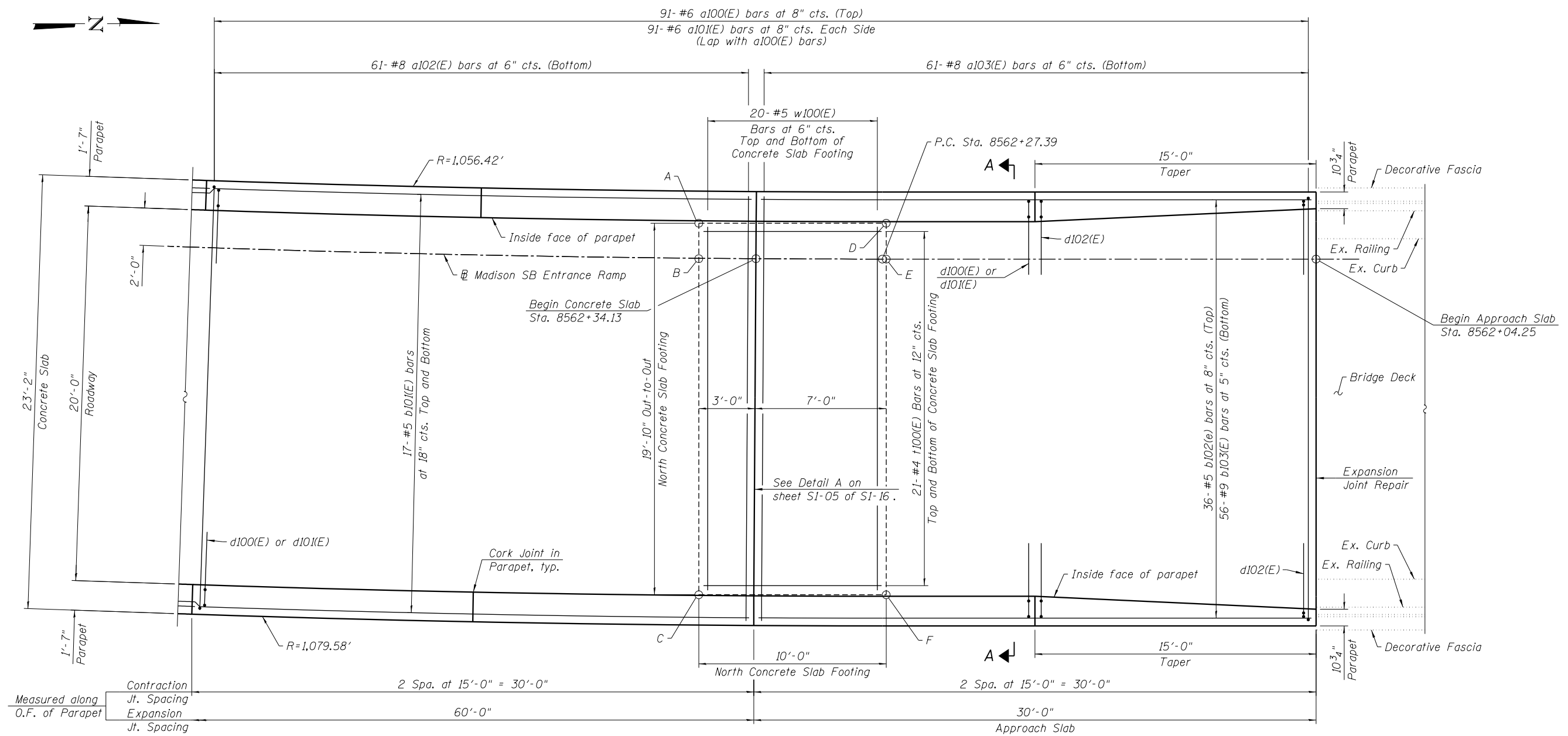
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CONCRETE SLAB PLAN 1  
RETAINING WALL 34 (STRUCTURE NO. 016-1823)**

SHEET NO. S1-05 OF S1-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	840
CONTRACT NO.			62A77	
ILLINOIS FED. AID PROJECT				





**CONCRETE SLAB PLAN**

**TOP AND BOTTOM ELEVATIONS FOR NORTH CONCRETE SLAB FOOTING**

Concrete Slab Footing		
Point	Top	Bottom
A	586.02	585.19
B	586.04	585.21
C	586.15	585.32
D	586.74	585.91
E	586.74	585.91
F	586.79	585.96

**MIN. BAR LAPS**

- #4 = 2'-8"
- #5 = 3'-4"
- #6 = 4'-4"
- #8 = 6'-8"

Notes:  
 For Section A-A, Bar Diagram, Expansion and Contraction Joint Details and Bill of Material, see Sheet S1-08 of S1-16.  
 For Expansion Joint Repair details, see Sheet S1-09 of S1-16.

1:05:09 PM 01/18/23-62A77-S006-SlabPlan2.dgn



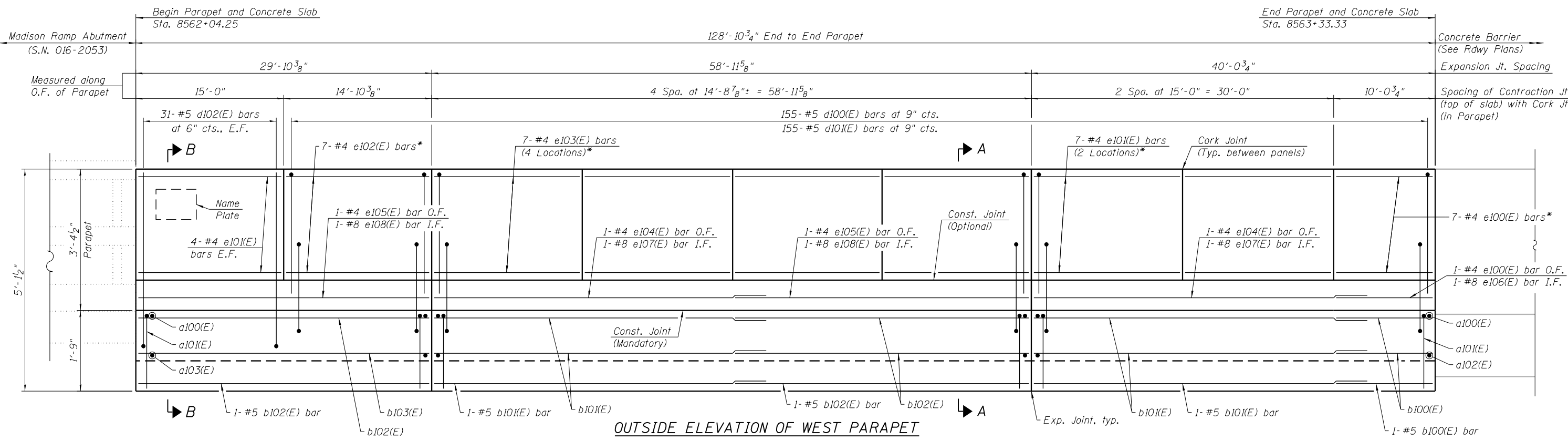
USER NAME = wjcollett	DESIGNED - TJA	REVISED -
	CHECKED - WJC/MDS	REVISED -
PLOT SCALE = NTS	DRAWN - TJA	REVISED -
PLOT DATE = 1/23/2020	CHECKED - WJC/MDS	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

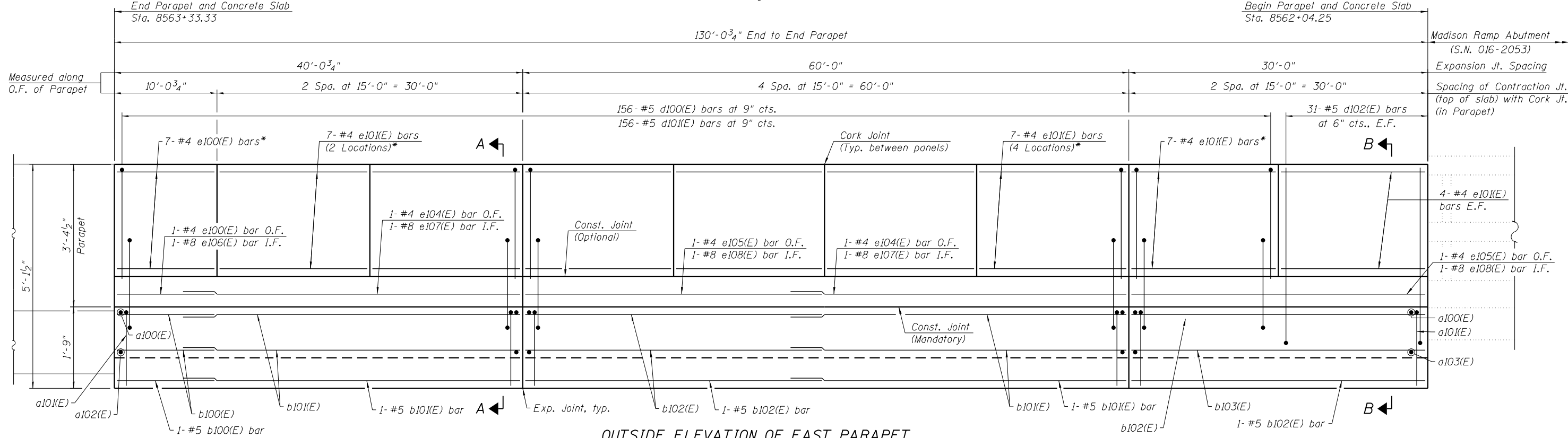
**CONCRETE SLAB PLAN 2  
 RETAINING WALL 34 (STRUCTURE NO. 016-1823)**

SHEET NO. S1-06 OF S1-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	841
CONTRACT NO.			62A77	
ILLINOIS FED. AID PROJECT				



**OUTSIDE ELEVATION OF WEST PARAPET**  
(Looking East)



**OUTSIDE ELEVATION OF EAST PARAPET**  
(Looking West)

**MIN. BAR LAPS**  
 #4 = 2'-8"  
 #5 = 3'-4"  
 #6 = 4'-4"  
 #8 = 6'-8"

**Notes:**  
 I.F. = Inside Face  
 O.F. = Outside Face  
 E.F. = Each Face  
 For Section A-A and B-B, Bar Diagram, Expansion and Contraction Joint Details and Bill of Material, see Sheet S1-08 of S1-16.  
 Preformed Flexible Foam Expansion Joint Filler (called out as PJF in plans) shall follow Article 1051.09 of IDOT Standard Specifications.  
 Cost included in Concrete Superstructure.

\* For details, see sheet S1-08 of S1-16.

2:10:31 PM 0161823-62A77-S007-Parapet.dgn



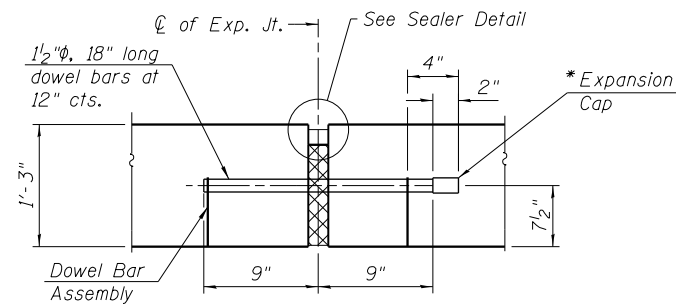
USER NAME = tjallen	DESIGNED - TJA	REVISED -
PLOT SCALE = NTS	CHECKED - WJC/MDS	REVISED -
PLOT DATE = 1/24/2020	DRAWN - TJA	REVISED -
	CHECKED - WJC/MDS	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PARAPET ELEVATION**  
**RETAINING WALL 34 (STRUCTURE NO. 016-1823)**

SHEET NO. S1-07 OF S1-16 SHEETS

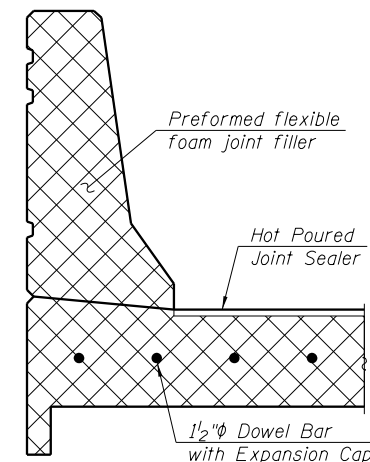
F.A.I. RTE. 90/94	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 842
CONTRACT NO. 62A77			ILLINOIS FED. AID PROJECT	



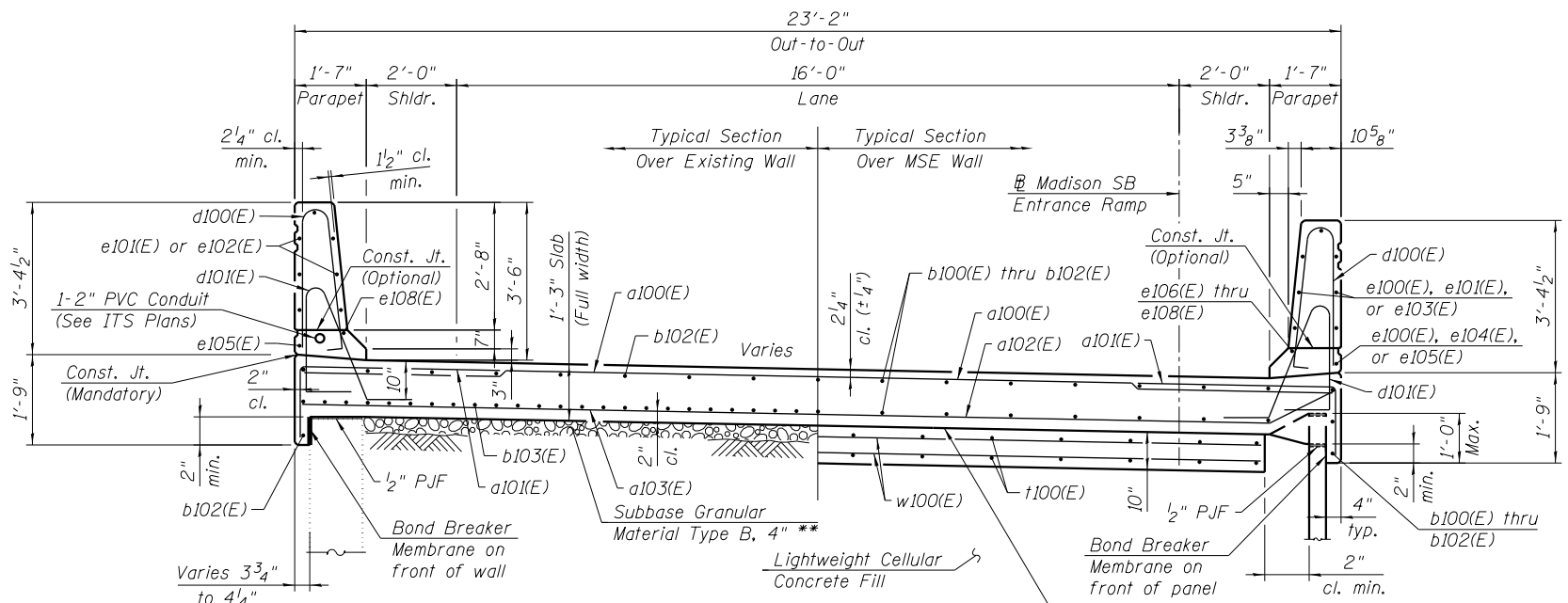
**CONCRETE SLAB TO CONCRETE SLAB  
TRANSVERSE EXPANSION JOINT**

Expansion Joint Filler, Sealer and Dowel Bars included in cost of Concrete Superstructure (Approach Slab).

\* Expansion caps shall be installed on the exposed end of each dowel bar once header has been removed and the joint filler material has been installed.

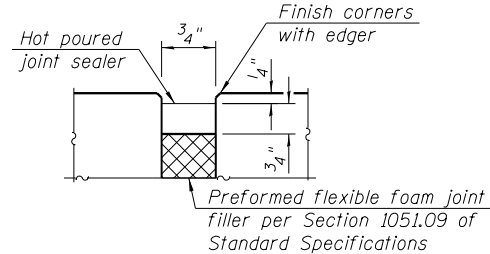


**TRANSVERSE EXPANSION  
JOINT SECTION**

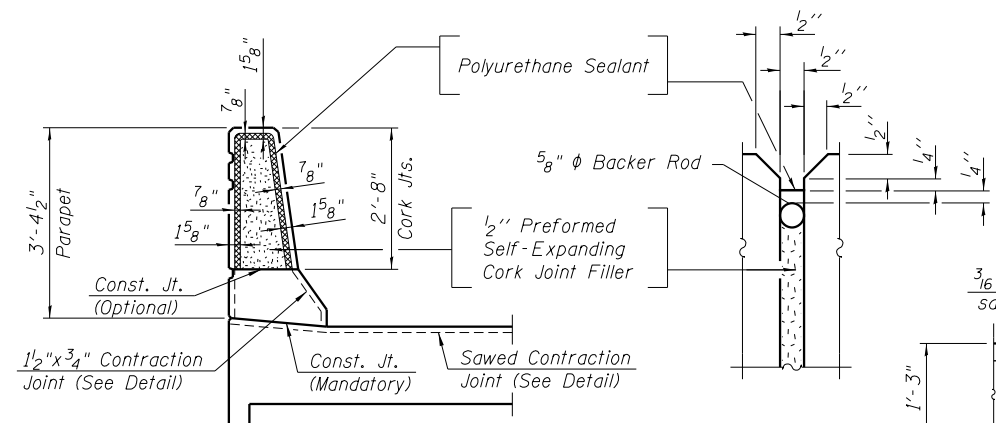


**SECTION A-A  
(Looking Upstation)**

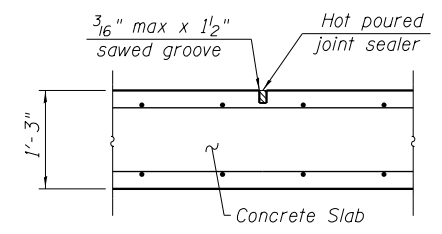
\*\* Cost included with Concrete Superstructure (Approach Slab)



**SEALER DETAIL**

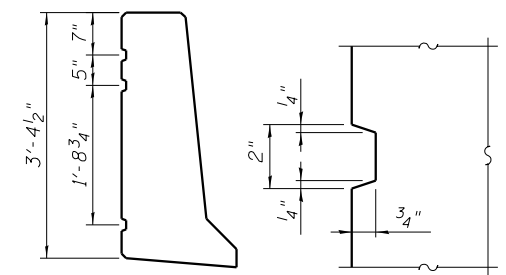


**PARTIAL HEIGHT BARRIER JOINT AND  
CONTRACTION JOINT SECTION**

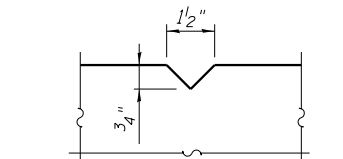


**CONCRETE SLAB TRANSVERSE  
CONTRACTION JOINT**

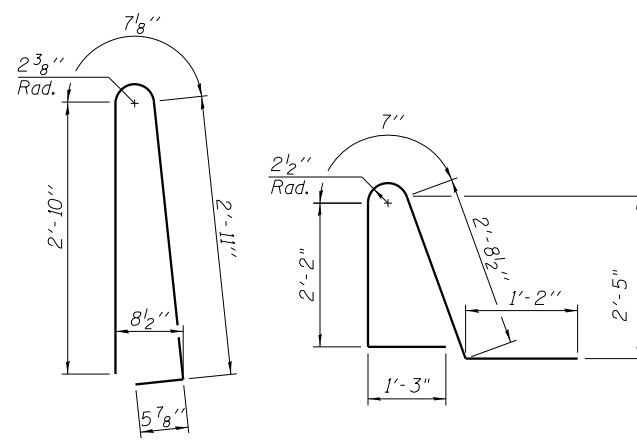
See Article 420.05 & 420.12 of the Standard Specifications



**REVEAL DETAIL**

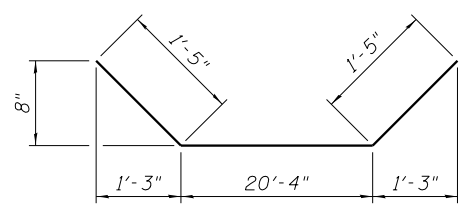


**PARAPET TRANSVERSE  
CONTRACTION JOINT**

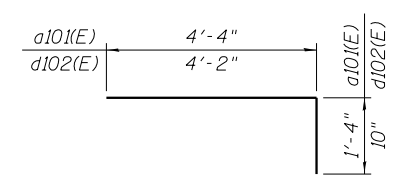


**BAR d100(E)**

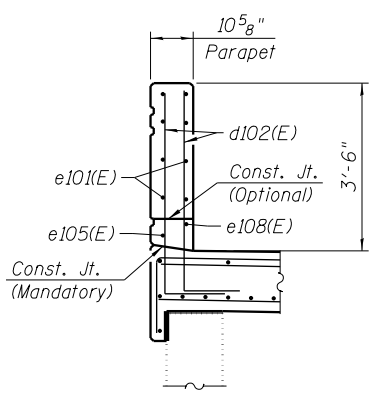
**BAR d101(E)**



**BARS a102(E)**



**BARS a101(E) AND d102(E)**



**SECTION B-B**

**Notes:**

Parapet Concrete and Concrete Slab shall be paid for as Concrete Superstructure.  
 Approach Slab Concrete shall be paid for as Concrete Superstructure (Approach Slab).  
 Footing Concrete shall be paid for as Concrete Structures.  
 The Footing Maximum Applied Service Bearing Pressure (Qmax) = 2.0 ksf.  
 All edges shall be chamfered 3/4 inches.  
 Bars indicated thus 3x4-#5 etc. indicates 3 lines of bars with 4 lengths per line.  
 See Sheet S1-02 of S1-16 for additional notes for MSE wall suppliers.  
 The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.  
 1/2" P.J.F included in the cost of Concrete Superstructure (Approach Slab).

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a100(E)	197	#6	22'-10"	—
a101(E)	394	#6	5'-8"	└
a102(E)	202	#8	23'-2"	└
a103(E)	61	#8	22'-10"	—
b100(E)	36	#5	9'-8"	—
b101(E)	72	#5	33'-4"	—
b102(E)	74	#5	29'-8"	—
b103(E)	56	#9	29'-8"	—
d100(E)	311	#5	6'-10"	└
d101(E)	311	#5	7'-11"	└
d102(E)	124	#5	5'-0"	└
e100(E)	16	#4	9'-8"	—
e101(E)	79	#4	14'-8"	—
e102(E)	7	#4	14'-6"	—
e103(E)	28	#4	14'-4"	—
e104(E)	4	#4	32'-8"	—
e105(E)	4	#4	29'-8"	—
e106(E)	2	#8	9'-8"	—
e107(E)	4	#8	36'-8"	—
e108(E)	4	#8	29'-8"	—
t100(E)	84	#4	9'-8"	—
w100(E)	80	#5	19'-6"	—
Concrete Structures		Cu. Yd.	12.2	
Concrete Superstructure		Cu. Yd.	144.7	
Protective Coat		Sq. Yd.	419	
Concrete Superstructure (Approach Slab)		Cu. Yd.	32.3	
Reinforcement Bars, Epoxy Coated		Pound	46,870	
Concrete Sealer		Sq. Ft.	1,671	
Bridge Deck Grooving (Longitudinal)		Sq. Yd.	289	

1:05:24 PM 0161823-62A77-S008-SlabPlan\_Details.dgn



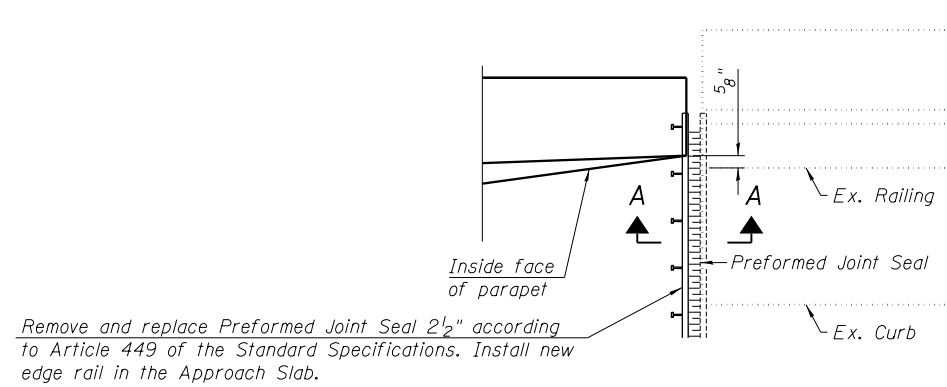
USER NAME = wjcolletti	DESIGNED - TJA	REVISED -
PLOT SCALE = NTS	CHECKED - WJC/MDS	REVISED -
PLOT DATE = 1/23/2020	DRAWN - TJA	REVISED -
	CHECKED - WJC/MDS	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PARAPET AND CONCRETE SLAB DETAILS  
RETAINING WALL 34 (STRUCTURE NO. 016-1823)**

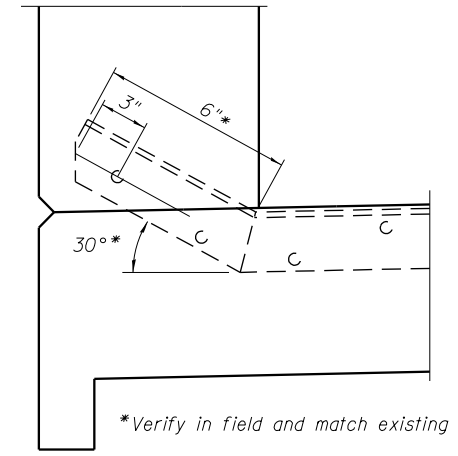
SHEET NO. S1-08 OF S1-16 SHEETS

F.A.I. RTE. 90/94	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 843
CONTRACT NO. 62A77			ILLINOIS FED. AID PROJECT	



Remove and replace Preformed Joint Seal 2 1/2" according to Article 449 of the Standard Specifications. Install new edge rail in the Approach Slab.

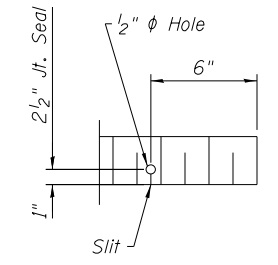
**PLAN AT PARAPET**



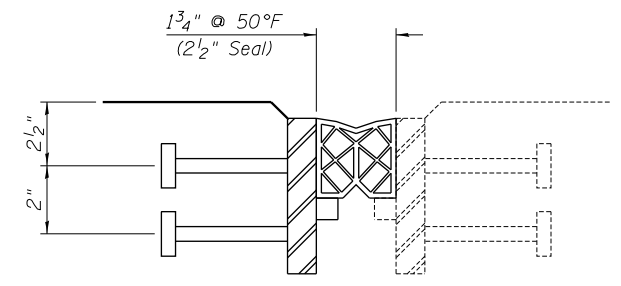
\*Verify in field and match existing

**AT PARAPET**

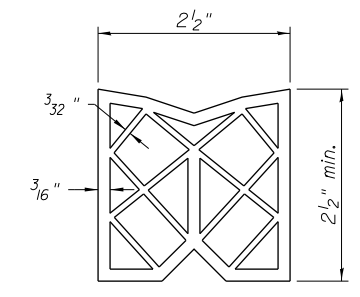
(Verify in field and match existing)



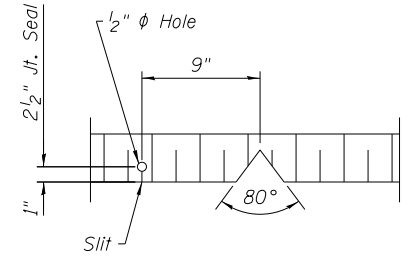
**END OF JOINT DETAIL**



**SECTION A-A**



**PREFORMED JOINT SEAL**



**SEAL CUT-OUT AT CURB**

**BILL OF MATERIAL**

Item	Unit	Total
Expansion Joint Repair	Foot	23

1:05:32 PM 0161823-62A77-S009-ExpJoint\_Details.dgn



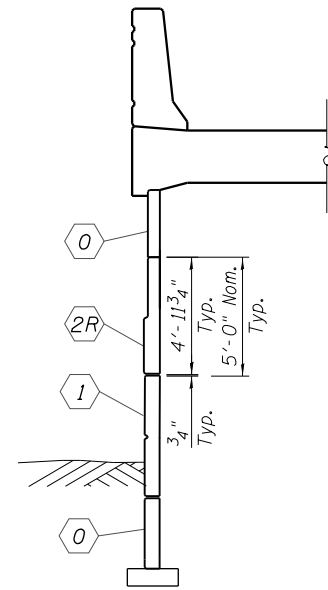
USER NAME = wjcolletti	DESIGNED - TJA	REVISED -
	CHECKED - WJC	REVISED -
PLOT SCALE = NTS	DRAWN - TJA	REVISED -
PLOT DATE = 1/23/2020	CHECKED - WJC	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

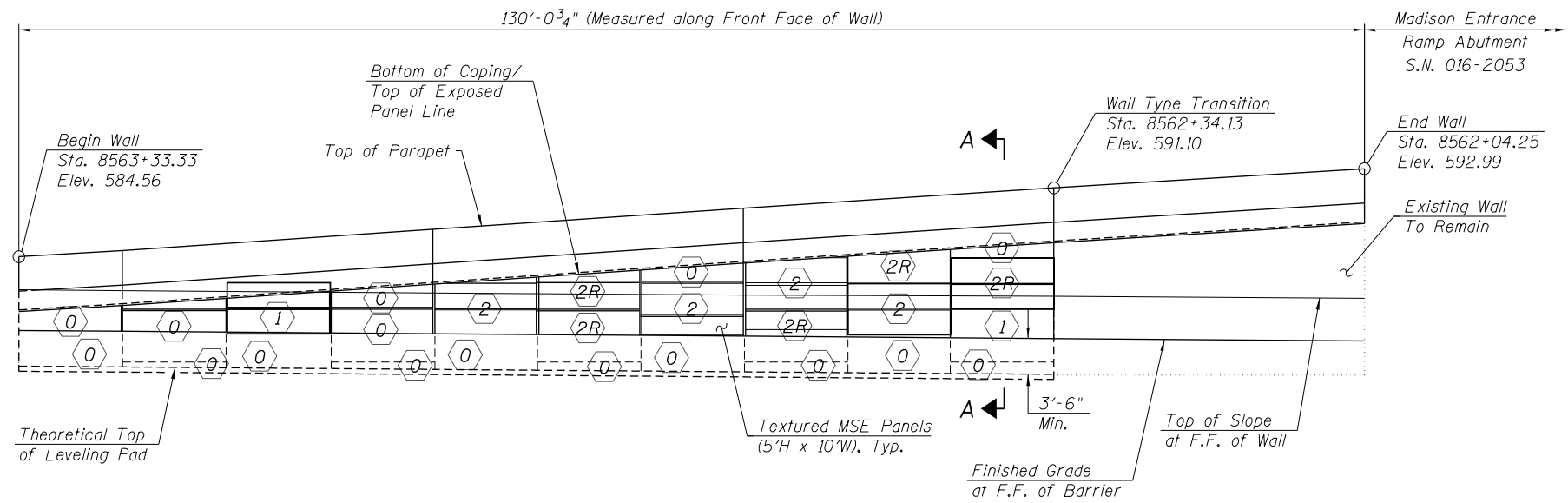
**EXPANSION JOINT DETAILS  
STRUCTURE NO. 016-1823**

SHEET NO. S1-09 OF S1-16 SHEETS

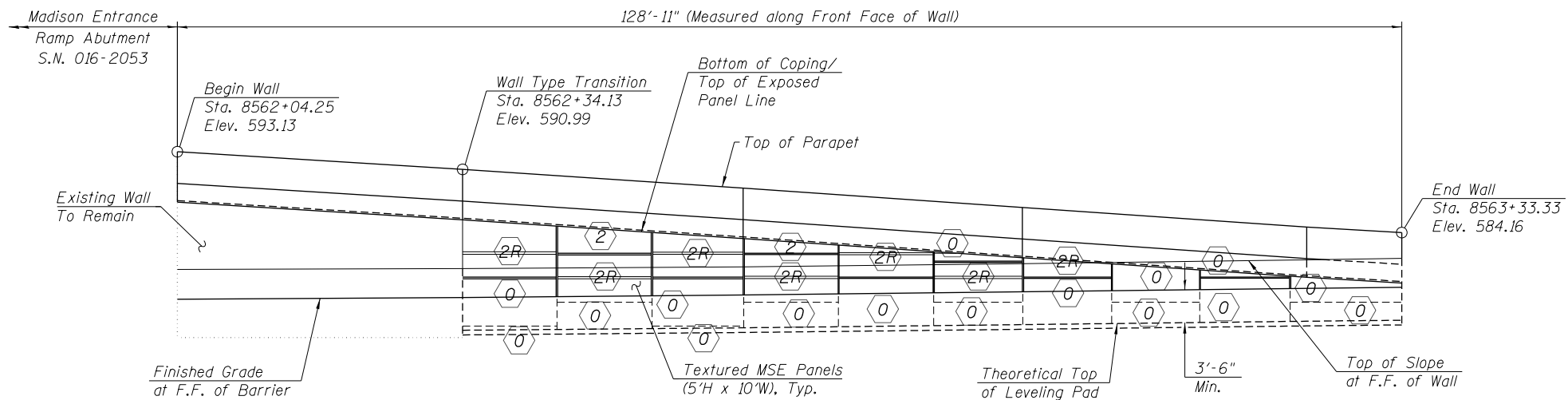
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	844
CONTRACT NO.			62A77	
ILLINOIS FED. AID PROJECT				



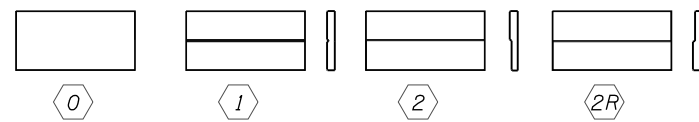
SECTION A-A



LEFT WALL ELEVATION - PRECAST PANEL LAYOUT  
(Looking West at F.F. of Wall)



RIGHT WALL ELEVATION - PRECAST PANEL LAYOUT  
(Looking East at F.F. of Wall)



PRECAST PANEL TYPES

Notes:  
 For Precast Panel and Formliner pattern details, see Sheet S1-11 of S1-16.  
 Textured formliner for precast panels will not be paid separately and will be included in the cost of Mechanical Stabilized Earth Retaining Wall, Special.  
 MSE Supplier to determine precast panel dimensions based on proprietary design. The suggested 10'-0" nominal width shown here may change depending on supplier. If this is the case, it will be addressed by the engineer and coordinated with the supplier during the shop drawing submittal and reviews.

1:05:40 PM 0161823-62A77-S010-ArcnDetails.dgn



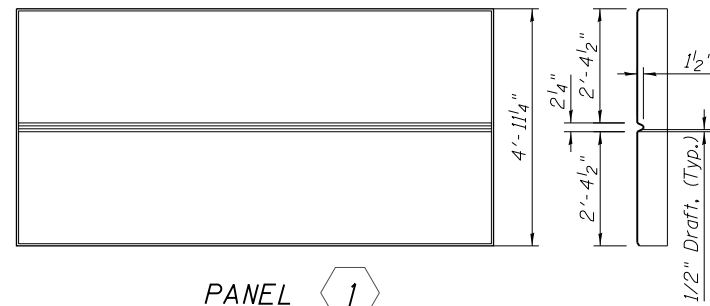
USER NAME = wjcolletti	DESIGNED - WJC	REVISED -
	CHECKED - WJC/MDS	REVISED -
PLOT SCALE = NTS	DRAWN - TJA	REVISED -
PLOT DATE = 1/23/2020	CHECKED - WJC/MDS	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL DETAILS 1  
RETAINING WALL 34 (STRUCTURE NO. 016-1823)

SHEET NO. S1-10 OF S1-16 SHEETS

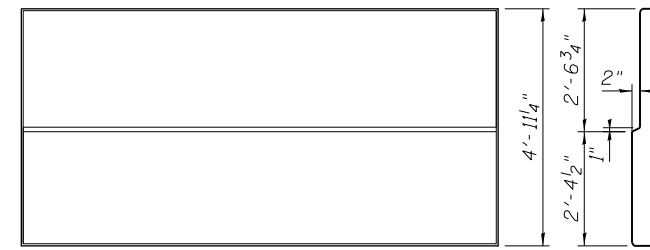
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	845
CONTRACT NO.			62A77	
ILLINOIS FED. AID PROJECT				



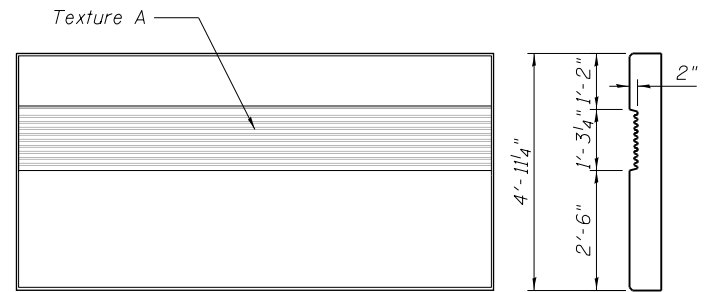
PANEL 1



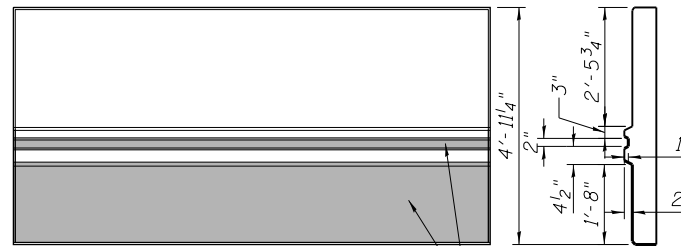
PANEL 2



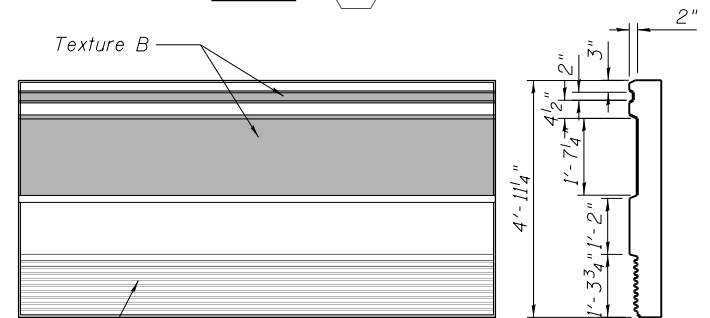
PANEL 2 R



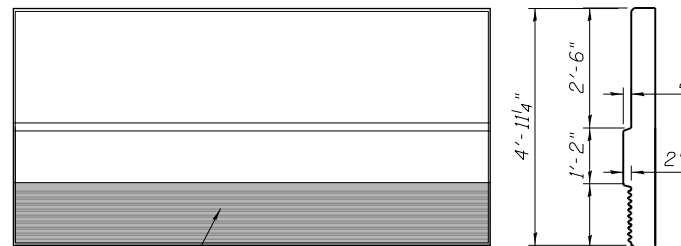
PANEL 3



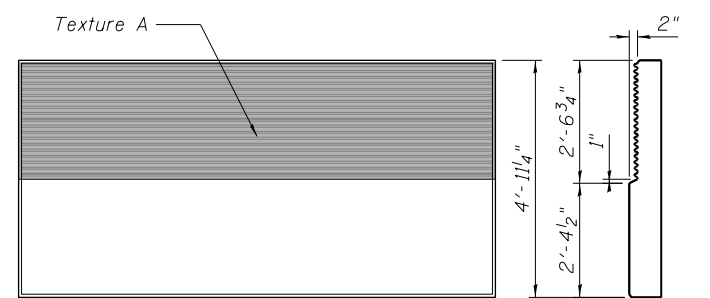
PANEL 4



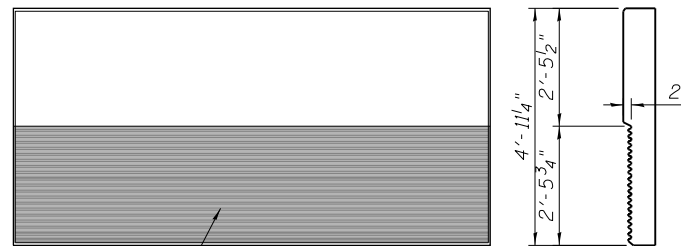
PANEL 5



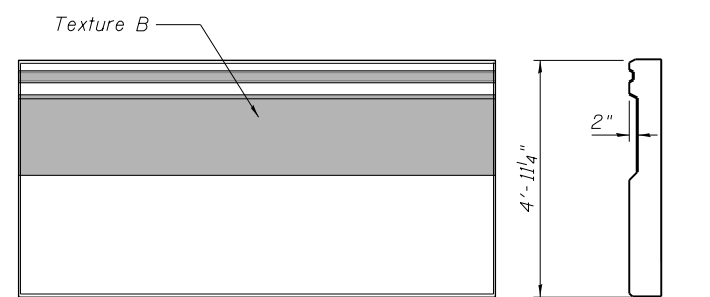
PANEL 6



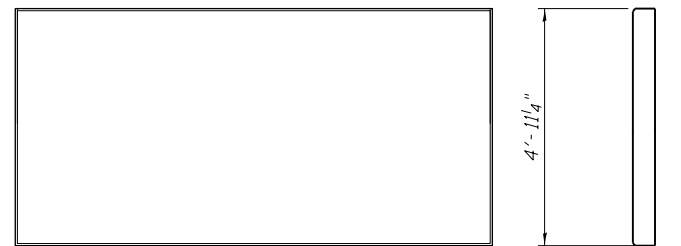
PANEL 7



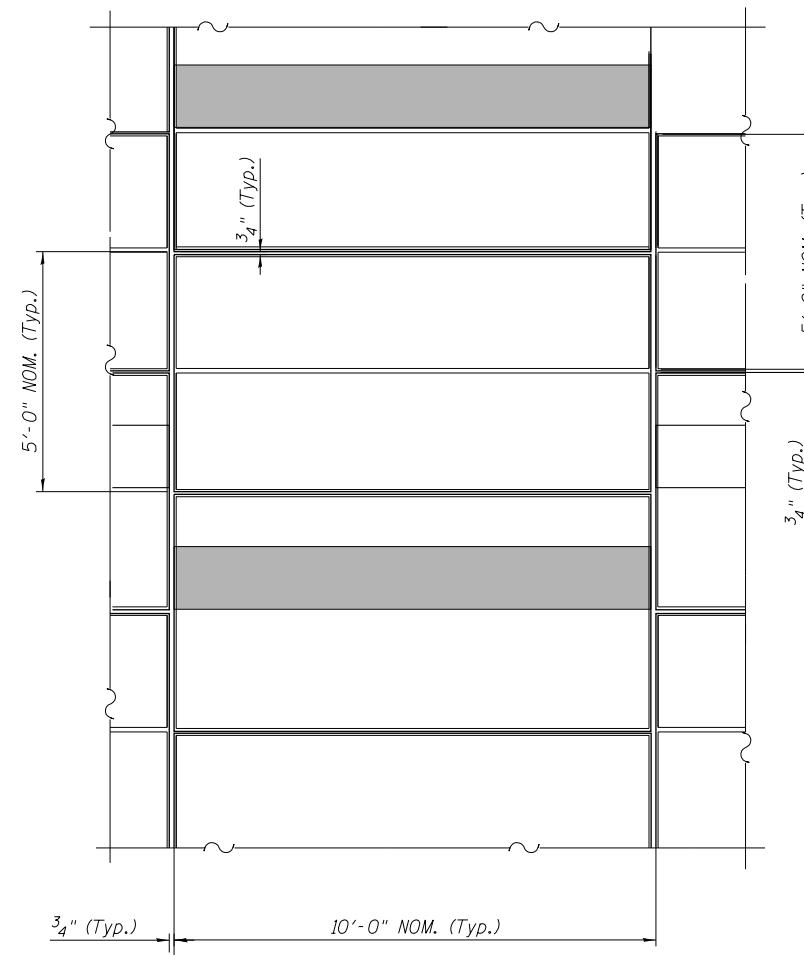
PANEL 7 R



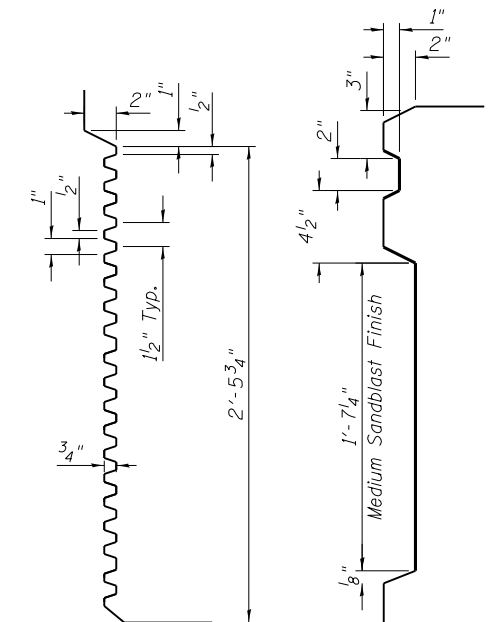
PANEL 8



PANEL 8



DETAIL



FORMLINER TEXTURE A      FORMLINER TEXTURE B

Notes:  
 Textured formliner for precast panels will not be paid separately and will be included in the cost of the pay item Mechanically Stabilized Earth Retaining Wall, Special.  
 Formliner layout numbering is typical for all MSE retaining walls in this Contract. Formliner details for precast panels are typ. for all panels shown in this Contract. Verify / coordinate all dimensions with bridge plans.  
 MSE Supplier to determine precast panel dimensions based on proprietary design. The suggested 10'-0" Nom. width shown here may change depending on supplier. If this is the case, it will be addressed by the engineer and coordinated with the supplier during the Shop Drawing submittal and review.

TYPICAL CONCRETE PANELS DETAILS

1:05:47 PM  
 0161823-62A77-S011-Ar-chnDetails2.dgn



USER NAME = wjcolletti	DESIGNED - TJA	REVISED -
PLOT SCALE = NTS	CHECKED - WJC	REVISED -
PLOT DATE = 1/23/2020	DRAWN - TJA	REVISED -
	CHECKED - WJC	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL DETAILS 2  
 RETAINING WALL 34 (STRUCTURE NO. 016-1823)

SHEET NO. S1-11 OF S1-16 SHEETS

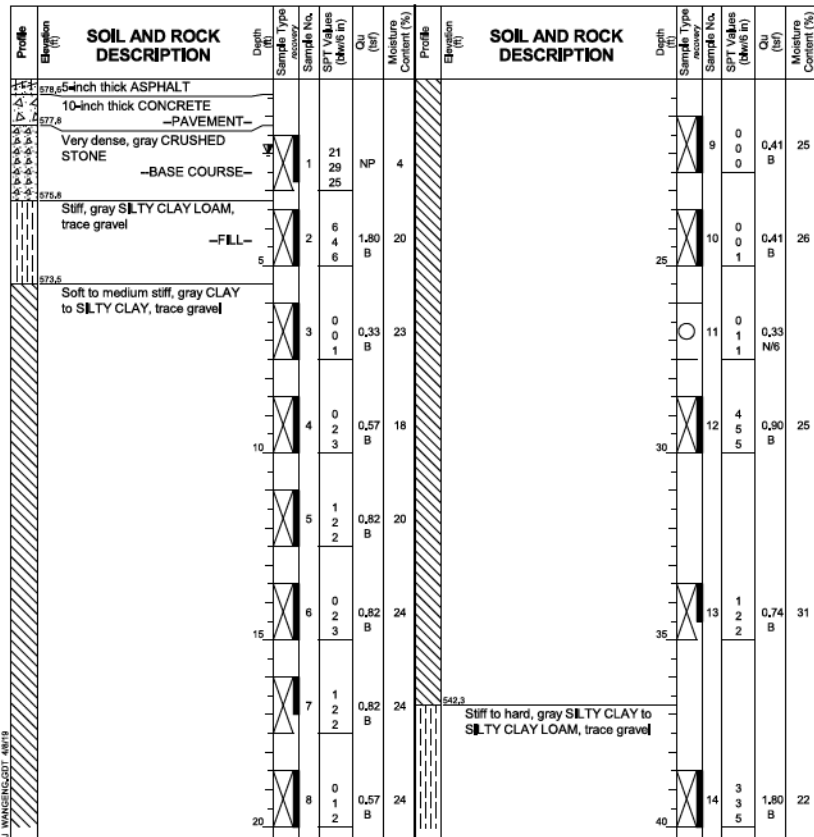
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	846
CONTRACT NO.			62A77	
ILLINOIS FED. AID PROJECT				

**Wang Engineering**  
 wangeng@wangeng.com  
 1145 N Main Street  
 Lombard, IL 60148  
 Telephone: 630 953-9928  
 Fax: 630 953-9938

**BORING LOG 2054-B-02**  
 WEI Job No.: 1100-04-01  
 Client: **AECOM**  
 Project: **Jane Byrne Interchange**  
 Location: **Section 17, T39N, R14E of 3rd PM**

Datum: NAVD 88  
 Elevation: 579.01 ft  
 North: 1899865.30 ft  
 East: 1171404.59 ft  
 Station: 8412+62.47  
 Offset: 73.45 LT

Page 1 of 3



**GENERAL NOTES**  
 Begin Drilling 09-15-2015 Complete Drilling 09-20-2015  
 Drilling Contractor Wang Testing Services Drill Rig D-50 TMR [78%]  
 Driller K&N Logger F. Bozga Checked by C. Marin  
 Drilling Method 3.25" HSA to 10', mud rotary thereafter, boring backfilled upon completion

**WATER LEVEL DATA**  
 While Drilling Rotary wash  
 At Completion of Drilling Mud at 5 ft  
 Time After Drilling 120 hours  
 Depth to Water 2.00 ft

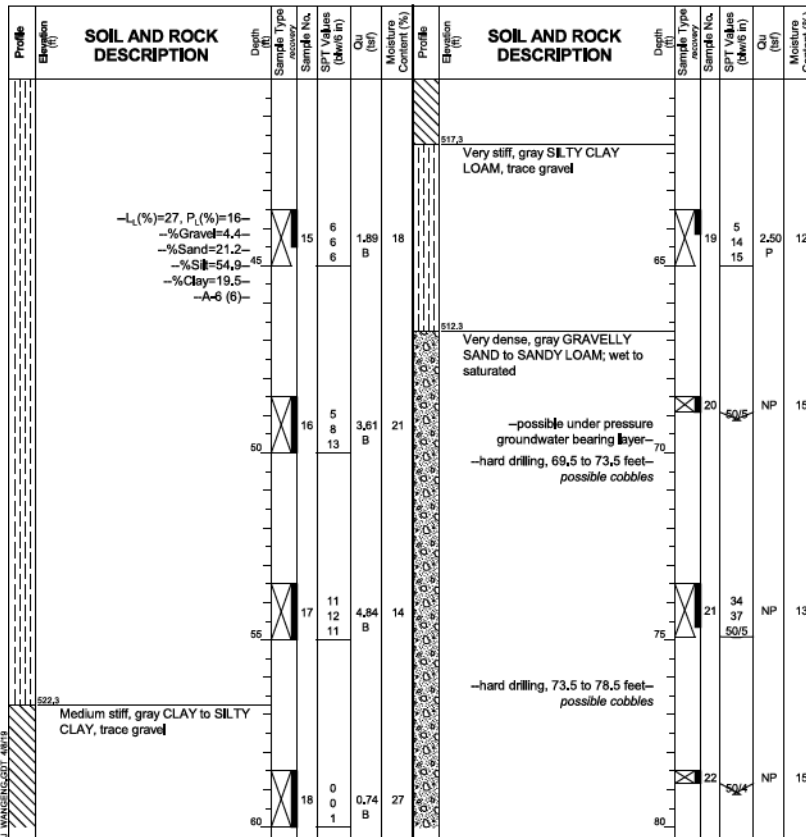
The stratification lines represent the approximate boundary between soil types, the actual transition may be gradual.

**Wang Engineering**  
 wangeng@wangeng.com  
 1145 N Main Street  
 Lombard, IL 60148  
 Telephone: 630 953-9928  
 Fax: 630 953-9938

**BORING LOG 2054-B-02**  
 WEI Job No.: 1100-04-01  
 Client: **AECOM**  
 Project: **Jane Byrne Interchange**  
 Location: **Section 17, T39N, R14E of 3rd PM**

Datum: NAVD 88  
 Elevation: 579.01 ft  
 North: 1899865.30 ft  
 East: 1171404.59 ft  
 Station: 8412+62.47  
 Offset: 73.45 LT

Page 2 of 3



**GENERAL NOTES**  
 Begin Drilling 09-15-2015 Complete Drilling 09-20-2015  
 Drilling Contractor Wang Testing Services Drill Rig D-50 TMR [78%]  
 Driller K&N Logger F. Bozga Checked by C. Marin  
 Drilling Method 3.25" HSA to 10', mud rotary thereafter, boring backfilled upon completion

**WATER LEVEL DATA**  
 While Drilling Rotary wash  
 At Completion of Drilling Mud at 5 ft  
 Time After Drilling 120 hours  
 Depth to Water 2.00 ft

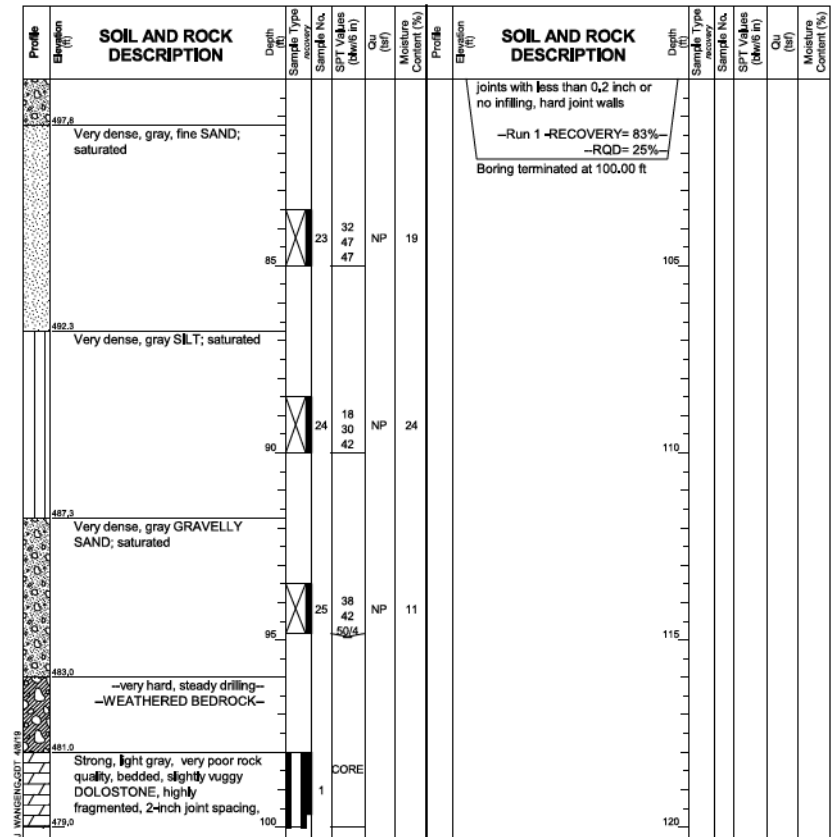
The stratification lines represent the approximate boundary between soil types, the actual transition may be gradual.

**Wang Engineering**  
 wangeng@wangeng.com  
 1145 N Main Street  
 Lombard, IL 60148  
 Telephone: 630 953-9928  
 Fax: 630 953-9938

**BORING LOG 2054-B-02**  
 WEI Job No.: 1100-04-01  
 Client: **AECOM**  
 Project: **Jane Byrne Interchange**  
 Location: **Section 17, T39N, R14E of 3rd PM**

Datum: NAVD 88  
 Elevation: 579.01 ft  
 North: 1899865.30 ft  
 East: 1171404.59 ft  
 Station: 8412+62.47  
 Offset: 73.45 LT

Page 3 of 3



**GENERAL NOTES**  
 Begin Drilling 09-15-2015 Complete Drilling 09-20-2015  
 Drilling Contractor Wang Testing Services Drill Rig D-50 TMR [78%]  
 Driller K&N Logger F. Bozga Checked by C. Marin  
 Drilling Method 3.25" HSA to 10', mud rotary thereafter, boring backfilled upon completion

**WATER LEVEL DATA**  
 While Drilling Rotary wash  
 At Completion of Drilling Mud at 5 ft  
 Time After Drilling 120 hours  
 Depth to Water 2.00 ft

The stratification lines represent the approximate boundary between soil types, the actual transition may be gradual.

1:05:57 PM  
 0161823-62A77-S012-Boring.dgn



USER NAME = wjcollett	DESIGNED - TJA	REVISED -
PLOT SCALE = NTS	CHECKED - WJC/MDS	REVISED -
PLOT DATE = 1/23/2020	DRAWN - TJA	REVISED -
	CHECKED - WJC/MDS	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BORING LOGS 1  
 RETAINING WALL 34 (STRUCTURE NO. 016-1823)

SHEET NO. S1-12 OF S1-16 SHEETS

Notes:  
 Boring Log 2054-B-02 Station and Offset Along @ Madison SB Entrance Ramp are: Sta. 8563+99.61, Offset 66.27' Rt.

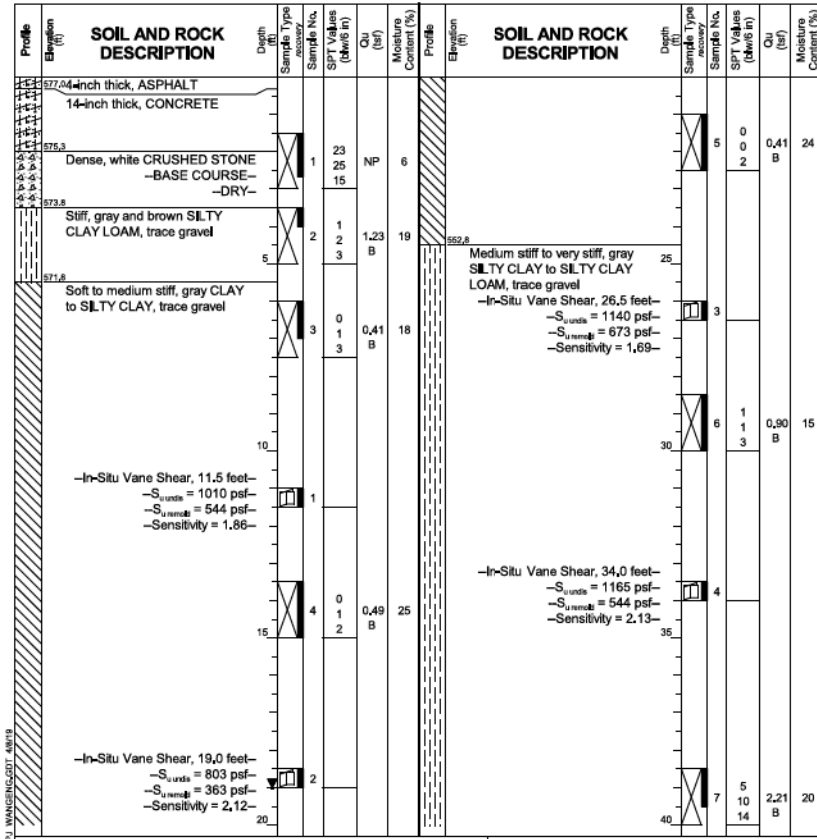
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	847
CONTRACT NO.			62A77	
ILLINOIS FED. AID PROJECT				

**Wang Engineering**  
wangeng@wangeng.com  
1145 N Main Street  
Lombard, IL 60148  
Telephone: 630 953-9928  
Fax: 630 953-9938

**BORING LOG 34-RWB-01**  
WEI Job No.: 1100-04-01  
Client: **AECOM**  
Project: **Jane Byrne Interchange**  
Location: **Section 17, T39N, R14E of 3rd PM**

Datum: NAVD 88  
Elevation: 577.30 ft  
North: 1899974.61 ft  
East: 1171509.36 ft  
Station: 6156+73.72  
Offset: 21.5607 LT

Page 1 of 2



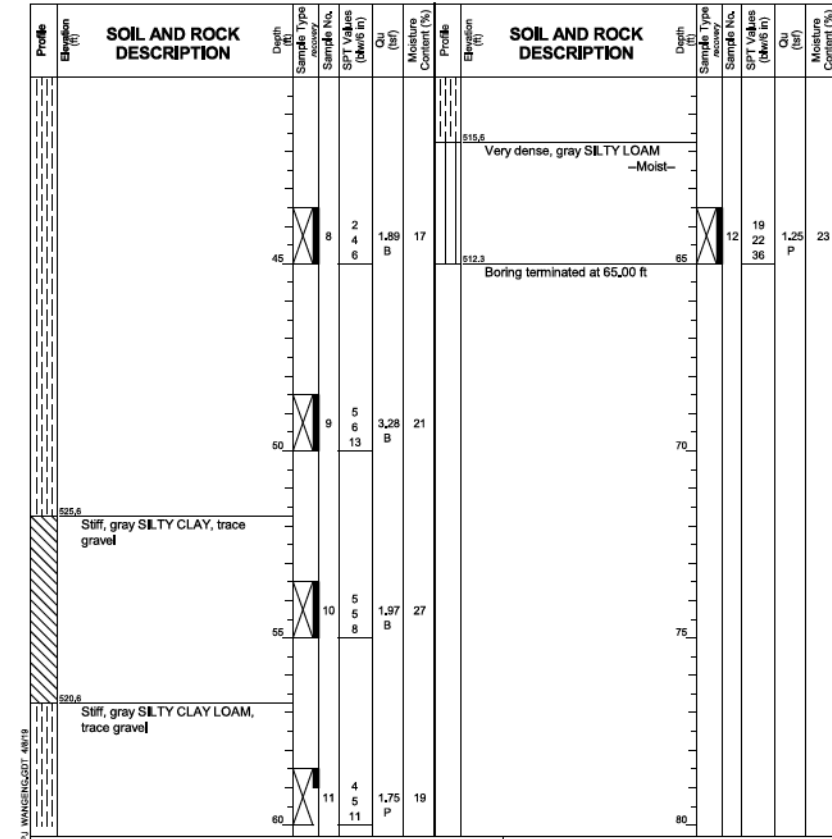
GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	07-21-2014	Complete Drilling	07-21-2014
Drilling Contractor	Wang Testing Services	Drill Rig	CME-55 TMR [85%]
Driller	A&K	Logger	A. Happel
Checked by	C. Marin	Time After Drilling	NA
Drilling Method	2.25" SSA to 10', mud rotary thereafter, boring	Depth to Water	NA
backfilled upon completion		The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.	

**Wang Engineering**  
wangeng@wangeng.com  
1145 N Main Street  
Lombard, IL 60148  
Telephone: 630 953-9928  
Fax: 630 953-9938

**BORING LOG 34-RWB-01**  
WEI Job No.: 1100-04-01  
Client: **AECOM**  
Project: **Jane Byrne Interchange**  
Location: **Section 17, T39N, R14E of 3rd PM**

Datum: NAVD 88  
Elevation: 577.30 ft  
North: 1899974.61 ft  
East: 1171509.36 ft  
Station: 6156+73.72  
Offset: 21.5607 LT

Page 2 of 2



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	07-21-2014	Complete Drilling	07-21-2014
Drilling Contractor	Wang Testing Services	Drill Rig	CME-55 TMR [85%]
Driller	A&K	Logger	A. Happel
Checked by	C. Marin	Time After Drilling	NA
Drilling Method	2.25" SSA to 10', mud rotary thereafter, boring	Depth to Water	NA
backfilled upon completion		The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.	

Notes:  
Boring Log 34-RWB-01 Station and Offset Along @ Madison SB Entrance Ramp are: Sta. 8562+92.28, Offset 36.90' Lt.

1:06:06 PM 0161823-62A77-3013-Boring.2.dgn



USER NAME = wjcolletti	DESIGNED - TJA	REVISED -
PLOT SCALE = NTS	CHECKED - WJC/MDS	REVISED -
PLOT DATE = 1/23/2020	DRAWN - TJA	REVISED -
	CHECKED - WJC/MDS	REVISED -

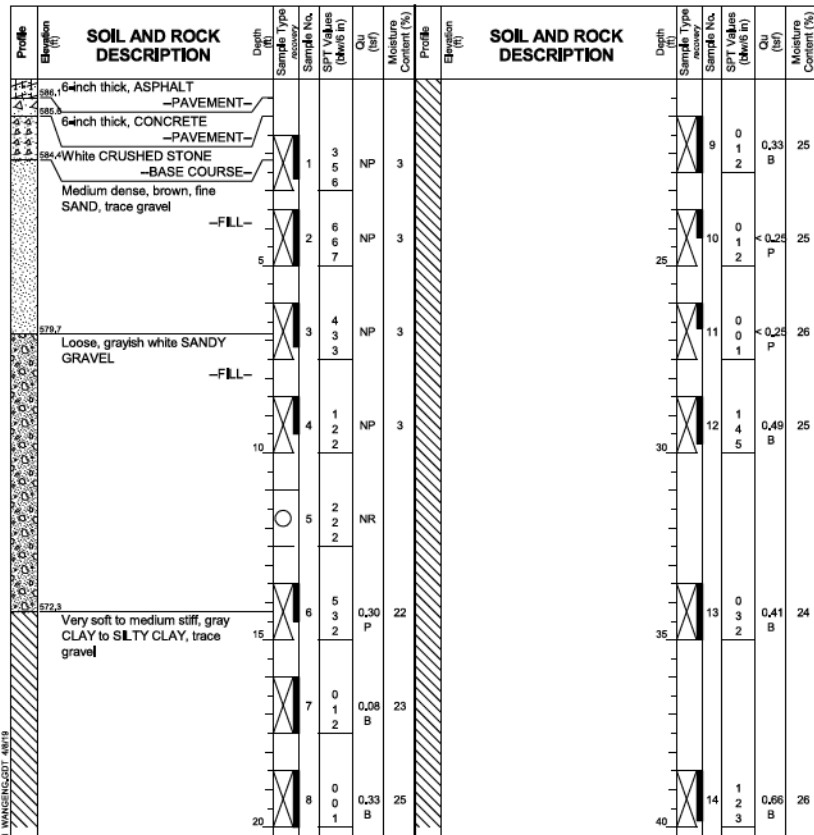
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BORING LOGS 2  
RETAINING WALL 34 (STRUCTURE NO. 016-1823)

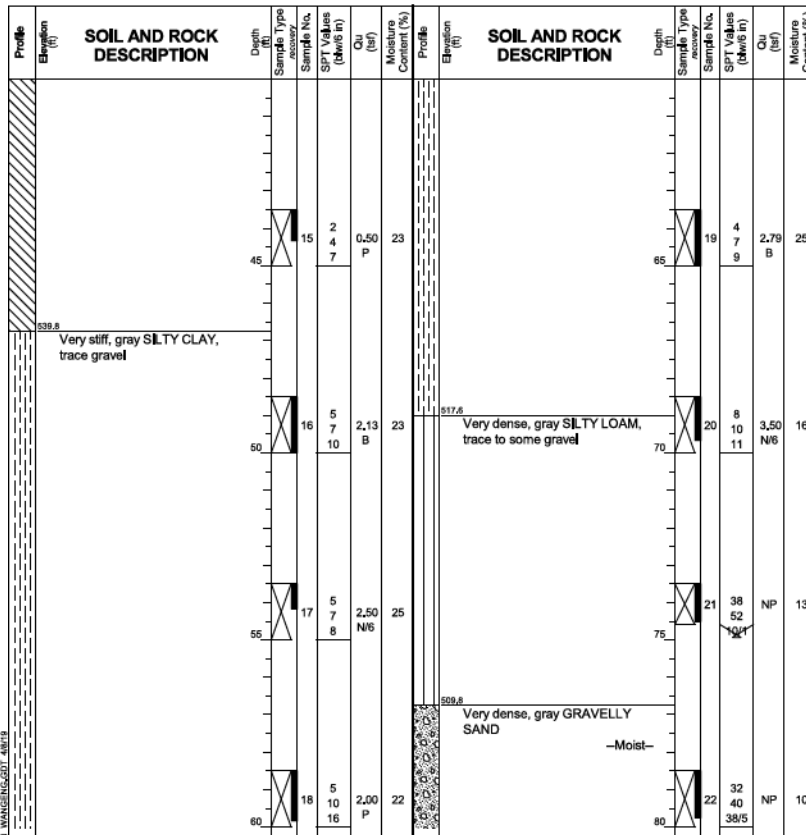
SHEET NO. S1-13 OF S1-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	848
CONTRACT NO.			62A77	
ILLINOIS FED. AID PROJECT				

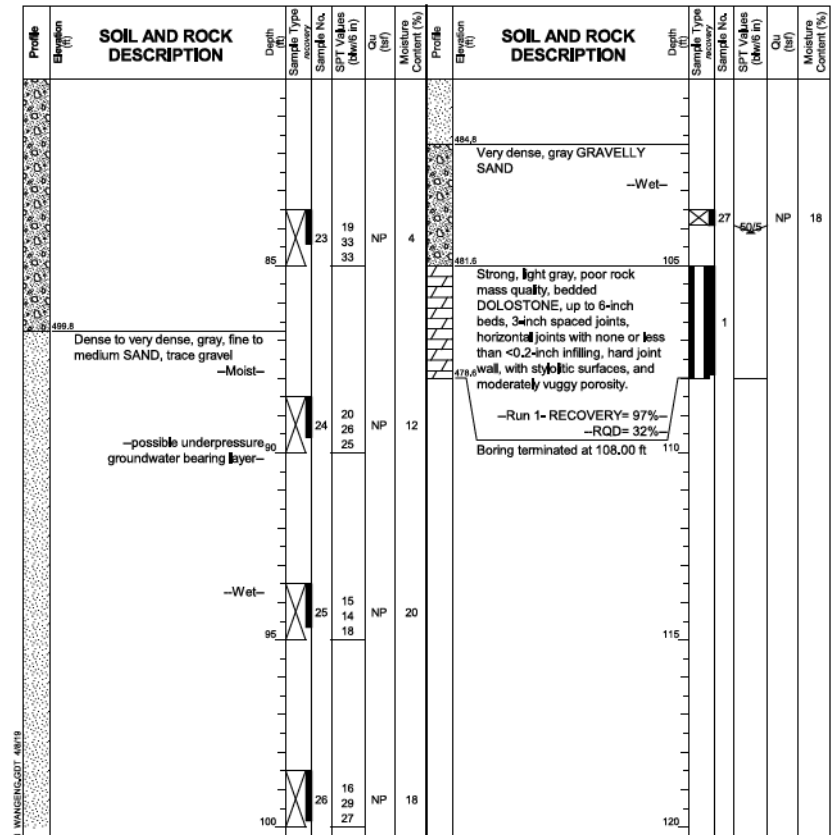




GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	07-07-2014	Complete Drilling	07-08-2014
Drilling Contractor	Wang Testing Services	Drill Rig	D-50 TMR [78%]
Driller	R&J	Logger	S. Woods
Checked by	C. Marin	Depth to Water	NA
Drilling Method	2.25" SSA to 10', mud rotary thereafter, boring		
backfilled upon completion		The stratification lines represent the approximate boundary between soil types, the actual transition may be gradual.	



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	07-07-2014	Complete Drilling	07-08-2014
Drilling Contractor	Wang Testing Services	Drill Rig	D-50 TMR [78%]
Driller	R&J	Logger	S. Woods
Checked by	C. Marin	Depth to Water	NA
Drilling Method	2.25" SSA to 10', mud rotary thereafter, boring		
backfilled upon completion		The stratification lines represent the approximate boundary between soil types, the actual transition may be gradual.	



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	07-07-2014	Complete Drilling	07-08-2014
Drilling Contractor	Wang Testing Services	Drill Rig	D-50 TMR [78%]
Driller	R&J	Logger	S. Woods
Checked by	C. Marin	Depth to Water	NA
Drilling Method	2.25" SSA to 10', mud rotary thereafter, boring		
backfilled upon completion		The stratification lines represent the approximate boundary between soil types, the actual transition may be gradual.	

1:06:15 PM  
 0161823-62A77-S014-Boring-3.dgn



USER NAME = wjcolletti	DESIGNED - TJA	REVISED -
PLOT SCALE = NTS	CHECKED - WJC/MDS	REVISED -
PLOT DATE = 1/23/2020	DRAWN - TJA	REVISED -
	CHECKED - WJC/MDS	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BORING LOGS 3  
 RETAINING WALL 34 (STRUCTURE NO. 016-1823)

SHEET NO. S1-14 OF S1-16 SHEETS

Notes:  
 Stations and offsets are measured  
 Along @ Madison SB Entrance Ramp.

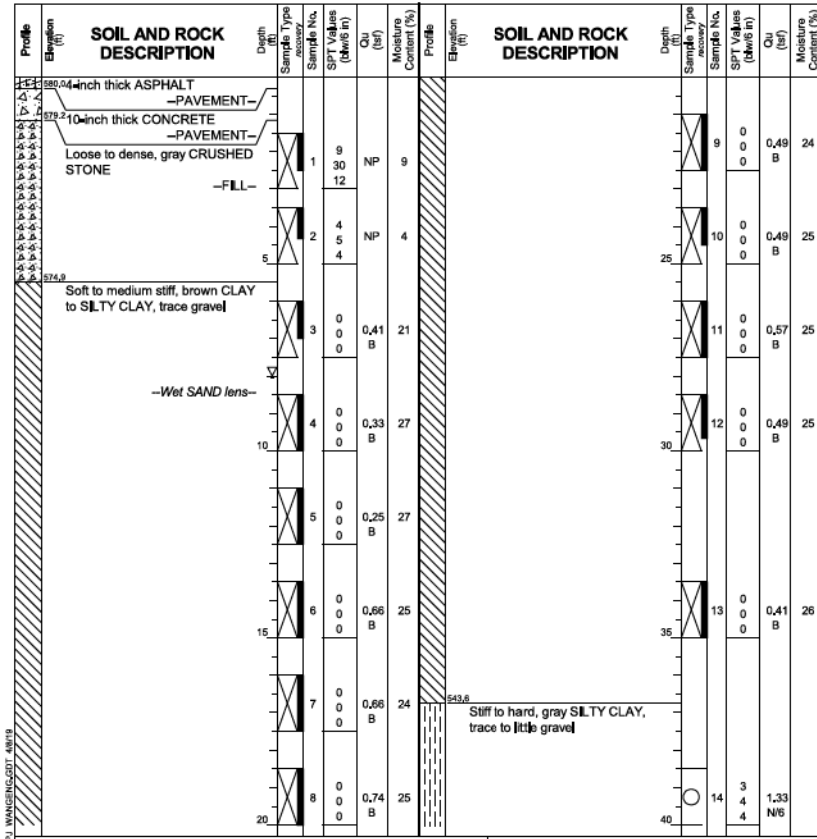
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	849
CONTRACT NO.			62A77	
ILLINOIS FED. AID PROJECT				

**Wang Engineering**  
wangeng@wangeng.com  
1145 N Main Street  
Lombard, IL 60148  
Telephone: 630 953-9928  
Fax: 630 953-9938

**BORING LOG 35-RWB-02**  
WEI Job No.: 1100-04-01  
Client: **AECOM**  
Project: **Jane Byrne Interchange**  
Location: **Section 17, T39N, R14E of 3rd PM**

Datum: NAVD 88  
Elevation: 580.37 ft  
North: 1899923.16 ft  
East: 1171484.85 ft  
Station: 8583444.20  
Offset: 12.9370 LT

Page 1 of 2



**GENERAL NOTES**  
Begin Drilling 07-08-2014 Complete Drilling 07-08-2014  
Drilling Contractor Wang Testing Services Drill Rig B-57 TMR [100%]  
Driller A&K Logger A. Mohammed Checked by C. Marin  
Drilling Method 2.25" HSA to 10', mud rotary thereafter, boring backfilled upon completion

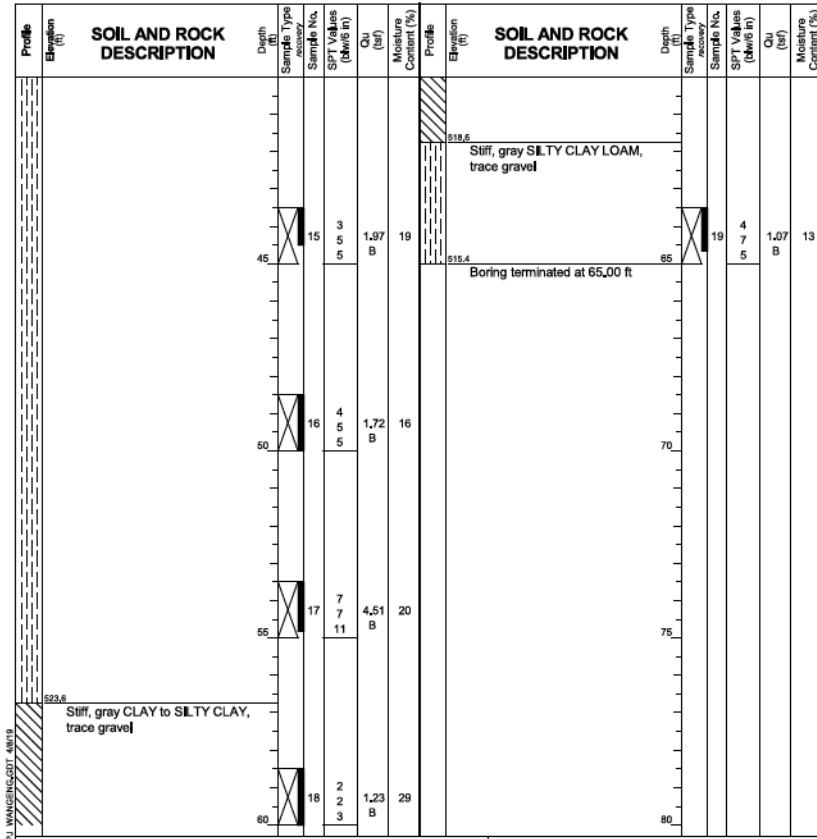
**WATER LEVEL DATA**  
While Drilling 8.00 ft  
At Completion of Drilling mud in the borehole  
Time After Drilling NA  
Depth to Water NA  
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

**Wang Engineering**  
wangeng@wangeng.com  
1145 N Main Street  
Lombard, IL 60148  
Telephone: 630 953-9928  
Fax: 630 953-9938

**BORING LOG 35-RWB-02**  
WEI Job No.: 1100-04-01  
Client: **AECOM**  
Project: **Jane Byrne Interchange**  
Location: **Section 17, T39N, R14E of 3rd PM**

Datum: NAVD 88  
Elevation: 580.37 ft  
North: 1899923.16 ft  
East: 1171484.85 ft  
Station: 8583444.20  
Offset: 12.9370 LT

Page 2 of 2



**GENERAL NOTES**  
Begin Drilling 07-08-2014 Complete Drilling 07-08-2014  
Drilling Contractor Wang Testing Services Drill Rig B-57 TMR [100%]  
Driller A&K Logger A. Mohammed Checked by C. Marin  
Drilling Method 2.25" HSA to 10', mud rotary thereafter, boring backfilled upon completion

**WATER LEVEL DATA**  
While Drilling 8.00 ft  
At Completion of Drilling mud in the borehole  
Time After Drilling NA  
Depth to Water NA  
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Notes:  
Stations and offsets are measured  
Along @ Madison SB Entrance Ramp.

1:06:24 PM  
0161823-62A77-S015-Boring\_4.dgn



USER NAME = wjcolletti	DESIGNED - TJA	REVISED -
PLOT SCALE = NTS	CHECKED - WJC/MDS	REVISED -
PLOT DATE = 1/23/2020	DRAWN - TJA	REVISED -
	CHECKED - WJC/MDS	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BORING LOGS 4  
RETAINING WALL 34 (STRUCTURE NO. 016-1823)

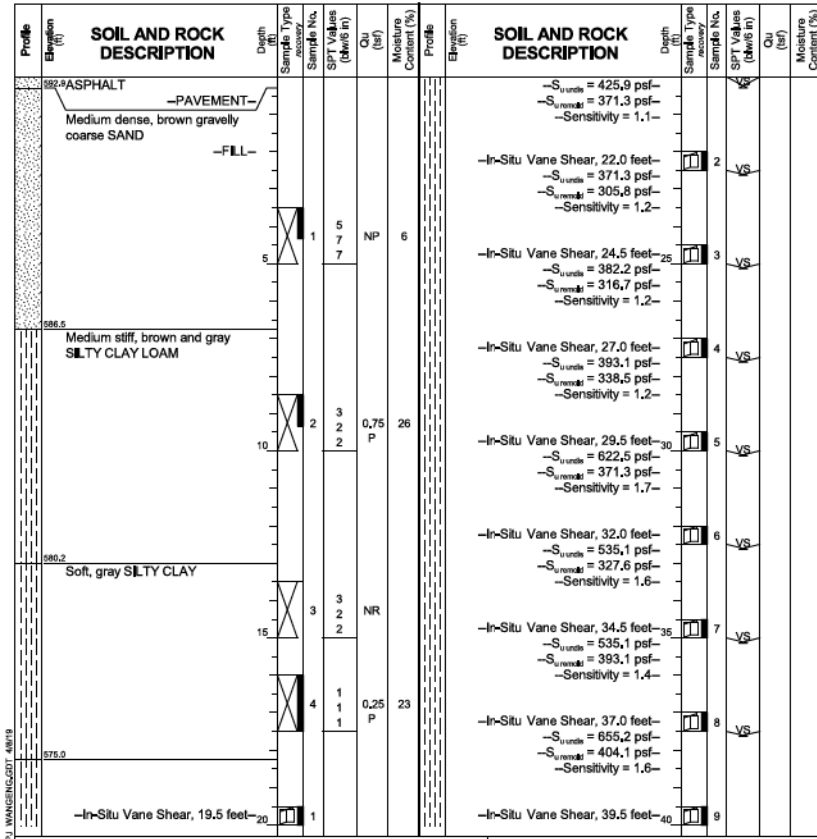
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	850
CONTRACT NO.			62A77	
ILLINOIS FED. AID PROJECT				

SHEET NO. S1-15 OF S1-16 SHEETS

**Wang Engineering**  
wangeng@wangeng.com  
1145 N Main Street  
Lombard, IL 60148  
Telephone: 630 953-9928  
Fax: 630 953-9938

**BORING LOG VST-03**  
WEI Job No.: 1100-04-01  
Client: **AECOM**  
Project: **Jane Byrne Interchange**  
Location: **Section 17, T39N, R14E of 3rd PM**

Datum: NAVD 88  
Elevation: 593.21 ft  
North: 1899985.05 ft  
East: 1171693.33 ft  
Station: 8415+53.90  
Offset: 182.276 LT

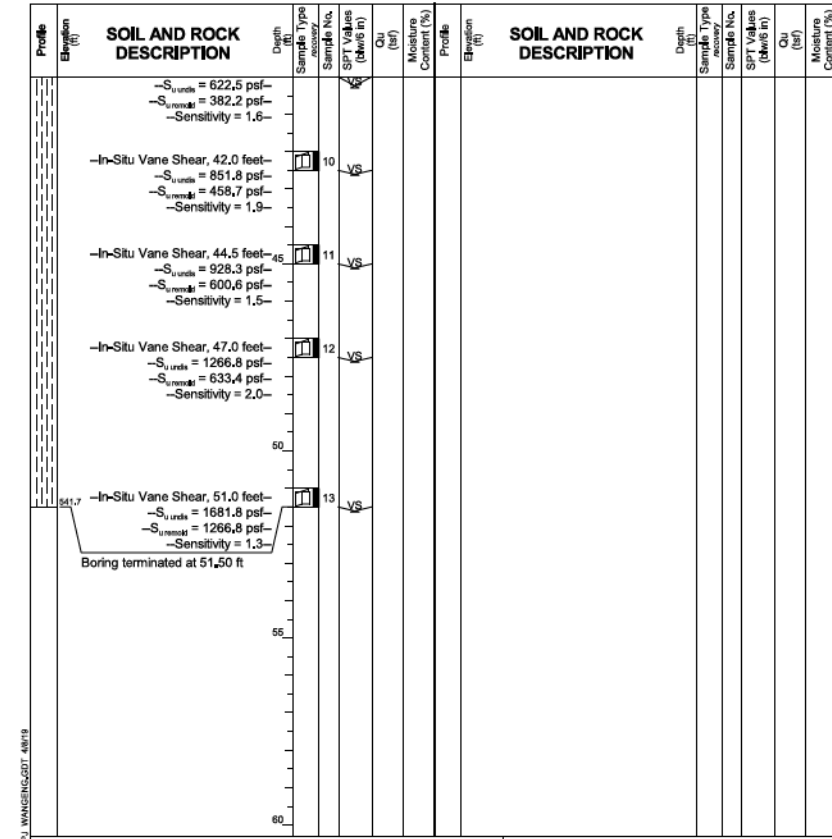


<b>GENERAL NOTES</b>	<b>WATER LEVEL DATA</b>
Begin Drilling 12-02-2015 Complete Drilling 12-02-2015	While Drilling <input checked="" type="checkbox"/> Rotary wash
Drilling Contractor Wang Testing Services Drill Rig CME-55 TMR [85%]	At Completion of Drilling <input checked="" type="checkbox"/> mud in the borehole
Driller R&N Logger F. Bozga Checked by A. Kurnia	Time After Drilling NA
Drilling Method 2.25" HSA to 10', mud rotary thereafter, boring backfilled upon completion	Depth to Water <input checked="" type="checkbox"/> NA
	The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

**Wang Engineering**  
wangeng@wangeng.com  
1145 N Main Street  
Lombard, IL 60148  
Telephone: 630 953-9928  
Fax: 630 953-9938

**BORING LOG VST-03**  
WEI Job No.: 1100-04-01  
Client: **AECOM**  
Project: **Jane Byrne Interchange**  
Location: **Section 17, T39N, R14E of 3rd PM**

Datum: NAVD 88  
Elevation: 593.21 ft  
North: 1899985.05 ft  
East: 1171693.33 ft  
Station: 8415+53.90  
Offset: 182.276 LT



<b>GENERAL NOTES</b>	<b>WATER LEVEL DATA</b>
Begin Drilling 12-02-2015 Complete Drilling 12-02-2015	While Drilling <input checked="" type="checkbox"/> Rotary wash
Drilling Contractor Wang Testing Services Drill Rig CME-55 TMR [85%]	At Completion of Drilling <input checked="" type="checkbox"/> mud in the borehole
Driller R&N Logger F. Bozga Checked by A. Kurnia	Time After Drilling NA
Drilling Method 2.25" HSA to 10', mud rotary thereafter, boring backfilled upon completion	Depth to Water <input checked="" type="checkbox"/> NA
	The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

1:06:32 PM 0161823-62A77-5016-Boring-5.dgn



USER NAME = wjcolletti	DESIGNED - TJA	REVISED -
PLOT SCALE = NTS	CHECKED - WJC/MDS	REVISED -
PLOT DATE = 1/23/2020	DRAWN - TJA	REVISED -
	CHECKED - WJC/MDS	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BORING LOGS 5  
RETAINING WALL 34 (STRUCTURE NO. 016-1823)**

SHEET NO. S1-16 OF S1-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	851
CONTRACT NO.			62A77	
ILLINOIS FED. AID PROJECT				

Notes:  
Boring Log VST-03 Station and Offset  
Along @ Madison SB Entrance Ramp are:  
Sta. 8562+78.74, Offset 220.17' Lt.

# FOR INFORMATION ONLY

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A.P. 90/94	*	COOK	246	192
*SECT. (202.6-2P, ETC. 1415 & 1517)R-7				
Contract # 62408				

Contract # 62408

## GENERAL NOTES

- REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 706 GR 60 (IL MODIFIED). SEE SPECIAL PROVISIONS.
- REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.
- EXPOSED EDGES SHALL HAVE A 3/4" CHAMFER.
- PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED UPON THE UNIT PRICE BID FOR THE WORK.
- EXISTING REINFORCEMENT, THAT IS TO BE REUSED IN THE PROPOSED, SHALL BE CLEANED AND STRAIGHTENED.
- EMBEDDED BARS SHALL BE EPOXY GROUTED, TO THE DEPTH SPECIFIED, IN ACCORDANCE WITH SECTION 584 OF THE STANDARD SPECIFICATIONS.

## DESIGN SPECIFICATIONS

AASHTO 2002 SPECIFICATIONS W/ CURRENT INTERIMS

## DESIGN STRESSES

f'c = 3,500 psi (CONCRETE)  
fy = 60,000 psi (REINFORCEMENT)

APPROVED  
FOR STRUCTURAL ADEQUACY ONLY

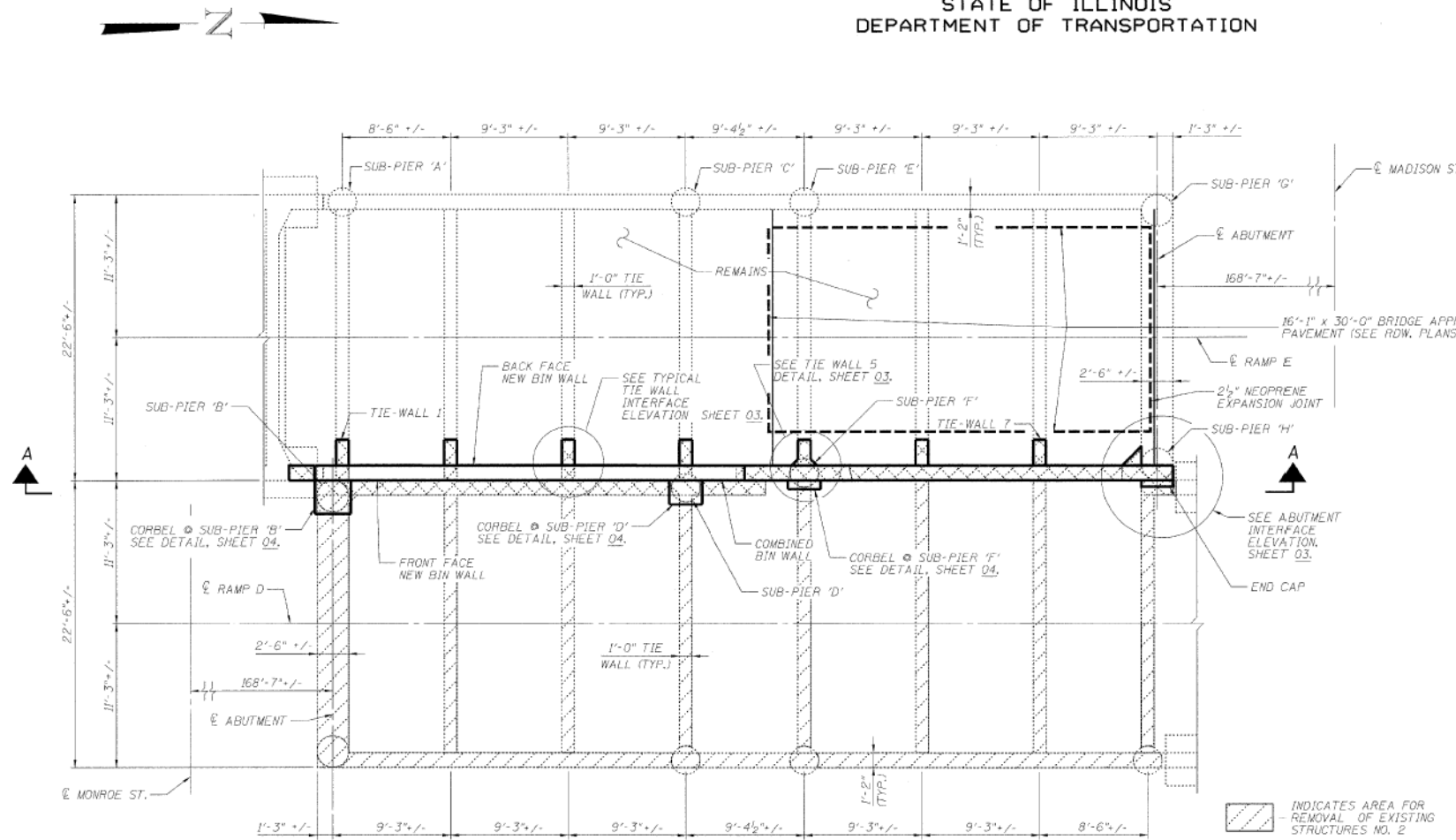
*Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES

## BILL OF MATERIALS

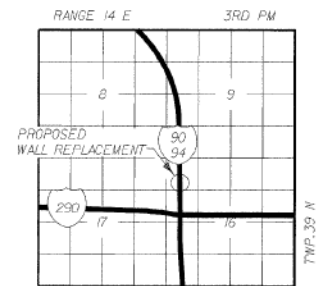
ITEM	UNIT	QUANTITY
CONCRETE STRUCTURES	CU YD	50.2
REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1
CONCRETE REMOVAL	CU YD	61
REINFORCEMENT BARS, EPOXY COATED	POUND	7,780
POROUS GRANULAR EMBANKMENT	TON	652
REMOVE, SALVAGE, STORE AND INSTALL DECORATIVE STEEL GUARDRAIL RAMP E	LS	1
FABRICATION AND INSTALLATION OF EMBEDDED PLATES, RAMP E	LS	1
2 1/2" NEOPRENE EXPANSION JOINT	FOOT	24

DLZ ILLINOIS, LLC  
ARLINGTON HEIGHTS, ILLINOIS

Signed: *Ralph E. Anderson*  
Date: 02-25-2020  
Expiration Date: 11/30/10

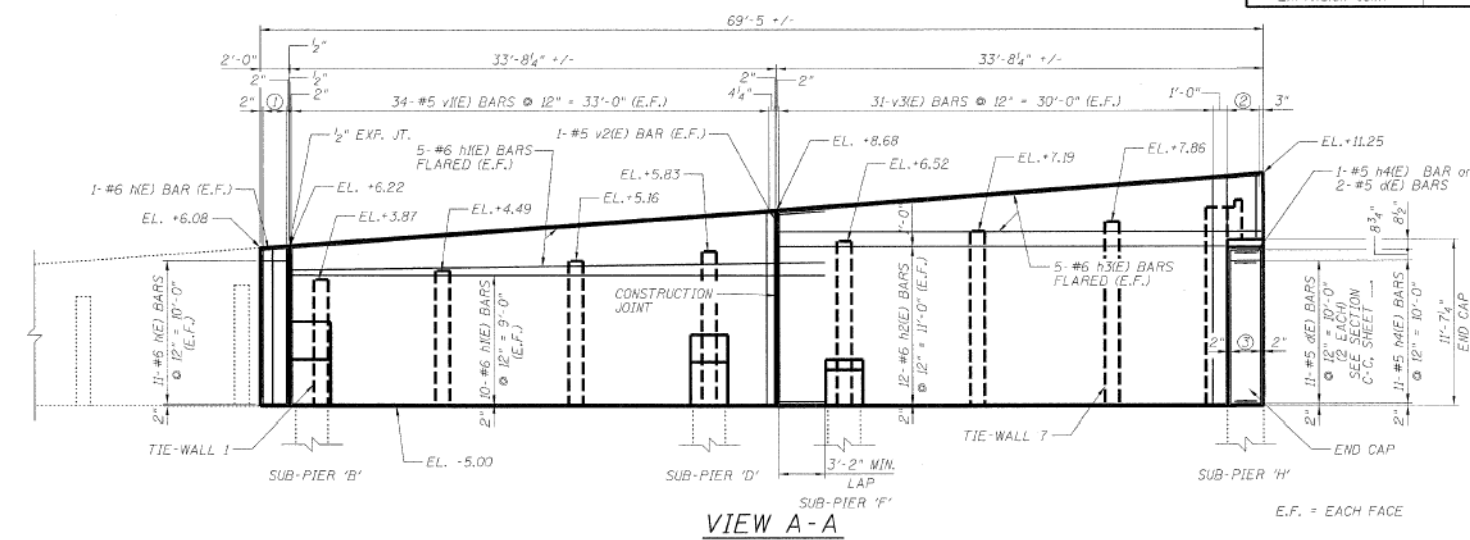


PARTIAL PLAN  
PAVEMENT REMOVED FOR CLARITY  
RAMP D TO BE REMOVED



LOCATION SKETCH

DESIGNED	ASP
CHECKED	LNB
DRAWN	BEM
CHECKED	ASP



VIEW A-A

- 3-#5 (E) BARS @ 2' ED. SPA. = 1'-8" (E.F.)  
SEE CORBEL @ SUB-PIER 'B' DETAIL, SHEET 04.
- 4-#5 (E) BARS @ ED. SPA. = 2'-3 1/4" (E.F.)  
SEE SECTION B-B SHEET 03.
- 4-#5 (E) BARS @ ED. SPACES  
SEE SECTION C-C SHEET 03.

RAMPS 'D' & 'E' GENERAL PLAN  
I-90/94 KENNEDY EXPRESSWAY  
(HUBBARD'S CAVE TO I-290)  
SECTION (202.6-2P, ETC. 1415 & 1517)R-7  
COOK COUNTY  
STRUCTURE NO. 016-W986

DLZ ILLINOIS, INC. 85 W. ALGONQUIN RD. STE. 220  
ARLINGTON HEIGHTS, IL 60005

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
RETAINING WALL 34 (STRUCTURE NO. 016-1823)

SHEET NO. AB-01 OF AB-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	852
CONTRACT NO.			62477	

ILLINOIS FED. AID PROJECT

14:07:23 PM  
D:\62477-SHT-AS-BUILT-01.dgn



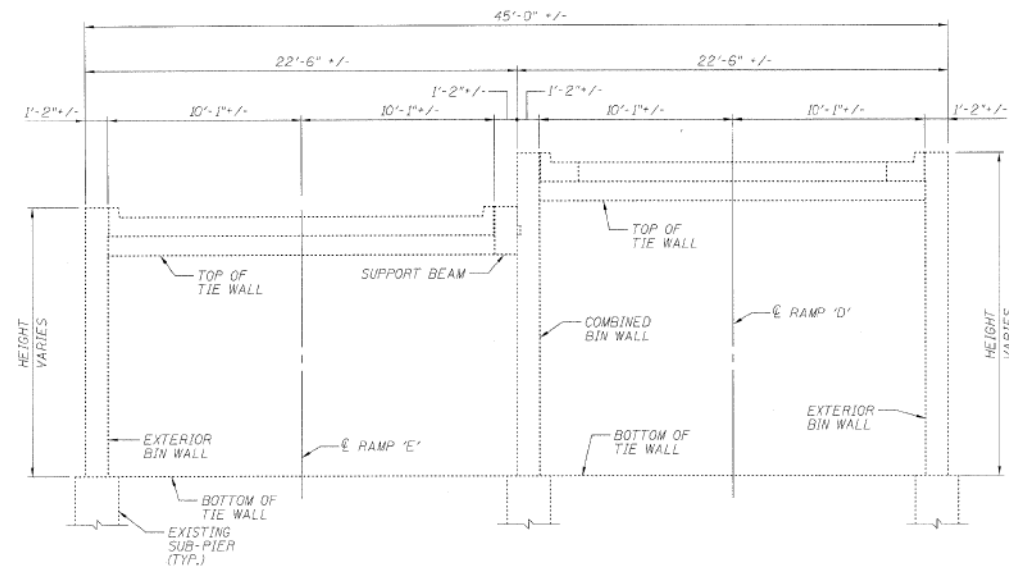
USER NAME = wjcolletti	DESIGNED - JTF	REVISED -
PLOT SCALE = NTS	CHECKED - WJC	REVISED -
PLOT DATE = 1/23/2020	DRAWN - JTF	REVISED -
	CHECKED - WJC	REVISED -

# FOR INFORMATION ONLY

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

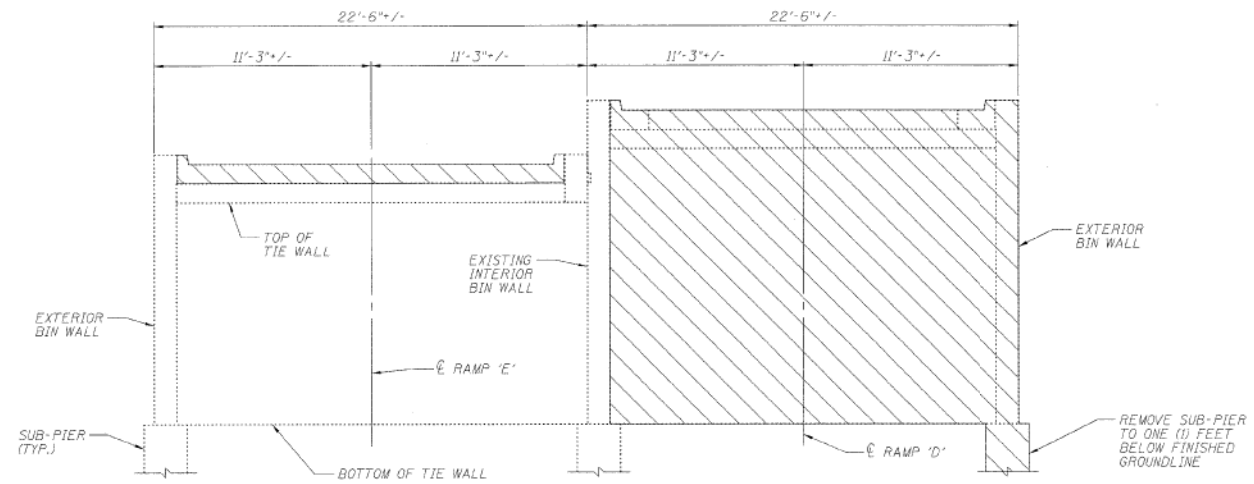
ROUTE NO.	SECTION	COUNTY	LEAD SHEET	SHEET NO.	SHEET NO. 02
F.A.P. 90/94	*	COOK	246	193	07 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			

\*SECT. (202.6-2P, ETC. 1415 & 1517)R-7  
Contract # 62408



**EXISTING TYPICAL SECTION**  
(LOOKING NORTH)

INDICATES AREA OF REMOVAL



**STAGE 1**  
(LOOKING NORTH)

## PROPOSED STAGE PLANNING

### STAGE 1

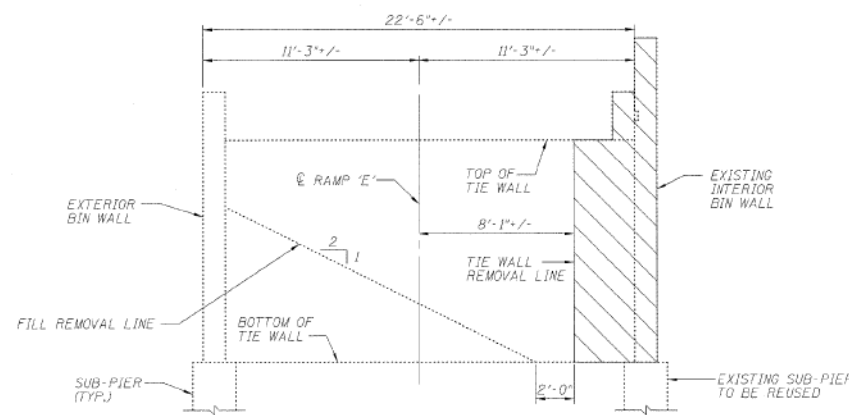
1. CLOSE RAMP 'E' TO TRAFFIC.
2. REMOVE, SALVAGE AND STORE RAILING FROM RAMP 'E' CENTER WALL.
3. REMOVE RAMP 'E' CURBS & PAVEMENT.
4. REMOVE RAMP 'D' IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. NO WORK SHALL BE PERFORMED FROM ON TOP OF RAMP 'E' UPON COMMENCEMENT OF RAMP 'D' REMOVAL FOR THE DURATION OF CENTER WALL REPLACEMENT.

### STAGE 2

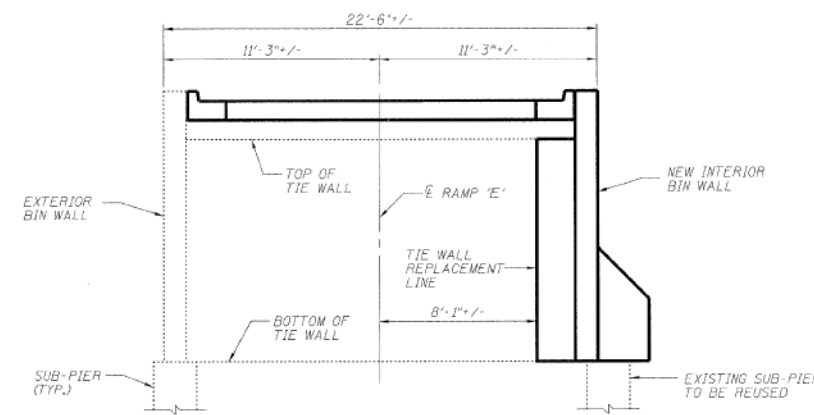
5. REMOVE CENTER WALL, FILL MATERIAL, AND RAMP 'E' TIE WALLS. TIE WALLS TO BE REMOVED FROM EXST. INTERIOR BIN WALL TO AN OFFSET OF 8'-1" RIGHT OF RAMP 'E' CENTERLINE.

### FINAL

6. CONSTRUCT PROPOSED CENTER WALL, CORBELS AND TIE WALL PORTIONS AS SPECIFIED IN THE PLANS AND SPECIFICATIONS.
7. FILL BIN WITH POROUS GRANULAR EMBANKMENT IN ACCORDANCE WITH SECTION 207.00 OF THE STANDARD SPECIFICATIONS.
8. UPON COMPLETION OF BACKFILLING OPERATIONS, CONSTRUCT PAVEMENT AND CURBS FOR RAMP 'E'.
9. REPLACE GUARDRAIL ON NEWLY CONSTRUCTED WALL.
10. RE-OPEN RAMP 'E' TO TRAFFIC.



**STAGE 2**  
(LOOKING NORTH)



**FINAL**  
(LOOKING NORTH)

DESIGNED	ASP
CHECKED	LNQ
DRAWN	BEM
CHECKED	ASP

**RAMPS 'D' & 'E' PROPOSED STAGE PLANNING**  
**I-90/94 KENNEDY EXPRESSWAY**  
**(HUBBARDS CAVE TO I-290)**  
**SECTION (202.6-2P, ETC. 1415 & 1517)R-7**  
**COOK COUNTY**  
**STRUCTURE NO. 016-W986**

**DLZ** 85 W. Algonquin Rd. Ste. 220  
Arlington Heights IL 60005

1:07:35 PM  
D162A77-SHT-AS-BUILT-02.dgn



USER NAME = wjcollett	DESIGNED - JTF	REVISED -
PLOT SCALE = NTS	CHECKED - WJC	REVISED -
PLOT DATE = 1/23/2020	DRAWN - JTF	REVISED -
	CHECKED - WJC	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
RETAINING WALL 34 (STRUCTURE NO. 016-1823)

SHEET NO. AB-02 OF AB-11 SHEETS

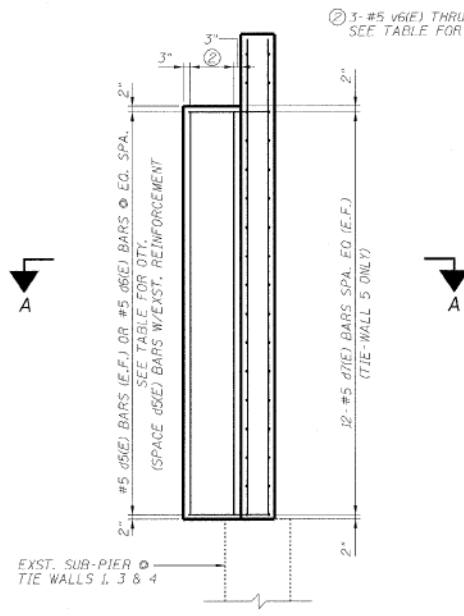
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	853
CONTRACT NO.			62A77	
ILLINOIS FED. AID PROJECT				

# FOR INFORMATION ONLY

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	JOB SHEETS	SHEET NO.	SHEET NO. 03
F.A.P. 90/94		COOK	246	194	07 SHEETS

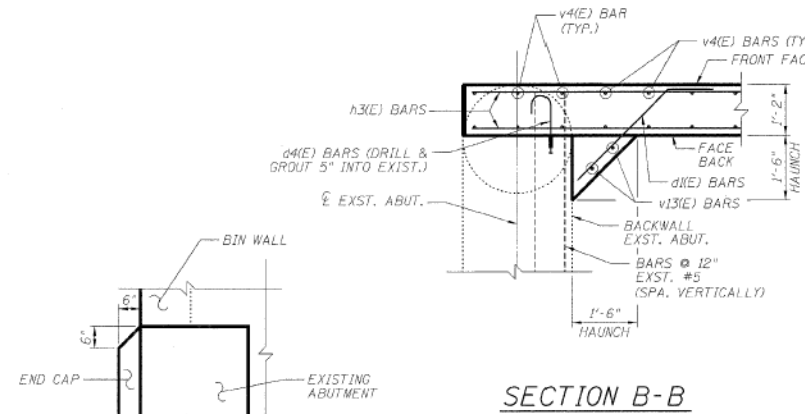
\*SECT. (202.6-2P, ETC. 1415 & 1517)R-7  
Contract # 62408



TYPICAL TIE-WALL  
INTERFACE ELEVATION

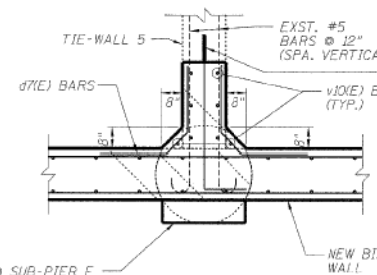
TIE WALL INTERFACE BARS

TIE WALL	(d6(E)) BARS (E.F.)	(d6(E)) BARS VERT. BARS
1	9	13 v6(E)
2	10	13 v7(E)
3	10	13 v8(E)
4	11	13 v9(E)
5	0	13 v10(E)
6	12	13 v11(E)
7	13	13 v12(E)

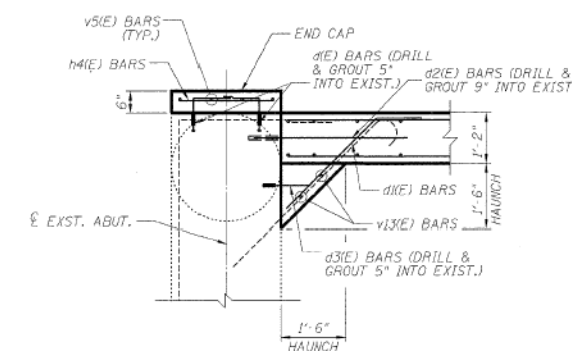


SECTION B-B

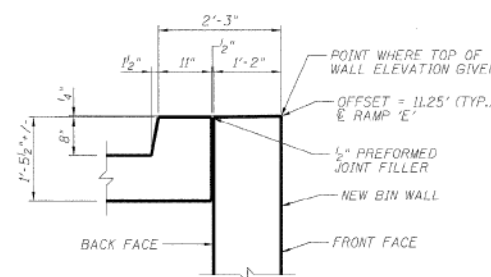
TOP OF END CAP  
DETAIL



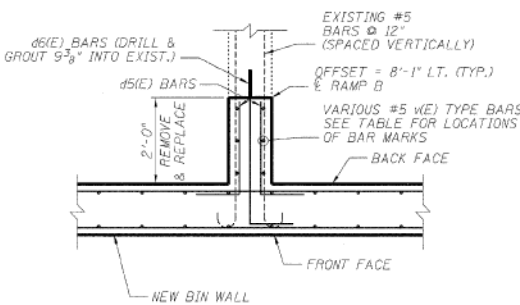
TIE-WALL 5 DETAIL



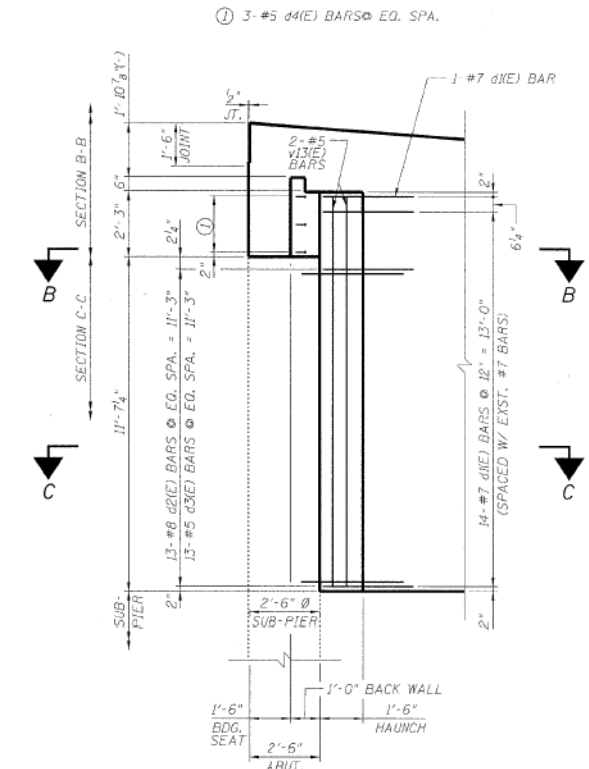
SECTION C-C



TOP OF WALL DETAIL



SECTION A-A



ABUTMENT INTERFACE  
ELEVATION  
(LOOKING @ BACKFACE)

RAMPS 'D' & 'E' DETAILS  
I-90/94 KENNEDY EXPRESSWAY  
(HUBBARDS CAVE TO I-290)  
SECTION (202.6-2P, ETC. 1415 & 1517)R-7  
COOK COUNTY  
STRUCTURE NO. 016-W986

DLZ 85 W. Algonquin Rd. Ste. 220  
Arlington Heights IL 60005  
DLZ Illinois, Inc.

DESIGNED	ASP
CHECKED	LNB
DRAWN	BEM
CHECKED	ASP

NOTE:  
BARS d (E), d2(E) - d4(E) & d6(E) SHALL  
BE EMBEDDED AND GROUTED USING  
HIGH STRENGTH EPOXY GROUT.

USER NAME	= wjcolletti
PLOT SCALE	= NTS
PLOT DATE	= 1/23/2020

DESIGNED	- JTF	REVISED	-
CHECKED	- WJC	REVISED	-
DRAWN	- JTF	REVISED	-
CHECKED	- WJC	REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
RETAINING WALL 34 (STRUCTURE NO. 016-1823)

SHEET NO. AB-03 OF AB-11 SHEETS

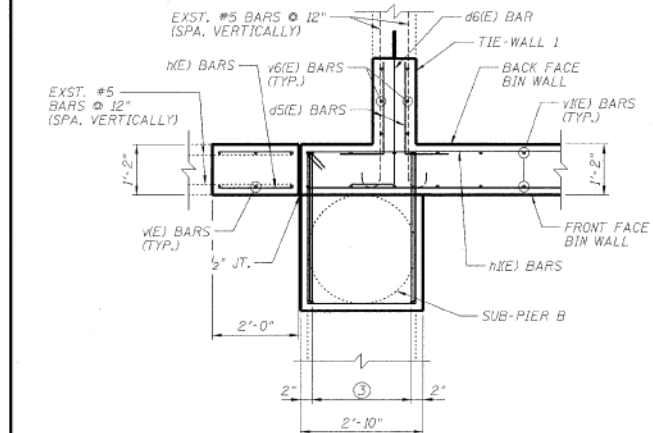
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	854
CONTRACT NO.			62477	

ILLINOIS FED. AID PROJECT

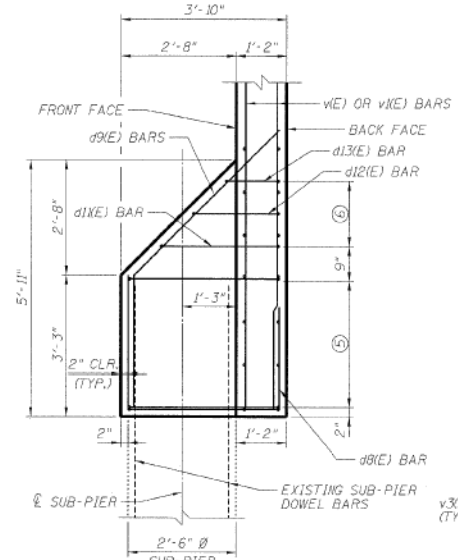
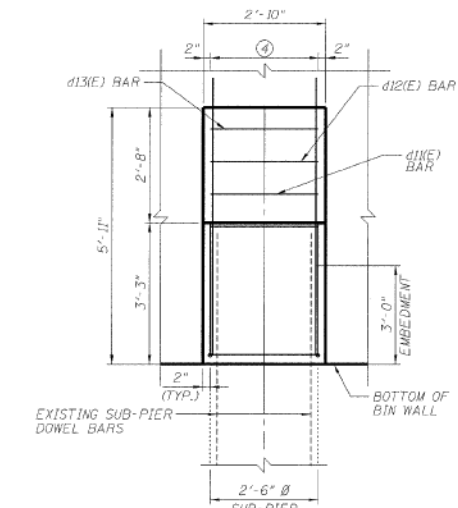
# FOR INFORMATION ONLY

## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

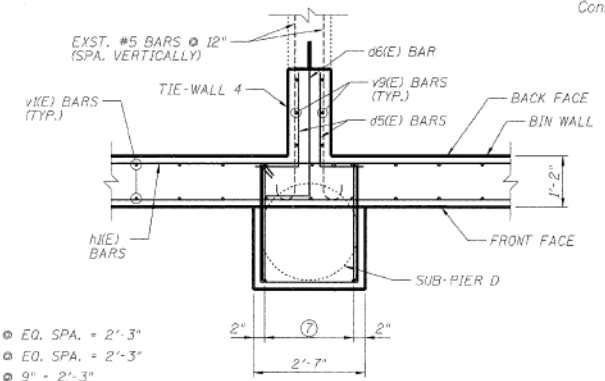
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO.
F.A.P. 90/94	*	COOK	246	195	07 SHEETS
*SECT. (202.6-2P, ETC, 1415 & 1517)R-7 Contract # 62408					



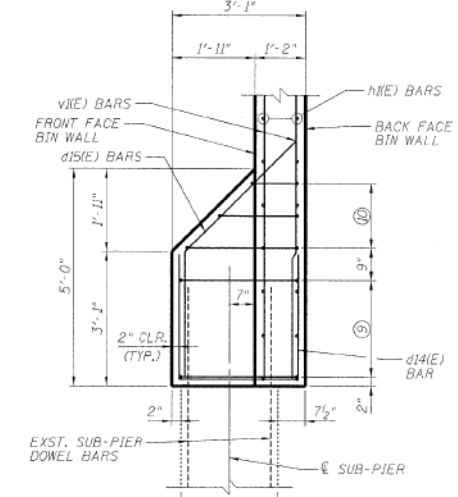
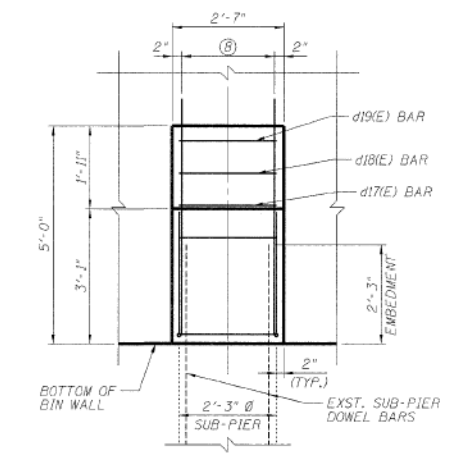
- ③ 5-#9 d6(E) BARS @ 6" = 2'-6"
- ④ 5-#5 d5(E) BARS @ 6" = 2'-6"
- ⑤ 5-#5 d10(E) BARS @ 9" = 3'-0"
- ⑥ 1-#5 d11(E) THRU d13(E) BARS @ 9" = 1'-6"



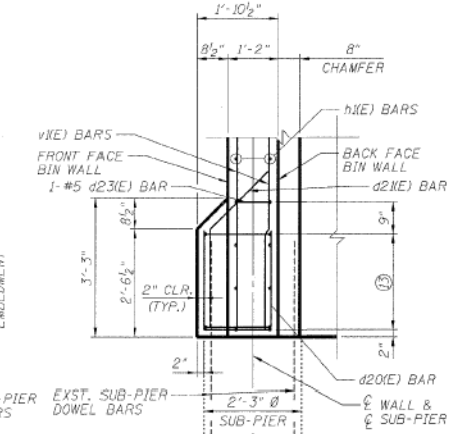
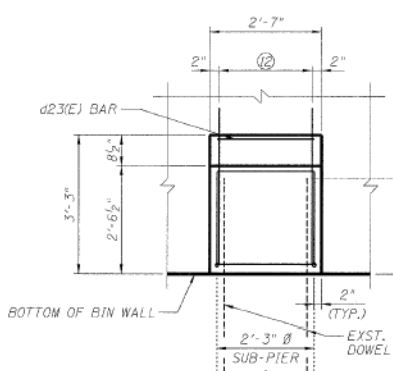
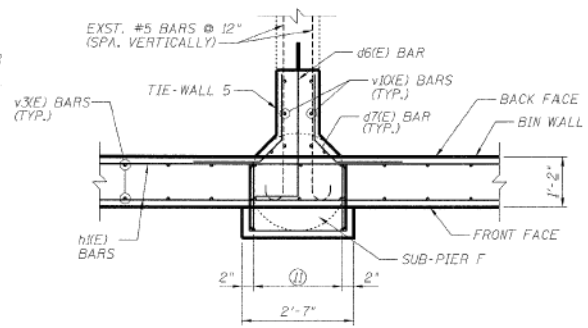
**CORBEL @ SUB-PIER B**



- ⑦ 5-#9 d14(E) BARS @ EQ. SPA. = 2'-3"
- ⑧ 5-#5 d15(E) BARS @ EQ. SPA. = 2'-3"
- ⑨ 4-#5 d16(E) BARS @ 9" = 2'-3"
- ⑩ 1-#5 d17(E) THRU d19(E) BARS @ 9" = 1'-6"



**CORBEL @ SUB-PIER D**



**CORBEL @ SUB-PIER F**

- ⑪ 5-#5 d20(E) BARS @ EQ. SPA. = 2'-3"
- ⑫ 5-#5 d21(E) BARS @ EQ. SPA. = 2'-3"
- ⑬ 4-#5 d22(E) BARS @ 9" = 2'-3"

**RAMPS 'D' & 'E' CORBEL DETAILS**  
**I-90/94 KENNEDY EXPRESSWAY**  
**(HUBBARDS CAVE TO I-290)**  
**SECTION (202.6-2P, ETC, 1415 & 1517)R-7**  
**COOK COUNTY**  
**STRUCTURE NO. 016-W986**



DESIGNED	ASP
CHECKED	LNB
DRAWN	BEM
CHECKED	ASP

USER NAME = wjcolletti	DESIGNED - JTF	REVISED -
PLOT SCALE = NTS	CHECKED - WJC	REVISED -
PLOT DATE = 1/23/2020	DRAWN - JTF	REVISED -
	CHECKED - WJC	REVISED -

## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

## EXISTING RECORD DRAWINGS RETAINING WALL 34 (STRUCTURE NO. 016-1823)

SHEET NO. AB-04 OF AB-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	855
CONTRACT NO.			62477	
ILLINOIS FED. AID PROJECT				

14:07:52 PM D:\62477-SHT-AS-BUILT-04.dgn

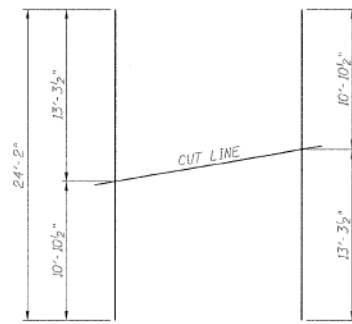


# FOR INFORMATION ONLY

## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

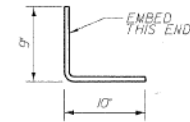
ROUTE NO. F.A.P. 90/94	SECTION *	COUNTY COOK	SHEET NO. 2AC	SHEET NO. 19C	SHEET NO. 05 07 SHEETS
------------------------------	--------------	----------------	------------------	------------------	---------------------------

\*SECT. (202.6-2P, ETC, 1415 & 1517)R-7  
Contract # 62408

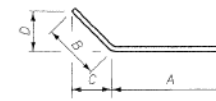


**BAR v1(E)**

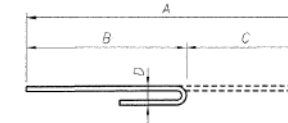
34 BARS-1 SET  
(USE REMAINDER OF BARS  
IN OPPOSITE FACE)



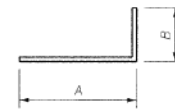
**BAR d1(E)**



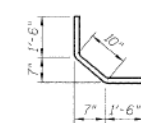
**BARS d1(E), d9(E), d15(E) OR d21(E)**



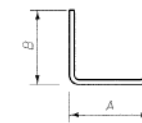
**BARS d2(E) THRU d4(E)**



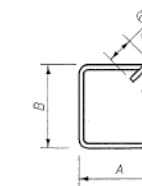
**BARS d5(E) OR d6(E)**



**BAR d7(E)**



**BARS d8(E), d14(E) OR d20(E)**



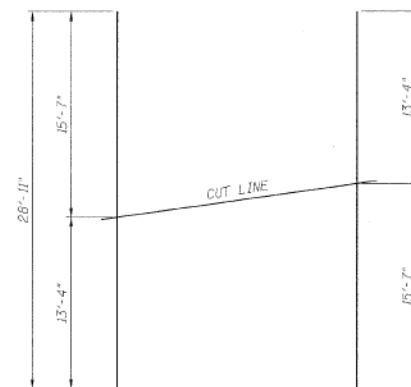
**BARS d10(E) THRU d13(E)  
OR d16(E) THRU d19(E)  
OR d22(E) THRU d23(E)**

### BAR BENDING DIAGRAMS

Bar	A		B		C		D	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
d1(E)	2	10	1	6	1	0 1/4	1	0 1/4
d2(E)	3	2	2	3	0	11	0	8
d3(E)	1	8	1	1	0	7	0	5
d4(E)	1	11	1	4	0	7	0	5
d5(E)	2	0	1	0				
d6(E)	3	9	1	0				
d8(E)	3	6	3	0				
d9(E)	4	10	3	0	2	1/2	2	1/2
d10(E)	2	6	3	6				
d11(E)	2	6	2	9				
d12(E)	2	6	2	0				
d13(E)	2	6	1	3				
d14(E)	2	9	2	10				
d15(E)	3	8	2	10	2	0 1/4	2	0 1/4
d16(E)	2	3	2	9				
d17(E)	2	3	2	8				
d18(E)	2	3	1	11				
d19(E)	2	3	1	2				
d20(E)	1	6	2	3				
d21(E)	2	3	1	11	1	4	1	4
d22(E)	2	3	1	6 1/2				
d23(E)	2	3	0	10				

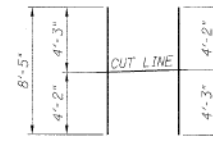
### BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d1(E)	24	5	1'-7"	┌───┐
d1(E)	15	7	4'-4"	┌───┐
d2(E)	13	8	3'-2"	┌───┐
d3(E)	13	5	1'-8"	┌───┐
d4(E)	3	5	1'-11"	┌───┐
d5(E)	130	5	3'-0"	┌───┐
d6(E)	91	5	4'-9"	┌───┐
d7(E)	24	5	3'-10"	┌───┐
d8(E)	6	9	9'-6"	┌───┐
d9(E)	6	5	7'-10"	┌───┐
d10(E)	5	5	13'-0"	┌───┐
d11(E)	1	5	11'-6"	┌───┐
d12(E)	1	5	10'-0"	┌───┐
d13(E)	1	5	8'-6"	┌───┐
d14(E)	5	9	8'-5"	┌───┐
d15(E)	5	5	6'-6"	┌───┐
d16(E)	4	5	11'-0"	┌───┐
d17(E)	1	5	10'-10"	┌───┐
d18(E)	1	5	9'-4"	┌───┐
d19(E)	1	5	7'-10"	┌───┐
d20(E)	5	5	6'-0"	┌───┐
d21(E)	5	5	4'-2"	┌───┐
d22(E)	4	5	8'-7"	┌───┐
d23(E)	1	5	7'-2"	┌───┐
v1(E)	24	6	1'-8"	┌───┐
v1(E)	30	6	37'-0"	┌───┐
v2(E)	24	6	30'-10"	┌───┐
v3(E)	10	6	33'-4"	┌───┐
v4(E)	12	5	2'-2"	┌───┐
v1(E)	6	5	10'-9"	┌───┐
v1(E)	34	5	24'-2"	┌───┐
v2(E)	2	5	13'-4"	┌───┐
v3(E)	31	5	28'-11"	┌───┐
v4(E)	4	5	8'-5"	┌───┐
v5(E)	4	5	10'-9"	┌───┐
v6(E)	6	5	8'-6"	┌───┐
v7(E)	6	5	9'-1"	┌───┐
v8(E)	6	5	9'-9"	┌───┐
v9(E)	6	5	10'-6"	┌───┐
v10(E)	6	5	11'-2"	┌───┐
v11(E)	6	5	11'-10"	┌───┐
v12(E)	6	5	12'-6"	┌───┐
v13(E)	2	5	13'-6"	┌───┐
CONCRETE STRUCTURES		CU. YD.	50.2	
REINFORCEMENT BARS, EPOXY COATED		POUND	7,780	



**BAR v3(E)**

31 BARS-1 SET  
(USE REMAINDER OF BARS  
IN OPPOSITE FACE)



**BAR v4(E)**

4 BARS-1 SET

### BAR CUTTING DIAGRAMS

DESIGNED	ASP
CHECKED	LAN
DRAWN	BEM
CHECKED	ASP

**RAMPS 'D' & 'E' BARBILL & DETAILS**  
**I-90/94 KENNEDY EXPRESSWAY**  
**(HUBBARDS CAVE TO I-290)**  
**SECTION (202.6-2P, ETC, 1415 & 1517)R-7**  
**COOK COUNTY**  
**STRUCTURE NO. 016-W986**

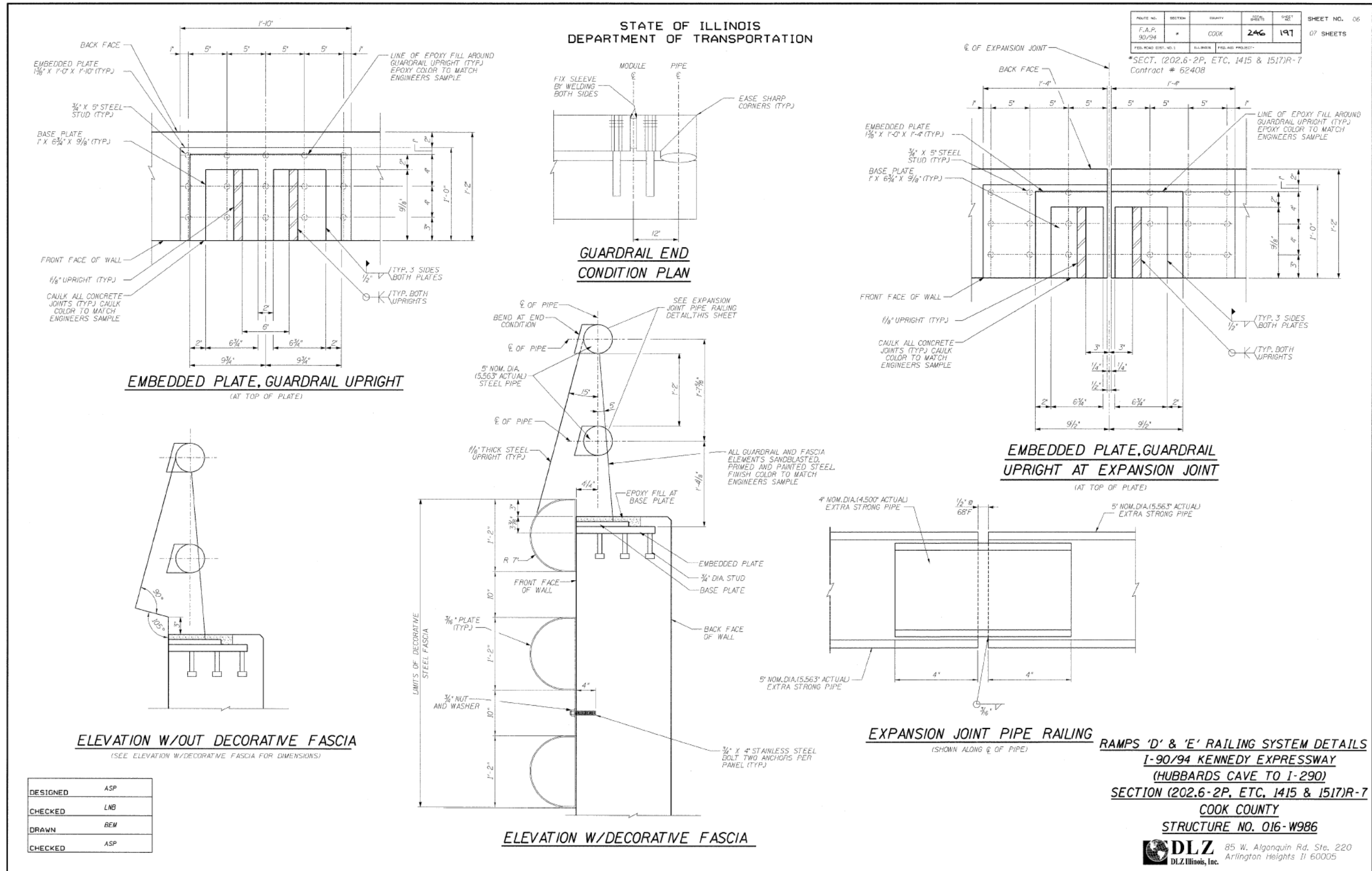
**DLZ** 85 W. Algonquin Rd. Ste. 220  
Arlington Heights IL 60005  
DLZ Illinois, Inc.

USER NAME = wjcolletti	DESIGNED - JTF	REVISED -
PLOT SCALE = NTS	CHECKED - WJC	REVISED -
PLOT DATE = 1/23/2020	DRAWN - JTF	REVISED -
	CHECKED - WJC	REVISED -

F.A.I. RTE. 90/94	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 856
CONTRACT NO. 62A77			ILLINOIS FED. AID PROJECT	



FOR INFORMATION ONLY



ROUTE NO.	SECTION	COUNTY	SHEETS	DATE	SHEET NO.
F.A.P. 90/94	*	COOK	246	197	07 SHEETS
FED. ROAD DIST. NO. 1	ILLINOIS	PROJECT			

\*SECT. (202.6-2P, ETC, 1415 & 1517)R-7  
Contract # 62408

**RAMPS 'D' & 'E' RAILING SYSTEM DETAILS**  
**I-90/94 KENNEDY EXPRESSWAY**  
**(HUBBARDS CAVE TO I-290)**  
**SECTION (202.6-2P, ETC, 1415 & 1517)R-7**  
**COOK COUNTY**  
**STRUCTURE NO. 016-W986**

**DLZ** 85 W. Algonquin Rd., Ste. 220  
 Arlington Heights IL 60005  
 DLZ Illinois, Inc.

DESIGNED	ASP
CHECKED	LNB
DRAWN	BEM
CHECKED	ASP

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
 RETAINING WALL 34 (STRUCTURE NO. 016-1823)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	857
CONTRACT NO.			62477	

SHEET NO. AB-06 OF AB-11 SHEETS

ILLINOIS FED. AID PROJECT

1:08:09 PM  
 D162A77-SHT-AS-BUILT-06.dgn



USER NAME = wjcolletti	DESIGNED - JTF	REVISED -
PLOT SCALE = NTS	CHECKED - WJC	REVISED -
PLOT DATE = 1/23/2020	DRAWN - JTF	REVISED -
	CHECKED - WJC	REVISED -

# FOR INFORMATION ONLY

Joint Size	"C" at 50°F	"D" at 50°F
2"	2"	1 1/2" Min.
2 1/2"	2 1/2"	1 3/4" Min.
4"	3"	2 1/2" Min.

### INSTALLATION NOTES

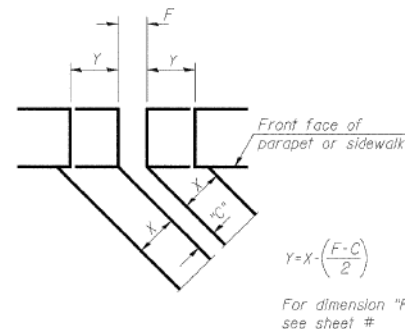
① Install continuous seal in roadway, parapet, curb, and sidewalk.

② Install anchor blocks as indicated.

Note A:  
Maximum spacing of anchor bolts shall be 12" centers.

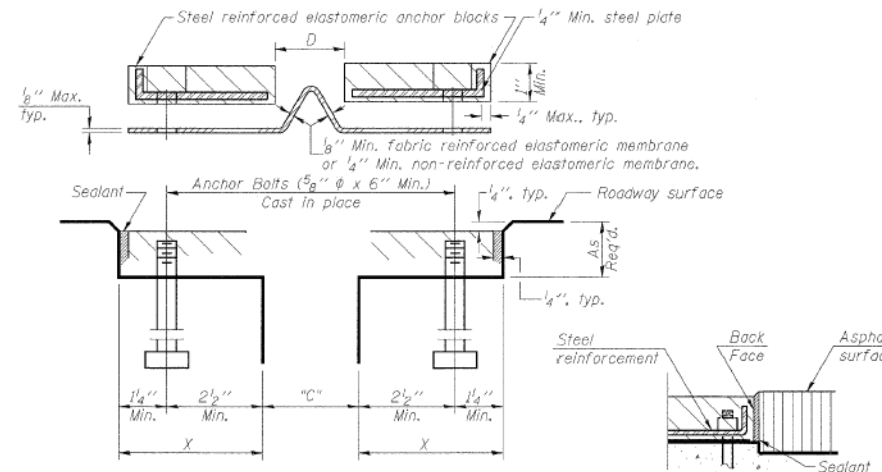
### SKREW LIMITATIONS

The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews. For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed according to dimension "D", might require modifications to insure a minimum clearance of 1/2" from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at ±12" cts.



FORMING BLOCKOUT SKETCH

### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



CROSS SECTION

ANCHOR BLOCK WITH ASPHALT SURFACE

DRAWING NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO. OF SHEETS
F.A.P. 90/94		COOK	246	198	07

\*SECT. (202.6-2P, ETC, 1415 & 1517)R-7  
Contract # 62408

### GENERAL NOTES

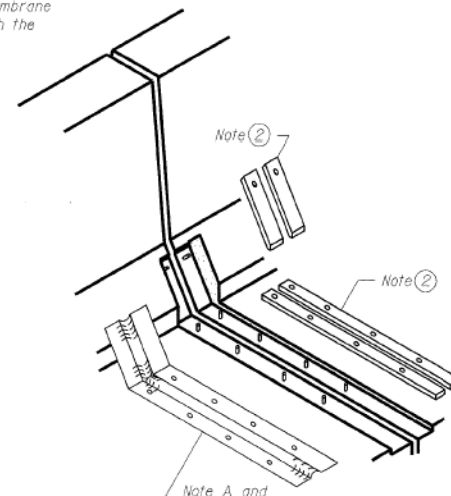
Continuous Seal Neoprene Expansion Joint shall consist of molded anchor blocks of elastomer and steel, field assembled over continuous lengths of elastomeric membrane.

The elastomeric membrane shall be pre-molded with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure.

The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed.

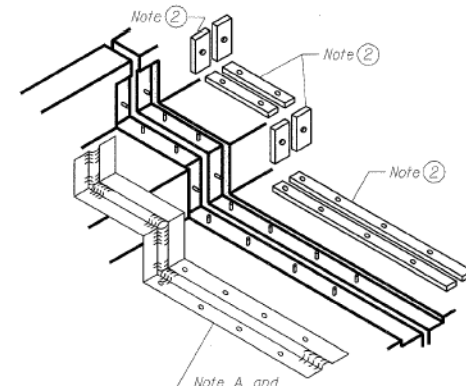
Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.

The parapet and roadway membrane shall be made continuous by an approved vulcanizing process. Lapping will not be permitted.

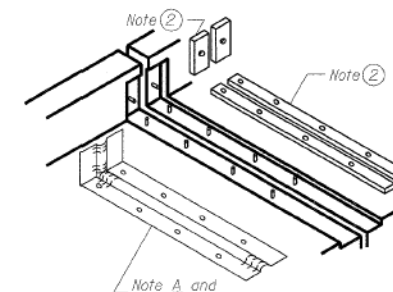


AT PARAPET

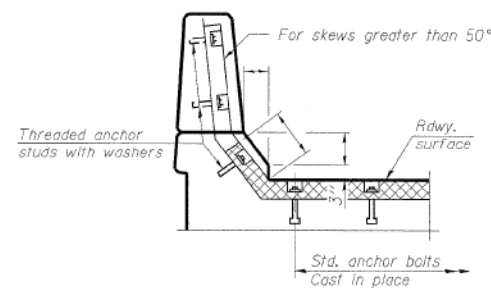
AT CURB



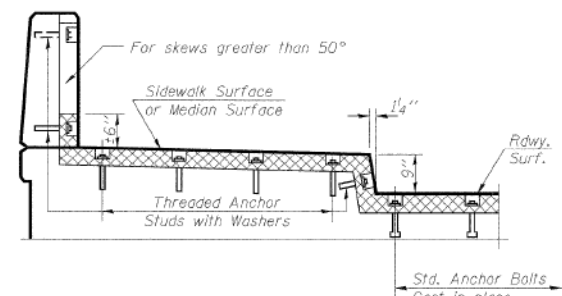
AT SIDEWALK OR MEDIAN



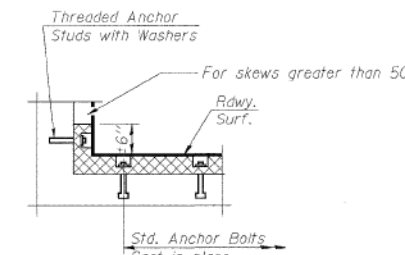
AT WALL



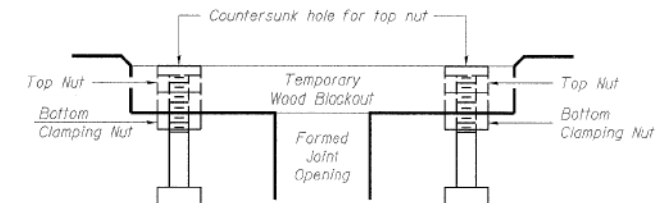
AT PARAPET



AT SIDEWALK OR MEDIAN TYPICAL END TREATMENTS



AT WALL



RECOMMENDED BLOCKOUT DETAIL

Note:  
Stud needs to be threaded lower to allow for use of clamping nut.

CONTINUOUS SEAL TYPE  
NEOPRENE EXPANSION JOINTS  
I-90/94 KENNEDY EXPRESSWAY  
(HUBBARDS CAVE TO I-290)  
SECTION (202.6-2P, ETC, 1415 & 1517)R-7  
COOK COUNTY  
STRUCTURE NO. 016-W986

DLZ 85 W. Algonquin Rd. Ste. 220  
Arlington Heights IL 60005  
DLZ Illinois, Inc.

DESIGNED	ASP
CHECKED	ASP
DRAWN	BEM
CHECKED	ASP

USER NAME = wjcollett	DESIGNED - JTF	REVISED -
	CHECKED - WJC	REVISED -
PLOT SCALE = NTS	DRAWN - JTF	REVISED -
PLOT DATE = 1/23/2020	CHECKED - WJC	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

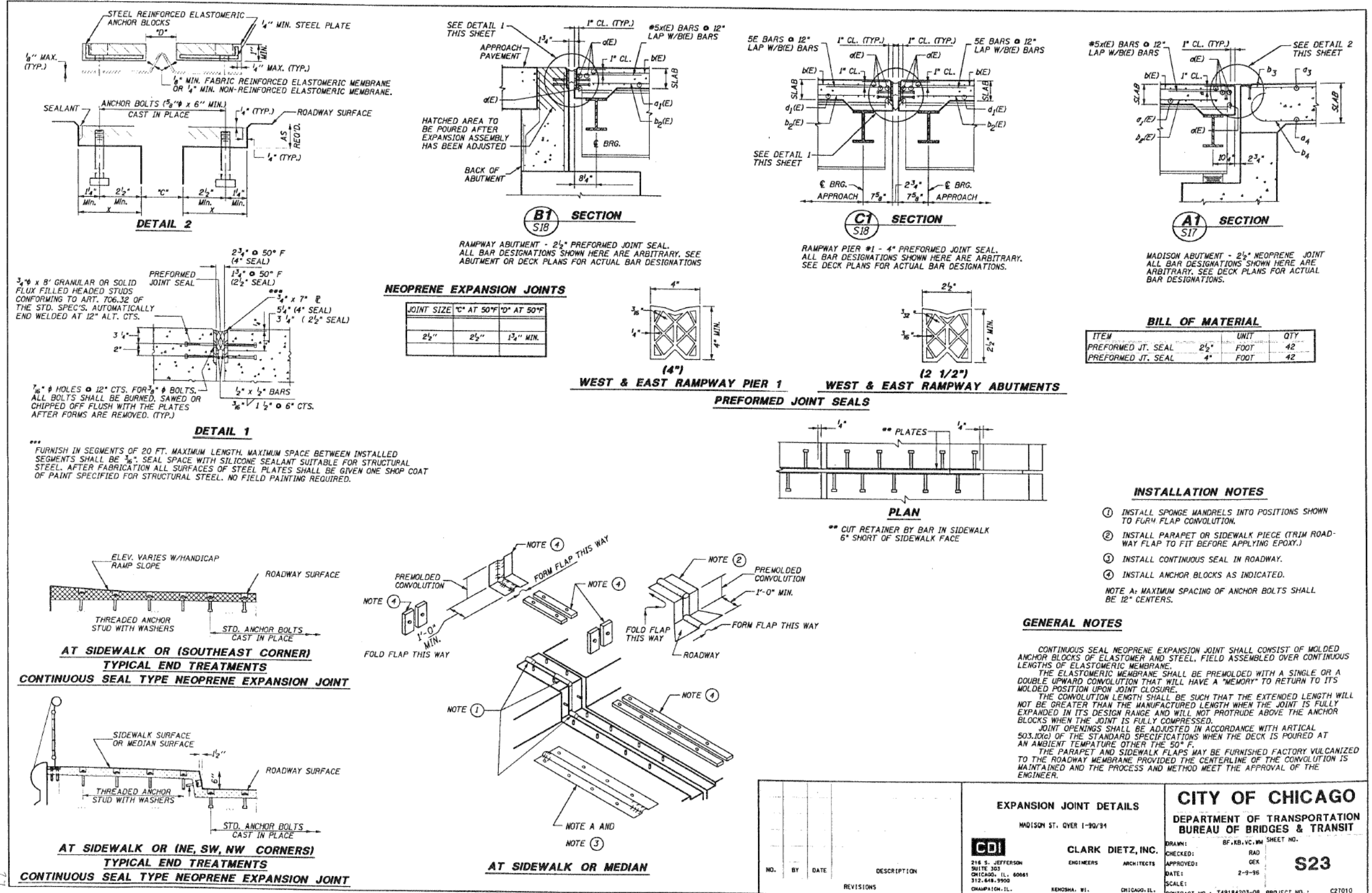
EXISTING RECORD DRAWINGS  
RETAINING WALL 34 (STRUCTURE NO. 016-1823)

SHEET NO. AB-07 OF AB-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	858
CONTRACT NO.			62477	

ILLINOIS FED. AID PROJECT

# FOR INFORMATION ONLY



1:08:26 PM  
D162A77-SHT-AS-BUILT-08.dgn



USER NAME = wjcolletti	DESIGNED - JTF	REVISED -
PLOT SCALE = NTS	CHECKED - WJC	REVISED -
PLOT DATE = 1/23/2020	DRAWN - JTF	REVISED -
	CHECKED - WJC	REVISED -

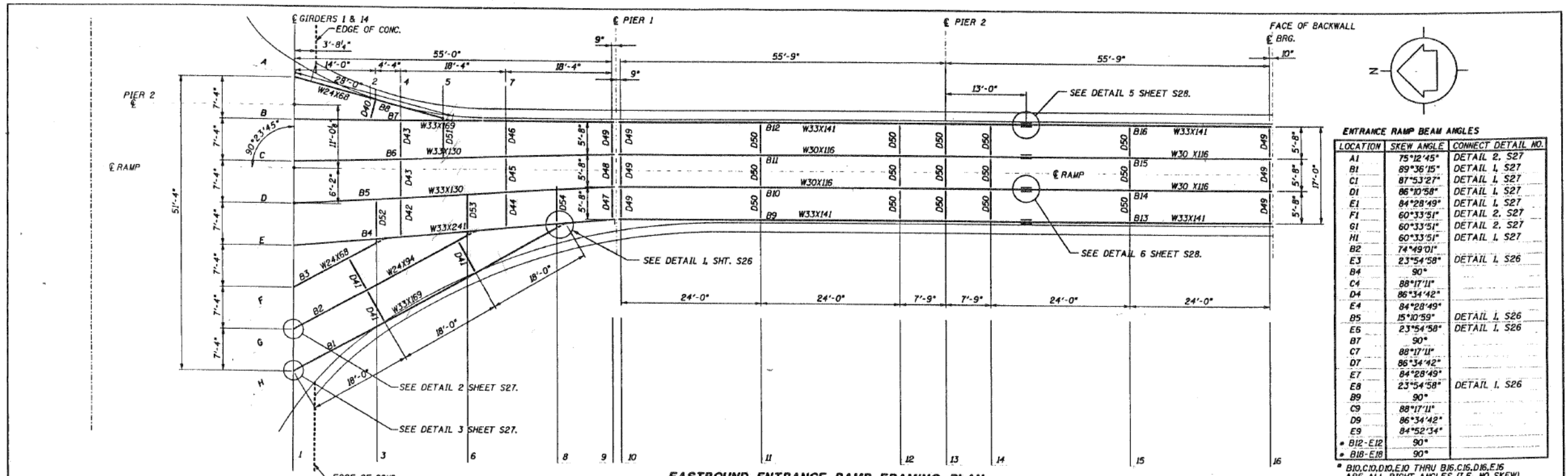
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
RETAINING WALL 34 (STRUCTURE NO. 016-1823)

SHEET NO. AB-08 OF AB-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	859
CONTRACT NO.			62A77	
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY



**ENTRANCE RAMP BEAM ANGLES**

LOCATION	SKREW ANGLE	CONNECT DETAIL NO.
A1	75°12'45"	DETAIL 2, S27
B1	89°36'15"	DETAIL 1, S27
C1	87°53'27"	DETAIL 1, S27
D1	86°10'58"	DETAIL 1, S27
E1	84°28'49"	DETAIL 1, S27
F1	60°33'51"	DETAIL 2, S27
G1	60°33'51"	DETAIL 2, S27
H1	60°33'51"	DETAIL 1, S27
B2	74°49'01"	
E3	23°54'58"	DETAIL 1, S26
B4	90°	
C4	88°17'11"	
D4	86°34'42"	
E4	84°28'49"	DETAIL 1, S26
B5	15°10'59"	DETAIL 1, S26
E6	23°54'58"	DETAIL 1, S26
B7	90°	
C7	88°17'11"	
D7	86°34'42"	
E7	84°28'49"	
E8	23°54'58"	DETAIL 1, S26
B9	90°	
C9	88°17'11"	
D9	86°34'42"	
E9	84°52'34"	
B12-E12	90°	
B18-E18	90°	

**RAMP STRUCTURAL STEEL MEMBER LIST**

ITEM	SIZE	NO. REQUIRED	LENGTH
B1	W33X169	2	52'-5 3/4"
B2	W24X94	2	34'-5 3/4"
B3	W24X68	2	16'-5 3/4"
B4	W33X241	2	55'-9 3/4"
B5	W33X130	2	55'-7 1/2"
B6	W33X130	2	55'-5 1/2"
B7	W33X169	2	55'-6 1/2"
B8	W24X68	2	25'-8"
B9	W33X141	2	69'-4 3/4"
B10	W30X116	2	69'-4 3/4"
B11	W30X116	2	69'-4 3/4"
B12	W33X116	2	69'-4 3/4"
B13	W33X141	2	43'-4 3/4"
B14	W30X116	2	43'-4 3/4"
B15	W30X116	2	43'-4 3/4"
B16	W33X141	2	43'-4 3/4"
D40	W16X36	2	3'-7 3/4"
D41	W16X36	6	6'-2 7/8"
D42	W16X36	2	6'-7 3/8"
D43	W16X36	4	6'-7 3/8"
D44	W16X36	2	6'-5 3/8"
D45	W16X36	2	6'-3 3/8"
D46	W16X36	2	6'-3 3/8"
D47	W12X40	2	5'-6"
D48	W12X40	2	5'-6"
D49	W12X40	14	5'-6 3/8"
D50	W16X36	30	5'-6 3/8"
D51	W16X36	2	6'-4 3/4"
D52	W16X36	2	6'-9 3/4"
D53	W16X36	2	6'-5"
D54	W16X36	2	6'-0 1/4"
PL	1 1/2" x 7/8"	8	3'-3 3/4"
PL	1" x 7/8"	8	2'-5"
PL	1 1/2" x 7/8"	8	2'-6 1/2"
PL	1" x 7/8"	8	2'-2"

**EXTERIOR BEAM REACTION TABLE**

	PIER 1	PIER 2	ABUT.
R <sub>V</sub>	(K) 13.4	44.6	13.4
R <sub>S</sub> @	(K) 17.3	50.1	17.3
R <sub>L</sub>	(K) 29.4	32.0	29.4
Imp.	(K) 8.1	8.9	8.1
R (TOTAL)	(K) 68.2	135.6	68.2

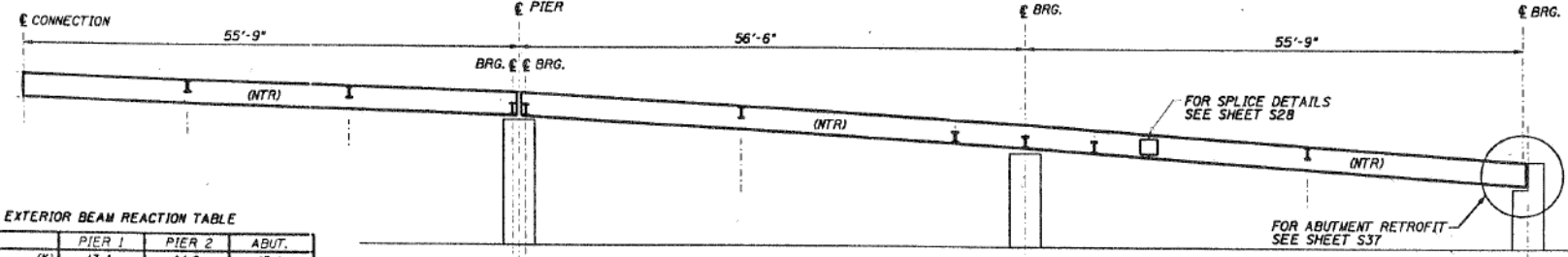
**EXTERIOR BEAM MOMENT TABLE**

	0.4 Sp. 2	PIER 2	0.6 Sp. 3
I <sub>s</sub>	(in <sup>4</sup> ) 7450	7450	7450
I <sub>c</sub>	(in <sup>4</sup> ) 1800		1800
S <sub>s</sub>	(in <sup>3</sup> ) 448	448	448
S <sub>c</sub>	(in <sup>3</sup> ) 626		626
Z	(in <sup>3</sup> ) 514	514	514
Q	(K/ft.) 1.4	1.4	1.4
M @ (NON-COMP.)	(K) 139.9	248.6	139.9
S @	(K/ft.) 0.76	0.76	0.76
M <sub>s</sub> @	(K) 196.50	216.8	196.50
M <sub>L</sub>	(K) 314.90	129.4	314.90
M (Imp.)	(K) 87.2	35.8	87.2
S <sub>3</sub> (M <sub>L</sub> + I)	(K) 670.2	275.3	670.2
M <sub>o</sub>	(K) 1308.6	962.9	1308.6
M <sub>u</sub>	(K) 1540	1540	1540
f <sub>s</sub> @ (NON-COMP.)	(k.s.i.) 3.75	6.65	3.75
f <sub>s</sub> @ (COMP.)	(k.s.i.) 3.77	5.81	3.77
f <sub>s</sub> S <sub>3</sub> (1/2 I)	(k.s.i.) 12.85	7.37	12.85
f <sub>s</sub> (OVERLOAD)	(k.s.i.) 20.37	19.84	20.37
f <sub>s</sub> (TOTAL)	(k.s.i.)		
VR	(K) 40.9	40.9	40.9

I<sub>s</sub> AND S<sub>s</sub> ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE STEEL SECTION USED IN COMPUTING f<sub>s</sub> (TOTAL & OVERLOAD). I<sub>c</sub> AND S<sub>c</sub> ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE COMPOSITE SECTION USED IN COMPUTING f<sub>s</sub> (TOTAL & OVERLOAD). VR IS THE MAXIMUM LIVE LOAD + IMPACT SHEAR RANGE IN SPAN. Z IS THE PLASTIC SECTION MODULUS USED TO DETERMINE THE FULLY PLASTIC MOMENTS IN THE NON-COMPOSITE AREAS. M<sub>o</sub> (APPLIED MOMENT) = 1.3CM @ + M<sub>s</sub> @ + 53(M<sub>L</sub> + I). M<sub>u</sub> IS THE FULL PLASTIC MOMENT CAPACITY FOR COMPACT, BRACED SECTION. f<sub>s</sub> (OVERLOAD) IS THE SUM OF THE STRESSES DUE TO M<sub>o</sub> + M<sub>s</sub> @ + 53(M<sub>L</sub> + I). f<sub>s</sub> (TOTAL) IS THE SUM OF THE STRESSES DUE TO 1.3CM @ + M<sub>s</sub> @ + 53(M<sub>L</sub> + I).

**INTERIOR BEAM REACTION TABLE - SPAN 1**

	WADISON ST. GIRDER 1 (OR 14)	PIER 1
R <sub>V</sub>	(K) 21.1	19.6
R <sub>S</sub> @	(K) 10.5	10.5
R <sub>L</sub>	(K) 39.9	29.0
Imp.	(K) 11.1	8.0
R (TOTAL)	(K) 82.6	67.1



EASTBOUND ENTRANCE RAMP LONGITUDINAL SECTION

**ENTRANCE RAMP / TOP OF STEEL FOR BEAMS**

LOCATION	ELEVATIONS
A1	+19.147 (19.196)
B1	+19.189 (19.16)
C1	+19.209 (19.102)
D1	+19.208 (19.102)
E1	+19.185 (18.922)
F1	+19.14 (18.80)
G1	+19.074 (18.656)
H1	+18.987 (18.49)
B9,E9	+16.87 (+16.99)
C9,D9	+16.87 (+16.99)
B10,E10	+16.78 (+16.90)
C10,D10	+16.78 (+16.90)
B13,E13	+13.19 (+13.87)
C13,D13	+13.19 (+13.87)
B(SPLICES), E(SPLICES)	+12.29 (+13.10)
C(SPLICES), D(SPLICES)	+12.29 (+13.10)
B16,E16	+9.59 (+10.80)
C16,D16	+9.59 (+10.80)

VALUES IN PARENTHESIS ARE FOR WESTBOUND RAMP.

NOTE: MEMBERS DENOTED NTR. SHALL CONFORM TO SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS (ZONE 2) AS PER IDOT BRIDGE MANUAL 3.3.5 (TYP.)

SEE S26 FOR STUD DETAILS. SEE S26 FOR DIAPHRAGM DETAILS. D40 - D47 = W16X36. D48 - D51 = W12X40. D52 - D54 = W16X36.

**ENTRANCE RAMP FRAMING PLAN**  
MADISON ST. OVER 1-90/94

**CLARK DIETZ, INC.**  
ENGINEERS ARCHITECTS

216 S. JEFFERSON  
SUITE 303  
CHICAGO, IL 60661  
312.448.9900  
CHAMPAIGN, IL. KENOSHA, WI. CHICAGO, IL.

**CITY OF CHICAGO**  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF BRIDGES & TRANSIT

DRAWN: BF, KB, VC, BW  
CHECKED: RAD  
APPROVED: GER  
DATE: 3-12-98  
SCALE: 1/2" = 1'-0"

**S25**

CONTRACT NO.: T49184203-08 PROJECT NO.: C27010

NO. BY DATE DESCRIPTION REVISIONS

140834 PM D162A77-SHT-AS-BUILT-09.dgn



USER NAME = wjcolletti	DESIGNED - JTF	REVISED -
	CHECKED - WJC	REVISED -
PLOT SCALE = NTS	DRAWN - JTF	REVISED -
PLOT DATE = 1/23/2020	CHECKED - WJC	REVISED -

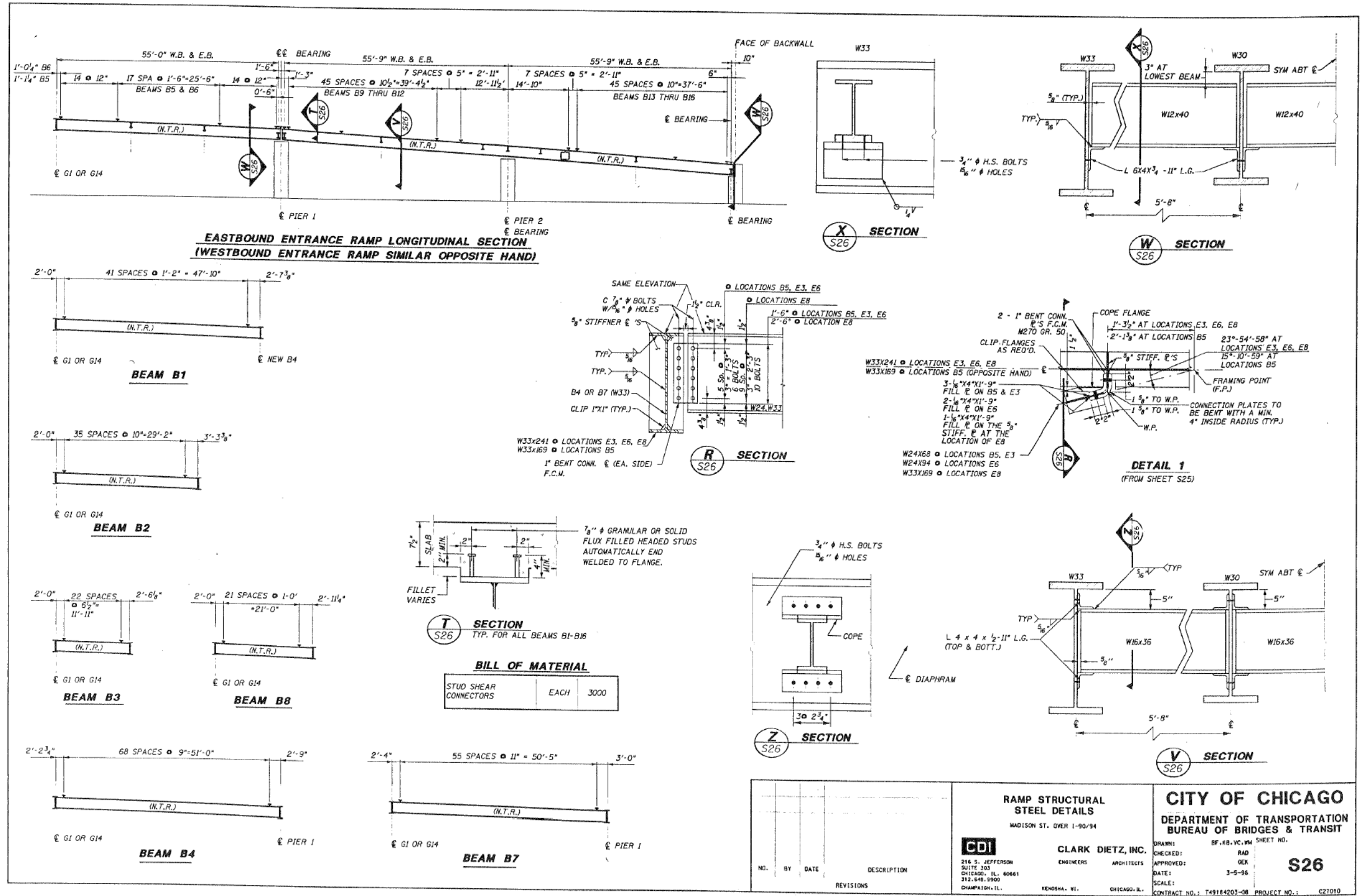
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
RETAINING WALL 34 (STRUCTURE NO. 016-1823)

SHEET NO. AB-09 OF AB-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	860
CONTRACT NO.			62477	
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY



1:08:43 PM  
D162A77-SHT-AS-BUILT-10.dgn



USER NAME = wjcolletti  
DESIGNED - JTF  
CHECKED - WJC  
PLOT SCALE = NTS  
DRAWN - JTF  
PLOT DATE = 1/23/2020

DESIGNED - JTF  
CHECKED - WJC  
DRAWN - JTF  
CHECKED - WJC

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
RETAINING WALL 34 (STRUCTURE NO. 016-1823)

SHEET NO. AB-10 OF AB-11 SHEETS

CITY OF CHICAGO  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF BRIDGES & TRANSIT

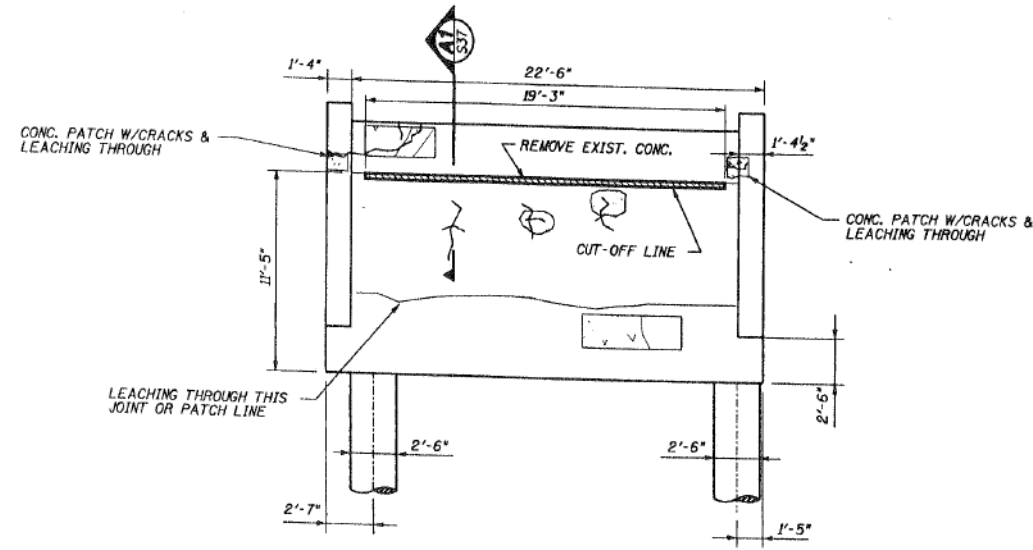
CDI  
CLARK DIETZ, INC.  
ENGINEERS ARCHITECTS  
214 S. JEFFERSON  
SUITE 303  
CHICAGO, IL 60661  
312.649.3900  
CHAMPAIGN, IL.

BF, KB, VC, WM SHEET NO.  
DRAWN: RAD  
CHECKED: GJK  
APPROVED: GJK  
DATE: 3-5-96  
SCALE:  
CONTRACT NO.: T49164203-08 PROJECT NO.: C27010

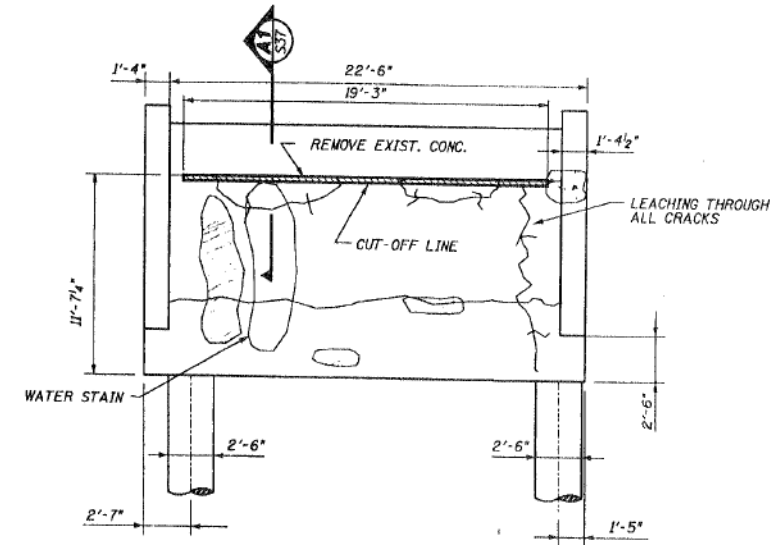
**S26**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	861
CONTRACT NO.			62A77	
ILLINOIS FED. AID PROJECT				

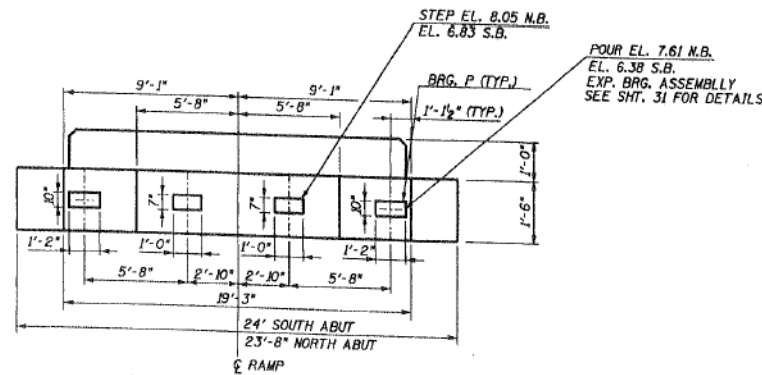
FOR INFORMATION ONLY



**NORTH ABUTMENT  
(LOOKING NORTH)**  
SCALE: 1/8" = 1'-0"



**SOUTH ABUTMENT  
(LOOKING SOUTH)**  
SCALE: 1/8" = 1'-0"



**ABUTMENT PLAN**

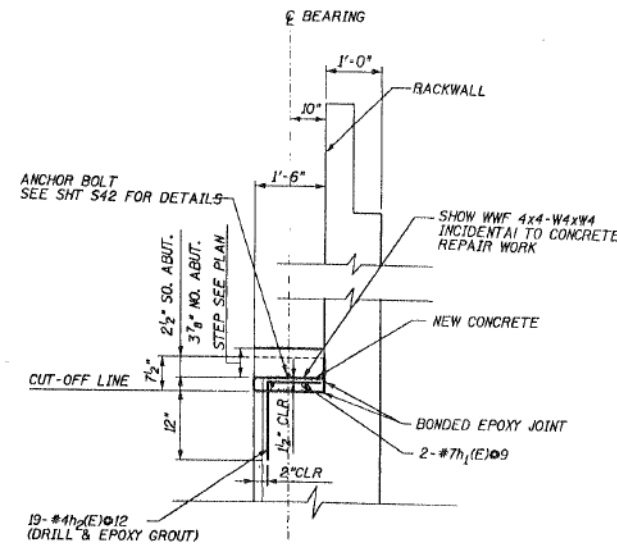
**LEGEND**

- SPALLING-(CONCRETE PATCH)
- CRACKS-(EPOXY INJECTION UNDER PRESSURE)
- LEACHING-(CLEAN AND EPOXY GROUTING UNDER PRESSURE)

**SUBSTRUCTURE  
BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
$h_1(E)$	4	#7	19'-0"	L
$h_2(E)$	38	#4	2'-2"	L
BRIDGE SEAT SEALER		SO. FT.		54
REINFORCEMENT BARS, EPOXY COATED		LBS.		211
FORMED CONCRETE REPAIR, DEPTH < 5"		SO. FT.		44
EPOXY CRACK SEALING		FOOT		94

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.  
CONCRETE REMOVAL AND CONCRETE STRUCTURE QUANTITIES ARE CONSIDERED NEGLIGIBLE HERE.



**A1  
S37** SECTION

SUBSTRUCTURE REHABILITATION DETAILS EAST & WEST BOUND ENTRANCE RAMP MADISON ST. OVER I-90/94		<b>CITY OF CHICAGO</b> DEPARTMENT OF TRANSPORTATION BUREAU OF BRIDGES & TRANSIT	
<b>CLARK DIETZ, INC.</b> 218 S. JEFFERSON SUITE 303 CHICAGO, IL. 60661 312.648.9900 CHAMPION, IL.		DRAWN: BF, KB, VC, WM CHECKED: RAD APPROVED: GEX DATE: 3-5-96 SCALE: CONTRACT NO.: T49184203-08 PROJECT NO.: C27010	
NO. BY DATE DESCRIPTION REVISIONS		<b>S37</b>	

1:08:51 PM  
D162A77-SHT-AS-BUILT-11.dgn



USER NAME = wjcollett	DESIGNED - JTF	REVISED -
PLOT SCALE = NTS	CHECKED - WJC	REVISED -
PLOT DATE = 1/23/2020	DRAWN - JTF	REVISED -
	CHECKED - WJC	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
RETAINING WALL 34 (STRUCTURE NO. 016-1823)

SHEET NO. AB-11 OF AB-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2015-018R	COOK	1360	862
CONTRACT NO.			62A77	
ILLINOIS FED. AID PROJECT				

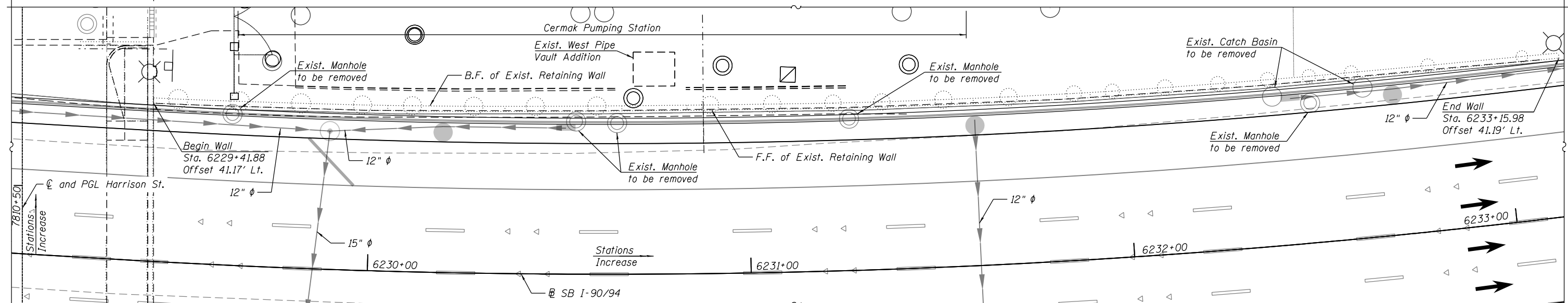
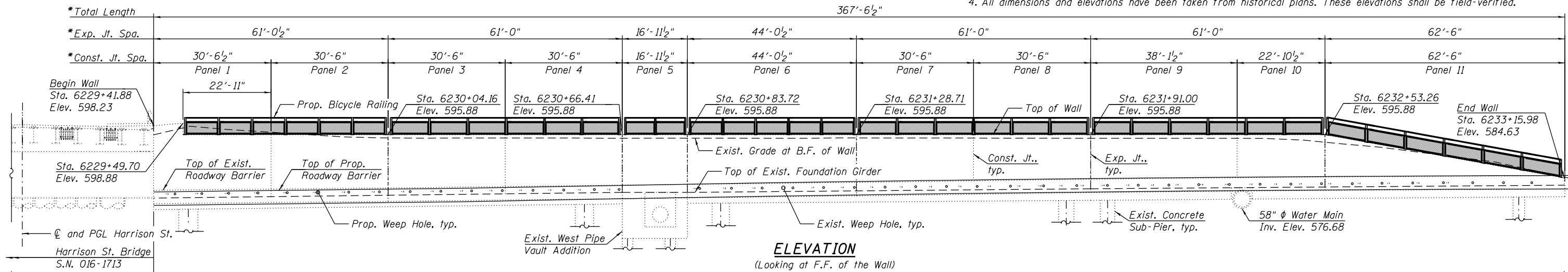
Existing Structure: Existing Retaining Wall 5 was constructed in 1958 under Project I-04-8(91) (F.A.I. Route No. 4; Section S-2626.2-1B). The wall consists of a reinforced concrete soldier pile wall with attached steel railing above and reinforced concrete barrier at base. The overall length of the wall is approximately 367'-6 1/2".

Traffic Control: Traffic to be maintained on SB I-90/94 during construction.

Salvage: No salvage.

**NOTES:**

1. For General Notes, Index of Sheets, Total Bill of Material, Profile Grade Lines and Curve Data, see Sheet S2-02.
2. Stations and offsets are measured along SB I-90/94 to the front face of wall.
3. For Roadway Barrier and additional details, see Roadway Plans.
4. All dimensions and elevations have been taken from historical plans. These elevations shall be field-verified.

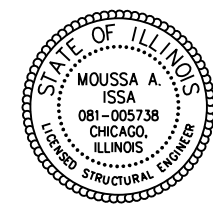


**LEGEND:**

- |  |                         |  |                       |
|--|-------------------------|--|-----------------------|
|  | Exist. Storm Sewer      |  | Prop. Storm Sewer     |
|  | Exist. Combined Sewer   |  | Prop. Pipe Underdrain |
|  | Exist. Catch Basin      |  | Prop. Manhole         |
|  | Exist. Inlet            |  | Prop. Catch Basin     |
|  | Exist. Utility Handhole |  | B.F. Back Face        |
|  | Exist. Manhole          |  | F.F. Front Face       |
|  | Exist. Traffic Signal   |  |                       |
|  | Exist. Light Pole       |  |                       |
|  | Exist. Sign             |  |                       |

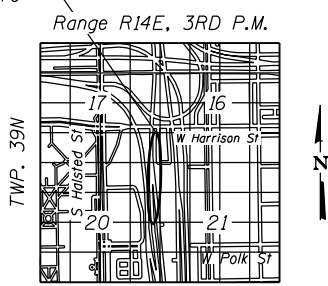
**SCOPE OF WORK**

1. Perform shrub removal. See Roadway Plans.
2. Perform Structural Repair of Concrete, preformed joint filler replacement and epoxy crack injection.
3. Core new weep holes, install weep hole assemblies and provide for extension thru roadway barrier.
4. Sandblast concrete, clean and apply Concrete Sealer.
5. Remove existing steel railing and replace with Bicycle Railing.
6. Remove and replace existing roadway barrier at front face of retaining wall. See Roadway Plans.



SIGNED *Moussa A. Issa*  
DR. MOUSSA A. ISSA, S.E. IL. LIC. NO. 081-005738  
EXPIRES 11-30-2020

DATE 1-29-2020 FOR SHEETS S2-01 THRU S2-04 AND AS2-01 THRU AS2-30 (TOTAL OF 34 SHEETS)



**GENERAL PLAN AND ELEVATION  
EXISTING RETAINING WALL 5  
F.A.I. RTE. 90/94 - SECTION 2015-018R  
COOK COUNTY  
STATION 6229+41.88 TO 6233+15.98  
STRUCTURE NO. 016-1164**



USER NAME =	ahmad,issa	DESIGNED -	MAA,JMI	REVISED -	
		CHECKED -	MI,JJS	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	MAA,JMI	REVISED -	
PLOT DATE =	1/31/2020	CHECKED -	MI,JJS	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SHEET NO. S2-01 OF S2-04 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	863
CONTRACT NO. 62A77				

FILE NAME: D:\VAECOM-NA-AWS1\arcocomonline-local\AECOM\_ID502\_NAD\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_5\Final\_Plans\EXRW5-62A77-5HT-001.dgn

**GENERAL NOTES:**

- Wall repair locations are approximate and were determined from field inspection performed at the time of plan preparation. The necessary adjustments based on current field conditions will be made at time of construction. Such variations shall not be cause for additional compensation for a change in the scope of work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field-verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- Existing reinforcing steel which is exposed by the concrete repair process, but is to remain embedded in the existing structure and reused, shall be cleaned (to be free of existing concrete and rust) and straightened (if necessary). Existing reinforcing steel which is cut, stretched or damaged by the Contractor during the concrete repair process shall be replaced by embedded reinforcing steel or anchorage, equal to or greater than the size of original reinforcing steel, subject to the approval of the Engineer and at no cost to the Department. See Special Provisions for Structural Repair of Concrete.
- Stations and offsets of Existing Retaining Wall 5 (S.N. 016-1164) are measured along Proposed SB I-90/94.

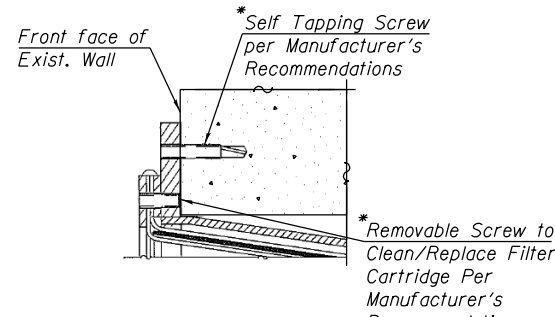
**INDEX OF SHEETS**

- S2-01 General Plan and Elevation
- S2-02 General Notes, Index of Sheets, Total BOM & Misc. Details
- S2-03 Wall Elevations - Front Face
- S2-04 Bicycle Railing Details
- AS2-01 Existing Record Drawings thru
- AS2-30

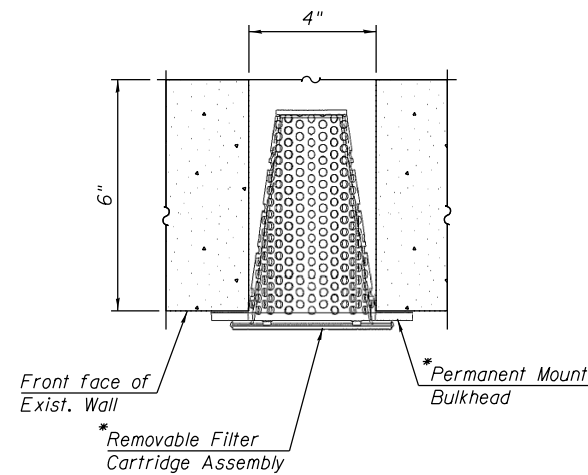
**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
BICYCLE RAILING	FOOT	361
CONCRETE SEALER	SQ FT	6307
EPOXY CRACK INJECTION	FOOT	46
STEEL RAILING REMOVAL	FOOT	361
WEEP HOLES CORED	EACH	45
REPLACE JOINT FILLER	FOOT	96
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	31
SANDBLASTING CONCRETE	SQ YD	701

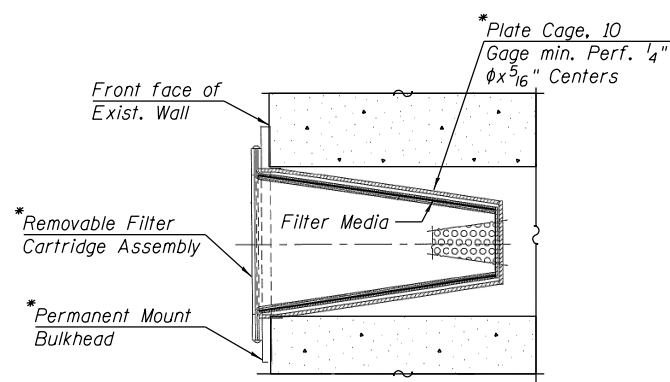
FILE NAME: D:\V\VAECOM-NA-AW51\arecomonline\local\AECOM\_DS02\_NAD\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_II\000\_CAD\008\_Structural\Structure\_EXRW5-62A77-5HT-002.dgn



**CORED WEEP HOLE ASSEMBLY MOUNTING DETAIL**

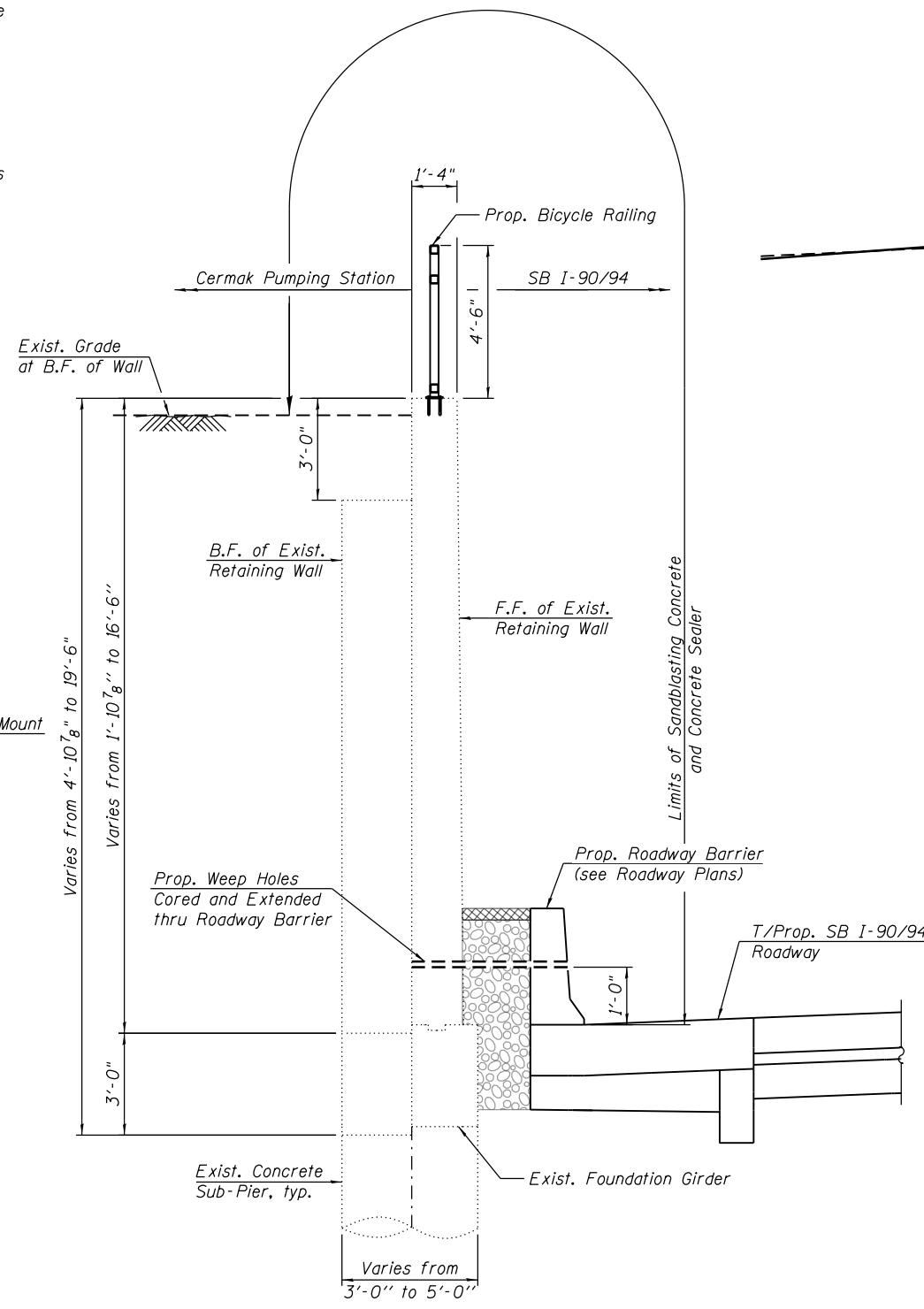


**CORED WEEP HOLE ASSEMBLY PLAN VIEW**

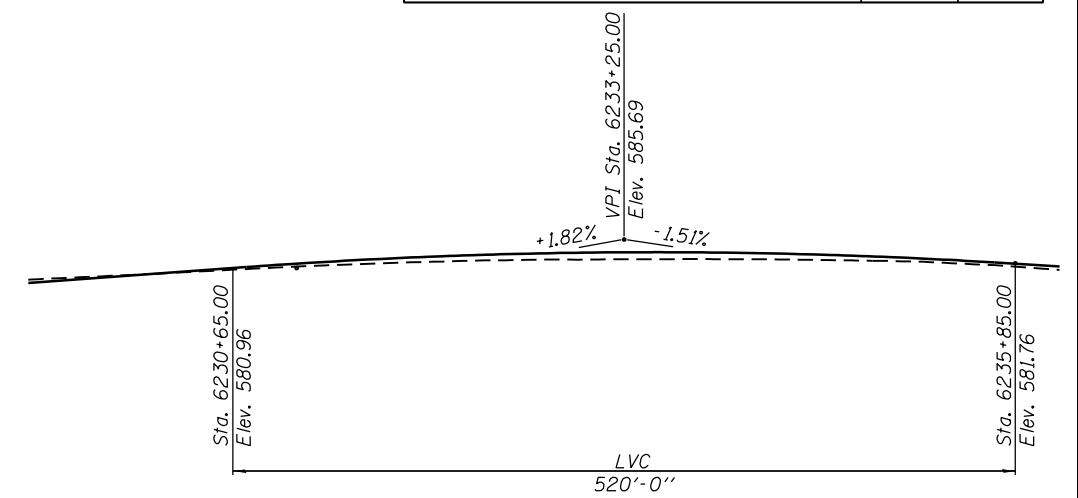


**SECTION THRU CORED WEEP HOLE ASSEMBLY**

\* Cost included with "Weep Holes Cored"



**TYPICAL WALL SECTION**

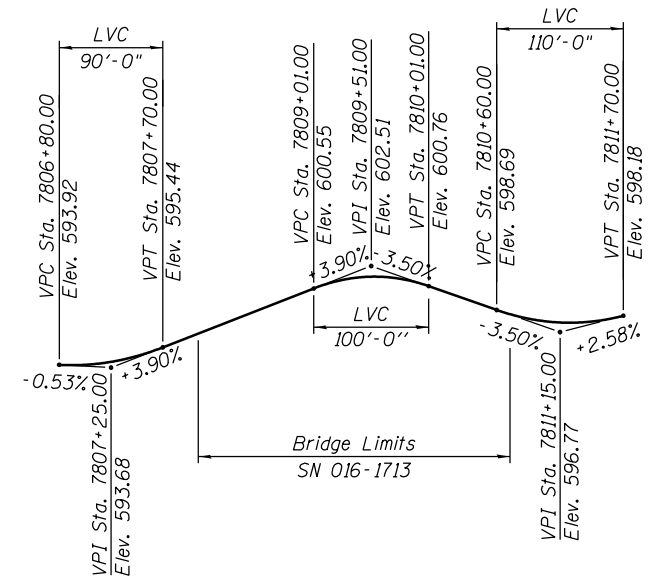


**PROFILE GRADE**

(Along SB I-90/94)

**CURVE DATA**

PROP. CURVE P-KDR-SB-4  
 PI STA. = 6231+84.46  
 $\Delta = 13^\circ 18' 21''$  (LT)  
 $D = 2^\circ 44' 34''$   
 $R = 2,089.00'$   
 $T = 243.66'$   
 $L = 485.13'$   
 $E = 14.16'$   
 P.C. STA = 6229+40.80  
 P.T. STA = 6234+25.93



**PROFILE GRADE**

(Along Harrison Street)



USER NAME = ahmad,issa	DESIGNED - MAA,JMI	REVISED -
PLOT SCALE = N.T.S	CHECKED - MI,JJS	REVISED -
PLOT DATE = 1/31/2020	DRAWN - MAA,JMI	REVISED -
	CHECKED - MI,JJS	REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

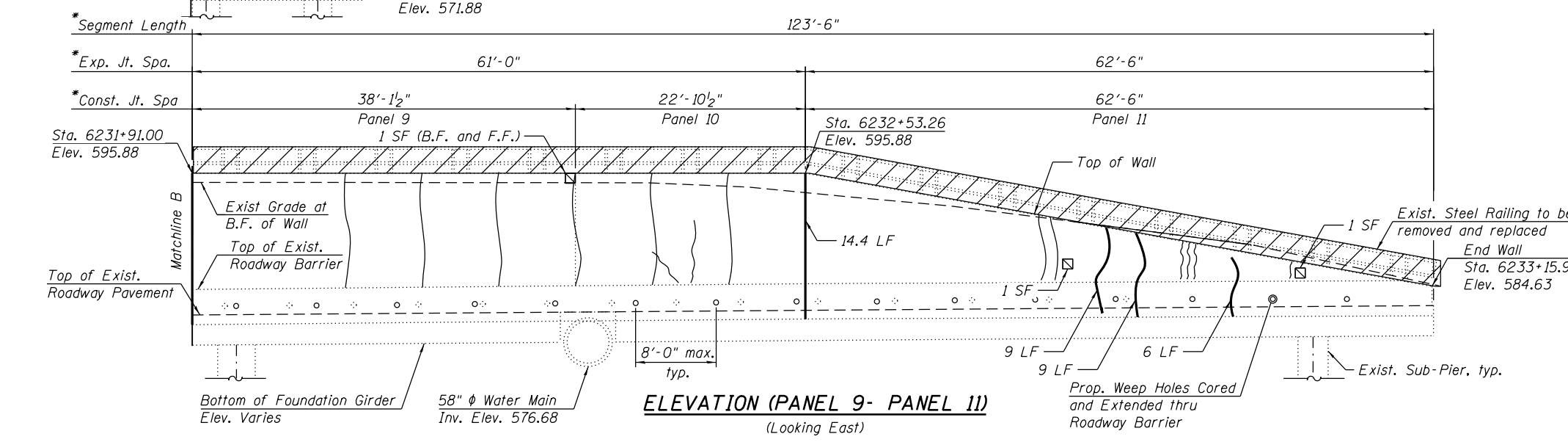
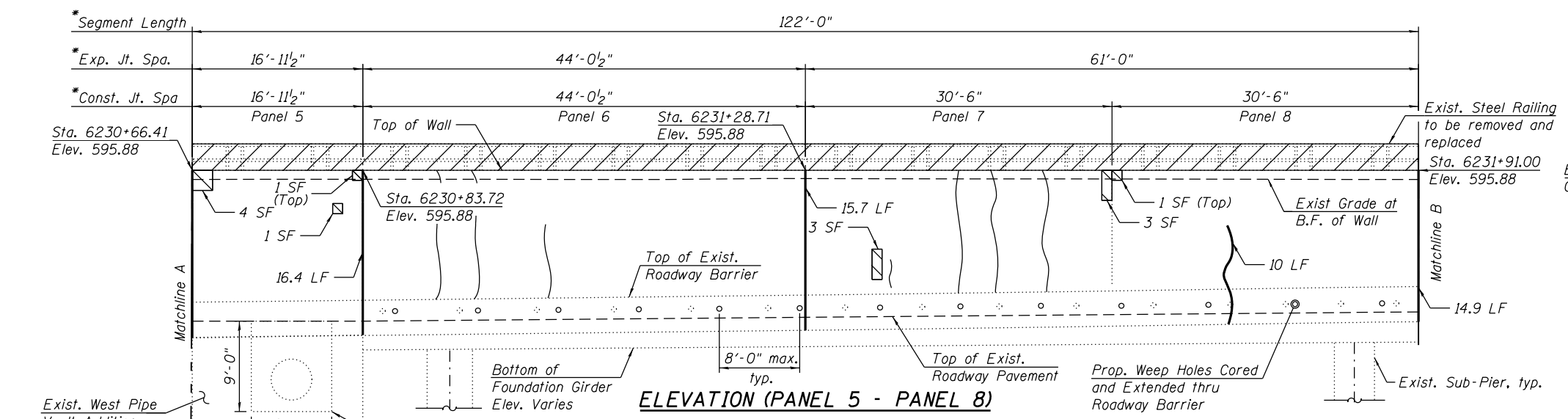
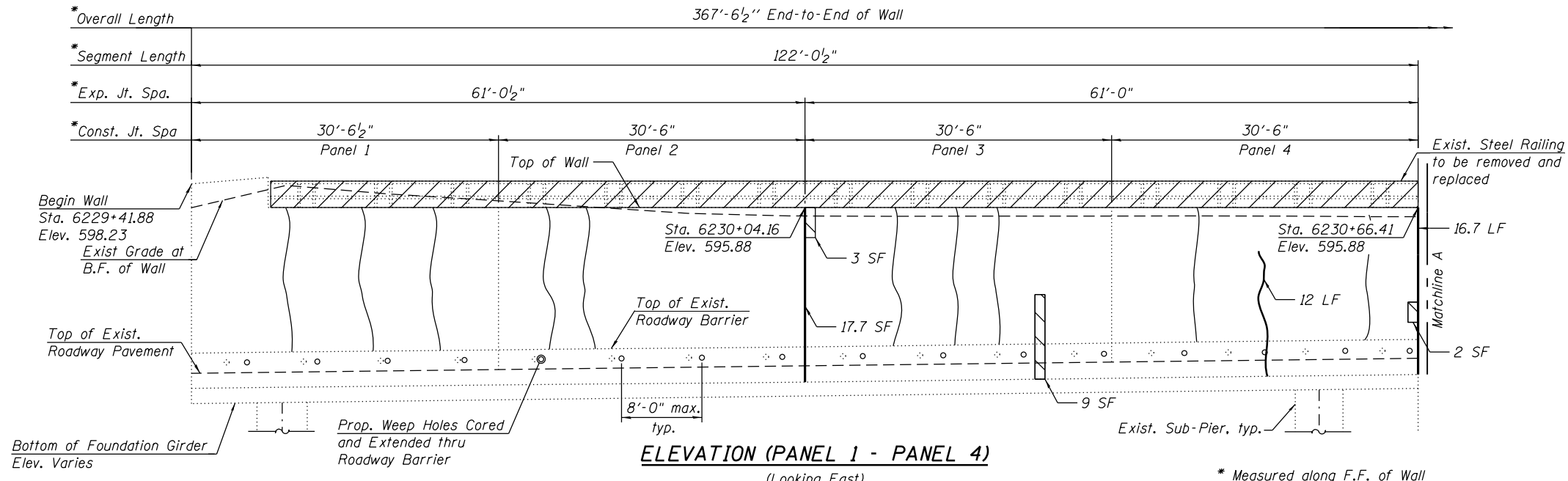
**GENERAL NOTES, INDEX OF SHEETS, TOTAL BOM & MISC. DETAILS**  
**STRUCTURE NO. 016-1164**

SHEET NO. S2-02 OF S2-04 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 864
CONTRACT NO. 62A77			ILLINOIS FED. AID PROJECT	

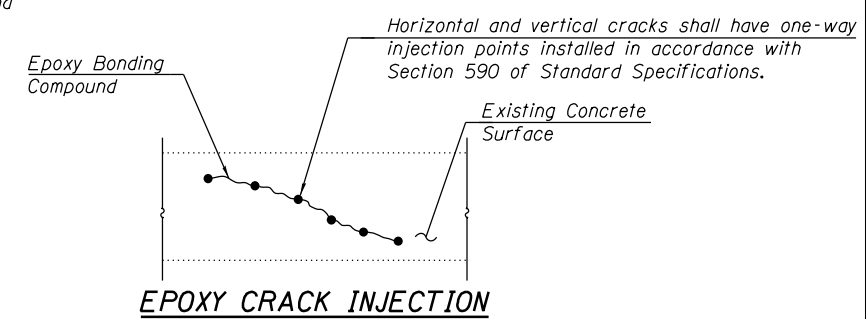


FILE NAME: D:\V\AE\COM-NA-AW51\ae\comonline\local\AE\COM\_D502\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\_5\Final\_Plans\Structure\_EXRW-5\Final\_Plans\Structure\_EXRW-5\5HT-003.dgn



**NOTES:**

- The front face of existing retaining wall contains a "vertical reveal" architectural finish. All structural repair of concrete within the areas of "vertical reveals" shall be performed such that the existing architectural finish is retained.
- The front face of wall between Sub-Piers E-13 and E-14 (Panel 5) is part of the "West Pipe Vault Addition" described in the Existing Record Drawings. Various water mains and additional utilities are also present behind, and/or underneath, the existing retaining wall. The Contractor shall exercise extreme caution during construction to avoid damage to existing pipe vaults, water mains, utilities and Chicago Department of Water Management property. Any damage to these elements caused by the Contractor in the performance of his/her work shall be repaired by the Contractor, to the satisfaction of the Engineer, at no cost to the Department.
- For roadway barrier removal and replacement, see Roadway Plans.
- The repair types and quantities shown on the plans are for information purposes only. In particular, retaining wall defects near the top of roadway barrier have been assumed to extend behind the barrier to the top of existing roadway. Actual field conditions may vary at the time of construction. Areas to be repaired will be determined and marked by the Engineer after removal of the existing roadway barrier.
- For weep hole assembly details, see Sheet S2-02.
- New weep holes shall be placed at a minimum distance of 1'-0" from existing expansion joints, existing weep holes and face of existing wall columns.
- The Contractor shall take all necessary precautions to avoid cutting existing retaining wall reinforcement during coring operations.



**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
EPOXY CRACK INJECTION	FOOT	46
STEEL RAILING REMOVAL	FOOT	361
WEEP HOLES CORED	EACH	45
REPLACE JOINT FILLER	FOOT	96
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	31

**LEGEND**

- Steel Railing Removal SF Square Foot
- Structural Repair of Concrete (Depth equal to or less than 5 in.) LF Linear Foot
- Epoxy Crack Injection (Width > 0.06") B.F. Back Face
- Hairline Crack (Width < 0.06") F.F. Front Face
- Replace Joint Filler
- Ground Line



USER NAME = ahmad,issa	DESIGNED - MAA,JMI	REVISED -
PLOT SCALE = N.T.S	CHECKED - MI,JJS	REVISED -
PLOT DATE = 1/31/2020	DRAWN - MAA,JMI	REVISED -
	CHECKED - MI,JJS	REVISED -

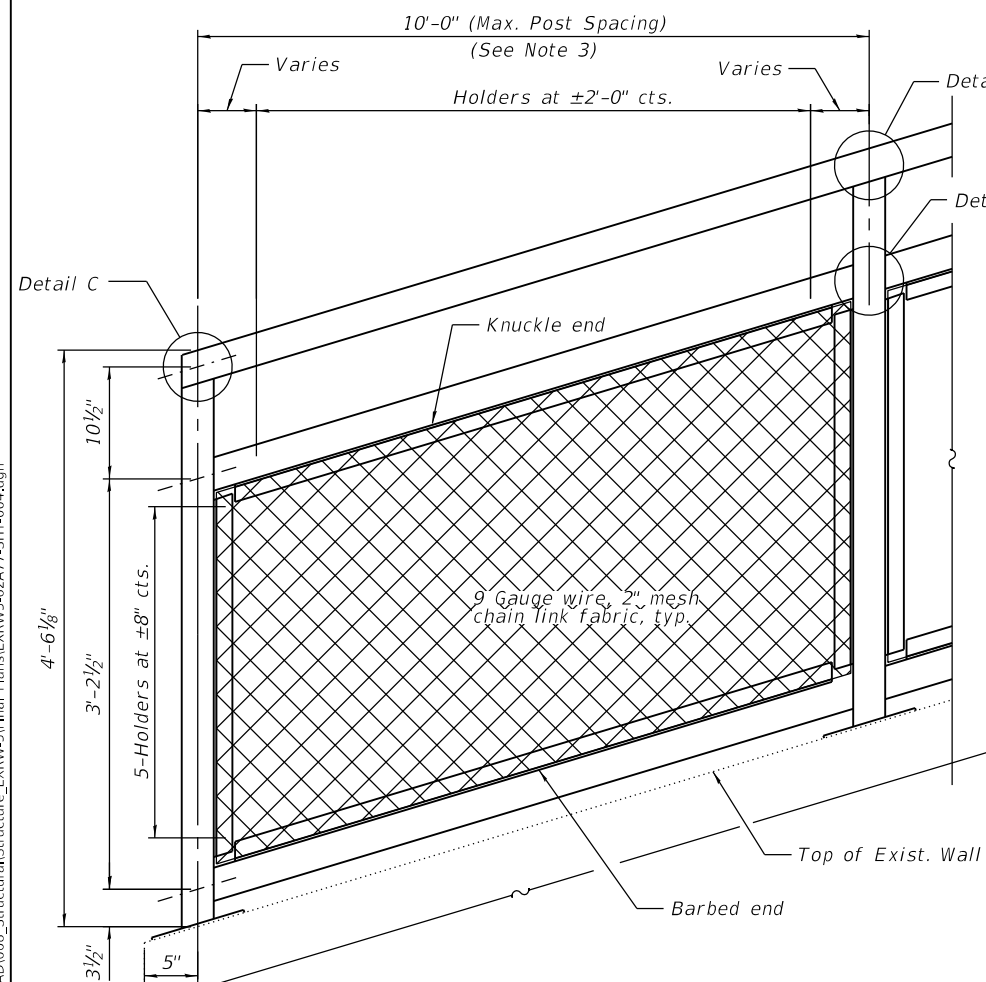
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WALL ELEVATIONS - FRONT FACE  
STRUCTURE NO. 016-1164**

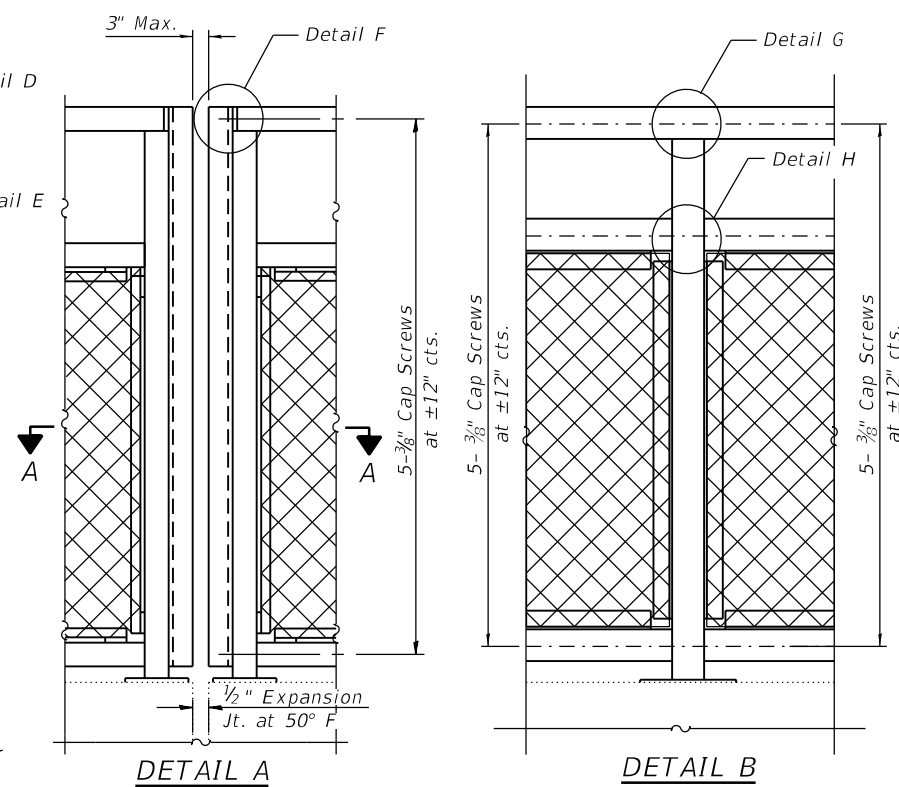
SHEET NO. S2-03 OF S2-04 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 865
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE NAME: D:\V\AECOM-NA-AWS1\ecomonline\local\AECOM\_D502\_NAD\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_III\000\_CAD\008\_Structural\Structure\_EXRW-5\Final Plans\EXRW5-62A77-5HT-004.dgn

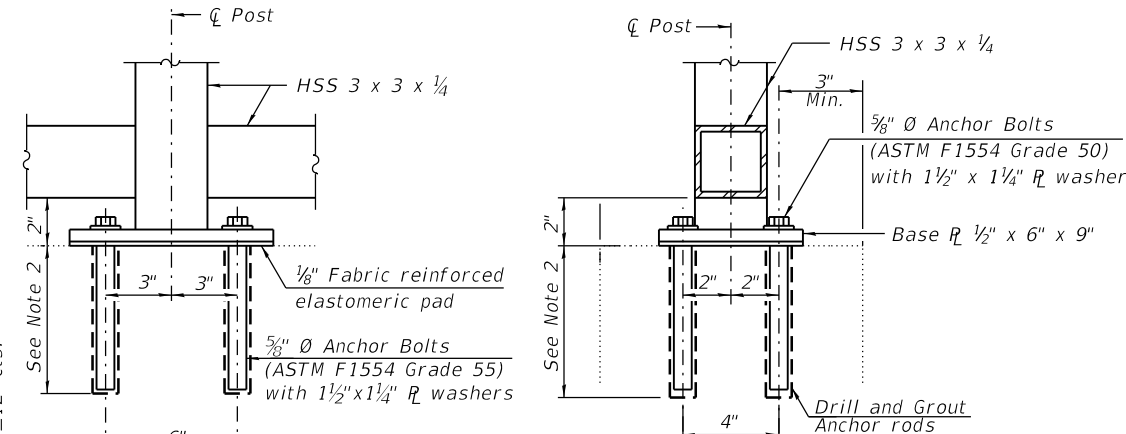


**BICYCLE RAILING**



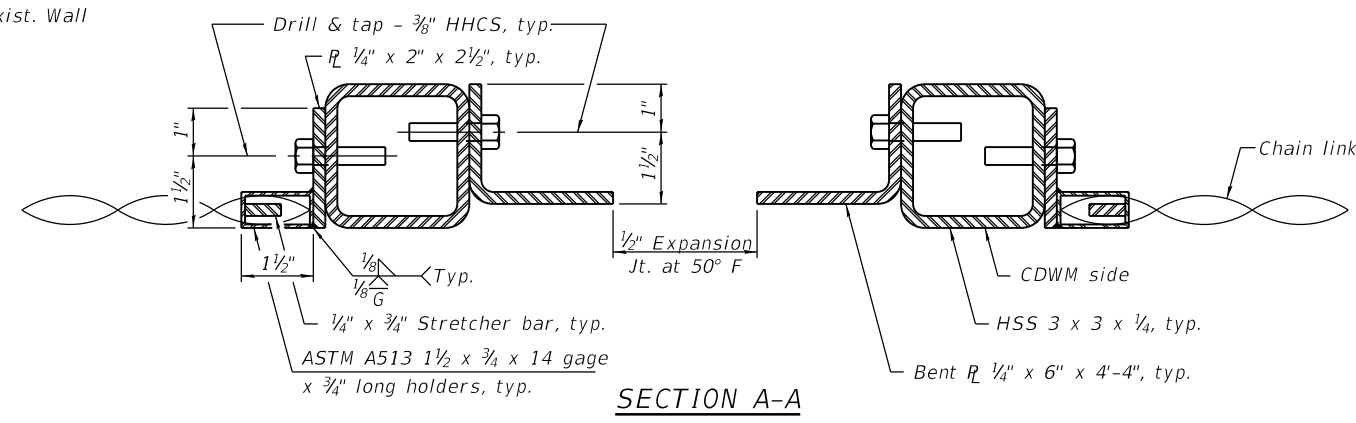
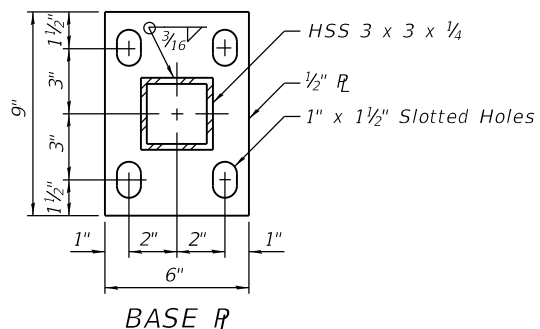
**DETAIL A**

**DETAIL B**

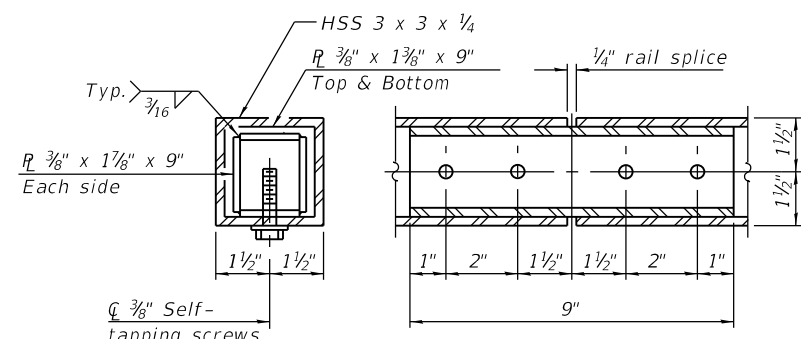
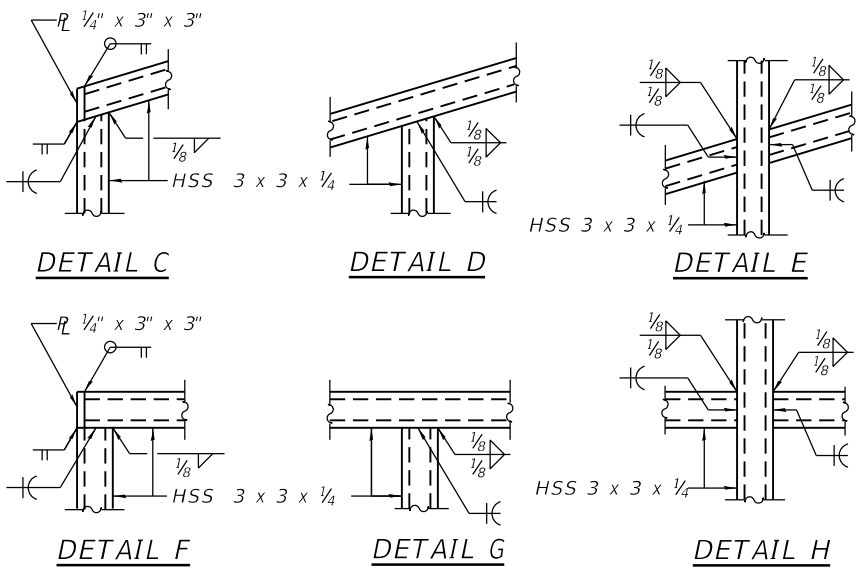


**ANCHOR BOLT DETAILS**

\* The Base PL detail may need to be modified at expansion joint/end post locations to avoid interference with existing anchor bolts. Any modifications to the existing base plate detail shall be designed, signed and sealed by a Structural Engineer, licensed in the State of Illinois, and subject to the approval of the Engineer. All associated costs shall be included with Bicycle Railing.



**SECTION A-A**



**RAIL SPLICE**

**NOTES:**

1. Base plates, anchor bolts, nuts, plate washers and all necessary drilling and grouting shall be included with Bicycle Railing pay item.
2. The Contractor shall drill and set anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.
3. The Contractor shall field-locate Existing Post locations prior to Steel Railing Removal, determine final post spacing to miss location of existing railing anchor bolts and submit Shop Drawings to the Department for approval prior to bicycle railing construction. Cost shall be included with Bicycle Railing.
4. Anchor rods shall be ASTM F1554 all-thread (or an Engineer approved alternate material) of the grade and diameter specified. The corresponding specified grade of AASHTO M314 Anchor Rods may be used in lieu of ASTM F1554.
5. Base plate structural steel shall conform to the requirements of AASHTO M270 Grade 50.
6. All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
BICYCLE RAILING	FOOT	361



USER NAME = ahmad,issa	DESIGNED - MAA,JMI	REVISED -
PLOT SCALE = N.T.S	CHECKED - MI,JJS	REVISED -
PLOT DATE = 1/31/2020	DRAWN - MAA,JMI	REVISED -
	CHECKED - MI,JJS	REVISED -

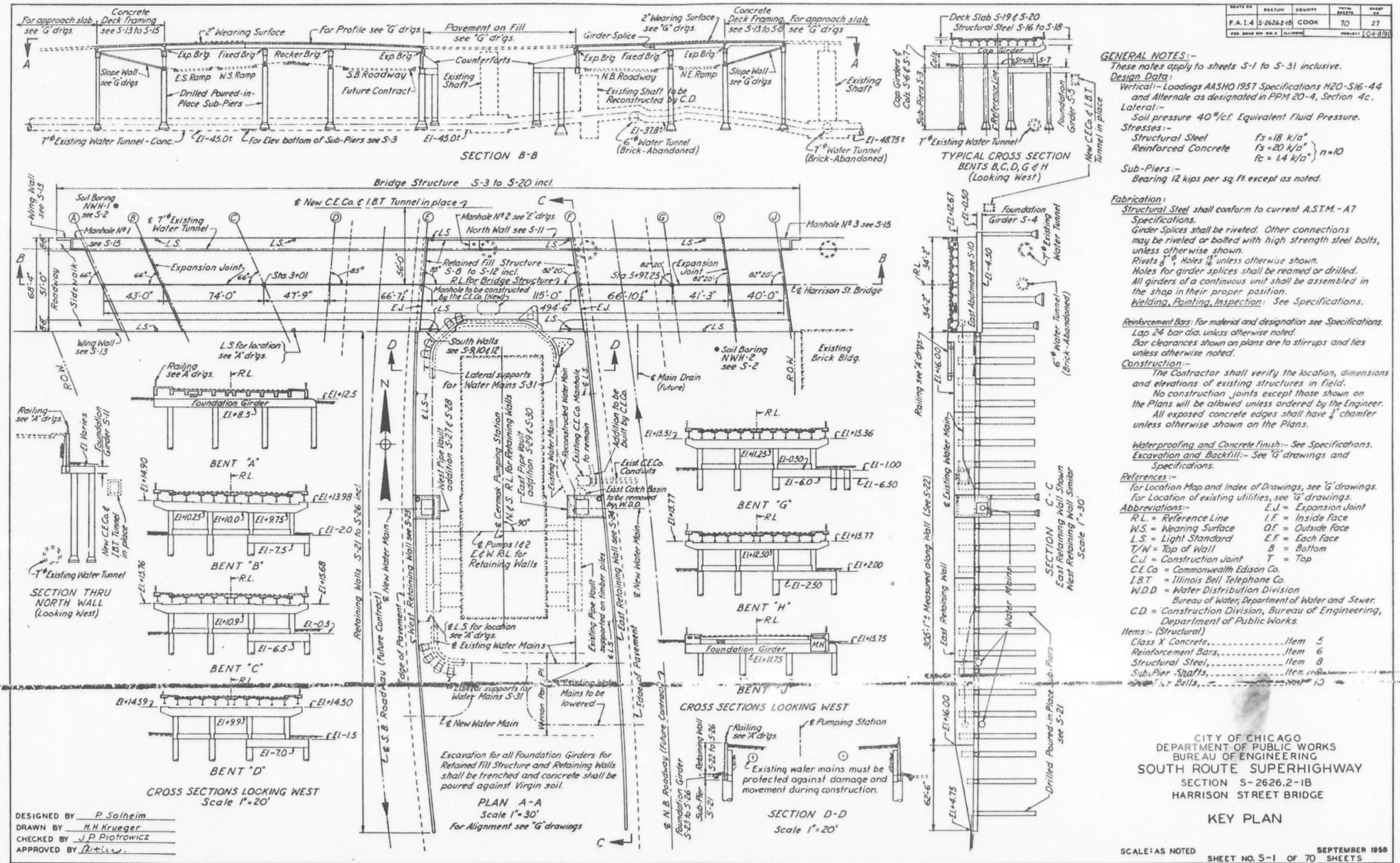
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BICYCLE RAILING DETAILS  
STRUCTURE NO. 016-1164**

SHEET NO. S2-04 OF S2-04 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 866
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

# FOR INFORMATION ONLY



FILE NAME: D:\VAE\COM-NA-AW51...americas\Transportation\60269938\_Circle\Phase\_I\000\_CAD\008\_Structural\Structure\_EXRW-5\Final\_Plans\EXRW5-62A77-5HT-005.dgn



USER NAME =	ahmad,issa	DESIGNED -	MAA,IMI	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MI, JJS	REVISED -	
PLOT DATE =	1/31/2020	DRAWN -	MAA,IMI	REVISED -	
		CHECKED -	MI, JJS	REVISED -	

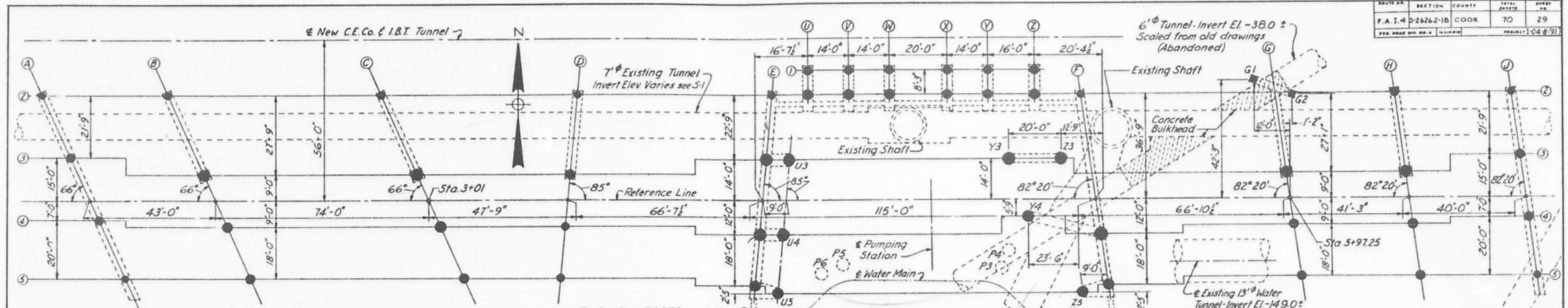
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
 STRUCTURE NO. 016-1164

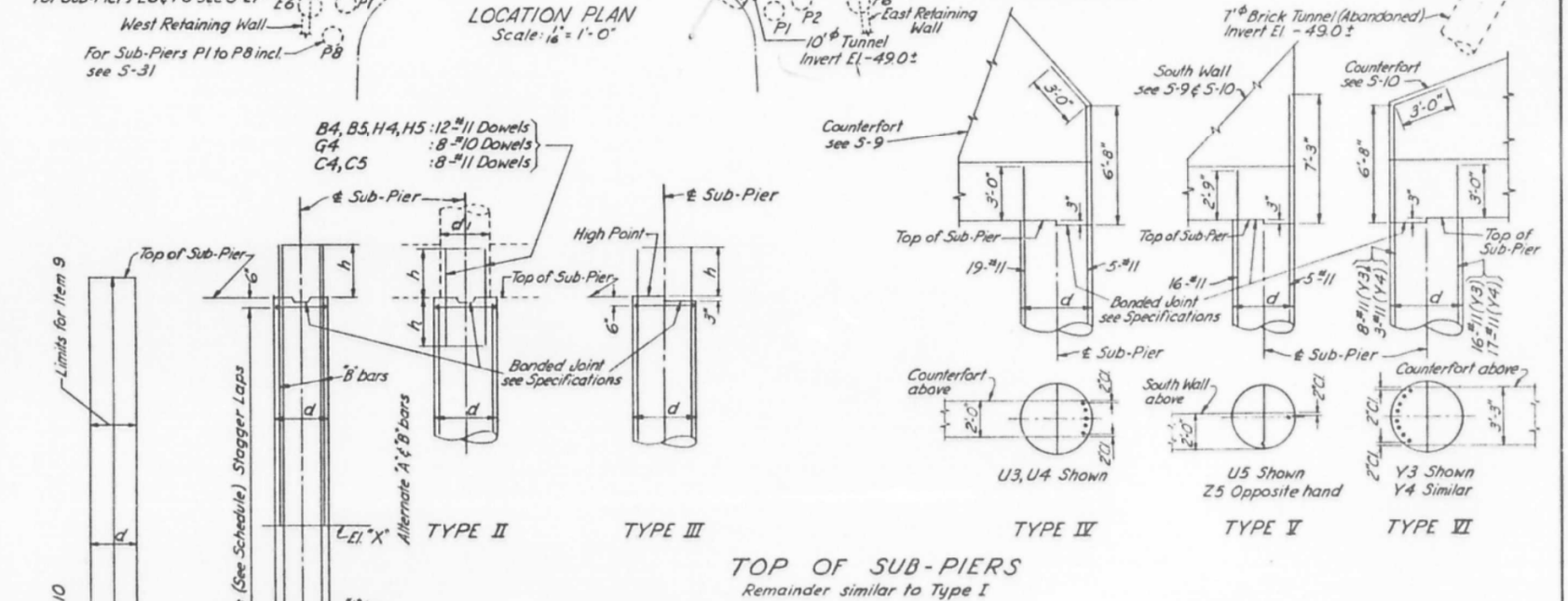
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	867
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

SHEET NO. AS-2-01 OF AS-2-30 SHEETS

# FOR INFORMATION ONLY



Bent No	Line	Type	d	wD	wH	Elev		Reinforcement		d1	Big Req'd	High Point
						ft	in	ft	in			
A	1	III	2-3	4-0	1-9	+8.50	-45.0	4-#8	4-#8	-200	2-6	#3-15
						ft	in	ft	in	ft	in	ft
B	1	III	2-3	4-0	1-9	+8.50	-45.0	4-#8	4-#8	-200	2-6	#3-15
						ft	in	ft	in	ft	in	ft
C	1	III	2-3	4-0	1-9	+8.50	-45.0	4-#8	4-#8	-200	2-6	#3-15
						ft	in	ft	in	ft	in	ft
D	1	III	2-3	4-0	1-9	+8.50	-45.0	4-#8	4-#8	-200	2-6	#3-15
						ft	in	ft	in	ft	in	ft
E	1	III	2-3	4-0	1-9	+8.50	-45.0	4-#8	4-#8	-200	2-6	#3-15
						ft	in	ft	in	ft	in	ft
F	1	III	2-3	4-0	1-9	+8.50	-45.0	4-#8	4-#8	-200	2-6	#3-15
						ft	in	ft	in	ft	in	ft
G	1	III	2-3	4-0	1-9	+8.50	-45.0	4-#8	4-#8	-200	2-6	#3-15
						ft	in	ft	in	ft	in	ft
H	1	III	2-3	4-0	1-9	+8.50	-45.0	4-#8	4-#8	-200	2-6	#3-15
						ft	in	ft	in	ft	in	ft
J	1	III	2-3	4-0	1-9	+8.50	-45.0	4-#8	4-#8	-200	2-6	#3-15
						ft	in	ft	in	ft	in	ft
U	1	III	2-3	4-0	1-9	+8.50	-45.0	4-#8	4-#8	-200	2-6	#3-15
						ft	in	ft	in	ft	in	ft
W	1	III	2-3	4-0	1-9	+8.50	-45.0	4-#8	4-#8	-200	2-6	#3-15
						ft	in	ft	in	ft	in	ft
X	1	III	2-3	4-0	1-9	+8.50	-45.0	4-#8	4-#8	-200	2-6	#3-15
						ft	in	ft	in	ft	in	ft
Y	1	III	2-3	4-0	1-9	+8.50	-45.0	4-#8	4-#8	-200	2-6	#3-15
						ft	in	ft	in	ft	in	ft
Z	1	III	2-3	4-0	1-9	+8.50	-45.0	4-#8	4-#8	-200	2-6	#3-15
						ft	in	ft	in	ft	in	ft



DESIGNED BY P. Solheim  
DRAWN BY H.H. Krueger  
CHECKED BY R. Graham  
APPROVED BY [Signature]

\* If required bearing value is not available at elevation shown, increase Bell dimensions D & H per instructions of the Engineer.

Note: Contractor shall make proper arrangements to maintain 2' clearance for vertical reinforcing for entire depth of Sub-Pier.

Notes:  
Key Plan and General Notes - Sheet S-1  
Soil Borings - Sheet S-2  
Foundation Girders - Sheets S-4, S-5 & S-11  
Sub-Piers for Retaining Walls - Sheet S-21  
Lateral Supports for Water Mains - Sheet S-31

CITY OF CHICAGO  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF ENGINEERING  
SOUTH ROUTE SUPERHIGHWAY  
SECTION S-2626.2-1B  
HARRISON STREET BRIDGE  
SUB-PIERS  
BRIDGE STRUCTURE  
SCALE: AS NOTED  
SHEET NO. S-3 OF 70  
SEPTEMBER 1958

FILE NAME: D:\V\AECOM\NA-AW51\ecomonline\local\AECOM\_ID502\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\_5\Structural\Structure\_EXRW5-62A77-5HT-006.dgn



USER NAME =	ahmad,issa	DESIGNED -	MAA, JMI	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MI, JJS	REVISED -	
PLOT DATE =	1/31/2020	DRAWN -	MAA, JMI	REVISED -	
		CHECKED -	MI, JJS	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

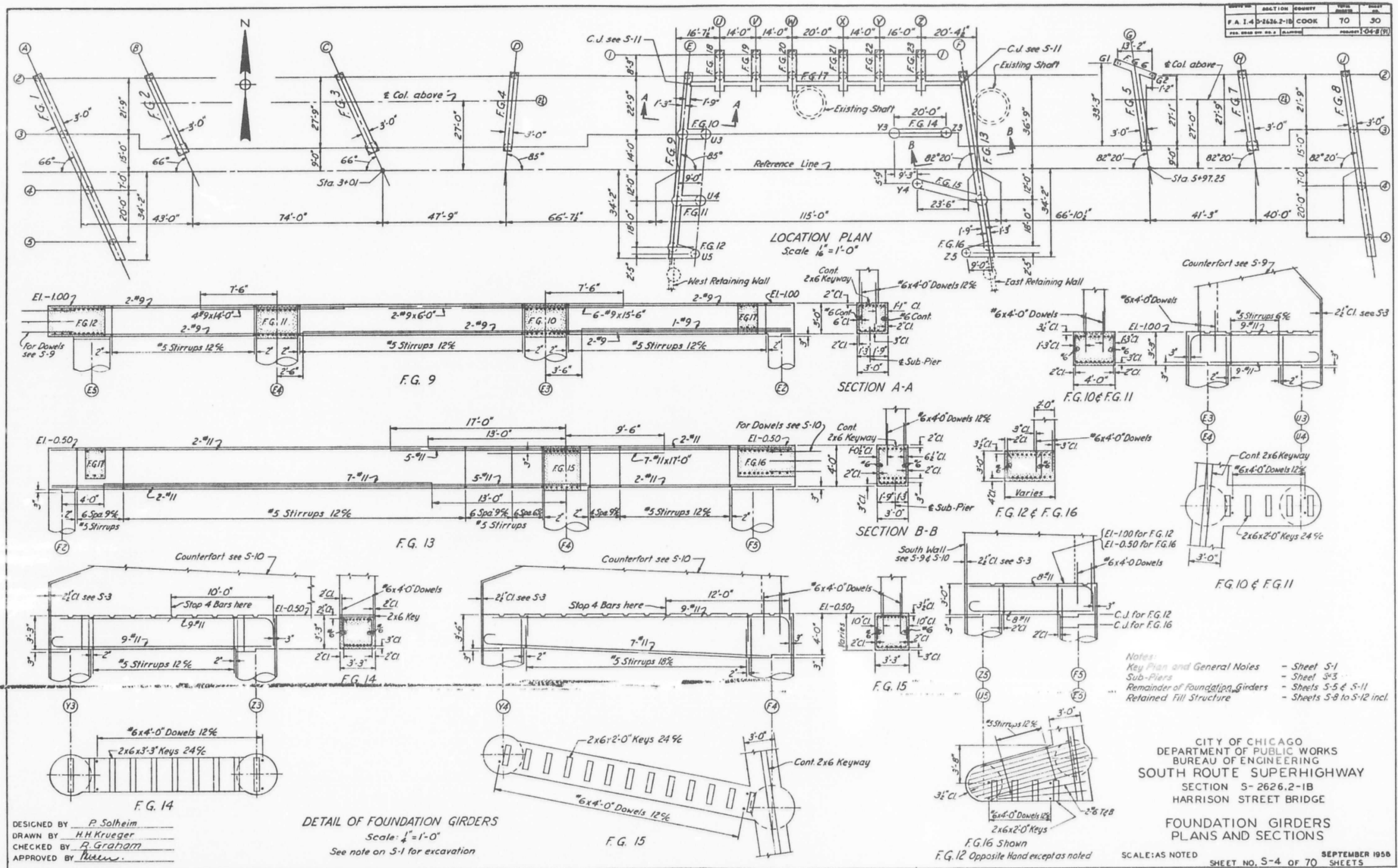
EXISTING RECORD DRAWINGS  
STRUCTURE NO. 016-1164

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	868
CONTRACT NO. 62A77				

SHEET NO. AS2-02 OF AS2-30 SHEETS

ILLINOIS FED. AID PROJECT

# FOR INFORMATION ONLY



DESIGNED BY P. Solheim  
 DRAWN BY H.H. Krueger  
 CHECKED BY R. Graham  
 APPROVED BY [Signature]

FILE NAME: D:\V\AE\COM-NA-AWS1\ae\comonline\local\AE\COM\_ID502\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\_5\Final\_Plans\EXRW5-62A77-5HT-007.dgn  
 10:09:31 AM



USER NAME =	ahmad,issa	DESIGNED -	MAA,JMI	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MI, JJS	REVISED -	
PLOT DATE =	1/31/2020	DRAWN -	MAA,JMI	REVISED -	
		CHECKED -	MI, JJS	REVISED -	

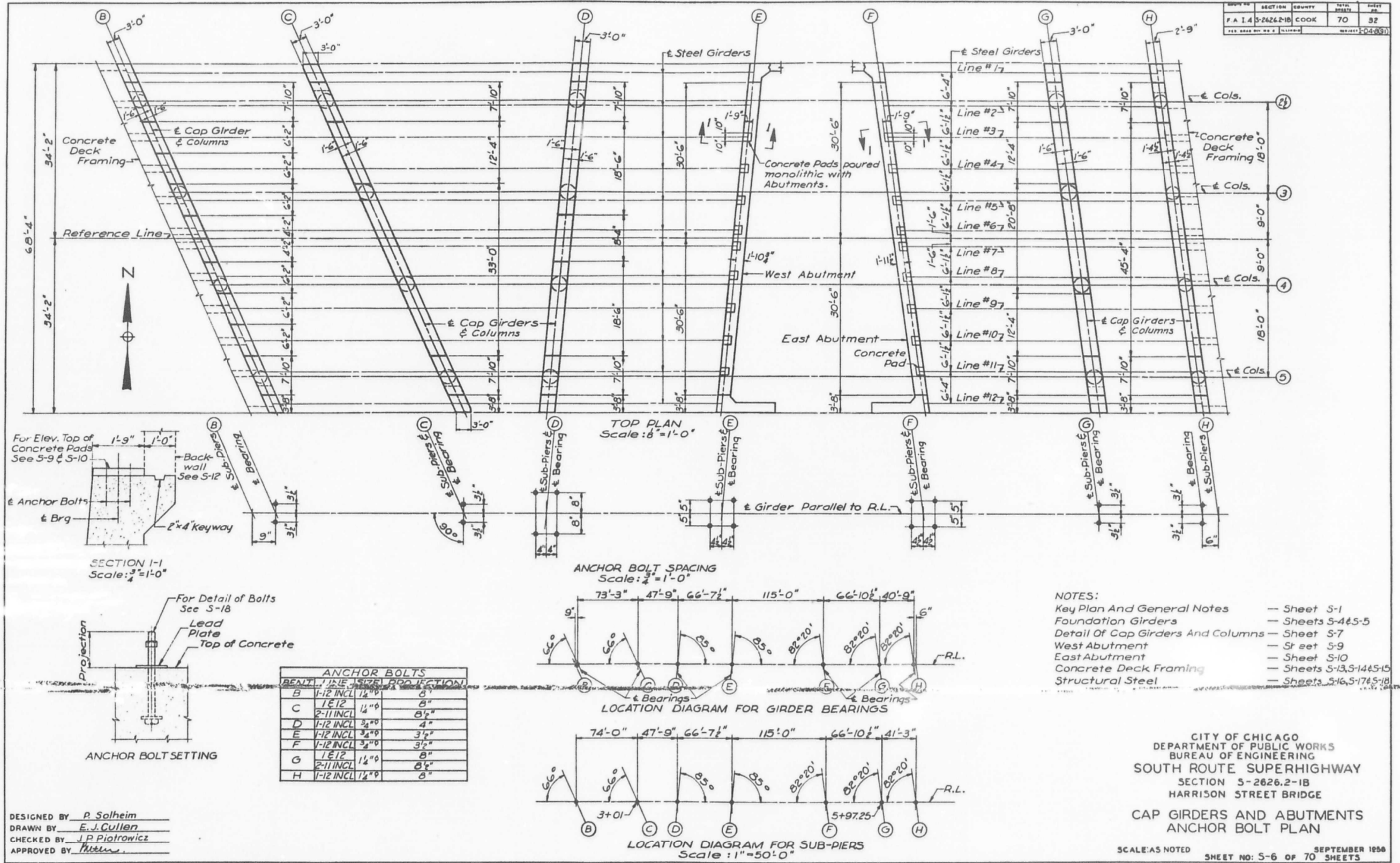
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
 STRUCTURE NO. 016-1164

SHEET NO. AS2-03 OF AS2-30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	869
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

# FOR INFORMATION ONLY



FILE NAME: D:\V\AECOM\NA-AW51\recomonline\local\AECOM\_ID502\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase5\_Structural\Structure\_EXRW-5\Final\_Plans\EXRW5-62A77-5HT-008.dgn



USER NAME =	ahmad,issa	DESIGNED -	MAA,JMI	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MI,JJS	REVISED -	
DATE =	1/31/2020	DRAWN -	MAA,JMI	REVISED -	
		CHECKED -	MI,JJS	REVISED -	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
 STRUCTURE NO. 016-1164

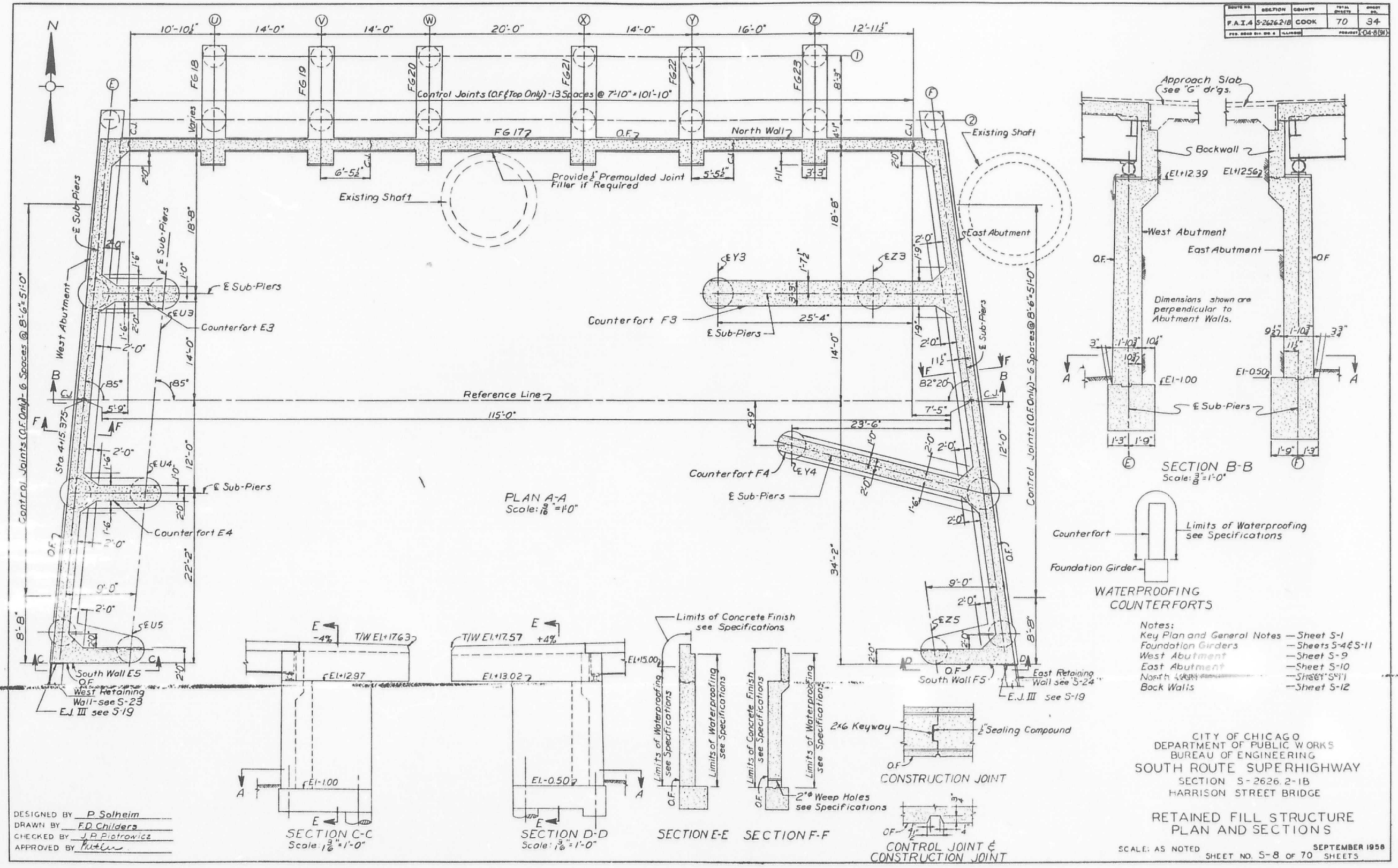
SHEET NO. AS2-04 OF AS2-30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	870
CONTRACT NO. 62A77				

ILLINOIS FED. AID PROJECT

# FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.A. S-2626.2-1B	COOK	70	34	
PROJECT: 04-8(9)				



DESIGNED BY P. Solheim  
 DRAWN BY F.D. Childers  
 CHECKED BY J.P. Piotrowicz  
 APPROVED BY [Signature]

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
 STRUCTURE NO. 016-1164

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	871
CONTRACT NO. 62A77				

SHEET NO. AS2-05 OF AS2-30 SHEETS

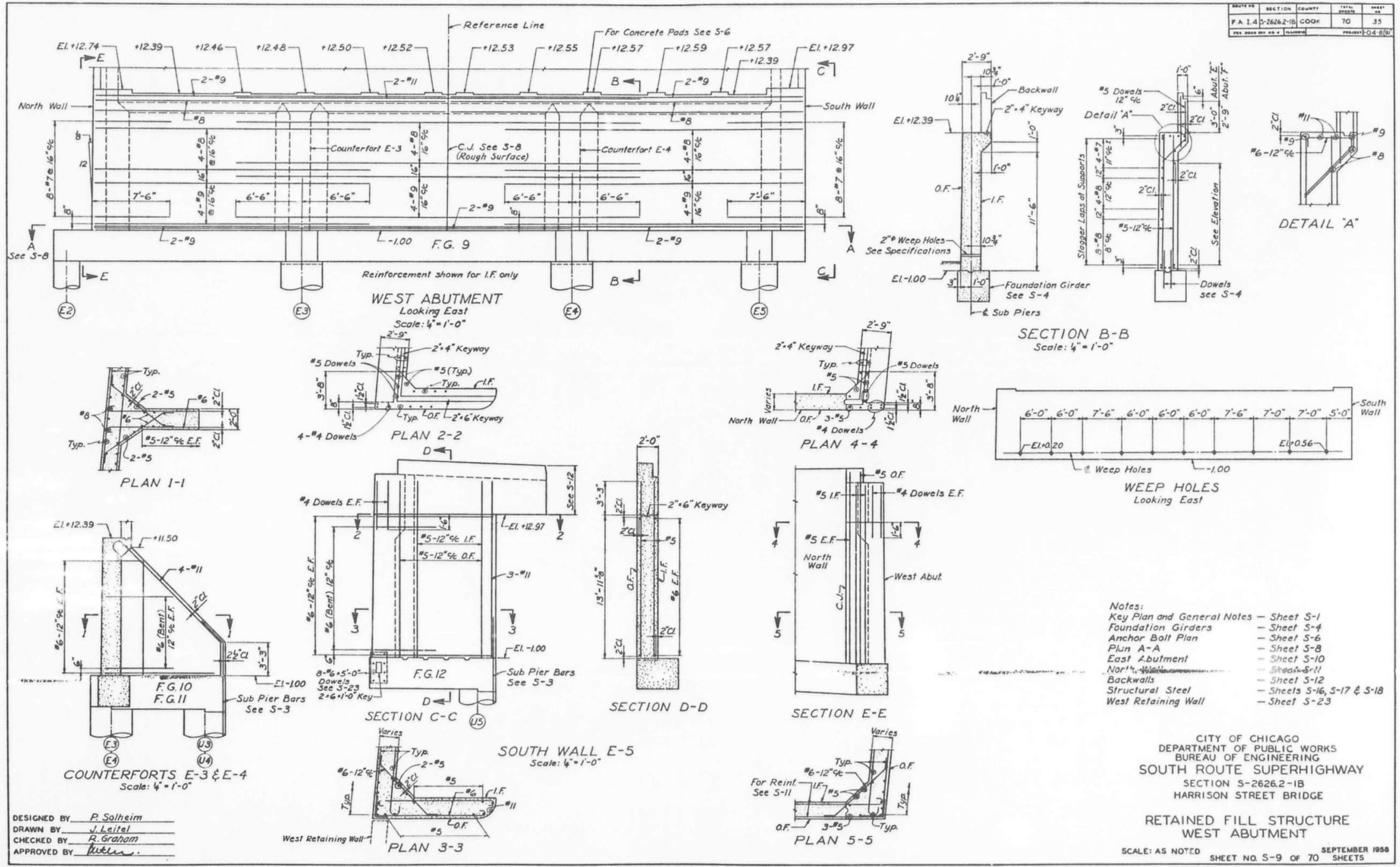
CITY OF CHICAGO  
 DEPARTMENT OF PUBLIC WORKS  
 BUREAU OF ENGINEERING  
 SOUTH ROUTE SUPERHIGHWAY  
 SECTION S-2626.2-1B  
 HARRISON STREET BRIDGE  
 RETAINED FILL STRUCTURE  
 PLAN AND SECTIONS  
 SCALE: AS NOTED  
 SHEET NO. S-8 OF 70 SHEETS  
 SEPTEMBER 1958

FILE NAME: D:\V\AECOM-NA-AW51\ecomonline\local\AECOM\_DS02\_NAD\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_II\000\_CAD\008\_Structural\Structure\_EXRW-5\Final\_Plans\EXRW5-62A77-SHT-009.dgn



USER NAME =	ahmad,issa	DESIGNED -	MAA,JMI	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MI, JJS	REVISED -	
PLOT DATE =	1/31/2020	DRAWN -	MAA,JMI	REVISED -	
		CHECKED -	MI, JJS	REVISED -	

# FOR INFORMATION ONLY



FILE NAME: D:\V\AE\COM-NA-AW51\ae\comonline\local\AE\COM\_D502\_NAV\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_II\000\_CAD\008\_Structural\Structure\_EXRW-5\Final Plans\EXRW5-62A77-SHT-010.dgn



USER NAME =	ahmad,issa	DESIGNED -	MAA,JMI	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MI,JJS	REVISED -	
DATE =	1/31/2020	DRAWN -	MAA,JMI	REVISED -	
		CHECKED -	MI,JJS	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
STRUCTURE NO. 016-1164

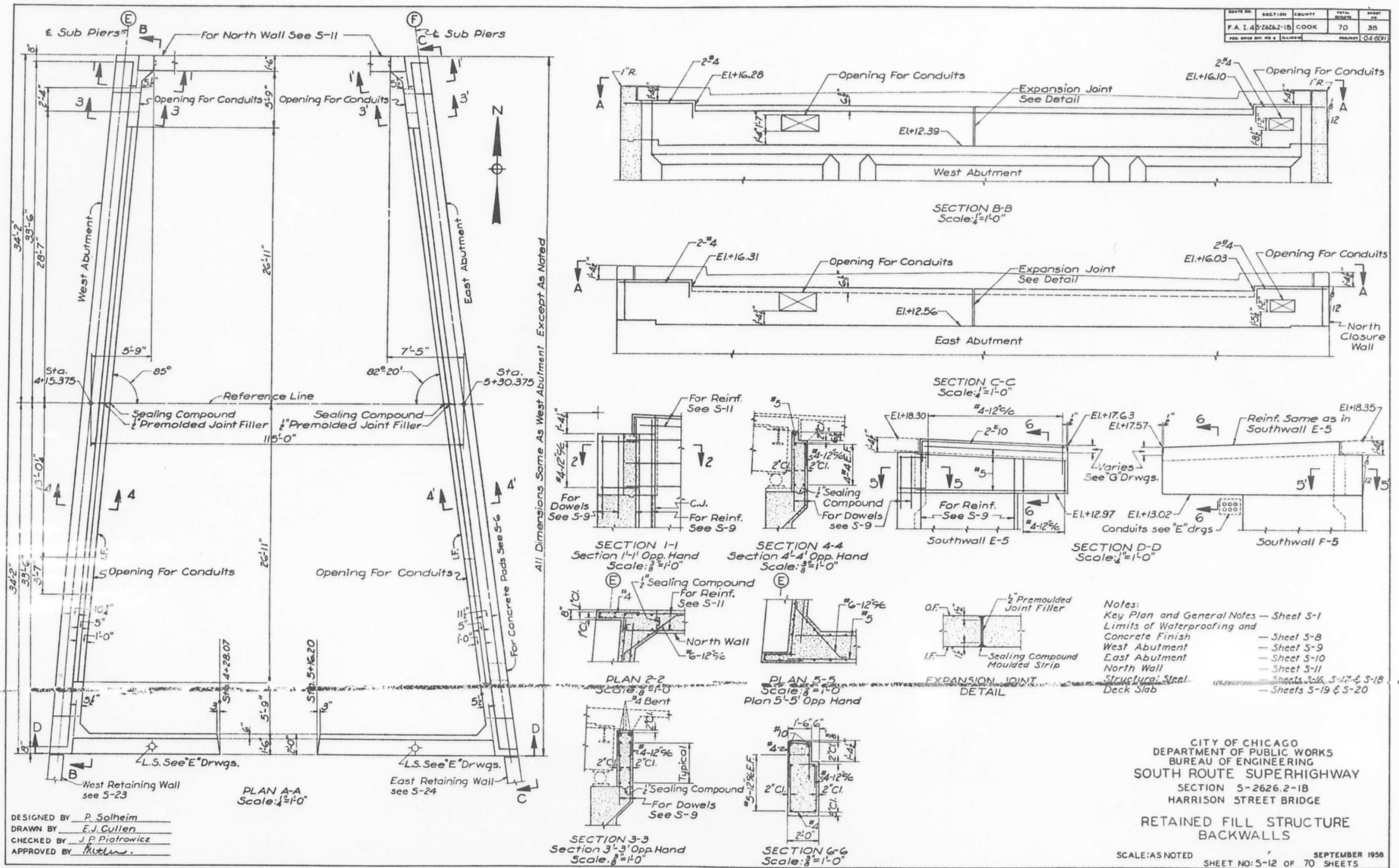
SHEET NO. AS2-06 OF AS2-30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	872
CONTRACT NO. 62A77				

ILLINOIS FED. AID PROJECT



# FOR INFORMATION ONLY



DESIGNED BY P. Solheim  
 DRAWN BY E.J. Cullen  
 CHECKED BY J.P. Piotrowicz  
 APPROVED BY [Signature]

Notes:  
 Key Plan and General Notes — Sheet S-1  
 Limits of Waterproofing and Concrete Finish — Sheet S-8  
 West Abutment — Sheet S-9  
 East Abutment — Sheet S-10  
 North Wall — Sheet S-11  
 Structural Steel Deck Slab — Sheets S-16, S-17 & S-18  
 — Sheets S-19 & S-20

CITY OF CHICAGO  
 DEPARTMENT OF PUBLIC WORKS  
 BUREAU OF ENGINEERING  
 SOUTH ROUTE SUPERHIGHWAY  
 SECTION 5-2626.2-1B  
 HARRISON STREET BRIDGE  
 RETAINED FILL STRUCTURE  
 BACKWALLS  
 SCALE: AS NOTED  
 SEPTEMBER 1958  
 SHEET NO: 5-12 OF 70 SHEETS

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
 STRUCTURE NO. 016-1164

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	873
CONTRACT NO. 62A77				

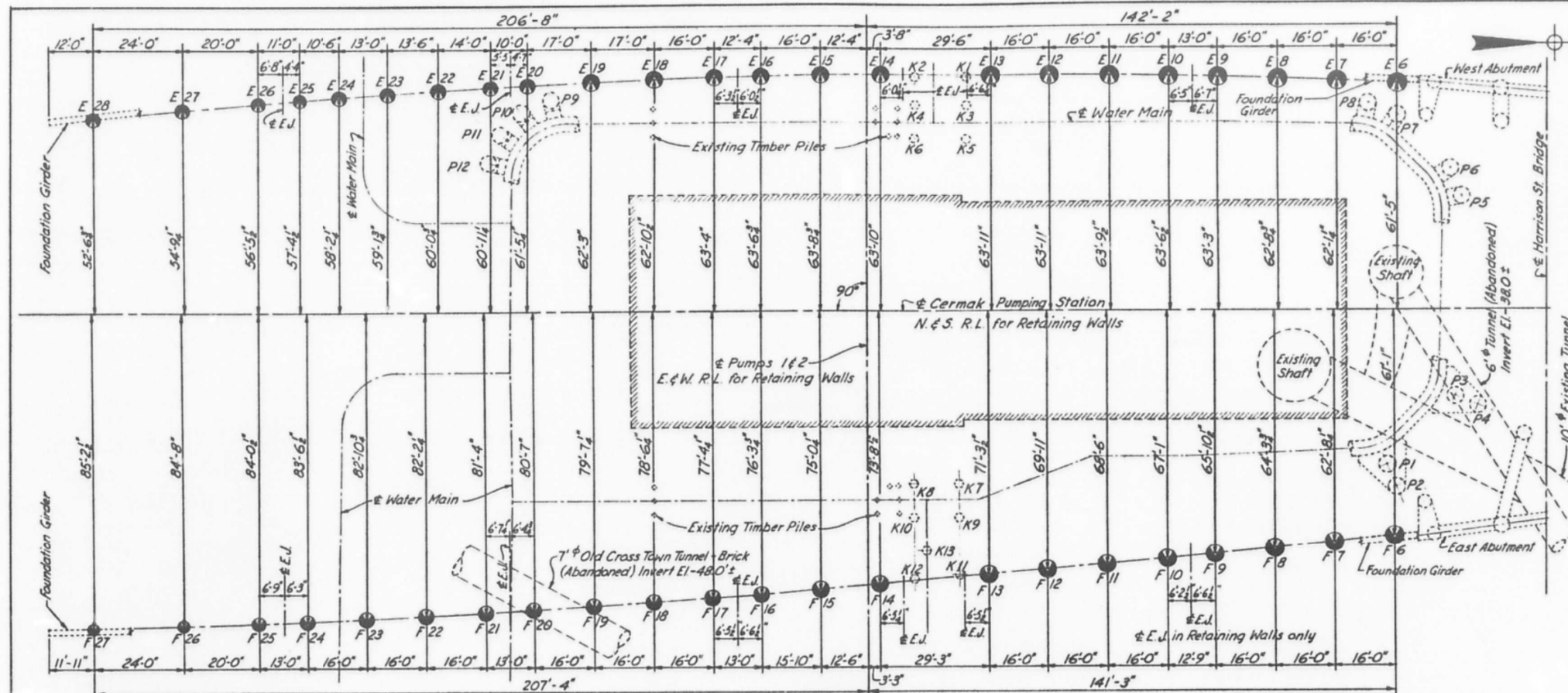
SHEET NO. AS2-07 OF AS2-30 SHEETS

ILLINOIS FED. AID PROJECT

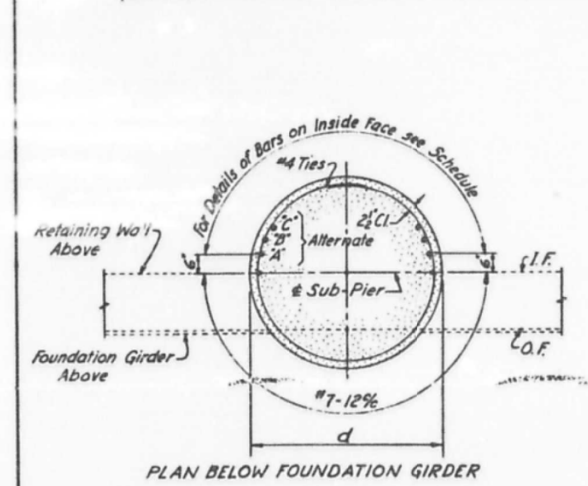
FILE NAME: D:\V\AECOM-NA-AWS1\ecomonline\local\AECOM\_D502\_NAV\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_II\000\_CAD\008\_Structural\Structure\_EXRW-5\Final\_Plans\EXRW5-62A77-5HT-01.1.dgn  
 10:10:27 AM



# FOR INFORMATION ONLY

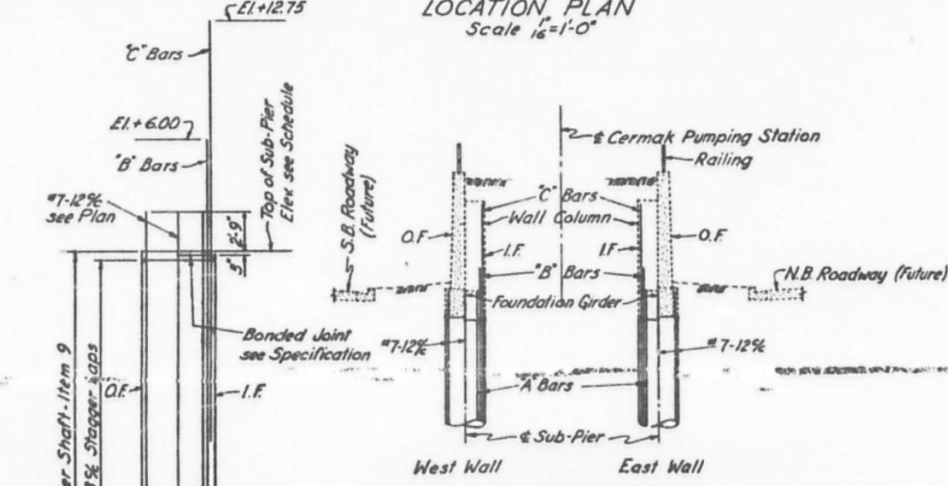


SUB-PIER SCHEDULE					
Mark	d	Elev Top	Reinforcement (I.F.)		
			A Bars	B Bars	C Bars
E6	5-0	-3.50	6" #11x41-0	6" #11x44-0	5" #11x44-0
E7	5-0	-3.25	6" #11x41-3	6" #11x44-0	5" #11x44-0
E8	5-0	-3.25	6" #11x41-3	6" #11x44-0	5" #11x44-0
E9	4-9	-3.00	6" #11x41-6	5" #11x42-0	5" #11x42-0
E10	4-9	-2.75	6" #11x41-9	5" #11x42-0	5" #11x42-0
E11	4-9	-2.50	6" #11x42-0	5" #11x42-0	5" #11x42-0
E12	4-9	-2.50	6" #11x42-0	5" #11x42-0	5" #11x42-0
E13	4-9	-2.25	6" #11x42-3	5" #11x41-0	5" #11x41-0
E14	4-6	-2.00	5" #11x42-6	5" #11x40-0	5" #11x40-0
E15	4-6	-2.00	5" #11x42-6	5" #11x40-0	5" #11x40-0
E16	4-3	-1.75	5" #11x42-9	5" #11x40-0	4" #11x40-0
E17	4-3	-1.75	5" #11x42-9	5" #11x40-0	4" #11x40-0
E18	4-6	-1.50	5" #11x43-0	5" #11x40-0	5" #11x40-0
E19	4-6	-1.50	5" #11x43-0	5" #11x40-0	5" #11x40-0
E20	4-0	-1.25	5" #11x43-3	4" #11x39-0	4" #11x39-0
E21	3-9	-1.25	4" #11x43-3	4" #11x38-0	4" #11x38-0
E22	4-0	-1.00	5" #11x43-6	4" #11x38-0	4" #11x38-0
E23	3-9	-1.00	4" #11x43-6	4" #11x39-0	4" #11x39-0
E24	3-9	-0.75	4" #11x43-9	4" #11x37-0	4" #11x37-0
E25	3-6	-0.75	4" #11x43-9	4" #11x36-0	3" #11x36-0
E26	3-6	-0.75	4" #11x43-9	4" #11x36-0	3" #11x36-0
E27	3-6	-0.50	4" #11x44-0	4" #11x30-0	3" #11x30-0
E28	3-0	-0.25	4" #9x44-3	5" #9x25-0	---
F6	4-9	-2.50	6" #11x42-0	5" #11x42-0	5" #11x42-0
F7	4-9	-2.50	6" #11x42-0	5" #11x42-0	5" #11x42-0
F8	4-9	-2.25	6" #11x42-3	5" #11x42-0	5" #11x42-0
F9	4-6	-2.00	5" #11x42-6	5" #11x41-0	5" #11x41-0
F10	4-6	-2.00	5" #11x42-6	5" #11x41-0	5" #11x41-0
F11	4-6	-1.75	5" #11x42-9	5" #11x41-0	5" #11x41-0
F12	4-6	-1.50	5" #11x43-0	5" #11x41-0	5" #11x41-0
F13	4-6	-1.50	5" #11x43-0	5" #11x40-0	5" #11x40-0
F14	4-3	-1.25	5" #11x43-3	5" #11x40-0	4" #11x40-0
F15	4-3	-1.25	5" #11x43-3	5" #11x40-0	4" #11x40-0
F16	4-0	-1.00	5" #11x43-6	4" #11x40-0	4" #11x40-0
F17	4-0	-1.00	5" #11x43-6	4" #11x40-0	4" #11x40-0
F18	4-0	-0.75	5" #11x43-9	4" #11x40-0	4" #11x40-0
F19	4-0	-0.75	5" #11x43-9	4" #11x40-0	4" #11x40-0
F20	4-0	-0.50	5" #11x44-0	4" #11x39-0	4" #11x39-0
F21	4-0	-0.50	5" #11x44-0	4" #11x39-0	4" #11x39-0
F22	4-0	-0.25	5" #11x44-3	4" #11x39-0	4" #11x39-0
F23	4-0	0.00	5" #11x44-6	4" #11x38-0	4" #11x38-0
F24	3-9	0.00	4" #11x44-6	4" #11x38-0	4" #11x38-0
F25	3-6	0.00	4" #11x44-6	4" #11x36-0	3" #11x36-0
F26	3-6	0.00	4" #11x44-6	4" #11x30-0	3" #11x30-0
F27	3-0	0.00	4" #9x44-6	5" #9x25-0	---



Note: Contractor shall make proper arrangements to maintain 2" clearance for vertical reinforcing for entire depth of Sub-Pier.

DESIGNED BY P. Solheim  
 DRAWN BY H.H. Krueger  
 CHECKED BY R. Graham  
 APPROVED BY [Signature]



Sub-Pier No	Elev. Top of C Bars	Elev. Top of B Bars
E26 & F23	+11.25	+5.25
E27	+7.25	+2.25
F26	+7.25	+2.75
E28	---	+2.50
F27	---	+2.75

- Notes:
- Key Plan and General Notes — Sheet S-1
  - Soil Borings — Sheet S-2
  - Sub-Piers - Bridge Structure — Sheet S-3
  - Retaining Walls - Top Plan — Sheet S-22
  - West Retaining Wall - Looking East — Sheet S-23
  - East Retaining Wall - Looking West — Sheet S-24
  - Retaining Walls - Sections — Sheet S-25
  - Retaining Walls - Reinforcement — Sheet S-26
  - Sub-Piers K1 to K6 incl. West Pipe Vault Addition — Sheet S-27
  - Sub-Piers K7 to K13 incl. East Pipe Vault Addition — Sheet S-28
  - Sub-Piers P1 to P12 incl. Lateral Supports for Water Mains — Sheet S-31

CITY OF CHICAGO  
 DEPARTMENT OF PUBLIC WORKS  
 BUREAU OF ENGINEERING  
 SOUTH ROUTE SUPERHIGHWAY  
 SECTION 5-2626.2-1B  
 HARRISON STREET BRIDGE

RETAINING WALLS  
 SUB-PIERS

SCALE: AS NOTED SHEET NO. 5-21 OF 70 SHEETS

FILE NAME: D:\V\AE\COM-NA-AW51\ae\comonline\local\AE\COM\_D502\_NAV\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_5\Final\_Plans\EXRW5-62A77-SHT-012.dgn



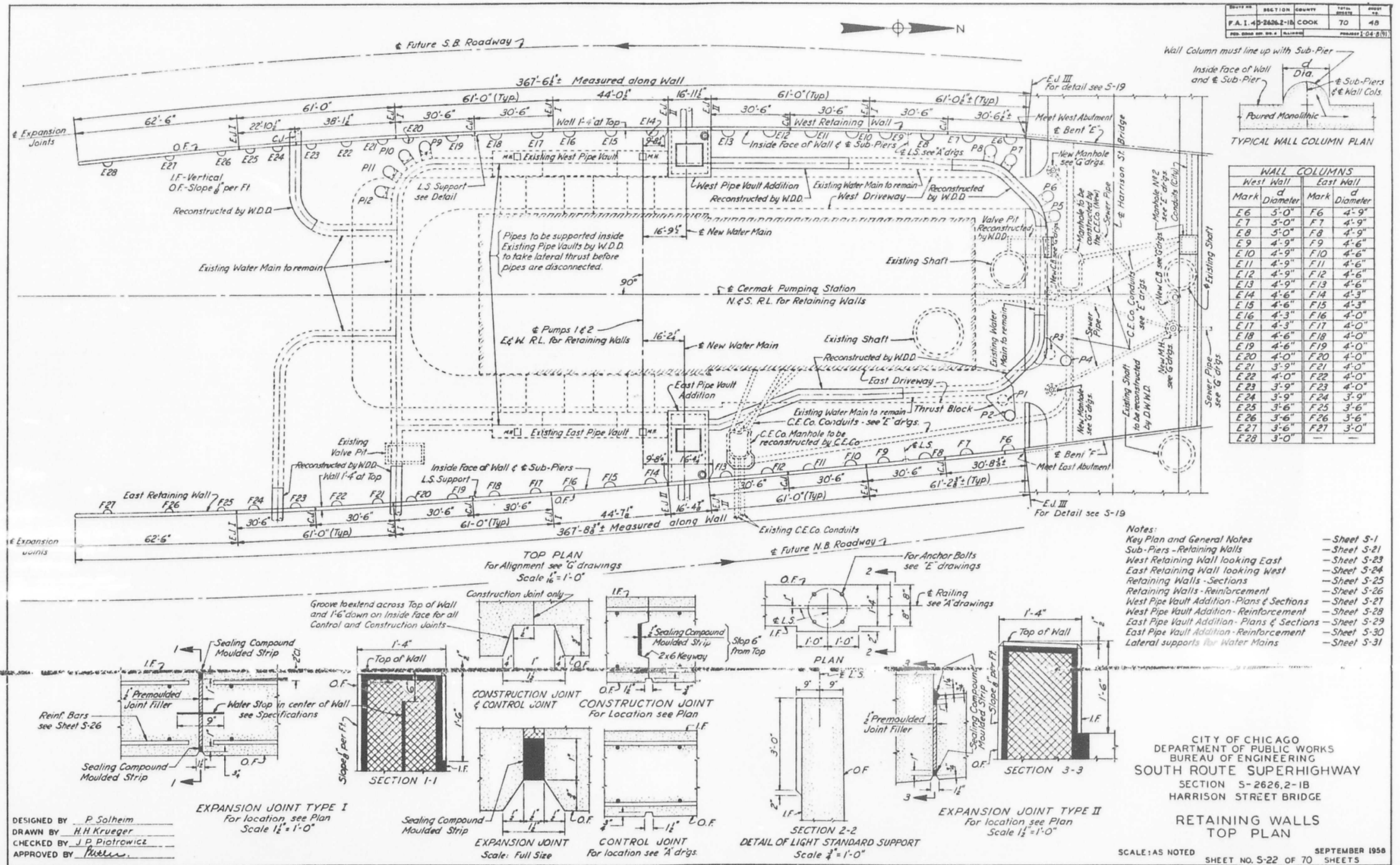
USER NAME =	ahmad,issa	DESIGNED -	MAA, JMI	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MI, JJS	REVISED -	
PLOT DATE =	1/31/2020	DRAWN -	MAA, JMI	REVISED -	
		CHECKED -	MI, JJS	REVISED -	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
 STRUCTURE NO. 016-1164

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	874
CONTRACT NO. 62A77				
ILLINOIS		FED. AID PROJECT		

# FOR INFORMATION ONLY



FILE NAME: D:\V\AECOM\NA-AW51\recomonline\local\AECOM\_ID502\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\_5\Final\_Plans\EXRW5-62A77-5HT-013.dgn  
 10:10:56 AM



USER NAME =	ahmad,issa	DESIGNED -	MAA,IMI	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MI,JJS	REVISED -	
PLOT DATE =	1/31/2020	DRAWN -	MAA,IMI	REVISED -	
		CHECKED -	MI,JJS	REVISED -	

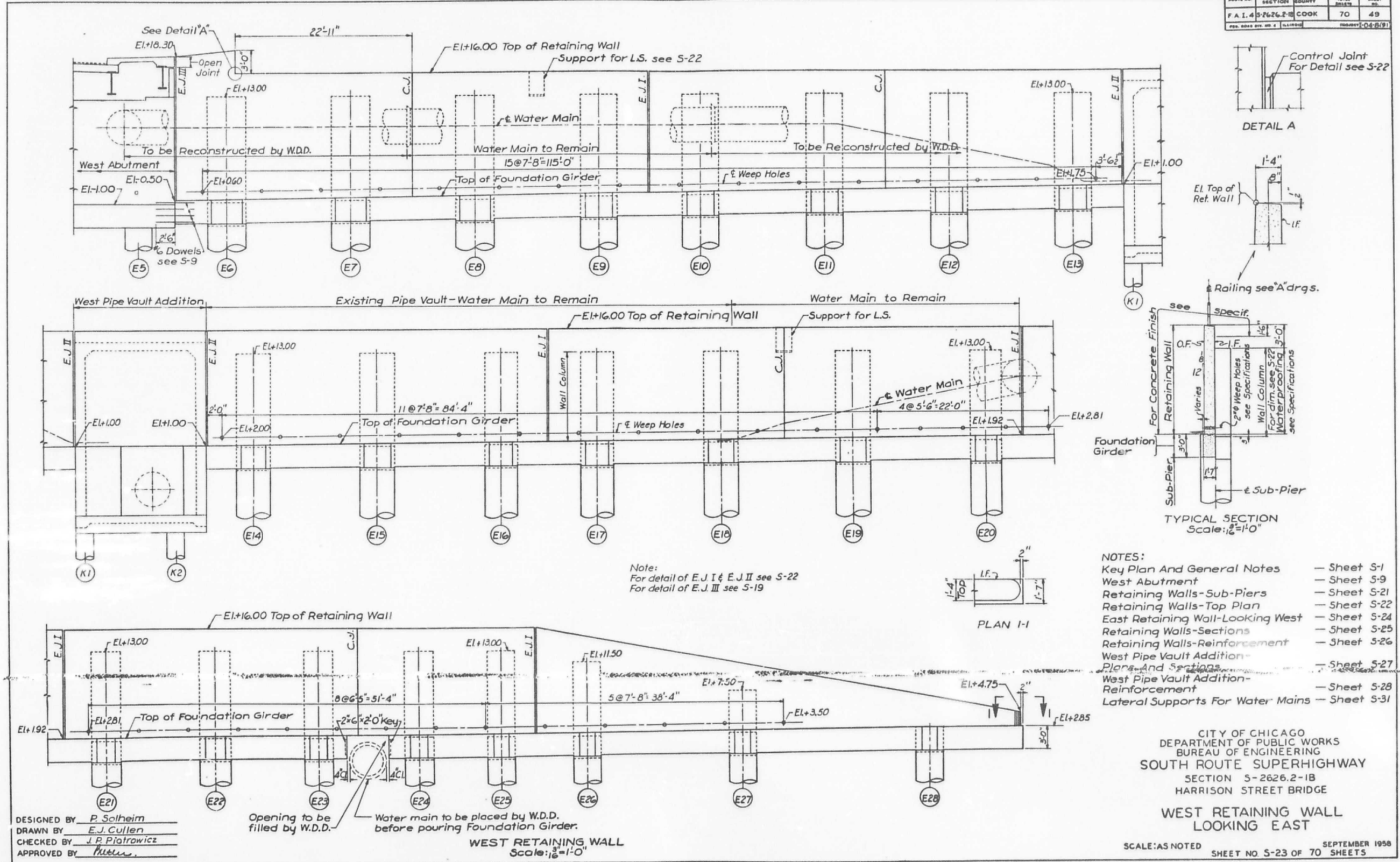
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
 STRUCTURE NO. 016-1164  
 SHEET NO. AS2-09 OF AS2-30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	875
CONTRACT NO. 62A77				
ILLINOIS		FED. AID PROJECT		

# FOR INFORMATION ONLY

SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 4	3-2626.2-1B	COOK	70	49
PROJECT: 04-8(9)				



CITY OF CHICAGO  
 DEPARTMENT OF PUBLIC WORKS  
 BUREAU OF ENGINEERING  
 SOUTH ROUTE SUPERHIGHWAY  
 SECTION 5-2626.2-1B  
 HARRISON STREET BRIDGE  
**WEST RETAINING WALL  
 LOOKING EAST**

SCALE: AS NOTED  
 SHEET NO. 5-23 OF 70 SHEETS  
 SEPTEMBER 1958

DESIGNED BY P. Solheim  
 DRAWN BY E.J. Cullen  
 CHECKED BY J.P. Piotrowicz  
 APPROVED BY Huber

Opening to be filled by W.D.D.  
 Water main to be placed by W.D.D. before pouring Foundation Girder.  
**WEST RETAINING WALL**  
 Scale: 1/2" = 1'-0"

FILE NAME: D:\V\AECOM\NA-AW51\ecomonline\local\AECOM\_ID502\_NAD\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_5\Final\_Plans\EXRW5-62A77-5HT-014.dgn



USER NAME =	ahmad,issa	DESIGNED -	MAA,JMI	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MI, JJS	REVISED -	
PLOT DATE =	1/31/2020	DRAWN -	MAA,JMI	REVISED -	
		CHECKED -	MI, JJS	REVISED -	

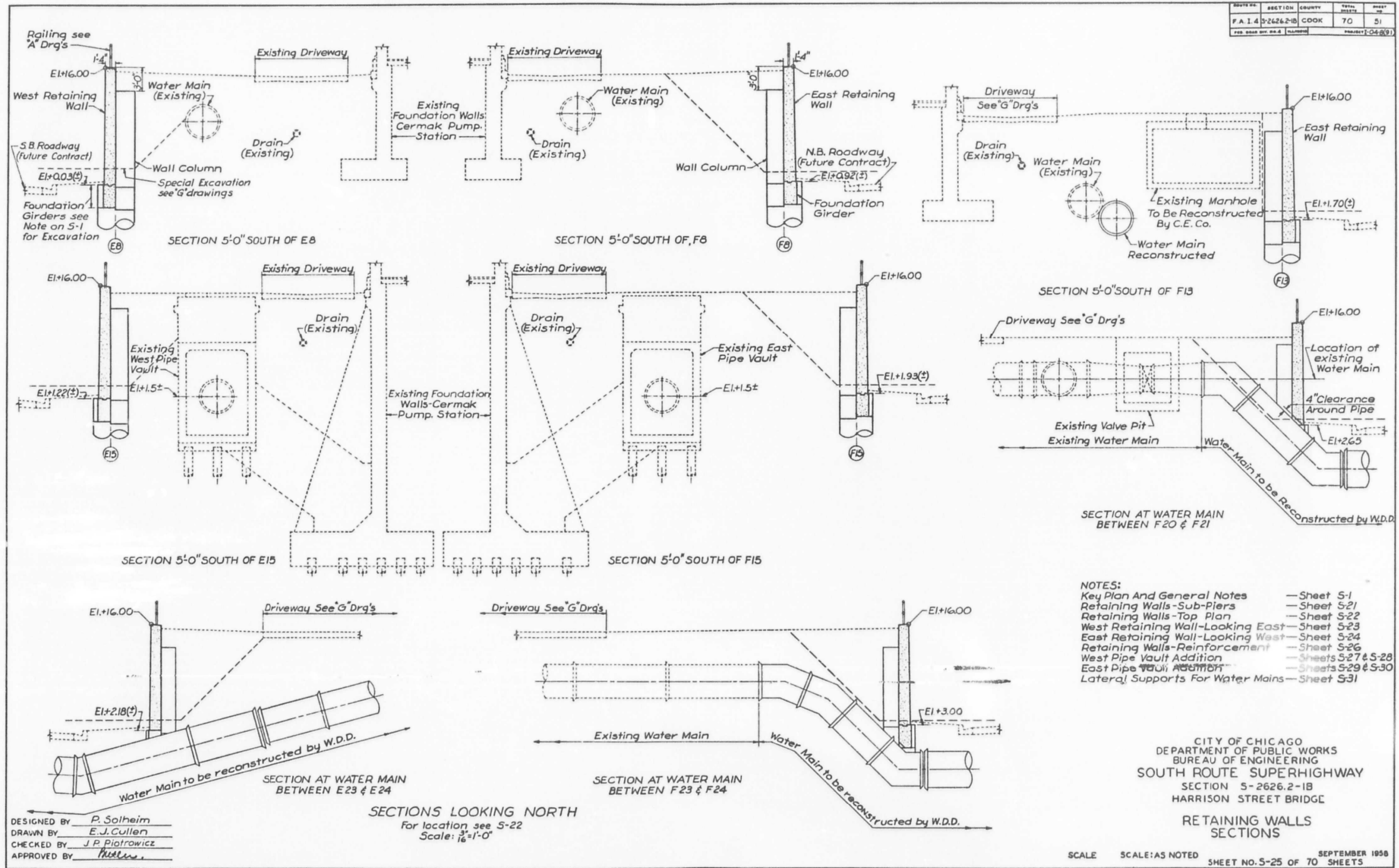
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
 STRUCTURE NO. 016-1164

SHEET NO. AS-210 OF AS-230 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	876
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

# FOR INFORMATION ONLY



- NOTES:**
- Key Plan And General Notes — Sheet S-1
  - Retaining Walls-Sub-Piers — Sheet S-21
  - Retaining Walls-Top Plan — Sheet S-22
  - West Retaining Wall-Looking East — Sheet S-23
  - East Retaining Wall-Looking West — Sheet S-24
  - Retaining Walls-Reinforcement — Sheet S-26
  - West Pipe Vault Addition — Sheets S-27 & S-28
  - East Pipe Vault Addition — Sheets S-29 & S-30
  - Lateral Supports For Water Mains — Sheet S-31

CITY OF CHICAGO  
 DEPARTMENT OF PUBLIC WORKS  
 BUREAU OF ENGINEERING  
 SOUTH ROUTE SUPERHIGHWAY  
 SECTION 5-2626.2-1B  
 HARRISON STREET BRIDGE  
**RETAINING WALLS  
 SECTIONS**

DESIGNED BY P. Solheim  
 DRAWN BY E.J. Cullen  
 CHECKED BY J.P. Piotrowicz  
 APPROVED BY [Signature]

**SECTIONS LOOKING NORTH**  
 For location see S-22  
 Scale: 3/8"=1'-0"

SCALE SCALE:AS NOTED SHEET NO. S-25 OF 70 SHEETS SEPTEMBER 1958

FILE NAME: D:\VAECOM-NA-AW51\_recomonline\local\VAECOM\_DS02\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\_5\Final\_Plans\EXRW5-62A77-5HT-015.dgn



USER NAME =	ahmad,issa	DESIGNED -	MAA,JMI	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MI, JJS	REVISED -	
PLOT DATE =	1/31/2020	DRAWN -	MAA,JMI	REVISED -	
		CHECKED -	MI, JJS	REVISED -	

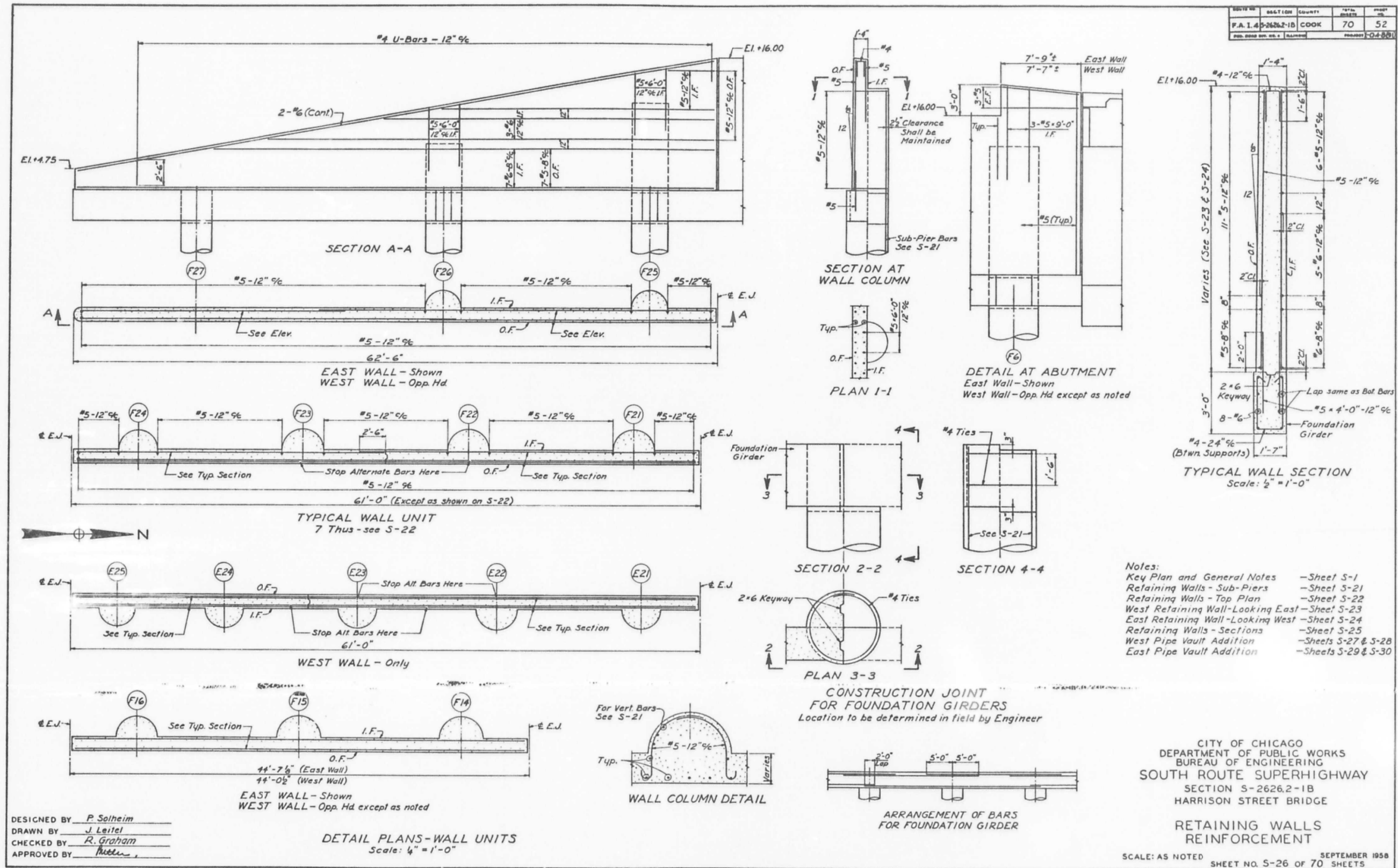
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
 STRUCTURE NO. 016-1164

SHEET NO. AS-21 OF AS-30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	877
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

# FOR INFORMATION ONLY



FILE NAME: D:\VAECOM\NA-AWS1\acconline\local\AECOM\_DS02\_NAD\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_3\Structural\Structure\_EXRW-5\Final\_Plans\EXRW5-62A77-5HT-016.dgn



USER NAME =	ahmad,issa	DESIGNED -	MAA,JMI	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MI,JJS	REVISED -	
PLOT DATE =	1/31/2020	DRAWN -	MAA,JMI	REVISED -	
		CHECKED -	MI,JJS	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

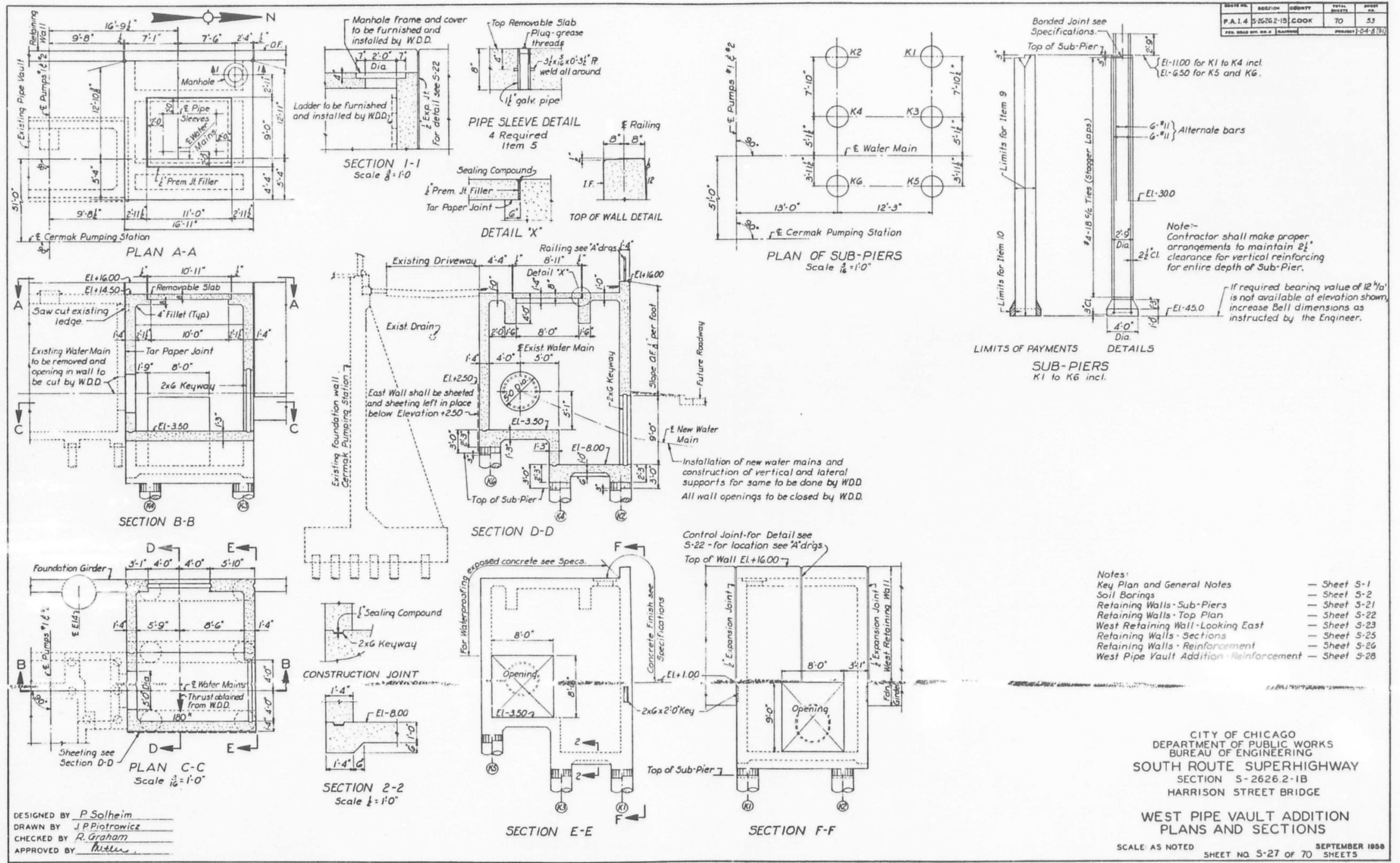
EXISTING RECORD DRAWINGS  
STRUCTURE NO. 016-1164

SHEET NO. AS2-12 OF AS2-30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	878
CONTRACT NO. 62A77				

ILLINOIS FED. AID PROJECT

# FOR INFORMATION ONLY



FILE NAME: D:\V\AE\COM-NA-AW51...americasonline\local\AE\COM\_D502\_NAD\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_5\Final\_Plans\EXRW5-62A77-SHT-017.dgn



USER NAME =	ahmad,issa	DESIGNED -	MAA,JMI	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MI,JJS	REVISED -	
PLOT DATE =	1/31/2020	DRAWN -	MAA,JMI	REVISED -	
		CHECKED -	MI,JJS	REVISED -	

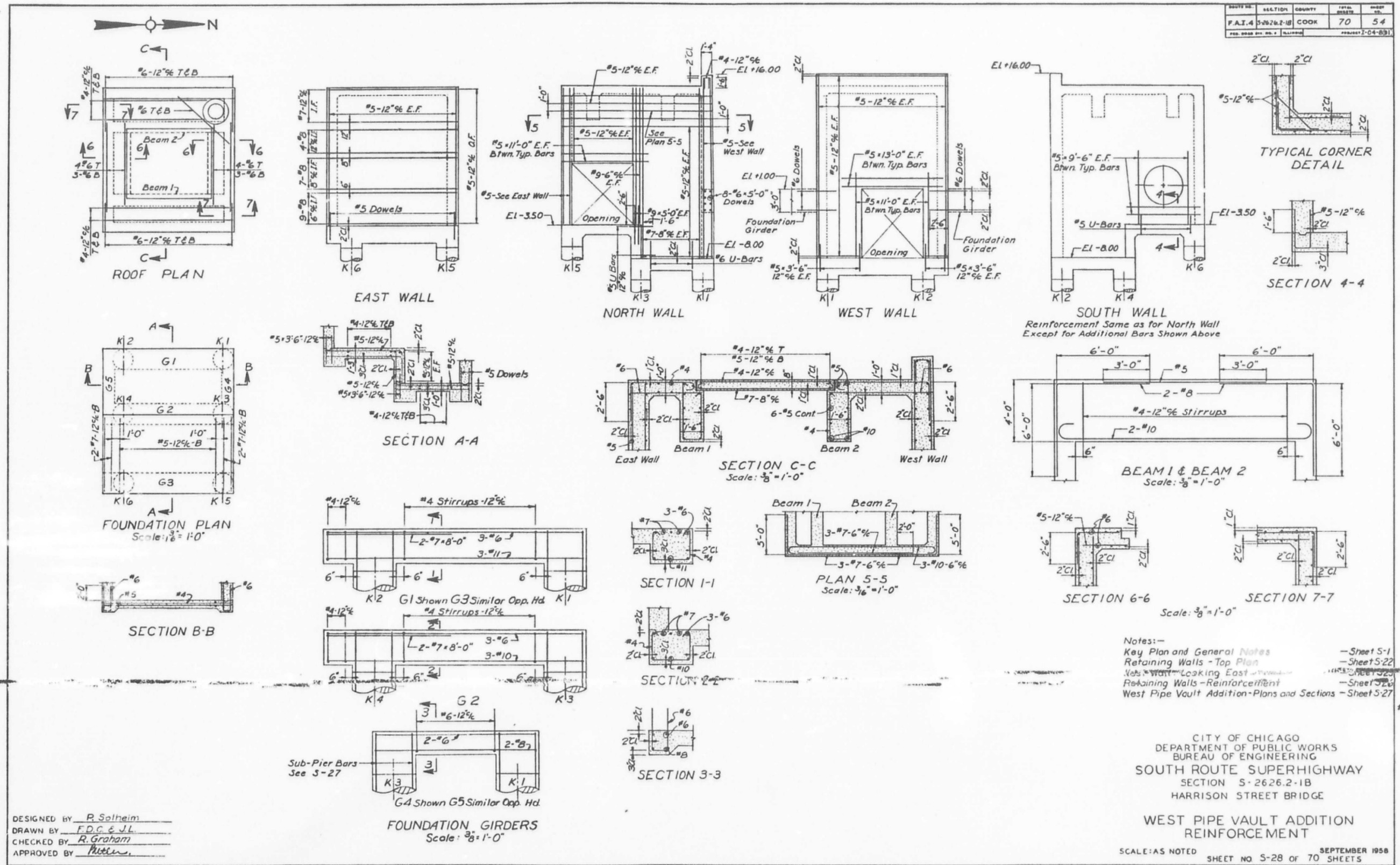
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
STRUCTURE NO. 016-1164

SHEET NO. AS2-13 OF AS2-30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	879
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

# FOR INFORMATION ONLY



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 4	S-262.2-1B	COOK	70	54
PROJ. NO.	DATE	BY	PROJECT	
			2-04-031	

Notes:—  
 Key Plan and General Notes — Sheet S-1  
 Retaining Walls - Top Plan — Sheet S-22  
 Retaining Walls - Looking East — Sheet S-23  
 Retaining Walls - Reinforcement — Sheet S-24  
 West Pipe Vault Addition - Plans and Sections — Sheet S-27

CITY OF CHICAGO  
 DEPARTMENT OF PUBLIC WORKS  
 BUREAU OF ENGINEERING  
 SOUTH ROUTE SUPERHIGHWAY  
 SECTION S-262.2-1B  
 HARRISON STREET BRIDGE  
 WEST PIPE VAULT ADDITION  
 REINFORCEMENT  
 SCALE: AS NOTED SHEET NO S-28 OF 70 SHEETS  
 SEPTEMBER 1958

DESIGNED BY R. Solheim  
 DRAWN BY F.D.C. & J.L.  
 CHECKED BY R. Graham  
 APPROVED BY Platt

USER NAME =	ahmad,issa	DESIGNED -	MAA,JMI	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MI, JJS	REVISED -	
PLOT DATE =	1/31/2020	DRAWN -	MAA,JMI	REVISED -	
		CHECKED -	MI, JJS	REVISED -	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
 STRUCTURE NO. 016-1164

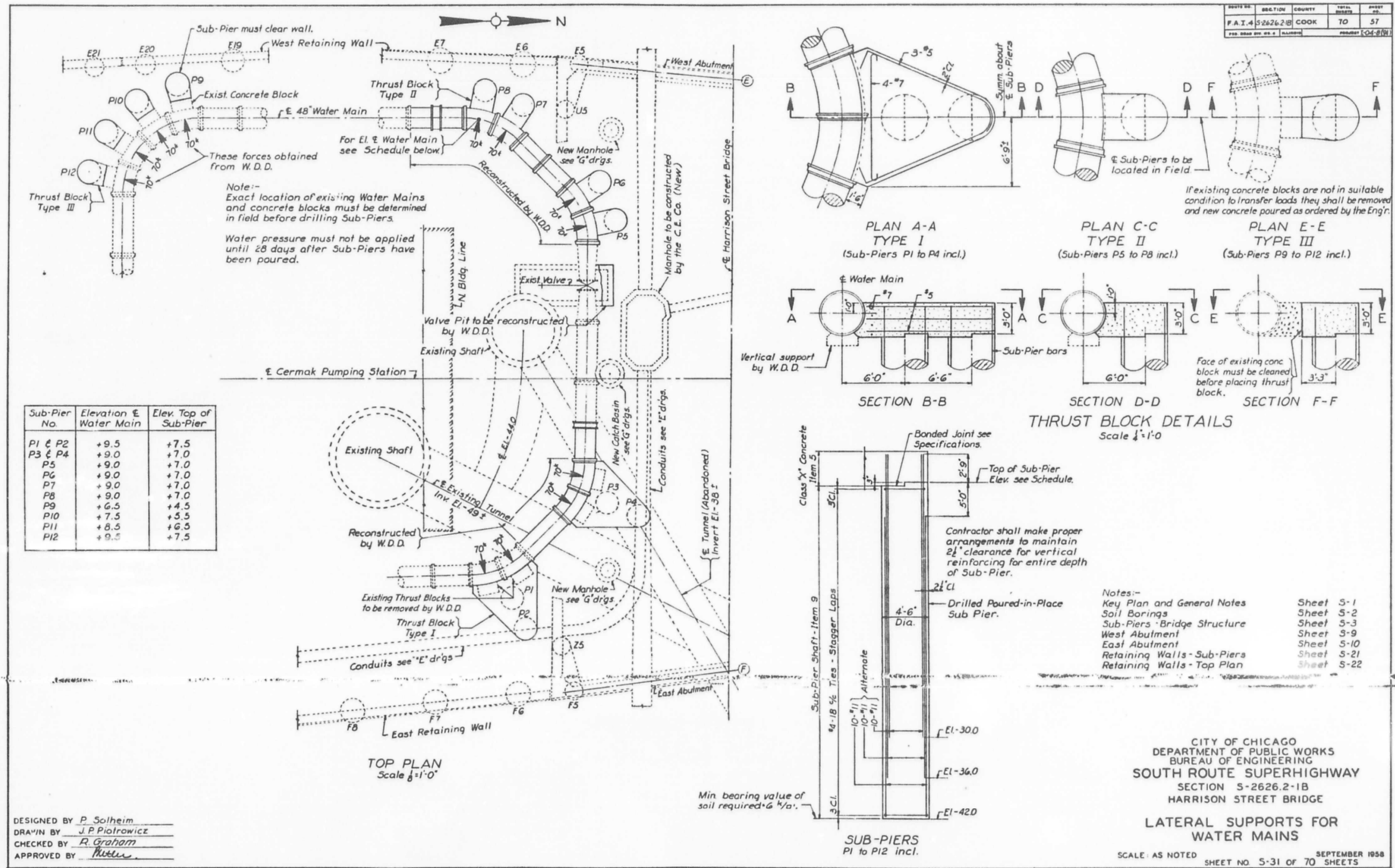
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	880
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				



FILE NAME: D:\V\AECOM-NA-AWS1\acocom\line\local\AECOM\_DS02\_NAD\Documents\01\_Americas\Transportation\620269938\_Circle\Phase\Structure\_EXRW-5\Final\_Plans\EXRW5-62A77-SHT-018.dgn



# FOR INFORMATION ONLY



DESIGNED BY P. Solheim  
 DRAWN BY J.P. Piotrowicz  
 CHECKED BY R. Graham  
 APPROVED BY [Signature]

CITY OF CHICAGO  
 DEPARTMENT OF PUBLIC WORKS  
 BUREAU OF ENGINEERING  
 SOUTH ROUTE SUPERHIGHWAY  
 SECTION S-2626.2-1B  
 HARRISON STREET BRIDGE  
 LATERAL SUPPORTS FOR  
 WATER MAINS  
 SCALE: AS NOTED  
 SHEET NO. 5-31 OF 70 SHEETS  
 SEPTEMBER 1958

FILE NAME: D:\V\AECOM-NA-AWS1\ecomonline\local\AECOM\_ID502\_NAD\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_5\Final\_Plans\EXRW5-62A77-5HT-019.dgn



USER NAME =	ahmad,issa	DESIGNED -	MAA,JMI	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MI,JJS	REVISED -	
PLOT DATE =	1/31/2020	DRAWN -	MAA,JMI	REVISED -	
		CHECKED -	MI,JJS	REVISED -	

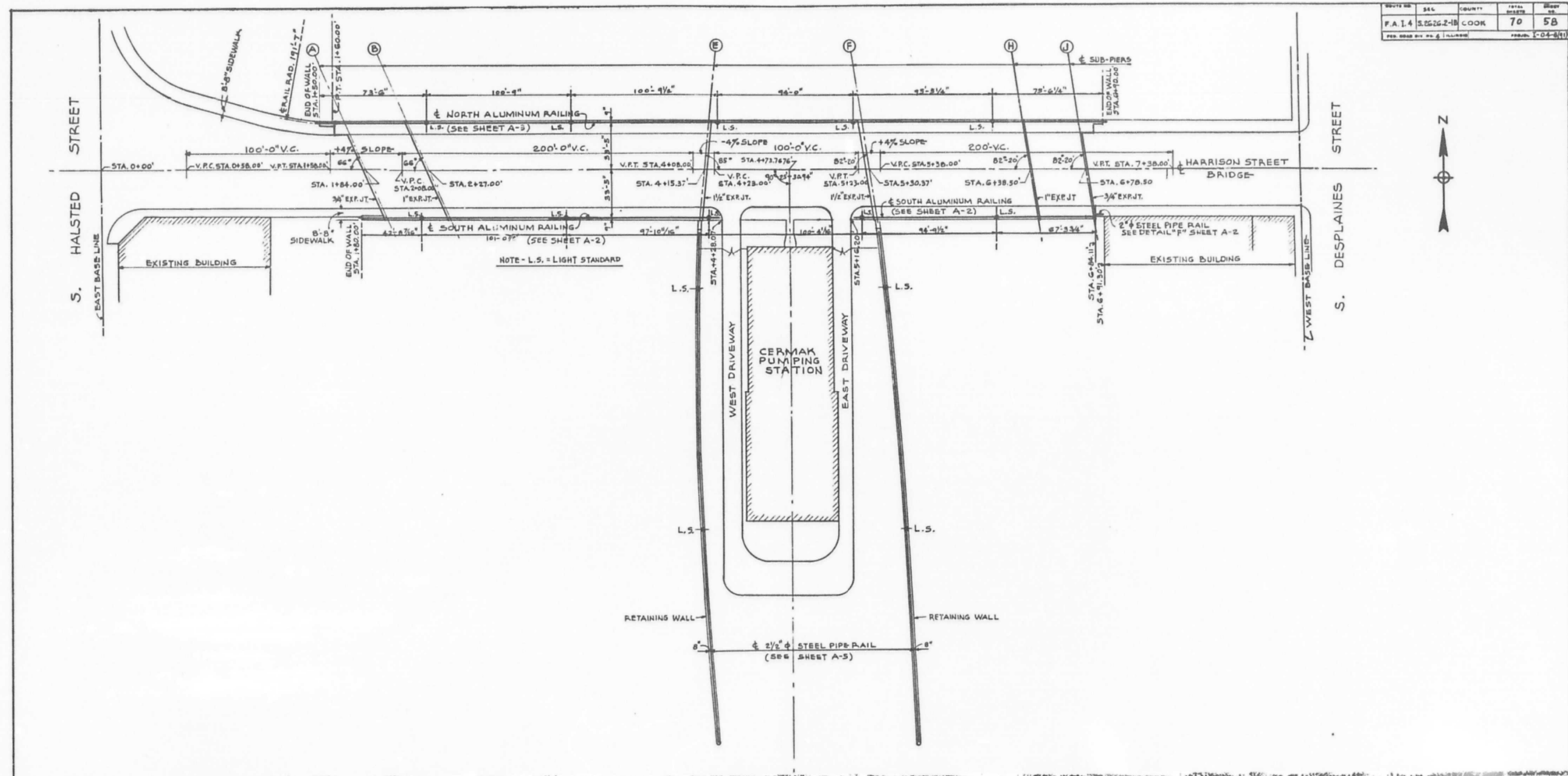
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
 STRUCTURE NO. 016-1164

SHEET NO. AS.25 OF AS.20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	881
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY



ROUTE NO.	S&L	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 14	2626.2-1B	COOK	70	58
FED. ROAD DIST. NO. 4			PROJECT NO. 62A77	



PLAN OF RAILINGS  
SCALE 1/32" = 1'-0"

CITY OF CHICAGO  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF ENGINEERING  
SOUTH ROUTE SUPERHIGHWAY  
SECTION S-2626.2-1B  
HARRISON STREET BRIDGE  
ARCHITECTURAL PLAN

Drawn By: E. S. DEANIN  
Traced By: REPRODUCTION  
Checked By: [Signature]  
Approved By: [Signature]

SCALE: AS NOTED  
SHEET NO. A-1 OF 70 SHEETS  
SEPTEMBER 1958

FILE NAME: D:\V\AECOM\NA-AWS1\acconline\local\AECOM\_ID502\_NAD\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_II\000\_CAD\008\_Structural\Structure\_EXRW-5\Final\_Plans\EXRW5-62A77-5HT-020.dgn



USER NAME =	ahmad,issa	DESIGNED -	MAA,JMI	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MI,JJS	REVISED -	
PLOT DATE =	1/31/2020	DRAWN -	MAA,JMI	REVISED -	
		CHECKED -	MI,JJS	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
STRUCTURE NO. 016-1164

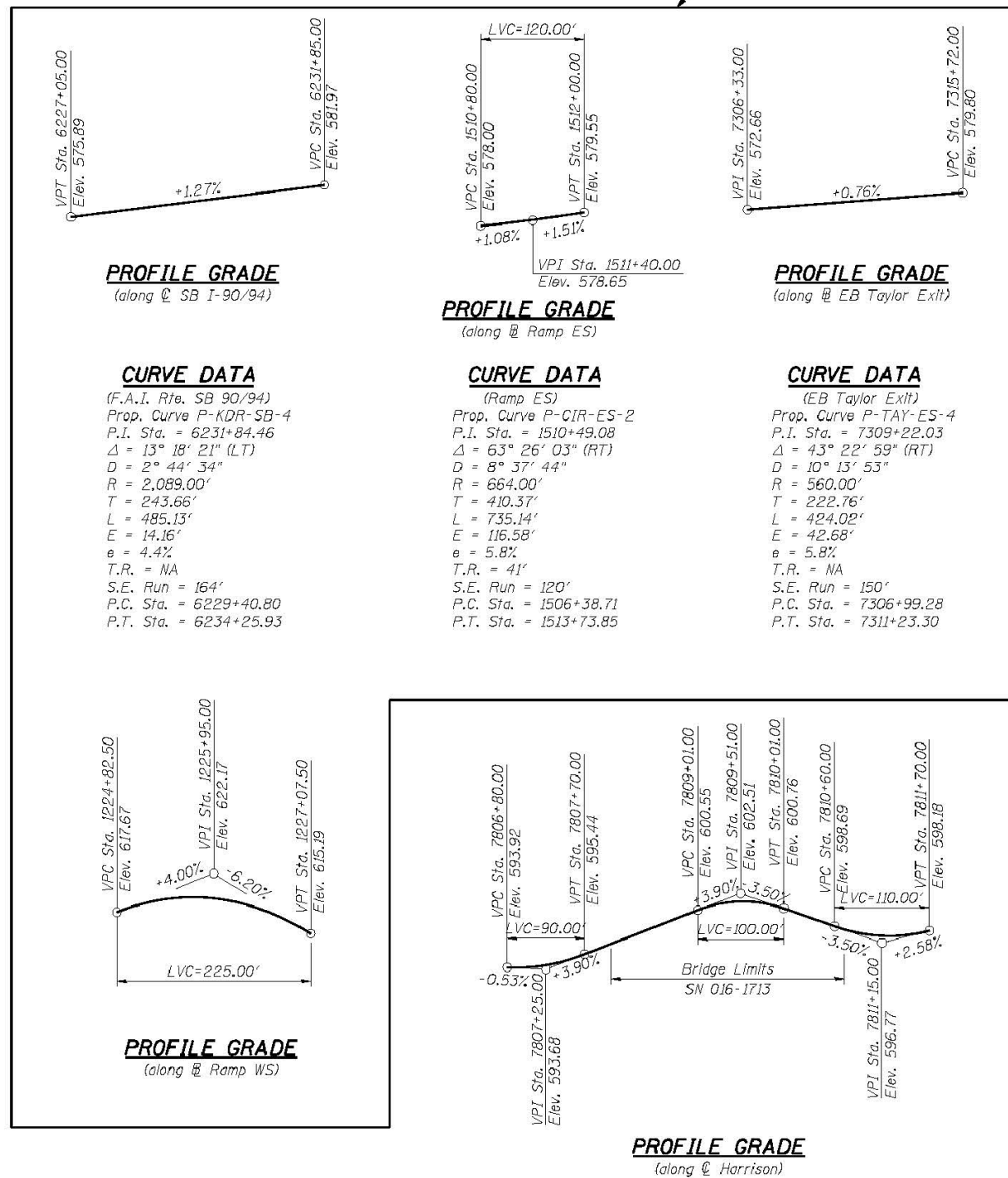
SHEET NO. AS2-16 OF AS2-30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	882
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

# FOR INFORMATION ONLY

## GENERAL NOTES

- Fasteners shall be ASTM A325 Type 1, hot-dipped galvanized bolts. Bolts  $\frac{7}{8}$ "  $\phi$ , holes  $\frac{15}{16}$ "  $\phi$ , unless otherwise noted. (see special provisions for hot-dipped galvanizing for structural steel)
- Calculated weight of structural steel  
Grade 50 = 1,663,318 lbs.  
Grade 36 = 0 lbs.
- All structural steel shall be hot dipped galvanized, cost included in Furnishing and Erecting Structural Steel pay item (see special provisions for hot-dipped galvanizing for structural steel).
- Expansion joint plates and attached bars shall be shop painted with inorganic zinc rich primer.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- Existing plans are provided as part of this contract plan set for information only. See Existing As-Builts SN 016-1087 sheets.
- Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- Concrete Sealer shall be applied to the designated areas of the abutments and pier.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of  $\frac{1}{8}$  inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- Slipforming of the parapets is not allowed.
- For the Conduit Attached to Structure and Embedded in Structure quantities and details, see Civil and Electrical Plans.
- The Contractor shall exercise extreme caution during construction to make certain that construction activities, live load surcharge and other loads applied to the structures will not have detrimental effects on the adjacent building foundations.
- For drilled shaft locations where permanent casing is required as shown on the plans, the casing will be paid for under the Permanent Casing pay item. If contractor elects to use permanent casing for ease of construction in locations where permanent casing is not required on the plans the casing will not be paid for separately and is included in the Drilled Shaft in Soil pay item.
- Abandoned 7' dia. concrete tunnel to be bulkheaded by others in a separate contract. Drilled shaft construction shall not start until tunnel bulkheading is complete. Several drilled shaft foundations will be placed thru the tunnel. Drilling operations must account for the presence of debris, soil and other expected materials.



## INDEX OF SHEETS

- S1-01 General Plan and Elevation
- S1-02 General Notes and Index of Sheets
- S1-03 Total Bill of Material and Abutment Sections
- S1-04 Existing Structural Removal (1 of 3)
- S1-05 Existing Structural Removal (2 of 3)
- S1-06 Existing Structural Removal (3 of 3)
- S1-07 Substructure Layout
- S1-08 Top of Slab Elevation Plan
- S1-09 Top of Slab Elevations - I
- S1-10 Top of Slab Elevations - II
- S1-11 Top of Slab Elevations - III
- S1-12 Top of Slab Elevations - IV
- S1-13 Top of Slab Elevations - V
- S1-14 Top of West Approach Slab Elevation
- S1-15 Top of East Approach Slab Elevation
- S1-16 Deck Plan I
- S1-17 Deck Plan II
- S1-18 Deck Cross Section
- S1-19 Parapet Elevations
- S1-20 Deck Details
- S1-21 Parapet and Decorative Railing Parapet Mounted Details
- S1-22 Deck Pouring Sequence
- S1-23 West Approach Slab Plan
- S1-24 West Approach Slab Details
- S1-25 East Approach Slab Plan
- S1-26 East Approach Slab Details
- S1-27 Expansion Joint Details
- S1-28 Girder Framing Plan
- S1-29 Girder Camber and Top of Web Elevations
- S1-30 Girder Bolted Field Splice Details
- S1-31 Girder Diaphragm Details and Moment Tables
- S1-32 Elastomeric Bearing Details
- S1-33 Fixed Bearing Details
- S1-34 West Abutment Plan and Elevation
- S1-35 West Abutment Section
- S1-36 West Abutment Details
- S1-37 West Abutment Architectural Details
- S1-38 East Abutment Plan and Elevation
- S1-39 East Abutment Section and Details
- S1-40 East Abutment Repair Details (1 of 2)
- S1-41 East Abutment Repair Details (2 of 2)
- S1-42 Pier Plan and Elevation
- S1-43 Pier Details
- S1-44 Pier Architectural Details
- S1-45 Bar Splicer Assembly
- S1-46 Boring Logs - I
- S1-47 Boring Logs - II
- S1-48 Boring Logs - III
- AS-01 thru AS-62 Existing As-Builts SN 016-1087

STATION 7810+32.21  
BUILT BY  
STATE OF ILLINOIS  
F.A.I. RTE. 90/94-SEC. 2013-008R  
LOADING HL-93  
STRUCTURE NO. 016-1713

### NAME PLATE

See Std. 515001

Locate Name Plate at the front face of Parapet at Southwest corner.



USER NAME = dunkerleyb	DESIGNED - EJO	REVISED
CHECKED - ATB	REVISED	
DRAWN - BRD	REVISED	
CHECKED - EJO	REVISED	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND INDEX OF SHEETS  
STRUCTURE NO. 016-1713  
SHEET NO. S1-02 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	252
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	



USER NAME = ahmad,issa	DESIGNED - MAA,JMI	REVISED -
CHECKED - MI,JJS	REVISED -	
DRAWN - MAA,JMI	REVISED -	
CHECKED - MI,JJS	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
STRUCTURE NO. 016-1164  
SHEET NO. AS2-17 OF AS2-30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	883
CONTRACT NO. 62A77			ILLINOIS FED. AID PROJECT	

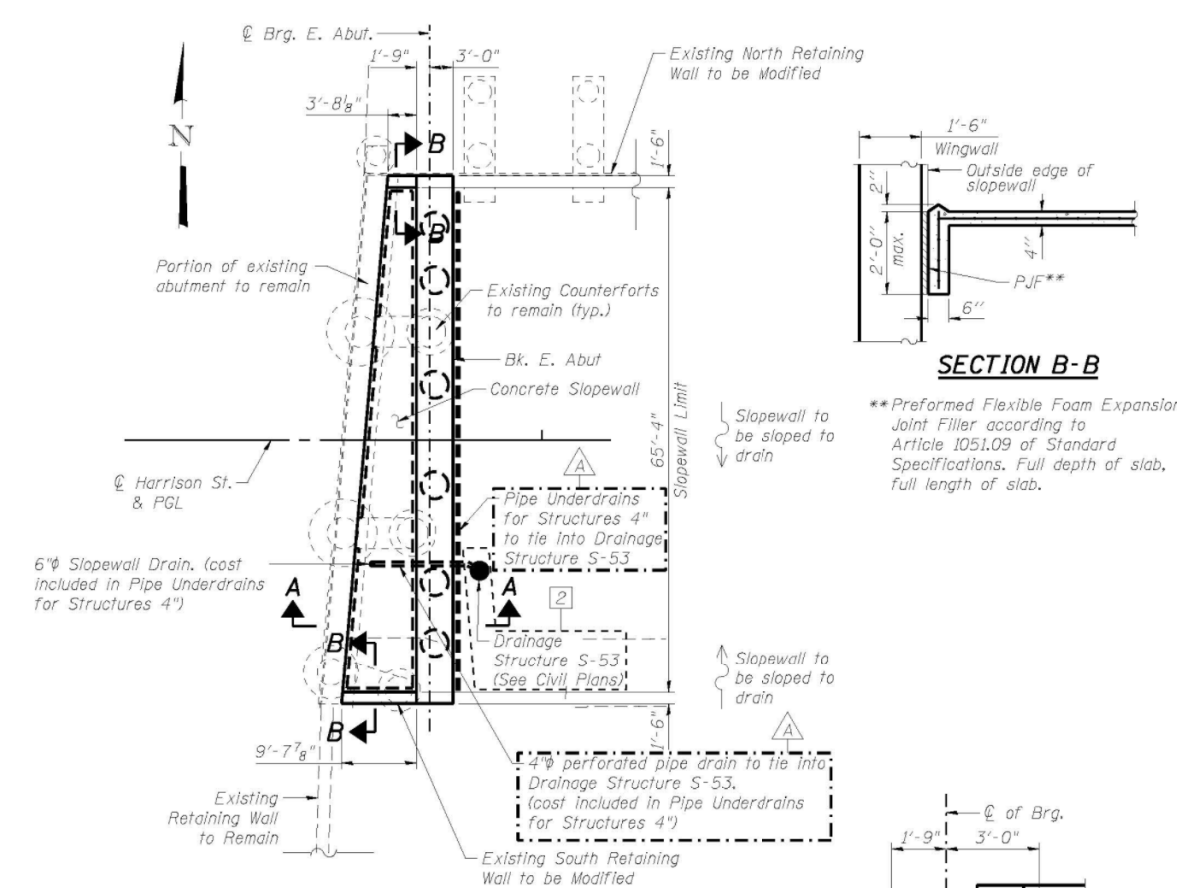
FILE NAME: D:\V\AECOM\NA-AWS1\arecomonline\local\AECOM\_DS02\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\_5\Final\_Plans\EXRW5-62A77-SHT-02-1.dgn

0161713-60W26-502-GenNote

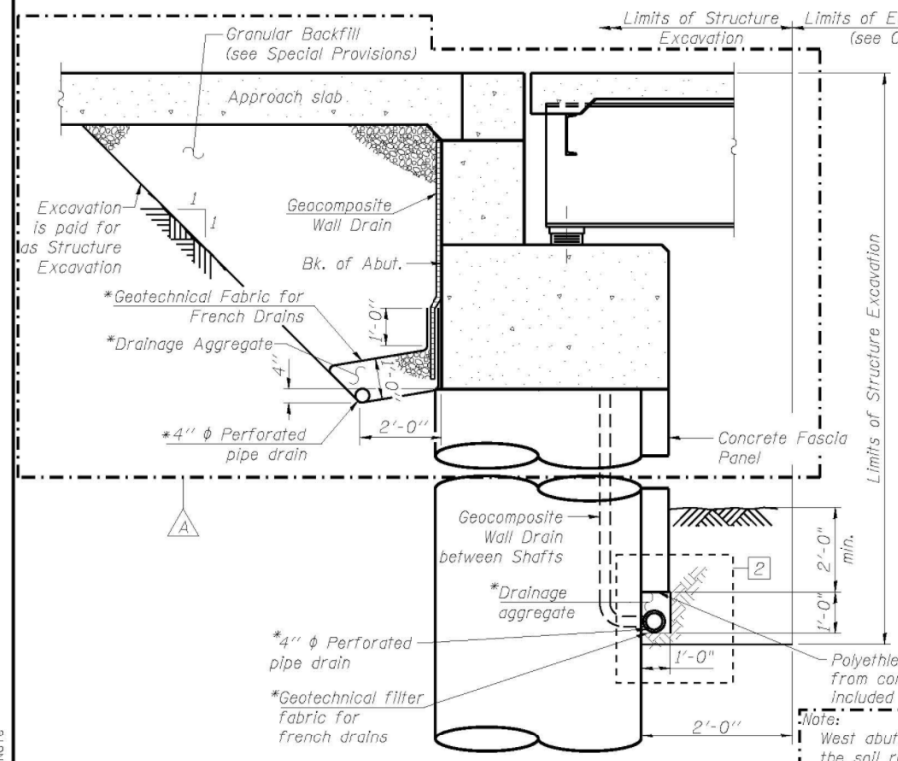
# FOR INFORMATION ONLY

## TOTAL BILL OF MATERIALS

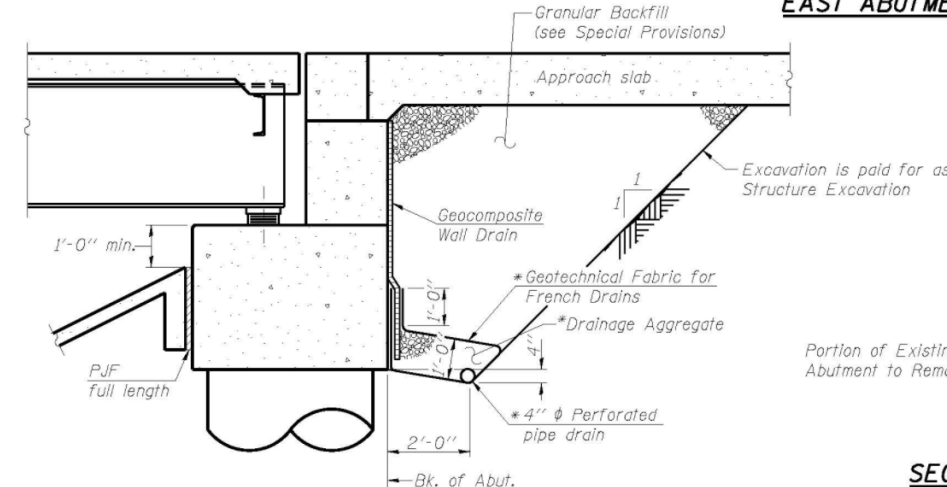
DESCRIPTION	UNIT	S.N. 016-1713		TOTAL
		SUPER	SUB	
GRANULAR BACKFILL FOR STRUCTURES	CU. YD.		372	372
REMOVAL OF EXISTING STRUCTURES, NO. 1	EACH	1		1
PROTECTIVE SHIELD	SQ. YD.	1,431		1,431
STRUCTURE EXCAVATION	CU. YD.		1,502	1,502
CONCRETE STRUCTURES	CU. YD.		421	421
CONCRETE SUPERSTRUCTURE	CU. YD.	1,058		1,058
BRIDGE DECK GROOVING	SQ. YD.	1,624		1,624
FORM LINER TEXTURED SURFACE	SQ. FT.		1,244	1,244
PROTECTIVE COAT	SQ. YD.	3,073		3,073
FURNISHING AND ERECTING STRUCTURAL STEEL	L. SUM	0.51		0.51
STUD SHEAR CONNECTORS	EACH	8,622		8,622
REINFORCEMENT BARS	POUND		465,780	465,780
REINFORCEMENT BARS, EPOXY COATED	POUND	190,550	111,140	301,690
BAR SPLICERS	EACH	134		134
MECHANICAL SPLICERS	EACH		418	418
SLOPE WALL 4 INCH	SQ. YD.		50	50
NAME PLATES	EACH	1		1
PERMANENT CASING	FOOT		460	460
DRILLED SHAFT IN SOIL	CU. YD.		1,340	1,340
DRILLED SHAFT IN ROCK	CU. YD.		12	12
PREFORMED JOINT STRIP SEAL	FOOT	133		133
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	24		24
ANCHOR BOLTS, 1 1/4"	EACH	48		48
ANCHOR BOLTS, 1 1/2"	EACH	24		24
CONCRETE SEALER	SQ. FT.		7,157	7,157
EPOXY CRACK INJECTION	FOOT		14	14
GEOCOMPOSITE WALL DRAIN	SQ. YD.		139	139
CHAIN LINK FENCE, 4'	FOOT		99	99
STRUCTURAL REPAIR OF CONCRETE (Depth equal or less than 5")	SQ. FT.		154	154
PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT		262	262
CLASS SI CONCRETE MISCELLANEOUS	CU. YD.		38	38
DECORATIVE RAILING (PARAPET MOUNTED)	FOOT	620		620
SOIL RETENTION SYSTEM	SQ. FT.		2,297	2,297
TEMPORARY SOIL RETENTION SYSTEM	SQ. FT.		2,828	2,828
CROSSHOLE SONIC LOGGING	EACH		3	3



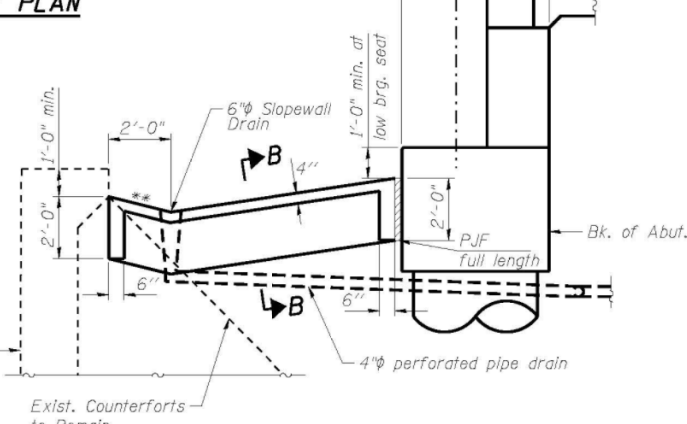
EAST ABUTMENT PLAN



SECTION THRU WEST ABUTMENT



SECTION THRU EAST ABUTMENT



SECTION A-A THRU CONCRETE SLOPEWALL EAST ABUTMENT

**NOTES:**

- Slope wall shall be reinforced with welded wire fabric, 6 in. x 6 in. - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft. Cost included in Slope Wall 4 Inch pay item.
- Work this sheet with sheets S1-38 and S1-39.

\*\*1:4 (V:H)



USER NAME = dunkerleyb	DESIGNED - EJO	REVISED - 10/15/2013 EJO, BRD
PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED - 01/08/2014 EJO, BRD
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOTAL BILL OF MATERIAL AND ABUTMENT SECTIONS  
STRUCTURE NO. 016-1713  
SHEET NO. S1-03 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	253
CONTRACT NO. 60W26				ILLINOIS FED. AID PROJECT



USER NAME = ahmad,issa	DESIGNED - MAA,IMI	REVISED -
PLOT SCALE = N.T.S.	CHECKED - MI,JJS	REVISED -
PLOT DATE = 1/31/2020	DRAWN - MAA,IMI	REVISED -
	CHECKED - MI,JJS	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

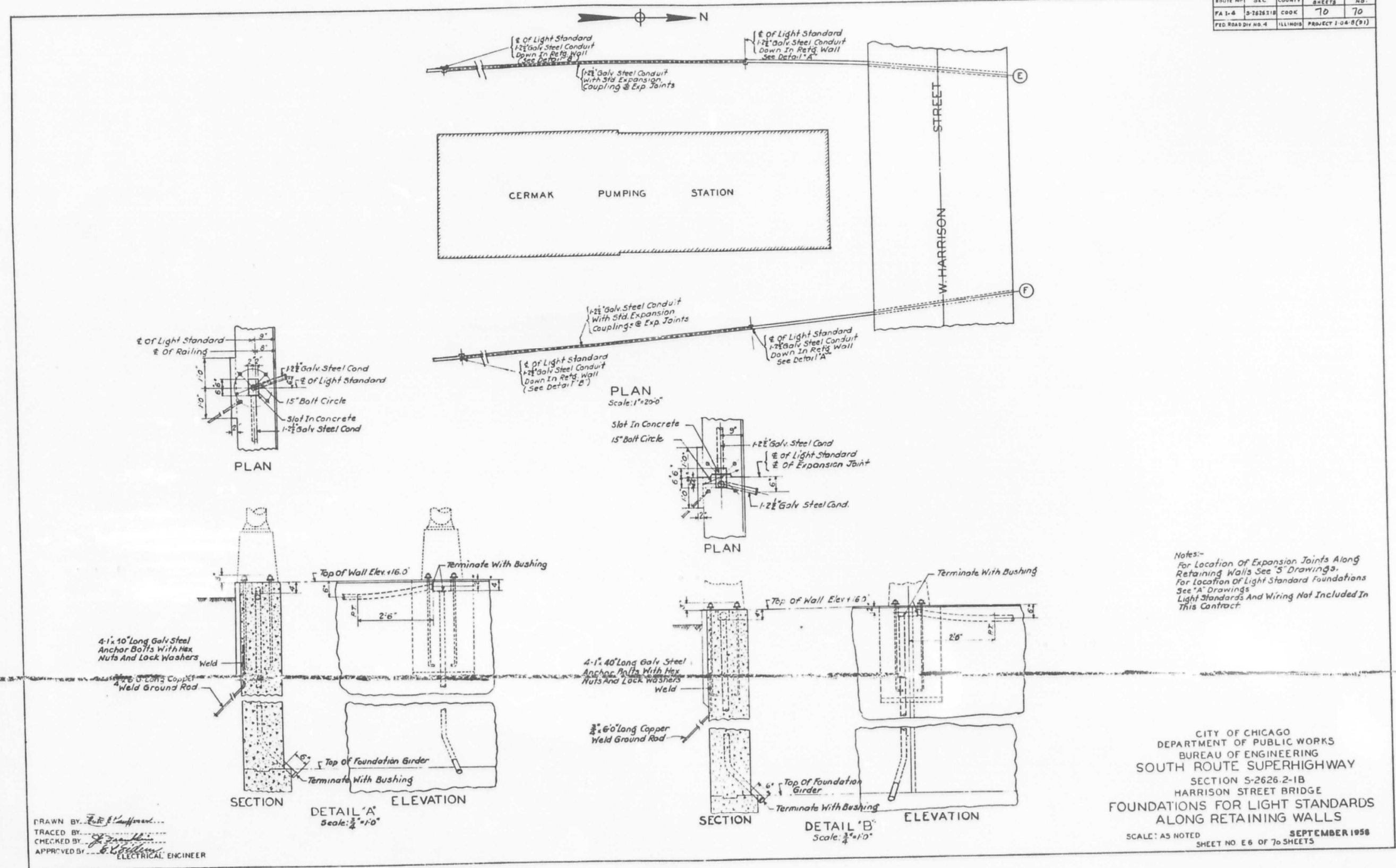
EXISTING RECORD DRAWINGS  
STRUCTURE NO. 016-1164  
SHEET NO. AS2-18 OF AS2-30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	884
CONTRACT NO. 62A77				ILLINOIS FED. AID PROJECT

FILE NAME: D:\V\AECOM\NA-AW51\AECOM\online\local\AECOM\_DS02\_NAD\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_5\Final\_Plans\EXRW5-62A77-5HT-022.dgn

# FOR INFORMATION ONLY

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 1-4	S-2626.2-1B	COOK	70	70
FED. ROAD DIST. NO. 4	ILLINOIS	PROJECT 1-04-8(91)		



FILE NAME: D:\V\AECOM-NA-AWS1\...americas\Transportation\60269938\_Circle\Phase\_5\Final\_Plans\EXRW5-62A77-5HT-023.dgn



USER NAME =	ahmad,issa	DESIGNED -	MAA,JMI	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MI,JJS	REVISED -	
PLOT DATE =	1/31/2020	DRAWN -	MAA,JMI	REVISED -	
		CHECKED -	MI,JJS	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
STRUCTURE NO. 016-1164

SHEET NO. AS2-19 OF AS2-30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	885
CONTRACT NO. 62A77				

ILLINOIS FED. AID PROJECT

# FOR INFORMATION ONLY

Bench Mark: Cut square on southwest parapet wall over I-90 on west end, ±2.5 A/G. Elevation 598.65.

Existing Structure: SN 016-1087 was originally built in 1960 as part of the F.A.I. Route No. 4 Project, Section S-2626.2-1B. The existing structure is a four (4) span bridge with a reinf. concrete deck supported on concrete T-Beams (Span 1) and steel WF beams (Spans 2-4). The existing substructure consists of reinforced concrete abutments and multi column piers founded on sub-piers (reinforced concrete caissons). The existing structure has an overall length of 231'-4 1/2" and an out-to-out deck width of 68'-4". The existing structure is to be removed and replaced. Harrison Street traffic will be detoured via local roads during construction and bridge will be closed. Local access to Cermak Pump Station provided via existing structure (SN 016-1088).

Salvage portion of existing East Abutment and North Retaining Wall.

Proposed East Abutment is designed for vertical load and portion of lateral load. The remainder of the lateral load is resisted by the existing counterfort wall, which is to remain.

**DESIGN SPECIFICATIONS**  
2012 AASHTO LRFD Bridge Design Specifications, 6th Edition with 2013 Interim Revisions

**LOADING HL-93**  
Allow 50#/sq. ft. for future wearing surface.

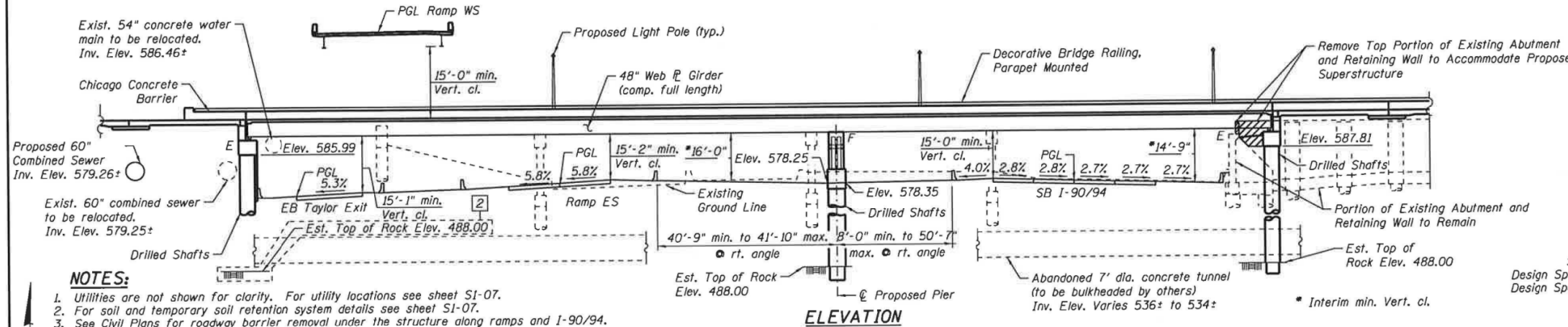
**DESIGN STRESSES**  
FIELD UNITS

$f'_c = 3,500$  psi  
 $f'_c = 7,000$  psi (West Abut.)  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 50,000$  psi (M270 Grade 50)

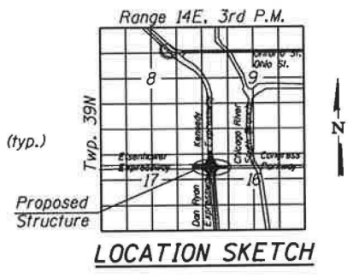
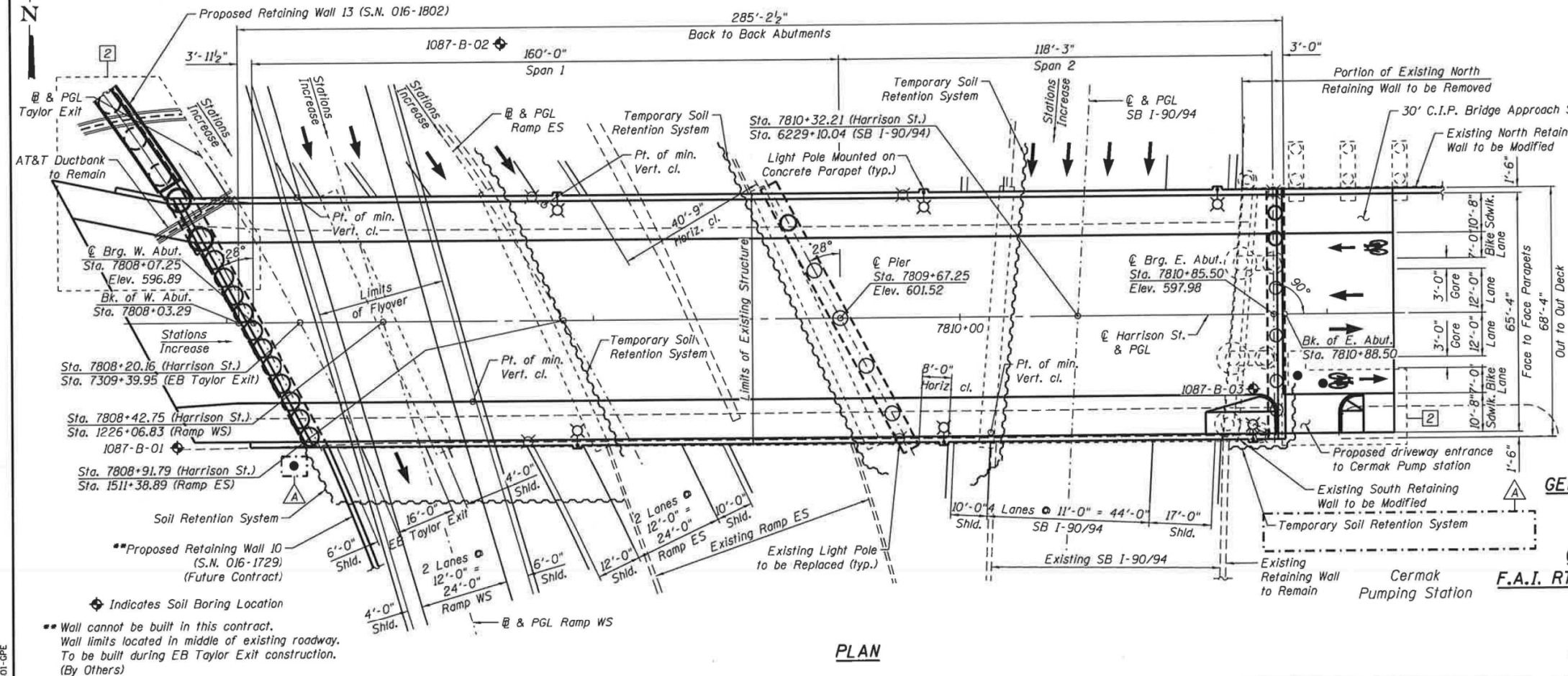
EXISTING UNITS  
 $f'_c = 3,000$  psi  
 $f_y = 40,000$  psi (Reinforcement)

**SEISMIC DATA**

Seismic Performance Zone (SPZ) = 1  
Design Spectral Acceleration at 1.0 sec. ( $S_{D1}$ ) = 0.085g  
Design Spectral Acceleration at 0.2 sec. ( $S_{D5}$ ) = 0.144g  
Soil Site Class = D



- NOTES:**
- Utilities are not shown for clarity. For utility locations see sheet S1-07.
  - For soil and temporary soil retention system details see sheet S1-07.
  - See Civil Plans for roadway barrier removal under the structure along ramps and I-90/94.



*Brad M. Radovich* 1-10-14  
BRAD M. RADOVICH DATE  
LICENSE EXPIRES 11/30/2014

**GENERAL PLAN & ELEVATION**  
**HARRISON ST. OVER**  
**F.A.I. RTE. SB 90/94**  
**(DAN RYAN EXPRESSWAY)**  
**F.A.I. RTE. 90/94 - SECTION 2013-008R**  
**COOK COUNTY**  
**STATION 7810+32.21**  
**STRUCTURE NO. 016-1713**

<b>AECOM</b>	USER NAME = dunkerleyb	DESIGNED - EJO	REVISED - 10/15/2013 EJO, BRD	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL PLAN AND ELEVATION</b> <b>STRUCTURE NO. 016-1713</b>	F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 251
	PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED - 01/08/2014 EJO, BRD			CONTRACT NO. 60W26				
	PLOT DATE = 9/15/2013	DRAWN - MRK	REVISED		SHEET NO. S1-01 OF S1-48 SHEETS	ILLINOIS FED. AID PROJECT				

USER NAME = ahmad,issa	DESIGNED - MAA,JMI	REVISED -
PLOT SCALE = N.T.S.	CHECKED - MI,JJS	REVISED -
PLOT DATE = 1/31/2020	DRAWN - MAA,JMI	REVISED -
	CHECKED - MI,JJS	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**EXISTING RECORD DRAWINGS**  
**STRUCTURE NO. 016-1164**  
SHEET NO. AS2-20 OF AS2-30 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 886
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE NAME: D:\V\AECOM\NA-AWS1\arecomonline\local\AECOM\_D502\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase-5\Structural\Structure\_EXRW-5\Final Plans\EXRW5-62A77-SHT-02-4.dgn



# FOR INFORMATION ONLY

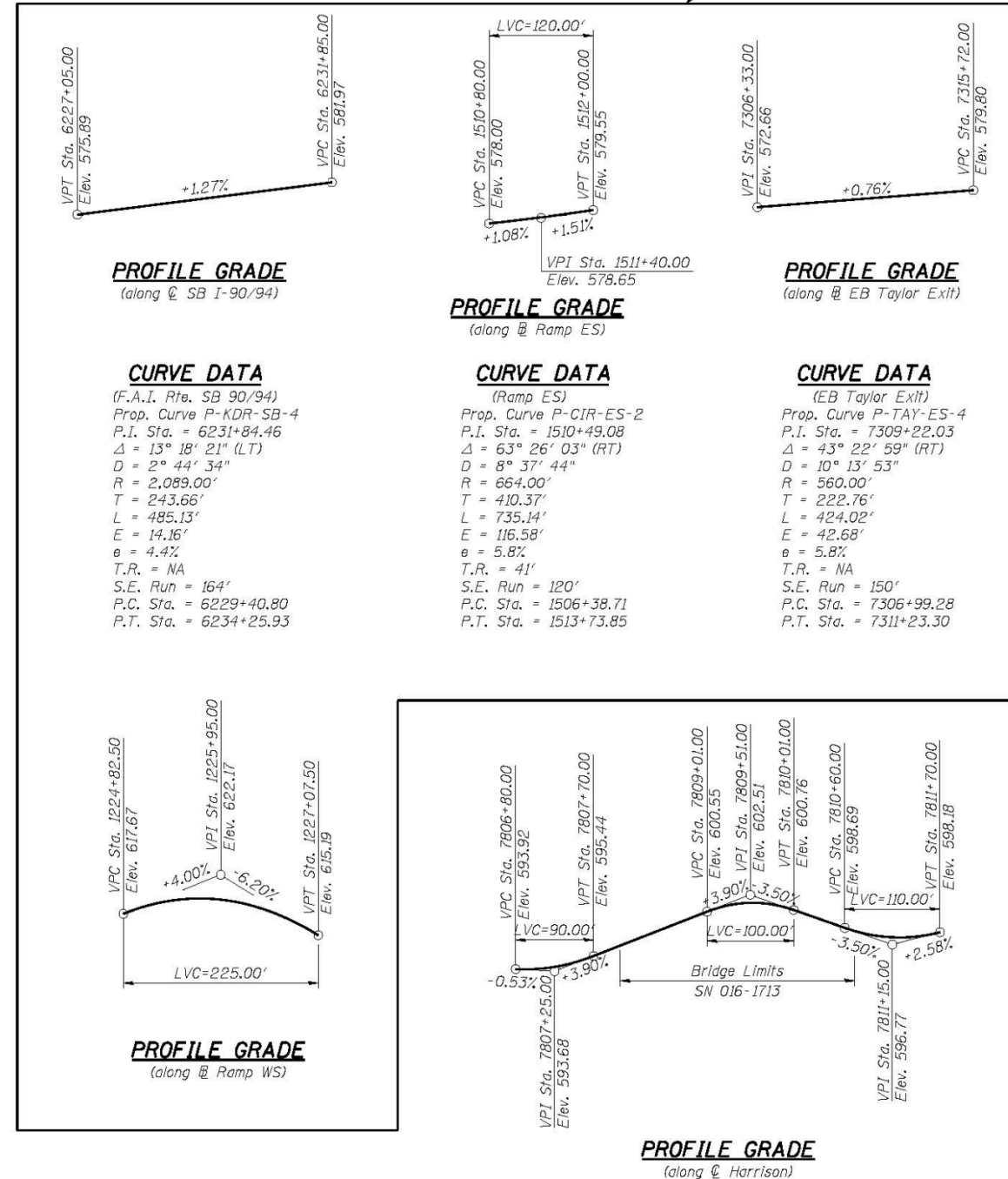
## GENERAL NOTES

1. Fasteners shall be ASTM A325 Type I, hot-dipped galvanized bolts. Bolts  $7/8"$   $\phi$ , holes  $15/16"$   $\phi$ , unless otherwise noted. (See special provisions for hot-dipped galvanizing for structural steel)
2. Calculated weight of structural steel  
Grade 50 = 1,663,318 lbs.  
Grade 36 = 0 lbs.
3. All structural steel shall be hot dipped galvanized, cost included in Furnishing and Erecting Structural Steel pay item (see special provisions for hot-dipped galvanizing for structural steel).
4. Expansion joint plates and attached bars shall be shop painted with inorganic zinc rich primer.
5. No field welding is permitted except as specified in the contract documents.
6. Reinforcement bars designated (E) shall be epoxy coated.
7. Existing plans are provided as part of this contract plan set for information only. See Existing As-Built SN 016-1087 sheets.
8. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
9. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
10. Concrete Sealer shall be applied to the designated areas of the abutments and pier.
11. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of  $1/8$  inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
12. Slipforming of the parapets is not allowed.
13. For the Conduit Attached to Structure and Embedded in Structure quantities and details, see Civil and Electrical Plans.
14. The Contractor shall exercise extreme caution during construction to make certain that construction activities, live load surcharge and other loads applied to the structures will not have detrimental effects on the adjacent building foundations.
15. For drilled shaft locations where permanent casing is required as shown on the plans, the casing will be paid for under the Permanent Casing pay item. If contractor elects to use permanent casing for ease of construction in locations where permanent casing is not required on the plans the casing will not be paid for separately and is included in the Drilled Shaft in Soil pay item.
16. Abandoned 7' dia. concrete tunnel to be bulkheaded by others in a separate contract. Drilled shaft construction shall not start until tunnel bulkheading is complete. Several drilled shaft foundations will be placed thru the tunnel. Drilling operations must account for the presence of debris, soil and other expected materials.

## INDEX OF SHEETS

- SI-01 General Plan and Elevation
- SI-02 General Notes and Index of Sheets
- SI-03 Total Bill of Material and Abutment Sections
- SI-04 Existing Structural Removal (1 of 3)
- SI-05 Existing Structural Removal (2 of 3)
- SI-06 Existing Structural Removal (3 of 3)
- SI-07 Substructure Layout
- SI-08 Top of Slab Elevation Plan
- SI-09 Top of Slab Elevations - I
- SI-10 Top of Slab Elevations - II
- SI-11 Top of Slab Elevations - III
- SI-12 Top of Slab Elevations - IV
- SI-13 Top of Slab Elevations - V
- SI-14 Top of West Approach Slab Elevation
- SI-15 Top of East Approach Slab Elevation
- SI-16 Deck Plan I
- SI-17 Deck Plan II
- SI-18 Deck Cross Section
- SI-19 Parapet Elevations
- SI-20 Deck Details
- SI-21 Parapet and Decorative Railing Parapet Mounted Details
- SI-22 Deck Pouring Sequence
- SI-23 West Approach Slab Plan
- SI-24 West Approach Slab Details
- SI-25 East Approach Slab Plan
- SI-26 East Approach Slab Details
- SI-27 Expansion Joint Details
- SI-28 Girder Framing Plan
- SI-29 Girder Camber and Top of Web Elevations
- SI-30 Girder Bolted Field Splice Details
- SI-31 Girder Diaphragm Details and Moment Tables
- SI-32 Elastomeric Bearing Details
- SI-33 Fixed Bearing Details
- SI-34 West Abutment Plan and Elevation
- SI-35 West Abutment Section
- SI-36 West Abutment Details
- SI-37 West Abutment Architectural Details
- SI-38 East Abutment Plan and Elevation
- SI-39 East Abutment Section and Details
- SI-40 East Abutment Repair Details (1 of 2)
- SI-41 East Abutment Repair Details (2 of 2)
- SI-42 Pier Plan and Elevation
- SI-43 Pier Details
- SI-44 Pier Architectural Details
- SI-45 Bar Splicer Assembly
- SI-46 Boring Logs - I
- SI-47 Boring Logs - II
- SI-48 Boring Logs - III

For Information Only.  
Part of Future Contract



PROFILE GRADE  
(along SB I-90/94)

PROFILE GRADE  
(along Ramp ES)

PROFILE GRADE  
(along EB Taylor Exit)

PROFILE GRADE  
(along Ramp WS)

PROFILE GRADE  
(along Harrison)

AS-01  
thru  
AS-62 Existing As-Built SN 016-1087

STATION 7810+32.21  
BUILT BY  
STATE OF ILLINOIS  
F.A.I. RTE. 90/94-SEC. 2013-008R  
LOADING HL-93  
STRUCTURE NO. 016-1713

### NAME PLATE

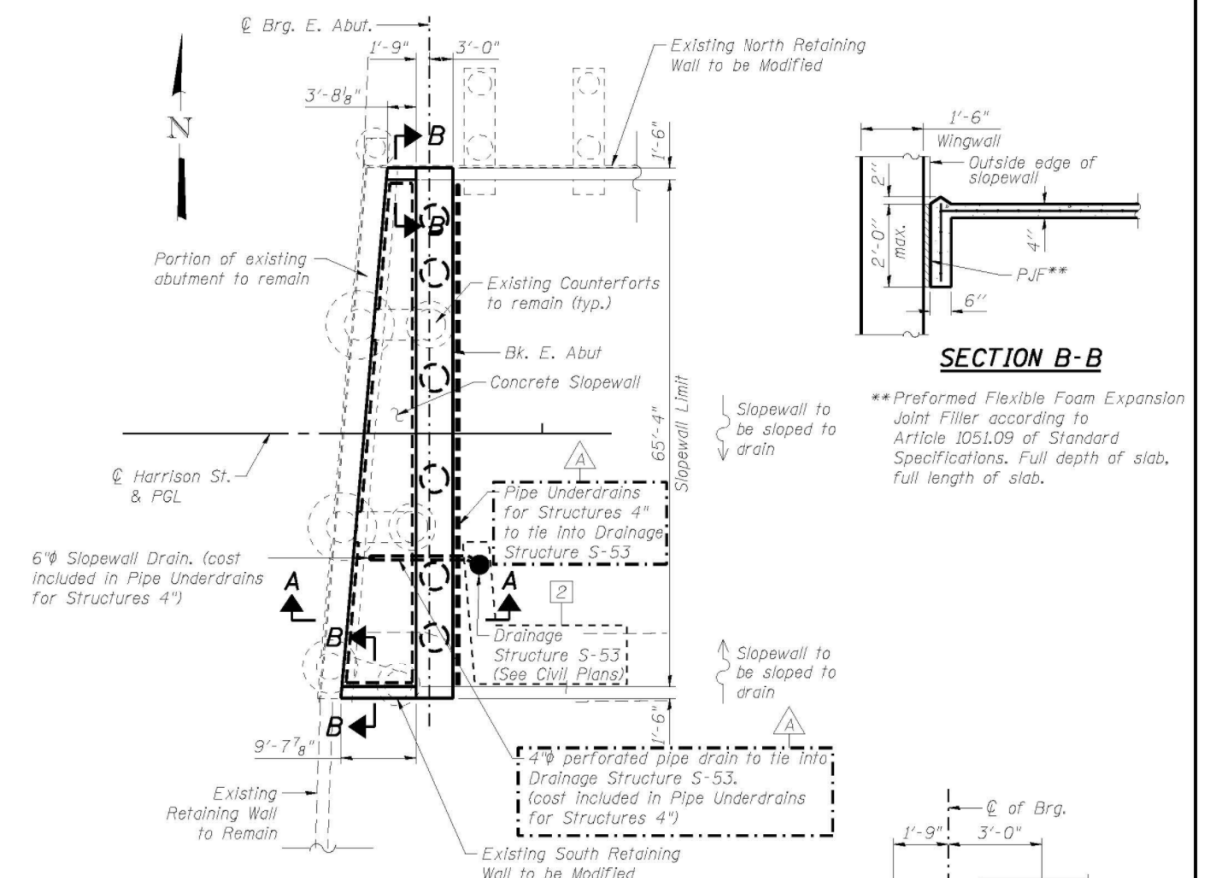
Locate Name Plate at the front face of Parapet at Southwest corner.

<b>AECOM</b>	USER NAME = dunkerleyb	DESIGNED - EJO	REVISOR -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL NOTES AND INDEX OF SHEETS STRUCTURE NO. 016-1713</b>	F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 252
	PLLOT SCALE = N.T.S.	CHECKED - ATB	REVISOR -			CONTRACT NO. 60W26				
	PLLOT DATE = 9/15/2013	DRAWN - BRD	REVISOR -			ILLINOIS FED. AID PROJECT				
		CHECKED - EJO	REVISOR -							

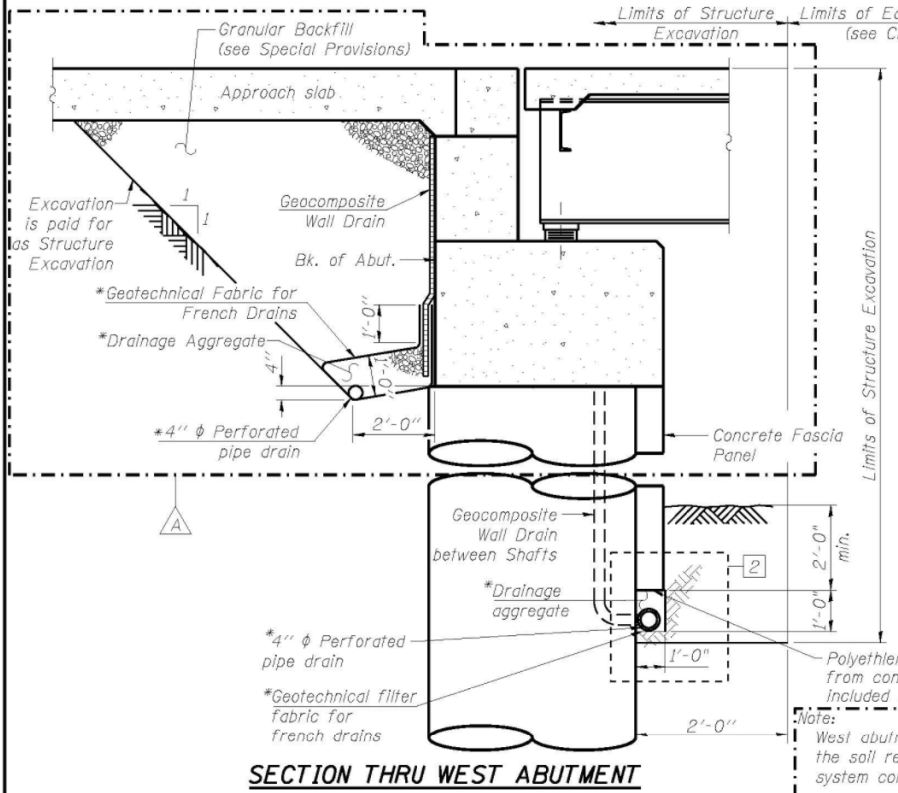
<b>HBM ENGINEERING GROUP, LLC</b>	USER NAME = ahmad,issa	DESIGNED - MAA,JMI	REVISOR -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING RECORD DRAWINGS STRUCTURE NO. 016-1164</b>	F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 887
	PLLOT SCALE = N.T.S.	DRAWN - MAA,JMI	REVISOR -			CONTRACT NO. 62A77				
	PLLOT DATE = 1/31/2020	CHECKED - MI, JJS	REVISOR -			ILLINOIS FED. AID PROJECT				
		CHECKED - MI, JJS	REVISOR -							

# FOR INFORMATION ONLY

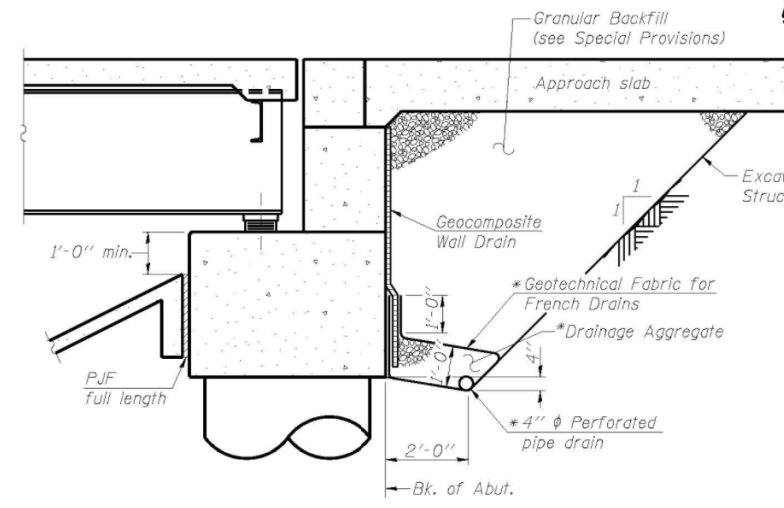
DESCRIPTION	UNIT	S.N. 016-1713		TOTAL
		SUPER	SUB	
GRANULAR BACKFILL FOR STRUCTURES	CU. YD.		372	372
REMOVAL OF EXISTING STRUCTURES, NO. 1	EACH	1		1
PROTECTIVE SHIELD	SQ. YD.	1,431		1,431
STRUCTURE EXCAVATION	CU. YD.		1,502	1,502
CONCRETE STRUCTURES	CU. YD.		421	421
CONCRETE SUPERSTRUCTURE	CU. YD.	1,058		1,058
BRIDGE DECK GROOVING	SQ. YD.	1,624		1,624
FORM LINER TEXTURED SURFACE	SQ. FT.		1,244	1,244
PROTECTIVE COAT	SQ. YD.	3,073		3,073
FURNISHING AND ERECTING STRUCTURAL STEEL	L. SUM	0.51		0.51
STUD SHEAR CONNECTORS	EACH	8,622		8,622
REINFORCEMENT BARS	POUND		465,780	465,780
REINFORCEMENT BARS, EPOXY COATED	POUND	190,550	111,140	301,690
BAR SPLICERS	EACH	134		134
MECHANICAL SPLICERS	EACH		418	418
SLOPE WALL 4 INCH	SQ. YD.		50	50
NAME PLATES	EACH	1		1
PERMANENT CASING	FOOT		460	460
DRILLED SHAFT IN SOIL	CU. YD.		1,340	1,340
DRILLED SHAFT IN ROCK	CU. YD.		12	12
PREFORMED JOINT STRIP SEAL	FOOT	133		133
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	24		24
ANCHOR BOLTS, 1 1/4"	EACH	48		48
ANCHOR BOLTS, 1 1/2"	EACH	24		24
CONCRETE SEALER	SQ. FT.		7,157	7,157
EPOXY CRACK INJECTION	FOOT	14		14
GEOCOMPOSITE WALL DRAIN	SQ. YD.		139	139
CHAIN LINK FENCE, 4'	FOOT		99	99
STRUCTURAL REPAIR OF CONCRETE (Depth equal or less than 5")	SQ. FT.		154	154
PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT		262	262
CLASS SI CONCRETE MISCELLANEOUS	CU. YD.		38	38
DECORATIVE RAILING (PARAPET MOUNTED)	FOOT	620		620
SOIL RETENTION SYSTEM	SQ. FT.		2,297	2,297
TEMPORARY SOIL RETENTION SYSTEM	SQ. FT.		2,828	2,828
CROSSHOLE SONIC LOGGING	EACH		3	3



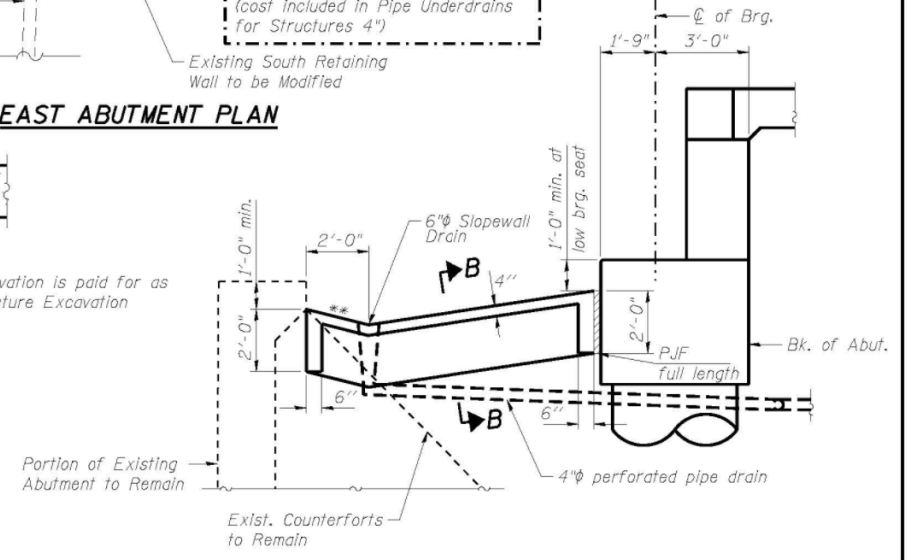
**EAST ABUTMENT PLAN**



**SECTION THRU WEST ABUTMENT**



**SECTION THRU EAST ABUTMENT**



**SECTION A-A THRU CONCRETE SLOPEWALL EAST ABUTMENT**

**NOTES:**

- Slope wall shall be reinforced with welded wire fabric, 6 in. x 6 in. - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft. Cost included in Slope Wall 4 Inch pay item.
- Work this sheet with sheets S1-3B and S1-39.

\*\*1:4 (V:H)



USER NAME = dunkerleyb	DESIGNED - EJO	REVISED - 10/15/2013 EJO, BRD
PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED - 01/08/2014 EJO, BRD
PLOT DATE = 9/15/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOTAL BILL OF MATERIAL AND ABUTMENT SECTIONS  
STRUCTURE NO. 016-1713  
SHEET NO. S1-03 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 253
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	



USER NAME = ahmad,issa	DESIGNED - MAA, JMI	REVISED -
PLOT SCALE = N.T.S.	CHECKED - MI, JJS	REVISED -
PLOT DATE = 1/31/2020	DRAWN - MAA, JMI	REVISED -
	CHECKED - MI, JJS	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

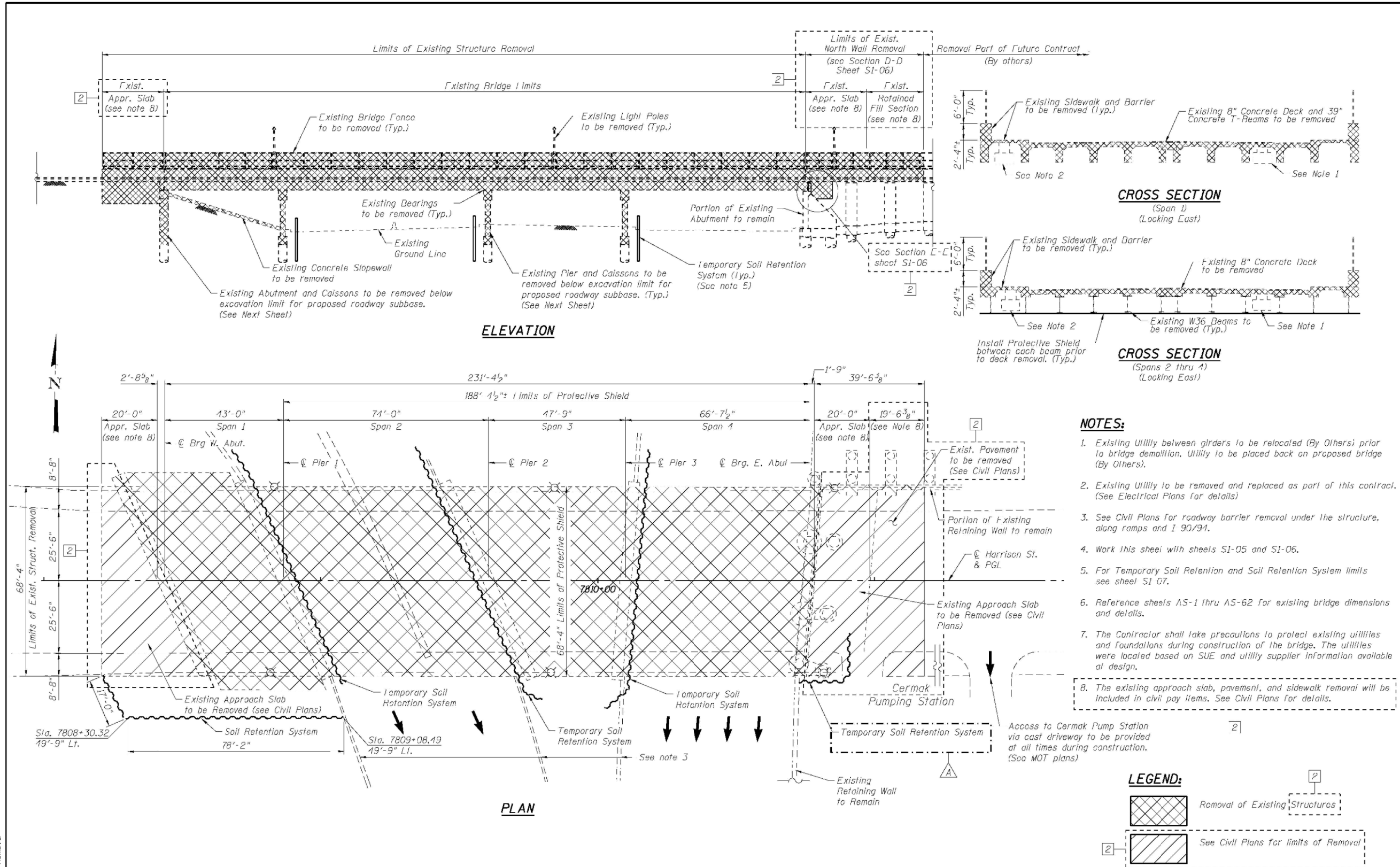
EXISTING RECORD DRAWINGS  
STRUCTURE NO. 016-1164  
SHEET NO. AS2-22 OF AS2-30 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 888
CONTRACT NO. 62A77			ILLINOIS FED. AID PROJECT	

FILE NAME: D:\V\AECOM\NA-AW51\aecononline\local\AECOM\_DS02\_NADocuments\01\_Americas\Transportation\60269938\_Circle\Phase\_5\Final\_Plans\EXRW5-62A77-5HT-026.dgn



# FOR INFORMATION ONLY



USER NAME = dunkerleyb	DESIGNED - EJO	REVISED - 10/15/2013 EJO, BRD
PLT SCALE = N.T.S.	CHECKED - ATB	REVISED - 01/08/2014 EJO, BRD
PLT DATE = 9/5/2013	DRAWN - MRK	REVISED
	CHECKED - EJO	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL REMOVAL (1 OF 3)  
STRUCTURE NO. 016-1713

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 254
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				



USER NAME = ahmad,issa	DESIGNED - MAA,JMI	REVISED -
PLT SCALE = N.T.S.	CHECKED - MI,JJS	REVISED -
PLT DATE = 1/31/2020	DRAWN - MAA,JMI	REVISED -
	CHECKED - MI,JJS	REVISED -

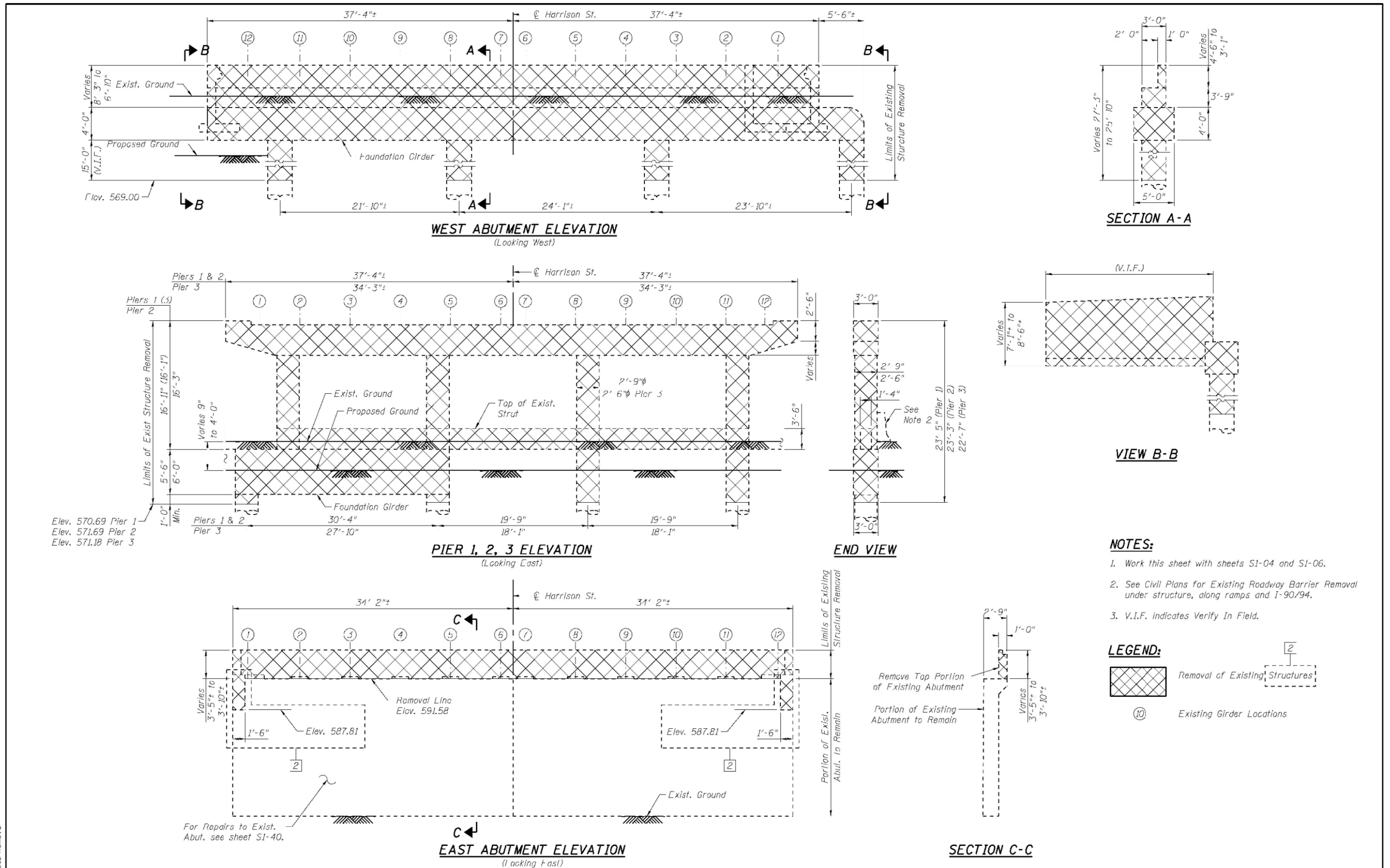
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
STRUCTURE NO. 016-1164

F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 889
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE NAME: D:\V\AECOM\NA-AW51\aecononline-local\AECOM\_ID502\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\_5\Structural\Structure\_EXRW-5\Final Plans\EXRW5-62A77-SHT-027.dgn

# FOR INFORMATION ONLY



USER NAME = dunkerleyb	DESIGNED - EJO	REVISED [2] 01/08/2014 EJO, BRD
PLT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLT DATE = 9/5/2013	DRAWN - MRK	REVISED
	CHECKED - EJO	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL REMOVAL (2 OF 3)  
STRUCTURE NO. 016-1713  
SHEET NO. S1-05 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	255
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				



USER NAME = ahmad,issa	DESIGNED - MAA,JMI	REVISED -
PLT SCALE = N.T.S.	CHECKED - MI,JJS	REVISED -
PLT DATE = 1/31/2020	DRAWN - MAA,JMI	REVISED -
	CHECKED - MI,JJS	REVISED -

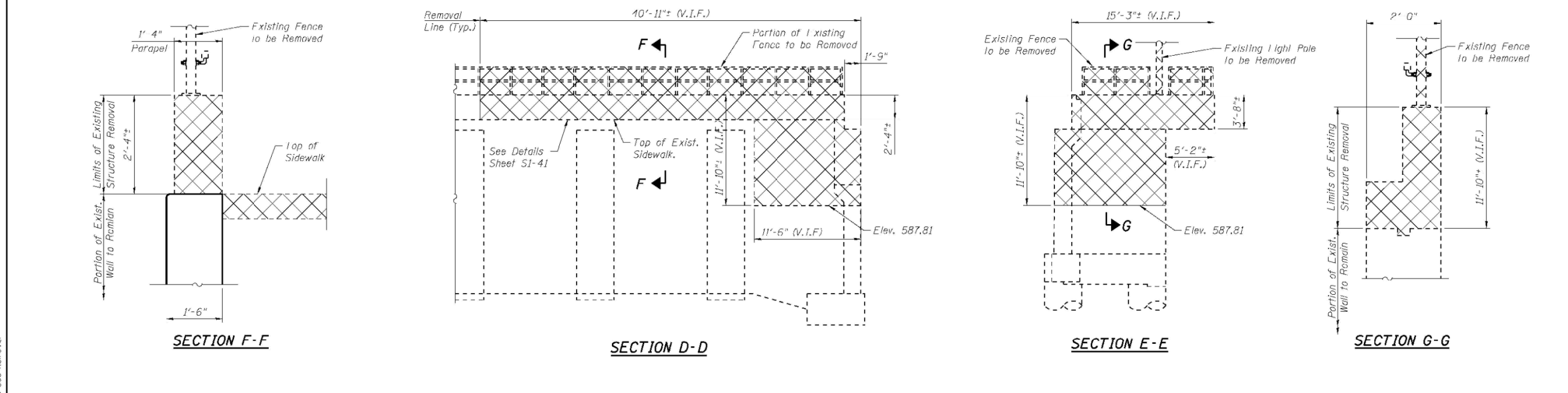
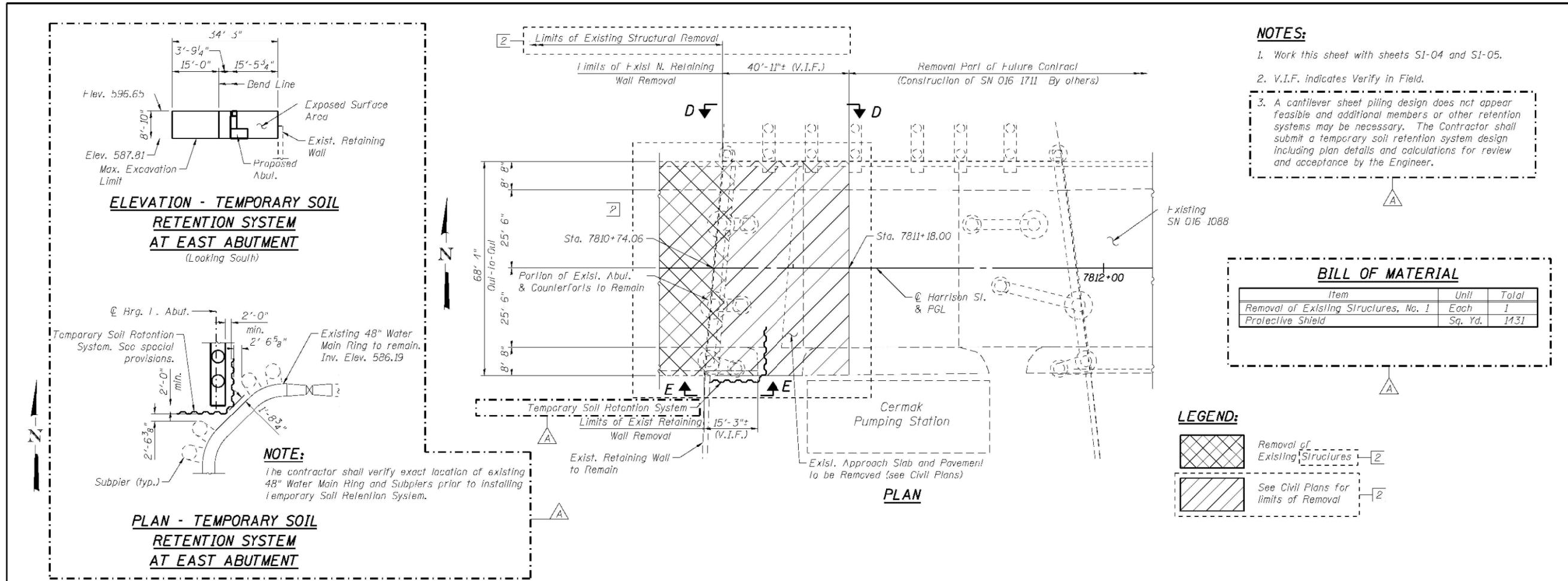
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
STRUCTURE NO. 016-1164  
SHEET NO. AS2-24 OF AS2-30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	890
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE NAME: D:\V\AECOM\NA-AV51\aecononline.local\AECOM\_ID502\_NAD\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_5\Final\_Plans\EXRW5-62A77-5HT-028.dgn

# FOR INFORMATION ONLY

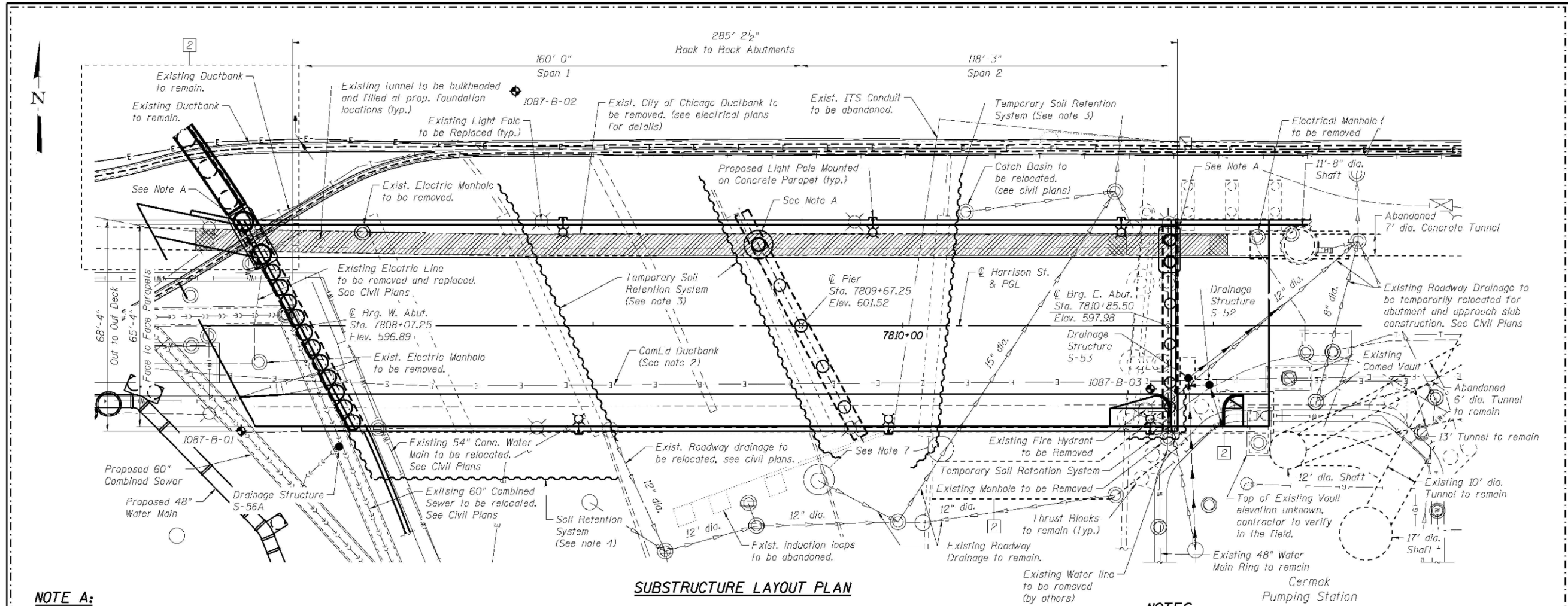


<b>AECOM</b>	USER NAME = dunkerleyb	DESIGNED - EJO	REVISED 10/15/2013 EJO, BRD	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING STRUCTURAL REMOVAL (3 OF 3) STRUCTURE NO. 016-1713</b>	F.A.I. RTE. = 90/94/290	SECTION = 2013-008R	COUNTY = COOK	TOTAL SHEETS = 559	SHEET NO. = 256
	PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED 01/08/2014 EJO, BRD			CONTRACT NO. = 60W26	ILLINOIS FED. AID PROJECT			
	PLOT DATE = 9/5/2013	DRAWN - MRK	REVISED							

<b>HBM ENGINEERING GROUP, LLC</b>	USER NAME = ahmad,issa	DESIGNED - MAA,JMI	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING RECORD DRAWINGS STRUCTURE NO. 016-1164</b>	F.A.I. RTE. = 90/94/290	SECTION = 2015-018R	COUNTY = COOK	TOTAL SHEETS = 1360	SHEET NO. = 891
	PLOT SCALE = N.T.S.	CHECKED - MI, JJS	REVISED -			CONTRACT NO. = 62A77	ILLINOIS FED. AID PROJECT			
	PLOT DATE = 1/31/2020	DRAWN - MAA,JMI	REVISED -							

FILE NAME: D:\V\AECOM\NA-AW51\aecononline.local\AECOM\_ID502\_NAD\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_5\Final\_Plans\EXRW-5\Final\_Structural\Structure\_EXRW-5\Final\_Plans\EXRW-5\2013-008R\016-1713-029.dgn

# FOR INFORMATION ONLY



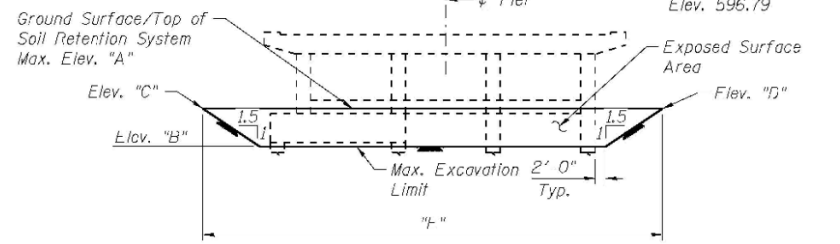
**SUBSTRUCTURE LAYOUT PLAN**

**NOTE A:**

The Drilled Shafts to be installed thru Existing Abandoned Tunnel require Permanent Casing. (see substructure sheets for details). (Drilling thru tunnel included in pay item Drilled Shaft In Soil. See Note B.)

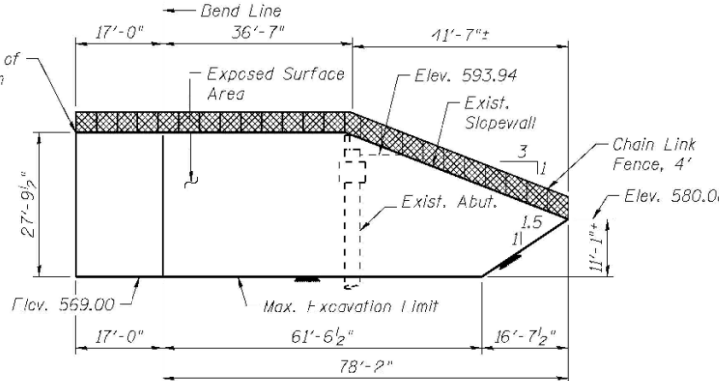
**LEGEND:**

- Combined Sewer
- Electric
- Fiber Optic
- Telephone
- Storm Sewer
- Water Line
- Fire Hydrant
- Light Pole
- Soil Boring
- Bulkhead
- Area filled with Grout



**ELEVATION - TEMPORARY SOIL RETENTION SYSTEM AT EXISTING PIERS**  
(Looking West)  
(See Note 5)

Location	L.lov. "A"	L.lov. "B"	L.lov. "C"	L.lov. "D"	Length "L"
Pier 1	577.33	570.69	577.17	577.33	96'-6"
Pier 2	581.16	571.69	580.96	581.16	105'-5"
Pier 3	580.29	571.18	577.88	579.94	93'-9"



**ELEVATION - SOIL RETENTION SYSTEM AT WEST ABUTMENT**  
(Looking North)  
(See Note 5)

**BILL OF MATERIAL**

Item	Unit	Total
Temporary Soil Retention System	Sq. Ft.	2828
Soil Retention System	Sq. Ft.	2297
Chain Link Fence, 4"	Foot	99

**NOTES:**

- Bulkhead and area to be filled with grout shall be complete prior to construction of SN 016-1713 as part of advanced contract (By Others).
- Existing Utility between girders to be relocated (By Others) prior to bridge demolition. Utility to be placed back on proposed bridge (By Others).
- Temporary Soil Retention System required for existing pier removal. See sheets S1-04 thru S1-06.
- Soil Retention System to be left in place. Required for proposed abutment construction. To be removed in future contract (By Others).
- A cantilever sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system and soil retention system design including plan details and calculations for review and acceptance by the Engineer.
- The Contractor shall take precautions to protect existing utilities and foundations during construction of the bridge. The utilities were located based on SUE and utility supplier information available at design.
- Temporary soil retention system to avoid existing roadway drainage.
- Contractor shall provide equipment, labor, and materials as required to install drilled shafts thru existing abandoned tunnel at locations shown. The costs incurred by installation thru tunnel shall not be measured separately but shall be included in the respective Drilled Shaft pay item.



USER NAME = dunkerleyb	DESIGNED - EJO	REVISED - 10/15/2013 EJO, BRD
PLT SCALE = N.T.S.	CHECKED - ATB	REVISED - 01/08/2014 EJO, BRD
PLT DATE = 9/7/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE LAYOUT  
STRUCTURE NO. 016-1713  
SHEET NO. S1-07 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	257
CONTRACT NO. 60W26				
ILLINOIS FED. AID PROJECT				



USER NAME = ahmad,issa	DESIGNED - MAA,JMI	REVISED -
PLT SCALE = N.T.S.	CHECKED - MI,JJS	REVISED -
PLT DATE = 1/31/2020	DRAWN - MAA,JMI	REVISED -
	CHECKED - MI,JJS	REVISED -

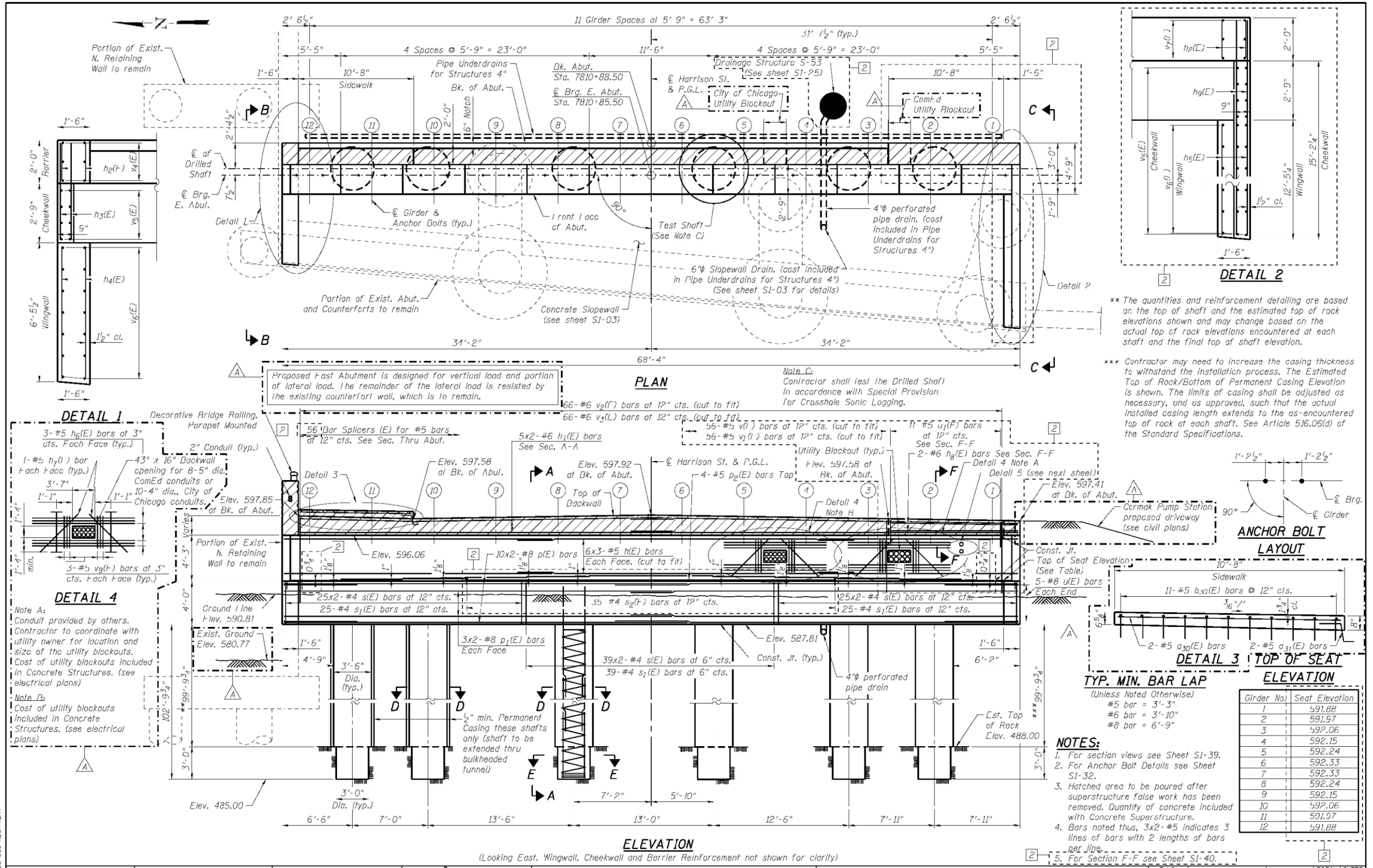
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
STRUCTURE NO. 016-1164  
SHEET NO. AS2-26 OF AS2-30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	892
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE NAME: D:\V\AECOM-NA-AWS1\ecomonline\local\AECOM\_DS02\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\Structure\_EXRW-5\Final Plans\EXRW5-62A77-SHT-030.dgn

# FOR INFORMATION ONLY



\*\* The quantities and reinforcement detailing are based on the top of shaft and the estimated top of rock elevations shown and may change based on the actual top of rock elevations encountered at each shaft and the final top of shaft elevation.

\*\*\* Contractor may need to increase the casing thickness to withstand the installation process. The Estimated Top of Rock/Bottom of Permanent Casing Elevation is shown. The limits of casing shall be adjusted as necessary, and as approved, such that the actual installed casing length extends to the as-encountered top of rock at each shaft. See Article 516.05(d) of the Standard Specifications.

<b>AECOM</b>	USER NAME = dunkerleyb	DESIGNED = EJO	REVISED = 10/15/2013 EJO, BRD	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EAST ABUTMENT PLAN AND ELEVATION</b> STRUCTURE NO. 016-1713	F.A.I. RTE. = 90/94/290	SECTION = 2013-008R	COUNTY = COOK	TOTAL SHEETS = 559	SHEET NO. = 288
	PLT SCALE = N.T.S.	CHECKED = ATB	REVISED = 01/08/2014 EJO, BRD			CONTRACT NO. = 60W26	ILLINOIS FED. AID PROJECT			
	PLT DATE = 9/7/2013	DRAWN = BRD	REVISED =							

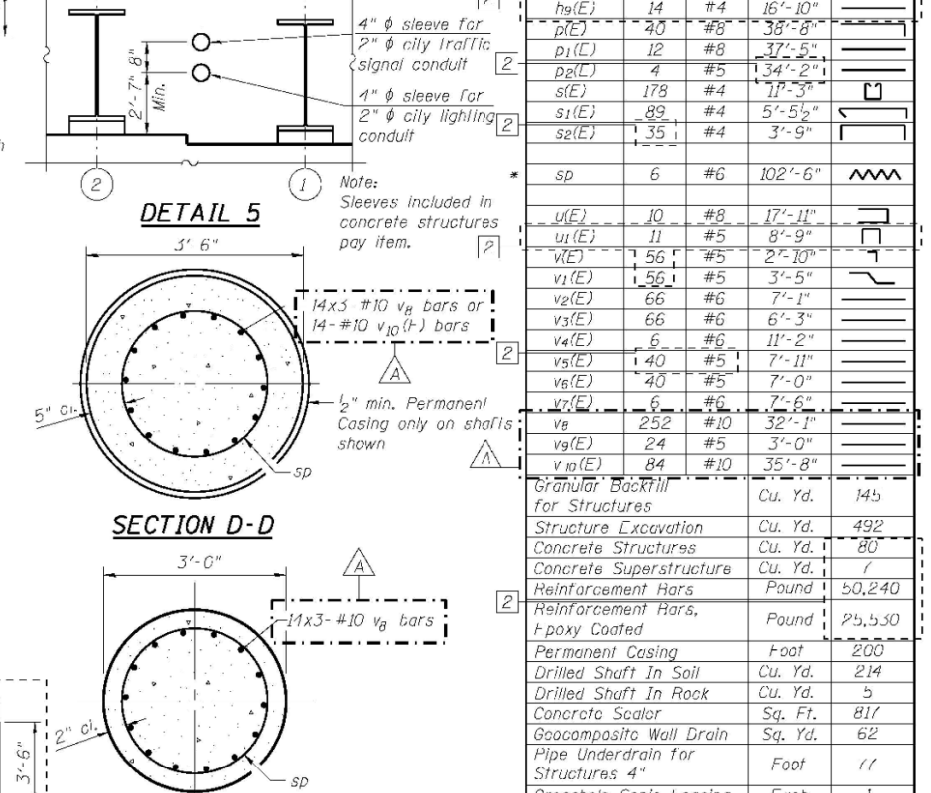
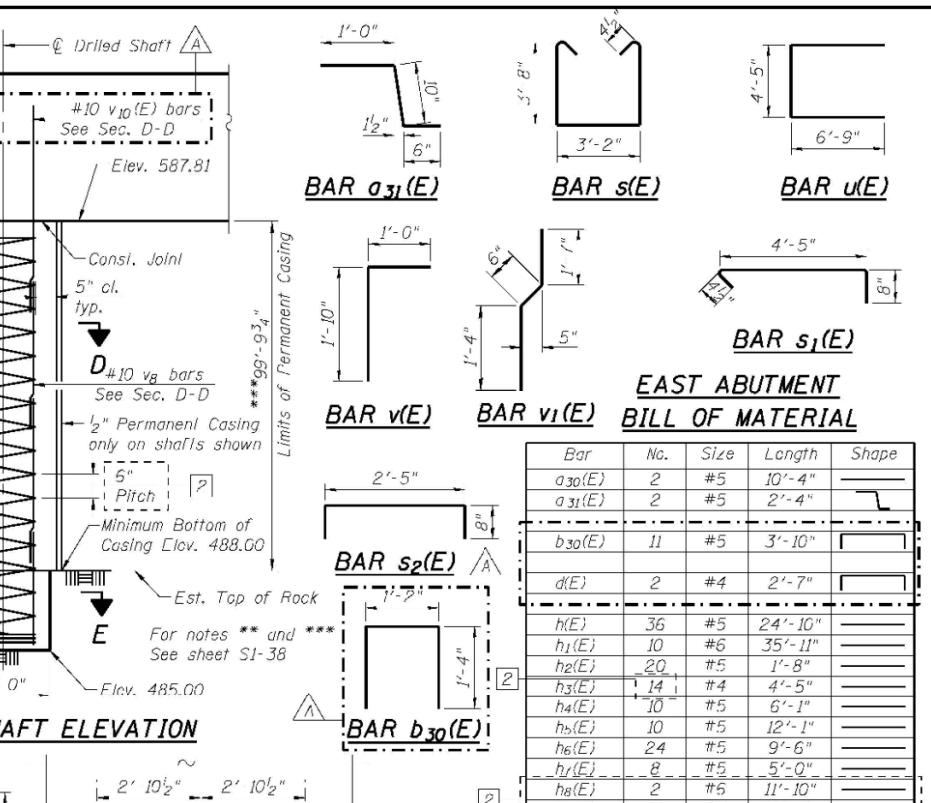
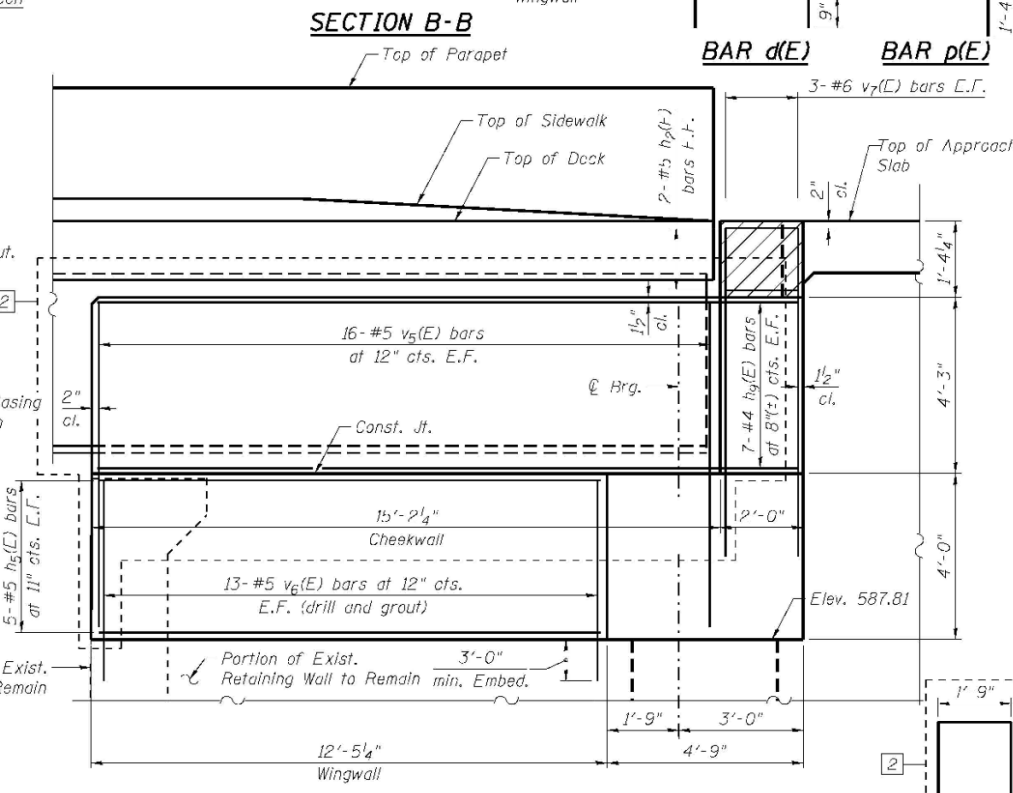
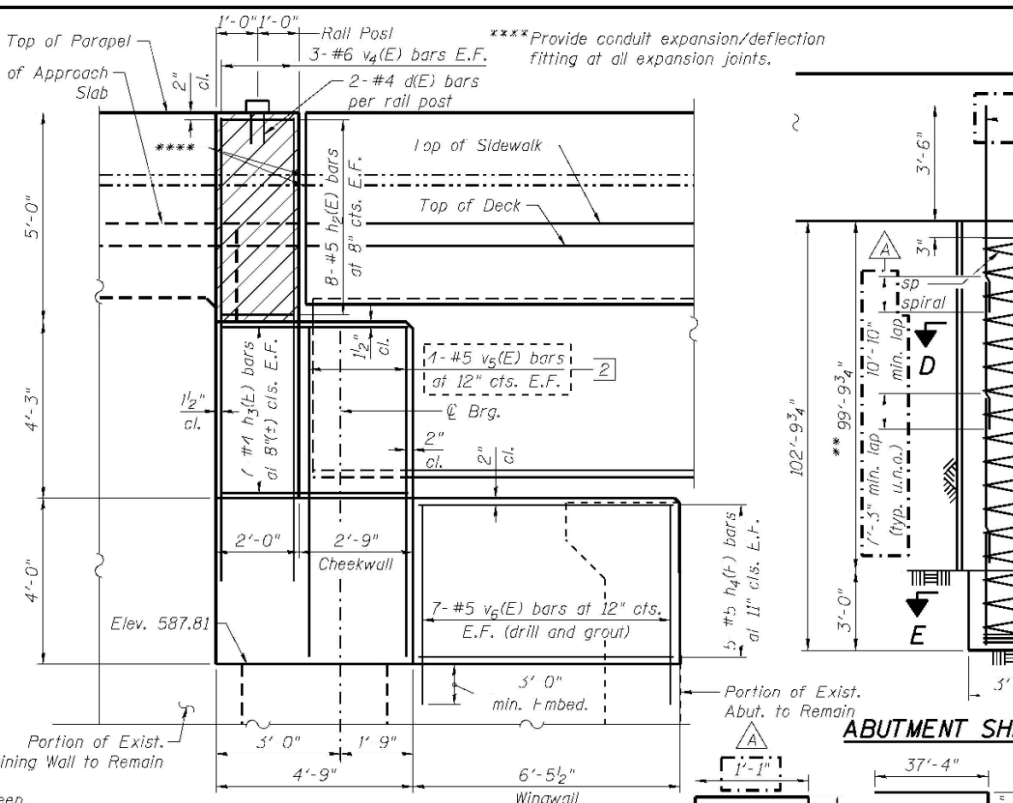
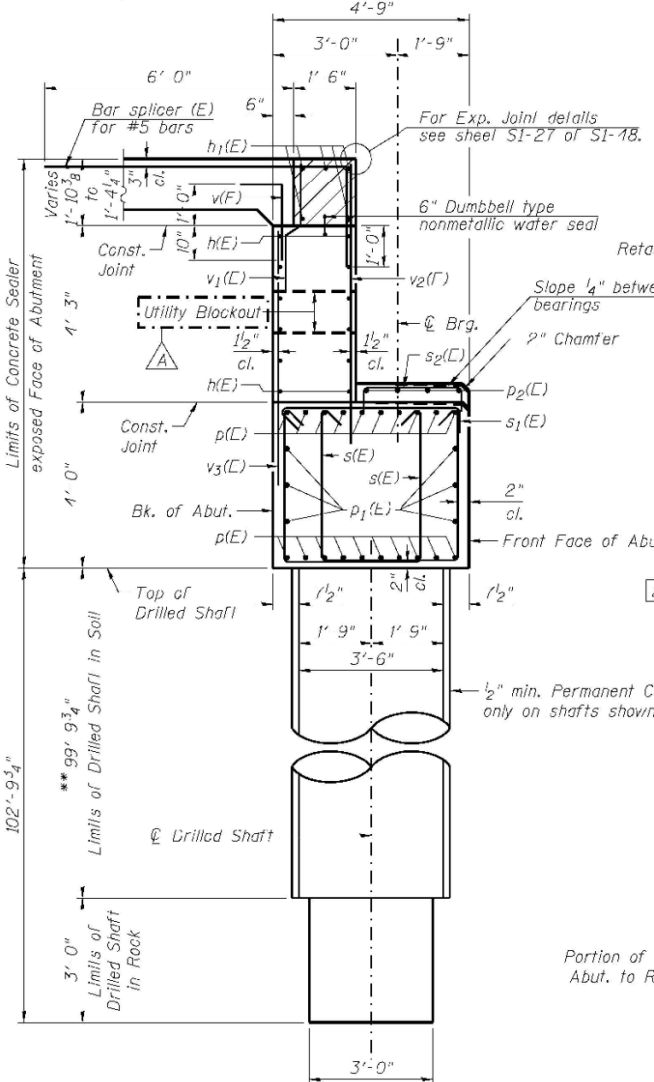
<b>HBM ENGINEERING GROUP, LLC</b>	USER NAME = ahmad,issa	DESIGNED = MAA, JMI	REVISED =	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING RECORD DRAWINGS</b> STRUCTURE NO. 016-1164	F.A.I. RTE. = 90/94/290	SECTION = 2015-018R	COUNTY = COOK	TOTAL SHEETS = 1360	SHEET NO. = 893
	PLT SCALE = N.T.S.	CHECKED = MI, JJS	REVISED =			CONTRACT NO. = 62A77	ILLINOIS FED. AID PROJECT			
	PLT DATE = 1/31/2020	DRAWN = MAA, JMI	REVISED =							

FILE NAME: D:\V\AECOM-NA-AWS1\ecomonline\local\AECOM\_DS02\_NADocuments\01\_Americas\Transportation\60269938\_Circle\Phase\_II\000\_CAD\008\_Structural\Structure\_EXRW-5\Final Plans\EXRW5-62A77-SHT-031.dgn

# FOR INFORMATION ONLY

## NOTES:

1. Haunched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
2. Concrete Sealer shall be applied to abutment backwall, bearing seats and exposed faces of abutment cap, cheekwalls and wingwalls.
3. When splicing spiral reinforcement is necessary, the spiral shall be provided with 1/2 extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4 or shall both terminate with a 135° standard hook.
4. E.F. = Each Face
5. Drilling and grouting of v6(t) bars are included with Reinforcement Bars, Epoxy Coated pay item.
6. For Pipe Underdrain detail see sheet S1-03.
7. Bars noted thus, 3x? #5 indicates 3 lines of bars with 2 lengths of bars per line.



### EAST ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a30(E)	2	#5	10'-4"	
a31(E)	2	#5	2'-4"	
b30(E)	11	#5	3'-10"	
d(E)	2	#4	2'-7"	
h(E)	36	#5	24'-10"	
h1(E)	10	#6	35'-11"	
h2(E)	20	#5	1'-8"	
h3(E)	14	#4	4'-5"	
h4(E)	10	#5	6'-1"	
h5(E)	10	#5	12'-1"	
h6(E)	24	#5	9'-6"	
h7(E)	8	#5	5'-0"	
h8(E)	2	#5	11'-10"	
h9(E)	14	#4	16'-10"	
p(E)	40	#6	38'-8"	
p1(L)	12	#8	37'-5"	
p2(L)	4	#5	34'-2"	
s(E)	178	#4	17'-3"	
s1(E)	89	#4	5'-5 1/2"	
s2(E)	35	#4	3'-9"	
sp	6	#6	102'-6"	
u(E)	10	#6	17'-11"	
u1(E)	11	#5	8'-9"	
v(E)	56	#5	2'-10"	
v1(E)	56	#5	3'-5"	
v2(E)	66	#6	7'-1"	
v3(E)	66	#6	6'-3"	
v4(E)	6	#6	11'-2"	
v5(E)	40	#5	7'-11"	
v6(E)	40	#5	7'-0"	
v7(E)	6	#6	7'-6"	
v8	252	#10	32'-1"	
v9(E)	24	#5	3'-0"	
v10(E)	84	#10	35'-8"	
Granular Backfill for Structures			Cu. Yd.	145
Structure Excavation			Cu. Yd.	492
Concrete Structures			Cu. Yd.	80
Concrete Superstructure			Cu. Yd.	7
Reinforcement Bars			Pound	50,240
Reinforcement Bars, Epoxy Coated			Pound	2,530
Permanent Casing			Foot	200
Drilled Shaft In Soil			Cu. Yd.	214
Drilled Shaft In Rock			Cu. Yd.	5
Concrete Sealer			Sq. Ft.	817
Geocomposite Wall Drain			Sq. Yd.	62
Pipe Underdrain for Structures 4"			Foot	11
Crosshole Sonic Logging			Each	1



USER NAME = dunkerleyb	DESIGNED = EJO	REVISION 10/15/2013 EJO, BRD
FLD SCALE = N.T.S.	CHECKED = ATB	REVISION 01/08/2014 EJO, BRD
FLD DATE = 9/7/2013	DRAWN = BRD	REVISION
	CHECKED = EJO	REVISION

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT SECTION AND DETAILS  
STRUCTURE NO. 016-1713  
SHEET NO. S1-39 OF S1-48 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-008R	COOK	559	289
CONTRACT NO.			60W26	
ILLINOIS FED. AID PROJECT				

USER NAME = ahmad,issa	DESIGNED = MAA,JMI	REVISION
FLD SCALE = N.T.S.	CHECKED = MI,JJS	REVISION
FLD DATE = 1/31/2020	DRAWN = MAA,JMI	REVISION
	CHECKED = MI,JJS	REVISION

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
STRUCTURE NO. 016-1164  
SHEET NO. AS2-28 OF AS2-30 SHEETS

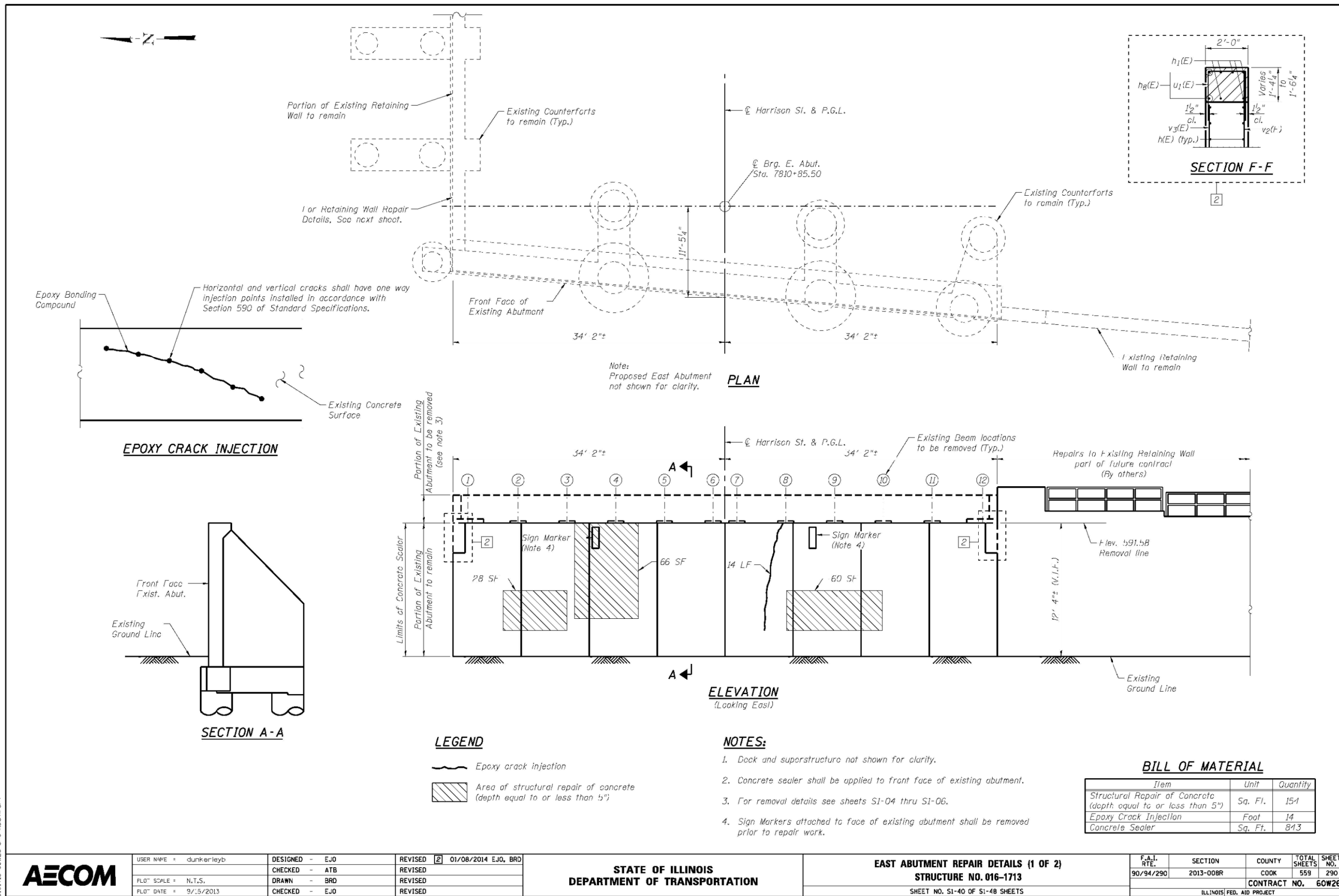
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	894
CONTRACT NO.			62A77	
ILLINOIS FED. AID PROJECT				

FILE NAME: D:\V\AECOM\NA-AWS1\acromonline\local\AECOM\_DS02\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\_03\_Structural\Structure\_EXRW-5\Final Plans\EXRW5-62A77-SHT-032.dgn



10:15:03 AM

# FOR INFORMATION ONLY



FILE NAME: D:\V\AECOM-NA-AWS1\AECOMonline\local\AECOM\_ID502\_NAD\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_5\Final Plans\EXRW5-62A77-5HT-033.dgn



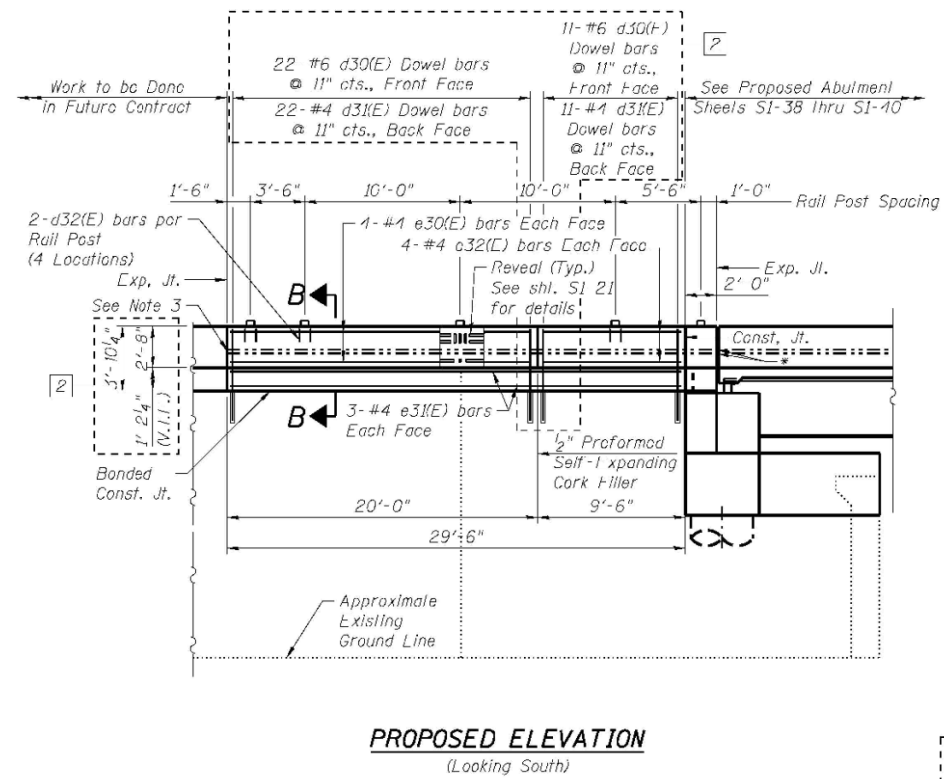
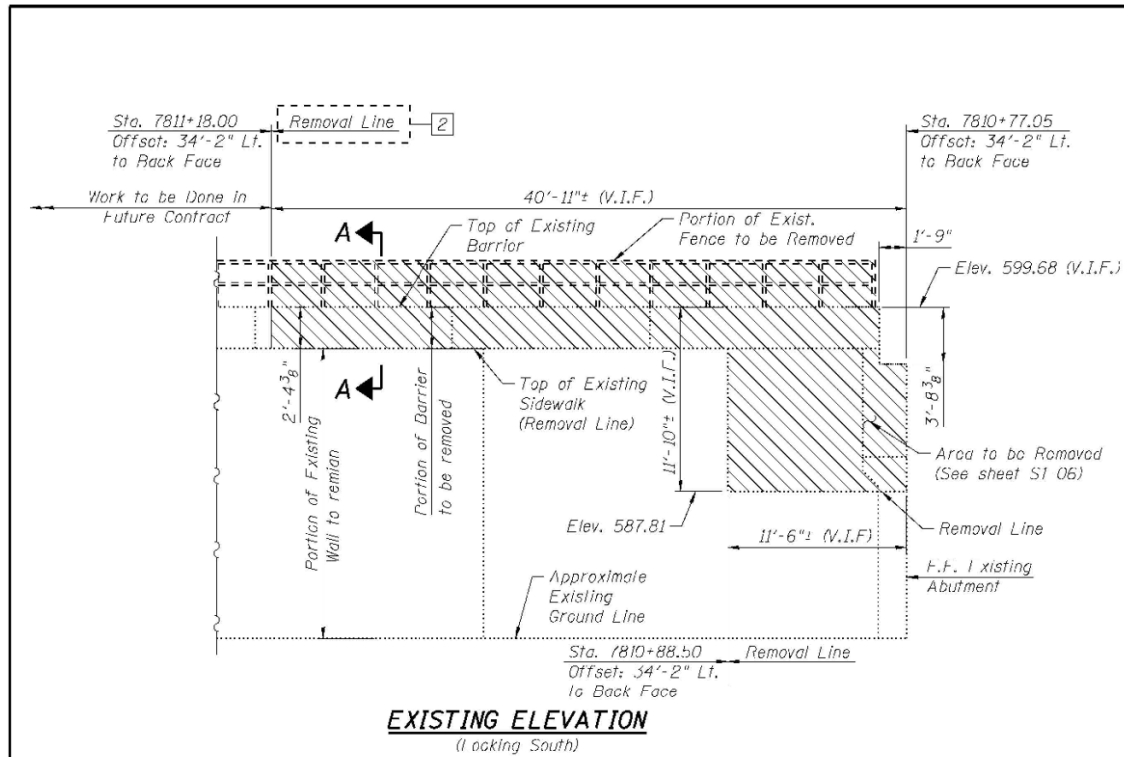
USER NAME = ahmad,issa	DESIGNED - MAA,JMI	REVISED -
FLD SCALE = N.T.S.	CHECKED - MI,JJS	REVISED -
FLD DATE = 1/31/2020	DRAWN - MAA,JMI	REVISED -
	CHECKED - MI,JJS	REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**EXISTING RECORD DRAWINGS**  
STRUCTURE NO. 016-1164  
SHEET NO. AS2-29 OF AS2-30 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	895
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

# FOR INFORMATION ONLY

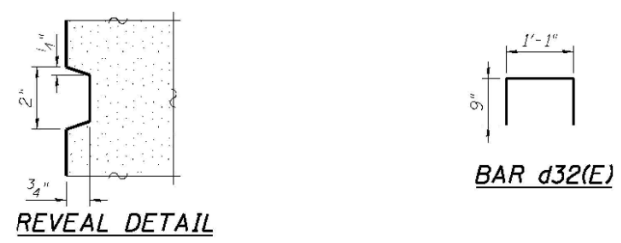
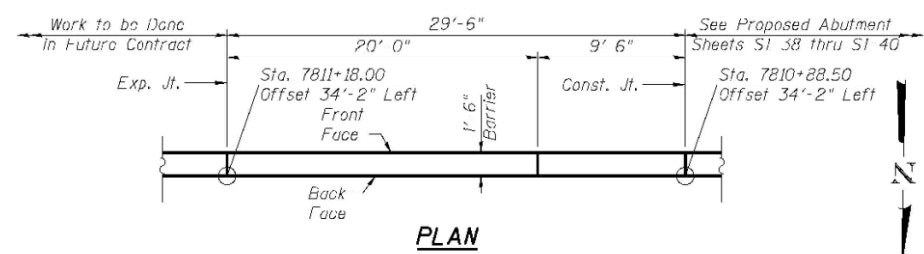
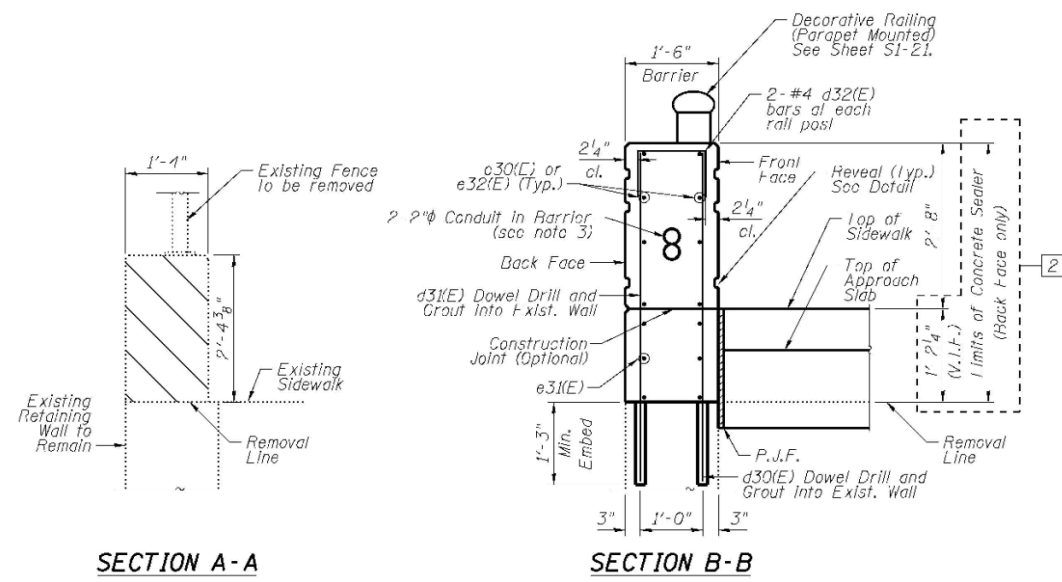


**LEGEND:**



**NOTES:**

1. Work this sheet with sheet S1-10.
2. Drill and Grout d30(E) and d31(E) into the Concrete to 1/4" larger in dia. than the diameter of the bar used with a Minimum Depth of 15 Inches in accordance with Section 584 of the Standard Specifications. Cost included with Reinforcement Bars, Epoxy Coated per item.
3. Embedded conduit shall be routed to the end of the new parapet wall and capped. See Lighting Plans details.
4. Apply Protective Coat to front face and top of Barrier. Concrete Sealer to be applied to back face only.



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
d30(E) Dowel	22	#6	5' 2"	—
d31(E) Dowel	22	#4	5' 2"	—
d32(E)	8	#1	2' 1"	□
e30(E)	8	#1	19' 8"	—
e31(E)	6	#1	29' 2"	—
e32(E)	8	#1	9' 2"	—
Concrete Superstructure			Cu. Yd.	7
Reinforcement Bars, Epoxy Coated			Pound	660
Concrete Sealer			Sq. Ft.	79
Protective Coat			Sq. Yd.	11



USER NAME = dunkerleyb	DESIGNED - EJO	REVISED 2 01/08/2014 EJO, BRD
PLT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLT DATE = 9/5/2013	DRAWN - BRD	REVISED
	CHECKED - EJO	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT REPAIR DETAILS (2 OF 2)  
STRUCTURE NO. 016-1713  
SHEET NO. S1-41 OF S1-48 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2013-008R	COUNTY COOK	TOTAL SHEETS 559	SHEET NO. 291
CONTRACT NO. 60W26			ILLINOIS FED. AID PROJECT	



USER NAME = ahmad,issa	DESIGNED - MAA,JMI	REVISED -
PLT SCALE = N.T.S.	CHECKED - MI,JJS	REVISED -
PLT DATE = 1/31/2020	DRAWN - MAA,JMI	REVISED -
	CHECKED - MI,JJS	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
STRUCTURE NO. 016-1164  
SHEET NO. AS2-30 OF AS2-30 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 896
CONTRACT NO. 62A77			ILLINOIS FED. AID PROJECT	

FILE NAME: D:\V\AECOM-NA-AV51\acemonline\local\AECOM\_DS02\_NAD\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_II\000\_CAD\008\_Structural\Structure\_EXRW-5\Final\_Plans\EXRW5-62A77-5HT-034.dgn



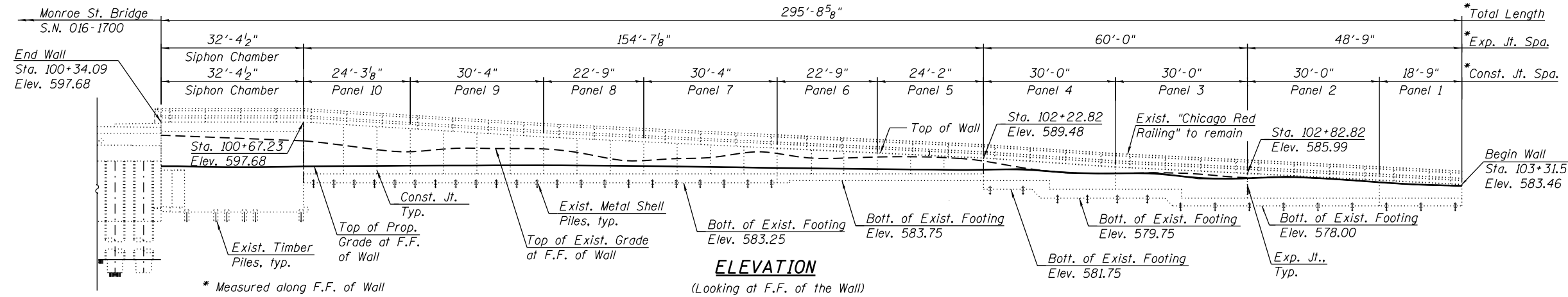
**Existing Structure:** Existing Retaining Wall 50 was originally constructed in 1957 under Project I-02-2 (50) (F.A.I. 94, F.A.I. Route No. 2; Section 0101.6-2P) and an extension of the wall at the north end was constructed in 2009 under Project ESP-0005 (659) (F.A.I. 94; Section 0202.6-2P, ETC. 1415 and 1517) R-7; <-91-091-02; Contract No. 62408). The wall consists of a reinforced concrete cantilever wall on various foundations. The north portion of wall is supported on treated on timber piles and the south wall portion is supported on metal shell piles and spread footing. The southernmost portion of "wall" consists of the Monroe Street Siphon constructed in 1954 under F.A. 173 Section 0101.2-48. The overall length of the wall (including Siphon) is approximately 295'-8<sup>5</sup>/<sub>8</sub>".

**Traffic Control:** Traffic along the SB I-90/94 to Monroe St. Exit Ramp will be maintained during construction. However, traffic along the SB I-90/94 to Adams Street and Jackson Boulevard Exit Ramps will be detoured due to concurrent construction in Contracts 62J31, 60X94 and 62A77.

**Salvage:** No Salvage.

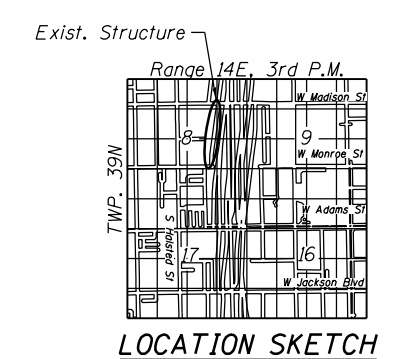
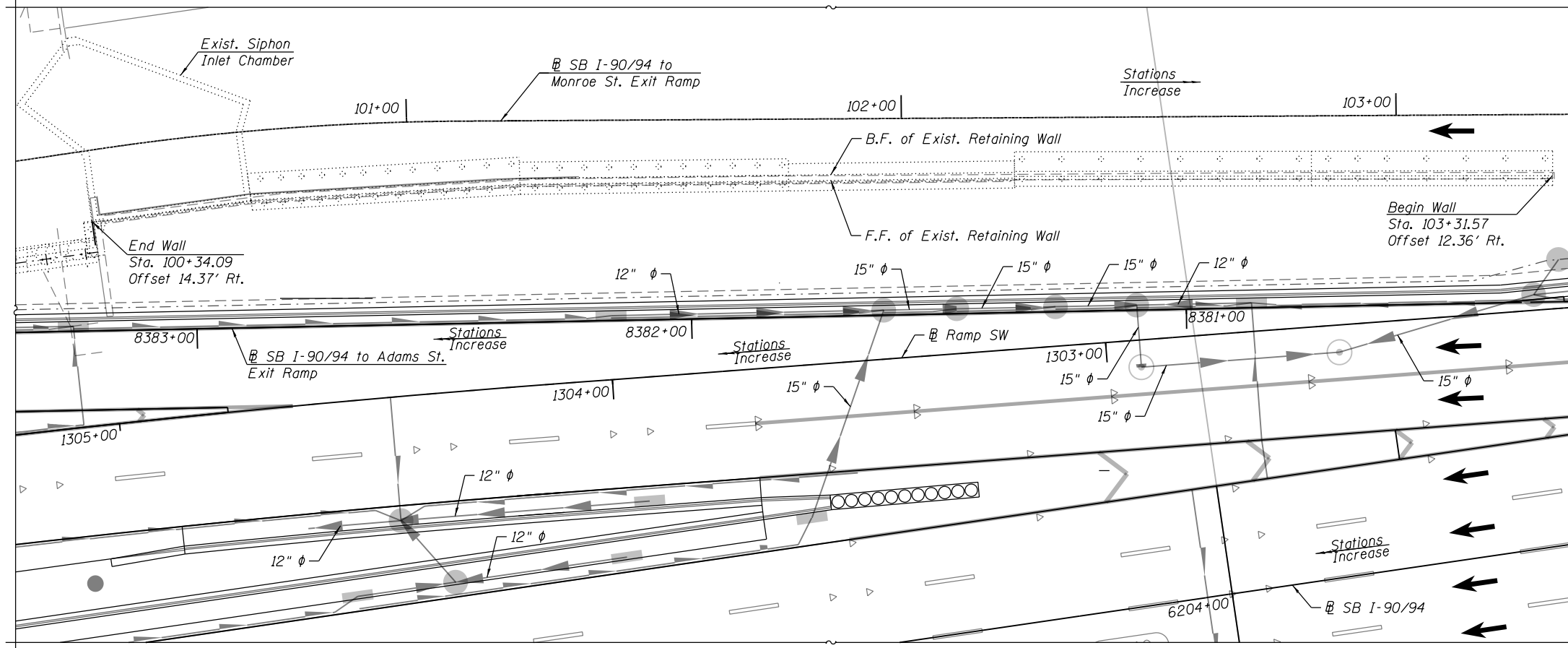
**NOTES:**

- For General Notes, Index of Sheets, Total Bill of Material, Profile Grade Lines and Curve Data, see Sheet S3-02
- Stations and offsets are measured along @ SB I-90/94 to Monroe St. Exit Ramp to the front face of wall.
- For Roadway Barrier and additional details, see Roadway Plans.
- All dimensions and elevations have been taken from historical plans. These elevations shall be field-verified.



**LEGEND:**

- Exist. Storm Sewer
- Exist. Combined Sewer
- Exist. Catch Basin
- Exist. Inlet
- Exist. Utility Handhole
- Exist. Manhole
- Exist. Traffic Signal
- Exist. Light Pole
- Exist. Sign
- Prop. Storm Sewer
- Prop. Pipe Underdrain
- Prop. Manhole
- Prop. Catch Basin
- B.F. Back Face
- F.F. Front Face



**SCOPE OF WORK**

- Remove ornamental cladding.
- Perform structural repair of concrete, preformed joint filler replacement and epoxy crack injection for the existing retaining wall.
- Sandblast concrete, clean and apply Concrete Sealer.

**PLAN**



SIGNED Moussa A. Issa  
 DR. MOUSSA A. ISSA, S.E. IL. LIC. NO. 081-005738  
 EXPIRES 11-30-2020  
 DATE 1-29-2020

FOR SHEETS S3-01 THRU S3-04  
 AND SHEETS AS3-01 THRU AS3-42  
 (TOTAL OF 46 SHEETS)

**GENERAL PLAN AND ELEVATION  
 EXISTING RETAINING WALL 50  
 F.A.I. RTE. 90/94 - SECTION 2015-018R  
 COOK COUNTY  
 STATION 100+34.09 TO 103+31.57  
 STRUCTURE NO. 016-1189**



USER NAME =	ahmad,issa	DESIGNED -	MAA,JMI	REVISED -	
		CHECKED -	MI,JJS	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	MAA,JMI	REVISED -	
PLOT DATE =	1/31/2020	CHECKED -	MI,JJS	REVISED -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

SHEET NO. S3-01 OF S3-04 SHEETS

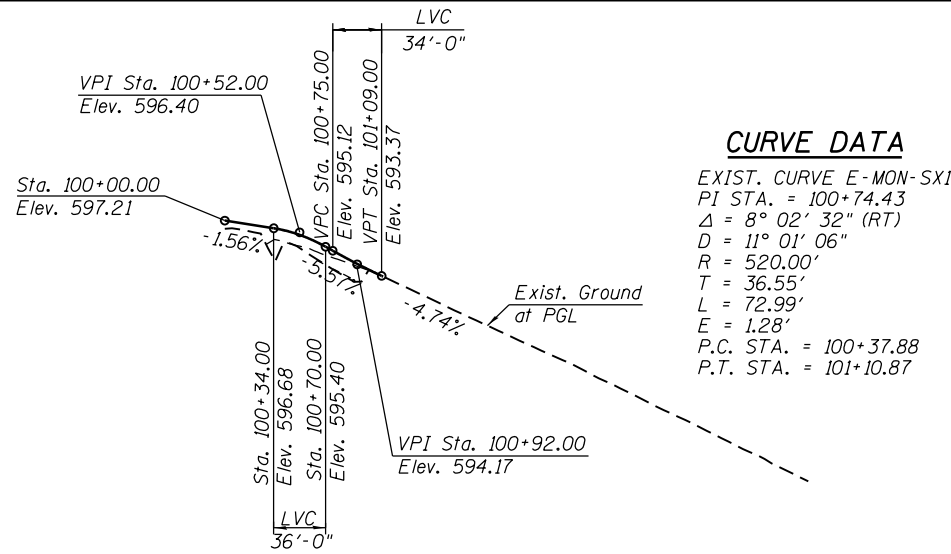
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	897
CONTRACT NO. 62A77				

ILLINOIS FED. AID PROJECT

FILE NAME: D:\VAECOM\NA-AW51\arecomonline\local\AECOM\_ID502\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\_I\1000\_CAD\008\_Structural\Structure\_EXRW-50\Final Plans\EXRW50-62A77-SHT-001

**GENERAL NOTES**

1. Wall repair locations are approximate and were determined from field inspection performed at the time of plan preparation. The necessary adjustments based on current field conditions will be made at time of construction. Such variations shall not be cause for additional compensation for a change in the scope of work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
2. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field-verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
3. Existing reinforcing steel which is exposed by the concrete repair process, but is to remain embedded in the existing structure and reused, shall be cleaned (to be free of existing concrete and rust) and straightened (if necessary). Existing reinforcing steel which is cut, stretched or damaged by the Contractor during the concrete repair process shall be replaced by embedded reinforcing steel or anchorage, equal to or greater than the size of original reinforcing steel, subject to the approval of the Engineer and at no cost to the Department. See Special Provisions for Structural Repair of Concrete.
4. Stations and offsets of Existing Retaining Wall 50 (S.N. 016-1189) are referenced along the Exist. SB I-90/94 to Monroe Street Exit Ramp.



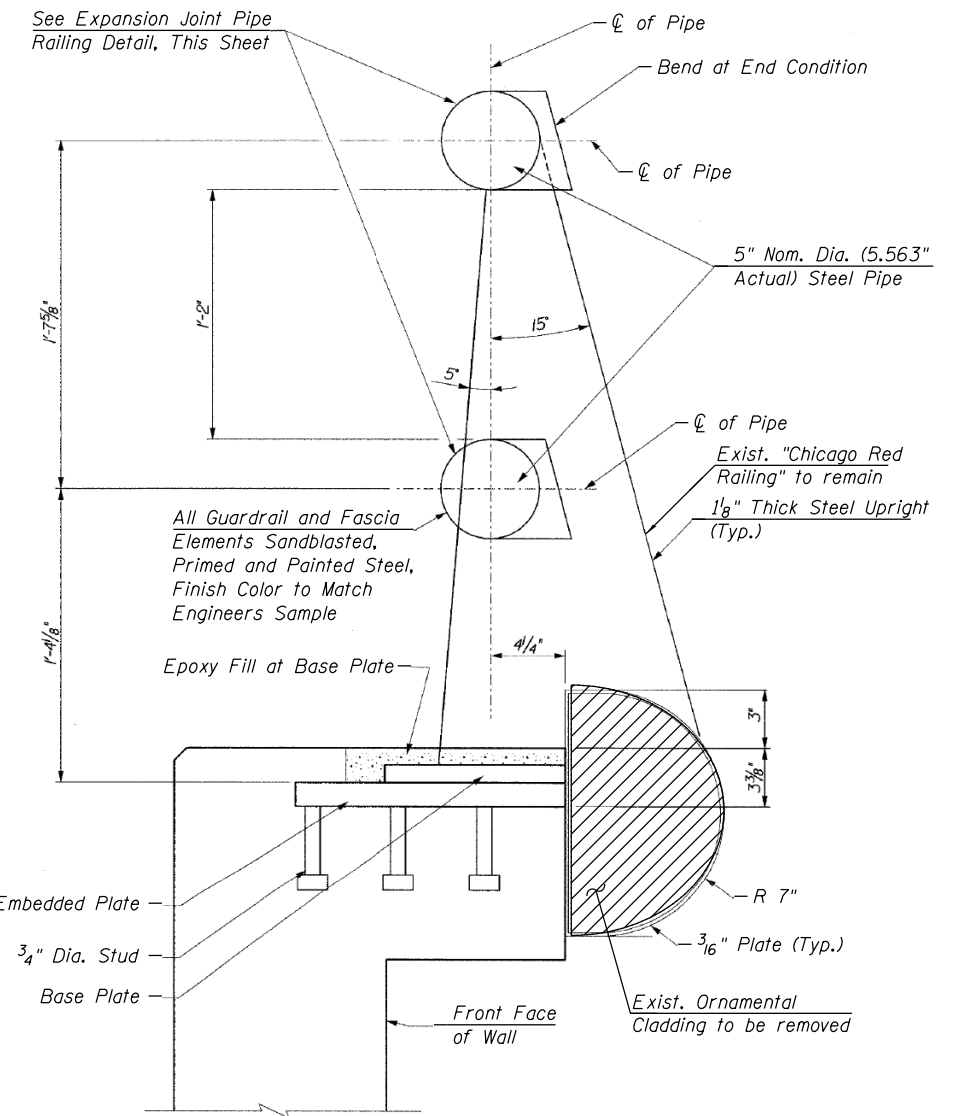
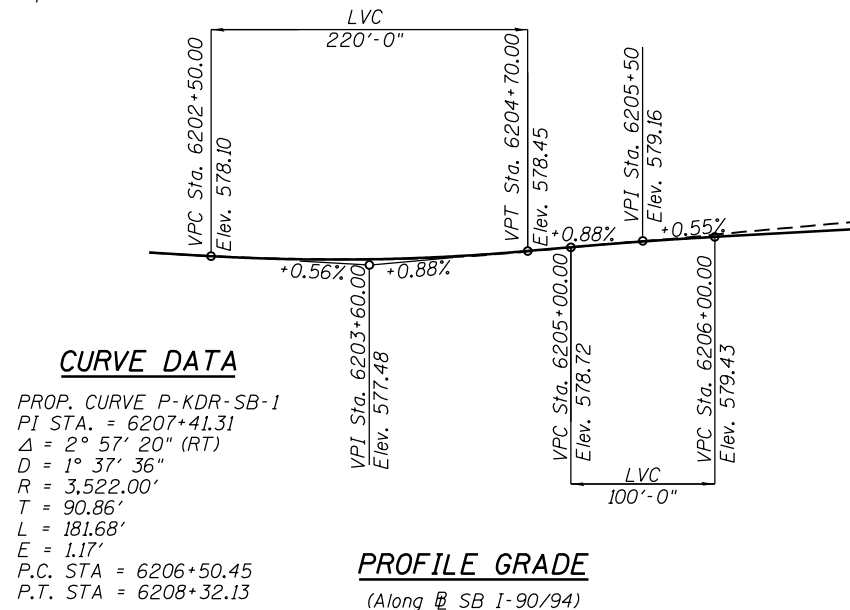
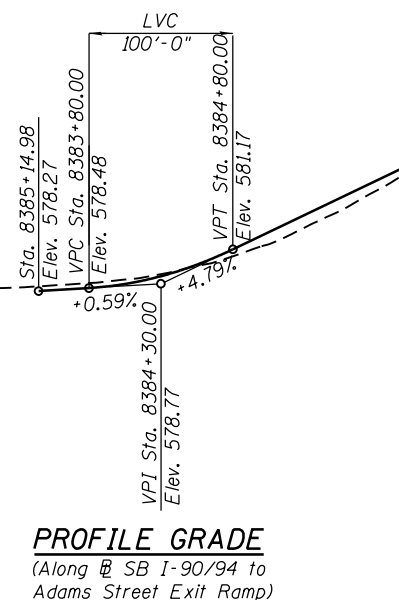
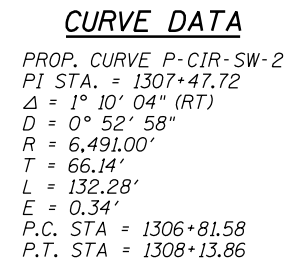
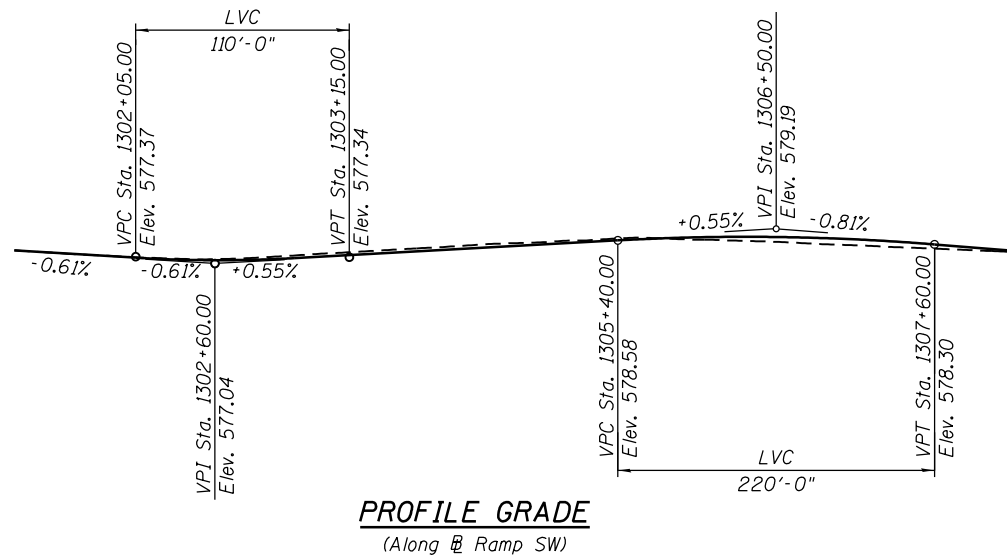
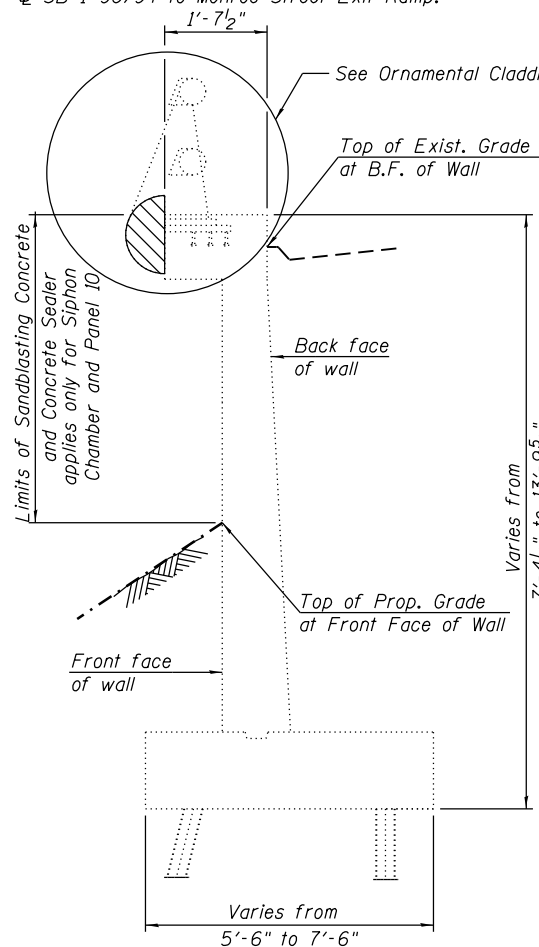
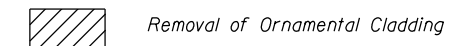
**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
CONCRETE SEALER	SQ FT	414
EPOXY CRACK INJECTION	FOOT	18
REPLACE JOINT FILLER	FOOT	14
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	111
SANDBLASTING CONCRETE	SQ YD	46
REMOVAL OF ORNAMENTAL CLADDING	FOOT	297

**INDEX OF SHEETS**

- S3-01 General Plan and Elevation
- S3-02 General Notes, Index of Sheets and Total Bill of Material
- S3-03 Wall Elevations - Front Face
- S3-04 Wall Elevations - Back Face
- AS3-01 Existing Record Drawings thru AS3-42

**LEGEND**



USER NAME = ahmad,issa	DESIGNED - MAA,JMI	REVISED -
PLOT SCALE = N.T.S	CHECKED - MI,JJS	REVISED -
PLOT DATE = 1/31/2020	DRAWN - MAA,JMI	REVISED -
	CHECKED - MI,JJS	REVISED -

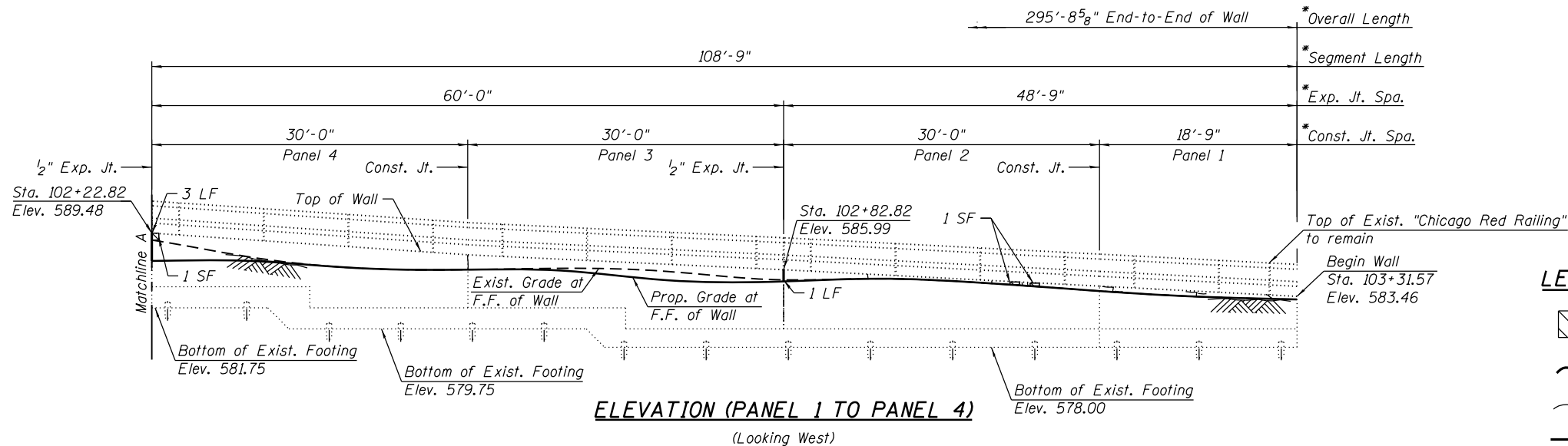
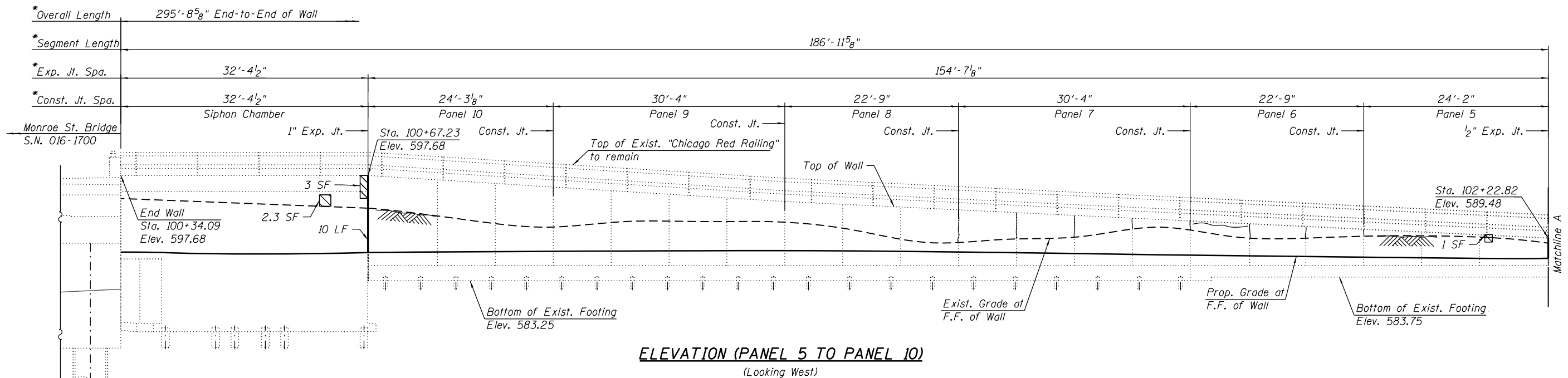
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS AND TOTAL BILL OF MATERIAL  
STRUCTURE NO. 016-1189

F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 898
CONTRACT NO. 62A77			ILLINOIS FED. AID PROJECT	

FILE NAME: D:\V\AECOM-NA-AWS1\arecomonline\local\AECOM\_D502\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\_50\Final\_Plans\EXRW50-Structural\Structure\_EXRW50-Final\_Plans\EXRW50-62A77-5HT-002

FILE NAME: D:\V\AECOM-NA-AWS1\acconline\local\AECOM\_ID502\_NAVDocuments\01\_Americas\Transportation\60269938\_CirclePhase\_II\000\_CAD\008\_Structural\Structure\_EXRW-50\Final Plans\EXRW50-62A77-5HT-003



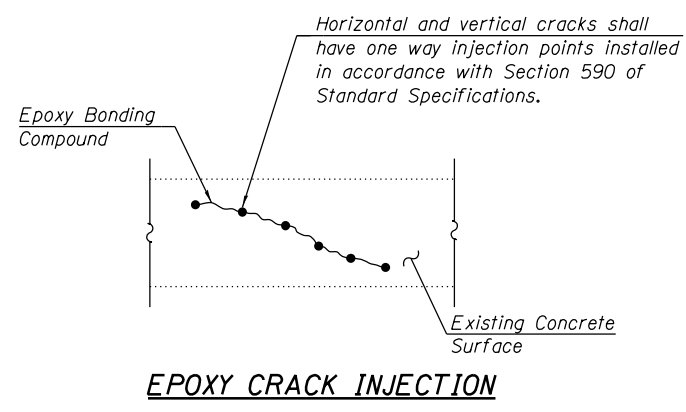
**LEGEND**

- Structural Repair of Concrete (Depth equal to or less than 5 in.)
- Epoxy Crack Injection (Width > 0.06")
- Hairline Crack (Width < 0.06")
- Replace Joint Filler
- Ground Line
- SF Square Foot
- LF Linear Foot
- B.F. Back Face
- F.F. Front Face

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
EPOXY CRACK INJECTION	FOOT	18
REPLACE JOINT FILLER	FOOT	14
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	111

- NOTES:**
- Existing ornamental cladding (to be removed) at front face of wall is not shown for clarity. Vertical cracks observed in the field have been assumed to extend behind the existing cladding for conservatism.
  - The Contractor shall exercise extreme caution during construction to avoid damage to the existing siphon chamber (at south end of wall) and existing "Chicago Red Railing" (at top of wall) to remain. Any damage to these (or other) existing elements to remain caused by the Contractor in the performance of his/her work shall be repaired by the Contractor, to the satisfaction of the Engineer, at no cost to the Department.



USER NAME =	ahmad,issa	DESIGNED -	MAA,JMI	REVISED -	
		CHECKED -	MI,JJS	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	MAA,JMI	REVISED -	
PLOT DATE =	1/31/2020	CHECKED -	MI,JJS	REVISED -	

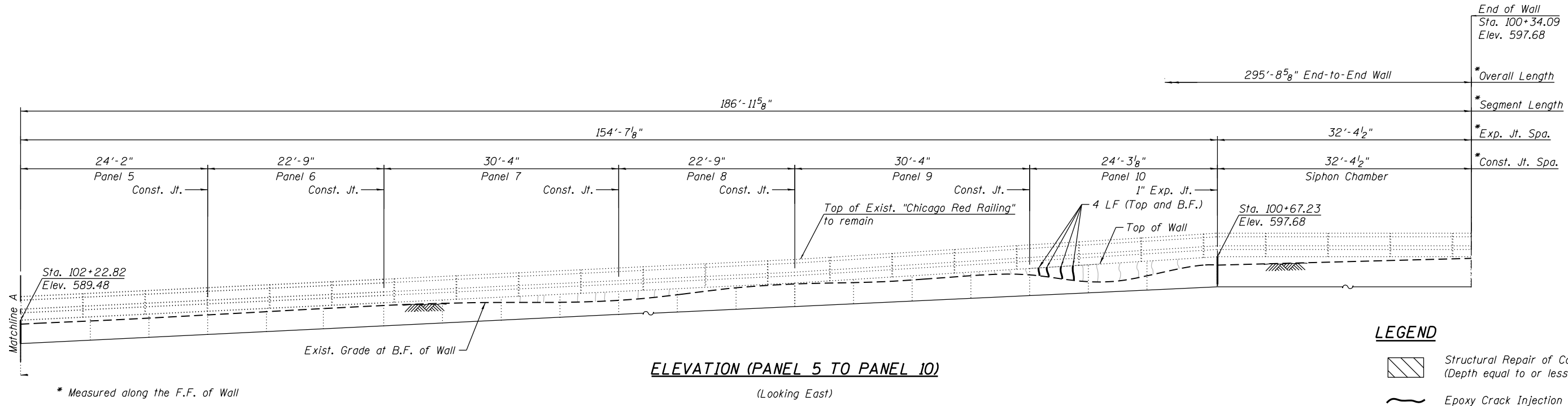
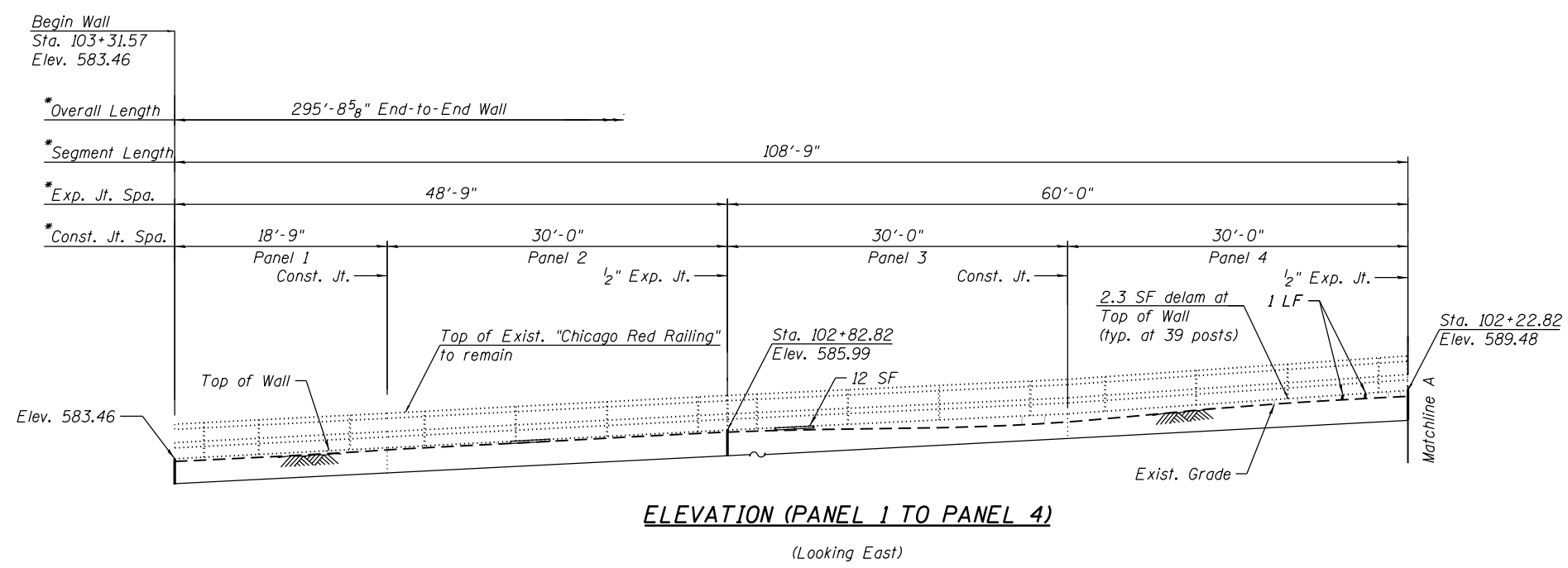
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

WALL ELEVATIONS - FRONT FACE  
STRUCTURE NO. 016-1189

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	899
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

SHEET NO. S3-03 OF S3-04 SHEETS

FILE NAME: D:\V\AECOM-NA-AW51\acocomonline-local\AECOM\_ID502\_NAD\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_II\000\_CAD\008\_Structural\Structure\_EXRW-50\Final Plans\EXRW50-62A77-5HT-004



\* Measured along the F.F. of Wall

**NOTES:**

1. Foundations not shown for clarity.
2. For Epoxy Crack Injection Detail, Bill of Material and additional notes, see Sheet S3-03.

**LEGEND**

- Structural Repair of Concrete (Depth equal to or less than 5 in.)
- Epoxy Crack Injection (Width > 0.06")
- Hairline Crack (Width < 0.06")
- Replace Joint Filler
- Ground Line
- SF Square Foot
- LF Linear Foot
- B.F. Back Face
- F.F. Front Face



USER NAME =	ahmad,issa	DESIGNED -	MAA,JMI	REVISED -	
		CHECKED -	MI,JJS	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	MAA,JMI	REVISED -	
PLOT DATE =	1/31/2020	CHECKED -	MI,JJS	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WALL ELEVATIONS - BACK FACE  
STRUCTURE NO. 016-1189**

SHEET NO. S3-04 OF S3-04 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	900
CONTRACT NO. 62A77				
ILLINOIS		FED. AID PROJECT		