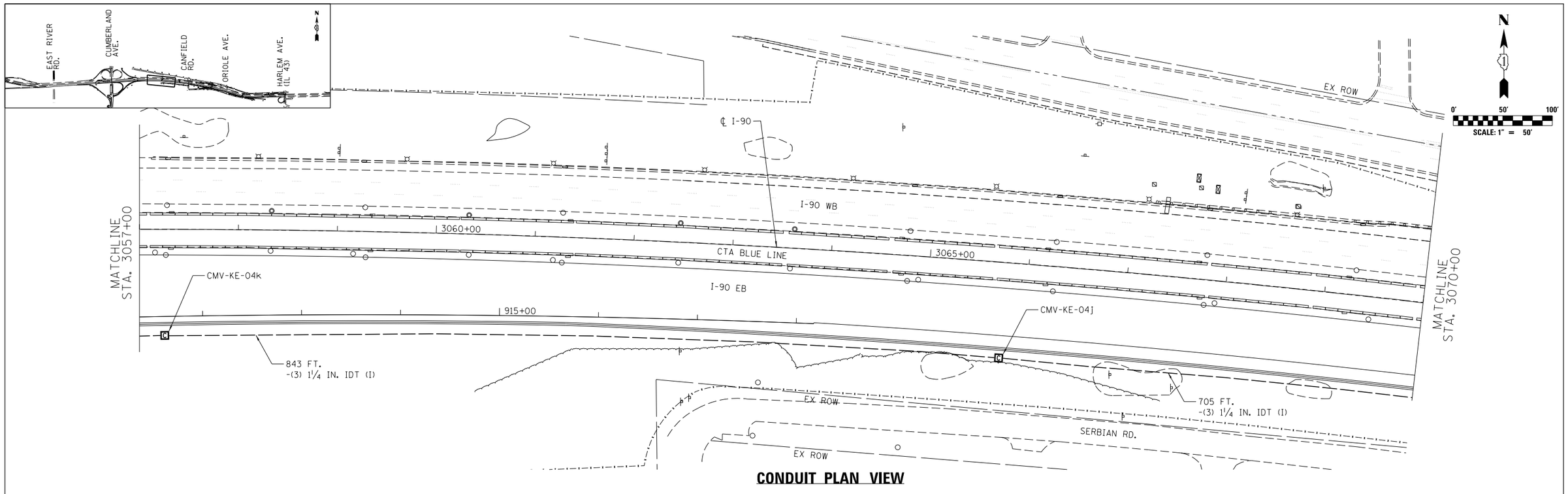
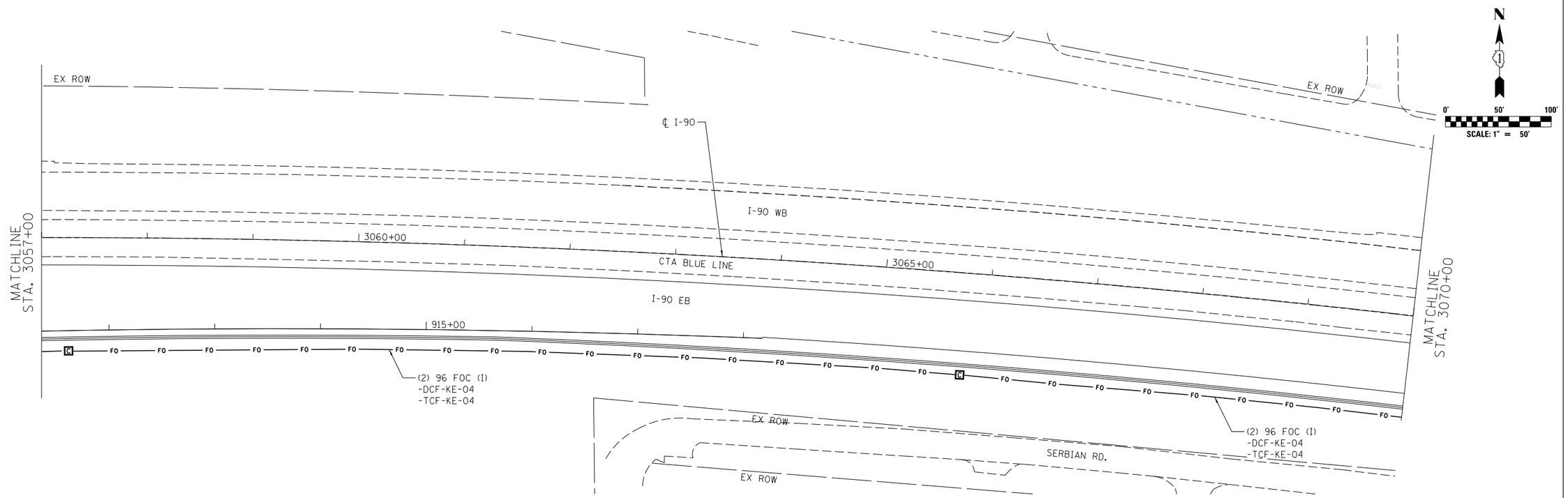


CONDUIT PLAN VIEW



CABLE PLAN VIEW

ITS–12

HNTB

USER NAME = jblakley	DESIGNED RJ	REVISED -
	DRAWN RJ	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED YJ	REVISED -
PLOT DATE = 6/6/2016	DATE 5/6/2016	REVISED -

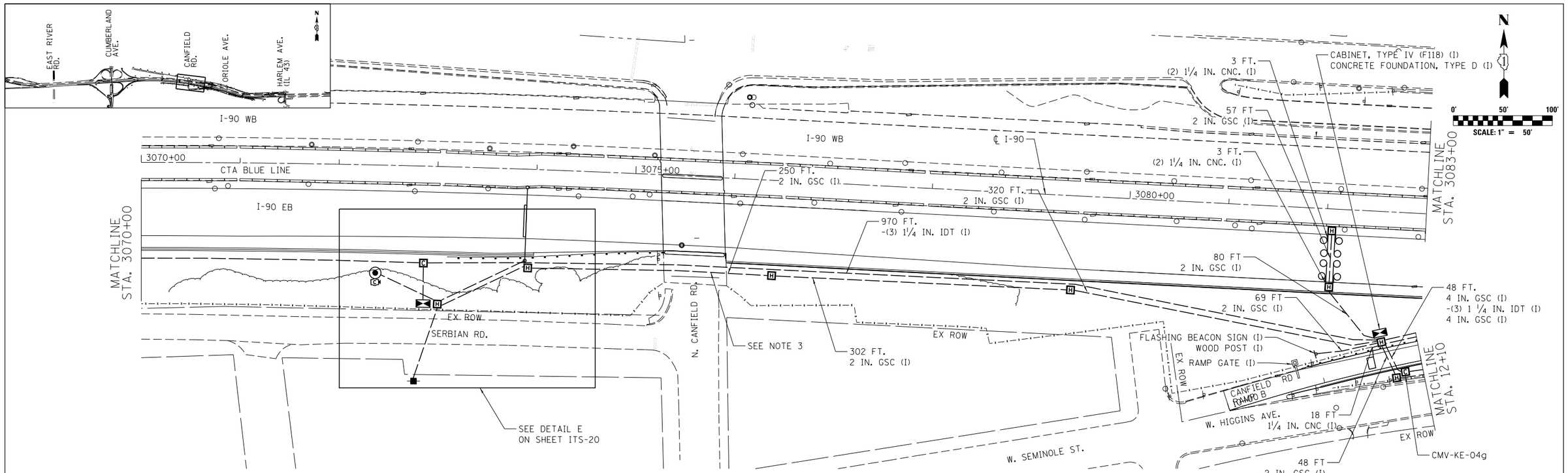
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND I–90 FROM CUMBERLAND AVE TO HARLEM AVE
ITS PROPOSED CONDUIT AND CABLE PLANS

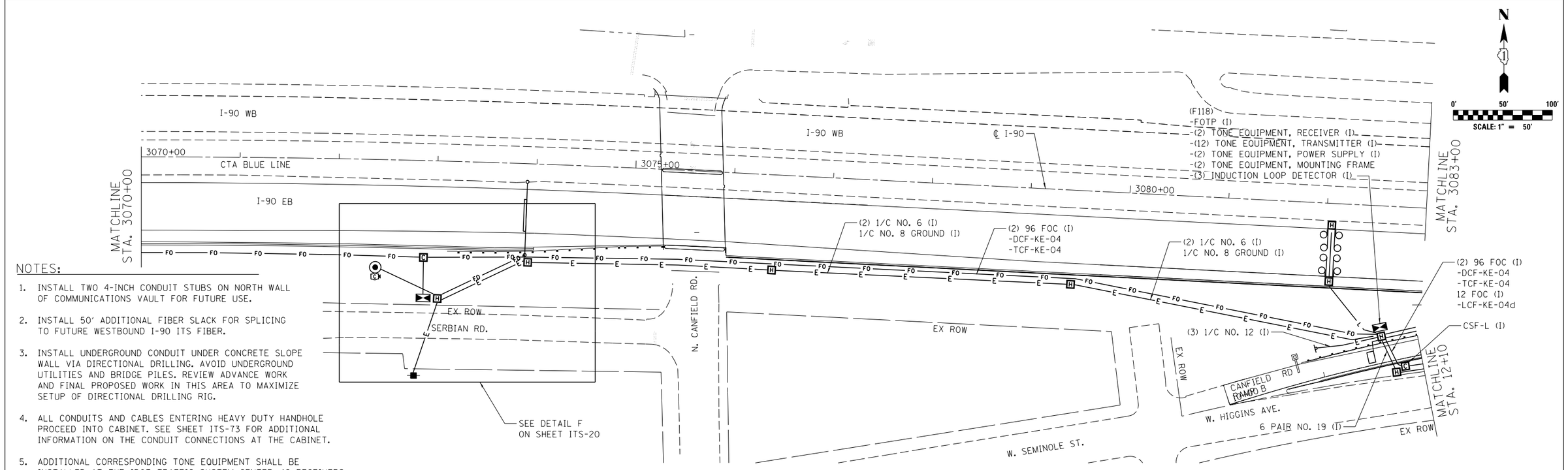
SCALE: 1"=50' | SHEET NO. 5 OF 10 SHEETS | STA. 3057+00 TO STA. 3070+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	301
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-pr-ITS-11.dgn



CONDUIT PLAN VIEW



CABLE PLAN VIEW

NOTES:

1. INSTALL TWO 4-INCH CONDUIT STUBS ON NORTH WALL OF COMMUNICATIONS VAULT FOR FUTURE USE.
2. INSTALL 50' ADDITIONAL FIBER SLACK FOR SPLICING TO FUTURE WESTBOUND I-90 ITS FIBER.
3. INSTALL UNDERGROUND CONDUIT UNDER CONCRETE SLOPE WALL VIA DIRECTIONAL DRILLING. AVOID UNDERGROUND UTILITIES AND BRIDGE PILES. REVIEW ADVANCE WORK AND FINAL PROPOSED WORK IN THIS AREA TO MAXIMIZE SETUP OF DIRECTIONAL DRILLING RIG.
4. ALL CONDUITS AND CABLES ENTERING HEAVY DUTY HANDHOLE PROCEED INTO CABINET. SEE SHEET ITS-73 FOR ADDITIONAL INFORMATION ON THE CONDUIT CONNECTIONS AT THE CABINET.
5. ADDITIONAL CORRESPONDING TONE EQUIPMENT SHALL BE INSTALLED AT THE IDOT TRAFFIC SYSTEM CENTER: 12 RECEIVERS, 2 TRANSMITTERS, 2 POWER SUPPLIES, 2 MOUNTING FRAMES.

ITS–13

HNTB

USER NAME = jblakley	DESIGNED RJ	REVISED -
	DRAWN RJ	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

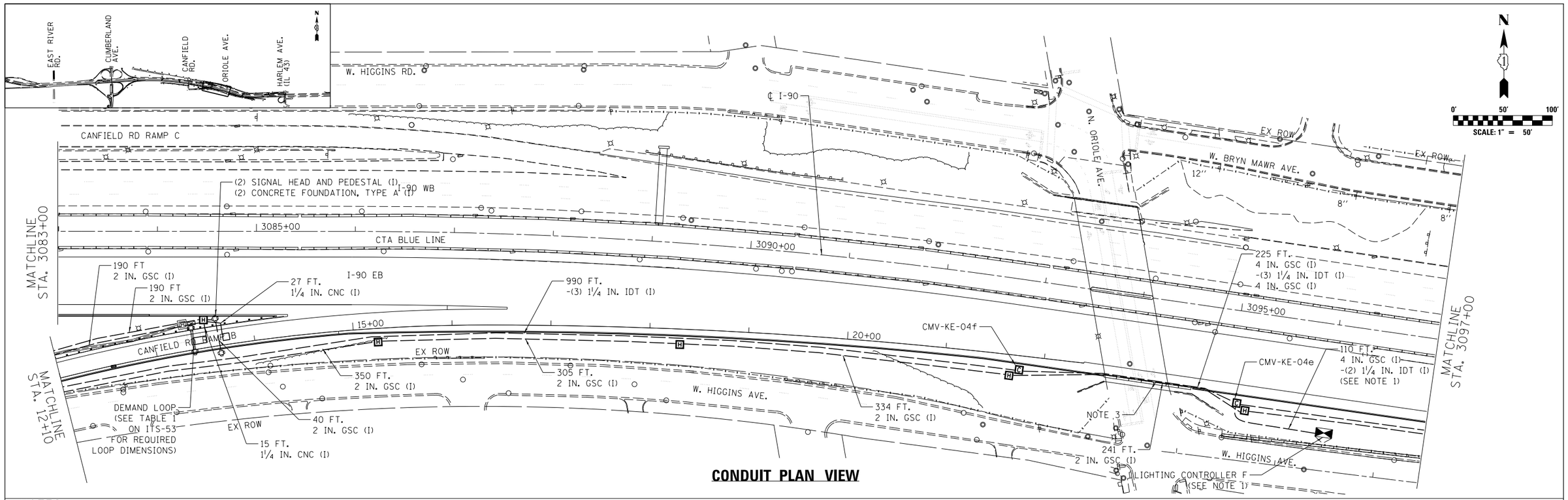
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND I–90 FROM CUMBERLAND AVE TO HARLEM AVE
ITS PROPOSED CONDUIT AND CABLE PLANS

SCALE: 1"=50' | SHEET NO. 6 OF 10 SHEETS | STA. 3070+00 TO STA. 3083+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	302
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

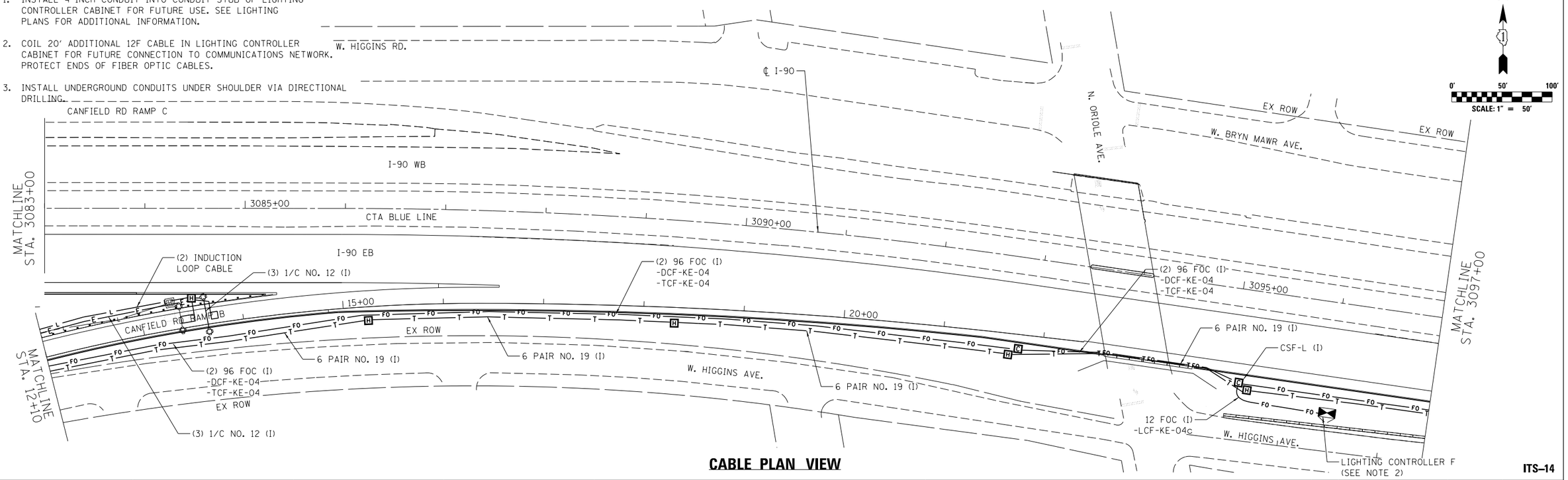
FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-pr-ITS-12.dgn



CONDUIT PLAN VIEW

NOTES:

1. INSTALL 4-INCH CONDUIT INTO CONDUIT STUB OF LIGHTING CONTROLLER CABINET FOR FUTURE USE. SEE LIGHTING PLANS FOR ADDITIONAL INFORMATION.
2. COIL 20' ADDITIONAL 12F CABLE IN LIGHTING CONTROLLER CABINET FOR FUTURE CONNECTION TO COMMUNICATIONS NETWORK. PROTECT ENDS OF FIBER OPTIC CABLES.
3. INSTALL UNDERGROUND CONDUITS UNDER SHOULDER VIA DIRECTIONAL DRILLING.



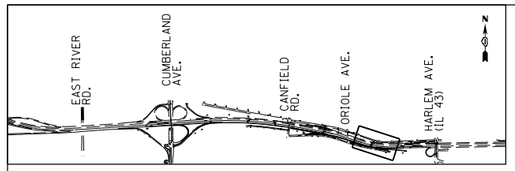
CABLE PLAN VIEW

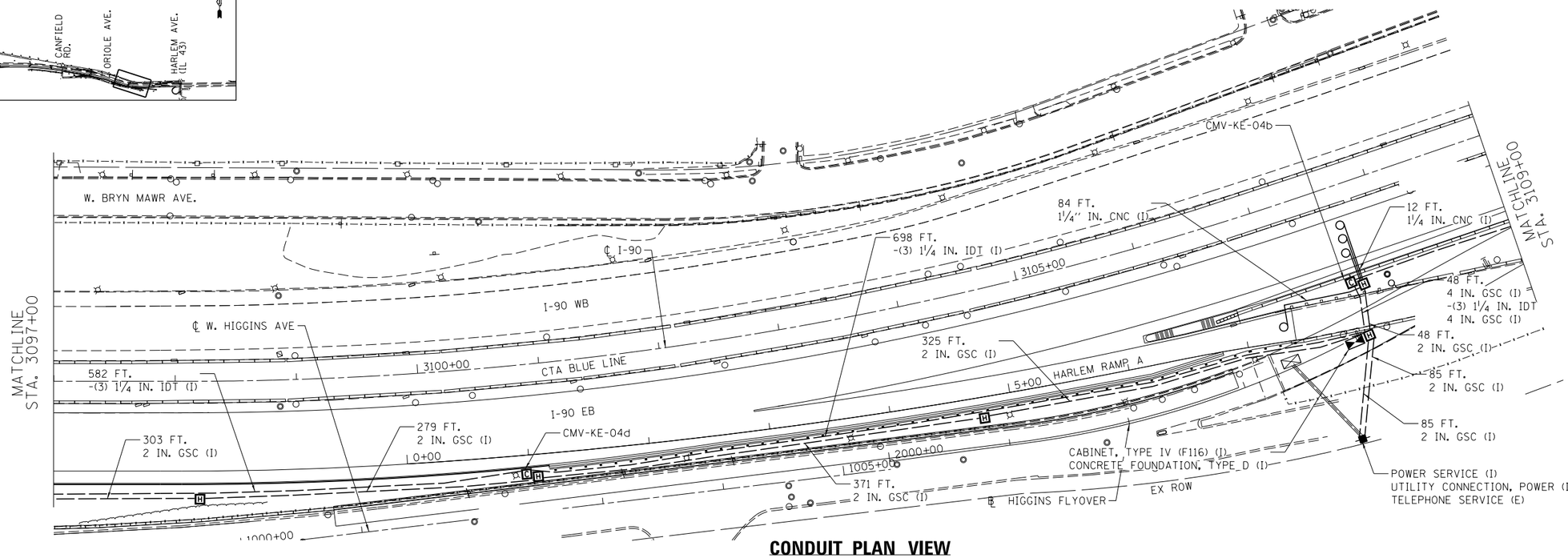
ITS–14

HNTB	USER NAME = jblakley	DESIGNED RJ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EASTBOUND I–90 FROM CUMBERLAND AVE TO HARLEM AVE ITS PROPOSED CONDUIT AND CABLE PLANS
		DRAWN RJ	REVISED -		
	PLOT SCALE = 1.0000 ' / in.	CHECKED YJ	REVISED -		
	PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -		SCALE: 1"=50' | SHEET NO. 7 OF 10 SHEETS | STA. 3083+00 TO STA. 3097+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	303
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-pr-ITS-13.dgn

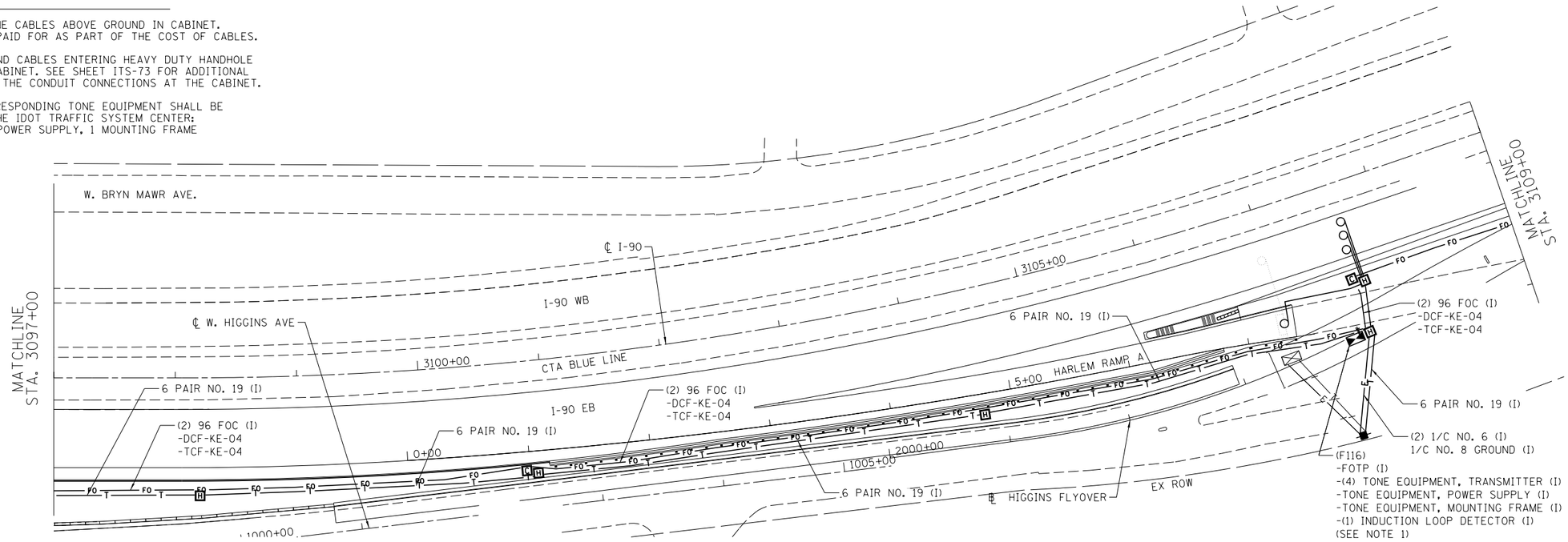




CONDUIT PLAN VIEW

NOTES:

1. SPLICE TELEPHONE CABLES ABOVE GROUND IN CABINET. SPLICES TO BE PAID FOR AS PART OF THE COST OF CABLES.
2. ALL CONDUITS AND CABLES ENTERING HEAVY DUTY HANDHOLE PROCEED INTO CABINET. SEE SHEET ITS-73 FOR ADDITIONAL INFORMATION ON THE CONDUIT CONNECTIONS AT THE CABINET.
3. ADDITIONAL CORRESPONDING TONE EQUIPMENT SHALL BE INSTALLED AT THE IDOT TRAFFIC SYSTEM CENTER: 4 RECEIVERS, 1 POWER SUPPLY, 1 MOUNTING FRAME



CABLE PLAN VIEW

ITS–15

HNTB	USER NAME = jblakley	DESIGNED RJ	REVISED -
		DRAWN RJ	REVISED -
	PLOT SCALE = 1.0000 ' / in.	CHECKED YJ	REVISED -
	PLOT DATE = 6/6/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND I–90 FROM CUMBERLAND AVE TO HARLEM AVE
ITS PROPOSED CONDUIT AND CABLE PLANS

SCALE: 1"=50' | SHEET NO. 8 OF 10 SHEETS | STA. 3097+00 | TO STA. 3109+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	304
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

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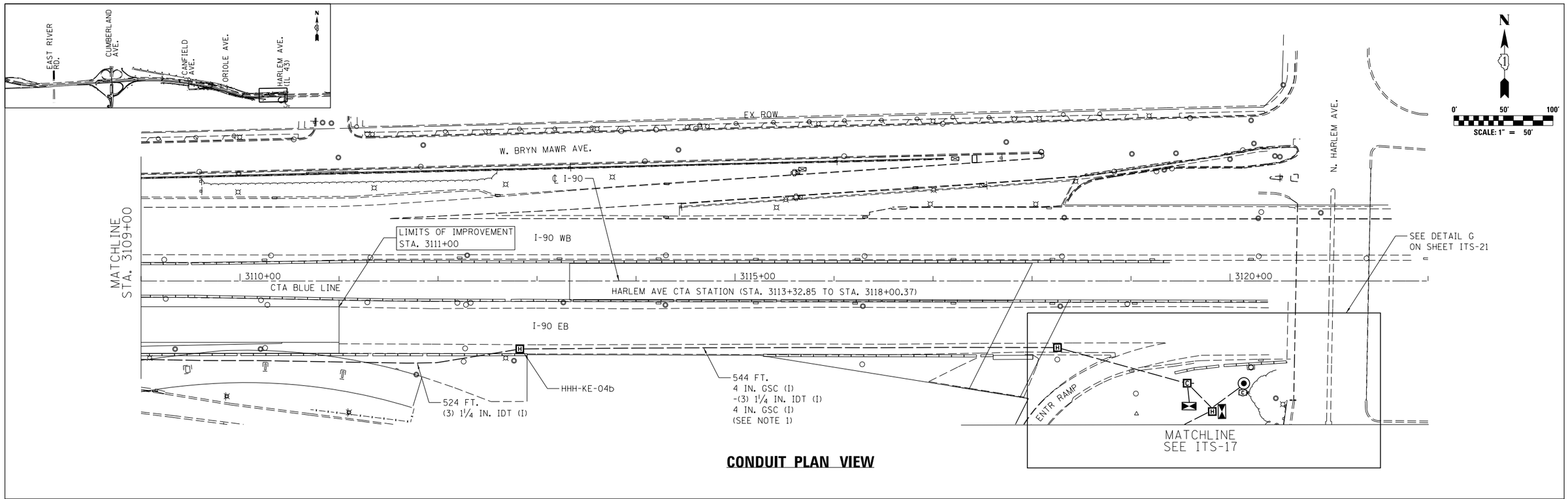
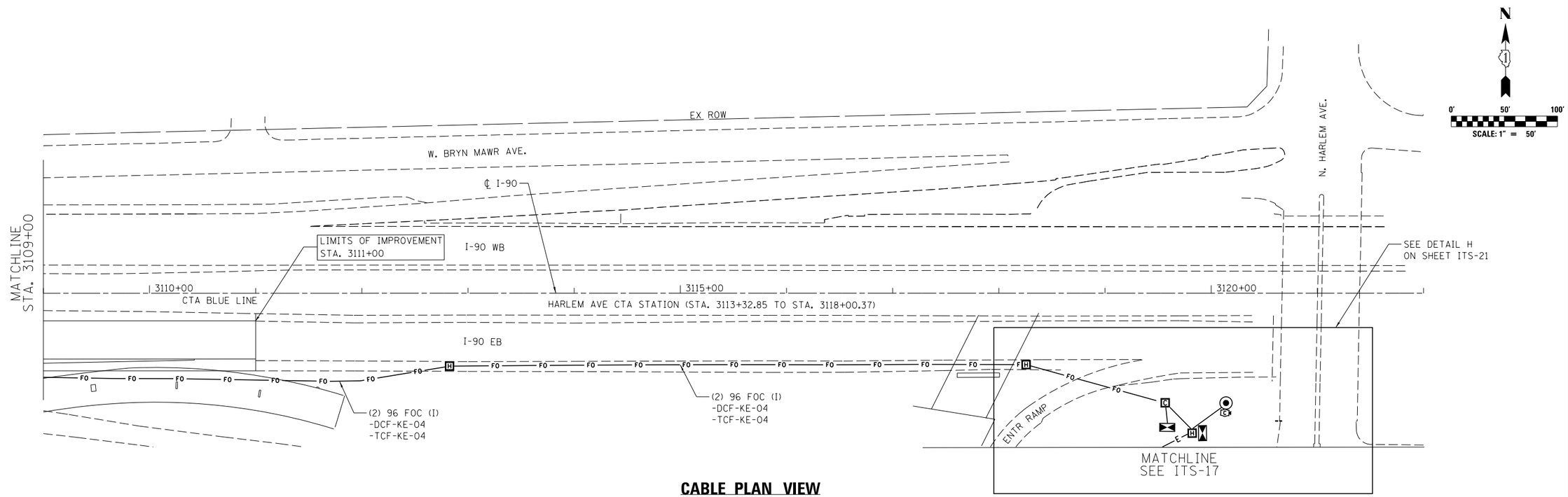


CONDUIT PLAN VIEW



CABLE PLAN VIEW

NOTES

1. INSTALL UNDERGROUND CONDUIT UNDER EXISTING SHOULDER VIA DIRECTIONAL DRILLING.

ITS–16

HNTB	USER NAME = jblakley	DESIGNED RJ	REVISED -
		DRAWN RJ	REVISED -
	PLOT SCALE = 1.0000 ' / in.	CHECKED YJ	REVISED -
	PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

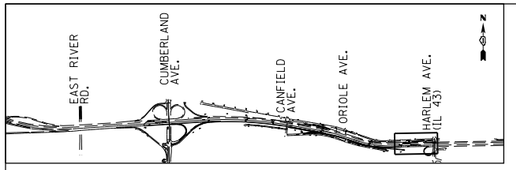
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

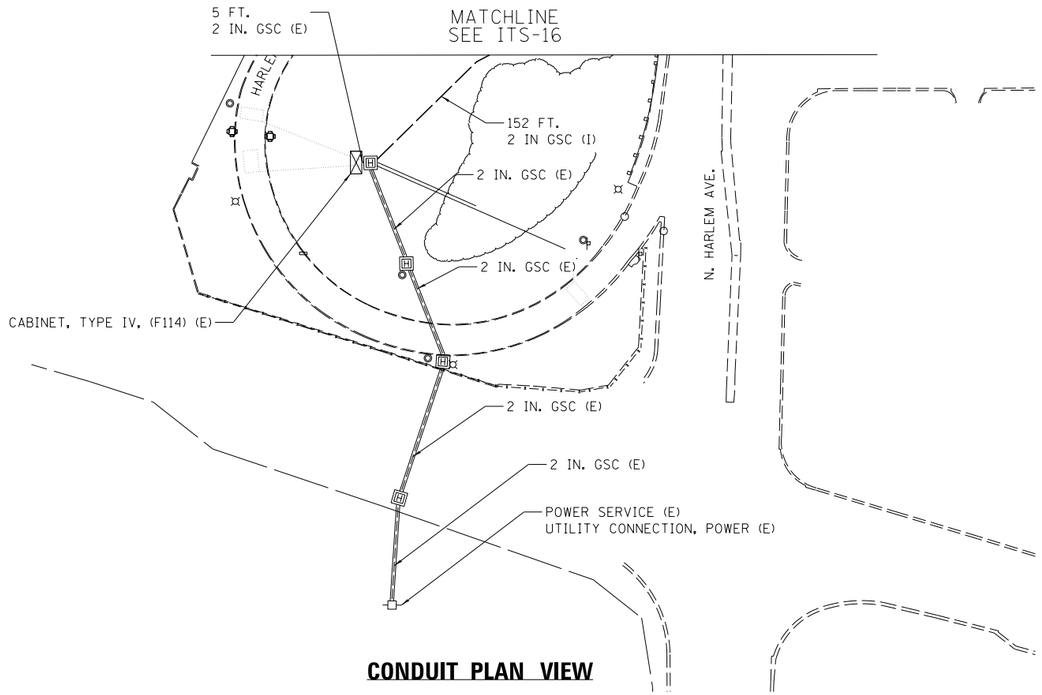
EASTBOUND I–90 FROM CUMBERLAND AVE TO HARLEM AVE
ITS PROPOSED CONDUIT AND CABLE PLANS

SCALE: 1"=50' | SHEET NO. 9 OF 10 SHEETS | STA. 3109+00 TO STA.

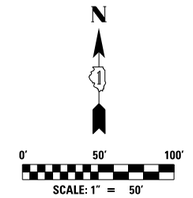
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	305
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

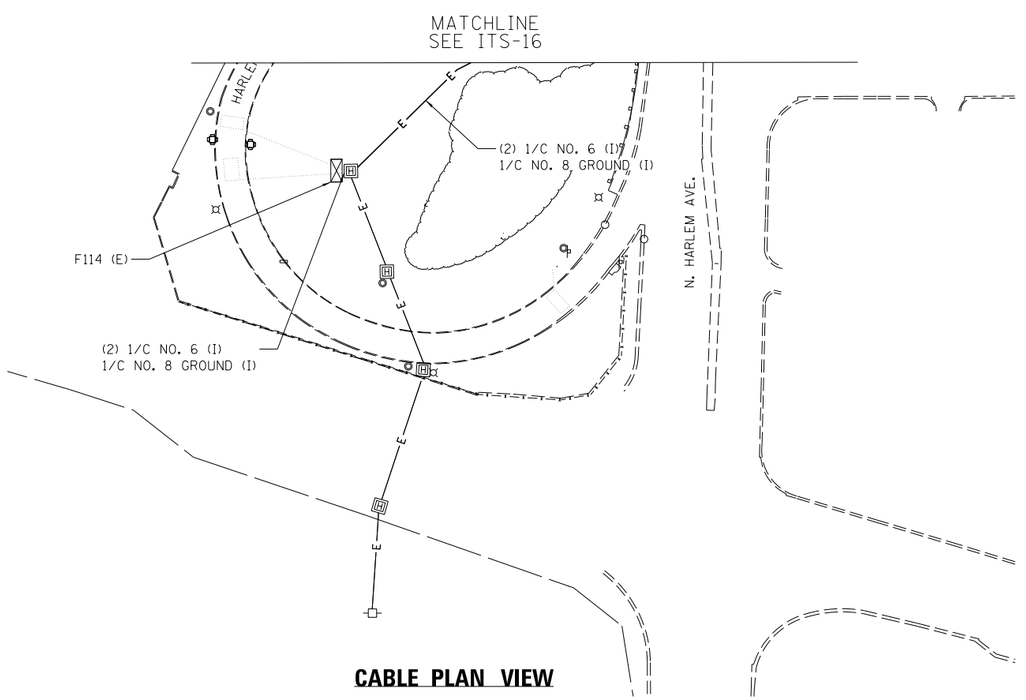
FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-pr-ITS-15.dgn



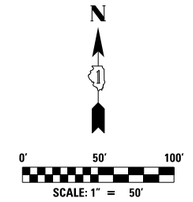


CONDUIT PLAN VIEW





CABLE PLAN VIEW



NOTES:

1. SEE DETAIL G ON SHEET ITS-21
2. SEE DETAIL H ON SHEET ITS-21

ITS–17

USER NAME = jblakley	DESIGNED RJ	REVISED -	
	DRAWN RJ	REVISED -	
PLOT SCALE = 1.0000 ' / in.	CHECKED YJ	REVISED -	
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -	

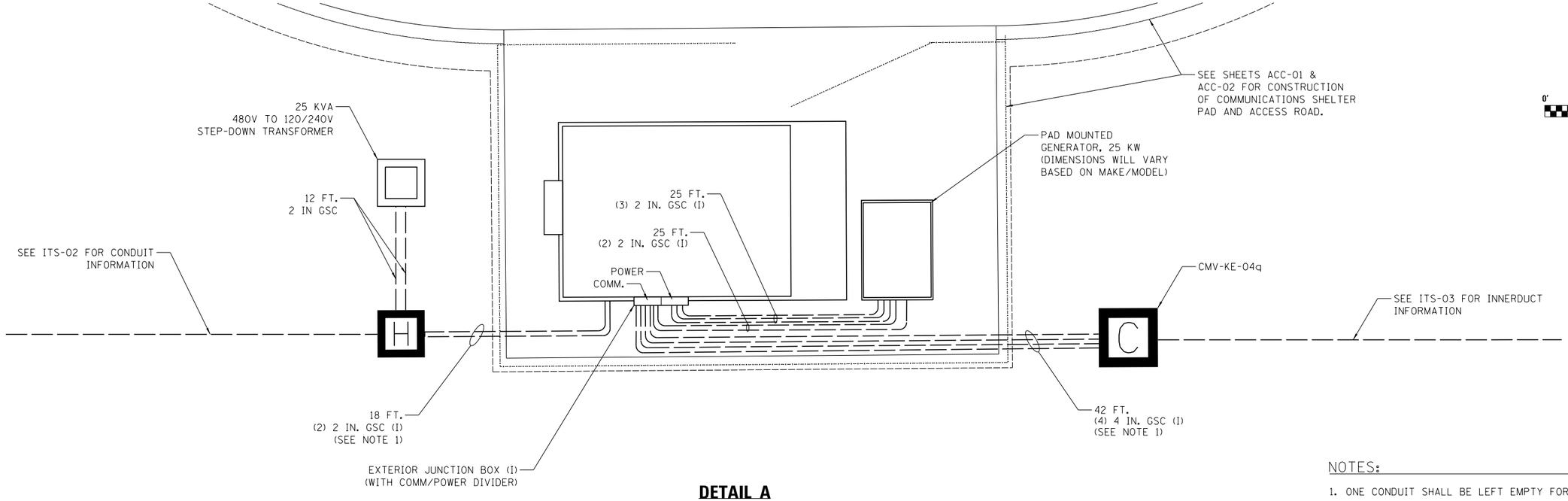
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND I–90 FROM CUMBERLAND AVE TO HARLEM AVE
ITS PROPOSED CONDUIT AND CABLE PLANS

SCALE: 1''=50' | SHEET NO. 10 OF 10 SHEETS | STA. 3109+00 TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	306
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

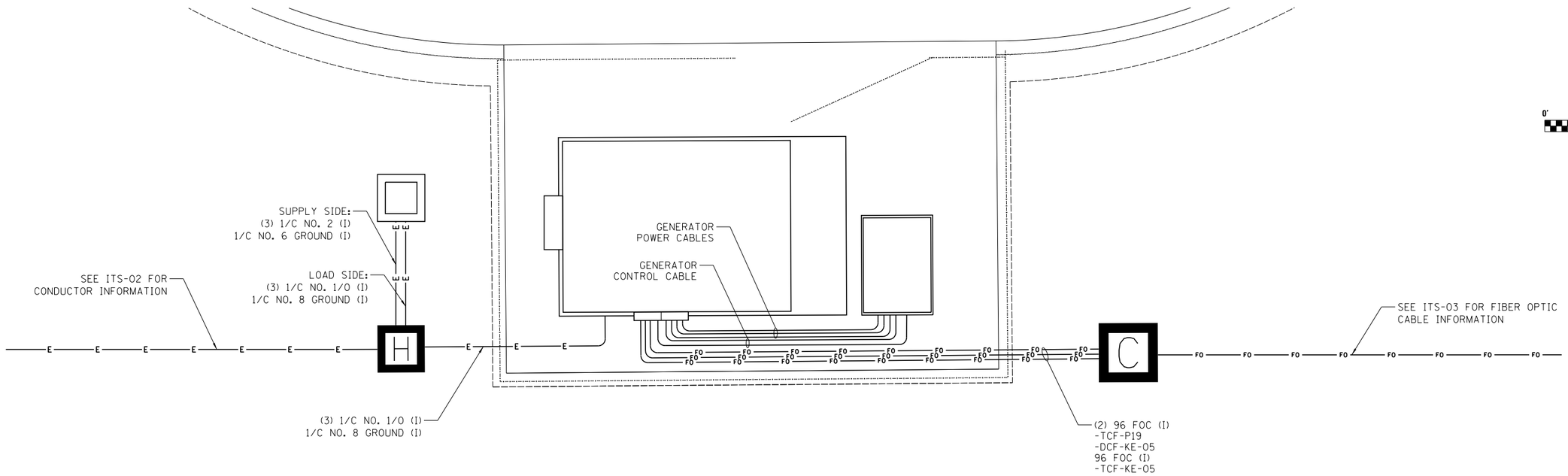
FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-pr-ITS-16.dgn



DETAIL A

NOTES:

1. ONE CONDUIT SHALL BE LEFT EMPTY FOR FUTURE USE.



DETAIL B

ITS–18

HNTB	USER NAME = jblakley	DESIGNED RJ	REVISED -
		DRAWN RJ	REVISED -
	PLOT SCALE = 1.0000 ' / in.	CHECKED YJ	REVISED -
	PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

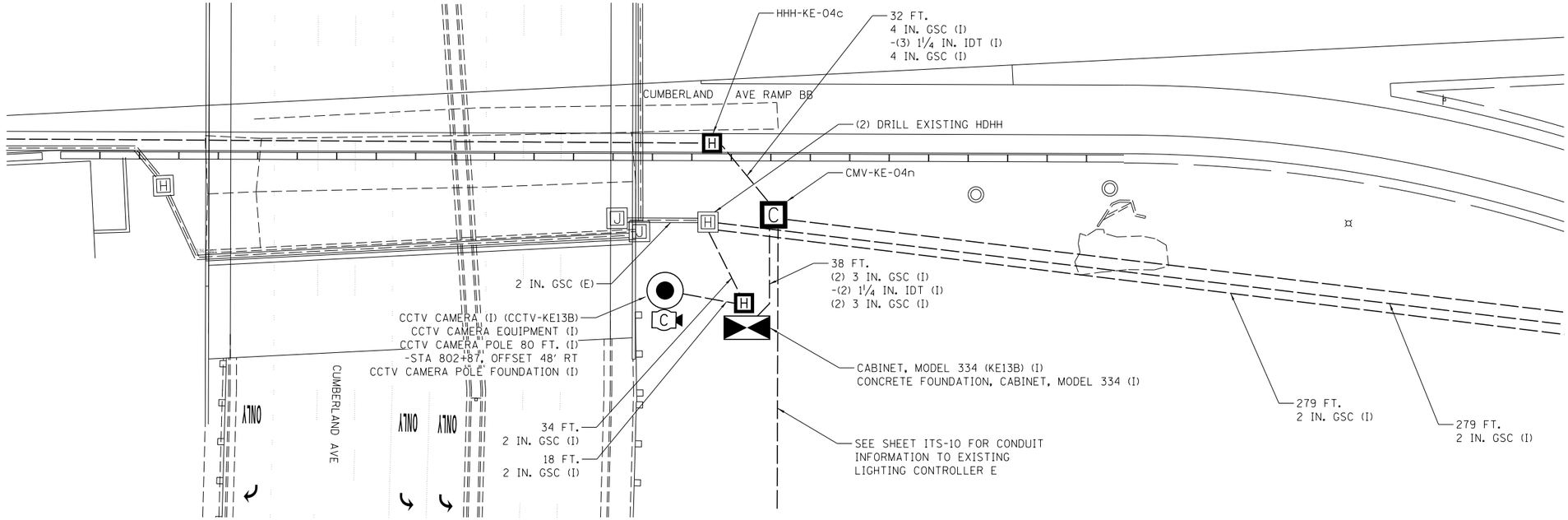
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND I–90 FROM CUMBERLAND AVE TO HARLEM AVE
ITS SITE INSTALLATION PLANS

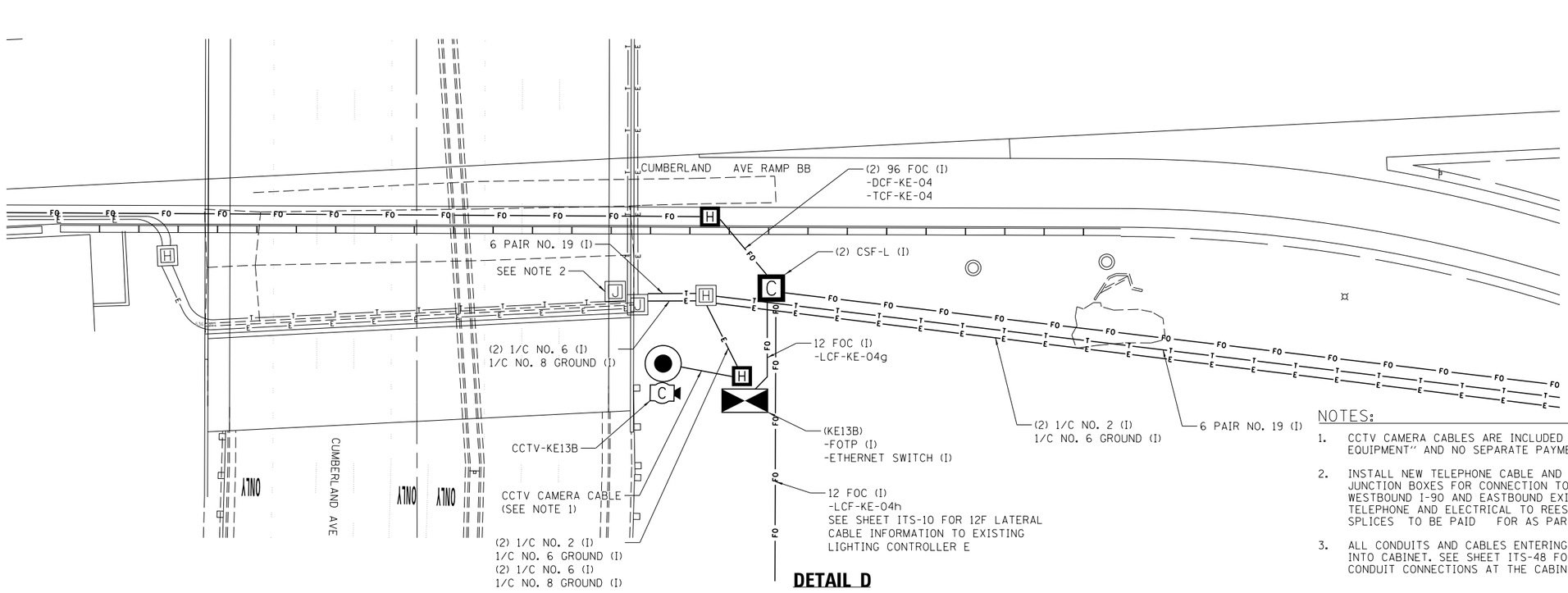
SCALE: 1''=5' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	307
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT 34			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-17.dgn



DETAIL C



DETAIL D

NOTES:

1. CCTV CAMERA CABLES ARE INCLUDED AS PART OF "CCTV CAMERA EQUIPMENT" AND NO SEPARATE PAYMENT WILL BE MADE.
2. INSTALL NEW TELEPHONE CABLE AND ELECTRICAL CABLE INTO EXISTING JUNCTION BOXES FOR CONNECTION TO EXISTING EQUIPMENT ON WESTBOUND I-90 AND EASTBOUND EXIT RAMP GORE. SPLICE TO EXISTING TELEPHONE AND ELECTRICAL TO REESTABLISH COMMUNICATIONS. ALL SPLICES TO BE PAID FOR AS PART OF COST OF CABLES.
3. ALL CONDUITS AND CABLES ENTERING HEAVY DUTY HANDHOLE PROCEED INTO CABINET. SEE SHEET ITS-48 FOR ADDITIONAL INFORMATION ON THE CONDUIT CONNECTIONS AT THE CABINET.

HNTB

USER NAME = jblakley	DESIGNED RJ	REVISED -
	DRAWN RJ	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

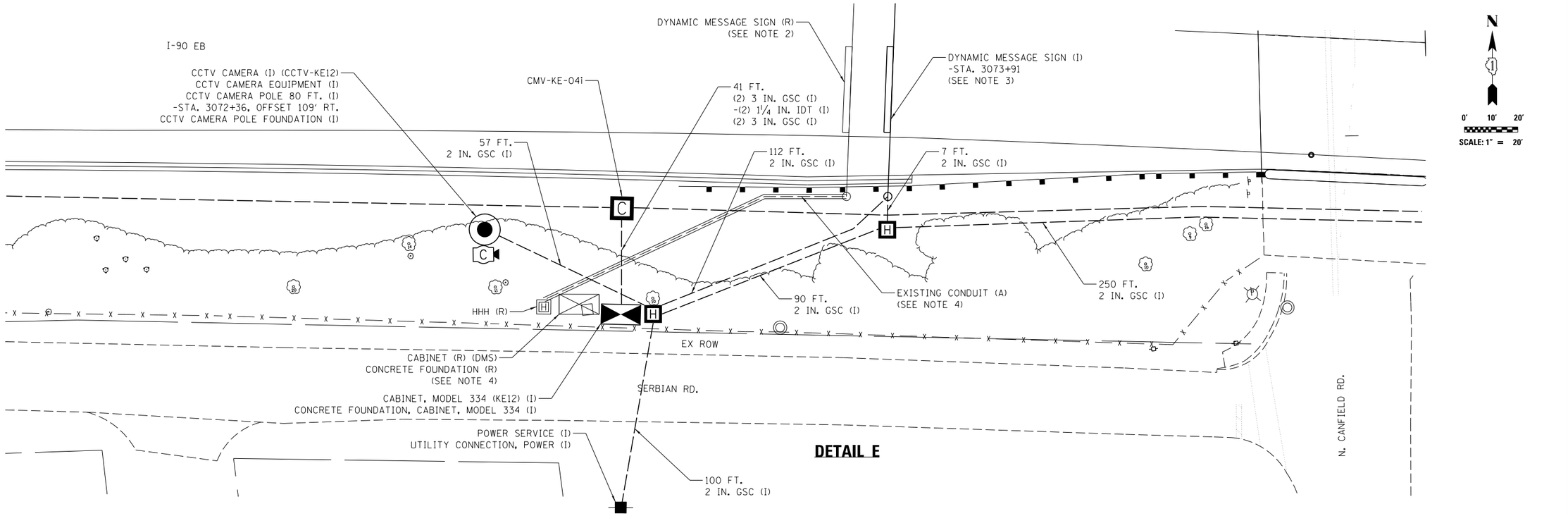
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND I-90 FROM CUMBERLAND AVE TO HARLEM AVE
ITS SITE INSTALLATION PLANS

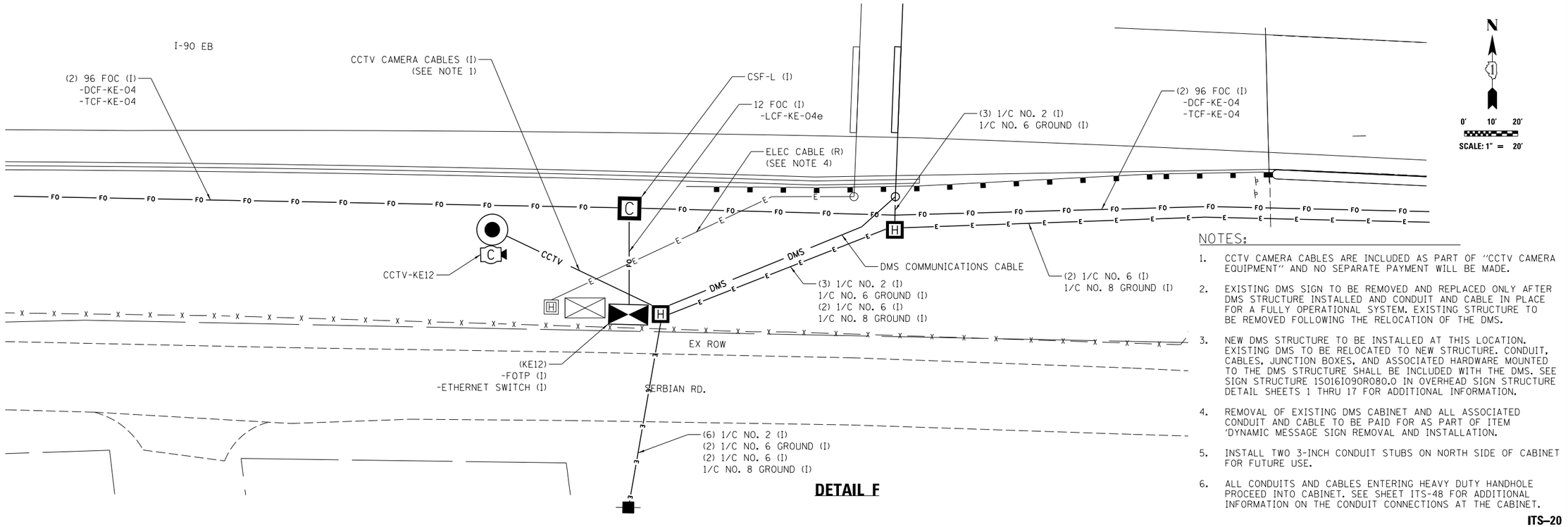
SCALE: 1"=20' | SHEET NO. 2 OF 34 SHEETS | STA. 3109+00 TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	308
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-18.dgn



DETAIL E



DETAIL F

NOTES:

1. CCTV CAMERA CABLES ARE INCLUDED AS PART OF "CCTV CAMERA EQUIPMENT" AND NO SEPARATE PAYMENT WILL BE MADE.
2. EXISTING DMS SIGN TO BE REMOVED AND REPLACED ONLY AFTER DMS STRUCTURE INSTALLED AND CONDUIT AND CABLE IN PLACE FOR A FULLY OPERATIONAL SYSTEM. EXISTING STRUCTURE TO BE REMOVED FOLLOWING THE RELOCATION OF THE DMS.
3. NEW DMS STRUCTURE TO BE INSTALLED AT THIS LOCATION. EXISTING DMS TO BE RELOCATED TO NEW STRUCTURE. CONDUIT, CABLES, JUNCTION BOXES, AND ASSOCIATED HARDWARE MOUNTED TO THE DMS STRUCTURE SHALL BE INCLUDED WITH THE DMS. SEE SIGN STRUCTURE 1SO16I09OR080.0 IN OVERHEAD SIGN STRUCTURE DETAIL SHEETS 1 THRU 17 FOR ADDITIONAL INFORMATION.
4. REMOVAL OF EXISTING DMS CABINET AND ALL ASSOCIATED CONDUIT AND CABLE TO BE PAID FOR AS PART OF ITEM 'DYNAMIC MESSAGE SIGN REMOVAL AND INSTALLATION.
5. INSTALL TWO 3-INCH CONDUIT STUBS ON NORTH SIDE OF CABINET FOR FUTURE USE.
6. ALL CONDUITS AND CABLES ENTERING HEAVY DUTY HANDHOLE PROCEED INTO CABINET. SEE SHEET ITS-48 FOR ADDITIONAL INFORMATION ON THE CONDUIT CONNECTIONS AT THE CABINET.

HNTB	USER NAME = jblakley	DESIGNED RJ	REVISED -
		DRAWN RJ	REVISED -
	PLOT SCALE = 1.0000 ' / in.	CHECKED YJ	REVISED -
	PLOT DATE = 6/6/2016	DATE 5/6/2016	REVISED -

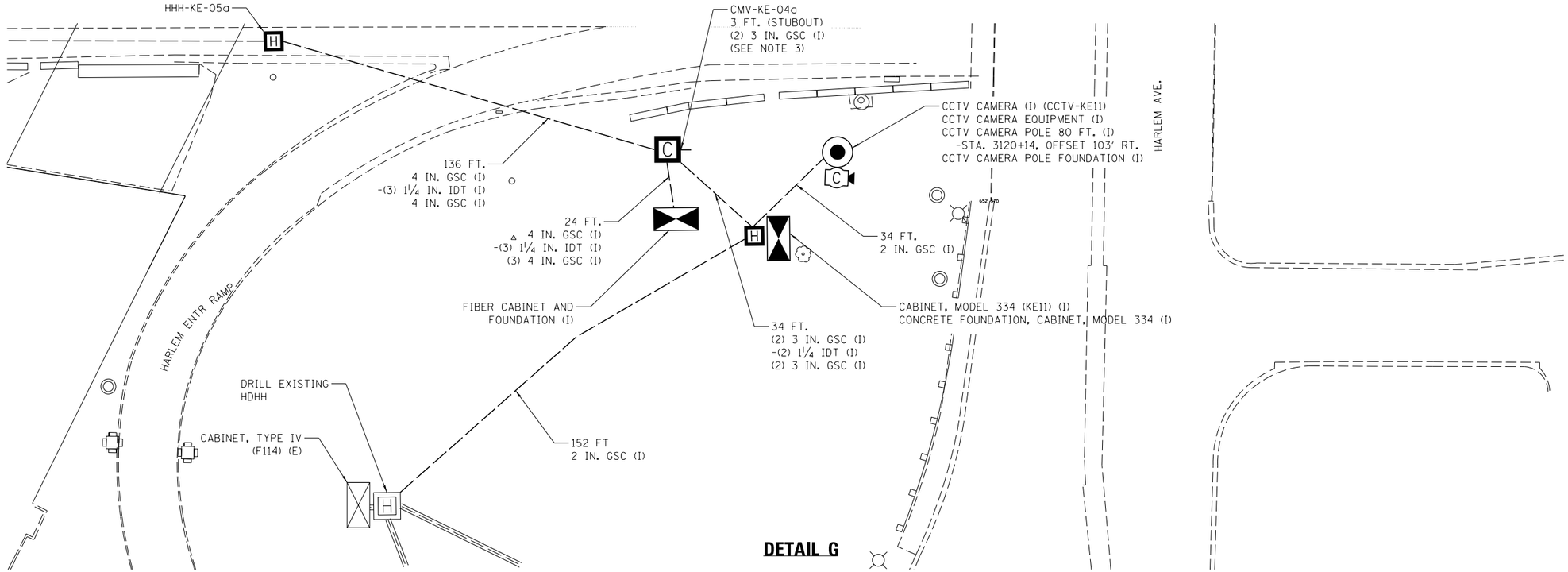
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND I-90 FROM CUMBERLAND AVE TO HARLEM AVE
ITS SITE INSTALLATION PLANS

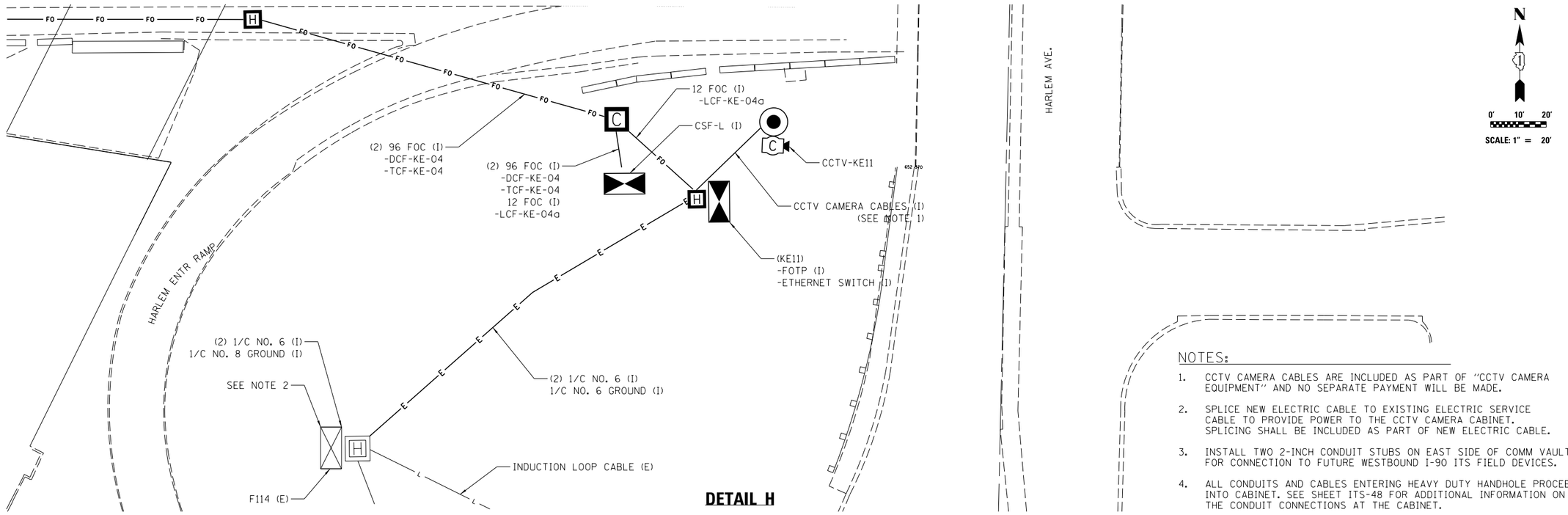
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	309
		CONTRACT NO. 60Y38		
1"=20'	ILLINOIS	FED. AID PROJECT 34		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-19.dgn



DETAIL G



DETAIL H

NOTES:

1. CCTV CAMERA CABLES ARE INCLUDED AS PART OF "CCTV CAMERA EQUIPMENT" AND NO SEPARATE PAYMENT WILL BE MADE.
2. SPLICE NEW ELECTRIC CABLE TO EXISTING ELECTRIC SERVICE CABLE TO PROVIDE POWER TO THE CCTV CAMERA CABINET. SPLICING SHALL BE INCLUDED AS PART OF NEW ELECTRIC CABLE.
3. INSTALL TWO 2-INCH CONDUIT STUBS ON EAST SIDE OF COMM VAULT FOR CONNECTION TO FUTURE WESTBOUND I-90 ITS FIELD DEVICES.
4. ALL CONDUITS AND CABLES ENTERING HEAVY DUTY HANDHOLE PROCEED INTO CABINET. SEE SHEET ITS-48 FOR ADDITIONAL INFORMATION ON THE CONDUIT CONNECTIONS AT THE CABINET.

HNTB

USER NAME = jblakley	DESIGNED RJ	REVISED -
	DRAWN RJ	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

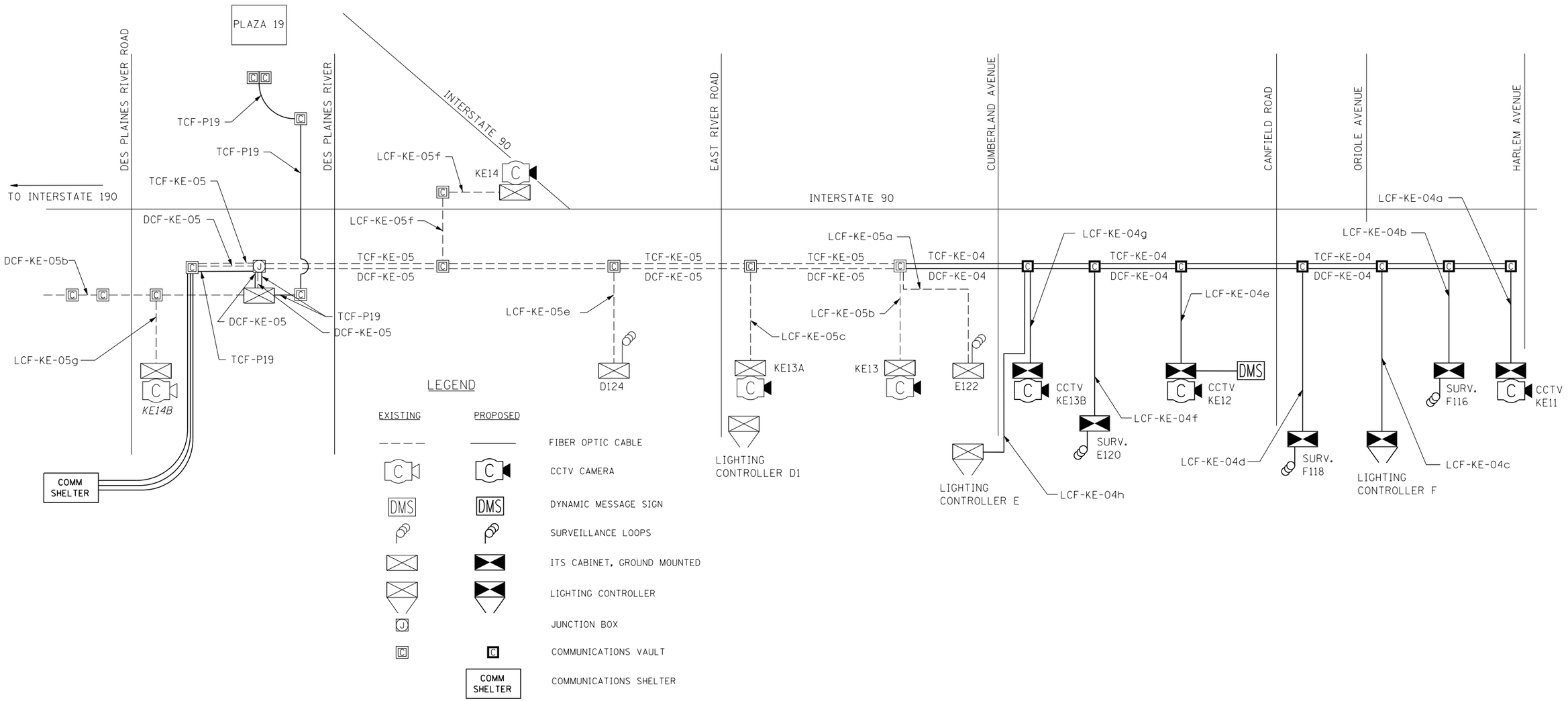
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND I-90 FROM CUMBERLAND AVE TO HARLEM AVE
ITS SITE INSTALLATION PLANS

SCALE: 1"=20' | SHEET NO. 4 OF 34 SHEETS | STA. 3109+00 TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	310
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-20.dgn



ITS–22

HNTB

USER NAME = jblakley	DESIGNED - JZ	REVISED -
	DRAWN - JZ	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

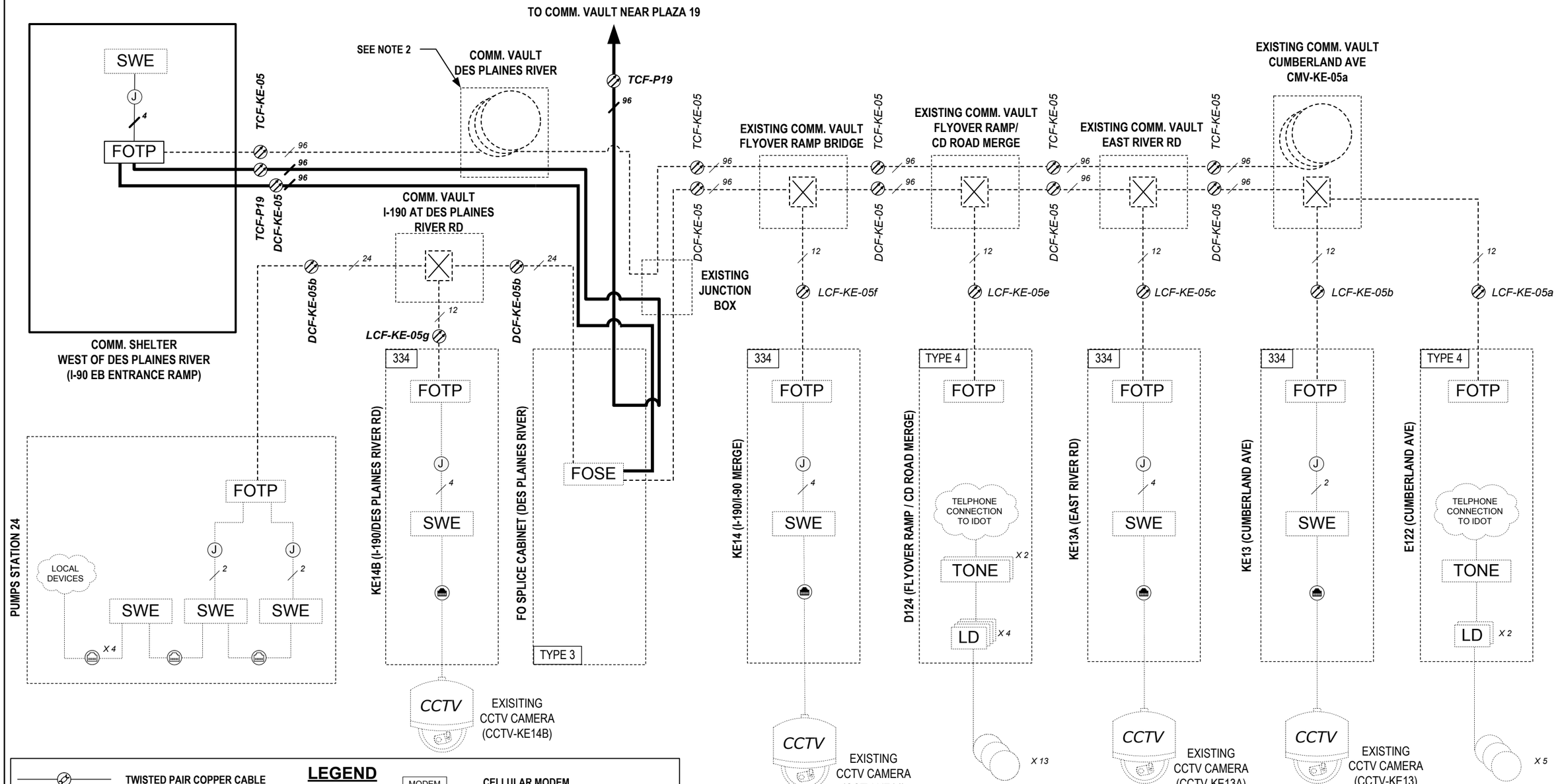
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SINGLE LINE FIBER DIAGRAM
EASTBOUND I–90 FROM CUMBERLAND AVE TO HARLEM AVE

SCALE: N.T.S. | SHEET NO. 5 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	311
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-21.dgn



LEGEND

- TWISTED PAIR COPPER CABLE
- UNSHIELDED CAT-5E CABLE
- SHIELDED CAT-5E CABLE
- FIBER OPTIC JUMPER (NO. OF JUMPERS)
- FIBER OPTIC CABLE, SINGLE MODE (STRAND COUNT)
- FIBER OPTIC SPLICE CLOSURE
- FOSE — FIBER OPTIC SPLICE ENCLOSURE
- FOTP — FIBER OPTIC TERMINATION PANEL, 12F OR 24F
- TS — TERMINAL SERVER
- MODEM — CELLULAR MODEM
- TONE — TONE RACK EQUIPMENT
- X 13 — INDUCTION LOOP (NO. OF LOOPS)
- LD X 6 — INDUCTIVE LOOP DETECTOR (NO. OF LOOP DETECTOR UNITS)
- SWE — ETHERNET SWITCH
- RVDS — TEMPORARY VEHICLE DETECTION SYSTEM
- CCTV — CCTV CAMERA

NOTES:
1. DASHED LINES INDICATED EXISITNG EQUIPMENT, CABLES, AND ENCLOSURES
2. 700 FEET OF FOC SLACK AVAILABLE IN EXISTING COMMUNICATIONS VAULT FOR CONNECTION TO NEW COMMUNICATIONS SHELTER.
3. ETHERNET SWITCHES HAVE GIGABIT FIBER OPTIC PORTS.
4. NOT ALL COMMUNICATIONS VAULTS ARE SHOWN FOR CLARITY.
5. JUMPER CABLES USED FOR PATCHING THROUGH FIBER CONNECTIONS NOW SHOWN. SEE SPLICING TABLES FOR MORE DETAIL.

ITS-23

HNTB

USER NAME = $USER$	DESIGNED RJ	REVISED -
	DRAWN RJ	REVISED -
PLOT SCALE = $SCALE$	CHECKED YJ	REVISED -
PLOT DATE = $DATE$	DATE 5/6/16	REVISED -

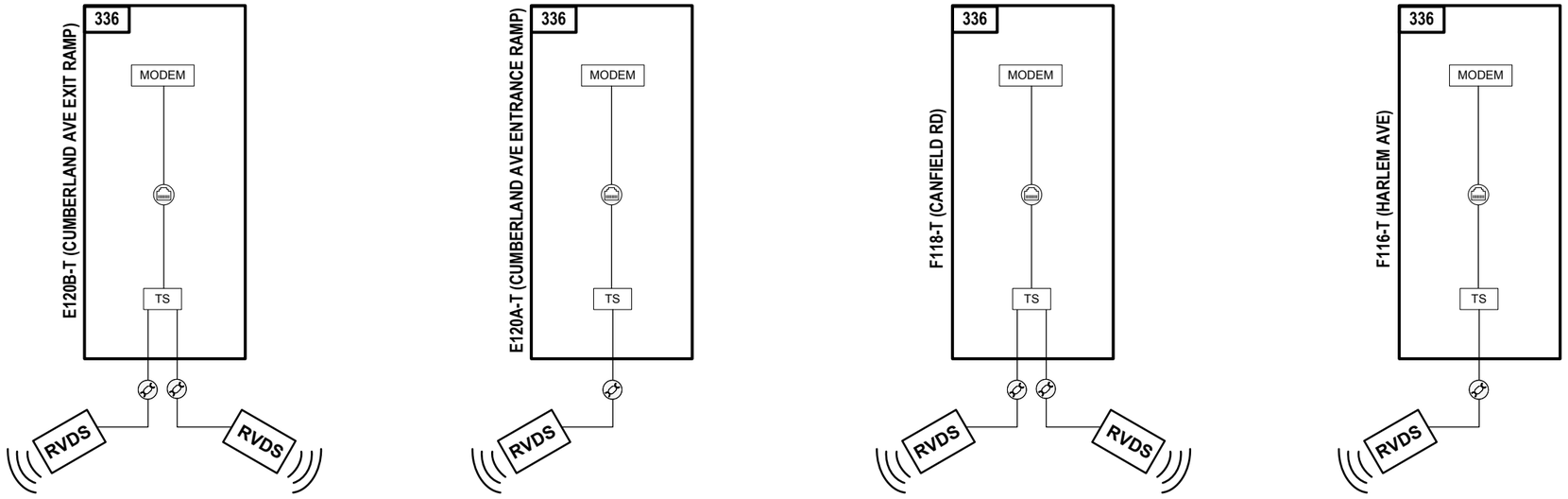
FILE NAME = $FILE$

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

ADVANCE COMMUNICATIONS OVERVIEW PLAN

SCALE: | SHEET NO. 1 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	312
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		



LEGEND

- TWISTED PAIR COPPER CABLE
- UNSHIELDED CAT-5E CABLE
- SHIELDED CAT-5E CABLE
- FIBER OPTIC JUMPER (NO. OF JUMPERS)
- FIBER OPTIC CABLE, SINGLE MODE (STRAND COUNT)
- FIBER OPTIC SPLICE CLOSURE
- FOSE — FIBER OPTIC SPLICE ENCLOSURE
- FOTP — FIBER OPTIC TERMINATION PANEL, 12F OR 24F
- TS — TERMINAL SERVER
- MODEM — CELLULAR MODEM
- TONE — TONE RACK EQUIPMENT
- X 13 — INDUCTION LOOP (NO. OF LOOPS)
- LD X 6 — INDUCTIVE LOOP DETECTOR (NO. OF LOOP DETECTOR UNITS)
- SWE — ETHERNET SWITCH
- RVDS — TEMPORARY VEHICLE DETECTION SYSTEM
- CCTV — CCTV CAMERA

ITS-24

HNTB

USER NAME = $USER$	DESIGNED RJ	REVISED -
	DRAWN RJ	REVISED -
PLOT SCALE = $SCALE$	CHECKED YJ	REVISED -
PLOT DATE = $DATE$	DATE 5/6/16	REVISED -

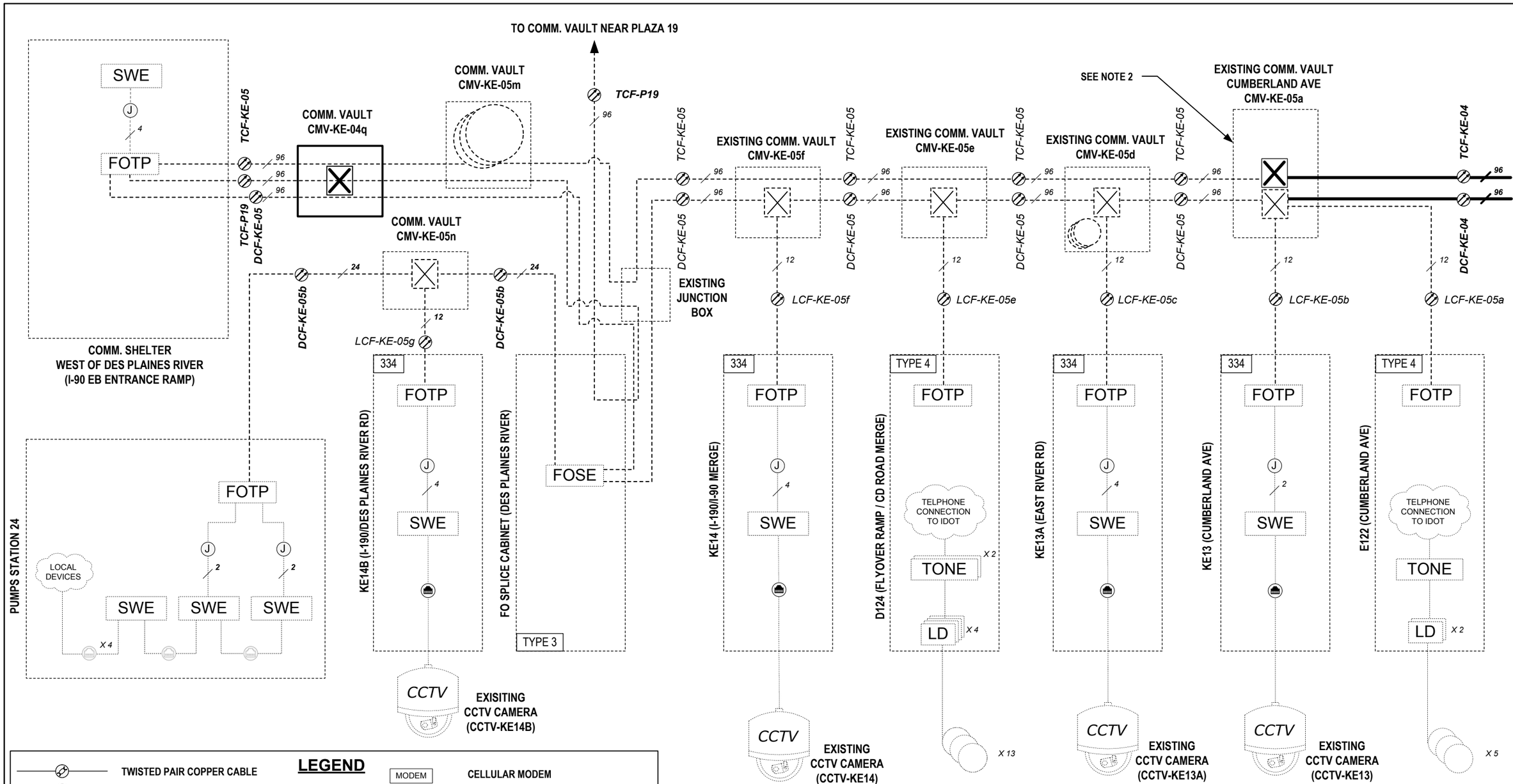
FILE NAME = $FILE$

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

ADVANCE COMMUNICATIONS OVERVIEW PLAN

SCALE: | SHEET NO. 2 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	313
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		



LEGEND

- TWISTED PAIR COPPER CABLE
- UNSHIELDED CAT-5E CABLE
- SHIELDED CAT-5E CABLE
- FIBER OPTIC JUMPER (NO. OF JUMPERS)
- FIBER OPTIC CABLE, SINGLE MODE (STRAND COUNT)
- FIBER OPTIC SPLICE CLOSURE
- FOSE — FIBER OPTIC SPLICE ENCLOSURE
- FOTP — FIBER OPTIC TERMINATION PANEL, 12F OR 24F
- TS — TERMINAL SERVER
- MODEM — CELLULAR MODEM
- TONE — TONE RACK EQUIPMENT
- X 13 — INDUCTION LOOP (NO. OF LOOPS)
- LD X 6 — INDUCTIVE LOOP DETECTOR (NO. OF LOOP DETECTOR UNITS)
- SWE — ETHERNET SWITCH
- RVDS — TEMPORARY VEHICLE DETECTION SYSTEM
- CCTV — CCTV CAMERA

NOTES:
1. DASHED LINES INDICATED EXISITNG EQUIPMENT, CABLES, AND ENCLOSURES
2. 100 FEET OF FOC SLACK AVAILABLE IN EXISTING COMMUNICATIONS VAULT FOR SPLICING TO NEW FIBER FOR NEW DEVICES TO THE EAST.
3. ETHERNET SWITCHES HAVE GIGABIT FIBER OPTIC PORTS.
4. NOT ALL COMMUNICATIONS VAULTS ARE SHOWN FOR CLARITY.
5. JUMPER CABLES USED FOR PATCHING THROUGH FIBER CONNECTIONS NOW SHOWN. SEE SPLICING TABLES FOR MORE DETAIL.

ITS-25

HNTB

USER NAME = $USER$	DESIGNED RJ	REVISED -
	DRAWN RJ	REVISED -
PLOT SCALE = $SCALE$	CHECKED YJ	REVISED -
PLOT DATE = $DATE$	DATE 5/6/16	REVISED -

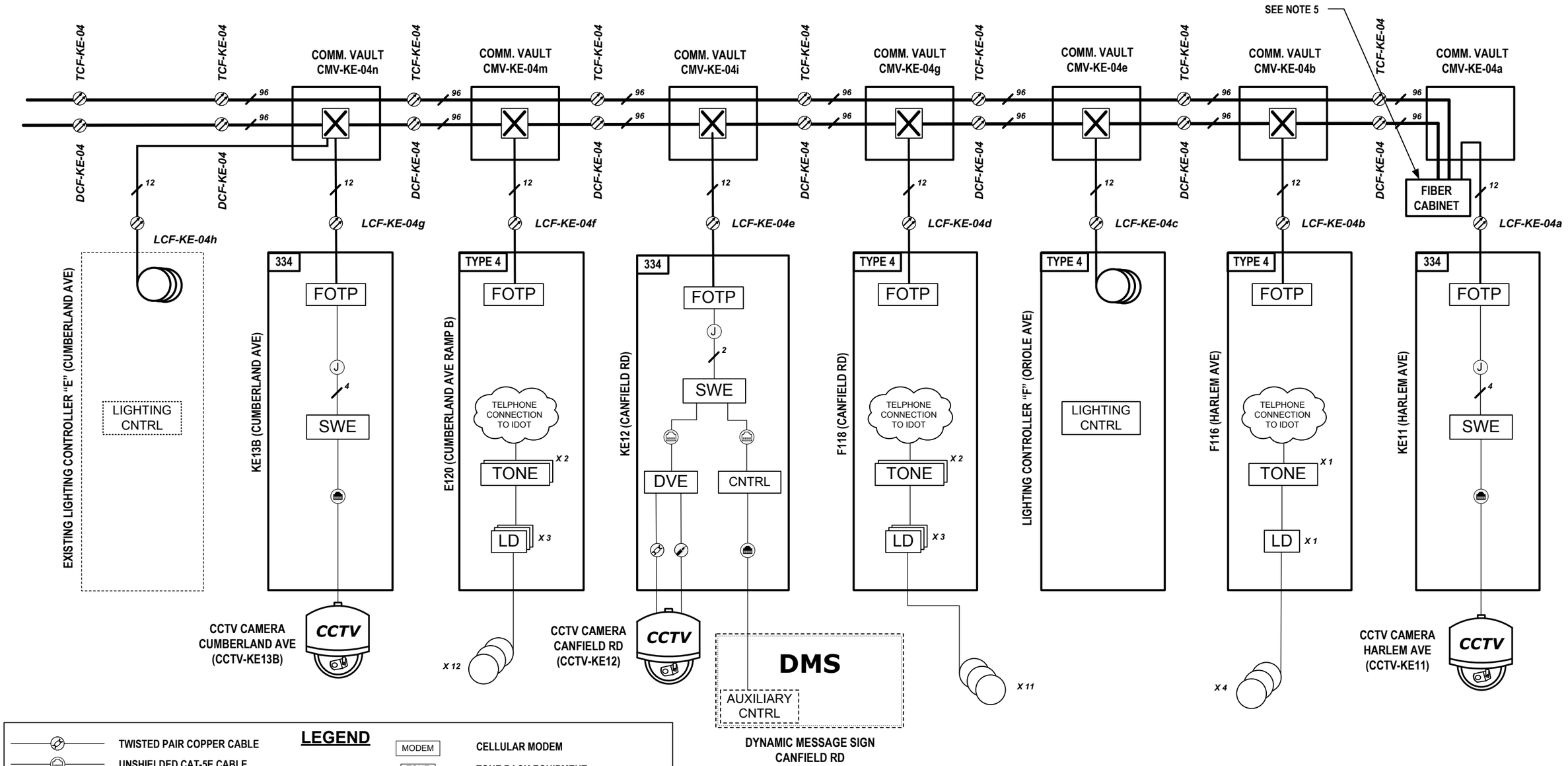
FILE NAME = $FILE$

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

FINAL COMMUNICATIONS OVERVIEW PLAN

SCALE: | SHEET NO. 3 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	314
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		



LEGEND

- TWISTED PAIR COPPER CABLE
- UNSHIELDED CAT-5E CABLE
- SHIELDED CAT-5E CABLE
- FIBER OPTIC JUMPER (NO. OF JUMPERS)
- FIBER OPTIC CABLE, SINGLE MODE (STRAND COUNT)
- FIBER OPTIC SPLICE CLOSURE
- FOSE — FIBER OPTIC SPLICE ENCLOSURE
- FOTP — FIBER OPTIC TERMINATION PANEL, 12F OR 24F
- TS — TERMINAL SERVER
- MODEM — CELLULAR MODEM
- TONE — TONE RACK EQUIPMENT
- X 13 — INDUCTION LOOP (NO. OF LOOPS)
- LD X 6 — INDUCTIVE LOOP DETECTOR (NO. OF LOOP DETECTOR UNITS)
- SWE — ETHERNET SWITCH
- RVDS — TEMPORARY VEHICLE DETECTION SYSTEM
- CCTV — CCTV CAMERA

NOTES:
1. DASHED LINES INDICATED EXISITNG EQUIPMENT, CABLES, AND ENCLOSURES
2. NEW ETHERNET SWITCHES HAVE GIGABIT FIBER OPTIC PORTS.
3. NOT ALL COMMUNICATIONS VAULTS ARE SHOWN FOR CLARITY.
4. JUMPER CABLES USED FOR PATCHING THROUGH FIBER CONNECTIONS NOW SHOWN. SEE SPLICING TABLES FOR MORE DETAIL.
5. SPLICE FIBER LATERAL TO FIBER DISTRIBUTION CABLE IN FIBER INTERCONNECT CABINET.

ITS-26

HNTB

USER NAME = $USER$	DESIGNED RJ	REVISED -
	DRAWN RJ	REVISED -
PLOT SCALE = $SCALE$	CHECKED YJ	REVISED -
PLOT DATE = $DATE$	DATE 5/6/16	REVISED -

FILE NAME = $FILE$

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

FINAL COMMUNICATIONS OVERVIEW PLAN

SCALE: | SHEET NO. 4 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	315
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

TRUNK CABLE FIBER ASSIGNMENTS				ORIGINATION			COMM. VAULT (NEW COMM. SHELTER)
TRUNK CABLE DESIGNATION		TCF-KE-04		DESTINATION			COMM. VAULT (CUMBERLAND AVE CMV-KE-05a)
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1	TCF-KE-05, BLU/BLU	SLATE	Blue 1	49	TCF-KE-05, SLA/BLU
	Orange 2	2	TCF-KE-05, BLU/ORA		Orange 2	50	TCF-KE-05, SLA/ORA
	Green 3	3	TCF-KE-05, BLU/GRE		Green 3	51	TCF-KE-05, SLA/GRE
	Brown 4	4	TCF-KE-05, BLU/BRO		Brown 4	52	TCF-KE-05, SLA/BRO
	Slate 5	5	TCF-KE-05, BLU/SLA		Slate 5	53	TCF-KE-05, SLA/SLA
	White 6	6	TCF-KE-05, BLU/WHI		White 6	54	TCF-KE-05, SLA/WHI
	Red 7	7	TCF-KE-05, BLU/RED		Red 7	55	TCF-KE-05, SLA/RED
	Black 8	8	TCF-KE-05, BLU/BLA		Black 8	56	TCF-KE-05, SLA/BLA
	Yellow 9	9	TCF-KE-05, BLU/YEL		Yellow 9	57	TCF-KE-05, SLA/YEL
	Violet 10	10	TCF-KE-05, BLU/VIO		Violet 10	58	TCF-KE-05, SLA/VIO
	Rose 11	11	TCF-KE-05, BLU/ROS		Rose 11	59	TCF-KE-05, SLA/ROS
	Aqua 12	12	TCF-KE-05, BLU/AQU		Aqua 12	60	TCF-KE-05, SLA/AQU
ORANGE	Blue 1	13	TCF-KE-05, ORA/BLU	WHITE	Blue 1	61	TCF-KE-05, WHI/BLU
	Orange 2	14	TCF-KE-05, ORA/ORA		Orange 2	62	TCF-KE-05, WHI/ORA
	Green 3	15	TCF-KE-05, ORA/GRE		Green 3	63	TCF-KE-05, WHI/GRE
	Brown 4	16	TCF-KE-05, ORA/BRO		Brown 4	64	TCF-KE-05, WHI/BRO
	Slate 5	17	TCF-KE-05, ORA/SLA		Slate 5	65	TCF-KE-05, WHI/SLA
	White 6	18	TCF-KE-05, ORA/WHI		White 6	66	TCF-KE-05, WHI/WHI
	Red 7	19	TCF-KE-05, ORA/RED		Red 7	67	TCF-KE-05, WHI/RED
	Black 8	20	TCF-KE-05, ORA/BLA		Black 8	68	TCF-KE-05, WHI/BLA
	Yellow 9	21	TCF-KE-05, ORA/YEL		Yellow 9	69	TCF-KE-05, WHI/YEL
	Violet 10	22	TCF-KE-05, ORA/VIO		Violet 10	70	TCF-KE-05, WHI/VIO
	Rose 11	23	TCF-KE-05, ORA/ROS		Rose 11	71	TCF-KE-05, WHI/ROS
	Aqua 12	24	TCF-KE-05, ORA/AQU		Aqua 12	72	TCF-KE-05, WHI/AQU
GREEN	Blue 1	25	TCF-KE-05, GRE/BLU	RED	Blue 1	73	TCF-KE-05, RED/BLU
	Orange 2	26	TCF-KE-05, GRE/ORA		Orange 2	74	TCF-KE-05, RED/ORA
	Green 3	27	TCF-KE-05, GRE/GRE		Green 3	75	TCF-KE-05, RED/GRE
	Brown 4	28	TCF-KE-05, GRE/BRO		Brown 4	76	TCF-KE-05, RED/BRO
	Slate 5	29	TCF-KE-05, GRE/SLA		Slate 5	77	TCF-KE-05, RED/SLA
	White 6	30	TCF-KE-05, GRE/WHI		White 6	78	TCF-KE-05, RED/WHI
	Red 7	31	TCF-KE-05, GRE/RED		Red 7	79	TCF-KE-05, RED/RED
	Black 8	32	TCF-KE-05, GRE/BLA		Black 8	80	TCF-KE-05, RED/BLA
	Yellow 9	33	TCF-KE-05, GRE/YEL		Yellow 9	81	TCF-KE-05, RED/YEL
	Violet 10	34	TCF-KE-05, GRE/VIO		Violet 10	82	TCF-KE-05, RED/VIO
	Rose 11	35	TCF-KE-05, GRE/ROS		Rose 11	83	TCF-KE-05, RED/ROS
	Aqua 12	36	TCF-KE-05, GRE/AQU		Aqua 12	84	TCF-KE-05, RED/AQU
BROWN	Blue 1	37	TCF-KE-05, BRO/BLU	BLACK	Blue 1	85	TCF-KE-05, BLA/BLU
	Orange 2	38	TCF-KE-05, BRO/ORA		Orange 2	86	TCF-KE-05, BLA/ORA
	Green 3	39	TCF-KE-05, BRO/GRE		Green 3	87	TCF-KE-05, BLA/GRE
	Brown 4	40	TCF-KE-05, BRO/BRO		Brown 4	88	TCF-KE-05, BLA/BRO
	Slate 5	41	TCF-KE-05, BRO/SLA		Slate 5	89	TCF-KE-05, BLA/SLA
	White 6	42	TCF-KE-05, BRO/WHI		White 6	90	TCF-KE-05, BLA/WHI
	Red 7	43	TCF-KE-05, BRO/RED		Red 7	91	TCF-KE-05, BLA/RED
	Black 8	44	TCF-KE-05, BRO/BLA		Black 8	92	TCF-KE-05, BLA/BLA
	Yellow 9	45	TCF-KE-05, BRO/YEL		Yellow 9	93	TCF-KE-05, BLA/YEL
	Violet 10	46	TCF-KE-05, BRO/VIO		Violet 10	94	TCF-KE-05, BLA/VIO
	Rose 11	47	TCF-KE-05, BRO/ROS		Rose 11	95	TCF-KE-05, BLA/ROS
	Aqua 12	48	TCF-KE-05, BRO/AQU		Aqua 12	96	TCF-KE-05, BLA/AQU

HNTB

USER NAME = jblakley	DESIGNED - JZ	REVISED -
	DRAWN - JZ	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRUNK CABLE FIBER ASSIGNMENTS TCF-KE-04
COMM. VAULT CMV-KE-05a

SCALE: N.T.S. | SHEET NO. 6 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	316
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-58.dgn

TRUNK CABLE FIBER ASSIGNMENTS				ORIGINATION	COMM. VAULT (FUTURE CABLE)		
TRUNK CABLE DESIGNATION		TCF-KE-04		DESTINATION	FIBER OPTIC INTERCONNECT CABINET (HARLEM AVE FIC-KE-04a)		
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1	CAPPED AND COILED	SLATE	Blue 1	49	CAPPED AND COILED
	Orange 2	2	CAPPED AND COILED		Orange 2	50	CAPPED AND COILED
	Green 3	3	CAPPED AND COILED		Green 3	51	CAPPED AND COILED
	Brown 4	4	CAPPED AND COILED		Brown 4	52	CAPPED AND COILED
	Slate 5	5	CAPPED AND COILED		Slate 5	53	CAPPED AND COILED
	White 6	6	CAPPED AND COILED		White 6	54	CAPPED AND COILED
	Red 7	7	CAPPED AND COILED		Red 7	55	CAPPED AND COILED
	Black 8	8	CAPPED AND COILED		Black 8	56	CAPPED AND COILED
	Yellow 9	9	CAPPED AND COILED		Yellow 9	57	CAPPED AND COILED
	Violet 10	10	CAPPED AND COILED		Violet 10	58	CAPPED AND COILED
	Rose 11	11	CAPPED AND COILED		Rose 11	59	CAPPED AND COILED
	Aqua 12	12	CAPPED AND COILED		Aqua 12	60	CAPPED AND COILED
ORANGE	Blue 1	13	CAPPED AND COILED	WHITE	Blue 1	61	CAPPED AND COILED
	Orange 2	14	CAPPED AND COILED		Orange 2	62	CAPPED AND COILED
	Green 3	15	CAPPED AND COILED		Green 3	63	CAPPED AND COILED
	Brown 4	16	CAPPED AND COILED		Brown 4	64	CAPPED AND COILED
	Slate 5	17	CAPPED AND COILED		Slate 5	65	CAPPED AND COILED
	White 6	18	CAPPED AND COILED		White 6	66	CAPPED AND COILED
	Red 7	19	CAPPED AND COILED		Red 7	67	CAPPED AND COILED
	Black 8	20	CAPPED AND COILED		Black 8	68	CAPPED AND COILED
	Yellow 9	21	CAPPED AND COILED		Yellow 9	69	CAPPED AND COILED
	Violet 10	22	CAPPED AND COILED		Violet 10	70	CAPPED AND COILED
	Rose 11	23	CAPPED AND COILED		Rose 11	71	CAPPED AND COILED
	Aqua 12	24	CAPPED AND COILED		Aqua 12	72	CAPPED AND COILED
GREEN	Blue 1	25	CAPPED AND COILED	RED	Blue 1	73	CAPPED AND COILED
	Orange 2	26	CAPPED AND COILED		Orange 2	74	CAPPED AND COILED
	Green 3	27	CAPPED AND COILED		Green 3	75	CAPPED AND COILED
	Brown 4	28	CAPPED AND COILED		Brown 4	76	CAPPED AND COILED
	Slate 5	29	CAPPED AND COILED		Slate 5	77	CAPPED AND COILED
	White 6	30	CAPPED AND COILED		White 6	78	CAPPED AND COILED
	Red 7	31	CAPPED AND COILED		Red 7	79	CAPPED AND COILED
	Black 8	32	CAPPED AND COILED		Black 8	80	CAPPED AND COILED
	Yellow 9	33	CAPPED AND COILED		Yellow 9	81	CAPPED AND COILED
	Violet 10	34	CAPPED AND COILED		Violet 10	82	CAPPED AND COILED
	Rose 11	35	CAPPED AND COILED		Rose 11	83	CAPPED AND COILED
	Aqua 12	36	CAPPED AND COILED		Aqua 12	84	CAPPED AND COILED
BROWN	Blue 1	37	CAPPED AND COILED	BLACK	Blue 1	85	CAPPED AND COILED
	Orange 2	38	CAPPED AND COILED		Orange 2	86	CAPPED AND COILED
	Green 3	39	CAPPED AND COILED		Green 3	87	CAPPED AND COILED
	Brown 4	40	CAPPED AND COILED		Brown 4	88	CAPPED AND COILED
	Slate 5	41	CAPPED AND COILED		Slate 5	89	CAPPED AND COILED
	White 6	42	CAPPED AND COILED		White 6	90	CAPPED AND COILED
	Red 7	43	CAPPED AND COILED		Red 7	91	CAPPED AND COILED
	Black 8	44	CAPPED AND COILED		Black 8	92	CAPPED AND COILED
	Yellow 9	45	CAPPED AND COILED		Yellow 9	93	CAPPED AND COILED
	Violet 10	46	CAPPED AND COILED		Violet 10	94	CAPPED AND COILED
	Rose 11	47	CAPPED AND COILED		Rose 11	95	CAPPED AND COILED
	Aqua 12	48	CAPPED AND COILED		Aqua 12	96	CAPPED AND COILED

HNTB

USER NAME = jblakley	DESIGNED - JZ	REVISED -
	DRAWN - JZ	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRUNK CABLE FIBER ASSIGNMENTS TCF–KE–04
FIBER OPTIC INTERCONNECT CABINET FIC–KE–04a

SCALE: N.T.S. | SHEET NO. 7 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	317
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-59.dgn

DISTRIBUTION CABLE FIBER ASSIGNMENTS				ORIGINATION	FIBER OPTIC SPLICE CLOSURE FOR KE13		
DISTRIBUTION CABLE DESIGNATION			DCF-KE-04	DESTINATION	FIBER OPTIC SPLICE CLOSURE FOR KE13B		
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1	LCF-KE-04g, BLU/BLU	SLATE	Blue 1	49	UNCUT, PASS THRU
	Orange 2	2	LCF-KE-04g, BLU/ORA		Orange 2	50	UNCUT, PASS THRU
	Green 3	3	SPLICE THRU		Green 3	51	UNCUT, PASS THRU
	Brown 4	4	SPLICE THRU		Brown 4	52	UNCUT, PASS THRU
	Slate 5	5	SPLICE THRU		Slate 5	53	UNCUT, PASS THRU
	White 6	6	SPLICE THRU		White 6	54	UNCUT, PASS THRU
	Red 7	7	SPLICE THRU		Red 7	55	UNCUT, PASS THRU
	Black 8	8	SPLICE THRU		Black 8	56	UNCUT, PASS THRU
	Yellow 9	9	SPLICE THRU		Yellow 9	57	UNCUT, PASS THRU
	Violet 10	10	SPLICE THRU		Violet 10	58	UNCUT, PASS THRU
	Rose 11	11	SPLICE THRU		Rose 11	59	UNCUT, PASS THRU
	Aqua 12	12	SPLICE THRU		Aqua 12	60	UNCUT, PASS THRU
ORANGE	Blue 1	13	UNCUT, PASS THRU	WHITE	Blue 1	61	UNCUT, PASS THRU
	Orange 2	14	UNCUT, PASS THRU		Orange 2	62	UNCUT, PASS THRU
	Green 3	15	UNCUT, PASS THRU		Green 3	63	UNCUT, PASS THRU
	Brown 4	16	UNCUT, PASS THRU		Brown 4	64	UNCUT, PASS THRU
	Slate 5	17	UNCUT, PASS THRU		Slate 5	65	UNCUT, PASS THRU
	White 6	18	UNCUT, PASS THRU		White 6	66	UNCUT, PASS THRU
	Red 7	19	UNCUT, PASS THRU		Red 7	67	UNCUT, PASS THRU
	Black 8	20	UNCUT, PASS THRU		Black 8	68	UNCUT, PASS THRU
	Yellow 9	21	UNCUT, PASS THRU		Yellow 9	69	UNCUT, PASS THRU
	Violet 10	22	UNCUT, PASS THRU		Violet 10	70	UNCUT, PASS THRU
	Rose 11	23	UNCUT, PASS THRU		Rose 11	71	UNCUT, PASS THRU
	Aqua 12	24	UNCUT, PASS THRU		Aqua 12	72	UNCUT, PASS THRU
GREEN	Blue 1	25	UNCUT, PASS THRU	RED	Blue 1	73	UNCUT, PASS THRU
	Orange 2	26	UNCUT, PASS THRU		Orange 2	74	UNCUT, PASS THRU
	Green 3	27	UNCUT, PASS THRU		Green 3	75	UNCUT, PASS THRU
	Brown 4	28	UNCUT, PASS THRU		Brown 4	76	UNCUT, PASS THRU
	Slate 5	29	UNCUT, PASS THRU		Slate 5	77	UNCUT, PASS THRU
	White 6	30	UNCUT, PASS THRU		White 6	78	UNCUT, PASS THRU
	Red 7	31	UNCUT, PASS THRU		Red 7	79	UNCUT, PASS THRU
	Black 8	32	UNCUT, PASS THRU		Black 8	80	UNCUT, PASS THRU
	Yellow 9	33	UNCUT, PASS THRU		Yellow 9	81	UNCUT, PASS THRU
	Violet 10	34	UNCUT, PASS THRU		Violet 10	82	UNCUT, PASS THRU
	Rose 11	35	UNCUT, PASS THRU		Rose 11	83	UNCUT, PASS THRU
	Aqua 12	36	UNCUT, PASS THRU		Aqua 12	84	UNCUT, PASS THRU
BROWN	Blue 1	37	UNCUT, PASS THRU	BLACK	Blue 1	85	UNCUT, PASS THRU
	Orange 2	38	UNCUT, PASS THRU		Orange 2	86	UNCUT, PASS THRU
	Green 3	39	UNCUT, PASS THRU		Green 3	87	UNCUT, PASS THRU
	Brown 4	40	UNCUT, PASS THRU		Brown 4	88	UNCUT, PASS THRU
	Slate 5	41	UNCUT, PASS THRU		Slate 5	89	UNCUT, PASS THRU
	White 6	42	UNCUT, PASS THRU		White 6	90	UNCUT, PASS THRU
	Red 7	43	UNCUT, PASS THRU		Red 7	91	UNCUT, PASS THRU
	Black 8	44	UNCUT, PASS THRU		Black 8	92	UNCUT, PASS THRU
	Yellow 9	45	UNCUT, PASS THRU		Yellow 9	93	UNCUT, PASS THRU
	Violet 10	46	UNCUT, PASS THRU		Violet 10	94	UNCUT, PASS THRU
	Rose 11	47	UNCUT, PASS THRU		Rose 11	95	UNCUT, PASS THRU
	Aqua 12	48	UNCUT, PASS THRU		Aqua 12	96	UNCUT, PASS THRU

DCF-KE-04 FROM THE WEST

DISTRIBUTION CABLE FIBER ASSIGNMENTS				ORIGINATION	FIBER OPTIC SPLICE CLOSURE FOR E120		
DISTRIBUTION CABLE DESIGNATION			DCF-KE-04	DESTINATION	FIBER OPTIC SPLICE CLOSURE FOR KE13B		
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1	LCF-KE-04g, BLU/GRE	SLATE	Blue 1	49	UNCUT, PASS THRU
	Orange 2	2	LCF-KE-04g, BLU/BRO		Orange 2	50	UNCUT, PASS THRU
	Green 3	3	SPLICE THRU		Green 3	51	UNCUT, PASS THRU
	Brown 4	4	SPLICE THRU		Brown 4	52	UNCUT, PASS THRU
	Slate 5	5	SPLICE THRU		Slate 5	53	UNCUT, PASS THRU
	White 6	6	SPLICE THRU		White 6	54	UNCUT, PASS THRU
	Red 7	7	SPLICE THRU		Red 7	55	UNCUT, PASS THRU
	Black 8	8	SPLICE THRU		Black 8	56	UNCUT, PASS THRU
	Yellow 9	9	SPLICE THRU		Yellow 9	57	UNCUT, PASS THRU
	Violet 10	10	SPLICE THRU		Violet 10	58	UNCUT, PASS THRU
	Rose 11	11	SPLICE THRU		Rose 11	59	UNCUT, PASS THRU
	Aqua 12	12	SPLICE THRU		Aqua 12	60	UNCUT, PASS THRU
ORANGE	Blue 1	13	UNCUT, PASS THRU	WHITE	Blue 1	61	UNCUT, PASS THRU
	Orange 2	14	UNCUT, PASS THRU		Orange 2	62	UNCUT, PASS THRU
	Green 3	15	UNCUT, PASS THRU		Green 3	63	UNCUT, PASS THRU
	Brown 4	16	UNCUT, PASS THRU		Brown 4	64	UNCUT, PASS THRU
	Slate 5	17	UNCUT, PASS THRU		Slate 5	65	UNCUT, PASS THRU
	White 6	18	UNCUT, PASS THRU		White 6	66	UNCUT, PASS THRU
	Red 7	19	UNCUT, PASS THRU		Red 7	67	UNCUT, PASS THRU
	Black 8	20	UNCUT, PASS THRU		Black 8	68	UNCUT, PASS THRU
	Yellow 9	21	UNCUT, PASS THRU		Yellow 9	69	UNCUT, PASS THRU
	Violet 10	22	UNCUT, PASS THRU		Violet 10	70	UNCUT, PASS THRU
	Rose 11	23	UNCUT, PASS THRU		Rose 11	71	UNCUT, PASS THRU
	Aqua 12	24	UNCUT, PASS THRU		Aqua 12	72	UNCUT, PASS THRU
GREEN	Blue 1	25	UNCUT, PASS THRU	RED	Blue 1	73	UNCUT, PASS THRU
	Orange 2	26	UNCUT, PASS THRU		Orange 2	74	UNCUT, PASS THRU
	Green 3	27	UNCUT, PASS THRU		Green 3	75	UNCUT, PASS THRU
	Brown 4	28	UNCUT, PASS THRU		Brown 4	76	UNCUT, PASS THRU
	Slate 5	29	UNCUT, PASS THRU		Slate 5	77	UNCUT, PASS THRU
	White 6	30	UNCUT, PASS THRU		White 6	78	UNCUT, PASS THRU
	Red 7	31	UNCUT, PASS THRU		Red 7	79	UNCUT, PASS THRU
	Black 8	32	UNCUT, PASS THRU		Black 8	80	UNCUT, PASS THRU
	Yellow 9	33	UNCUT, PASS THRU		Yellow 9	81	UNCUT, PASS THRU
	Violet 10	34	UNCUT, PASS THRU		Violet 10	82	UNCUT, PASS THRU
	Rose 11	35	UNCUT, PASS THRU		Rose 11	83	UNCUT, PASS THRU
	Aqua 12	36	UNCUT, PASS THRU		Aqua 12	84	UNCUT, PASS THRU
BROWN	Blue 1	37	UNCUT, PASS THRU	BLACK	Blue 1	85	UNCUT, PASS THRU
	Orange 2	38	UNCUT, PASS THRU		Orange 2	86	UNCUT, PASS THRU
	Green 3	39	UNCUT, PASS THRU		Green 3	87	UNCUT, PASS THRU
	Brown 4	40	UNCUT, PASS THRU		Brown 4	88	UNCUT, PASS THRU
	Slate 5	41	UNCUT, PASS THRU		Slate 5	89	UNCUT, PASS THRU
	White 6	42	UNCUT, PASS THRU		White 6	90	UNCUT, PASS THRU
	Red 7	43	UNCUT, PASS THRU		Red 7	91	UNCUT, PASS THRU
	Black 8	44	UNCUT, PASS THRU		Black 8	92	UNCUT, PASS THRU
	Yellow 9	45	UNCUT, PASS THRU		Yellow 9	93	UNCUT, PASS THRU
	Violet 10	46	UNCUT, PASS THRU		Violet 10	94	UNCUT, PASS THRU
	Rose 11	47	UNCUT, PASS THRU		Rose 11	95	UNCUT, PASS THRU
	Aqua 12	48	UNCUT, PASS THRU		Aqua 12	96	UNCUT, PASS THRU

DCF-KE-04 FROM THE EAST

ITS-29

HNTB

USER NAME = jblakley	DESIGNED - JZ	REVISED -
	DRAWN - JZ	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRIBUTION CABLE FIBER ASSIGNMENTS
FIBER OPTIC SPLICE CLOSURE FOR CMV–KE–04n
(CUMBERLAND CCTV)

SCALE: N.T.S. | SHEET NO. 8 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	318
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-60.dgn

DISTRIBUTION CABLE FIBER ASSIGNMENTS				ORIGINATION	FIBER OPTIC SPLICE CLOSURE FOR KE13		
DISTRIBUTION CABLE DESIGNATION			DCF-KE-04	DESTINATION	EXISTING IDOT LIGHTING CONTROLLER "E"		
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1	SPLICE THRU	SLATE	Blue 1	49	UNCUT, PASS THRU
	Orange 2	2	SPLICE THRU		Orange 2	50	UNCUT, PASS THRU
	Green 3	3	SPLICE THRU		Green 3	51	UNCUT, PASS THRU
	Brown 4	4	SPLICE THRU		Brown 4	52	UNCUT, PASS THRU
	Slate 5	5	SPLICE THRU		Slate 5	53	UNCUT, PASS THRU
	White 6	6	SPLICE THRU		White 6	54	UNCUT, PASS THRU
	Red 7	7	SPLICE THRU		Red 7	55	UNCUT, PASS THRU
	Black 8	8	SPLICE THRU		Black 8	56	UNCUT, PASS THRU
	Yellow 9	9	SPLICE THRU		Yellow 9	57	UNCUT, PASS THRU
	Violet 10	10	SPLICE THRU		Violet 10	58	UNCUT, PASS THRU
	Rose 11	11	LCF-KE-04h, BLU/BLU		Rose 11	59	UNCUT, PASS THRU
	Aqua 12	12	LCF-KE-04h, BLU/ORA		Aqua 12	60	UNCUT, PASS THRU
ORANGE	Blue 1	13	UNCUT, PASS THRU	WHITE	Blue 1	61	UNCUT, PASS THRU
	Orange 2	14	UNCUT, PASS THRU		Orange 2	62	UNCUT, PASS THRU
	Green 3	15	UNCUT, PASS THRU		Green 3	63	UNCUT, PASS THRU
	Brown 4	16	UNCUT, PASS THRU		Brown 4	64	UNCUT, PASS THRU
	Slate 5	17	UNCUT, PASS THRU		Slate 5	65	UNCUT, PASS THRU
	White 6	18	UNCUT, PASS THRU		White 6	66	UNCUT, PASS THRU
	Red 7	19	UNCUT, PASS THRU		Red 7	67	UNCUT, PASS THRU
	Black 8	20	UNCUT, PASS THRU		Black 8	68	UNCUT, PASS THRU
	Yellow 9	21	UNCUT, PASS THRU		Yellow 9	69	UNCUT, PASS THRU
	Violet 10	22	UNCUT, PASS THRU		Violet 10	70	UNCUT, PASS THRU
	Rose 11	23	UNCUT, PASS THRU		Rose 11	71	UNCUT, PASS THRU
	Aqua 12	24	UNCUT, PASS THRU		Aqua 12	72	UNCUT, PASS THRU
GREEN	Blue 1	25	UNCUT, PASS THRU	RED	Blue 1	73	UNCUT, PASS THRU
	Orange 2	26	UNCUT, PASS THRU		Orange 2	74	UNCUT, PASS THRU
	Green 3	27	UNCUT, PASS THRU		Green 3	75	UNCUT, PASS THRU
	Brown 4	28	UNCUT, PASS THRU		Brown 4	76	UNCUT, PASS THRU
	Slate 5	29	UNCUT, PASS THRU		Slate 5	77	UNCUT, PASS THRU
	White 6	30	UNCUT, PASS THRU		White 6	78	UNCUT, PASS THRU
	Red 7	31	UNCUT, PASS THRU		Red 7	79	UNCUT, PASS THRU
	Black 8	32	UNCUT, PASS THRU		Black 8	80	UNCUT, PASS THRU
	Yellow 9	33	UNCUT, PASS THRU		Yellow 9	81	UNCUT, PASS THRU
	Violet 10	34	UNCUT, PASS THRU		Violet 10	82	UNCUT, PASS THRU
	Rose 11	35	UNCUT, PASS THRU		Rose 11	83	UNCUT, PASS THRU
	Aqua 12	36	UNCUT, PASS THRU		Aqua 12	84	UNCUT, PASS THRU
BROWN	Blue 1	37	UNCUT, PASS THRU	BLACK	Blue 1	85	UNCUT, PASS THRU
	Orange 2	38	UNCUT, PASS THRU		Orange 2	86	UNCUT, PASS THRU
	Green 3	39	UNCUT, PASS THRU		Green 3	87	UNCUT, PASS THRU
	Brown 4	40	UNCUT, PASS THRU		Brown 4	88	UNCUT, PASS THRU
	Slate 5	41	UNCUT, PASS THRU		Slate 5	89	UNCUT, PASS THRU
	White 6	42	UNCUT, PASS THRU		White 6	90	UNCUT, PASS THRU
	Red 7	43	UNCUT, PASS THRU		Red 7	91	UNCUT, PASS THRU
	Black 8	44	UNCUT, PASS THRU		Black 8	92	UNCUT, PASS THRU
	Yellow 9	45	UNCUT, PASS THRU		Yellow 9	93	UNCUT, PASS THRU
	Violet 10	46	UNCUT, PASS THRU		Violet 10	94	UNCUT, PASS THRU
	Rose 11	47	UNCUT, PASS THRU		Rose 11	95	UNCUT, PASS THRU
	Aqua 12	48	UNCUT, PASS THRU		Aqua 12	96	UNCUT, PASS THRU

DCF-KE-04 FROM THE WEST

DISTRIBUTION CABLE FIBER ASSIGNMENTS				ORIGINATION	FIBER OPTIC SPLICE CLOSURE FOR E120		
DISTRIBUTION CABLE DESIGNATION			DCF-KE-04	DESTINATION	EXISTING IDOT LIGHTING CONTROLLER "E"		
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1	SPLICE THRU	SLATE	Blue 1	49	UNCUT, PASS THRU
	Orange 2	2	SPLICE THRU		Orange 2	50	UNCUT, PASS THRU
	Green 3	3	SPLICE THRU		Green 3	51	UNCUT, PASS THRU
	Brown 4	4	SPLICE THRU		Brown 4	52	UNCUT, PASS THRU
	Slate 5	5	SPLICE THRU		Slate 5	53	UNCUT, PASS THRU
	White 6	6	SPLICE THRU		White 6	54	UNCUT, PASS THRU
	Red 7	7	SPLICE THRU		Red 7	55	UNCUT, PASS THRU
	Black 8	8	SPLICE THRU		Black 8	56	UNCUT, PASS THRU
	Yellow 9	9	SPLICE THRU		Yellow 9	57	UNCUT, PASS THRU
	Violet 10	10	SPLICE THRU		Violet 10	58	UNCUT, PASS THRU
	Rose 11	11	LCF-KE-04h, BLU/GRE		Rose 11	59	UNCUT, PASS THRU
	Aqua 12	12	LCF-KE-04h, BLU/BRO		Aqua 12	60	UNCUT, PASS THRU
ORANGE	Blue 1	13	UNCUT, PASS THRU	WHITE	Blue 1	61	UNCUT, PASS THRU
	Orange 2	14	UNCUT, PASS THRU		Orange 2	62	UNCUT, PASS THRU
	Green 3	15	UNCUT, PASS THRU		Green 3	63	UNCUT, PASS THRU
	Brown 4	16	UNCUT, PASS THRU		Brown 4	64	UNCUT, PASS THRU
	Slate 5	17	UNCUT, PASS THRU		Slate 5	65	UNCUT, PASS THRU
	White 6	18	UNCUT, PASS THRU		White 6	66	UNCUT, PASS THRU
	Red 7	19	UNCUT, PASS THRU		Red 7	67	UNCUT, PASS THRU
	Black 8	20	UNCUT, PASS THRU		Black 8	68	UNCUT, PASS THRU
	Yellow 9	21	UNCUT, PASS THRU		Yellow 9	69	UNCUT, PASS THRU
	Violet 10	22	UNCUT, PASS THRU		Violet 10	70	UNCUT, PASS THRU
	Rose 11	23	UNCUT, PASS THRU		Rose 11	71	UNCUT, PASS THRU
	Aqua 12	24	UNCUT, PASS THRU		Aqua 12	72	UNCUT, PASS THRU
GREEN	Blue 1	25	UNCUT, PASS THRU	RED	Blue 1	73	UNCUT, PASS THRU
	Orange 2	26	UNCUT, PASS THRU		Orange 2	74	UNCUT, PASS THRU
	Green 3	27	UNCUT, PASS THRU		Green 3	75	UNCUT, PASS THRU
	Brown 4	28	UNCUT, PASS THRU		Brown 4	76	UNCUT, PASS THRU
	Slate 5	29	UNCUT, PASS THRU		Slate 5	77	UNCUT, PASS THRU
	White 6	30	UNCUT, PASS THRU		White 6	78	UNCUT, PASS THRU
	Red 7	31	UNCUT, PASS THRU		Red 7	79	UNCUT, PASS THRU
	Black 8	32	UNCUT, PASS THRU		Black 8	80	UNCUT, PASS THRU
	Yellow 9	33	UNCUT, PASS THRU		Yellow 9	81	UNCUT, PASS THRU
	Violet 10	34	UNCUT, PASS THRU		Violet 10	82	UNCUT, PASS THRU
	Rose 11	35	UNCUT, PASS THRU		Rose 11	83	UNCUT, PASS THRU
	Aqua 12	36	UNCUT, PASS THRU		Aqua 12	84	UNCUT, PASS THRU
BROWN	Blue 1	37	UNCUT, PASS THRU	BLACK	Blue 1	85	UNCUT, PASS THRU
	Orange 2	38	UNCUT, PASS THRU		Orange 2	86	UNCUT, PASS THRU
	Green 3	39	UNCUT, PASS THRU		Green 3	87	UNCUT, PASS THRU
	Brown 4	40	UNCUT, PASS THRU		Brown 4	88	UNCUT, PASS THRU
	Slate 5	41	UNCUT, PASS THRU		Slate 5	89	UNCUT, PASS THRU
	White 6	42	UNCUT, PASS THRU		White 6	90	UNCUT, PASS THRU
	Red 7	43	UNCUT, PASS THRU		Red 7	91	UNCUT, PASS THRU
	Black 8	44	UNCUT, PASS THRU		Black 8	92	UNCUT, PASS THRU
	Yellow 9	45	UNCUT, PASS THRU		Yellow 9	93	UNCUT, PASS THRU
	Violet 10	46	UNCUT, PASS THRU		Violet 10	94	UNCUT, PASS THRU
	Rose 11	47	UNCUT, PASS THRU		Rose 11	95	UNCUT, PASS THRU
	Aqua 12	48	UNCUT, PASS THRU		Aqua 12	96	UNCUT, PASS THRU

DCF-KE-04 FROM THE EAST

ITS-30

HNTB

USER NAME = jblakley	DESIGNED - JZ	REVISED -
	DRAWN - JZ	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRIBUTION CABLE FIBER ASSIGNMENTS
FIBER OPTIC SPLICE CLOSURE FOR CMV-KE-04n
(LIGHTING CONTROLLER "E")

SCALE: N.T.S. | SHEET NO. 9 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	319
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-60a.dgn

DISTRIBUTION CABLE FIBER ASSIGNMENTS				ORIGINATION	FIBER OPTIC SPLICE CLOSURE FOR KE13B		
DISTRIBUTION CABLE DESIGNATION			DCF-KE-04	DESTINATION	FIBER OPTIC SPLICE CLOSURE FOR E120		
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1	SPLICE THRU	SLATE	Blue 1	49	UNCUT, PASS THRU
	Orange 2	2	SPLICE THRU		Orange 2	50	UNCUT, PASS THRU
	Green 3	3	LCF-KE-04f, BLU/BLU		Green 3	51	UNCUT, PASS THRU
	Brown 4	4	LCF-KE-04f, BLU/ORA		Brown 4	52	UNCUT, PASS THRU
	Slate 5	5	SPLICE THRU		Slate 5	53	UNCUT, PASS THRU
	White 6	6	SPLICE THRU		White 6	54	UNCUT, PASS THRU
	Red 7	7	SPLICE THRU		Red 7	55	UNCUT, PASS THRU
	Black 8	8	SPLICE THRU		Black 8	56	UNCUT, PASS THRU
	Yellow 9	9	SPLICE THRU		Yellow 9	57	UNCUT, PASS THRU
	Violet 10	10	SPLICE THRU		Violet 10	58	UNCUT, PASS THRU
	Rose 11	11	SPLICE THRU		Rose 11	59	UNCUT, PASS THRU
	Aqua 12	12	SPLICE THRU		Aqua 12	60	UNCUT, PASS THRU
ORANGE	Blue 1	13	UNCUT, PASS THRU	WHITE	Blue 1	61	UNCUT, PASS THRU
	Orange 2	14	UNCUT, PASS THRU		Orange 2	62	UNCUT, PASS THRU
	Green 3	15	UNCUT, PASS THRU		Green 3	63	UNCUT, PASS THRU
	Brown 4	16	UNCUT, PASS THRU		Brown 4	64	UNCUT, PASS THRU
	Slate 5	17	UNCUT, PASS THRU		Slate 5	65	UNCUT, PASS THRU
	White 6	18	UNCUT, PASS THRU		White 6	66	UNCUT, PASS THRU
	Red 7	19	UNCUT, PASS THRU		Red 7	67	UNCUT, PASS THRU
	Black 8	20	UNCUT, PASS THRU		Black 8	68	UNCUT, PASS THRU
	Yellow 9	21	UNCUT, PASS THRU		Yellow 9	69	UNCUT, PASS THRU
	Violet 10	22	UNCUT, PASS THRU		Violet 10	70	UNCUT, PASS THRU
	Rose 11	23	UNCUT, PASS THRU		Rose 11	71	UNCUT, PASS THRU
	Aqua 12	24	UNCUT, PASS THRU		Aqua 12	72	UNCUT, PASS THRU
GREEN	Blue 1	25	UNCUT, PASS THRU	RED	Blue 1	73	UNCUT, PASS THRU
	Orange 2	26	UNCUT, PASS THRU		Orange 2	74	UNCUT, PASS THRU
	Green 3	27	UNCUT, PASS THRU		Green 3	75	UNCUT, PASS THRU
	Brown 4	28	UNCUT, PASS THRU		Brown 4	76	UNCUT, PASS THRU
	Slate 5	29	UNCUT, PASS THRU		Slate 5	77	UNCUT, PASS THRU
	White 6	30	UNCUT, PASS THRU		White 6	78	UNCUT, PASS THRU
	Red 7	31	UNCUT, PASS THRU		Red 7	79	UNCUT, PASS THRU
	Black 8	32	UNCUT, PASS THRU		Black 8	80	UNCUT, PASS THRU
	Yellow 9	33	UNCUT, PASS THRU		Yellow 9	81	UNCUT, PASS THRU
	Violet 10	34	UNCUT, PASS THRU		Violet 10	82	UNCUT, PASS THRU
	Rose 11	35	UNCUT, PASS THRU		Rose 11	83	UNCUT, PASS THRU
	Aqua 12	36	UNCUT, PASS THRU		Aqua 12	84	UNCUT, PASS THRU
BROWN	Blue 1	37	UNCUT, PASS THRU	BLACK	Blue 1	85	UNCUT, PASS THRU
	Orange 2	38	UNCUT, PASS THRU		Orange 2	86	UNCUT, PASS THRU
	Green 3	39	UNCUT, PASS THRU		Green 3	87	UNCUT, PASS THRU
	Brown 4	40	UNCUT, PASS THRU		Brown 4	88	UNCUT, PASS THRU
	Slate 5	41	UNCUT, PASS THRU		Slate 5	89	UNCUT, PASS THRU
	White 6	42	UNCUT, PASS THRU		White 6	90	UNCUT, PASS THRU
	Red 7	43	UNCUT, PASS THRU		Red 7	91	UNCUT, PASS THRU
	Black 8	44	UNCUT, PASS THRU		Black 8	92	UNCUT, PASS THRU
	Yellow 9	45	UNCUT, PASS THRU		Yellow 9	93	UNCUT, PASS THRU
	Violet 10	46	UNCUT, PASS THRU		Violet 10	94	UNCUT, PASS THRU
	Rose 11	47	UNCUT, PASS THRU		Rose 11	95	UNCUT, PASS THRU
	Aqua 12	48	UNCUT, PASS THRU		Aqua 12	96	UNCUT, PASS THRU

DCF-KE-04 FROM THE WEST

DISTRIBUTION CABLE FIBER ASSIGNMENTS				ORIGINATION	FIBER OPTIC SPLICE CLOSURE FOR KE12		
DISTRIBUTION CABLE DESIGNATION			DCF-KE-04	DESTINATION	FIBER OPTIC SPLICE CLOSURE FOR E120		
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1	SPLICE THRU	SLATE	Blue 1	49	UNCUT, PASS THRU
	Orange 2	2	SPLICE THRU		Orange 2	50	UNCUT, PASS THRU
	Green 3	3	LCF-KE-04f, BLU/GRE		Green 3	51	UNCUT, PASS THRU
	Brown 4	4	LCF-KE-04f, BLU/BRO		Brown 4	52	UNCUT, PASS THRU
	Slate 5	5	SPLICE THRU		Slate 5	53	UNCUT, PASS THRU
	White 6	6	SPLICE THRU		White 6	54	UNCUT, PASS THRU
	Red 7	7	SPLICE THRU		Red 7	55	UNCUT, PASS THRU
	Black 8	8	SPLICE THRU		Black 8	56	UNCUT, PASS THRU
	Yellow 9	9	SPLICE THRU		Yellow 9	57	UNCUT, PASS THRU
	Violet 10	10	SPLICE THRU		Violet 10	58	UNCUT, PASS THRU
	Rose 11	11	SPLICE THRU		Rose 11	59	UNCUT, PASS THRU
	Aqua 12	12	SPLICE THRU		Aqua 12	60	UNCUT, PASS THRU
ORANGE	Blue 1	13	UNCUT, PASS THRU	WHITE	Blue 1	61	UNCUT, PASS THRU
	Orange 2	14	UNCUT, PASS THRU		Orange 2	62	UNCUT, PASS THRU
	Green 3	15	UNCUT, PASS THRU		Green 3	63	UNCUT, PASS THRU
	Brown 4	16	UNCUT, PASS THRU		Brown 4	64	UNCUT, PASS THRU
	Slate 5	17	UNCUT, PASS THRU		Slate 5	65	UNCUT, PASS THRU
	White 6	18	UNCUT, PASS THRU		White 6	66	UNCUT, PASS THRU
	Red 7	19	UNCUT, PASS THRU		Red 7	67	UNCUT, PASS THRU
	Black 8	20	UNCUT, PASS THRU		Black 8	68	UNCUT, PASS THRU
	Yellow 9	21	UNCUT, PASS THRU		Yellow 9	69	UNCUT, PASS THRU
	Violet 10	22	UNCUT, PASS THRU		Violet 10	70	UNCUT, PASS THRU
	Rose 11	23	UNCUT, PASS THRU		Rose 11	71	UNCUT, PASS THRU
	Aqua 12	24	UNCUT, PASS THRU		Aqua 12	72	UNCUT, PASS THRU
GREEN	Blue 1	25	UNCUT, PASS THRU	RED	Blue 1	73	UNCUT, PASS THRU
	Orange 2	26	UNCUT, PASS THRU		Orange 2	74	UNCUT, PASS THRU
	Green 3	27	UNCUT, PASS THRU		Green 3	75	UNCUT, PASS THRU
	Brown 4	28	UNCUT, PASS THRU		Brown 4	76	UNCUT, PASS THRU
	Slate 5	29	UNCUT, PASS THRU		Slate 5	77	UNCUT, PASS THRU
	White 6	30	UNCUT, PASS THRU		White 6	78	UNCUT, PASS THRU
	Red 7	31	UNCUT, PASS THRU		Red 7	79	UNCUT, PASS THRU
	Black 8	32	UNCUT, PASS THRU		Black 8	80	UNCUT, PASS THRU
	Yellow 9	33	UNCUT, PASS THRU		Yellow 9	81	UNCUT, PASS THRU
	Violet 10	34	UNCUT, PASS THRU		Violet 10	82	UNCUT, PASS THRU
	Rose 11	35	UNCUT, PASS THRU		Rose 11	83	UNCUT, PASS THRU
	Aqua 12	36	UNCUT, PASS THRU		Aqua 12	84	UNCUT, PASS THRU
BROWN	Blue 1	37	UNCUT, PASS THRU	BLACK	Blue 1	85	UNCUT, PASS THRU
	Orange 2	38	UNCUT, PASS THRU		Orange 2	86	UNCUT, PASS THRU
	Green 3	39	UNCUT, PASS THRU		Green 3	87	UNCUT, PASS THRU
	Brown 4	40	UNCUT, PASS THRU		Brown 4	88	UNCUT, PASS THRU
	Slate 5	41	UNCUT, PASS THRU		Slate 5	89	UNCUT, PASS THRU
	White 6	42	UNCUT, PASS THRU		White 6	90	UNCUT, PASS THRU
	Red 7	43	UNCUT, PASS THRU		Red 7	91	UNCUT, PASS THRU
	Black 8	44	UNCUT, PASS THRU		Black 8	92	UNCUT, PASS THRU
	Yellow 9	45	UNCUT, PASS THRU		Yellow 9	93	UNCUT, PASS THRU
	Violet 10	46	UNCUT, PASS THRU		Violet 10	94	UNCUT, PASS THRU
	Rose 11	47	UNCUT, PASS THRU		Rose 11	95	UNCUT, PASS THRU
	Aqua 12	48	UNCUT, PASS THRU		Aqua 12	96	UNCUT, PASS THRU

DCF-KE-04 FROM THE EAST

ITS-31

HNTB

USER NAME = jblakley	DESIGNED - JZ	REVISED -
	DRAWN - JZ	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRIBUTION CABLE FIBER ASSIGNMENTS
FIBER OPTIC SPLICE CLOSURE FOR CMV-KE-04m
(CUMBERLAND SURV.)

SCALE: N.T.S. | SHEET NO. 10 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	320
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-60b.dgn

DISTRIBUTION CABLE FIBER ASSIGNMENTS				ORIGINATION	FIBER OPTIC SPLICE CLOSURE FOR E120		
DISTRIBUTION CABLE DESIGNATION			DCF-KE-04	DESTINATION	FIBER OPTIC SPLICE CLOSURE FOR KE12		
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1	LCF-KE-04e, BLU/BLU	SLATE	Blue 1	49	UNCUT, PASS THRU
	Orange 2	2	LCF-KE-04e, BLU/ORA		Orange 2	50	UNCUT, PASS THRU
	Green 3	3	SPLICE THRU		Green 3	51	UNCUT, PASS THRU
	Brown 4	4	SPLICE THRU		Brown 4	52	UNCUT, PASS THRU
	Slate 5	5	SPLICE THRU		Slate 5	53	UNCUT, PASS THRU
	White 6	6	SPLICE THRU		White 6	54	UNCUT, PASS THRU
	Red 7	7	SPLICE THRU		Red 7	55	UNCUT, PASS THRU
	Black 8	8	SPLICE THRU		Black 8	56	UNCUT, PASS THRU
	Yellow 9	9	SPLICE THRU		Yellow 9	57	UNCUT, PASS THRU
	Violet 10	10	SPLICE THRU		Violet 10	58	UNCUT, PASS THRU
	Rose 11	11	SPLICE THRU		Rose 11	59	UNCUT, PASS THRU
	Aqua 12	12	SPLICE THRU		Aqua 12	60	UNCUT, PASS THRU
ORANGE	Blue 1	13	UNCUT, PASS THRU	WHITE	Blue 1	61	UNCUT, PASS THRU
	Orange 2	14	UNCUT, PASS THRU		Orange 2	62	UNCUT, PASS THRU
	Green 3	15	UNCUT, PASS THRU		Green 3	63	UNCUT, PASS THRU
	Brown 4	16	UNCUT, PASS THRU		Brown 4	64	UNCUT, PASS THRU
	Slate 5	17	UNCUT, PASS THRU		Slate 5	65	UNCUT, PASS THRU
	White 6	18	UNCUT, PASS THRU		White 6	66	UNCUT, PASS THRU
	Red 7	19	UNCUT, PASS THRU		Red 7	67	UNCUT, PASS THRU
	Black 8	20	UNCUT, PASS THRU		Black 8	68	UNCUT, PASS THRU
	Yellow 9	21	UNCUT, PASS THRU		Yellow 9	69	UNCUT, PASS THRU
	Violet 10	22	UNCUT, PASS THRU		Violet 10	70	UNCUT, PASS THRU
	Rose 11	23	UNCUT, PASS THRU		Rose 11	71	UNCUT, PASS THRU
	Aqua 12	24	UNCUT, PASS THRU		Aqua 12	72	UNCUT, PASS THRU
GREEN	Blue 1	25	UNCUT, PASS THRU	RED	Blue 1	73	UNCUT, PASS THRU
	Orange 2	26	UNCUT, PASS THRU		Orange 2	74	UNCUT, PASS THRU
	Green 3	27	UNCUT, PASS THRU		Green 3	75	UNCUT, PASS THRU
	Brown 4	28	UNCUT, PASS THRU		Brown 4	76	UNCUT, PASS THRU
	Slate 5	29	UNCUT, PASS THRU		Slate 5	77	UNCUT, PASS THRU
	White 6	30	UNCUT, PASS THRU		White 6	78	UNCUT, PASS THRU
	Red 7	31	UNCUT, PASS THRU		Red 7	79	UNCUT, PASS THRU
	Black 8	32	UNCUT, PASS THRU		Black 8	80	UNCUT, PASS THRU
	Yellow 9	33	UNCUT, PASS THRU		Yellow 9	81	UNCUT, PASS THRU
	Violet 10	34	UNCUT, PASS THRU		Violet 10	82	UNCUT, PASS THRU
	Rose 11	35	UNCUT, PASS THRU		Rose 11	83	UNCUT, PASS THRU
	Aqua 12	36	UNCUT, PASS THRU		Aqua 12	84	UNCUT, PASS THRU
BROWN	Blue 1	37	UNCUT, PASS THRU	BLACK	Blue 1	85	UNCUT, PASS THRU
	Orange 2	38	UNCUT, PASS THRU		Orange 2	86	UNCUT, PASS THRU
	Green 3	39	UNCUT, PASS THRU		Green 3	87	UNCUT, PASS THRU
	Brown 4	40	UNCUT, PASS THRU		Brown 4	88	UNCUT, PASS THRU
	Slate 5	41	UNCUT, PASS THRU		Slate 5	89	UNCUT, PASS THRU
	White 6	42	UNCUT, PASS THRU		White 6	90	UNCUT, PASS THRU
	Red 7	43	UNCUT, PASS THRU		Red 7	91	UNCUT, PASS THRU
	Black 8	44	UNCUT, PASS THRU		Black 8	92	UNCUT, PASS THRU
	Yellow 9	45	UNCUT, PASS THRU		Yellow 9	93	UNCUT, PASS THRU
	Violet 10	46	UNCUT, PASS THRU		Violet 10	94	UNCUT, PASS THRU
	Rose 11	47	UNCUT, PASS THRU		Rose 11	95	UNCUT, PASS THRU
	Aqua 12	48	UNCUT, PASS THRU		Aqua 12	96	UNCUT, PASS THRU

DCF-KE-04 FROM THE WEST

DISTRIBUTION CABLE FIBER ASSIGNMENTS				ORIGINATION	FIBER OPTIC SPLICE CLOSURE FOR F118		
DISTRIBUTION CABLE DESIGNATION			DCF-KE-04	DESTINATION	FIBER OPTIC SPLICE CLOSURE FOR KE12		
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1	LCF-KE-04e, BLU/GRE	SLATE	Blue 1	49	UNCUT, PASS THRU
	Orange 2	2	LCF-KE-04e, BLU/BRO		Orange 2	50	UNCUT, PASS THRU
	Green 3	3	SPLICE THRU		Green 3	51	UNCUT, PASS THRU
	Brown 4	4	SPLICE THRU		Brown 4	52	UNCUT, PASS THRU
	Slate 5	5	SPLICE THRU		Slate 5	53	UNCUT, PASS THRU
	White 6	6	SPLICE THRU		White 6	54	UNCUT, PASS THRU
	Red 7	7	SPLICE THRU		Red 7	55	UNCUT, PASS THRU
	Black 8	8	SPLICE THRU		Black 8	56	UNCUT, PASS THRU
	Yellow 9	9	SPLICE THRU		Yellow 9	57	UNCUT, PASS THRU
	Violet 10	10	SPLICE THRU		Violet 10	58	UNCUT, PASS THRU
	Rose 11	11	SPLICE THRU		Rose 11	59	UNCUT, PASS THRU
	Aqua 12	12	SPLICE THRU		Aqua 12	60	UNCUT, PASS THRU
ORANGE	Blue 1	13	UNCUT, PASS THRU	WHITE	Blue 1	61	UNCUT, PASS THRU
	Orange 2	14	UNCUT, PASS THRU		Orange 2	62	UNCUT, PASS THRU
	Green 3	15	UNCUT, PASS THRU		Green 3	63	UNCUT, PASS THRU
	Brown 4	16	UNCUT, PASS THRU		Brown 4	64	UNCUT, PASS THRU
	Slate 5	17	UNCUT, PASS THRU		Slate 5	65	UNCUT, PASS THRU
	White 6	18	UNCUT, PASS THRU		White 6	66	UNCUT, PASS THRU
	Red 7	19	UNCUT, PASS THRU		Red 7	67	UNCUT, PASS THRU
	Black 8	20	UNCUT, PASS THRU		Black 8	68	UNCUT, PASS THRU
	Yellow 9	21	UNCUT, PASS THRU		Yellow 9	69	UNCUT, PASS THRU
	Violet 10	22	UNCUT, PASS THRU		Violet 10	70	UNCUT, PASS THRU
	Rose 11	23	UNCUT, PASS THRU		Rose 11	71	UNCUT, PASS THRU
	Aqua 12	24	UNCUT, PASS THRU		Aqua 12	72	UNCUT, PASS THRU
GREEN	Blue 1	25	UNCUT, PASS THRU	RED	Blue 1	73	UNCUT, PASS THRU
	Orange 2	26	UNCUT, PASS THRU		Orange 2	74	UNCUT, PASS THRU
	Green 3	27	UNCUT, PASS THRU		Green 3	75	UNCUT, PASS THRU
	Brown 4	28	UNCUT, PASS THRU		Brown 4	76	UNCUT, PASS THRU
	Slate 5	29	UNCUT, PASS THRU		Slate 5	77	UNCUT, PASS THRU
	White 6	30	UNCUT, PASS THRU		White 6	78	UNCUT, PASS THRU
	Red 7	31	UNCUT, PASS THRU		Red 7	79	UNCUT, PASS THRU
	Black 8	32	UNCUT, PASS THRU		Black 8	80	UNCUT, PASS THRU
	Yellow 9	33	UNCUT, PASS THRU		Yellow 9	81	UNCUT, PASS THRU
	Violet 10	34	UNCUT, PASS THRU		Violet 10	82	UNCUT, PASS THRU
	Rose 11	35	UNCUT, PASS THRU		Rose 11	83	UNCUT, PASS THRU
	Aqua 12	36	UNCUT, PASS THRU		Aqua 12	84	UNCUT, PASS THRU
BROWN	Blue 1	37	UNCUT, PASS THRU	BLACK	Blue 1	85	UNCUT, PASS THRU
	Orange 2	38	UNCUT, PASS THRU		Orange 2	86	UNCUT, PASS THRU
	Green 3	39	UNCUT, PASS THRU		Green 3	87	UNCUT, PASS THRU
	Brown 4	40	UNCUT, PASS THRU		Brown 4	88	UNCUT, PASS THRU
	Slate 5	41	UNCUT, PASS THRU		Slate 5	89	UNCUT, PASS THRU
	White 6	42	UNCUT, PASS THRU		White 6	90	UNCUT, PASS THRU
	Red 7	43	UNCUT, PASS THRU		Red 7	91	UNCUT, PASS THRU
	Black 8	44	UNCUT, PASS THRU		Black 8	92	UNCUT, PASS THRU
	Yellow 9	45	UNCUT, PASS THRU		Yellow 9	93	UNCUT, PASS THRU
	Violet 10	46	UNCUT, PASS THRU		Violet 10	94	UNCUT, PASS THRU
	Rose 11	47	UNCUT, PASS THRU		Rose 11	95	UNCUT, PASS THRU
	Aqua 12	48	UNCUT, PASS THRU		Aqua 12	96	UNCUT, PASS THRU

DCF-KE-04 FROM THE EAST

ITS-32

HNTB

USER NAME = jblakley	DESIGNED - JZ	REVISED -
	DRAWN - JZ	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRIBUTION CABLE FIBER ASSIGNMENTS
FIBER OPTIC SPLICE CLOSURE FOR CMV-KE-04i
(CANFIELD CCTV)

SCALE: N.T.S. | SHEET NO. 11 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	321
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-60c.dgn

DISTRIBUTION CABLE FIBER ASSIGNMENTS				ORIGINATION	FIBER OPTIC SPLICE CLOSURE FOR KE12		
DISTRIBUTION CABLE DESIGNATION			DCF-KE-04	DESTINATION	FIBER OPTIC SPLICE CLOSURE FOR F118		
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1	SPLICE THRU	SLATE	Blue 1	49	UNCUT, PASS THRU
	Orange 2	2	SPLICE THRU		Orange 2	50	UNCUT, PASS THRU
	Green 3	3	LCF-KE-04d, BLU/BLU		Green 3	51	UNCUT, PASS THRU
	Brown 4	4	LCF-KE-04d, BLU/ORA		Brown 4	52	UNCUT, PASS THRU
	Slate 5	5	SPLICE THRU		Slate 5	53	UNCUT, PASS THRU
	White 6	6	SPLICE THRU		White 6	54	UNCUT, PASS THRU
	Red 7	7	SPLICE THRU		Red 7	55	UNCUT, PASS THRU
	Black 8	8	SPLICE THRU		Black 8	56	UNCUT, PASS THRU
	Yellow 9	9	SPLICE THRU		Yellow 9	57	UNCUT, PASS THRU
	Violet 10	10	SPLICE THRU		Violet 10	58	UNCUT, PASS THRU
	Rose 11	11	SPLICE THRU		Rose 11	59	UNCUT, PASS THRU
	Aqua 12	12	SPLICE THRU		Aqua 12	60	UNCUT, PASS THRU
ORANGE	Blue 1	13	UNCUT, PASS THRU	WHITE	Blue 1	61	UNCUT, PASS THRU
	Orange 2	14	UNCUT, PASS THRU		Orange 2	62	UNCUT, PASS THRU
	Green 3	15	UNCUT, PASS THRU		Green 3	63	UNCUT, PASS THRU
	Brown 4	16	UNCUT, PASS THRU		Brown 4	64	UNCUT, PASS THRU
	Slate 5	17	UNCUT, PASS THRU		Slate 5	65	UNCUT, PASS THRU
	White 6	18	UNCUT, PASS THRU		White 6	66	UNCUT, PASS THRU
	Red 7	19	UNCUT, PASS THRU		Red 7	67	UNCUT, PASS THRU
	Black 8	20	UNCUT, PASS THRU		Black 8	68	UNCUT, PASS THRU
	Yellow 9	21	UNCUT, PASS THRU		Yellow 9	69	UNCUT, PASS THRU
	Violet 10	22	UNCUT, PASS THRU		Violet 10	70	UNCUT, PASS THRU
	Rose 11	23	UNCUT, PASS THRU		Rose 11	71	UNCUT, PASS THRU
	Aqua 12	24	UNCUT, PASS THRU		Aqua 12	72	UNCUT, PASS THRU
GREEN	Blue 1	25	UNCUT, PASS THRU	RED	Blue 1	73	UNCUT, PASS THRU
	Orange 2	26	UNCUT, PASS THRU		Orange 2	74	UNCUT, PASS THRU
	Green 3	27	UNCUT, PASS THRU		Green 3	75	UNCUT, PASS THRU
	Brown 4	28	UNCUT, PASS THRU		Brown 4	76	UNCUT, PASS THRU
	Slate 5	29	UNCUT, PASS THRU		Slate 5	77	UNCUT, PASS THRU
	White 6	30	UNCUT, PASS THRU		White 6	78	UNCUT, PASS THRU
	Red 7	31	UNCUT, PASS THRU		Red 7	79	UNCUT, PASS THRU
	Black 8	32	UNCUT, PASS THRU		Black 8	80	UNCUT, PASS THRU
	Yellow 9	33	UNCUT, PASS THRU		Yellow 9	81	UNCUT, PASS THRU
	Violet 10	34	UNCUT, PASS THRU		Violet 10	82	UNCUT, PASS THRU
	Rose 11	35	UNCUT, PASS THRU		Rose 11	83	UNCUT, PASS THRU
	Aqua 12	36	UNCUT, PASS THRU		Aqua 12	84	UNCUT, PASS THRU
BROWN	Blue 1	37	UNCUT, PASS THRU	BLACK	Blue 1	85	UNCUT, PASS THRU
	Orange 2	38	UNCUT, PASS THRU		Orange 2	86	UNCUT, PASS THRU
	Green 3	39	UNCUT, PASS THRU		Green 3	87	UNCUT, PASS THRU
	Brown 4	40	UNCUT, PASS THRU		Brown 4	88	UNCUT, PASS THRU
	Slate 5	41	UNCUT, PASS THRU		Slate 5	89	UNCUT, PASS THRU
	White 6	42	UNCUT, PASS THRU		White 6	90	UNCUT, PASS THRU
	Red 7	43	UNCUT, PASS THRU		Red 7	91	UNCUT, PASS THRU
	Black 8	44	UNCUT, PASS THRU		Black 8	92	UNCUT, PASS THRU
	Yellow 9	45	UNCUT, PASS THRU		Yellow 9	93	UNCUT, PASS THRU
	Violet 10	46	UNCUT, PASS THRU		Violet 10	94	UNCUT, PASS THRU
	Rose 11	47	UNCUT, PASS THRU		Rose 11	95	UNCUT, PASS THRU
	Aqua 12	48	UNCUT, PASS THRU		Aqua 12	96	UNCUT, PASS THRU

DCF-KE-04 FROM THE WEST

DISTRIBUTION CABLE FIBER ASSIGNMENTS				ORIGINATION	PROPOSED LIGHTING CONTROLLER "F"		
DISTRIBUTION CABLE DESIGNATION			DCF-KE-04	DESTINATION	FIBER OPTIC SPLICE CLOSURE FOR F118		
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1	SPLICE THRU	SLATE	Blue 1	49	UNCUT, PASS THRU
	Orange 2	2	SPLICE THRU		Orange 2	50	UNCUT, PASS THRU
	Green 3	3	LCF-KE-04d, BLU/GRE		Green 3	51	UNCUT, PASS THRU
	Brown 4	4	LCF-KE-04d, BLU/BRO		Brown 4	52	UNCUT, PASS THRU
	Slate 5	5	SPLICE THRU		Slate 5	53	UNCUT, PASS THRU
	White 6	6	SPLICE THRU		White 6	54	UNCUT, PASS THRU
	Red 7	7	SPLICE THRU		Red 7	55	UNCUT, PASS THRU
	Black 8	8	SPLICE THRU		Black 8	56	UNCUT, PASS THRU
	Yellow 9	9	SPLICE THRU		Yellow 9	57	UNCUT, PASS THRU
	Violet 10	10	SPLICE THRU		Violet 10	58	UNCUT, PASS THRU
	Rose 11	11	SPLICE THRU		Rose 11	59	UNCUT, PASS THRU
	Aqua 12	12	SPLICE THRU		Aqua 12	60	UNCUT, PASS THRU
ORANGE	Blue 1	13	UNCUT, PASS THRU	WHITE	Blue 1	61	UNCUT, PASS THRU
	Orange 2	14	UNCUT, PASS THRU		Orange 2	62	UNCUT, PASS THRU
	Green 3	15	UNCUT, PASS THRU		Green 3	63	UNCUT, PASS THRU
	Brown 4	16	UNCUT, PASS THRU		Brown 4	64	UNCUT, PASS THRU
	Slate 5	17	UNCUT, PASS THRU		Slate 5	65	UNCUT, PASS THRU
	White 6	18	UNCUT, PASS THRU		White 6	66	UNCUT, PASS THRU
	Red 7	19	UNCUT, PASS THRU		Red 7	67	UNCUT, PASS THRU
	Black 8	20	UNCUT, PASS THRU		Black 8	68	UNCUT, PASS THRU
	Yellow 9	21	UNCUT, PASS THRU		Yellow 9	69	UNCUT, PASS THRU
	Violet 10	22	UNCUT, PASS THRU		Violet 10	70	UNCUT, PASS THRU
	Rose 11	23	UNCUT, PASS THRU		Rose 11	71	UNCUT, PASS THRU
	Aqua 12	24	UNCUT, PASS THRU		Aqua 12	72	UNCUT, PASS THRU
GREEN	Blue 1	25	UNCUT, PASS THRU	RED	Blue 1	73	UNCUT, PASS THRU
	Orange 2	26	UNCUT, PASS THRU		Orange 2	74	UNCUT, PASS THRU
	Green 3	27	UNCUT, PASS THRU		Green 3	75	UNCUT, PASS THRU
	Brown 4	28	UNCUT, PASS THRU		Brown 4	76	UNCUT, PASS THRU
	Slate 5	29	UNCUT, PASS THRU		Slate 5	77	UNCUT, PASS THRU
	White 6	30	UNCUT, PASS THRU		White 6	78	UNCUT, PASS THRU
	Red 7	31	UNCUT, PASS THRU		Red 7	79	UNCUT, PASS THRU
	Black 8	32	UNCUT, PASS THRU		Black 8	80	UNCUT, PASS THRU
	Yellow 9	33	UNCUT, PASS THRU		Yellow 9	81	UNCUT, PASS THRU
	Violet 10	34	UNCUT, PASS THRU		Violet 10	82	UNCUT, PASS THRU
	Rose 11	35	UNCUT, PASS THRU		Rose 11	83	UNCUT, PASS THRU
	Aqua 12	36	UNCUT, PASS THRU		Aqua 12	84	UNCUT, PASS THRU
BROWN	Blue 1	37	UNCUT, PASS THRU	BLACK	Blue 1	85	UNCUT, PASS THRU
	Orange 2	38	UNCUT, PASS THRU		Orange 2	86	UNCUT, PASS THRU
	Green 3	39	UNCUT, PASS THRU		Green 3	87	UNCUT, PASS THRU
	Brown 4	40	UNCUT, PASS THRU		Brown 4	88	UNCUT, PASS THRU
	Slate 5	41	UNCUT, PASS THRU		Slate 5	89	UNCUT, PASS THRU
	White 6	42	UNCUT, PASS THRU		White 6	90	UNCUT, PASS THRU
	Red 7	43	UNCUT, PASS THRU		Red 7	91	UNCUT, PASS THRU
	Black 8	44	UNCUT, PASS THRU		Black 8	92	UNCUT, PASS THRU
	Yellow 9	45	UNCUT, PASS THRU		Yellow 9	93	UNCUT, PASS THRU
	Violet 10	46	UNCUT, PASS THRU		Violet 10	94	UNCUT, PASS THRU
	Rose 11	47	UNCUT, PASS THRU		Rose 11	95	UNCUT, PASS THRU
	Aqua 12	48	UNCUT, PASS THRU		Aqua 12	96	UNCUT, PASS THRU

DCF-KE-04 FROM THE EAST

ITS-33

HNTB

USER NAME = jblakley	DESIGNED - JZ	REVISED -
	DRAWN - JZ	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRIBUTION CABLE FIBER ASSIGNMENTS
FIBER OPTIC SPLICE CLOSURE FOR CMV-KE-04h
(CANFIELD SURV.)

SCALE: N.T.S. | SHEET NO. 12 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	322
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-60d.dgn

DISTRIBUTION CABLE FIBER ASSIGNMENTS				ORIGINATION	FIBER OPTIC SPLICE CLOSURE FOR F118		
DISTRIBUTION CABLE DESIGNATION			DCF-KE-04	DESTINATION	PROPOSED LIGHTING CONTROLLER "F"		
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1	SPLICE THRU	SLATE	Blue 1	49	UNCUT, PASS THRU
	Orange 2	2	SPLICE THRU		Orange 2	50	UNCUT, PASS THRU
	Green 3	3	SPLICE THRU		Green 3	51	UNCUT, PASS THRU
	Brown 4	4	SPLICE THRU		Brown 4	52	UNCUT, PASS THRU
	Slate 5	5	SPLICE THRU		Slate 5	53	UNCUT, PASS THRU
	White 6	6	SPLICE THRU		White 6	54	UNCUT, PASS THRU
	Red 7	7	SPLICE THRU		Red 7	55	UNCUT, PASS THRU
	Black 8	8	SPLICE THRU		Black 8	56	UNCUT, PASS THRU
	Yellow 9	9	SPLICE THRU		Yellow 9	57	UNCUT, PASS THRU
	Violet 10	10	SPLICE THRU		Violet 10	58	UNCUT, PASS THRU
	Rose 11	11	LCF-KE-04c, BLU/BLU		Rose 11	59	UNCUT, PASS THRU
	Aqua 12	12	LCF-KE-04c, BLU/ORA		Aqua 12	60	UNCUT, PASS THRU
ORANGE	Blue 1	13	UNCUT, PASS THRU	WHITE	Blue 1	61	UNCUT, PASS THRU
	Orange 2	14	UNCUT, PASS THRU		Orange 2	62	UNCUT, PASS THRU
	Green 3	15	UNCUT, PASS THRU		Green 3	63	UNCUT, PASS THRU
	Brown 4	16	UNCUT, PASS THRU		Brown 4	64	UNCUT, PASS THRU
	Slate 5	17	UNCUT, PASS THRU		Slate 5	65	UNCUT, PASS THRU
	White 6	18	UNCUT, PASS THRU		White 6	66	UNCUT, PASS THRU
	Red 7	19	UNCUT, PASS THRU		Red 7	67	UNCUT, PASS THRU
	Black 8	20	UNCUT, PASS THRU		Black 8	68	UNCUT, PASS THRU
	Yellow 9	21	UNCUT, PASS THRU		Yellow 9	69	UNCUT, PASS THRU
	Violet 10	22	UNCUT, PASS THRU		Violet 10	70	UNCUT, PASS THRU
	Rose 11	23	UNCUT, PASS THRU		Rose 11	71	UNCUT, PASS THRU
	Aqua 12	24	UNCUT, PASS THRU		Aqua 12	72	UNCUT, PASS THRU
GREEN	Blue 1	25	UNCUT, PASS THRU	RED	Blue 1	73	UNCUT, PASS THRU
	Orange 2	26	UNCUT, PASS THRU		Orange 2	74	UNCUT, PASS THRU
	Green 3	27	UNCUT, PASS THRU		Green 3	75	UNCUT, PASS THRU
	Brown 4	28	UNCUT, PASS THRU		Brown 4	76	UNCUT, PASS THRU
	Slate 5	29	UNCUT, PASS THRU		Slate 5	77	UNCUT, PASS THRU
	White 6	30	UNCUT, PASS THRU		White 6	78	UNCUT, PASS THRU
	Red 7	31	UNCUT, PASS THRU		Red 7	79	UNCUT, PASS THRU
	Black 8	32	UNCUT, PASS THRU		Black 8	80	UNCUT, PASS THRU
	Yellow 9	33	UNCUT, PASS THRU		Yellow 9	81	UNCUT, PASS THRU
	Violet 10	34	UNCUT, PASS THRU		Violet 10	82	UNCUT, PASS THRU
	Rose 11	35	UNCUT, PASS THRU		Rose 11	83	UNCUT, PASS THRU
	Aqua 12	36	UNCUT, PASS THRU		Aqua 12	84	UNCUT, PASS THRU
BROWN	Blue 1	37	UNCUT, PASS THRU	BLACK	Blue 1	85	UNCUT, PASS THRU
	Orange 2	38	UNCUT, PASS THRU		Orange 2	86	UNCUT, PASS THRU
	Green 3	39	UNCUT, PASS THRU		Green 3	87	UNCUT, PASS THRU
	Brown 4	40	UNCUT, PASS THRU		Brown 4	88	UNCUT, PASS THRU
	Slate 5	41	UNCUT, PASS THRU		Slate 5	89	UNCUT, PASS THRU
	White 6	42	UNCUT, PASS THRU		White 6	90	UNCUT, PASS THRU
	Red 7	43	UNCUT, PASS THRU		Red 7	91	UNCUT, PASS THRU
	Black 8	44	UNCUT, PASS THRU		Black 8	92	UNCUT, PASS THRU
	Yellow 9	45	UNCUT, PASS THRU		Yellow 9	93	UNCUT, PASS THRU
	Violet 10	46	UNCUT, PASS THRU		Violet 10	94	UNCUT, PASS THRU
	Rose 11	47	UNCUT, PASS THRU		Rose 11	95	UNCUT, PASS THRU
	Aqua 12	48	UNCUT, PASS THRU		Aqua 12	96	UNCUT, PASS THRU

DCF-KE-04 FROM THE WEST

DISTRIBUTION CABLE FIBER ASSIGNMENTS				ORIGINATION	FIBER OPTIC SPLICE CLOSURE FOR F116		
DISTRIBUTION CABLE DESIGNATION			DCF-KE-04	DESTINATION	PROPOSED LIGHTING CONTROLLER "F"		
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1	SPLICE THRU	SLATE	Blue 1	49	UNCUT, PASS THRU
	Orange 2	2	SPLICE THRU		Orange 2	50	UNCUT, PASS THRU
	Green 3	3	SPLICE THRU		Green 3	51	UNCUT, PASS THRU
	Brown 4	4	SPLICE THRU		Brown 4	52	UNCUT, PASS THRU
	Slate 5	5	SPLICE THRU		Slate 5	53	UNCUT, PASS THRU
	White 6	6	SPLICE THRU		White 6	54	UNCUT, PASS THRU
	Red 7	7	SPLICE THRU		Red 7	55	UNCUT, PASS THRU
	Black 8	8	SPLICE THRU		Black 8	56	UNCUT, PASS THRU
	Yellow 9	9	SPLICE THRU		Yellow 9	57	UNCUT, PASS THRU
	Violet 10	10	SPLICE THRU		Violet 10	58	UNCUT, PASS THRU
	Rose 11	11	LCF-KE-04c, BLU/GRE		Rose 11	59	UNCUT, PASS THRU
	Aqua 12	12	LCF-KE-04c, BLU/BRO		Aqua 12	60	UNCUT, PASS THRU
ORANGE	Blue 1	13	UNCUT, PASS THRU	WHITE	Blue 1	61	UNCUT, PASS THRU
	Orange 2	14	UNCUT, PASS THRU		Orange 2	62	UNCUT, PASS THRU
	Green 3	15	UNCUT, PASS THRU		Green 3	63	UNCUT, PASS THRU
	Brown 4	16	UNCUT, PASS THRU		Brown 4	64	UNCUT, PASS THRU
	Slate 5	17	UNCUT, PASS THRU		Slate 5	65	UNCUT, PASS THRU
	White 6	18	UNCUT, PASS THRU		White 6	66	UNCUT, PASS THRU
	Red 7	19	UNCUT, PASS THRU		Red 7	67	UNCUT, PASS THRU
	Black 8	20	UNCUT, PASS THRU		Black 8	68	UNCUT, PASS THRU
	Yellow 9	21	UNCUT, PASS THRU		Yellow 9	69	UNCUT, PASS THRU
	Violet 10	22	UNCUT, PASS THRU		Violet 10	70	UNCUT, PASS THRU
	Rose 11	23	UNCUT, PASS THRU		Rose 11	71	UNCUT, PASS THRU
	Aqua 12	24	UNCUT, PASS THRU		Aqua 12	72	UNCUT, PASS THRU
GREEN	Blue 1	25	UNCUT, PASS THRU	RED	Blue 1	73	UNCUT, PASS THRU
	Orange 2	26	UNCUT, PASS THRU		Orange 2	74	UNCUT, PASS THRU
	Green 3	27	UNCUT, PASS THRU		Green 3	75	UNCUT, PASS THRU
	Brown 4	28	UNCUT, PASS THRU		Brown 4	76	UNCUT, PASS THRU
	Slate 5	29	UNCUT, PASS THRU		Slate 5	77	UNCUT, PASS THRU
	White 6	30	UNCUT, PASS THRU		White 6	78	UNCUT, PASS THRU
	Red 7	31	UNCUT, PASS THRU		Red 7	79	UNCUT, PASS THRU
	Black 8	32	UNCUT, PASS THRU		Black 8	80	UNCUT, PASS THRU
	Yellow 9	33	UNCUT, PASS THRU		Yellow 9	81	UNCUT, PASS THRU
	Violet 10	34	UNCUT, PASS THRU		Violet 10	82	UNCUT, PASS THRU
	Rose 11	35	UNCUT, PASS THRU		Rose 11	83	UNCUT, PASS THRU
	Aqua 12	36	UNCUT, PASS THRU		Aqua 12	84	UNCUT, PASS THRU
BROWN	Blue 1	37	UNCUT, PASS THRU	BLACK	Blue 1	85	UNCUT, PASS THRU
	Orange 2	38	UNCUT, PASS THRU		Orange 2	86	UNCUT, PASS THRU
	Green 3	39	UNCUT, PASS THRU		Green 3	87	UNCUT, PASS THRU
	Brown 4	40	UNCUT, PASS THRU		Brown 4	88	UNCUT, PASS THRU
	Slate 5	41	UNCUT, PASS THRU		Slate 5	89	UNCUT, PASS THRU
	White 6	42	UNCUT, PASS THRU		White 6	90	UNCUT, PASS THRU
	Red 7	43	UNCUT, PASS THRU		Red 7	91	UNCUT, PASS THRU
	Black 8	44	UNCUT, PASS THRU		Black 8	92	UNCUT, PASS THRU
	Yellow 9	45	UNCUT, PASS THRU		Yellow 9	93	UNCUT, PASS THRU
	Violet 10	46	UNCUT, PASS THRU		Violet 10	94	UNCUT, PASS THRU
	Rose 11	47	UNCUT, PASS THRU		Rose 11	95	UNCUT, PASS THRU
	Aqua 12	48	UNCUT, PASS THRU		Aqua 12	96	UNCUT, PASS THRU

DCF-KE-04 FROM THE EAST

ITS-34

HNTB

USER NAME = jblakley	DESIGNED - JZ	REVISED -
	DRAWN - JZ	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRIBUTION CABLE FIBER ASSIGNMENTS
FIBER OPTIC SPLICE CLOSURE FOR CMV-KE-04e
(LIGHTING CONTROLLER "F")

SCALE: N.T.S. | SHEET NO. 13 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	323
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-60e.dgn

DISTRIBUTION CABLE FIBER ASSIGNMENTS				ORIGINATION	PROPOSED LIGHTING CONTROLLER "F"		
DISTRIBUTION CABLE DESIGNATION			DCF-KE-04	DESTINATION	FIBER OPTIC SPLICE CLOSURE FOR F116		
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1	SPLICE THRU	SLATE	Blue 1	49	UNCUT, PASS THRU
	Orange 2	2	SPLICE THRU		Orange 2	50	UNCUT, PASS THRU
	Green 3	3	LCF-KE-04b, BLU/BLU		Green 3	51	UNCUT, PASS THRU
	Brown 4	4	LCF-KE-04b, BLU/ORA		Brown 4	52	UNCUT, PASS THRU
	Slate 5	5	SPLICE THRU		Slate 5	53	UNCUT, PASS THRU
	White 6	6	SPLICE THRU		White 6	54	UNCUT, PASS THRU
	Red 7	7	SPLICE THRU		Red 7	55	UNCUT, PASS THRU
	Black 8	8	SPLICE THRU		Black 8	56	UNCUT, PASS THRU
	Yellow 9	9	SPLICE THRU		Yellow 9	57	UNCUT, PASS THRU
	Violet 10	10	SPLICE THRU		Violet 10	58	UNCUT, PASS THRU
	Rose 11	11	SPLICE THRU		Rose 11	59	UNCUT, PASS THRU
	Aqua 12	12	SPLICE THRU		Aqua 12	60	UNCUT, PASS THRU
ORANGE	Blue 1	13	UNCUT, PASS THRU	WHITE	Blue 1	61	UNCUT, PASS THRU
	Orange 2	14	UNCUT, PASS THRU		Orange 2	62	UNCUT, PASS THRU
	Green 3	15	UNCUT, PASS THRU		Green 3	63	UNCUT, PASS THRU
	Brown 4	16	UNCUT, PASS THRU		Brown 4	64	UNCUT, PASS THRU
	Slate 5	17	UNCUT, PASS THRU		Slate 5	65	UNCUT, PASS THRU
	White 6	18	UNCUT, PASS THRU		White 6	66	UNCUT, PASS THRU
	Red 7	19	UNCUT, PASS THRU		Red 7	67	UNCUT, PASS THRU
	Black 8	20	UNCUT, PASS THRU		Black 8	68	UNCUT, PASS THRU
	Yellow 9	21	UNCUT, PASS THRU		Yellow 9	69	UNCUT, PASS THRU
	Violet 10	22	UNCUT, PASS THRU		Violet 10	70	UNCUT, PASS THRU
	Rose 11	23	UNCUT, PASS THRU		Rose 11	71	UNCUT, PASS THRU
	Aqua 12	24	UNCUT, PASS THRU		Aqua 12	72	UNCUT, PASS THRU
GREEN	Blue 1	25	UNCUT, PASS THRU	RED	Blue 1	73	UNCUT, PASS THRU
	Orange 2	26	UNCUT, PASS THRU		Orange 2	74	UNCUT, PASS THRU
	Green 3	27	UNCUT, PASS THRU		Green 3	75	UNCUT, PASS THRU
	Brown 4	28	UNCUT, PASS THRU		Brown 4	76	UNCUT, PASS THRU
	Slate 5	29	UNCUT, PASS THRU		Slate 5	77	UNCUT, PASS THRU
	White 6	30	UNCUT, PASS THRU		White 6	78	UNCUT, PASS THRU
	Red 7	31	UNCUT, PASS THRU		Red 7	79	UNCUT, PASS THRU
	Black 8	32	UNCUT, PASS THRU		Black 8	80	UNCUT, PASS THRU
	Yellow 9	33	UNCUT, PASS THRU		Yellow 9	81	UNCUT, PASS THRU
	Violet 10	34	UNCUT, PASS THRU		Violet 10	82	UNCUT, PASS THRU
	Rose 11	35	UNCUT, PASS THRU		Rose 11	83	UNCUT, PASS THRU
	Aqua 12	36	UNCUT, PASS THRU		Aqua 12	84	UNCUT, PASS THRU
BROWN	Blue 1	37	UNCUT, PASS THRU	BLACK	Blue 1	85	UNCUT, PASS THRU
	Orange 2	38	UNCUT, PASS THRU		Orange 2	86	UNCUT, PASS THRU
	Green 3	39	UNCUT, PASS THRU		Green 3	87	UNCUT, PASS THRU
	Brown 4	40	UNCUT, PASS THRU		Brown 4	88	UNCUT, PASS THRU
	Slate 5	41	UNCUT, PASS THRU		Slate 5	89	UNCUT, PASS THRU
	White 6	42	UNCUT, PASS THRU		White 6	90	UNCUT, PASS THRU
	Red 7	43	UNCUT, PASS THRU		Red 7	91	UNCUT, PASS THRU
	Black 8	44	UNCUT, PASS THRU		Black 8	92	UNCUT, PASS THRU
	Yellow 9	45	UNCUT, PASS THRU		Yellow 9	93	UNCUT, PASS THRU
	Violet 10	46	UNCUT, PASS THRU		Violet 10	94	UNCUT, PASS THRU
	Rose 11	47	UNCUT, PASS THRU		Rose 11	95	UNCUT, PASS THRU
	Aqua 12	48	UNCUT, PASS THRU		Aqua 12	96	UNCUT, PASS THRU

DCF-KE-04 FROM THE WEST

DISTRIBUTION CABLE FIBER ASSIGNMENTS				ORIGINATION	FIBER OPTIC SPLICE CLOSURE FOR KE11		
DISTRIBUTION CABLE DESIGNATION			DCF-KE-04	DESTINATION	FIBER OPTIC SPLICE CLOSURE FOR F116		
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1	SPLICE THRU	SLATE	Blue 1	49	UNCUT, PASS THRU
	Orange 2	2	SPLICE THRU		Orange 2	50	UNCUT, PASS THRU
	Green 3	3	LCF-KE-04b, BLU/GRE		Green 3	51	UNCUT, PASS THRU
	Brown 4	4	LCF-KE-04b, BLU/BRO		Brown 4	52	UNCUT, PASS THRU
	Slate 5	5	SPLICE THRU		Slate 5	53	UNCUT, PASS THRU
	White 6	6	SPLICE THRU		White 6	54	UNCUT, PASS THRU
	Red 7	7	SPLICE THRU		Red 7	55	UNCUT, PASS THRU
	Black 8	8	SPLICE THRU		Black 8	56	UNCUT, PASS THRU
	Yellow 9	9	SPLICE THRU		Yellow 9	57	UNCUT, PASS THRU
	Violet 10	10	SPLICE THRU		Violet 10	58	UNCUT, PASS THRU
	Rose 11	11	SPLICE THRU		Rose 11	59	UNCUT, PASS THRU
	Aqua 12	12	SPLICE THRU		Aqua 12	60	UNCUT, PASS THRU
ORANGE	Blue 1	13	UNCUT, PASS THRU	WHITE	Blue 1	61	UNCUT, PASS THRU
	Orange 2	14	UNCUT, PASS THRU		Orange 2	62	UNCUT, PASS THRU
	Green 3	15	UNCUT, PASS THRU		Green 3	63	UNCUT, PASS THRU
	Brown 4	16	UNCUT, PASS THRU		Brown 4	64	UNCUT, PASS THRU
	Slate 5	17	UNCUT, PASS THRU		Slate 5	65	UNCUT, PASS THRU
	White 6	18	UNCUT, PASS THRU		White 6	66	UNCUT, PASS THRU
	Red 7	19	UNCUT, PASS THRU		Red 7	67	UNCUT, PASS THRU
	Black 8	20	UNCUT, PASS THRU		Black 8	68	UNCUT, PASS THRU
	Yellow 9	21	UNCUT, PASS THRU		Yellow 9	69	UNCUT, PASS THRU
	Violet 10	22	UNCUT, PASS THRU		Violet 10	70	UNCUT, PASS THRU
	Rose 11	23	UNCUT, PASS THRU		Rose 11	71	UNCUT, PASS THRU
	Aqua 12	24	UNCUT, PASS THRU		Aqua 12	72	UNCUT, PASS THRU
GREEN	Blue 1	25	UNCUT, PASS THRU	RED	Blue 1	73	UNCUT, PASS THRU
	Orange 2	26	UNCUT, PASS THRU		Orange 2	74	UNCUT, PASS THRU
	Green 3	27	UNCUT, PASS THRU		Green 3	75	UNCUT, PASS THRU
	Brown 4	28	UNCUT, PASS THRU		Brown 4	76	UNCUT, PASS THRU
	Slate 5	29	UNCUT, PASS THRU		Slate 5	77	UNCUT, PASS THRU
	White 6	30	UNCUT, PASS THRU		White 6	78	UNCUT, PASS THRU
	Red 7	31	UNCUT, PASS THRU		Red 7	79	UNCUT, PASS THRU
	Black 8	32	UNCUT, PASS THRU		Black 8	80	UNCUT, PASS THRU
	Yellow 9	33	UNCUT, PASS THRU		Yellow 9	81	UNCUT, PASS THRU
	Violet 10	34	UNCUT, PASS THRU		Violet 10	82	UNCUT, PASS THRU
	Rose 11	35	UNCUT, PASS THRU		Rose 11	83	UNCUT, PASS THRU
	Aqua 12	36	UNCUT, PASS THRU		Aqua 12	84	UNCUT, PASS THRU
BROWN	Blue 1	37	UNCUT, PASS THRU	BLACK	Blue 1	85	UNCUT, PASS THRU
	Orange 2	38	UNCUT, PASS THRU		Orange 2	86	UNCUT, PASS THRU
	Green 3	39	UNCUT, PASS THRU		Green 3	87	UNCUT, PASS THRU
	Brown 4	40	UNCUT, PASS THRU		Brown 4	88	UNCUT, PASS THRU
	Slate 5	41	UNCUT, PASS THRU		Slate 5	89	UNCUT, PASS THRU
	White 6	42	UNCUT, PASS THRU		White 6	90	UNCUT, PASS THRU
	Red 7	43	UNCUT, PASS THRU		Red 7	91	UNCUT, PASS THRU
	Black 8	44	UNCUT, PASS THRU		Black 8	92	UNCUT, PASS THRU
	Yellow 9	45	UNCUT, PASS THRU		Yellow 9	93	UNCUT, PASS THRU
	Violet 10	46	UNCUT, PASS THRU		Violet 10	94	UNCUT, PASS THRU
	Rose 11	47	UNCUT, PASS THRU		Rose 11	95	UNCUT, PASS THRU
	Aqua 12	48	UNCUT, PASS THRU		Aqua 12	96	UNCUT, PASS THRU

DCF-KE-04 FROM THE EAST

ITS-35

HNTB

USER NAME = jblakley	DESIGNED - JZ	REVISED -
	DRAWN - JZ	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRIBUTION CABLE FIBER ASSIGNMENTS
FIBER OPTIC SPLICE CLOSURE FOR CMV-KE-04c
(HARLEM SURV.)

SCALE: N.T.S. | SHEET NO. 14 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	324
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-61.dgn

DISTRIBUTION CABLE FIBER ASSIGNMENTS				ORIGINATION	FIBER OPTIC SPLICE CLOSURE FOR F116		
DISTRIBUTION CABLE DESIGNATION			DCF-KE-04	DESTINATION	FIBER OPTIC INTERCONNECT CABINET		
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1	LCF-KE-04a, BLU/BLU	SLATE	Blue 1	49	CAPPED AND COILED
	Orange 2	2	LCF-KE-04a, BLU/ORA		Orange 2	50	CAPPED AND COILED
	Green 3	3	SPLICED TO PIGTAIL		Green 3	51	CAPPED AND COILED
	Brown 4	4	SPLICED TO PIGTAIL		Brown 4	52	CAPPED AND COILED
	Slate 5	5	SPLICED TO PIGTAIL		Slate 5	53	CAPPED AND COILED
	White 6	6	SPLICED TO PIGTAIL		White 6	54	CAPPED AND COILED
	Red 7	7	SPLICED TO PIGTAIL		Red 7	55	CAPPED AND COILED
	Black 8	8	SPLICED TO PIGTAIL		Black 8	56	CAPPED AND COILED
	Yellow 9	9	SPLICED TO PIGTAIL		Yellow 9	57	CAPPED AND COILED
	Violet 10	10	SPLICED TO PIGTAIL		Violet 10	58	CAPPED AND COILED
	Rose 11	11	SPLICED TO PIGTAIL		Rose 11	59	CAPPED AND COILED
	Aqua 12	12	SPLICED TO PIGTAIL		Aqua 12	60	CAPPED AND COILED
ORANGE	Blue 1	13	CAPPED AND COILED	WHITE	Blue 1	61	CAPPED AND COILED
	Orange 2	14	CAPPED AND COILED		Orange 2	62	CAPPED AND COILED
	Green 3	15	CAPPED AND COILED		Green 3	63	CAPPED AND COILED
	Brown 4	16	CAPPED AND COILED		Brown 4	64	CAPPED AND COILED
	Slate 5	17	CAPPED AND COILED		Slate 5	65	CAPPED AND COILED
	White 6	18	CAPPED AND COILED		White 6	66	CAPPED AND COILED
	Red 7	19	CAPPED AND COILED		Red 7	67	CAPPED AND COILED
	Black 8	20	CAPPED AND COILED		Black 8	68	CAPPED AND COILED
	Yellow 9	21	CAPPED AND COILED		Yellow 9	69	CAPPED AND COILED
	Violet 10	22	CAPPED AND COILED		Violet 10	70	CAPPED AND COILED
	Rose 11	23	CAPPED AND COILED		Rose 11	71	CAPPED AND COILED
	Aqua 12	24	CAPPED AND COILED		Aqua 12	72	CAPPED AND COILED
GREEN	Blue 1	25	CAPPED AND COILED	RED	Blue 1	73	CAPPED AND COILED
	Orange 2	26	CAPPED AND COILED		Orange 2	74	CAPPED AND COILED
	Green 3	27	CAPPED AND COILED		Green 3	75	CAPPED AND COILED
	Brown 4	28	CAPPED AND COILED		Brown 4	76	CAPPED AND COILED
	Slate 5	29	CAPPED AND COILED		Slate 5	77	CAPPED AND COILED
	White 6	30	CAPPED AND COILED		White 6	78	CAPPED AND COILED
	Red 7	31	CAPPED AND COILED		Red 7	79	CAPPED AND COILED
	Black 8	32	CAPPED AND COILED		Black 8	80	CAPPED AND COILED
	Yellow 9	33	CAPPED AND COILED		Yellow 9	81	CAPPED AND COILED
	Violet 10	34	CAPPED AND COILED		Violet 10	82	CAPPED AND COILED
	Rose 11	35	CAPPED AND COILED		Rose 11	83	CAPPED AND COILED
	Aqua 12	36	CAPPED AND COILED		Aqua 12	84	CAPPED AND COILED
BROWN	Blue 1	37	CAPPED AND COILED	BLACK	Blue 1	85	CAPPED AND COILED
	Orange 2	38	CAPPED AND COILED		Orange 2	86	CAPPED AND COILED
	Green 3	39	CAPPED AND COILED		Green 3	87	CAPPED AND COILED
	Brown 4	40	CAPPED AND COILED		Brown 4	88	CAPPED AND COILED
	Slate 5	41	CAPPED AND COILED		Slate 5	89	CAPPED AND COILED
	White 6	42	CAPPED AND COILED		White 6	90	CAPPED AND COILED
	Red 7	43	CAPPED AND COILED		Red 7	91	CAPPED AND COILED
	Black 8	44	CAPPED AND COILED		Black 8	92	CAPPED AND COILED
	Yellow 9	45	CAPPED AND COILED		Yellow 9	93	CAPPED AND COILED
	Violet 10	46	CAPPED AND COILED		Violet 10	94	CAPPED AND COILED
	Rose 11	47	CAPPED AND COILED		Rose 11	95	CAPPED AND COILED
	Aqua 12	48	CAPPED AND COILED		Aqua 12	96	CAPPED AND COILED

DCF-KE-04 FROM THE WEST

DISTRIBUTION CABLE FIBER ASSIGNMENTS				ORIGINATION	FUTURE CABLE		
DISTRIBUTION CABLE DESIGNATION			DCF-KE-03	DESTINATION	FIBER OPTIC INTERCONNECT CABINET		
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1		SLATE	Blue 1	49	
	Orange 2	2			Orange 2	50	
	Green 3	3			Green 3	51	
	Brown 4	4			Brown 4	52	
	Slate 5	5			Slate 5	53	
	White 6	6			White 6	54	
	Red 7	7			Red 7	55	
	Black 8	8			Black 8	56	
	Yellow 9	9			Yellow 9	57	
	Violet 10	10			Violet 10	58	
	Rose 11	11			Rose 11	59	
	Aqua 12	12			Aqua 12	60	
ORANGE	Blue 1	13		WHITE	Blue 1	61	
	Orange 2	14			Orange 2	62	
	Green 3	15			Green 3	63	
	Brown 4	16			Brown 4	64	
	Slate 5	17			Slate 5	65	
	White 6	18			White 6	66	
	Red 7	19			Red 7	67	
	Black 8	20			Black 8	68	
	Yellow 9	21			Yellow 9	69	
	Violet 10	22			Violet 10	70	
	Rose 11	23			Rose 11	71	
	Aqua 12	24			Aqua 12	72	
GREEN	Blue 1	25		RED	Blue 1	73	
	Orange 2	26			Orange 2	74	
	Green 3	27			Green 3	75	
	Brown 4	28			Brown 4	76	
	Slate 5	29			Slate 5	77	
	White 6	30			White 6	78	
	Red 7	31			Red 7	79	
	Black 8	32			Black 8	80	
	Yellow 9	33			Yellow 9	81	
	Violet 10	34			Violet 10	82	
	Rose 11	35			Rose 11	83	
	Aqua 12	36			Aqua 12	84	
BROWN	Blue 1	37		BLACK	Blue 1	85	
	Orange 2	38			Orange 2	86	
	Green 3	39			Green 3	87	
	Brown 4	40			Brown 4	88	
	Slate 5	41			Slate 5	89	
	White 6	42			White 6	90	
	Red 7	43			Red 7	91	
	Black 8	44			Black 8	92	
	Yellow 9	45			Yellow 9	93	
	Violet 10	46			Violet 10	94	
	Rose 11	47			Rose 11	95	
	Aqua 12	48			Aqua 12	96	

DCF-KE-04 FROM THE EAST

HNTB

USER NAME = jblakley	DESIGNED - JZ	REVISED -
	DRAWN - JZ	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRIBUTION CABLE FIBER ASSIGNMENTS
FIBER OPTIC INTERCONNECT CABINET FIC-KE-04a
(HARLEM)

SCALE: N.T.S. | SHEET NO. 15 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	325
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-62.dgn

LATERAL CABLE FIBER ASSIGNMENTS		
LCF-KE-04g (FROM KE13B)		
FIBER NO.	FUNCTION	CONNECTION
1	ETHERNET SWITCH	DCF-KE-04, BLU/BLU 1 WEST
2	ETHERNET SWITCH	DCF-KE-04, BLU/ORA 1 WEST
3	ETHERNET SWITCH	DCF-KE-04, BLU/BLU 1 EAST
4	ETHERNET SWITCH	DCF-KE-04, BLU/ORA 2 EAST
5	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
6	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
7	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
8	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
9	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
10	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
11	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
12	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED

TO FIBER OPTIC SPLICE CLOSURE FOR CMV-KE-04n (CUMBERLAND CCTV)

LATERAL CABLE FIBER ASSIGNMENTS		
LCF-KE-04f (FROM E120)		
FIBER NO.	FUNCTION	CONNECTION
1	SPARE TO FIBER OPTIC SPLICE CLOSURE	DCF-KE-04, BLU/BLU 1
2	SPARE TO FIBER OPTIC SPLICE CLOSURE	DCF-KE-04, BLU/ORA 2
3	TONE EQUIP. FUTURE CONNECTION	DCF-KE-04, BLU/GRE 3
4	TONE EQUIP. FUTURE CONNECTION	DCF-KE-04, BLU/BRO 4
5	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
6	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
7	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
8	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
9	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
10	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
11	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
12	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED

TO FIBER OPTIC SPLICE CLOSURE FOR CMV-KE-04m (CUMBERLAND SURV.)

LATERAL CABLE FIBER ASSIGNMENTS		
LCF-KE-04e (FROM KE12)		
FIBER NO.	FUNCTION	CONNECTION
1	ETHERNET SWITCH	DCF-KE-04, BLU/BLU 1 WEST
2	ETHERNET SWITCH	DCF-KE-04, BLU/ORA 2 WEST
3	ETHERNET SWITCH	DCF-KE-04, BLU/BLU 1 EAST
4	ETHERNET SWITCH	DCF-KE-04, BLU/ORA 2 EAST
5	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
6	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
7	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
8	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
9	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
10	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
11	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
12	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED

TO FIBER OPTIC SPLICE CLOSURE FOR CMV-KE-04i (CANFIELD CCTV)

LATERAL CABLE FIBER ASSIGNMENTS		
LCF-KE-04d (FROM F118)		
FIBER NO.	FUNCTION	CONNECTION
1	SPARE TO FIBER OPTIC SPLICE CLOSURE	DCF-KE-04, BLU/BLU 1
2	SPARE TO FIBER OPTIC SPLICE CLOSURE	DCF-KE-04, BLU/ORA 2
3	TONE EQUIP. FUTURE CONNECTION	DCF-KE-04, BLU/GRE 3
4	TONE EQUIP. FUTURE CONNECTION	DCF-KE-04, BLU/BRO 4
5	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
6	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
7	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
8	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
9	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
10	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
11	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
12	SPARE TO FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED

TO FIBER OPTIC SPLICE CLOSURE FOR CMV-KE-04h (CANFIELD SURV.)

HNTB

USER NAME = jblakley	DESIGNED - JZ	REVISED -
	DRAWN - JZ	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TWELVE FIBER LATERAL CABLE FIBER ASSIGNMENTS

SCALE: N.T.S. | SHEET NO. 16 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	326
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

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LATERAL CABLE FIBER ASSIGNMENTS		
LCF-KE-04b (FROM F116)		
FIBER NO.	FUNCTION	CONNECTION
1	SPARE FIBER OPTIC SPLICE CLOSURE	DCF-KE-04, BLU/BLU 1
2	SPARE FIBER OPTIC SPLICE CLOSURE	DCF-KE-04, BLU/ORA 2
3	TONE EQUIP. FUTURE CONNECTION	DCF-KE-04, BLU/GRE 3
4	TONE EQUIP. FUTURE CONNECTION	DCF-KE-04, BLU/BRO 4
5	SPARE FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
6	SPARE FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
7	SPARE FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
8	SPARE FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
9	SPARE FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
10	SPARE FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
11	SPARE FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
12	SPARE FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED

TO FIBER OPTIC SPLICE CLOSURE FOR CMV-KE-04c (HARLEM SURV.)

LATERAL CABLE FIBER ASSIGNMENTS		
LCF-KE-04a (FROM KE11)		
FIBER NO.	FUNCTION	CONNECTION
1	ETHERNET SWITCH	DCF-KE-04, BLU/BLU 1 WEST
2	ETHERNET SWITCH	DCF-KE-04, BLU/ORA 2 WEST
3	ETHERNET SWITCH	FUTURE EAST
4	ETHERNET SWITCH	FUTURE EAST
5	SPARE FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
6	SPARE FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
7	SPARE FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
8	SPARE FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
9	SPARE FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
10	SPARE FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
11	SPARE FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED
12	SPARE FIBER OPTIC SPLICE CLOSURE	CAPPED AND COILED

TO FIBER OPTIC INTERCONNECT CABINET FOR FIC-KE-04a (HARLEM)

HNTB

USER NAME = jblakley	DESIGNED - JZ	REVISED -
	DRAWN - JZ	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TWELVE FIBER LATERAL CABLE FIBER ASSIGNMENTS

SCALE: N.T.S. | SHEET NO. 17 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	327
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

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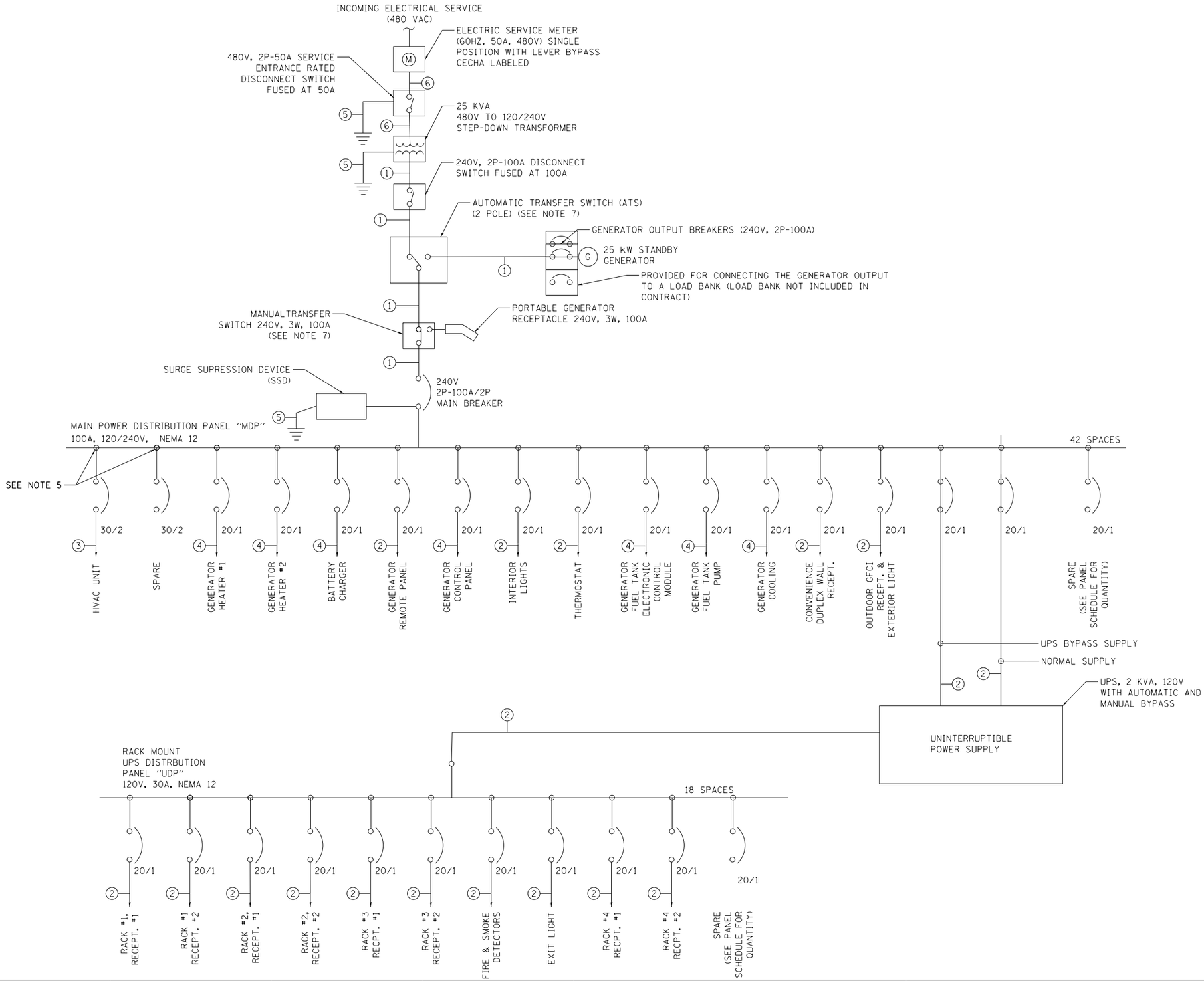

NOTES:

1. SEE PANEL SCHEDULES FOR BREAKER POSITIONS AND BLANK PANEL SLOTS.
2. SEE MANUFACTURER'S LITERATURE TO CONFIRM QUANTITY AND SIZE OF BREAKERS NEEDED FOR GENERATOR BEING SUPPLIED.
3. CONTRACTOR MAY RUN UP TO 4 CIRCUITS IN A SINGLE CONDUIT BETWEEN THE EQUIPMENT SHELTER AND THE GENERATOR. EACH CIRCUIT MUST HAVE ITS OWN NEUTRAL; ONLY ONE EQUIPMENT GROUND IS NEEDED IN A CONDUIT.
4. ALL CONDUCTIONS AND CABLE SHALL BE RUN IN CONDUIT: MIN SIZE 3/4" INSIDE SHELTER, MIN SIZE 2" BETWEEN SHELTER AND GENERATOR, MIN SIZE FOR SERVICE ENTRANCE. ON SUPPLY SIDE OF METER AND 2" ON LOAD SIDE.
5. NOMINAL SIZE SHOWN BREAKER MUST BE COORDINATED WITH ACTUAL HVAC UNIT SELECTED
6. RECEPTACLES POWERED FROM PANEL "UPD" ARE ATTACHED TO CABLE LADDER OVER EQUIPMENT RACKS; A PAIR OF QUADPLEX OUTLETS ARE CONNECTED TO A TOTAL OF THREE RACK MOUNTED OUTLET STRIPS IN EACH RACK.
7. THE NEUTRAL WIRE FROM THE PERMANENTLY INSTALLED STANDBY GENERATOR SHALL NOT BE SWITCHED IN THE AUTOMATIC TRANSFER SWITCH (ATS).THE NEUTRAL WIRE FROM THE PORTABLE GENERATOR WILL BE SWITCHED IN THE MANUAL TRANSFER SWITCH
8. CONTRACTOR IS RESPONSIBLE FOR SUBMITTING EQUIPMENT THAT CAN TERMINATE WIRE SIZES SHOWN OR FOR PROVIDING WIRING GUTTERS AND SPLICE KITS TO REDUCE CONDUCTOR SIZE.
9. EACH RUN OF RIGID METAL CONDUIT UPSTREAM OF, AND INCLUDING INTO "MDP", MUST END WITH AN INSULATED GROUNDING BUSHING. BUSHING INSIDE AN ENCLOSURE MUST BE BONDED TOGETHER WITH #6 AND CONNECTED TO THE GROUND BUS INSIDE EACH ENCLOSURE.

(1) (3) #1/0 & (1) #8 GND, 2" C

(2) (2) #12, (1) & (1) #12 GND

(3) (2) #8 & (1) #10 GND

(4) (2) #10 & (1) #12 GND

(5) #2 GND WIRE

(6) (3) #2 & (1) #6 GND, 2" C

HNTB

USER NAME = jblakley	DESIGNED MCD	REVISED -
	DRAWN MMK	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED KFA	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS SHELTER SINGLE LINE DIAGRAM

SCALE: N.T.S. | SHEET NO. 18 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	328
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

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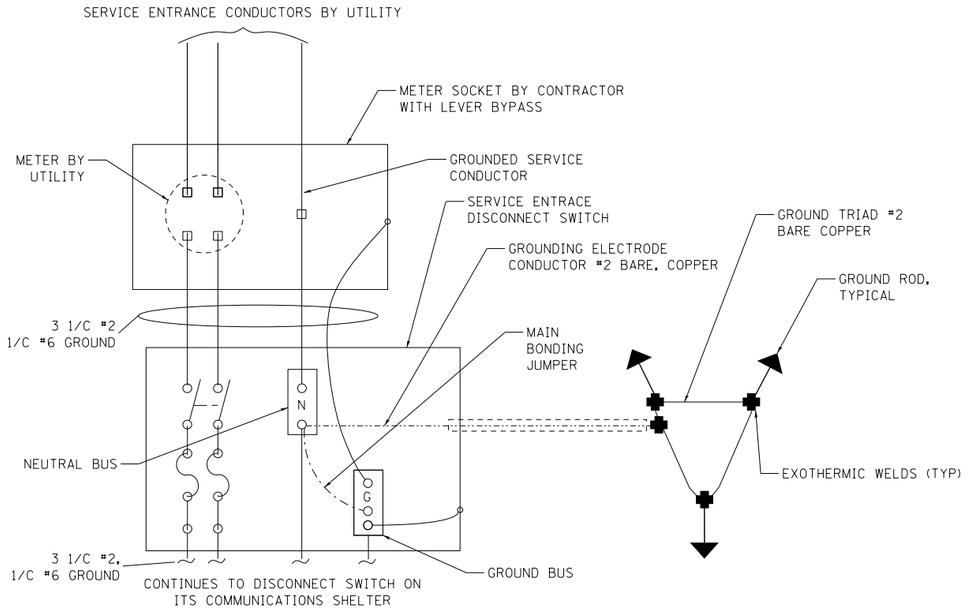
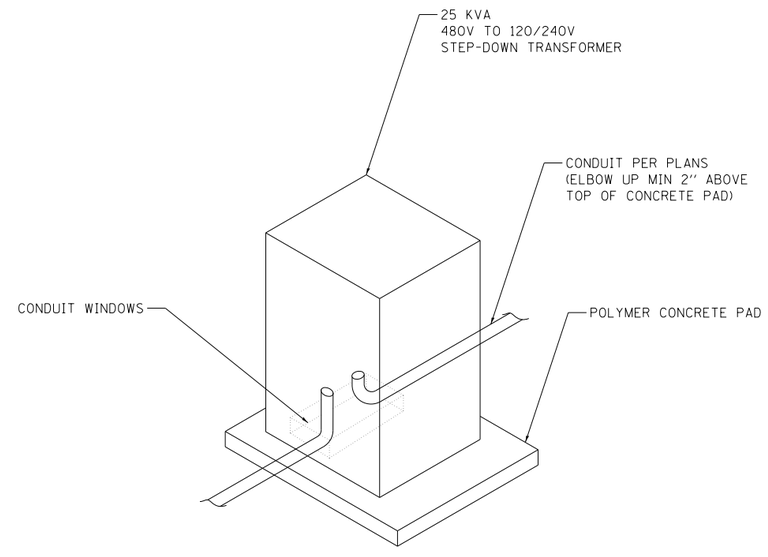
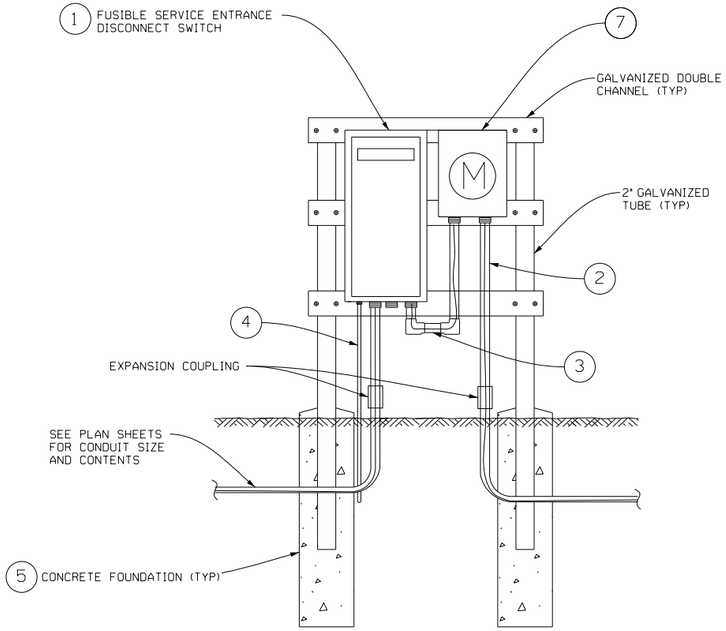


POWER SERVICE WIRING DIAGRAM



TRANSFORMER AND POLYMER CONCRETE PAD



POWER SERVICE ELEVATION DETAIL

(1) NEMA 4X, STAINLESS STEEL, HEAVY DUTY FUSIBLE, SERVICE ENTRANCE RATED DISCONNECT SWITCH. FUSE SIZES PER SINGLE LINE DIAGRAM. PROVIDE AND ATTACH LABEL WITH SITE ADDRESS TO OUTSIDE OF ENCLOSURE. FURNISH WITH CONDUCTOR LUGS RATED FOR WIRE SIZES SHOWN IN WIRING DIAGRAM.

(2) 2" GALVANIZED STEEL CONDUIT (GSC) ATTACHED TO EQUIPMENT STAND. PROPER BONDING OF METALLIC CONDUIT IS REQUIRED UTILIZING INSULATED GROUNDING BUSHINGS.

(3) 2" GSC BETWEEN ENCLOSURES.

(4) 1-1/C #2 BARE COPPER GROUNDING ELECTRODE CONDUCTOR IN 1" SCH. 80 PVC CONDUIT TO DISCONNECT SWITCH NEUTRAL BUS. AND GROUNDING TRIAD.

(5) (2) 12" DIA. X 44" CONCRETE FOUNDATIONS. SLOPE TOP OF FOUNDATION AWAY FROM GALVANIZED TUBE FOR DRAINAGE. ONE SOLID CONCRETE FOUNDATION MAY BE USED AS AN ALTERNATE DESIGN WITH APPROVAL FROM THE ENGINEER.

(6) NOT SHOWN ARE THREE 3/4" x 10' COPPER CLAD GROUND RODS EXOTHERMICALLY WELDED TO (4), CONNECTED IN A TRIANGLE, AND BONDED TOGETHER WITH BARE #2 COPPER CONDUCTOR.

(7) UTILITY SERVICE METER AND METER SOCKET. FURNISH WITH CONDUCTOR LUGS RATED FOR WIRE SIZES SHOWN IN WIRING DIAGRAM AND COORDINATE WITH UTILITY FOR CONDUCTOR LUG SIZES REQUIRED ON SERVICE SIDE.

NOTES:

1. COORDINATE IN FIELD WITH COMED FOR EXACT REQUIREMENTS FOR METER SOCKET, AND CONNECTING CONDUIT.

HNTB	USER NAME = jblakley	DESIGNED MCD	REVISED -
		DRAWN MMK	REVISED -
	PLOT SCALE = 1.00 ' / in.	CHECKED KFA	REVISED -
	PLOT DATE = 6/6/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS SHELTER
POWER SERVICE DETAILS

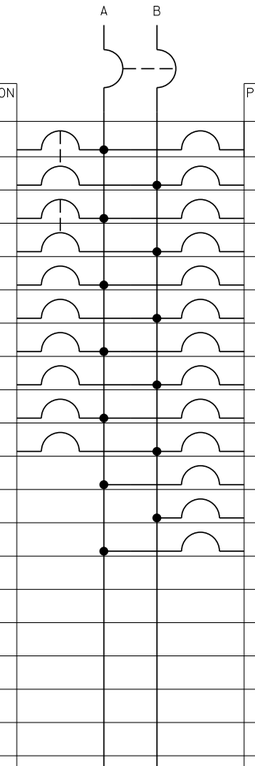
SCALE: N.T.S. | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	329
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-27.dgn

WIRE SIZE: #1/0 AWG
2P-100A, 65 KAIC MAIN BREAKER

PANEL: MDP
RATING: NEMA 12
MOUNTING: WALL

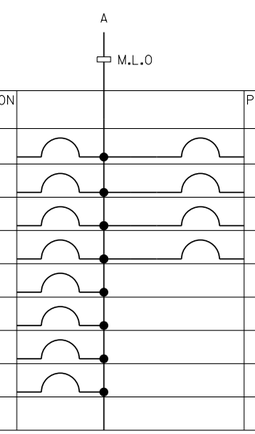


CIRCUIT DESCRIPTION	TRIP	POLES	WIRE	POSITION	POSITION	WIRE	POLES	TRIP	CIRCUIT DESCRIPTION
HVAC UNIT	30	2	8	1	2	12	1	20	UPS BYPASS
				3	4	12	1	20	UPS NORMAL
SPARE	30	2	-	5	6	-	1	20	SPARE
				7	8	12	1	20	GEN REMOTE. CONTROL PANEL
INTERIOR LIGHTS	20	1	12	9	10	10	1	20	GEN. FUEL TANK ECM
THERMOSTAT	20	1	12	11	12	10	1	20	GEN. FUEL TANK PUMP
INT. WALL RECEPT.	20	1	12	13	14	10	1	20	GEN. HEATER #1
EXT. RECPT & LIGHT	20	1	12	15	16	10	1	20	GEN. HEATER #2
SPARE	20	1	-	17	18	10	1	20	GEN. BATTERY CHARGER
SPARE	20	1	-	19	20	10	1	20	GEN. COOLING
				21	22	10	1	20	GEN CONTROL PANEL
				22	24	-	1	20	SPARE
				25	26	-	1	20	SPARE
				27	28				
				29	30				
				31	32				
				33	34				
				35	36				
				37	38				
				39	40				
				41	42				

VOLTAGE: 120/240V CYCLE: 60 Hz PHASE: 1 WIRES: 3 SOLID NEUTRAL: 100 AMPS MAIN BREAKER: 100 AMP

WIRE SIZE: #12

PANEL: UDP
RATING: NEMA 12
MOUNTING: WALL



CIRCUIT DESCRIPTION	TRIP	POLES	WIRE	POSITION	POSITION	WIRE	POLES	TRIP	CIRCUIT DESCRIPTION
RACK #1, RECEPT. #1	20	1	12	1	2	12	1	20	FIRE & SMOKE DETECTORS
RACK #1, RECEPT. #2	20	1	12	3	4	12	1	20	EXIT LIGHT
RACK #2, RECEPT. #1	20	1	12	5	6				SPARE
RACK #2, RECEPT. #2	20	1	12	7	8				SPARE
RACK #3, RECEPT. #1	20	1	12	9	10				
RACK #3, RECEPT. #2	20	1	12	11	12				
RACK #4, RECEPT. #1	20	1	12	13	14				
RACK #4, RECEPT. #2	20	1	12	15	16				
				17	18				

VOLTAGE: 120 CYCLE: 60 Hz PHASE: 1 WIRES: 2 SOLID NEUTRAL: 30 AMPS MAIN LUG ONLY (M.L.O.)

NOTES:

1. BREAKERS SHOWN FOR GENERATOR LOADS THAT ARE NOT NEEDED SHALL BE FURNISHED AND LABELED "SPARE"

HNTB

USER NAME = jblakley	DESIGNED MCD	REVISED -
	DRAWN MMK	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED KFA	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS SHELTER
PANEL SCHEDULES

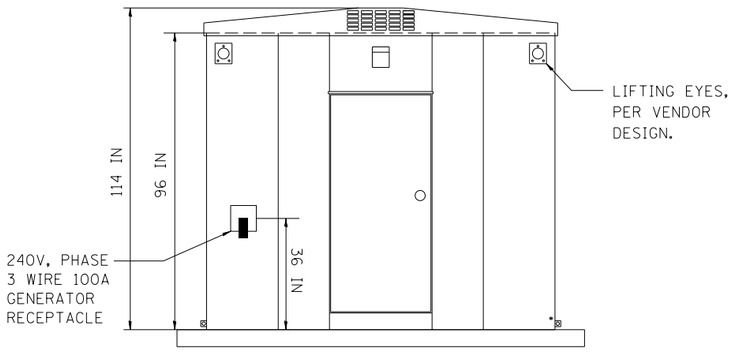
SCALE: N.T.S. | SHEET NO. 20 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	330
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

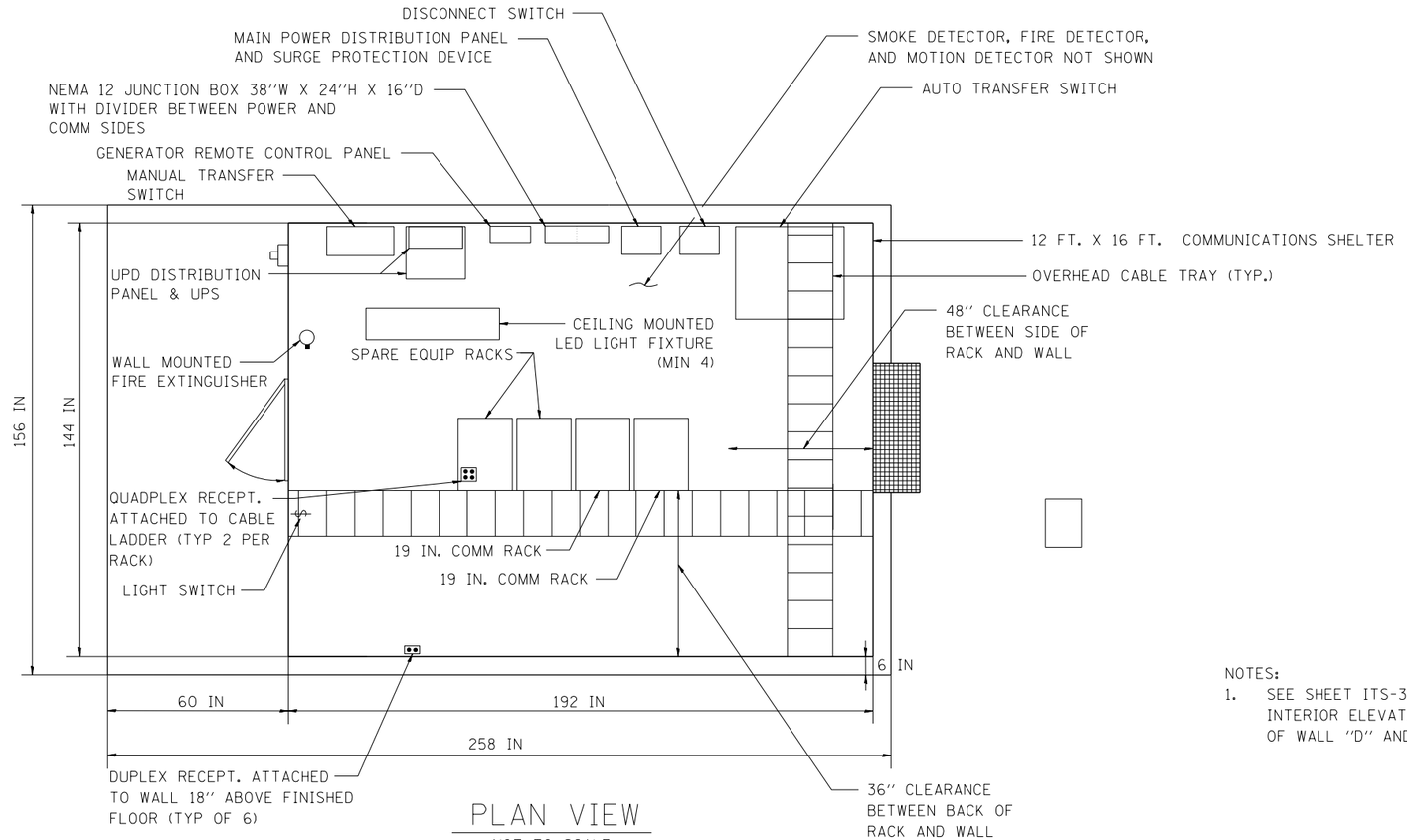
FILE NAME = pw:\\hntbw356.hntb.org:PWGreat.Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-28.dgn

NOTES
1. LIGHTNING PROTECTION SYSTEM SHOWN ON SHEET ITS-33.

2. MAINTAIN MINIMUM 36'' CLEARANCE FROM FACE OF POWER EQUIPMENT TO FACE OF COMM RACKS.

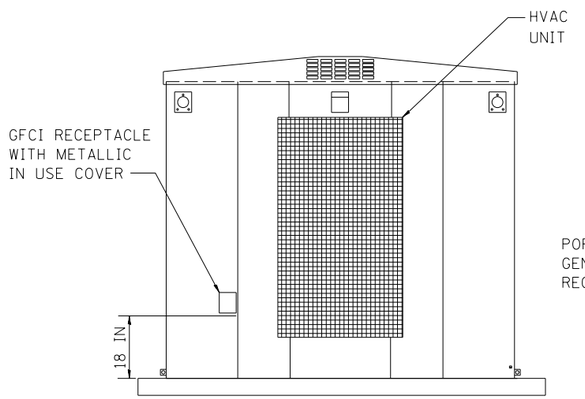


WALL ''A''
NOT TO SCALE

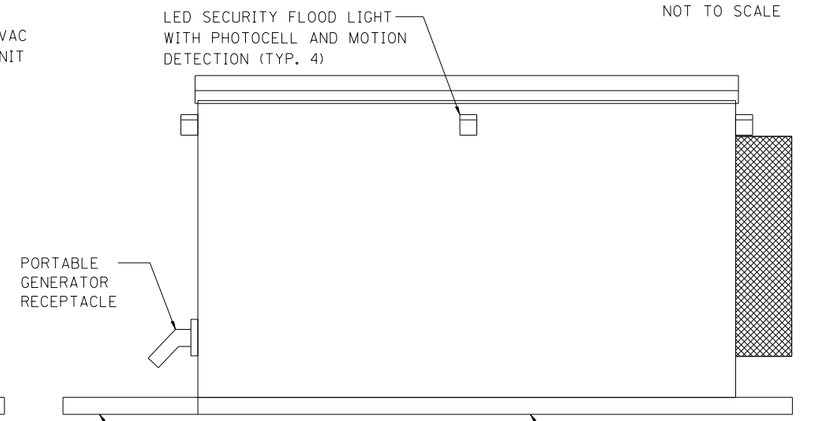


PLAN VIEW
NOT TO SCALE

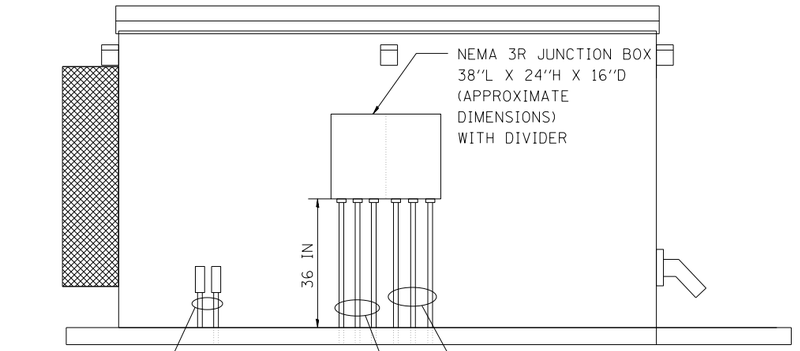
NOTES:
1. SEE SHEET ITS-33 FOR INTERIOR ELEVATION VIEWS OF WALL ''D'' AND EQUIPMENT RACKS.



WALL ''C''
NOT TO SCALE



WALL ''B''
NOT TO SCALE



WALL ''D''
NOT TO SCALE

HNTB

USER NAME = jblakley	DESIGNED MCD	REVISED -
	DRAWN MMK	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED KFA	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

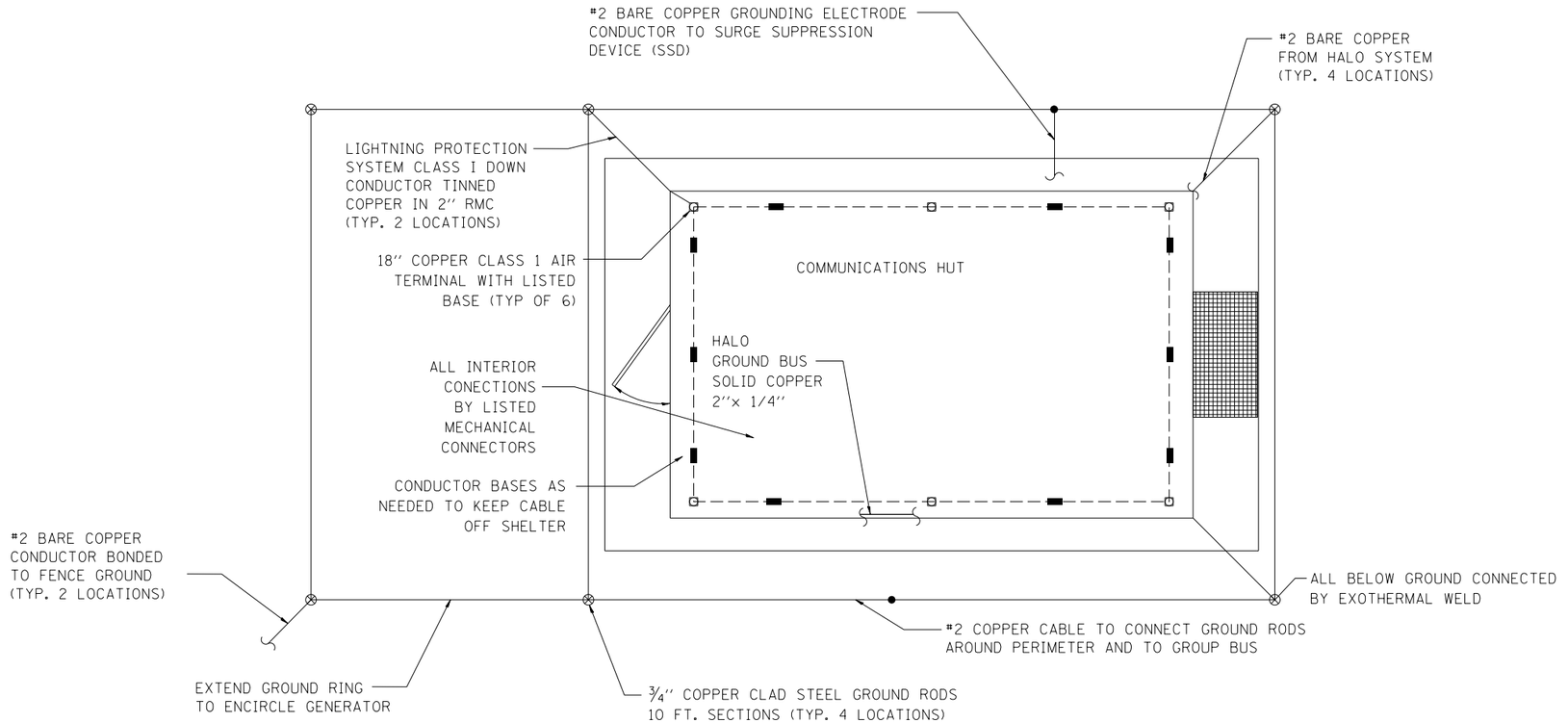
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS SHELTER
PLAN AND ELEVATION VIEWS

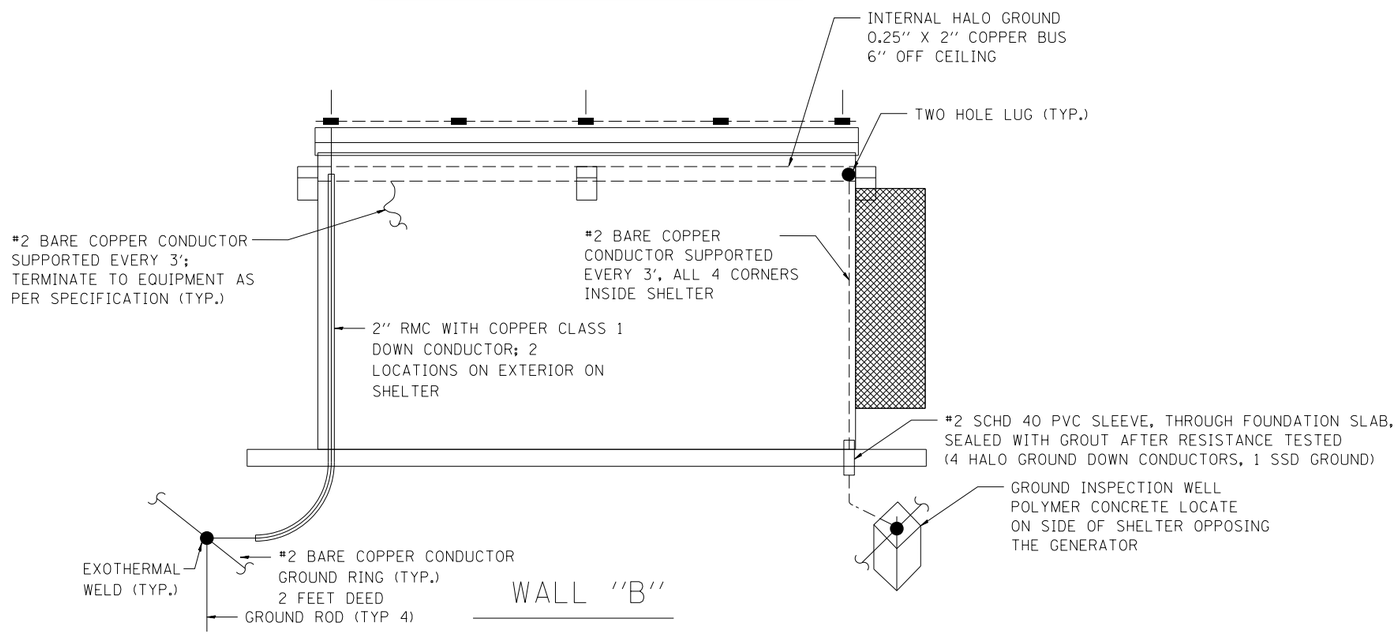
SCALE: N.T.S. | SHEET NO. 21 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	331
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-29.dgn



PERIMETER GROUND PLAN



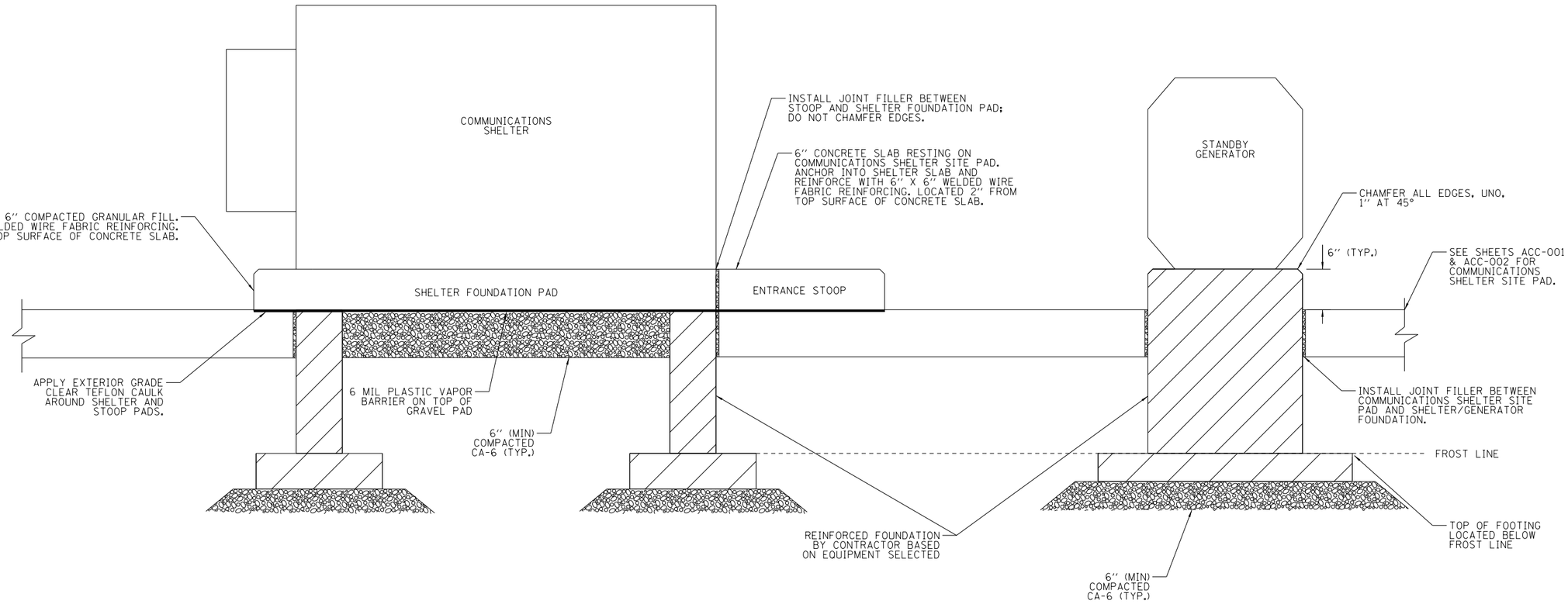
WALL "B"

ITS-43

HNTB	USER NAME = jblakley	DESIGNED MCD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	COMMUNICATIONS SHELTER LIGHTNING PROTECTION AND GROUNDING PLAN
		DRAWN MMK	REVISED -		
	PLOT SCALE = 1.00 ' / in.	CHECKED KFA	REVISED -		SCALE: N.T.S. SHEET NO. 22 OF 34 SHEETS STA. TO STA.
	PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	332
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-30.dgn



EQUIPMENT FOUNDATION DIAGRAMS

N.T.S.

USER NAME = jblakley	DESIGNED JZ	REVISED -	
	DRAWN JZ	REVISED -	
PLOT SCALE = 1.0000 ' / in.	CHECKED YJ	REVISED -	
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -	

HNTB

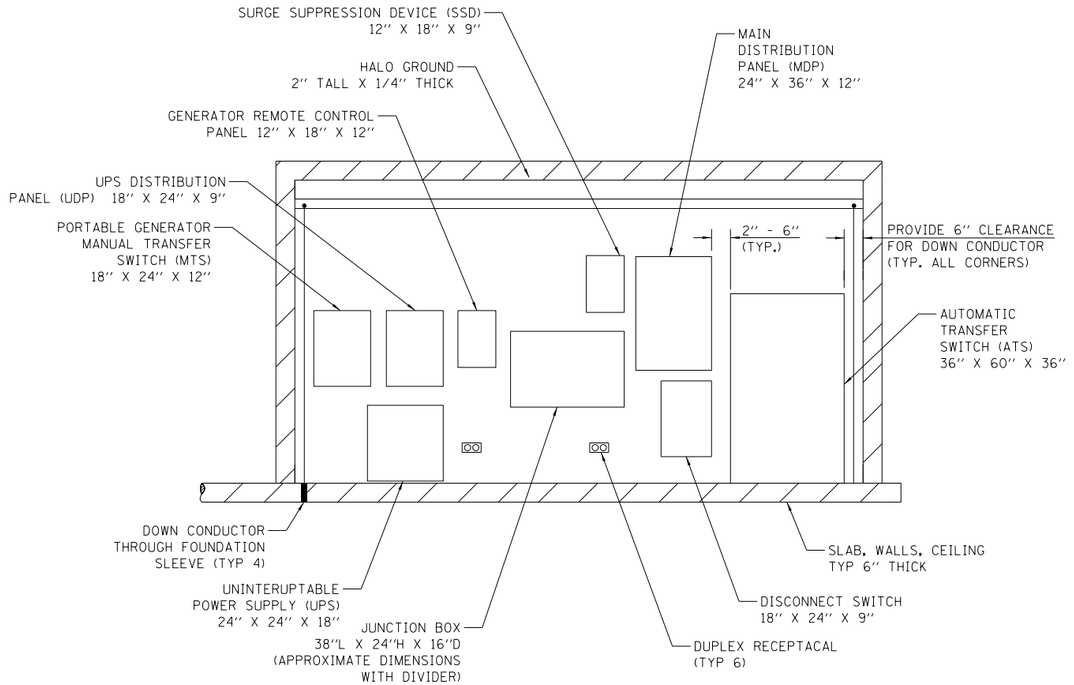
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS SHELTER EQUIPMENT ELEVATION

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	333
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT	34		

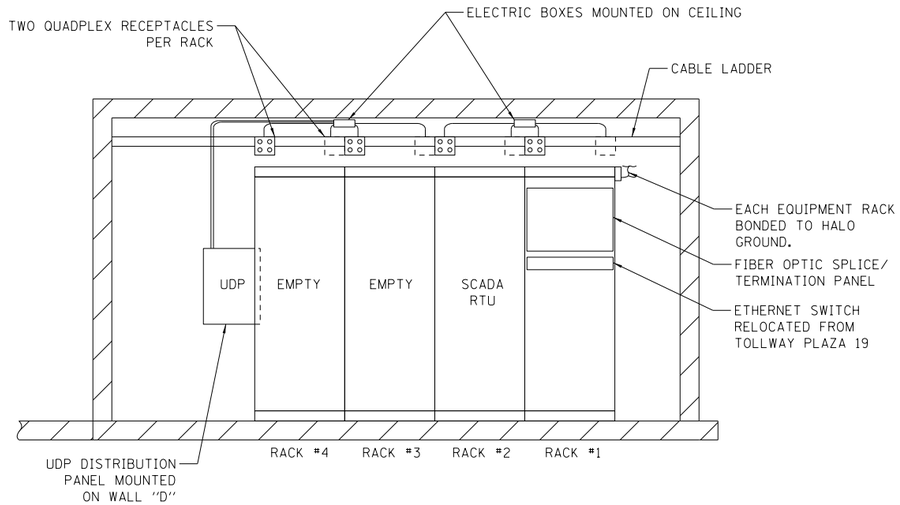
FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-17a.dgn



INTERIOR ELEVATION VIEW WALL D
N.T.S.

NOTES:

1. ALL DIMENSIONS: L X H X D
2. ALL DIMENSIONS APPROXIMATE AND DEPENDANT ON ACTUAL EQUIPMENT SELECTED, PRIOR TO COMMENCING SITE INSTALLATION CONTRACTOR MUST SUBMIT SKETCH SHOWING ELEVATION VIEWS OF SHELTER WALKS WITH ELECTRICAL EQUIPMENT. SKETCH TO SHOW ACTUAL DIMENSIONS OF EQUIPMENT SELECTED, CONDUIT ROUTES, AND CLEARANCES.



GENERAL EQUIPMENT RACK LAYOUTS
N.T.S.

NOTES:

1. INSTALL ETHERNET SWITCH IN TOP PORTION OF EQUIPMENT RACK 1. INSTALL ETHERNET SWITCH IN COORDINATION WITH THE DEPARTMENT, IL TOLLWAY, AND UIC.
2. FIBER SPLICE ASSIGNMENTS SHALL REESTABLISH EXISTING FIBER BACKHAUL LINKS THROUGH EXISTING COMMUNICATIONS VAULT NEAR TOLLWAY PLAZA 19. CLOSE COORDINATION WITH THE IL TOLLWAY AND THE DEPARMENT IS REQUIRED.

HNTB

USER NAME = jblakley	DESIGNED JZ	REVISED -
	DRAWN JZ	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED YJ	REVISED -
PLOT DATE = 6/6/2016	DATE 5/6/2016	REVISED -

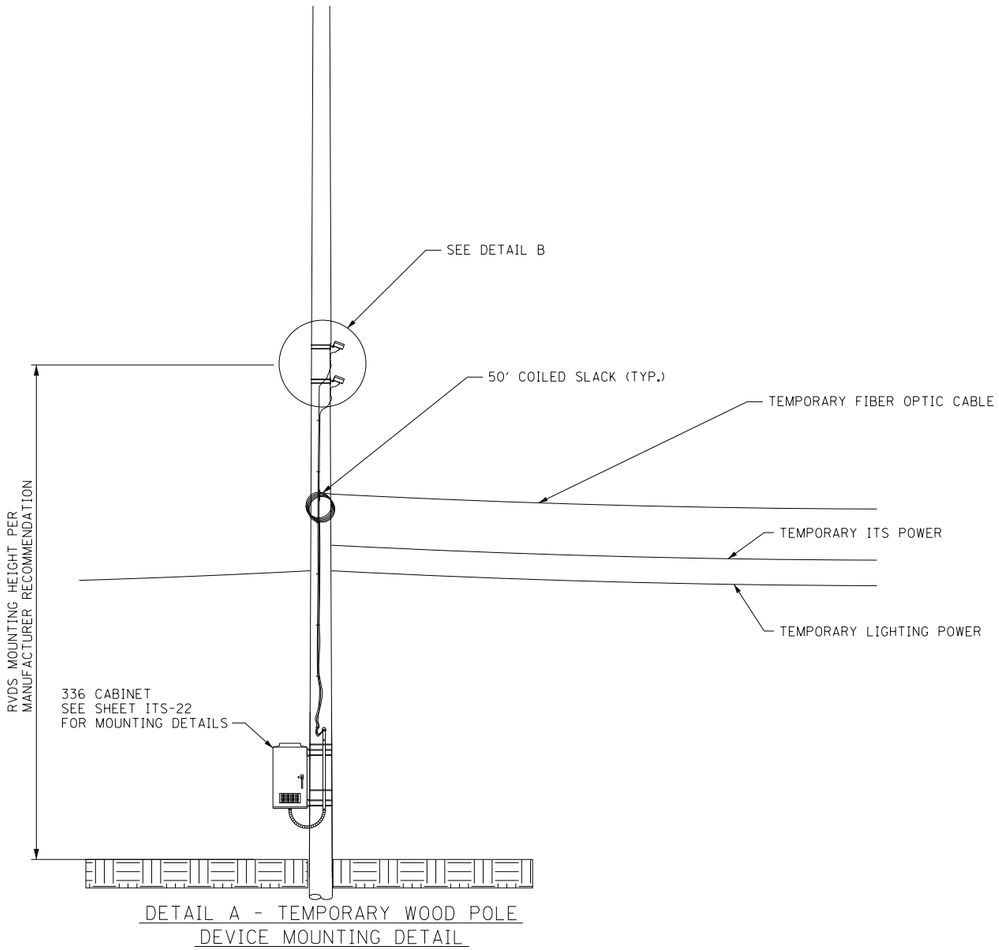
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

COMMUNICATIONS SHELTER EQUIPMENT SCHEMATIC

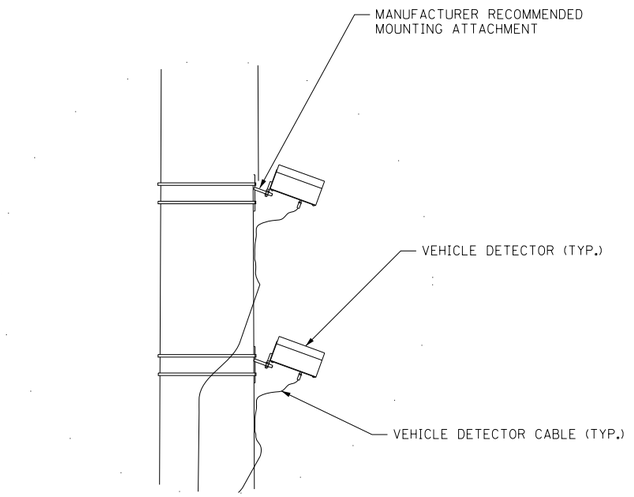
SCALE: NTS | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	334
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT 34		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-17b.dgn



DETAIL A - TEMPORARY WOOD POLE DEVICE MOUNTING DETAIL



DETAIL B - VEHICLE DETECTOR MOUNTING

HNTB

USER NAME = jblakley	DESIGNED JZ	REVISED -
	DRAWN - JZ	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

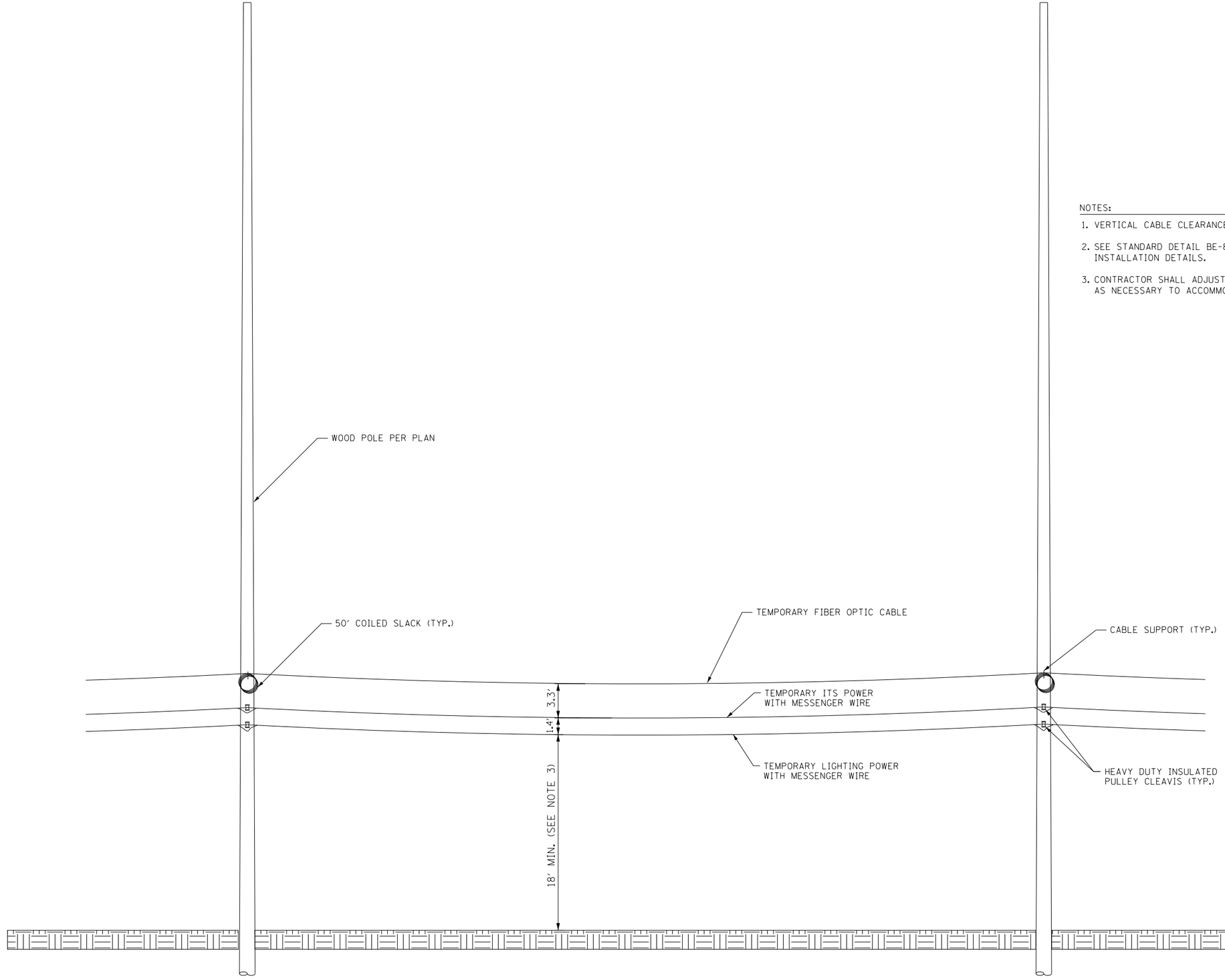
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY RADAR VEHICLE DETECTION SYSTEM AND CCTV CAMERA INSTALLATION DETAIL

SCALE: N/A | SHEET NO. 25 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	335
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y39-sht-ITS-30a.dgn



NOTES:

1. VERTICAL CABLE CLEARANCES SHOWN ARE MINIMUMS PER NESC.
2. SEE STANDARD DETAIL BE-800 AND BE-801 FOR MESSENGER WIRE INSTALLATION DETAILS.
3. CONTRACTOR SHALL ADJUST THE INSTALLATION HEIGHT AS NECESSARY TO ACCOMMODATE CONSTRUCTION ACTIVITIES.

HNTB

USER NAME = jblakley	DESIGNED - JZ	REVISED -
	DRAWN - JZ	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

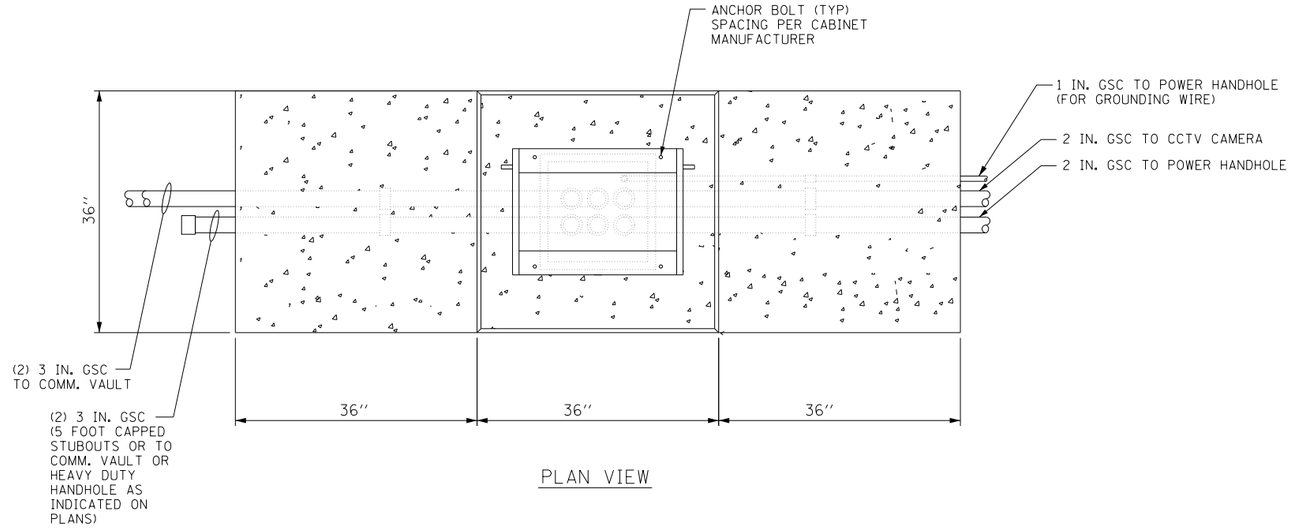
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY ITS AERIAL CABLE INSTALLATION DETAIL

SCALE: N/A | SHEET NO. 26 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	336
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

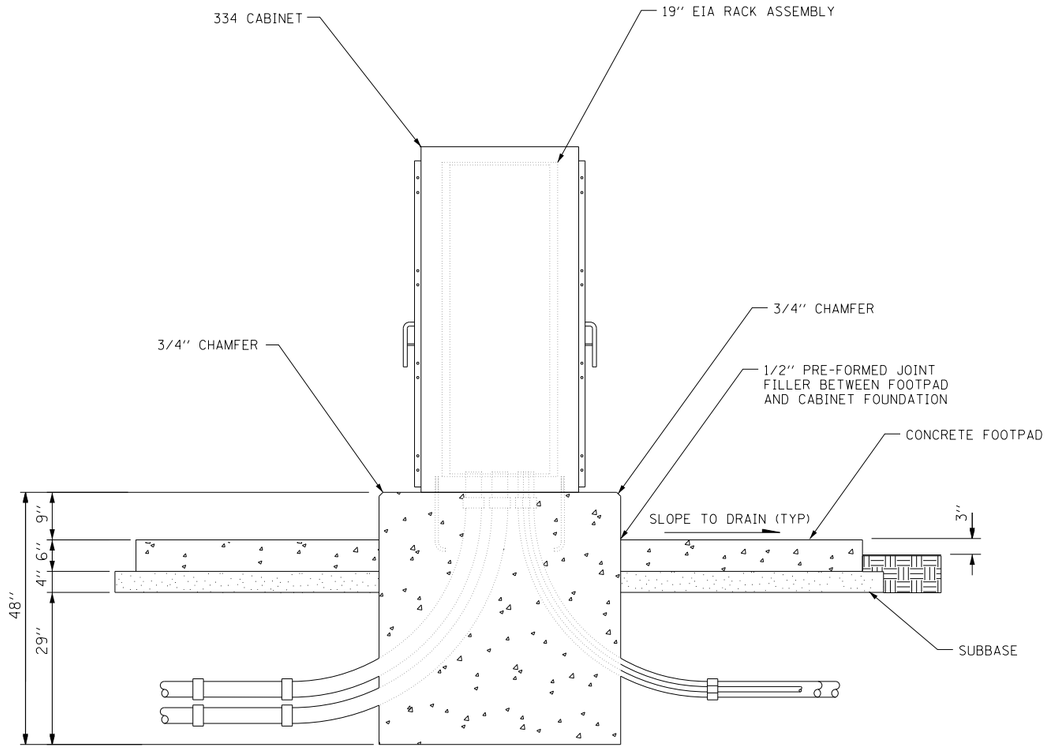
FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y39-sht-ITS-30b.dgn



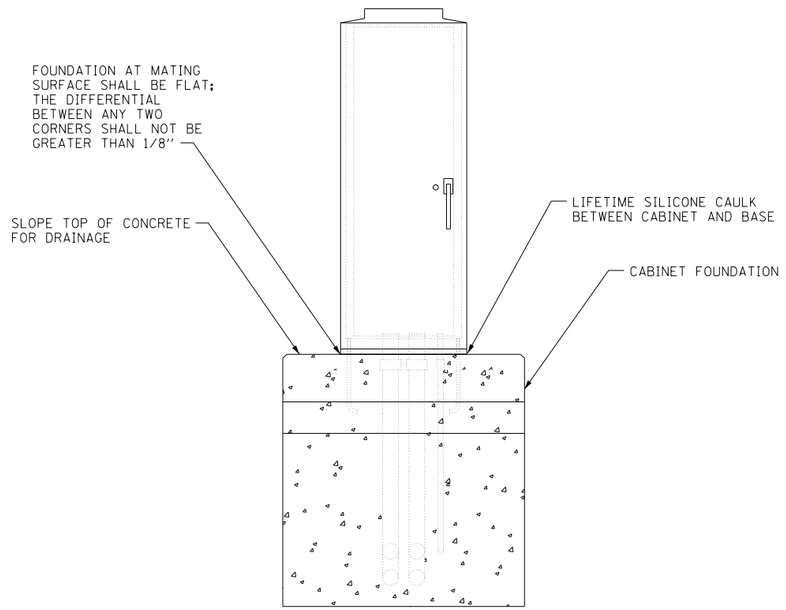
PLAN VIEW

NOTES:

1. ADJUST THE ELEVATIONS OF CONCRETE FOOTPADS TO MEET THE SITE CONDITIONS.
2. COMPACT THE SOIL BENEATH THE CONCRETE FOOTPAD AND AGGREGATE IN PLACE WITH A PLATE COMPACTOR OR OTHER COMPACTION METHOD APPROVED BY THE ENGINEER, PRIOR TO PLACING THE AGGREGATE.
3. INSTALL THE NUMBER, SIZE, AND TYPE OF CONDUIT(S) FOR COMMUNICATIONS AND POWER AS SHOWN IN THE PLANS. DETERMINE THE APPROACH/ENTRY ANGLE TO FOUNDATION BASED ON SITE CONDITIONS. THE NUMBER AND LOCATION OF CONDUIT SWEEPS SHOWN IN THIS DRAWING ARE DIAGRAMMATIC.
4. INSTALL A ¾'' X 10 FT. GROUNDING ROD IN POWER HANDHOLE NEAREST TO THE CABINET. INSTALL AN INSULATED #2 GROUND WIRE FROM THE CABINET TO THE GROUNDING ROD AND EXOTHERMICALLY BOND TO THE GROUND ROD.



ELEVATION (FRONT)



ELEVATION (SIDE)

HNTB	USER NAME = jblakley	DESIGNED - JZ	REVISED -
		DRAWN - JZ	REVISED -
	PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
	PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

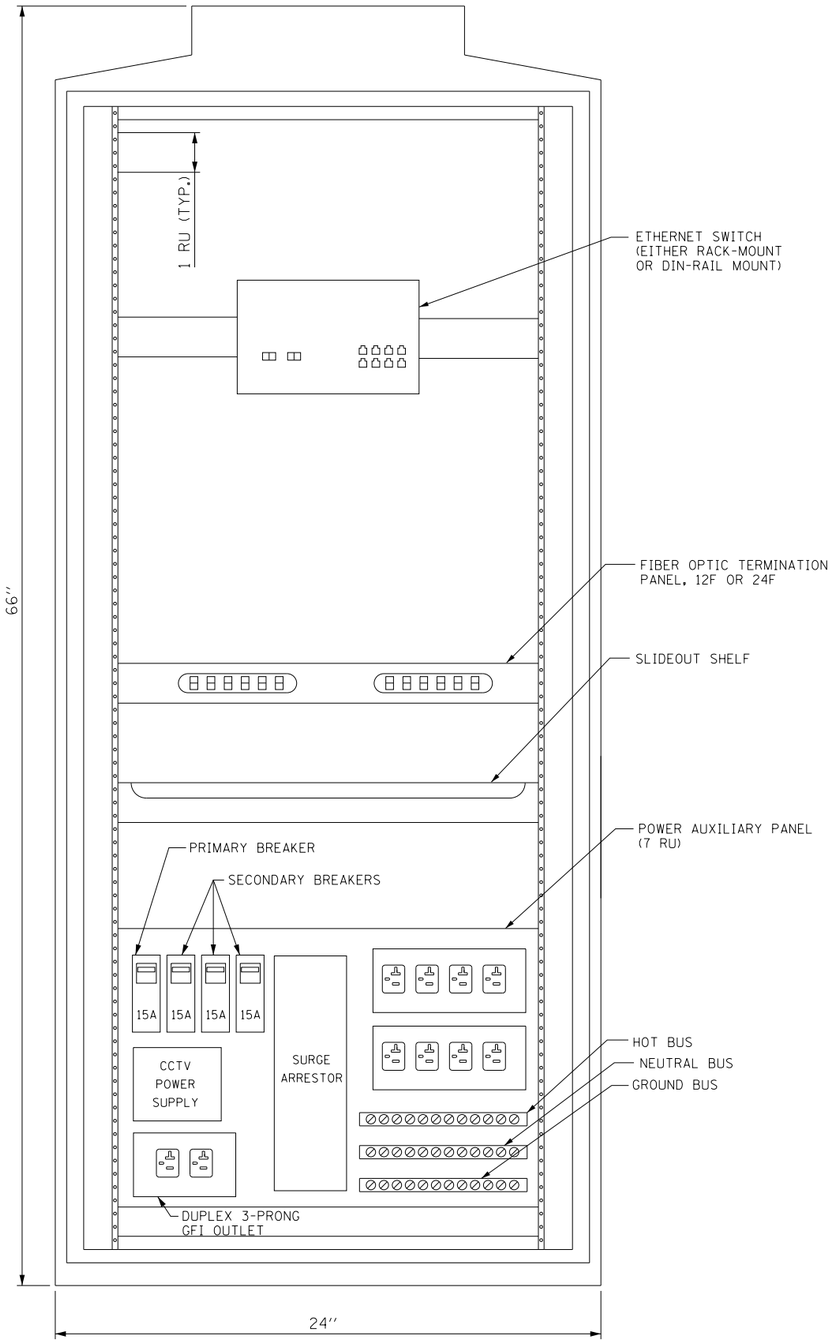
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET, MODEL 334
INSTALLATION DETAIL

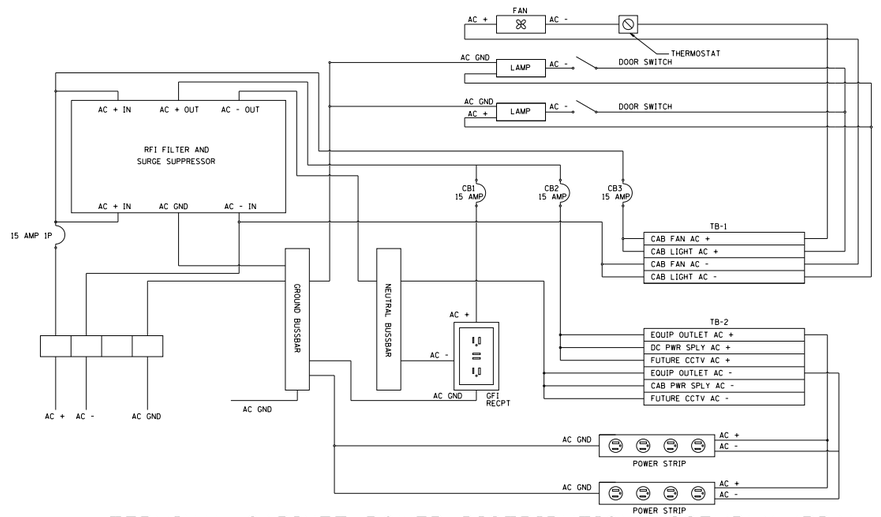
SCALE: N.T.S | SHEET NO. 27 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	337
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-31.dgn



SUGGESTED EQUIPMENT LAYOUT



TERMINAL CABINET POWER DISTRIBUTION ASSEMBLY (PDA)

NOT TO SCALE

NOTES:

1. CABINET DIMENSIONS ARE ROUNDED TO THE NEAREST INCH.
2. CABINET LIGHT AND FAN NOT SHOWN.

HNTB

USER NAME = jblakley	DESIGNED - JZ	REVISED -
	DRAWN - JZ	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

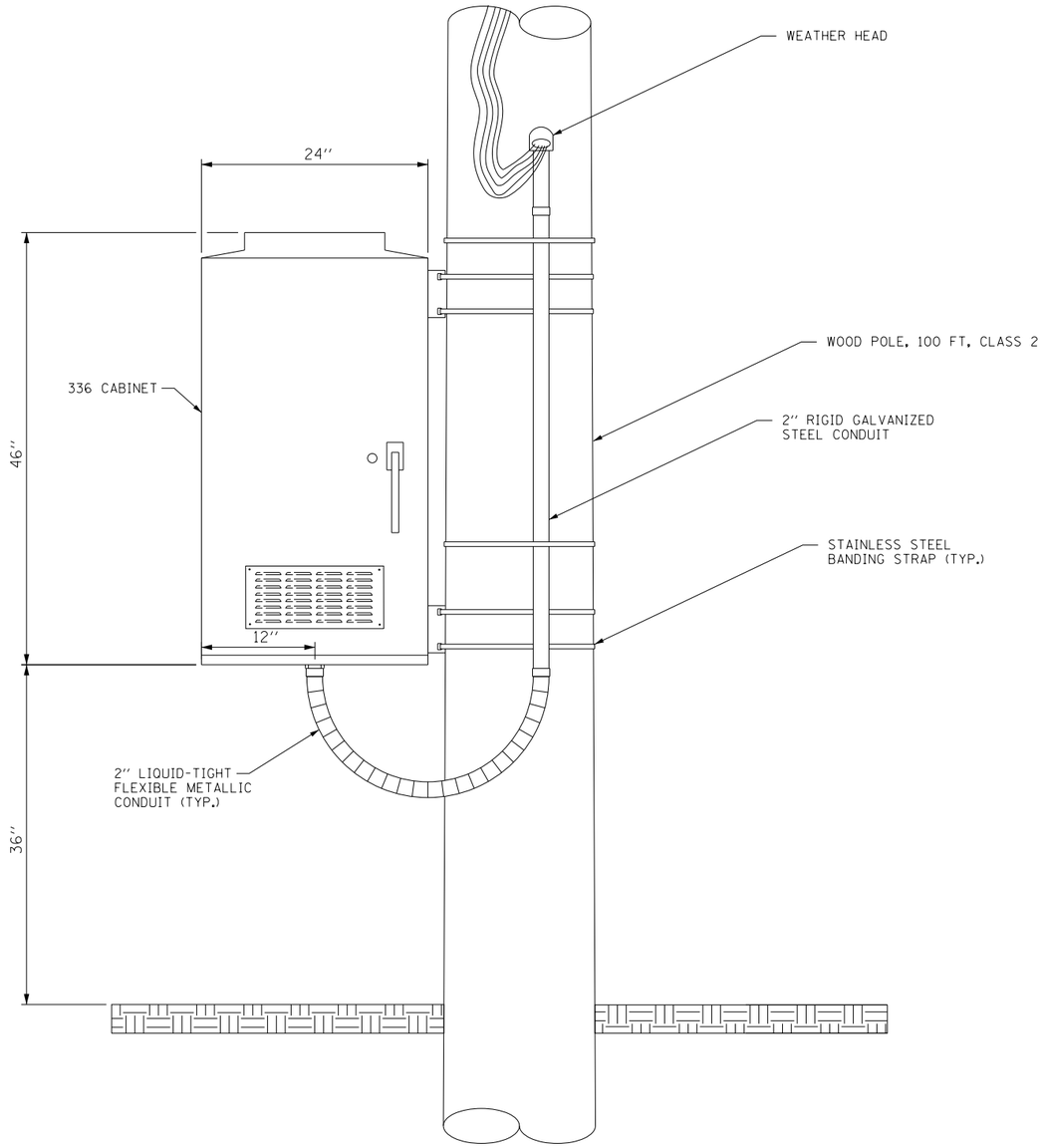
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET, MODEL 334
RACK LAYOUT

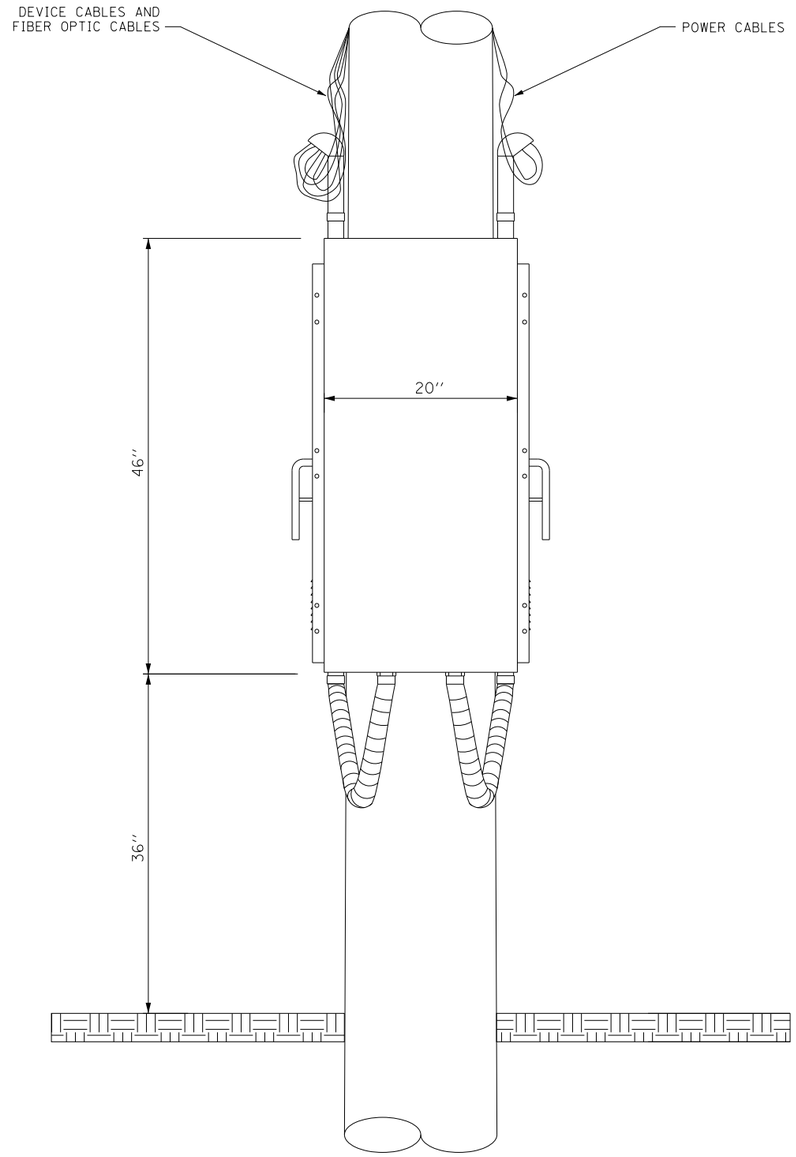
SCALE: N/A | SHEET NO. 28 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	338
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-32.dgn



POLE-MOUNTED CABINET
CONDUIT INSTALLATION DETAIL
(SIDE VIEW)



POLE-MOUNTED CABINET
CONDUIT INSTALLATION DETAIL
(FRONT VIEW)

ITS-50

HNTB	USER NAME = jblakley	DESIGNED - JZ	REVISED -
		DRAWN - JZ	REVISED -
	PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
	PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

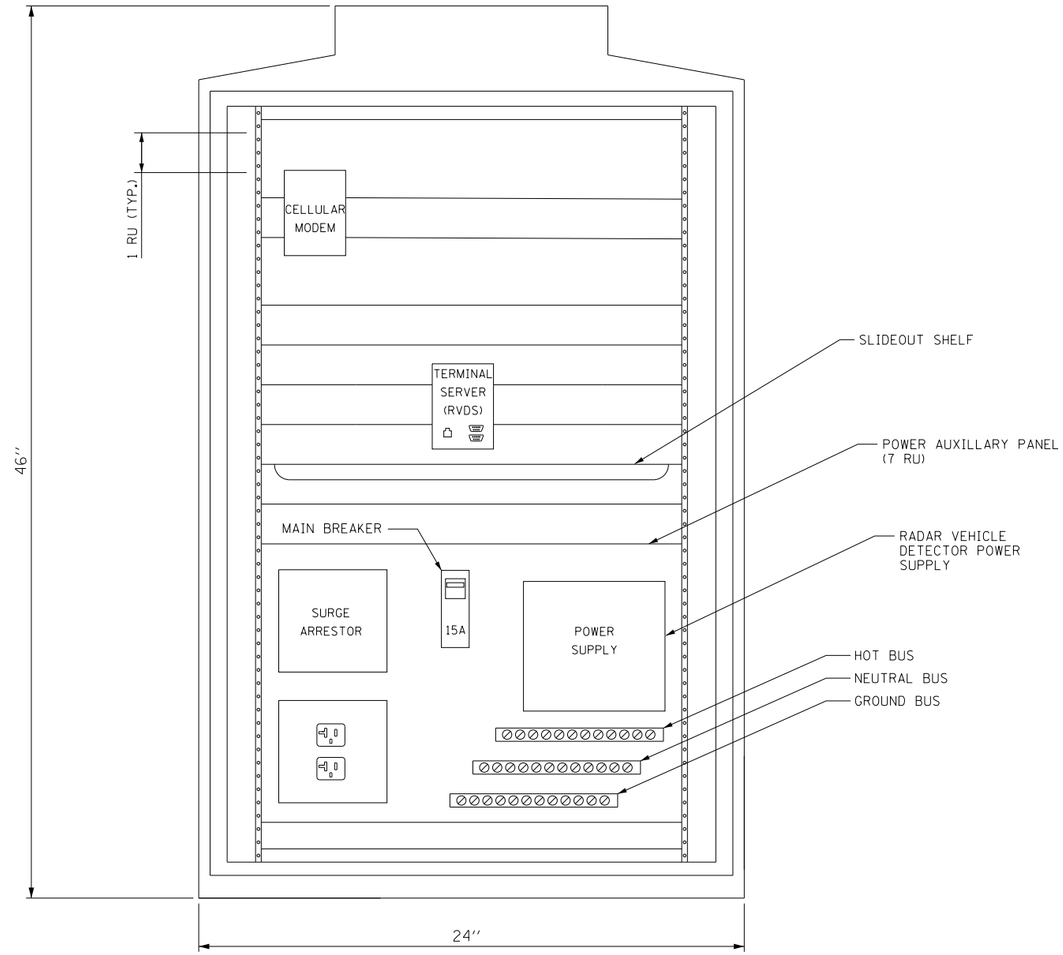
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET, MODEL 336
INSTALLATION DETAIL

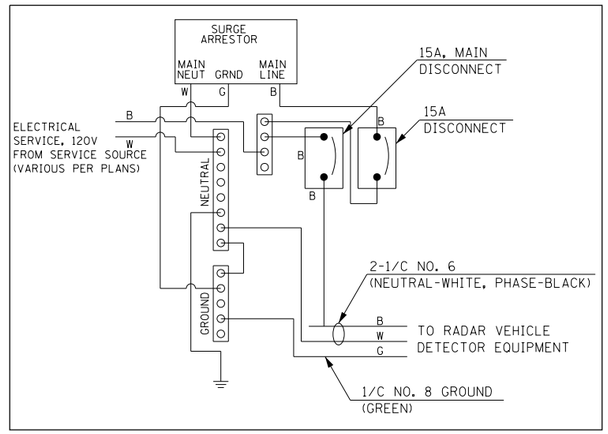
SCALE: N.T.S. | SHEET NO. 29 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	339
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-33.dgn



SUGGESTED EQUIPMENT LAYOUT



NOTES:

1. CABINET DIMENSIONS ARE ROUNDED TO THE NEAREST INCH.
2. THE CABINET SHALL BE MOUNTED TO THE POLE USING FOUR STAINLESS STEEL STRAPS.
3. CABINET LIGHT AND FAN NOT SHOWN.
4. CELLULAR MODEM EXTERNAL ANTENNA IS NOT SHOWN. IT SHALL BE INSTALLED IF REQUIRED AS DIRECTED BY THE ENGINEER.

HNTB

USER NAME = jblakley	DESIGNED - JZ	REVISED -
	DRAWN - JZ	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED - YJ	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

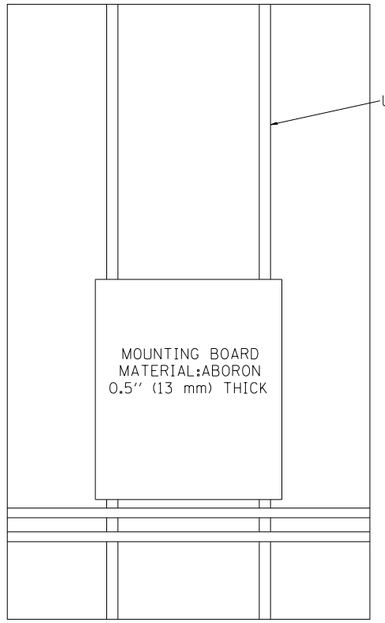
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET, MODEL 336
RACK LAYOUT

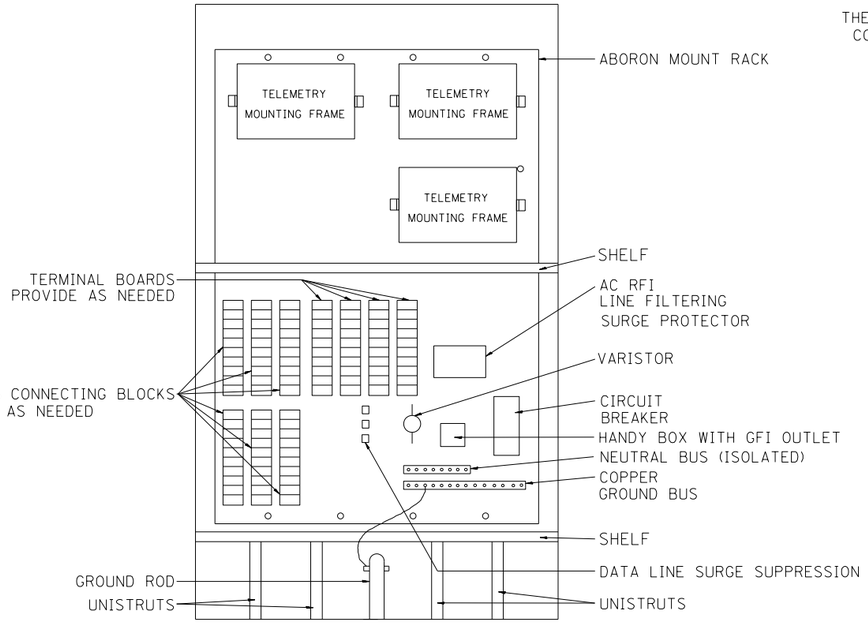
SCALE: N.T.S. | SHEET NO. 30 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	340
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

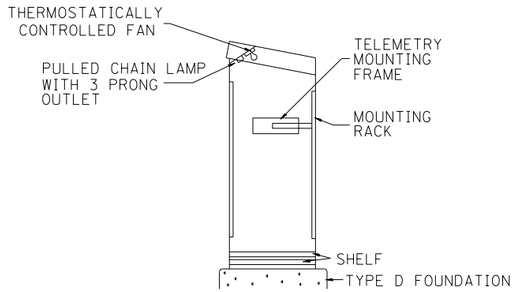
FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-34.dgn



SIDE VIEW ESP 4 CABINET



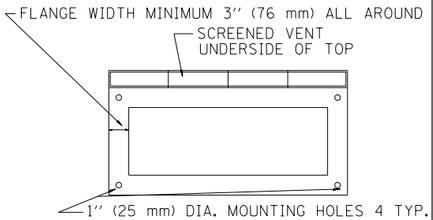
ESP 4 CABINET



ESP 4 CABINET

NOTE: MOUNTING RACK TO BE MOUNTED TO BACK PANEL OF CABINET

PROFILE VIEW



BOTTOM VIEW
MOUNTING PATTERN

TYPICAL CABINET INTERIORS

STANDARD TRAFFIC SYSTEMS CENTER CABINETS

TYPE	MINIMUM DIMENSIONS HEIGHT (IN-m)	WIDTH (IN-m)	DEPTH (IN-mm)	INSIDE THICKNESS (IN-mm)	MATERIAL
ESP4	55'' (1.4 m)	44'' (1.12 m)	26'' (660.4mm)	3/16'' (4.76mm)	FABRICATED ALUMINUM

NOTES:

1. CABINETS, CABINET POSTS AND CABINET PEDESTALS SHALL BE PRIMED AND PAINTED IN ACCORDANCE WITH SECTION T637 OF THE ''STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS''. THE FINAL COAT SHALL BE (X) IN COLOR. THE INTERIOR SHALL BE PAINTED WHITE.
2. CABINETS SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE PORTIONS OF SECTION T400 OF THE ''STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS''.
3. ALL CABINETS WHICH ARE SERVICED BY 117 VOLTS A.C. POWER SHALL BE EQUIPPED WITH A 10 AMP CIRCUIT BREAKER, A.C. R.F.I. LINE FILTERING SURGE PROTECTOR, VARISTOR, DATA SURGE AND LOOP SURGE PROTECTORS AS INCIDENTAL TO THE COST OF THE CABINET.
4. ESP 2/3/4 CABINETS SHALL BE FITTED WITH A THERMOSTATICALLY CONTROLLED FAN. IT SHALL BE MOUNTED AT THE TOP OF THE CABINET. THE FAN SHALL BE CAPABLE OF OPERATING AT 130 CPM AT 160' OF STATIC WATER PRESSURE. A PORCLAIN BASED PULL CHAIN FIXTURE WITH 3 PRONG OUTLET SHALL ALSO BE PROVIDED.
5. INCIDENTAL TO THE COST OF EACH CABINET THE CONTRACTOR SHALL CONSTRUCT A 5 INCN (127 mm) PCC SIDEWALK OF A RECTANGULAR AREA 6 FEET (1.83 m) BY 8 FEET (2.44 m) IMMEDIATELY ADJACENT TO THE CABINET FOUNDATION ON THE SAME SIDE OF THE FOUNDATION AS THE CABINET DOOR TO PROVIDE FOOTING DURING INSTALLATION AND MAINTENANCE
6. ANCHOR BOLTS FOR PEDESTAL AND BASE MOUNTED CABINETS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE CABINET.
7. ALL CABINETS SHALL HAVE TERMINAL BLOCKS AND SHELVES AS SHOWN. THESE ITEMS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE CABINET.
8. THE CABINET DOOR SHALL BE HINGED ON THE RIGHT SIDE WHEN FACING THE CABINET. THE DOOR SHALL BE FURNISHED WITH A GASKET THAT SHALL FORM A WEATHER TIGHT SEAL BETWEEN THE CABINET AND DOOR. THE HINGES SHALL BE CONTINUOUS AND BOLTED TO THE CABINET AND DOOR UTILIZING 1/4-20 STAINLESS STEEL CARRIAGE BOLTS AND NY-LOCK NUTS. THE HINGES WILL BE MADE OF STAINLESS STEEL WITH A 0.25 INCH (6.35 mm) DIAMETER STAINLESS STEEL HINGE PIN. THE HINGE PIN SHALL BE CAPPED TOP AND BOTTOM BY WELD TO RENDER IT TAMPER PROOF.
9. THE LATCHING MECHANISM SHALL BE A 3 POINT DRAW ROLLER TYPE. THE CENTER CATCH AND PUSHRODS SHALL BE EITHER CADMIUM OR ZINC PLATED, TYPE II CLASS I. PUSHRODS WILL BE TURNED EDGEWISE AT THE OUTWARD SUPPORTS AND SHALL BE 0.25 INCH (6.35 mm) BY 0.75 INCH (19.05 mm), MINIMUM. ROLLERS SHALL HAVE A MINIMUM DIAMETER OF 0.875 INCH (22.22 mm) AND WILL BE MADE OF NYLON. THE CENTER CATCH SHALL BE FABRICATED FROM 0.14 INCH (3.55 mm) STEEL, MIMIMUM. WHEN THE DOOR IS CLOSED AND LATCHED, IT WILL BE LOCKED. THE LATCHING HANDLE SHALL HAVE A PROVISION FOR PADLOCKING IN THE CLOSED POSITION. AN OPERATING HANDLE SHALL BE FURNISHED WITH EACH LOCK. THE HANDLE WILL BE STAINLESS STEEL WITH A 0.75 INCH (19.05 mm) DIAMETER SHANK.
10. THE ENCLOSURE SHALL BE EQUIPPED WITH TWO ADJUSTABLE ''C'' MOUNTING CHANNELS WELDED ON BOTH SIDE WALLS AND 4 ADJUSTABLE ''C'' MOUNTING CHANNELS WELDED ON THE BACK WALL OF THE ENCLOSURE, ALLOWING VERSATILE POSITIONING OF SHELVES OR PANELS. MOUNTING CHANNELS SHALL BE FACTORY PAINTED SAME COLOR AS INTERIOR OF CABINET.
11. CABINET DOOR SHALL NOT HAVE DOORS OR LOUVERS.
12. ALL FIELD CABINETS SHALL BE FITTED WITH BRASS LOCKS.
13. ESP TYPE 4 CABINET FITTED WITH TWO SHELVES AS SHOWN.
14. THE CONTROL CABINET SHALL BE SET PLUMB ON THE FOUNDATION AND FASTENED TO THE ANCHOR BOLTS WITH NUTS AND WASHERS. FLAT WASHERS SHALL BE INSTALLED BELOW AND ABOVE THE BASE PLATE OF THE CONTROL CABINET. LOCKWASHERS SHALL BE INSTALLED ON TOP OF THE TOP FLAT WASHER.

EDENS	WALNUT *
KENNEDY	BLUE STREAK **
EISENHOWER	CARIBBEAN BLUE *
I-290/IL53/I-355	EVERGREEN **
RYAN	YELLOW STONE II **
I-55	MEDIUM BRONZE *
I-57	RED BARON **
CAL-KING	BLUE STREAK **
LAKE SHORE DR.	GREEN *
I-80	STATUARY BRONZE **

ALL RAMP METERING CABINETS LIME GREEN ***. ALL POSTS, T.S. HEADS AND SERVICES WILL BE PAINTED FEDERAL YELLOW.

* MORTON POWDER PAINT COLOR OR EQUIVALENT.
** O'BRIEN POWDER PAINT COLOR OR EQUIVALENT.
*** BENJAMIN MOORE ENAMEL COLOR OR EQUIVALENT.

NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR CONFORMING TO COLOR REQUIREMENTS

ITS-52

HNTB

USER NAME = jblakley	DESIGNED - R.L.	REVISED - 02-98
	DRAWN - G.M.	REVISED - 03-99
PLOT SCALE = 1.00 ' / in.	CHECKED - R.L.	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

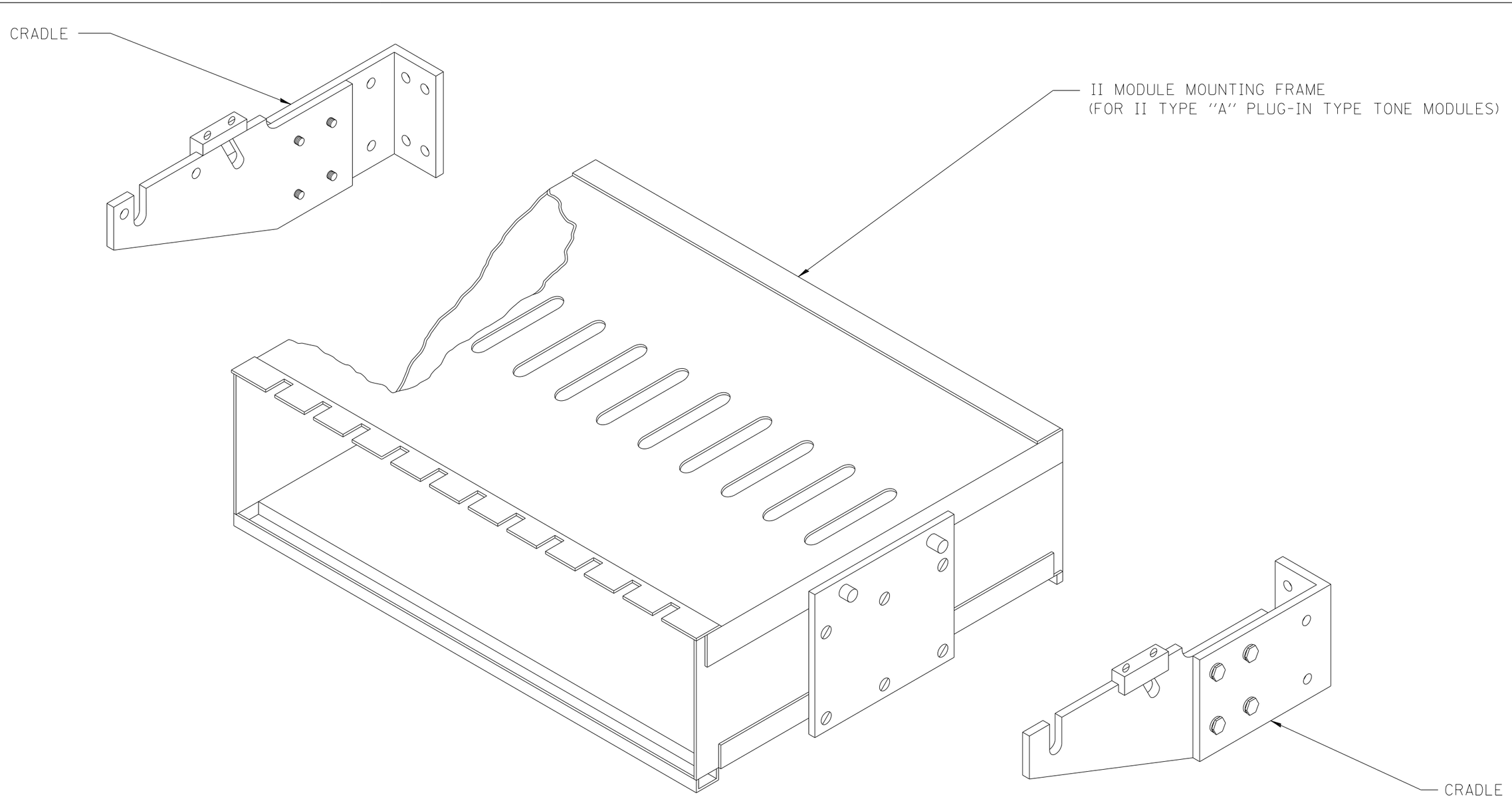
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

TYPE 4 CABINET
DETAIL SHEET

SCALE: N.T.S. | SHEET NO. 31 OF 34 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	341
		CONTRACT NO. 60Y38		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-35.dgn



NOTE:

TYPE ''A'' TONE MODULES ARE PLUG
IN UNIT MEASURING 5-7/32'' (132.55 mm) X 1.5'' (38.1 mm) X 13-3/4'' (349.25 mm)

ITS-53

HNTB

USER NAME = jblakley	DESIGNED - R.L.	REVISED - 02-98
	DRAWN - G.M.	REVISED - 03-99
PLOT SCALE = 1.00 '/ in.	CHECKED - R.L.	REVISED -
PLOT DATE = 6/3/2016	DATE 5/(	REVISED -

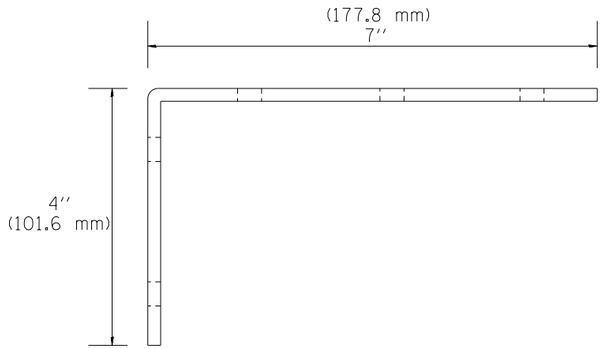
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

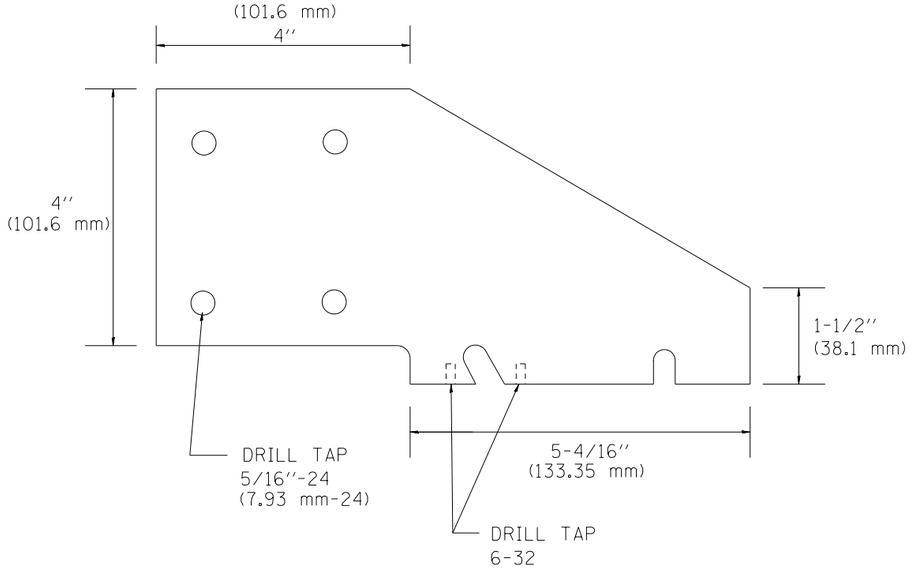
FIELD MOUNTING FRAME
WITH CRADLE ASSEMBLY
(#TY-1TSC-400#6)

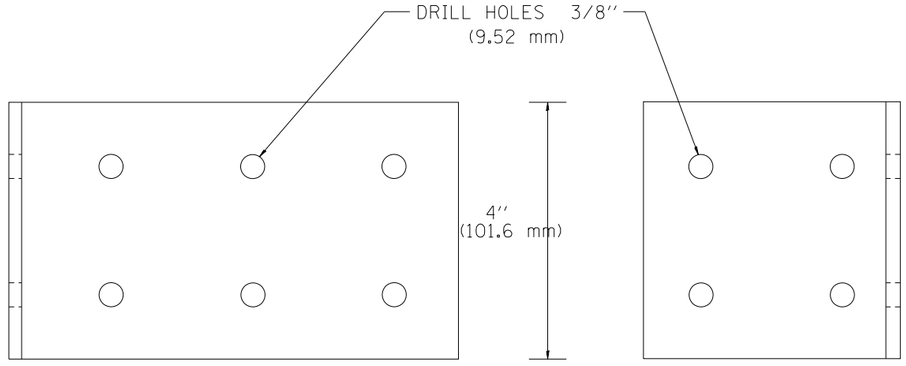
SCALE: N.T.S. | SHEET NO. 32 OF 34 SHEETS | STA. | TO STA.

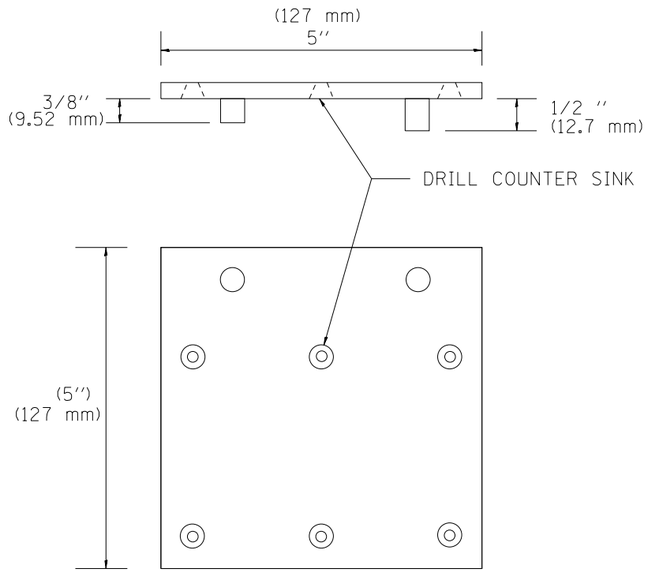
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	342
		CONTRACT NO. 60Y38		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

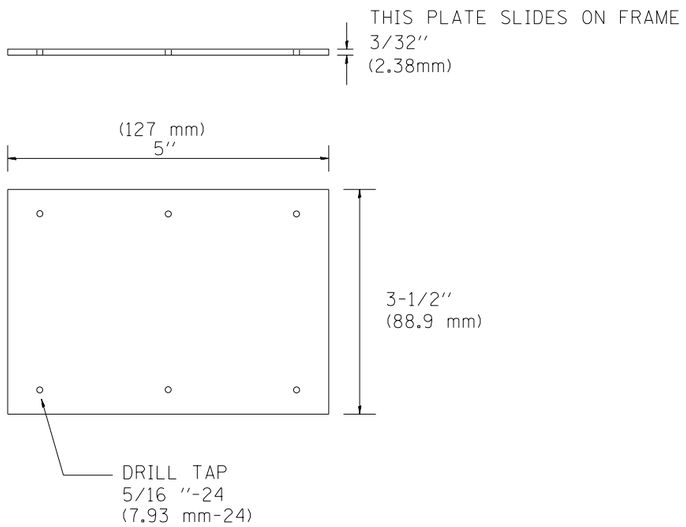
FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-36.dgn

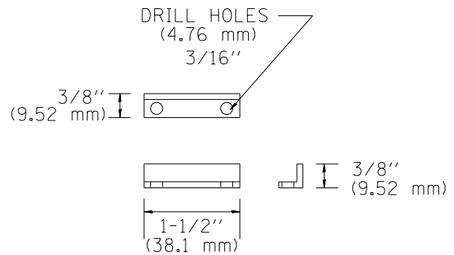










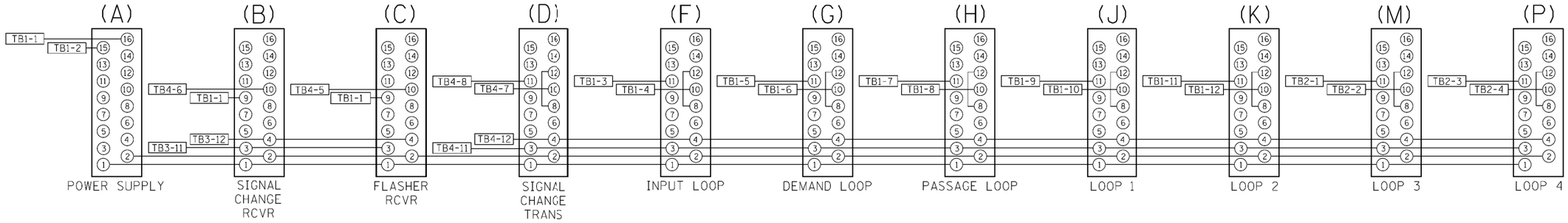


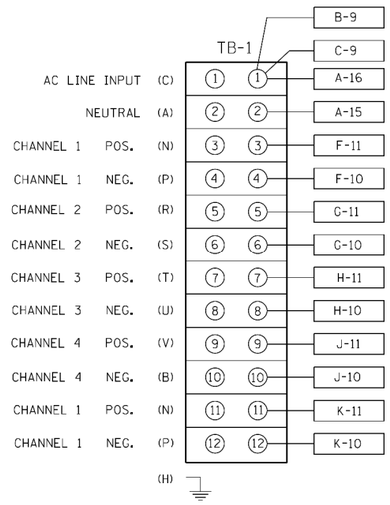
ITS-54

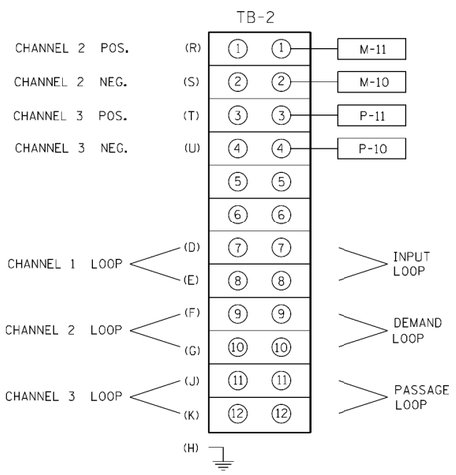
HNTB	USER NAME = jblakley	DESIGNED - R.L.	REVISED - 02/98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC SYSTEMS CENTER	FIELD CRADLE ASSEMBLY (#TY-1TSC-400#7)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - G.M.	REVISED - 03/99			90	(1517 & 1415) R-3	COOK	557 / 343
	PLOT SCALE = 1.00 ' / in.	CHECKED - R.L.	REVISED -					CONTRACT NO. 60Y38	
	PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -		SCALE: N.T.S. SHEET NO. 33 OF 34 SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

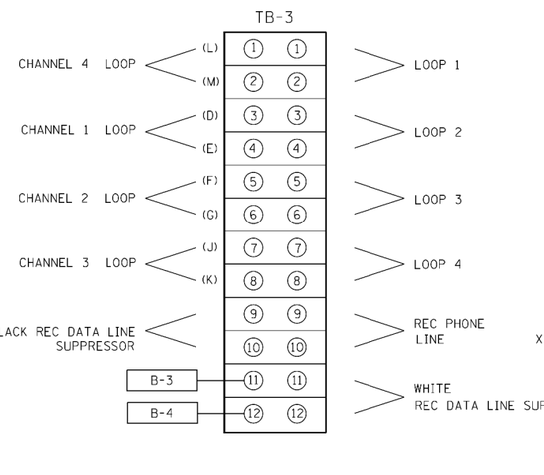
FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-37.dgn

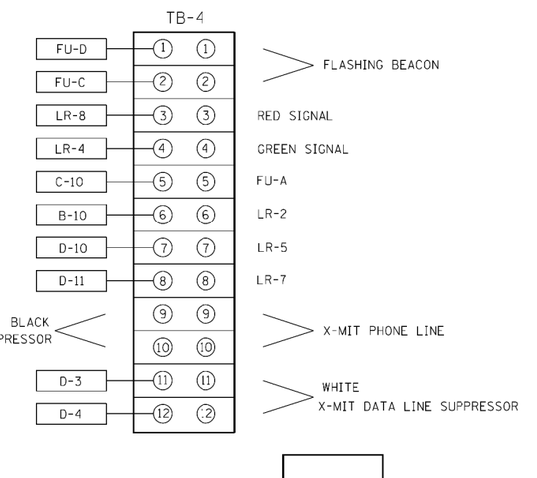
BACK VIEW OF TONE RACK

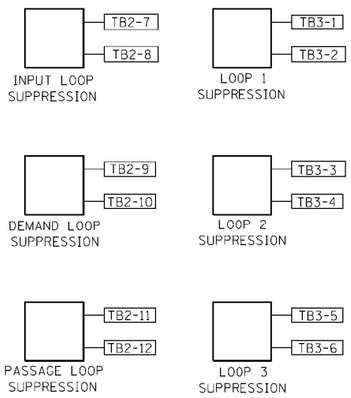


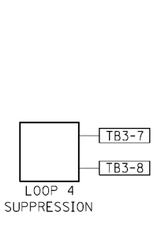


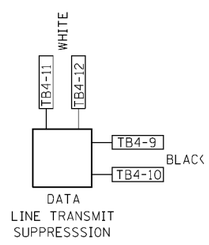


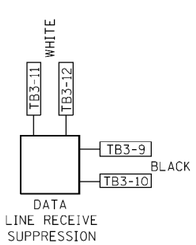


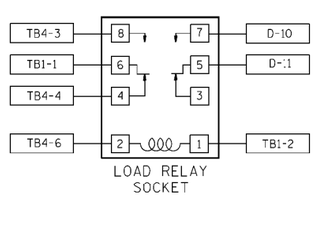


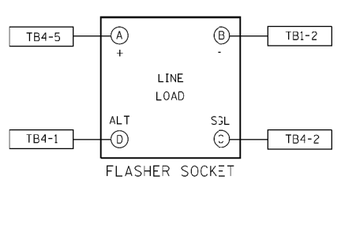


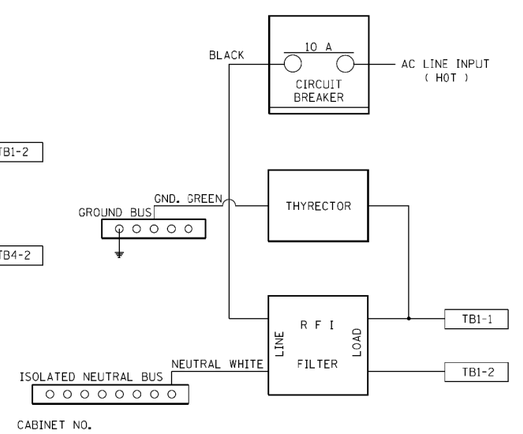












ITS–55

HNTB	USER NAME = jblakley	DESIGNED	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	METERING CABINET WIRING DIAGRAM	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN	REVISED -			90	(1517 & 1415) R-3	COOK	557	344
	PLOT SCALE = 1.00 ' / in.	CHECKED	REVISED -						CONTRACT NO. 60Y38	
	PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -		SCALE: N.T.S. SHEET NO. 34 OF 34 SHEETS STA. TO STA.			ILLINOIS	FED. AID PROJECT	

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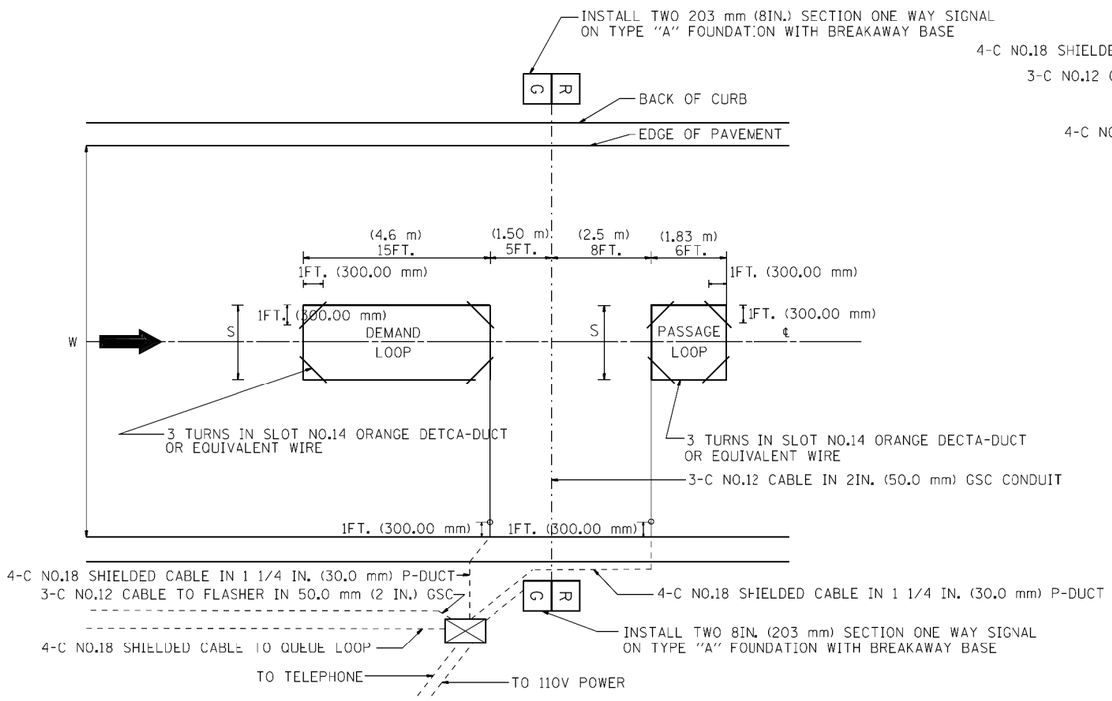
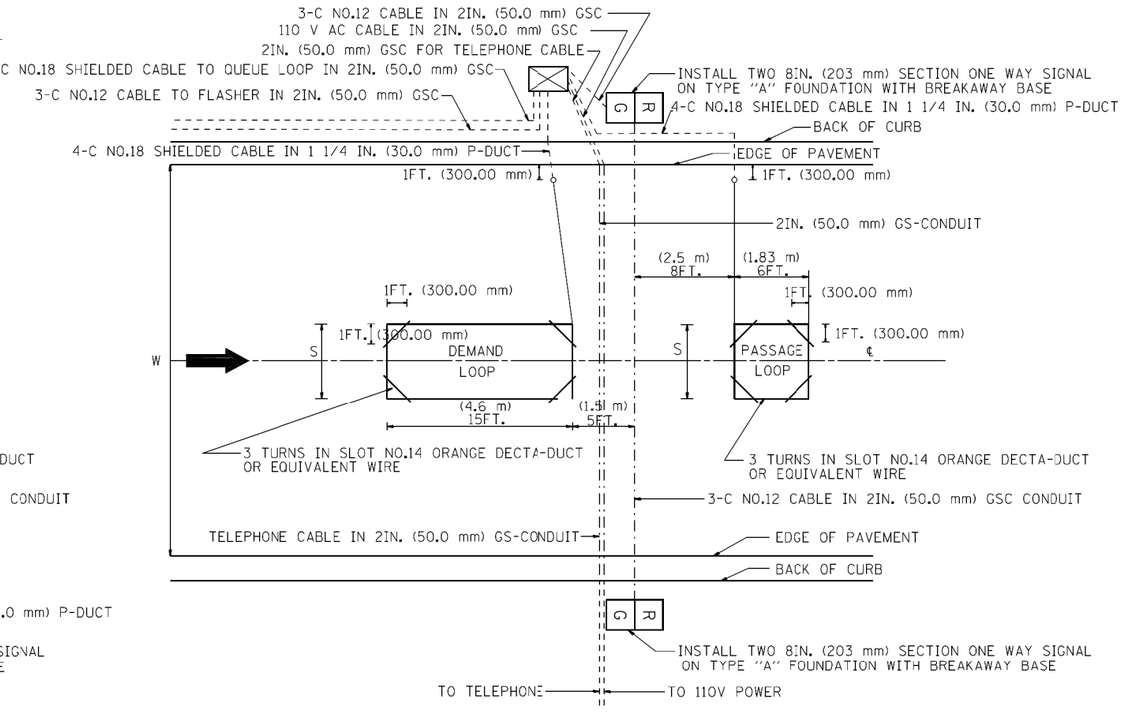
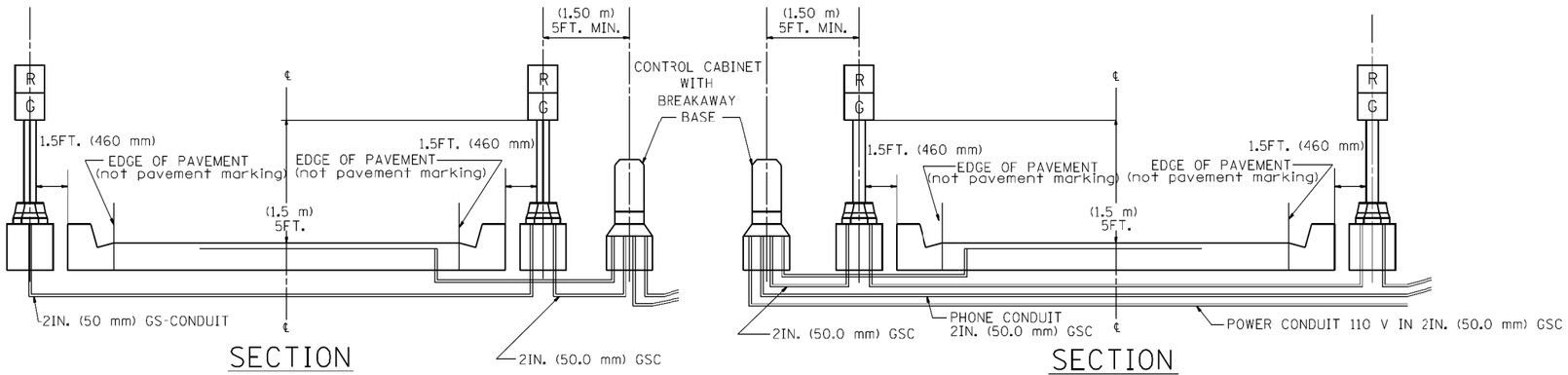


TYPICAL SIGNAL AND LOOP LAYOUT (TYPE I)



TYPICAL SIGNAL AND LOOP LAYOUT (TYPE II)



SECTION

SECTION

TABLE 1	
WIDTH (W)	WIDTH (S)
12' (3.7 m)	8' (2.5 m)
13' (4.0 m)	9' (2.8 m)
14' (4.3 m)	10' (3.1 m)
15' (4.6 m)	11' (3.4 m)
16' (4.9 m)	12' (3.7 m)
17' (5.2 m)	13' (4.0 m)
18' (5.5 m)	14' (4.3 m)
19' (5.8 m)	15' (4.6 m)
20' (6.1 m)	18' (4.9 m)
21' (6.4 m)	17' (5.2 m)
22' (6.7 m)	18' (5.5 m)
23' (7.0 m)	19' (5.8 m)
24' (7.3 m)	20' (6.1 m)
25' (7.6 m)	21' (6.4 m)

NOTES:

1. EACH LOOP SHALL BE SPLICED TO A 4-C NO.18 TWISTED SHIELDED LEAD IN WHEN 150FT. (45 m) OR MORE FROM CABINET.
2. LOOPS SHALL BE SPLICED IN HANDHOLES ONLY, OTHERWISE WRITTEN PERMISSION SHALL BE OBTAINED FROM TSC ENGINEER.
3. LOOPS SHALL NOT BE SPLICED IN SERIES.
4. EACH LOOP LEAD IN SHALL BE IDENTIFIED AND PERMANENTLY COLOR CODED IN THE COREHOLE, HANDHOLE & CABINETS THRU WHICH THEY ENTER OR PASS AND TAGGED WITH THE CORRECT NOMENCLATURES.

HNTB

USER NAME = jblakley	DESIGNED R.L.	REVISED -
	DRAWN G.M.	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED R.L.	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

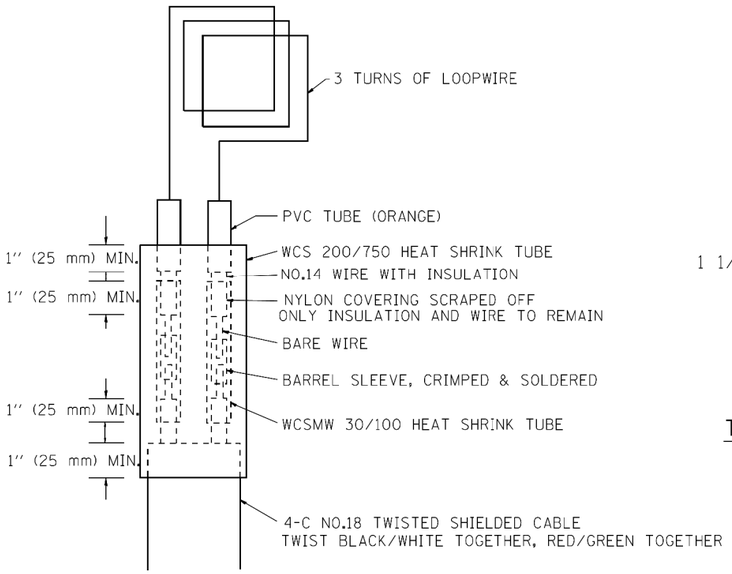
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL RAMP METERING INSTALLATION TYPE I AND II (WITH CURB AND GUTTER)

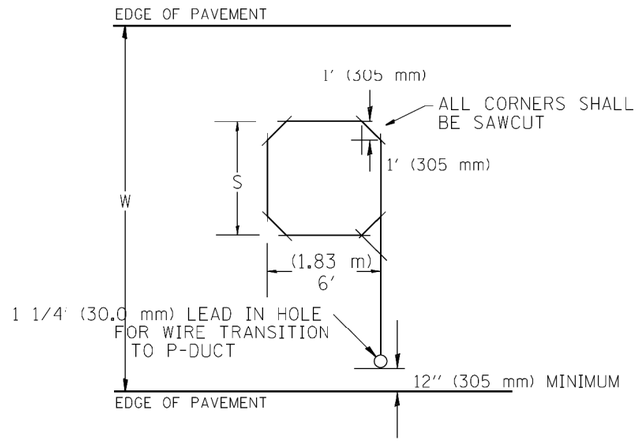
SCALE: N.T.S. | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	345
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

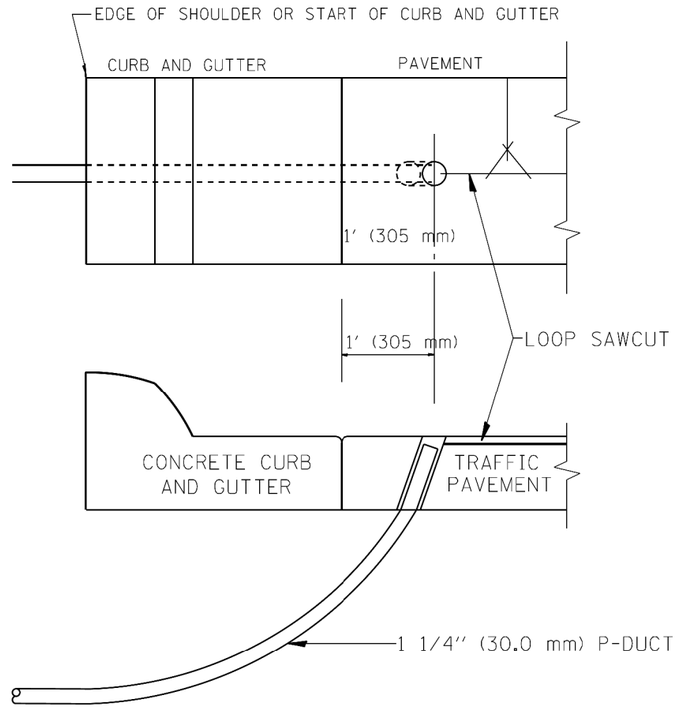
FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-39.dgn



LOOP SPLICING REQUIREMENTS



TYPICAL "S" FT. BY 6' (1.83 m) INDUCTION LOOP SAWCUT LAYOUT FOR RAMPS



CURB AND GUTTER LOOP LEAD-IN TRANSITION DETAIL

TABLE 1	
WIDTH (W)	WIDTH (S)
12' (3.7 m)	8' (2.5 m)
13' (4.0 m)	9' (2.8 m)
14' (4.3 m)	10' (3.1 m)
15' (4.6 m)	11' (3.4 m)
16' (4.9 m)	12' (3.7 m)
17' (5.2 m)	13. (4.0 m)
18' (5.5 m)	14' (4.3 m)
19' (5.8 m)	15' (4.6 m)
20' (6.1 m)	18' (4.9 m)
21' (6.4 m)	17' (5.2 m)
22' (6.7 m)	18' (5.5 m)
23' (7.0 m)	19' (5.8 m)
24' (7.3 m)	20' (6.1 m)
25' (7.6 m)	21' (6.4 m)

NOTES

1. EACH LOOP SHALL BE SPLICED TO A 4-C NO.18 TWISTED SHIELDED LEAD IN WHEN 150' (45 m) OR MORE FROM CABINET.
2. LOOPS SHALL BE SPLICED IN HANDHOLES ONLY, OTHERWISE WRITTEN PERMISSION SHALL BE OBTAINED FROM TSC ENGINEER.
3. LOOPS SHALL NOT BE SPLICED IN SERIES.
4. EACH LOOP LEAD IN SHALL BE IDENTIFIED AND PERMANENTLY COLOR CODED IN THE COREHOLE, HANDHOLE & CABINETS THRU WHICH THEY ENTER OR PASS AND TAGGED WITH THE CORRECT NOMENCLATURES.

HNTB

USER NAME = jblakley	DESIGNED R.L.	REVISED -
	DRAWN G.M.	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED R.L.	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

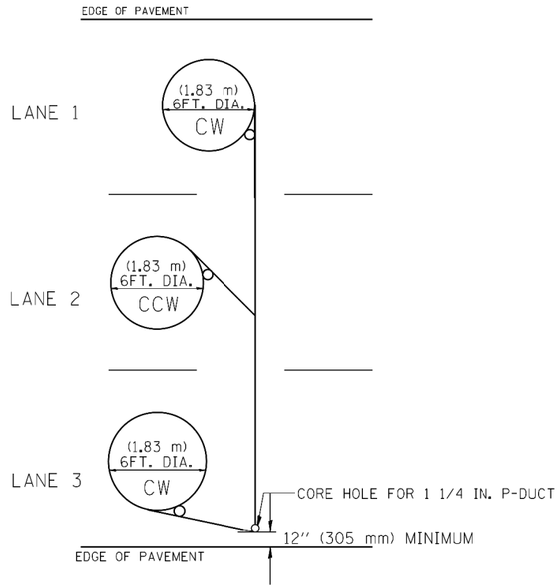
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RECTANGULAR INDUCTION LOOP
TYPICAL
(#TY-1TSC-418#3)

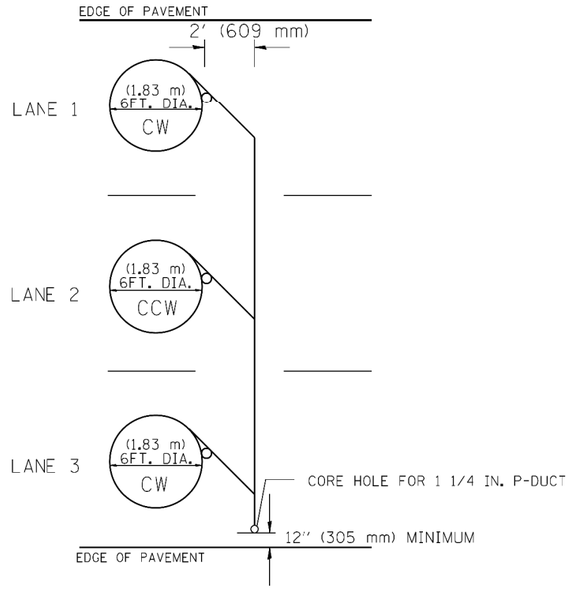
SCALE: N.T.S. | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	346
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

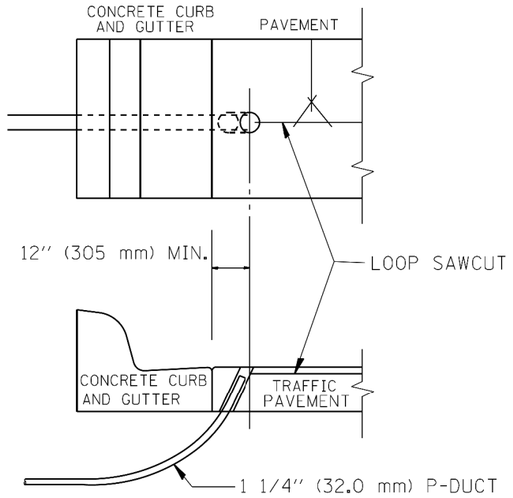
FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-40.dgn



TYPICAL 6FT. (1.83 m) DIA. INDUCTION LOOP CORE DRILL
LAYOUT FOR MULTIPLE LANE ROADWAY



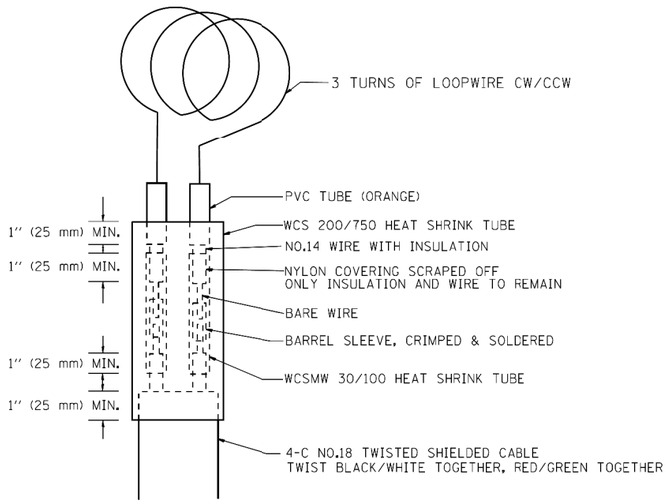
TYPICAL 6FT. (1.83 m) DIA. INDUCTION LOOP CORE DRILL
LAYOUT FOR MULTIPLE LANE ROADWAY



CURB AND GUTTER LOOP LEAD-IN
TRANSITION DETAIL

NOTES

1. EACH LOOP SHALL BE SPLICED TO A 4-C NO.18 TWISTED SHIELDED LEAD IN WHEN 150FT. (45 m) OR MORE FROM CABINET.
2. LOOPS SHALL BE SPLICED IN HANDHOLES ONLY, OTHERWISE WRITTEN PERMISSION SHALL BE OBTAINED FROM TSC ENGINEER.
3. LOOPS SHALL NOT BE SPLICED IN SERIES.
4. EACH LOOP LEAD IN SHALL BE IDENTIFIED AND PERMANENTLY COLOR CODED IN THE COREHOLE, HANDHOLE & CABINETS THRU WHICH THEY ENTER OR PASS AND TAGGED WITH THE CORRECT NOMENCLATURES.



LOOP SPLICING REQUIREMENTS

HNTB

USER NAME = jblakley	DESIGNED R.L.	REVISED -
	DRAWN G.M.	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED R.L.	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

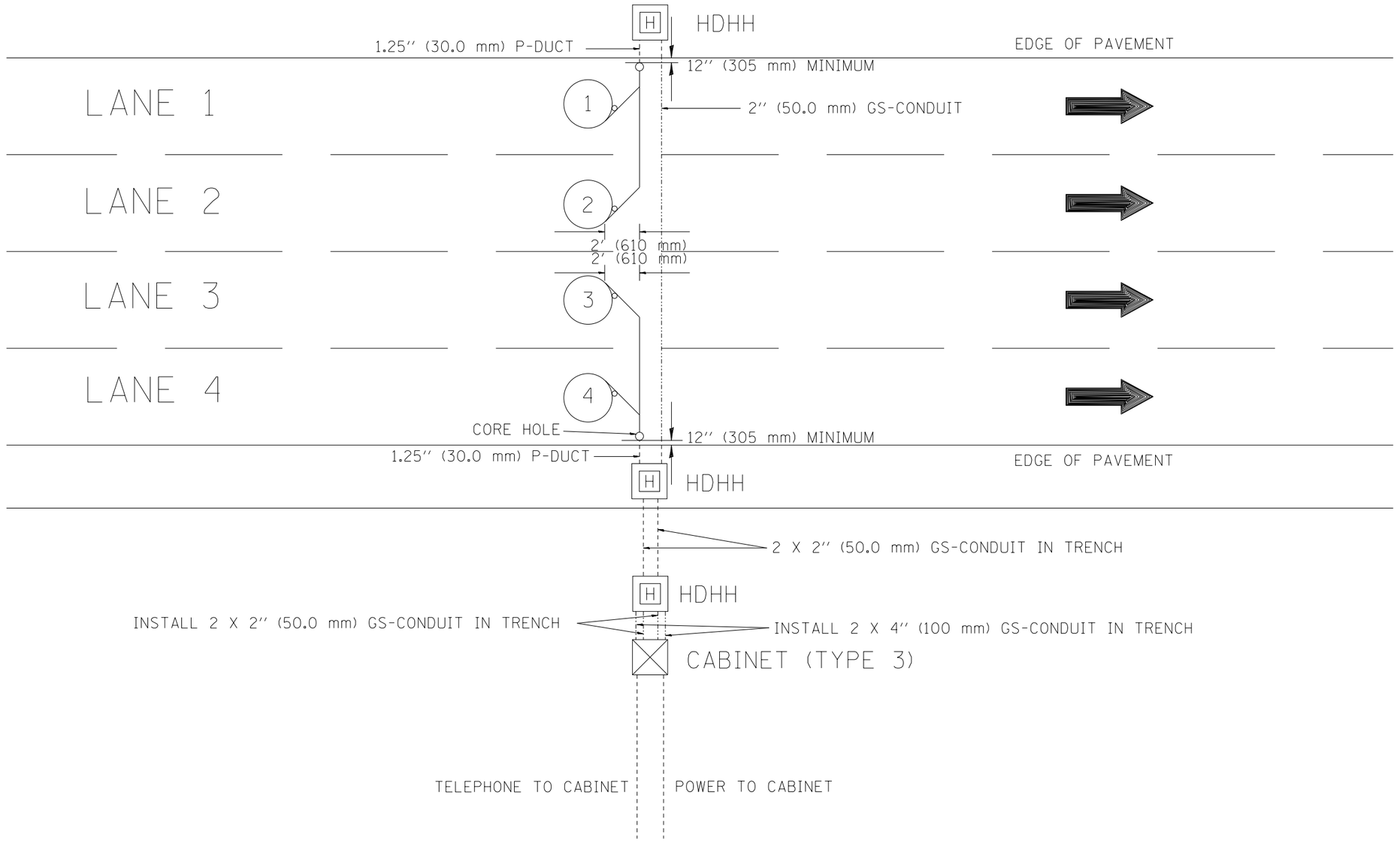
EXISTING ROUND
INDUCTION LOOP TYPICALS
(#TY-TSC-418#2)

SCALE: N.T.S. | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	347
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-41.dgn

NOTE: ALL MAIN LINE LOOPS ARE ROUND 6' DIA. (1.83 m)



NOTES

1. EACH LOOP SHALL BE SPLICED TO A 4-C NO.18 TWISTED SHIELDED LEAD IN WHEN 150' (45 m) OR MORE FROM CABINET.
2. LOOPS SHALL BE SPLICED IN HANDHOLES ONLY, OTHERWISE WRITTEN PERMISSION SHALL BE OBTAINED FROM TSC ENGINEER.
3. LOOPS SHALL NOT BE SPLICED IN SERIES.
4. EACH LOOP LEAD IN SHALL BE IDENTIFIED AND PERMANENTLY COLOR CODED IN THE COREHOLE, HANDHOLE & CABINETS THRU WHICH THEY ENTER OR PASS AND TAGGED WITH THE CORRECT NOMENCLATURES.

HNTB

USER NAME = jblakley	DESIGNED - R.L.	REVISED - 02/98
	DRAWN - G.M.	REVISED - 03/99
PLOT SCALE = 1.00 '/ in.	CHECKED - R.L.	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

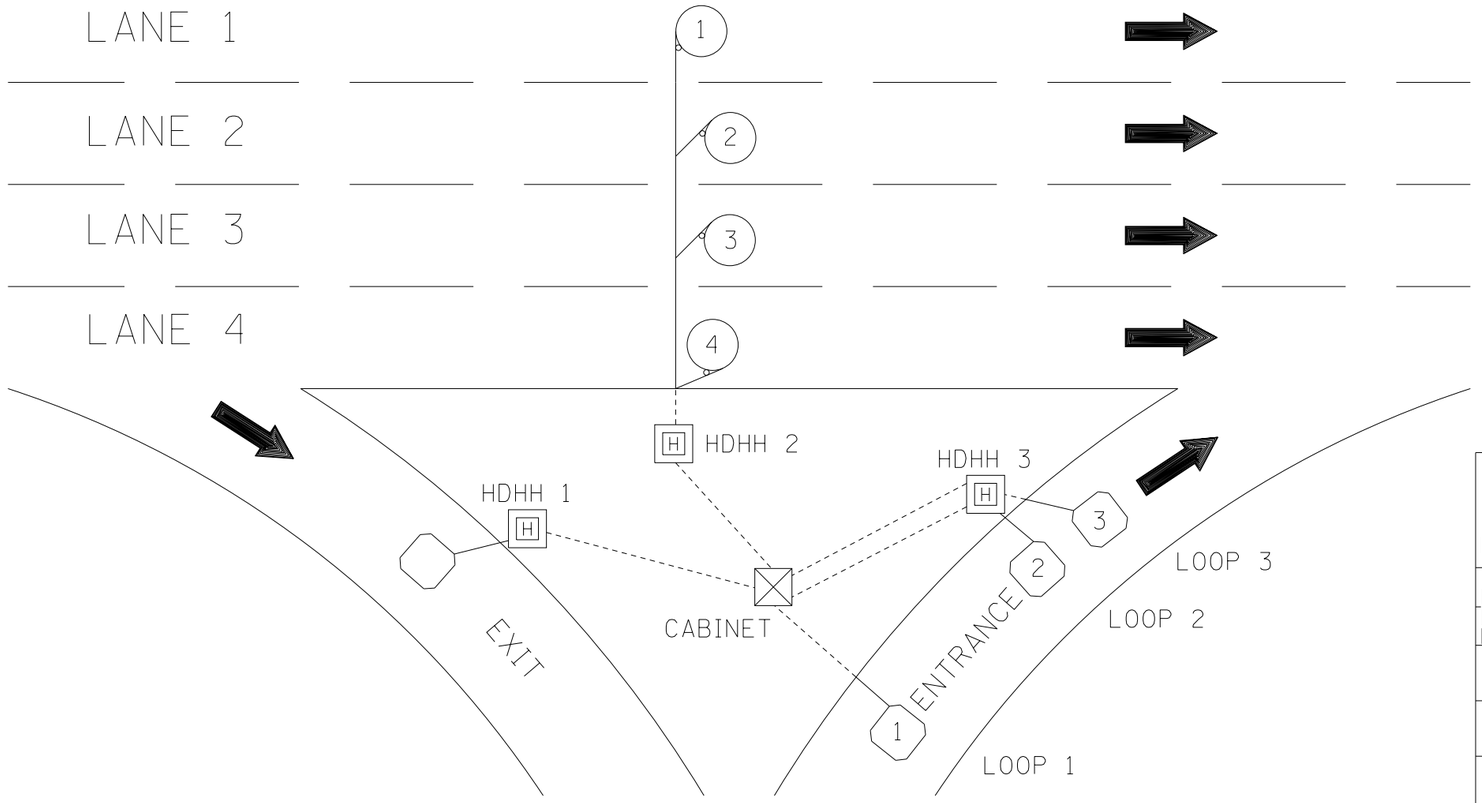
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

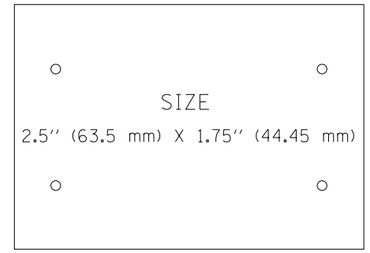
NEW CONSTRUCTION
ROUND INDUCTION LOOP
TYPICAL INSTALLATION

SCALE: N.T.S. | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	348
		CONTRACT NO. 60Y38		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-42.dgn





SUGGESTED TAG
PANDUIT
#MP25OW175-C
OR EQUIVALENT

LOOP ANALYZER

LOCATION_____ DATE_____

LOOP LOCATION / LANE DIRECTION	LOOP WIRE MARKED AND CODED	LOOP SIZE	FREQ. INDUCTANCE	INSULATION	LOOP RESISTANCE

HDHH 1 EXAMPLE

IB-EB EXIT
CCW IN/
TO CABINET #____

HDHH 2 EXAMPLE

IB (OB) LANE #___
CCW /OUT
TO CABINET #____

HDHH 3 EXAMPLE

IB-EB ENT.
LOOP #2
CW IN/

NOTE:

EACH LOOP WIRE SHALL BE TAGGED AS ''IN'' OR ''OUT'' AND ''CW'' OR ''CCW''. SHIELDED CABLE WILL BE TAGGED IN EACH HANDHOLE AND CABINET TO MATCH THE CABLE LOG.

HNTB

USER NAME = jblakley	DESIGNED - R.L.	REVISED - 02/98
	DRAWN - G.M.	REVISED - 03/99
PLOT SCALE = 1.00 ' / in.	CHECKED - R.L.	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

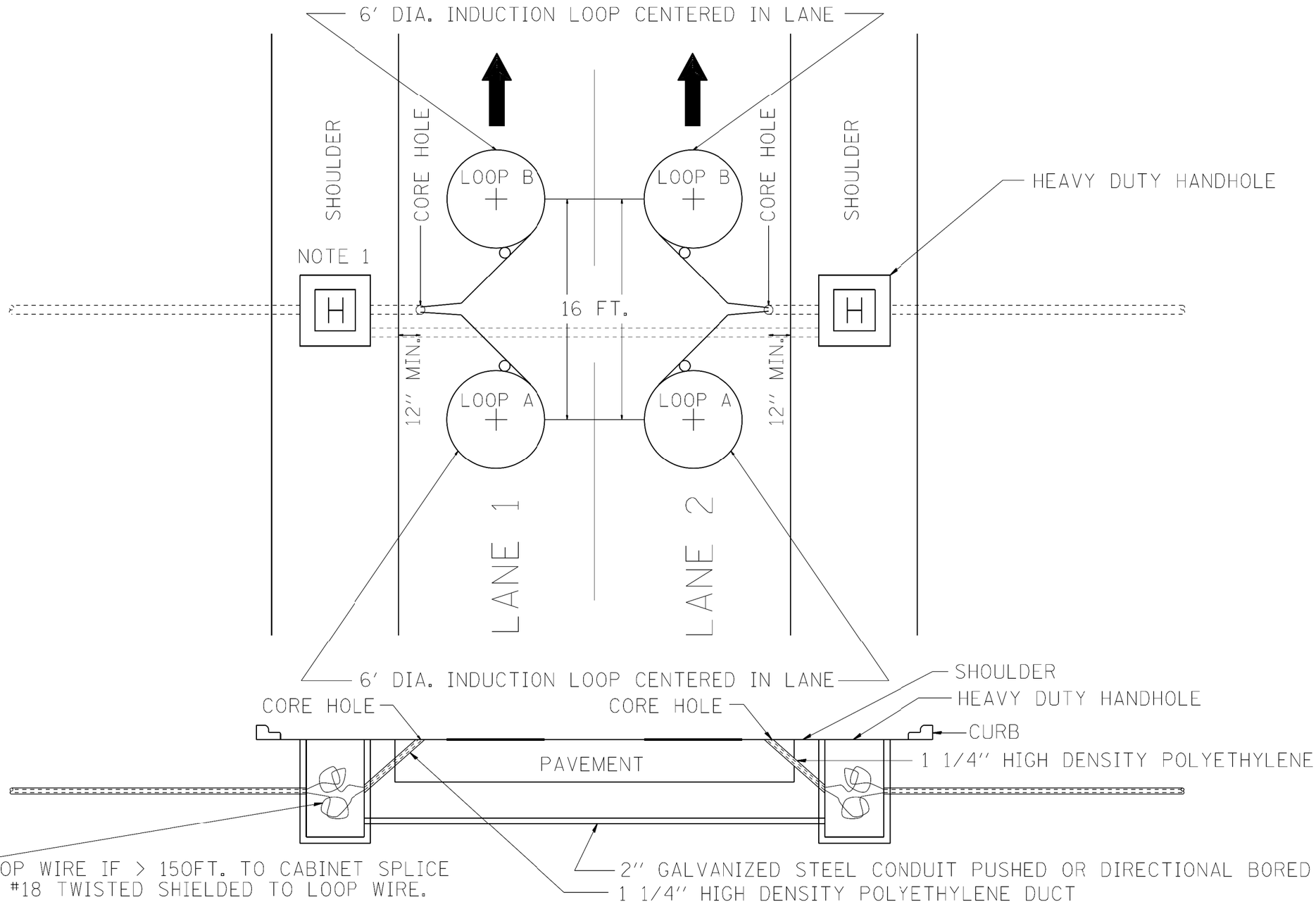
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

LOOP STATUS REPORT

SCALE: N.T.S. | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	349
		CONTRACT NO. 60Y38		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-43.dgn



NOTE 1: IF HDHH NOT POSSIBLE THEN LANE 1 LOOPS USE SAME CORE HOLE AS LANE 2 LOOPS. IN THE OTHER DIRECTION, LANE 2 LOOPS WILL USE SAME CORE HOLE AS LANE 1 LOOPS.

ITS-61

HNTB

USER NAME = jblakley	DESIGNED R.L.	REVISED -
	DRAWN G.M.	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED R.L.	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

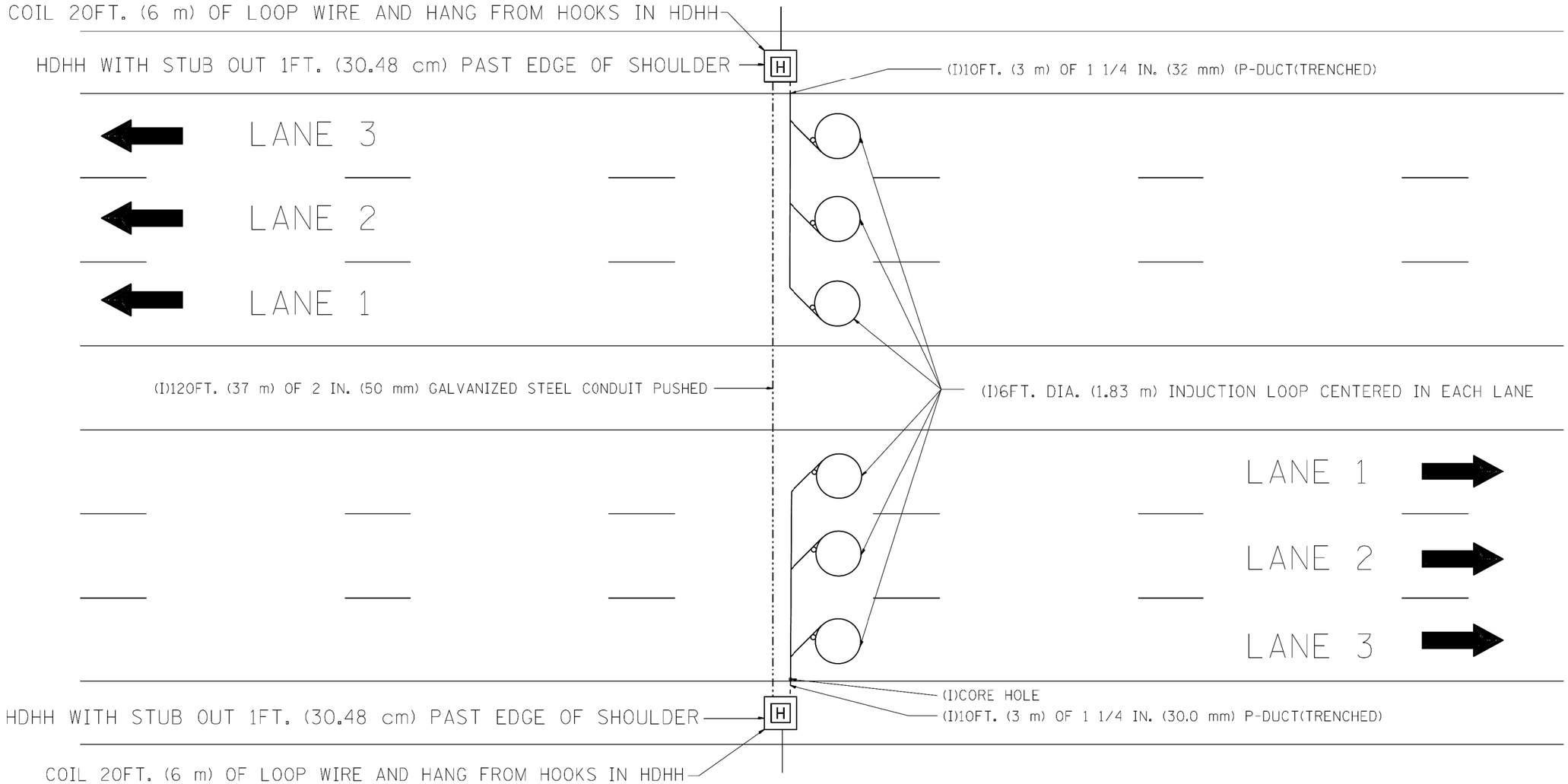
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SURVEILLANCE
2 LANE SPEED, COUNT, CLASSIFICATION STATION

SCALE: N.T.S. | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	350
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-44.dgn



NOTE:

THE COST OF LOOP WIRE IN HDHH IS INCIDENTAL TO THE INDUCTION LOOP. IT SHALL NOT BE MEASURE FOR PAYMENT.

INSTALL AT STATIONS.

HNTB

USER NAME = jblakley	DESIGNED R.L.	REVISED -
	DRAWN G.M.	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED R.L.	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

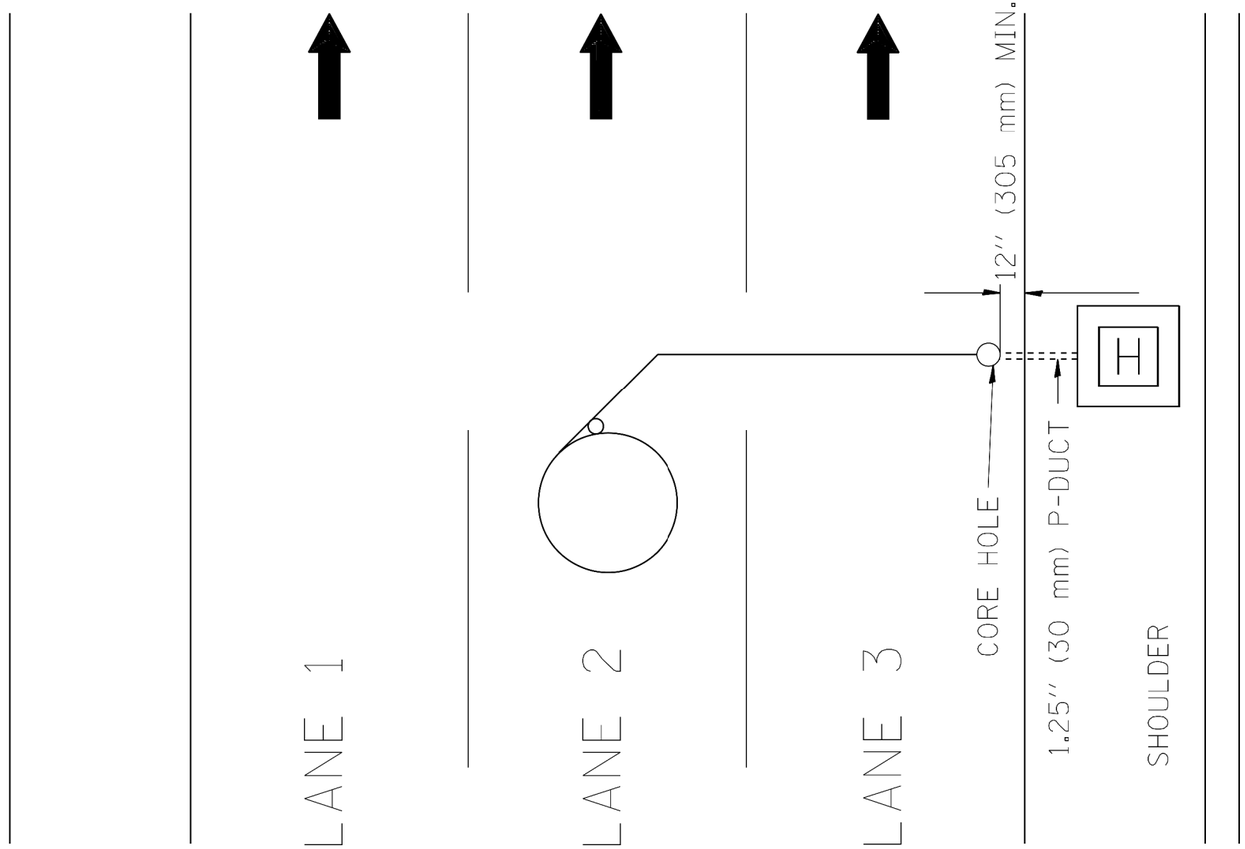
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

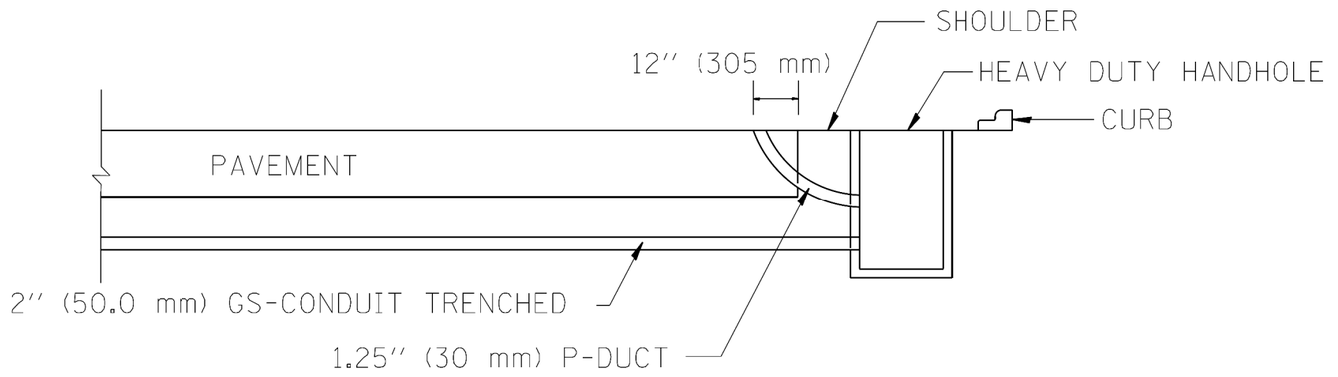
3 LANE COUNT STATION

SCALE: N.T.S. | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	351
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-45.dgn





ITS–63

HNTB

USER NAME = jblakley	DESIGNED R.L.	REVISED -
	DRAWN G.M.	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED R.L.	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

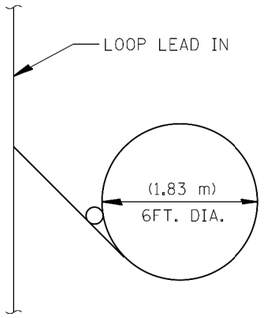
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIVE HOLE DUCT SYSTEM

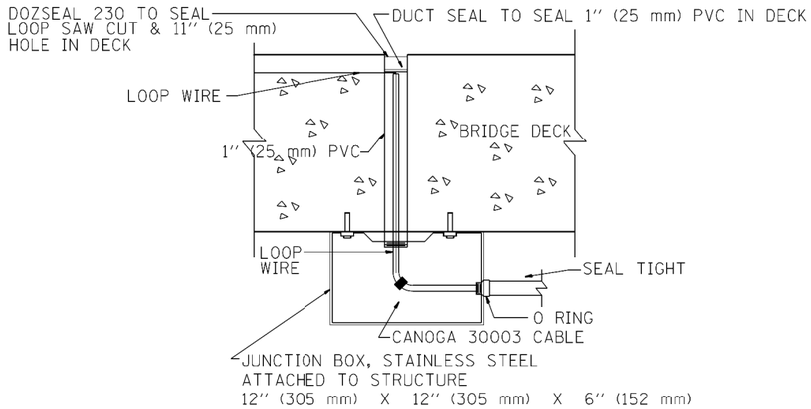
SCALE: N.T.S. | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	351A
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

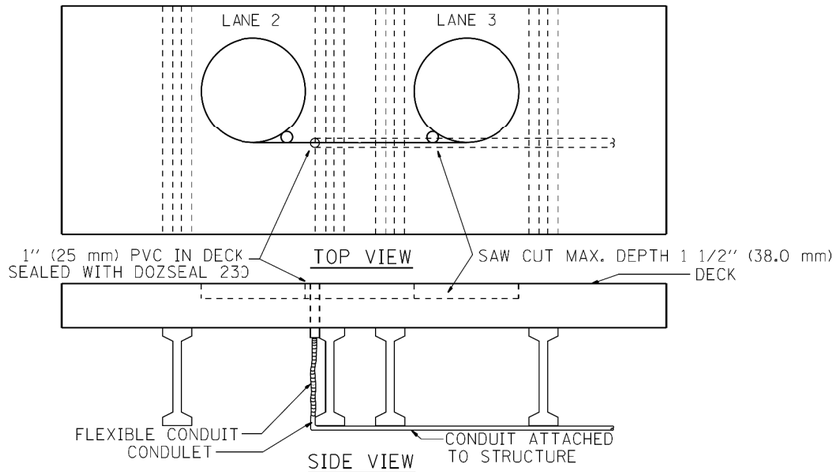
FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-46.dgn



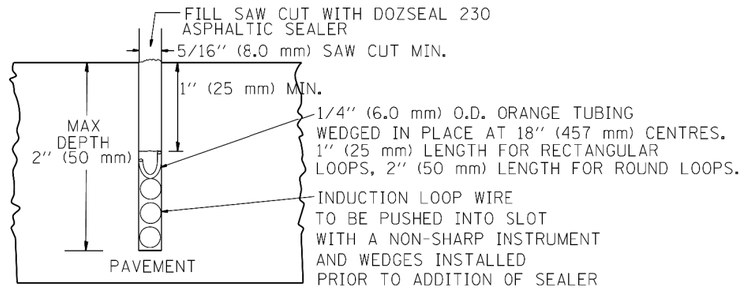
TYPICAL LOOP SAWCUT LAYOUT



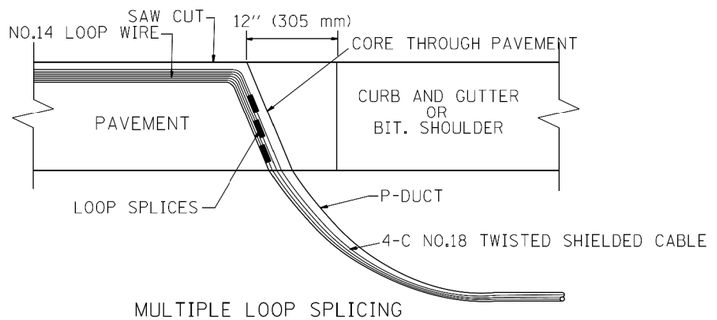
LOOP JUNCTION BOX UNDER BRIDGE DECK



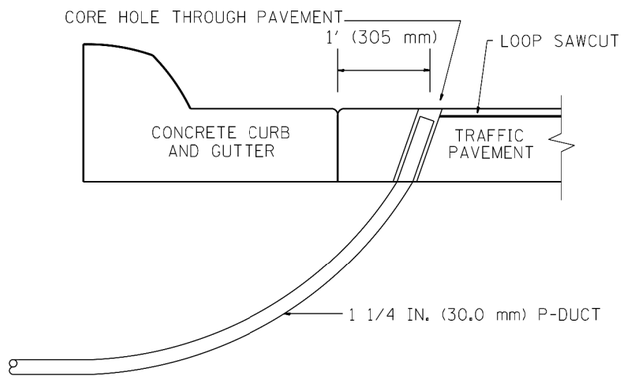
LOOP TRANSITION IN BRIDGE DECK



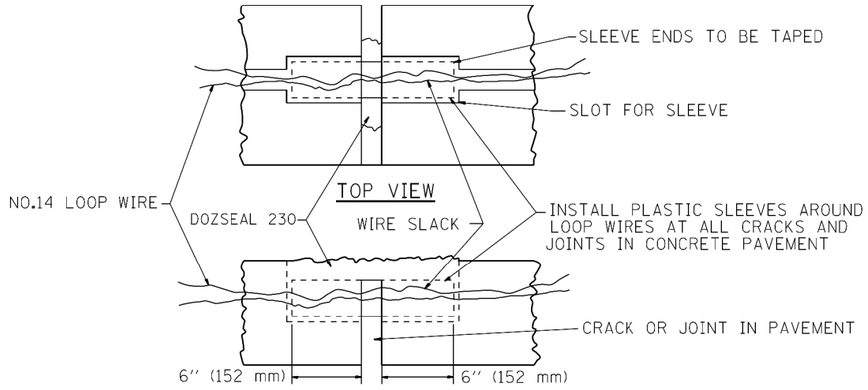
LOOP CROSS SECTION IN PAVEMENT



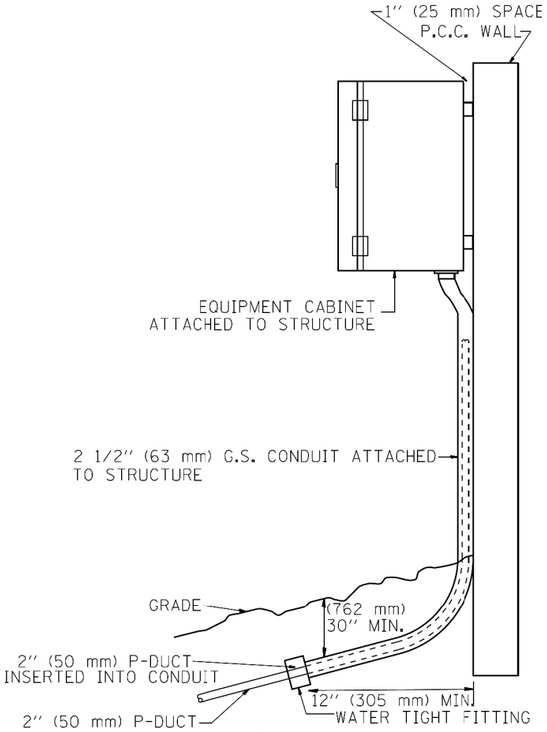
MULTIPLE LOOP SPLICING



SIDE SECTION LOOP LEAD-IN TRANSITION DETAIL



SIDE SECTION
PAVEMENT CRACK TRANSVERSE SLEEVE



SIDE VIEW
POLYETHYLENE DUCT/GS. CONDUIT TRANSITION

HNTB

USER NAME = jblakley	DESIGNED R.L.	REVISED -
	DRAWN G.M.	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED R.L.	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

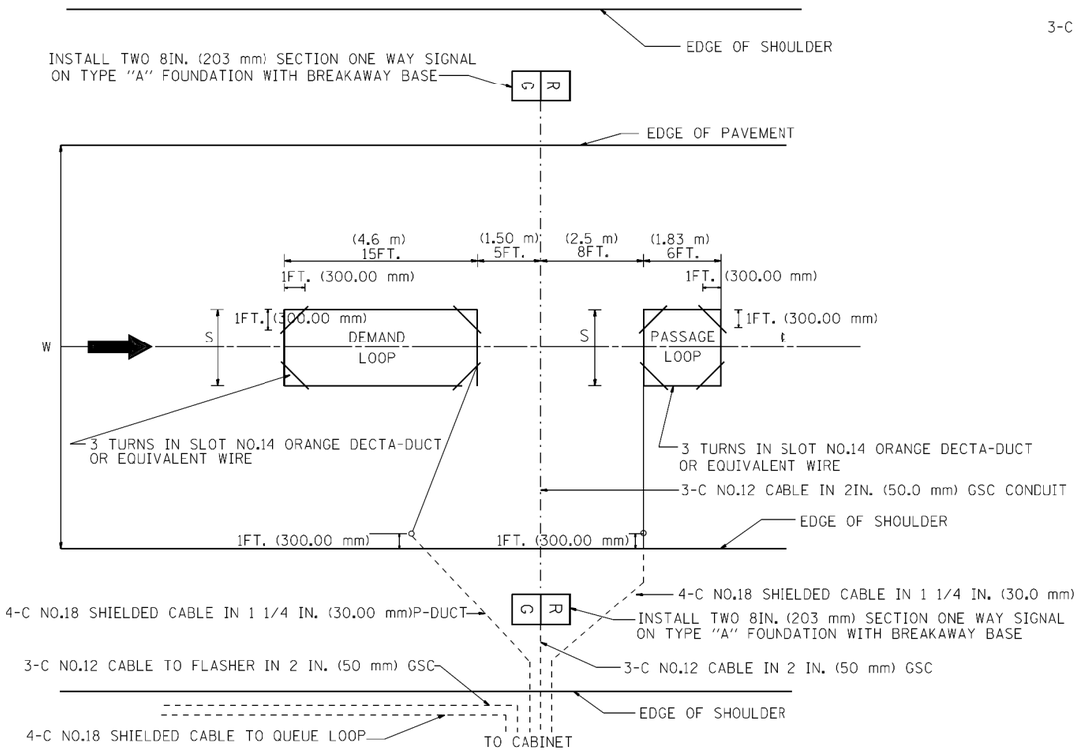
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOOP, CONDUIT & DUCT INSTALLATION DETAILS

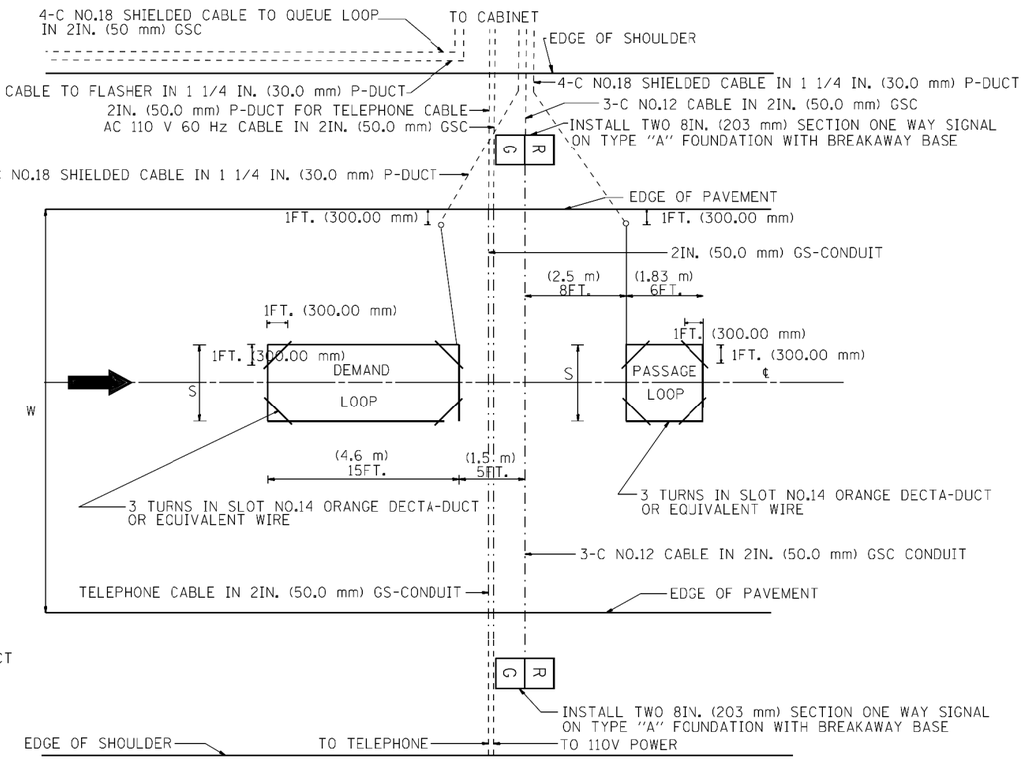
SCALE: N.T.S. | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	352
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-47.dgn

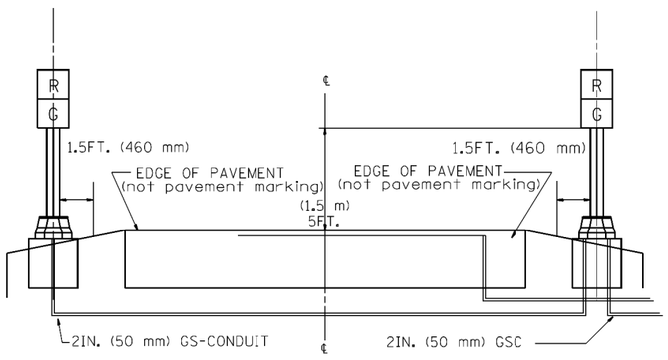


TYPICAL SIGNAL AND LOOP LAYOUT (TYPE I)

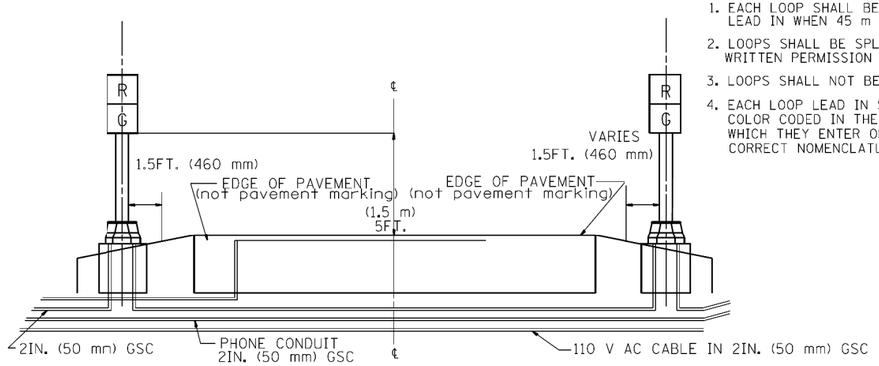


TYPICAL SIGNAL AND LOOP LAYOUT (TYPE II)

NOTE:
ALL SIGNALS & FOUNDATIONS SHALL BE FIELD LOCATED FOR ACTUAL SITE AND TRAFFIC CONDITIONS.



SECTION



SECTION

NOTES
1. EACH LOOP SHALL BE SPLICED TO A 4-C NO.18 TWISTED SHIELDED LEAD IN WHEN 45 m (150FT.) OR MORE FROM CABINET.
2. LOOPS SHALL BE SPLICED IN HANDHOLES ONLY, OTHERWISE WRITTEN PERMISSION SHALL BE OBTAINED FROM TSC ENGINEER.
3. LOOPS SHALL NOT BE SPLICED IN SERIES.
4. EACH LOOP LEAD IN SHALL BE IDENTIFIED AND PERMANENTLY COLOR CODED IN THE COREHOLE, HANDHOLE & CABINETS THRU WHICH THEY ENTER OR PASS AND TAGGED WITH THE CORRECT NOMENCLATURES.

TABLE 1

WIDTH (W)	WIDTH (S)
12' (3.7 m)	8' (2.5 m)
13' (4.0 m)	9' (2.8 m)
14' (4.3 m)	10' (3.1 m)
15' (4.6 m)	11' (3.4 m)
16' (4.9 m)	12' (3.7 m)
17' (5.2 m)	13' (4.0 m)
18' (5.5 m)	14' (4.3 m)
19' (5.8 m)	15' (4.6 m)
20' (6.1 m)	18' (4.9 m)
21' (6.4 m)	17' (5.2 m)
22' (6.7 m)	18' (5.5 m)
23' (7.0 m)	19' (5.8 m)
24' (7.3 m)	20' (6.1 m)
25' (7.6 m)	21' (6.4 m)

HNTB

USER NAME = jblakley	DESIGNED R.L.	REVISED -
	DRAWN G.M.	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED R.L.	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

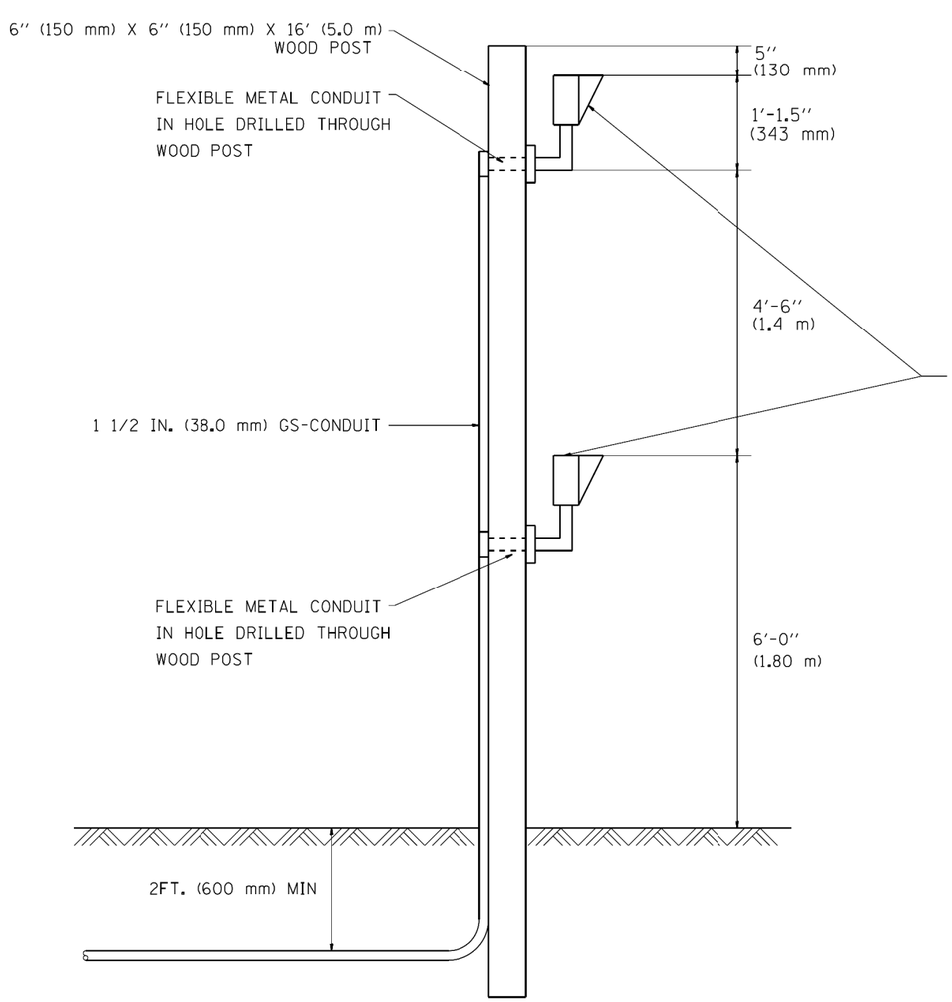
TYPICAL RAMP METERING INSTALLATION
TYPE I & II
(FOR RAMPS WITHOUT CURB & GUTTERS)

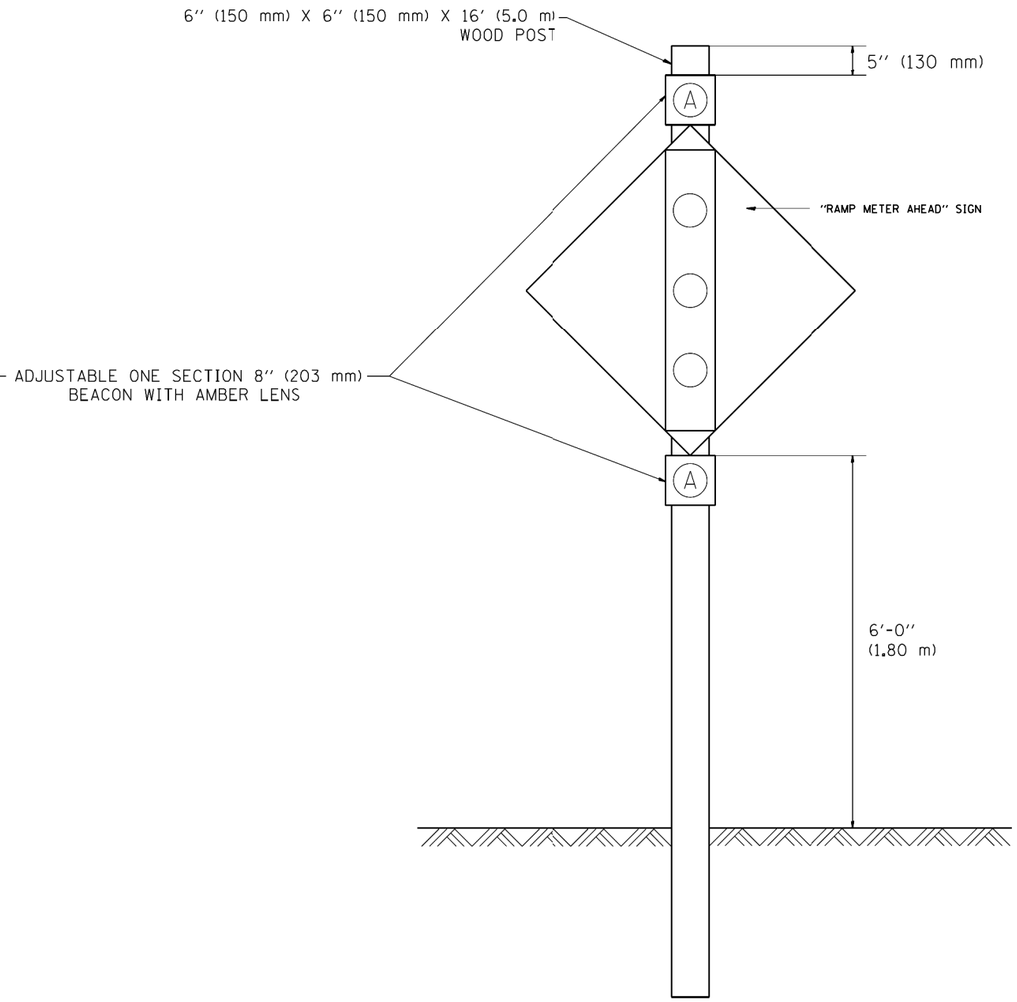
SCALE: N.T.S. | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	353
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-48.dgn

NOT TO SCALE





NOTE:

1) SIGN WILL BE PLACED ON THE FRONT FACE OF WOOD POST BY CONTRACTOR. 4'-6'' (1.4 m) DIMENSION MUST BE KEPT FREE OF CONDUIT AND CONNECTIONS TO PREVENT INTERFERENCE WITH SIGN PLACEMENT.
2) WOOD POST SHALL NOT BE SET IN CONCRETE (REFER TO SPECIAL PROVISIONS).
3) A CLEAR LAMP ESPECIALLY DESIGNED FOR TRAFFIC SIGNAL SERVICE SHALL BE RATED AT 67 WATTS, 120 VOLTS.

HNTB

USER NAME = jblakley	DESIGNED R.L.	REVISED -
	DRAWN G.M.	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED R.L.	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

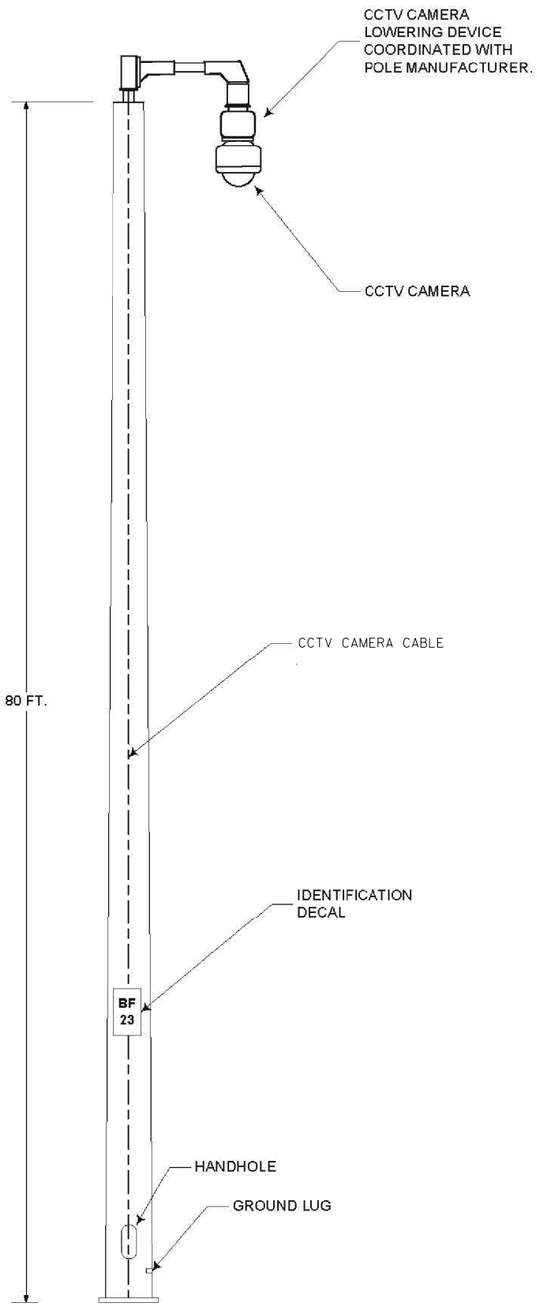
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FLASHER DETAIL SHEET

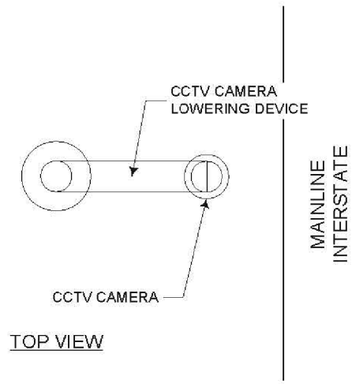
SCALE: N.T.S. | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	354
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\D160Y38-sht-its-xdet-ITS-49.dgn



ELEVATION



TOP VIEW

GENERAL NOTES

1. LOADING AND ALLOWABLE STRESS CRITERIA: 1994 AASHTO
2. MAXIMUM 1-INCH POLE TOP DEFLECTION WITH 30 MPH WIND VELOCITY, NO GUST.
3. LOCATIONS OF THE CCTV CAMERA INSTALLATIONS ARE APPROXIMATE. THE CONTRACTOR MAY ADJUST THE LOCATIONS OF THE INSTALLATIONS TO FACILITATE INSTALLATION WITH WRITTEN APPROVAL OF THE RESIDENT ENGINEER AND THE ELECTRICAL DESIGN SECTION. ALL STANDARD NON-FRANGIBLE SETBACK REQUIREMENTS AS WELL AS CLEAR ZONE REQUIREMENTS SHALL BE MAINTAINED.
4. THE POLE SHALL BE A MAXIMUM OF THREE SECTIONS FOR FIELD ASSEMBLY. THE POLE SHAFTS SHALL BE A ROUND CROSS SECTION AND MEET THE REQUIREMENTS OF ASTM A595 GRADE A WITH A MINIMUM YIELD STRENGTH OF 55,000 PSI. THE BOTTOM SECTION SHALL HAVE A MINIMUM .3125 WALL THICKNESS AND A MINIMUM DIAMETER OF 23". THE POLE SHALL HAVE A PROVISION FOR VENTING AT THE TOP AND BOTTOM TO PREVENT CONDENSATION BUILDUP ON THE INTERIOR OF THE POLE SHAFT.
5. CABLE SUPPORTS SHALL BE PROVIDED OF ALL CABLES INSIDE OF POLE SO THAT NO CABLE LOADING IS EXCEEDED. CALCULATIONS SHALL BE SUBMITTED FOR THE CABLES BEING FURNISHED.
6. ALL EQUIPMENT SHALL BE GROUNDED.
7. DOCUMENTATION SHALL BE SUBMITTED THAT THE POLE IS FULLY COORDINATED WITH THE CAMERA LOWERING DEVICE.
8. ALL CABLES, INCLUDING LOWERING DEVICE CABLES, SHALL BE WITHIN THE POLE SHAFT. EXTERNAL CABLING WILL NOT BE PERMITTED.
9. UNLESS OTHERWISE INDICATED, OR AS DIRECTED BY THE ENGINEER, THE CAMERA LOWERING DEVICE SHALL BE ORIENTED PERPENDICULAR TO THE MAINLINE INTERSTATE FOR THE LEAST OBSTRUCTED VIEW OF THE INTERSTATE ROADWAY.

MATERIAL REQUIREMENTS

COMPONENT	ASTM DESIGNATION	MIN. YIELD (KSI)
POLE SHAFT	A572 GR. 65	65
BASE PLATE	A36	36
POLE TOP PLATE	A36	36
ANCHOR BOLTS	F1554 GR. 55	55
GALVANIZING, STURCTURE	A123	N/A
GALVANIZING, HARDWARE	A153	N/A

HNTB

USER NAME = jblakley	DESIGNED R.L.	REVISED -
	DRAWN G.M.	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED R.L.	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CCTV CAMERA STRUCTURES
80 FT M.H., GALVANIZED STEEL

SCALE: N.T.S. | SHEET NO. 2 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	355
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

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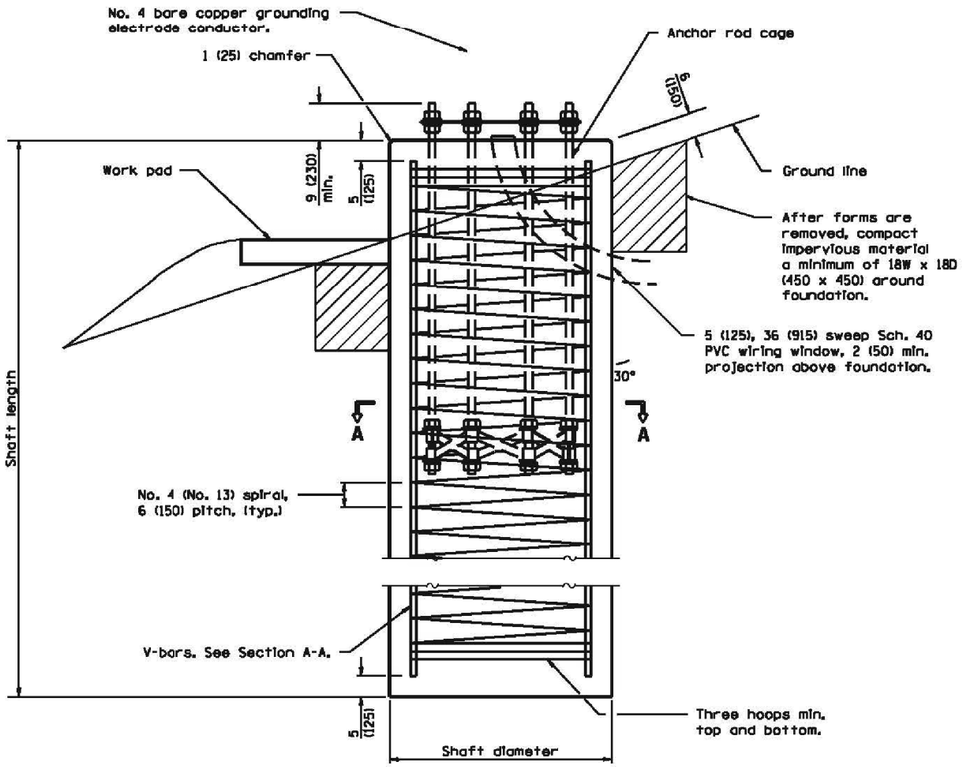
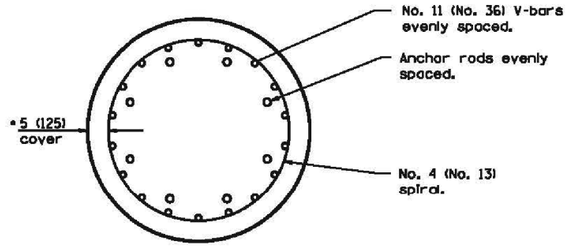


FOUNDATION ELEVATION



SECTION A-A

• See Rod and Reinforcement Table.

SHAFT LENGTH TABLE			
SOIL CONSISTENCY		AVERAGE STRENGTH	HEIGHT
		Qu in tsf (Qu in kPa)	80' (24 m)
Cohesive	SOFT	< 0.5 (< 50)	20'-6" (6.2 m)
	MEDIUM	0.5 to 1 (50 to 100)	17'-0" (5.1 m)
	STIFF	1 to 2 (100 to 200)	14'-6" (4.4 m)
	VERY STIFF	2 to 4 (200 to 400)	13'-0" (3.8 m)
	HARD	> 4 (> 400)	11'-6" (3.5 m)
		N in BLOWS/FT. (N in BLOWS/0.3m)	
Granular	VERY LOOSE	< 5 (< 5)	16'-6" (5.0 m)
	LOOSE	5 to 10 (5 to 10)	15'-0" (4.6 m)
	MEDIUM	10 to 25 (10 to 25)	14'-6" (4.4 m)
	DENSE	25 to 50 (25 to 50)	14'-0" (4.1 m)
	VERY DENSE	> 50 (> 50)	13'-0" (3.9 m)

HNTB

USER NAME = jblakley	DESIGNED R.L.	REVISED -
	DRAWN G.M.	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED R.L.	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CCTV CAMERA STRUCTURE, 80 FT M.H.,
FOUNDATION SHEET 1 OF 2

SCALE: N.T.S. | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	356
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

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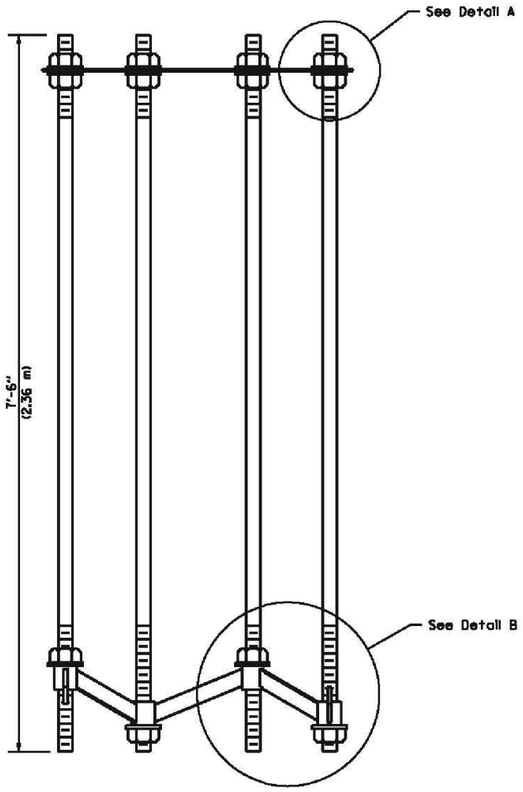
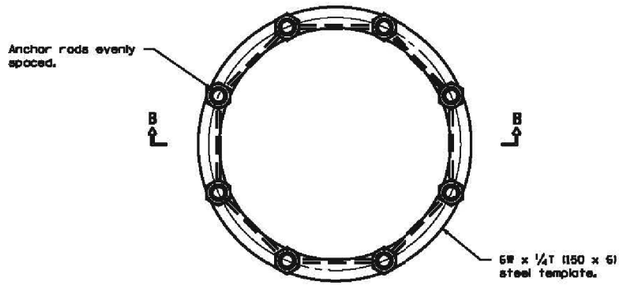
ROD AND REINFORCEMENT TABLE					
TOWER HEIGHT	ANCHOR ROD DIAM. (MIN)	ROD CIRCLE DIAM. (MIN)	TOWER BASE DIAM. (MIN)	DRILLED SHAFT DIAM. ①	V BAR QTY.
80' (25 m)	1½ (38)	30 (760)	24 (610)	4'-0" (1.2 m)	14

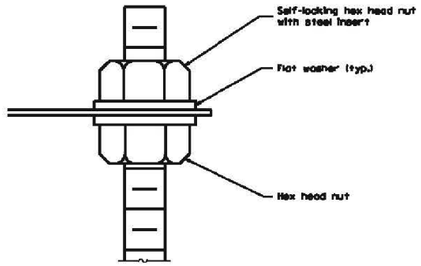
① Diameter based on a 5 (125) conc. cover. The min. cover shall be 3 (75) in dry shaft excavation and 4 (100) in a wet hole. When rock is encountered a 5 (125) cover against soil and a 2 (50) cover against rock shall be required.



SECTION B–B



ANCHOR ROD CAGE (PLAN)



DETAIL A

GENERAL NOTES

Anchor rod quantity, diameter, and length shall be determined by the CCTV structure manufacturer and approved by the Engineer. Each foundation shall have a minimum of 8 anchor rods.

All foundation reinforcement steel shall be epoxy coated.

The cost of reinforcement shall be included in the cost of the foundation.

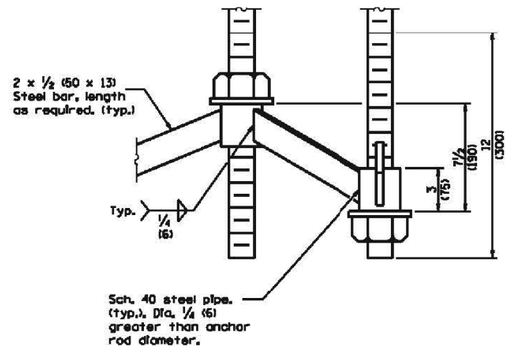
Steel anchor rod forms shall not be removed for a minimum of 3 days after concrete is poured. The tower shall not be set for a minimum of 7 days or as approved by the Engineer.

Coordinate the rod circle diameter of the structure with the diameter of the anchor rod cage.

The foundation shall be poured monolithically and shall have no construction joints.

Grounding electrodes shall be installed in an access well when there is a conflict in using the method shown.

All dimensions are in inches (millimeters) unless otherwise shown.



DETAIL B

USER NAME = jblakley	DESIGNED R.L.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN G.M.	REVISED -	
PLOT SCALE = 1.00 ' / in.	CHECKED R.L.	REVISED -	
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -	

CCTV CAMERA STRUCTURE, 80 FT M.H., FOUNDATION, SHEET 2 OF 2

SCALE: N.T.S. | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	357
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

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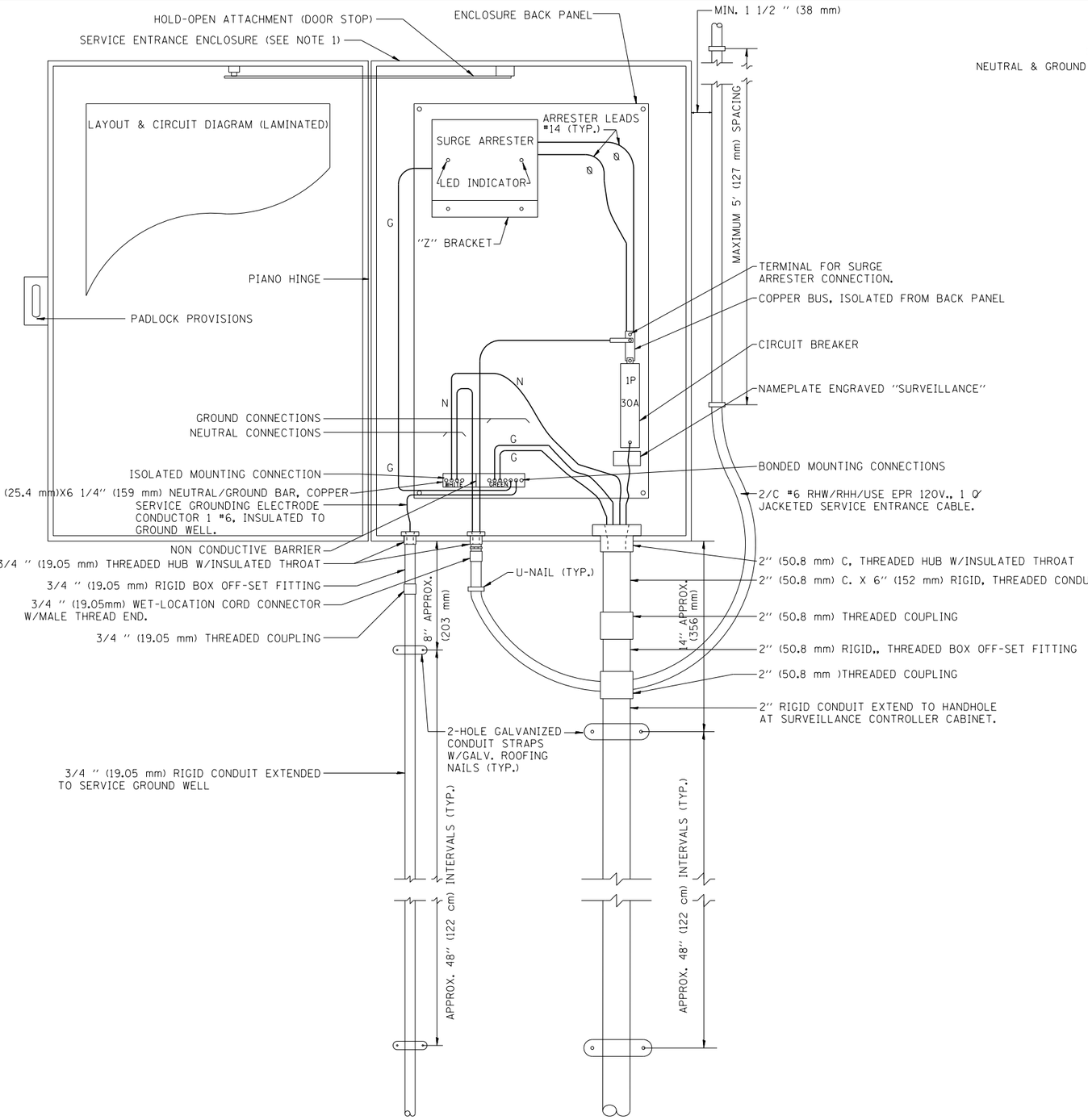
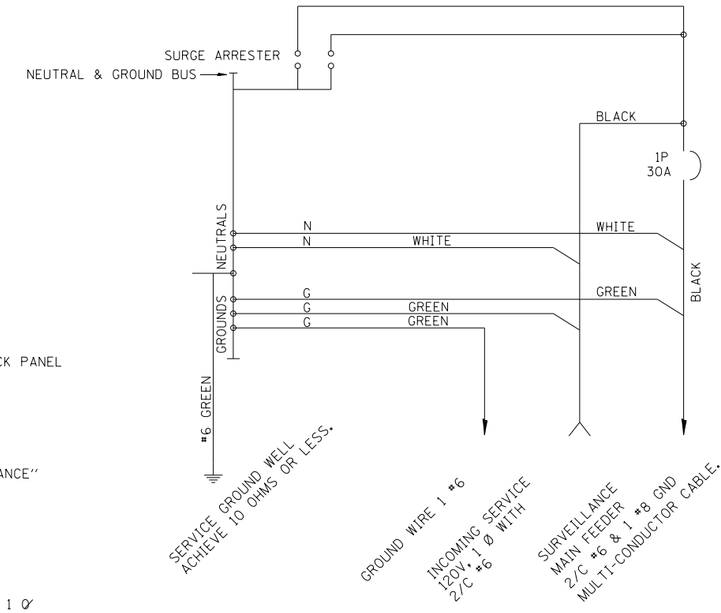


ELECTRIC SERVICE GENERAL LAYOUT DIAGRAM



SCHEMATIC DIAGRAM

NOTES:

1.- ELECTRIC SERVICE SHALL BE OF THE VOLTAGE INDICATED. WHERE 120-VOLT SERVICE IS INDICATED, SERVICE DROP CABLE SHALL BE INSTALLED ACCORDINGLY AND LIGHTING MAIN FEEDER CABLE SHALL BE OMITTED.

2.- THE ELECTRIC SERVICE BOX SHALL BE NEMA 4X STAINLESS STEEL, NOMINALLY 12" (305 mm) X 18" (457 mm) X 8" (203 mm), WITH PIANO HINGED DOOR, STEEL BACK PANEL, FAST-ACTING STAINLESS STEEL ENCLOSURE CLAMPS, PADLOCK PROVISIONS, DOOR STOP KIT AND STEEL BACK PANEL, HOFFMAN CATALOG A-16H1208SS6LP/A-16P2/A-DSTOPK/C-PMK12, OR APPROVED EQUAL.

3.- THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LABELED, SUITABLE FOR USE AS SERVICE EQUIPMENT.

4.- CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 240 VOLTS. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/TAG-OUT REQUIREMENTS. HANDLES SHALL BE ⚠ TRIP FREE.

5.- THE SURGE PROTECTOR SHALL BE SUITABLE FOR 240/120 VOLT SINGLE PHASE 60HZ AC ELECTRICAL SERVICE, WITH A SURGE ENERGY CAPABILITY OF >3600 JOULES OR BETTER AT 8/20 MICROSECONDS, RATED -40 TO 65 DEGREES C., WITH LED OPERATING INDICATORS, AND SHALL BE UL LISTED PER UL 1449, CUTLER-HAMMER CMOV 230L065XST OR APPROVED EQUAL. SURGE PROTECTOR SHALL BE WIRED FOR 120 V SERVICE. FOLLOW MANUFACTURER RECOMMENDED WIRING SPECIFICATIONS.

6.- BUS BARS, CONNECTORS AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO CONNECTIONS.

7.- THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED WHITE.

8.- A PLASTIC LAMINATED LAYOUT AND CIRCUIT DIAGRAM SHALL BE AFFIXED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.

9.- A 2-COLOR ENGRAVED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS, AND ENGRAVED AS INDICATED, SHALL BE PROVIDED FOR EACH MAIN BREAKER.

10.- PROVIDE ON LAYOUT AND CIRCUIT DIAGRAM A BILL OF MATERIALS USED WITH CATALOG NUMBERS.

11.- REFER TO T.S.C. TYPICAL DRAWING TY-1TSC-400#20 FOR POLE MOUNTED DISCONNECT MOUNTING DETAILS.

HNTB

USER NAME = jblakley	DESIGNED - R.L.	REVISED -
	DRAWN - G.M.	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED - R.L.	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 SURVEILLANCE POLE-MOUNTED
ELECTRIC SERVICE BOX DETAIL
(#TY-1TSC-400#19)

SCALE: N.T.S. | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	358
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

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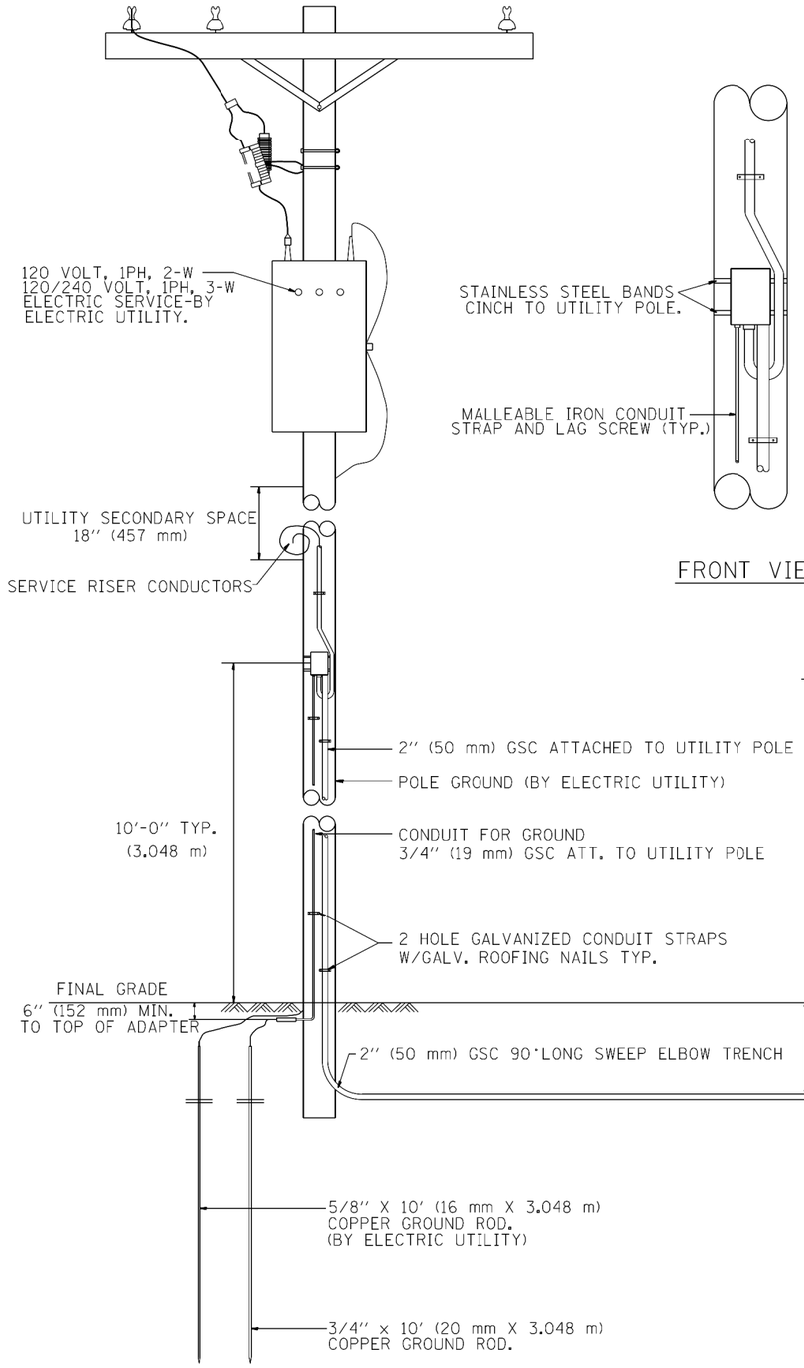
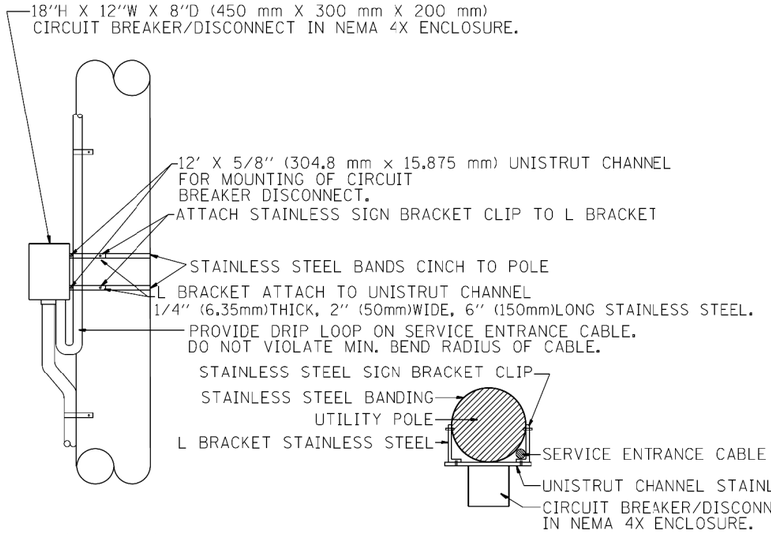


FRONT VIEW



SIDE VIEW

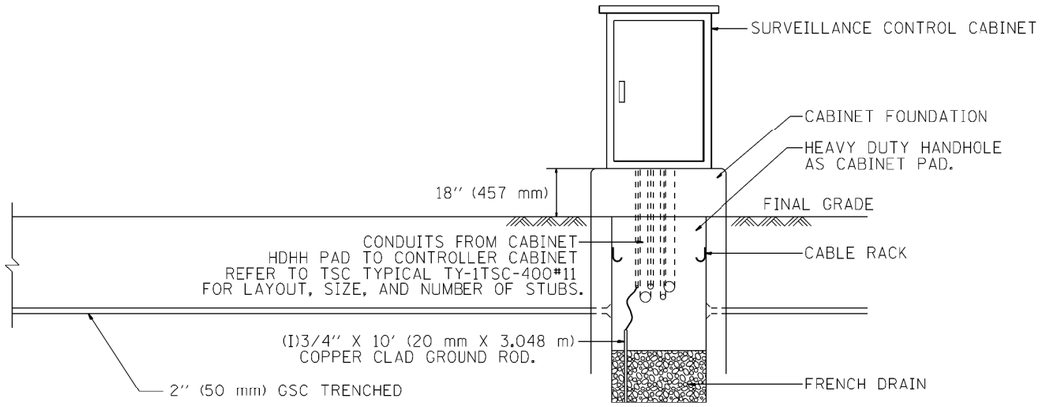
TOP VIEW

NOTES:

1.- ALL CONDUIT BUSHINGS SHALL HAVE AN ISOLATED THROAT.
2.- PROVIDE HEAT SHRINK BOOT AT THE TOP OF THE SERVICE ENTRANCE CABLE FOR MOISTURE PROOFING.
3.- ALL CONNECTIONS TO GROUND RODS SHALL BE EXOTHERMIC UNLESS OTHERWISE NOTED.
4.- ATTACH INCOMING ELECTRIC SERVICE CABLE TO UTILITY POLE EVERY 5 FEET USING INSULATED U-NAIL.
5.- PROVIDE CABLE RACK IN HANDHOLES.
6.- ALL CONDUCTORS SHALL BE COPPER.
7.- PROVIDE STAINLESS STEEL HARDWARE TO ATTACH L BRACKETS TO UNISTRUT AND TO SIGN HANGER.

NTS

DISCONNECT MOUNTING DETAIL



ITS-71

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PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

POLE MOUNTED
DISCONNECT MOUNTING DETAILS
(#TY-1TSC-400#20)

SCALE: N.T.S. | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	359
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

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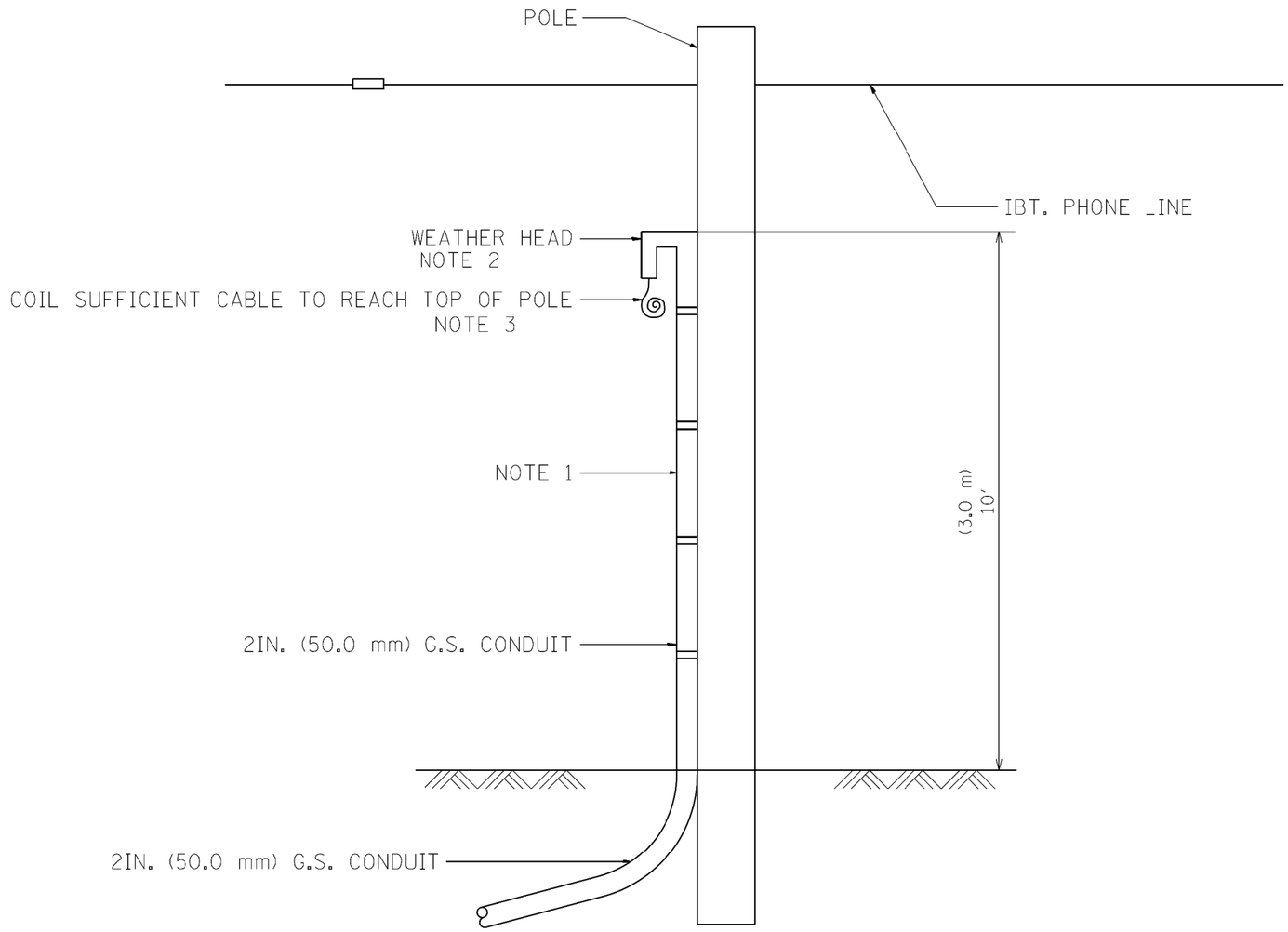

TELEPHONE SERVICE ON POLE

NOTES:

1. 2IN. (50 mm) DIAMETER 10 FT. (3.0 m) LONG G.S. CONDUIT SECTION, FURNISHED AND INSTALLED UNDER PAY ITEM FOR TELEPHONE SERVICE INSTALLATION.
2. WEATHER HEAD SHALL BE CONSIDERED INCIDENTAL TO TELEPHONE SERVICE INSTALLATION PAY ITEM.
3. SEE DRAWINGS FOR CABLE SIZE AND QUANTITY.

HNTB

USER NAME = jblakley	DESIGNED R.L.	REVISED -
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PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TELEPHONE INSTALLATION DETAILS

SCALE: N.T.S. | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	360
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

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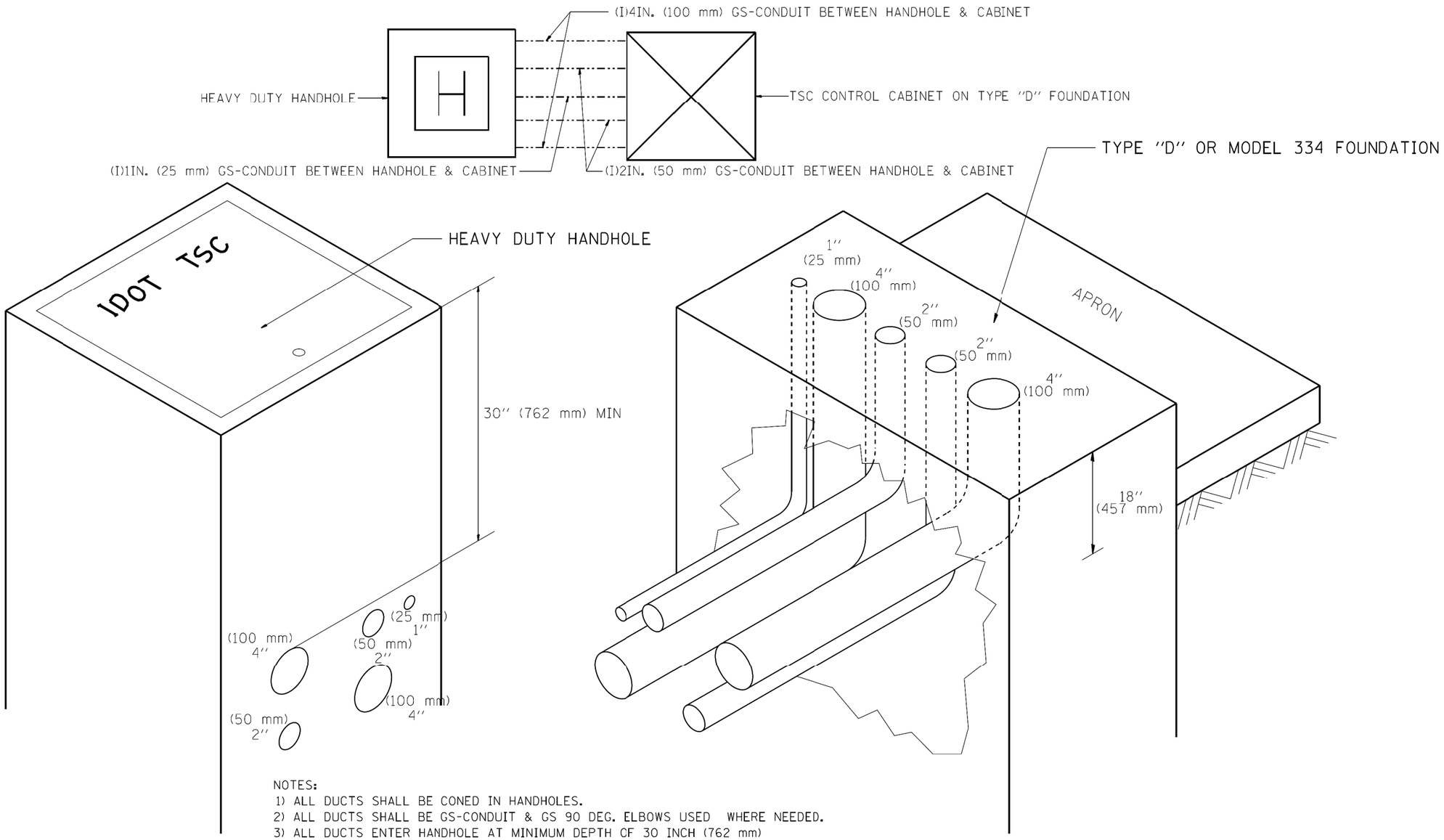

NOTES:

1) ALL DUCTS SHALL BE CONED IN HANDHOLES.
2) ALL DUCTS SHALL BE GS-CONDUIT & GS 90 DEG. ELBOWS USED WHERE NEEDED.
3) ALL DUCTS ENTER HANDHOLE AT MINIMUM DEPTH OF 30 INCH (762 mm)
4) ALL HANDHOLE COVERS SHALL READ "IDOT TSC".
5) ALL CABINET HANDHOLES SHALL BE HEAVY DUTY.
6) DUCTS SHALL BE CENTERED IN CABINET FOUNDATION/HANDHOLE AS SHOWN.
7) CONDUITS SHALL BE SPACED 305 mm (1 FOOT) CENTER TO CENTER IN HEAVY DUTY HANDHOLE.
8) INSTALL 3/4" X 10' (20 mm X 3 m) COPPER CLAD STEEL GROUND ROD IN HDHH PROVIDED AS CABINET PAD. EXOTHERMIC WELD CONNECTION FROM GROUND ROD TO #6 GROUND WIRE INSULATED (GREEN).
9) BOND ALL GSC CONDUITS IN CABINET FOUNDATION.
10) INSTALL #6 GROUND WIRE IN 1IN. (25 mm) GSC FROM HANDHOLE TO CABINET.
11) TYPE "D" FOUNDATION SHALL BE 18" FROM TOP OF FOUNDATION TO FINISHED GRADE.

HNTB

USER NAME = jblakley	DESIGNED R.L.	REVISED -
	DRAWN G.M.	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED R.L.	REVISED -
PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET – HANDHOLE CONDUIT DETAIL

SCALE: N.T.S. | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	361
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

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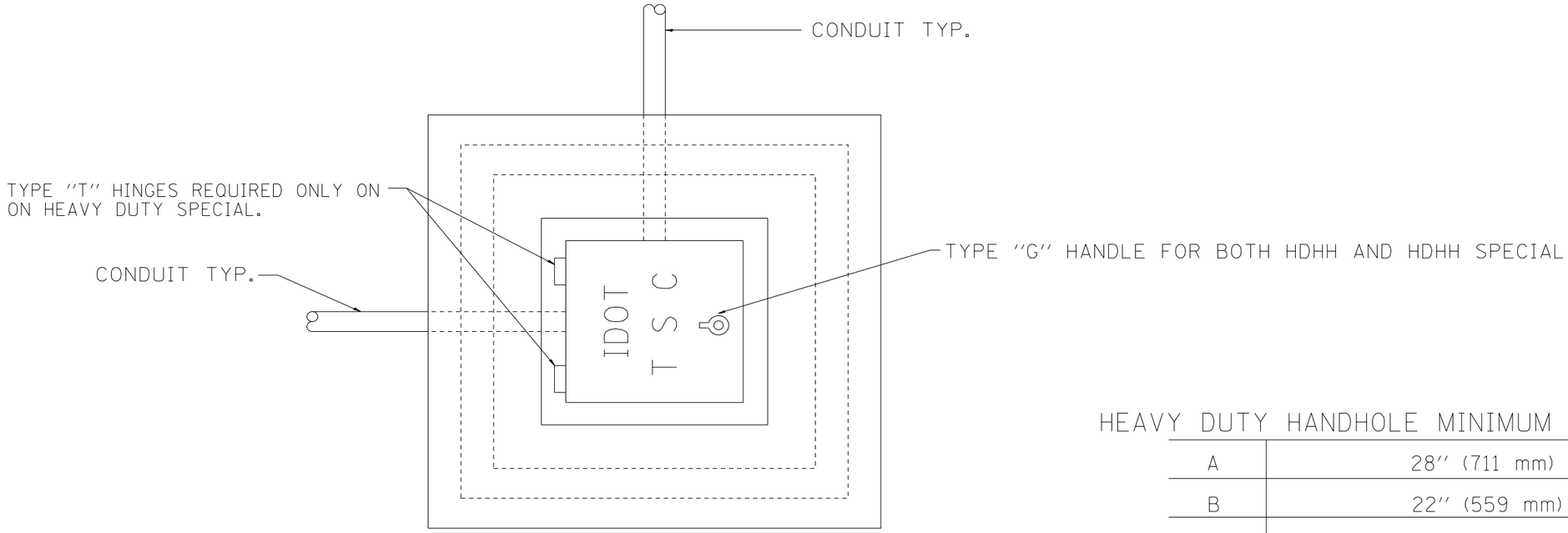
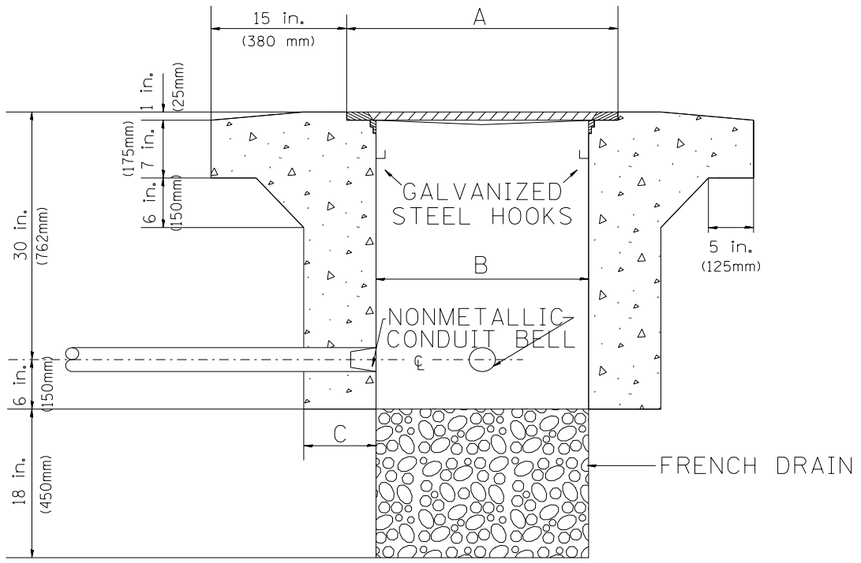


PLAN

HEAVY DUTY HANDHOLE MINIMUM DIMENSIONS (UNHINGED)

A	28'' (711 mm)
B	22'' (559 mm)
C	8'' (200 mm)

(FRAME AND COVER 260 LBS. (118 Kg.) MIN.)



ELEVATION

HEAVY DUTY HANDHOLE SPECIAL MINIMUM DIMENSIONS

A	31.5'' (800 mm)
B	30.0'' (762 mm)
C	10.0'' (250 mm)

(FRAME AND COVER 405 LBS. (184 Kg. (405))

PC CONCRETE - HEAVY DUTY HAND HOLE

ITS-74

HNTB

USER NAME = jblakley	DESIGNED - R.L.	REVISED - 04/97
	DRAWN - G.M.	REVISED -
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PLOT DATE = 6/3/2016	DATE 5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

PC CONCRETE – HEAVY DUTY HAND HOLE

SCALE: N.T.S. | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	362
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

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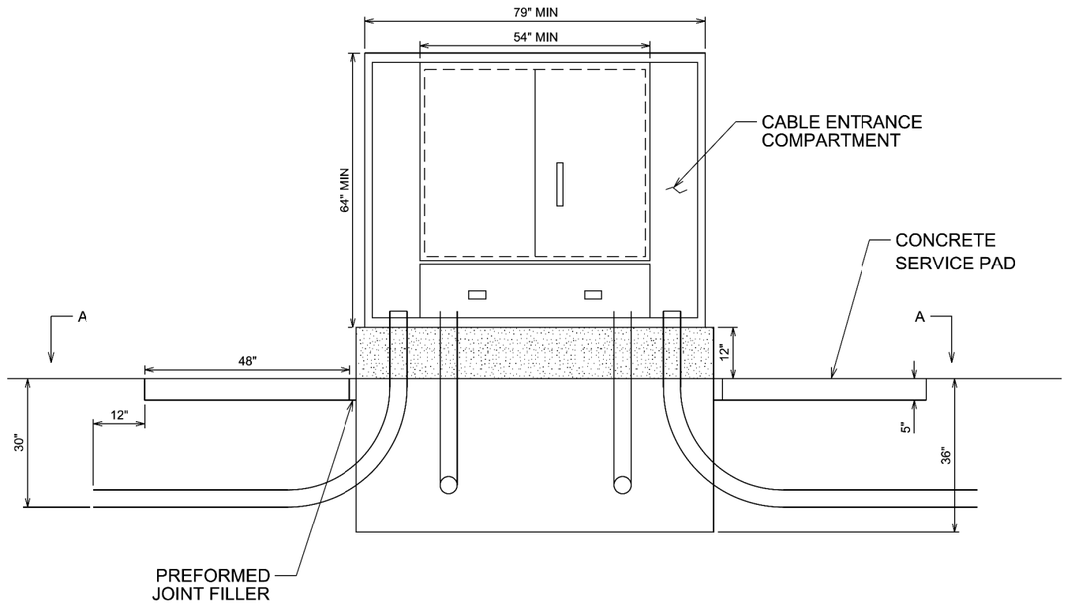
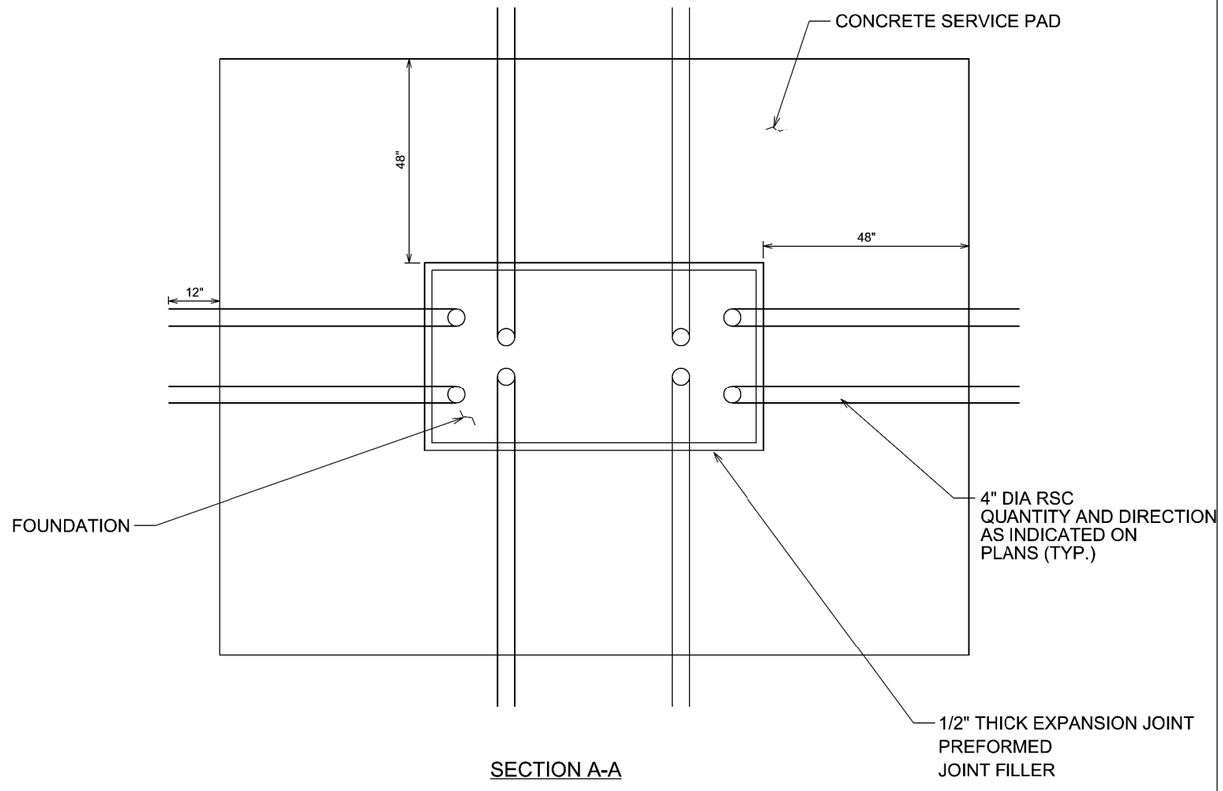


ELEVATION VIEW



SECTION A-A

NOTES:

CABINET:
ALUMINUM 5052-H32

HARDWARE:
TYPE 304 STAINLESS STEEL

FINISH:
POLYESTER POWDER COATED GRAY

RACKS:
3/16" STEEL E.I.A. / T.I.A. SPACING (10-32 THREADS)

DOORS:
3 POINT LATCH, LATCH CONTROL SWITCH, PIANO HINGE, WIND STOP

CABLE ENTRANCE COMPARTMENT:
FOUR SLACK STORAGE BRACKETS WITH HEAVY DUTY VELCRO STRAPS TO SECURE CABLES,
TWO ENTRY HOLES FOR BRINGING CABLES INTO THE MAIN CABINET

MAIN CABINET:
2-9"-23" ADJUSTABLE WIDTH RACKS, ADJUSTABLE FRONT TO REAR POSITION (43" TALL)
2-19"-23" ADJUSTABLE WIDTH RACKS, SWING OUT (40" TALL)
166" OF TOTAL INCHES OF RACK SPACE (95 RU)
4-15" WATT SHATTER-SHIELD LIGHT FIXTURES

HNTB

USER NAME = jblakley	DESIGNED R.L.	REVISED -
	DRAWN G.M.	REVISED -
PLOT SCALE = 1.00 ' / in.	CHECKED R.L.	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC INTERCONNECT CABINET

SCALE: N.T.S. | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	363
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

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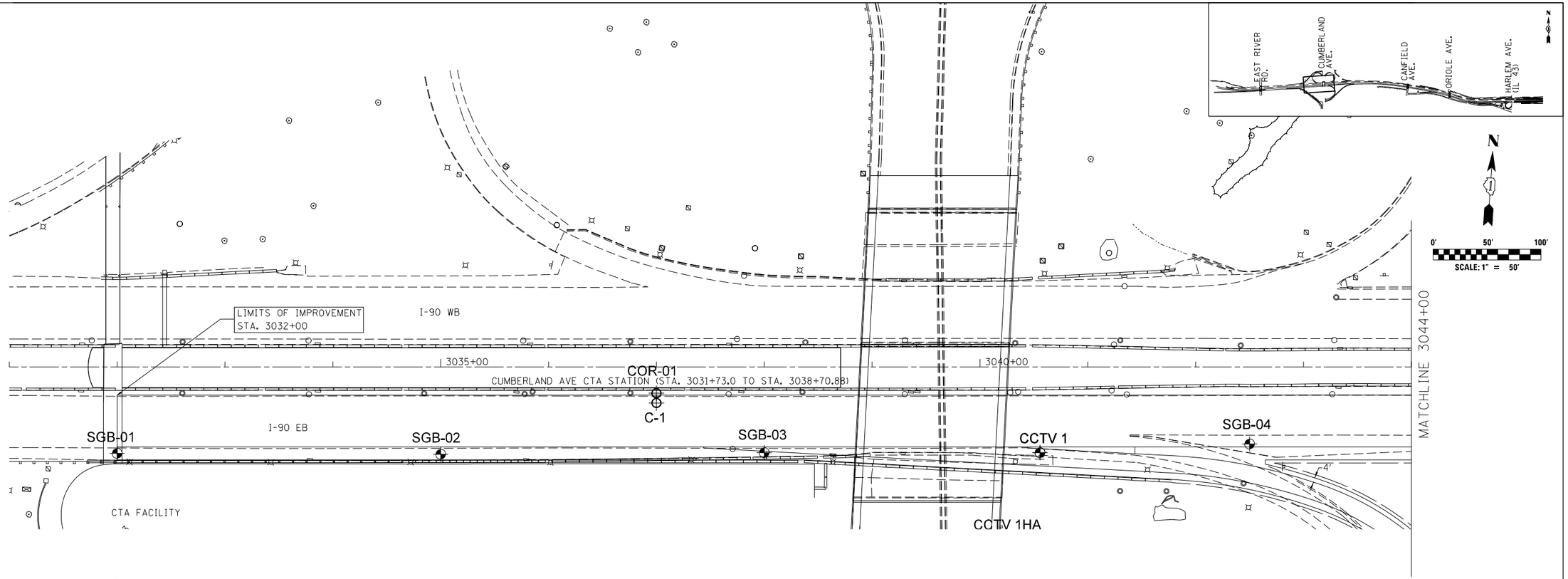
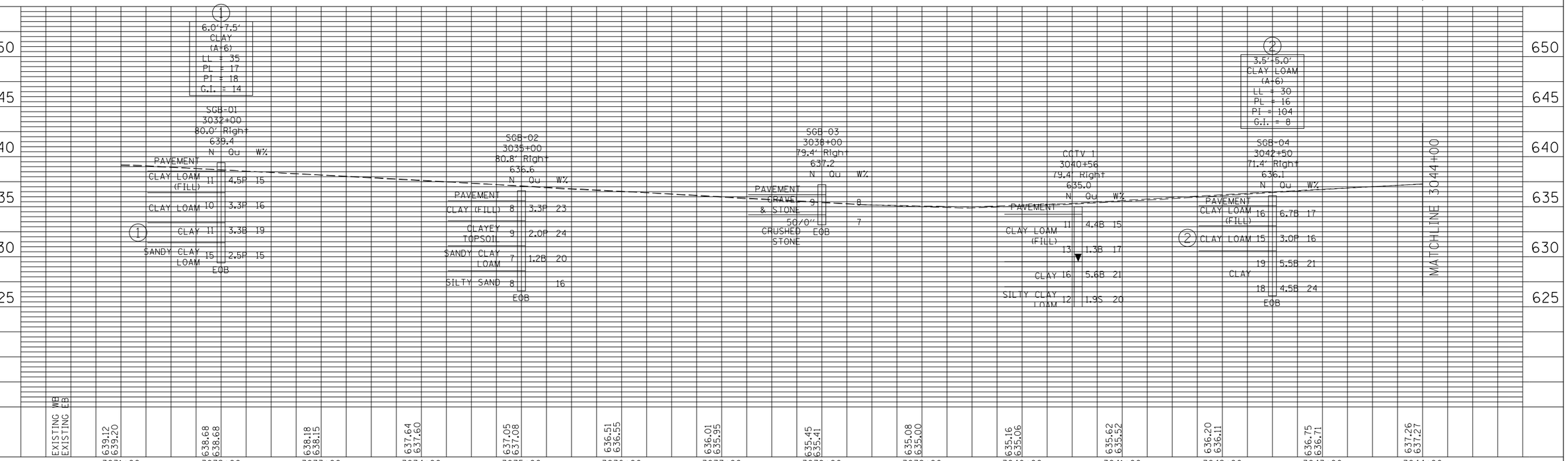
PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
CROSSINGS CHECKED
BM. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE





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805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2818

USER NAME =	DESIGNED RWC	REVISED -	
	DRAWN RWC	REVISED -	
PLOT SCALE =	CHECKED AJP	REVISED -	
PLOT DATE =	DATE 5/6/2016	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90 FROM I-190 TO HARLEM AVE.
WIDENING AND RESURFACING
EB MAINLINE ROADWAY SOIL BORING PLAN & PROFILE

SCALE: 1"=50' | SHEET NO. 1 OF 7 SHEETS | STA. 3031+00 TO STA. 3044+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	364
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

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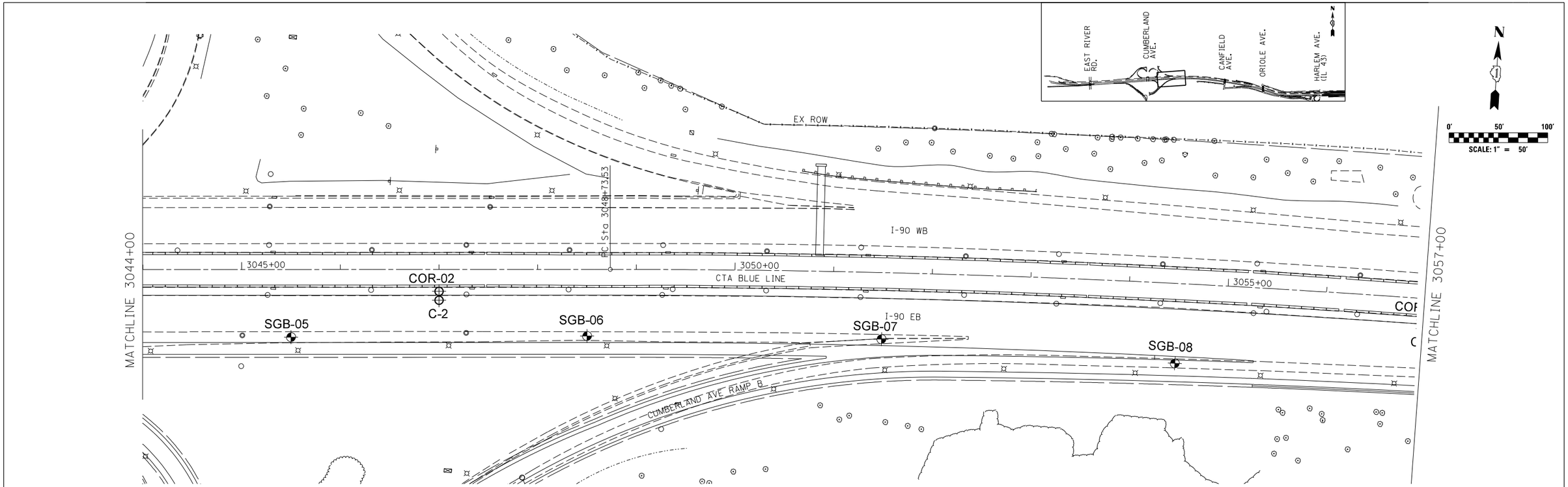

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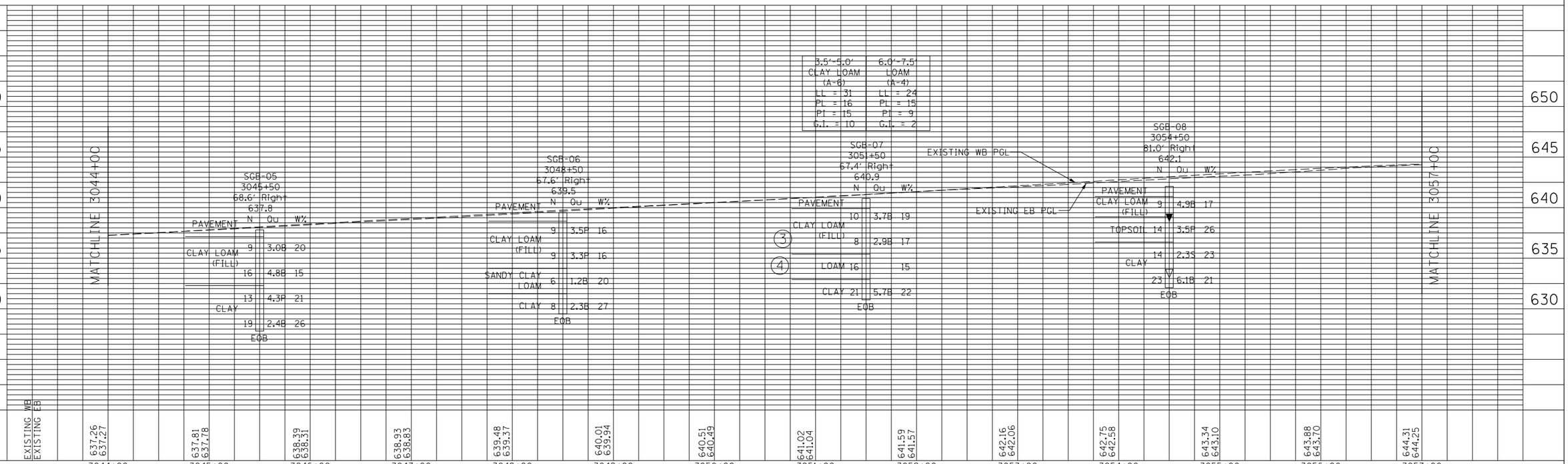

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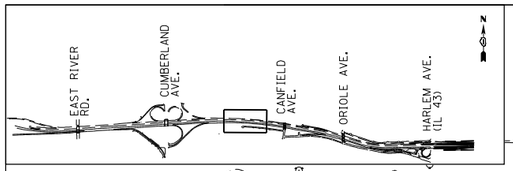
PLOT SCALE =	CHECKED AJP	REVISED -	
PLOT DATE =	DATE 5/6/2016	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90 FROM I-190 TO HARLEM AVE.
WIDENING AND RESURFACING
EB MAINLINE ROADWAY SOIL BORING PLAN & PROFILE

SCALE: 1"=50' | SHEET NO. 2 OF 7 SHEETS | STA. 3044+00 TO STA. 3057+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	365
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			



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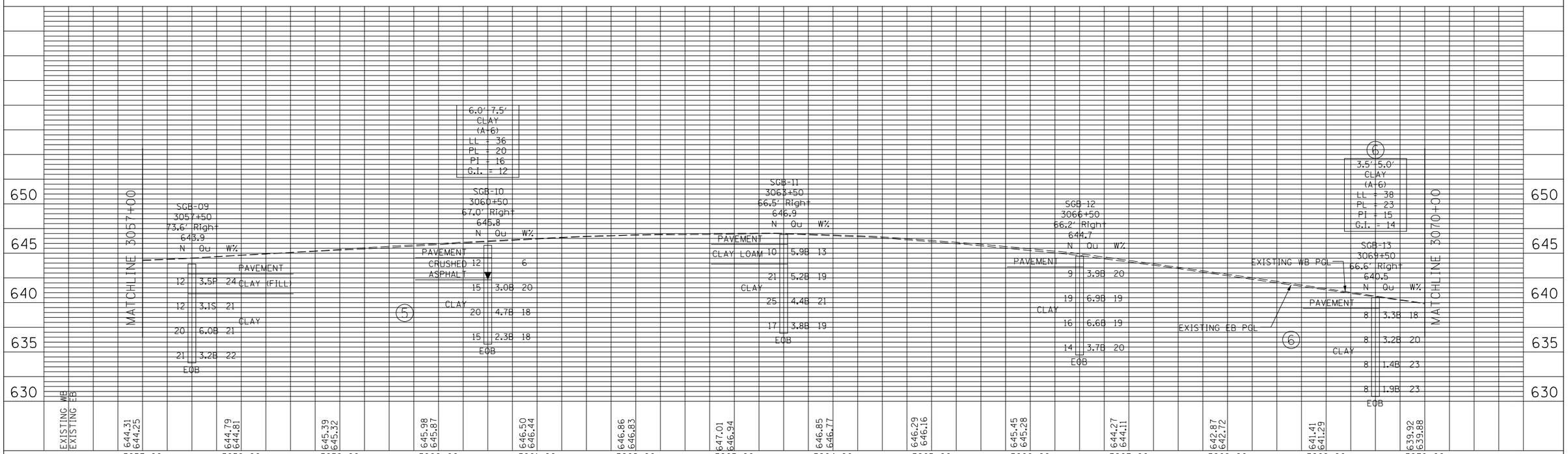

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805 Amherst Court Suite 204
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USER NAME =	DESIGNED RWC	REVISED -	
	DRAWN RWC	REVISED -	
PLOT SCALE =	CHECKED AJP	REVISED -	
PLOT DATE =	DATE 5/6/2016	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90 FROM I-190 TO HARLEM AVE.
WIDENING AND RESURFACING
EB MAINLINE ROADWAY SOIL BORING PLAN & PROFILE

SCALE: 1"=50' | SHEET NO. 3 OF 7 SHEETS | STA. 3057+00 TO STA. 3070+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	366
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

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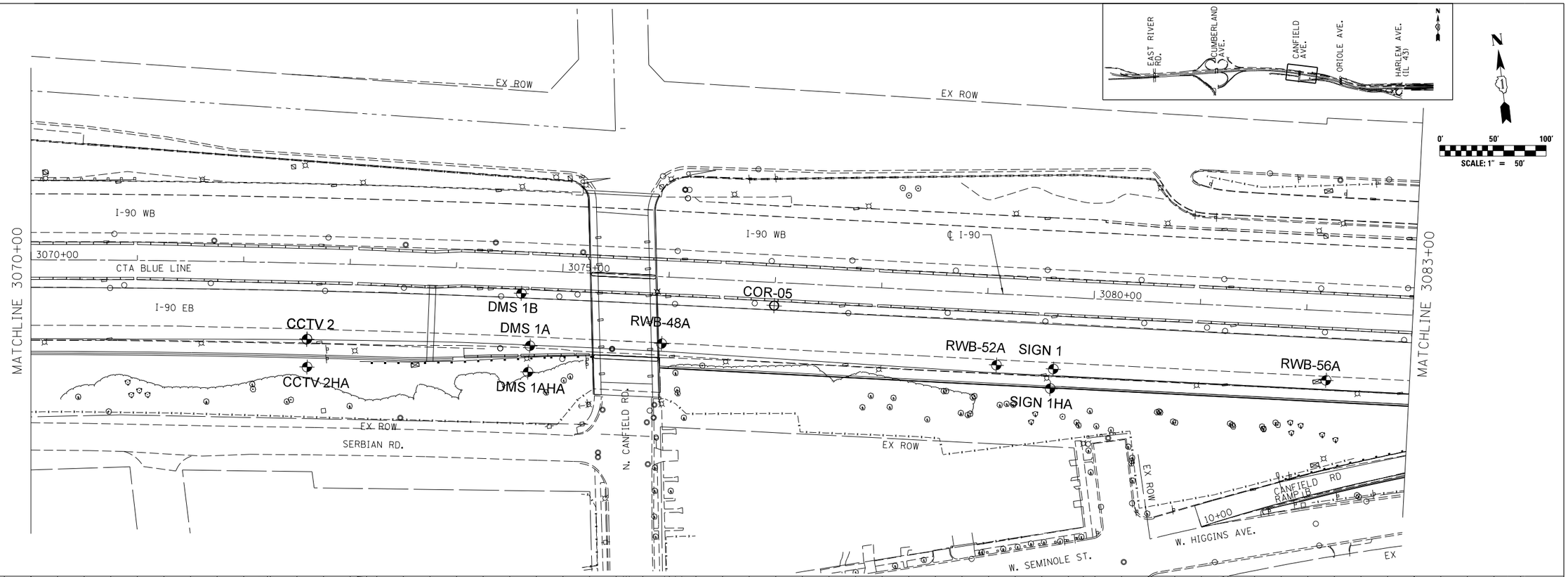

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	DRAWN RWC	REVISED -	
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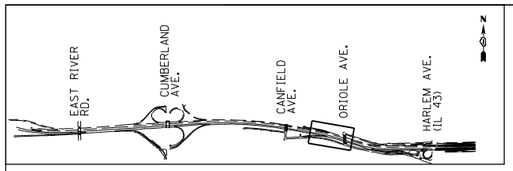
PLOT DATE =	DATE 5/6/2016	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90 FROM I-190 TO HARLEM AVE.
WIDENING AND RESURFACING
EB MAINLINE ROADWAY SOIL BORING PLAN & PROFILE

SCALE: 1"=50' | SHEET NO. 4 OF 7 SHEETS | STA. 3070+00 TO STA. 3083+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	367
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			



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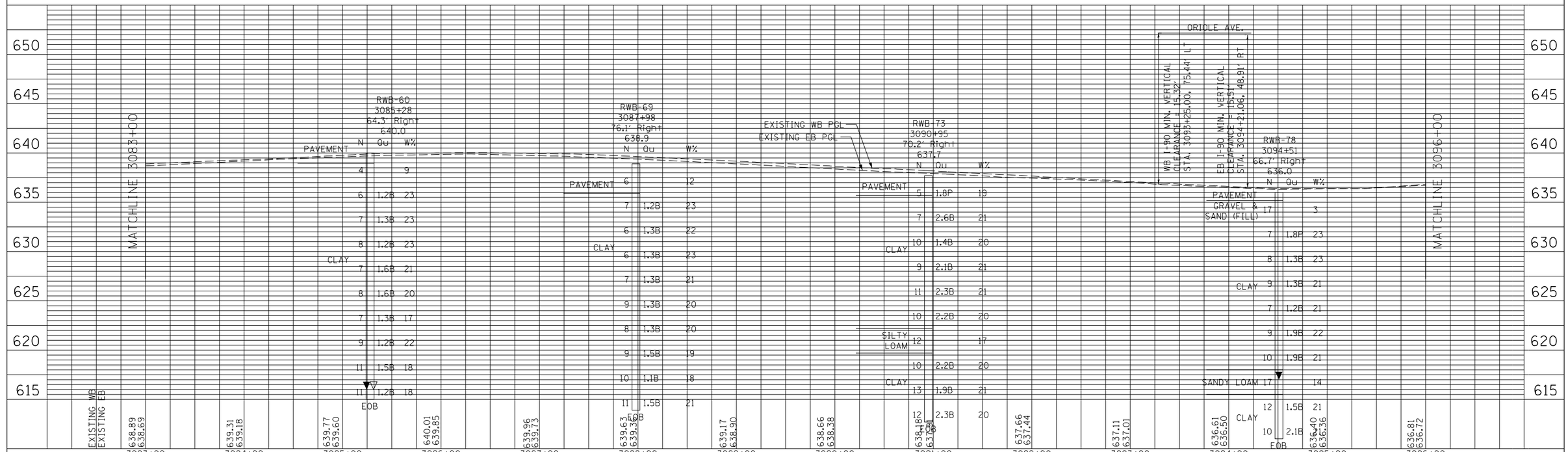

RWB-60
3085+28
64.3' Right
640.0

N	Qu	W%
4		9
6	1.2B	23
7	1.3B	23
6	1.2B	23
8	1.6B	21
7	1.6B	20
8	1.6B	17
9	1.2B	22
11	1.5B	18
11	1.2B	18

RWB-69
3087+98
76.1' Right
638.9

N	Qu	W%
6		12
7	1.2B	23
6	1.3B	22
6	1.3B	23
7	1.3B	21
9	1.3B	20
8	1.3B	20
9	1.5B	19
10	1.1B	18
11	1.5B	21

RWB-73
3090+95
70.2' Right
637.7

N	Qu	W%
5	1.8P	19
7	2.6B	21
10	1.4B	20
9	2.1B	21
11	2.3B	21
10	2.2B	20
12		17
10	2.2B	20
13	1.9B	21
12	2.3B	20

RWB-78
3094+51
66.7' Right
636.0

N	Qu	W%
17		3
7	1.8P	23
8	1.3B	23
9	1.3B	21
7	1.2B	21
9	1.9B	22
10	1.9B	21
17		14
12	1.5B	21
10	2.1B	20

EXISTING WB	638.89	639.31	639.77	640.01	639.96	639.63	639.17	638.66	638.48	637.66	637.11	636.61	636.40	636.81
EXISTING EB	638.69	639.18	639.60	639.85	639.73	639.39	638.90	638.38	637.81	637.44	637.01	636.50	636.36	636.72

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Naperville, Illinois 60565
630-355-2256

USER NAME =	DESIGNED	RWC	REVISED -
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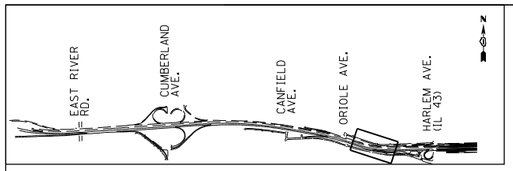
PLOT DATE =	DATE	5/6/2016	REVISED -

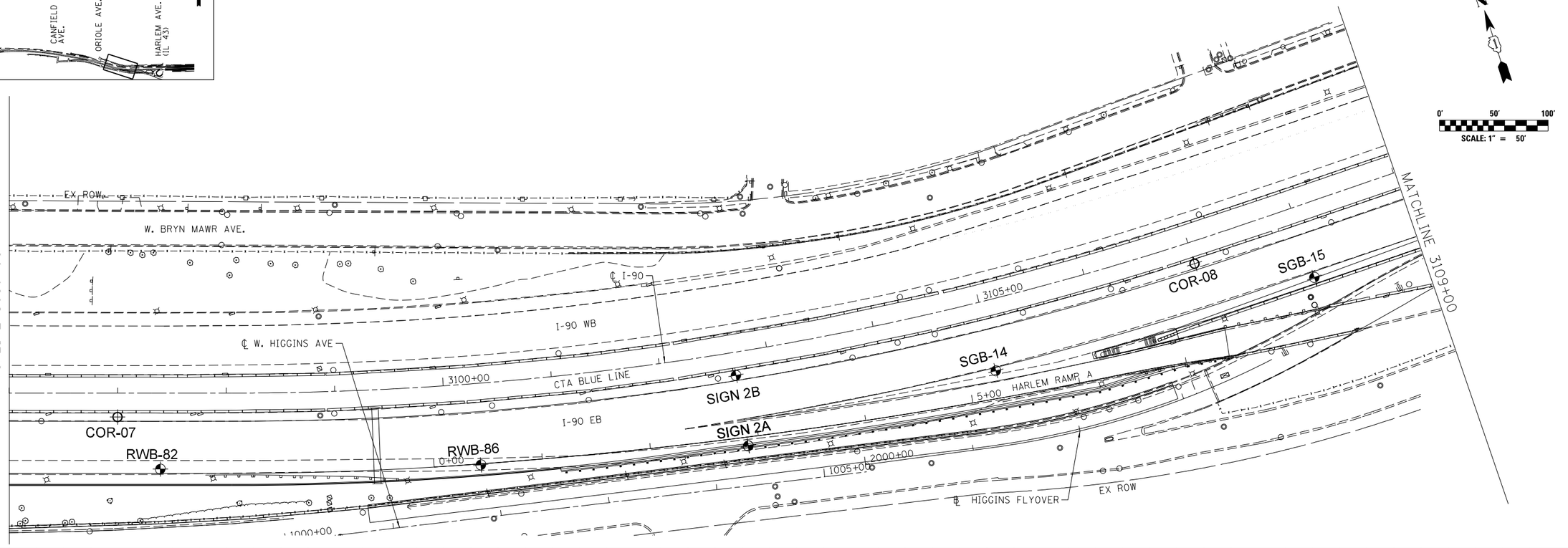
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

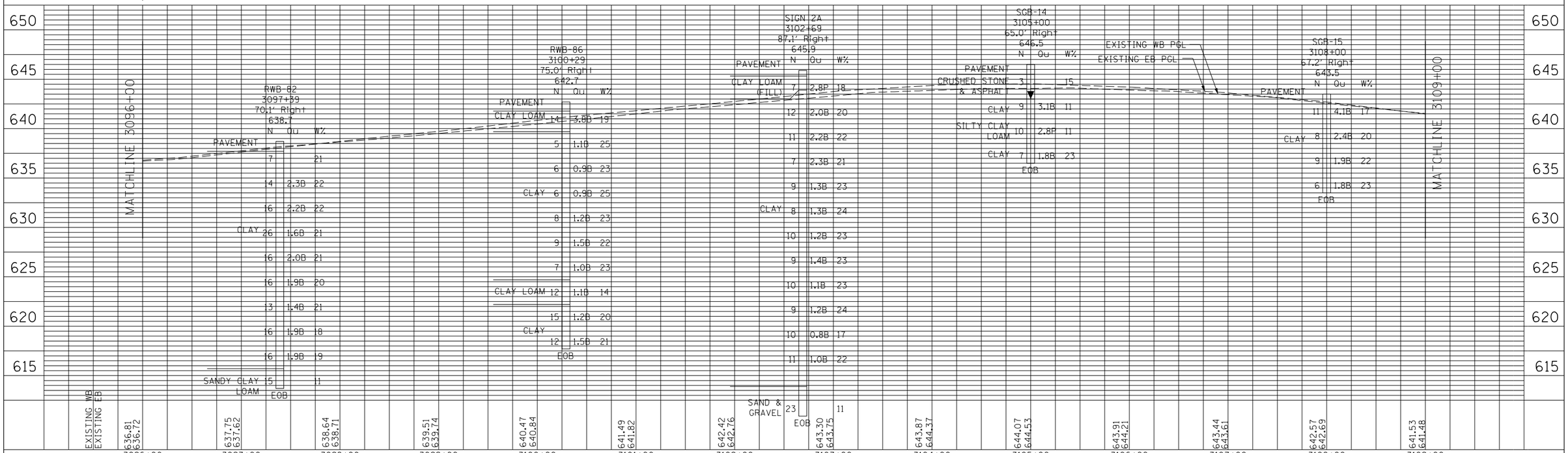
I-90 FROM I-190 TO HARLEM AVE.
WIDENING AND RESURFACING
EB MAINLINE ROADWAY SOIL BORING PLAN & PROFILE

SCALE: 1"=50' | SHEET NO. 5 OF 7 SHEETS | STA. 3083+00 TO STA. 3096+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	368
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			







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NOTE BOOK
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(630) 955-2956

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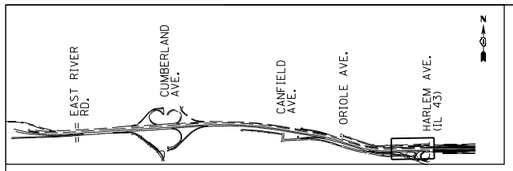
PLOT SCALE =	CHECKED AJP	REVISED -	
PLOT DATE =	DATE 5/6/2016	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90 FROM I-190 TO HARLEM AVE.
WIDENING AND RESURFACING
EB MAINLINE ROADWAY SOIL BORING PLAN & PROFILE

SCALE: 1"=50' | SHEET NO. 6 OF 7 SHEETS | STA. 3096+00 TO STA. 3109+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	369
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			



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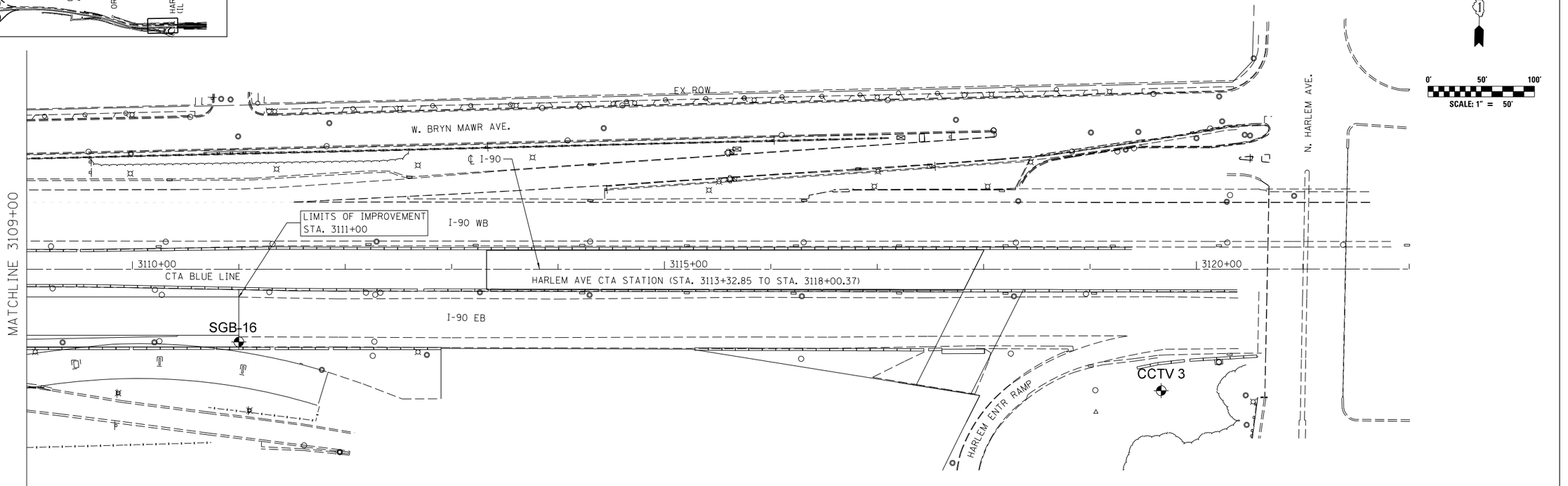

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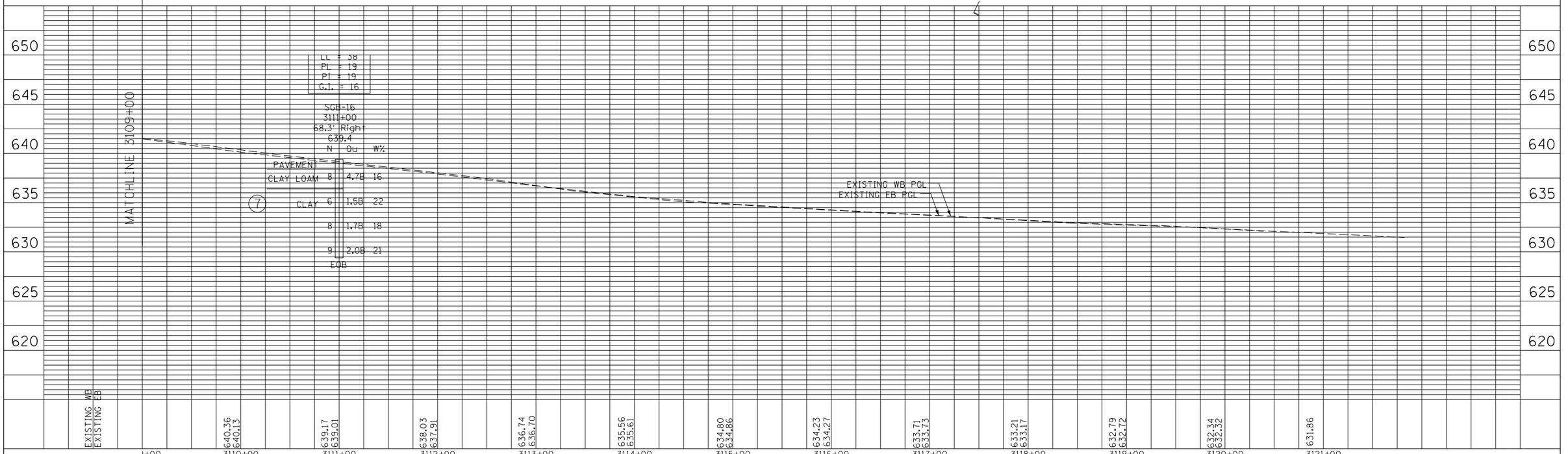

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Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 851-2938

USER NAME =	DESIGNED	RWC	REVISED -
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PLOT SCALE =	CHECKED	AJP	REVISED -
PLOT DATE =	DATE	5/6/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90 FROM I-190 TO HARLEM AVE.
WIDENING AND RESURFACING
EB MAINLINE ROADWAY SOIL BORING PLAN & PROFILE

SCALE: 1"=50' | SHEET NO. 7 OF 7 SHEETS | STA. 3109+00 TO STA. 3122+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	370
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

Bench Mark: TBM #19 - Square cut on top of barrier wall by light pole (FC13) mile marker 80.40 on north side WB I-90 just east of Canfield. Elev. 638.00

Existing Structure: None

GENERAL NOTES

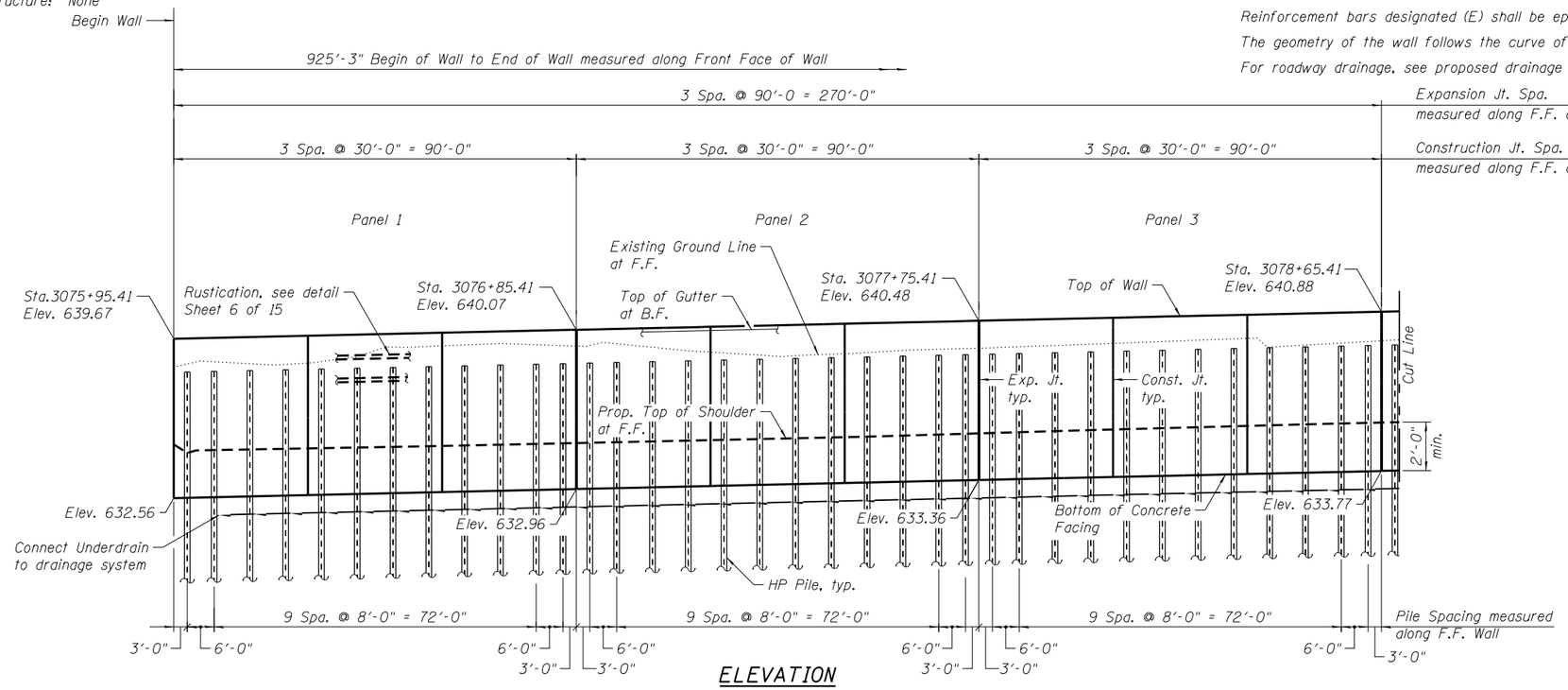
Offsets are measured from ℄ I-90 to Front Face of wall.

Reinforcement bars designated (E) shall be epoxy coated.

The geometry of the wall follows the curve of the ℄ I-90.

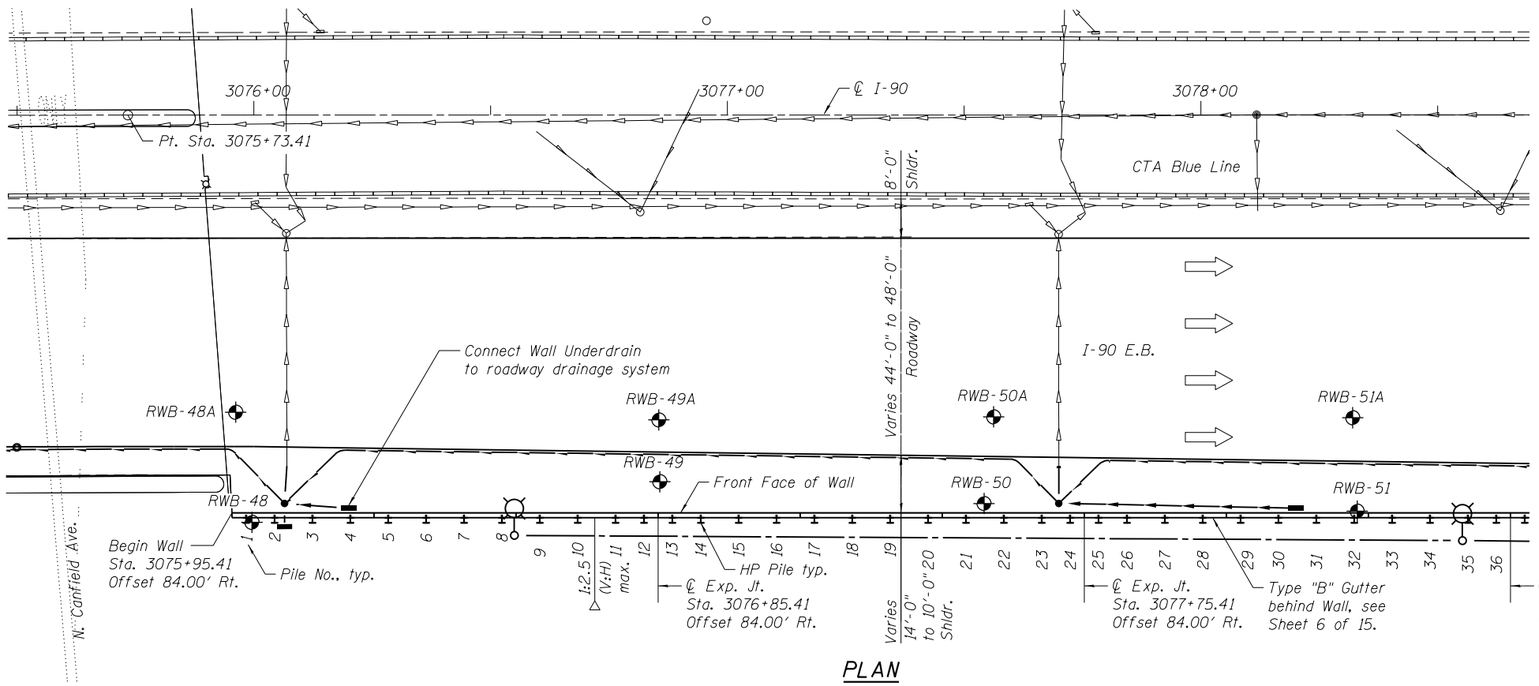
For roadway drainage, see proposed drainage plans.

INDEX OF SHEETS



ELEVATION

(Looking North at Back of the Wall)



PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structure Excavation	Cu Yd	739
Concrete Structures	Cu Yd	230.9
Protective Coat	Sq Yd	590
Stud Shear Connectors	Each	631
Reinforcement Bars, Epoxy Coated	Pound	34,580
Furnishing Soldier Piles (HP Section)	Foot	2,618
Driving Soldier Piles	Foot	2,618
Untreated Timber Lagging	Sq Ft	4,251
Geocomposite Wall Drain	Sq Yd	346
Pipe Underdrains for Structures 4"	Foot	947

STATE OF ILLINOIS
MATHEW R. INGRAM
081-007635
MORTON GROVE
ILLINOIS
LICENSED STRUCTURAL ENGINEER

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition, with 2015 Interim Revisions

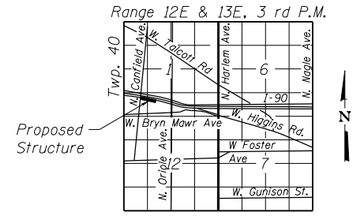
Signed:
Date:
Exp: 11/30/2016
Sheets: S-1 thru S-15

LEGEND:

Existing	Proposed	
		Inlet
		Catch Basin
		Manhole
		Storm Sewer
		Pipe Underdrain
		Light Pole
		Boring
		Prop. Lighting cable

F.F. - denotes Front Face
B.F. - denotes Back Face
E.F. - denotes Each Face

Notes:
1. For continuation, see Sheet 2 of 15.
2. For soldier pile data, see Sheets 3 and 5 of 15.
3. Piles to be placed with flanges parallel to wall.



LOCATION SKETCH

USER NAME = lkalita	DESIGNED MRI	REVISED	
	CHECKED PCA	REVISED	
PLOT SCALE = 0.16667 ' / in.	DRAWN LK	REVISED	
PLOT DATE = 6/6/2016	DATE 5/6/2016	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RETAINING WALL 1 PLAN & ELEVATION – 1
STRUCTURE NO. 016-Z033
SHEET NO. 1 OF 15 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	371
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z033-60Y38-001-GPE01.dgn

925'-3" Begin of Wall to End of Wall measured along Front Face of Wall

2 Spa. @ 90'-0" = 180'-0" | 2 Spa. @ 60'-0" = 120'-0" | 90'-0" | Expansion Jt. Spa. measured along F.F. of Wall

3 Spa. @ 30'-0" = 90'-0" | 3 Spa. @ 30'-0" = 90'-0" | 2 Spa. @ 30'-0" = 60'-0" | 2 Spa. @ 30'-0" = 60'-0" | 3 Spa. @ 30'-0" = 90'-0" | Construction Jt. Spa. measured along F.F. of Wall

Panel 4 | Panel 5 | Panel 6 | Panel 7 | Panel 8

Sta. 3078+65.41
Elev. 640.88

Rustication, see detail Sheet 6 of 15

Sta. 3079+55.41
Elev. 641.28

Existing Ground Line at F.F.

Top of Gutter at B.F.

Sta. 3080+45.41
Elev. 641.69

Sta. 3081+05.41
Elev. 641.96

Sta. 3081+35.41
Elev. 641.45

Sta. 3081+65.41
Elev. 641.58

Top of Wall

Sta. 3082+55.41
Elev. 641.99

Cut Line

Prop. Top of Shoulder at F.F.

Exp. Jt. typ.

Const. Jt. typ.

Cut Line

2'-0" min.

Elev. 633.77

Elev. 634.17

Elev. 634.57

Elev. 634.84

Elev. 635.11

Bottom of Concrete Facing

Elev. 635.51

Connect to roadway drainage system

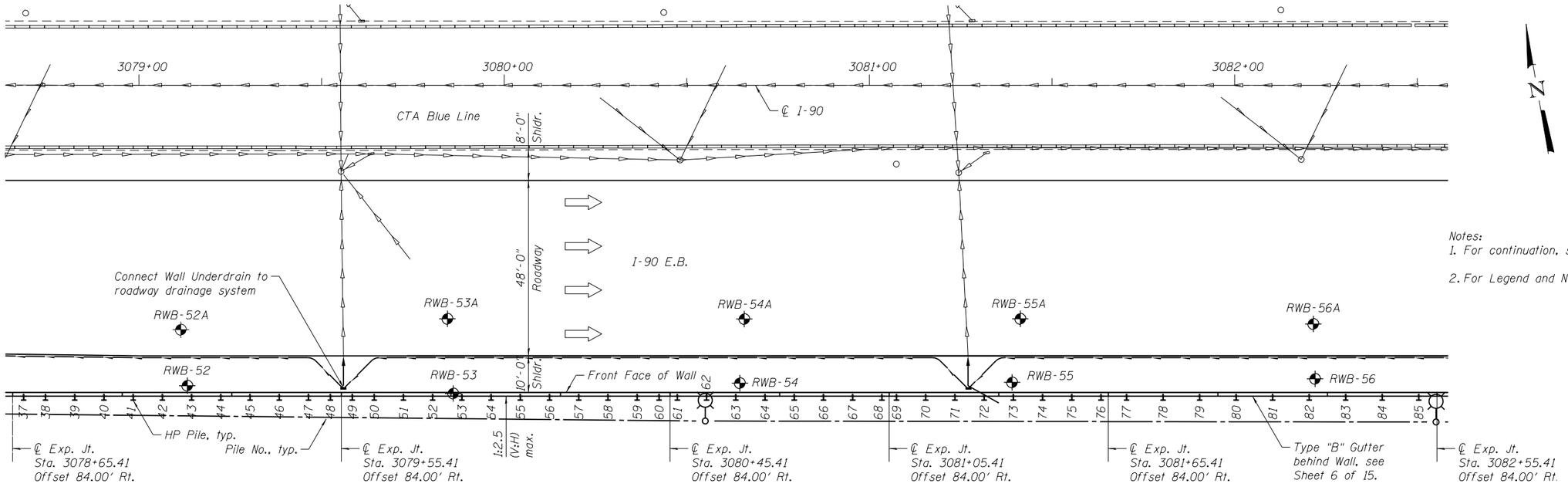
HP Pile, typ.

9 Spa. @ 8'-0" = 72'-0" | 9 Spa. @ 8'-0" = 72'-0" | 7 Spa. @ 8'-0" = 56'-0" | 7 Spa. @ 8'-0" = 56'-0" | 8 Spa. @ 10'-0" = 80'-0" | Pile Spacing measured along F.F. Wall

3'-0" 6'-0" | 6'-0" 3'-0" 3'-0" 6'-0" | 6'-0" 3'-0" 2'-0" | 2'-0" 2'-0" | 2'-0" 5'-0" | 5'-0"

ELEVATION

(Looking North at Back of the Wall)



PLAN

Notes:
1. For continuation, see Sheet 3 of 15.

2. For Legend and Notes, see Sheet 1 of 15.

USER NAME = lkalita	DESIGNED MRI	REVISED	
	CHECKED PCA	REVISED	
PLOT SCALE = 0.16667 ' / in.	DRAWN LK	REVISED	
PLOT DATE = 6/6/2016	DATE 5/6/2016	REVISED	

HNTB

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RETAINING WALL 1 PLAN & ELEVATION – 2
STRUCTURE NO. 016–Z033
SHEET NO. 2 OF 15 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	372
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

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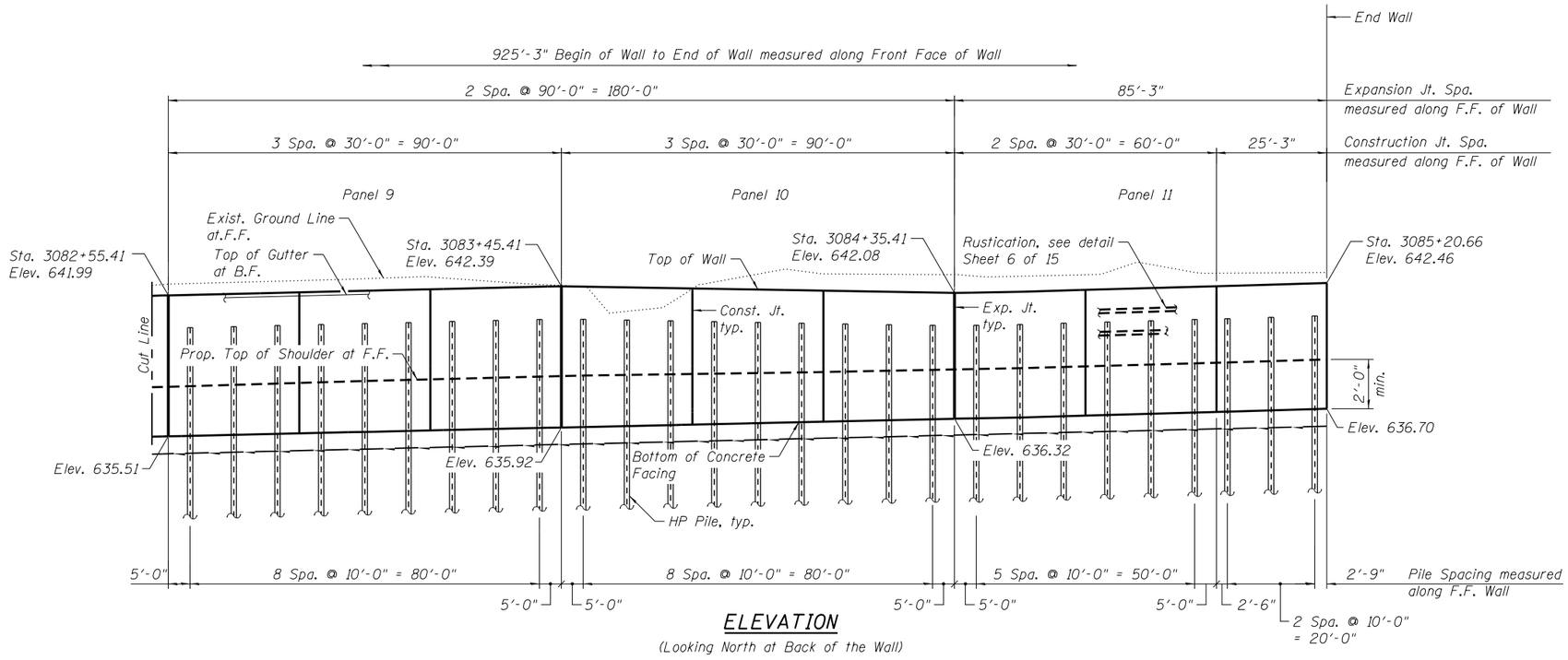
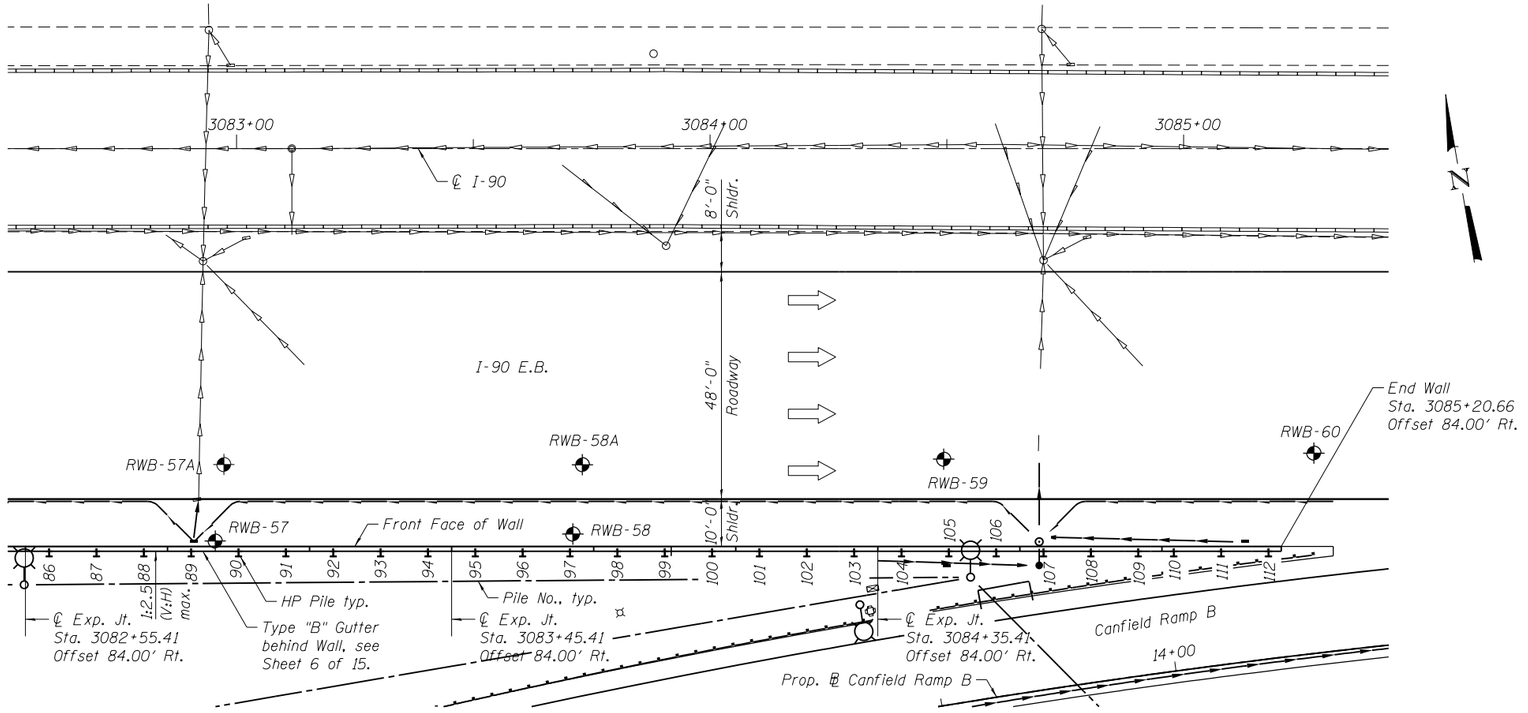


ELEVATION

(Looking North at Back of the Wall)



PLAN

PILE TABLE

Pile No.	Size	Top Elev.	Bott. Elev.	Pile Length	Shear Stud
1	HP14x89	638.02	614.35	23.67	6
2	HP14x89	638.04	614.38	23.67	6
3	HP14x89	638.08	614.41	23.67	6
4	HP14x89	638.12	614.45	23.67	6
5	HP14x89	638.15	614.48	23.67	6
6	HP14x89	638.19	614.52	23.67	6
7	HP14x89	638.22	614.56	23.67	6
8	HP14x89	638.26	614.59	23.67	6
9	HP14x89	638.29	614.63	23.67	6
10	HP14x89	638.33	614.66	23.67	6
11	HP14x89	638.37	614.70	23.67	6
12	HP14x89	638.39	614.73	23.67	6
13	HP14x89	638.42	614.75	23.67	6
14	HP14x89	638.45	614.78	23.67	6
15	HP14x89	638.48	614.82	23.67	6
16	HP14x89	638.52	614.85	23.67	6
17	HP14x89	638.55	614.89	23.67	6
18	HP14x89	638.59	614.92	23.67	6
19	HP14x89	638.63	614.96	23.67	6
20	HP14x89	638.66	615.00	23.67	6
21	HP14x89	638.70	615.03	23.67	6
22	HP14x89	638.73	615.07	23.67	6
23	HP14x89	638.77	615.10	23.67	6
24	HP14x89	638.80	615.13	23.67	6
25	HP14x89	638.82	615.16	23.67	6
26	HP14x89	638.85	615.18	23.67	6
27	HP14x89	638.89	615.22	23.67	6
28	HP14x89	638.92	615.26	23.67	6
29	HP14x89	638.96	615.29	23.67	6
30	HP14x89	638.99	615.33	23.67	6
31	HP14x89	639.03	615.36	23.67	6
32	HP14x89	639.07	615.40	23.67	6
33	HP14x89	639.10	615.43	23.67	6
34	HP14x89	639.14	615.47	23.67	6
35	HP14x89	639.17	615.51	23.67	6
36	HP14x89	639.20	615.53	23.67	6
37	HP14x89	639.23	615.56	23.67	6
38	HP14x89	639.25	615.59	23.67	6
39	HP14x89	639.29	615.62	23.67	6
40	HP14x89	639.33	615.66	23.67	6
41	HP14x89	639.36	615.69	23.67	6
42	HP14x89	639.40	615.73	23.67	6
43	HP14x89	639.43	615.77	23.67	6
44	HP14x89	639.47	615.80	23.67	6
45	HP14x89	639.50	615.84	23.67	6
46	HP14x89	639.54	615.87	23.67	6
47	HP14x89	639.58	615.91	23.67	6
48	HP14x89	639.60	615.94	23.67	6
49	HP14x89	639.63	615.96	23.67	6
50	HP14x89	639.66	615.99	23.67	6
51	HP14x89	639.69	616.03	23.67	6
52	HP14x89	639.73	616.06	23.67	6
53	HP14x89	639.76	616.10	23.67	6
54	HP14x89	639.80	616.13	23.67	6
55	HP14x89	639.84	616.17	23.67	6

Notes:
1. For Legend and Notes, see Sheet 1 of 15.

HNTB

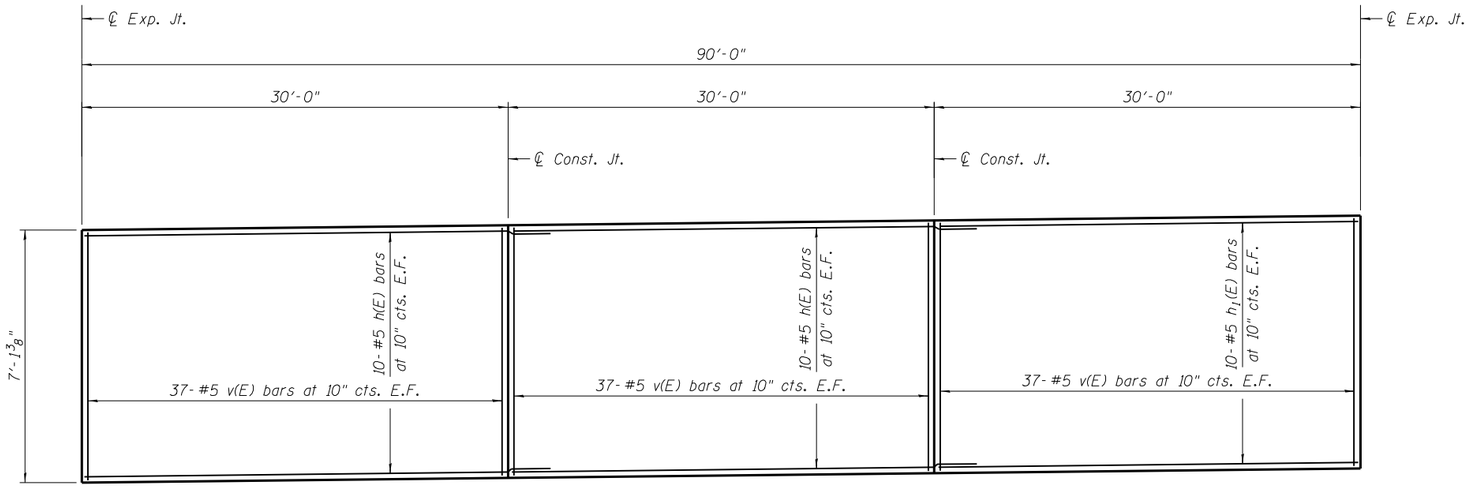
USER NAME = lkalita	DESIGNED	MRI	REVISED
	CHECKED	PCA	REVISED
PLOT SCALE = 0.16667 ' / in.	DRAWN	LK	REVISED
PLOT DATE = 6/6/2016	DATE	5/6/2016	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

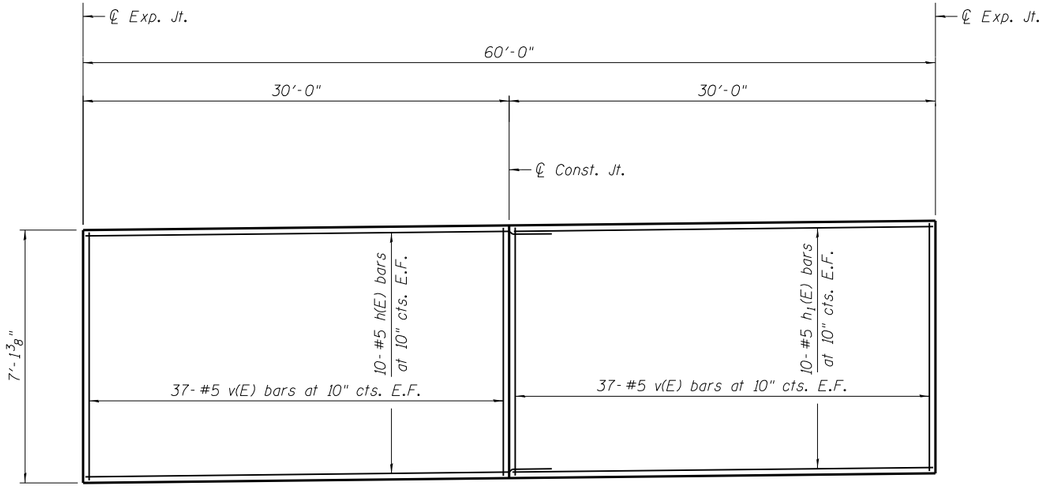
RETAINING WALL 1 PLAN & ELEVATION – 3
STRUCTURE NO. 016–Z033
SHEET NO. 3 OF 15 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	373
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

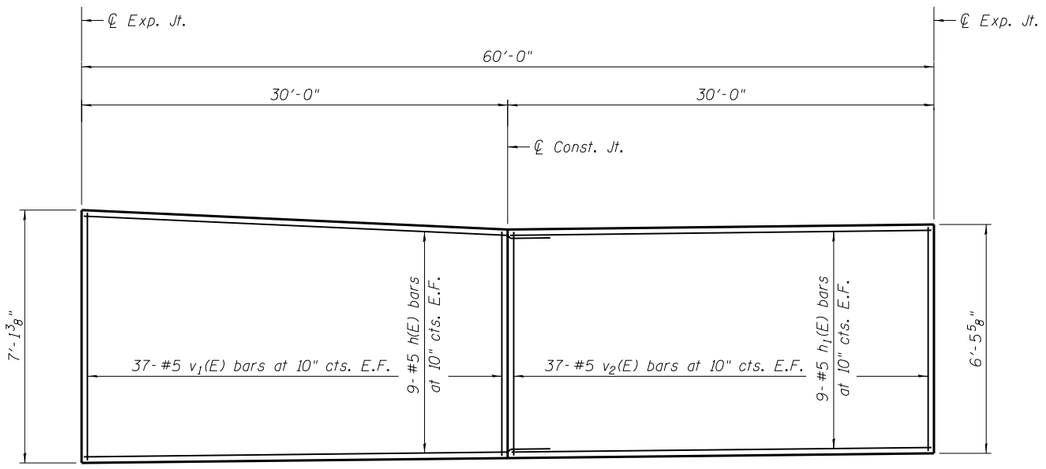
FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z033-60Y38-003-GPE03.dgn



PANEL 1 THRU PANEL 5 ELEVATION



PANEL 6 ELEVATION



PANEL 7 ELEVATION

MINIMUM BAR LAP

#5 bar = 3'-3"

Notes:

1. Panel types shown looking North at Back of the Wall.
2. Reinforcement spacing shown is to be used as maximum spacing.
3. For location of panels, see sheets 1 thru 3 of 15.
4. For panel details and Bill of Material, see sheet 6 of 15.

HNTB

USER NAME = lkolito	DESIGNED	ITC	REVISED
	CHECKED	MRI	REVISED
PLOT SCALE = 0.08333 ' / in.	DRAWN	LK	REVISED
PLOT DATE = 5/2/2016	DATE	5/6/2016	REVISED

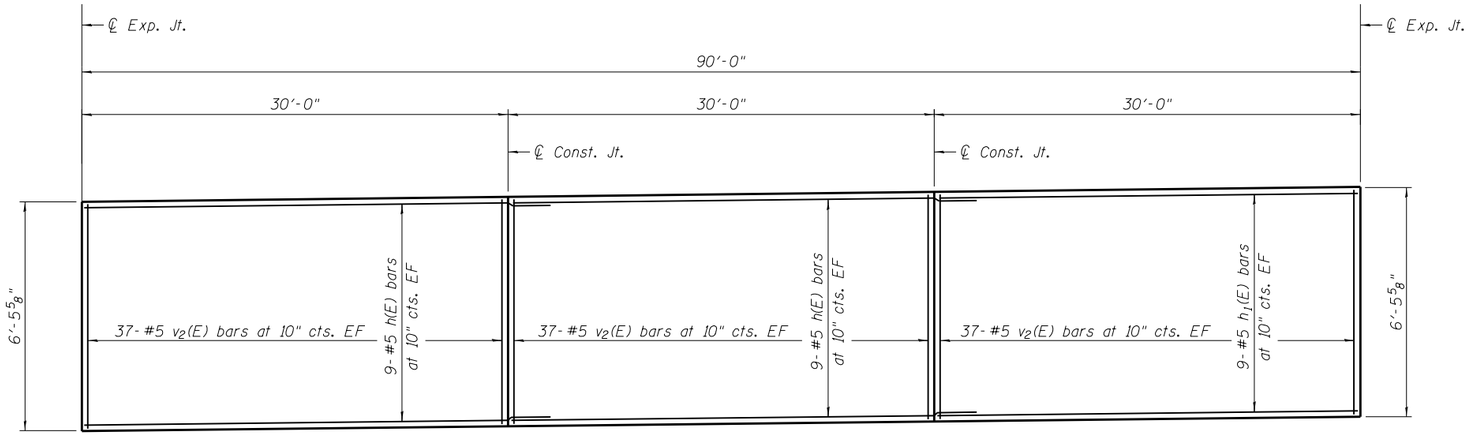
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RETAINING WALL 1 DETAILS – 1
STRUCTURE NO. 016-Z033

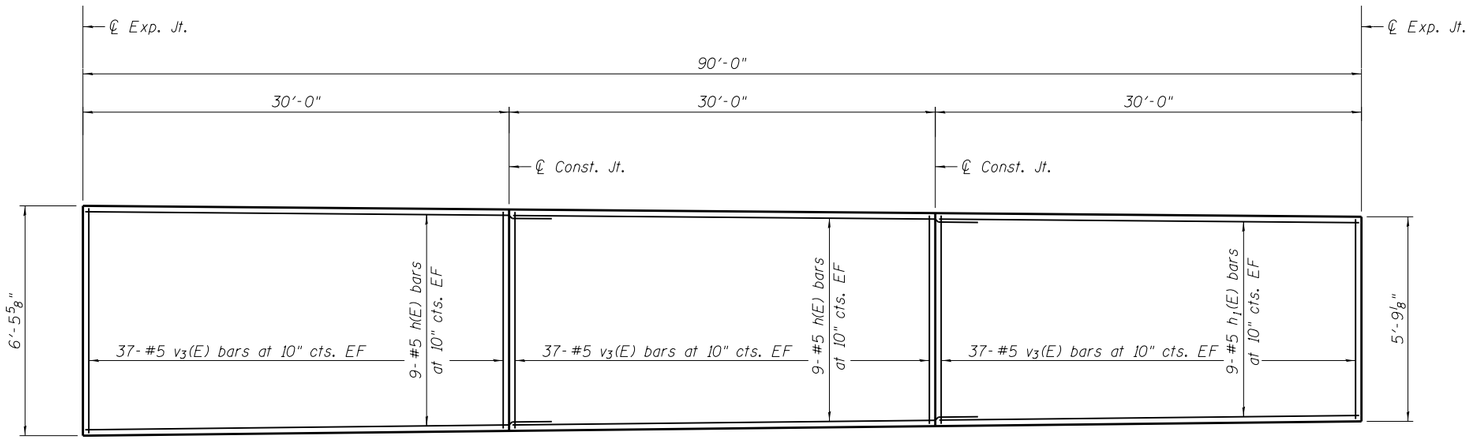
SHEET NO. 4 OF 15 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	374
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

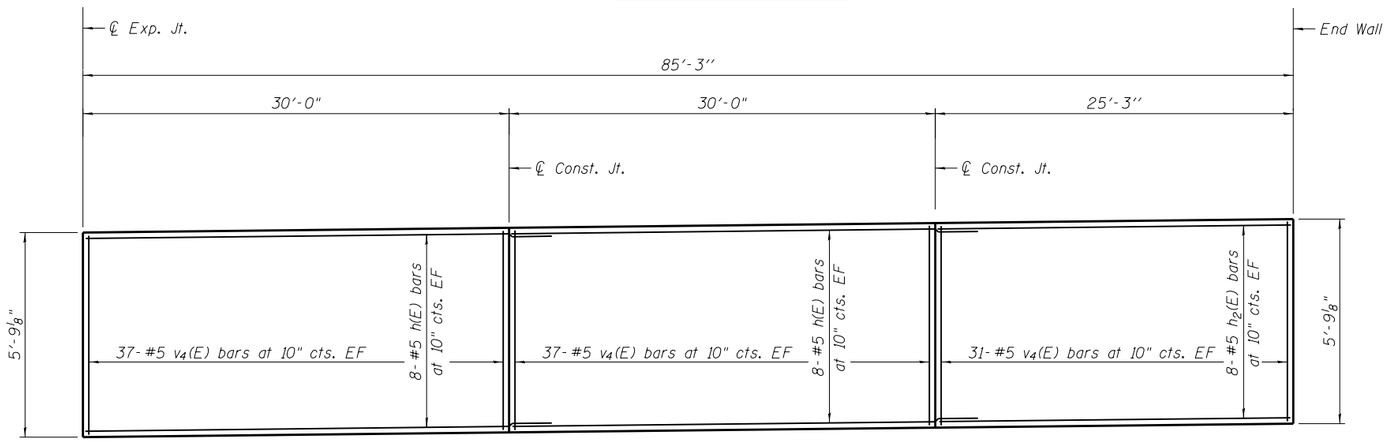
FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z033-60Y38-004-DET01.dgn



PANEL 8 AND 9 ELEVATION



PANEL 10 ELEVATION

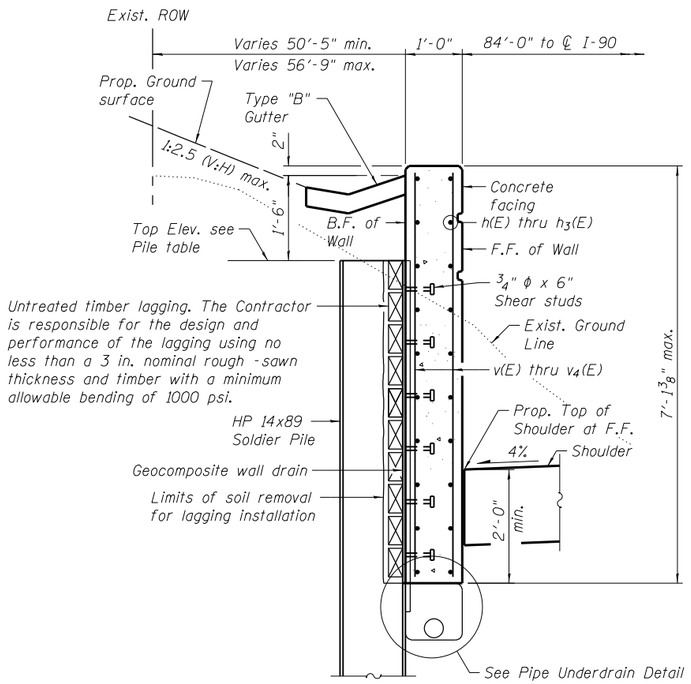


PANEL 11 ELEVATION

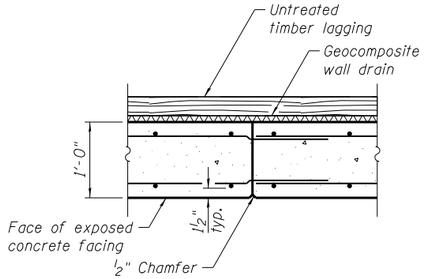
PILE TABLE

Pile No.	Size	Top Elev.	Bott. Elev.	Pile Length	Shear Stud
56	HP14x89	639.87	616.21	23.67	6
57	HP14x89	639.91	616.24	23.67	6
58	HP14x89	639.94	616.28	23.67	6
59	HP14x89	639.98	616.31	23.67	6
60	HP14x89	640.01	616.34	23.67	6
61	HP14x89	640.03	616.36	23.67	6
62	HP14x89	640.06	616.40	23.67	6
63	HP14x89	640.10	616.43	23.67	6
64	HP14x89	640.14	616.47	23.67	6
65	HP14x89	640.17	616.51	23.67	6
66	HP14x89	640.21	616.54	23.67	6
67	HP14x89	640.24	616.58	23.67	6
68	HP14x89	640.28	616.61	23.67	6
69	HP14x89	640.25	616.59	23.67	6
70	HP14x89	640.12	616.45	23.67	6
71	HP14x89	639.98	616.32	23.67	6
72	HP14x89	639.85	616.18	23.67	5
73	HP14x89	639.80	616.13	23.67	5
74	HP14x89	639.83	616.17	23.67	5
75	HP14x89	639.87	616.20	23.67	5
76	HP14x89	639.91	616.24	23.67	5
77	HP14x89	639.94	617.19	22.75	5
78	HP14x89	639.98	617.23	22.75	5
79	HP14x89	640.03	617.28	22.75	5
80	HP14x89	640.07	617.32	22.75	5
81	HP14x89	640.12	617.37	22.75	5
82	HP14x89	640.16	617.41	22.75	5
83	HP14x89	640.21	617.46	22.75	5
84	HP14x89	640.25	617.50	22.75	5
85	HP14x89	640.30	617.55	22.75	5
86	HP14x89	640.34	617.59	22.75	5
87	HP14x89	640.39	617.64	22.75	5
88	HP14x89	640.43	617.68	22.75	5
89	HP14x89	640.48	617.73	22.75	5
90	HP14x89	640.52	617.77	22.75	5
91	HP14x89	640.56	617.81	22.75	5
92	HP14x89	640.61	617.86	22.75	5
93	HP14x89	640.65	617.90	22.75	5
94	HP14x89	640.70	617.95	22.75	5
95	HP14x89	640.70	617.95	22.75	5
96	HP14x89	640.67	617.92	22.75	5
97	HP14x89	640.64	617.89	22.75	5
98	HP14x89	640.60	617.85	22.75	5
99	HP14x89	640.57	617.82	22.75	5
100	HP14x89	640.53	617.78	22.75	5
101	HP14x89	640.50	617.75	22.75	5
102	HP14x89	640.46	617.71	22.75	5
103	HP14x89	640.43	617.68	22.75	5
104	HP14x89	640.43	617.68	22.75	5
105	HP14x89	640.48	617.73	22.75	5
106	HP14x89	640.52	617.77	22.75	5
107	HP14x89	640.57	617.82	22.75	5
108	HP14x89	640.61	617.86	22.75	5
109	HP14x89	640.66	617.91	22.75	5
110	HP14x89	640.69	617.94	22.75	5
111	HP14x89	640.74	617.99	22.75	5
112	HP14x89	640.78	618.03	22.75	5

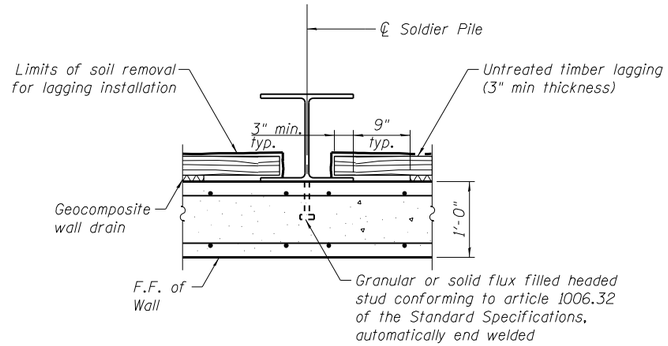
Notes:
1. For Notes, see Sheet 4 of 15.



SECTION THRU DRIVEN SOLDIER PILE WALL



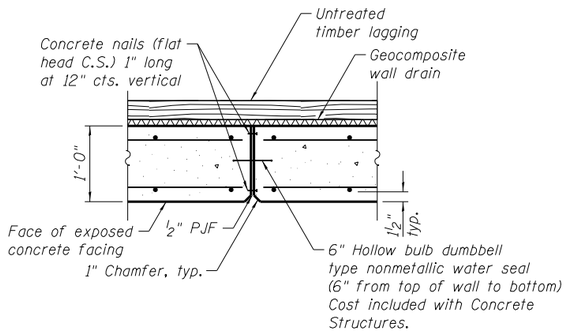
CONSTRUCTION JOIN



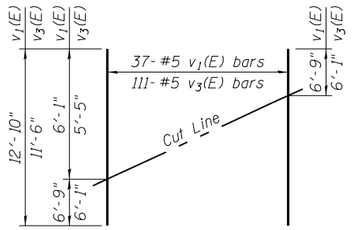
SECTION THRU SOLDIER PILE

WALL 1 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	378	#5	33'-1"	
h1(E)	192	#5	29'-9"	
h2(E)	16	#5	24'-11"	
v(E)	1258	#5	6'-9"	
v1(E)	37	#5	12'-10"	
v2(E)	518	#5	6'-1"	
v3(E)	111	#5	11'-6"	
v4(E)	210	#5	5'-5"	
Reinforcement Bars, Epoxy Coated			Pound	34,580
Concrete Structures			Cu Yd	230.9

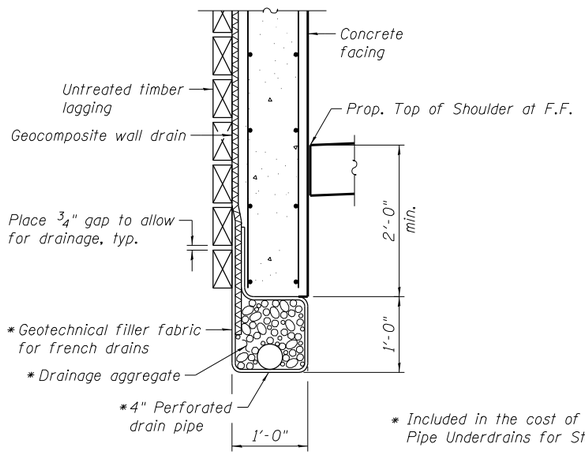


EXPANSION JOINT

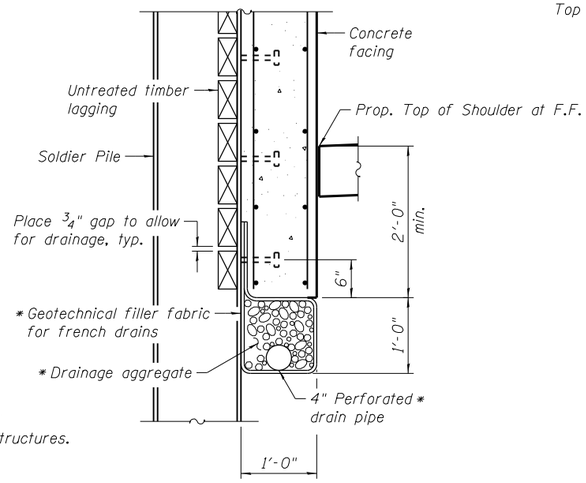


FIELD CUTTING DIAGRAM

Order $v_1(E)$ and $v_3(E)$ bars full length. Cut as shown and use remainder of bars in opposite face.



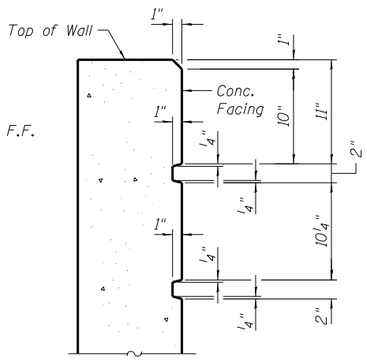
BETWEEN SOLDIER PILES



* Included in the cost of Pipe Underdrains for Structures.

AT SOLDIER PILES

UNDERDRAIN DETAIL



RUSTICATION DETAIL AT TOP OF WALL

Notes:

1. For panel reinforcement, see Sheets 4 and 5 of 15.
2. Slope underdrain to outlet to designated drain locations.
3. Protective coat to be applied to all exposed concrete.

USER NAME = lkalita	DESIGNED	ITC	REVISED
	CHECKED	MRI	REVISED
PLOT SCALE = 0.999998 '/ in.	DRAWN	LK	REVISED
PLOT DATE = 5/2/2016	DATE	5/6/2016	REVISED

HNTB

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RETAINING WALL 1 DETAILS – 3
STRUCTURE NO. 016–Z033
SHEET NO. 6 OF 15 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	376
		CONTRACT NO. 60Y38		
ILLINOIS	FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z033-60Y38-006-DET03.dgn

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Jamhirst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2688

SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 12/11/13

ROUTE -- DESCRIPTION Drainage Area Between Harlem Avenue & Foster Avenue LOGGED BY TZ
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hand Auger HAMMER TYPE Manual

STRUCT. NO.
Station
BORING NO. RWB-48
Station 3074+00
Offset 86.00ft Right
Ground Surface Elev. 639.10 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY LOAM-brown & gay-very stiff to hard (Fill)	4		
	8	2.5	15
	9	P	
	12		
	14	4.0	18
635.10	17	B	
CLAY-brown & gay-medium stiff to very stiff	11		
-5	4	1.0	21
	4	B	
		0.8	21
becoming gray @ -7.25'		B	
	5		24
	4	1.1	21
	6	B	
	11	1.1	18
629.10 -10	15	B	
End Of Boring @ -10.0'. Boring backfilled with cuttings.	16	3.8	
		B	

-15
-20

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

Z:\PROJECTS\2012\12245 HNTB, I-90 FROM I-190 TO HARLEM AVENUE (PTB 165-001)\12245 BORING LOGS\12245_LOG.GPJ 2/7/14

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Jamhirst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2688

SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 10/4/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY CW
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-48A
Station 3075+96
Offset 62.70ft Right
Ground Surface Elev. 634.90 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 618.9 ft ▼
Upon Completion 611.9 ft ▽
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
12.0" ASPHALT			
633.90			
CRUSHED STONE-loose (Fill)	3		
	4		9
	4		
631.90			
CLAY-gray-stiff to very stiff			
	3		
	3	1.1	22
-5	4	B	
	4		
	5	1.9	22
	8	B	
	5		
	7	2.3	22
-10	9	B	
	4		
	6	1.9	21
	10	B	
-15	5		
	9	2.0	20
	11	P	
▼			
	5		
	9	2.1	21
	11	B	
	6		
-20	8	1.7	16
	11	B	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY-gray-stiff to very stiff *(continued)*			
	9		
	12	1.7	20
▽	13	B	
	6		
	7	2.1	19
-25	9	B	
609.90			
End Of Boring @ -25.0'. Boring backfilled with cuttings.			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

Z:\PROJECTS\2012\12245 HNTB, I-90 FROM I-190 TO HARLEM AVENUE (PTB 165-001)\12245 BORING LOGS\12245_LOG.GPJ 2/7/14

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Geotechnical, Environmental & Civil Engineering
805 Jamhirst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2688

SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 12/11/13

ROUTE -- DESCRIPTION Drainage Area Between Harlem Avenue & Foster Avenue LOGGED BY TZ
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hand Auger HAMMER TYPE Manual

STRUCT. NO.
Station
BORING NO. RWB-49
Station 3076+86
Offset 77.40ft Right
Ground Surface Elev. 636.30 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
6.0" TOPSOIL-black			33
635.80			
CLAY LOAM-brown-very stiff (Fill)	4		
	5	2.3	18
634.30	8	B	
CLAY-brown & gray-very stiff	6		
	9	2.3	20
	13	B	
632.30			
CLAY LOAM-gray-very stiff	15		
-5	17	3.8	13
	19	B	
630.30			
CLAY-gray-hard	10		
	10	4.3	18
	15	B	
	10		
	13	4.7	19
626.30 -10	19	B	
End Of Boring @ -10.0'. Boring backfilled with cuttings.			
-15			
-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

Z:\PROJECTS\2012\12245 HNTB, I-90 FROM I-190 TO HARLEM AVENUE (PTB 165-001)\12245 BORING LOGS\12245_LOG.GPJ 2/7/14

Notes:
1. For location of soil boring, see Sheet 1 of 15.

HNTB

USER NAME = lkalita	DESIGNED --		REVISED
	CHECKED --		REVISED
PLOT SCALE = 01 '-' / in.	DRAWN LK		REVISED
PLOT DATE = 5/2/2016	DATE 5/6/2016		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS – 1
STRUCTURE NO. 016–Z033
SHEET NO. 7 OF 15 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	377
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z033-60Y38-007-BOR01.dgn

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
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(630) 355-2688

SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 10/4/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY CW
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-49A
Station 3076+86
Offset 64.40ft Right
Ground Surface Elev. 635.80 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 633.8 ft
Upon Completion 621.8 ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Soil Description
				12.0" ASPHALT 635.01
				6.0" CRUSHED STONE 634.51
	5			CLAY-gray-very stiff
	4		7	
	4			
	3			
-5	3	2.0	22	
	6	B		
	4			
	6	2.1	21	
	11	B		
				627.80
	7			LOAM-gray-medium dense
	8	2.5	12	
-10	9	P		
				625.30
	4			CLAY-gray-stiff
	5	1.5	20	
	9	B		
	3			
-15	5	1.2	23	
	8	B		
	4			
	8	1.6	21	
	11	B		
	6			
-20	6	1.6	20	
	11	B		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Soil Description
				CLAY-gray-stiff *(continued)*
	7			
	9	1.3	22	
	12	B		
	5			
	6	1.0	21	
-25	9	B		
				610.80
				End Of Boring @ -25.0'. Boring backfilled with cuttings.
-30				
-35				
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

Z:\PROJECTS\2012\12245 HNTB, I-90 FROM I-190 TO HARLEM AVENUE (PTB 165-001)\12245 BORING LOGS\12245_LOG.GPJ 2/7/14

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Geotechnical, Environmental & Civil Engineering
805 Aimhirst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2688

SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 12/11/13

ROUTE -- DESCRIPTION Drainage Area Between Harlem Avenue & Foster Avenue LOGGED BY TZ
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hand Auger HAMMER TYPE Manual

STRUCT. NO.
Station
BORING NO. RWB-50
Station 3077+54
Offset 82.00ft Right
Ground Surface Elev. 637.80 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Soil Description
	4			
	6	2.3	19	CLAY LOAM-brown & gray-very stiff to hard (Fill)
	10	B		
	9			
	14	6.2	18	
	13	B		
		2.5	15	632.80
-5	14	B		CLAY-gray-very stiff to hard
	19	4.9	19	
	27	B		
	12	3.5	20	
	12	B		
	16			
	9			
	11	2.7	21	
	12	B		
				627.80
-10				End Of Boring @ -10.0'. Boring backfilled with cuttings.
-15				
-20				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

Z:\PROJECTS\2012\12245 HNTB, I-90 FROM I-190 TO HARLEM AVENUE (PTB 165-001)\12245 BORING LOGS\12245_LOG.GPJ 2/7/14

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 10/4/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY CW
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-50A
Station 3077+56
Offset 63.70ft Right
Ground Surface Elev. 635.80 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 633.8 ft
Upon Completion 621.8 ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Soil Description
				9.0" ASPHALT 635.05
	5			15.0" CRUSHED STONE-loose (Fill)
	3		21	633.80
	4			CLAY-gray-stiff
	3			
-5	4	1.3	19	
	5	B		
	3			
	4	1.0	19	
	5	B		
	4			
	5	1.1	24	
-10	5	B		
	3			
	3	1.3	23	
	5	B		
	4			
	4	1.0	22	
-15	7	P		
	4			
	4	1.2	22	
	6	B		
	5			
	8	1.1	22	
-20	8	B		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Soil Description
				CLAY-gray-stiff *(continued)*
	5			
	7	1.2	25	
	8	B		
	5			
	6	1.2	21	
-25	8	B		
				610.80
				End Of Boring @ -25.0'. Boring backfilled with cuttings.
-30				
-35				
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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Notes:
1. For location of soil boring, see Sheet 1 of 15.

HNTB	USER NAME = lkalita	DESIGNED --	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS – 2 STRUCTURE NO. 016–Z033
		CHECKED --	REVISED		
	PLOT SCALE = 0:1 '' / in.	DRAWN LK	REVISED		SHEET NO. 8 OF 15 SHEETS
	PLOT DATE = 5/2/2016	DATE 5/6/2016	REVISED		

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	378
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z033-60Y38-008-BOR02.dgn

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SOIL BORING LOG

GSI Job No. 12245
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Date 12/11/13

ROUTE -- DESCRIPTION Drainage Area Between Harlem Avenue & Foster Avenue LOGGED BY TZ
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hand Auger HAMMER TYPE Manual

STRUCT. NO.
Station
BORING NO. RWB-51
Station 3078+33
Offset 83.60ft Right
Ground Surface Elev. 639.00 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
6.0" TOPSOIL-black 638.50			30
CLAY LOAM-gray-hard (Fill)	3		
	4	4.0	19
637.00	5	P	
CLAY-gray-stiff to hard	9		
	10	3.7	20
	12	B	
	10		
-5	10	2.2	20
	12	B	
	9		
	10	9.9	17
	10	B	
	12		
	20	1.0	21
629.00 -10	20	B	
End Of Boring @ -10.0'. Boring backfilled with cuttings.			
-15			
-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 12245
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Date 10/4/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY CW
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-51A
Station 3078+32
Offset 63.90ft Right
Ground Surface Elev. 636.10 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 634.6 ft
Upon Completion 623.1 ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
7.0" ASPHALT 635.52			
11.0" CLAYEY SAND & GRAVEL-brown 634.60	4		
CLAY-gray-stiff	5		9
	6		
	3		
	3	1.2	22
-5	5	B	
	5		
	5	1.2	18
	7	B	
	4		
	6	1.3	21
-10	6	B	
	4		
	7	1.6	20
	7	B	
	4		
	6	1.4	21
-15	7	B	
	5		
	7	1.6	20
	8	B	
	5		
	7	1.9	20
-20	8	B	

CLAY-gray-stiff *(continued)*

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	5		
	8	1.9	18
	9	B	
	5		
	7	1.9	21
611.10 -25	9	B	
End Of Boring @ -25.0'. Boring backfilled with cuttings.			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 12/11/13

ROUTE -- DESCRIPTION Drainage Area Between Harlem Avenue & Foster Avenue LOGGED BY TZ
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hand Auger HAMMER TYPE Manual

STRUCT. NO.
Station
BORING NO. RWB-52
Station 3079+13
Offset 82.20ft Right
Ground Surface Elev. 639.20 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
3.0" TOPSOIL-black 638.95	5		36
CLAY LOAM-brown, gray & spotted black-stiff (Fill)	5	1.9	19
637.20	6	B	
CLAY-gray-stiff to hard	6		
	10	3.6	20
	12	B	
	8		
-5	10	1.9	22
	12	B	
	8		
	11	11.7	17
	16	B	
	17		
	15	1.0	21
629.20 -10	19	B	
End Of Boring @ -10.0'. Boring backfilled with cuttings.			
-15			
-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

Notes:
1. For location of soil boring, see Sheet 1 and 2 of 15.

HNTB	USER NAME = lkalita	DESIGNED --	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS – 3 STRUCTURE NO. 016–Z033
		CHECKED --	REVISED		
	PLOT SCALE = 01 '-' / in.	DRAWN LK	REVISED		SHEET NO. 9 OF 15 SHEETS
	PLOT DATE = 5/2/2016	DATE 5/6/2016	REVISED		

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	379
		CONTRACT NO. 60Y38		
		ILLINOIS FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z033-60Y38-009-BOR03.dgn

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 2
Date 10/8/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY CW
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-52A
Station 3079+11
Offset 16.80ft Right
Ground Surface Elev. 636.70 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 635.2 ft
Upon Completion n/a ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
636.12 7.0" ASPHALT			
635.70 5.0" CRUSHED STONE			
SANDY CLAY LOAM with Gravel-brown & gray-loose (Fill)	3		
	4		14
	4		
633.70 CLAY-gray-stiff			
	4		
	4	1.5	22
-5	6	B	
	5		
	6	1.5	21
	8	B	
628.70 CLAY LOAM-gray-stiff			
	5		
	6	1.8	15
-10	9	B	
626.20 SILTY LOAM-gray-medium dense			
	8		
	9		14
	10		
623.70 SILTY CLAY LOAM-gray-medium dense			
	6		
	6	2.0	16
-15	7	P	
621.20 CLAY-gray-stiff			
	3		
	5	1.8	23
	8	P	
	4		
	6	1.9	22
-20	8	B	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY-gray-stiff *(continued)*			
	6		
	6	1.0	19
	8	B	
611.20 CLAY LOAM-gray-stiff to very stiff			
	6		
	6	2.0	13
	9	P	
	4		
	5	1.5	13
-30	9	P	
	7		
	10	1.9	15
-35	15	B	
	9		
	12	2.3	14
-40	14	B	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 12245
Page 2 of 2
Date 10/8/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY CW
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-52A
Station 3079+11
Offset 16.80ft Right
Ground Surface Elev. 636.70 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 635.2 ft
Upon Completion n/a ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY LOAM-gray-stiff to very stiff *(continued)*			
	10		
	12	2.3	15
591.70 -45	16	B	
End Of Boring @ -45.0'. Boring backfilled with cuttings.			
-50			
-55			
-60			

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 635.2 ft
Upon Completion n/a ft
After ____ Hrs. ____ ft

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 12/11/13

ROUTE -- DESCRIPTION Drainage Area Between Harlem Avenue & Foster Avenue LOGGED BY TZ
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hand Auger HAMMER TYPE Manual

STRUCT. NO.
Station
BORING NO. RWB-53
Station 3079+86
Offset 84.30ft Right
Ground Surface Elev. 640.60 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
640.10 6.0" TOPSOIL-black			29
CLAY LOAM-brown & gray-very stiff (Fill)	4		
	5	2.8	18
638.60	6	B	
CLAY-gray-stiff to hard	8		
	12	4.7	20
	18	B	
	9		
-5	9	1.7	22
	13	B	
	8		
	10	1.4	23
	14	B	
	8		
	10	2.1	23
630.60 -10	12	B	
End Of Boring @ -10.0'. Boring backfilled with cuttings.			
-15			
-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

Notes:
1. For location of soil boring, see Sheet 2 of 15.

HNTB	USER NAME = lkalita	DESIGNED --	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS – 4 STRUCTURE NO. 016–Z033
		CHECKED --	REVISED		
	PLOT SCALE = 0.1 ' / in.	DRAWN LK	REVISED		
	PLOT DATE = 5/2/2016	DATE 5/6/2016	REVISED		SHEET NO. 10 OF 15 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	380
		CONTRACT NO. 60Y38		
		ILLINOIS FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z033-60Y38-010-BOR04.dgn

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 10/4/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY CW
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-53A
Station 3079+84
Offset 63.90ft Right
Ground Surface Elev. 637.00 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 635.5 ft
Upon Completion 617.0 ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
7.0" ASPHALT 636.42			
17.0" CRUSHED STONE-loose (Fill) 635.00			
	4 5		6
CLAY-gray-stiff			
	3		
	5 6	1.3 B	18
-5			
	3		
	4 6	1.1 B	23
	4		
	5 7	1.3 P	22
-10			
	3		
	5 8	1.2 B	22
	5		
-15	7 9	1.5 B	22
	5		
	5 9	1.3 B	17
	5		
-20	8 9	1.9 B	16
CLAY-gray-stiff *(continued)*			
	7		
	9 14	1.3 B	15
	5		
	7 10	1.3 B	17
612.00 -25			
End Of Boring @ -25.0'. Boring backfilled with cuttings.			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 12/12/13

ROUTE -- DESCRIPTION Drainage Area Between Harlem Avenue & Foster Avenue LOGGED BY TZ
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hand Auger HAMMER TYPE Manual

STRUCT. NO.
Station
BORING NO. RWB-54
Station 3080+65
Offset 81.50ft Right
Ground Surface Elev. 639.90 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
12.0" TOPSOIL-black 638.90			31
CLAY LOAM-dark brown & gray-very stiff (Fill) 637.90	4 5	3.0	18
CLAY-gray-stiff to very stiff	8	P	
	9 12 17	1.7 B	22
	14		
-5	19 21	2.4 B	18
	15		
	21 23	2.4 B	21
	10		
629.90 -10	10 15	2.4 B	21
End Of Boring @ -10.0'. Boring backfilled with cuttings.			
-15			
-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 10/7/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY CW
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-54A
Station 3080+66
Offset 63.90ft Right
Ground Surface Elev. 637.70 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 636.2 ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
7.0" ASPHALT 637.12			
17.0" CRUSHED STONE-loose (Fill) 635.70			
	4 5		6
CLAY-gray-stiff			
	3		
	6		
	3 5	1.7 B	22
-5			
632.20			
LOAM-gray-stiff	3		
	4 7	1.8 B	11
629.70			
CLAY-gray-stiff	5		
	5 7	2.0 P	20
-10			
	4		
	5 8	1.7 B	18
	4		
-15	5 9	1.7 B	17
	3		
	4 7	1.8 B	21
	6		
-20	5 5	1.7 B	21
CLAY-gray-stiff *(continued)*			
	6		
	8 9	1.8 B	21
	6		
	9 11	1.7 B	16
612.70 -25			
End Of Boring @ -25.0'. Boring backfilled with cuttings.			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

Z:\PROJECTS\2012\12245 HNTB, I-90 FROM I-190 TO HARLEM AVENUE (PTB 165-001)\12245 BORING LOGS\12245_LOG.GPJ 2/7/14

Notes:
1. For location of soil boring, see Sheet 2 of 15.

HNTB

USER NAME = lkalita	DESIGNED --		REVISED
	CHECKED --		REVISED
PLOT SCALE = 01 '' / in.	DRAWN LK		REVISED
PLOT DATE = 5/2/2016	DATE 5/6/2016		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS – 5
STRUCTURE NO. 016–Z033
SHEET NO. 11 OF 15 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	381
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z033-60Y38-011-BOR05.dgn

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Aimhirst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2688

SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 12/12/13

ROUTE -- DESCRIPTION Drainage Area Between Harlem Avenue & Foster Avenue LOGGED BY TZ
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hand Auger HAMMER TYPE Manual

STRUCT. NO.
Station
BORING NO. RWB-55
Station 3081+39
Offset 81.30ft Right
Ground Surface Elev. 640.00 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY LOAM-brown & gray-very stiff (Fill)	4		
	5	2.3	18
	6	B	
637.50	8		
CLAY-gray-stiff to very stiff	12	3.3	20
	20	B	
	6		
-5	8	2.4	21
	10	B	
	12		
	14	2.4	21
	15	B	
	13		
	15	1.2	20
630.00 -10	20	B	
End Of Boring @ -10.0'. Boring backfilled with cuttings.			
-15			
-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 10/7/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY CW
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-55A
Station 3081+41
Offset 63.90ft Right
Ground Surface Elev. 637.90 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 636.4 ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
8.0" ASPHALT			
637.23 4.0" CRUSHED STONE 636.90			
CLAY to CLAY LOAM-gray-stiff to very stiff	3		
	4	2.5	17
	5	B	
	4		
-5	5	1.7	18
	7	B	
	5		
	7	1.9	19
	8	B	
	4		
-10	5	1.8	18
	6	B	
	4		
	5	1.2	14
	9	B	
	4		
-15	6	1.6	16
	9	B	
	5		
	5	1.8	21
	9	B	
	5		
-20	5	1.7	17
	7	B	

CLAY to CLAY LOAM-gray-stiff to very stiff *(continued)*

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	5		
	9	2.0	18
	10	B	
	7		
612.90 -25	8	2.6	18
	10	B	
End Of Boring @ -25.0'. Boring backfilled with cuttings.			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 12/12/13

ROUTE -- DESCRIPTION Drainage Area Between Harlem Avenue & Foster Avenue LOGGED BY TZ
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hand Auger HAMMER TYPE Manual

STRUCT. NO.
Station
BORING NO. RWB-56
Station 3082+22
Offset 80.30ft Right
Ground Surface Elev. 640.00 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
6.0" CLAYEY TOPSOIL-dark brown to black			28
639.50	4		
CLAY LOAM-gray-very stiff	5	2.8	16
638.00	6	B	
CLAY-gray-stiff to very stiff	8		
	12	3.3	21
	15	B	
	12		
-5	14		17
	16		
	15		
	17	3.2	20
	19	B	
	12		
	15	1.0	20
630.00 -10	16	B	
End Of Boring @ -10.0'. Boring backfilled with cuttings.			
-15			
-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

Notes:
1. For location of soil boring, see Sheet 2 of 15.

HNTB	USER NAME = lkalita	DESIGNED --	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS – 6 STRUCTURE NO. 016–Z033
		CHECKED --	REVISED		
	PLOT SCALE = 01 '-' / in.	DRAWN LK	REVISED		
	PLOT DATE = 5/2/2016	DATE 5/6/2016	REVISED		SHEET NO. 12 OF 15 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	382
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z033-60Y38-012-BOR06.dgn

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Naperville, Illinois 60565
(630) 355-2688

SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 10/7/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY CW
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-56A
Station 3082+22
Offset 65.30ft Right
Ground Surface Elev. 638.00 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 636.5 ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
7.0" ASPHALT 637.42			
5.0" CRUSHED STONE 637.00			
CLAY to CLAY LOAM-gray-stiff to very stiff	3		
	3 5	1.3 B	21
	3		
-5	5 7	1.5 B	21
	3		
	5 9	1.5 B	16
	5		
-10	6 9	1.9 B	19
	3		
	6 8	2.0 B	19
	5		
-15	8 12	2.8 B	13
	3		
	5 8	1.9 B	17
	7		
-20	7 8	1.8 B	14
CLAY to CLAY LOAM-gray-stiff to very stiff *(continued)*	7		
	9 13	2.8 B	19
615.00			
SANDY CLAY LOAM-gray-medium dense	5		
	9 11		9
613.00 -25			
End Of Boring @ -25.0'. Boring backfilled with cuttings.			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 12/12/13

ROUTE -- DESCRIPTION Drainage Area Between Harlem Avenue & Foster Avenue LOGGED BY TZ
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hand Auger HAMMER TYPE Manual

STRUCT. NO.
Station
BORING NO. RWB-57
Station 3082+92
Offset 82.90ft Right
Ground Surface Elev. 641.90 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY-brown & gray-stiff to very stiff	5		
	4 4	2.6 B	18
	7		
	10 12	2.6 B	20
becoming gray @ -4.0'	13		
-5	17 16	2.9 B	19
	18		
	20 20	1.4 B	20
	17		
	20 24	2.2 B	20
631.90 -10			
End Of Boring @ -10.0'. Boring backfilled with cuttings.			
-15			
-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 2
Date 10/8/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY CW
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-57A
Station 3082+97
Offset 66.70ft Right
Ground Surface Elev. 638.70 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry To -10.0' ft
Upon Completion n/a ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
6.0" ASPHALT 638.20			
6.0" CRUSHED STONE 637.70			
CLAY-gray-stiff to very stiff	3		
	4		15
	4		
	3		
-5	3 4	1.2 B	22
	3		
	4 6	1.2 B	18
	3		
-10	4 6	1.7 B	20
	3		
	3 5	1.3 P	17
	3		
-15	3 6	1.2 B	20
	3		
	5 7	1.2 B	23
	4		
-20	6 10	1.7 B	22
CLAY-gray-stiff to very stiff *(continued)*	4		
	7 11	2.1 B	21
	4		
	8 13	2.7 B	20
-25			
	4		
	12 16		28
	6		
	11 16	2.5 B	19
-30			
606.70			
CLAY LOAM-gray-very stiff to hard	8		
	12 14	2.4 B	16
-35			
	4		
-40	6 10	3.3 P	15

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

Notes:
1. For location of soil boring, see Sheets 2 and 3 of 15.

HNTB	USER NAME = lkolita	DESIGNED --	REVISED
		CHECKED --	REVISED
	PLOT SCALE = 0:1 ':' / in.	DRAWN LK	REVISED
	PLOT DATE = 5/2/2016	DATE 5/6/2016	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS – 7
STRUCTURE NO. 016–Z033
SHEET NO. 13 OF 15 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	383
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z033-60Y38-013-B0R07.dgn

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Naperville, Illinois 60565
(630) 355-2518

SOIL BORING LOG

GSI Job No. 12245
Page 2 of 2
Date 10/8/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY CW
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-57A
Station 3082+97
Offset 66.70ft Right
Ground Surface Elev. 638.70 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry To -10.0' ft
Upon Completion n/a ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY LOAM-gray-very stiff to hard *(continued)*			
	12		
593.70 -45	16 20	4.5 P	15
End Of Boring @ -45.0'. Boring backfilled with cuttings.			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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Naperville, Illinois 60565
(630) 355-2518

SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 12/12/13

ROUTE -- DESCRIPTION Drainage Area Between Harlem Avenue & Foster Avenue LOGGED BY TZ
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hand Auger HAMMER TYPE Manual

STRUCT. NO.
Station
BORING NO. RWB-58
Station 3083+71
Offset 81.40ft Right
Ground Surface Elev. 641.90 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
3.0" TOPSOIL-black 641.65	5		48
CLAY-brown & gray-stiff to very stiff	4 5	2.4 B	19
	6		
	9 12	2.9 B	21
becoming gray @ -4.0'	6		
635.90 -6	9 9	1.7 B	22
CLAY-gray-soft (Wet)	6		
	10 10	0.3 B	26
	6		
631.90 -10	7 10	0.4 B	25
End Of Boring @ -10.0'. Boring backfilled with cuttings.			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 10/23/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY JZ
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-58A
Station 3083+73
Offset 66.70ft Right
Ground Surface Elev. 639.00 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
10.0" ASPHALT 638.17			
CRUSHED STONE-medium dense	4		
637.00	6 4	5.9 B	16
CLAY LOAM-gray-hard 636.00			
CLAY-gray-stiff	3		
	3 4	1.3 B	23
-5			
	3		
	3 4	1.2 B	23
	2		
-10	3 5	1.2 B	22
	3		
	3 5	1.3 B	23
	2		
-15	3 4	1.1 B	23
	2		
	3 4	1.1 B	15
	3		
-20	5 7	1.6 B	20

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY-gray-stiff *(continued)*			
	4		
	6 7	1.5 B	20
	5		
614.00 -25	4 6	1.5 B	21
End Of Boring @ -25.0'. Boring backfilled with cuttings.			

-35
-40

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

Notes:
1. For location of soil boring, see Sheet 3 of 15.

Z:\PROJECTS\2012\12245 HNTB, I-90 FROM I-190 TO HARLEM AVENUE (PTB 165-001)\12245 BORING LOGS\12245_LOG.GPJ 2/7/14

HNTB

USER NAME = lkalita	DESIGNED --	REVISED
	CHECKED --	REVISED
PLOT SCALE = 01 '-' / in.	DRAWN LK	REVISED
PLOT DATE = 5/2/2016	DATE 5/6/2016	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS – 8
STRUCTURE NO. 016–Z033
SHEET NO. 14 OF 15 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	384
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z033-60Y38-014-BOR08.dgn

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GSI Job No. 12245

SOIL BORING LOG

Page 1 of 1

Date 10/25/13

ROUTE -- **DESCRIPTION** I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) **LOGGED BY** JZ

SECTION -- **LOCATION** SW 1/4, **SEC.** 1, **TWP.** T40N, **RNG.** R12E, 3rd **PM**

COUNTY Cook **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** CME Automatic

STRUCT. NO.
Station

BORING NO. RWB-59
Station 3084+49
Offset 65.60ft Right
Ground Surface Elev. 639.90 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ **Hrs.** ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4.5" ASPHALT 639.53			
8.5" CONCRETE 638.82			
CLAY-brown-stiff to hard	2		
	2	3.0	22
	2	P	
	2		
	5	4.2	21
-5	6	B	
becoming gray @ -5.5'	3		
	4	6.7	22
	5	B	
	2		
	3	1.4	22
-10	4	B	
	2		
	3	1.4	22
	4	B	
	3		
	3	1.7	22
-15	5	B	
	3		
	4	1.6	21
	5	B	
	3		
	4	1.2	16
-20	5	B	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY-brown-stiff to hard *(continued)*	4		
	5	1.8	19
	7	B	
	4		
614.90	6	2.7	19
-25	9	B	
End Of Boring @ -25.0'. Boring backfilled with cuttings.			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Z:\PROJECTS\2012\12245 HNTB, I-90 FROM I-190 TO HARLEM AVENUE (PTB 165-001)\12245 BORING LOGS\12245_LOG.GPJ 2/7/14

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Naperville, Illinois 60565
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GSI Job No. 12245

SOIL BORING LOG

Page 1 of 1

Date 10/25/13

ROUTE -- **DESCRIPTION** I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) **LOGGED BY** JZ

SECTION -- **LOCATION** SW 1/4, **SEC.** 1, **TWP.** T40N, **RNG.** R12E, 3rd **PM**

COUNTY Cook **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** CME Automatic

STRUCT. NO.
Station

BORING NO. RWB-60
Station 3085+28
Offset 64.30ft Right
Ground Surface Elev. 640.00 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter 616.0 ft ▼
Upon Completion 616.0 ft ▽
After ____ **Hrs.** ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
5.5" ASPHALT 639.54			
7.0" CONCRETE 638.96			
CLAY-gray-stiff	3		
	2		9
	2		
	2		
	3	1.2	23
-5	3	B	
	2		
	3	1.3	23
	4	B	
	3		
	4	1.2	23
-10	4	B	
	2		
	3	1.6	21
	4	B	
	3		
	3	1.6	20
-15	5	B	
	2		
	3	1.3	17
	4	B	
	3		
	4	1.2	22
-20	5	B	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY-gray-stiff *(continued)*	3		
	5	1.5	18
	6	B	
	4		
▼			
	5	1.2	18
615.00 -25	6	B	
End Of Boring @ -25.0'. Boring backfilled with cuttings.			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Z:\PROJECTS\2012\12245 HNTB, I-90 FROM I-190 TO HARLEM AVENUE (PTB 165-001)\12245 BORING LOGS\12245_LOG.GPJ 2/7/14

Notes:
1. For location of soil boring, see Sheet 3 of 15.

HNTB

USER NAME = lkalita	DESIGNED --		REVISED
	CHECKED --		REVISED
PLOT SCALE = 01 '-' / in.	DRAWN LK		REVISED
PLOT DATE = 5/2/2016	DATE 5/6/2016		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS – 9
STRUCTURE NO. 016–Z033
SHEET NO. 15 OF 15 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	385
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z033-60Y38-015-BOR09.dgn

Bench Mark: TBM #15 - Square cut SW corner at west end of barrier wall west of Oriole Bridge on south side of I-90 EB. Elev. 638.80

Existing Structure: None

Begin Wall

1165'-0" Begin of Wall to End of Wall

5 Spa. @ 60'-0 = 300'-0"

Expansion Jt. Spa. measured along F. F. of Wall

Construction Jt. Spa. measured along F. F. of Wall

2 Spa. @ 30'-0" = 60'-0" | Panel 1

2 Spa. @ 30'-0" = 60'-0" | Panel 2

2 Spa. @ 30'-0" = 60'-0" | Panel 3

2 Spa. @ 30'-0" = 60'-0" | Panel 4

2 Spa. @ 30'-0" = 60'-0" | Panel 5

Sta. 10+95.00
Elev. 654.37

Top of Gutter at B.F.

Sta. 11+55.09
Elev. 652.97

Rustication, see detail Sheet 10 of 18

Sta. 12+15.17
Elev. 650.80

Exist. Ground Line at F.F.

Sta. 12+75.26
Elev. 648.63

Top of Wall

Sta. 13+35.34
Elev. 646.74

Sta. 13+95.43
Elev. 645.16

Elev. 649.25

Elev. 647.83

Const. Jt., typ.

Exp. Jt., typ.

Prop. Top of Shoulder at F.F.

HP Pile, typ.

Elev. 644.14

Bottom of Concrete Facing

Elev. 640.46

Elev. 638.57

Elev. 636.98

Cut Line

2'-0" min.

2'-0" | 7 Spa. @ 8'-0" = 56'-0" | 2'-0" | 2'-0" | 7 Spa. @ 8'-0" = 56'-0" | 2'-0" | 2'-0" | 7 Spa. @ 8'-0" = 56'-0" | 2'-0" | 3'-9" | 7 Spa. @ 7'-6" = 52'-6" | 3'-9" | 3'-9" | 7 Spa. @ 7'-6" = 52'-6" | 3'-9"

Pile Spacing measured along F. F. of Wall

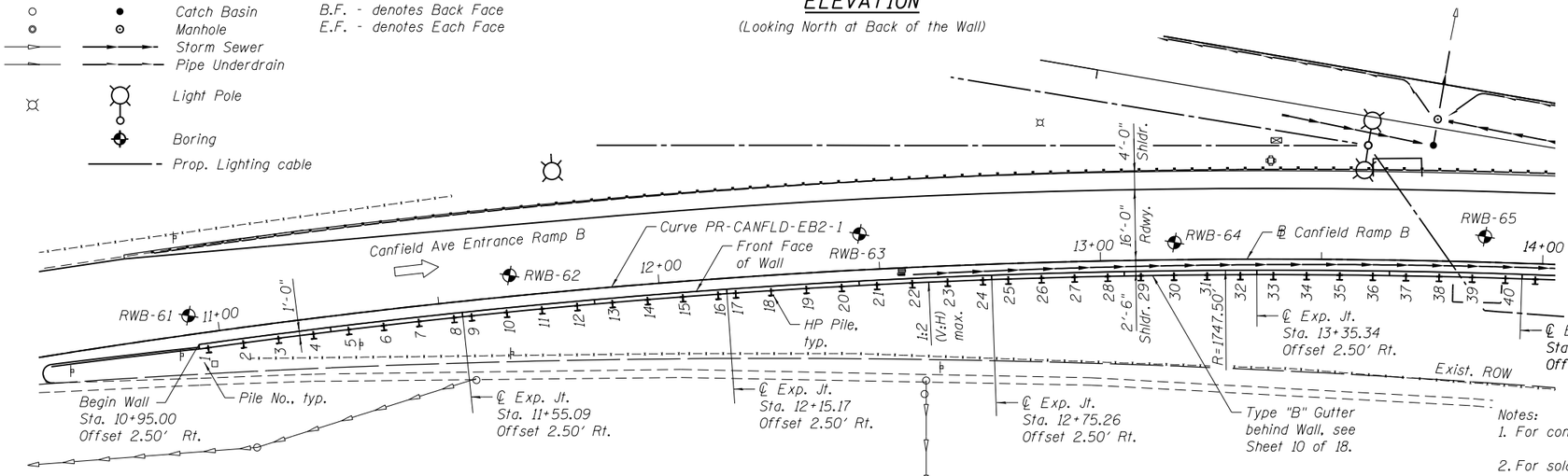
LEGEND:

Existing	Proposed	
▭	▬	Inlet
○	●	Catch Basin
◎	◉	Manhole
——▷	——▶	Storm Sewer
——▷	——▶	Pipe Underdrain
☼		Light Pole
	⊕	Boring
	——	Prop. Lighting cable

F.F. - denotes Front Face
B.F. - denotes Back Face
E.F. - denotes Each Face

ELEVATION

(Looking North at Back of the Wall)



PLAN

GENERAL NOTES

Offsets are measured from ℄ Canfield Ramp B to Front Face of wall.

Reinforcement bars designated (E) shall be epoxy coated.

Stations and Offsets are from ℄ Canfield Ramp B.

For roadway drainage, see proposed drainage plans.

INDEX OF SHEETS

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structure Excavation	Cu Yd	1,090
Concrete Structures	Cu Yd	348.9
Protective Coat	Sq Yd	918
Stud Shear Connectors	Each	1,390
Reinforcement Bars, Epoxy Coated	Pound	50,070
Furnishing Soldier Piles (HP Section)	Foot	4,943
Furnishing Soldier Piles (W Section)	Foot	48
Driving Soldier Piles	Foot	4,943
Drilling and Setting Soldier Piles (in Soil)	Cu Ft	339
Untreated Timber Lagging	Sq Ft	6,733
Geocomposite Wall Drain	Sq Yd	437
Pipe Underdrains for Structures 4"	Foot	1,194

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

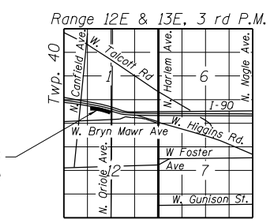
DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition, with 2015 Interim Revisions

STATE OF ILLINOIS
MATHEW R. INGRAM
081-007635
MORTON GROVE ILLINOIS
LICENSED STRUCTURAL ENGINEER

Signed:
Date:
Exp: 11/30/2016
Sheets: S-1 thru S-18

Notes:
1. For continuation, see Sheet 2 of 18.
2. For soldier pile data, see Sheets 3 thru 7 of 18.
3. For curve data, see Sheet 2 of 18.
4. Piles to be placed with flanges parallel to wall.



LOCATION SKETCH

HNTB

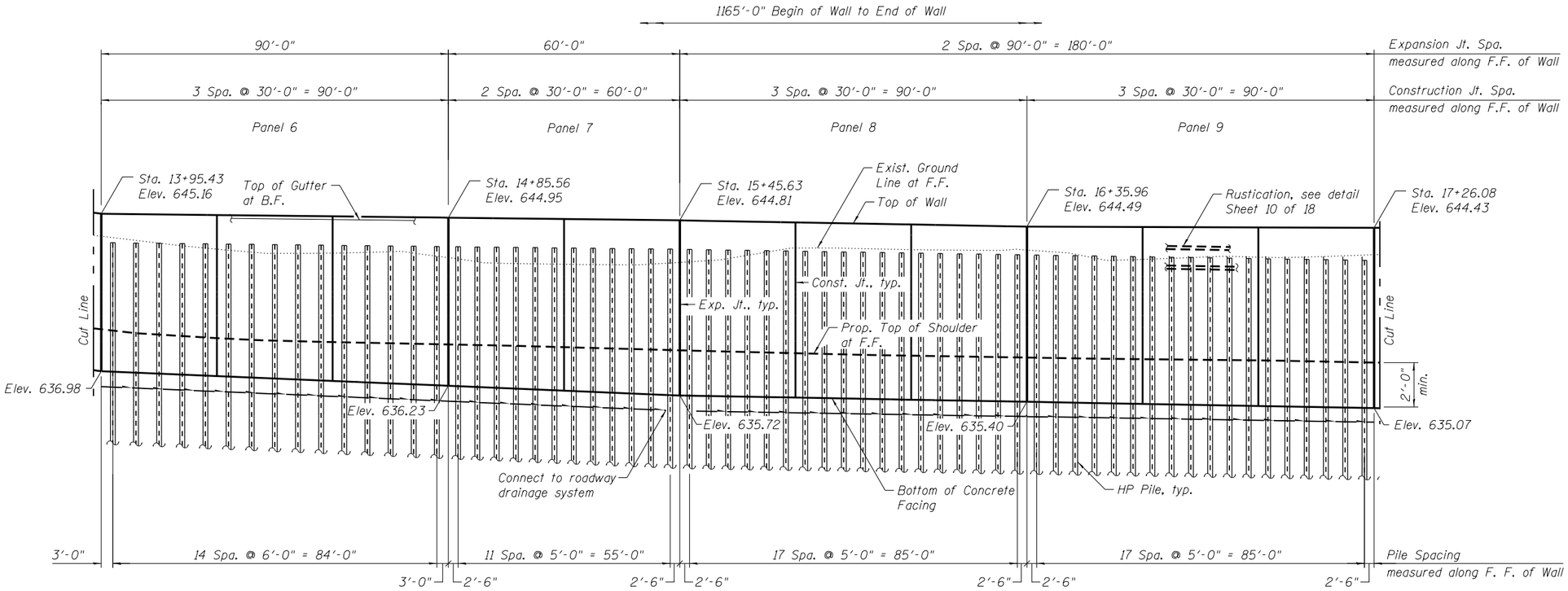
USER NAME = lkalita	DESIGNED	MRI	REVISED
	CHECKED	MLK	REVISED
PLOT SCALE = 0.166666 ' / in.	DRAWN	LK	REVISED
PLOT DATE = 6/6/2016	DATE	5/6/2016	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RETAINING WALL 2 PLAN & ELEVATION - 1
STRUCTURE NO. 016-Z034
SHEET NO. 1 OF 18 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	386
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z034-60Y38-001-GPE01.dgn



ELEVATION

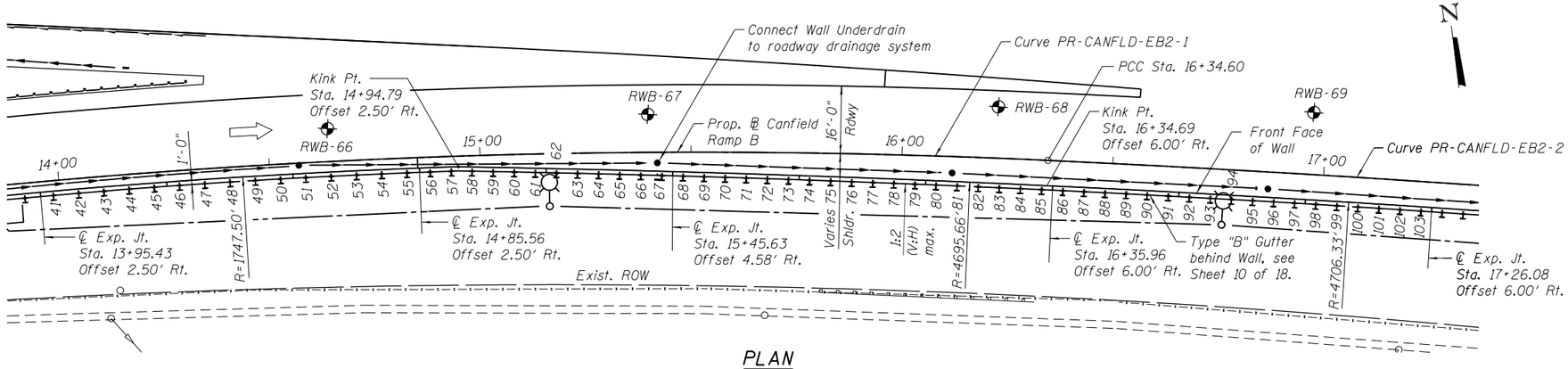
(Looking North at Back of the Wall)

CURVE DATA PR-CANFLD-EB2-1

PI Sta. = 13+20.82
Δ = 20° 46' 37" (Rt)
D = 3° 16' 27"
R = 1,750.00'
T = 320.82'
L = 634.60'
E = 29.16'
e = 4.60%
T.R. = 64
S.E. Run = 154
P.C. Sta. = 10+00.00
P.C.C. Sta. = 16+34.60

CURVE DATA PR-CANFLD-EB2-2

PI STA. = 19+04.47
Δ = 6° 33' 20" (Rt)
D = 1° 12' 57"
R = 4,712.33'
T = 269.88'
L = 539.16'
E = 7.72'
e = 3.00%
T.R. = N/A
S.E. Run = 95
P.C.C. Sta. = 16+34.60
P.T. Sta. = 21+73.76



PLAN

N

Notes:
1. For Legend and Notes, see Sheet 1 of 18.
2. For continuation, see Sheet 3 of 18.

HNTB	USER NAME = lkalita	DESIGNED MRI	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RETAINING WALL 2 PLAN & ELEVATION – 2 STRUCTURE NO. 016-Z034
		CHECKED MLK	REVISED		
	PLOT SCALE = 0.16667 ' / in.	DRAWN LK	REVISED		SHEET NO. 2 OF 18 SHEETS
	PLOT DATE = 6/6/2016	DATE 5/6/2016	REVISED		

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	387
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

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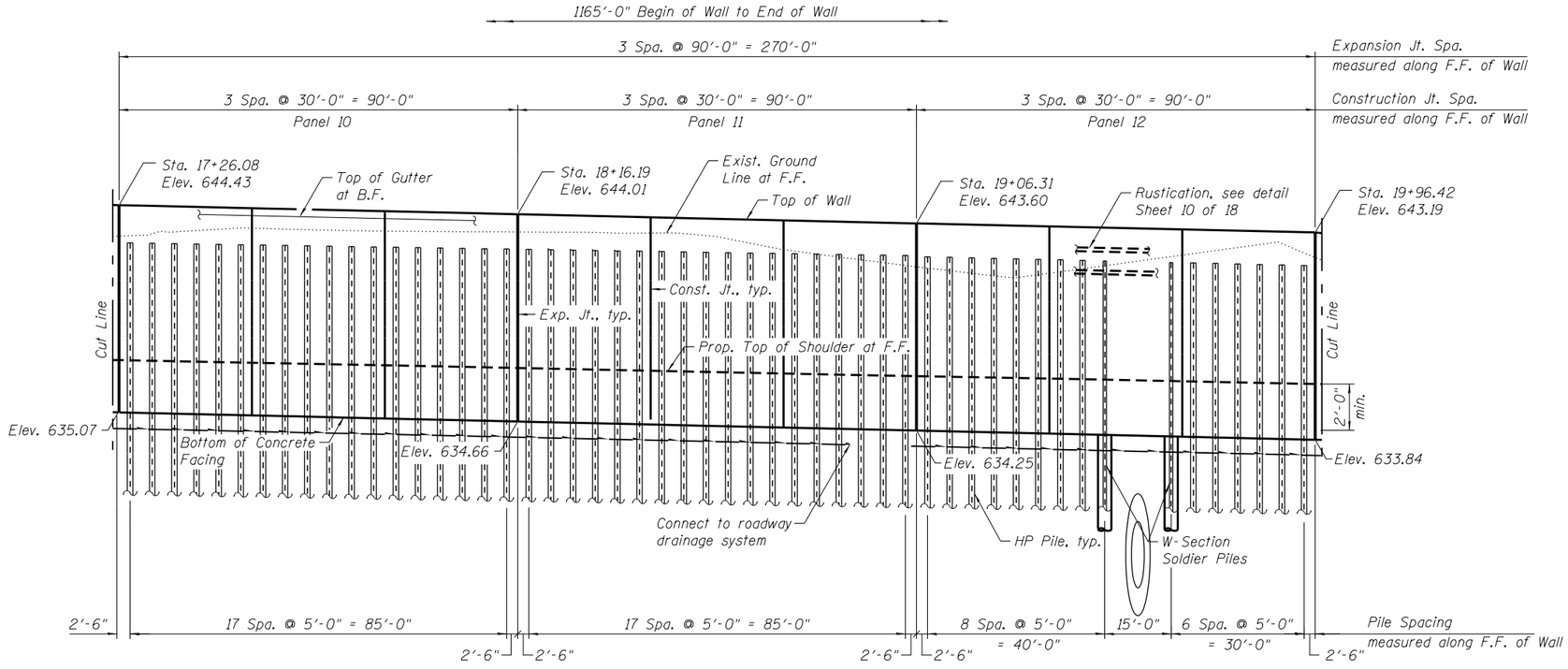
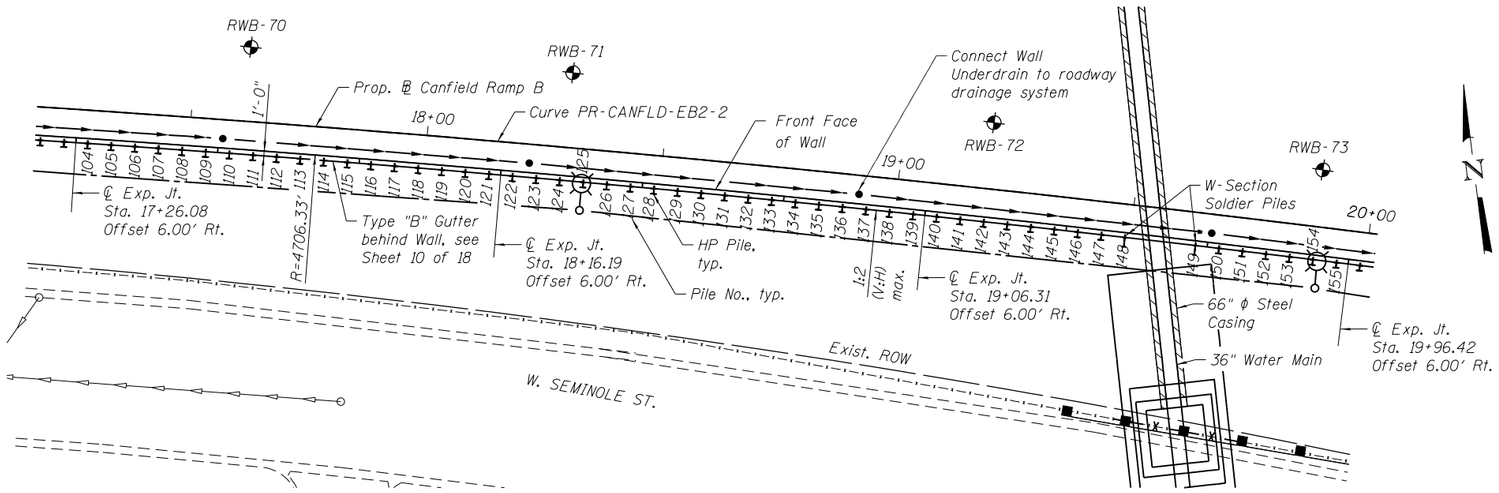


ELEVATION

(Looking North at Back of the Wall)



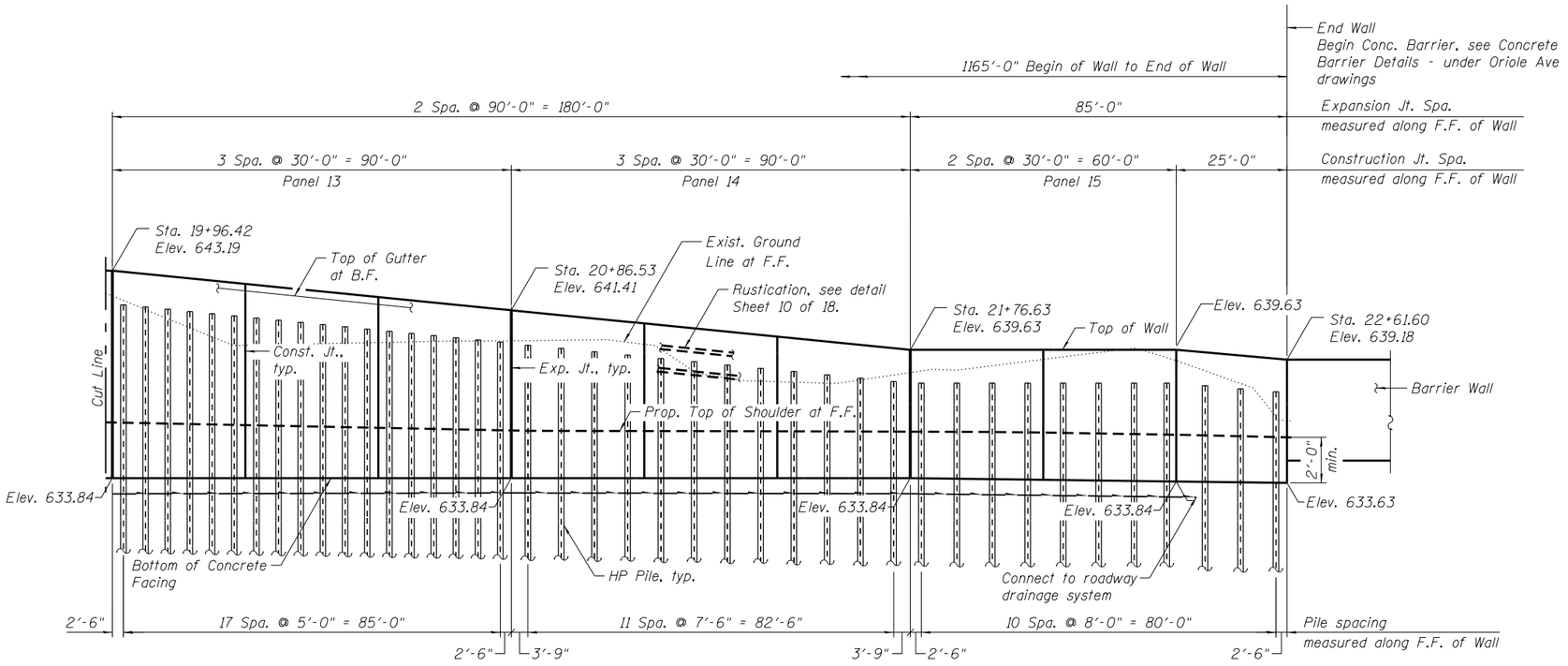
PLAN

Notes:

1. For continuation, see Sheet 4 of 18.
2. For curve data, see Sheet 2 of 18.
3. For Legend and Notes, see Sheet 1 of 18.
4. For W-Section Soldier Pile Details, see Sheet 11 of 18.

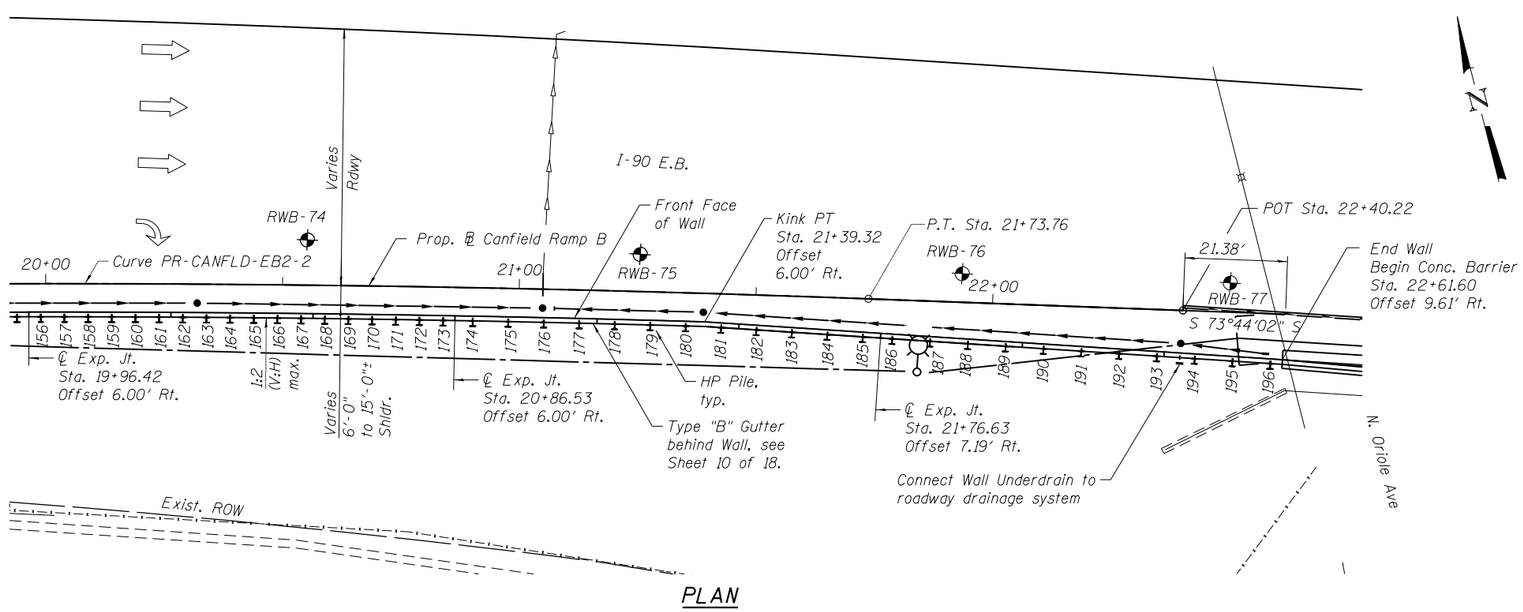
PILE TABLE

Pile No.	Size	Top Elev.	Bott. Elev.	Pile Length	Shear Stud
1	HP14x89	652.66	628.32	24.33	4
2	HP14x89	652.47	628.14	24.33	4
3	HP14x89	652.29	627.95	24.33	4
4	HP14x89	652.10	627.77	24.33	4
5	HP14x89	651.91	627.58	24.33	4
6	HP14x89	651.72	627.39	24.33	4
7	HP14x89	651.54	627.20	24.33	4
8	HP14x89	651.35	627.01	24.33	4
9	HP14x89	651.23	626.89	24.33	4
10	HP14x89	650.94	626.60	24.33	4
11	HP14x89	650.65	626.32	24.33	4
12	HP14x89	650.36	626.03	24.33	5
13	HP14x89	650.07	625.74	24.33	5
14	HP14x89	649.78	625.45	24.33	5
15	HP14x89	649.49	625.16	24.33	5
16	HP14x89	649.20	624.87	24.33	5
17	HP14x89	649.06	624.72	24.33	6
18	HP14x89	648.77	624.44	24.33	6
19	HP14x89	648.48	624.15	24.33	6
20	HP14x89	648.19	623.86	24.33	6
21	HP14x89	647.90	623.57	24.33	6
22	HP14x89	647.61	623.28	24.33	7
23	HP14x89	647.32	622.99	24.33	7
24	HP14x89	647.03	622.70	24.33	7
25	HP14x89	646.84	620.93	25.92	7
26	HP14x89	646.61	620.69	25.92	7
27	HP14x89	646.37	620.46	25.92	7
28	HP14x89	646.14	620.22	25.92	7
29	HP14x89	645.90	619.98	25.92	7
30	HP14x89	645.66	619.75	25.92	7
31	HP14x89	645.43	619.51	25.92	7
32	HP14x89	645.19	619.28	25.92	7
33	HP14x89	644.98	619.06	25.92	7
34	HP14x89	644.78	618.86	25.92	7
35	HP14x89	644.58	618.66	25.92	7
36	HP14x89	644.38	618.47	25.92	7
37	HP14x89	644.18	618.27	25.92	7
38	HP14x89	643.99	618.07	25.92	7
39	HP14x89	643.79	617.87	25.92	7
40	HP14x89	643.59	617.67	25.92	7
41	HP14x89	643.48	617.65	25.83	7
42	HP14x89	643.47	617.64	25.83	7
43	HP14x89	643.46	617.62	25.83	7
44	HP14x89	643.44	617.61	25.83	7
45	HP14x89	643.43	617.59	25.83	7
46	HP14x89	643.41	617.58	25.83	7
47	HP14x89	643.40	617.57	25.83	7
48	HP14x89	643.39	617.55	25.83	7
49	HP14x89	643.37	617.54	25.83	7
50	HP14x89	643.36	617.53	25.83	7
51	HP14x89	643.35	617.51	25.83	7
52	HP14x89	643.33	617.50	25.83	7
53	HP14x89	643.32	617.48	25.83	7
54	HP14x89	643.30	617.47	25.83	8
55	HP14x89	643.29	617.46	25.83	8



ELEVATION

(Looking North at Back of the Wall)



PLAN

PILE TABLE

Pile No.	Size	Top Elev.	Bott. Elev.	Pile Length	Shear Stud
56	HP14x89	643.28	617.61	25.67	8
57	HP14x89	643.27	617.60	25.67	8
58	HP14x89	643.25	617.59	25.67	8
59	HP14x89	643.24	617.58	25.67	8
60	HP14x89	643.23	617.57	25.67	8
61	HP14x89	643.22	617.55	25.67	8
62	HP14x89	643.21	617.54	25.67	8
63	HP14x89	643.20	617.53	25.67	8
64	HP14x89	643.19	617.52	25.67	8
65	HP14x89	643.17	617.51	25.67	8
66	HP14x89	643.16	617.50	25.67	8
67	HP14x89	643.15	617.48	25.67	8
68	HP14x89	643.14	617.47	25.67	8
69	HP14x89	643.12	617.45	25.67	8
70	HP14x89	643.10	617.43	25.67	8
71	HP14x89	643.08	617.42	25.67	8
72	HP14x89	643.06	617.40	25.67	8
73	HP14x89	643.05	617.38	25.67	8
74	HP14x89	643.03	617.36	25.67	8
75	HP14x89	643.01	617.34	25.67	8
76	HP14x89	642.99	617.33	25.67	8
77	HP14x89	642.97	617.31	25.67	8
78	HP14x89	642.96	617.29	25.67	8
79	HP14x89	642.94	617.27	25.67	8
80	HP14x89	642.92	617.25	25.67	8
81	HP14x89	642.90	617.24	25.67	8
82	HP14x89	642.88	617.22	25.67	8
83	HP14x89	642.87	617.20	25.67	8
84	HP14x89	642.85	617.18	25.67	8
85	HP14x89	642.83	617.16	25.67	8
86	HP14x89	642.81	617.14	25.67	8
87	HP14x89	642.81	617.14	25.67	8
88	HP14x89	642.81	617.14	25.67	8
89	HP14x89	642.81	617.14	25.67	8
90	HP14x89	642.81	617.14	25.67	8
91	HP14x89	642.80	617.13	25.67	8
92	HP14x89	642.80	617.13	25.67	8
93	HP14x89	642.80	617.13	25.67	8
94	HP14x89	642.79	617.12	25.67	8
95	HP14x89	642.79	617.12	25.67	8
96	HP14x89	642.79	617.12	25.67	8
97	HP14x89	642.78	617.11	25.67	8
98	HP14x89	642.78	617.11	25.67	8
99	HP14x89	642.78	617.11	25.67	8
100	HP14x89	642.77	617.10	25.67	8
101	HP14x89	642.77	617.10	25.67	8
102	HP14x89	642.77	617.10	25.67	8
103	HP14x89	642.76	617.10	25.67	8
104	HP14x89	642.75	617.08	25.67	8
105	HP14x89	642.73	617.06	25.67	8
106	HP14x89	642.70	617.04	25.67	8
107	HP14x89	642.68	617.01	25.67	8
108	HP14x89	642.66	616.99	25.67	8
109	HP14x89	642.63	616.97	25.67	8
110	HP14x89	642.61	616.94	25.67	8

Notes:
1. For Legend and Notes, see Sheet 1 of 18.

2. For curve data, see Sheet 2 of 18.

HNTB

USER NAME = lkalita	DESIGNED MRI	REVISED	
	CHECKED MLK	REVISED	
PLOT SCALE = 0.16667 ' / in.	DRAWN LK	REVISED	
PLOT DATE = 6/6/2016	DATE 5/6/2016	REVISED	

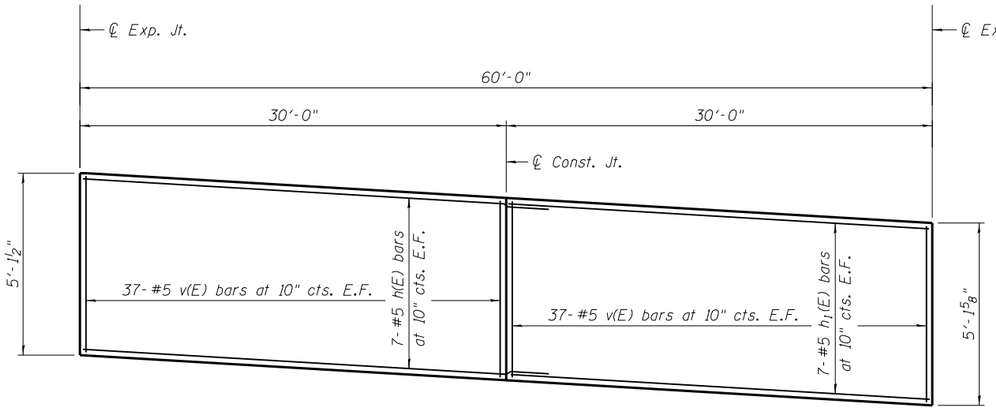
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RETAINING WALL 2 PLAN & ELEVATION – 4
STRUCTURE NO. 016-Z034

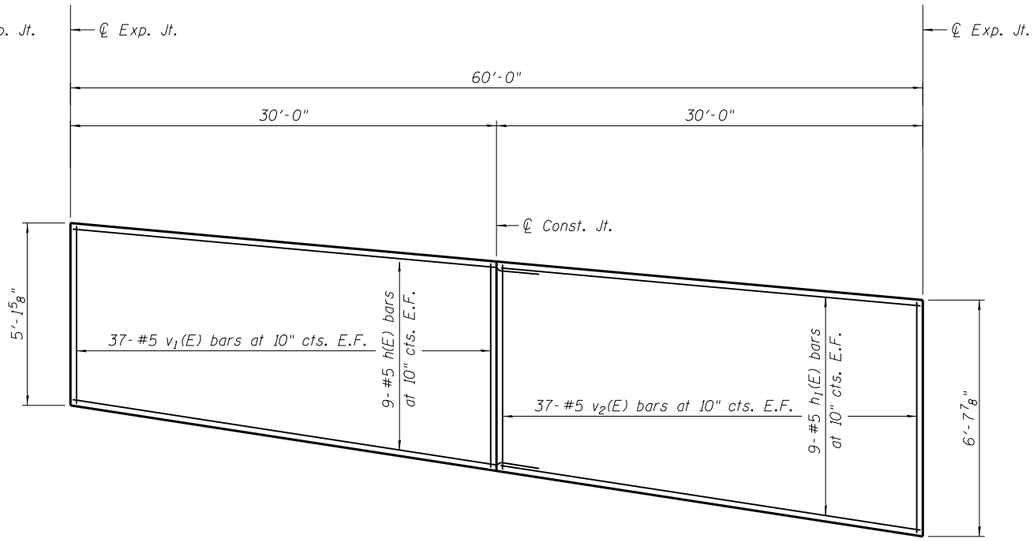
SHEET NO. 4 OF 18 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	389
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

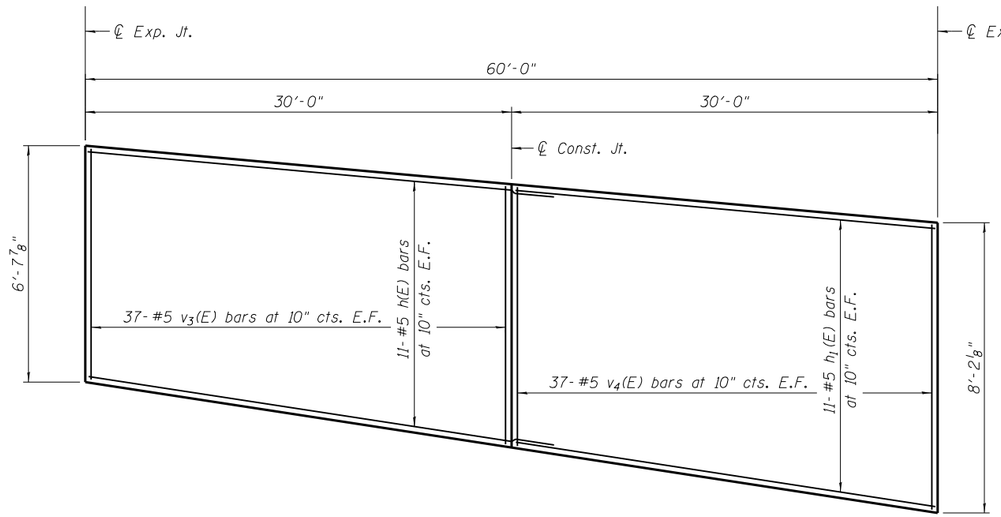
FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z034-60Y38-004-GPE04.dgn



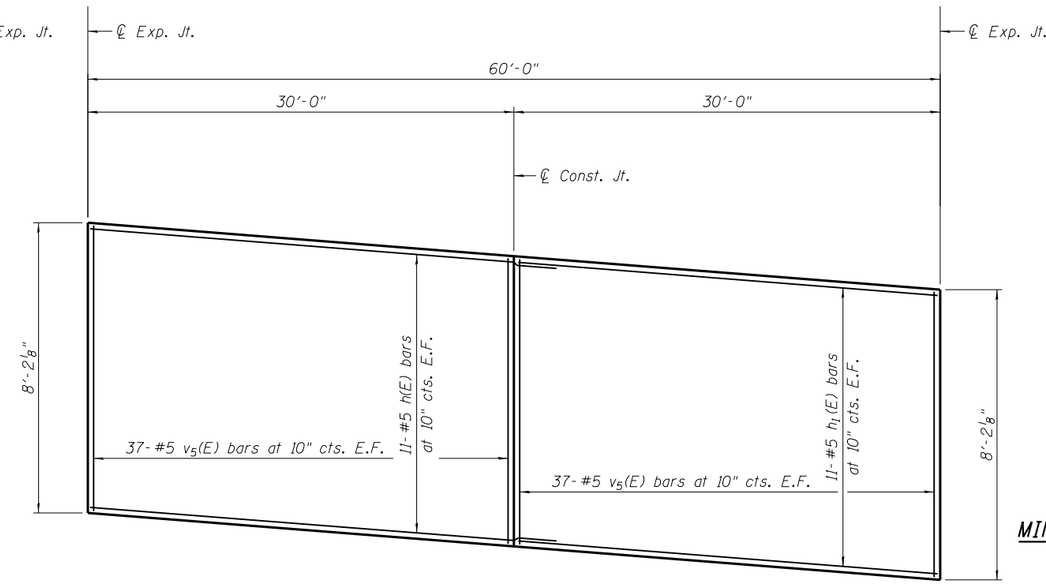
PANEL 1 ELEVATION



PANEL 2 ELEVATION



PANEL 3 ELEVATION



PANEL 4 AND 5 ELEVATION

MINIMUM BAR LAP

#5 bar = 3'-3"

Notes:

1. Panel types shown looking North at Back of the Wall.
2. Reinforcement spacing shown is to be used as maximum spacing.
3. For location of panels, see Sheets 1 thru 4 of 18.
4. For panel details and Bill of Material, see Sheet 10 of 18.
5. For typical driven pile detail, see Sheet 10 of 18.

HNTB

USER NAME = lkalita	DESIGNED MRI	REVISED	
	CHECKED MLK	REVISED	
PLOT SCALE = 0.08333 '/ in.	DRAWN LK	REVISED	
PLOT DATE = 5/2/2016	DATE 5/6/2016	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RETAINING WALL 2 DETAILS – 1
STRUCTURE NO. 016-Z034

SHEET NO. 5 OF 18 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	390
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

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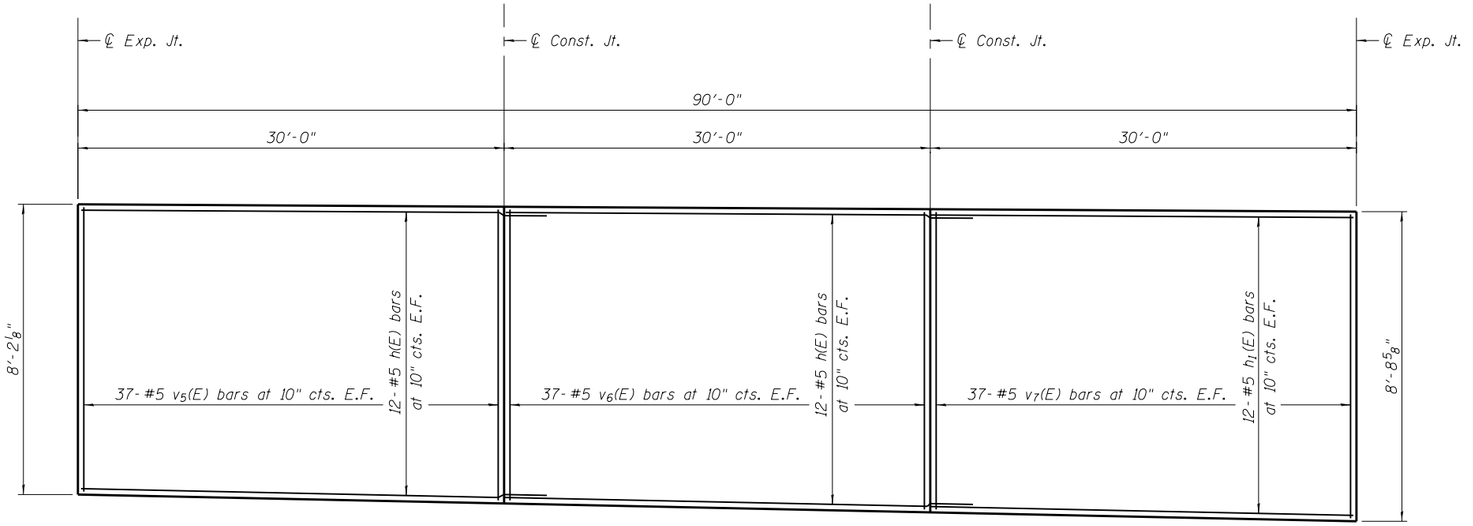
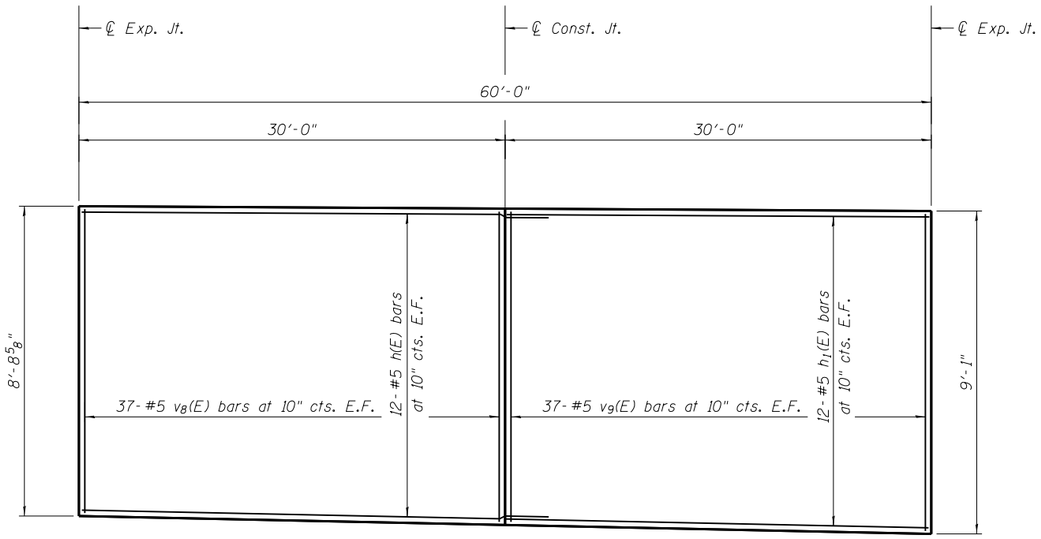


PANEL 6 ELEVATION



PANEL 7 ELEVATION

PILE TABLE

Pile No.	Size	Top Elev.	Bott. Elev.	Pile Length	Shear Stud
111	HP14x89	642.59	616.92	25.67	8
112	HP14x89	642.56	616.90	25.67	8
113	HP14x89	642.54	616.87	25.67	8
114	HP14x89	642.52	616.85	25.67	8
115	HP14x89	642.49	616.83	25.67	8
116	HP14x89	642.47	616.80	25.67	8
117	HP14x89	642.45	616.78	25.67	8
118	HP14x89	642.42	616.76	25.67	8
119	HP14x89	642.40	616.73	25.67	8
120	HP14x89	642.38	616.71	25.67	8
121	HP14x89	642.35	616.69	25.67	8
122	HP14x89	642.33	616.67	25.67	8
123	HP14x89	642.31	616.64	25.67	8
124	HP14x89	642.29	616.62	25.67	8
125	HP14x89	642.26	616.60	25.67	8
126	HP14x89	642.24	616.57	25.67	8
127	HP14x89	642.22	616.55	25.67	8
128	HP14x89	642.20	616.53	25.67	8
129	HP14x89	642.17	616.51	25.67	8
130	HP14x89	642.15	616.48	25.67	8
131	HP14x89	642.13	616.46	25.67	8
132	HP14x89	642.10	616.44	25.67	8
133	HP14x89	642.08	616.41	25.67	8
134	HP14x89	642.06	616.39	25.67	8
135	HP14x89	642.04	616.37	25.67	8
136	HP14x89	642.01	616.35	25.67	8
137	HP14x89	641.99	616.32	25.67	8
138	HP14x89	641.97	616.30	25.67	8
139	HP14x89	641.94	616.28	25.67	8
140	HP14x89	641.92	616.26	25.67	8
141	HP14x89	641.90	616.23	25.67	8
142	HP14x89	641.88	616.21	25.67	8
143	HP14x89	641.85	616.19	25.67	8
144	HP14x89	641.83	616.16	25.67	8
145	HP14x89	641.81	616.14	25.67	8
146	HP14x89	641.79	616.12	25.67	8
147	HP14x89	641.76	616.10	25.67	8
148	W27x76	641.74	617.82	23.92	8
149	W27x76	641.67	617.75	23.92	8
150	HP14x89	641.65	615.98	25.67	8
151	HP14x89	641.63	615.96	25.67	8
152	HP14x89	641.60	615.94	25.67	8
153	HP14x89	641.58	615.91	25.67	8
154	HP14x89	641.56	615.89	25.67	8
155	HP14x89	641.53	615.87	25.67	8
156	HP14x89	641.47	615.81	25.67	8
157	HP14x89	641.37	615.71	25.67	8
158	HP14x89	641.28	615.61	25.67	8
159	HP14x89	641.18	615.51	25.67	8
160	HP14x89	641.08	615.41	25.67	8
161	HP14x89	640.98	615.31	25.67	8
162	HP14x89	640.88	615.21	25.67	8
163	HP14x89	640.78	615.11	25.67	7
164	HP14x89	640.68	615.02	25.67	7
165	HP14x89	640.58	614.92	25.67	7

Notes:
1. For Notes, see Sheet 5 of 18.

HNTB

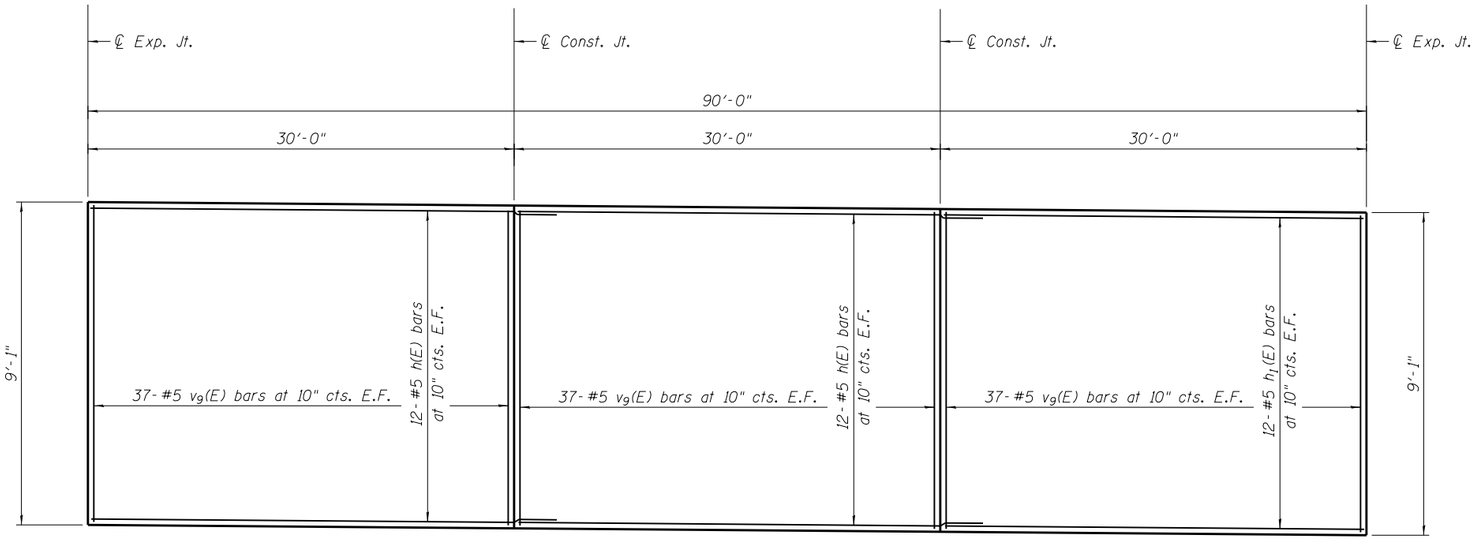
USER NAME = lkalita	DESIGNED MRI	REVISED
	CHECKED MLK	REVISED
PLOT SCALE = 0.166666 ' / in.	DRAWN LK	REVISED
PLOT DATE = 6/6/2016	DATE 5/6/2016	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

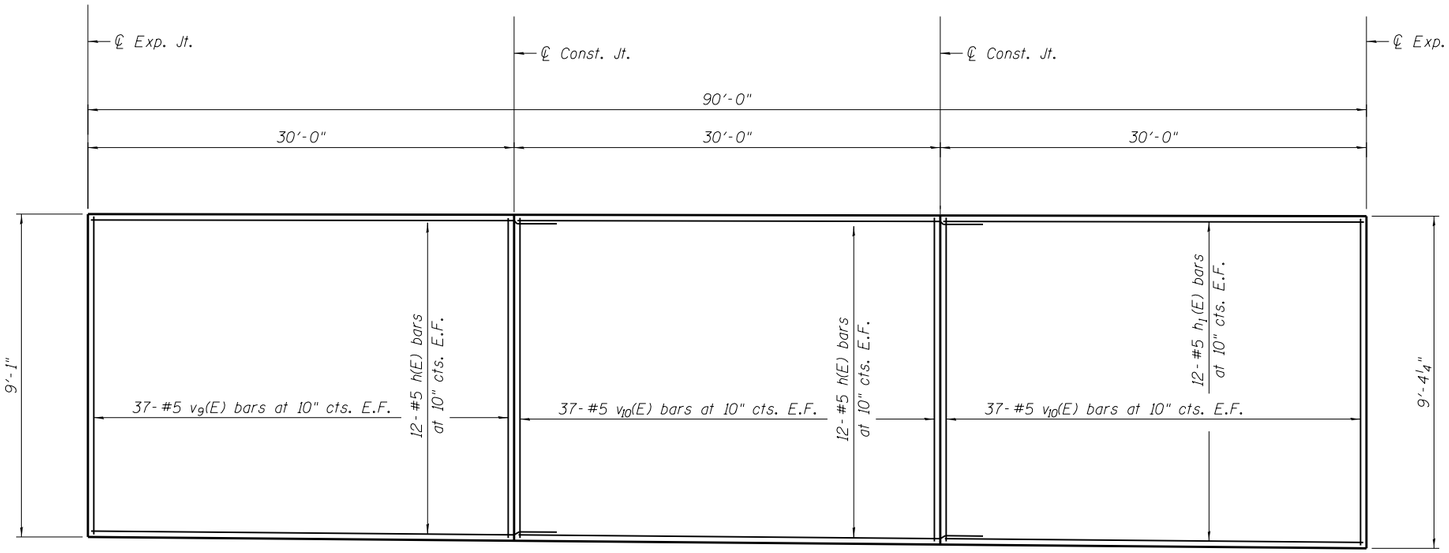
RETAINING WALL 2 DETAILS - 2
STRUCTURE NO. 016-Z034
SHEET NO. 6 OF 18 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	391
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z034-60Y38-006-DET02.dgn



PANEL 8 ELEVATION

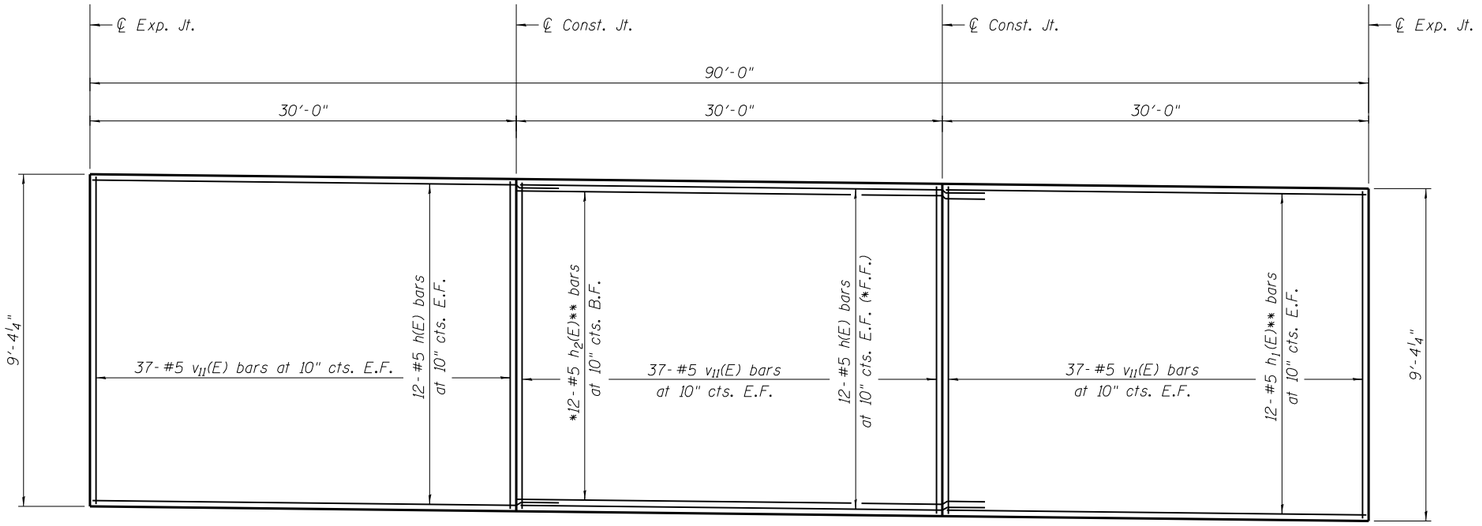


PANEL 9 ELEVATION

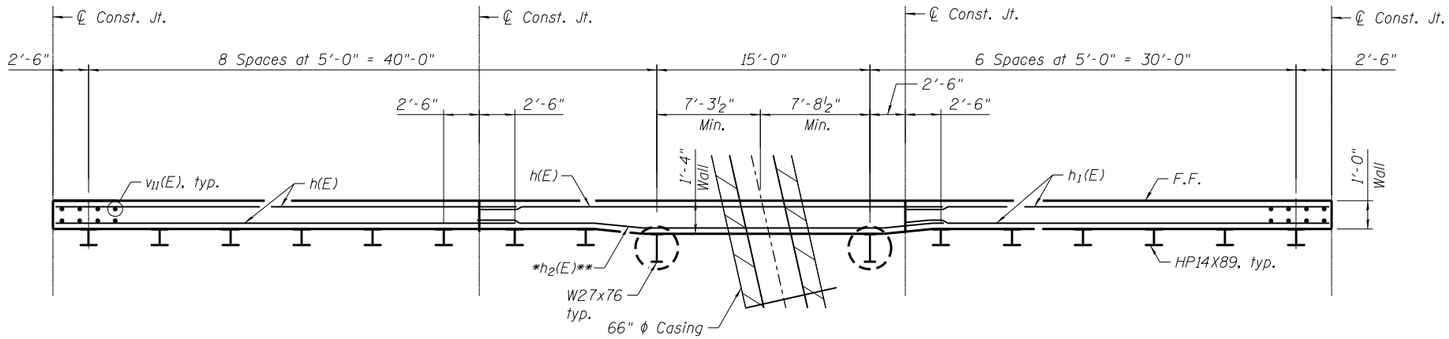
PILE TABLE

Pile No.	Size	Top Elev.	Bott. Elev.	Pile Length	Shear Stud
166	HP14x89	640.48	614.82	25.67	7
167	HP14x89	640.39	614.72	25.67	7
168	HP14x89	640.29	614.62	25.67	7
169	HP14x89	640.19	614.52	25.67	7
170	HP14x89	640.09	614.42	25.67	7
171	HP14x89	639.99	614.32	25.67	7
172	HP14x89	639.89	614.22	25.67	7
173	HP14x89	639.79	614.12	25.67	6
174	HP14x89	639.67	613.75	25.92	6
175	HP14x89	639.52	613.60	25.92	6
176	HP14x89	639.37	613.46	25.92	6
177	HP14x89	639.22	613.31	25.92	6
178	HP14x89	639.08	613.16	25.92	6
179	HP14x89	638.93	613.01	25.92	6
180	HP14x89	638.78	612.86	25.92	5
181	HP14x89	638.63	612.71	25.92	5
182	HP14x89	638.48	612.57	25.92	5
183	HP14x89	638.33	612.42	25.92	5
184	HP14x89	638.19	612.27	25.92	5
185	HP14x89	638.04	612.12	25.92	5
186	HP14x89	637.96	613.63	24.33	5
187	HP14x89	637.96	613.63	24.33	5
188	HP14x89	637.96	613.63	24.33	5
189	HP14x89	637.96	613.63	24.33	5
190	HP14x89	637.96	613.63	24.33	5
191	HP14x89	637.96	613.63	24.33	5
192	HP14x89	637.96	613.63	24.33	5
193	HP14x89	637.96	613.63	24.33	5
194	HP14x89	637.84	613.51	24.33	5
195	HP14x89	637.70	613.37	24.33	5
196	HP14x89	637.56	613.22	24.33	4

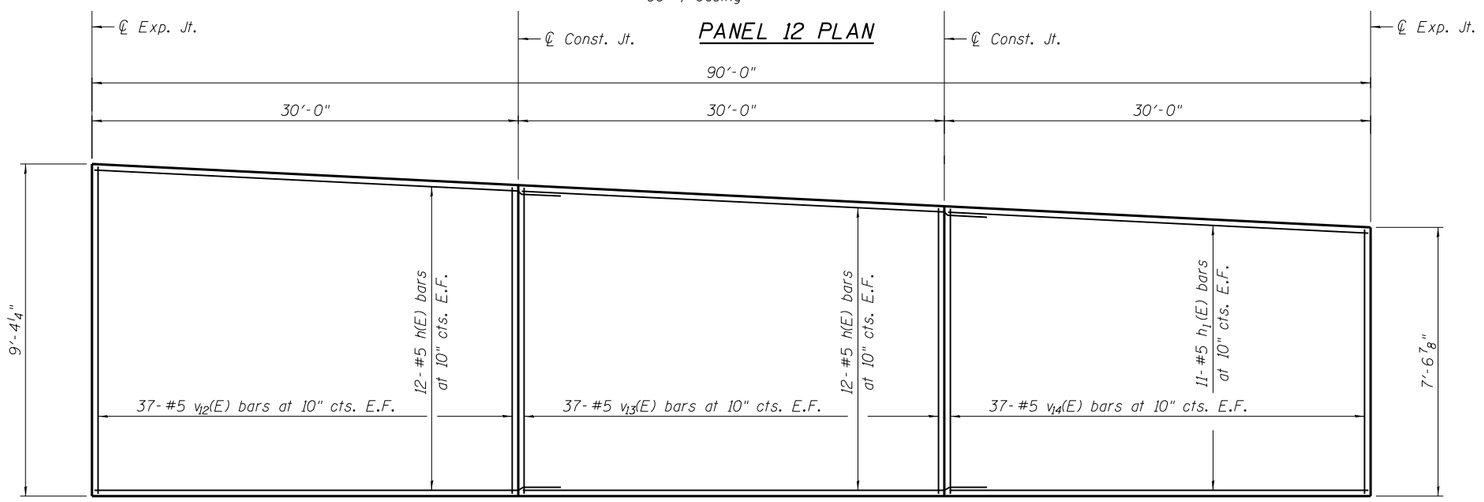
Notes:
1. For Notes, see Sheet 5 of 18.



PANEL 10, 11, AND 12 ELEVATION



PANEL 12 PLAN



PANEL 13 ELEVATION

* Panel 12 only

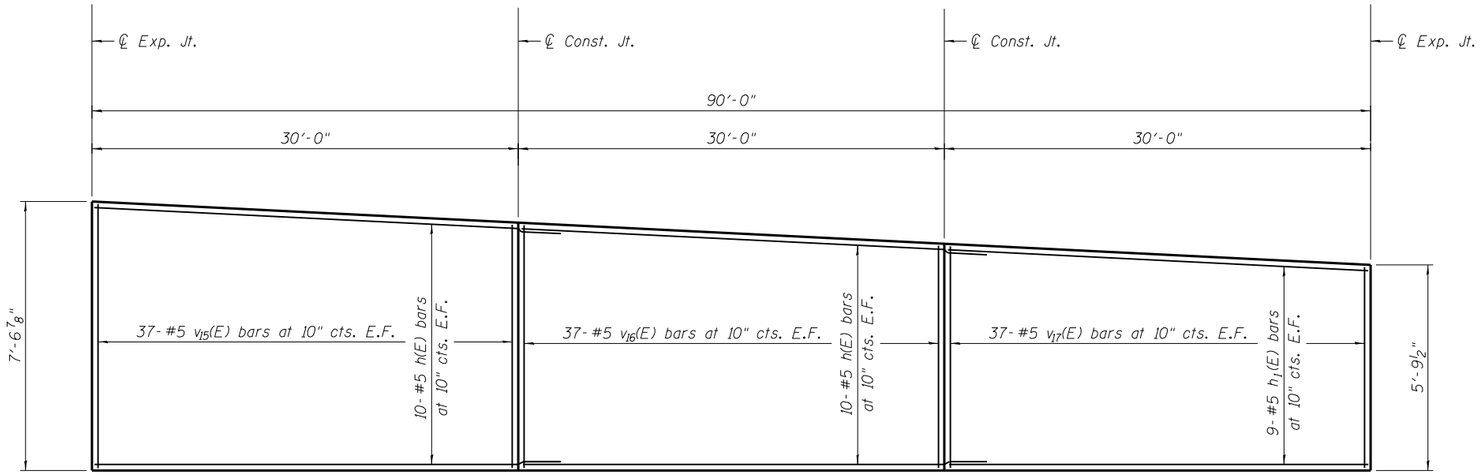
** Bend bars to fit in as required

Notes:
1. For Notes, see Sheet 5 of 18.
2. For detail at drilled soldier piles, see Sheet 11 of 18.

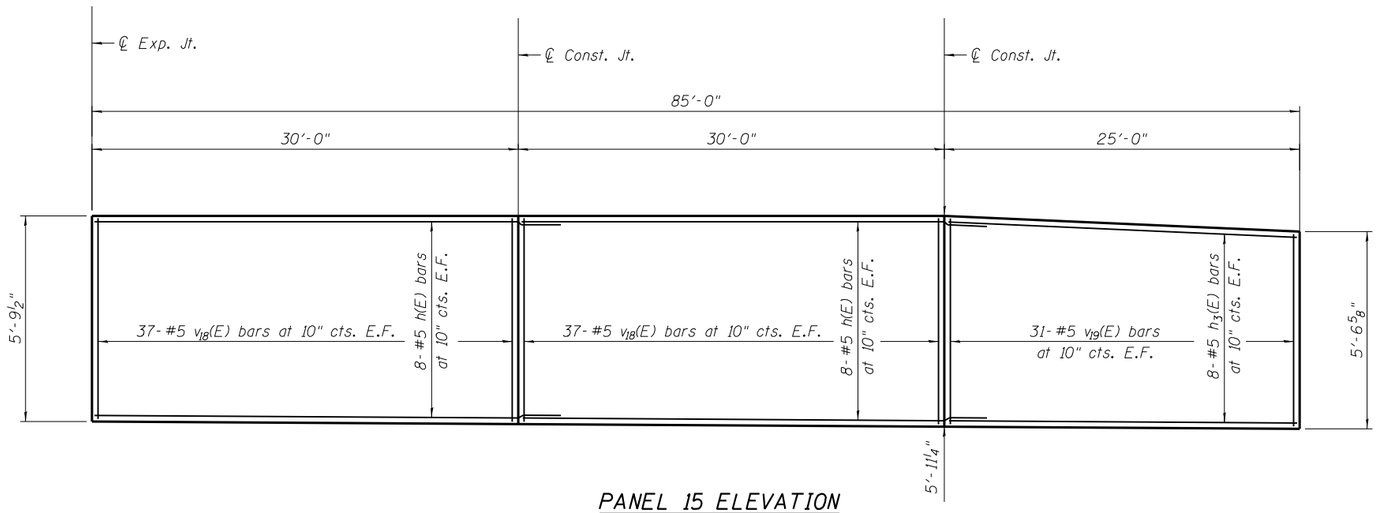
HNTB	USER NAME = lkalita	DESIGNED MRI	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RETAINING WALL 2 DETAILS – 4 STRUCTURE NO. 016–Z034
		CHECKED MLK	REVISED		
	PLOT SCALE = 0.08333 ' / in.	DRAWN LK	REVISED		SHEET NO. 8 OF 18 SHEETS
	PLOT DATE = 5/2/2016	DATE 5/6/2016	REVISED		

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	393
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z034-60Y38-008-DET04.dgn



PANEL 14 ELEVATION



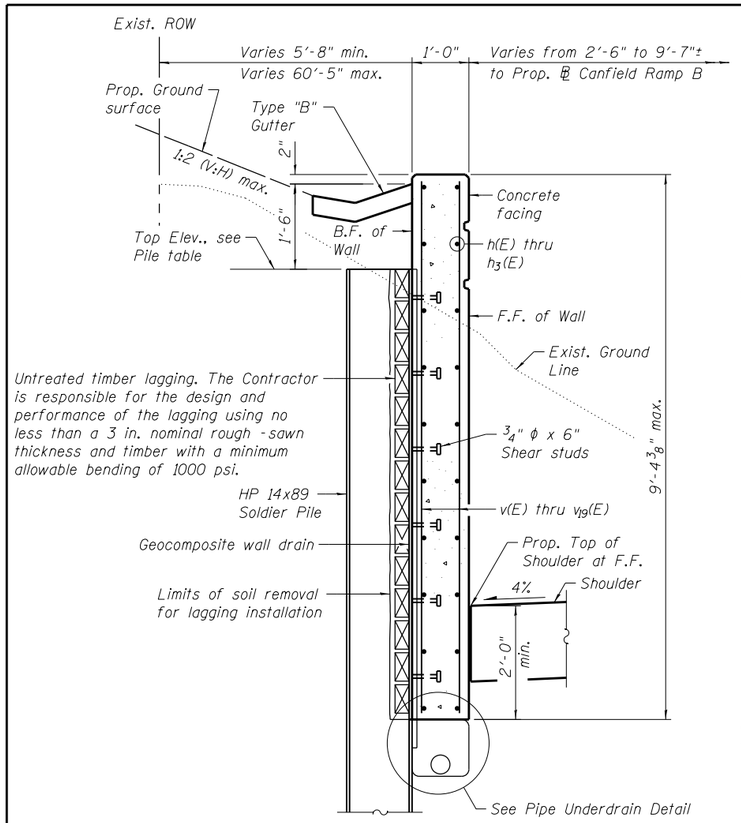
PANEL 15 ELEVATION

Notes:
1. For Notes, see Sheet 5 of 18.

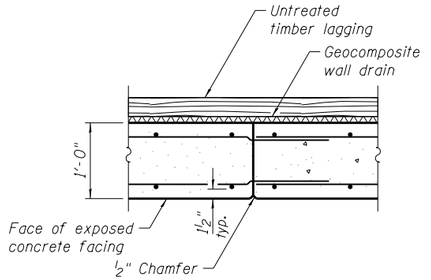
HNTB	USER NAME = lkalita	DESIGNED MRI	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RETAINING WALL 2 DETAILS – 5 STRUCTURE NO. 016–Z034
		CHECKED MLK	REVISED		
	PLOT SCALE = 0.08333 ' / in.	DRAWN LK	REVISED		SHEET NO. 9 OF 18 SHEETS
	PLOT DATE = 5/2/2016	DATE 5/6/2016	REVISED		

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	394
		CONTRACT NO. 60Y38		
	ILLINOIS	FED. AID PROJECT		

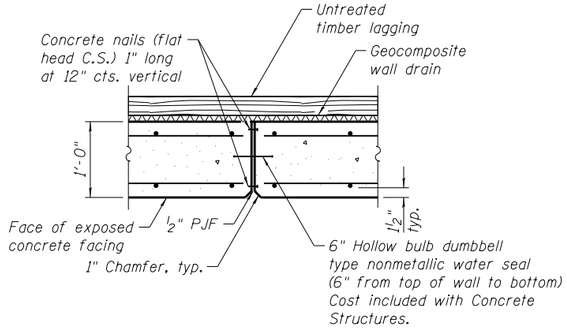
FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z034-60Y38-009-DET05.dgn



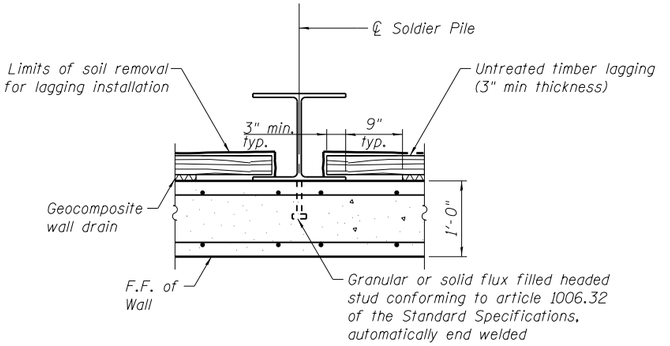
SECTION THRU DRIVEN SOLDIER PILE WALL AT SOLDIER PILE



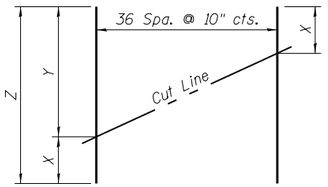
CONSTRUCTION JOIN



EXPANSION JOINT



SECTION THRU SOLDIER PILE

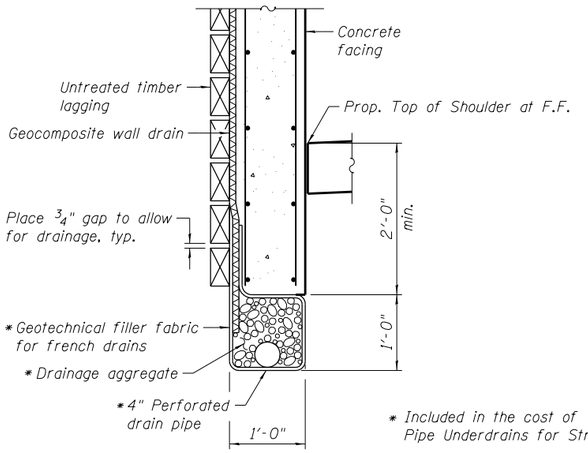


FIELD CUTTING DIAGRAM

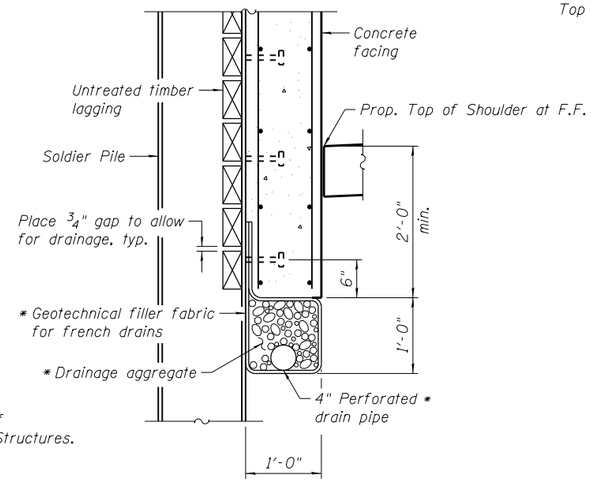
Order $v_1(E)$, $v_2(E)$, $v_3(E)$, $v_4(E)$, $V_{12}(E)$, $V_{13}(E)$, $V_{14}(E)$, $V_{15}(E)$, $V_{16}(E)$, and $V_{17}(E)$ bars full length. Cut as shown and use remainder of bars in opposite face.

WALL 2 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	518	#5	33'-1"	
$h_1(E)$	306	#5	29'-9"	
$h_2(E)$	12	#5	33'-4"	
$h_3(E)$	16	#5	24'-9"	
v(E)	148	#5	4'-9"	
$v_1(E)$	37	#5	10'-3"	
$v_2(E)$	37	#5	11'-9"	
$v_3(E)$	37	#5	13'-4"	
$v_4(E)$	37	#5	14'-11"	
$v_5(E)$	222	#5	7'-10"	
$v_6(E)$	74	#5	8'-0"	
$v_7(E)$	74	#5	8'-3"	
$v_8(E)$	74	#5	8'-5"	
$v_9(E)$	370	#5	8'-7"	
$v_{10}(E)$	148	#5	8'-10"	
$v_{11}(E)$	666	#5	9'-0"	
$v_{12}(E)$	37	#5	17'-5"	
$v_{13}(E)$	37	#5	16'-3"	
$v_{14}(E)$	37	#5	15'-1"	
$v_{15}(E)$	37	#5	13'-11"	
$v_{16}(E)$	37	#5	12'-8"	
$v_{17}(E)$	37	#5	11'-6"	
$v_{18}(E)$	148	#5	5'-6"	
$v_{19}(E)$	62	#5	5'-4"	
Reinforcement Bars, Epoxy Coated			Pound	50,070
Concrete Structures			Cu Yd	348.9



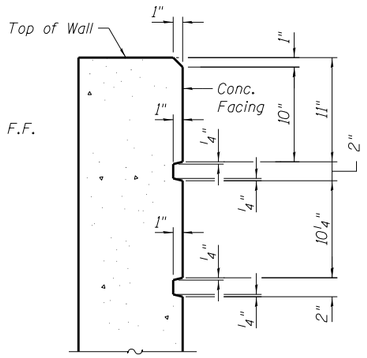
BETWEEN SOLDIER PILES



AT SOLDIER PILES

* Included in the cost of Pipe Underdrains for Structures.

UNDERDRAIN DETAIL



RUSTICATION DETAIL AT TOP OF WALL

SCHEDULE

Bar	X	Y	Z	No. of Bars
$v_1(E)$	4'-9"	5'-6"	10'-3"	37
$v_2(E)$	5'-6"	6'-3"	11'-9"	37
$v_3(E)$	6'-3"	7'-1"	13'-4"	37
$v_4(E)$	7'-1"	7'-10"	14'-11"	37
$v_{12}(E)$	9'-0"	8'-5"	17'-5"	37
$v_{13}(E)$	8'-5"	7'-10"	16'-3"	37
$v_{14}(E)$	7'-10"	7'-3"	15'-1"	37
$v_{15}(E)$	7'-3"	6'-8"	13'-11"	37
$v_{16}(E)$	6'-8"	6'-0"	12'-8"	37
$v_{17}(E)$	6'-0"	5'-6"	11'-6"	37

Notes:
1. For panel reinforcement, see Sheets 5-9 of 18.
2. Slope underdrain to outlet to designated locations.
3. Protective Coat to be applied to all exposed concrete.

HNTB

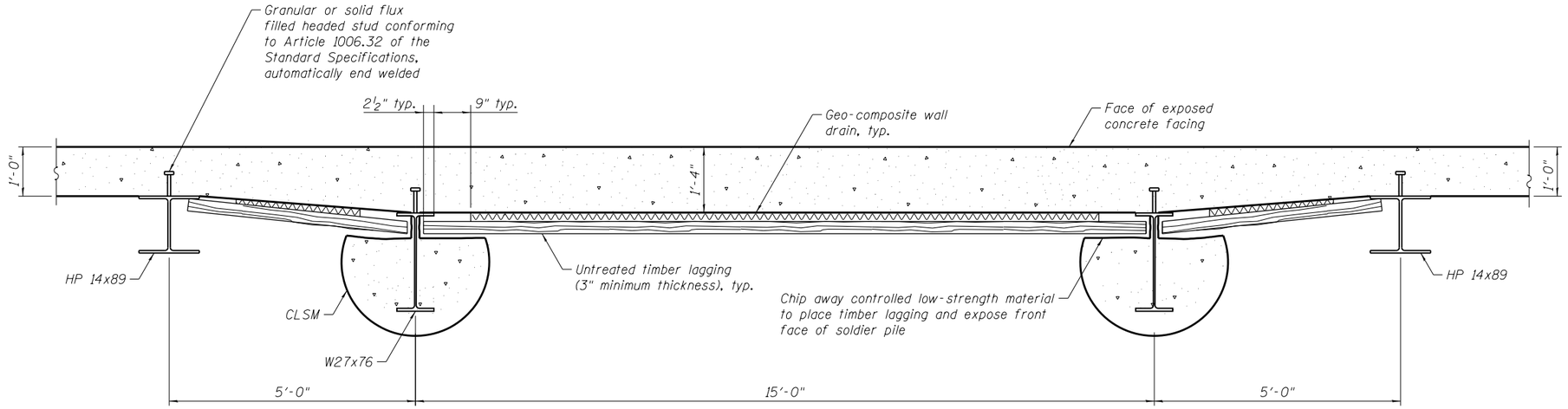
USER NAME = lkalita	DESIGNED MRI	REVISED	
	CHECKED MLK	REVISED	
PLOT SCALE = 02.0000 '' / in.	DRAWN LK	REVISED	
PLOT DATE = 6/6/2016	DATE 5/6/2016	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

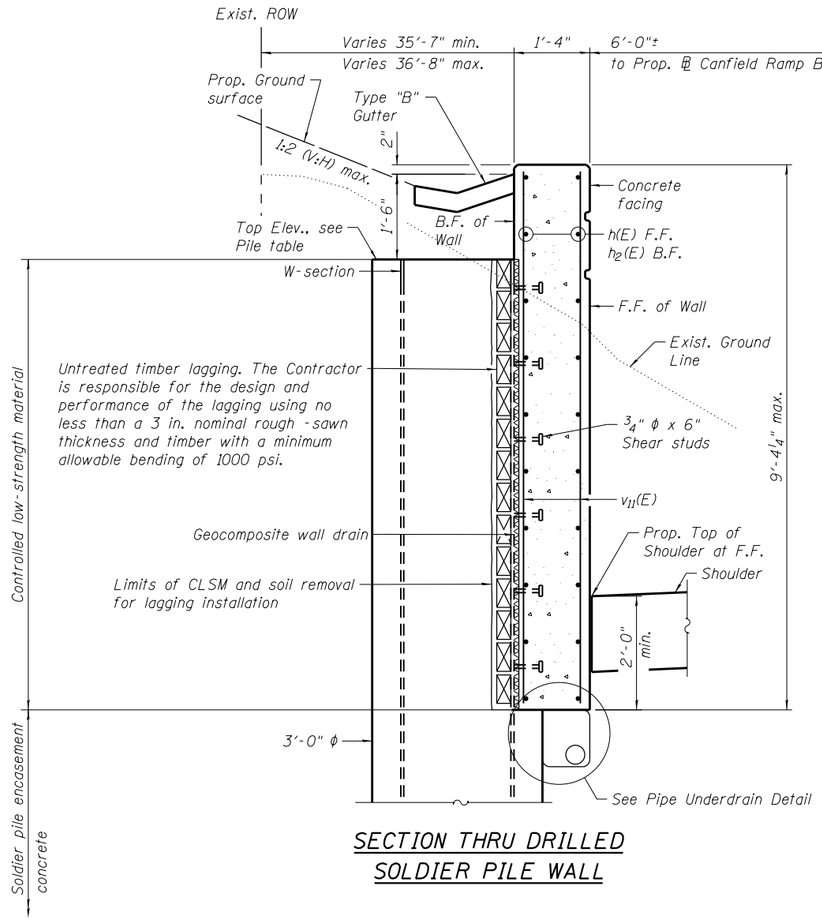
RETAINING WALL 2 DETAILS – 6
STRUCTURE NO. 016-Z034
SHEET NO. 10 OF 18 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	395
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

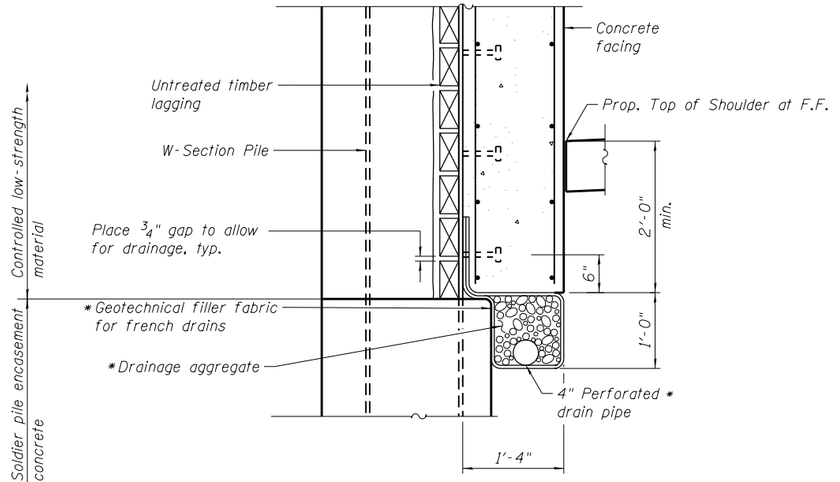
FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z034-60Y38-010-DET06.dgn



DETAILED PLAN AT DRILLED SOLDIER PILES



SECTION THRU DRILLED SOLDIER PILE WALL



UNDERDRAIN DETAIL AT DRILLED SOLDIER PILES

* Included in the cost of Pipe Underdrains for structures.

Notes:

1. Drilled soldier piles are located in Panel 12 at the locations of W-sections.
2. For Underdrain detail between soldier piles, see Sheet 10 of 18.
3. For Panel 12 reinforcement, see sheet 8 of 18.
4. Protective coat to be applied to all exposed concrete.

USER NAME = lkalita	DESIGNED MRI	REVISED	
	CHECKED MLK	REVISED	
PLOT SCALE = 0:2.0000 ':' / in.	DRAWN LK	REVISED	
PLOT DATE = 6/6/2016	DATE 5/6/2016	REVISED	

HNTB

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RETAINING WALL 2 DETAILS – 7
STRUCTURE NO. 016-Z034
SHEET NO. 11 OF 18 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	396
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.orgiPWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z034-60Y38-011-DET07.dgn

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Jamieson Court, Suite 204
Naperville, Illinois 60565
(630) 355-2688

GSI Job No. 12245

SOIL BORING LOG

Page 1 of 1

Date 10/28/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY JZ

SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station

BORING NO. RWB-61
Station 3081+69
Offset 173.50ft Right
Ground Surface Elev. 653.90 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4.0" ASPHALT 653.57			
10.0" CONCRETE 652.73			
CLAY LOAM-brown-hard	5		
	13		7
	14		
	7		
-5	9	7.9	18
	11	B	
	4		
	6	6.6	18
	11	B	
	4		
	6	6.3	18
-10	8	B	
643.40 CLAY-gray-very stiff			
	3		
	6	3.3	20
	7	B	
640.90 SILT-gray-medium dense			
	3		
-15	5		20
	6		
638.40 CLAY to CLAY LOAM-gray-stiff to very stiff			
	3		
	4	2.4	22
	6	B	
	3		
-20	5	1.9	20
	5	B	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY to CLAY LOAM-gray-stiff to very stiff *(continued)*			
	3		
	5	1.9	18
	6	B	
	3		
-25	4	1.3	14
628.90	5	B	
End Of Boring @ -25.0'. Boring backfilled with cuttings.			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Z:\PROJECTS\2012\12245 HNTB, I-90 FROM I-190 TO HARLEM AVENUE (PTB 165-001)\12245 BORING LOGS\12245_LOG.GPJ 2/7/14

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Jamieson Court, Suite 204
Naperville, Illinois 60565
(630) 355-2688

GSI Job No. 12245

SOIL BORING LOG

Page 1 of 1

Date 10/28/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY JZ

SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station

BORING NO. RWB-62
Station 3082+69
Offset 152.30ft Right
Ground Surface Elev. 652.00 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4.5" ASPHALT 651.63			
10.0" CONCRETE 650.79			
CLAY-brown & gray-stiff to hard	3		
	4		8
	4		
	2		
-5	7	4.2	19
	10	B	
	3		
	6	4.7	20
	8	B	
	4		
	7	5.9	19
-10	12	B	
becoming gray @ -13.0'			
	3		
	4	2.4	21
	6	B	
	3		
-15	4	1.9	22
	5	B	
	3		
	5	2.7	20
	6	B	
	3		
-20	5	2.1	20
	6	B	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY-brown & gray-stiff to hard *(continued)*			
	3		
	6	2.3	21
	6	B	
	3		
-25	6	2.1	21
627.00	7	B	
End Of Boring @ -25.0'. Boring backfilled with cuttings.			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Z:\PROJECTS\2012\12245 HNTB, I-90 FROM I-190 TO HARLEM AVENUE (PTB 165-001)\12245 BORING LOGS\12245_LOG.GPJ 2/7/14

Geo Services, Inc.
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GSI Job No. 12245

SOIL BORING LOG

Page 1 of 1

Date 10/28/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY JZ

SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station

BORING NO. RWB-63
Station 3083+45
Offset 129.70ft Right
Ground Surface Elev. 649.00 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
6.0" ASPHALT 648.50			
7.0" CONCRETE 647.92			
CLAY-brown & gray-stiff to hard	3		
	3		20
	3		
	3		
-5	6	6.4	19
	9	B	
becoming gray @ -5.5'			
	4		
	6	3.6	19
	9	B	
	3		
	5	2.6	21
-10	5	B	
	3		
	5	2.1	21
	7	B	
	3		
-15	4	2.1	21
	6	B	
	3		
	4	1.7	22
	5	B	
	3		
-20	5	1.3	22
	6	B	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY-brown & gray-stiff to hard *(continued)*			
	3		
	4	2.0	22
	6	B	
	3		
-25	4	1.1	20
624.00	5	B	
End Of Boring @ -25.0'. Boring backfilled with cuttings.			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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Notes:
1. For location of soil boring, see Sheet 1 of 18.

HNTB

USER NAME = lkalita	DESIGNED --		REVISED
	CHECKED --		REVISED
PLOT SCALE = 01 '-' / in.	DRAWN LK		REVISED
PLOT DATE = 5/2/2016	DATE 5/6/2016		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS – 1
STRUCTURE NO. 016–Z034
SHEET NO. 12 OF 18 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	397
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z034-60Y38-012-BOR01.dgn

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 10/29/13

ROUTE -- **DESCRIPTION** I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) **LOGGED BY** JZ
SECTION -- **LOCATION** SW 1/4, **SEC.** 1, **TWP.** T40N, **RNG.** R12E, 3rd **PM**
COUNTY Cook **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-64
Station 3084+16
Offset 119.60ft Right
Ground Surface Elev. 646.60 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ **Hrs.** ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
646.14 5.5" ASPHALT			
645.56 7.0" CONCRETE			
CLAY-brown-stiff to very stiff	2		
	3		21
	3		
becoming gray @ -3.0'			
	3		
	4	3.7	20
-5	7	B	
	3		
	3	1.4	22
	4	B	
	2		
	3	1.6	20
-10	4	B	
	2		
	3	1.5	22
	5	B	
	2		
	4	2.2	22
-15	5	B	
	2		
	4	1.2	21
	5	B	
	2		
	4	1.2	18
-20	4	B	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY-brown-stiff to very stiff *(continued)*			
	3		
	4	1.9	17
	6	B	
	3		
	5	2.3	18
621.60 -25	7	B	
End Of Boring @ -25.0'. Boring backfilled with cuttings.			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 2
Date 10/29/13

ROUTE -- **DESCRIPTION** I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) **LOGGED BY** JZ
SECTION -- **LOCATION** SW 1/4, **SEC.** 1, **TWP.** T40N, **RNG.** R12E, 3rd **PM**
COUNTY Cook **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-65
Station 3084+85
Offset 106.40ft Right
Ground Surface Elev. 644.00 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 626.5 ft ▼
Upon Completion Dry ft
After ____ **Hrs.** ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
643.38 7.5" ASPHALT			
642.71 8.0" CONCRETE	2		
SANDY CLAY LOAM-gray-very loose (Fill)	2		19
641.00 CLAY-gray-stiff to very stiff	2		
	3	2.2	22
-5	4	B	
	3		
	4	2.1	21
	5	B	
	3		
	4	2.6	21
-10	6	B	
	2		
	3	1.9	19
	4	B	
631.00 CLAY LOAM-gray-stiff	2		
	3	1.3	14
-15	5	B	
628.50 CLAY-gray-stiff to very stiff	2		
▼	4	1.3	20
	5	B	
	3		
	4	1.4	24
-20	4	B	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY-gray-stiff to very stiff *(continued)*			
	3		
	5	2.2	19
-25	7	B	
	5		
	6	3.5	19
	11	B	
	4		
	5	2.1	20
-30	8	B	
613.50 CLAY LOAM-gray-stiff to very stiff			
	4		
	6	2.2	15
-35	8	B	
	4		
	7	3.7	18
-40	7	B	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 12245
Page 2 of 2
Date 10/29/13

ROUTE -- **DESCRIPTION** I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) **LOGGED BY** JZ
SECTION -- **LOCATION** SW 1/4, **SEC.** 1, **TWP.** T40N, **RNG.** R12E, 3rd **PM**
COUNTY Cook **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-65
Station 3084+85
Offset 106.40ft Right
Ground Surface Elev. 644.00 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 626.5 ft ▼
Upon Completion Dry ft
After ____ **Hrs.** ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY LOAM-gray-stiff to very stiff *(continued)*			
	3		
	6	1.9	19
	6	B	
	3		
	5	2.2	19
-25	7	B	
End Of Boring @ -45.0'. Boring backfilled with cuttings. 599.00			
-45	4	1.5	17
	6	B	
-50			
-55			
-60			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

Notes:
1. For location of soil boring, see Sheet 1 of 18.

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 10/29/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY JZ
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-66
Station 3085+61
Offset 95.10ft Right
Ground Surface Elev. 641.80 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
6.5" ASPHALT 641.26			
8.0" CONCRETE 640.59			
CLAY LOAM-brown & gray-stiff (Fill)	1		
	2		19
	2		
	2		
	3	1.4	14
-5	3	B	
636.30 CLAY-gray-stiff			
	2		
	4	1.5	21
	5	B	
	2		
	4	1.0	16
-10	4	B	
	2		
	3	1.2	19
	4	B	
	2		
	3	1.3	19
-15	5	B	
	2		
	3	1.0	23
	4	B	
	3		
	4	1.3	21
-20	6	B	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY-gray-stiff *(continued)*			
	3		
	4	1.5	22
	5	B	
616.80			
-25	4	1.8	22
	6	B	
End Of Boring @ -25.0'. Boring backfilled with cuttings.			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 10/24/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY JZ
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-67
Station 3086+38
Offset 87.90ft Right
Ground Surface Elev. 640.00 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
8.0" ASPHALT 639.33			
9.0" CONCRETE 638.58	2		
7.0" CRUSHED STONE-loose 638.00	3	2.5	18
CLAY-gray-stiff to very stiff	3	P	
	2		
	3	1.4	20
-5	3	B	
	2		
	4	1.6	22
	4	B	
	3		
	4	1.8	21
-10	5	B	
	3		
	3	1.4	22
	4	B	
	3		
	4	1.8	20
-15	5	B	
	3		
	4	1.5	21
	5	B	
	3		
	4	1.3	21
-20	5	B	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY-gray-stiff to very stiff *(continued)*			
	3		
	6	1.7	20
	6	B	
	4		
	5	1.6	21
615.00			
-25	7	B	
End Of Boring @ -25.0'. Boring backfilled with cuttings.			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 10/24/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY JZ
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-68
Station 3087+22
Offset 80.80ft Right
Ground Surface Elev. 638.90 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 620.4 ft ▼
Upon Completion 620.9 ft ▽
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
6.5" ASPHALT 638.36			
8.0" CONCRETE 637.69	4		
CRUSHED BRICK & STONE-loose 636.40	4		10
	3		
CLAY-gray-stiff	2		
	4		
	2	1.0	24
-5	2	P	
	6		
	4	1.2	23
	4	B	
	2		
	3	1.4	22
-10	5	B	
628.40 CLAY LOAM-gray-stiff			
	2		
	4	1.2	14
	5	B	
	2		
	3	1.2	16
-15	5	B	
	2		
	4	1.9	16
	5	B	
620.90▽ SILTY LOAM-gray-loose			
	4		
-20	5		15

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SILTY LOAM-gray-loose 618.40 *(continued)*			
CLAY-gray-stiff	3		
	4	1.2	19
	4	B	
	4		
	5	1.0	21
613.90			
-25	6	B	
End Of Boring @ -25.0'. Boring backfilled with cuttings.			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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Notes:
1. For location of soil boring, see Sheet 2 of 18.

HNTB

USER NAME = lkalita	DESIGNED --		REVISED
	CHECKED --		REVISED
PLOT SCALE = 0.1 '' / in.	DRAWN LK		REVISED
PLOT DATE = 5/2/2016	DATE 5/6/2016		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS – 3
STRUCTURE NO. 016–Z034
SHEET NO. 14 OF 18 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	(1517 & 1415) R-3	COOK	557	399
		CONTRACT NO. 60Y38		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z034-60Y38-014-BOR03.dgn

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 10/23/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY JZ
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-69
Station 3087+98
Offset 76.10ft Right
Ground Surface Elev. 638.90 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4.0" ASPHALT 638.57			
8.0" CONCRETE 637.90			
CRUSHED BRICK & STONE-loose (Fill)	4		
	3		12
	3		
635.90			
CLAY-gray-stiff	2		
	3	1.2	23
-5	4	B	
	2		
	3	1.3	22
	3	B	
	2		
-10	3	1.3	23
	3	B	
	2		
	3	1.3	21
	4	B	
	3		
-15	4	1.3	20
	5	B	
	3		
	3	1.3	20
	5	B	
	3		
-20	4	1.5	19
	5	B	
CLAY-gray-stiff *(continued)*			
	3		
	4	1.1	18
	6	B	
	3		
	5	1.5	21
613.90 -25	6	B	
End Of Boring @ -25.0'. Boring backfilled with cuttings.			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 12245
Page 1 of 1
Date 10/23/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY JZ
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-70
Station 3088+64
Offset 73.20ft Right
Ground Surface Elev. 638.00 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
5.5" ASPHALT 637.54			
8.5" CONCRETE 636.83			
CRUSHED BRICK & STONE-loose	5		
	3		11
	3		
635.00			
CLAY-gray-stiff to very stiff	1		
	3	2.1	23
-5	3	B	
	3		
	5	1.5	23
	6	B	
	3		
-10	3	1.0	24
	5	B	
	2		
	3	3.0	22
	5	P	
	2		
-15	4	1.8	20
	5	B	
	3		
	4	1.2	21
	5	B	
	2		
-20	3	1.3	22
	5	B	
CLAY-gray-stiff to very stiff *(continued)*			
	3		
	5	1.8	21
	6	B	
	7		
	9	1.7	21
613.00 -25	11	B	
End Of Boring @ -25.0'. Boring backfilled with cuttings.			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Jamieson Court, Suite 204
Naperville, Illinois 60565
(630) 355-2288

SOIL BORING LOG

GSI Job No. 12245
Page 1 of 2
Date 10/23/13

ROUTE -- DESCRIPTION I-90 Retaining Walls (Canfield Ave. to Harlem Ave.) LOGGED BY JZ
SECTION -- LOCATION SW 1/4, SEC. 1, TWP. T40N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. RWB-71
Station 3089+33
Offset 71.10ft Right
Ground Surface Elev. 638.00 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
5.5" ASPHALT 637.54			
8.5" CONCRETE 636.83			
CRUSHED BRICK & STONE-medium dense	6		
	7		9
	7		
635.00			
CLAY-gray-stiff to very stiff	3		
	4	1.3	23
-5	4	B	
	3		
	4	1.3	18
	5	B	
	2		
	4	2.0	21
-10	6	B	
	2		
	4	2.2	20
	5	B	
625.00			
CLAY to CLAY LOAM-gray-stiff	2		
	3		
	4	1.8	12
-15	5	B	
	3		
	3	1.0	19
	6	B	
	3		
-20	3	1.0	23
	4	B	
CLAY to CLAY LOAM-gray-stiff *(continued)*			
	2		
	5	1.4	19
	5	B	
	3		
	6	1.5	13
-25 10		B	
	3		
	5	1.8	20
	6	B	
	3		
-30	4	1.9	24
	6	B	
	3		
	4	1.1	14
-35	5	B	
	3		
	4	1.8	20
-40	6	B	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

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Notes:
1. For location of soil boring, see Sheets 2 & 3 of 18.

HNTB	USER NAME = lkalita	DESIGNED --	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS – 4 STRUCTURE NO. 016–Z034	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED --	REVISED			90	(1517 & 1415) R-3	COOK	557	400
	PLOT SCALE = 0.1 '' / in.	DRAWN LK	REVISED						CONTRACT NO. 60Y38	
	PLOT DATE = 5/2/2016	DATE 5/6/2016	REVISED		SHEET NO. 15 OF 18 SHEETS			ILLINOIS	FED. AID PROJECT	

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\58015 I-90\Phase II\Contract 2 - Eastbound\Design\CADD\CADD Sheets\016-Z034-60Y38-015-BOR04.dgn