

FEDERAL AID PROGRAM ENGINEER: CARMEN E. RAMOS, PE, SCHAUMBURG, IL

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	1
		ILLINOIS	CONTRACT NO. 61G46	

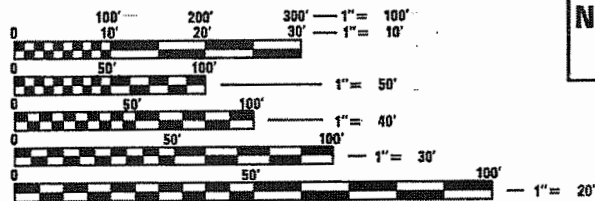
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
**PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**
FAU 149 (NIPPERSINK BOULEVARD)
FROM GRAND AVENUE TO OAK STREET
ROAD RECONSTRUCTION
SECTION 17-00025-00-PV
PROJECT 78SD(173)
VILLAGE OF FOX LAKE
LAKE COUNTY
C-91-216-18



FOR INDEX OF SHEETS AND LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

TRAFFIC DATA

ROAD NAME: NIPPERSINK BOULEVARD
FUNCTIONAL CLASSIFICATION: MINOR COLLECTOR
POSTED SPEED LIMIT: 25 MPH
DESIGN SPEED: 30 MPH
ADT: 1,930 (2050)

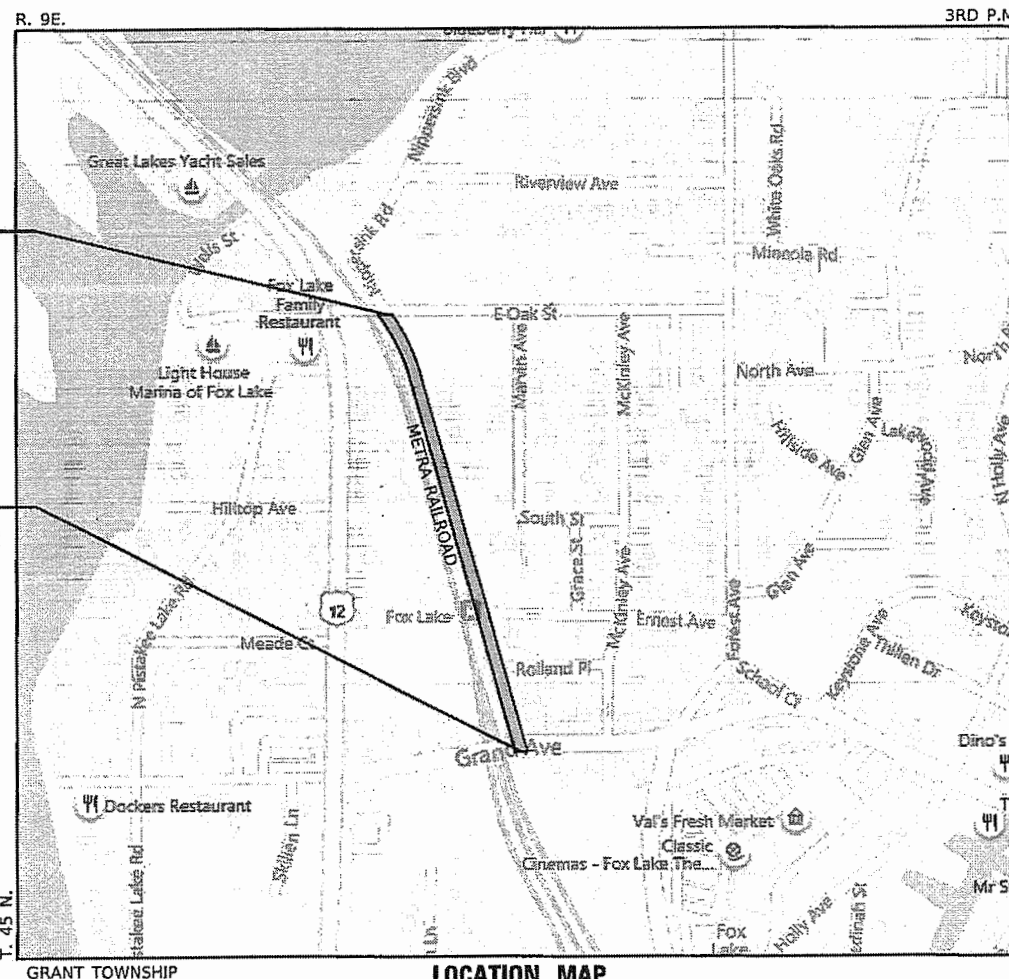


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

**END IMPROVEMENT
NIPPERSINK BOULEVARD
STA. 24 + 89.71**

**BEGIN IMPROVEMENT
NIPPERSINK BOULEVARD
STA. 9 + 74.98**



LOCATION MAP
GROSS LENGTH = 1,514.73 FT. = 0.287 MILE
NET LENGTH = 1,514.73 FT. = 0.287 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED 1-09-2020
Kieran Noonan
VILLAGE OF FOX LAKE, DIRECTOR OF PUBLIC WORKS

PASSED FEB 4, 2020
Chris R. [Signature]
DISTRICT ONE ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW FEBRUARY 4, 2020
Anthony J. [Signature]
REGIONAL ENGINEER

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OF THE STATE OF ILLINOIS**



SIGNED: *Mark W. [Signature]*
ENGINEER
DATE: 01/13/2020 EXP. 11/30/2021

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

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GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE PERFORMED ACCORDING TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED APRIL 1, 2016, THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" ADOPTED JANUARY 1, 2020, THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" LATEST EDITION, THE DETAILS IN THESE PLANS, THE CONTRACT DOCUMENTS, ALL APPLICABLE REQUIREMENTS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION, THE IEPA AND ORDINANCES OF AUTHORITIES HAVING JURISDICTION AND ALL ADDENDA THERETO.
2. EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
3. WHENEVER, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THE LOOSE MATERIAL WILL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS.
4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE PRIOR TO ORDERING MATERIALS. IN ADDITION, THE CONTRACTOR MUST VERIFY THE LINE AND GRADES. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSION OR DISCREPANCIES.
5. ALL PAVEMENT DIMENSIONS ARE SHOWN TO EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
6. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 72 HOURS PRIOR TO BEGINNING WORK.
7. IF DURING CONSTRUCTION THE CONTRACTOR ENCOUNTERS OR OTHERWISE BECOMES AWARE OF ANY SEWERS OR UNDERDRAINS OTHER THAN THOSE SHOWN ON THE PLANS, HE/SHE SHALL INFORM THE ENGINEER, WHO SHALL DIRECT THE WORK NECESSARY TO MAINTAIN OR REPLACE THE FACILITIES IN SERVICE AND TO PROTECT THEM FROM DAMAGE DURING CONSTRUCTION IF MAINTAINED.
8. THE CONTRACTOR SHALL PROVIDE TEMPORARY TOILET FACILITIES AND HAND SANITIZING STATIONS FOR THE USE OF ALL THE CONTRACTORS PERSONNEL EMPLOYED ON THE WORK SITE. THE FACILITIES SHALL BE MAINTAINED IN PROPER SANITARY CONDITION THROUGHOUT THE PROJECT. THE LOCATION OF THE TEMPORARY FACILITIES SHALL BE APPROVED BY THE ENGINEER.
9. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE NPDES PERMIT AND SWPPP MANUAL. IF NO NPDES PERMIT OR SWPPP MANUAL IS NEEDED FOR THE PROJECT THE CONTRACTOR SHALL PERFORM SOIL EROSION SEDIMENT CONTROL BEST PRACTICES OR AS DIRECTED BY THE OWNER TO PREVENT ILLICIT DISCHARGES FROM THE SITE.
10. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO COORDINATE WITH THE METRA RAILROAD WHENEVER CONSTRUCTION ACTIVITY IS WITHIN 25 FEET OF THE RAILROAD ROW. THE CONTRACTOR SHALL RETAIN FLAGMEN EMPLOYED AND DESIGNATED BY THE METRA RAILROAD TO MONITOR ON-COMING TRAIN TRAFFIC, AND ADVISE CONTRACTOR PERSONNEL WHEN ACTIVITY ON OR NEAR THE RAILROAD RIGHT-OF-WAY MAY PROCEED. THIS ITEM WILL BE PAID FOR ACCORDING TO ARTICLE 107.12 AND WILL BE REIMBURSED ACCORDING TO ARTICLE 109.05.
11. THE SUBGRADE STABILITY SHALL BE VERIFIED BY PROOF ROLLING WITH A FULLY LOADED TANDEM-AXLE TRUCK.
12. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION AND/OR AGGREGATE SUBGRADE IMPROVEMENT (CU YD) HAVE BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSTABLE AND/OR UNSUITABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH ABOVE ITEMS WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 OF THE SSRBC AND IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED, AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.
13. ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENTS IS TO BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
14. BACKFILLING STORM SEWER CONSTRUCTED UNDER THE ROADWAY SPECIFIED UNDER ART. 550.07(b, c) OF THE SSRBC WILL NOT BE ALLOWED.
15. PIPE UNDERDRAINS SHALL BE INSTALLED ACCORDING TO SECTION 601 OF THE SSRBC AND STANDARD 601001-05. TOP OF PIPE UNDERDRAINS SHALL BE PLACED A MINIMUM 6" BELOW THE AGGREGATE SUBGRADE IMPROVEMENT LAYER. THE COST OF MAKING PIPE UNDERDRAINS CONNECTIONS TO DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF PIPE UNDERDRAINS.

HIGHWAY STANDARDS

000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
424001-11	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424021-05	DEPRESSED CORNER FOR SIDEWALKS
601001-05	PIPE UNDERDRAINS
602001-02	CATCH BASIN TYPE A
602301-04	INLET TYPE A
602401-06	PRECAST MANHOLE, TYPE A, 4' DIAMETER
602601-06	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
602701-02	MANHOLE STEPS
604001-05	FRAME AND LIDS TYPE 1
604036-03	GRATE TYPE 8
604051-04	FRAME AND GRATE TYPE 11
604086-03	FRAME AND GRATE TYPE 23
606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
836001-04	LIGHT POLE FOUNDATION

DISTRICT 1 DETAILS

BD-07	STORM CONNECTION TO EXISTING SEWER
BD-08	FRAME AND LIDS ADJUSTMENT WITH MILLING
BD-32	BUTT JOINTS AND HMA TAPER
BE-220	ELECTRIC SERVICE INSTALLATION AERIAL, REMOTE DISCONNECT
BE-300	LIGHT POLE FOUNDATION 30, TO 35' M.H. 11 1/2" BOLT CIRCLE
BE-310	LIGHT POLE FOUNDATION, OFFSET 40' (12.192 m) TO 47' (14.478 m) M.H. 15" (381 mm) BOLT CIRCLE
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDEROADS, INTERSECTIONS AND DRIVEWAYS
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKING
TC-22	ARTERIAL ROAD INFORMATION SIGN
TC-23	TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS



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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

INDEX OF SHEETS, LISTING OF APPLICABLE STANDARDS, GENERAL NOTES

NIPPERSINK BOULEVARD RECONSTRUCTION

SCALE: N.T.S.	SHEET 1 OF 2 SHEETS	STA. TO STA.
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	2
			CONTRACT NO. 61G46	
		ILLINOIS	FED. AID PROJECT	

SUMMARY OF QUANTITIES						CONSTRUCTION CODE	CONSTRUCTION CODE	CONSTRUCTION CODE
						80% FEDERAL / 20% FOX LAKE	100% FOX LAKE	80% FEDERAL / 20% FOX LAKE
SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0004	0004	0042	
	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	60	60			
	20200100	EARTH EXCAVATION	CU YD	3,300	3,300			
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	500	500			
	20400800	FURNISHED EXCAVATION	CU YD	600	600			
	20800150	TRENCH BACKFILL	CU YD	350	350			
	21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	1,400	1,400			
	21101600	TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH	SQ YD	1,620	1,620			
	25000210	SEEDING, CLASS 2A	ACRE	0.50	0.50			
	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	40	40			
	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	40	40			
	25100630	EROSION CONTROL BLANKET	SQ YD	1,620	1,620			
	28000400	PERIMETER EROSION BARRIER	FOOT	500	500			
	28000500	INLET AND PIPE PROTECTION	EACH	40	40			
SP	30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	500	500			
SP	30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	7,200	7,200			
	35101600	AGGREGATE BASE COURSE, TYPE B, 4"	SQ YD	1,450	1,450			
	35300200	PORTLAND CEMENT CONCRETE BASE COURSE 7"	SQ YD	300	300			

SP - SPECIAL PROVISION

* SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES			
NIPPERSINK BOULEVARD RECONSTRUCTION			
SCALE: N.T.S.	SHEET 1 OF 8 SHEETS	STA.	TO STA.

F.A.U. RTE: 149	SECTION 17-00025-00-PV	COUNTY LAKE	TOTAL SHEETS 99	SHEET NO. 3
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61G46	

SUMMARY OF QUANTITIES						CONSTRUCTION CODE	CONSTRUCTION CODE	CONSTRUCTION CODE
						80% FEDERAL / 20% FOX LAKE	100% FOX LAKE	80% FEDERAL / 20% FOX LAKE
SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0004	0004	0042	
	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	4,000	4,000			
	40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	3	3			
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	700	700			
	40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	2,065	2,065			
	40603200	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50	TON	75	75			
	40604060	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N50	TON	930	930			
	42001300	PROTECTIVE COAT	SQ YD	1,230	1,230			
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	10,500	10,500			
	42400410	PORTLAND CEMENT CONCRETE SIDEWALK 8 INCH	SQ FT	2,600	2,600			
	42400800	DETECTABLE WARNINGS	SQ FT	210	210			
	44000100	PAVEMENT REMOVAL	SQ YD	7,500	7,500			
	44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	1,000	1,000			
	44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	SQ YD	460	460			
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	100	100			
	44000300	CURB REMOVAL	FOOT	50	50			
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	2,100	2,100			

SP - SPECIAL PROVISION

* SPECIALTY ITEM

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		DATE - 8/25/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES			
NIPPERSINK BOULEVARD RECONSTRUCTION			
SCALE: N.T.S.	SHEET 2 OF 8 SHEETS	STA.	TO STA.

F.A.U. RTE. 149	SECTION 17-00025-00-PV	COUNTY LAKE	TOTAL SHEETS 99	SHEET NO. 4
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61G46	

SUMMARY OF QUANTITIES						CONSTRUCTION CODE	CONSTRUCTION CODE	CONSTRUCTION CODE
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SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0004	0004	0042	
	44000600	SIDEWALK REMOVAL	SQ FT	5,900	5,900			
	44201747	CLASS D PATCHES, TYPE IV, 8 INCH	SQ YD	50	50			
	50300225	CONCRETE STRUCTURES	CU YD	182	182			
	50300285	FORM LINER TEXTURED SURFACE	SQ FT	3,680	3,680			
	50500505	STUD SHEAR CONNECTORS	EACH	769	769			
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	19,040	19,040			
	52200105	FURNISHING SOLDIER PILES (W SECTION)	FOOT	1,347	1,347			
	52200200	DRILLING AND SETTING SOLDIER PILES (IN SOIL)	CU FT	6,665	6,665			
	52200250	UNTREATED TIMBER LAGGING	SQ FT	3,276	3,276			
	550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	180	180			
	550A0120	STORM SEWERS, CLASS A, TYPE 1 24"	FOOT	850	850			
	550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	140	140			
	550A0410	STORM SEWERS, CLASS A, TYPE 2 24"	FOOT	200	200			
	55100400	STORM SEWER REMOVAL 10"	FOOT	370	370			
	55100500	STORM SEWER REMOVAL 12"	FOOT	540	540			
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	250	250			

SP - SPECIAL PROVISION

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
NIPPERSINK BOULEVARD RECONSTRUCTION
SCALE: N.T.S. SHEET 3 OF 8 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	5
CONTRACT NO. 61G46			ILLINOIS FED. AID PROJECT	

SUMMARY OF QUANTITIES						CONSTRUCTION CODE	CONSTRUCTION CODE	CONSTRUCTION CODE
						80% FEDERAL / 20% FOX LAKE	100% FOX LAKE	80% FEDERAL / 20% FOX LAKE
SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0004	0004	0042	
	60108204	PIPE UNDERDRAINS, TYPE 2, 4"	FOOT	3,900	3,900			
	60201105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	1	1			
	60201330	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 23 FRAME AND GRATE	EACH	5	5			
	60219300	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	2	2			
	60219530	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 23 FRAME AND GRATE	EACH	13	13			
	60221000	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1	1			
	60236200	INLETS, TYPE A, TYPE 8 GRATE	EACH	1	1			
	60236800	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	EACH	1	1			
	60237460	INLETS, TYPE A, TYPE 23 FRAME AND GRATE	EACH	12	12			
	60266600	VALVE BOXES TO BE ADJUSTED	EACH	12	12			
	60500040	REMOVING MANHOLES	EACH	8	8			
	60500060	REMOVING INLETS	EACH	2	2			
	60602800	CONCRETE GUTTER, TYPE B	FOOT	300	300			
	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	3,250	3,250			
	60608300	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.12	FOOT	400	400			
SP	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	600	600			

SP - SPECIAL PROVISION

* SPECIALTY ITEM



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PLOT DATE = 8/25/2020

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
NIPPERSINK BOULEVARD RECONSTRUCTION
SCALE: N.T.S. SHEET 4 OF 8 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	6
CONTRACT NO. 61G46			ILLINOIS FED. AID PROJECT	

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SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0004	0004	0042	
*	SP	66900530	SOIL DISPOSAL ANALYSIS	EACH	4	4		
*	SP	66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1		
*	SP	66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1		
*	SP	66901006	REGULATED SUBSTANCES MONITORING	CAL DAY	6	6		
		67100100	MOBILIZATION	LSUM	1	1		
		70107006	PAVEMENT MARKING BLACKOUT TAPE, 6"	FOOT	350	350		
		70300100	SHORT TERM PAVEMENT MARKING	FOOT	4,300	4,300		
		70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	1,600	1,600		
		70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SQ FT	150	150		
		70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	7,100	7,100		
		70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	90	90		
		70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	550	550		
		70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	70	70		
*		72000200	SIGN PANEL - TYPE 2	SQ FT	120	120		
*		72900100	METAL POST - TYPE A	FOOT	190	190		
*		78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	150	150		

SP - SPECIAL PROVISION

* SPECIALTY ITEM

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4870.25	
Default	

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STATE OF ILLINOIS
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SUMMARY OF QUANTITIES			
NIPPERSINK BOULEVARD RECONSTRUCTION			
SCALE: N.T.S.	SHEET 5 OF 8 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	7
CONTRACT NO. 61G46			ILLINOIS FED. AID PROJECT	

SUMMARY OF QUANTITIES						CONSTRUCTION CODE	CONSTRUCTION CODE	CONSTRUCTION CODE
						80% FEDERAL / 20% FOX LAKE	100% FOX LAKE	80% FEDERAL / 20% FOX LAKE
SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0004	0004	0042	
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	7,100	7,100			
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	90	90			
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	550	550			
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	70	70			
* SP	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1	1			
* SP	80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1	1			
*	81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	270	270			
*	81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	180	180			
*	81400730	HANDHOLE, COMPOSITE CONCRETE	EACH	1	1			
*	81603138	UNIT DUCT, 600V, 5-1C NO. 6, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1 1/2" DIAMETER POLYETHYLENE	FOOT	300	300			
*	81702180	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 3/0	FOOT	810	810			
* SP	83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	135	135			
*	84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	2	2			
*	84200804	REMOVAL OF POLE FOUNDATION	EACH	2	2			
*	87900200	DRILL EXISTING HANDHOLE	EACH	1	1			
* SP	X0320031	SIGN LIGHTING UNIT COMPLETE	EACH	4	4			

SP - SPECIAL PROVISION

* SPECIALTY ITEM

FILE NAME =	USER NAME = mccabb	DESIGNED - MGC	REVISED -
4870-250-sh-500 6.dgn		DRAWN - PJS	REVISED -
4870.25	PLOT SCALE = 1:2	CHECKED - KLB	REVISED -
Default	PLOT DATE = 8/25/2020	DATE - 8/25/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES			
NIPPERSINK BOULEVARD RECONSTRUCTION			
SCALE: N.T.S.	SHEET 6 OF 8 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	8
CONTRACT NO. 61G46			ILLINOIS FED. AID PROJECT	

SUMMARY OF QUANTITIES						CONSTRUCTION CODE	CONSTRUCTION CODE	CONSTRUCTION CODE
						80% FEDERAL / 20% FOX LAKE	100% FOX LAKE	80% FEDERAL / 20% FOX LAKE
SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0004	0004	0042	
SP	X0322080	BUS SHELTER REMOVE AND RELOCATE	EACH	1	1			
SP	X0323389	STORM SEWER CONNECTION	EACH	2	2			
SP	X0323992	HELICAL GROUND ANCHORS	EACH	33	33			
SP	X0326275	RAILROAD RIGHT-OF-WAY ENTRY PERMIT	EACH	1	1			
SP	X0326864	BRICK SIDEWALK REMOVAL	SQ FT	570	570			
* SP	X0326998	FURNISH AND INSTALL HANDRAIL	FOOT	10	10			
SP	X0327999	ANTI-GRAFFITI COATING	SQ FT	4,255		4,255		
SP	X1700071	CLASS D PATCHES, TYPE II, 10 INCH (SPECIAL)	SQ YD	10	10			
SP	X2010510	CLEARING AND GRUBBING	L SUM	1	1			
SP	X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	10	10			
SP	X4023000	TEMPORARY ACCESS (ROAD)	EACH	3	3			
SP	X5012502	CONCRETE REMOVAL (SPECIAL)	CU YD	20	20			
SP	X5030290	STAINING CONCRETE STRUCTURES	SQ FT	4,255	4,255			
SP	X6030205	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	15	15			
SP	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1			
*	X8162821	UNIT DUCT, 600V, 2-1C NO.6, 2-1C NO.4, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	110	110			

SP - SPECIAL PROVISION

* SPECIALTY ITEM

FILE NAME =	USER NAME = mcoobb	DESIGNED - MGC	REVISED -
4870-250-sh-S00 7.dgn		DRAWN - PIS	REVISED -
4870.25	PLOT SCALE = 1:2	CHECKED - KLB	REVISED -
Default	PLOT DATE = 8/25/2020	DATE - 8/25/2020	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES			
NIPPERSINK BOULEVARD RECONSTRUCTION			
SCALE: N.T.S.	SHEET 7 OF 8 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	9
CONTRACT NO. 61G46			ILLINOIS FED. AID PROJECT	

SUMMARY OF QUANTITIES						CONSTRUCTION CODE	CONSTRUCTION CODE	CONSTRUCTION CODE
						80% FEDERAL / 20% FOX LAKE	100% FOX LAKE	80% FEDERAL / 20% FOX LAKE
SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0004	0004	0042	
*	X8162822	UNIT DUCT, 600V, 4-1C NO.6, 3-1C NO.4, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	1,350	1,350			
* SP	X8250500	LIGHTING UNIT COMPLETE, SPECIAL	EACH	15	15			
* SP	X8250505	LIGHTING CONTROLLER, SPECIAL	EACH	1	1			
* SP	X8250510	LIGHTING CONTROLLER FOUNDATION	EACH	1	1			
* SP	X8360215	LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	12	12			
SP	Z0007126	HANDRAIL REMOVAL	FOOT	30	30			
SP	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1			
SP	Z0017400	DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED	EACH	8	8			
SP	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	96	96			
* SP	Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	6	6			
SP	Z0046304	PIPE UNDERDRAIN FOR STRUCTURES 4"	FOOT	320	320			
SP	Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1			
* SP	Z0051500	REMOVING AND RESETTING STREET SIGNS	EACH	10	10			
SP	Z0056648	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 12"	FOOT	650	650			
SP	Z0075496	CONCRETE RETAINING WALL REMOVAL	FOOT	330	330			
SP	Z0076600	TRAINEES	HOUR	500			500	
SP	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500			500	

SP - SPECIAL PROVISION

* SPECIALTY ITEM

FILE NAME =	USER NAME = mcobb
4870-250-shr-SOQ 8.dgn	
4870.25	
Default	

DESIGNED - MGC	REVISOR -
DRAWN - PJS	REVISOR -
CHECKED - KLB	REVISOR -
DATE - 8/25/2020	REVISOR -

DESIGNED - MGC	REVISOR -
DRAWN - PJS	REVISOR -
CHECKED - KLB	REVISOR -
DATE - 8/25/2020	REVISOR -

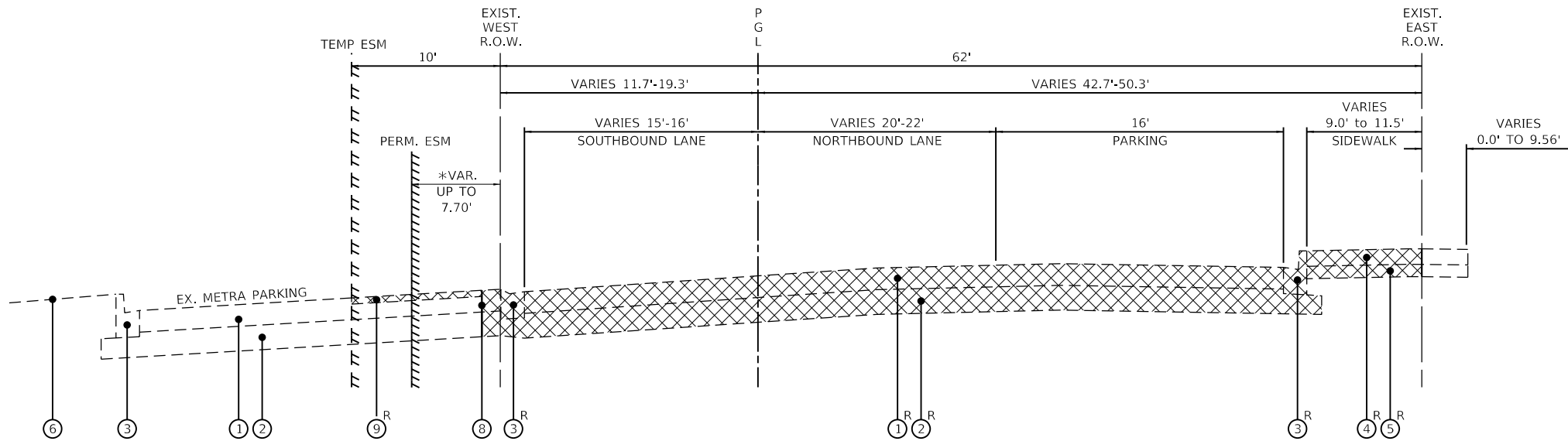
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES			
NIPPERSINK BOULEVARD RECONSTRUCTION			
SCALE: N.T.S.	SHEET 8 OF 8 SHEETS	STA.	TO STA.

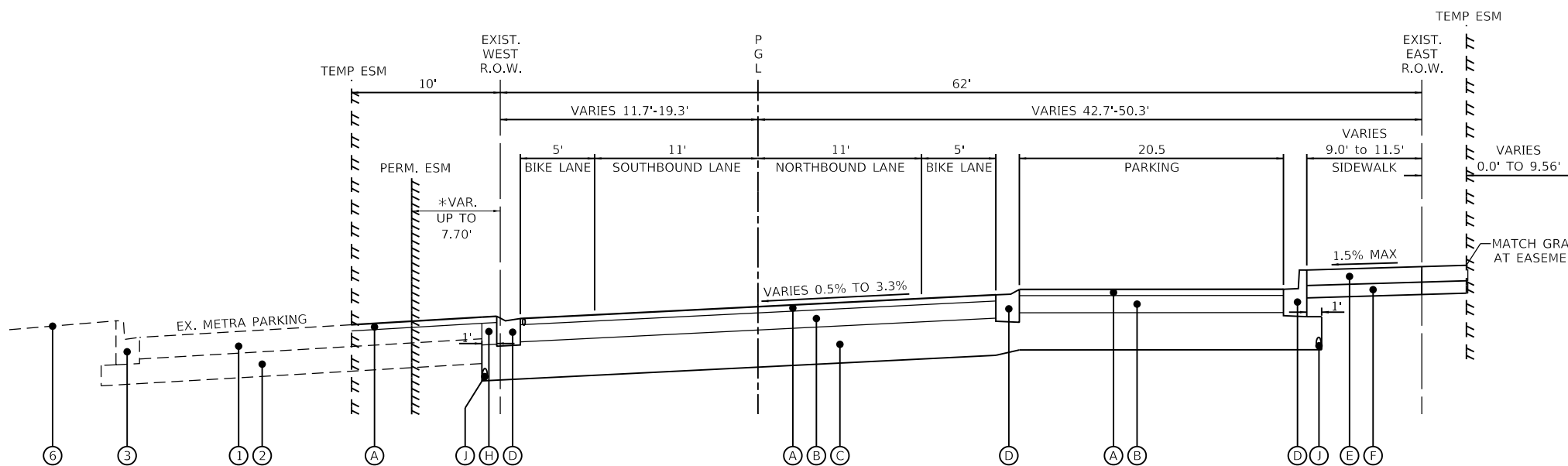
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	10
CONTRACT NO. 61G46			ILLINOIS FED. AID PROJECT	

LEGEND

- ① EXISTING HMA PAVEMENT, 7"
- ② EXISTING AGGREGATE BASE, 8"
- ③ EXISTING CURB & GUTTER, B6.12
- ④ EXISTING SIDEWALK, 5"
- ⑤ EXISTING AGGREGATE BASE, 4"
- ⑥ EXISTING GROUND
- ⑦ EXISTING WALL
- ⑧ SAWCUT
- ⑨ HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- (A) HOT-MIX ASPHALT SURFACE COURSE, MIX 'D', N50, 2"
- (B) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 5 1/2"
- (C) AGGREGATE SUBGRADE IMPROVEMENT, 12"
- (D) COMBINATION CONCRETE CURB & GUTTER, TYPE B6.12
- (E) PORTLAND CEMENT CONCRETE SIDEWALK, 5"
- (F) AGGREGATE BASE COURSE, TYPE B, 4"
- (G) PROPOSED WALL
- (H) PORTLAND CEMENT CONCRETE BASE COURSE, 7"
- (I) COMBINATION CONCRETE CURB & GUTTER, TYPE B2.12
- (J) PIPE UNDERDRAINS, TYPE 2, 4"
- ^R ITEM TO BE REMOVED
- * FROM STA. 10+44.13 TO 12+27.72



**NIPPERSINK BOULEVARD
EXISTING TYPICAL SECTION**
STA. 10+22.64 TO STA. 12+75



**NIPPERSINK BOULEVARD
PROPOSED TYPICAL SECTION**
STA. 10+22.64 TO STA. 12+75

HOT-MIX ASPHALT MIXTURE TABLE	AIR VOIDS @Ndes
NIPPERSINK BOULEVARD	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N50, 2"	4% @ 50 GYRATION
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 5.5"	4% @ 50 GYRATION
PAVEMENT RESURFACING (GRAND AVE AND NIPPERSINK BOULEVARD INTERSECTION)	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N50, 2"	4% @ 50 GYRATION
POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 1"	3.5% @ 50 GYRATION
PAVEMENT RESURFACING (METRA LOT RESTORATION)	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N50, 2"	4% @ 50 GYRATION
CLASS D PATCHES, 10" (SPECIAL)	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N50, 2"	4% @ 50 GYRATION
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 8"	4% @ 70 GYRATION
CLASS D PATCHES, 8"	
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, 8"	4% @ 70 GYRATION

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 Lbs/SqYd/in

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

NOTE:
AGGREGATE SUBGRADE IMPROVEMENT (CU YD) HAS BEEN PROVIDED FOR USE AT LOCATIONS INDICATED FOR SOLIS THAT TEND TO BE UNSTABLE AND/OR UNSUITABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH ASI WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 OF THE SSRBC AND IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.

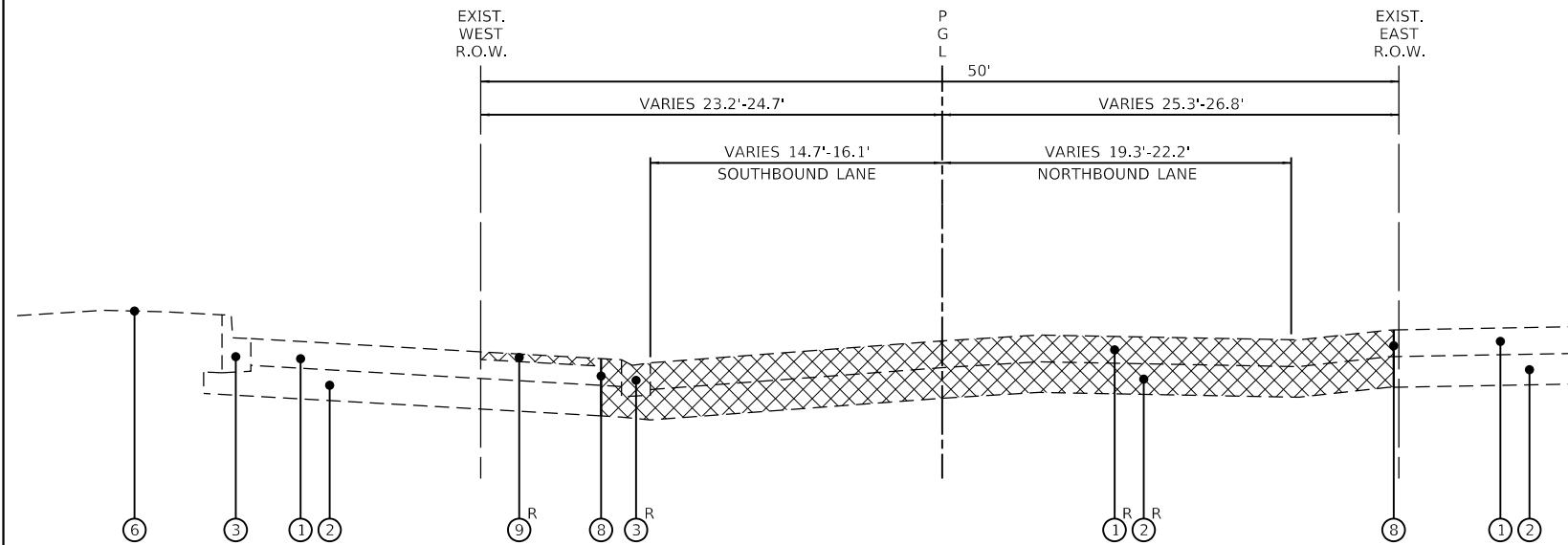
ALL AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENTS IS TO BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

FILE NAME = 4870-250-sht-typical 1.dgn	USER NAME = mcobb	DESIGNED - MGC	REVISED -
4870.25	PLOT SCALE = 1:10	DRAWN - PJS	REVISED -
Default	PLOT DATE = 8/25/2020	CHECKED - KLB	REVISED -
		DATE - 8/25/2020	REVISED -

TYPICAL SECTIONS		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
NIPPERSINK BOULEVARD RECONSTRUCTION		149	17-00025-00-PV	LAKE	99	11
CONTRACT NO. 61G46						
SCALE: H:1"=5'		SHEET 1 OF 4 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT		

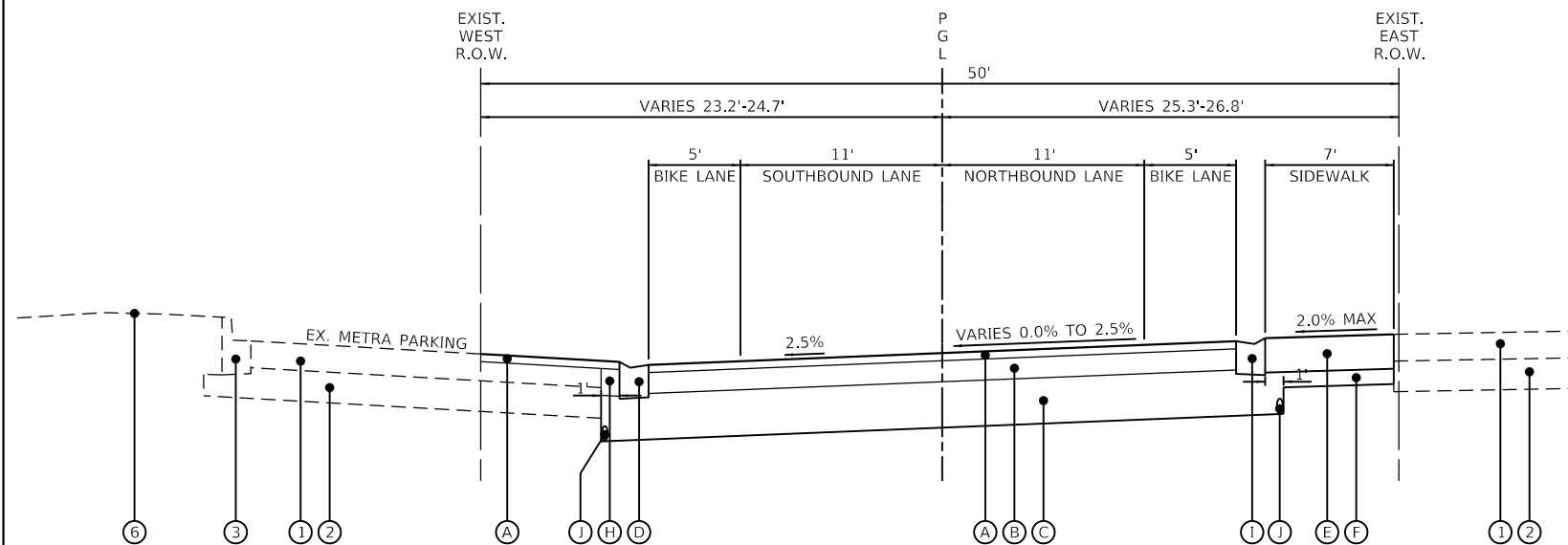
LEGEND

- ① EXISTING HMA PAVEMENT, 7"
- ② EXISTING AGGREGATE BASE, 8"
- ③ EXISTING CURB & GUTTER, B6.12
- ④ EXISTING SIDEWALK, 5"
- ⑤ EXISTING AGGREGATE BASE, 4"
- ⑥ EXISTING GROUND
- ⑦ EXISTING WALL
- ⑧ SAWCUT
- ⑨ HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- Ⓐ HOT-MIX ASPHALT SURFACE COURSE, MIX 'D', N50, 2"
- Ⓑ HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 5 1/2"
- Ⓒ AGGREGATE SUBGRADE IMPROVEMENT, 12"
- Ⓓ COMBINATION CONCRETE CURB & GUTTER, TYPE B6.12
- Ⓔ PORTLAND CEMENT CONCRETE SIDEWALK, 5"
- Ⓕ AGGREGATE BASE COURSE, TYPE B, 4"
- Ⓖ PROPOSED WALL
- Ⓗ PORTLAND CEMENT CONCRETE BASE COURSE, 7"
- Ⓘ COMBINATION CONCRETE CURB & GUTTER, TYPE B2.12
- ⓷ PIPE UNDERDRAINS, TYPE 2, 4"
- ⓸^R ITEM TO BE REMOVED
- * FROM STA. 10+44.13 TO 12+27.72



**NIPPERSINK BOULEVARD
EXISTING TYPICAL SECTION**

STA. 12+75 TO STA. 14+50
STA. 18+00 TO STA. 22+00



**NIPPERSINK BOULEVARD
PROPOSED TYPICAL SECTION**

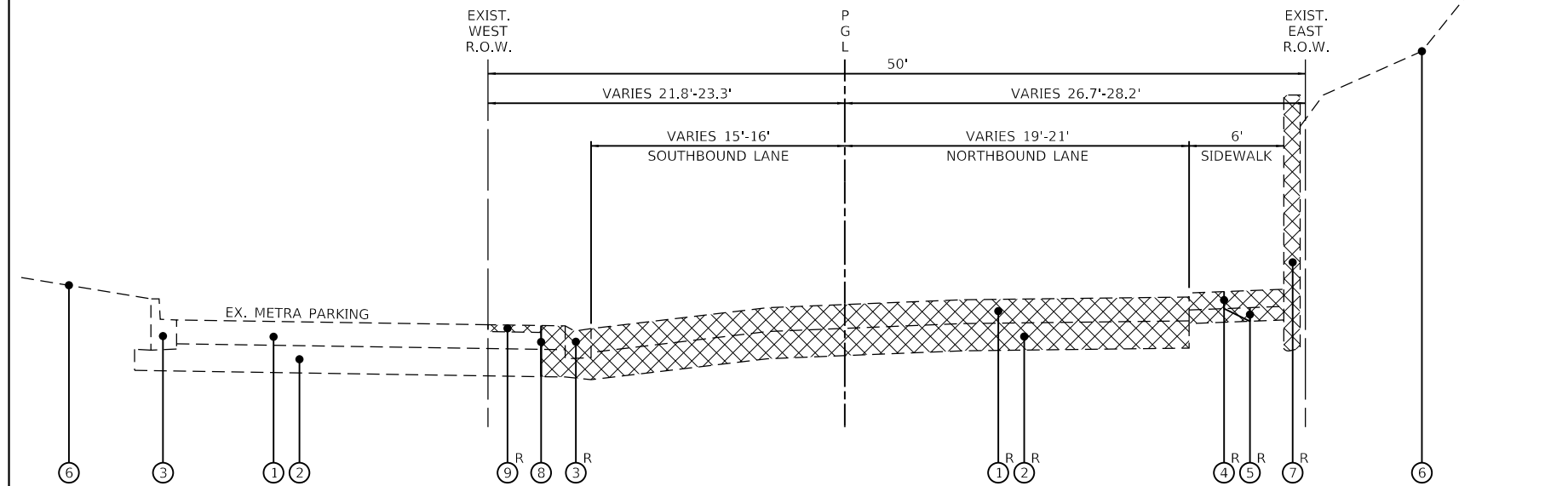
STA. 12+75 TO STA. 14+50
STA. 18+00 TO STA. 22+00

FILE NAME =	USER NAME = mcobb	DESIGNED - MGC	REVISED -
4870-250-sh-typical 2.dgn		DRAWN - PJS	REVISED -
4870.25	PLOT SCALE = 1:10	CHECKED - KLB	REVISED -
Default	PLOT DATE = 8/25/2020	DATE - 8/25/2020	REVISED -

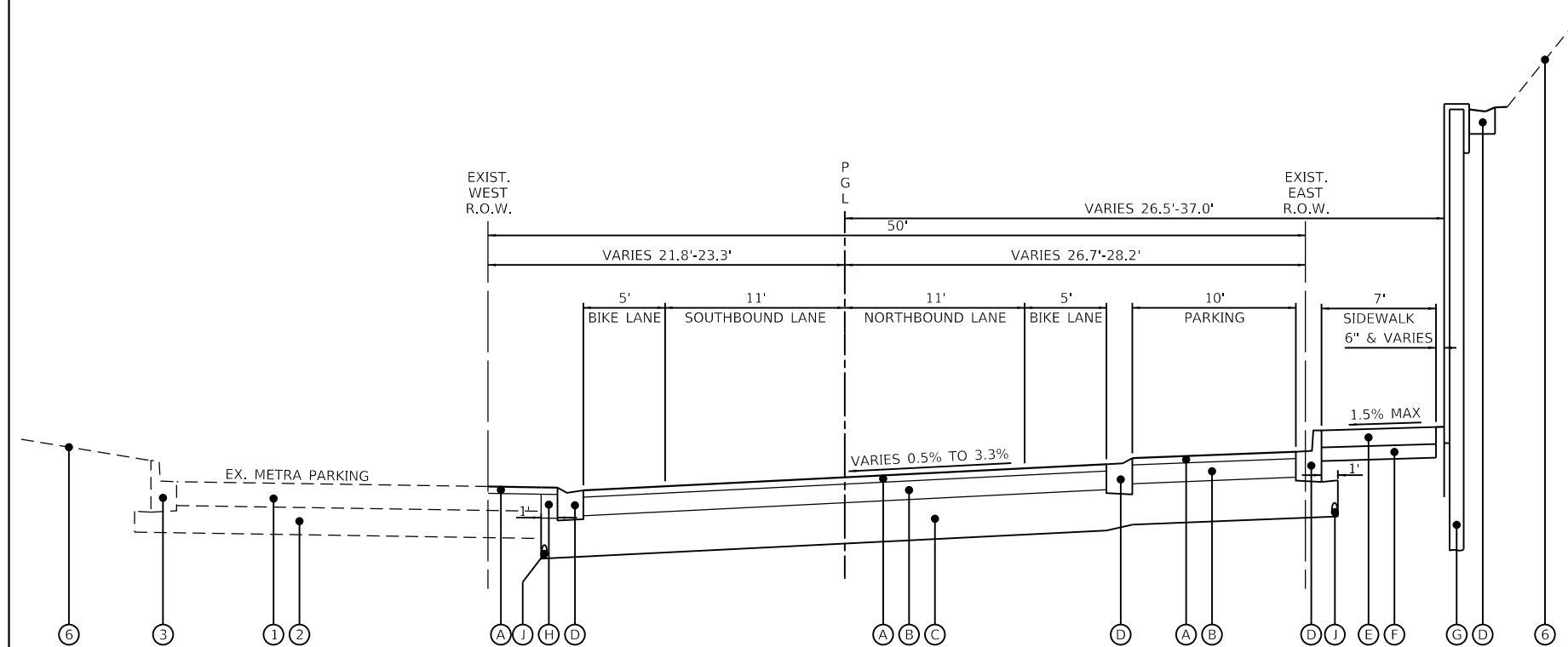
TYPICAL SECTIONS		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
NIPPERSINK BOULEVARD RECONSTRUCTION		149	17-00025-00-PV	LAKE	99	12
		CONTRACT NO. 61G46				
SCALE: H:1"=5'		SHEET 2 OF 4 SHEETS		STA.	TO STA.	
				ILLINOIS FED. AID PROJECT		

LEGEND

- ① EXISTING HMA PAVEMENT, 7"
- ② EXISTING AGGREGATE BASE, 8"
- ③ EXISTING CURB & GUTTER, B6.12
- ④ EXISTING SIDEWALK, 5"
- ⑤ EXISTING AGGREGATE BASE, 4"
- ⑥ EXISTING GROUND
- ⑦ EXISTING WALL
- ⑧ SAWCUT
- ⑨ HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- (A) HOT-MIX ASPHALT SURFACE COURSE, MIX 'D', N50, 2"
- (B) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 5 1/2"
- (C) AGGREGATE SUBGRADE IMPROVEMENT, 12"
- (D) COMBINATION CONCRETE CURB & GUTTER, TYPE B6.12
- (E) PORTLAND CEMENT CONCRETE SIDEWALK, 5"
- (F) AGGREGATE BASE COURSE, TYPE B, 4"
- (G) PROPOSED WALL
- (H) PORTLAND CEMENT CONCRETE BASE COURSE, 7"
- (I) COMBINATION CONCRETE CURB & GUTTER, TYPE B2.12
- (J) PIPE UNDERDRAINS, TYPE 2, 4"
- ^R ITEM TO BE REMOVED
- * FROM STA. 10+44.13 TO 12+27.72



**NIPPERSINK BOULEVARD
EXISTING TYPICAL SECTION**
STA. 14+50 TO STA. 18+00



**NIPPERSINK BOULEVARD
PROPOSED TYPICAL SECTION**
STA. 14+50 TO STA. 18+00

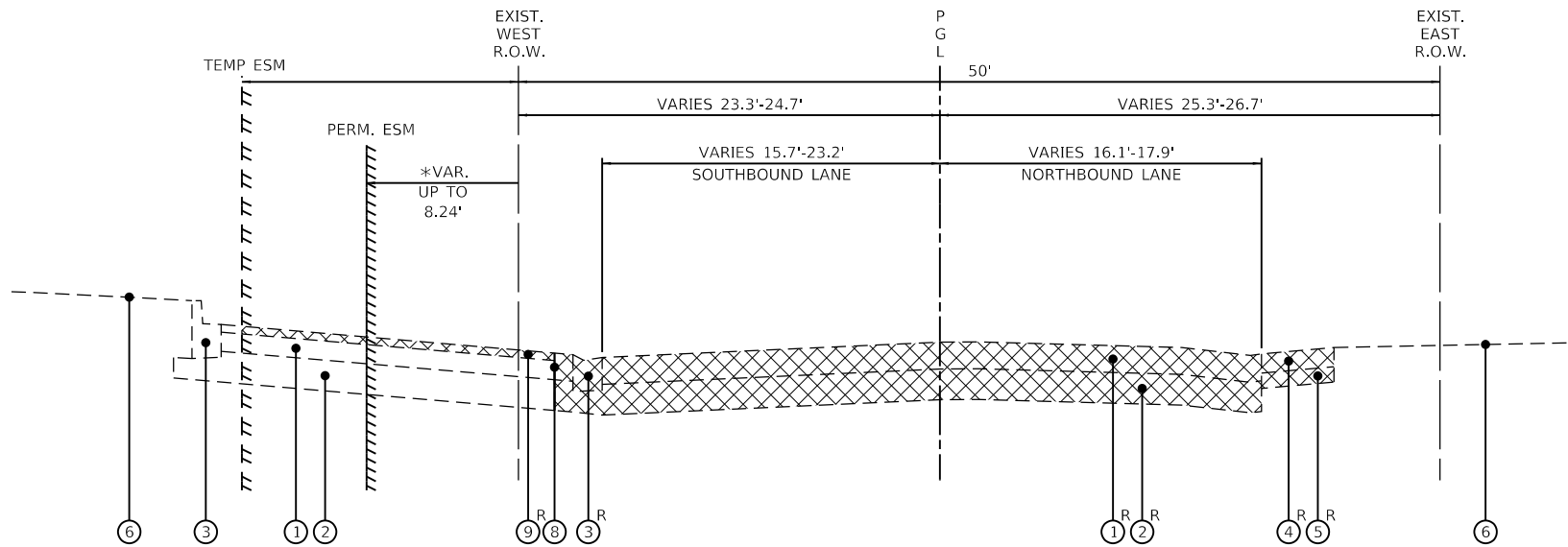
FILE NAME =	USER NAME = mcobb	DESIGNED - MGC	REVISED -
4870-250-sht-typical 3.dgn		DRAWN - PJS	REVISED -
4870.25	PLOT SCALE = 1:10	CHECKED - KLB	REVISED -
Default	PLOT DATE = 8/25/2020	DATE - 8/25/2020	REVISED -

TYPICAL SECTIONS	
NIPPERSINK BOULEVARD RECONSTRUCTION	
SCALE: H:1"=5'	SHEET 3 OF 4 SHEETS
STA.	TO STA.

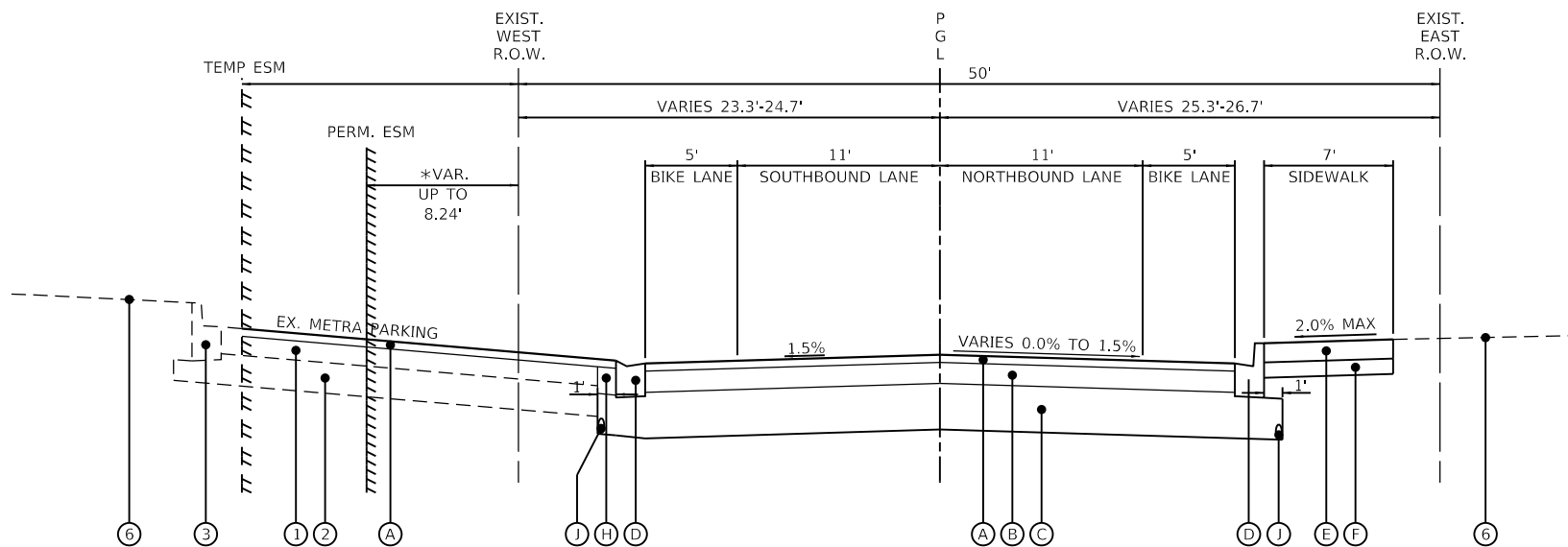
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	13
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				

LEGEND

- ① EXISTING HMA PAVEMENT, 7"
- ② EXISTING AGGREGATE BASE, 8"
- ③ EXISTING CURB & GUTTER, B6.12
- ④ EXISTING SIDEWALK, 5"
- ⑤ EXISTING AGGREGATE BASE, 4"
- ⑥ EXISTING GROUND
- ⑦ EXISTING WALL
- ⑧ SAWCUT
- ⑨ HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- (A) HOT-MIX ASPHALT SURFACE COURSE, MIX 'D', N50, 2"
- (B) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 5 1/2"
- (C) AGGREGATE SUBGRADE IMPROVEMENT, 12"
- (D) COMBINATION CONCRETE CURB & GUTTER, TYPE B6.12
- (E) PORTLAND CEMENT CONCRETE SIDEWALK, 5"
- (F) AGGREGATE BASE COURSE, TYPE B, 4"
- (G) PROPOSED WALL
- (H) PORTLAND CEMENT CONCRETE BASE COURSE, 7"
- (I) COMBINATION CONCRETE CURB & GUTTER, TYPE B2.12
- (J) PIPE UNDERDRAINS, TYPE 2, 4"
- ⊖^R ITEM TO BE REMOVED
- * FROM STA. 10+44.13 TO 12+27.72



**NIPPERSINK BOULEVARD
EXISTING TYPICAL SECTION**
STA. 22+00 TO STA. 24+89.71



**NIPPERSINK BOULEVARD
PROPOSED TYPICAL SECTION**
STA. 22+00 TO STA. 24+89.71

FILE NAME =	USER NAME = mcobb
4870-250-sht-typical.dgn	
4870.25	
Default	

PLOT SCALE = 1:10	CHECKED - KLB	DATE - 8/25/2020
PLOT DATE = 8/25/2020		

DESIGNED - MGC	REVISED -
DRAWN - PJS	REVISED -
CHECKED - KLB	REVISED -
DATE - 8/25/2020	REVISED -

TYPICAL SECTIONS	
NIPPERSINK BOULEVARD RECONSTRUCTION	
SCALE: H:1"=5'	SHEET 4 OF 4 SHEETS
STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	14
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				

1		EARTHWORK SCHEDULE				
STATION		20200100		20400800		
		EARTH EXCAVATION	EARTH EXCAVATION VOLUME USED (15% SHRINKAGE)	FURNISHED EXCAVATION	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)	
		(CU YD)	(CU YD)	(CU YD)	(CU YD)	
10+50.00	TO	10+75.00	41.40	35.19	0.69	34.50
10+75.00	TO	11+00.00	53.38	45.37	0.00	45.37
11+00.00	TO	11+25.00	64.25	54.62	0.00	54.62
11+25.00	TO	11+50.00	63.97	54.38	0.06	54.32
11+50.00	TO	11+75.00	58.60	49.81	0.13	49.68
11+75.00	TO	12+00.00	57.35	48.75	0.07	48.67
12+00.00	TO	12+25.00	60.25	51.21	0.00	51.21
12+25.00	TO	12+50.00	51.76	44.00	0.00	44.00
12+50.00	TO	12+75.00	57.57	48.94	0.00	48.94
12+75.00	TO	13+00.00	56.60	48.11	0.00	48.11
13+00.00	TO	13+25.00	38.79	32.97	0.00	32.97
13+25.00	TO	13+50.00	35.62	30.28	0.00	30.28
13+50.00	TO	13+75.00	35.05	29.79	0.00	29.79
13+75.00	TO	14+00.00	33.94	28.85	0.00	28.85
14+00.00	TO	14+25.00	33.84	28.76	0.00	28.76
14+25.00	TO	14+50.00	68.53	58.25	0.00	58.25
14+50.00	TO	14+75.00	84.34	71.69	42.54	29.15
14+75.00	TO	15+00.00	78.11	66.39	73.30	-6.91
15+00.00	TO	15+25.00	111.40	94.69	50.87	43.82
15+25.00	TO	15+50.00	136.49	116.01	36.90	79.12
15+50.00	TO	15+75.00	144.21	122.58	31.47	91.11
15+75.00	TO	16+00.00	144.61	122.92	32.28	90.64
16+00.00	TO	16+25.00	135.58	115.24	40.29	74.95
16+25.00	TO	16+50.00	125.37	106.56	52.10	54.46
16+50.00	TO	16+75.00	120.25	102.21	43.29	58.92
16+75.00	TO	17+00.00	110.39	93.83	40.01	53.83
17+00.00	TO	17+25.00	105.52	89.69	33.89	55.80
17+25.00	TO	17+50.00	96.13	81.71	60.92	20.80
17+50.00	TO	17+75.00	60.27	51.23	53.16	-1.93

1		EARTHWORK SCHEDULE				
STATION		20200100		20400800		
		EARTH EXCAVATION	EARTH EXCAVATION VOLUME USED (15% SHRINKAGE)	FURNISHED EXCAVATION	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)	
		(CU YD)	(CU YD)	(CU YD)	(CU YD)	
17+75.00	TO	18+00.00	38.84	33.01	0.00	33.01
18+00.00	TO	18+25.00	39.54	33.61	0.00	33.61
18+25.00	TO	18+50.00	39.60	33.66	0.00	33.66
18+50.00	TO	18+75.00	39.81	33.84	0.00	33.84
18+75.00	TO	19+00.00	41.18	35.00	0.00	35.00
19+00.00	TO	19+25.00	40.51	34.44	0.00	34.44
19+25.00	TO	19+50.00	36.86	31.33	0.00	31.33
19+50.00	TO	19+75.00	35.17	29.89	0.00	29.89
19+75.00	TO	20+00.00	35.18	29.90	0.00	29.90
20+00.00	TO	20+25.00	32.39	27.53	0.00	27.53
20+25.00	TO	20+50.00	30.64	26.04	0.00	26.04
20+50.00	TO	20+75.00	33.82	28.75	0.00	28.75
20+75.00	TO	21+00.00	36.26	30.82	0.00	30.82
21+00.00	TO	21+25.00	35.19	29.91	0.00	29.91
21+25.00	TO	21+50.00	35.45	30.13	0.00	30.13
21+50.00	TO	21+75.00	35.87	30.49	0.00	30.49
21+75.00	TO	22+00.00	36.69	31.19	0.00	31.19
22+00.00	TO	22+25.00	37.32	31.73	0.00	31.73
22+25.00	TO	22+50.00	35.55	30.21	0.00	30.21
22+50.00	TO	22+75.00	34.24	29.10	0.00	29.10
22+75.00	TO	23+00.00	34.14	29.02	0.00	29.02
23+00.00	TO	23+25.00	36.05	30.64	0.00	30.64
23+25.00	TO	23+50.00	48.45	41.18	0.00	41.18
23+50.00	TO	23+75.00	53.11	45.14	0.00	45.14
23+75.00	TO	24+00.00	43.22	36.74	0.50	36.24
24+00.00	TO	24+25.00	37.51	31.88	0.98	30.91
24+25.00	TO	24+50.00	36.98	31.43	0.83	30.60
24+50.00	TO	24+75.00	44.36	37.71	0.35	37.36
Total:			3327.5	2828.4	594.6	2233.8



FILE NAME = 4870-250-sht-schedule_1.dgn	USER NAME = mcobb	DESIGNED - MGC	REVISED -
4870.25	PLOT SCALE = 1:2	DRAWN - PJS	REVISED -
Default	PLOT DATE = 8/25/2020	CHECKED - KLB	REVISED -
		DATE - 8/25/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES	
NIPPERSINK BOULEVARD RECONSTRUCTION	
SCALE: N.T.S.	SHEET 1 OF 5 SHEETS STA. TO STA.

F.A.U. RTE. 149	SECTION 17-00025-00-PV	COUNTY LAKE	TOTAL SHEETS 99	SHEET NO. 15
			CONTRACT NO. 61G46	
ILLINOIS FED. AID PROJECT				

2								SCHEDULE OF TREE REMOVALS			
ROAD	STATION	OFFSET	RT/LT	SURVEYED DIAMETER	ESTIMATED GROWTH	20100110	20100210				
						TREE REMOVAL (6 TO 15 UNITS DIAMETER)	TREE REMOVAL (OVER 15 UNITS DIAMETER)				
				INCHES	INCHES	UNIT	UNIT				
NIPPERSINK BLVD	10+94.24	41.19'	RT	16	2		18				
NIPPERSINK BLVD	12+03.26	39.26'	RT	14	2		16				
NIPPERSINK BLVD	17+60.85	41.44'	RT	24	2		26				
				TOTAL		0	60				

3									SCHEDULE OF LIGHT POLE REMOVAL AND REPLACEMENT			
ROAD	STATION	OFFSET	RT/LT	DESCRIPTION	81400730	84200500	X8250500	X8250505				
					HANDHOLE, COMPOSITE CONCRETE	REMOVAL OF LIGHTING UNIT, SALVAGE	LIGHTING UNIT COMPLETE, SPECIAL	LIGHTING CONTROLLER, SPECIAL				
					EACH	EACH	EACH	EACH				
NIPPERSINK BLVD	10+50.00	20.08'	RT	PROPOSED STREET LIGHT			1					
NIPPERSINK BLVD	11+55.81	39.34'	RT	EXISTING STREET LIGHT		1						
NIPPERSINK BLVD	11+60.00	42.16'	RT	PROPOSED STREET LIGHT			1					
NIPPERSINK BLVD	12+43.10	41.65'	RT	EXISTING STREET LIGHT		1						
NIPPERSINK BLVD	12+50.00	22.90'	RT	PROPOSED STREET LIGHT			1					
NIPPERSINK BLVD	13+30.00	20.08'	RT	PROPOSED STREET LIGHT			1					
NIPPERSINK BLVD	14+30.00	20.27'	RT	PROPOSED STREET LIGHT			1					
NIPPERSINK BLVD	15+30.00	31.66'	RT	PROPOSED STREET LIGHT			1					
NIPPERSINK BLVD	16+30.00	31.66'	RT	PROPOSED STREET LIGHT			1					
NIPPERSINK BLVD	17+30.00	31.66'	RT	PROPOSED STREET LIGHT			1					
NIPPERSINK BLVD	17+77.64	23.67'	RT	PROPOSED HANDHOLE	1							
NIPPERSINK BLVD	18+55.00	20.08'	RT	PROPOSED STREET LIGHT			1					
NIPPERSINK BLVD	19+60.00	20.08'	RT	PROPOSED STREET LIGHT			1					
NIPPERSINK BLVD	20+65.00	20.08'	RT	PROPOSED STREET LIGHT			1					
NIPPERSINK BLVD	21+55.00	20.08'	RT	PROPOSED STREET LIGHT			1					
NIPPERSINK BLVD	22+60.00	20.08'	RT	PROPOSED STREET LIGHT			1					
NIPPERSINK BLVD	23+38.00	20.08'	RT	PROPOSED STREET LIGHT			1					
NIPPERSINK BLVD	24+38.00	20.08'	RT	PROPOSED STREET LIGHT			1					
NIPPERSINK BLVD	24+93.28	39.80'	LT	PROPOSED LIGHTING CONTROLLER				1				
TOTAL					1	2	15	1				



MODEL: Default
FILE: 4870-250-sht-schedule 2.dgn

FILE NAME =	USER NAME = mcobb	DESIGNED - MGC	REVISED -
4870-250-sht-schedule 2.dgn		DRAWN - PJS	REVISED -
4870.25	PLOT SCALE = 1:2	CHECKED - KLB	REVISED -
Default	PLOT DATE = 8/25/2020	DATE - 8/25/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
NIPPERSINK BOULEVARD RECONSTRUCTION

SCALE: N.T.S. SHEET 2 OF 5 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	16
			CONTRACT NO. 61G46	
		ILLINOIS FED. AID PROJECT		

4

SCHEDULE OF SIDEWALK RELATED ITEMS

ROAD	FROM STATION	OFFSET	RT/LT	TO STATION	OFFSET	RT/LT	DESCRIPTION	35101600	42400200	42400410	42400800
								AGGREGATE BASE COURSE, TYPE B 4"	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	PORTLAND CEMENT CONCRETE SIDEWALK 8 INCH	DETECTABLE WARNINGS
								SQ YD	SQ FT	SQ FT	SQ FT
NIPPERSINK BLVD	9+81.99	27.91'	LT	10+00.43	48.95'	LT	SIDEWALK	34.8	312.9		
NIPPERSINK BLVD	9+82.60	28.71'	LT	9+87.81	30.06'	LT	DETECTABLE WARNINGS				10.0
NIPPERSINK BLVD	9+95.49	35.89'	LT	9+98.11	40.60'	LT	DETECTABLE WARNINGS				10.0
NIPPERSINK BLVD	10+26.82	45.43'	LT	10+42.35	18.88'	LT	SIDEWALK	37.6	338.8		
NIPPERSINK BLVD	10+28.65	31.63'	LT	10+31.27	36.33'	LT	DETECTABLE WARNINGS				10.0
NIPPERSINK BLVD	10+34.60	23.44'	LT	10+42.87	24.69'	LT	DETECTABLE WARNINGS				16.3
NIPPERSINK BLVD	10+19.94	51.86'	RT	11+35.98	39.66'	RT	SIDEWALK	245.7	2211.7		
NIPPERSINK BLVD	10+32.13	22.85'	RT	10+40.97	20.43'	RT	DETECTABLE WARNINGS				17.9
NIPPERSINK BLVD	11+35.98	39.66'	RT	11+54.00	39.66'	RT	SIDEWALK	13.7		122.9	
NIPPERSINK BLVD	11+54.00	39.66'	RT	12+55.24	54.11'	RT	SIDEWALK	129.4	1164.5		
NIPPERSINK BLVD	12+53.25	25.17'	RT	12+58.59	31.23'	RT	DETECTABLE WARNINGS				15.9
NIPPERSINK BLVD	12+88.63	31.11'	RT	12+95.70	20.90'	RT	SIDEWALK	6.6	59.6		
NIPPERSINK BLVD	12+88.63	31.11'	RT	12+93.71	25.44'	RT	DETECTABLE WARNINGS				14.9
NIPPERSINK BLVD	12+95.70	20.90'	RT	13+16.14	17.58'	RT	SIDEWALK	13.3		119.8	
NIPPERSINK BLVD	13+16.14	17.58'	RT	13+32.10	17.58'	RT	SIDEWALK	14.9	134.2		
NIPPERSINK BLVD	13+32.10	17.58'	RT	14+23.10	17.58'	RT	SIDEWALK	68.5		616.3	
NIPPERSINK BLVD	14+23.10	17.58'	RT	14+36.82	24.58'	RT	SIDEWALK	4.6	41.6		
NIPPERSINK BLVD	14+32.78	18.74'	RT	14+36.82	24.58'	RT	DETECTABLE WARNINGS				12.6
NIPPERSINK BLVD	14+56.57	25.04'	RT	18+09.87	17.58'	RT	SIDEWALK	279.6	2516.0		
NIPPERSINK BLVD	14+56.57	25.04'	RT	14+68.02	17.58'	RT	DETECTABLE WARNINGS				27.7
NIPPERSINK BLVD	14+62.02	18.83'	LT	14+68.02	18.83'	LT	DETECTABLE WARNINGS				12.0
NIPPERSINK BLVD	18+09.87	17.58'	RT	18+51.81	17.58'	RT	SIDEWALK	30.2		271.8	
NIPPERSINK BLVD	18+51.81	17.58'	RT	19+73.42	17.58'	RT	SIDEWALK	96.0	863.8		
NIPPERSINK BLVD	19+73.42	17.58'	RT	19+91.29	17.58'	RT	SIDEWALK	11.7		105.0	
NIPPERSINK BLVD	19+91.29	17.58'	RT	20+04.88	17.58'	RT	SIDEWALK	12.3	111.1		
NIPPERSINK BLVD	20+04.88	17.58'	RT	20+61.17	17.58'	RT	SIDEWALK	41.0		368.7	
NIPPERSINK BLVD	20+61.17	17.58'	RT	20+80.18	17.58'	RT	SIDEWALK	16.9	152.3		
NIPPERSINK BLVD	20+80.18	17.58'	RT	21+11.81	17.58'	RT	SIDEWALK	22.4		201.3	
NIPPERSINK BLVD	21+11.51	17.58'	RT	21+25.74	17.58'	RT	SIDEWALK	13.2	118.8		
NIPPERSINK BLVD	21+25.74	17.58'	RT	21+44.00	17.58'	RT	SIDEWALK	12.3		110.3	
NIPPERSINK BLVD	21+44.00	17.58'	RT	21+60.21	17.58'	RT	SIDEWALK	14.6	131.5		
NIPPERSINK BLVD	21+60.21	17.58'	RT	22+15.65	17.58'	RT	SIDEWALK	41.5		373.6	
NIPPERSINK BLVD	22+15.65	17.58'	RT	22+34.22	17.58'	RT	SIDEWALK	16.4	147.8		
NIPPERSINK BLVD	22+34.22	17.58'	RT	22+54.29	17.58'	RT	SIDEWALK	14.0		125.8	
NIPPERSINK BLVD	22+54.29	17.58'	RT	22+81.67	17.58'	RT	SIDEWALK	23.5	211.5		
NIPPERSINK BLVD	22+81.67	17.58'	RT	23+00.66	17.58'	RT	SIDEWALK	13.0		117.4	
NIPPERSINK BLVD	23+00.66	17.58'	RT	23+42.42	30.66'	RT	SIDEWALK	54.2	487.7		
NIPPERSINK BLVD	23+30.15	17.58'	RT	23+36.10	17.64'	RT	DETECTABLE WARNINGS				11.8
NIPPERSINK BLVD	23+43.42	26.53'	RT	23+42.42	30.66'	RT	DETECTABLE WARNINGS				8.1
NIPPERSINK BLVD	23+30.75	17.58'	LT	23+41.14	17.58'	LT	SIDEWALK	7.7	69.0		
NIPPERSINK BLVD	23+30.75	17.58'	LT	23+41.14	17.58'	LT	DETECTABLE WARNINGS				20.5
NIPPERSINK BLVD	23+74.96	29.87'	RT	24+75.34	25.40'	RT	SIDEWALK	85.9	772.9		
NIPPERSINK BLVD	23+74.96	29.87'	RT	23+76.29	24.73'	RT	DETECTABLE WARNINGS				10.0
NIPPERSINK BLVD	24+72.47	21.35'	RT	24+75.34	25.40'	RT	DETECTABLE WARNINGS				9.8
TOTAL								1375.4	9845.8	2532.9	207.6



MODEL: Default
FILE: 4870-250-sht-schedule_3.dgn

FILE NAME =	USER NAME = mcobb
4870-250-sht-schedule_3.dgn	
4870.25	
Default	

DESIGNED - MGC	REVISOR -
DRAWN - PJS	REVISIONS -
CHECKED - KLB	REVISIONS -
DATE - 8/25/2020	REVISIONS -

DESIGNED - MGC	REVISOR -
DRAWN - PJS	REVISIONS -
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DATE - 8/25/2020	REVISIONS -

DESIGNED - MGC	REVISOR -
DRAWN - PJS	REVISIONS -
CHECKED - KLB	REVISIONS -
DATE - 8/25/2020	REVISIONS -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES			
NIPPERSINK BOULEVARD RECONSTRUCTION			
SCALE: N.T.S.	SHEET 3 OF 5 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	17
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				

5	SCHEDULE OF CURB AND GUTTER									
	ROAD	FROM STATION	OFFSET	RT/LT	TO STATION	OFFSET	RT/LT	DESCRIPTION	60603800	60608300
									COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.12
									FT	FT
NIPPERSINK BLVD	9+78.53	26.36'	LT	9+82.49	26.33'	LT	B-6.12	5.8		
NIPPERSINK BLVD	9+82.49	26.33'	LT	9+87.82	26.52'	LT	DEPRESSED B-6.12	5.3		
NIPPERSINK BLVD	9+87.82	26.52'	LT	9+98.90	34.97'	LT	B-6.12	14.5		
NIPPERSINK BLVD	9+98.90	34.97'	LT	10+00.38	40.30'	LT	DEPRESSED B-6.12	5.6		
NIPPERSINK BLVD	10+00.38	40.30'	LT	10+01.98	48.65'	LT	B-6.12	8.5		
NIPPERSINK BLVD	10+25.25	45.57'	LT	10+25.51	36.60'	LT	B-6.12	9.0		
NIPPERSINK BLVD	10+25.51	36.60'	LT	10+27.20	31.00'	LT	DEPRESSED B-6.12	5.9		
NIPPERSINK BLVD	10+27.20	31.00'	LT	10+33.55	22.26'	LT	B-6.12	10.9		
NIPPERSINK BLVD	10+33.55	22.26'	LT	10+42.26	17.24'	LT	DEPRESSED B-6.12	10.1		
NIPPERSINK BLVD	10+42.26	17.24'	LT	10+99.63	16.00'	LT	B-6.12	58.0		
NIPPERSINK BLVD	10+99.63	16.00'	LT	14+39.82	16.00'	LT	DEPRESSED B-6.12	339.5		
NIPPERSINK BLVD	14+39.82	16.00'	LT	14+62.02	16.00'	LT	B-6.12	22.2		
NIPPERSINK BLVD	14+62.02	16.00'	LT	24+88.72	28.15'	LT	DEPRESSED B-6.12	1025.7		
NIPPERSINK BLVD	24+88.72	28.15'	LT	25+04.36	35.96'	LT	B-6.12	17.5		
NIPPERSINK BLVD	10+19.83	45.93'	RT	10+31.17	21.58'	RT	B-6.12	27.5		
NIPPERSINK BLVD	10+31.17	21.58'	RT	10+40.50	16.85'	RT	DEPRESSED B-6.12	10.5		
NIPPERSINK BLVD	10+40.50	16.85'	RT	10+70.58	16.00'	RT	B-6.12	29.9		
NIPPERSINK BLVD	10+70.58	16.00'	RT	12+34.36	16.00'	RT	DEPRESSED B-6.12	163.5		
NIPPERSINK BLVD	10+70.58	16.00'	RT	11+35.98	36.50'	RT	B-6.12	72.0		
NIPPERSINK BLVD	11+35.98	36.50'	RT	11+54.00	36.50'	RT	DEPRESSED B-6.12	17.8		
NIPPERSINK BLVD	11+54.00	36.50'	RT	12+34.36	16.00'	RT	B-6.12	107.8		
NIPPERSINK BLVD	12+34.36	16.00'	RT	12+55.92	22.82'	RT	B-6.12	23.7		
NIPPERSINK BLVD	12+55.92	22.82'	RT	12+60.09	30.83'	RT	DEPRESSED B-6.12	9.1		
NIPPERSINK BLVD	12+60.09	30.83'	RT	12+56.73	54.50'	RT	B-6.12	24.2		
NIPPERSINK BLVD	12+89.60	48.47'	RT	12+87.13	30.69'	RT	M-2.12		18.2	
NIPPERSINK BLVD	12+87.13	30.69'	RT	12+91.00	23.15'	RT	DEPRESSED B-6.12	8.6		
NIPPERSINK BLVD	12+91.00	23.15'	RT	12+94.80	19.60'	RT	M-2.12		5.3	
NIPPERSINK BLVD	12+94.80	19.60'	RT	13+16.14	16.00'	RT	DEPRESSED B-6.12	22.3		
NIPPERSINK BLVD	13+16.14	16.00'	RT	13+32.10	16.00'	RT	M-2.12		16.1	
NIPPERSINK BLVD	13+32.10	16.00'	RT	14+23.10	16.00'	RT	DEPRESSED B-6.12	91.0		
NIPPERSINK BLVD	14+23.10	16.00'	RT	14+33.58	17.38'	RT	M-2.12		10.7	
NIPPERSINK BLVD	14+33.58	17.38'	RT	14+38.38	24.32'	RT	DEPRESSED B-6.12	8.7		
NIPPERSINK BLVD	14+38.38	24.32'	RT	14+38.09	28.88'	RT	M-2.12		4.6	
NIPPERSINK BLVD	14+58.76	37.90'	RT	14+55.05	24.58'	RT	M-2.12		14.0	
NIPPERSINK BLVD	14+55.05	24.58'	RT	14+68.02	16.00'	RT	DEPRESSED B-6.12	17.3		
NIPPERSINK BLVD	14+68.02	16.00'	RT	14+93.06	16.00'	RT	B-6.12	25.0		
NIPPERSINK BLVD	14+93.06	16.00'	RT	17+76.78	16.00'	RT	DEPRESSED B-6.12	283.4		
NIPPERSINK BLVD	15+01.44	18.52'	RT	17+68.40	18.52'	RT	B-6.12	269.7		
NIPPERSINK BLVD	17+76.78	16.00'	RT	18+09.87	16.00'	RT	M-2.12		33.2	
NIPPERSINK BLVD	18+09.87	16.00'	RT	18+51.81	16.00'	RT	DEPRESSED B-6.12	42.0		
NIPPERSINK BLVD	18+51.81	16.00'	RT	19+73.42	16.00'	RT	M-2.12		121.6	
NIPPERSINK BLVD	19+73.42	16.00'	RT	19+91.29	16.00'	RT	DEPRESSED B-6.12	17.9		
NIPPERSINK BLVD	19+91.29	16.00'	RT	20+04.88	16.00'	RT	M-2.12		13.6	
NIPPERSINK BLVD	20+04.88	16.00'	RT	20+61.17	16.00'	RT	DEPRESSED B-6.12	56.4		
NIPPERSINK BLVD	20+61.17	16.00'	RT	20+80.19	16.00'	RT	M-2.12		19.1	
NIPPERSINK BLVD	20+80.19	16.00'	RT	21+11.51	16.00'	RT	DEPRESSED B-6.12	31.4		
NIPPERSINK BLVD	21+11.51	16.00'	RT	21+25.74	16.00'	RT	M-2.12		14.3	
NIPPERSINK BLVD	21+25.74	16.00'	RT	21+44.00	16.00'	RT	DEPRESSED B-6.12	18.3		

FILE NAME =	USER NAME = mcobb
4870-250-sht-schedule_4.dgn	
4870.25	
Default	

DESIGNED - MGC	REVISOR -
DRAWN - PJS	REVISION -
CHECKED - KLB	REVISION -
DATE - 8/25/2020	REVISION -

PLOT SCALE = 1:2	
PLOT DATE = 8/25/2020	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES			
NIPPERSINK BOULEVARD RECONSTRUCTION			
SCALE: N.T.S.	SHEET 4 OF 5 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	18
CONTRACT NO. 61G46			ILLINOIS FED. AID PROJECT	

5	SCHEDULE OF CURB AND GUTTER									
	ROAD	FROM STATION	OFFSET	RT/LT	TO STATION	OFFSET	RT/LT	DESCRIPTION	60603800	60608300
									COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.12
									FT	FT
NIPPERSINK BLVD	21+44.00	16.00'	RT	21+60.21	16.00'	RT	M-2.12		16.3	
NIPPERSINK BLVD	21+60.21	16.00'	RT	22+15.66	16.00'	RT	DEPRESSED B-6.12	16.3		
NIPPERSINK BLVD	22+15.66	16.00'	RT	22+34.22	16.00'	RT	M-2.12		16.3	
NIPPERSINK BLVD	22+34.22	16.00'	RT	22+54.30	16.00'	RT	DEPRESSED B-6.12	20.3		
NIPPERSINK BLVD	22+54.30	16.00'	RT	22+81.67	16.00'	RT	M-2.12		20.3	
NIPPERSINK BLVD	22+81.67	16.00'	RT	23+00.66	16.00'	RT	DEPRESSED B-6.12	19.2		
NIPPERSINK BLVD	23+00.66	16.00'	RT	23+30.15	16.00'	RT	M-2.12		29.8	
NIPPERSINK BLVD	23+30.15	16.00'	RT	23+86.64	16.00'	RT	DEPRESSED B-6.12	29.8		
NIPPERSINK BLVD	23+41.51	18.34'	RT	23+44.97	26.63'	RT	B-6.12	9.3		
NIPPERSINK BLVD	23+44.97	26.63'	RT	23+43.91	31.12'	RT	DEPRESSED B-6.12	4.6		
NIPPERSINK BLVD	23+43.91	31.12'	RT	23+41.00	41.63'	RT	B-6.12	10.9		
NIPPERSINK BLVD	23+73.41	29.83'	RT	23+74.83	24.19'	RT	DEPRESSED B-6.12	5.9		
NIPPERSINK BLVD	23+74.83	24.19'	RT	23+78.32	18.34'	RT	B-6.12	6.9		
NIPPERSINK BLVD	23+86.64	16.00'	RT	24+73.57	20.21'	RT	B-6.12	88.6		
NIPPERSINK BLVD	24+73.57	20.21'	RT	24+76.78	24.74'	RT	DEPRESSED B-6.12	5.6		
NIPPERSINK BLVD	24+76.78	24.74'	RT	24+67.38	43.23'	RT	B-6.12	24.8		
							TOTAL	3158.7	353.4	



MODEL: Default
FILE NAME: 4870-250-sht-schedule_5.dgn

FILE NAME = 4870-250-sht-schedule_5.dgn
USER NAME = mcobb
PLOT SCALE = 1:2
PLOT DATE = 8/25/2020

DESIGNED - MGC
DRAWN - PJS
CHECKED - KLB
DATE - 8/25/2020

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
NIPPERSINK BOULEVARD RECONSTRUCTION

SCALE: N.T.S. SHEET 5 OF 5 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	19
			CONTRACT NO. 61G46	
ILLINOIS FED. AID PROJECT				

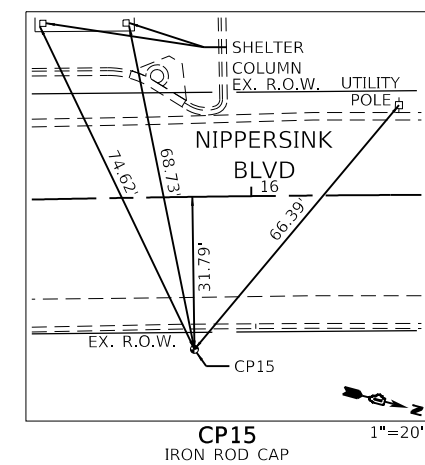
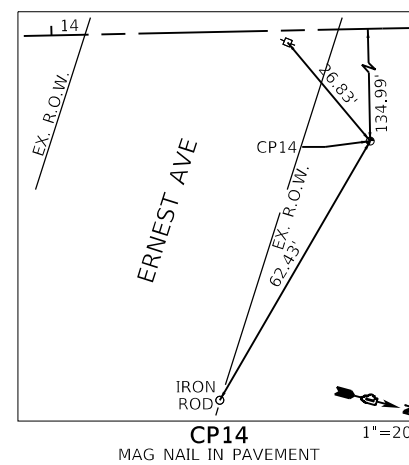
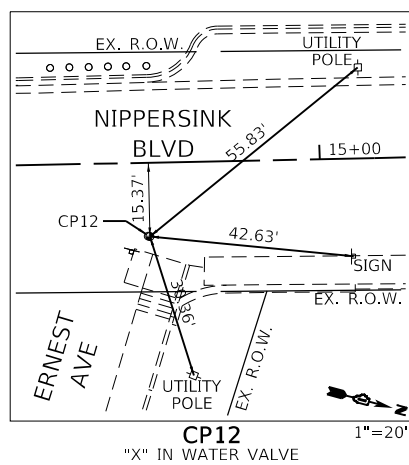
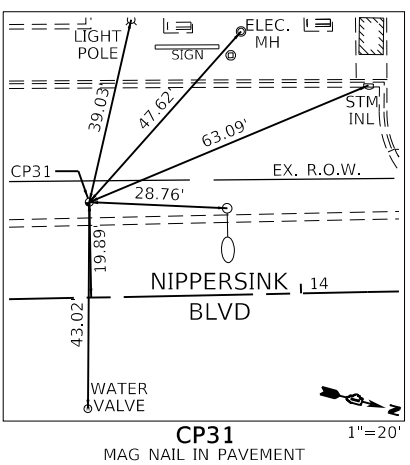
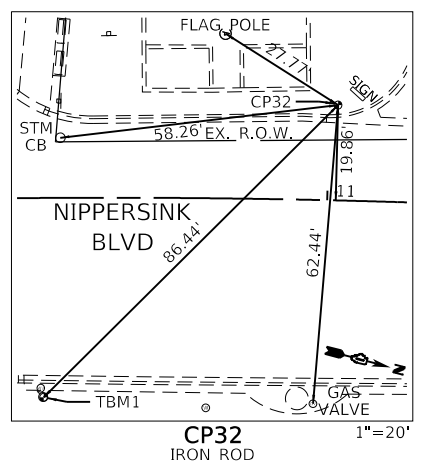
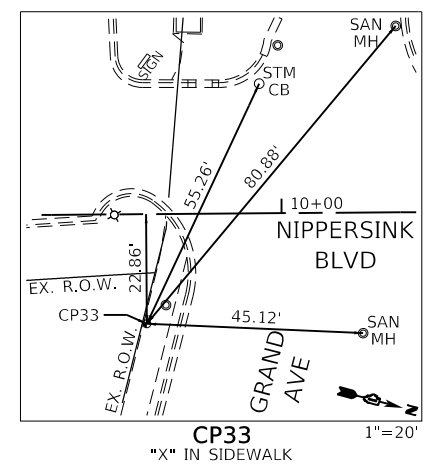
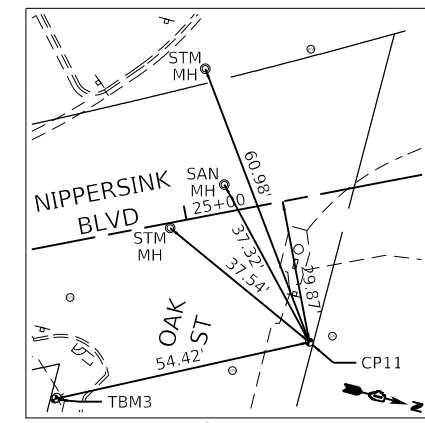
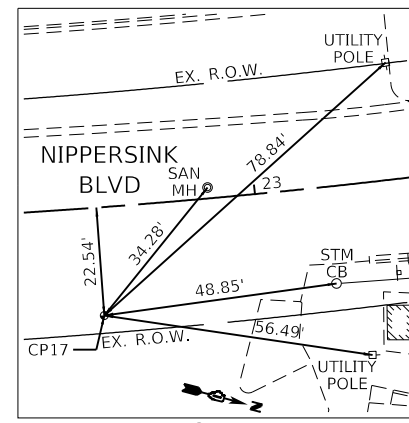
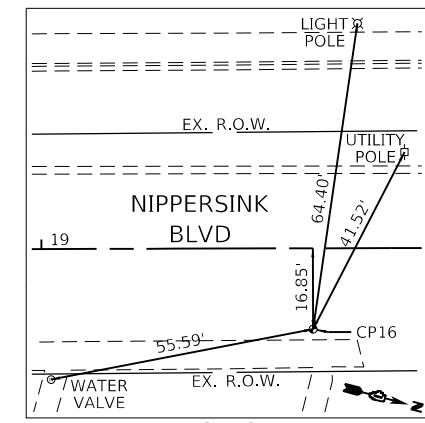
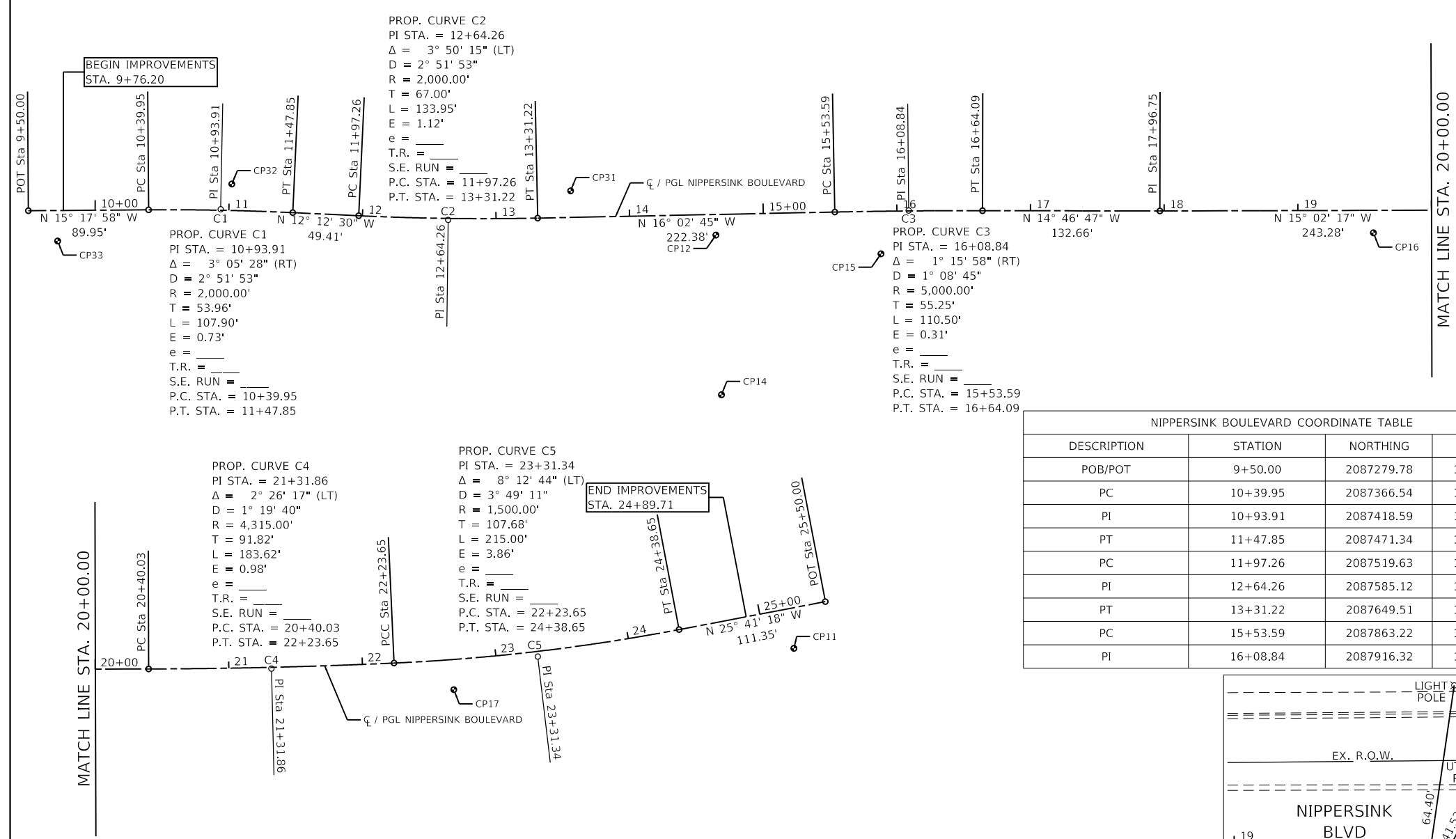


BENCHMARK:
ELEVATIONS SHOWN HEREON ARE OBTAINED VIA GPS USING
TRIMBLE VRS[®] NOW[™] (NO PUBLISHED MONUMENT VERIFIED)
DATUM: NAVD88

CONTROL POINT COORDINATE TABLE					
DESCRIPTION	ELEVATION	STATION	OFFSET	NORTHING	EASTING
CP11	741.72	25+20.39	29.87' RT	2088795.59	1024815.54
CP12	746.24	14+64.31	15.37' RT	2087781.67	1025120.24
CP14	773.11	14+65.95	134.99' RT	2087816.31	1025234.75
CP15	753.74	15+87.71	31.79' RT	2087904.62	1025102.08
CP16	743.42	19+56.54	16.85' RT	2088256.70	1024992.40
CP17	741.90	22+66.82	22.54' RT	2088557.60	1024910.80
CP31	746.19	13+56.26	19.89' LT	2087668.08	1025116.22
CP32	745.98	11+01.80	19.86' LT	2087421.79	1025176.34
CP33	744.93	9+71.78	22.86' RT	2087306.82	1025251.09
TBM1	747.35	10+40.63	41.57' RT	2087378.16	1025250.96
TBM2	745.68	20+49.79	22.74' RT	2088348.33	1024973.87
TBM3	743.42	24+65.99	31.54' RT	2088747.29	1024840.62

NIPPERSINK BOULEVARD COORDINATE TABLE			
DESCRIPTION	STATION	NORTHING	EASTING
POB/POT	9+50.00	2087279.78	1025234.78
PC	10+39.95	2087366.54	1025211.05
PI	10+93.91	2087418.59	1025196.81
PT	11+47.85	2087471.34	1025185.40
PC	11+97.26	2087519.63	1025174.95
PI	12+64.26	2087585.12	1025160.78
PT	13+31.22	2087649.51	1025142.26
PC	15+53.59	2087863.22	1025080.79
PI	16+08.84	2087916.32	1025065.52

NIPPERSINK BOULEVARD COORDINATE TABLE CONTINUED			
DESCRIPTION	STATION	NORTHING	EASTING
PT	16+64.09	2087969.74	1025051.43
PI	17+96.75	2088098.02	1025017.58
PC	20+40.03	2088332.97	1024954.46
PI	21+31.86	2088421.65	1024930.64
PCC	22+23.65	2088509.23	1024903.06
PI	23+31.34	2088611.94	1024870.72
PT	24+38.65	2088708.98	1024824.05
POT	25+50.00	2088809.33	1024775.78



GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: Default
 FILE NAME: 4870-250-sht-ATB 1.dgn

FILE NAME = 4870-250-sht-ATB 1.dgn
 USER NAME = mcobb
 PLOT SCALE = 1:100
 PLOT DATE = 8/25/2020

DESIGNED - MGC
 DRAWN - PJS
 CHECKED - KLB
 DATE - 8/25/2020

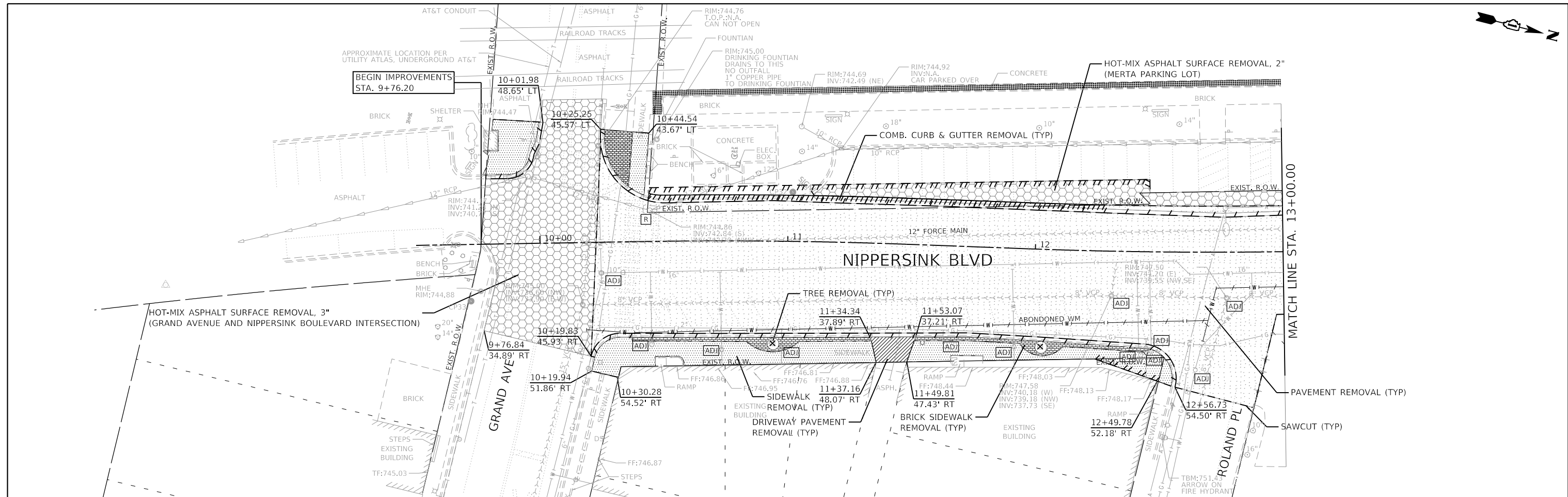
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

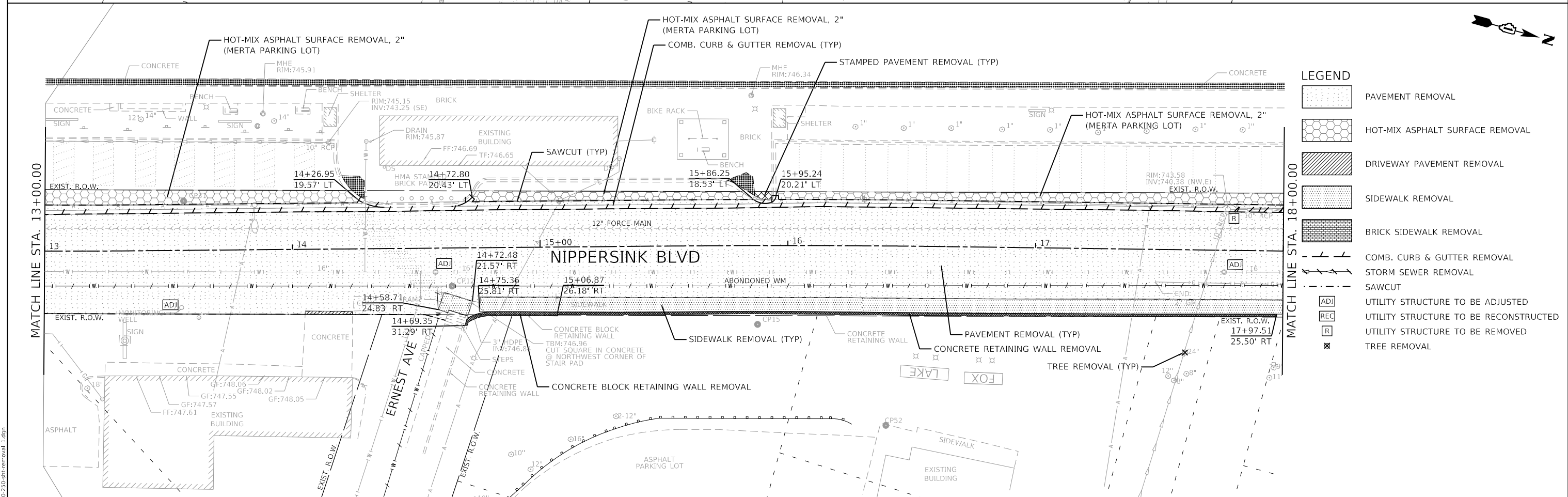
ALIGNMENT, TIES AND BENCHMARK
NIPPERSINK BOULEVARD RECONSTRUCTION
 SCALE: 1"=50' SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	20

CONTRACT NO. 61G46
 ILLINOIS FED. AID PROJECT

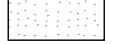



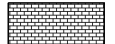
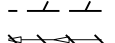
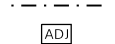







MATCH LINE STA. 13+00.00



MATCH LINE STA. 18+00.00

LEGEND

-  PAVEMENT REMOVAL
-  HOT-MIX ASPHALT SURFACE REMOVAL
-  DRIVEWAY PAVEMENT REMOVAL
-  SIDEWALK REMOVAL
-  BRICK SIDEWALK REMOVAL
-  COMB. CURB & GUTTER REMOVAL
-  STORM SEWER REMOVAL
-  SAWCUT
-  UTILITY STRUCTURE TO BE ADJUSTED
-  UTILITY STRUCTURE TO BE RECONSTRUCTED
-  UTILITY STRUCTURE TO BE REMOVED
-  TREE REMOVAL

GHA GEWALT HAMILTON ASSOCIATES, INC.

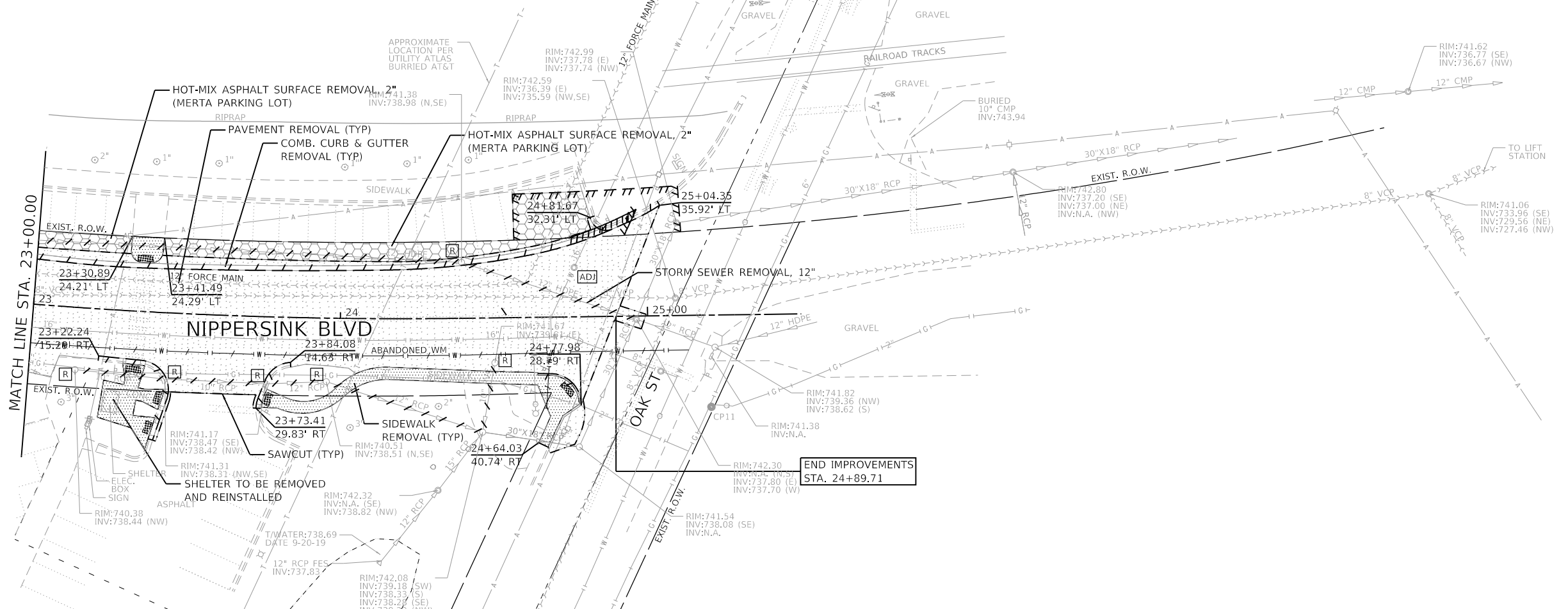
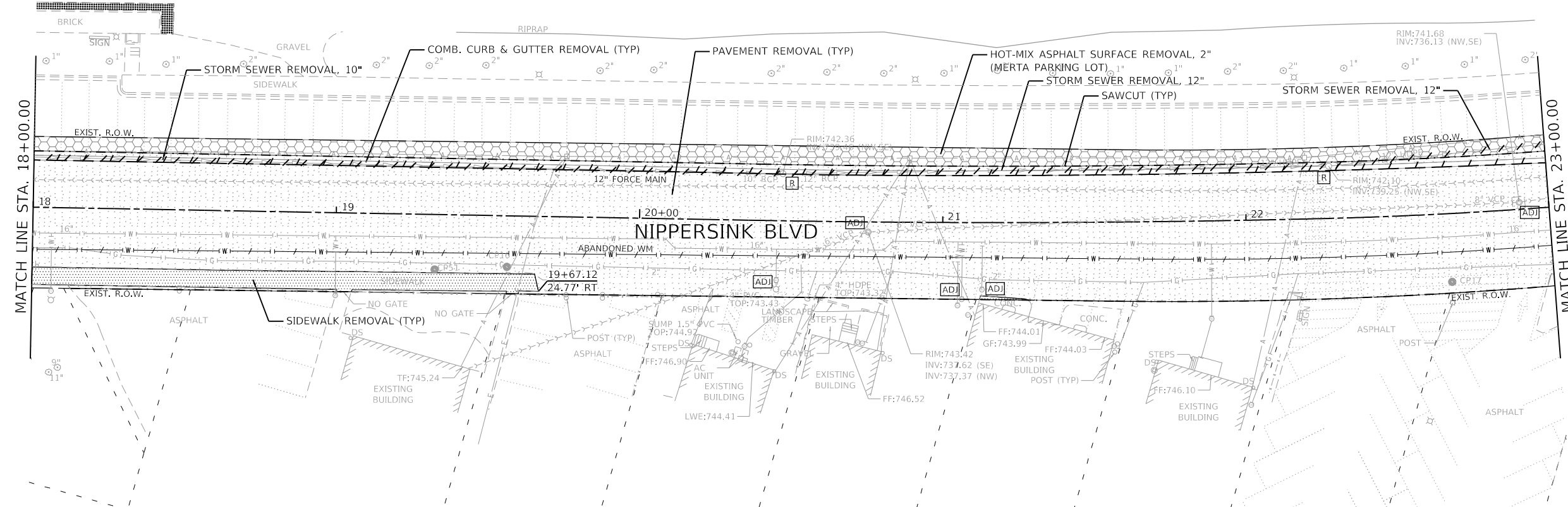
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 USER NAME = mcobb
 DESIGNED - MGC
 DRAWN - PJS
 CHECKED - KLB
 DATE - 8/25/2020

REVISIONS
 REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

REMOVAL PLANS
NIPPERSINK BOULEVARD RECONSTRUCTION
 SCALE: 1"=20'
 SHEET 1 OF 2 SHEETS
 STA. 10+00.00 TO STA. 18+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	21
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				



LEGEND

	PAVEMENT REMOVAL
	HOT-MIX ASPHALT SURFACE REMOVAL
	DRIVEWAY PAVEMENT REMOVAL
	SIDEWALK REMOVAL
	BRICK SIDEWALK REMOVAL
	COMB. CURB & GUTTER REMOVAL
	STORM SEWER REMOVAL
	SAWCUT
	UTILITY STRUCTURE TO BE ADJUSTED
	UTILITY STRUCTURE TO BE RECONSTRUCTED
	UTILITY STRUCTURE TO BE REMOVED
	TREE REMOVAL

GHA GEWALT HAMILTON ASSOCIATES, INC.

FILE NAME = 4870-250-sht-removal 2.dgn	USER NAME = mcobb	DESIGNED - MGC	REVISED -
4870.25	PLOT SCALE = 1:40	DRAWN - PJS	REVISED -
Default	PLOT DATE = 8/25/2020	CHECKED - KLB	REVISED -
		DATE - 8/25/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

REMOVAL PLANS			
NIPPERSINK BOULEVARD RECONSTRUCTION			
SCALE: 1"=20'	SHEET 2 OF 2 SHEETS	STA. 18+00.00 TO STA. 25+50.00	

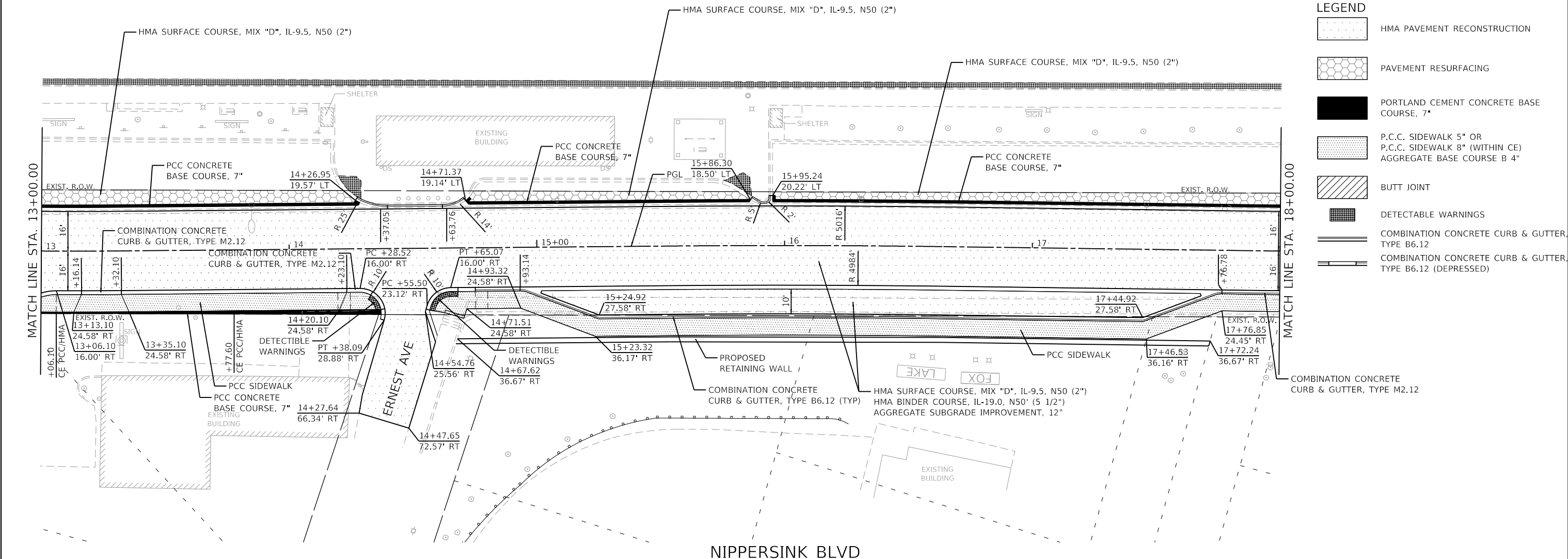
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	22
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				



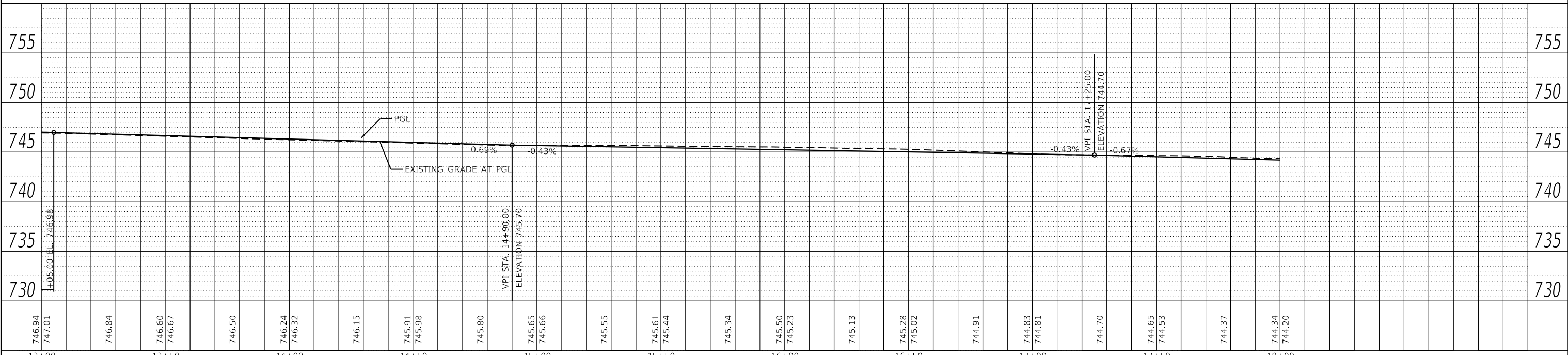
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	PLOTTED	
	ALIGNMENT CHECKED	
	GRADE CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	FILE NAME	

GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: Default
 FILE NAME: 4870-250-shl-plnprf 2.dgn



LEGEND	
	HMA PAVEMENT RECONSTRUCTION
	PAVEMENT RESURFACING
	PORTLAND CEMENT CONCRETE BASE COURSE, 7"
	P.C.C. SIDEWALK 5' OR P.C.C. SIDEWALK 8" (WITHIN CE) AGGREGATE BASE COURSE B 4"
	BUTT JOINT
	DETECTABLE WARNINGS
	COMBINATION CONCRETE CURB & GUTTER, TYPE B6.12
	COMBINATION CONCRETE CURB & GUTTER, TYPE B6.12 (DEPRESSED)



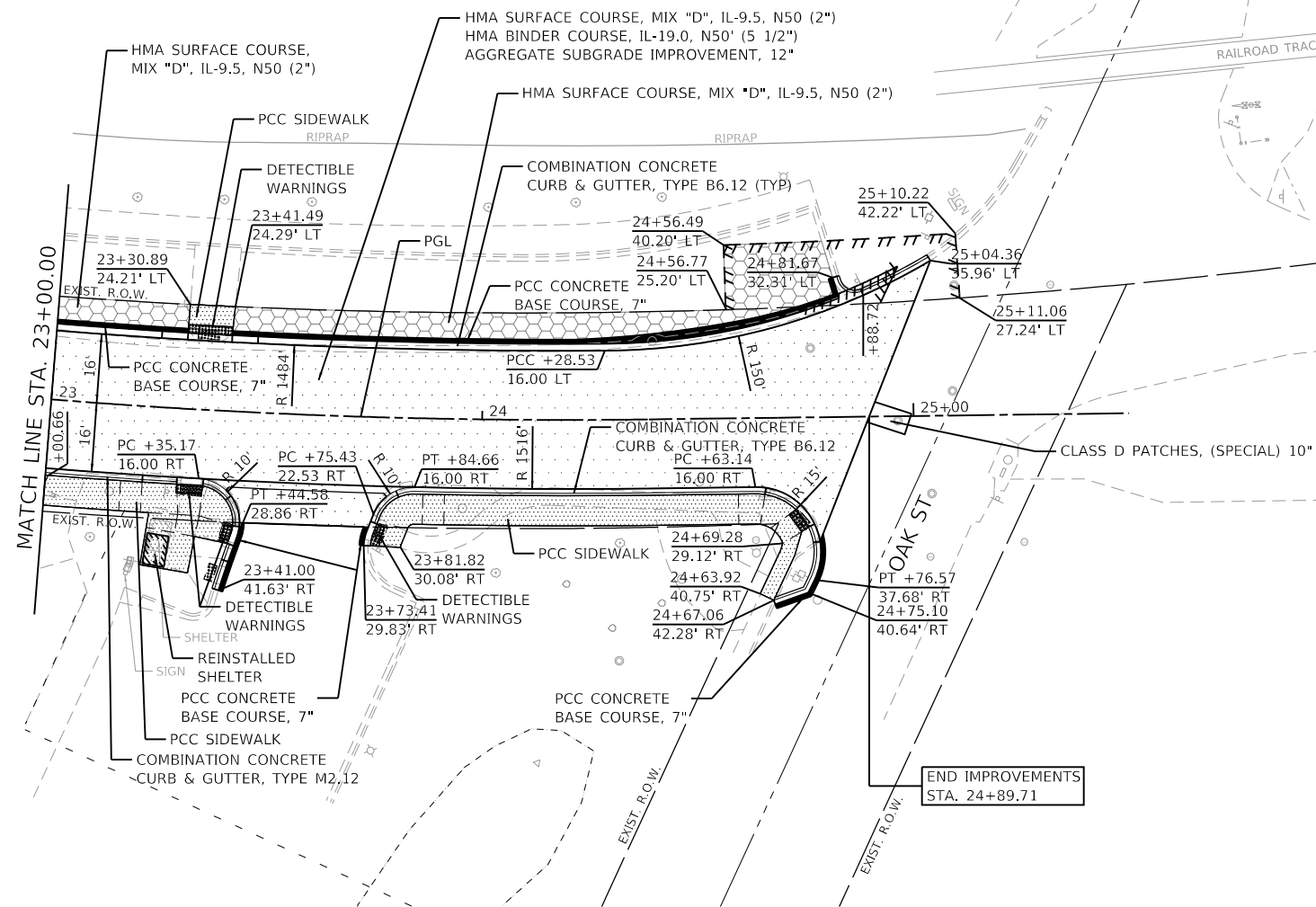
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4870.25	PLOT SCALE = 1:40	CHECKED - KLB	REVISED -		NIPPERSINK BOULEVARD RECONSTRUCTION		CONTRACT NO. 61G46		ILLINOIS FED. AID PROJECT			
Default	PLOT DATE = 8/25/2020	DATE - 8/25/2020	REVISED -		SCALE: H:1"=20'	SHEET 2 OF 4 SHEETS	STA. 13+00.00 TO STA. 18+00.00					



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

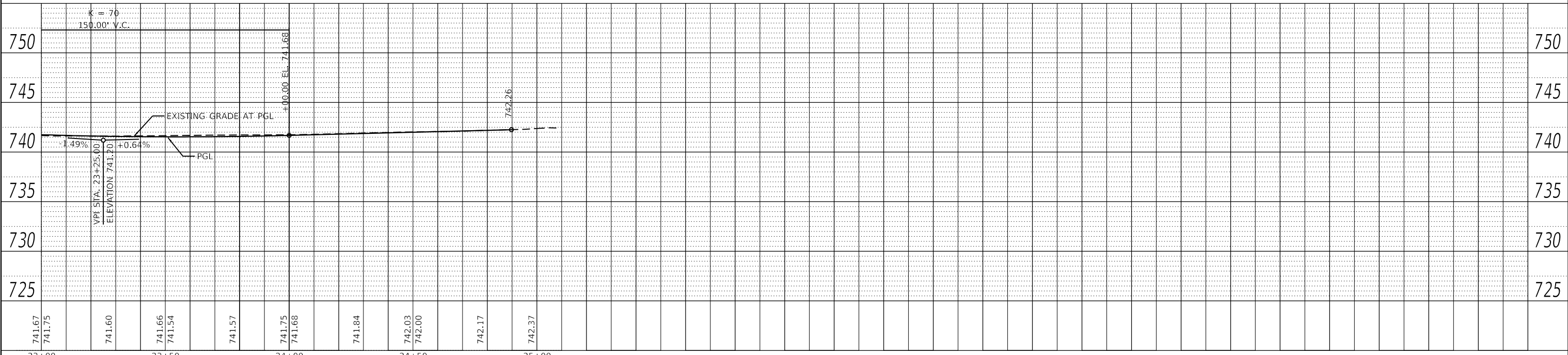
DATE	
BY	
PROFILE	
SURVEYED	
PLOTTED	
GRADES CHECKED	
NOTE BOOK	
NO.	
STRUCTURE NOTATION SHEET	

GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: Default
 FILE NAME: 4870-25-00-shr-plnprf 4.dgn



	HMA PAVEMENT RECONSTRUCTION
	PAVEMENT RESURFACING
	PORTLAND CEMENT CONCRETE BASE COURSE, 7"
	P.C.C. SIDEWALK 5' OR P.C.C. SIDEWALK 8" (WITHIN CE) AGGREGATE BASE COURSE B 4"
	BUTT JOINT
	DETECTABLE WARNINGS
	COMBINATION CONCRETE CURB & GUTTER, TYPE B6.12
	COMBINATION CONCRETE CURB & GUTTER, TYPE B6.12 (DEPRESSED)

NIPPERSINK BLVD






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4870.25		CHECKED - KLB	REVISED -
Default		DATE - 8/25/2020	REVISED -
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		PLOT DATE = 8/25/2020	

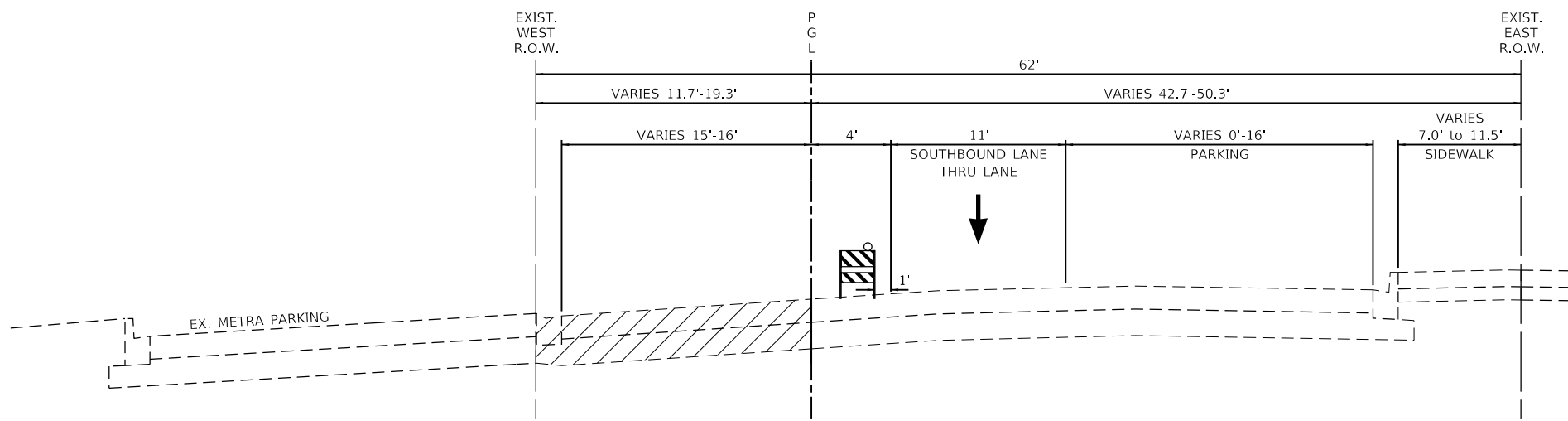
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

PLAN AND PROFILE			
NIPPERSINK BOULEVARD RECONSTRUCTION			
SCALE: H:1"=20'	SHEET 4 OF 4 SHEETS	STA. 23+00.00 TO STA. 25+50.00	

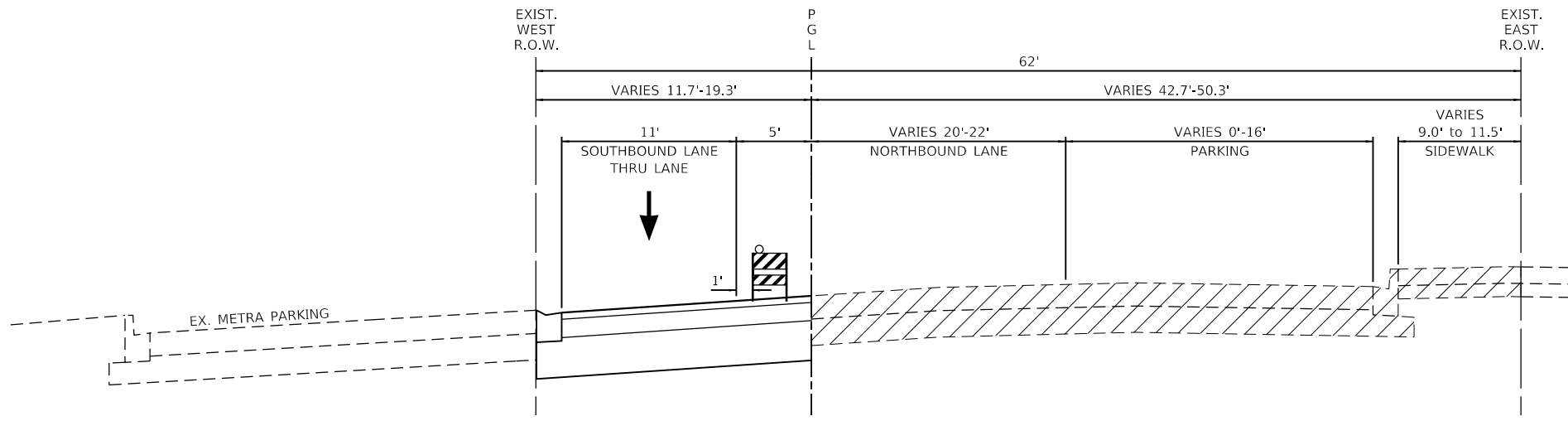
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	26
				CONTRACT NO. 61G46
				ILLINOIS FED. AID PROJECT

LEGEND

-  WORK ZONE
-  BARRICADES, TYPE II WITH WARNING LIGHT COMPLIANT WITH APPLICABLE REQUIREMENTS OUTLINED IN BDE 80392
-  DIRECTIONAL ARROW



**NIPPERSINK BOULEVARD
STAGE 1 TYPICAL SECTION**
STA. 9+76.20 TO STA. 24+89.71



**NIPPERSINK BOULEVARD
STAGE 2 TYPICAL SECTION**
STA. 9+76.20 TO STA. 24+89.71

GHA GEWALT HAMILTON ASSOCIATES, INC.

MODEL: Default
FILE NAME: 4870-250-sht-MOT stage(1-2) typical.dgn

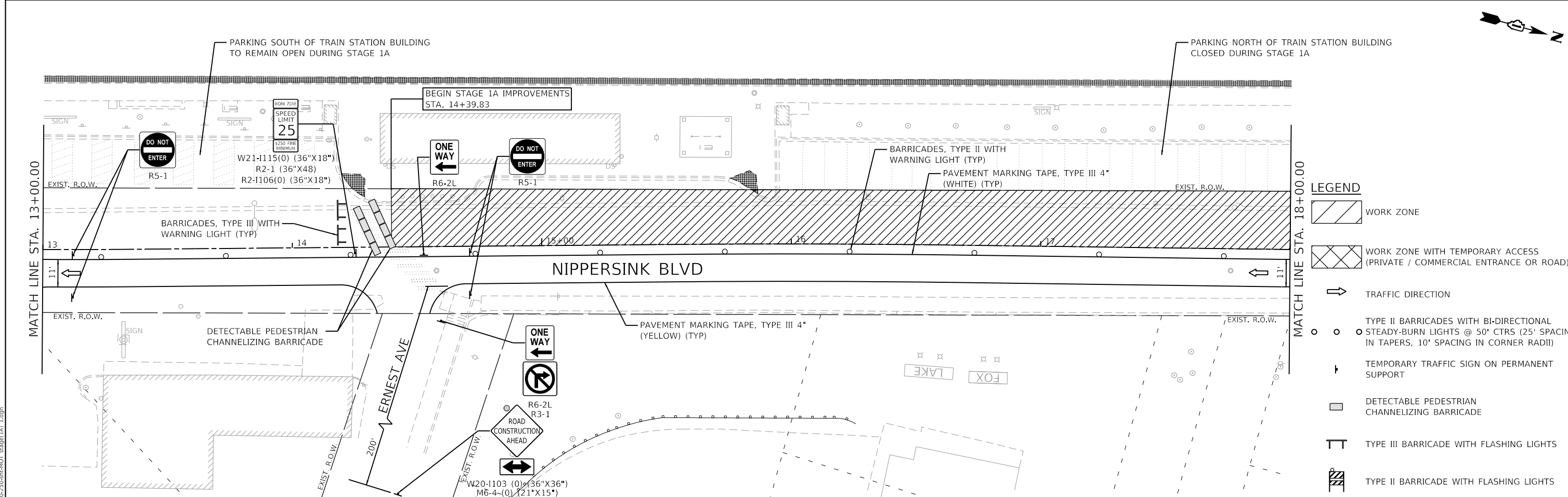
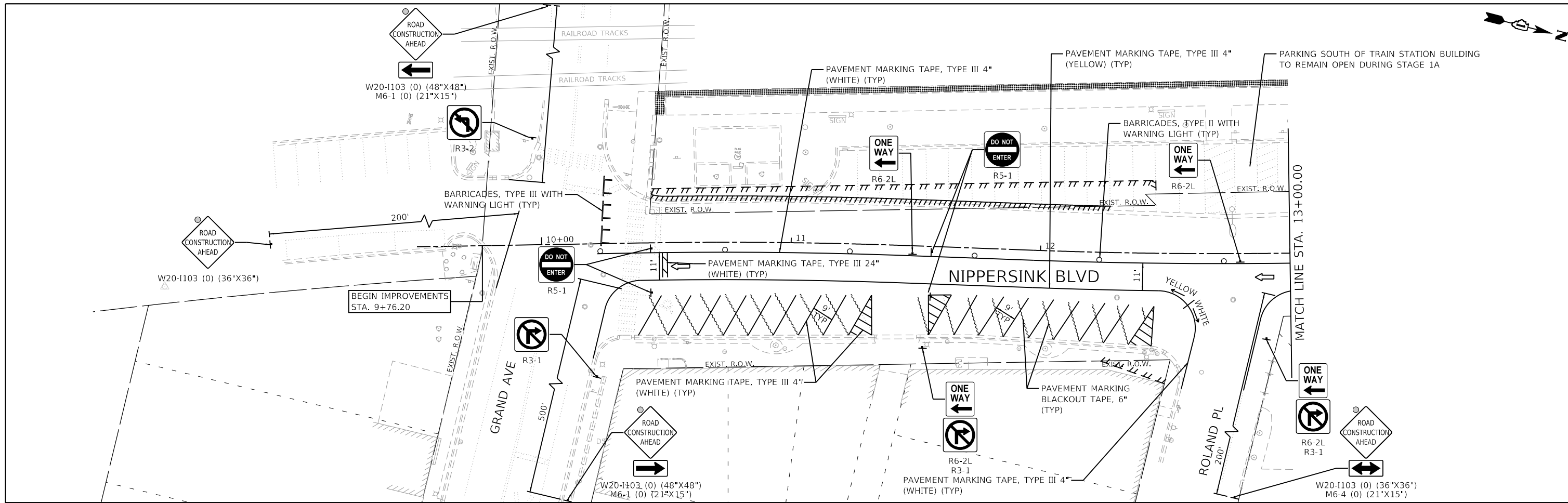
FILE NAME =	USER NAME = mcobb	DESIGNED - MGC	REVISED -
4870-250-sht-MOT stage(1-2) typical.dgn		DRAWN - PJS	REVISED -
4870.25	PLOT SCALE = 1:10	CHECKED - KLB	REVISED -
Default	PLOT DATE = 8/25/2020	DATE - 8/25/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
NIPPERSINK BOULEVARD RECONSTRUCTION**

SCALE: NIT.S. SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	27
CONTRACT NO. 61G46			ILLINOIS FED. AID PROJECT	



- LEGEND**
- WORK ZONE
 - WORK ZONE WITH TEMPORARY ACCESS (PRIVATE / COMMERCIAL ENTRANCE OR ROAD)
 - TRAFFIC DIRECTION
 - TYPE II BARRICADES WITH BI-DIRECTIONAL STEADY-BURN LIGHTS @ 50' CTRS (25' SPACING IN TAPERS, 10' SPACING IN CORNER RADII)
 - TEMPORARY TRAFFIC SIGN ON PERMANENT SUPPORT
 - DETECTABLE PEDESTRIAN CHANNELIZING BARRICADE
 - TYPE III BARRICADE WITH FLASHING LIGHTS
 - TYPE II BARRICADE WITH FLASHING LIGHTS

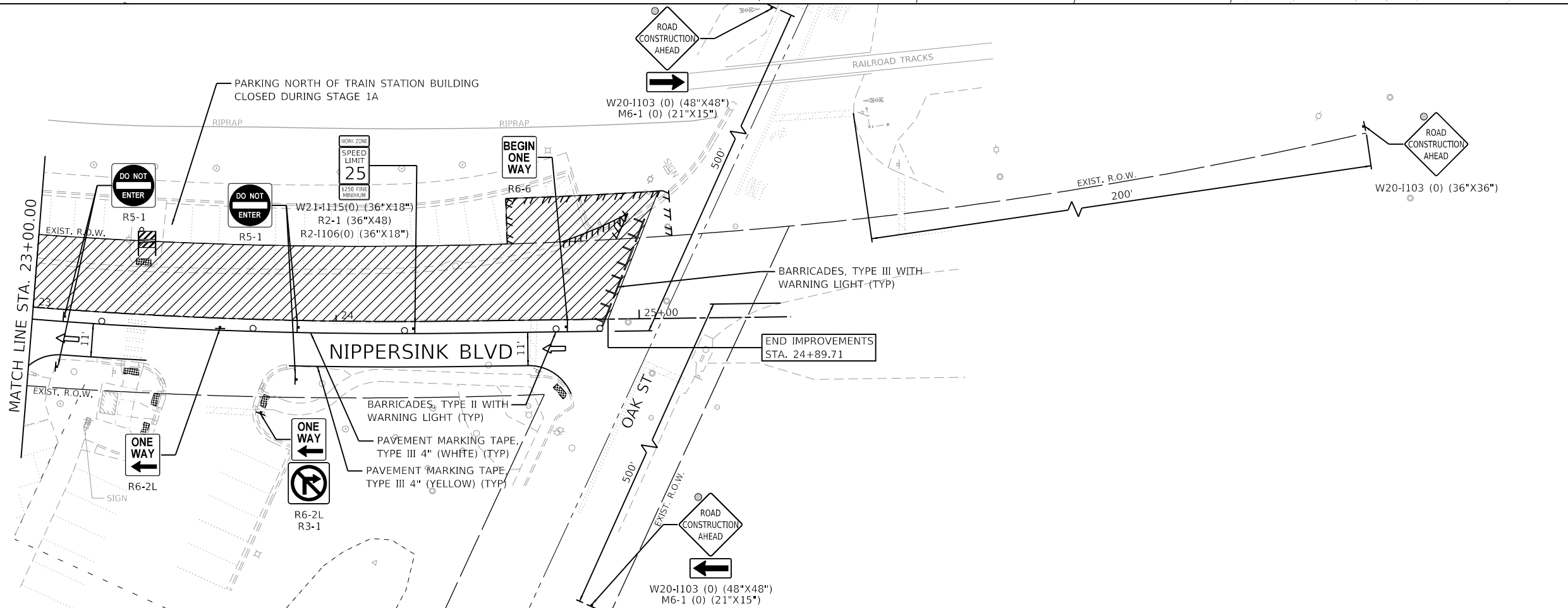
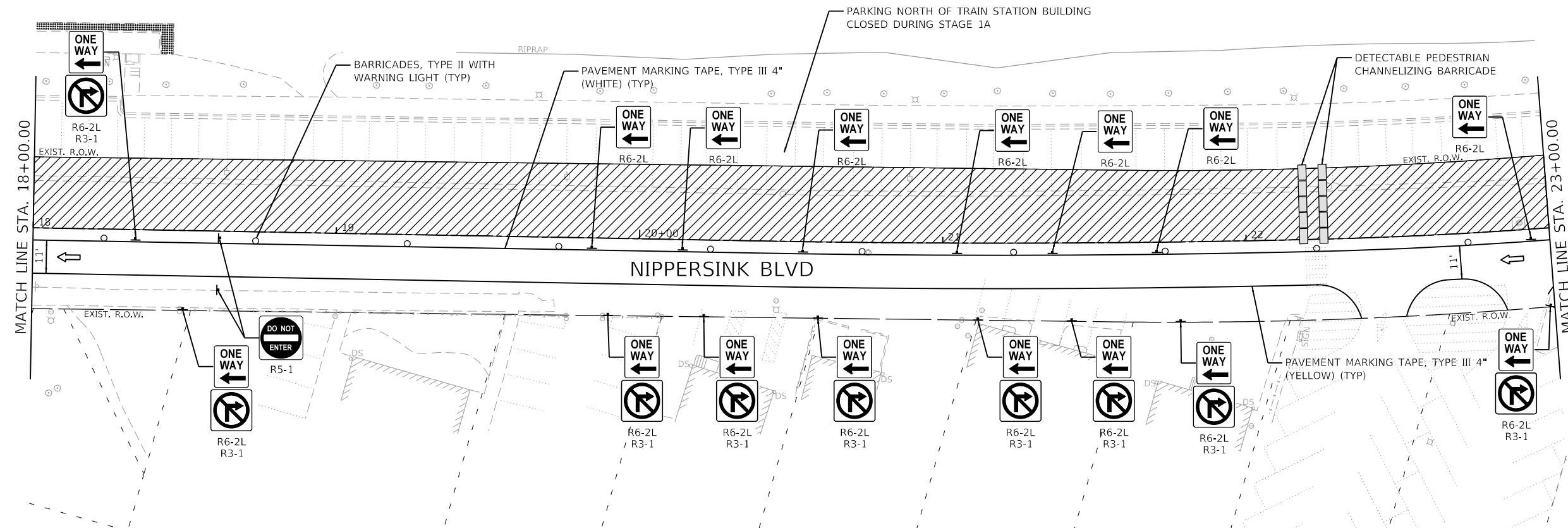
GHA GEWALT HAMILTON ASSOCIATES, INC.
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 FILE NUMBER: 4870-250-sht-MOT-stage1A.dgn

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4870.25		DRAWN - PJS	REVISED -
Default	PLOT SCALE = 1:40	CHECKED - KLB	REVISED -
	PLOT DATE = 8/25/2020	DATE - 8/25/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC STAGE 1A
NIPPERSINK BOULEVARD RECONSTRUCTION
 SCALE: 1"=20' SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.U. RTE. 149	SECTION 17-00025-00-PV	COUNTY LAKE	TOTAL SHEETS 99	SHEET NO. 28
			CONTRACT NO. 61G46	
ILLINOIS FED. AID PROJECT				



- LEGEND**
- WORK ZONE
 - WORK ZONE WITH TEMPORARY ACCESS (PRIVATE / COMMERCIAL ENTRANCE OR ROAD)
 - TRAFFIC DIRECTION
 - TYPE II BARRICADES WITH BI-DIRECTIONAL STEADY-BURN LIGHTS @ 50' CTRS (25' SPACING IN TAPERS, 10' SPACING IN CORNER RADII)
 - TEMPORARY TRAFFIC SIGN ON PERMANENT SUPPORT
 - DETECTABLE PEDESTRIAN CHANNELIZING BARRICADE
 - TYPE III BARRICADE WITH FLASHING LIGHTS
 - TYPE II BARRICADE WITH FLASHING LIGHTS

GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: Default
 FILE NAME: 4870-250-shr-MOT-stage1A.dgn

FILE NAME = 4870-250-shr-MOT-stage1A.dgn
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 PLOT DATE = 8/25/2020

DESIGNED - MGC
 DRAWN - PJS
 CHECKED - KLB
 DATE - 8/25/2020

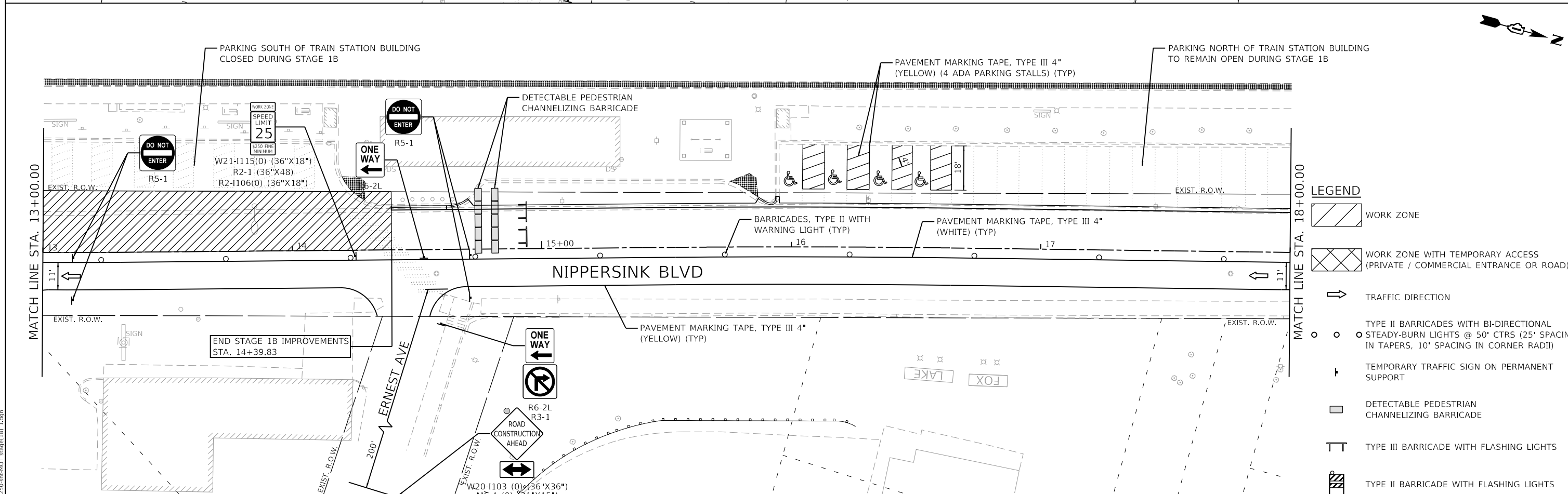
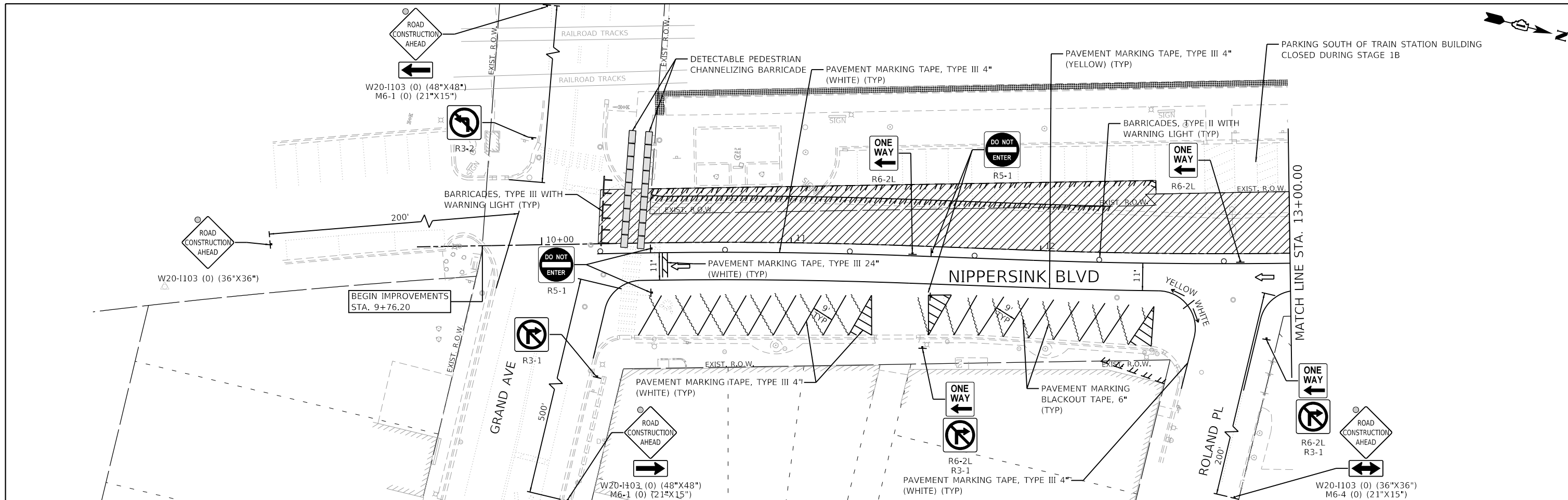
REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC STAGE 1A
 NIPPERSINK BOULEVARD RECONSTRUCTION**

SCALE: 1"=20' SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	29
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				



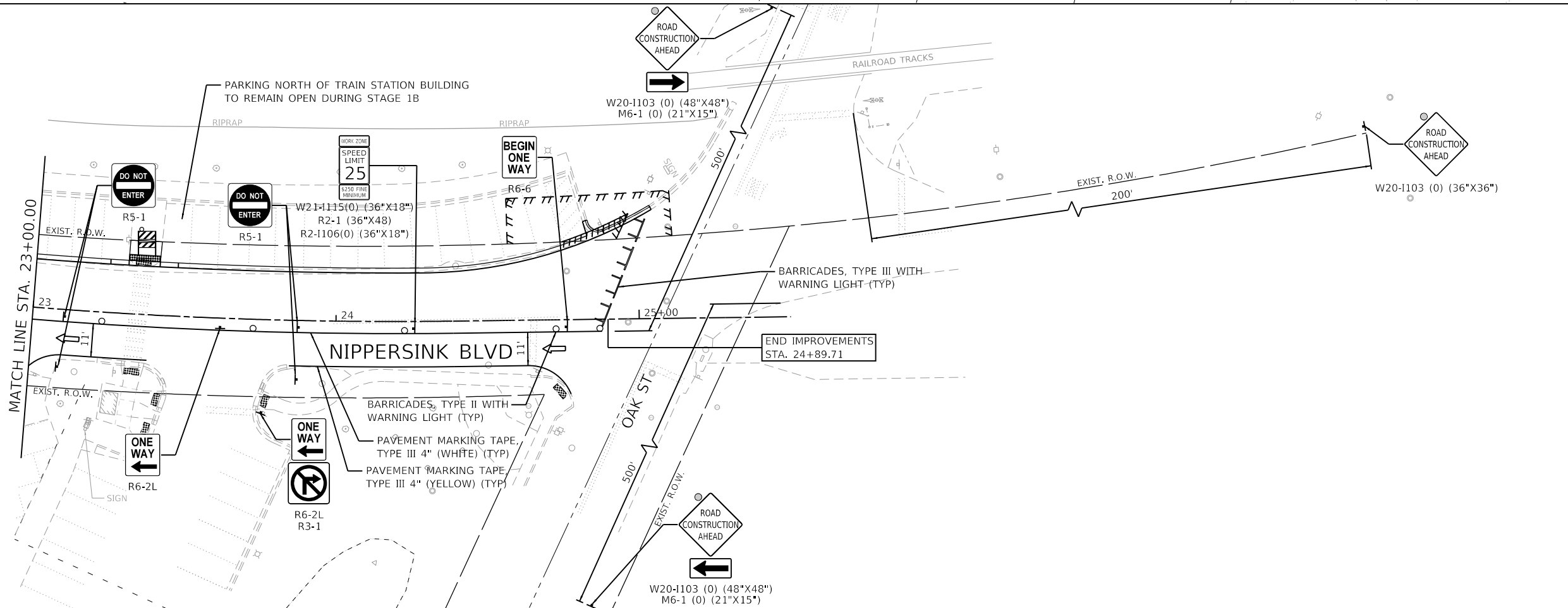
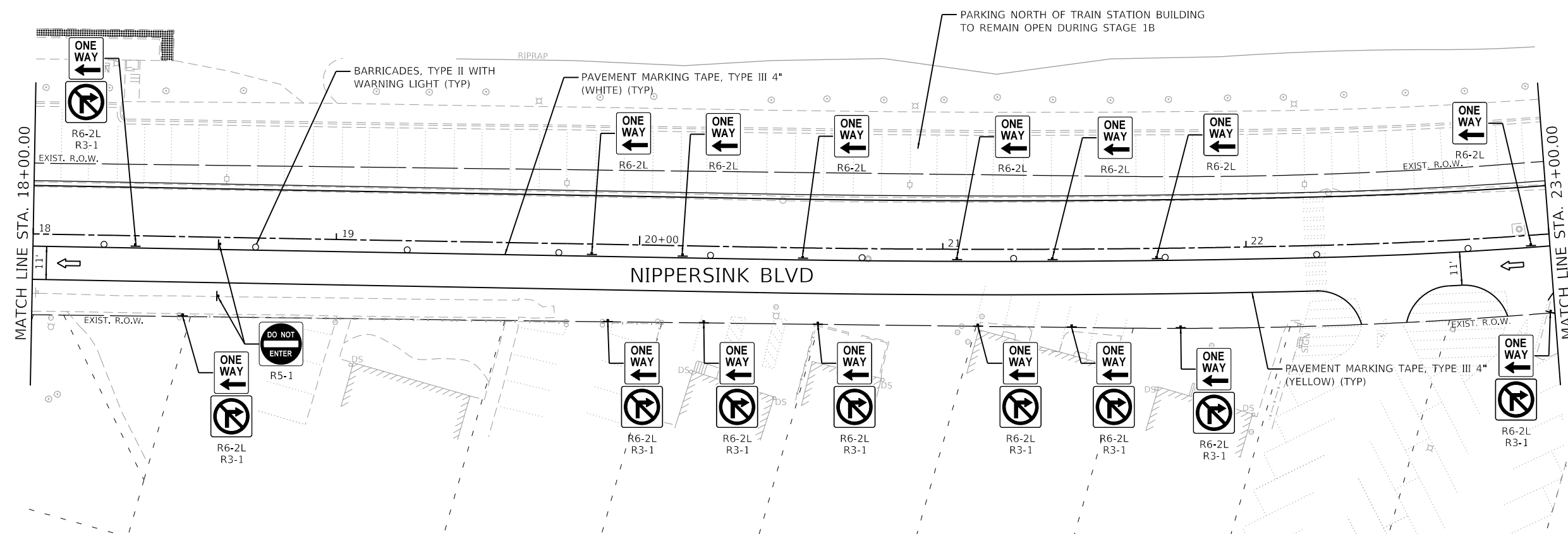
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FILE NAME = 4870-250-sht-MOT-stage1B.dgn	USER NAME = mcobb	DESIGNED - MGC	REVISED -
4870.25		DRAWN - PJS	REVISED -
Default		CHECKED - KLB	REVISED -
	PLOT DATE = 8/25/2020	DATE - 8/25/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC STAGE 1B
NIPPERSINK BOULEVARD RECONSTRUCTION
 SCALE: 1"=20' SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	30
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				



LEGEND

- WORK ZONE
- WORK ZONE WITH TEMPORARY ACCESS (PRIVATE / COMMERCIAL ENTRANCE OR ROAD)
- TRAFFIC DIRECTION
- TYPE II BARRICADES WITH BI-DIRECTIONAL STEADY-BURN LIGHTS @ 50' CTRS (25' SPACING IN TAPERS, 10' SPACING IN CORNER RADII)
- TEMPORARY TRAFFIC SIGN ON PERMANENT SUPPORT
- DETECTABLE PEDESTRIAN CHANNELIZING BARRICADE
- TYPE III BARRICADE WITH FLASHING LIGHTS
- TYPE II BARRICADE WITH FLASHING LIGHTS

GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: Default
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FILE NAME = 4870-250-sht-MOT_stage1B(1).2.dgn
 USER NAME = mcobb
 PLOT SCALE = 1:40
 PLOT DATE = 8/25/2020

DESIGNED - MGC
 DRAWN - PJS
 CHECKED - KLB
 DATE - 8/25/2020

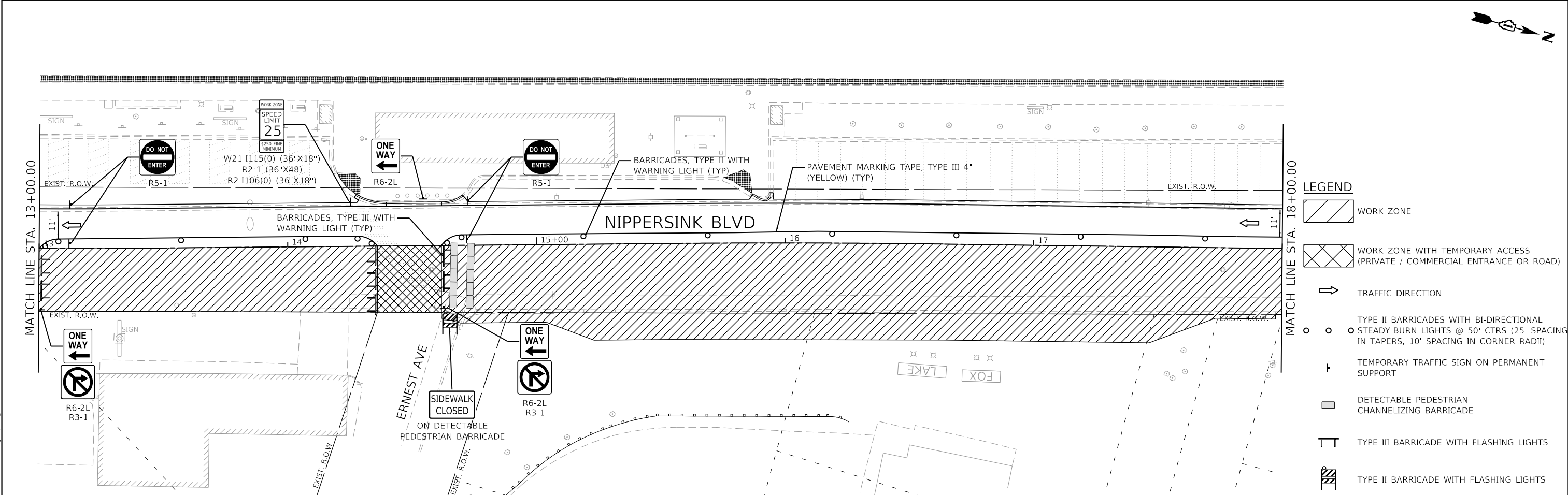
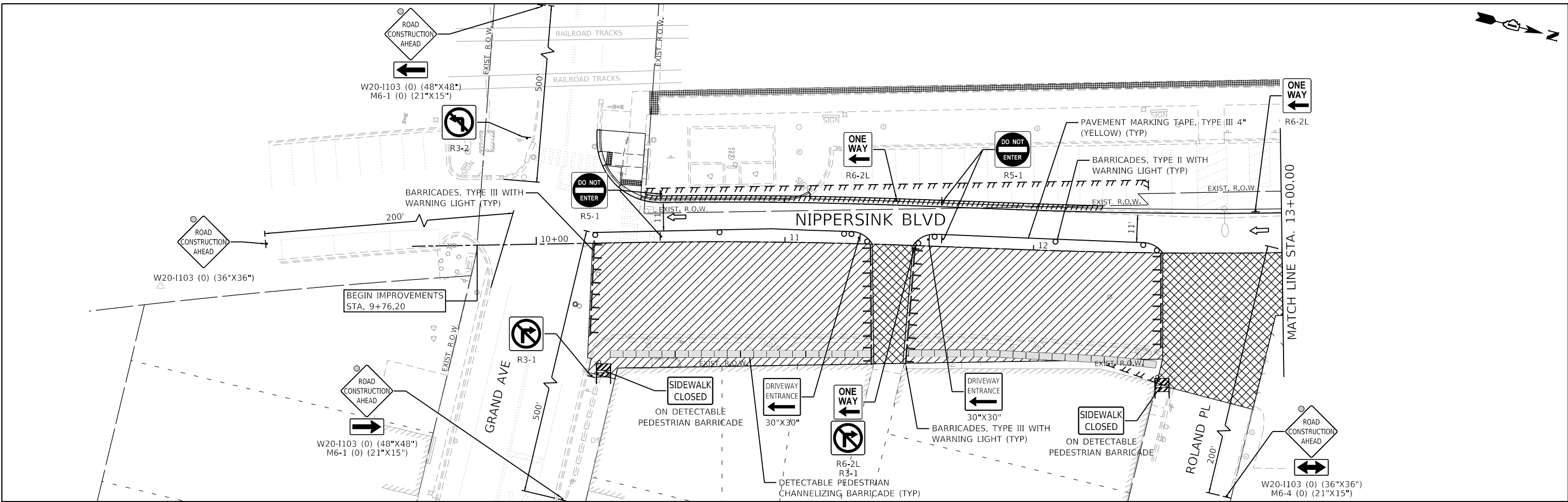
REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC STAGE 1B
 NIPPERSINK BOULEVARD RECONSTRUCTION**

SCALE: 1"=20' SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	31
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				



- LEGEND**
- WORK ZONE
 - WORK ZONE WITH TEMPORARY ACCESS (PRIVATE / COMMERCIAL ENTRANCE OR ROAD)
 - TRAFFIC DIRECTION
 - TYPE II BARRICADES WITH BI-DIRECTIONAL STEADY-BURN LIGHTS @ 50' CTRS (25' SPACING IN TAPERS, 10' SPACING IN CORNER RADII)
 - TEMPORARY TRAFFIC SIGN ON PERMANENT SUPPORT
 - DETECTABLE PEDESTRIAN CHANNELIZING BARRICADE
 - TYPE III BARRICADE WITH FLASHING LIGHTS
 - TYPE II BARRICADE WITH FLASHING LIGHTS

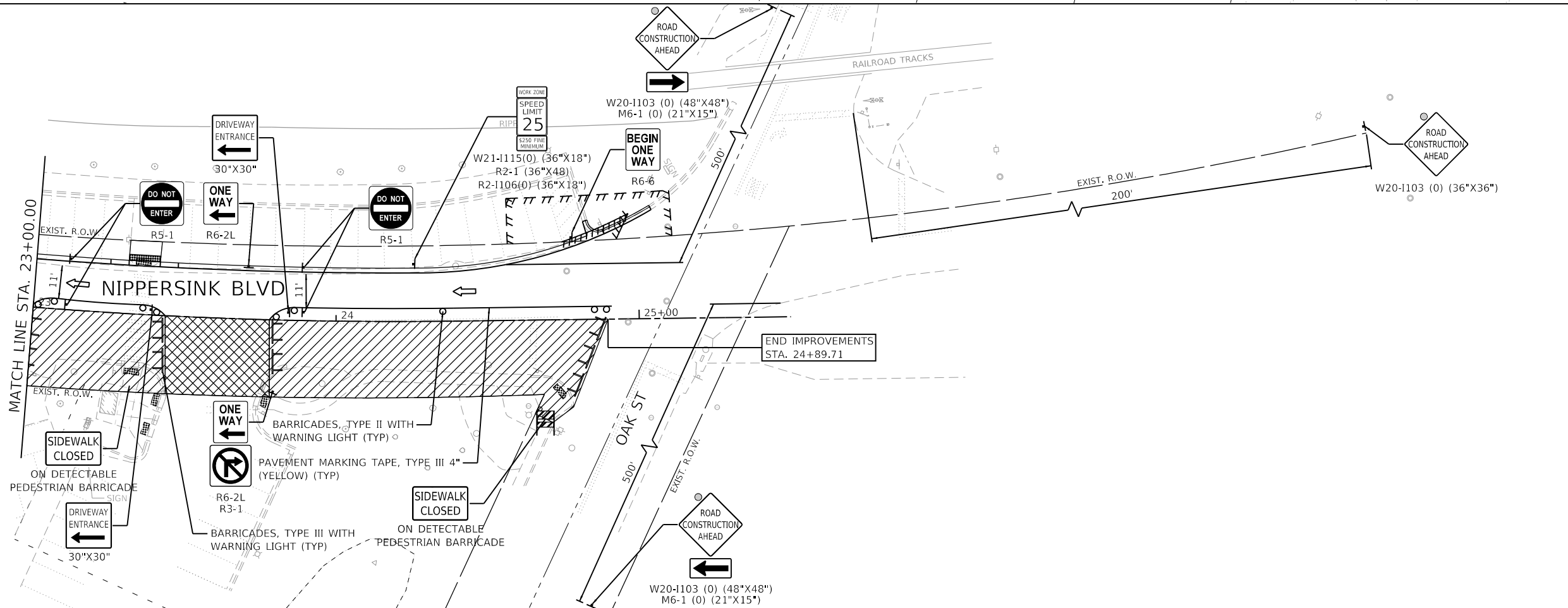
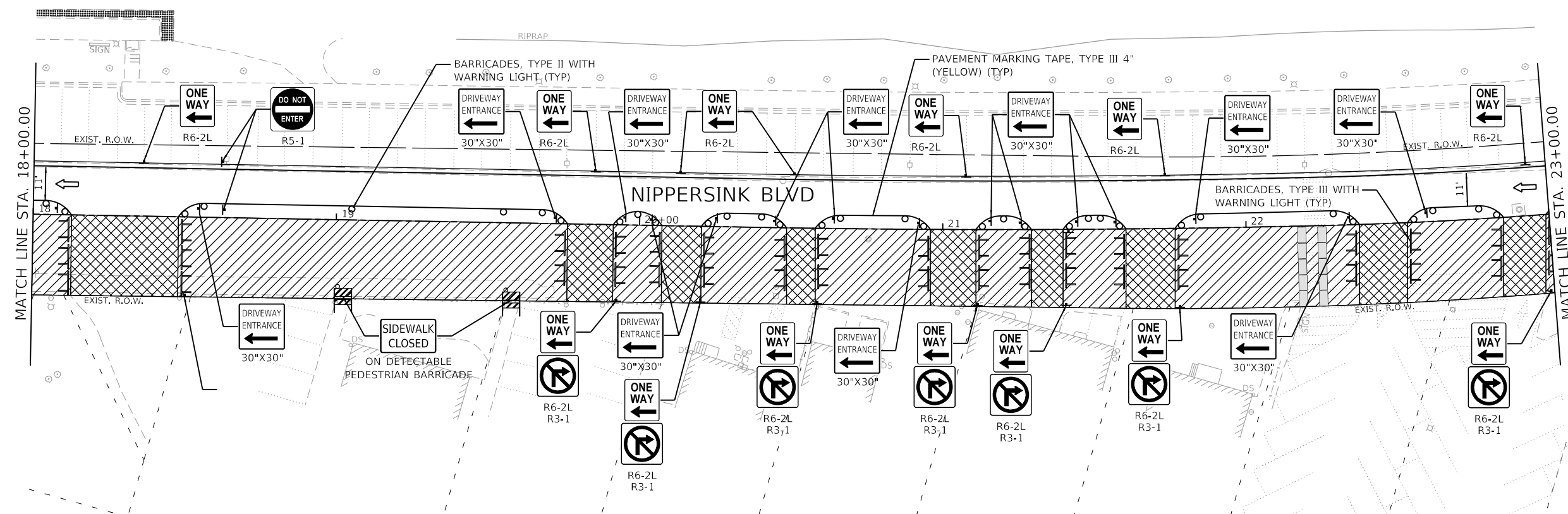
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4870.25		DRAWN - PJS	REVISED -
Default		CHECKED - KLB	REVISED -
	PLOT DATE = 8/25/2020	DATE - 8/25/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC STAGE 2
NIPPERSINK BOULEVARD RECONSTRUCTION
 SCALE: 1"=20' SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	32
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				



- LEGEND**
- WORK ZONE
 - WORK ZONE WITH TEMPORARY ACCESS (PRIVATE / COMMERCIAL ENTRANCE OR ROAD)
 - TRAFFIC DIRECTION
 - TYPE II BARRICADES WITH BI-DIRECTIONAL STEADY-BURN LIGHTS @ 50' CTRS (25' SPACING IN TAPERS, 10' SPACING IN CORNER RADII)
 - TEMPORARY TRAFFIC SIGN ON PERMANENT SUPPORT
 - DETECTABLE PEDESTRIAN CHANNELIZING BARRICADE
 - TYPE III BARRICADE WITH FLASHING LIGHTS
 - TYPE II BARRICADE WITH FLASHING LIGHTS

GHA GEWALT HAMILTON ASSOCIATES, INC.
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 FILE NUMBER: 4870-250-sht-MOT_stage(2).dgn

FILE NAME = 4870-250-sht-MOT_stage(2).dgn
 USER NAME = mcobb
 PLOT SCALE = 1:40
 PLOT DATE = 8/25/2020

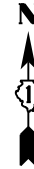
DESIGNED - MGC	REVISED -
DRAWN - PJS	REVISED -
CHECKED - KLB	REVISED -
DATE - 8/25/2020	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC STAGE 2
 NIPPERSINK BOULEVARD RECONSTRUCTION**

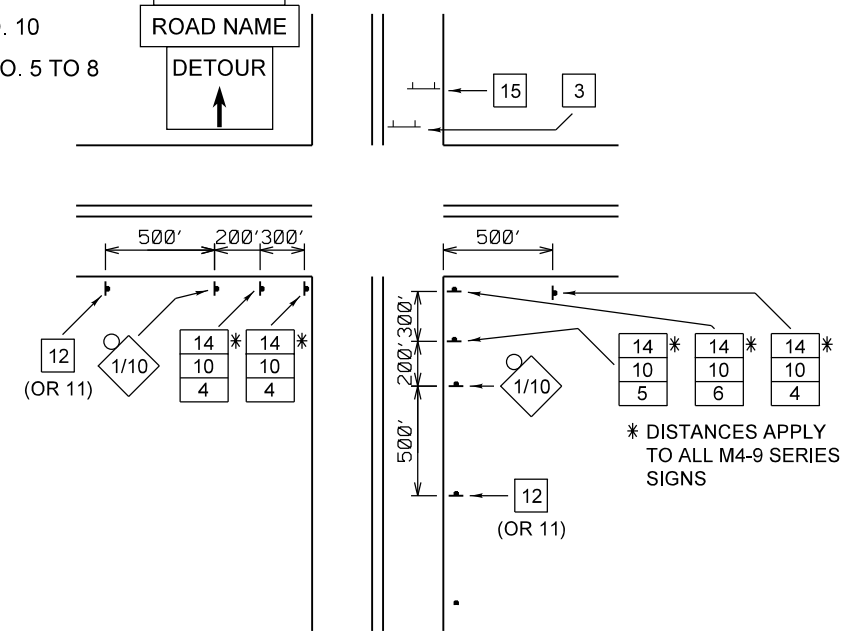
SCALE: 1"=20' SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	33
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				



TYPICAL INTERSECTION AT POINT OF DETOUR

TYPICAL DETOUR ASSEMBLY SIGN
 SIGN NO. 14 DIRECTION
 SIGN NO. 10 ROAD NAME
 SIGNS NO. 5 TO 8 DETOUR

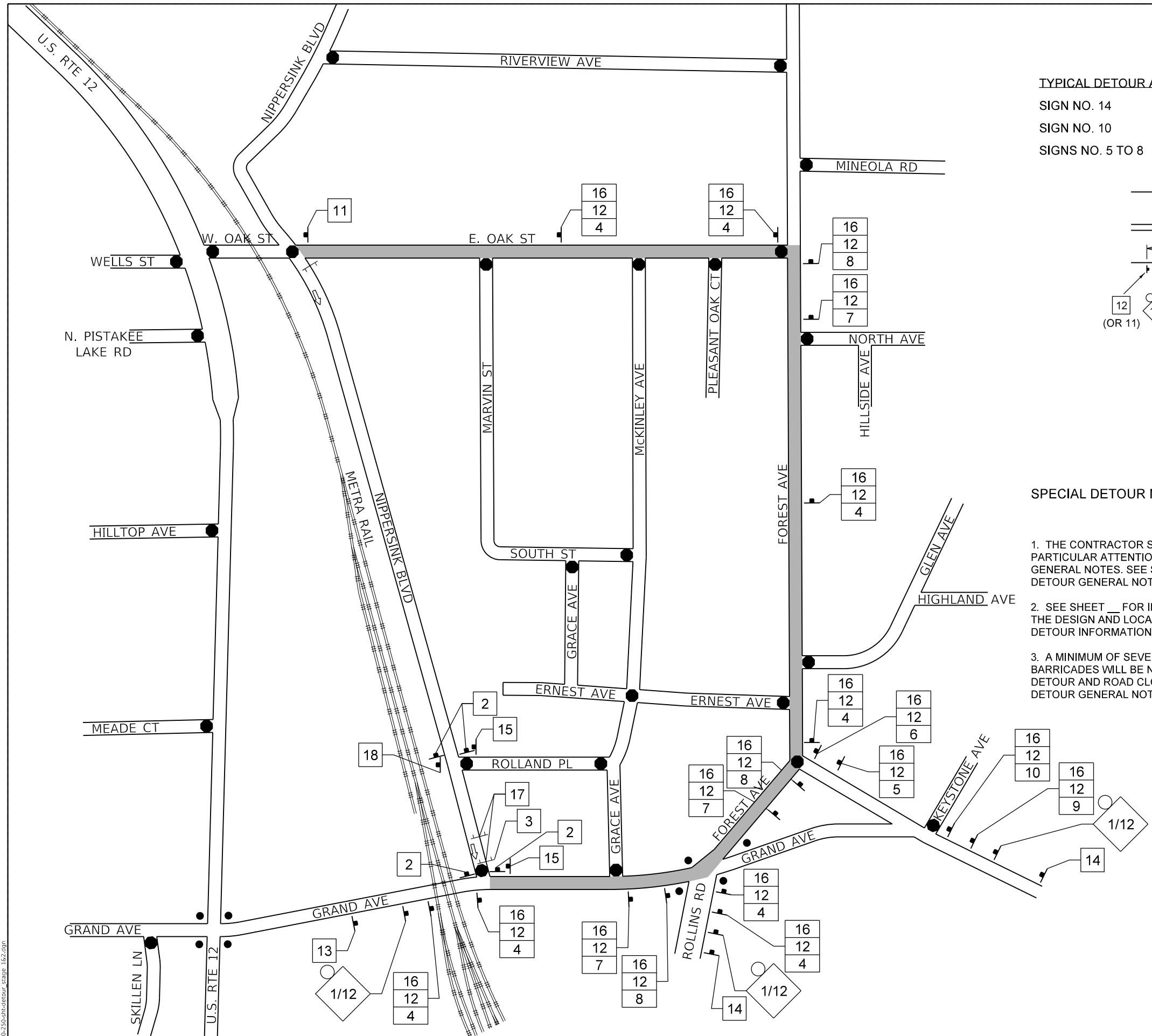


SPECIAL DETOUR NOTES:

1. THE CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO THE DETOUR GENERAL NOTES. SEE SHEET __ FOR THE DETOUR GENERAL NOTES.
2. SEE SHEET __ FOR INFORMATION ON THE DESIGN AND LOCATION OF THE DETOUR INFORMATION SIGNS.
3. A MINIMUM OF SEVEN (7) TYPE III BARRICADES WILL BE NEEDED FOR THIS DETOUR AND ROAD CLOSURE. SEE DETOUR GENERAL NOTE 10.

LEGEND

- SIGNALIZED INTERSECTION
- DETOUR ROUTE
- STOP SIGN INTERSECTION
- 48"X48" CONSTRUCTION WARNING SIGN, WITH AMBER FLASHING LIGHT NUMBER DENOTES TYPE
- M4-9 SERIES DETOUR SIGN WITH ROAD NAME AND DIRECTION PLATES, NUMBER DENOTES TYPE
- OTHER DETOUR SIGNS, NUMBER DENOTES TYPE
- TYPE III BARRICADE WITH AMBER FLASHING LIGHTS



GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: Default
 FILE: 4870-250-sht-detour_stage 1&2.dgn
 4870.25
 Default

FILE NAME =	USER NAME = mcobb	DESIGNED - MGC	REVISED -
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4870.25	PLOT SCALE = 1:2	CHECKED - KLB	REVISED -
Default	PLOT DATE = 8/25/2020	DATE - 8/25/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETOUR PLAN STAGE 1 AND 2			
NIPPERSINK BOULEVARD RECONSTRUCTION			
SCALE: N.T.S.	SHEET 1 OF 1 SHEETS	STA. _____	TO STA. _____

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	34
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES

SIGN NO. SIGN SIGN TYPE QUANTITY

①		W20-2 (O) 48	3
②		R5-1	4
③		M4-10R (O) 4818	1
④		M4-9 (O) 3021	8
⑤		M4-9R (O) 3021	1
⑥		M4-9R (O) 3021	1
⑦		M4-9L (O) 3021	3
⑧		M4-9L (O) 3021	3
⑨		M4-9L (O) 3021	1
⑩		M4-9L (O) 3021	1
⑪		M4-8a (O) 2418	1
⑫		SPECIAL (O) 9 VARIABLE	21
⑬		SPECIAL (O) 6030	1
⑭		SPECIAL (O) 6030	2
⑮		R3-1	2
⑯		M3-1 (O) 2412	18

⑰		R11-2 4830	2
⑱		R6-1	1

DETOUR GENERAL NOTES:

- ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL, 1, 2016", "THE QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES ADOPTED 2010, "THE DETAILS IN THESE PLANS AND THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
- THE ENGINEER SHALL BE NOTIFIED IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT. THE ENGINEER SHALL DETERMINE THE HOUR OF CLOSURE. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.
- IF DEEMED NECESSARY BY THE ENGINEER A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR SHALL BE HELD AT LEAST TWO WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT.
- THE CONTRACTOR SHALL SUPPLY TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF HIS REPRESENTATIVES ON THE CONSTRUCTION SITE AND HIS REPRESENTATIVE RESPONSIBLE FOR THE DETOUR SIGNING PRIOR TO THE START OF THE WORK. THE FOX LAKE POLICE DEPARTMENT REPRESENTATIVE FOR THIS DETOUR IS:
FOX LAKE POLICE DEPARTMENT
POLICE NON-EMERGENCY NUMBER
301 IL-59
FOX LAKE, IL 60020
(847) 587-3100
- IF REQUESTED BY THE CONTRACTOR IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT THE ENGINEER WILL FIELD LOCATE THE POSITIONS OF ANY SIGNS.
- LONGITUDINAL DIMENSIONS SHOWN ON THESE PLANS MAY BE ADJUSTED TO FIT FIELD CONDITIONS, WITH THE APPROVAL OF THE ENGINEER.
- THE ROAD SHALL NOT BE CLOSED UNTIL ALL SIGNING IS ERECTED IN ACCORDANCE WITH THE DETOUR PLAN AND INSPECTED AND APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL BARRICADES, SIGNS, LIGHTS, AND OTHER DEVICES INSTALLED BY HIM ARE IN PLACE AND OPERATING 24 HOURS EACH DAY INCLUDING SUNDAYS AND HOLIDAYS DURING THE TIME THE DETOUR IS IN EFFECT.
- THE TRAFFIC CONTROL SHOWN ON THE DETOUR PLAN IS THE MINIMUM NECESSARY TO ENSURE THIS ROAD CLOSURE. THE CONTRACTOR SHALL MAKE ALL CHANGES IN TRAFFIC CONTROL THAT IS DEEMED NECESSARY BY THE ENGINEER.
- ALL EXISTING SIGNING THAT IS NOT APPLICABLE WHILE THE DETOUR IS IN EFFECT SHALL BE COMPLETELY COVERED BY THE CONTRACTOR, IN A MANNER APPROVED BY THE ENGINEER.
- ALL DETOUR SIGNING SHALL BE POST MOUNTED IF THE ROAD CLOSURE IS TO EXCEED FOUR (4) CALENDAR DAYS.
- ALL DETOUR SIGNING EXCEPT REGULATORY SIGNS SHALL HAVE BLACK LEGENDS ON FLUORESCENT ORANGE SHEETING AND STANDARD BLACK BORDERS. THE FLUORESCENT ORANGE REFLECTIVE SHEETING SHALL MEET THE REQUIREMENTS OF SECTION 1091 OF THE STANDARD SPECIFICATIONS. ALL DETOUR SIGNING SHALL BE NEW OR LIKE NEW CONDITION. THE ENGINEER SHALL BE THE SOLE JUDGE OF THE CONDITION OF THE SIGNS.
- THE SIZES OF ALL SIGNS NOT SPECIFIED IN THESE PLANS SHALL BE AS REQUIRED BY THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- AS A MINIMUM, ALL AMBER FLASHING LIGHTS THAT ARE REQUIRED FOR THIS DETOUR SHALL MEET THE REQUIREMENTS FOR TYPE A-LOW INTENSITY FLASHING LIGHTS IN ARTICLE 1106.02 OF THE STANDARD SPECIFICATIONS. ALL LIGHTS SHALL OPERATE DURING THE HOURS OF DARKNESS. ONLY LIGHTS THAT HAVE BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION SHALL BE USED.
- WHEN REQUIRED THE MINIMUM DIMENSIONS OF THE ORANGE WARNING FLAGS SHOWN IN THESE PLANS ARE 18"X 18".
- ALL BARRICADES SHALL HAVE REFLECTORIZED STRIPING ON BOTH SIDES OF THE BARRICADES. THE TYPE III BARRICADES USED AT THE POINT OF CLOSURE TO THRU TRAFFIC SHALL NOT EXCEED 8 FEET IN WIDTH EACH, FOR A SINGLE APPROACH LANE.
- THE "ROAD CLOSED" (R11-2), THE "ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY" (R11-3) AND THE "ROAD CLOSED TO THRU TRAFFIC" (R11-4) SIGNS SHALL BE MOUNTED ABOVE THE TOP OF THE BARRICADE. ALL TYPE III BARRICADES SHALL HAVE TWO (2) AMBER TYPE A-LOW INTENSITY FLASHING LIGHTS SPACED NEAR THE CENTERLINE OF THE SUPPORTS.
- THE ROAD NAME SIGN SHALL HAVE A BLACK LEGEND ON THE FLUORESCENT ORANGE REFLECTIVE SHEETING. THE SIGN BLANK SHALL BE A 9" X VARIABLE OR A 12" X VARIABLE WITH DESIGN SERIES C LETTERS. THE CAPITAL LETTERS SHALL BE 6" WITH 4.5" LOWER CASE.
- DURING NON-WORKING HOURS AT THE POINT OF ROAD CLOSURE TO ALL TRAFFIC THE CONTRACTOR SHALL PROVIDE A MEANS TO RESTRAIN THE BARRICADES FROM EASY MOVEMENT BY VANDALS. THE CHOSEN METHOD SHALL BE APPROVED BY THE ENGINEER.
- CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED IMMEDIATELY BEHIND THE TYPE III BARRICADES DURING NON-WORKING HOURS. IN ANY EVENT ARTICLE 701.04 OF THE STANDARD SPECIFICATIONS SHALL APPLY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE VISIBILITY OF ALL DETOUR AND CONSTRUCTION SIGNING, INCLUDING BRUSHING BACK VEGETATION IF DEEMED NECESSARY BY THE ENGINEER.
- THE FOLLOWING ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD IS APPLICABLE FOR THIS WORK:
STANDARD 701901
- THE ENGINEER SHALL BE NOTIFIED AT LEAST TWO (2) HOURS BEFORE THE ROAD IS TO BE OPENED TO TRAFFIC. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.
- THE DURATION OF THE DETOUR SHALL NOT EXCEED 110 WORKING DAYS. THE PENALTY FOR EXCEEDING THE DURATION SHALL BE \$2,000 PER WORKING DAY.

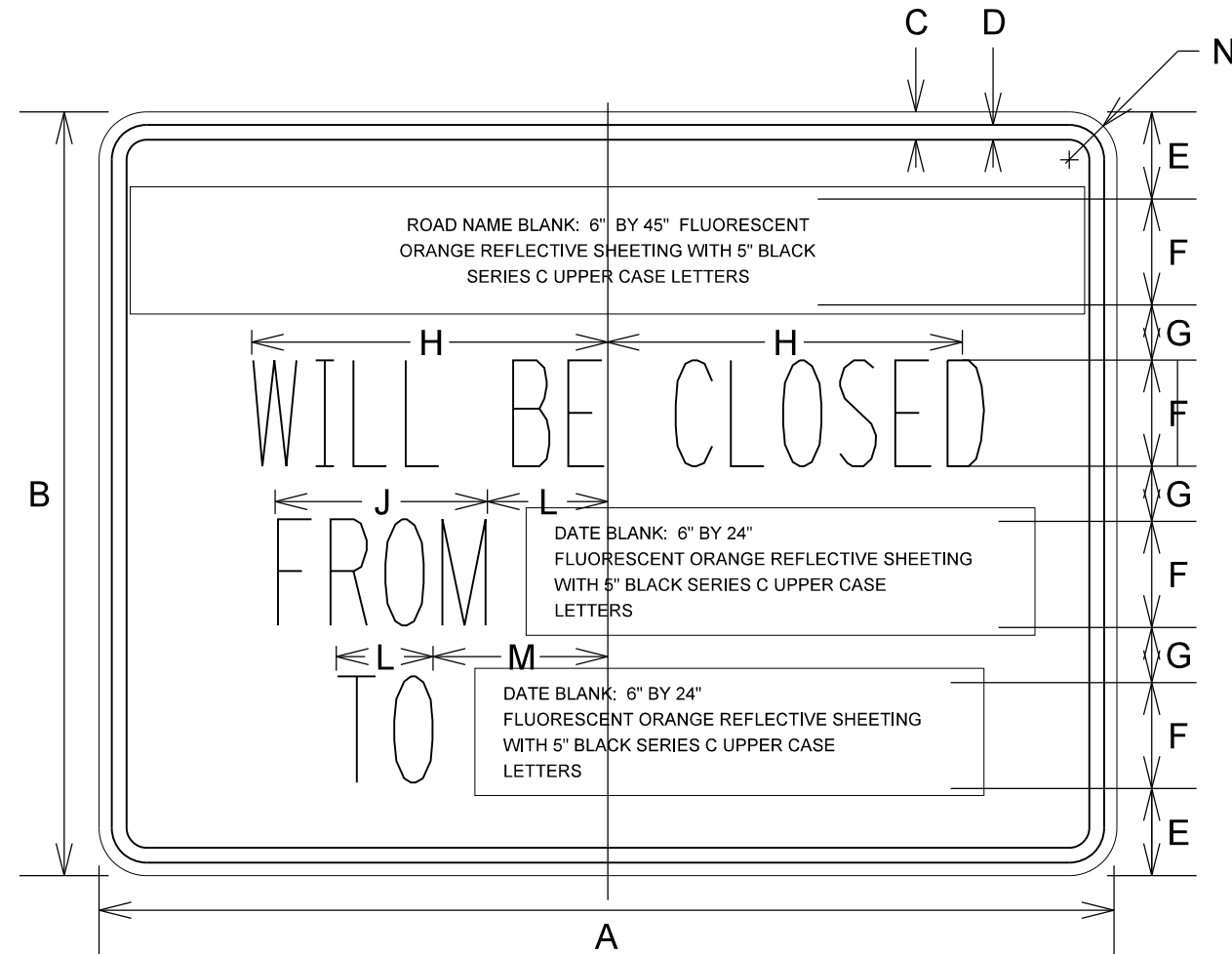
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4870.25	PLOT SCALE = 1:2	CHECKED - KLB	REVISED -
Default	PLOT DATE = 8/25/2020	DATE - 8/25/2020	REVISED -

DETOUR PLAN GENERAL NOTES NIPPERSINK BOULEVARD RECONSTRUCTION		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		149	17-00025-00-PV	LAKE	99	35
SCALE: N.T.S.		SHEET 1 OF 1 SHEETS		STA. TO STA.		CONTRACT NO. 61G46
				ILLINOIS		FED. AID PROJECT

NUMBER OF SIGNS 5



DATES SHOWN ARE FOR EXAMPLE ONLY



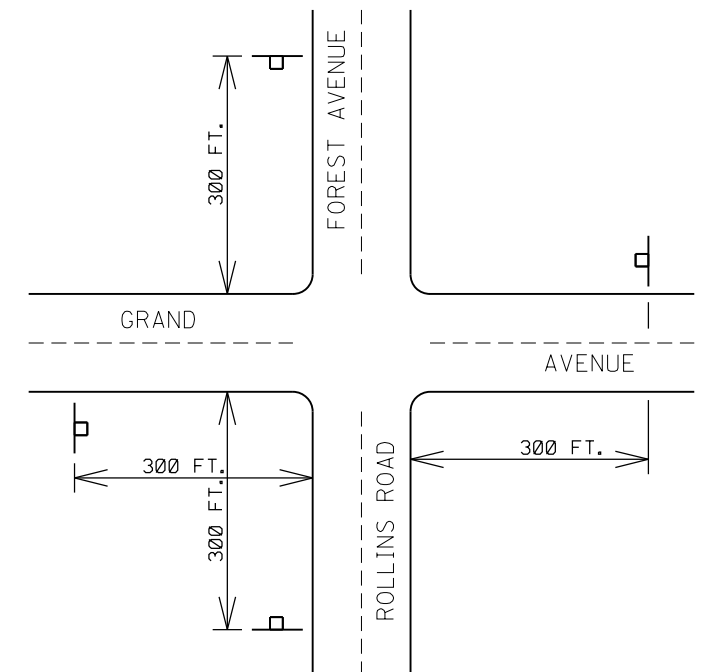
DIMENSIONS (ENGLISH)

- A 48"
- B 36"
- C 5/8"
- D 7/8"
- E 4 1/8"
- F 5"
- G 2 5/8"
- H 9 3/4"
- J 12"
- K 5 1/2"
- L 5 1/2"
- M 8 1/2"
- N 2 1/4"

NOTE: SIGN SHEETING SHALL BE FLUORESCENT ORANGE WITH 5 INCH (125 mm) BLACK SERIES C LETTERS

LOCATIONS OF PRE-DETOUR INFORMATION SIGNS BY INTERSECTION

- E.B. GRAND AVENUE APPROACHING NIPPERSINK BOULEVARD
- N.B. ROLLINS ROAD APPROACHING GRAND AVENUE
- W.B. GRAND AVENUE APPROACHING ROLLINS ROAD / FOREST AVENUE
- W.B. E. SCHOOL COURT APPROACHING FOREST AVENUE



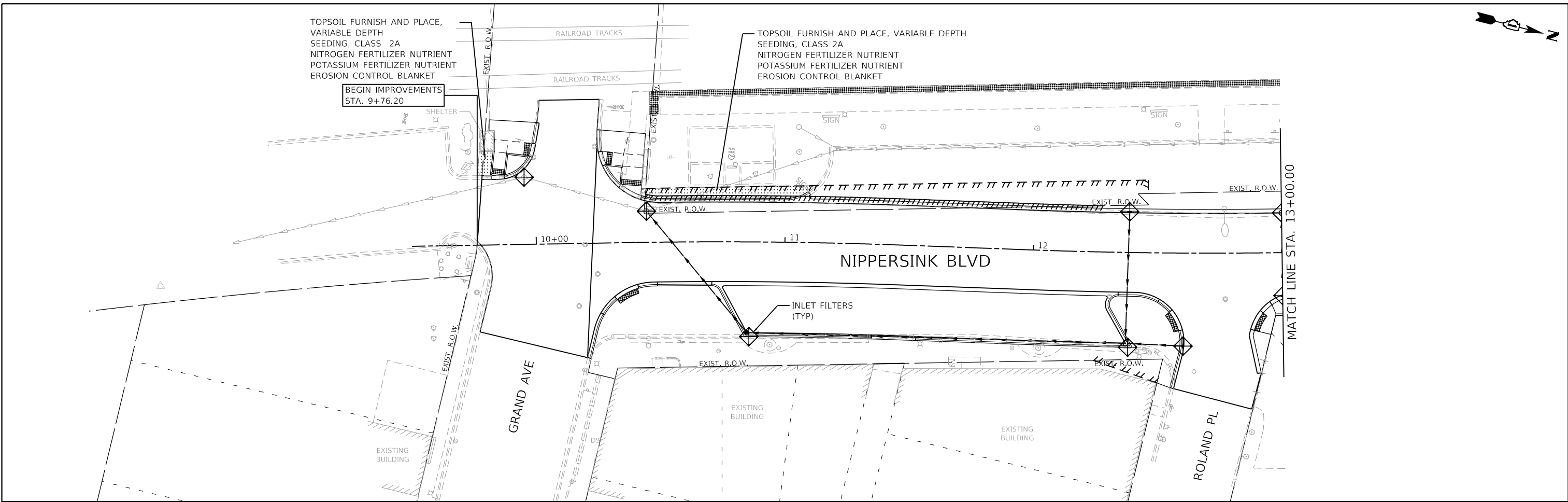
NOTE:
THESE SIGNS SHALL BE INSTALLED 14 CALENDAR DAYS PRIOR TO THE DETOUR AND ROAD CLOSURE. THE SIGNS SHALL BE REMOVED THE DAY THE DETOUR BEGINS.

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Default	PLOT DATE = 8/25/2020	CHECKED - KLB	REVISED -
		DATE - 8/25/2020	REVISED -

TOPSOIL FURNISH AND PLACE,
VARIABLE DEPTH
SEEDING, CLASS 2A
NITROGEN FERTILIZER NUTRIENT
POTASSIUM FERTILIZER NUTRIENT
EROSION CONTROL BLANKET

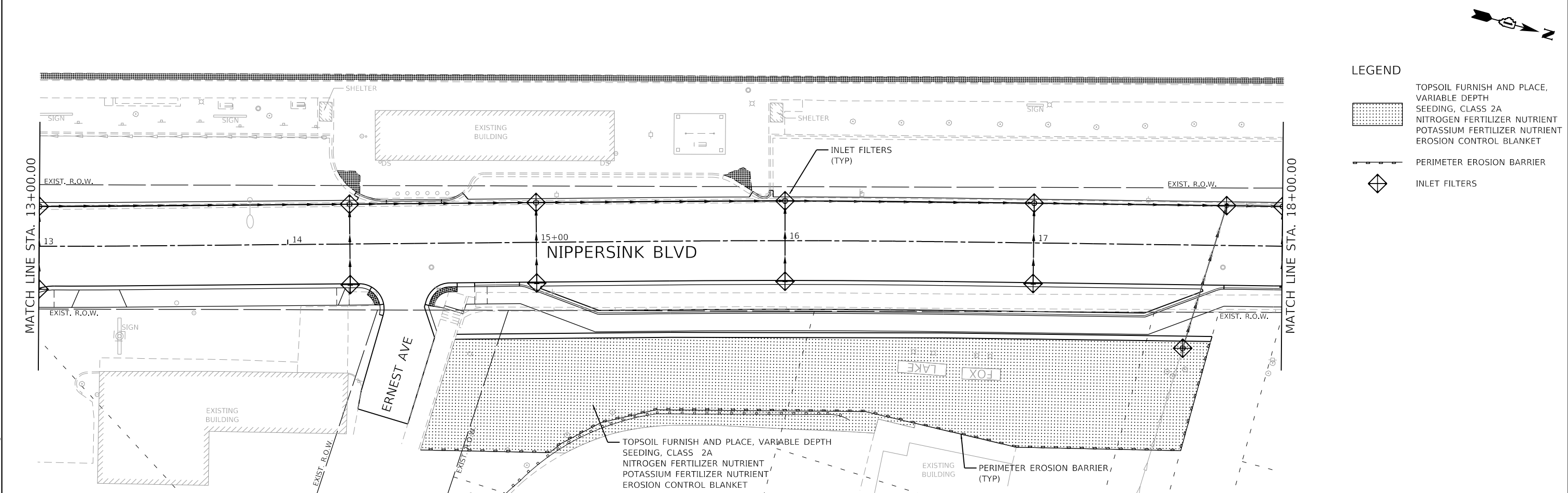
BEGIN IMPROVEMENTS
STA. 9+76.20

TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH
SEEDING, CLASS 2A
NITROGEN FERTILIZER NUTRIENT
POTASSIUM FERTILIZER NUTRIENT
EROSION CONTROL BLANKET



LEGEND

- TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH SEEDING, CLASS 2A NITROGEN FERTILIZER NUTRIENT POTASSIUM FERTILIZER NUTRIENT EROSION CONTROL BLANKET
- PERIMETER EROSION BARRIER
- INLET FILTERS



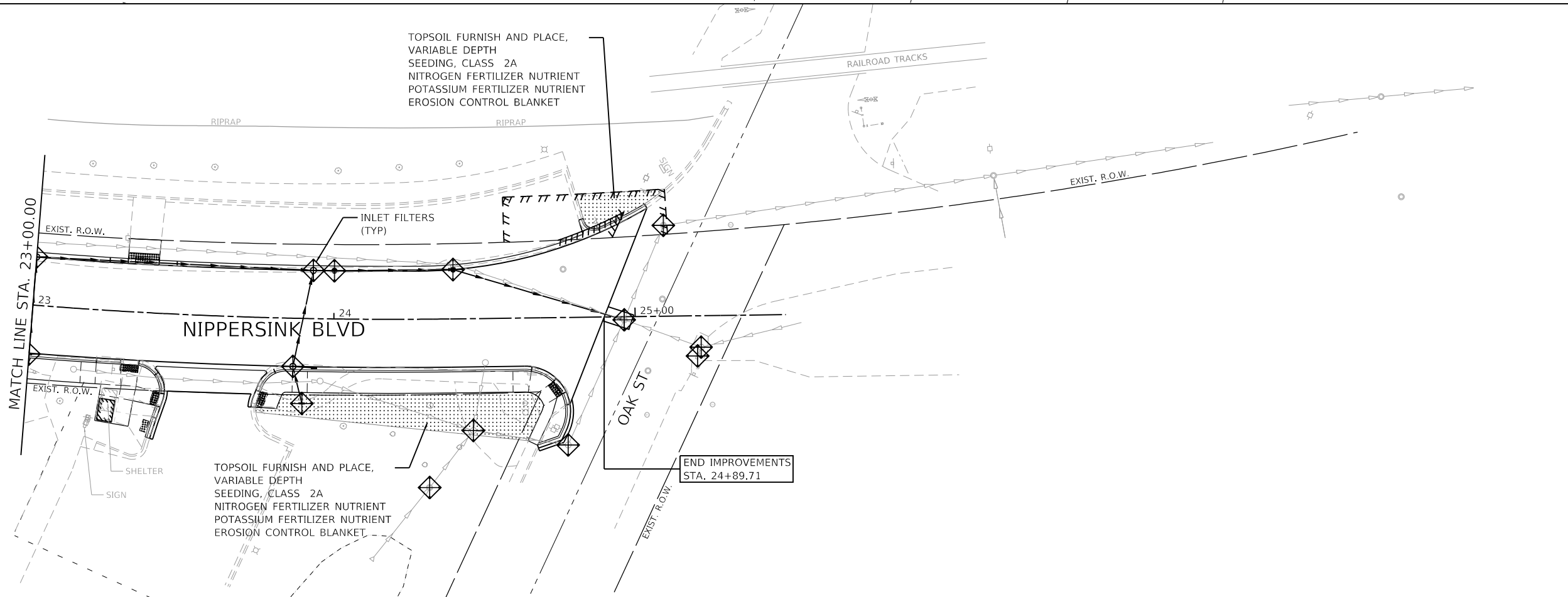
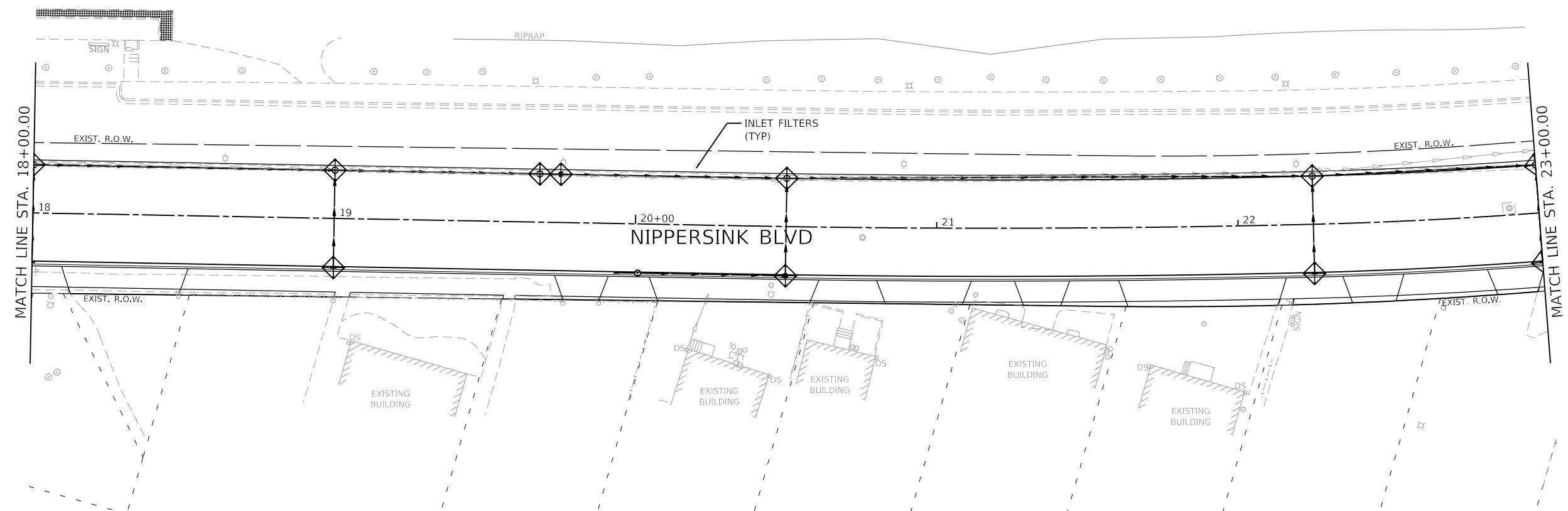
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Default		CHECKED - KLB	REVISED -
		DATE - 8/25/2020	REVISED -




**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOIL EROSION AND SEDIMENT CONTROL PLANS
NIPPERSINK BOULEVARD RECONSTRUCTION**

SCALE: 1"=20' SHEET 1 OF 2 SHEETS STA. 10+00.00 TO STA. 18+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	37
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				



- LEGEND**
-  TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH SEEDING, CLASS 2A NITROGEN FERTILIZER NUTRIENT POTASSIUM FERTILIZER NUTRIENT EROSION CONTROL BLANKET
 -  PERIMETER EROSION BARRIER
 -  INLET FILTERS

GHA GEWALT HAMILTON ASSOCIATES, INC.
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 4870.25
 Default

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Default	PLOT DATE = 8/25/2020	CHECKED - KLB	REVISED -
		DATE - 8/25/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOIL EROSION AND SEDIMENT CONTROL PLANS
NIPPERSINK BOULEVARD RECONSTRUCTION**

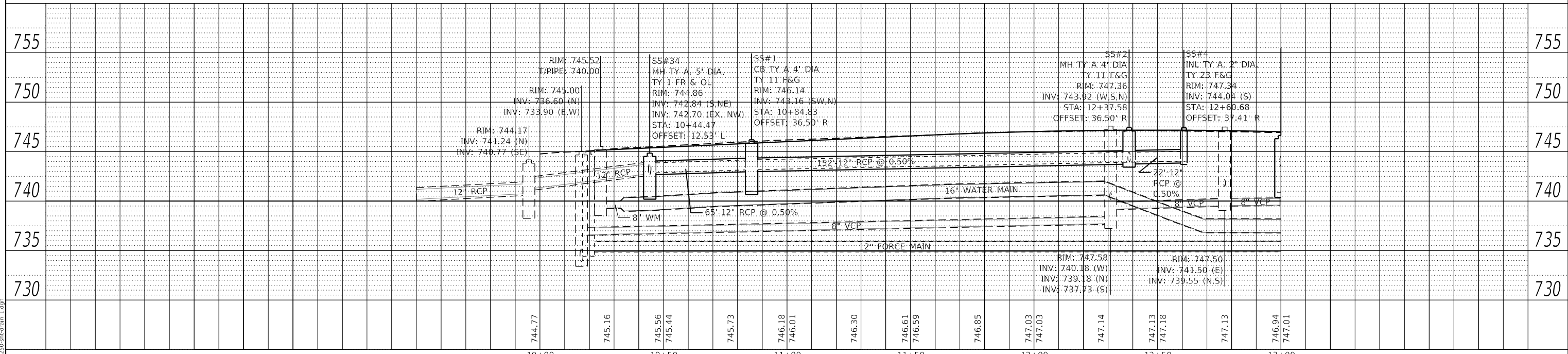
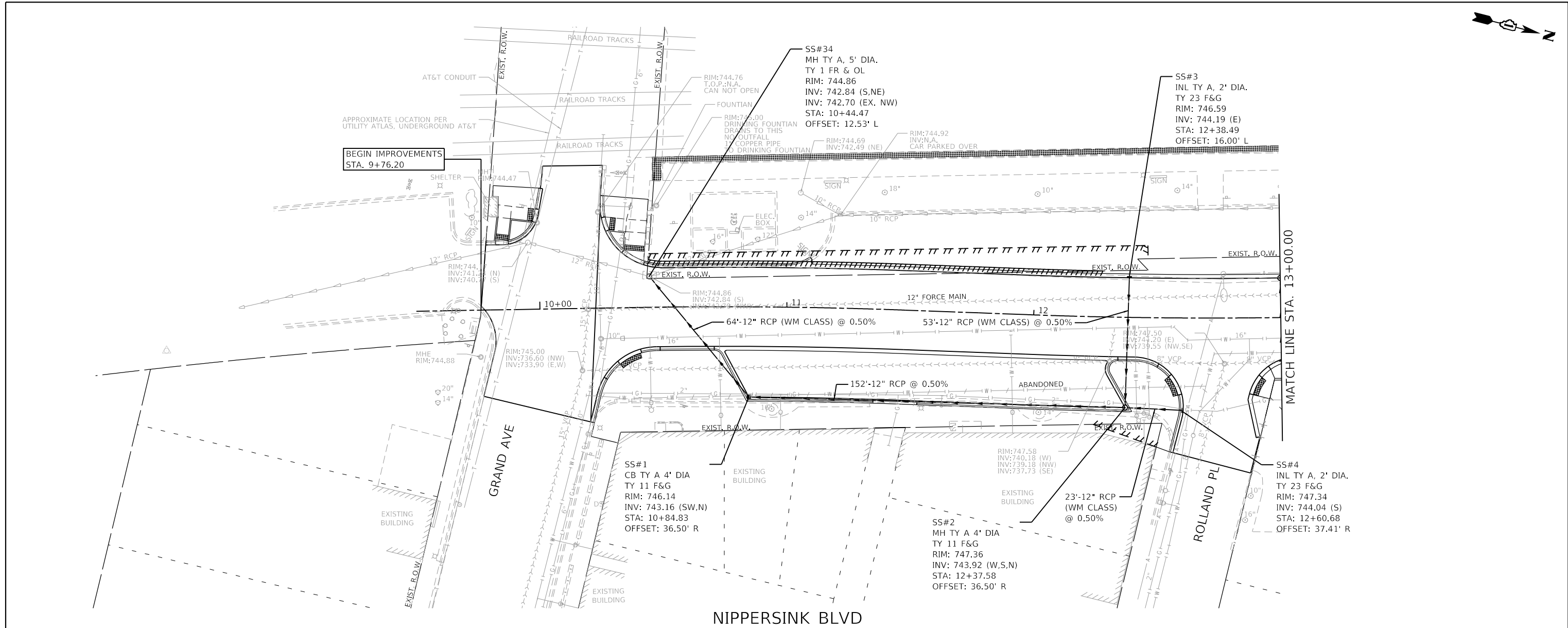
SCALE: 1"=20' SHEET 2 OF 2 SHEETS STA. 18+00.00 TO STA. 25+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	38
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				

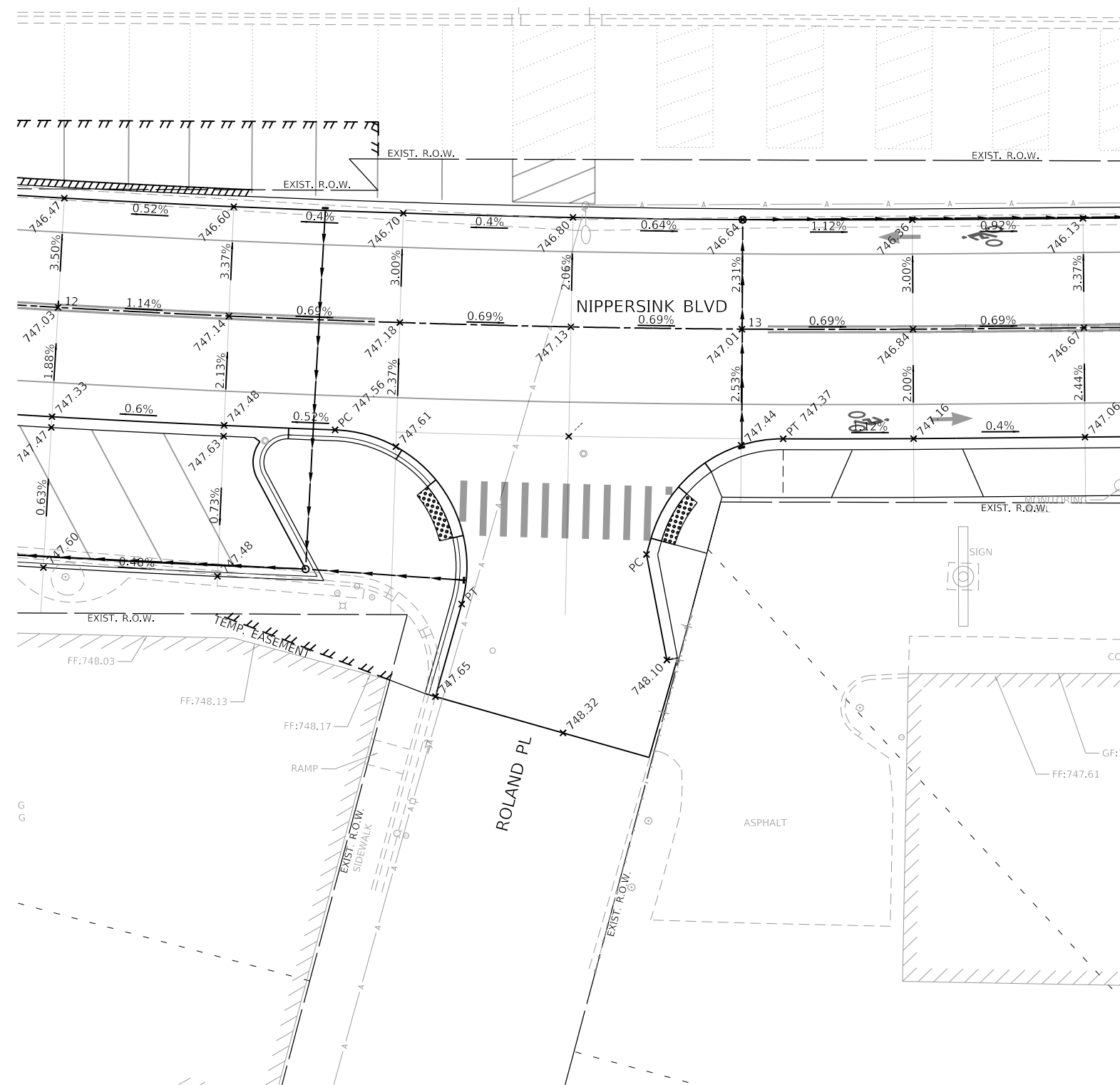


PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	
	CHECKED	
	FILE NAME	
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PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO.	



FILE NAME =	USER NAME = mcobb	DESIGNED - MGC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAINAGE AND UTILITY PLANS		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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4870.25		CHECKED - KLB	REVISED -		SCALE: 1"=20'		SHEET 1 OF 4 SHEETS		STA. 10+00.00 TO STA. 13+00.00		CONTRACT NO. 61G46	
Default		DATE - 8/25/2020	REVISED -								ILLINOIS FED. AID PROJECT	



GHA GEWALT HAMILTON ASSOCIATES, INC.

MODEL: Default
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4870-250-sht-grading 1.dgn	
4870.25	
Default	

DESIGNED - MGC	REVISD -
DRAWN - PJS	REVISD -
CHECKED - KLB	REVISD -
DATE - 8/25/2020	REVISD -

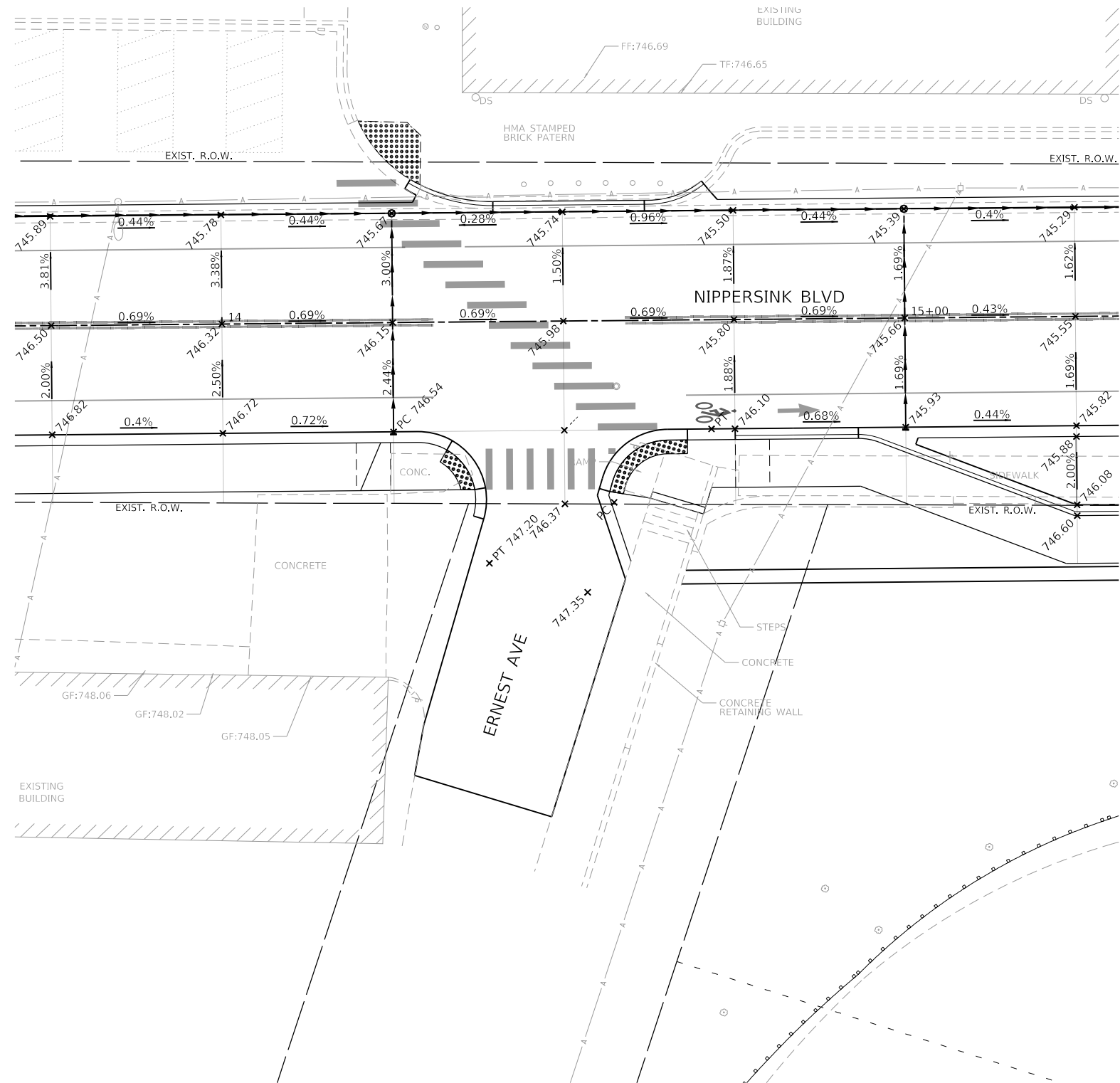
DESIGNED - MGC	REVISD -
DRAWN - PJS	REVISD -
CHECKED - KLB	REVISD -
DATE - 8/25/2020	REVISD -

DESIGNED - MGC	REVISD -
DRAWN - PJS	REVISD -
CHECKED - KLB	REVISD -
DATE - 8/25/2020	REVISD -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

INTERSECTION GRADING DETAIL - ROLAND PL	
NIPPERSINK BOULEVARD RECONSTRUCTION	
SCALE: 1"=10'	SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	43
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				



GHA GEWALT HAMILTON ASSOCIATES, INC.
MODEL: Default
 FILE NAME: 4870-250-sht-grading 2.dgn

FILE NAME =	4870-250-sht-grading 2.dgn
MODEL: Default	
FILE NAME:	4870-250-sht-grading 2.dgn
Default	

USER NAME =	mcobb
PLOT SCALE =	1:20,001
PLOT DATE =	8/25/2020

DESIGNED -	MGC
DRAWN -	PJS
CHECKED -	KLB
DATE -	8/25/2020

REVISED -	
REVISED -	
REVISED -	
REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERSECTION GRADING DETAIL - ERNEST AVE
NIPPERSINK BOULEVARD RECONSTRUCTION

SCALE: 1"=10' SHEET 1 OF 1 SHEETS STA. TO STA.

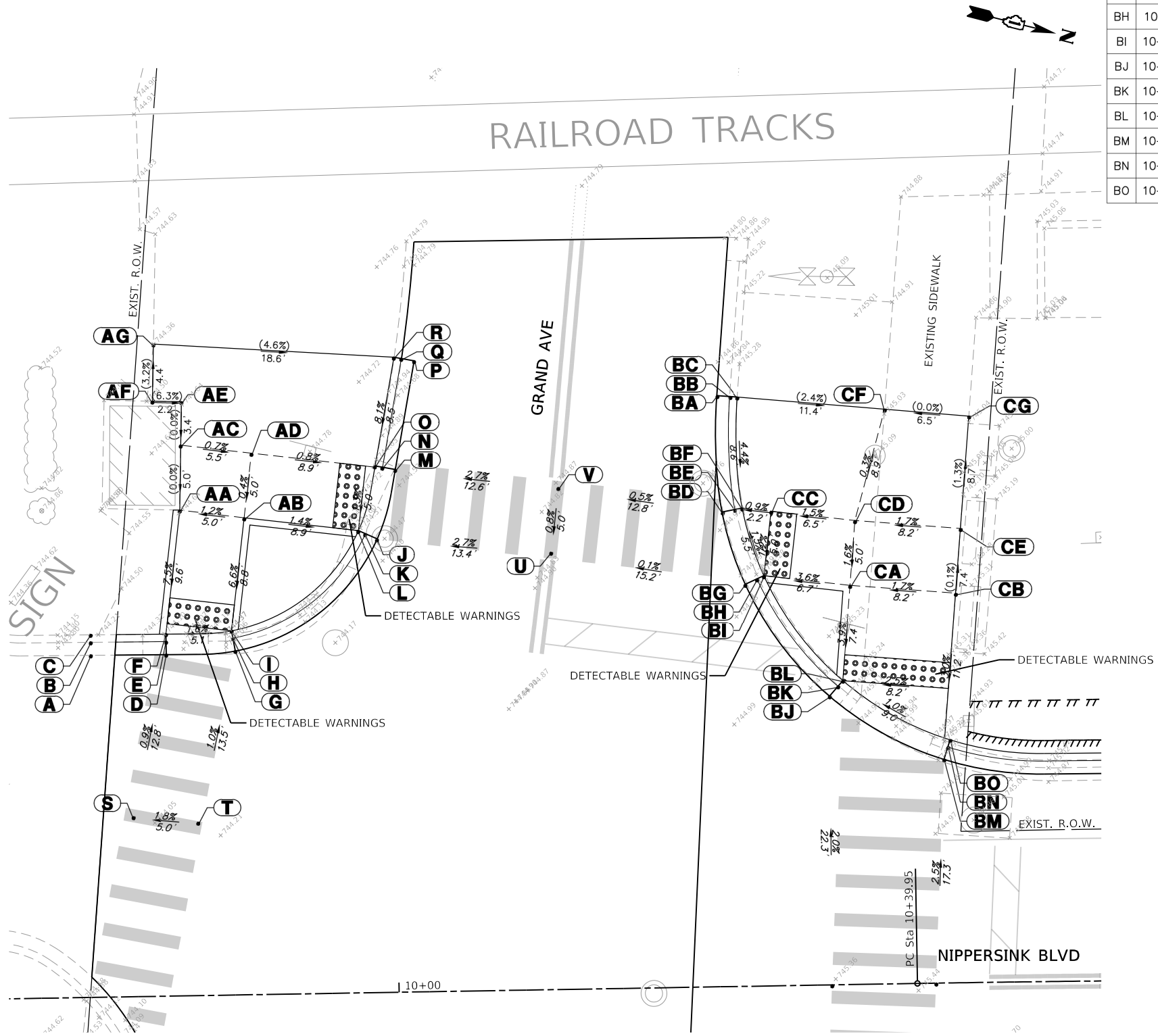
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	44
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				

ADA GRADING TABLE			
STATION	OFFSET	ELEVATION	
A	9+76.7	26.4' L	(743.83)
B	9+76.7	27.4' L	(743.77)
C	9+76.7	28.0' L	(744.27)
D	9+82.5	26.3' L	743.93
E	9+82.5	27.3' L	743.88
F	9+82.5	27.9' L	743.92
G	9+87.8	26.5' L	744.01
H	9+87.7	27.5' L	743.96
I	9+87.6	28.1' L	744.00
J	9+98.9	35.0' L	744.47
K	9+98	35.4' L	744.42
L	9+97.5	35.6' L	744.46
M	10+00.4	40.3' L	744.53
N	9+99.4	40.5' L	744.48
O	9+98.8	40.6' L	744.52
P	10+02	48.7' L	(744.77)
Q	10+01	48.8' L	(744.71)
R	10+00.4	49.0' L	(745.21)
S	9+79.8	13.9' L	744.05
T	9+84.7	13.3' L	744.14
U	10+12.3	33.7' L	744.83
V	10+12.9	38.7' L	744.87

ADA GRADING TABLE			
STATION	OFFSET	ELEVATION	
AA	9+83.7	37.5' L	(744.64)
AB	9+88.7	36.8' L	744.58
AC	9+83.9	42.5' L	744.64
AD	9+89.3	41.7' L	744.60
AE	9+84	45.8' L	(744.64)
AF	9+81.8	45.9' L	(744.50)
AG	9+81.9	50.3' L	(744.36)

ADA GRADING TABLE			
STATION	OFFSET	ELEVATION	
BA	10+25.2	45.6' L	(744.86)
BB	10+26.2	45.5' L	(744.80)
BC	10+26.8	45.4' L	(745.30)
BD	10+25.5	36.6' L	744.93
BE	10+26.5	36.8' L	744.88
BF	10+27.1	36.9' L	744.92
BG	10+27.2	31.0' L	744.85
BH	10+28.1	31.4' L	744.80
BI	10+28.6	31.6' L	744.84
BJ	10+33.5	22.3' L	744.80
BK	10+34.2	23.0' L	744.75
BL	10+34.6	23.4' L	744.79
BM	10+42.3	17.2' L	744.90
BN	10+42.6	18.2' L	744.85
BO	10+42.8	18.7' L	744.89

ADA GRADING TABLE			
STATION	OFFSET	ELEVATION	
CA	10+35.3	30.8' L	745.08
CB	10+43.3	30.0' L	745.22
CC	10+29.3	36.6' L	744.90
CD	10+35.7	35.8' L	745.00
CE	10+43.8	35.0' L	(745.14)
CF	10+38.2	44.3' L	(745.03)
CG	10+44.5	43.7' L	(745.03)

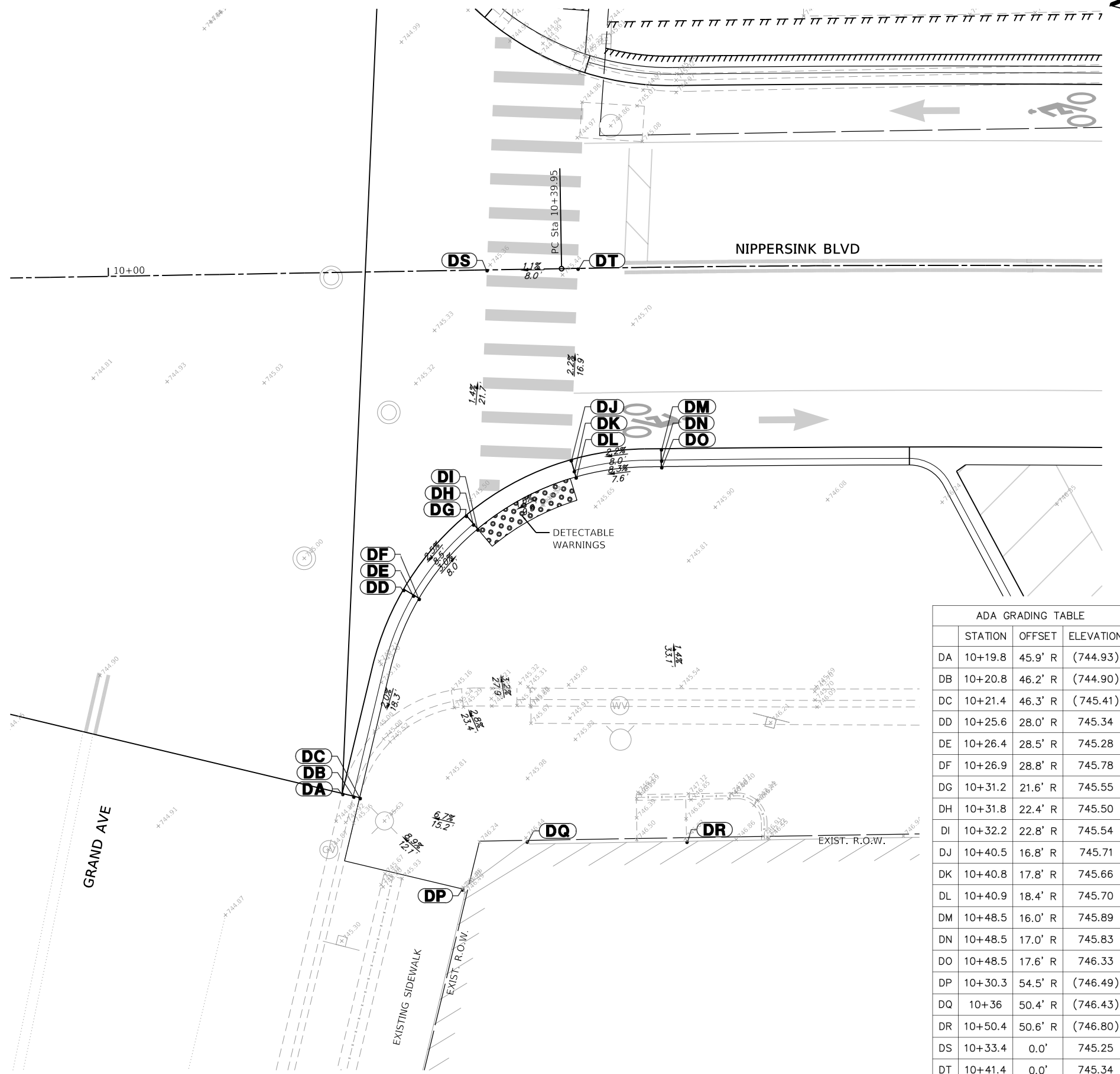


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4870.25	PLOT SCALE = 1:10	DRAWN - PJS	REVISED -
Default	PLOT DATE = 8/25/2020	CHECKED - KLB	REVISED -
		DATE - 8/25/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ADA GRADING DETAILS			
NIPPERSINK BOULEVARD RECONSTRUCTION			
SCALE: 1"=5'	SHEET 1 OF 6 SHEETS	STA.	TO STA.

F.A.U. RTE. 149	SECTION 17-00025-00-PV	COUNTY LAKE	TOTAL SHEETS 99	SHEET NO. 45
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61G46	



ADA GRADING TABLE			
	STATION	OFFSET	ELEVATION
DA	10+19.8	45.9' R	(744.93)
DB	10+20.8	46.2' R	(744.90)
DC	10+21.4	46.3' R	(745.41)
DD	10+25.6	28.0' R	745.34
DE	10+26.4	28.5' R	745.28
DF	10+26.9	28.8' R	745.78
DG	10+31.2	21.6' R	745.55
DH	10+31.8	22.4' R	745.50
DI	10+32.2	22.8' R	745.54
DJ	10+40.5	16.8' R	745.71
DK	10+40.8	17.8' R	745.66
DL	10+40.9	18.4' R	745.70
DM	10+48.5	16.0' R	745.89
DN	10+48.5	17.0' R	745.83
DO	10+48.5	17.6' R	746.33
DP	10+30.3	54.5' R	(746.49)
DQ	10+36	50.4' R	(746.43)
DR	10+50.4	50.6' R	(746.80)
DS	10+33.4	0.0'	745.25
DT	10+41.4	0.0'	745.34



MODEL: Default
 FILE NAME: 4870-250-sht-ADA grading details 1.dgn

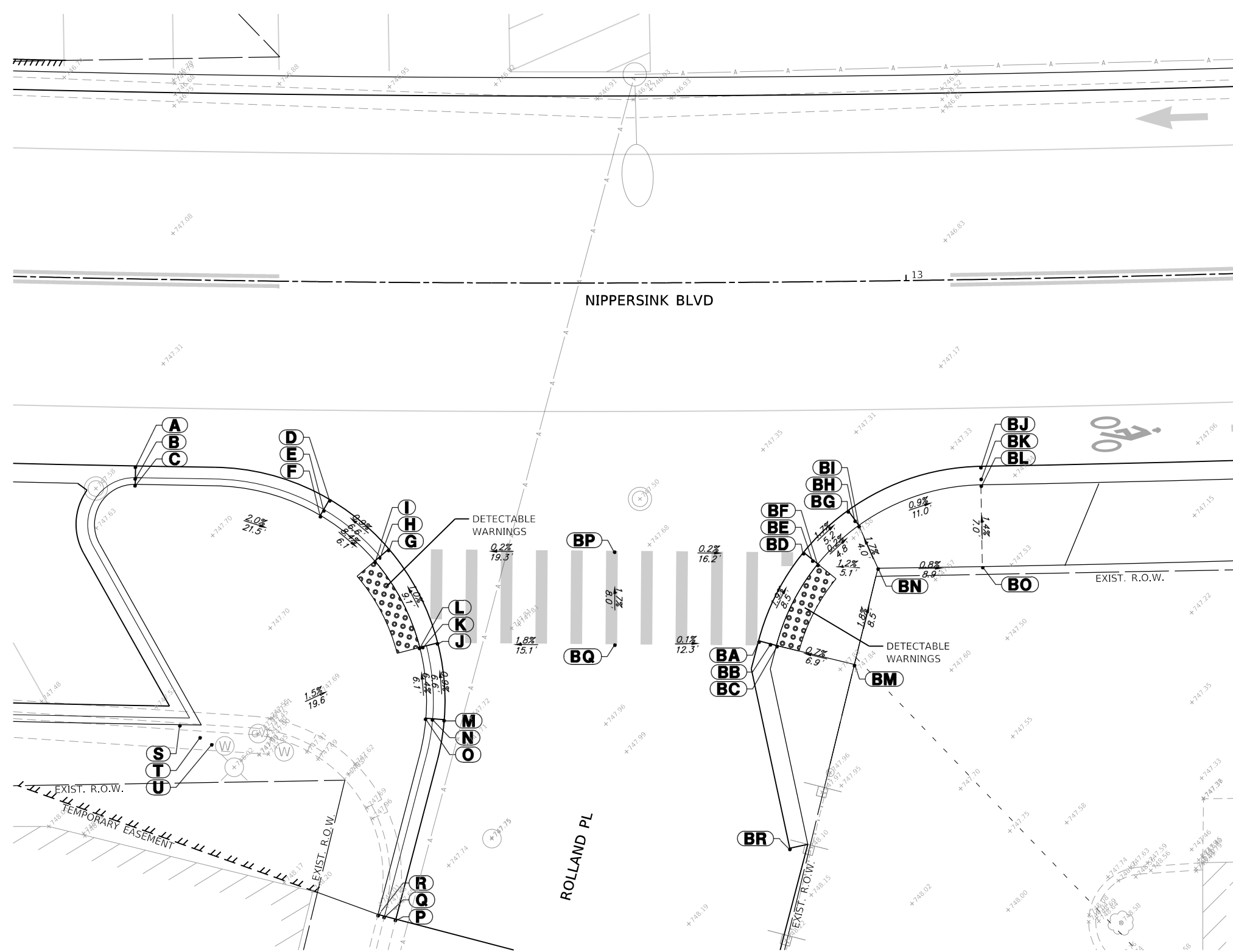
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4870-250-sht-ADA grading details 1.dgn		DRAWN - PJS	REVISED -
4870.25	PLOT SCALE = 1:10	CHECKED - KLB	REVISED -
Default	PLOT DATE = 8/25/2020	DATE - 8/25/2020	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ADA GRADING DETAILS
 NIPPERSINK BOULEVARD RECONSTRUCTION**

SCALE: 1"=5' SHEET 2 OF 6 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	46
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				



ADA GRADING TABLE			
	STATION	OFFSET	ELEVATION
A	12+34.4	16.0' R	747.55
B	12+34.4	17.0' R	747.47
C	12+34.4	17.6' R	747.97
D	12+50.9	18.6' R	747.61
E	12+50.4	19.5' R	747.55
F	12+50.1	20.0' R	748.05
G	12+55.9	22.8' R	747.55
H	12+55.2	23.5' R	747.50
I	12+54.7	23.9' R	747.54
J	12+60.1	30.8' R	747.46
K	12+58.9	31.2' R	747.43
L	12+58.6	31.2' R	747.45
M	12+60.7	37.4' R	747.40
N	12+59.7	37.3' R	747.34
O	12+59.1	37.3' R	747.84
P	12+56.7	54.5' R	(747.65)
Q	12+55.8	54.3' R	(747.54)
R	12+55.2	54.1' R	(748.01)
S	12+38.5	38.1' R	747.30
T	12+40.2	39.1' R	747.24
U	12+41.2	39.7' R	747.74

ADA GRADING TABLE			
	STATION	OFFSET	ELEVATION
BA	12+87.1	30.7' R	747.72
BB	12+88.1	31.0' R	747.67
BC	12+88.6	31.1' R	747.71
BD	12+91	23.1' R	747.56
BE	12+91.8	23.8' R	747.51
BF	12+92.2	24.2' R	747.55
BG	12+94.8	19.6' R	747.47
BH	12+95.4	20.4' R	747.41
BI	12+95.7	20.9' R	747.54
BJ	13+06.1	16.0' R	747.37
BK	13+06.1	17.0' R	747.31
BL	13+06.1	17.6' R	747.44
BM	12+95.2	32.8' R	(747.76)
BN	12+97.3	24.6' R	(747.61)
BO	13+06.1	24.6' R	(747.54)
BP	12+75	22.9' R	747.59
BQ	12+75	30.9' R	747.73
BR	12+89.6	48.5' R	(748.10)

GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: Default
 FILE NAME: 4870-250-shr-ADA grading details 2.dgn

FILE NAME = 4870-250-shr-ADA grading details 2.dgn
 USER NAME = mcobb
 PLOT SCALE = 1:10
 PLOT DATE = 8/25/2020

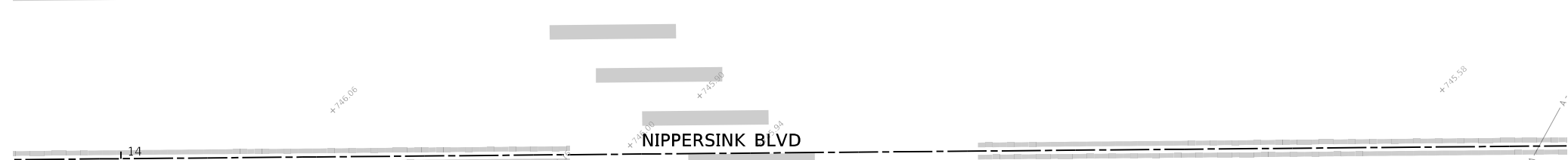
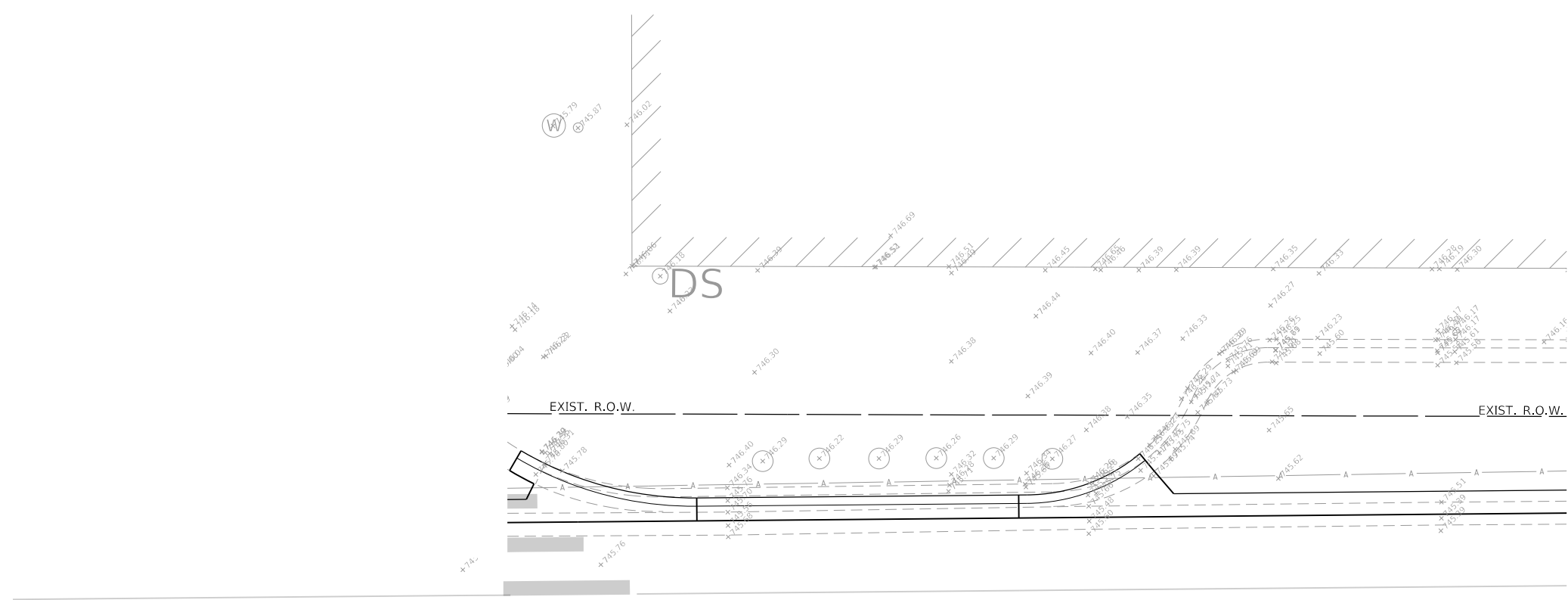
DESIGNED - MGC
 DRAWN - PJS
 CHECKED - KLB
 DATE - 8/25/2020

REVISED -
 REVISED -
 REVISED -
 REVISED -

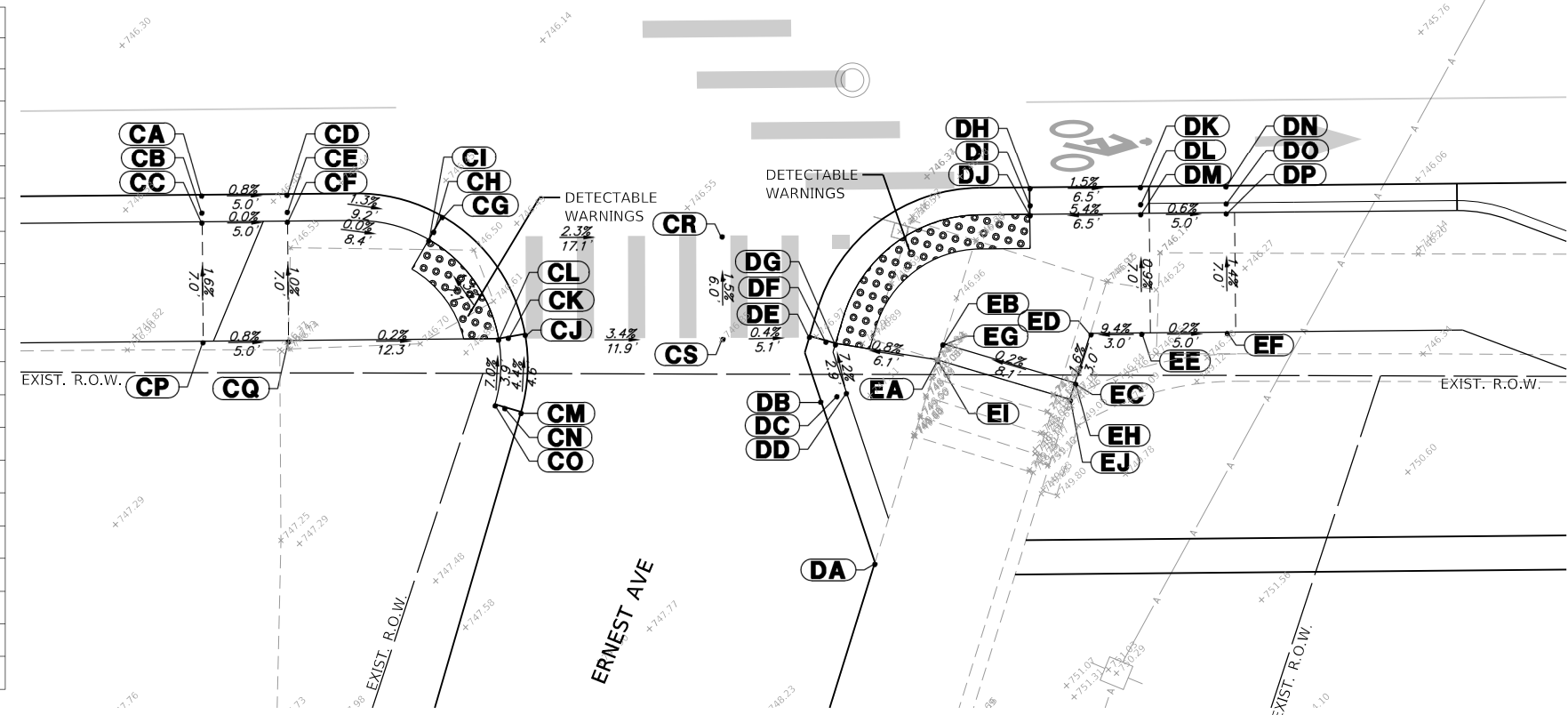
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ADA GRADING DETAILS
 NIPPERSINK BOULEVARD RECONSTRUCTION**
 SCALE: 1"=5' SHEET 3 OF 6 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	47
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				



ADA GRADING TABLE			
	STATION	OFFSET	ELEVATION
CA	14+19.5	16.0' R	746.58
CB	14+19.5	17.0' R	746.52
CC	14+19.5	17.6' R	746.65
CD	14+24.5	16.0' R	746.54
CE	14+24.5	17.0' R	746.48
CF	14+24.5	17.6' R	746.65
CG	14+33.6	17.4' R	746.66
CH	14+33.1	18.2' R	746.61
CI	14+32.8	18.7' R	746.65
CJ	14+38.4	24.3' R	746.75
CK	14+37.4	24.5' R	746.70
CL	14+36.8	24.6' R	746.74
CM	14+38.1	28.9' R	(746.95)
CN	14+37.1	28.6' R	746.89
CO	14+36.6	28.4' R	747.01
CP	14+19.5	24.6' R	746.76
CQ	14+24.5	24.6' R	746.72
CR	14+50	18.7' R	746.25
CS	14+50	24.7' R	746.34



ADA GRADING TABLE			
	STATION	OFFSET	ELEVATION
DA	14+58.8	37.9' R	(747.00)
DB	14+55.7	28.4' R	(746.53)
DC	14+56.6	28.1' R	746.47
DD	14+57.2	27.9' R	746.52
DE	14+55.1	24.6' R	746.32
DF	14+56	24.9' R	746.27
DG	14+56.6	25.0' R	746.31
DH	14+68	16.0' R	746.20
DI	14+68	17.0' R	746.15
DJ	14+68	17.6' R	746.19
DK	14+74.5	16.0' R	746.10
DL	14+74.5	17.0' R	746.04
DM	14+74.5	17.6' R	746.54
DN	14+79.5	16.0' R	746.07
DO	14+79.5	17.0' R	746.01
DP	14+79.5	17.6' R	746.51

ADA GRADING TABLE			
	STATION	OFFSET	ELEVATION
EA	14+62.5	26.1' R	746.36
EB	14+62.8	25.1' R	746.35
EC	14+70.6	27.5' R	746.37
ED	14+71.5	24.6' R	746.32
EE	14+74.5	24.6' R	746.60
EF	14+79.5	24.6' R	746.61
EG	14+62.9	25.1' R	746.93
EH	14+70.6	27.5' R	746.95
EI	14+62.5	26.1' R	746.94
EJ	14+70.3	28.4' R	746.96

NOTE:
POINTS EG, EH, EI AND EJ ARE TOP
OF STEP

GHA GEWALT HAMILTON ASSOCIATES, INC.
MODEL: Default
FILE NAME: 1870-250-shr-ada grading details 3.dgn

FILE NAME =	USER NAME = mcobb	DESIGNED - MGC	REVISED -
4870-250-shr-ada grading details 3.dgn		DRAWN - PJS	REVISED -
4870.25	PLOT SCALE = 1:10	CHECKED - KLB	REVISED -
Default	PLOT DATE = 8/25/2020	DATE - 8/25/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ADA GRADING DETAILS NIPPERSINK BOULEVARD RECONSTRUCTION			
SCALE: 1"=5'	SHEET 4 OF 6 SHEETS	STA.	TO STA.

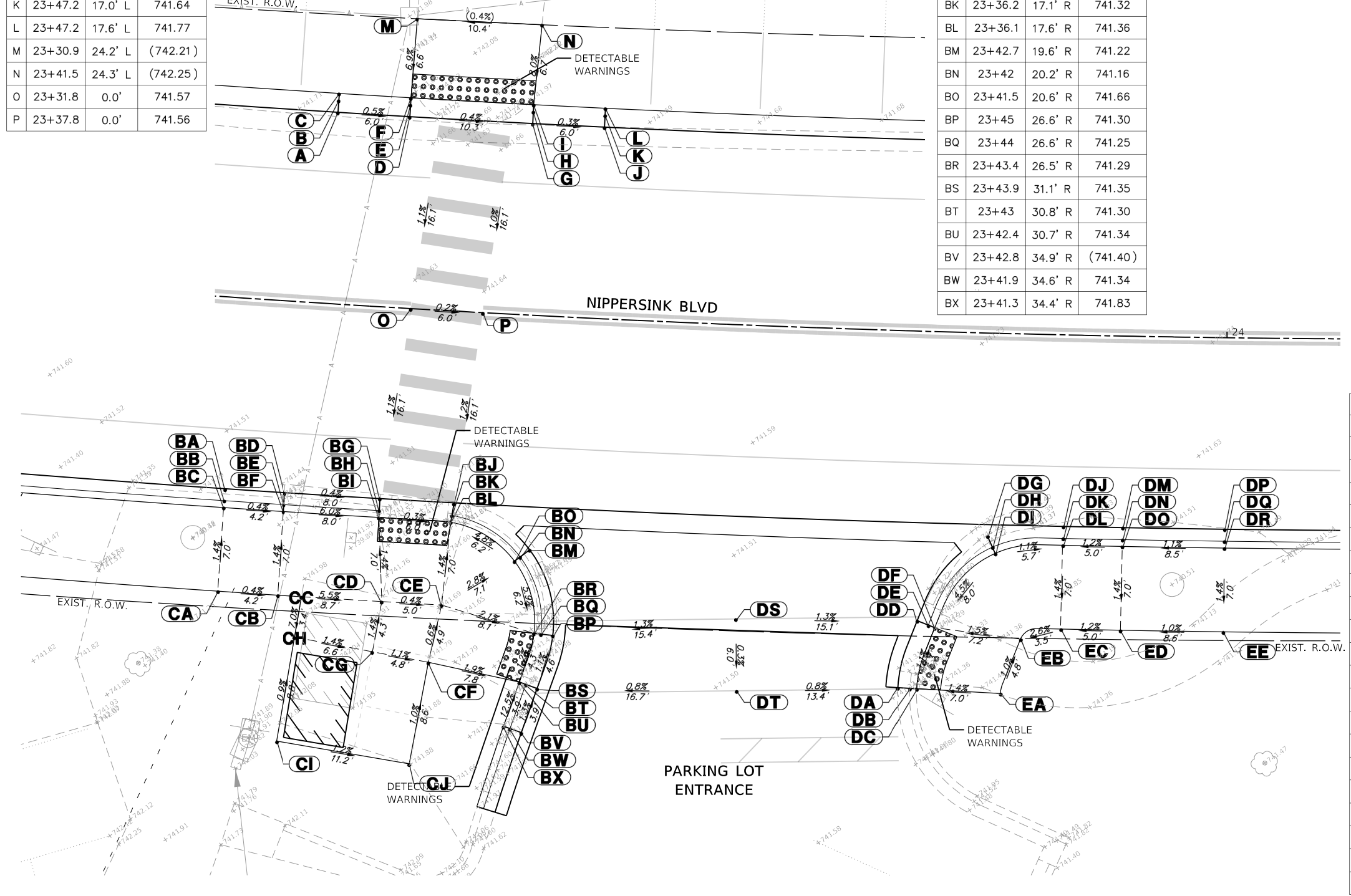
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	48
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				



ADA GRADING TABLE			
STATION	OFFSET	ELEVATION	
A	23+24.7	16.0' L	741.79
B	23+24.7	17.0' L	741.73
C	23+24.7	17.6' L	741.86
D	23+30.7	16.0' L	741.76
E	23+30.7	17.0' L	741.71
F	23+30.7	17.6' L	741.75
G	23+41.1	16.0' L	741.72
H	23+41.1	17.0' L	741.67
I	23+41.1	17.6' L	741.71
J	23+47.2	16.0' L	741.70
K	23+47.2	17.0' L	741.64
L	23+47.2	17.6' L	741.77
M	23+30.9	24.2' L	(742.21)
N	23+41.5	24.3' L	(742.25)
O	23+31.8	0.0'	741.57
P	23+37.8	0.0'	741.56

ADA GRADING TABLE			
STATION	OFFSET	ELEVATION	
BA	23+17.3	16.0' R	741.44
BB	23+17.3	17.0' R	741.38
BC	23+17.3	17.6' R	741.88
BD	23+22.2	16.0' R	741.42
BE	23+22.2	17.0' R	741.36
BF	23+22.2	17.6' R	741.86
BG	23+30.1	16.0' R	741.39
BH	23+30.1	17.0' R	741.34
BI	23+30.1	17.6' R	741.38
BJ	23+36.3	16.1' R	741.37
BK	23+36.2	17.1' R	741.32
BL	23+36.1	17.6' R	741.36
BM	23+42.7	19.6' R	741.22
BN	23+42	20.2' R	741.16
BO	23+41.5	20.6' R	741.66
BP	23+45	26.6' R	741.30
BQ	23+44	26.6' R	741.25
BR	23+43.4	26.5' R	741.29
BS	23+43.9	31.1' R	741.35
BT	23+43	30.8' R	741.30
BU	23+42.4	30.7' R	741.34
BV	23+42.8	34.9' R	(741.40)
BW	23+41.9	34.6' R	741.34
BX	23+41.3	34.4' R	741.83

ADA GRADING TABLE			
STATION	OFFSET	ELEVATION	
CA	23+17.3	24.6' R	741.98
CB	23+22.2	24.6' R	741.96
CC	23+24.2	24.6' R	741.87
CD	23+30.8	24.6' R	741.48
CE	23+35.7	24.6' R	741.46
CF	23+34.9	29.4' R	741.49
CG	23+30.3	28.8' R	741.54
CH	23+23.8	28.0' R	741.63
CI	23+22.9	36.8' R	741.71
CJ	23+33.8	38.0' R	741.58



ADA GRADING TABLE			
STATION	OFFSET	ELEVATION	
DA	23+73.4	29.8' R	(741.37)
DB	23+74.4	29.9' R	741.32
DC	23+75	29.9' R	741.36
DD	23+74.8	24.2' R	741.31
DE	23+75.8	24.5' R	741.26
DF	23+76.3	24.7' R	741.30
DG	23+80.4	17.0' R	741.22
DH	23+80.9	17.9' R	741.16
DI	23+81.1	18.4' R	741.66
DJ	23+86.6	16.0' R	741.16
DK	23+86.6	17.0' R	741.10
DL	23+86.6	17.6' R	741.60
DM	23+91.6	16.0' R	741.22
DN	23+91.6	17.0' R	741.16
DO	23+91.6	17.6' R	741.66
DP	24+00	16.0' R	741.31
DQ	24+00	17.0' R	741.25
DR	24+00	17.6' R	741.75
DS	23+60	24.6' R	741.50
DT	23+60.3	30.6' R	741.48

ADA GRADING TABLE			
STATION	OFFSET	ELEVATION	
EA	23+81.8	30.1' R	741.46
EB	23+83.4	25.5' R	741.41
EC	23+86.6	24.6' R	741.50
ED	23+91.6	24.6' R	741.56
EE	24+00	24.6' R	741.65

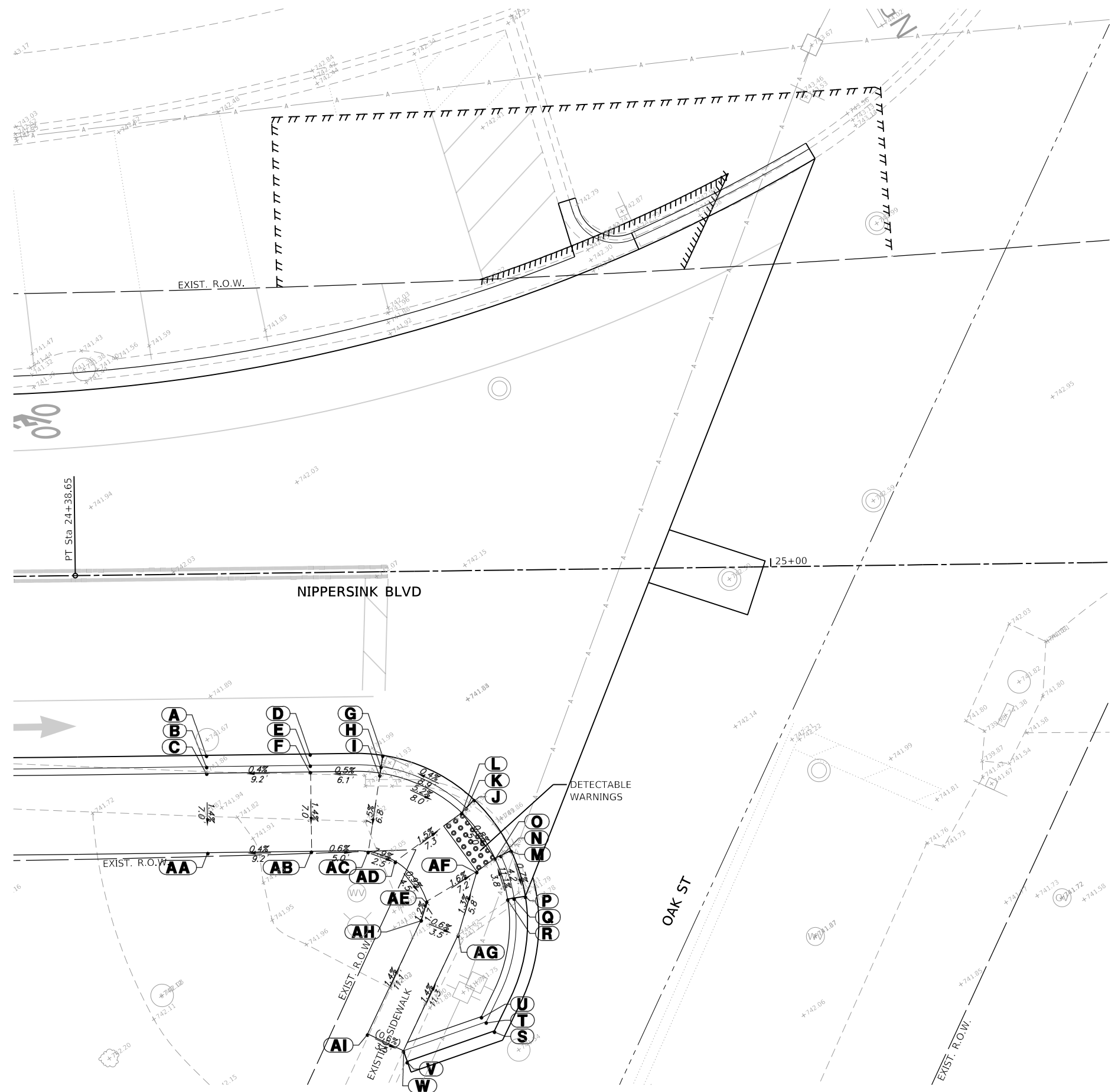
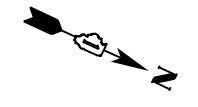
GHA GEWALT HAMILTON ASSOCIATES, INC.

FILE NAME = 4870-250-sht-ADA grading details 4.dgn	USER NAME = mcobb	DESIGNED - MGC	REVISED -
4870.25	PLOT SCALE = 1:10	DRAWN - PJS	REVISED -
Default	PLOT DATE = 8/25/2020	CHECKED - KLB	REVISED -
		DATE - 8/25/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ADA GRADING DETAILS			
NIPPERSINK BOULEVARD RECONSTRUCTION			
SCALE: 1"=5'	SHEET 5 OF 6 SHEETS	STA. TO STA.	

F.A.U. RTE. 149	SECTION 17-00025-00-PV	COUNTY LAKE	TOTAL SHEETS 99	SHEET NO. 49
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				



ADA GRADING TABLE			
	STATION	OFFSET	ELEVATION
A	24+50	16.0' R	741.75
B	24+50	17.0' R	741.69
C	24+50	17.6' R	742.19
D	24+59.2	16.0' R	741.79
E	24+59.2	17.0' R	741.73
F	24+59.2	17.6' R	742.23
G	24+65.6	16.2' R	741.82
H	24+65.4	17.2' R	741.76
I	24+65.3	17.9' R	742.26
J	24+73.6	20.2' R	741.86
K	24+72.9	20.9' R	741.81
L	24+72.5	21.3' R	741.85
M	24+76.8	24.7' R	741.82
N	24+75.9	25.2' R	741.77
O	24+75.3	25.4' R	741.81
P	24+78	28.8' R	(741.79)
Q	24+77	28.9' R	741.73
R	24+76.4	29.0' R	742.23
S	24+75.1	40.6' R	(741.65)
T	24+74.4	39.8' R	741.67
U	24+74	39.3' R	742.17
V	24+67.4	43.2' R	(741.90)
W	24+67.1	42.3' R	(742.08)

ADA GRADING TABLE			
	STATION	OFFSET	ELEVATION
AA	24+50	24.6' R	742.09
AB	24+59.2	24.6' R	742.13
AC	24+64.2	24.7' R	742.16
AD	24+66.6	25.6' R	741.96
AE	24+69.3	29.1' R	741.92
AF	24+73.7	26.6' R	741.84
AG	24+72	32.1' R	741.92
AH	24+68.8	30.7' R	741.94
AI	24+63.9	40.7' R	(742.10)

GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: Default
 FILE NAME: 4870-250-sht-ADA grading details 5.dgn

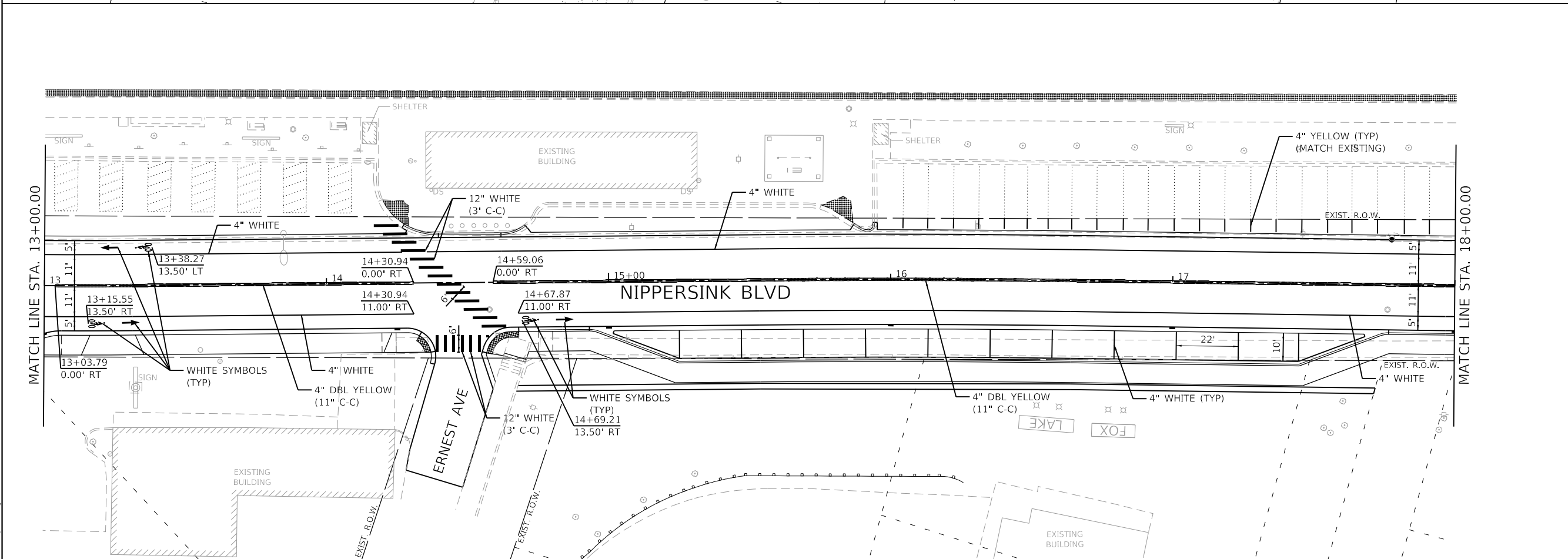
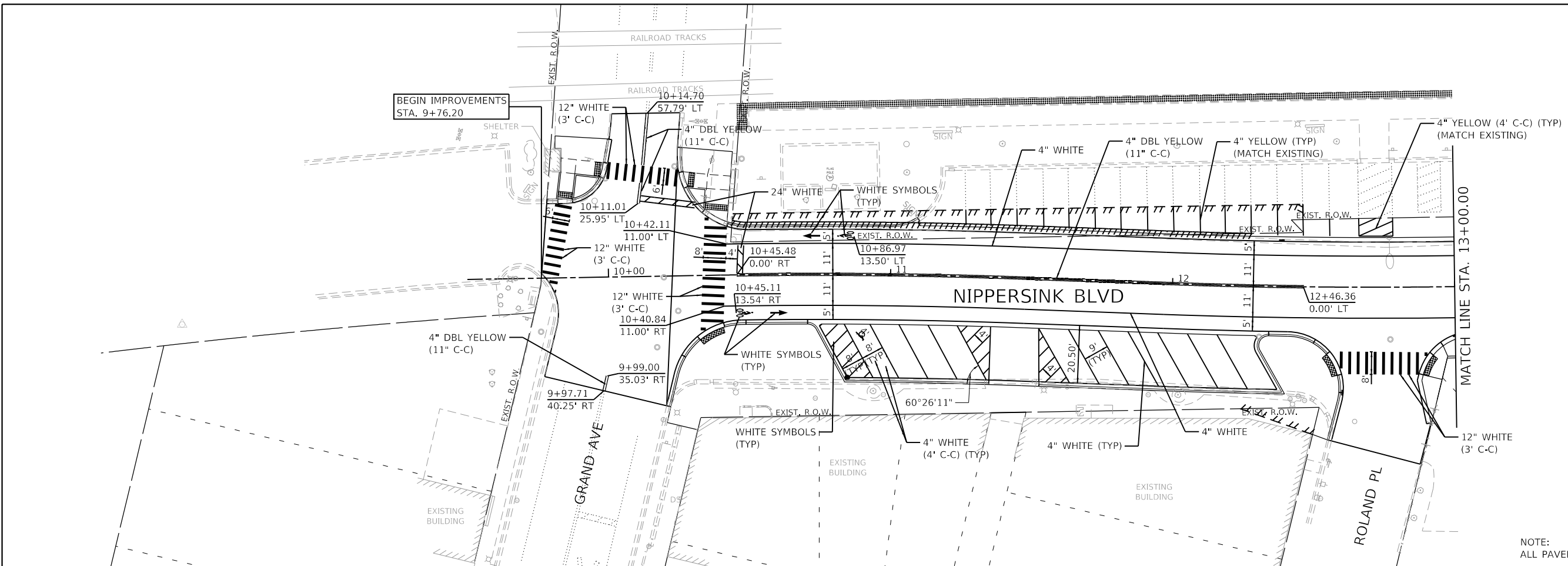
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4870-250-sht-ADA grading details 5.dgn		DRAWN - PJS	REVISED -
4870.25	PLOT SCALE = 1:10	CHECKED - KLB	REVISED -
Default	PLOT DATE = 8/25/2020	DATE - 8/25/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ADA GRADING DETAILS
NIPPERSINK BOULEVARD RECONSTRUCTION

SCALE: 1"=5' SHEET 6 OF 6 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	50
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				



GHA GEWALT HAMILTON ASSOCIATES, INC.

MODEL: Default
FILE: 4870-250-sh-pmk 1.dgn

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PLOT DATE = 8/25/2020

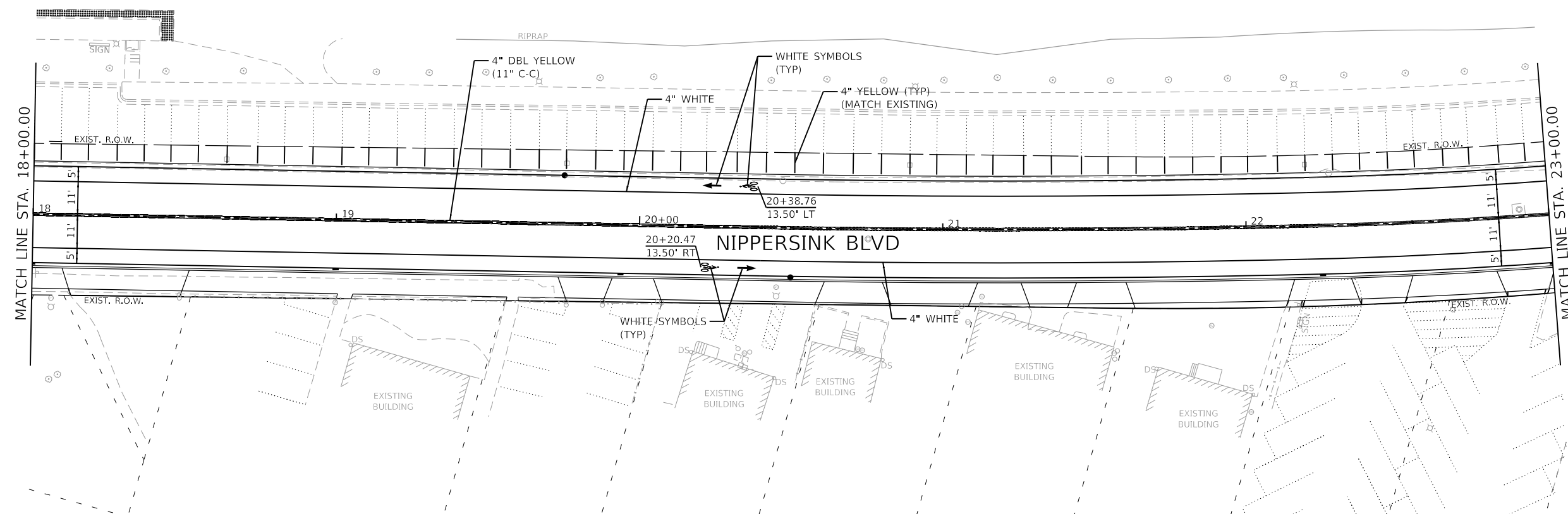
DESIGNED - MGC
DRAWN - PJS
CHECKED - KLB
DATE - 8/25/2020

REVISED -
REVISED -
REVISED -
REVISED -

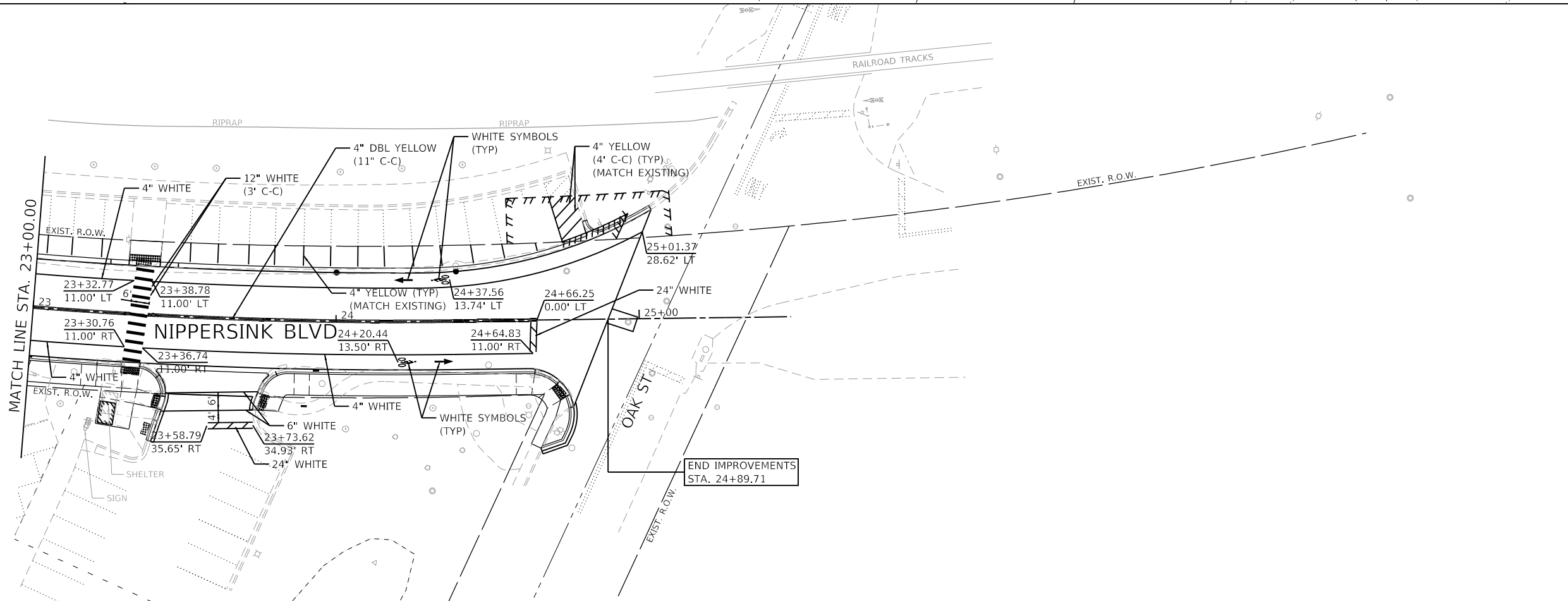
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING PLANS
NIPPERSINK BOULEVARD RECONSTRUCTION**
SCALE: 1"=20'
SHEET 1 OF 2 SHEETS
STA. 10+00.00 TO STA. 18+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	51
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				



NOTE:
ALL PAVEMENT MARKINGS ARE THERMOPLASTIC



END IMPROVEMENTS
STA. 24+89.71

GHA GEWALT HAMILTON ASSOCIATES, INC.
MODEL: Default
FILE: 4870-250-sht-pmk 2.dgn

FILE NAME = 4870-250-sht-pmk 2.dgn	USER NAME = mcobb	DESIGNED - MGC	REVISED -
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Default	PLOT DATE = 8/25/2020	CHECKED - KLB	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

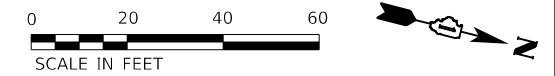
**PAVEMENT MARKING PLANS
NIPPERSINK BOULEVARD RECONSTRUCTION**

SCALE: 1"=20' SHEET 2 OF 2 SHEETS STA. 18+00.00 TO STA. 25+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	52
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				

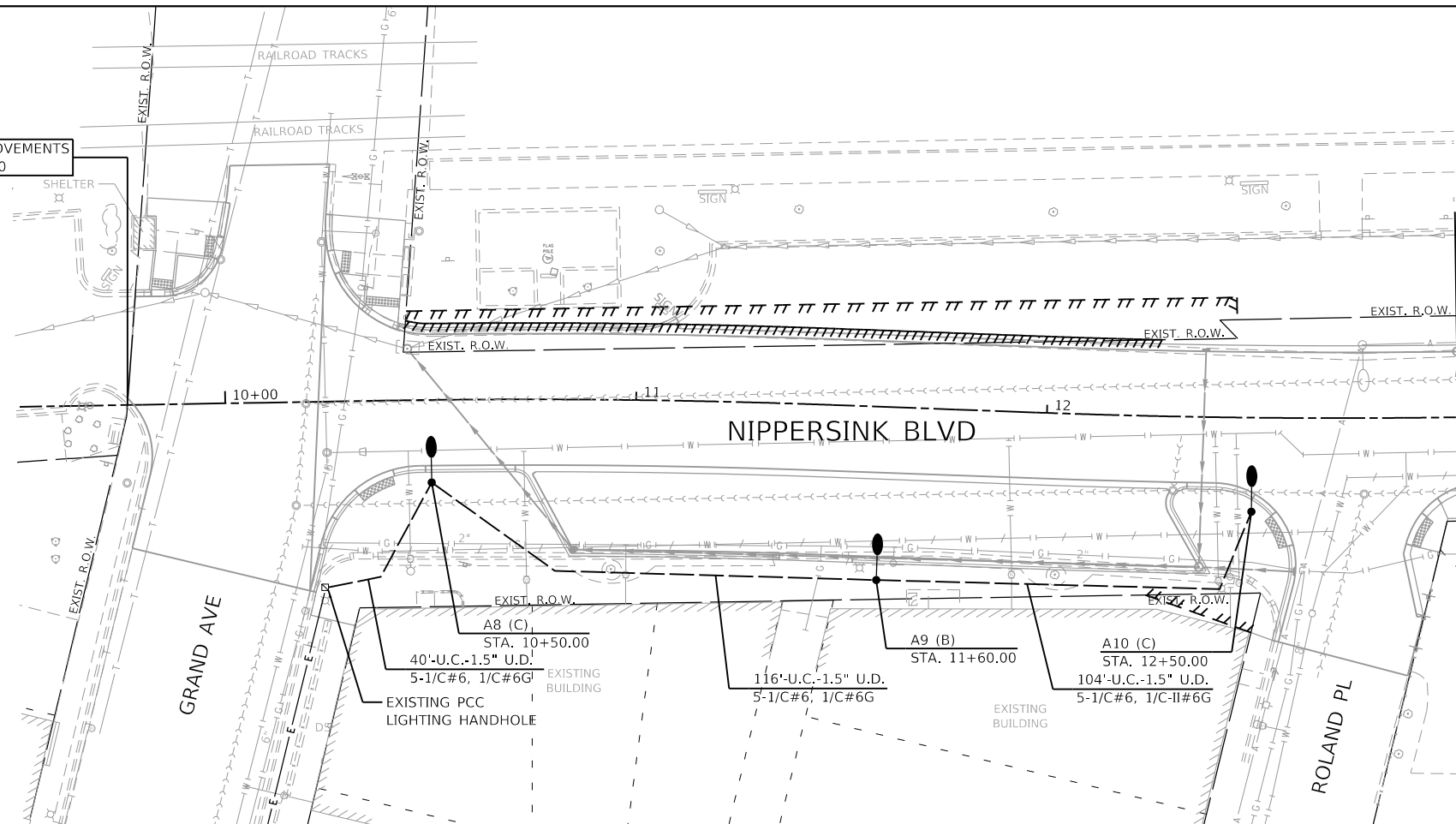
LEGEND

- PROPOSED STREET LIGHT
25 FT M.H., 4 FT MAST ARM
SINGLE ARM ARRANGEMENT
- L1 - DENOTES LIGHTING CONTROLLER
- A1 - DENOTES FIXTURE NUMBER ON GIVEN CIRCUIT
- (Z1) - DENOTES RECEPTACLE CIRCUIT
- STA # - DENOTES STATIONING LOCATION
- PHASE, NEUTRAL, & GROUND CONDUCTORS, 600V, TYPE XLP
IN 1.5" HDPE CONDUIT (UNIT DUCT)
(OR AS SHOWN)
- PROPOSED LIGHTING CONTROLLER
- "P" PROPOSED ELECTRIC SERVICE INSTALLATION
- PROPOSED LIGHTING HANDHOLE
- EXISTING STREET LIGHT, TO REMAIN
- EXISTING CONTROLLER CABINET
- EXISTING STREET LIGHT CONDUIT



POLE PLACEMENT		
POLE LABEL	SETBACK	STATION
A8	2.5'	10+50.00
A9	2.5'	11+60.00
A10	2.5'	12+50.00

BEGIN IMPROVEMENTS
STA. 9+76.20



- CONSTRUCTION NOTES:**
- THE CONTRACTOR SHALL INSTALL A RIGID GALVANIZED STEEL CONDUIT SLEEVE FOR ALL ROADWAY AND ALLEY CROSSINGS. THE SLEEVE SHALL EXTEND 2-FT (MIN) BEYOND THE BACK OF CURB OR EDGE OF PAVEMENT (AS APPLICABLE).
 - THE PROPOSED LIGHTING UNITS SHALL MATCH THE EXISTING STREET LIGHTING ALONG GRAND AVE (WITH A MODIFIED POLE/MOUNTING HEIGHT). THE POLES SHALL BE MANUFACTURED BY VALMONT AND THE LUMINAIRES SHALL BE MANUFACTURED BY CYCLONE OR KING.
 - THE PROPOSED ROADWAY LIGHTING ALONG NIPPERSINK BLVD (LIGHT POLE A8(C), A9(B), AND A10(C)) SHALL BE CONNECTED TO THE EXISTING LIGHTING SYSTEM ALONG GRAND AVE.
 - THE EXISTING LIGHTING SYSTEM ALONG GRAND AVE, EAST OF THE RAILROAD TRACKS, IS OPERATED BY A LIGHTING CONTROLLER AT THE NORTHEAST CORNER OF GRAND AVE & KEYSTONE AVE.
 - THE CONTRACTOR SHALL DRILL THE EXISTING PCC LIGHTING HANDHOLE AT THE NORTHEAST CORNER OF GRAND AVE AND NIPPERSINK BLVD TO INSTALL/CONNECT THE PROPOSED 1.5-INCH UNIT DUCT.
 - THE PROPOSED SIGN LIGHTING SHALL BE CONNECTED TO LIGHTING CIRCUIT 'A' AT THE PROPOSED HANDHOLE 'H1'.
 - THE CONTRACTOR SHALL REFER TO THE SPECIAL PROVISIONS FOR SIGN LIGHTING REQUIREMENTS.

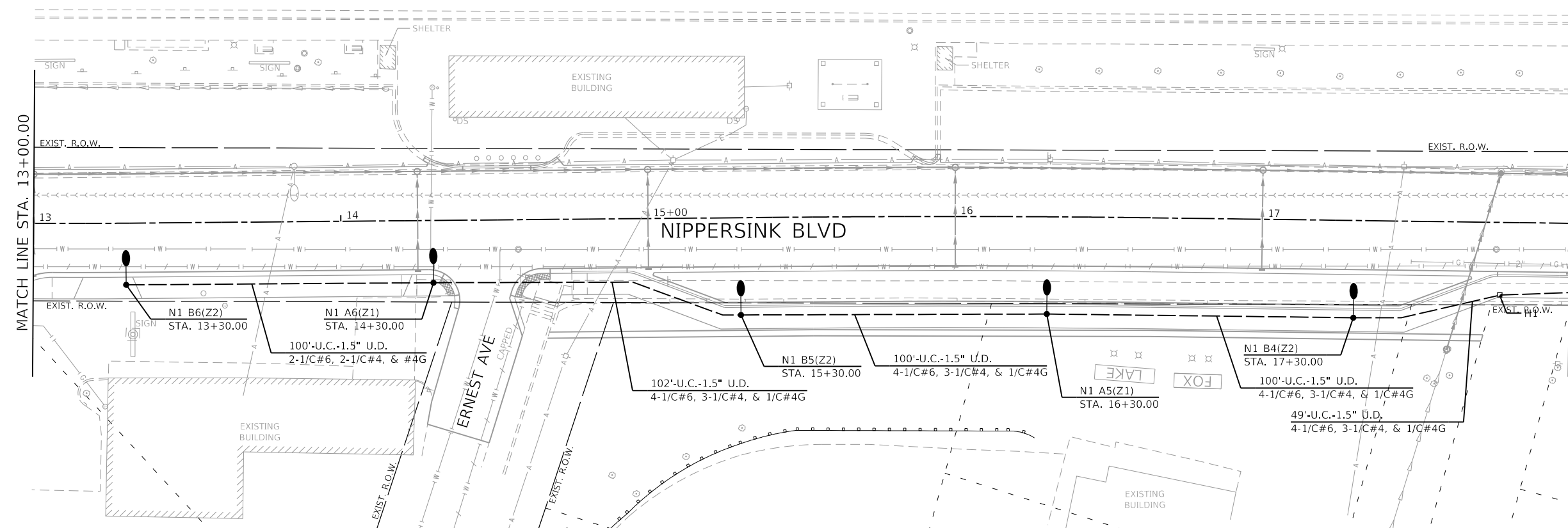
MATCH LINE STA. 13+00.00

POLE PLACEMENT		
POLE LABEL	SETBACK	STATION
N1 B4	2.5'	17+30.00
N1 A5	2.5'	16+30.00
N1 B5	2.5'	15+30.00
N1 A6	2.5'	14+30.00
N1 B6	2.5'	13+30.00

HANDHOLE PLACEMENT		
HANDHOLE	SETBACK	STATION
H1	6.1'	17+77.64

- PLAN NOTES:**
- NO LIGHTING REMOVAL SHALL OCCUR UNTIL ALL PROPOSED LIGHTS ARE INSTALLED AND OPERATIONAL, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
 - LANDSCAPE RESTORATION WILL NOT BE PAID FOR SEPARATELY AND SHALL BE INCLUDED IN THE COST OF THE APPLICABLE PAY ITEMS.
 - SIDEWALK, PAVEMENT, DRIVEWAY, CURB, AND MEDIAN REMOVAL AND REPLACEMENT SHALL BE LIMITED TO THE AREA NECESSARY TO FACILITATE THE INSTALLATION OF THE PROPOSED LIGHTING SYSTEM OR TO RESTORE AREAS WHERE THE EXISTING SYSTEM WAS REMOVED. ALL LIMITS SHALL BE APPROVED BY THE ENGINEER PRIOR TO PERFORMING WORK.
 - ALL SALVAGED MATERIAL SHALL BE DELIVERED TO THE VILLAGE OF FOX LAKE'S PUBLIC WORKS FACILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING DELIVERIES WITH VILLAGE STAFF.
 - THE PROPOSED LIGHT POLE LOCATIONS SHALL BE VERIFIED BY THE ENGINEER PRIOR TO INSTALLATION.
 - SETBACK IS MEASURED FROM THE BACK OF CURB (BOC) TO THE CENTER OF THE LIGHT POLE FOUNDATION.
 - ALL CABLE SPLICES SHALL OCCUR WITHIN JUNCTION BOXES OR LIGHT POLES AND BE WATER TIGHT. UNDERGROUND SPLICING OF CABLES SHALL NOT BE PERMITTED.

MATCH LINE STA. 18+00.00



FILE NAME = 4870-250-sht-light 1.dgn
 USER NAME = mcobb
 DESIGNED - MGC
 DRAWN - PJS
 CHECKED - KLB
 DATE - 8/25/2020

REVISIONS:
 REVISION NO. | DATE | BY | DESCRIPTION
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 2 | 8/25/2020 | PJS | REVISED PER COMMENTS
 3 | 8/25/2020 | KLB | CHECKED FOR CONSTRUCTION

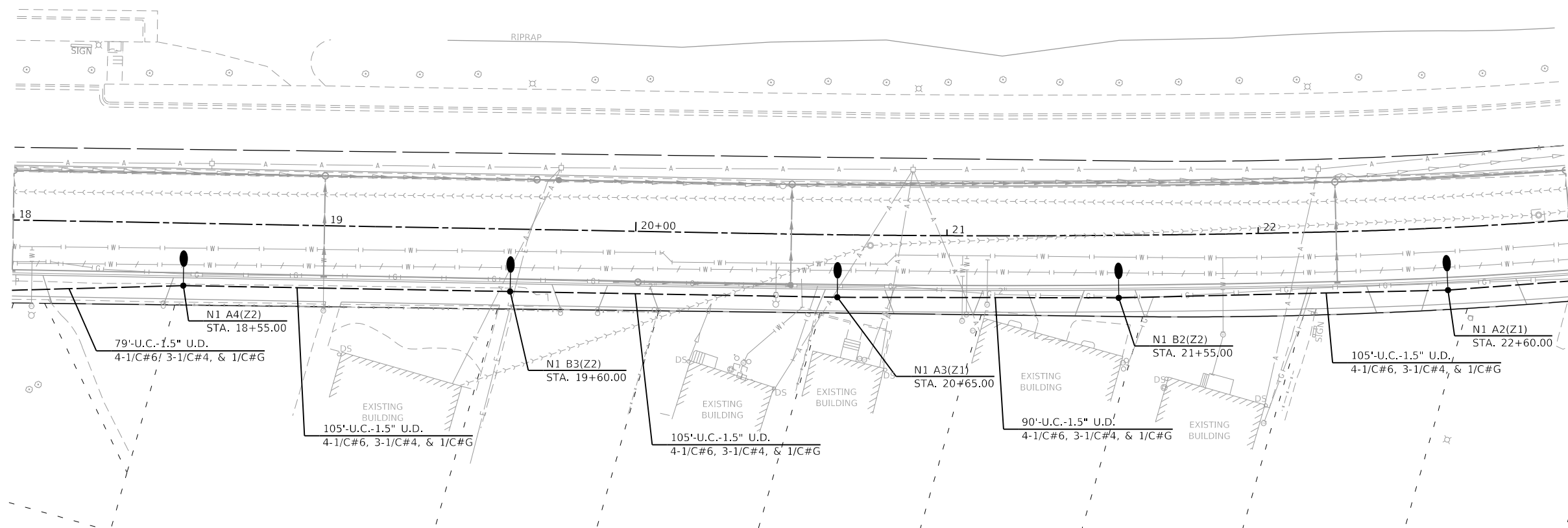
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

LIGHTING PLANS
NIPPERSINK BOULEVARD RECONSTRUCTION
 SCALE: 1"=20'
 SHEET 1 OF 2 SHEETS
 STA. 10+00.00 TO STA. 18+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	53

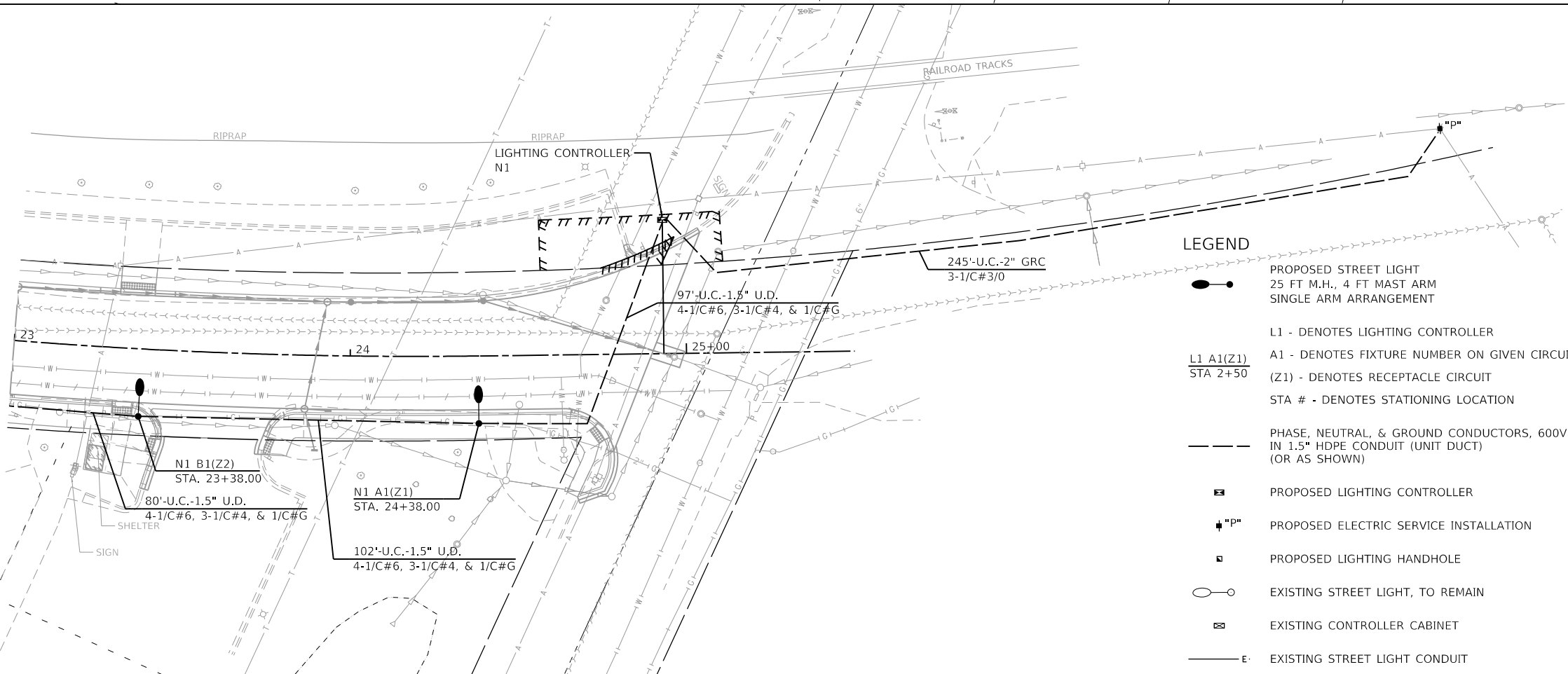
CONTRACT NO. 61G46
 ILLINOIS FED. AID PROJECT





POLE PLACEMENT		
POLE LABEL	SETBACK	STATION
N1 A2	2.5'	22+60.00
N1 B2	2.5'	21+55.00
N1 A3	2.5'	20+65.00
N1 B3	2.5'	19+60.00
N1 A4	2.5'	15+55.00

- CONSTRUCTION NOTES:**
1. THE CONTRACTOR SHALL INSTALL A RIGID GALVANIZED STEEL CONDUIT SLEEVE FOR ALL ROADWAY AND ALLEY CROSSINGS. THE SLEEVE SHALL EXTEND 2-FT (MIN) BEYOND THE BACK OF CURB OR EDGE OF PAVEMENT (AS APPLICABLE).
 2. THE PROPOSED LIGHTING UNITS SHALL MATCH THE EXISTING STREET LIGHTING ALONG GRAND AVE (WITH A MODIFIED POLE/MOUNTING HEIGHT). THE POLES SHALL BE MANUFACTURED BY VALMONT AND THE LUMINAIRES SHALL BE MANUFACTURED BY CYCLONE OR KING.
 3. THE LIGHTING CONTROLLER SHALL BE ORIENTED WITH THE CABINET DOOR OPENING AWAY FROM THE ROADWAY.
 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE EXACT LOCATION AND CONNECTION OF THE ELECTRICAL SERVICE FOR THE STREET LIGHTING CONTROLLER 'N1'. NO WORK SHALL BE PERFORMED FOR THE CONTROLLER OR THE SERVICE UNTIL THE ELECTRICAL SERVICE LOCATION IS APPROVED BY COMMONWEALTH EDISON (COMED). IF ALLOWED BY COMED, THE ELECTRICAL SERVICE SHALL BE INSTALLED CLOSER TO THE PROPOSED CONTROLLER.



POLE PLACEMENT		
POLE LABEL	SETBACK	STATION
N1 A1	2.5'	24+38.00
N1 B1	2.5'	24+38.00

CONTROLLER PLACEMENT		
CONTROLLER	SETBACK	STATION
N1	7'	24+93.28

- PLAN NOTES:**
1. NO LIGHTING REMOVAL SHALL OCCUR UNTIL ALL PROPOSED LIGHTS ARE INSTALLED AND OPERATIONAL, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
 2. LANDSCAPE RESTORATION WILL NOT BE PAID FOR SEPARATELY AND SHALL BE INCLUDED IN THE COST OF THE APPLICABLE PAY ITEMS.
 3. SIDEWALK, PAVEMENT, DRIVEWAY, CURB, AND MEDIAN REMOVAL AND REPLACEMENT SHALL BE LIMITED TO THE AREA NECESSARY TO FACILITATE THE INSTALLATION OF THE PROPOSED LIGHTING SYSTEM OR TO RESTORE AREAS WHERE THE EXISTING SYSTEM WAS REMOVED. ALL LIMITS SHALL BE APPROVED BY THE ENGINEER PRIOR TO PERFORMING WORK.
 4. ALL SALVAGED MATERIAL SHALL BE DELIVERED TO THE VILLAGE OF FOX LAKE'S PUBLIC WORKS FACILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING DELIVERIES WITH VILLAGE STAFF.
 5. THE PROPOSED LIGHT POLE LOCATIONS SHALL BE VERIFIED BY THE ENGINEER PRIOR TO INSTALLATION.
 6. SETBACK IS MEASURED FROM THE BACK OF CURB (BOC) TO THE CENTER OF THE LIGHT POLE FOUNDATION.
 7. ALL CABLE SPLICES SHALL OCCUR WITHIN JUNCTION BOXES OR LIGHT POLES AND BE WATER TIGHT. UNDERGROUND SPLICING OF CABLES SHALL NOT BE PERMITTED.

- LEGEND**
- PROPOSED STREET LIGHT 25 FT M.H., 4 FT MAST ARM SINGLE ARM ARRANGEMENT
 - L1 - DENOTES LIGHTING CONTROLLER
 - A1 - DENOTES FIXTURE NUMBER ON GIVEN CIRCUIT
 - (Z1) - DENOTES RECEPTACLE CIRCUIT
 - STA # - DENOTES STATIONING LOCATION
 - PHASE, NEUTRAL, & GROUND CONDUCTORS, 600V, TYPE XLP IN 1.5" HDPE CONDUIT (UNIT DUCT) (OR AS SHOWN)
 - PROPOSED LIGHTING CONTROLLER
 - ⊕ "P" PROPOSED ELECTRIC SERVICE INSTALLATION
 - PROPOSED LIGHTING HANDHOLE
 - ○ EXISTING STREET LIGHT, TO REMAIN
 - EXISTING CONTROLLER CABINET
 - E — EXISTING STREET LIGHT CONDUIT

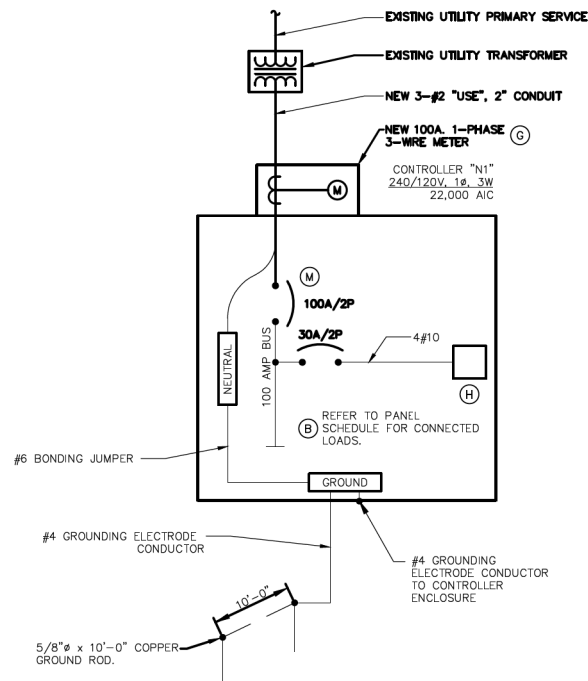
GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: Default
 FILE: 4870-250-sht-light 2.dgn

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4870.25	PLOT SCALE = 1:40	DRAWN - PJS	REVISED -
Default	PLOT DATE = 8/25/2020	CHECKED - KLB	REVISED -
		DATE - 8/25/2020	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

LIGHTING PLANS			
NIPPERSINK BOULEVARD RECONSTRUCTION			
SCALE: 1"=20'	SHEET 2 OF 2 SHEETS	STA. 18+00.00	TO STA. 25+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	54
				CONTRACT NO. 61G46
ILLINOIS FED. AID PROJECT				



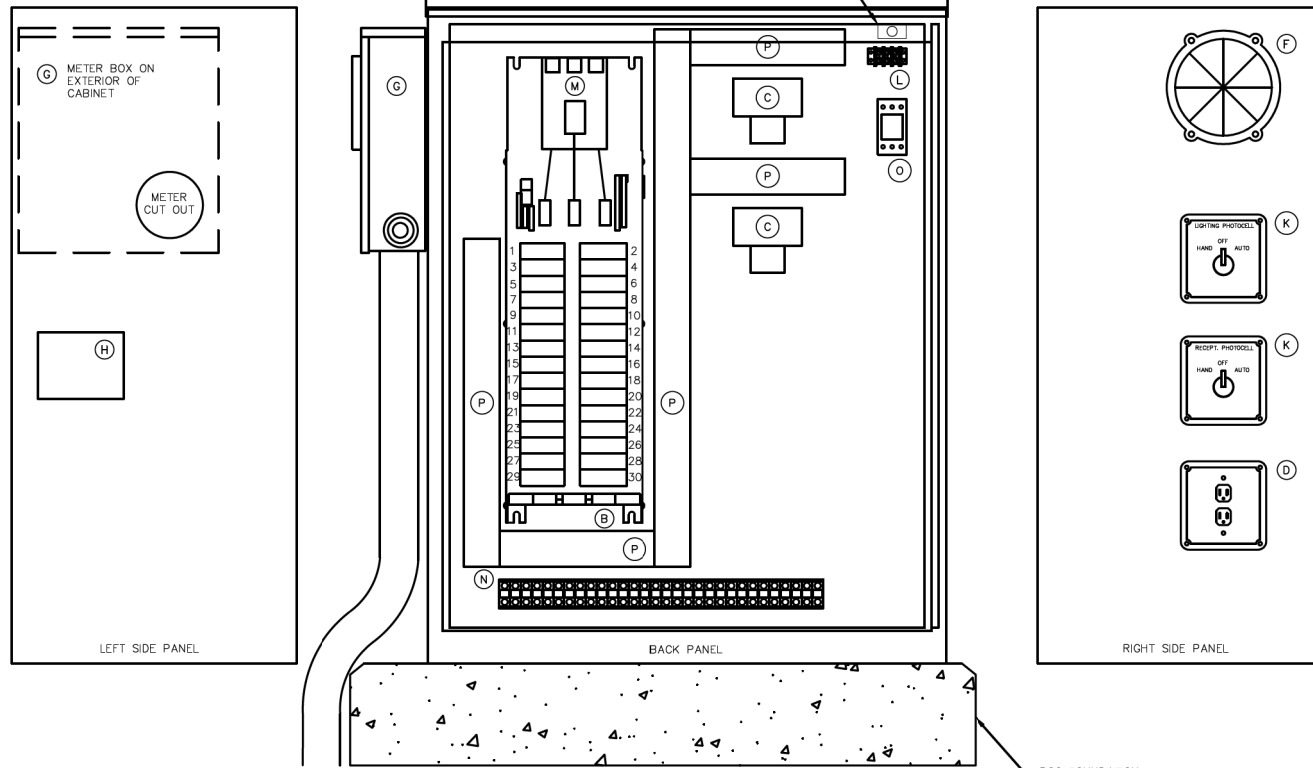
ONE LINE DIAGRAM CONTROLLER "N1"

1 NO SCALE

ONE-LINE DIAGRAM NOTES

- AIC RATINGS LISTED FOR EQUIPMENT ARE MINIMUM REQUIREMENTS FOR BUS BRACING AND DEVICE RATING. ALL EQUIPMENT SHALL BE FULLY RATED UNLESS SPECIFICALLY NOTED AS SERIES RATED.
- ALL FUSES FROM 0 AMPERE TO 200 AMPERE SHALL BE DUAL ELEMENT, CLASS RK-5 UNLESS NOTED OTHERWISE.

BILL OF MATERIALS FOR LIGHTING CONTROLLER "N1"		
ITEM #	QUANTITY	DESCRIPTION
B	1	BRANCH CIRCUIT PANEL INTERIOR WITH DEAD FRONT TRIM, 100A COPPER BUS, 240/120 VOLT, MOLDED CASE THERMAL MAGNETIC CIRCUIT BREAKERS, BOLT ON TYPE, AIC RATING OF 22,000 AMPS AT 240 VOLTS.
C	2	LIGHTING CONTACTOR, ELECTRICALLY HELD, 8 POLE, 30 AMP, 120V COIL. PROVIDE WITH TWO-WIRE CONTROL FOR PHOTOCELL INTERFACE.
D	1	WEATHER RESISTANT (WR) GFI RECEPTACLE 120V, 20A, SPECIFICATION GRADE, NEMA 5-20R IN WEATHER-PROOF BOX WITH FLAP-TYPE COVER.
E	1	20A SPDT MICRO SWITCH (MOUNT WITH ACTUATOR TO SWITCH WHEN DOOR OPENED), 120 VOLT, 15 AMP CONTACTS.
F	1	60 WATT LIGHT FIXTURE, VAPOR TIGHT WITH GLOBE, GUARD, AND MOUNTING BOX. LAMP PROVIDED WITH FIXTURE.
G	1	WEATHERPROOF METER FITTING, 1 PHASE, 3 WIRE, 200 AMP.
H	1	SURGE ARRESTOR, 100KA RATED, 120/240V, 1φ, 3W SERVICE.
I	2	PHOTOCELL, 120V, 1500 VA RATED, DOUBLE POLE, SINGLE POLE CONTACT, WEATHERPROOF AND CORROSION PROOF ENCLOSURE, U.L. LISTED. RECEPT. PHOTOCELL MOUNTED ON CABINET.
J	1	CABINET ENCLOSURE PAD MOUNTED, ALUMINUM, N.E.M.A. 3R CONSTRUCTION, FACTORY PRIMED AND PAINTED BLACK, WITH KEY LOCKING DOOR. KEY CYLINDER SHALL MATCH EXISTING VILLAGE LIGHTING CONTROLLER LOCKS. 30"W. 50"H. 17"D.
K	2	HAND-OFF-AUTO SELECTOR SWITCH, 600V RATED, IN GRADE MOUNTED SURFACE BOX.
L	2	COPPER LOAD TERMINAL BLOCK TO PHOTOCELL (ITEM I)
M	1	MAIN CIRCUIT BREAKER, MOLDED CASE THERMAL MAGNETIC, SERVICE ENTRANCE DUTY RATED 240 VOLT, 100 AMP, 2 POLE, AIC RATING OF 22,000 AMPS AT 240 VOLTS. INTEGRAL TO BRANCH PANEL.
N	1	COPPER LOAD TERMINAL BLOCK FOR AWG#6 AND AWG#12
O	2	FORM TYPE C RELAY, ELECTRICALLY HELD, ONE NORMALLY OPEN (N.O.) AND ONE NORMALLY CLOSED (N.C.) CONTACTS, 600V CONTINUOUS DUTY COIL, 30 AMP CONTACT RATING.
P	1	WIRE DUCT

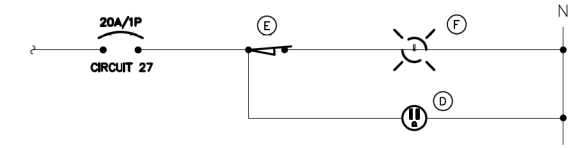


2 LIGHTING CONTROL CABINET

2 NO SCALE U.L. LISTED

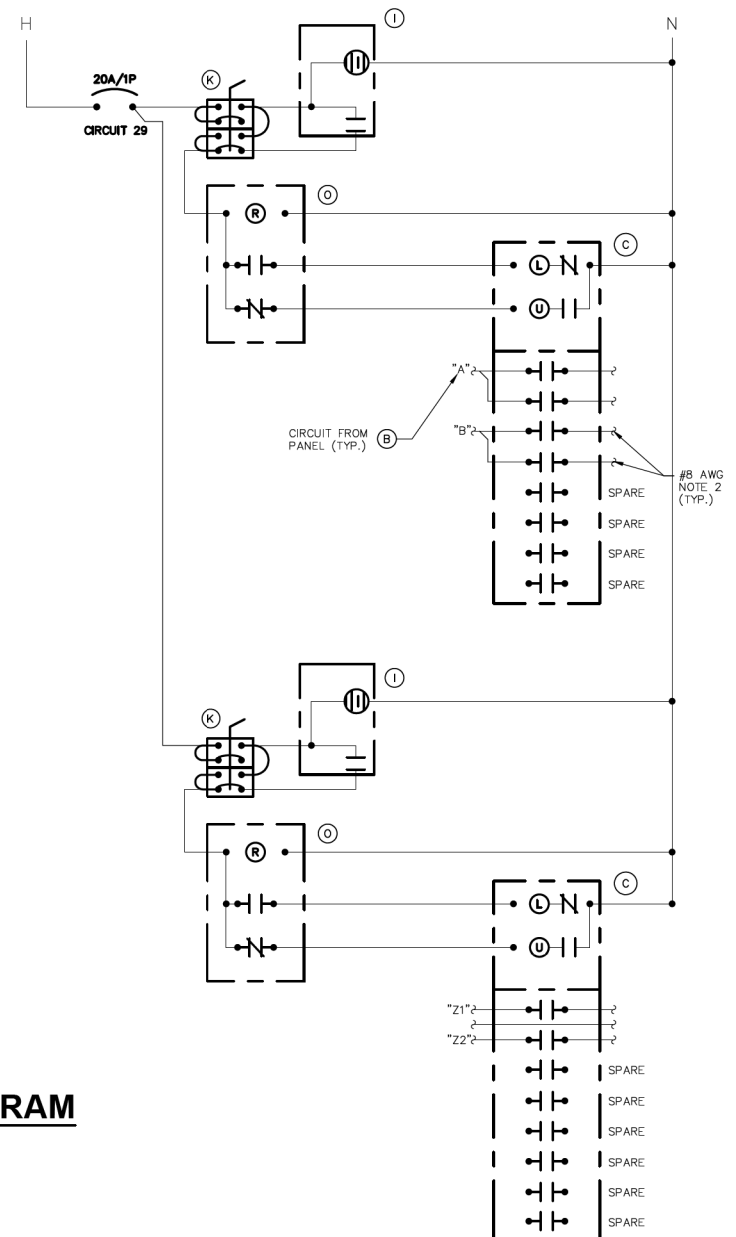
CONTROLLER NOTES:

- THE CONTROLLER FOUNDATION SHALL HAVE TWO ADDITIONAL RACEWAYS INSTALLED FOR FUTURE USE.
- THE CONTROL CABINET SHALL BE U.L. LISTED UNDER U.L. 508A.
- ALL EXTERNAL HARDWARE SHALL BE STAINLESS STEEL.
- THE METER FITTING SHALL BE PAINTED TO MATCH THE CONTROLLER CABINET.
- THE ENCLOSURE SHALL BE VENTED. ONE INCH SCREENED VENT HOLES WILL BE PROVIDED IN THE OVER HANG.
- THE CABINET SHALL BE PROVIDED WITH A 5' X 8' STAINLESS STEEL NAMEPLATE, ENGRAVED TO READ "LIGHTING CONTROLLER"
- THE DOORS SHALL BE GASKETED PER SPECIFICATIONS. THE DOOR HANDLE SHALL BE 3/4" STAINLESS STEEL WITH KEY LOCK, AND HAVE A PROVISION FOR PADLOCKING
- THE MOUNTING PANEL SHALL BE 1/2 INCH ARBORON MATERIAL. EXPOSED BUS BARS SHALL BE INSULATED.
- CONNECTOR SCREWS SHALL BE PAINTED WHITE FOR THE NEUTRAL BUS AND GREEN FOR THE GROUNDING BUS.
- ALL MULTIPLE CONNECTIONS TO A SINGLE SOURCE WILL BE ACCOMPLISHED BY USE OF SPLICE BLOCKS OR MULTI CONNECTION LUGS.
- ALL LUGS SHALL BE OF COPPER SCREWS AND CONNECTORS, SPRING HELD.
- ALL WIRING TERMINATIONS SHALL BE RATED NOT LESS THAN 75 DEGREE CENTIGRADE.
- ALL DEVICES SHALL BE FRONT REMOVABLE.
- ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED USING THE FOLLOWING ABBREVIATIONS:
R - RED Y - YELLOW
B - BLACK W - WHITE
BL - BLUE G - GREEN
- ALL CONTROL CABINET ITEMS SHALL HAVE SUITABLE IDENTIFICATION. OPEN CIRCUIT BREAKERS, CONTACTORS AND OTHER OPEN DEVICES SHALL HAVE PERMANENT SELF STICKING TAGS. DEVICES IN ENCLOSURES SHALL HAVE ENGRAVED 2-COLOR LAMINATED PLASTIC NAMEPLATES ATTACHED TO ENCLOSURES WITH SCREWS. NAMEPLATES SHALL BE ENGRAVED TO CORRESPOND TO DESIGNATIONS ON THE DRAWINGS, AS INDICATED OR AS DIRECTED BY THE ENGINEER, BY MEANS OF BRADY MARKERS. ALL CONTROL WIRING SHALL BE STRANDED AND LABELED AT EACH END (NUMBER TO MATCH PROVIDED CONTROLLER SCHEMATIC DIAGRAM).
- A LAMINATED AS-BUILT COPY OF THE CIRCUIT WIRING DIAGRAM SHALL BE ATTACHED TO THE INSIDE OF THE CONTROLLER.
- SEALING GROMMETS SHALL BE PROVIDED FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL.
- ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



3 CABINET ELEMENTARY DIAGRAM

3 NO SCALE



4 LIGHTING CONTROL ELEMENTARY DIAGRAM

- NOTES:
- ALL CABINET INTERIOR WIRING SHALL BE STRANDED COPPER #12 AWG THWN UNLESS NOTED OTHERWISE.
 - ROUTE TO STREET LIGHTING LUMINAIRES VIA TERMINAL BLOCK.
 - REFER TO PROPOSED LIGHTING PLAN FOR BRANCH CIRCUIT WIRE AND CONDUIT SIZES FROM TERMINAL BLOCK "N" TO THE STREET LIGHTING POLES.

TYPE: BOLT-ON		PANEL NAME: CONTROLLER "N1"		CONNECTED 4.3 KVA	
MOUNTING: SURFACE - INTERIOR ONLY		SOLID NEUTRAL		100A MCB	
FED FROM: UTILITY		GROUND BUS		VOLTS: 240/120	
AIC RATING: 22,000				PHASE: 1	
				WIRE: 3	

CKT NO.	LOAD DESCRIPTION	WIRE SIZE	LOAD KVA	BREAKER AMP	BREAKER P	LOAD AMP	LOAD P	WIRE SIZE	LOAD DESCRIPTION	CKT NO.
1	"A" POLE LIGHTING	*S	0.8	20	2	20	2	*S	"B" POLE LIGHTING	2
3	"A" POLE LIGHTING	--	--	--	--	--	--	--	"B" POLE LIGHTING	4
5	SPARE	--	--	20	2	20	2	--	SPARE	6
7	SPARE	--	--	--	--	--	--	--	SPARE	8
9	SPACE								SPACE	10
11	SPACE								SPACE	12
13	SPACE								SPACE	14
15	SPACE								SPACE	16
17	SPACE								SPACE	18
19	SPACE								SPACE	20
21	SPACE								SPACE	22
23	SPACE								SPACE	24
25	"Z1" 6 - RECEPTACLES	4	1.1	20	1	20	1	1.1	4 "Z2" 6 - RECEPTACLES	26
27	LGT. RECEPT. IN CABINET	12	0.3	20	1	30	2	0.1	10 SURGE ARRESTOR	28
29	LGT CONTROL	12	0.1	20	1	--	--	--	SURGE ARRESTOR	30

NOTES: *S = REFER TO WIRING DIAGRAM FOR WIRE SIZE.

GHA GEWALT HAMILTON ASSOCIATES, INC.

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PLOT SCALE = 1:2
PLOT DATE = 8/25/2020

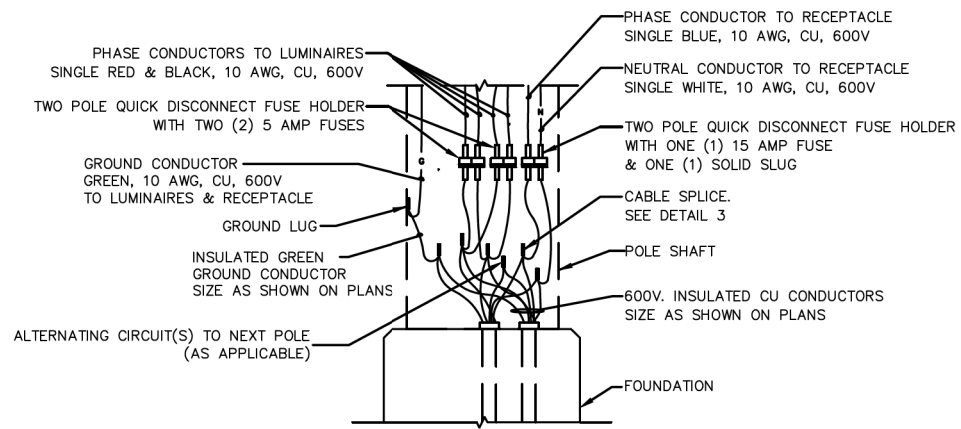
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DATE - 8/25/2020

REVISED -
REVISED -
REVISED -
REVISED -

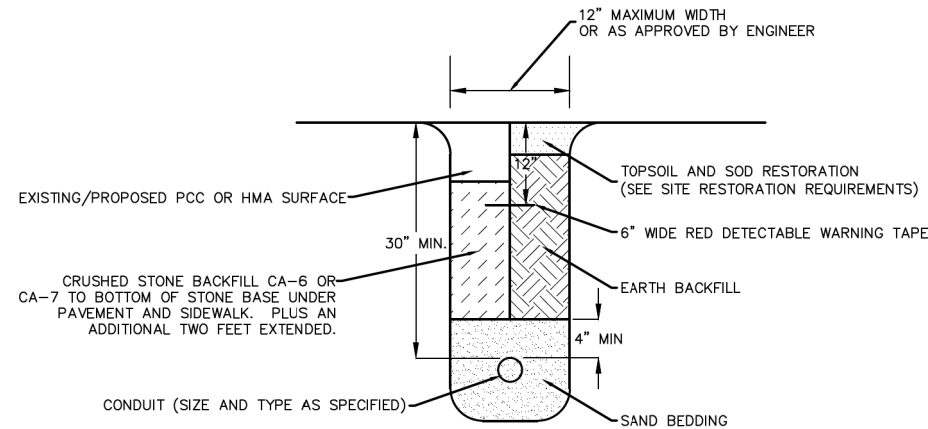
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING CONTROLLER DETAIL
NIPPERSINK BOULEVARD RECONSTRUCTION
SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE. 149 SECTION 17-00025-00-PV COUNTY LAKE TOTAL SHEETS 99 SHEET NO. 55 CONTRACT NO. 61G46 ILLINOIS FED. AID PROJECT



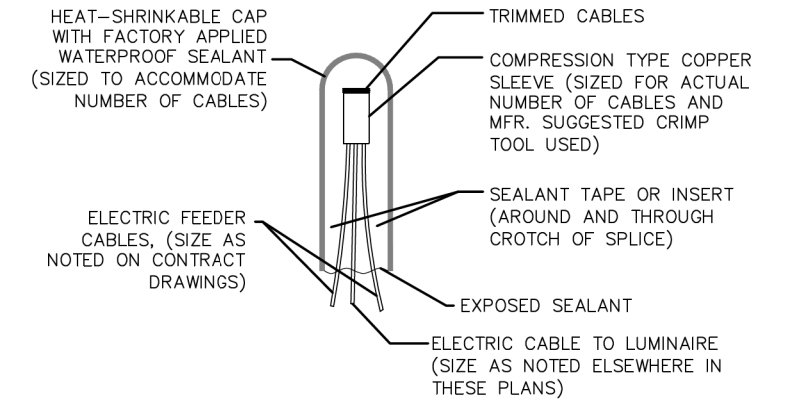
1 POLE BASE WIRING DIAGRAM
NO SCALE



2 TYPICAL CONDUIT IN TRENCH DETAIL
NO SCALE

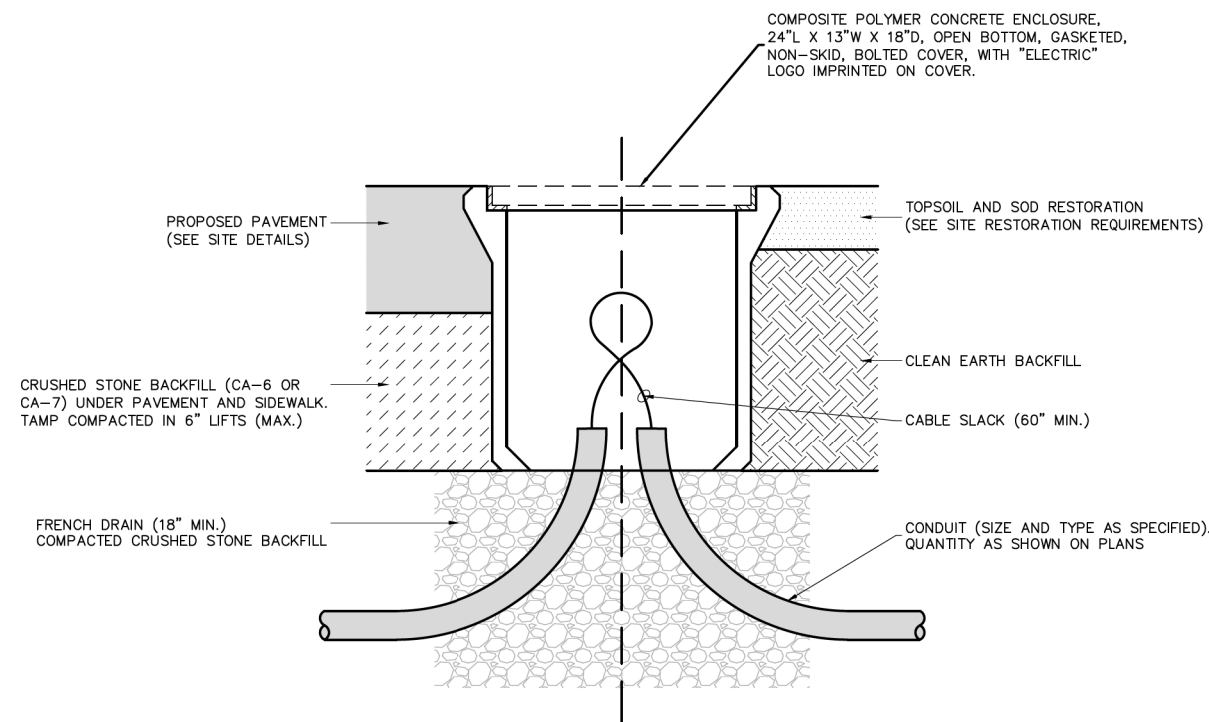
NOTES:

1. CONDUIT SHALL BE SURROUNDED BY 4" OF COMPACTED SAND.
2. BACKFILL SHALL BE PLACED AND COMPACTED IN 8" LIFTS
3. EARTH BACKFILL SHALL BE COMPACTED TO 95% OF THE DENSITY OF SURROUNDING UNDISTURBED SOIL.



3 BASIC MATERIALS AND METHODS
NO SCALE

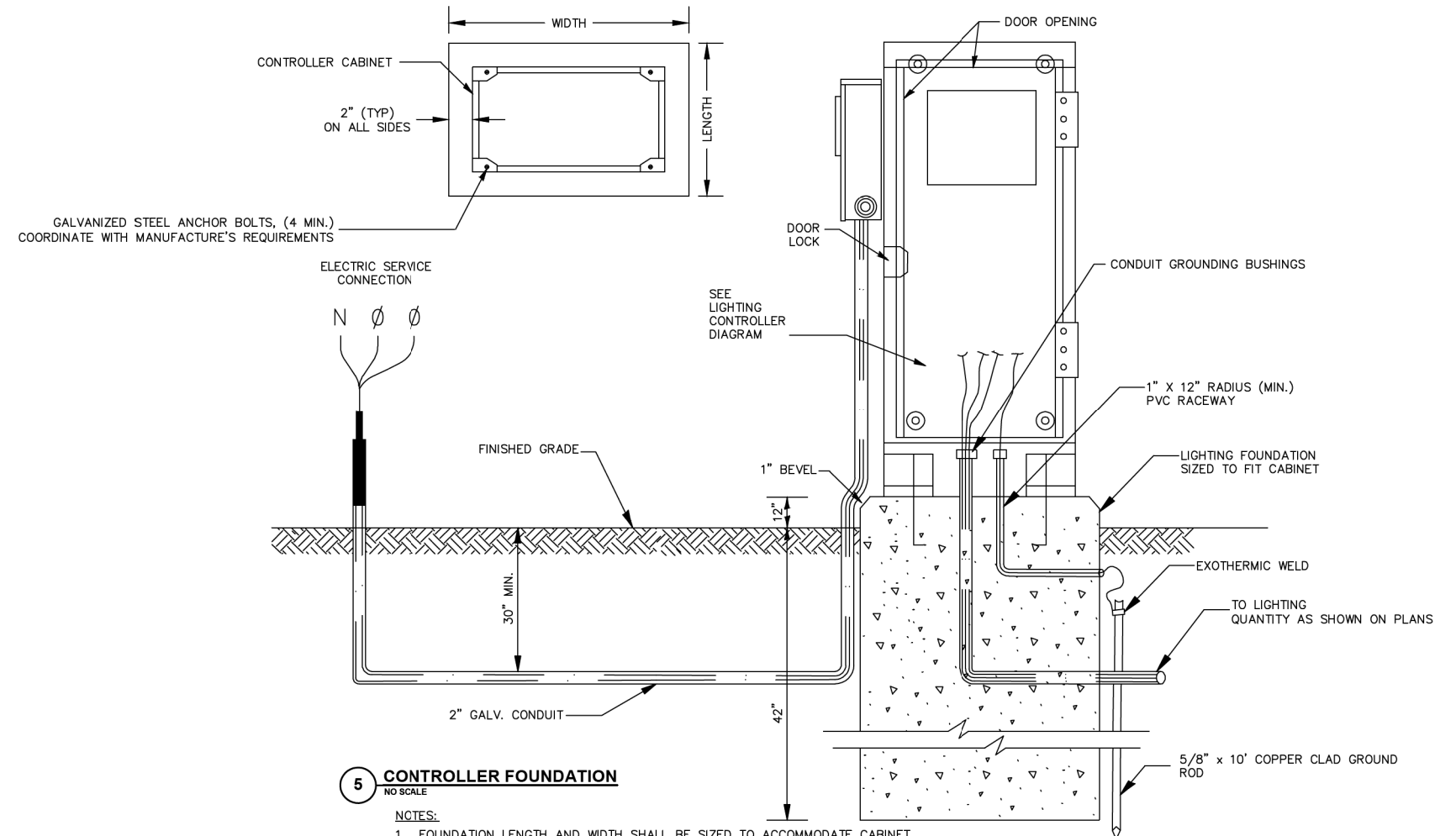
NOTE:
THE NUMBER OF CABLES IN SPLICE MAY VARY



4 COMPOSITE HANDHOLE DETAIL
NO SCALE

NOTES:

1. HANDHOLE SHALL BE UL LISTED (OR EQUIVALENT)
2. EARTH BACKFILL SHALL BE COMPACTED TO 95% OF THE DENSITY OF SURROUNDING UNDISTURBED SOIL.
3. HANDHOLE SHALL BE RATED BASED ON APPLICATION AND LOCATION:
A. GRASS OR PARKWAY WITH NO VEHICULAR TRAFFIC - TIER 5
B. SIDEWALK WITH NO VEHICULAR TRAFFIC - TIER 8
C. DRIVEWAY OR PARKING LOT WITH OCCASIONAL VEHICULAR TRAFFIC - TIER 22
D. DELIBERATE VEHICULAR TRAFFIC - AASHTO H-20



5 CONTROLLER FOUNDATION
NO SCALE

NOTES:

1. FOUNDATION LENGTH AND WIDTH SHALL BE SIZED TO ACCOMMODATE CABINET.
2. REFER TO PLAN SHEETS FOR METER ORIENTATION.
3. CONTRACTOR SHALL PROVIDE A 4" THICK, 48" X 48" PCC WORK PAD EXCEPT WHERE THE CABINET IS ADJACENT TO SIDEWALK.
4. CONTROLLER SHALL BE ORIENTED SO THE CABINET DOOR OPENS AWAY FROM THE ROADWAY.

FILE NAME =	USER NAME = mcobb	DESIGNED - MGC	REVISED -
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	56
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				

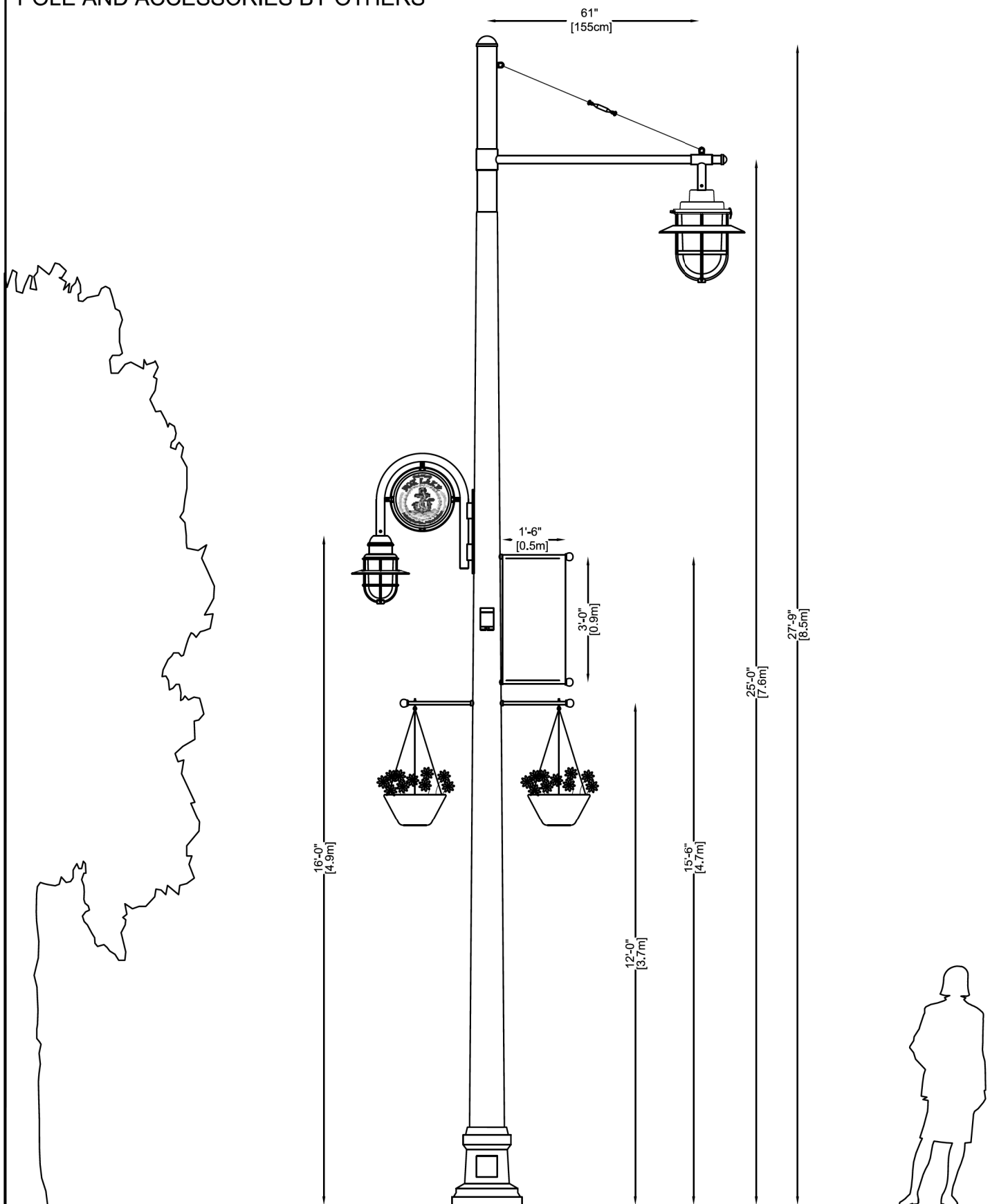
GENERAL LIGHTING NOTES:

1. THE OWNER OF THE PROPOSED LIGHTING SYSTEM SHALL BE THE VILLAGE OF FOX LAKE.
2. ALL WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE, THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND ANY APPLICABLE LOCAL CODES. IF DISCREPANCIES EXIST THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER TO DETERMINE THE PROPER COURSE OF ACTION.
3. ALL PAY ITEMS REFER TO IDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
4. THE EXACT LOCATIONS OF ALL UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR BEFORE INSTALLATION OF ANY COMPONENTS OF THE LIGHTING SYSTEM. FOR THE LOCATIONS OF THE UTILITIES, CALL JULIE TOLL FREE AT 1-800-892-0123. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE EXISTING TRAFFIC SIGNAL CABLES AND CONDUITS.
5. CONDUIT SHALL BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH TREES, BUSHES, DRAINS AND OTHER UTILITIES.
6. CARE SHALL BE TAKEN NOT TO DAMAGE ANY OF THE EXISTING TRAFFIC SIGNAL CONDUITS, DETECTORS, AND EQUIPMENT. IF ANY OF THE TRAFFIC SIGNAL CONDUIT AND/OR EQUIPMENT IS DAMAGED, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE THE CONDUIT AND/OR EQUIPMENT AT NO COST TO THE COUNTY, STATE, OR VILLAGE.
7. ALL DISTURBED AREAS SHALL BE RESTORED TO THE SATISFACTION OF THE ENGINEER. THE WORK WILL NOT BE PAID FOR SEPARATELY, AND SHALL BE INCLUDED IN THE COST OF THE APPLICABLE PAY ITEMS, UNLESS OTHERWISE INDICATED ON THE PLAN SHEETS.
8. ALL PROPOSED LIGHT POLES SHALL SATISFY IDOT'S MINIMUM SETBACK REQUIREMENTS.
9. THE CONTRACTOR SHALL MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLES AND CONTROLLERS FOR VERIFICATION AND APPROVAL BY THE ENGINEER, PRIOR TO STARTING WORK.
10. IF LIGHTS ARE POSITIONED NEAR OVERHEAD UTILITIES, THE CONTRACTOR SHALL CONTACT THE LOCAL UTILITY FOR LOCATION APPROVAL.
11. NO MATERIALS SHALL BE DELIVERED TO THE JOB SITE UNTIL A STORAGE LOCATION AND ALL PERTINENT SUBMITTALS HAVE BEEN APPROVED BY THE ENGINEER.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE. THE RESIDENT ENGINEER MAY ASSIST THE CONTRACTOR, AS APPLICABLE, BUT THE RESPONSIBILITY FOR COORDINATING THE FINISHED GRADE ELEVATION WITH THE TOP OF THE FOUNDATION HEIGHTS SHALL REMAIN WITH THE CONTRACTOR.
13. CONTRACTOR SHALL COORDINATE ALL SERVICE CONNECTIONS WITH THE LOCAL UTILITY COMPANY.
14. THE ELECTRICAL SUPPLY SHALL BE A PROPERLY GROUNDED AC SYSTEM.
15. ALL FOUNDATIONS SHALL BE EQUIPPED WITH A GROUNDING ROD.
16. GROUNDING CONNECTIONS AT THE FOUNDATIONS SHALL BE EXOTHERMICALLY WELDED, AS SPECIFIED, AND SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER PRIOR TO FRAMING LIGHT POLE.
17. THE GROUNDING CONDUCTOR SHALL BE INSULATED.
18. THE GROUNDING CONDUCTOR SHALL EXTEND CONTINUOUSLY WITH ALL CIRCUIT CONDUCTORS, IN THE SAME RACEWAY.
19. THE GROUNDING CONDUCTOR SHALL BE SPLICED AND BONDED AT EACH POLE.
20. ALL CONDUCTORS AND EQUIPMENT SHALL HAVE PROPER OVERCURRENT PROTECTION. OVERCURRENT PROTECTION SHALL BE PROVIDED FOR EACH LUMINAIRE AND ITS ASSOCIATED BRANCH CIRCUIT THROUGH THE USE OF POLE BASE FUSING, OR OTHER MEANS AS APPROVED BY THE ENGINEER.
21. NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, AS APPROVED BY THE ENGINEER.
22. POLES WITH MAST ARMS SHALL NOT BE ERECTED AND LEFT TO STAND WITHOUT LUMINAIRES, AND THE PROPOSED LIGHT POLES WILL NOT BE CONSIDERED COMPLETE WITHOUT THE LUMINAIRES INSTALLED.
23. UPON COMPLETION OF THE PERMANENT LIGHTING SYSTEM, THE CONTRACTOR SHALL REQUEST IN WRITING A PREFINAL INSPECTION. A MINIMUM OF THREE DAYS NOTICE SHALL BE GIVEN TO THE VILLAGE OF FOX LAKE. UPON COMPLETION OF INSPECTION AND APPROVAL OF WORK, THE VILLAGE SHALL TAKE MAINTENANCE OF THE LIGHTING SYSTEM.
24. THE PROPOSED LIGHTING SYSTEM SHALL BE TESTED ACCORDING TO ART. 801.13 OF THE STANDARD SPECIFICATIONS. THE ELECTRICAL CABLES SHALL BE MEG TESTED PRIOR TO CONNECTING THE LED LUMINAIRES OR GFCI RECEPTACLES.

LIGHTING CONTROLLER INSPECTION NOTES:

1. FOLLOWING THE COMPLETE INSTALLATION OF THE LIGHTING CONTROLLER, THE ELECTRICAL CONTRACTOR SHALL CONTACT THE VILLAGE'S BUILDING MAINTENANCE DEPARTMENT AT (630)293-2252 TO SCHEDULE AN INSPECTION. NOTE: COMMONWEALTH EDISON (COMED) WILL NOT COMPLETE THE SERVICE CONNECTION UNTIL THE VILLAGE HAS INSPECTED AND APPROVED THE INSTALLATION OF THE CONTROLLER.
2. THE DAY AFTER INSPECTION, THE CONTRACTOR SHALL REFER TO THE INSIDE OF THE CONTROLLER CABINET (OR CALL THE BUILDING MAINTENANCE DEPARTMENT) FOR THE RESULTS. A YELLOW TAG INDICATES THAT IT HAS PASSED. A RED TAG INDICATES THAT IT HAS FAILED AND A COPY OF THE INSPECTION SHEET WILL BE LOCATED IN THE ELECTRICAL METER PANEL STATING WHAT NEEDS TO BE CORRECTED.
3. IF THE LIGHTING CONTROLLER FAILS INSPECTION, THE ELECTRICAL CONTRACTOR SHALL CORRECT THE ITEMS SPECIFIED ON THE INSPECTION SHEET AND HAVE THE CABINET RE-INSPECTED BY THE VILLAGE'S BUILDING MAINTENANCE DEPARTMENT. THE ELECTRICAL CONTRACTOR SHALL REPEAT THIS PROCESS UNTIL THE PROPOSED LIGHTING CONTROLLER IS APPROVED.
4. ONCE THE LIGHTING CONTROLLER HAS PASSED INSPECTION, THE ELECTRICAL CONTRACTOR SHALL CONTACT COMED AND REQUEST ELECTRICAL SERVICE BE CONNECTED AND METER INSTALLED.

FIXTURES AND ARMS BY CYCLONE
POLE AND ACCESSORIES BY OTHERS



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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	57
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				

BENCHMARK

Cut square in the northwest corner of stair pad south of wall location, Elev. 746.96

EXISTING STRUCTURE

The existing structure (no known S.N.) is a ±330 foot long cast-in-place concrete T-Type retaining wall and segmental block retaining wall. Year built is unknown.

No Salvage. Traffic is to be staged.

DESIGN SPECIFICATIONS

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

DESIGN STRESSES

FIELD UNITS

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

CURVE DATA

P.I. Sta. = 16+08.84
 $\Delta = 1^\circ 15' 58''$ (RT)
 $D = 1^\circ 08' 45''$
 $R = 5,000'$
 $T = 55.25$
 $L = 110.50'$
 $E = 0.31'$
 $e = N/A$
 $T.R. = N/A$
 $S.E. Run = N/A$
 $P.C. Sta. = 15+53.59$
 $P.T. Sta. = 16+64.09$

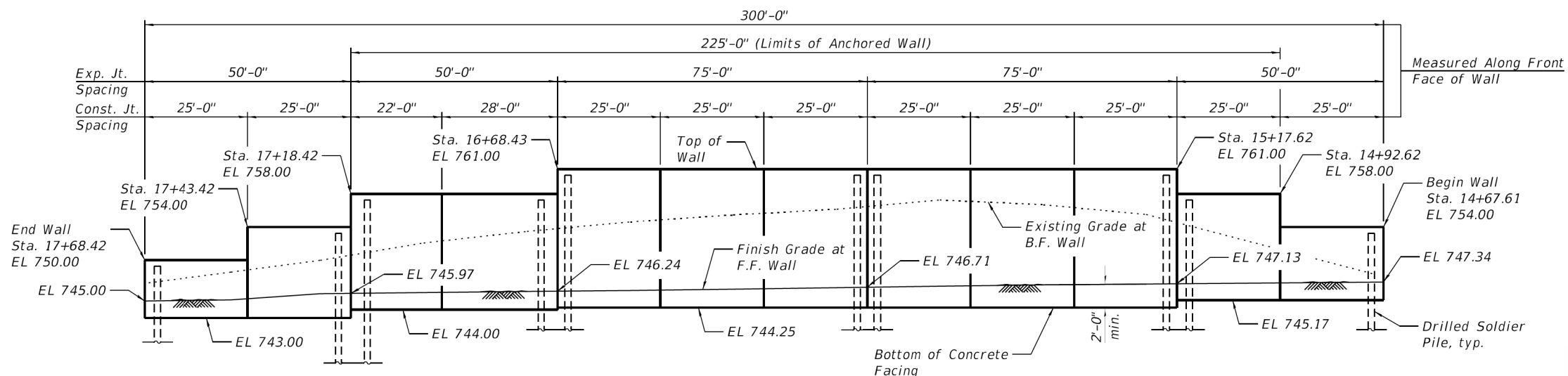
INDEX OF SHEETS

1. General Plan and Elevation
2. General Data
3. Soldier Pile Layout (1 of 2)
4. Soldier Pile Layout (2 of 2)
5. Soldier Pile Details (1 of 2)
6. Soldier Pile Details (2 of 2)
7. Concrete Facing
8. Formliner Details
- 9-19. Soil Boring Log I-XI

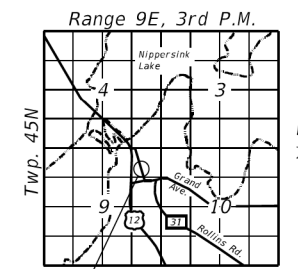
LEGEND

- A — Existing Aerial Lines
- GS — Existing Storm Sewer
- T — Existing Gasline
- W — Existing Telephone
- W — Existing Watermain
- ⊙ Soil Boring Location

ELEVATION (Looking at Front Face)



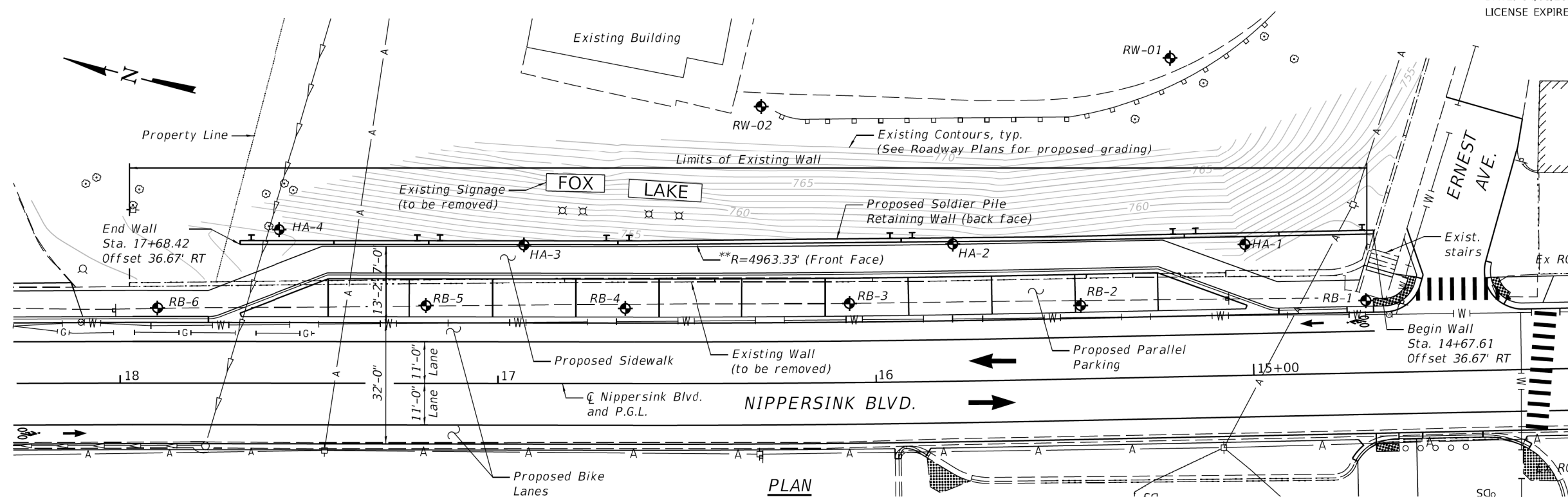
SIGNED:
DATE: 04/06/2020
LICENSE EXPIRES: 11/30/2020



LOCATION SKETCH

Note:
Offsets are measured from \varnothing of Nippersink Blvd. to the front face of proposed wall.
See Sheet 2 for Profile Grade

** Walls are straight along chord between construction joints.



PLAN

GENERAL PLAN & ELEVATION

NIPPERSINK BOULEVARD

SEC. 17-00025-00-PV

LAKE COUNTY

STA. 14+67.61 TO STA. 17+68.42

WBK engineering
WBK ENGINEERING LLC
116 WEST MAIN STREET, SUITE 201
ST. CHARLES, ILLINOIS 60174
(630) 443-7755

USER NAME = ctacey	DESIGNED - JMM	REVISED -
PLOT SCALE = 1:32,6667	CHECKED - JZ	REVISED -
PLOT DATE = 4/6/2020	DRAWN - JMM	REVISED -
	CHECKED - JZ	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
NIPPERSINK BOULEVARD RETAINING WALL

SHEET NO. 1 OF 19 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0149	17-00025-00-PV	LAKE	99	58
CONTRACT NO. 61G46			ILLINOIS FED. AID PROJECT	

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr. 60.

Reinforcement bars designated (E) shall be epoxy coated.

The Contractor shall take extra care during removal of the existing retaining wall adjacent to stairwell at Ernest Avenue as to not damage or undermine the existing foundation(s).

All exposed concrete edges shall be chamfered $\frac{3}{4}$ " except as noted.

All structural steel shall conform to the requirements of AASHTO M 270 Grade 50.

No field welding is permitted except as specified in the contract documents.

The contractor shall be responsible for design of Helical Grand Anchors and connection assembly (per special provisions). Shop drawings of Helical Ground Anchors and connections shall be submitted to engineer for review.

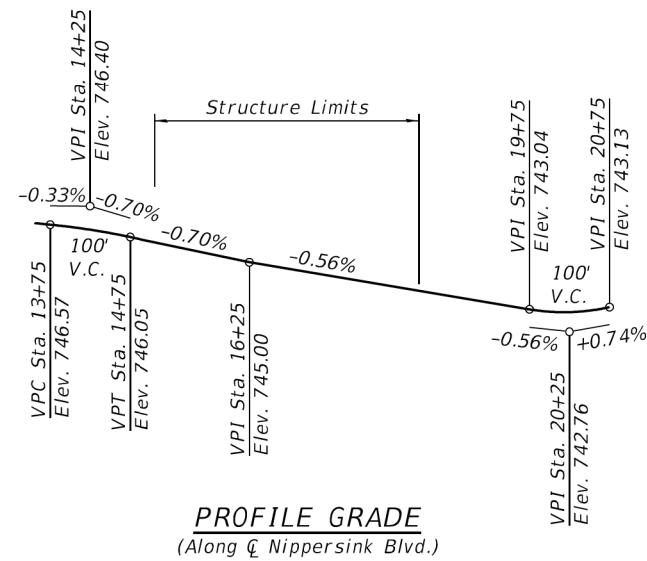
All Helical Ground Anchors and anchor assembly shall be hot-dip galvanized in accordance with AASHTO M111. See Special Provision for "Helical Ground Anchor."

Refer to Structure Geotechnical Report for site preparation and backfilling.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Structures	Cu. Yd.	181.7
Form Liner Textured Surface	Sq. Ft.	3,680
Stud Shear Connectors	Each	769
Reinforcement Bars, Epoxy Coated	Pound	19,040
Furnishing Soldier Piles (W Section)	Foot	1,347
Drilling and Setting Soldier Piles (in Soil)	Cu. Ft.	6,665
Untreated Timber Lagging	Sq. Ft.	3,276
Geocomposite Wall Drain	Sq. Yd.	250
Helical Ground Anchors	Each	33
* Anti-Graffiti Coating	Sq. Ft.	4,255
* Staining Concrete Structures	Sq. Ft.	4,255
* Pipe Underdrain for Structures	Foot	320
* Concrete Retaining Wall Removal	Foot	330

*Denotes Special Provision



PROFILE GRADE
(Along \bar{C} Nippersink Blvd.)

FILE NAME = \\A:\Projects\2019\190119_Fo... \082-General_Detailed.dgn



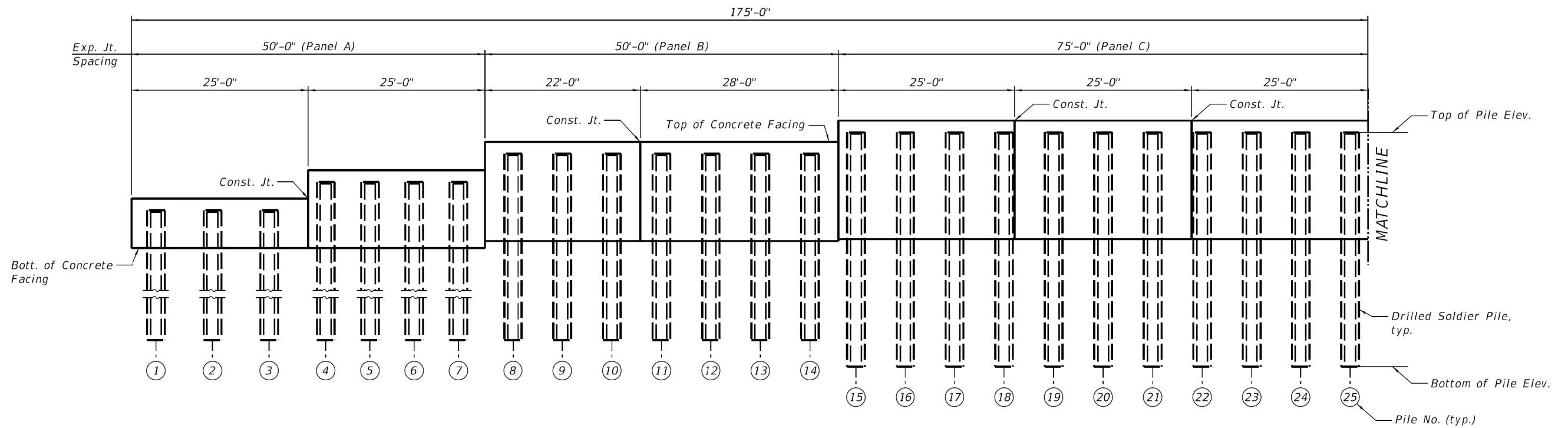
WBK ENGINEERING LLC
116 WEST MAIN STREET, SUITE 201
ST. CHARLES, ILLINOIS 60174
(630) 443-7755

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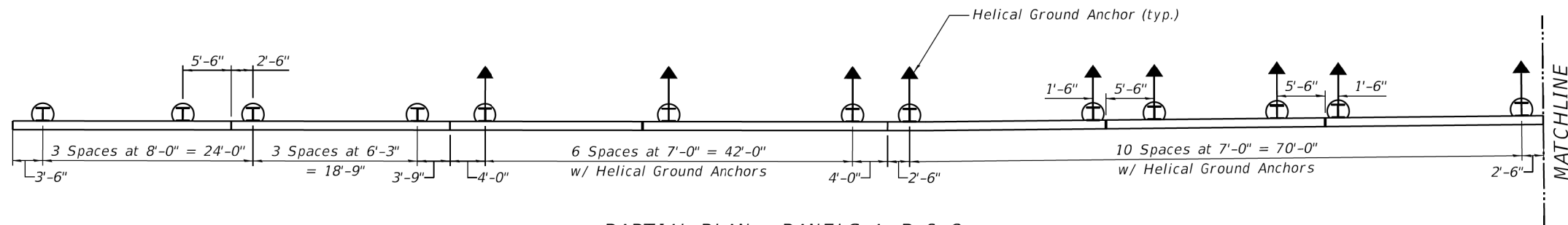
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA
NIPPERSINK BOULEVARD RETAINING WALL**

F.A.U. RTE. 0149	SECTION 17-00025-00-PV	COUNTY LAKE	TOTAL SHEETS 99	SHEET NO. 59
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				



PARTIAL ELEVATION - PANELS A, B & C
(Timber Lagging not shown)



PARTIAL PLAN - PANELS A, B & C

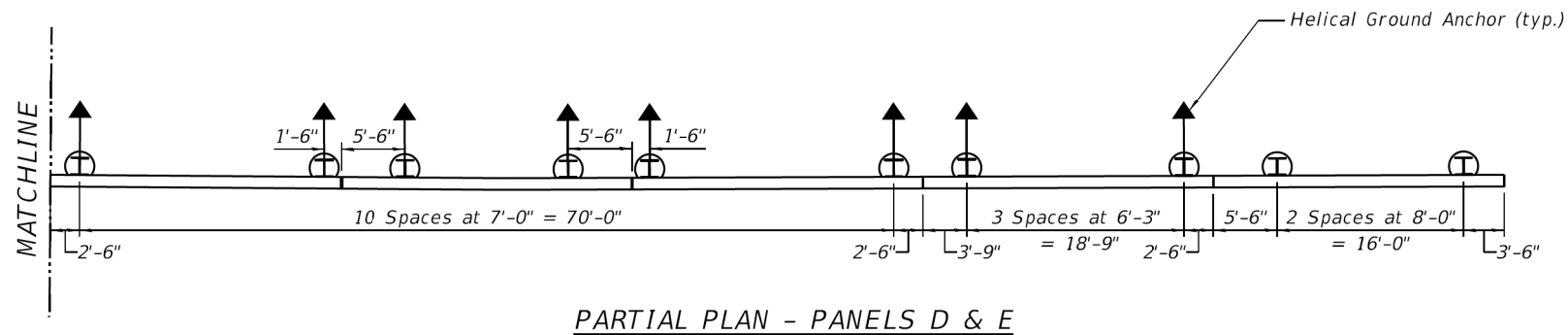
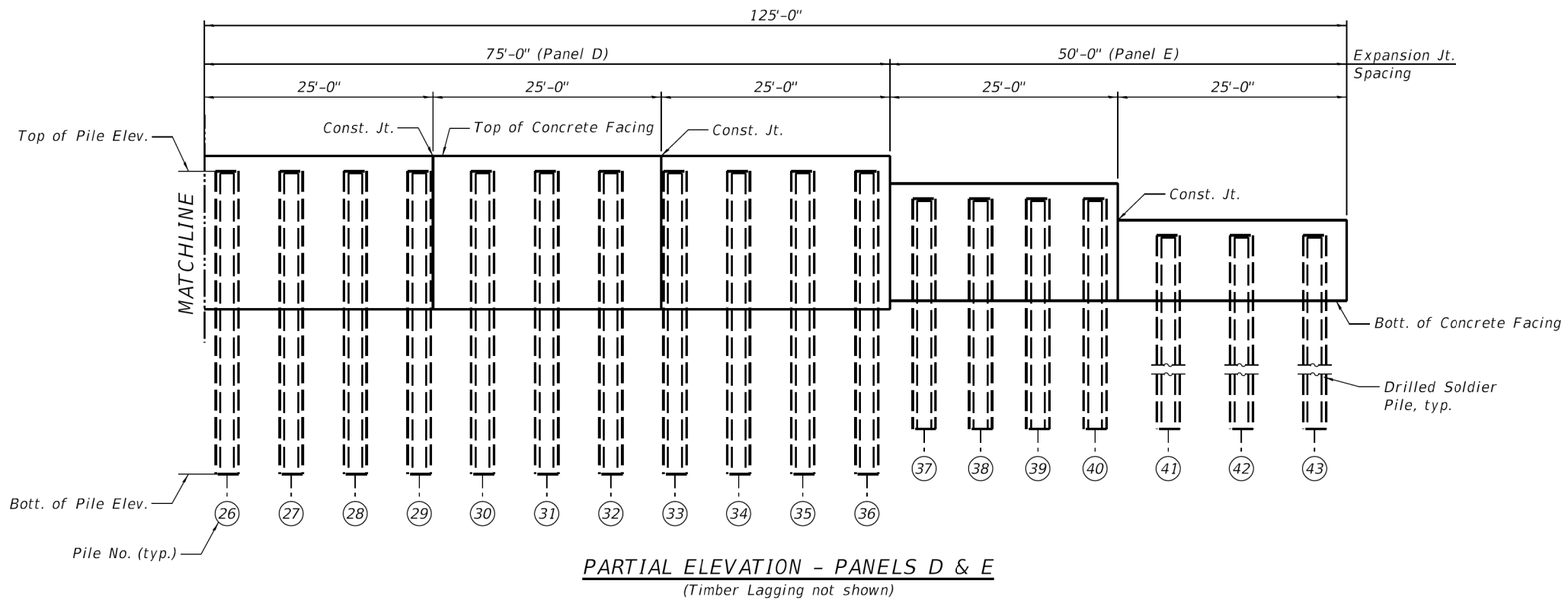
Note:
For top and bottom of concrete facing elevations, see Sheet 1.
For concrete facing panel reinforcement details, see Sheet 7.

SOLDIER PILE DATA

Pile No.	Station	Offset (Ft.)	Pile Size	Top of Pile Elev.	Bott. of Pile Elev.	Total Pile Length (Ft.)	Shaft Dia. (ft.)	HGA Design Load (kip.)	Number of Shear Studs	Pile No.	Station	Offset (Ft.)	Pile Size	Top of Pile Elev.	Bott. of Pile Elev.	Total Pile Length (Ft.)	Shaft Dia. (ft.)	HGA Design Load (kip.)	Number of Shear Studs
1	17+64.92	37.67	W14x159	748.33	719.33	29	2.50	N/A	8	14	16+72.42	37.67	W14x90	756.33	729.33	27	2.50	65	19
2	17+56.92	37.67	W14x159	748.33	719.33	29	2.50	N/A	8	15	16+65.92	37.67	W14x90	759.33	727.33	32	2.50	105	21
3	17+48.92	37.67	W14x159	748.33	719.33	29	2.50	N/A	8	16	16+58.88	37.72	W14x90	759.33	727.33	32	2.50	105	21
4	17+40.92	37.67	W14x159	752.33	714.33	38	2.50	N/A	12	17	16+51.83	37.79	W14x90	759.33	727.33	32	2.50	105	21
5	17+34.67	37.67	W14x159	752.33	714.33	38	2.50	N/A	12	18	16+44.78	37.84	W14x90	759.33	727.33	32	2.50	105	21
6	17+28.42	37.67	W14x159	752.33	714.33	38	2.50	N/A	12	19	16+37.72	37.89	W14x90	759.33	727.33	32	2.50	105	21
7	17+22.17	37.67	W14x159	752.33	714.33	38	2.50	N/A	12	20	16+30.67	37.92	W14x90	759.33	727.33	32	2.50	105	21
8	17+14.42	37.67	W14x90	756.33	729.33	27	2.50	65	19	21	16+23.62	37.95	W14x90	759.33	727.33	32	2.50	105	21
9	17+07.42	37.67	W14x90	756.33	729.33	27	2.50	65	19	22	16+16.56	37.96	W14x90	759.33	727.33	32	2.50	105	21
10	17+00.44	37.67	W14x90	756.33	729.33	27	2.50	65	19	23	16+09.51	37.97	W14x90	759.33	727.33	32	2.50	105	21
11	16+93.42	37.67	W14x90	756.33	729.33	27	2.50	65	19	24	16+02.46	37.97	W14x90	759.33	727.33	32	2.50	105	21
12	16+86.42	37.67	W14x90	756.33	729.33	27	2.50	65	19	25	15+95.40	37.95	W14x90	759.33	727.33	32	2.50	105	21
13	16+79.42	37.67	W14x90	756.33	729.33	27	2.50	65	19										

Note:
Station and offset are at front face of the pile and measured along ϕ of Nippersink Blvd.
H.G.A. = Helical Ground Anchor
HGA design loads are factored. Resistance factors shall be applied per AASHTO LRFD Bridge Design Specifications, 8th Edition.

FILE NAME = \\A:\Projects\2019\190119_Fo... \Dgn\Structural\083-Soldier_Pile_Layout.dgn



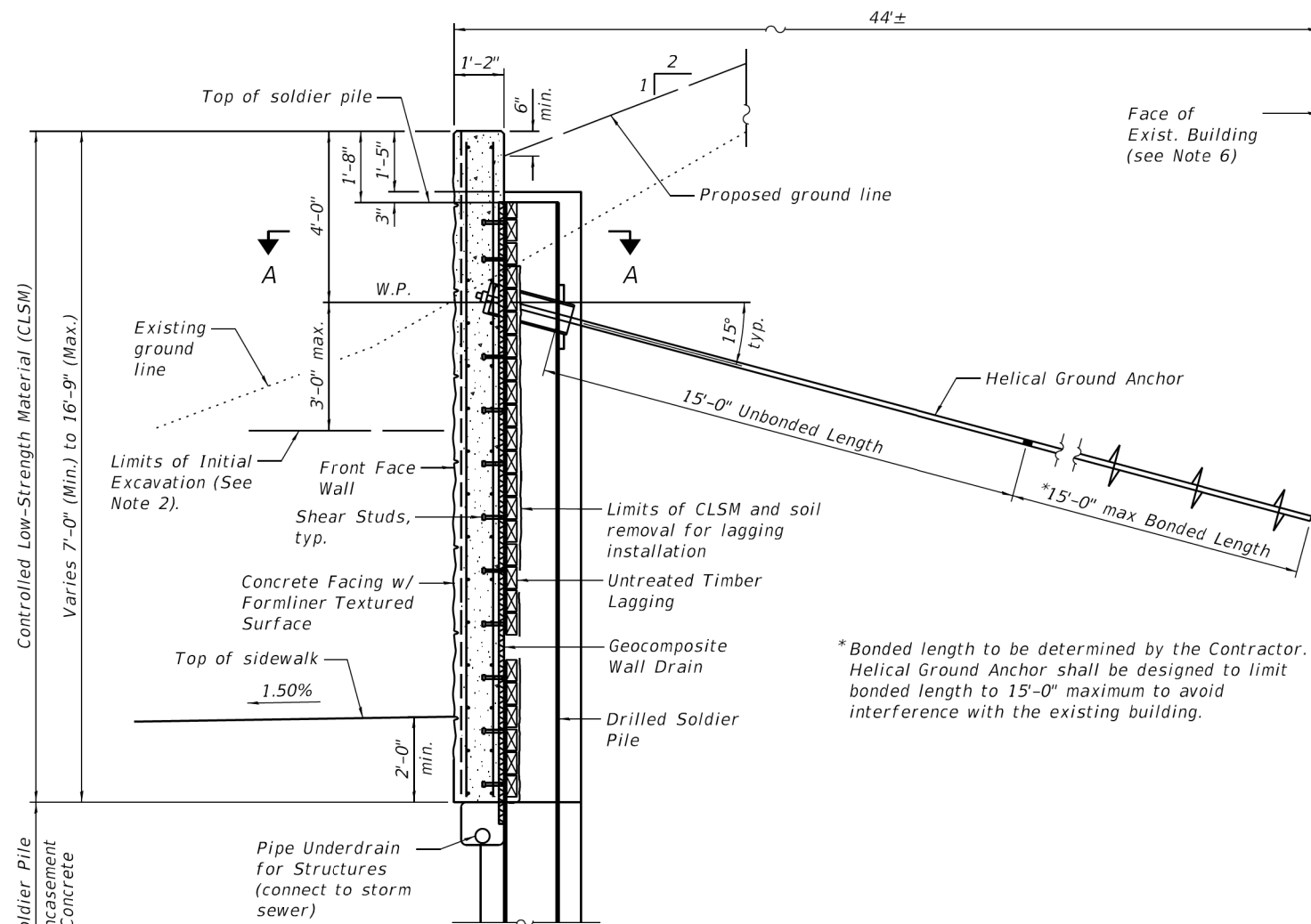
Note:
 For top and bottom of concrete facing elevations, see Sheet 1.
 For concrete facing panel reinforcement details, see Sheet 7.

SOLDIER PILE DATA

Pile No.	Station	Offset (Ft.)	Pile Size	Top of Pile Elev.	Bott. of Pile Elev.	Total Pile Length (Ft.)	Shaft Dia. (ft.)	HGA Design Load (kip.)	Number of Shear Studs	Pile No.	Station	Offset (Ft.)	Pile Size	Top of Pile Elev.	Bott. of Pile Elev.	Total Pile Length (Ft.)	Shaft Dia. (ft.)	HGA Design Load (kip.)	Number of Shear Studs
26	15+90.39	37.94	W14x90	759.33	727.33	32	2.50	105	21	35	15+27.12	37.67	W14x90	759.33	727.33	32	2.50	105	21
27	15+83.34	37.91	W14x90	759.33	727.33	32	2.50	105	21	36	15+20.12	37.67	W14x90	759.33	727.33	32	2.50	105	21
28	15+76.29	37.86	W14x90	759.33	727.33	32	2.50	105	21	37	15+13.87	37.67	W14x90	756.33	730.33	26	2.50	65	18
29	15+69.23	37.81	W14x90	759.33	727.33	32	2.50	105	21	38	15+07.62	37.67	W14x90	756.33	730.33	26	2.50	65	18
30	15+62.18	37.75	W14x90	759.33	727.33	32	2.50	105	21	39	15+01.37	37.67	W14x90	756.33	730.33	26	2.50	65	18
31	15+55.13	37.68	W14x90	759.33	727.33	32	2.50	105	21	40	14+95.12	37.67	W14x90	756.33	730.33	26	2.50	65	18
32	15+48.12	37.67	W14x90	759.33	727.33	32	2.50	105	21	41	14+87.12	37.67	W14x159	752.33	715.33	37	2.50	N/A	10
33	15+41.12	37.67	W14x90	759.33	727.33	32	2.50	105	21	42	14+79.12	37.67	W14x159	752.33	715.33	37	2.50	N/A	10
34	15+34.12	37.67	W14x90	759.33	727.33	32	2.50	105	21	43	14+71.11	37.67	W14x159	752.33	715.33	37	2.50	N/A	10

Note:
 Station and offset are at front face of the pile and measured along ϕ of Nippersink Blvd.
 H.G.A. = Helical Ground Anchor
 HGA design loads are factored. Resistance factors shall be applied per AASHTO LRFD Bridge Design Specifications, 8th Edition.

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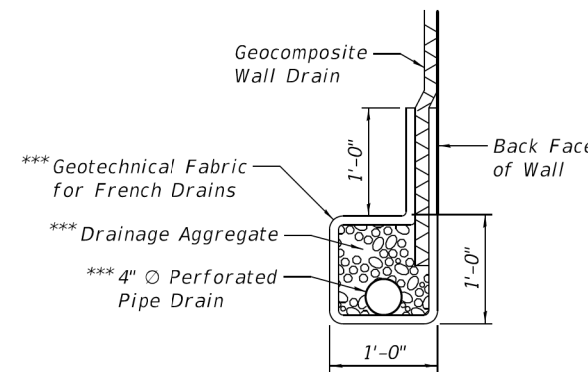


TYPICAL SECTION THRU SOLDIER PILE WALL

Soldier Pile With H.G.A. shown. Similar Soldier Pile Without H.G.A.

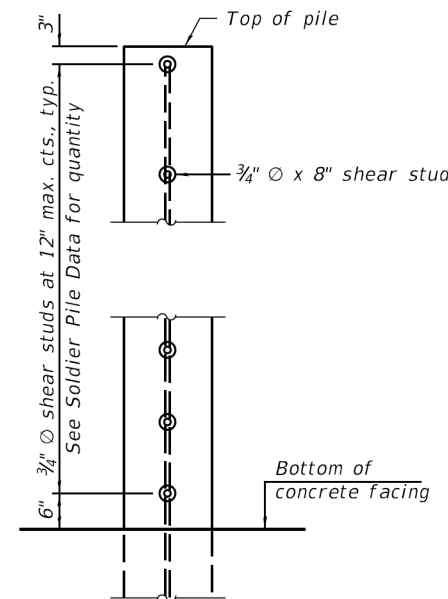
H.G.A. = Helical Ground Anchor
W.P. = Work Point

* Bonded length to be determined by the Contractor. Helical Ground Anchor shall be designed to limit bonded length to 15'-0" maximum to avoid interference with the existing building.



PIPE UNDERDRAIN DETAIL

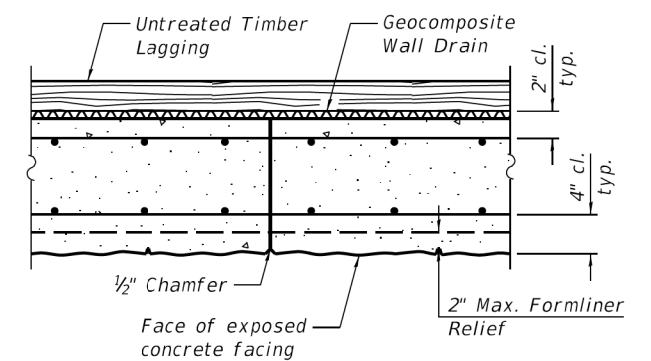
*** Included in the cost of "Pipe Underdrains for Structures"



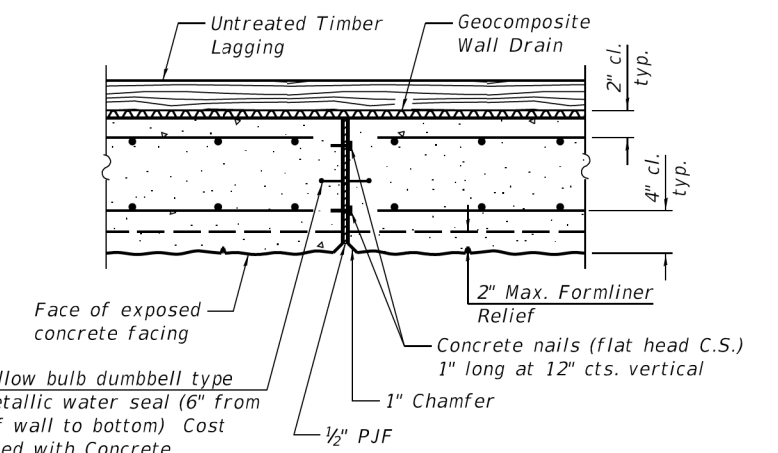
SHEAR STUD DETAIL

(Elevation of pile shown)

Note: See sheet 6 for additional stud placement at H.G.A. bearing plate.

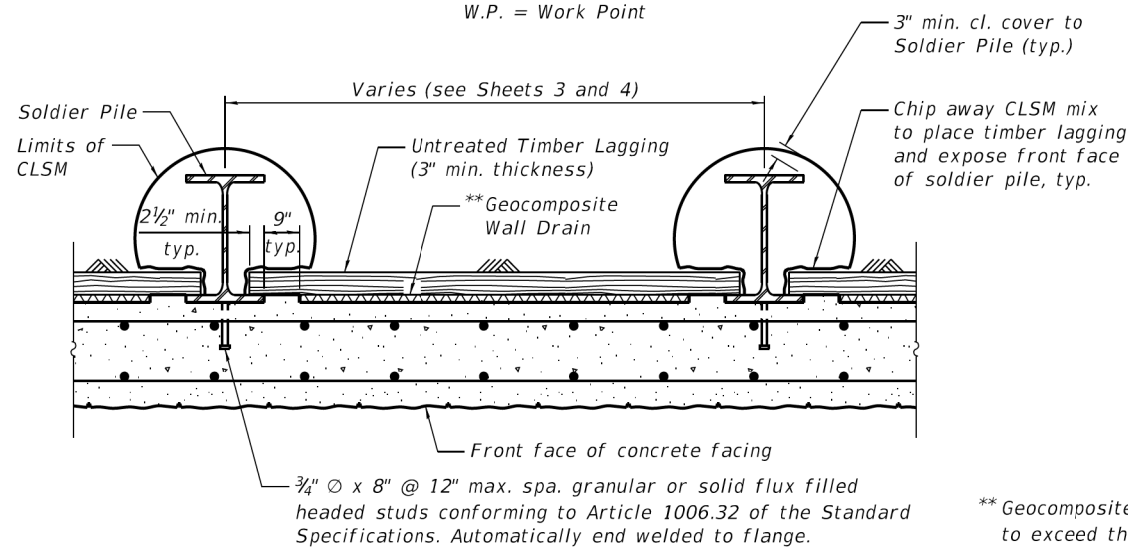


CONSTRUCTION JOINT

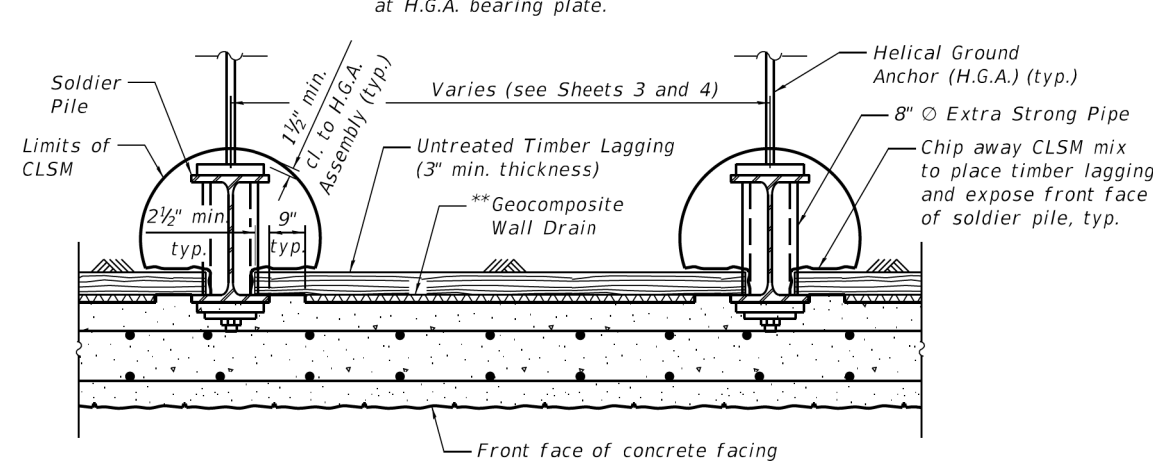


EXPANSION JOINT

6" Hollow bulb dumbbell type nonmetallic water seal (6" from top of wall to bottom) Cost included with Concrete Structures.



SECTION A-A
(without H.G.A.)



SECTION A-A

(with H.G.A.)
(Shear Studs omitted for clarity)

** Geocomposite Wall Drain not to exceed thickness of 3/4"

NOTES:

1. All Helical Ground Anchors and anchor assembly shall be hot-dip galvanized in accordance with AASHTO M111. See Special Provision for "Helical Ground Anchor."
2. All Helical Ground Anchors must be load or proof tested to lock off the load and accepted by the Engineer prior to excavating beyond the "Limits of Initial Excavation" as shown in the Typical Section Thru Soldier Pile Wall.
3. See Sheets 3 and 4 for Soldier Pile Layout.
4. See Sheet 6 for additional Soldier Pile Details.
5. See Sheets 7 and 8 for Concrete Facing and Formliner Details.
6. Install at least one inclinometer along the crest of the embankment in front of the existing building during construction to monitor the ground movement. The maximum movement shall not exceed 0.25 in. Inclinometer(s) and monitoring shall not be paid for separately but included in the unit cost for Helical Ground Anchor.

FILE NAME = \\A\Projects\2019\190119_FoU_LakeWall\1\PhII\Veedit\Structure\1\Dgn\085-Soldier_Pile_Details_1.dgn



WBK ENGINEERING LLC
116 WEST MAIN STREET, SUITE 201
ST. CHARLES, ILLINOIS 60174
(630) 443-7755

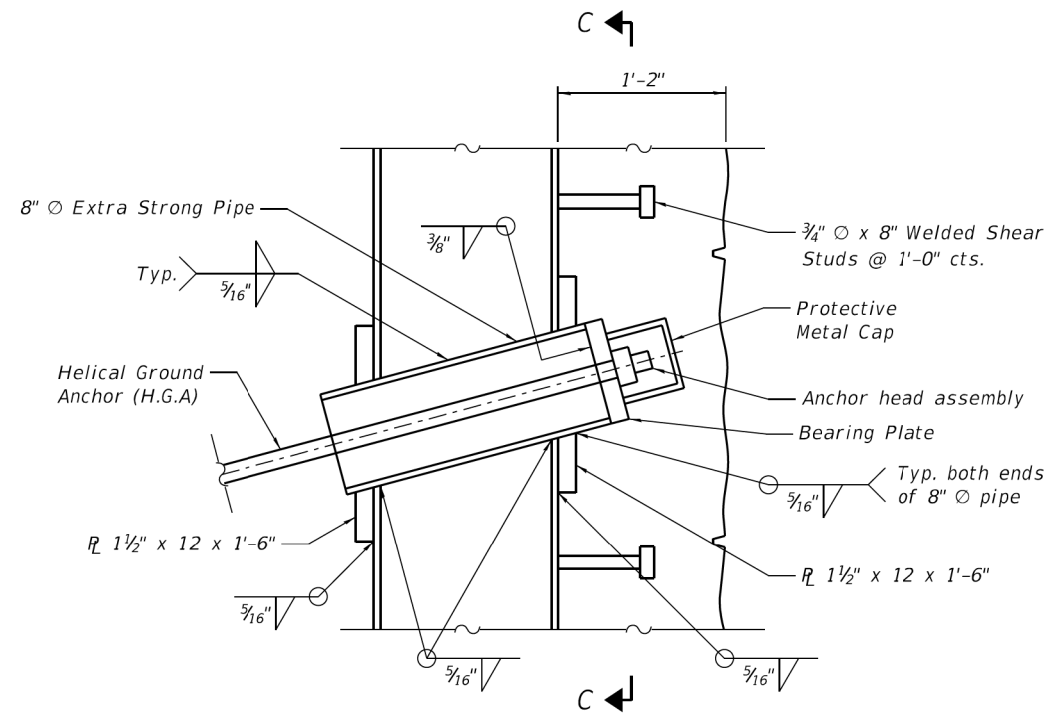
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	CHECKED - JZ	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOLDIER PILE DETAILS
NIPPERSINK BOULEVARD RETAINING WALL

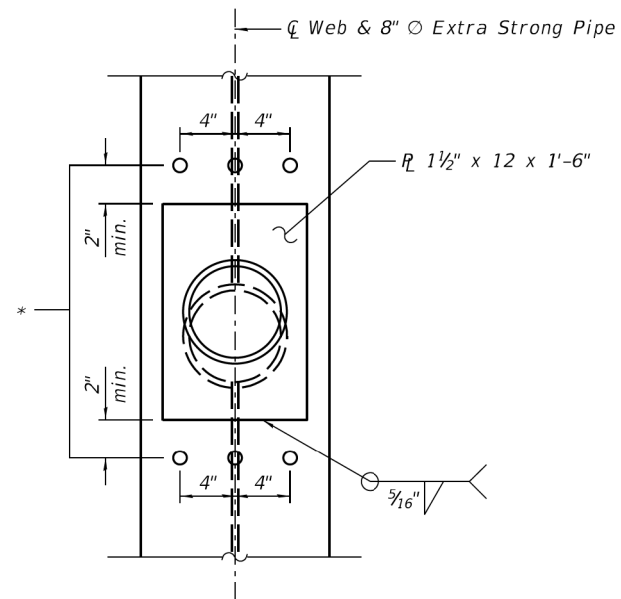
SHEET NO. 5 OF 19 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0149	17-0025-00-PV	LAKE	99	62
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				

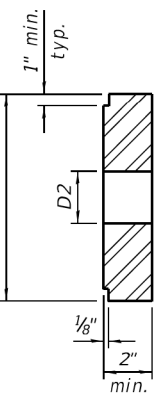
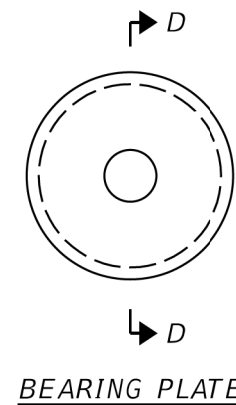


**ELEVATION - SOLDIER PILE
WITH H.G.A. THRU WEB**
H.G.A. = Helical Ground Anchor

*For anchored pile sections, the Contractor shall install three (3) studs on each side of anchor plate as shown.



VIEW C-C



SECTION D-D

Notes:

Steel plates and pipe shall be hot-dip galvanized in accordance with AASHTO M111. Hardware and fasteners shall be hot-dip galvanized in accordance with AASHTO M232.

Plate dimensions shown are for reference only. The Contractor shall check the plate sizes and welds. Plates are used to replace flange steel removed for pipe installation. Weld sizes shown are minimum. The Contractor shall check and ensure welds are adequate to transfer H.G.A. loads and flexural loads.

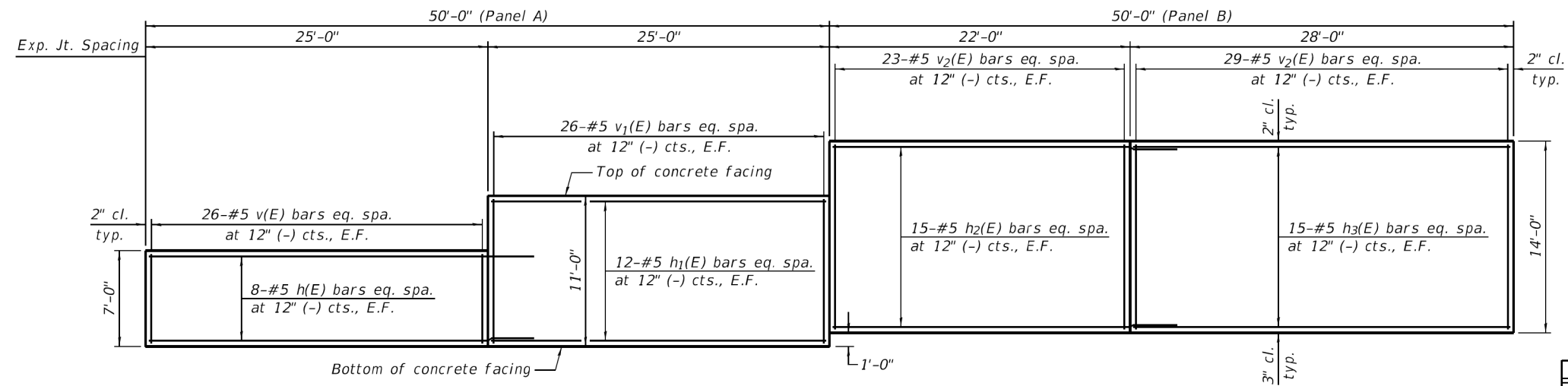
Bearing plate dimension D2 to be determined by the Contractor. The Contractor is responsible for the design and performance of the timber lagging using no less than a 3-inch nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1,000 psi.

For Typical Section Thru Soldier Pile Wall, see Sheet 5 of 19.

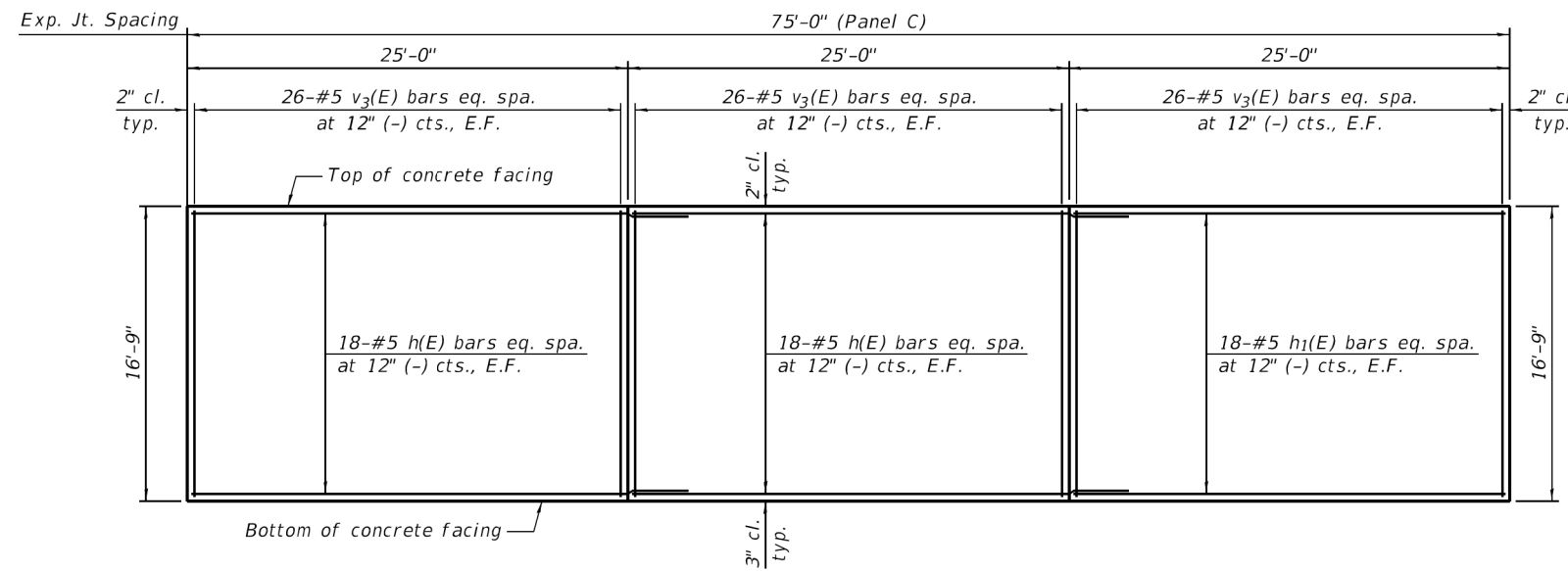
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PLOT SCALE = 1:4	CHECKED - JZ	REVISED -
PLOT DATE = 4/6/2020	DRAWN - JMM	REVISED -
	CHECKED - JZ	REVISED -

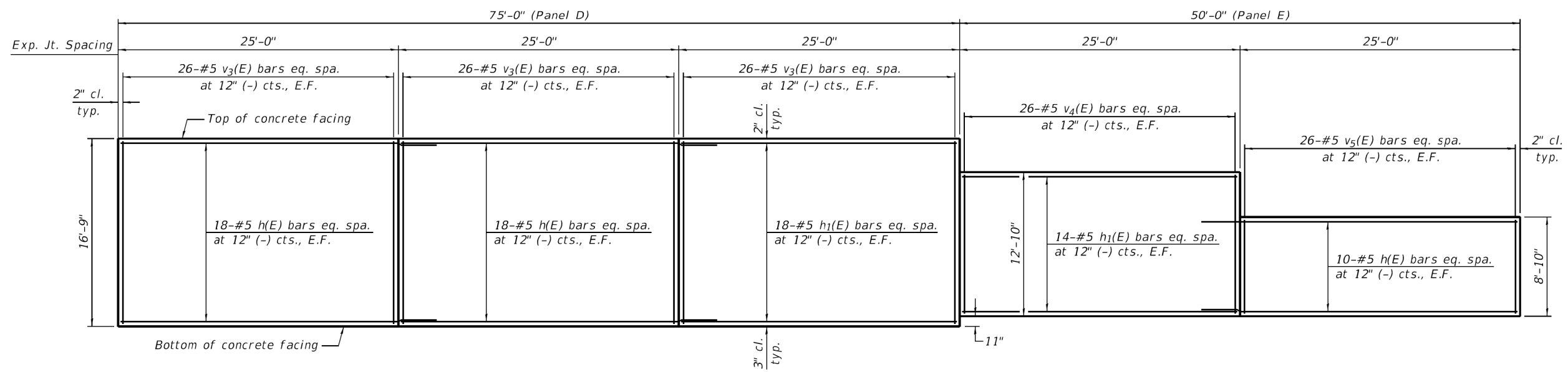
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0149	17-00025-00-PV	LAKE	99	63
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				



ELEVATION - PANELS A & B



ELEVATION - PANEL C



ELEVATION - PANELS D & E

MIN. BAR LAP
#5 Bar = 3'-2"

LEGEND
E.F. = Each Face

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	180	#5	28'-2"	—
h ₁ (E)	124	#5	24'-8"	—
h ₂ (E)	30	#5	25'-2"	—
h ₃ (E)	30	#5	27'-8"	—
v(E)	52	#5	6'-8"	—
v ₁ (E)	52	#5	10'-8"	—
v ₂ (E)	104	#5	13'-8"	—
v ₃ (E)	312	#5	16'-5"	—
v ₄ (E)	52	#5	12'-6"	—
v ₅ (E)	52	#5	8'-6"	—
Concrete Structures	Cu. Yd.		181.7	
Reinforcement Bars, Epoxy Coated	Pound		19,040	
Anti-Graffiti Coating	Sq. Ft.		4,255	
Staining Concrete Structures	Sq. Ft.		4,255	
Form Liner Textured Surface	Sq. Ft.		3,680	

Notes:
All dimensions are measured along front face of wall.
See Sheet 5 of 19 for Section Thru Wall.
See Sheet 8 of 19 for Formliner Details.

FILE NAME = \\A\Projects\2019\190119_Fo...Concrete Facing.dgn



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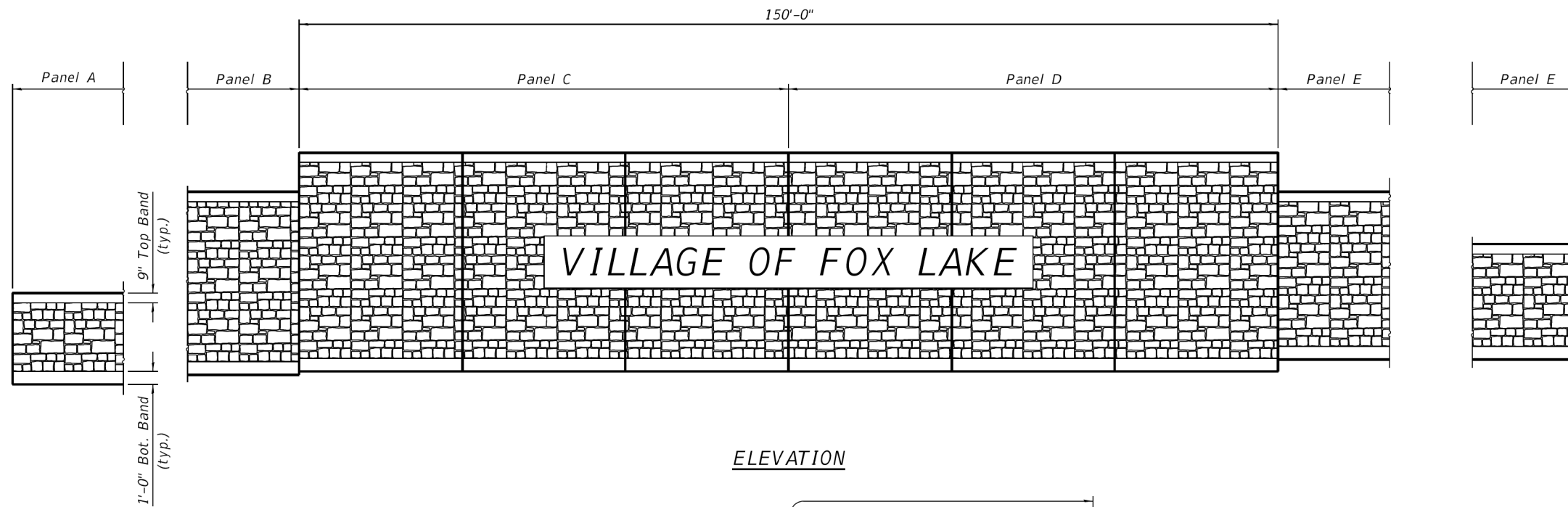
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PLOT DATE = 4/6/2020	DRAWN - JMM	REVISED -
	CHECKED - JZ	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

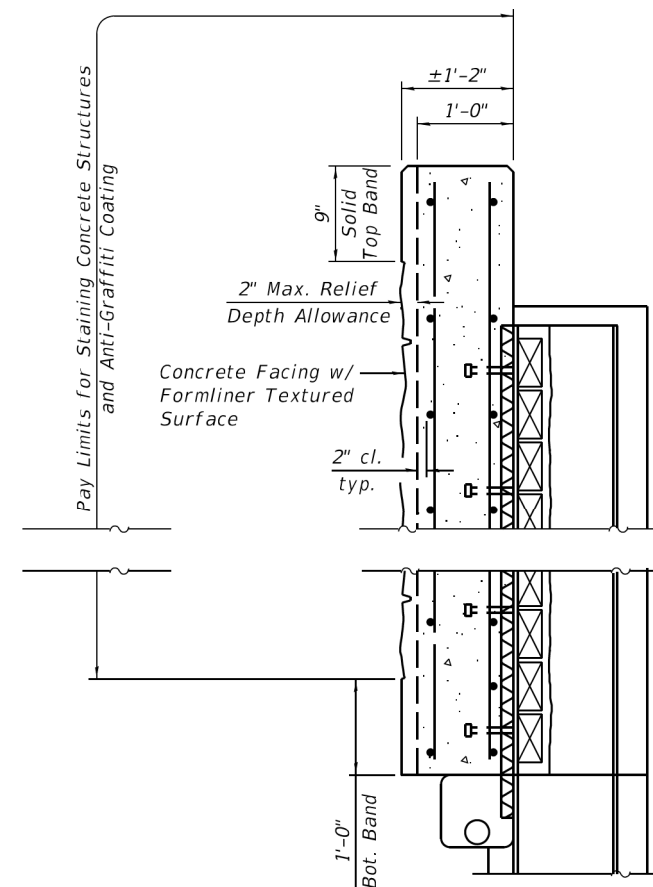
CONCRETE FACING
NIPPERSINK BOULEVARD RETAINING WALL

SHEET NO. 7 OF 19 SHEETS

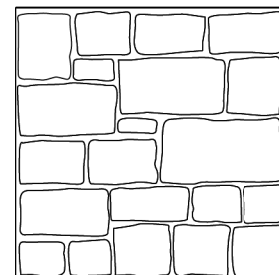
F.A.U. RTE. 0149	SECTION 17-0025-00-PV	COUNTY LAKE	TOTAL SHEETS 99	SHEET NO. 64
CONTRACT NO. 61G46			ILLINOIS FED. AID PROJECT	



ELEVATION



SECTION THRU WALL



ASHLAR STONE PATTERN

TYPICAL FORMLINER DETAILS
(for reference only)

Notes:

1. Form Liner shall be placed with a 9" top band and a 1'-0" bottom band.
2. See Sheet 7 for Form Liner Textured Surface quantity.
3. Refer to Special Provision "Form Liner Textured Surface" for Form Liner details.
4. The Contractor shall coordinate with the Village of Fox Lake for final details of "Village of Fox Lake" logo.

FILE NAME = \\A\Projects\2019\190119_FoxLakeWall\1\Needs\Structural\Dgn\088 - Formliner Detail.dgn



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PLOT SCALE = 1:10.6667	CHECKED - JZ	REVISED -
PLOT DATE = 4/6/2020	DRAWN - JMM	REVISED -
	CHECKED - JZ	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FORMLINER DETAILS
NIPPERSINK BOULEVARD RETAINING WALL**

SHEET NO. 8 OF 19 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0149	17-00025-00-PV	LAKE	99	65
CONTRACT NO. 61G46				
ILLINOIS		FED. AID PROJECT		



BORING LOG RW-01

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax:

WEI Job No.: 412-12-01

Client **Wills Burke Kelsey Associates, Ltd.**
Project **Fox Lake Retaining Wall**
Location **Lake County, IL**

Datum: NAVD 88
Elevation: 773.76 ft
North: 2087854.64 ft
East: 1025171.05 ft
Station: 15+20.40
Offset: 84.37 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	773.2	7-inch thick, black ASPHALT --PAVEMENT--															
		Medium dense, brown, damp LOAM, little gravel --FILL--	1		4	NP	8				--laminated, fine SAND--	9		9	NP	3	
	770.8	Loose, brown, damp SAND, trace to little gravel --auger sample--	5		7	NR	6			750.8	Medium dense, brown, wet SILT --2-inches brown, moist clay-- --saturated--	25		7	NP	19	
					5									8			
					5					748.3	Loose, brown, moist SAND to SANDY LOAM			11	NP	22	
	767.5	Loose to medium dense, brown, damp SAND --trace organic matter--	3		3	NP	6							2			
					2					745.8	Very stiff, brown, damp to moist CLAY, sand and silt laminations			4	3.03	21	
					4									5	B		
					4					743.3	Loose, brown, wet SAND			13	NP	19	
					2									3			
					4									3			
					5									2			
					2									4			
					5									3			
					7									2			
					9									3			
					9									5			
					4									5	2.13	20	
					5					734.5	Very stiff, brown and gray, moist			6	B		
					5					733.8				6			

--LL = NP, PL = NP--
--% Gravel = 6.7%--
--% Sand = 88.1%--
--% Silt and Clay = 5.2%--

GENERAL NOTES

Begin Drilling **07-12-2019** Complete Drilling **07-12-2019**
Drilling Contractor **Wang Testing Services** Drill Rig **17D50T [81%]**
Driller **K&P** Logger **E. Yim** Checked by **E. Yim**
Drilling Method **3.25" ID HSA, backfilled upon completion**

WATER LEVEL DATA

While Drilling **24.75 ft**
At Completion of Drilling **36.50 ft**
Time After Drilling **NA**
Depth to Water **NA**

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



BORING LOG RW-01

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Telephone: (630) 953-9928
Fax:

WEI Job No.: 412-12-01

Client **Wills Burke Kelsey Associates, Ltd.**
Project **Fox Lake Retaining Wall**
Location **Lake County, IL**

Datum: NAVD 88
Elevation: 773.76 ft
North: 2087854.64 ft
East: 1025171.05 ft
Station: 15+20.40
Offset: 84.37 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		SILTY CLAY Boring terminated at 40.00 ft															

GENERAL NOTES

Begin Drilling **07-12-2019** Complete Drilling **07-12-2019**
Drilling Contractor **Wang Testing Services** Drill Rig **17D50T [81%]**
Driller **K&P** Logger **E. Yim** Checked by **E. Yim**
Drilling Method **3.25" ID HSA, backfilled upon completion**

WATER LEVEL DATA

While Drilling **24.75 ft**
At Completion of Drilling **36.50 ft**
Time After Drilling **NA**
Depth to Water **NA**

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

FILE NAME = \\A\Projects\2019\190119_FoxLakeRetainingWall\Drawings\089 - Soil Boring_1.dgn



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DRAWN - JMM
CHECKED - JZ
PLOT SCALE = 1:10.6667
PLOT DATE = 4/6/2020

DESIGNED - JMM
CHECKED - JZ
DRAWN - JMM
CHECKED - JZ
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG I
NIPPERSINK BOULEVARD RETAINING WALL

SHEET NO. 9 OF 19 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0149	17-00025-00-PV	LAKE	99	66
CONTRACT NO. 61G46				

ILLINOIS FED. AID PROJECT



BORING LOG RW-02

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax:

WEI Job No.: 412-12-01

Client: **Wills Burke Kelsey Associates, Ltd.**
Project: **Fox Lake Retaining Wall**
Location: **Lake County, IL**

Datum: NAVD 88
Elevation: 773.64 ft
North: 2087955.98 ft
East: 1025130.98 ft
Station: 16+29.99
Offset: 73.29 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
773.2	5-inch thick, brown SILTY CLAY LOAM to LOAM --TOPSOIL-- Medium dense, brown damp LOAM, little gravel -FILL-	0	1	5 7 9	NP	8	773.2	--laminated--	0	9	3 4 5	NP	7
770.1	Medium stiff, brown, moist SILTY CLAY LOAM, trace to little gravel -FILL-	5	2	3 4 6	0.98 S	12	749.4	--moist-- Medium dense, brown, wet to saturated SILT to SILTY LOAM	25	10	5 5 6	NP	21
768.1	Medium dense, brown, damp LOAM, some gravel -FILL-- --LL = 26%, PL = 15%-- --% Gravel = 12.7%-- --% Sand = 42.5%-- --% Silt = 29.7%-- --% Clay = 15.1%--	10	3	5 7 9	1.00 P	8	744.1	--0.5- to 1-inch, saturated sand seams-- Stiff to very stiff, brown, damp to moist CLAY --silt laminations--	30	12	6 7 8	3.00 P	19
767.4	Loose to medium dense, brown, damp SAND, some gravel --little to some gravel--	15	4	4 9 9	NP	4	742.2	Loose to medium dense, brown, saturated SANDY LOAM	35	13	4 5 5	1.48 S	18
		20	5	3 4 5	NP	4			40	14	3 4 5	NP	19
			6	6 6 5	NP	3				15	4 3 4	NP	21
			7	4 5 7	NP	3				16	1 2 7	NP	29
			8	5 6 4	NP	20							

GENERAL NOTES

Begin Drilling: 07-12-2019 Complete Drilling: 07-12-2019
Drilling Contractor: Wang Testing Services Drill Rig: 17D50T [81%]
Driller: K&P Logger: E. Yim Checked by: E. Yim
Drilling Method: 3.25" ID HSA, backfilled upon completion

WATER LEVEL DATA

While Drilling: 24.20 ft
At Completion of Drilling: 38.50 ft
Time After Drilling: NA
Depth to Water: NA

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



BORING LOG RW-02

wangeng@wangeng.com
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Lombard, IL 60148
Telephone: (630) 953-9928
Fax:

WEI Job No.: 412-12-01

Client: **Wills Burke Kelsey Associates, Ltd.**
Project: **Fox Lake Retaining Wall**
Location: **Lake County, IL**

Datum: NAVD 88
Elevation: 773.64 ft
North: 2087955.98 ft
East: 1025130.98 ft
Station: 16+29.99
Offset: 73.29 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
733.1	Very stiff, gray, moist CLAY	0	17	2 4 10	2.46 B	20	733.1		0				
731.6	Gray, saturated SANDY LOAM	17											
731.3	Boring terminated at 42.50 ft	42.50											

GENERAL NOTES

Begin Drilling: 07-12-2019 Complete Drilling: 07-12-2019
Drilling Contractor: Wang Testing Services Drill Rig: 17D50T [81%]
Driller: K&P Logger: E. Yim Checked by: E. Yim
Drilling Method: 3.25" ID HSA, backfilled upon completion

WATER LEVEL DATA

While Drilling: 24.20 ft
At Completion of Drilling: 38.50 ft
Time After Drilling: NA
Depth to Water: NA

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

FILE NAME = \\A\Projects\2019\120119_FoxLakeRetainingWall\Drawings\010 - Soil Boring_IL.dgn



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DRAWN - JMM
CHECKED - JZ
PLOT SCALE = 1:10.6667
PLOT DATE = 4/6/2020

DESIGNED - JMM
CHECKED - JZ
DRAWN - JMM
CHECKED - JZ
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG II
NIPPERSINK BOULEVARD RETAINING WALL

SHEET NO. 10 OF 19 SHEETS

F.A.U. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.
0149 17-00025-00-PV LAKE 99 67
CONTRACT NO. 61G46
ILLINOIS FED. AID PROJECT



BORING LOG RW-03

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 Lombard, IL 60148
 Telephone: (630) 953-9928
 Fax:

Client **Wills Burke Kelsey Associates, Ltd.**
 Project **Fox Lake Retaining Wall**
 Location **Lake County, IL**

Datum: NAVD 88
 Elevation: 771.66 ft
 North: 2088092.61 ft
 East: 1025129.11 ft
 Station: 17+63.07
 Offset: 106.46 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	771.2	5-inch thick, brown, LOAM to SILTY LOAM, little gravel --TOPSOIL-- Medium dense, brown, damp LOAM to SILTY LOAM, trace to some gravel --Possibly NATURAL?--	1	X	1	7 8 10	np	5					X	9	3 3 4	np	5
	765.5	Soft, gray, moist to wet SILTY CLAY LOAM, trace gravel --FILL--	3	X	3	1 1	0.33 B	17		747.9	Medium stiff to very stiff, brown, damp to moist SILTY CLAY --LL = 34%, PL = 17%--25 --% Gravel = 0.1%-- --% Sand = 1.8%-- --% Silt = 56.2%-- --% Clay = 41.9%	4	X	10	4 4 6	0.66 S	21
	762.6	Medium stiff, brown, moist to wet SILTY CLAY LOAM --trace organic matter-- --FILL--	4	X	4	3 5 5	0.50 P	19		742.2	--moist to wet silt and clay laminations-- Medium dense, brown, saturated SANDY LOAM	12	X	12	6 5 4	3.25 P	19
	761.2	Medium dense, brown, damp LOAM, some gravel	5	X	5	3 5 5	np	9					X	13	4 8 8	np	20
	757.7	Loose to medium dense, brown, damp SAND --some gravel--	6	X	6	4 4 6	np	10					X	14	6 6 5	np	25
			7	X	7	2 3 3	np	5					X	15	4 5 7	np	27
			8	X	8	5 4 4	np	5					X	16	5 6 7	np	24
			20	X						731.7	Boring terminated at 40.00 ft	40	X				

GENERAL NOTES

Begin Drilling **07-12-2019** Complete Drilling **07-12-2019**
 Drilling Contractor **Wang Testing Services** Drill Rig **17D50T [81%]**
 Driller **K&P** Logger **E. Yim** Checked by **E. Yim**
 Drilling Method **3.25" ID HSA, backfilled upon completion**

WATER LEVEL DATA

While Drilling **28.60 ft**
 At Completion of Drilling **40.00 ft**
 Time After Drilling **NA**
 Depth to Water **NA**

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

FILE NAME = \\A\Projects\2019\190119_FoxLakeWall\PH\Needs\Structure\Dgn\01 - Soil Boring III.dgn



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 PLOT DATE = 4/6/2020

DESIGNED - JMM
 CHECKED - JZ
 DRAWN - JMM
 CHECKED - JZ

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG III
 NIPPERSINK BOULEVARD RETAINING WALL

SHEET NO. 11 OF 19 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0149	17-00025-00-PV	LAKE	99	68
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				

Soil Boring Log

Construction & Geotechnical Material Testing, Inc. 60 Martin Lane, Elk Grove Village, Illinois 60007 Telephone (630) 595-1111 • Fax (630) 595-1110		Boring No.: RB-01	
		Date: Tuesday, March 28, 2017	
Soil Boring Prepared for: Gewalt Hamilton Associates, Inc. Mr. Mark A. Coleman, Jr. JD, P.E. 675 Forest Edge Drive Vernon Hills, Illinois 60061		Project: Proposed Nippersink Blvd. Improvements	
		Project Location: Fox Lake, IL	
Project No.: 17G0157		Boring Location: See Boring Location Diagram	
Logged By: LH		Ground Elevation: 746	
Sheet 1 of 3			

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
0.0			3" Concrete Pavement					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
1.0			3" Aggregate Basecourse					
	1.0		Fine Sand, brown, loose to medium dense (A-3)	SS-1 1.0' - 2.5'	2			
	2.0			3	5.0	--		
	3.0			4				
	4.0			13" Recovery				
	5.0			SS-2 3.5' - 5.0'	2			
	6.0			4	3.4	--		
	7.0			11" Recovery	4			
	8.0			SS-3 6.0' - 7.5'	3			
	9.0			3	4.3	--		
	10.0			15" Recovery	4			
	11.0			SS-4 8.5' - 10.0'	1			
	12.0			3	19.8	--		
	13.0			15" Recovery	4			
	14.0			SS-5 13.5' - 15.0'	3			
	15.0			4	22.9	--		
	16.0			13" Recovery	8			
	17.0			SS-6 18.5' - 20.0'	3			
	18.0			5	28.9	--		
	19.0			19" Recovery	12			
	20.0							

Drilling Contractor: CGMT, Inc.		Water Level (Ft.)	
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling		During Drilling: 9.5 feet	
Drilling Equipment: CME-45C Truck Mounted Drill Rig		Immediately After Drilling: None	
REVIEWED BY: PKP		cave in at 13.5 feet	

Soil Boring Log

Construction & Geotechnical Material Testing, Inc. 60 Martin Lane, Elk Grove Village, Illinois 60007 Telephone (630) 595-1111 • Fax (630) 595-1110		Boring No.: RB-01	
		Date: Tuesday, March 28, 2017	
Soil Boring Prepared for: Gewalt Hamilton Associates, Inc. Mr. Mark A. Coleman, Jr. JD, P.E. 675 Forest Edge Drive Vernon Hills, Illinois 60061		Project: Proposed Nippersink Blvd. Improvements	
		Project Location: Fox Lake, IL	
Project No.: 17G0157		Boring Location: See Boring Location Diagram	
Logged By: LH		Ground Elevation: 746	
Sheet 2 of 3			

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
20.0			Fine Sand, brown, loose to medium dense (A-3)					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
21.0								
22.0								
23.0								
	24.0		Silty Loam, brown, medium dense, saturated (A-4)	SS-7 23.5' - 25.0'	5			
	25.0			6	25.1	--		
	26.0			16" Recovery	8			
	27.0			SS-8 28.5' - 30.0'	4			
	28.0			7	19.3	1.5		
	29.0			20" Recovery	10			
	30.0			SS-9 33.5' - 35.0'	4			
	31.0			9	21.4	--		
	32.0			20" Recovery	10			
	33.0			SS-10 38.5' - 40.0'	7			
	34.0			9	18.2	--		
	35.0			19" Recovery	14			
	36.0							
	37.0							
	38.0							
	39.0							
	40.0							

Drilling Contractor: CGMT, Inc.		Water Level (Ft.)	
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling		During Drilling: None	
Drilling Equipment: CME-45C Truck Mounted Drill Rig		Immediately After Drilling: None	
REVIEWED BY: PKP		cave in at 13.5 feet	

Soil Boring Log

Construction & Geotechnical Material Testing, Inc. 60 Martin Lane, Elk Grove Village, Illinois 60007 Telephone (630) 595-1111 • Fax (630) 595-1110		Boring No.: RB-01	
		Date: Tuesday, March 28, 2017	
Soil Boring Prepared for: Gewalt Hamilton Associates, Inc. Mr. Mark A. Coleman, Jr. JD, P.E. 675 Forest Edge Drive Vernon Hills, Illinois 60061		Project: Proposed Nippersink Blvd. Improvements	
		Project Location: Fox Lake, IL	
Project No.: 17G0157		Boring Location: See Boring Location Diagram	
Logged By: LH		Ground Elevation: 746	
Sheet 3 of 3			

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
40.0			Silty Loam, brown, medium dense, saturated (A-4)					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
41.0								
42.0								
43.0								
	44.0		Silty Clay, brown, very stiff (A-6)	SS-11 43.5' - 45.0'	4			
	45.0			6	20.2	2.75	3.04 (B)*	
	46.0			23" Recovery	4			
	47.0							
	48.0							
	49.0							
	50.0							
	51.0							
	52.0							
	53.0							
	54.0							
	55.0							
	56.0							
	57.0							
	58.0							
	59.0							
	60.0							

Drilling Contractor: CGMT, Inc.		Water Level (Ft.)	
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling		During Drilling: None	
Drilling Equipment: CME-45C Truck Mounted Drill Rig		Immediately After Drilling: None	
REVIEWED BY: PKP		cave in at 13.5 feet	

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Soil Boring Log

Construction & Geotechnical Material Testing, Inc. 60 Martin Lane, Elk Grove Village, Illinois 60007 Telephone (630) 595-1111 • Fax (630) 595-1110		Boring No.: RB-02 Date: Tuesday, March 28, 2017	
		Project: Proposed Nippersink Blvd. Improvements Fox Lake, IL Project No.: 17G0157 Boring Location: See Boring Location Diagram	
Soil Boring Prepared for: Gewalt Hamilton Associates, Inc. Mr. Mark A. Coleman, Jr. JD, P.E. 675 Forest Edge Drive Vernon Hills, Illinois 60061		Logged By: LH Ground Elevation: 746	
Sheet 1 of 3			

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
0.0			4" Asphalt Pavement					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
1.0			Fine Sand, brown, loose, saturated (A-3)	SS-1 1.0' - 2.5'	2			
					3	16.7	--	
2.0					14" Recovery	4		
3.0			Silty Clay, brown, very stiff (A-6)	SS-2 3.5' - 5.0'	2			
4.0					3	22.8	2.0	
5.0					19" Recovery	4		
6.0			Fine Sand, brown, loose, saturated (A-3)	SS-3 6.0' - 7.5'	3			
7.0					3	20.2	--	
8.0					15" Recovery	3		
9.0			Silty Loam, brown, loose, saturated (A-4)	SS-4 8.5' - 10.0'	2			
10.0					2	22.8	--	
11.0					19" Recovery	2		
12.0			Silty Clay, brown, very stiff to hard (A-6)	SS-5 13.5' - 15.0'	1			
13.0					2	21.3	2.5	
14.0					16" Recovery	2		2.91 (B)*
15.0				SS-6 18.5' - 20.0'	2			
16.0					2	20.6	2.0	
17.0					19" Recovery	4		2.86 (B)*
18.0								* Unconfined via a Rimac device
19.0								
20.0								

Drilling Contractor: CGMT, Inc.		Water Level (Ft.)	
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling		During Drilling: 13.5 feet	
Drilling Equipment: CME-45C Truck Mounted Drill Rig		Immediately After Drilling: 11 feet	
REVIEWED BY: PKP		cave in at 13.5 feet	

Soil Boring Log

Construction & Geotechnical Material Testing, Inc. 60 Martin Lane, Elk Grove Village, Illinois 60007 Telephone (630) 595-1111 • Fax (630) 595-1110		Boring No.: RB-02 Date: Tuesday, March 28, 2017	
		Project: Proposed Nippersink Blvd. Improvements Fox Lake, IL Project No.: 17G0157 Boring Location: See Boring Location Diagram	
Soil Boring Prepared for: Gewalt Hamilton Associates, Inc. Mr. Mark A. Coleman, Jr. JD, P.E. 675 Forest Edge Drive Vernon Hills, Illinois 60061		Logged By: LH Ground Elevation: 746	
Sheet 2 of 3			

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
20.0			Silty Clay, brown, very stiff to hard (A-6)					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
21.0								
22.0								
23.0				SS-7 23.5' - 25.0'	2			
24.0					4	21.9	3.5	
25.0					21" Recovery	5		4.12 (B)*
26.0			Fine to Medium Sand, brown, medium dense, saturated (A-2-4)	SS-8 28.5' - 30.0'	10			
27.0					8	15.1	--	
28.0					20" Recovery	4		
29.0				SS-9 33.5' - 35.0'	3			
30.0					4	15.9	--	
31.0					23" Recovery	5		
32.0				SS-10 38.5' - 40.0'	14			
33.0					10	20.2	--	
34.0					10" Recovery	13		* Unconfined via a Rimac device
35.0								
36.0								
37.0								
38.0								
39.0								
40.0								

Drilling Contractor: CGMT, Inc.		Water Level (Ft.)	
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling		During Drilling: 13.5 feet	
Drilling Equipment: CME-45C Truck Mounted Drill Rig		Immediately After Drilling: 11 feet	
REVIEWED BY: PKP		cave in at 13.5 feet	

Soil Boring Log

Construction & Geotechnical Material Testing, Inc. 60 Martin Lane, Elk Grove Village, Illinois 60007 Telephone (630) 595-1111 • Fax (630) 595-1110		Boring No.: RB-02 Date: Tuesday, March 28, 2017	
		Project: Proposed Nippersink Blvd. Improvements Fox Lake, IL Project No.: 17G0157 Boring Location: See Boring Location Diagram	
Soil Boring Prepared for: Gewalt Hamilton Associates, Inc. Mr. Mark A. Coleman, Jr. JD, P.E. 675 Forest Edge Drive Vernon Hills, Illinois 60061		Logged By: LH Ground Elevation: 746	
Sheet 3 of 3			

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
40.0			Fine to Medium Sand, brown, medium dense, saturated (A-2-4)					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
41.0								
42.0								
43.0			Sand and Gravel, brown, medium dense (A-1-b)	SS-11 43.5' - 45.0'	8			
44.0					5	8.1	--	
45.0					10" Recovery	6		
46.0			END of BORING at 45.0 Feet					
47.0								
48.0								
49.0								
50.0								
51.0								
52.0								
53.0								
54.0								
55.0								
56.0								
57.0								
58.0								
59.0								
60.0								

Drilling Contractor: CGMT, Inc.		Water Level (Ft.)	
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling		During Drilling: 13.5 feet	
Drilling Equipment: CME-45C Truck Mounted Drill Rig		Immediately After Drilling: 11 feet	
REVIEWED BY: PKP		cave in at 13.5 feet	

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Soil Boring Log

Construction & Geotechnical Material Testing, Inc. 60 Martin Lane, Elk Grove Village, Illinois 60007 Telephone (630) 595-1111 • Fax (630) 595-1110		Boring No.: RB-03 Date: Tuesday, March 28, 2017	
		Project: Proposed Nippersink Blvd. Improvements Fox Lake, IL Project No.: 17G0157 Boring Location: See Boring Location Diagram	
Soil Boring Prepared for: Gewalt Hamilton Associates, Inc. Mr. Mark A. Coleman, Jr. JD, P.E. 675 Forest Edge Drive Vernon Hills, Illinois 60061		Logged By: LH Ground Elevation: 746	
Sheet 1 of 3			

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
0.0			3 1/2" Asphalt Pavement					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
1.0			Clay Loam, brown, stiff (A-6)	SS-1 1.0' - 2.5' 15" Recovery	2 2 3	20.5	--	
2.0								
3.0			Silty Clay, brown, very stiff (A-6)	SS-2 3.5' - 5.0' 20" Recovery	3 3 3	25.2	3.0	3.46 (B)*
4.0								
5.0			Silty Loam, brown, loose, saturated (A-4)	SS-3 6.0' - 7.5' 20" Recovery	4 4 4	22.6	--	
6.0								
7.0			Silty Clay, brown, very stiff (A-6)	SS-4 8.5' - 10.0' 18" Recovery	3 3 6	19.3	3.0	3.27 (S)*
8.0								
9.0			Silty Loam, brown, loose, saturated (A-4)	SS-5 13.5' - 15.0' 17" Recovery	2 4 5	21.8	--	
10.0								
11.0								
12.0								
13.0								
14.0								
15.0								
16.0								
17.0								
18.0								
19.0			Silty Clay, brown, very stiff (A-6)	SS-6 18.5' - 20.0' 18" Recovery	2 3 4	20.9	2.0	2.86 (B)*
20.0								* Unconfined via a Rimac device

Drilling Contractor: CGMT, Inc.		Water Level (Ft.)	
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling		During Drilling: 14 feet	
Drilling Equipment: CME-45C Truck Mounted Drill Rig		Immediately After Drilling: None	
REVIEWED BY: PKP			

Soil Boring Log

Construction & Geotechnical Material Testing, Inc. 60 Martin Lane, Elk Grove Village, Illinois 60007 Telephone (630) 595-1111 • Fax (630) 595-1110		Boring No.: RB-03 Date: Tuesday, March 28, 2017	
		Project: Proposed Nippersink Blvd. Improvements Fox Lake, IL Project No.: 17G0157 Boring Location: See Boring Location Diagram	
Soil Boring Prepared for: Gewalt Hamilton Associates, Inc. Mr. Mark A. Coleman, Jr. JD, P.E. 675 Forest Edge Drive Vernon Hills, Illinois 60061		Logged By: LH Ground Elevation: 746	
Sheet 2 of 3			

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
20.0			Silty Clay, brown, very stiff (A-6)					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
21.0								
22.0								
23.0								
24.0				SS-7 23.5' - 25.0' 15" Recovery	3 9 13	20.4	2.0	2.29 (B)*
25.0								
26.0								
27.0								
28.0								
29.0				SS-8 28.5' - 30.0' 18" Recovery	2 3 5	18.5	2.5	2.57 (B)*
30.0								
31.0								
32.0								
33.0								
34.0			Sand and Gravel, brown, loose to medium dense (A-1-b)	SS-9 33.5' - 35.0' 10" Recovery	1 3 7	21.8	--	
35.0								
36.0								
37.0								
38.0								
39.0				SS-10 38.5' - 40.0' 10" Recovery	4 4 4	8.1	--	* Unconfined via a Rimac device
40.0								

Drilling Contractor: CGMT, Inc.		Water Level (Ft.)	
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling		During Drilling: 14 feet	
Drilling Equipment: CME-45C Truck Mounted Drill Rig		Immediately After Drilling: None	
REVIEWED BY: PKP			

Soil Boring Log


Construction & Geotechnical Material Testing, Inc. 60 Martin Lane, Elk Grove Village, Illinois 60007 Telephone (630) 595-1111 • Fax (630) 595-1110		Boring No.: RB-03 Date: Tuesday, March 28, 2017	
		Project: Proposed Nippersink Blvd. Improvements Fox Lake, IL Project No.: 17G0157 Boring Location: See Boring Location Diagram	
Soil Boring Prepared for: Gewalt Hamilton Associates, Inc. Mr. Mark A. Coleman, Jr. JD, P.E. 675 Forest Edge Drive Vernon Hills, Illinois 60061		Logged By: LH Ground Elevation: 746	
Sheet 3 of 3			

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
40.0			Sand and Gravel, brown, loose to medium dense (A-1-b)					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
41.0								
42.0								
43.0								
44.0				SS-11 43.5' - 45.0' 2" Recovery	7 6 6	--	--	
45.0			END of BORING at 45.0 Feet					
46.0								
47.0								
48.0								
49.0								
50.0								
51.0								
52.0								
53.0								
54.0								
55.0								
56.0								
57.0								
58.0								
59.0								
60.0								


Drilling Contractor: CGMT, Inc.		Water Level (Ft.)	
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling		During Drilling: 14 feet	
Drilling Equipment: CME-45C Truck Mounted Drill Rig		Immediately After Drilling: None	
REVIEWED BY: PKP			

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Soil Boring Log

 Construction & Geotechnical Material Testing, Inc. 60 Martin Lane, Elk Grove Village, Illinois 60007 Telephone (630) 595-1111 • Fax (630) 595-1110		Boring No.: RB-04						
		Date: Tuesday, March 28, 2017						
Soil Boring Prepared for: Gewalt Hamilton Associates, Inc. Mr. Mark A. Coleman, Jr. JD, P.E. 675 Forest Edge Drive Vernon Hills, Illinois 60061		Project: Proposed Nippersink Blvd. Improvements Fox Lake, IL Project No.: 17G0157 Boring Location: See Boring Location Diagram Logged By: LH Ground Elevation: 745.5						
Sheet 1 of 3								
Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
0.0			3" Asphalt Pavement					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
1.0			Fine Sand, brown, medium dense (A-3)	SS-1 1.0' - 2.5'	3	2.8	--	
2.0				4				
3.0				6				
4.0			Silty Loam, brown, loose, saturated (A-4)	SS-2 3.5' - 5.0'	4	3.3	--	
5.0				4				
6.0			Silty Clay, brown, very stiff (A-6)	SS-3 6.0' - 7.5'	3	21.0	--	
7.0				3				
8.0			Fine Sand, brown, loose (A-3)	SS-4 8.5' - 10.0'	5	22.6	3.5	
9.0				4	22.6	2.0	1.93 (B)*	
10.0				5				
11.0			Fine Sand, brown, loose (A-3)	SS-5 13.5' - 15.0'	4	22.6	--	
12.0				3				
13.0			Fine Sand, brown, loose (A-3)	SS-6 18.5' - 20.0'	2			
14.0				4				
15.0				3	20.1	--	* Unconfined via a Rimac device	
16.0				3				
17.0								
18.0								
19.0								
20.0								
Drilling Contractor: CGMT, Inc.				Water Level (Ft.)				
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling				During Drilling: 13 feet				
Drilling Equipment: CME-45C Truck Mounted Drill Rig				Immediately After Drilling: None				
REVIEWED BY: PKP								

Soil Boring Log

 Construction & Geotechnical Material Testing, Inc. 60 Martin Lane, Elk Grove Village, Illinois 60007 Telephone (630) 595-1111 • Fax (630) 595-1110		Boring No.: RB-04						
		Date: Tuesday, March 28, 2017						
Soil Boring Prepared for: Gewalt Hamilton Associates, Inc. Mr. Mark A. Coleman, Jr. JD, P.E. 675 Forest Edge Drive Vernon Hills, Illinois 60061		Project: Proposed Nippersink Blvd. Improvements Fox Lake, IL Project No.: 17G0157 Boring Location: See Boring Location Diagram Logged By: LH Ground Elevation: 745.5						
Sheet 2 of 3								
Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
20.0			Fine Sand, brown, loose (A-3)					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
21.0			Silty Clay, brown, stiff to hard (A-6)	SS-7 23.5' - 25.0'	3	21.5	1.0	
22.0				7				
23.0			Silty Clay, brown, stiff to hard (A-6)	SS-8 28.5' - 30.0'	3	19.3	1.5	
24.0				3				
25.0			Silty Clay, brown, stiff to hard (A-6)	SS-9 33.5' - 35.0'	3	20.1	3.5	
26.0				5				
27.0			Silty Clay, brown, stiff to hard (A-6)	SS-10 38.5' - 40.0'	3	20.2	3.0	
28.0				4				
29.0			Silty Clay, brown, stiff to hard (A-6)	SS-11 43.5' - 45.0'	4	12.4	--	
30.0				4				
31.0			Silty Clay, brown, stiff to hard (A-6)	SS-12 48.5' - 50.0'	4	12.4	--	
32.0				4				
33.0			Silty Clay, brown, stiff to hard (A-6)	SS-13 53.5' - 55.0'	4	12.4	--	
34.0				4				
35.0			Silty Clay, brown, stiff to hard (A-6)	SS-14 58.5' - 60.0'	4	12.4	--	
36.0				4				
37.0			Silty Clay, brown, stiff to hard (A-6)	SS-15 63.5' - 65.0'	4	12.4	--	
38.0				4				
39.0			Silty Clay, brown, stiff to hard (A-6)	SS-16 68.5' - 70.0'	4	12.4	--	
40.0				4				
Drilling Contractor: CGMT, Inc.				Water Level (Ft.)				
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling				During Drilling: 13 feet				
Drilling Equipment: CME-45C Truck Mounted Drill Rig				Immediately After Drilling: None				
REVIEWED BY: PKP								

Soil Boring Log

 Construction & Geotechnical Material Testing, Inc. 60 Martin Lane, Elk Grove Village, Illinois 60007 Telephone (630) 595-1111 • Fax (630) 595-1110		Boring No.: RB-04						
		Date: Tuesday, March 28, 2017						
Soil Boring Prepared for: Gewalt Hamilton Associates, Inc. Mr. Mark A. Coleman, Jr. JD, P.E. 675 Forest Edge Drive Vernon Hills, Illinois 60061		Project: Proposed Nippersink Blvd. Improvements Fox Lake, IL Project No.: 17G0157 Boring Location: See Boring Location Diagram Logged By: LH Ground Elevation: 745.5						
Sheet 3 of 3								
Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
40.0			Silty Clay, brown, stiff to hard (A-6)					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
41.0			Sand and Gravel, brown, medium dense (A-1-b)	SS-11 43.5' - 45.0'	4	12.4	--	
42.0				4				
43.0			Sand and Gravel, brown, medium dense (A-1-b)	SS-12 48.5' - 50.0'	4	12.4	--	
44.0				4				
45.0			END of BORING at 45.0 Feet					
46.0			END of BORING at 45.0 Feet	SS-13 53.5' - 55.0'	4	12.4	--	
47.0				4				
48.0			END of BORING at 45.0 Feet	SS-14 58.5' - 60.0'	4	12.4	--	
49.0				4				
50.0			END of BORING at 45.0 Feet	SS-15 63.5' - 65.0'	4	12.4	--	
51.0				4				
52.0			END of BORING at 45.0 Feet	SS-16 68.5' - 70.0'	4	12.4	--	
53.0				4				
54.0			END of BORING at 45.0 Feet	SS-17 73.5' - 75.0'	4	12.4	--	
55.0				4				
56.0			END of BORING at 45.0 Feet	SS-18 78.5' - 80.0'	4	12.4	--	
57.0				4				
58.0			END of BORING at 45.0 Feet	SS-19 83.5' - 85.0'	4	12.4	--	
59.0				4				
60.0			END of BORING at 45.0 Feet	SS-20 88.5' - 90.0'	4	12.4	--	
				4				
Drilling Contractor: CGMT, Inc.				Water Level (Ft.)				
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling				During Drilling: 13 feet				
Drilling Equipment: CME-45C Truck Mounted Drill Rig				Immediately After Drilling: None				
REVIEWED BY: PKP								

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Soil Boring Log

		Construction & Geotechnical Material Testing, Inc. 60 Martin Lane, Elk Grove Village, Illinois 60007 Telephone (630) 595-1111 • Fax (630) 595-1110		Boring No.: RB-05 Date: Tuesday, March 28, 2017 Project: Proposed Nippersink Blvd. Improvements Fox Lake, IL Project No.: 17G0157 Boring Location: See Boring Location Diagram Logged By: LH Ground Elevation: 745			
		Soil Boring Prepared for: Gewalt Hamilton Associates, Inc. Mr. Mark A. Coleman, Jr. JD, P.E. 675 Forest Edge Drive Vernon Hills, Illinois 60061		Sheet 1 of 3			
Elevation	Depth	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
0.0		4" Concrete Pavement					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
1.0		Fine Sand, brown, loose (A-3)	SS-1 1.0' - 2.5' 8" Recovery	3 3 3	7.7	--	
2.0							
3.0							
4.0		Fine to Medium Sand, brown, loose to medium dense (A-2-4)	SS-2 3.5' - 5.0' 6" Recovery	7 6 8	6.5	--	
5.0							
6.0							
7.0							
8.0							
9.0		Silty Loam, brown, loose, saturated (A-4)	SS-4 8.5' - 10.0' 18" Recovery	3 4 5	27.2	--	
10.0							
11.0							
12.0							
13.0							
14.0		Silty Clay, brown, stiff (A-6)	SS-5 13.5' - 15.0' 18" Recovery	2 3 8	30.8	1.5	
15.0							
16.0							
17.0							
18.0							
19.0							
20.0			SS-6 18.5' - 20.0' 18" Recovery	4 4 4	27.4	1.5	
Drilling Contractor: CGMT, Inc.			Water Level (Ft.)				
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling			During Drilling: 8.5 feet				
Drilling Equipment: CME-45C Truck Mounted Drill Rig			Immediately After Drilling: 7 feet				
REVIEWED BY: PKP			cave in at 8 feet				

Soil Boring Log


		Construction & Geotechnical Material Testing, Inc. 60 Martin Lane, Elk Grove Village, Illinois 60007 Telephone (630) 595-1111 • Fax (630) 595-1110		Boring No.: RB-05 Date: Tuesday, March 28, 2017 Project: Proposed Nippersink Blvd. Improvements Fox Lake, IL Project No.: 17G0157 Boring Location: See Boring Location Diagram Logged By: LH Ground Elevation: 745			
		Soil Boring Prepared for: Gewalt Hamilton Associates, Inc. Mr. Mark A. Coleman, Jr. JD, P.E. 675 Forest Edge Drive Vernon Hills, Illinois 60061		Sheet 2 of 3			
Elevation	Depth	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
20.0		Silty Clay, brown, stiff (A-6)					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
21.0							
22.0							
23.0							
24.0		Fine Sand, brown, loose, saturated (A-3)	SS-7 23.5' - 25.0' 18" Recovery	1 3 3	23.2	--	
25.0							
26.0							
27.0							
28.0							
29.0		Fine Silty Sand, brown, loose, saturated (A-2-4)	SS-8 28.5' - 30.0' 18" Recovery	1 2 4	21.2	--	
30.0							
31.0							
32.0							
33.0							
34.0		Silty Clay, brown, firm to very stiff (A-6)	SS-9 33.5' - 35.0' 18" Recovery	2 3 4	17.8	2.5	
35.0							
36.0							
37.0							
38.0							
39.0		6" Silty Sand seam at 39 feet	SS-10 38.5' - 40.0' 18" Recovery	3 6 5	26.7	0.5	
40.0							
Drilling Contractor: CGMT, Inc.			Water Level (Ft.)				
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling			During Drilling: 8.5 feet				
Drilling Equipment: CME-45C Truck Mounted Drill Rig			Immediately After Drilling: 7 feet				
REVIEWED BY: PKP			cave in at 8 feet				

Soil Boring Log


		Construction & Geotechnical Material Testing, Inc. 60 Martin Lane, Elk Grove Village, Illinois 60007 Telephone (630) 595-1111 • Fax (630) 595-1110		Boring No.: RB-05 Date: Tuesday, March 28, 2017 Project: Proposed Nippersink Blvd. Improvements Fox Lake, IL Project No.: 17G0157 Boring Location: See Boring Location Diagram Logged By: LH Ground Elevation: 745			
		Soil Boring Prepared for: Gewalt Hamilton Associates, Inc. Mr. Mark A. Coleman, Jr. JD, P.E. 675 Forest Edge Drive Vernon Hills, Illinois 60061		Sheet 3 of 3			
Elevation	Depth	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
40.0		Silty Clay, brown, firm to very stiff (A-6)					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
41.0							
42.0							
43.0							
44.0			SS-11 43.5' - 45.0' 8" Recovery	2 3 2	11.7	--	
45.0		6" Coarse Sand and Gravel seam at 44.5 feet					
46.0		END OF BORING at 45.0 Feet					
47.0							
48.0							
49.0							
50.0							
51.0							
52.0							
53.0							
54.0							
55.0							
56.0							
57.0							
58.0							
59.0							
60.0							
Drilling Contractor: CGMT, Inc.			Water Level (Ft.)				
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling			During Drilling: 8.5 feet				
Drilling Equipment: CME-45C Truck Mounted Drill Rig			Immediately After Drilling: 7 feet				
REVIEWED BY: PKP			cave in at 8 feet				

FILE NAME = \\A\Projects\2017\170119_FoxLakeWall\Ph\SoilBoring_VIII.dgn


Soil Boring Log

 Construction & Geotechnical Material Testing, Inc. 60 Martin Lane, Elk Grove Village, Illinois 60007 Telephone (630) 595-1111 • Fax (630) 595-1110		Boring No.: RB-06 Date: Tuesday, March 28, 2017					
		Project: Proposed Nippersink Blvd. Improvements Fox Lake, IL Project No.: 17G0157 Boring Location: See Boring Location Diagram					
Soil Boring Prepared for: Gewalt Hamilton Associates, Inc. Mr. Mark A. Coleman, Jr. JD, P.E. 675 Forest Edge Drive Vernon Hills, Illinois 60061		Logged By: LH Ground Elevation: 745					
Sheet 1 of 3							
Elevation	Depth	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
0.0		4" Concrete Pavement					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
1.0		Sandy Loam, brown, firm (A-2.4-FILL)	SS-1 1.0' - 2.5' 14" Recovery	1 2	12.5	--	
2.0			SS-2 3.5' - 5.0' 14" Recovery	2 4	7.7	--	
3.0		Fine Sand, brown, loose, saturated (A-3)	SS-3 6.0' - 7.5' 18" Recovery	2 2 2	23.5	--	
4.0			SS-4 8.5' - 10.0' 18" Recovery	2 1 1	24.8	--	
5.0			SS-5 13.5' - 15.0' 18" Recovery	1 2 3	23.8	--	
6.0		Silty Clay, brown, stiff (A-6)	SS-6 18.5' - 20.0' 18" Recovery	2 4 4	28.7	1.5	
7.0							
Drilling Contractor: CGMT, Inc.			Water Level (Ft.)				
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling			During Drilling: 7.5 feet				
Drilling Equipment: CME-45C Truck Mounted Drill Rig			Immediately After Drilling: None				
REVIEWED BY: PKP			cave in at 6 feet				

Soil Boring Log

 Construction & Geotechnical Material Testing, Inc. 60 Martin Lane, Elk Grove Village, Illinois 60007 Telephone (630) 595-1111 • Fax (630) 595-1110		Boring No.: RB-06 Date: Tuesday, March 28, 2017					
		Project: Proposed Nippersink Blvd. Improvements Fox Lake, IL Project No.: 17G0157 Boring Location: See Boring Location Diagram					
Soil Boring Prepared for: Gewalt Hamilton Associates, Inc. Mr. Mark A. Coleman, Jr. JD, P.E. 675 Forest Edge Drive Vernon Hills, Illinois 60061		Logged By: LH Ground Elevation: 745					
Sheet 2 of 3							
Elevation	Depth	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
20.0		Silty Clay, brown, stiff (A-6)					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
21.0		Silty Loam, brown, saturated (A-4)	SS-7 23.5' - 25.0' 18" Recovery	2 3 4	24.8	--	
22.0			SS-8 28.5' - 30.0' 18" Recovery	2 3 5	18.1	2.5	
23.0		Silty Clay, brown, very stiff (A-7-6)	SS-9 33.5' - 35.0' 18" Recovery	2 2 3	23.8	--	
24.0			SS-10 38.5' - 40.0' 18" Recovery	6 9 9	18.5	--	
25.0		Fine sand, gray, loose, saturated (A-3)					
26.0		Silty Loam, brown, saturated (A-4)	SS-11 43.5' - 45.0' 18" Recovery	1 3 4	24.3	1.5	
27.0							
Drilling Contractor: CGMT, Inc.			Water Level (Ft.)				
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling			During Drilling: 7.5 feet				
Drilling Equipment: CME-45C Truck Mounted Drill Rig			Immediately After Drilling: None				
REVIEWED BY: PKP			cave in at 6 feet				

Soil Boring Log

 Construction & Geotechnical Material Testing, Inc. 60 Martin Lane, Elk Grove Village, Illinois 60007 Telephone (630) 595-1111 • Fax (630) 595-1110		Boring No.: RB-06 Date: Tuesday, March 28, 2017					
		Project: Proposed Nippersink Blvd. Improvements Fox Lake, IL Project No.: 17G0157 Boring Location: See Boring Location Diagram					
Soil Boring Prepared for: Gewalt Hamilton Associates, Inc. Mr. Mark A. Coleman, Jr. JD, P.E. 675 Forest Edge Drive Vernon Hills, Illinois 60061		Logged By: LH Ground Elevation: 745					
Sheet 3 of 3							
Elevation	Depth	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
40.0		Silty Loam, brown, saturated (A-4)					Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
41.0		Silty Clay, brown, stiff (A-6)	SS-11 43.5' - 45.0' 18" Recovery	1 3 4	24.3	1.5	
42.0							
43.0		END of BORING at 45.0 Feet					
44.0							
45.0							
46.0							
Drilling Contractor: CGMT, Inc.			Water Level (Ft.)				
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling			During Drilling: 7.5 feet				
Drilling Equipment: CME-45C Truck Mounted Drill Rig			Immediately After Drilling: None				
REVIEWED BY: PKP			cave in at 6 feet				

FILE NAME = \\A\Projects\2017\170119_FoxLakeWall\Ph\SoilBoring_IX.dgn


WBK ENGINEERING LLC
 116 WEST MAIN STREET, SUITE 201
 ST. CHARLES, ILLINOIS 60174
 (630) 443-7755

USER NAME = jmueller	DESIGNED - JMM	REVISED -
PLOT SCALE = 1:10,6667	CHECKED - JZ	REVISED -
PLOT DATE = 4/6/2020	DRAWN - JMM	REVISED -
	CHECKED - JZ	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG IX
NIPPERSINK BOULEVARD RETAINING WALL
 SHEET NO. 17 OF 19 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0149	17-00025-00-PV	LAKE	99	74
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				

Soil Boring Log



Construction & Geotechnical Material Testing, Inc.

60 Martin Lane, Elk Grove Village, Illinois 60007
Telephone (630) 595-1111 • Fax (630) 595-1110

Soil Boring Prepared for:
Gewalt Hamilton Associates, Inc.
Mr. Mark A. Coleman, Jr. JD, P.E.
675 Forest Edge Drive
Vernon Hills, Illinois 60061

Boring No.: **HA-1**

Date: Thursday, April 06, 2017

Project: Proposed Nippersink Boulevard Improvements
Nippersink Boulevard, Fox Lake, Illinois

Project No.: 17G0157

Boring Location: Approximately Station No. 15+10

See Boring Location Diagram

Logged By: LH

Ground Elevation: 755

Sheet 1 of 1

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results	
	0.0		12" Topsoil	HA-1 0.0' - 1.0'	--	--	--	Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.	
	1.0		Sandy Clay Loam, dark brown (A-6-FILL)	HA-2 1.0' - 2.0'	--	14.9	--		
	2.0			HA-3 2.0' - 3.0'	--	15.8	--		
	3.0		Sand with Gravel, brown (A-1-b-FILL)	HA-4 3.0' - 4.0'	--	14.7	--		
	4.0		END of BORING at 4.0 Feet						
	5.0								
	6.0								
	7.0								
	8.0								
	9.0								
	10.0								
	11.0								
	12.0								
	13.0								
	14.0								
	15.0								
	16.0								
	17.0								
	18.0								
	19.0								
	20.0								
Drilling Contractor: CGMT, Inc.					Water Level (Ft.)				
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling					During Drilling: None				
Drilling Equipment: CME-45C Truck Mounted Drill Rig					Immediately After Drilling: None				
REVIEWED BY: PKP									

Soil Boring Log



Construction & Geotechnical Material Testing, Inc.

60 Martin Lane, Elk Grove Village, Illinois 60007
Telephone (630) 595-1111 • Fax (630) 595-1110

Soil Boring Prepared for:
Gewalt Hamilton Associates, Inc.
Mr. Mark A. Coleman, Jr. JD, P.E.
675 Forest Edge Drive
Vernon Hills, Illinois 60061

Boring No.: **HA-2**

Date: Thursday, April 06, 2017

Project: Proposed Nippersink Boulevard Improvements
Nippersink Boulevard, Fox Lake, Illinois

Project No.: 17G0157

Boring Location: Approximately Station No. 15+70

See Boring Location Diagram

Logged By: LH

Ground Elevation: 753

Sheet 1 of 1

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results	
	0.0		12" Topsoil	HA-1 0.0' - 1.0'	--	--	--	Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.	
	1.0		Sand with Gravel, brown (A-1-b-FILL)	HA-2 1.0' - 2.0'	--	7.7	--		
	2.0			HA-3 2.0' - 3.0'	--	8.9	--		
	3.0		Sandy Clay Loam, brown (A-6-FILL)	HA-4 3.0' - 4.0'	--	13.9	--		
	4.0		Sand with Gravel, brown (A-1-b-FILL)	HA-5 4.0' - 5.0'	--	7.0	--		
	5.0		END of BORING at 4.0 Feet						
	6.0								
	7.0								
	8.0								
	9.0								
	10.0								
	11.0								
	12.0								
	13.0								
	14.0								
	15.0								
	16.0								
	17.0								
	18.0								
	19.0								
	20.0								
Drilling Contractor: CGMT, Inc.					Water Level (Ft.)				
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling					During Drilling: None				
Drilling Equipment: CME-45C Truck Mounted Drill Rig					Immediately After Drilling: None				
REVIEWED BY: PKP									

FILE NAME = \\A\Projects\2015\170119_FoxLakeWall\Phd\Structural\Dgn\01B - Soil Boring_X.dgn

WBK engineering
WBKENGINEERING LLC
116 WEST MAIN STREET, SUITE 201
ST. CHARLES, ILLINOIS 60174
(630) 443-7755

USER NAME = jmueller	DESIGNED - JMM	REVISED -
PLOT SCALE = 1:10.6667	CHECKED - JZ	REVISED -
PLOT DATE = 4/6/2020	DRAWN - JMM	REVISED -
	CHECKED - JZ	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOG X
NIPPERSINK BOULEVARD RETAINING WALL**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0149	17-00025-00-PV	LAKE	99	75
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				

Soil Boring Log



Construction & Geotechnical Material Testing, Inc.

60 Martin Lane, Elk Grove Village, Illinois 60007
Telephone (630) 595-1111 • Fax (630) 595-1110

Soil Boring Prepared for:
Gewalt Hamilton Associates, Inc.
Mr. Mark A. Coleman, Jr. JD, P.E.
675 Forest Edge Drive
Vernon Hills, Illinois 60061

Boring No.: **HA-3**

Date: Thursday, April 06, 2017

Project: Proposed Nippersink Boulevard Improvements
Nippersink Boulevard, Fox Lake, Illinois

Project No.: 17G0157

Boring Location: Approximately Station No. 16+90

See Boring Location Diagram

Logged By: LH

Ground Elevation: 753

Sheet 1 of 1

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
	0.0		12" Topsoil	HA-1 0.0' - 1.0'	--	--	--	Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
	1.0		Sandy Clay Loam, dark brown (A-6-FILL)	HA-2 1.0' - 2.0'	--	14.7	--	
	2.0		Clay Loam, brown (A-6-FILL)	HA-3 2.0' - 3.0'	--	14.6	--	
	3.0			HA-4 3.0' - 4.0'	--	14.7	--	
	4.0			HA-5 4.0' - 5.0'	--	13.8	--	
	5.0		END of BORING at 5.0 Feet					
	6.0							
	7.0							
	8.0							
	9.0							
	10.0							
	11.0							
	12.0							
	13.0							
	14.0							
	15.0							
	16.0							
	17.0							
	18.0							
	19.0							
	20.0							
Drilling Contractor: CGMT, Inc.					Water Level (Ft.)			
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling					During Drilling: None			
Drilling Equipment: CME-45C Truck Mounted Drill Rig					Immediately After Drilling: None			
REVIEWED BY: PKP								

Soil Boring Log



Construction & Geotechnical Material Testing, Inc.

60 Martin Lane, Elk Grove Village, Illinois 60007
Telephone (630) 595-1111 • Fax (630) 595-1110

Soil Boring Prepared for:
Gewalt Hamilton Associates, Inc.
Mr. Mark A. Coleman, Jr. JD, P.E.
675 Forest Edge Drive
Vernon Hills, Illinois 60061

Boring No.: **HA-4**

Date: Thursday, April 06, 2017

Project: Proposed Nippersink Boulevard Improvements
Nippersink Boulevard, Fox Lake, Illinois

Project No.: 17G0157

Boring Location: Approximately Station No. 17+50

See Boring Location Diagram

Logged By: LH

Ground Elevation: 750

Sheet 1 of 1

Elevation	Depth	Strata	Soil / Rock Description	Sample Type & No. Depth Interval (Ft) Recovery (in)	Blow Count	Moisture Content (%)	Unconfined Compressive Strength (TSF)	Notes & Test Results
	0.0		12" Topsoil	HA-1 0.0' - 1.0'	--	--	--	Unconfined compressive strength of soil samples estimated using a calibrated penetrometer.
	1.0		Sandy Clay Loam, dark brown (A-6-FILL)	HA-2 1.0' - 2.0'	--	11.9	--	
	2.0			HA-3 2.0' - 3.0'	--	14.0	--	
	3.0			HA-4 3.0' - 4.0'	--	--	--	
	4.0			Fine to Medium Sand, brown (A-1-b-FILL)	3.0' - 4.0'	--	10.1	
	4.0		END of BORING at 4.0 Feet					
	5.0							
	6.0							
	7.0							
	8.0							
	9.0							
	10.0							
	11.0							
	12.0							
	13.0							
	14.0							
	15.0							
	16.0							
	17.0							
	18.0							
	19.0							
	20.0							
Drilling Contractor: CGMT, Inc.					Water Level (Ft.)			
Drilling Method: 4.25" O.D. H.S.A. Split Spoon Sampling					During Drilling: None			
Drilling Equipment: CME-45C Truck Mounted Drill Rig					Immediately After Drilling: None			
REVIEWED BY: PKP								

FILE NAME = \\A\Projects\2019\190119_FoxLakeWall\Phd\Structural\Dgn\019 - Soil Boring_XLdgn



WBK ENGINEERING LLC
116 WEST MAIN STREET, SUITE 201
ST. CHARLES, ILLINOIS 60174
(630) 443-7755

USER NAME = jmueller
PLOT SCALE = 1:10.6667
PLOT DATE = 4/6/2020

DESIGNED - JMM
CHECKED - JZ
DRAWN - JMM
CHECKED - JZ

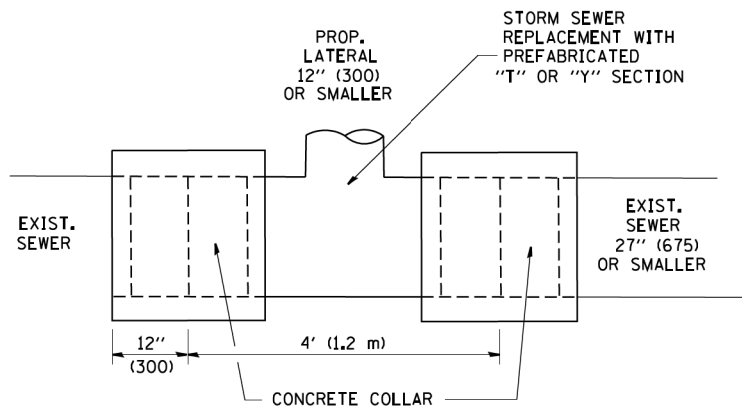
REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOG XI
NIPPERSINK BOULEVARD RETAINING WALL**

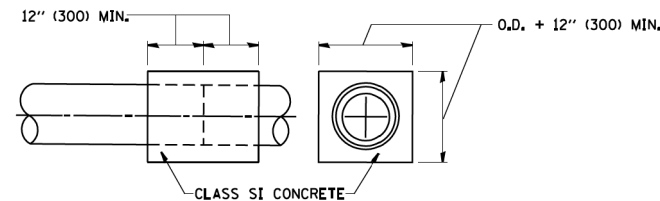
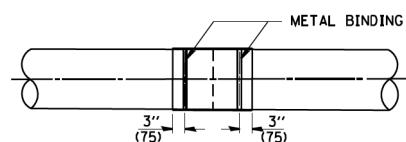
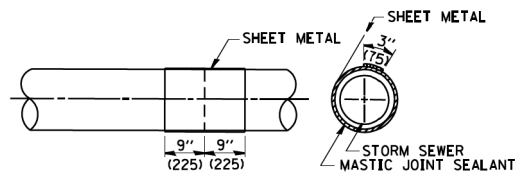
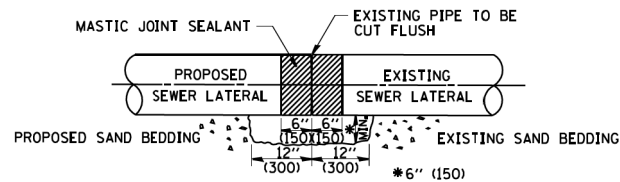
SHEET NO.19 OF 19 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0149	17-00025-00-PV	LAKE	99	76
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				



DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER

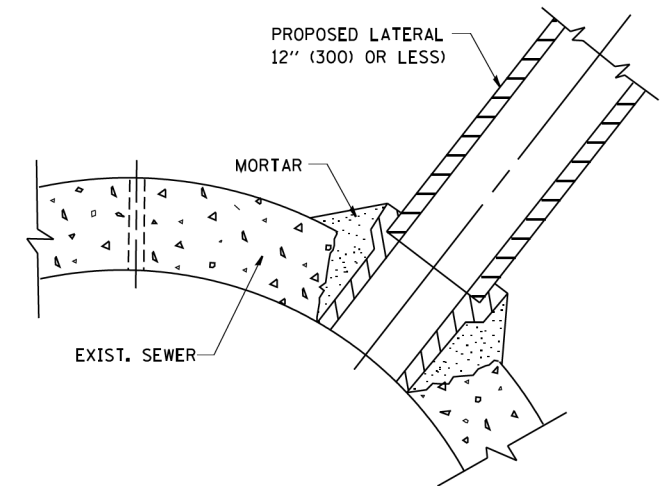


DETAIL "B"

CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

1. CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12' x 6' (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERENCE OF THE PIPE PLUS 3" (75) LONG.
5. WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
7. PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
9. PLACE CLASS SI CONCRETE AROUND THE JOINT.



DETAIL "C"

PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

- I. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
 - A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
 - B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS. THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

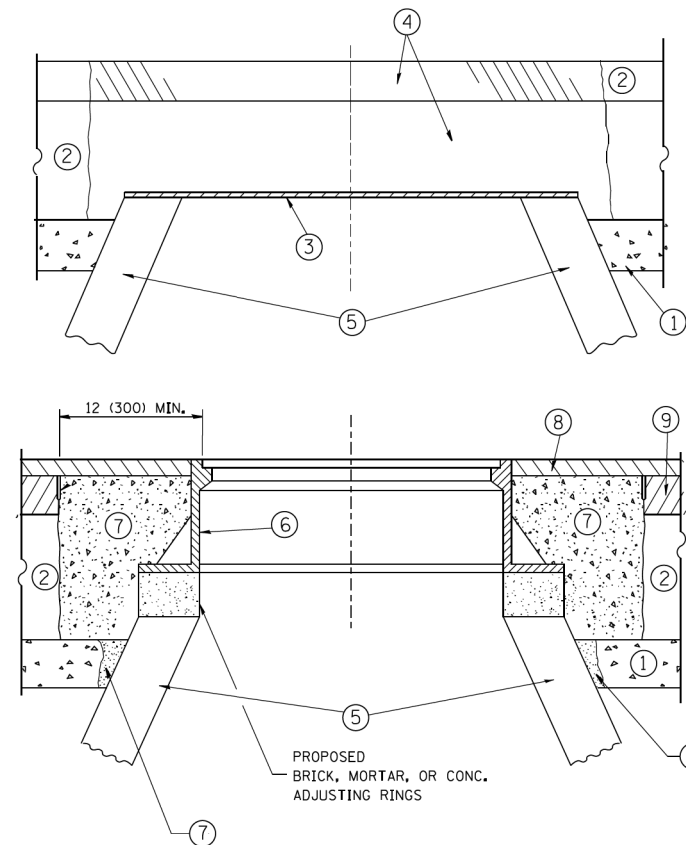
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	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - R. SHAH 10-25-94
	PLOT DATE = 1/4/2008	DATE - 07-25-90	REVISED - R. SHAH 06-12-96

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DETAIL OF STORM SEWER
CONNECTION TO EXISTING SEWER**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	77
BD500-01 (BD-7)		CONTRACT NO. 61G46		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

LEGEND

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS PP-1* CONCRETE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT:

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

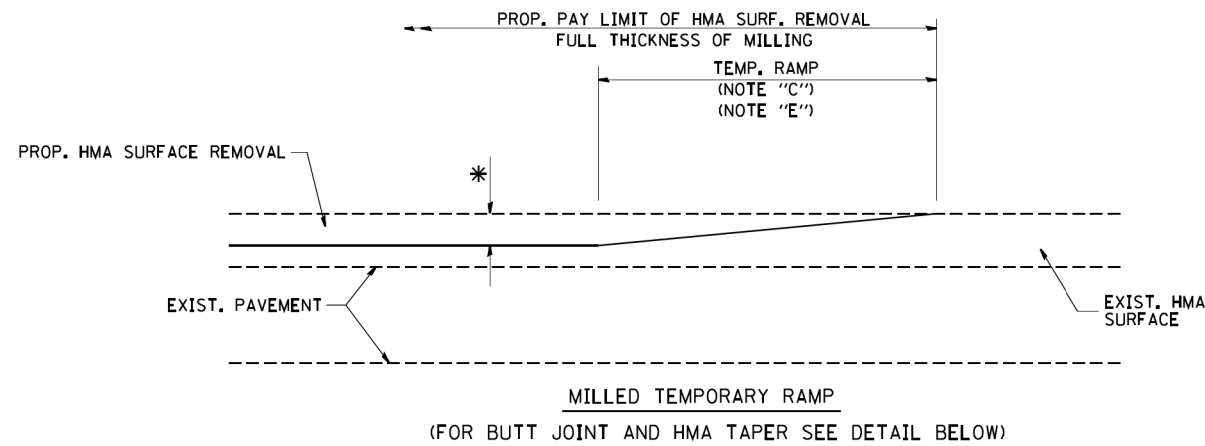
DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

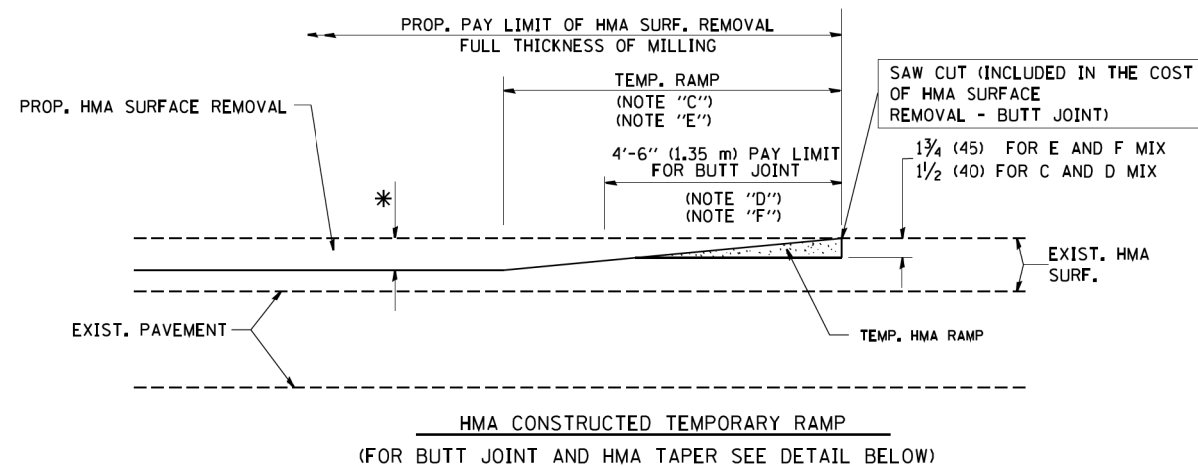
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	PLOT DATE = 12/6/2011	DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS
149	17-00025-00-PV	LAKE	99
BD600-03 (BD-8)		CONTRACT NO.	61G46
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			

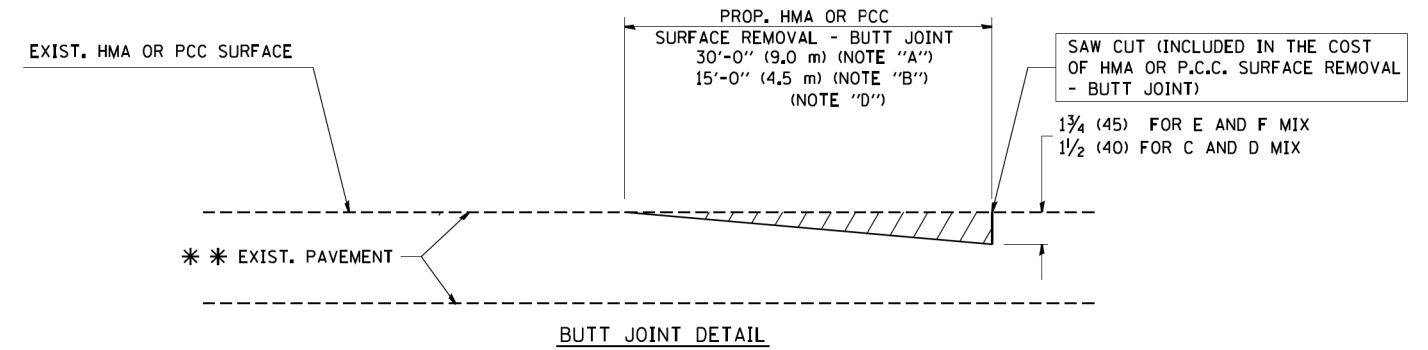


OPTION 1

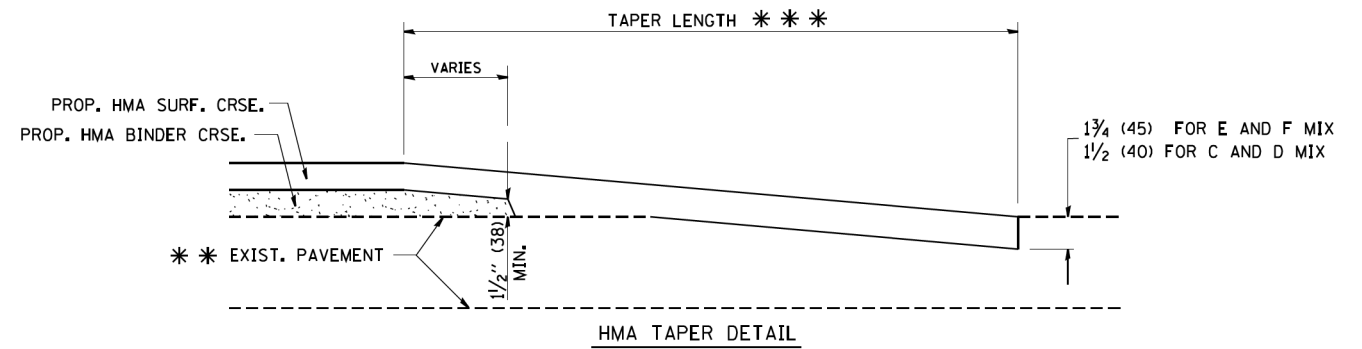


OPTION 2

TYPICAL TEMPORARY RAMP



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

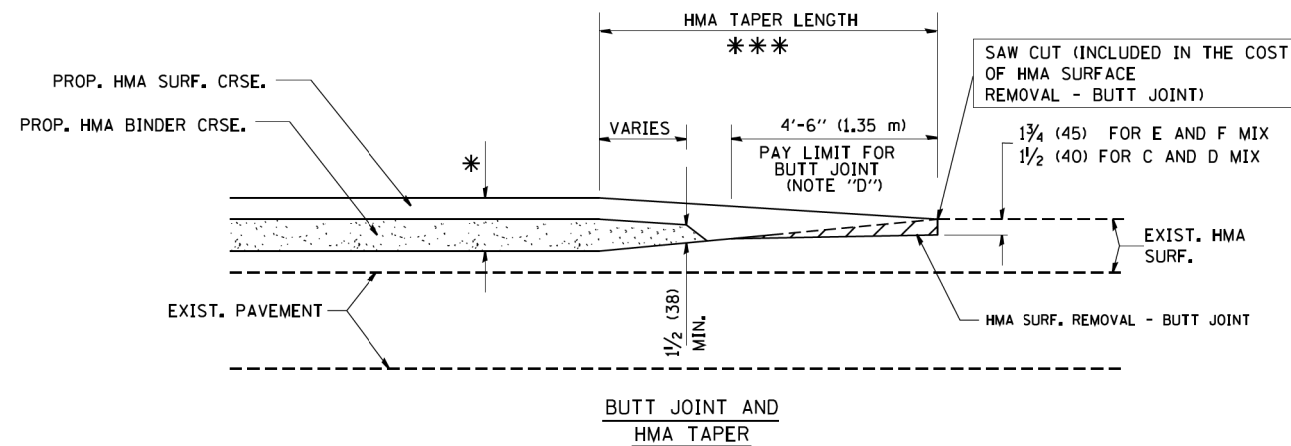
NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
 - B: MINOR SIDE ROADS.
 - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
 - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
 - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
 - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
 - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.



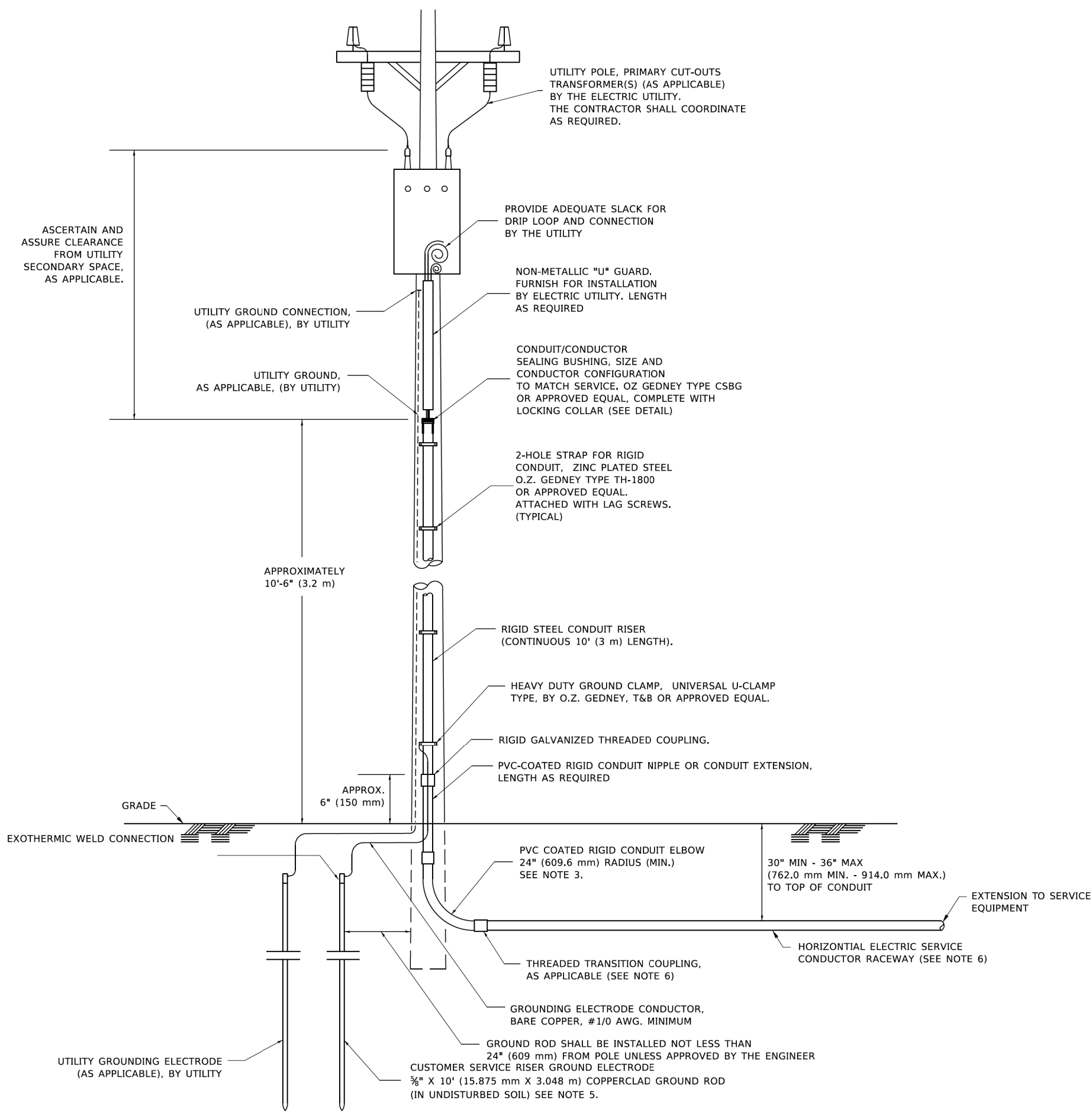
TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

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		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BUTT JOINT AND HMA TAPER DETAILS	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

F.A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	79
BD400-05 BD32		CONTRACT NO. 61G46		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

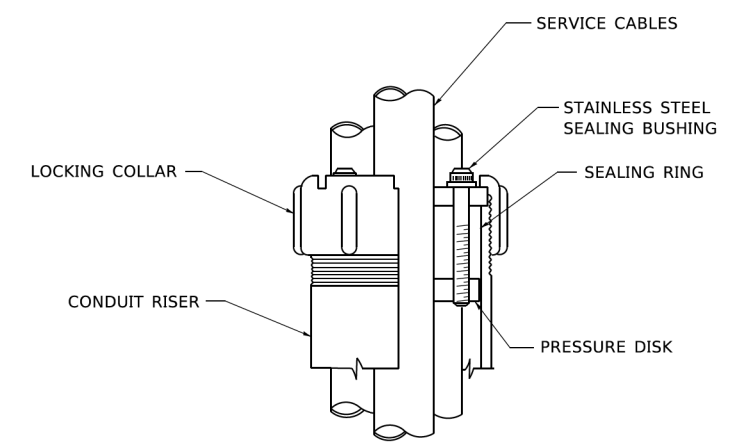


APPLICATION

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

NOTES

- SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
- UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
- CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
- PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
- THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
- THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
- PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY, FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



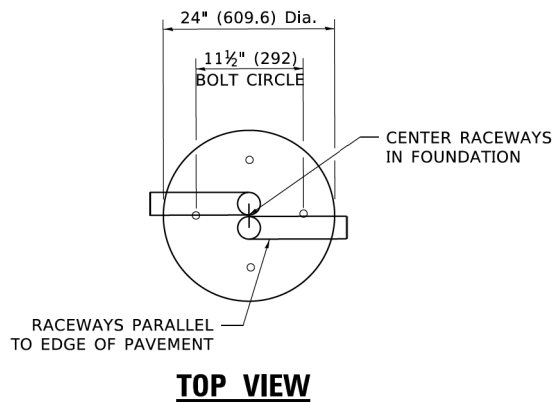
SEALING BUSHING DETAIL

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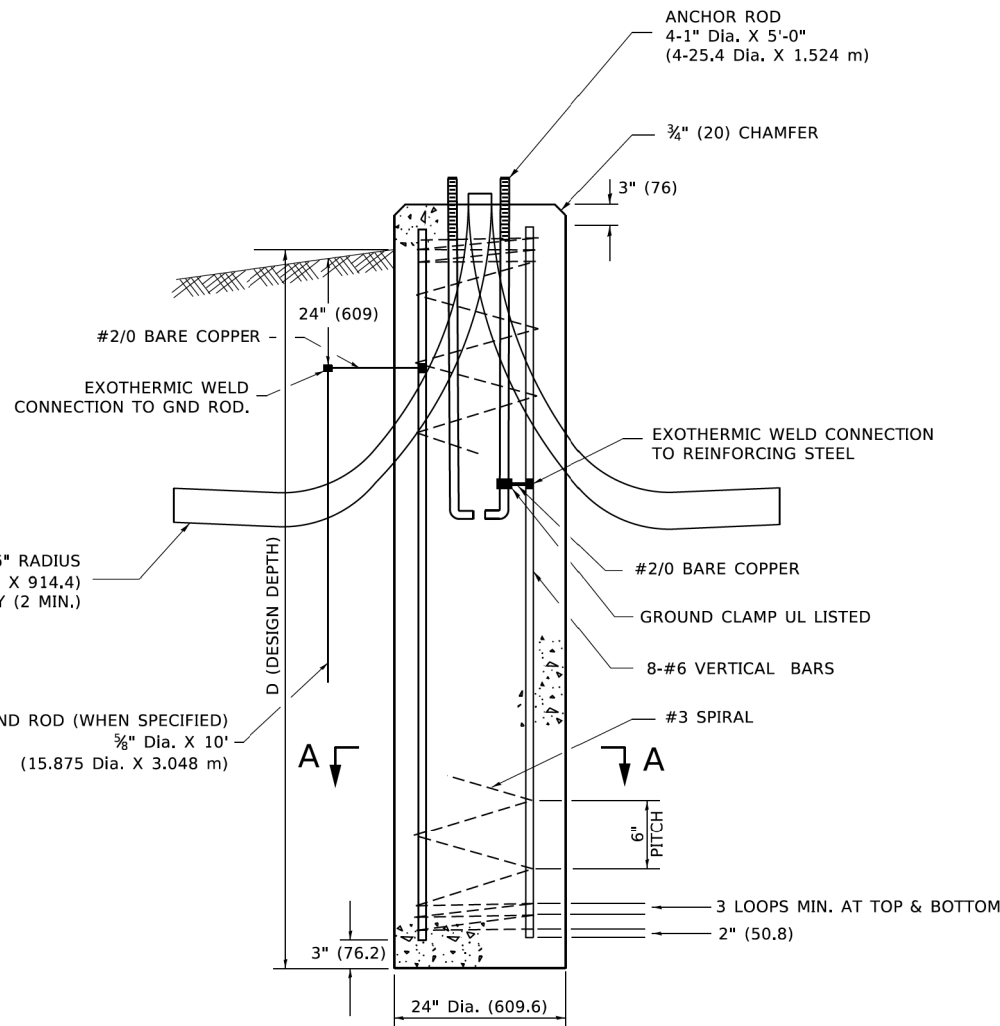
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PLOT SCALE = 50,0000 ' / ft.	DRAWN -	REVISED -		SCALE: NONE	SHEET 1 OF 1 SHEETS	STA. TO STA.	BE-220		CONTRACT NO. 61G46		
PLOT DATE = 4/19/2019	CHECKED - MEA	REVISED -		ILLINOIS FED. AID PROJECT							
	DATE -	REVISED -									

LIGHT POLE FOUNDATION DEPTH TABLE
30 FT. (9.144 m) TO 35 FT. (10.668 m) MOUNTING HEIGHT

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	11'-0" (3.35 m)	12'-8" (3.85 m)
MEDIUM CLAY Qu = 0.75 TON/SQ.FT.	9'-0" (2.74 m)	14'-10" (4.52 m)
STIFF CLAY Qu = 1.50 TON/SQ. FT.	7'-6" (2.29 m)	8'-7" (2.61 m)
LOOSE SAND φ = 34°	9'-6" (2.90 m)	10'-7" (3.22 m)
MEDIUM SAND φ = 37.5°	9'-0" (2.74 m)	9'-10" (2.99 m)
DENSE SAND φ = 40°	8'-3" (2.51 m)	9'-7" (2.91 m)



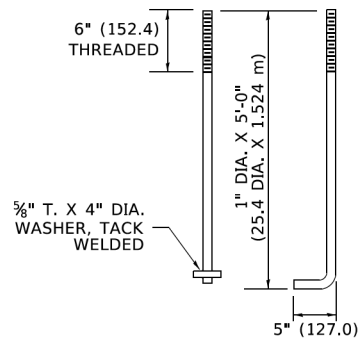
TOP VIEW



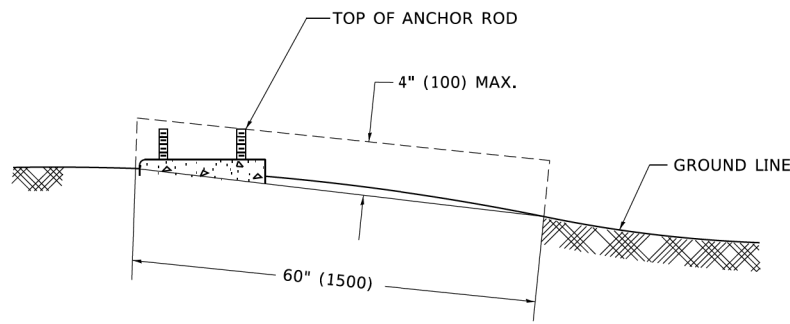
FOUNDATION DETAIL

NOTES

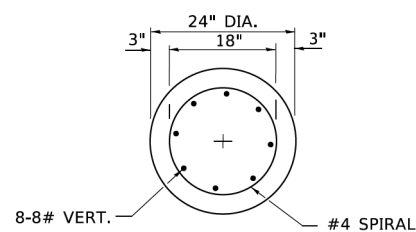
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 4 IN. (100 mm) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3#4-IN. (20 mm).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 23#4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.



ANCHOR BOLT DETAIL



FOUNDATION EXTENSION DETAIL



SECTION A-A

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	DRAWN -	REVISED -
PLOT SCALE = 50.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 4/19/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHT POLE FOUNDATION
30' (9.144 m) TO 35' (10.668 m) M.H. 11 1/2" (292 mm) BOLT CIRCLE
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	81
BE-300			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				

FOUNDATION DESIGN TABLE

TYPE OF SOIL	DESIGN DEPTH OF FOUNDATION		REINFORCEMENT IN FOUNDATION			
	SINGLE ARM D	TWIN ARM D	SINGLE ARM		TWIN ARM	
			VERT BARS	SPIRAL	VERT BARS	SPIRAL
SOFT CLAY	13'-0" (3.962 m)	15'-0" (4.572 m)	8-#6X12'-6" (3.810 m)	#3X122' (37.186 m)	8-#6X14'-3" (4.343 m)	#3X141' (42.977 m)
MEDIUM CLAY	9'-6" (2.896 m)	10'-9" (3.277 m)	8-#6X9'-0" (2.743 m)	#3X90' (27.432 m)	8-#6X10'-0" (3.048 m)	#3X100' (30.480 m)
STIFF CLAY	7'-0" (2.134 m)	8'-0" (2.438 m)	8-#6X6'-6" (1.981 m)	#3X66' (20.112 m)	8-#6X7'-6" (2.286 m)	#3X76' (23.165 m)
LOOSE SAND	9'-0" (2.743 m)	10'-0" (3.048 m)	8-#6X8'-6" (2.591 m)	#3X85' (25.908 m)	8-#6X9'-6" (2.896 m)	#3X94' (28.651 m)
MEDIUM SAND	8'-3" (2.515 m)	9'-0" (2.743 m)	8-#6X8'-0" (2.438 m)	#3X78' (23.774 m)	8-#6X8'-6" (2.591 m)	#3X85' (25.908 m)
DENSE SAND	7'-9" (2.362 m)	9'-0" (2.743 m)	8-#6X7'-6" (2.286 m)	#3X73' (22.250 m)	8-#6X8'-6" (2.591 m)	#3X85' (25.908 m)
ROCK OR SOLIDIFIED SLAG	5'-0" (1.524 m)	5'-0" (1.524 m)	NONE	NONE	NONE	NONE

OFFSET SCHEDULE

SEWER DIAM. d IN.	PILE OFFSET from Q-MED'N FT.	LENGTH of BAR a FT.
UP TO 24" (609.6 mm)	3'-3" (0.991 m)	#6 x 5'-3" (1.600 m)
27" (685.8 mm) TO 36" (914.4 mm)	3'-9" (1.143 m)	5'-9" (1.753 m)
42" (1066.8 mm) TO 48" (1219.2 mm)	4'-6" (1.372 m)	6'-6" (1.981 m)
54" (1371.6 mm) TO 60" (1524.0 mm)	5'-0" (1.524 m)	7'-0" (2.134 m)
66" (1676.4 mm) TO 72" (1828.8 mm)	5'-6" (1.676 m)	7'-6" (2.286 m)

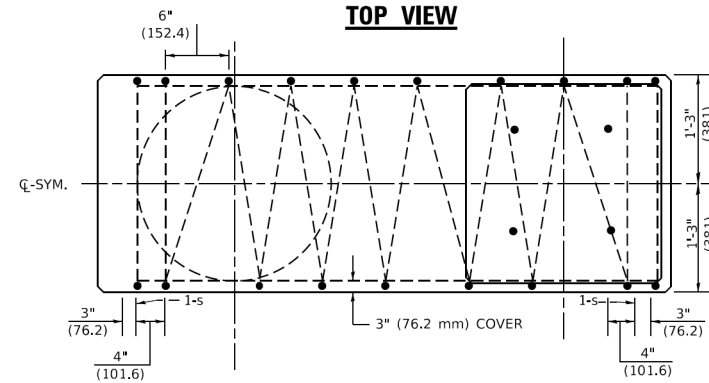
BILL OF MATERIAL

MARK	NO.	SIZE	LENGTH	SHAPE
a	10	6	SEE BELOW	—
s	12	4	8'-0" (2.438 m)	□
s1	3	3	7'-6" (2.286 m)	□
v1	8	6	2'-9" (0.838 m)	—
v2				

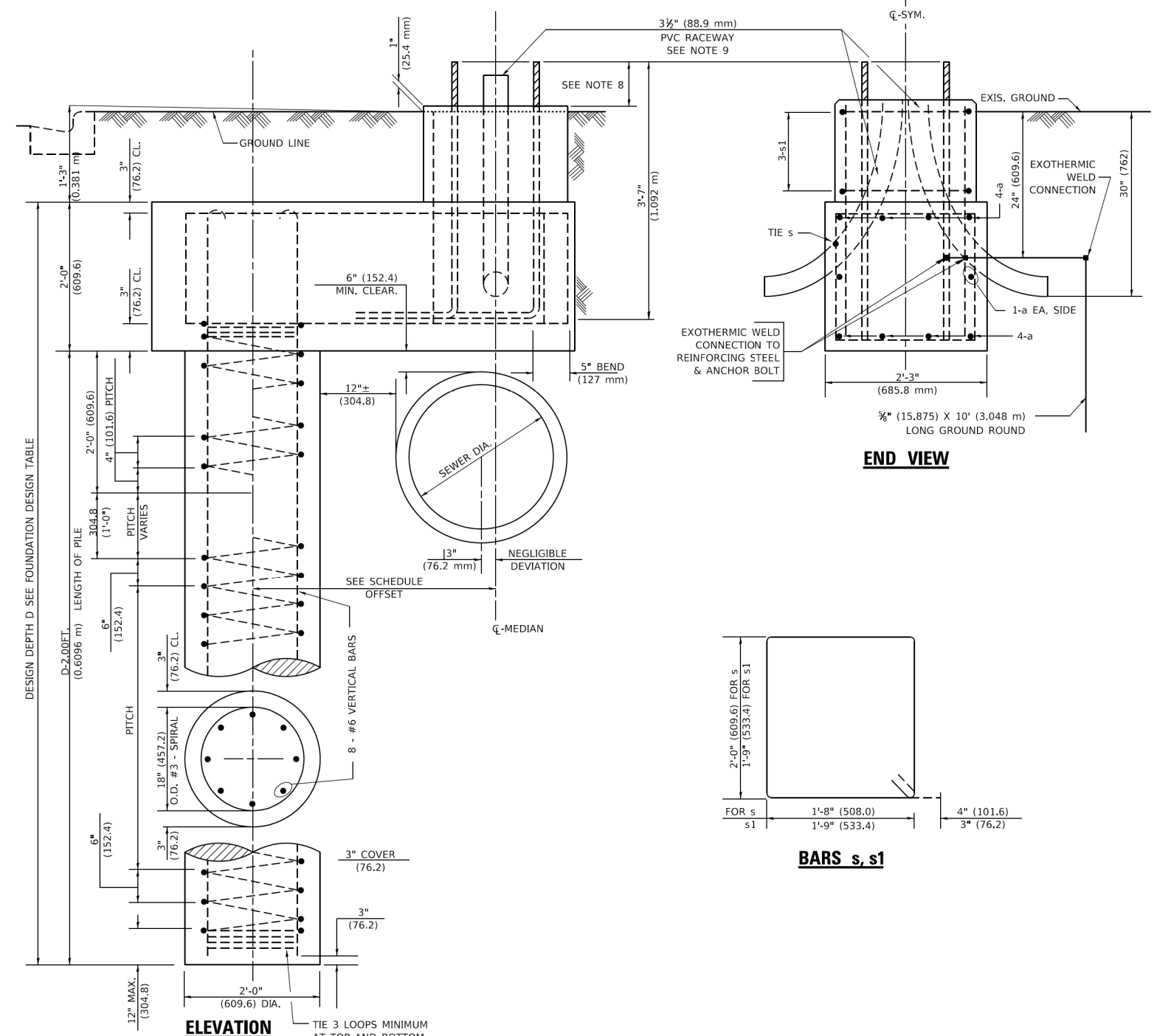
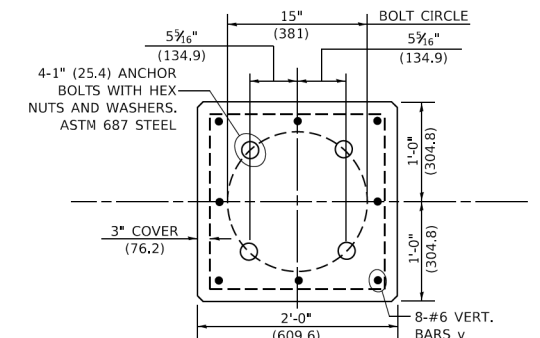
NOTES

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE.
- EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER, 24" (609.6 mm) OR 30" (762.0 mm) IN DIAMETER.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS. IF LIGHT POLE IS MOUNTED WITHOUT BREAKAWAY DEVICE, ANCHOR BOLTS SHALL PROJECT 23#4" (69.9 mm) ABOVE TOP OF THE FOUNDATION. THE CONTRACTOR SHALL CONFIRM ANCHOR BOLT EXTENTION WITH ENGINEER.
- RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.
- THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERECTED.

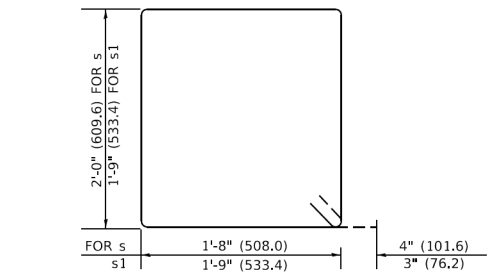
PLAN-CAP BEAM TOP VIEW



TOP VIEW



END VIEW



BARS s, s1

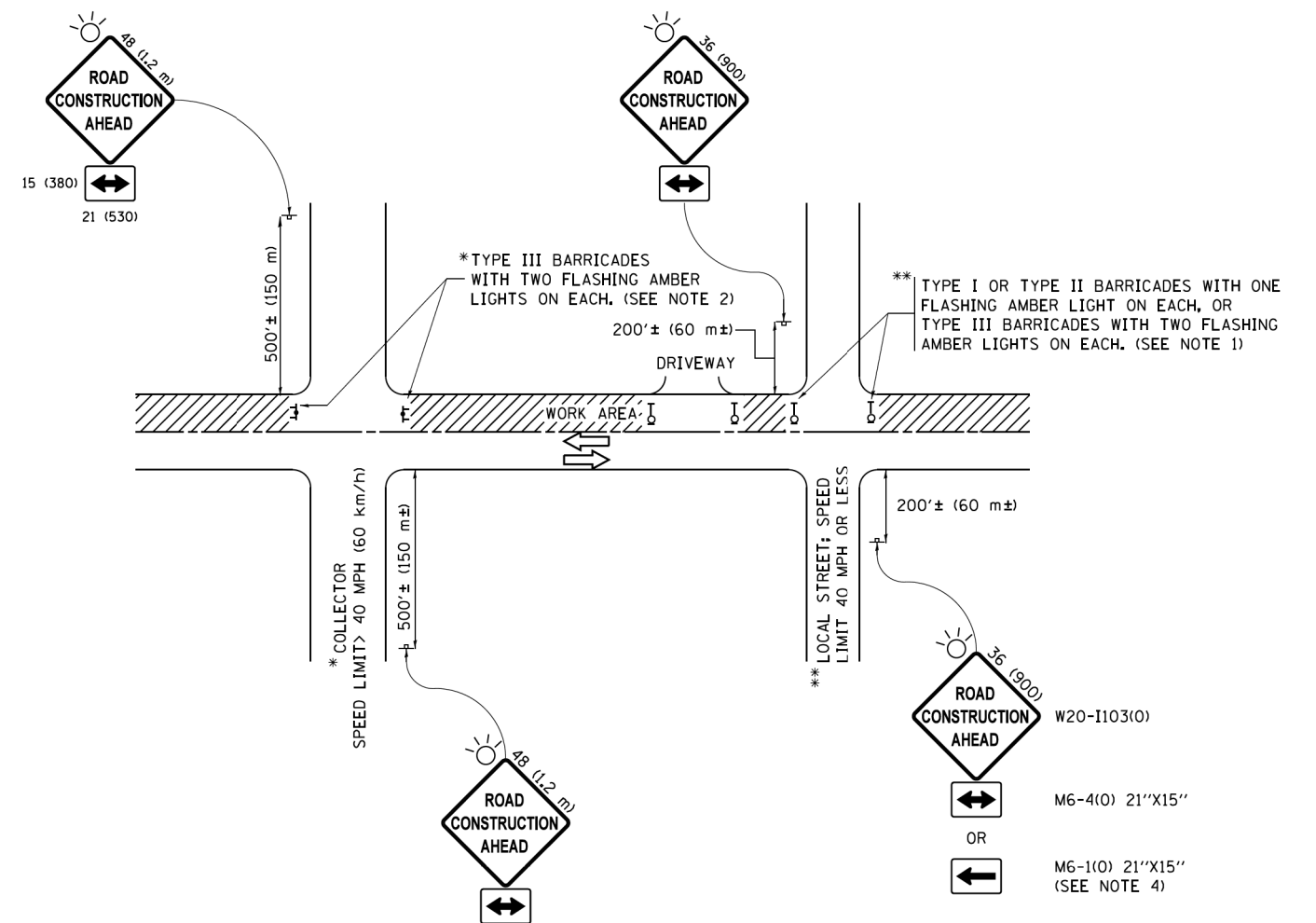
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LIGHT POLE FOUNDATION OFFSET
40' (12.192m) TO 47 1/2' (14.478m) M.H., 15" (381mm) BOLT CIRCLE**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	82
BE310		CONTRACT NO. 61G46		
ILLINOIS		FED. AID PROJECT		

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

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NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

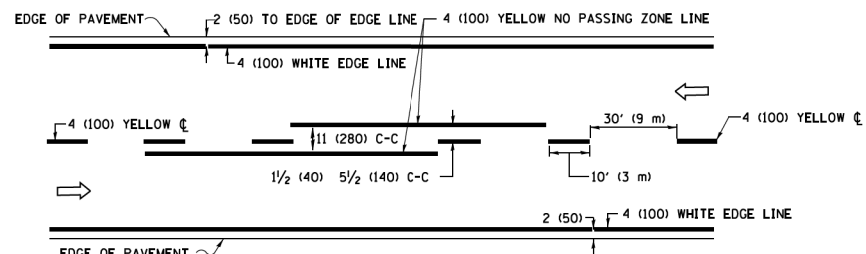
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

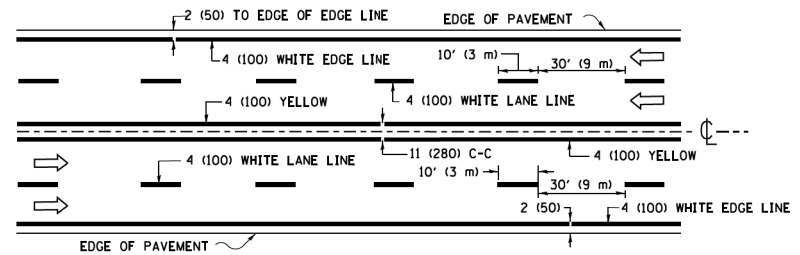
**TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

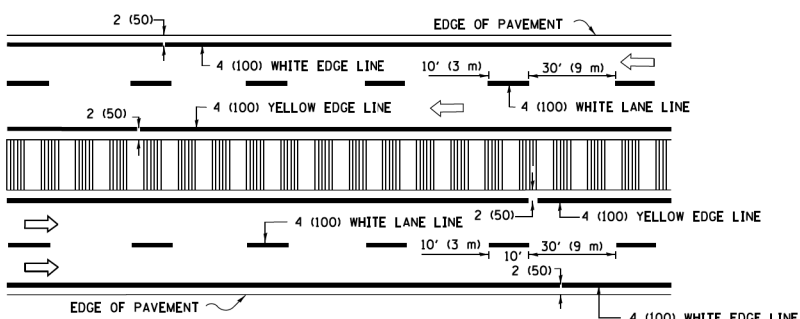
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TC-10			CONTRACT NO. 61G46	
ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY

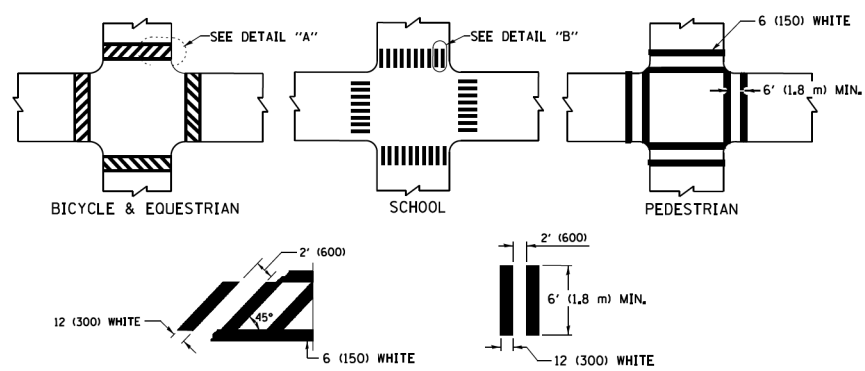


MULTI-LANE UNDIVIDED



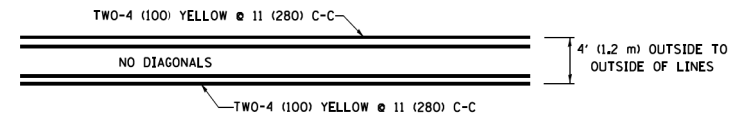
MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

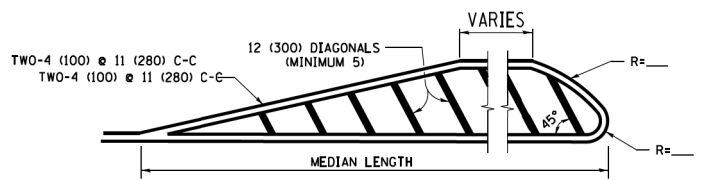


TYPICAL CROSSWALK MARKING

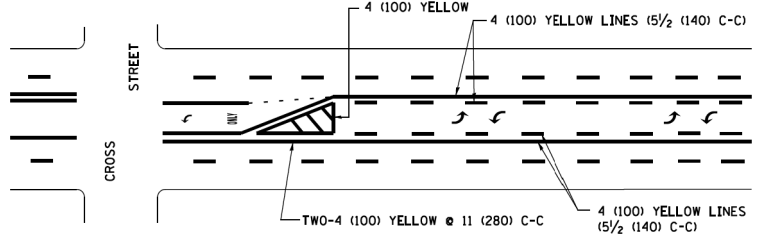
* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



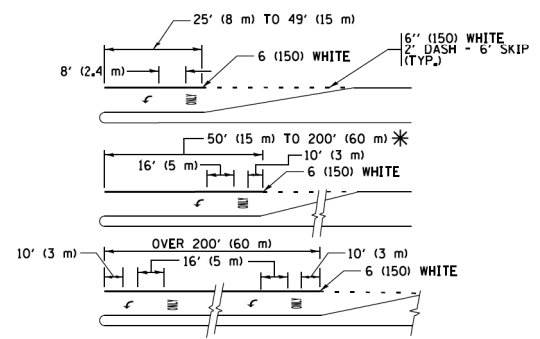
4' (1.2 m) WIDE MEDIANS ONLY



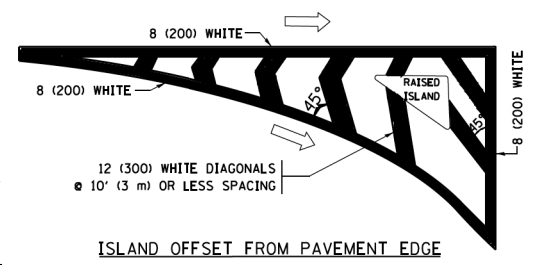
MEDIANS OVER 4' (1.2 m) WIDE



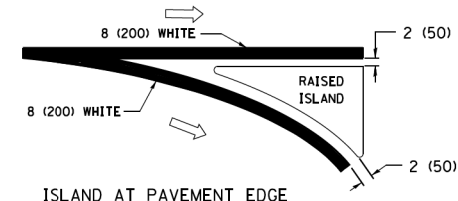
MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING



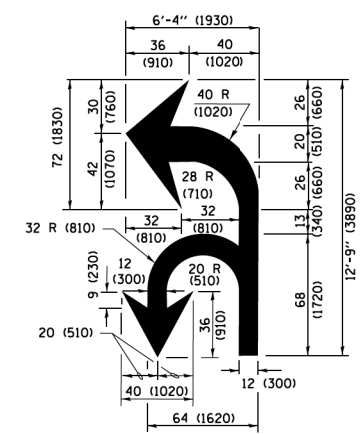
TYPICAL LEFT (OR RIGHT) TURN LANE TYPICAL TURN LANE MARKING



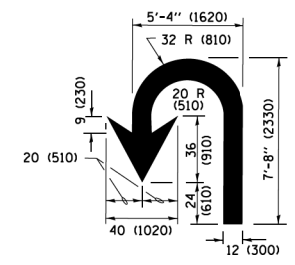
ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

LANE REDUCTION TRANSITION

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
CORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

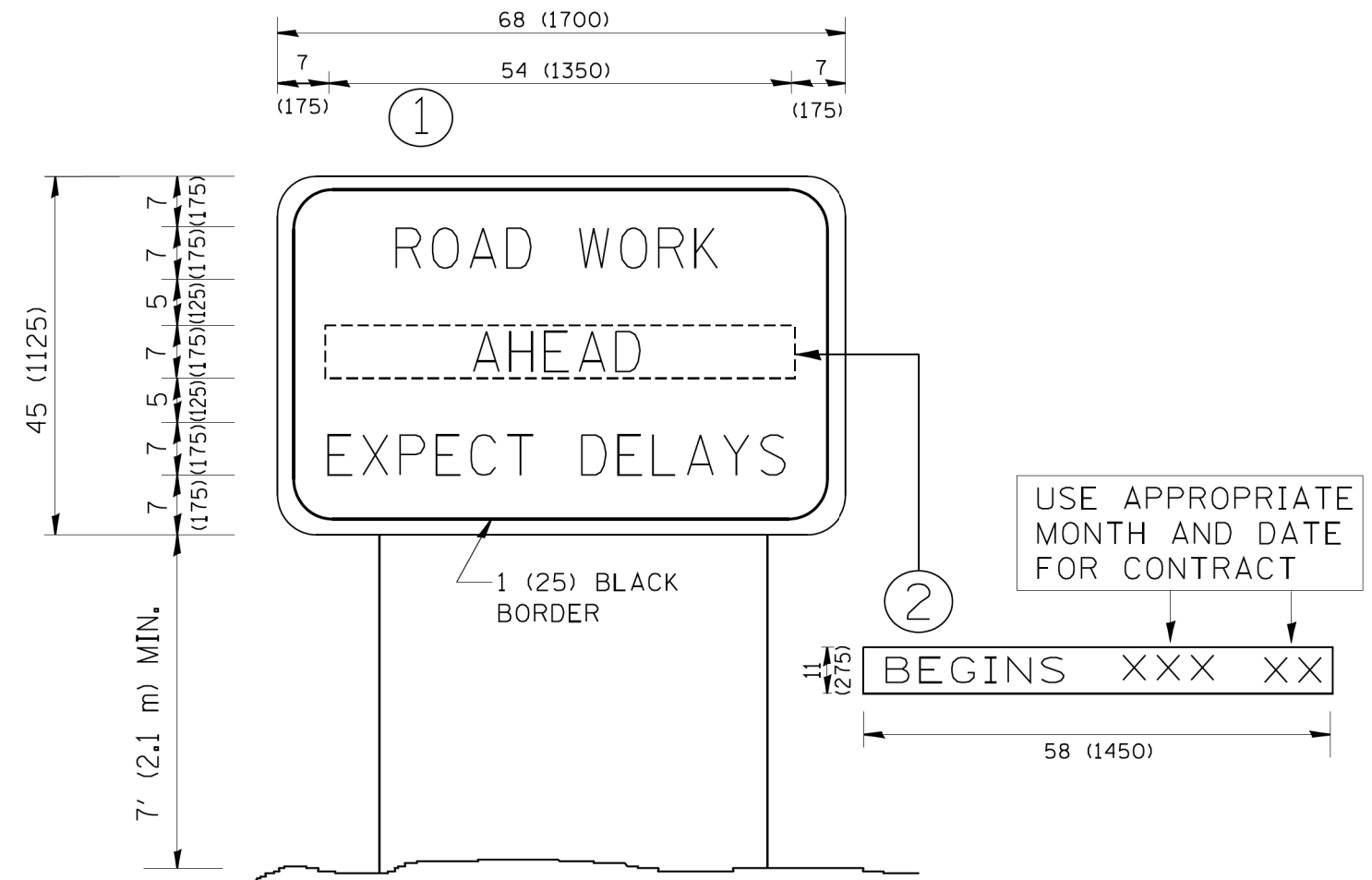
All dimensions are in inches (millimeters) unless otherwise shown.

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		DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET 1	OF 1 SHEETS	STA. TO STA.

F.A.U. RTE. 149	SECTION 17-00025-00-PV	COUNTY LAKE	TOTAL SHEETS 99	SHEET NO. 84
TC-13		CONTRACT NO. 61G46	ILLINOIS/FED. AID PROJECT	



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

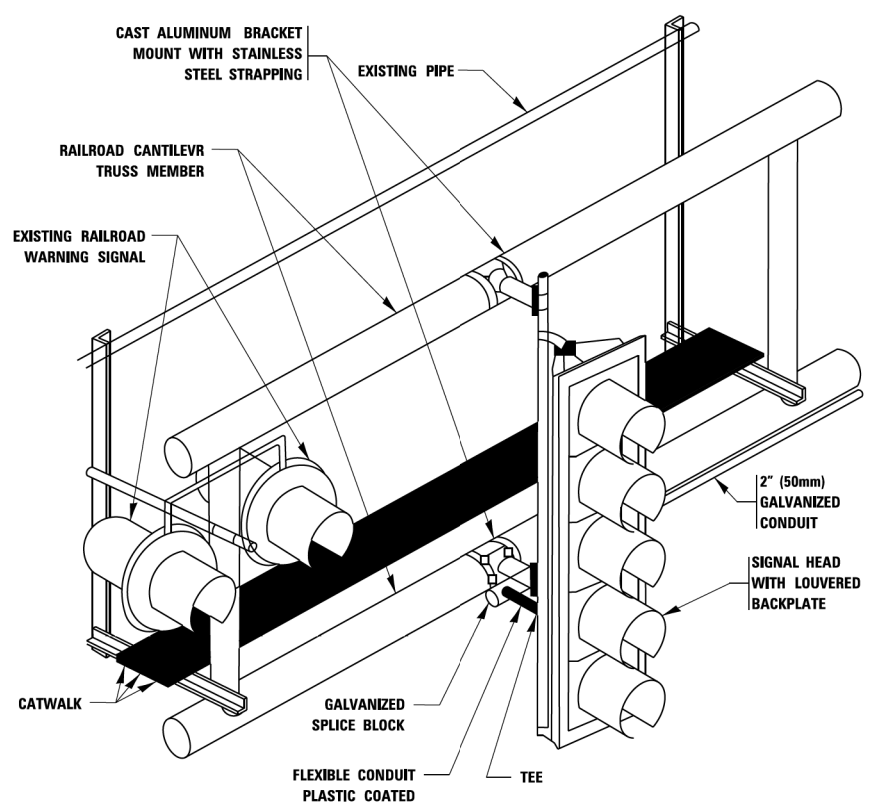
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-22		CONTRACT NO. 61G46		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



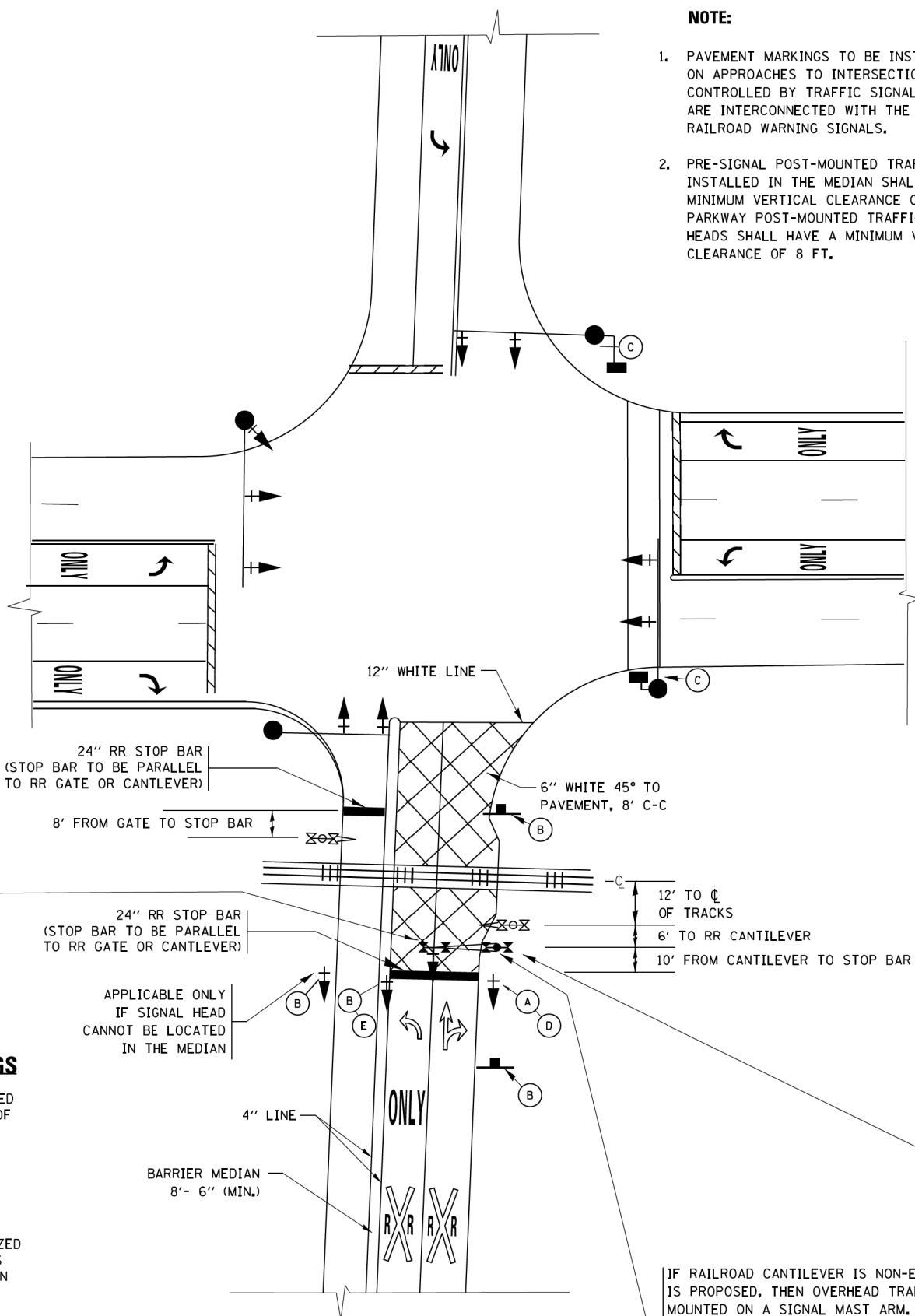
RAILROAD CANTILEVER SIGNAL HEAD MOUNTING
 USE NON-CONDUCTIVE SPACERS BETWEEN THE TRAFFIC SIGNAL EQUIPMENT AND THE RAILROAD CANTILEVER TO PREVENT DISSIMILAR METAL CORROSION
 N.T.S.

SIGNING AND PAVEMENT MARKING AT RAILROAD CROSSINGS

SIGNING AND PAVEMENT MARKING TRAFFIC CONTROL STANDARD (TC-23) HAS BEEN DEVELOPED IN CONSULTATION WITH THE ILLINOIS COMMERCE COMMISSION AND THE U.S. DEPARTMENT OF TRANSPORTATION'S GRADE CROSSING SAFETY TASK FORCE. THIS STANDARD PROVIDES INFORMATION ON UPDATES TO THE PAVEMENT MARKING AND SIGNING DETAILS IN ORDER TO INCORPORATE CHANGES ADOPTED IN THE 2009 NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICE (MUTCD). THESE NEW DETAILS HAVE BEEN STUDIED AND TESTED BY THE DEPARTMENT AND ACCEPTED BY THE ILLINOIS COMMERCE COMMISSION.

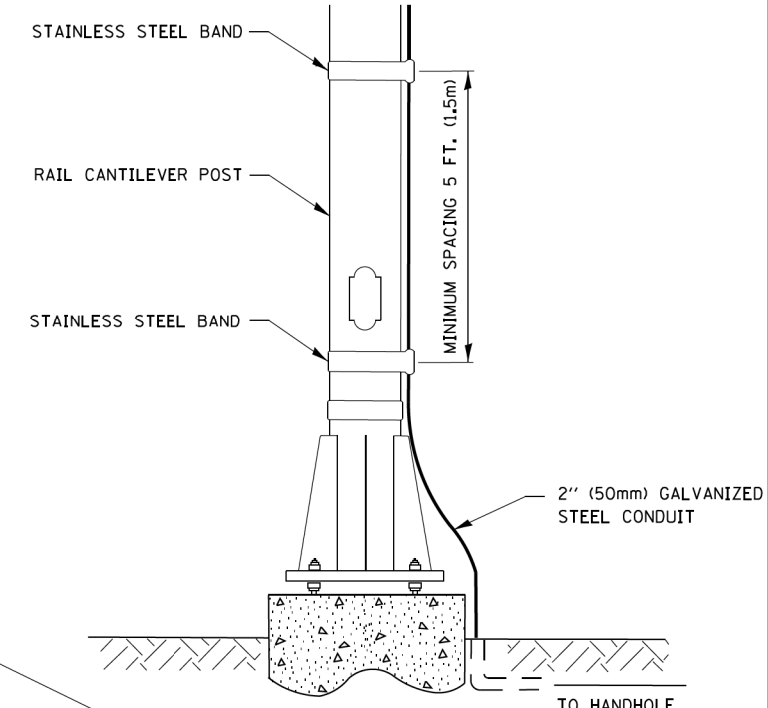
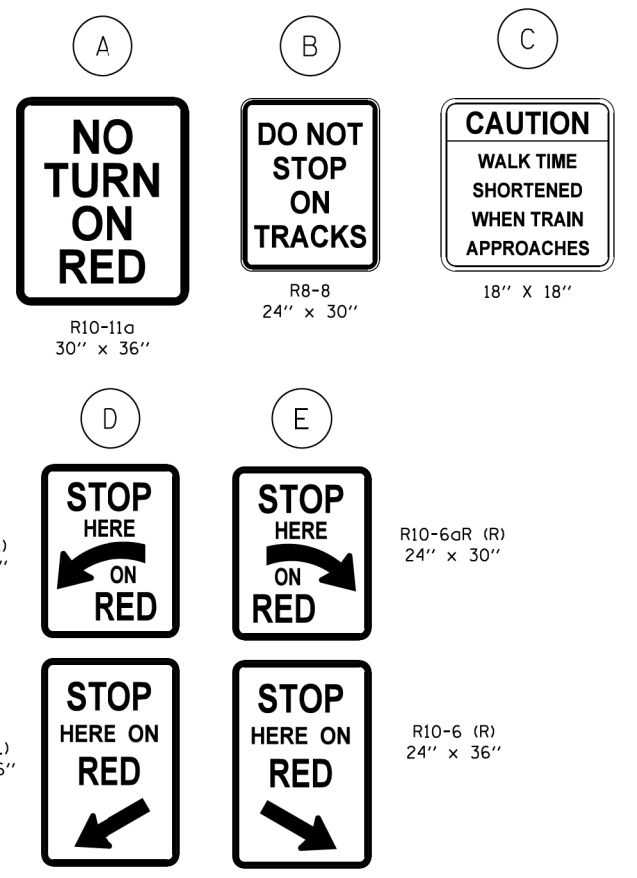
THIS APPLIES TO PROJECTS WHICH INCLUDE RAILROAD INTERCONNECTED TRAFFIC SIGNALS, WITH OR WITHOUT PRE-SIGNALS. THIS STANDARD ALSO APPLIES TO NON-SIGNALIZED INTERSECTIONS THAT ARE WITHIN 81 FEET OF A RAILROAD GRADE CROSSING. THE ILLINOIS SUPPLEMENT TO THE MUTCD SHOULD BE CONSULTED FOR ADDITIONAL INFORMATION ON SIGN REQUIREMENTS AT NON-SIGNALIZED INTERSECTIONS NEAR RAILROAD GRADE CROSSINGS.

THESE DETAILS WILL BE INCLUDED IN A FUTURE UPDATE TO THE BUREAU OF OPERATIONS TRAFFIC POLICIES AND PROCEDURES MANUAL.



SIGNALIZED INTERSECTION WITH NEAR-SIDE TRAFFIC SIGNAL

- NOTE:**
- PAVEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.
 - PRE-SIGNAL POST-MOUNTED TRAFFIC SIGNAL HEADS INSTALLED IN THE MEDIAN SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 4.5 FT. PARKWAY POST-MOUNTED TRAFFIC SIGNAL HEADS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 8 FT.



SIGNAL CONDUIT CONNECTION TO RAIL CANTILEVER DETAIL

USE NON-CONDUCTIVE SPACERS BETWEEN THE TRAFFIC SIGNAL EQUIPMENT AND THE RAILROAD CANTILEVER TO PREVENT DISSIMILAR METAL CORROSION.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

IF RAILROAD CANTILEVER IS NON-EXISTANT AND NONE IS PROPOSED, THEN OVERHEAD TRAFFIC SIGNAL TO BE MOUNTED ON A SIGNAL MAST ARM. SIGNAL MAST ARM AND SIGNAL HEADS SHALL BE INSTALLED AS CLOSE AS PRACTICABLE TO THE RAILROAD TRACKS WITHOUT OBSTRUCTING ANY RAILROAD WARNING DEVICES. SIGNAL MAST ARM SHALL BE AT LEAST 12 FT. FROM NEAREST RAIL.

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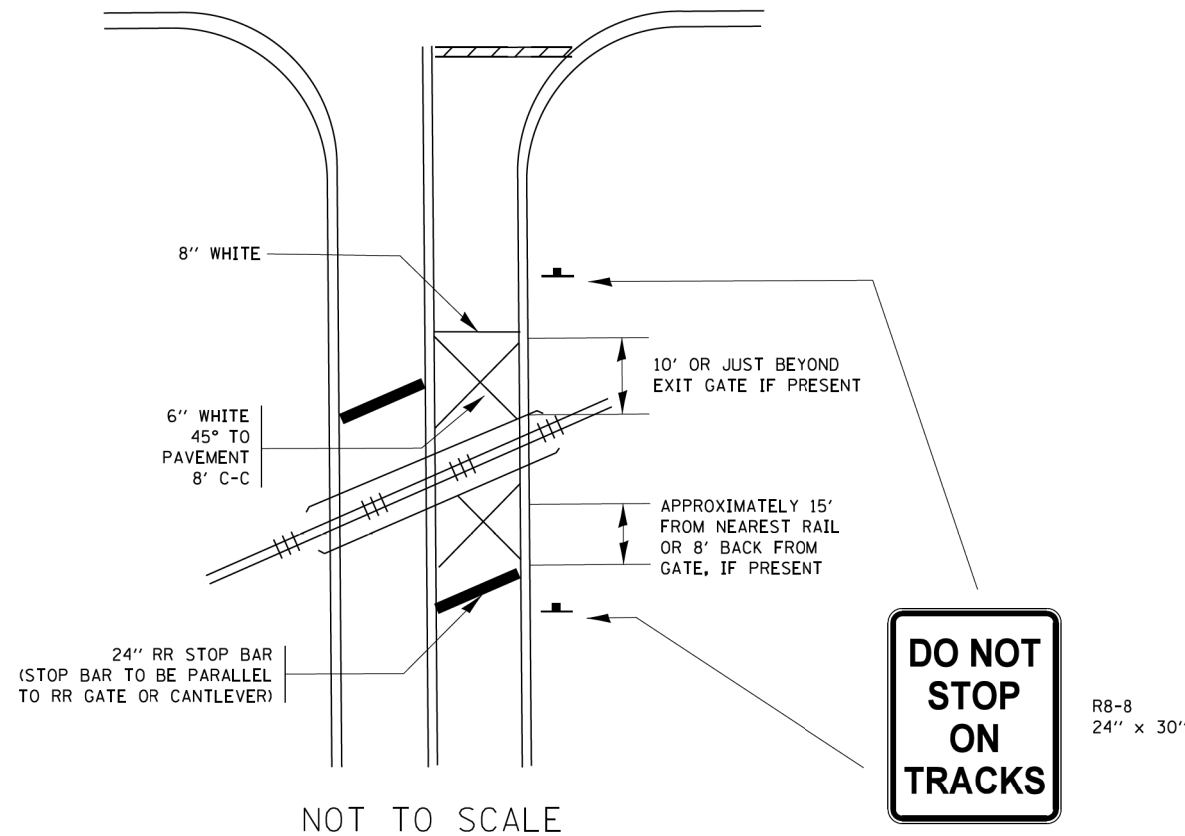
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS			
SCALE: NONE	SHEET 1	OF 2 SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-0025-00-PV	LAKE	99	86
TC-23			CONTRACT NO. 61G46	
ILLINOIS/FED. AID PROJECT				

TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS

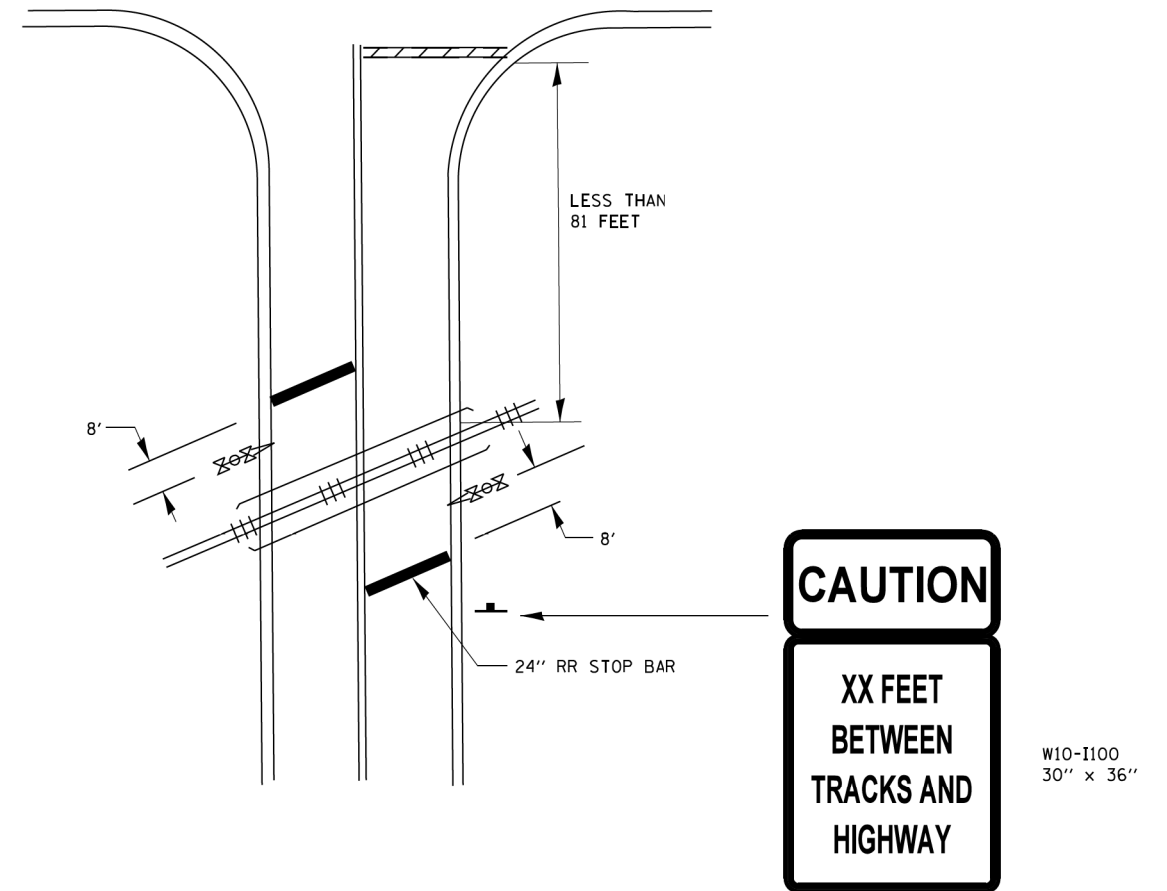
WITH SIGNALIZED INTERSECTION



NOTE:

1. PAVEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.
2. WHERE NEAR-SIDE TRAFFIC SIGNALS ARE USED THE PAVEMENT MARKINGS EXTEND TO THE INTERSECTION. (SEE DETAIL FOR PRE-SIGNALS).

WITH NON-SIGNALIZED INTERSECTION 81' OR LESS TO CLOSEST RAIL



NOTE:

1. DISTANCE TO BE SHOWN ON SIGN MEASURED FROM A POINT 6 FEET FROM THE RAIL CLOSEST TO THE INTERSECTION OR FROM THE CLOSEST POINT ALONG THE EXIT GATE IF PRESENT OVER THE ROADWAY WHEN IN THE LOWERED POSITION TO THE STOP BAR OR CROSSWALK, WHICHEVER IS CLOSEST, ROUNDED DOWN TO THE NEAREST 5 FEET. WHERE THERE IS NO STOP LINE, MEASURE TO POINT WHERE DRIVER HAS A VIEW OF APPROACHING TRAFFIC.
2. THE CLEARANCE SIGN IS ALSO TO BE USED AS AN INTERIM MEASURE AT LOCATIONS WITH INTERCONNECTED INTERSECTION TRAFFIC SIGNALS WHERE IT IS PLANNED TO CHANGE THEM TO NEAR-SIDE SIGNALS AT A FUTURE TIME. IN THIS CASE, THE DISTANCE TO BE SHOWN ON THE SIGN IS MEASURED FROM THE EDGE OF THE STRIPED-OUT AREA INSTEAD OF 6 FEET FROM THE RAIL. THE SIGN IS TO BE REMOVED WHEN THE NEAR-SIDE SIGNALS ARE INSTALLED AND THE PAVEMENT MARKING EXTEND TO THE INTERSECTION.

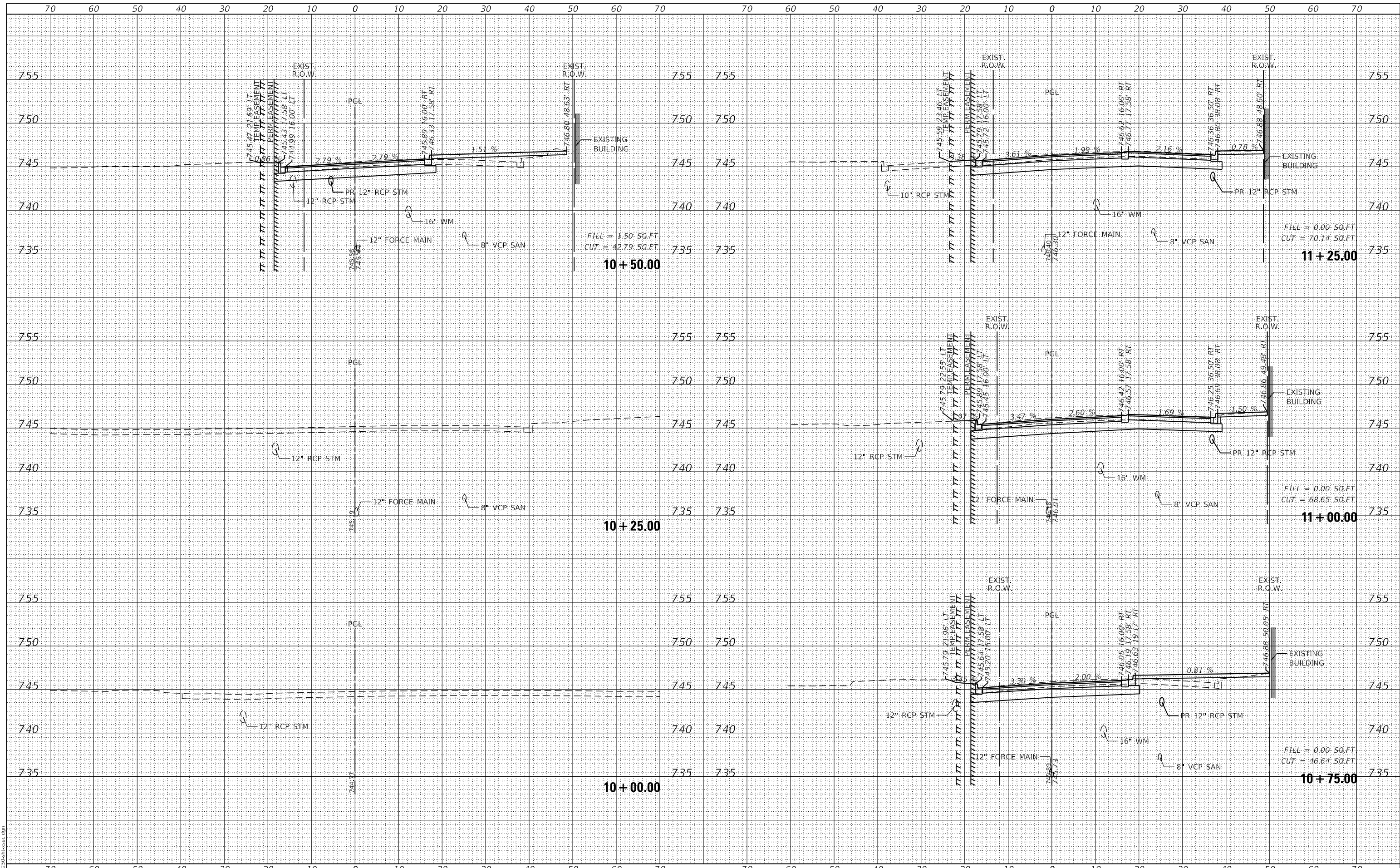
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.

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	PLOT DATE = 1/3/2017					ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
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GHA GEWALT HAMILTON ASSOCIATES, INC.
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

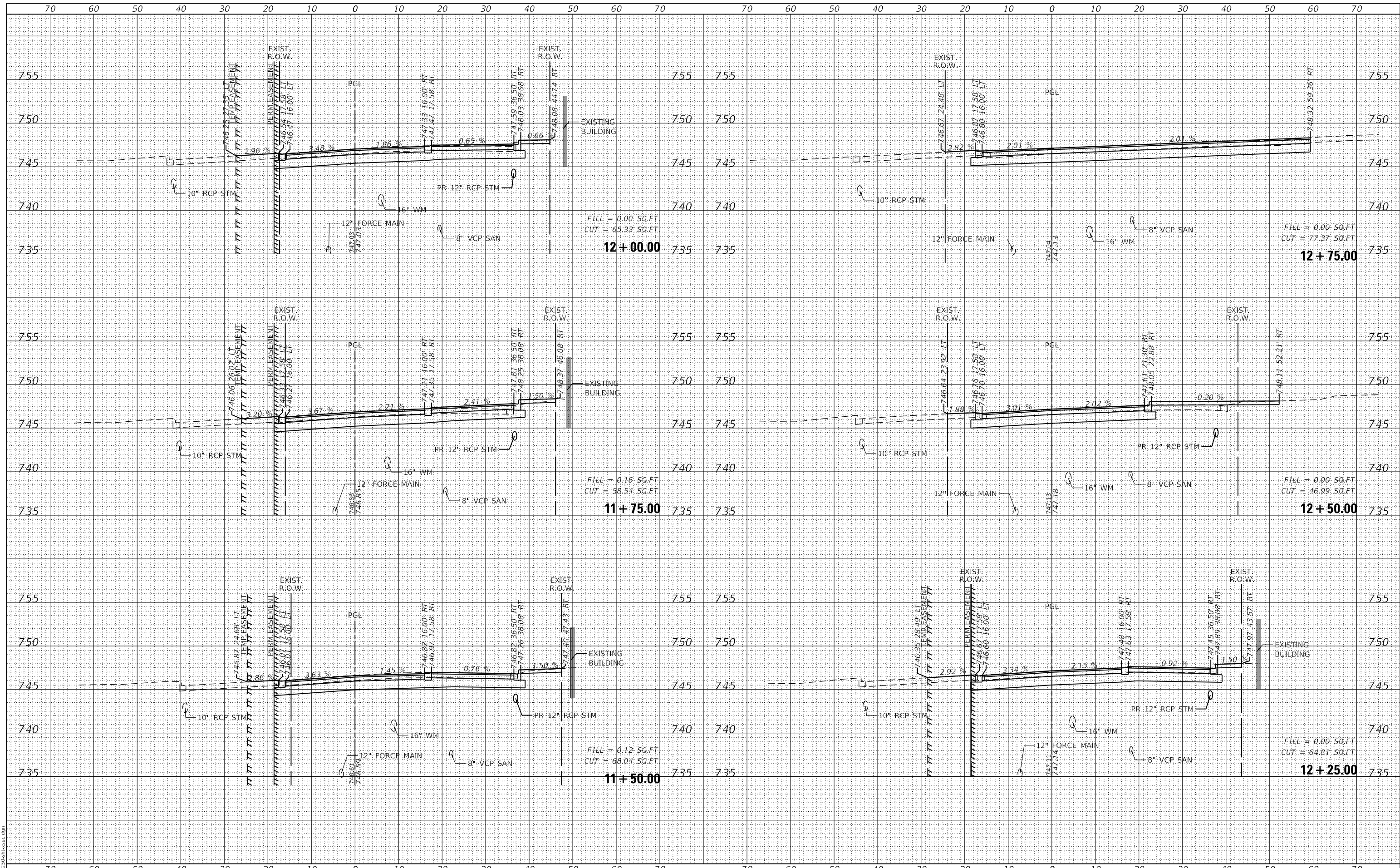
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STA. 10+00.00	TO STA. 11+25.00

COUNTY	TOTAL SHEETS	SHEET NO.
LAKE	99	88
CONTRACT NO. 61G46		
ILLINOIS FED. AID PROJECT		

DATE	
BY	
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NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED

GHA GEWALT HAMILTON ASSOCIATES, INC.
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REVISD	-
REVISD	-
REVISD	-
REVISD	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

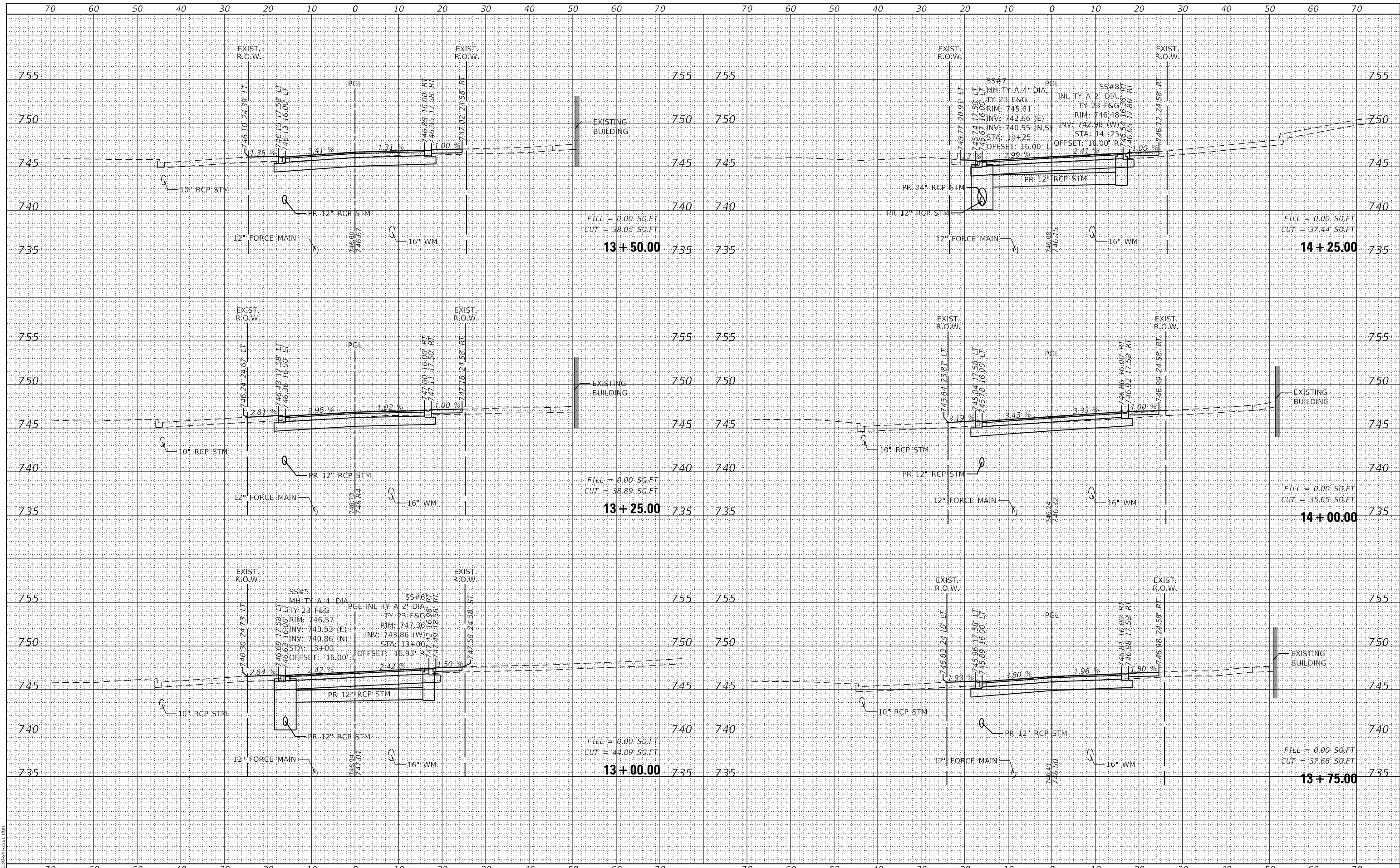
CROSS SECTIONS	
F.A.U. RTE.	SECTION
149	17-00025-00-PV
SCALE: H:1"=10'	
SHEET 2 OF 12 SHEETS	STA. 11+50.00 TO STA. 12+75.00

TOTAL SHEETS	SHEET NO.
99	89
CONTRACT NO. 61G46	
ILLINOIS FED. AID PROJECT	

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: XS_SHEET_temporary_model_name_3
 FILE NAME: 4870-250-shr-xsec.dgn



FILE NAME =	USER NAME = mcobb	DESIGNED - MGC	REVISED -
4870-250-shr-xsec.dgn		DRAWN - PJS	REVISED -
4870.25		CHECKED - KLB	REVISED -
XS_SHEET_temporary_model_name_3		DATE - 8/25/2020	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

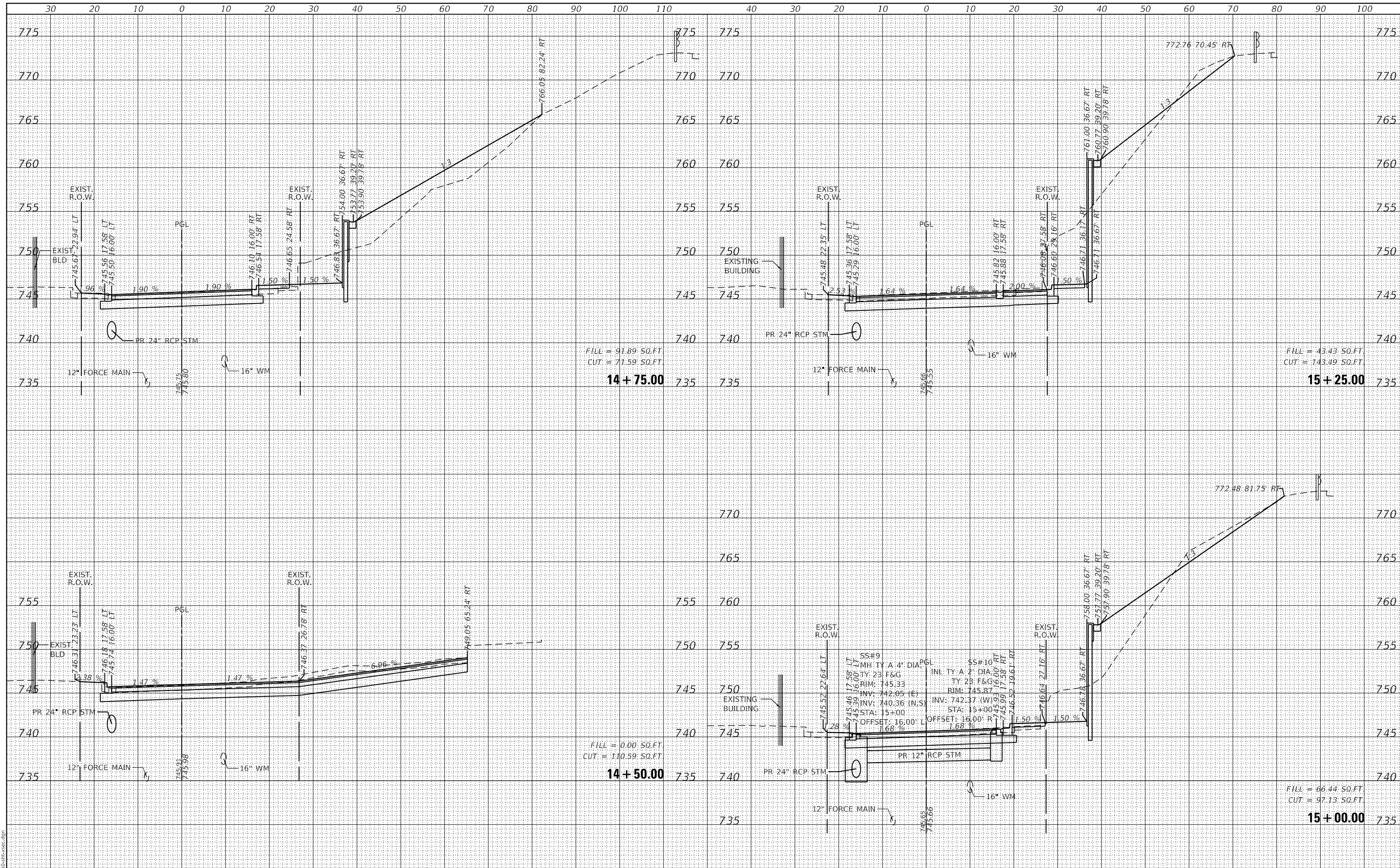
CROSS SECTIONS	
F.A.U. RTE.	SECTION
149	17-00025-00-PV
SCALE: H:1"=10'	SHEET 3 OF 12 SHEETS
STA. 13+00.00	TO STA. 14+25.00

COUNTY	TOTAL SHEETS	SHEET NO.
LAKE	99	90
CONTRACT NO. 61G46		
ILLINOIS FED. AID PROJECT		

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: XS_SHEET_temporary_model_name_4
 FILE NAME: 4870-250-shr-xsec.dgn



FILE NAME =	USER NAME = mcobb	DESIGNED - MGC	REVISED -
4870-250-shr-xsec.dgn		DRAWN - PJS	REVISED -
4870.25		CHECKED - KLB	REVISED -
XS_SHEET_temporary_model_name_4		DATE - 8/25/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

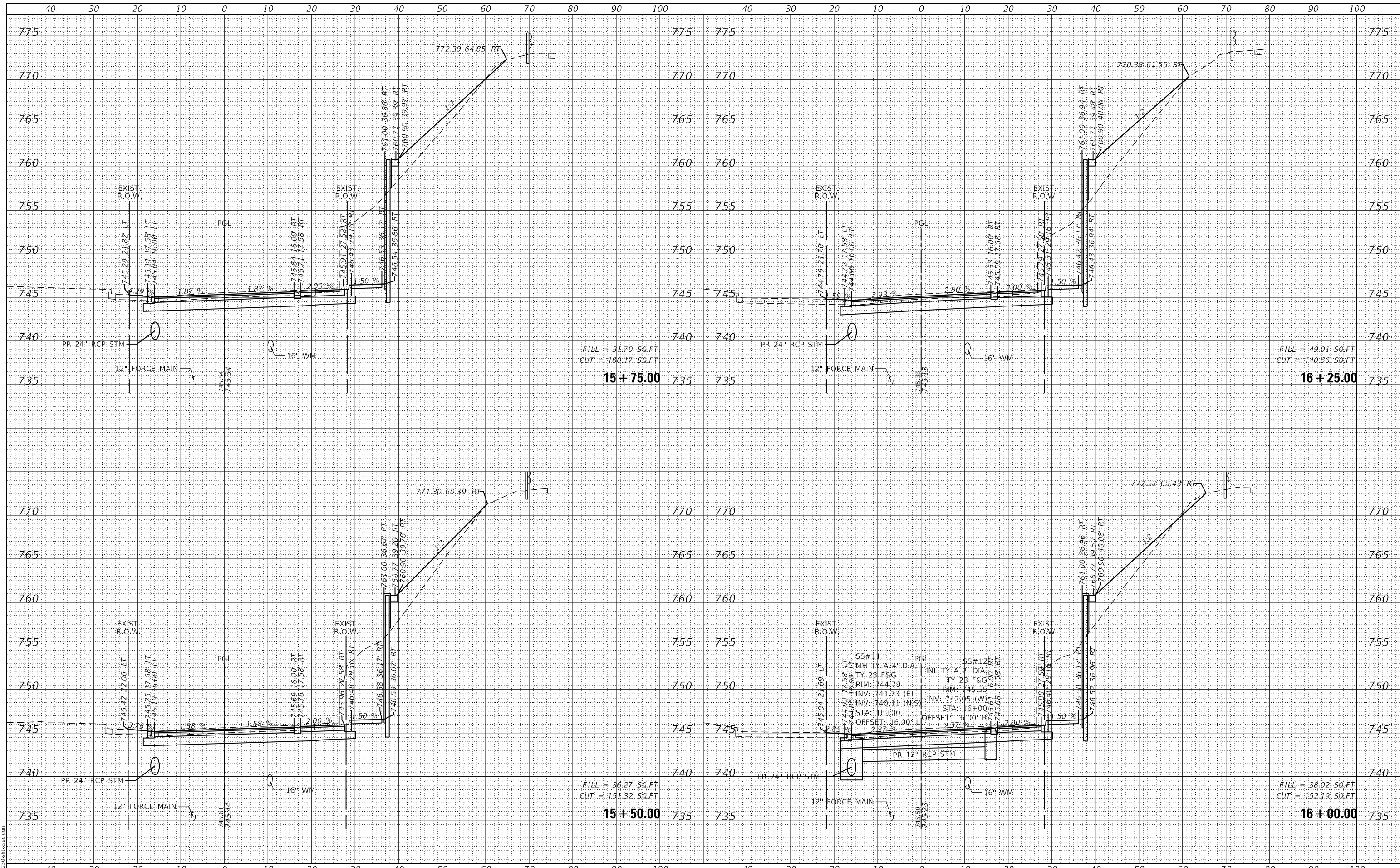
CROSS SECTIONS	
F.A.U. RTE.	SECTION
149	17-00025-00-PV
SCALE: H:1"=10'	SHEET 4 OF 12 SHEETS
STA. 14+50.00	TO STA. 15+25.00

COUNTY	TOTAL SHEETS	SHEET NO.
LAKE	99	91
CONTRACT NO. 61G46		
ILLINOIS FED. AID PROJECT		

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: XS_SHEET_temporary_model_name_5
 FILE NAME: 4870-250-00-00-00-00.dgn

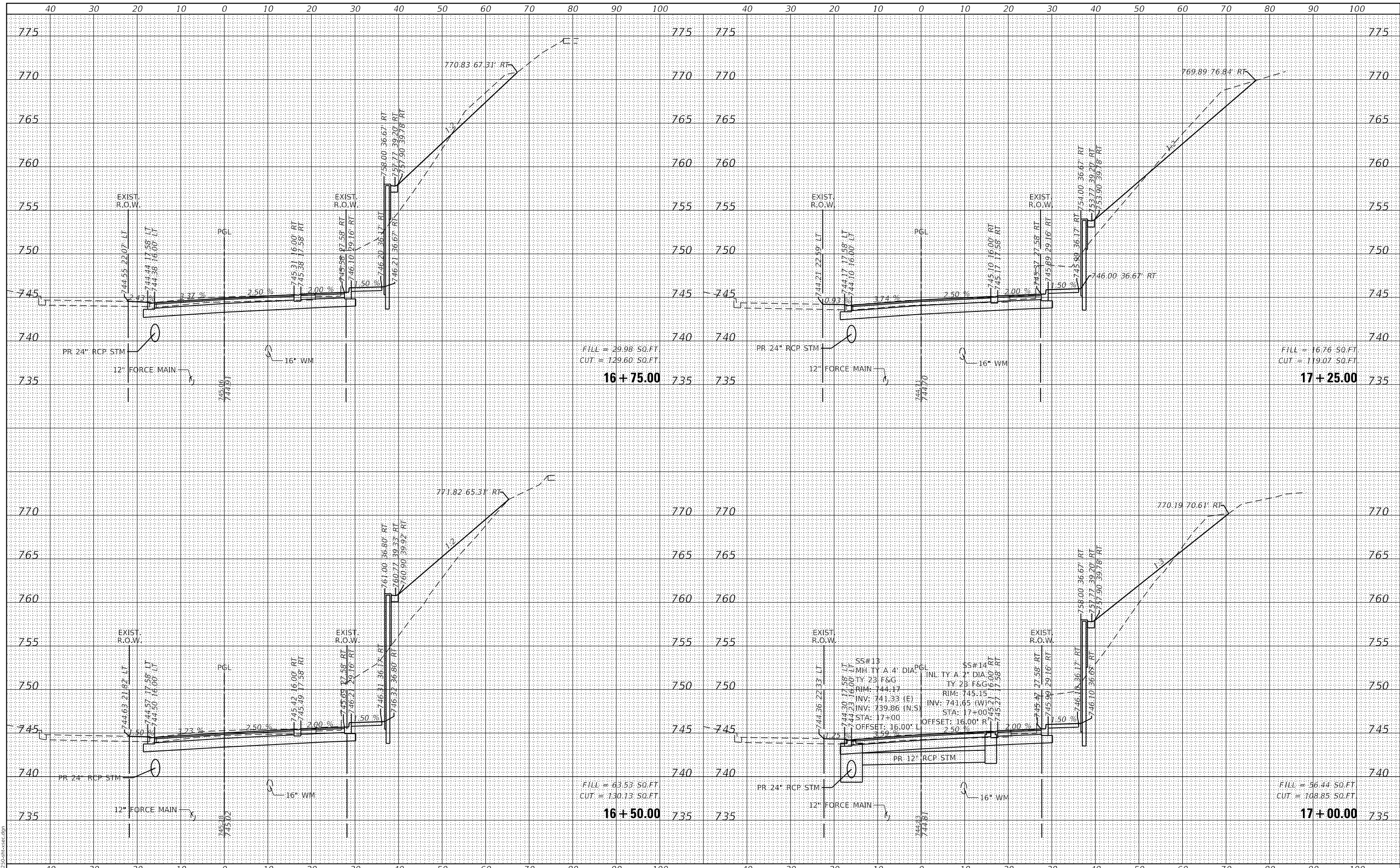


FILE NAME =	USER NAME = mcobb	DESIGNED - MGC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		CROSS SECTIONS		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4870-250-sht-xsec.dgn		DRAWN - PJS	REVISED -			149	17-00025-00-PV	LAKE	99	92		
4870.25	PLOT SCALE = 1:20	CHECKED - KLB	REVISED -	NIPPERSINK BOULEVARD RECONSTRUCTION		SCALE: H:1"=10'		SHEET 5 OF 12 SHEETS		STA. 15+50.00 TO STA. 16+25.00	CONTRACT NO. 61G46	
XS_SHEET_temporary_model_name_5	PLOT DATE = 8/25/2020	DATE - 8/25/2020	REVISED -			ILLINOIS FED. AID PROJECT						

DATE	
BY	
FINAL SURVEY NO.	
SURVEY PLOTTED	
NOTE BOOK	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY NO.	
SURVEY PLOTTED	
NOTE BOOK	
AREAS CHECKED	

GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: XS_SHEET_temporary_model_name_6
 FILE NAME: 4870-250-00-00-00-00.dgn

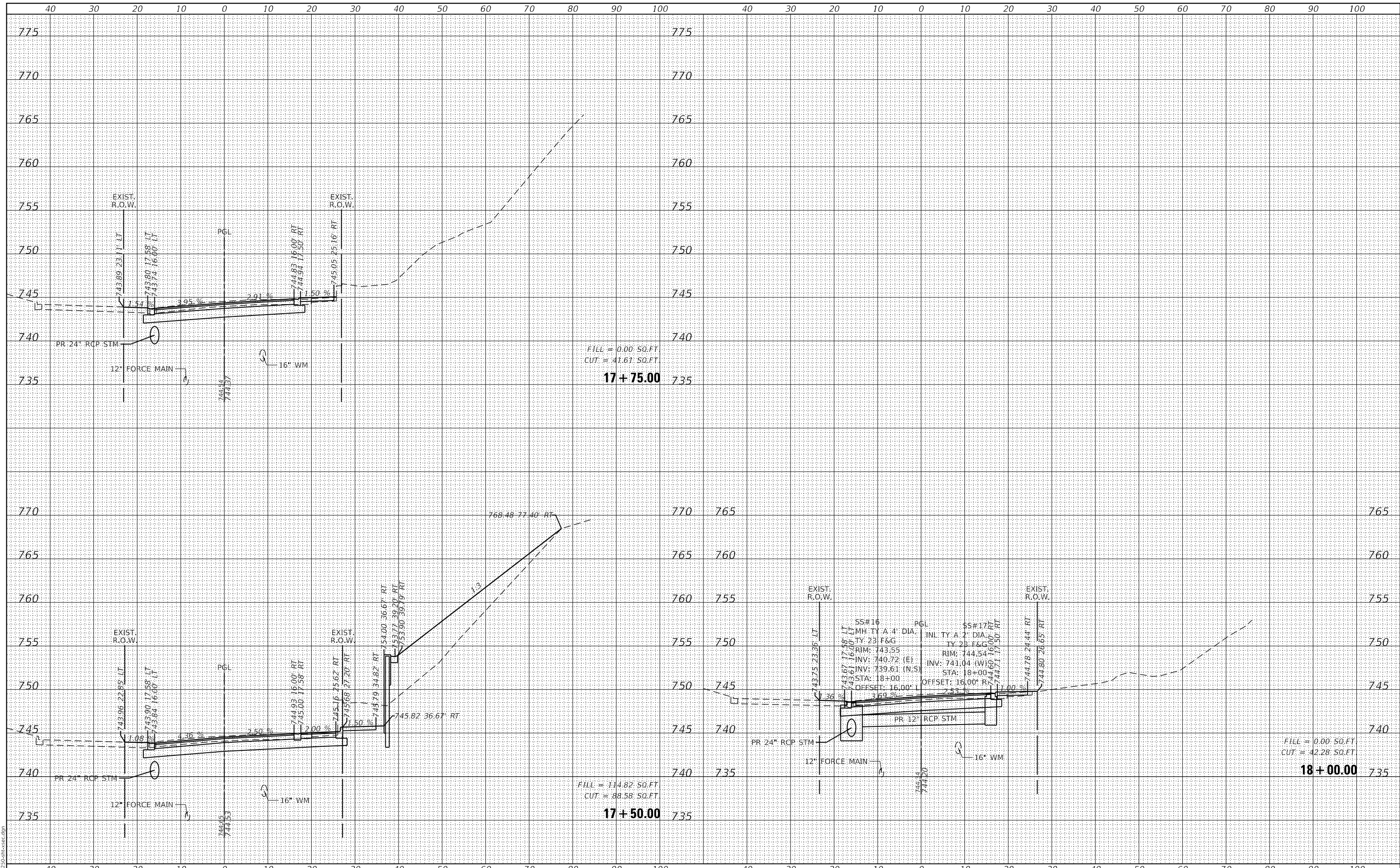


FILE NAME = 4870-250-sht-xsec.dgn	USER NAME = mcobb	DESIGNED - MGC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION CROSS SECTIONS NIPPERSINK BOULEVARD RECONSTRUCTION SCALE: H:1"=10' SHEET 6 OF 12 SHEETS STA. 16+50.00 TO STA. 17+25.00	F.A.U. RTE. 149	SECTION 17-0025-00-PV	COUNTY LAKE	TOTAL SHEETS 99	SHEET NO. 93	
PLOT SCALE = 1:20		CHECKED - KLB	REVISED -		CONTRACT NO. 61G46					
PLOT DATE = 8/25/2020		DATE - 8/25/2020	REVISED -		ILLINOIS FED. AID PROJECT					

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: XS_SHEET_temporary_model_name_7
 FILE NAME: 4870-250-sh-xsec.dgn



FILE NAME =	USER NAME = mcobb
4870-250-sh-xsec.dgn	DESIGNED - MGC
4870.25	DRAWN - PJS
XS_SHEET_temporary_model_name_7	CHECKED - KLB
	DATE - 8/25/2020

REVISIONS	REVISIONS
REVISIONS	REVISIONS
REVISIONS	REVISIONS
REVISIONS	REVISIONS
REVISIONS	REVISIONS

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

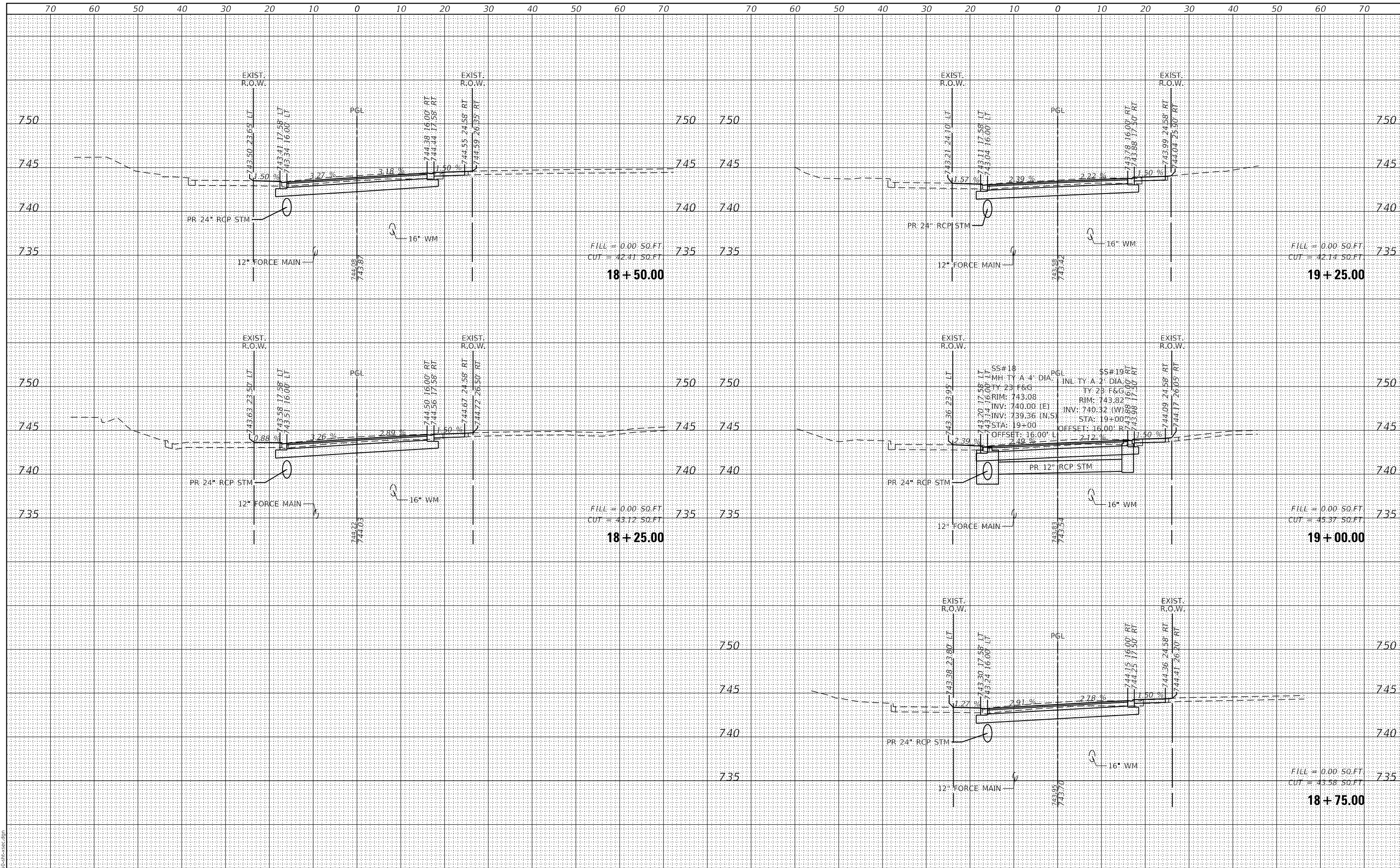
CROSS SECTIONS	
SCALE: H:1"=10'	SHEET 7 OF 12 SHEETS
STA. 17+50.00	TO STA. 18+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	94
				CONTRACT NO. 61G46
ILLINOIS FED. AID PROJECT				

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
FINAL SURVEY	
NOTE BOOK	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	

GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: XS_SHEET_temporary_model_name_3
 FILE NAME: 4870-250-sh-xsec.dgn

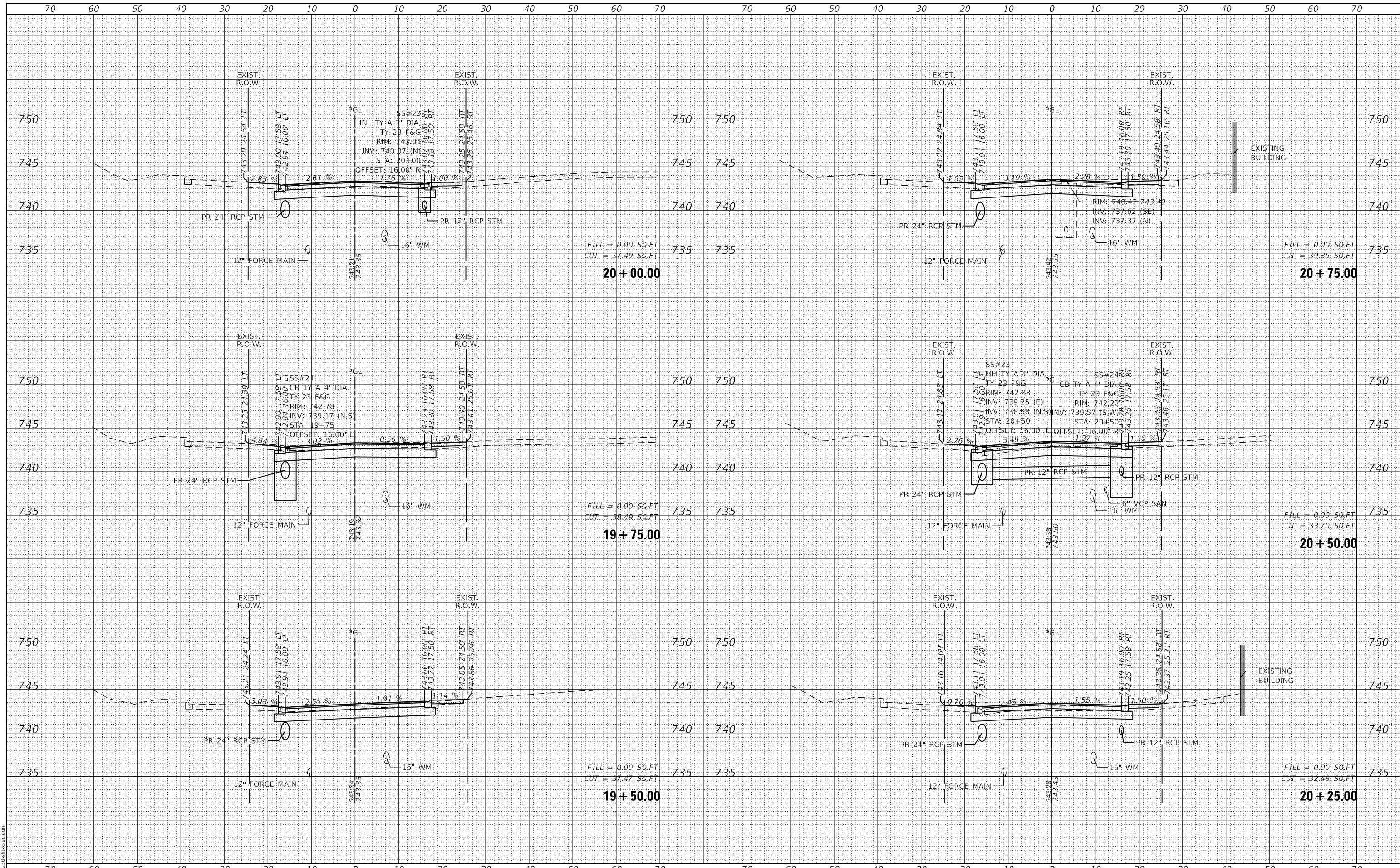


FILE NAME = 4870-250-sh-xsec.dgn	USER NAME = mcobb	DESIGNED - MGC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION CROSS SECTIONS NIPPERSINK BOULEVARD RECONSTRUCTION SCALE: H:1"=10' SHEET 8 OF 12 SHEETS STA. 18+25.00 TO STA. 19+25.00	F.A.U. RTE. 149	SECTION 17-00025-00-PV	COUNTY LAKE	TOTAL SHEETS 99	SHEET NO. 95
PLOT SCALE = 1:20	CHECKED - KLB	REVISED -	REVISED -		CONTRACT NO. 61G46				
PLOT DATE = 8/25/2020	DATE - 8/25/2020	REVISED -	REVISED -		ILLINOIS FED. AID PROJECT				
XS_SHEET_temporary_model_name_3									

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED

GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: XS_SHEET_temporary_model_name_9
 FILE NAME: 4870-250-00-00-00-00.dgn



FILE NAME =	USER NAME = mcobb
4870-250-sht-xsec.dgn	DESIGNED - MGC
4870.25	DRAWN - PJS
XS_SHEET_temporary_model_name_9	CHECKED - KLB
	DATE - 8/25/2020
	REVISIONS
	REVISED -
	REVISED -
	REVISED -
	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

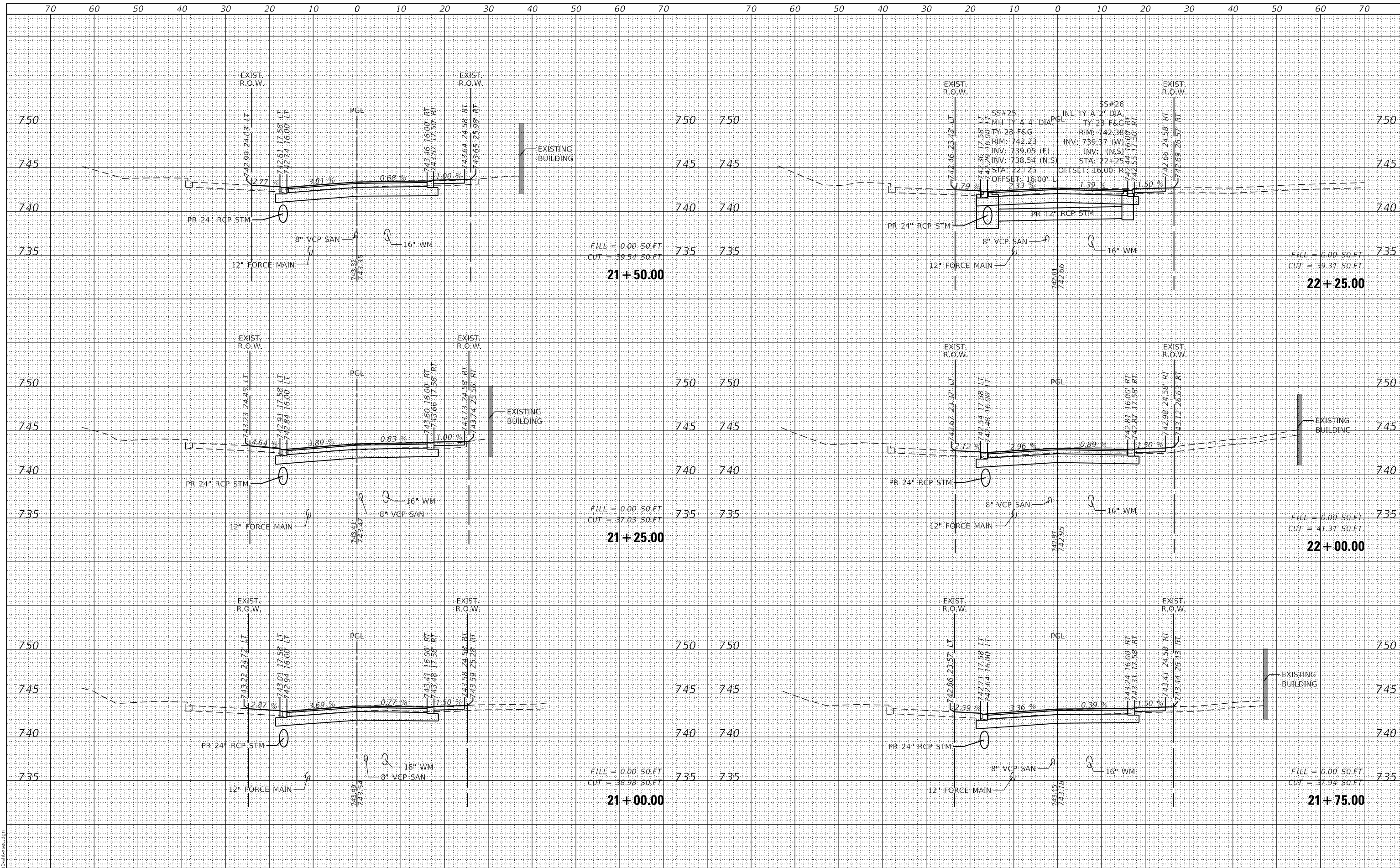
CROSS SECTIONS	
SCALE: H:1"=10'	SHEET 9 OF 12 SHEETS
STA. 19+50.00	TO STA. 20+75.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	96
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: XS_SHEET_temporary_model_name_10
 FILE NAME: 4870-250-00-00-00-00.dgn

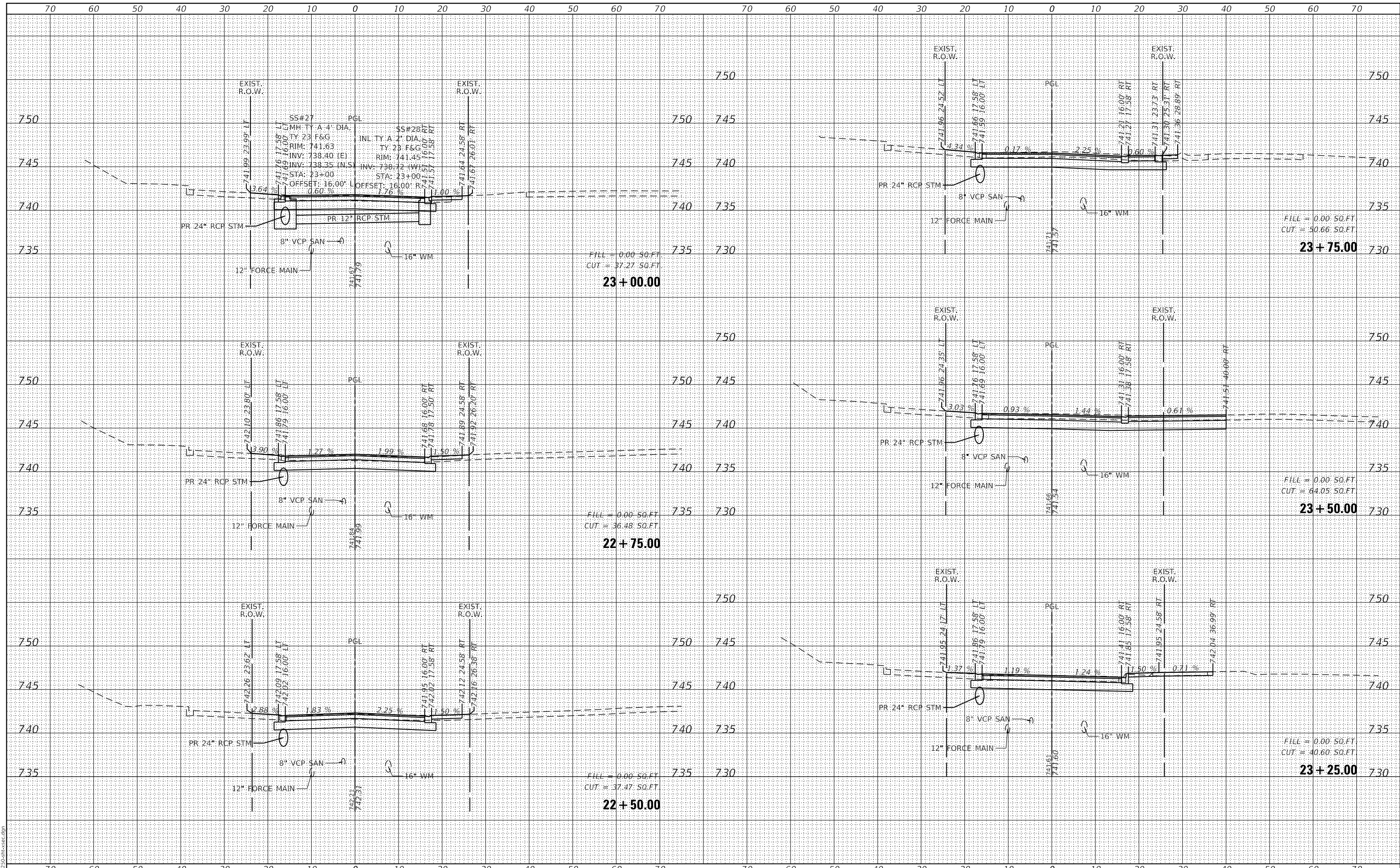


FILE NAME = 4870-250-sht-xsec.dgn	USER NAME = mcobb	DESIGNED - MGC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION CROSS SECTIONS NIPPERSINK BOULEVARD RECONSTRUCTION SCALE: H:1"=10' SHEET 10 OF 12 SHEETS STA. 21+00.00 TO STA. 22+25.00	F.A.U. RTE. 149	SECTION 17-00025-00-PV	COUNTY LAKE	TOTAL SHEETS 99	SHEET NO. 97
PLOT SCALE = 1:20		CHECKED - KLB	REVISED -		CONTRACT NO. 61G46				
PLOT DATE = 8/25/2020		DATE - 8/25/2020	REVISED -		ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED

GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: XS_SHEET_temporary_model_name_11
 FILE NAME: 4870-250-00-00-00-00.dgn

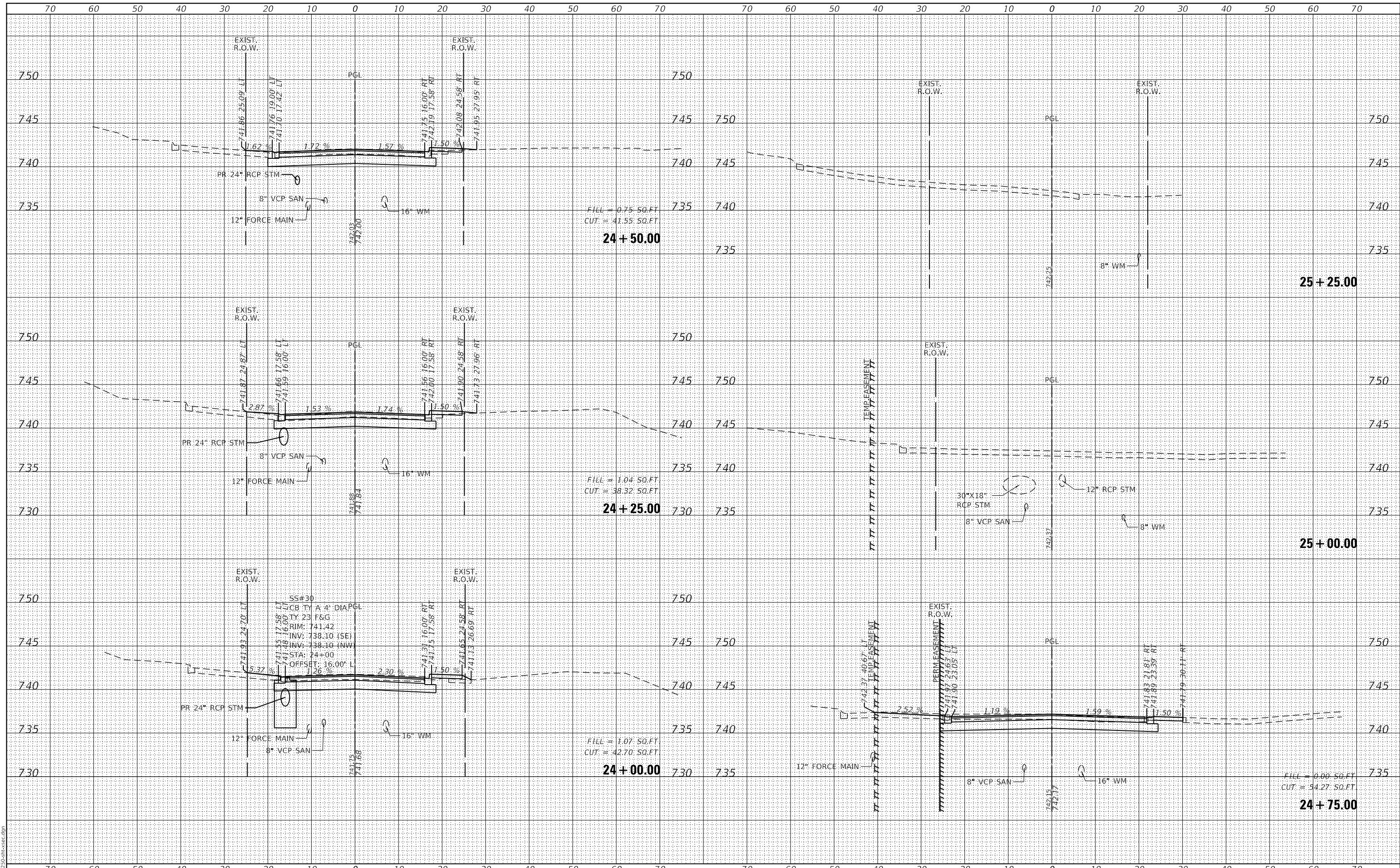


FILE NAME = 4870-250-sht-xsec.dgn	USER NAME = mcobb	DESIGNED - MGC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION CROSS SECTIONS NIPPERSINK BOULEVARD RECONSTRUCTION SCALE: H:1"=10' SHEET 11 OF 12 SHEETS STA. 22+50.00 TO STA. 23+75.00	F.A.U. RTE. 149	SECTION 17-00025-00-PV	COUNTY LAKE	TOTAL SHEETS 99	SHEET NO. 98
PLOT SCALE = 1:20		CHECKED - KLB	REVISED -		CONTRACT NO. 61G46				
PLOT DATE = 8/25/2020		DATE - 8/25/2020	REVISED -		ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED

GHA GEWALT HAMILTON ASSOCIATES, INC.
 MODEL: XS_SHEET_temporary_model_name_12
 FILE NAME: 4870-250-sh-xsec.dgn



FILE NAME =	USER NAME = mcobb
4870-250-sh-xsec.dgn	DESIGNED - MGC
4870.25	DRAWN - PJS
XS_SHEET_temporary_model_name_12	CHECKED - KLB
	DATE - 8/25/2020

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS	
NIPPERSINK BOULEVARD RECONSTRUCTION	
SCALE: H:1"=10'	SHEET 12 OF 12 SHEETS
STA. 24+00.00	TO STA. 25+25.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
149	17-00025-00-PV	LAKE	99	99
CONTRACT NO. 61G46				
ILLINOIS FED. AID PROJECT				