

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2010-048-N	COOK	53	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 60L23		

\* 53+3 = 56

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

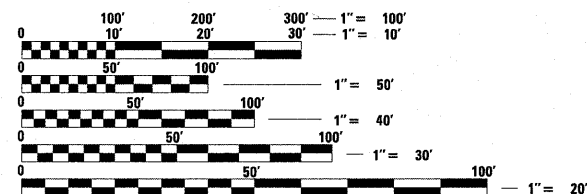
FAU ROUTE 1321: ILL 19 (IRVIN PARK RD)  
AT BARRINGTON RD.  
SECTION: 2010-048-N  
CHANNELIZATION AND TRAFFIC SIGNAL MODERNIZATION  
PROJECT: CMM-1321(021)  
COOK COUNTY  
C-91-659-10

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THIS PROJECT IS LOCATED IN THE  
VILLAGE OF HANOVER PARK

**TRAFFIC DATA**

ILL 19 (IRVIN PARK RD.): 2009 ADT = 33,700  
SPEED LIMIT = 40 MPH  
BARRINGTON RD.: 2006 ADT = 34,200  
SPEED LIMIT = 30 MPH



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

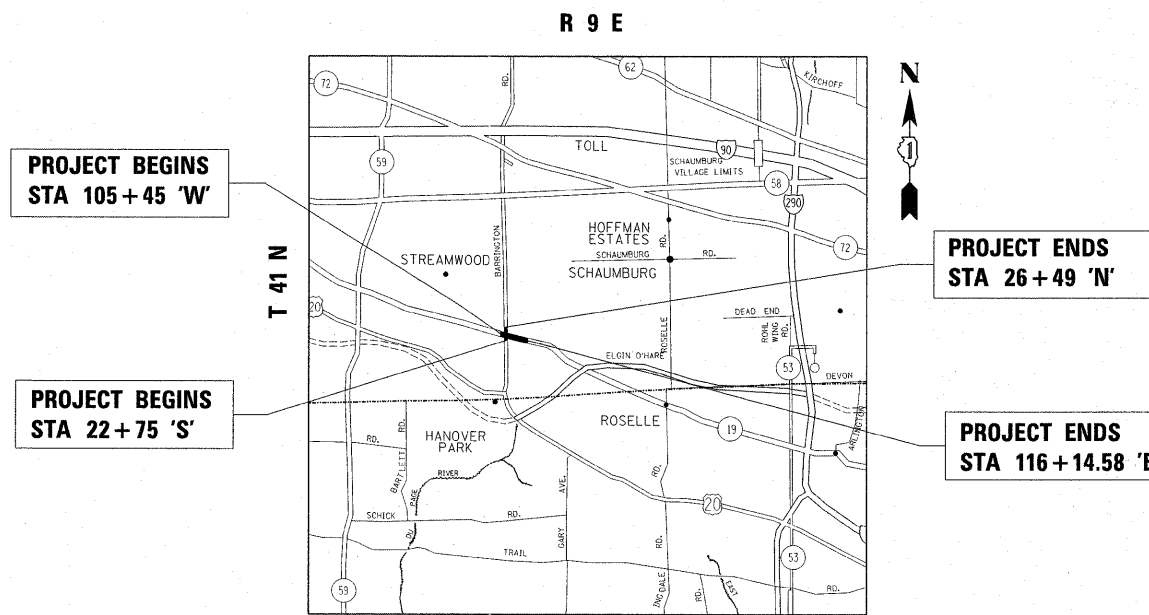
J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

PROJECT ENGINEER: ROBERT BORO (847)-705-4178  
PROJECT MANAGER: ISSAM RAYYAN

CONTRACT NO. 60L23



LOCATION OF SECTION INDICATED THUS: - [black rectangle] -



HANOVER AND SCHAUMBURG TOWNSHIPS

GROSS AND NET LENGTH = 1069.58 FT. = 0.20 MILE

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED MAY 10, 2011  
*Diana M. O'Keefe* as  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

July 1, 2011  
*Scott E. Stitt, P.E.* as  
ENGINEER OF DESIGN AND ENVIRONMENT

July 1, 2011  
*Christine M. Reed* as  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

## INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, STANDARDS, AND GENERAL NOTES
3-4	SUMMARY OF QUANTITIES
5-7	TYPICAL SECTIONS
8	SCHEDULE OF QUANTITIES
9-10	ALIGNMENT, TIES AND BENCHMARKS
11	ROADWAY PLAN
12	EROSION AND SEDIMENT CONTROL PLAN
13	SUE INVESTIGATION OF UNDERGROUND UTILITIES PLANS
14	EXISTING AND PROPOSED DRAINAGE PLANS
15-16	PLATS OF HIGHWAY
17	PAVEMENT MARKING & LANDSCAPING PLANS
18-30	TRAFFIC SIGNAL PLANS AND DETAILS
31-35	LIGHTING PLANS AND DETAILS
39A-39C	RETAINING WALL AND BICYCLE RAILING DETAILS
36	DRIVEWAY DETAILS DISTANCE BETWEEN R.O.W. AND FACE OF CURB AND EDGE OF SHOULDER > 15' (BD-02)
37	DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER (BD-07)
38	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-08)
39	MANHOLE WITH RESTRICTOR PLATE (BD-12)
40	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)
41	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)
42	BUTT JOINT AND HMA TAPER DETAILS (BD-32)
43	BENCHING DETAIL FOR EMBANKMENT WIDENKNG (BD-51)
44	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS (TC-10)
45	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)
46	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
47	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)
48	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16)
49	TEMPORARY INFORMATION SIGNING (TC-22)
50	DRIVEWAY ENTRANCE SIGNING (TC-26)
51	DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)
52-53	CROSS SECTIONS

## LIST OF STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
424001-05	CURB RAMPS FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
602011-02	CATCH BASIN TYPE C
602401-03	MANHOLE TYPE A
604001-03	FRAME AND LIDS TYPE 1
604091-02	FRAME AND GRATE TYPE 24
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	PC CONCRETE ISLANDS AND MEDIANS
701427	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≤ 40 MPH
701601-07	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701701-07	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-04	LANE CLOSURE MULTILANE, 1W OR 2W CROSSWALK OF SIDEWALK CLOSURE
701901-01	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
780001-02	TYPICAL PAVEMENT MARKINGS
814001-02	HANDHOLES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
876001-01	PEDESTRIAN PUSH BUTTON POST
878001-08	CONCRETE FOUNDATION DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS

## GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, AND THE VILLAGE OF HANOVER PARK.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.

DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN THE PLANS.

TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTER AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.

PRIOR TO EMBANKMENT PLACEMENT, ALL VEGETATION, LOOSE MATERIAL, AND UNSTABLE MATERIAL SHOULD BE REMOVED TO DEPTH ENCOUNTERED AND REPLACED WITH SUITABLE EMBANKMENT MATERIAL. ANY EMBANKMENT WIDENING ON EXISTING SLOPES SHOULD BE BENCHED ACCORDING TO ARTICLE 205.04 OF THE STANDARD SPECIFICATIONS.

THE RESIDENT ENGINEER SHALL CONTACT MR. DON CHIARUGI AREA TRAFFIC FIELD ENGINEER AT (847) 741-9857 A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKING.

RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED THROUGHOUT THE IMPROVEMENT ACCORDING TO THE DISTRICT STANDARDS AS NOTED IN THE DETAIL.

THE RESIDENT ENGINEER SHALL VERIFY THE LOCATIONS OF ALL EXISTING PAVEMENT MARKINGS PRIOR TO MILLING, RESURFACING OR OVERLAYING.

WHEN CONSTRUCTING SIDEWALK RAMPS FOR THE HANDICAPPED (STATE STANDARD 424001), USE TYPE B RAMPS UNLESS OTHERWISE SPECIFIED

ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.

ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

THE THICKNESS OF THE HMA MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA MIXTURE IS PLACED.

FILE NAME =	USER NAME = miduja	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF SHEETS LIST OF STATE STANDARDS &amp; PLAN NOTES</b>				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\p\work\p\midot\miduja\d0156237\PI4180-Design.dgn		DRAWN -	REVISED -		1321	2010-048-N	COOK	53	2				
PLOT SCALE = 50.7684' / IN.		CHECKED -	REVISED -		CONTRACT NO. 60L23								
PLOT DATE = 5/13/2011		DATE -	REVISED -		ILLINOIS FED. AID PROJECT								
					SCALE:	SHEET NO.	OF	SHEETS	STA.	TO	STA.		

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE					SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES						CODE NO	ITEM	UNIT	TOTAL QUANTITIES					
				0003	TRAFFIC 0021	INTER-CONNECT 0021	LIGHTING 0021							0003	TRAFFIC 0021	INTER-CONNECT 0021	LIGHTING 0021
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	36	36					44201765	CLASS D PATCHES, TYPE II, 10 INCH	SO YD	342	342				
20200100	EARTH EXCAVATION	CU YD	450	450					44201769	CLASS D PATCHES, TYPE III, 10 INCH	SO YD	228	228				
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	130	130					44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	564	564				
20800150	TRENCH BACKFILL	CU YD	256.4	256.4					550A0070	STORM SEWERS, CLASS A, TYPE 1 15"	FOOT	127	127				
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	298	298					550A0090	STORM SEWERS, CLASS A, TYPE 1 18"	FOOT	232	232				
25000400	NITROGEN FERTILIZER.NUTRIENT	POUND	4	4					60201340	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	2	2				
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	4	4					60208240	CATCH BASINS, TYPE C, TYPE 24 FRAME AND GRATE	EACH	2	2				
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	4	4					60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2	2				
25100630	EROSION CONTROL BLANKET	SO YD	298	298					60250500	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1	1				
25200110	SODDING, SALT TOLERANT	SO YD	298	298					60500050	REMOVING CATCH BASINS	EACH	3	3				
25200200	SUPPLEMENTAL WATERING	UNIT	3	3					60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	570	570				
28000400	PERIMETER EROSION BARRIER	FOOT	269	269					60620800	CONCRETE MEDIAN, TYPE SB-9.12	SO FT	1000	1000				
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SO YD	111	111					67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6				
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	6	6					67100100	MOBILIZATION	L SUM	1	1				
40600300	AGGREGATE (PRIME COAT)	TON	25	25					70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1				
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	18	18					70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1				
40600895	CONSTRUCTING TEST STRIP	EACH	1	1					70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1				
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	162	162					70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	15	15				
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	97	97					70300100	SHORT TERM PAVEMENT MARKING	FOOT	8010	8010				
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	1274	1274					70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SO FT	355	355				
40701931	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 12 1/2"	SO YD	708	708					70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	3406	3406				
42001300	PROTECTIVE COAT	SO YD	723	723					70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	2115	2115				
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SO YD	67	67					70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	58	58				
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	3105	3105					70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	310	310				
42400800	DETECTABLE WARNINGS	SO FT	140	140					* 70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	133	133				
44000100	PAVEMENT REMOVAL	SO YD	111	111					* 72400500	SIGN PANEL - TYPE 1	SO FT	15	15				
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SO YD	11375	11375					* 72400710	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	1	1				
44000200	DRIVEWAY PAVEMENT REMOVAL	SO YD	97	97					* 78000100	RELOCATE SIGN PANEL - TYPE 1	SO FT	5	5				
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	600	600													
44000600	SIDEWALK REMOVAL	SO FT	2850	2850													
44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"	SO YD	575	575													
44003100	MEDIAN REMOVAL	SO FT	40	40													

FILE NAME =	USER NAME = mdyja	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>				<b>IL 19 @ BARRINGTON RD.</b> <b>SUMMARY OF QUANTITIES</b>				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwr\work\pwr\mdyja\0156237\PI4809-Design.dwg		DRAWN -	REVISED -									1321	2010-048-N	COOK	53	3
		CHECKED -	REVISED -									CONTRACT NO. 60L23				
		DATE -	REVISED -	SCALE:	SHEET NO.	OF	SHEETS	STA.	TO	STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

\* SPECIALTY ITEMS

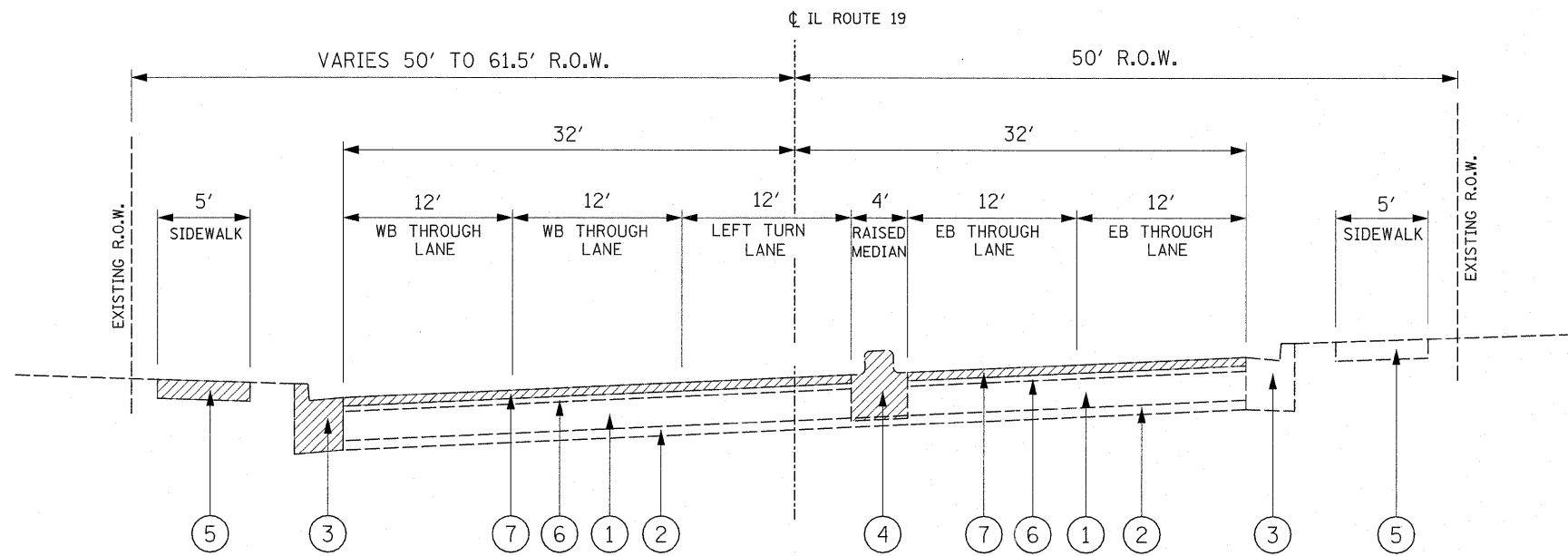
Rev.

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE					SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	STATE URBAN 0003	TRAFFIC 0021	INTER-CONNECT 0021	LIGHTING 0021		CODE NO	ITEM	UNIT	TOTAL QUANTITIES	STATE URBAN 0003	TRAFFIC 0021	INTER-CONNECT 0021	LIGHTING 0021	
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3406	3406					* 89500400	RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	1		1			
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2115	2115					* 89501150	RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	1		1			
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	58	58					* 89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	483		483			
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	310	310					* 89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	1105		328	777		
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	120	120					* 89502380	REMOVE EXISTING HANDHOLE	EACH	2		2			
* 78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	100	100					* 89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	1		1			
* 80400100	ELECTRIC SERVICE INSTALLATION	EACH	1				1		<del>* X0301503</del>	<del>RELOCATE EXISTING METAL POLE FOUNDATION</del>	<del>EACH</del>	<del>3</del>					<del>3</del>
* 81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	437		274	163			X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	1	1				
* 81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	43		43				Δ X5539700	STORM SEWERS TO BE CLEANED	FOOT	300	300				
* 81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	70		70				X6020094	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID, RESTRICTOR PLATE	EACH	1	1				
* 81018700	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	200				200		X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	7	7				
* 81400100	HANDHOLE	EACH	1		1				* 07301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	85		85			
* 81603090	UNIT DUCT, 600V, 3-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	1000				1000		Z0001050	AGGREGATE SUBGRADE 12"	SQ YD	875	875				
* 81702220	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C 350MCM	FOOT	500				500		Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	60	60				
* 81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1437		274	163	1000		Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1				
* 84400105	RELOCATE EXISTING LIGHTING UNIT	EACH	3				3		Δ Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	9	9				
* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2		1	1			Z0023203	SEDIMENT CONTROL, DRAINAGE STRUCTURE INLET FILTER	EACH	7	7				
* 87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	214.5		214.5				Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	102.8	102.8				
* 87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	516		516				* Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	6				6	
* 87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1		1				50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	570	570				
* 87800100	CONCRETE FOUNDATION, TYPE A	FOOT	6		6				50300225	CONCRETE STRUCTURES	CU YD	5.9	5.9				
* 87900200	DRILL EXISTING HANDHOLE	EACH	4		3	1			50500505	STUD SHEAR CONNECTORS	EACH	85	85				
* 88600100	DETECTOR LOOP, TYPE I	FOOT	27		27				50200100	STRUCTURE EXCAVATION	CU YD	3.8	3.8				
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	1056		1056				X5121800	PERMANENT STEEL SHEET PILING	SQ FT	700	700				
* 88800100	PEDESTRIAN PUSH-BUTTON	EACH	1		1				X5091725	BICYCLE RAILING, SPECIAL	FOOT	140	140				
* 89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	2		2												
* 89500200	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	2		2												

Δ NON-PART (100% STAFF)

FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				IL 19 @ BARRINGTON RD. SUMMARY OF QUANTITIES				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwr\work\pwr\midyja\0156237\FI41809-Design.dwg	DRAWN -	REVISED -	1321									2010-048-N	COOK	53	4	
PLOT SCALE = 507684' / IN.	CHECKED -	REVISED -	CONTRACT NO. 60L23													
PLOT DATE = 5/13/2011	DATE -	REVISED -	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT													
				SCALE:				SHEET NO. OF SHEETS STA. TO STA.								

\* SPECIALTY ITEMS

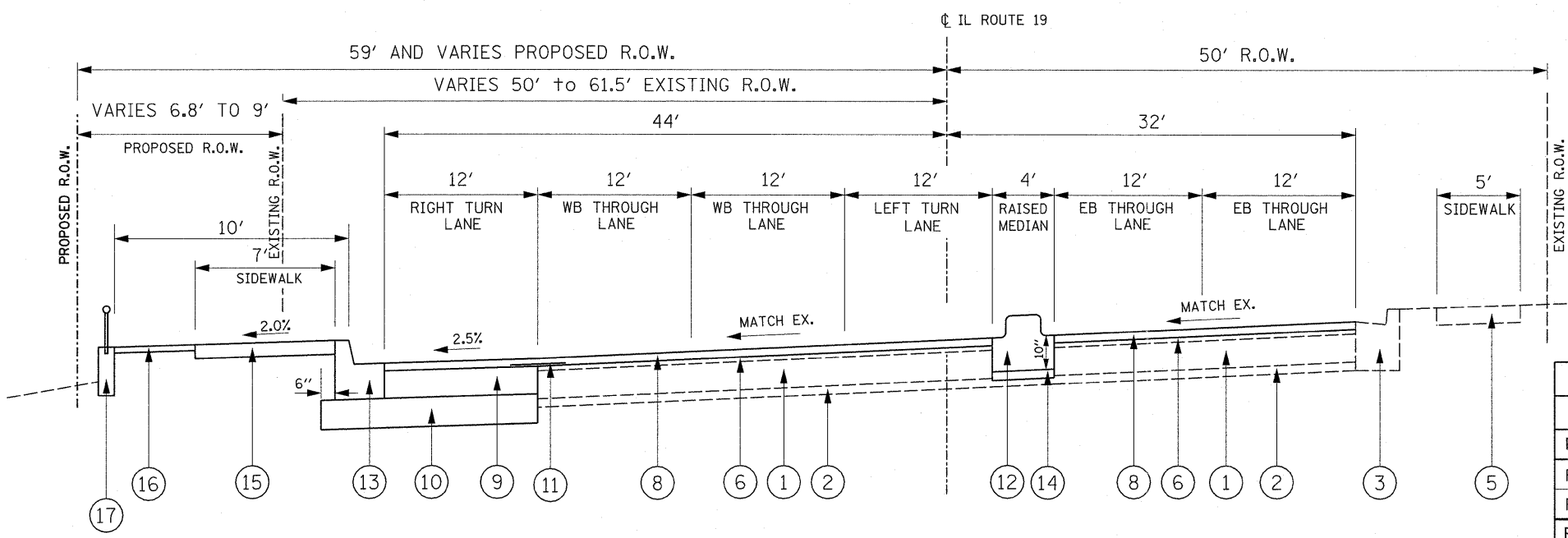


**EXISTING TYPICAL SECTION  
IL ROUTE 19 (IRVING PARK ROAD)  
STA 107+00 TO STA 116+14.58**

- LEGEND**
- ① EXISTING P.C.C. PAVEMENT, ± 10'
  - ② EXISTING STABILIZED AGGREGATE SUBBASE, 4"
  - ③ EXISTING COMBINATION CONCRETE C&G TYPE B-6.24
  - ④ EXISTING COMBINATION CONCRETE C&G TYPE SB-9.12
  - ⑤ EXISTING P.C.C. SIDEWALK, 5"
  - ⑥ EXISTING HOT-MIX ASPHALT AFTER MILLING (± 1")
  - ⑦ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL 2"
  - ⑧ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 2"
  - ⑨ PROPOSED POLYMERIZED BINDER COURSE IL 19 N90, 10½" (3 LIFTS)
  - ⑩ PROPOSED AGGREGATE SUBGRADE, 12"
  - ⑪ PROPOSED STRIP REFLECTIVE CRACK CONTROL TREATMENT
  - ⑫ PROPOSED CONCRETE MEDIAN, TYPE SB-9.12 (10")
  - ⑬ PROPOSED COMBINATION CONCRETE C&G TYPE B-6.24
  - ⑭ PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE B, 4"
  - ⑮ PROPOSED P.C.C. SIDEWALK, 5"
  - ⑯ PROPOSED TOPSOIL, 4"
  - ⑰ RETAINING WALL WITH HANDRAIL

REMOVAL ITEMS

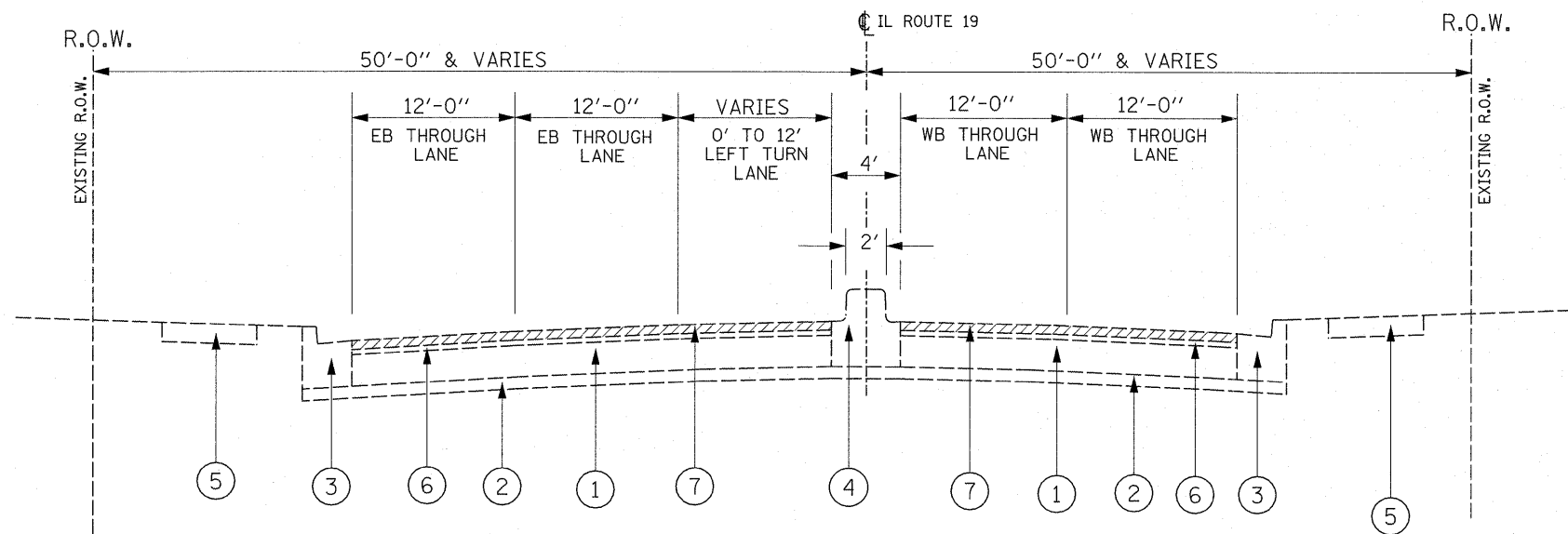
CONTRACTOR SHALL PATCH FIRST BEFORE MILLING



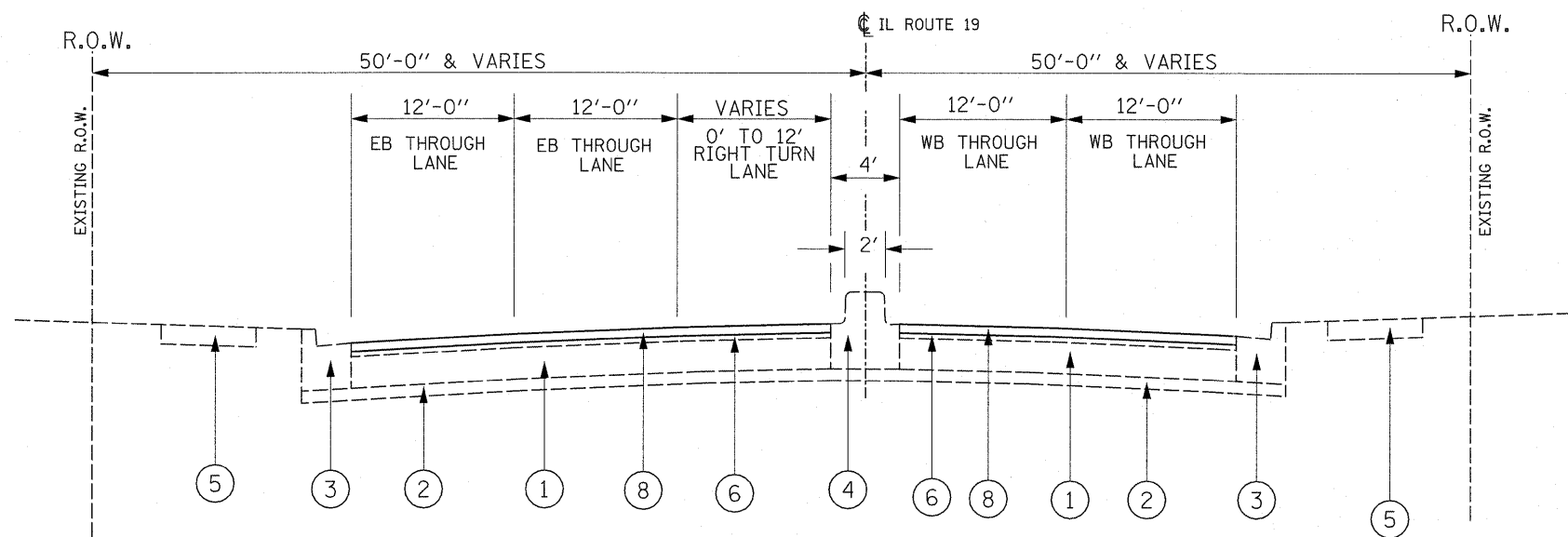
**PROPOSED TYPICAL SECTION  
IL ROUTE 19 (IRVING PARK ROAD)  
STA 107+00 TO STA 116+14.58**

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS @ Ndes
FULL DEPTH PAVEMENT (IL 19 - IRVING PARK RD)	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL-9.5 mm); 2"	4% @ 90 GYR.
POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90; 10½"	4% @ 90 GYR.
PAVEMENT RESURFACING	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL-9.5 mm)	4% @ 90 GYR.
PATCHING	
CLASS D PATCHES (HMA BINDER IL-19 mm)	4% @ 70 GYR.
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19 mm)	4% @ 70 GYR.

- THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LBS/SQ.YD./IN  
 - THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.



**EXISTING TYPICAL SECTION**  
**IL ROUTE 19 (IRVING PARK ROAD)**  
 STA 105+45 TO STA 107+00



**PROPOSED TYPICAL SECTION**  
**IL ROUTE 19 (IRVING PARK ROAD)**  
 STA 105+45 TO STA 107+00

**LEGEND**


- ① EXISTING P.C.C. PAVEMENT, ± 10'
- ② EXISTING STABILIZED AGGREGATE SUBBASE, 4"
- ③ EXISTING COMBINATION CONCRETE C&G TYPE B-6.24
- ④ EXISTING COMBINATION CONCRETE C&G TYPE SB-9.12
- ⑤ EXISTING P.C.C. SIDEWALK, 5"
- ⑥ EXISTING HOT-MIX ASPHALT AFTER MILLING (± 1")
- ⑦ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL 2"
- ⑧ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 2"
- ⑨ PROPOSED POLYMERIZED BINDER COURSE IL 19 N90, 10 1/2" (3 LIFTS)
- ⑩ PROPOSED AGGREGATE SUBGRADE, 12"
- ⑪ PROPOSED STRIP REFLECTIVE CRACK CONTROL TREATMENT
- ⑫ PROPOSED CONCRETE MEDIAN, TYPE SB-9.12 (10')
- ⑬ PROPOSED COMBINATION CONCRETE C&G TYPE B-6.24
- ⑭ PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE B, 4"
- ⑮ PROPOSED P.C.C. SIDEWALK, 5"
- ⑯ PROPOSED TOPSOIL, 4"
- ⑰ RETAINING WALL WITH HANDRAIL

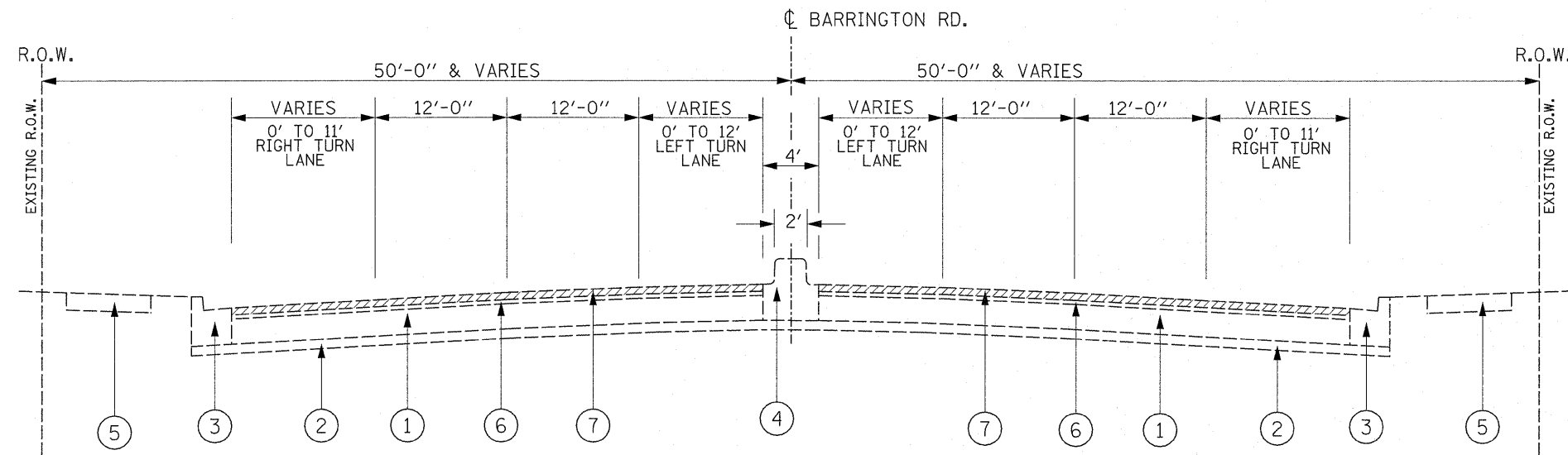
REMOVAL ITEMS

FILE NAME =	USER NAME = mdyja	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING AND PROPOSED TYPICAL SECTION IL ROUTE 19 @ BARRINGTON RD.</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr:\pw\work\pwsdot\mdyja\d0156237\p14180-Design.dgn	DRAWN -	REVISED -	1321			2010-048-N	COOK	53	6	
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -	CONTRACT NO. 60L23							
PLOT DATE = 5/12/2011	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							
					SCALE:	SHEET NO. OF SHEETS		STA. TO STA.		

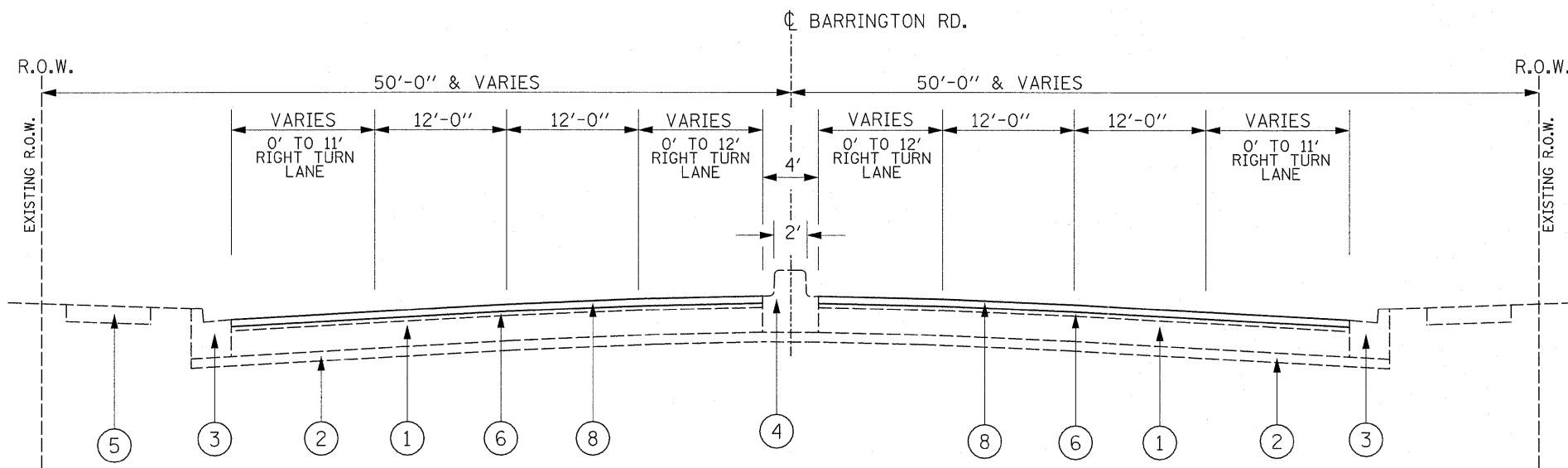
LEGEND

- ① EXISTING P.C.C. PAVEMENT, ± 10'
- ② EXISTING STABILIZED AGGREGATE SUBBASE, 4"
- ③ EXISTING COMBINATION CONCRETE C&G TYPE B-6.24
- ④ EXISTING COMBINATION CONCRETE C&G TYPE SB-9.12
- ⑤ EXISTING P.C.C. SIDEWALK, 5"
- ⑥ EXISTING HOT-MIX ASPHALT AFTER MILLING (± 1")
- ⑦ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL 2"
- ⑧ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 2"
- ⑨ PROPOSED POLYMERIZED BINDER COURSE IL 19 N90, 10 1/2" (3 LIFTS)
- ⑩ PROPOSED AGGREGATE SUBGRADE, 12"
- ⑪ PROPOSED STRIP REFLECTIVE CRACK CONTROL TREATMENT
- ⑫ PROPOSED CONCRETE MEDIAN, TYPE SB-9.12 (10")
- ⑬ PROPOSED COMBINATION CONCRETE C&G TYPE B-6.24
- ⑭ PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE B, 4"
- ⑮ PROPOSED P.C.C. SIDEWALK, 5"
- ⑯ PROPOSED TOPSOIL, 4"
- ⑰ RETAINING WALL WITH HANDRAIL

 REMOVAL ITEMS



EXISTING TYPICAL SECTION  
BARRINGTON ROAD  
STA 22+75 TO STA 26+49



PROPOSED TYPICAL SECTION  
BARRINGTON ROAD  
STA 22+75 TO STA 26+49

FILE NAME = c:\pw_work\pawdot\mdyja\d0156237\p14180	USER NAME = mdyja	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING AND PROPOSED TYPICAL SECTION IL ROUTE 19 @ BARRINGTON RD.</b>				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	Design.dgn	DRAWN -	REVISED -						1321	2010-048-N	COOK	53	7
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.				CONTRACT NO. 60L23				
	PLOT DATE = 5/12/2011	DATE -	REVISED -		ILLINOIS FED. AID PROJECT								

EARTHWORK SCHEDULE

EARTHWORK LOCATION	1 EARTH EXCAVATION (CU. YD.)	2 EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (CU. YD.)	3 REMOVAL OF UNSUITABLE OR UNSTABLE MATERIAL (CU. YD.)	4 EMBANKMENT (CU. YD.)	5 EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CU. YD.)	6 FURNISHED EXCAVATION (CU. YD.)
IL 19						
107+10 - 112+20	450	383	130	47	336	0
TOTAL =	450	383	130	47	336	0

NOTE:

- 1 = QUANTITIES FROM EARTHWORK SPREADSHEET
- 2 = (1) \* 0.85
- 3 = ESTIMATED QUANTITIES FROM CROSS-SECTIONS
- 4 = QUANTITIES FROM EARTHWORK SPREADSHEET
- 5 = 2-4
- 6 = FURNISHED EXCAVATION = SHORTAGE (-) 5

NOTE:

A THICKNESS OF 6 INCHES OF TOPSOIL STRIPPING SHALL BE USED FOR REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL.

TREE REMOVAL SCHEDULE

STATION	OFFSET/ SIDE (FEET)	6 TO 15 UNIT DIAMETER
110+33	38' L	12
110+81	38' L	12
111+36	38' L	12
TOTALS		36

DRAINAGE STRUCTURES TABLE

NO.	STATION	OFFSET	STRUCTURE TYPE		DIA.	FRAME	TOP OF GRATE	INVERT(N)	INVERT(S)	INVERT(E)	INVERT(W)
			CB	MH							
1	108+58	EOP LT	TYP. C		2'	TY. 24 F&G	809.10			804.5	
2	108+83	EOP LT	TYP. A		4'	TY. 24 F&G	809.03	804.26			804.28
3	108+83	52' LT		TYP. A	4'	TY. 1 F&CL	809.31		804.24	804.23	
4	109+76	EOP LT	TYP. C		2'	TY. 24 F&G	809.35	804.5			
5	109+76	52' LT		TYP. A	4'	TY. 1 F&CL	809.63		804.45	803.40	803.42
6*	110+92	52' LT		REST. TYP. A	6'	2 TY. 1 F&CL	809.86		802.98	803.00	803.00
7	112+00	EOP LT	TYP. A		4'	TY. 24 F&G	809.20				803.90

\* MANHOLE WITH RESTRICTOR PLATE

STORM SEWER TABLE

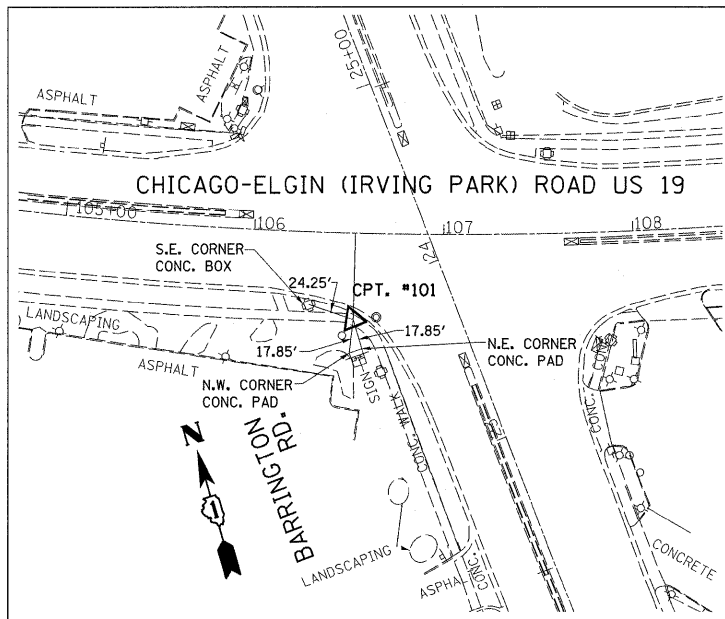
NO.	TYPE	DIA.	LIN. FT.	TB CU.YD.	INVERT (N)	INVERT (S)	INVERT (E)	INVERT (W)	
									1
2	PROP. STORM SEWER, CLASS A	2	15"	6	1.4	804.24	804.26		
3	PROP. STORM SEWER, CLASS A	2	15"	90	62.6			803.42	804.23
4	PROP. STORM SEWER, CLASS A	2	15"	6	1.6	804.45	804.5		
5	PROP. STORM SEWER, CLASS A	2	18"	110	93.5			803.00	803.40
6	PROP. STORM SEWER, CLASS A	2	18"	14	9.5	802.98	802.92		
7	PROP. STORM SEWER, CLASS A	2	18"	108	82.7			803.90	803.00



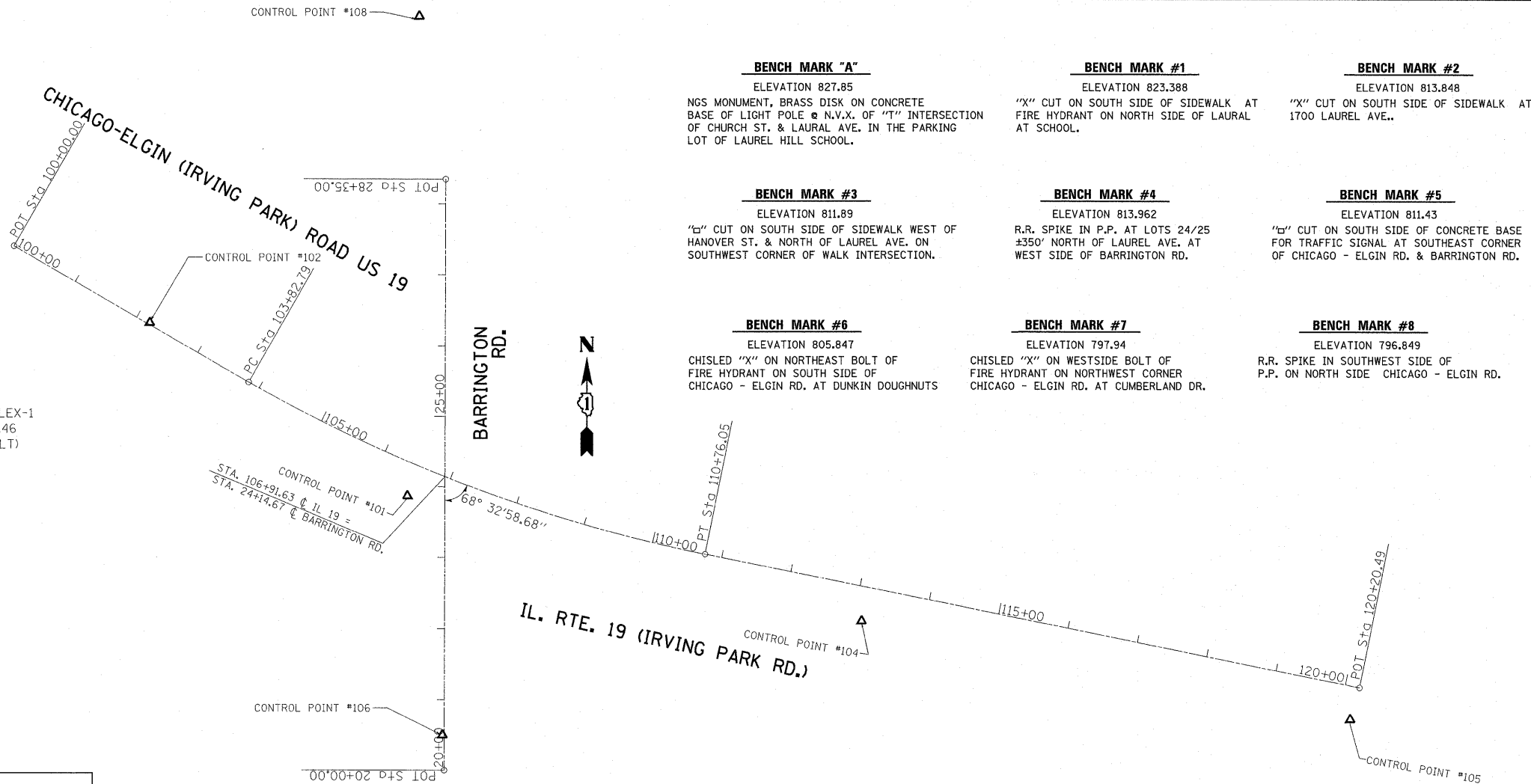
ALIGNMENT COORDINATES - IL. RTE. 19 (IRVING PARK RD.)			
IL. 19	STATION	N	S
POB	100+00.00	1944935.8776	1034906.3428
PC	103+82.79	1944744.9341	1035238.1036
PI	107+32.46	1944570.5089	1035541.1641
PT	110+76.05	1944501.1723	1035883.8819
POT	120+20.49	1944313.8988	1036809.578

ALIGNMENT COORDINATES - BARRINGTON RD.			
IL. 19	STATION	N	S
POB	20+00.00	2147459.4803	2148536.1927
POT	28+35.00	2148294.4782	2148538.0198

EXIST. CURVE 19CLEX-1  
 PI STA. = 107+32.46  
 $\Delta = 18^\circ 29' 07''$  (LT)  
 $D = 2^\circ 39' 59''$   
 $R = 2,148.79'$   
 $T = 349.67'$   
 $L = 693.27'$   
 $E = 28.26'$   
 $e = \text{-----}$   
 $T.R. = \text{-----}$   
 $S.E. RUN = \text{-----}$



**CONTROL POINT #101**  
 CUT CROSS ON WALK  
 STATION 106+53.25, 45.68' RT.  
 NORTH: 1,944,582.9501  
 EAST: 1,035,462.7882  
 ELEV=811.095  
 CUT CROSS ON WALK



**BENCH MARK "A"**  
 ELEVATION 827.85  
 NGS MONUMENT, BRASS DISK ON CONCRETE BASE OF LIGHT POLE @ N.V.X. OF "T" INTERSECTION OF CHURCH ST. & LAURAL AVE. IN THE PARKING LOT OF LAUREL HILL SCHOOL.

**BENCH MARK #1**  
 ELEVATION 823.388  
 "X" CUT ON SOUTH SIDE OF SIDEWALK AT FIRE HYDRANT ON NORTH SIDE OF LAURAL AT SCHOOL.

**BENCH MARK #2**  
 ELEVATION 813.848  
 "X" CUT ON SOUTH SIDE OF SIDEWALK AT 1700 LAUREL AVE..

**BENCH MARK #3**  
 ELEVATION 811.89  
 "C" CUT ON SOUTH SIDE OF SIDEWALK WEST OF HANOVER ST. & NORTH OF LAUREL AVE. ON SOUTHWEST CORNER OF WALK INTERSECTION.

**BENCH MARK #4**  
 ELEVATION 813.962  
 R.R. SPIKE IN P.P. AT LOTS 24/25 ±350' NORTH OF LAUREL AVE. AT WEST SIDE OF BARRINGTON RD.

**BENCH MARK #5**  
 ELEVATION 811.43  
 "C" CUT ON SOUTH SIDE OF CONCRETE BASE FOR TRAFFIC SIGNAL AT SOUTHEAST CORNER OF CHICAGO - ELGIN RD. & BARRINGTON RD.

**BENCH MARK #6**  
 ELEVATION 805.847  
 CHISLED "X" ON NORTHEAST BOLT OF FIRE HYDRANT ON SOUTH SIDE OF CHICAGO - ELGIN RD. AT DUNKIN DOUGHNUTS

**BENCH MARK #7**  
 ELEVATION 797.94  
 CHISLED "X" ON WESTSIDE BOLT OF FIRE HYDRANT ON NORTHWEST CORNER CHICAGO - ELGIN RD. AT CUMBERLAND DR.

**BENCH MARK #8**  
 ELEVATION 796.849  
 R.R. SPIKE IN SOUTHWEST SIDE OF P.P. ON NORTH SIDE CHICAGO - ELGIN RD.

**BENCH MARK "B"**  
 ELEVATION 827.85  
 NGS MONUMENT, BRASS DISK ON STEEL ROD APPROXIMATELY 0.5 MILES EAST OF INTERSECTION OF BARRINGTON RD. AND IRVING PARK RD. ON NORTH SIDE OF IRVING PARK RD.

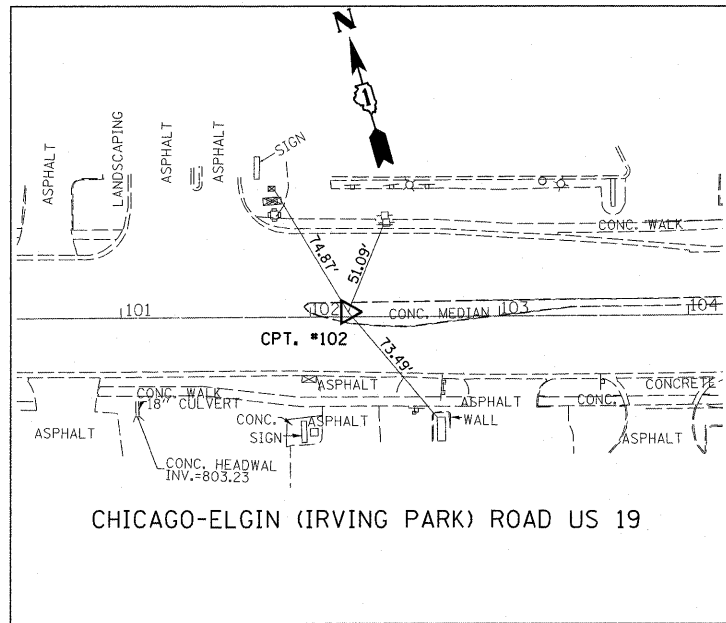
**BENCH MARK #9**  
 ELEVATION 809.685  
 "C" CUT ON SOUTHEAST CORNER OF TRAFFIC CONTROL BOX ON SOUTHWEST CORNER OF JIFFY LUBE PROPERTY.

**BENCH MARK #10**  
 ELEVATION 812.606  
 CHISLED "X" CUT ON NORTHEAST BOLT OF FIRE HYDRANT ON NORTH SIDE OF CHICAGO - ELGIN RD. AT BURGER KING.

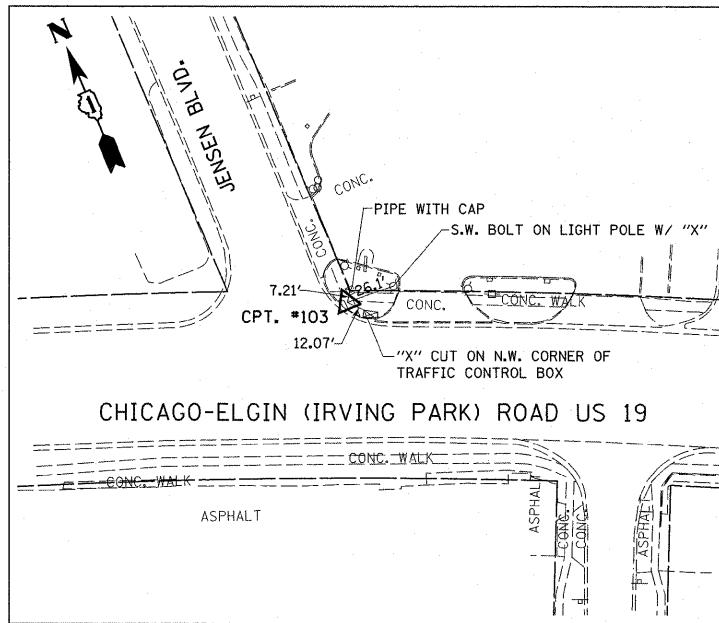
**BENCH MARK #11**  
 ELEVATION 807.36  
 "C" CUT ON TOP OF CURB ±13' NORTH OF A FIRE HYDRANT, EAST SIDE OF SIDEWALK AT NORTHWEST CORNER OF BARRINGTON RD. & CHICAGO - ELGIN RD.

**BENCH MARK #12**  
 ELEVATION 798.432  
 "C" CUT ON TOP OF CURB ON NORTH SIDE OF AN ISLAND FOR AN ENTRANCE ON WEST SIDE OF BARRINGTON RD. AT DUNKIN DOUGHNUTS.

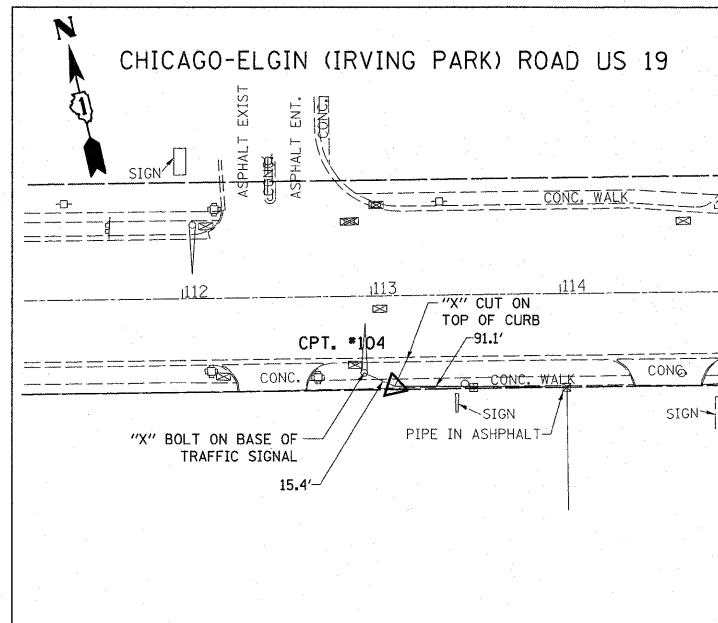
**BENCH MARK #13**  
 ELEVATION 800.42  
 "X" CUT ON WEST BOLT OF A FIRE HYDRANT ON WEST SIDE OF BARRINGTON RD. ACROSS FROM AMERICAN MATTRESS.



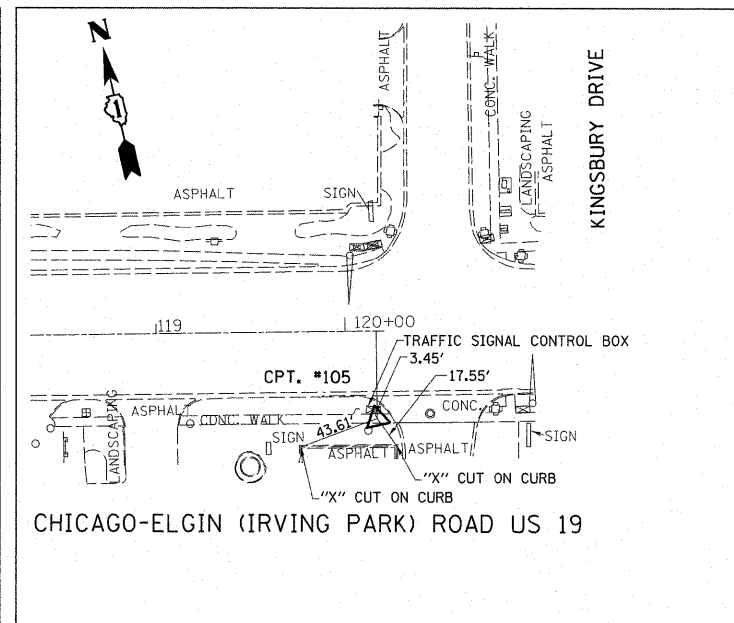
**CONTROL POINT #102**  
 CUT CROSS ON MEDIAN  
 STATION 102+20.03, 2.55' LT.  
 NORTH: 1,944,828.3329  
 EAST: 1,035,098.3110  
 ELEV=811.382



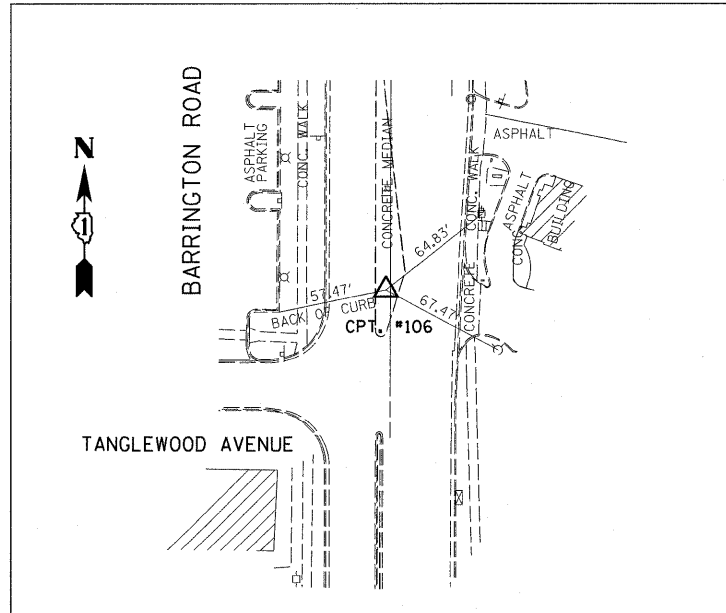
**CONTROL POINT #103**  
 CUT CROSS ON WALK  
 NORTH: 1,945,185.2048  
 EAST: 1,034,502.4588  
 ELEV=816.923



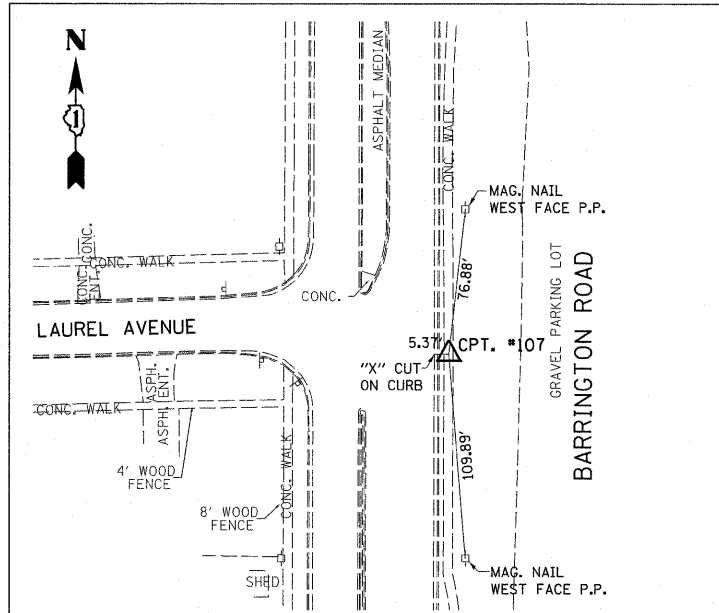
**CONTROL POINT #104**  
 CUT CROSS ON WALK  
 STATION 113+34.41, 48.24' RT.  
 NORTH: 1,944,407.1394  
 EAST: 1,036,105.3899  
 ELEV=809.626



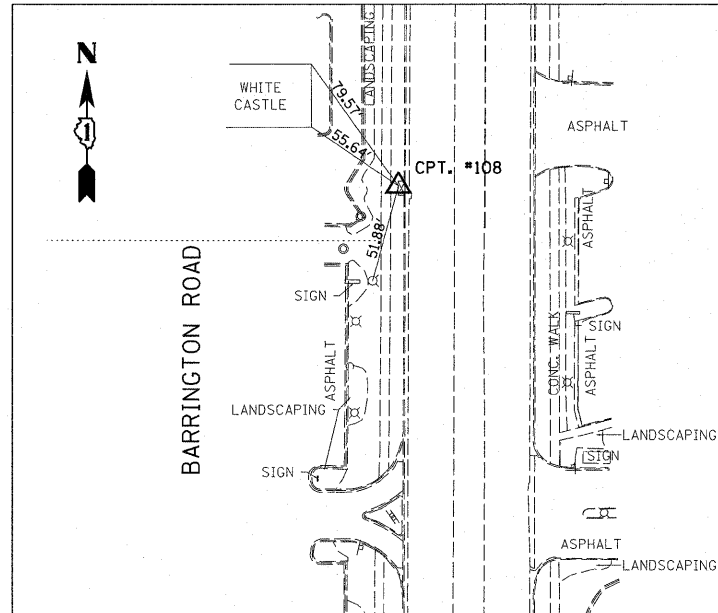
**CONTROL POINT #105**  
 CUT CROSS ON WALK  
 STATION 120+16.67, 46.75' RT.  
 NORTH: 1,944,268.8709  
 EAST: 1,036,796.3617  
 ELEV=800.022



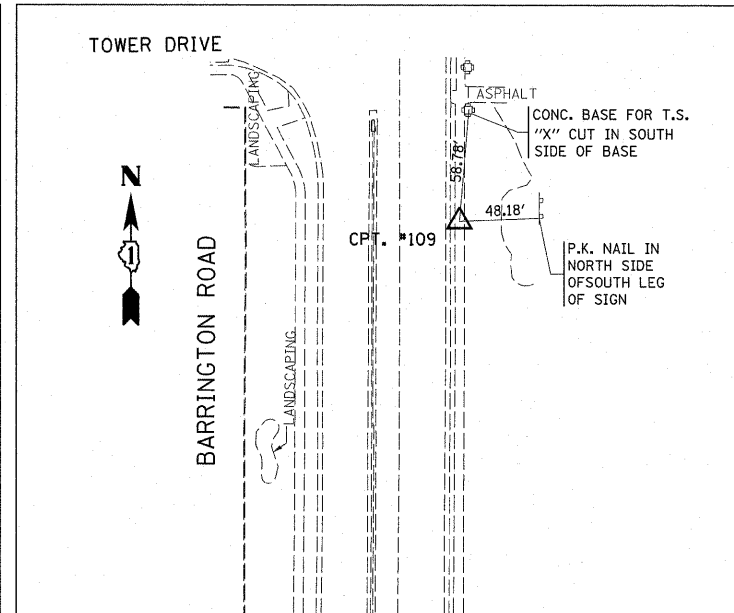
**CONTROL POINT #106**  
 CUT CROSS ON MEDIAN  
 STA. 20+50.14, 2.39 LT.  
 NORTH: 1,944,246.0881  
 EAST: 1,035,512.7249  
 ELEV=810.676



**CONTROL POINT #107**  
 CUT CROSS ON WALK  
 NORTH: 1,943,649.9923  
 EAST: 1,035,553.5145  
 ELEV=811.255

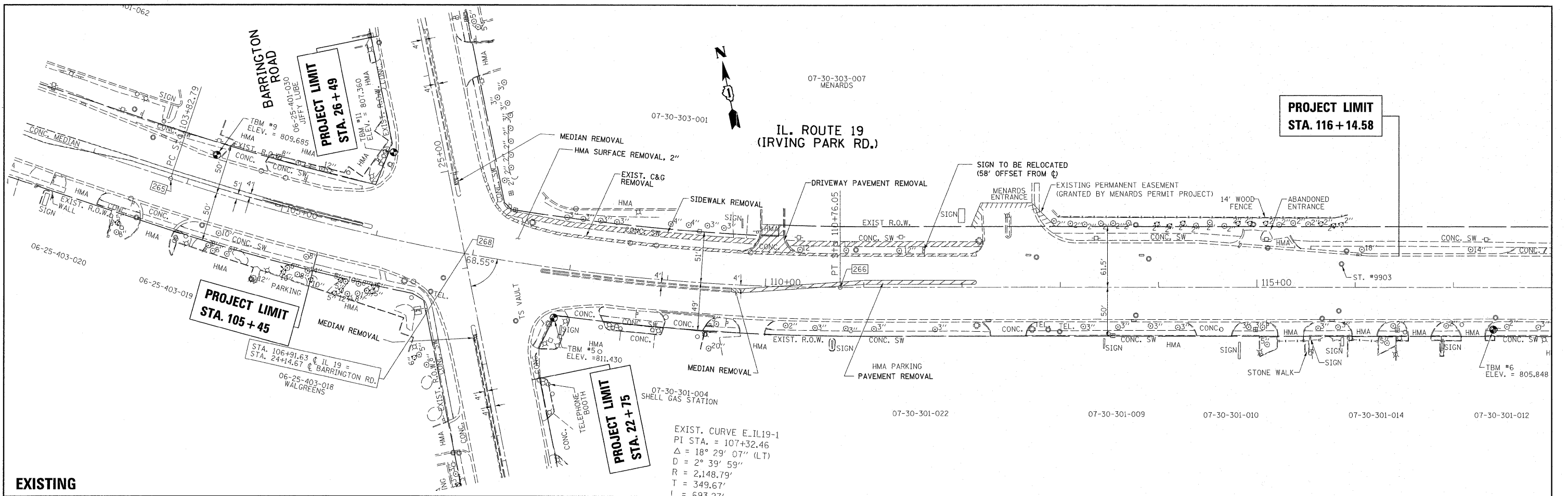


**CONTROL POINT #108**  
 CUT CROSS ON HANDHOLE  
 NORTH: 1,945,261.9291  
 EAST: 1,035,479.4265  
 ELEV=797.575

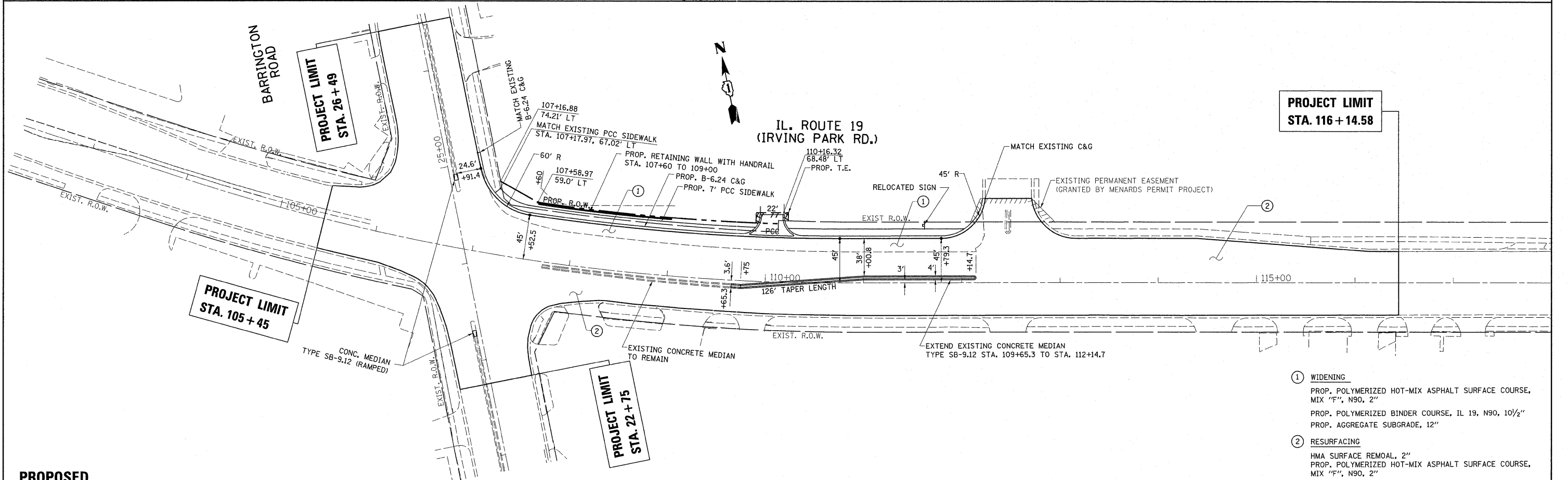


**CONTROL POINT #109**  
 CUT CROSS ON WALK  
 NORTH: 1,945,970.3512  
 EAST: 1,035,558.5810  
 ELEV=798.960

FILE NAME =	USER NAME = midjja	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL. RTE. 19 (IRVING PARK RD.) AT BARRINGTON RD. ALIGNMENT, TIES &amp; BENCHMARKS</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cs:\pwwork\pwwork\midjja\d0156246\VP14180	shd-ATB.dgn	DRAWN -	REVISED -		1321	2010-048-N	COOK	53	10			
PLOT SCALE = 1/8"=1'-0"		CHECKED -	REVISED -		CONTRACT NO. 60L23							
PLOT DATE = 5/12/2011		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							



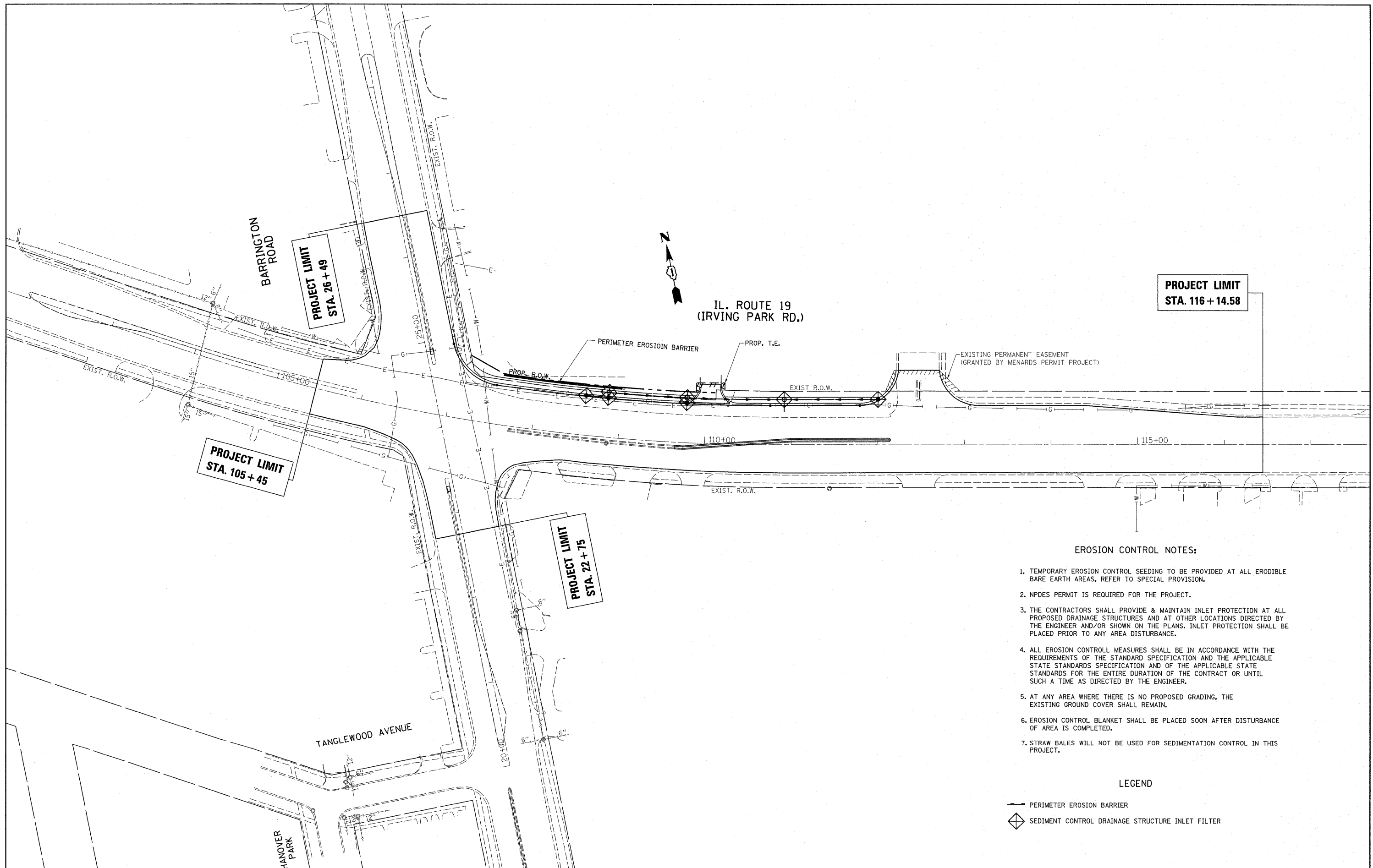
**EXISTING**



**PROPOSED**

- ① **WIDENING**  
 PROP. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 2"  
 PROP. POLYMERIZED BINDER COURSE, IL 19, N90, 10 1/2"  
 PROP. AGGREGATE SUBGRADE, 12"
- ② **RESURFACING**  
 HMA SURFACE REMOVAL, 2"  
 PROP. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 2"

FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL. RTE. 19 (IRVING PARK RD.) AT BARRINGTON RD. EXISTING AND PROPOSED ROADWAY PLAN</b>				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pwwork\pwws\d0156246\p14180	sh-t-plan.dgn	DRAWN -	REVISED -		1321	2010-048-N	COOK	53	11				
PLOT SCALE = 5/8"=1'-0"		CHECKED -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.				CONTRACT NO. 60L23				
PLOT DATE = 5/12/2011		DATE -	REVISED -		ILLINOIS FED. AID PROJECT								



**EROSION CONTROL NOTES:**

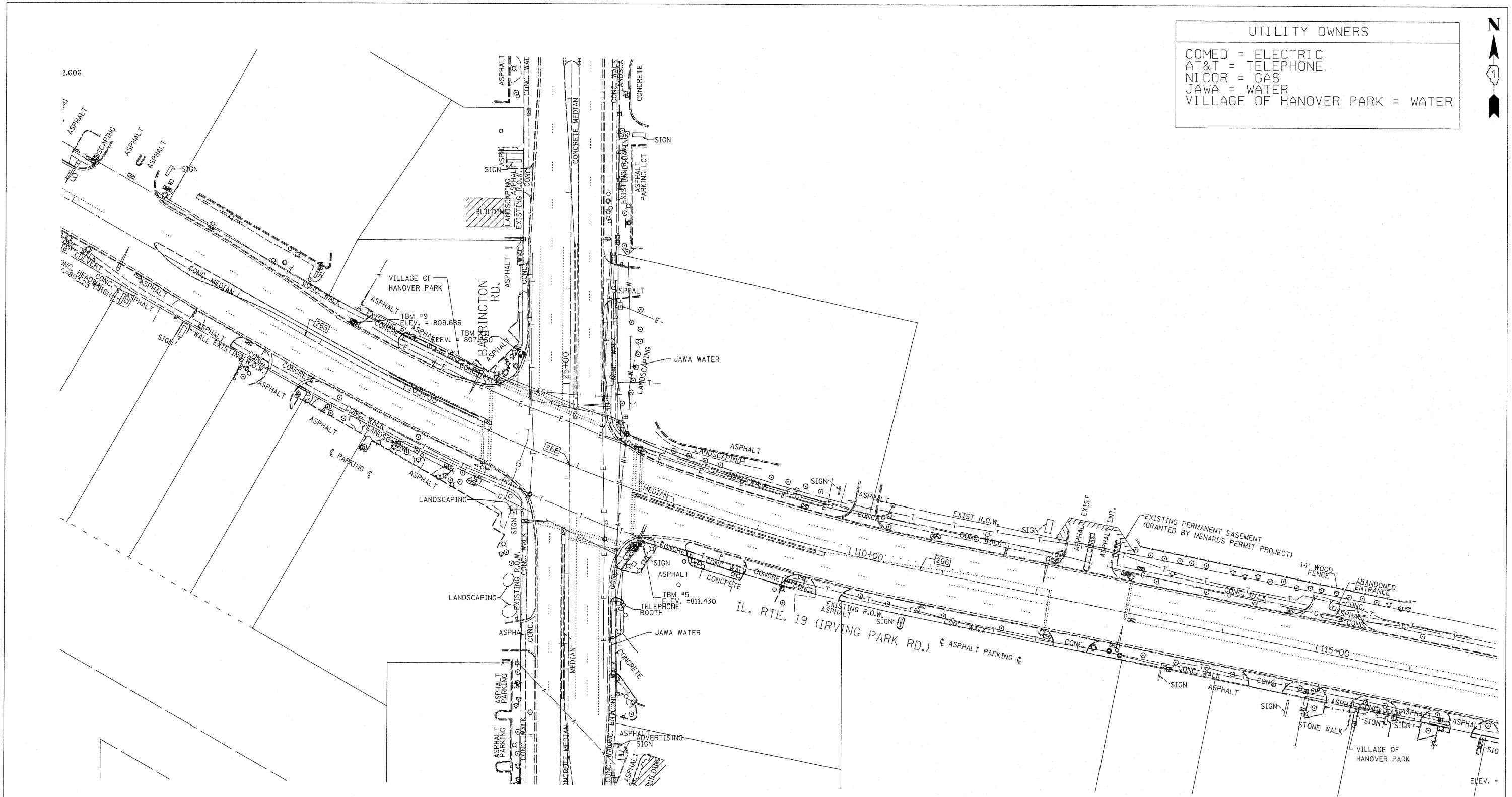
1. TEMPORARY EROSION CONTROL SEEDING TO BE PROVIDED AT ALL ERODIBLE BARE EARTH AREAS, REFER TO SPECIAL PROVISION.
2. NPDES PERMIT IS REQUIRED FOR THE PROJECT.
3. THE CONTRACTORS SHALL PROVIDE & MAINTAIN INLET PROTECTION AT ALL PROPOSED DRAINAGE STRUCTURES AND AT OTHER LOCATIONS DIRECTED BY THE ENGINEER AND/OR SHOWN ON THE PLANS. INLET PROTECTION SHALL BE PLACED PRIOR TO ANY AREA DISTURBANCE.
4. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATION AND THE APPLICABLE STATE STANDARDS SPECIFICATION AND OF THE APPLICABLE STATE STANDARDS FOR THE ENTIRE DURATION OF THE CONTRACT OR UNTIL SUCH A TIME AS DIRECTED BY THE ENGINEER.
5. AT ANY AREA WHERE THERE IS NO PROPOSED GRADING, THE EXISTING GROUND COVER SHALL REMAIN.
6. EROSION CONTROL BLANKET SHALL BE PLACED SOON AFTER DISTURBANCE OF AREA IS COMPLETED.
7. STRAW BALES WILL NOT BE USED FOR SEDIMENTATION CONTROL IN THIS PROJECT.

**LEGEND**

- PERIMETER EROSION BARRIER
- SEDIMENT CONTROL DRAINAGE STRUCTURE INLET FILTER

FILE NAME = c:\pwork\pwork\midyja\20156246\141801-sht-eros.dgn	USER NAME = midyja	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL. RTE.19 (IRVING PARK RD.) AT BARRINGTON RD. EROSION &amp; SEDIMENT CONTROL PLAN</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -		1321	2010-048-N	COOK	53	12			
PLOT DATE = 5/12/2011	DATE -	REVISED -	REVISED -		SCALE: 1"=50'	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO. 60L23		
ILLINOIS FED. AID PROJECT												

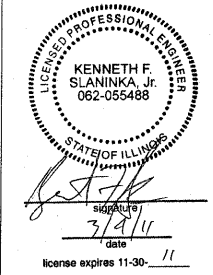
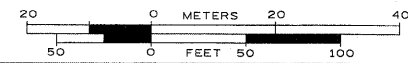
UTILITY OWNERS	
COMED	= ELECTRIC
AT&T	= TELEPHONE
NICOR	= GAS
JAWA	= WATER
VILLAGE OF HANOVER PARK	= WATER



— A — A —	AERIAL UTILITY
- - - - -	UNKNOWN
— CTV — CTV —	CABLE TV
— T — T —	TELEPHONE
— G — G —	GAS
— E — E —	ELECTRIC
— W — W —	WATER
— FO — FO —	FIBER OPTIC
— S — S —	SEWER
— T — T —	TBE TEST HOLE

Utilities shown on these plans as depicted in the legend have been investigated by Cardno TBE in accordance with SUE Industry Standards. All other information shown has been provided to Cardno TBE by others. TBE's SUE field investigation was performed 1/24/11 through 2/23/11. Changes to utilities after 2/23/11 may have been made and therefore may result in variances from this plan. Consideration should be given to updating this plan if deemed advisable prior to final design and construction.

ALL UTILITIES SHOWN QUALITY LEVEL "B"  
UNLESS NOTED OTHERWISE.



Utility Quality Level "A" : Test Hole
Utility Quality Level "B" : Designating
Utility Quality Level "C" : Research with Survey
Utility Quality Level "D" : Records Research

DESIGNED LP	REVISED
DRAWN KLC	REVISED
CHECKED KFS	REVISED
DATE 3/04/11	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

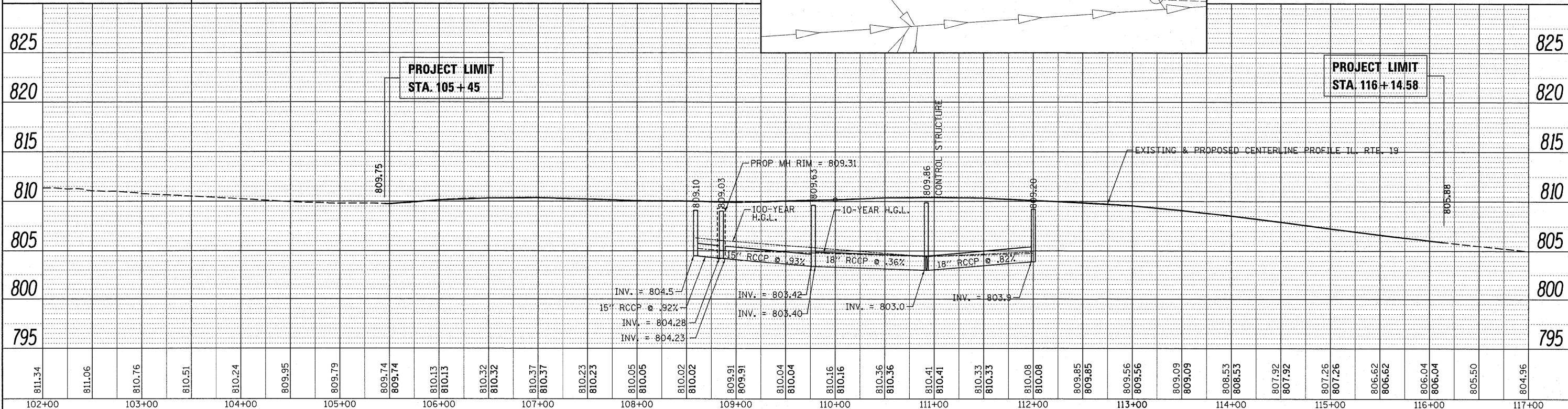
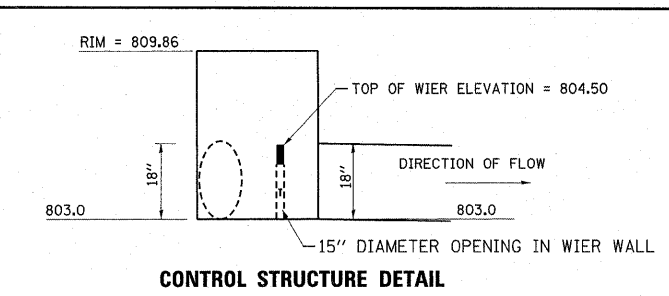
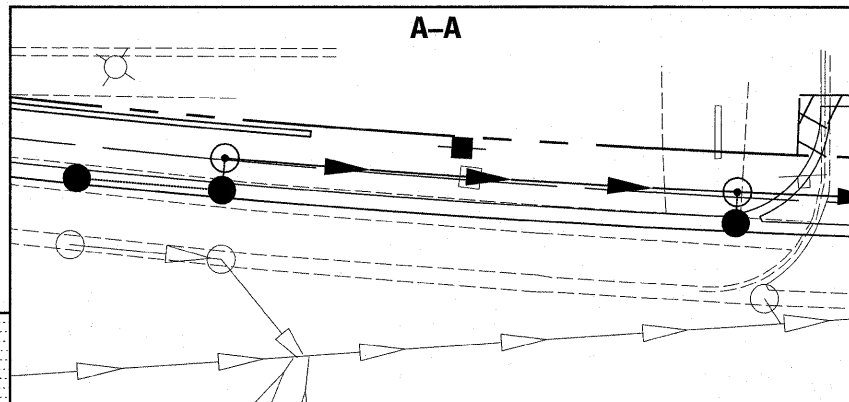
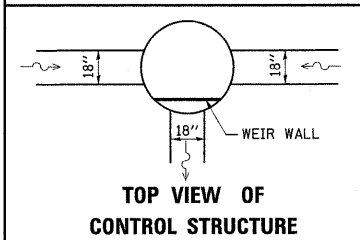
IL RT.19 at Barrington Road

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2010-048N	Cook	53	13
Contract No. 60L23				
FED. ROAD DIST. NO.		ILLINOIS IDOT Project No.		

TBE Job No. IL09510428  
SUE Plan Page: 1 of 1

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

DATE	
BY	
PROFILE	SURVEYED
	PLOTTED
	NOTE BOOK
	NO. _____
	STRUCTURE NOTATIONS CHKD
	NO. _____



FILE NAME =	USER NAME = mdyjo	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>IL. RTE. 19 (IRVING PARK RD.) AT BARRINGTON RD.</b> <b>EXISTING AND PROPOSED DRAINAGE PLAN</b>	F.A.U. RTE. 1321	SECTION 2010-048-N	COUNTY COOK	TOTAL SHEETS 53	SHEET NO. 14		
ca:\pw\work\p\p\dot\mdyjo\0156246\p141809-shd-drain.dgn	PLOT SCALE = 50:0000 / IN.	DRAWN -	REVISED -			SCALE: 1"=50'	SHEET NO. OF SHEETS	STA. 105+45	TO STA. 116+14.58	CONTRACT NO. 60L23		
PLOT DATE = 5/12/2011	DATE -	CHECKED -	REVISED -			ILLINOIS FED. AID PROJECT						
		DATE -	REVISED -									

PART OF THE SW FRAC. 14 OF SECTION 30, TWP. 41N., R. 10E. OF THE 3RD. P.M., IN COOK COUNTY, ILLINOIS.

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1301	COOK	53	15
STATION TO STA.			
FED. ROAD DIST. NO. 7 ILLINOIS		FED AID PROJECT	

LEGEND

SECTION CORNER 16 SECTION CORNER 15

GRAPHIC SCALE FEET  
0 50,100  
20,40  
30,60  
SCALE: 1" =

- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- EXISTING CENTERLINE
- PROPOSED CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- MEASURED DIMENSION
- COMPUTED DIMENSION
- RECORDED DIMENSION
- EXISTING BUILDING

129.82'  
129.82' (COMP)  
(129.82')

Bearings are referenced to the Illinois Coordinate System, NAD83, East Zone, as provided by the Illinois Department of Transportation.

- IRON PIPE OR ROD FOUND
- ⊕ "MAG" NAIL SET
- + CUT CROSS FOUND OR SET
- 5/8" REBAR SET
- T1 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT1 THESE STAKES IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT2
- BT3
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ⊙ PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)
- RIGHT OF WAY STAKING PROPOSED TO BE SET

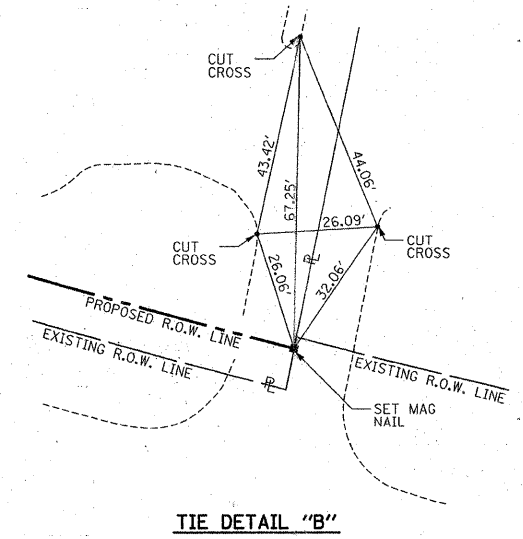
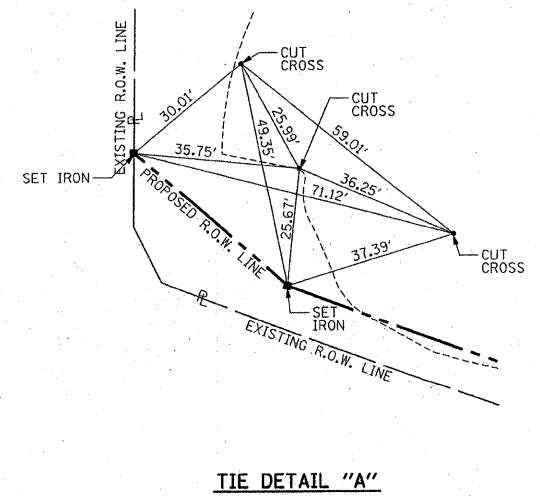
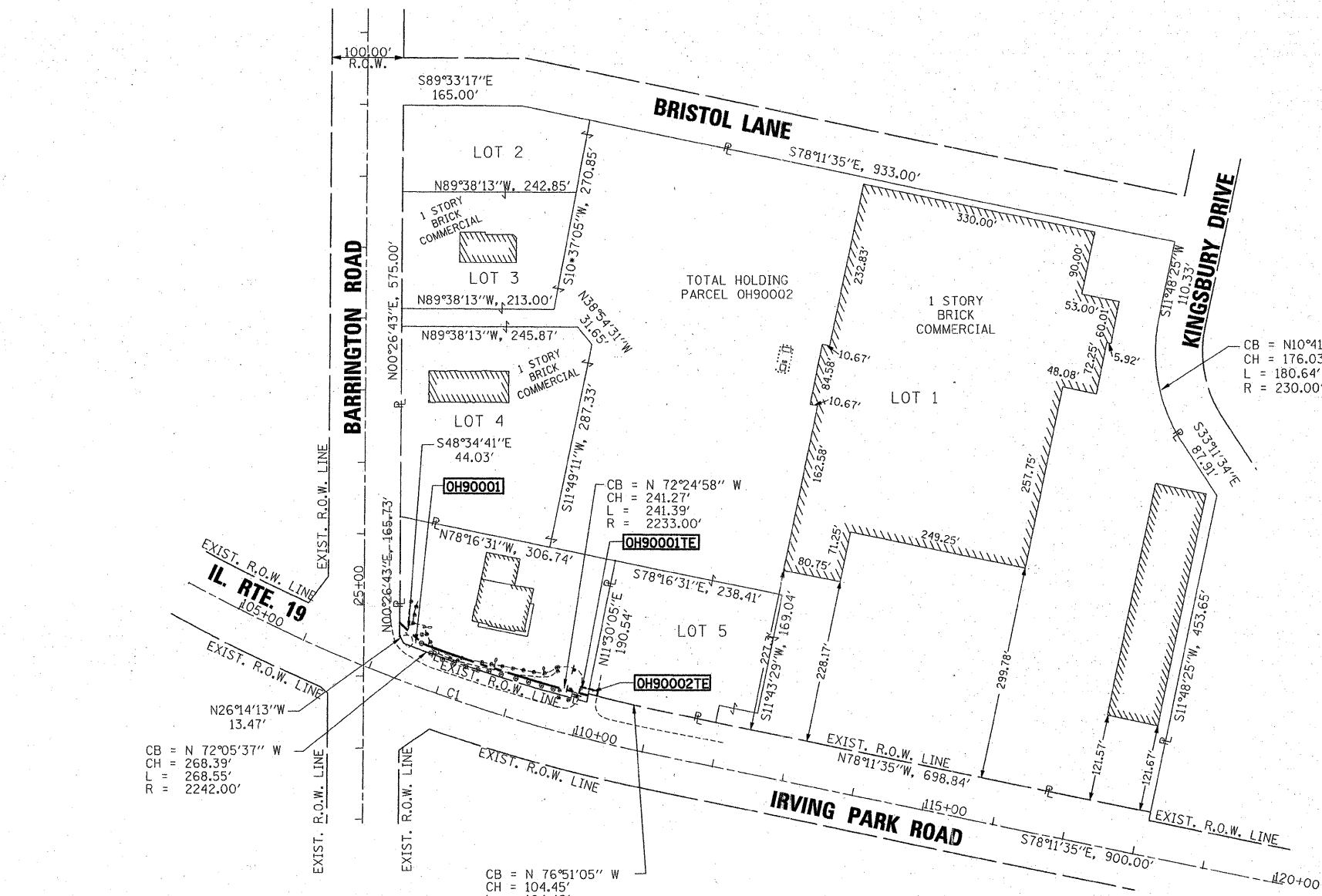
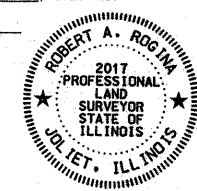
STATE OF ILLINOIS )  
COUNTY OF WILL )

THIS IS TO CERTIFY THAT I, ROBERT A. ROGINA, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HERE ON IN SECTION 30, TOWNSHIP 41 NORTH, AND RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT JOLIET, ILLINOIS, THIS 3<sup>rd</sup> DAY OF March, 2011 A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2017  
LICENSE EXPIRATION DATE: 11/30/12

LICENSE EXPIRES THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS STANDARDS FOR A BOUNDARY SURVEY



POINT NUMBER	NORTHING	EASTING
5	1944763.97697	1035866.90002
6	1944565.98235	1035826.61298
7	1944826.30931	1035566.55794
8	1944661.24968	1035565.27528
271	1944676.83035	1035565.39636
272	1944647.70201	1035598.41033
273	1944574.81357	1035828.40992

RECEIVED  
MAR 07 2011  
PLATS & LEGALS

PREPARED BY: **ROGINA & ASSOCIATES, LTD.**  
ENGINEERS SURVEYORS PLANNERS  
93 Caterpillar Drive - Joliet, Illinois - 815/729-0777 - FAX 815/729-0782  
PROFESSIONAL DESIGN FIRM LICENSE NO. 184-001106

**PLAT OF HIGHWAYS**  
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
IL. ROUTE 19 @ BARRINGTON ROAD

LIMITS: COUNTY: COOK  
PROJECT: JOB NO.: R-90-016-10  
STATION: 247+00 TO STATION: 258+50  
SCALE: 1"=100' SHEET 3 OF 3

BUREAU OF LAND ACQUISITION  
201 WEST CENTER COURT  
SCHAMBURG, ILLINOIS 60196

PART OF THE SW FRAC. 1/4 OF SECTION 30, TWP. 41N., R. 10E. OF THE 3RD. P.M., IN COOK COUNTY, ILLINOIS.

LEGEND

- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APL
- APPARENT PROPERTY LINE
- EXISTING CENTERLINE
- PROPOSED CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- MEASURED DIMENSION
- COMPUTED DIMENSION
- RECORDED DIMENSION
- EXISTING BUILDING

GRAPHIC SCALE  
 0 50,100  
 0 20,40  
 0 30,60  
 SCALE: 1" =

Bearings are referenced to the Illinois Coordinate System, NAD83, East Zone, as provided by the Illinois Department of Transportation.

- IRON PIPE OR ROD FOUND
- ⊕ "MAG" NAIL SET
- + CUT CROSS FOUND OR SET
- 5/8" REBAR SET
- T1 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T2
- T3
- BT1 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION.
- BT2 BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT3
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ⊙ PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)
- RIGHT OF WAY STAKING PROPOSED TO BE SET

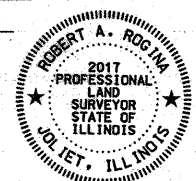
STATE OF ILLINOIS )  
 COUNTY OF WILL )

THIS IS TO CERTIFY THAT I, ROBERT A. ROGINA, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HERE ON IN SECTION 30, TOWNSHIP 41 NORTH, AND RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT JOLIET, ILLINOIS, THIS 3<sup>RD</sup> DAY OF MARCH, 2011 A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2017  
 LICENSE EXPIRATION DATE: 11/30/12

LICENSE EXPIRES THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS STANDARDS FOR A BOUNDARY SURVEY



TA	SECTION	COUNTY	TOWNSHIP	RANGE
1321	2010-048-N	COOK	53	16

RECEIVED  
 MAR 07 2011  
 PLATS & LEGALS

PREPARED BY: **ROGINA & ASSOCIATES, LTD.**  
 ENGINEERS SURVEYORS PLANNERS  
 93 Caterpillar Drive • Joliet, Illinois • 815/729-0777 • FAX 815/729-0782  
 PROFESSIONAL DESIGN FIRM LICENSE NO. 184-001108

**PLAT OF HIGHWAYS**  
 STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 IL. ROUTE 19 @ BARRINGTON ROAD

LIMITS: COUNTY: COOK  
 PROJECT: JOB NO.: R-90-016-10  
 STATION: 107+00 TO STATION: 110+17  
 SCALE: 1"=20' SHEET 2 OF 3

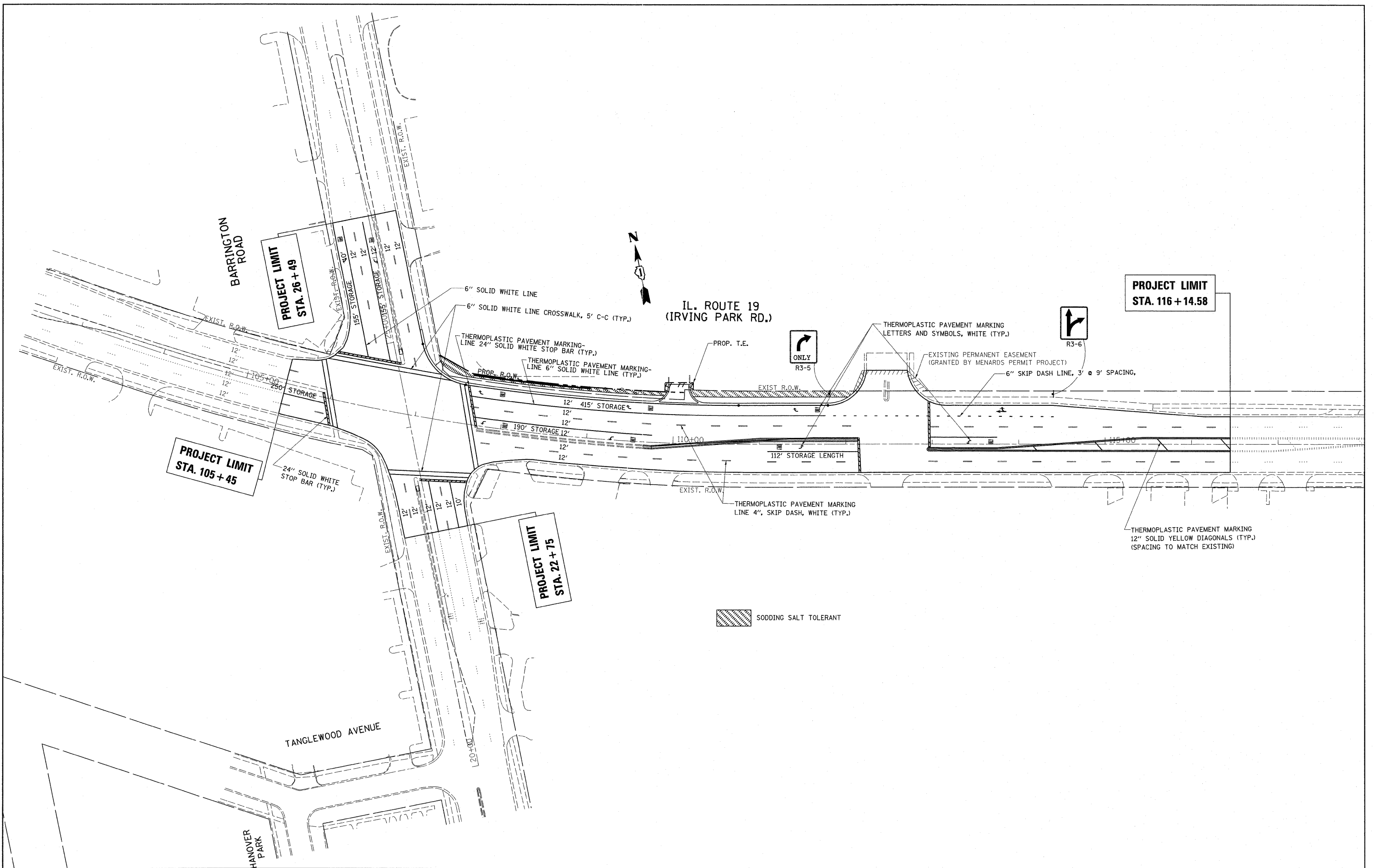
BUREAU OF LAND ACQUISITION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196

PARCEL NUMBER	OWNER	TOTAL HOLDINGS ACRES	PART TAKEN ACRES	AREA IN EXISTING R.O.W. ACRES	REMAINDER AREA ACRES	EASEMENT ACRES	AREA SQUARE FEET	EASEMENT PURPOSE	PERMANENT INDEX NUMBER	PROPERTY ACQUIRED BY
OH90001	PARK BLOCK PROPERTIES, LLC	1.256	0.063	N/A	1.193	0.003	119	CONSTRUCTION	07-30-303-001	
OH90002	MENARDS, INC	18.736	N/A	N/A	18.736	0.002	89	CONSTRUCTION	07-30-303-006 07-30-303-007	

POINT NUMBER	NORTHING	EASTING
5	1944763.97697	1035866.90002
6	1944565.98235	1035826.61298
7	1944826.30931	1035566.55794
8	1944661.24968	1035565.27528
271	1944676.83035	1035565.39636
272	1944647.70201	1035598.41033
273	1944574.81357	1035828.40992

\* - FOR TOTAL HOLDING OF PARCEL OH90002 SEE SHEET 3





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 PLOT DATE = 6/28/2011

DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

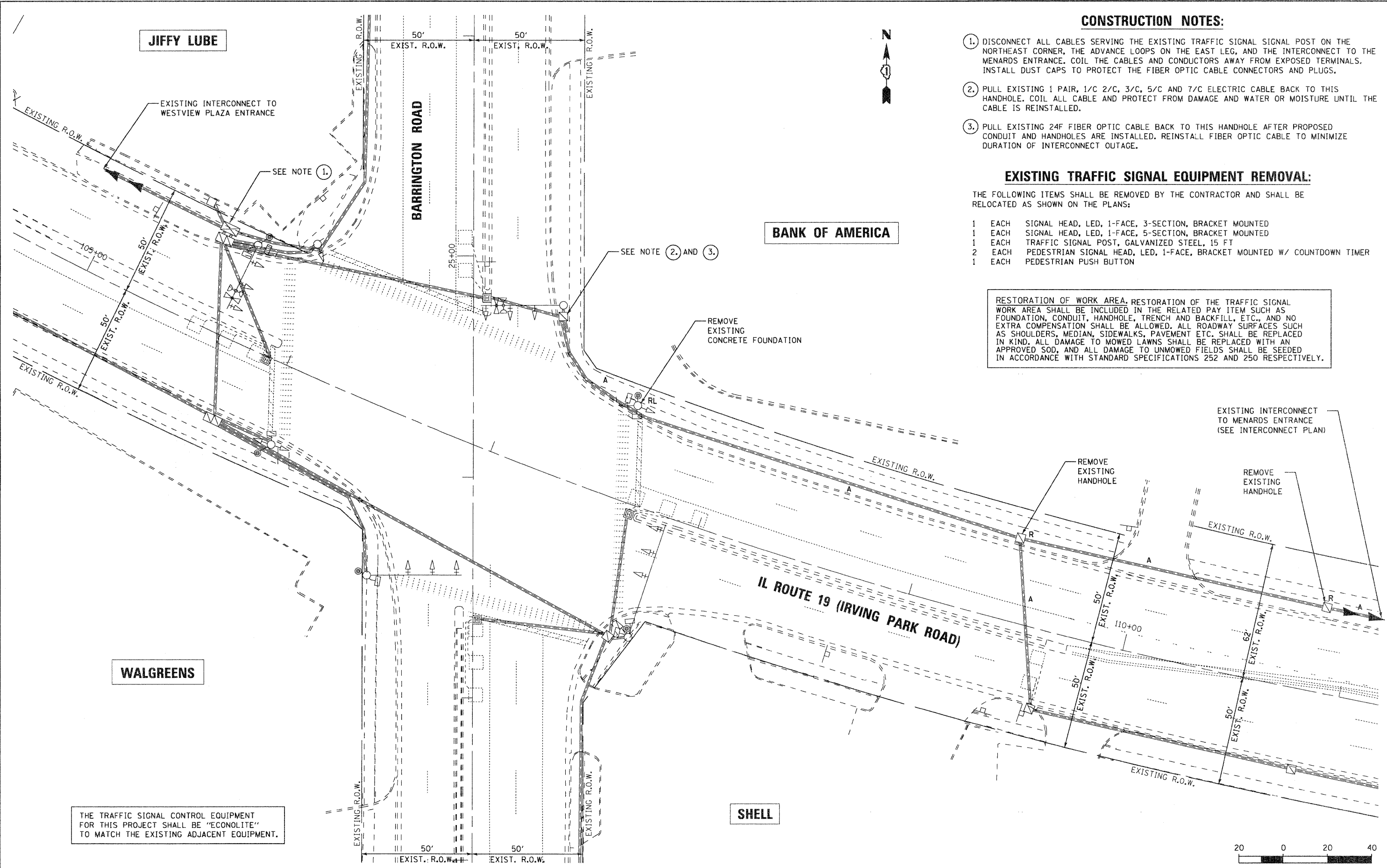
REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**IL. RTE. 19 (IRVING PARK RD.) AT BARRINGTON RD.  
 PAVEMENT MARKING & LANDSCAPING PLAN**

SCALE: 1"=50'    SHEET NO.    OF    SHEETS    STA.    TO STA.

F.A.U. RTE. 1321	SECTION 2010-048-N	COUNTY COOK	TOTAL SHEETS 53	SHEET NO. 17
CONTRACT NO. 60L23				
ILLINOIS FED. AID PROJECT				



**CONSTRUCTION NOTES:**

1. DISCONNECT ALL CABLES SERVING THE EXISTING TRAFFIC SIGNAL SIGNAL POST ON THE NORTHEAST CORNER, THE ADVANCE LOOPS ON THE EAST LEG, AND THE INTERCONNECT TO THE MENARDS ENTRANCE. COIL THE CABLES AND CONDUCTORS AWAY FROM EXPOSED TERMINALS. INSTALL DUST CAPS TO PROTECT THE FIBER OPTIC CABLE CONNECTORS AND PLUGS.
2. PULL EXISTING 1 PAIR, 1/C 2/C, 3/C, 5/C AND 7/C ELECTRIC CABLE BACK TO THIS HANDHOLE. COIL ALL CABLE AND PROTECT FROM DAMAGE AND WATER OR MOISTURE UNTIL THE CABLE IS REINSTALLED.
3. PULL EXISTING 24F FIBER OPTIC CABLE BACK TO THIS HANDHOLE AFTER PROPOSED CONDUIT AND HANDHOLES ARE INSTALLED. REINSTALL FIBER OPTIC CABLE TO MINIMIZE DURATION OF INTERCONNECT OUTAGE.

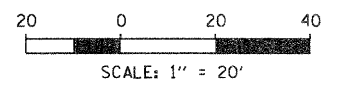
**EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVAL:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE RELOCATED AS SHOWN ON THE PLANS:

- 1 EACH SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
- 1 EACH SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
- 1 EACH TRAFFIC SIGNAL POST, GALVANIZED STEEL, 15 FT
- 2 EACH PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED W/ COUNTDOWN TIMER
- 1 EACH PEDESTRIAN PUSH BUTTON

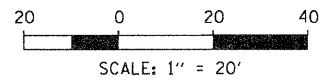
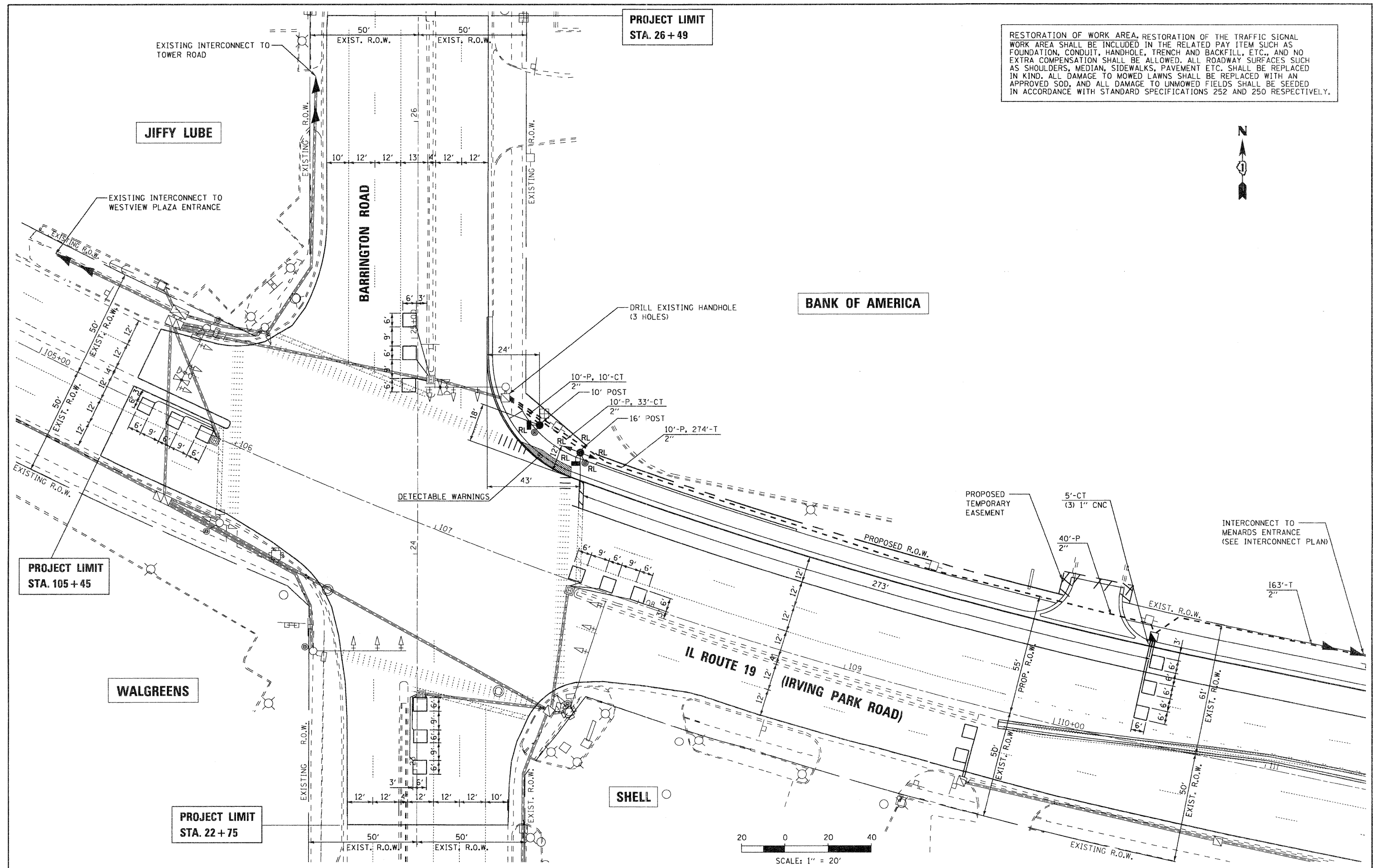
RESTORATION OF WORK AREA: RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT EQUIPMENT.



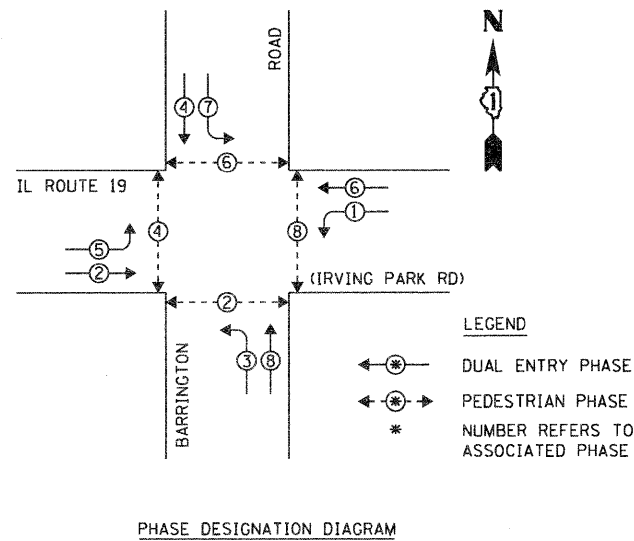
FILE NAME =	USER NAME = \$USER\$	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL ROUTE 19 (IRVING PARK ROAD) AT BARRINGTON ROAD EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVAL PLAN</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
K:\Projects\10055\Design\CAD\Sheet Files\141889-woTRAFax01.dgn	PLOT SCALE = \$SCALE\$	DRAWN -	REVISED -			1321	2010-048-N	COOK	53	18	
PLOT DATE = 3/6/2011	DATE -	CHECKED -	REVISED -			SCALE: 1" = 20'-0" SHEET NO. OF SHEETS STA. TO STA.		CONTRACT NO. 60L23			
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

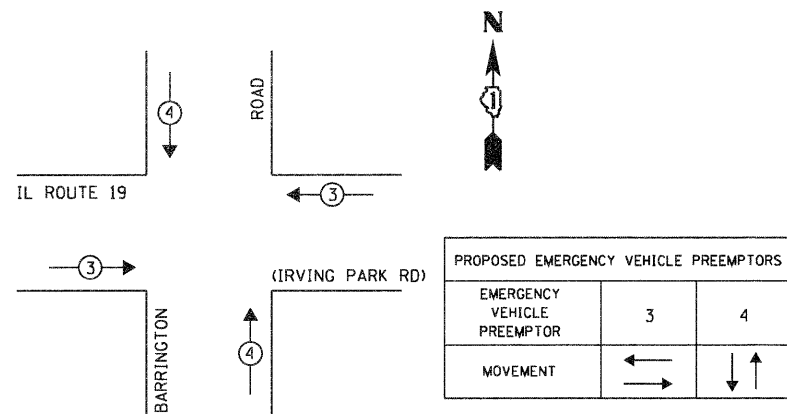


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PLOT SCALE = *SCALE*	CHECKED -	REVISED -	SCALE: 1" = 20'-0"			SHEET NO. OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT			
PLOT DATE = 3/6/2011	DATE -	REVISED -									

**CONTROLLER SEQUENCE**



**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



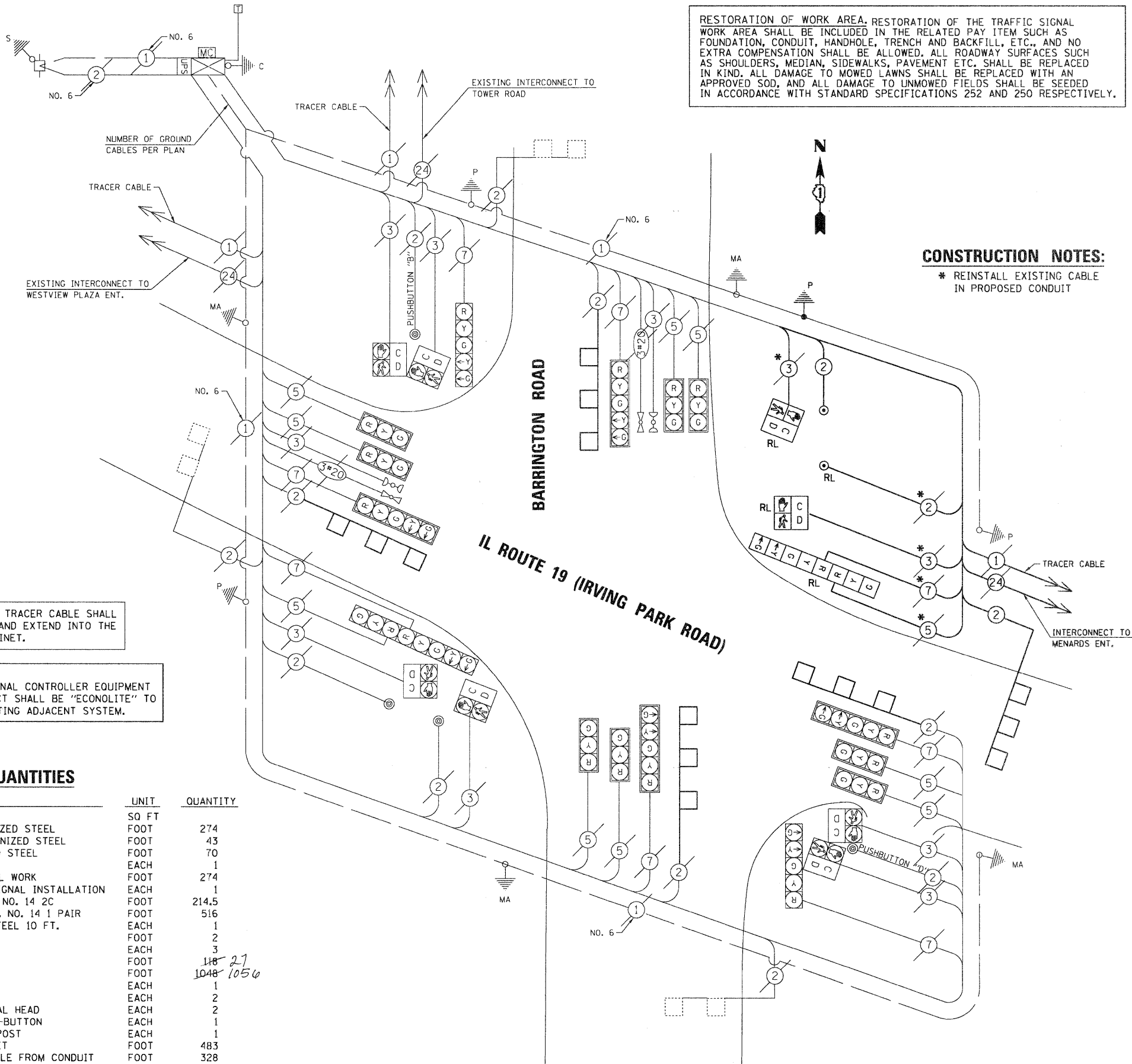
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

NOTE: THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QUANTITY
DETECTABLE WARNINGS	SQ FT	
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	274
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	43
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	70
HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	274
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2C	FOOT	214.5
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	516
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	2
DRILL EXISTING HANDHOLE	EACH	3
DETECTOR LOOP, TYPE 1	FOOT	118
DETECTOR LOOP REPLACEMENT	FOOT	1048
PEDESTRIAN PUSH-BUTTON	EACH	1
RELOCATE EXISTING SIGNAL HEAD	EACH	2
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	2
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	1
RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	483
REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	328
REMOVE EXISTING HANDHOLE	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	85

**CABLE PLAN**



RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

**CONSTRUCTION NOTES:**

\* REINSTALL EXISTING CABLE IN PROPOSED CONDUIT

NOTE: PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6. PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED % OPERATION		
SIGNAL (RED)	18	17	0.50		153.00
(YELLOW)	18	25	0.25		112.50
(GREEN)	18	15	0.25		67.50
ARROW	16	12	0.10		19.20
PED. SIGNAL	8	25	1.00		200.00
CONTROLLER	1	100	1.00		100.00
ILLUM. SIGN	-	25	0.05		-
VIDEO SYSTEM	-	150	1.00		-
FLASHER			0.50		
ENERGY COSTS TO:			TOTAL =		652.20

**ILLINOIS DEPARTMENT OF TRANSPORTATION**  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: MARTY RUBIN  
 PHONE: (847) 608-2400  
 COMPANY: COMED

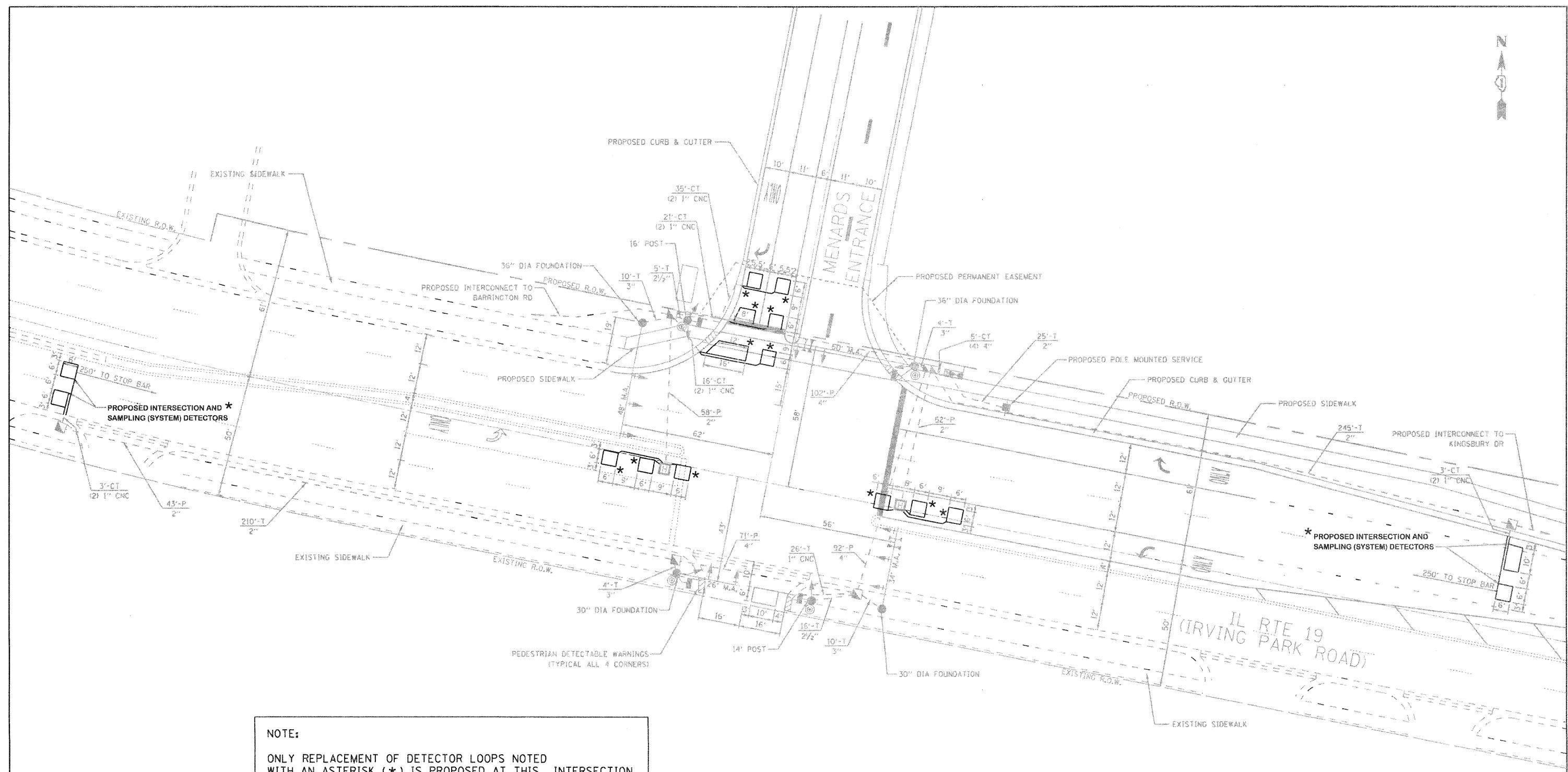
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K:\Projects\10055\Design\CAD\Sheet Files\141809\raoCAB.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 19 (IRVING PARK ROAD) AT BARRINGTON ROAD CABLE PLAN, SCHEDULE OF QUANTITIES & PHASE DESIGNATION DIAGRAM**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2010-048-N	COOK	53	20
CONTRACT NO. 60L23				
ILLINOIS FED. AID PROJECT				



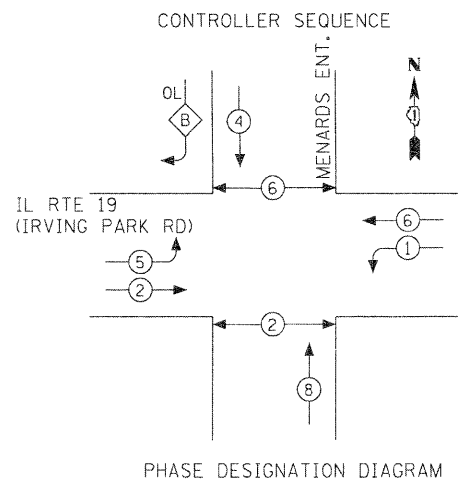
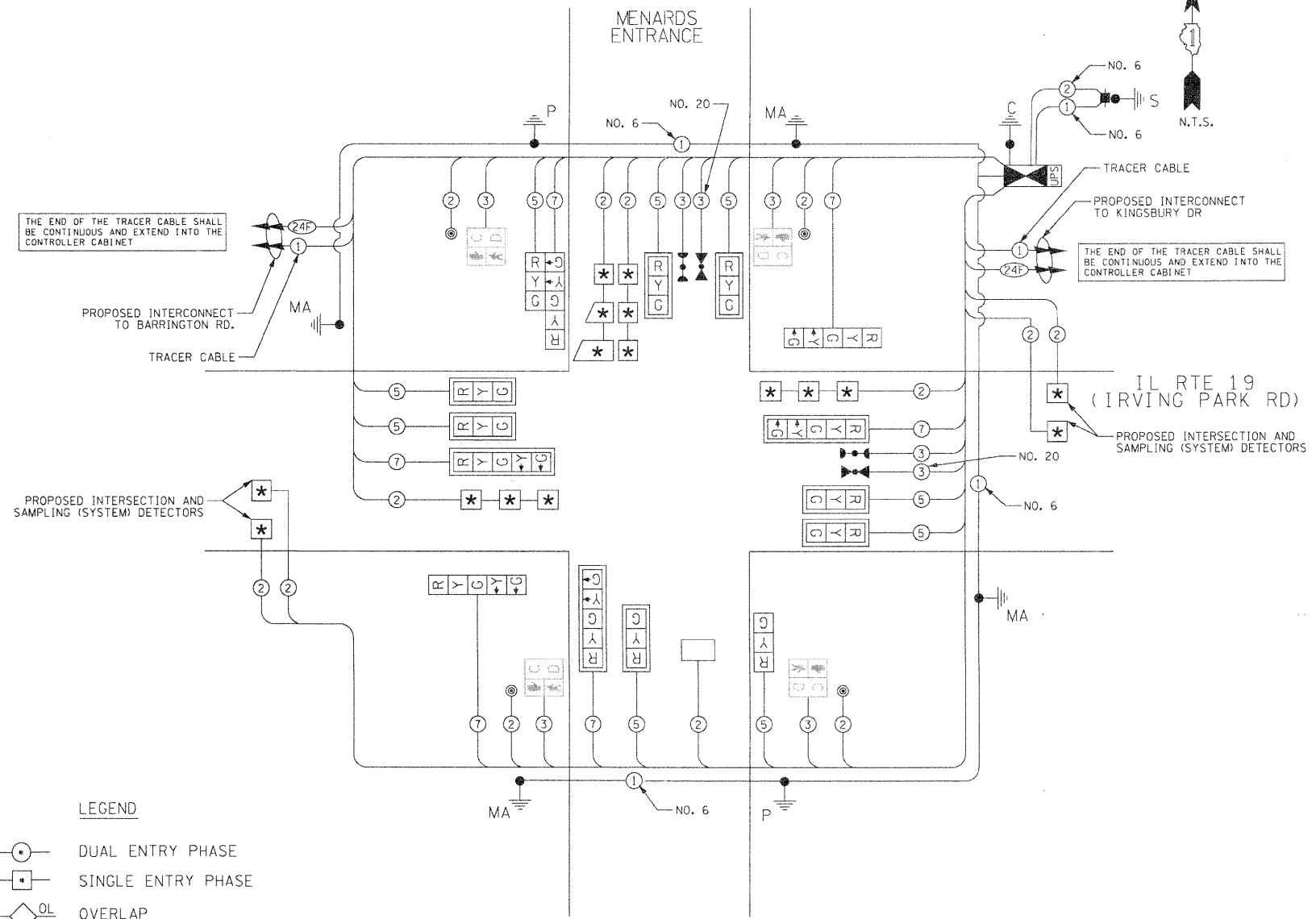
**NOTE:**  
 ONLY REPLACEMENT OF DETECTOR LOOPS NOTED WITH AN ASTERISK (\*) IS PROPOSED AT THIS INTERSECTION.  
 QUANTITIES FOR DETECTOR LOOP REPLACEMENT ARE INCLUDED IN THE SCHEDULE OF QUANTITIES ON THE CABLE PLAN FOR IL ROUTE 19 (IRVING PARK ROAD) AT BARRINGTON ROAD, CONTRACT NO. 60L23.

**NOTE:**  
 THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED, ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND, ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FILE NAME = K:\Projects\10055\DesignCAD\Sheet Files\141809rwaME\01.dgn	USER NAME = \$USER\$ 141809rwaME\01.dgn	DESIGNED - DRAWN -	REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL ROUTE 19 (IRVING PARK ROAD) AT BARRINGTON ROAD EXISTING TRAFFIC SIGNAL EQUIPMENT AT MENARDS ENTRANCE</b>	F.A.U. RTE. 1321	SECTION 2010-048-N	COUNTY COOK	TOTAL SHEETS 53	SHEET NO. 21	
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -	SCALE: N.T.S.			SHEET NO. OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT			
PLOT DATE = 3/6/2011	DATE -	REVISED -									
CONTRACT NO. 60L23											

PROPOSED CABLE PLAN



- LEGEND**
- ◀ ⊙ ▶ DUAL ENTRY PHASE
  - ◀ □ ▶ SINGLE ENTRY PHASE
  - ◀ ◇ ▶ OVERLAP
  - ◀ ⊙ ▶ PEDESTRIAN PHASE
  - NUMBER REFERS TO ASSOCIATED PHASE

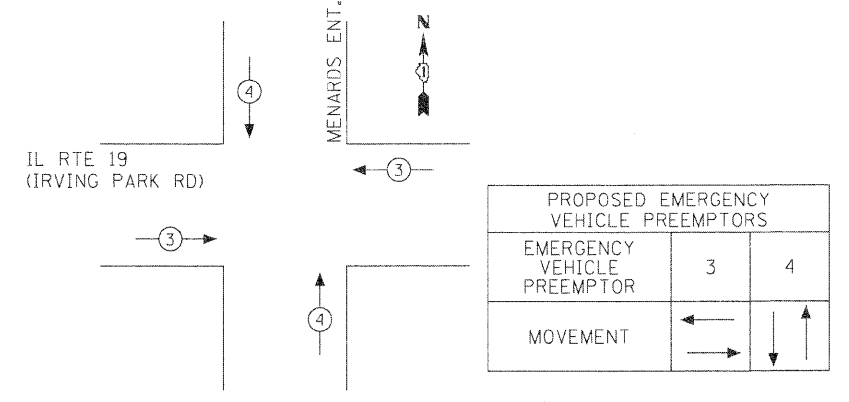
OVERLAP LETTER    PERMISSIVE PHASE    PROTECTED PHASE

B = 4 + 5

SCHEDULE OF QUANTITIES

\* ONLY REPLACEMENT OF DETECTOR LOOPS NOTED WITH AN ASTERISK (\*) IS PROPOSED AT THIS INTERSECTION. QUANTITIES FOR DETECTOR LOOP REPLACEMENT ARE INCLUDED IN THE SCHEDULE OF QUANTITIES ON THE CABLE PLAN FOR IL ROUTE 19 (IRVING PARK ROAD) AT BARRINGTON ROAD, CONTRACT NO. 60L23.

EMERGENCY VEHICLE PREEMPTION SEQUENCE



NOTE:  
 THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND.)	LED	% OPERATION	
SIGNAL (RED)	15	17		0.50	127.5
(YELLOW)	15	25		0.25	93.75
(GREEN)	15	15		0.25	56.25
ARROW	12	12		0.10	14.4
PED. SIGNAL	4	25		1.00	100.0
CONTROLLER	1	100		1.00	100.0
ILLUM. SIGN	-			0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	491.9
ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, ILLINOIS 60196-1096					
ENERGY SUPPLY CONTACT: MARTY RUBIN					
PHONE: (847) 608-2400					
COMPANY: COM. ED.					

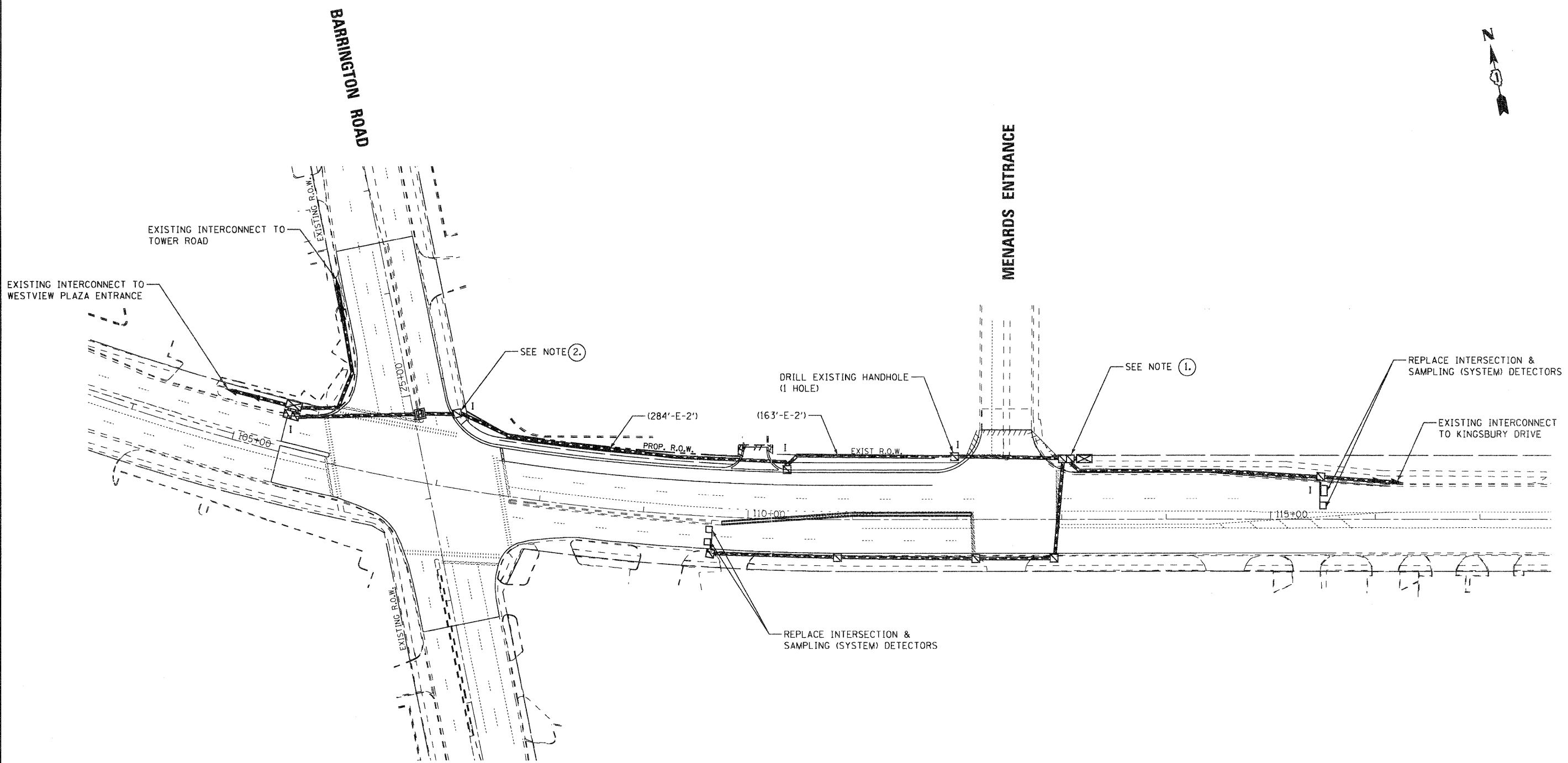
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		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

IL ROUTE 19 (IRVING PARK ROAD) AT BARRINGTON ROAD  
 MENARDS ENTRANCE CABLE PLAN & PHASE DESIGNATION DIAGRAM

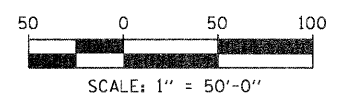
SCALE: N.T.S.    SHEET NO. OF SHEETS    STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2010-048-N	COOK	53	22
CONTRACT NO. 60L23				
ILLINOIS FED. AID PROJECT				



**CONSTRUCTION NOTES:**

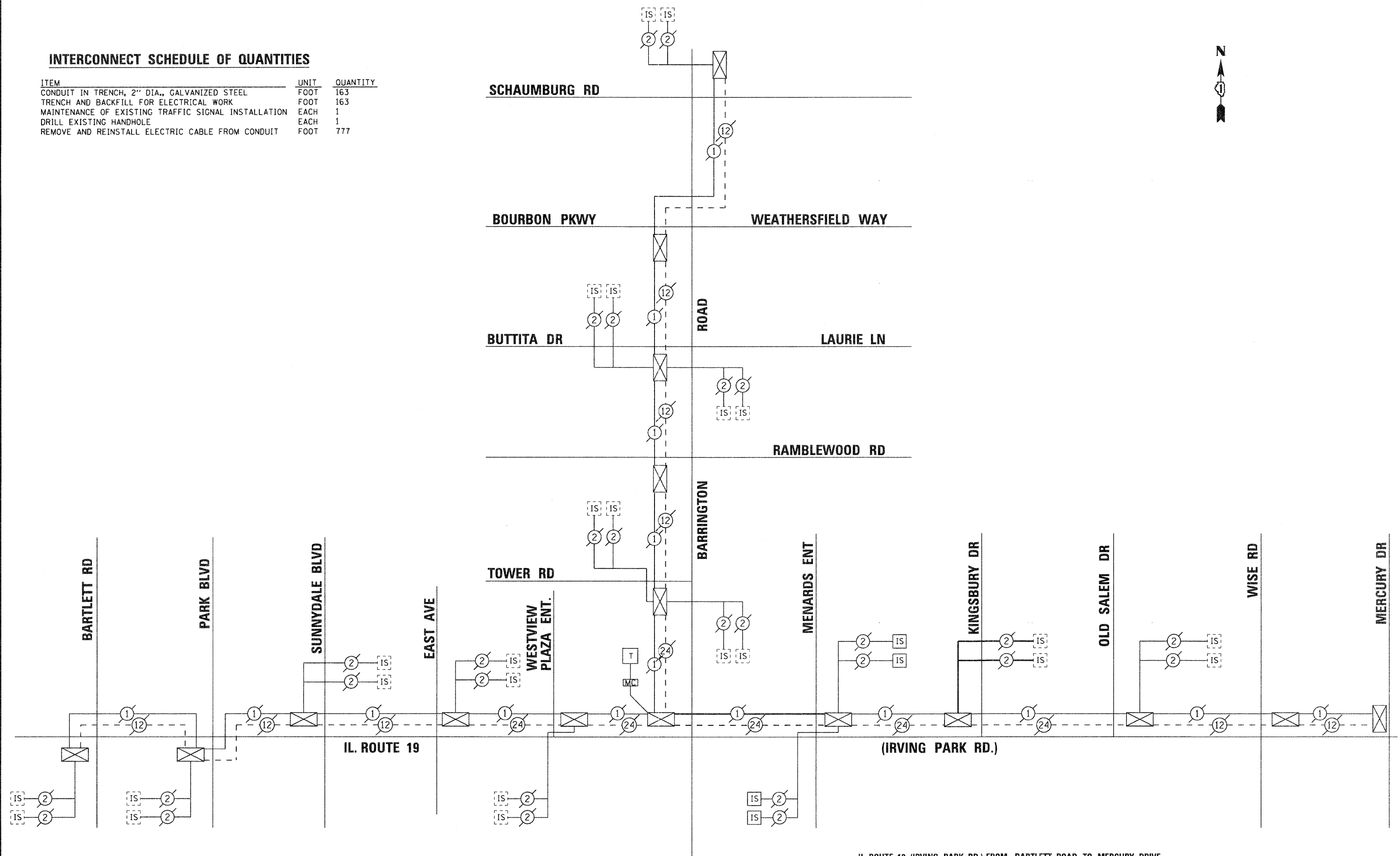
- ① DISCONNECT THE FIBER OPTIC INTERCONNECT CABLE TO THE INTERSECTION OF ILL RTE 19 (IRVING PARK ROAD) AT BARRINGTON ROAD. INSTALL DUST CAPS TO PROTECT THE FIBER OPTIC CABLE CONNECTORS AND PLUGS. REINSTALL FIBER OPTIC CABLE IN CONTROLLER CABINET AFTER CABLE IS REINSTALLED IN CONDUIT INSTALLED AS PART OF TRAFFIC SIGNAL MODIFICATION AT BARRINGTON ROAD.
- ② PULL EXISTING 24F FIBER OPTIC CABLE BACK TO THIS HANDHOLE. COIL THE CABLE AND PROTECT FROM DAMAGE AND WATER OR MOISTURE. REINSTALL FIBER OPTIC CABLE IN CONDUIT INSTALLED AS PART OF TRAFFIC SIGNAL MODIFICATION AT BARRINGTON ROAD.



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PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -	SCALE: 1" = 50'-0"			SHEET NO. OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT			
PLOT DATE = 3/6/2011	DATE -	REVISED -									

**INTERCONNECT SCHEDULE OF QUANTITIES**

ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	163
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	163
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
DRILL EXISTING HANDHOLE	EACH	1
REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	777



IL ROUTE 19 (IRVING PARK RD.) FROM BARTLETT ROAD TO MERCURY DRIVE

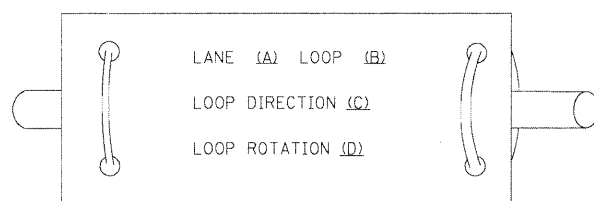
FILE NAME =	USER NAME = #USER*	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL ROUTE 19 (IRVING PARK ROAD) AT BARRINGTON ROAD INTERCONNECT SCHEMATIC</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
K:\Projects\10265\DesignCAD\Sheet Files\141809\141809.rwa\INTschdgn	PLOT SCALE = #SCALE*	DRAWN -	REVISED -			1321	2010-048-N	COOK	53	24	
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		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
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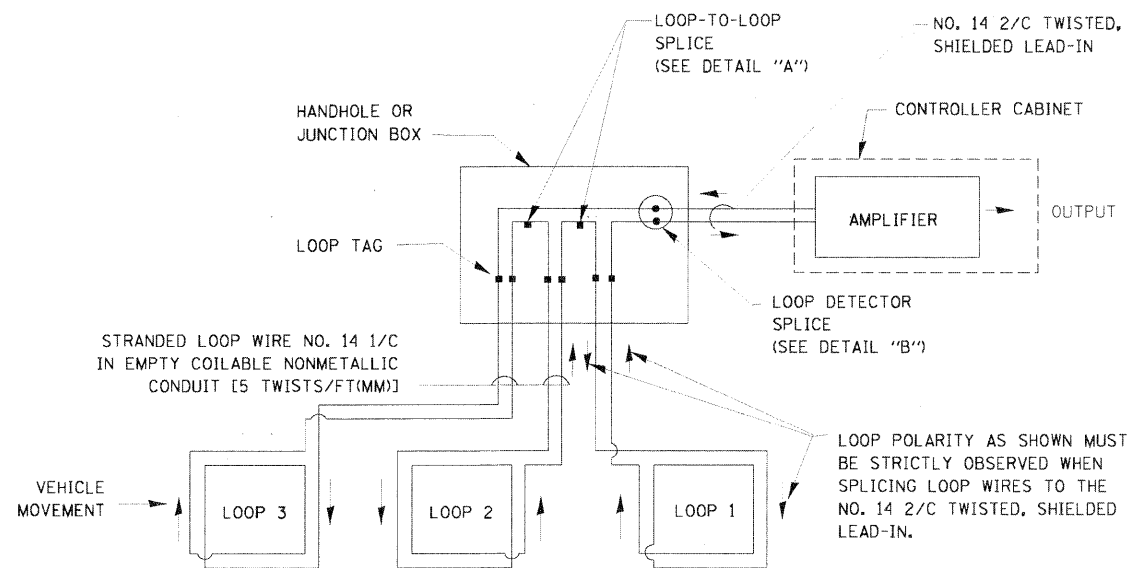
### LOOP DETECTOR NOTES

- EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

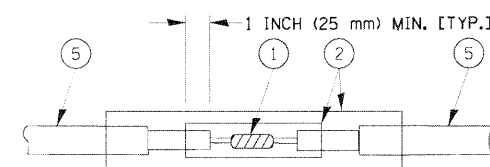


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

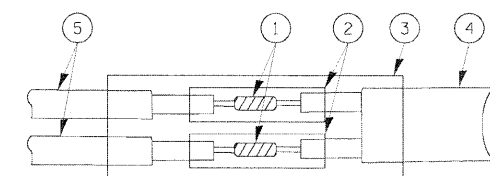


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

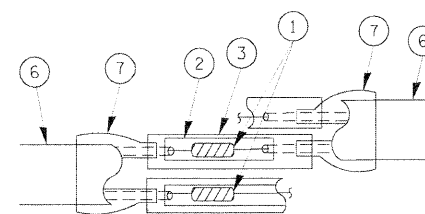


DETAIL "A"  
LOOP-TO-LOOP SPLICE

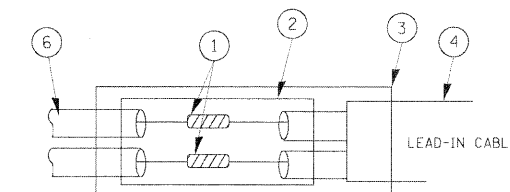


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

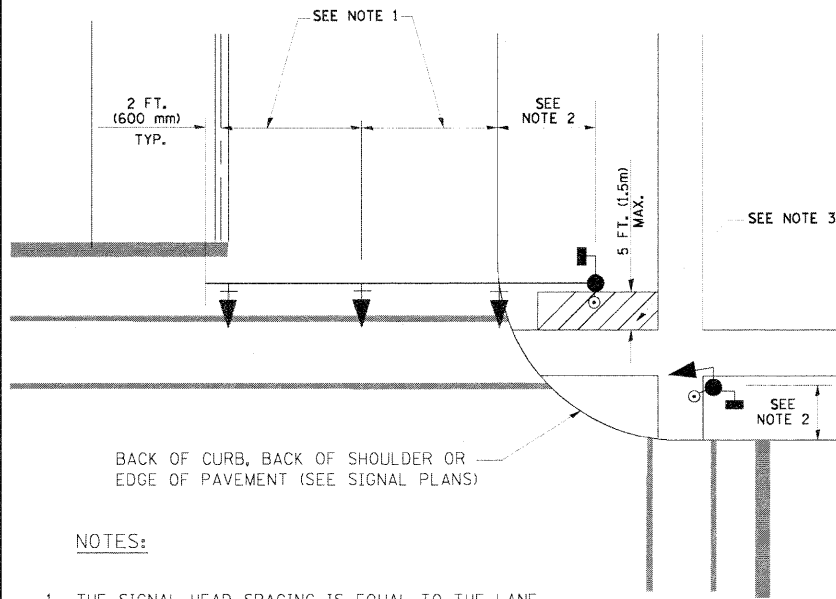
LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- NO. 14 2/C TWISTED, SHIELDED CABLE.
- LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- PRE-FORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL ROUTE 19 (IRVING PARK ROAD) AT BARRINGTON ROAD DISTRICT ONE - STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
K:\Projects\12055\DesignCAD\Sheet Files\14180\pwa\DET01.dgn		DRAWN -	REVISED -		SCALE: N.T.S.	SHEET NO. 1 OF 6 SHEETS	STA.	1321	2010-048-N	COOK	53	25
PLDT SCALE = #SCALE#		CHECKED -	REVISED -		TO STA.			ILLINOIS FED. AID PROJECT		CONTRACT NO. 60L23		
PLDT DATE = 3/6/2011		DATE -	REVISED -									

**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST**

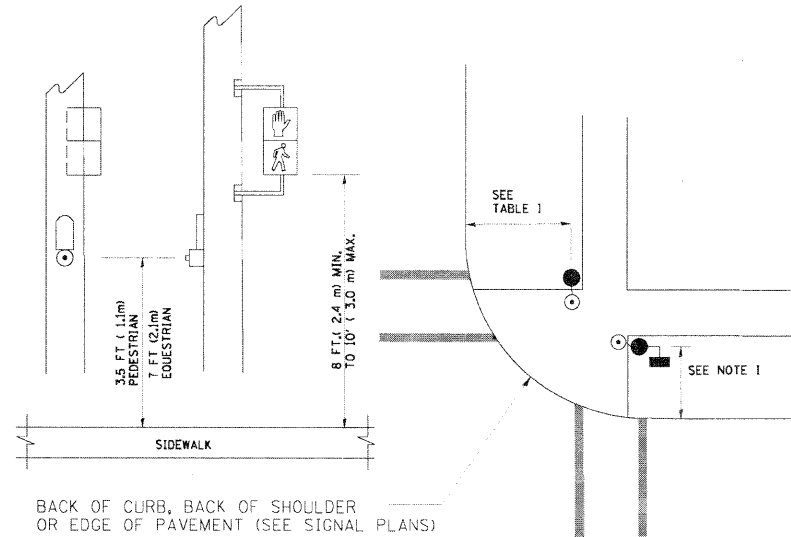
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



**NOTES:**

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

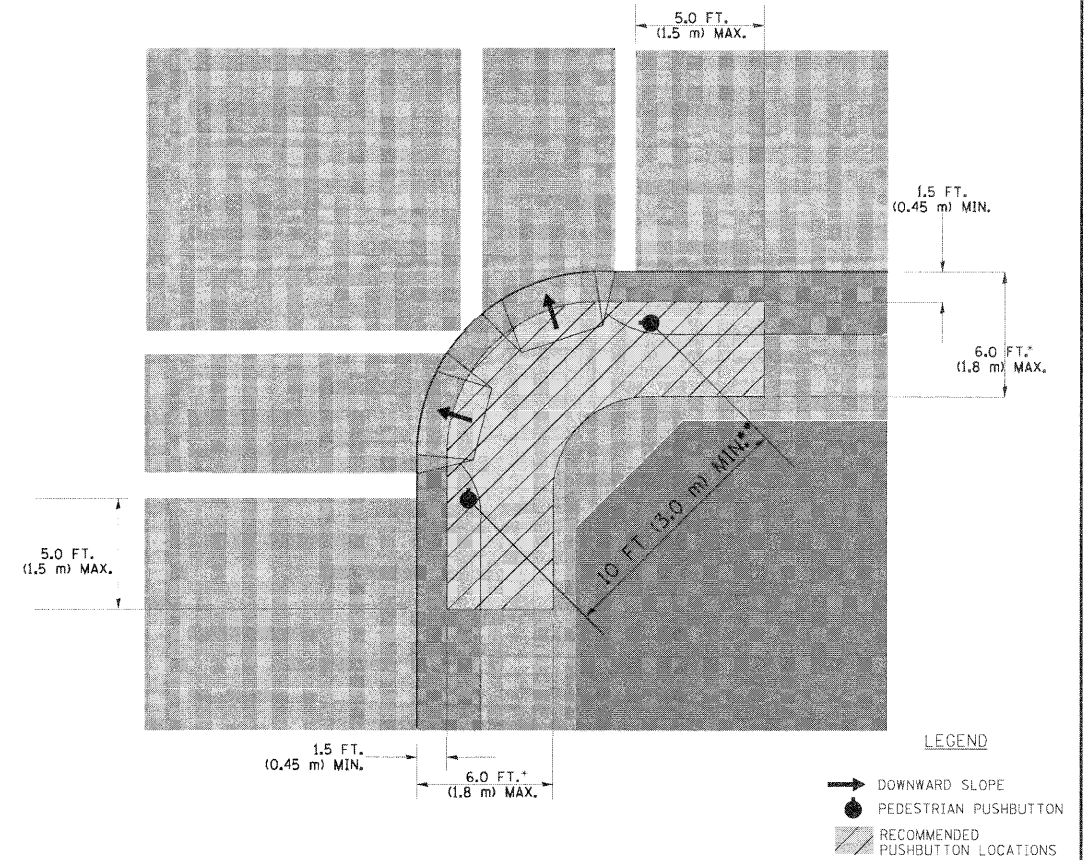
**PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST**



**NOTES:**

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

**RECOMMENDED PUSHBUTTON LOCATIONS**



**LEGEND**

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- RECOMMENDED PUSHBUTTON LOCATIONS

- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

**NOTES:**

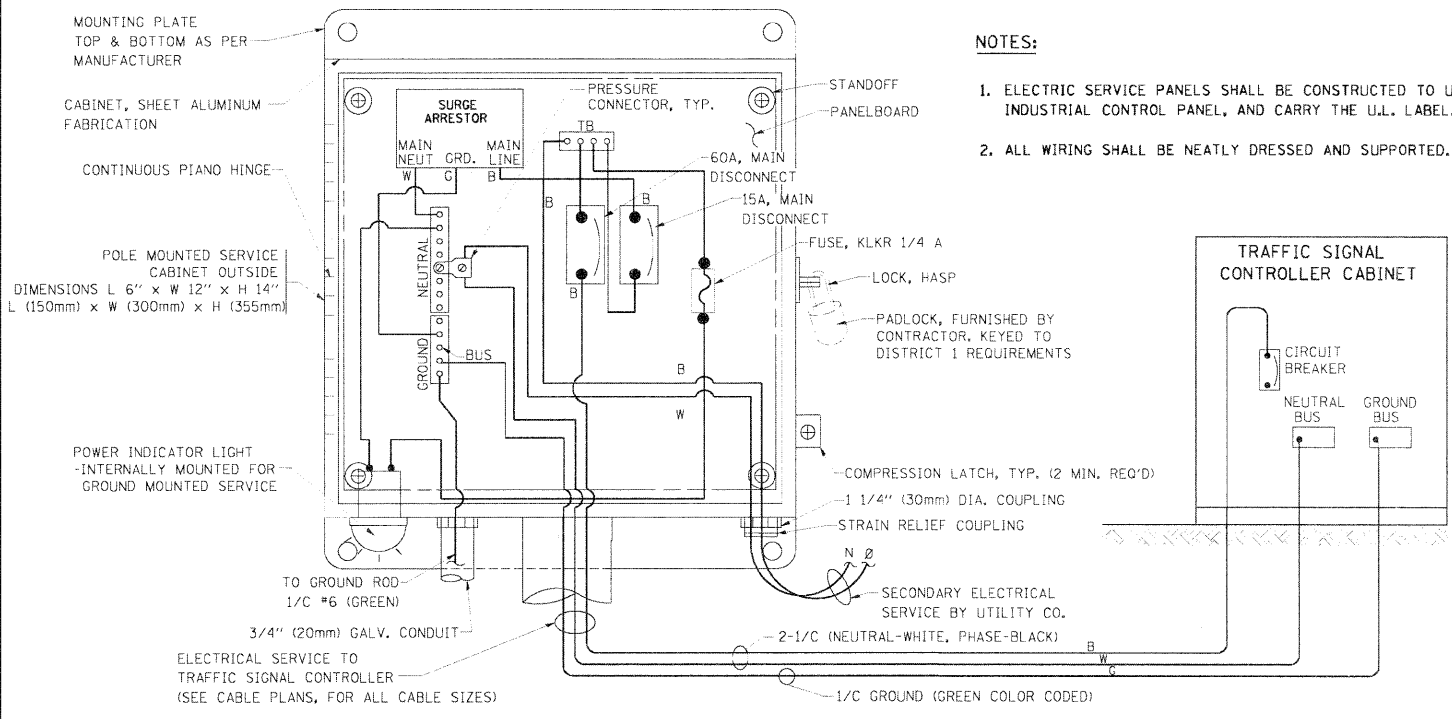
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

**TRAFFIC SIGNAL EQUIPMENT OFFSET**

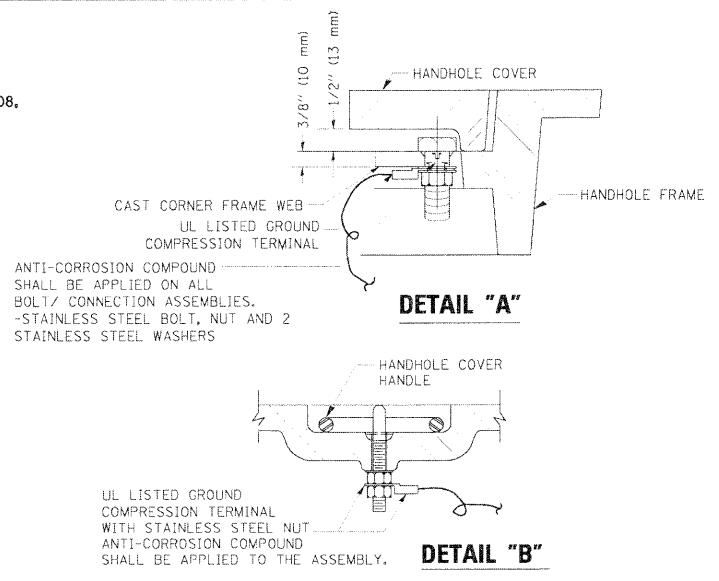
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

**NOTES:**

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD AFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

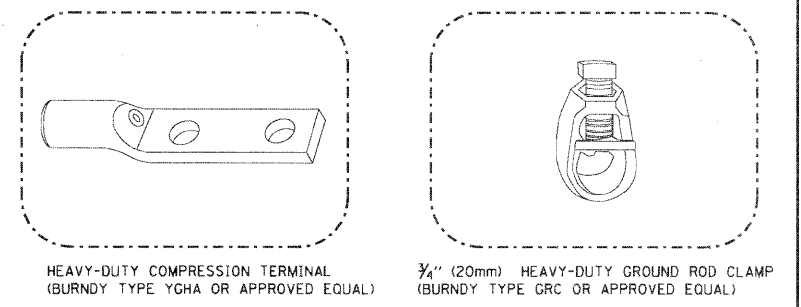
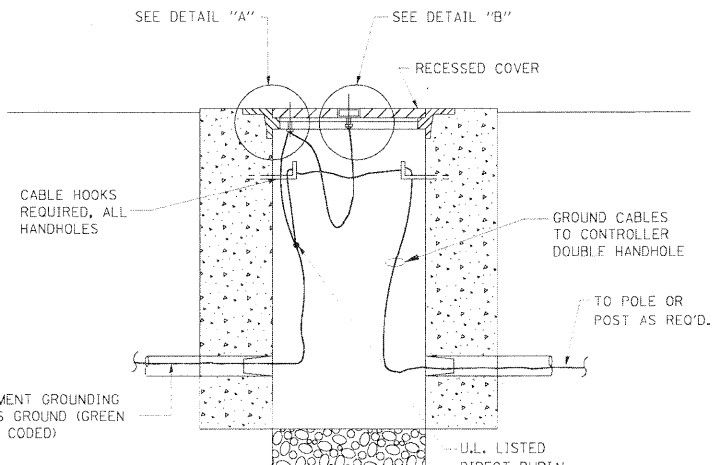


- NOTES:**
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
  2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



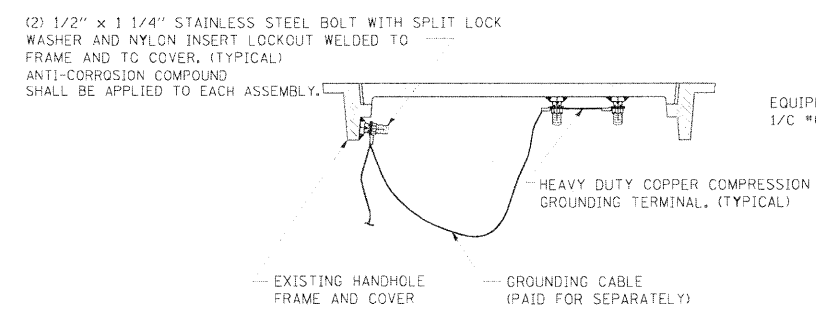
- NOTES:**
- GROUNDING SYSTEM**
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
  2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
  3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
  4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN) (NOT TO SCALE)**

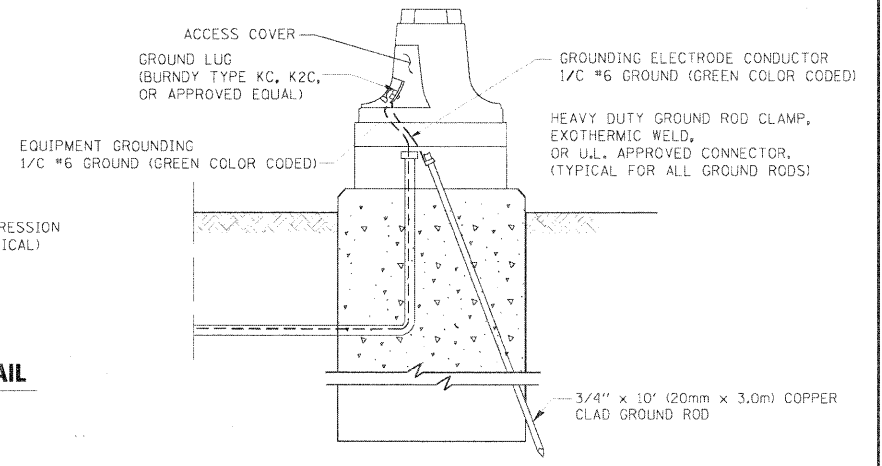


- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
  - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

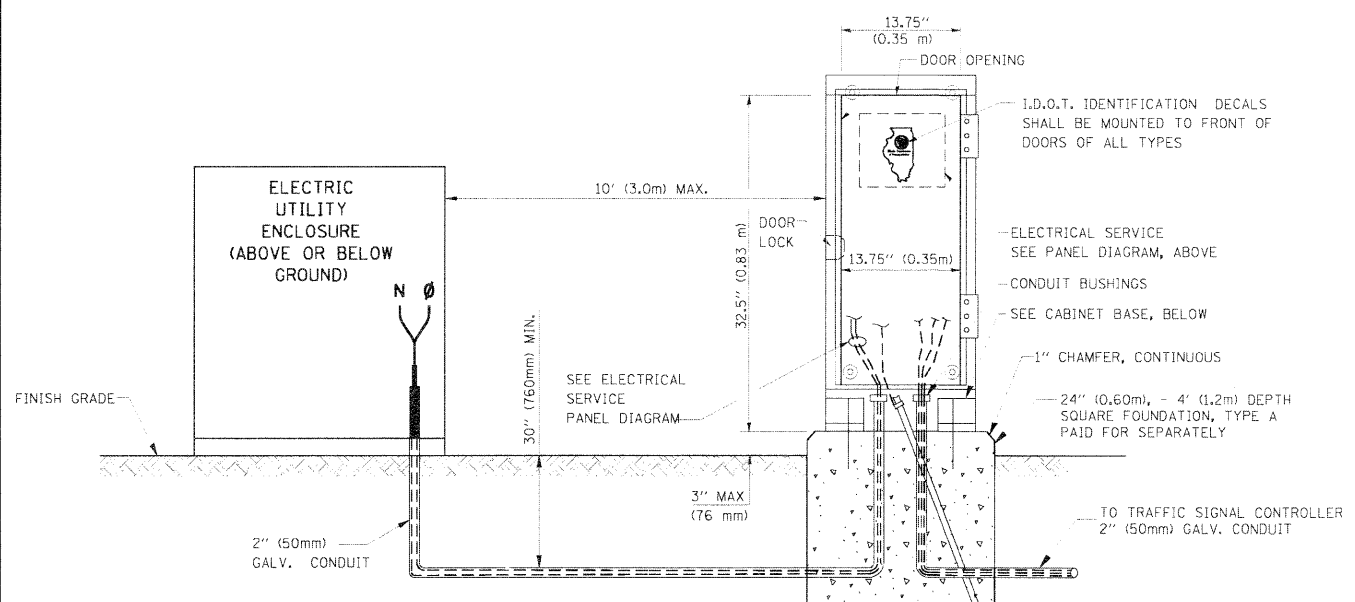
**HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)**



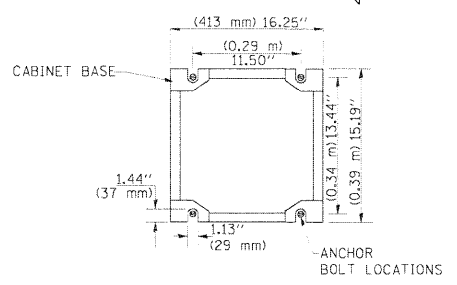
**EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)**



**MAST ARM POLE / POST-GROUNDING DETAIL (NOT TO SCALE)**



**SERVICE INSTALLATION GROUND MOUNT (NOT TO SCALE)**



**CABINET - BASE BOLT PATTERN (NOT TO SCALE)**

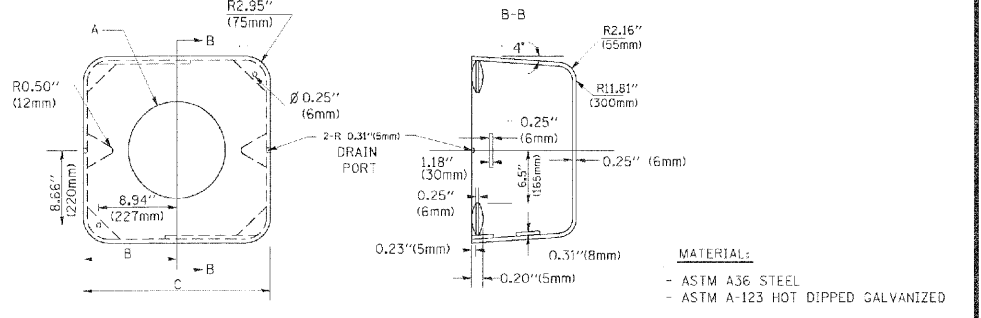
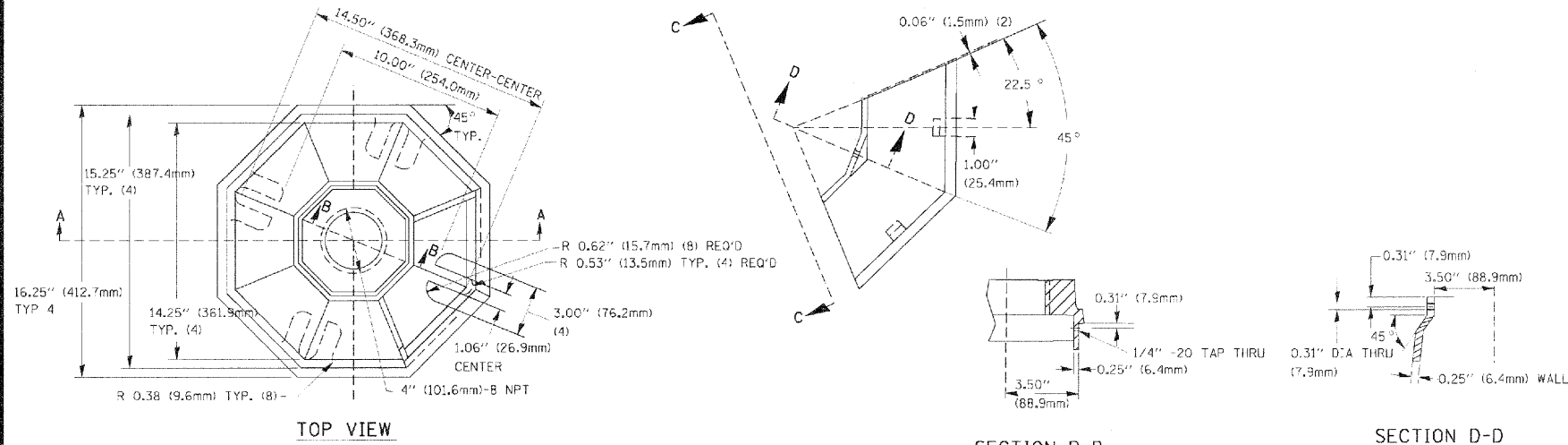
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K:\Projects\10095\DesignCAD\Sheet Files\141807rwaDET03.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 19 (IRVING PARK ROAD) AT BARRINGTON ROAD  
 DISTRICT ONE - STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: N.T.S. SHEET NO. 3 OF 6 SHEETS STA. TO STA.

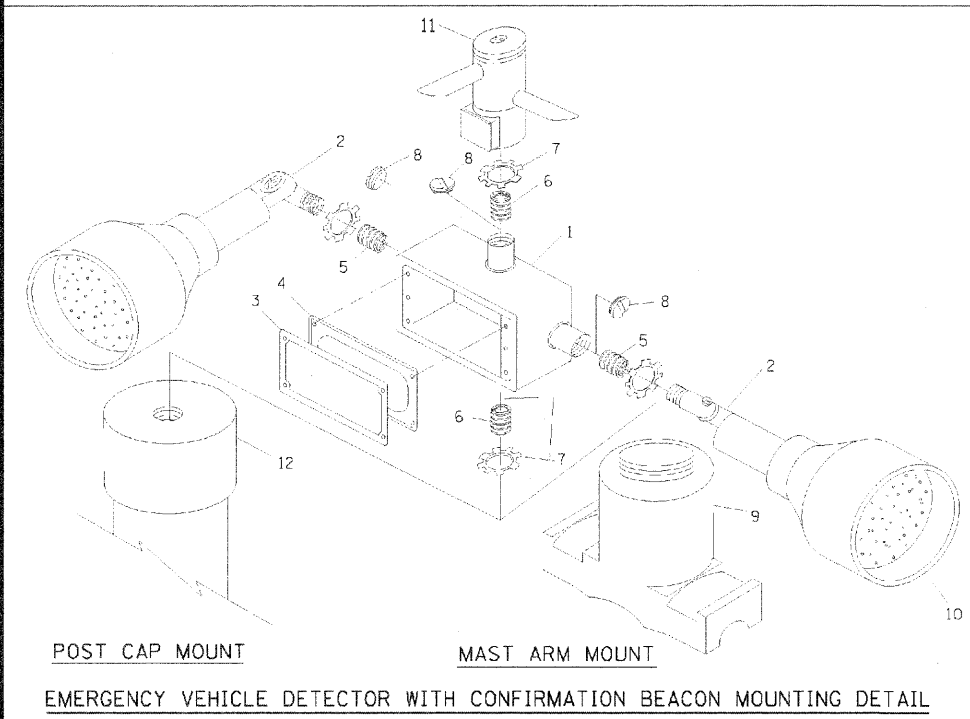
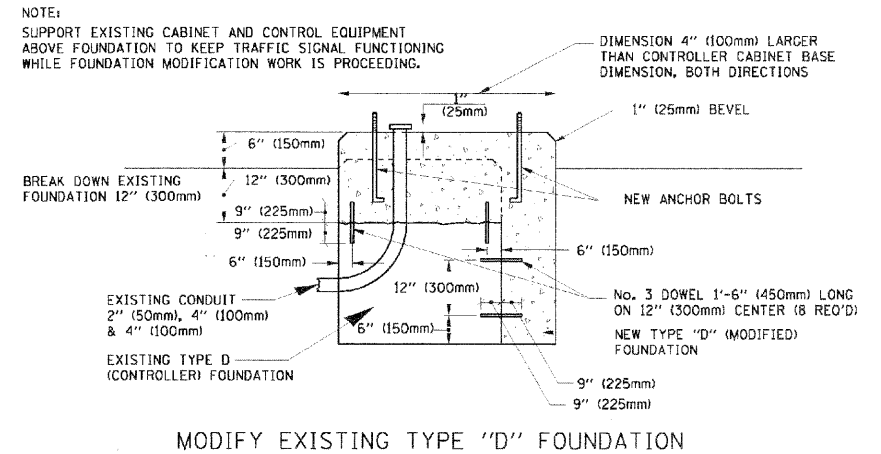
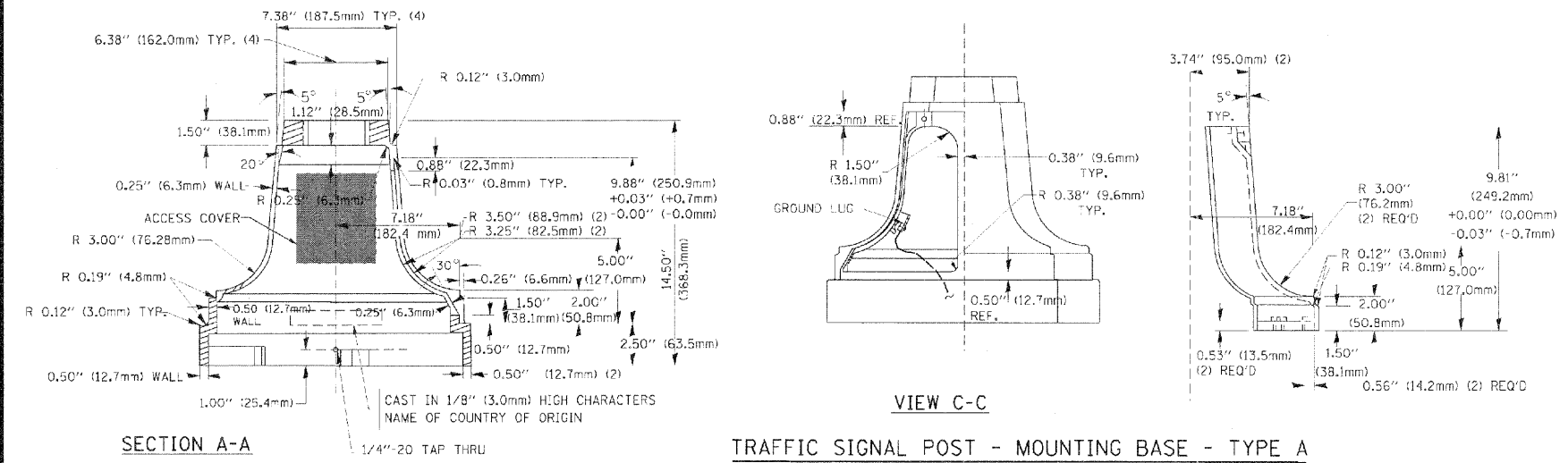
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2010-048-N	COOK	53	27
CONTRACT NO. 60L23				
ILLINOIS FED. AID PROJECT				



A	B	C	HEIGHT	WEIGHT
VARIES	9.5\" (241mm)	19\" (483mm)	7\" (178mm) - 12\" (300mm)	53 lbs (24kg)
VARIES	10.75\" (273mm)	21.5\" (546mm)	7\" (178mm) - 12\" (300mm)	68 lbs (31 kg)
VARIES	13.0\" (330mm)	26\" (660mm)	7\" (178mm) - 12\" (300mm)	81 lbs (37 kg)
VARIES	18.5\" (470mm)	37\" (940mm)	7\" (178mm) - 12\" (300mm)	126 lbs (57 kg)

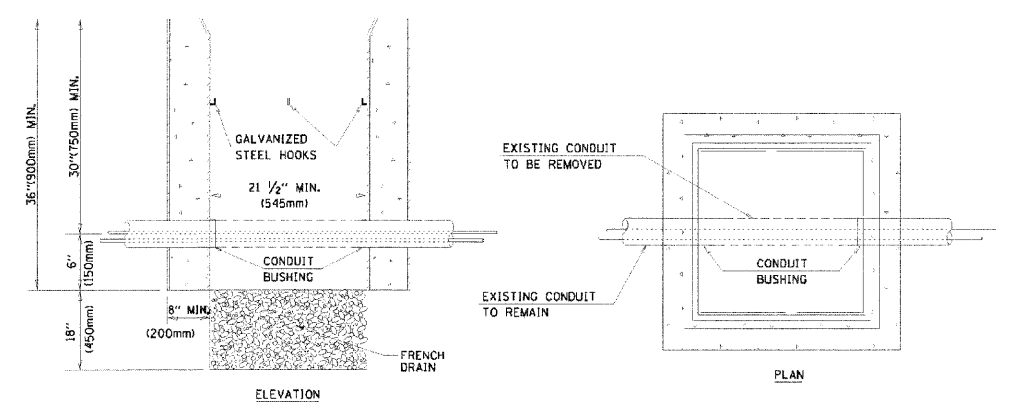
**SHROUD**

- NOTES:
- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
  - THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
  - THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.



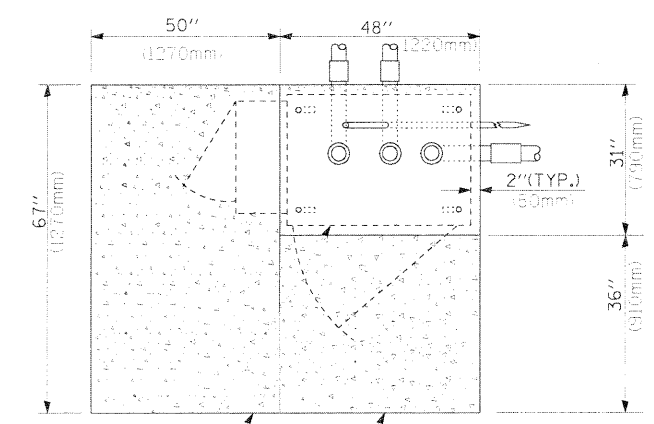
ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\" (19 mm) CLOSE NIPPLE
7	3/4\" (19 mm) LOCKNUT
8	3/4\" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP (18 FT. (5.4 m) POST MIN.)

- NOTES:
- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
  - ITEM #1- OZ/CDNEY FSX-1-50 OR EQUIVALENT  
 ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT  
 ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
  - WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4\" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

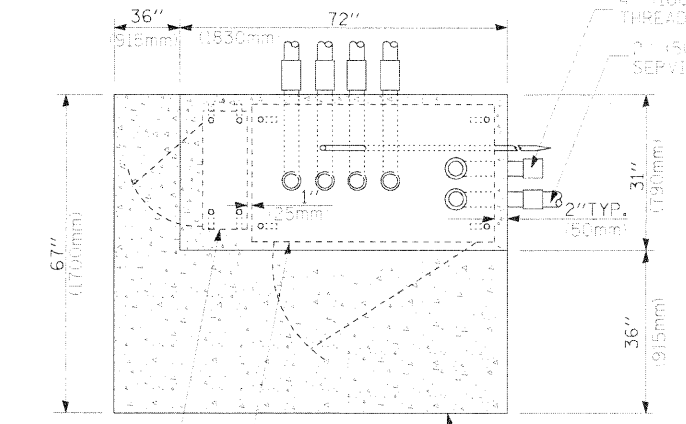


- NOTES:
- HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
  - REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

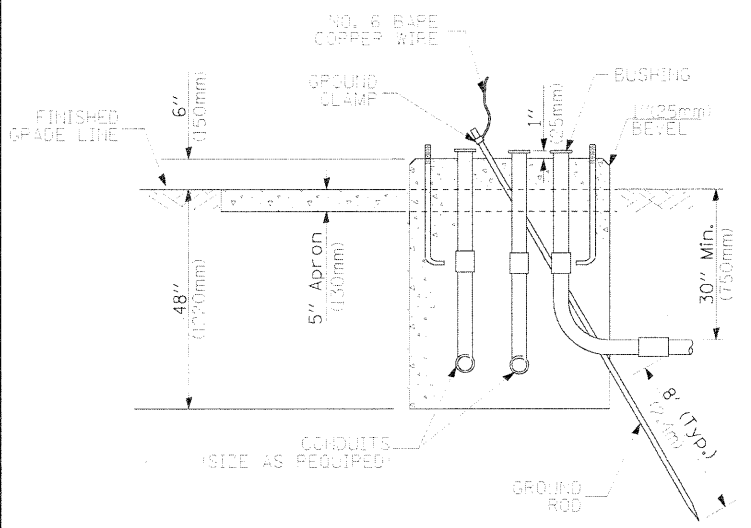
**HANDHOLE TO INTERCEPT EXISTING CONDUIT**



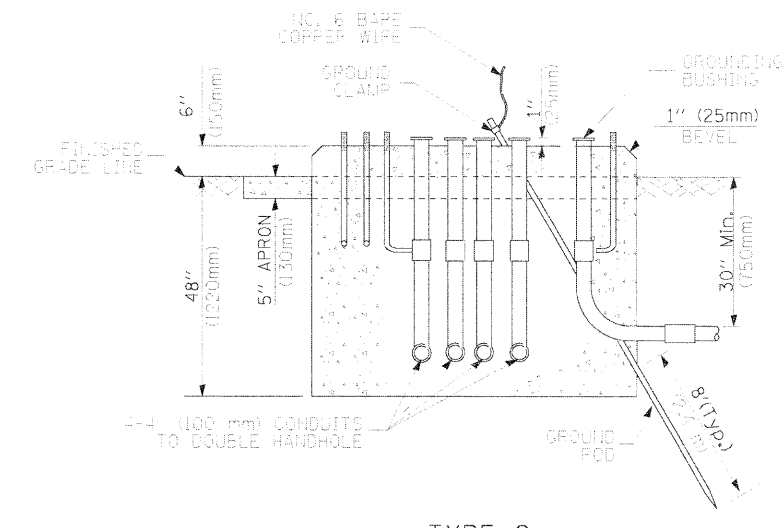
TOP VIEW



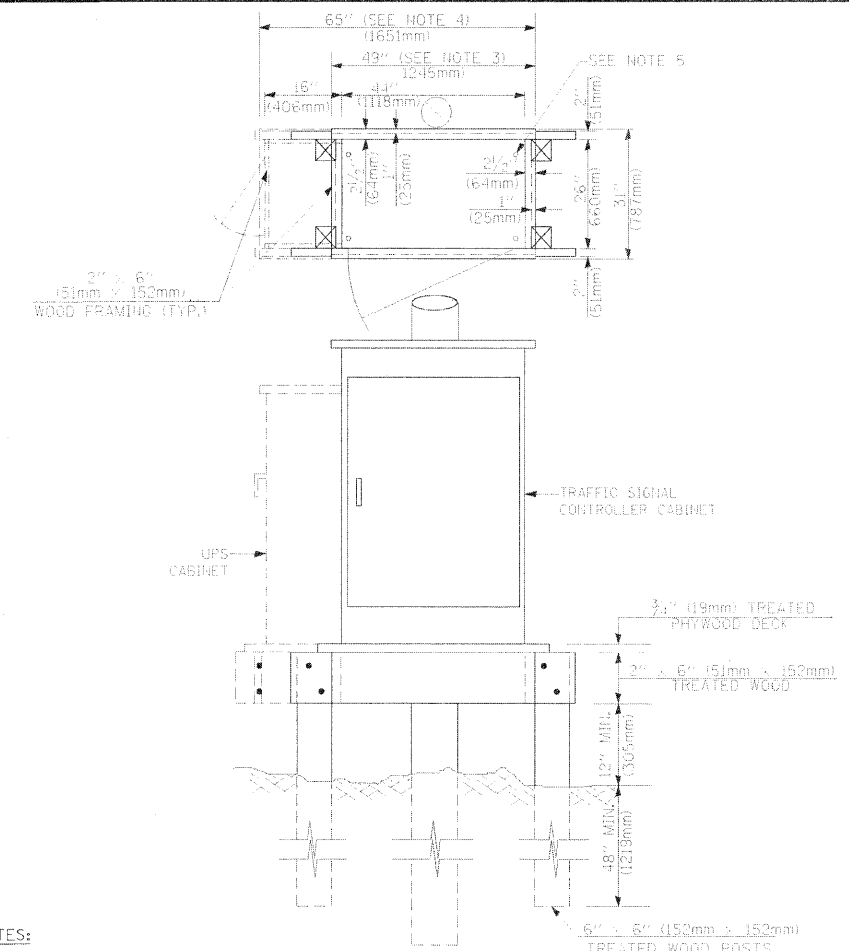
TOP VIEW



TYPE D  
 FOR GROUND MOUNTED  
 CONTROLLER CABINET  
 AND UPS BATTERY CABINET



TYPE C  
 FOR GROUND MOUNTED  
 CONTROLLER CABINET  
 AND UPS BATTERY CABINET



NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

TEMPORARY SIGNAL CONTROLLER  
 WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

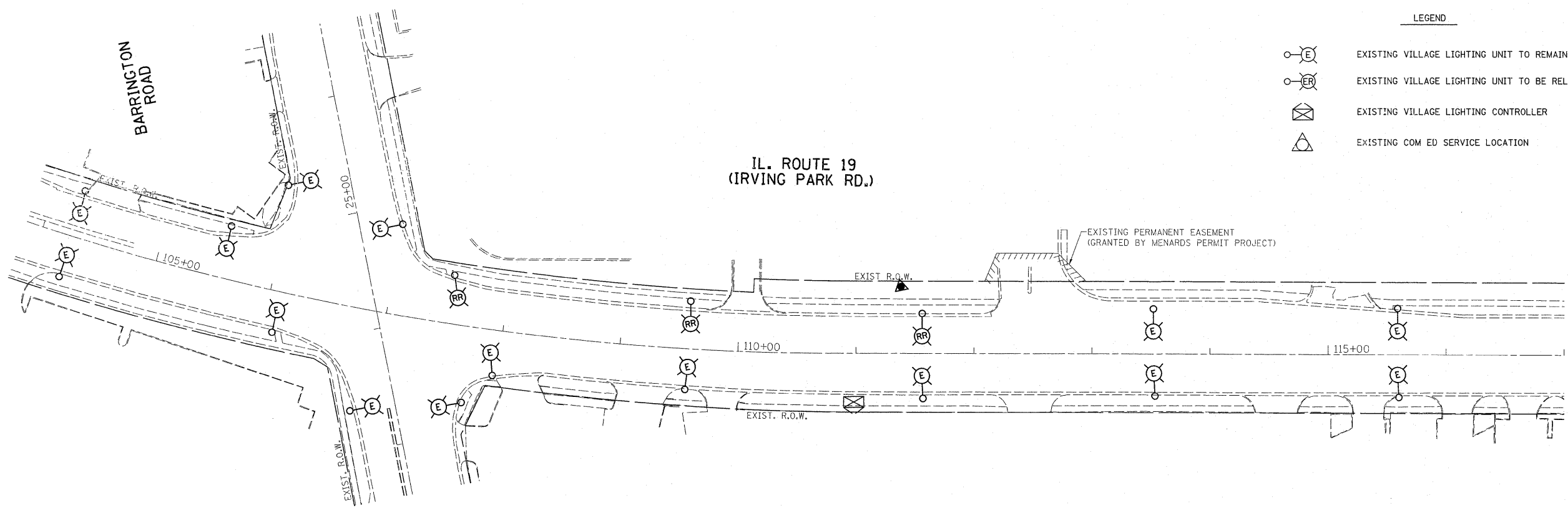
MAST ARM LENGTH	FOUNDATION DEPTH	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF REBARS	SIZE OF REBARS
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	24" (600mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and up to 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m) and up to 85' (25.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (QU) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E



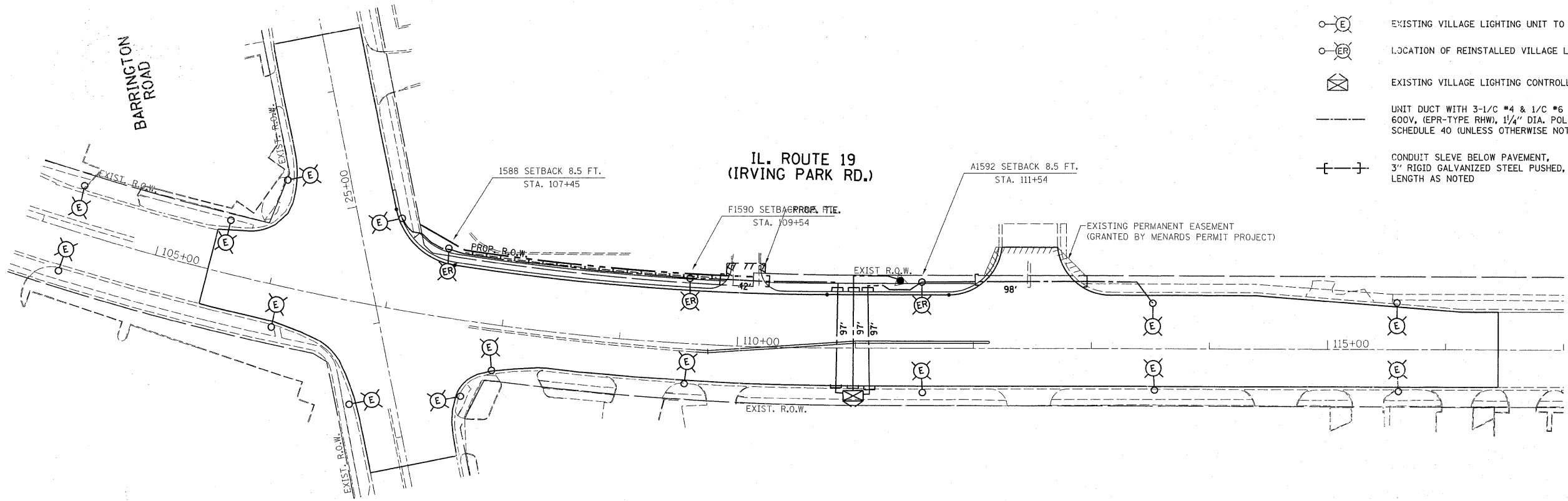


LEGEND

- EXISTING VILLAGE LIGHTING UNIT TO REMAIN
- EXISTING VILLAGE LIGHTING UNIT TO BE RELOCATED
- EXISTING VILLAGE LIGHTING CONTROLLER
- EXISTING COM ED SERVICE LOCATION

IL. ROUTE 19  
(IRVING PARK RD.)

EXISTING



LEGEND

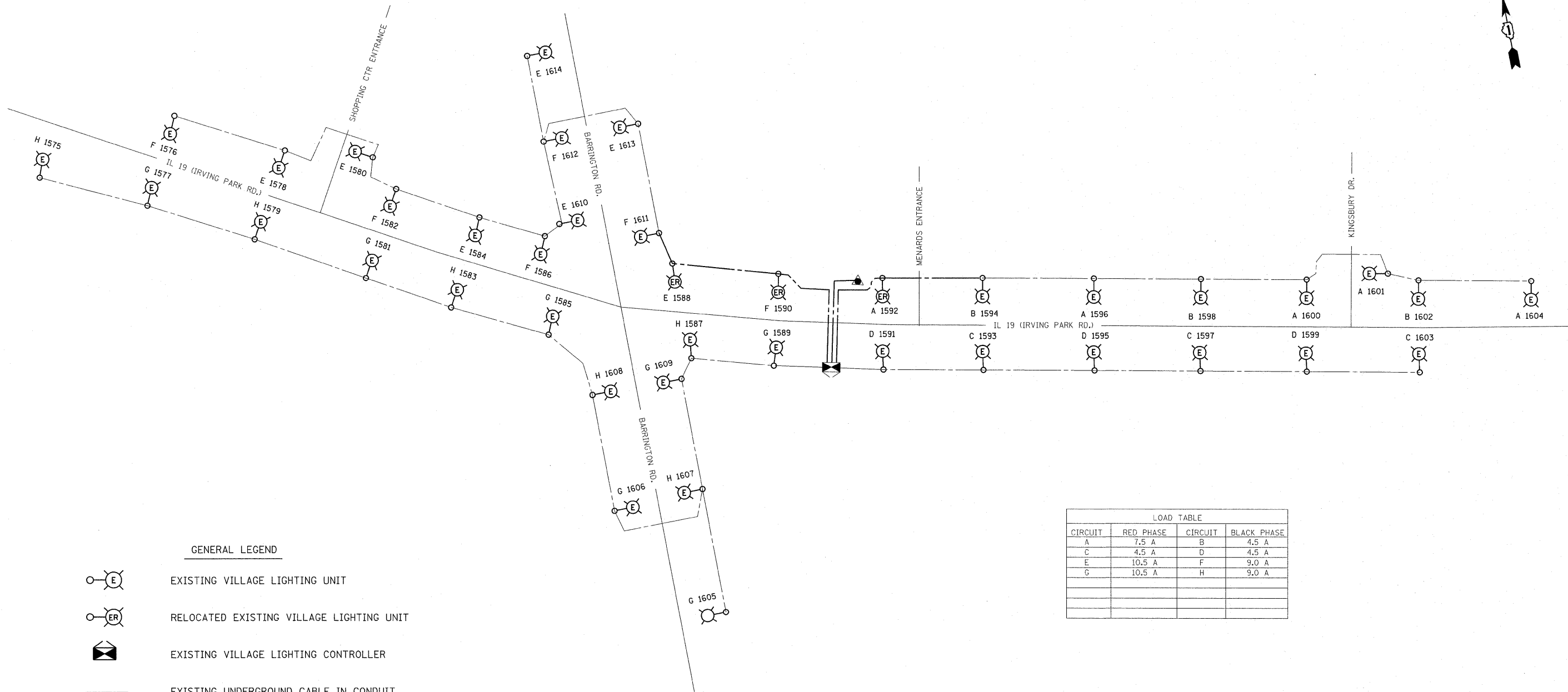
- EXISTING VILLAGE LIGHTING UNIT TO REMAIN
- LOCATION OF REINSTALLED VILLAGE LIGHTING UNIT
- EXISTING VILLAGE LIGHTING CONTROLLER
- UNIT DUCT WITH 3-1/2" #4 & 1/2" #6 GROUND 600V, (EPR-TYPE RHW), 1/4" DIA. POLYETHYLENE, SCHEDULE 40 (UNLESS OTHERWISE NOTED)
- CONDUIT SLEVE BELOW PAVEMENT, 3" RIGID GALVANIZED STEEL PUSHED, LENGTH AS NOTED

IL. ROUTE 19  
(IRVING PARK RD.)







PROPOSED

E1

FILE NAME =	USER NAME = midj.ja	DESIGNED - MAP	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 19 AT BARRINGTON RD. LIGHTING PLANS</b>			F-AJ RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr:\pw_work\pw\dot\midjja\d0242261\p14180	light.dgn	DRAWN - MAP	REVISED -					1321	2010-048-N	COOK	53	31
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -	REVISED -		SCALE: 1" = 50'			CONTRACT NO. 60L23				
PLOT DATE = 5/12/2011	DATE - 3-22-11	REVISED -	REVISED -		SHEET NO. OF SHEETS STA. 103+85 TO STA. 117+00			ILLINOIS FED. AID PROJECT				



**GENERAL LEGEND**

-  EXISTING VILLAGE LIGHTING UNIT
-  RELOCATED EXISTING VILLAGE LIGHTING UNIT
-  EXISTING VILLAGE LIGHTING CONTROLLER
-  EXISTING UNDERGROUND CABLE IN CONDUIT
-  UNIT DUCT WITH 3-1/C #4 & 1/C #6 GROUND 600V, (EPR-TYPE RHW), 1/4" DIA. POLYETHYLENE, SCHEDULE 40 (UNLESS OTHERWISE NOTED)
-  EXISTING COM ED SERVICE CONNECTION

LOAD TABLE			
CIRCUIT	RED PHASE	CIRCUIT	BLACK PHASE
A	7.5 A	B	4.5 A
C	4.5 A	D	4.5 A
E	10.5 A	F	9.0 A
G	10.5 A	H	9.0 A

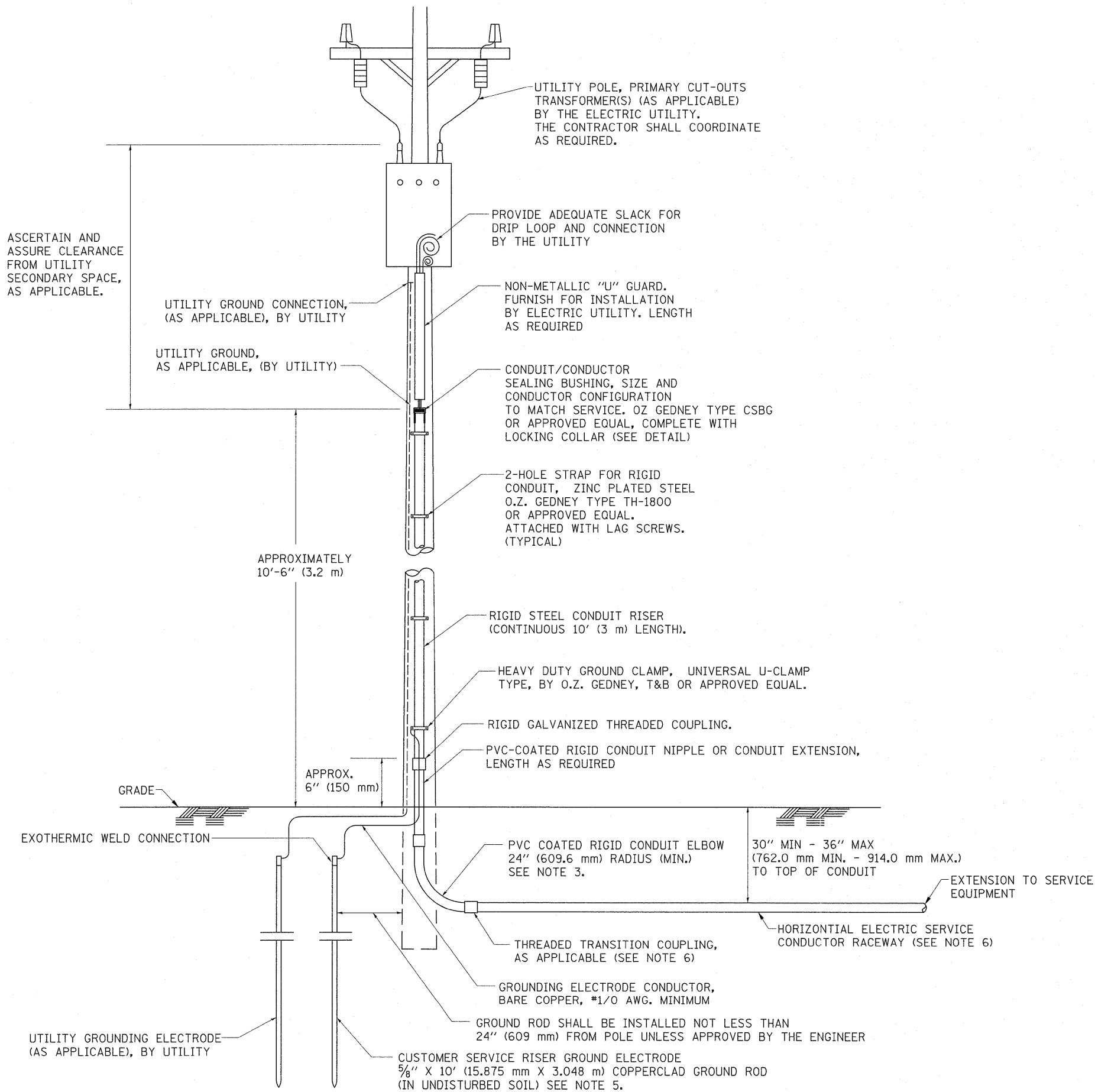
**GENERAL NOTES:**

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES BEFORE TRENCHING.
2. THE CONTRACTOR SHALL STAKE THE PROPOSED LOCATION OF THE RELOCATED LIGHT POLES AND HAVE THE LOCATIONS APPROVED BY THE ENGINEER.
3. LIGHTING UNIT RELOCATION MUST BE PERFORMED IN SUCH A WAY THAT NIGHT TIME LIGHTING IS MAINTAINED AT ALL TIMES.
4. RELOCATION OF LIGHT POLE FOUNDATIONS SHALL BE INCLUDED IN THE RELOCATION OF LIGHTING UNIT PAY ITEM.

E2

FILE NAME =	USER NAME = midjje	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 19 AT BARRINGTON RD. ONE-LINE DIGRAM</b>				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw_work\pwsdot\midjje\d0242261\PI4180-light.dgn		DRAWN -	REVISED -		1321	2010-048-N	COOK	53	32				
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PLOT DATE = 6/15/2011		DATE -	REVISED -		[ILLINOIS] FED. AID PROJECT								



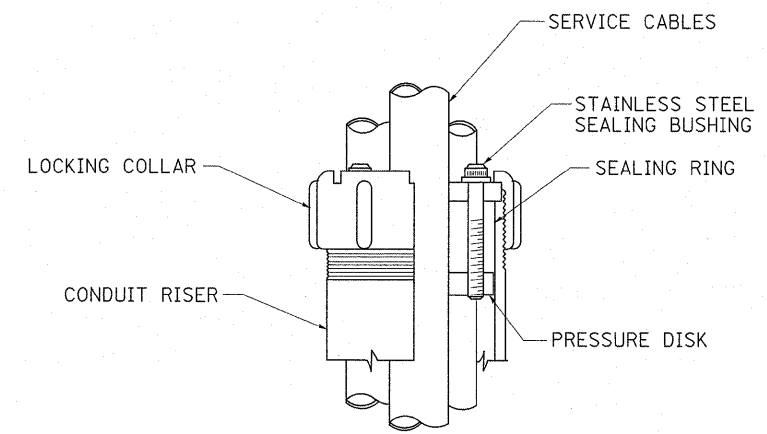


**APPLICATION**

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

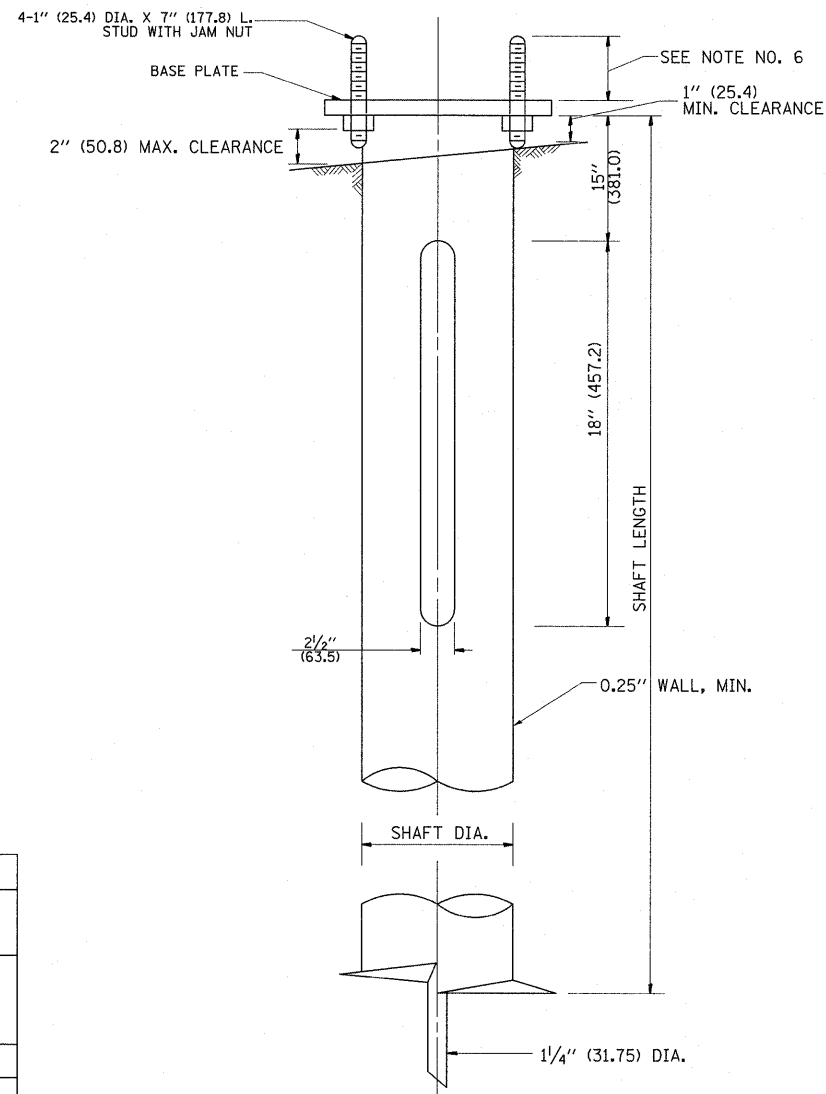
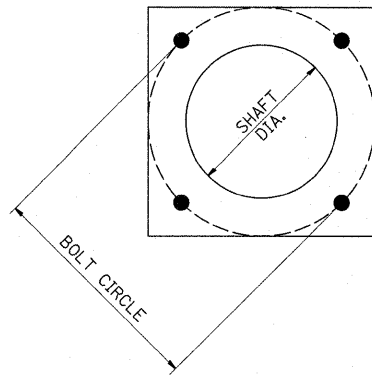
**NOTES**

- 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**

FILE NAME =	USER NAME = mdyja	DESIGNED -	REVISED - 03-03-06	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ELECTRIC SERVICE INSTALLATION AERIAL, REMOTE DISCONNECT</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pwork\mdyja\0156237\01st.dgn		DRAWN -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	1321	2010-048-N	COOK	53	33
		CHECKED - MEA	REVISED -					<b>BE-220</b>			CONTRACT NO. 60L23		
		DATE -	REVISED -					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					



**HELIX FOUNDATION SIZE**

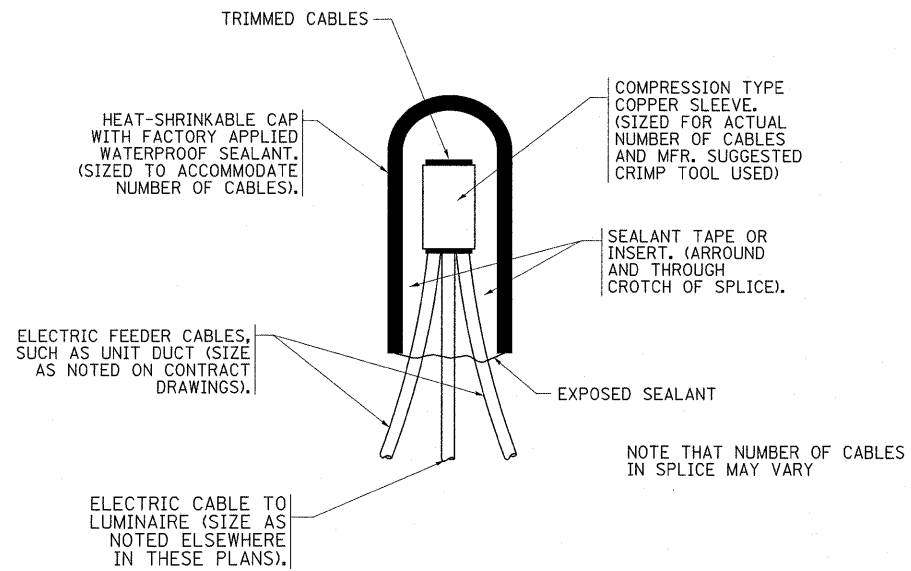
POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
30 FT.	1 1/2"	8 5/8"	6 FT.	12"x12"x1"
31 FT.-35 FT.	1 1/2"	8 5/8"	6 FT.	12"x12"x1"
36 FT.-40 FT.	15"	8 5/8"	6 FT.	15"x15"x1 1/4"
41 FT.-45 FT.	15"	8 5/8"	6 FT.	15"x15"x1 1/4"
46 FT.-50 FT.	15"	10"	8 FT.	15"x15"x1 1/4"

**METAL HELIX FOUNDATION MATERIALS**

ITEM	MATERIAL REQUIREMENT
BASEPLATE	AASHTO M 270M, GRADE 36 (M270M, GRADE 250)
SHAFT	ASTM A 252, GRADE 2 (PHOSPHOROUS 0.04% MAXIMUM, SULFUR 0.05% MAXIMUM)
HELIX SCREW	AASHTO M 183 (ASTM A 635)
PILOT POINT	AASHTO M 270 (ASTM A 575)
ANCHOR RODS/STUDS	AASHTO M 314 (ASTM F 1554)
HEXAGON NUTS	AASHTO M 291M (ASTM A 563) GRADE DH, OR AASHTO M 292 (ASTM A 194) GRADE 2H
WASHERS	AASHTO M 293 (ASTM F 436)

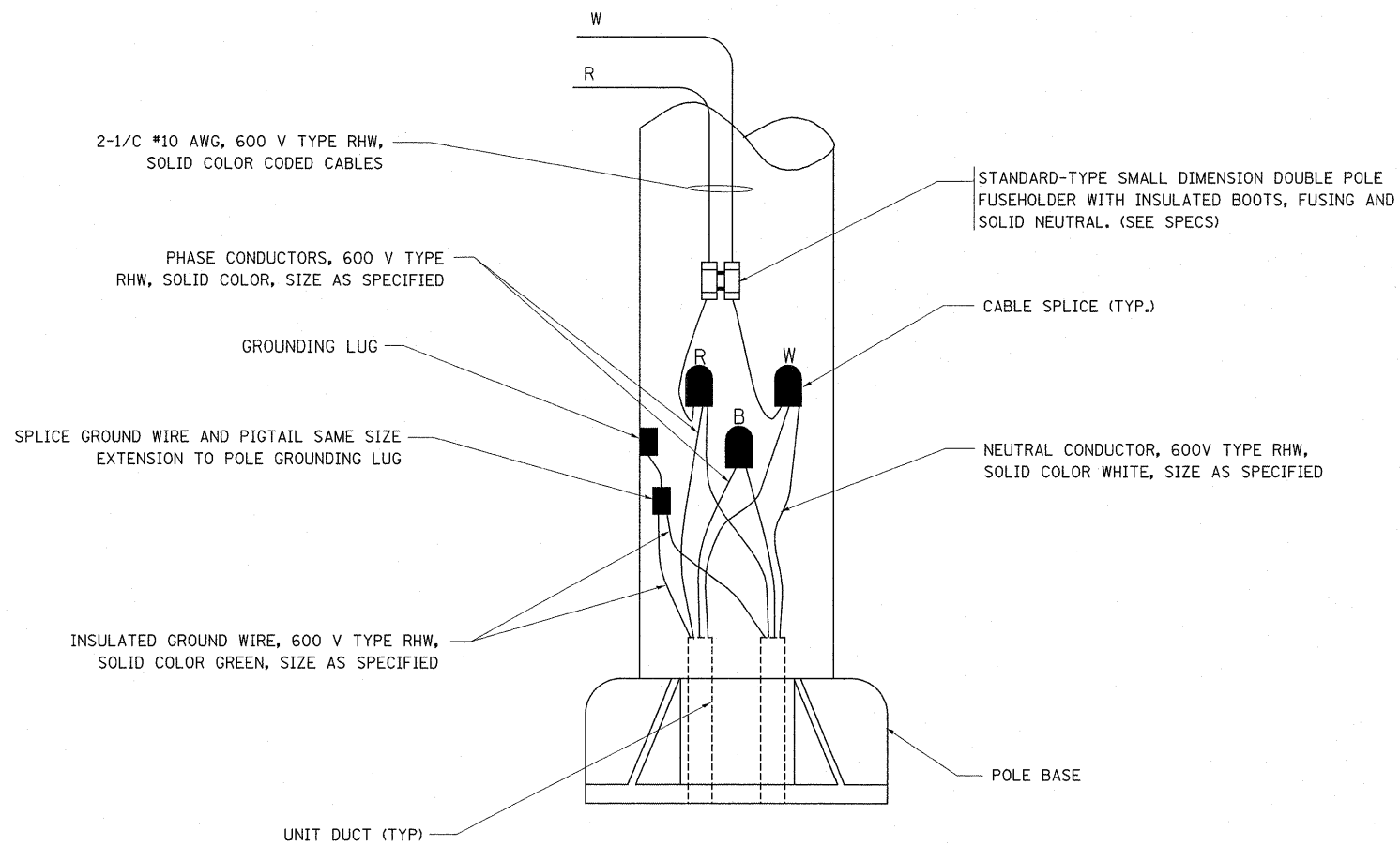
**NOTES:**

- ALL DIMENSION IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- ALL MATERIAL SHALL BE GALVINIZED ACCORDING TO AASHTO M111, UNLESS OTHERWISE SPECIFIED.
- ALL WELDS SHALL BE CONTINUOUS AND NOT LESS THAN 1/4" (6.35 mm) FILLET WELDS. THE WELDED FOUNDATION SHALL BE CAPABLE OF WITHSTANDING 10,000 FT/LBS (13558.18 n.m) OF INSTALLATION TORQUE APPLIED ABOUT THE AXIS OF THE FOUNDATION.
- THE HELIX FOUNDATION SHAFT SHALL BE INSTALLED VERTICAL AND THE BASE PLATE SHALL BE IN LEVEL. THE BREAKAWAY COUPLINGS AND HARDWARE SHALL NOT BE USED TO ALIGN THE POLE INSTALLATION.
- THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE INSTALLATION OF THE LIGHT POLE.
- THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF THE BASE PLATE WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS.
- ANY VOIDS WITHIN THE METAL FOUNDATION SHALL BE FILLED WITH FINE AGGREGATE.
- METAL FOUNDATIONS SHALL BE INSTALLED IN UNDISTURBED SOIL. PREDRILLING A PILOT HOLE AND/OR BACKFILLING AROUND THE FOUNDATION IS NOT ALLOWED.
- THE METAL FOUNDATION SHALL NOT BE INSTALLED TO A TORQUE WHICH EXCEEDS THE MANUFACTURER'S MAXIMUM TORQUE RATING NOR SHALL IT BE INSTALLED TO AN INSTALLATION TORQUE VALUE OF LESS THAN 3,500 FT LB (4,750 KNM). METAL FOUNDATIONS THAT ARE NOT INSTALLED TO FULL INSTALLATION DEPTH OR DO NOT ACHIEVE THE MINIMUM INSTALLATION TORQUE SHALL BE REMOVED AND REPLACED WITH A CONCRETE FOUNDATION AT NO ADDITIONAL COST.
- THE BASEPLATE SHALL BE PERPENDICULAR TO THE SHAFT AXIS ( $\pm 1^\circ$ ) AND THE HOLE CENTERLINE SHALL BE CONCENTRIC ( $\pm 0.188$ ) TO THE SHAFT AXIS.
- THE PILOT POINT AND SHAFT AXIS SHALL BE CONCENTRIC ( $\pm 0.125$ ) AND IN LINE ( $\pm 2^\circ$ ).
- THE BASEPLATE SHALL BE STAMPED WITH THE MANUFACTURERS NAME AND DATE OF MANUFACTURE.



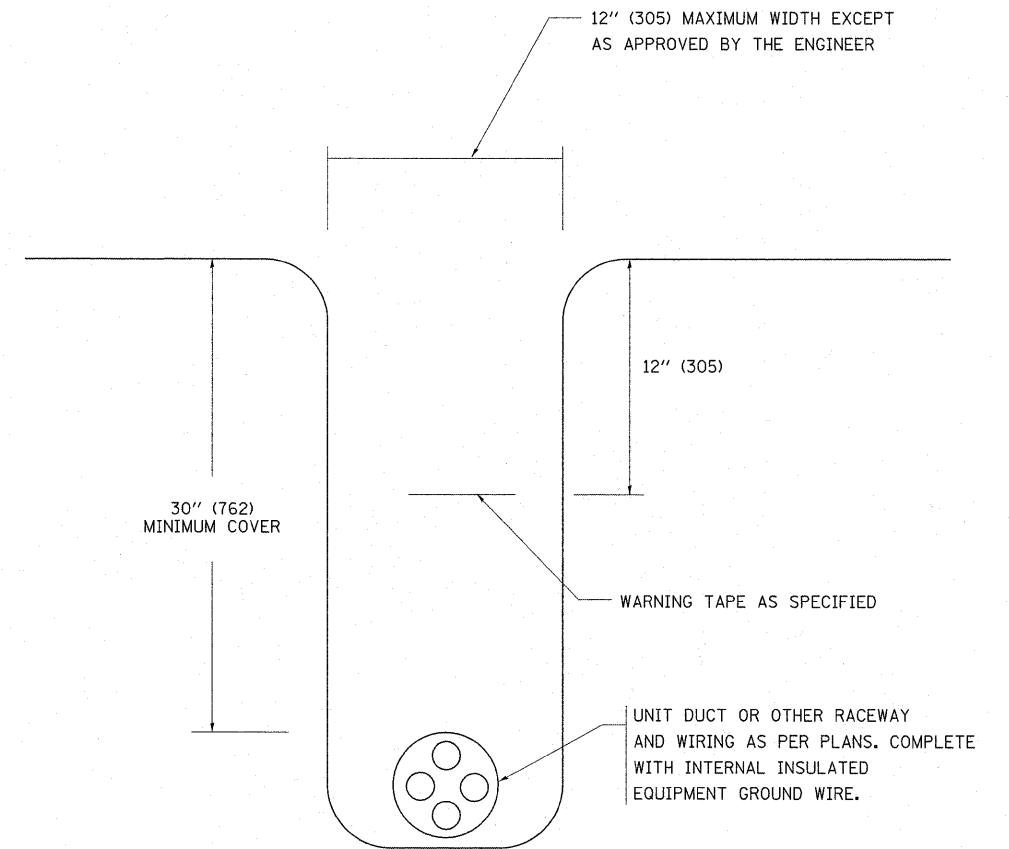
TYPICAL SPLICE DETAIL

N.T.S.



POLE WIRING DETAIL

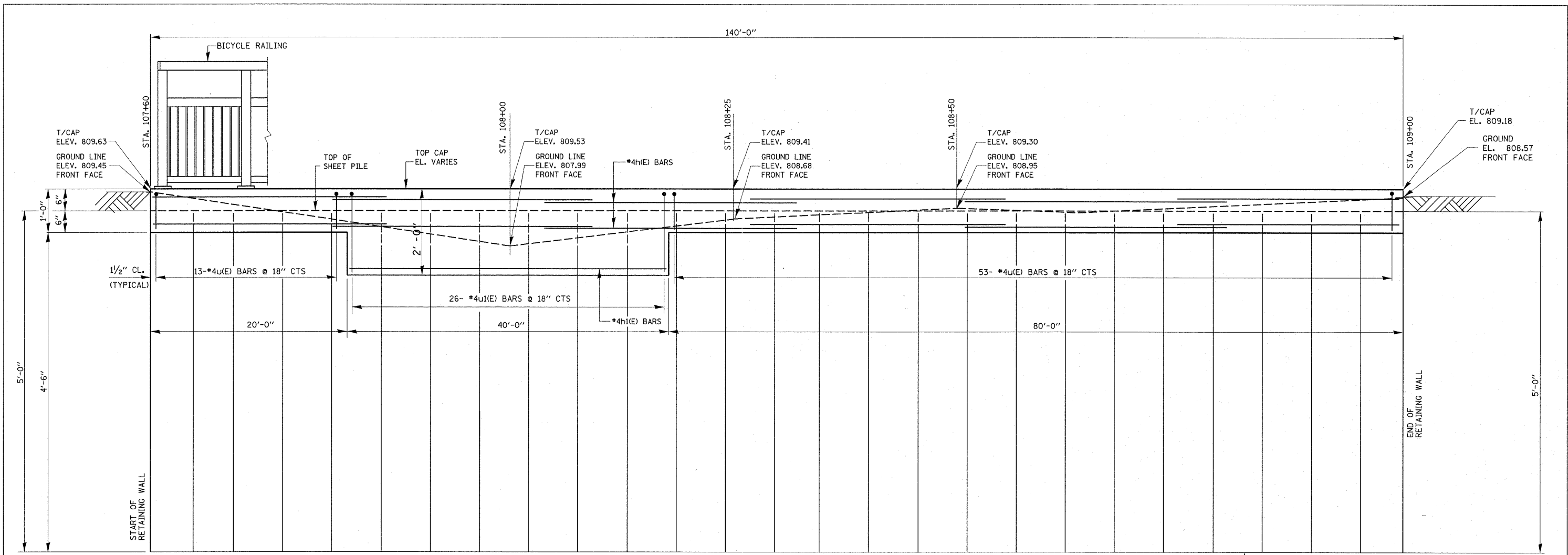
N.T.S.



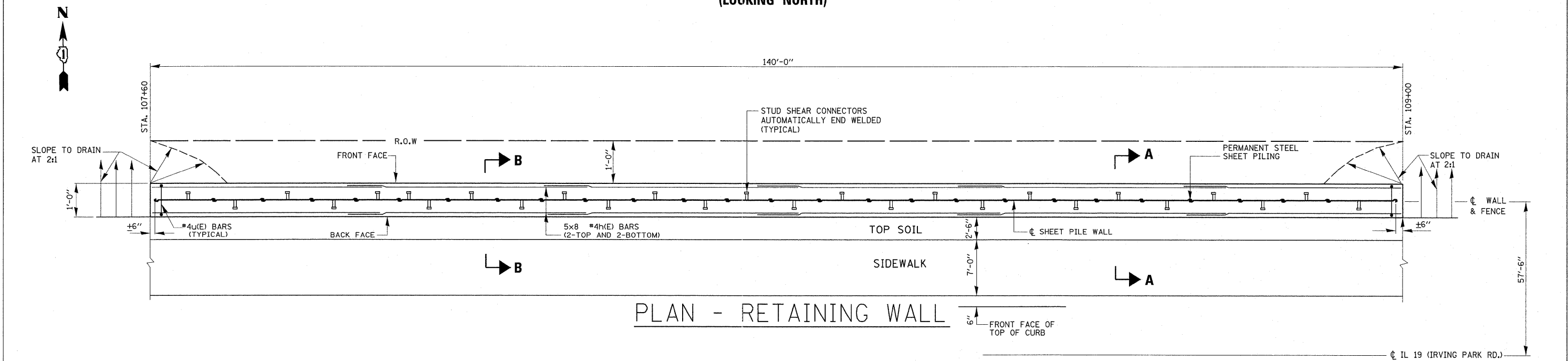
TYPICAL WIRING IN TRENCH DETAIL

N.T.S.

FILE NAME =	USER NAME = mrdjje	DESIGNED -	REVISED - 08-08-03	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MISC. ELECTRICAL DETAILS SHEET A</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\pw_work\pwi\dot\mrdjje\08156237\DistSheet.dgn		DRAWN -	REVISED -		1321	2010-048-N	COOK	53	35			
PLOT SCALE = 50.0000 / IN.		CHECKED -	REVISED -		<b>BE-702</b>			CONTRACT NO. 60L23				
PLOT DATE = 5/11/2011		DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			

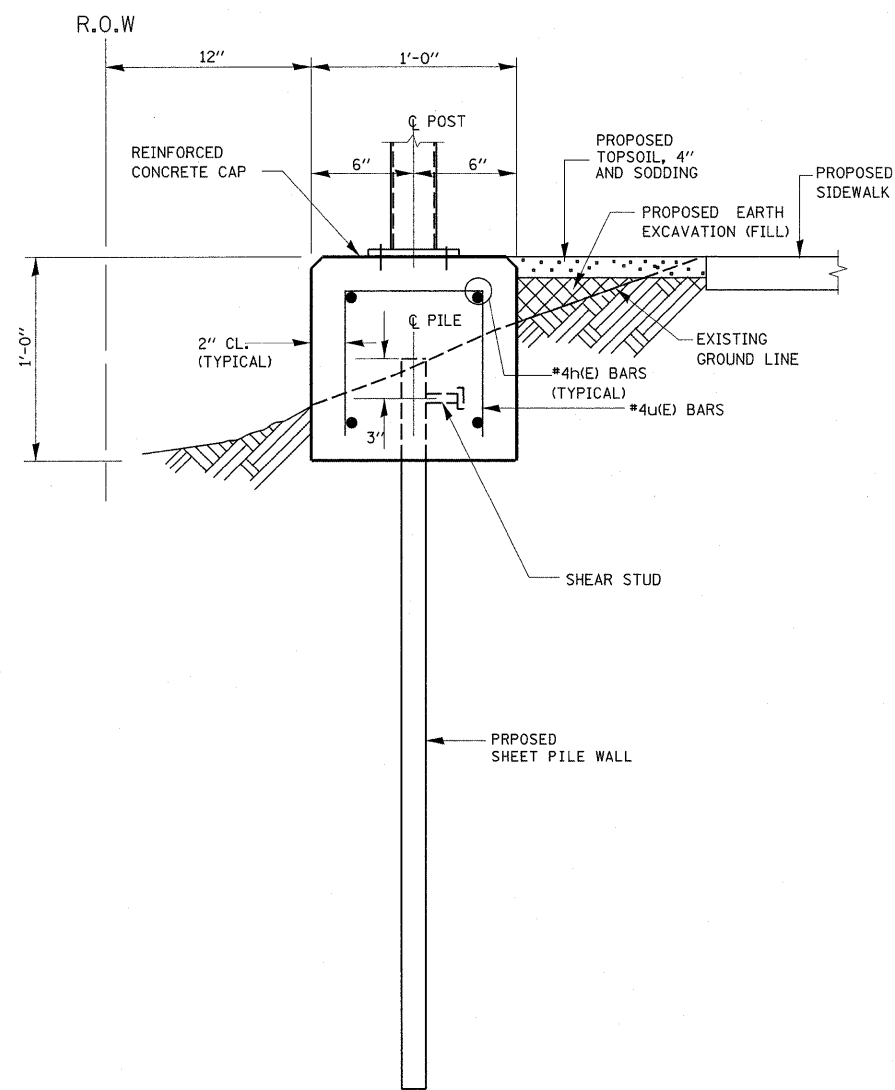


ELEVATION - RETAINING WALL  
(LOOKING NORTH)

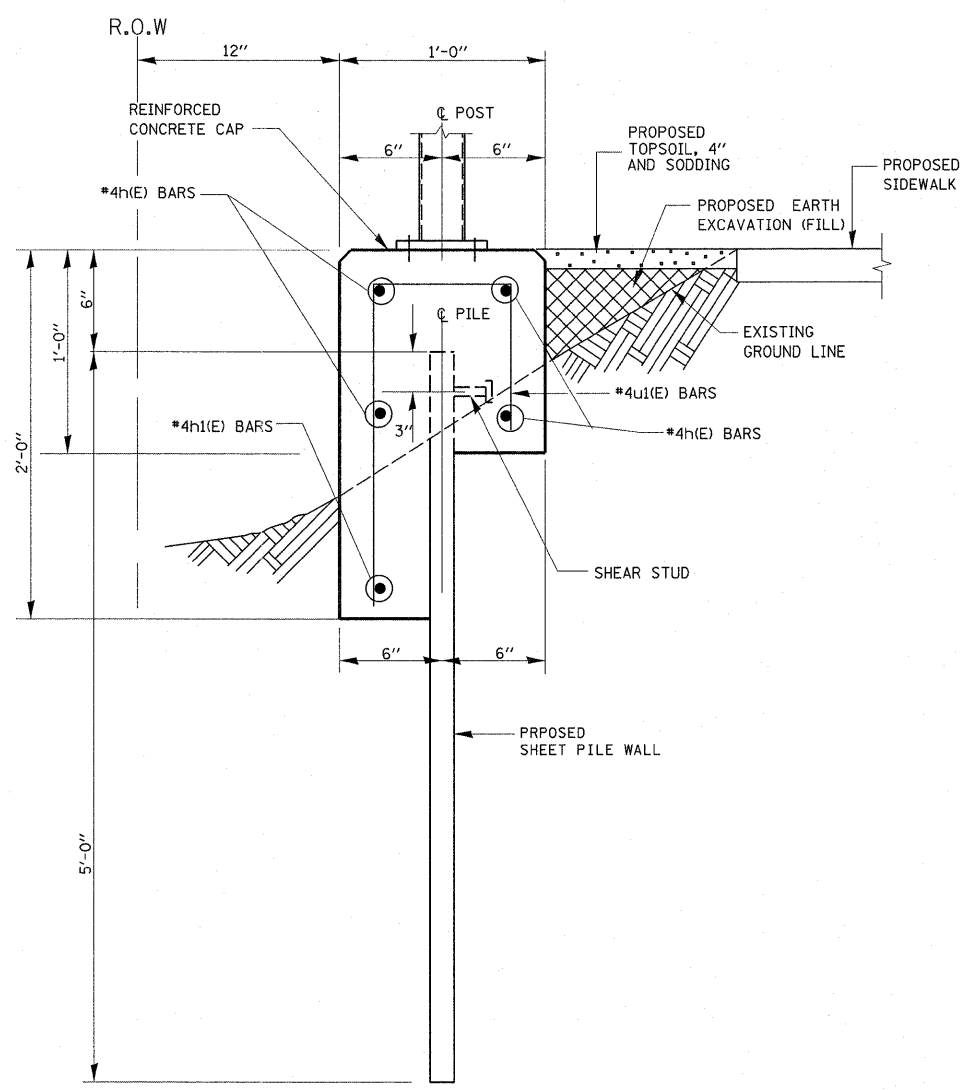


PLAN - RETAINING WALL

FILE NAME =	USER NAME = mdyje	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL RTE (IRVING PARK RD.) AT BARRINGTON RD. RETAINING WALL	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw_work\pwsdot\mdyje\d0101671\IL19-retwall.dgn	DRAWN -	REVISED -	1321			2010-048-N	COOK	53	35A	
PLOT SCALE = 50.0000' / 1" =	CHECKED -	REVISED -	CONTRACT NO. 60L23							
			SCALE:			SHEET NO.	OF SHEETS	STA.	TO	STA.



SECTION A-A



SECTION B-B

TOTAL BILL OF MATERIALS

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	24	#4	25'-0"	—
h1(E)	1	#4	39'-9"	—
u(E)	66	#4	2'-3"	□
u1(E)	26	#4	2'-9"	□
REINFORCEMENT BARS, EPOXY COATED			POUND	570
CONCRETE STRUCTURES			CU. YDS.	5.8
PERMANENT STEEL SHEET PILING			SQ. FT.	700
STUD SHEAR CONNECTORS			EACH	85
BICYCLE RAILING SPECIAL			FOOT	140
STRUCTURE EXCAVATION			CU. YDS.	3.8

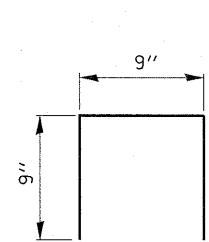
REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

BARS INDICATED 2x6-#4h(E) BARS INDICATES 2 LINES OF BARS WITH 6 LENGTHS PER LINE

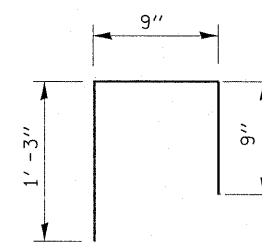
MINIMUM SECTION MODULUS  $S_{x_{mm}} = 1.9 \text{ IN}^3/\text{FT.}$

BAR LAP TABLE

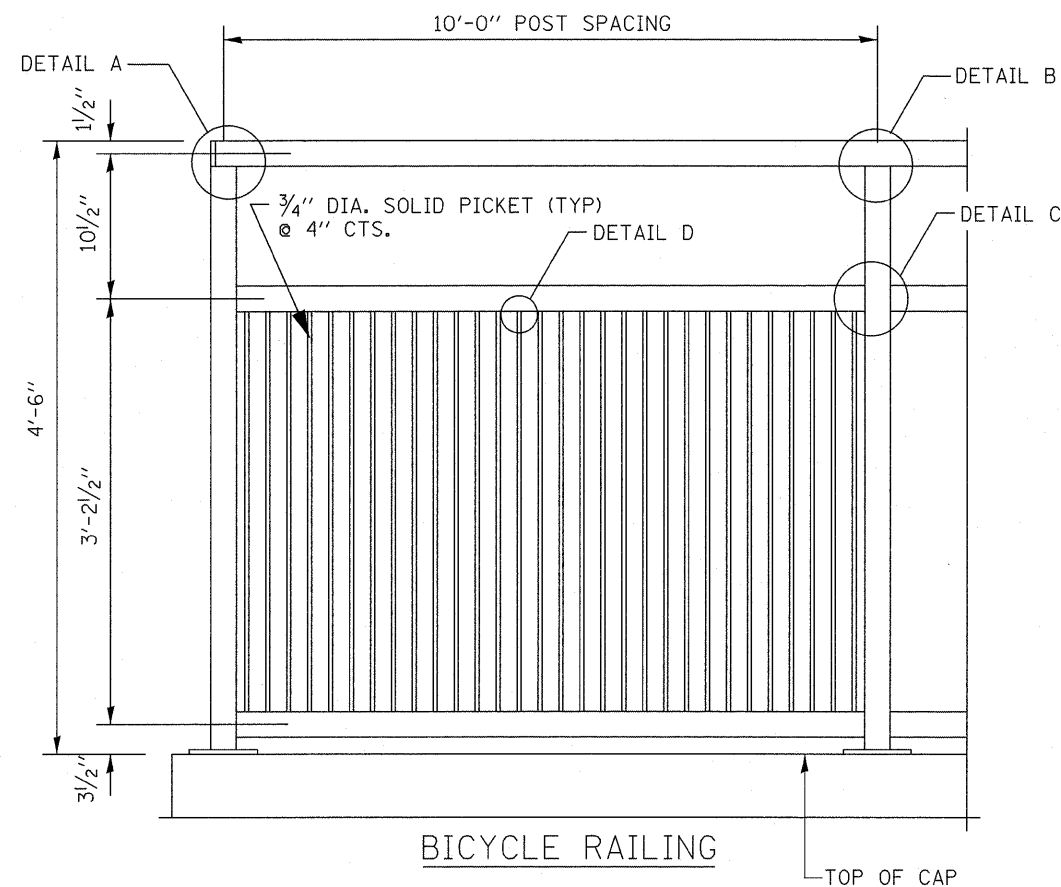
SIZE	LENGTH
#4	1' - 8"



BAR u(E)

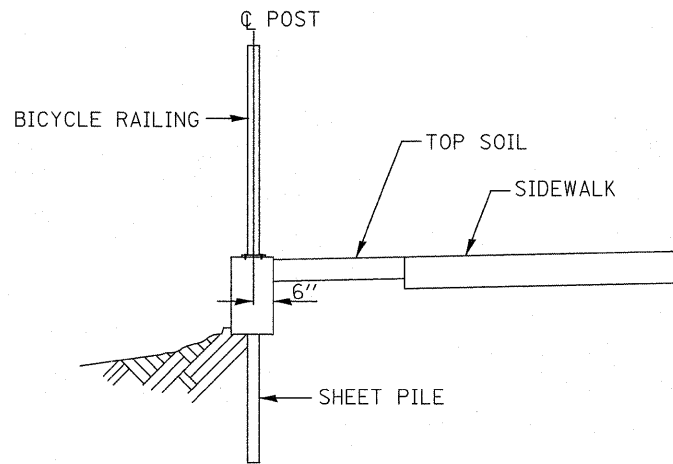


BAR u1(E)



ANCHOR BOLT DETAILS

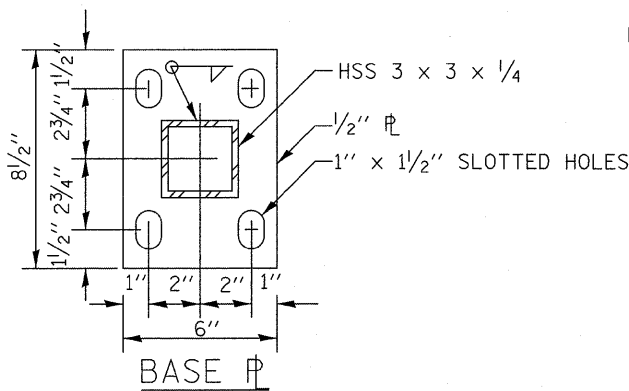
IN LIEU OF THE CAST-IN-PLACE ANCHOR DEVICE SHOWN, THE CONTRACTOR HAS THE OPTION OF DRILLING AND SETTING 5/8" Ø ANCHOR RODS ACCORDING TO ARTICLE 509.06 OF THE STANDARD SPECIFICATIONS. EMBEDMENT SHALL BE ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.



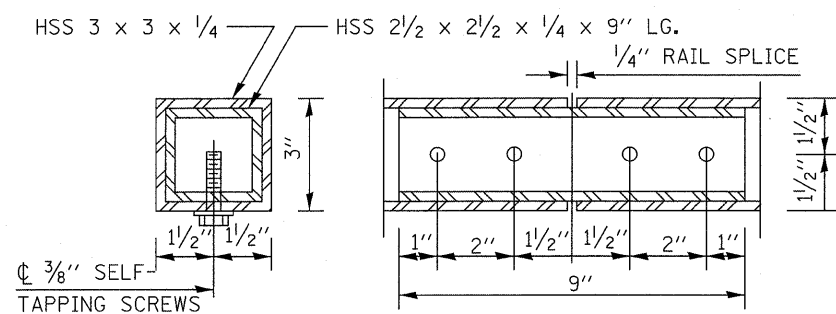
SECTION THRU BICYCLE RAILING

NOTES:

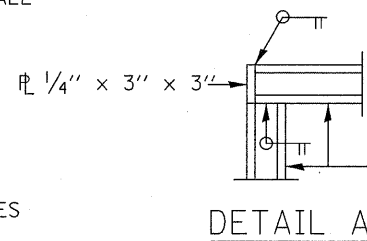
1. RAILING SHALL BE ACCORDING TO SECTION 509 OF THE STANDARD SPECIFICATIONS, EXCEPT AS NOTED, AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR BICYCLE RAILING (SPECIAL).
2. HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A 500, GRADE B, STRUCTURAL STEEL TUBING.
3. ALL OTHER STEEL SHAPES AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 270 GRADE 36.
4. IF THE OPTION OF DRILLING AND EPOXY GROUTING THE ANCHOR RODS IS CHOSEN, THE CONTRACTOR SHALL USE THE CAPSULE OR THE ADHESIVE CARTRIDGE TYPE ANCHOR RODS THAT HAVE BEEN PREVIOUSLY TESTED AND GIVEN A PRIOR APPROVAL BY THE ENGINEER. THE CONTRACTOR SHALL INSTALL THESE ANCHOR RODS IN PRE-DRILLED HOLES ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES. THE CAPSULE OR THE ADHESIVE CARTRIDGE SHALL BE SEALED WITH PRE-MEASURED AMOUNTS OF THE ADHESIVE CHEMICAL.
5. SPACE REINFORCEMENT TO MISS ANCHOR RODS.
6. ALL POST, RAILING, SPLICES, ANCHOR DEVICES, AND BENT PLATES SHALL BE GALVANIZED AFTER SHOP FABRICATION ACCORDING TO AASHTO M 111 AND ASTM A 385. ALL BOLTS, NUTS, WASHERS, AND ANCHOR RODS SHALL BE GALVANIZED ACCORDING TO AASHTO M 232 EXCEPT STAINLESS STEEL BOLTS AS NOTED. VENT HOLES FOR GALVANIZING SHALL BE PLACED IN THE POSTS AND RAILS AT LOCATIONS THAT WILL NOT ALLOW THE ACCUMULATION OF MOISTURE IN THE MEMBERS.



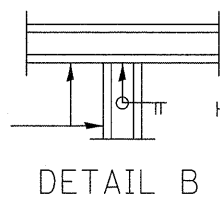
BASE PL



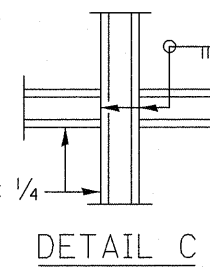
RAIL SPLICE



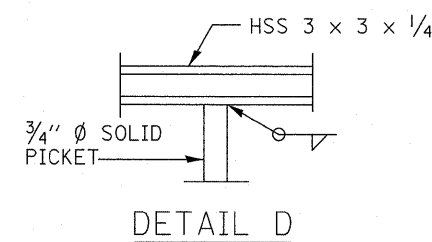
DETAIL A



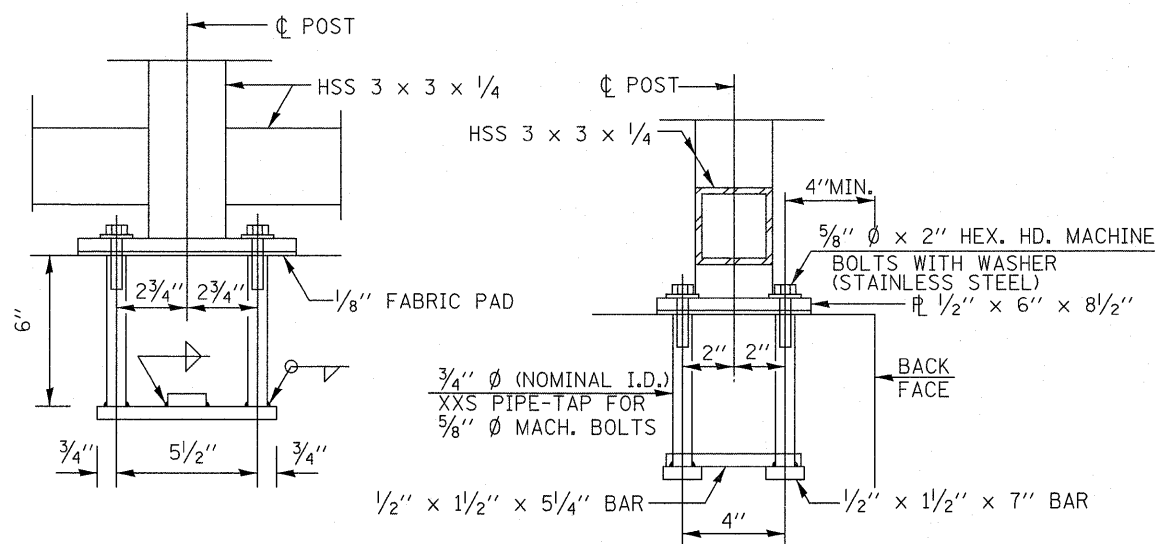
DETAIL B



DETAIL C

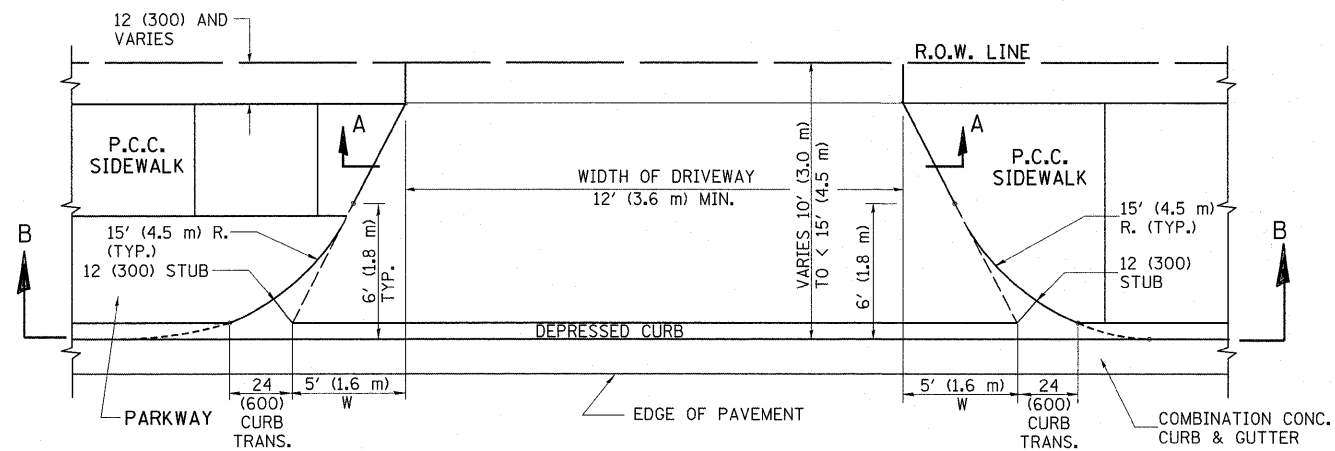


DETAIL D

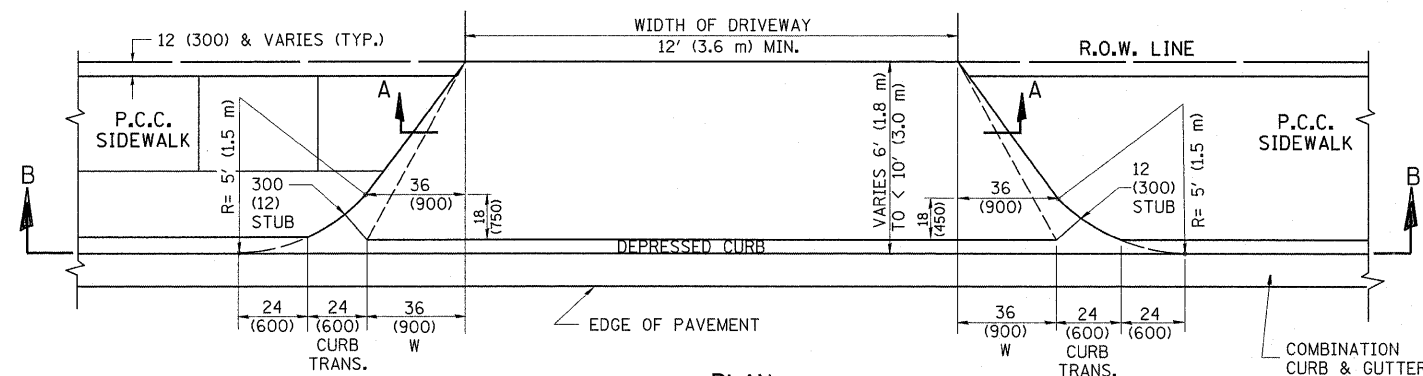


BILL OF MATERIALS

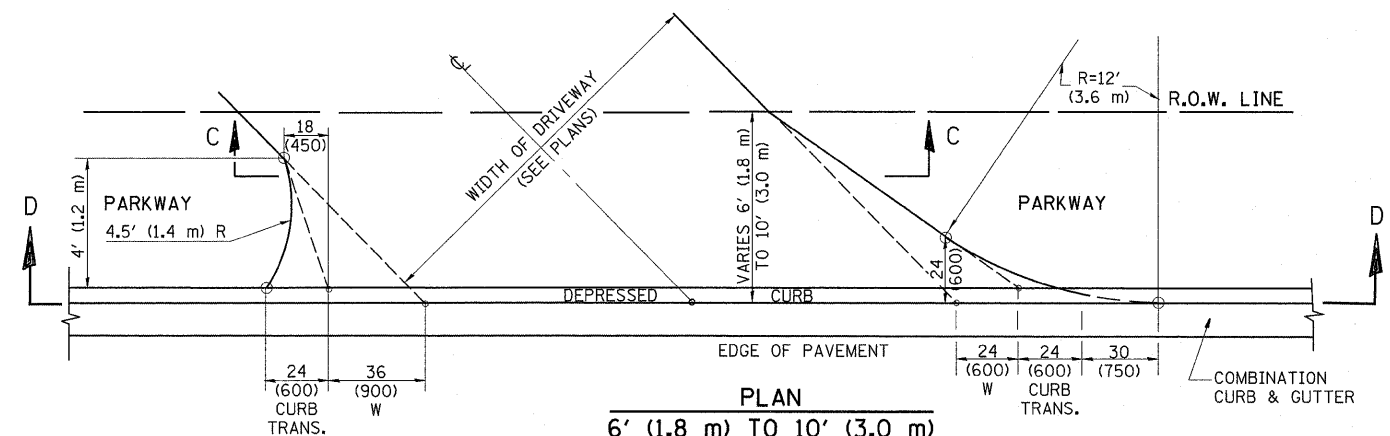
ITEM	UNIT	QUANTITY
BICYCLE RAILING SPECIAL	FOOT	140



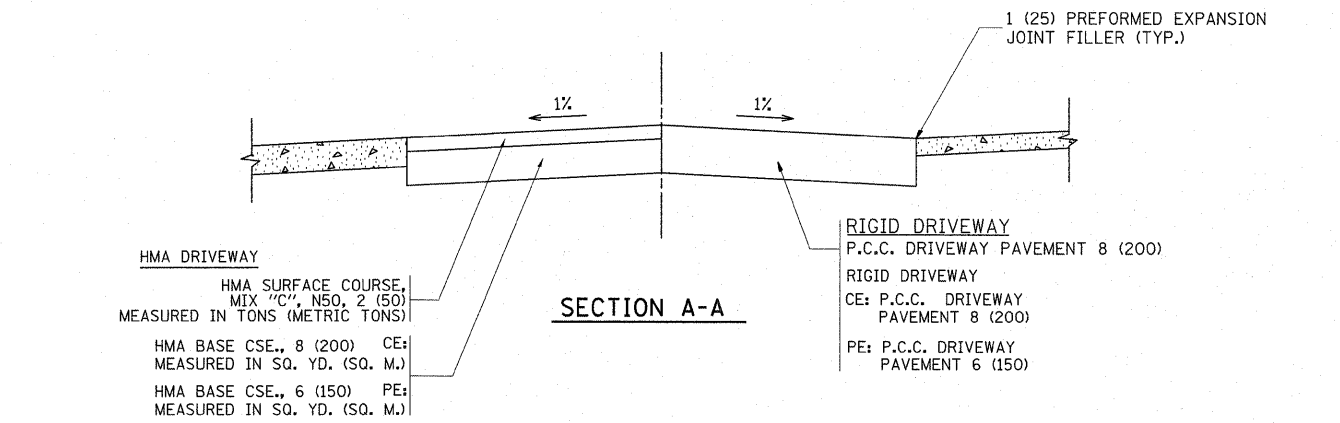
**PLAN**  
10' (3.0 m) TO < 15' (4.5 m)



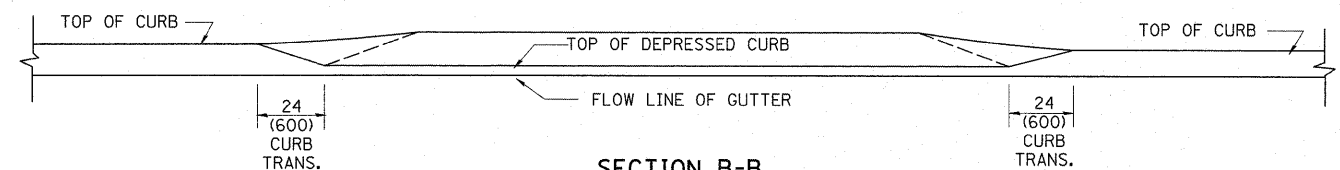
**PLAN**  
6' (1.8 m) TO < 10' (3.0 m)



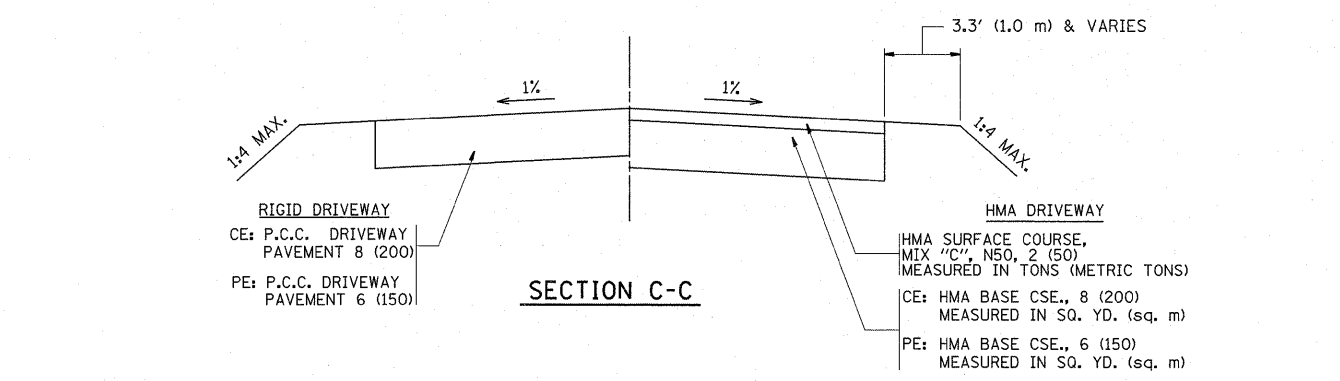
**PLAN**  
6' (1.8 m) TO 10' (3.0 m)



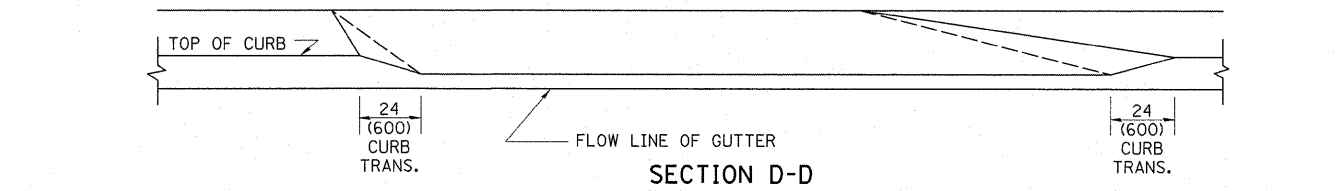
**SECTION A-A**



**SECTION B-B**



**SECTION C-C**



**SECTION D-D**

**GENERAL NOTES**

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

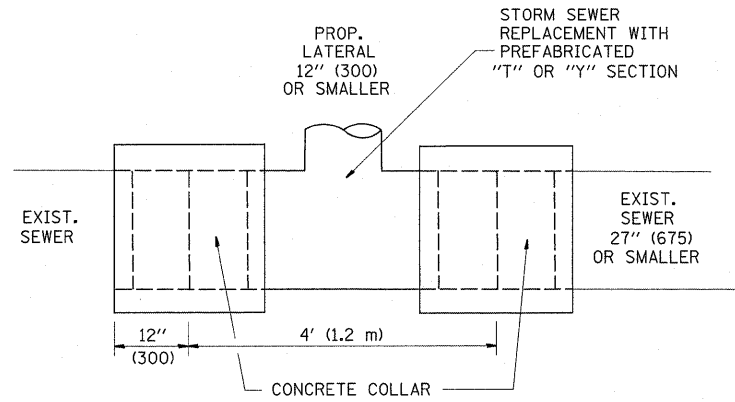
COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

THE 1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

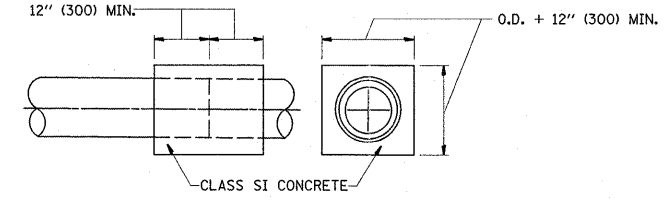
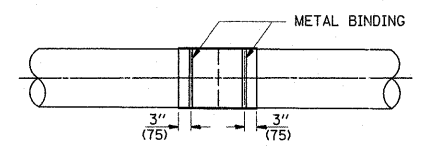
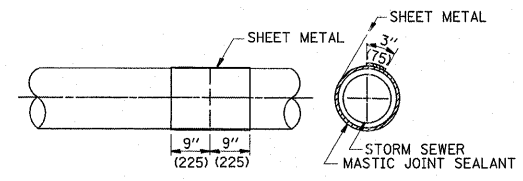
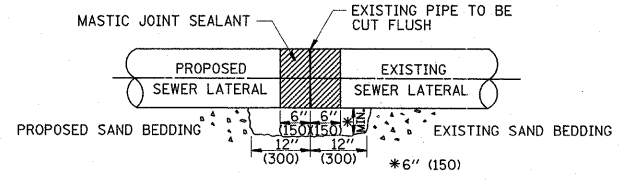
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED.

FILE NAME =	USER NAME = midyja	DESIGNED - R. SHAH	REVISED - T. HOLTZ 04-08-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DRIVEWAY DETAILS</b>			F.A.P. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cs:\pwork\pwi\dost\midyja\d0156237\DistStg.dgn		DRAWN -	REVISED - M. GOMEZ 04-06-01		<b>DISTANCE BETWEEN ROW AND FACE OF CURB &lt; 15' (4.5 m)</b>			1321	2010-048-N	COOK	53	36
PLOT SCALE = 5/8"=1' / IN.		CHECKED -	REVISED - P. LaFLEUR 04-15-03		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	<b>BD400-02 (BD-02) CONTRACT NO. 60L23</b>				
PLOT DATE = 5/11/2011		DATE - 11-06-95	REVISED - R. BORO 01-01-07		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							



**DETAIL "A"**

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



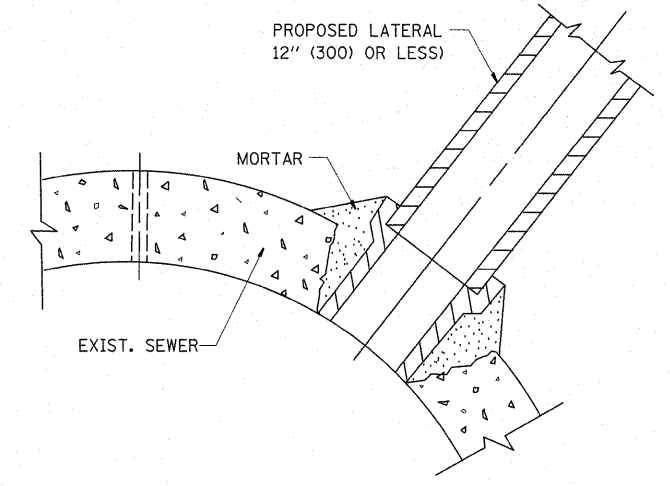
**DETAIL "B"**

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 OZZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
9. PLACE CLASS SI CONCRETE AROUND THE JOINT.

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



**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.

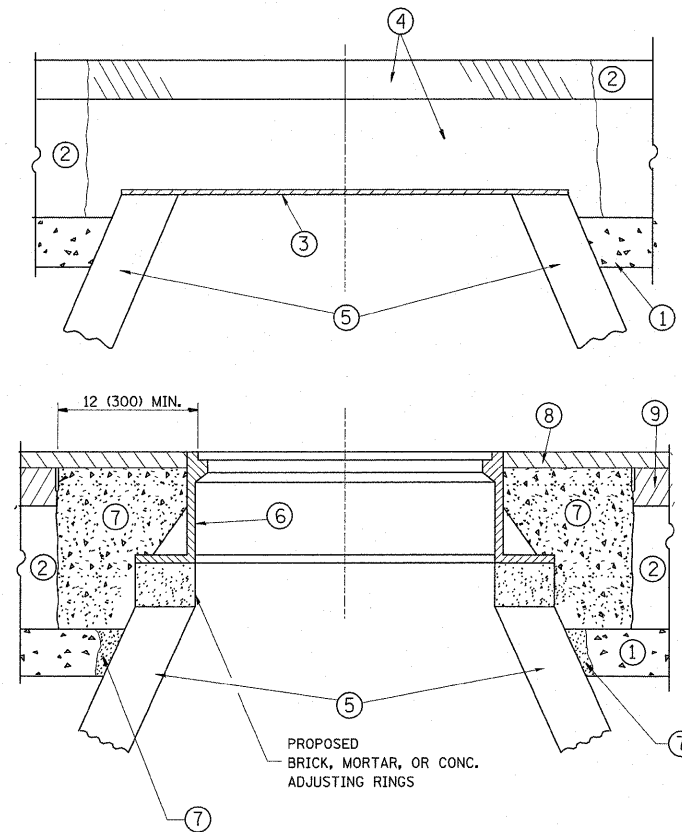
REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

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.

FILE NAME =	USER NAME = midgje	DESIGNED - M. DE YONG	REVISED - M. DE YONG 05-08-92	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cc:\pw_work\pwidot\midgje\0156237\Dist5tdgn		DRAWN -	REVISED - R. SHAH 09-09-94		1321	2010-048-N	COOK	53	37			
		CHECKED -	REVISED - R. SHAH 10-25-94		<b>BD500-01 (BD-7)</b>				CONTRACT NO. 60L23			
		DATE - 07-25-90	REVISED - R. SHAH 06-12-96		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
					SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.				





**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.

**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:** THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL" 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.

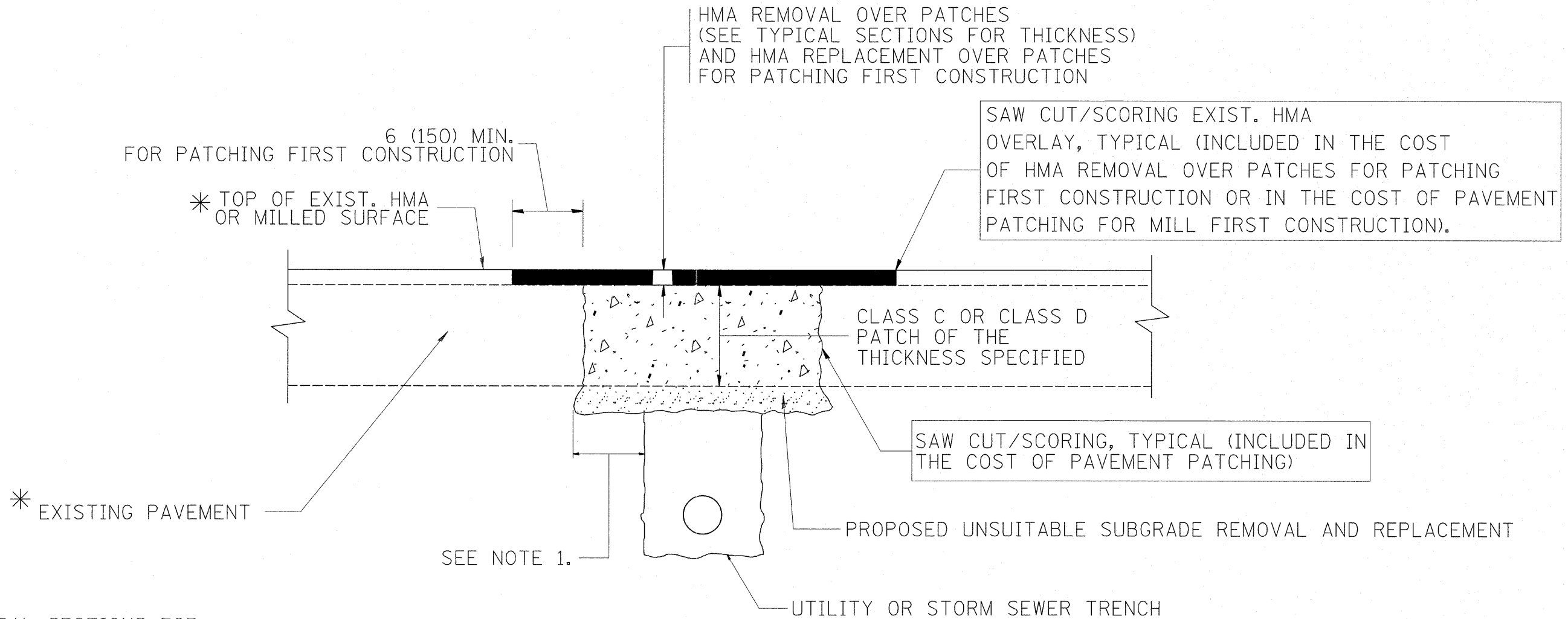
WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = mdyja	DESIGNED - R. SHAH	REVISED - A. ABBAS 03-21-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING</b>			F.A.P. RTE. 1321	SECTION 2010-048-N	COUNTY COOK	TOTAL SHEETS 53	SHEET NO. 38
ct\pw\work\p\dot\mdyja\d0156237\Dist5\dgn		DRAWN -	REVISED - R. WIEDEMAN 05-14-04		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	<b>BD600-03 (BD-8)</b>		CONTRACT NO. 60L23		
		PLOT SCALE = 50.0000 / IN.	CHECKED -		REVISED - R. BORO 01-01-07							
		PLOT DATE = 5/11/2011	DATE - 10-25-94		REVISED - R. BORO 03-09-11	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						





\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**NOTES:**

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

FILE NAME =	USER NAME = midjja	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT</b>			F.A.P. RTE. 1321	SECTION 2010-048-N	COUNTY COOK	TOTAL SHEETS 53	SHEET NO. 40
os\pwork\pwork\midjja\0156237\DistStd.dgn		DRAWN -	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	<b>BD400-04 (BD-22)</b>		CONTRACT NO. 60L23	
PLOT SCALE = 50.0000 / IN.		CHECKED -	REVISED - R. BORO 09-04-07		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
PLOT DATE = 5/11/2011		DATE - 10-25-94	REVISED - K. ENG 10-27-08									

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001  
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

1/4" (5) \*\*

18" (450) MAX.

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

**BASIS OF PAYMENT:**

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

\* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

\*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY,

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

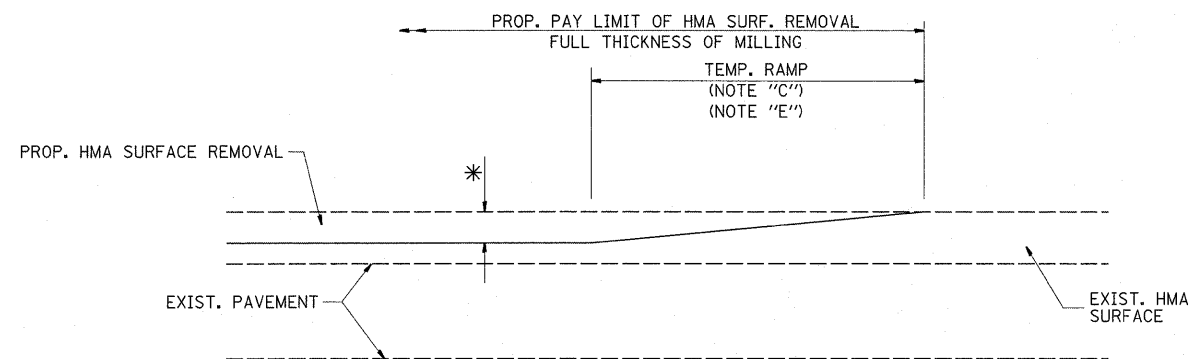
⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

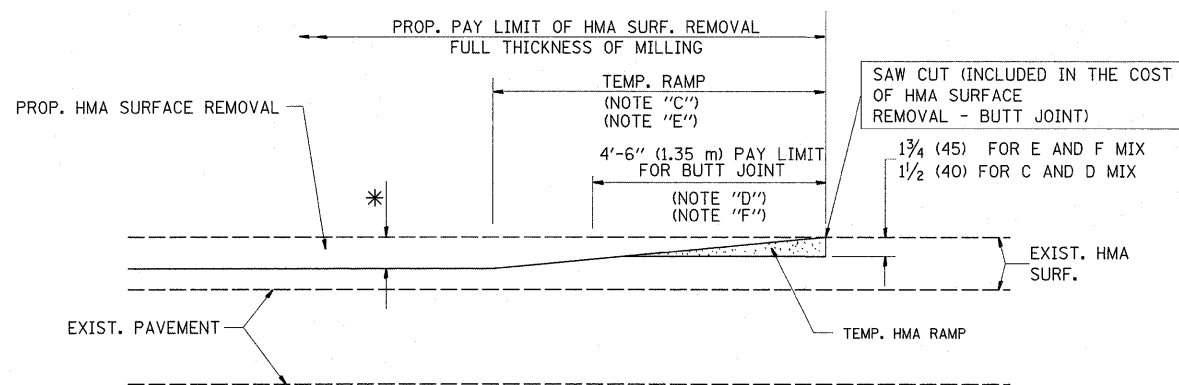
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = midjje	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
02\pwork\pwork\midjje\d2156237\Dist5\dgn		DRAWN -	REVISED - A. ABBAS 03-21-97		1321	2010-048-N	COOK	53	41			
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED - M. GOMEZ 01-22-01		BD600-06 (BD-24)			CONTRACT NO. 60L23				
PLOT DATE = 5/11/2011		DATE - 03-11-94	REVISED - R. BORO 12-15-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



MILLED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

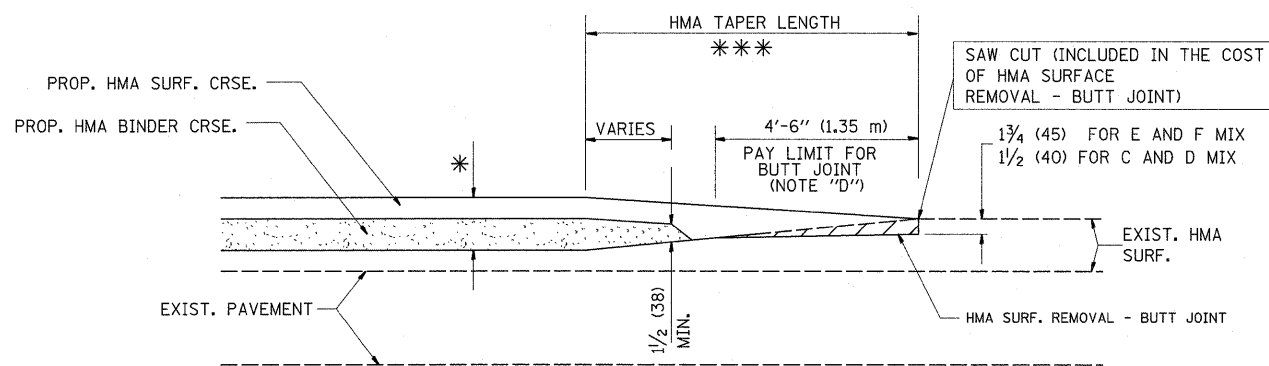
**OPTION 1**



HMA CONSTRUCTED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

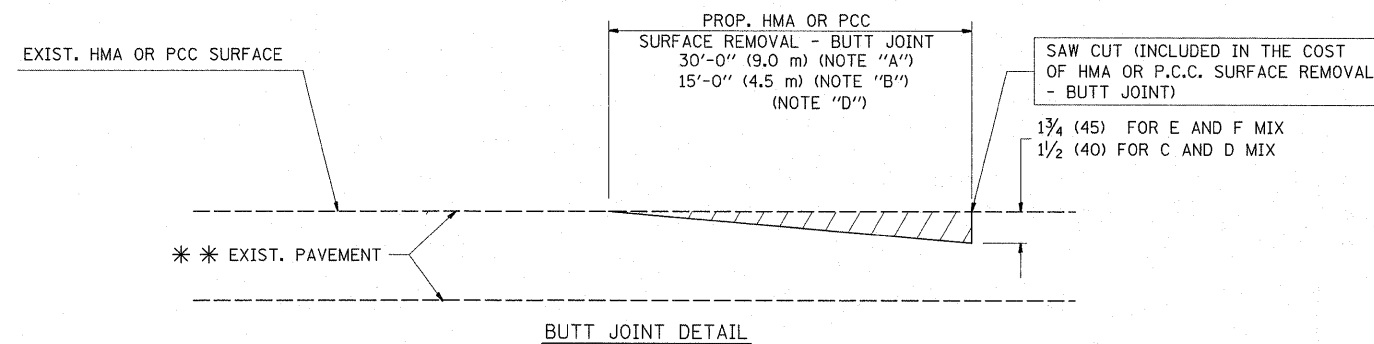
**OPTION 2**

**TYPICAL TEMPORARY RAMP**

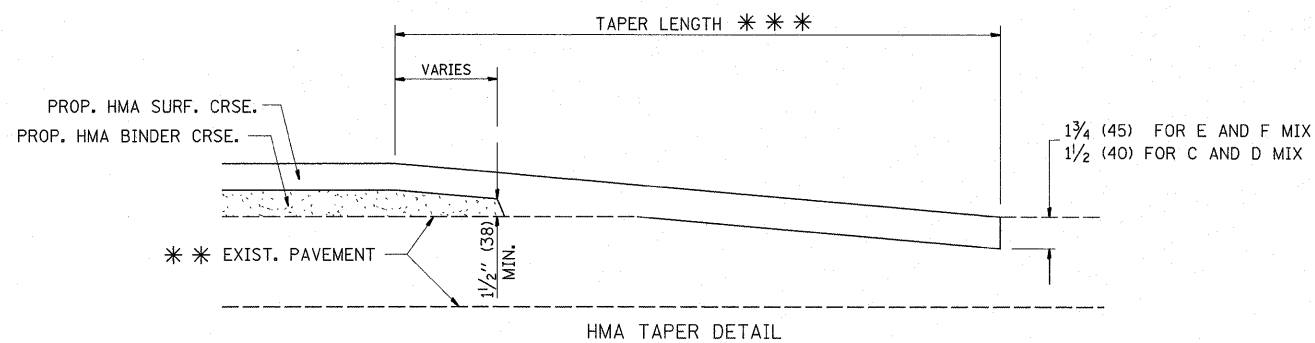


BUTT JOINT AND HMA TAPER

**TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING**



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.

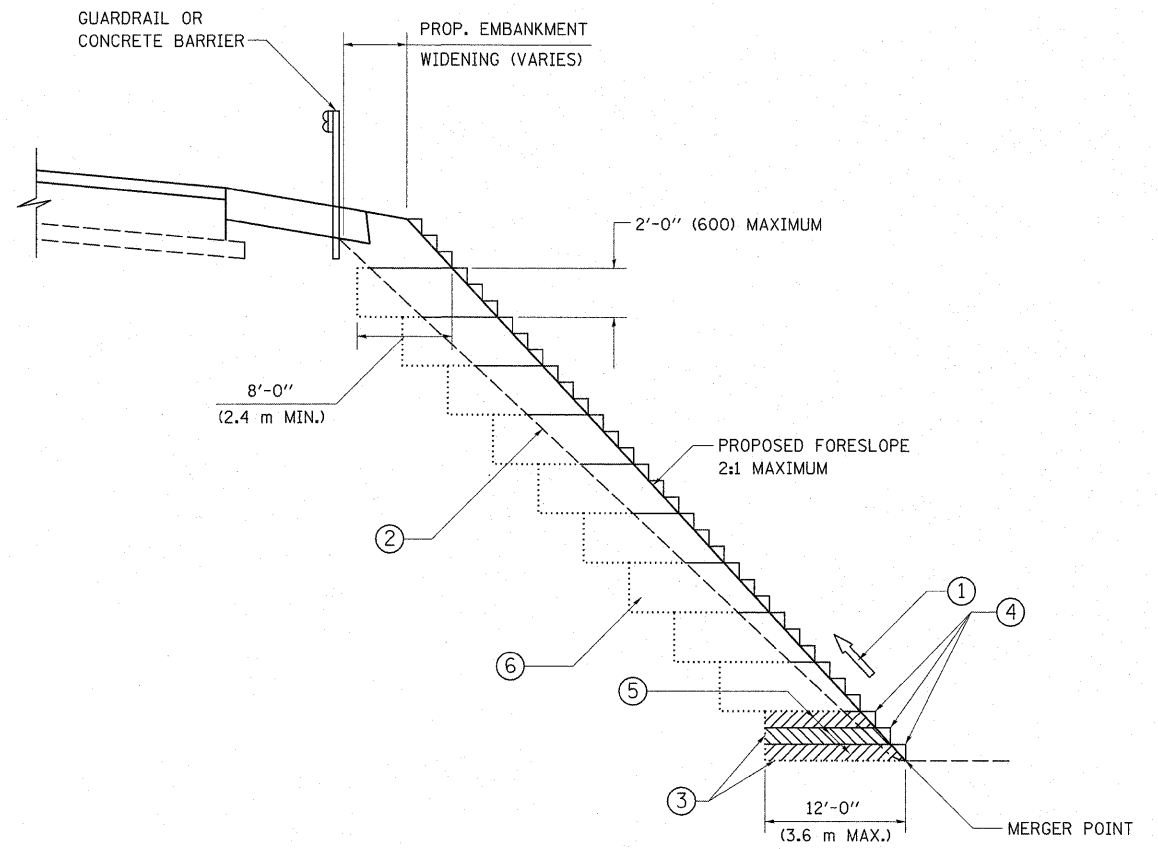
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ar:\pwork\pwork\mdyje\0156237\01st.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 5/11/2011	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**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.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2010-048-N	COOK	53	42
BD400-05 BD32			CONTRACT NO. 60L23	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TYPICAL BENCHING DETAIL  
FOR EMBANKMENT

**NOTES:**

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

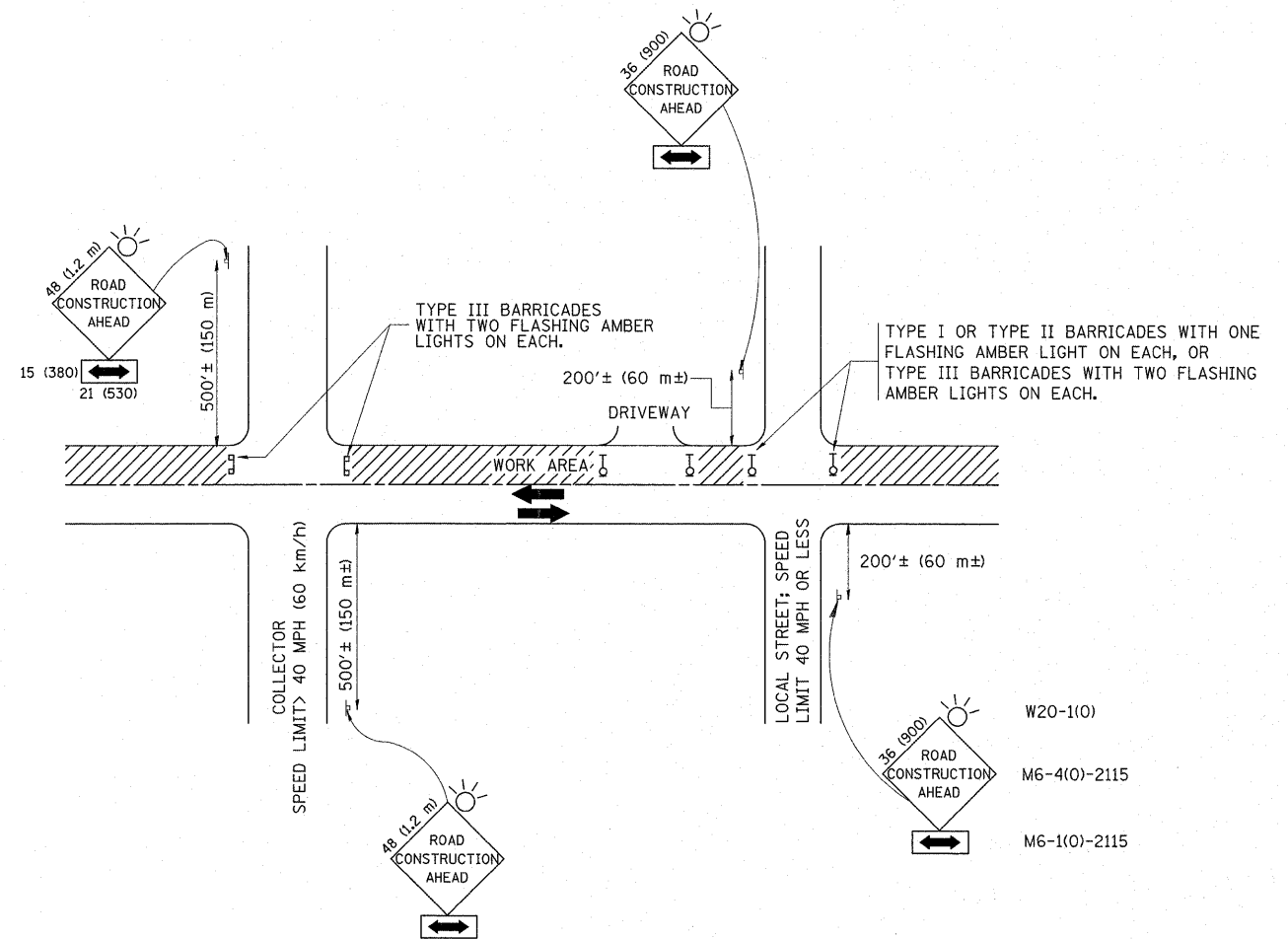
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = mtdjja	DESIGNED -	REVISED -
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PLOT SCALE = 50.0000' / IN.		CHECKED - S.E.B.	REVISED -
PLOT DATE = 5/11/2011		DATE - 06-16-04	REVISED -

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

<b>BENCHING DETAIL</b>			
<b>FOR EMBANKMENT WIDENING</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2010-048-N	COOK	53	43
<b>BD-51</b>			<b>CONTRACT NO. 60L23</b>	
FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				



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

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

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 AND FLAG 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. 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).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

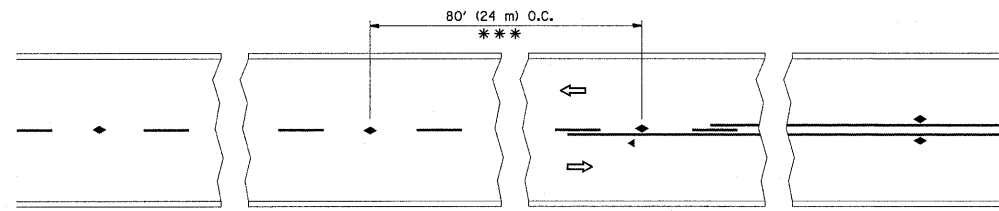
FILE NAME =	USER NAME = midyja	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
ca\pwork\pwork\midyja\0156237\Dist\stdgn		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.0000 / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 5/11/2011	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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

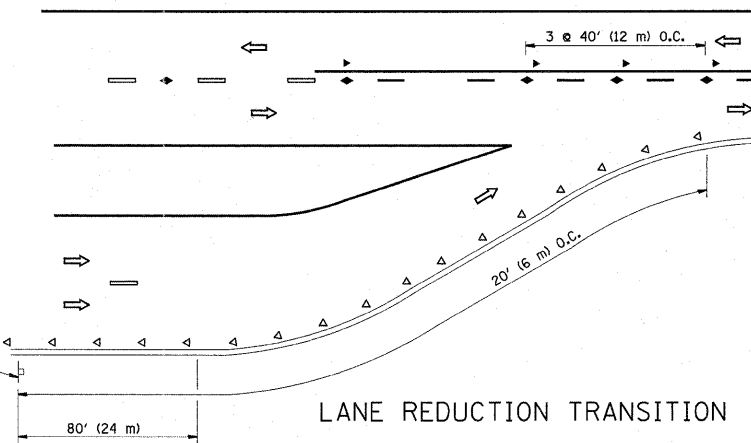
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2010-048-N	COOK	53	44
TC-10			CONTRACT NO. 60L23	
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				

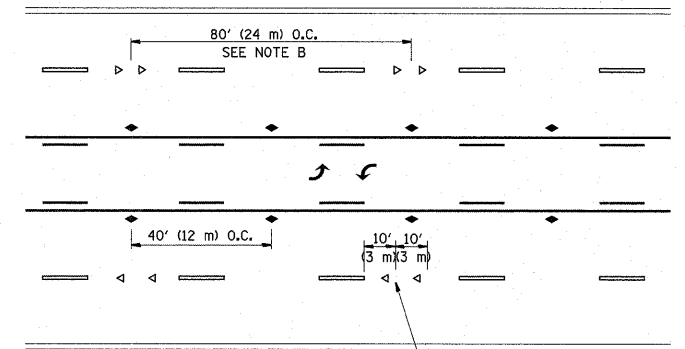


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

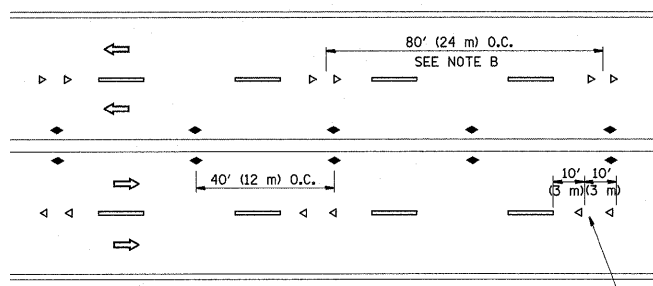
TWO-LANE/TWO-WAY



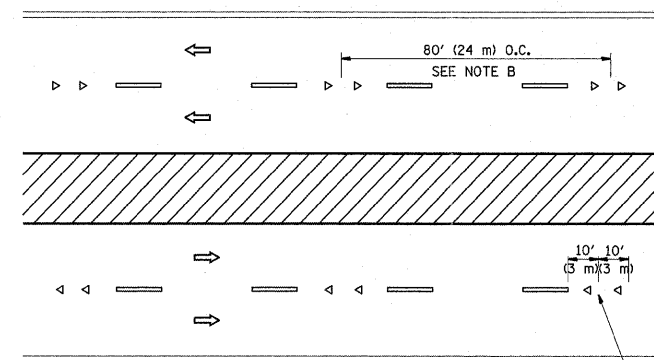
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

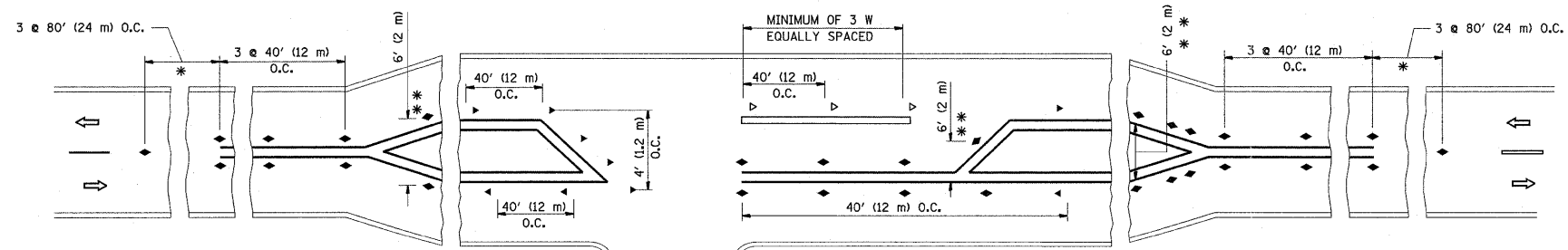
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



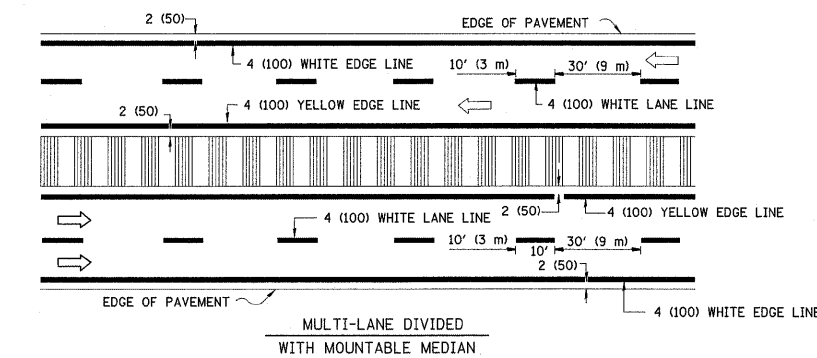
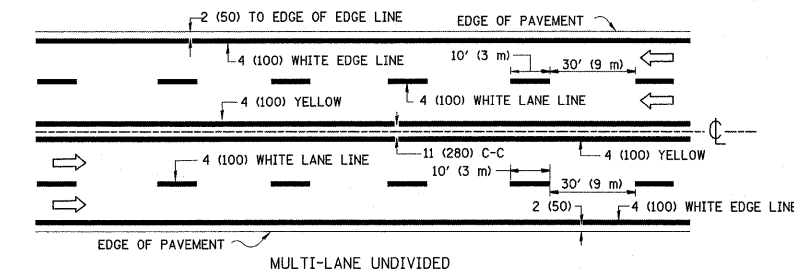
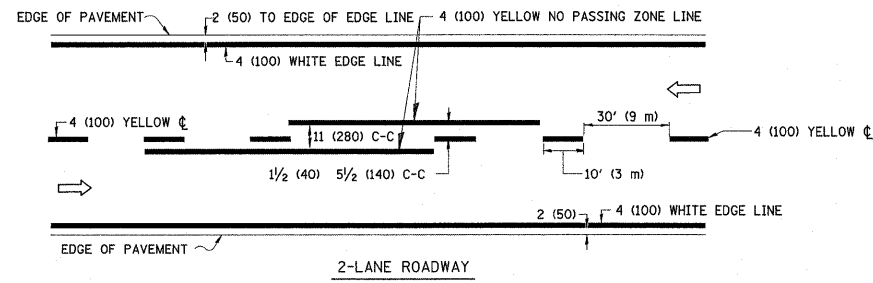
LEFT TURN

\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
 \*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

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

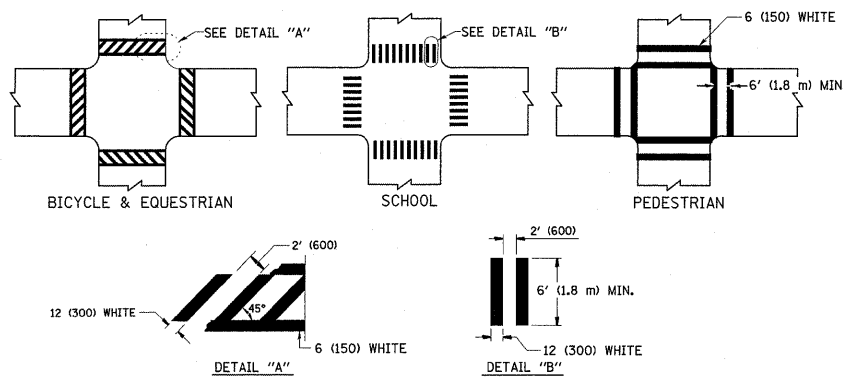
FILE NAME =	USER NAME = mdyja	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TYPICAL APPLICATIONS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwork\mtdjja\0156237\01stst.dgn		DRAWN -	REVISED - T. RAMMACHER 03-12-99		<b>RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)</b>			1321	2010-048-N	COOK	53	45
		CHECKED -	REVISED - T. RAMMACHER 01-06-00		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	<b>TC-11</b>		CONTRACT NO. 60L23	
		DATE -	REVISED - C. JUCIUS 09-09-09		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							



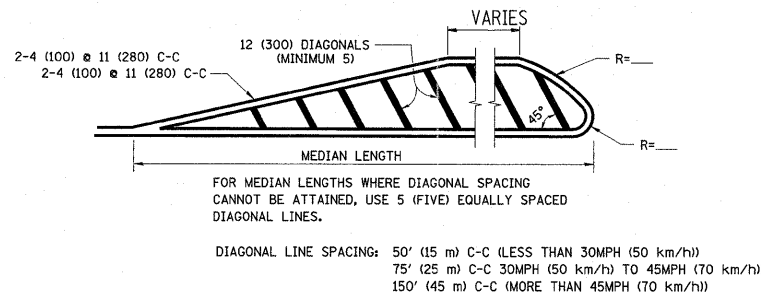
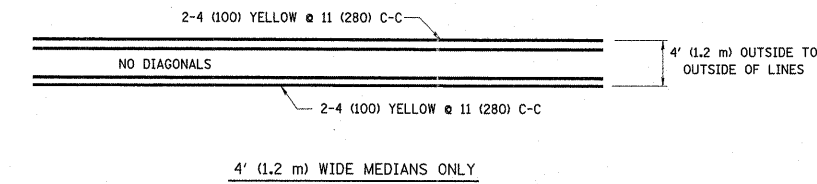


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

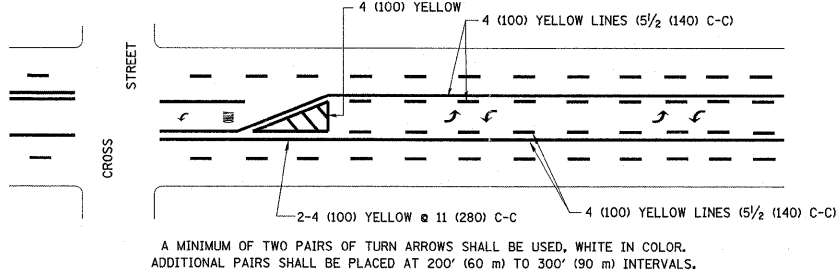
**TYPICAL LANE AND EDGE LINE MARKING**



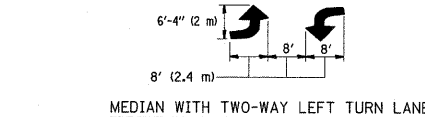
**TYPICAL CROSSWALK MARKING**



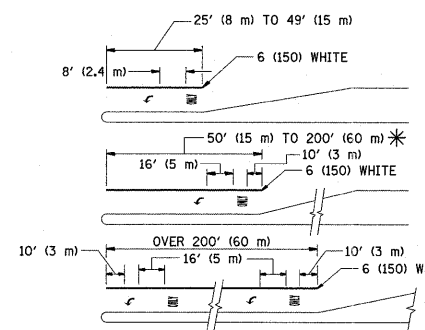
**MEDIANS OVER 4' (1.2 m) WIDE**



**TYPICAL PAINTED MEDIAN MARKING**

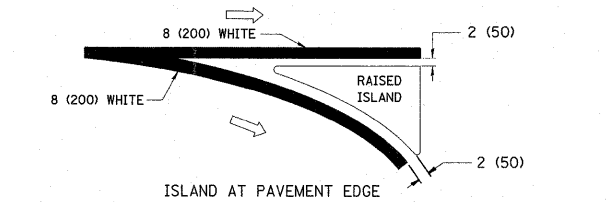
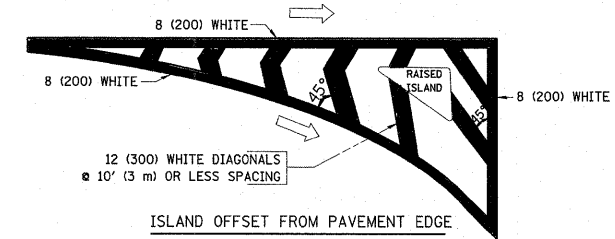


**TYPICAL PAINTED MEDIAN MARKING**



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

**TYPICAL TURN LANE MARKING**



**TYPICAL ISLAND MARKING**

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	4 (100)	SOLID	YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH	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 MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
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	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW		WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN)	2 @ 6 (150)	SOLID	WHITE	NOT LESS THAN 6' (1.8 m) APART
A. DIAGONALS (BIKE & EQUESTRIAN)	12 (300) @ 45°	SOLID	WHITE	2' (600) APART
B. LONGITUDINAL BARS (SCHOOL)	12 (300) @ 90°	SOLID	WHITE	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°	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE 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: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	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))

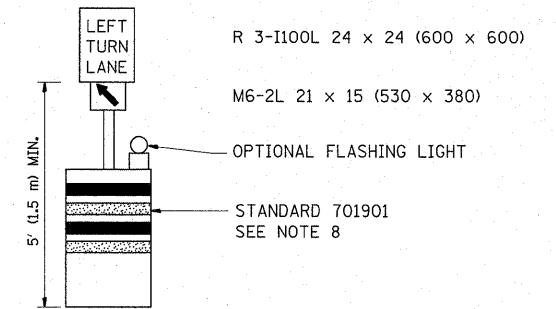
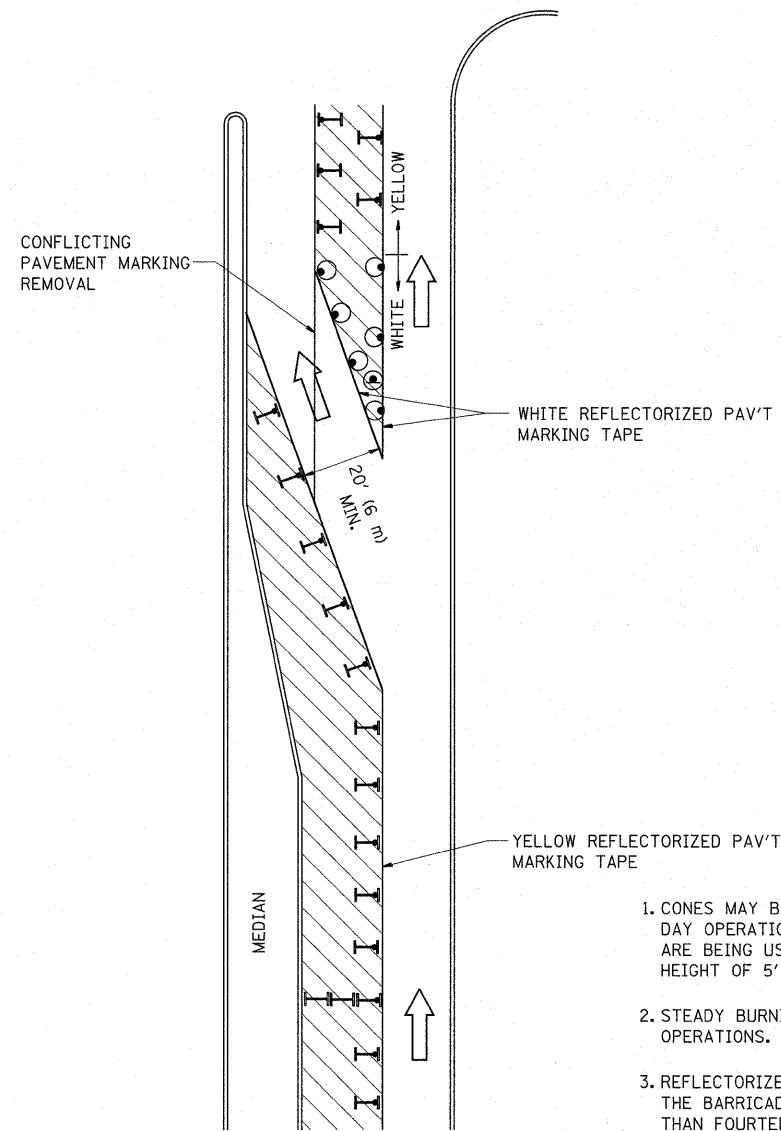
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

FILE NAME =	USER NAME = mrdjja	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
os\p_wor\pwi\d01\mrdjja\0156237\Dist5tdgn		DRAWN -	REVISED - C. JUCIUS 09-09-09
		CHECKED -	REVISED -
		DATE - 03-19-90	REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL PAVEMENT MARKINGS		1321	2010-048-N	COOK	53	46
SCALE: NONE		TC-13		CONTRACT NO. 60L23		
SHEET NO. 1 OF 1 SHEETS		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				









**GENERAL NOTES**

1. 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. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM OPER 725 IS REQUIRED.
8. IF A DRUM OR TYPE II BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHR 350 PREQUIREMENTS.
9. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

**LEGEND**

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

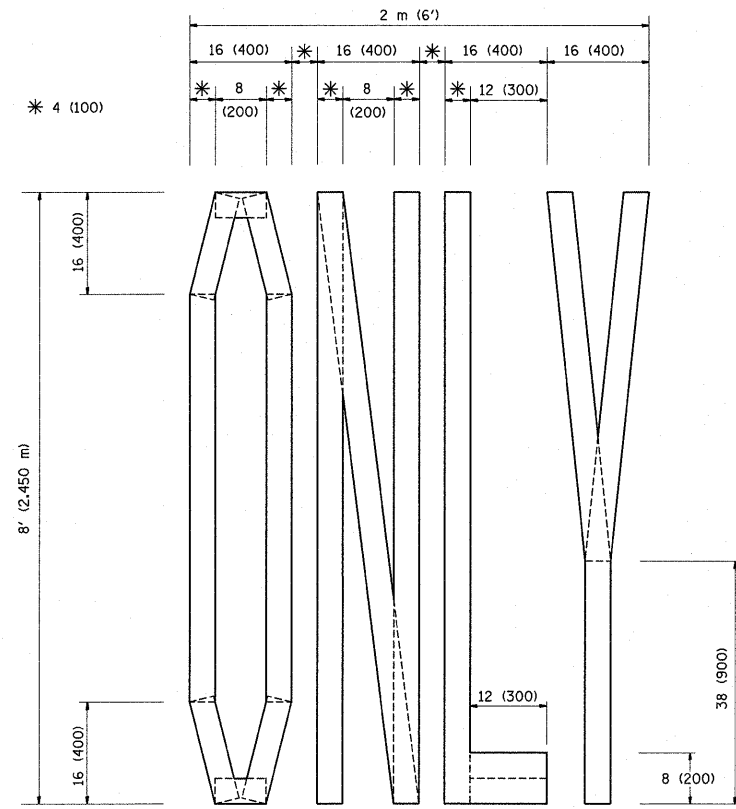
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cr\pwork\pwork\midjja\20156237\Dist5.dgn		REVISED - A. HOUSEH 11-07-95	REVISED -
PLOT SCALE = 50.0000" / IN.		REVISED - A. HOUSEH 10-12-96	REVISED -
PLOT DATE = 5/11/2011		REVISED - T. RAMMACHER 01-06-00	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

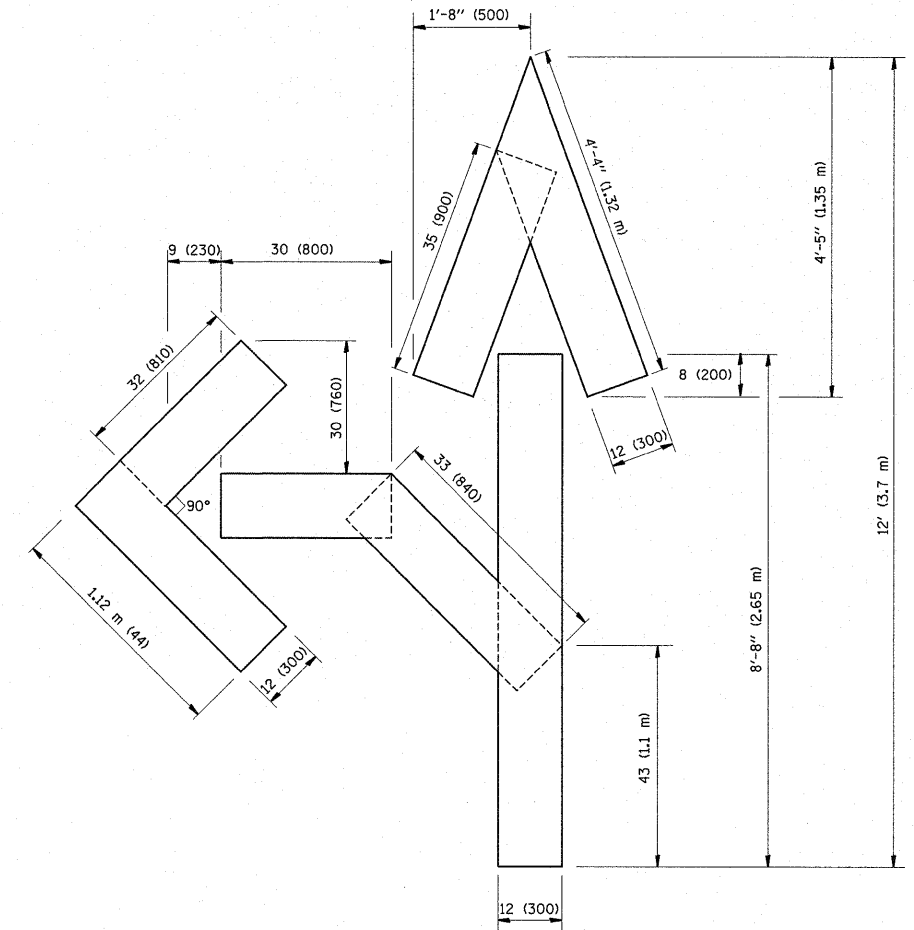
**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS  
(TO REMAIN OPEN TO TRAFFIC)**

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

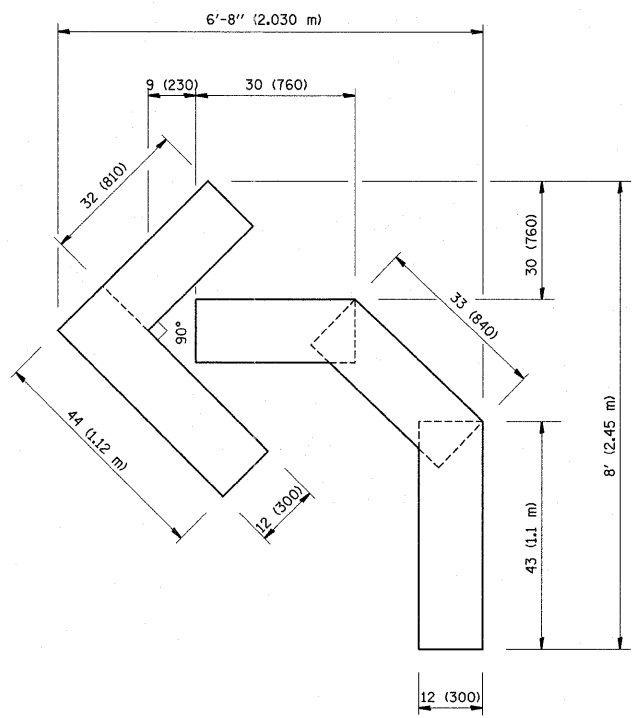
F.A.P. RTE. 1321	SECTION 2010-048-N	COUNTY COOK	TOTAL SHEETS 53	SHEET NO. 47
<b>TC-14</b>		CONTRACT NO. 60L23		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



QUANTITY  
 4 (100) LINE = 64.1 ft. (19.7 m)  
 21.1 sq. ft. (1.97 sq. m)



QUANTITY  
 4 (100) LINE = 82.5 ft. (25.3 m)  
 27.5 sq. ft. (2.53 sq. m)



QUANTITY  
 4 (100) LINE = 45.5 ft. (13.9 m)  
 15.2 sq. ft. (1.39 sq. m)

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

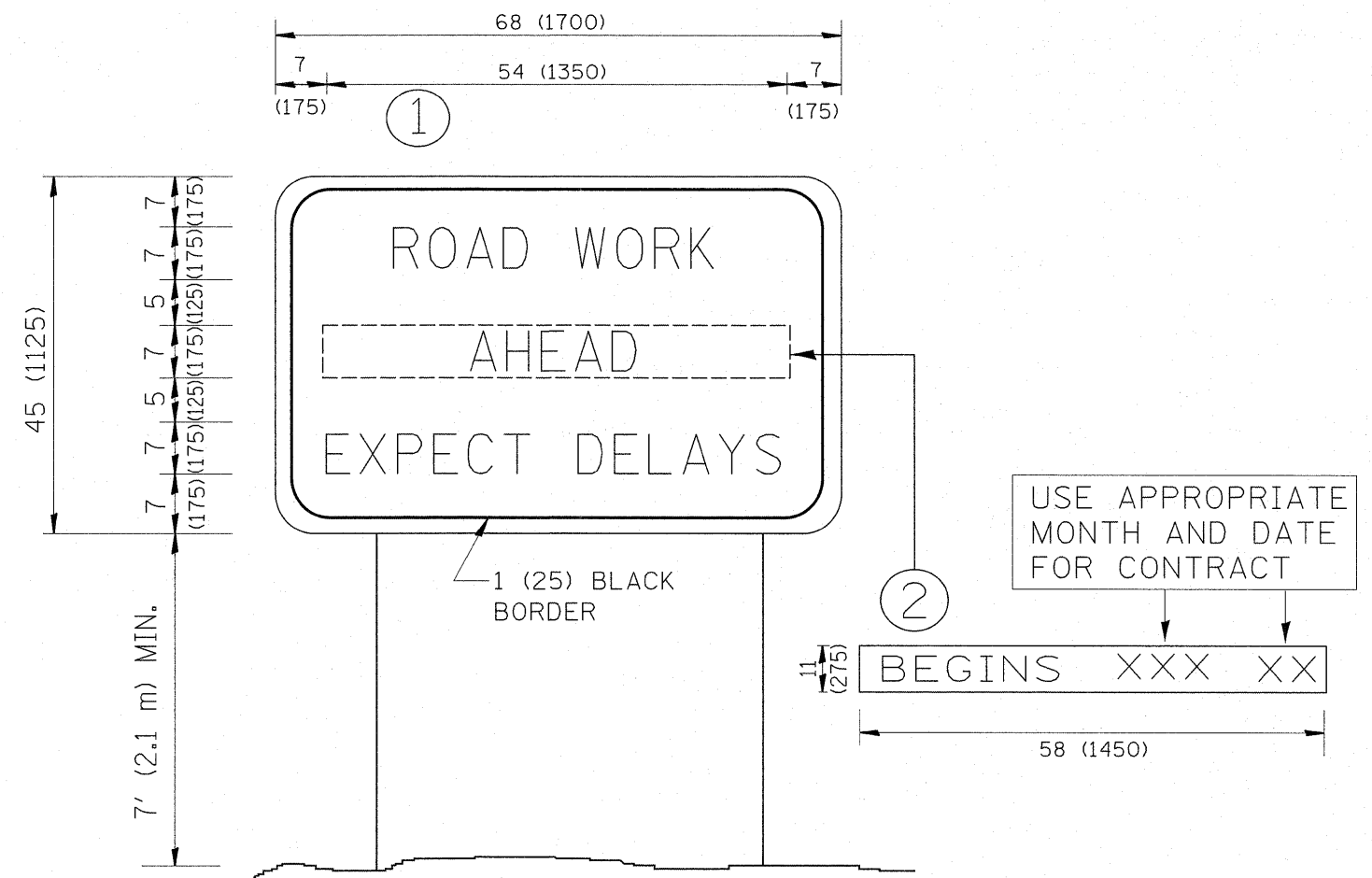
FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
c:\pwork\pwidot\midyja\d0156237\Dist5tdgn		DRAWN -	REVISED -T. RAMMACHER 11-04-97
PLOT SCALE = 50.0000" / IN.		CHECKED -	REVISED -T. RAMMACHER 03-02-98
PLOT DATE = 5/11/2011		DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS  
 FOR TRAFFIC STAGING

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2010-048-N	COOK	53	48
TC-16		CONTRACT NO. 60L23		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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

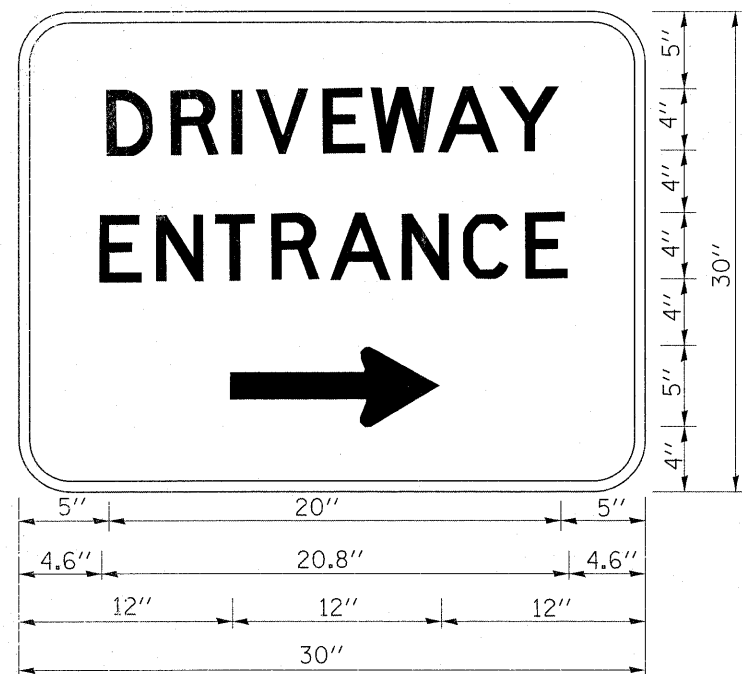


**NOTES:**

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.

FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED - R. MIRS 09-15-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ARTERIAL ROAD INFORMATION SIGN</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca\pw_work\pwidot\midyja\d0156237\Dist5t\dgn	DRAWN -	REVISED - R. MIRS 12-11-97	1321			2010-048-N	COOK	53	49	
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99	<b>TC-22</b>			CONTRACT NO. 60L23				
PLOT DATE = 5/11/2011	DATE -	REVISED - C. JUCIUS 01-31-07	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
				SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA. TO STA.		



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED  
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

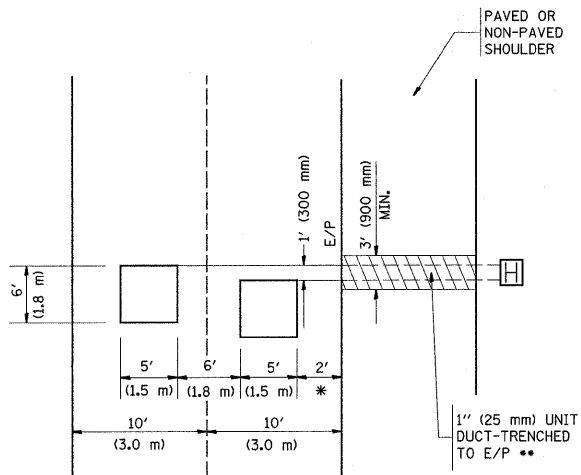
**NOTES:**

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK; ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED - C. JUCIUS 02-15-07	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DRIVEWAY ENTRANCE SIGNING</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#		DRAWN -	REVISED -		1321	2010-048-N	COOK	53	50				
PLOT SCALE = #SCALE#		CHECKED -	REVISED -		<b>TC-26</b>				CONTRACT NO. 60L23				
PLOT DATE = #DATE#		DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				

**LOOPS NEXT TO SHOULDERS**

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.



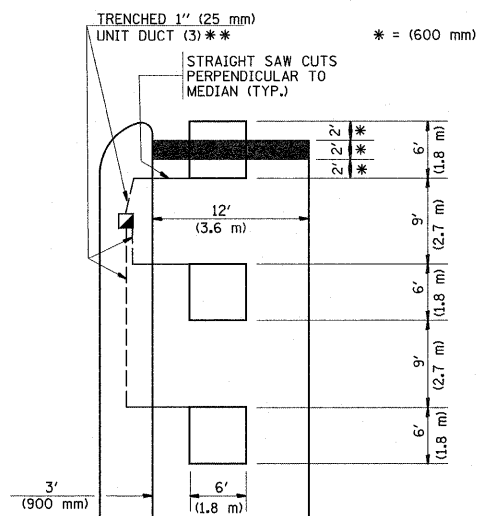
\* = (600 mm)

\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

**LEFT TURN LANES WITH MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH**

(PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.

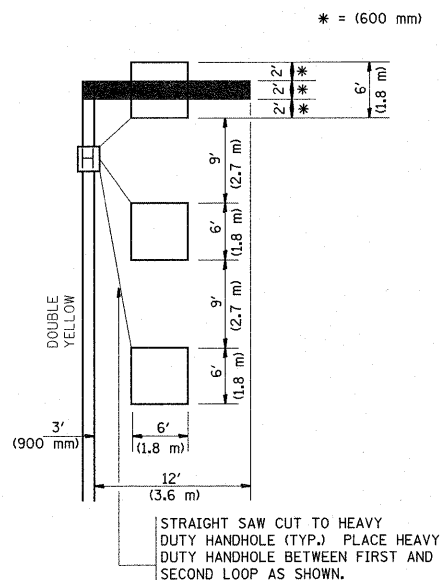


\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

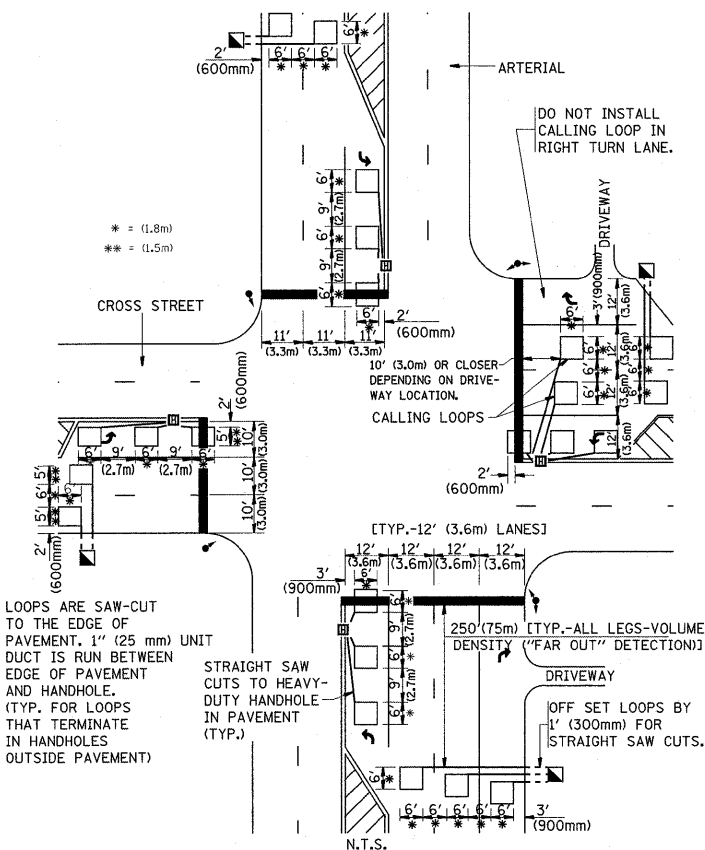
**LEFT TURN LANES WITHOUT MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH**

(PROTECTED / PERMITTED LEFT TURN PHASING)



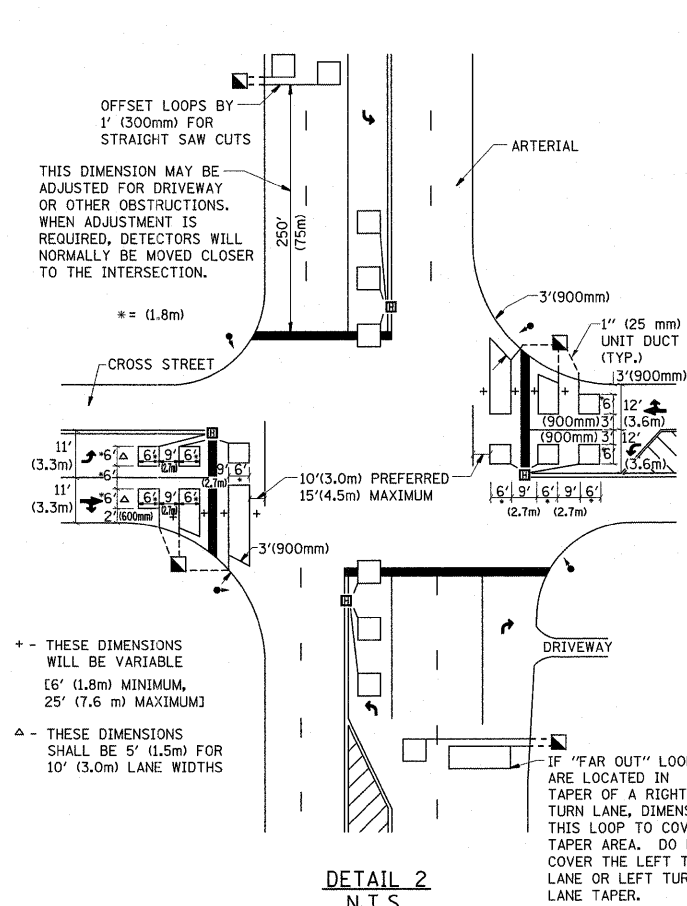
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)  
CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)**



DETAIL 1  
N.T.S.

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)  
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)**



DETAIL 2  
N.T.S.

**NOTES:**

**VEHICLES LOOP DETECTORS**

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATELY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- \* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- \* WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

**PLACEMENT OF DETECTORS**

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

**NOTE:**

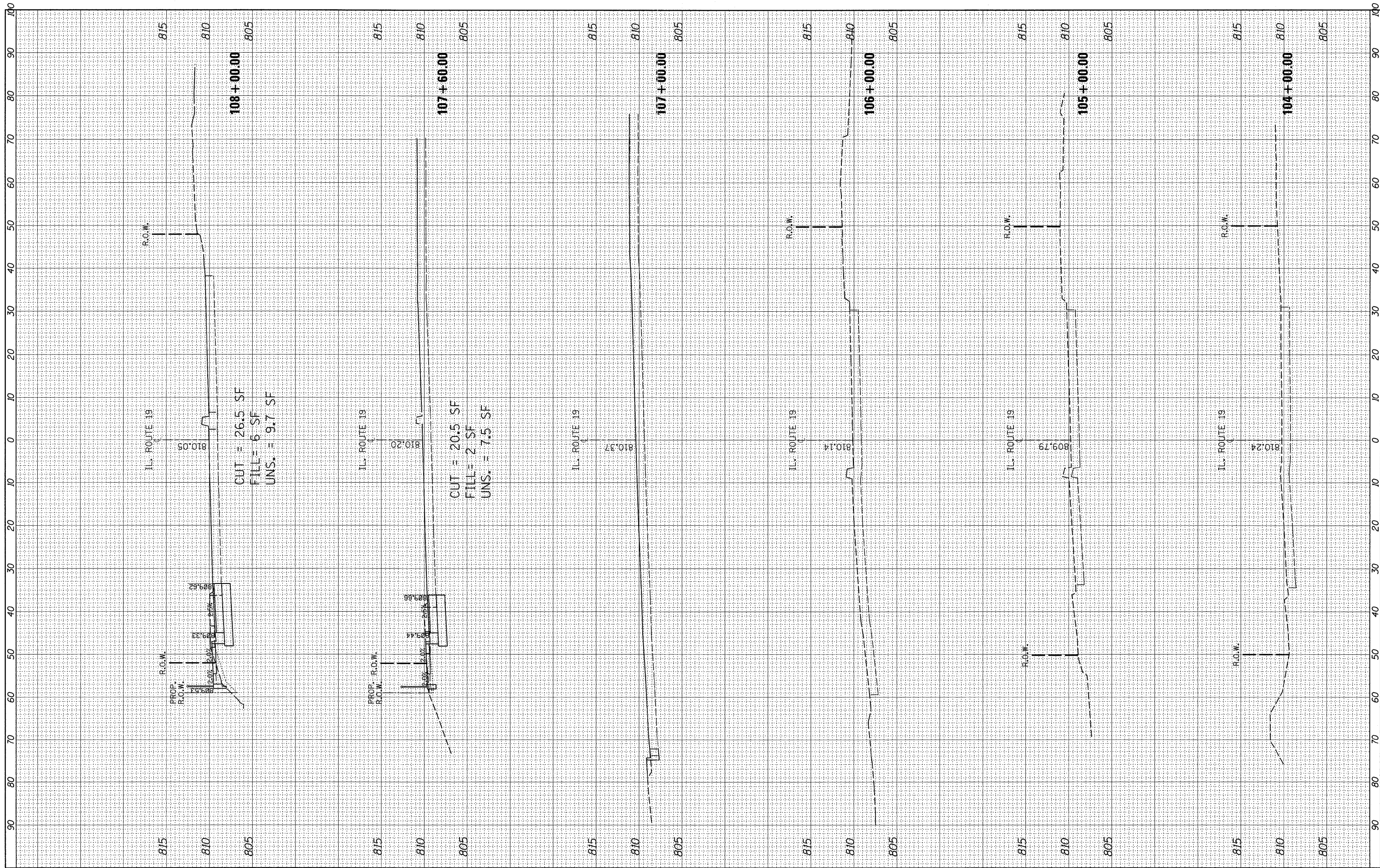
ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

FILE NAME =	USER NAME = msdyja	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING</b>			F.A.P. RTE. 1321	SECTION 2010-048-N	COUNTY COOK	TOTAL SHEETS 53	SHEET NO. 51
cd:\pw\work\pwsido\msdyja\d0156237\01st54.dgn		DRAWN -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	<b>TS-07</b>		CONTRACT NO. 60L23		
		CHECKED - R.K.F.	REVISED -									
		DATE -	REVISED -		FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT							

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

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



FILE NAME = P141809-shht-xshht-IL19-Design.dgn  
 USER NAME = msdjja  
 PLOT SCALE = 18.0000' / 1" = 18000  
 PLOT DATE = 6/14/2011

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

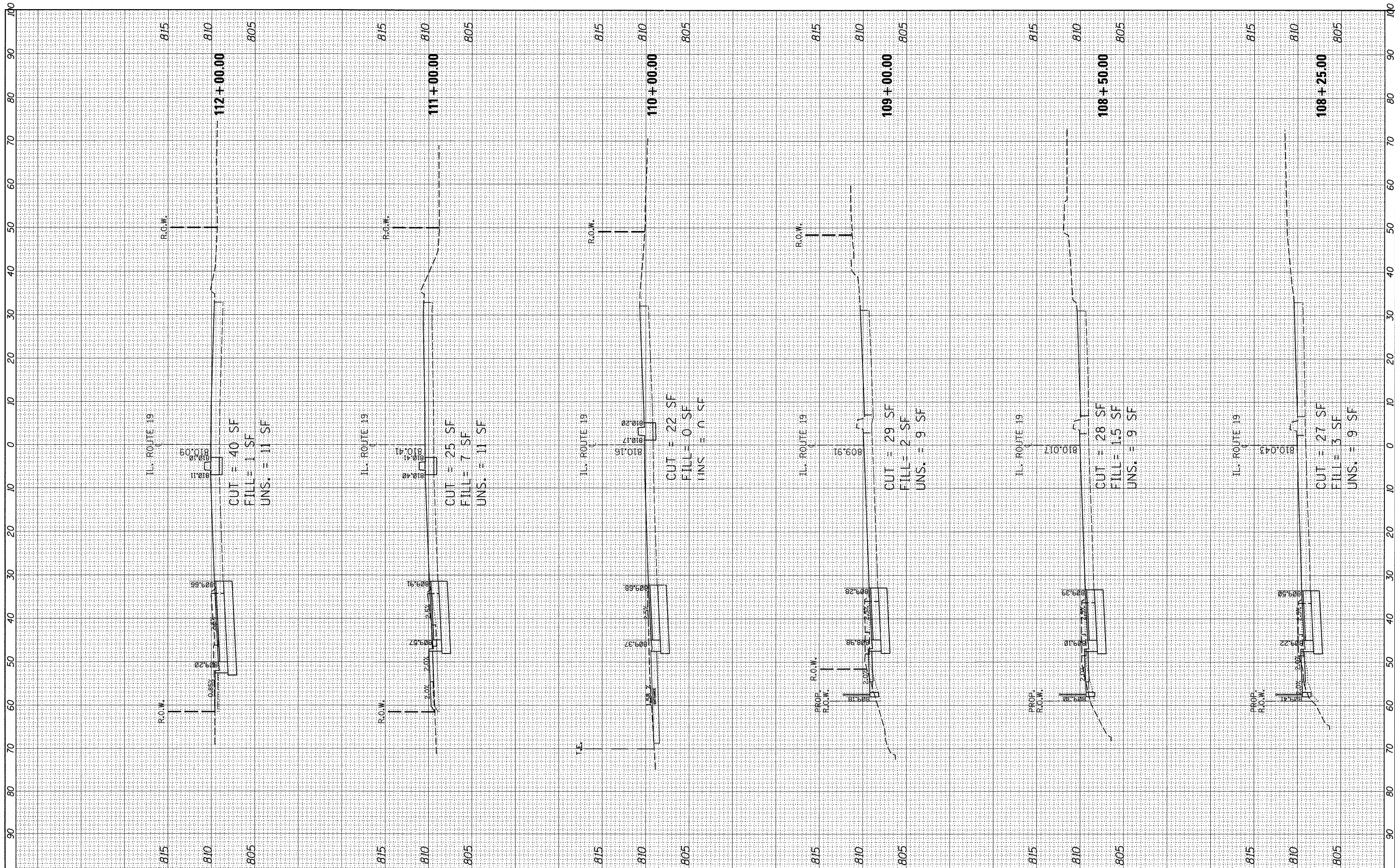
**IL. ROUTE 19 CROSS SECTIONS**

SCALE: SHEET NO. OF SHEETS STA. 104+00.00 TO STA. 108+00.00

F.A.A.I. RTE. 1321	SECTION 2010-048-N	COUNTY COOK	TOTAL SHEETS 53	SHEET NO. 52
				CONTRACT NO. 60L23
ILLINOIS FED. AID PROJECT				

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

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



FILE NAME = P141809-shht-xshht-IL19-Design.dgn  
 USER NAME = msdjlja  
 PLOT SCALE = 10.0000' / 1" = 100  
 PLOT DATE = 6/14/2011

DESIGNED	-	REVISED	-
DRAWN	-	REVISED	-
CHECKED	-	REVISED	-
DATE	-	REVISED	-

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**IL. ROUTE 19 CROSS SECTIONS**  
 SCALE: SHEET NO. OF SHEETS STA. 108+25.00 TO STA. 112+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2010-048-N	COOK	53	53
CONTRACT NO. 60L23			ILLINOIS FED. AID PROJECT	