

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

FAP 397/ILL 83 (SIBLEY BOULEVARD)  
AT WALLACE STREET  
SECTION: 104TS-1(12)  
TRAFFIC SIGNAL INSTALLATION; TIMING/PROGRESSION; RESURFACING  
PROJECT: HSIP-0397(005)  
COOK COUNTY  
C-91-500-12

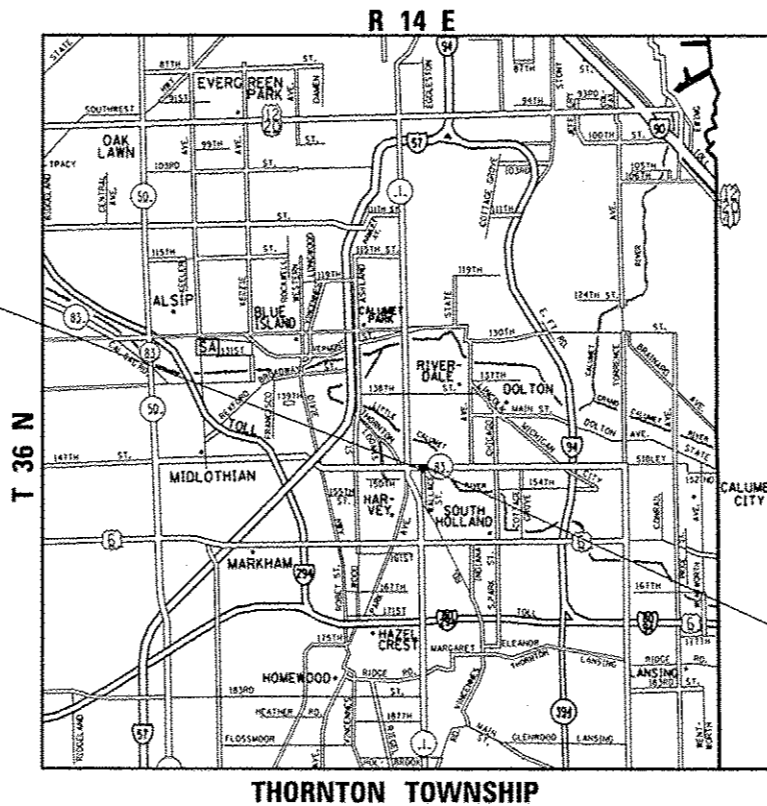
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
397	104TS-1(12)	COOK	38	1
FED. ROAD DIST. NO. -		ILLINOIS	CONTRACT NO. 60T92	

D -91-500-12



FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT IS LOCATED IN THE CITY OF HARVEY

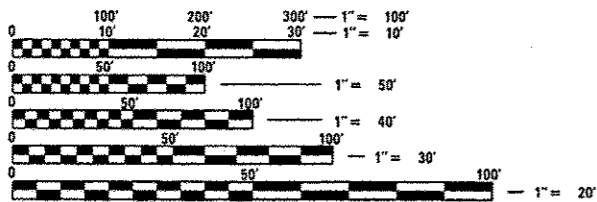


PROJECT BEGINS STA. 17+38

**TRAFFIC DATA**

2009 ADT = 29,600  
POSTED SPEED LIMIT = 35 MPH

PROJECT ENDS STA. 26+36



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 KARI SMITH (847) 705-4437  
PROJECT MANAGER KEN ENG (847) 705-4247

CONTRACT NO. 60T92

GROSS AND NET LENGTH OF IMPROVEMENT = 898.00 LINEAL FEET = 0.17 MILE

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED *December 20, 2012*

*John Erik Mann*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

*Feb 1, 2013*  
*John D. Baranowski, P.E.*  
acting ENGINEER OF DESIGN AND ENVIRONMENT

*Feb 1, 2013*  
*Omer Osman, P.E.*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS**

**INDEX OF SHEETS**

**GENERAL NOTES**

**SHEET NO. DESCRIPTION**

1	COVER SHEET
2	INDEX OF SHEETS, STANDARDS, AND GENERAL NOTES
3-6	SUMMARY OF QUANTITIES
7	TYPICAL SECTIONS PLAN
8	EXISTING & PROPOSED ROADWAY PLAN
9	EROSION CONTROL PLAN
10	PAVEMENT MARKING & LANDSCAPING PLAN
11-12	PLAT OF HIGHWAYS
13-28	PROPOSED TRAFFIC SIGNAL PLANS
29	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-8)
30	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)
31	BUTT JOINT AND HMA TAPER DETAILS (BD-32)
32	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
33	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)
34	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
35	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)
36	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16)
37	ARTERIAL ROAD INFORMATION SIGN (TC-22)
38	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)

**LIST OF STATE STANDARDS**

STANDARD NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
424001-07	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424006-01	DIAGONAL CURB RAMPS FOR SIDEWALKS
424011-01	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424016-01	MID-BLOCK CURB RAMPS FOR SIDEWALKS
424021-01	DEPRESSED CORNER FOR SIDEWALKS
604001-03	FRAME AND LIDS, TYPE I
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701101-03	OFF-ROAD OPERATIONS, MULTILANE, 15'(4.5M) TO 24'(600MM) FROM PAVEMENT EDGE
701427-01	LANE CLOSURE, INTERMITTENT OR MOVING OPERATION FOR SPEEDS <=40 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-08	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-05	SIDEWALK CORNER OR CROSSWALK CLOSURE
701901-02	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-03	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
729001-01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
780001-03	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
805001-01	ELECTRIC SERVICE INSTALLATION DETAILS
814001-02	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-05	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
878001-09	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS

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 CITY OF HARVEY.

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

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40 MM) WHERE THE SPEED LIMIT IS 45 MPH (45 KM/H) OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (45 KM/H). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

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.

THE RESIDENT ENGINEER SHALL CONTACT MS. PATRICE HARRIS AREA TRAFFIC FIELD TECHNICIAN AT (708) 597-9800 A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKING.

THE RESIDENT ENGINEER SHALL VERIFY ALL EXISTING PAVEMENT MARKINGS BEFORE MILLING

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS

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.

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

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKINGS LINES (AND RAISED REFLECTIVE MARKINGS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

THE LOCATIONS OF THE VARIOUS UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL USE SPECIAL CARE WHEN CONDUCTING CONSTRUCTION OPERATIONS NEAR THEM TO PREVENT DAMAGE

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKER MONUMENTS UNTIL THE OWNER, AN AUTHORIZED AGENT, OR LAND SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCE THEIR LOCATION. THE CONTRACTOR WILL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUB-SECTION MONUMENTS DISRUPTED BY THEIR OPERATIONS

BARRICADES: ALL UNBALLASTED TYPE I AND TYPE II BARRICADES SHALL HAVE TWO (2) SANDBAGS ON THE BOTTOM RAIL. A TYPE III BARRICADE SHALL REQUIRE A MINIMUM OF FOUR (4) SANDBAGS

CONTRACTOR SHALL TAKE CARE TO PROTECT EXISTING SIDEWALK AND LANDSCAPING AT LOCATIONS NOT SHOWN IN THE PLANS TO BE REMOVED AND AS DIRECTED BY THE ENGINEER. SIDEWALK AND LANDSCAPING TO BE PROTECTED THAT IS DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED IN KIND AT THEIR EXPENSE

**GENERAL NOTES (CONTINUED)**

THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF EXISTING PLANT MATERIAL FOR WHICH THE CONTRACT DOES NOT PROVIDE REMOVAL. THE PROTECTION OF EXISTING PLANT MATERIAL AND THE REPAIR OR REPLACEMENT OF EXISTING PLANT MATERIAL DAMAGED BY THE CONTRACTOR SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 201 OF THE STANDARD SPECIFICATIONS. ANY DAMAGE TO EXISTING PLANT MATERIAL DUE TO THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED IN KIND AT THEIR EXPENSE

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION

THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS

LAYOUT AND STAKING FOR ALL CONSTRUCTION OPERATIONS SHALL BE PROVIDED BY THE CONTRACTOR

THE CONTRACTOR'S OPERATIONS AND TEMPORARY STORAGE ACTIVITIES SHALL BE LIMITED TO THE WORK AREA AND/OR CONSTRUCTION LIMITS. ANY ADDITIONAL STAGING AREAS ADJACENT TO THE PROJECT ARE SUBJECT TO PRIOR APPROVAL BY THE APPROPRIATE AGENCY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR COMPLIANCE WITH THE ABOVE REQUIREMENTS

CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES ALONG THE PROJECT CORRIDOR, INCLUDING POWER POLES, TELEPHONE PEDESTALS, GAS VALVES AND ANY OTHER UTILITIES IDENTIFIED BY THE ENGINEER. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY AGENCY IF CONFLICTS ARE IDENTIFIED IN THE FIELD

CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATION AT LOCATIONS INDICATED ON THE PLAN SHEETS AS POTENTIAL UTILITY CONFLICTS AND AS SUGGESTED BY THE ENGINEER TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES

MODIFICATIONS TO PROPOSED HANDHOLES NECESSARY TO INTERCEPT EXISTING CONDUITS SHALL NOT BE MEASURED FOR PAYMENT BUT SHALL BE INCIDENTAL TO THE PAY ITEM HANDHOLE

FILE NAME :	USER NAME :	DESIGNED :	REVISED :
c:\pwwork\axidat\gulloumefp\d0307142V	gulloumefp	13689-Design.dgn	
		DRAWN :	REVISED :
		CHECKED :	REVISED :
		DATE :	REVISED :

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, LIST OF STATE STANDARDS & GENERAL NOTES  
FAP 397/ILL 83 (147TH STREET)**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
397	104TS-1(12)	COOK	38	2
CONTRACT NO. 60T92				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		ROADWAY 0005 90% FED 10% STATE	TRAFFIC SIGNAL 0021 90% FED 5% STATE 5% CITY OF HARVEY	EVP 0021 100% CITY OF HARVEY	INTER CONNECT 0021 90% FED 10% STATE		
20101200	TREE ROOT PRUNING	EACH	1		1				
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	105.5	105.5					
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	105.5	105.5					
25200110	SODDING, SALT TOLERANT	SO YD	5	5					
28000510	INLET FILTERS	EACH	9	9					
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SO YD	72	72					
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	45	45					
40600300	AGGREGATE (PRIME COAT)	TON	22	22					
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	8	8					
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	229	229					
40600895	CONSTRUCTING TEST STRIP	EACH	1	1					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	56.5	56.5					
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	543	543					

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		ROADWAY 0005 90% FED 10% STATE	TRAFFIC SIGNAL 0021 90% FED 5% STATE 5% CITY OF HARVEY	EVP 0021 100% CITY OF HARVEY	INTER CONNECT 0021 90% FED 10% STATE		
42001300	PROTECTIVE COAT	SO YD	167	167					
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	950	950					
42400800	DETECTABLE WARNINGS	SO FT	196.4	196.4					
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SO YD	5530	5530					
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	200	200					
44000600	SIDEWALK REMOVAL	SO FT	1030	1030					
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	10	10					
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	50	50					
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	150	150					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6					
67100100	MOBILIZATION	L SUM	1	1					
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1					
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1					

FILE NAME :	USER NAME : gulloumfp	DESIGNED -	REVISED -
ORIG. WORK: gulloumfp\gulloumfp\0307142\PI13609-001.dgn		DRAWN -	REVISED -
PLOT SCALE : 1000000' / 1"		CHECKED -	REVISED -
PLOT DATE : 12/21/2012		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>SUMMARY OF QUANTITIES</b>			
SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	

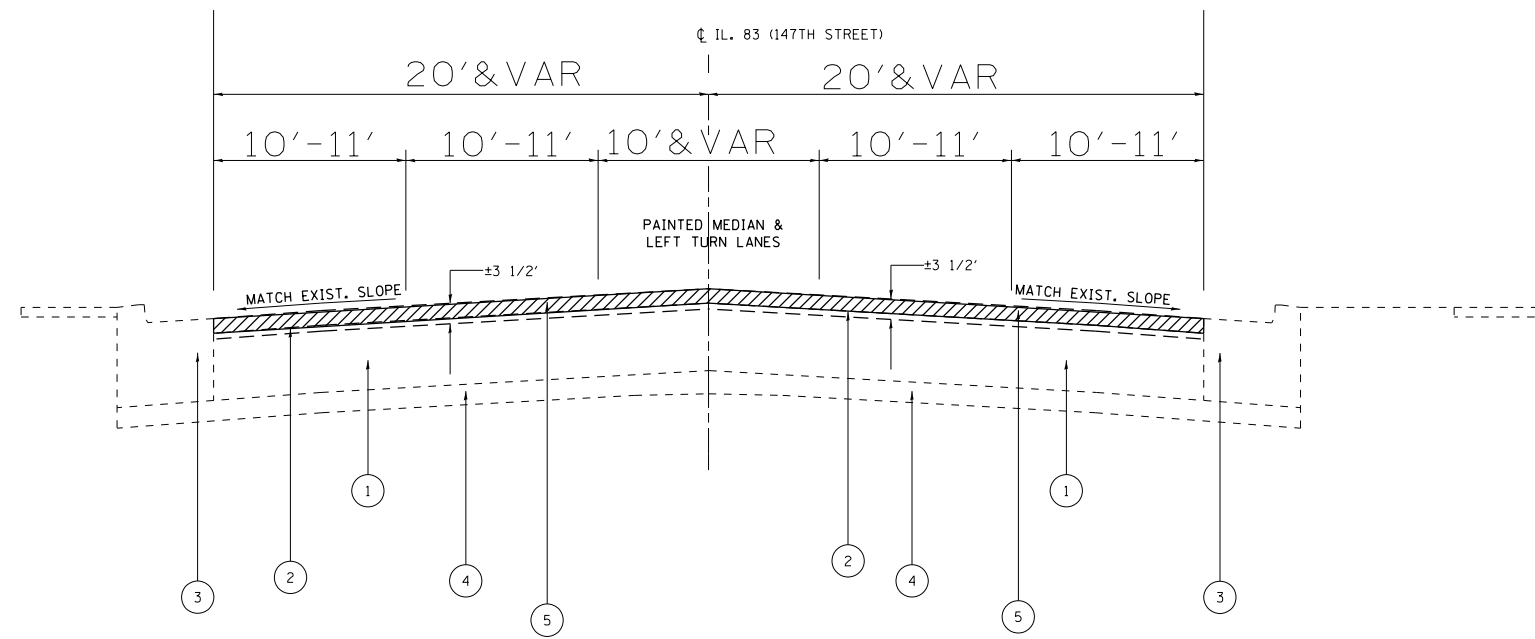
F.A.P. RTE. 397	SECTION 104TS-1(12)	COUNTY COOK	TOTAL SHEETS 38	SHEET NO. 3
CONTRACT NO. 60T92				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE					SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE							
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	ROADWAY 0005 90% FED 10% STATE	TRAFFIC SIGNAL 0021 90% FED 5% STATE 5% CITY OF HARVEY	EVP 0021 100% CITY OF HARVEY	INTER CONNECT 0021 90% FED 10% STATE			CODE NO	ITEM	UNIT	TOTAL QUANTITIES	ROADWAY 0005 90% FED 10% STATE	TRAFFIC SIGNAL 0021 90% FED 5% STATE 5% CITY OF HARVEY	EVP 0021 100% CITY OF HARVEY	INTER CONNECT 0021 90% FED 10% STATE			
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1						* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	145	145						
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	2	2						* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	500	500						
70300100	SHORT TERM PAVEMENT MARKING	FOOT	850	850						* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	55	55						
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SO FT	103	103						* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	60	60						
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	3450	3450						78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	30	30						
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	145	145						80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	1		1					
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	500	500						81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	977		657			320		
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	55	55						81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	104.5		104.5					
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	95	95						81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	78		78					
* 72000100	SIGN PANEL - TYPE 1	SO FT	15		15					81028230	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3 1/2" DIA.	FOOT	42		42					
* 72000200	SIGN PANEL - TYPE 2	SO FT	13.75		13.75					81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	235		235					
* 72400310	REMOVE SIGN PANEL - TYPE 1	SO FT	8.3		8.3															
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	103	103																
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3450	3450																

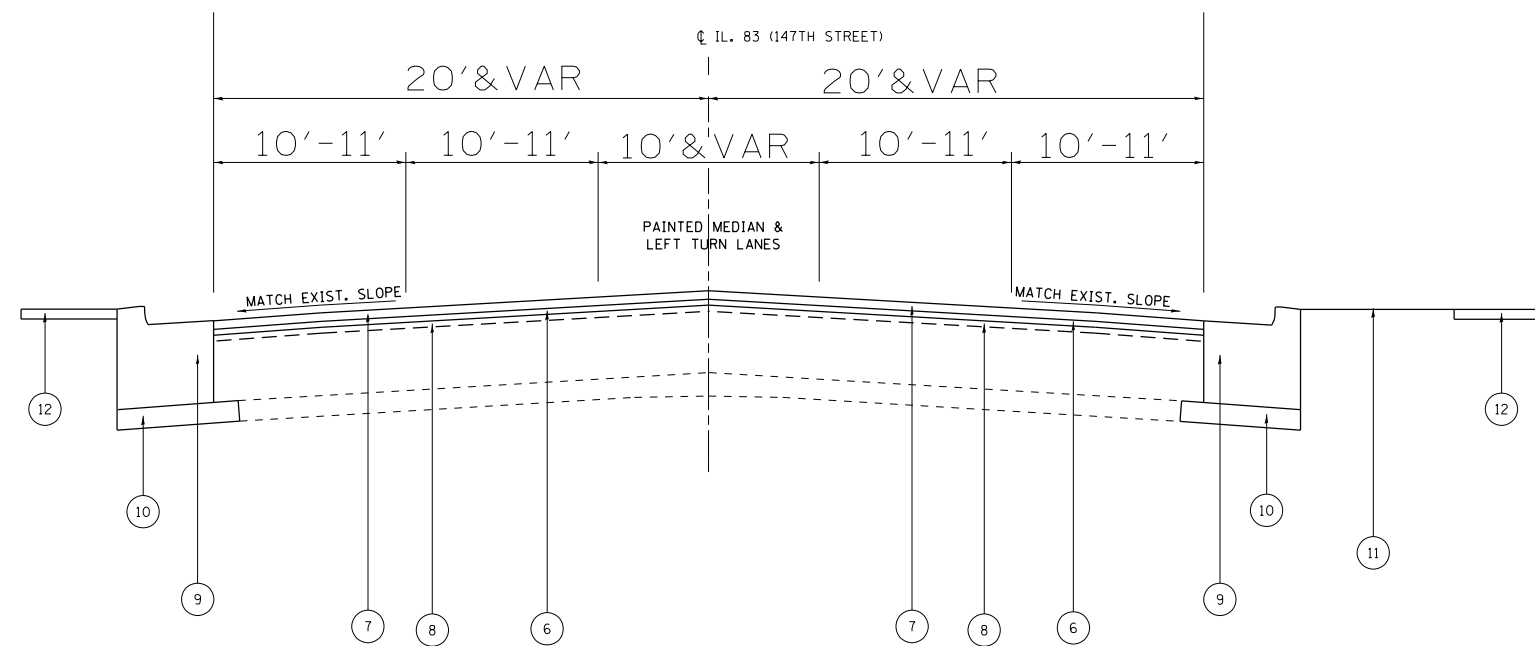
\* Specialty Items



SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE					SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	ROADWAY 0005 90% FED 10% STATE	TRAFFIC SIGNAL 0021 90% FED 5% STATE 5% CITY OF HARVEY	EVP 0021 100% CITY OF HARVEY	INTER CONNECT 0021 90% FED 10% STATE	CODE NO	ITEM	UNIT	TOTAL QUANTITIES	ROADWAY 0005 90% FED 10% STATE	TRAFFIC SIGNAL 0021 90% FED 5% STATE 5% CITY OF HARVEY	EVP 0021 100% CITY OF HARVEY	INTER CONNECT 0021 90% FED 10% STATE		
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6		6			89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	8832				8832		
88030070	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2		2			89502380	REMOVE EXISTING HANDHOLE	EACH	1				1		
88030080	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2		2			X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	273.5			273.5			
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2		2			X0327318	VIDEO DETECTION SYSTEM, PARTIAL	EACH	1		1				
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2		2			X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	10	10					
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4		4			X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1		1				
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10		10			X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1		1				
88500100	INDUCTIVE LOOP DETECTOR	EACH	7		7			X8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	4516				4516		
88600100	DETECTOR LOOP, TYPE 1	FOOT	515		515			XX005431	LOCATING UNDERGROUND UTILITY	EACH	3		3				
88700200	LIGHT DETECTOR	EACH	2			2		Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1					
88700300	LIGHT DETECTOR AMPLIFIER	EACH	1			1		Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	31	31					
88800100	PEDESTRIAN PUSH-BUTTON	EACH	4		4			Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	51.4	51.4					
								Z0033046	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL	EACH	1				1		



**EXISTING TYPICAL CROSS SECTION**  
**IL. ROUTE 83 (STA. 17+38 TO STA. 26+36)**



**PROPOSED TYPICAL CROSS SECTION**  
**IL. ROUTE 83 (STA. 17+38 TO STA. 26+36)**

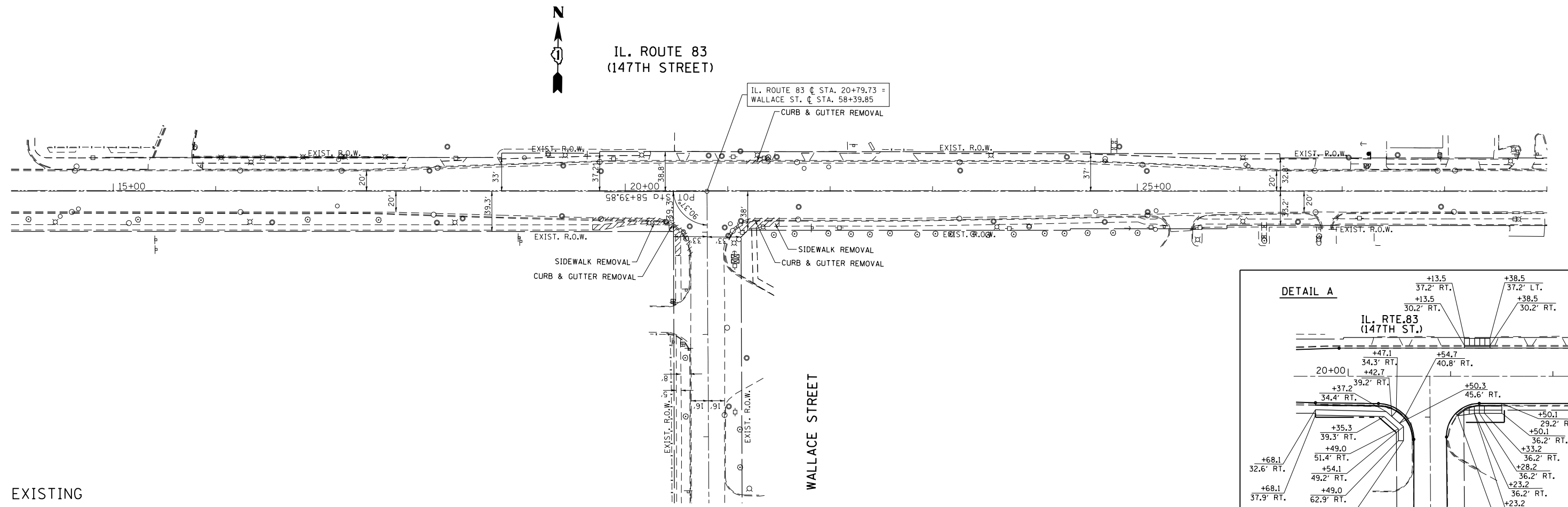
**LEGEND**

1. EXISTING P.C.C PAVEMENT, ± 10"
2. EXISTING HMA SURFACE COURSE, ± 3 1/2"
3. EXISTING COMB. CONCRETE CURB
4. EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A, 4"
5. PROPOSED HMA SURFACE REMOVAL (2 1/2")
6. PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 (3/4")
7. PROPOSED POLYMERIZED HMA SURFACE COURSE, MIX "F", N90 (1 3/4 ")
8. EXISTING HMA SURFACE OVERLAY AFTER MILLING, ± 1/2"
9. PROPOSED CURB & GUTTER B6.24 (SEE EXISTING & PROPOSED ROADWAY PLAN FOR EXACT LOCATIONS)
10. PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE B, 4"
11. PROPOSED TOPSOIL FURNISH PLACEMENT, 4" PROPOSED SODDING, SALT TOLERANT (SEE EXISTING & PROPOSED ROADWAY PLAN FOR EXACT LOCATIONS)
12. PROPOSED 5' PCC SIDEWALK (SEE EXISTING & PROPOSED ROADWAY PLAN FOR EXACT LOCATIONS)

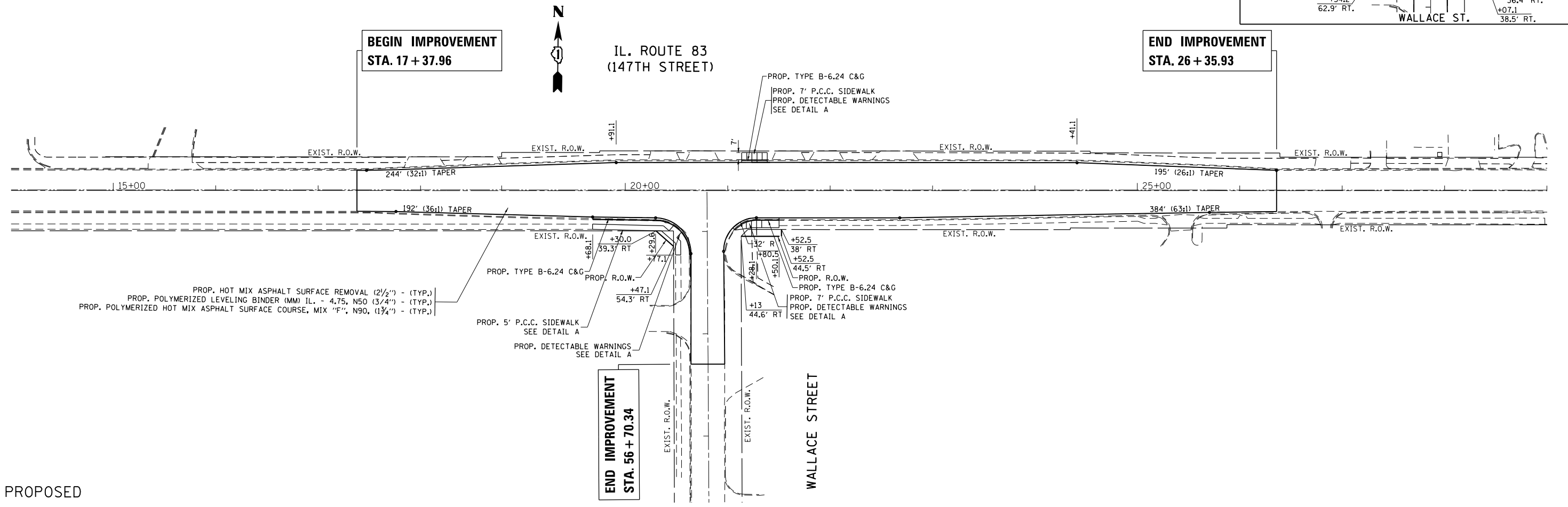
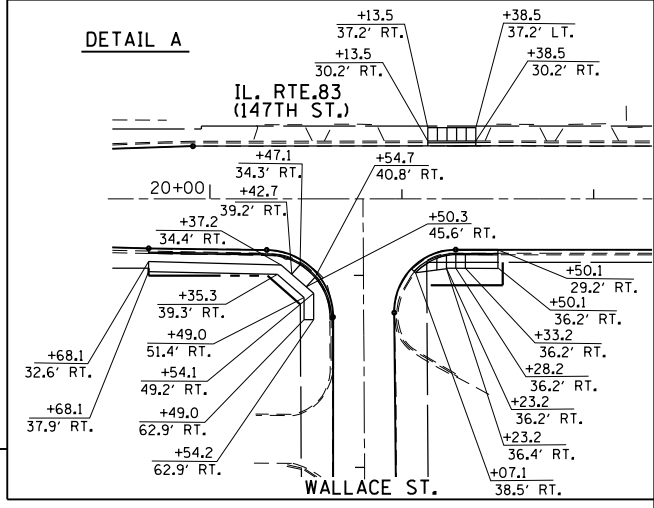
HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	DESIGN AIR VOIDS @ NDES
POLYMERIZED HMA SURFACE COURSE, MIX F, N90, (IL-9.5 mm)	4% @ 90 GYR
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	3.5% @ 50 GYR

**NOTES**

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE COURSE MIXTURES IS 112 LBS/SOYD/IN. "THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS." "FOR USE OF RECYCLED SEE DISTRICT ONE SPECIAL PROVISIONS."



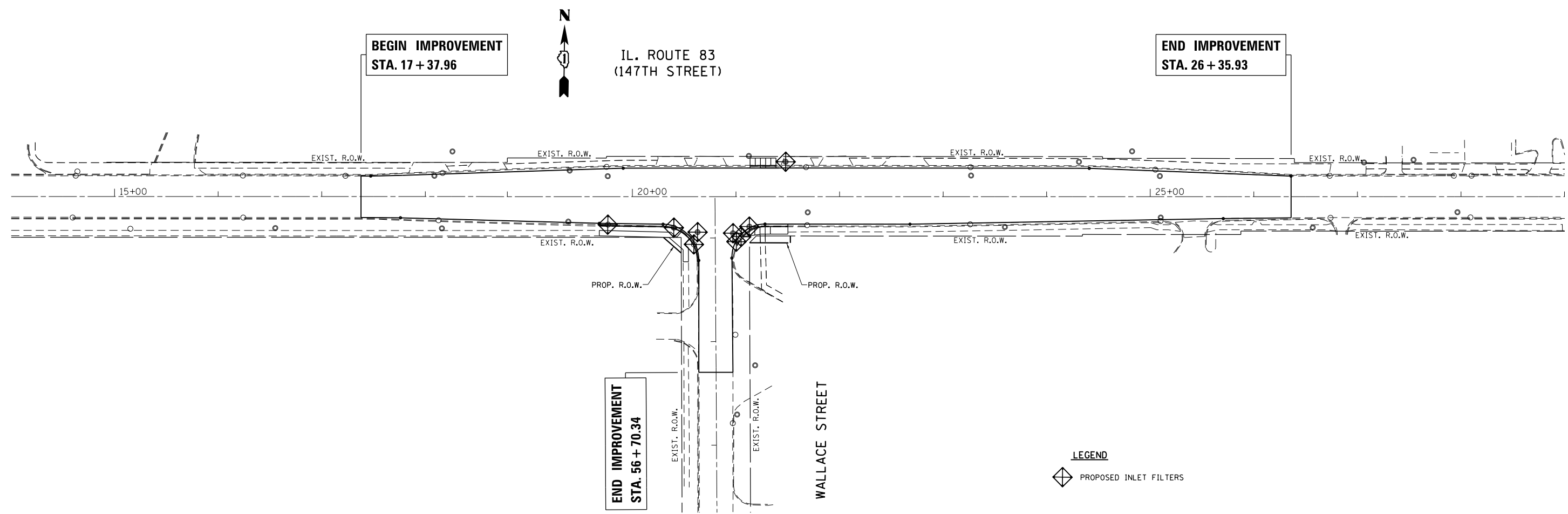
EXISTING



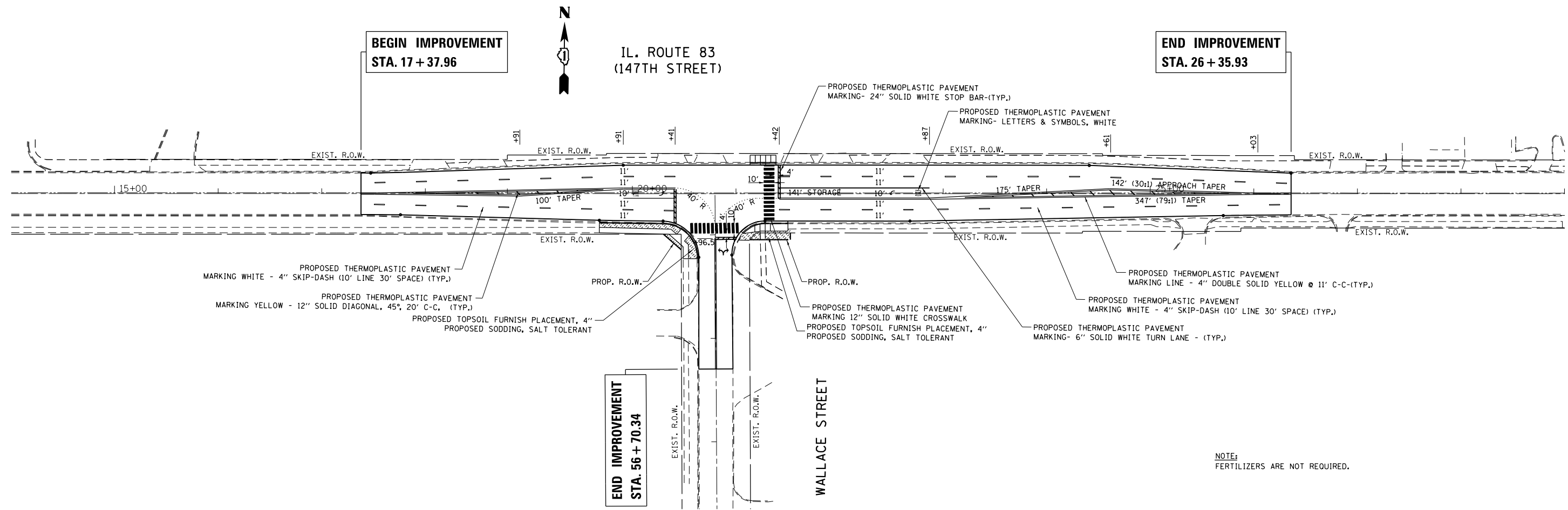
PROPOSED

FILE NAME =	USER NAME = guillaumefp	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ROADWAY PLAN IL. RTE. 83 AT WALLACE ST.</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\pwidot\guillaumefp\d0307141\13609-sh-t-plan.dgn		DRAWN -	REVISED -		397	104TS-1(12)	COOK	38	8			
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -		CONTRACT NO. 60T92							
#MODELNAME#	PLOT DATE = 12/21/2012	DATE -	REVISED -		SCALE: 1"=50'	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS FED. AID PROJECT





FILE NAME =	USER NAME = guillaumejp	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EROSION CONTROL PLAN IL. RTE. 83 AT WALLACE ST.</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pwork\pwork\guillaumejp\0307141\103609-shr-eros.dgn	PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -					397	104TS-1(12)	COOK	38	9
#MODELNAME#	PLOT DATE = 12/21/2012	CHECKED -	REVISED -		SCALE: 1"=50'    SHEET    OF    SHEETS    STA.    TO    STA.			CONTRACT NO. 60T92				
		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							



NOTE:  
FERTILIZERS ARE NOT REQUIRED.

FILE NAME = c:\pwork\pwork\pwork\guillaume\p\13609-sh-t-pmk.dgn	USER NAME = guillaume	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT MARKING &amp; LANDSCAPING PLAN IL. RTE. 83 AT WALLACE ST.</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -					397	104TS-1(12)	COOK	38	10
*MODELNAME*	PLOT DATE = 12/21/2012	DATE -	REVISED -	SCALE: 1"=50'			SHEET	OF	SHEETS	STA.	TO	STA.
ILLINOIS FED. AID PROJECT											CONTRACT NO. 60T92	

PART OF THE SW 1/4 SECTION 9, T36N, R14E OF THE 3rd PM, THORNTON TOWNSHIP, COOK COUNTY, ILLINOIS.

PARCEL NUMBER	OWNER	TOTAL HOLDING ACRES	PART TAKEN ACRES	REMAINDER ACRES	PREV. DED. ACRES	EASEMENT ACRES	EASEMENT PURPOSE	PERMANENT TAX INDEX NUMBER	PROPERTY ACQUIRED BY
0J40001	CITY OF HARVEY, AN ILLINOIS MUNICIPAL CORPORATION	1.384	0.003	1.381				29-09-300-014	
0J40002	HARVEY SCHOOL DISTRICT NUMBER 152 WHICH ACQUIRED TITLE AS THE TRUSTEES OF SCHOOLS OF TOWNSHIP 36 NORTH, RANGE 14 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY, ILLINOIS.	15.993	0.005	15.987				SEE PIN TABLE	

**PIN TABLE**

29-09-301-015
29-09-302-007
29-09-303-001
29-09-303-012
29-09-303-013
29-09-303-014
29-09-303-015
29-09-303-016
29-09-303-017
29-09-303-018
29-09-303-019
29-09-303-020
29-09-303-021
29-09-304-001
29-09-304-002
29-09-304-004
29-09-304-059
29-09-304-060

**COORDINATE TABLE**  
ALIGNMENT & SECTION CORNERS

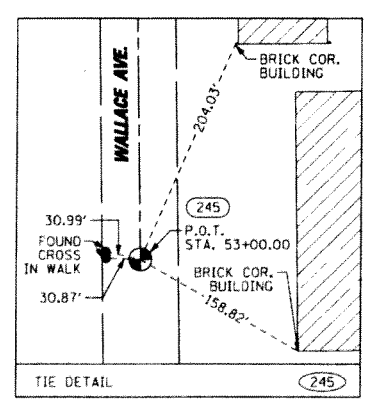
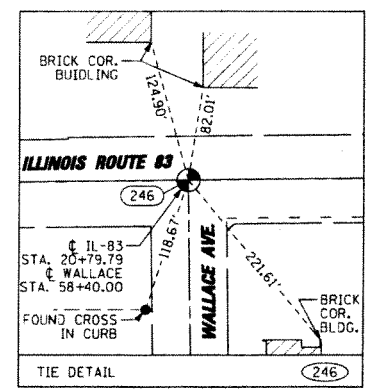
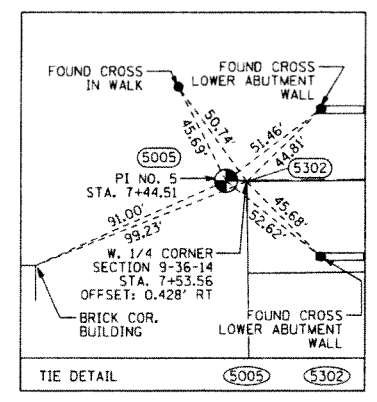
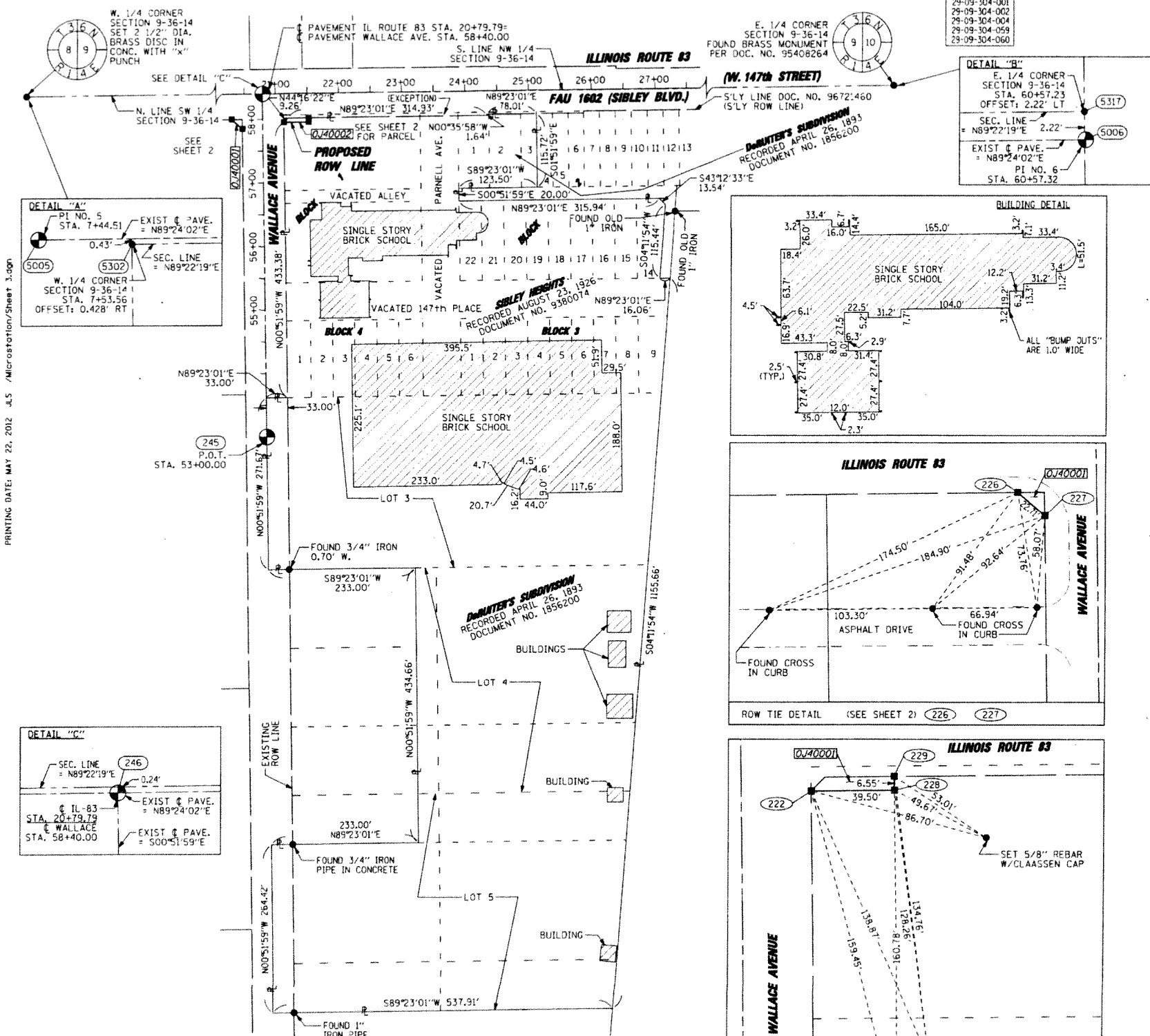
NO.	NORTHING	EASTING
245	1,805,316.9940	1,176,101.9515
246	1,805,856.9323	1,176,093.7871
5005	1,805,842.9599	1,174,758.5813
5006	1,805,898.5534	1,180,071.0987
5302	1,805,842.6266	1,174,767.6376
5317	1,805,900.7745	1,180,070.9904

**LEGEND**

SECTION LINE  
QUARTER SECTION LINE  
QUARTER, QUARTER SECTION LINE  
PLATTED LOT LINE  
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  
RECORD DATA

SECTION CORNER  
QUARTER SECTION CORNER

BEARINGS ARE BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, N.A.D. 83 (2007).



- IRON PIPE OR ROD FOUND
- SET 5/8" x 30" REBAR
- + CUT CROSS FOUND OR SET
- PK FOUND PK NAIL
- PK SET PK NAIL
- T1 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION
- T2 SET 5/8 INCH REBAR FLUSH WITH GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP AND BEARING SURVEYORS PROFESSIONAL NUMBER.
- BT1 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION.
- BT2 BURIED 5/8 INCH REBAR 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE.
- BT3 IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS PROFESSIONAL NUMBER.
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS PROFESSIONAL NUMBER.
- M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH REBAR 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS PROFESSIONAL NUMBER.
- PERMANENT SURVEY MARKER. IDOT STD. 2. (TO BE SET BY OTHERS)
- RIGHT OF WAY STAKING PROPOSED TO BE SET.

STATE OF ILLINOIS )  
COUNTY OF WILL )

THIS IS TO CERTIFY THAT WE, CLAASSEN, WHITE & ASSOCIATES, P.C., AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYING CORPORATION NUMBER 184-004039, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 13, TOWNSHIP 40 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, DUPAGE 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. THIS SURVEY CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT JOLIET, ILLINOIS THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2012 A.D.

\_\_\_\_\_  
PRESIDENT

RHONDA J. WHITE  
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 035-003306  
LICENSE EXPIRES NOVEMBER 30, 2012  
THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

0 100 200 300  
SCALE: 1" = 100'

NOTES:

- 1) BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, NAD 83, (2007).
- 2) COMBINED SCALE FACTOR IS 0.99999954

**COORDINATE TABLE - ILL. 83 STATIONING**

NO.	STATION	OFFSET	NORTHING	EASTING
226	20+29.97	39.79' RT	1,805,816.6230	1,176,044.3913
227	20+47.04	54.78' RT	1,805,801.8110	1,176,061.6110
222	21+13.00	45.00' RT	1,805,812.2826	1,176,127.4660
229	21+52.47	38.43' RT	1,805,819.2642	1,176,166.8646
228	21+52.50	44.98' RT	1,805,812.7156	1,176,166.9636

**COORDINATE TABLE - WALLACE AVE. STATIONING**

NO.	STATION	OFFSET	NORTHING	EASTING
227	57+85.37	33.01' LT	1,805,801.8110	1,176,061.6110
228	57+94.68	72.50' RT	1,805,812.7156	1,176,166.9636
222	57+94.85	33.00' RT	1,805,812.2826	1,176,127.4660
226	58+00.44	50.00' LT	1,805,816.6230	1,176,044.3913
229	58+01.23	72.50' RT	1,805,819.2642	1,176,166.8646

ILLINOIS ROUTE 83 @ WALLACE STREET, SECTION, JOB. NO. R-90-018-10.

RECEIVED  
MAY 23 2012

PLATS & LEGALS

LEGEND

- POWER POLE
- LIGHT POLE
- GUY WIRE
- FIRE HYDRANT
- CONTROL BOX

PLAT OF HIGHWAYS  
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
ILLINOIS 83 @ WALLACE STREET

SECTION COOK COUNTY  
PROJECT JOB NO. R-90-018-10  
STATION TO STATION  
SCALE: 1" = 100' SHEET 11 of 38

BUREAU OF LAND ACQUISITION  
201 WEST CENTER COURT  
SCHAMBURG, ILLINOIS 60196-1096

PART OF SW 1/4 SECTION 9, T36N, R14E OF THE 3rd PM, THORNTON TOWNSHIP, COOK COUNTY, ILLINOIS.

PARCEL NUMBER	OWNER	TOTAL HOLDING ACRES	PART TAKEN ACRES	REMAINDER ACRES	PREV. DED. ACRES	EASEMENT ACRES	EASEMENT PURPOSE	PERMANENT TAX INDEX NUMBER	PROPERTY ACQUIRED BY
0J40001	CITY OF HARVEY, AN ILLINOIS MUNICIPAL CORPORATION	1.384	0.003	1.381				29-09-300-014	
0J40002	HARVEY SCHOOL DISTRICT NUMBER 152 WHICH ACQUIRED TITLE AS THE TRUSTEES OF SCHOOLS OF TOWNSHIP 36 NORTH RANGE 14 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY, ILLINOIS.	15.993	0.005	15.987				SEE PIN TABLE	

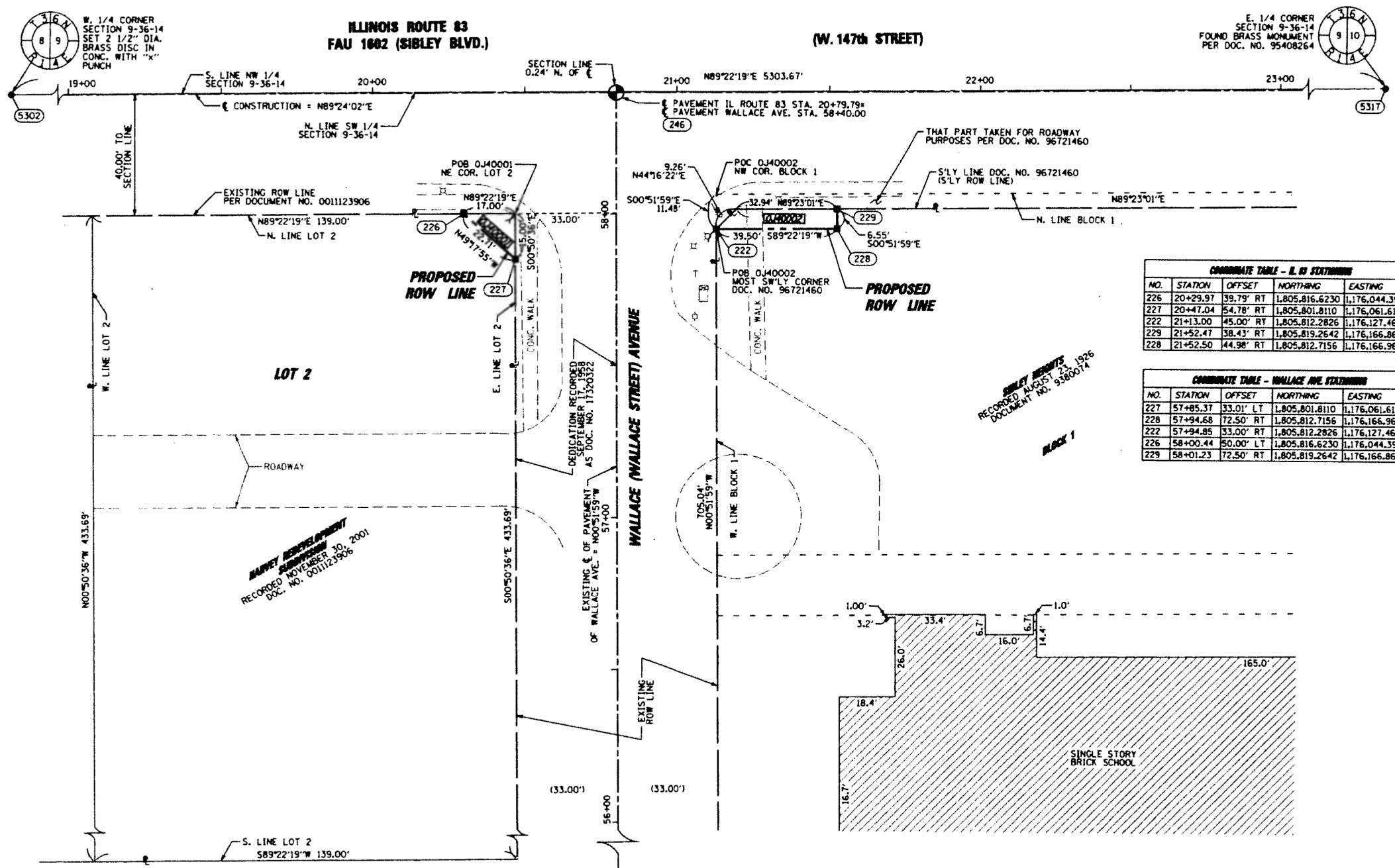
**PIN TABLE**

29-09-301-015
29-09-302-007
29-09-303-001
29-09-303-012
29-09-303-013
29-09-303-014
29-09-303-015
29-09-303-016
29-09-303-017
29-09-303-018
29-09-303-019
29-09-303-020
29-09-303-021
29-09-304-001
29-09-304-002
29-09-304-004
29-09-304-005
29-09-304-060

**LEGEND**

- SECTION CORNER
- QUARTER SECTION CORNER
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINE
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- EXISTING CENTERLINE
- PROPOSED CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- MEASURED DIMENSION RECORD DATA
- IRON PIPE OR ROD FOUND
- CUT CROSS FOUND OR SET
- SET 5/8" x 30" REBAR
- FOUND PK NAIL
- SET PK NAIL
- T1 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION
- T2 SET 5/8 INCH REBAR FLUSH WITH GROUND TO TIE FOUND IRON STAKE, IDENTIFIED BY COLORED PLASTIC CAP AND BEARING SURVEYORS PROFESSIONAL NUMBER.
- T3 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION.
- BT1 BURIED 5/8 INCH REBAR 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE, IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS PROFESSIONAL NUMBER.
- BT2 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION.
- BT3 BURIED 5/8 INCH REBAR 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE, IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS PROFESSIONAL NUMBER.
- STAKING OF PROPOSED RIGHT OF WAY, SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS PROFESSIONAL NUMBER.
- STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS, BURIED 5/8 INCH REBAR 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION, IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS PROFESSIONAL NUMBER.
- PERMANENT SURVEY MARKER, IDOT STD. 2135 (TO BE SET BY OTHERS)
- RIGHT OF WAY STAKING PROPOSED TO BE SET.

BEARINGS ARE BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, NAD 83 (2007).



**COORDINATE TABLE - IL 83 STATIONING**

NO.	STATION	OFFSET	NORTHING	EASTING
226	20+29.97	39.79' RT	1,805,816.6230	1,176,044.3913
227	20+47.04	54.78' RT	1,805,801.8110	1,176,061.6110
222	21+13.00	45.00' RT	1,805,812.2826	1,176,127.4660
229	21+52.47	38.43' RT	1,805,819.2642	1,176,166.8646
228	21+52.50	44.98' RT	1,805,812.7156	1,176,166.9636

**COORDINATE TABLE - WALLACE AVE. STATIONING**

NO.	STATION	OFFSET	NORTHING	EASTING
227	57+85.37	33.01' LT	1,805,801.8110	1,176,061.6110
228	57+94.68	72.50' RT	1,805,812.7156	1,176,166.9636
222	57+94.85	33.00' RT	1,805,812.2826	1,176,127.4660
226	58+00.44	50.00' LT	1,805,816.6230	1,176,044.3913
229	58+01.23	72.50' RT	1,805,819.2642	1,176,166.8646

**COORDINATE TABLE ALIGNMENT & SECTION CORNERS**

NO.	NORTHING	EASTING
245	1,805,316.9940	1,176,101.9515
246	1,805,856.9323	1,176,093.7871
5302	1,805,842.6266	1,174,767.6376
5317	1,805,900.7745	1,180,070.9904

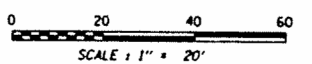
- IRON PIPE OR ROD FOUND
- CUT CROSS FOUND OR SET
- SET 5/8" x 30" REBAR
- FOUND PK NAIL
- SET PK NAIL
- T1 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION
- T2 SET 5/8 INCH REBAR FLUSH WITH GROUND TO TIE FOUND IRON STAKE, IDENTIFIED BY COLORED PLASTIC CAP AND BEARING SURVEYORS PROFESSIONAL NUMBER.
- T3 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION.
- BT1 BURIED 5/8 INCH REBAR 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE, IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS PROFESSIONAL NUMBER.
- BT2 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION.
- BT3 BURIED 5/8 INCH REBAR 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE, IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS PROFESSIONAL NUMBER.
- STAKING OF PROPOSED RIGHT OF WAY, SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS PROFESSIONAL NUMBER.
- STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS, BURIED 5/8 INCH REBAR 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION, IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS PROFESSIONAL NUMBER.
- PERMANENT SURVEY MARKER, IDOT STD. 2135 (TO BE SET BY OTHERS)
- RIGHT OF WAY STAKING PROPOSED TO BE SET.

STATE OF ILLINOIS)  
 ) SS  
 COUNTY OF WILL )

THIS IS TO CERTIFY THAT WE, CLAASSEN, WHITE & ASSOCIATES, P.C., AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYING CORPORATION NUMBER 184-004039, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 13, TOWNSHIP 40 NORTH, RANGE 14 EAST OF THE THIRD PRINCIPAL MERIDIAN, DUPAGE 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. THIS SURVEY CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT JOLIET, ILLINOIS THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2012 A.D.

\_\_\_\_\_  
 PRESIDENT  
 RHONDA J. WHITE  
 ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 035-003306  
 LICENSE EXPIRES NOVEMBER 30, 2012  
 THIS PROFESSIONAL SERVICE CONFORMS TO THE  
 CURRENT ILLINOIS MINIMUM STANDARDS FOR A  
 BOUNDARY SURVEY.



- NOTES:
- 1) BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, NAD 83, (2007).
  - 2) COMBINED SCALE FACTOR IS 0.99999954

**CWA**  
 CLAASSEN, WHITE & ASSOCIATES, P.C.  
 LAND SURVEYORS  
 121 AIRPORT DRIVE, UNIT L, JOLIET, ILLINOIS 60431  
 (815) 744-3720 clausenwhite@cwa-survey.com  
 CWA Job #565

RECEIVED  
 MAY 14 2012  
 PLATS & LEGALS

**PLAT OF HIGHWAYS STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION ILLINOIS 83 @ WALLACE STREET**

SECTION \_\_\_\_\_ COOK COUNTY  
 PROJECT \_\_\_\_\_ JOB NO. R-90-018-10  
 STATION \_\_\_\_\_ TO STATION \_\_\_\_\_  
 SCALE: 1" = 20' SHEET 12 OF 38

- LEGEND**
- POWER POLE
  - LIGHT POLE
  - GUY WIRE
  - FIRE HYDRANT
  - CONTROL BOX

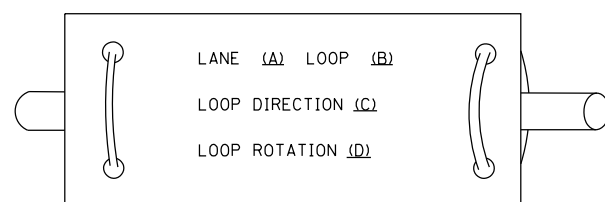
BUREAU OF LAND ACQUISITION  
 201 WEST CENTER COURT  
 SCHAMBERG, ILLINOIS 60196-1096

PRINTING DATE: MAY 2, 2012 J.S. /R/02/01/01/Sheet 2.dgn

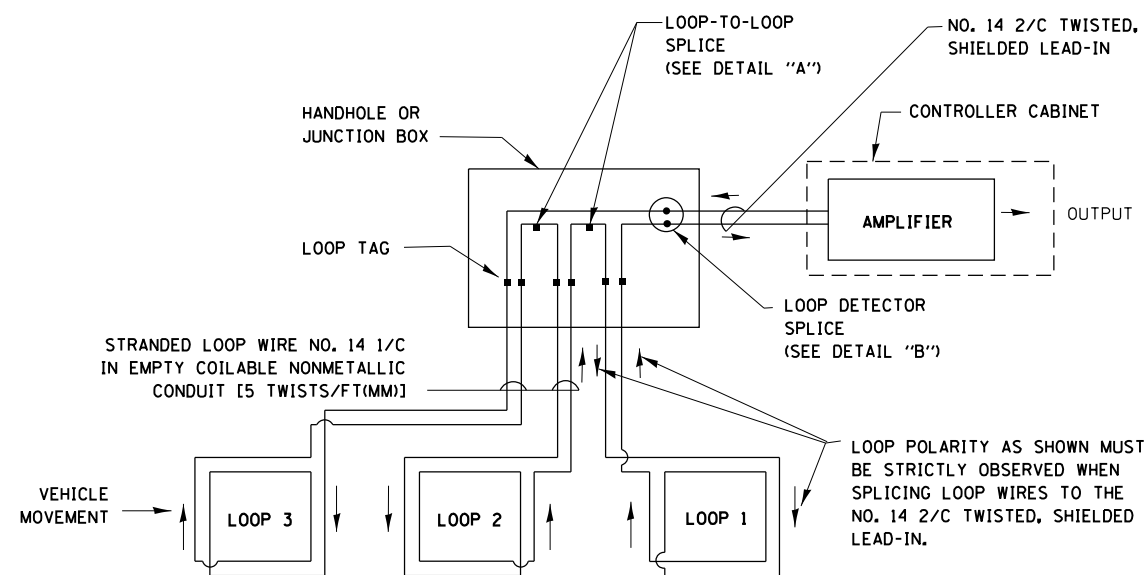
## LOOP DETECTOR NOTES

- 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.
- PERFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PERFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

### LOOP LEAD-IN CABLE TAG

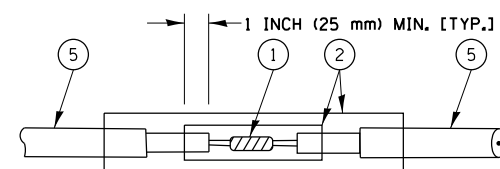


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

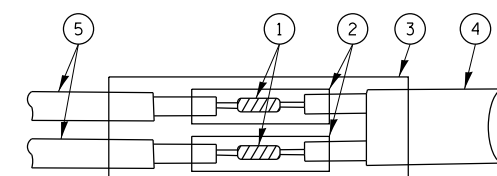


### DETECTOR LOOP WIRING SCHEMATIC

- 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.

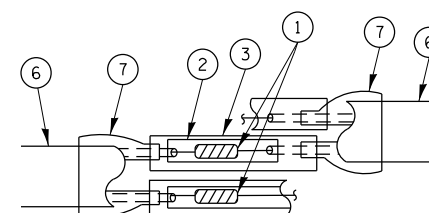


DETAIL "A"  
LOOP-TO-LOOP SPLICE

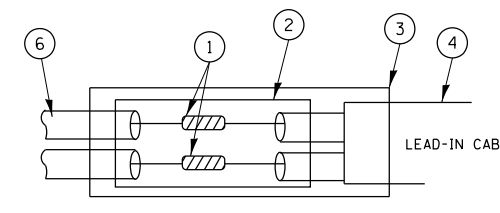


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

### 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 = guillaumefp	DESIGNED - DAD	REVISED -
et:\pw\work\p\idot\guillaumefp\d0307142\p	13609-Design.dgn	DRAWN - BCK	REVISED -
	PLOT SCALE = 100.0000' / in.	CHECKED - DAD	REVISED -
	PLOT DATE = 12/21/2012	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

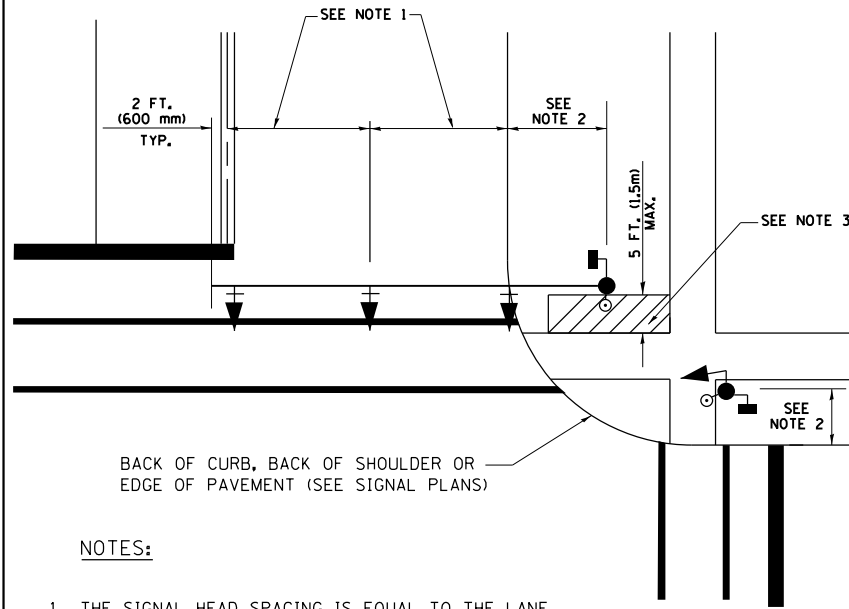
DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE SHEET NO. 1 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
357	104TS-1(12)	COOK	38	13
TS-05		CONTRACT NO. 60T92		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST**

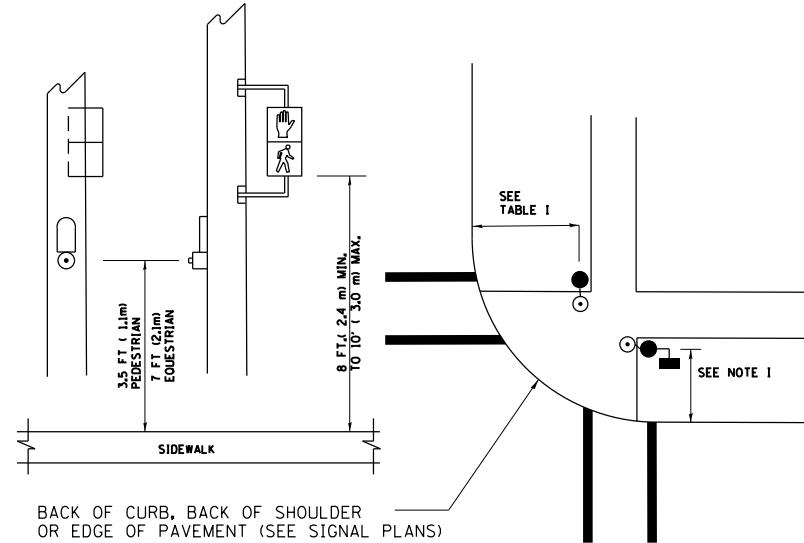
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



**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."

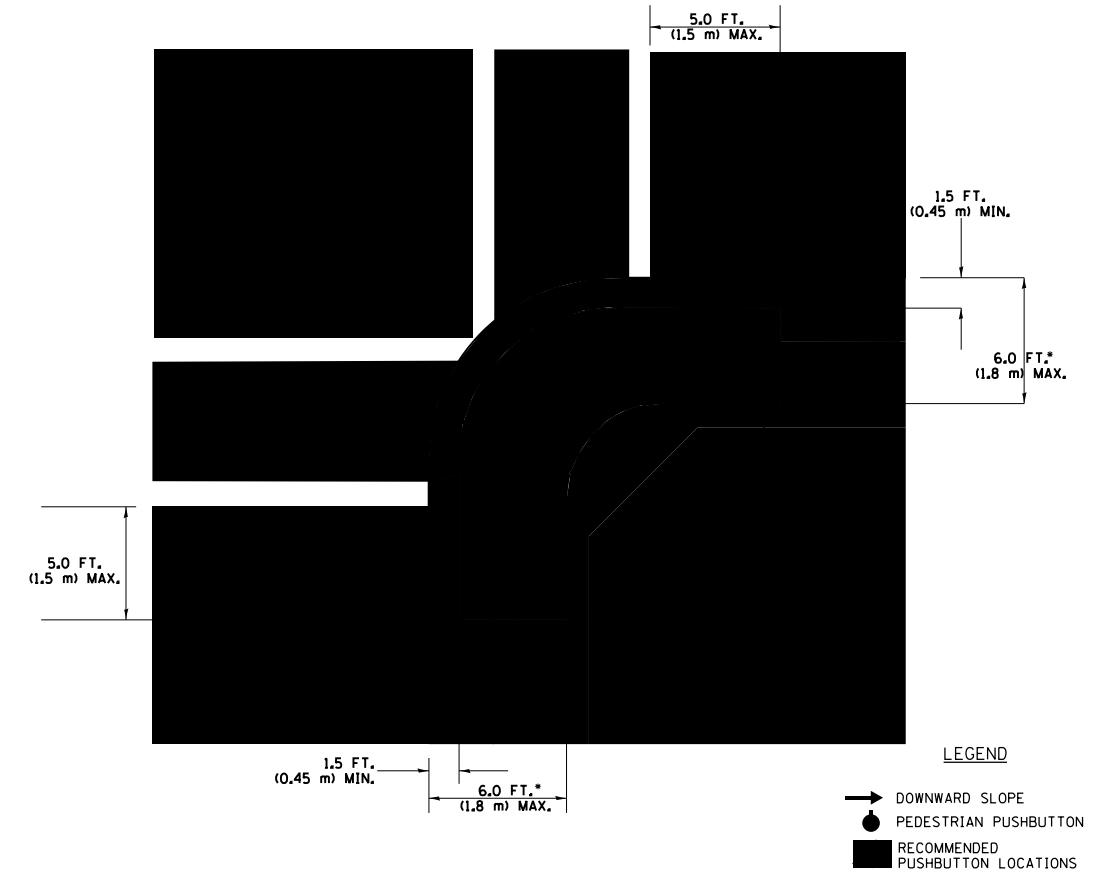
**PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST**



**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**



- 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:**

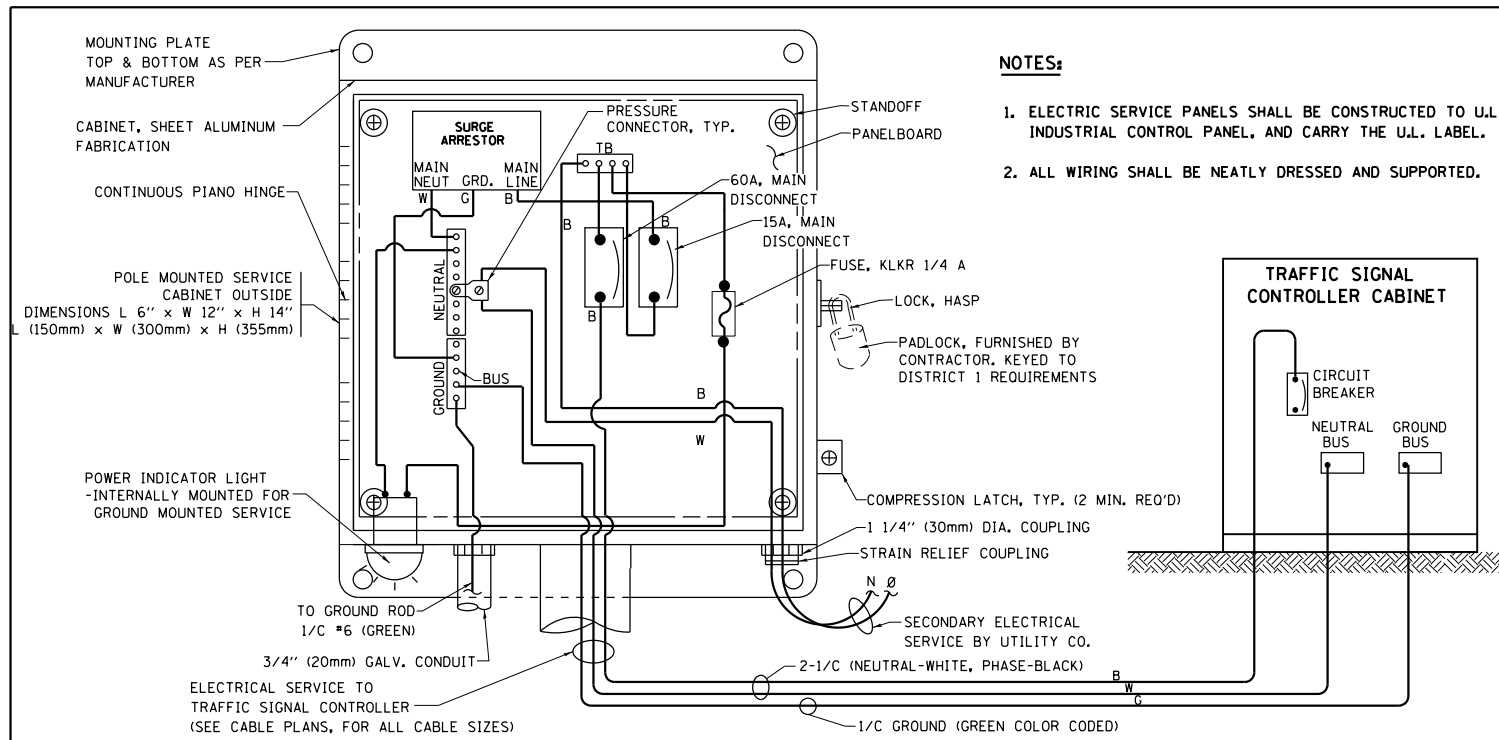
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM 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**

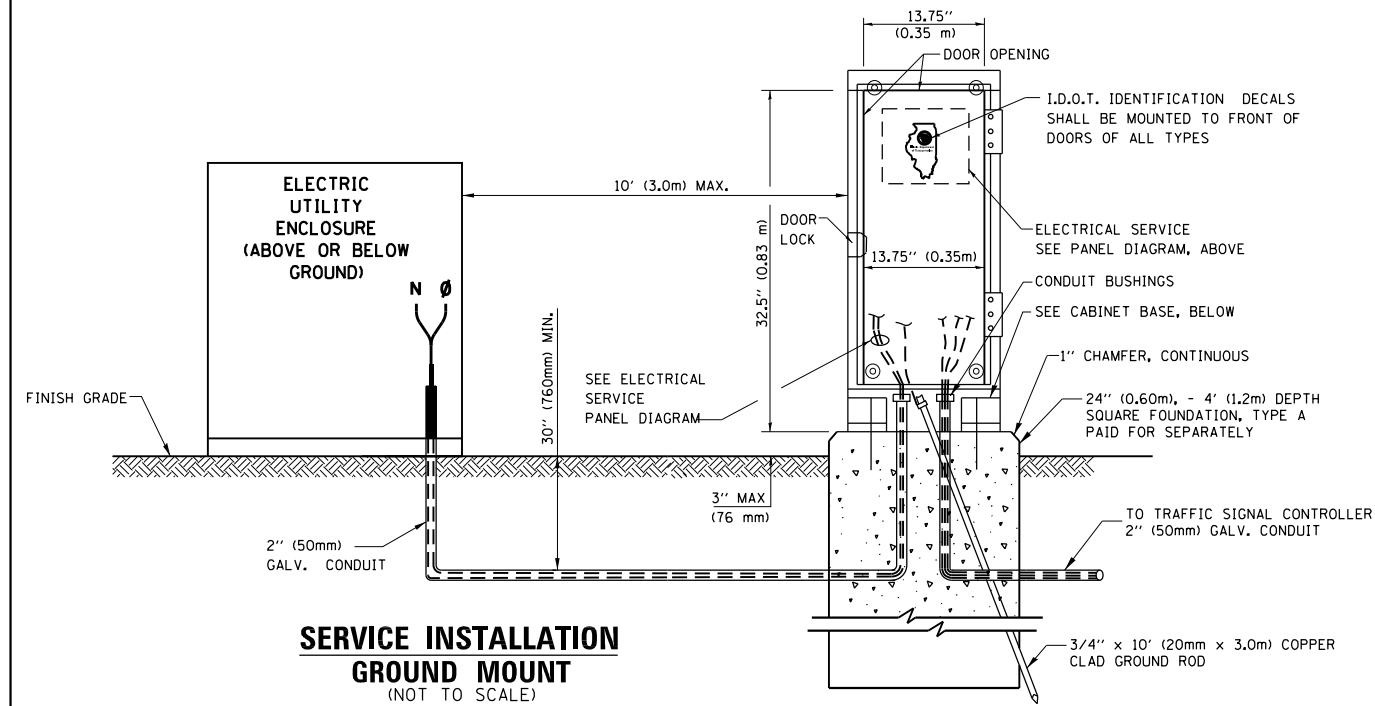
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 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 EFFECT 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.

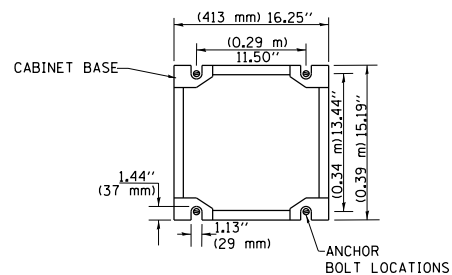


**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**  
**SERVICE INSTALLATION POLE MOUNT (SHOWN)**  
 (NOT TO SCALE)



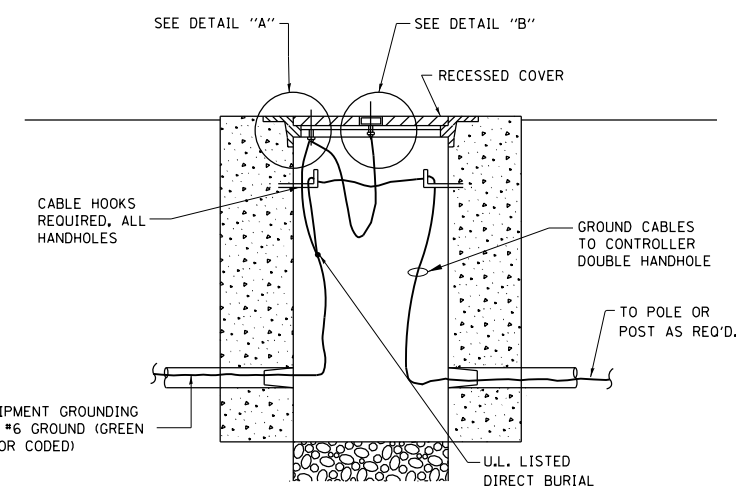
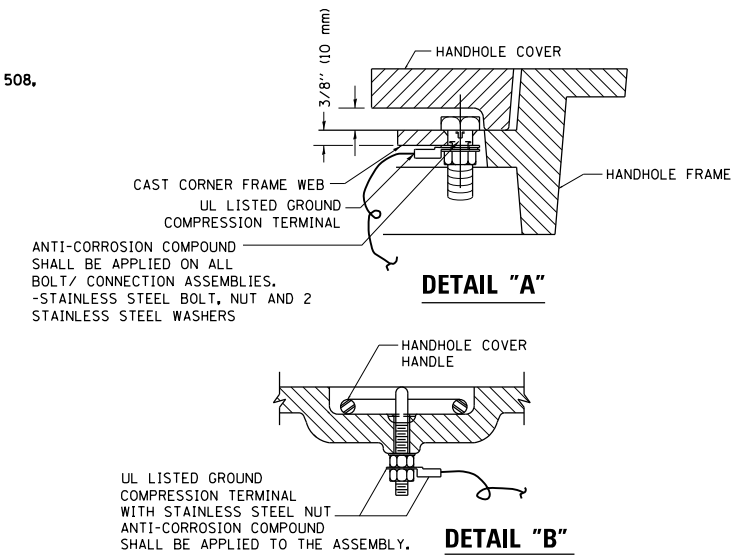
**SERVICE INSTALLATION GROUND MOUNT**  
 (NOT TO SCALE)

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

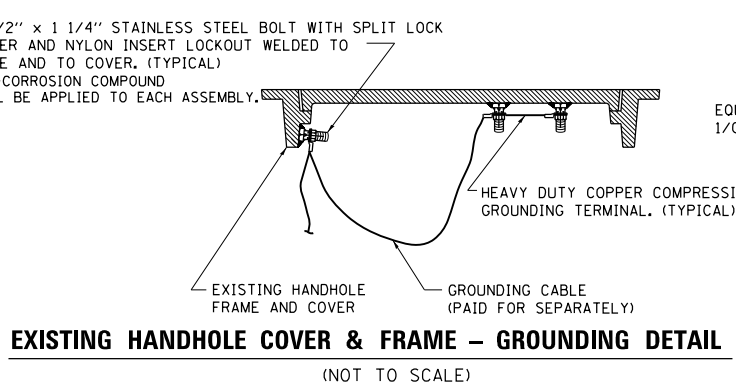


**NOTES:**

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.



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

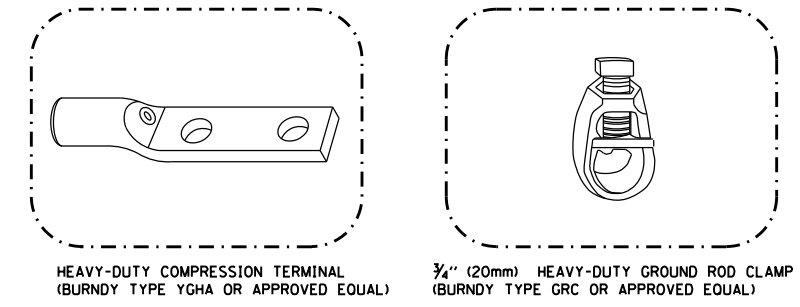


**EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL**  
 (NOT TO SCALE)

**NOTES:**

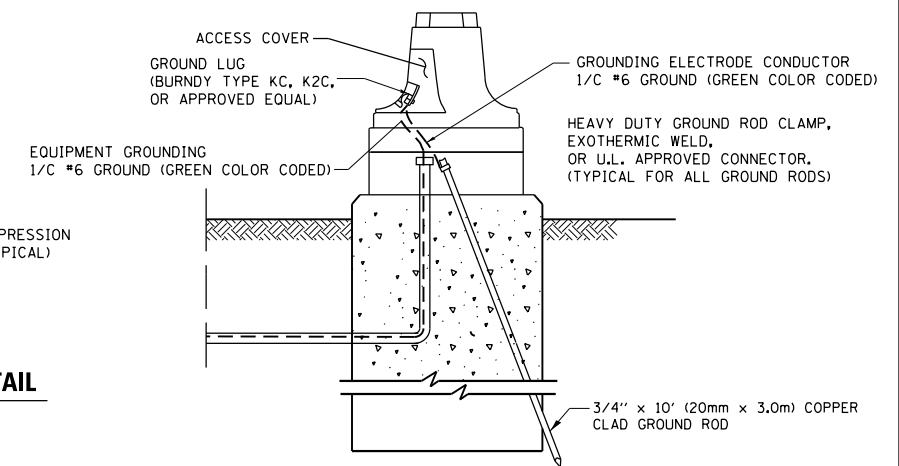
**GROUNDING SYSTEM**

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.



**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.



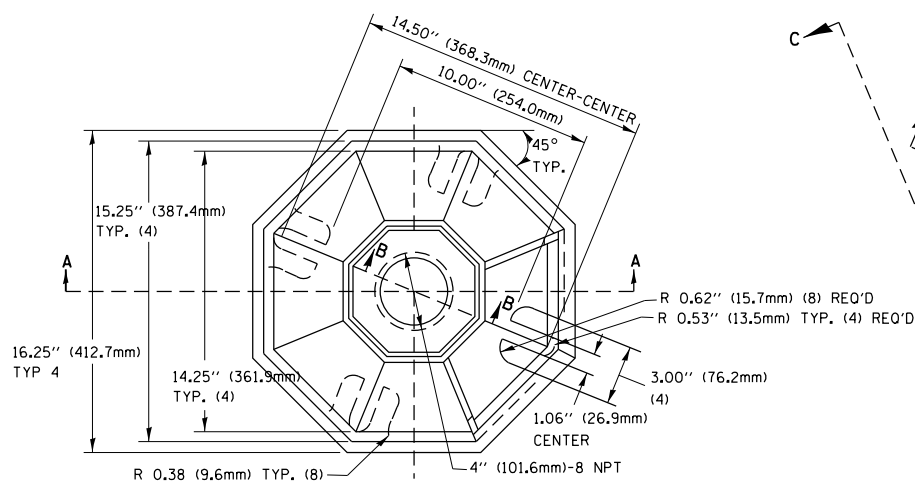
**MAST ARM POLE / POST-GROUNDING DETAIL**  
 (NOT TO SCALE)

FILE NAME =	USER NAME = guillaumejp	DESIGNED - DAD	REVISED -
et:\pwork\p\dot\guillaumejp\d0307142\p	13609-Design.dgn	DRAWN - BCK	REVISED -
	PLOT SCALE = 100.0000' / in.	CHECKED - DAD	REVISED -
	PLOT DATE = 12/21/2012	DATE - 10-28-09	REVISED -

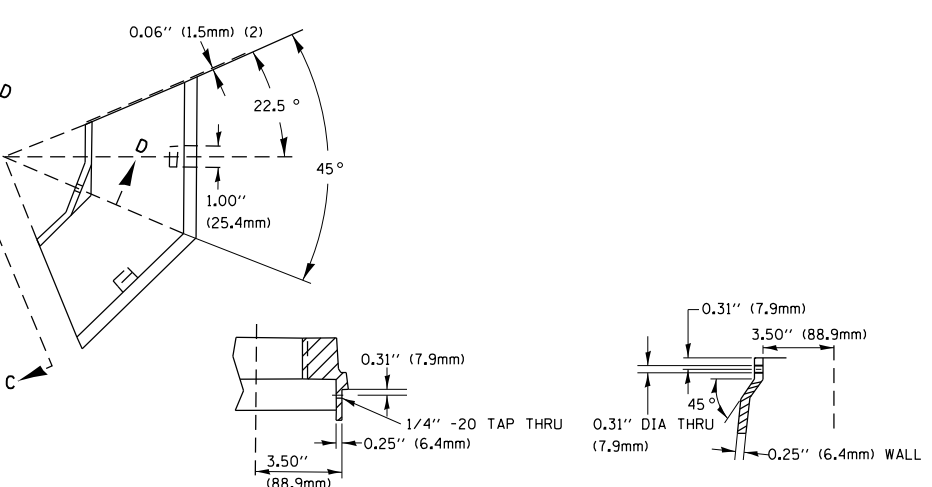
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

<b>DISTRICT ONE</b>			
<b>STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>			
SCALE: NONE	SHEET NO. 3 OF 6 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
357	10475-1(12)	COOK	38	15
<b>TS-05</b>		<b>CONTRACT NO. 60T92</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

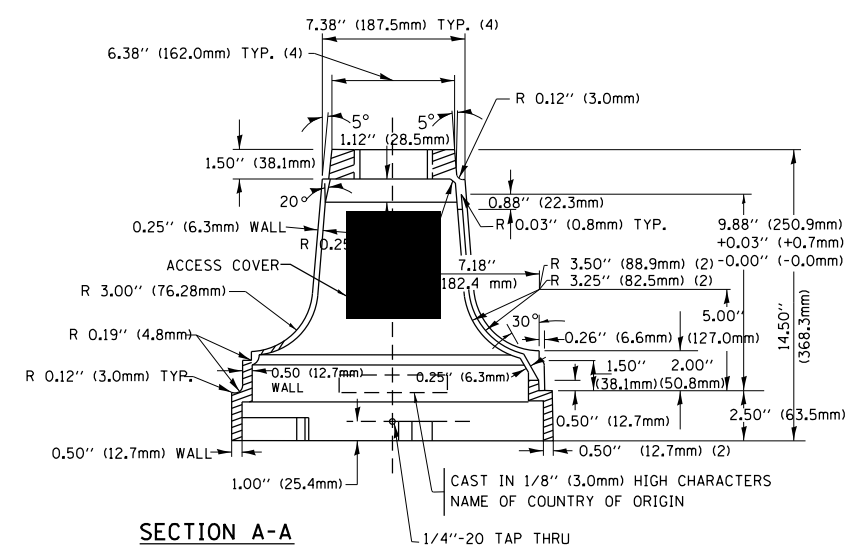


TOP VIEW

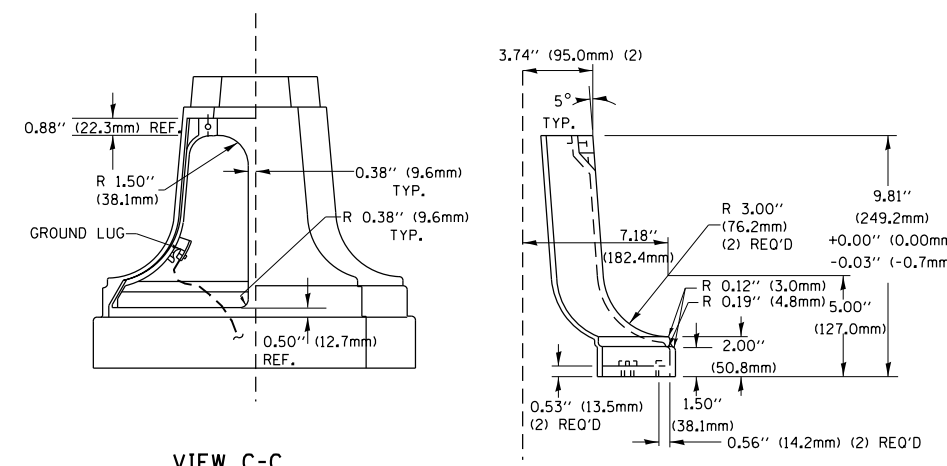


SECTION B-B

SECTION D-D

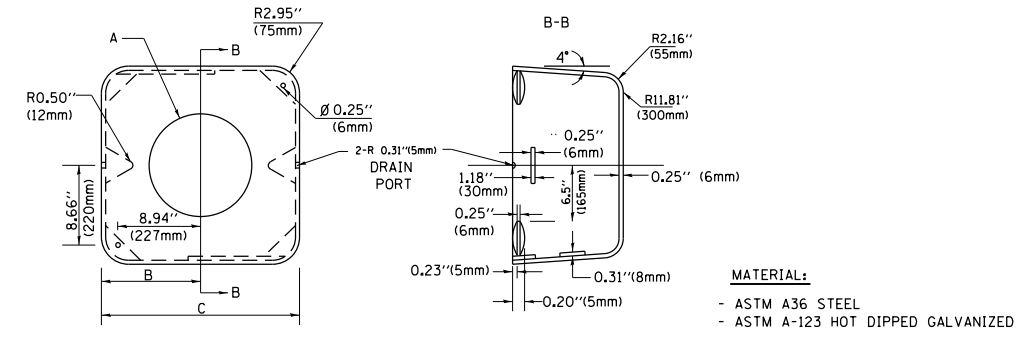


SECTION A-A



VIEW C-C

TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



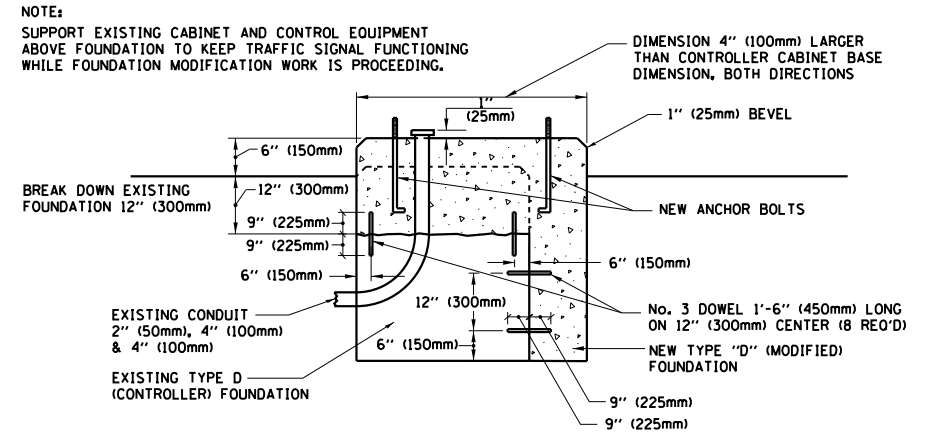
MATERIAL:  
- ASTM A36 STEEL  
- ASTM A-123 HOT DIPPED GALVANIZED

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

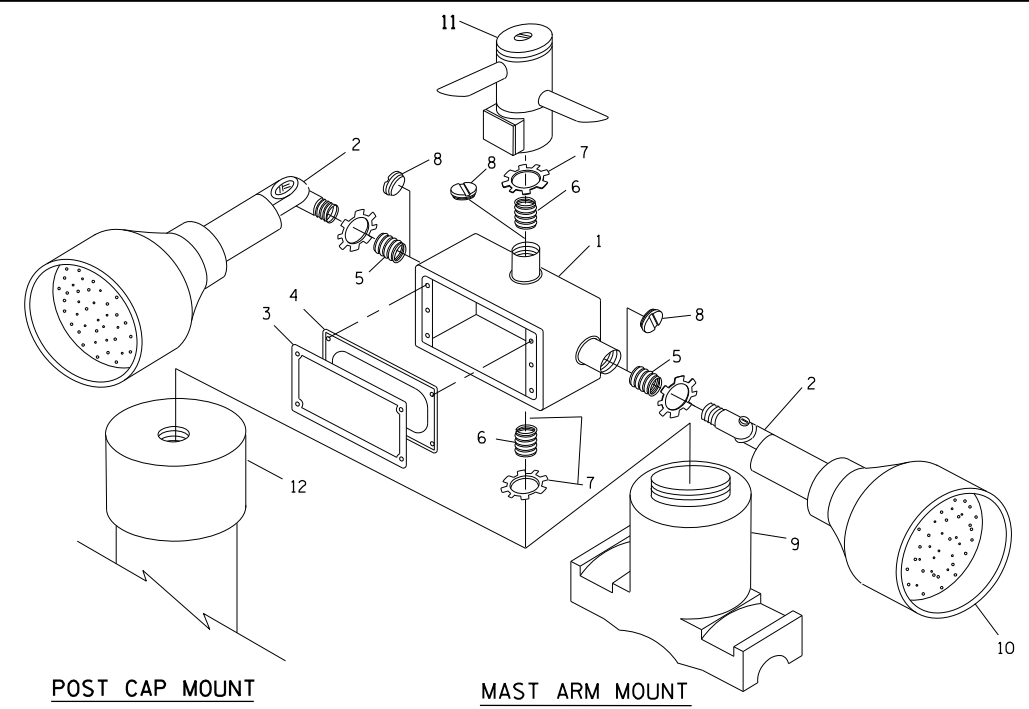
SHROUD

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.



MODIFY EXISTING TYPE "D" FOUNDATION



POST CAP MOUNT

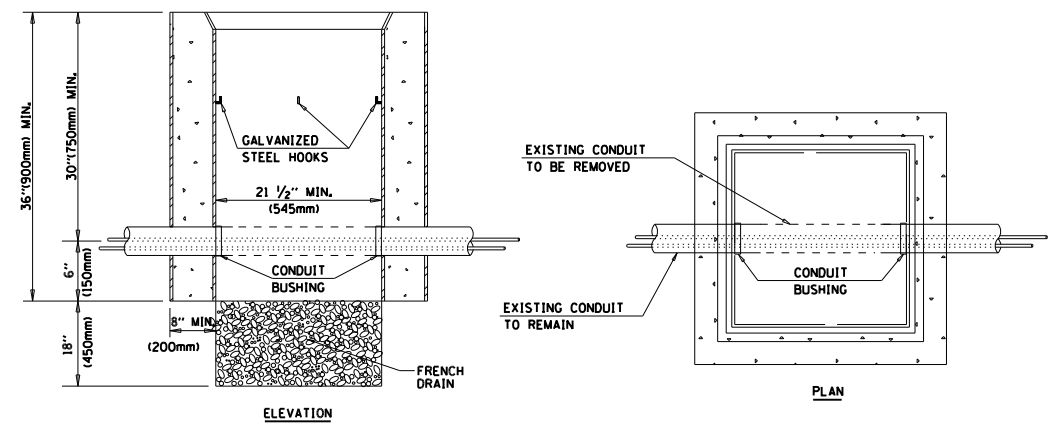
MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

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/GEDNEY FSX-1-50 OR EQUIVALENT  
ITEM #2- MULBERRY CON-0-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

FILE NAME =	USER NAME = guillaumefp	DESIGNED - DAD	REVISED -
et:\pwork\pwork\guillaumefp\d0307142\13609-Design.dgn	13609-Design.dgn	DRAWN - BCK	REVISED -
	PLOT SCALE = 100.0000' / 1in.	CHECKED - DAD	REVISED -
	PLOT DATE = 12/21/2012	DATE - 10-28-09	REVISED -

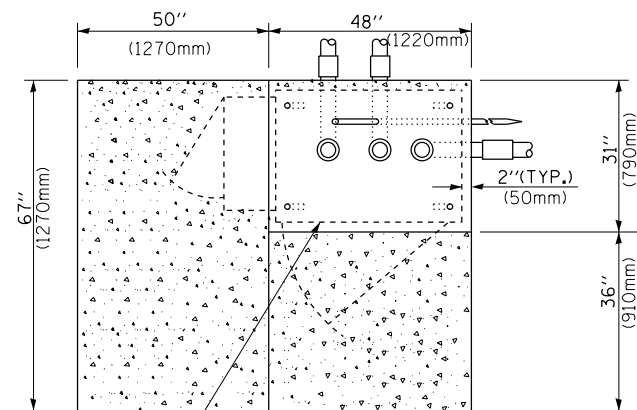
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

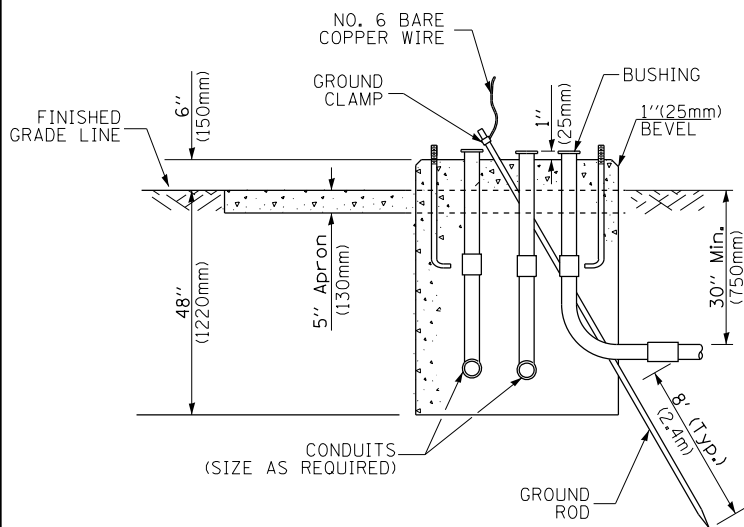
SCALE: NONE SHEET NO. 4 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
357	1047S-1(12)	COOK	38	16
TS-05		CONTRACT NO. 60T92		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

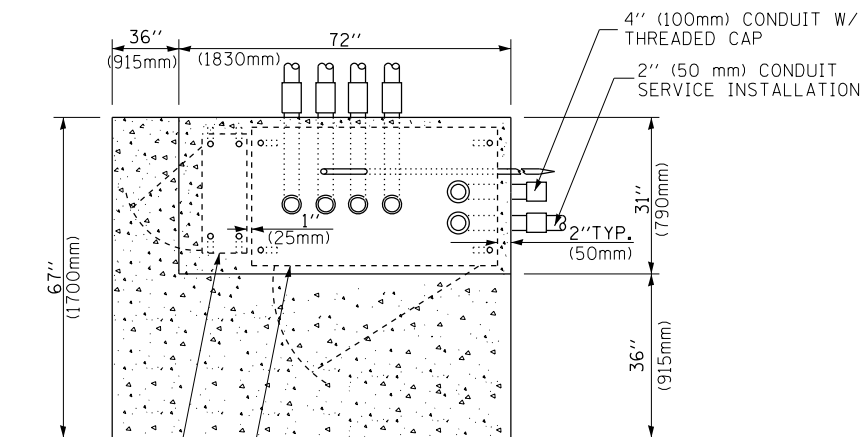




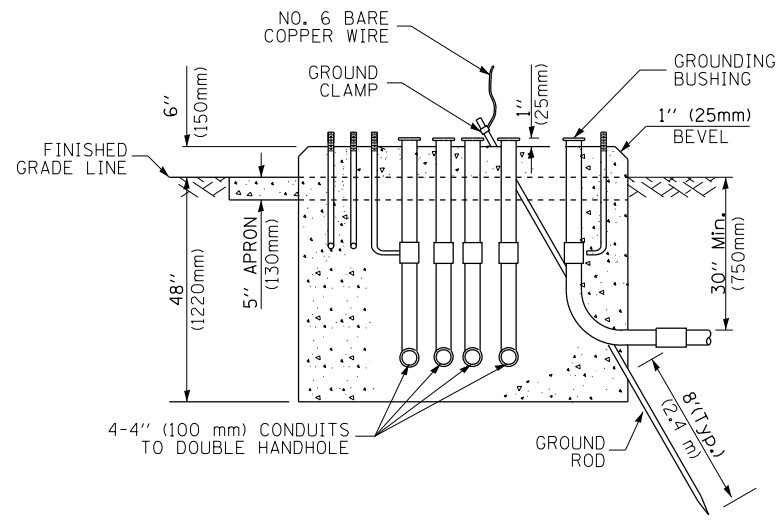
CONTROLLER CABINET BASE  
EXISTING APRON  
PROPOSED APRON  
**TOP VIEW**



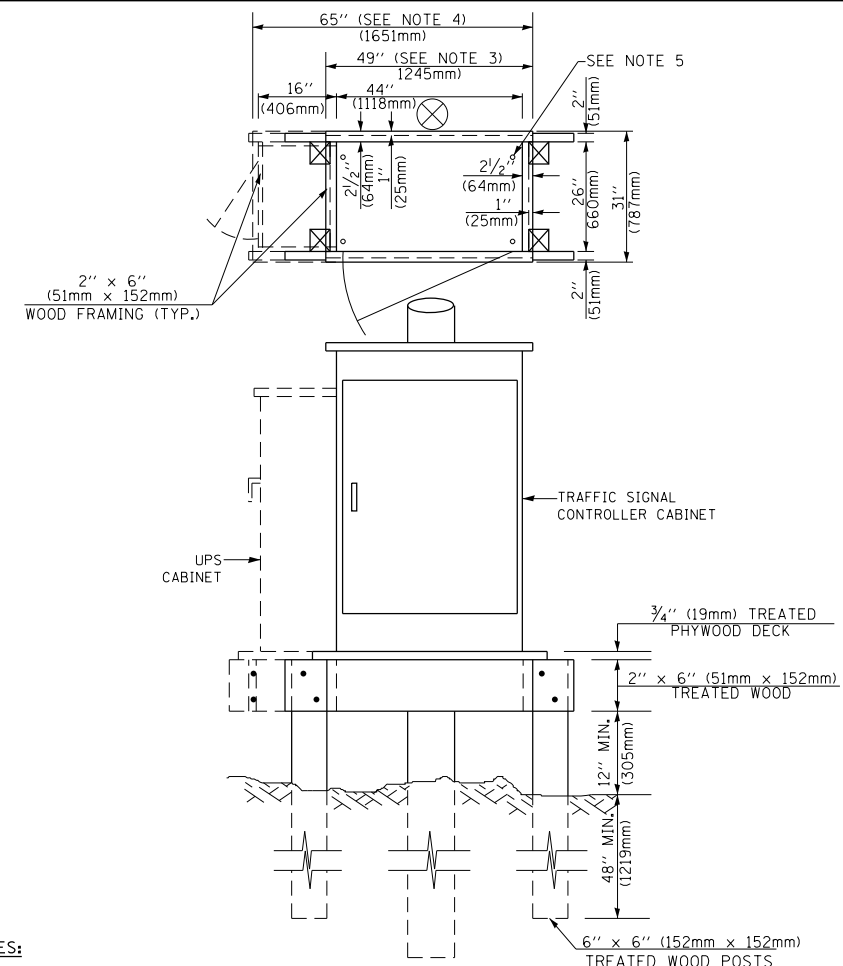
**TYPE D**  
FOR GROUND MOUNTED  
CONTROLLER CABINET  
AND UPS BATTERY CABINET



UPS CABINET BASE  
CONTROLLER CABINET BASE  
APRON  
**TOP VIEW**



**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)	30" (750mm)	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 less than 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 up to 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**

FILE NAME =	USER NAME = guillaumejp	DESIGNED - DAG	REVISED -
et:\pw\work\p\idot\guillaumejp\d0307142\13609-Design.dgn		DRAWN - BCK	REVISED -
	PLOT SCALE = 100.0000' / in.	CHECKED - DAD	REVISED -
	PLOT DATE = 12/21/2012	DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS		357	1047S-112	COOK	38	17
SCALE: NONE		SHEET NO. 5 OF 6 SHEETS		STA.	TO STA.	
		TS-05		CONTRACT NO. 60T92		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						

# TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE			
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA			
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED			
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F			
UNINTERRUPTIBLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F			
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM21F			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)			
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM		S	S	STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM		I	IP	ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM	R			STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM	RL			SIGNAL POST AND FOUNDATION TO BE REMOVED			
GUY WIRE				ABANDON ITEM	A			INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				PREFORMED SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED							
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID							
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER							
ILLUMINATED SIGN "NO LEFT TURN"				RADIO INTERCONNECT							
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO REPEATER							
DETECTOR LOOP, TYPE I				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED							
PREFORMED DETECTOR LOOP				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)							
MICROWAVE VEHICLE SENSOR											
VIDEO DETECTION CAMERA											
VIDEO DETECTION ZONE											
PAN, TILT, ZOOM CAMERA											
WIRELESS DETECTOR SENSOR											
WIRELESS ACCESS POINT											

## RAILROAD SYMBOLS

	EXISTING	PROPOSED
RAILROAD CONTROL CABINET		
RAILROAD CANTILEVER MAST ARM		
FLASHING SIGNAL		
CROSSING GATE		
CROSSBUCK		



**SCHEDULE OF QUANTITIES**

PAY ITEMS	UNIT	TOTAL
TREE ROOT PRUNING	EACH	1
ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6
MOBILIZATION	L SUM	0.33
TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	0.33
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.33
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	0.33
CHANGEABLE MESSAGE SIGN	CAL MO	2
SIGN PANEL - TYPE 1	SQ FT	15
SIGN PANEL - TYPE 2	SQ FT	13.75
REMOVE SIGN PANEL - TYPE 1	SQ FT	8.3
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	657
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	104.5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	78
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	235
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	427
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	728.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1029.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1344.5
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1157.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	35.5
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	518
TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	33
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	7
DETECTOR LOOP, TYPE I	FOOT	515
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	273.5
VIDEO DETECTION SYSTEM, PARTIAL	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
LOCATING UNDERGROUND UTILITY	EACH	3
CONSTRUCTION LAYOUT	L SUM	0.33
TEMPORARY INFORMATION SIGNING	SQ FT	51.4

•100% OF THE COST SHALL BE PAID FOR BY THE CITY OF HARVEY

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		%OPERATION	
SIGNAL (RED)	14	INCAND.	LED	0.5	119
(YELLOW)	14			0.25	87.5
(GREEN)	14			0.25	52.5
ARROW	4			0.10	4.8
PED. SIGNAL	4			1.00	100
CONTROLLER	1			1.00	100
VIDEO SYSTEM	1			1.00	15
ILLUM. SIGN	0			0	-
FLASHER				0.50	0

ENERGY COSTS TO: TOTAL = 478.8

CITY OF HARVEY (33.3%)

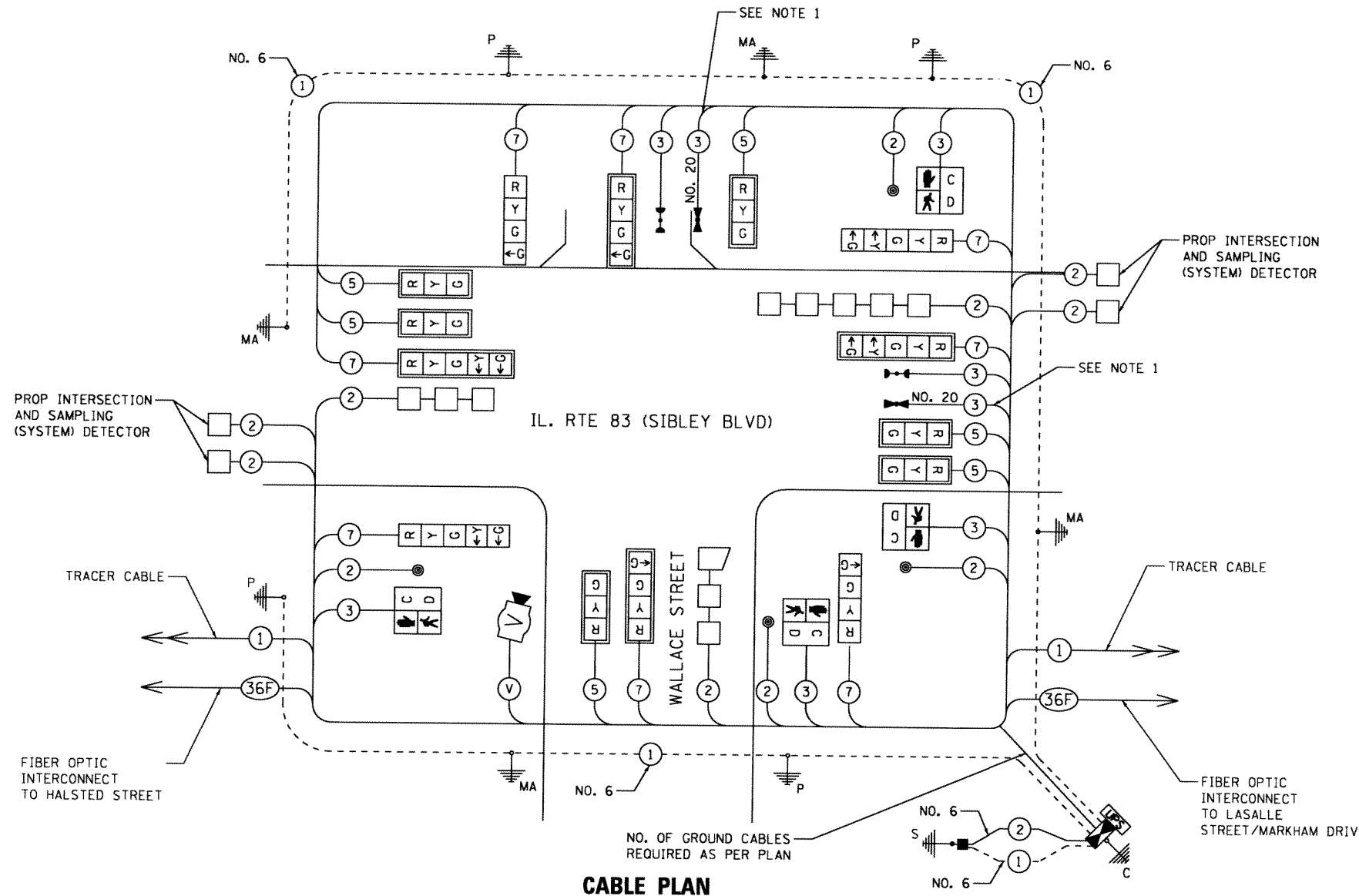
IDOT (66.7%)

ENERGY SUPPLY CONTACT: KATHERYN SUGRUE  
PHONE: (708) 235-2337  
COMPANY: COMMONWEALTH EDISON

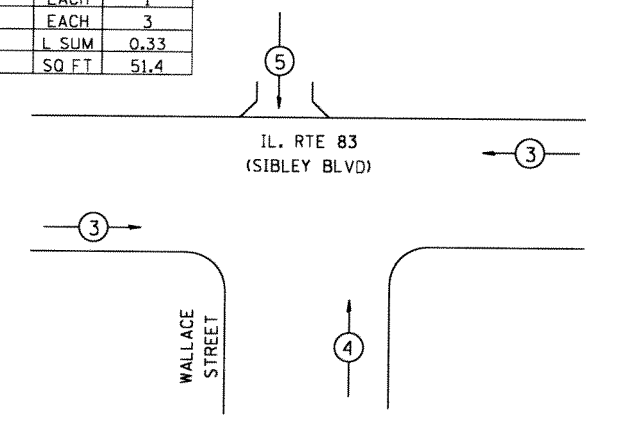
**EMERGENCY VEHICLE PREEMPTION SEQUENCE**

**NOTES**

- BI-DIRECTIONAL LIGHT DETECTOR SHALL BE PLACED ON THE MAST ARM TWO FEET TO THE RIGHT OF THE FAR LEFT MAST ARM MOUNTED SIGNAL



**CABLE PLAN**



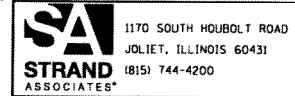
**PHASE DESIGNATION DIAGRAM**

RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, 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.

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

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

FILE NAME = SA\JDL\6388--6399\6346\B43\Mucos\GADD\_Sheets\01\2345-rt-trafficable-Wall1.mxd.dgn



1170 SOUTH HOBOLT ROAD  
JOLIET, ILLINOIS 60431  
(815) 744-4200

DESIGNED - RMS	REVISIONS - RMS
DRAWN - DJW	REVISIONS - BJF
CHECKED - ARM	REVISIONS - ARM
DATE - 10/17/2012	REVISIONS - 12/4/12

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION  
DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE  
IL. RTE. 83 (SIBLEY BLVD) AND WALLACE STREET

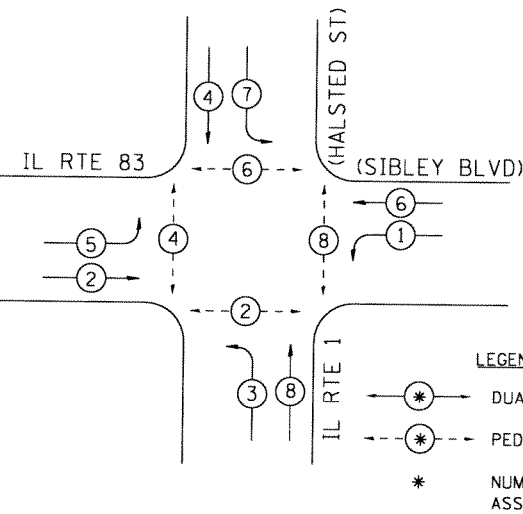
SCALE: AS SHOWN SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
397	104TS-1(12)	COOK	36	20
				CONTRACT NO. 60T92

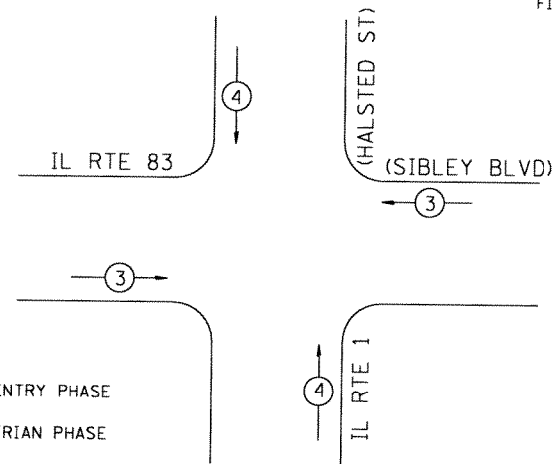
ILLINOIS FED. AID PROJECT



**CONTROLLER SEQUENCE**



**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**PHASE DESIGNATION DIAGRAM**

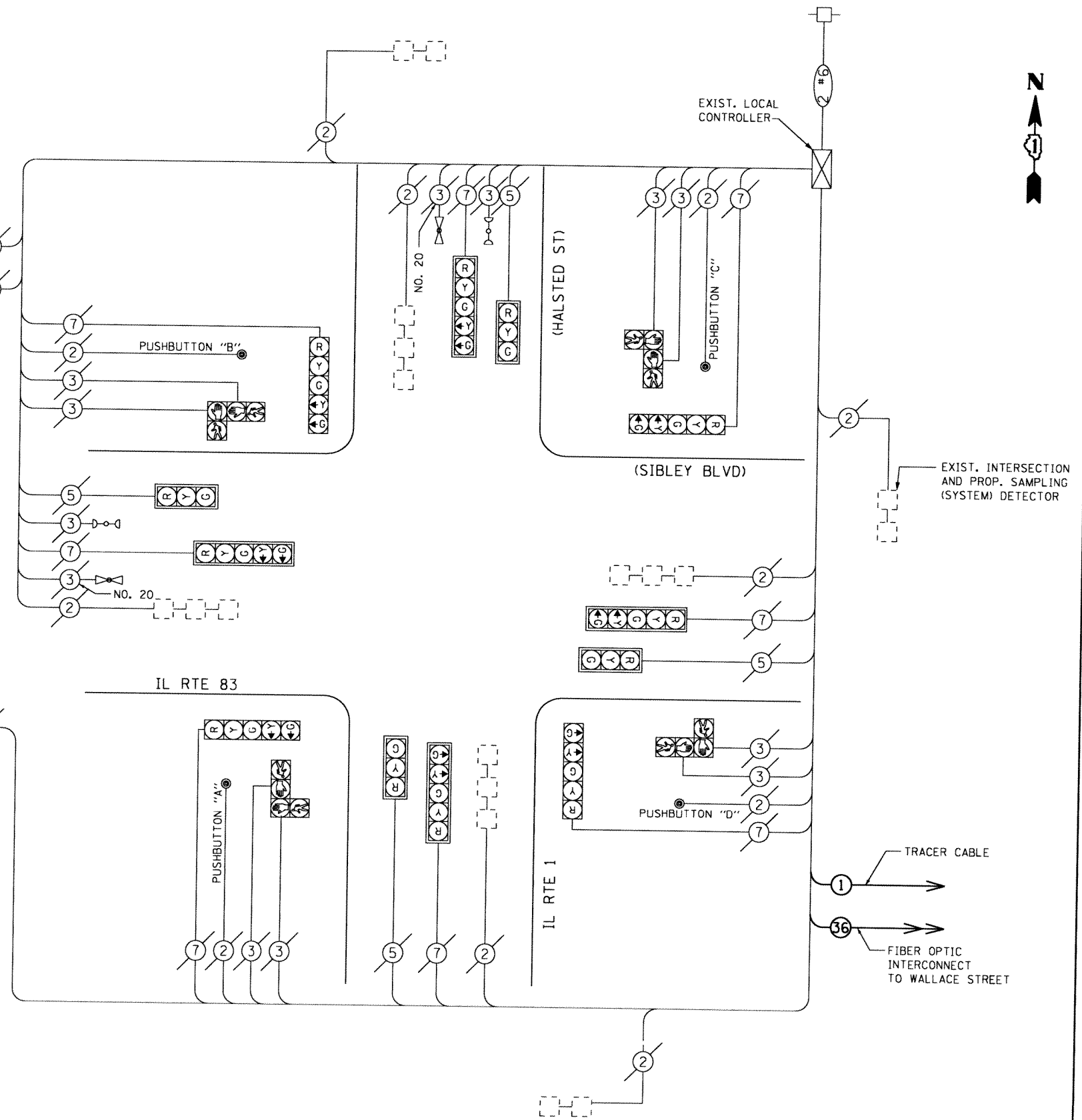
EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

TRACER CABLE  
 INTERCONNECT TO VINCENNES AVE./ BROADWAY AVE. NO. 62.5/125 12F FIBER OPTIC CABLE

EXIST. INTERSECTION AND PROP. SAMPLING (SYSTEM) DETECTOR

**NOTE**

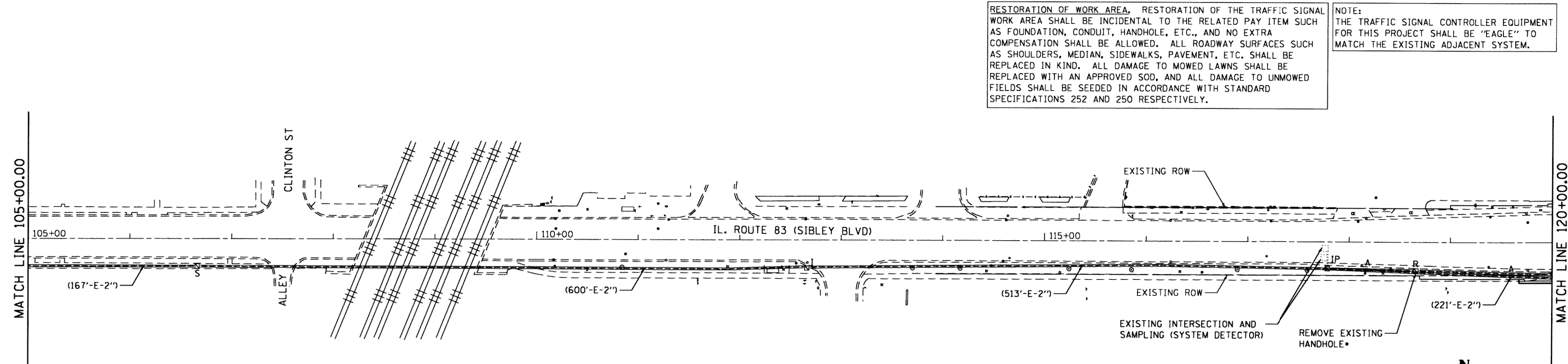
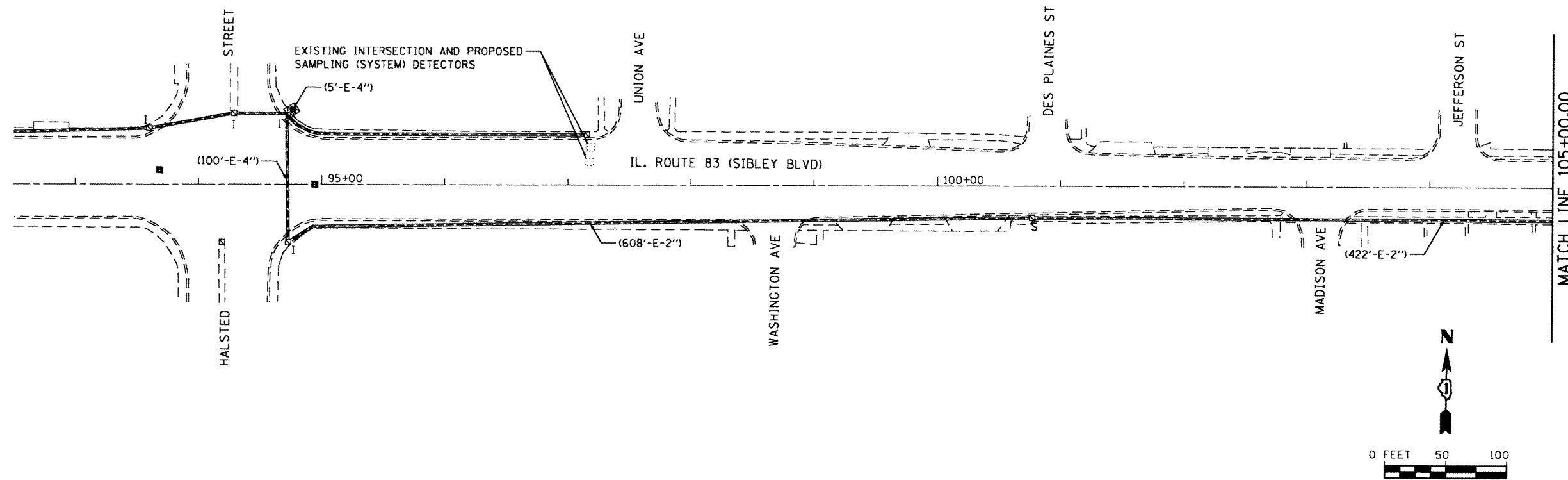
PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.  
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.  
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.  
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 8 AND 2.



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12		135	0.5	810
(YELLOW)	12		135	0.25	405
(GREEN)	12		135	0.25	405
ARROW	16		135	0.10	216
PED. SIGNAL	4		90	1.00	360
CONTROLLER	1		100	1.00	100
ILLUM. SIGN	-		252	0.05	-
FLASHER	-			0.50	0
ENERGY COSTS TO:				TOTAL =	2296
ENERGY SUPPLY CONTACT: _____					
PHONE: _____					
COMPANY: _____					







RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, 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.

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

**INTERCONNECT NOTE**

1. THE CONTRACTOR SHALL PULL THE PROPOSED FIBER OPTIC CABLE AND TRACER CABLE THROUGH THE EXISTING CONDUIT ON THE SOUTH SIDE OF IL ROUTE 83 BETWEEN HALSTED ST. AND WALLACE ST. AND BETWEEN WALLACE ST. TO LASALLE ST.
2. EXISTING FIBER OPTIC AND TRACER CABLE SHALL BE MAINTAINED DURING THE CONSTRUCTION AND SHALL NOT BE REMOVED UNTIL PROPOSED FIBER OPTIC INTERCONNECT SYSTEM IS COMPLETE AND FULLY OPERATIONAL.
3. CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING FIBER OPTIC CABLE AND WILL BE REQUIRED TO REPLACE ANY DAMAGED CABLE AT NO ADDITIONAL COST TO THE CONTRACT.

**NOTES**

- EXISTING HANDHOLE SHALL BE REMOVED AFTER THE PROPOSED INTERCONNECT SYSTEM IS COMPLETE AND FULLY OPERATIONAL.

FILE NAME = S:\JULIEN\63988-63999\63946\63943\K:\coron\10000\_Sheets\0812345-sh1-ta-int1.dgn

**SA STRAND ASSOCIATES\***  
1170 SOUTH HOUBOLT ROAD  
JOLIET, ILLINOIS 60431  
(815) 744-4200

USER NAME = brianf	DESIGNED - RMS	REVISED - RMS
PLLOT SCALE = 100.0000' / in.	DRAWN - DJW	REVISED - BJF
PLLOT DATE = 12/5/2012	CHECKED - ARM	REVISED - ARM
	DATE - 10/17/2012	REVISED - 12/4/2012

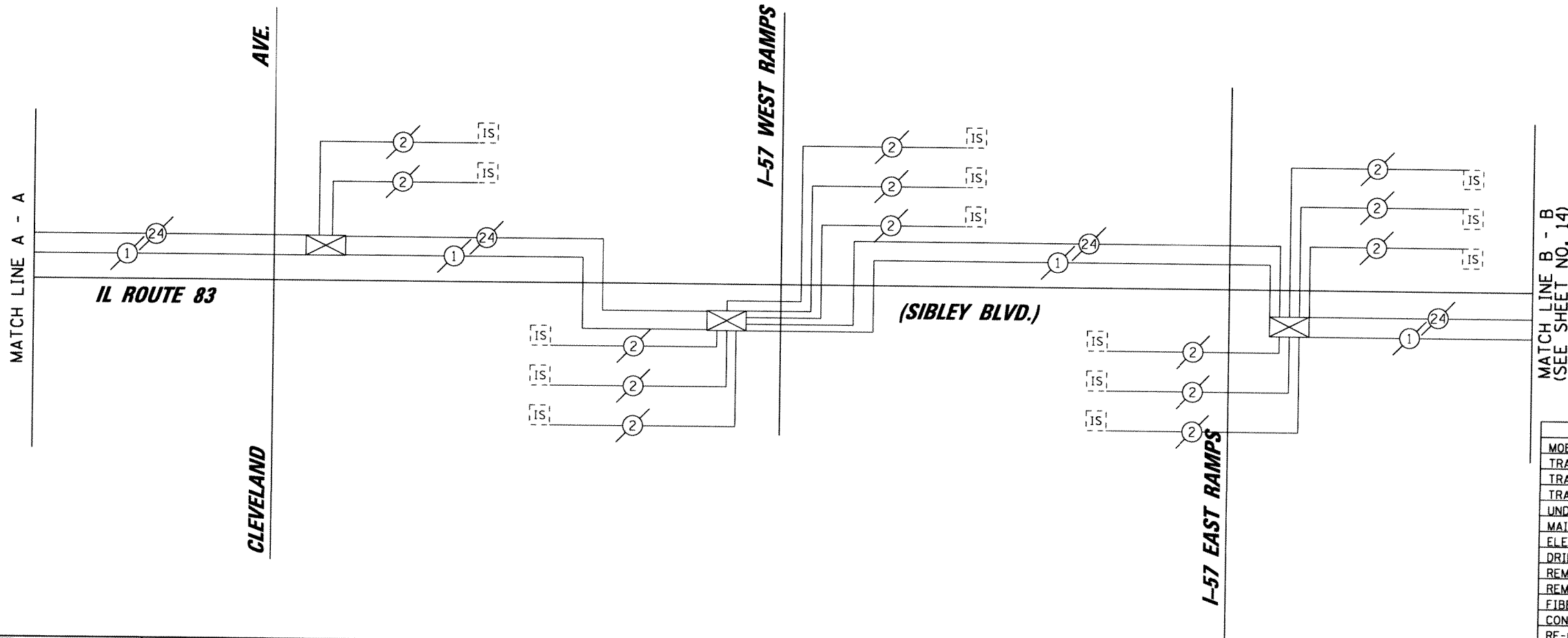
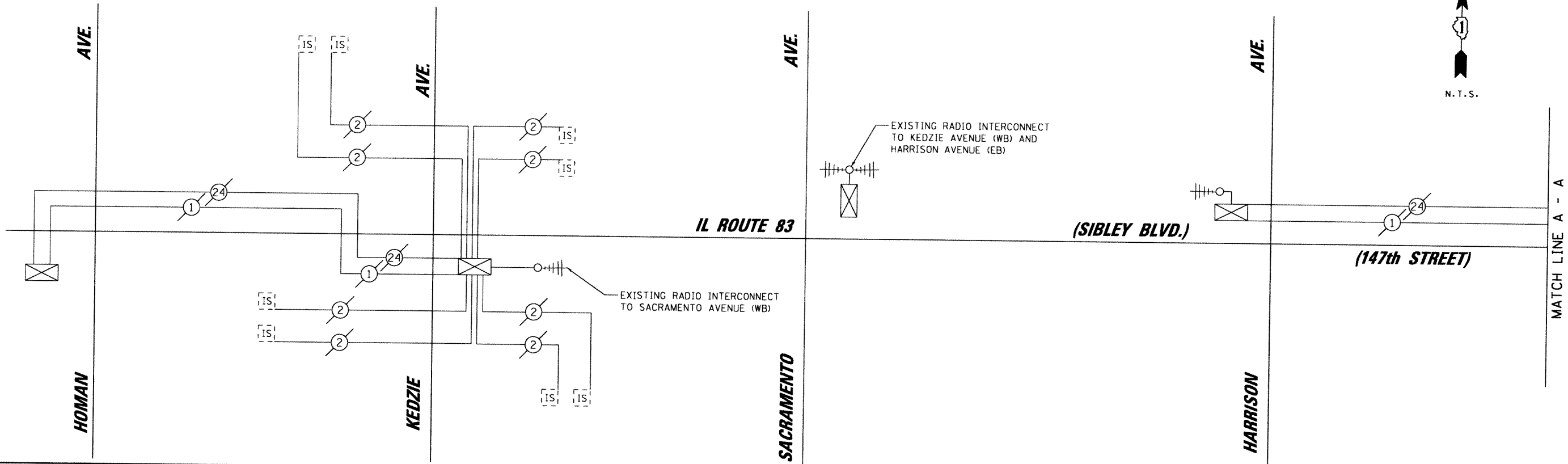
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

<b>INTERCONNECT PLAN</b>	
<b>IL. RTE. 83 (SIBLEY BLVD) AND WALLACE STREET</b>	
SCALE: AS SHOWN	SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE. 397	SECTION 104TS-1(12)	COUNTY COOK	TOTAL SHEETS 38	SHEET NO. 24
CONTRACT NO. 60T92				ILLINOIS FED. AID PROJECT







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

PAY ITEMS	UNIT	TOTAL
MOBILIZATION	L SUM	0.33
TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	0.33
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.33
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	0.33
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	320
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	4516
DRILL EXISTING HANDHOLE	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	8832
REMOVE EXISTING HANDHOLE	EACH	1
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	4516
CONSTRUCTION LAYOUT	L SUM	0.33
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	1

FILE NAME = S:\JDL\6388--6389\6346\43\Micros\CADD\_Sheets\0812345-INT-TRAFFIC SIGNAL SCHEMATIC.DGN

**SA STRAND ASSOCIATES**  
1170 SOUTH HOUBOLT ROAD  
JOLIET, ILLINOIS 60431  
(815) 744-4200

USER NAME = briantf	DESIGNED - RMS	REVISED - RMS
PLOT SCALE = 40,0000 1/16" IN.	DRAWN - DJW	REVISED - BJB
PLOT DATE = 12/11/2012	CHECKED - ARM	REVISED - ARM
	DATE - 10/17/2012	REVISED - 12/4/2012

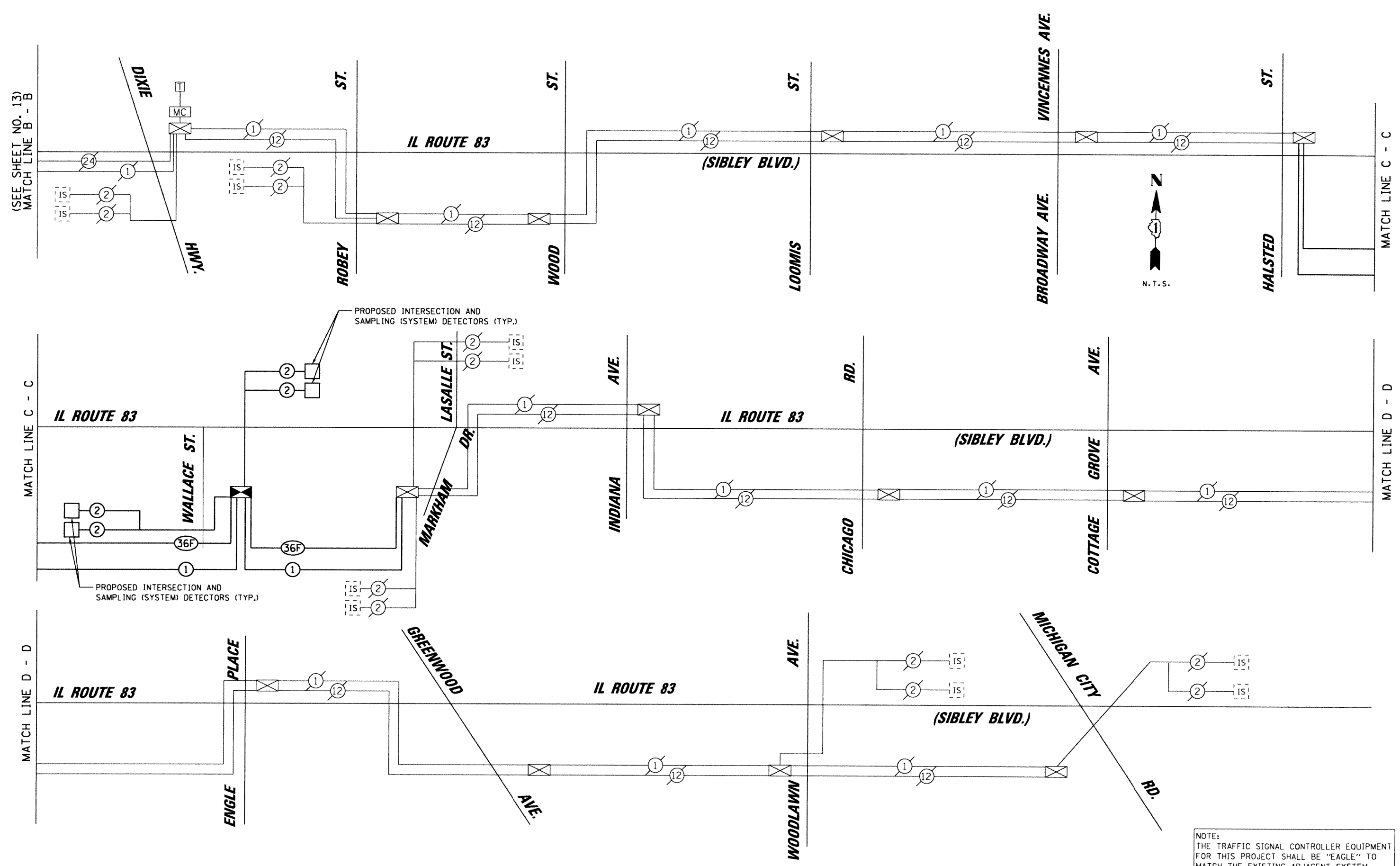
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT SCHEMATIC  
IL ROUTE 83 (SIBLEY BLVD) FROM HOMAN AVENUE TO EAST OF I-57 RAMPS**

SCALE: AS SHOWN SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE. 397	SECTION 104TS-1(12)	COUNTY COOK	TOTAL SHEETS 26	SHEET NO. 26
CONTRACT NO. 60T92				ILLINOIS FED. AID PROJECT

FILE NAME = S:\JUL\63088-6399\6346\943\1\MicroStation\COOD\_Sheets\0412245-ah1-ta-int-schematic2.dgn



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

**SA STRAND ASSOCIATES**  
1170 SOUTH HOUBOLT ROAD  
JOLIET, ILLINOIS 60431  
(815) 744-4200

USER NAME = brjanf
DESIGNED - RMS
REVISD - RMS
REVISD - B.J.F.
REVISD - ARM
REVISD - 12/4/2012
DATE - 10/17/2012
DATE - 12/4/2012

DESIGNED - RMS
REVISD - RMS
REVISD - B.J.F.
REVISD - ARM
REVISD - 12/4/2012

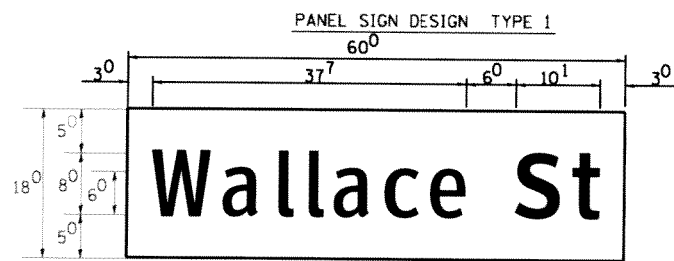
DESIGNED - RMS
REVISD - RMS
REVISD - B.J.F.
REVISD - ARM
REVISD - 12/4/2012

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT SCHEMATIC  
IL ROUTE 83 (SIBLEY BLVD.) FROM DIXIE HIGHWAY TO MICHIGAN CITY ROAD**

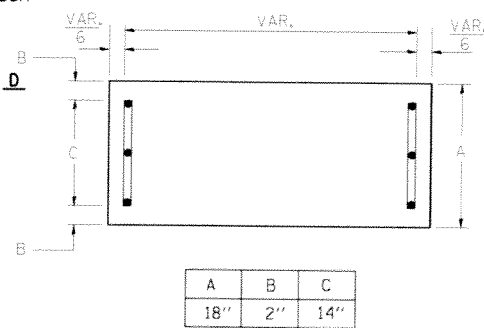
SCALE: AS SHOWN SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
397	104TS-1(12)	COOK	27	27
CONTRACT NO. 60T92				
ILLINOIS FED. AID PROJECT				

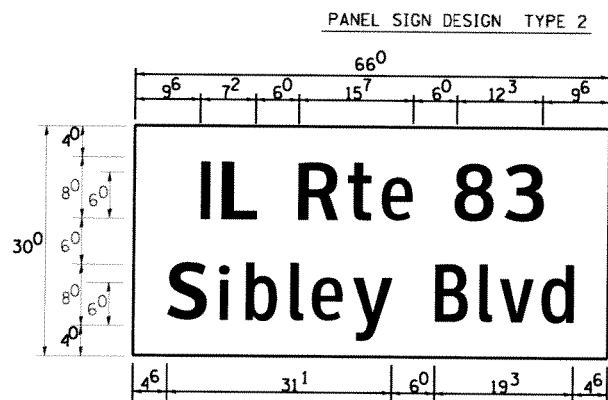


0.7 Sq. M. each  
 7.5 Sq. Ft. each  
 2 Required  
 Design Series D

SUPPORTING CHANNELS

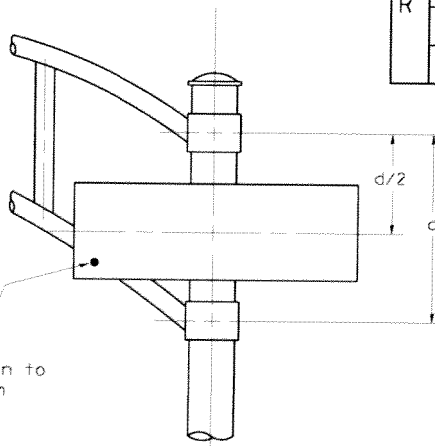
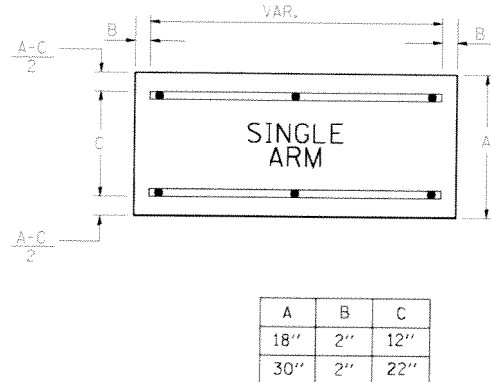


NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS



1.3 Sq. M. each  
 13.75 Sq. Ft. each  
 1 Required  
 Design Series D

SUPPORTING CHANNELS



DUAL ARM

SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM shall be used. See Note #5.

Upper Case To Lower Case  
 Spacing Chart 8-6 Inch Series "C & D"

SERIES	SECOND LETTER															
	acde		bhikl		f w		j		s t		v y		x		z	
	g	o	q	m	n	p	r	u								
A W X	12	14	14	15	12	14	06	10	11	14	06	10	11	12	12	14
B	14	15	20	21	14	15	11	12	14	15	12	14	12	14	16	17
C E G	14	15	20	21	12	14	06	10	12	14	12	14	14	15	14	15
D O Q R	14	15	20	21	14	15	06	10	12	14	12	14	14	15	14	15
F	05	06	14	15	06	10	05	06	06	10	06	10	06	10	11	12
H I M N	20	21	22	24	20	21	14	15	16	17	16	17	20	21	20	21
J U	20	21	20	21	16	17	14	15	16	17	16	17	16	17	20	21
K L	11	12	16	17	11	12	05	06	11	12	11	12	11	12	12	14
P	12	14	14	15	12	14	05	06	11	12	11	12	12	14	12	14
S	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
T	11	12	16	17	06	10	06	10	11	12	11	12	11	12	12	14
V	06	10	14	15	11	12	06	10	12	14	12	14	12	14	12	14
Y	05	06	14	15	06	10	05	06	05	07	05	06	06	10	11	12
Z	16	17	22	24	16	17	12	14	16	17	16	17	16	17	20	21

Lower Case To Lower Case  
 Spacing Chart 6 Inch Series "C & D"

SERIES	SECOND LETTER															
	acde		bhikl		f w		j		s t		v y		x		z	
	g	o	q	m	n	p	r	u								
ad h g i j	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17
l m n q u																
b f k o p s	12	14	16	17	11	12	05	06	11	12	11	12	12	14	12	14
c e	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
r	06	10	12	14	06	10	03	03	05	06	05	06	06	10	06	10
t z	12	14	16	17	12	14	06	10	11	12	11	12	12	14	12	14
v y	11	12	14	15	11	12	05	06	06	10	06	10	11	12	11	12
w	11	12	14	15	11	12	05	06	11	12	11	12	11	12	12	14
x	12	14	16	17	11	12	05	06	11	12	11	12	11	12	12	14

Number To Number  
 Spacing Chart 8 Inch Series "C & D"

SERIES	SECOND NUMBER																			
	0		1		2		3		4		5		6		7		8		9	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
0 9	16	17	16	17	14	15	12	14	14	15	14	15	16	17	12	14	16	17	16	17
1	20	21	20	21	20	21	16	17	14	15	20	21	20	21	14	15	20	21	20	21
2 3 4	14	15	14	15	14	15	12	14	12	14	14	15	14	15	11	12	16	17	14	15
5	14	15	14	15	14	15	11	12	11	12	14	15	14	15	11	12	14	15	14	15
6	16	17	14	15	14	15	12	15	12	14	14	15	14	15	11	12	14	15	14	15
7	12	14	12	14	14	15	12	15	05	06	12	14	14	15	11	12	14	15	12	14
8	16	17	16	17	14	15	12	15	12	14	14	15	16	17	12	14	16	17	14	15

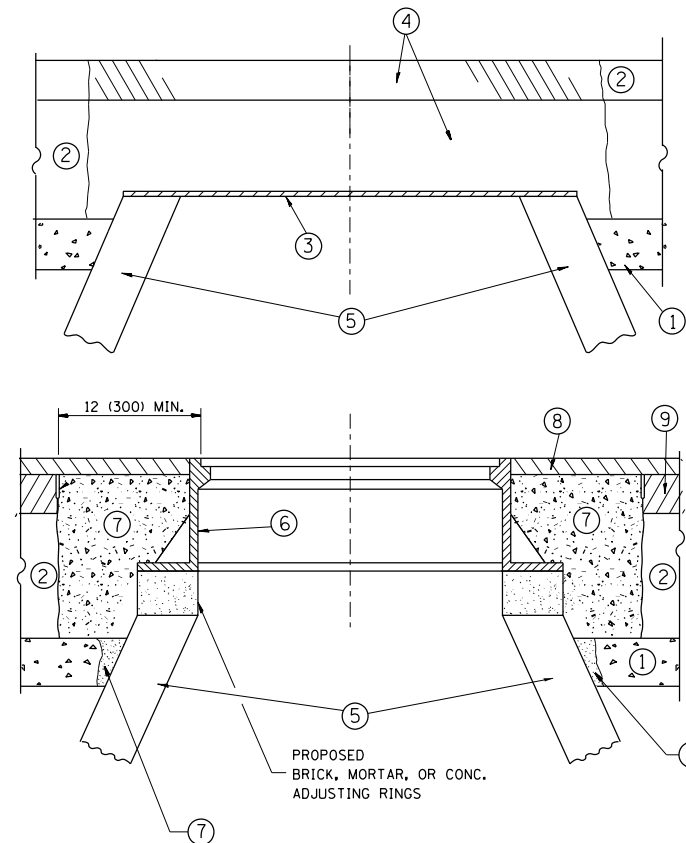
EXAMPLE, 2 <sup>3</sup> DENOTES 3/8"

UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS				8 INCH UPPER CASE LETTERS				LETTERS	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES		SERIES		SERIES			C	D
	C	D	C	D	C	D	C	D			
A	36	50	50	65	a	35	42				
B	32	40	43	53	b	35	42				
C	32	40	43	53	c	35	41				
D	32	40	43	53	d	35	42				
E	30	35	40	47	e	35	42				
F	30	35	40	47	f	23	26				
G	32	40	43	53	g	35	42				
H	32	40	43	53	h	35	42				
I	07	07	11	12	i	11	11				
J	30	36	40	50	j	20	22				
K	32	41	43	54	k	35	42				
L	30	35	40	47	l	11	11				
M	37	45	51	61	m	60	70				
N	32	40	43	53	n	35	42				
O	34	42	45	55	o	36	43				
P	32	40	43	53	p	35	42				
Q	34	42	45	55	q	35	42				
R	32	40	43	53	r	26	32				
S	32	40	43	53	s	36	42				
T	30	35	40	47	t	27	32				
U	32	40	43	53	u	35	42				
V	35	44	47	60	v	42	47				
W	44	52	60	70	w	55	64				
X	34	40	45	53	x	44	51				
Y	36	50	50	66	y	46	53				
Z	32	40	43	53	z	36	43				

NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	12	14	15	20
2	32	40	43	53
3	32	40	43	53
4	35	43	47	57
5	32	40	43	53
6	32	40	43	53
7	32	40	43	53
8	32	40	43	53
9	32	40	43	53
0	34	42	45	55

- GENERAL NOTES**
- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
  - ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
  - THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 8'-0".
  - ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
  - SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:
    - \* J.O. HERBERT CO. MIDLOTHIAN, VA.
    - \* WESTERN REMAC INC. WOODRIDGE, IL.
- PARTS LISTING:**
- SIGN CHANNEL PART \*HPN053 (MED. CHANNEL)  
 SIGN SCREWS 1/2" x 14 x 1" H.W.H. #3  
 BRACKETS PART \*HPN034 (UNIVERSAL)  
 CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING
- OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.



**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

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

**STAGE 2 (AFTER PAVEMENT MILLING)**

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

\* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

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

**LEGEND**

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

**LOCATION OF STRUCTURES:**

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

**BASIS OF PAYMENT:**

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

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

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

**NOTES:**

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

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

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

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

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

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

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = guillaumefp	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
et:\pw\work\p\id\dot\guillaumefp\d0307142\p	13609-Design.dgn	DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - R. BORO 03-09-11
	PLOT DATE = 12/21/2012	DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
357	104TS-1(12)	COOK	38	29
<b>BD600-03 (BD-8)</b>		<b>CONTRACT NO. 60T92</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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)

18" (450) MAX.

1/4" (5) \*\*

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).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

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.)

\* 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.

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.

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.

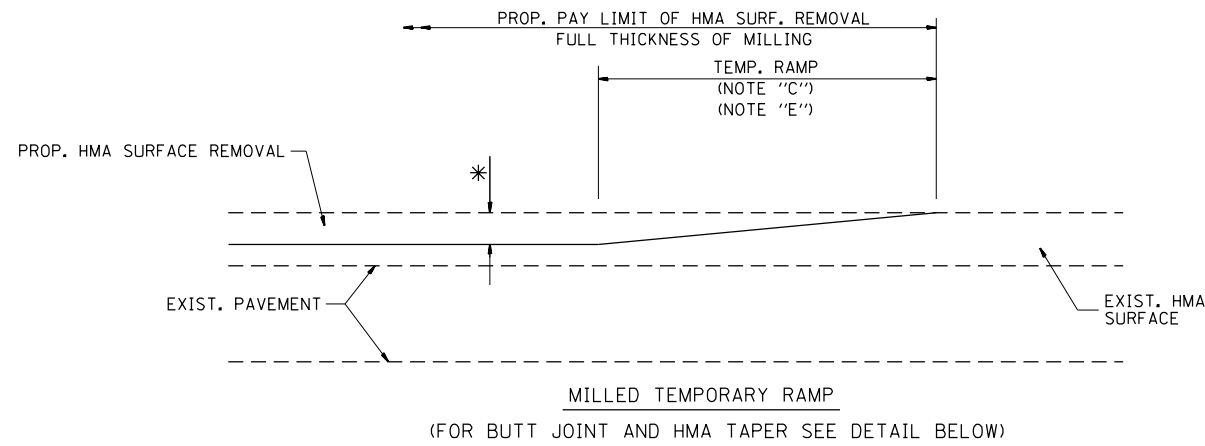
PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

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".

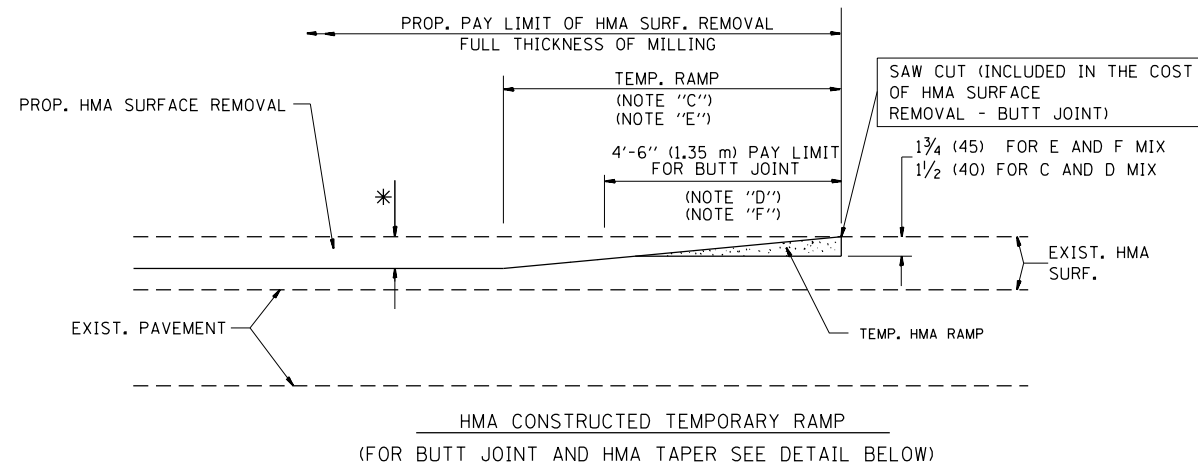
# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = guillaumefp	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.
et:\pw\work\p\id\dot\guillaumefp\d0307142\p	13609-Design.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97					357	104TS-1(12)	COOK	38	30
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - M. GOMEZ 01-22-01		<b>BD600-06 (BD-24)</b>			<b>CONTRACT NO. 60T92</b>				
	PLOT DATE = 12/21/2012	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				

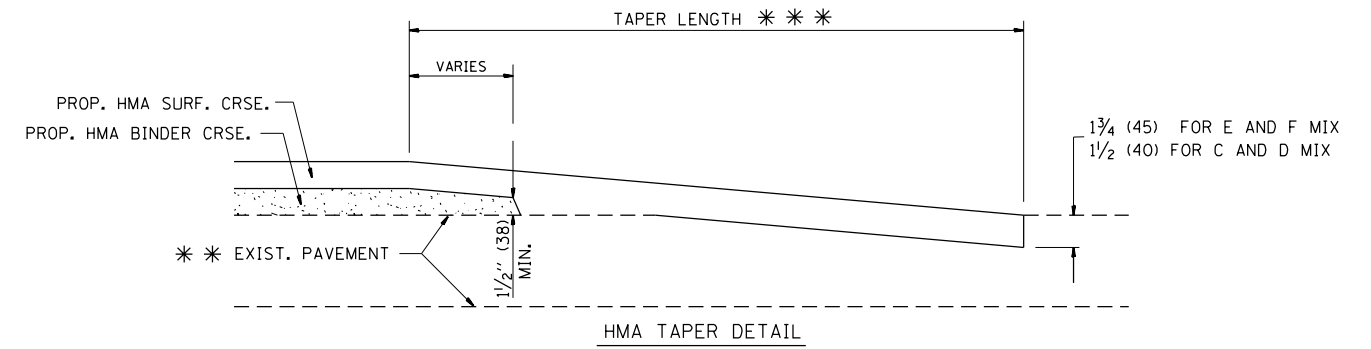
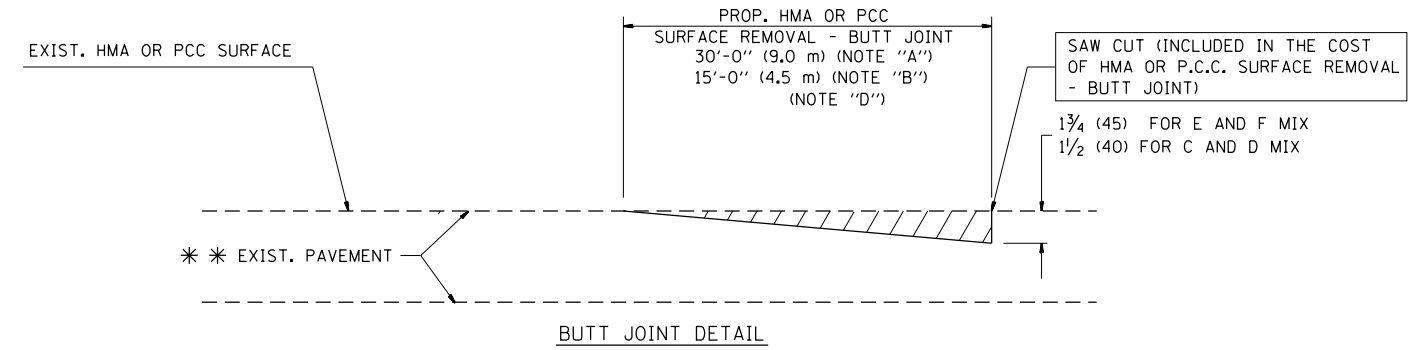


**OPTION 1**



**OPTION 2**

**TYPICAL TEMPORARY RAMP**



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

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

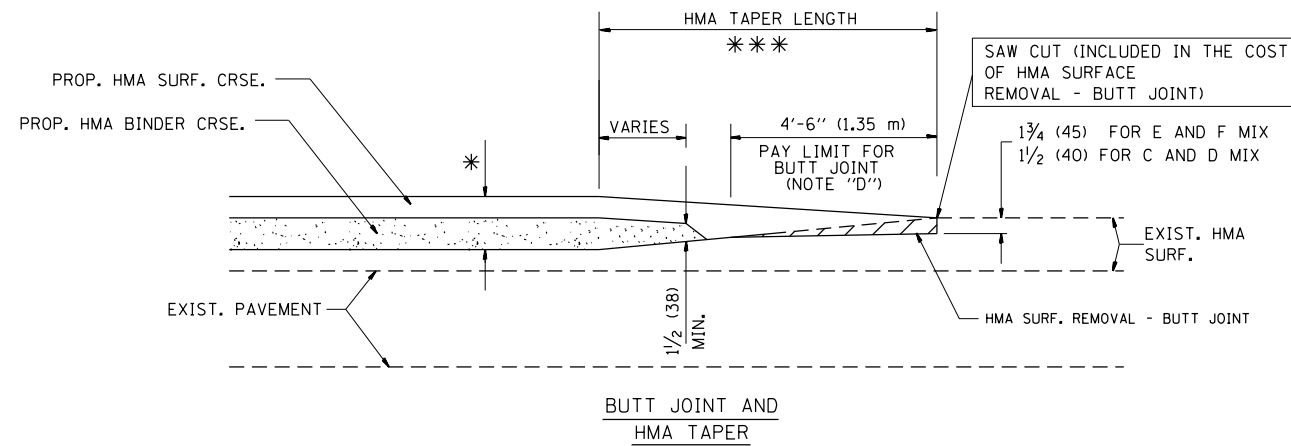
**NOTES**

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

**BASIS OF PAYMENT:**

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

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



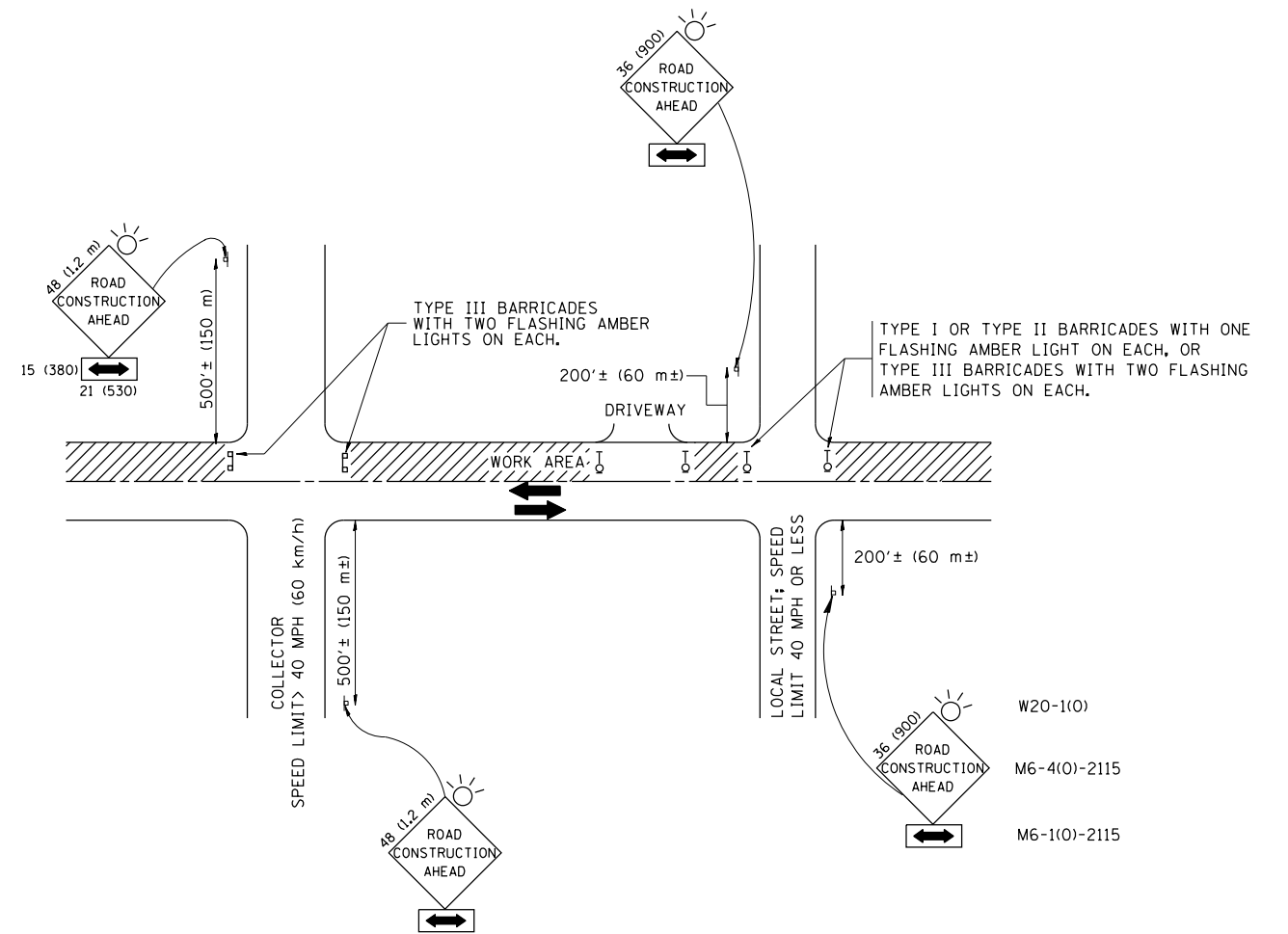
**TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING**

FILE NAME =	USER NAME = guillaumefp	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
et:\pw\work\p\id\guillaumefp\d0307142\13609-Design.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 12/21/2012	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
357	10475-1(12)	COOK	38	31
BD400-05 BD32		CONTRACT NO. 60T92		
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 = guillaumejp	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
et:\pwork\pwork\guillaumejp\d0307142\13609-Design.dgn		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 12/21/2012	DATE - 06-89	REVISED - T. RAMMACH 01-06-00

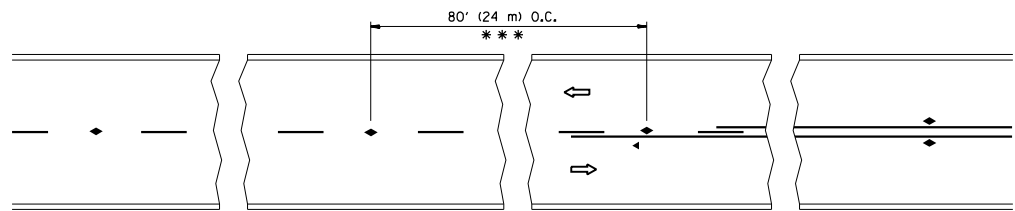
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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

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

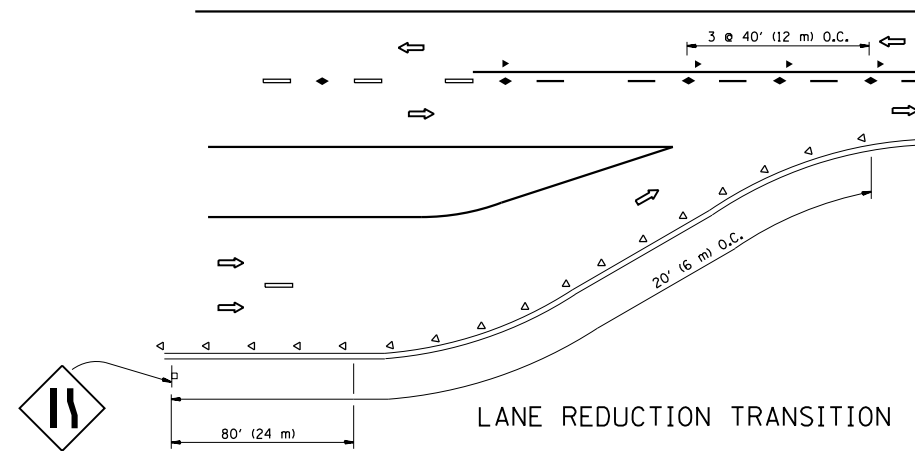
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
357	1047S-1(12)	COOK	38	32
TC-10		CONTRACT NO. 60T92		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



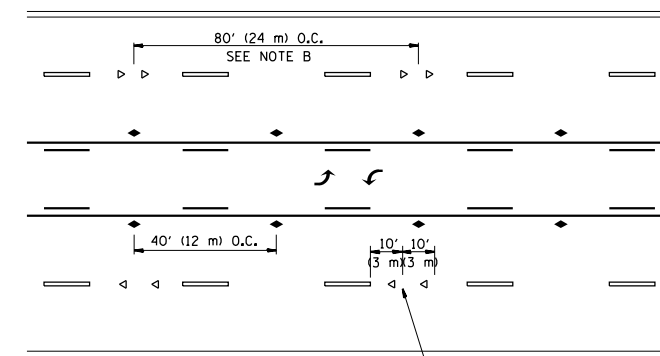


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

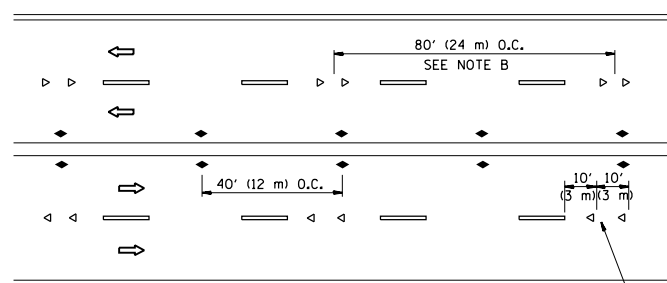
TWO-LANE/TWO-WAY



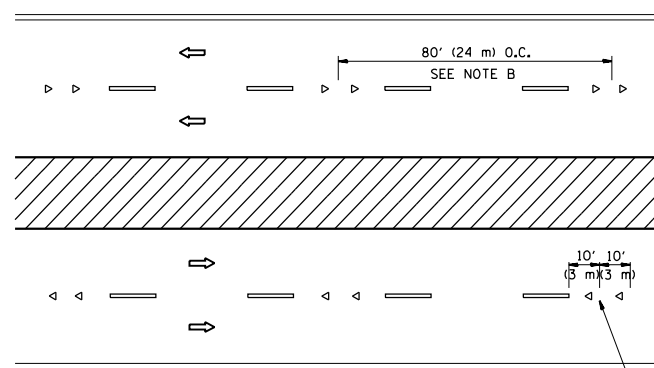
LANE REDUCTION TRANSITION



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

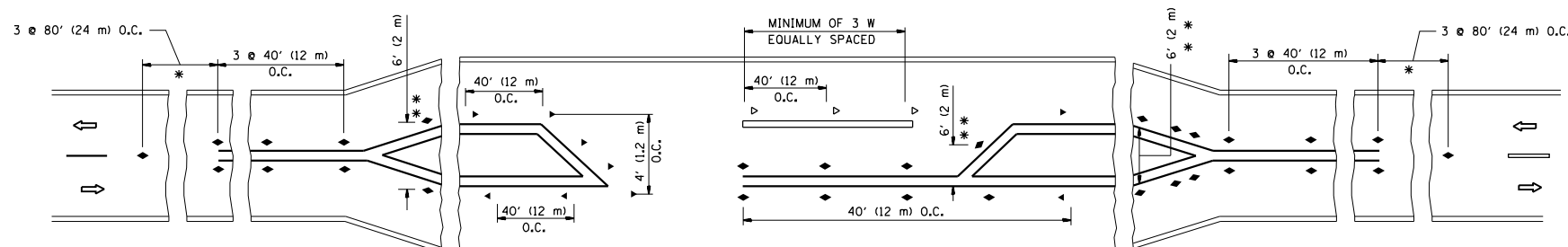
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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.



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

LEFT TURN

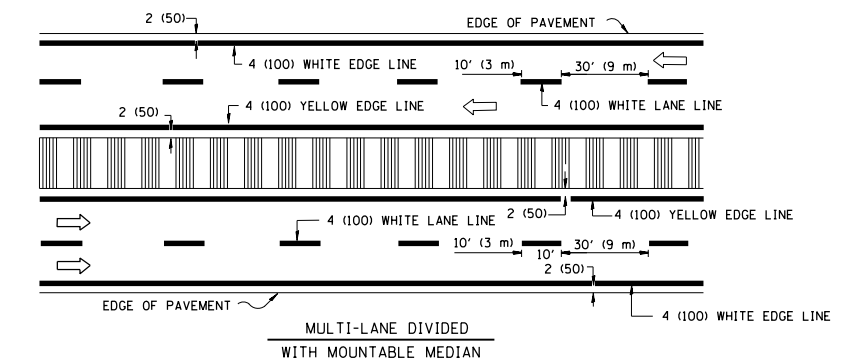
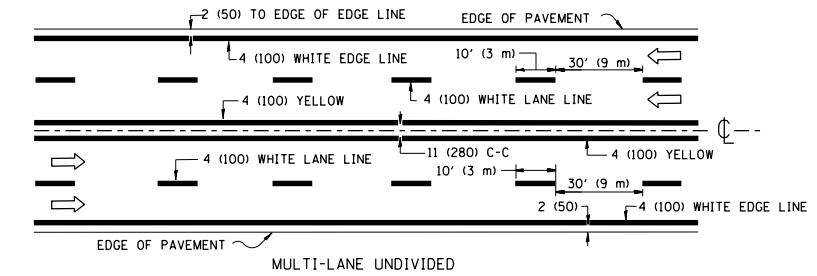
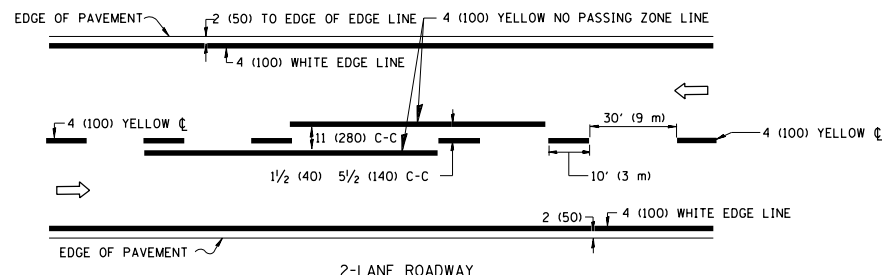
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = guillaumejp	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
et:\pw\work\p\dot\guillaumejp\d0307142\p	13609-Design.dgn	DRAWN -	REVISED - T. RAMMACHER 03-12-99
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 12/21/2012	DATE -	REVISED - C. JUCIUS 09-09-09

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

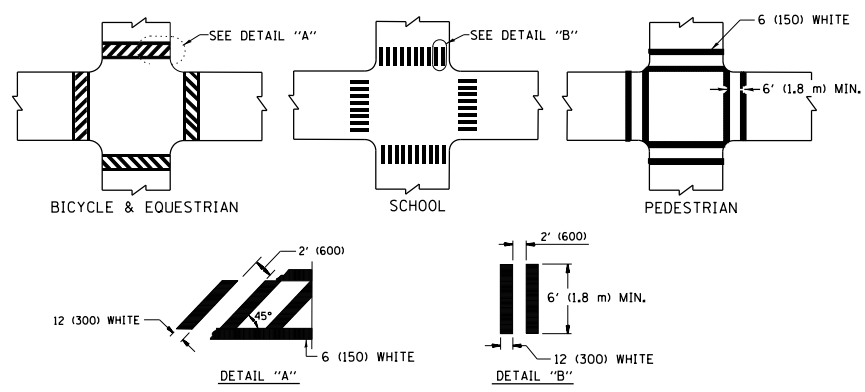
TYPICAL APPLICATIONS			
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
357	104TS-1(12)	COOK	38	33
TC-11			CONTRACT NO. 60T92	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

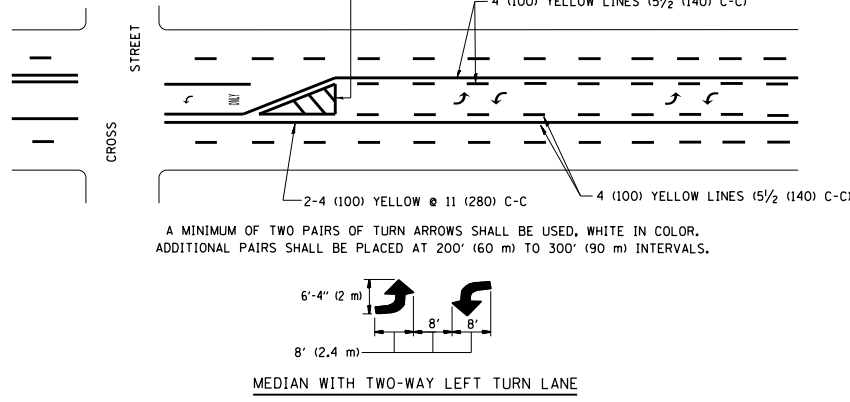
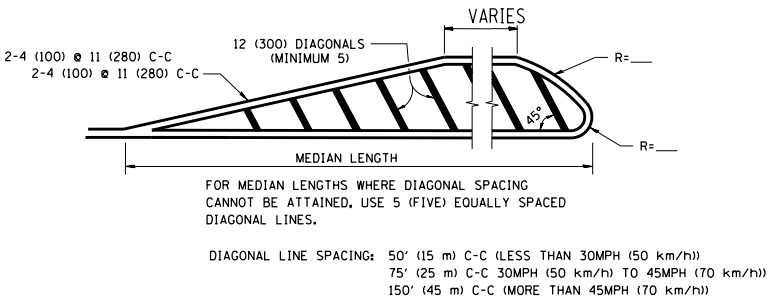
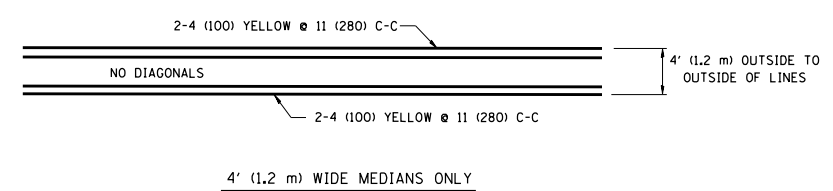


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

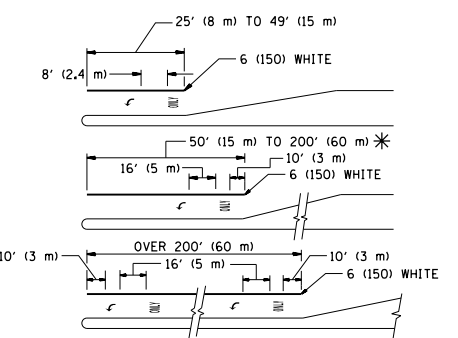
**TYPICAL LANE AND EDGE LINE MARKING**



**TYPICAL CROSSWALK MARKING**



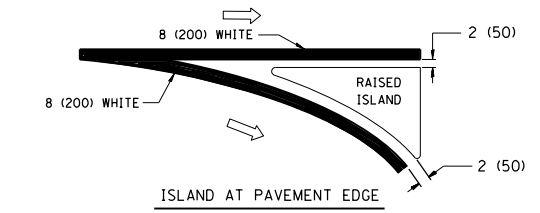
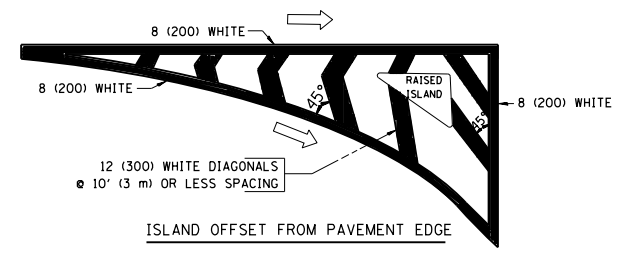
**TYPICAL PAINTED MEDIAN MARKING**



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
 \* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

**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	5/2 (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 SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE 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 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE. SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE. SEE TYPICAL PAINTED MEDIAN MARKING.
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" 15 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 m <sup>2</sup> ) EACH "X": 54.0 SQ. FT. (5.0 m <sup>2</sup> )
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.

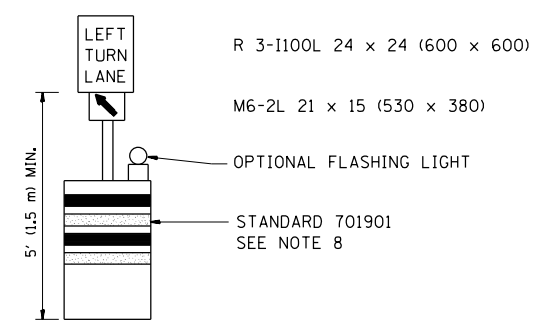
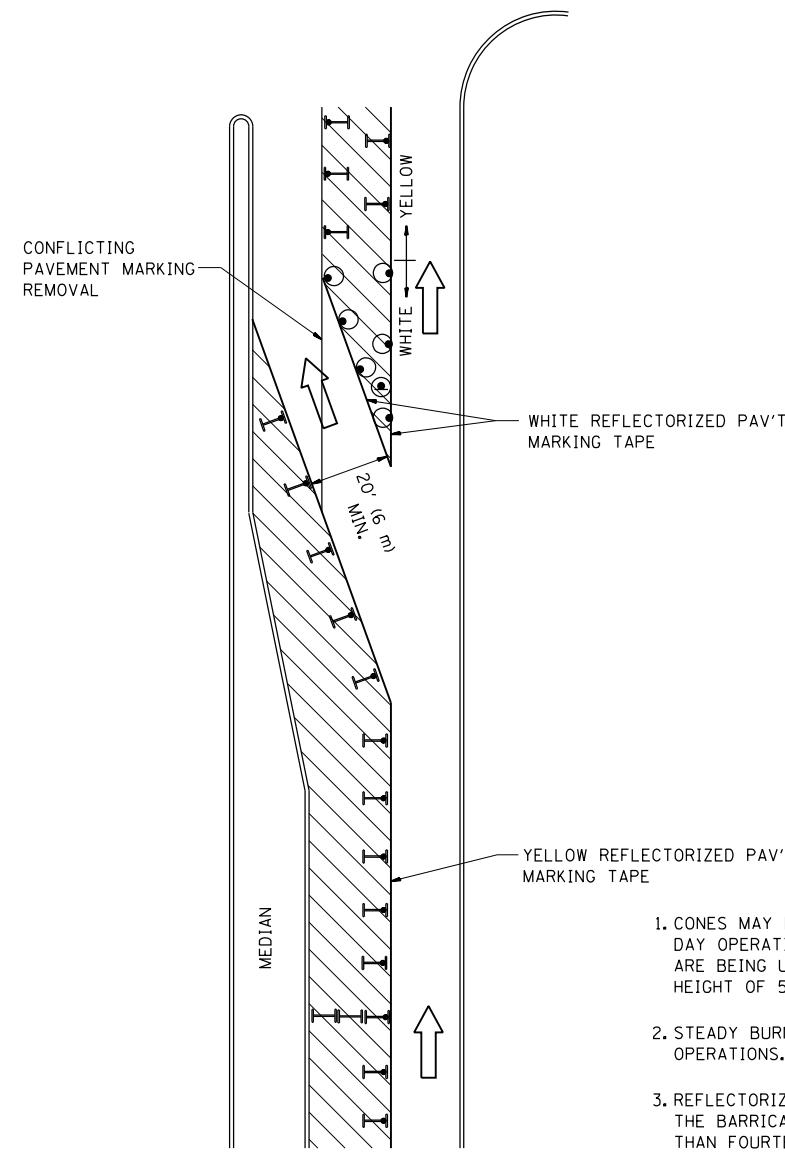
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = guillaumejp	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
et:\pw\work\p\dtd\guillaumejp\d0307142\p	13609-Design.dgn	DRAWN -	REVISED -C. JUCIUS 09-09-09
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 12/21/2012	DATE - 03-19-90	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
357	104TS-1(12)	COOK	38	34
TC-13		CONTRACT NO. 60T92		
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 NCHRP 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

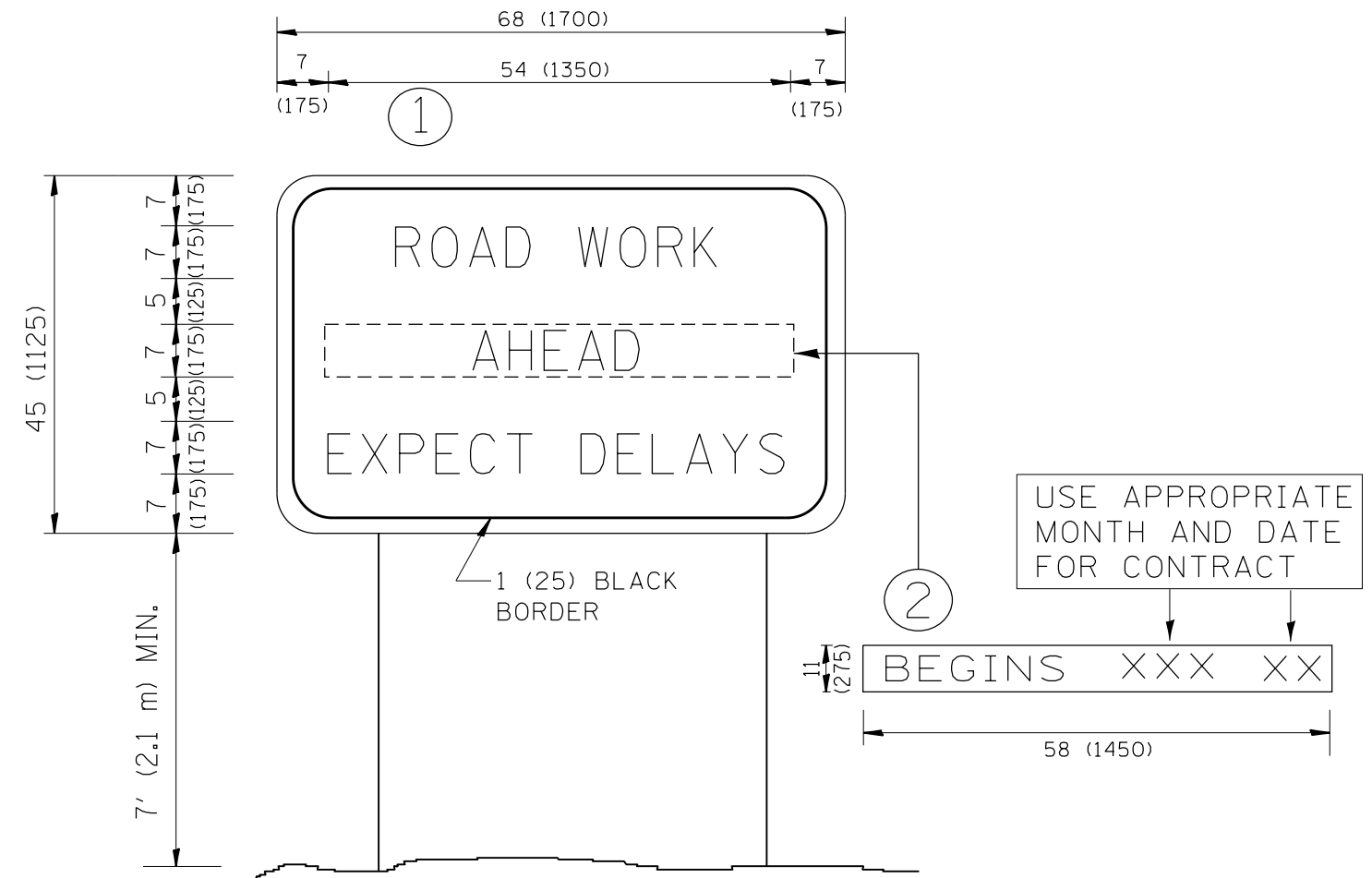
FILE NAME =	USER NAME = guillaumefp	REVISED -T, RAMMACHER 09-08-94	REVISED - R, BORO 09-14-09
et:\pw\work\p1dot\guillaumefp\d0307142\13609-Design.dgn		REVISED - A. HOUSEH 11-07-95	REVISED -
	PLOT SCALE = 100.0000' / in.	REVISED - A. HOUSEH 10-12-96	REVISED -
	PLOT DATE = 12/21/2012	REVISED -T, RAMMACHER 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.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
357	104TS-1(12)	COOK	38	35
TC-14		CONTRACT NO. 60T92		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				





**NOTES:**

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

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

FILE NAME =	USER NAME = guillaumejp	DESIGNED -	REVISED - R. MIRS 09-15-97
et:\pw\work\p\dot\guillaumejp\d0307142\p	13609-Design.dgn	DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 12/21/2012	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

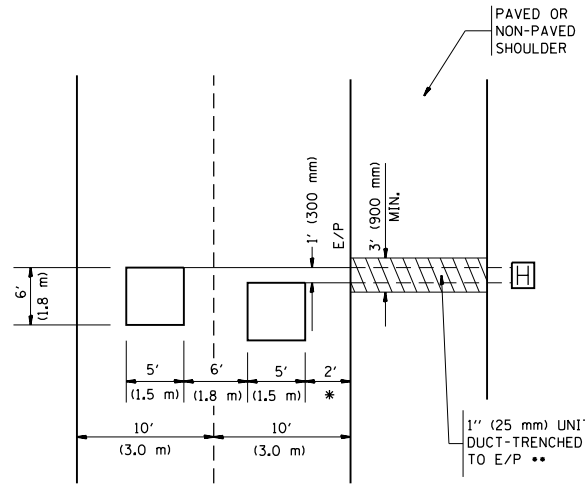
**ARTERIAL ROAD  
INFORMATION SIGN**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
357	104TS-1(12)	COOK	38	37
TC-22			CONTRACT NO. 60T92	
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.

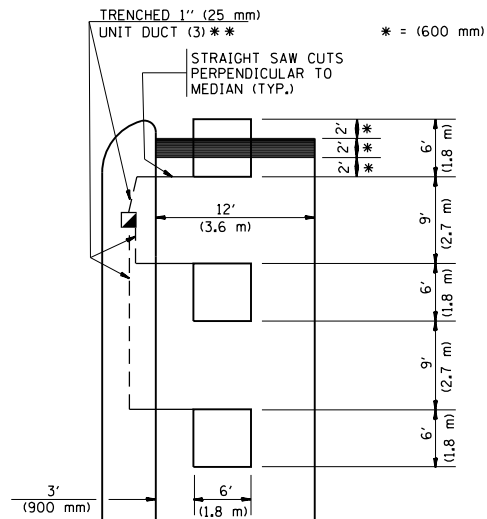


\* = (600 mm)

\*\* 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)

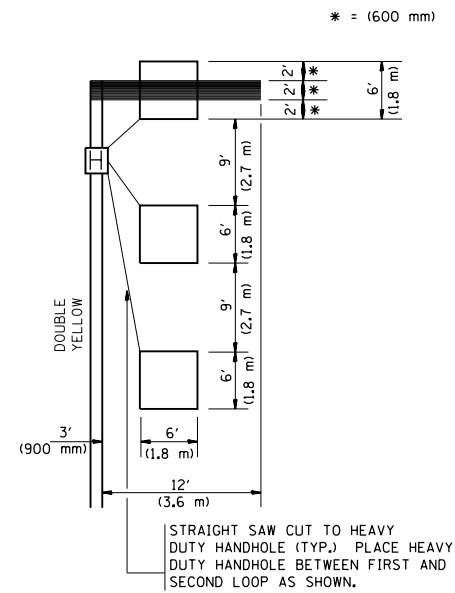
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



\*\* 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)



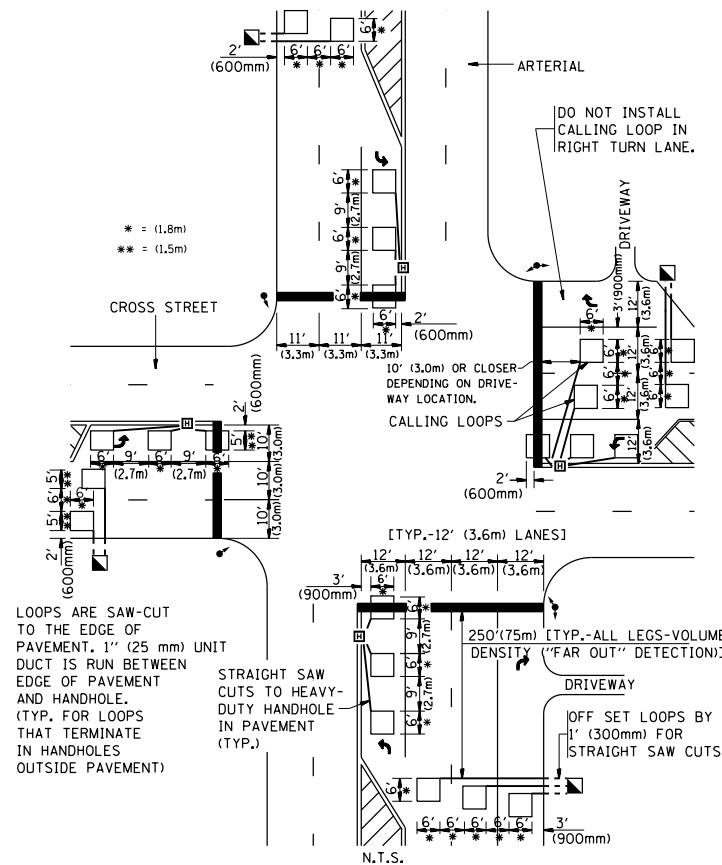
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

NOTES:

VEHICLES LOOP DETECTORS

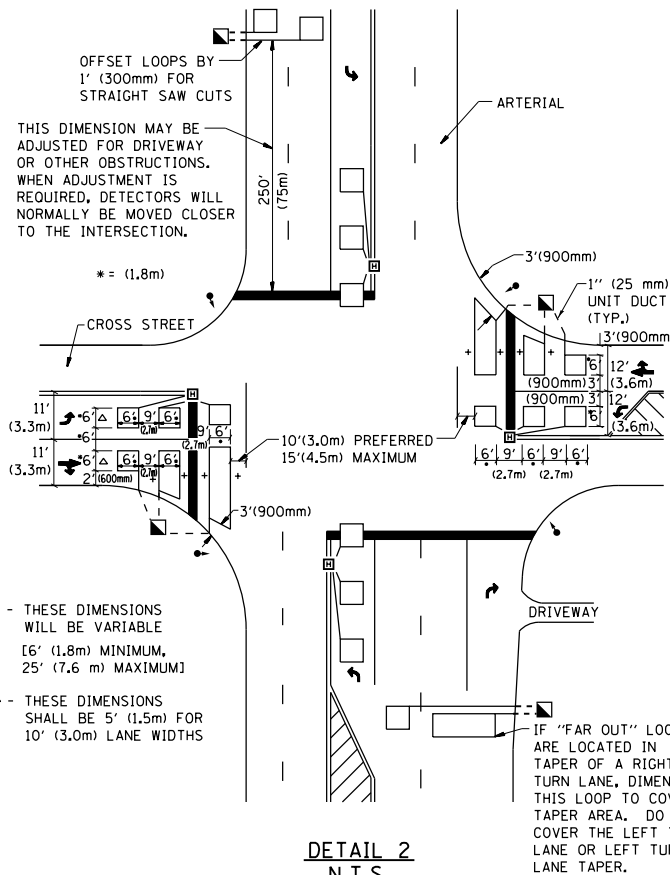
- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE 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.

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.

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 = gulllaumejp	DESIGNED -	REVISED -
et:\pwork\pwork\gulllaumejp\d0307142\13609-Design.dgn	13609-Design.dgn	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.		CHECKED - R.K.F.	REVISED -
PLOT DATE = 12/21/2012		DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION  
DETAILS FOR ROADWAY RESURFACING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
357	104TS-1(12)	COOK	38	38
TS-07		CONTRACT NO. 60T92		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				