04-27-12 LETTING ITEM 156

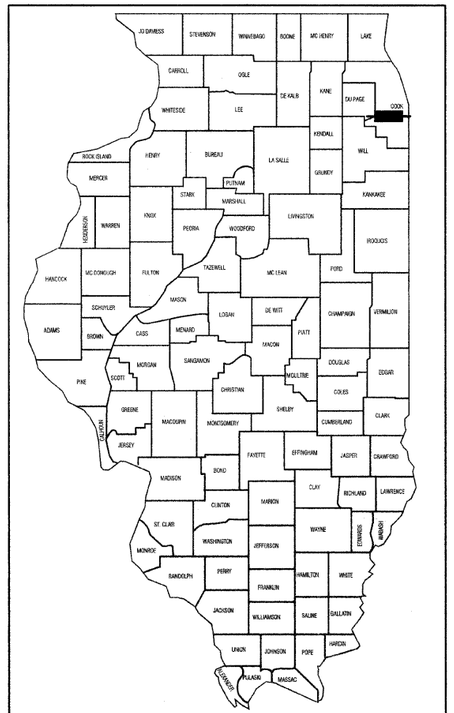
F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
0344	06-00175-00-TL	COOK	48	1
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

CONTRACT #63613

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAP 0344 (127TH STREET)
AT SACRAMENTO AVENUE
TRAFFIC SIGNAL MODERNIZATION
AND INTERSECTION CHANNELIZATION
PROJECT: F-0344 (041)
SECTION NO.: 06-00175-00-TL
JOB NO.: C-91-013-07
CITY OF BLUE ISLAND
COOK COUNTY



LOCATION OF SECTION INDICATED THUS: -

INDEX OF SHEETS
SEE SHEET NO. 2

STATE STANDARDS
SEE SHEET NO. 2

DESIGN DESIGNATION – 127TH ST 23,000 (2005) – ARTERIAL
24,000 (2030)

SACRAMENTO AVE
2000 (2005)
2200 (2030)

EXISTING SPEED LIMIT – 30 MPH
PROPOSED SPEED LIMIT – 30 MPH

DESIGN PERIOD – 20 YEARS
DESIGN SPEED LIMIT – 35 MPH – 127TH ST
DESIGN SPEED LIMIT – 25 MPH – SACRAMENTO AVE
STREET CLASSIFICATION – CLASS II ROAD

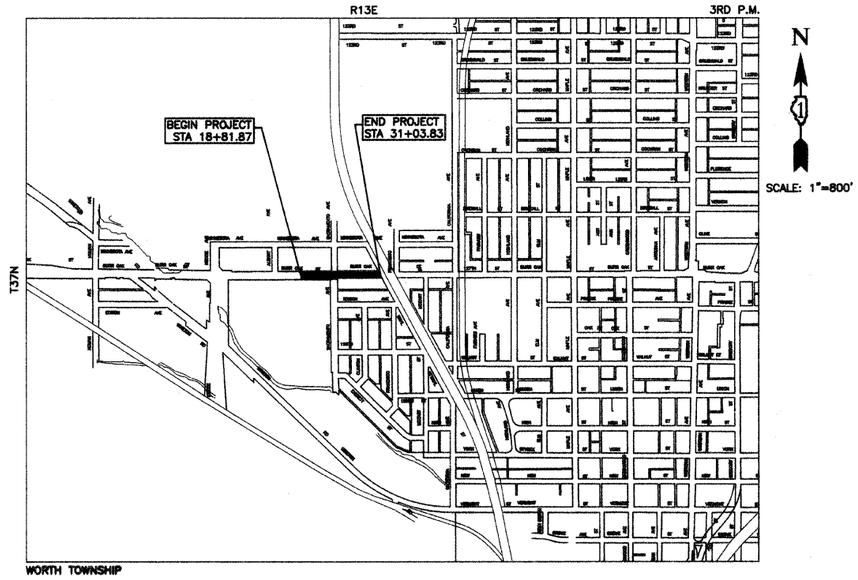
SCALES
- PLAN - 1"=50'
- PROFILE HORIZ. - 1"=50'
- PROFILE VERT. - 1"=5'
- CROSS SECTIONS HORIZ. - 1"=10'
- CROSS SECTIONS VERT. - 1"=5'

100' 200' 300' - 1"= 100'
0 10' 20' 30' - 1"= 10'
0 50' 100' - 1"= 50'
0 50' 100' - 1"= 40'
0 50' 100' - 1"= 30'
0 50' 100' - 1"= 20'

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

CONTRACT NO. 63613



PROJECT LOCATION

GROSS LENGTH= 1235 FEET = 0.23 MILES
NET LENGTH= 1235 FEET = 0.23 MILES

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Approved _____
City of Blue Island, Mayor

Passed FEBRUARY 15, 2012
_____
District 1 Engineer of Local Roads & Streets

Released for Bid
Based on Limited
Review FEBRUARY 15 2012
_____
Deputy Director of Highways, Region 1 Engineer

DESCRIPTION OF IMPROVEMENT

THIS IMPROVEMENT CONSISTS OF EARTH EXCAVATION, SIDEWALK, LANDSCAPING, INTERSECTION WIDENING AND THE INSTALLATION OF A TRAFFIC SIGNAL.

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PREPARED BY OR UNDER THE DIRECT SUPERVISION OF:

_____
2/15/12

GILMORE, HARRY L. JR. 62-3576 REGISTERED PROFESSIONAL ENGINEER STATE OF ILLINOIS

LICENSE EXPIRES: 11/30/13

PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. (847) 705-4406, SCHAUMBURG, IL
CONSULTANTS: ROBINSON ENGINEERING, LTD. 815-806-0300

09527-COVR-01 - C01

INDEX OF SHEETS

STATE STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-06	TEMPORARY EROSION CONTROL SYSTEMS
353001-04	P.C.C. BASE COURSE WITH HMA BINDER AND SURFACE COURSE
420001-07	PAVEMENT JOINTS
424001-06	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
602001-02	CATCH BASIN, TYPE A
602301-03	INLET - TYPE A
602401-03	MANHOLE, TYPE A
602601-02	PRECAST REINFORCED FLAT TOP SLAB
602701-02	MANHOLE STEPS
604001-03	FRAME AND LIDS, TYPE 1
606001-04	CONCRETE CURB & COMBINATION CONCRETE CURB & GUTTER
701101-02	OFF-RD OPERATIONS, MUTILANE, 15' TO 24" FROM PAVEMENT EDGE
701606-08	URBAN LANE CLOSURE, MUTILANE, 2W WITH MOUNTABLE MEDIAN
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
728001-01	TELESCOPING STEEL SIGN SUPPORT
780001-03	TYPICAL PAVEMENT MARKINGS
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)
876001-02	PEDESTRIAN PUSH BUTTON POST
877001-05	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
878001-09	CONCRETE FOUNDATION DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS AND BEACON INSTALLATION
880006-01	TRAFFIC SIGNAL MOUNTED DETAILS
886001-01	DETECTOR LOOP INSTALLATION
886006-01	TYPICAL LAYOUT FOR DETECTOR LOOPS

DISTRICT 1 DETAILS

BD-02	DRIVEWAY DETAILS DISTANCE BETWEEN ROW AND FACE OF CURB <15'
BD-07	DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER
BD-08	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
BD-22	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
BD-32	BUTT JOINT AND HMA TAPER DETAILS
BD-33	HMA TAPER AT EDGE OF P.C.C. PAVEMENT
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-11	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-22	ARTERIAL ROAD INFORMATION SIGN

FILE NAME = 09527-INDX-01 - I-01	USER NAME =	DESIGNED — HLG	REVISED —	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP 0344 (127TH STREET) AT SACRAMENTO AVENUE INDEX OF SHEETS			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED — HLG	REVISED —					0344	06-00175-00-TL	COOK	48	2
	PLOT SCALE =	DRAWN — LTL	REVISED —							CONTRACT NO. 63613		
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —		SCALE: NA	SHEET NO. 2 OF 48 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

SUMMARY OF QUANTITIES

S.I.	CODE NO.	PAY ITEM	UNIT	QUAN	ROADWAY CONSTRUCTION TYPE CODE 0004	SAFETY CONSTRUCTION TYPE CODE 0021	TRAINEES CONSTRUCTION TYPE CODE 0042
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	100	100		
	20800150	TRENCH BACKFILL	CU YD	126	126		
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	2200	2200		
	28000400	PERIMETER EROSION BARRIER	FOOT	360	360		
	28000510	INLET FILTERS	EACH	12	12		
	30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	2008	2008		
	35400300	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 8"	SQ YD	1320	1320		
	40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	203	203		
	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1575	1575		
	40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	250	250		
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	191	191		
	40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	740	740		
	40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	661	661		
	42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	50	50		
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	6030		6030	
	42400800	DETECTABLE WARNINGS	SQ FT	128		128	
	44000152	HOT-MIX ASPHALT SURFACE REMOVAL, 3/4"	SQ YD	3526	3526		
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	1679	1679		
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	2560	2560		
	44000600	SIDEWALK REMOVAL	SQ FT	3085	3085		
	44201741	CLASS D PATCHES, TYPE II, 8 INCH	SQ YD	25	25		
	44201747	CLASS D PATCHES, TYPE IV, 8 INCH	SQ YD	139	139		
	44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	2376	2376		
	542D0223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	15	15		
	550A0030	STORM SEWERS, CLASS A, TYPE 1 8"	FOOT	9	9		
	550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	468	468		

* - INDICATES SPECIALTY ITEMS

SUMMARY OF QUANTITIES

S.I.	CODE NO.	PAY ITEM	UNIT	QUAN	ROADWAY CONSTRUCTION TYPE CODE 0004	SAFETY CONSTRUCTION TYPE CODE 0021	TRAINEES CONSTRUCTION TYPE CODE 0042
	55100300	STORM SEWER REMOVAL 8"	FOOT	74	74		
	55100400	STORM SEWER REMOVAL 10"	FOOT	297	297		
	55100500	STORM SEWER REMOVAL 12"	FOOT	45	45		
	56500200	DOMESTIC WATER SERVICE BOXES TO BE MOVED	EACH	2	2		
	60200105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	6	6		
	60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1		
	60234200	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID	EACH	1	1		
	60266600	VALVE BOXES TO BE ADJUSTED	EACH	5	5		
	60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	20	20		
	60500040	REMOVING MANHOLES	EACH	2	2		
	60500050	REMOVING CATCH BASINS	EACH	7	7		
	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	2607	2607		
	60624600	CORRUGATED MEDIAN	SQ FT	40	40		
*	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	480	480		
*	66900400	SPECIAL WASTE GROUNDWATER DISPOSAL	GALLON	18000	18000		
*	66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1		
*	66900530	SOIL DISPOSAL ANALYSIS	EACH	3	3		
*	66901000	BACKFILL PLUGS	CU YD	10	10		
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6		
	67100100	MOBILIZATION	L SUM	1	1		
	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	8		8	
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	860		860	
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2596		2596	
	70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	85		85	
*	72000100	SIGN PANEL - TYPE 1	SQ FT	131		131	
*	72000200	SIGN PANEL - TYPE 2	SQ FT	95		95	

* - INDICATES SPECIALTY ITEMS

FILE NAME = 09527-QUAN-01 - P01	USER NAME =	DESIGNED - HLG	REVISED -
		CHECKED - HLG	REVISED -
	PLOT SCALE =	DRAWN - LTL	REVISED -
	PLOT DATE = 02-22-12	CHECKED - AG	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 0344 (127TH STREET)
AT SACRAMENTO AVENUE
SUMMARY OF QUANTITIES AND GENERAL NOTES

SCALE: NA | SHEET NO. 3 OF 48 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	3
		CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES					ROADWAY	SAFETY	TRAINEES
					CONSTRUCTION TYPE CODE		
S.I.	CODE NO.	PAY ITEM	UNIT	QUAN	0004	0021	0042
*	72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	225		225	
*	78000100	THERMOPLASTIC PAVEMENT MARKING – LETTERS AND SYMBOLS	SQ FT	170		170	
*	78000200	THERMOPLASTIC PAVEMENT MARKING – LINE 4"	FOOT	4470		4470	
*	78000400	THERMOPLASTIC PAVEMENT MARKING – LINE 6"	FOOT	565		565	
*	78000600	THERMOPLASTIC PAVEMENT MARKING – LINE 12"	FOOT	595		595	
*	78000650	THERMOPLASTIC PAVEMENT MARKING – LINE 24"	FOOT	250		250	
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	124		124	
*	78300100	PAVEMENT MARKING REMOVAL	SQ FT	110		110	
*	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	116		116	
*	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1		1	
*	80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1		1	
*	80500020	SERVICE INSTALLATION – POLE MOUNTED	EACH	1		1	
*	81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	593		593	
*	81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	490		490	
*	81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	109		109	
*	81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	207		207	
*	81400100	HANDHOLE	EACH	6		6	
*	81400200	HEAVY–DUTY HANDHOLE	EACH	2		2	
*	81400300	DOUBLE HANDHOLE	EACH	2		2	
*	81603090	UNIT DUCT, 600V, 3–1C NO.4, 1/C NO.6 GROUND, (XLP–TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	2800		2800	
*	81702440	ELECTRIC CABLE IN CONDUIT, 600V (XLP–TYPE USE) 3–1/C NO. 1/0	FOOT	60		60	
*	82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	17		17	
*	82500360	LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 100AMP	EACH	1		1	
*	83008500	LIGHT POLE, ALUMINUM, 40 FT. M.H., 12 FT. MAST ARM	EACH	17		17	
*	83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	170		170	

* – INDICATES SPECIALTY ITEMS

SUMMARY OF QUANTITIES					ROADWAY	SAFETY	TRAINEES
					CONSTRUCTION TYPE CODE		
S.I.	CODE NO.	PAY ITEM	UNIT	QUAN	0004	0021	0042
*	83800205	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	17		17	
*	84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	6		6	
*	84200804	REMOVAL OF POLE FOUNDATION	EACH	6		6	
*	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1077		1077	
*	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1171		1171	
*	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1545		1545	
*	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	699		699	
*	87301305	ELECTRIC CABLE IN CONDUIT, LEAD–IN, NO. 14 1 PAIR	FOOT	1163		1163	
*	87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	101		101	
*	87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	411		411	
*	87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2		2	
*	87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2		2	
*	87600100	PEDESTRIAN PUSH–BUTTON POST, TYPE I	EACH	1		1	
*	87700160	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1		1	
*	87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1		1	
*	87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1		1	
*	87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1		1	
*	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	20		20	
*	87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4		4	
*	87800400	CONCRETE FOUNDATION, TYPE E 30–INCH DIAMETER	FOOT	60		60	
*	88030020	SIGNAL HEAD, LED, 1–FACE, 3–SECTION, MAST–ARM MOUNTED	EACH	8		8	
*	88030050	SIGNAL HEAD, LED, 1–FACE, 3–SECTION, BRACKET MOUNTED	EACH	2		2	
*	88030100	SIGNAL HEAD, LED, 1–FACE, 5–SECTION, BRACKET MOUNTED	EACH	2		2	
*	88030110	SIGNAL HEAD, LED, 1–FACE, 5–SECTION, MAST–ARM MOUNTED	EACH	2		2	
*	88102717	PEDESTRIAN SIGNAL HEAD, LED, 1–FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8		8	

* – INDICATES SPECIALTY ITEMS

FILE NAME = 09527-QUAN-01 - P02	USER NAME =	DESIGNED – HLG	REVISED –
		CHECKED – HLG	REVISED –
	PLOT SCALE =	DRAWN – LTL	REVISED –
	PLOT DATE = 02-22-12	CHECKED – AG	REVISED –

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 0344 (127TH STREET)
AT SACRAMENTO AVENUE
SUMMARY OF QUANTITIES AND GENERAL NOTES

SCALE: NA | SHEET NO. 4 OF 48 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	4
		CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

S.I.	CODE NO.	PAY ITEM	UNIT	QUAN	ROADWAY CONSTRUCTION TYPE CODE 0004	SAFETY CONSTRUCTION TYPE CODE 0021	TRAINEES CONSTRUCTION TYPE CODE 0042
*	88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10		10	
*	88500100	INDUCTIVE LOOP DETECTOR	EACH	6		6	
*	88600100	DETECTOR LOOP, TYPE I	FOOT	516		516	
*	88800100	PEDESTRIAN PUSH-BUTTON	EACH	8		8	
*	89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1		1	
*	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1		1	
*	89502380	REMOVE EXISTING HANDHOLE	EACH	7		7	
*	89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	9		9	
	Z0018900	DRILL AND GROUT DOWEL BARS	EACH	1186	1186		
*	Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	4		4	
	Z0042002	POROUS GRANULAR EMBANKMENT, SUBGRADE	CU YD	100	100		
	Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1		
	Z0066600	STABILIZED DRIVEWAYS 8"	SQ YD	416	416		
*	Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1		1	
	Z0076600	TRAINEES	HOUR	500			500
	XX005565	REMOVE AND RESET BRICK PAVERS	SQ FT	623	623		
	X0325405	FILL EXISTING STORM SEWERS	CU YD	4	4		
	X2020410	EARTH EXCAVATION (SPECIAL)	CU YD	1980	1980		
	X2130010	EXPLORATION TRENCH, SPECIAL	FOOT	100	100		
	X2520650	SODDING, SALT TOLERANT (SPECIAL)	SQ YD	2200	2200		
	X4400100	PORTLAND CEMENT CONCRETE SURFACE REMOVAL (VARIABLE DEPTH)	SQ YD	47	47		
	X4403300	CONCRETE MEDIAN REMOVAL	SQ FT	40	40		
	X6022712	CATCH BASINS, TYPE A, 4'-DIAMETER, WITH SPECIAL FRAME AND GRATE	EACH	1	1		
	X6050110	FILLING MANHOLES, SPECIAL	EACH	2	2		
	X6061005	CONCRETE CURB, TYPE B (SPECIAL)	FOOT	90	90		

* - INDICATES SPECIALTY ITEMS

SUMMARY OF QUANTITIES

S.I.	CODE NO.	PAY ITEM	UNIT	QUAN	ROADWAY CONSTRUCTION TYPE CODE 0004	SAFETY CONSTRUCTION TYPE CODE 0021	TRAINEES CONSTRUCTION TYPE CODE 0042
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1		
*	X8360215	LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	10		10	
*	X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1		1	
*	X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1		1	

* - INDICATES SPECIALTY ITEMS

GENERAL NOTES

1. ANY REFERENCE TO THE STANDARD SPECIFICATIONS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2012.
2. ITEMS OF WORK LISTED IN THE SUMMARY OF QUANTITIES WHICH ARE NOT SPECIFICALLY INDICATED IN THE PLANS SHALL BE PERFORMED AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. THE TOP OF ALL STRUCTURES SHALL BE FLUSH WITH THE ADJACENT SURFACE OR AT THE INDICATED ELEVATIONS SHOWN ON THE PLANS.
4. FRAME ELEVATIONS ARE GIVEN ONLY TO ASSIST IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF THE STRUCTURE. FRAMES ON ALL NEW STRUCTURES WILL BE ADJUSTED TO THE FINAL ELEVATION OF THE AREA IN WHICH THEY ARE LOCATED AS PART OF THE STRUCTURE COST.
5. WHEN, IN THE CONSTRUCTION OPERATION, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS OR OTHER DRAINAGE STRUCTURES SO THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH DAY BY THE CONTRACTOR AT HIS EXPENSE. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES SHALL BE FREE FROM ALL DIRT AND DEBRIS. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
6. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS OR CATCH BASINS. HE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS & SEWERS AND DISCHARGE SAME. HE SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET, AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY SEWER CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE. THIS WORK SHALL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
7. THE APPROXIMATE LOCATION OF KNOWN PUBLIC UTILITIES ARE SHOWN ON THE PLANS. HOWEVER, THE DEPARTMENT DOES NOT GUARANTEE ITS ACCURACY. PRIOR TO COMMENCING OPERATIONS ON THE PROJECT WHICH MAY IN ANY WAY CREATE THE POSSIBILITY OF INVOLVEMENT WITH EXISTING UTILITIES, THE CONTRACTOR SHALL CONTACT THE FIRM (OR COMMUNITY) INVOLVED. ADJUSTMENT OF ALL PUBLIC UTILITIES WITHIN THE LIMITS OF THIS IMPROVEMENT WILL BE DONE BY THE RESPECTIVE OWNERS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO DELAYS OR INCONVENIENCE CAUSED BY THESE ADJUSTMENTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF UNDERGROUND INSTALLATION BEFORE STARTING CONSTRUCTION OPERATIONS.
8. ALL TRENCHES WITHIN 2 FEET OF PROPOSED PAVEMENT, DRIVEWAYS, AND SIDEWALKS SHALL BE BACKFILLED WITH TRENCH BACKFILL ONLY.
9. THE CONTRACTOR SHALL PROTECT ALL TREES WITHIN AND ADJACENT TO THE CONSTRUCTION SITE DURING THE CLEARING AND SUBSEQUENT CONSTRUCTION OPERATIONS IN ACCORDANCE WITH SECTION 201 OF THE STANDARD SPECIFICATIONS.
10. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED).
11. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON CITY PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
12. ALL STORM SEWERS FOR THIS PROJECT SHALL BE FURNISHED AND INSTALLED WITH RUBBER GASKETS IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR STORM SEWERS AS SPECIFIED.
13. ALL HMA PAVING SHALL FOLLOW DESIGNATED DRIVING LANES AS SHOWN IN STRIPING DETAILS. NO LONGITUDINAL PAVING JOINT OR SEAMS ARE ALLOWED WITHIN THE DRIVING LANES. ALL LONGITUDINAL PAVING JOINTS OR SEAMS WILL BE BETWEEN THE DRIVING LANES.
14. ALL PAVEMENT, CURB AND SIDEWALK REMOVALS SHALL BE MADE BY MEANS OF STRAIGHT SAW CUT JOINT. THE COST FOR SAW CUTTING SHALL BE INCLUDED IN THE COST OF THE CONTRACT.
15. CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES FOR TRAFFIC CONTROL AND PROTECTION IN ACCORDANCE WITH THE IDOT STANDARD SPECIFICATIONS ADOPTED JANUARY 1, 2012, THE LATEST EDITION OF THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AND THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.
16. 10' TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER TO EXISTING CURB AND GUTTER, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEM OF WORK SPECIFIED.
17. ALL STORM SEWERS, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE STATE SPECIFICATIONS FOR REINFORCED CONCRETE CULVERT, STORM DRAIN AND SEWER PIPE A.A.S.H.T.O. DESIGNATION M170 (A.S.T.M. DESIGNATION C76), (CLASS I AND II).
18. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS THROUGHOUT THE RECONSTRUCTION LIMITS AT ALL TIMES. IF DRIVEWAY ACCESS MUST BE RESTRICTED, THE CONTRACTOR SHALL NOTIFY THE RESIDENT IN WRITING 24 HOURS IN ADVANCE.
19. BOTH THE ROBINSON ENGINEERING, LTD. FIELD OFFICE (708-331-6700) AND THE CITY OF BLUE ISLAND PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED TWO (2) WORKING DAYS BEFORE CONSTRUCTION BEGINS.
20. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO COORDINATE WITH THE CANADIAN NATIONAL RAILROAD WHENEVER CONSTRUCTION ACTIVITY IS WITHIN 25 FEET OF THE RAILROAD ROW. THE CONTRACTOR SHALL RETAIN FLAGMEN EMPLOYED AND DESIGNATED BY THE CANADIAN NATIONAL RAILROAD TO MONITOR ON-COMING TRAIN TRAFFIC, AND ADVISE CONTRACTOR PERSONNEL WHEN ACTIVITY ON OR NEAR THE RAILROAD RIGHT-OF-WAY MAY PROCEED. THIS ITEM WILL BE PAID FOR ACCORDING TO ARTICLE 107.12 AND WILL BE REIMBURSED ACCORDING TO ARTICLE 109.05.
21. RESIDENT ENGINEER SHALL CONTACT MS. PATRICE HARRIS, AREA TRAFFIC FIELD TECHNICIAN, AT 708-597-9800 A MINIMUM OF TWO WEEKS PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKINGS.
22. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
23. FOR WORK OUTSIDE THE LIMITS OF BRIDGE APPROACH PAVEMENT, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT, SHOULDERS, CURB, GUTTER, COMBINATION CURB AND GUTTER AND MEDIAN, AND CHAIR SUPPORTS FOR CRC PAVEMENT, SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLAN.
24. THE GENERAL CONTRACTOR IS REQUIRED TO HIRE AN ENVIRONMENTAL FIRM WITH AT LEAST FIVE (5) DOCUMENTED LEAKING UNDERGROUND STORAGE TANK CLEANUPS OR THAT IS PRE-QUALIFIED IN HAZARDOUS WASTE BY THE DEPARTMENT TO REMEDIATE THE SOIL CONTAMINATION AND MONITOR FOR WORKER PROTECTION.

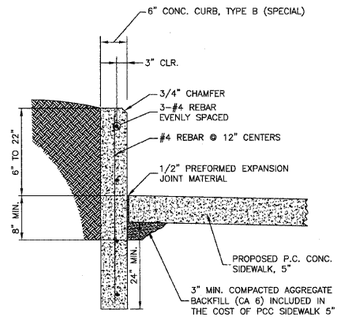
FILE NAME = 09627-QUAN-01 - P03	USER NAME =	DESIGNED - HLG	REVISED -
		CHECKED - HLG	REVISED -
	PLOT SCALE =	DRAWN - LTL	REVISED -
	PLOT DATE = 02-22-12	CHECKED - AG	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 0344 (127TH STREET)
AT SACRAMENTO AVENUE
SUMMARY OF QUANTITIES AND GENERAL NOTES

SCALE: NA | SHEET NO. 5 OF 48 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	5
		CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

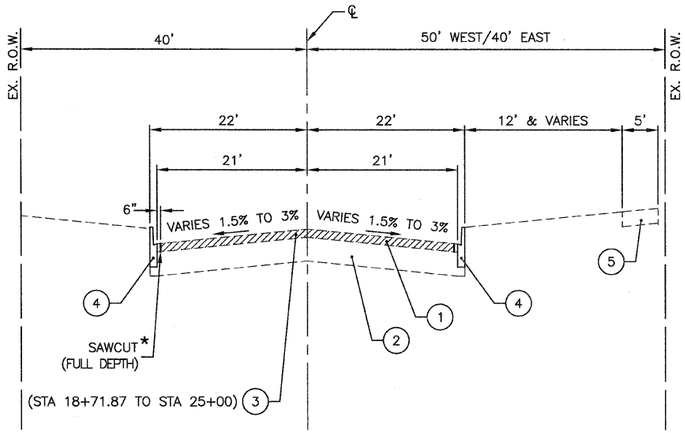


NOTE:

THE COST OF CONSTRUCTING THE ADDITIONAL CURB WIDTH BELOW GRADE AND FURNISHING AND INSTALLING THE #4 REBARS AND PREFORMED EXPANSION JOINT MATERIAL SHALL BE INCLUDED IN THE COST OF THE CONCRETE CURB, TYPE B (SPECIAL), AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. THE P.C. CONC. SIDEWALK WILL BE PAID FOR SEPARATELY.

CONCRETE CURB, TYPE B (SPECIAL) DETAIL

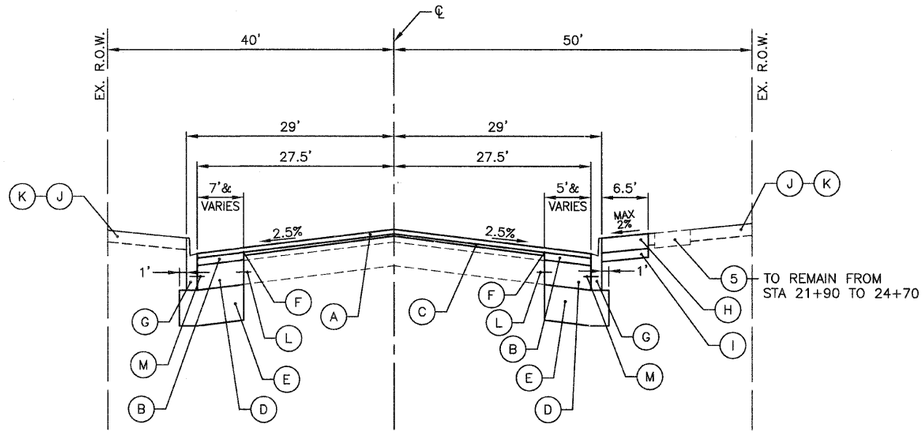
STA 21+30 TO 21+45 (SOUTH SIDE) &
STA 25+30 TO 26+50 (NORTH SIDE)



EXISTING TYPICAL SECTION 127TH STREET

*NOTE:

1) THE EXISTING PAVEMENT IS TO BE SAW-CUT 6" FROM THE EDGE OF PAVEMENT IN WIDENING AREAS.



PROPOSED TYPICAL SECTION 127TH STREET STA 18+83.41 TO STA 25+00

EXISTING LEGEND

1. EXISTING BITUMINOUS SURFACE, ±2 ¾"
2. EXISTING CONCRETE BASE, ±8"
3. HOT-MIX ASPHALT SURFACE REMOVAL, ¾" (STA 18+71.87 TO STA 25+00)
4. EXISTING COMBINATION CURB & GUTTER, TYPE B-6.12 TO BE REMOVED
5. EXISTING CONCRETE SIDEWALK (SIDEWALK TO BE REMOVED FROM STA 19+40 TO 21+90 – SEE PLAN SHEET)

PROPOSED LEGEND

- A. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 ½"
- B. HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 2 ¾"
- B1. HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 2 ½"
- B2. HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 5 ¼" & VARIES
- C. LEVELING BINDER (MACHINE METHOD), N70, ¾" & VARIES
- C1. LEVELING BINDER (MACHINE METHOD), VARIES AS DIRECTED BY ENGINEER
- D. PORTLAND CEMENT CONCRETE BASE COURSE WIDENING, 8"
- E. AGGREGATE SUBGRADE, 12"
- F. STRIP REFLECTIVE CRACK CONTROL TREATMENT SYSTEM B, 24"
- G. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- H. PORTLAND CEMENT CONCRETE SIDEWALK, 5" (SOUTH SIDE – FROM STA 19+40 TO 21+90, 6 ½' WIDE) (NORTH SIDE – FROM STA 25+30 TO END IMPROVEMENT, 5' WIDE)
- I. AGGREGATE BASE, 3" (INCLUDED IN THE COST OF P.C.C. SIDEWALK 5")
- J. TOPSOIL FURNISH AND PLACE, 4"
- K. SODDING, SALT TOLERANT (SPECIAL)
- L. DRILL & GROUT DOWEL BARS (#6, 24" @ 24" C-C)
- M. #6 TIE BARS @ 24" C-C (INCLUDED IN THE COST OF COMBINATION CONCRETE CURB & GUTTER)

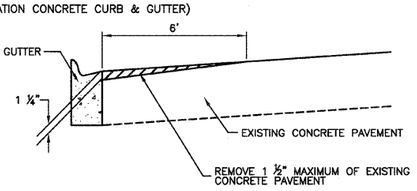
HOT-MIX ASPHALT MIXTURE REQUIREMENTS

THE CONTRACTOR SHALL MILL BEFORE PATCHING.

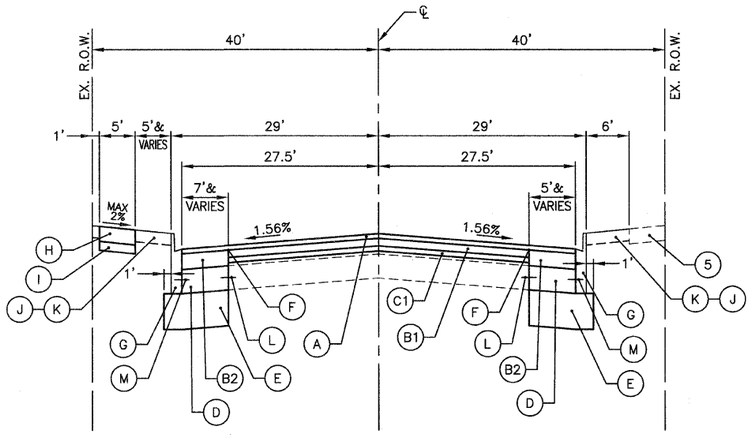
MIXTURE TYPE	AIR VOIDS @ NDES
DRIVEWAYS	
HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50 (IL-9.5 mm), 2-1/2"	4% @ 50 Gyr.
WIDENING, AND RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE, MIX D, N70 (IL-9.5mm), 1-1/2"	4% @ 70 Gyr.
LEVELING BINDER (MACHINE METHOD), N70 (IL-9.5 mm), 3/4"	4% @ 70 Gyr.
HOT-MIX ASPHALT BINDER COURSE, IL-19 mm, N70, 5-1/4" (IN 2 LIFTS)	4% @ 70 Gyr.
PATCHING	
CLASS D PATCHES (HMA BINDER IL-19 mm), 8" (IN 3 LIFTS)	4% @ 70 Gyr.

NOTE:
THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SY/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.



PCC SURFACE REMOVAL, VARIABLE DEPTH (6' EDGE GRIND) DETAIL

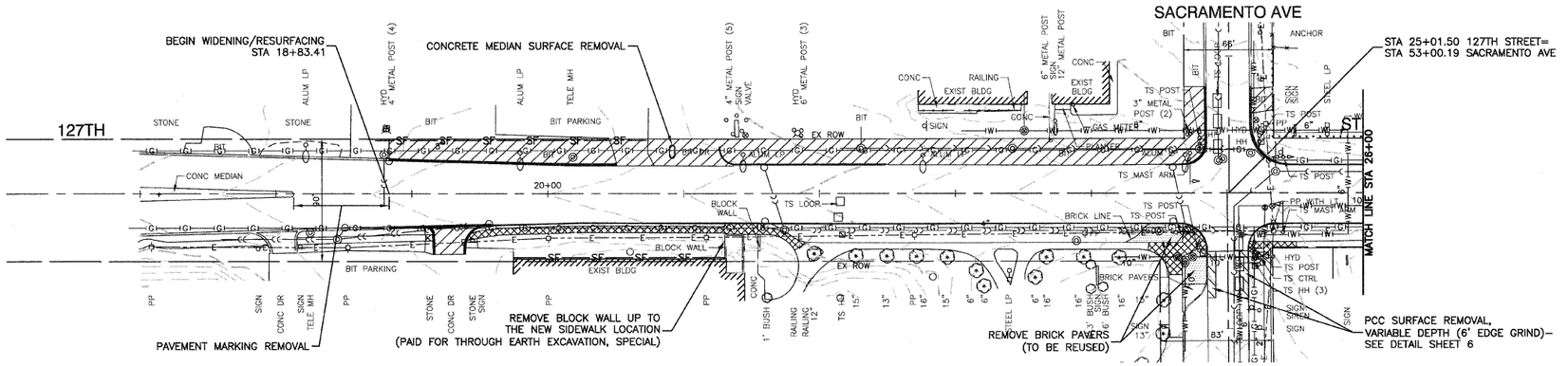


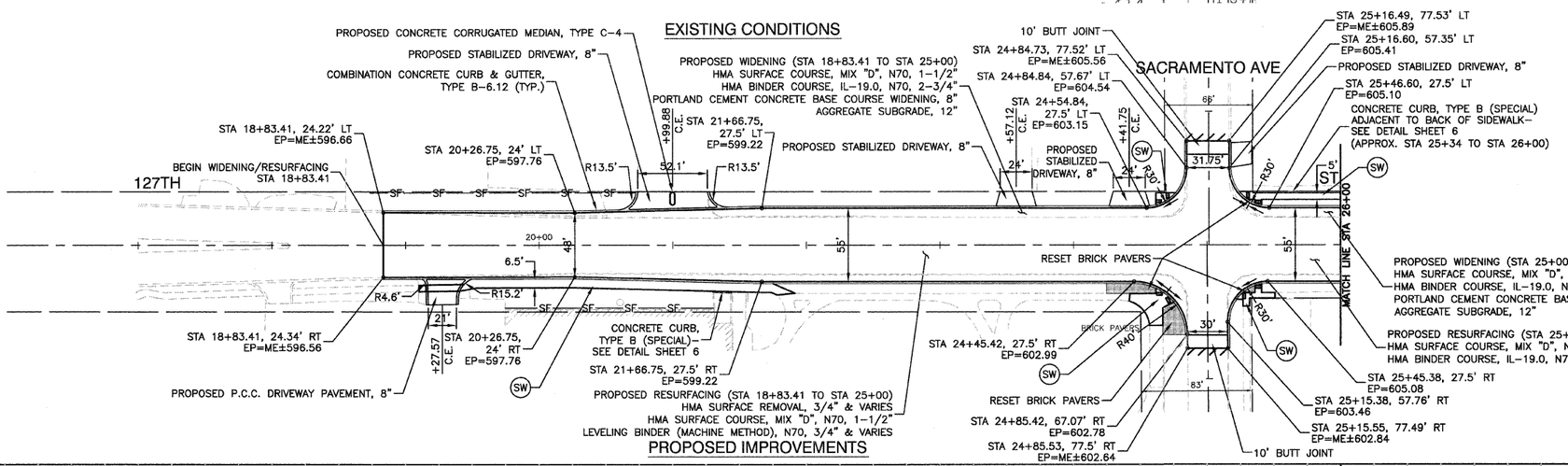
PROPOSED TYPICAL SECTION 127TH STREET STA 25+00 TO STA 31+03.83

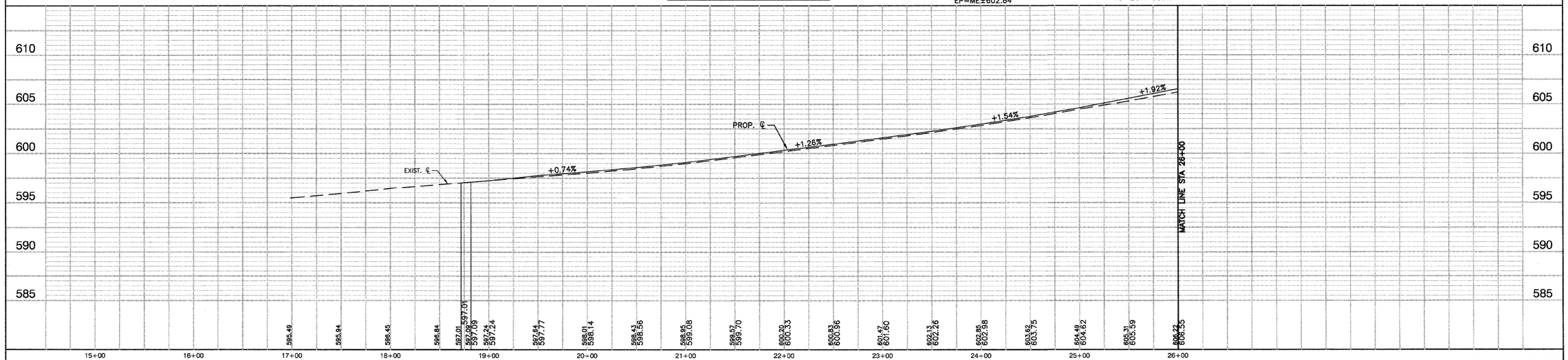
FILE NAME = 09527-TYPX-01 - P01	USER NAME =	DESIGNED – HLG/TAG	REVISED –	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP 0344 (127TH STREET) AT SACRAMENTO AVENUE TYPICAL CROSS SECTIONS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED – HLG	REVISED –			0344	06-00175-00-TL	COOK	48	6
	PLOT SCALE =	DRAWN – LTL	REVISED –					CONTRACT NO. 63613		
	PLOT DATE = 02-22-12	CHECKED – AG	REVISED –		SCALE: SHEET NO. 6 OF 48 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

LAST SAVED BY: RSCHMIDT ON 02/21/12
PLOTTED BY: RICHARD SCHMIDT ON 2/21/12

SECTION 25, TOWNSHIP 37, RANGE 13
SECTION 36, TOWNSHIP 37, RANGE 13







LEGEND

- CONCRETE CURB & GUTTER REMOVAL
- PROPOSED DEPRESSED CURB
- PROPOSED ADA COMPLIANT DETECTABLE WARNING, 4'x2' (RED E.J.I.W. CAST IRON PLATES)
- SIDEWALK REMOVAL
- DRIVEWAY PAVEMENT REMOVAL
- (SW) PROPOSED P.C.C. SIDEWALK, 5" (3" AGGREGATE BASE INCLUDED IN THE COST OF THE P.C.C. SIDEWALK, 5")
- BUTT JOINT
- —SF— PROPOSED SILT FENCE

FILE NAME = 09527-PLPR-01 - PLPR01	USER NAME =	DESIGNED — HLG/TAG	REVISED —	
		CHECKED — HLG	REVISED —	
	PLOT SCALE = 1' = 50'	DRAWN — LTL	REVISED —	
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —	

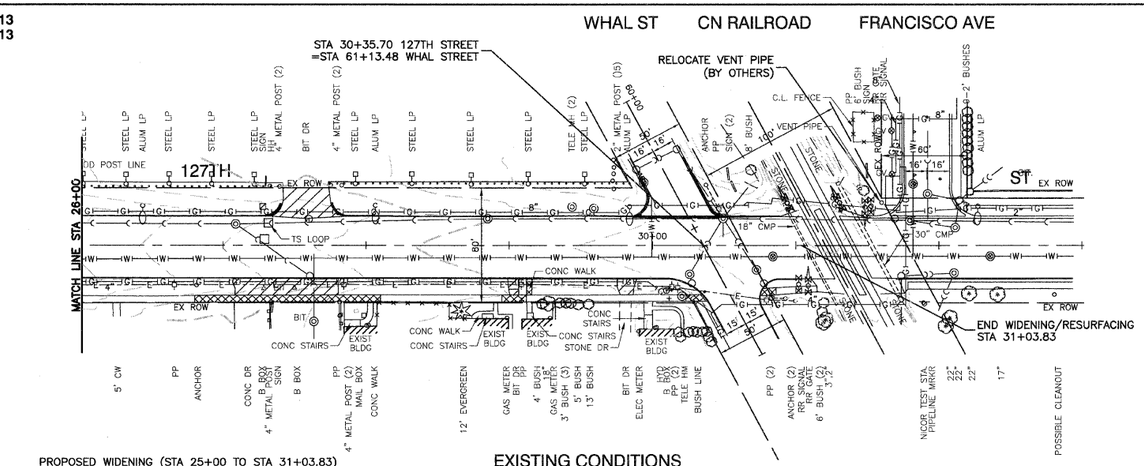
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

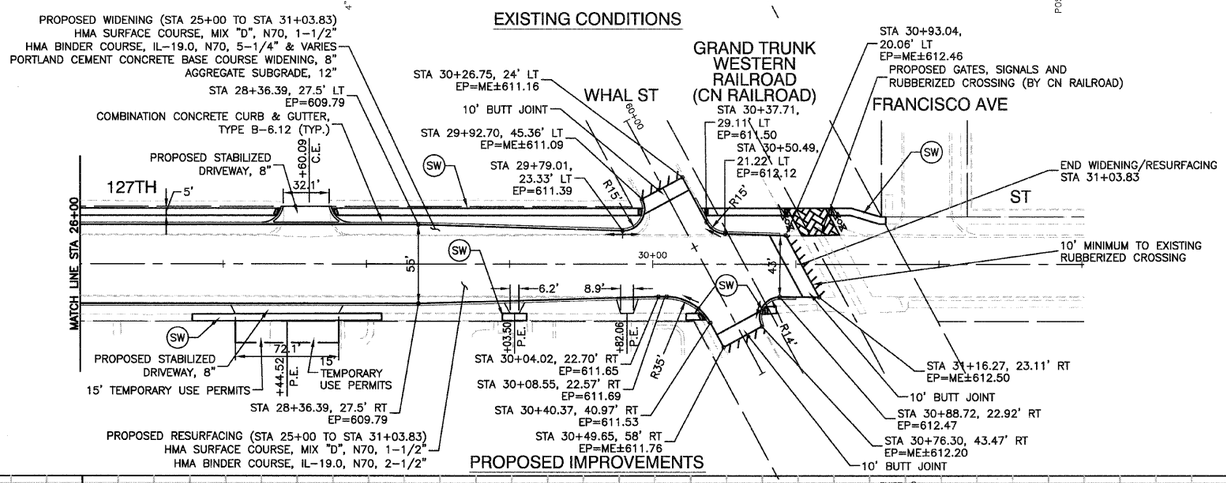
FAP 0344 (127TH STREET)
AT SACRAMENTO AVENUE
PLAN & PROFILE

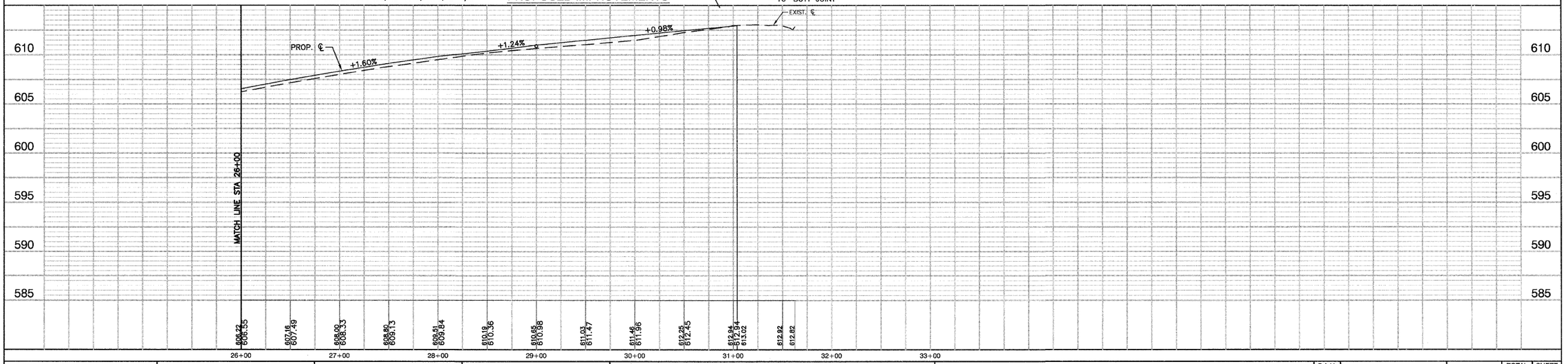
SCALE: H 1"=50' V 1"=5' | SHEET NO. 7 OF 48 SHEETS | STA. 18+71.82 TO STA. 26+00

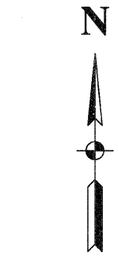
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	7
		CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

SECTION 25, TOWNSHIP 37, RANGE 13
SECTION 36, TOWNSHIP 37, RANGE 13









LEGEND

- CONCRETE CURB & GUTTER REMOVAL
- PROPOSED DEPRESSED CURB
- PROPOSED ADA COMPLIANT DETECTABLE WARNING, 4'x2' (RED E.J.I.W. CAST IRON PLATES)
- SIDEWALK REMOVAL
- DRIVEWAY PAVEMENT REMOVAL
- (SW) PROPOSED P.C.C. SIDEWALK, 5" (3" AGGREGATE BASE INCLUDED IN THE COST OF THE P.C.C. SIDEWALK, 5")
- BUTT JOINT

FILE NAME = 09527-PLPR-01 - PLPR02	USER NAME =	DESIGNED — HLG/TG	REVISED —	
		CHECKED — HLG	REVISED —	
	PLOT SCALE = 1" = 50'	DRAWN — LTL	REVISED —	
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

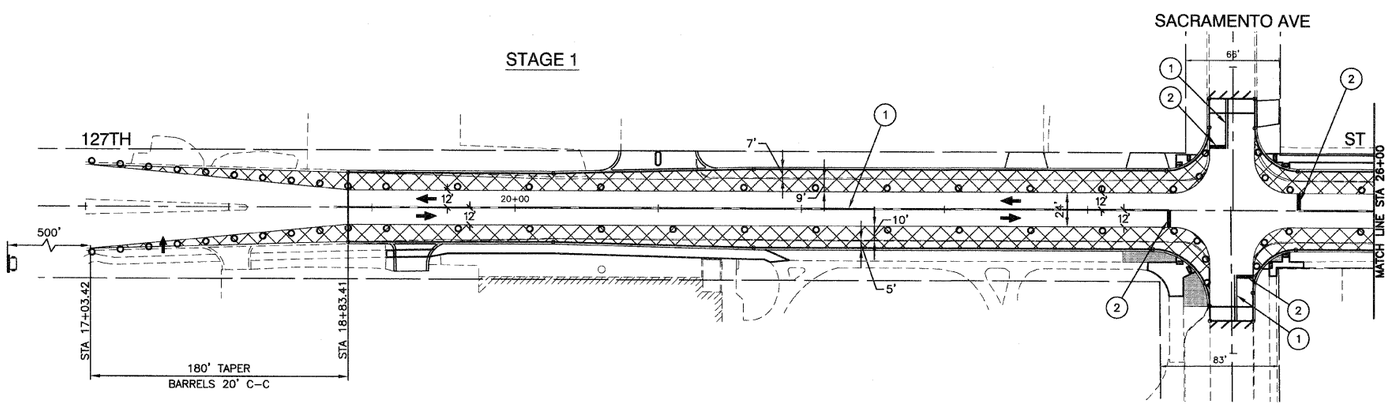
FAP 0344 (127TH STREET)
AT SACRAMENTO AVENUE
PLAN & PROFILE

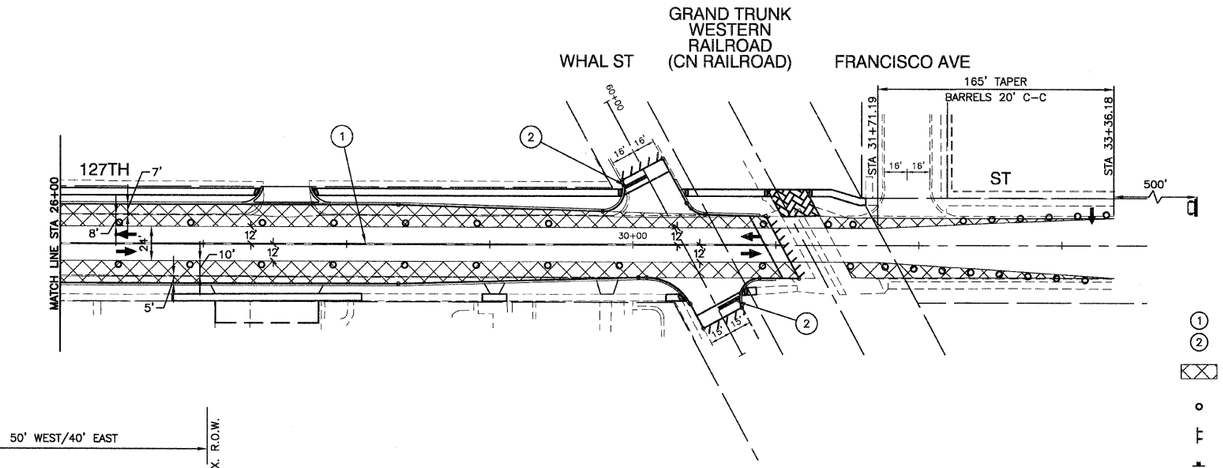
SCALE: H 1"=50' V 1"=5' | SHEET NO. 8 OF 48 SHEETS | STA. 18+81.87 TO STA. 26+00

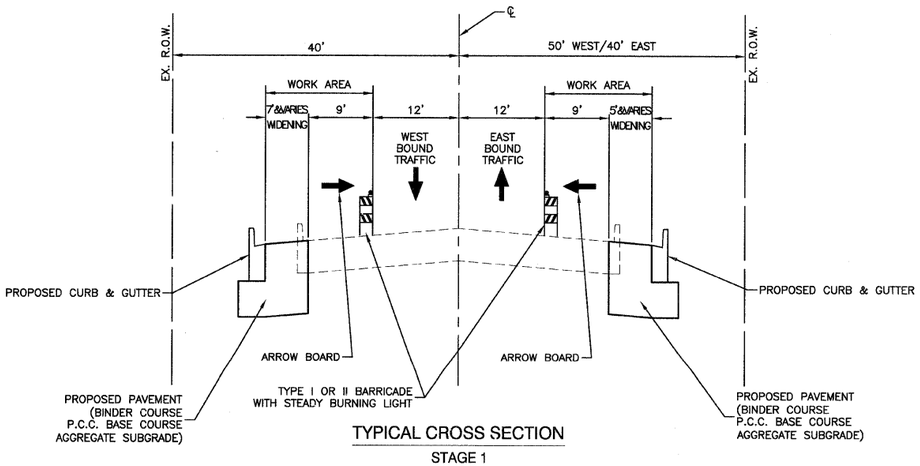
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	8
		CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

MAINTENANCE OF TRAFFIC GENERAL NOTES

1. TRAFFIC CONTROL AND PROTECTION, SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIAL PROVISIONS FOR THIS PROJECT, SECTION 701 OF THE IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", APPLICABLE GUIDELINES IN THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", AND APPLICABLE HIGHWAY STANDARDS FOR TRAFFIC CONTROL.
2. ANY DROP–OFF GREATER THAN THREE INCHES WITHIN EIGHT FEET OF THE PAVEMENT EDGE, SHALL BE PROTECTED BY TYPE I OR II BARRICADES (OR DRUMS) EQUIPPED WITH MONO–DIRECTIONAL STEADY–BURN LIGHTS SPACES AT 50–FOOT CENTERS. BARRICADES THAT MUST BE PLACED IN EXCAVATED AREAS SHALL HAVE LEG EXTENSIONS INSTALLED SUCH THAT THE TOP OF THE BARRICADE IS IN COMPLIANCE WITH THE HEIGHT REQUIREMENTS OF THE IDOT HIGHWAY STANDARDS.
3. ARROW BOARDS WILL BE REQUIRED WHEN IMPLEMENTING ALL LANE CLOSURES.
4. PRIOR TO THE START OF CONSTRUCTION, REQUIRED TRAFFIC CONTROL DEVICES SHALL BE IN PLACE.
5. IDOT TRAFFIC CONTROL STANDARDS LISTED BY REFERENCE ON THE TITLE SHEET SHALL BE USED AS GUIDES IN IMPLEMENTING THE TRAFFIC CONTROL, INCLUDING SIGN LOCATIONS, FOR THIS PROJECT.
6. MONO–DIRECTIONAL FLASHING LIGHTS AND ORANGE WARNING FLAGS SHALL BE MOUNTED ON ALL "ROAD CONSTRUCTION AHEAD" SIGNS.
7. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES DURING CONSTRUCTION OPERATIONS.
8. DEPICTED TRAFFIC CONTROL IS A MINIMUM REQUIREMENT, AND OTHER WORK OR SIGNING MAY BE REQUIRED AS PER THE INSTRUCTION OF THE ENGINEER IN CHARGE. THE COST INCURRED TO COMPLY WILL BE INCLUDED IN THE PAY ITEMS "TRAFFIC CONTROL AND PROTECTION, SPECIAL".
9. THE CITY OF BLUE ISLAND, AND THE ENGINEER SHALL BE NOTIFIED IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE CONSTRUCTION STAGING PLAN IS TO BE IN EFFECT. THE CONTRACTOR WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.
10. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH THE NAMES AND PHONE NUMBERS OF HIS REPRESENTATIVES ON THE CONSTRUCTION SITE AND HIS REPRESENTATIVE RESPONSIBLE FOR THE TEMPORARY CONSTRUCTION SIGNING, PRIOR TO THE START OF WORK.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIELD LOCATION OF ALL CONSTRUCTION SIGNINC. THE CONTRACTOR MAY REQUEST THE ENGINEER TO FIELD VERIFY THE POSITIONS OF ANY SINGS.
12. ALL EXISTING SIGNING THAT IS NOT APPLICABLE WHILE THE CONSTRUCTION STAGING PLAN IS IN EFFECT SHALL BE COMPLETELY COVERED, OR REMOVED, BY THE CONTRACTOR IN A MANNER MEETING THE APPROVAL OF THE ENGINEER.
13. ADVANCED CLOSURE SIGNS (CHANGEABLE MESSAGE SIGNS) SHALL BE ERECTED AT LEAST 10 DAYS PRIOR TO ANY ROAD CLOSURES.
14. AT LEAST ONE LANE OF TRAFFIC SHALL REMAIN OPEN ON BOTH 127TH ST. AND SACRAMENTO AVE. AT ALL TIMES. AT THE END OF THE DAY BOTH ROADS MUST BE OPEN TO TRAFFIC.







TYPICAL CROSS SECTION
STAGE 1

SUGGESTED CONSTRUCTION STAGING NOTES

PRE-STAGE

- PRE-STAGE WORK TO BE DONE UNDER FLAGGER AND APPLICABLE IDOT TRAFFIC CONTROL STANDARDS FOR DAILY LANE CLOSURES.
- WORK:
  - MILL + 3/4 " IN AREAS SHOWN ON TYPICAL CROSS SECTION.
  - INSTALL STORM SEWER.
  - PAVEMENT PATCHING.
  - TEMPORARY TRAFFIC SIGNALS.

STAGE 1 (SEE PLAN VIEW AND TYPICAL CROSS SECTION)

- CLOSE THE OUTSIDE EXISTING LANES .
- WORK FOR WIDENING:
  - EXISTING CURB AND GUTTER REMOVAL.
  - EXCAVATION AND FILL.
  - AGGREGATE SUBGRADE.
  - P.C.C. BASE COURSE WIDENING.
  - BINDER COURSE.
  - CURB AND GUTTER.
  - TRAFFIC SIGNALS.
  - ROADWAY LIGHTING.

STAGE 2

- STAGE 2 WORK TO BE DONE UNDER FLAGGER AND APPLICABLE IDOT TRAFFIC CONTROL STANDARDS FOR DAILY LANE CLOSURES.
- WORK:
  - LEVELING BINDER.
  - FINAL SURFACE COURSE.
  - PAVEMENT MARKINGS.
  - LANDSCAPING.

LEGEND

- (1) 4" DOUBLE YELLOW CENTERLINE (11" C–C) – TEMPORARY PAVEMENT MARKINGS
- (2) 24" WHITE STOP BAR – TEMPORARY PAVEMENT MARKINGS
- WORK AREA
- TYPE I OR II BARRICADE OR DRUM WITH STEADY BURNING LIGHT (50' C–C) UNLESS OTHERWISE INDICATED
- TYPE III BARRICADE WITH STEADY BURNING LIGHT
- SIGN
- TRAFFIC FLOW
- ARROW BOARD
- CHANGEABLE MESSAGE SIGN

NOTES:

1. PRE–STAGE TO BE DONE UNDER DAILY LANE CLOSURES PER APPLICABLE IDOT STANDARDS.
2. WIDENING SHALL NOT BE LEFT EXCAVATED OVERNIGHT.
3. ADVANCE SIGNING FOR APPROACHING CONSTRUCTION TO BE IN ACCORDANCE WITH HIGHWAY STANDARDS 701606.

FILE NAME = 09527-TCON-01 - P01	USER NAME =	DESIGNED – HLG	REVISED –
		CHECKED – HLG	REVISED –
	PLOT SCALE =	DRAWN – LTL	REVISED –
	PLOT DATE = 02-22-12	CHECKED – AG	REVISED –

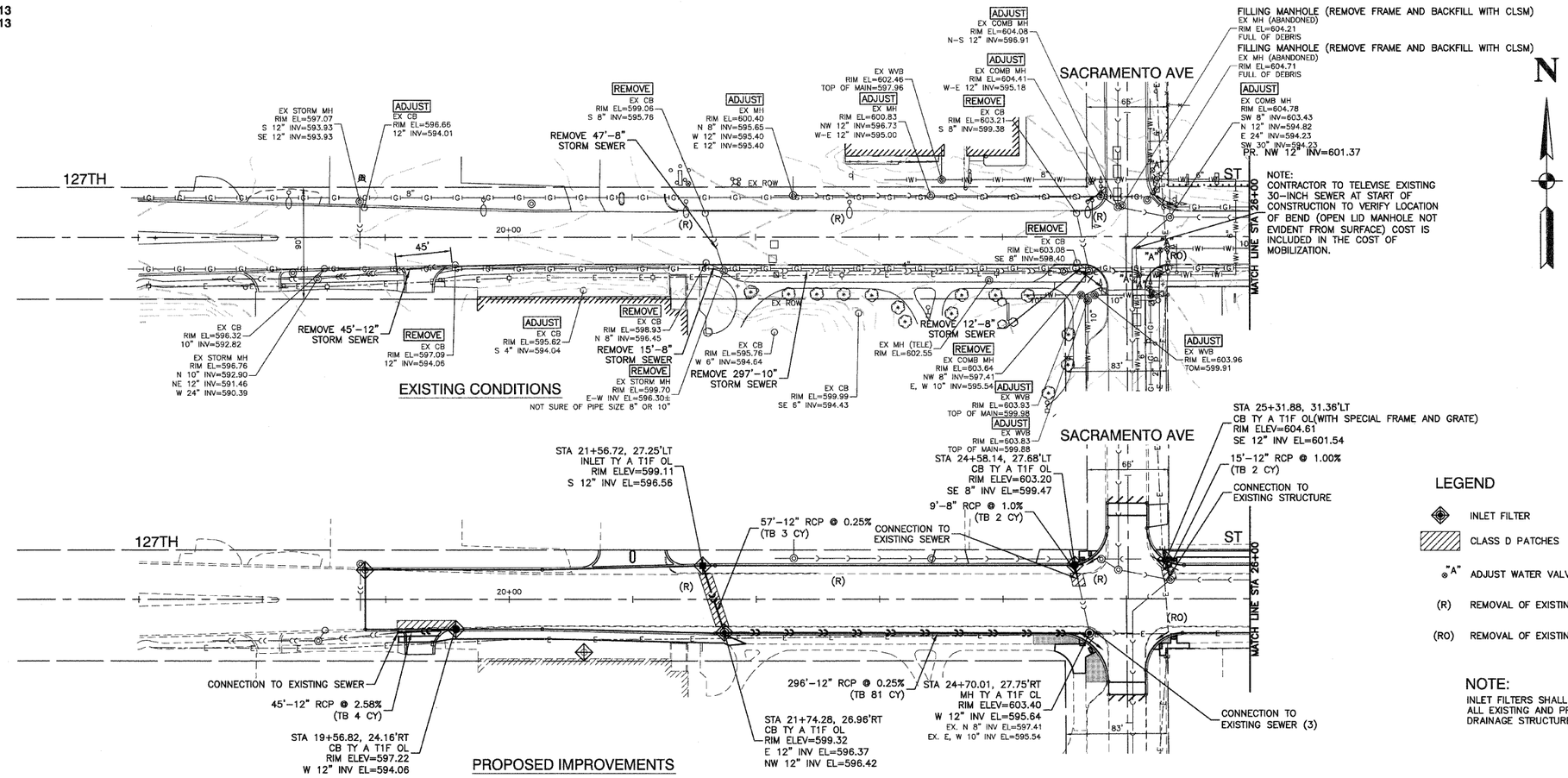
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 0344 (127TH STREET)
AT SACRAMENTO AVENUE
SUGGESTED CONSTRUCTION STAGING

SCALE: 1" = 50' | SHEET NO. 9 OF 48 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	9
		CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

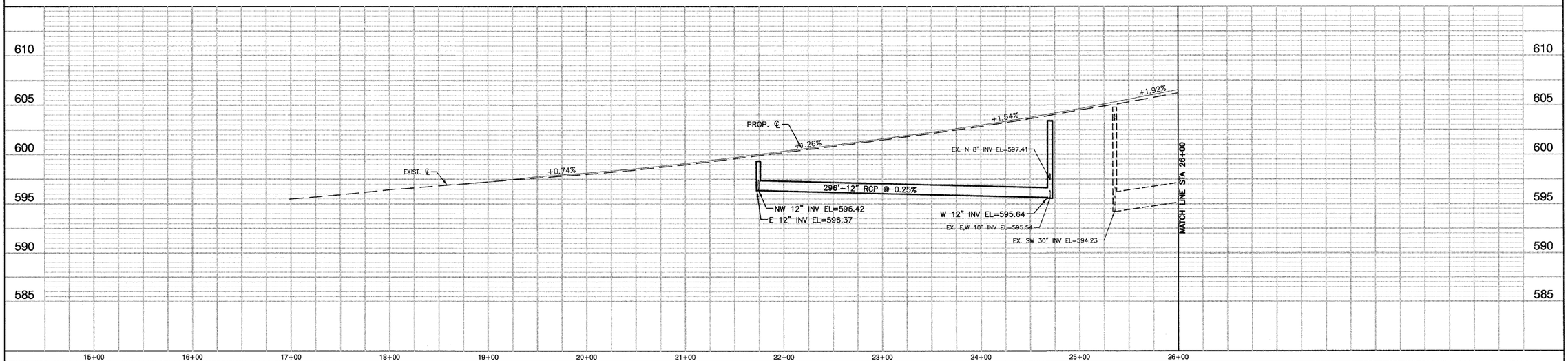
SECTION 25, TOWNSHIP 37, RANGE 13
SECTION 36, TOWNSHIP 37, RANGE 13



LEGEND

- INLET FILTER
- CLASS D PATCHES
- "A" ADJUST WATER VALVE BOX
- (R) REMOVAL OF EXISTING STREET LIGHT
- (RO) REMOVAL OF EXISTING STREET LIGHT (BY OTHERS)

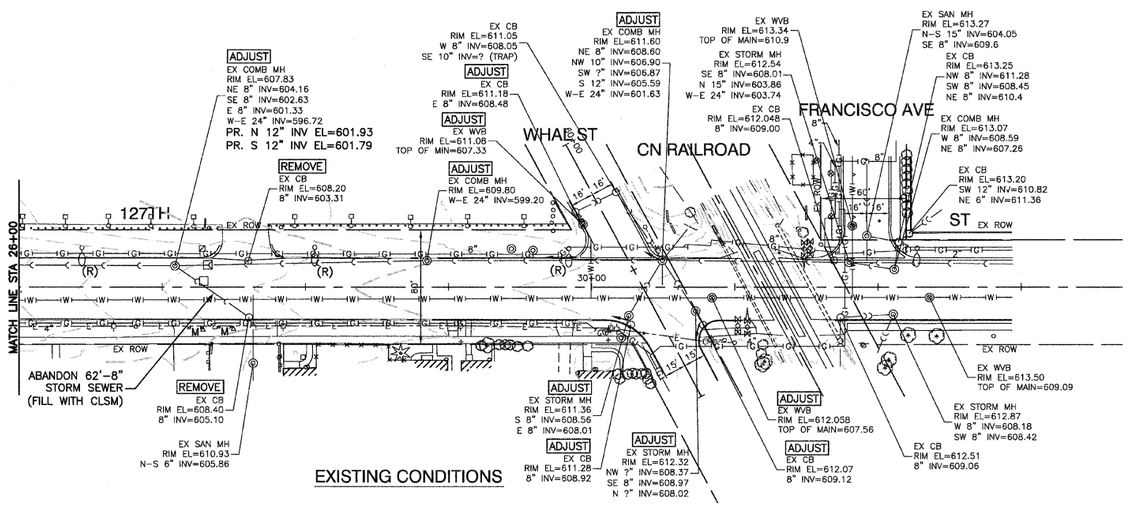
NOTE:
INLET FILTERS SHALL BE PROVIDED ON ALL EXISTING AND PROPOSED OPEN LID DRAINAGE STRUCTURES.

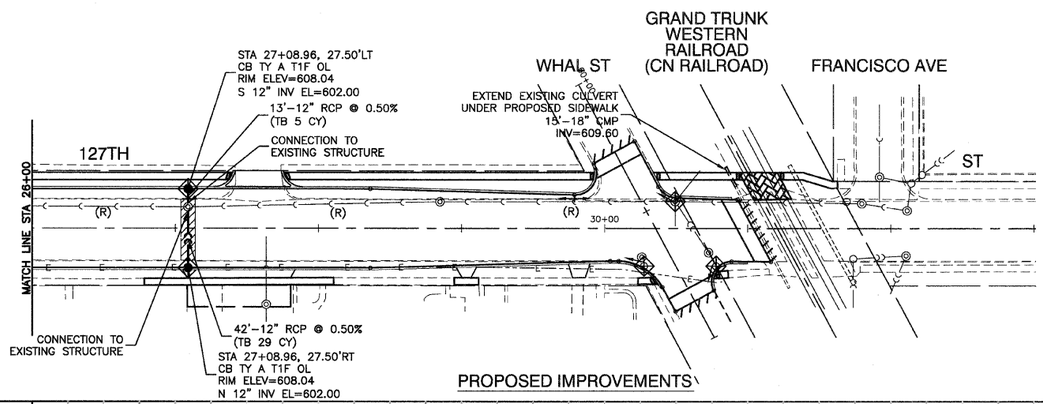


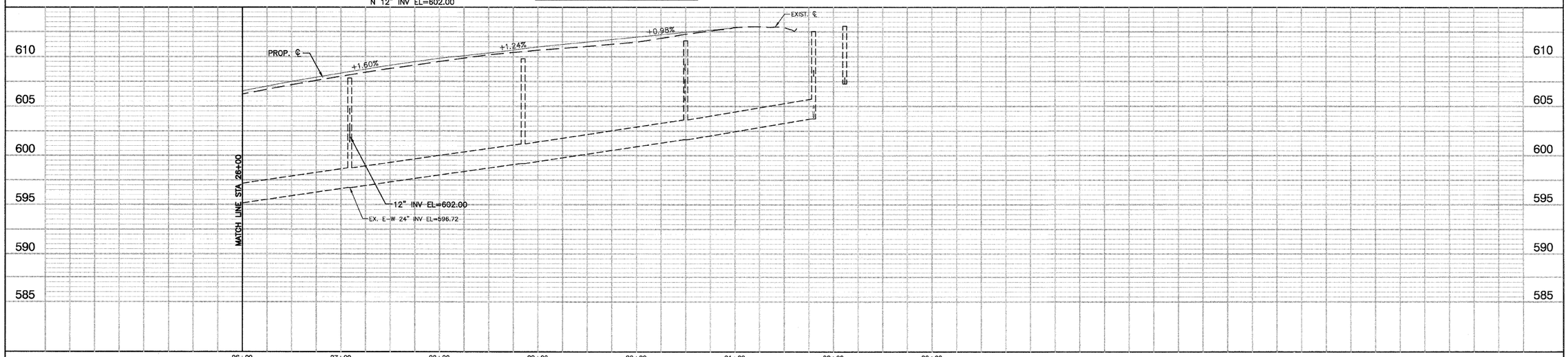
FILE NAME = 09527-STRM-01 - PLPR01	USER NAME =	DESIGNED — HLG/TAG	REVISED —	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP 0344 (127TH STREET) AT SACRAMENTO AVENUE DRAINAGE & UTILITIES
		CHECKED — HLG	REVISED —		
	PLOT SCALE =	DRAWN — AG/LTL	REVISED —		
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —		SCALE: H 1" = 50' V 1"=5 | SHEET NO. 10 OF 48 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	10
		CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

SECTION 25, TOWNSHIP 37, RANGE 13
SECTION 36, TOWNSHIP 37, RANGE 13







N

LEGEND

- INLET FILTER
- CLASS D PATCHES
- ⊗"A" ADJUST WATER VALVE BOX
- (R) REMOVAL OF EXISTING STREET LIGHT
- (RO) REMOVAL OF EXISTING STREET LIGHT (BY OTHERS)

NOTE:
INLET FILTERS SHALL BE PROVIDED ON ALL EXISTING AND PROPOSED OPEN LID DRAINAGE STRUCTURES.

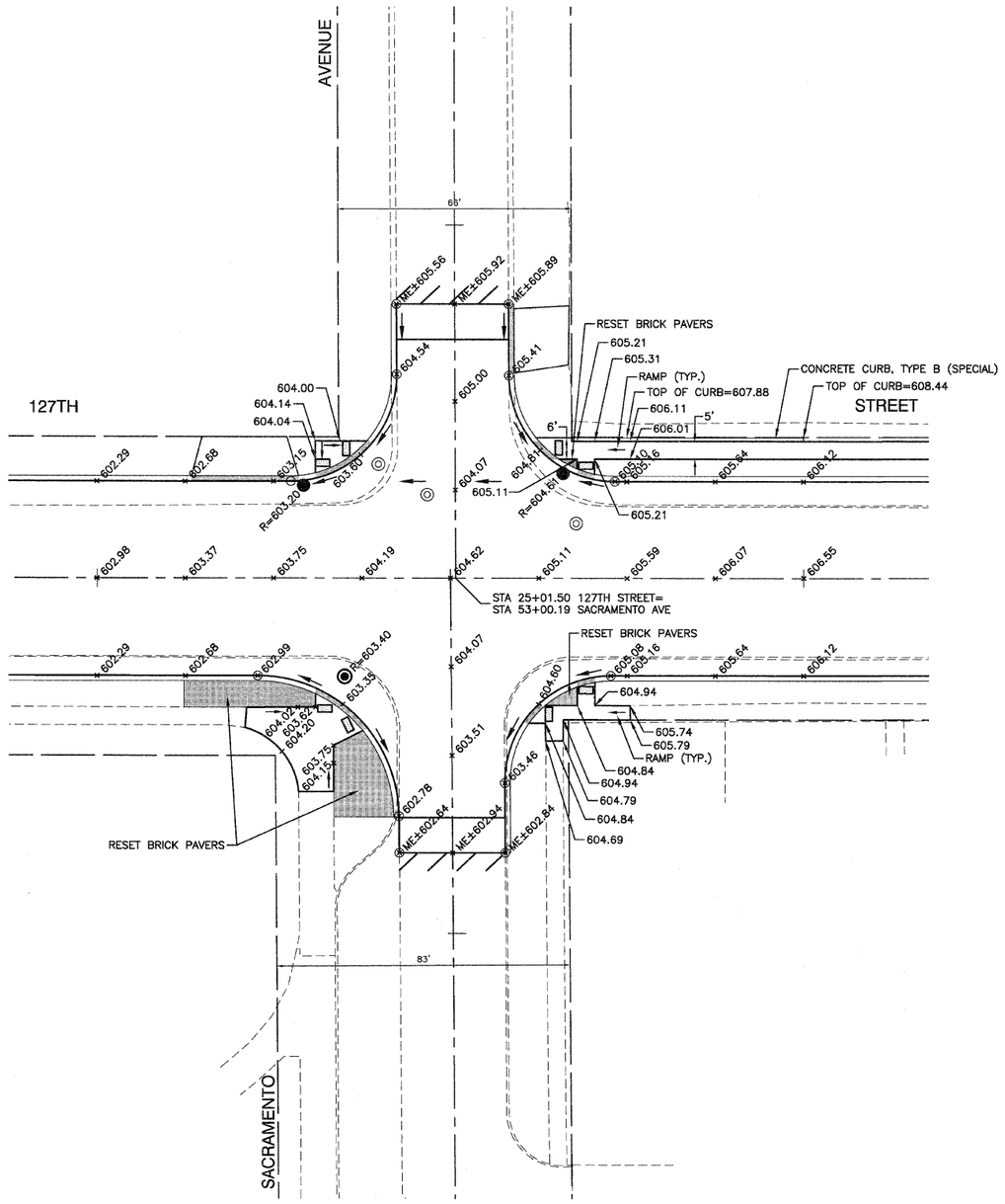
FILE NAME = 09527-STRM-01 - PLPR02	USER NAME =	DESIGNED — HLG/TAG	REVISED —
		CHECKED — HLG	REVISED —
	PLOT SCALE =	DRAWN — AG/LTL	REVISED —
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 0344 (127TH STREET)
AT SACRAMENTO AVENUE
DRAINAGE & UTILITIES

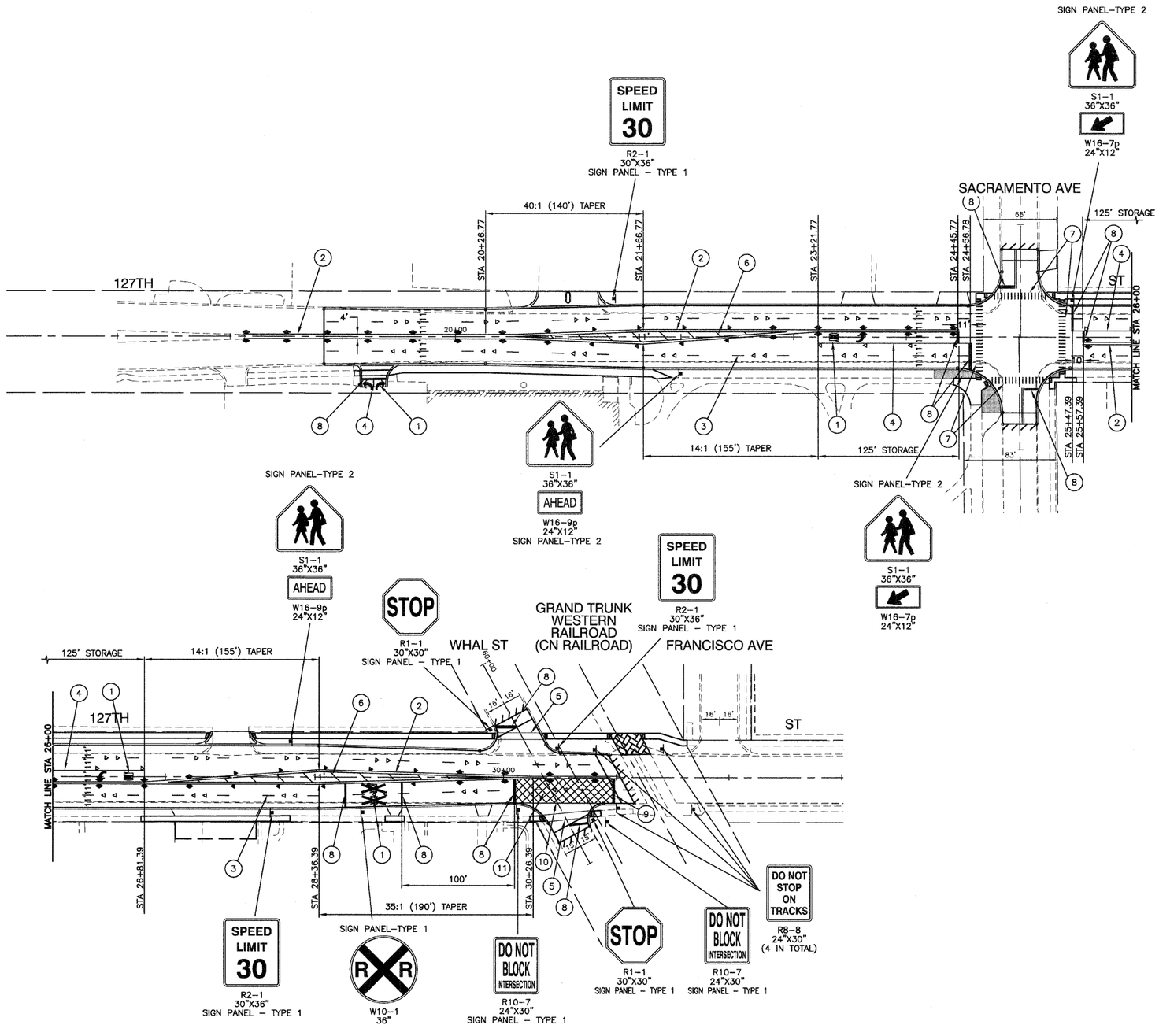
SCALE: H 1"=50' V=1"=5' | SHEET NO. 11 OF 48 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	11
		CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		



FILE NAME = 09527-PLAN-01 - P01	USER NAME =	DESIGNED — HLG/TAG	REVISED —	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP 0344 (127TH STREET) AT SACRAMENTO AVENUE INTERSECTION GRADING PLAN			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED — HLG	REVISED —					0344	06-00175-00-TL	COOK	48	12
	PLOT SCALE =	DRAWN — LTL	REVISED —							CONTRACT NO. 63613		
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —		SCALE: 1" = 20'	SHEET NO. 12 OF 48 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

LAST SAVED BY: HLGOMEZ ON 2/21/12
PLOTTED BY: RICHARD GRADUK ON 2/23/12



N

PAVEMENT MARKING LEGEND

1. WHITE LETTERS & SYMBOLS
2. DOUBLE 4" YELLOW CENTERLINE (11" C/C)
3. 4" WHITE SKIP – DASH LINE (10' LINE – 30' SPACE)
4. 6" WHITE LANE LINE
5. 6" DOUBLE WHITE CROSSWALK (6' APART)
6. 12" YELLOW LINE (45° ANGLE, 20' C/C)
7. 12" WHITE LINE (CROSSWALK, 2' APART, 6' WIDE)
8. 24" WHITE STOP BAR
9. 12" WHITE STOP BAR
10. 8" WHITE EDGE LINE
11. 6" WHITE CROSS HATCH (8' CENTERS)

◁ ONE–WAY CRYSTAL MARKER 80' C/C UNLESS OTHERWISE INDICATED

◀ ONE–WAY AMBER MARKER 40' C/C UNLESS OTHERWISE INDICATED

◆ TWO–WAY AMBER MARKER 40' C/C UNLESS OTHERWISE INDICATED

TRAFFIC SIGN

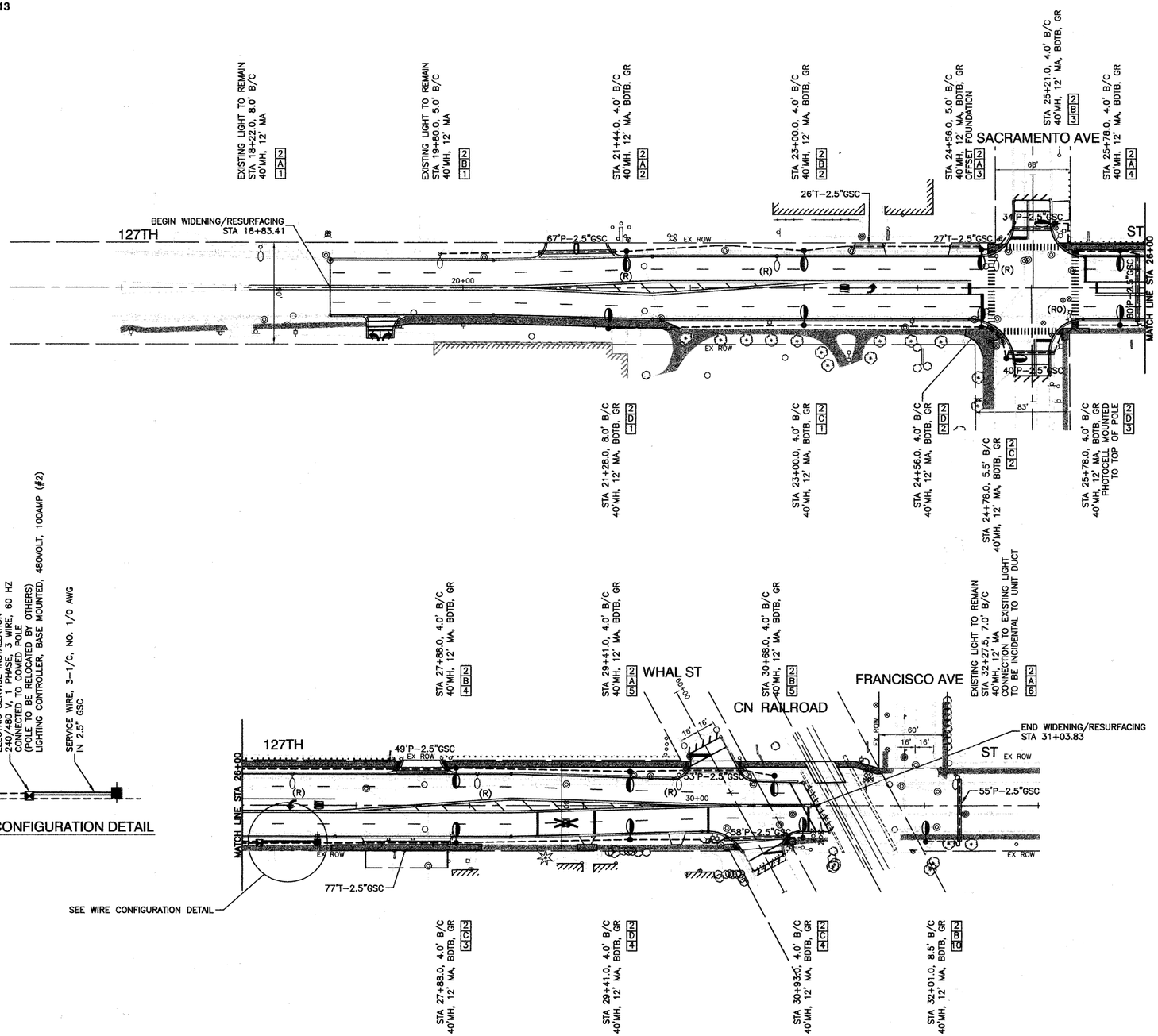
NOTE:

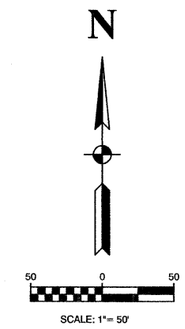
1. ALL MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED.
2. SEE IDOT STANDARD TC–13 FOR PAVEMENT MARKING DETAILS.
3. ALL SIGN PANELS WILL BE INSTALLED WITH TELESCOPING STEEL SIGN SUPPORTS.

FILE NAME = 09527-PVMK-01 - P01	USER NAME =	DESIGNED – HLG	REVISED –	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP 0344 (127TH STREET) AT SACRAMENTO AVENUE PAVEMENT MARKING AND SIGNING
		CHECKED – HLG	REVISED –		
	PLOT SCALE =	DRAWN – LTL	REVISED –		
	PLOT DATE = 02-22-12	CHECKED – AG	REVISED –		SCALE: 1" = 50' | SHEET NO. 13 OF 48 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	13
		CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

SECTION 25, TOWNSHIP 37, RANGE 13
SECTION 36, TOWNSHIP 37, RANGE 13





NOTES:

1. ALL SPLICES SHALL BE MADE IN THE POLE HANDHOLE. NO UNDERGROUND SPLICES WILL BE ALLOWED.
2. EQUIPMENT GROUND SHALL BE CONTINUOUS FROM THE LIGHTING CONTROLLER TO THE LAST POLE OF EACH CIRCUIT, AND SHALL HAVE RESISTANCE CONFORMING TO IDOT SPECIFICATIONS.

LEGEND:

- EXISTING STREET LIGHT–400W HPS
- PROPOSED STREET LIGHT–250W HPS
- PROPOSED CONTROLLER
- COMED POWER POLE FOR SERVICE CONNECTION
- P — UNDERGROUND CONDUIT, PUSHED, GALVANIZED STEEL
- T — UNDERGROUND CONDUIT, TRENCHED, GALVANIZED STEEL
- UNIT DUCT, 600V, 3–1C NO.4, 1/C NO.6 GROUND, (XLP–TYPE USE),1–1/4" DIA., POLYETHYLENE
- GR — GROUND ROD, 5/8" DIA. x 10'
- (R) — REMOVAL OF EXISTING STREET LIGHT (SALVAGE)
- (RO) — REMOVAL OF EXISTING STREET LIGHT (BY OTHERS)
- MH — MOUNTING HEIGHT
- MA — MAST ARM
- B/C — BACK OF CURB
- B/EP — BEHIND EDGE OF PAVEMENT
- BDTB — BREAKAWAY DEVICE, TRANSFORMER BASE
- PEDESTRIAN FACILITIES

POLE IDENTIFICATION

1 / C / 1
- CABINET NUMBER
- CIRCUIT
- POLE POSITION

PREPARED BY OR UNDER THE DIRECT SUPERVISION OF:

David W. Shilling
3/21/2012

DAVID W. SHILLING — 62-62411 REGISTERED PROFESSIONAL ENGINEER — STATE OF ILLINOIS

LICENSE EXPIRES: 11/30/13

Robinson ENGINEERING

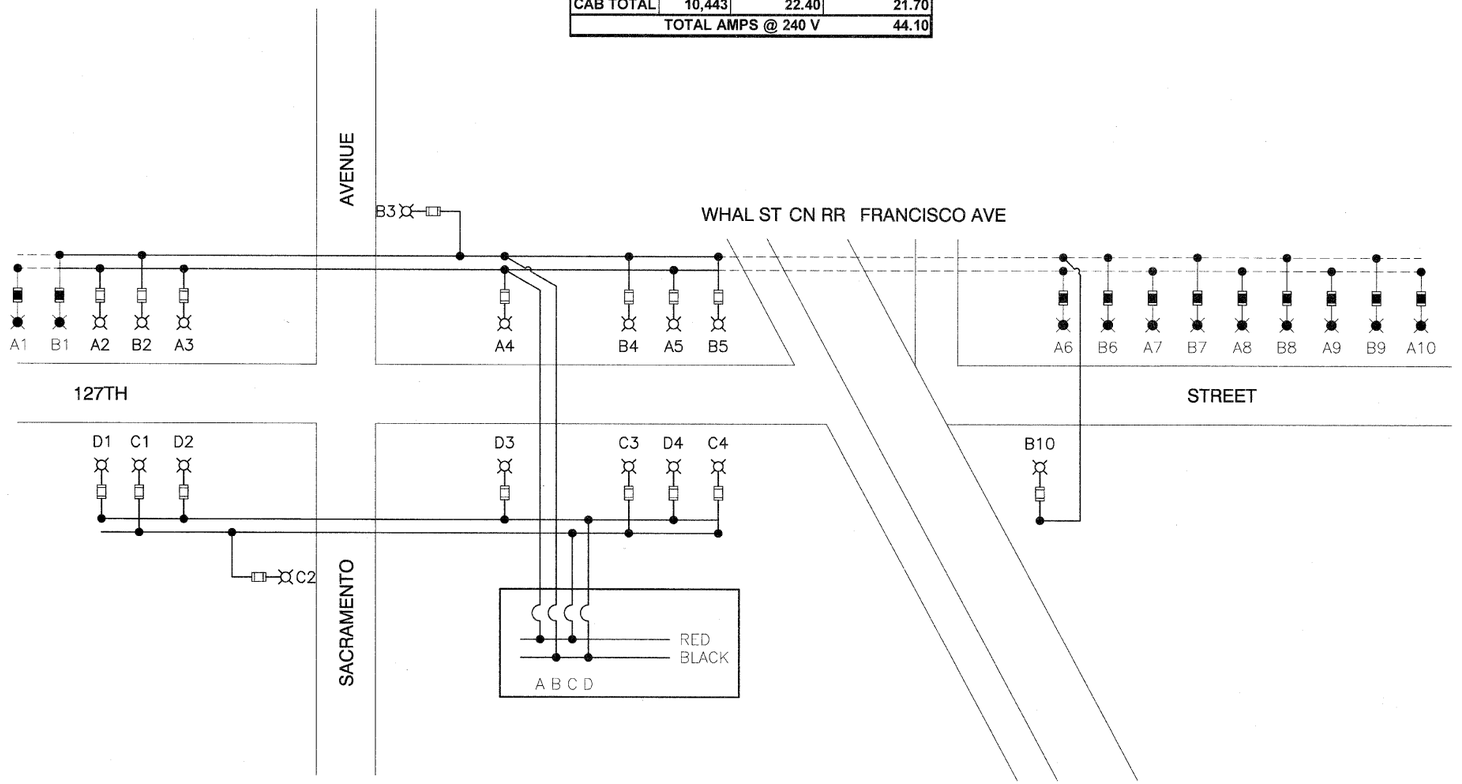
FILE NAME = 09527-LGHT-01 - P01	USER NAME =	DESIGNED — DWS	REVISED —	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP 0344 (127TH STREET) AT SACRAMENTO AVENUE STREET LIGHTING PLAN			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED — PAP	REVISED —					0344	06-00175-00-TL	COOK	48	14
	PLOT SCALE = 1" = 50'	DRAWN — LTL	REVISED —							CONTRACT NO. 63613		
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —		SCALE: 1" = 50'	SHEET NO. 14 OF 48 SHEETS	STA. 18+83.41 TO STA. 31+03.83	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

LOAD TABULATIONS CONTROLLER #2

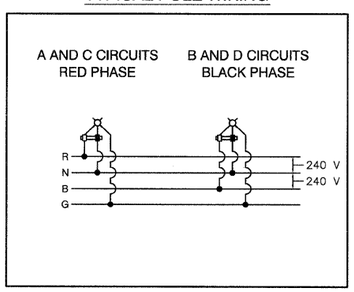
CIRCUIT	WATTS	AMPS @ 240V	
		RED PHASE	BLACK PHASE
A	4,088	17.20	
B	3,915		16.50
C	1,220	5.20	
D	1,220		5.20
CAB TOTAL	**10,443**	**22.40**	**21.70**
TOTAL AMPS @ 240 V			**44.10**

INDIVIDUAL LUMINAIRE LOAD DATA

RATED WATTS	INPUT VOLTS	MAX INPUT AMPS	INPUT WATTS
250	240	1.3	305
400	240	2.0	478



TYPICAL POLE WIRING



LEGEND

	LUMINAIRE, 250W HPS, 240V
	LUMINAIRE, 400W HPS, 240V (EXISTING)
	FUSE, 3.5 AMP
	FUSE, 6.0 AMP (EXISTING)
A1	LUMINAIRE CIRCUIT
	CIRCUIT BREAKER
	CONNECTION
	EXISTING CIRCUIT

Robinson ENGINEERING

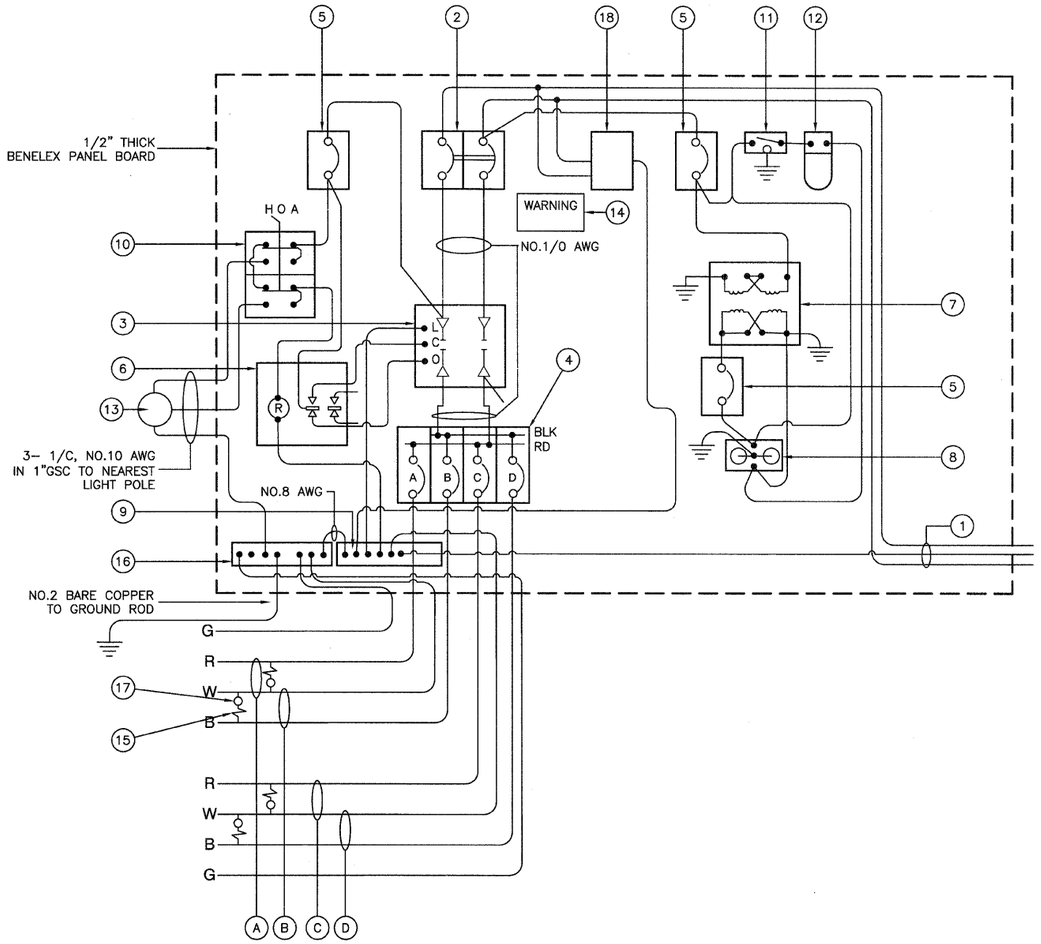
FILE NAME = 09627-LGHT-DTLS-01 - P01	USER NAME =	DESIGNED — DWS	REVISED —
		CHECKED — PAP	REVISED —
	PLOT SCALE = 1=1'	DRAWN — LTL	REVISED —
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 0344 (127TH STREET)
AT SACRAMENTO AVENUE
SINGLE LINE WIRING DIAGRAM

SCALE: NA | SHEET NO. 15 OF 48 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	15
		CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		



CONTROLLER WIRING DIAGRAM
CONTROLLER #2

CONTROLLER WIRING DIAGRAM LEGEND

(1) 3-1/C, NO. 1/0 600V SERVICE WIRE IN 2" DIA GALVANIZED STEEL CONDUIT FOR 240/480 VOLT, 1ø, 3 WIRE, 60HZ. SERVICE.

(2) (1) 100 AMP MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT, 100 AMP BASE, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA – 22 KA AT 480 V.

(3) (1) 100 AMP CONTACTOR SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, 600 VOLT

(4) (4) 30 AMP CIRCUIT BREAKER, 1 POLE, 240 VOLT, 100 AMP BASE, NON-INTER-CHANGEABLE TRIP RATING NEMA – 22 KA AT 240 VOLTS.

(5) (3) 20 AMP CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 240 VOLT, 100 AMP BASE, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA 22 KA AT 240 V.

(6) (1) 20 AMP, 1 POLE DOUBLE THROW, 240 VOLT RELAY

(7) (1) 1.5 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240 X 480/120 X 240 VOLT, 60HZ.

(8) (1) 20 AMP, 120 VOLT DUPLEX GFCI RECEPTACLE MOUNTED IN BOX.

(9) NEUTRAL BUS BAR, 1/4"x1"x12" LONG MOUNTED ON PANEL WITH LUGS.

(10) 3 POSITION SELECTOR SWITCH, 240V, 30 AMP.

(11) SWITCH FOR LIGHTING FIXTURE MOUNTED IN BOX, 20 AMP.

(12) WEATHER-PROOF INCANDESCENT LIGHTING FIXTURE WITH 60 WATT, 120 V LAMP.

(13) PHOTOCELL MOUNTED TO TOP OF NEAREST LIGHT POLE, 240 V, 1000 VA.

(14) WARNING PLATE TO READ: WARNING, MAINTENANCE CIRCUIT IS LIVE WHEN MAIN BREAKER IS SWITCHED OFF.

(15) IN-LINE FUSEHOLDER WITH FUSE AS NOTED IN FUSE TABLE

(16) GROUND BUS BAR 1/4"x1"x12" MINIMUM LENGTH MOUNTED ON PANEL WITH LUGS.

(17) LUMINAIRE

(A) CIRCUIT (RED)

(B) CIRCUIT (BLACK)

(C) CIRCUIT (RED)

(D) CIRCUIT (BLACK)

GENERAL NOTES FOR CONTROL CABINET

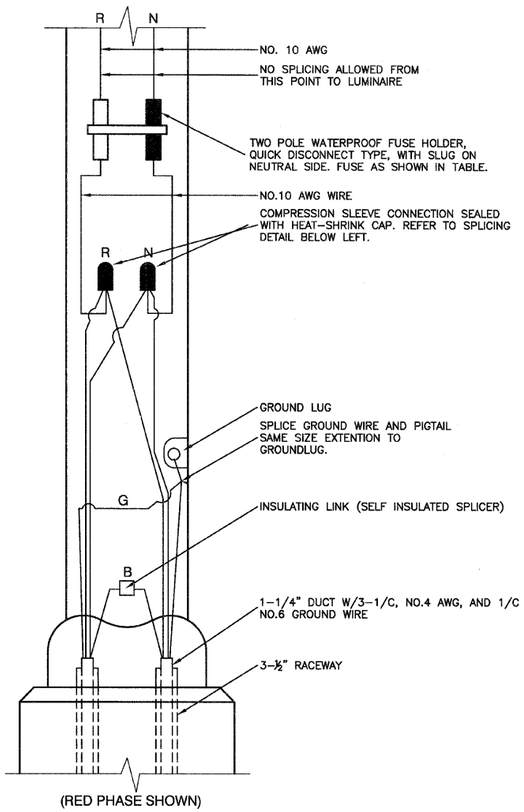
1. ENTIRE CONTROL CABINET SHALL BE GROUNDED.
2. ALL WIRING SHALL BE TAGGED WITH SELF-STICKING WIRE MARKERS.
3. GROUND BUS TO BE COLOR CODED GREEN, NEUTRAL BUS WHITE, AND BONDED TO CABINET ENCLOSURE, BY LISTED PRESSURE CONNECTORS OR LISTED CLAMPS.
4. ALL INTERNAL CONTROLLER WIRING TO BE NO.12 AWG UNLESS OTHERWISE SPECIFIED.
5. CABINET WIRING INSULATION TO BE TYPE XHHW OR APPROVED EQUAL.
6. THE CONTROLLER SHALL BE UL LISTED, NEMA 3R, AND BE SUITABLE FOR USE AS SERVICE ENTRANCE RATED.

LIGHTING GENERAL NOTES

1. ALL WORK TO CONFORM TO THE MOST RECENT NATIONAL ELECTRICAL CODE AND ANY APPLICABLE LOCAL CODES.
2. CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND UTILITIES BEFORE TRENCHING OR AUGERING.
3. BEFORE INSTALLING STANDARDS NEAR OVERHEAD FACILITIES CALL ComEd FOR APPROVAL OF LOCATION.
4. FOR LOCATION OF EXISTING UNDERGROUND ELECTRICAL CABLE CALL ComEd.
5. CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO RESTORE ANY SPECIALIZED LANDSCAPING, (i.e. DECORATIVE ROCKS, SHRUBS, PLANTS, ECT.) OR SHALL REPLACE IT, THE COST OF WHICH SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
6. CARE IS TO BE TAKEN AS NOT TO DAMAGE ANY OF THE EXISTING TRAFFIC SIGNAL CONDUIT, MAGNETIC DETECTORS AND EQUIPMENT. IF ANY OF THE TRAFFIC SIGNAL CONDUIT AND/OR EQUIPMENT IS DAMAGED. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE THE CONDUIT AND/OR EQUIPMENT AT NO COST TO THE CITY OR STATE.
7. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENT FOR BURIED WARNING TAPE, SPECIFIED AS PART OF "TRENCH AND BACK FILL FOR ELECTRICAL WORK". THE INSTALLATION OF THE TAPE SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER PRIOR TO BACKFILLING OR DURING PLOWING OPERATIONS, AS APPLICABLE.
8. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE. THE RESIDENT ENGINEER MAY ASSIST THE CONTRACTOR, AS APPLICABLE, BUT THE RESPONSIBILITY FOR CORDINATING THE FINISHED GRADE ELEVATION WITH THE TOP OF THE FOUNDATION HEIGHTS AND THE LIGHT SHALL REMAIN WITH THE CONTRACTOR.
9. NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, AS APPROVED BY THE ENGINEER.
10. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR WIRE MARKERS AND SHALL TAG ALL WIRE ACCORDINGLY.
11. EQUIPMENT GROUND CONDUCTORS SHALL BE SPLICED AND BONDED AT EACH LIGHT POLE OR OTHER PIECE OF EQUIPMENT.
12. UNDERGROUND SPLICES OF LIGHTING CONDUCTORS WILL NOT BE ALLOWED EXCEPT AT LIGHT POLE BASE.
13. CONDUITS AND UNIT DUCTS MUST BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH TREE, BUSHES, DRAINS AND OTHER UTILITIES.

NOMINAL WATTAGE	FUSE SIZE
250W	3.5 AMP

LUMINAIRE FUSE SIZE TABLE



(RED PHASE SHOWN)

POLE HANDHOLE WIRING DIAGRAM
(TYPICAL FOR SINGLE LUMINAIRE INSTALLATION)

NOTE:
ALLOW 36" LOOP OF CABLES TO INSURE SUFFICIENT SLACK FOR WITHDRAWAL OF THE CONNECTORS OUTSIDE OF THE POLE HANDHOLE.

Robinson ENGINEERING

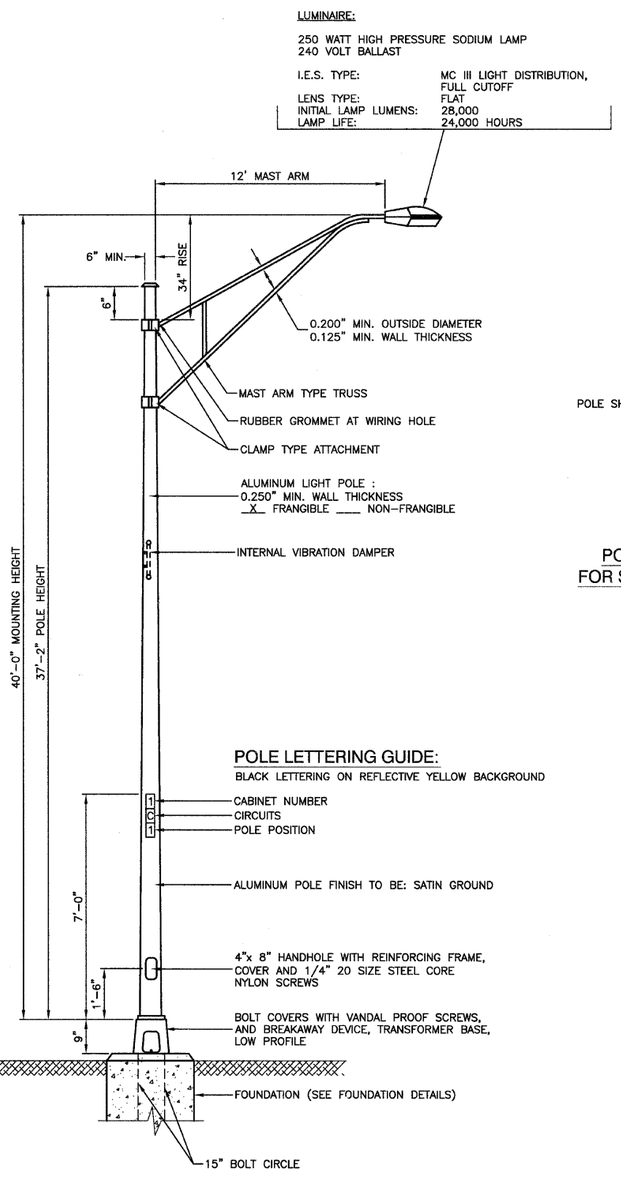
FILE NAME = 09527-LGHT-DTLS-01 - P02	USER NAME =	DESIGNED — DWS	REVISED —
		CHECKED — PAP	REVISED —
	PLOT SCALE = 1=1'	DRAWN — LTL	REVISED —
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 0344 (127TH STREET)
AT SACRAMENTO AVENUE
STREET LIGHTING DETAILS

SCALE: NA | SHEET NO. 16 OF 48 SHEETS | STA. | TO STA.

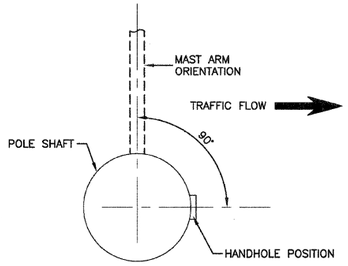
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	16
		CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		



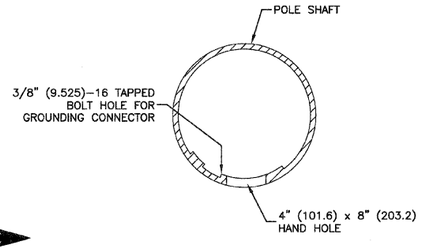
NOTES:

1. THE LIGHTING UNITS SHALL MEET AASHTO DESIGN CRITERIA. DESIGN FOR 90 M.P.H. WIND WITH 30% GUST AND 75 POUND LUMINAIRE HAVING AN E.P.A. OF 1.6 SQ. FT. AND PROPER ICE LOADING.
2. ALUMINUM ALLOY 6063-T6 SHALL BE USED.
3. LIGHT POLE AND ASSOCIATED EQUIPMENT TO BE U.L. LISTED

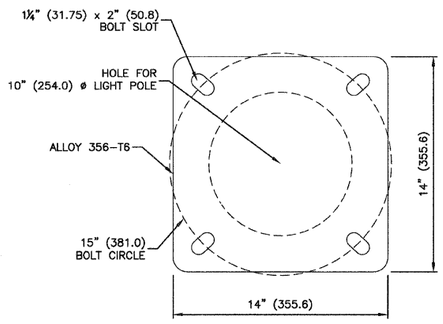
TYPICAL POLE INSTALLATION



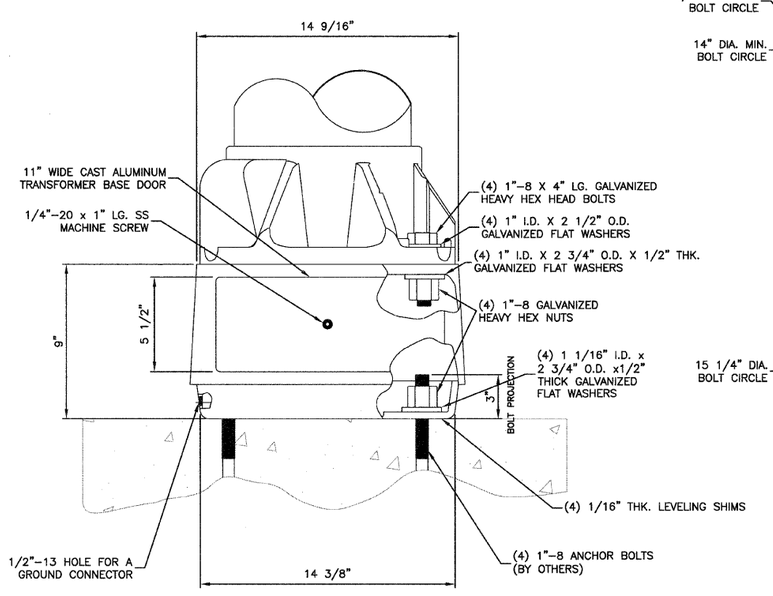
POSITION OF HANDHOLE FOR SINGLE MAST ARM POLES



HANDHOLE DETAIL
(N.T.S.)



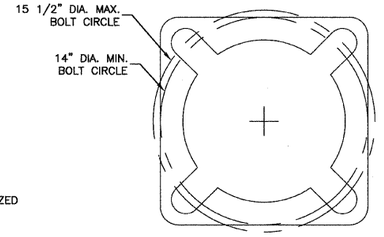
LIGHT POLE BASE PLATE DETAIL
15" BOLT (381.0) BOLT CIRCLE



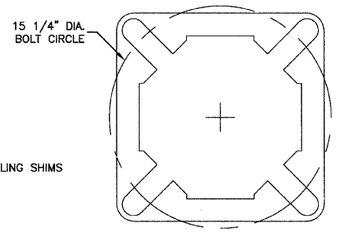
TRANSFORMER BASE DETAIL, 15" BOLT CIRCLE

NOTES:

1. BREAKAWAY DEVICE TO BE AASHTO APPROVED.



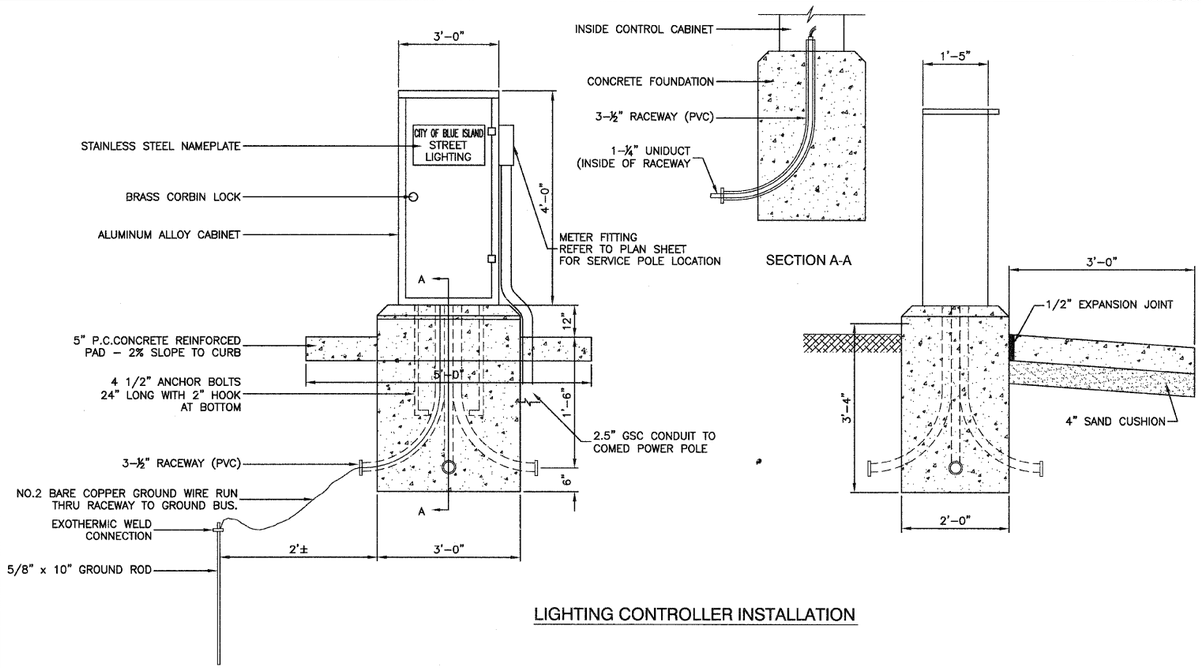
TOP DETAIL



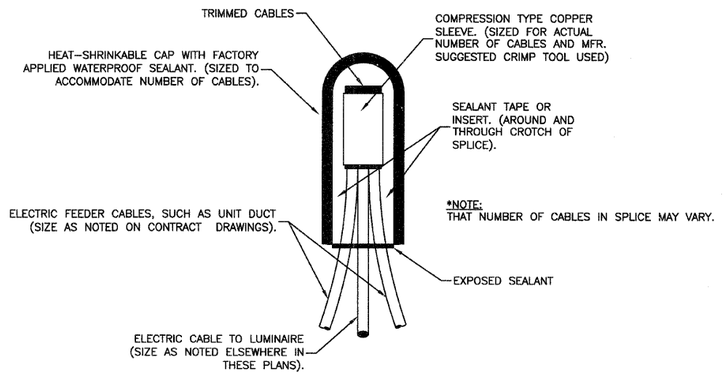
BOTTOM DETAIL

Robinson ENGINEERING

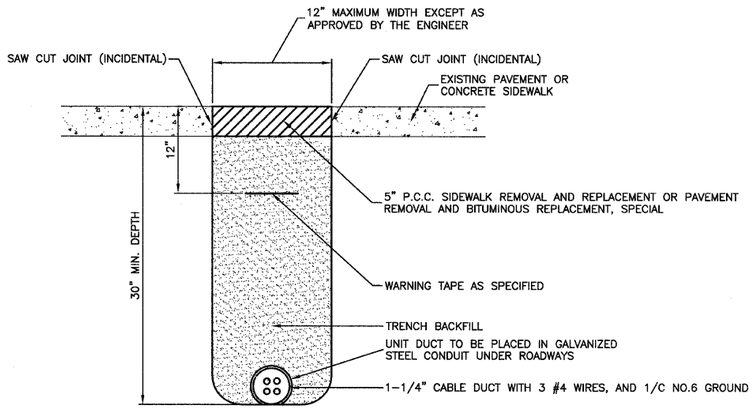
FILE NAME = 09527-LGHT-DTLS-01 - P03	USER NAME =	DESIGNED — DWS	REVISED —	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP 0344 (127TH STREET) AT SACRAMENTO AVENUE STREET LIGHTING DETAILS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED — PAP	REVISED —			0344	06-00175-00-TL	COOK	48	17
	PLOT SCALE = 1=1'	DRAWN — LTL	REVISED —					CONTRACT NO. 63613		
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —		SCALE: NA / SHEET NO. 17 OF 48 SHEETS / STA. / TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		



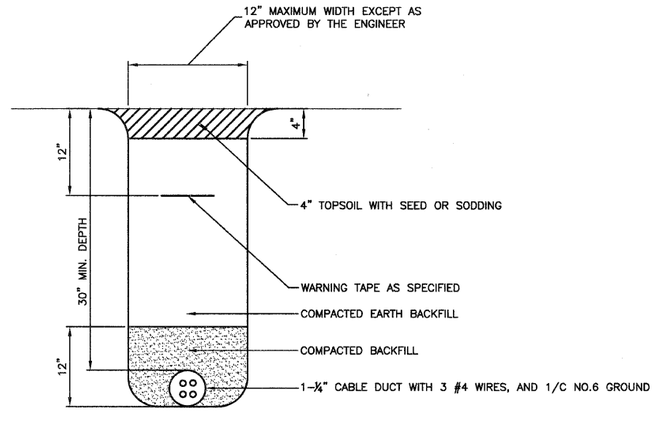
LIGHTING CONTROLLER INSTALLATION



SPLICING ELECTRIC CABLES
BASIC MATERIALS AND METHODS



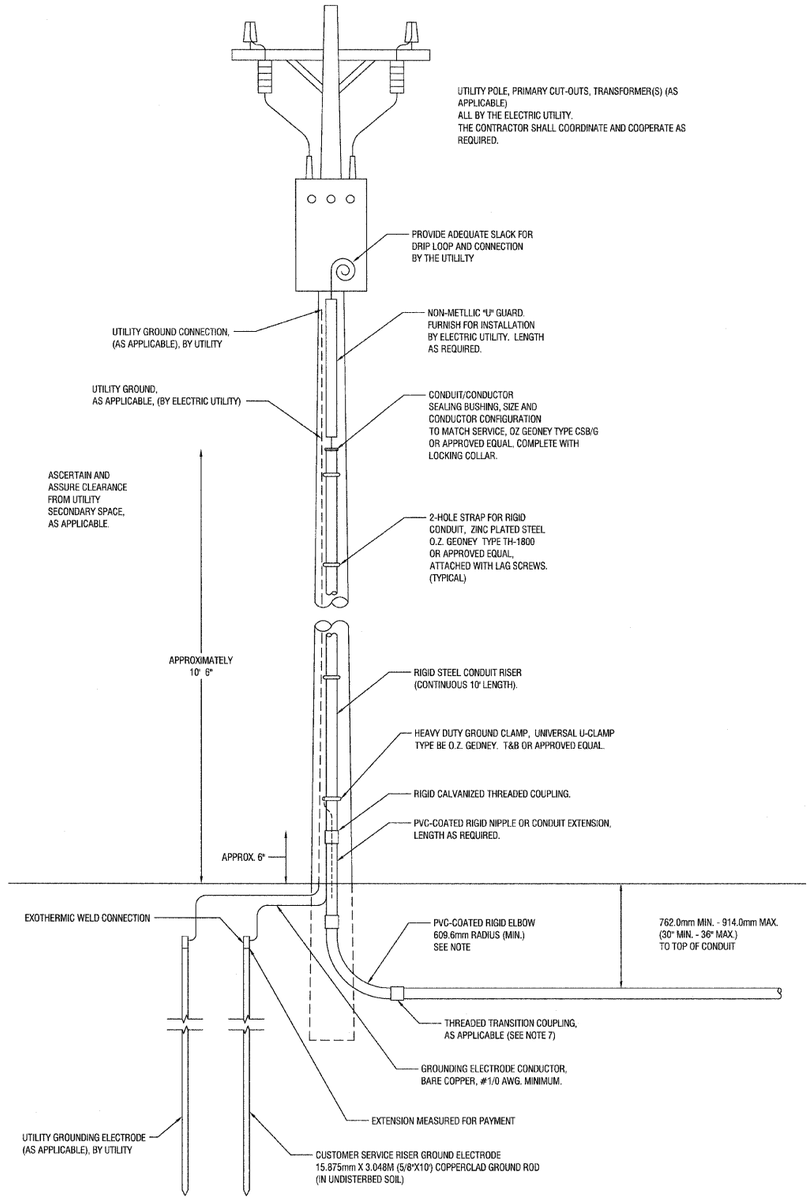
HOT-MIX ASPHALT PAVEMENT OR CONCRETE SIDEWALK
REMOVAL AND REPLACEMENT



TRENCH DETAIL

Robinson ENGINEERING

FILE NAME = 09527-LGHT-DTLS-01 - P04	USER NAME =	DESIGNED — DWS	REVISED —	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP 0344 (127TH STREET) AT SACRAMENTO AVENUE STREET LIGHTING DETAILS			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED — PAP	REVISED —					0344	06-00175-00-TL	COOK	48	18
	PLOT SCALE = 1=1'	DRAWN — LTL	REVISED —							CONTRACT NO. 63613		
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —		SCALE: NA	SHEET NO. 18 OF 48 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		



NOTES:

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

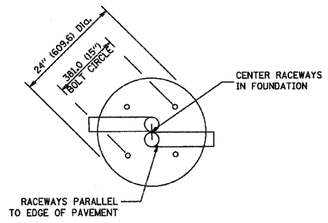
SERVICE CONNECTION FOR CONTROL CABINETS

Robinson ENGINEERING

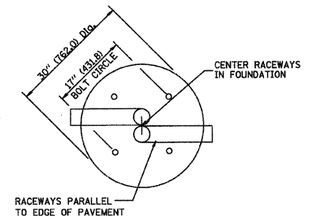
FILE NAME = 09527-LGHT-DTLS-01 - P05	USER NAME =	DESIGNED — DWS	REVISED —	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP 0344 (127TH STREET) AT SACRAMENTO AVENUE STREET LIGHTING DETAILS			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED — PAP	REVISED —					0344	06-00175-00-TL	COOK	48	19
	PLOT SCALE = 1=1'	DRAWN — LTL	REVISED —							CONTRACT NO. 63613		
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —		SCALE: NA	SHEET NO. 19 OF 48 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

LIGHT POLE FOUNDATION DEPTH TABLE
40 FT. (12.192 m) TO 47.5 FT. (14.478 m) MOUNTING HEIGHT

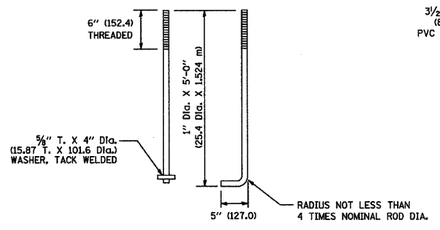
SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	13'-0" (3.96 m)	15'-0" (4.57 m)
MEDIUM CLAY Qu = 0.75 TON/SQ.FT	9'-6" (2.09 m)	10'-9" (3.23 m)
STIFF CLAY Qu = 1.50 TON/SQ. FT.	7'-0" (2.13 m)	8'-0" (2.44 m)
LOOSE SAND ϕ = 34°	9'-0" (2.74 m)	10'-0" (3.05 m)
MEDIUM SAND ϕ = 37.5°	8'-3" (2.52 m)	9'-0" (2.74 m)
DENSE SAND ϕ = 40°	7'-9" (2.36 m)	9'-0" (2.74 m)



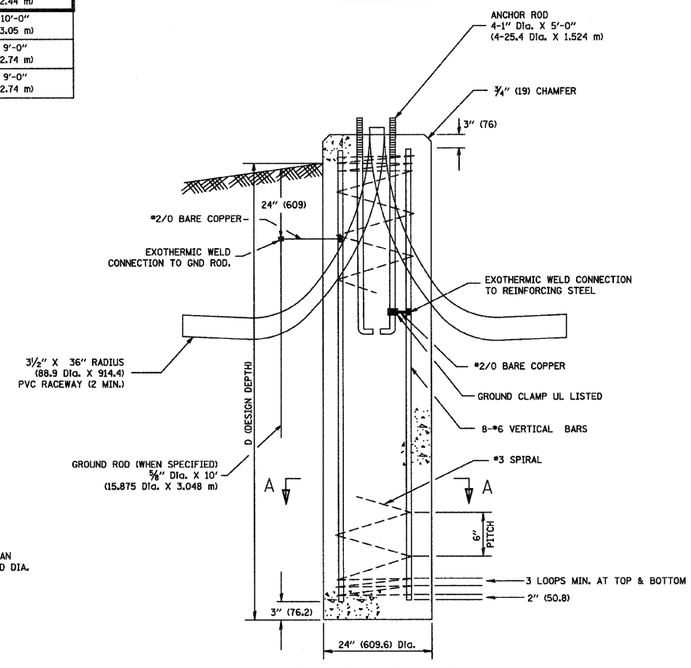
TOP VIEW



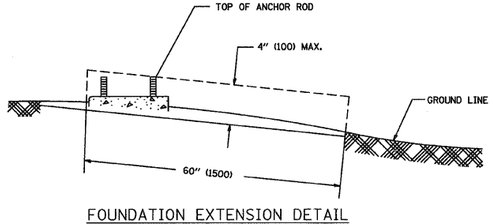
TOP VIEW



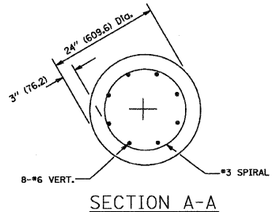
ANCHOR ROD DETAIL



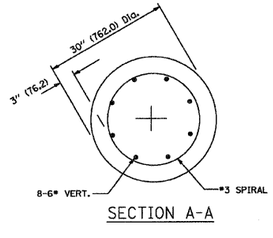
FOUNDATION DETAIL



FOUNDATION EXTENSION DETAIL



SECTION A-A



SECTION A-A

NOTES

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
3. THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
4. THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
5. THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
6. THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
7. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
8. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
9. ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
10. THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
11. ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
12. THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
13. THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
14. THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

Robinson ENGINEERING

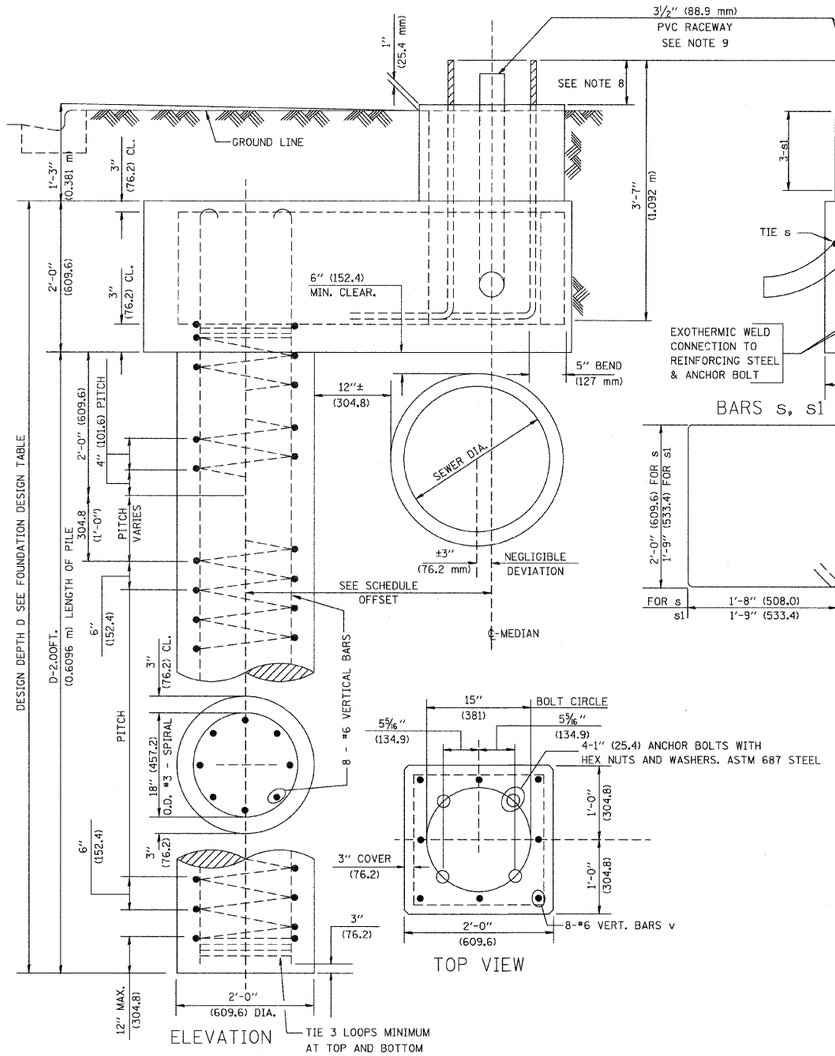
FILE NAME = 09527-LGHT-DTLS-01 - P06	USER NAME =	DESIGNED — DWS	REVISED —	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP 0344 (127TH STREET) AT SACRAMENTO AVENUE STREET LIGHTING DETAILS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED — PAP	REVISED —			0344	06-00175-00-TL	COOK	48	20
	PLOT SCALE = 1=1'	DRAWN — LTL	REVISED —					CONTRACT NO. 63613		
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —		SCALE: NA | SHEET NO. 20 OF 48 SHEETS | STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

35 FT. TO 47.5 FT. MOUNTING HEIGHT
FOUNDATION DESIGN TABLE

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

NOTES

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE.
3. EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER, 24″ (609.6 mm) OR 30″ (762.0 mm) IN DIAMETER.
4. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
5. THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
6. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
7. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS. IF LIGHT POLE IS MOUNTED WITHOUT BREAKAWAY DEVICE, ANCHOR BOLTS SHALL PROJECT 2¾″ (69.9 mm) ABOVE TOP OF THE FOUNDATION. THE CONTRACTOR SHALL CONFIRM ANCHOR BOLT EXTENTION WITH ENGINEER.
8. RACEWAYS SHALL PROJECT 1″ (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.
9. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERECTED.



BILL OF MATERIAL

MARK	NO.	SIZE	LENGTH	SHAPE
a	10	6	SEE BELOW	—
s	12	4	8′-0″ (2.438 m)	□
s_1	3	3	7′-6″ (2.286 m)	□
v_1	8	6	2′-9″ (0.838 m)	—
v_2				

OFFSET SCHEDULE

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

Robinson ENGINEERING

FILE NAME = 09527-LGHT-DTLS-01 - P07	USER NAME =	DESIGNED — DWS	REVISED —
		CHECKED — PAP	REVISED —
	PLOT SCALE = 1=1′	DRAWN — LTL	REVISED —
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 0344 (127TH STREET)
AT SACRAMENTO AVENUE
STREET LIGHTING DETAILS

SCALE: NA | SHEET NO. 21 OF 48 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	21
		CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

LOOP DETECTOR NOTES

1. 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.

2. 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.

3. 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.

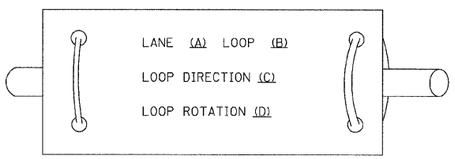
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

5. 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.

6. 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.

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

LOOP LEAD-IN CABLE TAG

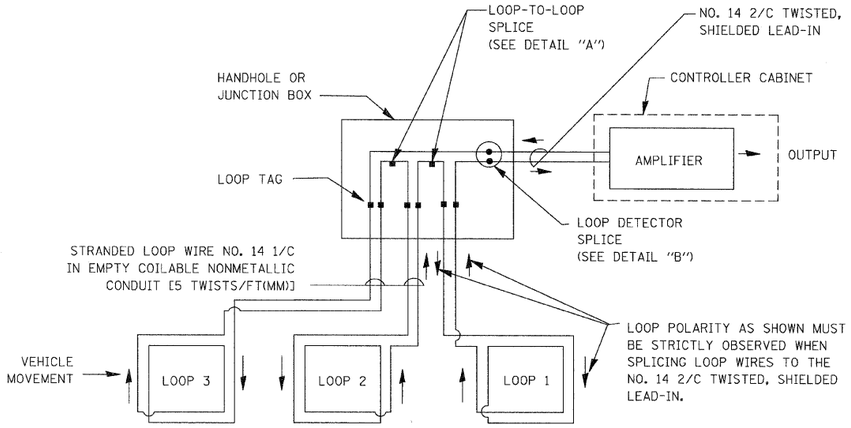


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

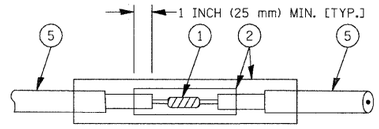
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

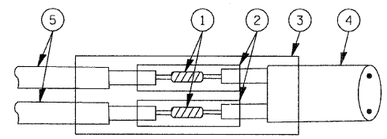


DETECTOR LOOP WIRING SCHEMATIC

- 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.

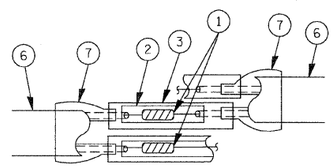


DETAIL "A"
LOOP-TO-LOOP SPLICE



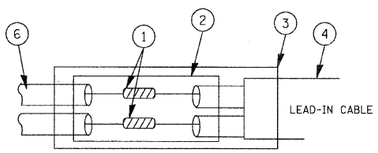
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

(1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.

(2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.

(3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

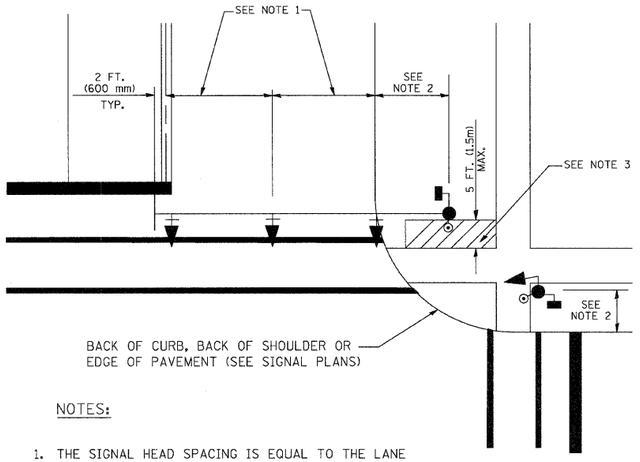
(6) PRE-FORMED LOOP

(7) XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

FILE NAME = 09527-SGNL-DTLS-01 - P01	USER NAME = bauerdl	DESIGNED — DAD	REVISED —	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED — BCK	REVISED —					0344	06-00175-00-TL	COOK	48	22
	PLOT SCALE = 50.0000 ' / IN.	DRAWN — DAD	REVISED —						TS-05	CONTRACT NO. 63613		
	PLOT DATE = 11/4/2009	CHECKED — 10-28-09	REVISED —		SCALE:	SHEET NO. 1 OF 6 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

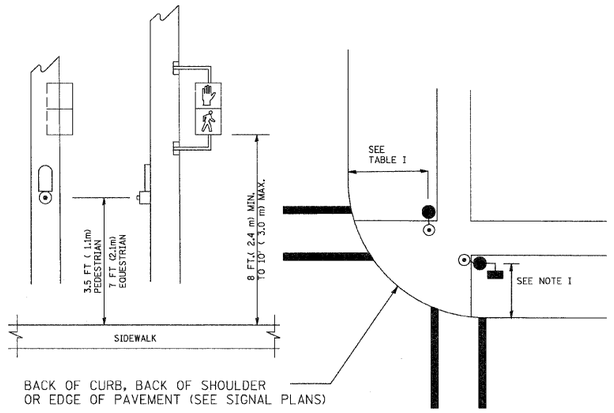
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



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."

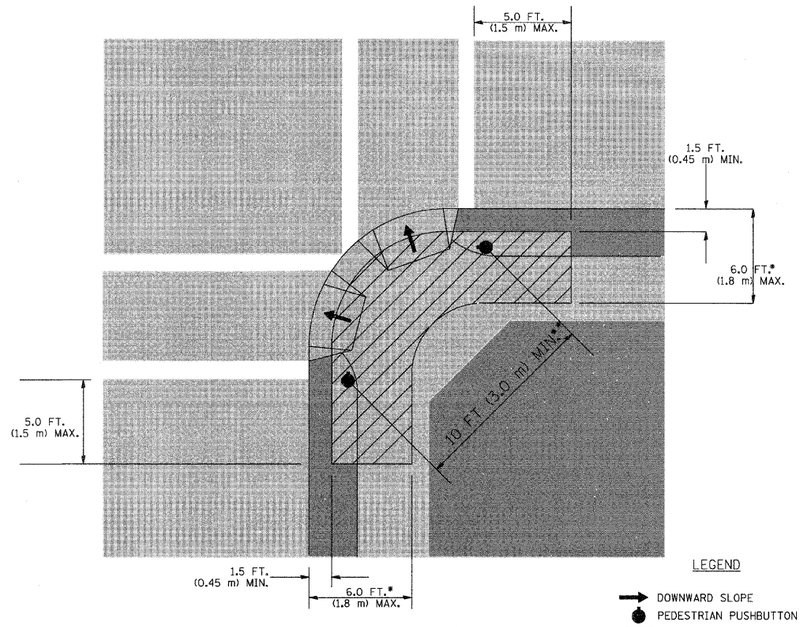
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



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.

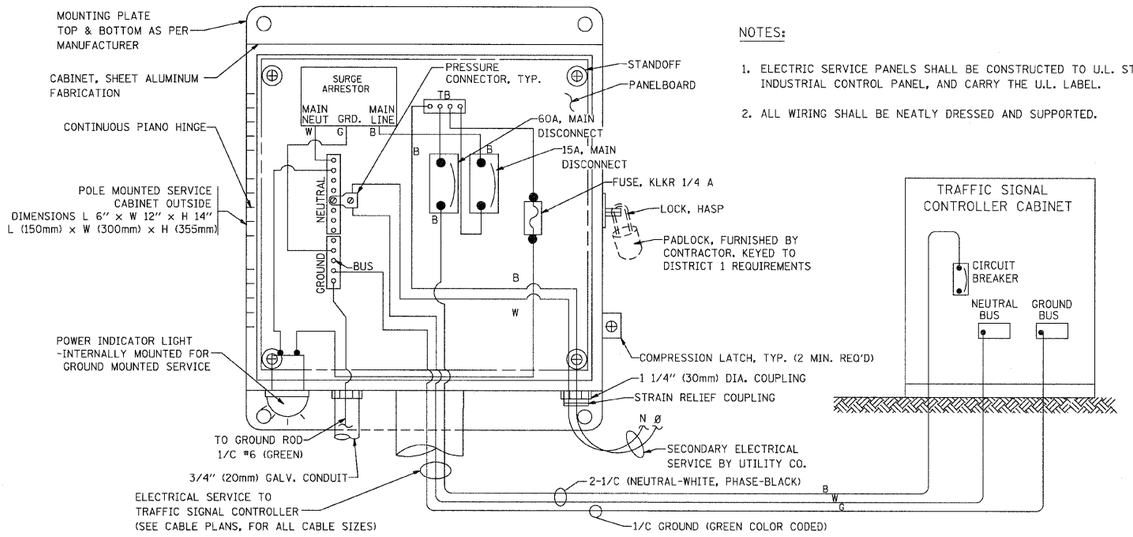
FILE NAME = 09527-SGNL-DTLS-01 - P02	USER NAME = bauerdl	DESIGNED — DAD	REVISED —
		CHECKED — BCK	REVISED —
	PLOT SCALE = 50.0000 ' / IN.	DRAWN — DAD	REVISED —
	PLOT DATE = 11/4/2009	CHECKED — 10-28-09	REVISED —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 2 OF 6 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	23
	TS-05	CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		



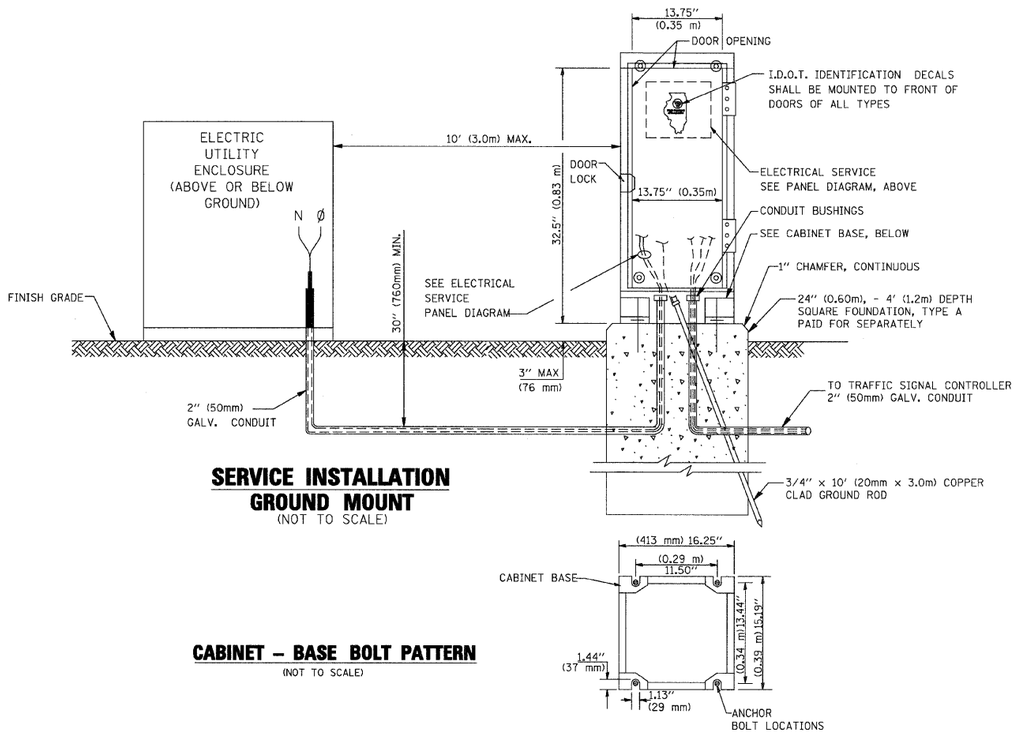
NOTES:

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.

ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)

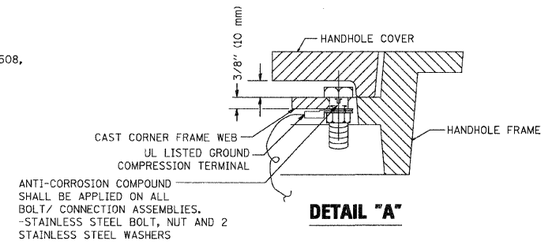


SERVICE INSTALLATION GROUND MOUNT

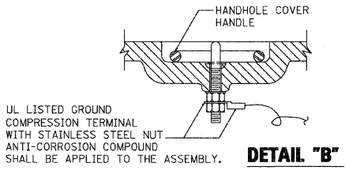
(NOT TO SCALE)

CABINET – BASE BOLT PATTERN

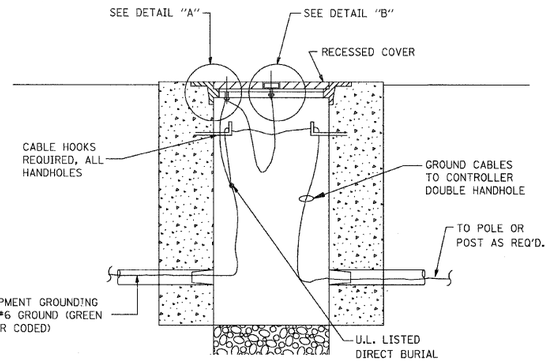
(NOT TO SCALE)



DETAIL "A"

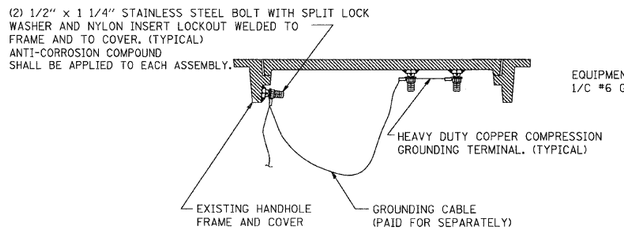


DETAIL "B"



HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



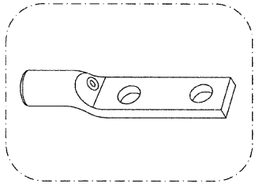
EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)

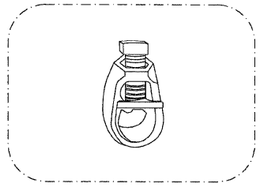
NOTES:

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.



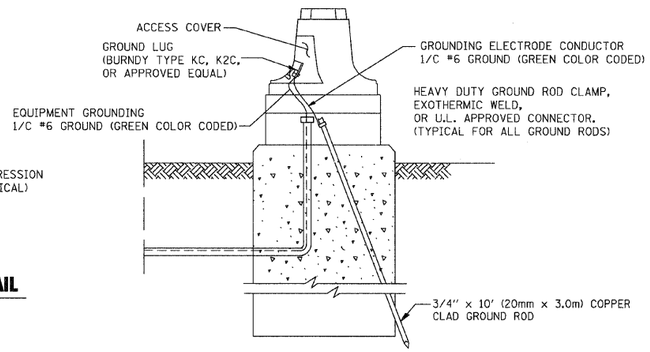
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

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)

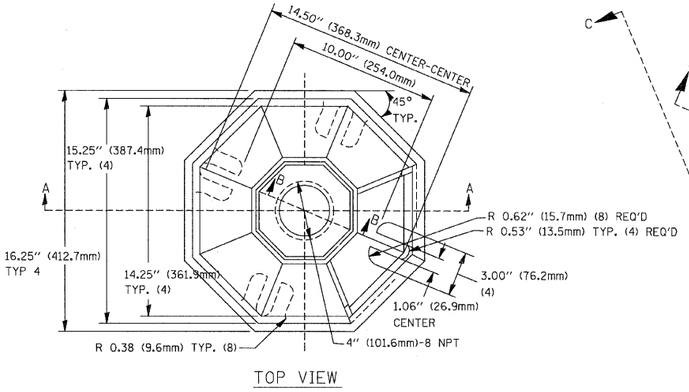
FILE NAME = 09527-SGNL-DTLS-01 - P03	USER NAME = bauerdl	DESIGNED — DAD	REVISED —
		CHECKED — BCK	REVISED —
	PLOT SCALE = 50.0000 ' / IN.	DRAWN — DAD	REVISED —
	PLOT DATE = 11/4/2009	CHECKED — 10-28-09	REVISED —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

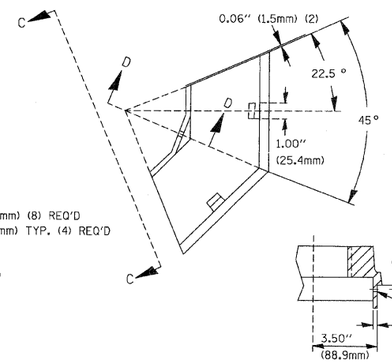
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 3 OF 6 SHEETS | STA. | TO STA.

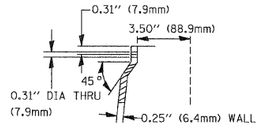
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	24
	TS-05	CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		



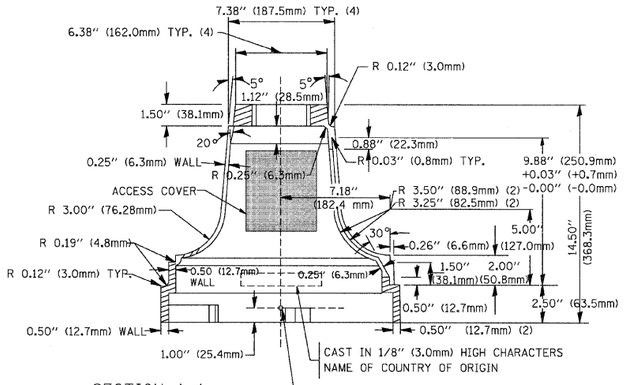
TOP VIEW



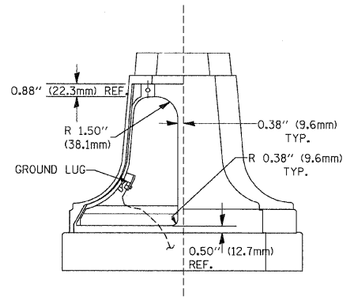
SECTION B-B



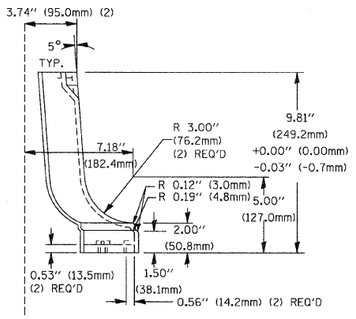
SECTION D-D



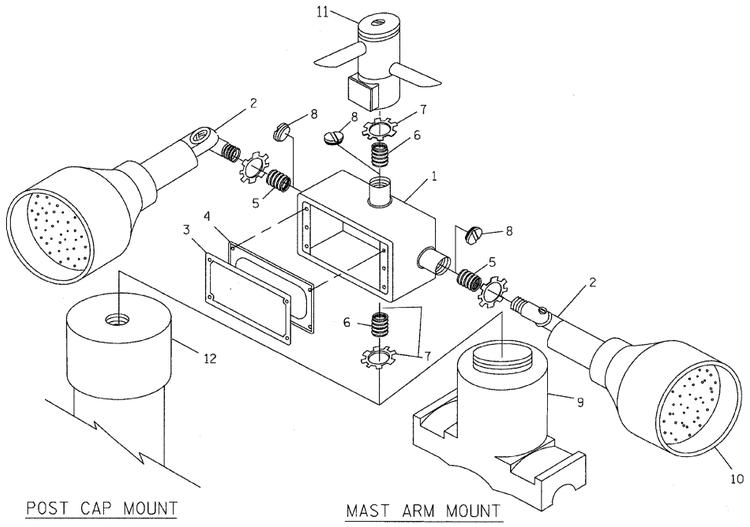
SECTION A-A



VIEW C-C



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



POST CAP MOUNT

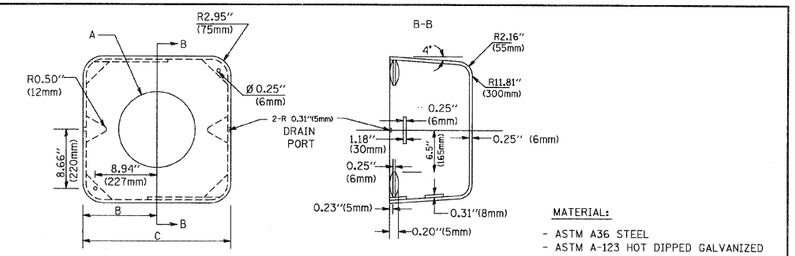
MAST ARM MOUNT

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	¾"(19 mm) CLOSE NIPPLE
7	¾"(19 mm) LOCKNUT
8	¾"(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:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
   ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
   ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. 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 ¾"(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.



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

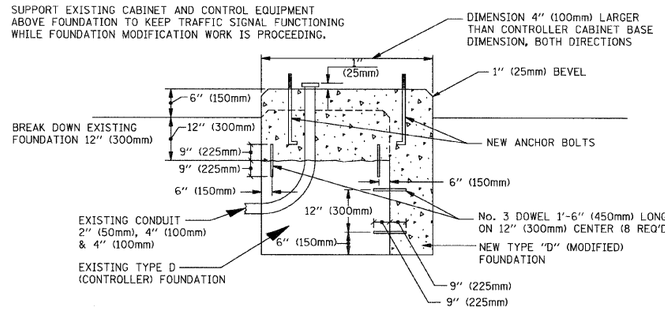
A	B	C	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57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

SHROUD

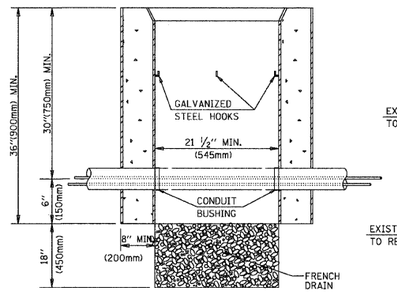
NOTES:

1. 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.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

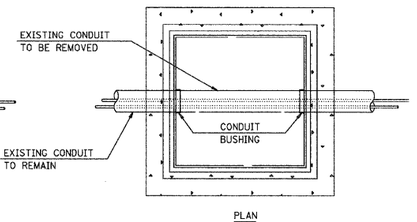
NOTE:
SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION



ELEVATION



PLAN

NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. 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

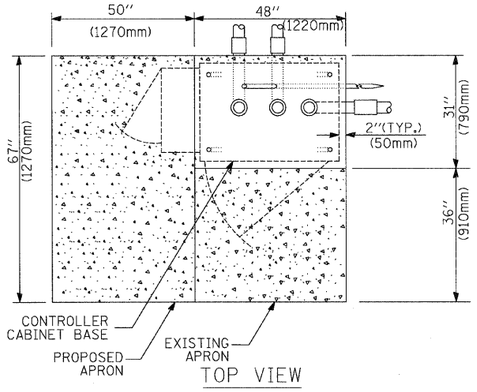
FILE NAME = 09527-SGNL-DTLS-01 - P04	USER NAME = bauer-dl	DESIGNED — DAD	REVISED —
		CHECKED — BCK	REVISED —
	PLOT SCALE = 50.0000 ' / IN.	DRAWN — DAD	REVISED —
	PLOT DATE = 11/4/2009	CHECKED — 10-28-09	REVISED —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

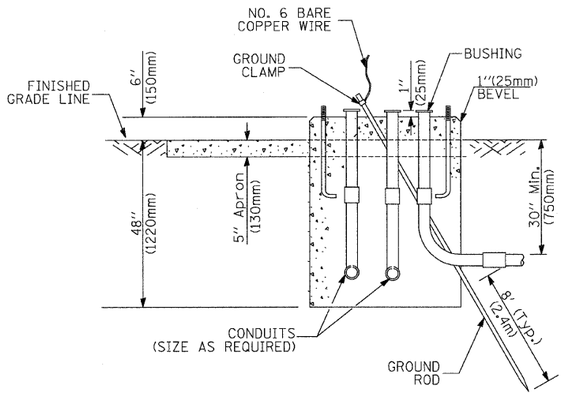
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 4 OF 6 SHEETS | STA. | TO STA.

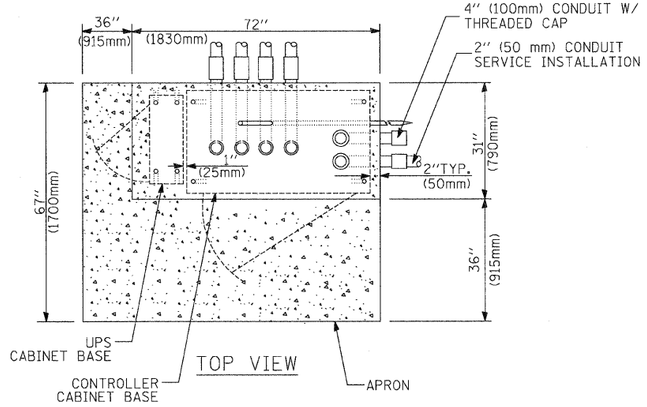
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	25
	TS-05	CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		



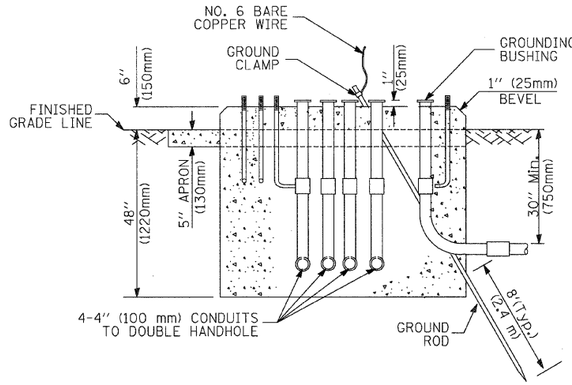
TOP VIEW



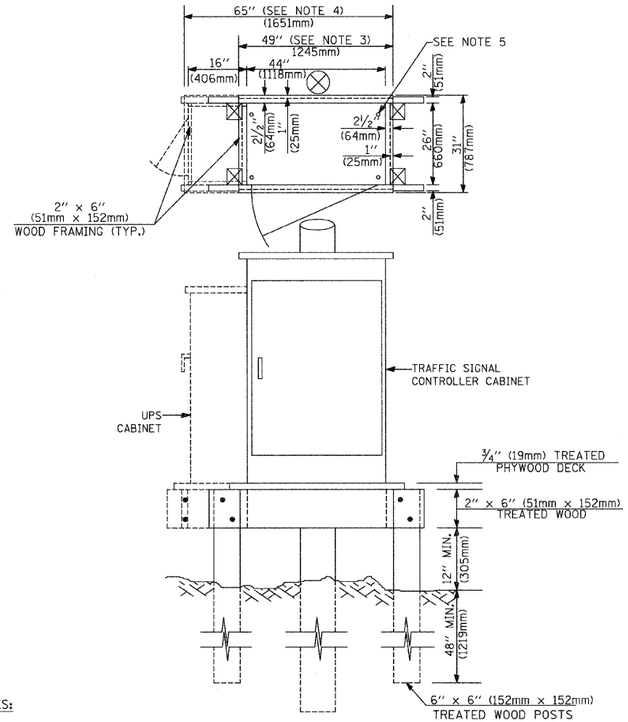
TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



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	① 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)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 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 = 09527-SGNL-DTLS-01 - P05

USER NAME = bauerdl	DESIGNED — DAG	REVISED —	
	CHECKED — BCK	REVISED —	
PLOT SCALE = 50.0000 ' / IN.	DRAWN — DAD	REVISED —	
PLOT DATE = 11/4/2009	CHECKED — 10-28-09	REVISED —	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 5 OF 6 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	26
	TS-05	CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET	R		
RAILROAD CONTROL CABINET			
COMMUNICATIONS CABINET	R CC	ECC	CC
MASTER CONTROLLER		EMC	MC
MASTER MASTER CONTROLLER		EMMC	MMC
UNINTERRUPTIBLE POWER SUPPLY	R UPS	EUPS	UPS
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT	R	P	P
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT	R T	P T	P T
STEEL MAST ARM ASSEMBLY AND POLE	R		
ALUMINUM MAST ARM ASSEMBLY AND POLE	R		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	R		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA	R PTZ	PTZ	PTZ
SIGNAL POST	R		
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM	R		
GUY WIRE	R		
SIGNAL HEAD	R		
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)			2
SIGNAL HEAD WITH BACKPLATE	R		
SIGNAL HEAD OPTICALLY PROGRAMMED	R "P"	"P"	"P"
FLASHER INSTALLATION (S DENOTES SOLAR POWER)	R "F"	"F"	"F"
PEDESTRIAN SIGNAL HEAD	R		
PEDESTRIAN PUSHBUTTON DETECTOR	R		
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR	R APS	APS	APS
ILLUMINATED SIGN "NO LEFT TURN"	R		
ILLUMINATED SIGN "NO RIGHT TURN"	R		
DETECTOR LOOP, TYPE I			
PREFORMED DETECTOR LOOP		P	P
MICROWAVE VEHICLE SENSOR	R M	M	M
VIDEO DETECTION CAMERA	R V	V	V
VIDEO DETECTION ZONE			
PAN, TILT, ZOOM CAMERA	R PTZ	PTZ	PTZ
WIRELESS DETECTOR SENSOR	R W	W	W
WIRELESS ACCESS POINT	R		

ITEM	REMOVAL	EXISTING	PROPOSED
EMERGENCY VEHICLE LIGHT DETECTOR	R		
CONFIRMATION BEACON	R		
HANDHOLE	R		
HEAVY DUTY HANDHOLE	R H	H	H
DOUBLE HANDHOLE	R		
JUNCTION BOX	R		
GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)			
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE	R		
COMMON TRENCH			CT
COILABLE NONMETALLIC CONDUIT (EMPTY)			CNC
SYSTEM ITEM		S	S
INTERSECTION ITEM		I	IP
REMOVE ITEM	R		
RELOCATE ITEM	RL		
ABANDON ITEM	A		
12" (300mm) TRAFFIC SIGNAL SECTION		R	R
12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE		R Y G	
SIGNAL FACE		R Y G Y G	R Y G Y G
SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD		R Y G Y G "P"	R Y G Y G "P"
12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL		DW W	
12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED			
12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID			
PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER		C D	C D
RADIO INTERCONNECT	R		
RADIO REPEATER	R ERR	ERR	RR
DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED		5	5
GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)		1	1

ITEM	REMOVAL	EXISTING	PROPOSED
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE		1	1
COAXIAL CABLE		C	C
VENDOR CABLE FOR CAMERA		V	V
COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED		6	6
FIBER OPTIC CABLE NO. 62.5/125, MM12F		12F	
FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F		24F	24F
FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)			
GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE		C	C
CONTROLLER CABINET AND FOUNDATION TO BE REMOVED	RCF		
STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED	RMF		
SIGNAL POST AND FOUNDATION TO BE REMOVED	RMF		
INTERSECTION & SAMPLING (SYSTEM) DETECTOR		IS	IS
SAMPLING (SYSTEM) DETECTOR		S	S
EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		P	
EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PP	
PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PIS	PIS
PREFORMED SAMPLING (SYSTEM) DETECTOR		PS	PS

RAILROAD SYMBOLS

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

FILE NAME = 09527-SGNL-DTLS-01 - P06	USER NAME = bauerdl	DESIGNED — DAG/BCK	REVISED —
		CHECKED — BCK	REVISED —
	PLOT SCALE = 50.0000 ' / IN.	DRAWN — DAD	REVISED —
	PLOT DATE = 11/4/2009	CHECKED — 10-28-09	REVISED —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 6 OF 6 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	27
	TS-05	CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.

2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.

3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT BE BE INSTALLED AT A RAILROAD INTERSECTION. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.

4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.

5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.

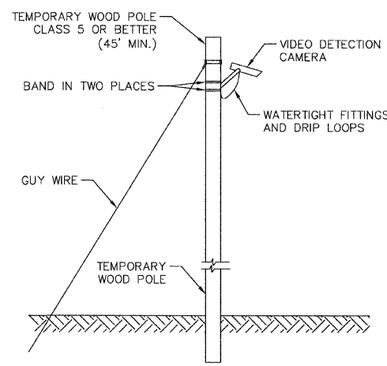
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.

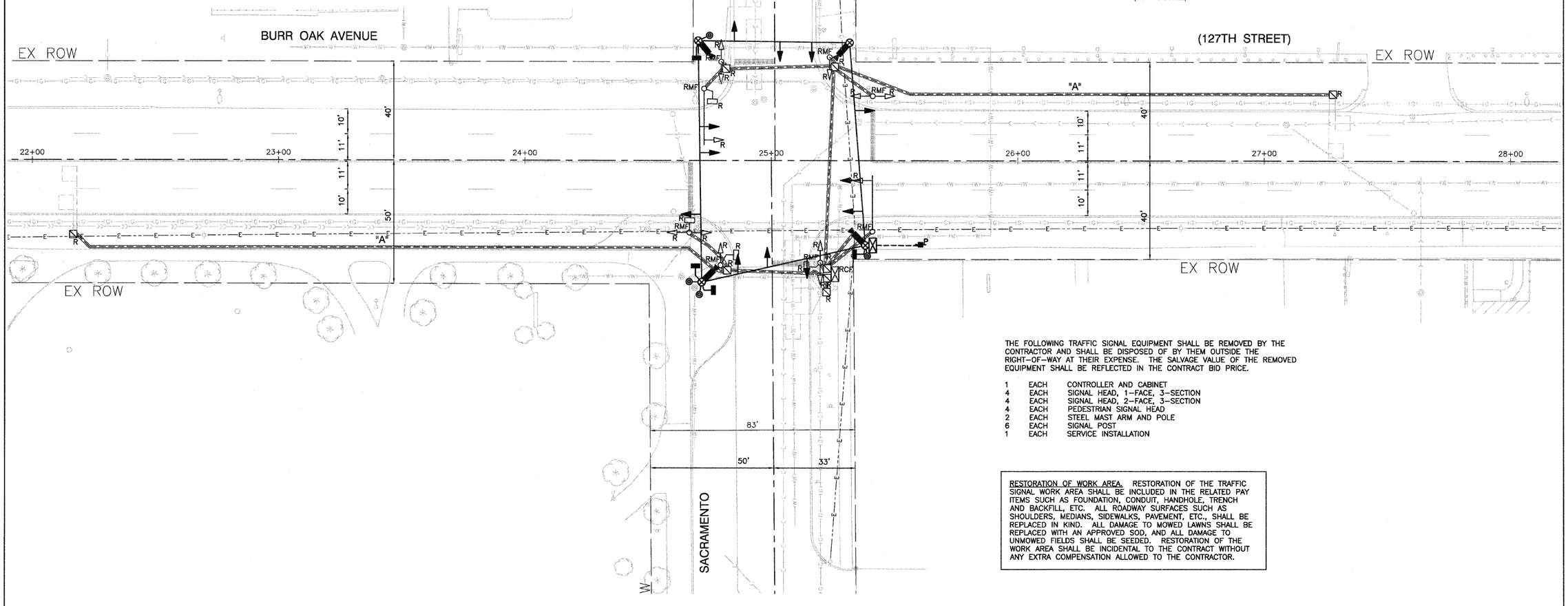
8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN THE OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.

9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.

10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.



TEMPORARY VIDEO DETECTION
MOUNTING DETAIL
(NOT TO SCALE)



THE FOLLOWING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1	EACH	CONTROLLER AND CABINET
4	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
4	EACH	PEDESTRIAN SIGNAL HEAD
2	EACH	STEEL MAST ARM AND POLE
6	EACH	SIGNAL POST
1	EACH	SERVICE INSTALLATION

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEMS SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC., SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED. RESTORATION OF THE WORK AREA SHALL BE INCIDENTAL TO THE CONTRACT WITHOUT ANY EXTRA COMPENSATION ALLOWED TO THE CONTRACTOR.

FILE NAME = 09527-SGNL-01 - TS01	USER NAME =	DESIGNED — HLG/JRA	REVISED —
		CHECKED — HLG	REVISED —
	PLOT SCALE =	DRAWN — JJB	REVISED —
	PLOT DATE = 02-22-12	CHECKED — JRA	REVISED —

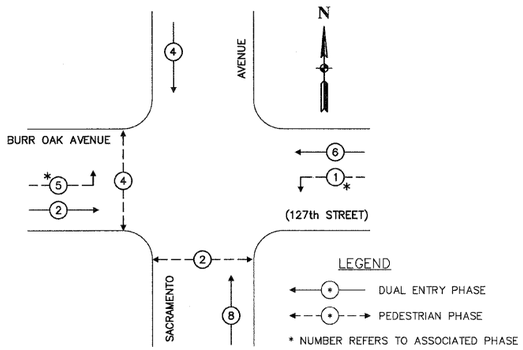
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 0344 (127TH STREET)
AT SACRAMENTO AVENUE
TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN

SCALE: 1" = 20' | SHEET NO. 28 OF 48 SHEETS | STA. | TO STA.

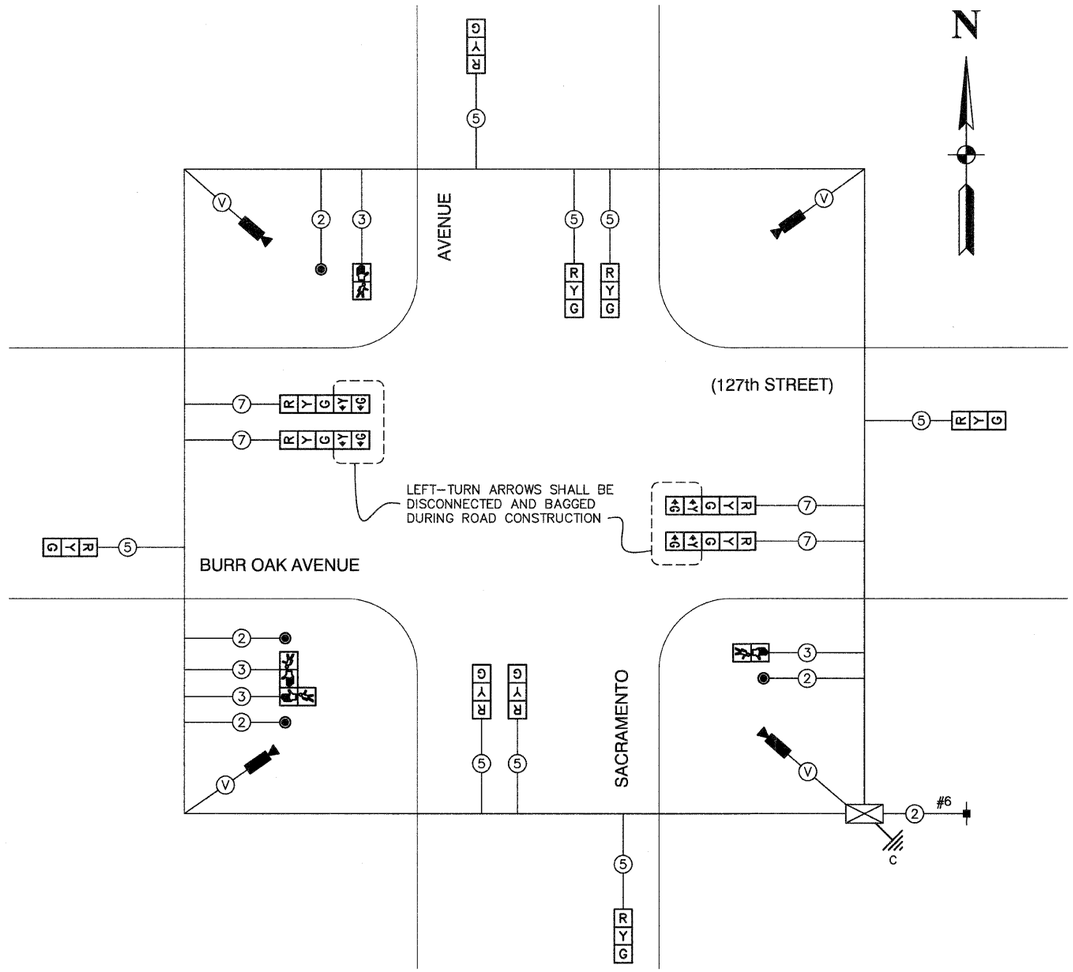
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	28
		CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

TEMPORARY CONTROLLER SEQUENCE



TEMPORARY PHASE DESIGNATION DIAGRAM

* INTRODUCE LEFT–TURN PHASING UPON COMPLETION OF ALL ROAD AND UTILITY WORK



TEMPORARY CABLE PLAN

CONSTRUCTION NOTES:

(1) LEFT–TURN PHASING SHALL BE INTRODUCED PRIOR TO PERMANENT SIGNAL TURN–ON AND UPON COMPLETION OF ALL ROAD AND UTILITY WORK.

I.D.O.T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	x %OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	–	135	12	0.10	–
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	–	84		0.05	–
VIDEO SYSTEM	1	150		1.00	150
LIGHTS	–	250		0.25	–
FLASHER				0.50	
ENERGY COSTS TO: CITY OF BLUE ISLAND				TOTAL =	572

ENERGY SUPPLY CONTACT: COM–ED BUSINESS DEPARTMENT
PHONE: 866–639–3532
COMPANY: COMMONWEALTH EDISON COMPANY

FILE NAME = 09627-SGNL-CBLE-01 - P01	USER NAME =	DESIGNED — HLG/JRA	REVISED —
		CHECKED — HLG	REVISED —
	PLOT SCALE =	DRAWN — JJB	REVISED —
	PLOT DATE = 02-22-12	CHECKED — JRA	REVISED —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

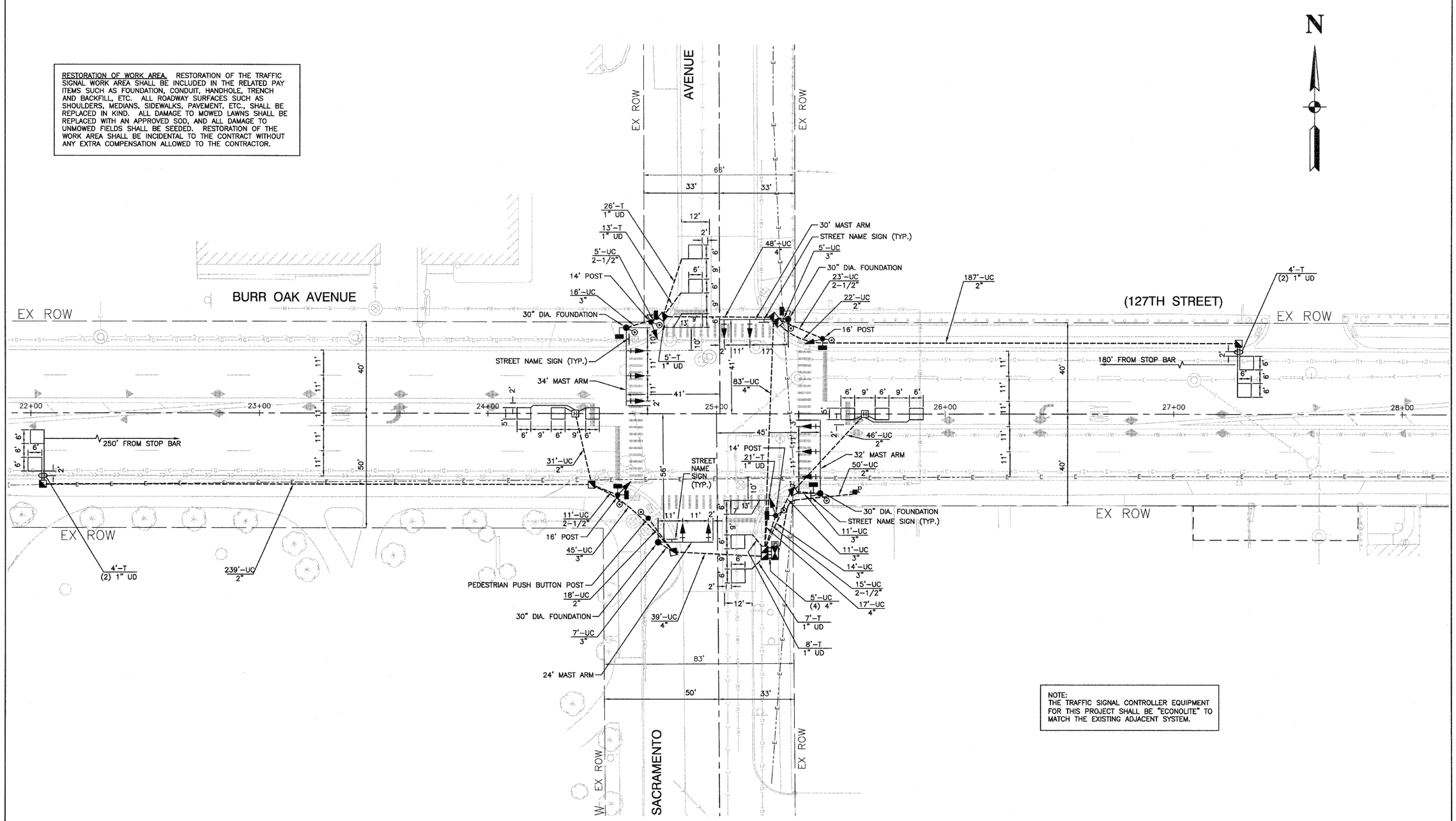
FAP 0344 (127TH STREET)
AT SACRAMENTO AVENUE
TEMPORARY TRAFFIC SIGNAL CABLE PLAN

SCALE: NA | SHEET NO. 29 OF 48 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	29
		CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

LAST SAVED BY: HLGONDER, ON 2/13/12
PLOTTED BY: HLGONDER ON 2/13/12

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEMS SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC., SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED. RESTORATION OF THE WORK AREA SHALL BE INCIDENTAL TO THE CONTRACT WITHOUT ANY EXTRA COMPENSATION ALLOWED TO THE CONTRACTOR.



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

FILE NAME = 09527-SGNL-02 - TS01	USER NAME =	DESIGNED — HLG/JRA	REVISED —
		CHECKED — HLG	REVISED —
	PLOT SCALE =	DRAWN — JJB	REVISED —
	PLOT DATE = 02-22-12	CHECKED — JRA	REVISED —

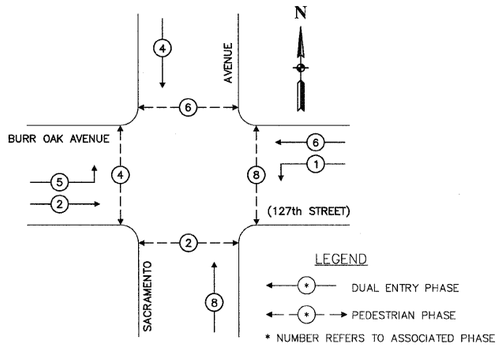
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 0344 (127TH STREET)
AT SACRAMENTO AVENUE
TRAFFIC SIGNAL INSTALLATION PLAN

SCALE: 1" = 20' | SHEET NO. 30 OF 48 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	30
		CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

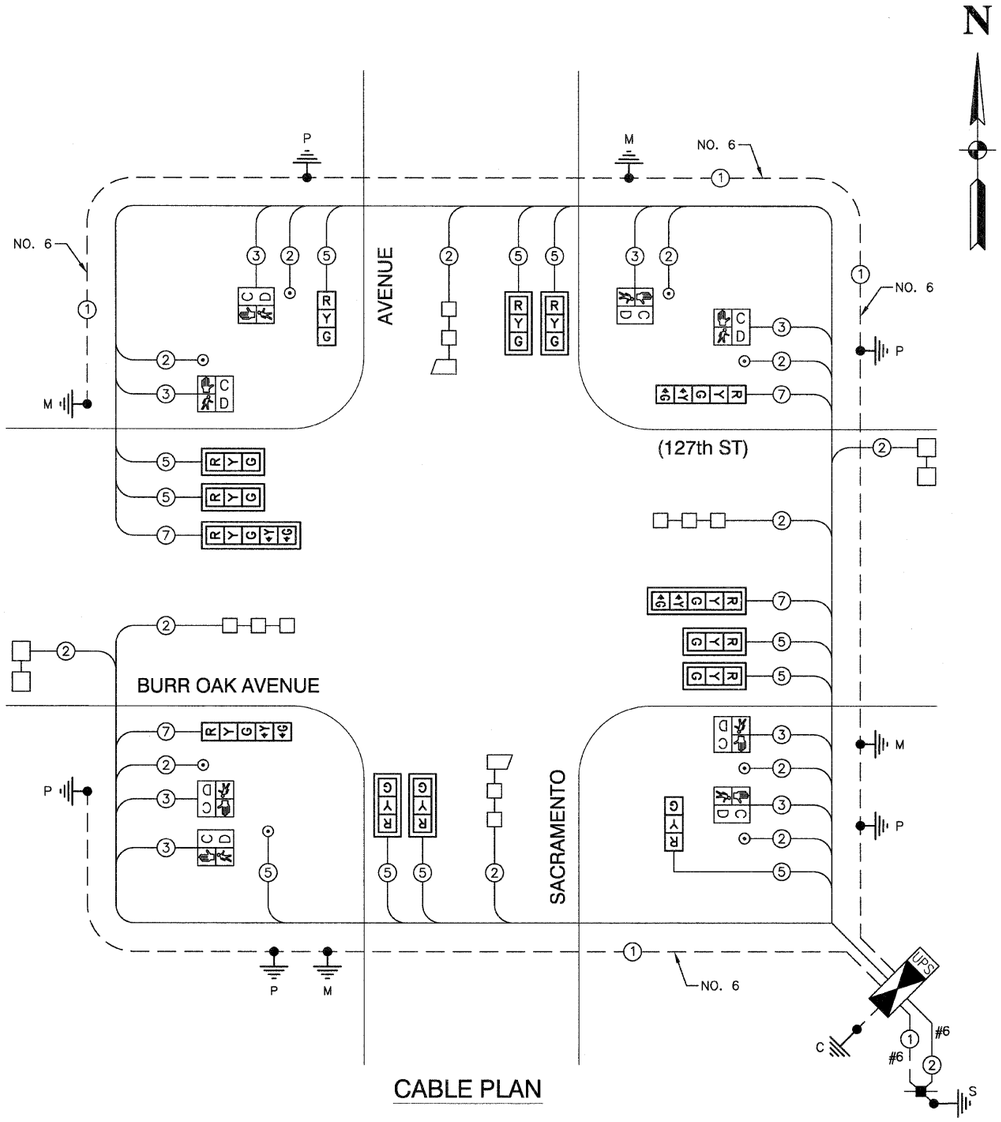
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

R10-3e

THE CONTRACTOR SHALL SUPPLY AND MOUNT ONE SIGN WITH EACH PEDESTRIAN PUSH BUTTON AND THIS SHALL BE INCLUDED IN THE COST OF THE PEDESTRIAN PUSH BUTTON PAY ITEM



CABLE PLAN

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS X	WATTAGE INCAND.	WATTAGE LED	X %OPERATION	
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	–	84		0.05	–
LIGHTS	–	250		0.25	–
FLASHER	–			0.50	–
ENERGY COSTS TO: CITY OF BLUE ISLAND				TOTAL =	568.6

ENERGY SUPPLY CONTACT: COM-ED BUSINESS DEPARTMENT
PHONE: 866-639-3532
COMPANY: COMMONWEALTH EDISON COMPANY

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUAN
SIGN PANEL, TYPE 2	SQ FT	58
SERVICE INSTALLATION – POLE MOUNT	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	593
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	54
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	109
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	207
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1077
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1171
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1545
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	699
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1163
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	101
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	411
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
PEDESTRIAN PUSH-BUTTON POST, TYPE I	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	20
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	60
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET 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	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	6
DETECTOR LOOP, TYPE 1	FOOT	516
PEDESTRIAN PUSH-BUTTON	EACH	8
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	7
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1

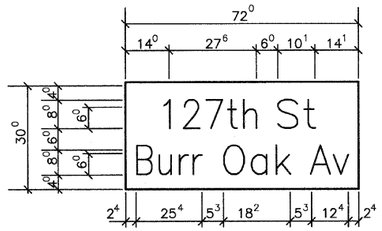
NOTES:

1. ALL SIGNAL INDICATIONS SHALL BE LED.
2. STOP BARS ON BURR OAK AVENUE SHALL NOT BE INSTALLED UNTIL TRAFFIC SIGNAL IS OPERATIONAL.
3. ALL NEW GROUND RODS SHALL BE ¾" X 10' LONG COPPER CLAD. THE COST SHALL BE INCIDENTAL TO THE COST OF INSTALLATION.
4. REFER TO TS-05 FOR IDOT DISTRICT ONE GROUNDING REQUIREMENTS.
5. IF THE CONTRACTOR REQUESTS AND OBTAINS PRIOR APPROVAL TO INSTALL "CONDUIT IN TRENCH", OF THE SIZE AND TYPE SPECIFIED, BY DIRECTIONAL BORING METHOD, NO ADDITIONAL COMPENSATION WILL BE ALLOWED AND THE WORK SHALL BE PAID FOR AS SHOWN ON THE CONTRACT PLANS.

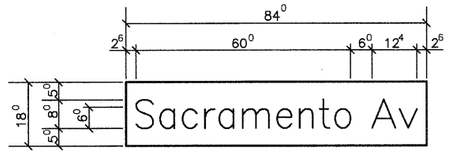
NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = 09527-SGNL-CBLE-02 - P01	USER NAME =	DESIGNED — HLG/JRA	REVISED —	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP 0344 (127TH STREET) AT SACRAMENTO AVENUE TRAFFIC SIGNAL CABLE PLAN
		CHECKED — HLG	REVISED —		
	PLOT SCALE =	DRAWN — JJB	REVISED —		
	PLOT DATE = 02-22-12	CHECKED — JRA	REVISED —		SCALE: NA / SHEET NO. 31 OF 48 SHEETS / STA. / TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	31
		CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		



15.0 Sq. Ft. each
2 Required
Design Series "D"



10.5 Sq. Ft. each
2 Required
Design Series "D"

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

GENERAL NOTES

1. 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, LUMINARIES AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
2. ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
3. THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 8'-0".
4. ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
5. 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:

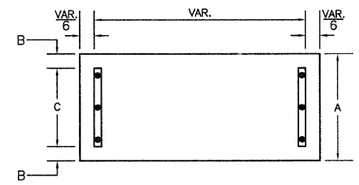
   * J.O. HERBERT CO. MIDLOTHIAN, VA
   * WESTERN REMAC INC. WOODRIDGE, IL

PARTS LISTING:

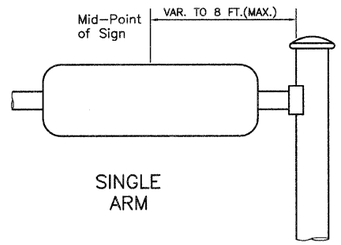
SIGN CHANNEL	PART #HPN053 (MED. CHANNEL)
SIGN SCREWS	1/4" X 14 X 1" H.W.H. #3 SELF TAPPING WITH NEOPRENE WASHER
BRACKETS	PART #HPN034 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

SUPPORTING CHANNELS

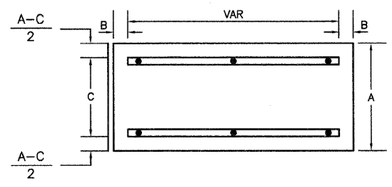


A	B	C
18"	2"	14"

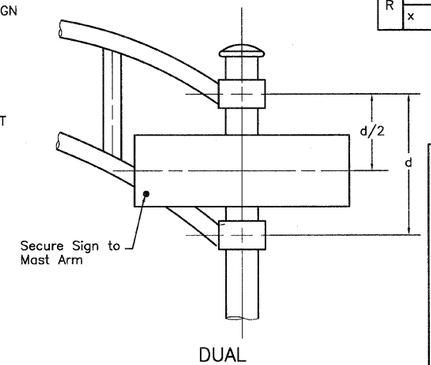


SINGLE ARM

SUPPORTING CHANNELS



A	B	C
18"	2"	12"
30"	2"	22"



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"

FIRST LETTER	SECOND LETTER: a c d e g o q		b h i k l m n p r u		f w		j		s t		v y		x		z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	1^2	1^4	1^4	1^5	1^2	1^4	0^6	1^0	1^1	1^4	0^6	1^0	1^1	1^2	1^2	1^4
B	1^4	1^5	2^0	2^1	1^4	1^5	1^1	1^2	1^4	1^5	1^2	1^4	1^2	1^4	1^6	1^7
C E G	1^4	1^5	2^0	2^1	1^2	1^4	0^6	1^0	1^2	1^4	1^2	1^4	1^4	1^5	1^4	1^5
D O Q R	1^4	1^5	2^0	2^1	1^4	1^5	0^6	1^0	1^2	1^4	1^2	1^4	1^4	1^5	1^4	1^5
F	0^5	0^6	1^4	1^5	0^6	1^0	0^5	0^6	0^6	1^0	0^6	1^0	0^6	1^0	1^1	1^2
H I M N	2^0	2^1	2^2	2^4	2^0	2^1	1^4	1^5	1^6	1^7	1^6	1^7	2^0	2^1	2^0	2^1
J U	2^0	2^1	2^0	2^1	1^6	1^7	1^4	1^5	1^6	1^7	1^6	1^7	1^6	1^7	2^0	2^1
K L	1^1	1^2	1^6	1^7	1^1	1^2	0^5	0^6	1^1	1^2	1^1	1^2	1^1	1^2	1^2	1^4
P	1^2	1^4	1^4	1^5	1^2	1^4	0^5	0^6	1^1	1^2	1^1	1^2	1^2	1^4	1^2	1^4
S	1^2	1^4	1^6	1^7	1^2	1^4	0^6	1^0	1^2	1^4	1^2	1^4	1^2	1^4	1^2	1^4
T	1^1	1^2	1^6	1^7	0^6	1^0	0^6	1^0	1^1	1^2	1^1	1^2	1^1	1^2	1^2	1^4
V	0^6	1^0	1^4	1^5	1^1	1^2	0^6	1^0	1^2	1^4	1^2	1^4	1^2	1^4	1^2	1^4
Y	0^5	0^6	1^4	1^5	0^6	1^0	0^5	0^6	0^5	0^7	0^5	0^6	0^6	1^0	1^1	1^2
Z	1^6	1^7	2^2	2^4	1^6	1^7	1^2	1^4	1^6	1^7	1^6	1^7	1^6	1^7	2^0	2^1

Lower Case To Lower Case
Spacing Chart 6 inch Series C & D

FIRST LETTER	SECOND LETTER: a c d e g o q		b h i k l m n p r u		f w		j		s t		v y		x		z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
a d h g i j l m n q u	1^6	1^7	2^2	2^4	1^6	1^7	1^2	1^4	1^4	1^5	1^4	1^5	1^6	1^7	1^6	1^7
b f k o p s	1^2	1^4	1^6	1^7	1^1	1^2	0^5	0^6	1^1	1^2	1^1	1^2	1^2	1^4	1^2	1^4
c e	1^2	1^4	1^6	1^7	1^2	1^4	0^6	1^0	1^2	1^4	1^2	1^4	1^2	1^4	1^2	1^4
r	0^6	1^0	1^2	1^4	0^6	1^0	0^3	0^3	0^5	0^6	0^5	0^6	0^6	1^0	0^6	1^0
t z	1^2	1^4	1^6	1^7	1^2	1^4	0^6	1^0	1^1	1^2	1^1	1^2	1^2	1^4	1^2	1^4
v y	1^1	1^2	1^4	1^5	1^1	1^2	0^5	0^6	0^6	1^0	0^6	1^0	1^1	1^2	1^1	1^2
w	1^1	1^2	1^4	1^5	1^1	1^2	0^5	0^6	1^1	1^2	1^1	1^2	1^1	1^2	1^2	1^4
x	1^2	1^4	1^6	1^7	1^1	1^2	0^5	0^6	1^1	1^2	1^1	1^2	1^1	1^2	1^2	1^4

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

FIRST NUMBER	SECOND LETTER: 0		1		2		3		4		5		6		7		8		9	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
0 9	1^6	1^7	1^6	1^7	1^4	1^5	1^2	1^4	1^4	1^5	1^4	1^5	1^6	1^7	1^2	1^4	1^6	1^7	1^6	1^7
1	2^0	2^1	2^0	2^1	2^0	2^1	1^6	1^7	1^4	1^5	2^0	2^1	2^0	2^1	1^4	1^5	2^0	2^1	2^0	2^1
2 3 4	1^4	1^5	1^4	1^5	1^4	1^5	1^2	1^4	1^2	1^4	1^4	1^5	1^4	1^5	1^1	1^2	1^6	1^7	1^4	1^5
5	1^4	1^5	1^4	1^5	1^4	1^5	1^1	1^2	1^1	1^2	1^4	1^5	1^4	1^5	1^1	1^2	1^4	1^5	1^4	1^5
6	1^6	1^7	1^4	1^5	1^4	1^5	1^2	1^5	1^2	1^4	1^4	1^5	1^4	1^5	1^1	1^2	1^4	1^5	1^4	1^5
7	1^2	1^4	1^2	1^4	1^4	1^5	1^2	1^5	0^5	0^6	1^2	1^4	1^4	1^5	1^1	1^2	1^4	1^5	1^2	1^4
8	1^6	1^7	1^6	1^7	1^4	1^5	1^2	1^5	1^2	1^4	1^4	1^5	1^6	1^7	1^2	1^4	1^6	1^7	1^4	1^5

EXAMPLE, 2 ③ DENOTES $\frac{3}{8}$"

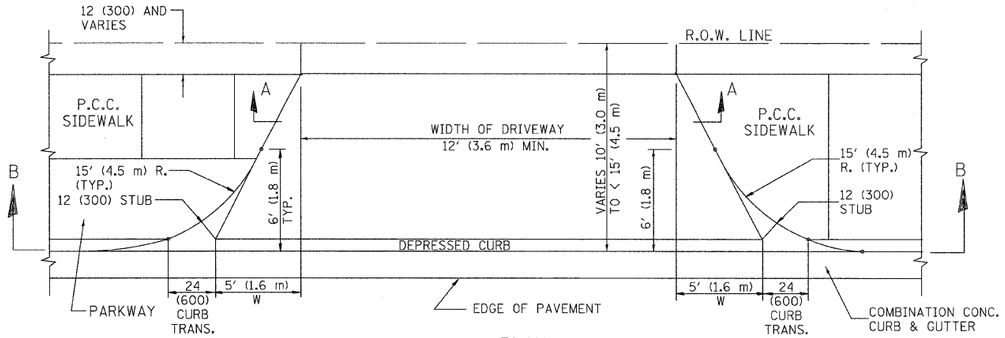
UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS SERIES C	D	8 INCH UPPER CASE LETTERS SERIES C	D	LETTERS	6 INCH LOWER CASE LETTERS SERIES C	D
A	3^6	5^0	5^0	6^5	a	3^5	4^2
B	3^2	4^0	4^3	5^3	b	3^5	4^2
C	3^2	4^0	4^3	5^3	c	3^5	4^1
D	3^2	4^0	4^3	5^3	d	3^5	4^2
E	3^0	3^5	4^0	4^7	e	3^5	4^2
F	3^0	3^5	4^0	4^7	f	2^3	2^6
G	3^2	4^0	4^3	5^3	g	3^5	4^2
H	3^2	4^0	4^3	5^3	h	3^5	4^2
I	0^7	0^7	1^1	1^2	i	1^1	1^1
J	3^0	3^6	4^0	5^0	j	2^0	2^2
K	3^2	4^1	4^3	5^4	k	3^5	4^2
L	3^0	3^5	4^0	4^7	l	1^1	1^1
M	3^7	4^5	5^1	6^1	m	6^0	7^0
N	3^2	4^0	4^3	5^3	n	3^5	4^2
O	3^4	4^2	4^5	5^5	o	3^6	4^3
P	3^2	4^0	4^3	5^3	p	3^5	4^2
Q	3^4	4^2	4^5	5^5	q	3^5	4^2
R	3^2	4^0	4^3	5^3	r	2^6	3^2
S	3^2	4^0	4^3	5^3	s	3^6	4^2
T	3^0	3^5	4^0	4^7	t	2^7	3^2
U	3^2	4^0	4^3	5^3	u	3^5	4^2
V	3^5	4^4	4^7	6^0	v	4^2	4^7
W	4^4	5^2	6^0	7^0	w	5^5	6^4
X	3^4	4^0	4^5	5^3	x	4^4	5^1
Y	3^6	5^0	5^0	6^6	y	4^6	5^3
Z	3^2	4^0	4^3	5^3	z	3^6	4^3

NUMBER	6 INCH SERIES C	D	8 INCH SERIES C	D
1	1^2	1^4	1^5	2^0
2	3^2	4^0	4^3	5^3
3	3^2	4^0	4^3	5^3
4	3^5	4^3	4^7	5^7
5	3^2	4^0	4^3	5^3
6	3^2	4^0	4^3	5^3
7	3^2	4^0	4^3	5^3
8	3^2	4^0	4^3	5^3
9	3^2	4^0	4^3	5^3
0	3^4	4^2	4^5	5^5

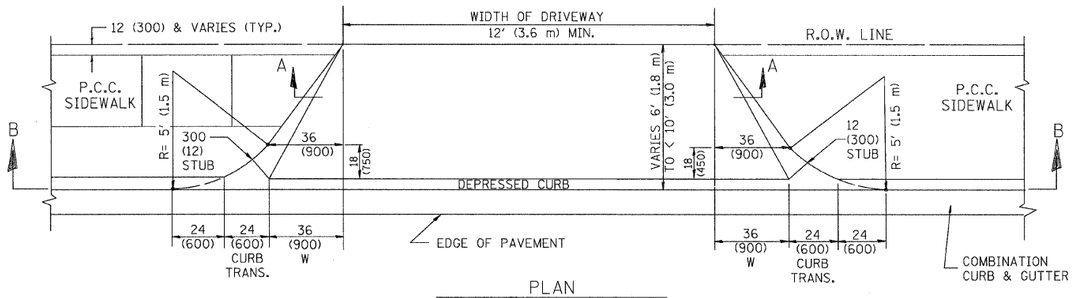
FILE NAME = 09527-SIGN-DTLS-01 - P01	USER NAME = kanthaphixaybc	DESIGNED — DAG./BCK.	REVISED — DAG-10/28/09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 MAST ARM MOUNTED STREET NAME SIGNS
		CHECKED — BCK.	REVISED —		
	PLOT SCALE = 20.000 '/IN.	DRAWN — DAG/DAD	REVISED —		SCALE: SHEET NO. 32 OF 48 SHEETS STA. TO STA.
	PLOT DATE = 10/6/2009	CHECKED — 03/15/09	REVISED —		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	32
	TS-02	CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		



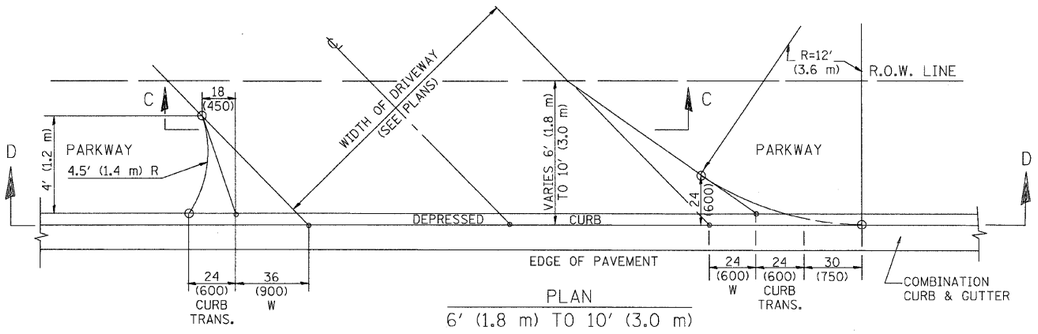
PLAN

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



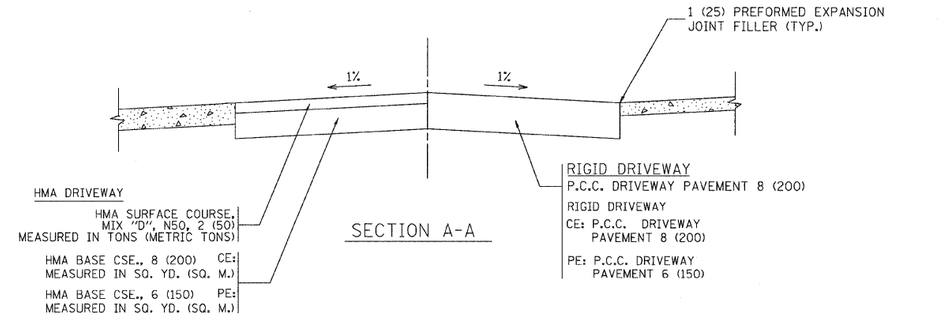
PLAN

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

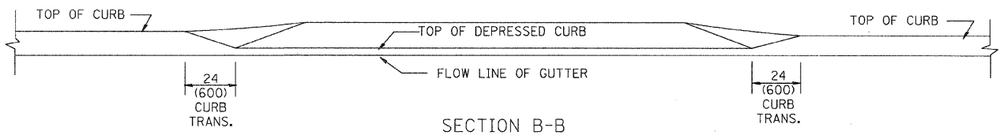


PLAN

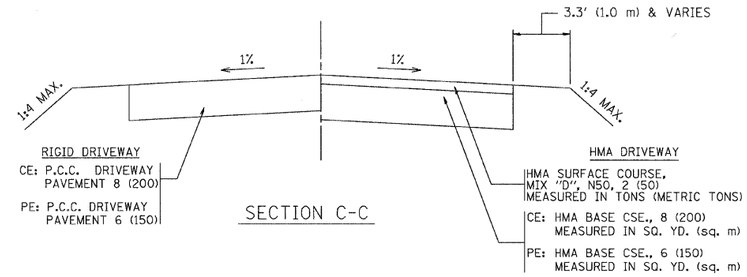
6' (1.8 m) TO 10' (3.0 m)



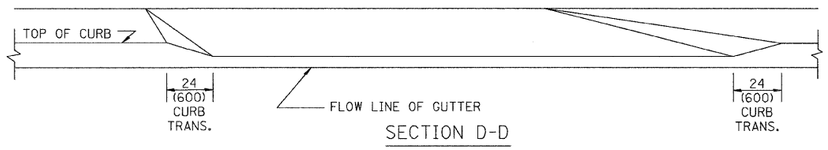
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

GENERAL NOTES

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

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

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

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

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

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

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

FILE NAME = 09527-DTLS-01 - BD02	USER NAME = leyse	DESIGNED — R. SHAH	REVISED — M. GOMEZ 04-06-01
		CHECKED —	REVISED — P. LaFLEUR 04-15-03
	PLOT SCALE =	DRAWN —	REVISED — R. BORO 01-01-07
	PLOT DATE =	CHECKED — 11-06-95	REVISED — R. BORO 09-06-11

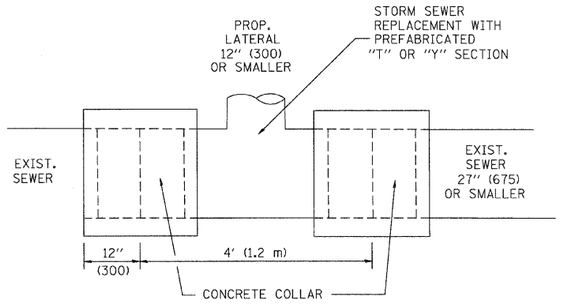
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS

DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)

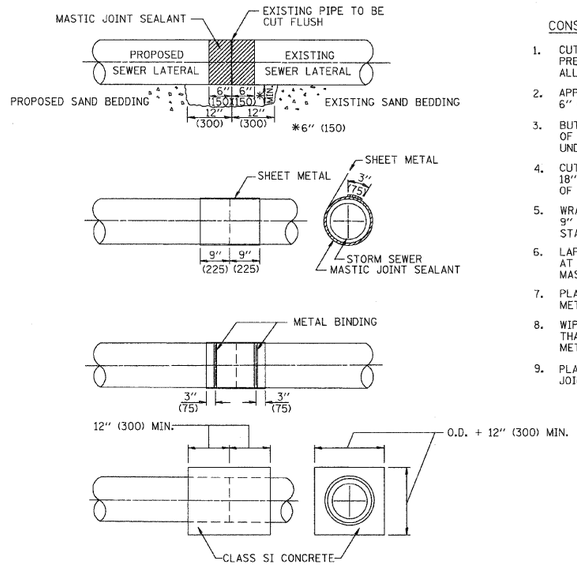
SCALE: | SHEET NO. 33 OF 48 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	08-00175-00-TL	COOK	48	33
	BD400-02 (BD-02)	CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT: F-0344 (041)		



DETAIL "A"

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

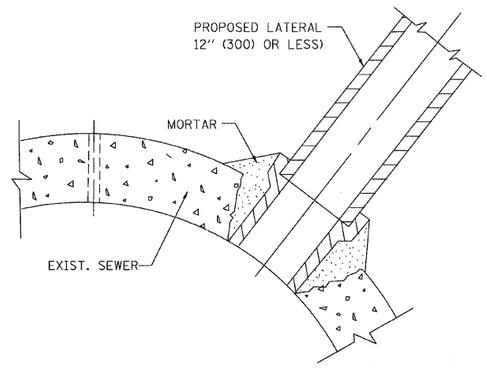


DETAIL "B"

CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

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



DETAIL "C"

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

NOTES

MATERIAL

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

CONSTRUCTION METHODS

I. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.

II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:

A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".

B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

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

GENERAL

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

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

BASIS OF PAYMENT

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

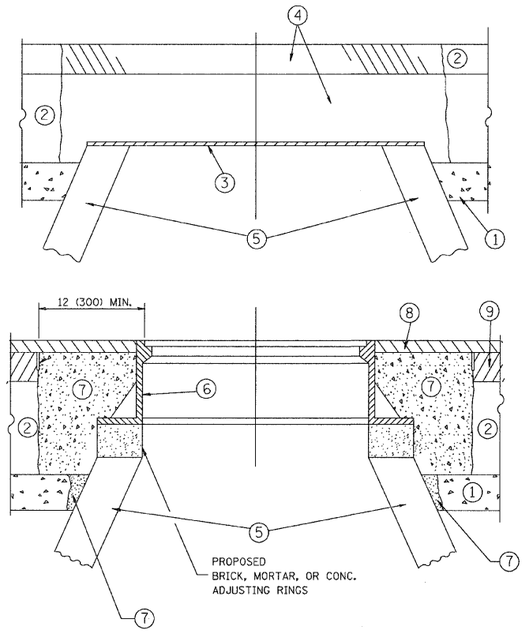
REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

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

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

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

FILE NAME = 09527-DTLS-01 - BD07	USER NAME = gaglianobt	DESIGNED — M. DE YONG	REVISED — M. DE YONG 05-08-92	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED —	REVISED — R. SHAH 09-09-94					0344	06-00175-00-TL	COOK	48	34
	PLOT SCALE =	DRAWN —	REVISED — R. SHAH 10-25-94						BD500-01 (BD-7)		CONTRACT NO. 63613	
	PLOT DATE =	CHECKED — 07-25-90	REVISED — R. SHAH 06-12-96		SCALE:	SHEET NO. 34 OF 48 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		



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.

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 1½ (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.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

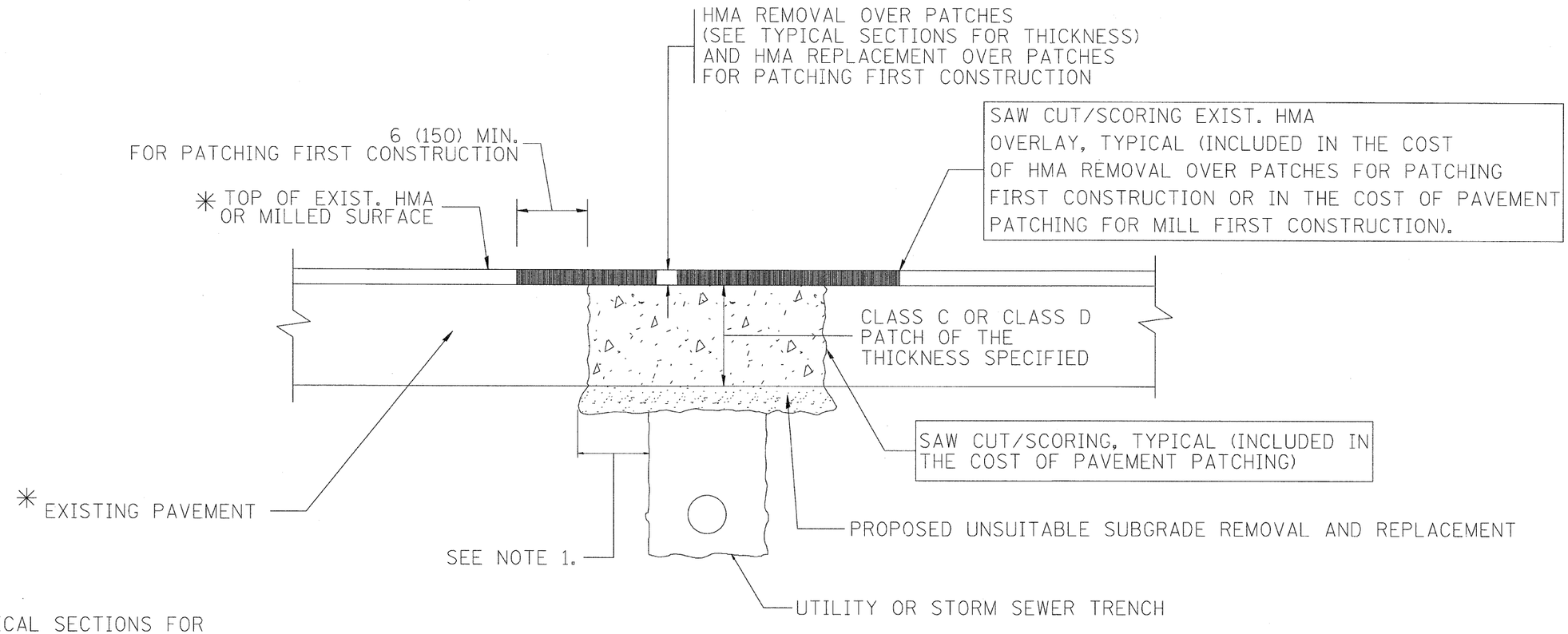
FILE NAME = 09527-DTLS-02 - BD08	USER NAME = bauerdl	DESIGNED — R. SHAH	REVISED — R. WIEDEMAN 05-14-04
		CHECKED —	REVISED — R. BORO 01-01-07
	PLOT SCALE =	DRAWN —	REVISED — R. BORO 03-09-11
	PLOT DATE =	CHECKED — 10-25-94	REVISED — R. BORO 12-06-11

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS FOR
FRAMES AND LIDS ADJUSTMENT WITH MILLING

SCALE: | SHEET NO. 35 OF 48 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	35
	BD600-03 (BD-8)	CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

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

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

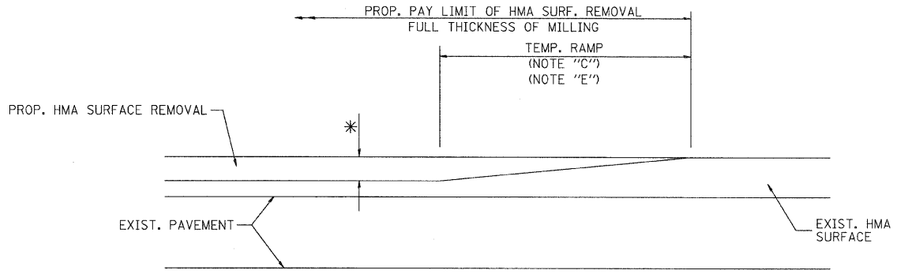
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4½ INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

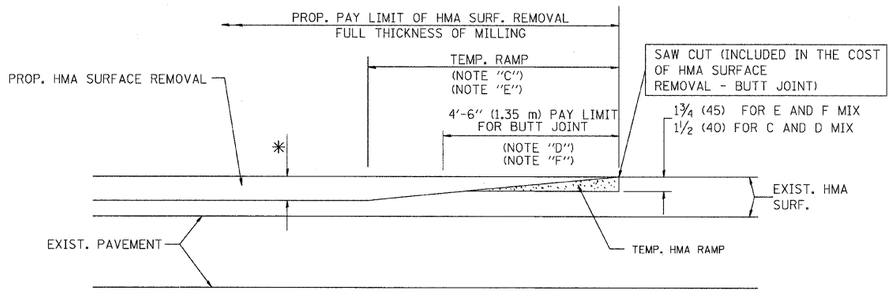
FILE NAME = 09627-DTLS-01 - BD22	USER NAME = bauerdl	DESIGNED — R. SHAH	REVISED — A. ABBAS 04-27-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED —	REVISED — R. BORO 01-01-07					0344	06-00175-00-TL	COOK	48	36
	PLOT SCALE =	DRAWN —	REVISED — R. BORO 09-04-07						BD400-04 (BD-22)	CONTRACT NO. 63613		
	PLOT DATE =	CHECKED — 10-25-94	REVISED — K. ENG 10-27-08		SCALE:	SHEET NO. 36 OF 48 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

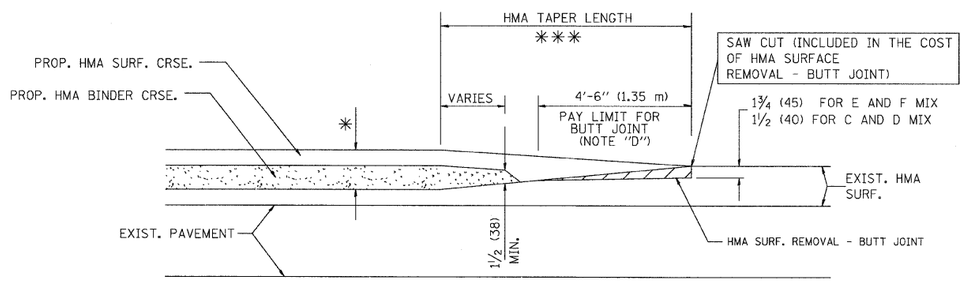


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

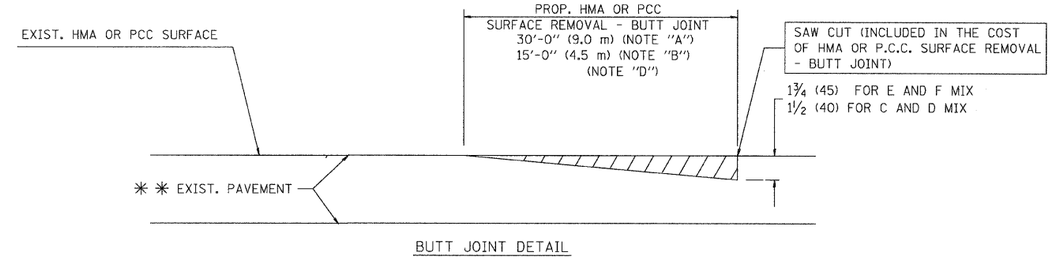
OPTION 2

TYPICAL TEMPORARY RAMP

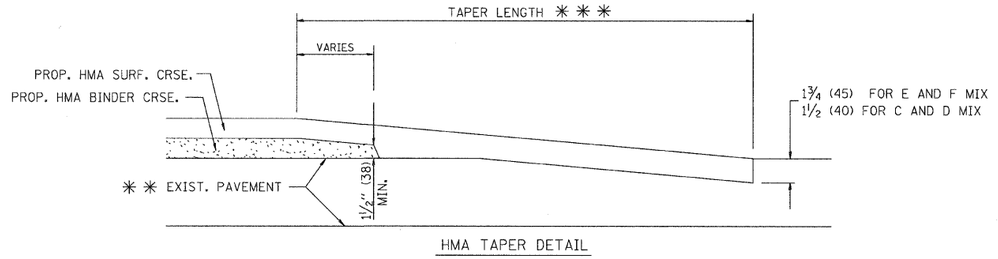


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

B: MINOR SIDE ROADS.

C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.

D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.

E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.

F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT

G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

*** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

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

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

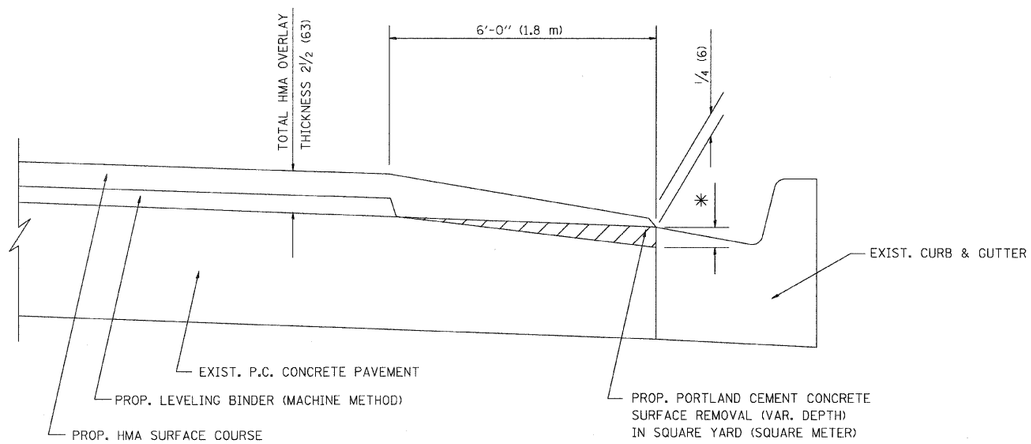
FILE NAME = 09527-DTLS-01 - BD32	USER NAME = gaglianobt	DESIGNED — M. DE YONG	REVISED — R. SHAH 10-25-94
		CHECKED —	REVISED — A. ABBAS 03-21-97
	PLOT SCALE =	DRAWN —	REVISED — M. GOMEZ 04-06-01
	PLOT DATE =	CHECKED —	REVISED — R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

SCALE: | SHEET NO. 37 OF 48 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	37
	BD400-05 BD32	CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		



HMA TAPER AT EDGE OF P.C.C PAVEMENT

HMA SURFACE		LEVELING BINDER	
MIX	THICKNESS	THICKNESS	* MILLING AT GUTTER FLAG
C OR D	1½ (38)	1 (25)	1¼ (33)
F	1¾ (44)	¾ (19)	1½ (38)

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

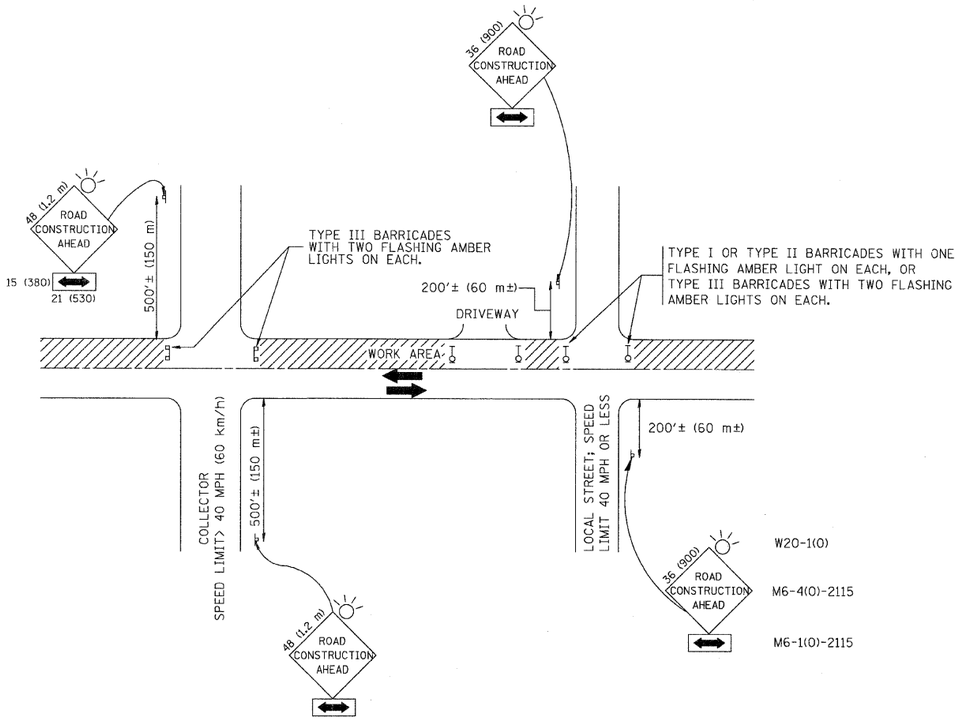
FILE NAME = 09527-DTLS-02 - BD33	USER NAME = gaglianobt	DESIGNED — R. SHAH	REVISED — R. SHAH 10-25-94
		CHECKED —	REVISED — A. ABBAS 05-05-99
	PLOT SCALE =	DRAWN —	REVISED — E. GOMEZ 12-21-00
	PLOT DATE =	CHECKED — 09-10-94	REVISED — R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HMA TAPER AT EDGE OF P.C.C. PAVEMENT

SCALE: | SHEET NO. 38 OF 48 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	08-00175-00-TL	COOK	48	38
	BD400-06 (BD33)	CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		



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.

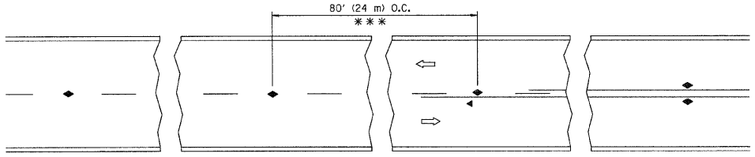
FILE NAME = 09527-DTLS-01 - TC10	USER NAME = gaglianobt	DESIGNED — LHA	REVISED — J. OBERLE 10-18-95
		CHECKED —	REVISED — A. HOUSEH 03-06-96
	PLOT SCALE =	DRAWN —	REVISED — A. HOUSEH 10-15-96
	PLOT DATE =	CHECKED — 06-89	REVISED — T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

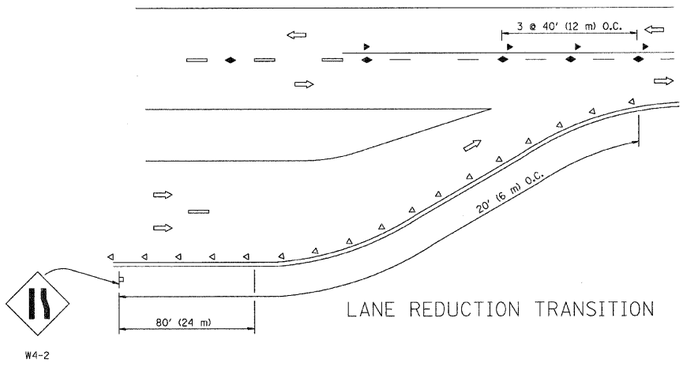
SCALE: | SHEET NO. 39 OF 48 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	39
	TC-10	CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

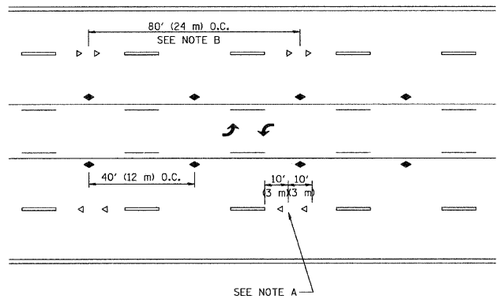


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

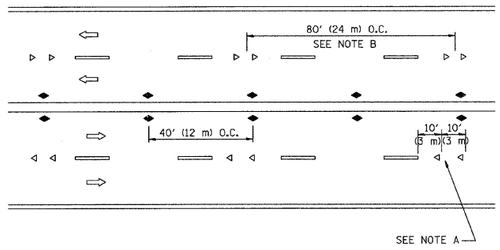
TWO-LANE/TWO-WAY



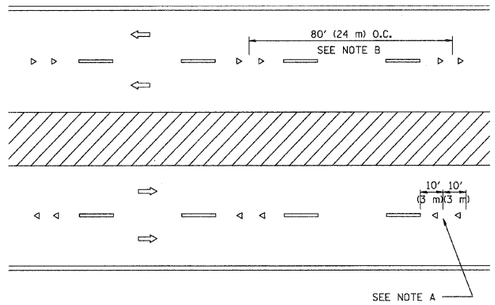
LANE REDUCTION TRANSITION



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

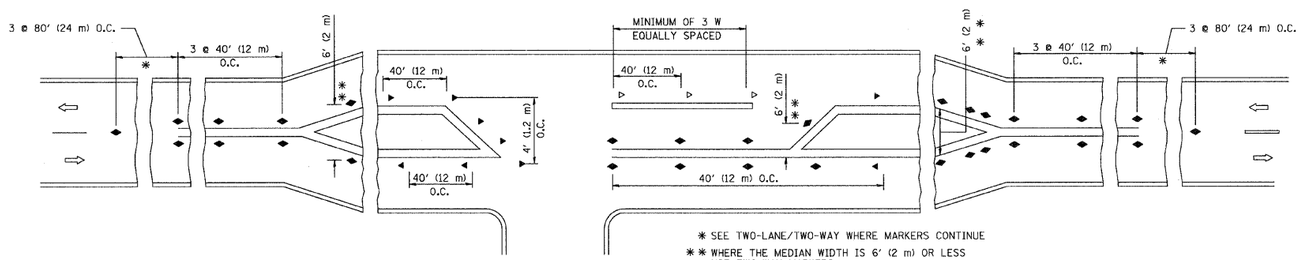
LANE MARKER NOTES

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

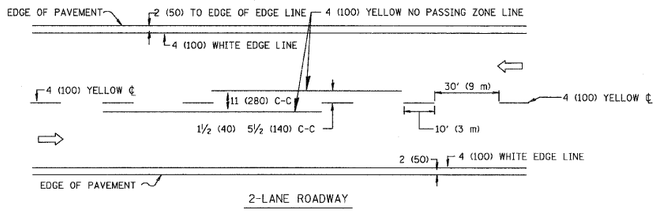
1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD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



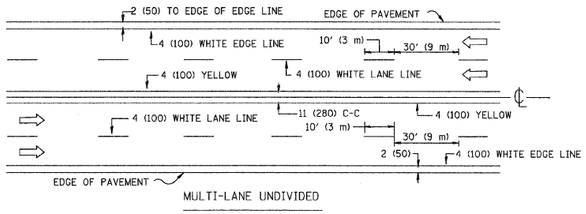
LEFT TURN

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

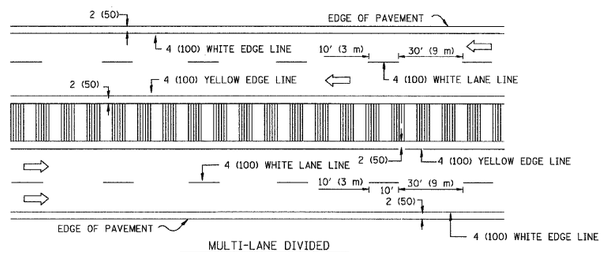
FILE NAME = 09527-DTLS-01 - TC11	USER NAME = dravskosgn	DESIGNED —	REVISED —T. RAMMACHER 09-19-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED —	REVISED —T. RAMMACHER 03-12-99			0344	06-00175-00-TL	COOK	48	40
	PLOT SCALE =	DRAWN —	REVISED —T. RAMMACHER 01-06-00				TC-11	CONTRACT NO. 63613		
	PLOT DATE =	CHECKED —	REVISED —C. JUCIUS 09-09-09		SCALE: SHEET NO. 40 OF 48 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		



2-LANE ROADWAY



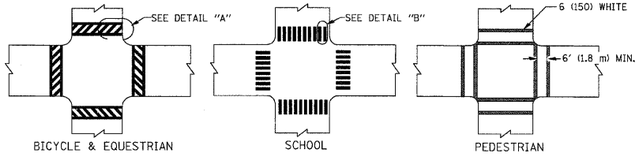
MULTI-LANE UNDIVIDED

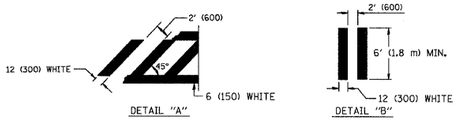


MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN

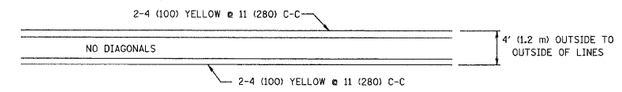
NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

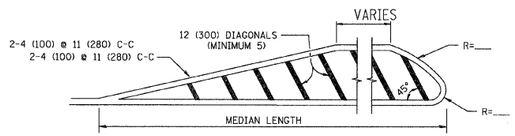




TYPICAL CROSSWALK MARKING



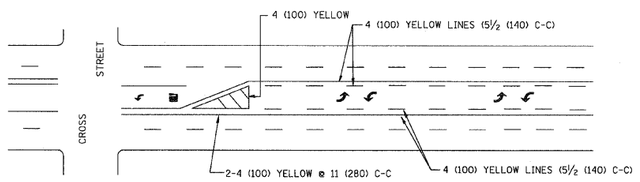
4' (1.2 m) WIDE MEDIANS ONLY



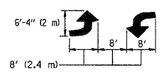
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

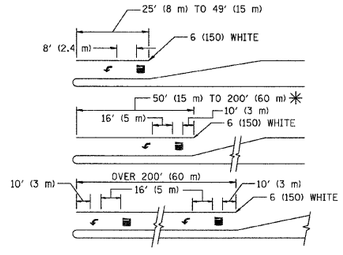


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

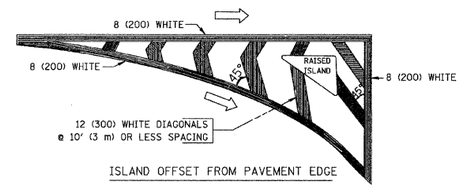


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m^2) **ONLY** AREA = 20.8 SQ. FT. (1.9 m^2)

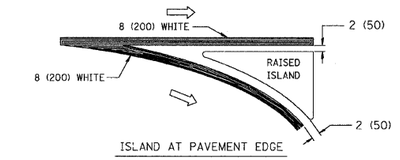
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

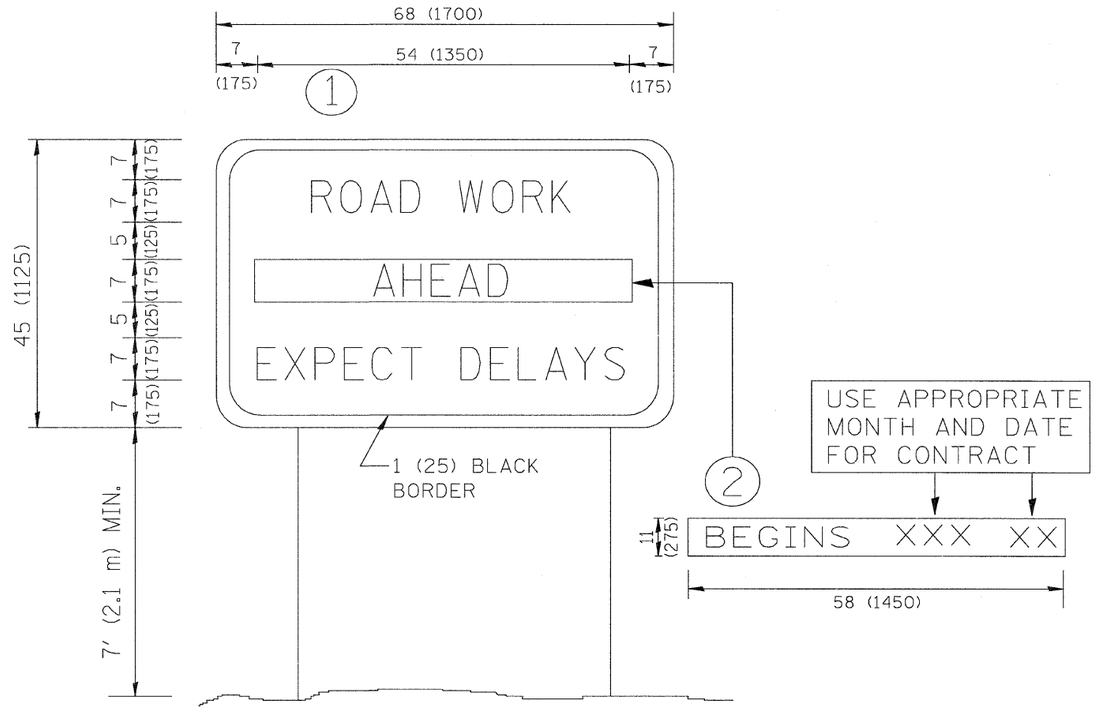
TYPICAL ISLAND MARKING

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 FOR BOTH DIRECTIONS	4 (100) 2 ⊄ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE 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; 5½ (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" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m^2) EACH "X"=54.0 SQ. FT. (5.0 m^2)
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 = 09627-DTLS-01 - TC13	USER NAME = drivekosgn	DESIGNED — EVERS	REVISED —T. RAMMACHER 10-27-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE TYPICAL PAVEMENT MARKINGS			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED —	REVISED —C. JUCIUS 09-09-09					0344	06-00175-00-TL	COOK	48	41
	PLOT SCALE =	DRAWN —	REVISED —						TC-13	CONTRACT NO. 63613		
	PLOT DATE =	CHECKED — 03-19-90	REVISED —		SCALE:	SHEET NO. 41 OF 48 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		



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.

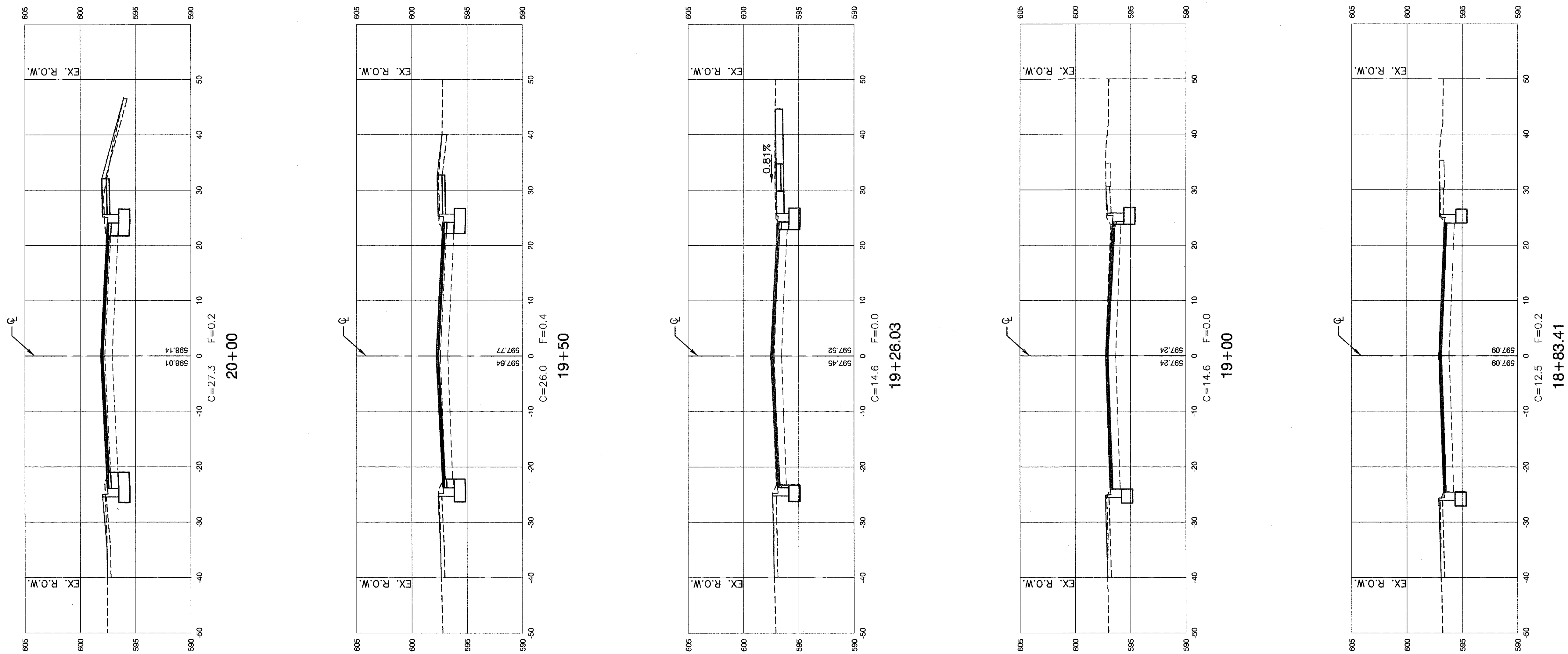
FILE NAME = 09527-DTLS-01 - TC22	USER NAME = gaglianobt	DESIGNED —	REVISED — R. MIRS 09-15-97
		CHECKED —	REVISED — R. MIRS 12-11-97
	PLOT SCALE =	DRAWN —	REVISED —T. RAMMACHER 02-02-99
	PLOT DATE =	CHECKED —	REVISED — C. JUCIUS 01-31-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

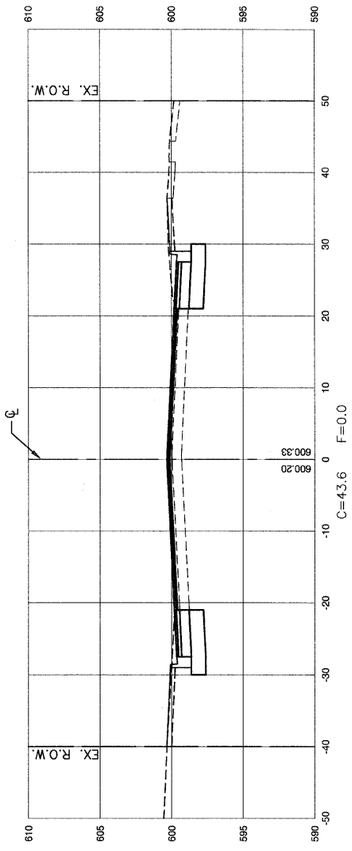
ARTERIAL ROAD INFORMATION SIGN

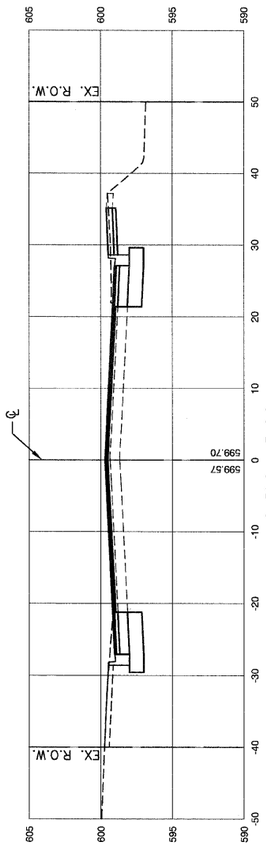
SCALE: | SHEET NO. 42 OF 48 SHEETS | STA. | TO STA.

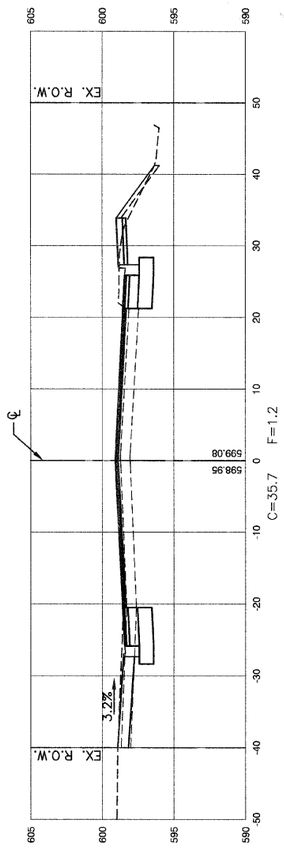
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	42
	TC-22	CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

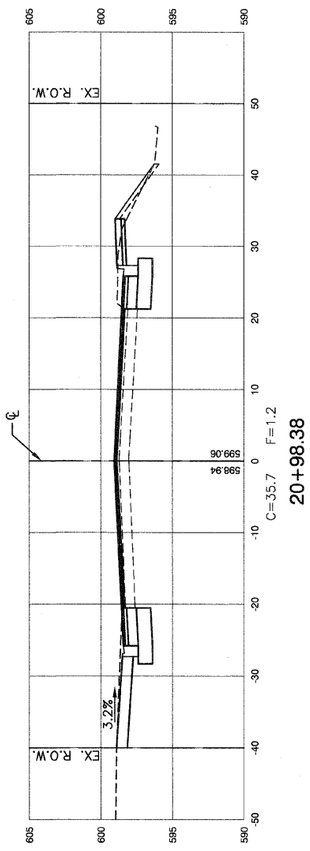


FILE NAME = 09527-XSCT-01 - X01	USER NAME =	DESIGNED — HLG	REVISED —	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP 0344 (127TH STREET) AT SACRAMENTO AVENUE CROSS SECTIONS	F.A.U. RTE. 0344	SECTION 06-00175-00-TL	COUNTY COOK; TOTAL SHEETS 48; SHEET NO. 43
		CHECKED — ####	REVISED —					CONTRACT NO. 63613
	PLOT SCALE =	DRAWN — LTL	REVISED —					
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —		SCALE: H 1"=10' V 1"=5 | SHEET NO. 43 OF 48 SHEETS | STA. 18+83.41 TO STA. 20+00	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)

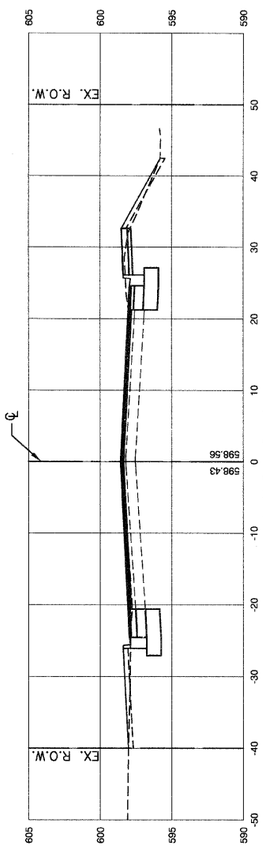








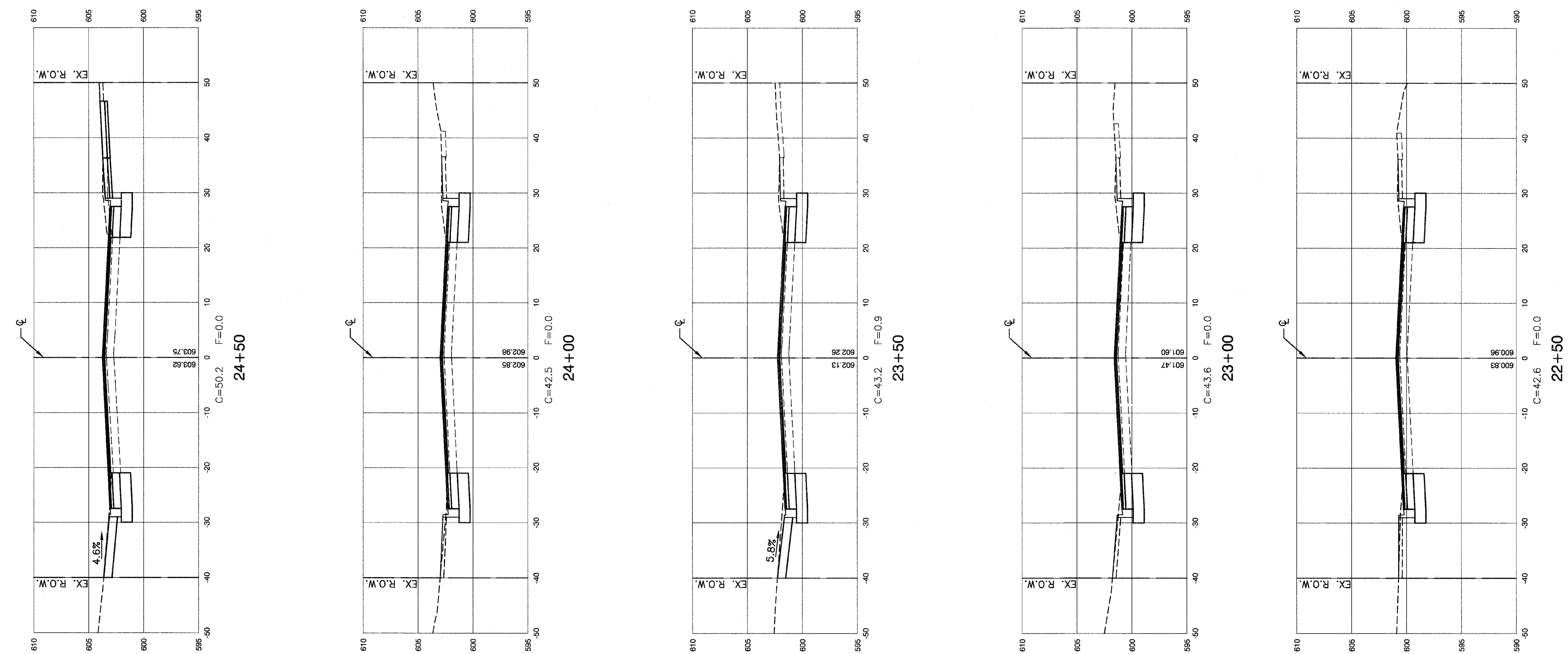
SWALE TO DRAIN TO
EXISTING STRUCTURE ©
STA. 20+60
RIM EL=595.62



FILE NAME = 09527-XSCT-01 - X02	USER NAME =	DESIGNED — HLG	REVISED —	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP 0344 (127TH STREET) AT SACRAMENTO AVENUE CROSS SECTIONS
		CHECKED — ####	REVISED —		
	PLOT SCALE =	DRAWN — LTL	REVISED —		
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —		SCALE: H 1"=10' V 1"=5' | SHEET NO. 44 OF 48 SHEETS | STA. 20+50 TO STA. 22+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	44
		CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

PLOTTED BY: MOHAMED SCHNYK ON 2/21/12



FILE NAME = 09527-XSCT-01 - X03	USER NAME =	DESIGNED — HLG	REVISED —
		CHECKED — ####	REVISED —
	PLOT SCALE =	DRAWN — LTL	REVISED —
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —

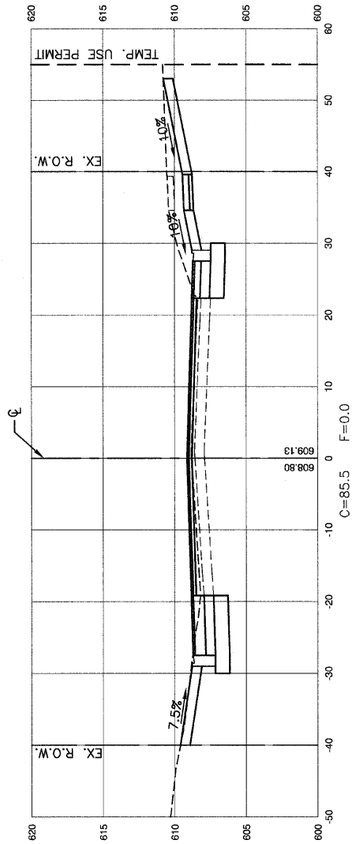
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

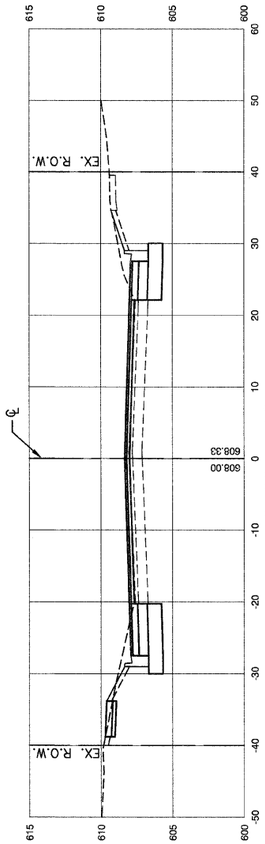
FAP 0344 (127TH STREET)
AT SACRAMENTO AVENUE
CROSS SECTIONS

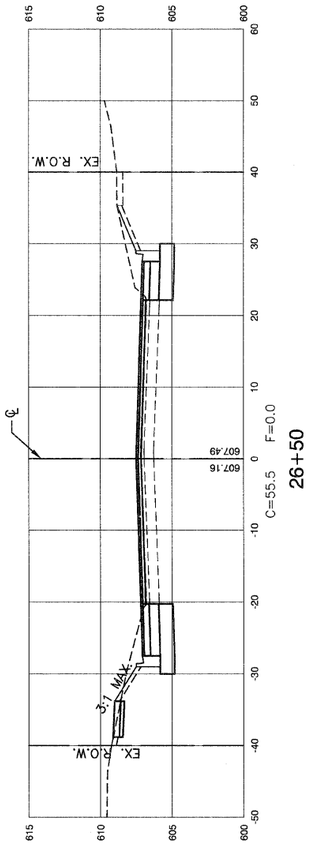
SCALE: H 1"=10' V 1"=5' | SHEET NO. 45 OF 48 SHEETS | STA. 22+50 TO STA. 24+50

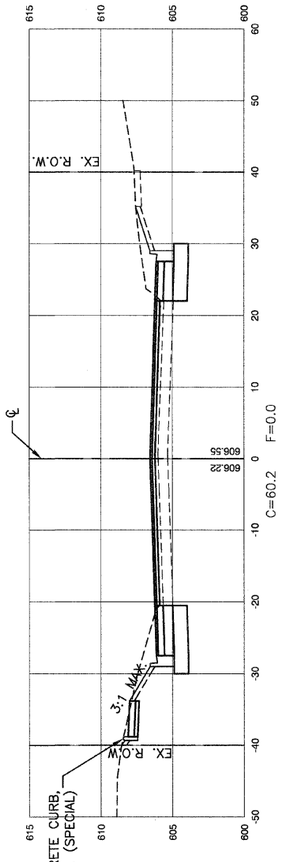
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	45
		CONTRACT NO. 63613		

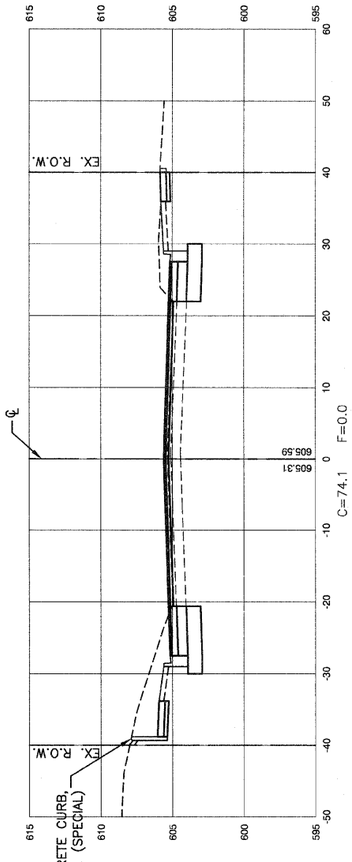
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT F-0344 (041)







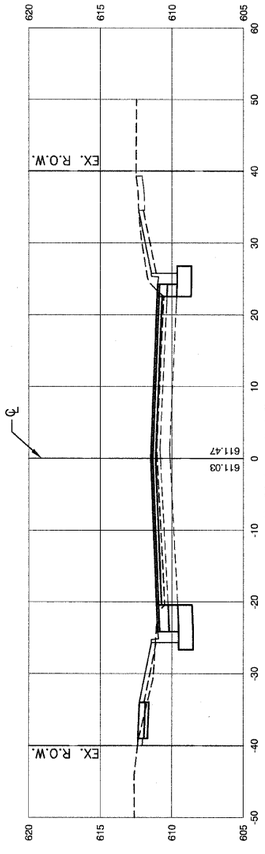


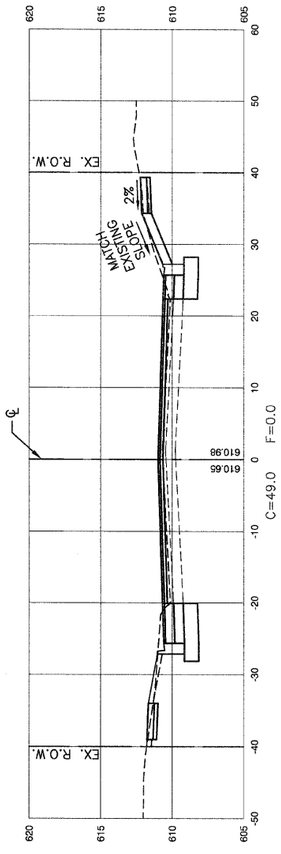


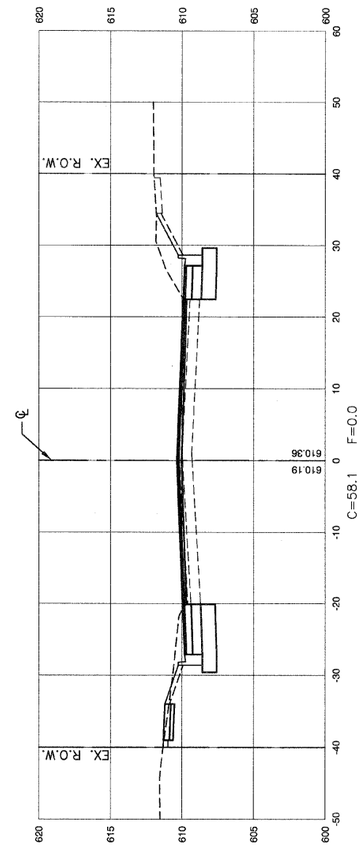
FILE NAME = 09527-XSCT-01 - X04	USER NAME =	DESIGNED — HLG	REVISED —	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP 0344 (127TH STREET) AT SACRAMENTO AVENUE CROSS SECTIONS
		CHECKED — ####	REVISED —		
	PLOT SCALE =	DRAWN — LTL	REVISED —		
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —		SCALE: H 1"=10' V 1"=5 | SHEET NO. 46 OF 48 SHEETS | STA. 25+00 TO STA. 27+50

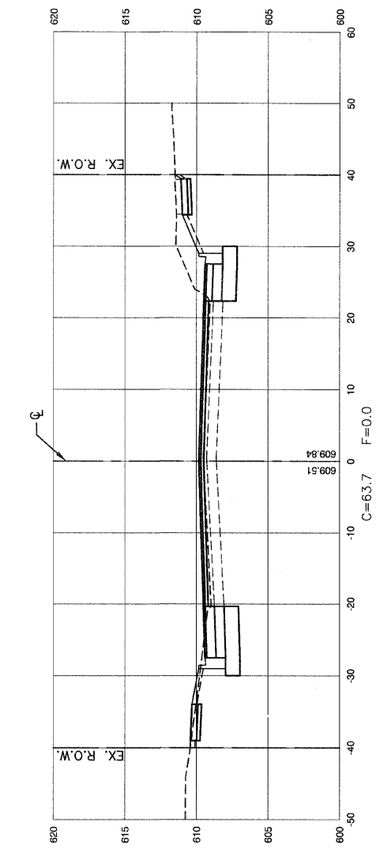
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	06-00175-00-TL	COOK	48	46
		CONTRACT NO. 63613		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

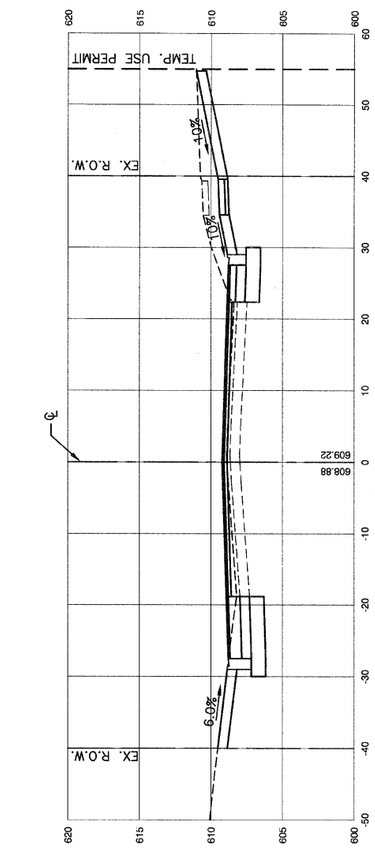
LAST SAVED BY: HGUNDEL ON 2/23/12
PLOTTED BY: HGUNDEL ON 2/23/12





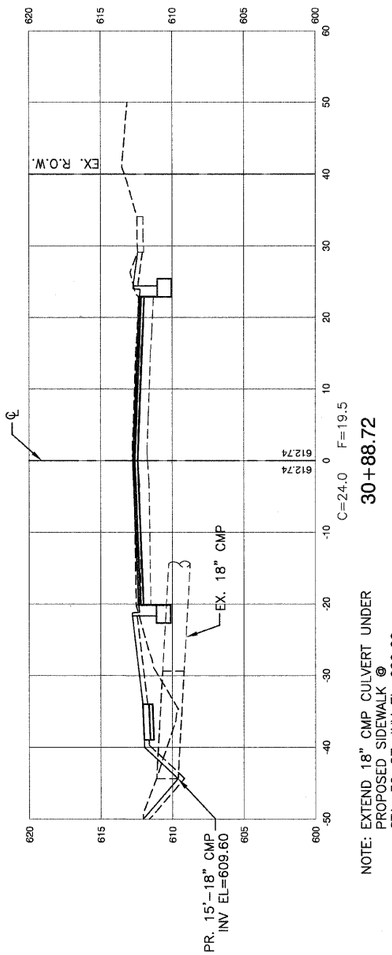






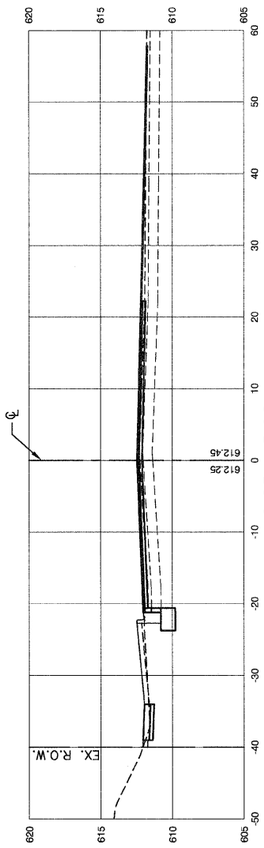
FILE NAME = 09527-XSCT-01 - X05	USER NAME =	DESIGNED — HLG	REVISED —	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP 0344 (127TH STREET) AT SACRAMENTO AVENUE CROSS SECTIONS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED — ####	REVISED —			0344	06-00175-00-TL	COOK	48	47
	PLOT SCALE =	DRAWN — LTL	REVISED —					CONTRACT NO. 63613		
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —		SCALE: H 1"=10' V 1"=5 | SHEET NO. 47 OF 48 SHEETS | STA. 27+56.43 TO STA. 29+50	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

LAST SAVED BY: RGERNON ON 2/5/15
PLOTTED BY: RGERNON ON 2/5/15

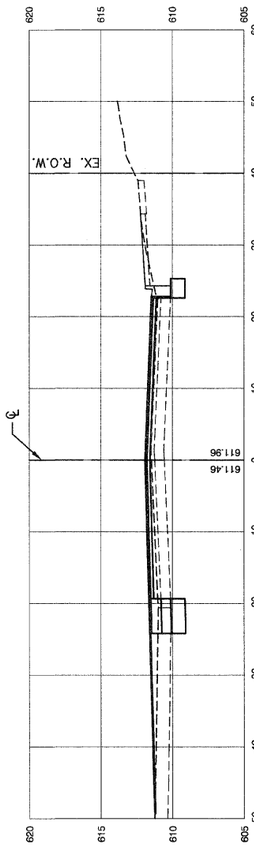


30+88.72

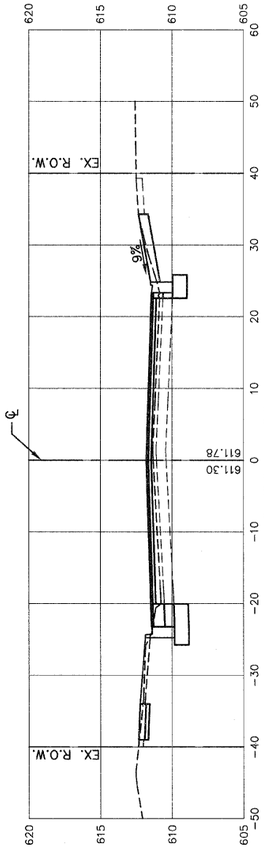
NOTE: EXTEND 18" CMP CULVERT UNDER PROPOSED SIDEWALK @ STA. 30+87, INV EL=609.60



30+50



30+00



29+82.06

FILE NAME = 09527-XSCT-01 - X06	USER NAME =	DESIGNED — HLG	REVISED —	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP 0344 (127TH STREET) AT SACRAMENTO AVENUE CROSS SECTIONS		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED — ####	REVISED —				0344	06-00175-00-TL	COOK	48	48
	PLOT SCALE =	DRAWN — LTL	REVISED —						CONTRACT NO. 63613		
	PLOT DATE = 02-22-12	CHECKED — AG	REVISED —		SCALE: H 1"=10' V 1"=5'	SHEET NO. 48 OF 48 SHEETS STA. 29+82.06 TO STA. 30+88.72	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT F-0344 (041)		

LAST SAVED BY: NGUYEN, KIN 2/24/12
PLOTTED BY: RICHART, TERESA ON 2/24/12