

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PLANS FOR

PROPOSED FEDERAL-AID HIGHWAY

F.A.P. 352 (SHERIDAN ROAD / GENESEE STREET / IL 137)

DR. MARTIN LUTHER KING, JR. DRIVE (F.A.U. 1230)

TO BELVIDERE ROAD (F.A.U. 1225)

TRAFFIC SIGNAL IMPROVEMENTS & INTERCONNECT

SECTION 09-00169-00-TL

PROJECT NO: CMM-9003(348)

CITY OF NORTH CHICAGO

CITY OF WAUKEGAN

LAKE COUNTY

C-91-662-09

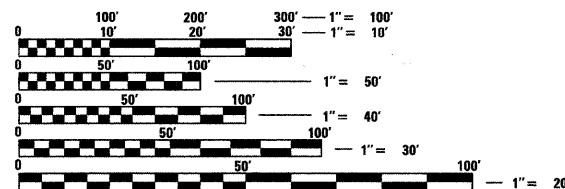
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2736	09-00169-00-TL	LAKE	35	1
FED. ROAD DIST. NO. 1		ILLINOIS	CONTRACT NO. 63592	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THESE IMPROVEMENTS ARE LOCATED WITHIN THE CITIES OF NORTH CHICAGO AND OF WAUKEGAN

TRAFFIC DATA

SHERIDAN ROAD
2009 ADT - 16,900
POSTED SPEED LIMIT - 35 MPH



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

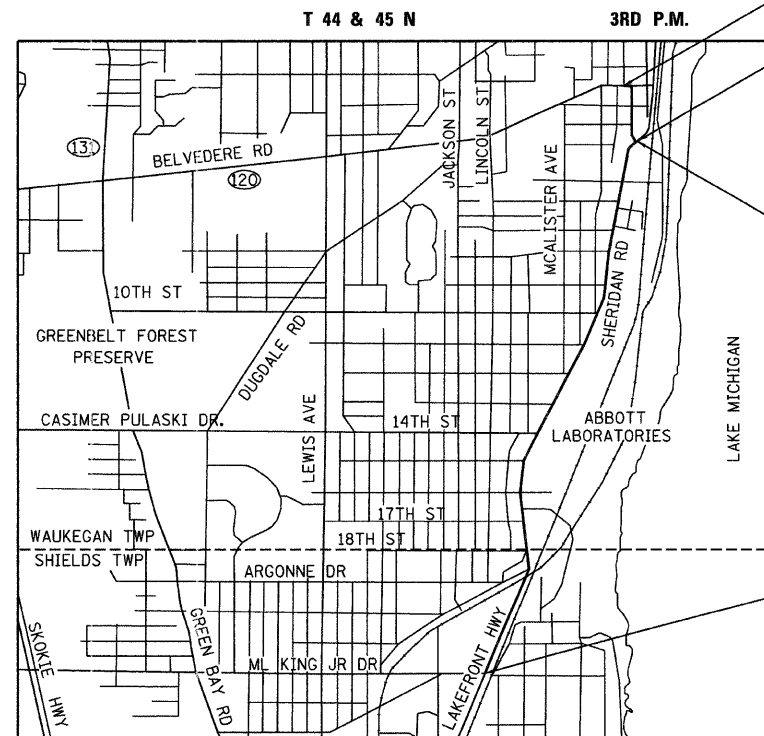
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

Ciorba Group, Inc.

DESIGN FIRM
REGISTRATION NUMBER

184-001016

CONSULTING ENGINEERS
SUITE 402, 5507 NORTH CUMBERLAND AVE
CHICAGO, ILLINOIS 60656 :: (773) 775-4009



SHIELDS AND WAUKEGAN TOWNSHIPS

LOCATION MAP

1" = 2,000'

GROSS AND NET LENGTH OF PROJECT = 14,000 FT = 2.65 MI.

END PROJECT
STA. 114 + 50

BEGIN PROJECT
STA. 100 + 00

END PROJECT
STA. 449 + 00

BEGIN PROJECT
STA. 323 + 70



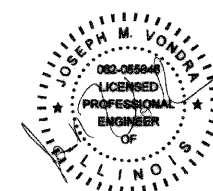
LOCATION OF SECTION INDICATED THUS: -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED: *Sean Riedinger*
CITY OF NORTH CHICAGO, MAYOR

PASSED: *APRIL 13, 2011*
C. J. [Signature]
DISTRICT 4 ENGINEER OF LOCAL ROAD & STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW: *APRIL 14, 2011*
Diane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER



DATE: 4/8/2011
SEAL EXPIRES: 11/30/2011

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OF THE STATE OF ILLINOIS**

PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. 847-705-4406 SCHAUMBURG, IL

CONTRACT NO. 63592

INDEX OF SHEETS

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LIST OF HIGHWAY STANDARDS

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 701006-03 OFF-RD OPERATIONS, 2L, 2W, 15'(4.5M) TO 24'(600MM) FROM PAVEMENT EDGE
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
- 701502-04 URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
- 701602-05 URBAN LANE CLOSURE, MULTILANE, 2W WITH EIDIRECTIONAL LEFT TURN LANE
- 701606-07 URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 701701-07 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701801-04 LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
- 701901-01 TRAFFIC CONTROL DEVICES
- 814001-02 HANDHOLES

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS AS WELL AS:
 - ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS ADOPTED JANUARY 1, 2007.
 - ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (LATEST EDITION IN EFFECT ON THE DATE OF INVITATION FOR BIDS)
 - NATIONAL ELECTRIC CODE, 2008 EDITION.
2. ALL UNDERGROUND UTILITY LOCATIONS, INCLUDING SANITARY SEWERS, STORM SEWERS, WATER MAINS, AND THEIR SERVICE LINES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE THE RESPECTIVE UTILITY COMPANIES FIELD-LOCATE ALL UTILITIES, ASCERTAIN THEIR STATUS AND ADJUST OR RELOCATE THESE UTILITIES, AS NECESSARY, PRIOR TO STARTING CONSTRUCTION. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE CONTRACT. THE CONTRACTOR SHALL NOTIFY ALL PUBLIC AND PRIVATE UTILITIES BEFORE STARTING CONSTRUCTION BY CONTACTING J.U.I.E. AT 1-800-892-0123. BELSKI ELECTRIC (847)-417-0999 SHOULD ALSO BE CONTACTED INDIVIDUALLY AT THIS TIME.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER OR OWNER. THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

- 4. THE MUNICIPALITIES' DEPARTMENT OF PUBLIC WORKS SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
 - CITY OF NORTH CHICAGO
JOSH WHEELER, CITY ENGINEER (847)-596-8691
 - CITY OF WAUKEGAN
RON LAUBACH, CITY ENGINEER (847)-625-6858
- 5. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO COMMENCING CONSTRUCTION.
- 6. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION FROM THE ENGINEER BEFORE BEGINNING WORK AT ANY INTERSECTION.

7. THE CONTRACTOR SHALL MAINTAIN A SET OF CONSTRUCTION RECORD DRAWINGS NOTING ALL CHANGES TO THE PLANS AND THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES ENCOUNTERED. A MYLAR REPRODUCIBLE AS-BUILT DRAWING AND TWO (2) PAPER SETS MUST BE SUBMITTED TO EACH DEPARTMENT OF PUBLIC WORKS FOR REVIEW AND APPROVAL UPON COMPLETION OF THE PROJECT. THIS WORK WILL BE CONSIDERED INCLUDED IN THIS CONTRACT.

- 8. ANY SIGN LOCATED IN THE PUBLIC RIGHT-OF-WAY WHICH INTERFERES WITH THE CONSTRUCTION OF THE PROPOSED INTERCONNECT SYSTEM SHALL BE REMOVED AND RE-ERECTED. ALL WORK INVOLVING SIGN REMOVAL AND RE-ERECTION SHALL BE GOVERNED BY THE FOLLOWING REQUIREMENTS:
 - A. A SIGN LOG SHALL BE CREATED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. A COPY SHALL BE GIVEN TO THE ENGINEER FOR REVIEW. UPON REVIEW BY THE ENGINEER, THE CONTRACTOR SHALL PROVIDE A COPY TO IDOT AND EACH MUNICIPALITY.
 - B. SIGNS SHALL NOT BE MOVED UNTIL PROGRESS OF WORK NECESSITATES IT.
 - C. EVERY SIGN REMOVED MUST BE RE-ERECTED AT A TEMPORARY LOCATION IN A WORKMANLIKE MANNER AND BE VISIBLE TO TRAFFIC FOR WHICH IT WAS INTENDED. ALL SUCH SIGNS MUST BE MAINTAINED STRAIGHT AND CLEAN FOR THE DURATION OF THE TEMPORARY SETTING.
 - D. ALL SIGNS SHALL BE RE-ERECTED IN THE ORIGINAL LOCATION AS THE IMPROVEMENTS ARE COMPLETED.
 - E. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY SIGNS DAMAGED BY HIS/HER CONSTRUCTION ACTIVITIES AND WILL REPLACE THEM AT NO COST TO THE MUNICIPALITY. THIS WORK SHALL BE INCLUDED IN THE CONTRACT.
 - F. STREET SIGNS TEMPORARILY RELOCATED DURING CONSTRUCTION MAY BE ATTACHED TO THE NEW STREET LIGHTS WITH THE APPROVAL OF THE ENGINEER.

9. THE CONTRACTOR WILL CONFINE HIS OPERATIONS TO WITHIN THE AREAS DESIGNATED BY THE ENGINEER IN THE FIELD. DAMAGE TO PROPERTY OUTSIDE OF THESE LIMITS WILL BE RESTORED TO THE CONDITION THAT EXISTED PRIOR TO THE PROJECT AND SHALL BE INCLUDED IN THE CONTRACT. ANY AREAS WITHIN THE MUNICIPALITY RIGHT OF WAY SHALL BE REPLACED WITH SOD.

10. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN SATISFACTORY DRAINAGE OF THE PROJECT SITE AND THOSE AREAS THAT PRESENTLY DRAIN THROUGH THE PROJECT SITE AT ALL TIMES DURING THE CONSTRUCTION PERIOD. THE COST OF PROVIDING, INSTALLING AND MAINTAINING THESE MEASURES SHALL BE INCLUDED IN THE COST OF THE CONTRACT.

11. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CLEAN ALL DRAINAGE STRUCTURES OF ALL DEBRIS ACCUMULATED DURING CONSTRUCTION OPERATIONS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT.

12. NO CONSTRUCTION MATERIALS OR EQUIPMENT SHALL BE STORED IN OR MOVED THROUGH THE DRIPLINE OF ANY PARKWAY TREE. IF THIS CLEARANCE CANNOT BE MAINTAINED, THE ENGINEER MUST BE NOTIFIED PRIOR TO CONSTRUCTION.

- 13. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS PRIOR TO BIDDING ON THIS PROJECT. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR FAILURE TO VERIFY EXISTING DIMENSIONS OR CONDITIONS.
- 14. HANDICAPPED RAMPS SHALL BE PROVIDED AT ALL CROSS WALK LOCATIONS, AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH THE IDOT STANDARD SPECIFICATIONS.
- 15. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- 16. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL PAVEMENT OPENINGS, OPEN HOLES, EQUIPMENT AND RUBBLE LEFT IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL MAINTAIN HIGH VISIBILITY OF ALL TEMPORARY HAZARDS TO PEDESTRIANS AND MOTORISTS.
- 17. ALL PARKWAYS DISTURBED BY CONSTRUCTION OPERATIONS SHALL BE PROPERLY GRADED AND RECEIVE FOUR INCHES OF TOPSOIL AND SOD.
- 18. PLACEMENT OF TOPSOIL AND SOD SHALL BE COMPLETED WITHIN 10-15 DAYS AFTER THE COMPLETION OF CURB AND GUTTER, PAVING AND/OR DRIVEWAY REPLACEMENT OPERATIONS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- 19. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON CITY PROPERTY WITHOUT WRITTEN PERMISSION FROM THE CITY.
- 20. ALL DIMENSIONS ARE TO THE EDGE OF PAVEMENT, UNLESS INDICATED OTHERWISE.

21. THE CONTRACTOR SHALL BE REQUIRED TO DISPOSE OF ALL SIDEWALKS, CURB AND GUTTER, PAVEMENT AND ALL OTHER MATERIALS EXCAVATED OR REMOVED DUE TO THE PROPOSED IMPROVEMENTS. ALL EXCESS EXCAVATED MATERIAL SHALL BE REMOVED FROM THE WORK SITE ON THE DAY OF ITS EXCAVATION. NO ADDITIONAL COMPENSATION WILL BE MADE FOR HAULING THESE MATERIALS OUTSIDE THE PROJECT LIMITS.

22. TRAFFIC CONDITIONS, ACCIDENTS AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL MAKE THE NECESSARY ADJUSTMENTS AS DIRECTED BY THE ENGINEER WITHOUT DELAY. THE CONTRACTOR SHALL RESPOND TO ANY REQUEST MADE BY THE ENGINEER FOR CORRECTION WITHIN TWO (2) HOURS FROM THE TIME OF NOTIFICATION.

23. SAW CUTTING OF PAVEMENTS, SHOULDERS, ETC., SHALL BE FULL DEPTH AND SHALL RESULT IN A CLEAN, STRAIGHT EDGE ON THE PORTION REMAINING. ALL SAW CUTTING SHALL BE CONSIDERED INCLUDED IN THE ITEM REMOVED.

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PLOT DATE = 4/11/2011	CHECKED - JMV	REVISED -
	DATE - 03/22/2011	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SHERIDAN ROAD TRAFFIC SIGNAL IMPROVEMENTS & INTERCONNECT
INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES**

F.A.P. RTE. 2736	SECTION 09-00169-00-TL	COUNTY LAKE	TOTAL SHEETS 35	SHEET NO. 2
SCALE: STA. TO STA.			CONTRACT NO. 63592	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CODE #	DESCRIPTION	UNIT	TOTAL 0021	Sheridan at MLK Jr. Dr.	Sheridan at 18th	Sheridan at 16th	Sheridan at 14th	Sheridan at 10th	Genesee at South	Genesee at Amstutz	Genesee at Belvidere	Belvidere at Sheridan	Interconnect
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	1,885		45	90							1,750
2500C400	NITROGEN FERTILIZER NUTRIENT	POUND	23		1	1							21
2500C500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	23		1	1							21
2500C600	POTASSIUM FERTILIZER NUTRIENT	POUND	23		1	1							21
2520C100	SODDING	SQ YD	1,885		45	90							1,750
2520C200	SUPPLEMENTAL WATERING	UNIT	122		6	3							113
* 35102000	AGGREGATE BASE COURSE, TYPE B 8"	SQ YD	50										50
* 4060C080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	14										14
* 4060C310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	6										6
* 4230C400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	50										50
* 4240C200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	3,215		935	1,330							950
* 4240C800	DETECTABLE WARNINGS	SQ FT	152		48	64							40
* 4400C200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	50										50
* 4400C500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	317		152	165							
* 4400C600	SIDEWALK REMOVAL	SQ FT	3,515		1,235	1,330							950
* 6060C800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	317		152	165							
* 6690C200	NON-SPECIAL WASTE DISPOSAL	CU YD	50										50
* 6690C450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1										1
* 6690C530	SOIL DISPOSAL ANALYSIS	EACH	10										10
6710C100	MOBILIZATION	L SUM	1										1
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1										1
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1										1
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1										1
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1										1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1										1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1										1
7200C100	SIGN PANEL - TYPE 1	SQ FT	51		21	30							
* 7800C200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	155		100	55							
8050C020	SERVICE INSTALLATION - POLE MOUNTED	EACH	2		1	1							
8100C600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	4,470										4,470
8100C700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	80		30	50							
8100C800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	95		30	65							
81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	40		20	20							
8101E500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	8,150		605	615							6,930
8101E700	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	75		75								
8101E900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	320		120	200							
8140C100	HANDHOLE	EACH	30		4	5							21
8140C300	DOUBLE HANDHOLE	EACH	2		1	1							
8190C200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	215		80	135							
8500C200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	7	1			1	1	1	1	1	1	
8570C205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	2		1	1							
8570C500	FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	2				1	1					
8620C120	UNINTERRUPTIBLE POWER SUPPLY	EACH	2		1	1							
8730C925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	15,000										15,000
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,500		600	900							

* = SPECIALTY ITEM

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CHECKED - JMV
DATE - 03/22/2011

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHERIDAN ROAD TRAFFIC SIGNAL IMPROVEMENTS & INTERCONNECT
SUMMARY OF QUANTITIES

SCALE: SHEET NO. 3 OF 35 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2736	09-00169-00-TL	LAKE	35	3
CONTRACT NO. 63592			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

CODE #	DESCRIPTION	UNIT	TOTAL 0021	Sheridan at MLK Jr. Dr.	Sheridan at 18th	Sheridan at 16th	Sheridan at 14th	Sheridan at 10th	Genesee at South	Genesee at Amstutz	Genesee at Belvidere	Belvidere at Sheridan	Interconnect
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2,000		650	1,100	250						
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3,350		1,600	1,750							
87301405	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 16 1 PAIR	FOOT	1,260		380	880							
87301415	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 16 3 PAIR	FOOT	360		360								
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	210		110	100							
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1 C	FOOT	1,650		750	900							
87500600	TRAFFIC SIGNAL POST, 10 FT.	EACH	1		1								
87501000	TRAFFIC SIGNAL POST, 14 FT.	EACH	6		2	4							
87700150	STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	3		1	2							
87700160	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	2		1	1							
87700180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1		1								
87702840	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 22 FT.	EACH	1			1							
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	28		12	16							
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	8		4	4							
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	70		30	40							
87900200	DRILL EXISTING HANDHOLE	EACH	10										10
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	14		6	8							
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5		2	3							
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3		2	1							
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	14		6	8							
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	14		6	8							
88600100	DETECTOR LOOP, TYPE 1	FOOT	555		230	325							
88800100	PEDESTRIAN PUSH-BUTTON	EACH	14		6	8							
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	2		1	1							
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3,950		2,500	1,450							
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2		1	1							
89502380	REMOVE EXISTING HANDHOLE	EACH	6		2	4							
89502382	REMOVE EXISTING DOUBLE HANDHOLE	EACH	1		1								
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	15		7	8							
X0325462	MEDIA CONVERTER	EACH	1										1
* X4240430	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL	SQ FT	300		300								
X8710029	FIBER OPTIC CABLE 24 FIBERS, SINGLE MODE	FOOT	15,276										15,276
XX003338	TEST HOLE	EACH	67		11	14							42
XX005940	REMOTE CONTROLLED VIDEO SYSTEM	EACH	2			1	1						
XX006655	LAYER II (DATALINK) SWITCH	EACH	6		1	1	1	1	1	1			
XX008251	SPLICE FIBER IN CABINET	EACH	8								4	4	
XX008253	VIDEO ENCODER	EACH	2			1	1						
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	103										103
Z0033050	COAXIAL CABLE IN CONDUIT	FOOT	400			150	250						
Z0033056	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1										1
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1										1
Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	2		1	1							
Δ Z0076600	TRAINEES	HOUR	500										500
X8730300	ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4C	FOOT	400			150	250						

Δ = CONSTRUCTION TYPE CODE 0042

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SHERIDAN ROAD TRAFFIC SIGNAL IMPROVEMENTS & INTERCONNECT
SUMMARY OF QUANTITIES**

SCALE: SHEET NO. 4 OF 35 SHEETS STA. TO STA.

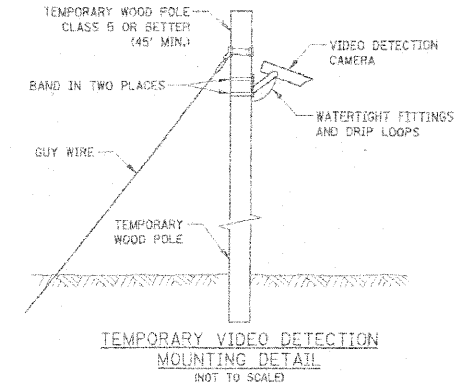
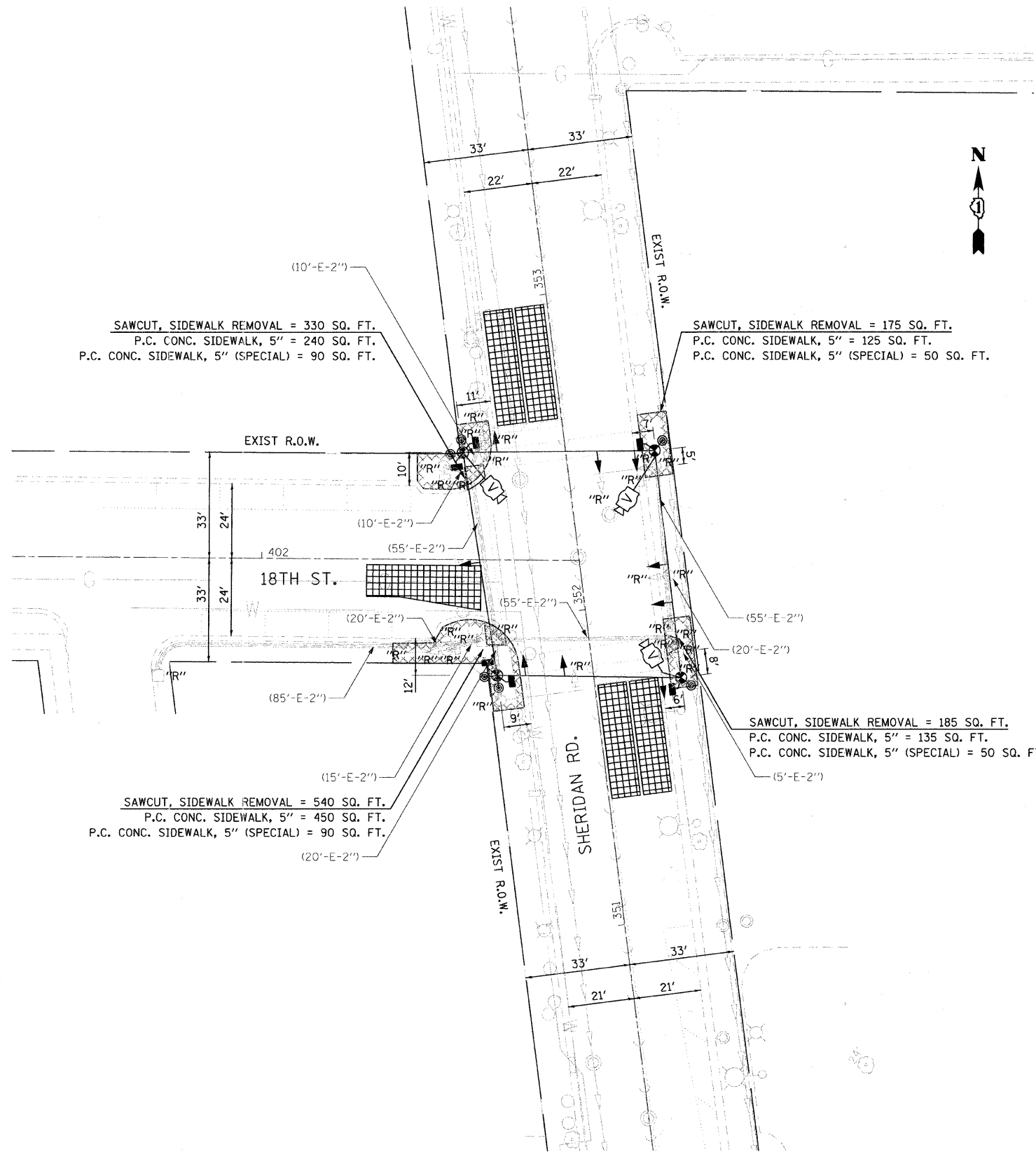
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2736	09-00169-00-TL	LAKE	35	4
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 63592	

TEMPORARY TRAFFIC SIGNAL NOTES

- ALL CONTROL EQUIPMENT FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- ONLY CONTROLLERS SUPPLIED BY ONE OF THE STATE 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 THE ILLINOIS DEPARTMENT OF TRANSPORTATION. INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
- ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" 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 TO 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.
- 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.
- ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- 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.
- 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.
- 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 OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
- 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.
- 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.

THE FOLLOWING ITEMS 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 B/D PRICE.

- 7 EACH SIGNAL HEAD, 1-FACE, 3-SECTION BRACKET MOUNTED
- 2 EACH SIGNAL HEAD, 1-FACE, 3-SECTION MAST ARM MOUNTED
- 5 EACH TRAFFIC SIGNAL POST
- 2 EACH MAST ARM POLE
- 7 EACH CONCRETE FOUNDATION
- 2 EACH TRAFFIC SIGNAL BACKPLATE
- 1 EACH POLE MOUNTED ELECTRIC SERVICE
- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 1 EACH CONTROLLER FOUNDATION
- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 2 EACH HANDHOLE
- 1 EACH DOUBLE HANDHOLE



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CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
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Tel. 773.775.4009 Fax 773.775.4014

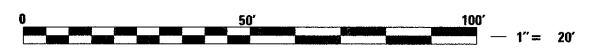
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

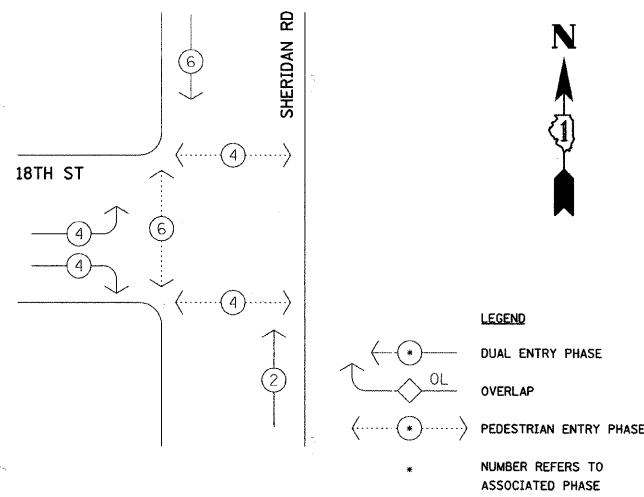
SHERIDAN ROAD TRAFFIC SIGNAL IMPROVEMENTS & INTERCONNECT TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN
SHERIDAN ROAD AT 18TH STREET

SCALE: 1"=20' SHEET NO. 5 OF 35 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2736	09-00169-00-TL	LAKE	35	5
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 63592	

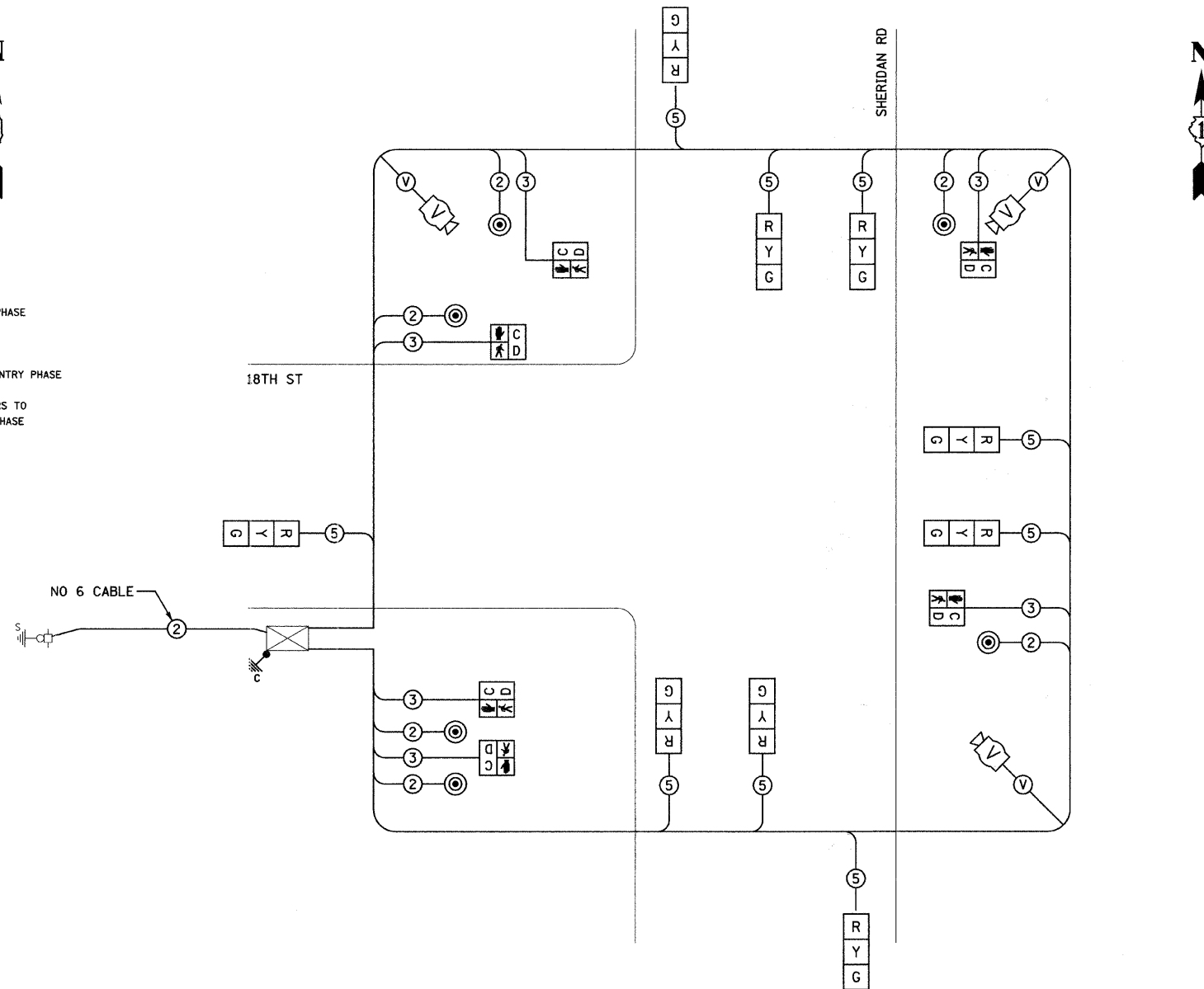


TEMPORARY CONTROLLER SEQUENCE



TEMPORARY PHASE DESIGNATION DIAGRAM

TEMPORARY CABLE PLAN



I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL
TYPE	NO. LAMPS	WATTAGE (INCAND.)	LED	% OPERATION	WATTAGE
SIGNAL (RED)	9	17		0.50	76.50
(YELLOW)	9		25	0.25	56.25
(GREEN)	9		15	0.25	33.75
ARROW	0		12	0.10	0.00
PED. SIGNAL	6		25	1.00	150.00
CONTROLLER	1		100	1.00	100.00
VIDEO SYSTEM	1		-	1.00	150.00
ENERGY COSTS TO:					TOTAL = 566.50
ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, ILLINOIS 60196-1096					
ENERGY SUPPLY CONTACT: CRAIG WEBER					
PHONE: (630) 437-3313					
COMPANY: COM. ED.					

Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4008 Fax 773.775.4014

USER NAME = ntumber	DESIGNED - RJR	REVISED -
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	DATE - 03/22/2011	REVISED -

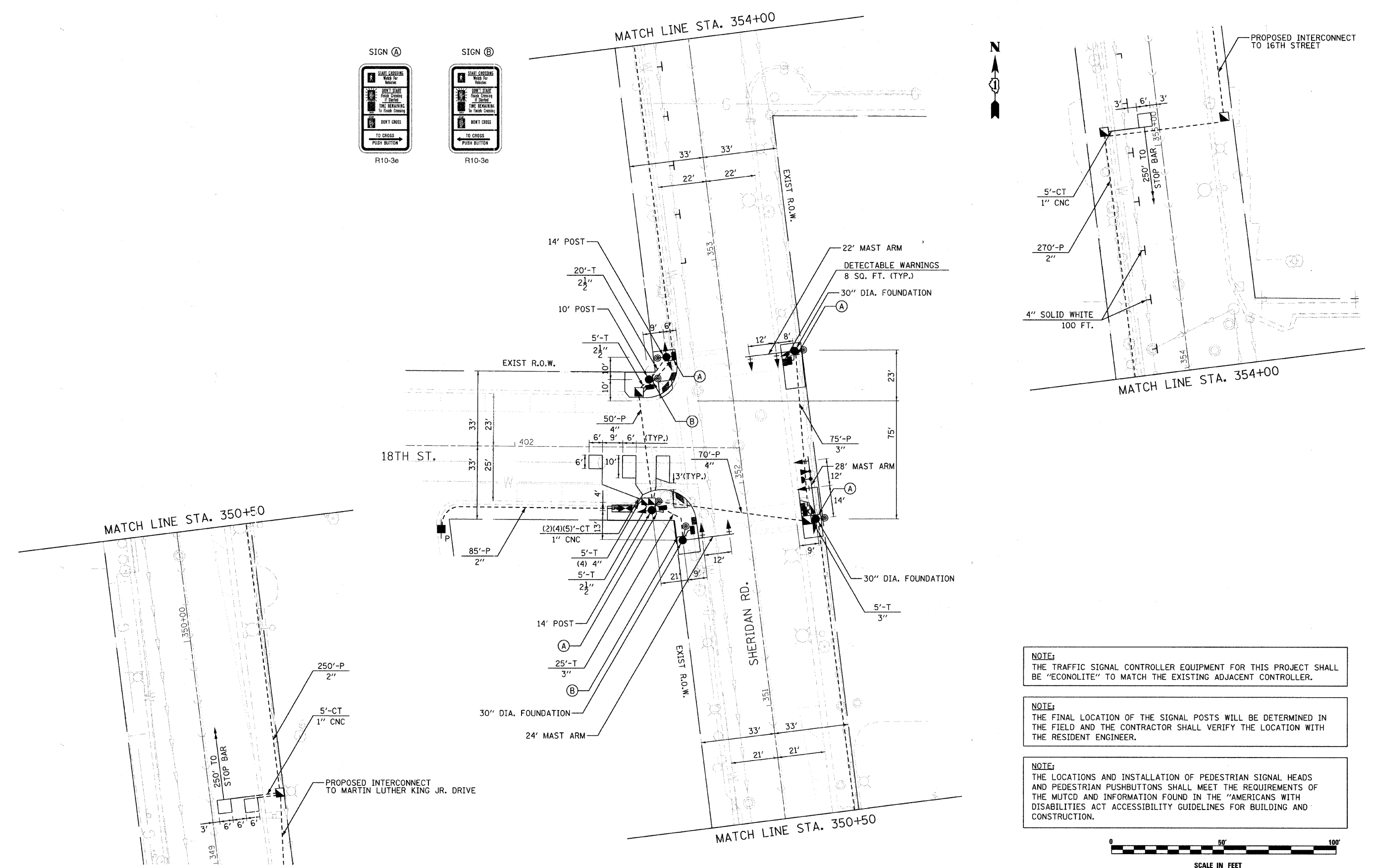
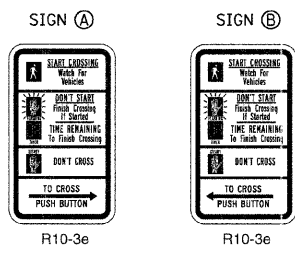
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM,
SCHEDULE OF QUANTITIES**
SHERIDAN ROAD AT 18TH STREET

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2736	09-00169-00-TL	LAKE	35	6
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63592	

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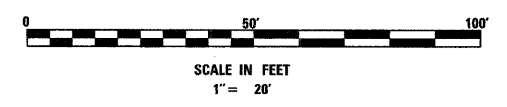
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NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT CONTROLLER.

NOTE:
THE FINAL LOCATION OF THE SIGNAL POSTS WILL BE DETERMINED IN THE FIELD AND THE CONTRACTOR SHALL VERIFY THE LOCATION WITH THE RESIDENT ENGINEER.

NOTE:
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 BUILDING AND CONSTRUCTION."



Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014

USER NAME = ntumbv	DESIGNED - RJR	REVISED -
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	DATE - 03/22/2011	REVISED -

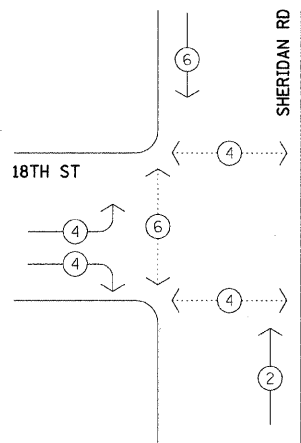
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SHERIDAN ROAD TRAFFIC SIGNAL IMPROVEMENTS & INTERCONNECT
TRAFFIC SIGNAL MODERNIZATION PLAN
SHERIDAN ROAD AT 18TH STREET**

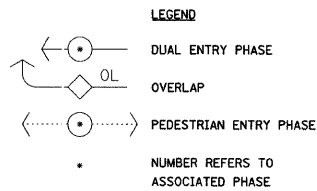
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2736	09-00169-00-TL	LAKE	35	7
CONTRACT NO. 63592			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

SCALE: 1"=20' SHEET NO. 7 OF 35 SHEETS STA. TO STA.

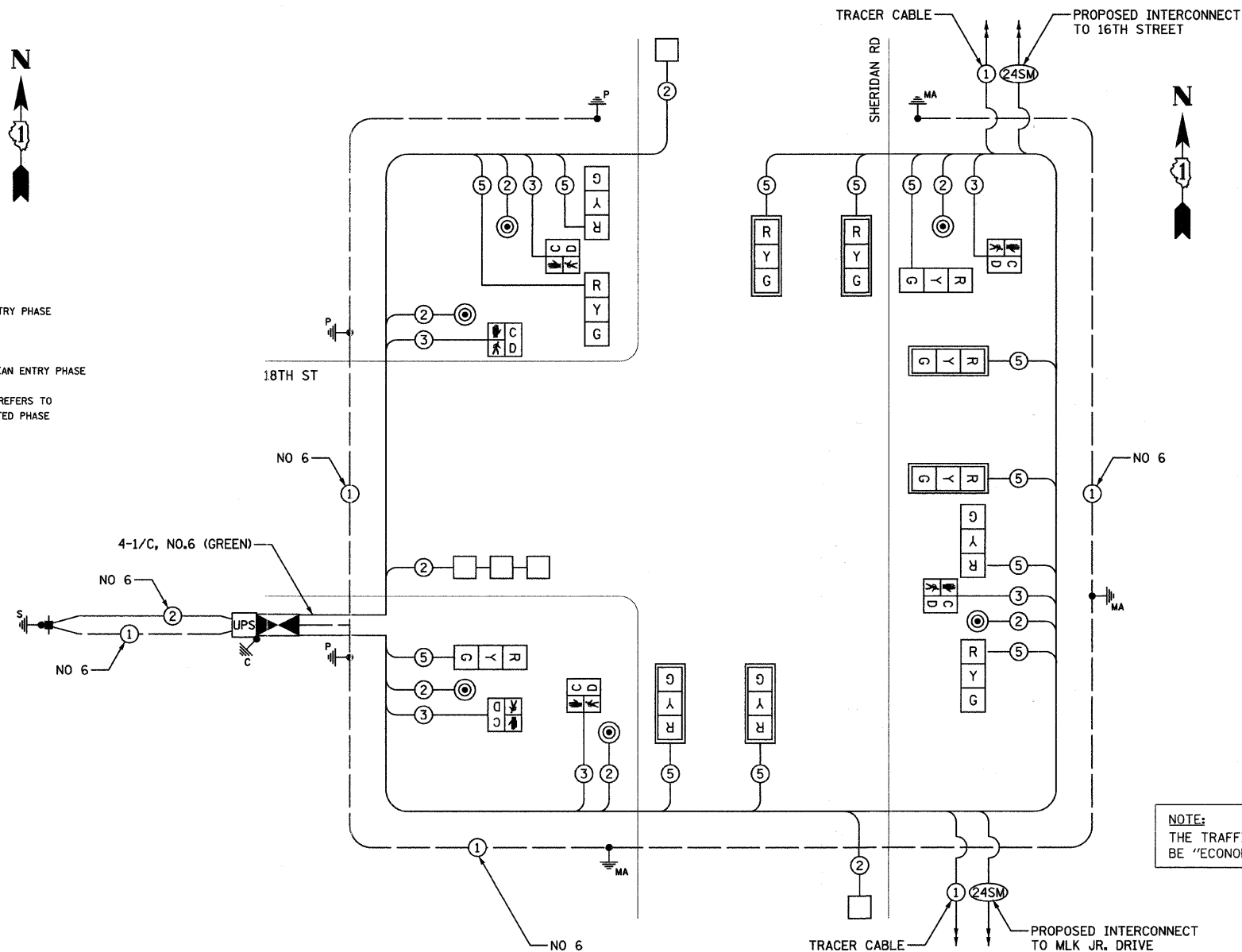
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



PROPOSED CABLE PLAN



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

NOTE:
EQUIPMENT GROUND CONDUCTOR (GREEN COLOR CODED) SPLICE TO FRAME AND COVER IS REQUIRED FOR ALL HANDHOLES OR DOUBLE HANDHOLES THAT CARRY SIGNAL CABLES AND SERVICE CABLES.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND.)	WATTAGE LED	% OPERATION	
SIGNAL (RED)	12	17	0.50	102.00	
(YELLOW)	12	25	0.25	75.00	
(GREEN)	12	15	0.25	45.00	
ARROW	0	12	0.10	0.00	
PED. SIGNAL	6	25	1.00	150.00	
CONTROLLER	1	100	1.00	100.00	

ENERGY COSTS TO: TOTAL = 472.00
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096
ENERGY SUPPLY CONTACT: CRAIG WEBER
PHONE: (630) 437-3313
COMPANY: COM. ED.

SCHEDULE OF QUANTITIES

DESCRIPTION	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	21
THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	100
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	30
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	30
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	605
CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	75
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	120
HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	1

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE
E - M. ARM POLE	10 (3.0)	SIGNAL POST	2 (0.6)	20' H.-2=
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.3)	6m H.-0.6m=
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	
		ELECTRIC SERVICE	1 (0.3)	
		GROUND CABLE	1 (0.3)	
				BRACKET MOUNTED
				13 (4.0)
				PED. PUSHBUTTON
				4 (1.2)
				ELECTRIC SERVICE
				13.5 (4.1)
				SERVICE TO GROUND
				13.5 (4.1)
				POST MOUNTED
				6 (1.8)

DESCRIPTION	UNIT	QUANTITY
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	80
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	600
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	650
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1600
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 16 1 PAIR	FOOT	380
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 16 3 PAIR	FOOT	360
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	110
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1 C	FOOT	750
TRAFFIC SIGNAL POST, 10 FT.	EACH	1
TRAFFIC SIGNAL POST, 14 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30

DESCRIPTION	UNIT	QUANTITY
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	6
DETECTOR LOOP, TYPE 1	FOOT	230
PEDESTRIAN PUSH-BUTTON	EACH	6
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2500
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	2
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL	SQ FT	300
TEST HOLE	EACH	11
LAYER II (DATALINK) SWITCH	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014

DESIGNED - RJR	REVISED -
DRAWN - RJR	REVISED -
CHECKED - JMV	REVISED -
DATE - 03/22/2011	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES
SHERIDAN ROAD AT 18TH STREET

F.A.P. RTE. 2736	SECTION 09-00169-00-TL	COUNTY LAKE	TOTAL SHEETS 35	SHEET NO. 8
CONTRACT NO. 63592			ILLINOIS FED. AID PROJECT	

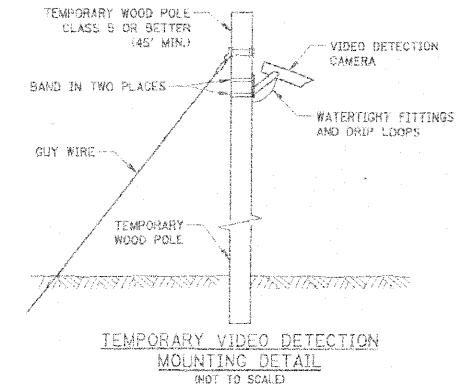
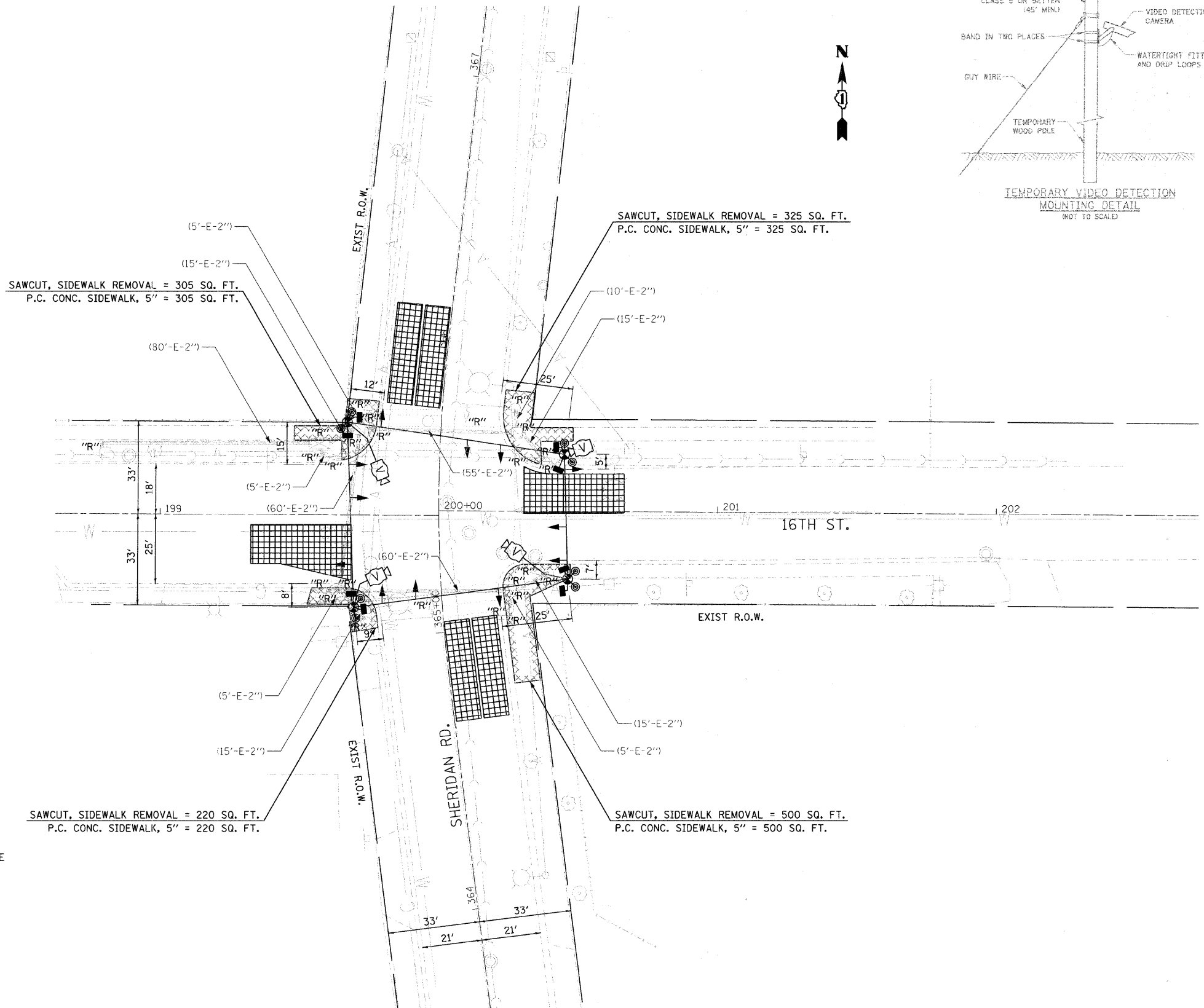
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TEMPORARY TRAFFIC SIGNAL NOTES

- ALL CONTROL EQUIPMENT FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- ONLY CONTROLLERS SUPPLIED BY ONE OF THE STATE 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 THE ILLINOIS DEPARTMENT OF TRANSPORTATION. INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
- ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" 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 TO 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.
- 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.
- ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- 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.
- 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 FAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
- 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 OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
- 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.
- 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.

THE FOLLOWING ITEMS 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 B/D PRICE.

- 10 EACH SIGNAL HEAD, 1-FACE, 3-SECTION BRACKET MOUNTED
- 2 EACH SIGNAL HEAD, 1-FACE, 3-SECTION MAST ARM MOUNTED
- 6 EACH TRAFFIC SIGNAL POST
- 2 EACH MAST ARM POLE
- 8 EACH CONCRETE FOUNDATION
- 2 EACH TRAFFIC SIGNAL BACKPLATE
- 1 EACH POLE MOUNTED ELECTRIC SERVICE
- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 1 EACH CONTROLLER FOUNDATION
- 4 EACH HANDHOLE



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 CONSULTING ENGINEERS
 5507 North Cumberland Avenue, Suite 402
 Chicago, Illinois 60656
 Tel. 773.775.4009 Fax 773.775.4014

USER NAME = ntumbev	DESIGNED - RJR	REVISED -
PLOT SCALE = 20,0000' / IN.	DRAWN - RJR	REVISED -
PLOT DATE = 4/11/2011	CHECKED - JMV	REVISED -
	DATE - 03/22/2011	REVISED -

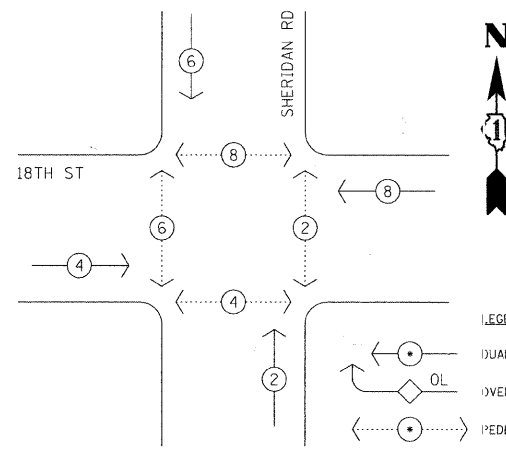
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SHERIDAN ROAD TRAFFIC SIGNAL IMPROVEMENTS & INTERCONNECT
 TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN
 SHERIDAN ROAD AT 16TH STREET**

SCALE: 1"=20' SHEET NO. 9 OF 35 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2736	09-00169-00-TL	LAKE	35	9
CONTRACT NO. 63592			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

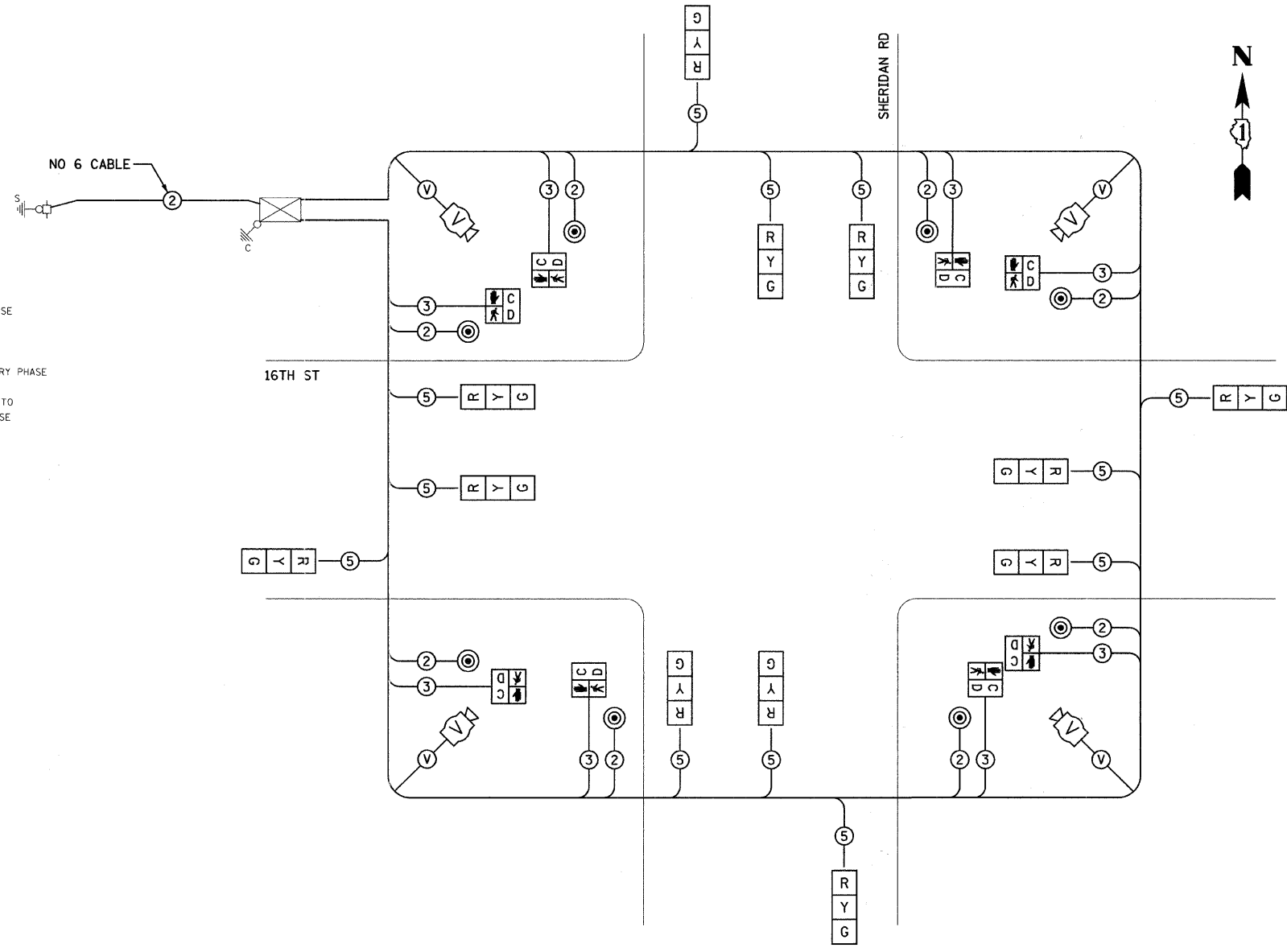
TEMPORARY CONTROLLER SEQUENCE



LEGEND
 ○ DUAL ENTRY PHASE
 ◇ OVERLAP
 ○ PEDESTRIAN ENTRY PHASE
 ○ NUMBER REFERS TO ASSOCIATED PHASE

TEMPORARY PHASE DESIGNATION DIAGRAM

TEMPORARY CABLE PLAN



I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL
TYPE	NO. LAMPS	WATTAGE (INCAND.)	LED	% OPERATION	WATTAGE
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	0		12	0.10	0.00
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
VIDEO SYSTEM	1		-	1.00	150.00
ENERGY COSTS TO:					TOTAL = 672.00
ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, ILLINOIS 60196-1096					
ENERGY SUPPLY CONTACT: CRAIG WEBER PHONE: (630) 437-3313 COMPANY: COM. ED.					

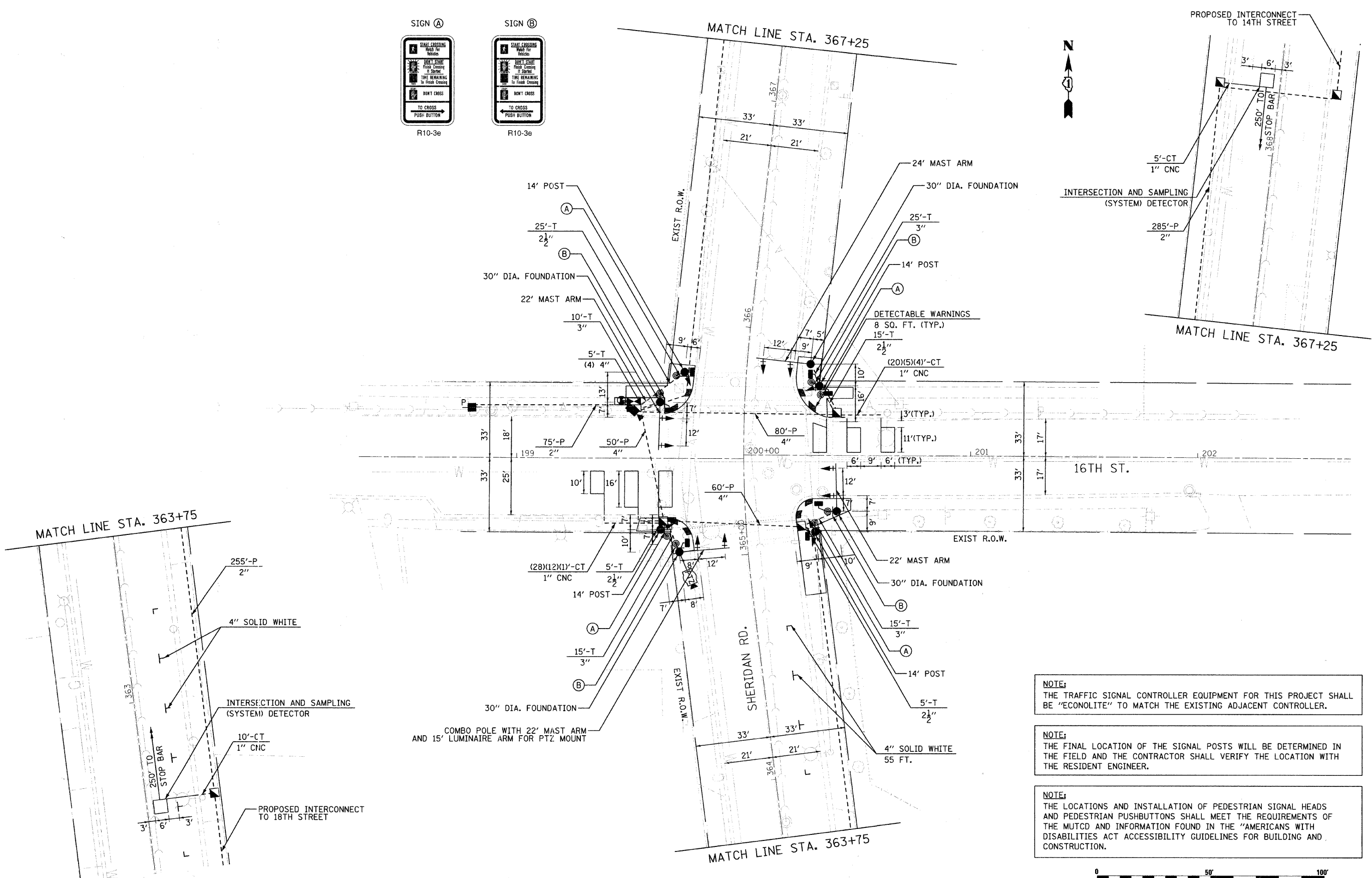
Ciorba Group, Inc.
 CONSULTING ENGINEERS
 5507 North Cumberland Avenue, Suite 402
 Chicago, Illinois 60656
 Tel. 773.775.4009 Fax 773.775.4014

DESIGNED - RJR	REVISED -
DRAWN - RJR	REVISED -
CHECKED - JMV	REVISED -
DATE - 03/22/2011	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM,
 SCHEDULE OF QUANTITIES
 SHERIDAN ROAD AT 16TH STREET
 SCALE: N.T.S. SHEET NO. 10 OF 35 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2736	09-00169-00-TL	LAKE	35	10
CONTRACT NO. 63592			ILLINOIS FED. AID PROJECT	



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

NOTE:
THE FINAL LOCATION OF THE SIGNAL POSTS WILL BE DETERMINED IN THE FIELD AND THE CONTRACTOR SHALL VERIFY THE LOCATION WITH THE RESIDENT ENGINEER.

NOTE:
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 BUILDING AND CONSTRUCTION."



FILE NAME = N:\PROJ\5175\Design\Proposed\16th\Signal\16th.TrafficSignal.dgn

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CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
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USER NAME = ntumbey	DESIGNED - RJR	REVISED -
PLOT SCALE = 20,0000' / IN.	DRAWN - RJR	REVISED -
PLOT DATE = 4/11/2011	CHECKED - JMV	REVISED -
	DATE - 03/22/2011	REVISED -

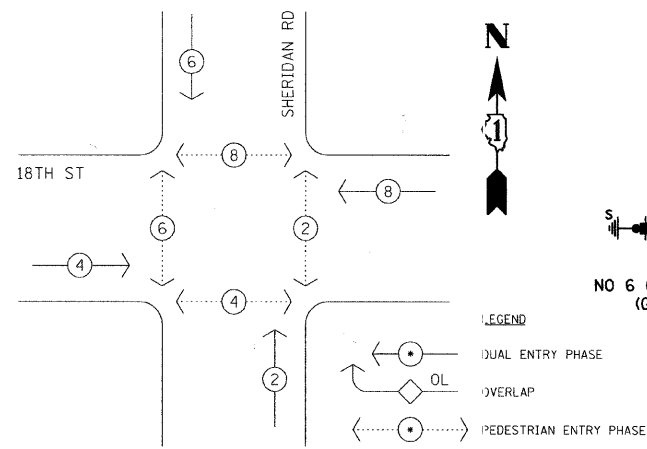
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHERIDAN ROAD TRAFFIC SIGNAL IMPROVEMENTS & INTERCONNECT
TRAFFIC SIGNAL MODERNIZATION PLAN
SHERIDAN ROAD AT 16TH STREET

SCALE: 1"=20' SHEET NO. 11 OF 35 SHEETS STA. TO STA.

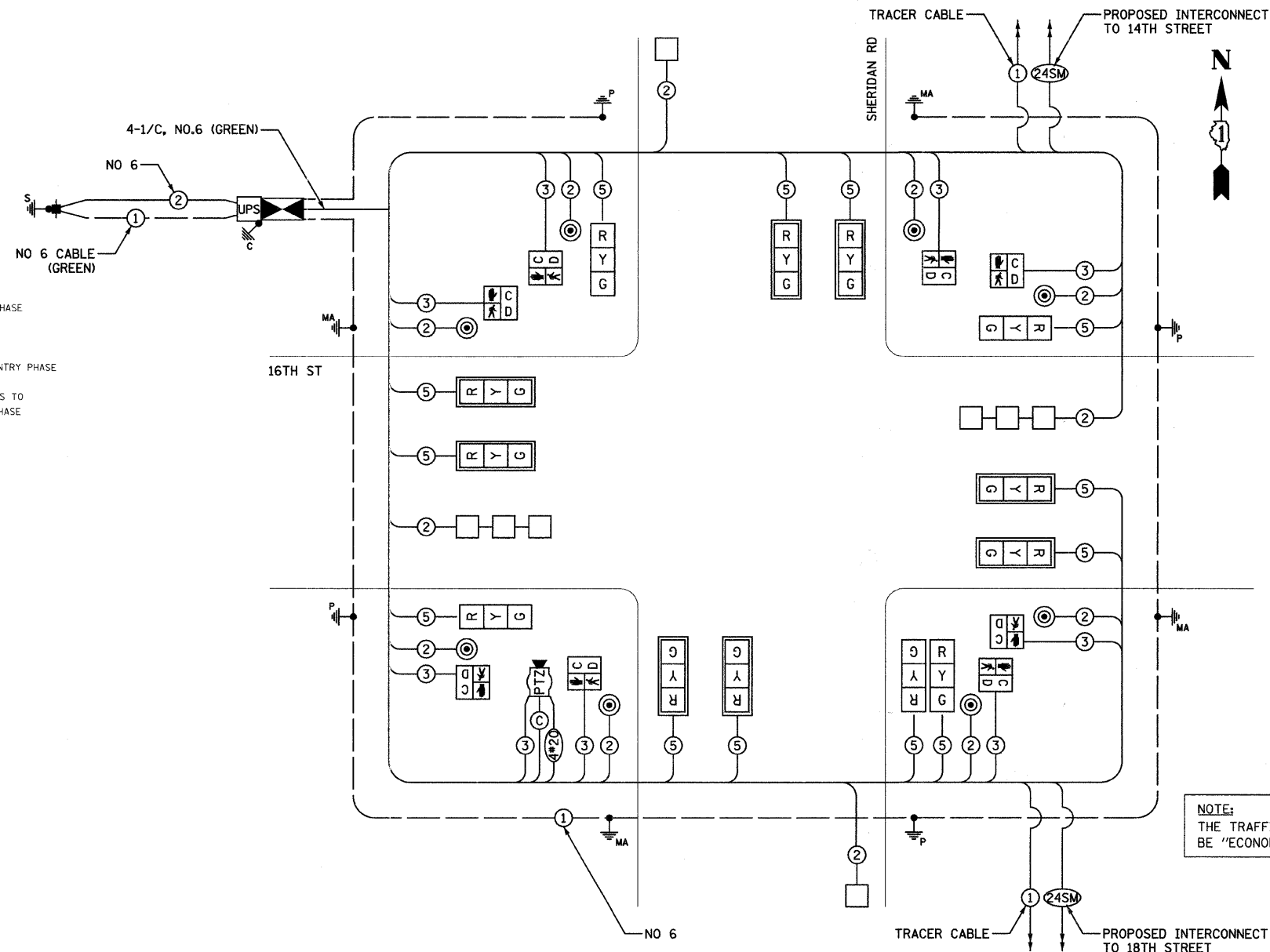
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2736	09-00169-00-TL	LAKE	35	11
CONTRACT NO. 63592			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

TEMPORARY CONTROLLER SEQUENCE



TEMPORARY PHASE DESIGNATION DIAGRAM

PROPOSED CABLE PLAN



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

NOTE:
EQUIPMENT GROUND CONDUCTOR (GREEN COLOR CODED) SPLICE TO FRAME AND COVER IS REQUIRED FOR ALL HANDHOLES OR DOUBLE HANDHOLES THAT CARRY SIGNAL CABLES AND SERVICE CABLES.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND.)	LED	% OPERATION	
SIGNAL (RED)	13	17	0.50		110.50
(YELLOW)	13	25	0.25		81.25
(GREEN)	13	15	0.25		48.75
ARROW	0	12	0.10		0.00
PED. SIGNAL	8	25	1.00		200.00
CONTROLLER	1	100	1.00		100.00
PTZ CAMERA	1	150	1.00		150.00
TOTAL =					690.50

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096
CONTACT: CRAIG WEBER
PHONE: (630) 437-3313
COMPANY: COM. ED.

SCHEDULE OF QUANTITIES

DESCRIPTION	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ. FT.	30
THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	55
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	50
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	65
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	615
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	200
HANDHOLE	EACH	5

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE
E - M. ARM POLE	2 (1.0)	SIGNAL POST	2 (1.0)	20' H L - 2=
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	6m H L - 0.6m =
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	BRACKET MOUNTED
		ELECTRIC SERVICE	1 (0.5)	PED. PUSHBUTTON
		GROUND CABLE	1 (0.5)	ELECTRIC SERVICE
				SERVICE TO GROUND
				POST MOUNTED

DESCRIPTION	UNIT	QUANTITY
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	135
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	900
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1100
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1750
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 16 1 PAIR	FOOT	880
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	100
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1 C	FOOT	900
TRAFFIC SIGNAL POST, 14 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 22 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	40
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8

DESCRIPTION	UNIT	QUANTITY
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
DETECTOR LOOP, TYPE 1	FOOT	325
PEDESTRIAN PUSH-BUTTON	EACH	8
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1450
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	4
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
TEST HOLE	EACH	14
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
COAXIAL CABLE IN CONDUIT	FOOT	150
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4C	FOOT	150

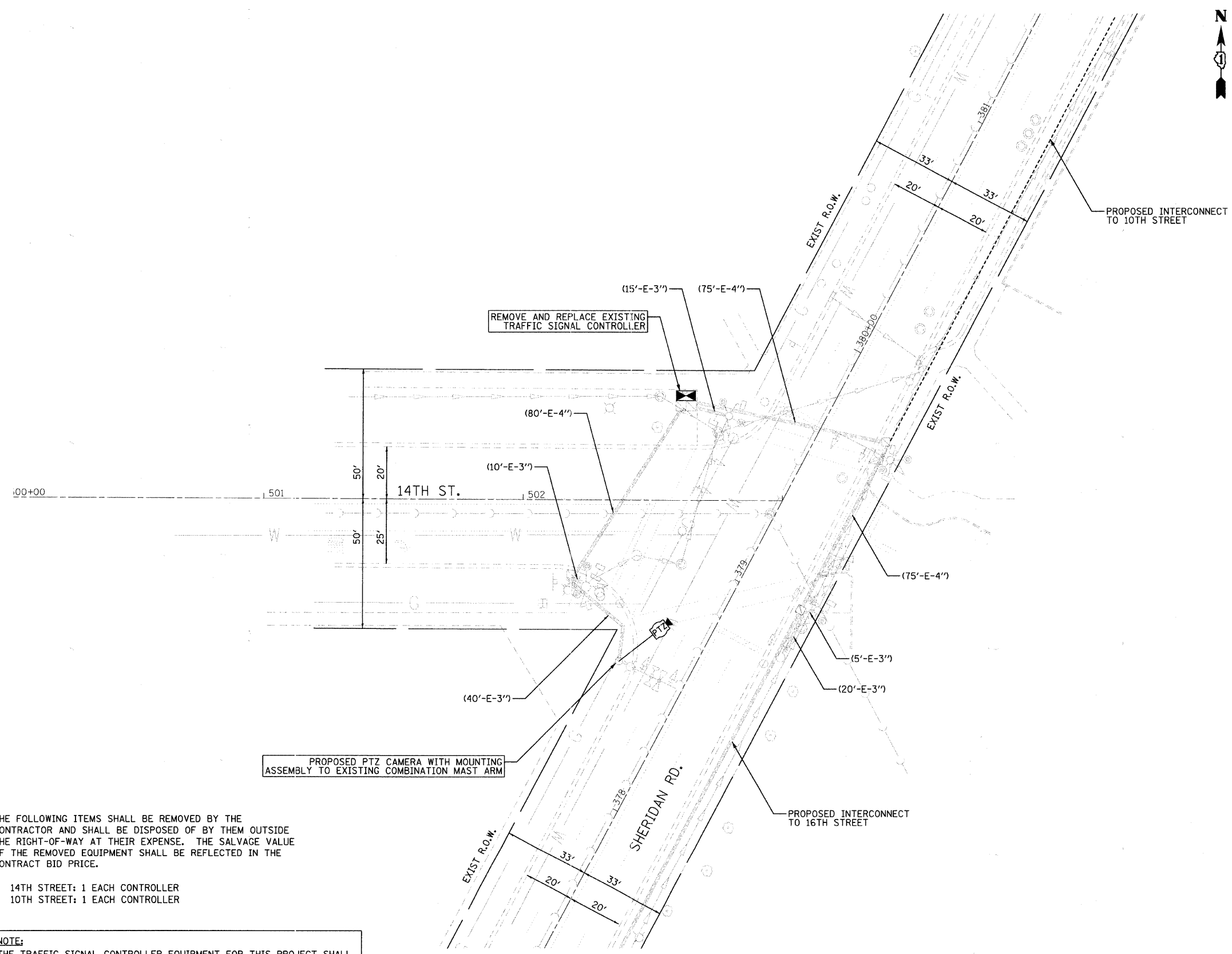
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CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014

USER NAME = ntumbav	DESIGNED - RJR	REVISED -
PLOT SCALE = 1:2000' / IN.	DRAWN - RJR	REVISED -
PLOT DATE = 4/11/2011	CHECKED - JMV	REVISED -
	DATE - 03/22/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM,
SCHEDULE OF QUANTITIES
SHERIDAN ROAD AT 16TH STREET

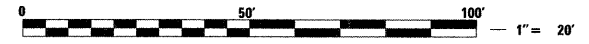
F.A.P. RTE. 2736	SECTION 09-00169-00-TL	COUNTY LAKE	TOTAL SHEETS 35	SHEET NO. 12
SCALE: N.T.S. SHEET NO. 12 OF 35 SHEETS STA. TO STA.			CONTRACT NO. 63592	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



THE FOLLOWING ITEMS 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.

14TH STREET: 1 EACH CONTROLLER
10TH STREET: 1 EACH CONTROLLER

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



FILE NAME: N:\PROJ\5175\Design\ProposedPlan\5175-13_Signal_14th_TrafficSignal.dgn

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USER NAME = ntumbev	DESIGNED - RJR	REVISED -
PLOT SCALE = 20.0000 1" / IN.	DRAWN - RJR	REVISED -
PLOT DATE = 4/11/2011	CHECKED - JMV	REVISED -
	DATE - 03/22/2011	REVISED -

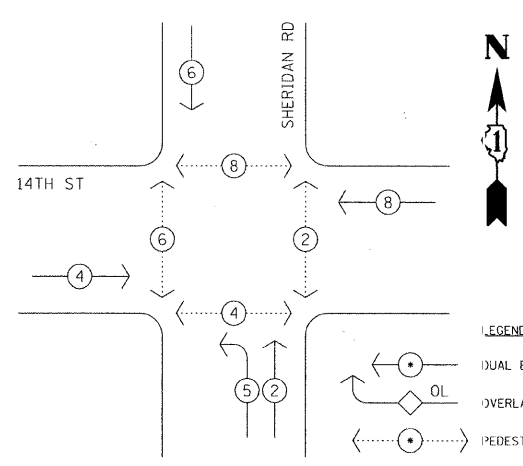
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SHERIDAN ROAD TRAFFIC SIGNAL IMPROVEMENTS & INTERCONNECT
TRAFFIC SIGNAL MODERNIZATION PLAN
SHERIDAN ROAD AT 14TH STREET**

SCALE: 1"=20' SHEET NO. 13 OF 35 SHEETS STA. TO STA.

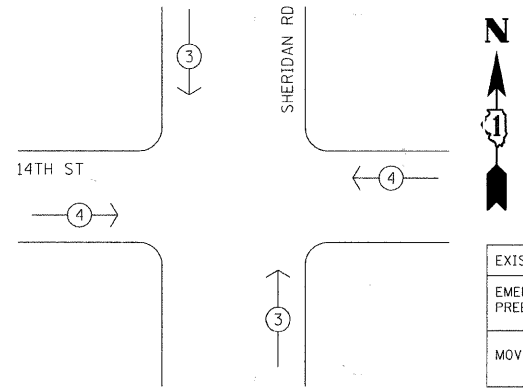
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2736	09-00169-00-TL	LAKE	35	13
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 63592	

TEMPORARY CONTROLLER SEQUENCE

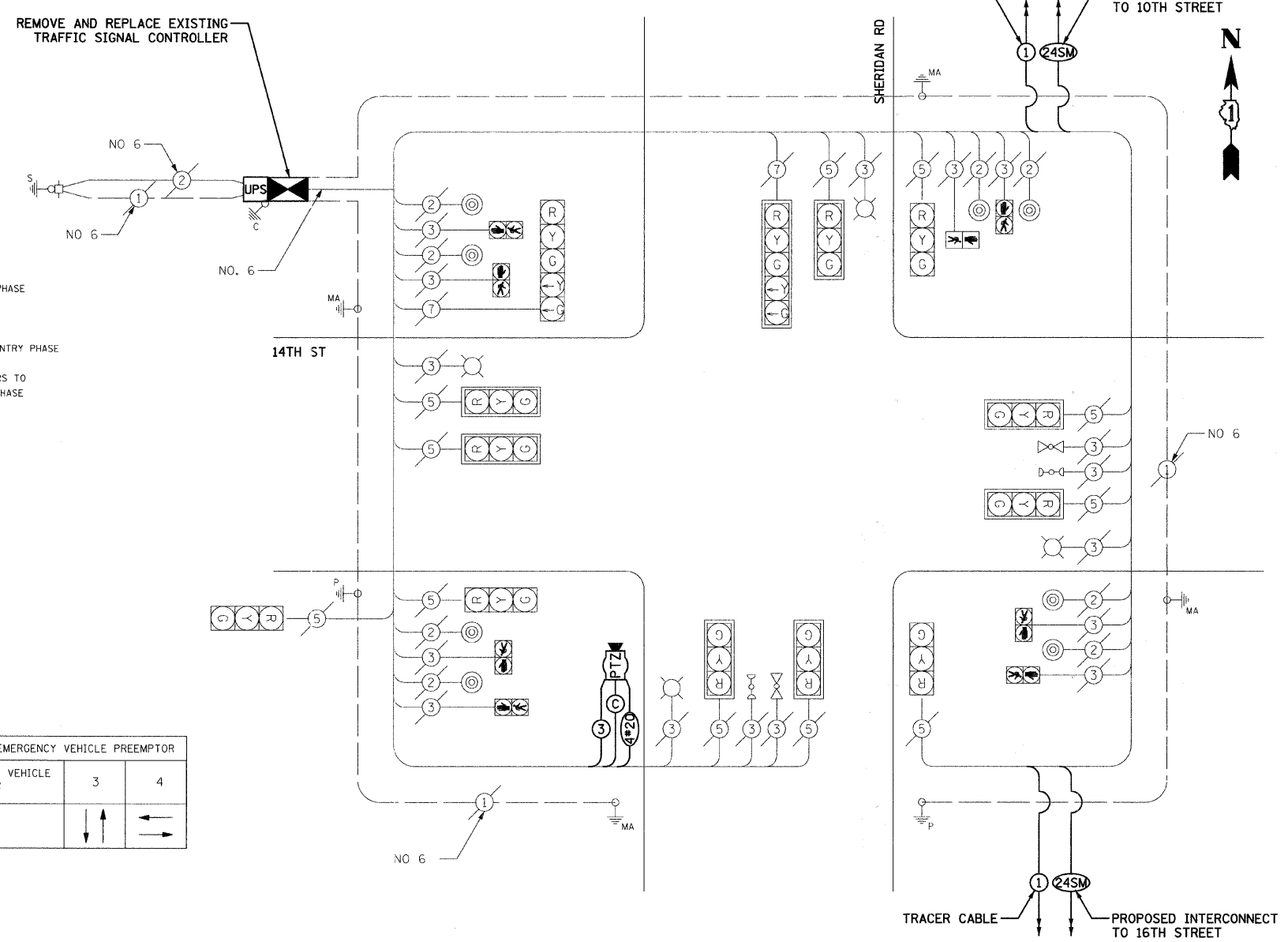


TEMPORARY PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED CABLE PLAN



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

NOTE:
EQUIPMENT GROUND CONDUCTOR (GREEN COLOR CODED) SPLICE TO FRAME AND COVER IS REQUIRED FOR ALL HANDHOLES OR DOUBLE HANDHOLES THAT CARRY SIGNAL CABLES AND SERVICE CABLES.

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND.)	LED	% OPERATION	
SIGNAL (RED)	13		17	0.50	110.50
(YELLOW)	13		25	0.25	81.25
(GREEN)	13		15	0.25	48.75
ARROW	4		12	0.10	4.80
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
PTZ CAMERA	1	150		1.00	150.00

ENERGY COSTS TO: TOTAL = **695.30**
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096
ENERGY SUPPLY CONTACT: CRAIG WEBER
PHONE: (630) 437-3313
COMPANY: COM. ED.

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE
E - M. ARM POLE		SIGNAL POST	2 (1.0)	20' H-2=
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	6m H-0.6m=
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	BRACKET MOUNTED
		ELECTRIC SERVICE	1 (0.5)	PED. PUSHBUTTON
		GROUND CABLE	1 (0.5)	ELECTRIC SERVICE
				SERVICE TO GROUND
				POST MOUNTED

SCHEDULE OF QUANTITIES

DESCRIPTION	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	250
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
COAXIAL CABLE IN CONDUIT	FOOT	250
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4C	FOOT	250

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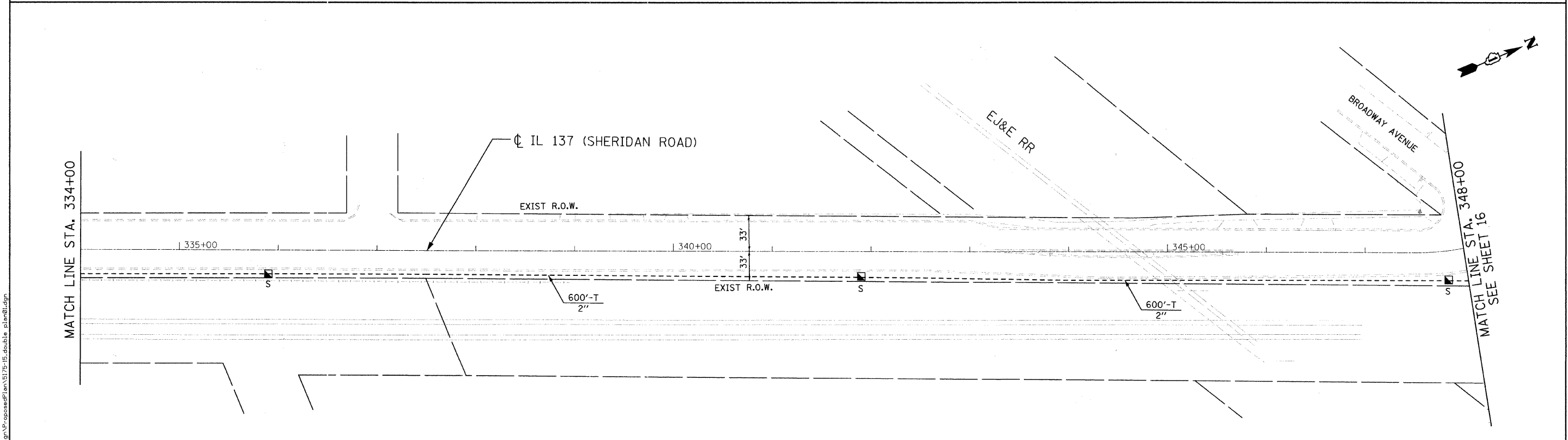
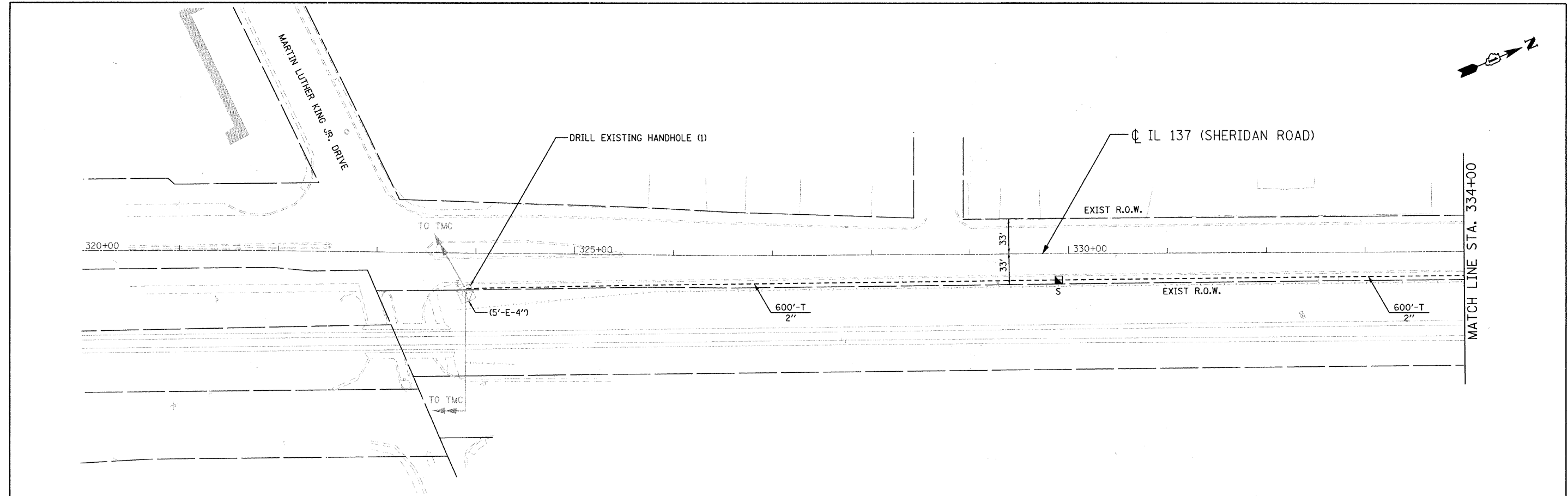
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DESIGNED - RJR
DRAWN - RJR
CHECKED - JMV
DATE - 03/22/2011
REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM,
SCHEDULE OF QUANTITIES
SHERIDAN ROAD AT 14TH STREET**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2736	09-00169-00-TL	LAKE	35	14
CONTRACT NO. 63592			ILLINOIS FED. AID PROJECT	

FILE NAME = N:\PROJ\575\Design\Proposed\14_Signal\14_Sig_CablePlan.dgn



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

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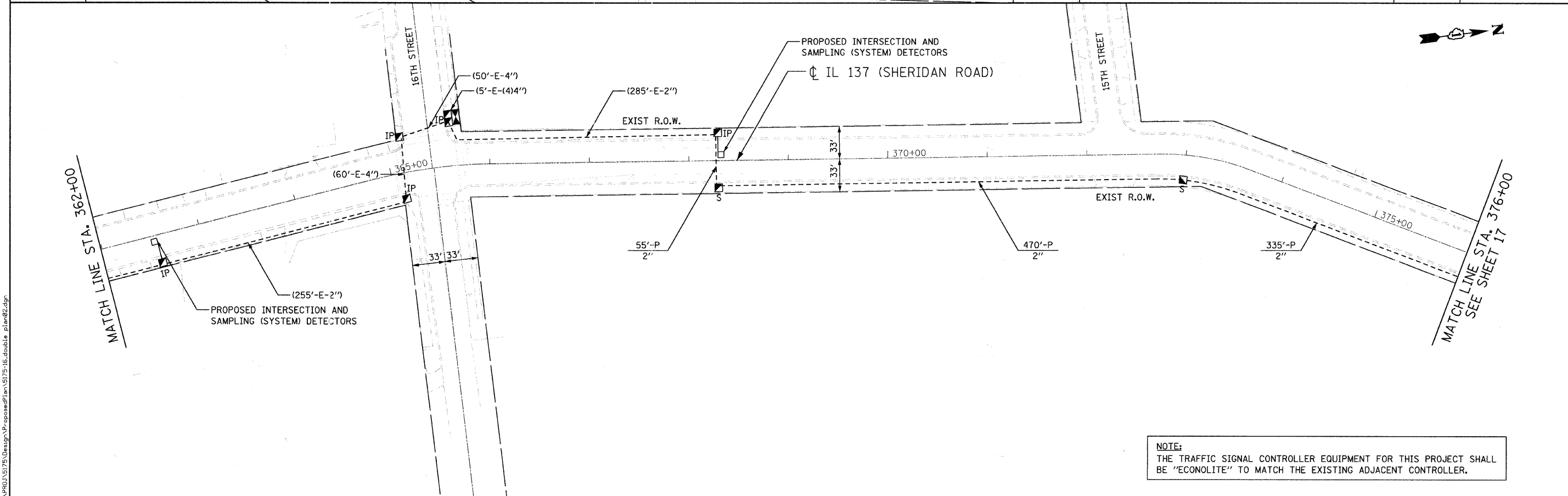
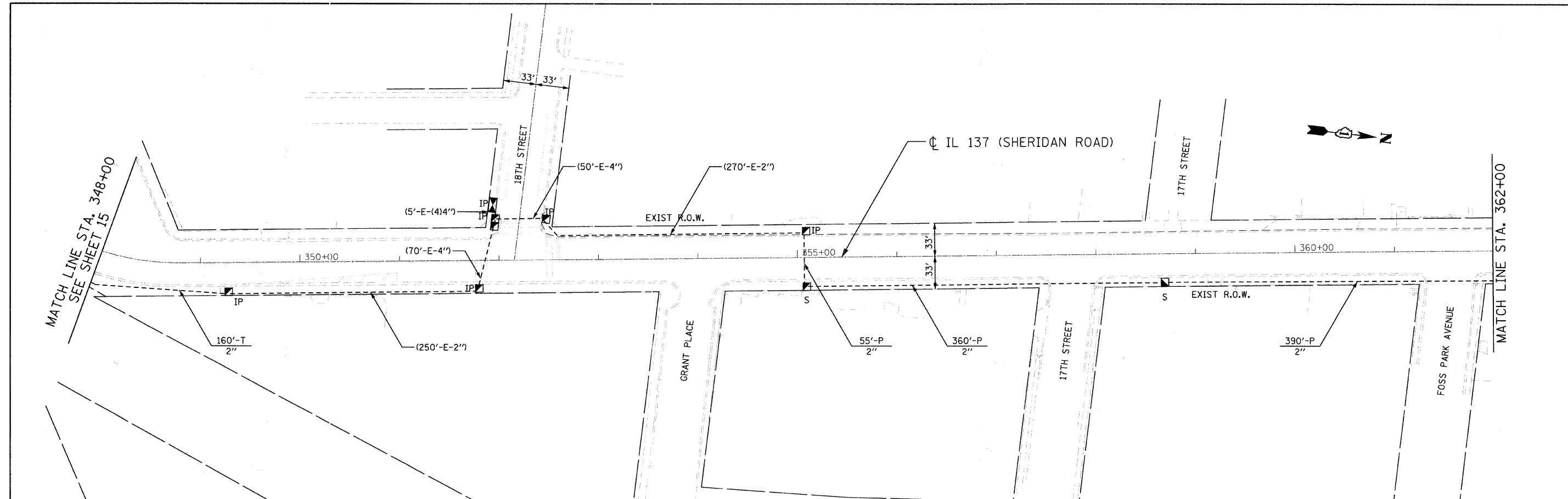
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5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014

USER NAME = ntumbv	DESIGNED - RJR	REVISED -
PLOT SCALE = 50.0000' / IN.	DRAWN - RJR	REVISED -
PLOT DATE = 4/11/2011	CHECKED - JMV	REVISED -
	DATE - 03/22/2011	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SHERIDAN ROAD TRAFFIC SIGNAL IMPROVEMENTS & INTERCONNECT
INTERCONNECT PLAN**

F.A.P. RTE. 2736	SECTION 09-00169-00-TL	COUNTY LAKE	TOTAL SHEETS 35	SHEET NO. 15
SCALE: 1"=50'			SHEET NO. 15 OF 35 SHEETS	
STA. TO STA.		CONTRACT NO. 63592		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

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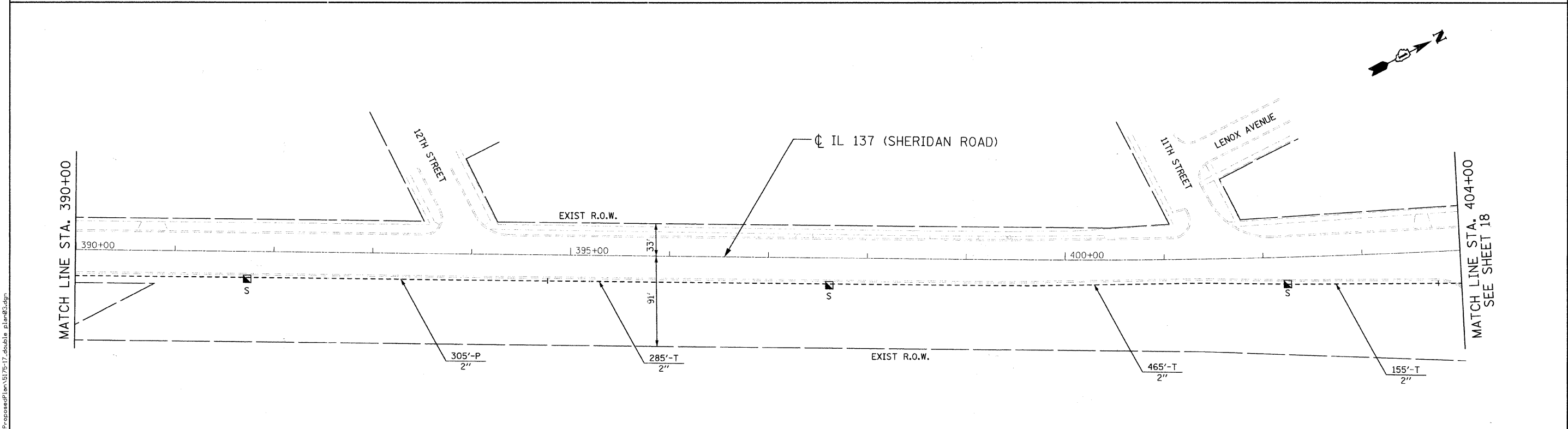
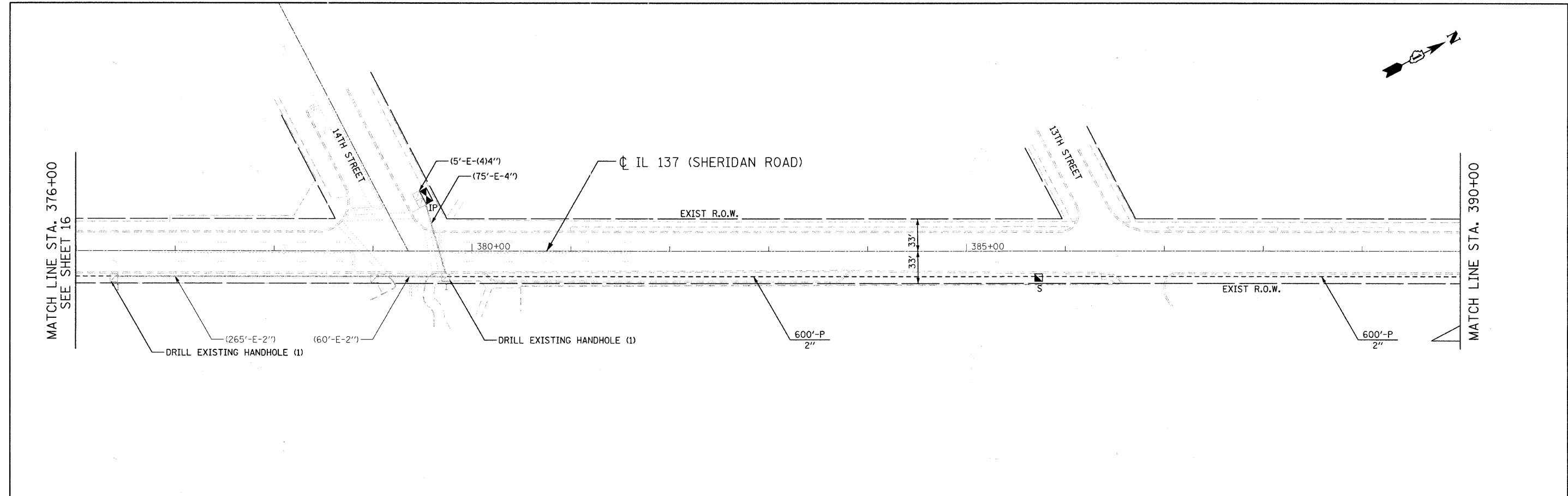
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PLOT DATE = 4/11/2011	CHECKED - JMV	REVISED -
	DATE - 03/22/2011	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SHERIDAN ROAD TRAFFIC SIGNAL IMPROVEMENTS & INTERCONNECT
 INTERCONNECT PLAN**

SCALE: 1"=50' SHEET NO. 16 OF 35 SHEETS STA. TO STA.

F.A.P. RTE. 2736	SECTION 09-00169-00-TL	COUNTY LAKE	TOTAL SHEETS 35	SHEET NO. 16
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 63592	



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

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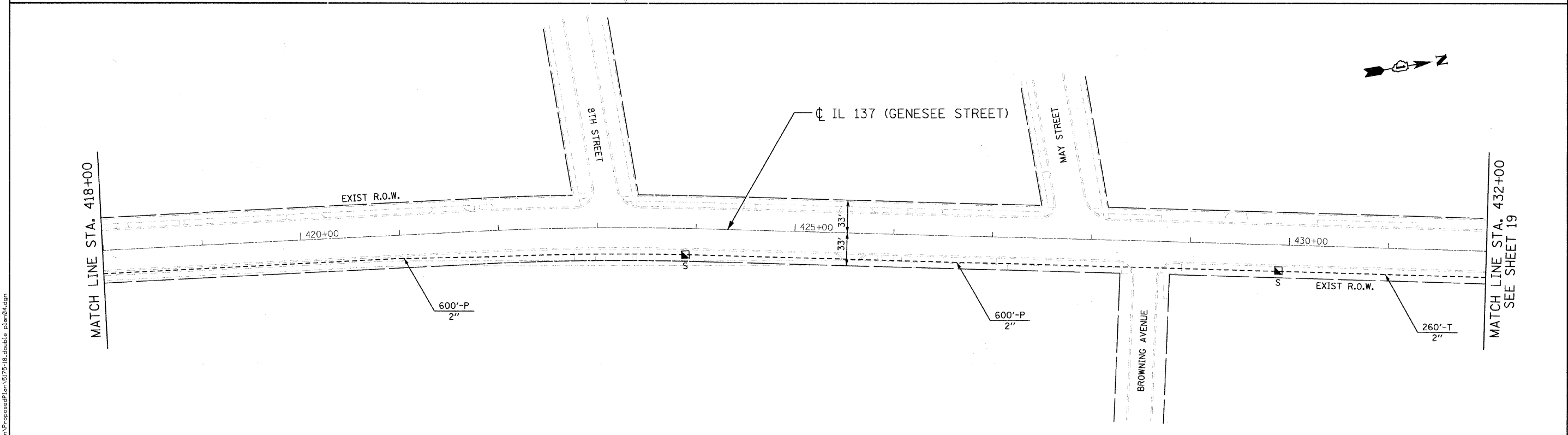
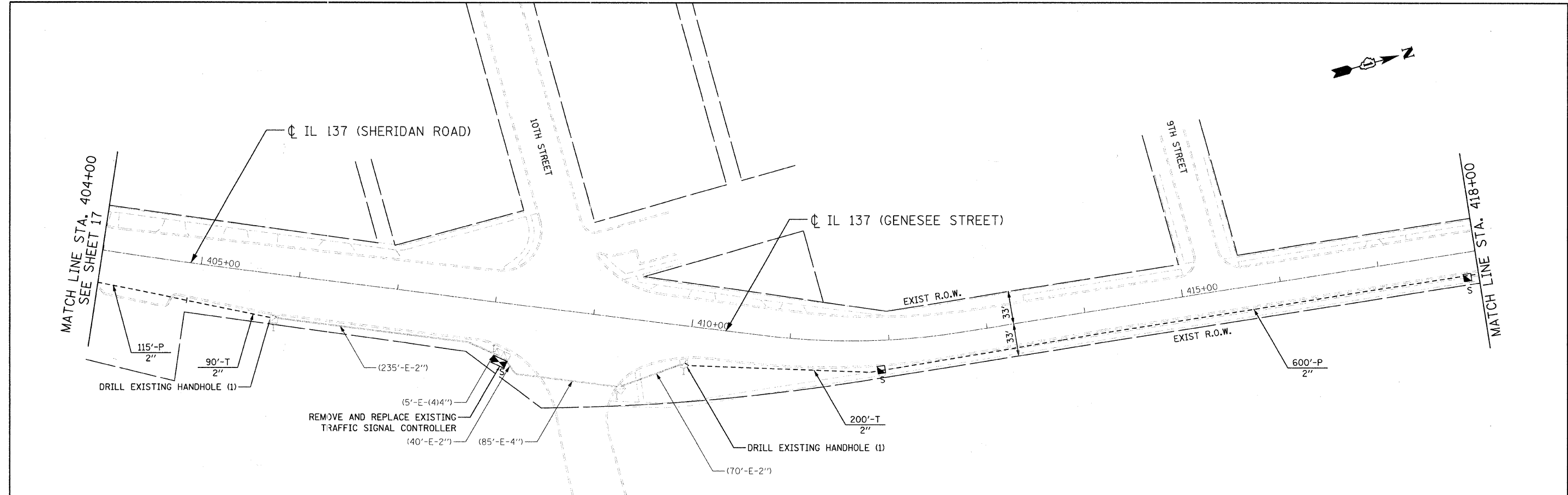
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PLOT SCALE = 50.0000' / IN.	DRAWN - RJR	REVISED -
PLOT DATE = 4/11/2011	CHECKED - JMV	REVISED -
	DATE - 03/22/2011	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SHERIDAN ROAD TRAFFIC SIGNAL IMPROVEMENTS & INTERCONNECT
 INTERCONNECT PLAN**

F.A.P. RTE. 2736	SECTION 09-00169-00-TL	COUNTY LAKE	TOTAL SHEETS 35	SHEET NO. 17
SCALE: 1"=50'			SHEET NO. 17 OF 35 SHEETS	
STA. TO STA.			CONTRACT NO. 63592	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

FILE NAME = N:\PROJECTS\15175\Design\Proposed\Plan\15175-18_double_plan.dgn

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 Chicago, Illinois 60658
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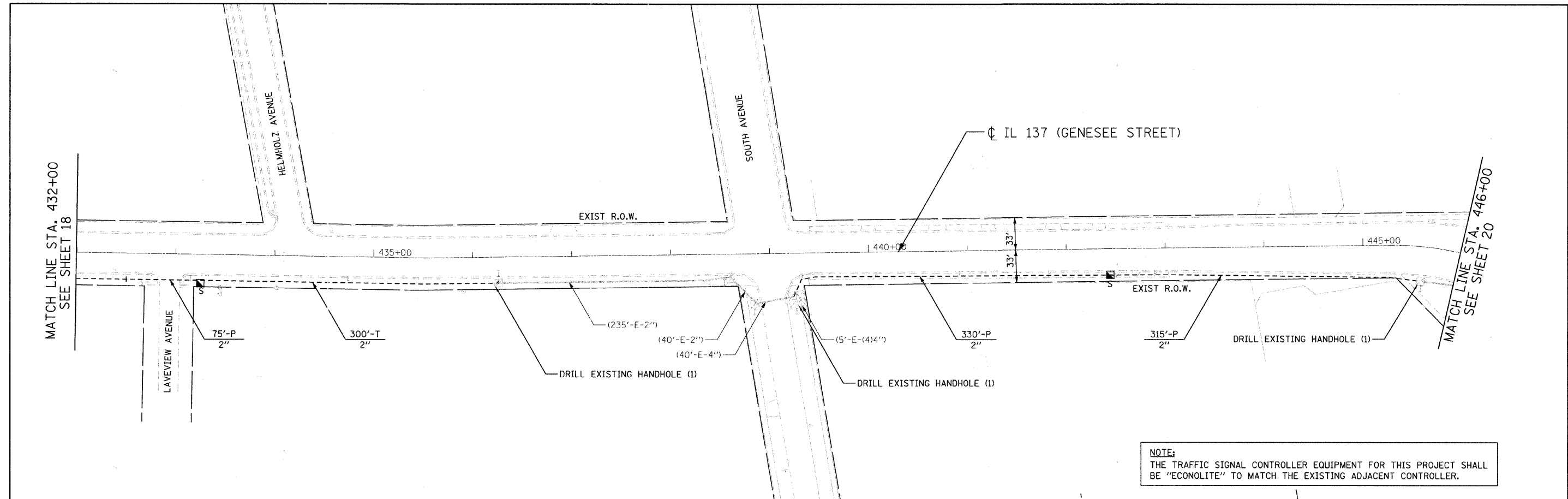
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PLOT DATE = 4/11/2011	CHECKED - JMW	REVISED -
	DATE - 03/22/2011	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SHERIDAN ROAD TRAFFIC SIGNAL IMPROVEMENTS & INTERCONNECT
 INTERCONNECT PLAN**

SCALE: 1"=50' SHEET NO. 18 OF 35 SHEETS STA. TO STA.

F.A.P. RTE. 2736	SECTION 09-00169-00-TL	COUNTY LAKE	TOTAL SHEETS 35	SHEET NO. 18
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 63592	



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

FILE NAME: N:\PROJ\5175\Design\ProposedPlan\5175-19_double_plan06.dgn

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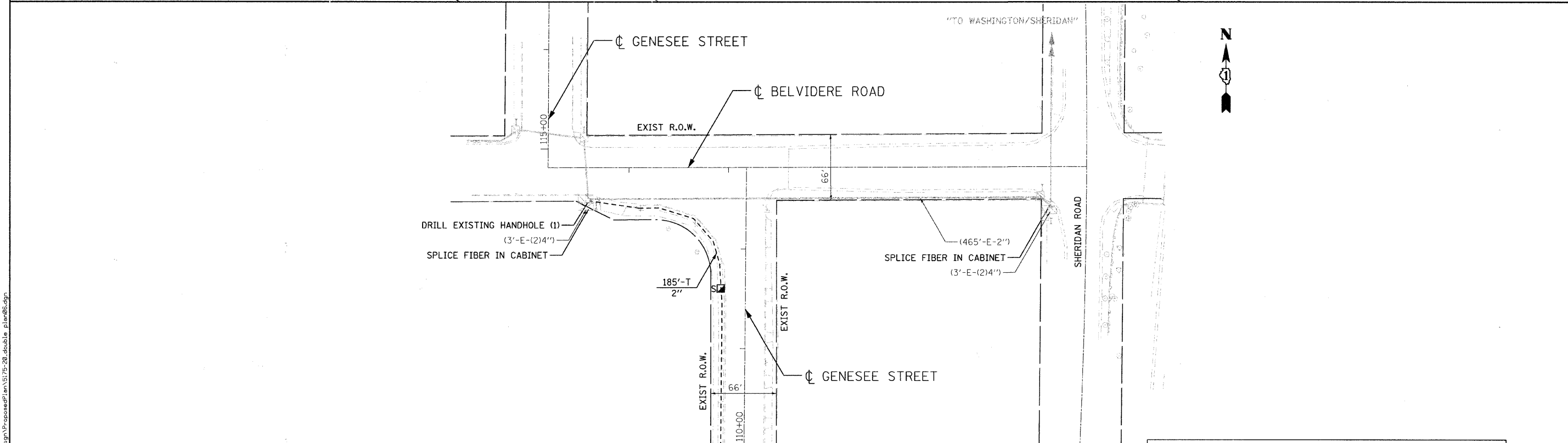
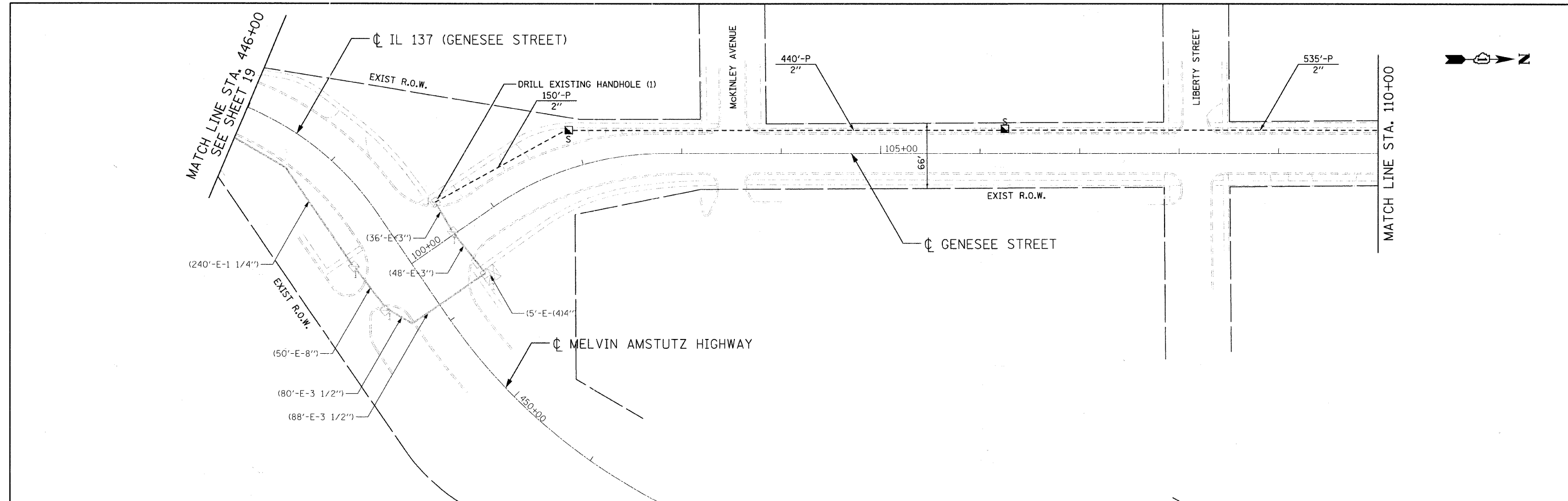
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PLOT DATE = 4/11/2011	CHECKED - JMV	REVISED -
	DATE - 03/22/2011	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SHERIDAN ROAD TRAFFIC SIGNAL IMPROVEMENTS & INTERCONNECT
 INTERCONNECT PLAN**

F.A.P. RTE. 2736	SECTION 09-00169-00-TL	COUNTY LAKE	TOTAL SHEETS 35	SHEET NO. 19
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 63592	

SCALE: 1"=50' SHEET NO. 19 OF 35 SHEETS STA. TO STA.



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

FILE NAME: I:\PROJECTS\Design\Proposed\Plan\5175-20_double_plan06.dgn

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 Tel. 773.775.4009 Fax 773.775.4014

USER NAME = ntumbev	DESIGNED - RJR	REVISED -
PLOT SCALE = 50.0000' / IN.	DRAWN - RJR	REVISED -
PLOT DATE = 4/11/2011	CHECKED - JMV	REVISED -
	DATE - 03/22/2011	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SHERIDAN ROAD TRAFFIC SIGNAL IMPROVEMENTS & INTERCONNECT
 INTERCONNECT PLAN**

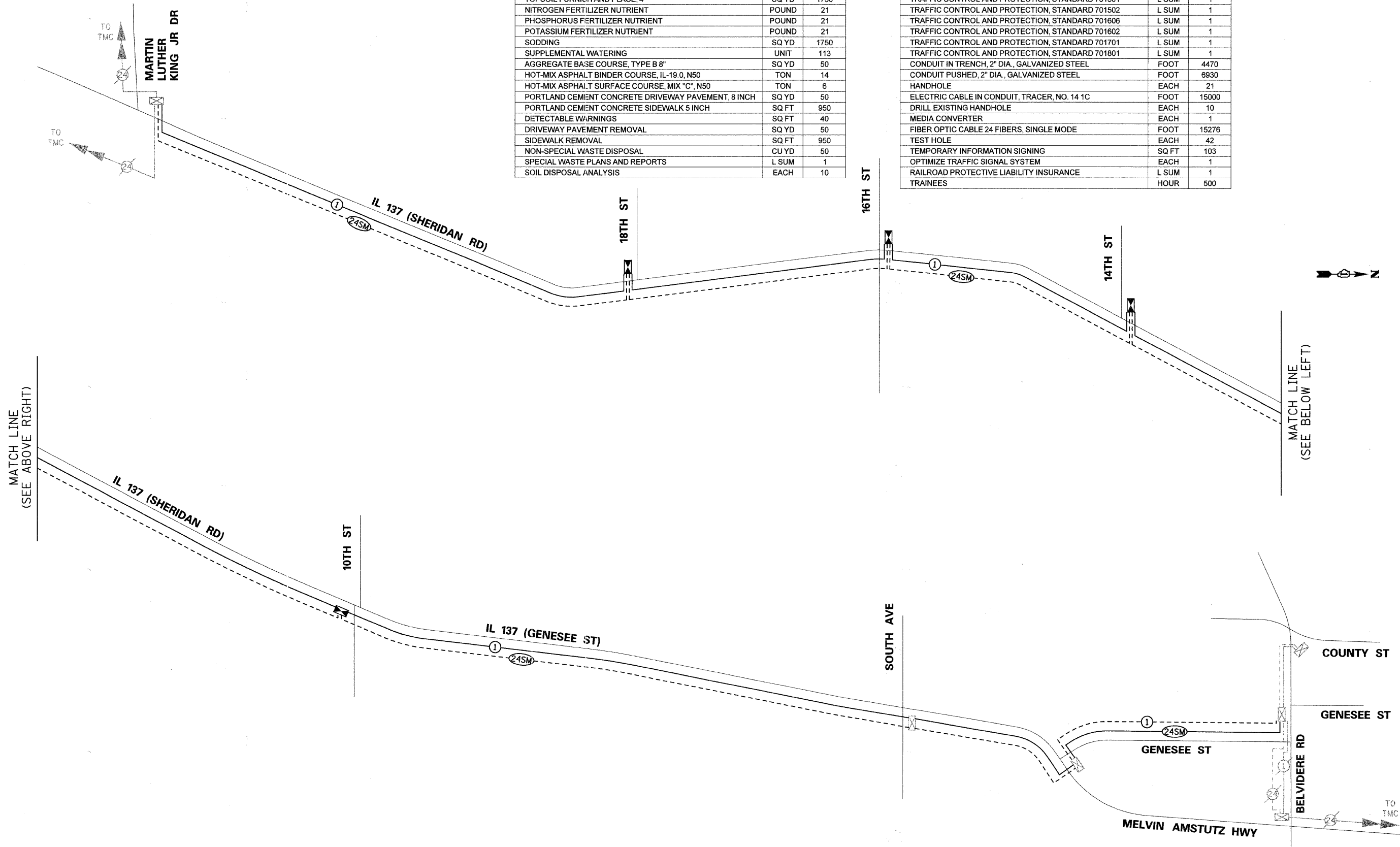
SCALE: 1"=50' SHEET NO. 20 OF 35 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2736	09-00169-00-TL	LAKE	35	20
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 63592	

SCHEDULE OF QUANTITIES

DESCRIPTION	UNIT	QUANTITY
TOPSOIL FURNISH AND PLACE, 4"	SQ YD	1750
NITROGEN FERTILIZER NUTRIENT	POUND	21
PHOSPHORUS FERTILIZER NUTRIENT	POUND	21
POTASSIUM FERTILIZER NUTRIENT	POUND	21
SODDING	SQ YD	1750
SUPPLEMENTAL WATERING	UNIT	113
AGGREGATE BASE COURSE, TYPE B 8"	SQ YD	50
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	14
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	6
PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	50
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	950
DETECTABLE WARNINGS	SQ FT	40
DRIVEWAY PAVEMENT REMOVAL	SQ YD	50
SIDEWALK REMOVAL	SQ FT	950
NON-SPECIAL WASTE DISPOSAL	CU YD	50
SPECIAL WASTE PLANS AND REPORTS	L SUM	1
SOIL DISPOSAL ANALYSIS	EACH	10

MOBILIZATION	L SUM	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	4470
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	6930
HANDHOLE	EACH	21
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	15000
DRILL EXISTING HANDHOLE	EACH	10
MEDIA CONVERTER	EACH	1
FIBER OPTIC CABLE 24 FIBERS, SINGLE MODE	FOOT	15276
TEST HOLE	EACH	42
TEMPORARY INFORMATION SIGNING	SQ FT	103
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1
RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1
TRAINEES	HOUR	500



FILE NAME: N:\PROJECTS\Design\ProposedPlan\5175-21_Signal_Interconnect_Schematic_Sheridan.dgn

Ciorba Group, Inc.
 CONSULTING ENGINEERS
 5507 North Cumberland Avenue, Suite 402
 Chicago, Illinois 60656
 Tel. 773.775.4009 Fax 773.775.4014

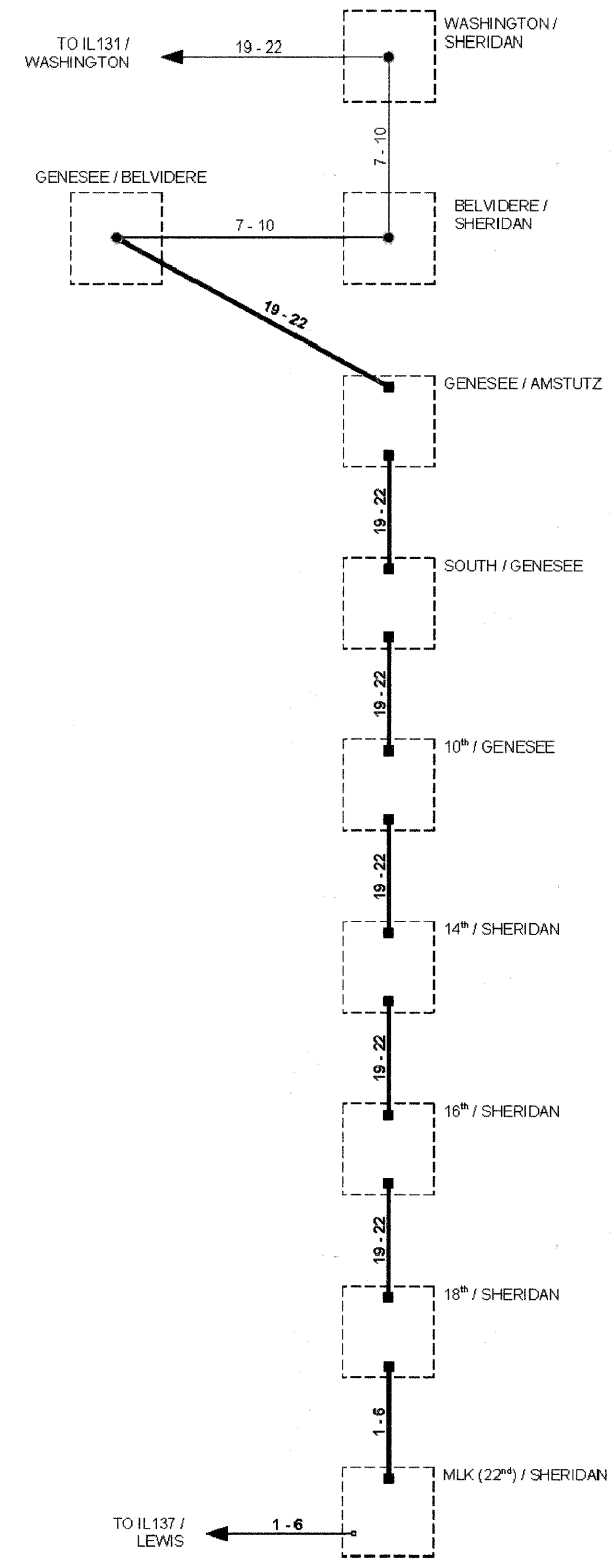
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	DATE - 03/22/2011	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

**SHERIDAN ROAD TRAFFIC SIGNAL IMPROVEMENTS & INTERCONNECT
 INTERCONNECT SCHEMATIC - SHERIDAN RD**

SCALE: N.T.S. SHEET NO. 21 OF 35 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2736	09-00169-00-TL	LAKE	35	21
CONTRACT NO. 63592			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	



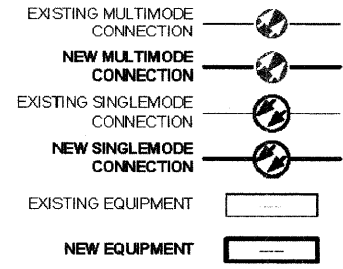
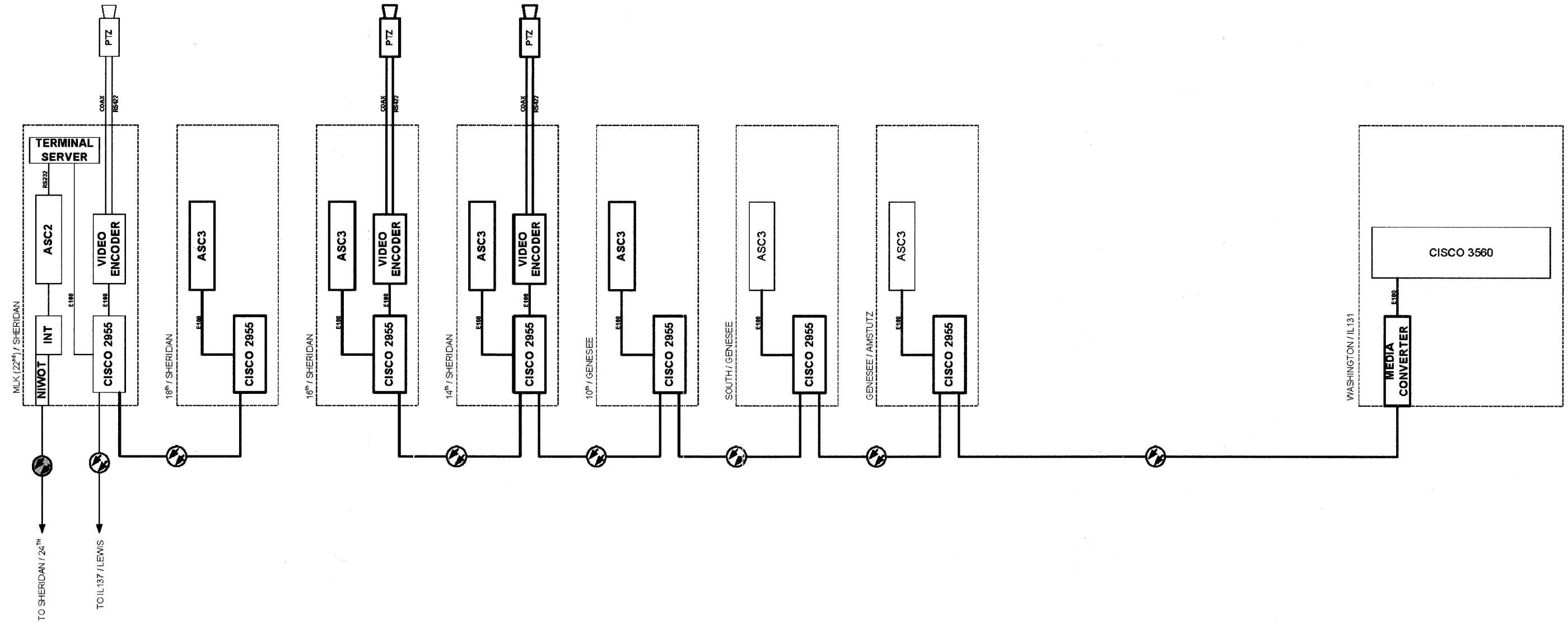
- EXISTING CONNECTOR / EXISTING FIBER
- NEW CONNECTOR / EXISTING FIBER
- EXISTING FUSION SPLICE / EXISTING FIBER
- NEW FUSION SPLICE / EXISTING FIBER
- NEW CONNECTOR / NEW FIBER
- NEW FUSION SPLICE / NEW FIBER

USER NAME = "USER"	DESIGNED - DG	REVISED -
PLOT SCALE = N/A	CHECKED - DG	REVISED -
PLOT DATE = "DATE"	DATE 2011/03/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER SPLICING DIAGRAM - 1
SHERIDAN / MLK

ROUTE	SECTION	ROUTE SECTION	SHEETS	SHEET
F.A.P. 2736		09-00169-00-TL	35	22
SCALE N/A		CONTRACT NO. 63592		



USER NAME = *USER*	DESIGNED - DG	REVISED -
	DRAWN - DG	REVISED -
PLOT SCALE = N/A	CHECKED - DG	REVISED -
PLOT DATE = *DATE*	DATE 2011/03/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET DETAIL 1
SHERIDAN / MLK

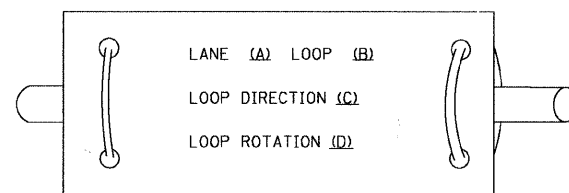
ROUTE	SECTION	ROUTE SECTION	SHEETS	SHEET
F.A.P.		09-00169-00-TL	35	23
2736				
CONTRACT NO.		63592		

SCALE N/A

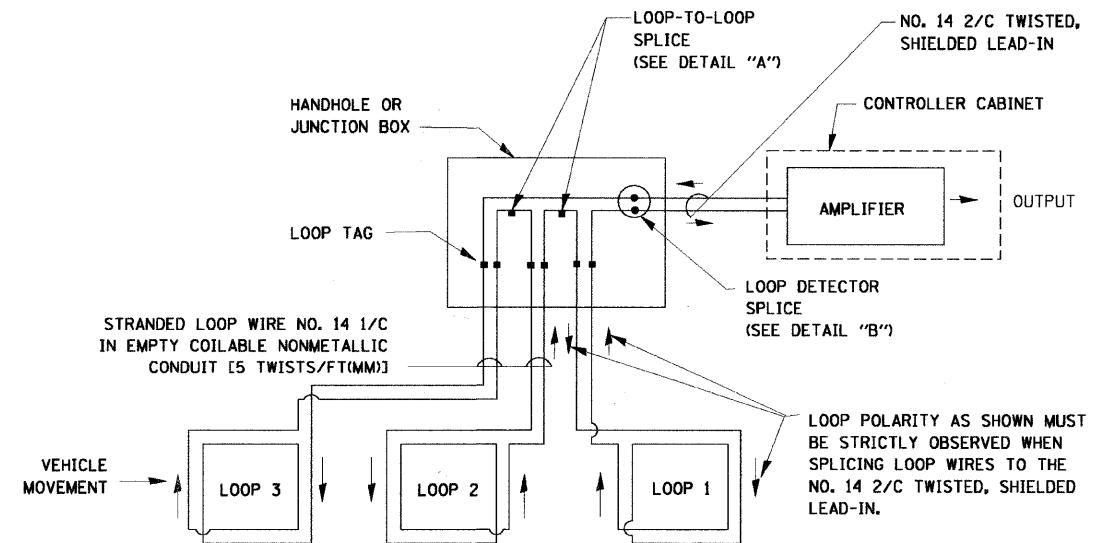
LOOP DETECTOR NOTES

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 DIVESHOLES 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

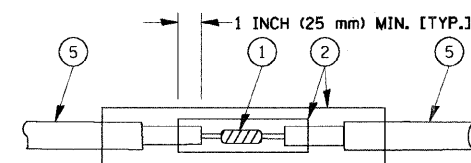


- A. LANE #1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

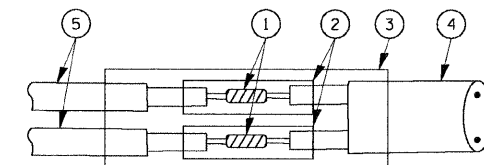


DETECTOR LOOP WIRING SCHEMATIC

- 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.

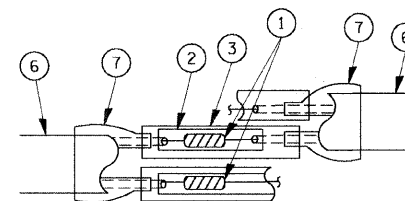


**DETAIL "A"
LOOP-TO-LOOP SPLICE**

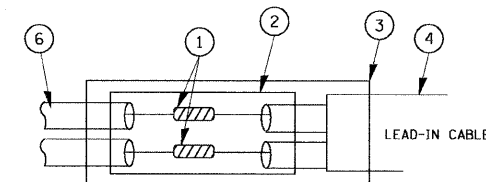


**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

TYPE I LOOP



**DETAIL "A"
LOOP-TO-LOOP SPLICE**



**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

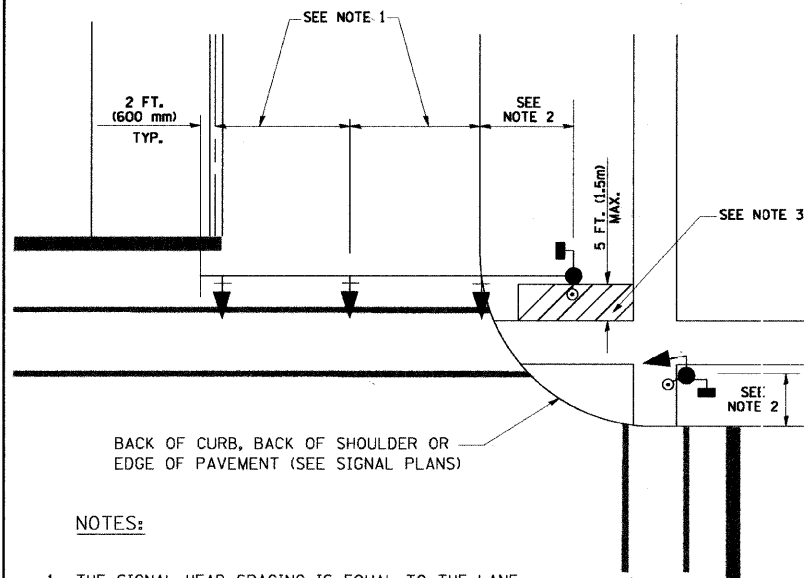
LOOP DETECTOR SPLICE

- 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 LENGTH 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 =	USER NAME = kanzhaphixajbo	DESIGNED - DAD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwidot\KANTHAPHIXAYBC\d81125	4\traffic_legend.v7.dgn	DRAWN - BCK	REVISED -			2736	09-00169-00-TL	LAKE	35	24
PLOT SCALE = 20,0000 1/ IN.	CHECKED - DAD	REVISED -				CONTRACT NO. 63592				
PLOT DATE = 10/6/2009	DATE - 10/28/09	REVISED -				FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
				SCALE:	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.			

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

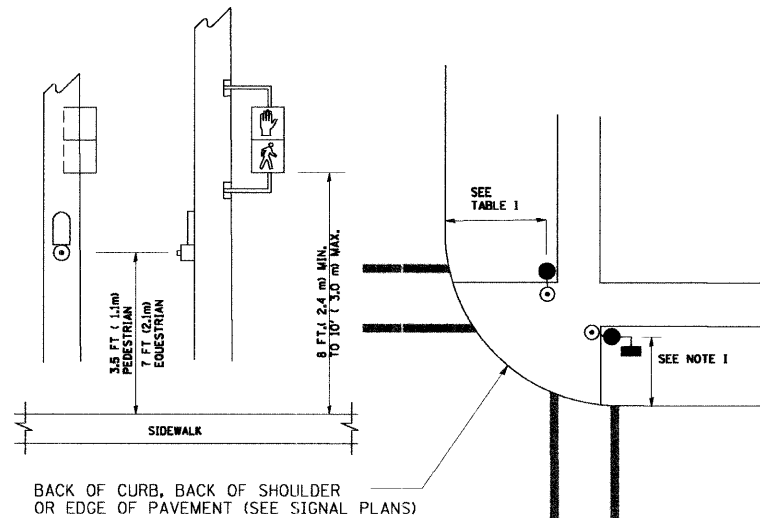
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

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

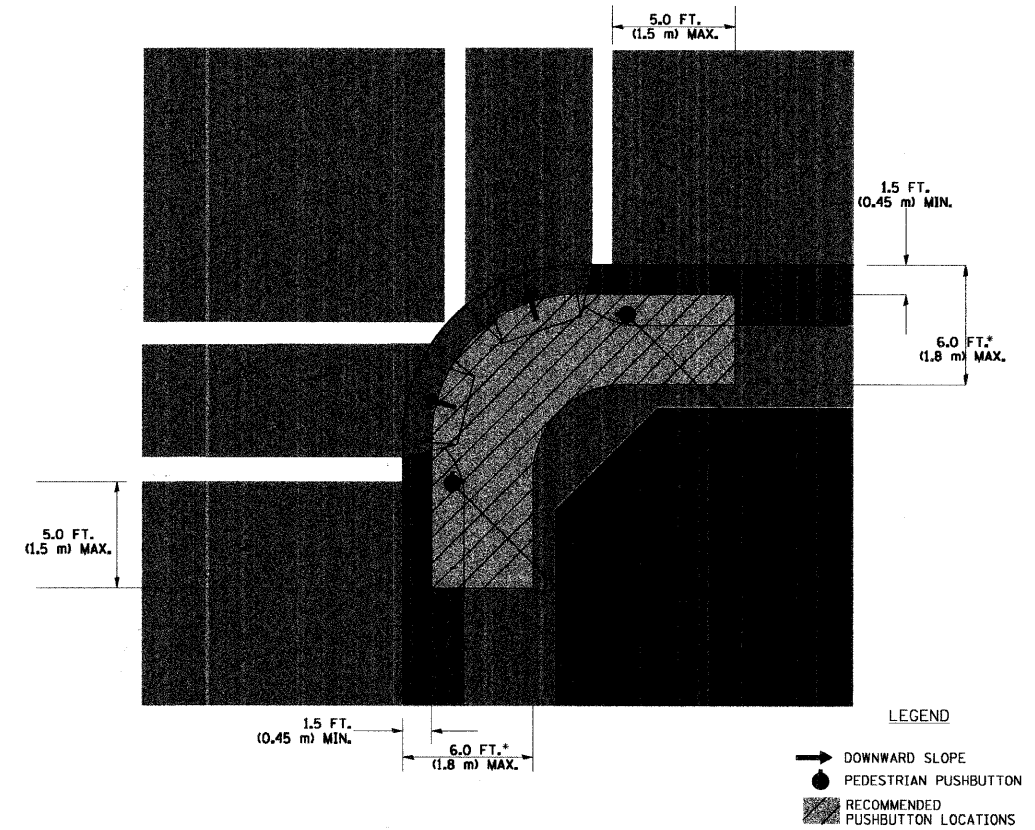
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



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

NOTES:

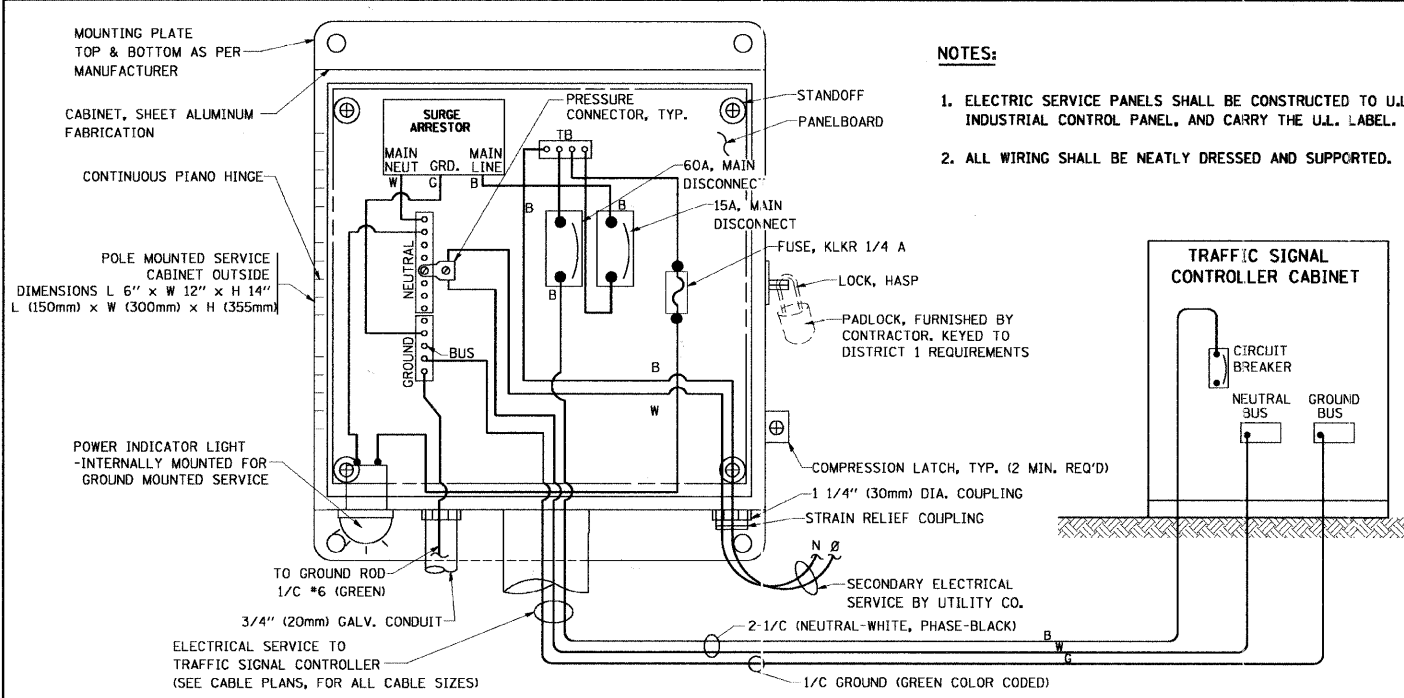
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM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

TRAFFIC SIGNAL EQUIPMENT OFFSET

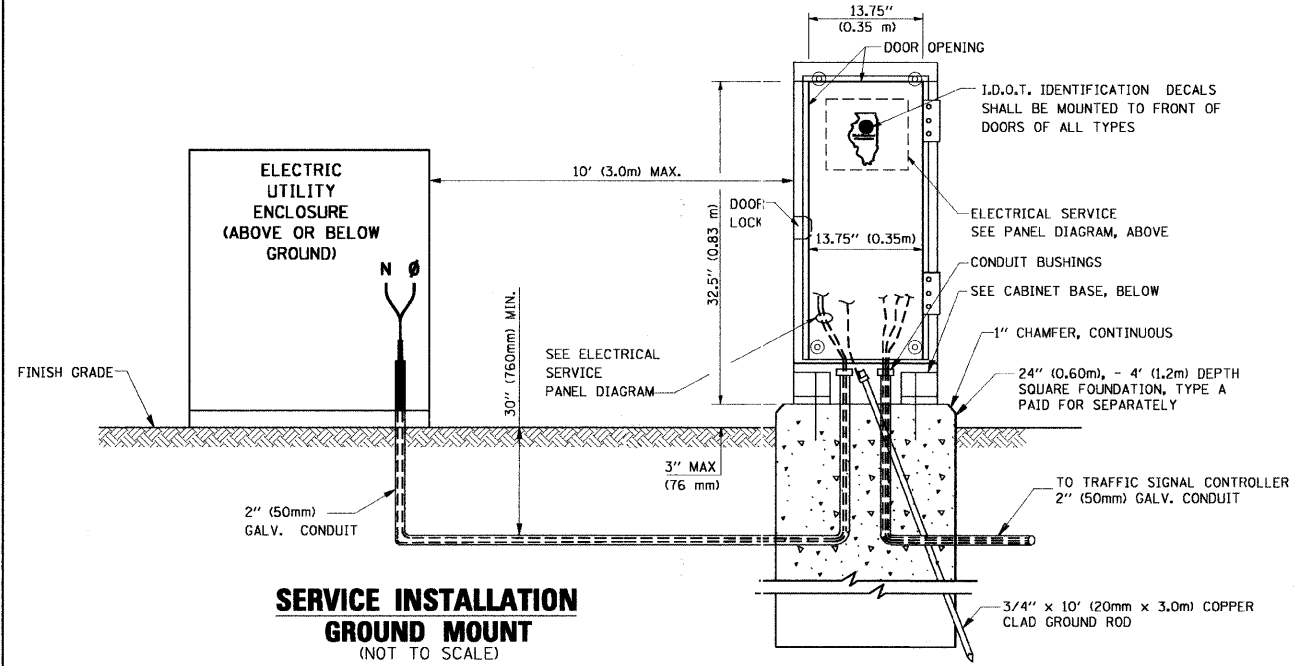
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10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

NOTES:

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

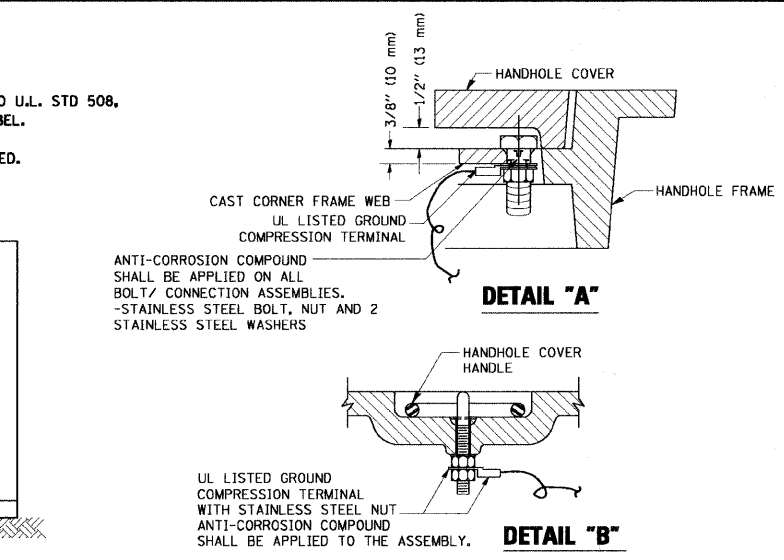
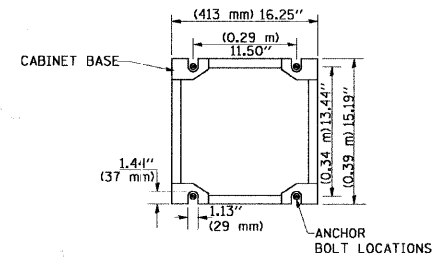


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



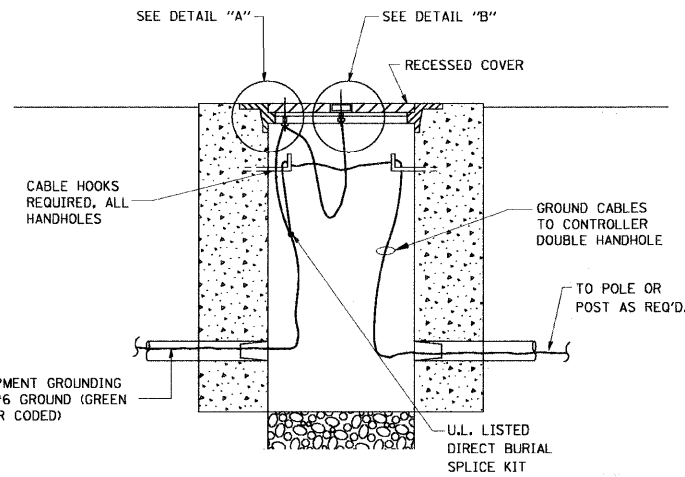
SERVICE INSTALLATION GROUND MOUNT
 (NOT TO SCALE)

CABINET - BASE BOLT PATTERN
 (NOT TO SCALE)

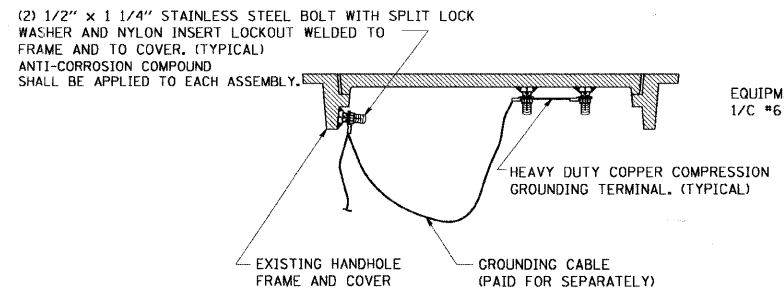


NOTES:
GROUNDING SYSTEM

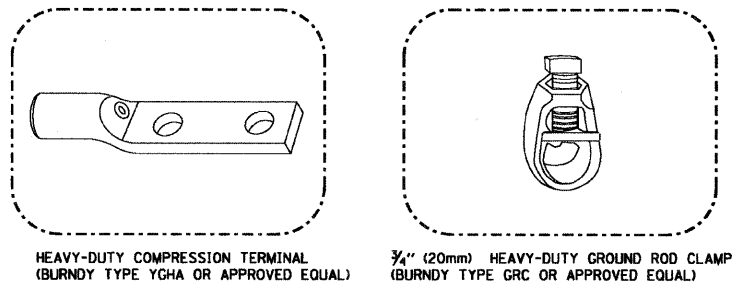
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, 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.



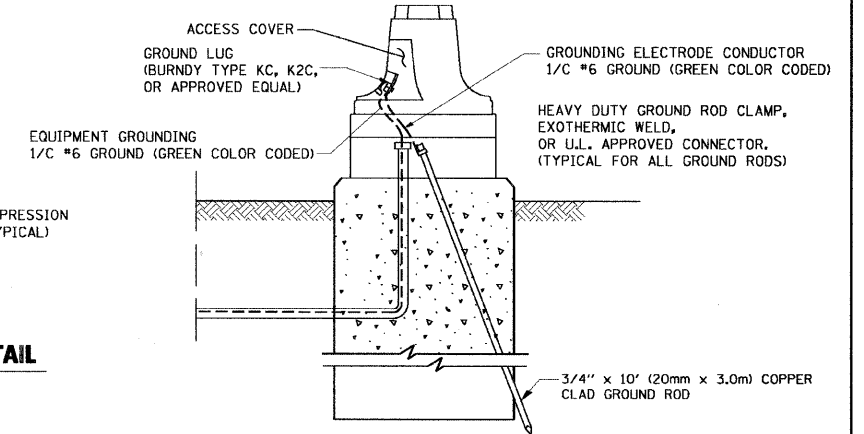
HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)



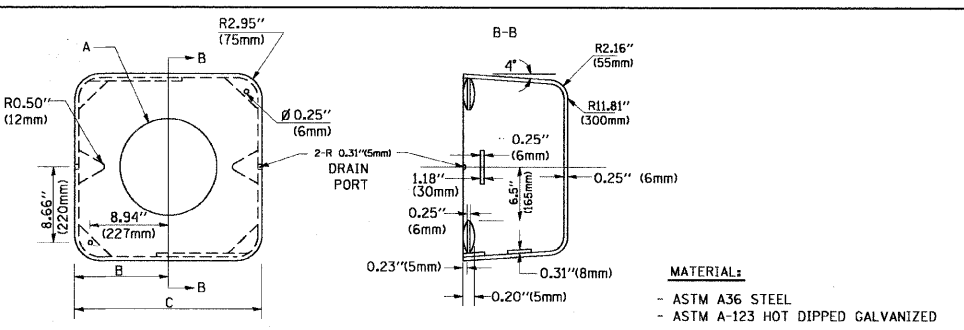
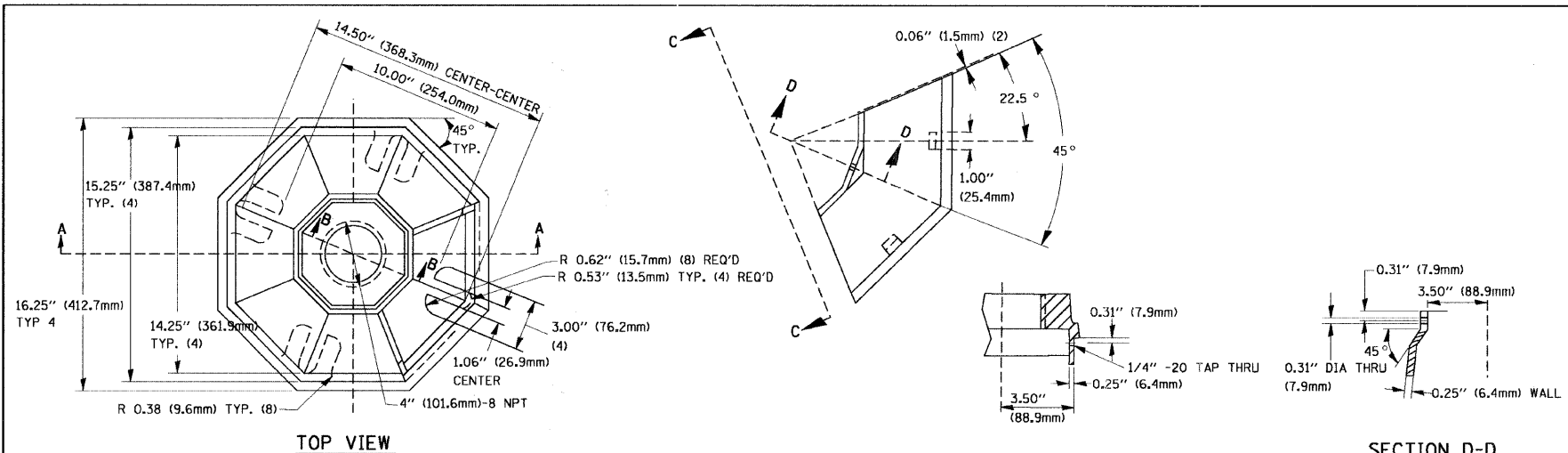
EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)



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



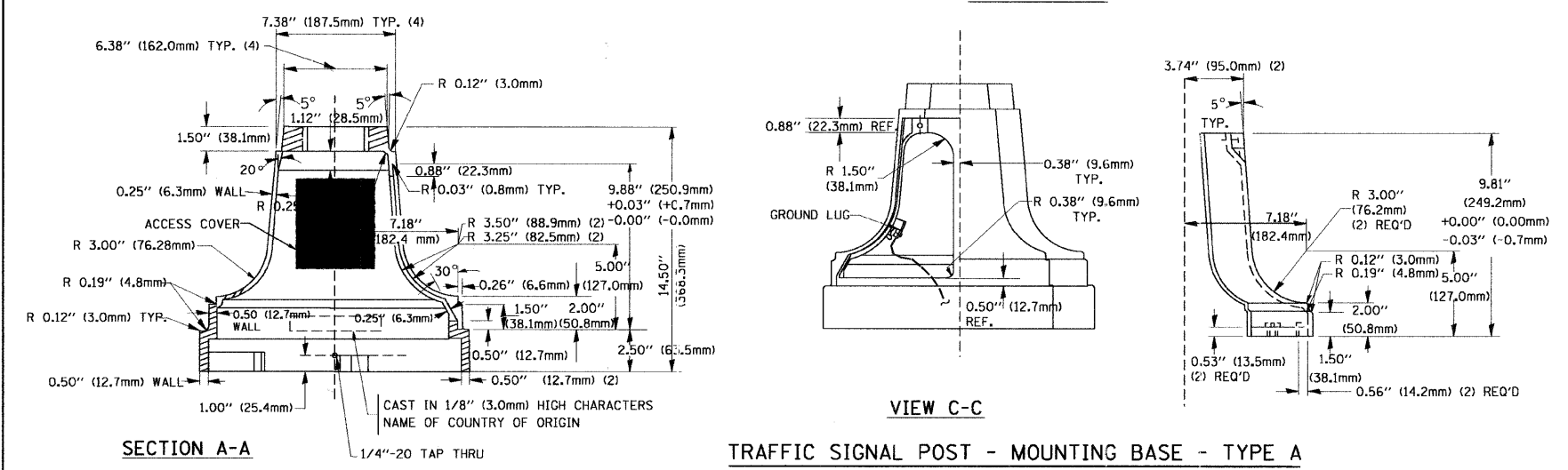
MAST ARM POLE / POST-GROUNDING DETAIL
 (NOT TO SCALE)



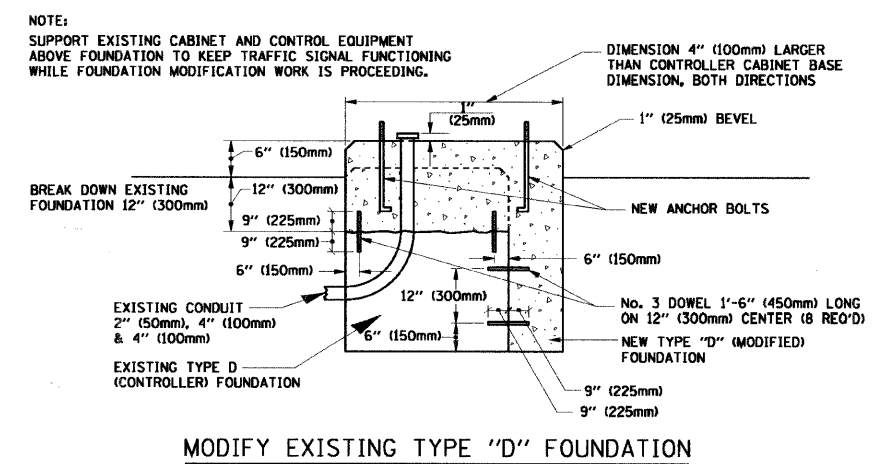
A	B	C	HEIGHT	WEIGHT
VARIABLES	9.5\"(241mm)	19\"(483mm)	7\"(178mm) - 12\"(300mm)	53 lbs (24kg)
VARIABLES	10.75\"(273mm)	21.5\"(546mm)	7\"(178mm) - 12\"(300mm)	68 lbs (31 kg)
VARIABLES	13.0\"(330mm)	26\"(660mm)	7\"(178mm) - 12\"(300mm)	81 lbs (37 kg)
VARIABLES	18.5\"(470mm)	37\"(940mm)	7\"(178mm) - 12\"(300mm)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

SHROUD

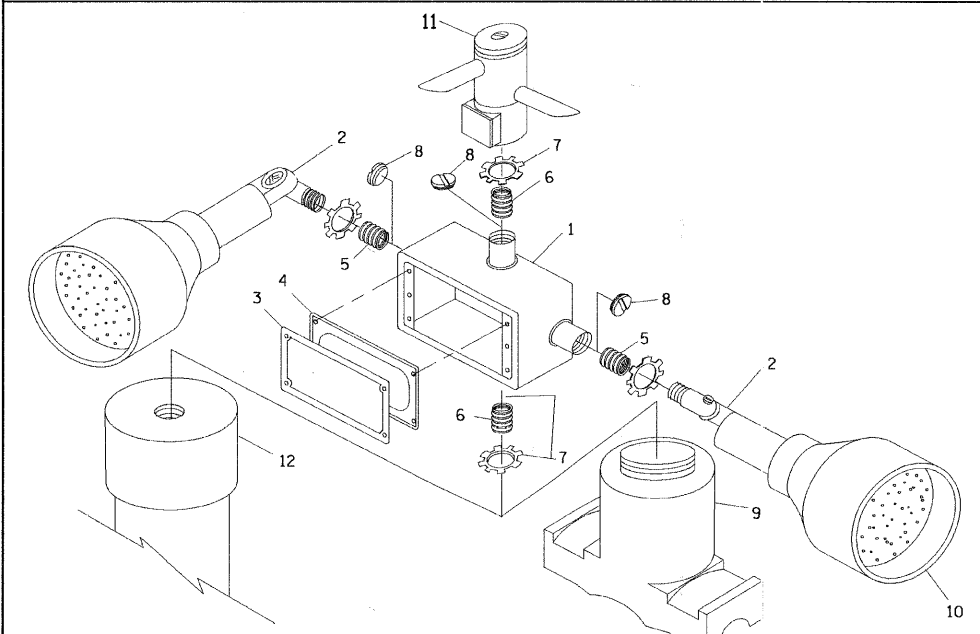
- NOTES:
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
 2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
 3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST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



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

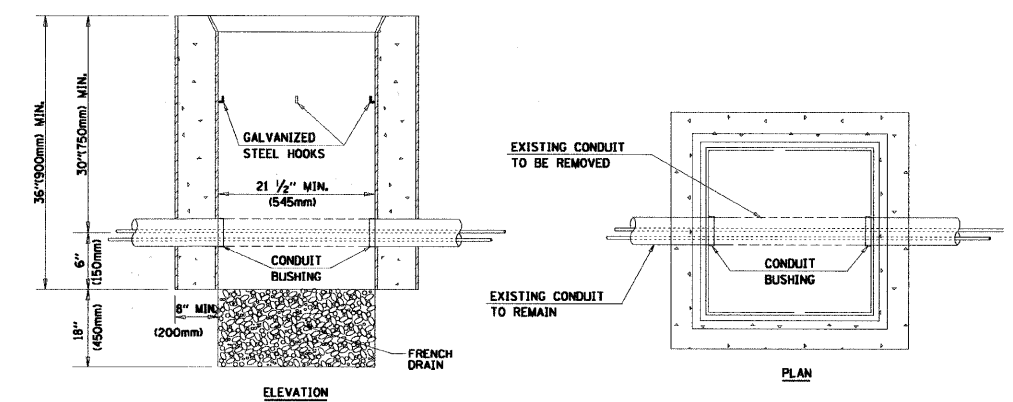


MODIFY EXISTING TYPE "D" FOUNDATION



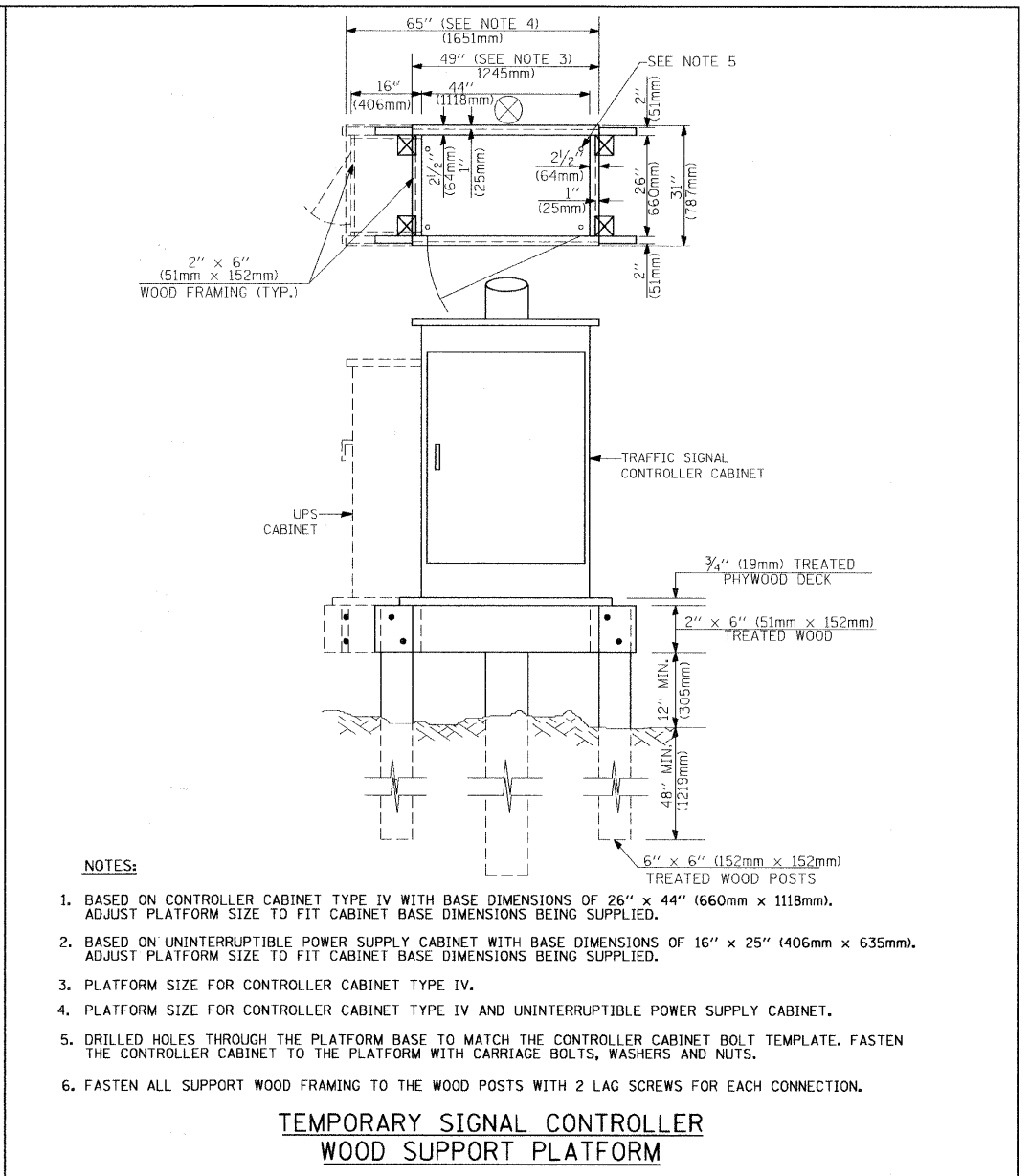
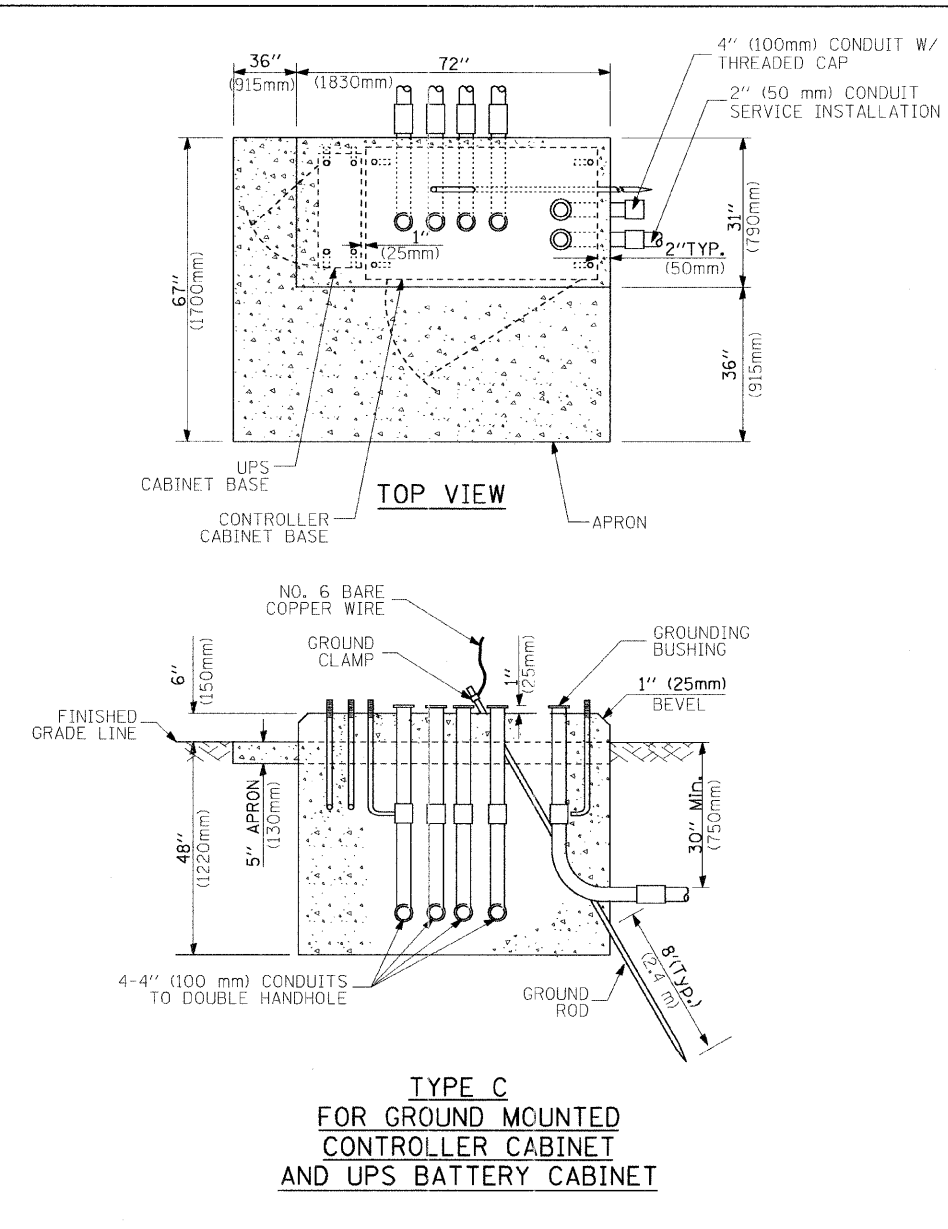
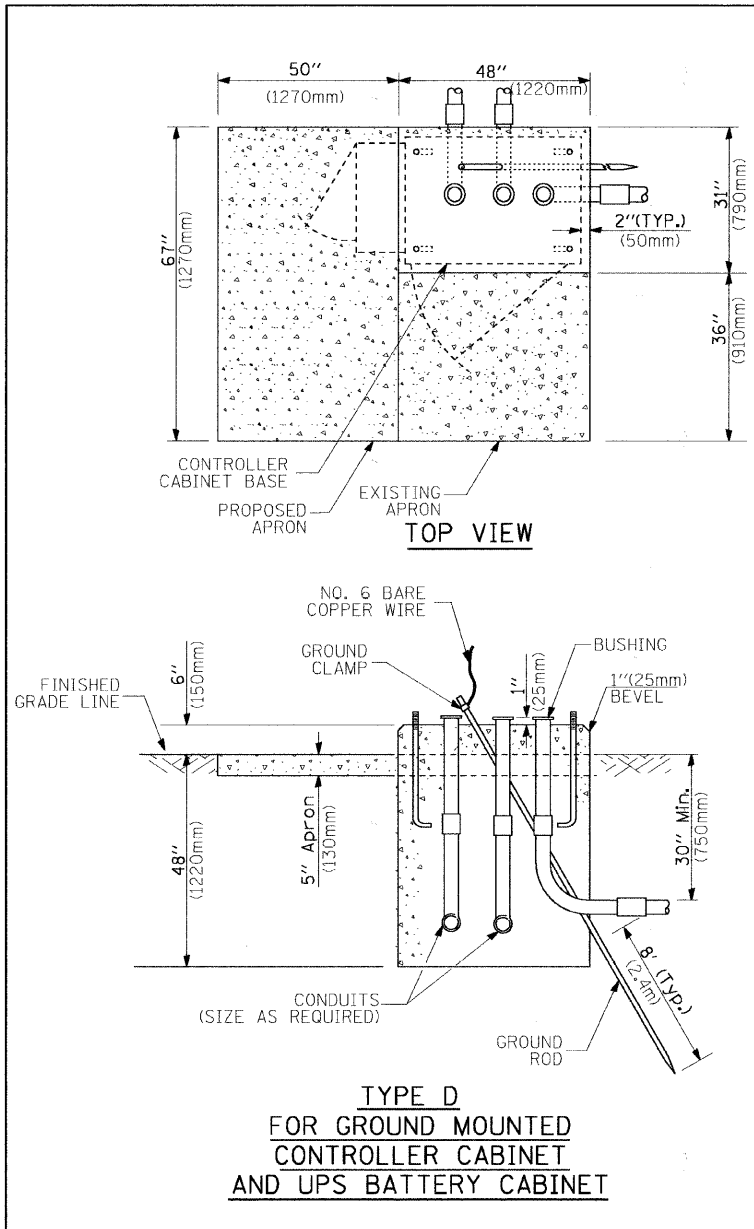
ITEM NO.	IDENTIFICATION
1	OUTLET BOX - GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\"(19 mm) CLOSE NIPPLE
7	3/4\"(19 mm) LOCKNUT
8	3/4\"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT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

- NOTES:
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 3/4\"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



HANDHOLE TO INTERCEPT EXISTING CONDUIT

- 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.



- 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.

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

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

DEPTH OF FOUNDATION

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

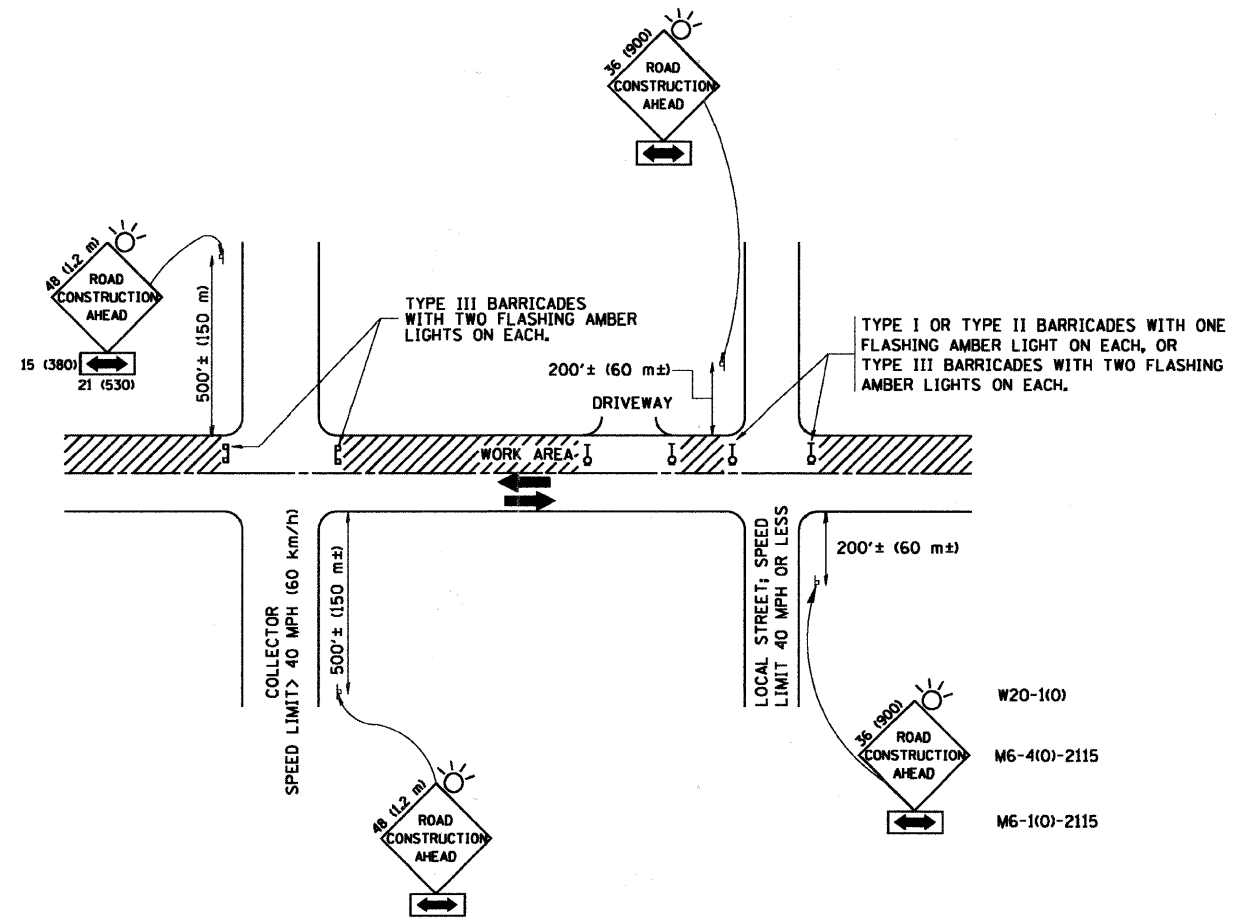
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

TRAFFIC SIGNAL LEGEND

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

RAILROAD SYMBOLS

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



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:

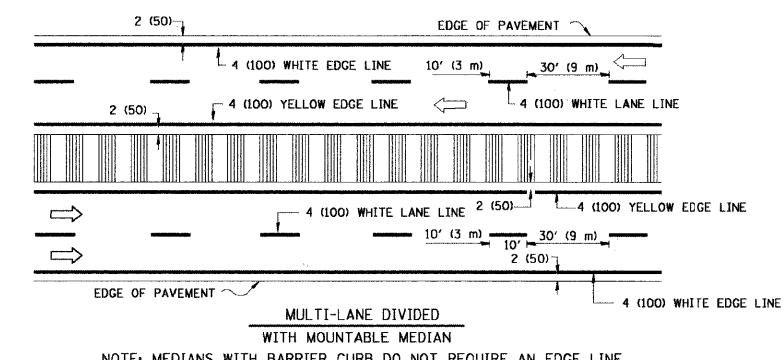
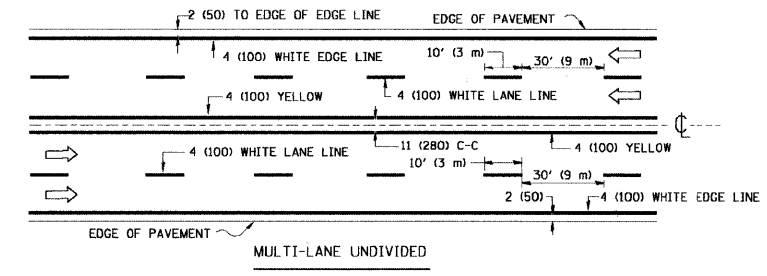
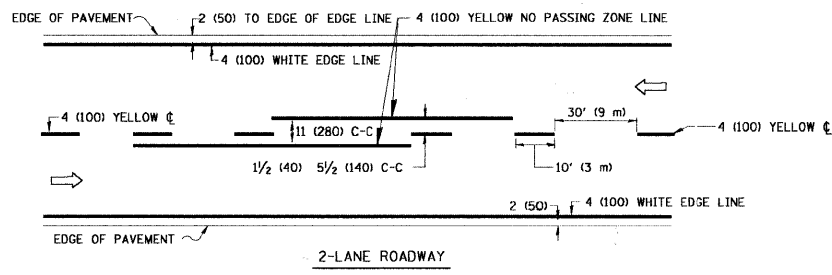
USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 70150L, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER 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.

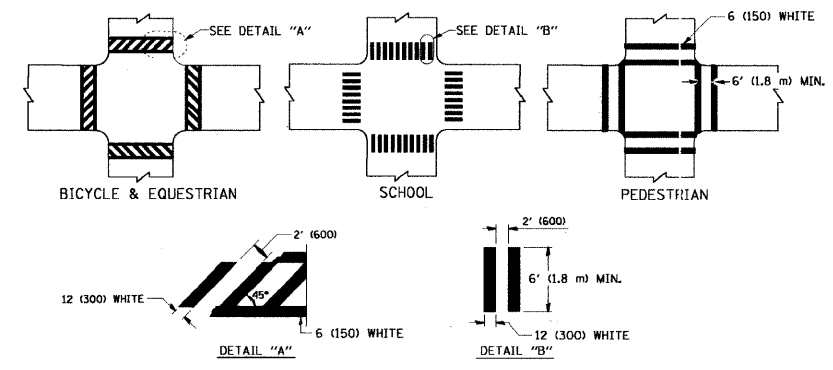
All dimensions are in millimeters (inches) unless otherwise shown.

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	PLOT SCALE = 58.000' / IN.	DRAWN -	REVISED - A. HOUSEH 03-06-96		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	TC-10		CONTRACT NO. 63592	
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - A. HOUSEH 10-15-96		FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT							
		DATE - 06-89	REVISED - T. RAMMACHER 01-06-00									

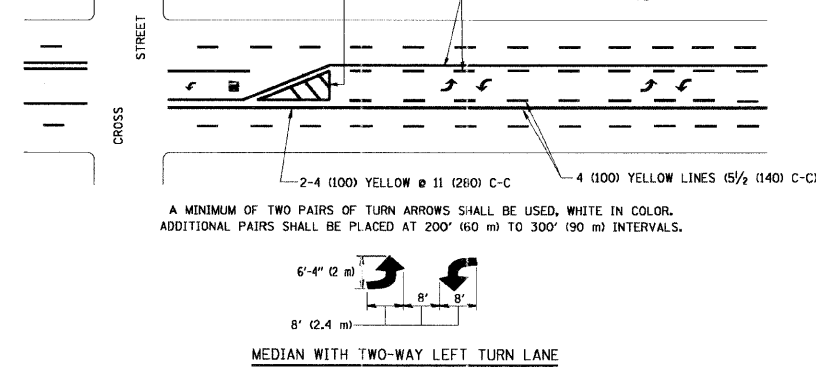
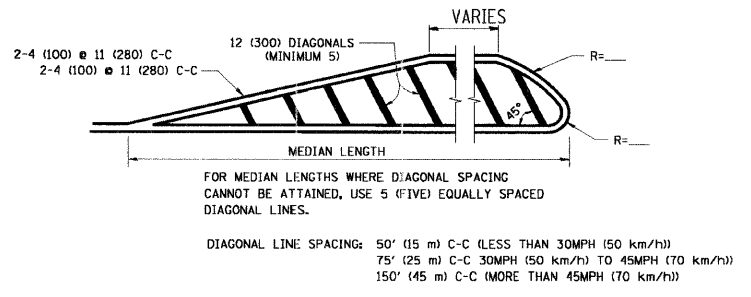
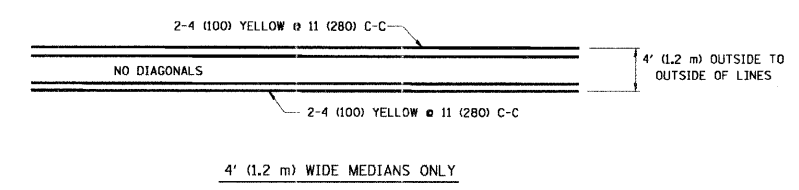


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

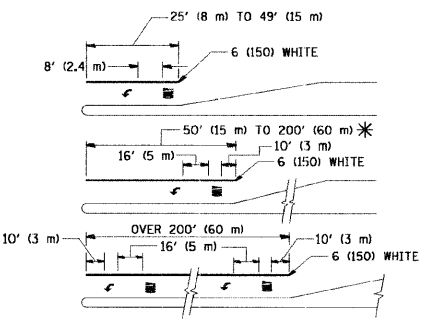
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



TYPICAL PAINTED MEDIAN MARKING

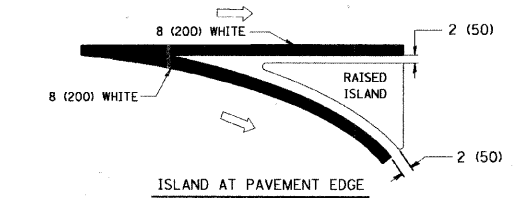
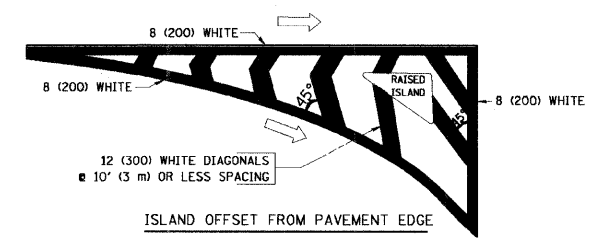


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

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

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

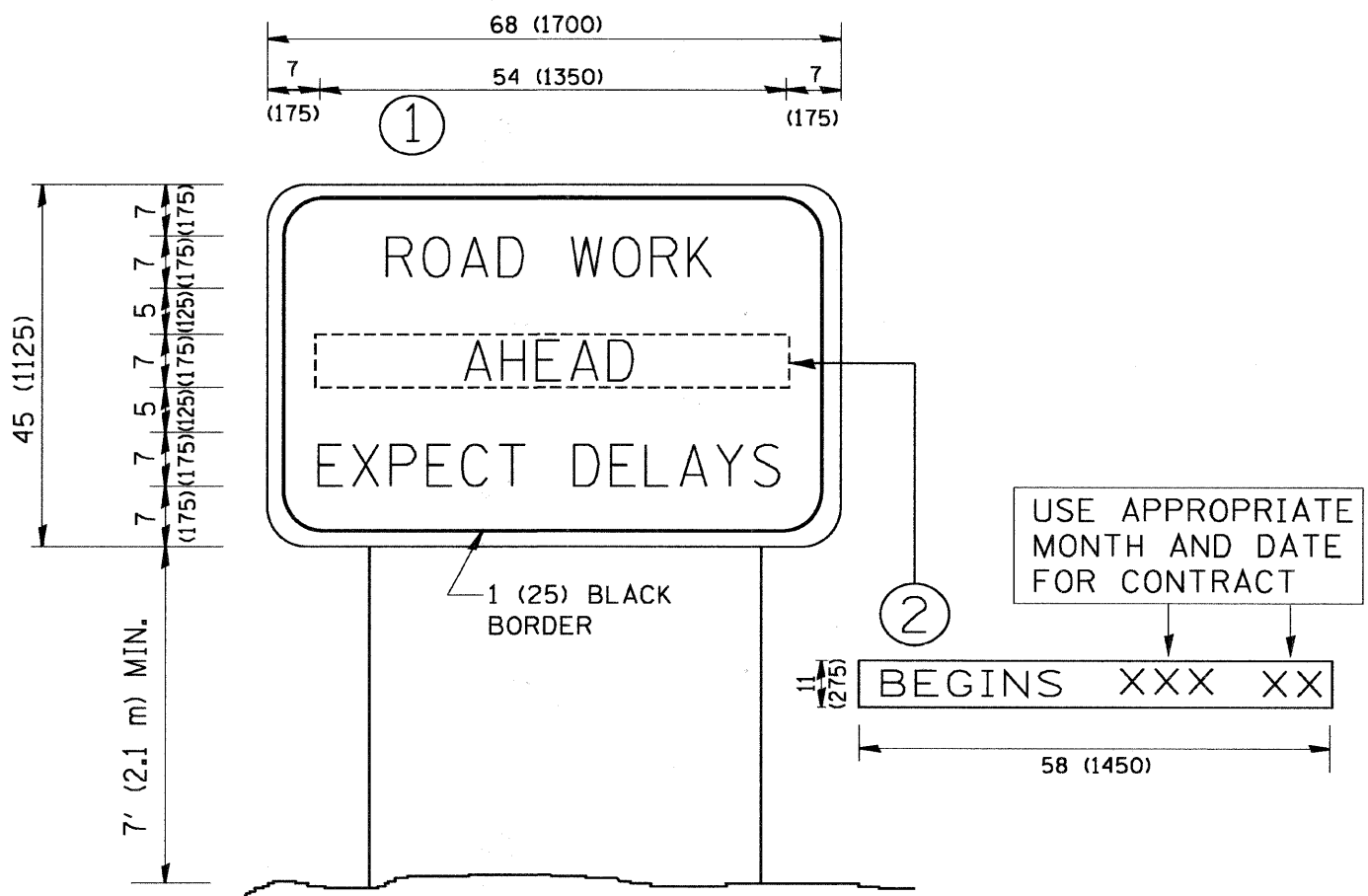


TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT; OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C (30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) 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.

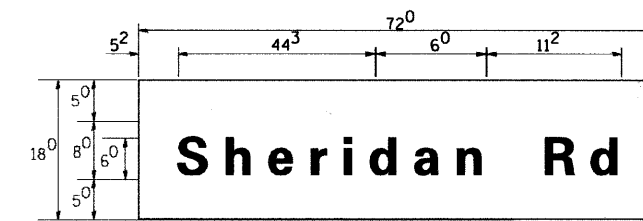
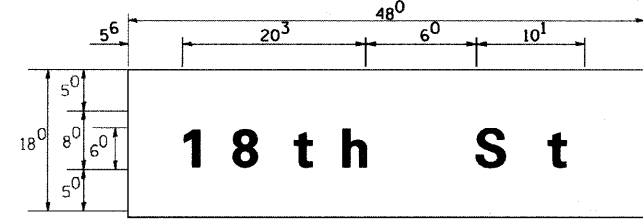
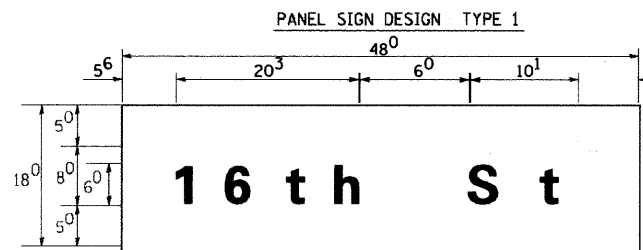


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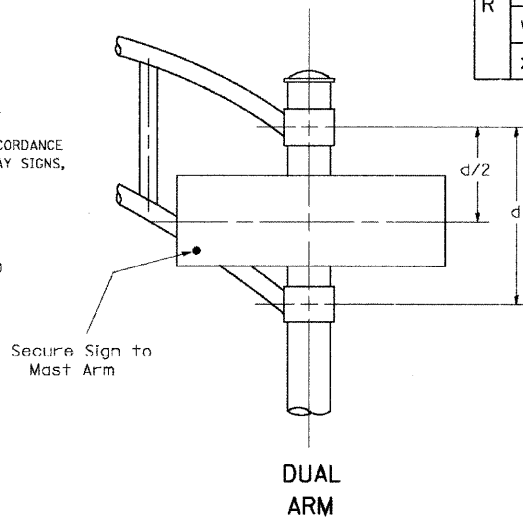
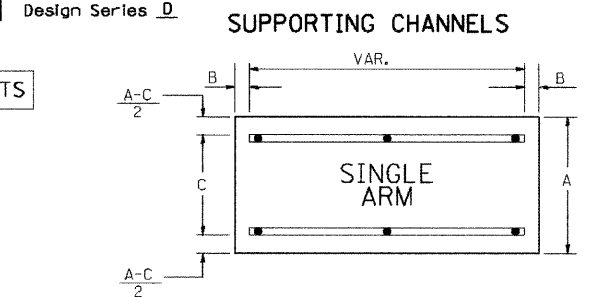
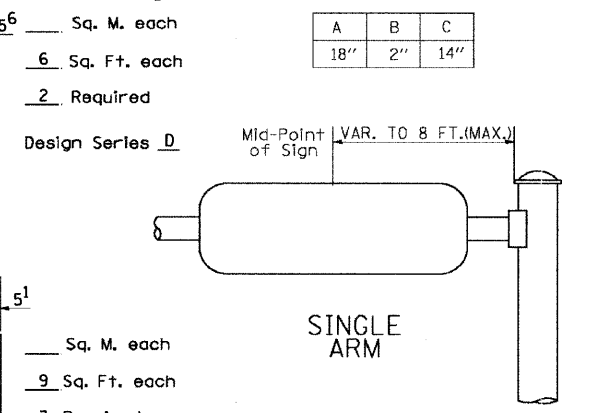
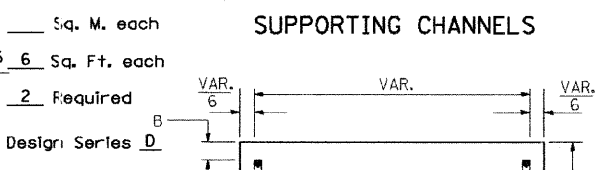
1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
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 = M:\distatd\22x34\to22.dgn	USER NAME = geglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN			F.A.P. RTE. 2736	SECTION 09-00169-00-TL	COUNTY LAKE	TOTAL SHEETS 35	SHEET NO. 32
	PLOT SCALE = 50,000' / IN.	DRAWN -	REVISED - R. MIRS 12-11-97		SCALE: NONE	SHEET NO. 1	OF 1 SHEETS	STA.	TO STA.	TC-22 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - T. RAMMACHER 02-02-99		CONTRACT NO. 63592							
		DATE -	REVISED - C. JUCIUS 01-31-07									



NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS



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

SERIES	SECOND LETTER															
	a c d e		b h i k l		f w		j		s t		v y		x		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	12	14	14	15	12	14	06	10	11	14	06	10	11	12	12	14
B	14	15	20	21	14	15	11	12	14	15	12	14	12	14	16	17
C E G	14	15	20	21	12	14	06	10	12	14	12	14	14	15	14	15
D O O R	14	15	20	21	14	15	06	10	12	14	12	14	14	15	14	15
F	05	06	14	15	06	10	05	06	06	10	06	10	06	10	11	12
H I M N	20	21	22	24	20	21	14	15	16	17	16	17	20	21	20	21
J U	20	21	20	21	16	17	14	15	16	17	16	17	16	17	20	21
K L	11	12	16	17	11	12	05	06	11	12	11	12	11	12	12	14
P	12	14	14	15	12	14	05	06	11	12	11	12	12	14	12	14
S	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
T	11	12	16	17	06	10	06	10	11	12	11	12	11	12	12	14
V	06	10	14	15	11	12	06	10	12	14	12	14	12	14	12	14
Y	05	06	14	15	06	10	05	06	05	07	05	06	06	10	11	12
Z	16	17	22	24	16	17	12	14	16	17	16	17	16	17	20	21

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

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

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

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

EXAMPLE, 2³ DENOTES 3/8"

UPPER AND LOWER CASE
LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS				LETTERS	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES			SERIES	
	C	D	C	D		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		8 INCH SERIES	
	C	D	C	D
	1	1 ²	1 ⁴	1 ⁵
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

- GENERAL NOTES**
- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLLS SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
 - ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
 - THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 8'-0".
 - ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
 - SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:

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

PARTS LISTING:
SIGN CHANNEL PART #HPN053 (MED. CHANNEL) 1/4" x 14 x 1" H.W.H. #3
SIGN SCREWS 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.

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

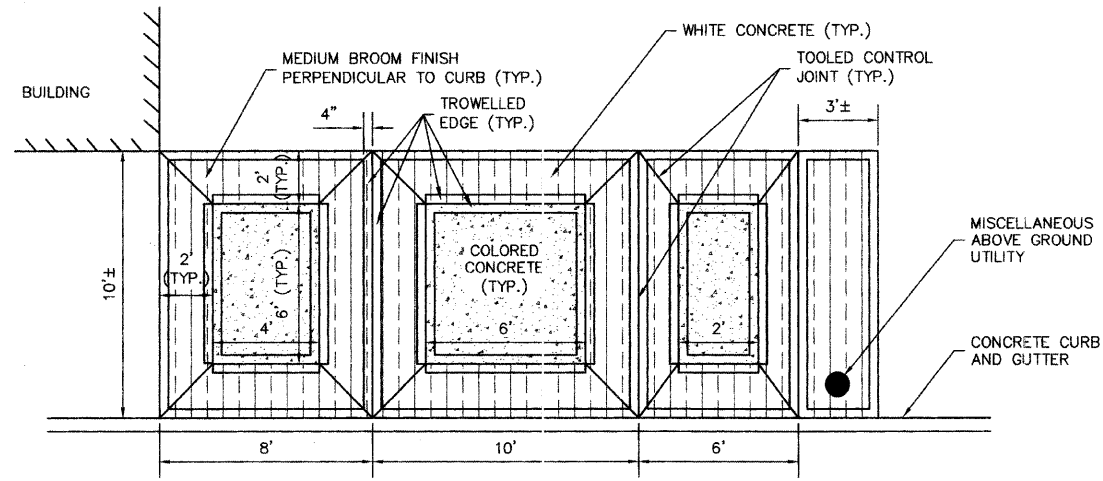
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	PLOT SCALE = 49.9999' / IN.	CHECKED - DAG/DAD	REVISED -
	PLOT DATE = 11/4/2009	DATE - 03-15-09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

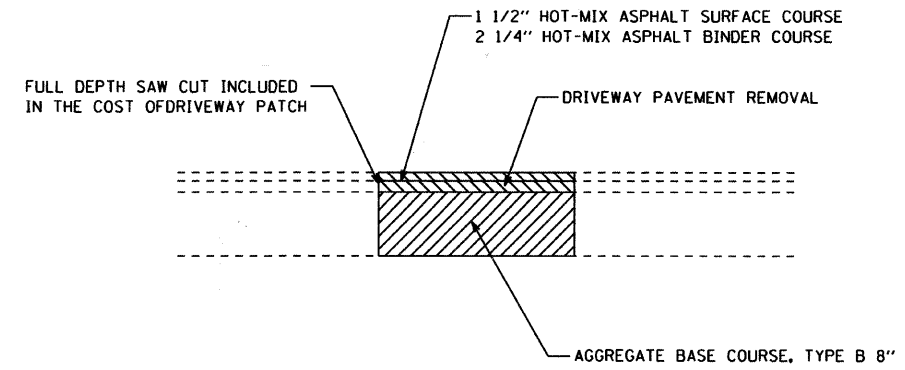
**DISTRICT ONE
MAST ARM MOUNTED STREET NAME SIGNS**

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

F.A.P. RTE. 2736	SECTION 09-00169-00-TL	COUNTY LAKE	TOTAL SHEETS 35	SHEET NO. 33
TS-02		CONTRACT NO. 63592		
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				



SIDEWALK SPECIAL
CONCRETE FINISH DETAIL



HOT-MIX ASPHALT MIXTURE REQUIREMENTS:

MIXTURE TYPE	AIR VOIDS @Ndes
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 (IL-9.5mm) 1 1/2"	4% @ 50 GYR.
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19.0mm) 2 1/4"	4% @ 50 GYR.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LB/SO YD/IN.

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

FOR "PERCENT OF RAP", SEE DISTRICT ONE SPECIAL PROVISIONS.

DRIVEWAY PATCHING DETAIL

FILE NAME = N:\PROJ\5175\Design\Detail\5175-Des.dwg

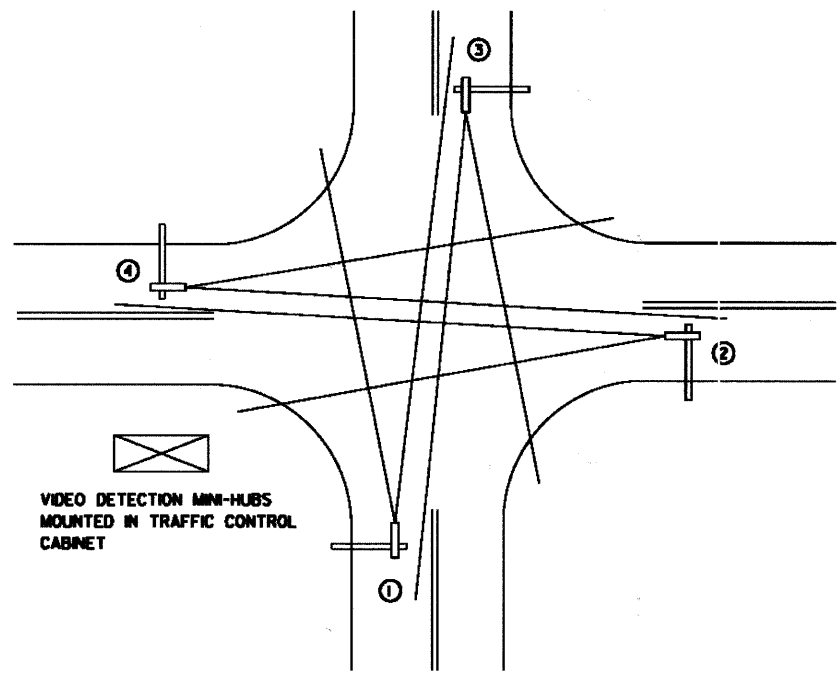
CC Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014

USER NAME = rtumbv	DESIGNED - RJR	REVISED -
	DRAWN - RJR	REVISED -
PLOT SCALE = 1/8" = 1' IN.	CHECKED - JMV	REVISED -
PLOT DATE = 4/11/2011	DATE - 03/22/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

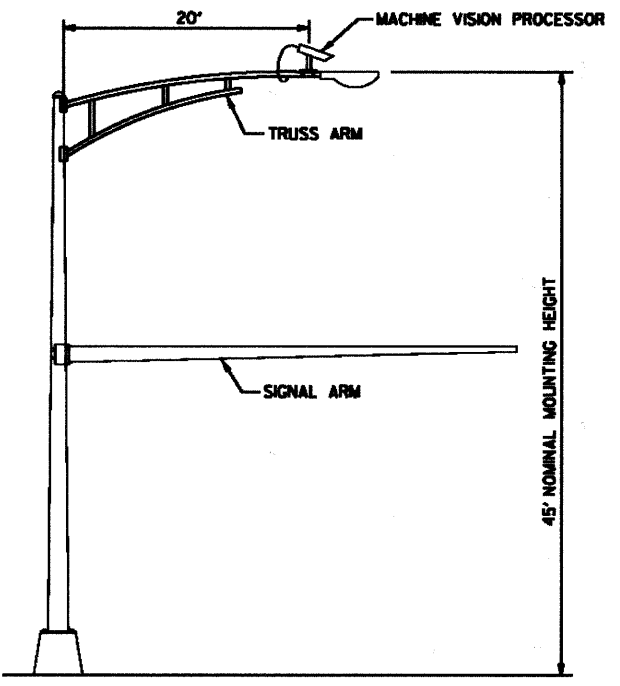
SHERIDAN ROAD TRAFFIC SIGNAL IMPROVEMENTS & INTERCONNECT
DRIVEWAY PATCHING & CONCRETE FINISH DETAIL
SCALE: 1"=50' SHEET NO. 34 OF 35 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2736	09-00169-00-TL	LAKE	35	34
CONTRACT NO. 63592				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TYPICAL VIDEO VEHICLE DETECTION SYSTEM
(NOT TO SCALE)

(1) MACHINE VISION PROCESSOR ASSEMBLIES AND BRACKETS (2) (3) (4) POWER CABLE TO EACH MACHINE VISION PROCESSOR (24 VAC)



COMBINATION MAST ARM ASSEMBLY AND POLE DIMENSIONS
(NOT TO SCALE)

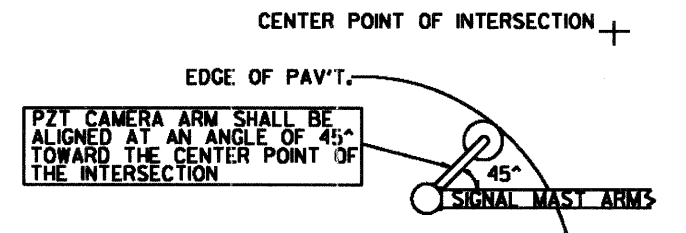
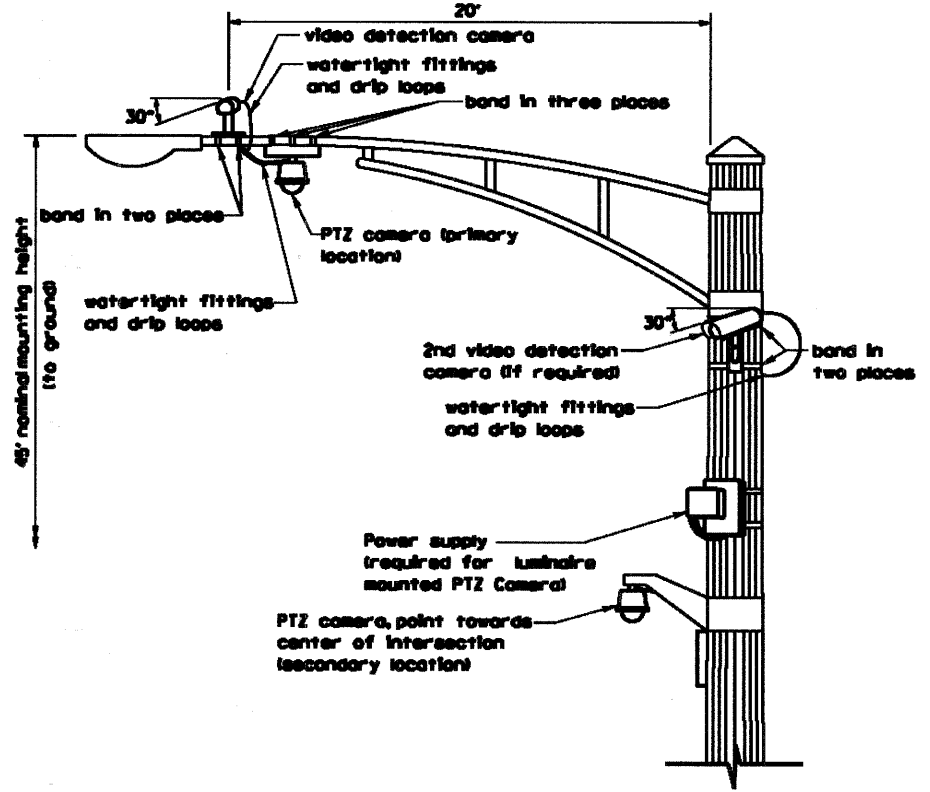
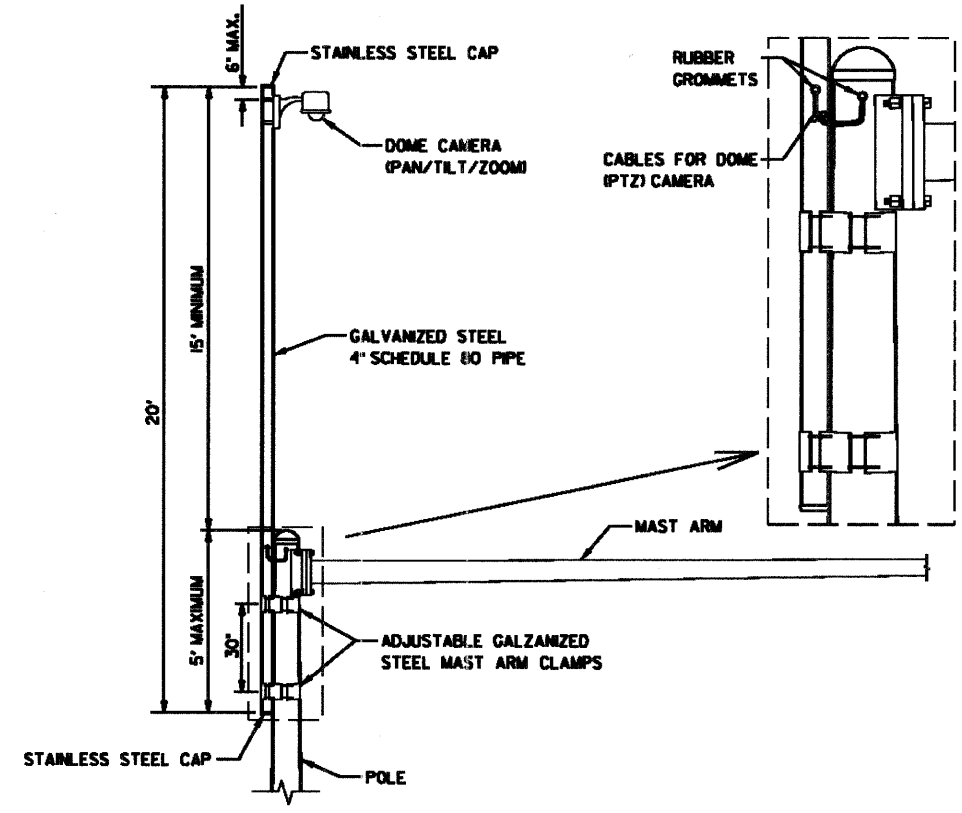


IMAGE SENSOR MOUNTING DETAILS
(NO SCALE)



VIDEO DETECTION CAMERA(S) AND DOME (PTZ) CAMERA MOUNTING DETAIL
(NOT TO SCALE)

- NOTES FOR SINGLE, DUAL AND MULTIPLE MVP MOUNTING:
- MOUNT LUMINAIRE MOUNTING BRACKET AS HIGH AS POSSIBLE.
 - AIM BRACKET TOWARD DIRECTION OF TRAFFIC TO BE DETECTED.
 - MOUNT MACHINE VISION PROCESSOR AIMING DOWN AT 30 DEGREE ANGLE.



CAMERA MOUNTING ASSEMBLY DETAIL
(NOT TO SCALE)

REVISIONS / NOTES	DATE		APPROVED BY: A. KHARAJA
Mounting Details Revised	8/1/08		DATE: APRIL 1, 2007
2nd Camera Layout added	1/14/09		

NO.	DESCRIPTION	DATE	BY	SURVEYOR
				DISCH/ALANSON
				PLOTTED BY: Indrc 1/16/2009



VIDEO DETECTION DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEETS	SHEET
F.A.P. 2736		09-00169-00-TL	35	35

FILE NAME: I:\DOT\To ITS\LC0900.dgn

CONTRACT NO. 63592