

06-12-2020 LETTING ITEM 005
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN THE CITY OF WAUKEGAN

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

FAU 1215 SUNSET AVENUE
FAU 1215 GOLF ROAD
FAU 1217 GREENWOOD AVENUE
McAREE ROAD TO IL 137 (SHERIDAN RD)
TRAFFIC SIGNAL MODERNIZATION AND
FIBER OPTIC COMMUNICATION SYSTEM
PROJECT NO.: Q5RM(365)
SECTION: 12-00999-30-TL
LAKE COUNTY
JOB NO.: C-91-157-16

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	1
		ILLINOIS	CONTRACT NO. 61G47	



LOCATION OF SECTION INDICATED THUS: - [shaded box] -

SIGNED: *[Signature]*
DANIEL P. BRINKMAN, EXP. 11/30/2021
DATE: JANUARY 10, 2020
[Professional Engineer Seal]

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
APPROVED *[Signature]* 2020
LAKE COUNTY DIVISION OF TRANS., COUNTY ENGINEER
PASSED *[Signature]* 2020
DISTRICT ONE ENGINEER OF LOCAL ROADS AND STREETS
RELEASING FOR BID BASED ON LIMITED REVIEW *[Signature]* 2020
REGIONAL ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

DESIGN DESIGNATION

CLASSIFICATION:

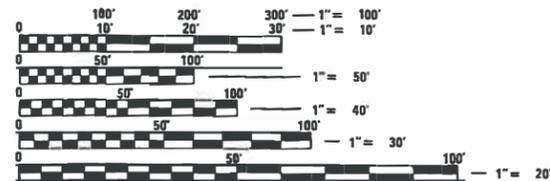
SUNSET AVENUE (FAU 1215) = MINOR ARTERIAL
GOLF ROAD (FAU 1215) = MINOR ARTERIAL
GREENWOOD AVENUE (FAU 1217) = MINOR ARTERIAL

ADT:

SUNSET AVENUE = 14,000 (2015)
GOLF ROAD = 12,00 (2015)
GREENWOOD AVENUE = 7,450 (2015)

POSTED SPEED LIMIT:

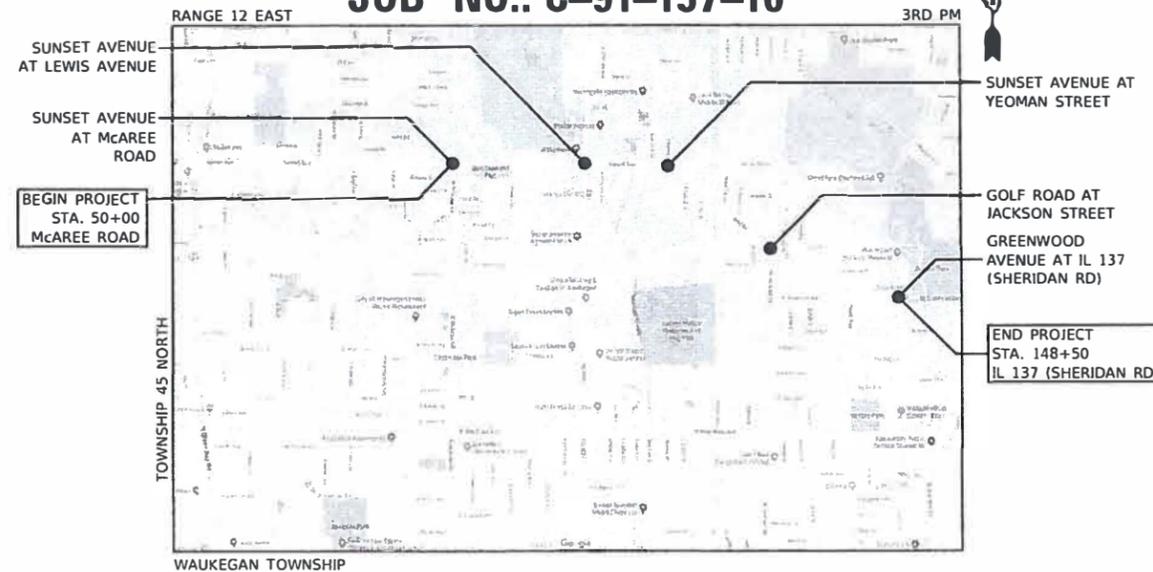
SUNSET AVENUE = 30MPH
GOLF ROAD = 30MPH
GREENWOOD AVENUE = 30MPH



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

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive • Vernon Hills, IL 60061
Consulting Engineers & Surveyors
PH: 847-478-9700 FAX: 847-478-9701
CONTRACT NO. 61G47



GROSS LENGTH = 14,850 FT. = 2.81 MILE
NET LENGTH = 14,850 FT. = 2.81 MILE

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

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HIGHWAY STANDARDS

000001-07	STANDARD SYMBOLS, ABBREVIATIONS, & PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
424001-11	PERPENDICULAR CURB RAMP FOR SIDEWALKS
424006-04	DIAGONAL CURB RAMP FOR SIDEWALKS
424011-04	CORNER PARALLEL CURB RAMP FOR SIDEWALKS
424021-05	DEPRESSED CORNER FOR SIDEWALKS
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS 2L, 2W, DAY ONLY
701101-05	OFF-RD OPERATIONS, MULTILANE 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
701301-04	LANE CLOSURE, 2L, 2W SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLYLANE CLOSURE,
701427-05	MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≤ 40 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-09	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-03	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING AND BONDING
877006-06	STEEL MAST ARM ASSEMBLY & POLE WITH DUAL MAST ARMS
877011-10	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
878001-10	CONCRETE FOUNDATION DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS

LCDOT STANDARDS

LC2051	PERIMETER EROSION BARRIER INSTALLATION
LC4201	CURB RAMP WITH TRAFFIC SIGNAL POSTS AND MAST ARMS
LC4202	CONCRETE WASHOUT FACILITIES
LC7200	DIRECTIONAL INDICATOR BARRICADES
LC7800	TYPICAL PAVEMENT MARKINGS FOR COUNTY HIGHWAYS
LC8900	CAMERA MOUNTING DETAILS

HOT-MIX ASPHALT MIXTURE TABLE

MIX TYPE	PERCENT AIR VOIDS @Ndes
INCIDENTAL HMA PAVING	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N50	4% @ 50 Gyr

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

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

FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

POINTS OF CONTACT			
LAKE COUNTY PASSAGE MR. JON NELSON, P.E. ENGINEER OF TRAFFIC PH: (847) 377-7000 FAX: (847) 984-5606			
UTILITY POINTS OF CONTACT (LEGAL MANDATE CONTACT FOR QUESTIONS ON UTILITY PLANS & PERMITS)			
AT&T CORPORATION MR. HECTOR GARCIA LEGAL MANDATE DEPARTMENT 1000 COMMERCE DRIVE, FLOOR 1 OAK BROOK, IL. 60523 PH: (847) 888-6799 FAX: (630) 573-5445 CELL: (630) 639-8372 hg2929@att.com	NICOR GAS MR. BRUCE KOPPANG DOT LIAISON 1844 FERRY RD. NAPERVILLE, IL 60563 PH: (630) 388-3046 FAX: (630) 983-4028 CELL: (708) 243-5136 bkoppan@aglresources.com	NORTHWEST WATER COMMISSION MR. DAVID NEYBERT 1525 NORTH WOLF ROAD DES PLAINES, IL 60016 PH: (847) 635-0777	REDSPEED ILLINOIS MR. JOSE CHAVEZ 400 EISENHOWER LANE NORTH LOMBARD, IL 60148 OFFICE: (630) 317-5705 jose.chavez@redspeed-illinois.com
COMED MS. TERRI J. BLECK, MANAGER, PUBLIC RELOCATION GROUP (NORTHEAST REGION) 1500 FRANKLIN BLVD. LIBERTYVILLE, IL 60048 PH: (847) 816-5239 FAX: (847) 816-5348 terri.bleck@comed.com	NORTH SHORE GAS MS. GLANNIE CHAN 3001 GRAND AVE. WAUKEGAN, IL 60085 OFFICE: (847) 263-4687 CELL: (224) 360-2035 gachan@peoplesgasdelivery.com	COMCAST MR. ROBERT SCHULTER, MANAGER 688 INDUSTRIAL DRIVE ELMHURST, IL 60126 PH: (630) 600-6347 FAX: (630) 600-6390 BOB_SCHULTER@CABLE.COMCAST.COM CONTACT FIRST ADM. ASSISTANT: MARTHA GIERAS PH: (630) 600-6352 martha_gieras@cable.comcast.com	CITY OF WAUKEGAN MR. MIKE HEWITT 1700 N. McAREE ROAD WAUKEGAN, IL 60085 OFFICE: (847) 360-0944 mike.hewitt@waukeganil.gov
UTILITY POINTS OF CONTACT (DAMAGE PREVENTION CONTACT FOR PROBLEMS WITH JULIE LOCATES AND/OR UTILITY EMERGENCIES)			
NICOR GAS MR. JEREMY REMPERT UTILITY DAMAGE CONTROL COORD. PH: (224) 242-6543 jremper@southernco.com	COMCAST MR. SHARI GREENWOOD UTILITY DAMAGE CONTROL COORD. PH: (708) 417-8522 shari_greenwood@cable.comcast.com	AT&T CORPORATION MR. KEVIN CAVENAILE AT&T DAMAGE PREVENTION PH: (630) 906-2166 PH: (815) 274-3093 kc2951@att.com	COMED (DAMAGE PREVENTION) MS. KELLEY HEINZ SR. CLAIMS CASE MANAGER PH: (630) 333-2231 PH: (630) 691-4759 kelley.heinz@comed.com
NORTH SHORE GAS MR. TED ANDERSEN UTILITY DAMAGE CONTROL COORD. PH: (847) 263-4614 taandersen@northshoregasdelivery.com			

CONTROL POINTS

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION	STATION	OFFSET	NAME
42	2085832.31	1113760.08	658.98	CP42-XSW	80+60.4	37.0' LT	CP-42
56	2085755.03	1113308.02	659.95	CP56-XSW	76+08.2	39.1' RT	CP-56
57	2085761.51	1114118.57	657.28	CP57-XSW	84+18.7	34.7' RT	CP-57
58	2084603.21	1116451.47	662.84	CP58-SXSW	111+71.7	33.7' RT	CP-58
60	2083201.92	1118625.81	658.99	CP60-XSW	138+55.2	22.5' LT	CP-60
61	2083139.93	1119515.81	660.25	CP61-XSW	147+45.1	41.3' RT	CP-61
75	2083134.47	1119440.91	659.01	CP75-FXSW	146+70.2	46.6' RT	CP-75
76	2083145.77	1118249.94	663.75	CP76-SXSW	134+79.3	32.9' RT	CP-76
77	2083443.23	1117922.15	664.98	CP77-SXSW	130+43.7	30.6' LT	CP-77
78	2083765.22	1117434.18	666.92	CP78-SXSW	124+63	37.7' RT	CP-78
79	2084712.72	1116428.89	662.63	CP79-SXSW	110+83.6	35.3' LT	CP-79
80	2084489.87	1116691.04	661.75	CP80-SXSW	114+27.7	34.8' LT	CP-80
81	2084907.26	1116100.54	664.16	CP81-SXSW	107+07.4	28.7' RT	CP-81
82	2085484.74	1115404.65	663.99	CP82-SXSW	98+03.1	38.3' RT	CP-82
200	2085756.91	1112531.10	664.41	CP200-XSW	68+31.3	35.3' RT	CP-200
201	2085824.16	1110699.50	700.15	CP201-XSW	49+99.7	37.3' LT	CP-201
202	2085755.45	1111906.24	670.13	CP202-XSW	62+06.4	34.8' RT	CP-202
203	2085752.76	1111040.04	686.65	CP203-XSW	53+40.1	34.2' RT	CP-203
204	2085462.60	1110775.12	706.33	CP204-XSW	50+74.1	323.4' RT	CP-204
59723	2086179.68	1113437.00	660.29	CP34-FMN	77+38.2	385.2' LT	CP-34
59724	2085201.36	1113420.52	657.41	CP8-FXSW	77+19.3	593.1' RT	CP-8

BEARINGS AND COORDINATES SHOWN HEREON REFERENCE THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (CORS 96) (2002 ADJUSTMENT) "GRID".

DATUM IS NAVD 88.

ANY ROADWAY OR DRIVEWAY PAVEMENT DAMAGED IN THE REMOVAL OF COMBINATION CURB AND GUTTER OR SIDEWALK SHALL BE REPAIRED AND INCLUDED IN THE COST OF THE COMBINATION CURB AND GUTTER, TYPE B-6.12 OR PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT kalpana.kannah-hosadurga@illinois.gov A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

ANY EXPLORATORY POTHOLING FOR EXISTING BELOW GRADE UTILITIES IN HARD SURFACES OR GRASSED AREAS SHALL BE INCLUDED IN THE COST OF THE CONTRACT. ALL POTHOLE SHALL BE FILLED WITH SAND OR BENTONITE CHIPS AS APPROVED BY THE ENGINEER.

FILE NAME = GenNote-Index.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
4572.800	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
Default	PLOT DATE = 4/3/2020	CHECKED - DPB	REVISED -
		DATE - 1/10/2020	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	2
CONTRACT NO. 61G47			ILLINOIS FED. AID PROJECT	

LCDOT GENERAL NOTES

1. GENERAL

A. ALL CONSTRUCTION SHALL BE DONE ACCORDING TO THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED APRIL 1, 2016; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JAN. 1, 2020; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS"; THE DETAILS IN THESE PLANS, AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.

B. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 72 HOURS PRIOR TO BEGINNING WORK AND SHALL COORDINATE ALL CONSTRUCTION OPERATIONS WITH THE ENGINEER.

C. THE CONTRACTOR SHALL COORDINATE HIS/HER WORK WITH ANY ADJACENT PROJECTS THAT ARE OR MAY BE UNDER CONSTRUCTION.

D. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. WHERE NEW WORK IS PROPOSED TO MEET EXISTING FEATURES, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD CHECK ALL DIMENSIONS AND ELEVATIONS AND NOTIFY THE ENGINEER OF DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION.

E. THE CONTRACTOR SHALL PROVIDE ACCESS TO ABUTTING PROPERTIES AT ALL TIMES DURING CONSTRUCTION, EXCEPT FOR BRIEF PERIODS OF INTERRUPTION. THE CONTRACTOR SHALL NOTIFY THE PROPERTY OWNER NO LESS THAN 24 HOURS IN ADVANCE OF THE INTERRUPTION OF ACCESS AND/OR SERVICES. THE NOTIFICATION WILL INCLUDE THE TIME AND DURATION OF THE INTERRUPTION.

2. SURVEY

A. ALL ELEVATIONS SHOWN ON THESE PLANS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). THE ELEVATIONS SHOWN ON THE PLANS ARE FOR FINISHED GRADES UNLESS OTHERWISE NOTED.

B. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE THE MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

C. ALL RADII FOR PROPOSED CURB AND GUTTER ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

3. REMOVAL

A. ALL EXCESS MATERIAL SHALL BE DISPOSED OF OFFSITE ON THE DAY IT IS EXCAVATED OR REMOVED.

B. THE CONTRACTOR IS PROHIBITED FROM BURNING ANY MATERIAL WITHIN OR ADJACENT TO THE PROJECT LIMITS. ALL EXCESS OR WASTE MATERIAL SHALL BE HAULED AWAY FROM THE PROJECT SITE BY THE CONTRACTOR AND LEGALLY DISPOSED OF OUTSIDE THE RIGHT-OF-WAY.

C. ALL EXISTING DRAINAGE FACILITIES, HEADWALLS AND FENCES NO LONGER REQUIRED, IN THE OPINION OF THE ENGINEER, SHALL BE REMOVED.

D. REMOVED ITEMS DESIGNATED FOR SALVAGE - ITEMS DESIGNATED FOR SALVAGE SHALL BE CAREFULLY REMOVED AND STORED AT THE LOCATION AND IN THE MANNER DESIGNATED BY ENGINEER.

NONE OF THE REMOVAL ITEMS/COMPONENTS HAVE BEEN DESIGNATED FOR SALVAGE BY LCDOT. THE CONTRACTOR SHALL TRANSPORT THE REMOVED ITEMS FROM THE PROJECT SITE AND DISPOSE OF THEM OUTSIDE THE ROW ACCORDING TO ARTICLE 202.03 OF THE "STANDARD SPECIFICATIONS".

4. DRAINAGE

A. UNLESS OTHERWISE NOTED ON THE PLANS, THE EXISTING DRAINAGE FACILITIES SHALL REMAIN IN USE DURING THE PERIOD OF CONSTRUCTION. DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHALL ENSURE POSITIVE SITE DRAINAGE AT THE CONCLUSION OF EACH DAY. SITE DRAINAGE MAY BE ACHIEVED BY DITCHING, PUMPING, OR ANY OTHER METHOD ACCEPTABLE TO THE ENGINEER.

B. THE CONTRACTOR SHALL CONFIRM ALL EXISTING STORM SEWER PIPE SIZES AND INVERTS PRIOR TO ORDERING STRUCTURES. ANY MODIFICATION OF STRUCTURES DUE TO THE FAILURE OF THE CONTRACTOR TO PERFORM THIS TASK SHALL BE AT THE CONTRACTOR'S EXPENSE AND MAY LEAD TO THE REJECTION OF THE STRUCTURE IN THE FIELD IF THE MODIFICATION IS NOT APPROVED BY THE ENGINEER.

C. IF DURING CONSTRUCTION, THE CONTRACTOR ENCOUNTERS OR OTHERWISE BECOMES AWARE OF ANY SEWERS OR UNDERDRAINS WITHIN THE RIGHT-OF-WAY OTHER THAN THOSE SHOWN ON THE PLANS, HE/SHE SHALL INFORM THE ENGINEER, WHO SHALL DIRECT THE WORK NECESSARY TO MAINTAIN OR REPLACE THE FACILITIES IN SERVICE AND TO PROTECT THEM FROM DAMAGE DURING CONSTRUCTION IF MAINTAINED. EXISTING FACILITIES TO BE MAINTAINED THAT ARE DAMAGED BECAUSE OF NON-COMPLIANCE WITH THIS PROVISION SHALL BE REPLACED AT THE CONTRACTOR'S OWN EXPENSE. SHOULD THE ENGINEER DIRECT THE REPLACEMENT OF A FACILITY, THE NECESSARY WORK AND PAYMENT SHALL BE ACCORDING TO SECTIONS 550 AND 601, AND ARTICLE 104.02 OF THE "STANDARD SPECIFICATIONS".

D. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, CULVERTS, SEWERS OR CATCH BASINS. THE CONTRACTOR SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE THE SAME. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET. THE CONTRACTOR SHALL BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWER ARE BUILT AND IN SERVICE.

E. THE CONTRACTOR SHALL DETERMINE WHEN FLAT SLAB TOPS ARE REQUIRED ON MANHOLES AND CATCH BASINS. RESTRICTED DEPTH MANHOLES AND CATCH BASINS SHALL BE CONSTRUCTED ACCORDING TO LCDOT STANDARD LC6000. SUMPS, WHERE REQUIRED, WILL BE INCLUDED IN THE UNIT PRICE OF THE RESTRICTED DEPTH STRUCTURE.

F. TOP OF FRAME (RIM) ELEVATIONS SHOWN ON THE PLANS ARE ONLY TO ASSIST THE CONTRACTOR IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF THE STRUCTURE. FRAMES ON ALL NEW STRUCTURES SHALL BE ADJUSTED TO THE FINAL ELEVATIONS OF THE AREAS IN WHICH THEY ARE LOCATED AS PART OF THE STRUCTURE COST.

G. UNLESS OTHERWISE NOTED, LOCATIONS SHOWN ON THE PLANS ARE TO THE EDGE OF PAVEMENT FOR STRUCTURES IN THE CURB AND TO THE CENTER OF THE STRUCTURE FOR ALL OTHER STRUCTURES. ALL TOP OF FRAME (RIM) ELEVATIONS FOR STRUCTURES LOCATED IN THE CURB AND GUTTER ARE AT THE EDGE OF PAVEMENT. SEE THE LCDOT DETAIL FOR DRAINAGE STRUCTURE RIM ELEVATIONS AND OFFSETS LC6003. DRAINAGE STRUCTURE FLAT-TOPS AND CONES SHALL BE TURNED SO THAT THE FRAMES ARE CLOSEST TO THE CENTERLINE OF THE LANE UNLESS OTHERWISE NOTED. ALL FLAT-TOPS AND CONES ARE ASSUMED TO BE ECCENTRIC UNLESS OTHERWISE NOTED.

H. STATIONS, OFFSETS, AND INVERT ELEVATIONS FOR FLARED END SECTIONS ARE GIVEN AT THE CENTERLINE OF THE OUTLET END OF THE FLARED END SECTION. THE FLARED END SECTION SHALL BE INSTALLED AT THE SAME SLOPE AS THE OUTLET PIPE.

I. HOT-MIX ASPHALT OR CONCRETE PAVEMENT CROSSINGS SHALL NOT BE LEFT IN GRAVEL OVERNIGHT. THIS WILL INCLUDE THE MAIN ROAD, SIDE STREETS, PRIVATE ENTRANCES, COMMERCIAL ENTRANCES AND PARKING AREAS. TEMPORARY HOT-MIX ASPHALT PATCHING OR STEEL PLATES (SEE STEEL PLATE SPECIAL PROVISION) MAY BE USED IN LIEU OF IMMEDIATE PAVEMENT REPLACEMENT.

J. COUPLINGS USED FOR CONNECTIONS OF NEW PIPE TO EXISTING PIPE AND WHERE DISSIMILAR PIPE AND JOINT MATERIALS ARE ENCOUNTERED SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. NO STAINLESS STEEL SHEAR RINGS WILL BE ALLOWED.

5. DRIVEWAYS AND ENTRANCES

A. EXISTING HOT-MIX ASPHALT, CONCRETE, AND GRAVEL DRIVEWAYS AND ENTRANCES SHALL BE RE-SURFACED TO ONE FOOT INSIDE THE RIGHT-OF-WAY WITH HOT-MIX ASPHALT SURFACE COURSE AS SCHEDULED ON THE PLANS.

B. EXISTING CONCRETE DRIVEWAYS AND ENTRANCES SHALL BE RECONSTRUCTED TO ONE FOOT INSIDE THE RIGHT-OF-WAY WITH CONCRETE AS SCHEDULED ON THE PLANS.

C. EXISTING HOT-MIX ASPHALT DRIVEWAYS AND ENTRANCES SHALL BE SAWCUT AT THE LIMITS OF CONSTRUCTION LINE. THE SURFACE SHALL BE REMOVED TO THE SAWCUT. THE AGGREGATE BASE SHALL BE APPROPRIATELY PREPARED, AND THE DRIVEWAY SHALL BE RESURFACED WITH HOT-MIX ASPHALT SURFACE COURSE.

D. EXISTING AGGREGATE FIELD ENTRANCES SHALL BE BUILT UP IN PLACE TO ONE FOOT INSIDE THE RIGHT-OF-WAY WITH AGGREGATE BASE COURSE.

6. LANDSCAPING: PHOSPHORUS FERTILIZER NUTRIENT SHALL NOT BE USED ON LAKE COUNTY HIGHWAYS.

7. MILLED PAVEMENT: WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM ELEVATION DIFFERENCE BETWEEN LANES, AT CONCRETE CURB AND GUTTER, OR EXISTING GROUND (SHOULDERS, ENTRANCES ETC...) SHALL NOT EXCEED 1.5 INCHES. WITH WRITTEN APPROVAL FROM THE ENGINEER THE MAXIMUM ELEVATION DIFFERENCE MAY BE UP TO 3 INCHES IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 3:1 (H:V).

8. SIGNS

A. THE CONTRACTOR WILL BE REQUIRED TO RELOCATE OR REMOVE AND REPLACE SIGNS WHICH INTERFERE WITH HIS/HER CONSTRUCTION OPERATIONS, AND TO TEMPORARILY RESET ALL SUCH SIGNS DURING CONSTRUCTION OPERATIONS ACCORDING TO ARTICLE 107.25 OF THE "STANDARD SPECIFICATIONS".

*ALL UNUSED SIGNS SHALL BE RETURNED TO THE COUNTY.

*LONGER POSTS MAY BE REQUIRED AT SOME TEMPORARY OR PERMANENT SIGN LOCATIONS TO MAINTAIN PROPER SIGN ELEVATIONS.

B. PERMANENT SIGNING WILL BE FURNISHED AND INSTALLED BY LCDOT. PROPOSED PERMANENT SIGNS SHOWN ON THE PLANS ARE FOR REFERENCE ONLY.

9. UTILITIES

A. LOCATION INFORMATION FOR UNDERGROUND UTILITY FACILITIES SHOWN ON THE PLANS AND/OR INCLUDED IN THE CONTRACT SPECIFICATIONS REPRESENTS THE BEST INFORMATION PROVIDED TO LCDOT, AND IS ONLY INCLUDED FOR THE CONVENIENCE OF THE CONTRACTOR. LCDOT ASSUMES NO RESPONSIBILITY FOR THE SUFFICIENCY OR THE ACCURACY OF THE LOCATION INFORMATION PROVIDED.

B. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS, WATER, SEWER, CABLE, ETC..., UTILITY LINES (MINIMUM 48-HOUR NOTIFICATION IS REQUIRED).

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OR DESTRUCTION OF PUBLIC OR PRIVATE PROPERTY ACCORDING TO THE SPECIAL PROVISIONS AND ARTICLE 107.20 OF THE "STANDARD SPECIFICATIONS". THE CONTRACTOR SHALL RESTORE SUCH PROPERTY AT HIS/HER OWN EXPENSE. THE CONTRACTOR SHALL USE ALL NECESSARY PRECAUTIONS AND PROTECTIVE MEASURES REQUIRED TO MAINTAIN EXISTING UTILITIES, SEWERS, AND APPURTENANCES THAT MUST BE KEPT IN OPERATION. IN PARTICULAR, THE CONTRACTOR WILL TAKE ADEQUATE MEASURES TO PREVENT THE UNDERMINING OF UTILITIES AND SEWERS WHICH ARE STILL IN SERVICE.

10. MISCELLANEOUS

A. GENERALLY, 10 FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED ITEMS OF WORK TO EXISTING ITEMS IN THE FIELD, UNLESS OTHERWISE SHOWN ON THE PLANS.

B. THE CONTRACTOR SHALL NOT CROSS COMPLETED SURFACE COURSE, OR EXISTING PAVEMENT NOT SCHEDULED TO BE REMOVED, WITH CONSTRUCTION EQUIPMENT WHICH MAY DAMAGE THE PAVEMENT.

C. ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT, SHOULDERS, CURB, GUTTER, COMBINATION CURB & GUTTER AND MEDIAN, AND CHAIR SUPPORTS FOR CONTINUOUSLY REINFORCED CONCRETE PAVEMENT, SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLANS.

D. THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT SOME QUANTITIES ARE GIVEN IN BOTH SUMMARY FORM AND ON THE PLAN SHEETS. CARE SHOULD BE TAKEN TO AVOID DUPLICATION OF QUANTITIES.

THE STANDARD SPECIFICATIONS, PROJECT SPECIFICATIONS, CONSTRUCTION PLANS, AND SUBSEQUENT DETAILS ARE ALL TO BE CONSIDERED AS PART OF THE CONTRACT. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED BUT ARE TO BE CONSIDERED A PART OF THE CONTRACT.

WHENEVER, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THE LOOSE MATERIAL WILL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OF UNSTABLE MATERIALS CREATED AS A RESULT THEREOF.

THE CONTRACTOR SHALL SOLELY BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, TRAFFIC CONTROL DEVICES, AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC DURING ALL PHASES OF CONSTRUCTION.

THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL AREAS AFFECTED BY EQUIPMENT OR LABORERS TO EXISTING CONDITIONS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROTECTING ALL NEW WORK UNTIL COMPLETION OF THIS CONTRACT.

EXISTING UTILITIES: WHEN THE PLANS OR SPECIAL PROVISIONS INCLUDE INFORMATION PERTAINING TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES, SUCH INFORMATION IS BASED ON RECORD INFORMATION PROVIDED BY THE INDIVIDUAL UTILITY OWNERS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES. THE CONTRACTOR SHALL ALSO CONTACT J.U.L.I.E. TO OBTAIN LOCATES OF THE RESPECTIVE UTILITY COMPANIES UNDERGROUND FACILITIES.

THE GENERAL CONTRACTOR IS REQUIRED TO HIRE AN ENVIRONMENTAL FIRM WITH AT LEAST FIVE (5) DOCUMENTED LEAKING UNDERGROUND STORAGE TANK CLEANUPS OR THAT IS PRE-QUALIFIED IN HAZARDOUS WASTE BY THE DEPARTMENT TO REMEDIATE THE SOIL CONTAMINATION AND MONITOR FOR WORKER PROTECTION.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARM LENGTH.

THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES, AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES, AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL 'JULIE' AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).

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

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES, AND IDOT.

FILE NAME = GenNote-Index.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISION -
4572.000	PLOT SCALE = 1:20	DRAWN - ZCW	REVISION -
Sheet 2	DATE = 2/20/20	CHECKED - DPB	REVISION -
		DATE - 1/10/2020	REVISION -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	3
ILLINOIS FEDERAL PROJECT			CONTRACT NO. 61G47	

SP	CODE NO.	ITEM	UNIT	TOTAL	FUNDING BREAKDOWNS						
					80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT
					LOCATION OF WORK	SUNSET AVENUE AT McAREE ROAD	SUNSET AVENUE AT LEWIS AVENUE	SUNSET AVENUE AT YEOMAN STREET	GOLF ROAD AT JACKSON STREET	GREENWOOD AVE AT IL 137 (SHERIDAN RD)	INTERCONNECT - VARIOUS LOCATIONS
					CONSTRUCTION CODES						
					0021 TRAFFIC SIGNALS						
*	20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	10					10		
*	20200100	EARTH EXCAVATION	CU YD	6	2		2		2		
	21301072	EXPLORATION TRENCH 72" DEPTH	FT	100	30		30		30		10
*	40800029	BITUMINOUS MATERIALS (TACK COAT)	POUND	230	46		46		46		92
*	40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	10	2		2		2		4
*	42001300	PROTECTIVE COAT	SQ YD	496	184		144		168		
*	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	3,921	1,444		1,134		1,343		
*	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	536	268		103		165		
*	44000600	SIDEWALK REMOVAL	SQ FT	3,386	1,148		957		1,281		
*	60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	5	2		3				
* Y	60603900	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (ABUTTING EXISTING PAVEMENT)	FOOT	543	216		162		165		
*	66400105	CHAIN LINK FENCE, 4'	FOOT	35	35						
* Y	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	10			5.00		5.00		
* Y	66900530	SOIL DISPOSAL ANALYSIS	EACH	5							

* SPECIALTY ITEM
** CONSTRUCTION CODE 0042

FILE NAME = 50Q.dgn 4572.800 50Q-01	USER NAME = zwallsten	DESIGNED - JRD DRAWN - ZCW CHECKED - DPB DATE - 1/10/2020	REVISED - REVISED - REVISED - REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES (SHEET 1 OF 8)			
SCALE: NONE	SHEET 1 OF 7 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	4
CONTRACT NO. 61G47			ILLINOIS FED. AID PROJECT	

SP	CODE NO.	ITEM	UNIT	TOTAL	FUNDING BREAKDOWNS					
					80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT
LOCATION OF WORK					SUNSET AVENUE AT McAREE ROAD	SUNSET AVENUE AT LEWIS AVENUE	SUNSET AVENUE AT YEOMAN STREET	GOLF ROAD AT JACKSON STREET	GREENWOOD AVE AT 1L 137 (SHERIDAN RD)	INTERCONNECT - VARIOUS LOCATIONS
					CONSTRUCTION CODES					
					TRAFFIC SIGNALS					
* Y	66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1					
* Y	66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1					
* Y	66901006	REGULATED SUBSTANCES MONITORING	CAL DAY	5	5					
Y	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	14	14					
	67100100	MOBILIZATION	L SUM	1	1					
	80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	3	1		1	1		
	81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	7,494	278		73	248		6,895
	81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	212	52		39	121		
	81028230	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3 1/2" DIA.	FOOT	104	47		57			
	81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	1,144	337		346	461		
	81400100	HANDHOLE	EACH	18	3		2	3		10
	81400300	DOUBLE HANDHOLE	EACH	7	2		2	3		
	81702450	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	FOOT	2,377	730		784	863		
	82103250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	11	4		4	3		

* SPECIALTY ITEM
** CONSTRUCTION CODE 0042

FILE NAME = 500.dgn 4572.800 500-02	USER NAME = zwallsten	DESIGNED - JRD DRAWN - ZCW CHECKED - DPB DATE - 1/10/2020	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES (SHEET 2 OF 8)			F.A.U. RTE. VAR.	SECTION 12-00999-30-1L	COUNTY LAKE	TOTAL SHEETS 69	SHEET NO. 5
					SCALE: NONE	SHEET 2 OF 7 SHEETS	STA. TO STA.	CONTRACT NO. 61G47 ILLINOIS FED. AID PROJECT				

SP	CODE NO.	ITEM	UNIT	TOTAL	FUNDING BREAKDOWNS							
					80% FEDERAL 20% LCDOT							
			LOCATION OF WORK			CONSTRUCTION CODES						
						TRAFFIC SIGNALS						
	83060355	LIGHT POLE, GALVANIZED STEEL, 40 FT. M.H., 15 FT. DAVIT ARM	EACH	2					2			
	83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	22					22			
Y	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	3			1			1		1
	87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	15,825								15,825
	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	4,719	1,039			1,787	1,893			
	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	4,995	1,579			1,600	1,816			
	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	4,483	1,001			1,607	1,875			
	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2,777	1,279			635	863			
	87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	634	264			93	277			
	87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1,989	708			486	795			
	87704340	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 28 FT. AND 30 FT. (SPECIAL)	EACH	2					2			
	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	40	16			12	12			
	87800150	CONCRETE FOUNDATION, TYPE C	FOOT	12	4			4	4			
	87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	150	60			60	30			

* SPECIALTY ITEM
** CONSTRUCTION CODE 0042

FILE NAME = 50Q.dgn 4572.800 50Q-03	USER NAME = zwallsten	DESIGNED - JRD DRAWN - ZCW	REVISED -
PLOT SCALE = 1:1	CHECKED - DPB	REVISED -	
PLOT DATE = 2/7/2020	DATE - 1/10/2020	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
(SHEET 3 OF 8)**

SCALE: NONE SHEET 3 OF 7 SHEETS STA. TO STA.

F.A.U. RTE. VAR.	SECTION 12-00999-30-TL	COUNTY LAKE	TOTAL SHEETS 69	SHEET NO. 6
CONTRACT NO. 61G47			ILLINOIS FED. AID PROJECT	

SP	CODE NO.	ITEM	UNIT	TOTAL	FUNDING BREAKDOWNS						
					80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	
					LOCATION OF WORK	SUNSET AVENUE AT McAREE ROAD	SUNSET AVENUE AT LEWIS AVENUE	SUNSET AVENUE AT YEOMAN STREET	GOLF ROAD AT JACKSON STREET	GREENWOOD AVE AT IL 137 (SHERIDAN RD)	INTERCONNECT - VARIOUS LOCATIONS
					CONSTRUCTION CODES						
					TRAFFIC SIGNALS						
	87900200	DRILL EXISTING HANDHOLE	EACH	2							2
	88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	15	6		8	1			
	88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6			2	4			
	88030070	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	1				1			
	88030080	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	3				3			
	88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	6	4		2				
	88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	6	4		2				
	88055150	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2				2			
	88055160	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4				4			
	88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	22	8		8	6			
	88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	26	10		8	8			
	88700200	LIGHT DETECTOR	EACH	8	2		2	4			
	88700300	LIGHT DETECTOR AMPLIFIER	EACH	3	1		1	1			
	88800100	PEDESTRIAN PUSH-BUTTON	EACH	22	8		8	6			

* SPECIALTY ITEM
** CONSTRUCTION CODE 0042

FILE NAME = 50Q.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
4572.800	PLOT SCALE = 1:1	DRAWN - ZCW	REVISED -
50Q-04	PLOT DATE = 2/7/2020	CHECKED - DPB	REVISED -
		DATE - 1/10/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
(SHEET 4 OF 8)

SCALE: NONE SHEET 4 OF 7 SHEETS STA. TO STA.

F.A.U. RTE. VAR.	SECTION 12-00999-30-TL	COUNTY LAKE	TOTAL SHEETS 69	SHEET NO. 7
CONTRACT NO. 61G47			ILLINOIS FED. AID PROJECT	

SP	CODE NO.	ITEM	UNIT	TOTAL	FUNDING BREAKDOWNS						
					80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT
					LOCATION OF WORK	SUNSET AVENUE AT McAREE ROAD	SUNSET AVENUE AT LEWIS AVENUE	SUNSET AVENUE AT YEOMAN STREET	GOLF ROAD AT JACKSON STREET	GREENWOOD AVE AT IL 137 (SHERIDAN RD)	INTERCONNECT - VARIOUS LOCATIONS
					CONSTRUCTION CODES						
					TRAFFIC SIGNALS						
	89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	3	1		1		1		
Y	89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	2		1				1	
	89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	15,760							15,760
Y	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	3	1		1		1		
	89502380	REMOVE EXISTING HANDHOLE	EACH	29	9		11		9		
	89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	27	9		9		9		
Y	X0320050	CONSTRUCTION LAYOUT (SPECIAL)	LSUM	1	1						
Y	X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1,166	177		406		583		
Y	X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	7,650							7,650
Y	X0325462	MEDIA CONVERTER	EACH	3							3
Y	X0327698	LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	12	4		4		4		
* Y	X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	2,049	1,290		419		340		
Y	X1400007	FIBER OPTIC CABLE IN CONDUIT, 24 FIBERS, SINGLE MODE	FOOT	15,825							15,825
Y	X1400102	OUTDOOR RATED NETWORK CABLE	FOOT	518	190		117		211		

* SPECIALTY ITEM
** CONSTRUCTION CODE 0042

FILE NAME =	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
SOQ.dgn		DRAWN - ZCW	REVISED -
4572.800	PLOT SCALE = 1:1	CHECKED - DPB	REVISED -
SOQ-05	PLOT DATE = 2/7/2020	DATE - 1/10/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
(SHEET 5 OF 8)**

SCALE: NONE SHEET 5 OF 7 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	8
CONTRACT NO. 61G47			ILLINOIS FED. AID PROJECT	

SP	CODE NO.	ITEM	UNIT	TOTAL	FUNDING BREAKDOWNS						
					80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	
					LOCATION OF WORK	SUNSET AVENUE AT MCAREE ROAD	SUNSET AVENUE AT LEWIS AVENUE	SUNSET AVENUE AT YEOMAN STREET	GOLF ROAD AT JACKSON STREET	GREENWOOD AVE AT 1L 137 (SHERIDAN RD)	INTERCONNECT - VARIOUS LOCATIONS
					CONSTRUCTION CODES						
					TRAFFIC SIGNALS						
Y	X1400215	REMOTE CONTROLLED VIDEO SYSTEM	EACH	3	1		1		1		
Y	X1400216	LAYER II (DATALINK) SWITCH	EACH	3	1		1		1		
Y	X1400217	TERMINATE FIBER IN CABINET	EACH	6							6
Y	X1400319	TRAFFIC SIGNAL POST, 10 FOOT, (SPECIAL)	EACH	1					1		
Y	X1400320	TRAFFIC SIGNAL POST, 16 FOOT, (SPECIAL)	EACH	8	4		3		1		
Y	X1400321	TRAFFIC SIGNAL POST, 18 FOOT, (SPECIAL)	EACH	1					1		
* Y	X4240800	DETECTABLE WARNINGS (SPECIAL)	SQ FT	364	162		118		84		
Y	X7010216	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1.00	0.20		0.20		0.20		0.40
* Y	X7830078	GROOVING FOR RECESSED PAVEMENT MARKING 13"	FOOT	1,209	472		427		310		
* Y	X7830090	GROOVING FOR RECESSED PAVEMENT MARKING 25"	FOOT	308	129		106		73		
Y	X8100105	CONDUIT SPLICE	EACH	2							2
Y	X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	3	1		1		1		
Y	X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	3	1		1		1		
Y	X8730571	ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	211					211		

* SPECIALTY ITEM
** CONSTRUCTION CODE 0042

FILE NAME = 500.dgn	USER NAME = zwallston	DESIGNED - JRD	REVISED -
4572.B00		DRAWN - ZCW	REVISED -
500-06	PLOT SCALE = 1:1	CHECKED - DPB	REVISED -
	PLOT DATE = 2/7/2020	DATE - 1/10/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES (SHEET 6 OF 8)			
SCALE: NONE	SHEET 6 OF 7 SHEETS	STA.	TO STA.

F.A.U. RTE. VAR.	SECTION 12-00999-30-TL	COUNTY LAKE	TOTAL SHEETS 69	SHEET NO. 9
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61G47	

SP	CODE NO.	ITEM	UNIT	TOTAL	FUNDING BREAKDOWNS						CONSTRUCTION CODES
					80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	80% FEDERAL 20% LCDOT	
					LOCATION OF WORK	SUNSET AVENUE AT McAREE ROAD	SUNSET AVENUE AT LEWIS AVENUE	SUNSET AVENUE AT YEOMAN STREET	GOLF ROAD AT JACKSON STREET	GREENWOOD AVE AT IL 137 (SHERIDAN RD)	INTERCONNECT VARIOUS LOCATIONS
Y	X8730800	ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4 C	FOOT	211					211		
Y	X8770123	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 24 FT. (SPECIAL)	EACH	1			1				
Y	X8770135	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT. (SPECIAL)	EACH	2	2						
Y	X8770137	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT. (SPECIAL)	EACH	1	1						
Y	X8770139	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 44 FT. (SPECIAL)	EACH	1	1						
Y	X8770154	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 54 FT. (SPECIAL)	EACH	1			1				
Y	X8772860	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 26 FT. (SPECIAL)	EACH	1			1				
Y	X8772930	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT. (SPECIAL)	EACH	1			1				
* Y	Z0022800	FENCE REMOVAL	FOOT	35	35						
Y	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	52	52						
Y	Z0033056	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1							1
Y	Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	3	1		1	1	1		
** Y	Z0076600	TRAINEES	HOUR	500							
** Y	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500							

* SPECIALTY ITEM
** CONSTRUCTION CODE 0042

FILE NAME = 50Q.dgn 4572.800 50Q-07	USER NAME = zwallston PLOT SCALE = 1:1 PLOT DATE = 2/7/2020	DESIGNED - JRD DRAWN - ZCW CHECKED - DPB DATE - 1/10/2020	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES (SHEET 7 OF 8)			F.A.U. RTE. VAR.	SECTION 12-00999-30-TL	COUNTY LAKE	TOTAL SHEETS 69	SHEET NO. 10
					SCALE: NONE	SHEET 7 OF 7 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT CONTRACT NO. 61G47				

SP	CODE NO.	ITEM	UNIT	TOTAL	FUNDING BREAKDOWNS							
					80% FEDERAL 20% LCDOT							
			LOCATION OF WORK		CONSTRUCTION CODES							
					TRAFFIC SIGNALS							
Y	XX005723	VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	3	1			1	1			
* Y	XX006343	SEEDING (COMPLETE)	SQ YD	75	26			21	28			

* SPECIALTY ITEM
** CONSTRUCTION CODE 0042

GHA GEWALT HAMILTON
 ASSOCIATES, INC. TS SHT NO. 11

FILE NAME = 500.dgn 4572.800 500-08	USER NAME = zwallston	DESIGNED - JRD DRAWN - ZCW CHECKED - DPB DATE - 1/10/2020	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES (SHEET 8 OF 8)				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
					SCALE: NONE	SHEET 7 OF 7 SHEETS	STA.	TO STA.	VAR.	12-00999-30-TL	LAKE	69	11
											CONTRACT NO. 61G47		
											ILLINOIS FED. AID PROJECT		

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLER CABINET			HANDHOLE -SQUARE -ROUND			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD		
COMMUNICATION CABINET			HEAVY DUTY HANDHOLE -SQUARE -ROUND			SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
MASTER CONTROLLER			DOUBLE HANDHOLE			PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
MASTER MASTER CONTROLLER			JUNCTION BOX			PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER		
UNINTERRUPTABLE POWER SUPPLY			RAILROAD CANTILEVER MAST ARM			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
SERVICE INSTALLATION -(P) POLE MOUNTED			RAILROAD FLASHING SIGNAL			NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED		
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED			RAILROAD CROSSING GATE			GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)		
TELEPHONE CONNECTION			RAILROAD CROSSBUCK			ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
STEEL MAST ARM ASSEMBLY AND POLE			RAILROAD CONTROLLER CABINET			COAXIAL CABLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			VENDOR CABLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY			SYSTEM ITEM			FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		
WOOD POLE			INTERSECTION ITEM			GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE		
GUY WIRE			REMOVE ITEM					
SIGNAL HEAD			RELOCATE ITEM					
SIGNAL HEAD WITH BACKPLATE			ABANDON ITEM					
SIGNAL HEAD OPTICALLY PROGRAMMED			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED					
FLASHER INSTALLATION -(FS) SOLAR POWERED			MAST ARM POLE AND FOUNDATION TO BE REMOVED					
PEDESTRIAN SIGNAL HEAD			SIGNAL POST AND FOUNDATION TO BE REMOVED					
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			DETECTOR LOOP, TYPE I					
RADAR DETECTION SENSOR			PREFORMED DETECTOR LOOP					
VIDEO DETECTION CAMERA			SAMPLING (SYSTEM) DETECTOR					
RADAR/VIDEO DETECTION ZONE			INTERSECTION AND SAMPLING (SYSTEM) DETECTOR					
PAN, TILT, ZOOM (PTZ) CAMERA			QUEUE AND SAMPLING (SYSTEM) DETECTOR					
EMERGENCY VEHICLE LIGHT DETECTOR			WIRELESS DETECTOR SENSOR					
CONFIRMATION BEACON			WIRELESS ACCESS POINT					
WIRELESS INTERCONNECT								
WIRELESS INTERCONNECT RADIO REPEATER								

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 12

FILE NAME =	USER NAME = zwallsten	DESIGNED - IP	REVISED -
IDOT-StdDetails.dgn		DRAWN - IP	REVISED -
4572.800	PLOT SCALE = 1:1	CHECKED - LP	REVISED -
IDOT D1 STANDARD TS05a	PLOT DATE = 2/7/2020	DATE - 9/29/2016	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

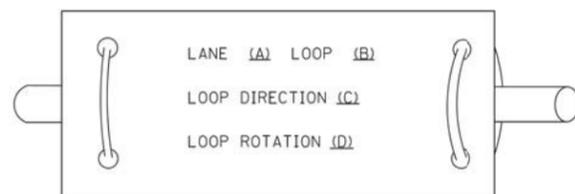
SCALE: NONE SHEET 1 OF 7 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	12
TS-05		CONTRACT NO. 61G47		
ILLINOIS FED. AID PROJECT				

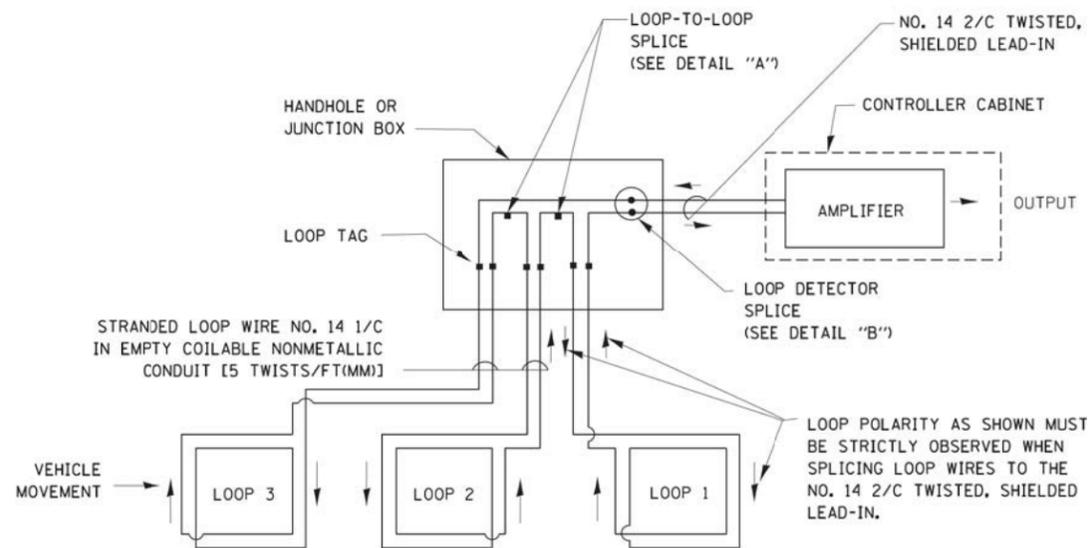
LOOP DETECTOR NOTES

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

LOOP LEAD-IN CABLE TAG

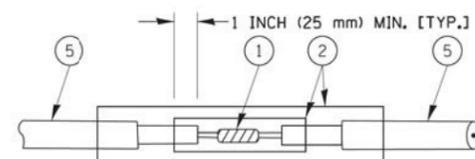


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

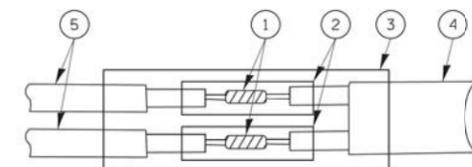


DETECTOR LOOP WIRING SCHEMATIC

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

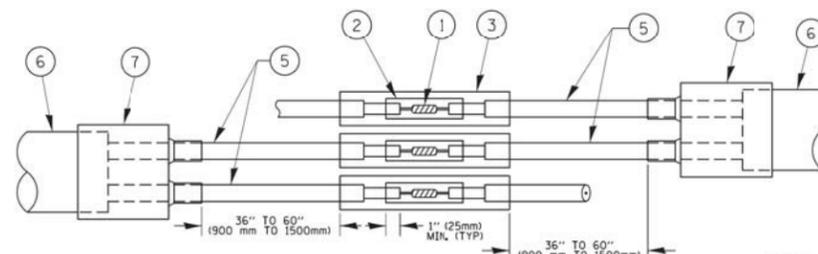


DETAIL "A"
LOOP-TO-LOOP SPLICE

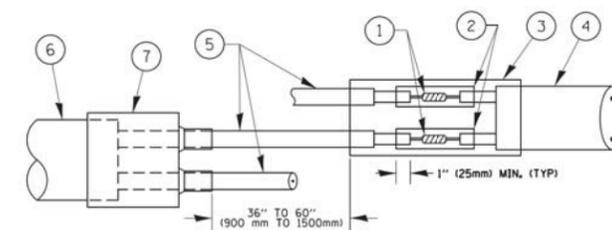


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

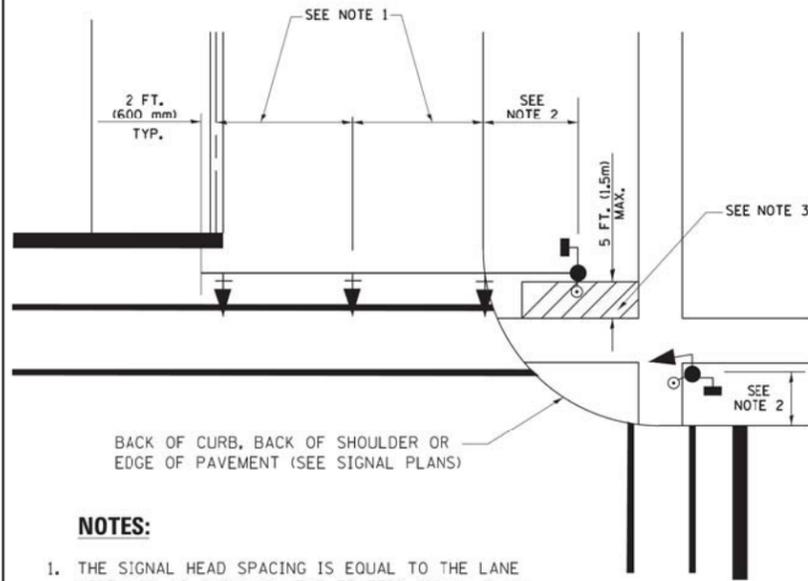
LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- 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 = zwallsten	DESIGNED - DAD	REVISED - DAG 1-1-14
IDOT-StdDetails.dgn		DRAWN - BCK	REVISED -
4572.800	PLOT SCALE = 1:1	CHECKED - DAD	REVISED -
IDOT D1 STANDARD TS05b	PLOT DATE = 2/7/2020	DATE - 10-28-09	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	13
TS-05		CONTRACT NO. 61G47		
ILLINOIS FED. AID PROJECT				

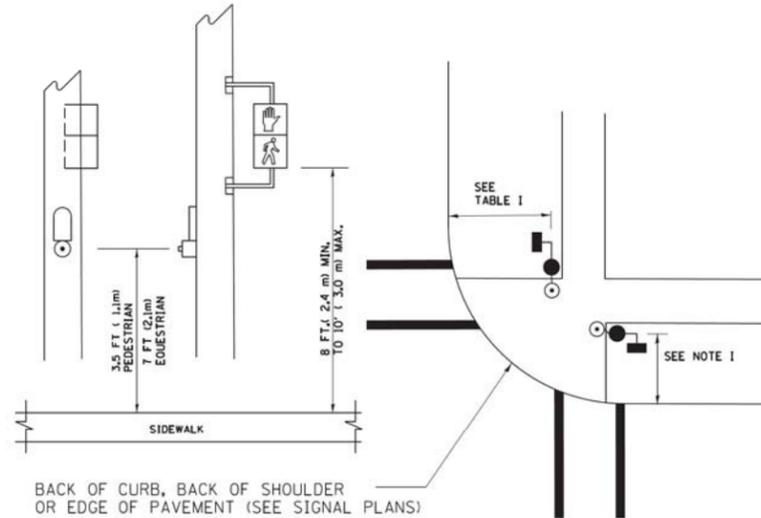
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



NOTES:

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

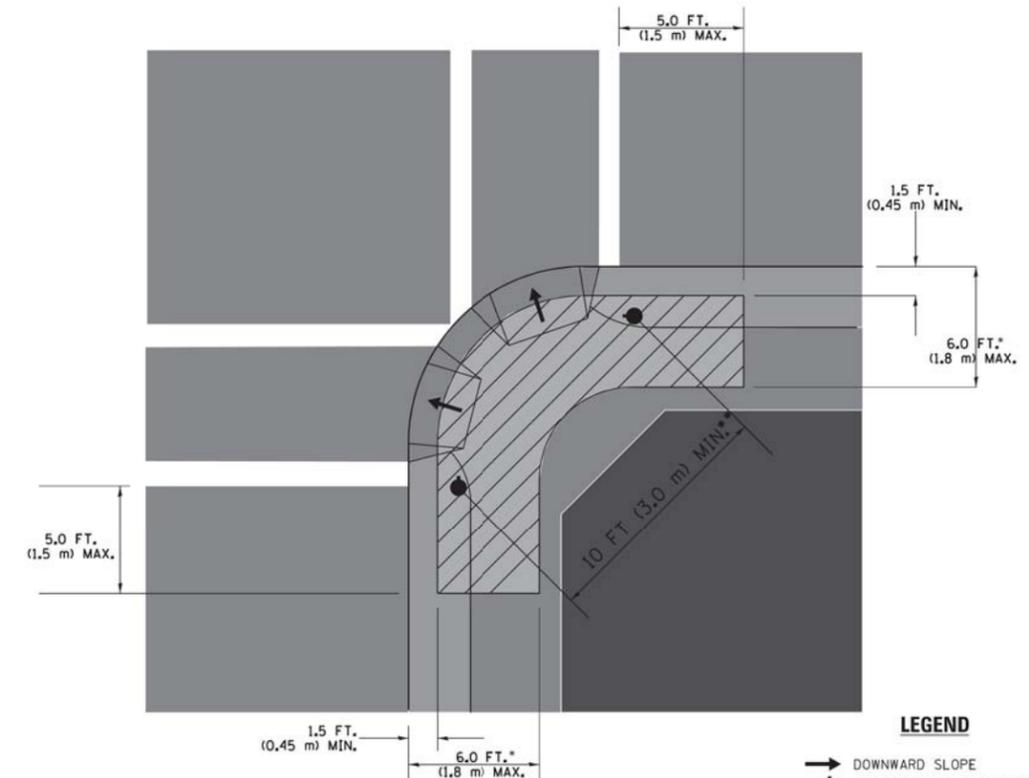
**PEDESTRIAN SIGNAL POST
AND
PEDESTRIAN PUSH BUTTON POST**



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ RECOMMENDED PUSHBUTTON LOCATIONS

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

NOTES:

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

TRAFFIC SIGNAL EQUIPMENT OFFSET

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

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD 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.

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 14

FILE NAME = IDOT-StdDetails.dgn
4572.800
IDOT D1 STANDARD TS05c

USER NAME = zwallsten
PLOT SCALE = 1:1
PLOT DATE = 2/7/2020

DESIGNED - DAD
DRAWN - BCK
CHECKED - DAD
DATE - 10-28-09

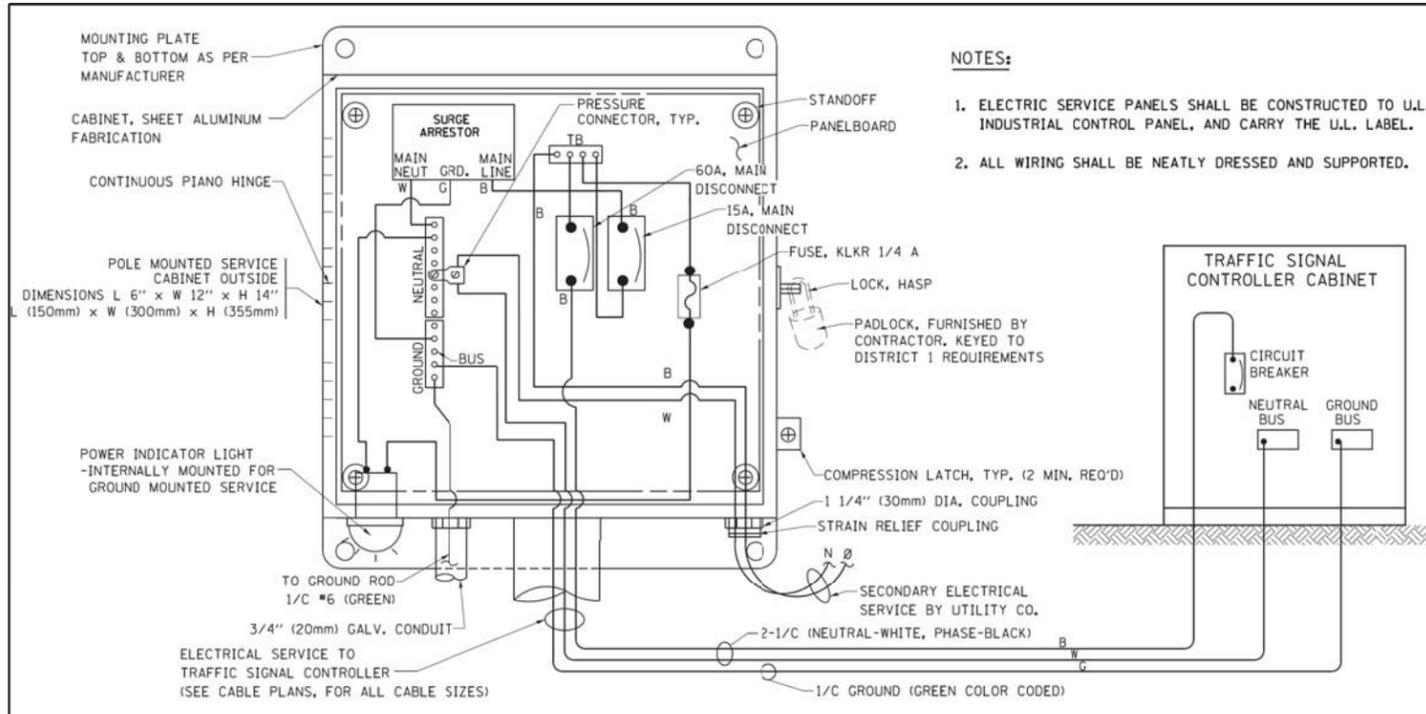
REVISED - DAG 1-1-14
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

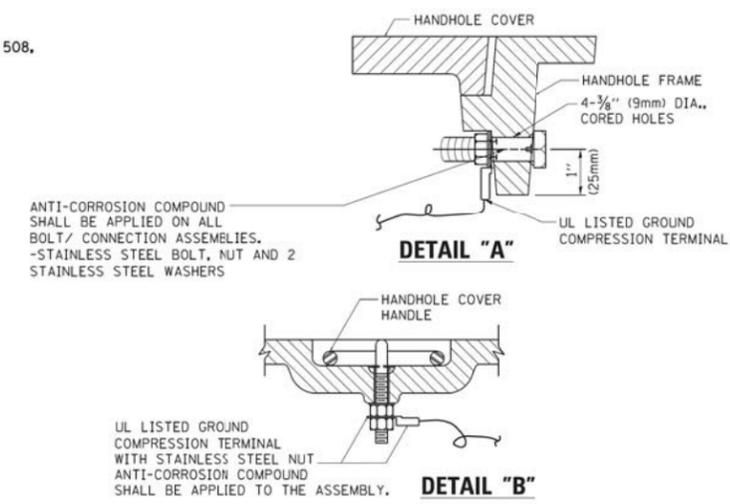
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET NO. 3 OF 7 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	14
TS-05		CONTRACT NO. 61G47		
ILLINOIS FED. AID PROJECT				

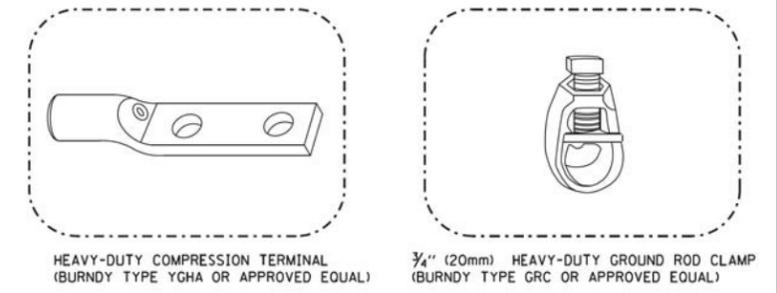
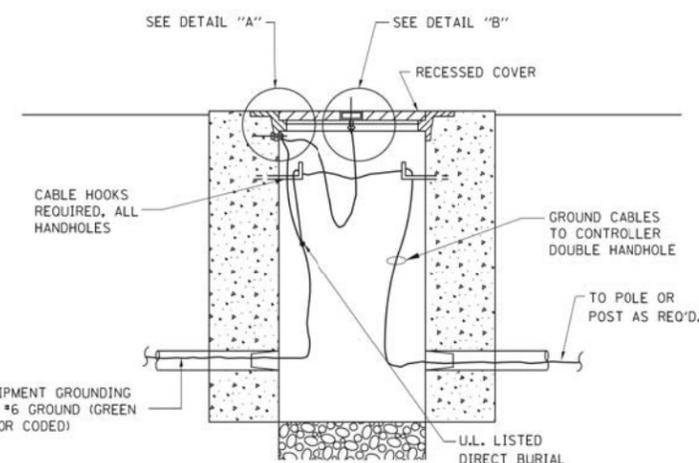


**ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)**

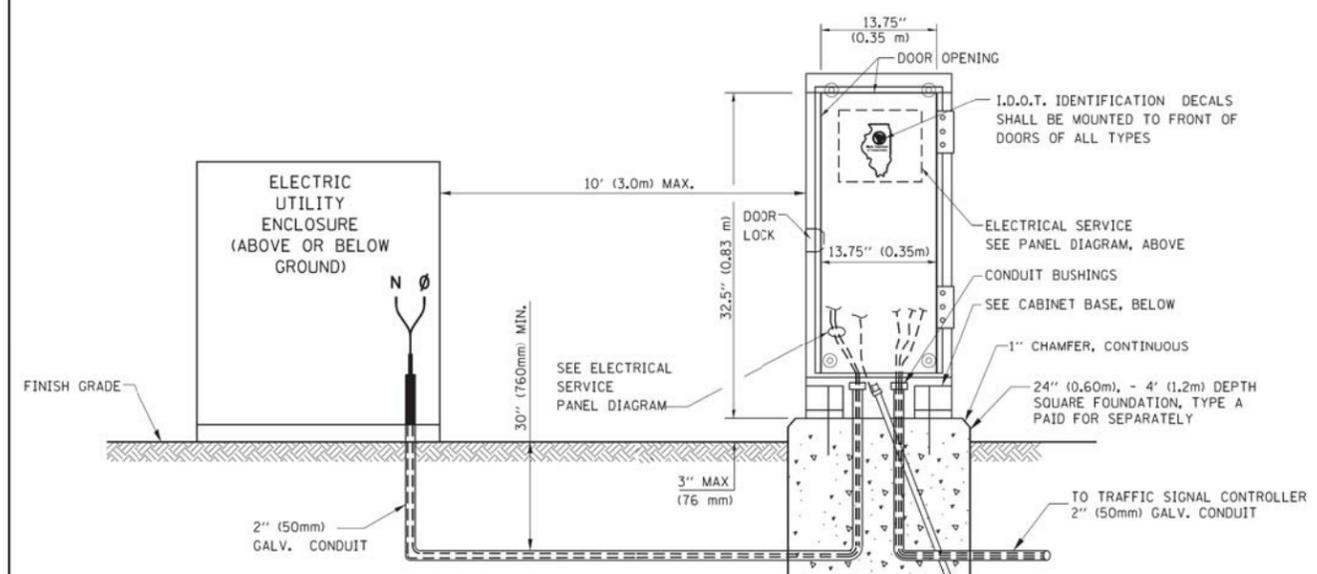
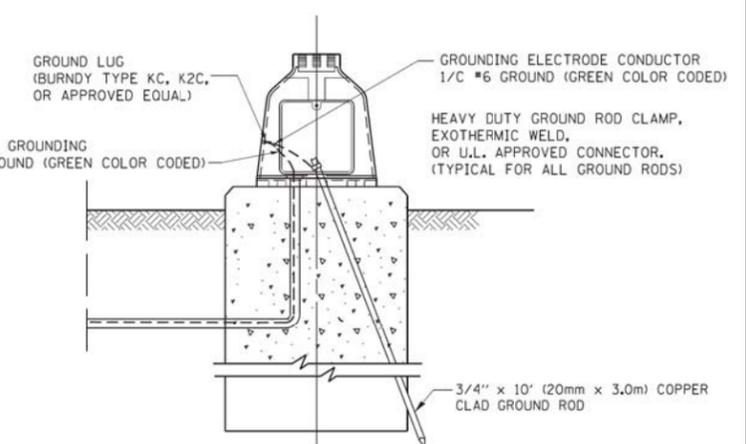
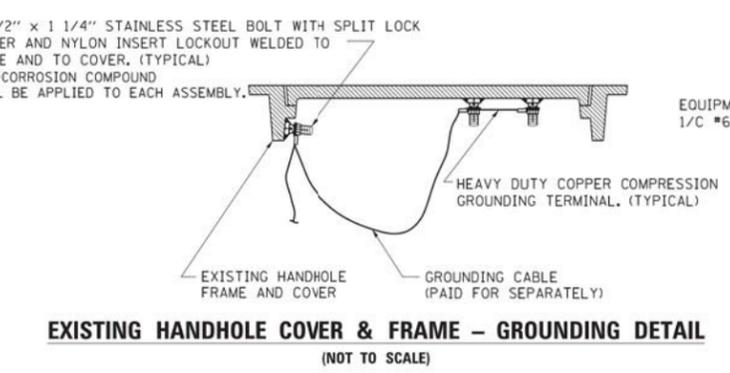


NOTES:
GROUNDING SYSTEM

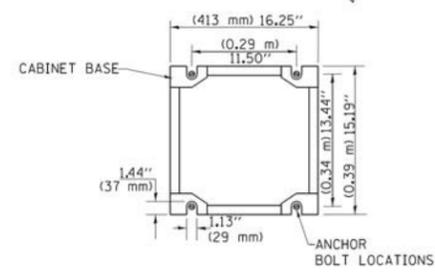
- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, 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.
- 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.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



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



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



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

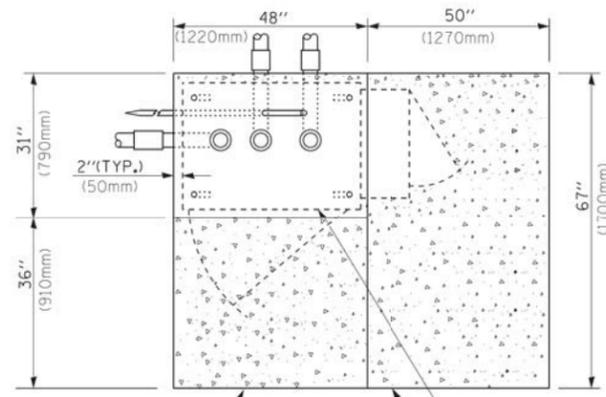
GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 15

FILE NAME =	USER NAME = zwallsten	DESIGNED - DAD	REVISED - DAG 1-1-14
IDOT-StdDetails.dgn		DRAWN - BCK	REVISED -
4572.800	PLOT SCALE = 1:1	CHECKED - DAD	REVISED -
IDOT D1 STANDARD TS05d	PLOT DATE = 2/7/2020	DATE - 10-28-09	REVISED -

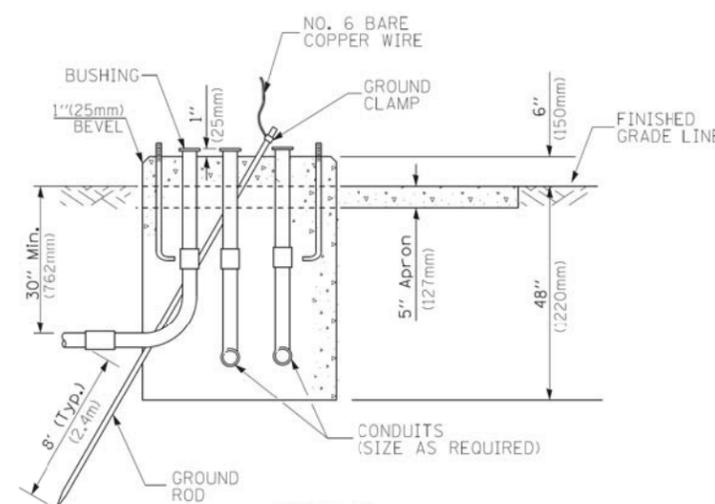
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE	
STANDARD TRAFFIC SIGNAL DESIGN DETAILS	
SCALE: NONE	SHEET NO. 4 OF 7 SHEETS
STA.	TO STA.

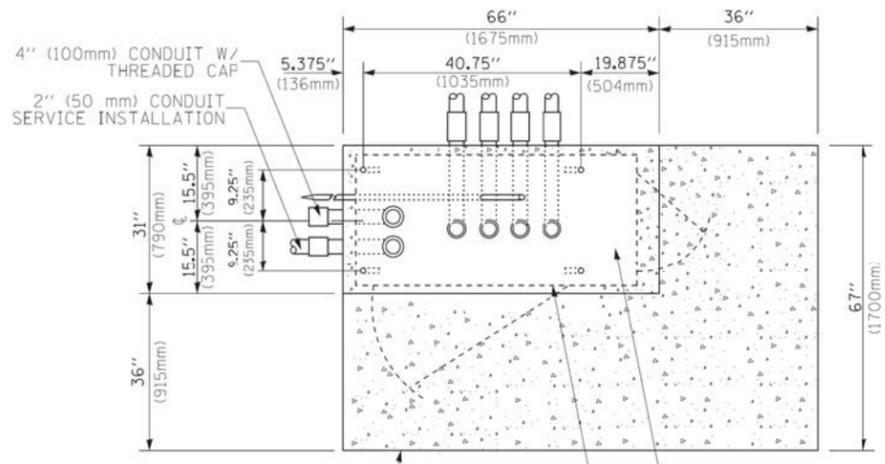
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	12-00999-30-TL	LAKE	69	15
TS-05		CONTRACT NO. 61G47		
ILLINOIS FED. AID PROJECT				



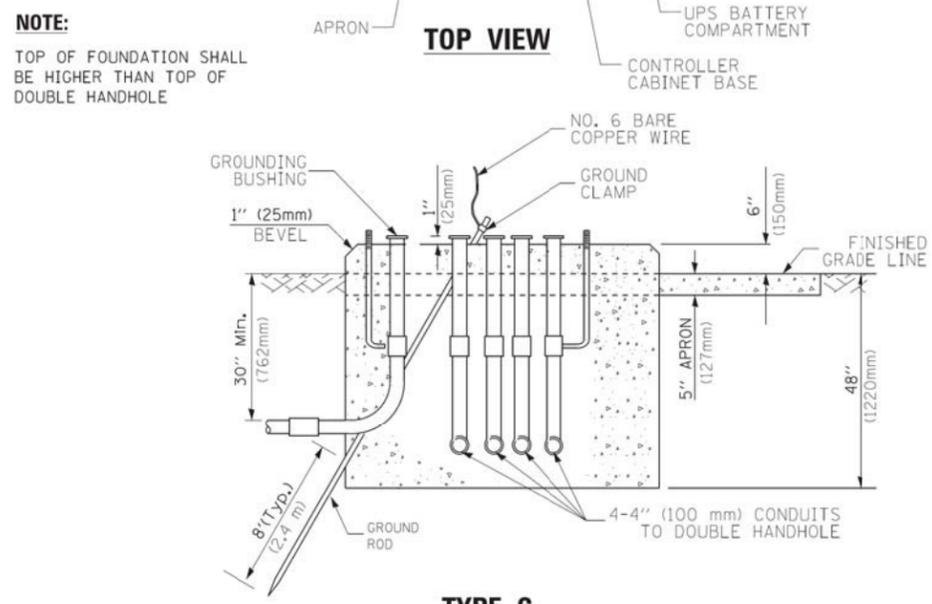
TOP VIEW



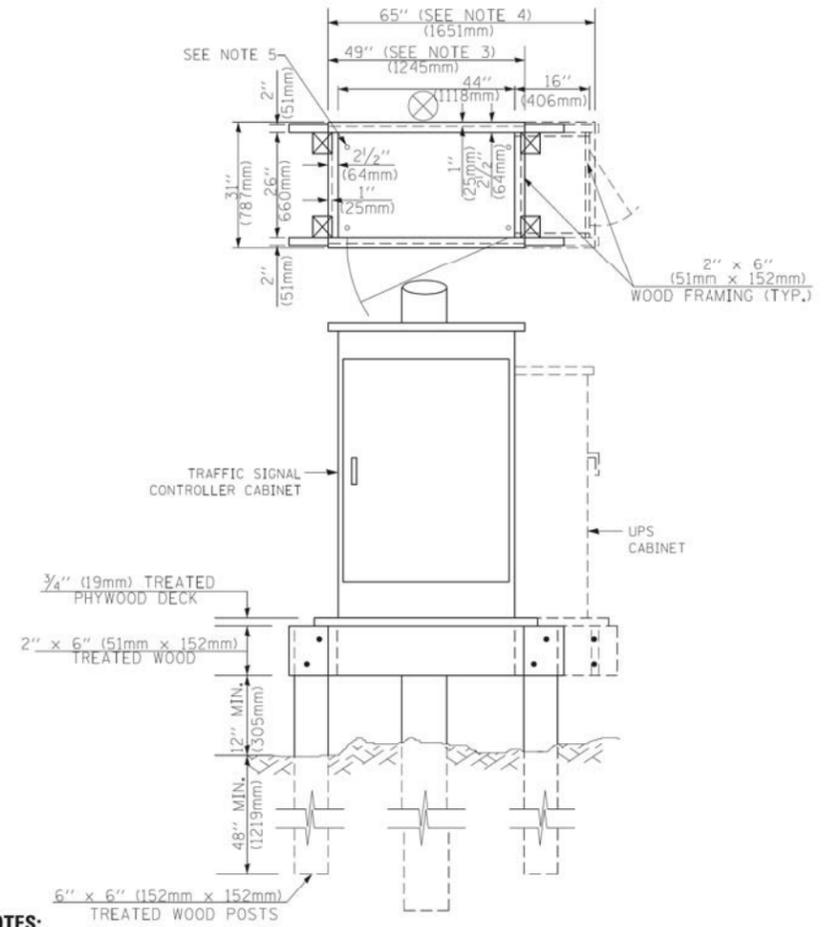
**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



TOP VIEW



**TYPE C
FOR GROUND MOUNTED
SUPER P (TYPE IV) AND SUPER R (TYPE V)
CONTROLLER CABINETS**



NOTES:

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

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

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

DEPTH OF FOUNDATION

MAST ARM LENGTH	① FOUNDATION DEPTH	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF REBARS	SIZE OF REBARS
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and up to 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m) and up to 85' (25.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

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

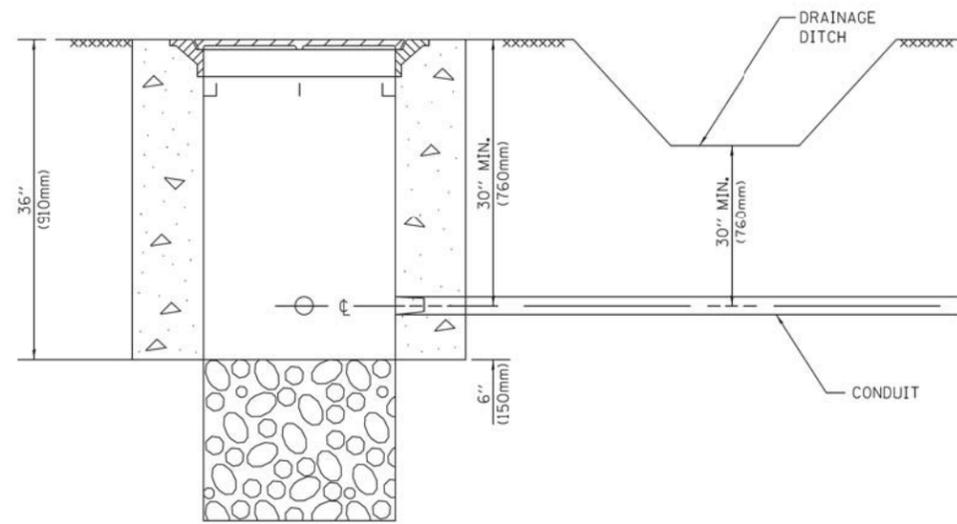
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 16

FILE NAME =	USER NAME = zwallsten	DESIGNED - DAG	REVISED - DAG 1-1-14
IDOT-StdDetails.dgn		DRAWN - BCK	REVISED -
4572.800	PLOT SCALE = 1:1	CHECKED - DAD	REVISED -
IDOT D1 STANDARD TS05e	PLOT DATE = 2/7/2020	DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

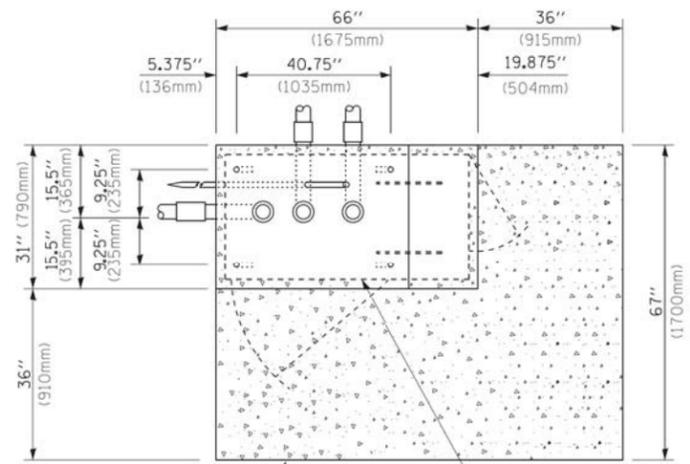
SCALE: NONE	SHEET NO. 5 OF 7 SHEETS	STA. TO STA.	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A.U. RTE. SECTION VAR. 12-00999-30-TL	COUNTY LAKE	TOTAL SHEETS 69	SHEET NO. 16
			TS-05	CONTRACT NO. 61G47		ILLINOIS FED. AID PROJECT	



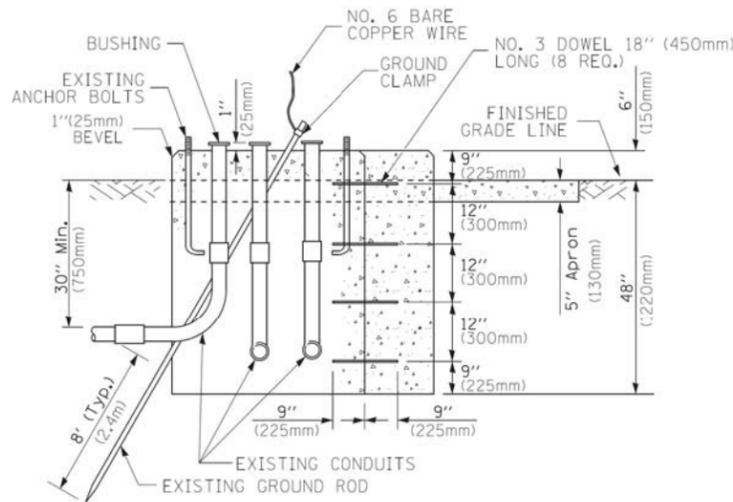
NOTES:

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



TOP VIEW
(NOT TO SCALE)

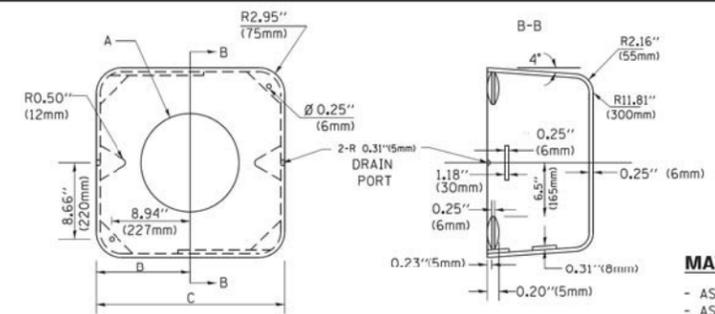


MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION
(NOT TO SCALE)

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.



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

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

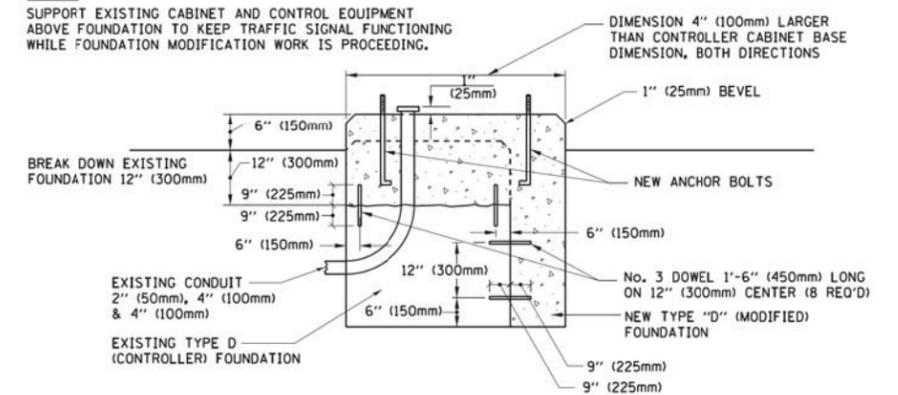
SHROUD

NOTES:

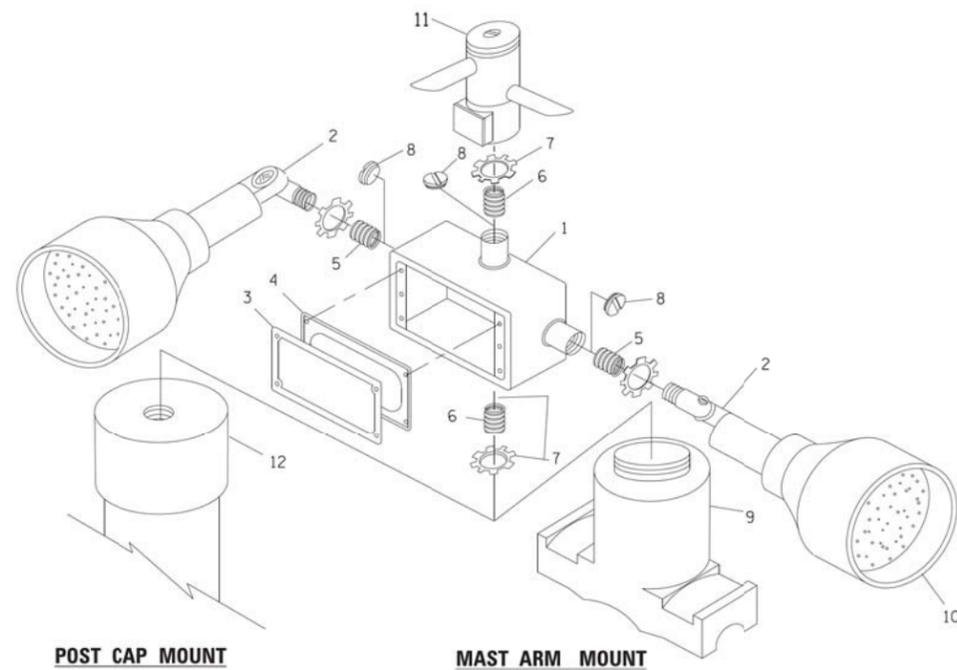
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

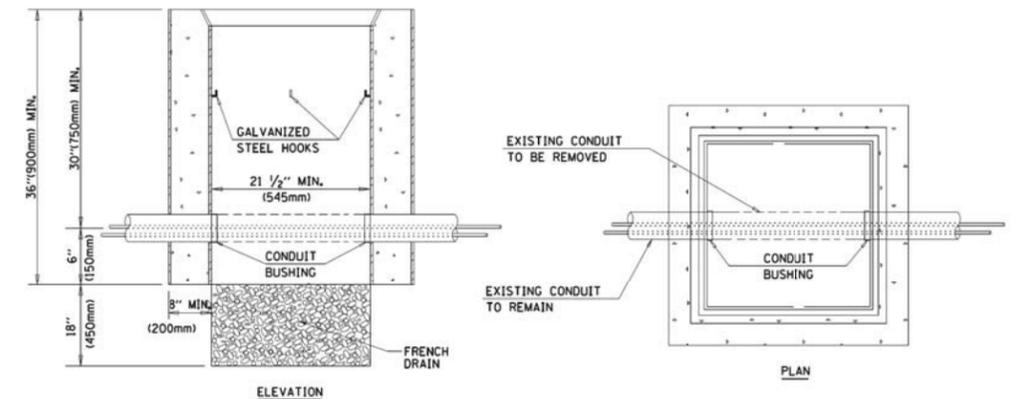
SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION



POST CAP MOUNT **MAST ARM MOUNT**
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



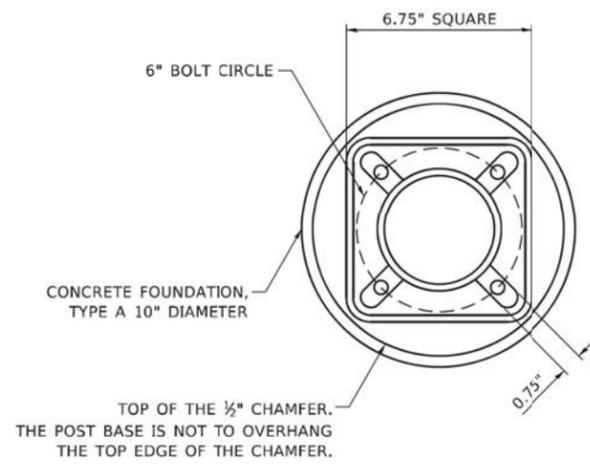
NOTES:

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 INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

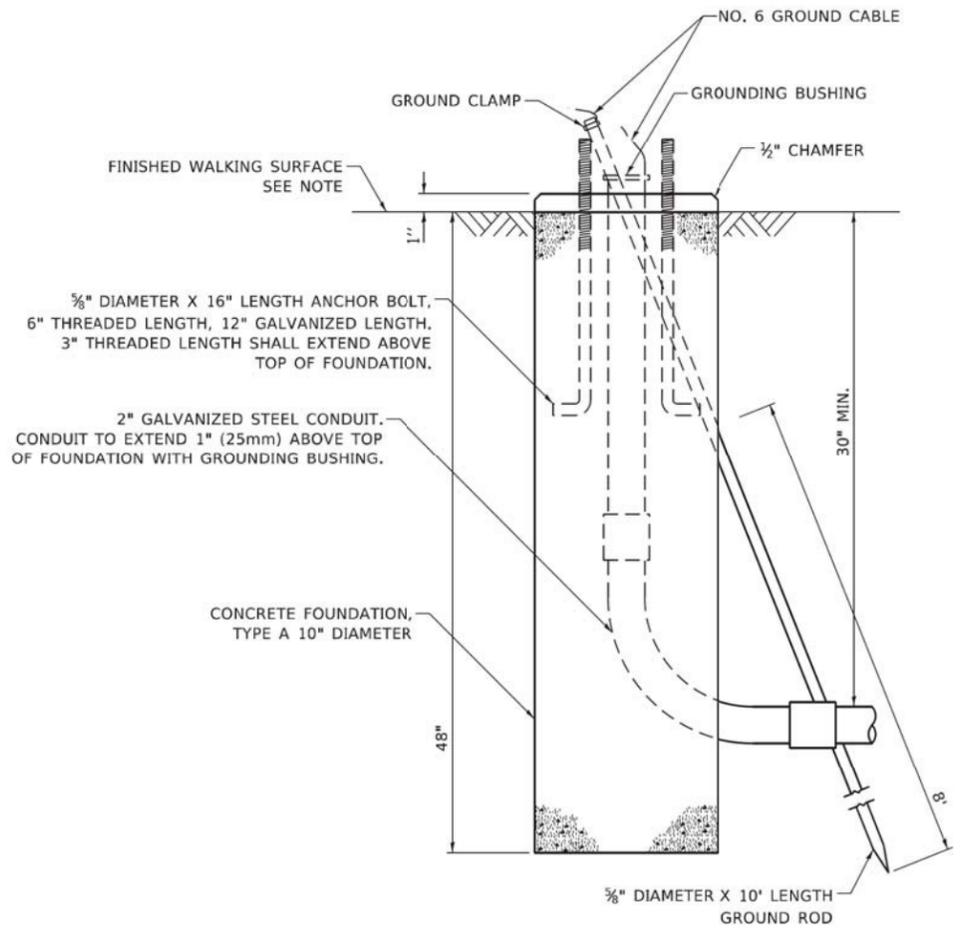
FILE NAME =	USER NAME = zwallsten	DESIGNED - DAD	REVISED - DAG 1-1-14
IDOT-StdDetails.dgn		DRAWN - BCK	REVISED -
4572.800		CHECKED - DAD	REVISED -
IDOT D1 STANDARD TS051	PLOT DATE = 2/7/2020	DATE - 10-28-09	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	17
TS-05		CONTRACT NO. 61G47		
ILLINOIS FED. AID PROJECT				

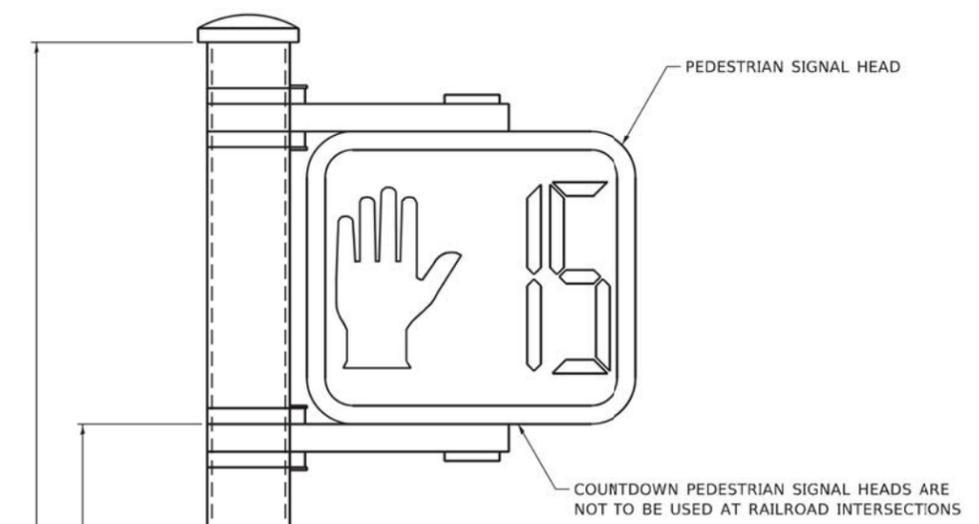


BOLT PATTERN

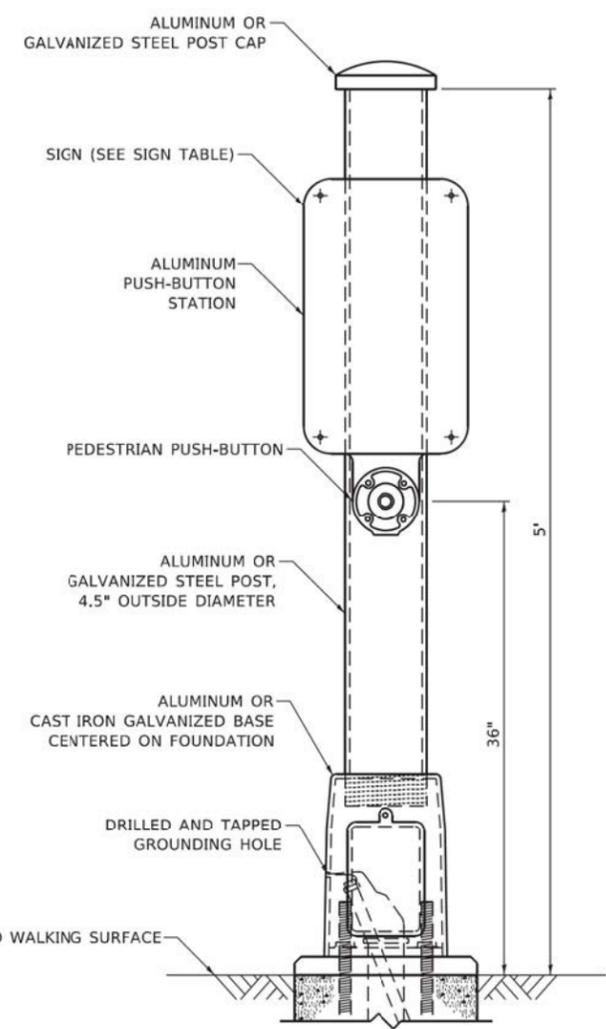
NOTE:
 1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.



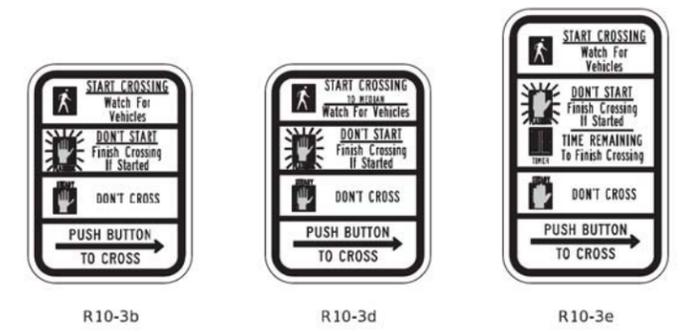
**CONCRETE FOUNDATION,
 TYPE A 10-INCH DIAMETER**



PEDESTRIAN SIGNAL POST, 10 FT.



PEDESTRIAN SIGNAL POST, 5 FT.



SIGN TABLE

SIGN	DIMENSIONS
R10-3b (RAILROAD ONLY)	9" X 12"
R10-3d (RAILROAD ONLY)	9" X 12"
R10-3e	9" X 15"

NOTES:
 1. THE SIGN PANELS SHALL BE TYPE AP SHEETING.
 2. THE ARROW ON SIGNS FOR PUSH-BUTTONS SERVING TWO DIRECTIONS ON THE SAME PHASE SHALL BE BI-DIRECTIONAL.
 3. THE SIGN FOR DUAL-CALL PUSH-BUTTONS SHALL HAVE NO ARROW.

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 18

FILE NAME = IDOT-StdDetails.dgn 4572.800 IDOT D1 STANDARD TS05g	USER NAME = zwallsten	DESIGNED - JP DRAWN - JP CHECKED - LP DATE - 10/15/2018	REVISED - IP 1/8/2020 REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A.U. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO. VAR. 12-00999-30-TL LAKE 69 18
SCALE: NONE SHEET 7 OF 7 SHEETS STA. TO STA.						TS-05 ILLINOIS FED. AID PROJECT

REMOVAL AND RELOCATION NOTES:

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.

- 4 EACH ALUMINUM MAST ARM ASSEMBLY AND POLE
- 4 EACH TRAFFIC SIGNAL POST
- 8 EACH 3-SECTION SIGNAL HEAD
- 8 EACH 5-SECTION SIGNAL HEAD
- 8 EACH PEDESTRIAN SIGNAL HEAD
- 4 EACH PEDESTRIAN PUSH-BUTTON
- 1 EACH SERVICE INSTALLATION
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 1 EACH LIGHT DETECTOR AMPLIFIER
- 2 EACH CONFIRMATION BEACON
- 1 EACH LIGHT DETECTOR

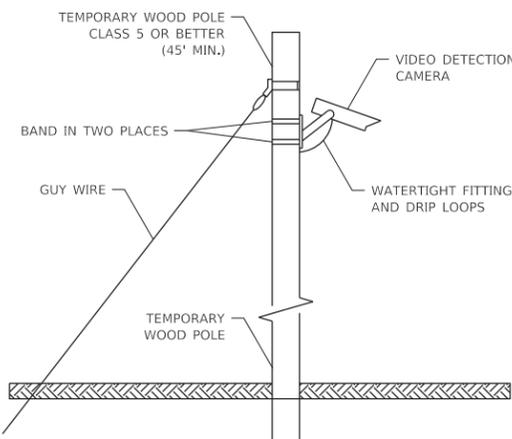
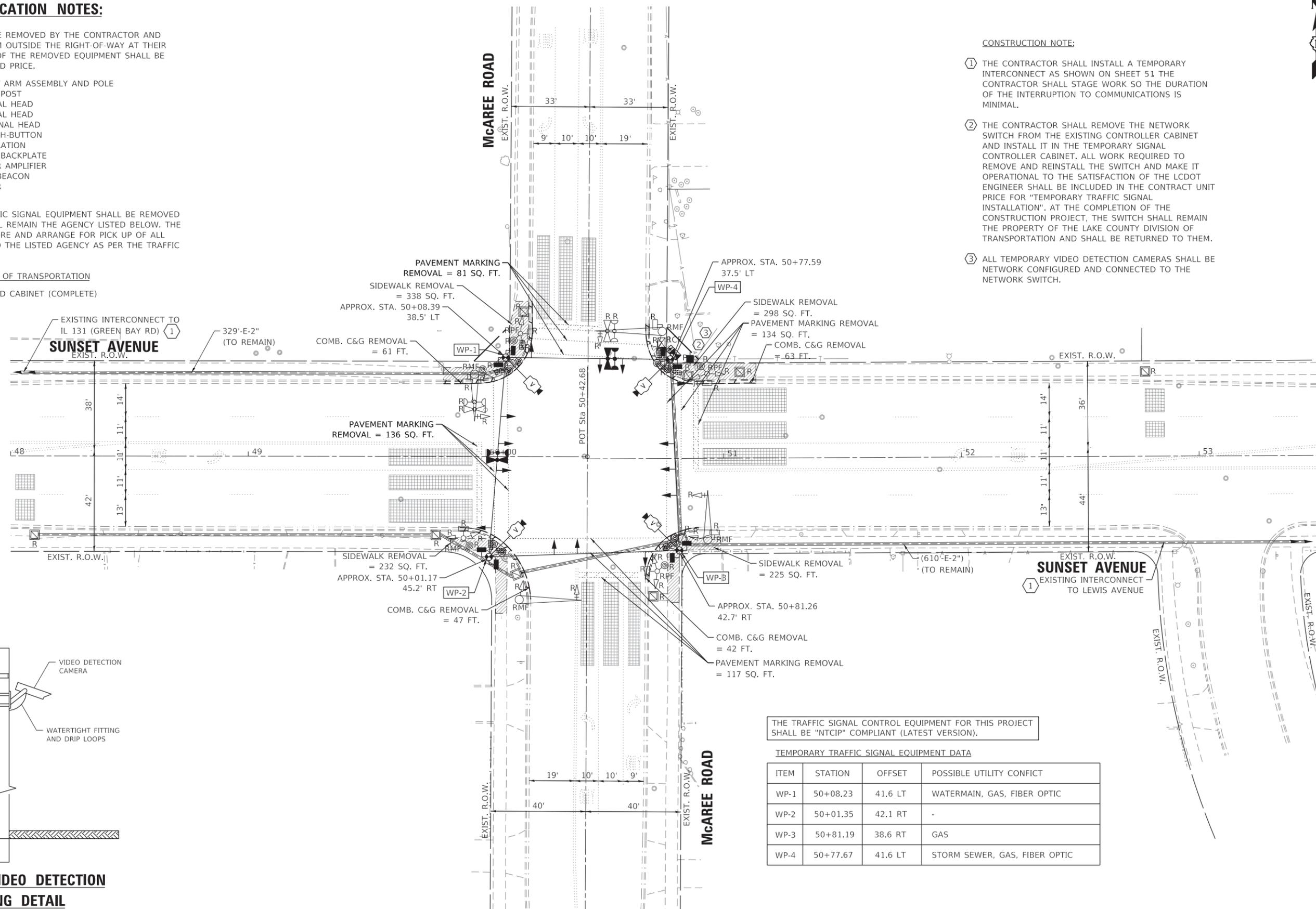
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: LAKE COUNTY DIVISION OF TRANSPORTATION

- 1 EACH CONTROLLER AND CABINET (COMPLETE)

CONSTRUCTION NOTE:

- ① THE CONTRACTOR SHALL INSTALL A TEMPORARY INTERCONNECT AS SHOWN ON SHEET 51 THE CONTRACTOR SHALL STAGE WORK SO THE DURATION OF THE INTERRUPTION TO COMMUNICATIONS IS MINIMAL.
- ② THE CONTRACTOR SHALL REMOVE THE NETWORK SWITCH FROM THE EXISTING CONTROLLER CABINET AND INSTALL IT IN THE TEMPORARY SIGNAL CONTROLLER CABINET. ALL WORK REQUIRED TO REMOVE AND REINSTALL THE SWITCH AND MAKE IT OPERATIONAL TO THE SATISFACTION OF THE LCDOT ENGINEER SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR "TEMPORARY TRAFFIC SIGNAL INSTALLATION". AT THE COMPLETION OF THE CONSTRUCTION PROJECT, THE SWITCH SHALL REMAIN THE PROPERTY OF THE LAKE COUNTY DIVISION OF TRANSPORTATION AND SHALL BE RETURNED TO THEM.
- ③ ALL TEMPORARY VIDEO DETECTION CAMERAS SHALL BE NETWORK CONFIGURED AND CONNECTED TO THE NETWORK SWITCH.



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "NTCIP" COMPLIANT (LATEST VERSION).

TEMPORARY TRAFFIC SIGNAL EQUIPMENT DATA

ITEM	STATION	OFFSET	POSSIBLE UTILITY CONFLICT
WP-1	50+08.23	41.6 LT	WATERMAIN, GAS, FIBER OPTIC
WP-2	50+01.35	42.1 RT	-
WP-3	50+81.19	38.6 RT	GAS
WP-4	50+77.67	41.6 LT	STORM SEWER, GAS, FIBER OPTIC

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 19

FILE NAME =	Sunset@McAree-TS-Temp.dgn	USER NAME =	zwallsten	DESIGNED -	JRD	REVISED -	
	4572.800			DRAWN -	ZCW	REVISED -	
	Default	PLOT SCALE =	1:20	CHECKED -	DPB	REVISED -	
		PLOT DATE =	2/7/2020	DATE -	1/10/2020	REVISED -	

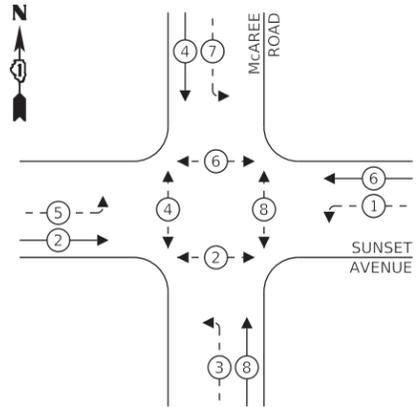
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
SUNSET AVENUE AND McAREE ROAD

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	19
CONTRACT NO. 61G47			ILLINOIS FED. AID PROJECT	

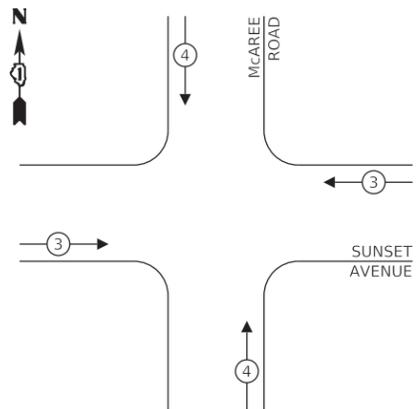
TEMPORARY CONTROLLER SEQUENCE



LEGEND:

- ← * → PROTECTED PHASE
- ← - * - → PROTECTED/PERMITTED PHASE
- ← * → PEDESTRIAN PHASE
- ← * OL → OVERLAP

**TEMPORARY EMERGENCY VEHICLE
PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL
ELECTRICAL SERVICE REQUIREMENTS**

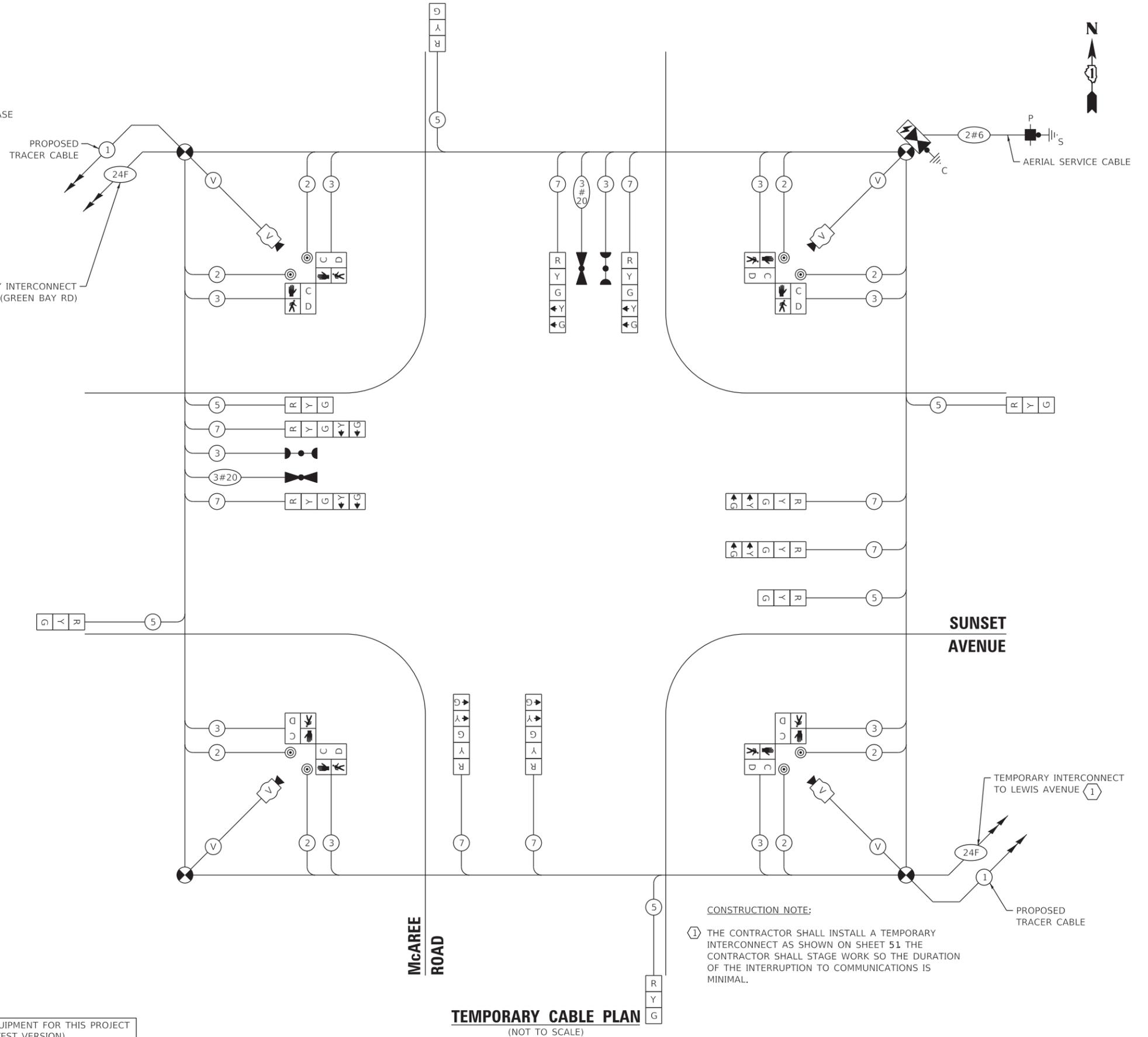
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77.0
(YELLOW)	14	20	5	14.0
(GREEN)	14	12	45	75.6
PROT-PERM ARROW	16	10	10	16.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
TOTAL =				617.6

ENERGY COSTS TO:

CITY OF WAUKEGAN
100 N. MARTIN LUTHER KING JR. AVENUE
WAUKEGAN IL, 60085

ENERGY SUPPLY: CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: COMED - LIBERTYVILLE
ACCOUNT NUMBER: -

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "NTCIP" COMPLIANT (LATEST VERSION).



CONSTRUCTION NOTE:
① THE CONTRACTOR SHALL INSTALL A TEMPORARY INTERCONNECT AS SHOWN ON SHEET 51 THE CONTRACTOR SHALL STAGE WORK SO THE DURATION OF THE INTERRUPTION TO COMMUNICATIONS IS MINIMAL.

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 20

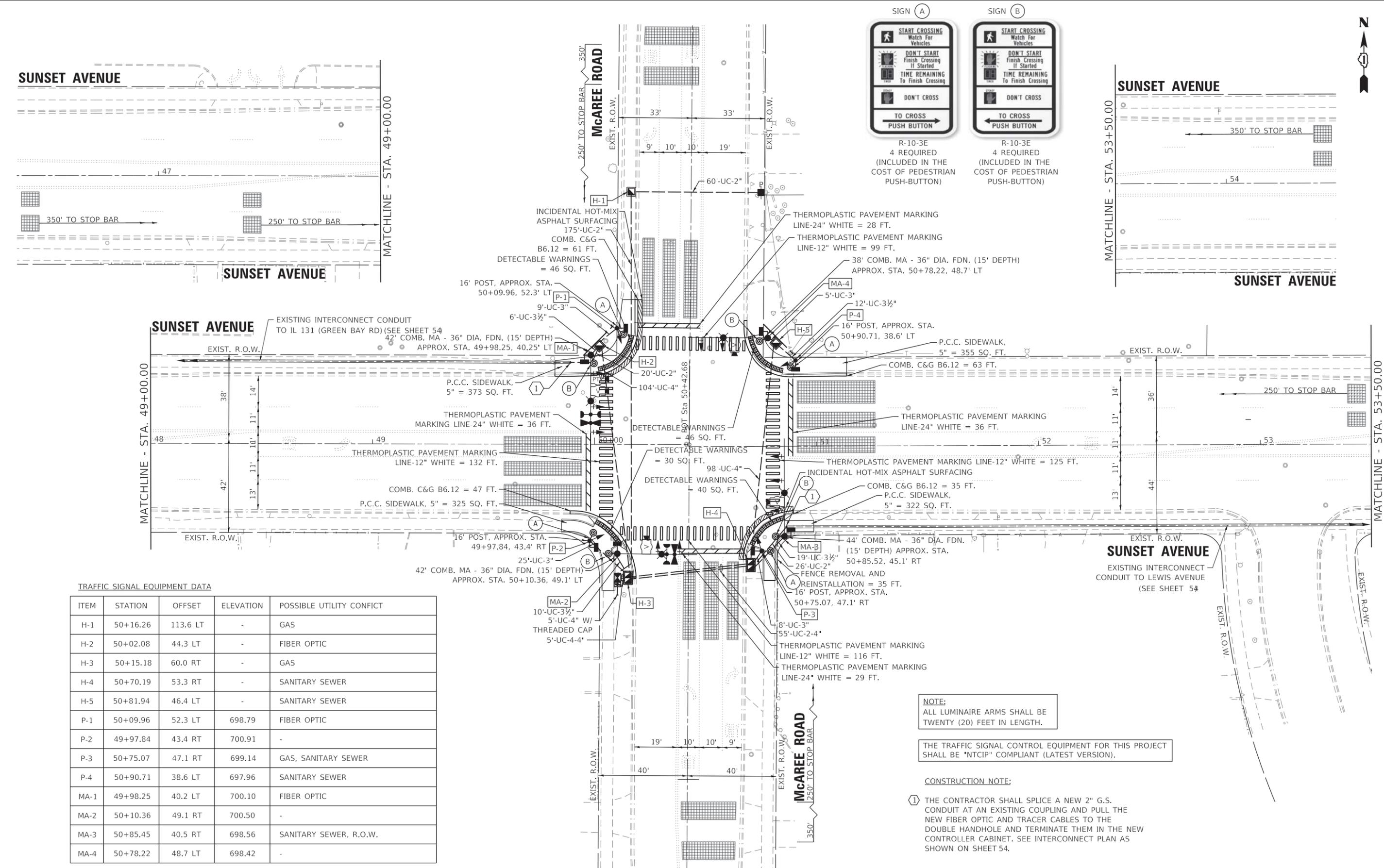
FILE NAME =	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Sunset@McAree-Cable-Temp.dgn		DRAWN - ZCW	REVISED -
4572.800	PLOT SCALE = 1:20	CHECKED - DPB	REVISED -
Default	PLOT DATE = 2/7/2020	DATE - 1/10/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION
DIAGRAM, AND TEMPORARY VEHICLE PREEMPTION SEQUENCE
SUNSET AVENUE AND McAREE ROAD**

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	20
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				



TRAFFIC SIGNAL EQUIPMENT DATA

ITEM	STATION	OFFSET	ELEVATION	POSSIBLE UTILITY CONFLICT
H-1	50+16.26	113.6 LT	-	GAS
H-2	50+02.08	44.3 LT	-	FIBER OPTIC
H-3	50+15.18	60.0 RT	-	GAS
H-4	50+70.19	53.3 RT	-	SANITARY SEWER
H-5	50+81.94	46.4 LT	-	SANITARY SEWER
P-1	50+09.96	52.3 LT	698.79	FIBER OPTIC
P-2	49+97.84	43.4 RT	700.91	-
P-3	50+75.07	47.1 RT	699.14	GAS, SANITARY SEWER
P-4	50+90.71	38.6 LT	697.96	SANITARY SEWER
MA-1	49+98.25	40.2 LT	700.10	FIBER OPTIC
MA-2	50+10.36	49.1 RT	700.50	-
MA-3	50+85.45	40.5 RT	698.56	SANITARY SEWER, R.O.W.
MA-4	50+78.22	48.7 LT	698.42	-

NOTE:
ALL LUMINAIRE ARMS SHALL BE TWENTY (20) FEET IN LENGTH.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "NTCIP" COMPLIANT (LATEST VERSION).

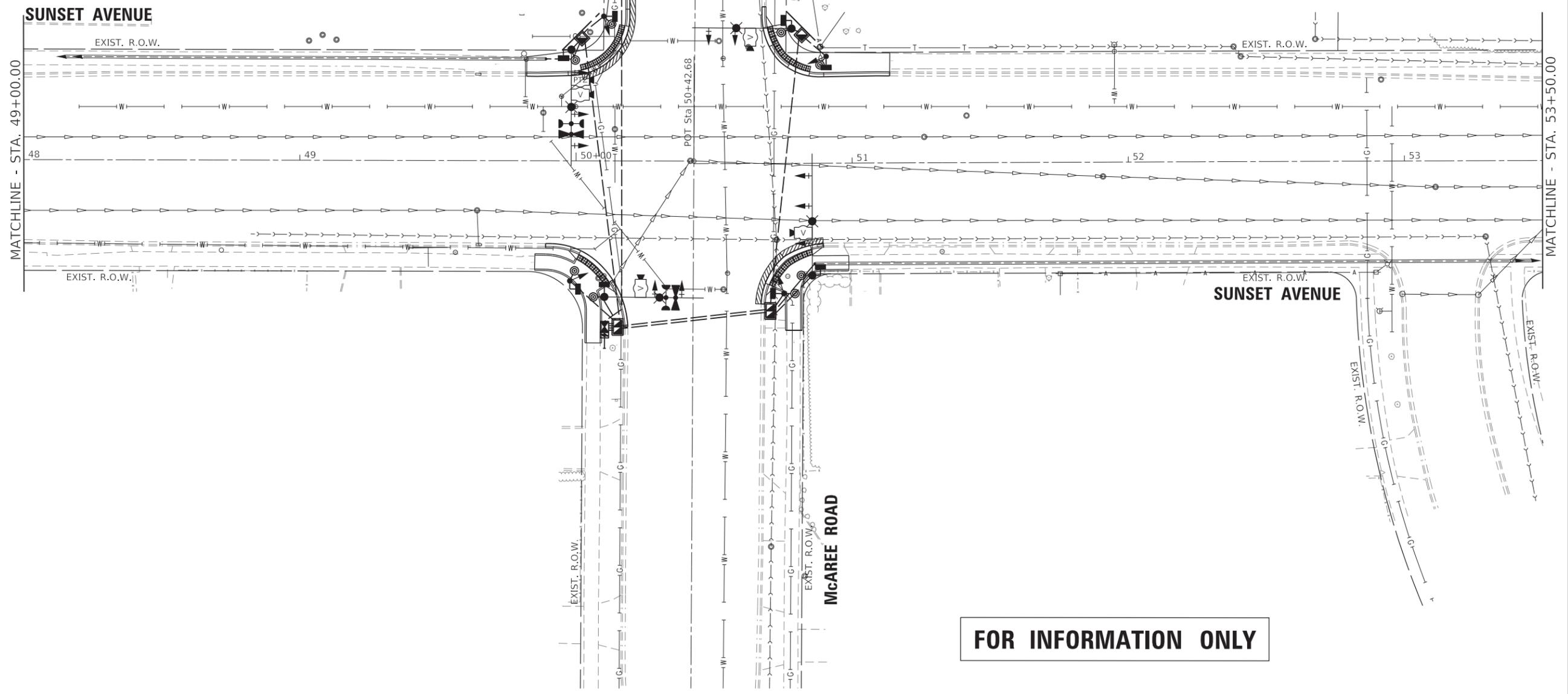
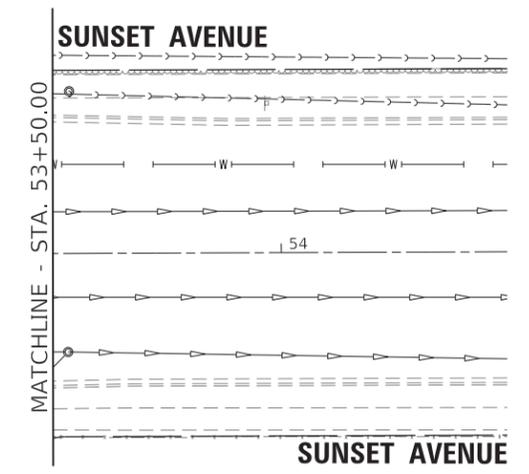
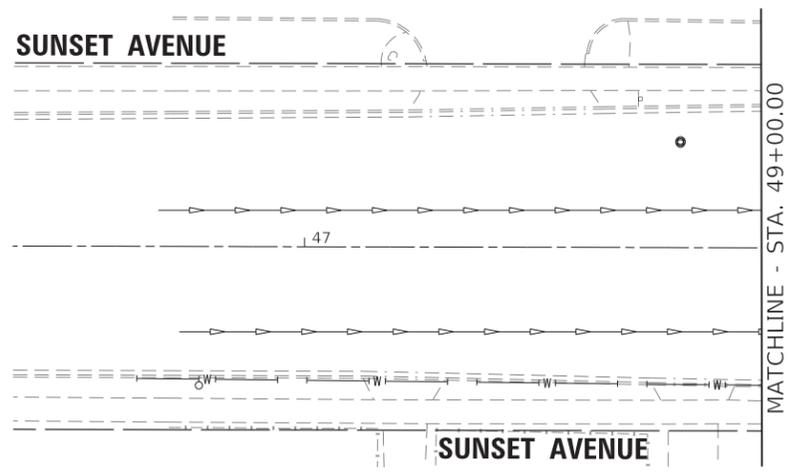
CONSTRUCTION NOTE:
① THE CONTRACTOR SHALL SPLICE A NEW 2" G.S. CONDUIT AT AN EXISTING COUPLING AND PULL THE NEW FIBER OPTIC AND TRACER CABLES TO THE DOUBLE HANDHOLE AND TERMINATE THEM IN THE NEW CONTROLLER CABINET. SEE INTERCONNECT PLAN AS SHOWN ON SHEET 54.

FILE NAME = Sunset@McAree-TS-Perm.dgn 4572.800 Default	USER NAME = zwallsten	DESIGNED - JRD DRAWN - ZCW	REVISED - REVISED - REVISED - REVISED -
	PLOT SCALE = 1:20 PLOT DATE = 2/7/2020	CHECKED - DPB DATE - 1/10/2020	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC SIGNAL MODERNIZATION PLAN SUNSET AVENUE AND McAREE ROAD	
SCALE: 1"=20'	SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	21
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				



FOR INFORMATION ONLY

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 22

FILE NAME =	Sunset@McAree-Utilities.dgn
4572.800	
Default	

USER NAME =	zwallsten
PLOT SCALE =	1:20
PLOT DATE =	2/7/2020

DESIGNED -	JRD
DRAWN -	ZCW
CHECKED -	DPB
DATE -	1/10/2020

REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EXISTING UTILITIES			
SUNSET AVENUE AND McAREE ROAD			
SCALE: 1"=20'	SHEET	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	22
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				

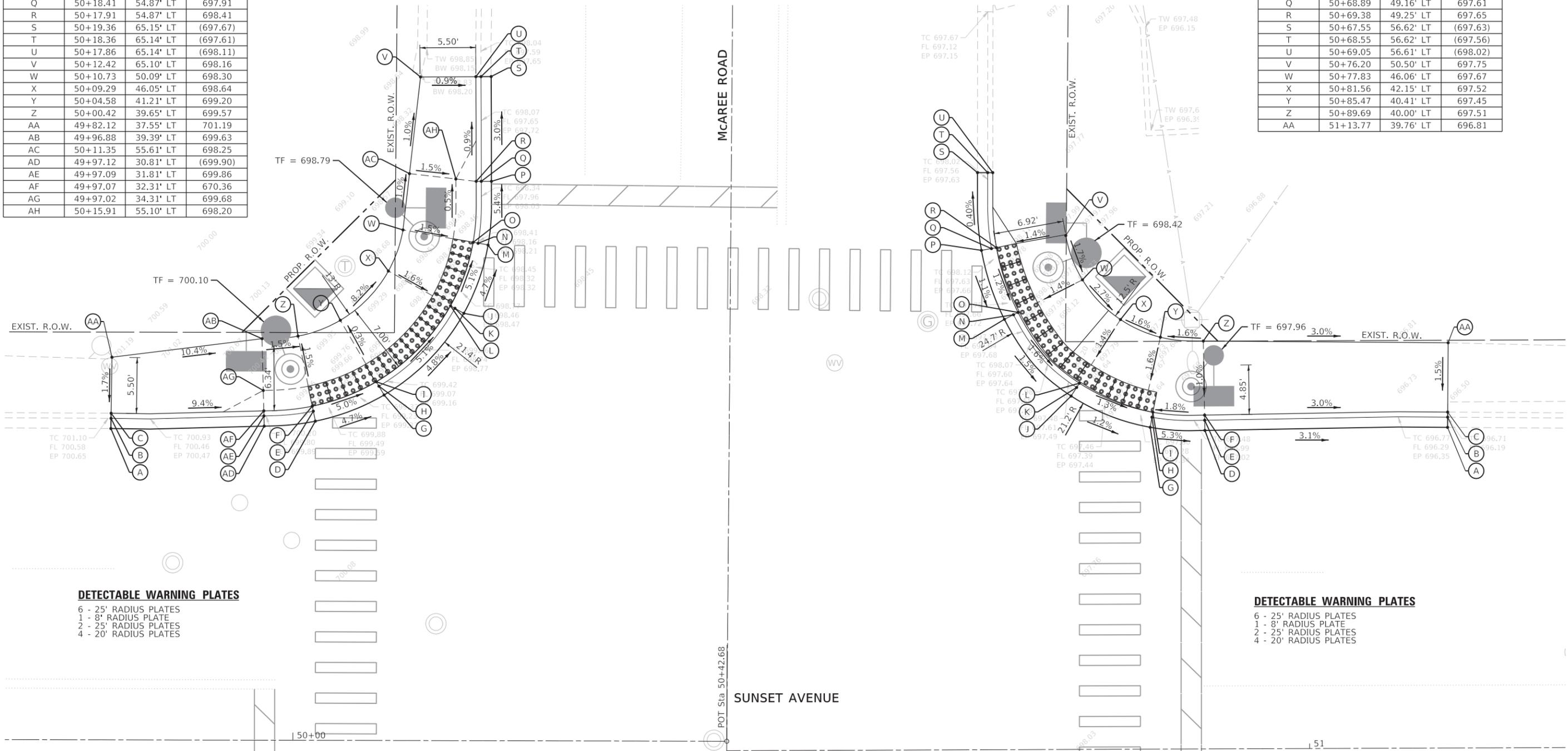


NORTHWEST CORNER OF
SUNSET AVENUE AND McAREE ROAD

Point	Station	Offset	Elevation
A	49+82.04	30.54' LT	(700.65)
B	49+82.05	31.54' LT	(700.59)
C	49+82.05	32.04' LT	(701.09)
D	50+02.14	31.31' LT	(699.68)
E	50+01.94	32.29' LT	699.63
F	50+01.84	32.78' LT	699.67
G	50+08.90	33.89' LT	(699.23)
H	50+08.39	34.75' LT	699.18
I	50+08.14	35.19' LT	699.22
J	50+16.72	41.92' LT	(698.54)
K	50+15.85	42.41' LT	698.49
L	50+15.41	42.65' LT	698.53
M	50+19.10	48.62' LT	(698.21)
N	50+18.12	48.81' LT	698.16
O	50+17.62	48.88' LT	698.20
P	50+19.41	54.88' LT	(697.97)
Q	50+18.41	54.87' LT	697.91
R	50+17.91	54.87' LT	698.41
S	50+19.36	65.15' LT	(697.67)
T	50+18.36	65.14' LT	(697.61)
U	50+17.86	65.14' LT	(698.11)
V	50+12.42	65.10' LT	698.16
W	50+10.73	50.09' LT	698.30
X	50+09.29	46.05' LT	698.64
Y	50+04.58	41.21' LT	699.20
Z	50+00.42	39.65' LT	699.57
AA	49+82.12	37.55' LT	701.19
AB	49+96.88	39.39' LT	699.63
AC	50+11.35	55.61' LT	698.25
AD	49+97.12	30.81' LT	(699.90)
AE	49+97.09	31.81' LT	699.86
AF	49+97.07	32.31' LT	670.36
AG	49+97.02	34.31' LT	699.68
AH	50+15.91	55.10' LT	698.20

NORTHEAST CORNER OF
SUNSET AVENUE AND McAREE ROAD

Point	Station	Offset	Elevation
A	51+13.68	27.46' LT	(696.25)
B	51+13.69	32.41' LT	(696.19)
C	51+13.70	32.96' LT	(696.71)
D	50+89.82	31.25' LT	(697.00)
E	50+89.80	32.25' LT	696.94
F	50+89.80	32.75' LT	697.44
G	50+84.44	31.57' LT	(697.34)
H	50+84.62	32.56' LT	697.29
I	50+84.71	33.05' LT	697.33
J	50+76.67	34.67' LT	(697.43)
K	50+77.22	35.51' LT	697.38
L	50+77.49	35.93' LT	697.42
M	50+70.14	42.22' LT	(697.58)
N	50+71.04	42.67' LT	697.53
O	50+71.48	42.89' LT	697.57
P	50+67.91	48.99' LT	(697.66)
Q	50+68.89	49.16' LT	697.61
R	50+69.38	49.25' LT	697.65
S	50+67.55	56.62' LT	(697.63)
T	50+68.55	56.62' LT	(697.56)
U	50+69.05	56.61' LT	(698.02)
V	50+76.20	50.50' LT	697.75
W	50+77.83	46.06' LT	697.67
X	50+81.56	42.15' LT	697.52
Y	50+85.47	40.41' LT	697.45
Z	50+89.69	40.00' LT	697.51
AA	51+13.77	39.76' LT	696.81



DETECTABLE WARNING PLATES
 6 - 25' RADIUS PLATES
 1 - 8' RADIUS PLATE
 2 - 25' RADIUS PLATES
 4 - 20' RADIUS PLATES

DETECTABLE WARNING PLATES
 6 - 25' RADIUS PLATES
 1 - 8' RADIUS PLATE
 2 - 25' RADIUS PLATES
 4 - 20' RADIUS PLATES

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 23

FILE NAME = Sunset@McAree-ADA.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
4572.800	PLOT SCALE = 1:5	DRAWN - ZCW	REVISED -
Sheet 1	PLOT DATE = 2/7/2020	CHECKED - DPB	REVISED -
		DATE - 1/10/2020	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

ADA GRADING DETAILS	
SUNSET AVENUE AND McAREE ROAD	
SCALE: 1"=5'	SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	23
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				

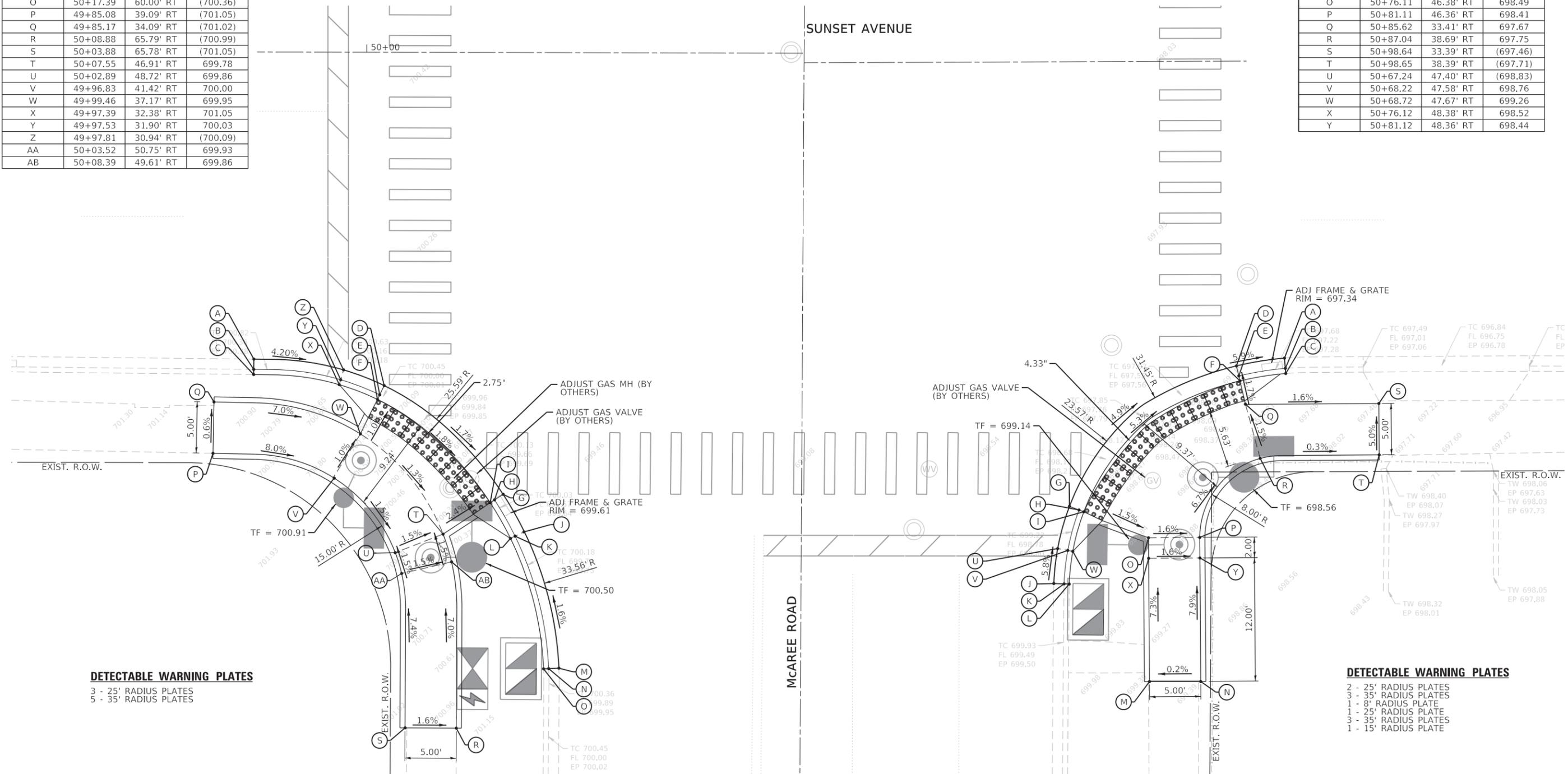


SOUTHWEST CORNER OF
SUNSET AVENUE AND McAREE ROAD

Point	Station	Offset	Elevation
A	49+89.05	29.91' RT	(700.38)
B	49+89.04	30.91' RT	(700.36)
C	49+89.04	31.41' RT	(700.82)
D	50+01.77	32.45' RT	(699.92)
E	50+01.34	33.36' RT	699.87
F	50+01.12	33.81' RT	699.91
G	50+13.40	43.01' RT	(699.66)
H	50+12.56	43.56' RT	699.61
I	50+12.15	43.84' RT	699.65
J	50+15.48	46.66' RT	(699.72)
K	50+14.58	47.09' RT	699.66
L	50+14.13	47.31' RT	700.16
M	50+18.88	59.93' RT	(699.95)
N	50+17.88	59.98' RT	(699.89)
O	50+17.39	60.00' RT	(700.36)
P	49+85.08	39.09' RT	(701.05)
Q	49+85.17	34.09' RT	(701.02)
R	50+08.88	65.79' RT	(700.99)
S	50+03.88	65.78' RT	(701.05)
T	50+07.55	46.91' RT	699.78
U	50+02.89	48.72' RT	699.86
V	49+96.83	41.42' RT	700.00
W	49+99.46	37.17' RT	699.95
X	49+97.39	32.38' RT	701.05
Y	49+97.53	31.90' RT	700.03
Z	49+97.81	30.94' RT	(700.09)
AA	50+03.52	50.75' RT	699.93
AB	50+08.39	49.61' RT	699.86

SOUTHEAST CORNER OF
SUNSET AVENUE AND McAREE ROAD

Point	Station	Offset	Elevation
A	50+89.44	29.94' RT	(697.28)
B	50+89.52	29.93' RT	(697.22)
C	50+89.56	30.43' RT	(697.68)
D	50+84.75	29.68' RT	(697.64)
E	50+84.98	30.65' RT	697.59
F	50+85.10	31.14' RT	697.63
G	50+68.41	43.29' RT	(698.60)
H	50+69.34	43.65' RT	698.55
I	50+69.81	43.83' RT	698.59
J	50+66.86	50.80' RT	(699.12)
K	50+67.85	50.84' RT	(699.06)
L	50+68.35	50.86' RT	(699.56)
M	50+76.16	60.38' RT	(699.39)
N	50+81.16	60.39' RT	(699.39)
O	50+76.11	46.38' RT	698.49
P	50+81.11	46.36' RT	698.41
Q	50+85.62	33.41' RT	697.67
R	50+87.04	38.69' RT	697.75
S	50+98.64	33.39' RT	(697.46)
T	50+98.65	38.39' RT	(697.71)
U	50+67.24	47.40' RT	(698.83)
V	50+68.22	47.58' RT	698.76
W	50+68.72	47.67' RT	699.26
X	50+76.12	48.38' RT	698.52
Y	50+81.12	48.36' RT	698.44



DETECTABLE WARNING PLATES
 3 - 25' RADIUS PLATES
 5 - 35' RADIUS PLATES

DETECTABLE WARNING PLATES
 2 - 25' RADIUS PLATES
 3 - 35' RADIUS PLATES
 1 - 8' RADIUS PLATE
 1 - 25' RADIUS PLATE
 3 - 35' RADIUS PLATES
 1 - 15' RADIUS PLATE

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 24

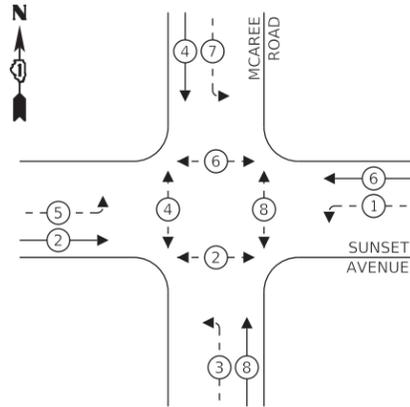
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4572.800	PLOT SCALE = 1:5	DRAWN - ZCW	REVISED -
Sheet 2	PLOT DATE = 2/7/2020	CHECKED - DPB	REVISED -
		DATE - 1/10/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ADA GRADING DETAILS	
SUNSET AVENUE AND McAREE ROAD	
SCALE: 1"=5'	SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	24
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				

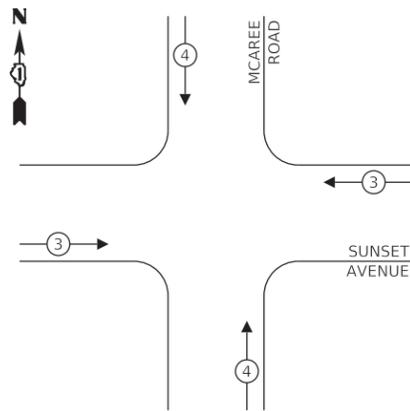
PROPOSED CONTROLLER SEQUENCE



LEGEND:

- ← ⊙ ← PROTECTED PHASE
- ← ⊙ - - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL OVERLAP

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77.0
(YELLOW)	14	20	5	14.0
(GREEN)	14	12	45	75.6
PROT-PERM ARROW	16	10	10	16.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	4	120	50	240.0
LUMINAIRE	4	250	50	500.0
TOTAL =				1357.6

ENERGY COSTS TO:

CITY OF WAUKEGAN
100 N MARTIN LUTHER KING JR. AVENUE
WAUKEGAN, IL 60085

ENERGY SUPPLY: CONTACT: TERRI BLECK
PHONE: 847-816-5235
COMPANY: COMED - LIBERTYVILLE
ACCOUNT NUMBER: -

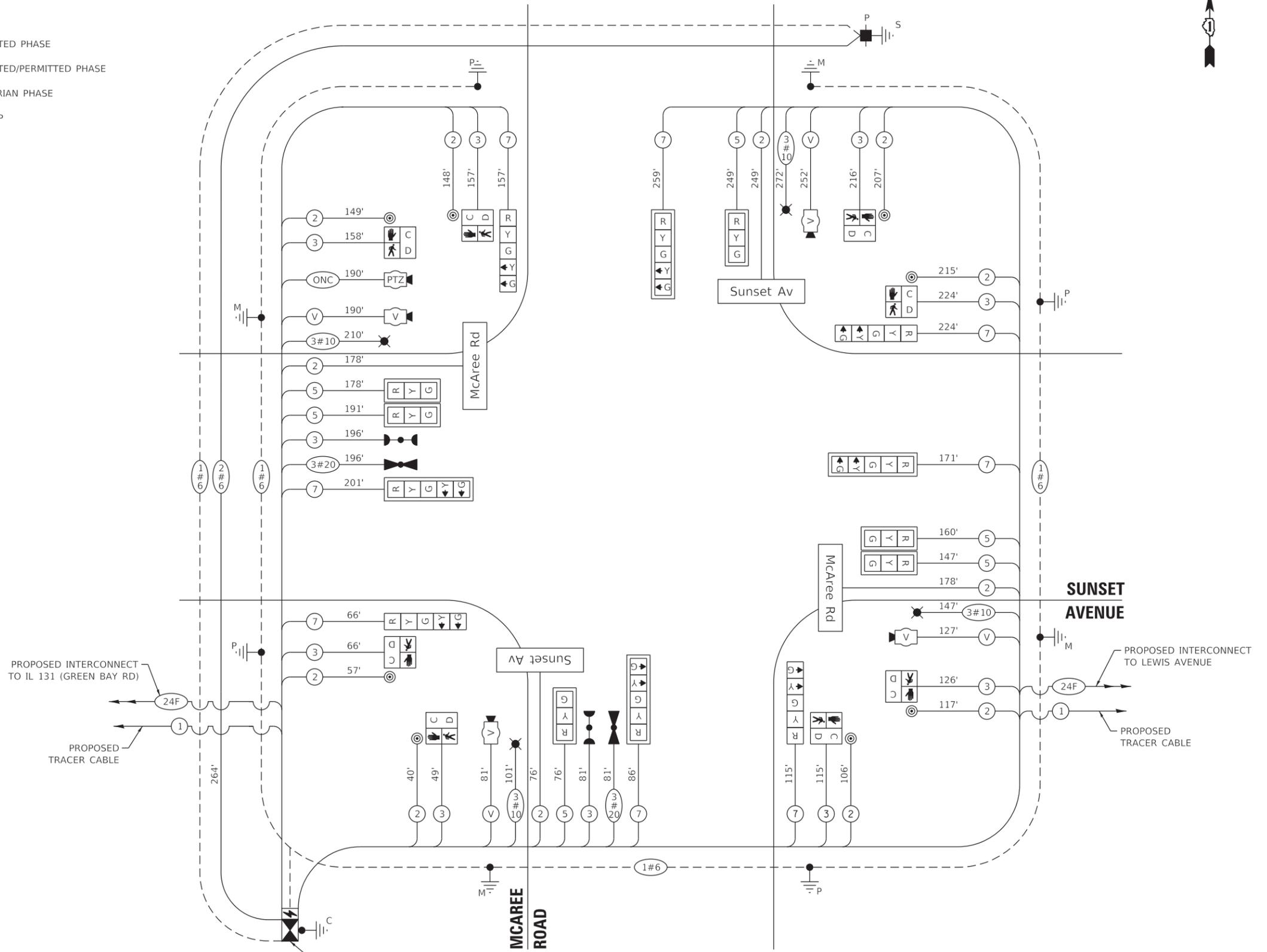
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "NTCIP" COMPLIANT (LATEST VERSION).

PROPOSED INTERCONNECT TO IL 131 (GREEN BAY RD)

PROPOSED TRACER CABLE

FULL ACTUATED CONTROLLER & TYPE IV CABINET, SPECIAL

CABLE PLAN
(NOT TO SCALE)



GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 25

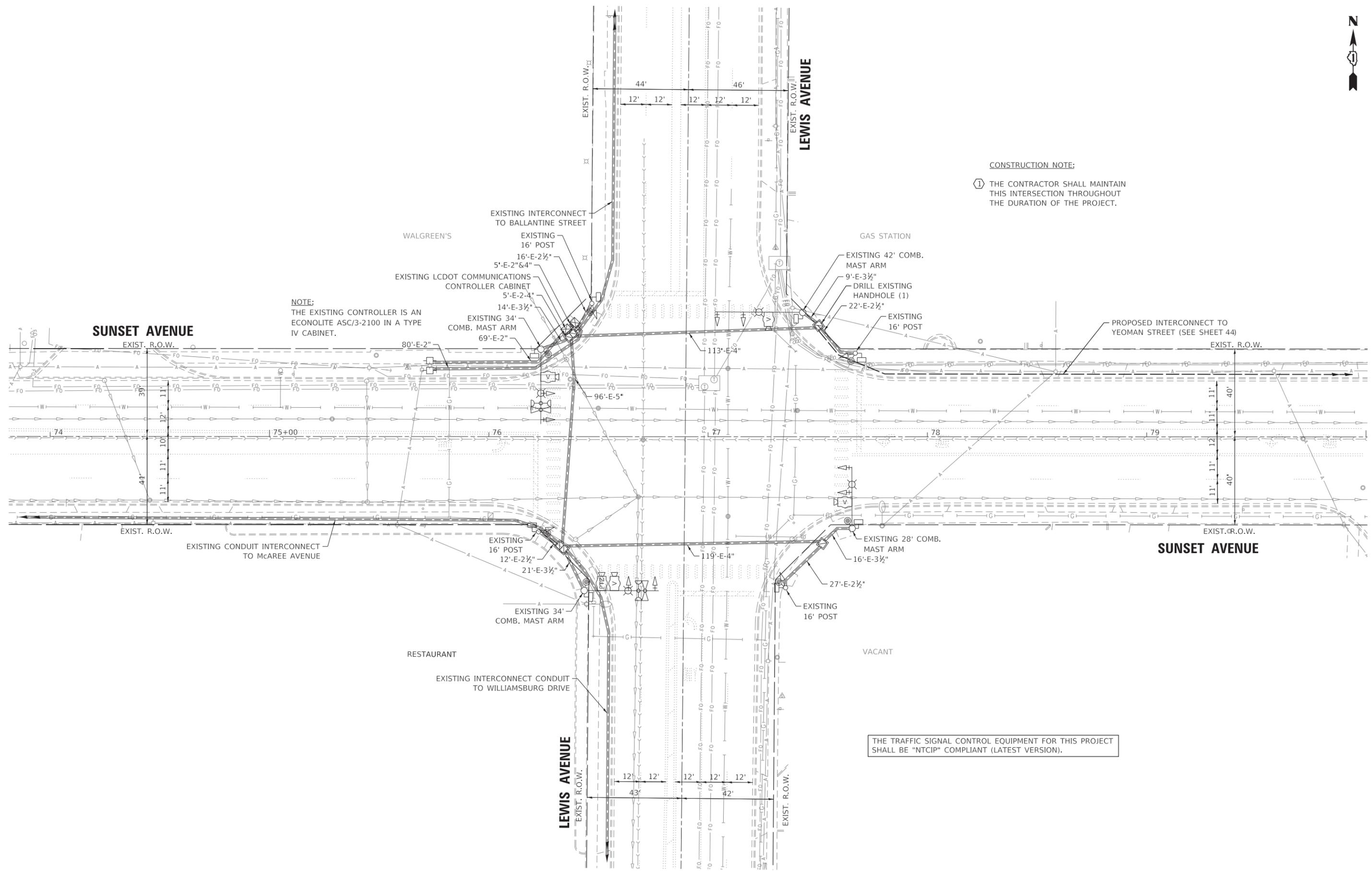
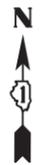
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Sunset@McAree-Cable-Perm.dgn		DRAWN - ZCW	REVISED -
4572.800	PLOT SCALE = 1:20	CHECKED - DPB	REVISED -
Default	PLOT DATE = 2/7/2020	DATE - 1/10/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
SUNSET AVENUE AND McAREE ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	25
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				



CONSTRUCTION NOTE:
 ① THE CONTRACTOR SHALL MAINTAIN THIS INTERSECTION THROUGHOUT THE DURATION OF THE PROJECT.

NOTE:
 THE EXISTING CONTROLLER IS AN ECONOLITE ASC/3-2100 IN A TYPE IV CABINET.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "NTCIP" COMPLIANT (LATEST VERSION).

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 27

FILE NAME = Sunset@Lewis-TS-Perm.dgn 4572.800 Default	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
		DRAWN - ZCW	REVISED -
		CHECKED - DPB	REVISED -
		DATE - 1/10/2020	REVISED -

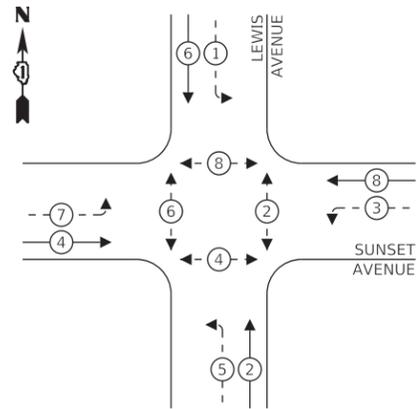
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN
 SUNSET AVENUE AND LEWIS AVENUE**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	27
CONTRACT NO. 61G47			ILLINOIS FED. AID PROJECT	

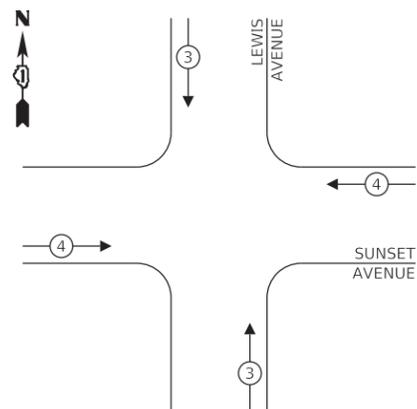
EXISTING CONTROLLER SEQUENCE



LEGEND:

- ← * → PROTECTED PHASE
- ← * - - * → PROTECTED/PERMITTED PHASE
- ← * → PEDESTRIAN PHASE
- ← * → OL OVERLAP

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PROT-PERM ARROW	16	10	10	16.00
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	4	120	50	240
LUMINAIRE	4	250	50	500.0
TOTAL =				1333.8

ENERGY COSTS TO:

CITY OF WAUKEGAN
100 N. MARTIN LUTHER KING JR. AVENUE
WAUKEGAN, IL 60085

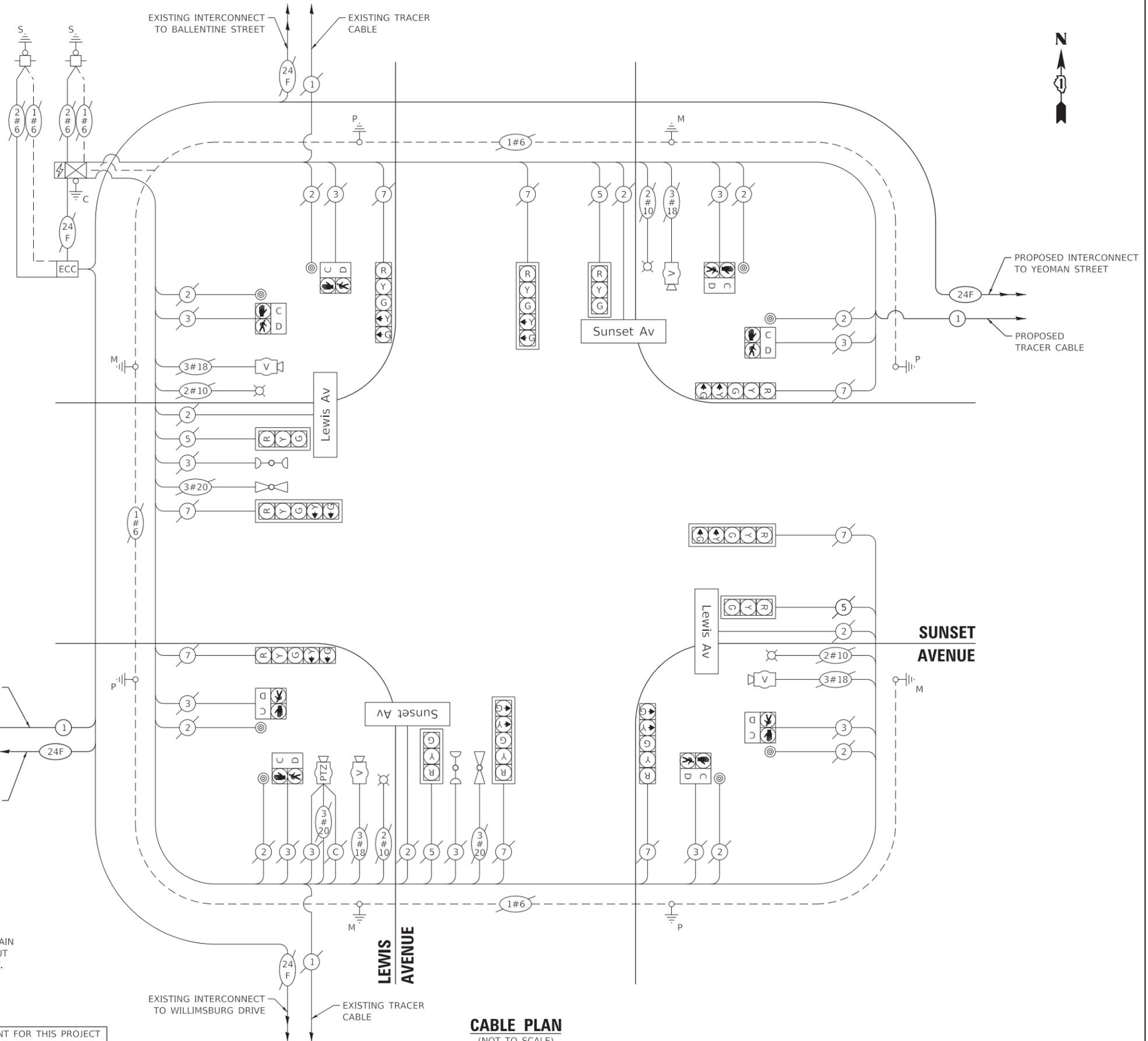
ENERGY SUPPLY: CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: COMED - LIBERTYVILLE
ACCOUNT NUMBER: -

CONSTRUCTION NOTE:

- ① THE CONTRACTOR SHALL MAINTAIN THIS INTERSECTION THROUGHOUT THE DURATION OF THE PROJECT.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "NTCIP" COMPLIANT (LATEST VERSION).

DESIGNED -	JRD	REVISED -	
DRAWN -	ZCW	REVISED -	
CHECKED -	DPB	REVISED -	
DATE -	1/10/2020	REVISED -	



CABLE PLAN
(NOT TO SCALE)

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 28

FILE NAME = Sunset@Lewis-Cable-Perm.dgn
4572.800
Default

USER NAME = zwallsten
PLOT SCALE = 1:20
PLOT DATE = 2/7/2020

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
SUNSET AVENUE AND LEWIS AVENUE
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	28
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES

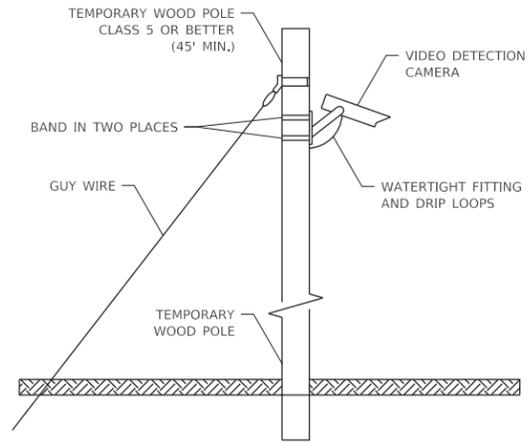
ITEM DESCRIPTION	UNITS	TOTAL QTY.
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1

FILE NAME = Sunset@Lewis-500.dgn 4572.800 Default	USER NAME = zwallsten	DESIGNED - JRD DRAWN - ZCW CHECKED - DPB DATE - 1/10/2020	REVISED - REVISED - REVISED - REVISED -
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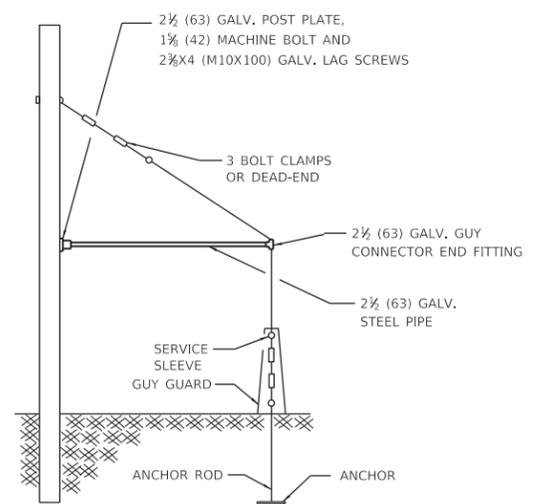
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES			
SUNSET AVENUE AND LEWIS AVENUE			
SCALE: NONE	SHEET	OF	SHEETS
STA.	TO STA.		

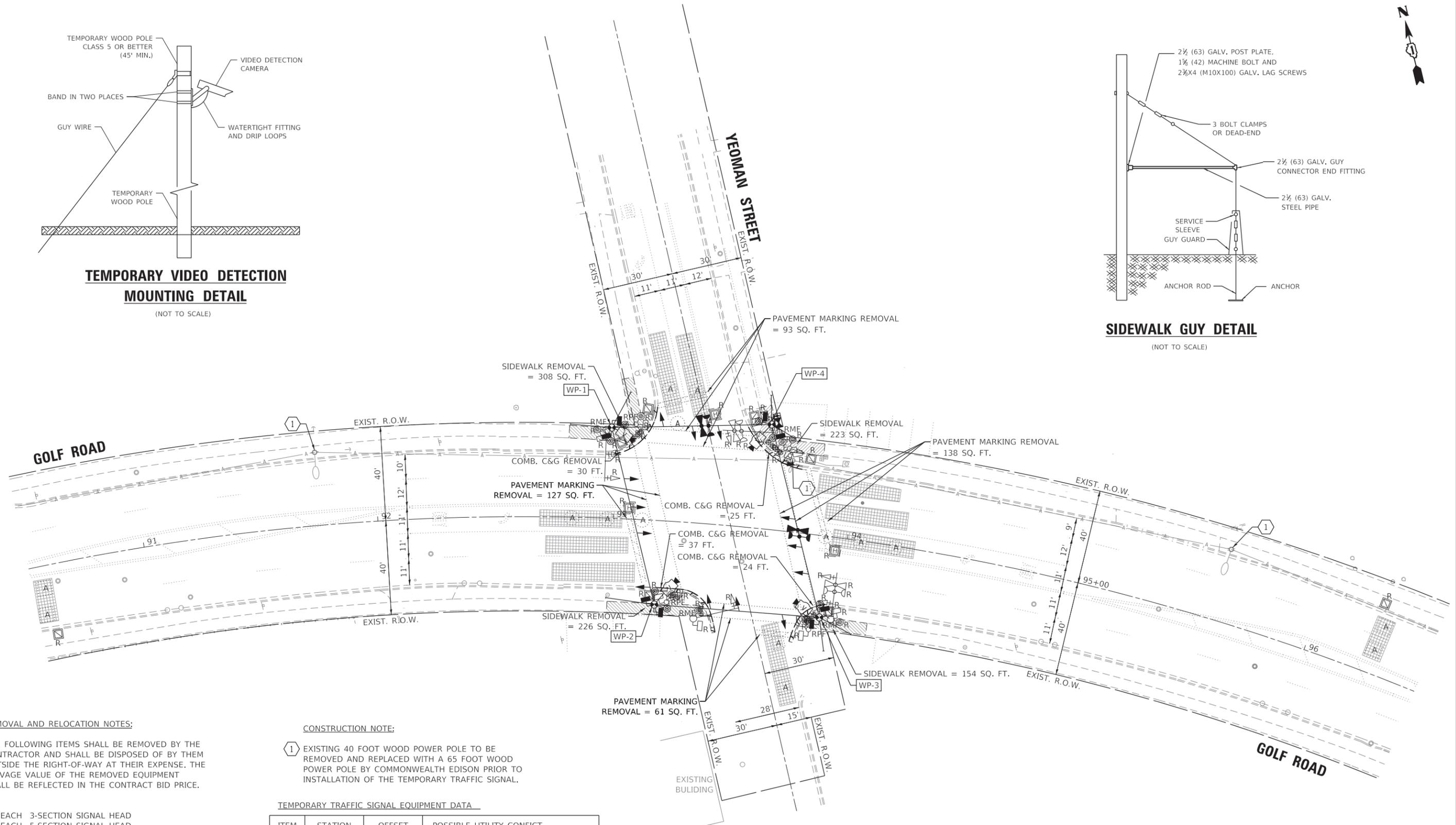
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	29
			CONTRACT NO. 61G47	
		ILLINOIS	FED. AID PROJECT	



TEMPORARY VIDEO DETECTION MOUNTING DETAIL
(NOT TO SCALE)



SIDEWALK GUY DETAIL
(NOT TO SCALE)



REMOVAL AND RELOCATION NOTES:
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.

CONSTRUCTION NOTE:
1 EXISTING 40 FOOT WOOD POWER POLE TO BE REMOVED AND REPLACED WITH A 65 FOOT WOOD POWER POLE BY COMMONWEALTH EDISON PRIOR TO INSTALLATION OF THE TEMPORARY TRAFFIC SIGNAL.

TEMPORARY TRAFFIC SIGNAL EQUIPMENT DATA

ITEM	STATION	OFFSET	POSSIBLE UTILITY CONFLICT
WP-1	92+98.08	38.4 LT	R.O.W. - OVERHEAD CABLES
WP-2	93+19.59	35.7 RT	-
WP-3	93+92.53	34.5 RT	-
WP-4	93+63.11	44.4 LT	R.O.W. - OVERHEAD CABLES

- 8 EACH 3-SECTION SIGNAL HEAD
- 4 EACH 5-SECTION SIGNAL HEAD
- 6 EACH TRAFFIC SIGNAL BACKPLATE
- 8 EACH PEDESTRIAN SIGNAL HEAD
- 8 EACH PEDESTRIAN PUSH-BUTTON
- 4 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 4 EACH TRAFFIC SIGNAL POST
- 1 EACH SERVICE INSTALLATION
- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 2 EACH LIGHT DETECTOR
- 1 EACH LIGHT DETECTOR AMPLIFIER

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 30

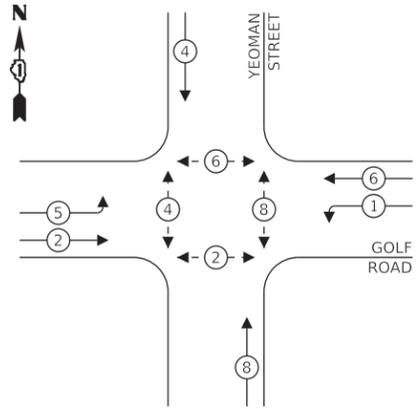
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Sunset@Yeoman-TS-Temp.dgn		DRAWN - ZCW	REVISED -
4572.800	PLOT SCALE = 1:20	CHECKED - DPB	REVISED -
Default	PLOT DATE = 2/7/2020	DATE - 1/10/2020	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT GOLF ROAD AND YEOMAN STREET
SCALE: 1"=20' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	30
CONTRACT NO. 61G47			ILLINOIS FED. AID PROJECT	

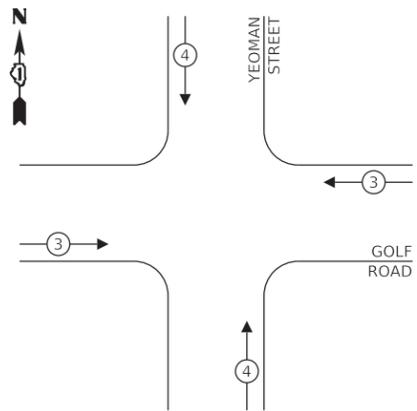
TEMPORARY CONTROLLER SEQUENCE



LEGEND:

- ← * → PROTECTED PHASE
- ← - * - → PROTECTED/PERMITTED PHASE
- ← * → PEDESTRIAN PHASE
- ← * OL → OVERLAP

**TEMPORARY EMERGENCY VEHICLE
PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL
ELECTRICAL SERVICE REQUIREMENTS**

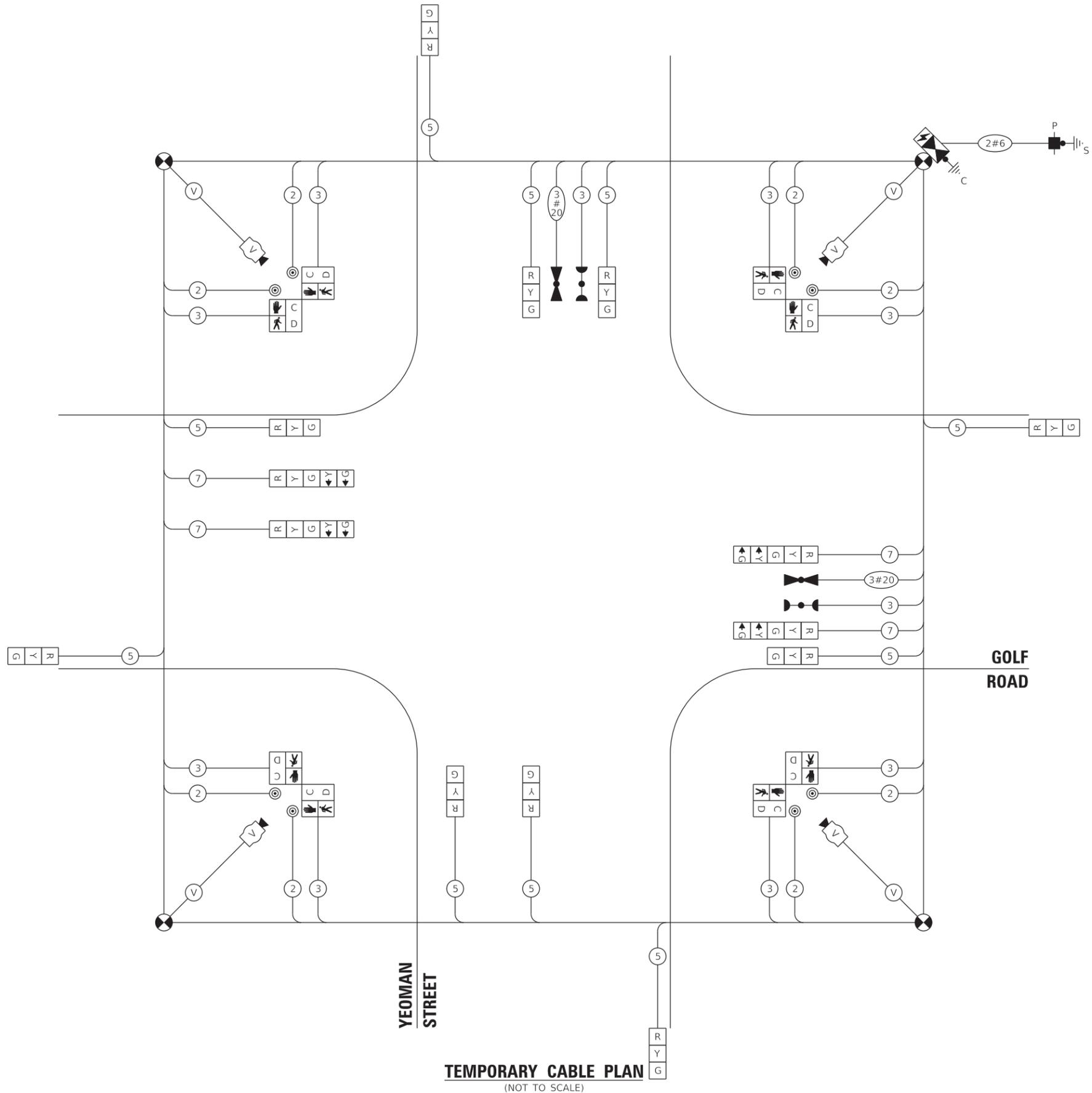
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77.0
(YELLOW)	14	20	5	14.0
(GREEN)	14	12	45	75.6
PROT-PERM ARROW	8	10	10	8.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	250	50	-
TOTAL =				609.6

ENERGY COSTS TO:

CITY OF WAUKEGAN
100 N. MARTIN LUTHER KING JR. AVENUE
WAYKEGAN, IL 60085

ENERGY SUPPLY: CONTACT: TERRY BLECK
PHONE: (847) 816-5239
COMPANY: COMED - LIBERTYVILLE
ACCOUNT NUMBER: -

FILE NAME =	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Sunset@Yeoman-Cable-Temp.dgn		DRAWN - ZCW	REVISED -
4572.800		CHECKED - DPB	REVISED -
Default		DATE - 1/10/2020	REVISED -



TEMPORARY CABLE PLAN
(NOT TO SCALE)

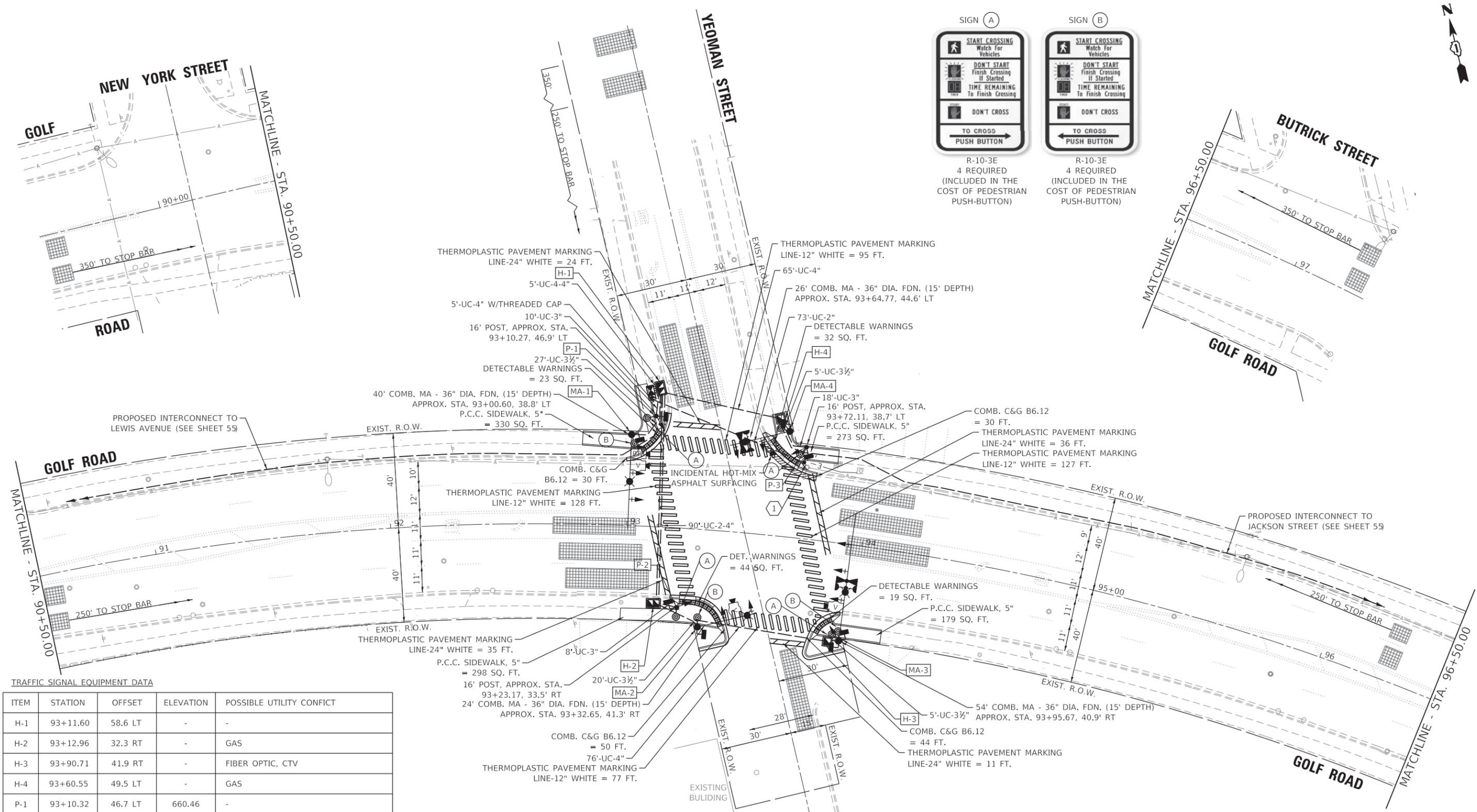
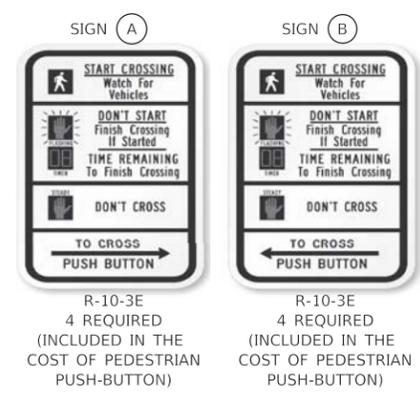
GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 31

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION
DIAGRAM, AND TEMPORARY VEHICLE PREEMPTION SEQUENCE
GOLF ROAD AND YEOMAN STREET**

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	31
CONTRACT NO. 61G47			ILLINOIS FED. AID PROJECT	



TRAFFIC SIGNAL EQUIPMENT DATA

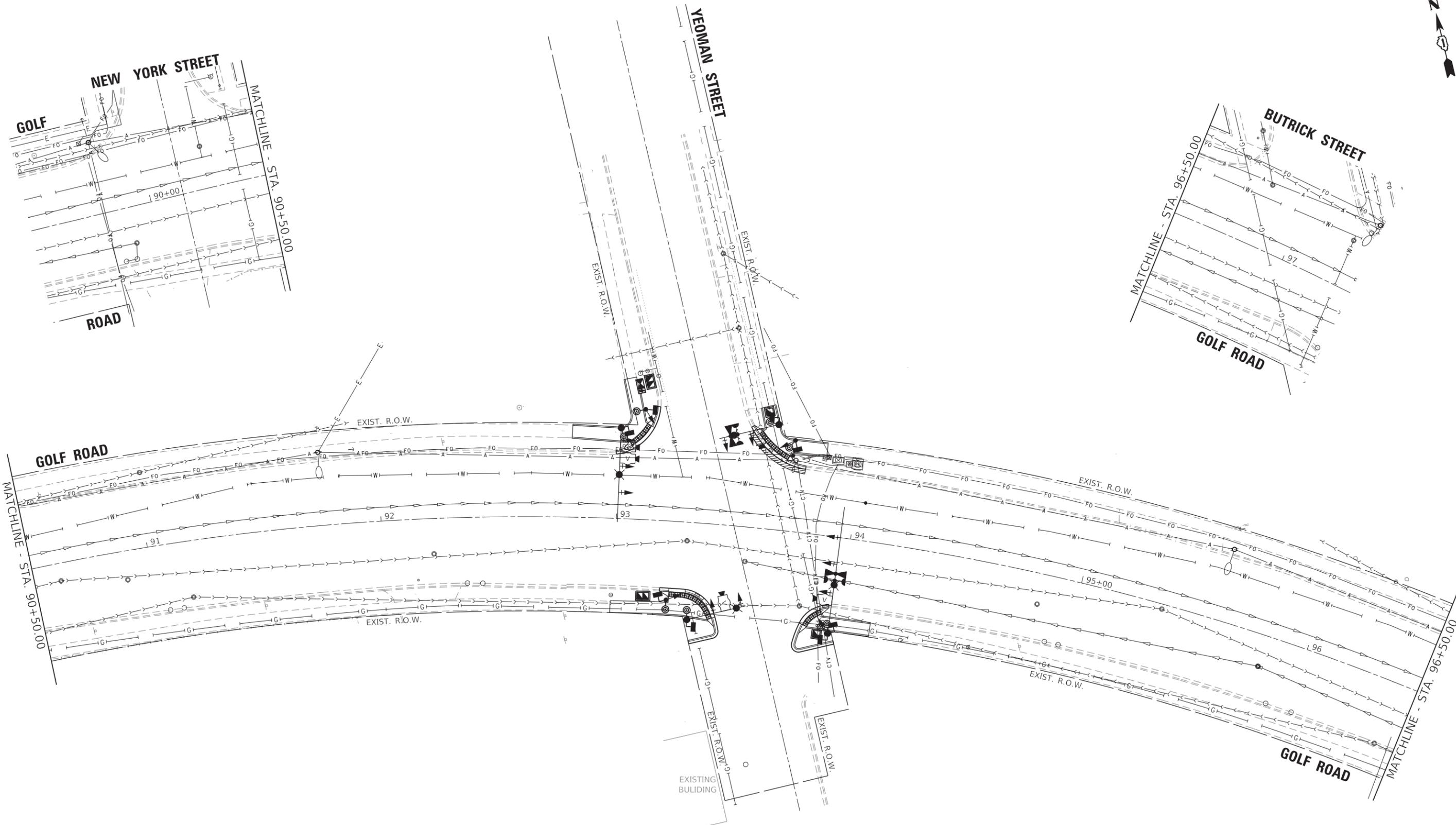
ITEM	STATION	OFFSET	ELEVATION	POSSIBLE UTILITY CONFLICT
H-1	93+11.60	58.6 LT	-	-
H-2	93+12.96	32.3 RT	-	GAS
H-3	93+90.71	41.9 RT	-	FIBER OPTIC, CTV
H-4	93+60.55	49.5 LT	-	GAS
P-1	93+10.32	46.7 LT	660.46	-
P-2	93+23.17	33.5 RT	660.20	SANITARY SEWER
P-3	93+72.16	38.6 LT	661.20	R.O.W.
MA-1	93+00.65	38.5 LT	660.17	OVERHEAD CABLES, R.O.W.
MA-2	93+32.65	41.3 RT	660.26	GAS
MA-3	93+95.67	40.9' RT	660.66	GAS, CTV
MA-4	93+64.77	44.6 LT	661.35	R.O.W., GAS

NOTE:
ALL LUMINAIRE ARMS SHALL BE TWENTY (20) FEET IN LENGTH.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "NTCIP" COMPLIANT (LATEST VERSION).

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 32

FILE NAME = Sunset@Yeoman-TS-Perm.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN GOLF ROAD AND YEOMAN STREET	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
4572.800	PLOT SCALE = 1:20	CHECKED - DPB	REVISED -			VAR.	12-00999-30-TL	LAKE	69	32	
Default	PLOT DATE = 2/7/2020	DATE - 1/10/2020	REVISED -			CONTRACT NO. 61G47					
						ILLINOIS FED. AID PROJECT					



GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 33

FILE NAME = Sunset@Yeoman-TS-Utilities.dgn
 4572.800
 Default

USER NAME = zwallsten
 PLOT SCALE = 1:20
 PLOT DATE = 2/7/2020

DESIGNED - JRD
 DRAWN - ZCW
 CHECKED - DPB
 DATE - 1/10/2020

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EXISTING UTILITIES
 GOLF ROAD AND YEOMAN STREET**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	33
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				



NORTHWEST CORNER OF GOLF ROAD AND YEOMAN STREET			
Point	Station	Offset	Elevation
A	92+99.09	27.23' LT	(660.25)
B	92+98.91	28.21' LT	(660.19)
C	92+98.83	28.70' LT	(660.69)
D	93+06.17	29.96' LT	(659.98)
E	93+05.67	30.82' LT	659.93
F	93+05.42	31.25' LT	659.97
G	93+14.31	39.24' LT	(659.80)
H	93+13.51	39.64' LT	659.75
I	93+13.01	39.89' LT	659.79
J	93+15.71	43.28' LT	(659.71)
K	93+14.78	43.52' LT	659.65
L	93+14.31	42.65' LT	660.15
M	93+16.39	48.14' LT	(659.60)
N	93+15.40	48.18' LT	(659.54)
O	93+14.93	48.20' LT	(660.04)
P	93+06.02	60.26' LT	(660.19)
Q	93+01.43	59.07' LT	(660.44)
R	93+08.77	48.61' LT	659.91
S	93+04.13	47.41' LT	659.98
T	93+04.34	32.91' LT	660.00
U	92+98.02	33.02' LT	660.05
V	92+98.13	38.36' LT	660.05
W	92+80.62	33.93' LT	660.90
X	92+80.81	38.92' LT	660.98
Y	93+10.54	41.23' LT	659.84
Z	93+02.40	28.13' LT	660.11
AA	93+02.07	29.07' LT	660.05
AB	93+01.91	29.55' LT	660.55
AC	93+03.91	40.19' LT	659.95

NORTHEAST CORNER OF GOLF ROAD AND YEOMAN STREET			
Point	Station	Offset	Elevation
A	93+77.60	26.91' LT	(660.80)
B	93+77.66	27.91' LT	(660.76)
C	93+77.69	28.41' LT	(661.33)
D	93+69.38	28.71' LT	(660.64)
E	93+69.72	29.65' LT	660.59
F	93+69.89	30.12' LT	660.63
G	93+56.14	39.01' LT	(660.36)
H	93+56.89	39.63' LT	660.31
I	93+57.27	39.94' LT	660.35
J	93+53.82	42.38' LT	(660.28)
K	93+54.63	42.92' LT	(660.22)
L	93+55.03	43.19' LT	(660.72)
M	93+57.45	50.95' LT	(660.62)
N	93+62.34	52.66' LT	(660.84)
O	93+59.11	45.00' LT	660.45
P	93+64.28	46.59' LT	660.53
Q	93+59.90	41.16' LT	660.41
R	93+67.57	39.55' LT	660.60
S	93+71.26	33.66' LT	660.65
T	93+71.18	38.66' LT	660.68
U	93+85.68	33.68' LT	(661.32)
V	93+85.62	38.79' LT	(661.35)
W	93+62.09	32.88' LT	(660.50)
X	93+62.68	33.67' LT	660.45
Y	93+62.97	34.07' LT	660.49
Z	93+73.31	27.52' LT	660.72
AA	93+73.51	28.50' LT	660.66
AB	93+73.62	28.99' LT	661.16
AC	93+74.06	39.68' LT	660.71
AD	93+74.07	33.65' LT	660.70



DETECTABLE WARNING PLATES
6 - 25' RADIUS PLATES

DETECTABLE WARNING PLATES
9 - 35' RADIUS PLATES

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 34

FILE NAME = Sunset@Yeoman-ADA.dgn
4572.800
Sheet 1

USER NAME = zwallsten
PLOT SCALE = 1:5
PLOT DATE = 2/7/2020

DESIGNED - JRD
DRAWN - ZCW
CHECKED - DPB
DATE - 1/10/2020

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ADA GRADING DETAILS
GOLF ROAD AND YEOMAN STREET**

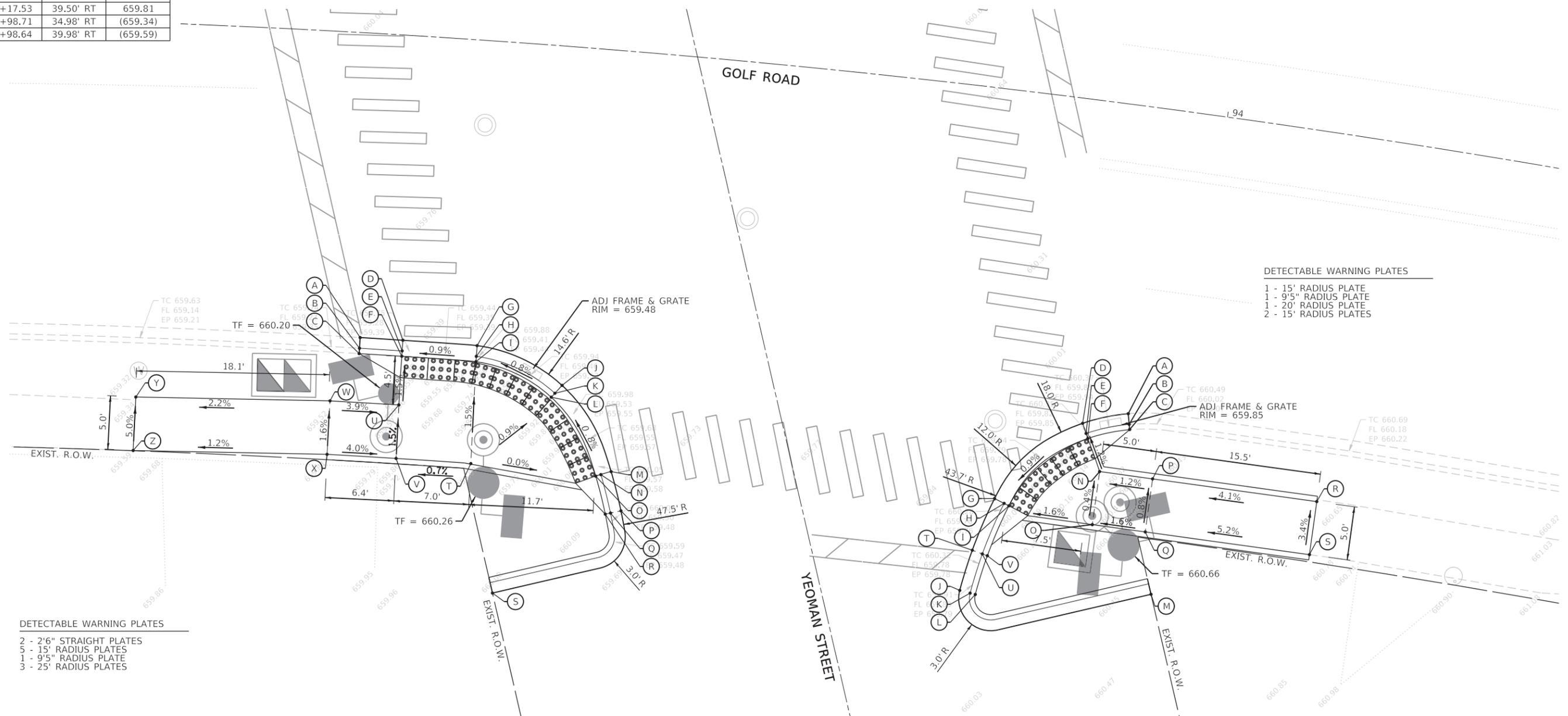
SCALE: 1"=5' SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	34
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				



SOUTHWEST CORNER OF GOLF ROAD AND YEOMAN STREET			
Point	Station	Offset	Elevation
A	93+20.09	28.44' RT	(659.37)
B	93+20.09	29.44' RT	(659.31)
C	93+20.08	29.94' RT	(659.81)
D	93+24.21	28.45' RT	(659.39)
E	93+24.21	29.45' RT	659.34
F	93+24.21	29.95' RT	659.38
G	93+31.38	28.49' RT	(659.45)
H	93+31.38	29.50' RT	659.40
I	93+31.37	30.00' RT	659.44
J	93+39.84	31.61' RT	(659.51)
K	93+39.20	32.40' RT	659.46
L	93+39.88	32.79' RT	659.50
M	93+45.24	39.25' RT	(659.58)
N	93+44.27	39.61' RT	659.53
O	93+43.78	39.79' RT	659.57
P	93+46.52	42.84' RT	(659.48)
Q	93+45.52	43.13' RT	659.44
R	93+45.02	43.26' RT	659.98
S	93+34.58	51.43' RT	(660.00)
T	93+31.57	39.52' RT	659.57
U	93+24.22	34.50' RT	659.45
V	93+24.27	39.50' RT	659.52
W	93+17.53	34.50' RT	659.73
X	93+17.53	39.50' RT	659.81
Y	92+98.71	34.98' RT	(659.34)
Z	92+98.64	39.98' RT	(659.59)

SOUTHEAST CORNER OF GOLF ROAD AND YEOMAN STREET			
Point	Station	Offset	Elevation
A	93+92.41	29.24' RT	(660.00)
B	93+92.74	30.19' RT	(659.96)
C	93+92.91	30.66' RT	(660.50)
D	93+90.10	30.18' RT	(659.85)
E	93+90.56	31.08' RT	659.80
F	93+90.79	31.52' RT	659.84
G	93+82.21	39.32' RT	(659.76)
H	93+83.19	39.64' RT	659.71
I	93+83.69	39.79' RT	659.75
J	93+80.33	47.02' RT	(659.79)
K	93+81.37	47.16' RT	659.73
L	93+81.89	47.23' RT	660.23
M	93+98.98	45.12' RT	(660.50)
N	93+91.68	34.39' RT	659.88
O	93+91.64	39.39' RT	659.88
P	93+96.86	34.42' RT	659.95
Q	93+96.84	39.42' RT	659.95
R	94+13.67	34.32' RT	(660.58)
S	94+13.74	39.32' RT	(660.75)
T	93+81.08	43.17' RT	(659.78)
U	93+82.10	43.39' RT	659.72
V	93+82.61	43.51' RT	660.22



- DETECTABLE WARNING PLATES**
- 1 - 15' RADIUS PLATE
 - 1 - 9'5" RADIUS PLATE
 - 1 - 20' RADIUS PLATE
 - 2 - 15' RADIUS PLATES

- DETECTABLE WARNING PLATES**
- 2 - 2'6" STRAIGHT PLATES
 - 5 - 15' RADIUS PLATES
 - 1 - 9'5" RADIUS PLATE
 - 3 - 25' RADIUS PLATES

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 35

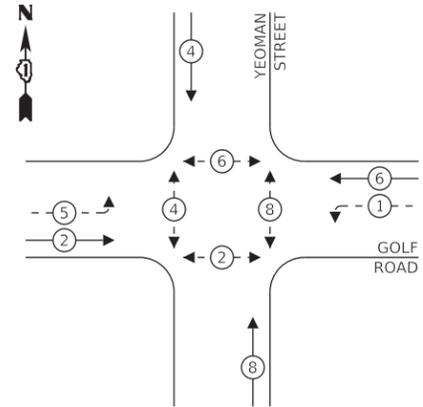
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Sheet 2	PLOT DATE = 2/7/2020	CHECKED - DPB	REVISED -
		DATE - 1/10/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ADA GRADING DETAILS			
GOLF ROAD AND YEOMAN STREET			
SCALE: 1"=5'	SHEET 2 OF 2 SHEETS	STA. _____	TO STA. _____

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	35
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				

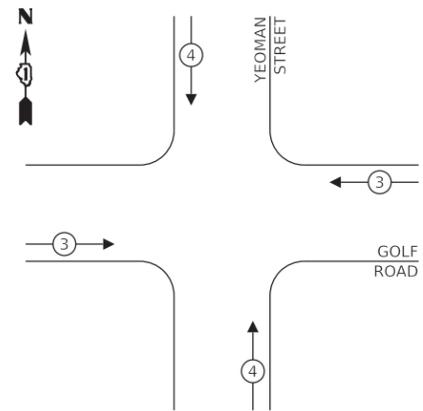
PROPOSED CONTROLLER SEQUENCE



LEGEND:

- ← * → PROTECTED PHASE
- ← * - - PROTECTED/PERMITTED PHASE
- ← * → PEDESTRIAN PHASE
- ← * OL → OVERLAP

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77.0
(YELLOW)	14	20	5	14.0
(GREEN)	14	12	45	75.6
PROT-PERM ARROW	8	10	10	8.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	4	120	50	240.0
LUMINAIRE	4	250	50	500.0
TOTAL =				1,349.6

ENERGY COSTS TO:

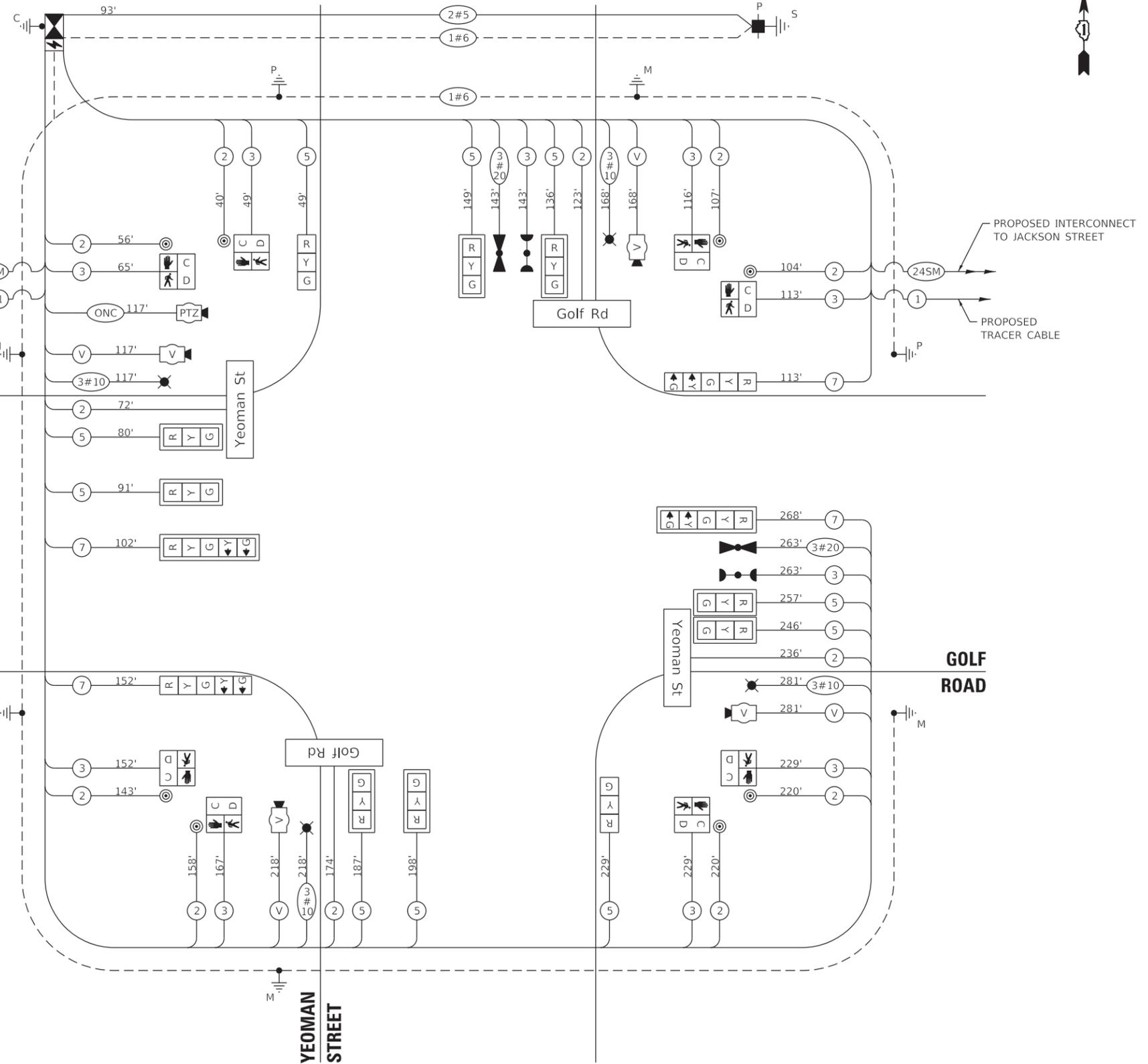
CITY OF WAUKEGAN
100 N. MARTIN LUTHER KING JR. AVENUE
WAUKEGAN, IL 60085

ENERGY SUPPLY: CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: COMED - LIBERTYVILLE
ACCOUNT NUMBER: -

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "NTCIP" COMPLIANT (LATEST VERSION).

DESIGNED -	JRD	REVISED -	
DRAWN -	ZCW	REVISED -	
CHECKED -	DPB	REVISED -	
DATE -	1/10/2020	REVISED -	

FILE NAME =	USER NAME = zwallsten
Sunset@Yeoman-Cable-Perm.dgn	
4572.800	
Default	
PLOT SCALE = 1:20	
PLOT DATE = 2/7/2020	



CABLE PLAN
(NOT TO SCALE)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
GOLF ROAD AND YEOMAN STREET**

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	36
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				

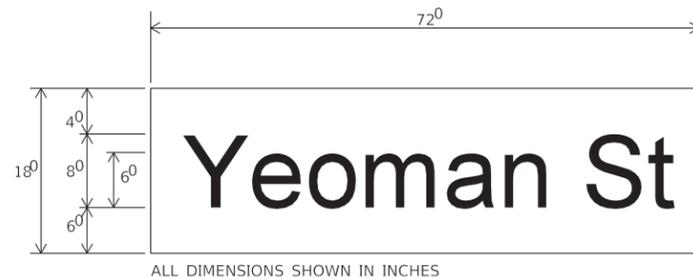
GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 36

PANEL DESIGN TYPE 1



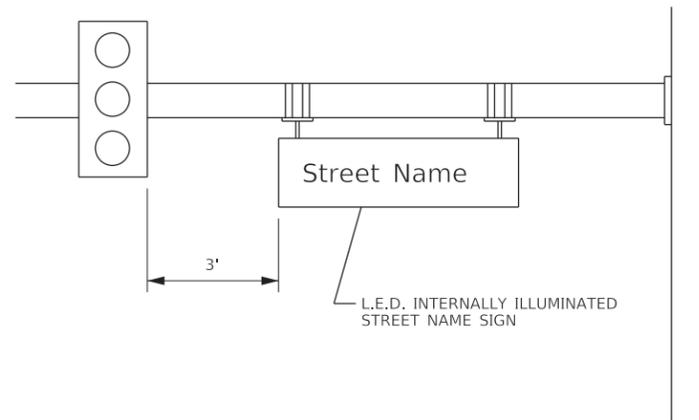
ALL DIMENSIONS SHOWN IN INCHES

9.0 SQ. FT. EACH
 _____ SINGLE SIDED REQUIRED
 2 DOUBLE SIDED REQUIRED
 DESIGN SERIES D
 HIGHWAY GOTHIC FONT

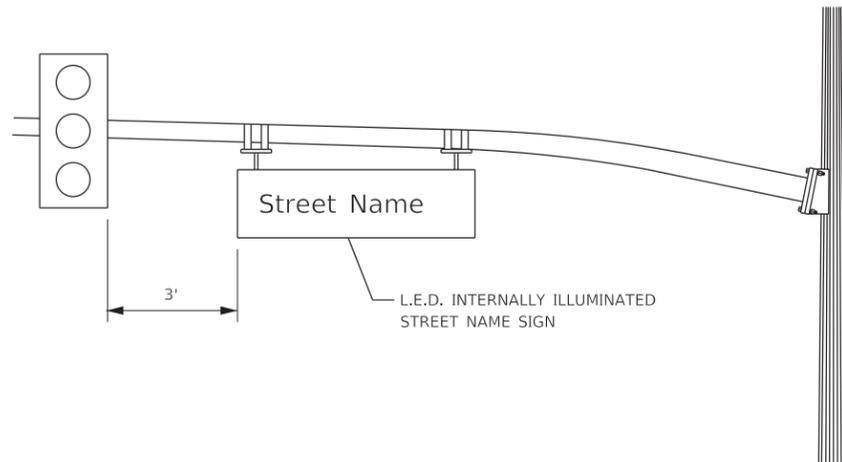


ALL DIMENSIONS SHOWN IN INCHES

9.0 SQ. FT. EACH
 _____ SINGLE SIDED REQUIRED
 2 DOUBLE SIDED REQUIRED
 DESIGN SERIES D
 HIGHWAY GOTHIC FONT



REGULAR STEEL MAST ARM ASSEMBLY AND POLE



DECORATIVE STEEL MAST ARM ASSEMBLY AND POLE

NOTE: L.E.D. ILLUMINATED STREET NAME SIGNS
 AVAILABLE ONLY IN 2 FOOT INCREMENTS.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
EARTH EXCAVATION	CU YD	2
INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	2
PROTECTIVE COAT	SQ YD	144
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1,134
COMBINATION CURB AND GUTTER REMOVAL	FOOT	103
SIDEWALK REMOVAL	SQ FT	957
FRAMES AND GRATES TO BE ADJUSTED	EACH	3
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (ABUTTING EXISTING PAVEMENT)	FOOT	162
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	73
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	39
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3 1/2" DIA.	FOOT	57
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	346
HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	FOOT	784
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	4
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,787
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,600
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,607
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	635
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	93
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	486
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	11
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	406
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	419
OUTDOOR RATED NETWORK CABLE	FOOT	117
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TRAFFIC SIGNAL POST, 16 FOOT, (SPECIAL)	EACH	3
DETECTABLE WARNINGS (SPECIAL)	SQ FT	118
TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	0.20
GROOVING FOR RECESSED PAVEMENT MARKING 13"	FOOT	427
GROOVING FOR RECESSED PAVEMENT MARKING 25"	FOOT	106
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 24 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 54 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 26 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT. (SPECIAL)	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
SEEDING (COMPLETE)	SQ YD	21

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 37

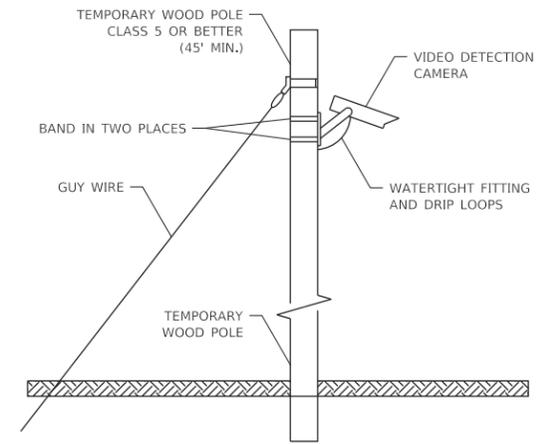
FILE NAME = Sunset@Yeoman-Sign.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
4572.800	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
Default	PLOT DATE = 2/7/2020	CHECKED - DPB	REVISED -
		DATE - 1/10/2020	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

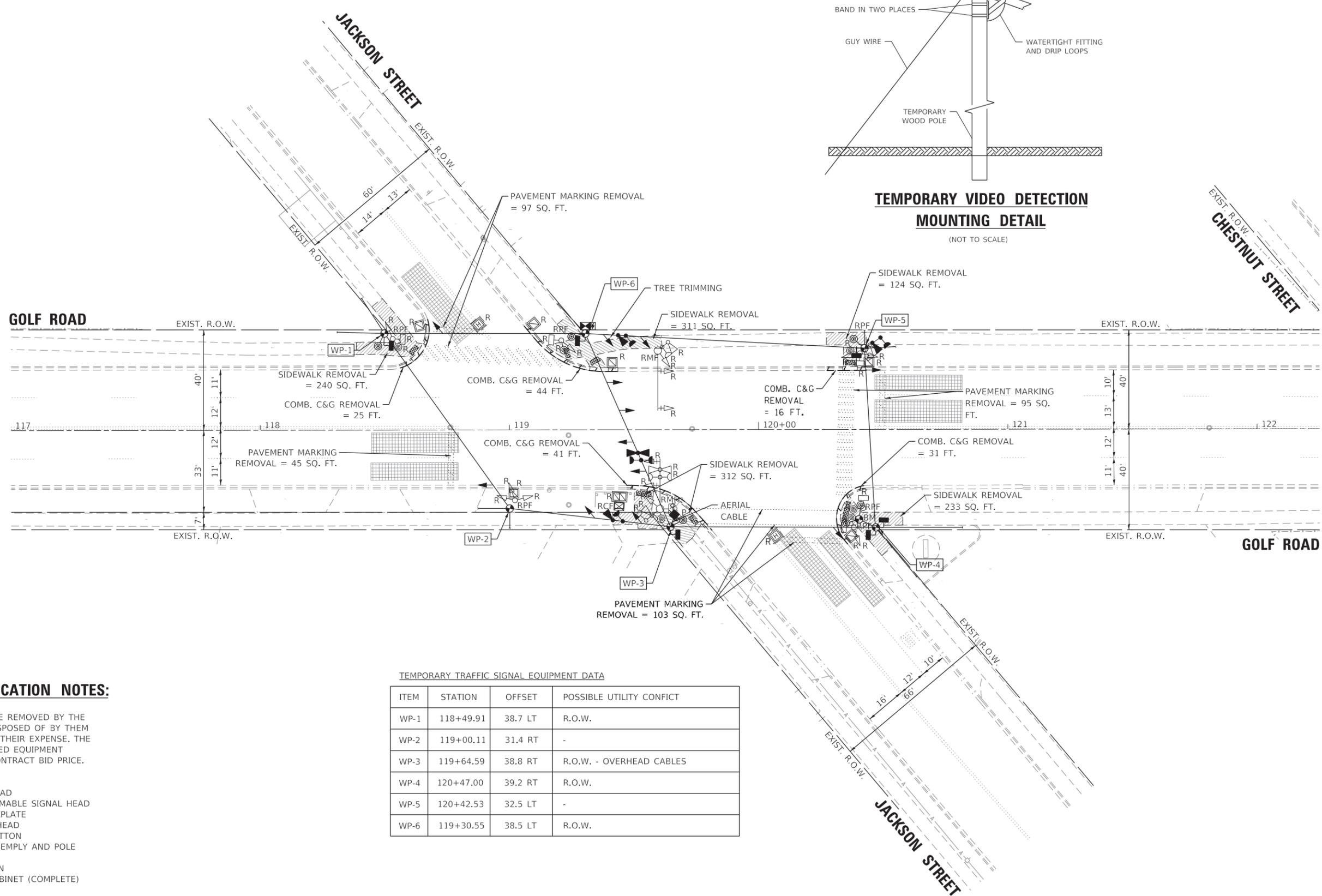
MAST ARM MOUNTED STREET NAME SIGNS
 AND SCHEDULE OF QUANTITIES
 GOLF ROAD AND YEOMAN STREET

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	37
			CONTRACT NO. 61G47	
		ILLINOIS	FED. AID PROJECT	



TEMPORARY VIDEO DETECTION MOUNTING DETAIL
(NOT TO SCALE)



REMOVAL AND RELOCATION NOTES:

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.

- 9 EACH 3-SECTION SIGNAL HEAD
- 4 EACH 3-SECTION, PROGRAMMABLE SIGNAL HEAD
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 6 EACH PEDESTRIAN SIGNAL HEAD
- 6 EACH PEDESTRIAN PUSH-BUTTON
- 2 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 5 EACH TRAFFIC SIGNAL POST
- 1 EACH SERVICE INSTALLATION
- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 3 EACH LIGHT DETECTOR
- 1 EACH LIGHT DETECTOR AMPLIFIER

TEMPORARY TRAFFIC SIGNAL EQUIPMENT DATA

ITEM	STATION	OFFSET	POSSIBLE UTILITY CONFLICT
WP-1	118+49.91	38.7 LT	R.O.W.
WP-2	119+00.11	31.4 RT	-
WP-3	119+64.59	38.8 RT	R.O.W. - OVERHEAD CABLES
WP-4	120+47.00	39.2 RT	R.O.W.
WP-5	120+42.53	32.5 LT	-
WP-6	119+30.55	38.5 LT	R.O.W.

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 38

FILE NAME = Golf@Jackson-TS-Temp.dgn
4572.800
Default

USER NAME = zwallsten
PLOT SCALE = 1:20
PLOT DATE = 2/7/2020

DESIGNED - JRD
DRAWN - ZCW
CHECKED - DPB
DATE - 1/10/2020

REVISED -
REVISED -
REVISED -
REVISED -

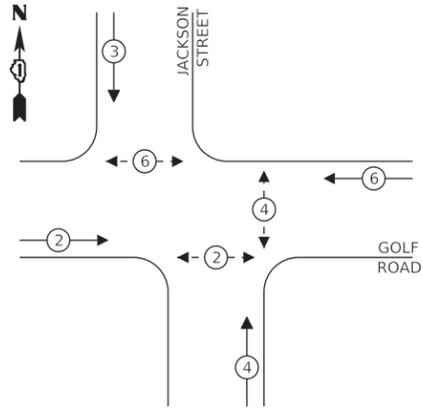
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
GOLF ROAD AND JACKSON STREET**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	38
CONTRACT NO. 61G47			ILLINOIS FED. AID PROJECT	

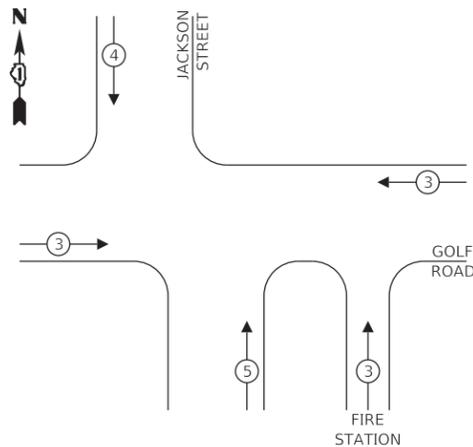
TEMPORARY CONTROLLER SEQUENCE



LEGEND:

- ← * → PROTECTED PHASE
- ← - * - → PROTECTED/PERMITTED PHASE
- ← * → PEDESTRIAN PHASE
- ← * → OL OVERLAP

**TEMPORARY EMERGENCY VEHICLE
PREEMPTION SEQUENCE**



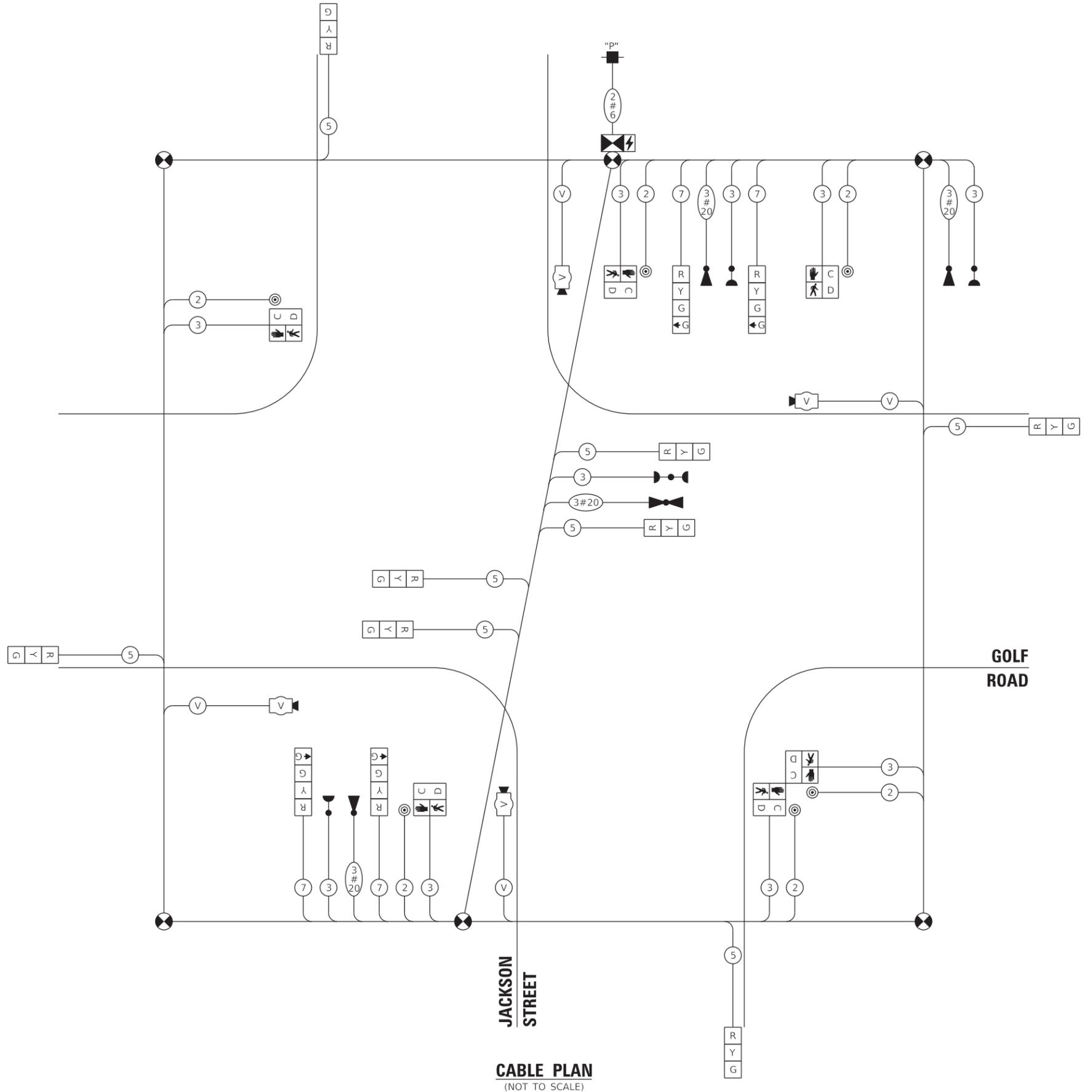
**TRAFFIC SIGNAL
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	16	12	45	86.4
PROT-PERM ARROW	-	10	10	-
PED. SIGNAL	6	20	100	120.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	84	50	-
TOTAL =				559.4

ENERGY COSTS TO:

CITY OF WAUKEGAN
100 N. MARTIN LUTHER KING JR. AVENUE
WAYKEGAN, IL 60085

ENERGY SUPPLY: CONTACT: TERRY BLECK
PHONE: (847) 816-5239
COMPANY: COMED - LIBERTYVILLE
ACCOUNT NUMBER: -



CABLE PLAN
(NOT TO SCALE)

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 39

FILE NAME =
Golf@Jackson-Cable-Temp.dgn
4572.800
Default

USER NAME = zwallsten
PLOT SCALE = 1:20
PLOT DATE = 2/7/2020

DESIGNED - JRD
DRAWN - ZCW
CHECKED - DPB
DATE - 1/10/2020

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

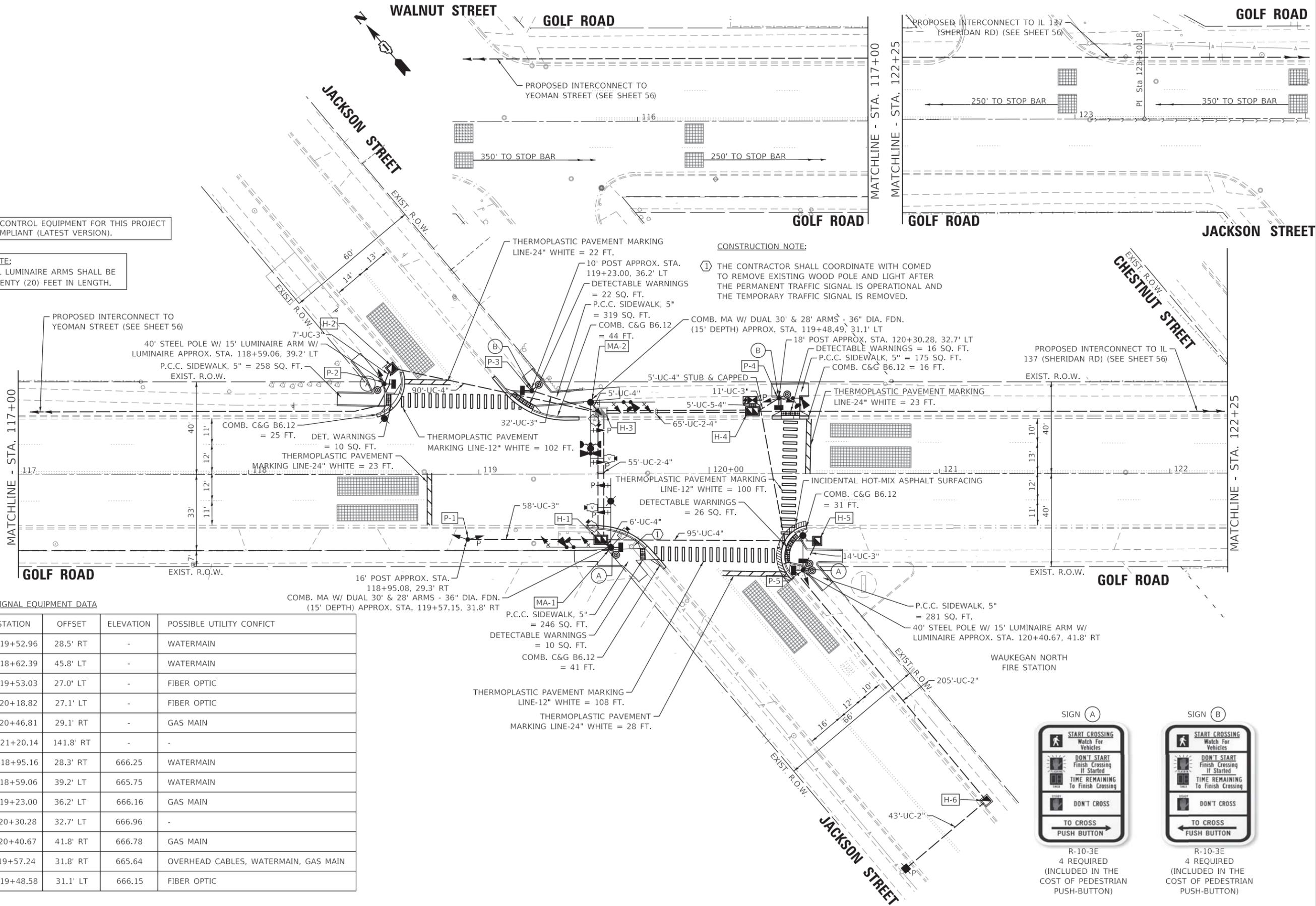
**TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION
DIAGRAM, AND TEMPORARY VEHICLE PREEMPTION SEQUENCE
GOLF ROAD AND JACKSON STREET**

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	39
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "NTCIP" COMPLIANT (LATEST VERSION).

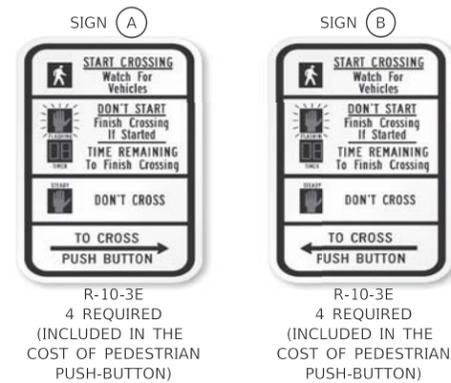
NOTE:
ALL LUMINAIRE ARMS SHALL BE TWENTY (20) FEET IN LENGTH.



TRAFFIC SIGNAL EQUIPMENT DATA

ITEM	STATION	OFFSET	ELEVATION	POSSIBLE UTILITY CONFLICT
H-1	119+52.96	28.5' RT	-	WATERMAIN
H-2	118+62.39	45.8' LT	-	WATERMAIN
H-3	119+53.03	27.0' LT	-	FIBER OPTIC
H-4	120+18.82	27.1' LT	-	FIBER OPTIC
H-5	120+46.81	29.1' RT	-	GAS MAIN
H-6	121+20.14	141.8' RT	-	-
P-1	118+95.16	28.3' RT	666.25	WATERMAIN
P-2	118+59.06	39.2' LT	665.75	WATERMAIN
P-3	119+23.00	36.2' LT	666.16	GAS MAIN
P-4	120+30.28	32.7' LT	666.96	-
P-5	120+40.67	41.8' RT	666.78	GAS MAIN
MA-1	119+57.24	31.8' RT	665.64	OVERHEAD CABLES, WATERMAIN, GAS MAIN
MA-2	119+48.58	31.1' LT	666.15	FIBER OPTIC

CONSTRUCTION NOTE:
① THE CONTRACTOR SHALL COORDINATE WITH COMED TO REMOVE EXISTING WOOD POLE AND LIGHT AFTER THE PERMANENT TRAFFIC SIGNAL IS OPERATIONAL AND THE TEMPORARY TRAFFIC SIGNAL IS REMOVED.



FILE NAME = Golf@Jackson-TS-Perm.dgn 4572.800 Default	USER NAME = zwallsten	DESIGNED - JRD DRAWN - ZCW	REVISED - REVISED - REVISED - REVISED -
	PLOT SCALE = 1:20 PLOT DATE = 2/7/2020	CHECKED - DPB DATE - 1/10/2020	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN GOLF ROAD AND JACKSON STREET	
SCALE: 1"=20'	SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	40
ILLINOIS FED. AID PROJECT				

CONTRACT NO. 61G47

FILE NAME =	USER NAME = zwallsten
Golf@Jackson-TS-Utilities.dgn	
4572.800	
Default	

DESIGNED - JRD	REVISD -
DRAWN - ZCW	REVISD -
CHECKED - DPB	REVISD -
DATE - 1/10/2020	REVISD -

DESIGNED - JRD	REVISD -
DRAWN - ZCW	REVISD -
CHECKED - DPB	REVISD -
DATE - 1/10/2020	REVISD -

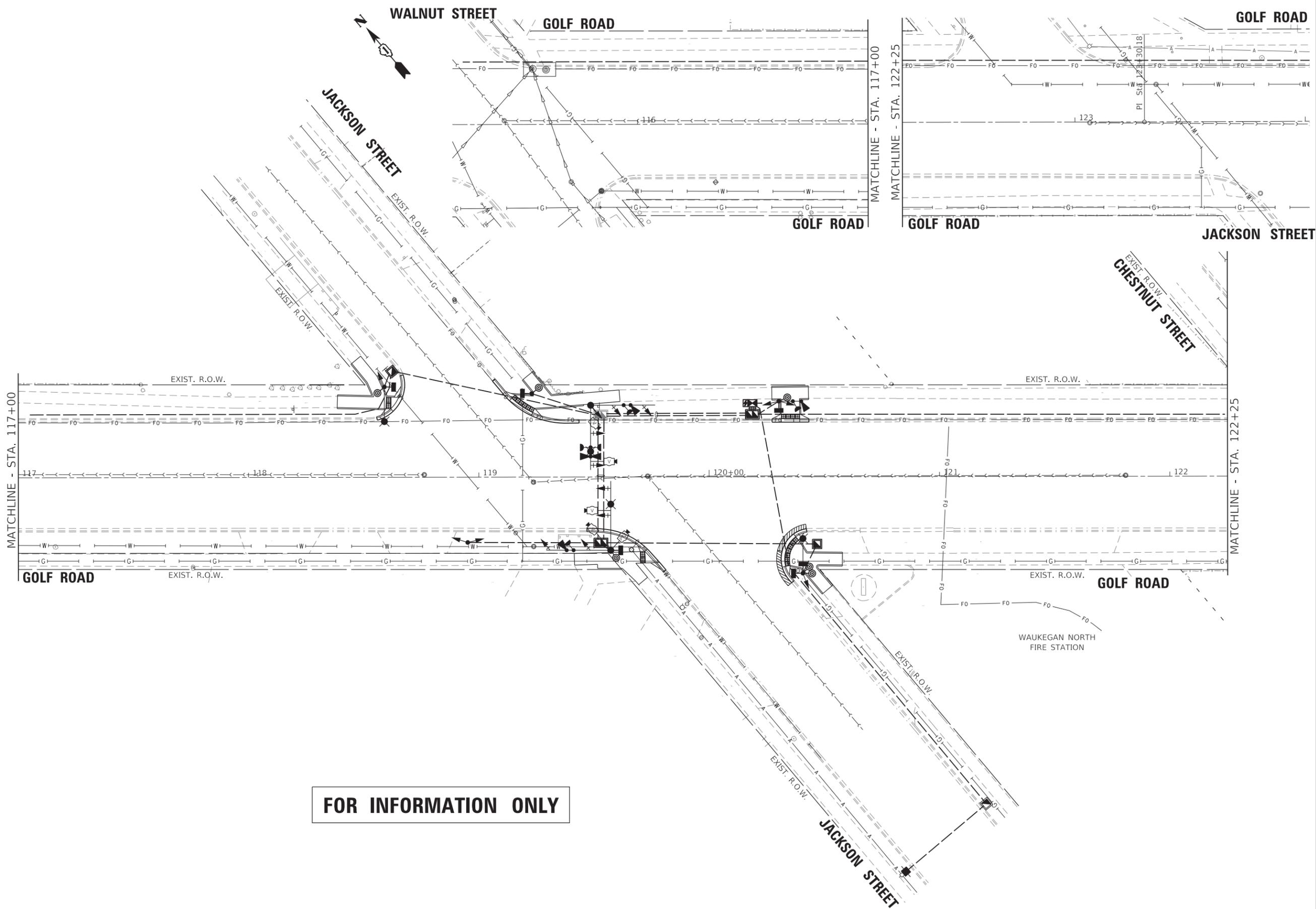
FOR INFORMATION ONLY

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING UTILITIES
GOLF ROAD AND JACKSON STREET**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	41
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				



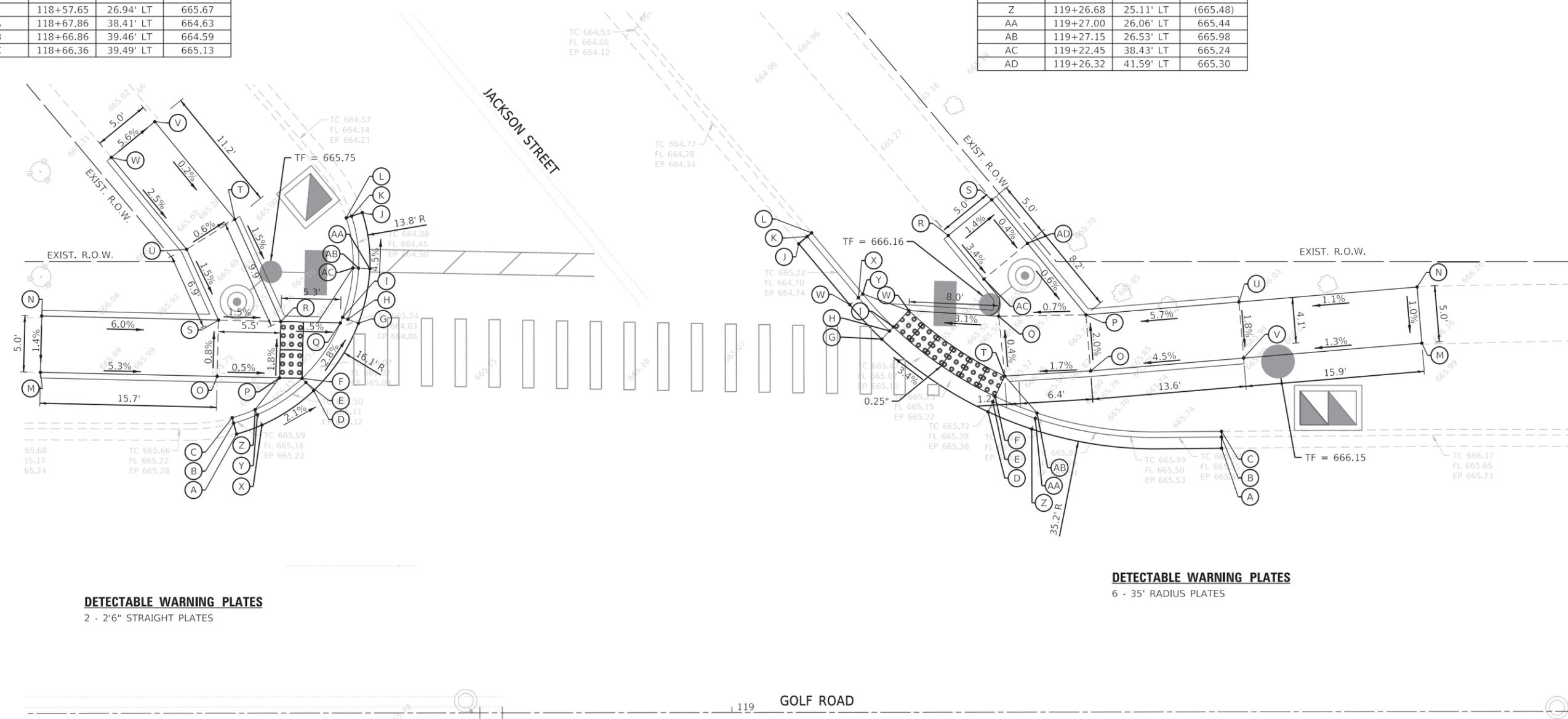


NORTHWEST CORNER OF GOLF ROAD AND JACKSON STREET

Point	Station	Offset	Elevation
A	118+56.00	24.77' LT	(665.22)
B	118+55.74	25.74' LT	665.18
C	118+55.61	26.22' LT	665.59
D	118+62.85	28.61' LT	(665.05)
E	118+62.17	29.34' LT	665.00
F	118+61.82	29.70' LT	665.04
G	118+66.83	34.58' LT	(664.85)
H	118+65.90	34.93' LT	664.80
I	118+65.43	35.11' LT	664.84
J	118+67.19	44.40' LT	(664.40)
K	118+66.24	44.09' LT	664.34
L	118+65.77	43.93' LT	664.84
M	118+38.56	30.27' LT	(665.90)
N	118+38.69	35.27' LT	(665.97)
O	118+54.28	29.89' LT	665.07
P	118+59.82	29.75' LT	665.04
Q	118+65.23	34.62' LT	664.87
R	118+59.94	34.75' LT	664.95
S	118+54.40	34.88' LT	665.03
T	118+55.87	43.82' LT	665.10
U	118+51.58	41.16' LT	665.13
V	118+48.76	52.49' LT	(665.12)
W	118+44.89	49.33' LT	(665.40)
X	118+58.25	25.56' LT	(665.17)
Y	118+57.85	26.48' LT	665.13
Z	118+57.65	26.94' LT	665.67
AA	118+67.86	38.41' LT	664.63
AB	118+66.86	39.46' LT	664.59
AC	118+66.36	39.49' LT	665.13

NORTHEAST CORNER OF GOLF ROAD AND JACKSON STREET

Point	Station	Offset	Elevation
A	119+43.56	23.39' LT	(665.60)
B	119+43.55	24.39' LT	665.54
C	119+43.55	24.89' LT	666.04
D	119+22.80	26.65' LT	(665.23)
E	119+23.22	27.56' LT	665.19
F	119+23.43	28.01' LT	665.22
G	119+13.36	33.11' LT	(664.96)
H	119+14.05	33.83' LT	664.91
I	119+14.40	34.19' LT	664.96
J	119+05.99	41.59' LT	(664.65)
K	119+06.76	42.23' LT	664.59
L	119+07.14	42.55' LT	665.09
M	119+61.37	32.69' LT	(666.15)
N	119+60.96	37.67' LT	(666.20)
O	119+31.92	30.26' LT	665.33
P	119+31.51	35.24' LT	665.25
Q	119+23.75	35.13' LT	665.20
R	119+19.29	40.30' LT	(665.41)
S	119+23.16	45.46' LT	(665.32)
T	119+15.77	35.65' LT	665.22
U	119+45.12	36.37' LT	664.97
V	119+45.53	36.38' LT	665.94
W	119+10.52	36.17' LT	(664.82)
X	119+11.29	37.80' LT	664.76
Y	119+11.68	37.12' LT	665.26
Z	119+26.68	25.11' LT	(665.48)
AA	119+27.00	26.06' LT	665.44
AB	119+27.15	26.53' LT	665.98
AC	119+22.45	38.43' LT	665.24
AD	119+26.32	41.59' LT	665.30



DETECTABLE WARNING PLATES
2 - 2'6" STRAIGHT PLATES

DETECTABLE WARNING PLATES
6 - 35' RADIUS PLATES

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 42

FILE NAME = Golf@Jackson-ADA.dgn
4572.800
Sheet 1

USER NAME = zwallsten
PLOT SCALE = 1:5
PLOT DATE = 2/7/2020

DESIGNED - JRD
DRAWN - ZCW
CHECKED - DPB
DATE - 1/10/2020

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ADA GRADING DETAILS
GOLF ROAD AND JACKSON STREET**
SCALE: 1"=5'
SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	42
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				

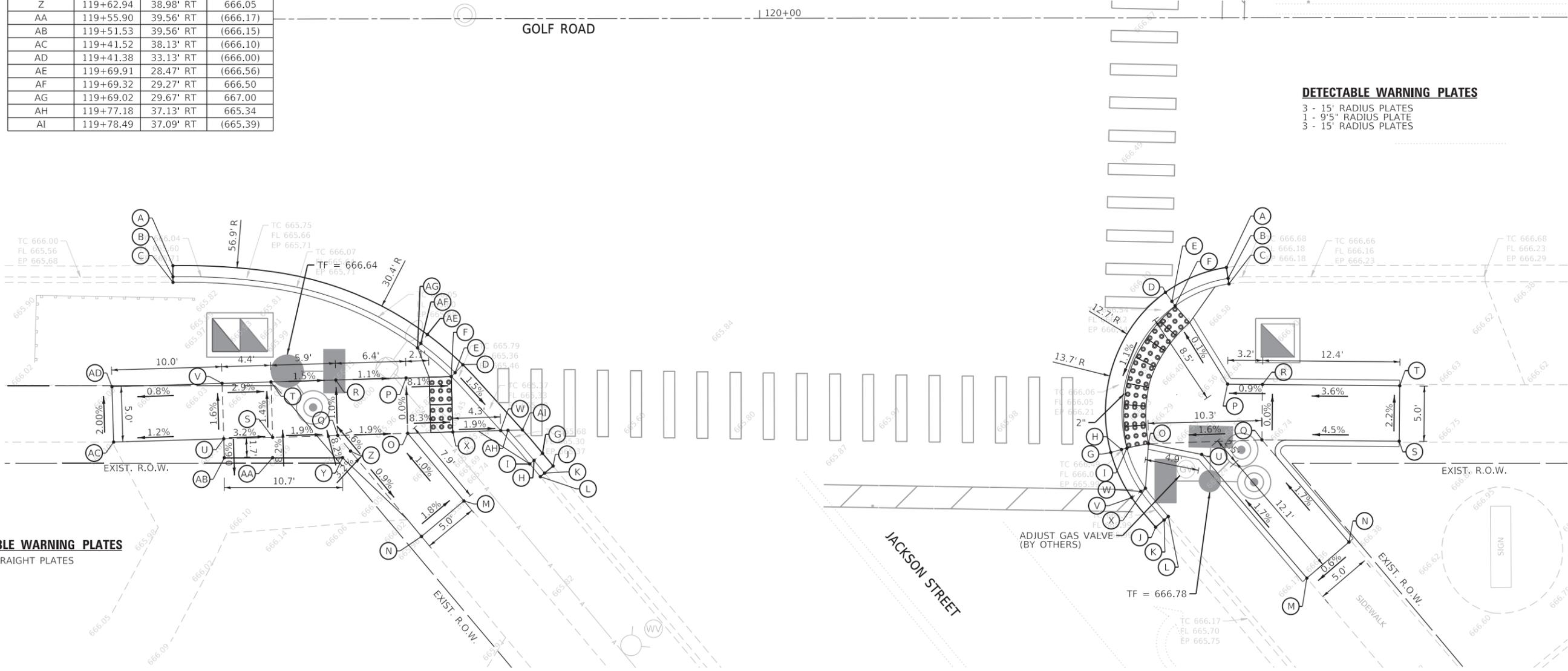


SOUTHWEST CORNER OF
GOLF ROAD AND JACKSON STREET

Point	Station	Offset	Elevation
A	119+46.90	22.23' RT	(665.70)
B	119+46.91	23.23' RT	(665.64)
C	119+46.91	23.73' RT	(666.14)
D	119+73.11	31.20' RT	(665.47)
E	119+72.41	31.91' RT	665.42
F	119+72.06	32.27' RT	665.46
G	119+80.31	39.20' RT	(665.37)
H	119+79.54	39.84' RT	665.32
I	119+79.15	40.16' RT	665.36
J	119+81.26	40.35' RT	(665.35)
K	119+80.49	40.99' RT	(665.29)
L	119+80.11	41.31' RT	(665.79)
M	119+73.20	43.49' RT	(665.87)
N	119+69.35	46.69' RT	(665.96)
O	119+68.12	37.38' RT	665.79
P	119+67.98	32.38' RT	665.79
Q	119+61.77	37.56' RT	665.91
R	119+61.62	32.56' RT	665.86
S	119+55.90	37.72' RT	666.02
T	119+55.76	32.73' RT	665.95
U	119+51.48	37.85' RT	666.16
V	119+51.34	32.85' RT	666.08
W	119+76.53	37.14' RT	665.37
X	119+72.20	37.27' RT	665.45
Y	119+62.23	39.57' RT	(666.08)
Z	119+62.94	38.98' RT	666.05
AA	119+55.90	39.56' RT	(666.17)
AB	119+51.53	39.56' RT	(666.15)
AC	119+41.52	38.13' RT	(666.10)
AD	119+41.38	33.13' RT	(666.00)
AE	119+69.91	28.47' RT	(666.56)
AF	119+69.32	29.27' RT	666.50
AG	119+69.02	29.67' RT	667.00
AH	119+77.18	37.13' RT	665.34
AI	119+78.49	37.09' RT	(665.39)

SOUTHEAST CORNER OF
GOLF ROAD AND JACKSON STREET

Point	Station	Offset	Elevation
A	120+42.18	22.52' RT	(666.18)
B	120+42.33	23.51' RT	(666.18)
C	120+42.40	24.00' RT	(666.68)
D	120+36.66	24.76' RT	(666.16)
E	120+37.24	25.58' RT	666.11
F	120+37.53	25.98' RT	666.15
G	120+31.70	39.19' RT	(666.01)
H	120+32.67	38.93' RT	665.96
I	120+33.15	38.80' RT	666.00
J	120+35.74	45.94' RT	(665.95)
K	120+36.51	45.30' RT	(665.89)
L	120+36.89	44.97' RT	(666.39)
M	120+49.41	50.55' RT	(666.36)
N	120+53.22	47.31' RT	(666.39)
O	120+35.11	38.41' RT	666.03
P	120+42.27	33.04' RT	666.16
Q	120+45.37	38.08' RT	666.19
R	120+45.46	33.07' RT	666.19
S	120+57.78	38.22' RT	(666.75)
T	120+57.83	33.22' RT	(666.64)
U	120+39.91	39.39' RT	666.11
V	120+33.58	43.27' RT	(665.99)
W	120+34.41	42.71' RT	665.93
X	120+34.58	43.27' RT	666.43



DETECTABLE WARNING PLATES
 3 - 15' RADIUS PLATES
 1 - 9'5" RADIUS PLATE
 3 - 15' RADIUS PLATES

DETECTABLE WARNING PLATES
 2 - 2'6" STRAIGHT PLATES

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 43

FILE NAME = Golf@Jackson-ADA.dgn
 4572.800
 Sheet 2

USER NAME = zwallsten
 PLOT SCALE = 1:5
 PLOT DATE = 2/7/2020

DESIGNED - JRD
 DRAWN - ZCW
 CHECKED - DPB
 DATE - 1/10/2020

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ADA GRADING DETAILS
 GOLF ROAD AND JACKSON STREET**

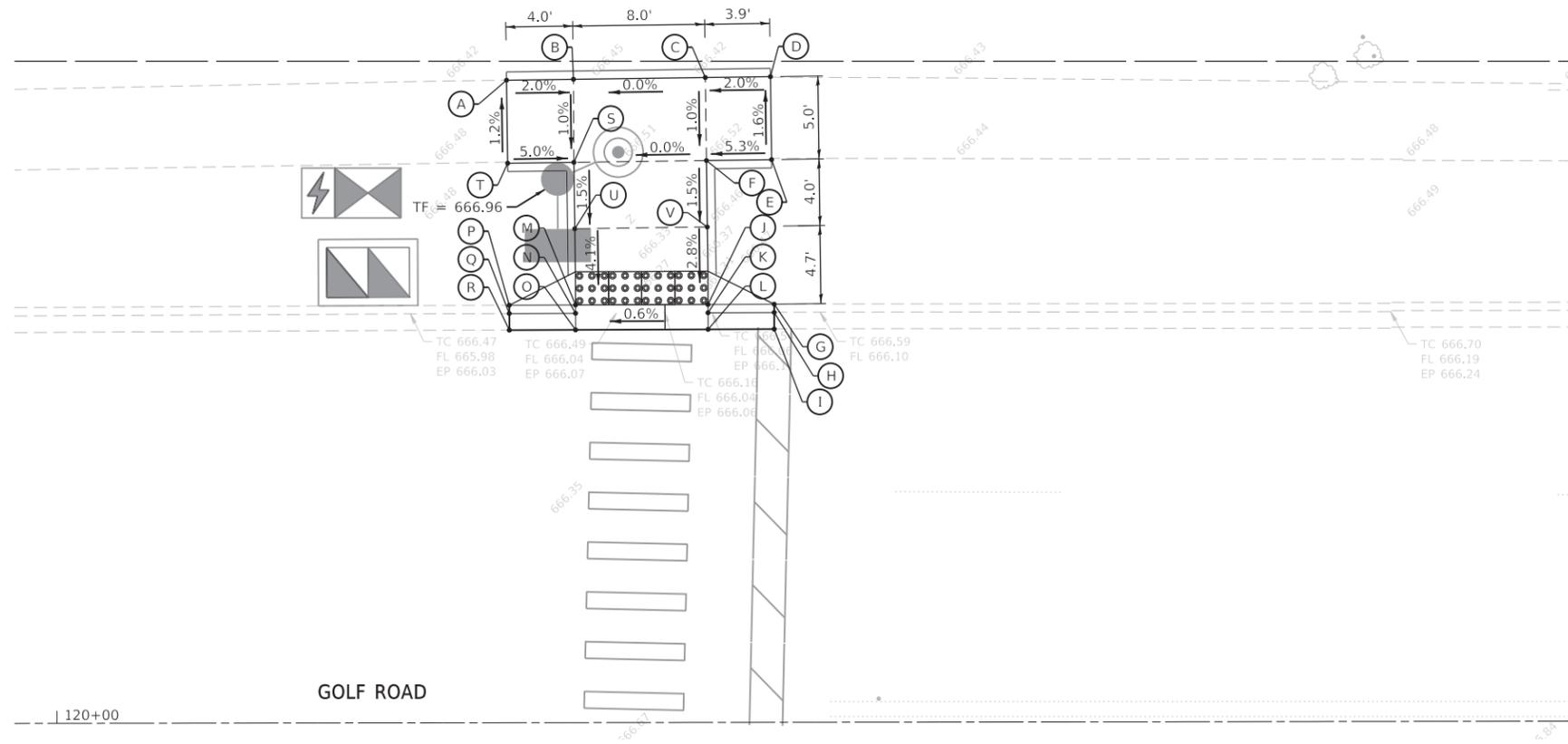
SCALE: 1"=5' SHEET 2 OF 3 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	43
CONTRACT NO. 61G47				
ILLINOIS		FED. AID PROJECT		



SOUTHEAST CORNER OF GOLF ROAD AND JACKSON STREET			
Point	Station	Offset	Elevation
A	120+27.21	38.69 LT	(666.43)
B	120+31.25	38.74' LT	666.37
C	120+39.21	38.84' LT	666.37
D	120+43.14	38.89 LT	(666.42)
E	120+43.20	33.89' LT	(666.50)
F	120+39.27	33.84' LT	666.29
G	120+43.35	25.18' LT	(666.57)
H	120+43.35	24.68' LT	(666.07)
I	120+43.35	23.68 LT	(666.13)
J	120+39.35	25.17' LT	666.10
K	120+39.35	24.67' LT	666.06
L	120+39.36	23.67' LT	(666.11)
M	120+31.35	25.15' LT	666.05
N	120+31.35	24.65' LT	666.01
O	120+31.35	23.65' LT	(666.06)
P	120+27.35	25.14' LT	(666.49)
Q	120+27.35	24.64' LT	(665.99)
R	120+27.35	23.64' LT	(666.05)
S	120+31.27	33.74' LT	666.29
T	120+27.27	33.69' LT	(666.49)
U	120+31.32	29.74' LT	666.23
V	120+39.31	29.84' LT	666.23

DETECTABLE WARNING PLATES
4 - 2' STRAIGHT PLATES



GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 44

FILE NAME =	USER NAME = zwallsten
Golf@Jackson-ADA.dgn	
4572.800	
Sheet 3	

DESIGNED - JRD	REVISD -
DRAWN - ZCW	REVISD -
CHECKED - DPB	REVISD -
DATE - 1/10/2020	REVISD -

DESIGNED - JRD	REVISD -
DRAWN - ZCW	REVISD -
CHECKED - DPB	REVISD -
DATE - 1/10/2020	REVISD -

DESIGNED - JRD	REVISD -
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CHECKED - DPB	REVISD -
DATE - 1/10/2020	REVISD -

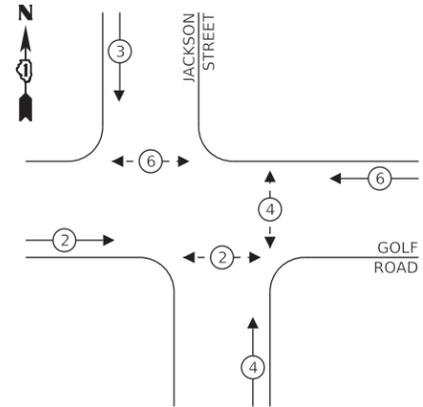
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ADA GRADING DETAILS
GOLF ROAD AND JACKSON STREET**

SCALE: 1"=5' SHEET 3 OF 3 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	44
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				

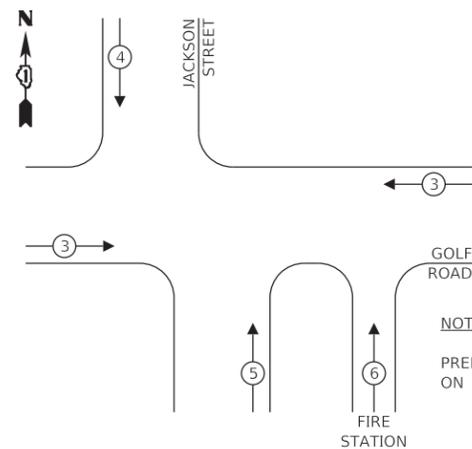
PROPOSED CONTROLLER SEQUENCE



LEGEND:

- ← ⊙ ← PROTECTED PHASE
- ← ⊙ - - ⊙ ← PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ⊙ OL OVERLAP

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



NOTE:
PREEMPT 6 SHALL DWELL ON PHASES 2 AND 6.

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

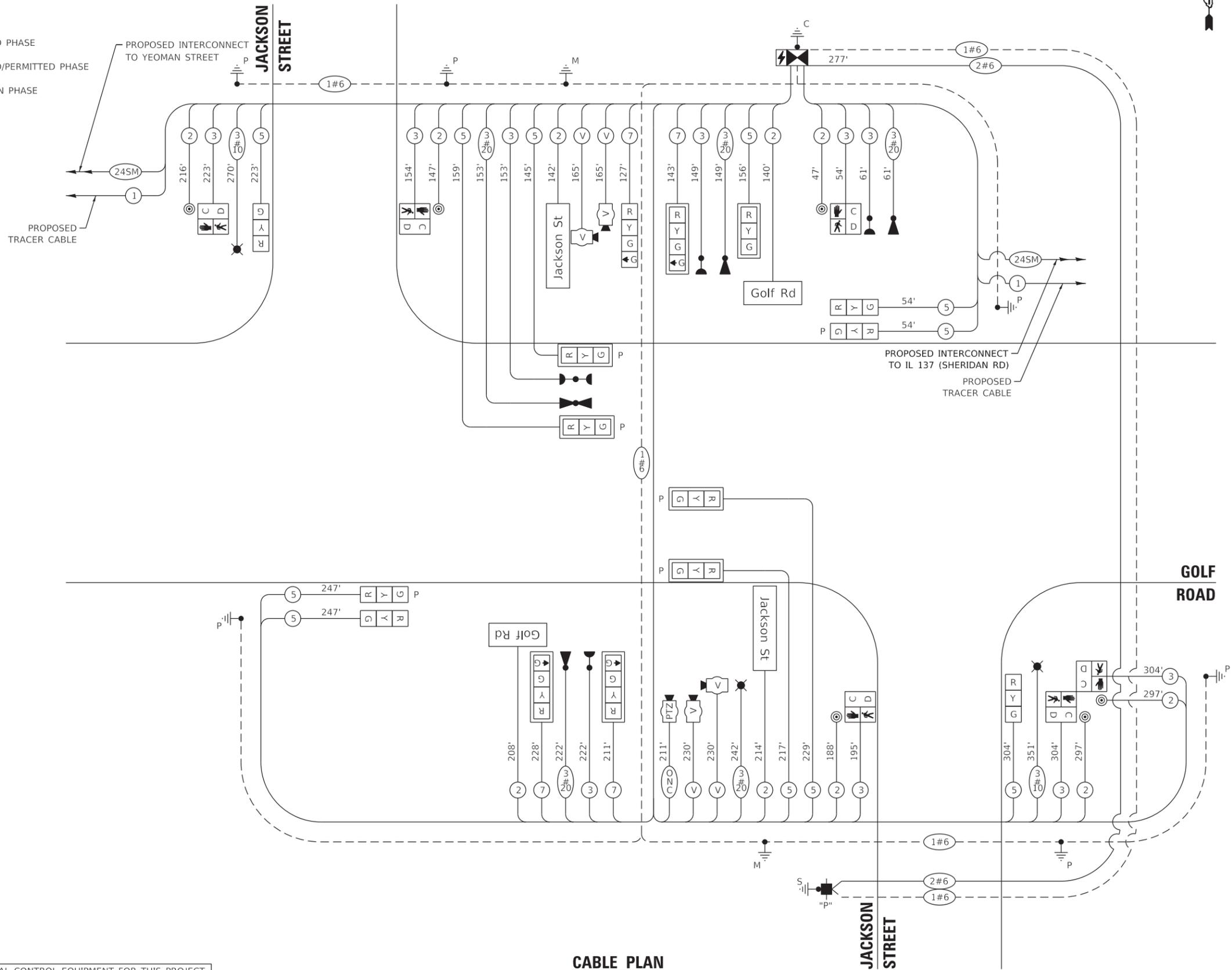
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	15	11	50	82.5
(YELLOW)	15	20	5	15.0
(GREEN)	19	12	45	102.6
PROT-PERM ARROW	0	10	10	-
PED. SIGNAL	6	20	100	120.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	4	120	50	240.0
LUMINAIRE	2	250	50	250.0
TOTAL =				1,085.1

ENERGY COSTS TO:

CITY OF WAUKEGAN
100 N. MARTIN LUTHER KING JR. AVENUE
WAUKEGAN, IL 60085

ENERGY SUPPLY: CONTACT: TERRI BLECK
PHONE: (847) 816-5239
COMPANY: COMED - LIBERTYVILLE
ACCOUNT NUMBER: -

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "NTCIP" COMPLIANT (LATEST VERSION).



CABLE PLAN
(NOT TO SCALE)

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 45

FILE NAME = Golf@Jackson-Cable-Perm.dgn
4572.800
Default

USER NAME = zwallsten
PLOT SCALE = 1:20
PLOT DATE = 2/7/2020

DESIGNED - JRD
DRAWN - ZCW
CHECKED - DPB
DATE - 1/10/2020

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
GOLF ROAD AND JACKSON STREET

SCALE: NONE SHEET OF SHEETS STA. TO STA.

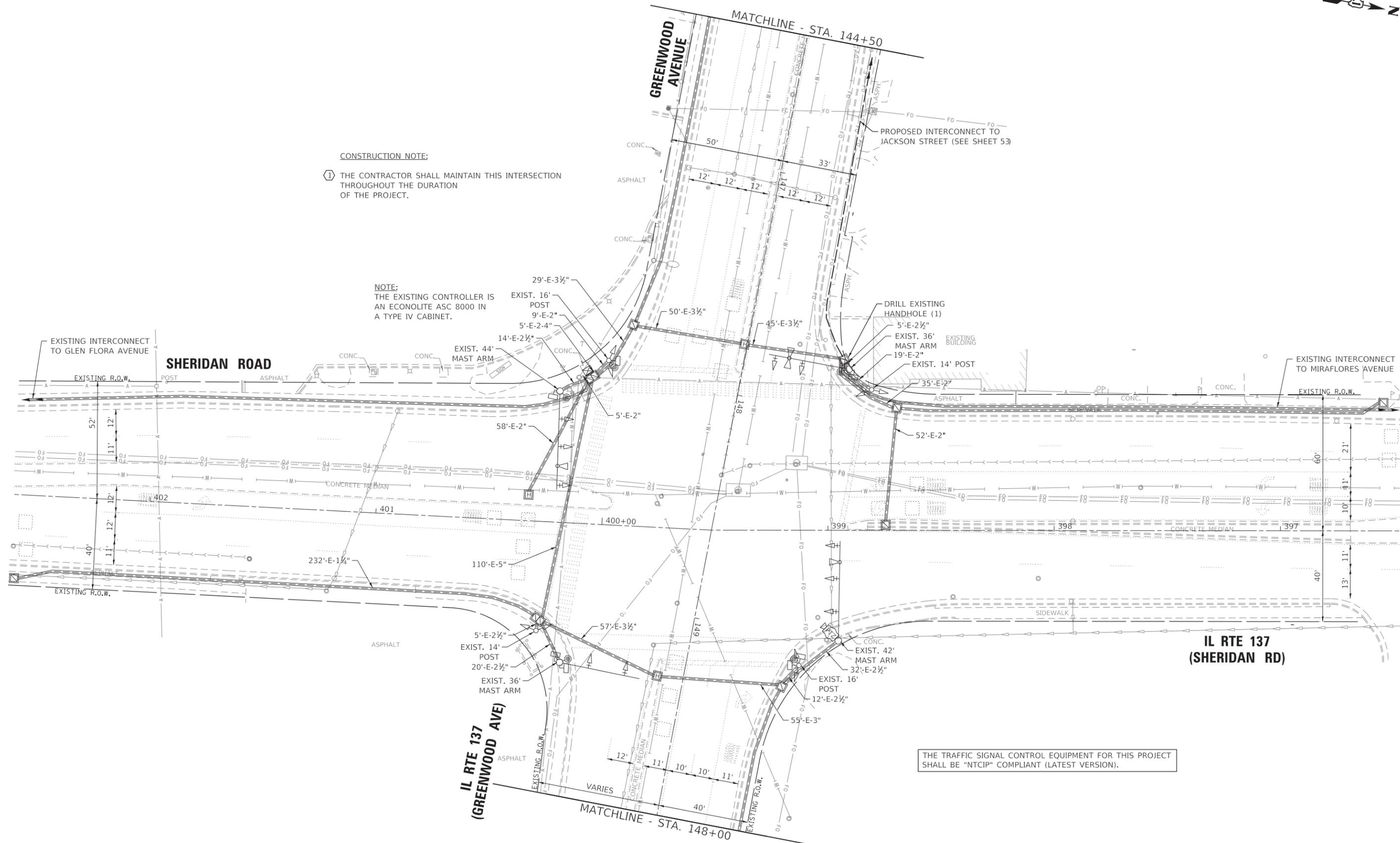
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	45
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				



CONSTRUCTION NOTE:

① THE CONTRACTOR SHALL MAINTAIN THIS INTERSECTION THROUGHOUT THE DURATION OF THE PROJECT.

NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC 8000 IN A TYPE IV CABINET.



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "NTCIP" COMPLIANT (LATEST VERSION).

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 47

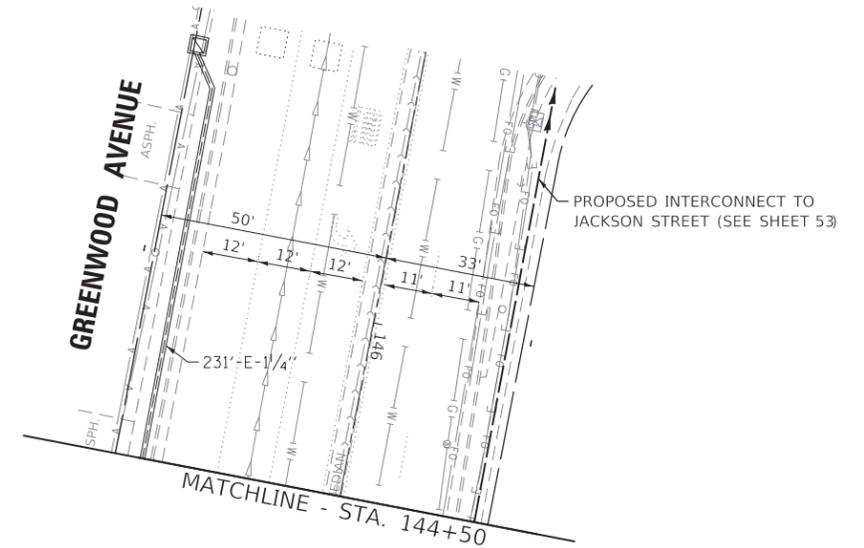
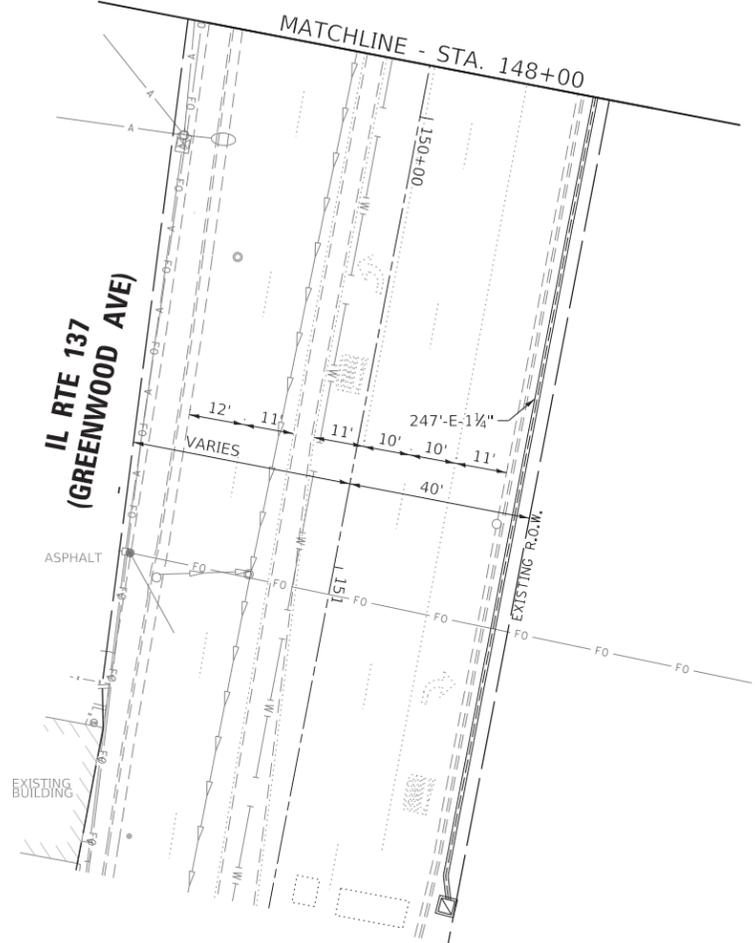
FILE NAME = Greenwood@IL_137-TS-Perm-01.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
4572.800	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
Default	PLOT DATE = 2/7/2020	CHECKED - DPB	REVISED -
		DATE - 1/10/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN -
GREENWOOD AVENUE AND IL 137 (SHERIDAN ROAD)**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	47
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "NTCIP" COMPLIANT (LATEST VERSION).

FILE NAME =	Greenwood@IL_137-TS-Perm-02.dgn
4572.800	
Default	

USER NAME =	zwallsten
PLOT SCALE =	1:20
PLOT DATE =	2/7/2020

DESIGNED -	JRD
DRAWN -	ZCW
CHECKED -	DPB
DATE -	1/10/2020

REVISED -	

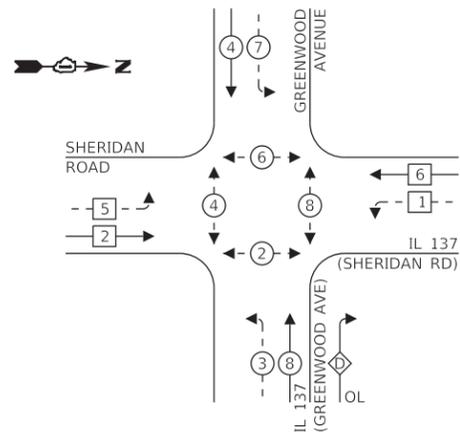
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN -
GREENWOOD AVENUE AND IL 137 (SHERIDAN ROAD)**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	48
			CONTRACT NO. 61G47	
		ILLINOIS	FED. AID PROJECT	

EXISTING CONTROLLER SEQUENCE



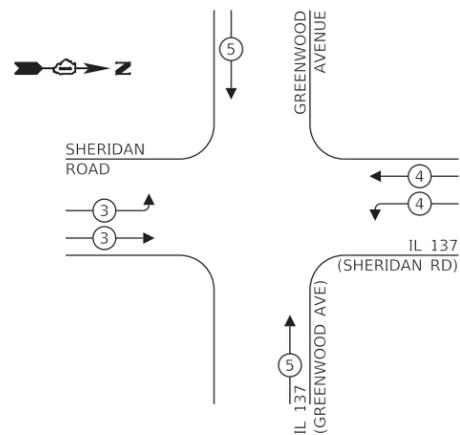
LEGEND:

- ← * → PROTECTED PHASE
- ← - * - → PROTECTED/PERMITTED PHASE
- ← * → PEDESTRIAN PHASE
- ← * OL → OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	8	1

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

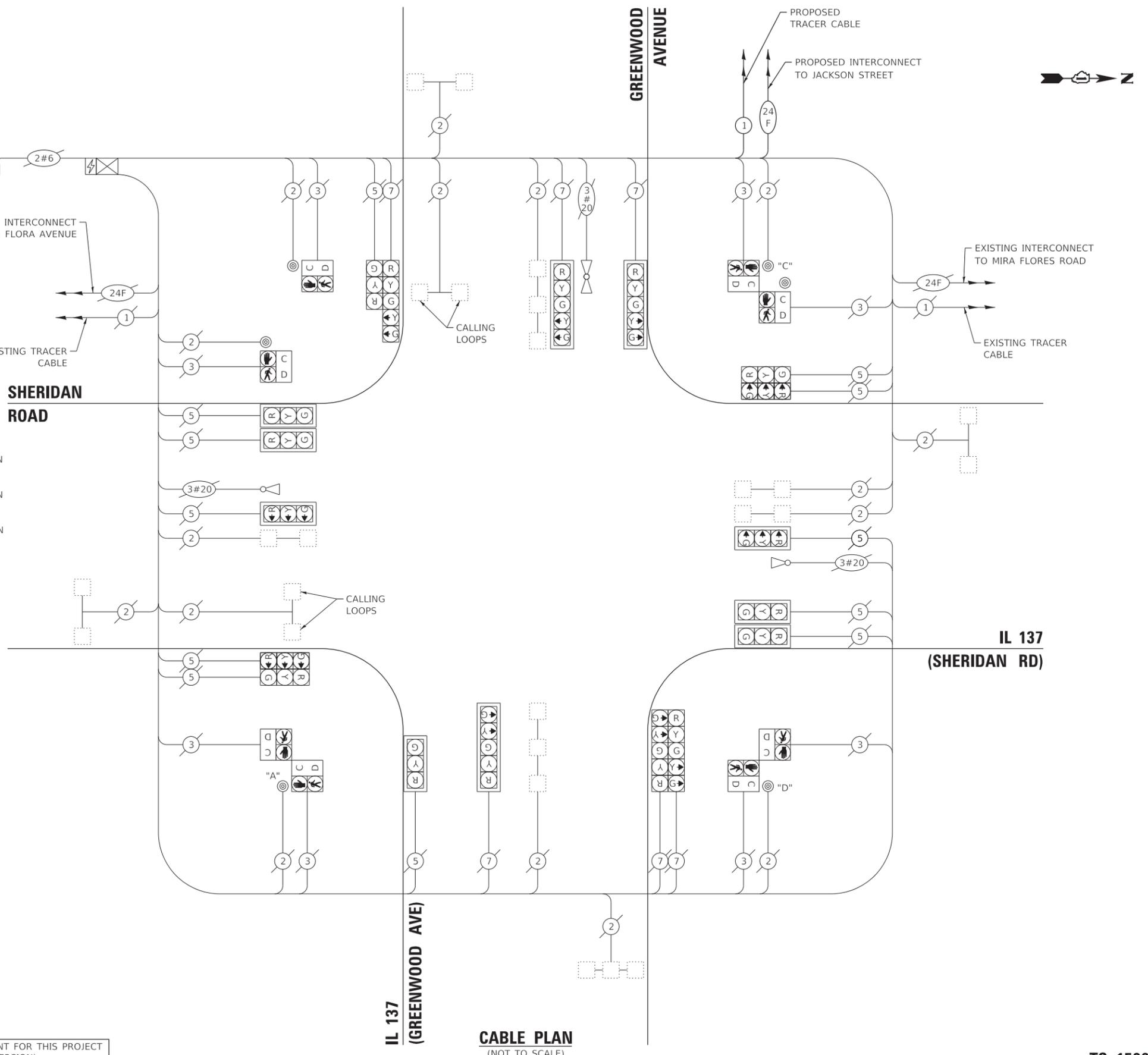


NOTE:

PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.

PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.

PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.



CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	18	11	50	99.0
(YELLOW)	18	20	5	18.0
(GREEN)	18	12	45	97.2
PROT-PERM ARROW	12	10	10	12.0
PED. SIGNAL	-	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
TOTAL =				511.2

ENERGY COSTS TO:

CITY OF WAUKEGAN
100 N. MARTIN LUTHER KING JR. AVENUE
WAUKEGAN, IL 60085

ENERGY SUPPLY: CONTACT: TERRY BLECK
PHONE: (847) 816-5239
COMPANY: COMED - LIBERTYVILLE
ACCOUNT NUMBER: -

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "NTCIP" COMPLIANT (LATEST VERSION).

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 49

FILE NAME = Greenwood@IL_137-Cable-Perm.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
4572.800	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
Default	PLOT DATE = 2/7/2020	CHECKED - DPB	REVISED -
		DATE - 1/10/2020	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE GREENWOOD AVENUE AND IL 137 (SHERIDAN RD)

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	49
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61G47	

TS 15060

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1

FILE NAME = Greenwood@IL_137-500.dgn 4572.800 Default	USER NAME = zwallsten	DESIGNED - JRD DRAWN - ZCW	REVISED -
	PLOT SCALE = 1:20	CHECKED - DPB	REVISED -
	PLOT DATE = 2/7/2020	DATE - 1/10/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES
GREENWOOD AVENUE AND IL 137 (SHERIDAN ROAD)**

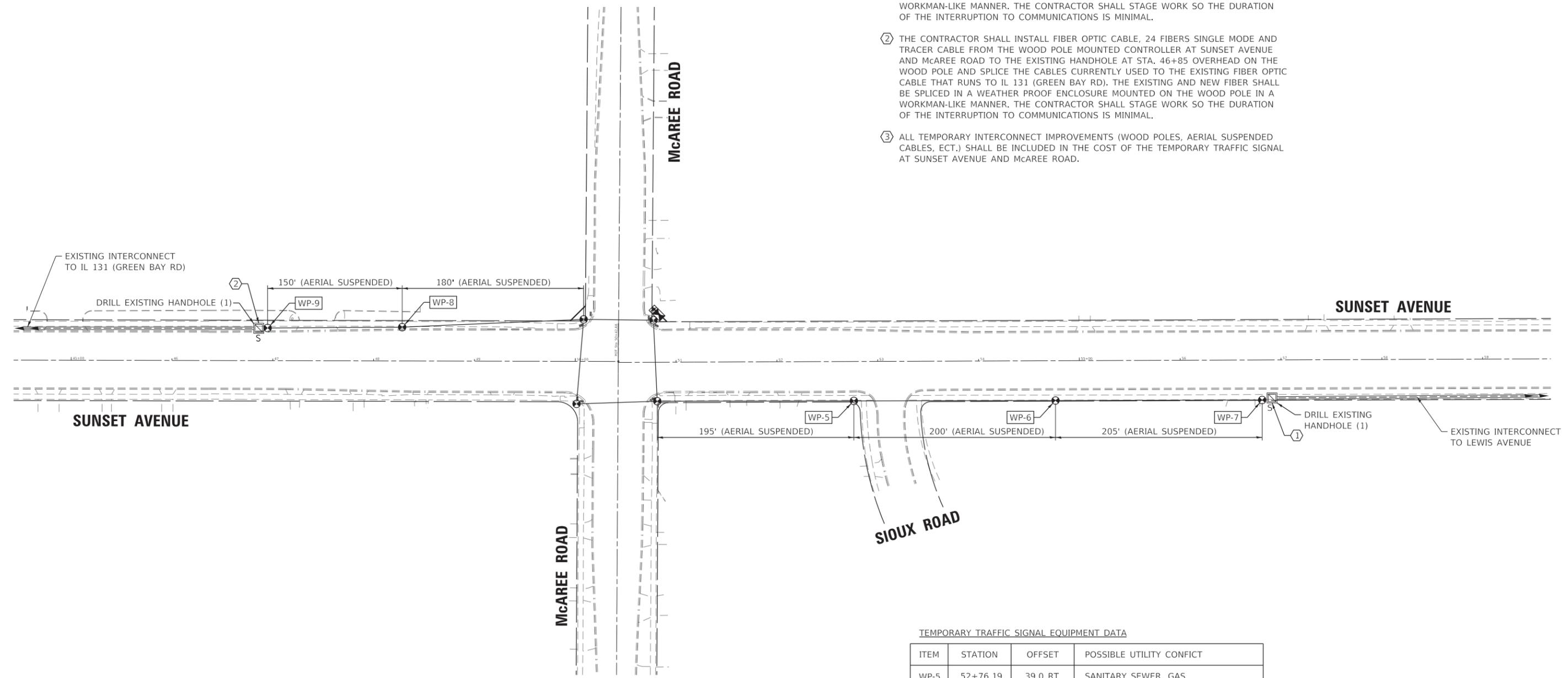
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	50
			CONTRACT NO. 61G47	
		ILLINOIS	FED. AID PROJECT	



CONSTRUCTION NOTES:

- ① THE CONTRACTOR SHALL INSTALL FIBER OPTIC CABLE, 24 FIBERS SINGLE MODE AND TRACER CABLE FROM THE WOOD POLE MOUNTED CONTROLLER AT SUNSET AVENUE AND McAREE ROAD TO THE EXISTING HANDHOLE AT STA. 56+90 OVERHEAD ON THE WOOD POLES AND SPLICE THE CABLES CURRENTLY USED TO THE EXISTING FIBER OPTIC CABLE THAT RUNS TO LEWIS AVENUE. THE EXISTING AND NEW FIBER SHALL BE SPLICED IN A WEATHER PROOF ENCLOSURE MOUNTED ON THE WOOD POLE IN A WORKMAN-LIKE MANNER. THE CONTRACTOR SHALL STAGE WORK SO THE DURATION OF THE INTERRUPTION TO COMMUNICATIONS IS MINIMAL.
- ② THE CONTRACTOR SHALL INSTALL FIBER OPTIC CABLE, 24 FIBERS SINGLE MODE AND TRACER CABLE FROM THE WOOD POLE MOUNTED CONTROLLER AT SUNSET AVENUE AND McAREE ROAD TO THE EXISTING HANDHOLE AT STA. 46+85 OVERHEAD ON THE WOOD POLE AND SPLICE THE CABLES CURRENTLY USED TO THE EXISTING FIBER OPTIC CABLE THAT RUNS TO IL 131 (GREEN BAY RD). THE EXISTING AND NEW FIBER SHALL BE SPLICED IN A WEATHER PROOF ENCLOSURE MOUNTED ON THE WOOD POLE IN A WORKMAN-LIKE MANNER. THE CONTRACTOR SHALL STAGE WORK SO THE DURATION OF THE INTERRUPTION TO COMMUNICATIONS IS MINIMAL.
- ③ ALL TEMPORARY INTERCONNECT IMPROVEMENTS (WOOD POLES, AERIAL SUSPENDED CABLES, ECT.) SHALL BE INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL AT SUNSET AVENUE AND McAREE ROAD.



TEMPORARY TRAFFIC SIGNAL EQUIPMENT DATA

ITEM	STATION	OFFSET	POSSIBLE UTILITY CONFLICT
WP-5	52+76.19	39.0 RT	SANITARY SEWER, GAS
WP-6	54+76.19	39.4 RT	STORM SEWER
WP-7	56+81.19	39.6 RT	STORM SEWER
WP-8	48+28.25	33.5 LT	FIBER OPTIC, GAS
WP-9	46+94.79	32.3 LT	FIBER OPTIC, GAS

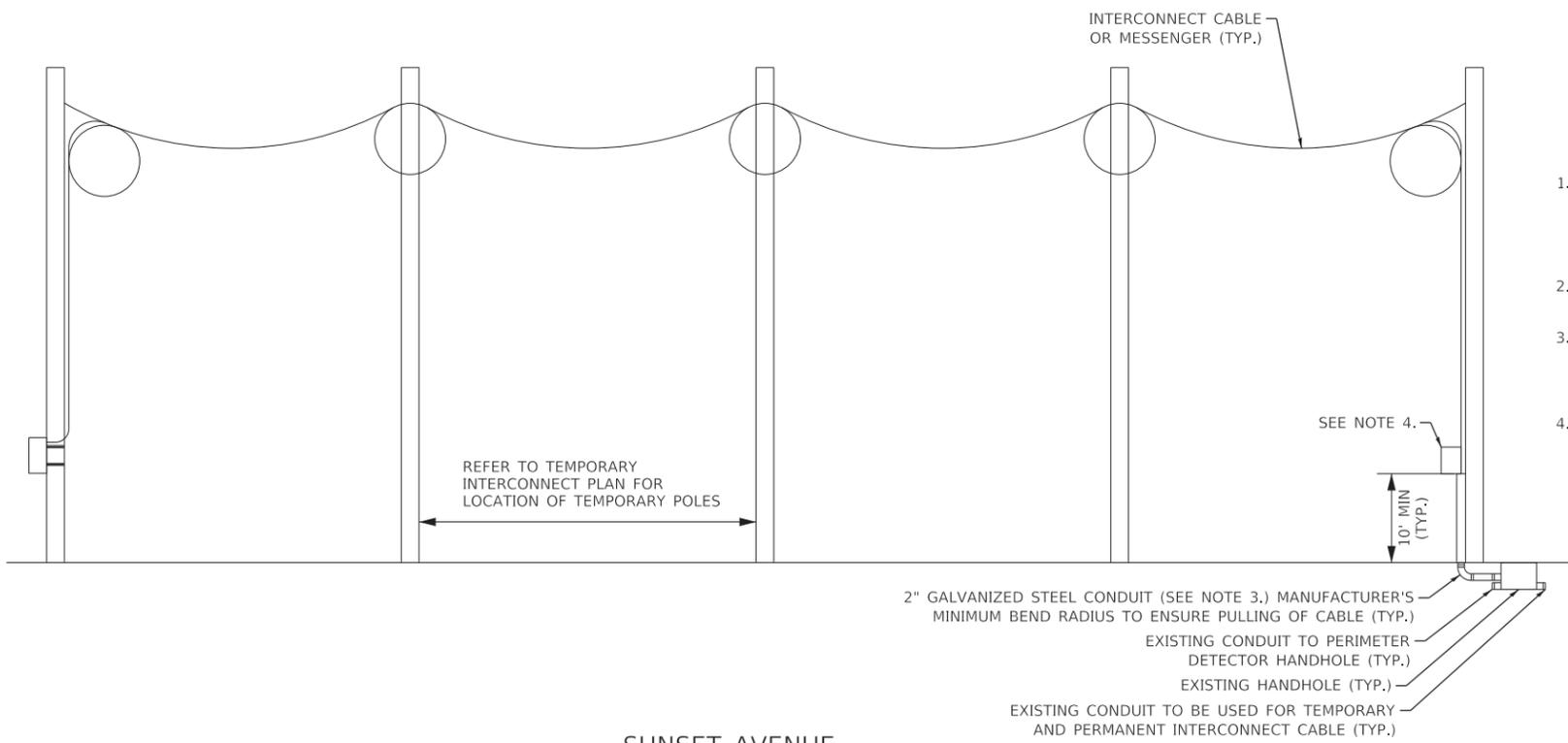
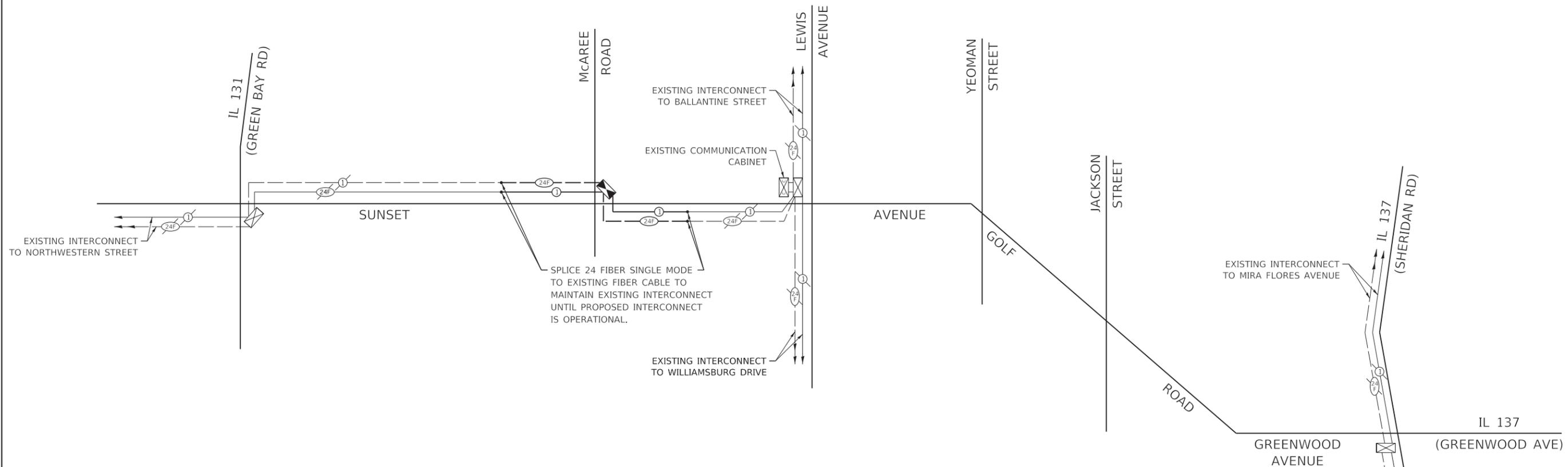
GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 51

FILE NAME = Interconnect-Temp.dgn 4572.800 Default	USER NAME = zwallsten	DESIGNED - JRD DRAWN - ZCW CHECKED - DPB DATE - 1/10/2020	REVISED - REVISED - REVISED - REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TEMPORARY INTERCONNECT PLAN SUNSET AVENUE /GOLF ROAD /GREENWOOD AVENUE			
SCALE: 1"=50'	SHEET	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	51
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61G47	



- CONSTRUCTION NOTES:**
1. TRANSFER OF EXISTING TO TEMPORARY INTERCONNECT CABLE AND INTERIM INTERCONNECT CABLE TO PROPOSED MUST BE COMPLETED IN ONE (1) WORKING DAY DURING NON-PEAK HOURS OR AS DIRECTED BY THE ENGINEER.
 2. AFTER PROPOSED INTERCONNECT IS TURNED ON, THE EXISTING INTERCONNECT CABLE SHALL BE REMOVED.
 3. CONTRACTOR MUST NOTIFY LCDOT SIGNAL SYSTEM ENGINEERS A MINIMUM OF SEVEN (7) WORKING DAYS PRIOR TO THE START OF ANY WORK ON THE INTERCONNECT SIGNAL SYSTEM.
 4. THE TEMPORARY FIBER SHALL BE SPLICED IN A WEATHERPROOF ENCLOSURE MOUNTED ON THE WOOD POLE IN A WORKMAN-LIKE MANNER. THE CONTRACTOR SHALL STAGE WORK SO THE DURATION OF INTERRUPTION TO COMMUNICATIONS IS MINIMAL.

**SUNSET AVENUE
AERIALY SUPPORTED INTERCONNECT CABLE**

(NOT TO SCALE)

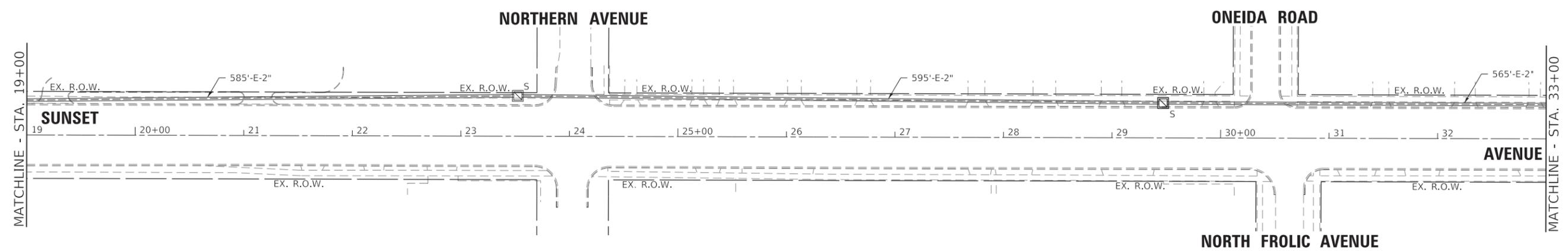
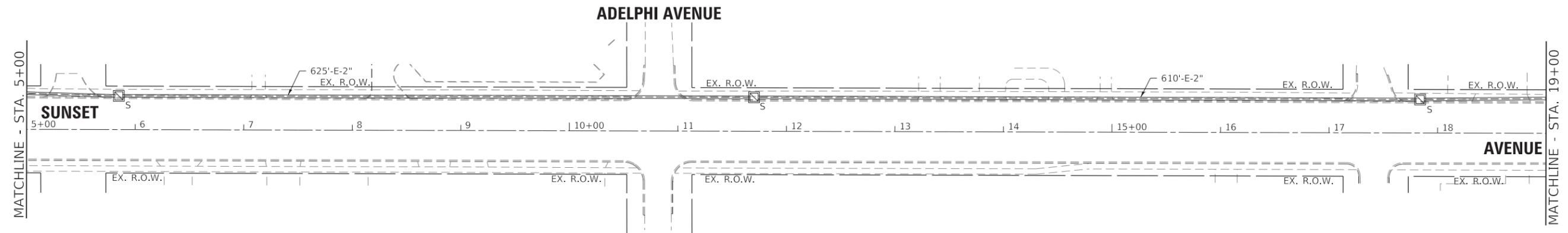
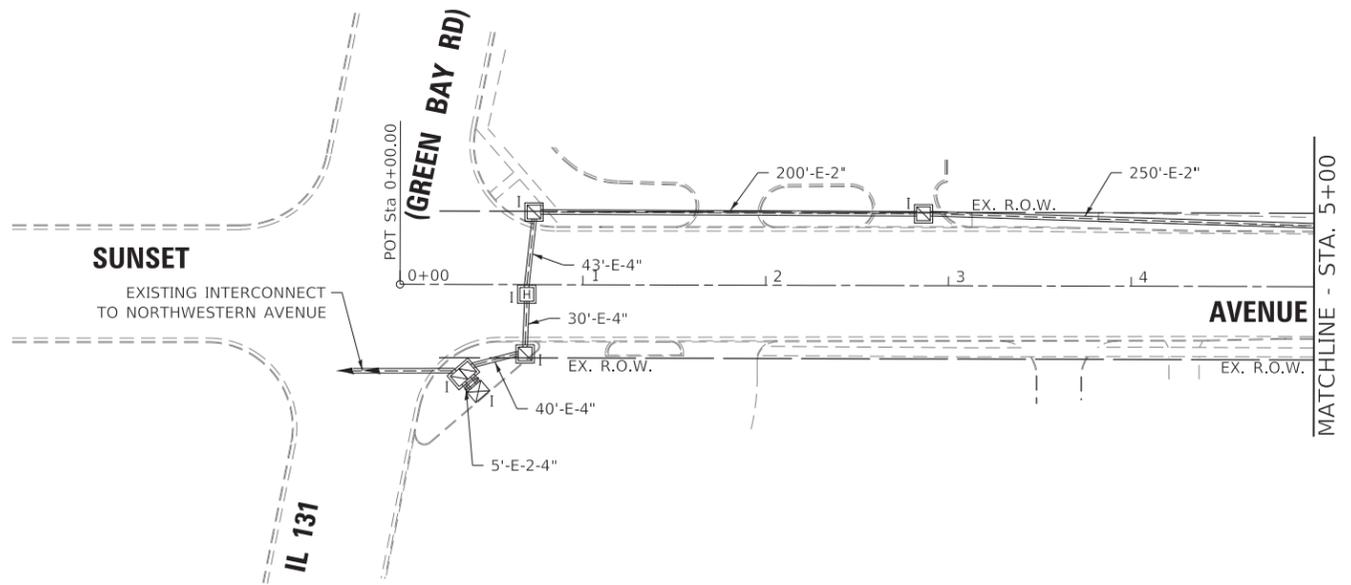
GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 52

FILE NAME = Interconnect-Temp-Schematic.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
4572.800	PLOT SCALE = 1:50	DRAWN - ZCW	REVISED -
Default	PLOT DATE = 2/7/2020	CHECKED - DPB	REVISED -
		DATE - 1/10/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TEMPORARY INTERCONNECT SCHEMATIC SUNSET AVENUE /GOLF ROAD /GREENWOOD AVENUE IL 131 (GREEN BAY RD) TO LEWIS AVENUE			
SCALE: NONE	SHEET	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	52
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				



GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 53

FILE NAME =	Interconnect-Perm.dgn
4572.800	
1 OF 4	

USER NAME =	zwallsten
PLOT SCALE =	1:50
PLOT DATE =	2/7/2020

DESIGNED -	JRD
DRAWN -	ZCW
CHECKED -	DPB
DATE -	1/10/2020

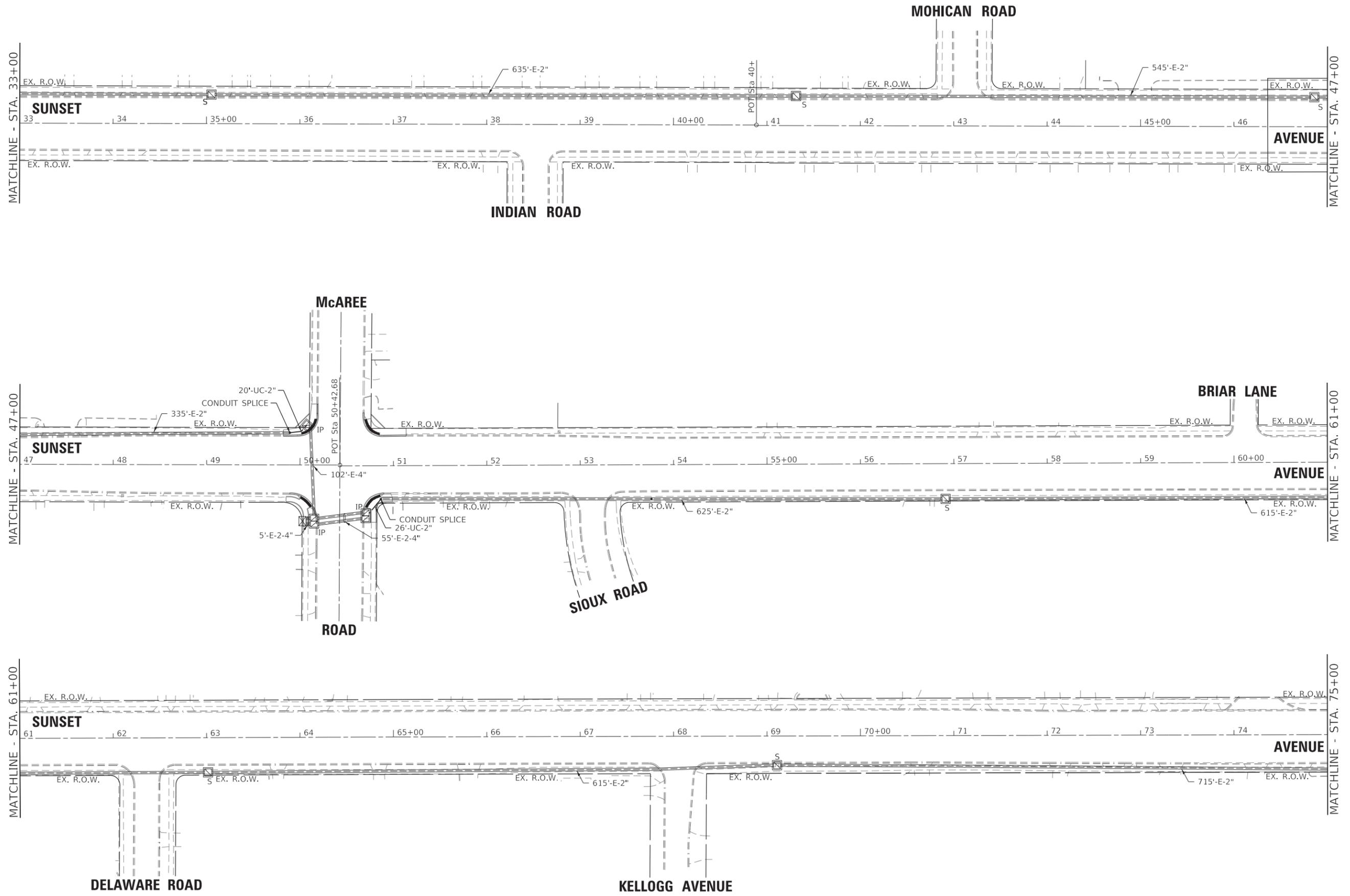
REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT PLAN - SUNSET AVENUE / GOLF ROAD /
GREENWOOD AVENUE FROM IL 131 (GREEN BAY RD)
TO IL 137 (SHERIDAN RD) (SHEET 1 OF 4)**

SCALE: 1"=50' SHEET 1 OF 4 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	53
			CONTRACT NO. 61G47	
		ILLINOIS	FED. AID PROJECT	



GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 54

FILE NAME = Interconnect-Perm.dgn
 4572.800
 2 OF 4

USER NAME = zwallsten
 PLOT SCALE = 1:50
 PLOT DATE = 2/7/2020

DESIGNED - JRD
 DRAWN - ZCW
 CHECKED - DPB
 DATE - 1/10/2020

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT PLAN - SUNSET AVENUE /GOLF ROAD /
 GREENWOOD AVENUE FROM IL 131 (GREEN BAY RD)
 TO IL 137 (SHERIDAN RD) (SHEET 2 OF 4)**

SCALE: 1"=50' SHEET 2 OF 4 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	54
CONTRACT NO. 61G47				
ILLINOIS		FED. AID PROJECT		

FILE NAME = Interconnect-Perm.dgn
4572.800
3 OF 4

USER NAME = zwallsten
PLOT SCALE = 1:50
PLOT DATE = 2/7/2020

DESIGNED - JRD
DRAWN - ZCW
CHECKED - DPB
DATE - 1/10/2020

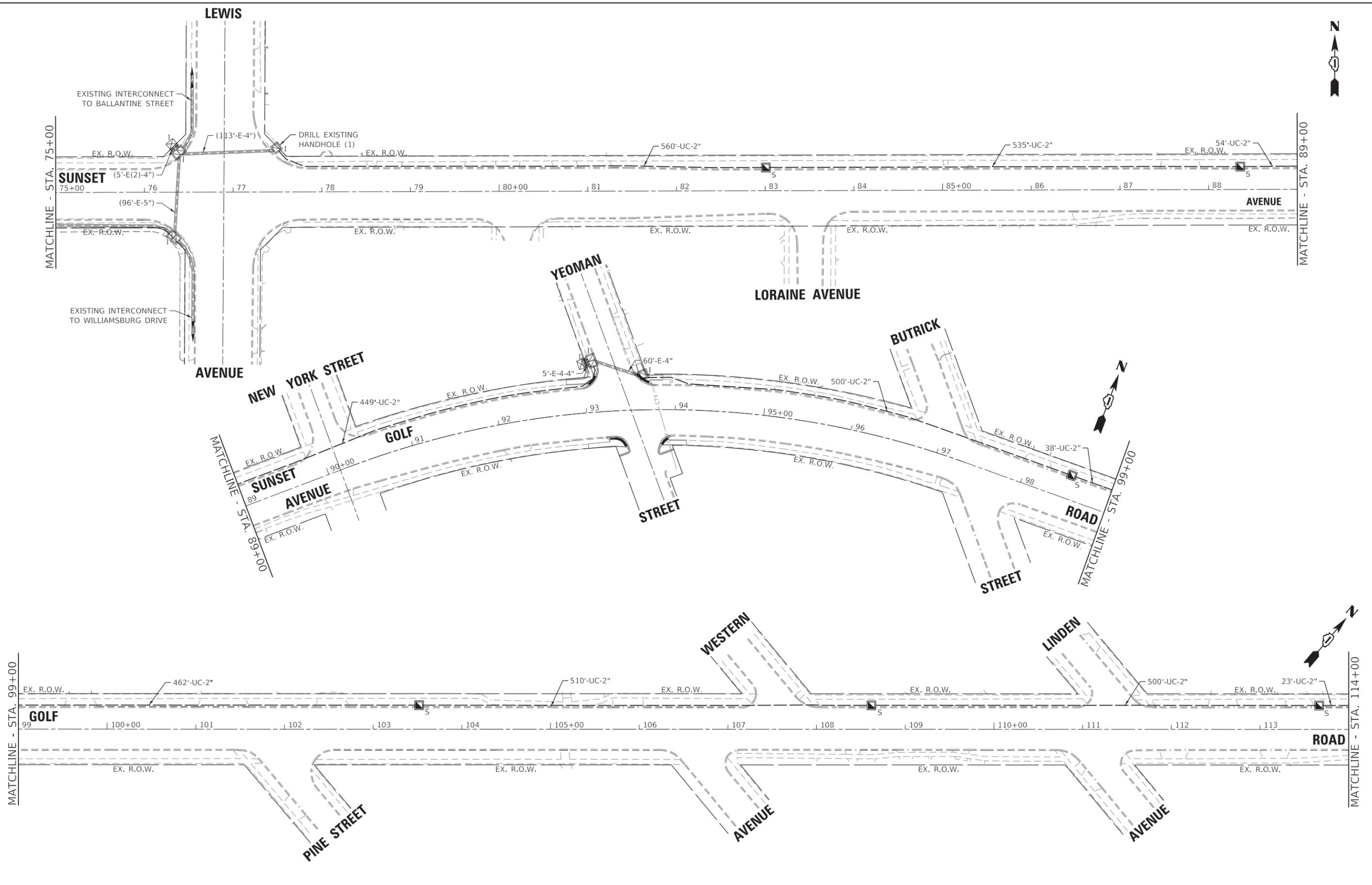
REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT PLAN - SUNSET AVENUE / GOLF ROAD /
GREENWOOD AVENUE FROM IL 131 (GREEN BAY RD)
TO IL 137 (SHERIDAN RD) (SHEET 3 OF 4)**

SCALE: 1"=50' SHEET 3 OF 4 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	55
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61G47	



FILE NAME =	Interconnect-Perm.dgn
4572.800	
4 OF 4	

USER NAME =	zwallsten
PLOT SCALE =	1:50
PLOT DATE =	2/7/2020

DESIGNED -	JRD
DRAWN -	ZCW
CHECKED -	DPB
DATE -	1/10/2020

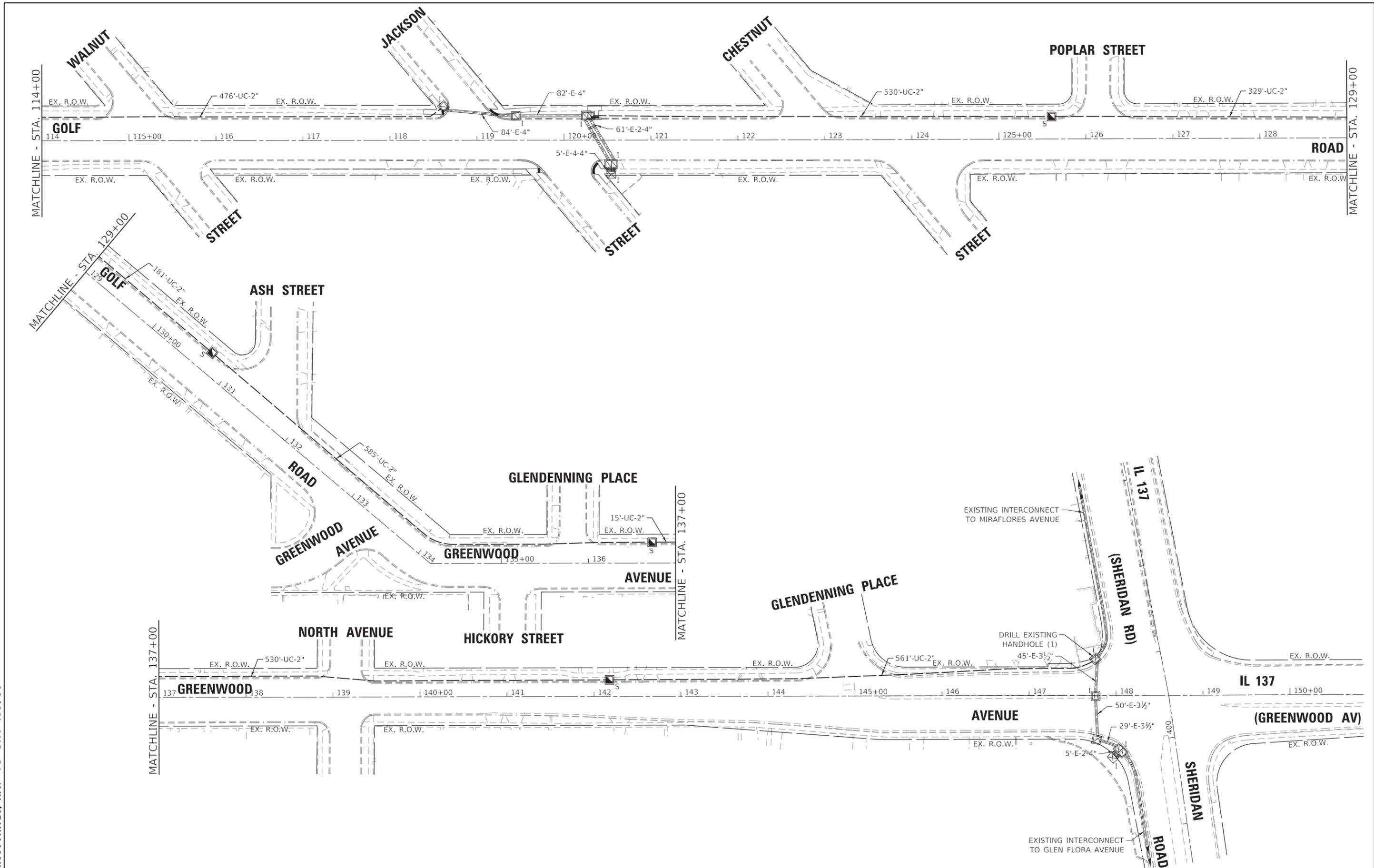
REVISED -	

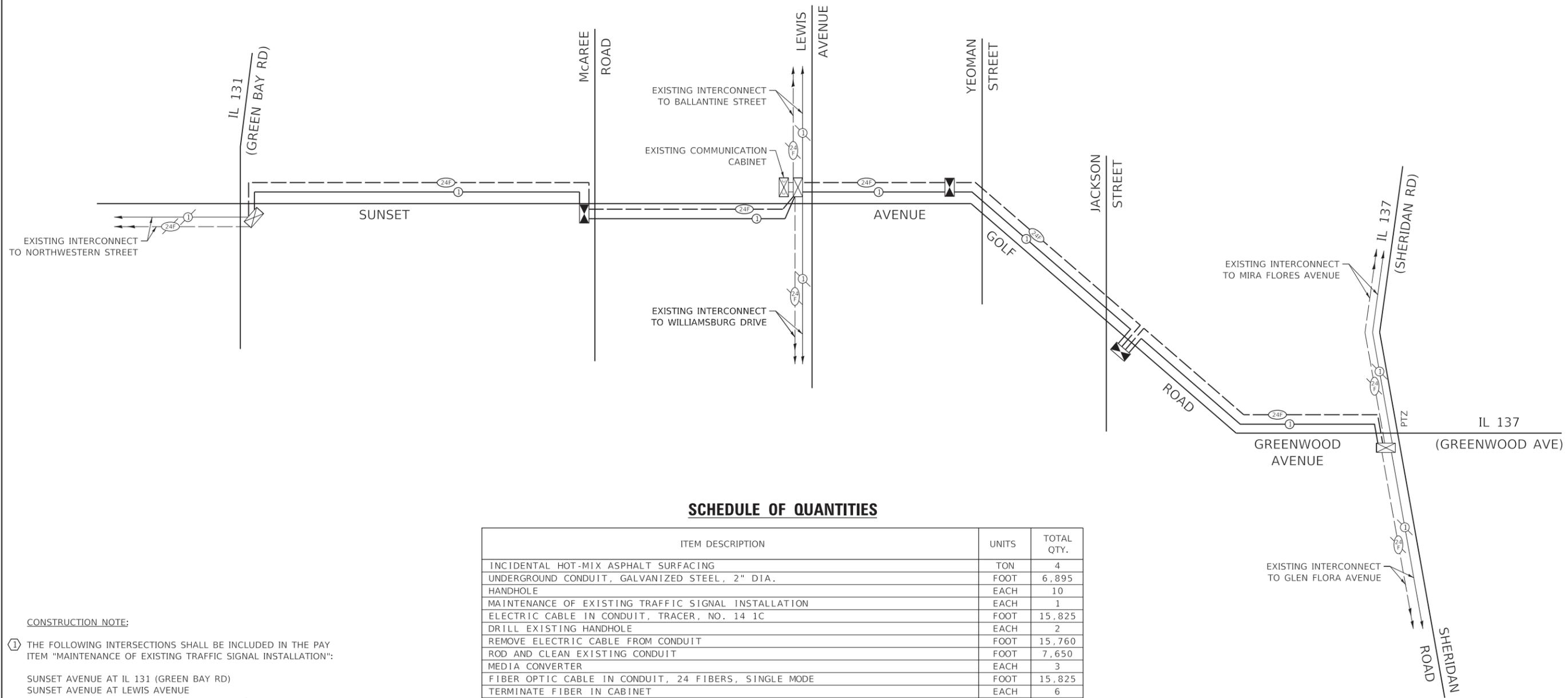
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT PLAN - SUNSET AVENUE /GOLF ROAD /
GREENWOOD AVENUE FROM IL 131 (GREEN BAY RD)
TO IL 137 (SHERIDAN RD) (SHEET 4 OF 4)**

SCALE: 1"=50' SHEET 4 OF 4 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	56
CONTRACT NO. 61G47				
ILLINOIS FED. AID PROJECT				





SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	4
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	6,895
HANDHOLE	EACH	10
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	15,825
DRILL EXISTING HANDHOLE	EACH	2
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	15,760
ROD AND CLEAN EXISTING CONDUIT	FOOT	7,650
MEDIA CONVERTER	EACH	3
FIBER OPTIC CABLE IN CONDUIT, 24 FIBERS, SINGLE MODE	FOOT	15,825
TERMINATE FIBER IN CABINET	EACH	6
TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	0.40
CONDUIT SPLICE	EACH	2
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

CONSTRUCTION NOTE:

- ① THE FOLLOWING INTERSECTIONS SHALL BE INCLUDED IN THE PAY ITEM "MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION":
 SUNSET AVENUE AT IL 131 (GREEN BAY RD)
 SUNSET AVENUE AT LEWIS AVENUE
 GREENWOOD AVENUE AT IL 137 (SHERIDAN RD)
- ② THE MAINTENANCE OF THE COMMUNICATIONS CABINET AT SUNSET AVENUE AND LEWIS AVENUE SHALL ALSO BE INCLUDED IN THE MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION PAY ITEM.
- ③ THE PAY ITEM "OPTIMIZE TRAFFIC SIGNAL SYSTEM" SHALL INCLUDE THE FOLLOWING INTERSECTIONS:
 SUNSET AVENUE AT IL 131 (GREEN BAY RD)
 SUNSET AVENUE AT McAREE ROAD
 SUNSET AVENUE AT LEWIS AVENUE
 GOLF ROAD AT YEOMAN STREET
 GOLF ROAD AT JACKSON STREET
 GREENWOOD AVENUE AT IL 137 (SHERIDAN RD)
- ④ AFTER THE PROPOSED INTERCONNECT HAS BEEN TURNED ON, THE CONTRACTOR SHALL REMOVE THE EXISTING FIBER OPTIC AND TRACER CABLES BETWEEN IL 131 (GREEN BAY RD) AND LEWIS AVENUE. ALL WORK REQUIRED TO REMOVE THE CABLES TO THE SATISFACTION OF THE LCDOT ENGINEER SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR "REMOVE ELECTRIC CABLE FROM CONDUIT".

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 57

FILE NAME = Interconnect-Schematic.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
4572.800	PLOT SCALE = 1:50	DRAWN - ZCW	REVISED -
Default	PLOT DATE = 2/7/2020	CHECKED - DPB	REVISED -
		DATE - 1/10/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

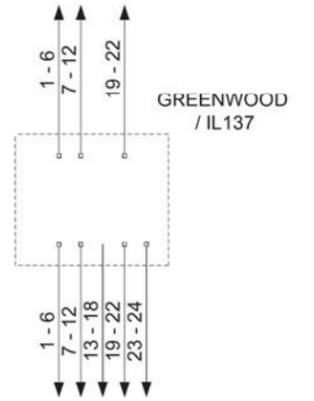
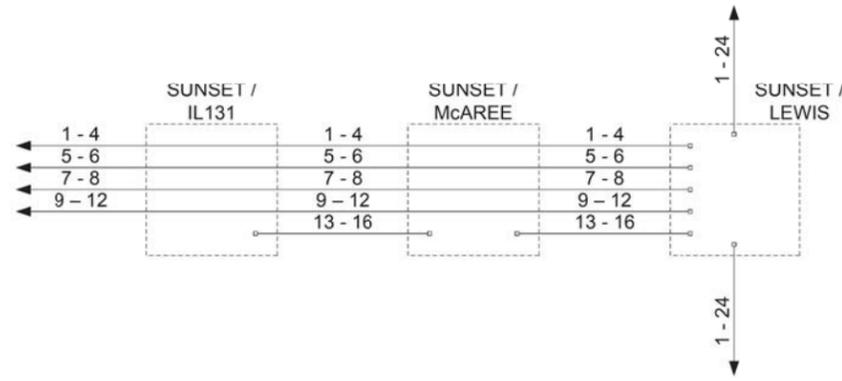
**PROPOSED INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES
SUNSET AVENUE /GOLF ROAD /GREENWOOD AVENUE
IL 131 (GREEN BAY RD) TO IL 137 (SHERIDAN RD)**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	57
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61G47	

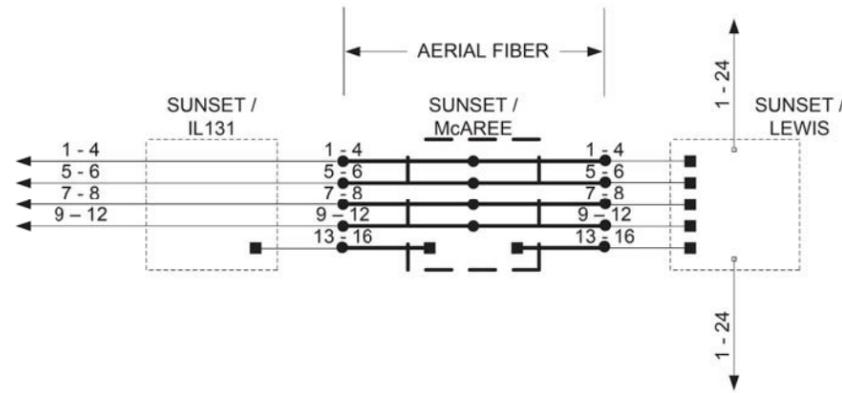
SCALE: NONE SHEET OF SHEETS STA. TO STA.

-  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

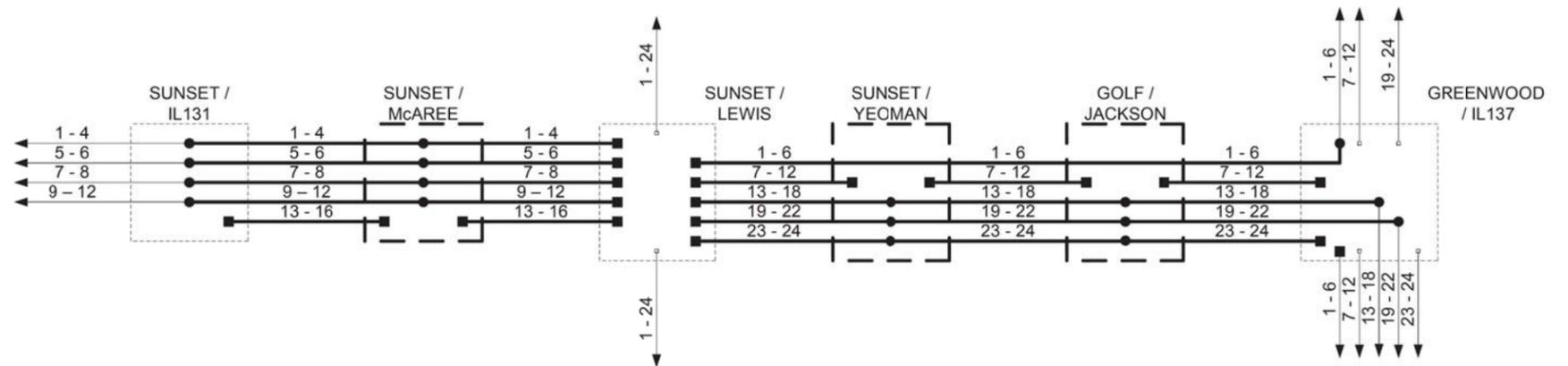
EXISTING



TEMP



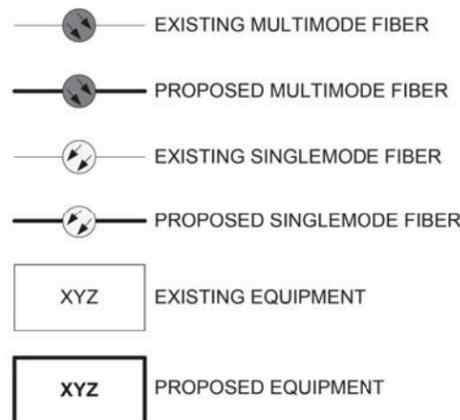
FINAL



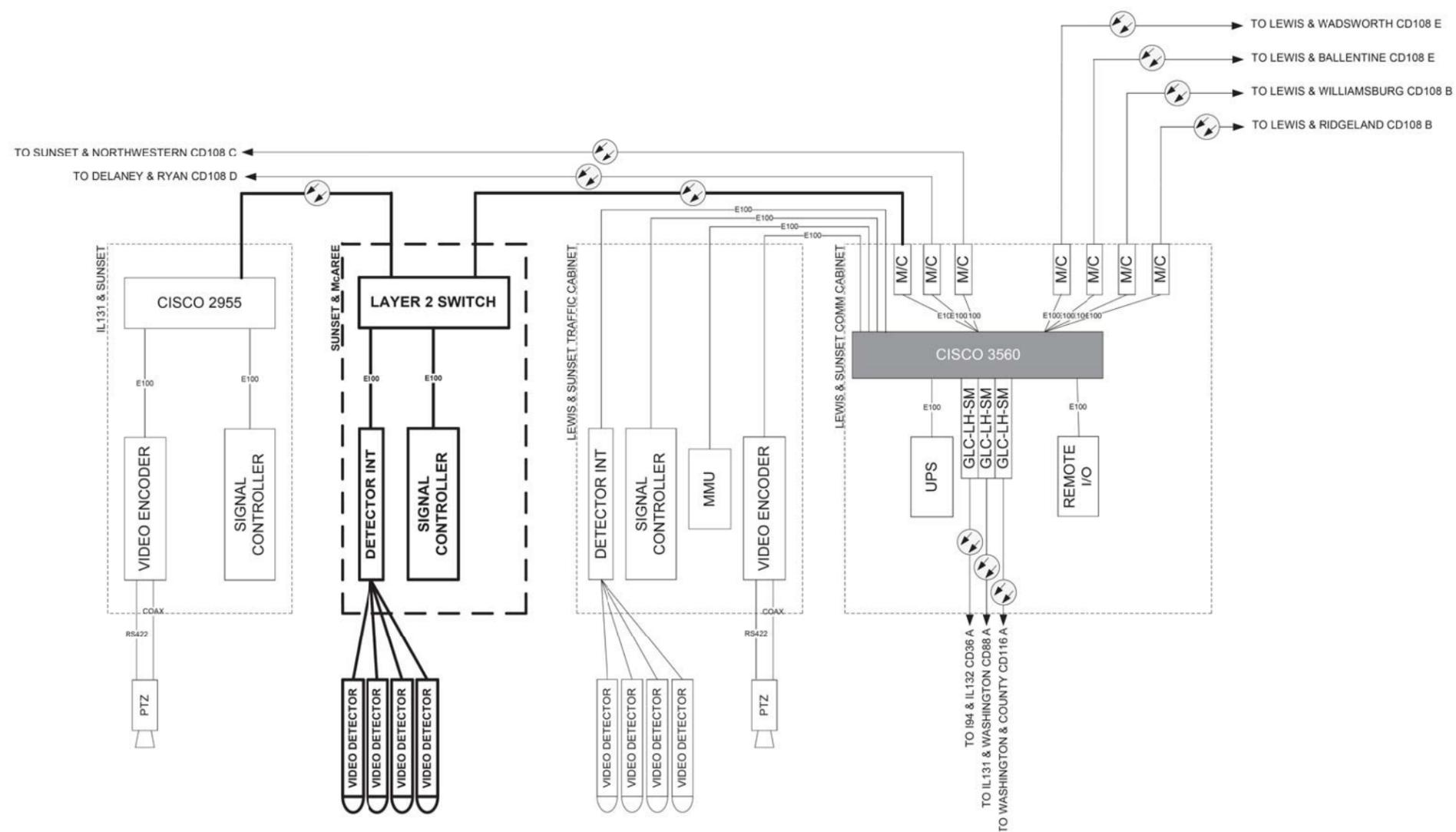
FIBER OPTIC TERMINATION /SPLICING QUANTITIES (BY INTERSECTION /LOCATION)

INTERSECTION / LOCATION	INCLUDED		BID ITEM	
	T	S	T	S
SUNSET AVENUE AT IL 131 (GREEN BAY RD)	4	12	0	0
SUNSET AVENUE AT McAREE ROAD	8	12	0	0
SUNSET AVENUE AT LEWIS AVENUE	40	0	0	0
GOLF ROAD AT YEOMAN STREET	12	12	0	0
GOLF ROAD AT JACKSON STREET	12	12	0	0
GREENWOOD AVENUE AT IL 137 (SHERIDAN RD)	8	16	6	0
TOTALS	84	64	6	0

T = TERMINATE FIBER IN CABINET
S = SPLICE FIBER IN CABINET



TEMP



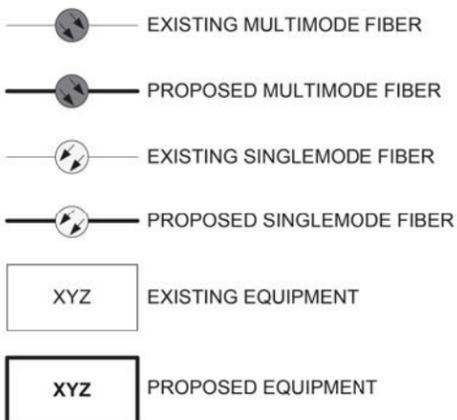
FILE NAME =	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
IDOT-StdDetails.dgn		DRAWN - ZCW	REVISED -
4572.800	PLOT SCALE = 1:1	CHECKED - DPB	REVISED -
CABINET DETAIL 01	PLOT DATE = 2/7/2020	DATE - 1/10/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

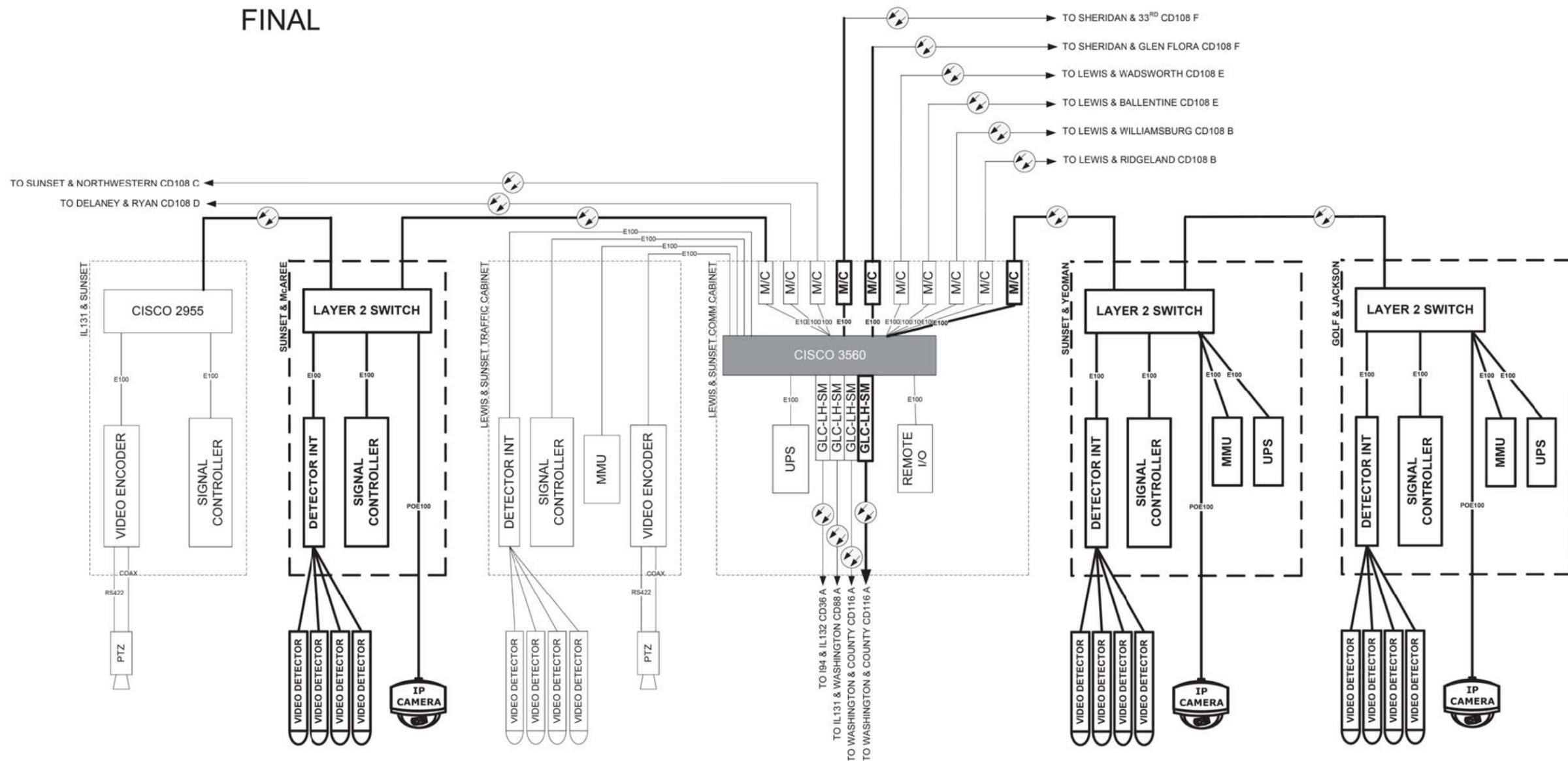
TEMPORARY 108A CABINET DETAIL
SUNSET AVENUE AND LEWIS AVENUE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	59
CONTRACT NO. 61G47			ILLINOIS FED. AID PROJECT	

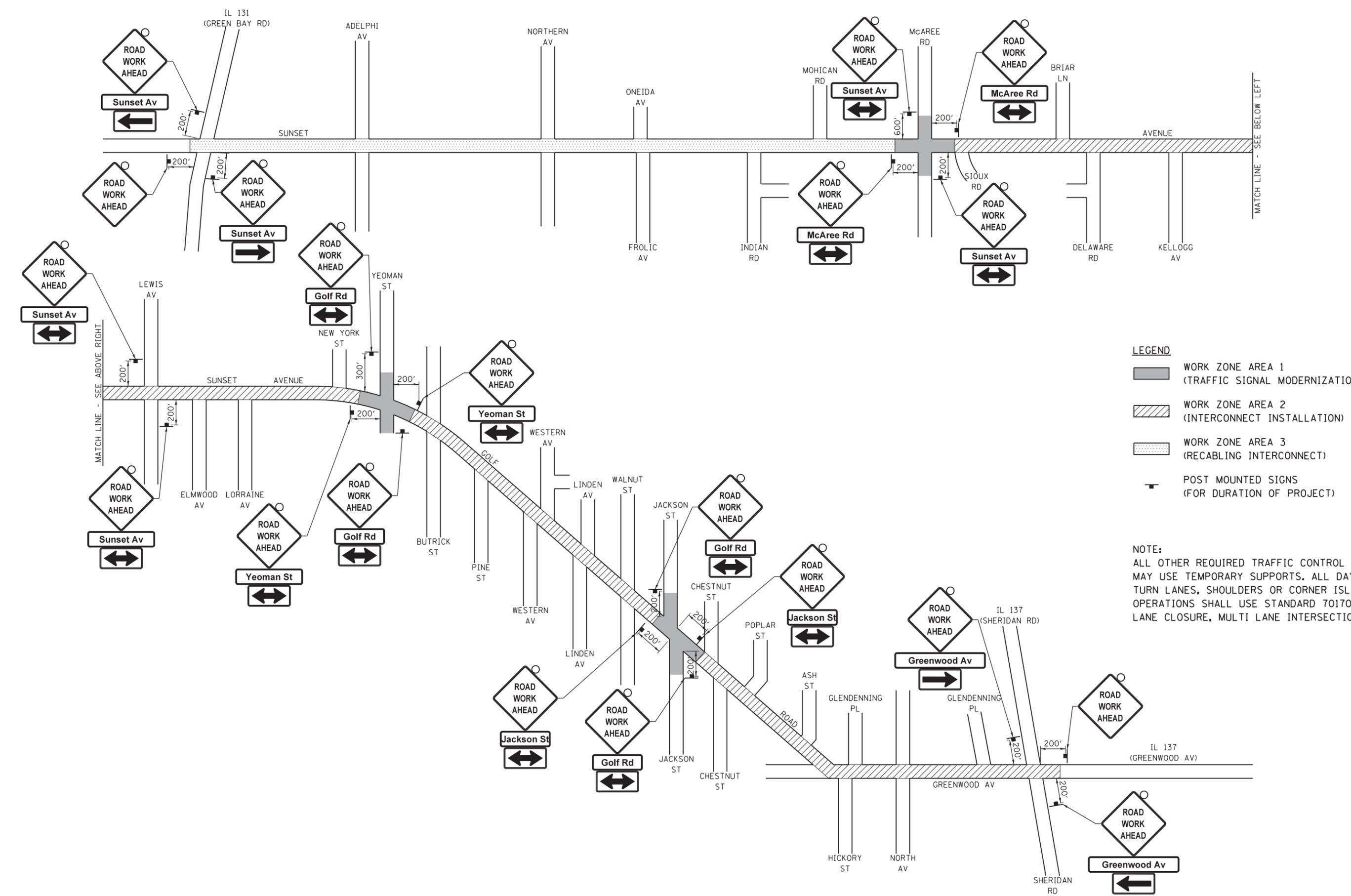


FINAL



FILE NAME =	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
IDOT-StdDetails.dgn		DRAWN - ZCW	REVISED -
4572.800	PLOT SCALE = 1:1	CHECKED - DPB	REVISED -
CABINET DETAIL 02	PLOT DATE = 2/7/2020	DATE - 1/10/2020	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	60
			CONTRACT NO. 61G47	
		ILLINOIS	FED. AID PROJECT	



- LEGEND**
- WORK ZONE AREA 1 (TRAFFIC SIGNAL MODERNIZATION)
 - WORK ZONE AREA 2 (INTERCONNECT INSTALLATION)
 - WORK ZONE AREA 3 (RECALIBING INTERCONNECT)
 - POST MOUNTED SIGNS (FOR DURATION OF PROJECT)

NOTE:
 ALL OTHER REQUIRED TRAFFIC CONTROL SIGNAGE MAY USE TEMPORARY SUPPORTS. ALL DAYTIME LEFT TURN LANES, SHOULDERS OR CORNER ISLAND OPERATIONS SHALL USE STANDARD 701701 (URBAN LANE CLOSURE, MULTI LANE INTERSECTION).

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 61

FILE NAME = TrafficControl.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
4572.800	PLOT SCALE = 1:1	DRAWN - ZCW	REVISED -
Default	PLOT DATE = 2/7/2020	CHECKED - DPB	REVISED -
		DATE - 1/10/2020	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

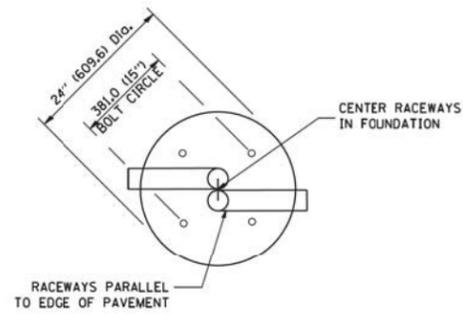
**SUGGESTED TRAFFIC CONTROL PLAN
 SUNSET AVENUE /GOLF ROAD /GREENWOOD AVENUE
 FROM IL 131 (GREEN BAY RD) TO IL 137 (SHERIDAN RD)**

SCALE: NONE SHEET OF SHEETS STA. TO STA.

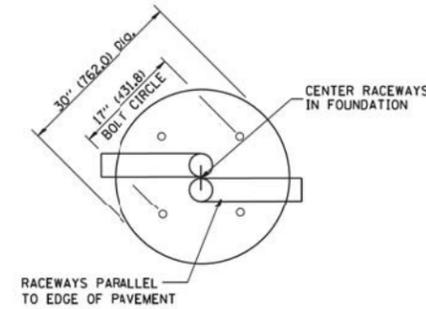
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	61
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61G47	

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

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY O _u = 0.375 TON/SO. FT.	13'-0" (3.96 m)	15'-0" (4.57 m)
MEDIUM CLAY O _u = 0.75 TON/SO.FT	9'-6" (2.93 m)	10'-9" (3.23 m)
STIFF CLAY O _u = 1.50 TON/SO. FT.	7'-0" (2.13 m)	8'-0" (2.44 m)
LOOSE SAND φ = 34°	9'-0" (2.74 m)	10'-0" (3.05 m)
MEDIUM SAND φ = 37.5°	8'-3" (2.52 m)	9'-0" (2.74 m)
DENSE SAND φ = 40°	7'-9" (2.36 m)	9'-0" (2.74 m)



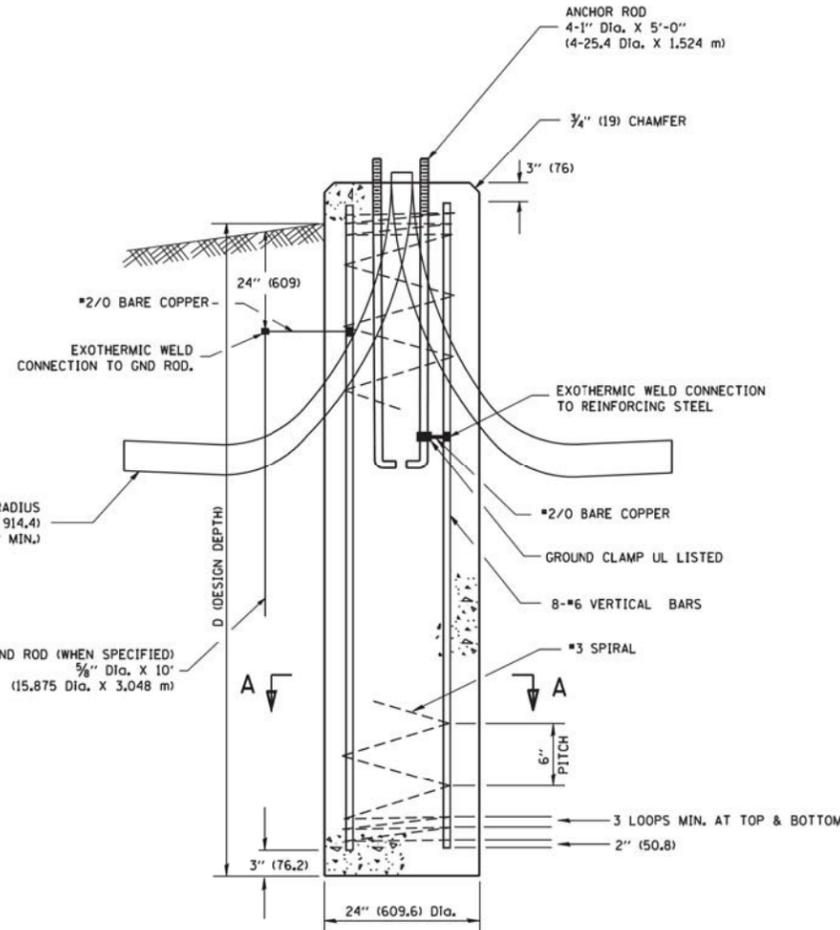
TOP VIEW



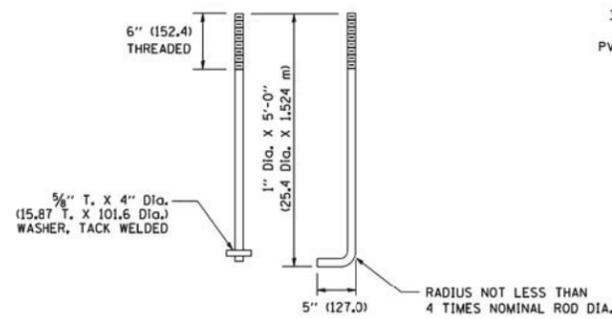
TOP VIEW

NOTES

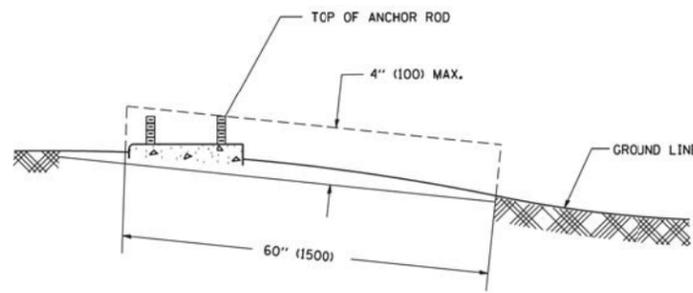
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED. IN ACCORDANCE WITH AASHTO GUIDELINES, IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION, IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.



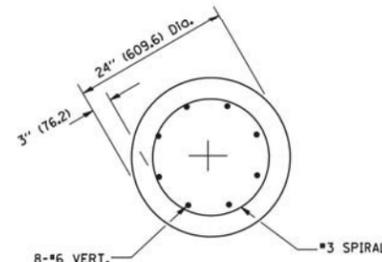
FOUNDATION DETAIL



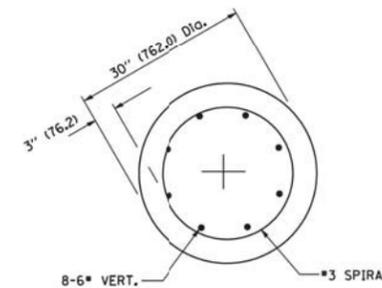
ANCHOR ROD DETAIL



FOUNDATION EXTENSION DETAIL



SECTION A-A



SECTION A-A

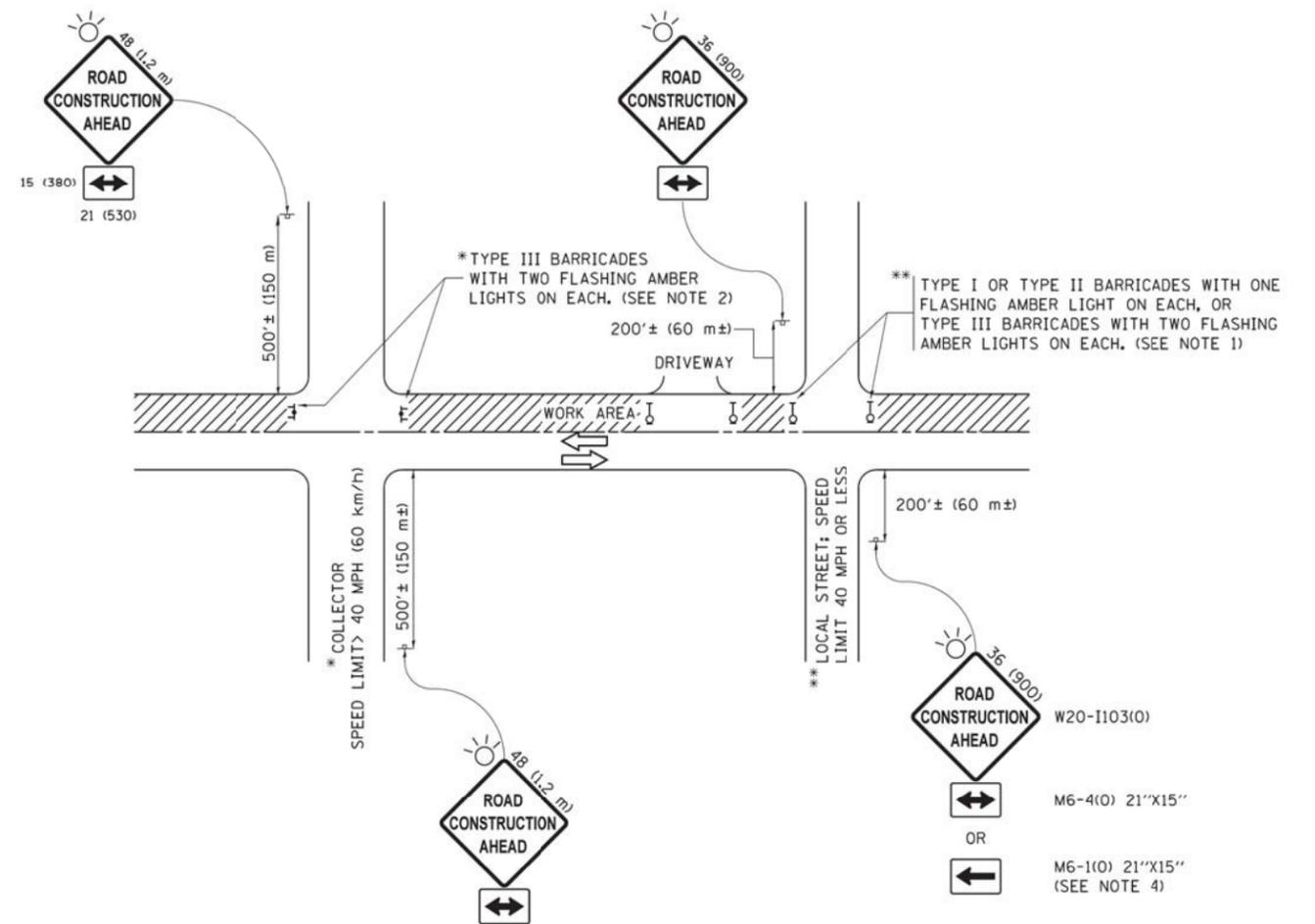
GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 62

FILE NAME =	USER NAME = zwallsten	DESIGNED -	REVISED - 04-22-02
IDOT-StdDetails.dgn		DRAWN -	REVISED -
4572.800		CHECKED -	REVISED -
BE-301	PLOT DATE = 2/7/2020	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHT POLE FOUNDATION
40' (12.192 m) TO 47' 1/2' (14.478 m) M.H. 15" (381 mm) BOLT CIRCLE
 SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	62
BE-301		CONTRACT NO. 61G47		
ILLINOIS FED. AID PROJECT				



NOTES:

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

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

FILE NAME =	USER NAME = zwallsten	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
IDOT-StdDetails.dgn		DRAWN -	REVISED - T. RAMMACHER 01-06-00
4572.800	PLOT SCALE = 1:1	CHECKED -	REVISED - A. SCHUETZE 07-01-13
TC-10	PLOT DATE = 2/7/2020	DATE - 06-89	REVISED - A. SCHUETZE 05-15-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	63
TC-10			CONTRACT NO. 61G47	
ILLINOIS FED. AID PROJECT				

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

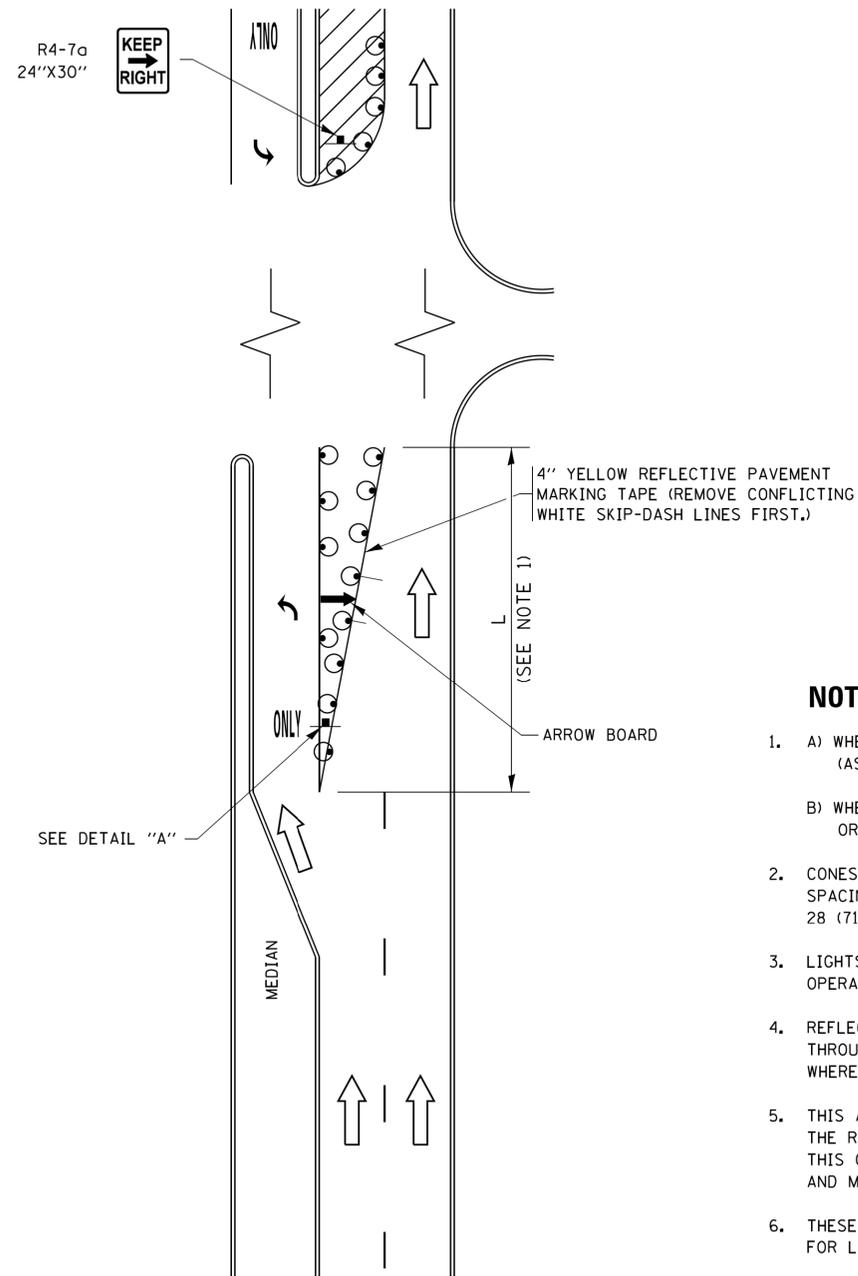


FIGURE 1

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

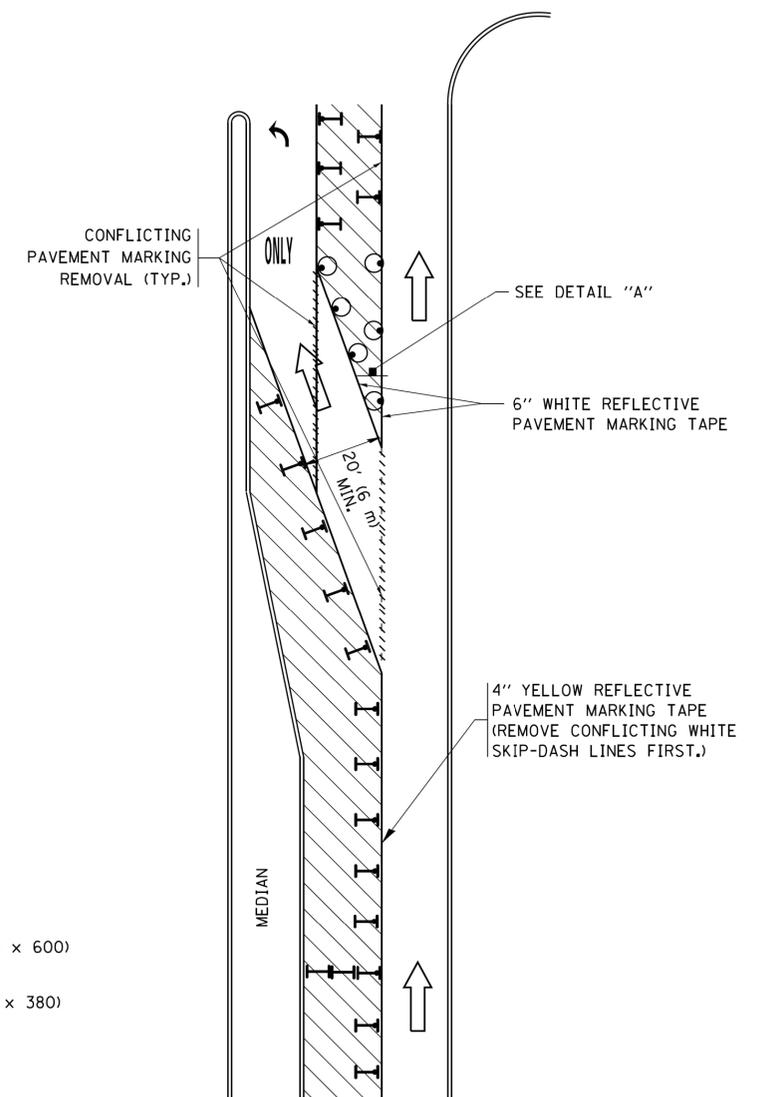


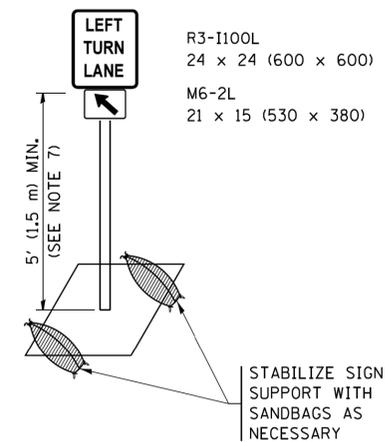
FIGURE 2

LEGEND

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  ARROW BOARD
-  TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  SIGN ASSEMBLY
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

NOTES:

1. A) WHEN "L" IS \leq THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
B) WHEN "L" IS $>$ THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-I100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PRE REQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

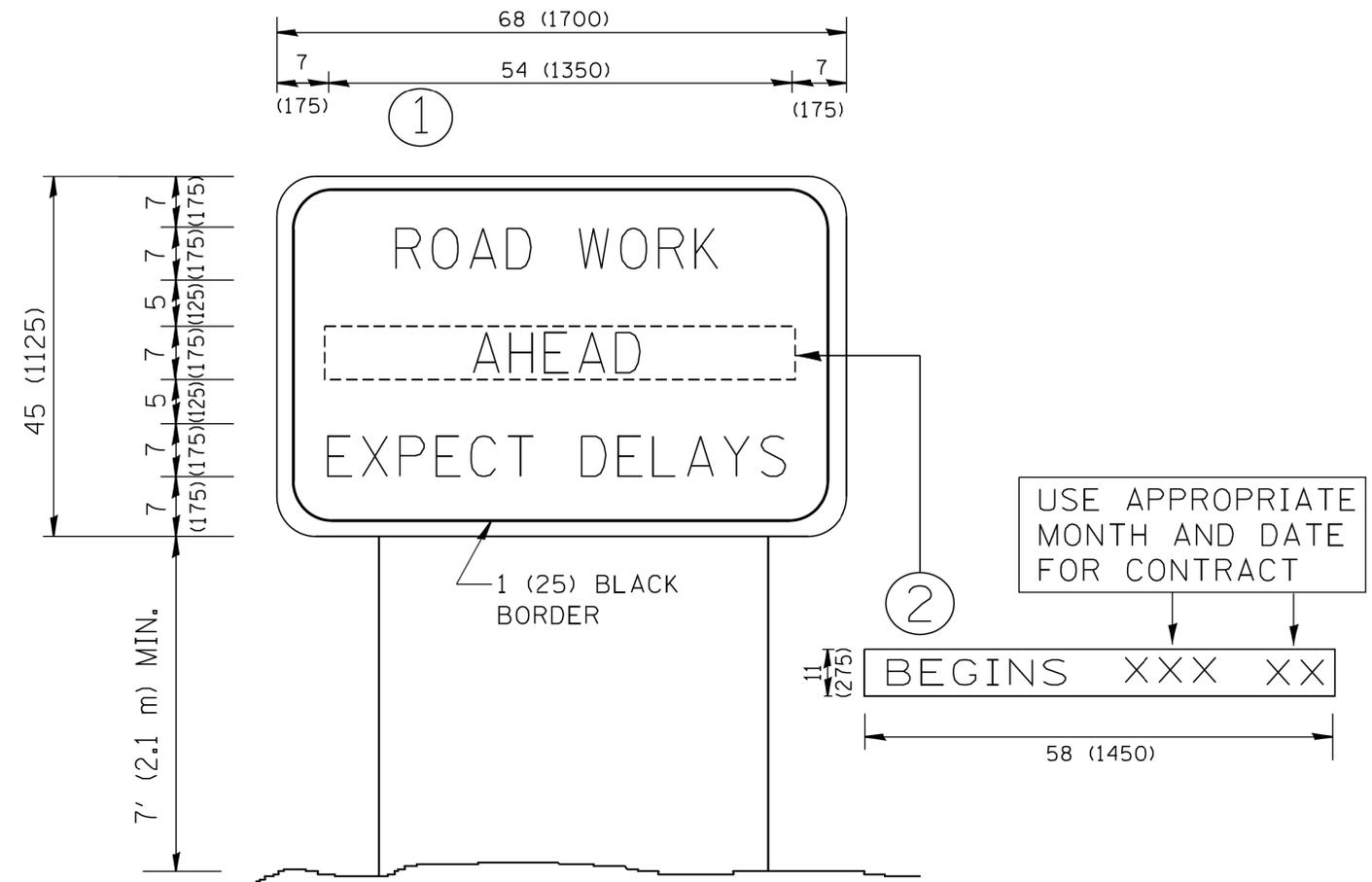


DETAIL A

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

FILE NAME =	USER NAME = zwallsten	DESIGNED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09
IDOT-StdDetails.dgn		DRAWN - T. RAMMACHER 10-07-95	REVISED - A. SCHUETZE 07-01-13
4572.800		CHECKED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16
TC-14	PLOT DATE = 4/3/2020	DATE - T. RAMMACHER 01-06-00	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	64
TC-14			CONTRACT NO. 61G47	
ILLINOIS FED. AID PROJECT				



NOTES:

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

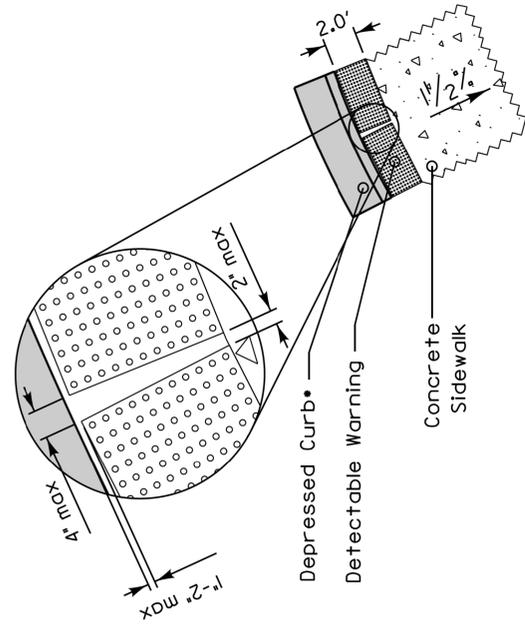
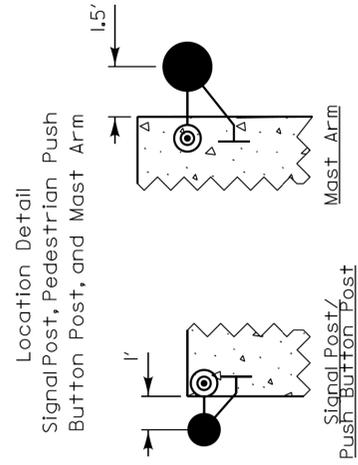
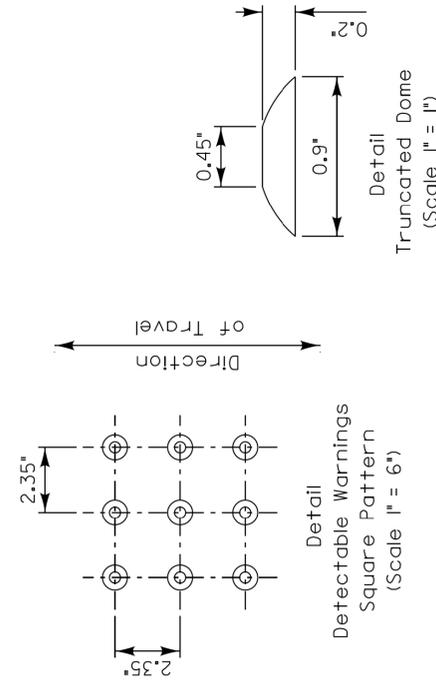
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = zwallsten	DESIGNED -	REVISED - R. MIRS 09-15-97
IDOT-StdDetails.dgn		DRAWN -	REVISED - R. MIRS 12-11-97
4572.800	PLOT SCALE = 1:1	CHECKED -	REVISED - T. RAMMACHER 02-02-99
TC-22	PLOT DATE = 4/3/2020	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ARTERIAL ROAD INFORMATION SIGN	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	65
TC-22			CONTRACT NO. 61G47	
ILLINOIS FED. AID PROJECT				



•GENERAL NOTES:

1. Cross slopes on sidewalks and paths shall not exceed 1.5% except at locations detailed on the plans.
2. Only whole cast iron panels from the manufacturer shall be used for the detectable warnings. Cut panels shall not be allowed.
3. The gutter slope for the DEPRESSED CURB adjacent to the curb ramp shall be a maximum of 5% (standard curb and gutter is 6%). The back of curb rise shall be a maximum of 1/2" (standard depressed curb is 1/2"). See IDOT standard 606001 for the different curb dimensions.
4. The Depressed Curb and the Transition Curb will be paid for as COMBINATION CONCRETE CURB AND GUTTER of the type adjacent to the curb ramp.
5. The DETECTABLE WARNINGS shall be installed according to Article 424.09 of the IDOT Standard Specifications and the LCDOT specification 4240800 DETECTABLE WARNINGS. Detectable warnings shall be measured and paid for per square foot.

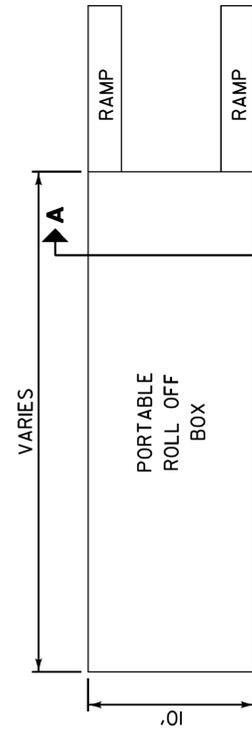
REVISIONS	DATE
Added Warning Details	8/1/2009
Updates & Remove Duplicates	7/14/2015



APPROVED BY: M. G. ZEMAITIS
DATE: APRIL 1, 2007

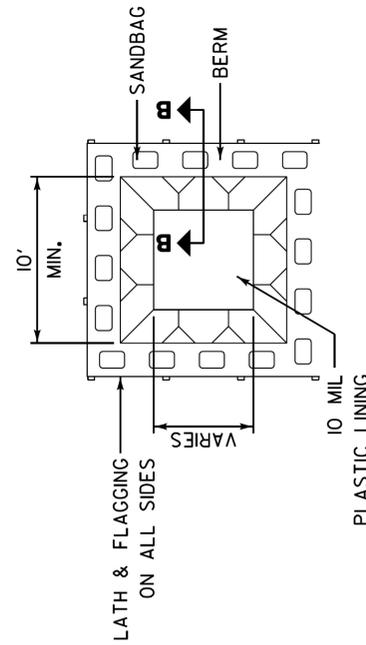
LC4201

DETECTABLE WARNINGS
and PEDESTRIAN
PUSHBUTTON LOCATIONS



PREFAB PORTABLE WASHOUT

SECTION A-A



BELOW GRADE

SECTION B-B

NOTES:

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. OTHER WASHOUT DESIGNS MAY BE USED IF APPROVED BY THE ENGINEER.
3. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

NOT TO SCALE

REVISIONS	DATE



APPROVED BY: MGZ
DATE: March 17, 2008

LC4202

CONCRETE WASHOUT
FACILITIES

SHEET 1 OF 2

FILE NAME = 1DOT-StdDetails.dgn
4572.800
LCDOT DETAIL 03

USER NAME = zwallsten
DESIGNED - JRD
DRAWN - ZCW
PLOT SCALE = 1:1
PLOT DATE = 4/6/2020

CHECKED - DPB
DATE - 1/10/2020

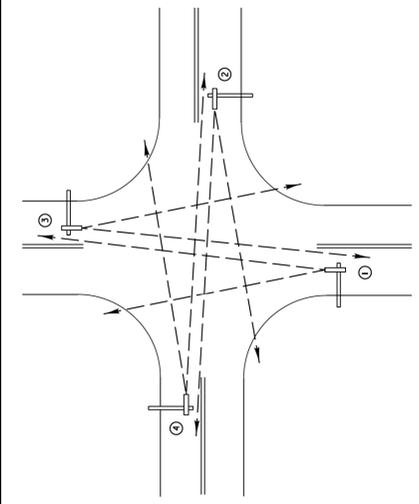
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

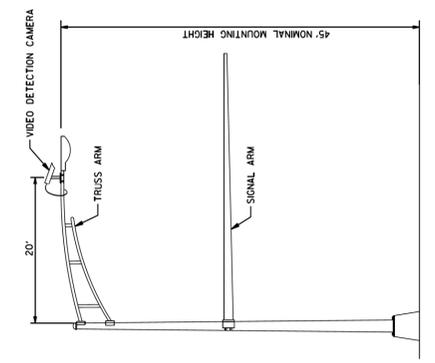
LAKE COUNTY DIVISION OF TRANSPORTATION STANDARDS

SCALE: NONE SHEET 3 OF 4 SHEETS STA. TO STA.

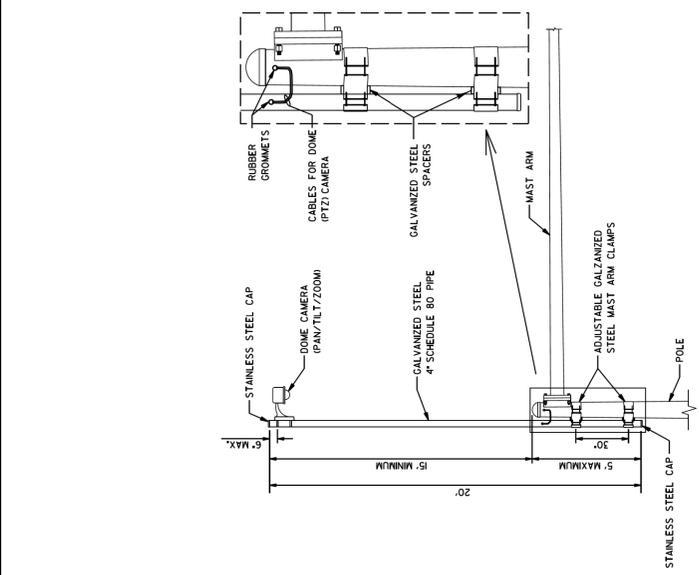
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00999-30-TL	LAKE	69	68
CONTRACT NO. 61G47			ILLINOIS FED. AID PROJECT	



14) VIDEO DETECTION CAMERA ASSEMBLIES AND BRACKETS (1) (2) (3) (4)

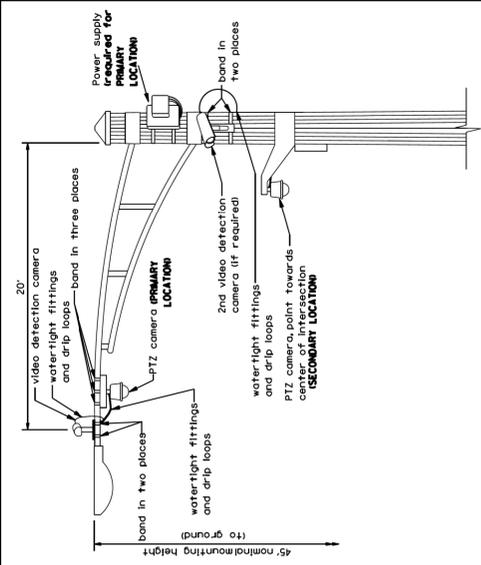


COMBINATION MAST ARM ASSEMBLY AND POLE DIMENSIONS (NOT TO SCALE)



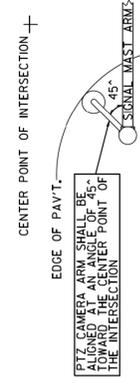
CAMERA MOUNTING ASSEMBLY DETAIL (NOT TO SCALE)

NOTES:
- THE MAST ARM IS TAPERED.
- THE MAST ARM IS VERTICAL AND PLUMB BY THE TIME OF INSTALLATION.
- MODIFYING/INSTALLING BRACKETS AS NECESSARY. ADDITIONAL SPACERS REQUIRED ARE INCLUDED IN THE COST OF THE CAMERA MOUNTING ASSEMBLY OF THE TYPE SPECIFIED.
- SPACERS ARE TO BE INTEGRATED OR MANUFACTURED WITH THE MAST ARM BRACKETS.



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

NOTES FOR SINGLE, DUAL AND MULTIPLE CAMERA MOUNTING:
- MOUNT LUMINAIRE MOUNTING BRACKET AS HIGH AS POSSIBLE.
- MOUNT VIDEO DETECTION CAMERA ARMING DOWN TOWARD THE DIRECTION OF TRAFFIC TO BE DETECTED.



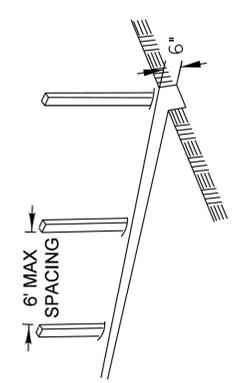
PTZ CAMERA MOUNTING DETAILS (SECONDARY LOCATION) (NO SCALE)

REVISIONS	DATE	APPROVED BY	DATE
Mounting Details Revised	07/07/08	J. P. NELSON	JUNE 13, 2014
Mounting Details Revised	07/07/08		
Mast Arm Taper Detail	08/01/12		
Mounting Details Revised	08/13/14		

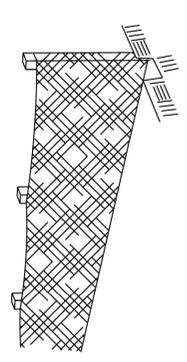
PROJECT NAME	LAKE COUNTY STANDARDS & DETAILS
ROUTE / SECTION	CHXXXX-XX-XX XXX XXX
SECTION NUMBER	LC8900
SHEET	3
SHEETS	4

NO.	DATE	BY	DESCRIPTION
1	1/10/2020	JRD	VIDEO DETECTION DETAILS REVISION-JUNE 2014
2			
3			
4			

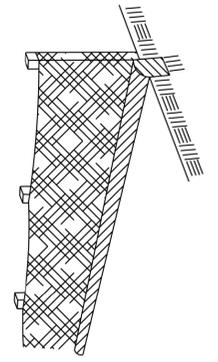
1. SET POSTS AND EXCAVATE OR SLIT-TRENCH A 6-INCH DEEP TRENCH UPSLOPE ALONG THE LINE OF POSTS



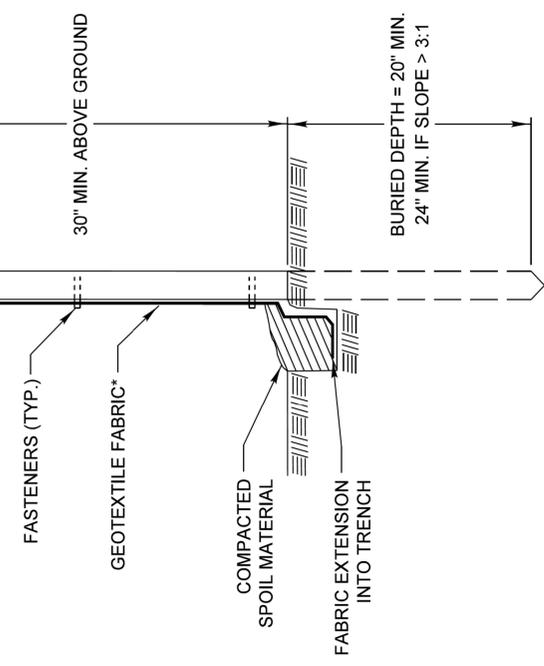
2. ATTACH GEOTEXTILE FILTER FABRIC TO EACH POST WITH A MINIMUM OF 3 (THREE) FASTENERS PER POST AND EXTEND FABRIC TO THE BOTTOM OF THE TRENCH



3. BACKFILL AND COMPACT THE EXCAVATED MATERIALS



POSTS - CHOICE OF:
1.2" X 1.2" NOMINAL HARDWOOD POSTS
2.6" X 2.6" NOMINAL NO.2 SOUTHERN PINE OR U. T. L. OR C-SHAPE STEEL POSTS WITH MIN. WEIGHT 1.33 LBS/FT



* NOTE: OPTIONAL WIRE SUPPORT
- MIN. 30" HEIGHT
- MIN. 14 GAUGE WIRE
- MIN. 6 HORIZ. WIRES
- MIN. 6" VERTICAL SPACING

Requirements	Test Methods	Wire Backed Supported Silt Fence ¹	Unsupported Silt Fence
Maximum Post Spacing	ASTM D 4632	4 feet	4 feet
Grab Strength Machine direction		90 lbs	124 lbs
X-Machine direction		90 lbs	100 lbs
Permeivity ⁶	ASTM D 4491	0.05 sec ⁻¹	0.05 sec ⁻¹
Apparent Opening Size	ASTM D 4751	0.024in	maximum average roll value
Ultraviolet stability (retained strength)	ASTM D 4355	70% after 500 hours of exposure	

REVISIONS	DATE	APPROVED BY	DATE
ORIG. by LCSMC	4/21/08	M. G. ZEMAITIS	JUNE 20, 2008
Update Text	7/15/11		

PERIMETER EROSION BARRIER INSTALLATION

LC2051

FILE NAME = 1DOT5tdDetails.dgn
4572.800
LCDOT DETAIL 04

USER NAME = zwallsten
PLOT SCALE = 1:1
PLOT DATE = 4/3/2020

DESIGNED - JRD
DRAWN - ZCW
CHECKED - DPB
DATE - 1/10/2020

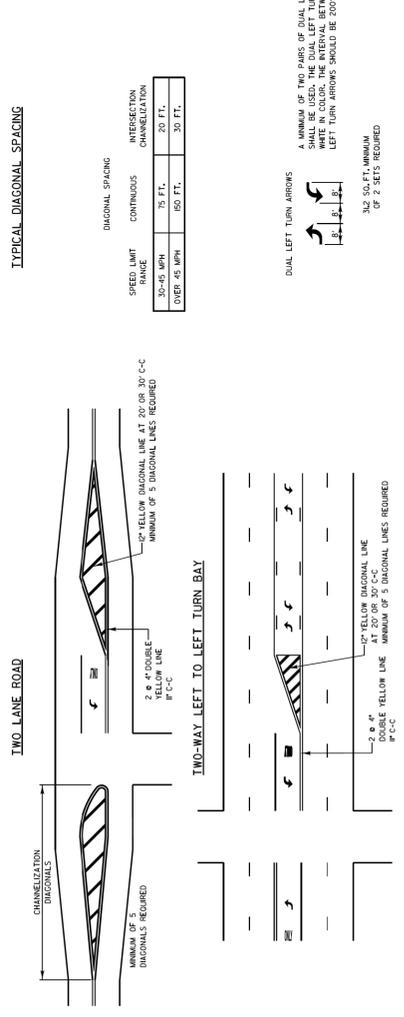
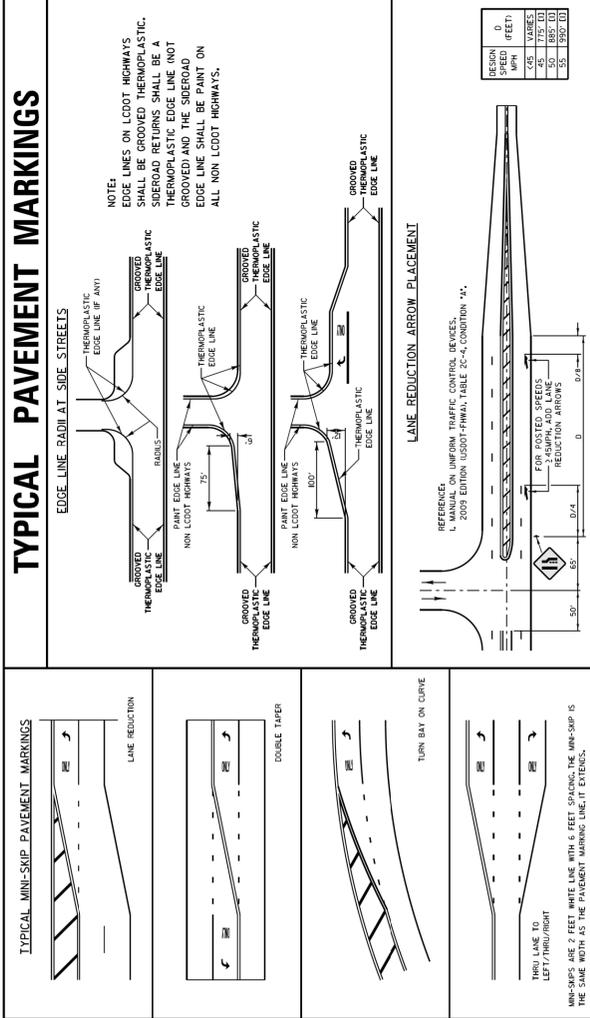
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

LAKE COUNTY DIVISION OF TRANSPORTATION STANDARDS

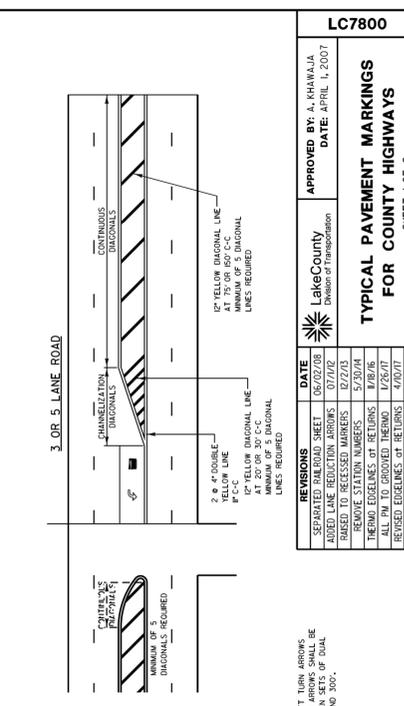
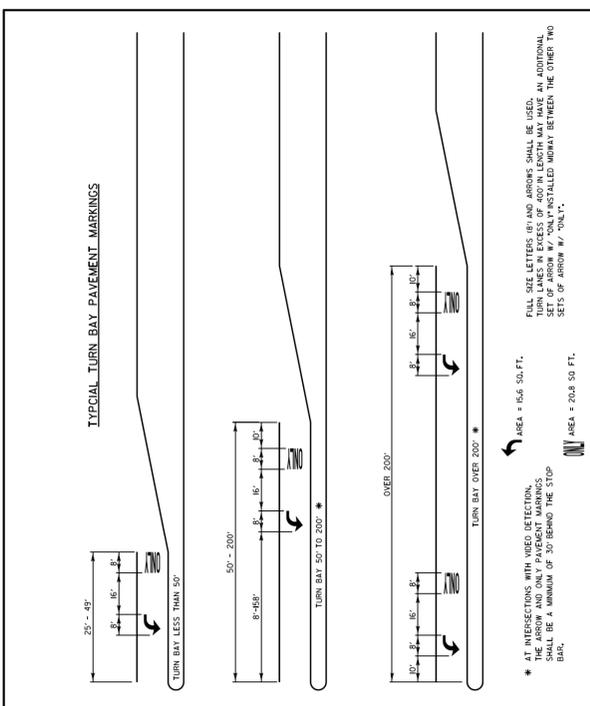
SCALE: NONE SHEET 4 OF 4 SHEETS STA. TO STA.

F.A.U. R.T.E. SECTION COUNTY TOTAL SHEETS SHEET NO.
VAR. 12-00999-30-TL LAKE 69 69
ILLINOIS FED. AID PROJECT CONTRACT NO. 61G47



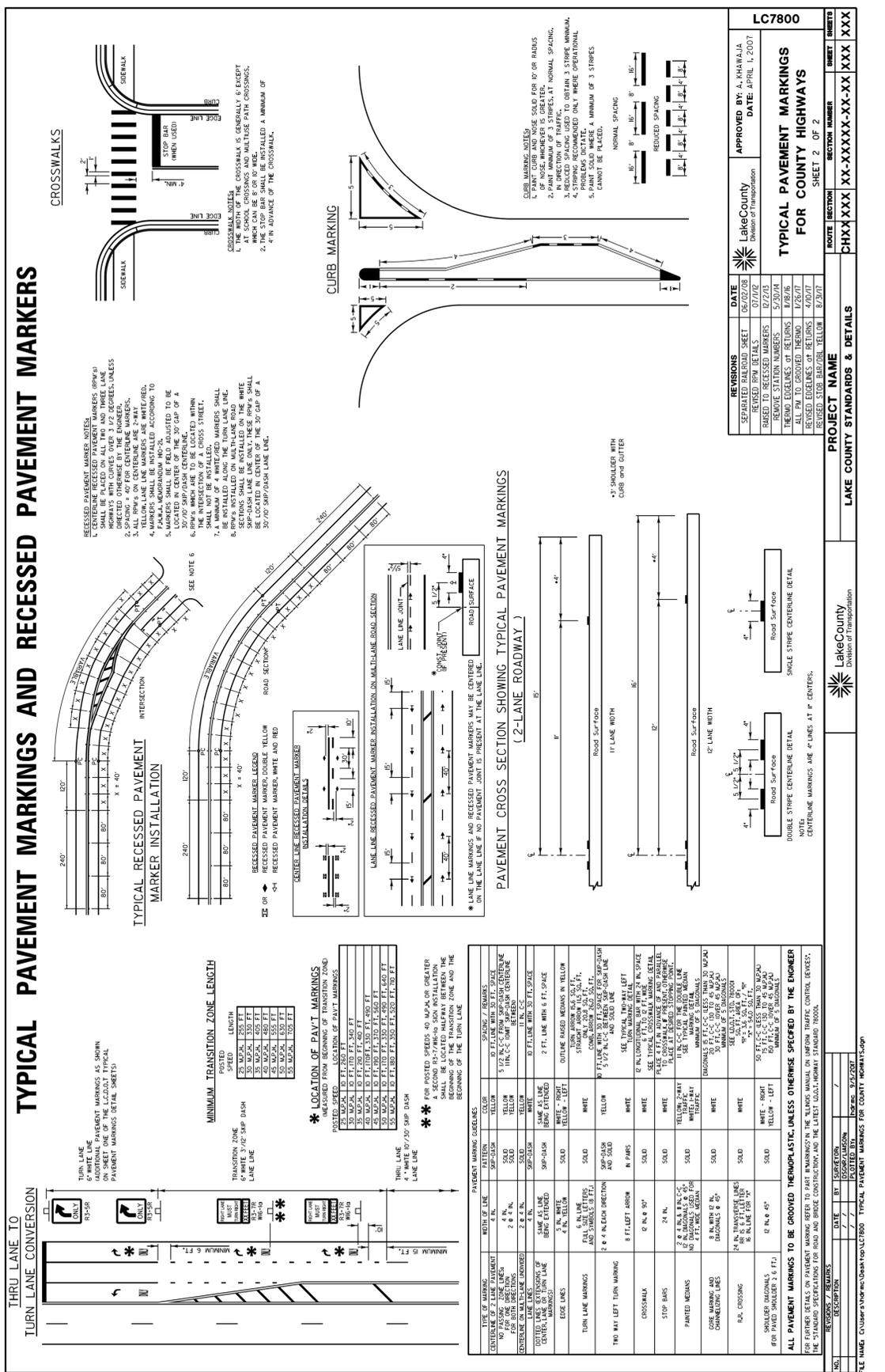
NO.	REVISIONS / REMARKS	DATE	BY	LOCATION	SCALE	DATE
1	ISSUED FOR CONSTRUCTION	3/22/20	ZSW			

FILE NAME: C:\Users\zwallsten\OneDrive\Work\120000\TYPICAL PAVEMENT MARKINGS FOR COUNTY HIGHWAYS.SHP



NO.	REVISIONS / REMARKS	DATE	BY	LOCATION	SCALE	DATE
1	ISSUED FOR CONSTRUCTION	3/22/20	ZSW			

FILE NAME: C:\Users\zwallsten\OneDrive\Work\120000\TYPICAL PAVEMENT MARKINGS FOR COUNTY HIGHWAYS.SHP



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