FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR INDEX OF HIGHWAY STANDARDS, SEE SHEET NO. 2

PROJECT LOCATED IN THE VILLAGE OF GRAYSLAKE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS** PLANS FOR PROPOSED FEDERAL AID HIGHWAY F.A.U. 0198 ATKINSON ROAD FROM F.A.U. 3713 BRAE LOCH ROAD TO F.A.U. 1223 WASHINGTON STREET **RESURFACING AND** 

**RECONSTRUCTION IMPROVEMENTS** 

SECTION NO.: 09-00058-00-RS PROJECT NO.: M-9003 (485) JOB NO.: C-91-073-10 LAKE COUNTY

WASHINGTON STREET

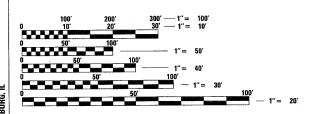
BRAE LOCK ROAD

BLACKBURN DRIVE

LAKE COUNTY (NOT TO SCALE)

TRAFFIC DATA

ATKINSON ROAD
POSTED & DESIGN SPEED = 40 MPH
2009 ADT = 11,320
COLLECTOR



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. DESIGN STAGE REQUEST DIG. No. A2020644



CONTACT JULIE AT 811 OR 800-892-0123 WITH THE FOLLOWING:

CITY-TWNSHP. = AVON

SEC. & 1/4 SEC. NO. = SEC 25, TWP 45 R. 10
ONE CALL SYSTEM

48 HOURS (2 working days) BEFORE YOU DIG

PROJECT NO.: M-9003 (485) F.A.U. ROUTE 0198 ATKINSON ROAD **END IMPROVEMENTS** STA 82 + 10.00

> PROJECT NO.: M-9003 (485) F.A.U. ROUTE 3713 **BRAE LOCH ROAD BEGIN IMPROVEMENTS** STA 10 + 00.00

PROJECT NO.: M-9003 (485) F.A.U. ROUTE 0198 ATKINSON ROAD **BEGIN IMPROVEMENTS** STA 47 + 70.00

FREDERICK ROAD

PROJECT NO.: M-9003 (485) **F.A.U. ROUTE 3713 BRAE LOCH ROAD END IMPROVEMENTS** 

STA 10 + 89.00

AVON TOWNSHIP GROSS LENGTH OF IMPROVEMENT = 3,440 LF OR 0.65 MILES NET LENGTH OF IMPROVEMENT = 3,440 LF OR 0.65 MILES

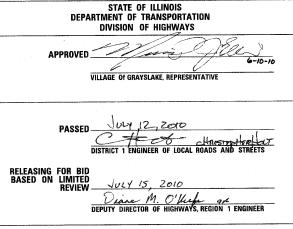






SECTION 0198 09-00058-00-RS LAKE STA. FED. ROAD DIST. NO ILLINOIS CONTRACT NO. 63498





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

262.763.7834

312,578.0050

815.787.3111 847.223.5088 630.773.1870

608.347.1542

Burlington, Wisconsin Chicago, Illinois Crystal Lake, Illinois DeKalb, Illinois Grayslake, Illinois Itasca, Illinois Madison, Wisconsin Mokena, Illinois Plainfield, Illinois 708.478.2090 815.609.7425

**CONTRACT NO. 63498** 

815.459.1260 (OFFICE WHICH PREPARED PLANS)

	BENCHMARK LIST	
B.M. #7	SOUTHWEST FLANGE BOLT OF FIRE HYDRANT ON WEST SIDE OF ATKINSON ROAD AT BRAE LOCH ROAD ELEV = 783,66	000001-05
		001001-02
B.M. #9	RAILROAD SPIKE IN POWER POLE ON THE WEST SIDE OF ATKINSON ROAD APPROXIMATELY 100 FT SOUTH OF SHEFFIELD.	280001-05
	ELEV = 786.96	424001-05
B.M. #11	RAILROAD SPIKE IN POWER POLE AT THE SOUTHWEST CORNER OF THE	442201-03
B.M. "11	INTERSECTION OF FREDERICK ROAD AND ATKINSON ROAD.	602001-01
	ELEV = 777.96	602301-02
B.M. #12	RAILROAD SPIKE IN POWER POLE AT THE SOUTHWEST CORNER THE	602306-02
	INTERSECTION OF SHAKESPEARE DRIVE SOUTH AND ATKINSON ROAD.	602401-02
	ELEV = 775.01	602406-03
B.M. #17	RAILROAD SPIKE IN POWER POLE AT THE SOUTHWEST CORNER OF THE	602601-02
	INTERSECTION OF SHAKESPEARE DRIVE NORTH AND ATKINSON ROAD.  ELEV = 775.39	602701-02
		604001-03
B.M. #26	RAILROAD SPIKE IN POWER POLE ON THE SOUTH SIDE OF BRAE LOCH ROAD APPROXIMATELY 200 FT WEST OF CAMBRIDGE DRIVE.	604051-03
	ELEV = 782.24	606001-04
	RAILROAD SPIKE IN POWER POLE IN 4TH POWER POLE SOUTH OF NORTH	701301-03
B.M. #32	SHAKESPEARE DRIVE IN WEST PARKWAY OF ATKINSON ROAD.	701311-03
	ELEV = 773.42	701501-05
		701502-03
		701701-06
		701801-04
		701901-01
		720016-02
		780001-02
		805001-01
		814001-02
		814006-02
		857001-01
		862001-01
		873001-02
		877001-04
		878001-08

	HIGHWAY STANDARDS
000001.05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
000001-05	AREAS OF REINFORCEMENT BARS
001001-02	TEMPORARY EROSION CONTROL SYSTEMS
280001-05	
424001-05	CURB RAMPS FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
602001-01	CATCH BASIN TYPE A
602301-02	INLET TYPE A
602306-02	INLET TYPE B
602401-02	MANHOLE TYPE A
602406-03	MANHOLE TYPE A 6' DIA (1.8 m) DIAMETER
602601-02	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
602701-02	MANHOLE STEPS
604001-03	FRAME AND LIDS TYPE 1
604051-03	FRAME AND GRATE TYPE 11
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W MOVING OPERATIONS - DAY ONLY
701501-05	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-03	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-04	LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-01	TRAFFIC CONTROL DEVICES
720016-02	MAST ARM MOUNTED STREET NAME SIGNS
780001-02	TYPICAL PAVEMENT MARKINGS
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-02	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERPRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-04	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
878001-08	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

# INDEX OF SHEETS

SHEET NO.	TITLE
1	COVER SHEET
2	INDEX OF SHEETS, BENCHMARKS AND HIGHWAY STANDARDS
3	GENERAL NOTES
4 -8	SUMMARY OF QUANTITIES
9 -10	TYPICAL SECTIONS
11	SCHEDULE OF MATERIALS
12	MAINTENANCE OF TRAFFIC GENERAL NOTES
13	SUGGESTED MAINTENANCE OF TRAFFIC DETOUR ROUTE
14	GEOMETRIC-DRAINAGE PLAN STA. 46+00 TO STA. 58+00
15	GEOMETRIC PLAN AND PROFILE: STA. 58+00 TO STA. 63+50
16	GEOMETRIC PLAN AND PROFILE: STA. 63+50 TO STA. 69+00
17	GEOMETRIC-DRAINAGE PLAN STA. 69+00 TO STA. 79+00
18	GEOMETRIC-DRAINAGE PLAN STA. 79+00 TO STA. 83+00
19	DRAINAGE AND UTILITY PLAN AND PROFILE: STA. 58+00 TO STA. 63+50
20	DRAINAGE AND UTILTTY PLAN AND PROFILE: STA. 63+50 TO STA. 69+00
21	EROSION CONTROL PLAN
22-23	PAVEMENT MARKING AND SIGNING PLAN
24 - 29	DISTRICT 1 TRAFFIC SIGNAL DESIGN DETAILS (SHTS 1 THRU 6)
30	DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS
31	DISTRICT 1 DETECTOR LOOP INSTALLATION DETAIL FOR ROADWAY RESURFACING (TS-07)
32	TRAFFIC SIGNAL - INSTALLATION PLAN
33	TRAFFIC SIGNAL - CABLE PLAN, PHASE DIAGRAM
34	MISCELLANEOUS DETAILS
35	DRIVEWAY DETAILS-DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >
	15' (4.5m) (BD-01)
36	DRIVEWAY DETAILS DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5m) (BD-02)
37	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-08)
38	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)
39	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)
40	BUTT JOINT AND HMA TAPER DETAILS (BD-32)
41	BENCHING DETAIL FOR EMBANKMENT WIDENING (BD-51) TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
42	
	(TC-10)
43	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13) PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16)
44	ARTERIAL ROAD INFORMATION SIGN (TC-22)
45	
46	CROSS SECTIONS

# **DISTRICT 1 DETAILS**

BD-01	DRIVEWAY DETAILS-DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5m)
BD-02	DRIVEWAY DETAILS DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5m)
BD-08	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
BD-22	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
BD-24	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
BD-32	BUTT JOINT AND HMA TAPER DETAILS
BD-51	BENCHING DETAIL FOR EMBANKMENT WIDENING
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-16	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
TC-22	ARTERIAL ROAD INFORMATION SIGN
TS-02	DISTRICT ONE - MAST ARM MOUNTED STREET NAME SIGNS
TS-05	DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS (SHEETS 1 THRU 6)
TS-07	DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING



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DESIGNED	-	DJS	REVISED	-6-8-10 IDOT REVIEW	1
DRAWN		UKB	REVISED		
CHECKED	-	RWL	REVISED	-	
DATE	-	4-27-10	FILE -	090772-Index-S†nds.dgn	

SCALE:

# **GENERAL NOTES**

- 1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE DETAILS IN THE PLANS, THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS, AND THE LATEST EDITION OF THE FOLLOWING STATE OF ILLINOIS SPECIFICATIONS: "THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (REFERED TO AS THE "STANDARD SPECIFICATIONS"), THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", THE "MANUAL OF TEST PROCEDURES FOR MATERIALS" AND THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS".
- 2. THE LOCATIONS OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THE VILLAGE DOES NOT GUARANTEE THEIR ACCURACY. THE CONTRACTOR SHALL HAVE THE RESPECTIVE UTILITY COMPANIES FIELD LOCATE ALL THEIR FACILITIES PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL ALSO VERIFY THE DEPTHS OF THE EXISTING UTILITIES IF NECESSARY. ANY RELOCATION OR LOWERING OF UTILITIES SHALL BE COORDINATED BY THE CONTRACTOR.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES, INCLUDING SPRINKLER SYSTEMS, EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY OR SPRINKLER SYSTEM THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER OR VILLAGE.
- 4. THE CONTRACTOR SHALL NOTIFY THE VILLAGE PUBLIC WORKS ADMINISTRATOR AT LEAST 48 HOURS IN ADVANCE OF BEGINNING WORK TO OBTAIN VILLAGE UTILITY LOCATIONS AND SHALL COORDINATE ALL CONSTRUCTION OPERATIONS WITH THE ENGINEER.
- 5. MATERIALS RESULTING FROM THE REMOVAL OF PAVEMENT, DRIVEWAYS, CURB AND GUTTER, HOT-MIX ASPHALT SURFACES, ETC. SHALL BE REMOVED AT THE END OF EACH DAY TO AN APPROVED SITE. IN THE JUDGMENT OF THE VILLAGE, SHOULD IT BE NECESSARY TO REMOVE SUCH MATERIALS, THE VILLAGE WILL HAVE THE MATERIAL REMOVED AND THE CONTRACTOR WILL BE BILLED (CHARGED) ACCORDINGLY.
- 6. THE CONTRACTOR MAY OBTAIN MUNICIPAL WATER IN BULK, AT NO CHARGE, AS LONG AS THERE IS NOT A "WATERING BAN" IN EFFECT. THE INDISCRIMINATE USE OF FIRE HYDRANTS IS STRICTLY PROHIBITED. WATER FOR CONSTRUCTION SHALL BE METERED OR OTHERWISE ACCOUNTED FOR AND A DAILY LOG MAINTAINED. THE CONTRACTOR SHALL PROVIDE THE WATER TRUCK AND DRIVER REQUIRED TO OBTAIN AND TRANSPORT THIS WATER. THE VILLAGE RESERVES THE RIGHT TO RESTRICT OR REFUSE THE USE OF VILLAGE WATER IF DEEMED NECESSARY.
- 7. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY RESIDENTS AND THE VILLAGE WHEN ACCESS TO THEIR DRIVEWAYS WILL BE TEMPORARILY CLOSED DUE TO CURB AND GUTTER AND/OR DRIVEWAY REPLACEMENT. THE CONTRACTOR SHALL DISTRIBUTE NOTICES PROVIDED BY THE VILLAGE TO RESIDENTS. EVERY EFFORT SHALL BE MADE TO ACCOMMODATE ACCESS TO THESE PROPERTIES INCLUDING KNOCKING ON DOORS WHEN DRIVEWAYS ARE ABOUT TO BE
- 8. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS OR PROPERTY OR REFERENCE MARKERS UNTIL THE OWNERS, HIS AGENT OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.
- 9. ACCESS TO PRIVATE DRIVEWAYS SHALL BE PROVIDED AT ALL TIMES EXCEPT DURING ACTUAL CONSTRUCTION ADJACENT THERE TO. TEMPORARY RAMPS SHALL BE CONSTRUCTED AS NEEDED TO PROVIDE SUCH ACCESS, UTILIZING CRUSHED STONE OR CRUSHED GRAVEL. THIS WORK WILL BE PAID FOR AS TEMPORARY ACCESS OF THE TYPE SPECIFIED.
- 10. ANY SIGNS OR MAILBOXES THAT ARE IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH VILLAGE STANDARDS AND INCLUDED IN THE PAY ITEM FOR COMBINATION CURB AND GUTTER REMOVAL. MAIL SERVICE SHALL BE MAINTAINED AT ALL TIMES.
- 11. EXISTING PAVEMENT, DRIVEWAY PAVEMENT, CURB AND GUTTER AND SIDEWALK TO REMAIN IN PLACE SHALL BE SAW CUT FULL DEPTH TO PROVIDE A NEAT VERTICAL FACE BETWEEN THE PROPOSED AND EXISTING AND SHALL BE INCLUDED IN THE PRICE OF THE APPROPRIATE REMOVAL PAY ITEM.
- 12. IN AREAS WHERE THE EXISTING DRIVEWAY, SIDEWALK, OR CURB AND GUTTER IS TO BE REMOVED AND REPLACED, THE REMOVAL AND DISPOSAL OF ANY ADDITIONAL MATERIAL REQUIRED TO ESTABLISH THE PROPOSED DRIVEWAY, SIDEWALK, OR CURB AND GUTTER SUBGRADE ELEVATION SHALL BE INCLUDED IN THE PAY ITEMS, DRIVEWAY PAVEMENT REMOVAL, SIDEWALK REMOVAL OR COMBINATION CURB AND GUTTER REMOVAL.
- 13. THE CURB SHALL BE TAPERED TO THE GUTTER IN A FIVE (5) FOOT LENGTH WHEREVER THE CURB AND GUTTER TERMINATES, WITH AN EXPANSION JOINT PLACED AT THE START OF THE TAPER.
- 14. CURB AND GUTTER SHALL BE DEPRESSED AT DRIVEWAYS AND SIDEWALK RAMPS IN ACCORDANCE WITH THE IDOT HIGHWAY STANDARDS. SIDEWALK RAMPS FOR ACCESS FOR THE DISABLED SHALL BE PROVIDED AT THE PROPOSED CROSSWALKS IN ACCORDANCE WITH THE IDOT HIGHWAY STANDARDS OR AS DETERMINED BY THE ENGINEER.
- 15. THE FINISHED HOT-MIX ASPHALT SURFACE SHALL BE CONSTRUCTED 0.25 INCH ABOVE THE GUTTER FLAG.
- 16. THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SANDBAGS ON EACH TYPE I OR TYPE II BARRICADE USED. ONE (1) WEIGHTED SANDBAG SHALL BE PLACED ACROSS
- 17. PORTLAND CEMENT CONCRETE SIDEWALK SHALL BE THICKENED TO 6-INCHES AT LOCATIONS WHERE THE SIDEWALK CROSSES DRIVEWAYS. TRANSVERSE EXPANSION JOINTS 3/4" SHALL BE PLACED EVERY 50 FEET OR AS DETERMINED BY THE ENGINEER. TRANSVERSE CONTRACTION JOINTS SHALL BE PLACED EVERY 5-FEET.
- 18. A 1/2-INCH THICK EXPANSION JOINT SHALL BE PROVIDED AT THE JUNCTION OF THE DRIVEWAY APRON AND CURB, AND AT THE JUNCTION OF THE DRIVEWAY APRON AND THE SIDEWALK. THIS WORK WILL BE INCLUDED IN THE COST OF PORTLAND CEMENT CONCRETE DRIVEWAY PAYEMENT.
- 19. DETECTABLE WARNINGS SHALL BE CONSTRUCTED WITH THE INSTALLATION OF A CAST-IN-PLACE "ARMOR-TILE" 24"X48" NOMINAL PANEL WIDTH AS MANUFACTURED BY "ENGINEERED PLASTICS, INC." (800) 682-2525 OF WILLIAMSVILLE, NY OR AN APPROVED EQUAL. THE PANEL SHALL BE A POLYMER COMPOSITE AND COMPLY WITH ADA REQUIREMENTS. THE DOMES LOCATED ON THE PANEL SHALL PARALLEL THE PAVEMENT CROSS WALK WITH THE CLOSEST EDGE LOCATED AT THE BACK OF CURB. THE PANEL COLOR SHALL BE SELECTED BY THE VILLAGE. INSTALLATION SHALL OCCUR IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
- 20. ALL POSTS, RAILROAD TIES, AND DECORATIVE TIMBER IN CONFLICT WITH THE PROPOSED IMPROVEMENTS SHALL BE REMOVED AND RELOCATED AS DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION AND SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. EVERY EFFORT SHALL BE MADE BY THE CONTRACTOR WHEN REMOVING THESE ITEMS TO PRESERVE THEM FROM HARM. ITEMS NOT RELOCATED SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR.

- 21. PRIOR TO CONSTRUCTION OF ANY PROPOSED UTILITIES, THE CONTRACTOR SHALL EXCAVATE AND LOCATE THE EXISTING UTILITIES TO VERIFY THEIR LOCATION, SIZE, AND DEPTH TO INSURE THAT GRADE CONFLICTS WILL NOT OCCUR. THE COST OF THIS EXPLORATION SHALL BE INCLUDED IN THE COST OF THE PROPOSED UTILITY CONSTRUCTION.
- 22. CONNECTION OF PROPOSED STORM SEWER INTO EXISTING STORM SEWER OR EXISTING STORM SEWER STRUCTURES SHALL BE INCLUDED IN THE COST OF STORM SEWERS.
- 23. CONNECTION OF EXISTING STORM SEWER INTO PROPOSED STORM SEWER STRUCTURES SHALL BE INCLUDED IN THE COST OF THE STORM SEWER STRUCTURE, ANY ADDITIONAL STORM SEWER PIPE REQUIRED TO MAKE THE CONNECTION SHALL BE OF THE SAME SIZE AND MATERIAL TYPE AS THE EXISTING STORM SEWER AND SHALL BE INCLUDED IN THE COST OF THE STORM SEWER STRUCTURE.
- 24. IF ANY STORM SEWER LATERALS ARE FOUND DURING CONSTRUCTION AND ARE NOT IDENTIFIED ON THE PLANS, THEY SHALL BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM AND INCLUDED IN THE COST OF THE STORM SEWER CONSTRUCTION.
- 25. STORM STRUCTURE OFFSET LOCATIONS ARE TO THE EDGE OF PAYEMENT IF THE STRUCTURE IS IN THE CURB LINE OR TO THE CENTER OF STRUCTURE IF THE STRUCTURE IS NOT IN THE CURBLINE.
- 26. IN ALL TRENCHES CROSSING DRIVEWAYS, SIDEWALKS, AND ALL PROPOSED AND EXISTING ROADWAYS, THE MATERIAL FOR THE TOP 12 INCHES SHALL BE CA-6 CRUSHED GRAVEL OR CRUSHED STONE AND BE INCLUDED IN THE PAY ITEM FOR TRENCH BACKFILL. THE BACKFILL SHALL EXTEND TO AND BE MEASURED FOR PAYMENT TO THE EXISTING GROUND OR SURFACE
- 27. FRAME ELEVATIONS GIVEN 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 ELEVATION OF THE AREA IN WHICH THEY ARE LOCATED AS PART OF COST OF THE STRUCTURE.
- 28. A PORTABLE BATHROOM(S) SHALL BE PLACED ON THE JOB SITE(S) AND RELOCATED WHEN NECESSARY SO IT IS ACCESSIBLE TO WORKERS. IF WORK IS OCCURRING AT SEVERAL LOCATIONS, ONE PORTABLE BATHROOM SHALL BE PLACED AT EACH LOCATION WITHIN A REASONABLE DISTANCE FROM THE WORK AS DETERMINED BY THE ENGINEER. THIS SHALL BE INCLUDED IN THE PAY ITEM FOR MOBILIZATION.
- 29. ALL CRACKS AND JOINTS SHALL BE CLEANED PRIOR TO FILLING THEM. THIS WORK SHALL BE INCLUDED IN THE ITEM "MIXTURE FOR CRACKS, JOINTS AND FLANGEWAYS."
- 30. THE PRIME COAT APPLICATION RATE SHALL BE 0.1 GAL/SY. THE MC-30 PRIME COAT APPLICATION RATE SHALL BE 0.3 GAL/SY.
- 31. THE DETAIL FOR COMBINATION CONCRETE CURB AND CUTTER REMOVAL AND REPLACEMENT SHOWN IN THE PLANS SHALL BE MODIFIED TO INCLUDE THE FOLLOWING. THE WORK SHALL INCLUDE SAW-CUTTING AND REMOVING THE EXISTING PAVEMENT A MINIMUM OF 6-INCHES MEASURED FROM THE EXISTING EDGE OF PAVEMENT, AND FILLING THE 6" GAP WITH CLASS SI CONCRETE TO AN ELEVATION 2-1/2" BELOW THE PROPOSED CURB AND GUTTER FLAG. IF THE CONCRETE IS POURED HIGHER THAN 2-1/2" FROM THE GUTTER FLAG FOR STREETS TO BE RESURFACED, THE CONTRACTOR WILL BE REDUIRED TO GRIND ADDITIONAL CONCRETE TO THE REQUIRED 2-1/2" DEPTH. THE AREA BEHIND THE PROPOSED CURB AND GUTTER SHALL BE RESTORED WITH SEEDING CLASS 1A IN ACCORDANCE WITH SECTION 1081.03 RATHER THAN SALT TOLERANT SOD.
- 32. ON STREETS TO BE FULL WIDTH MILLED (2" OR MORE), THE STRUCTURES IN THE PAVEMENT SHALL BE ADJUSTED IN ACCORDANCE WITH THE IDOT DETAIL "DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING". THIS WORK SHALL BE PAID FOR AS FRAMES AND LIDS TO BE ADJUSTED (SPECIAL) AND SHALL INCLUDE THE ADJUSTMENT OF FRAMES AND LIDS FOR STRUCTURES, SANITARY MANHOLES, WATER VALVE VAULTS, AND ANY OTHER UTILITY MANHOLES LOCATED WITHIN THE EXISTING PAVEMENT TO REMAIN.
- 33. THE DAYS PAVING OPERATION SHOULD RESULT IN A SINGLE TRANSVERSE JOINT. ANY COLD LONGITUDINAL JOINTS WILL NOT BE ACCEPTED. PROVIDING A SINGLE TRANSVERSE JOINT SHALL BE ACCOMPLISHED BY PAVING ONE LANE OF SUFFICIENT LENGTH THAT WILL ALLOW FOR THE PAVING OF THE ADJACENT LANE IN THE SAME DAY.
- 34. HMA RECREATIONAL PATHS AND PCC SIDEWALKS TO BE REMOVED SHALL BE PAID FOR AS
- 35. DEWATERING IS ANTICIPATED FOR CONSTRUCTION WORK IN THE WETLAND AREAS. ALL DEWATERING SHALL BE IN ACCORDANCE WITH THE EROSION CONTROL PLANS AND SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
- 36. THE PROPOSED STORM SEWER TRUNK LINE SHALL BE CONNECTED TO THE EXISTING STORM SEWER TRUNK LINE AT THE END OF EACH DAY SO THAT A CONTINUOUS STORM SEWER SYSTEM IS MAINTAINED DURING CONSTRUCTION. THESE TEMPORARY CONNECTIONS SHALL BE INCLUDED IN THE COST OF THE STORM SEWER CONSTRUCTION.
- 37. PULVERIZED MATERIAL SHALL BE STOCKPILED ON THE EXISTING PAVEMENT BETWEEN THE NORTH RECONSTRUCTION LIMITS AND NORTH SHAKESPEARE DRIVE.
- 38. FRAMES AND GRATES OR LIDS THAT ARE REMOVED AS PART OF ADJUSTMENTS OR REMOVALS SHALL BE DELIVERED TO THE VILLAGE PUBLIC WORKS FACILITY. THE CONTRACTOR SHALL SCHEDULE A DELIVERY DATE AND TIME WITH THE VILLAGE PRIOR TO DELIVERY. THIS WORK SHALL BE INCLUDED IN THE STRUCTURE ADJUSTMENT OR REMOVAL.
- 39. ALL AGGREGATE USED ON PROJECT SHALL BE CRUSHED MATERIAL.

SCALE:

- 40, ANY DAMAGE DONE TO WATER MAIN, (VILLAGE OWNED OR OWNED BY OTHERS) WATER SERVICES, SANITARY SEWER, OR SANITARY SEWER SERVICES NOT CONSIDERED IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE.
- 41. MATERIALS, STRUCTURES, OR MACHINES SHALL NOT BE STORED WHERE THEY WILL OBSTRUCT STREET CROSSINGS OR DRIVEWAY SIGHTLINES.
- 42. CURB AND GUTTER AND DRIVEWAYS PROVIDING ACCESS SHALL BE REMOVED AND REPLACED WITHIN 3 DAYS.
- 43. REMOVAL AND REPLACEMENT OF CURB AND GUTTER AND DRIVEWAYS PROVIDING ACCESS FOR COMMERCIAL OR MULTIFAMILY DWELLINGS SHALL BE STAGED TO MAINTAIN CONTINUOUS
- 44. THE CONTRACTOR SHALL CONTACT THE CENTRAL LAKE COUNTY JOINT ACTION WATER AGENCY (CLCJAWA) AT (847)980-8947 72 HOURS PRIOR TO ADJUSTING ANY CLCJAWA UTILITY STRUCTURES (30" WATER MAIN).

WOODMAN

 DESIGNED
 DJS
 REVISED
 6-8-10 IDOT REVIEW

 DRAWN
 UKB
 REVISED

 CHECKED
 RWL
 REVISED

 DATE
 4-27-10
 FILE
 090772-GEN-NTES.dgn

VILLAGE OF GRAYSLAKE, ILLINOIS ATKINSON ROAD RESURFACING AND RECONSTRUCTION IMPROVEMENTS

INCL YST GLEGNE VURALL NOSOTTE-ATNITISOTTE TOTAL CONTINUENT TOTAL CONTINUE

					TION TYPE CODE
CODE NUMBER	R PAY ITEM	UNIT	TOTAL QUANTITY	ROADWAY 1000-2A	TRAFFIC SIGNALS Y031-1F
2010011	0 TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	95	95	
2010110	0 TREE TRUNK PROTECTION	EACH	4	4	· _
2010120	0 TREE ROOT PRUNING	EACH	4	4	
2010130	0 TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	4	4	-
2010135	0 TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	4	4	-
2020010	0 EARTH EXCAVATION	CUYD	1,446	1,446	
2020120	0 REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CUYD	387	387	-
2070042	0 POROUS GRANULAR EMBANKMENT, SUBGRADE	CUYD	171	171	
2080015	0 TRENCH BACKFILL	CUYD	3,005	3,005	_
2100100	0 GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	469	469	
2110161	5 TOPSOIL FURNISH AND PLACE, 4"	SQ YD	2,958	2,958	· -
2500011	0 SEEDING, CLASS 1A	ACRE	0.15	0.15	
2500021	0 SEEDING, CLASS 2A	ACRE	0.49	0.49	
2500040	0 NITROGEN FERTILIZER NUTRIENT	POUND	60	60	-
ž 2500050	0 PHOSPHORUS FERTILIZER NUTRIENT	POUND	60	60	-
2500060	0 POTASSIUM FERTILIZER NUTRIENT	POUND	60	60	
2510063	0 EROSION CONTROL BLANKET	SQ YD	2,958	2,958	
* 2520020	0 SUPPLEMENTAL WATERING	UNIT	38	38	-
2800025	10 TEMPORARY EROSION CONTROL SEEDING	POUND	100	100	-
2800040	0 PERIMETER EROSION BARRIER	FOOT	3,233	3,233	
2800051	0 INLET FILTERS	EACH	31	31	
2800070	MULCH, METHOD 1	ACRE	1.00	1.00	· 
3110140	0 SUB-BASE GRANULAR MATERIAL, TYPE B 6"	SQ YD	2,392	2,392	_ :
3110181	0 SUB-BASE GRANULAR MATERIAL, TYPE B 12"	SQ YD	98	98	<u>.</u>
3510004	0 STOCKPILING SALVAGED AGGREGATE	CUYD	843	843	
3510160	00 AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	109	109	
3510200	AGGREGATE BASE COURSE, TYPE B 8"	SQ YD	198	198	
3540030	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 8"	SQ YD	10	10	· <u>-</u>
3550130	08 HOT-MIX ASPHALT BASE COURSE, 6"	SQ YD	40	40	
3550131	6 HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	2,020	2,020	· · · · · · · · · · · · · · · · · · ·

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DRAWN	-	UKB	REVISED -
CHECKED	-	RWL	REVISED -
DATE	-	4-27-10	FILE - 090772-SMY-QTY-1.dgn

SUMMARY	OF	QUANTITIES	
		STA.	TO STA.

CODE			TOTAL	CONSTRUC ROADWAY	TION TYPE CODE TRAFFIC SIGNALS
NUMBER	PAY ITEM	UNIT	QUANTITY	1000-2A	Y031-1F
35600708	HOT-MIX ASPHALT BASE COURSE WIDENING, 8"	SQ YD	56	56	
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	3,854	3,854	-
40600300	AGGREGATE (PRIME COAT)	TON	64	64	-
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	3	3	·
X406 0826	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	603	603	· · · · · · · · · · · · · · · · · · ·
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	159	159	-
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	31	31	
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	1,363	1,363	
42001300	PROTECTIVE COAT	SQ YD	399	399	·
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	103	103	-
42400800	DETECTABLE WARNINGS	SQ FT	80	80	-
44000100	PAVEMENT REMOVAL	SQ YD	23	23	-
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	13,040	13,040	- · · · · · · · · · · · · · · · · · · ·
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	100	100	·
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1,565	1,565	· -
44000600	SIDEWALK REMOVAL	SQ FT	1,675	1,675	
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	587	587	
44201737	CLASS D PATCHES, TYPE I, 8 INCH	SQ YD	131	131	· <u>-</u>
44201741	CLASS D PATCHES, TYPE II, 8 INCH	SQYD	131	131	-
44201745	CLASS D PATCHES, TYPE III, 8 INCH	SQ YD	652	652	-
44201747	CLASS D PATCHES, TYPE IV, 8 INCH	SQ YD	392	392	-
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	12	12	-
550A0160	STORM SEWERS, CLASS A, TYPE 1 36"	FOOT	245	245	
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	12	12	· -
550A0430	STORM SEWERS, CLASS A, TYPE 2 30"	FOOT	281	281	
550A0450	STORM SEWERS, CLASS A, TYPE 2 36"	FOOT	376	376	
550A2320	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 1 12"	FOOT	72	72	-
55100500	STORM SEWER REMOVAL 12"	FOOT	168	168	-
55100700	STORM SEWER REMOVAL 15"	FOOT	7	7	·
55101400	STORM SEWER REMOVAL 30"	FOOT	289	289	- <u>-</u>

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SUMMARY OF Q	UANIIII	E9	0198	09-00058
SCALE:	STA.	TO STA.	FED. R	OAD DIST. NO. 1

				CONSTRUCTION TYPE CODE	
CODE NUMBER	PAY ITEM	UNIT	TOTAL QUANTITY	ROADWAY 1000-2A	TRAFFIC SIGNALS Y031-1F
55101600	STORM SEWER REMOVAL 36"	FOOT	613	613	<u>-</u> .
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CUYD	16	16	<u> </u>
60201105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	2	2	-
60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2	2	_
60222000	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	1	1	
60223800	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	5	5	-
60236800	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	EACH	9	9	_
60240310	INLETS, TYPE B, TYPE 11 FRAME AND GRATE	EACH	1	1	_
60250200	CATCH BASINS TO BE ADJUSTED	EACH	5	5	· · · · · ·
60255500	MANHOLES TO BE ADJUSTED	EACH	3	3	
60260100	INLETS TO BE ADJUSTED	EACH	4	4	
60265700	VALVE VAULTS TO BE ADJUSTED	EACH	2	2	_
60266600	VALVE BOXES TO BE ADJUSTED	EACH	2	2	· .
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	10	10	
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	1	1	· -
60500040	REMOVING MANHOLES	EACH	3	3	_
60500050	REMOVING CATCH BASINS	EACH	2	2	· -
60500060	REMOVING INLETS	EACH	5	5	
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	1,605	1,605	
67100100	MOBILIZATION	LSUM	1	1	-
70101900	TRAFFIC CONTROL AND PROTECTION (DETOUR 1)	LSUM	1		-
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	LSUM	1	1	_
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	LSUM	1	. 1	_
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1	-
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1	. <u>-</u>
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	3,097	3,097	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1,033	1,033	-
72000100	SIGN PANEL - TYPE 1	SQ FT	27	-	27
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	296	296	-

<sup>\*</sup> INDICATES SPECIALTY ITEM

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DRAWN	-	UKB	REVISED - 7-12-10 IDOT REVIEW	
CHECKED	~	RWL .	REVISED -	
DATE	-	4-27-10	FILE - 090772-SMY-QTY-3.dgn	

			F.A.U RTE.	SECTION	COUNTY	TOTAL	SHEE NO.
SUMMARY	OF QUANTITIES		0198	09-00058-00-RS	LAKE	46	6
					CONTRAC	T NO.	63498
SCALE:	STA.	TO STA.	FED. R	OAD DIST. NO. 1 ILLINOIS FED.	AID PROJECT: M-9	003 (485)	

CODE NUMBER	PAY ITEM	UNIT	TOTAL QUANTITY	CONSTRUC ROADWAY 1000-2A	TION TYPE CODE TRAFFIC SIGNALS Y031-1F
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	9,880	9,880	
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1,617	1,617	
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	940	940	-
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	155	155	<u>-</u> ·
81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	425		425
81000800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	41		41
81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	20	-	20
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	201	· · · · · · · · · · · · · · · · · · ·	201
81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	184	<u>-</u>	184
81400100	HANDHOLE	EACH	6	_	6
81400200	HEAVY-DUTY HANDHOLE	EACH	1		1
81400300	DOUBLE HANDHOLE	EACH	1	<del>-</del>	
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	471	-	471
85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1	-	1
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	368	<u>-</u>	368
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	635		635
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,155		1,155
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	338	<u>-</u>	338
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	977		977
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	87	_	87
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1	<u>-</u>	1
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1	·	1
87700180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1	-	1
87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	2	-	2
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	8	<u>-</u>	8
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4	-	4
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	37	- -	37
88000160	SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3	-	3
88000170	SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	5		5
88000290	SIGNAL HEAD, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1		1

\* INDICATES SPECIALTY ITEM

WOODMAN

DESIGNED	-	DJS	REVISED - 6-8-10 IDOT REVIEW
DRAWN		UKB	REVISED -
CHECKED		RWL	REVISED -
DATE	-	4-27-10	FILE - 090772-SMY-QTY-4.dgn

VILLAGE OF	GRAYSL	AKE, ILLINOIS	
ATKINSON	ROAD R	ESURFACING	
AND RECONSTR	RUCTION	IMPROVEMENTS	;

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SUMMAKY	UF	QUANTITIES		0198		
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U SECTION COUNTY TOTAL SHEET NO.

8 09-00058-00-RS LAKE 46 7

CONTRACT NO. 63498

ROAD DIST. NO. 1 | ILLINOIS | FED. AID | PROJECT: M-9003 (485)

						TION TYPE CODE
	CODE	DAYITEM	LINUT	TOTAL	ROADWAY	TRAFFIC SIGNALS Y031-1F
.  -	NUMBER	PAY ITEM	UNIT	QUANTITY	1000-2A	YU31-1F
*	88000490	SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1		1
*	88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4	· ·	4
*	88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	6		6
*	88500100	INDUCTIVE LOOP DETECTOR	EACH	5	_	5
*	88600100	DETECTOR LOOP, TYPE I	FOOT	304	_	304
*	88700200	LIGHT DETECTOR	EACH	2		2
*	88700300	LIGHT DETECTOR AMPLIFIER	EACH	1		1
*	88800100	PEDESTRIAN PUSH-BUTTON	EACH	4	<u>.</u> ·	4
*	A2004816	TREE, GLEDITSIA TRIACANTHOS INERMIS SKYLINE (SKYLINE THORNLESS COMMON HONEYLOCUST), 2" CALIPER, BALLED AND BURLAPPED	EACH	2	2	· -
*	A2006516	TREE, QUERCUS BICOLOR (SWAMP WHITE OAK), 2" CALIPER, BALLED AND BURLAPPED	EACH	4	4	- -
*	B2005416	TREE, PRUNUS VIRGINIANA SCHUBERT (SCHUBERT CHOKEBERRY), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	2	2	<u>-</u>
*	B2006116	TREE, SYRINGA PEKINENSIS MORTON (CHINA SNOW PEKING LILAC), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	3	3	-
Δ	Z0076600	TRAINEES	HOUR	500	500	
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	
	X0326861	PULVERIZATION	SQ YD	2,020	2,020	
	X0320139	TEMPORARY CONSTRUCTION FENCE	FOOT	1,380	1,380	
	X0322033	STORM SEWER (WATER MAIN REQUIREMENTS) 12 INCH	FOOT	146	146	· -
	X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	390	390	·
	X0325279	CLASS SI CONCRETE (MISCELLANEOUS)	CUYD	9	9	
_	X0325608	GEOSYNTHETIC REINFORCEMENT	SQ YD	2,471	2,471	
	X0325391	EXPANDED POLYSTYRENE FILL	CUYD	1,712	1,712	
	X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	1	1	-
*	X8050015	SERVICE INSTALLATION - POLE MOUNTED	EACH	1	· -	1
*	X8620020	UNINTERRUPTIBLE POWER SUPPLY	EACH	1	_	1
*	X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	998		998
*	X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	232	<del>-</del>	232

\* INDICATES SPECIALTY ITEM

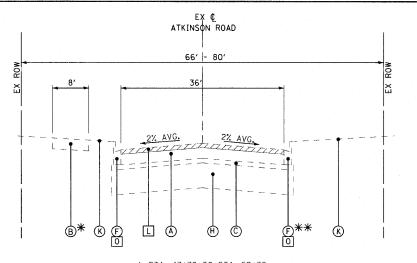
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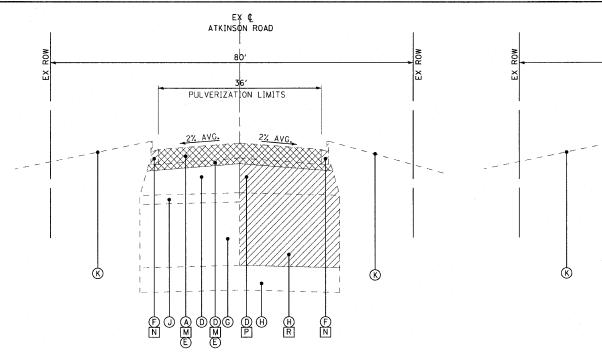
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- \* STA. 47+70 TO STA. 59+30 STA. 77+15 TO STA. 82+10
- \*\* INTERSECTION WIDENING FN STA. 50+69 TO STA. 51+99 (SEE SHEET 14)

# **ATKINSON ROAD EXISTING TYPICAL SECTION**

(STA. 47+70 TO STA. 60+20) (STA. 65+25 TO STA. 82+10)



# ATKINSON ROAD **EXISTING TYPICAL SECTION**

(STA. 61+00 TO STA. 62+00) (STA. 64+50 TO STA. 65+00)



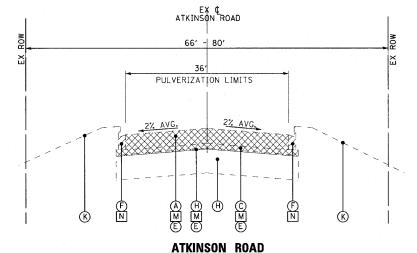
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EX ¢ ATKINSON ROAD

PULVERIZATION LIMITS

2% AVG.

(STA. 62+00 TO STA. 64+50)



# EXISTING TYPICAL SECTION

(STA, 60+20 TO STA, 61+00) (STA. 65+00 TO STA. 65+25)

# **HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

THE CONTRACTOR SHALL MILL PRIOR TO HMA PATCHING.

MIXTURE TYPE	VOIDS
RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5mm) - 1 1/2"	4% @ 70 GYR
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75 N50 - 3/4"	4% <b>e</b> 50 GYR
HOT-MIX ASPHALT PAVEMENT	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5mm) - 2"	4% @ 70 GYR
HOT-MIX ASPHALT BASE COURSE (HMA BINDER COURSE, IL19.0, N70) - 8" (IN 3 LIFTS)	4% @ 70 GYR
HOT-MIX ASPHALT PAVEMENT WIDENING	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5mm) - 2"	4% @ 70 GYR
HOT-MIX ASPHALT BASE COURSE WIDENING (HMA BINDER COURSE, IL19.0, N70) - 8" (IN 3 LIFTS)	4% @ 70 GYR
PATCHING	
CLASS D PATCHES (HMA BINDER IL-19mm); TYPE I-IV - 8"	4% @ 70 GYR
RECREATION PATHS	
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 (IL 9.5 mm) - 2"	4% @ 50 GYR
DRIVEWAYS	-
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 (IL 9.5 mm) - 2"	4% @ 50 GYR
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19 mm) - 6"	4% @ 50 GYR

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

# **EXISTING LEGEND**

- HOT-MIX ASPHALT SURFACE COURSE, 1 1/2"+/-HOT-MIX ASPHALT BINDER COURSE, 8 1/2"+/-
- HOT-MIX ASPHALT MULTI-USE PATH
- (C) AGGREGATE BASE COURSE, 4" +/-
- **(** AGGREGATE BASE COURSE, 12" TO 20" +/-
- Œ STOCKPILING SALVAGED AGGREGATE - 15" DEPTH
- (E) CONCRETE CURB AND GUTTER, TYPE B-6.12
- **©** EXPANDED POLYSTYRENE FILL, 30" TO 42" +/-
- $\oplus$ AGGREGATE FILL
- **(** CONCRETE CAP, 6" +/-
- (K) GROUND SURFACE
- L HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- М PULVERIZATION - 15" DEPTH
  - COMBINATION CURB AND GUTTER REMOVAL
  - COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (AS DETERMINED BY THE ENGINEER)  $\,$
- AGGREGATE BASE COURSE REMOVAL (PAID AS EARTH EXCAVATION)
- R AGGREGATE FILL REMOVAL (PAID AS EARTH EXCAVATION)
- $\square$ ITEM TO BE REMOVED
- $\boxtimes$ ITEM TO BE STOCKPILED

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REVISED - 6-8-10 IDOT REVIEW DESIGNED DJS DRAWN UKB REVISED CHECKED RWL REVISED 4-27-10 FILE - 090772-TYP-SECT.dgn

**VILLAGE OF GRAYSLAKE, ILLINOIS** ATKINSON ROAD RESURFACING

TYPICAL SECTIONS AND **HOT-MIX ASPHALT MIXTURE REQUIREMENTS** SCALE: NONE STA. NONE TO STA.

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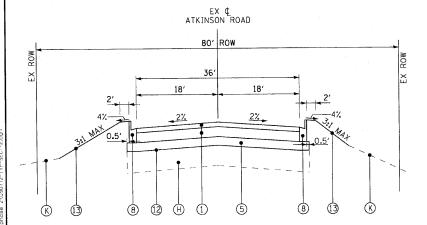
SECTION COUNTY TOTAL SHEE 0198 09-00058-00-RS CONTRACT NO. 63498

AND RECONSTRUCTION IMPROVEMENTS

\*STA. 47+70 TO STA. 59+30 STA. 77+15 TO STA. 82+10 \*\* INTERSECTION WIDENING STA. 50+69 TO STA. 51+99 (SEE SHEET 14)

# ATKINSON ROAD PROPOSED TYPICAL SECTION

(STA. 47+70 TO STA. 60+20) (STA. 65+25 TO STA. 82+10)

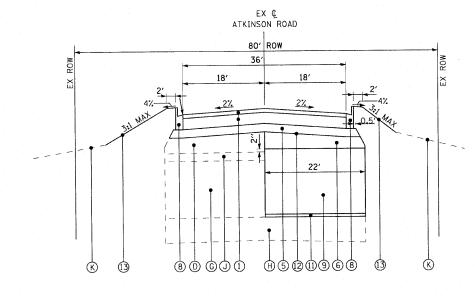


# ATKINSON ROAD PROPOSED TYPICAL SECTION

(STA, 60+20 TO STA, 61+00) (STA. 65+00 TO STA. 65+25)

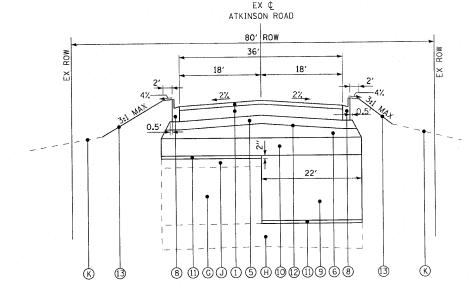
# NOTES:

- 1. POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES) HAS BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSUITABLE OR UNSTABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGES WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.03 AND THE UNDERCUT GUIDELINES IN THE IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE MATERIAL IS NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE THE CONTRACTOR.
- 2. THE FINISHED HOT-MIX ASPHALT SURFACE COURSE SHALL BE CONSTRUCTED  $1/4^{\prime\prime}$  ABOVE THE GUTTER FLAG.
- 3. AS DETERMINED BY THE ENGINEER.
- 4. THE PROPOSED LOWER LAYER OF EXPANDED POLYSTRENE FILL ON THE EAST SIDE OF THE ROAD SHALL EXTEND FROM THE BOTTOM OF THE EXISTING EXPANDED POLYSTYRENE FILL TO 2" ABOVE THE EXISTING CONCRETE CAP ON THE WEST SIDE OF THE ROAD. ANY VARIATION IN THICKNESS OF THE EXISTING EXPANDED POLYSTYRENE FILL AND/OR CONCRETE CAP SHALL BE MATCHED IN THE PROPOSED LOWER LAYER OF EXPANDED POLYSTYRENE FILL.
- 5. THE PROPOSED UPPER LAYER OF EXPANDED POLYSTYRENE FILL SHALL MATCH THE WIDTH OF THE EXISTING EXPANDED POLYSTYRENE FILL ON THE WEST SIDE OF THE ROAD PLUS THE WIDTH OF THE PROPOSED LOWER LAYER OF EXPANDED POLYSTYRENE ON THE EAST SIDE OF THE ROAD.
- 6. THE STATIONING LIMITS OF THE UPPER LAYER OF EPS SHALL BE ADJUSTED IN THE FIELD TO MAINTAIN A 9-INCH MINIMUM THICKNESS OF SALVAGED AGGREGATE.



# ATKINSON ROAD PROPOSED TYPICAL SECTION

(STA. 61+00 TO STA. 62+00) (STA. 64+50 TO STA. 65+00)



ATKINSON ROAD PROPOSED TYPICAL SECTION

(STA. 62+00 TO STA. 64+50)

# **EXISTING LEGEND**

- HOT-MIX ASPHALT SURFACE COURSE, 1 1/2"+/-HOT-MIX ASPHALT BINDER COURSE, 8 1/2"+/- $\bigcirc$
- $^{\otimes}$ HOT-MIX ASPHALT MULTI-USE PATH
- 0 AGGREGATE BASE COURSE, 4" +/-
- (D) AGGREGATE BASE COURSE, 12" TO 20" +/-
- STOCKPILING SALVAGED AGGREGATE 15" DEPTH Œ
- F CONCRETE CURB AND GUTTER, TYPE B-6.12
- **©** EXPANDED POLYSTYRENE FILL, 30" TO 42" +/-
- $\oplus$ AGGREGATE FILL
- (J) CONCRETE CAP, 6" +/-
- K GROUND SURFACE
- HOT-MIX ASPHALT SURFACE REMOVAL, 2" L
- M PULVERIZATION - 15" DEPTH
- COMBINATION CURB AND GUTTER REMOVAL N
- COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (AS DETERMINED BY THE ENGINEER) 0
- AGGREGATE BASE COURSE REMOVAL (PAID AS EARTH EXCAVATION)
- AGGREGATE FILL REMOVAL (PAID AS EARTH EXCAVATION) R
- ITEM TO BE REMOVED
- $\boxtimes$ ITEM TO BE STOCKPILED

# **PROPOSED LEGEND**

- HOT-MIX ASPHALT PAVEMENT 10" (SEE NOTE 2) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N7O 2" HOT-MIX ASPHALT BASE COURSE 8" (IN 3 LIFTS)
- HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 1.5" (SEE NOTE 2)
- POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 3/4" (AVG) 3
- CLASS D PATCHES, TYPE I IV, 8" (SEE NOTE 3) (4)
- SUB-BASE GRANULAR MATERIAL TYPE B 6" (5)
- SALVAGED AGGREGATE 9" MIN (PAID AS STOCKPILING SALVAGED AGGREGATE) 6
- REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND POROUS GRANULAR 7 EMBANKMENT, SUBGRADE (SEE NOTE 1)
- CONCRETE CURB AND GUTTER TYPE B-6.12 (8)
- 9 EXPANDED POLYSTYRENE FILL - 36" TO 48" AND VARIES (SEE NOTE 4)
- EXPANDED POLYSTYRENE FILL 12" (SEE NOTES 5 AND 6) 10
- SAND BEDDING 2" (INCLUDED IN COST OF EXPANDED POLYSTYRENE FILL) (11)
- 12 GEOSYNTHETIC REINFORCEMENT
- TOPSOIL FURNISH AND PLACE 4" SEEDING CLASS 2A, FERTILIZER (13) EROSION CONTROL BLANKET
- TOPSOIL FURNISH AND PLACE -SEEDING CLASS 1A, FERTILIZER EROSION CONTROL BLANKET 14)

REVISED - 6-8-10 IDOT REVIEW DESIGNED -DJS DRAWN UKB REVISED RWL REVISED CHECKED FILE - 090772-TYP-SECT-2.dgn 4-27-10 DATE

**VILLAGE OF GRAYSLAKE, ILLINOIS** ATKINSON ROAD RESURFACING AND RECONSTRUCTION IMPROVEMENTS

COUNTY SECTION TYPICAL SECTIONS LAKE 09-00058-00-RS 0198 CONTRACT NO. 63498 STA. NONE TO STA. FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT: M-9003 (485) SCALE: NONE

2005 INOIS

# **EARTHWORK**

LOCATION STA TO STA	1 UNDERCUT AND PGE REPLACEMENT (CY)	2 UNSUITABLE EXCAVATION (TOPSOIL) (CY)	3 REMOVAL & DISPOSAL OF UNSUITABLE MATERIAL (CY)	4 EARTH EXCAVATION (CY)	5 UTILITY EXCAVATION (CY)	6 EXCESS STRUCTURE EXCAVATION (CY)	TOTAL SUITABLE EXCAVATION	8 EXCAVATION TO BE USED IN EMBANKMENT (15% SHRINKAGE) (CY)	9 EMBANKMENT (CY)	10 EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CY)
ATKINSON ROAD	161	181	342	1416	2975	0	4391	3733	652	3081
BRAE LOCH ROAD	10	35	45	30	5	0	35	30	5	25
TOTALS	171	216	387	1446	2980	0	4426	3763	657	3106

# HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

LOCATION	SQ YD
ATKINSON ROAD (47+70)	23
BRAE LOCH ROAD (50+98, 89' RT)	17
FREDERICK ROAD (56+17, 50' LT)	.15
BLACKBURN DRIVE (56+17, 47' RT)	15
SHAKESPEARE DRIVE (59+66, 53' LT)	20
SHAKESPEARE DRIVE (71+19, 53' LT)	14
CAMBRIDGE DRIVE (74+62, 53' RT)	14
CHERRY CREEK DRIVE (77+67, 65' LT)	19
ATKINSON ROAD (82+10)	- 22
TOTAL	159

SCALE:

BAXTER
WOODMAN

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# SUGGESTED SEQUENCE OF CONSTRUCTION

# STAGE I:

1. INSTALL EROSION CONTROL ON THE ENTIRE PROJECT AND ESTABLISH TRAFFIC CONTROL MEASURES INCLUDING DETOUR ROUTE.

# STAGE II (RECONSTRUCTION SECTION ONLY):

- 1. PULVERIZE AND STOCKPILE EXISTING PAVEMENT AND AGGREGATE BASE.
- 2. REMOVE EXISTING CURB AND GUTTER AND STORM SEWER LATERALS.
- 3. EXCAVATE EXISTING AGGREGATE MATERIAL.
- 4. DEWATER EXCAVATION SITE (AS REQUIRED FOR SITE CONDITIONS THROUGHOUT STAGE II).
- 5. INSTALL PROPOSED, EXPANDED POLYSTYRENE FILL (EPS).
- 6. INSTALL STOCKPILED PULVERIZED MATERIAL ABOVE EPS.
- 7. REMOVE EXISTING STORM SEWER TRUNK LINE AND INSTALL PROPOSED STORM SEWER TRUNK LINE AND LATERALS.

### STAGE III (RECONSTRUCTION SECTION ONLY):

- 1. INSTALL GEOSYNTHETIC REINFORCEMENT AND PROPOSED SUB-BASE GRANULAR MATERIAL.
- 2. CONSTRUCT CURB AND GUTTER AND HMA BINDER.

# STAGE IV (WIDENING AT BRAE LOCH ROAD):

- 1. REMOVE CURB AND GUTTER AND EXCAVATE FOR WIDENING AREA.
- 2. INSTALL STORM SEWER MANHOLE, SUB-BASE GRANULAR MATERIAL, CURB AND GUTTER, AND HMA BINDER.
- 3. INSTALL ALL TRAFFIC SIGNAL EQUIPMENT EXCEPT DETECTOR LOOPS.

### STAGE V (RESURFACING):

- REMOVE AND REPLACE CURB AND GUTTER, SIDEWALK, HMA RECREATIONAL PATHS AND DRIVEWAYS AS DETERMINED BY THE ENGINEER.
- 2. COMPLETE HMA SURFACE REMOVAL, HMA PATCHES, AND INSTALL LEVELING BINDER.
- 3. INSTALL PROPOSED DETECTOR LOOPS IN LEVELING BINDER.
- 4. INSTALL HMA SURFACE COURSE.
- 5. INSTALL PERMANENT PAVEMENT MARKINGS.
- 6. TEST AND BEGIN TRAFFIC SIGNAL OPERATIONS.
- 7. COMPLETE TOPSOIL AND SEEDING RESTORATION.
- 8. COMPLETE PUNCH LIST ITEMS, REMOVE TEMPORARY EROSION CONTROL ITEMS ONCE SEEDING HAS ESTABLISHED AND REMOVE TRAFFIC CONTROL MEASURES.

# MAINTENANCE OF TRAFFIC GENERAL NOTES

- EMERGENCY ACCESS SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL ADVISE ALL EMERGENCY RESPONDERS A MINIMUM OF 3 DAYS IN ADVANCE OF CONSTRUCTION ACTIVITIES WHICH IMPACT EMERGENCY SERVICES. THIS SHALL INCLUDE, BUT NOT LIMIT TO, THE VILLAGE OF GRAYSLAKE POLICE AND FIRE DEPARTMENT.
- 2. ALL SIDE STREETS SHALL BE OPEN TO LOCAL TRAFFIC THROUGHOUT THE DURATION OF THE CONTRACT.
- THE CONTRACTOR SHALL NOTIFY THE VILLAGE A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION OPERATIONS INVOLVING THE TEMPORARY CLOSING OF DRIVEWAYS OR THE ROADWAY. THE CONTRACTOR SHALL PROVIDE 48-HOUR NOTICE TO AFFECTED PARTIES BY DISTRIBUTING WRITTEN NOTICES AND /OR POSTING SIGNS.
- RESIDENTS SHALL HAVE ACCESS TO THEIR DRIVEWAYS. WHERE WORK IS REQUIRED ON THE DRIVEWAY DURING THE DAY, ACCESS SHALL BE RESTORED AT THE END OF EACH WORK DAY EXCEPT DURING CURB AND GUTTER INSTALLATION.
- THE ENGINEER SHALL BE INFORMED 72-HOURS IN ADVANCE OF ANY CHANGE IN CONSTRUCTION STAGING.
- ALL SHORT-TERM PAVEMENT MARKINGS SHOWING DETERIORATION SHALL BE REPLACED BY THE CONTRACTOR AS DETERMINED BY THE ENGINEER. ALL MARKINGS REQUIRING REPLACEMENT SHALL BE REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE.
- THE PROPOSED STORM SEWER TRUNK LINE SHALL BE CONNECTED TO THE EXISTING STORM SEWER TRUNK LINE AT THE END OF EACH DAY SO THAT A CONTINUOUS STORM SEWER SYSTEM IS MAINTAINED DURING CONSTRUCTION.

WOODMAN, INC. DESIGN FIRM 4/30/2011 BY BAXTER & W - PROFESSIONAL DOILZI - EXPIRES IGHT © 2009, DF ILLINOIS E NO. - 184-0

DESIGNED DJS REVISED REVISED DRAWN UKB REVISED CHECKED RWL 4-27-10 FILE - \$FILES\$ DATE

**VILLAGE OF GRAYSLAKE, ILLINOIS** ATKINSON ROAD RESURFACING

**MAINTENANCE OF TRAFFIC GENERAL NOTES** 

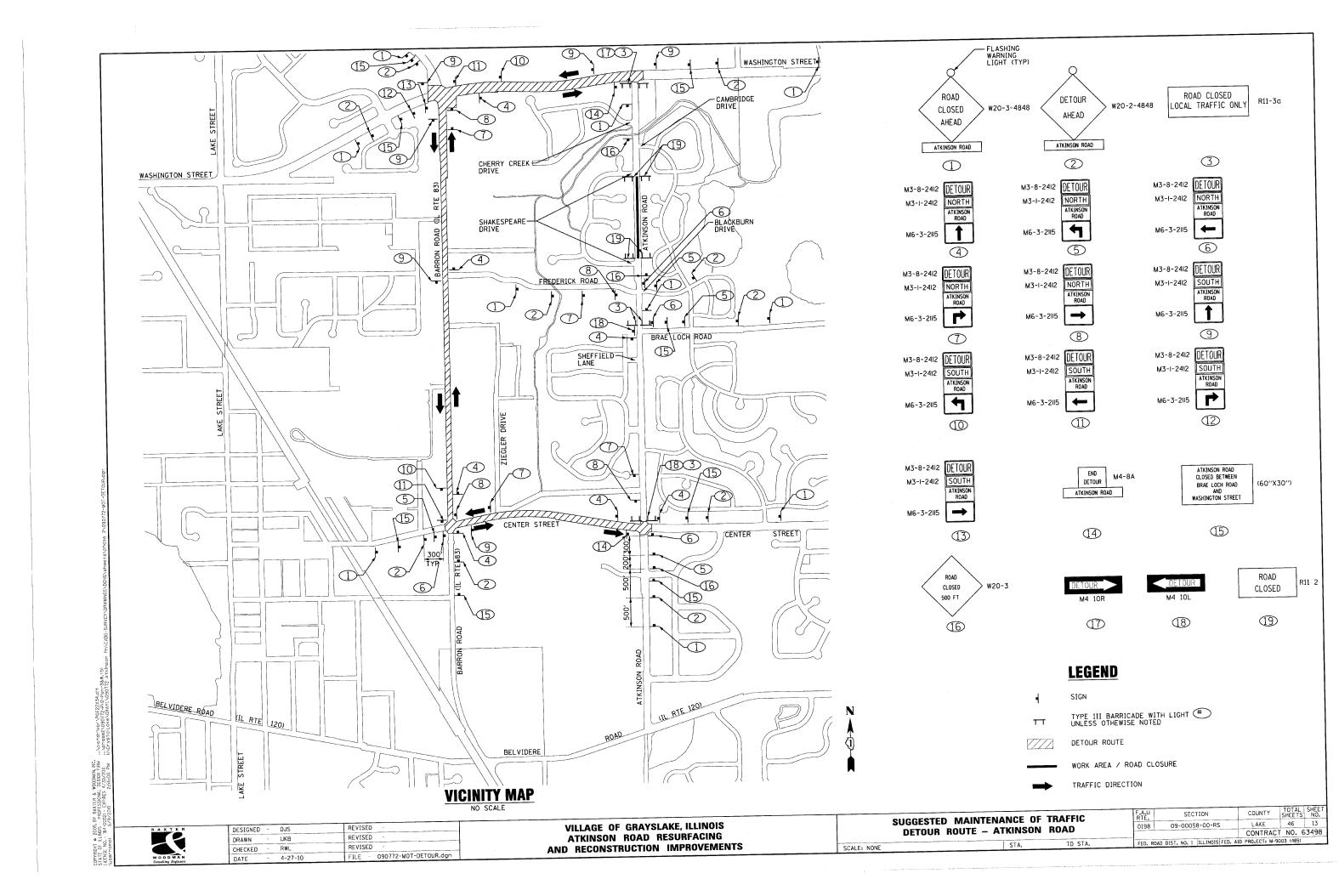
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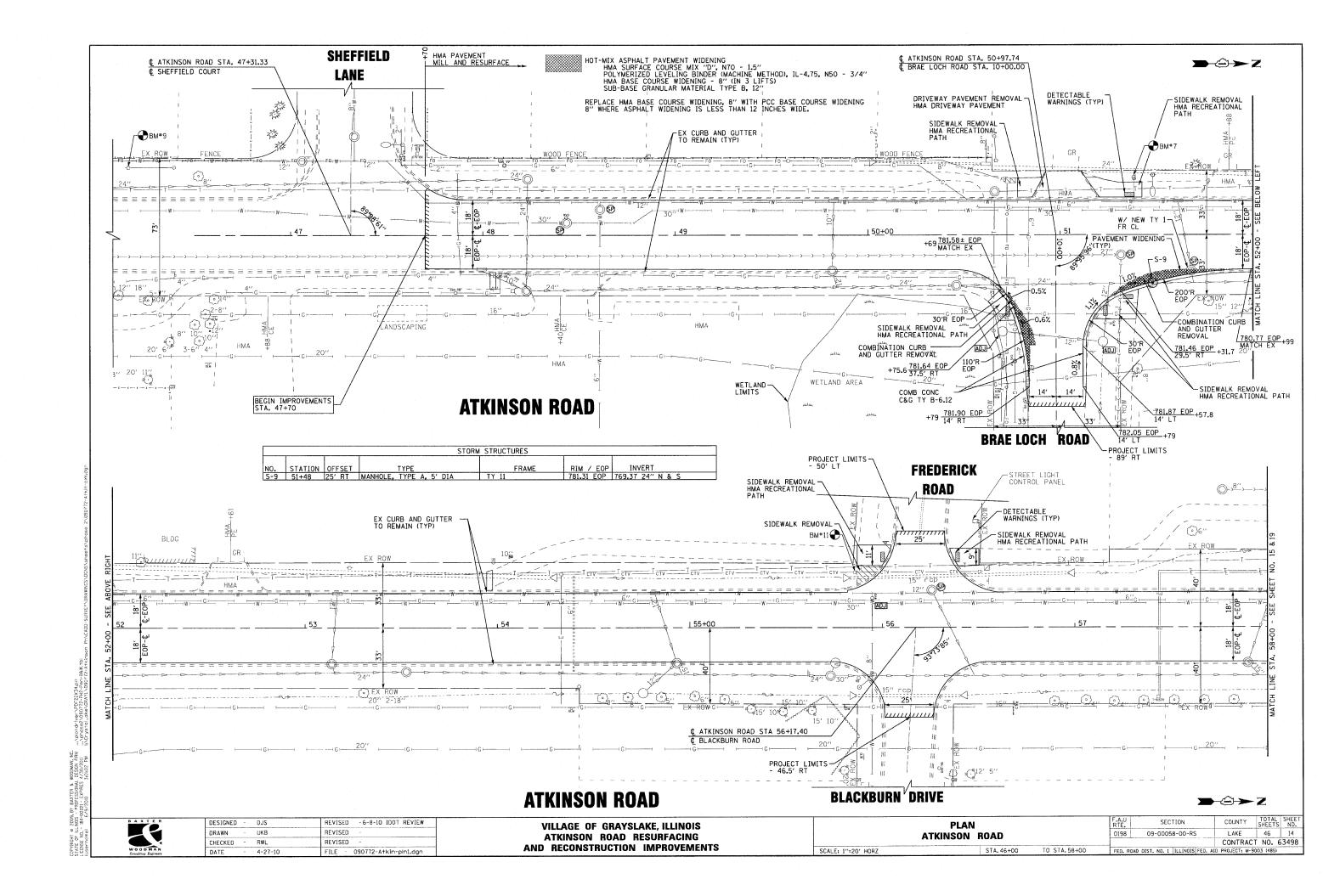
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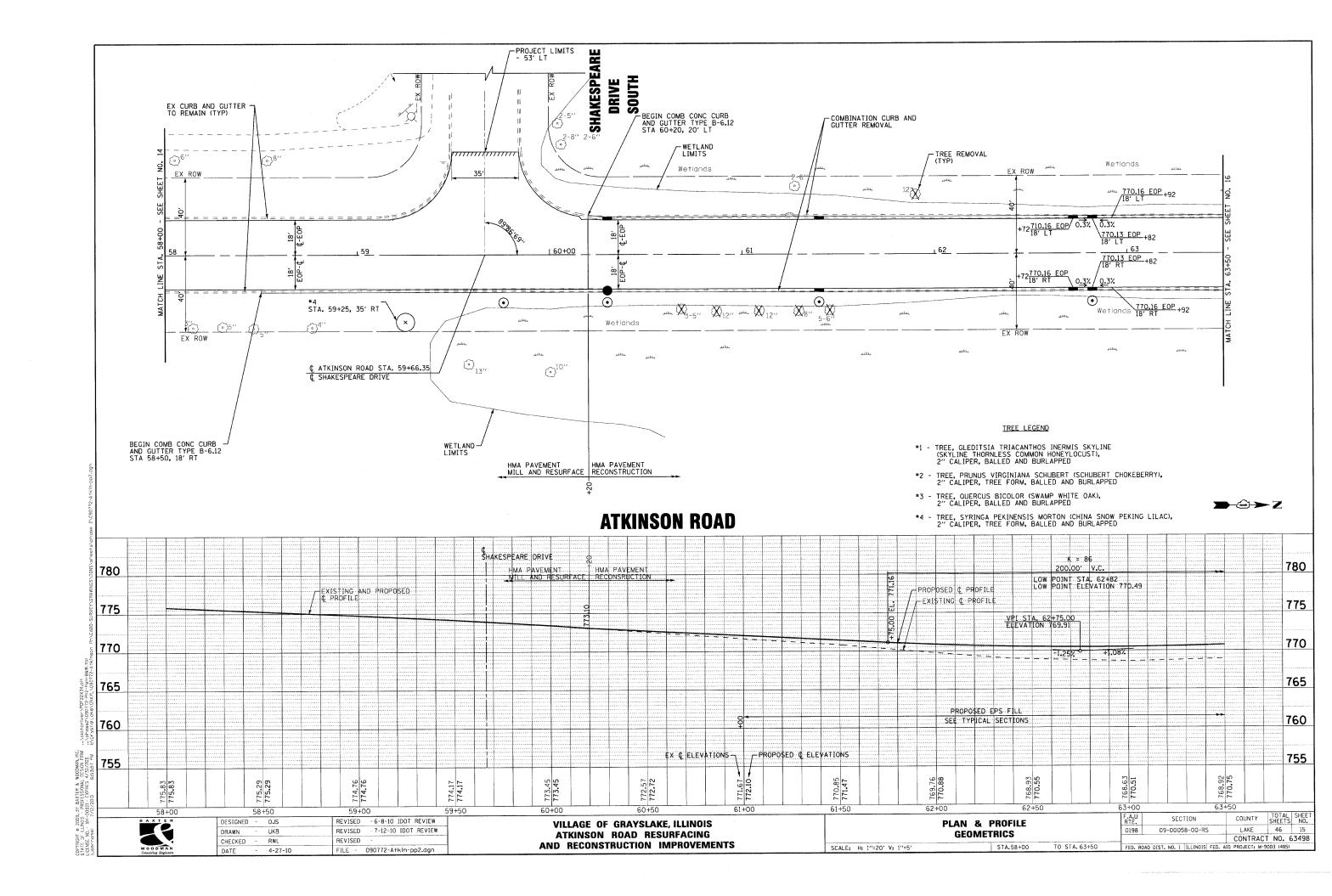
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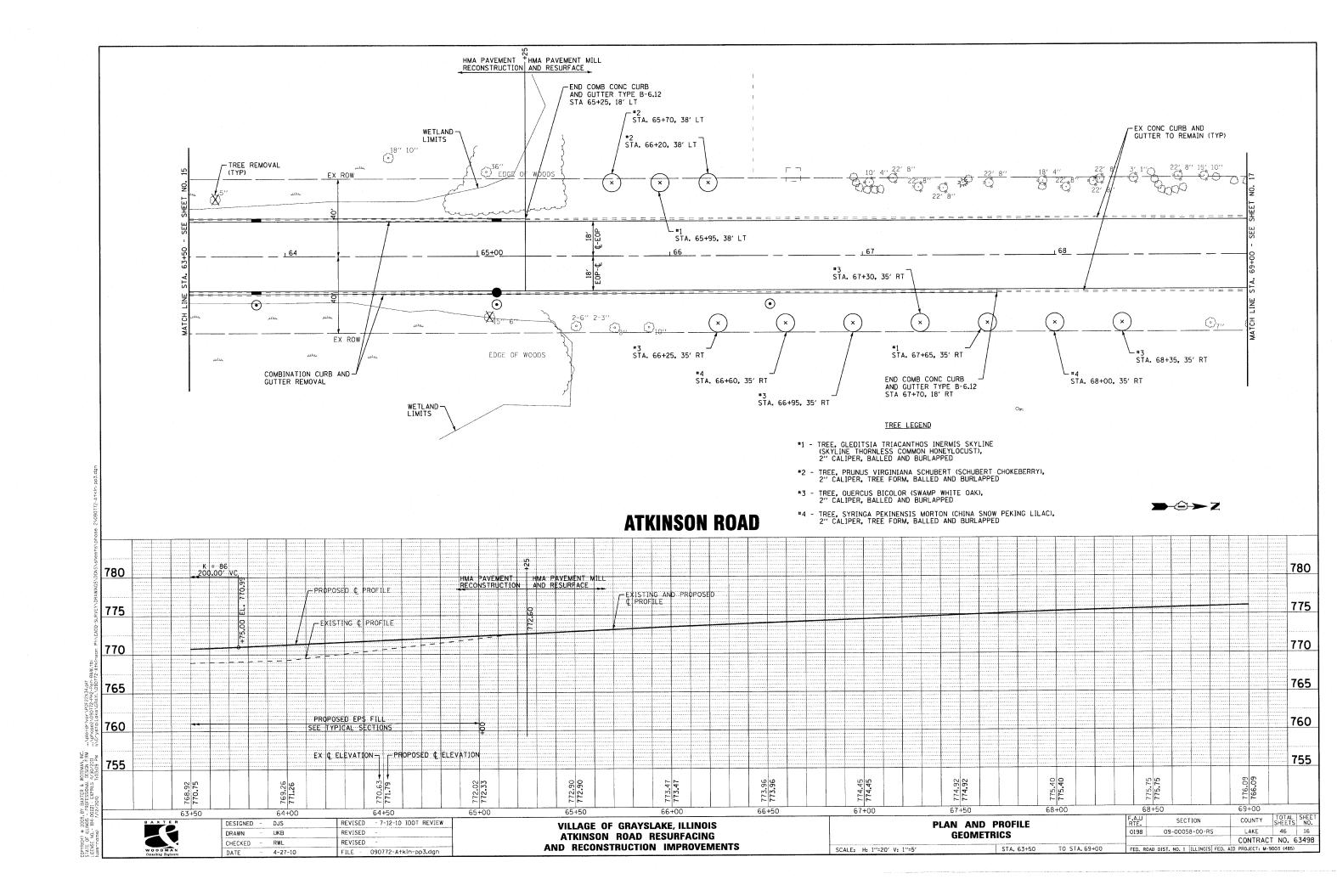
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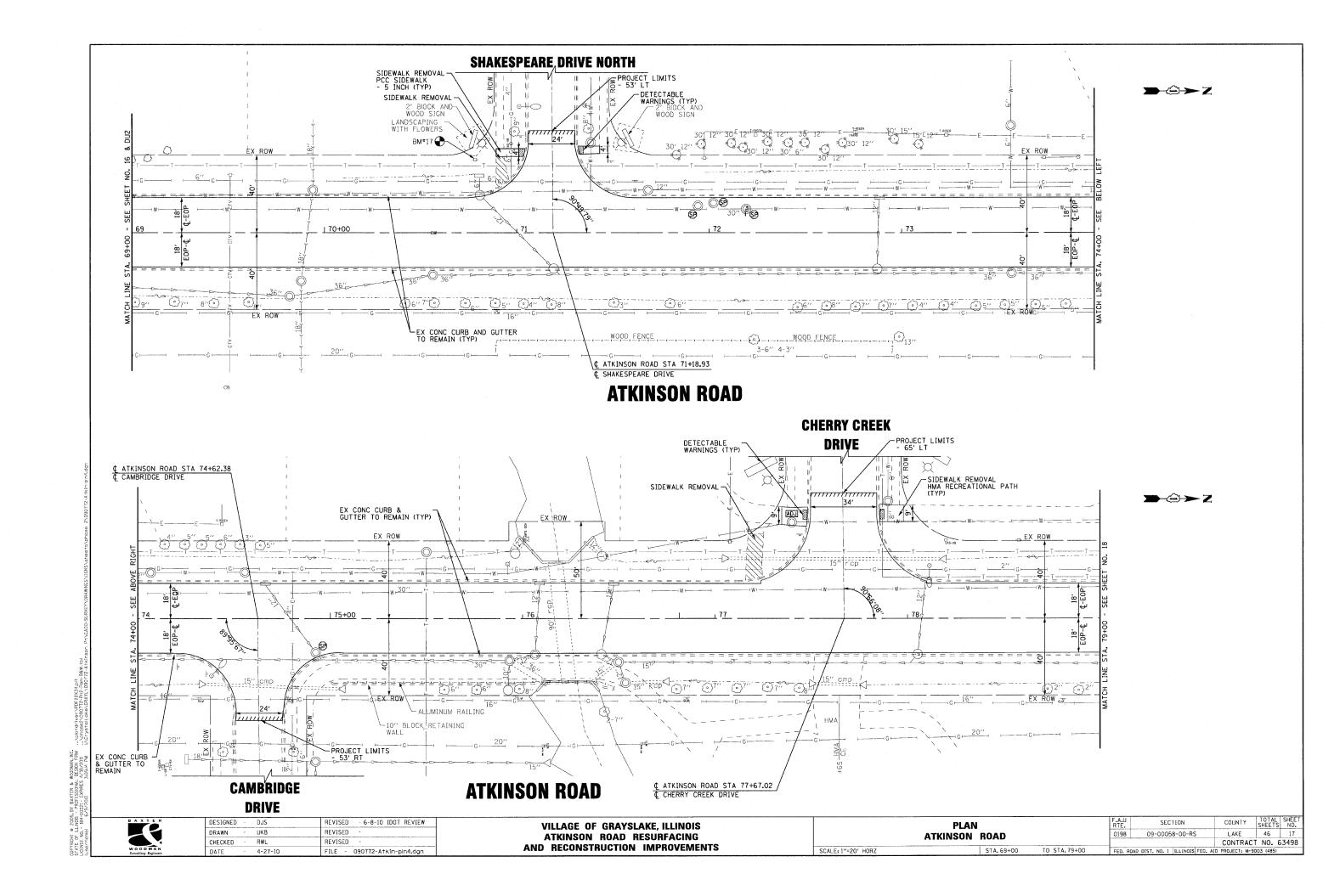
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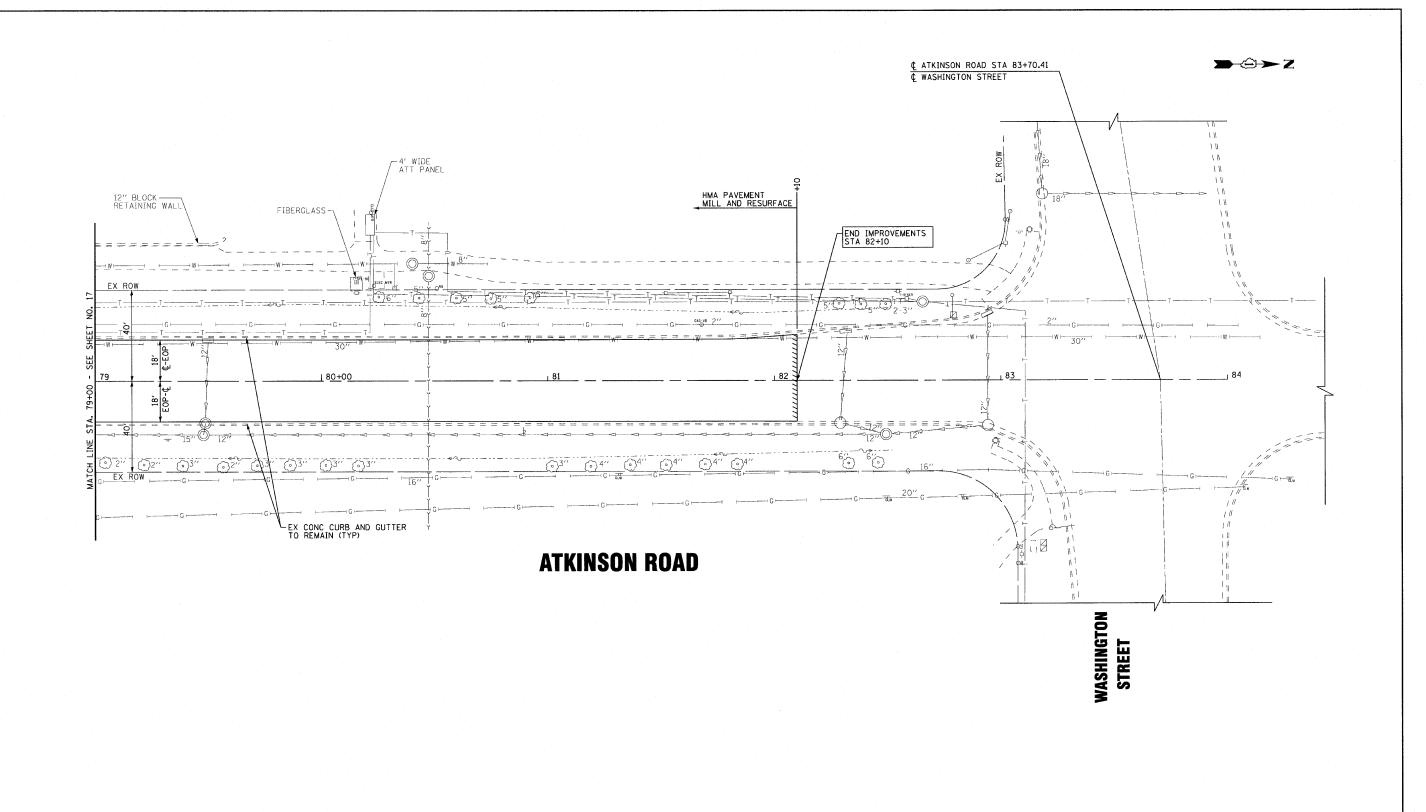












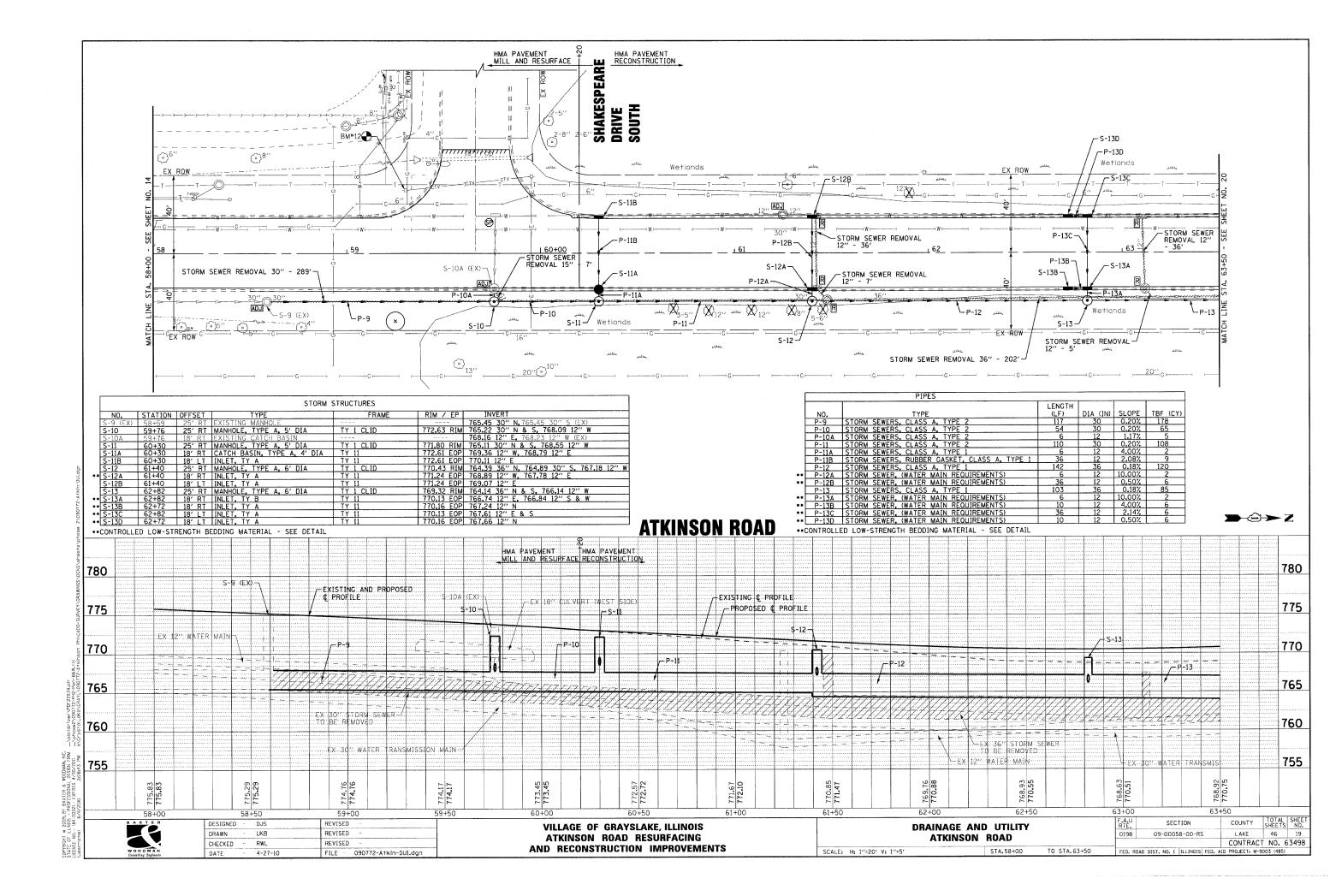
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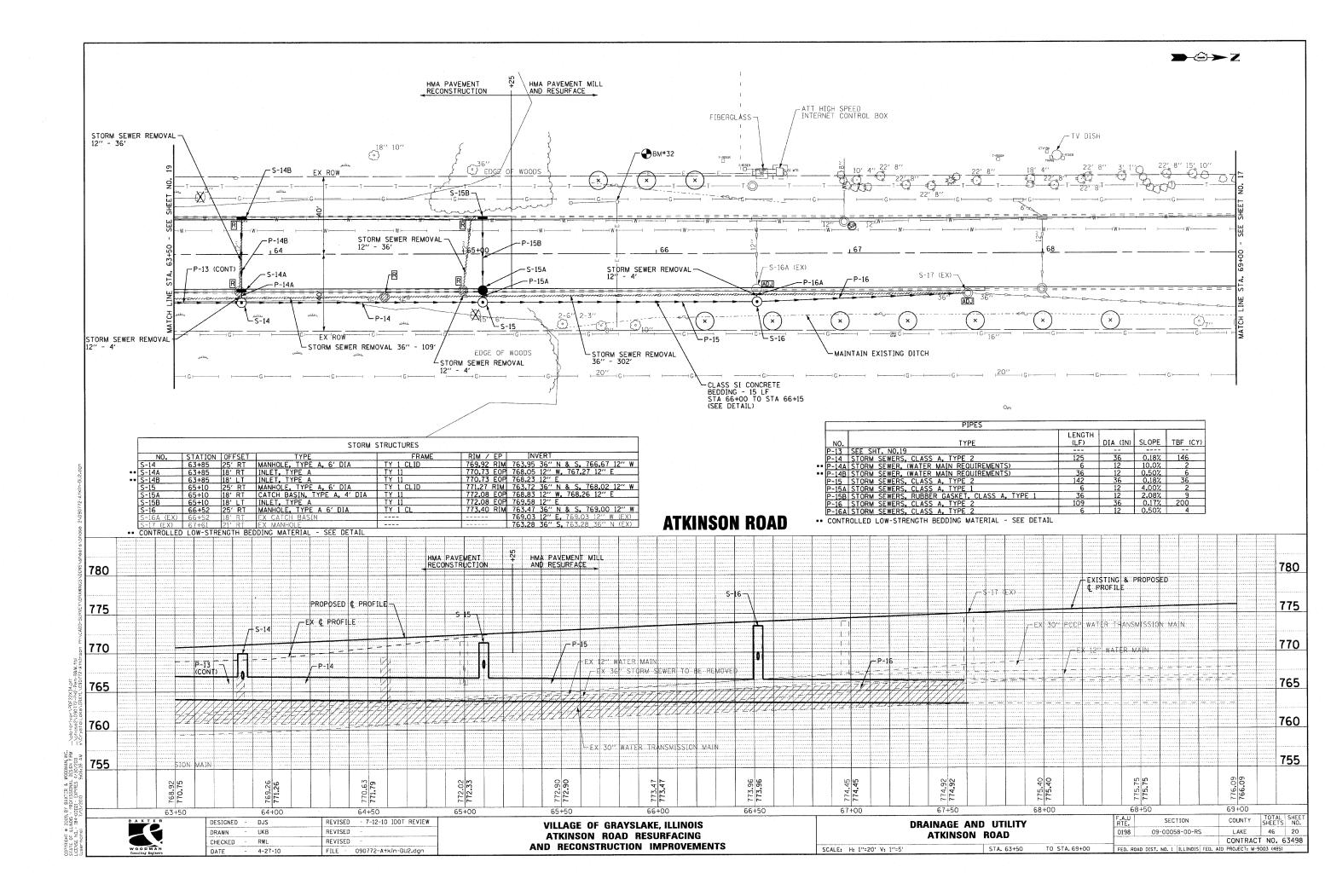
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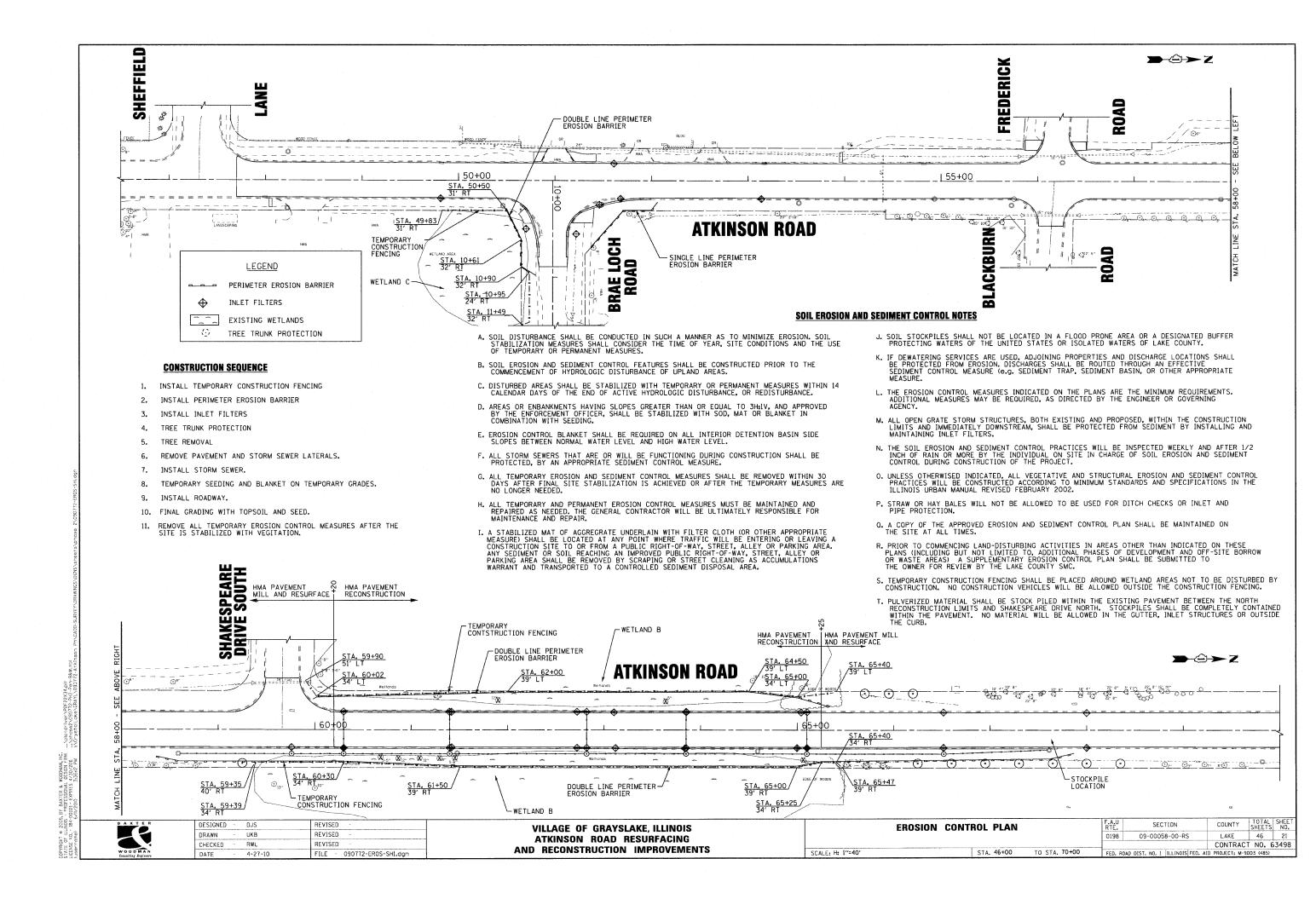
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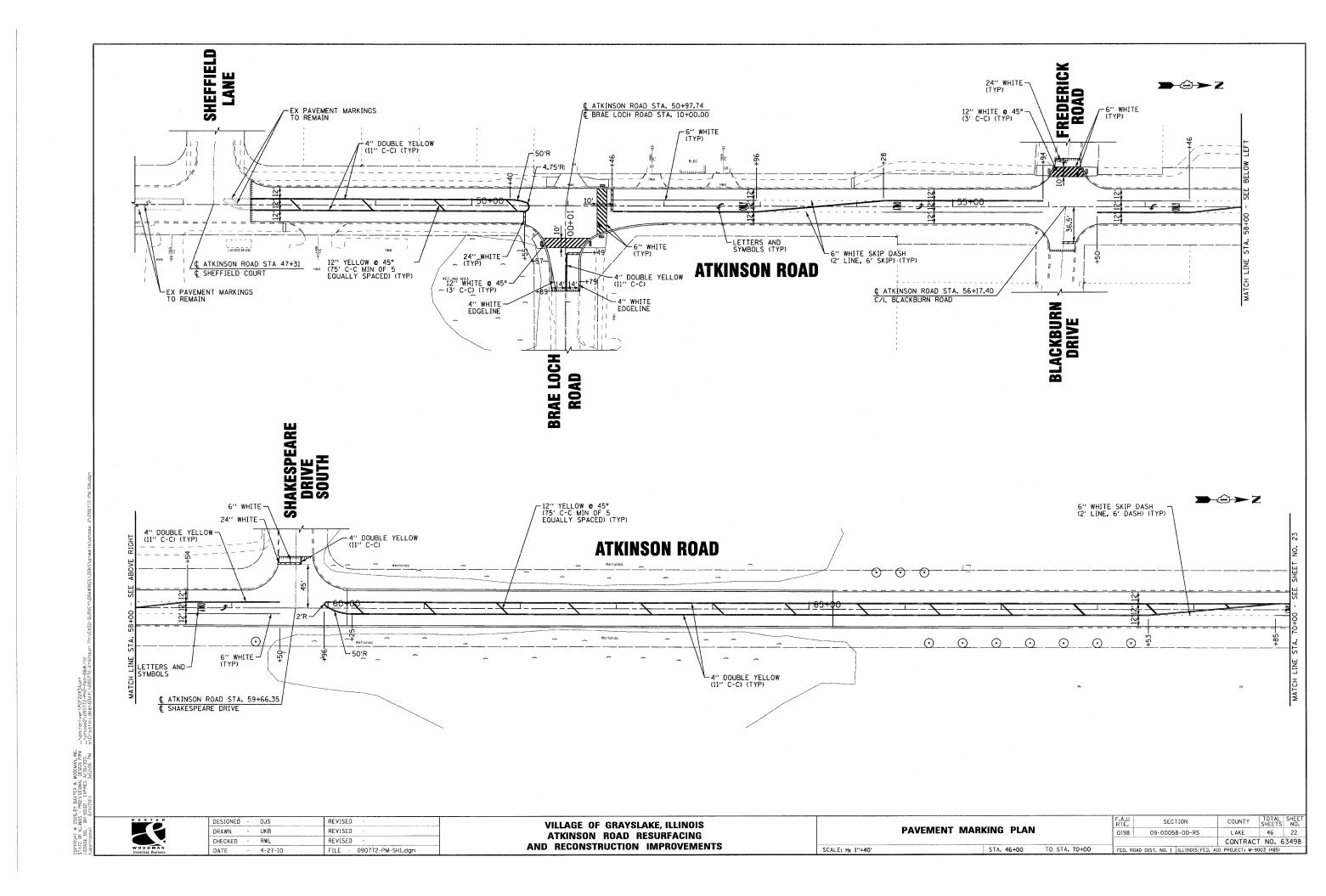
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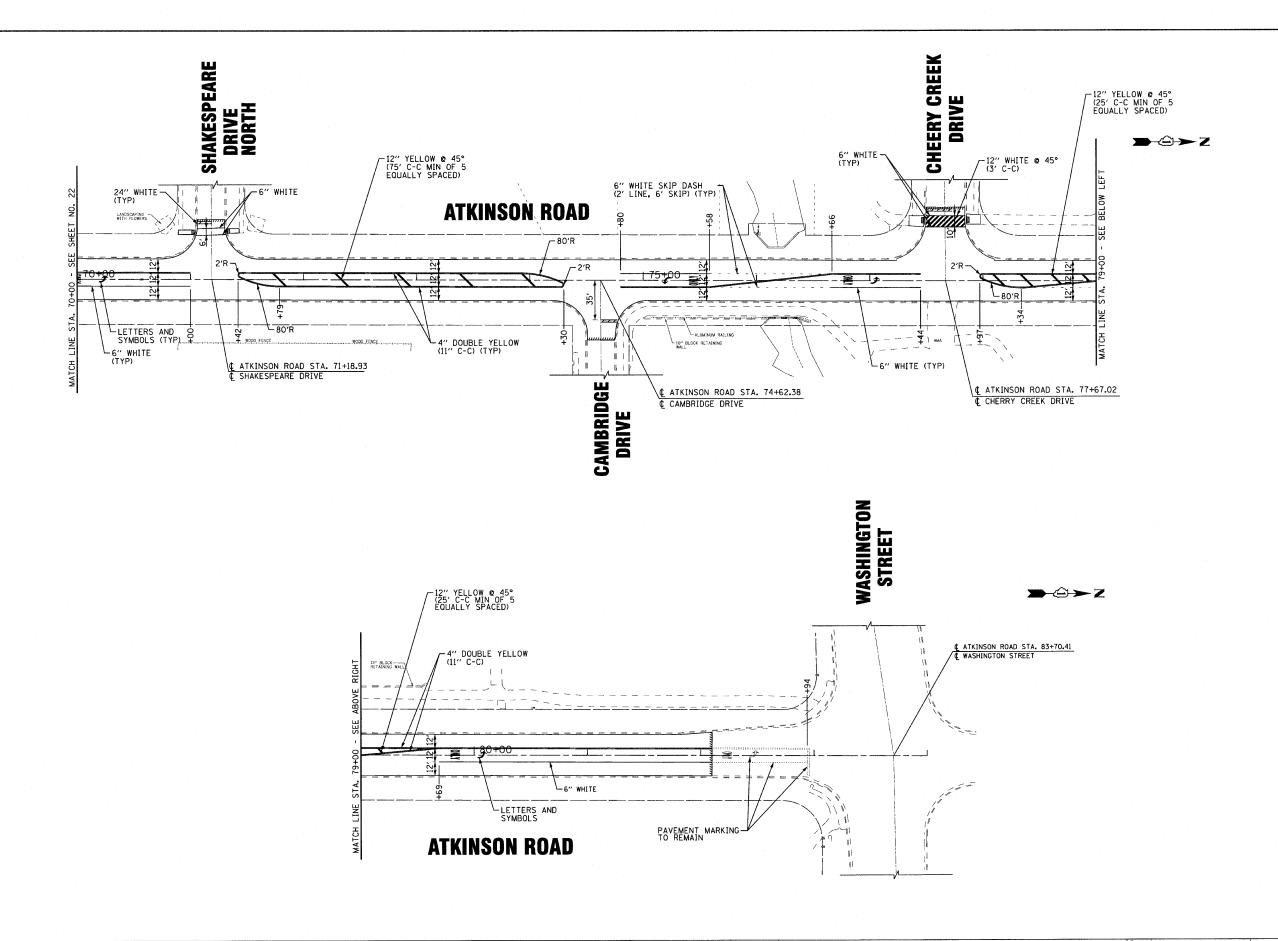
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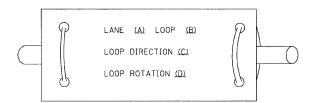
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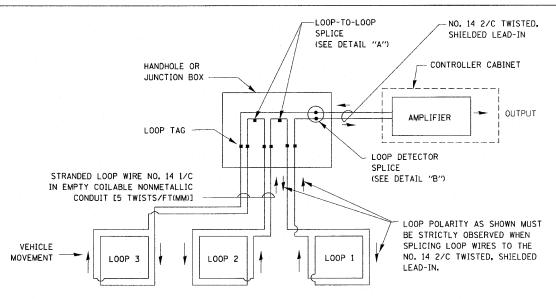
# LOOP DETECTOR NOTES

- 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

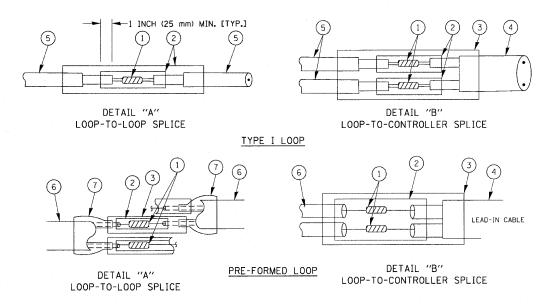


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



### 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.



LAKE CONTRACT NO. 63498

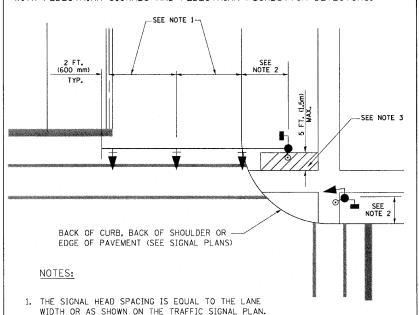
### LOOP DETECTOR SPLICE

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

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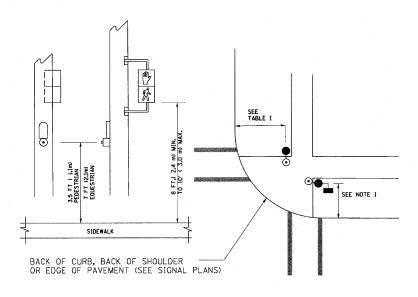
# TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

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



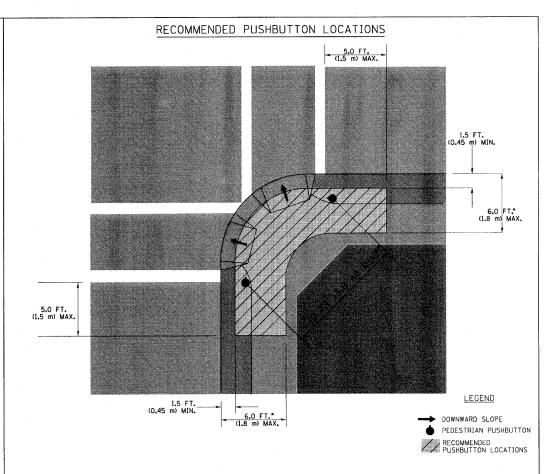
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO 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."



- 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.

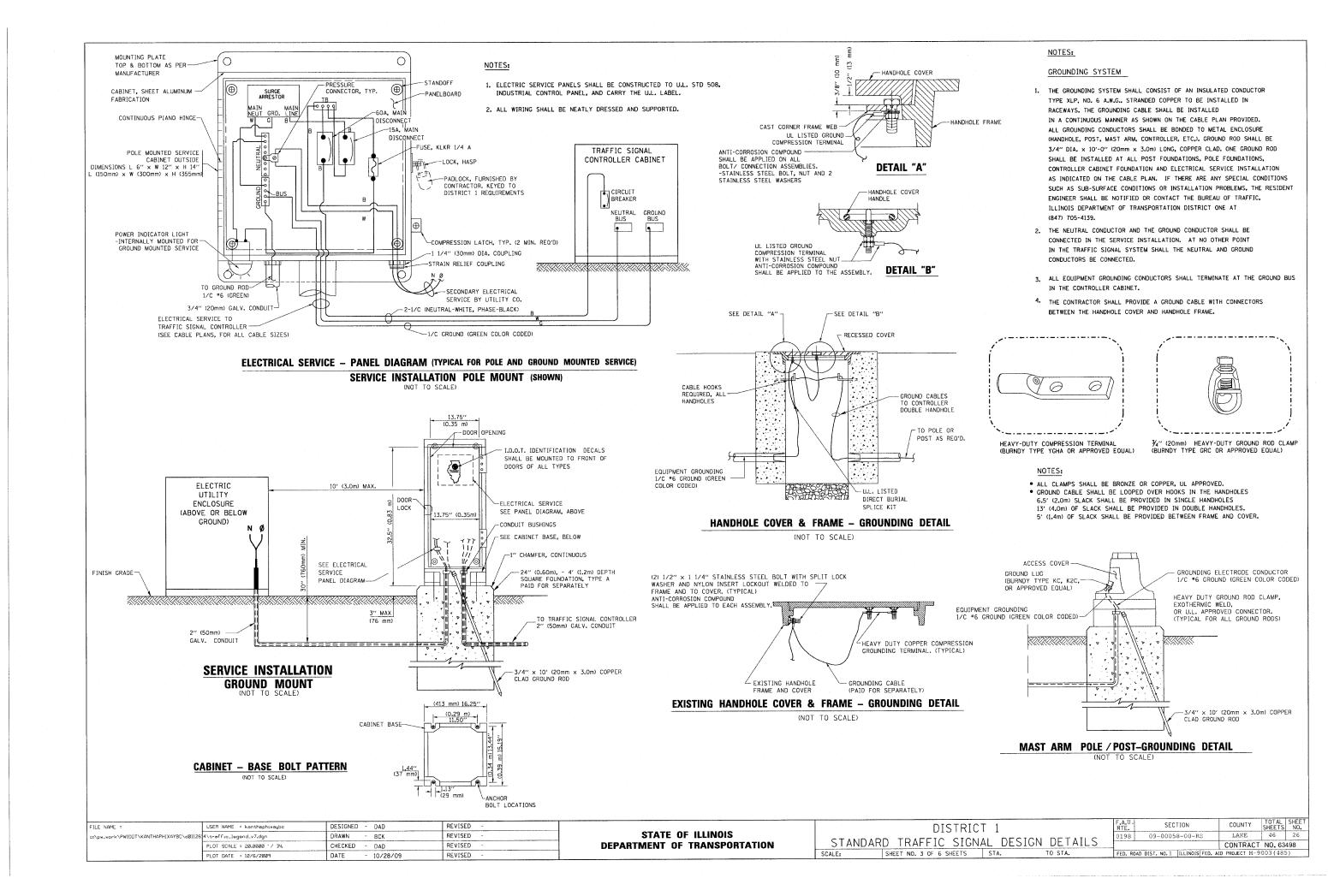
# TRAFFIC SIGNAL EQUIPMENT OFFSET

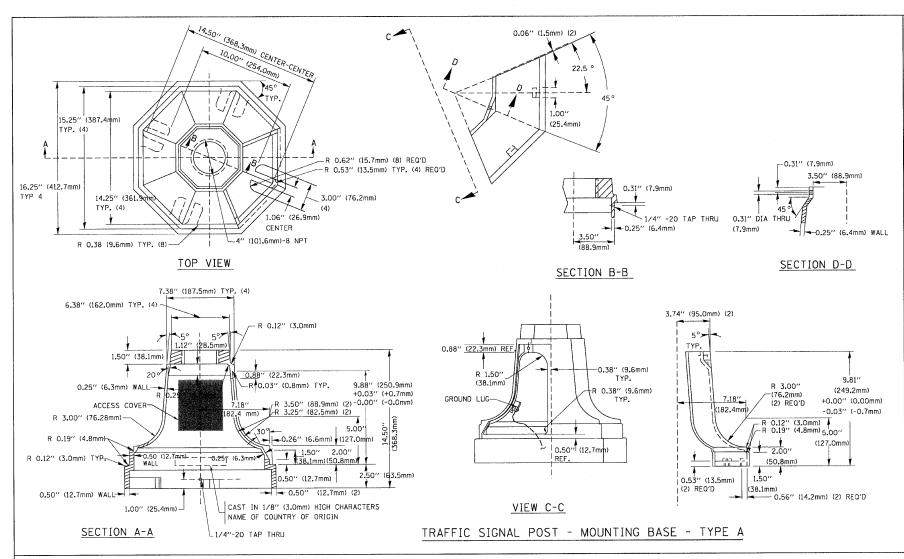
TRAFFIC SIGNAL EQUIPMENT OFFSET							
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)					
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)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

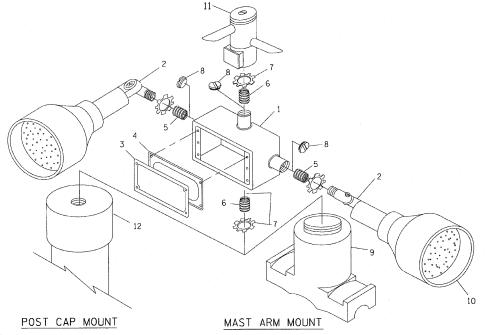
### NOTES:

- 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 PLANCEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

FILE NAME =	USER NAME = kanthaphixaybo	DESIGNED - DAG	REVISED ~		DISTRICT 1	F.A.U. SECTION	COUNTY TOTAL SHEET NO.
c:\pw_work\PWIDUT\KANTHAPHIXAYBC\dØ1126	4\traffic_legend_v7.dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS		0198 09-00058-00-RS	LAKE 46 25
	PLOT SCALE = 20.0000 '/ IN.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION			CONTRACT NO. 63498
-	PLOT DATE = 10/6/2009	DATE - 10/28/09	REVISED -		SCALE: SHEET NO. 2 OF 6 SHEETS STA. TO STA.	FED. ROAD DIST. NO.1   ILLINOIS FED. AID	D PROJECT M-9003 (485)





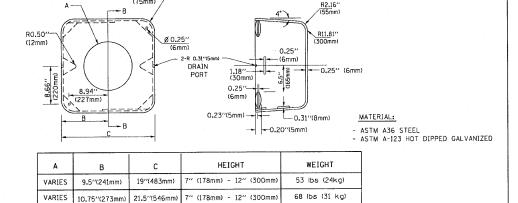


ITEM	NO. IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4"(19 mm) CLOSE NIPPLE
7	3/4"(19 mm) LOCKNUT
8	3/4"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT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

# NOTES:

- 1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GAL VANIZED
- 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 34"(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.

# 2" (50mm), 4" (100mm) & 4" (100mm) EXISTING TYPE D (CONTROLLER) FOUNDATION



126 lbs (57 kg)

# SHROUD

7" (178mm) - 12" (300mm)

VARIES

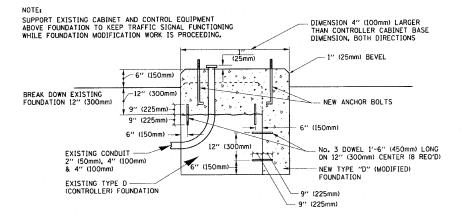
VARIES 18.5"(470mm)

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.

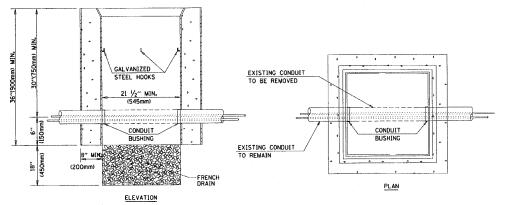
26"(660mm

37"(940mm)

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



# MODIFY EXISTING TYPE "D" FOUNDATION



# NOTES:

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

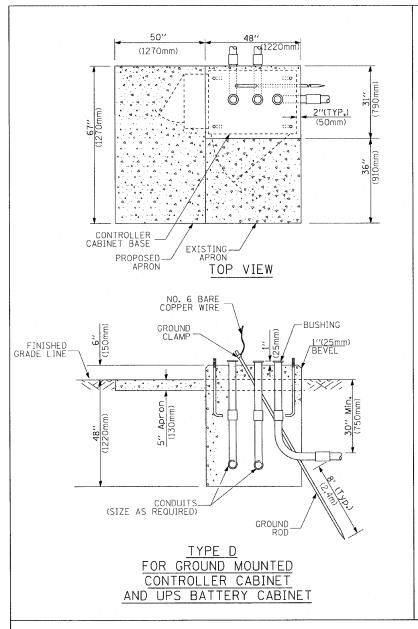
# HANDHOLE TO INTERCEPT EXISTING CONDUIT

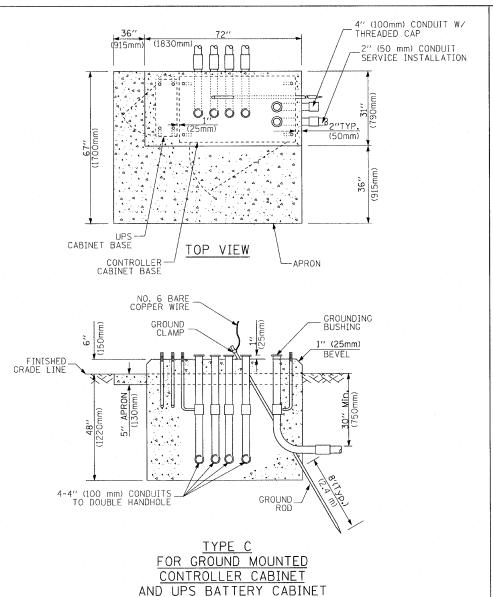
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	PLOT DATE = 10/6/2009	DATE - 10/28/09	REVISED -

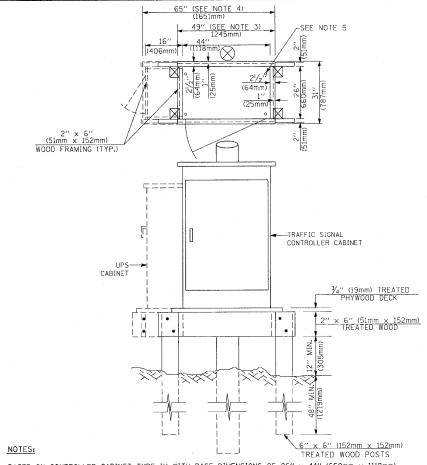
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

	DISTRICT	· 1		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS					09-00058-00-RS	LAKE	46	27
2 I ANDAK	D TRAFFIC SIGNA	AL DESIGN	DETAILS			CONTRACT		
ALE:	SHEET NO. 4 OF 6 SHEETS	STA.	TO STA.	FED. RO	AD DIST. NO.1   ILLINOIS FED. AL	ID PROJECT M-9	003 (485	)







- 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.
- 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

1	FOUNDATION	DEPTH
F	TYPE A - Signal Post	4'-0" (1.2m)
	TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
ſ	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	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0'' (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65′ (19.8 m) and up to 75′ (22.9 m)	25'-0" (7.6 m)	42'' (1060mm)	36" (900mm)	16	8(25)

### IOTES:

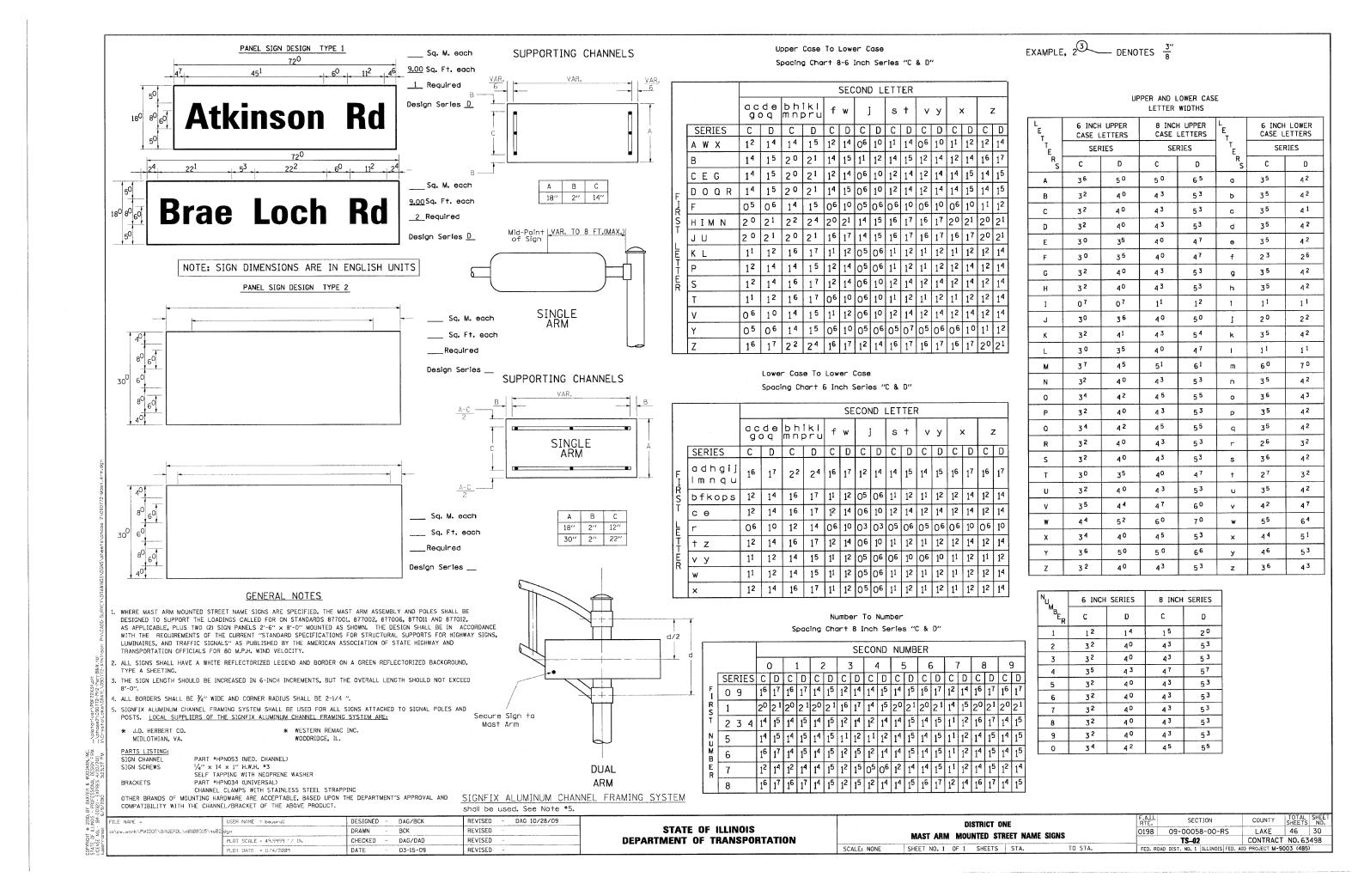
- These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along
  the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa).
  This strength shall be verified by boring data prior to construction or with testing by the Engineer
  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 assembles under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm diameter foundations.
- 4. For most arm assemblies with dual arms refer to state standard 878001.

# DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME =	USER NAME = kanthaphixaybo	DESIGNED - DAG	REVISED -		DISTRICT 1	F.A.U. SECTION COUNTY TOTAL SHEET NO.
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	PLOT SCALE = 20.0000 '/ IN.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION		CONTRACT NO. 63498
	PLOT DATE = 10/6/2009	DATE - 10/28/09	REVISED -		SCALE: SHEET NO. 5 OF 6 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-9003 (485)

# TRAFFIC SIGNAL LEGEND

	PLOT SCALE = 20.0000 '/ PLOT DATE = 10/6/2009		CHECKED - DAD DATE - 10/28/09	REVISED -	DEPARTMENT	OF TRANSP	ORTATION	SCALE: NO				CONTRACT NO. 63498 AID PROJECT M-9003 (485)
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WIRELESS ACCESS POINT		R			GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)		(1)		CNOSSBUCK			
WIRELESS DETECTOR SENSO		RW	<b>W</b>	W	ALL DETECTOR LOOP CABLE TO BE SHIELDED		~		CROSSING GATE CROSSBUCK		<del>X0X&gt;</del>	<b>X⊕X</b> ► <b>★</b>
AN, TILT, ZOOM CAMERA		R PTZ[1]	PTZD	PIZ	DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE,		(5)		FLASHING SIGNAL		X <del>o</del> X	XOX
DEO DETECTION ZONE		-			RADIO REPEATER	RERR	ERR	RR	RAILROAD CANTILEVER MAST ARM		XOX X X	XOX X
TIDEO DETECTION CAMERA		ÛVD	(V)	<b>∑</b> •	RADIO INTERCONNECT	##*O	##+0		RAILROAD CONTROL CABINET			
MICROWAVE VEHICLE SENSOF		R		(M) <b>1</b>	SYMBOL, WITH COUNTDOWN TIMER			<b>₽</b> C <b>★</b> D			EXISTING	PROPOSED
PREFORMED DETECTOR LOOP		R	1 P 1	P	INTERNATIONAL SYMBOL, SOLID PEDESTRIAN SIGNAL HEAD, INTERNATIONAL				RAILROAD	9 I MID	OF9	
DETECTOR LOOP, TYPE I					12" (300mm) PEDESTRIAN SIGNAL HEAD			*	DALLDOAD	CVRAD	ΛI C	
NO RIGHT TURN"				<b>®</b>	12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED				PREFORMED SAMPLING (SYSTEM) DETECTOR		ÎPSÎ	PS
LUMINATED SIGN		R R			12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PIS	PIS
LLUMINATED SIGN		R		•			"P"	"P"	EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTO	R	1 PP	
CCESSIBLE PEDESTRIAN PU	SHBUTTON DETECTOR	R	⊚APS		The state of the s		<b>★∀</b>	<b>∢</b> Y <b>∢</b> G	PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	R		
EDESTRIAN SIGNAL MEAD	TECTOR	-1.J R ⊚	©	• •	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD			Y	EXISTING INTERSECTION LOOP DETECTOR			2
EDESTRIAN SIGNAL HEAD		R -D	-0	 -1				R	(SYSTEM) DETECTOR  SAMPLING (SYSTEM) DETECTOR			IS
ASHER INSTALLATION DENOTES SOLAR POWER)		- R O-E>'F''	O-⊳″F″	<b>→</b> "F"			<b>4</b> 9	<b>←</b> Y <b>←</b> G	INTERSECTION & SAMPLING		[15]	IS
NAL HEAD WITH BACKPLA NAL HEAD OPTICALLY PR		+[>> R [>''P''	+t> -t>′′p'′	+ <b>▶</b> - <b>▶</b> "P"	SIGNAL FACE			Y	SIGNAL POST AND FOUNDATION TO BE REMOVED	RMF O		
IMBERS INDICATE THE CO	ISTRUCTION STAGE)	+R +⊳		2	The state of the s			R	AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED	RMF O–X———		
GNAL HEAD GNAL HEAD CONSTRUCTION	STAGES	\\\\\\\\\\	>	<b>-►</b> 2	12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE		R Y C		FOUNDATION TO BE REMOVED  STEEL COMBINATION MAST ARM ASSEMBLY			
Y WIRE		R	>	> <u> </u>	12" (300mm) TRAFFIC SIGNAL SECTION		R	R	ALUMINUM MAST ARM POLE AND	RMF		
MPORARY WOOD POLE (CL) TTER) 45 FOOT (13.7m) M		R⊗	8	<b>©</b>	ABANDON ITEM	А		_	STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
GNAL POST	00.5.00	RO	0	•	REMOVE ITEM RELOCATE ITEM	R RL			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
FEEL COMBINATION MAST A SSEMBLY AND POLE WITH F		RQ——— PīZļ	PTZD	PIZ	INTERSECTION ITEM		I	IP	OR (S) SERVICE	RCF	, Ч	'1
TEEL COMBINATION MAST A SSEMBLY AND POLE WITH L		RO-14	0	• <del>×</del>	SYSTEM ITEM		S	S	GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM,		C	c <sub>il</sub> ⊢⊸
UMINUM MAST ARM ASSEM		R	0		COMMON TRENCH COILABLE NONMETALLIC CONDUIT (EMPTY)			CT CNC	(NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)		— <del>—</del> ——	
TEEL MAST ARM ASSEMBLY		R .	0		TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE	<u>R</u>			NO. 62.5/125, MM12F SM12F FIBER OPTIC CABLE NO. 62.5/125,		<i>&gt;</i>	
ELEPHONE CONNECTION ) POLE OR (G) GROUND MO		R	P	P	GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)		termination interpretation being	-	NO. 62.5/125, MM12F  FIBER OPTIC CABLE		—(24F)—	—(24F)—
RVICE INSTALLATION, POLE OR (G) GROUND MO	TNL	R	P	- <b>■</b> P	JUNCTION BOX	R	0	0	FIBER OPTIC CABLE		<u> </u>	
INTERRUPTIBLE POWER SU		R UPS	EUPS	UPS	DOUBLE HANDHOLE	R			COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED			6
STER CONTROLLER STER MASTER CONTROLLE	3		EMC EMMC	MC MMC	HEAVY DUTY HANDHOLE	R	H	H	VENDOR CABLE FOR CAMERA			<b></b> V
OMMUNICATIONS CABINET		cc'	ECC	СС	HANDHOLE	R 🔯						
AILROAD CONTROL CABINET		D		<b>▶</b> ◀	CONFIRMATION BEACON	Ro-0	0-(]	<b>⊷</b>	COAXIAL CABLE		— <u> </u>	— <u>©</u> —
ONTROLLER CABINET		R		$\blacksquare$	EMERGENCY VEHICLE LIGHT DETECTOR	R≪	$\bowtie$	- ◄	NO. 14 1/C, UNLESS NOTED OTHERWISE			
TEM						D			TO THE STATE OF TH		,	

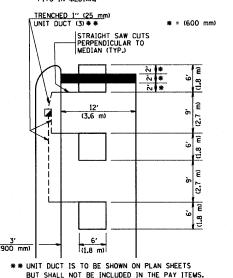


# PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) WIDTH OF PAVED SHOULDER. PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER 10' 10' 10' 10' 10' 11' (25 mm) UNIT DUCT - TRENCHED TO E/P \*\* \* \* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS. ARTERIAL - VOLUME DENSITY ("FAR OU

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

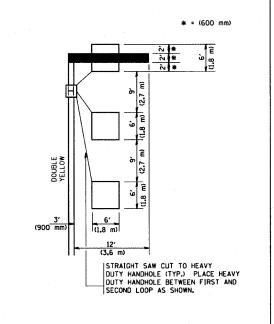
HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
814001 TO ENSURE THAT HANDHOLE
FITS IN MEDIAN.



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

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

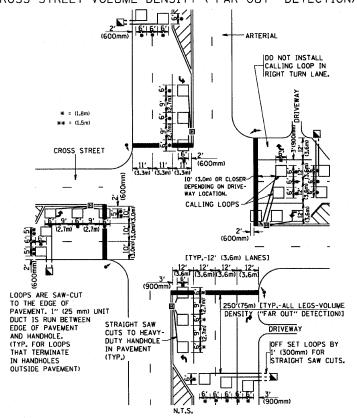
(PROTECTED / PERMITTED LEFT TURN PHASING)

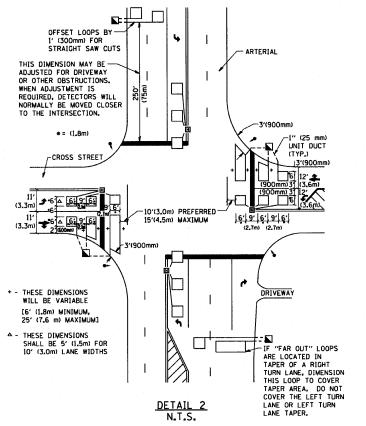


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

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





### NOTE

### VEHICLES LOOP DETECTORS

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

# PLACEMENT OF DETECTORS

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

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

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

### NOTE.

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

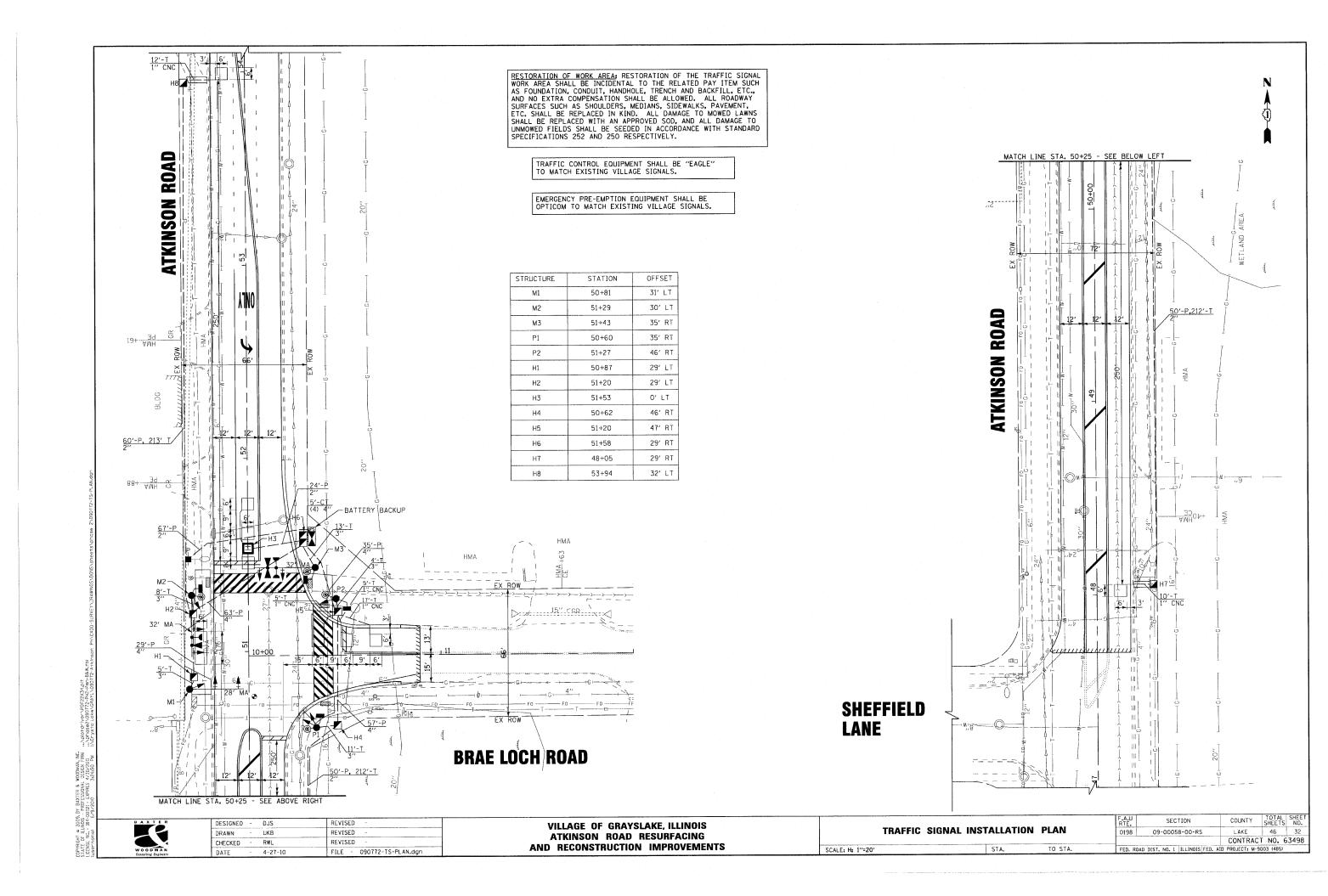
THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

		<del></del>	
FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -
W:\diststd\22x34\ts07.dgn		DRAWN -	REVISED -
	PLOT SCALE = 50.0000 '/ IN.	CHECKED - R.K.F.	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

DETAIL 1

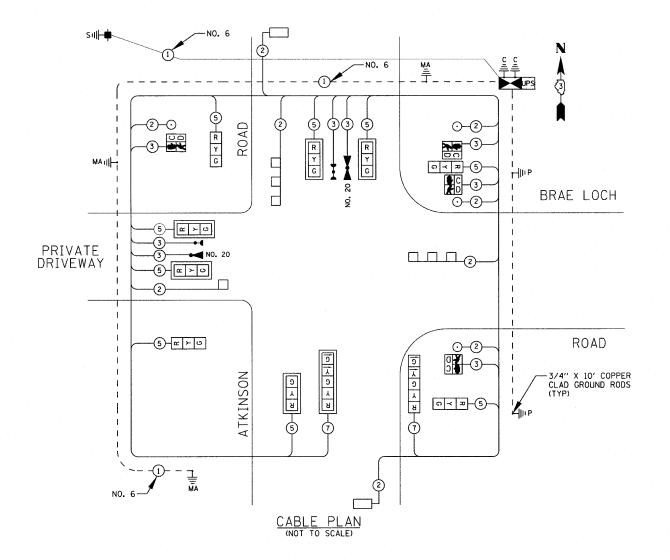
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

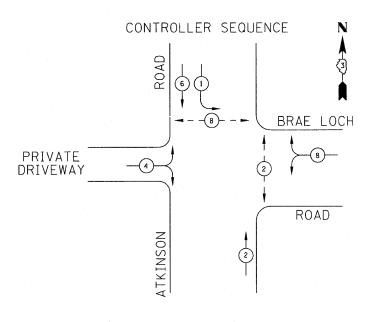
	DISTRICT 1 - DE	TECTOR L	OOP INSTA	LLATION		F.A.U. RTE.	SECT	ION	COUNTY	TOTAL SHEETS	SHEET NO.
						0198	09-00058-	-00-RS	LAKE	46	31
DETAILS FOR ROADWAY RESURFACING					TS-07		CONTRACT	NO. 63	498		
CALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO S	TA.	FED. RO	DAD DIST, NO. 1	ILLINOIS FED. AI	PROJECT M-90	03 (485	)



# SCHEDULE OF QUANTITIES

		TOTAL
РАУПЕМ	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQFT	27
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	425
CONDUIT IN TRENCH, 2 DIA., GALVANIZED STEEL	FOOT	423
	FOOT	20
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	184
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL		
HANDHOLE	EACH	
HEAVY-DUTY HANDHOLE	EACH	
DOUBLE HANDHOLE	EACH	ļ <u>.</u>
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	47
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	-
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2C	FOOT	368
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C	FOOT	638
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5C	FOOT	1,15
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 7C	FOOT	338
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	97
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	8
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT.	EACH	
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT.	EACH	
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	:
CONCRETE FOUNDATION, TYPE A	FOOT	
CONCRETE FOUNDATION, TYPE C	FOOT	
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	37
SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	
SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	
SIGNAL HEAD, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	
SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MC	EACH	
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED '	EACH	
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	
NDUCTIVE LOOP DETECTOR	EACH	:
DETECTOR LOOP, TYPE I	FOOT	304
LIGHT DETECTOR	EACH	
LIGHT DETECTOR AMPLIFIER	EACH	
PEDESTRIAN PUSH-BUTTON	EACH	4
SERVICE INSTALLATION - POLE MOUNTED	EACH	
UNINTERRUPTIBLE POWER SUPPLY	EACH	1 .
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	998
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	233





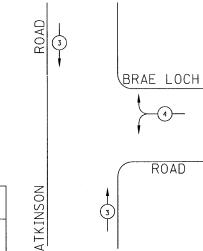
# PHASE DESIGNATION DIAGRAM LEGEND

DUAL ENTRY PHASE

NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE

PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTION EMERGENCY VEHICLE MOVEMENT

NOTES:

THE NEUTRAL AND GROUND SHALL BE TIED AT THE SERVICE INSTALLATION, BUT SHALL BE SEPERATED AT THE TRAFFIC SIGNAL CABINET.

SCALE:

FLASHER

ENERGY COSTS TO:

VILLAGE OF GRAYSLAKE

10 S. SEYMOUR AVE.
GRAYSLAKE, ILLINOIS 60030-0325

ENERGY SUPPLY CONTACT:

PHONE:

B47-816-5489

COM ED. LASHER OF ILLINOIS - NO. - 184-0

TYPE

PED. SIGNAL CONTROLLER ILLUM. SIGN

BAXTER
WOODMAN
Consulting Engineers

I.D.O.T

TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

WATTAGE

INCAND. LED

COM ED

DESIGNED	~	DJS	REVISED	- 6-8-10 IDOT REVIEW
DRAWN	-	UKB	REVISED	-
CHECKED	-	RWL	REV1SED	-
DATE	-	4-27-10	FILE -	090772-TS-CABLE.dgn

WATTAGE

1739

%OPERATION

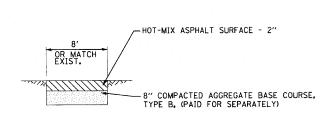
TOTAL =

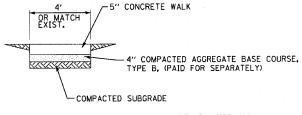
VILLAGE OF GRAYSLAKE, ILLINOIS ATKINSON ROAD RESURFACING AND RECONSTRUCTION IMPROVEMENTS CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES

STA.

TO STA.

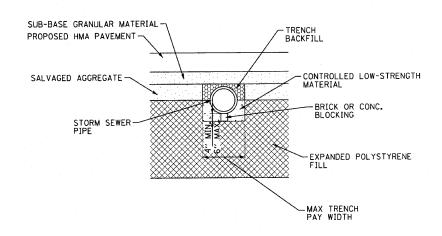
SECTION COUNTY LAKE 09-00058-00-RS CONTRACT NO. 63498



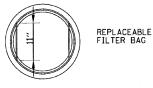


NOTE: PROVIDE FIBER EXPANSION JOINTS WHERE NEW SIDEWALK MEETS EXISTING AND @ 50' O.C. MAX. AND PROVIDE CONTROL JOINTS @ 5' O.C.

# P.C.C. SIDEWALK - 5"



# **HMA RECREATIONAL PATH** NO SCALE



GENERAL NOTES:

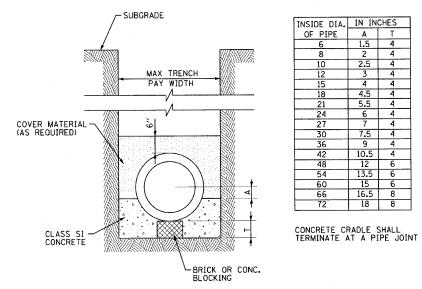


TOP RING CONSTRUCTED FROM 1 1/4" X 1 1/4" X 1/8" ANGLE. BASE RING CONSTRUCTED OF 1 1/2" X 1/2" X 1/8" CHANNEL. HANDLES & SUSPENSION BRACKETS CONSTRUCTED FROM 1/4" X 1 1/4" FLAT. ALL STEEL CONFORMING TO ASTM-A36. FRAME:

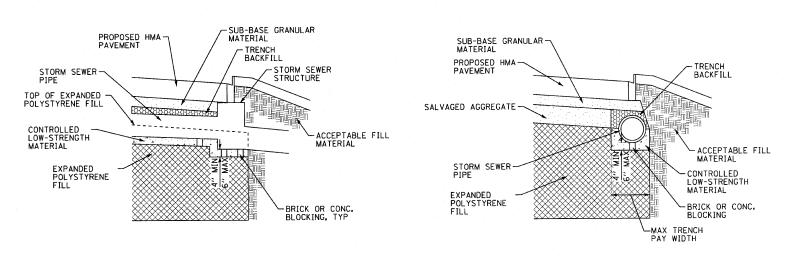
SECTION

REPLACEABLE BAG: CONSTRUCTED FROM 4 OZ./SO. YD. NON-WOVEN POLYPROPYLENE GEOTEXTILE REINFORCED WITH POLYESTER MESH. CONNECTED TO BASE RING WITH STAINLESS STEEL STRAP & LOCK.

# **INLET PROTECTION INLET FILTER**



# PERPENDICULAR TO CENTERLINE



# **PARALLEL TO CENTERLINE**

SCAL

# **PARALLEL TO CENTERLINE**

# STORM SEWER BEDDING IN **EXPANDED POLYSTYRENE FILL**

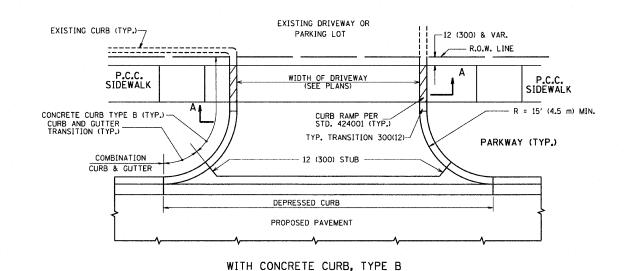
STANDARD CONC. CRADLE SECTION - CLASS SI CONCRETE (MISCELLANEOUS)

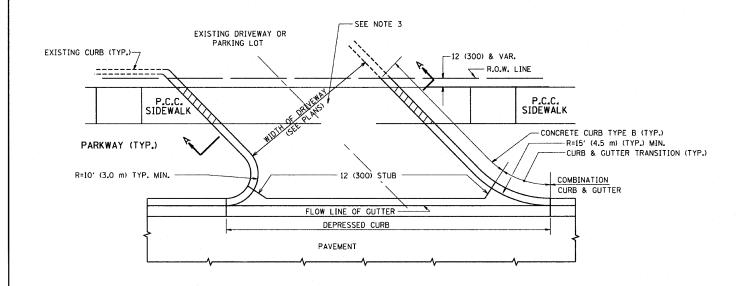


Ī	DESIGNED		DJS	REVISED -
١	DRAWN	-	UKB	REVISED -
I	CHECKED	-	RWL	REVISED -
I	DATE	-	4-27-10	FILE - 090772-MISC-DETS.dgn

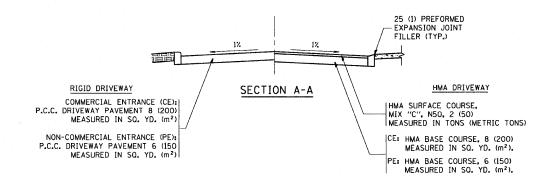
VILLAGE OF GRAYSLAKE, ILLINOIS ATKINSON ROAD RESURFACING AND RECONSTRUCTION IMPROVEMENTS

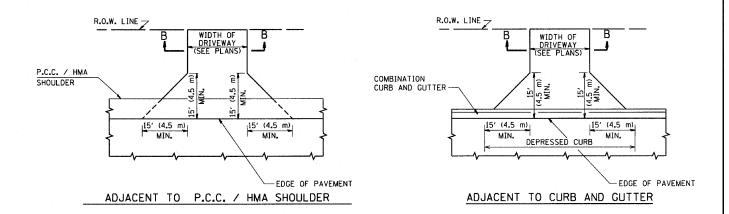
			F.A.U RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
MISCELLANEOUS	0198	09-00058-00-RS	LAKE	46	34		
					CONTRAC	T NO. (	63498
LE: NOT TO SCALE	STA.	TO STA.	FED. RO	AD DIST. NO. 1 ILLINOIS FED. AT	D PROJECT: M-9	003 (485)	

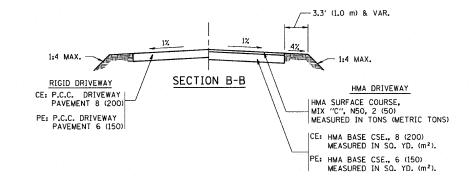




WITH CONCRETE CURB, TYPE B







# RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE, MIX "C", N50, 2 (50) MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE B, 8 (200) MEASURED IN SQ. YD. (m²).

# GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

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

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

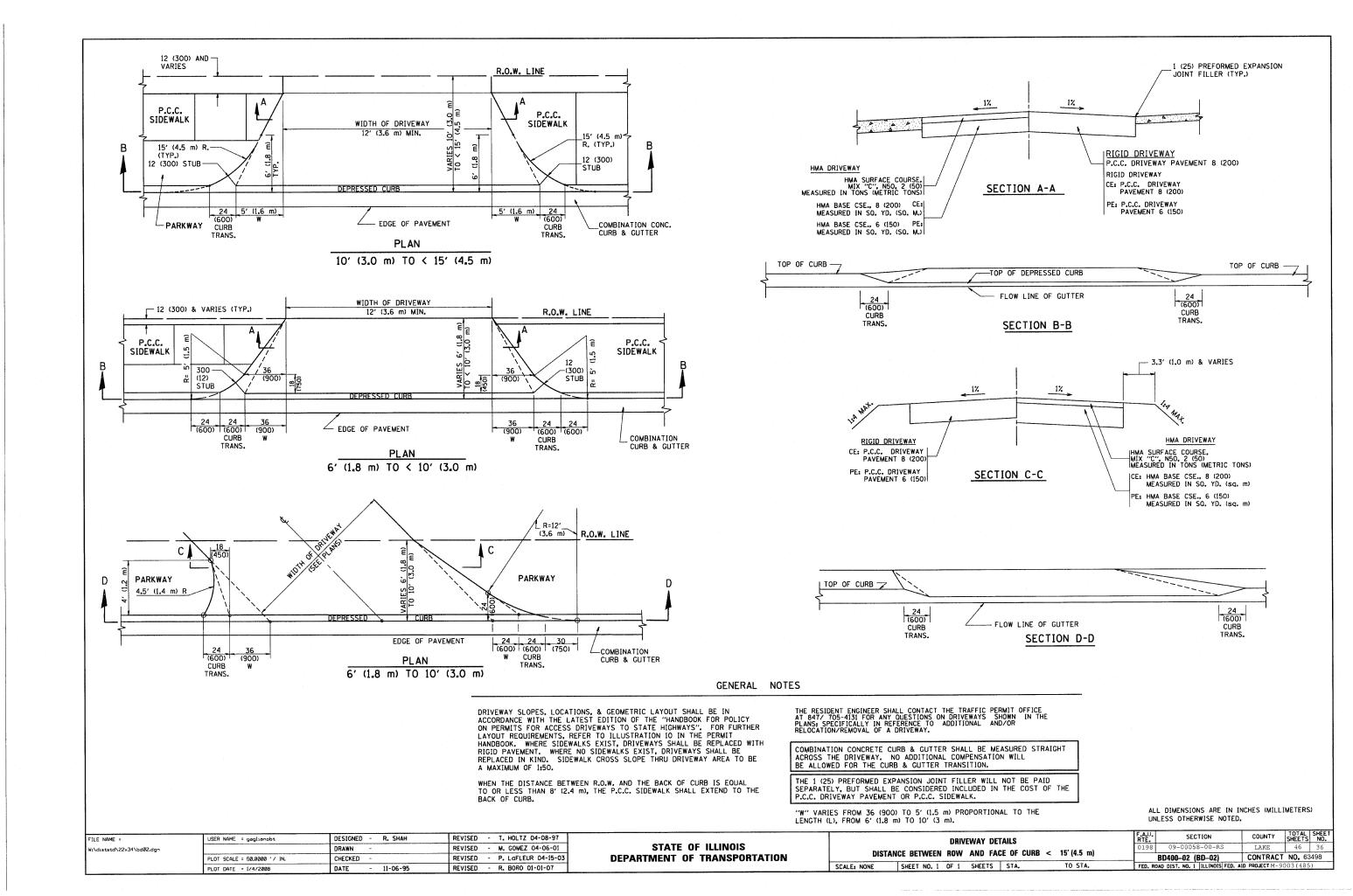
1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

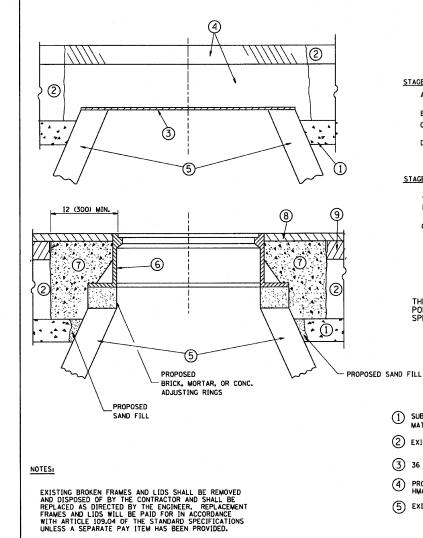
WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - M. GOMEZ 04-06-01
c:\projects\diststd22x34\bd0l.dgn		DRAWN -	REVISED - P. LoFLUER 04-15-03
	PLOT SCALE = 49,9999 '/ IN.	CHECKED -	REVISED - R. BORO 01-01-07
	PLOT DATE = 6/12/2008	DATE - 11-04-95	REVISED - R. BORO 06-11-08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	0198	09-00058-00-RS	LAKE	46	35
AND FACE OF CURB & EDGE OF SHOULDER > = 15' (4.5 m)		BD0156-07 (BD-01)	CONTRACT	NO. 634	498
SCALE: NONE   SHEET NO. 1 OF 1 SHEETS   STA. TO STA.	FED. R	DAD DIST. NO. 1   ILLINOIS FED. AL	D PROJECT M-9	003(485	)





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

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

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

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

- STAGE 1 (BEFORE PAVEMENT MILLING)
- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.

CONSTRUCTION PROCEDURES

- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 11/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

# STAGE 2 (AFTER PAVEMENT MILLING)

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

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

# LEGEND

- SUB-BASE GRANULAR MATERIAL
  - GRANULAR (6) FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- 3 36 (900) DIAMETER METAL PLATE

  4 PROPOSED CRUSHED STONE AND
  HMA SURFACE MIX
- 8 PROPOSED HMA SURFACE COURSE
- 5 EXISTING STRUCTURE
- 9 PROPOSED HMA BINDER COURSE

### LOCATION OF STRUCTURES:

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

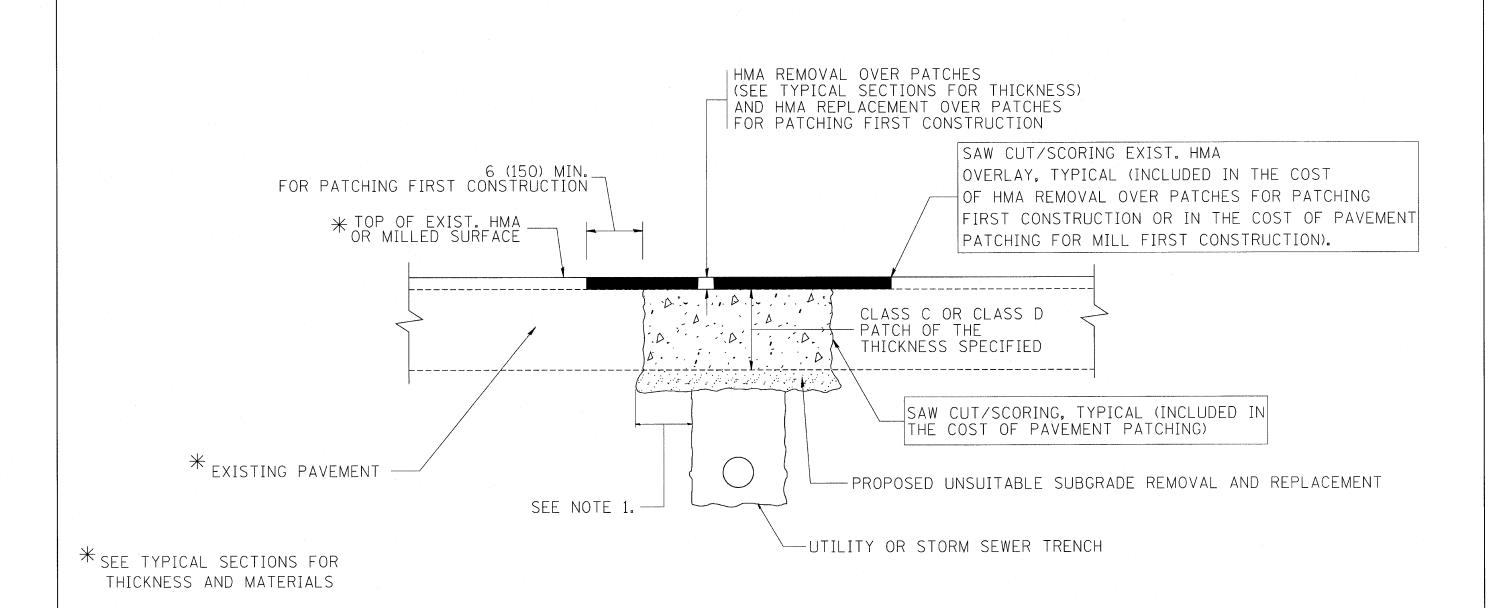
BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

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

DETAILS FOR FRAMES AND LIDS ADJUSTMENT
WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FI	LE NAME =	USER NAME = gaglianobt	DESIGNED - R. SHAH	REVISED - R. SHAH 03-10-95		DETAILS FOR F.A.U. SECTION COUNTY TOTAL SHEET NO.
W:	\diststd\22x34\bdØ8.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS	0198   09-00058-00-RS   LAKE   46   37
		PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - R. WIEDEMAN 05-14-04	DEPARTMENT OF TRANSPORTATION	FRAMES AND LIDS ADJUSTMENT WITH MILLING  BD600-03 (BD-8)  CONTRACT NO. 63498
		PLOT DATE = 1/4/2008	DATE - 10-25-94	REVISED - R. BORO 01-01-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT M-9003 (485)



# NOTES:

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

# SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

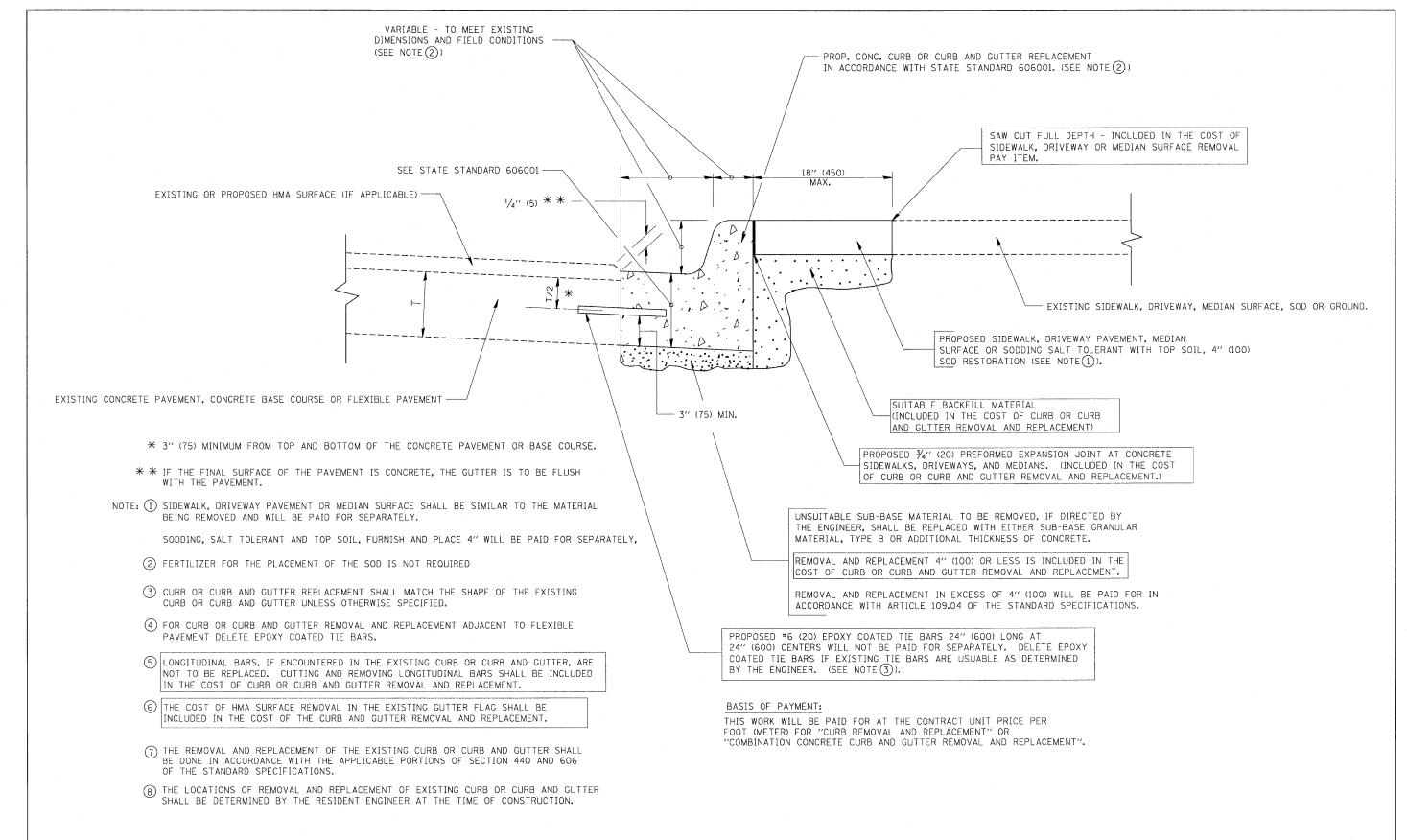
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

# SEQUENCE OF CONSTRUCTION (MILLING FIRST)

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

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS

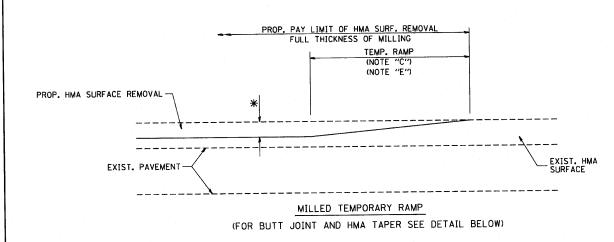
- 1	FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98			PAVEMENT PATCHING FOR		F.A.U. SECTION	COUNTY SHEETS NO.
	c:\projects\d:ststd22x34\bd22.dgn		DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS				0198 09-00058-00-RS	LAKE 46 38
		PLOT SCALE = 50.000 '/ IN.	CHECKED ~	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT			BD400-04 (BD-22)	CONTRACT NO. 63498
		PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED.	AID PROJECT M-9003 (485)



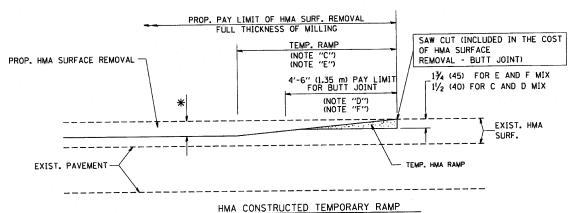
# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = drivekosgn	DESIGNED - A. HOUSEH	REVISED -	R. SHAH 10-03-96			CURB OR CURB AND GUTTER	F.A.U. SECTION	COUNTY TOTAL SHEET NO.
c:\pw_work\pwidot\drivakosgn\d0108315\	ba24.dgn	DRAWN -	REVISED -	A. ABBAS 03-21-97	STATE OF ILLINOIS			0198 09-00058-00-RS	LAKE 46 39
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -	M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION		REMOVAL AND REPLACEMENT	BD600-06 (BD-24)	CONTRACT NO.63498
	PLOT DATE = 12/15/2009	DATE - 03-11-94	REVISED -	R. BORO 12-15-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.		ID PROJECT M-9003 (485)



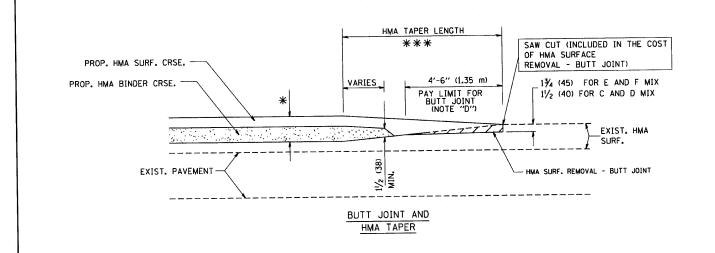
# OPTION 1



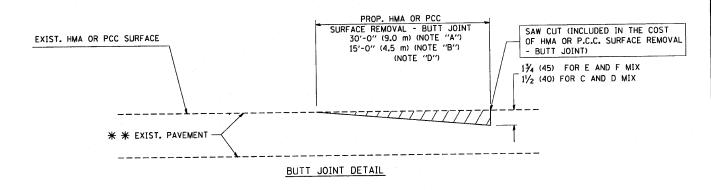
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

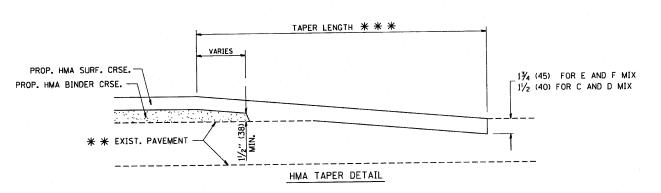
# OPTION 2

# TYPICAL TEMPORARY RAMP



# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

### NOTES

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

# BASIS OF PAYMENT:

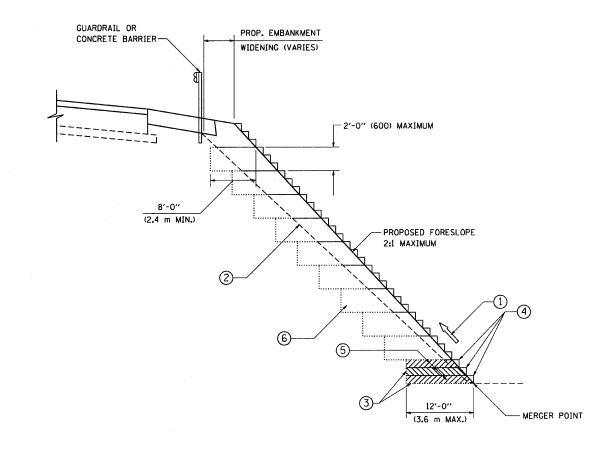
THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SOUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
W:\diststd\22x34\bd32.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97
_	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
1	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	BUTT JOINT AND					F.A.U. RTE.	SECTION	COUNTY	SHEETS	NO.
	BOTT SOIRT AND						09-00058-00-RS	LAKE	46	40
		HMA	TAPER DE	TAILS				CONTRACT		
CALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	FED. RC	DAD DIST, NO. 1   ILLINOIS FED. A	D PROJECT M-90	03 (485)	



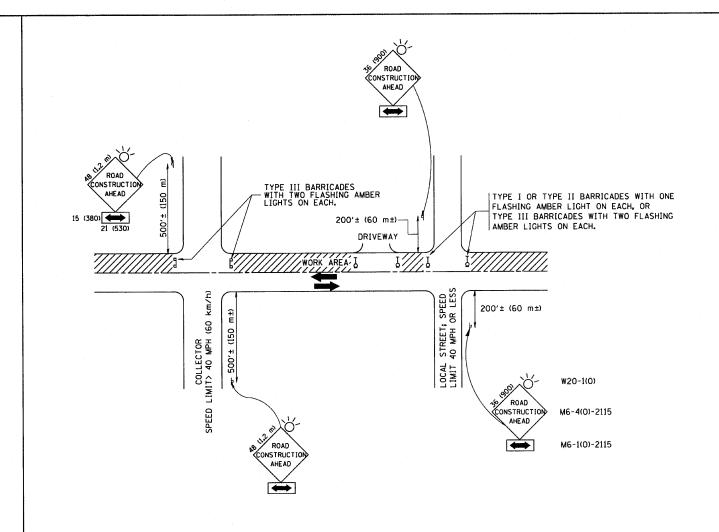
# TYPICAL BENCHING DETAIL FOR EMBANKMENT

# NOTES:

- Onstruct succeeding bench cuts and embankment placement and compaction from bottom to top in stairstep fashion.
- EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- 3 BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- 4 TRIM TO FINAL SLOPE.
- (5) EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -			BENCHING DETAIL	F.A.U.	SECTION	COUNTY	TOTAL SHEET
W:\diststd\22x34\bd51.dgn		DRAWN - CADD	REVISED -	STATE OF ILLINOIS	FOR EMBANKMENT WIDENING		0198	09-00058-00-RS	LAKE	46 41
	PLOT SCALE = 50.0000 '/ IN.	CHECKED - S.E.B.	REVISED -	DEPARTMENT OF TRANSPORTATION				BD-51	CONTRACT	T NO. 63498
	PLOT DATE = 1/4/2008	DATE - 06-16-04	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. RO	DAD DIST. NO. 1   ILLINOIS FED. A	ID PROJECT M-9	J003(485)



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

# NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 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:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSES SECTION OF THE CROSES 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 ROLLE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

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

- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS-OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

COUNTY SHEETS NO.

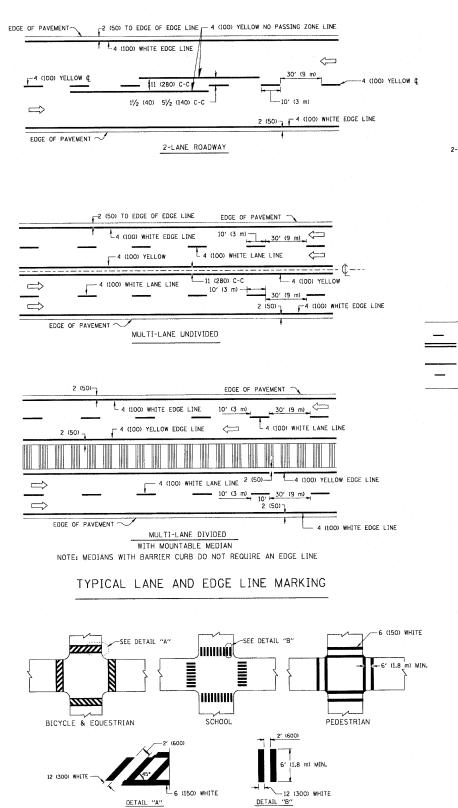
LAKE 46 42

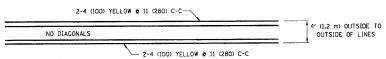
CONTRACT NO. 63498

FILE NAME =	USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
Wi\diststd\22x34\tc10.dgn		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
l .	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED -T, RAMMACHER 01-06-00

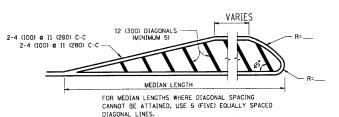
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR	F.A.U. RTE.	SECTION
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	0198	09-00058-00-RS
SIDE RUADS, INTERSECTIONS, AND DIRECTAR		TC-10
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS



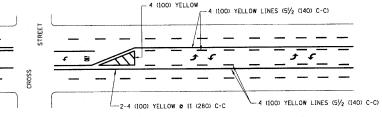


# 4' (1.2 m) WIDE MEDIANS ONLY

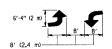


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

# MEDIANS OVER 4' (1.2 m) WIDE

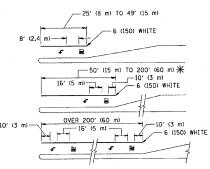


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

# TYPICAL PAINTED MEDIAN MARKING

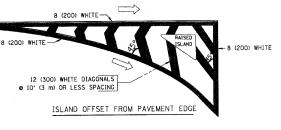


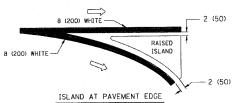
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SQ. FT. (1.5 m²)  $\P$  AREA = 20.8 SQ. FT. (1.9 m²)

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

TYPICAL LEFT (OR RIGHT) TURN LANE

# TYPICAL TURN LANE MARKING





# TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 <b>6</b> 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW: EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE: FULL SIZE LETTERS & SYMBOLS (8' (2,4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (500) APART 2' (500) APART 5EE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSMALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS & 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"-3.6 SO. FT. (0.33 m²) EACH "X"-54.0 SO. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

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

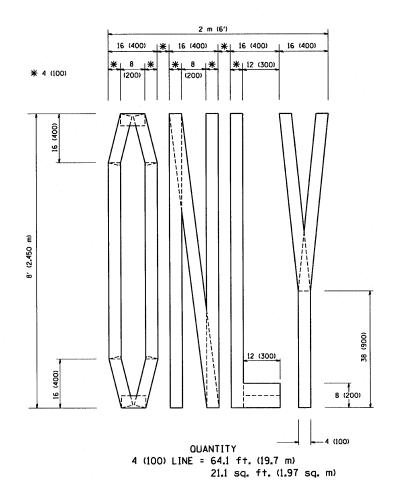
All dimensions are in inches (millimeters

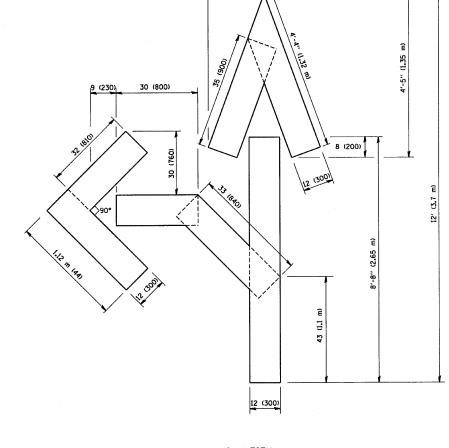
1								
FILE NAME =	USER NAME = drivekesgn	DESIGNED	-	EVERS	REVISED	-T.	RAMMACHER	10-27-94
c:\pw_work\pwidot\drivakosgn\d0108315\to	3,dgn	DRAWN	-		REVISED	- C.	JUCIUS	09-09-09
	PLOT SCALE = 50.000 '/ IN.	CHECKED	-		REVISED	-		
	PLOT DATE = 9/9/2009	DATE	-	03-19-90	REVISED	-		

TYPICAL CROSSWALK MARKING

STATE	OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

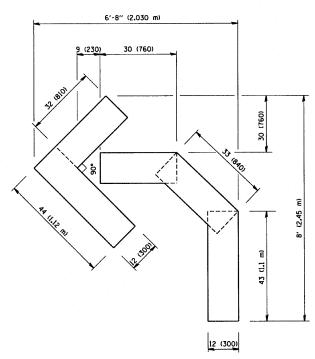
٦	DISTRICT ONE					SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			0198	09-00058-00-RS	LAKE	46	43		
		TYPICAL PAVEMENT	MARKINGS			TC-13	CONTRACT NO. 63498		
	SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.					DAD DIST. NO. 1   ILLINOIS FED. A	ID PROJECT M-9	003(485	))





1'-8" (500)

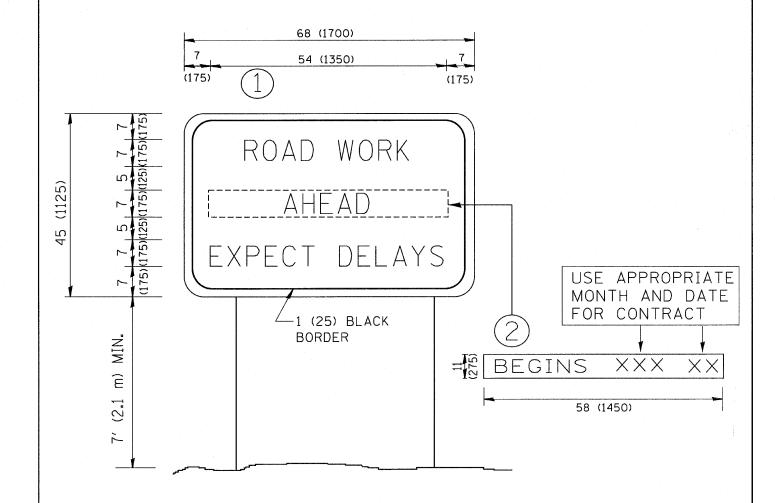
OUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)



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

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96		PAVEMENT MARKING LETTERS AND SYMBOLS	RTE. SECTION	COUNTY TOTAL SHEET NO.
W:\diststd\22x34\tc16.dgn		DRAWN -	REVISED -T, RAMMACHER 11-04-97	STATE OF ILLINOIS	FOR TRAFFIC STAGING	0198 09-00058-00-RS	LAKE 46 44
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION		TC-16	CONTRACT NO. 63498
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FE	D. AID PROJECT M-9003 (485)



# 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 = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97			ARTERIAL ROAD		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
W:\diststd\22x34\tc22.dgn	The second of th	DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS	,	INFORMATION SIGN		0198	09-00058-00-RS	LAKE	46 45
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION	INFURMATION SIGN			_	TC-22	CONTRACT	T NO. 63498
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. RO	AD DIST. NO. 1   ILLINOIS FED. A	.ID PROJECT M-9	9003(485)

