

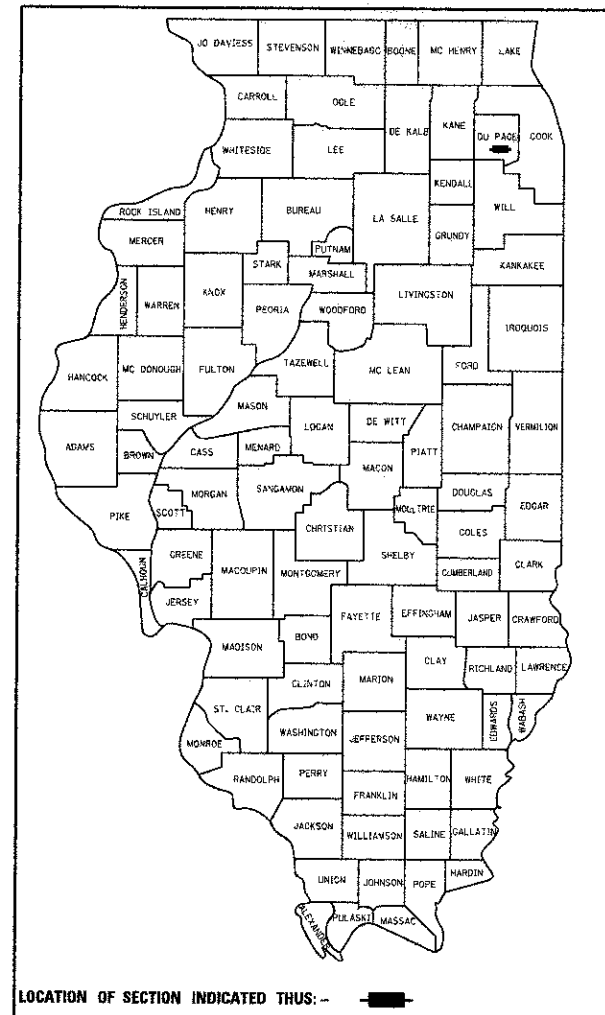
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	10-00057-00-SW	DUPAGE	23	1
		ILLINOIS	CONTRACT NO. 63819	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAP 311 (US ROUTE 34)(OGDEN AVENUE)
YACKLEY AVENUE TO SCHWARTZ AVENUE
SIDEWALK CONSTRUCTION
SECTION: 11-00057-00-SW
PROJECT: M-9003(863)
VILLAGE OF LISLE
DuPAGE COUNTY
C-91-055-12



TRAFFIC DATA

ADT:

OGDEN AVENUE = 33,700 (2009)

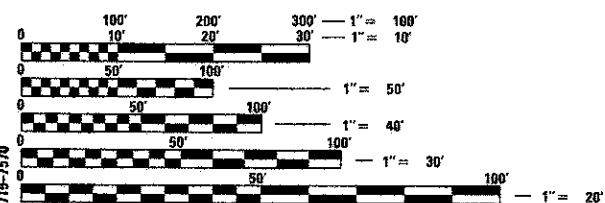
POSTED SPEED LIMIT:

OGDEN AVENUE = 35 MPH

DESIGN DESIGNATION: LOCAL ROAD

OGDEN AVENUE = OTHER PRINCIPAL ARTERIAL

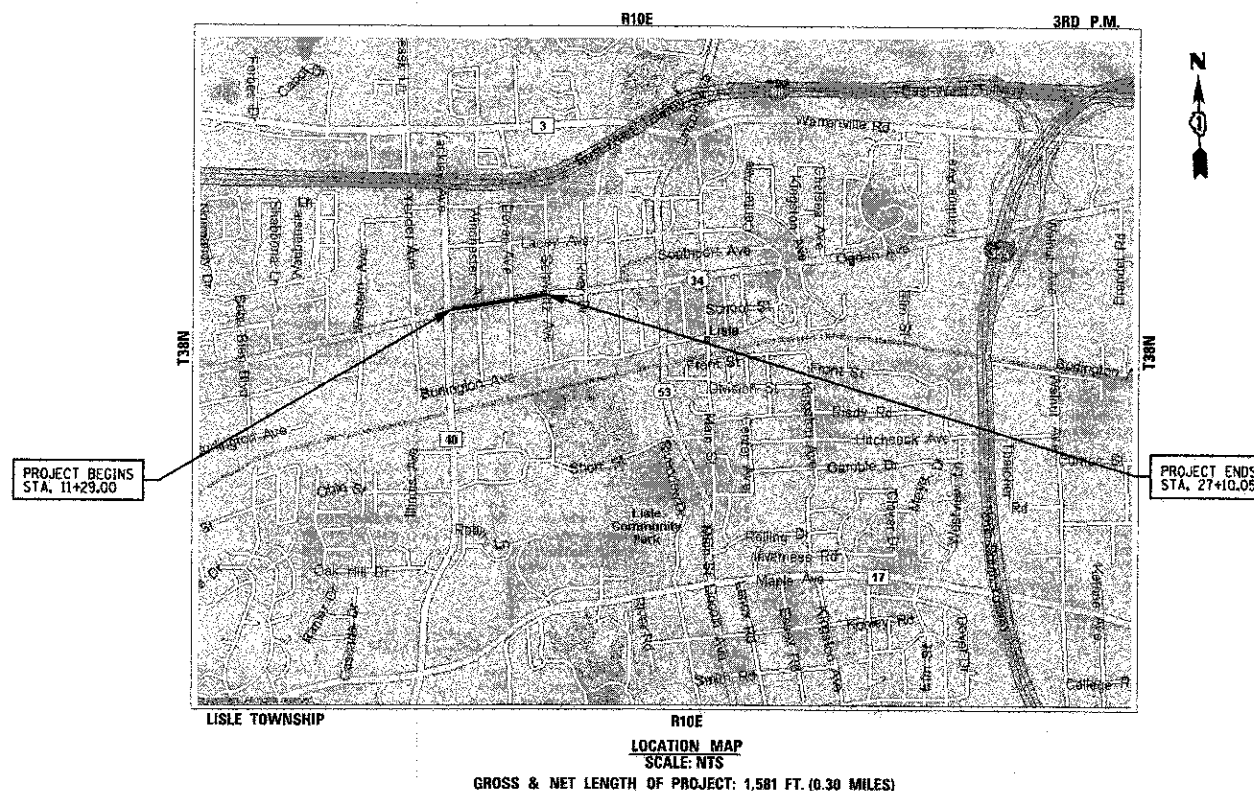
PROJECT LOCATED IN
VILLAGE OF LISLE



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

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

CONTRACT NO. 63819



PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. (847) 705-4406, SCHAUMBURG, IL
CONSULTANT: JAMES J. BENES & ASSOCIATES, INC. (630) 719-7570

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED: 2/19/13 2013
James J. Benes
Village of Lisle, Director of Public Works

PASSED: FEBRUARY 25 2013
C. J. Holt
District Engineer of Local Roads & Streets

Releasing for Bid
Based on Limited Review February 27 2013
John Fontana
Deputy Director of Highways, Region I Engineer

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JAMES J. BENES & ASSOCIATES, INC.

JAMES J. BENES & ASSOCIATES
CONSULTING ENGINEERS
950 WARRENVILLE ROAD, SUITE 101
LISLE, IL 60532
(630) 719-7570

SIGNATURE: *John Fontana*
DATE: 2/19/13
IL LICENSE NO: 062-080441
EXP. DATE: NOVEMBER 30, 2013
FIELD: JAMES J. BENES AND ASSOCIATES, INC.
CIVIL ENGINEERING

INDEX OF SHEETS

SHEET NO.	TITLE
1	TITLE SHEET
2	INDEX OF SHEETS, GENERAL NOTES, STATE STANDARDS AND BENCH MARKS
3	SUMMARY OF QUANTITIES
4	SCHEDULES OF QUANTITIES
5	TYPICAL SECTIONS
6-7	GEOMETRIC PLANS
8-15	PROPOSED TRAFFIC SIGNAL PLANS AND DETAILS
16	CONSTRUCTION DETAILS
17-19	DISTRICT DETAILS
20-23	CROSS SECTIONS

BENCH MARKS

- BM#1: N.W. FLANGE BOLT ON FIRE HYDRANT. FIRE HYDRANT LOCATED ON THE NORTH SIDE OF OGDEN AVENUE AT STA. 11+47, 15' LEFT. ELEVATION = 732.12
- BM#2: N.W. FLANGE BOLT ON FIRE HYDRANT. FIRE HYDRANT LOCATED ON THE NORTH SIDE OF OGDEN AVENUE AT STA. 19+38, 18' LEFT. ELEVATION = 706.19
- BM#3: N.W. FLANGE BOLT ON FIRE HYDRANT. FIRE HYDRANT LOCATED AT THE NORTHWEST CORNER OF OGDEN AVENUE AND SCHWARTZ AVENUE (STA. 27+00, 17' LEFT). ELEVATION = 676.27

DuPAGE COUNTY BENCH MARK: NO. LI03004, TOP OF BRONZE DISK MONUMENT ESTABLISHED IN SOUTHWEST CORNER OF CONCRETE STRUCTURE OVER OGDEN AVENUE (US ROUTE 34) BRIDGE OVER THE EAST BRANCH DuPAGE RIVER. ELEVATION = 669.28

COMMITMENTS: NONE

GENERAL NOTES

1. ACCESS TO LOCAL RESIDENCES AND BUSINESSES SHALL BE MAINTAINED DURING CONSTRUCTION.
2. THE CONTRACTOR SHALL GIVE THE ENGINEER, MUNICIPALITY, AND JAMES J. BENES AND ASSOCIATES, INC. THREE (3) WORKING DAYS NOTICE PRIOR TO THE COMMENCEMENT OF WORK. (VILLAGE OF LISLE: (630) 271-4170) (JAMES J. BENES AND ASSOICATES, INC.: (630) 719-7570)
3. ALL ELEVATIONS ARE ON U.S.G.S. DATUM.
4. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
5. THE ENGINEER OR THE OWNER, SHALL NOT ASSUME ANY OF THE RESPONSIBILITIES OF THE CONTRACTOR'S SUPERINTENDENT OR OF SUBCONTRACTORS. ADDITIONALLY, THE ENGINEER OR OWNER, SHALL NOT ADVISE ON, OR ISSUE DIRECTIONS CONCERNING, ASPECTS OF CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR SAFETY PRECAUTIONS AND/OR PROGRAMS IN CONNECTION WITH THE WORK.
6. THE LOCATIONS OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THEIR ACCURACY IS NOT GUARANTEED. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES. THE CONTRACTOR SHALL REPORT ANY ENCOUNTERED DISCREPANCIES TO THE ENGINEER AT ONCE. THE CONTRACTOR SHALL TAKE DUE CARE IN ALL PHASES OF CONSTRUCTION TO PROTECT ANY UTILITIES WHICH MAY BE AFFECTED BY THE WORK. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE IN ACCORDANCE WITH ARTICLES 105.07, 107.20, AND 107.31.
7. THE CONTRACTOR SHALL KEEP THE CONSTRUCTION AREA FREE OF DEBRIS DURING CONSTRUCTION. THE CONTRACTOR SHALL INSPECT THE SITE DAILY FOR DEBRIS ON THE ROADWAY SURFACE IN ACCORDANCE WITH ARTICLE 107.15. THE RIGHT-OF-WAY SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITION IN ACCORDANCE WITH ARTICLE 107.20.
8. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING DRAINAGE FACILITIES DURING CONSTRUCTION AND SHALL REPAIR ANY DRAINAGE FACILITIES DAMAGED DURING CONSTRUCTION. THIS WORK SHALL BE INCLUDED IN THE COST OF THE CONTRACT AND WILL NOT BE PAID FOR SEPARATELY.
9. THE CONTRACTOR SHALL VERIFY THE ELEVATIONS OF EXISTING STORM SEWERS PRIOR TO THE CONSTRUCTION OF PROPOSED STORM SEWER.
10. THE RELOCATION OF SIGNS ARE INCLUDED IN THE COST OF THE CONTRACT AND WILL NOT BE PAID FOR SEPARATELY IN ACCORDANCE WITH ARTICLE 107.25.
11. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS, SEWERS AND WATER UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED.)
12. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH ALL UTILITY COMPANIES AND THE VILLAGE OF LISLE.
13. SAW CUTTING OF PAVEMENT, SHOULDERS, CURB AND GUTTER, ETC. SHALL BE TO FULL DEPTH AND SHALL RESULT IN CLEAN, STRAIGHT EDGE ON THE PORTION REMAINING. ALL SAW CUTTING SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEM REMOVED.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE MADE BY THE CONTRACTOR TO THE IRRIGATION SYSTEMS AND IT SHALL BE REPAIRED IN ACCORDANCE WITH ARTICLE 107.20. THE CONTRACTOR WILL DETERMINE THE LOCATIONS OF DAMAGE AND EXTENT OF DAMAGE. ALL LOCATIONS OF REPAIR WORK AND EXTENT OF REPAIR SHALL BE APPROVED BY THE ENGINEER PRIOR TO PERFORMING THE WORK. THE SPRINKLER LINES SHALL BE PRESSURE TESTED. ANY PRESSURE LEAKS SHALL BE IDENTIFIED AND REPAIRS MADE PRIOR TO RETESTING THE SYSTEM FOR APPROVAL. ALL MATERIAL, LABOR AND EQUIPMENT USED TO LOCATE, REPAIR AND TEST THE DAMAGED IRRIGATION SYSTEMS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT BID PRICE OF THE CONTROLLING ITEM BEING WORKED ON AT THE TIME OF DAMAGE.
15. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED JANUARY 1, 2012; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", ADOPTED JANUARY 1, 2013; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (MUTCD), "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" JULY 2009 SIXTH EDITION, THE "DETAILS" IN THE PLANS AND THE "SPECIAL PROVISIONS" INCLUDED IN THE CONTRACT DOCUMENTS.

LIST OF STATE STANDARDS


000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
424001-07	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424026-01	ENTRANCE/ALLEY PEDESTRIAN CROSSINGS
606001-05	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701606-08	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701801-05	LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-02	TRAFFIC CONTROL DEVICES
876001-02	PEDESTRIAN PUSH BUTTON POST

LIST OF DISTRICT ONE DETAILS

BD-01	DRIVEWAY DETAILS-DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >=15' (4.5m)
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TS-05	STANDARD TRAFFIC SIGNAL DESIGN DETAILS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

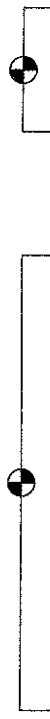
INDEX OF SHEETS, GENERAL NOTES, STATE STANDARDS AND BENCH MARKS
OGDEN AVENUE

 JAMES J. BENES & ASSOCIATES, INC. 950 Warrenville Road, Suite 101, Lisle, Illinois 60532 Tel. (630) 719-7570 • Fax (630) 719-7589				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	11-00057-00-SW	DuPAGE	23	2
CONTRACT NO. 63819			ILLINOIS FED. AID PROJECT	

FILE NAME =	USER NAME =	DESIGNED -- JDS	REVISED --
		DRAWN -- SMP	REVISED --
		CHECKED -- JDS	REVISED --
		DATE -- 12/12/12	REVISED --

SCALE: NONE SHEET NO. 2 OF 23 SHEETS STA. _____ TO STA. _____

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SAFETY IMPROVEMENTS	
				75% FED	25% VILLAGE 0021
20101000	TEMPORARY FENCE	FOOT	100	100	
20101200	TREE ROOT PRUNING	EACH	11	11	
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	353	353	
28000510	INLET FILTERS	EACH	8	8	
40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	50	50	
42001300	PROTECTIVE COAT	SQ YD	947	947	
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	70	70	
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	7,192	7,192	
42400800	DETECTABLE WARNINGS	SQ FT	80	80	
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	517	517	
44000300	CURB REMOVAL	FOOT	169	169	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	211	211	
44000600	SIDEWALK REMOVAL	SQ FT	1,025	1,025	
44201670	CLASS D PATCHES, TYPE I, 2 INCH	SQ YD	23	23	
44201672	CLASS D PATCHES, TYPE II, 2 INCH	SQ YD	7	7	
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	7	7	
60600605	CONCRETE CURB, TYPE B	FOOT	184	184	
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	88	88	
60604400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	FOOT	113	113	
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	10	10	
66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	80	80	
66900460	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1	
66900530	SOIL DISPOSAL ANALYSIS	EACH	3	3	
67100100	MOBILIZATION	L SUM	1	1	
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701806	L SUM	1	1	
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1	
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12'	FOOT	336	336	
78300100	PAVEMENT MARKING REMOVAL	SQ FT	192	192	
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA	FOOT	30	30	
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1	
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	140	140	
87602000	PEDESTRIAN PUSH-BUTTON POST	EACH	1	1	
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2	2	
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1	1	
88800100	PEDESTRIAN PUSH BUTTON	EACH	4	4	
89502200	MODIFY EXISTING CONTROLLER	EACH	1	1	
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	1	
Z0013302	SEGMENTAL CONCRETE BLOCK WALL	SQ FT	100	100	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	
Z0017400	DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED	EACH	8	8	
Z0066700	STABILIZED DRIVEWAYS 10"	SQ YD	306	306	
X2501020	SEEDING, CLASS 2A (SPECIAL)	ACRE	0.4	0.4	



LEGEND
 - DENOTES SPECIALTY ITEM

	JAMES J. BENES & ASSOCIATES, INC. 950 Warrenville Road, Suite 101, Lisle, Illinois 60532 Tel. (630) 719-7570 • Fax (630) 719-7589			
	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
311	11-00057-00-SW	DuPAGE	23	3
CONTRACT NO. 63819			ILLINOIS FED. AID PROJECT	

FILE NAME =	USER NAME =	DESIGNED -- JDS	REVISED -- 03/01/13
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		DATE -- 12/12/12	REVISED --

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
 OGDEN AVENUE

SCALE: NONE SHEET NO. 3 OF 23 SHEETS STA. _____ TO STA. _____

TREE ROOT PRUNING		
STATION	OFFSET (FOOT)	QUANTITY (EACH)
OGDEN AVENUE		
17+18	18 LT	1
17+75	18 LT	1
18+24	18 LT	1
18+63	18 LT	1
19+04	18 LT	1
19+49	19 LT	1
23+61	6 LT	1
24+56	7 LT	1
24+89	6 LT	1
25+20	6 LT	1
25+98	12 LT	1
TOTAL QUANTITY =		11

EARTHWORK	
LOCATION	REMOVAL & DISPOSAL OF UNSUITABLE MAT.* (CU. YD.)
OGDEN AVENUE YACKLEY AVENUE TO SCHWARTZ AVENUE	353
TOTAL QUANTITY =	353

*ALL CUT MATERIAL SHALL BE HAULED OFF SITE DUE TO NO ONSITE STORAGE LOCATIONS.

INLET FILTERS		
STATION	OFFSET (FEET)	QUANTITY (EACH)
OGDEN AVENUE		
11+52	1 LT	1
13+51	1 LT	1
16+93	1 LT	1
18+75	1 LT	1
20+61	1 LT	1
22+96	1 LT	1
25+13	1 LT	1
27+04	4 LT	1
TOTAL QUANTITY =		8

DRIEWAY QUANTITY SCHEDULE						
STATION	OFFSET	EXISTING PAVEMENT	DRIVEWAY PAVEMENT REMOVAL (SQ. YD.)	STABILIZED DRIVEWAYS 10" (SQ. YD.)	P.C.C. DRIVEWAY PVMT 8 INCH (SQ. YD.)	
OGDEN AVENUE						
11+81	LT	HMA	63	37	70	
12+57	LT	HMA	40	19		
14+36	LT	HMA	29	23		
17+48	LT	PCC	90			
20+00	LT	HMA	76	83		
22+05	LT	HMA	42	29		
22+57	LT	HMA	42	24		
25+66	LT	HMA	89	70		
26+29	LT	HMA	29	13		
26+80	LT	HMA	17	8		
TOTAL QUANTITY =			617	306		70

DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED		
STATION	OFFSET (FEET)	QUANTITY (EACH)
OGDEN AVENUE		
11+52	12 LT	1
15+06	13 LT	1
16+91	8 LT	1
18+75	10 LT	1
20+77	12 LT	1
20+78	19 LT	1
22+75	9 LT	1
27+04	4 LT	1
TOTAL QUANTITY =		8

SEGMENTAL CONCRETE BLOCK WALL				
LOCATION	OFFSET	LENGTH (FOOT)	AVERAGE HEIGHT (FOOT)	QUANTITY (SQ. FT)
OGDEN AVENUE				
13+86 TO 14+18	LT	32	1	32
24+75 TO 25+20	LT	45	1.5	68
TOTAL QUANTITY =				100

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Tel. (630) 719-7570 • Fax (630) 719-7589

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULES OF QUANTITIES
OGDEN AVENUE

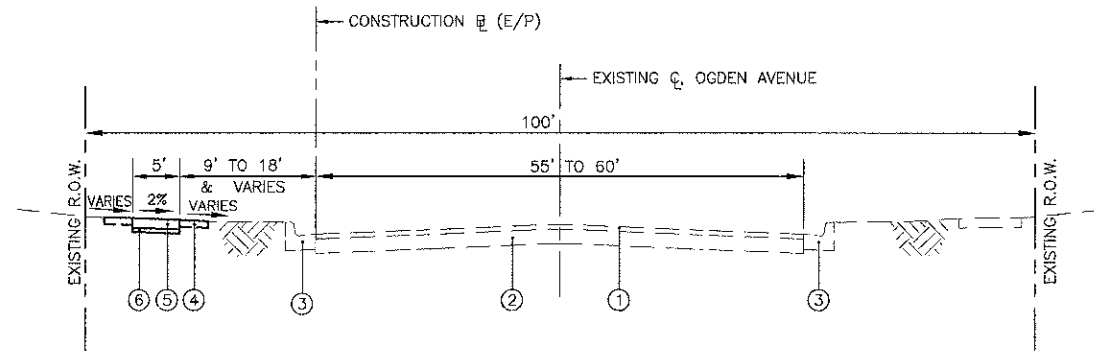
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	11-00057-00-SW	DuPAGE	23	4

CONTRACT NO. 63819

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SCALE: NONE SHEET NO. 4 OF 23 SHEETS STA. _____ TO STA. _____

ILLINOIS FED. AID PROJECT



PROPOSED TYPICAL SECTION-OGDEN AVENUE
 STA. 11+29.00 (YACKLEY AVENUE) TO STA. 27+10.05 (SCHWARTZ AVENUE)
 (SECTION LOOKING EAST)

- LEGEND**
- ① EXISTING HOT-MIX ASPHALT SURFACE COURSE, THICKNESS VARIES
 - ② EXISTING HOT-MIX PAVEMENT, THICKNESS VARIES
 - ③ EXISTING CURB AND GUTTER
 - ④ SEEDING, CLASS 1 (SPECIAL)
 (INCLUDES 4" PULVERIZED TOP SOIL AND FERTILIZER)
 (AT LOCATIONS DESIGNATED BY THE ENGINEER)
 - ⑤ PORTLAND CEMENT CONCRETE SIDEWALK 5"
 (AT ENTRANCES, THE SIDEWALK SHALL BE INCREASED TO THE THICKNESS OF THE DRIVEWAY PAVEMENT. COST INCLUDED IN P.C.C. SIDEWALK 5")
 - ⑥ SUB-BASE GRANULAR MATERIAL, TYPE B 2"
 (COST INCLUDED IN P.C.C. SIDEWALK 5")

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @Ndes
DRIVEWAYS	
HOT-MIX ASPHALT BASE COURSE, 8" (HMA BINDER IL-19mm) (2 LIFTS)	4% @ 50 Gyr.
HOT-MIX ASPHALT SURFACE COURSE, MIX "D" N50, 2" (IL-9.5m)	4% @ 50 Gyr.
PATCHING	
CLASS D PATCHES, 2" (HMA SURFACE IL-19mm)	4% @ 70 Gyr.

- NOTES:**
- 1) THE UNIT WEIGHT USED TO CALCULATE ALL HMA QUANTITIES IS 112 LB/SY/IN.
 - 2) 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.

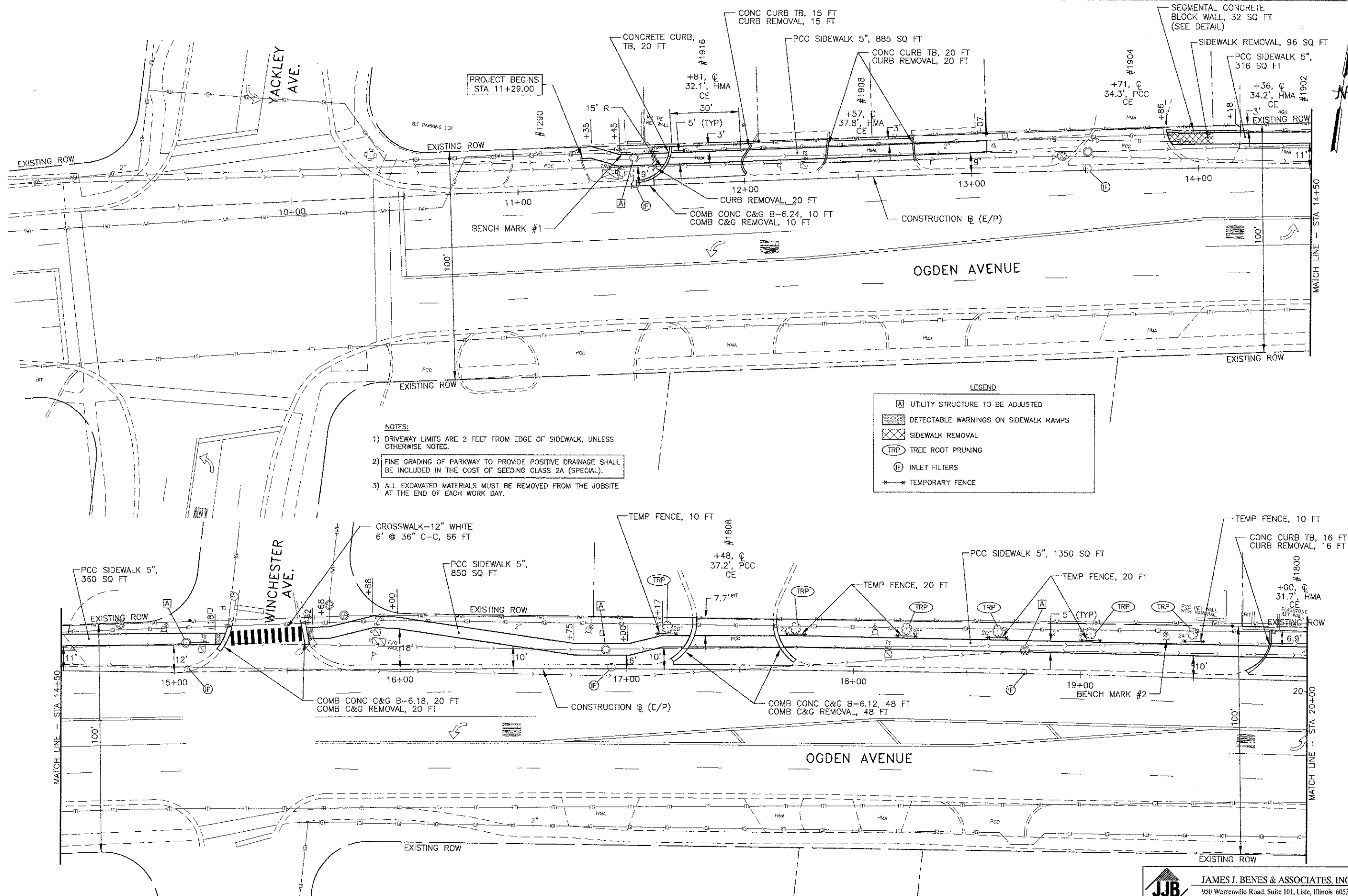
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SCALE: NONE	SHEET NO. 5 OF 23 SHEETS	STA. _____ TO STA. _____
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 Tel. (630) 719-7570 • Fax (630) 719-7589

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311	11-00057-00-SW	DuPAGE	23	5
CONTRACT NO. 63819				
ILLINOIS FED. AID PROJECT				



- NOTES:**
- 1) DRIVEWAY LIMITS ARE 2 FEET FROM EDGE OF SIDEWALK, UNLESS OTHERWISE NOTED.
 - 2) FINE GRADING OF PARKWAY TO PROVIDE POSITIVE DRAINAGE SHALL BE INCLUDED IN THE COST OF SEEDING CLASS 2A (SPECIAL).
 - 3) ALL EXCAVATED MATERIALS MUST BE REMOVED FROM THE JOBSITE AT THE END OF EACH WORK DAY.

LEGEND

- [A] UTILITY STRUCTURE TO BE ADJUSTED
- [X] DETECTABLE WARNINGS ON SIDEWALK RAMP
- [X] SIDEWALK REMOVAL
- (TRP) TREE ROOT PRUNING
- (IF) INLET FILTERS
- *-* TEMPORARY FENCE

FILE NAME =

USER NAME =

PLOT SCALE =

PLOT DATE =

DESIGNED -	BOH	REVISED -	03/01/13
DRAWN -	SMP	REVISED -	
CHECKED -	BDH	REVISED -	
DATE -	12/12/12	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GEOMETRIC PLAN
OGDEN AVENUE**

SCALE: 1"=20' SHEET NO. 8 OF 23 SHEETS STA. 10+00 TO STA. 20+00

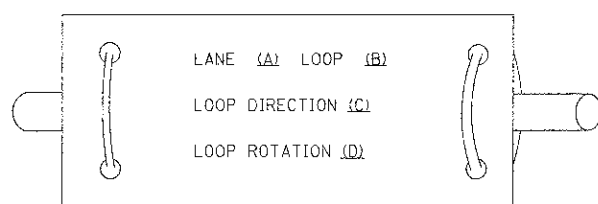
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	11-00057-00-SW	DuPAGE	23	6
				CONTRACT NO. 63819
ILLINOIS FED. AID PROJECT				

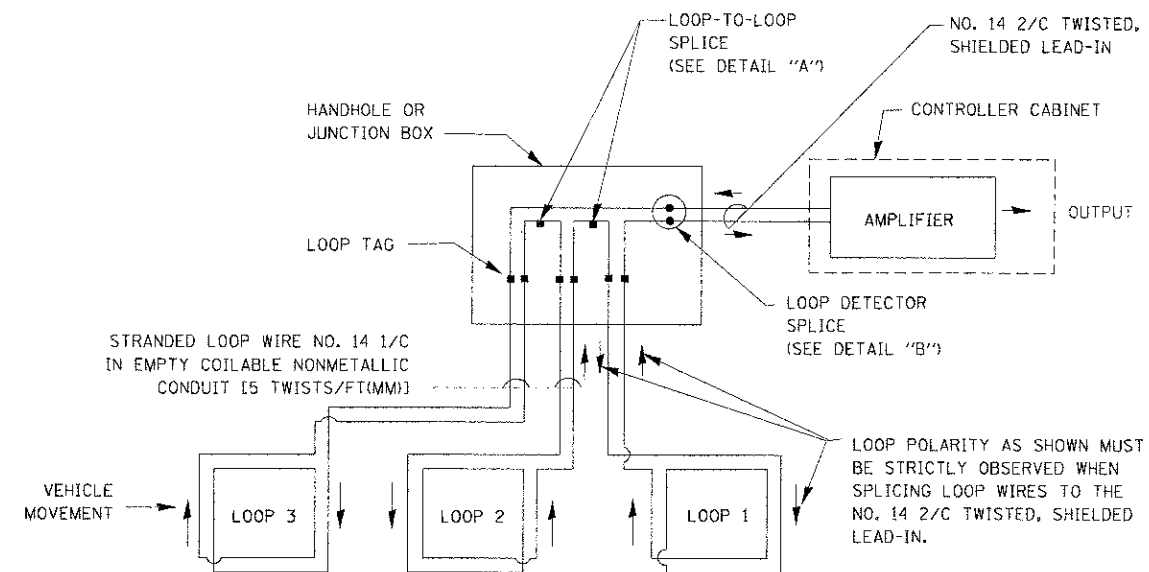
LOOP DETECTOR NOTES

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

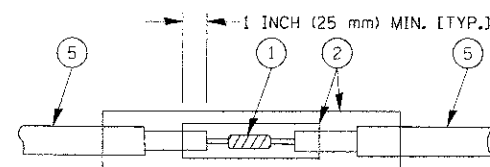


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

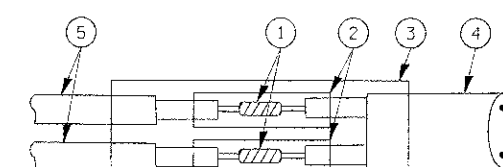


DETECTOR LOOP WIRING SCHEMATIC

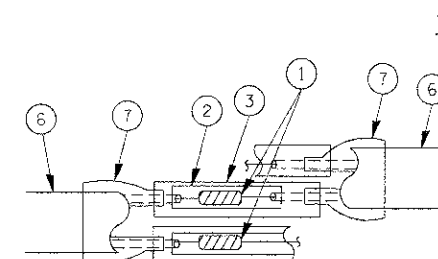
- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.



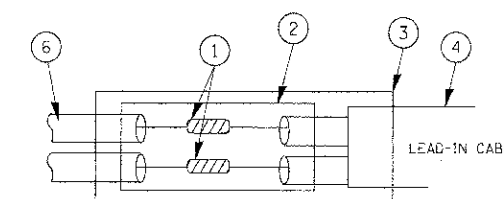
DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
311	11-00057-00-SW	DuPAGE	23 8
TS-05		CONTRACT NO.	63819
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			

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

FILE NAME -
D:\work\PKWIDOT\BALERCL\0810315\tsd3.dgn

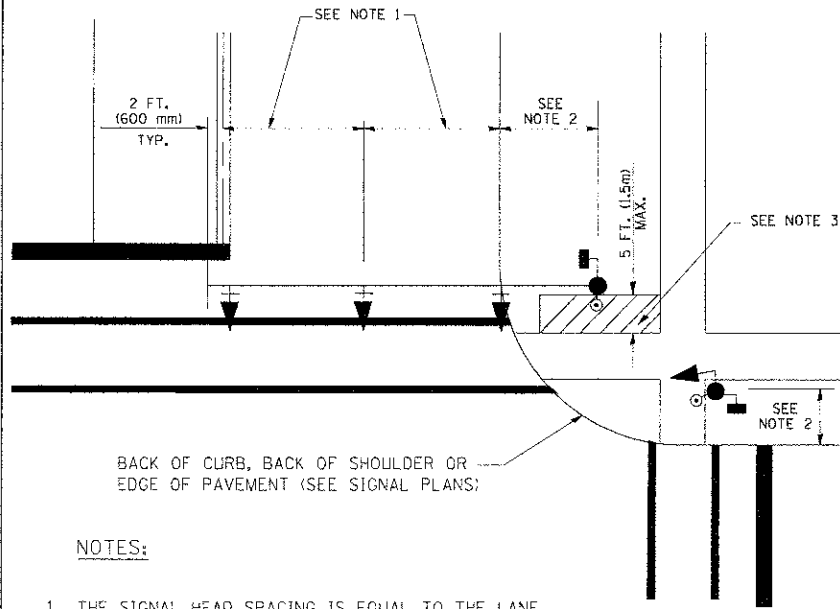
USER NAME = baueirdl
PLOT SCALE = 50,0000 / IN.
PLOT DATE = 11/4/2009

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

REVISED -
REVISED -
REVISED -
REVISED -

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

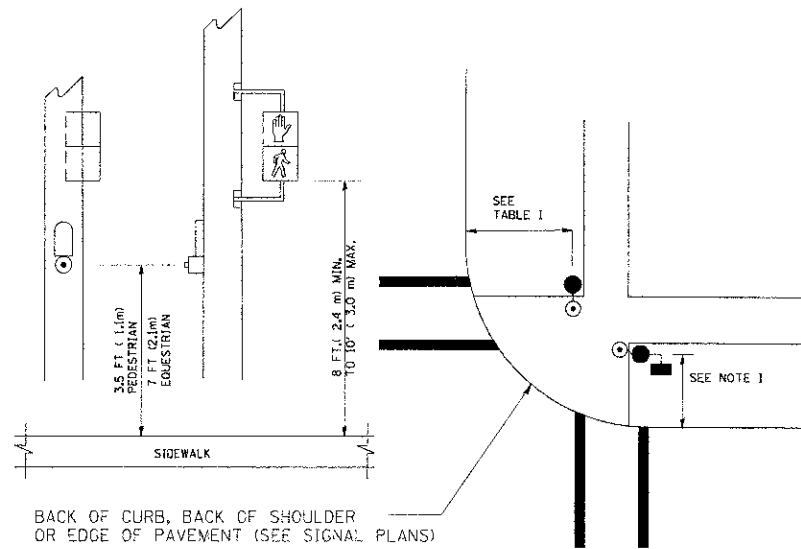
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

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

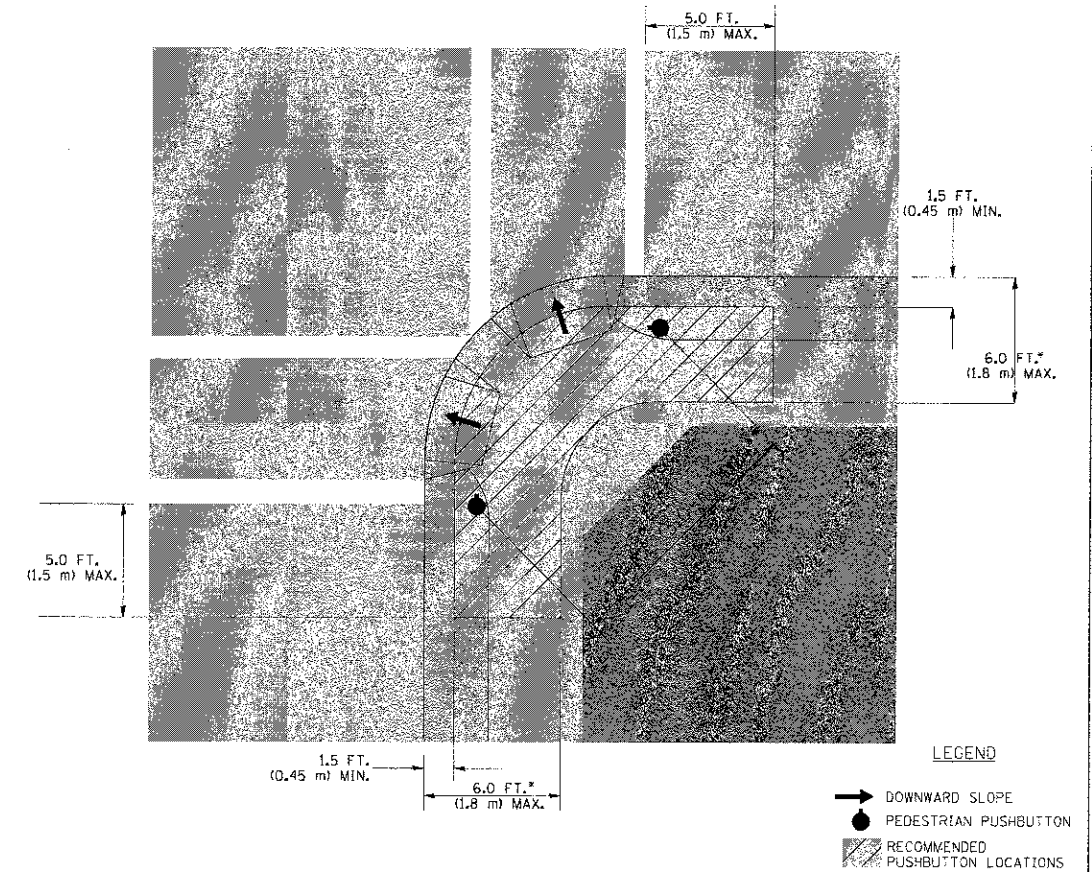
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



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

NOTES:

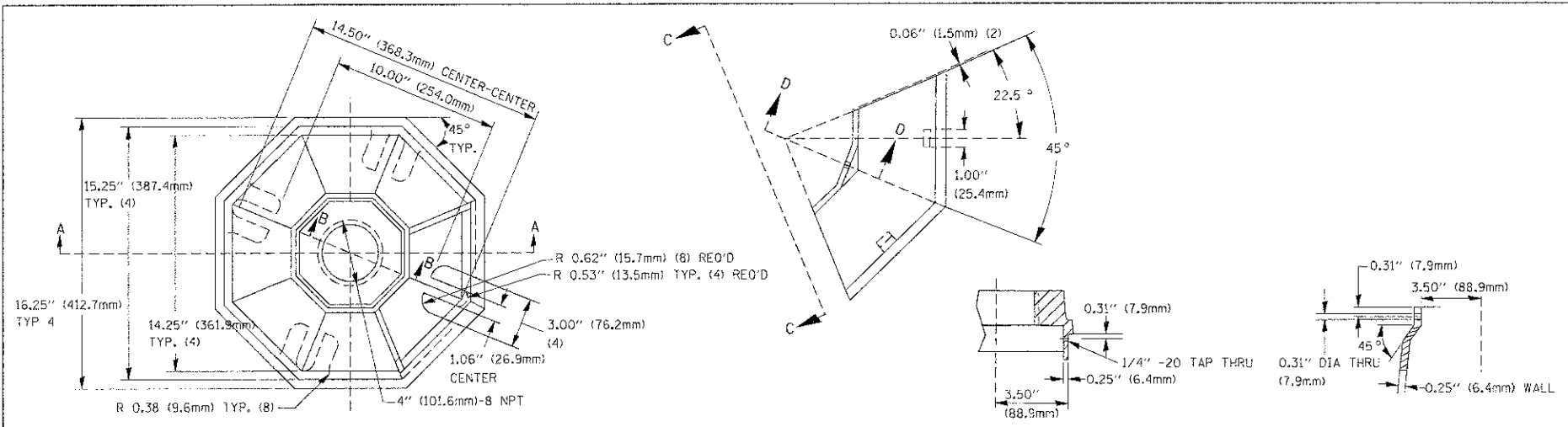
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM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

TRAFFIC SIGNAL EQUIPMENT OFFSET

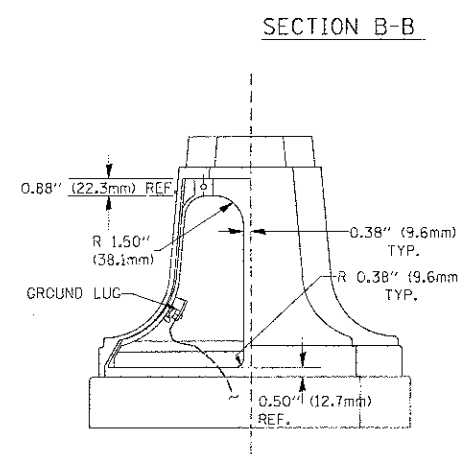
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10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

NOTES:

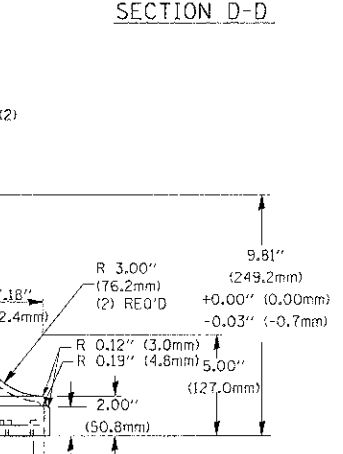
1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM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



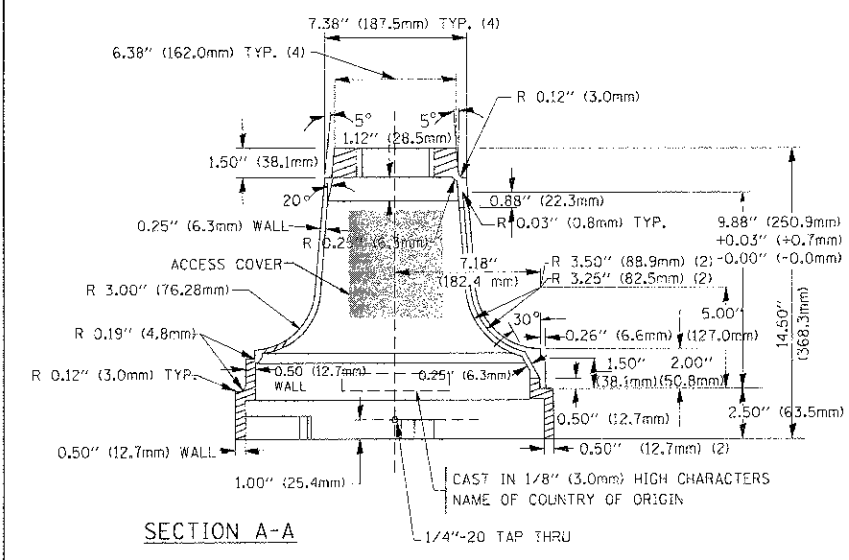
TOP VIEW



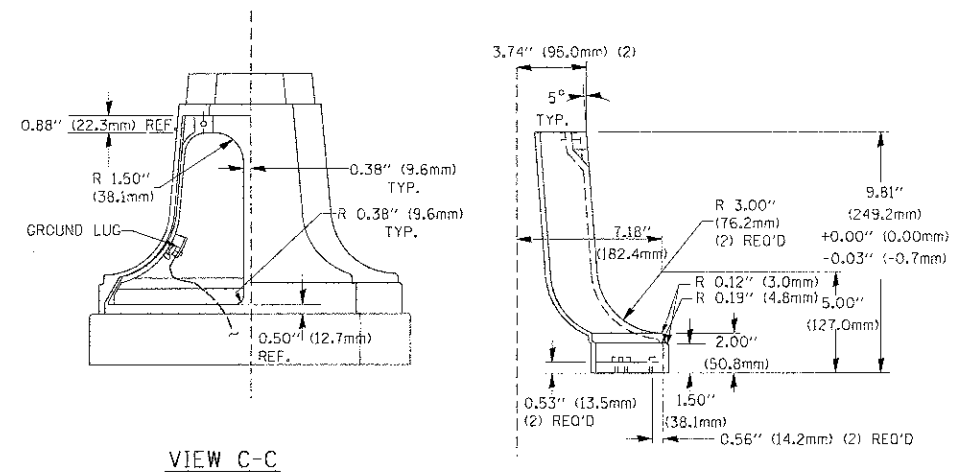
SECTION B-B



SECTION D-D

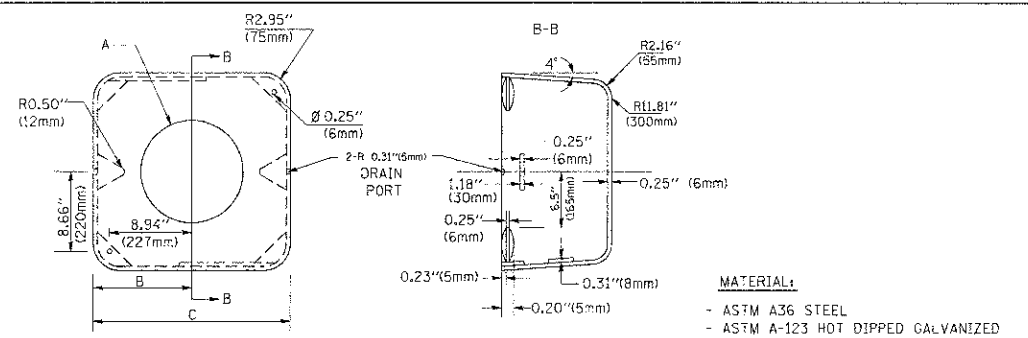


SECTION A-A



VIEW C-C

TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

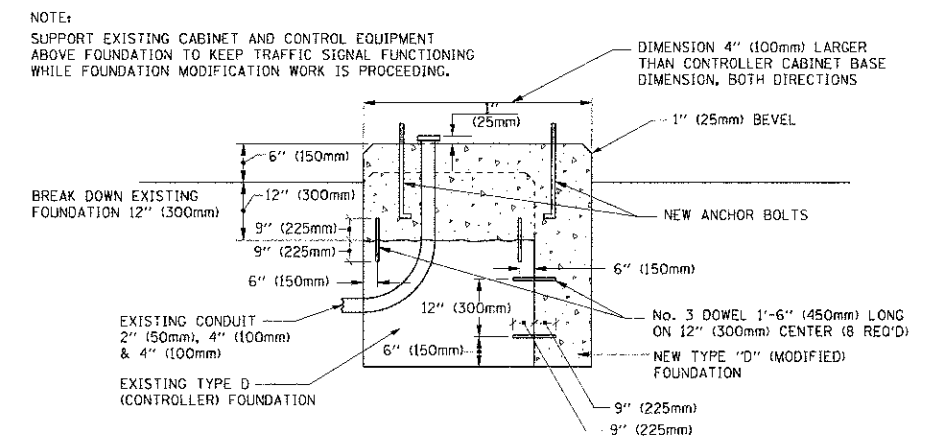


SHROUD

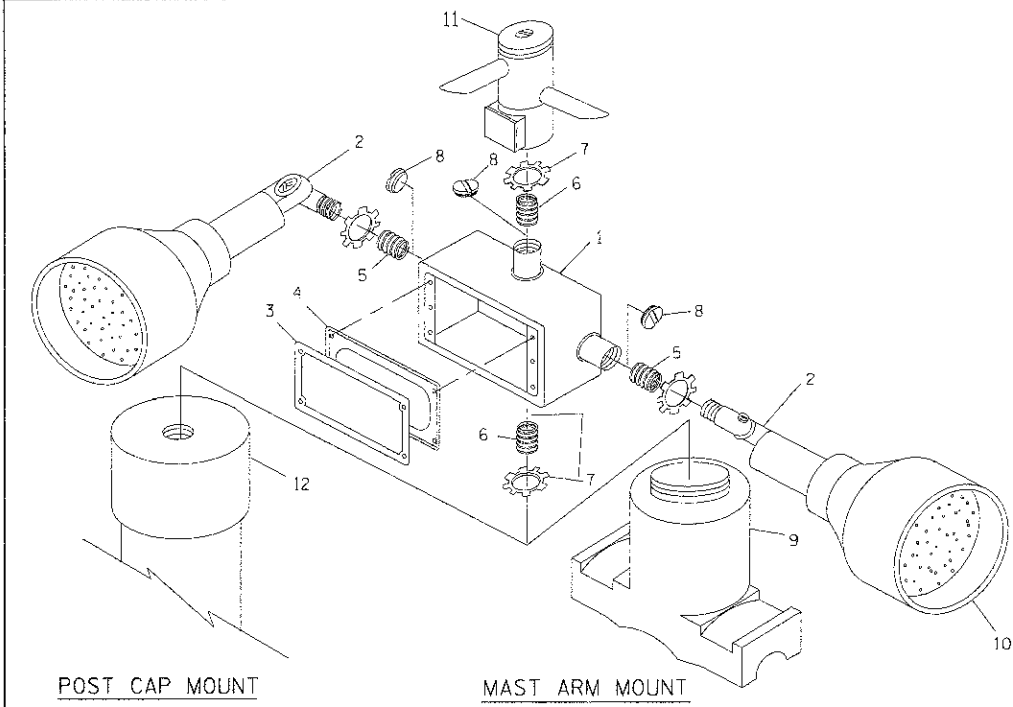
A	B	C	HEIGHT	WEIGHT
VARIABLES	9.5\" (241mm)	19\" (483mm)	7\" (178mm) - 12\" (300mm)	53 lbs (24kg)
VARIABLES	10.75\" (273mm)	21.5\" (546mm)	7\" (178mm) - 12\" (300mm)	68 lbs (31 kg)
VARIABLES	13.0\" (330mm)	26\" (660mm)	7\" (178mm) - 12\" (300mm)	81 lbs (37 kg)
VARIABLES	16.5\" (417mm)	37\" (940mm)	7\" (178mm) - 12\" (300mm)	126 lbs (57 kg)

NOTES:

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



MODIFY EXISTING TYPE "D" FOUNDATION



ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 2\" CU. IN. (0.000344 CU-IN)
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 36 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

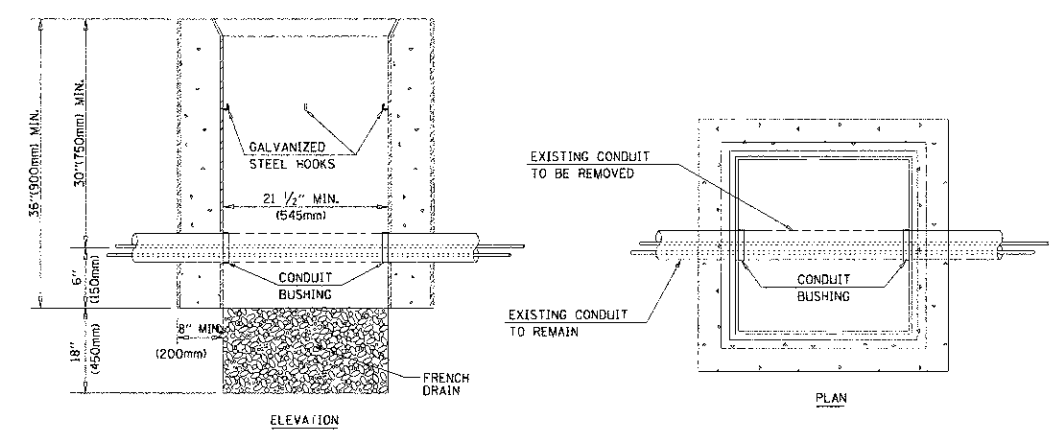
NOTES:

- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-0-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4\" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

POST CAP MOUNT

MAST ARM MOUNT

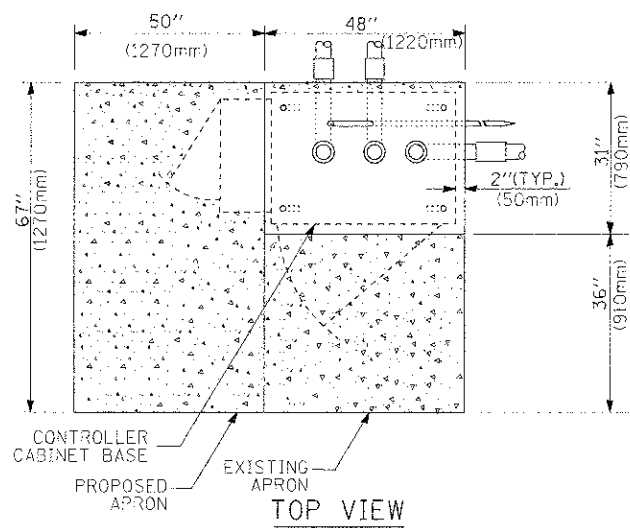
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



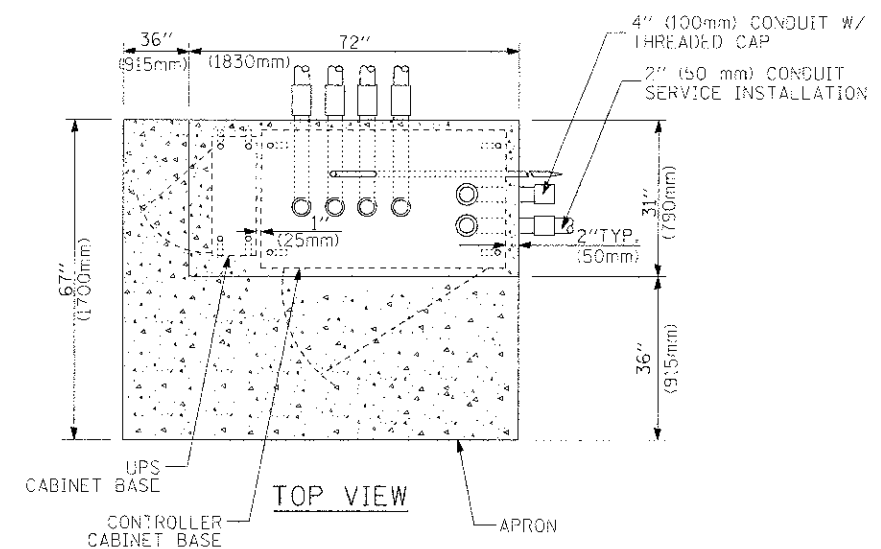
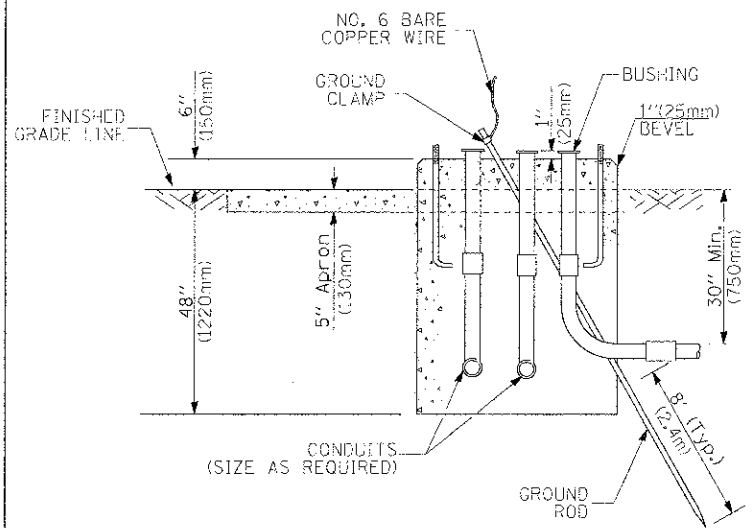
NOTES:

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

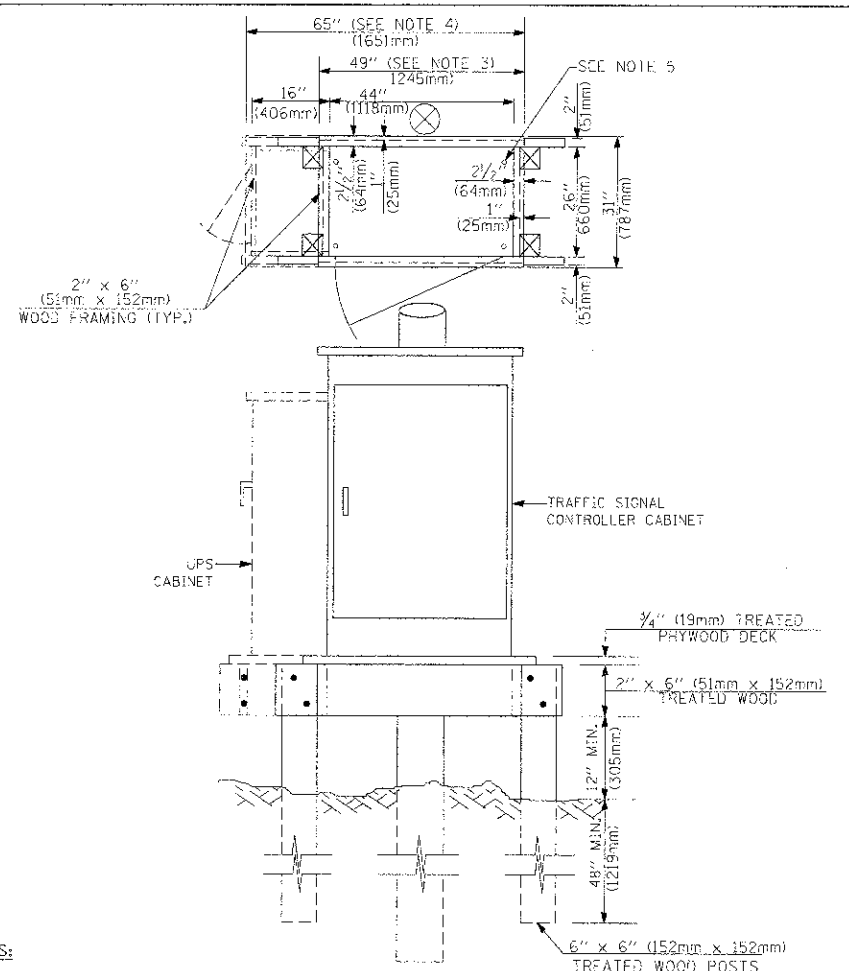
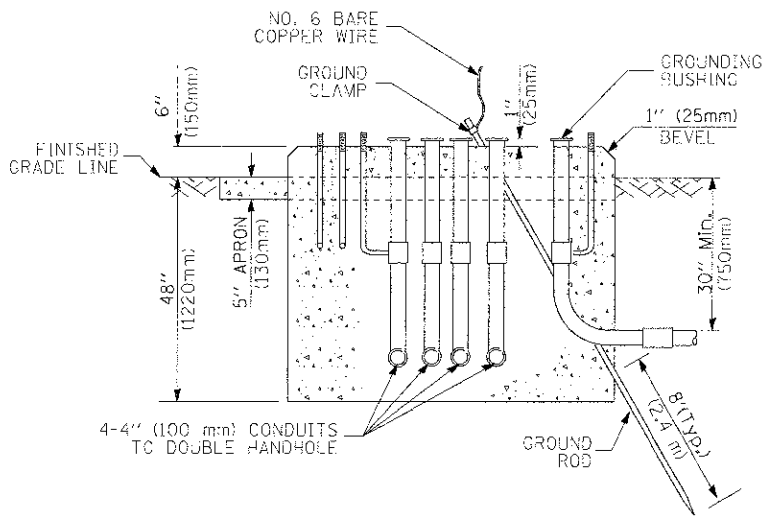
HANDHOLE TO INTERCEPT EXISTING CONDUIT



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



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



- NOTES:**
- 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.
 - PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
 - PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
 - 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.
 - FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

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

DEPTH OF FOUNDATION

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

- NOTES:**
- 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 (UCS) > 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.
 - Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
 - Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
 - For mast arm assemblies with dual arms refer to state standard 878001.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

TRAFFIC SIGNAL LEGEND

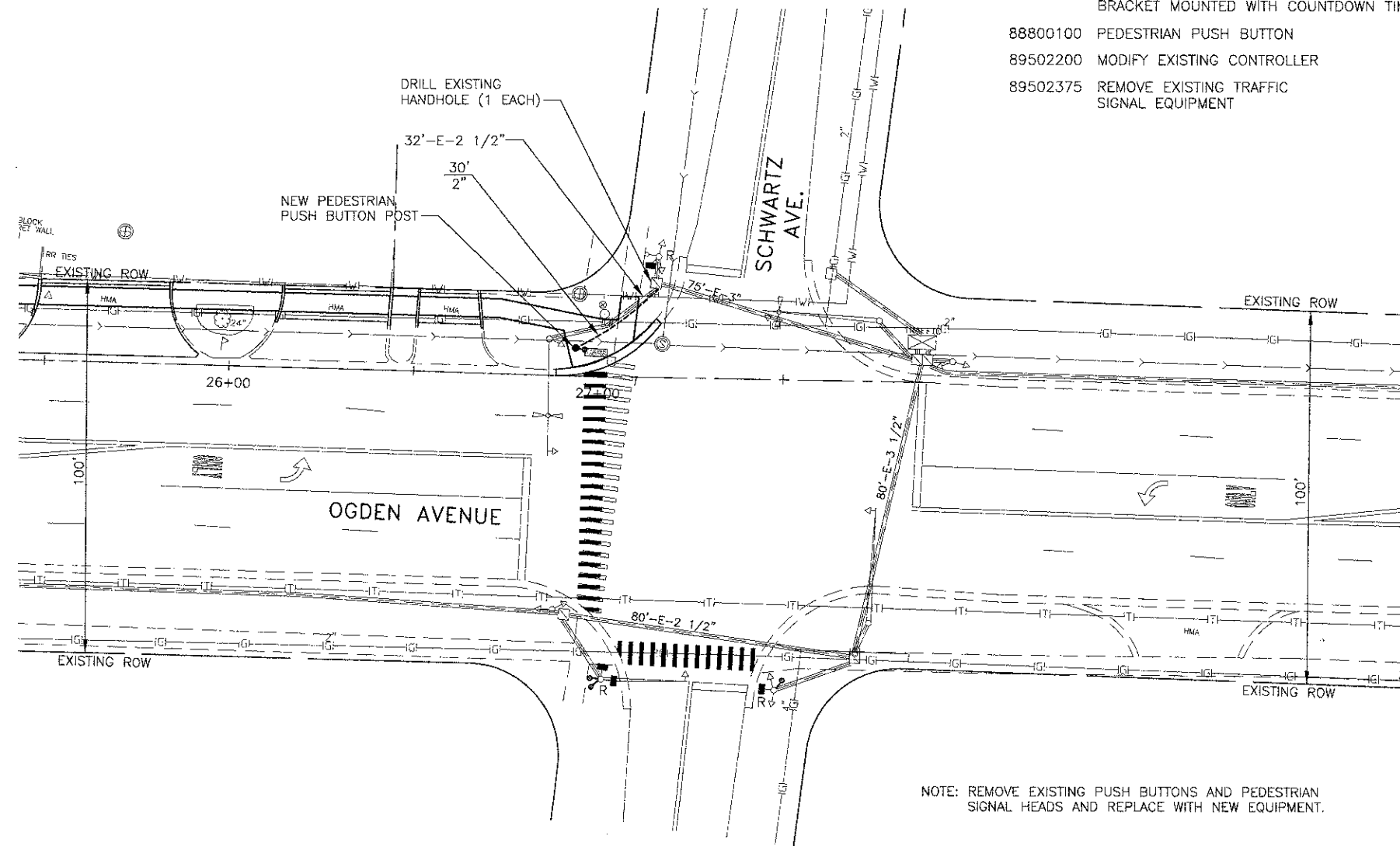
ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED				
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE							
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE							
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA							
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED							
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F							
UNINTERRUPTIBLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F							
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)				FIBER OPTIC CABLE NO. 62.5/125, MM12F 24F							
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)							
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE							
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED							
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM				STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED							
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED							
SIGNAL POST				REMOVE ITEM				STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED							
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM				SIGNAL POST AND FOUNDATION TO BE REMOVED							
GUY WIRE				ABANDON ITEM				INTERSECTION & SAMPLING (SYSTEM) DETECTOR							
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR							
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR							
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR							
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR							
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				PREFORMED SAMPLING (SYSTEM) DETECTOR							
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED				RAILROAD SYMBOLS							
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID				EXISTING			PROPOSED				
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER				RAILROAD CONTROL CABINET							
ILLUMINATED SIGN "NO LEFT TURN"				RADIO INTERCONNECT				RAILROAD CANTILEVER MAST ARM							
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO REPEATER				FLASHING SIGNAL							
DETECTOR LOOP, TYPE I				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED				CROSSING GATE							
PREFORMED DETECTOR LOOP				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)				CROSSBUCK							
MICROWAVE VEHICLE SENSOR															
VIDEO DETECTION CAMERA															
VIDEO DETECTION ZONE															
PAN, TILT, ZOOM CAMERA															
WIRELESS DETECTOR SENSOR															
WIRELESS ACCESS POINT															

SCHEDULE OF QUANTITIES

CODE	ITEM	UNIT	QUANTITY
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	30
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14, 2/C	FOOT	140
87602000	PEDESTRIAN PUSH BUTTON POST	EACH	1
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
88102747	PEDESTRIAN SIGNAL HEAD, 2-FACE BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
88800100	PEDESTRIAN PUSH BUTTON	EACH	4
89502200	MODIFY EXISTING CONTROLLER	EACH	1
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD PEDESTRIAN		
SIGNAL POST		
MAST ARM ASSEMBLY AND POLE, STEEL		
MAST ARM ASSEMBLY AND POLE, ALUMINUM		
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH OR PUSHED		
PEDESTRIAN PUSHBUTTON DETECTOR		
DETECTOR LOOP		
CAST IRON JUNCTION BOX		
COMMON TRENCH		
UNIT DUCT		
EMERGENCY VEHICLE SYSTEM DETECTOR		
CONFIRMATION BEACON		
SIGNAL HEAD OPTICALLY PROGRAMMED		
MICROWAVE VEHICLE SENSOR		
TELEPHONE CONNECTION		
ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"		
ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"		
CONDUIT SPLICE		
WOOD POLE		
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
RAILROAD CONTROL CABINET		
RADIO INTERCONNECT		



NOTE: REMOVE EXISTING PUSH BUTTONS AND PEDESTRIAN SIGNAL HEADS AND REPLACE WITH NEW EQUIPMENT.



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

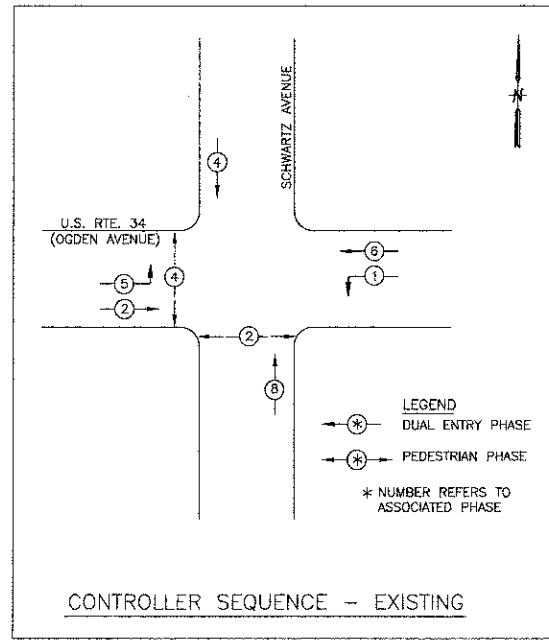
TRAFFIC SIGNAL PLAN
OGDEN AVENUE (US RTE 34) AT SCHWARTZ AVENUE

JJB JAMES J. BENES & ASSOCIATES, INC.
950 Warrenville Road, Suite 101, Lisle, Illinois 60532
Tel. (630) 719-7570 • Fax (630) 719-7589

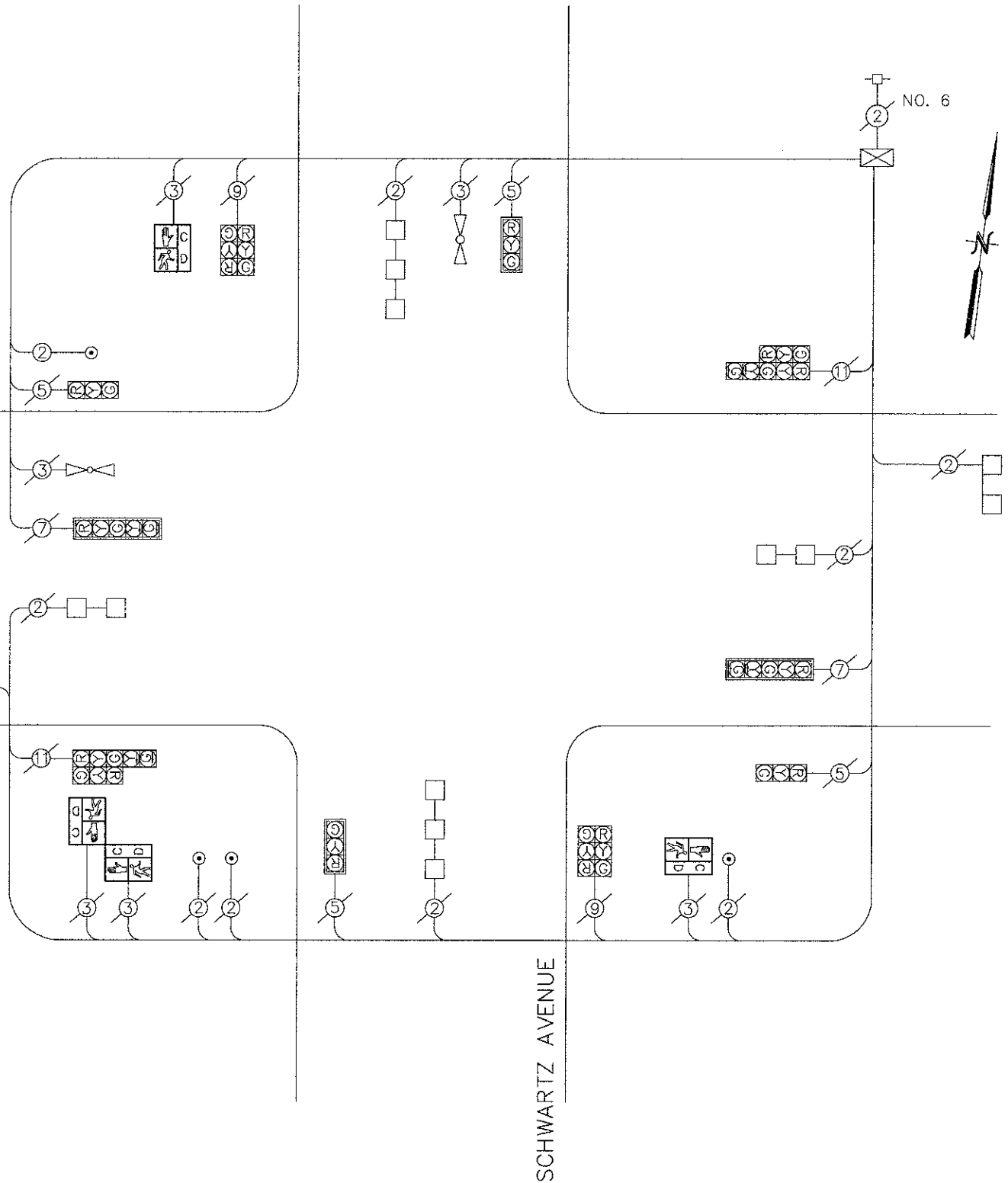
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	11-00057-00-SW	DuPAGE	23	14
CONTRACT NO. 63819			ILLINOIS FED. AID PROJECT	

FILE NAME =	USER NAME =	DESIGNED -- SJG	REVISED -- 03/01/13
		DRAWN -- SMP	REVISED --
		CHECKED -- SJG	REVISED --
		DATE -- 12/12/12	REVISED --

SCALE: 1"=20' SHEET NO. 14 OF 23 SHEETS STA. TO STA.



U.S. RTE. 34 (OGDEN AVENUE)



CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
[Symbol]	[Symbol]	8" (200mm) TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER
[Symbol]	[Symbol]	CONTROLLER CABINET
[Symbol]	[Symbol]	SERVICE INSTALLATION
[Symbol]	[Symbol]	VEHICLE DETECTOR, INDUCTION LOOP
[Symbol]	[Symbol]	MAGNETIC DETECTOR
[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR
[Symbol]	[Symbol]	CONFIRMATION BEACON
[Symbol]	[Symbol]	PUSHBUTTON DETECTOR
[Symbol]	[Symbol]	2 DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
[Symbol]	[Symbol]	1 GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
[Symbol]	[Symbol]	2 FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F & SM12F
[Symbol]	[Symbol]	UNINTERRUPTIBLE POWER SUPPLY (UPS)
[Symbol]	[Symbol]	"P" INDICATES PROGRAMMED HEAD SIGNAL FACE WITH BACKPLATE
[Symbol]	[Symbol]	TELEPHONE CONNECTION
[Symbol]	[Symbol]	ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
[Symbol]	[Symbol]	ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
[Symbol]	[Symbol]	RAILROAD CONTROL CABINET
[Symbol]	[Symbol]	GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER
[Symbol]	[Symbol]	GROUND ROD AT POST (P) OR MAST ARM POLE (M)
[Symbol]	[Symbol]	GROUND ROD AT ELECTRIC SERVICE INSTALLATION

NOTE: ALL GROUND RODS SHALL BE 3/4" x 10'-0" LONG COPPER CLAD AND THE COST SHALL BE INCIDENTAL TO THE COST OF INSTALLATION

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

TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14	135	17	0.50	945
(YELLOW)	14	135	25	0.25	472
(GREEN)	14	135	15	0.25	473
ARROW	8	135	12	0.10	108
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	-	100	100	1.00	100
MASTER CONTROLLER	-	100	100	1.00	-
ILLUM. SIGN	-	252	-	0.05	-
FLASHER	-	-	-	-	-
ENERGY COSTS TO: 50% TO IDOT, 50% TO VILLAGE OF LISLE					TOTAL = 2198
ENERGY SUPPLY CONTACT: DEBBIE RANKIN					
PHONE: 630-691-4379					
COMPANY: COMMONWEALTH EDISON					

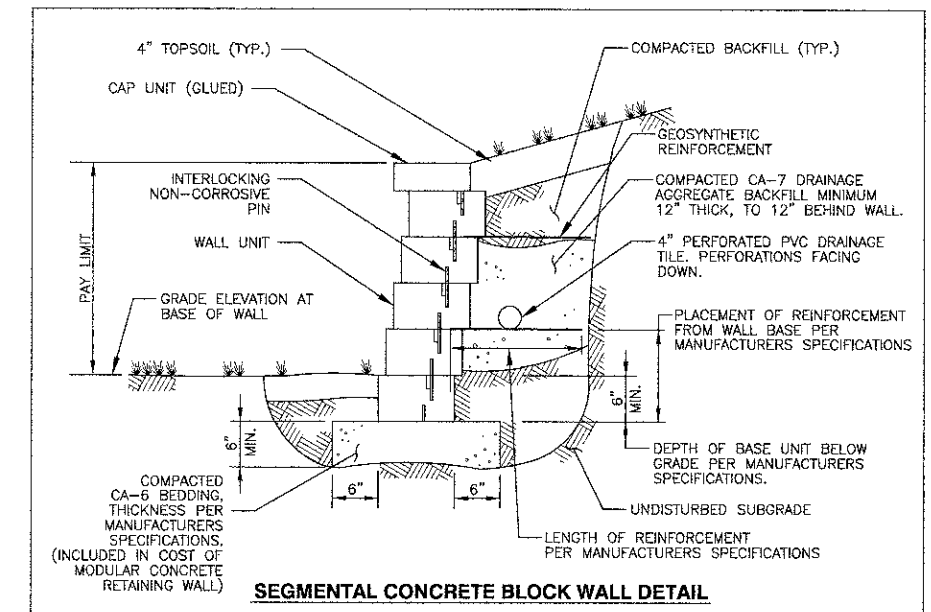
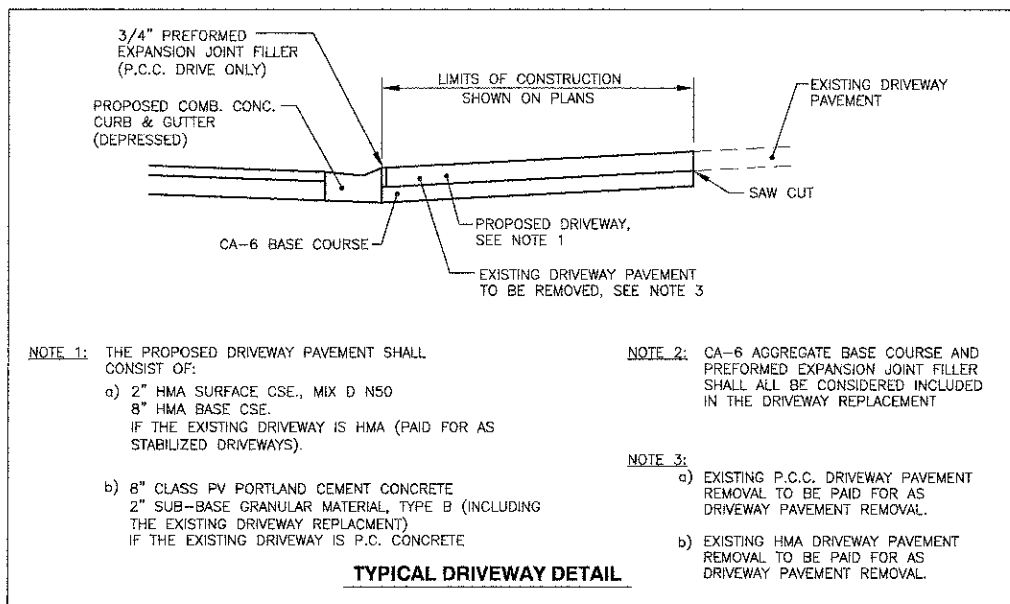
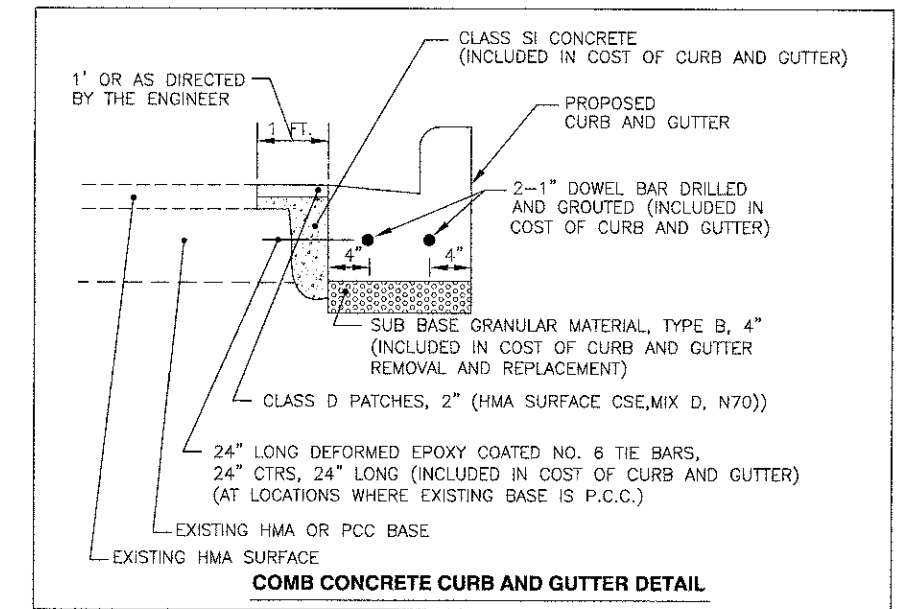
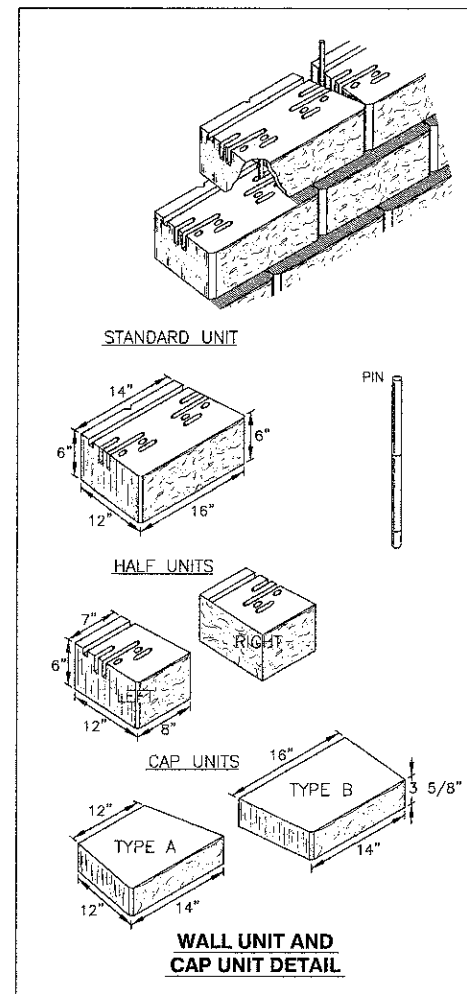
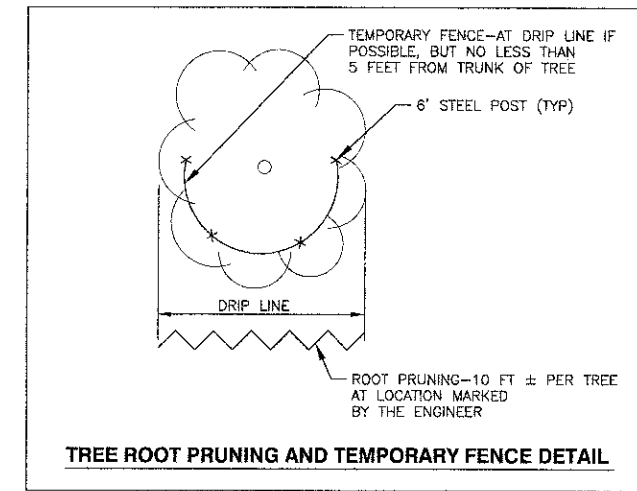
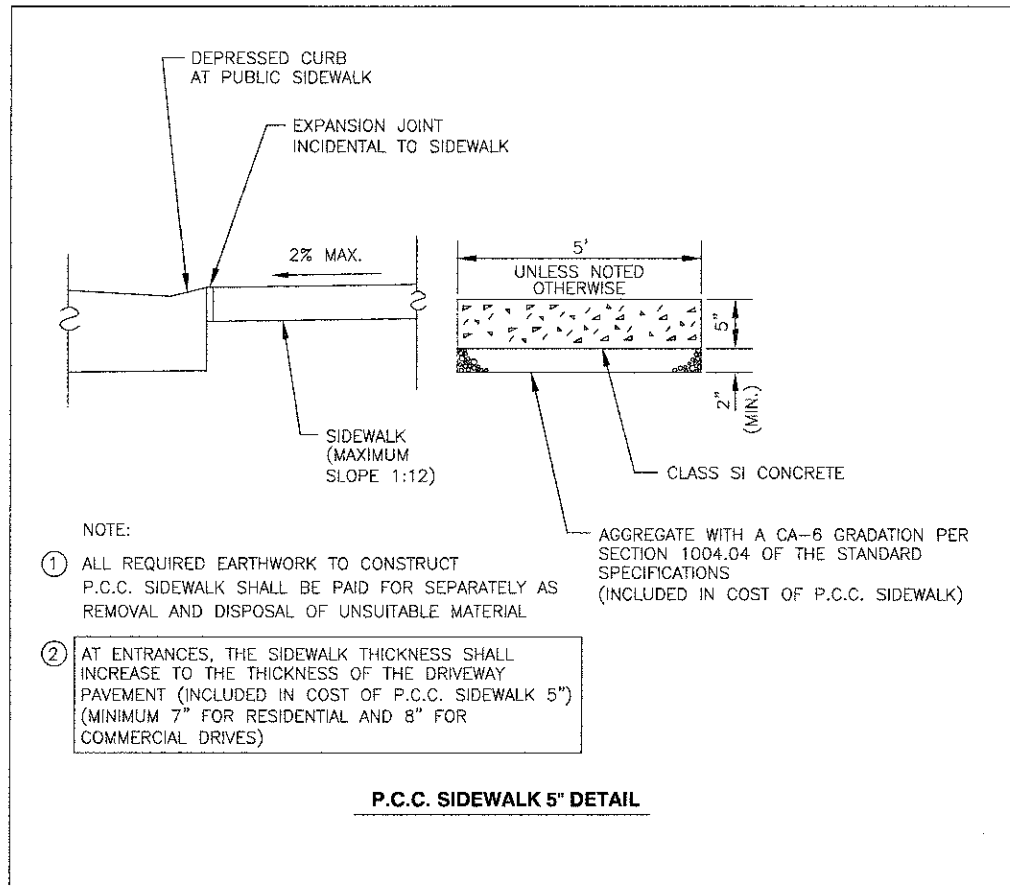
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		DRAWN - SMP	REVISED -
		CHECKED - SJG	REVISED -
		DATE - 12/12/12	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN
OGDEN AVENUE (US RTE 34) AT SCHWARTZ AVENUE
 SCALE: NTS SHEET NO. 15 OF 23 SHEETS STA. TO STA.

JJB JAMES J. BENES & ASSOCIATES, INC.
 950 Warrenville Road, Suite 101, Lisle, Illinois 60532
 Tel. (630) 719-7570 · Fax (630) 719-7589

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	11-00057-00-SW	DuPAGE	23	15
CONTRACT NO. 63819				ILLINOIS FED. AID PROJECT



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

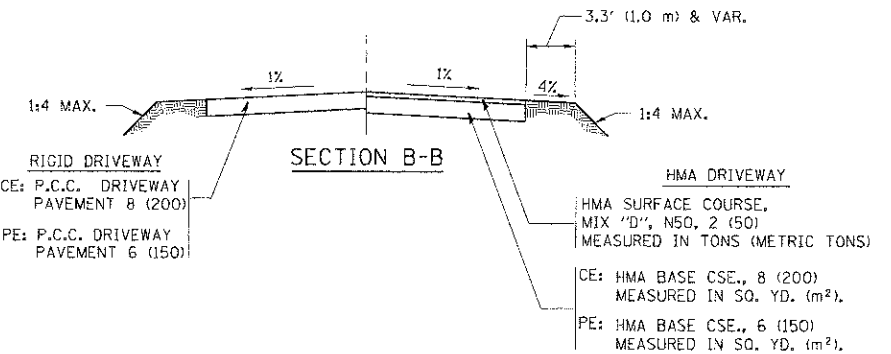
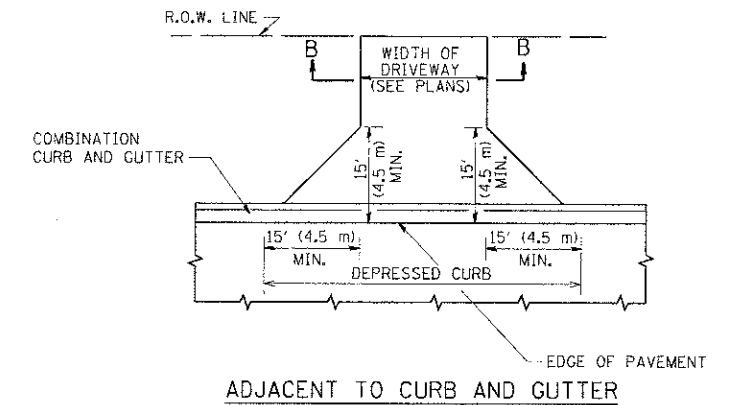
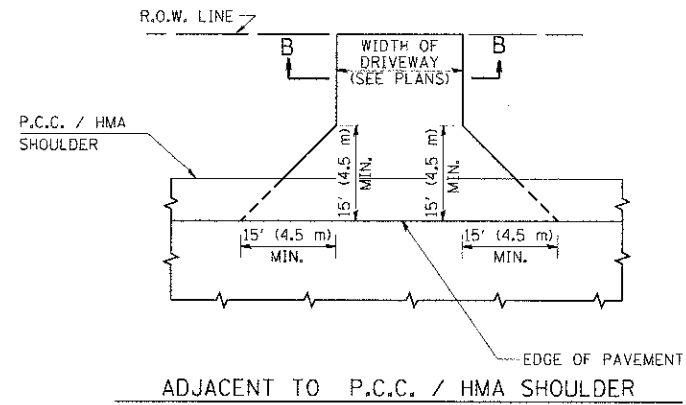
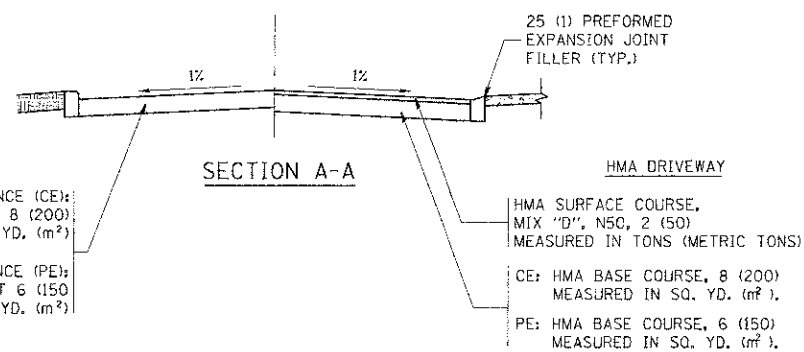
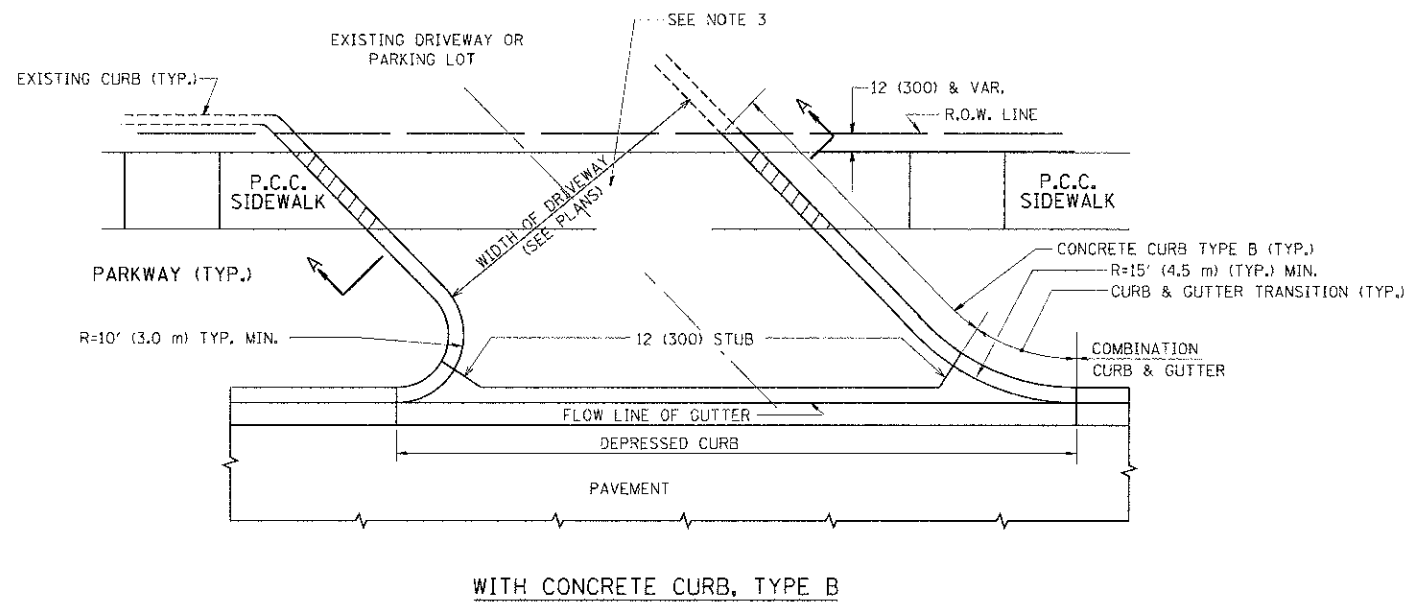
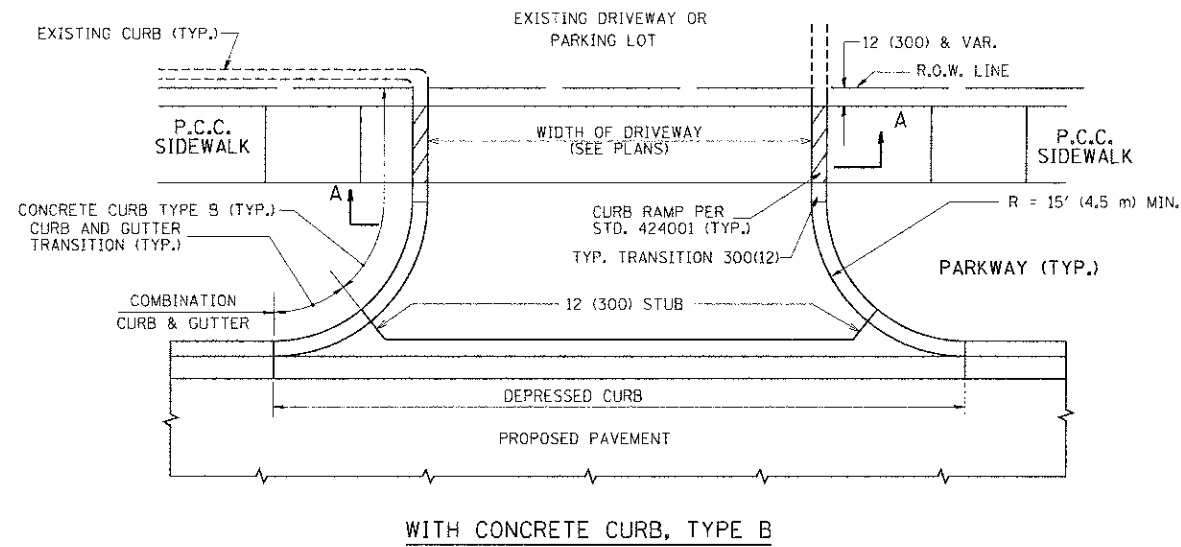
CONSTRUCTION DETAILS
OGDEN AVENUE

JJB JAMES J. BENES & ASSOCIATES, INC.
950 Warrenville Road, Suite 103, Lisle, Illinois 60532
Tel. (630) 719-7570 • Fax (630) 719-7589

FILE NAME =	USER NAME =	DESIGNED — JDS	REVISED — 03/01/13
		DRAWN — SMP	REVISED —
		CHECKED — JDS	REVISED —
		DATE — 12/12/12	REVISED —

SCALE: NONE SHEET NO. 16 OF 23 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	11-00057-00-SW	DuPAGE	23	16
				CONTRACT NO. 63819
ILLINOIS FED. AID PROJECT				



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.

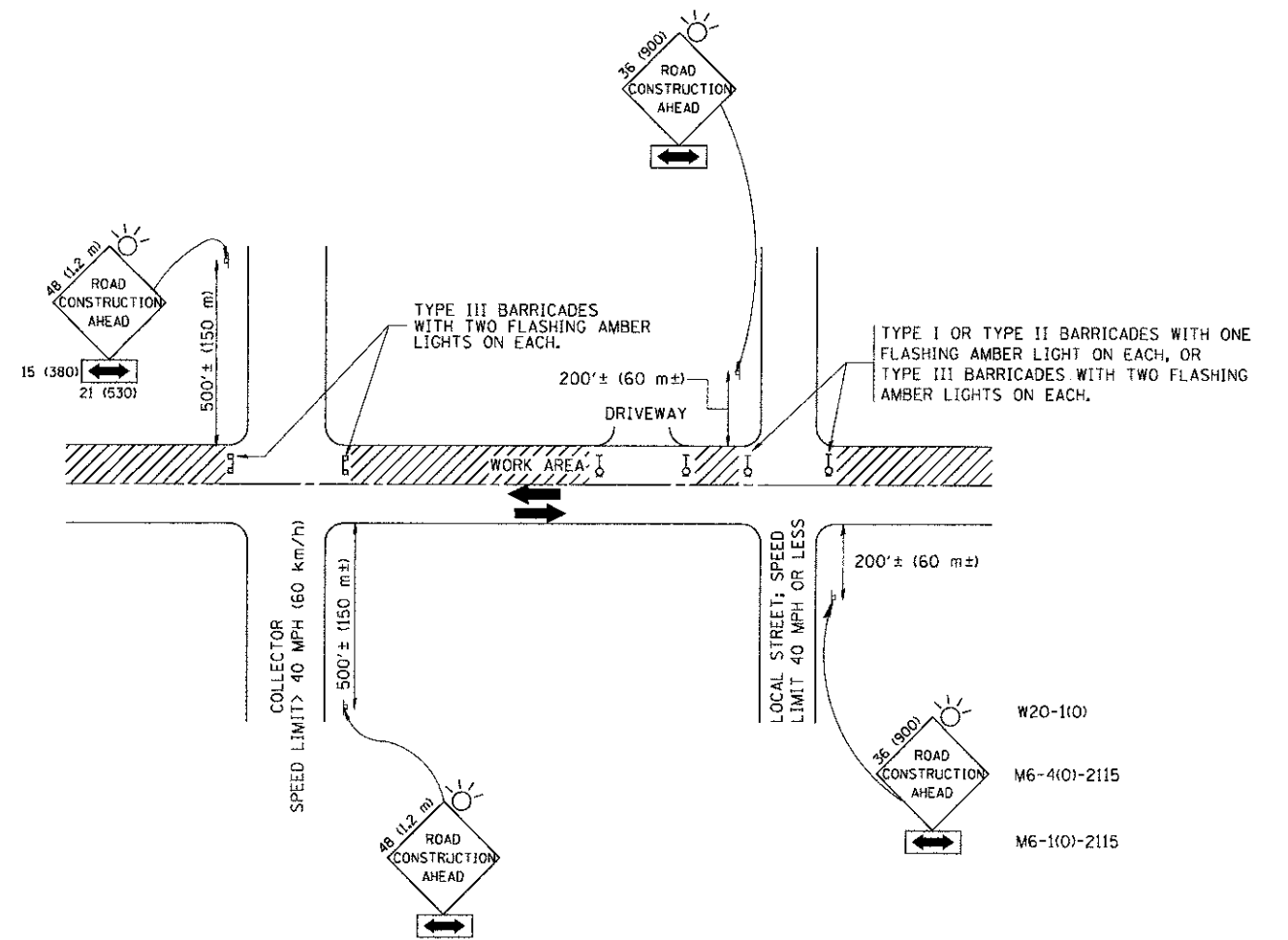
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W.
AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	11-00057-00-SW	DuPAGE	23	17
BD0156-07 (BD-01)			CONTRACT NO. 63819	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FILE NAME =	USER NAME = logan	DESIGNED - R. SHAH	REVISED - P. LOFLUER 04-15-03
c:\pwworkspace\p1dot1\logan\1186315\bd01.dwg		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 3/8"=1'-0"	CHECKED -	REVISED - R. BORO 06-11-08
	PLOT DATE = 9/6/2011	DATE - 11-04-95	REVISED - R. BORO 09-06-11

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



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

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

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

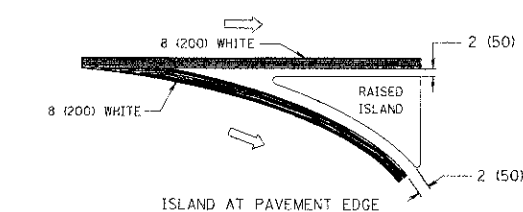
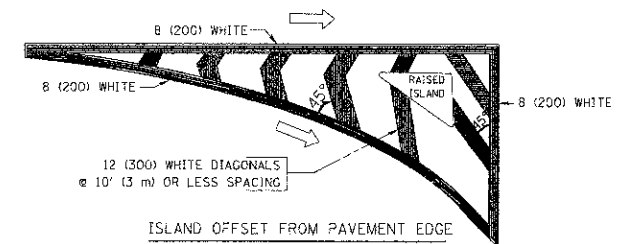
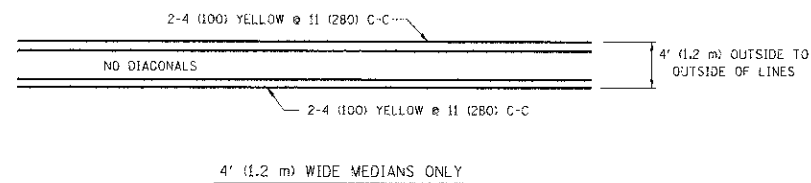
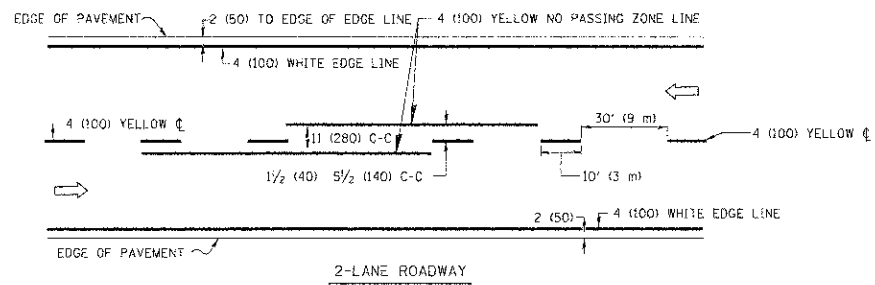
USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

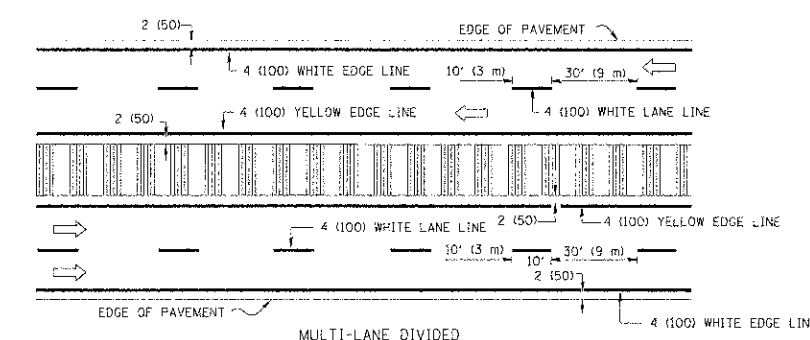
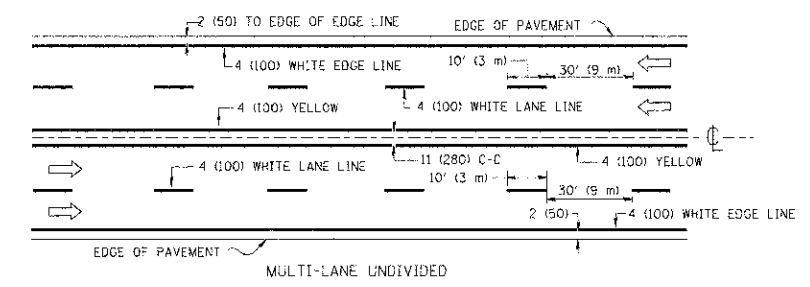
D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME = W:\drtstd\22x34\td12.dgn	USER NAME = gegltenabt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS			F.A.P. RTE. 311	SECTION 11-00057-00-SW	COUNTY DuPAGE	TOTAL SHEETS 23	SHEET NO. 18
	PLOT SCALE = 50.000' / IN.	DRAWN -	REVISED - A. HOUSEH 03-06-96		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	TC-10		CONTRACT NO. 63819	
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - A. HOUSEH 10-15-96						FED. ROAD DIST. NO. 1 ILLINOIS		FED. AID PROJECT	
		DATE - 06-89	REVISED - T. RAMMACHER 01-06-00									

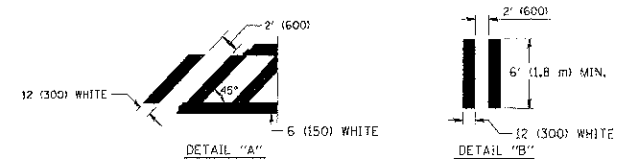
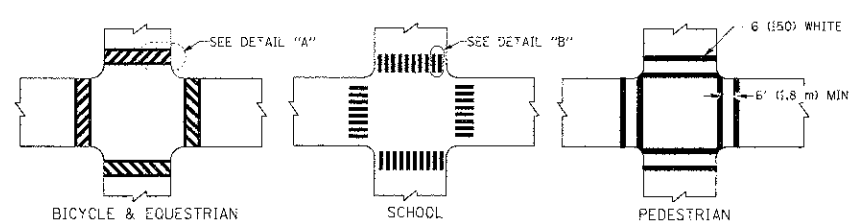


TYPICAL ISLAND MARKING

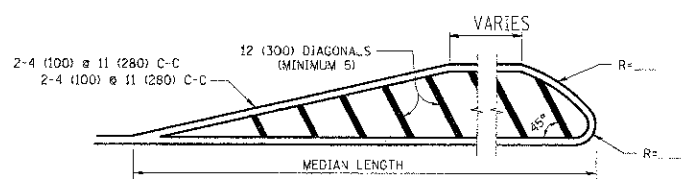


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



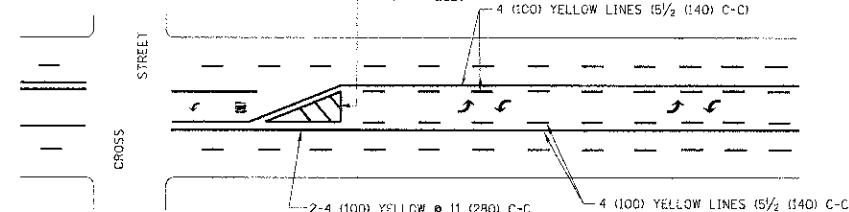
TYPICAL CROSSWALK MARKING



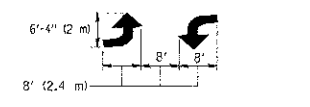
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

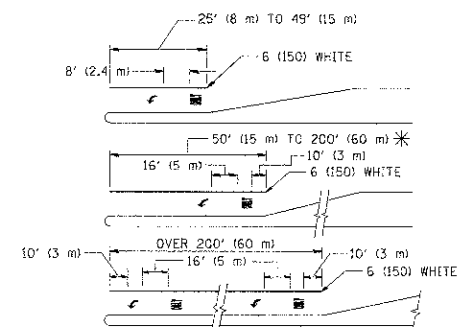
MEDIANS OVER 4' (1.2 m) WIDE



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



TYPICAL PAINTED MEDIAN MARKING



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

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

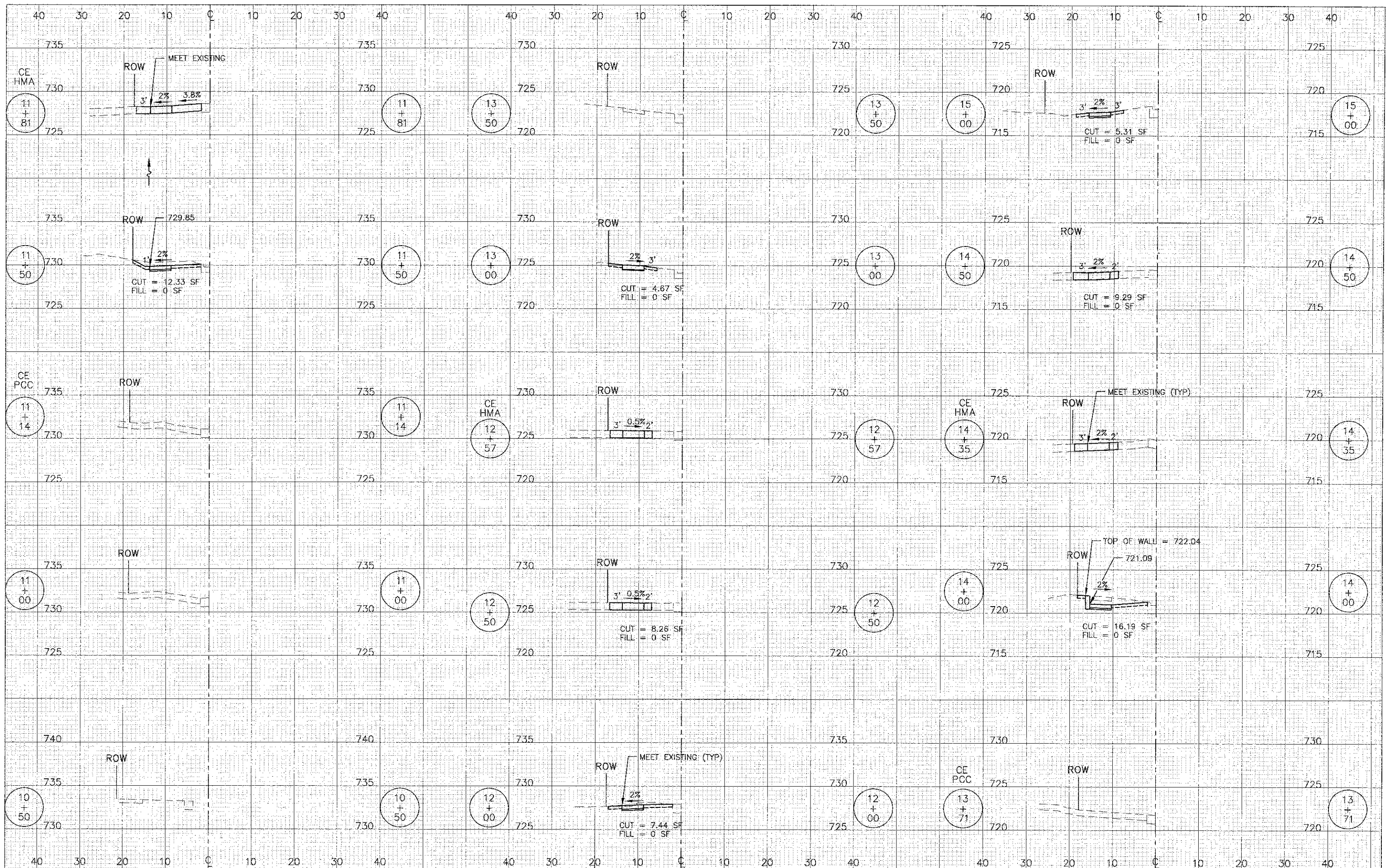
TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4 m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4 m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE.
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
CORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

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

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



FILE NAME =
 JAMES J. BENES & ASSOCIATES, INC.
 400 Westmoreland Road, Suite 100, Lake Bluff, Illinois 60053
 Tel: (815) 919-3750 Fax: (815) 919-7589

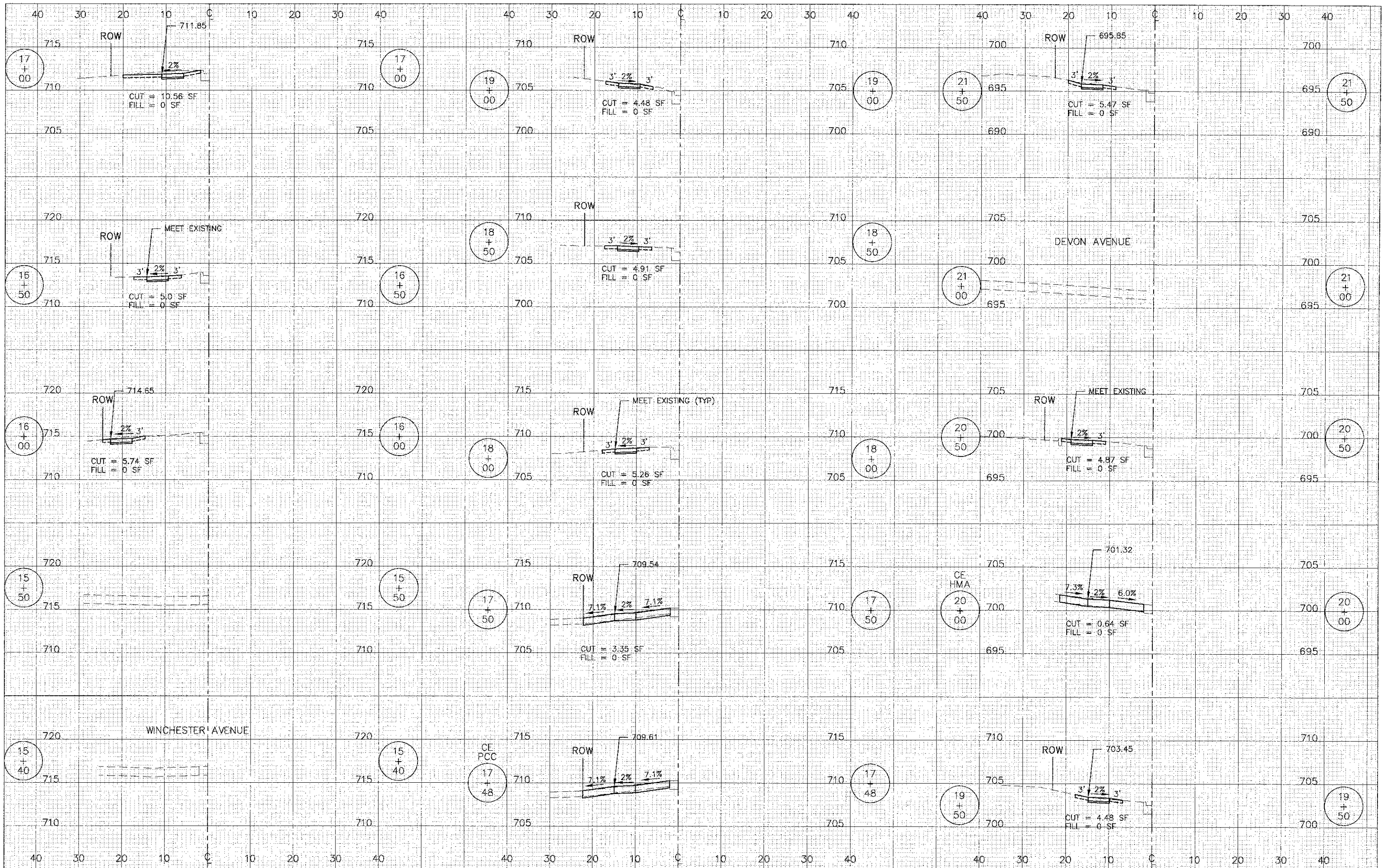
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 DRAWN - SMP
 CHECKED - BDH
 PLOT DATE =
 DATE - 12/12/12

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
 OGDEN AVENUE**
 1"=10' HOR.
 SCALE: 1"=5' VERT. SHEET NO. 1 OF 4 SHEETS
 STA. 10+50 TO STA. 15+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	11-00057-00-SW	DUPAGE	23	20
CONTRACT NO. 63819			ILLINOIS FED. AID PROJECT	



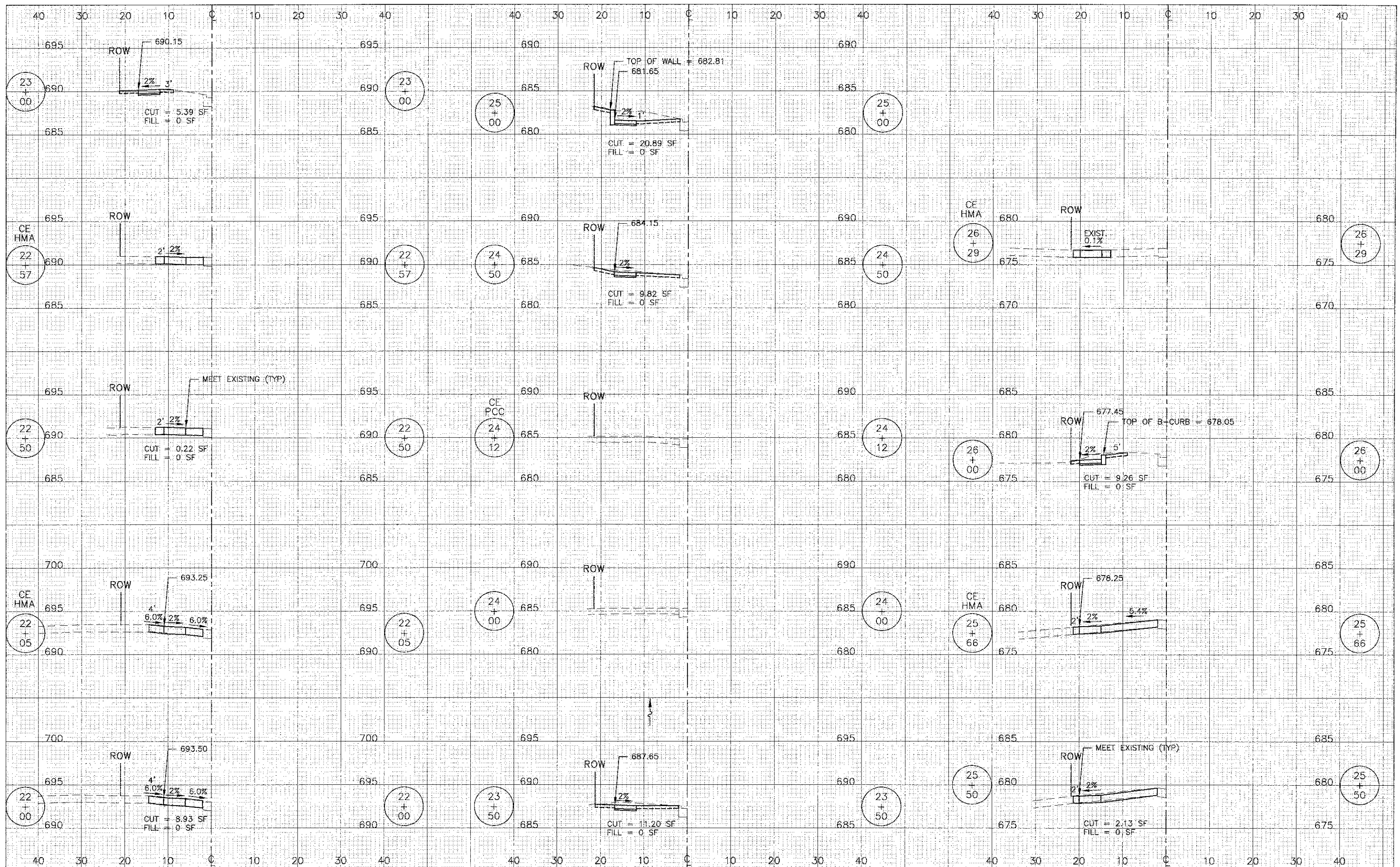
FILE NAME = USER NAME =
 DESIGNED - BDH
 DRAWN - SMP
 CHECKED - BDH
 PLOT DATE =

DESIGNED - BDH
 DRAWN - SMP
 CHECKED - BDH
 DATE - 12/12/12

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
 OGDEN AVENUE
 1"=10' HOR.
 SCALE: 1"=5' VERT.
 SHEET NO. 2 OF 4 SHEETS
 STA. 15+40 TO STA. 21+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	11-00057-00-SW	DuPAGE	23	21
CONTRACT NO. 63819				
ILLINOIS FED. AID PROJECT				



FILE NAME =
 USER NAME =
 DESIGNED - BDH
 DRAWN - SMP
 CHECKED - BDH
 PLOT DATE =

DATE - 12/12/12
 PLOT SCALE: 1"=10' HOR, 1"=5' VERT.

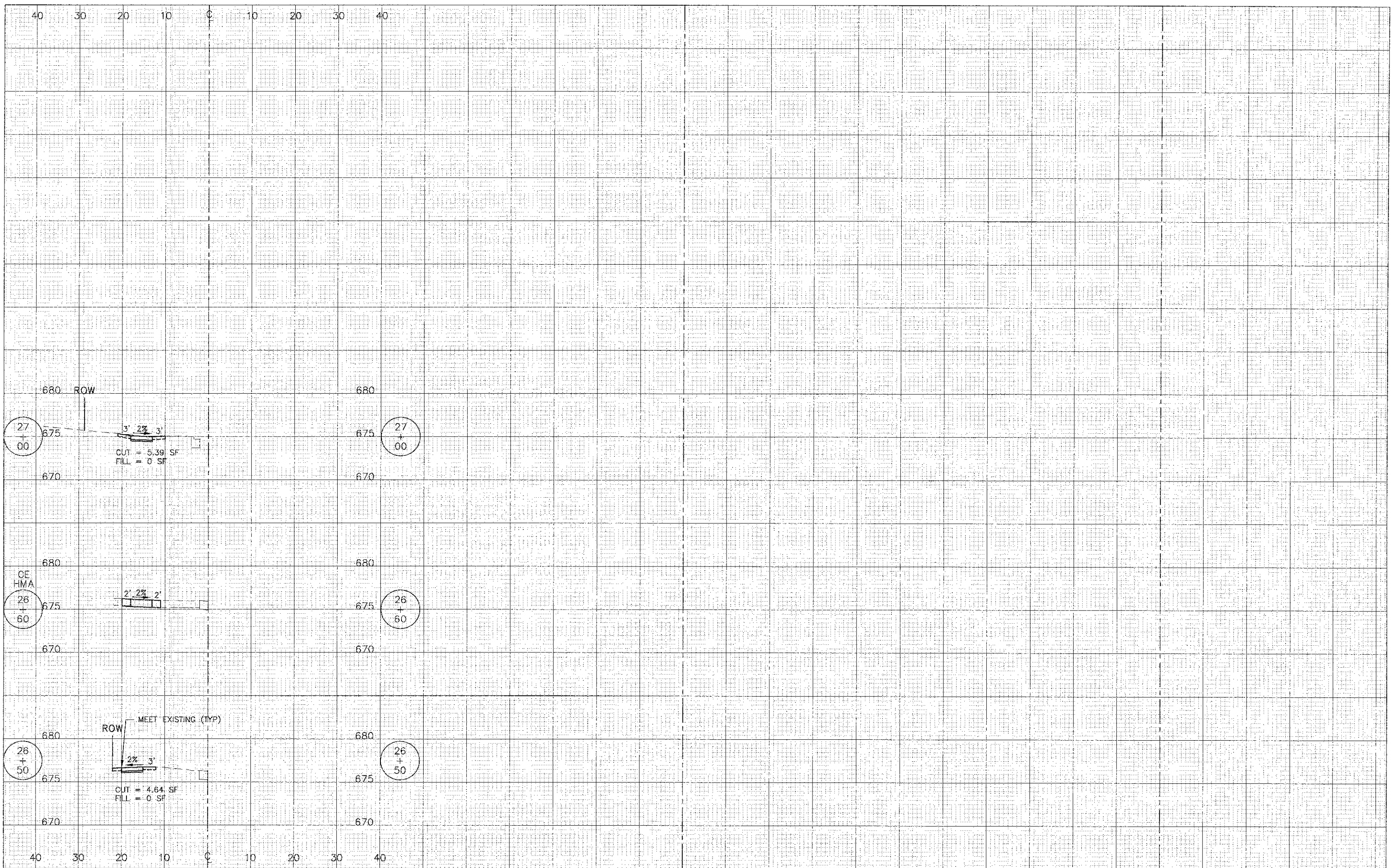
REVISOR -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**GROSS SECTIONS
 OGDEN AVENUE**
 1"=10' HOR.
 SCALE: 1"=5' VERT.
 SHEET NO. 3 OF 4 SHEETS

STA. 22+00 TO STA. 26+40

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	11-00057-00-SW	DUPAGE	23	22
CONTRACT NO. 63819			ILLINOIS FED. AID PROJECT	



FILE NAME =
 USER NAME =
 DESIGNED -- BDH
 DRAWN -- SMP
 CHECKED -- BDH
 PLOT DATE =

DESIGNED -- BDH
 DRAWN -- SMP
 CHECKED -- BDH
 DATE -- 12/12/12

REVISED --
 REVISED --
 REVISED --
 REVISED --

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
 OGDEN AVENUE**

1"=10' HOR.
 SCALE: 1"=5' VERT. SHEET NO. 4 OF 4 SHEETS STA. 26+50 TO STA. 27+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	11-00057-00-SW	DuPAGE	23	23
CONTRACT NO. 63819			ILLINOIS FED. AID PROJECT	