

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	1
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 83971				

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS**

**PLANS FOR PROPOSED FEDERAL AID HIGHWAY**

**FAU 1324 ILLINOIS ROUTE 58  
(DEMPSTER STREET)**

**FERRIS AVENUE (FAU 2788) TO CENTRAL AVENUE (FAU 2794)  
ROADWAY IMPROVEMENTS AND TRAFFIC SIGNAL MODERNIZATION**

**SECTION: 03-00097-01-PV  
PROJ. NO. NCPD-TCSP-CMM-8003(966)  
JOB NO. C-91-335-10  
VILLAGE OF MORTON GROVE  
COOK COUNTY**

FOR INDEX OF SHEETS, SEE SHEET NO. 2

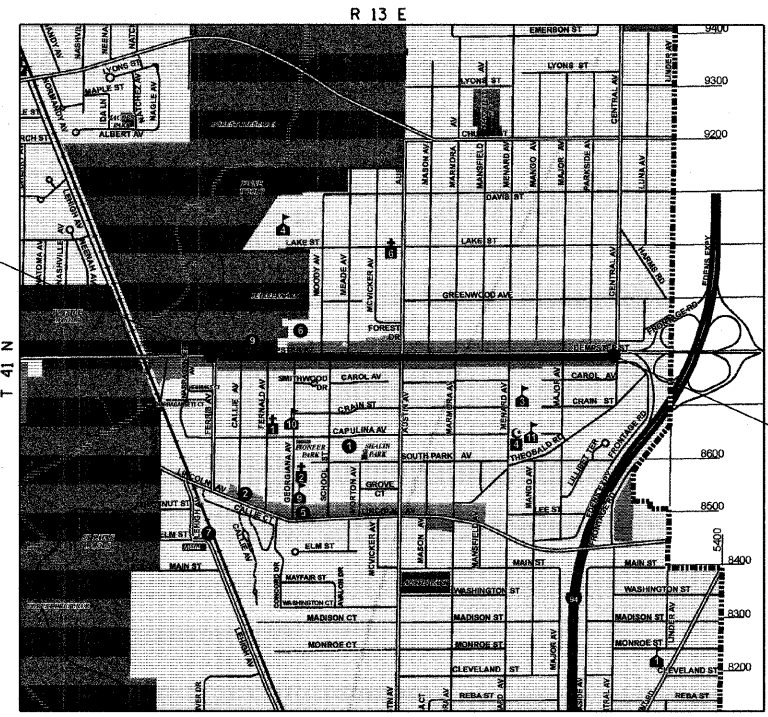
PROJECT LOCATED IN  
VILLAGE OF MORTON GROVE



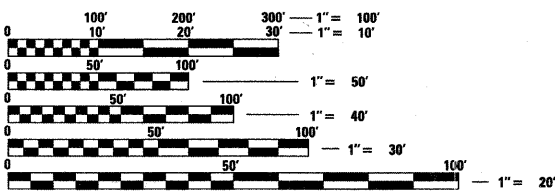
**DESIGN DESIGNATION:**  
3451(25) STRATEGIC REGIONAL ARTERIAL 15.73 (JRCP20)  
IL RTE 58 ADT: = 38,000(2002); 44,000(2025)

**DESIGN SPEED:**  
IL RTE 58 = 40 MPH

BEGIN PROJECT  
STA 58+45.14 DEMPSTER STREET



END PROJECT  
STA 107+99.21 DEMPSTER STREET



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

**LOCATION MAP  
N.T.S.**

GROSS LENGTH = 4,954.07 FT = 0.94 MILES  
NET LENGTH = 4,954.07 FT = 0.94 MILES

**CONTRACT NO. 83971**

ILLINOIS DEPARTMENT OF TRANSPORTATION	
APPROVED	<u>DECEMBER 8</u> 2009 <i>[Signature]</i> MORTON GROVE, VILLAGE ENGINEER
PASSED	<u>DECEMBER 8</u> 2009 <i>[Signature]</i> DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS
RELEASING FOR BID BASED ON LIMITED REVIEW	<u>DECEMBER 8</u> 2009 <i>[Signature]</i> DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER
PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS	



December 7 2009  
*[Signature]*  
ALAN R. SWANSON, MCDONOUGH ASSOCIATES INC.  
130 EAST RANDOLPH, SUITE 1000  
CHICAGO, IL 60601 (312) 946-8600

IDOT ASSOCIATE FIELD ENGINEER: KEVIN STALLWORTH (847) 705-4169

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 83971				

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## STATE STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
424001-05	CURB RAMPS FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
602001-01	CATCH BASIN, TYPE A
602401-02	MANHOLE, TYPE A
604001-03	FRAME AND LIDS, TYPE 1
604086-02	FRAME AND GRATE, TYPE 23
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND CUTTER
701501-05	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-03	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701701-06	LANE CLOSURE, MULTILANE, INTERSECTION
701801-04	LANE CLOSURE, MULTILANE, 1W OR 2W, CROSSWALK OR SIDEWALK CLOSURE
720016-02	MAST ARM MOUNTED STREET NAME SIGNS
780001-02	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-02	CONCRETE HANDHOLES
814006-02	DOUBLE HANDHOLES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING
877001-04	STEEL MAST ARM ASSEMBLY AND POLE
877011-04	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
878001-08	CONCRETE FOUNDATION DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUT FOR DETECTION LOOPS

## GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL J.U.L.I.E. (1-800-892-0123) FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED).
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, MUNICIPALITIES AND ADJACENT CONTRACTORS.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH TYPE I OR TYPE II BARRICADE USED-ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL.
- WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
- SAW CUTTING WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEM BEING REMOVED, UNLESS OTHERWISE SPECIFIED.
- ANY REFERENCE TO "STANDARD" THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE CONSIDERED TO BE THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2007 BY THE STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION, AND "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" DATED JANUARY 1, 2010.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING LOCAL AGENCIES MAINTAINING SANITARY SEWERS, WATERMANS, AND STREET LIGHTS TO VERIFY THE MATERIALS AND METHODS ALLOWED FOR ADJUSTMENT, RELOCATION, OR EXTENSION OF THE UTILITY INVOLVED.
- THE LOCATION AND ELEVATION OF EXISTING UTILITIES ARE APPROXIMATE AND ARE PROVIDED BY THE OWNERS. THE EXACT LOCATIONS AND ELEVATIONS ARE TO BE VERIFIED BY THE CONTRACTOR THROUGH THE OWNER OF THE UTILITY.
- THE COST OF MAKING STORM SEWER CONNECTIONS TO EXISTING OR PROPOSED SEWER SHALL BE INCIDENTAL TO THE COST OF STORM SEWER BEING CONNECTED.
- CONTRACTOR PARTICIPATION IN PUBLIC INFORMATION MEETINGS IS CONSIDERED INCIDENTAL TO CONTRACT.


## MWRD TYPICAL GENERAL NOTES

- THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF WORK (CALL 708-588-4055).
- ELEVATION DATUM IS U.S.G.S. (ENGLISH).
- NO FLOOR DRAINS.
- NO FOOTING DRAINS AND/OR DOWNSPOUTS.
- ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO: PIPE MATERIAL RCP ASTM C-76, JOINT MATERIAL ASTM C-443.
- ALL SANITARY SEWER CONSTRUCTION, AND ALSO STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS, REQUIRED STONE BEDDING 1/4" TO 1" IN SIZE, WITH A MINIMUM THICKNESS EQUAL TO 1/4 THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES OR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE TOP OF PIPE WHEN USING PVC.
- "BAND SEAL" OR SIMILAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPE OF DISSIMILAR MATERIALS.
- WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AND EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED:
  - CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUB-WYE SADDLE OR HUB-TEE SADDLE.
  - REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION.
  - WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTHS OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND-SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.
- WHEREVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMANS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM OF 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM OF 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED ABOVE CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATERMAIN, THE SEWER SHALL BE CONSTRUCTED TO WATERMAIN STANDARDS.
- ALL SANITARY MANHOLES, AND ALSO STORM MANHOLES IN COMBINED SEWER AREAS, SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRECAST REINFORCED CONCRETE.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
INDEX OF SHEETS, GENERAL NOTES  
AND STATE STANDARDS

SCALE: N.T.S. DRAWN BY: NKU  
DATE: 10-16-09 CHECKED BY: RY

 **McDonough Associates Inc.**  
Engineers / Architects


CONTRACT # 83971

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	**CMAQ/NCPD		***TCSP	
				ROADWAY/ DRAINAGE	TRAFFIC SIGNALS	HIGHWAY LIGHTING	LANDSCAPING
				CONSTRUCTION TYPE CODE			
				1000-2A	Y031-1F	Y030-1E	Y003
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	96	96			
20101100	TREE TRUNK PROTECTION	EACH	46	46			
* 20101200	TREE ROOT PRUNING	EACH	46	46			
* 20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	20	20			
* 20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	26	26			
* 20101400	NITROGEN FERTILIZER NUTRIENT	POUND	10	10			
* 20101500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	10	10			
* 20101600	POTASSIUM FERTILIZER NUTRIENT	POUND	10	10			
* 20101700	SUPPLEMENTAL WATERING	UNIT	85	85			
20200100	EARTH EXCAVATION	CU YD	500	500			
20800150	TRENCH BACKFILL	CU YD	500	500			
* 25200110	SODDING, SALT TOLERANT	SQ YD	420	420			
28000510	INLET FILTERS	EACH	50	50			
31101100	SUB-BASE GRANULAR MATERIAL, TYPE B	CU YD	1,000	1,000			
35501328	HOT-MIX ASPHALT BASE COURSE, 11"	SQ YD	3,000	3,000			
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	3,525	3,525			
40600826	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1,700	1,700			
40600895	CONSTRUCTING TEST STRIP	EACH	1	1			
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	350	350			
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	600	600			
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	3,800	3,800			
42001300	PROTECTIVE COAT	SQ YD	1,850	1,850			
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	1,600	1,600			
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	86,000	86,000			
42400800	DETECTABLE WARNINGS	SQ FT	350	350			
44000100	PAVEMENT REMOVAL	SQ YD	2,850	2,850			
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	40,250	40,250			
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	1,520	1,520			
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	11,100	11,100			
44000600	SIDEWALK REMOVAL	SQ FT	71,350	71,350			
44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"	SQ YD	4,000	4,000			
44201761	CLASS D PATCHES, TYPE I, 10 INCH	SQ YD	750	750			
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	2,500	2,500			
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	750	750			
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	944	944			
60201330	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 23 FRAME AND GRATE	EACH	47	47			
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	4	4			
60219530	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 23 FRAME AND GRATE	EACH	3	3			
60250200	CATCH BASINS TO BE ADJUSTED	EACH	2	2			
60255500	MANHOLES TO BE ADJUSTED	EACH	91	91			
60260100	INLETS TO BE ADJUSTED	EACH	9	9			
60265700	VALVE VAULTS TO BE ADJUSTED	EACH	27	27			
60500205	FILLING CATCH BASINS	EACH	2	2			
60500305	FILLING INLETS	EACH	31	31			
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	500	500			
60604800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18 (SPECIAL)	FOOT	11,100	11,100			
66900205	SPECIAL WASTE DISPOSAL	CU YD	300	300			
66900450	SPECIAL WASTE PLANS AND REPORT	L SUM	1	1			
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8	8			
67100100	MOBILIZATION	L SUM	1	1			
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1			

- SPECIALTY ITEMS
- CMAQ/NCPD IS 80% FEDERAL, 20% LOCAL MATCH
- TCSP IS 100% FEDERAL

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION IL RTE 58 (DEMPSTER ST) IMPROVEMENTS
NAME	DATE	
		SUMMARY OF QUANTITIES

SCALE: N.T.S.      DRAWN BY: NKU  
DATE: 10-16-09      CHECKED BY: RY

 **McDonough Associates Inc.**  
Engineers / Architects



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	5
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 83971

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	**CMAQ/NCPD		***TCSP	
				ROADWAY/DRAINAGE	TRAFFIC SIGNALS	HIGHWAY LIGHTING	LANDSCAPING
				1000-2A	Y031-1F	Y030-1E	Y003
• 87700290	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1		1		
• 87800100	CONCRETE FOUNDATION, TYPE A	FOOT	20		20		
• 87800150	CONCRETE FOUNDATION, TYPE C	FOOT	16		16		
• 87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	225		225		
• 88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	28		28		
• 88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1		1		
• 88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	11		11		
• 88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	11		11		
• 88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4		4		
• 88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	13		13		
• 88200100	TRAFFIC SIGNAL BACKPLATE	EACH	39		39		
• 88500100	INDUCTIVE LOOP DETECTOR	EACH	32		32		
• 88600100	DETECTOR LOOP, TYPE I	FOOT	4,481		4,481		
• 88700200	LIGHT DETECTOR	EACH	8		8		
• 88700300	LIGHT DETECTOR AMPLIFIER	EACH	4		4		
• 88800100	PEDESTRIAN PUSH-BUTTON	EACH	30		30		
• 89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	4		4		
• 89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	250		250		
• 89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	4		4		
• 89502380	REMOVE EXISTING HANDHOLE	EACH	22		22		
• 89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	28		28		
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1			
▲ Z0076600	TRAINEES	HOUR	1,000	1,000			
• A2002010	TREE, AESCULUS FLAVA (YELLOW BUCKEYE), 3" CALIPER, BALLED & BURLAPPED	EACH	5				5
• A2002820	TREE, CATALPA SPECIOSA (NORTHERN CATALPA), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	8				8
• A2003020	TREE, CELTIS OCCIDENTALIS PRAIRIE PRIDE (PRAIRIE PRIDE HACKBERRY), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	12				12
• A2005020	TREE, GYMNOCLADUS DIOICUS (KENTUCKY COFFEETREE), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	8				8
• A2005820	TREE, PLATANUS OCCIDENTALIS (SYCAMORE), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	6				6
• A2006420	TREE, QUERCUS ALBA (WHITE OAK), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	5				5
• A2007720	TREE, TAXODIUM DISTICHUM SHAWNEE BRAVE (SHAWNEE BRAVE BALD CYPRESS), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	8				8
• A2018720	TREE, ULMUS CARPINIFOLIA MORTON, (ACCOLADE ELM), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	14				14
• B2005720	TREE, PYRUS CALLERYANA CHANTICLEER CHANTICLEER CALLERY PEAR, 2-1/2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	8				8
• B2006220	TREE, SYRINGA RETICULATA (JAPANESE TREE LILAC), 2-1/2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	7				7
• K0030490	PERENNIAL PLANTS, FOR SUN, 1/2 GALLON CONTAINER	UNIT	4				4
* K1003679	MULCH	CU YD	10				10
• XX000959	TRASH RECEPTACLES	EACH	20				20
• XX001011	BICYCLE RACKS	EACH	13				13
• XX002918	TREE FRAME AND GRATES	EACH	81				81
• XX005972	STAMPED ASPHALT CROSSWALK	SO YD	1,089				1,089
• XX007393	DECORATIVE LIGHT TYPE A	EACH	93			93	
• XX008104	POLE MOUNTED PLANTER BASKET	EACH	90				90
• XX008270	BANNER ARMS	EACH	69				69
• X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	7,240		7,240		
• X0323153	ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1C (GREEN)	FOOT	1,650		1,650		
• X0323574	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	8	8			
• X0324232	PAINT NEW MAST ARM POLE, UNDER 40 FEET	EACH	7		7		
• X0325037	PAINT NEW SIGNAL POST	EACH	3		3		
• X0325141	PAINT NEW MAST ARM POLE, 40 FEET AND OVER	EACH	8		8		
• X0325737	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	4		4		
• X0325890	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL I	EACH	1		1		
• X0350800	BOLLARDS	EACH	54				54

- SPECIALTY ITEMS
- CMAQ/NCPD IS 80% FEDERAL, 20% LOCAL MATCH
- TCSP IS 100% FEDERAL
- ▲ Y080


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS

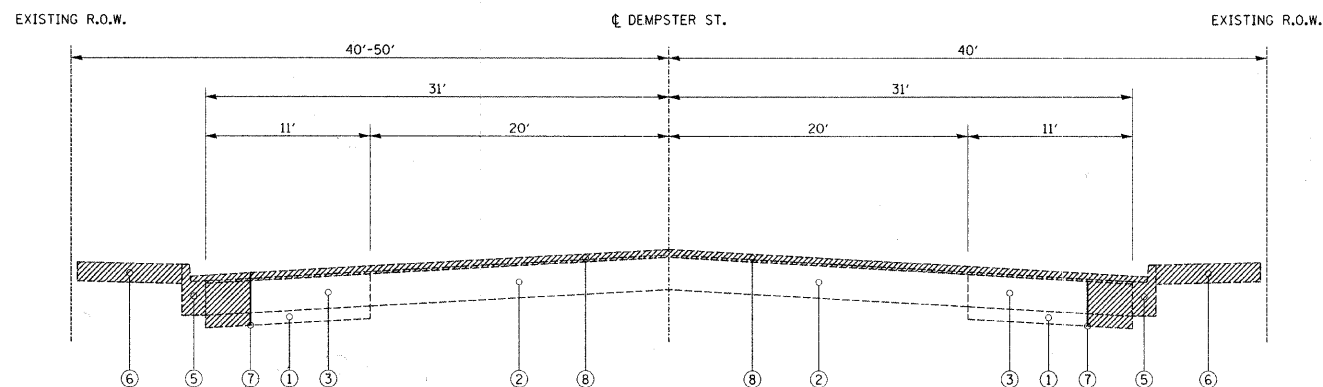
SUMMARY OF QUANTITIES

SCALE: N.T.S.  
DATE: 10-16-09

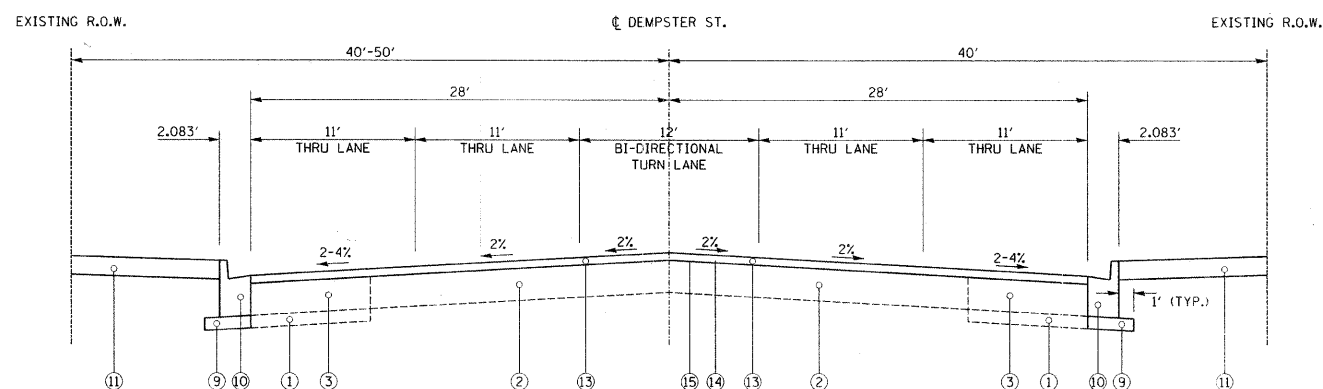
DRAWN BY: NKU  
CHECKED BY: RY

 **McDonough Associates Inc.**  
Engineers / Architects





**EXISTING TYPICAL SECTION**  
 STA 58+45.14 TO STA 68+75, DEMPSTER ST  
 STA 79+50 TO STA 85+15, DEMPSTER ST



**PROPOSED TYPICAL SECTION**  
 STA 58+45.14 TO STA 68+75, DEMPSTER ST  
 STA 79+50 TO STA 85+15, DEMPSTER ST



**EXISTING LEGEND**

- ① SUBBASE GRANULAR MATERIAL TYPE B (4")
- ② PCC PAVEMENT (10"±)
- ②A PCC BASE COURSE (8")
- ③ HOT-MIX ASPHALT BASE COURSE (11")
- ④ HOT-MIX ASPHALT PARKING LANE (5")
- ⑤ COMBINATION CONCRETE CURB AND GUTTER, TYPE B6.12
- ⑥ PCC SIDEWALK
- ⑦ SAWCUT (INCIDENTAL)

**PROPOSED LEGEND**

- ⑧ HOT-MIX ASPHALT SURFACE REMOVAL (2 1/2")
- ⑨ SUBBASE GRANULAR MATERIAL, TYPE B (4")
- ⑩ COMBINATION CONCRETE CURB AND GUTTER, TYPE B6.18 (SPECIAL)
- ⑪ PORTLAND CEMENT CONCRETE SIDEWALK (5")
- ⑫ HOT-MIX ASPHALT BASE COURSE, (11")
- ⑬ POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4"
- ⑭ POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ⑮ BITUMINOUS MATERIALS (PRIME COAT)

**HOT-MIX ASPHALT MIXTURE REQUIREMENTS CHART**

MIX TYPE	AIR VOIDS @ Ndes
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL-9.5 mm)	4% AT 90 GYR.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	4% AT 50 GYR.
HOT-MIX ASPHALT BASE COURSE, 11" (HMA BINDER IL-19 mm)	4% AT 90 GYR.
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19mm)	4% AT 70 GYR.

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/50 YD<sup>3</sup>/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.

**NOTES:**

1. ALL REFERENCES TO SURFACE, BINDER, LEVELING BINDER OR BASE COURSE CONTAINED IN THESE PLANS, STANDARDS OR DETAILS WILL REQUIRE MIX PROPERTIES AS GIVEN IN THE TABLE ABOVE.
2. PATCHING SHALL BE COMPLETED PRIOR TO MILLING AND RESURFACING.

REVISIONS	
NAME	DATE

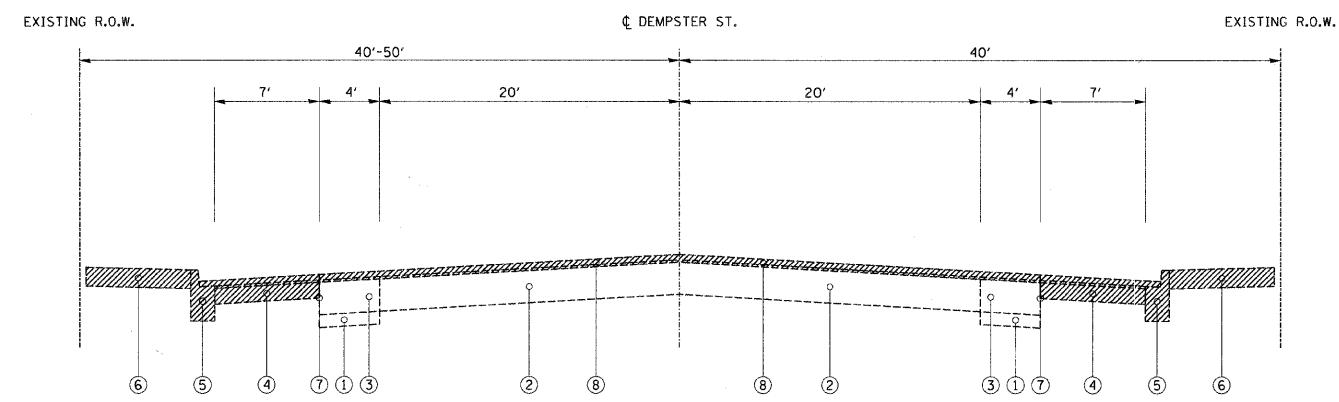
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
 TYPICAL SECTIONS

SCALE: N.T.S.  
 DATE: 10-16-09

DRAWN BY: DMB  
 CHECKED BY: NKU

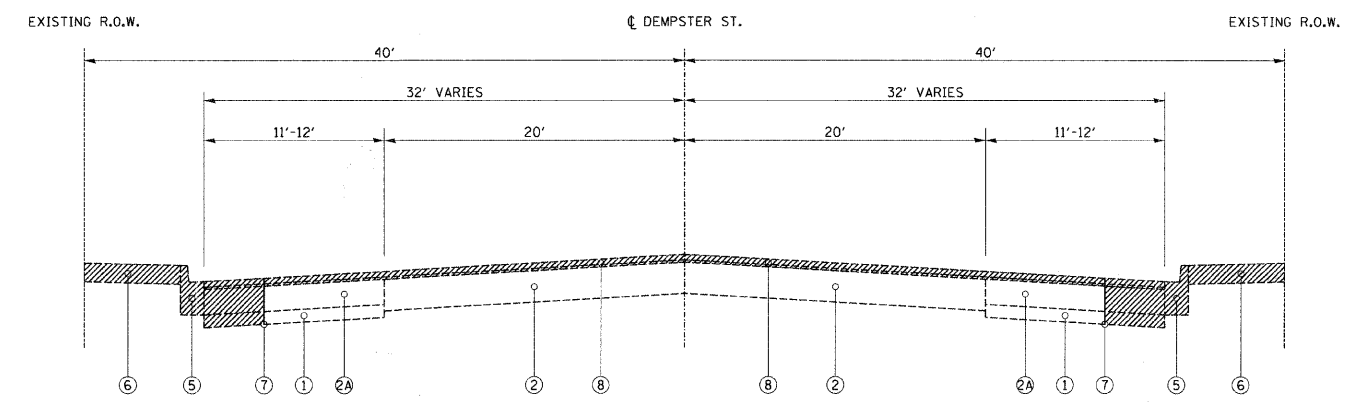
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1324	03-00097-01-PV	COOK	82	8
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 83971



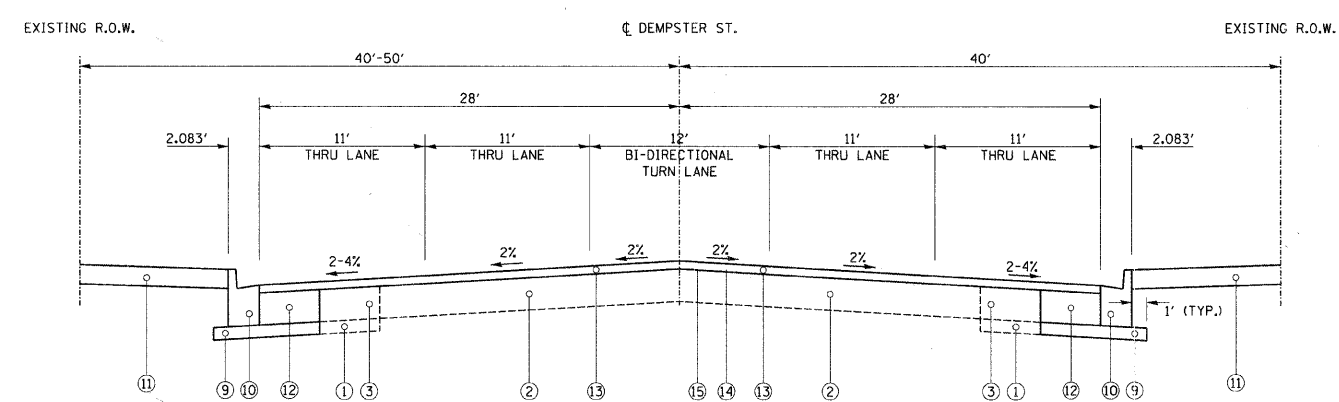
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STA 68+75 TO STA 79+50, DEMPSTER ST  
STA 85+15 TO STA 104+85, DEMPSTER ST



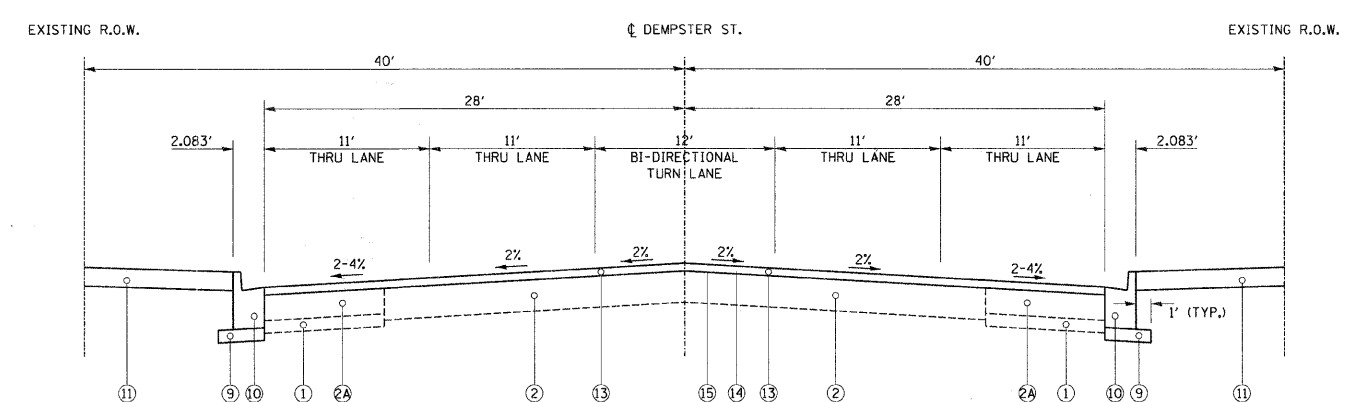
**EXISTING TYPICAL SECTION**

STA 104+85 TO STA 107+99.21, DEMPSTER ST



**PROPOSED TYPICAL SECTION**

STA 68+75 TO STA 79+50, DEMPSTER ST  
STA 85+15 TO STA 104+85, DEMPSTER ST



**PROPOSED TYPICAL SECTION**

STA 104+85 TO STA 107+99.21, DEMPSTER ST



**EXISTING LEGEND**

- ① SUBBASE GRANULAR MATERIAL TYPE B (4")
- ② PCC PAVEMENT (10"±)
- ②A PCC BASE COURSE (8")
- ③ HOT-MIX ASPHALT BASE COURSE (11")
- ④ HOT-MIX ASPHALT PARKING LANE (5")
- ⑤ COMBINATION CONCRETE CURB AND GUTTER, TYPE B6.12
- ⑥ PCC SIDEWALK
- ⑦ SAWCUT (INCIDENTAL)

**PROPOSED LEGEND**

- ⑧ HOT-MIX ASPHALT SURFACE REMOVAL (2 1/2")
- ⑨ SUBBASE GRANULAR MATERIAL TYPE, B (4")
- ⑩ COMBINATION CONCRETE CURB AND GUTTER, TYPE B6.18 (SPECIAL)
- ⑪ PORTLAND CEMENT CONCRETE SIDEWALK (5")
- ⑫ HOT-MIX ASPHALT BASE COURSE, (11")
- ⑬ POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4"
- ⑭ POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ⑮ BITUMINOUS MATERIALS (PRIME COAT)

REVISIONS	
NAME	DATE

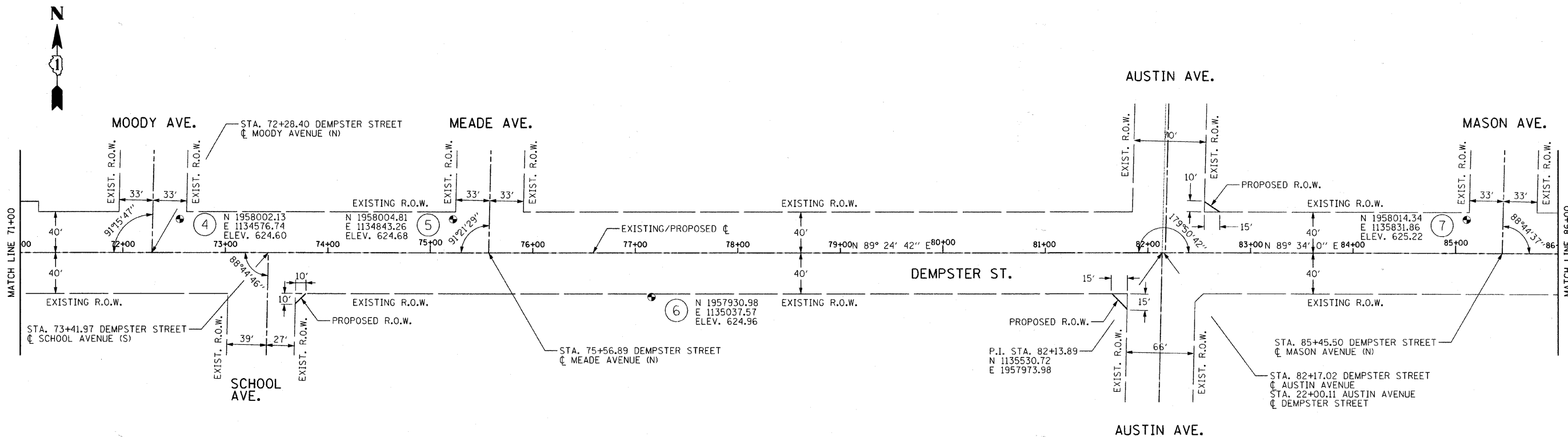
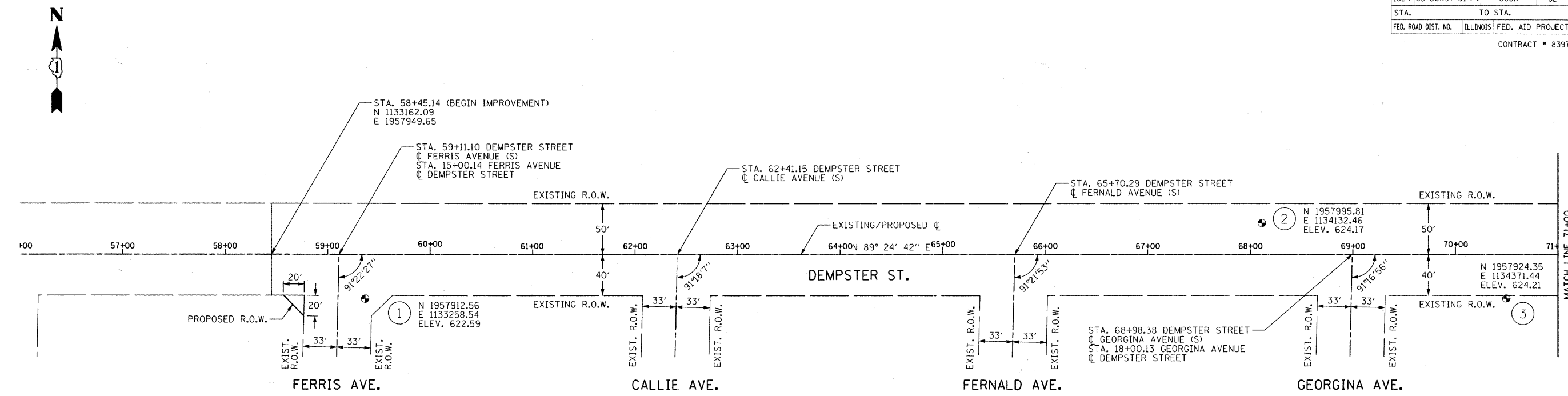
ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**TYPICAL SECTIONS**

SCALE: N.T.S. DRAWN BY: DMB  
DATE: 10-16-09 CHECKED BY: NKU





F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	9
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT # 83971



**CONTROL POINTS/BENCHMARKS:**

- |   |   |   |   |
|---|---|---|---|
| 1. CROSS IN CONCRETE<br>NORTH 1957912.56<br>EASTING 1133258.54<br>ELEVATION 622.59<br>OFFSET TO PROP. CL 43.24' | 3. CROSS IN CONCRETE<br>NORTH 1957924.35<br>EASTING 1134371.44<br>ELEVATION 624.21<br>OFFSET TO PROP. CL 42.88' | 5. CROSS IN CONCRETE<br>NORTH 1958004.81<br>EASTING 1134843.26<br>ELEVATION 624.68<br>OFFSET TO PROP. CL 32.73' | 7. CROSS IN CONCRETE<br>NORTH 1958014.34<br>EASTING 1135831.86<br>ELEVATION 625.22<br>OFFSET TO PROP. CL 32.91' |
| 2. CROSS IN CONCRETE<br>NORTH 1957995.81<br>EASTING 1134132.46<br>ELEVATION 624.17<br>OFFSET TO PROP. CL 31.03' | 4. CROSS IN CONCRETE<br>NORTH 1958002.13<br>EASTING 1134576.74<br>ELEVATION 624.60<br>OFFSET TO PROP. CL 32.79' | 6. CROSS IN CONCRETE<br>NORTH 1957930.98<br>EASTING 1135037.57<br>ELEVATION 624.96<br>OFFSET TO PROP. CL 43.09' |   |

REVISIONS	
NAME	DATE

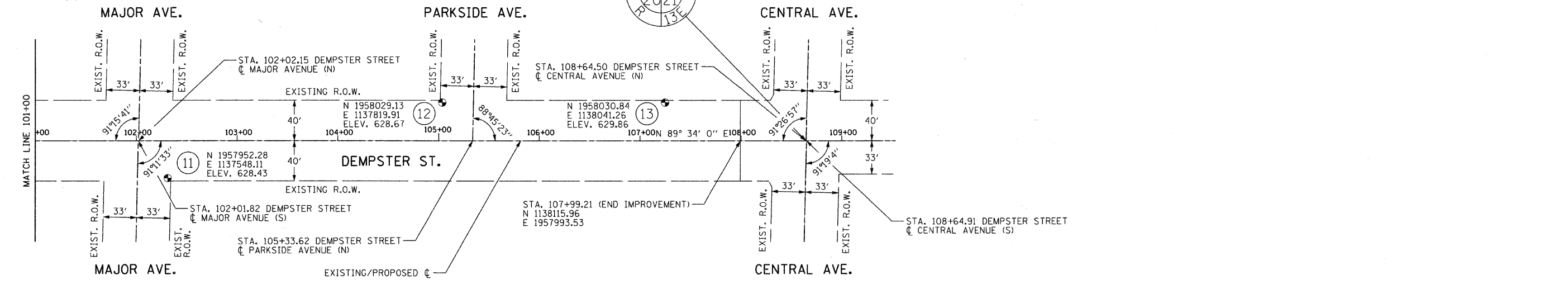
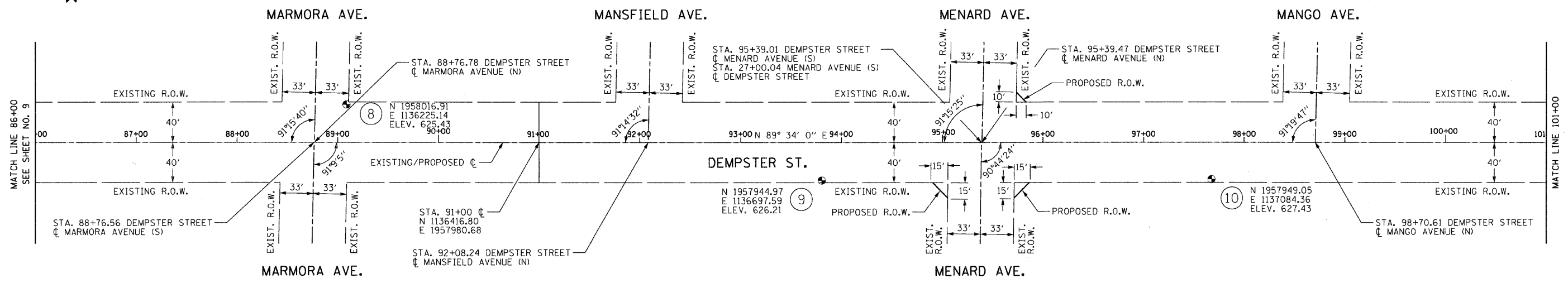
ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
HORIZONTAL ALIGNMENT  
AND TIES

SCALE: 1" = 50'  
DATE: 10-16-09

DRAWN BY: DMB  
CHECKED BY: NKU

**McDonough Associates Inc.**  
Engineers / Architects

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	10
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 83971				



**CONTROL POINTS/BENCHMARKS:**

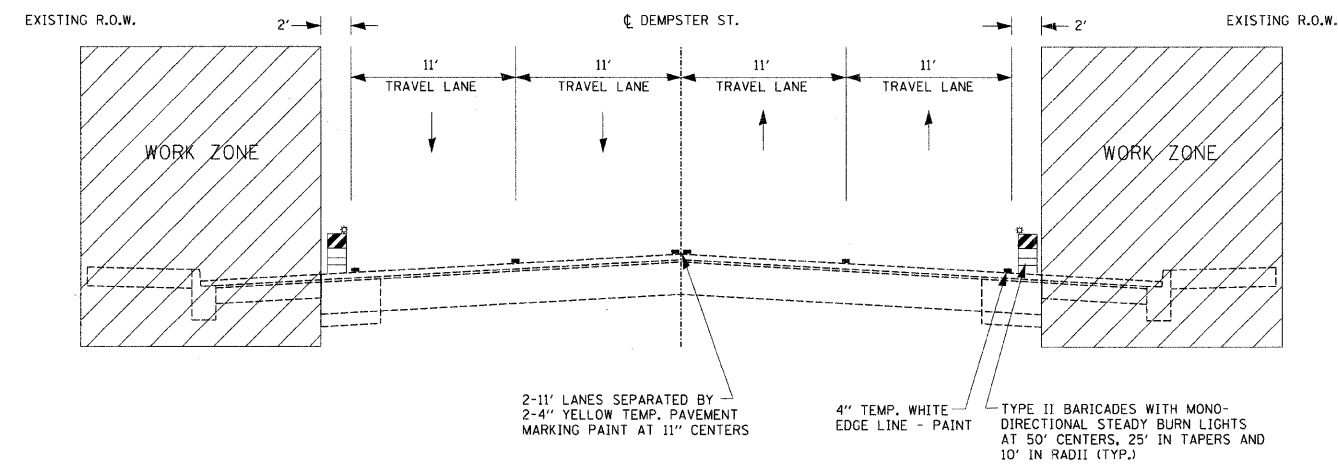
- |   |   |   |
|---|---|---|
| <p>8. CROSS IN CONCRETE<br/>NORTH 1958016.91<br/>EASTING 1136225.14<br/>ELEVATION 625.43<br/>OFFSET TO PROP. <math>\phi</math> 37.68'</p> <p>9. CROSS IN CONCRETE<br/>NORTH 1957944.97<br/>EASTING 1136697.59<br/>ELEVATION 626.21<br/>OFFSET TO PROP. <math>\phi</math> 37.83'</p> | <p>10. CROSS IN CONCRETE<br/>NORTH 1957949.05<br/>EASTING 1137084.36<br/>ELEVATION 627.43<br/>OFFSET TO PROP. <math>\phi</math> 36.68'</p> <p>11. CROSS IN CONCRETE<br/>NORTH 1957952.28<br/>EASTING 1137548.11<br/>ELEVATION 628.43<br/>OFFSET TO PROP. <math>\phi</math> 36.96'</p> | <p>12. CROSS IN CONCRETE<br/>NORTH 1958029.13<br/>EASTING 1137819.91<br/>ELEVATION 628.67<br/>OFFSET TO PROP. <math>\phi</math> 37.84'</p> <p>13. CROSS IN CONCRETE<br/>NORTH 1958030.84<br/>EASTING 1138041.26<br/>ELEVATION 629.86<br/>OFFSET TO PROP. <math>\phi</math> 37.88'</p> |
|---|---|---|

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
ALIGNMENT, TIES & BENCHMARKS

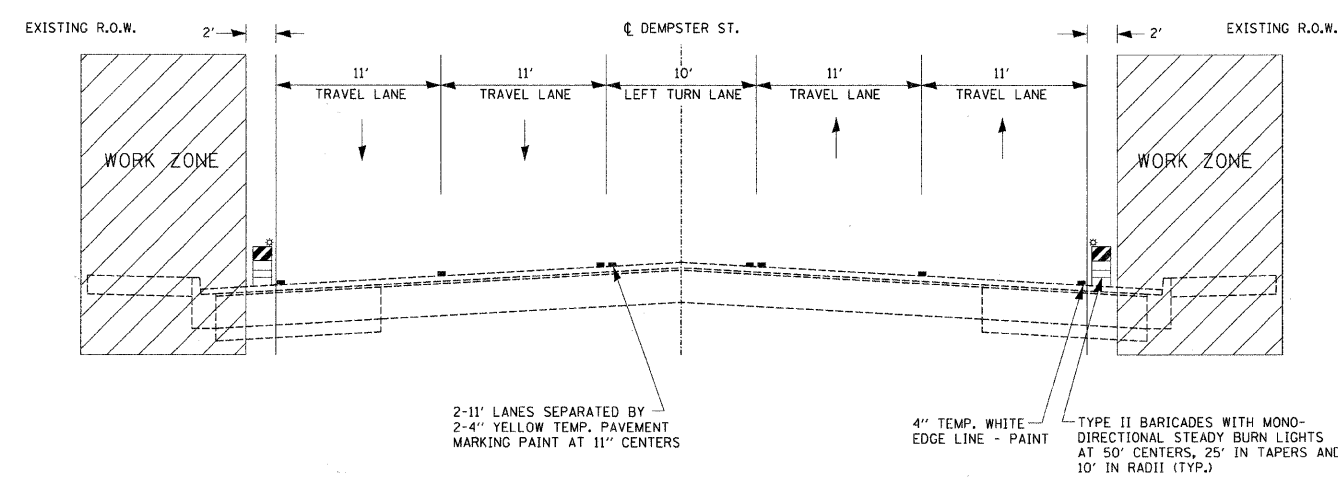
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DATE: 10-16-09  
DRAWN BY: DMB  
CHECKED BY: NKU





2-11' LANES SEPARATED BY 2-4" YELLOW TEMP. PAVEMENT MARKING PAINT AT 11" CENTERS  
4" TEMP. WHITE EDGE LINE - PAINT  
TYPE II BARRICADES WITH MONO-DIRECTIONAL STEADY BURN LIGHTS AT 50' CENTERS, 25' IN TAPERS AND 10' IN RADII (TYP.)

**MAINTENANCE OF TRAFFIC  
TYPICAL SECTION - MAIN LINE**



2-11' LANES SEPARATED BY 2-4" YELLOW TEMP. PAVEMENT MARKING PAINT AT 11" CENTERS  
4" TEMP. WHITE EDGE LINE - PAINT  
TYPE II BARRICADES WITH MONO-DIRECTIONAL STEADY BURN LIGHTS AT 50' CENTERS, 25' IN TAPERS AND 10' IN RADII (TYP.)

**MAINTENANCE OF TRAFFIC  
TYPICAL SECTION - SIGNALIZED INTERSECTIONS**

**CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES**

1. TRAFFIC CONTROL SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THE APPLICABLE HIGHWAY STANDARDS OR AS HEREIN SPECIFIED.
2. THE WORK ZONE WILL BE DELINEATED AT ALL TIMES THROUGHOUT CONSTRUCTION BY TYPE II BARRICADES WITH MONODIRECTIONAL STEADY BURN LIGHTS. THE BARRICADES SHALL BE PLACED AT 50 FEET CENTERS. BARRICADES THAT MUST BE PLACED IN EXCAVATED AREAS SHALL HAVE LEG EXTENSIONS INSTALLED SUCH THAT THE TOP OF THE BARRICADE IS IN COMPLIANCE WITH THE HEIGHT REQUIREMENTS OF STANDARD 702001.
3. OPPOSING LANES OF TRAFFIC WILL BE DELINEATED AT ALL TIMES THROUGHOUT CONSTRUCTION BY TWO 4 INCHES YELLOW TEMPORARY PAVEMENT MARKING LINES AT 11 INCHES CENTERS.
4. THE COST OF FURNISHING, INSTALLING, MAINTAINING, RELOCATING AND REMOVING ALL TRAFFIC CONTROL DEVICES INCLUDING BUT NOT LIMITED TO: BARRICADES, VERTICAL PANELS, FLEXIBLE DELINEATORS, CONSTRUCTION SIGNS, WARNING LIGHTS, FLAGMEN, AND ALL OTHER MISCELLANEOUS DEVICES USED FOR THE PURPOSE OF RELOCATING OR DIRECTING TRAFFIC DURING CONSTRUCTION OF THIS IMPROVEMENT WILL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR EACH STANDARD AS APPLICABLE.
5. WHERE PROVIDED, EXISTING TRAFFIC SIGNS SHALL BE RELOCATED FOR EACH CONSTRUCTION STAGE.
6. ACCESS TO DRIVEWAYS AND SIDE ROADS IS TO BE MAINTAINED DURING CONSTRUCTION. ANY DELAYS OR INCONVENIENCE CAUSED BY THE CONTRACTOR BY COMPLYING WITH THESE REQUIREMENTS SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
7. ALL APPLICABLE PORTIONS OF TRAFFIC CONTROL STANDARDS 70101, 701301, 701602, 701701, 701801, 701901 AND IDOT DISTRICT ONE STANDARDS TC-10 AND TC-16 SHALL APPLY DURING ALL STAGES AND ALL SUB STAGES THAT ARE NOT SPECIFIED.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**MAINTENANCE OF TRAFFIC  
TYPICAL SECTIONS AND NOTES**

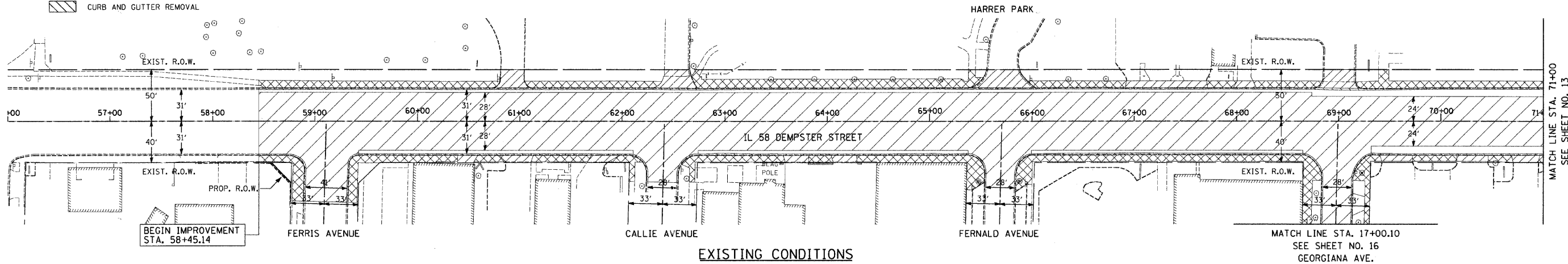
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DATE: 10-16-09 CHECKED BY: RY

**McDonough Associates Inc.**  
Engineers / Architects

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	12
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT 83971				

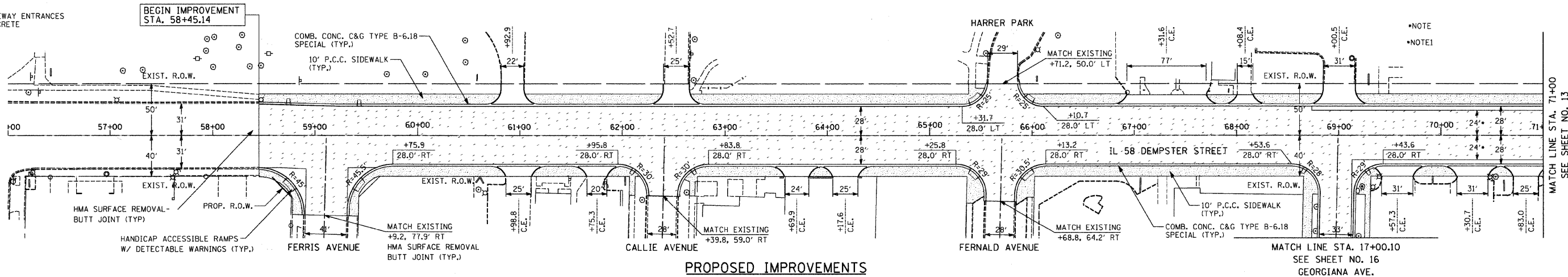
**LEGEND**

- HOT-MIX ASPHALT SURFACE REMOVAL
- SIDEWALK REMOVAL
- DRIVEWAY REMOVAL
- CURB AND GUTTER REMOVAL
- PROPOSED HMA SURFACE COURSE
- PROPOSED P.C.C. SIDEWALK

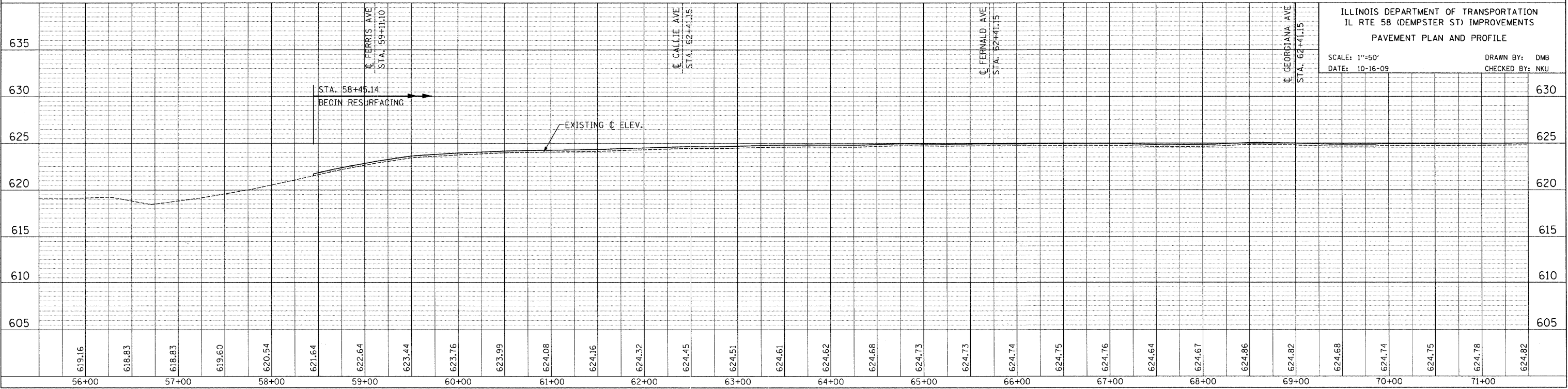


**EXISTING CONDITIONS**

NOTE: ALL DRIVEWAY ENTRANCES TO BE PCC CONCRETE



**PROPOSED IMPROVEMENTS**



ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
 PAVEMENT PLAN AND PROFILE  
 SCALE: 1"=50'  
 DATE: 10-16-09  
 DRAWN BY: DMB  
 CHECKED BY: NKU

PLAN	SURVEYED	DATE
	BY	
	PLOTTED	
	DATE	
	BY	
	NOTE BOOK	
	NO.	
	DATE	
	BY	
	FILE NAME	







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	BY	
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	DATE	
	BY	
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	FILE NAME	

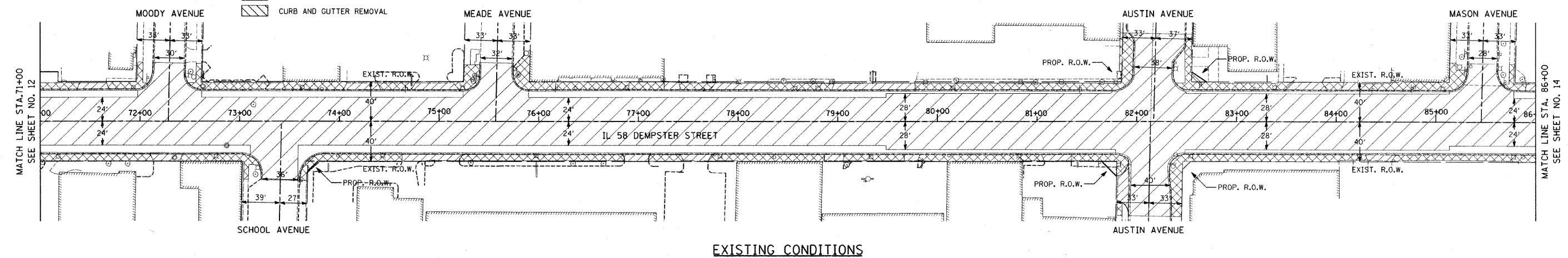
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS		FED. AID PROJECT	

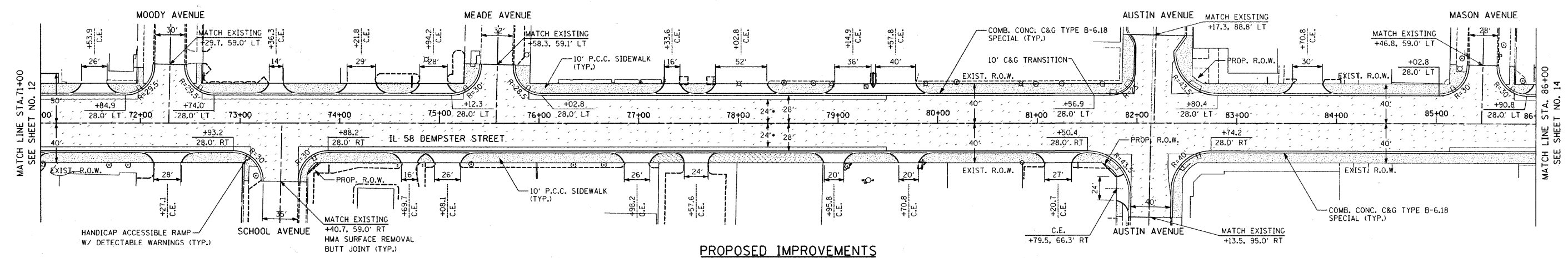
CONTRACT 83971

**LEGEND**

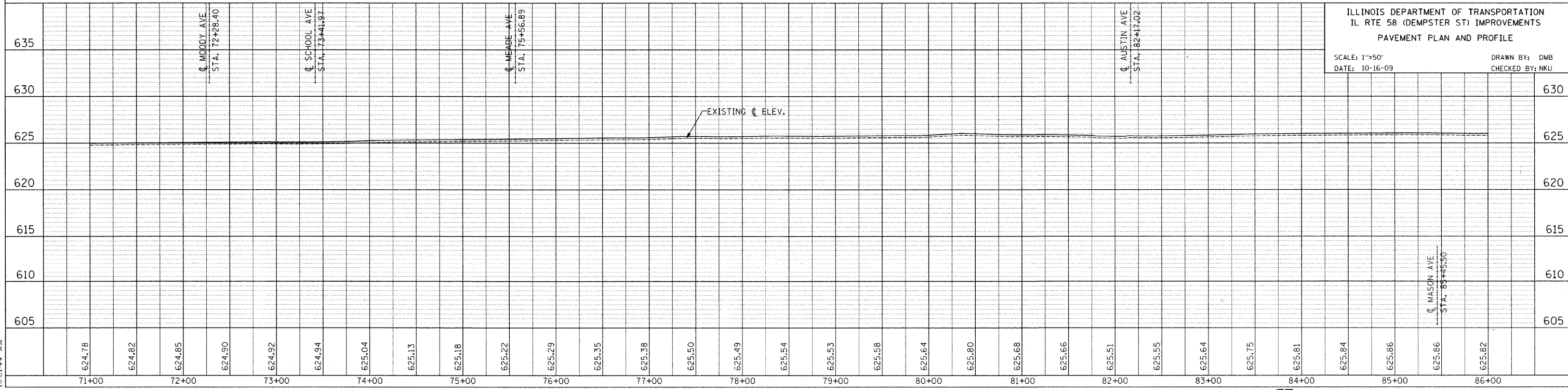
-  HOT-MIX ASPHALT SURFACE REMOVAL
-  SIDEWALK REMOVAL
-  DRIVEWAY REMOVAL
-  CURB AND GUTTER REMOVAL
-  PROPOSED HMA SURFACE COURSE
-  PROPOSED P.C.C. SIDEWALK



**EXISTING CONDITIONS**



**PROPOSED IMPROVEMENTS**



ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
PAVEMENT PLAN AND PROFILE

SCALE: 1"=50'  
DATE: 10-16-09  
DRAWN BY: DMB  
CHECKED BY: NKU

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
SUPERVISED: \_\_\_\_\_  
PLANNED: \_\_\_\_\_  
NOTED: \_\_\_\_\_  
NOTE BOOK NO. \_\_\_\_\_  
STRUCTURE NOTATION: DRND  
NO. \_\_\_\_\_

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
SUPERVISED: \_\_\_\_\_  
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NO. \_\_\_\_\_

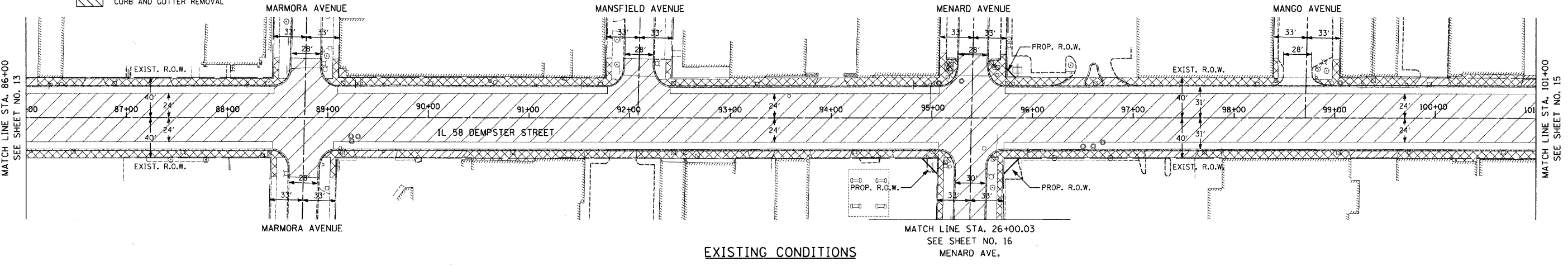
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

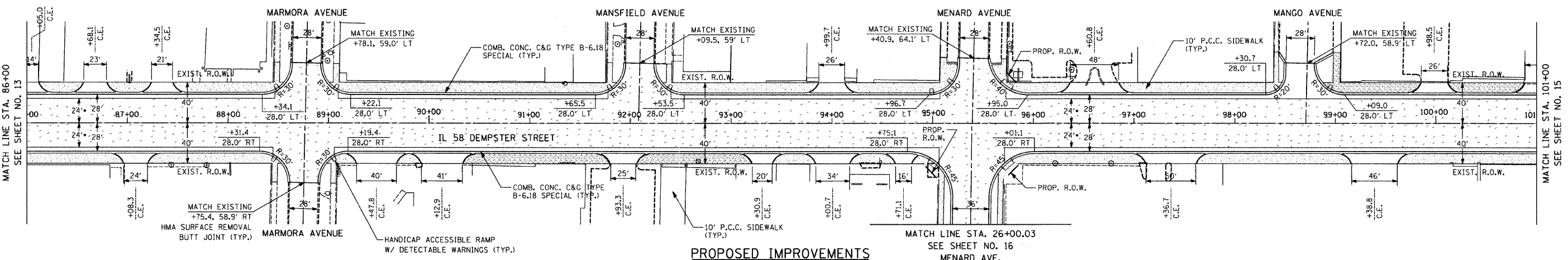
CONTRACT 9371

**LEGEND**

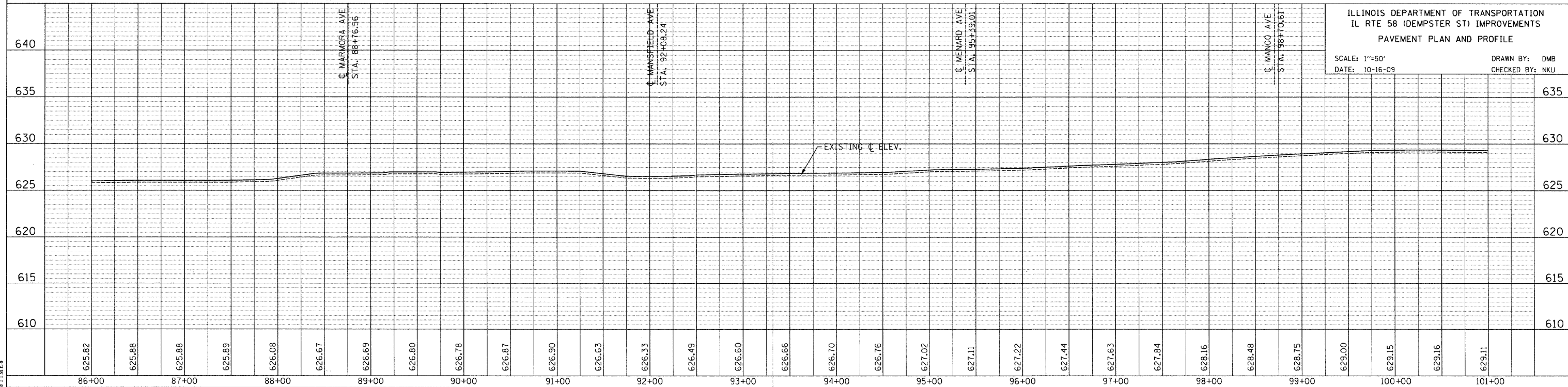
- HOT-MIX ASPHALT SURFACE REMOVAL
- SIDEWALK REMOVAL
- DRIVEWAY REMOVAL
- CURB AND GUTTER REMOVAL
- PROPOSED HMA SURFACE COURSE
- PROPOSED P.C.C. SIDEWALK



EXISTING CONDITIONS



PROPOSED IMPROVEMENTS



ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
 PAVEMENT PLAN AND PROFILE  
 SCALE: 1"=50'  
 DATE: 10-16-09  
 DRAWN BY: DMB  
 CHECKED BY: NKU

PLAN

DATE	BY

REVISIONS

NO.	DATE	DESCRIPTION

PROFILE

DATE	BY

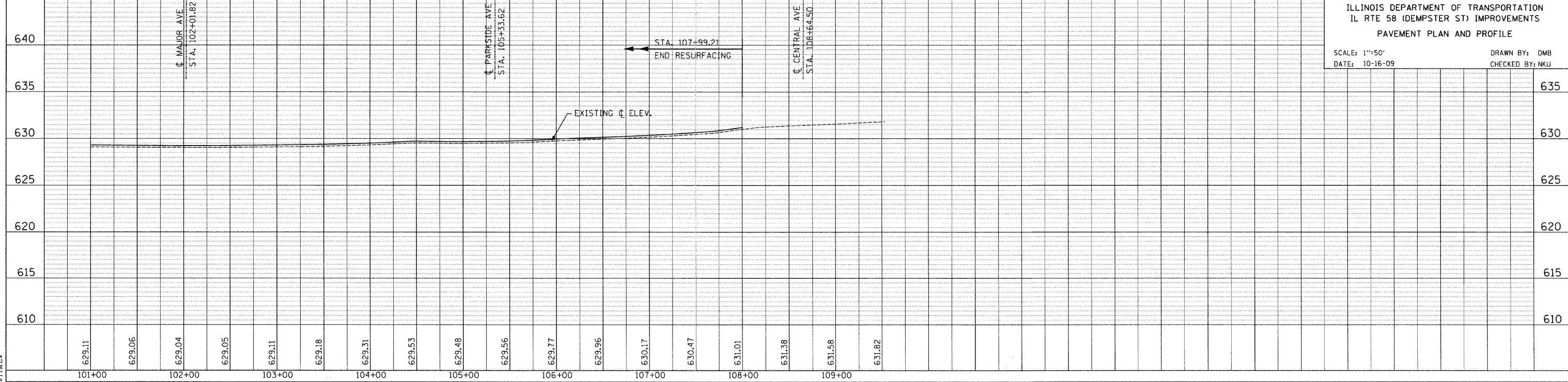
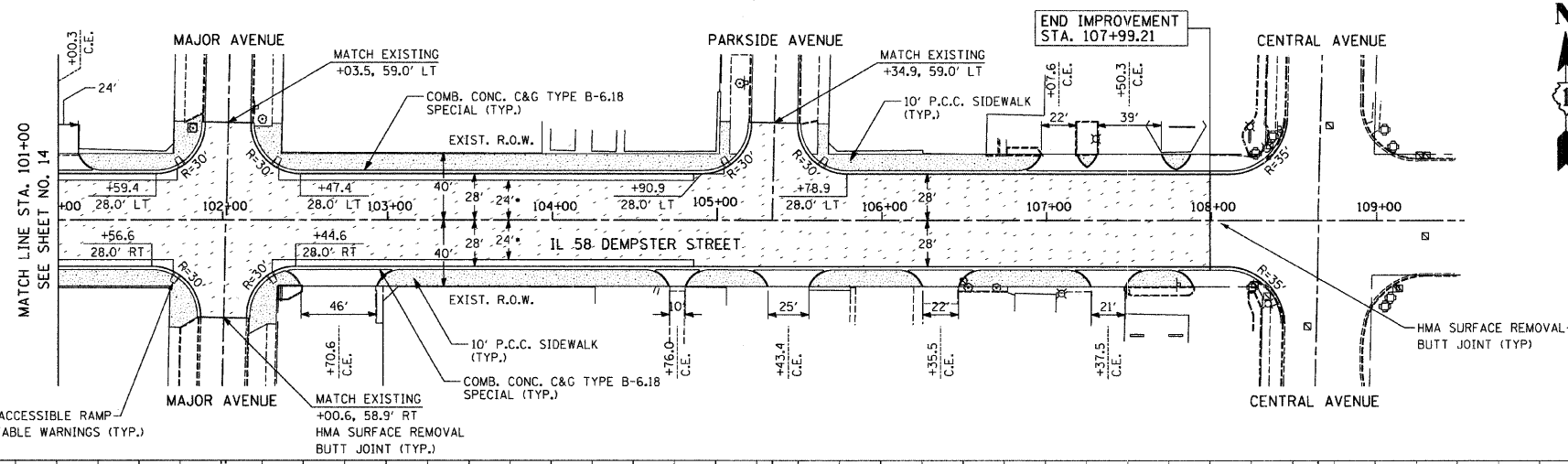
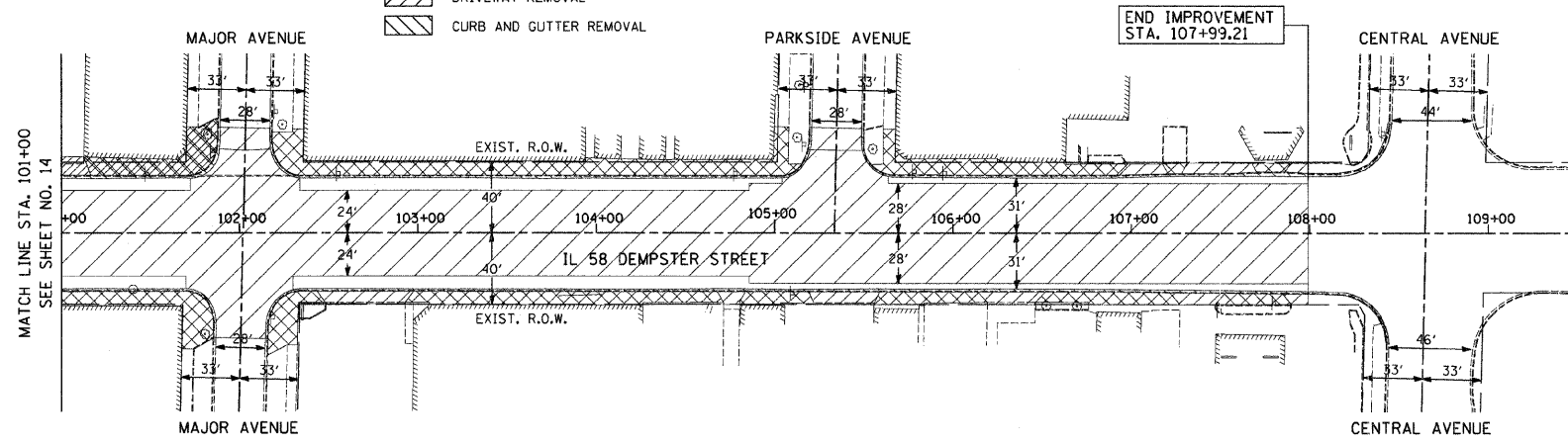
REVISIONS

NO.	DATE	DESCRIPTION

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	15
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT 85971				

**LEGEND**

- HOT-MIX ASPHALT SURFACE REMOVAL
- SIDEWALK REMOVAL
- DRIVEWAY REMOVAL
- CURB AND GUTTER REMOVAL
- PROPOSED HMA SURFACE COURSE
- PROPOSED P.C.C. SIDEWALK



ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
 PAVEMENT PLAN AND PROFILE  
 SCALE: 1"=50'  
 DATE: 10-16-09  
 DRAWN BY: DMB  
 CHECKED BY: NKU

PLAN	DATE	BY
SURVEYED		
PLOTTED		
NOTED		
NO. _____		

PROFILE	DATE	BY
SURVEYED		
PLOTTED		
NOTED		
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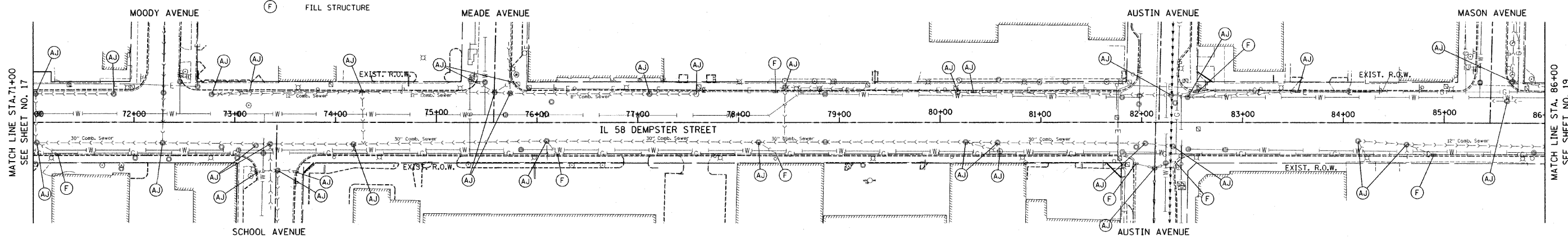




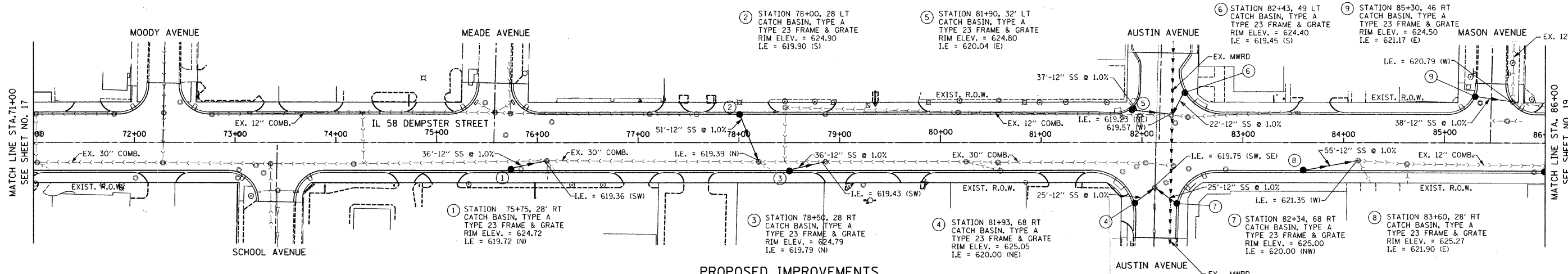


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA. TO STA.		FED. AID PROJECT		
CONTRACT 83971				

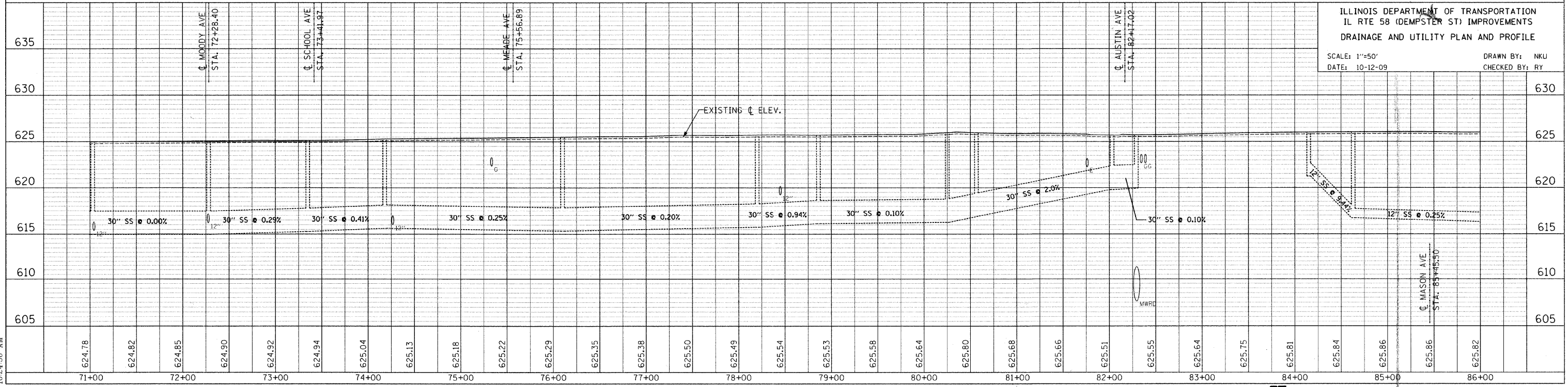
- LEGEND**
- (AB) ABANDON STRUCTURE
  - (AU) ADJUST STRUCTURE
  - (RC) RECONSTRUCT STRUCTURE
  - (F) FILL STRUCTURE



**EXISTING CONDITIONS**



**PROPOSED IMPROVEMENTS**



ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
 DRAINAGE AND UTILITY PLAN AND PROFILE  
 SCALE: 1"=50'  
 DATE: 10-12-09  
 DRAWN BY: NKU  
 CHECKED BY: RY

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 PLAN  
 SUBMITTED: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
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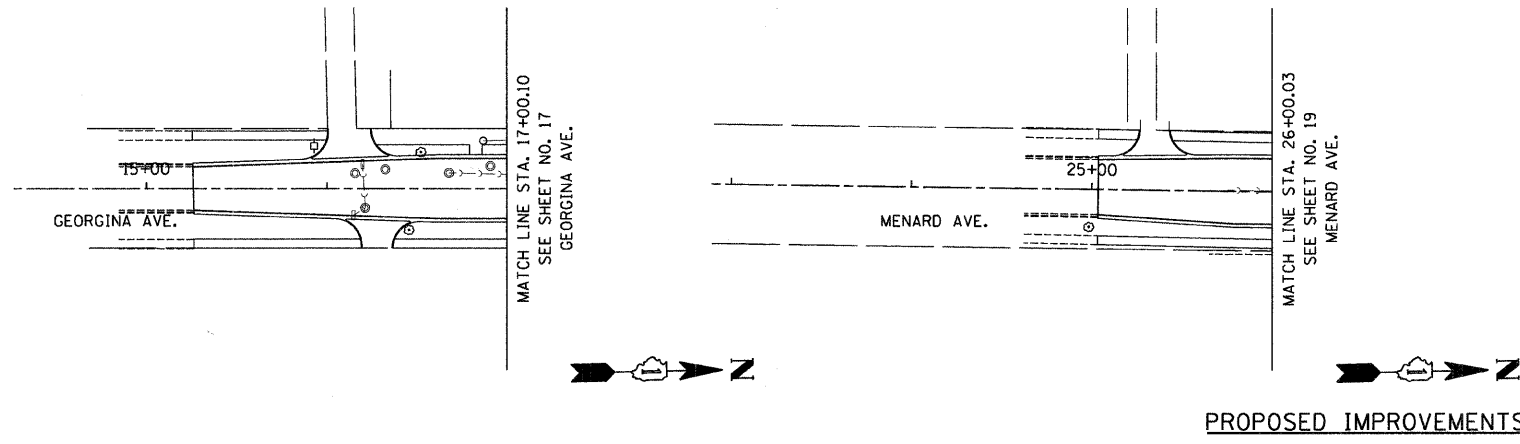
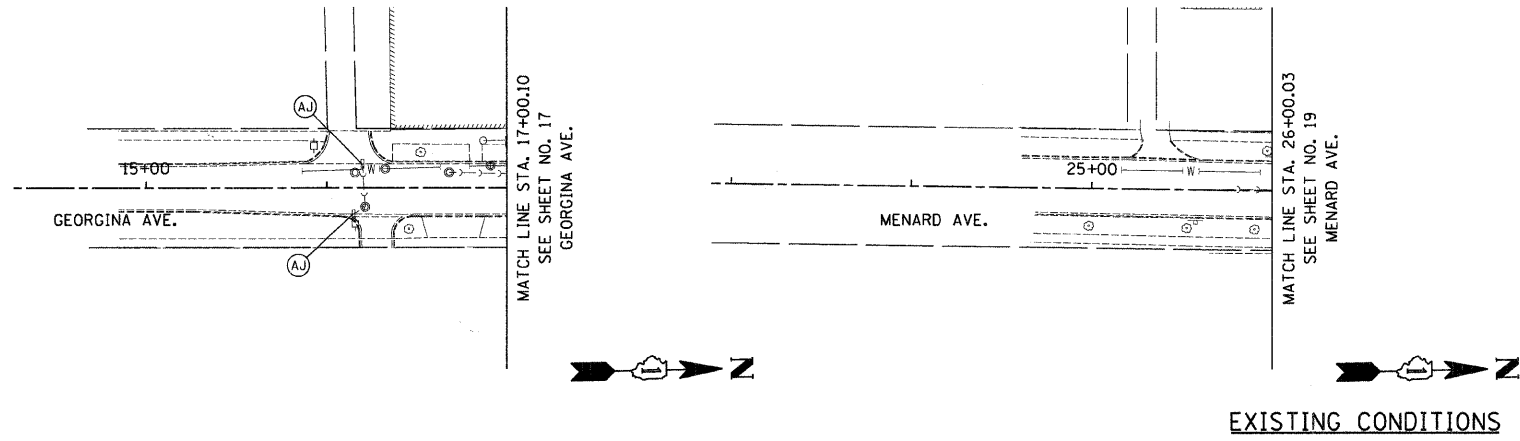
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	21
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT 83971				

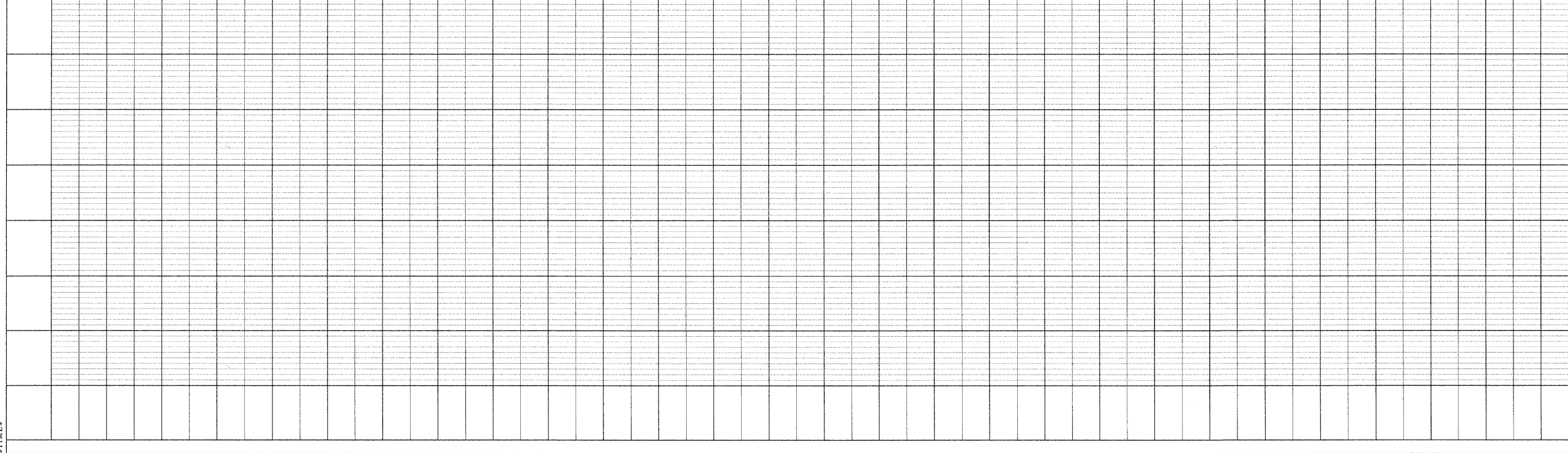
- LEGEND**
- (AB) ABANDON STRUCTURE
  - (AJ) ADJUST STRUCTURE
  - (RC) RECONSTRUCT STRUCTURE
  - (F) FILL STRUCTURE



PLAN	SURVEYED	DATE
	PLOTTED	BY
	REVISIONS	
	BY	
	DATE	
	NO. OF WAY CHECKED	
	CADD FILE NAME	
	NO.	

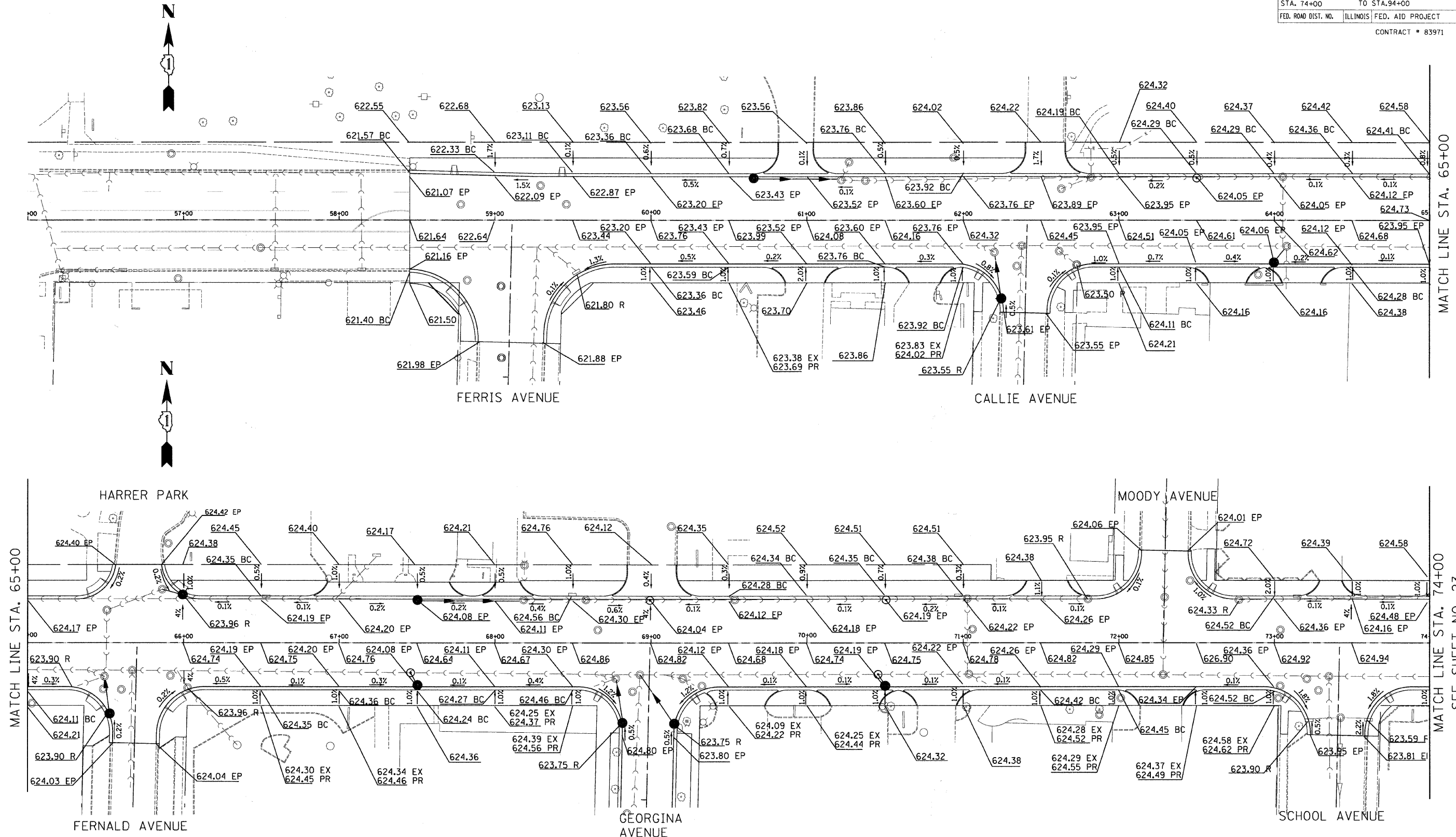
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	PLOTTED	BY
	REVISIONS	
	BY	
	DATE	
	NO. OF WAY CHECKED	
	CADD FILE NAME	
	NO.	

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
 DRAINAGE AND UTILITY PLAN AND PROFILE  
 SCALE: 1"=50'  
 DATE: 10-16-09  
 DRAWN BY: NKU  
 CHECKED BY: RY



SFILES  
 SDATES  
 STIMES

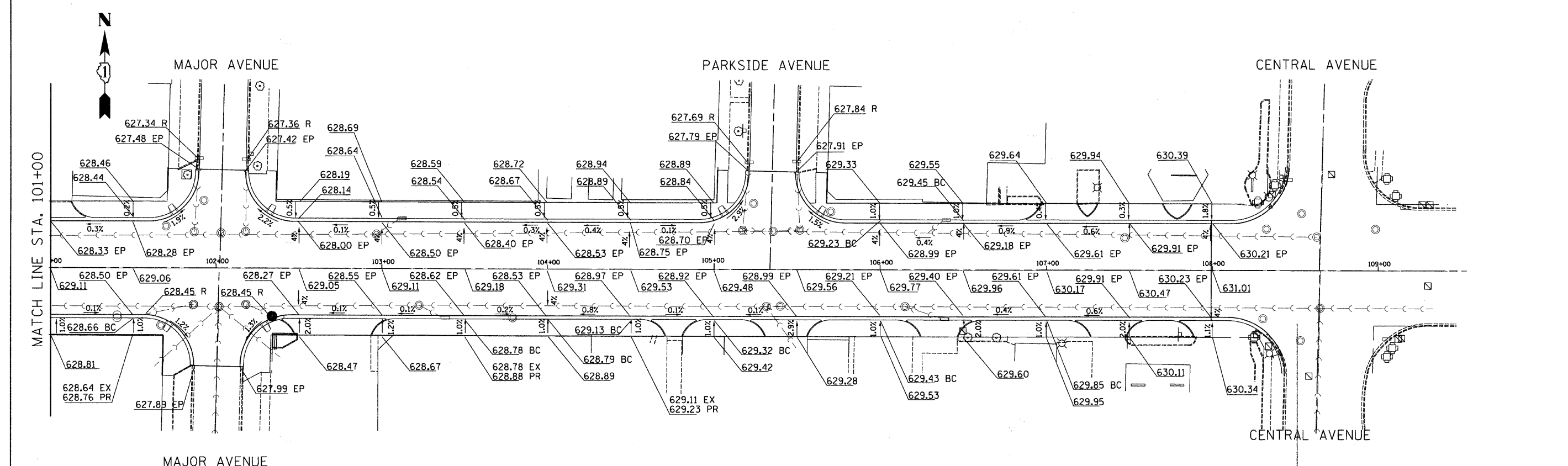
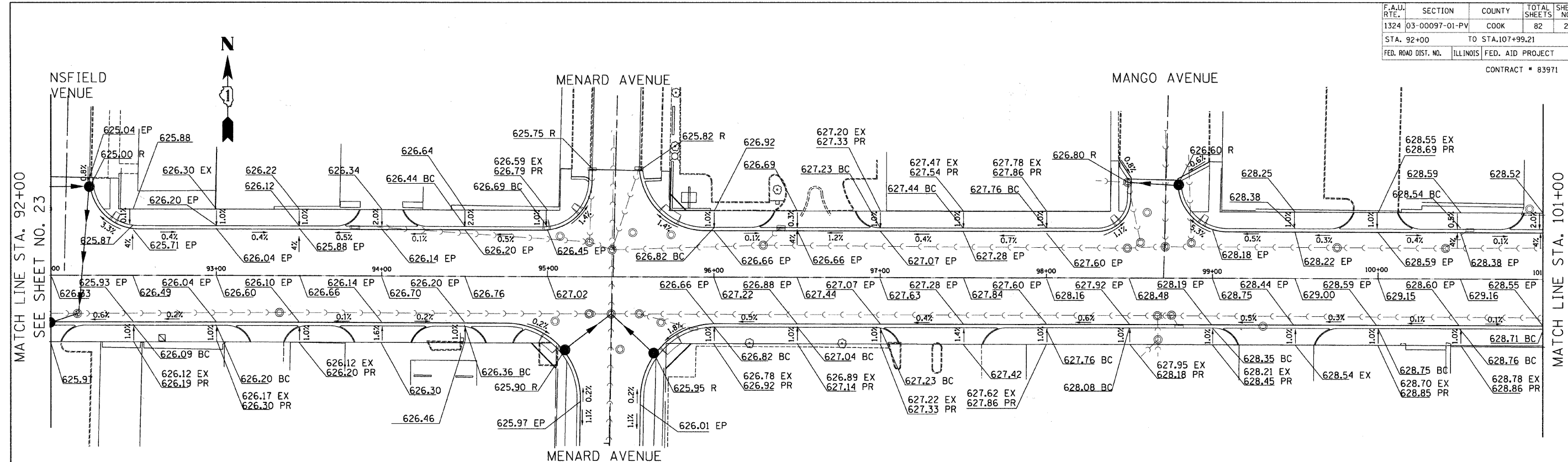
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	22
STA. 74+00		TO STA. 94+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 83971				



REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION IL RTE 58 (DEMPSTER ST) IMPROVEMENTS DETAILED GRADING PLANS
NAME	DATE	
		SCALE: 1"=30' DATE: 10-16-09 DRAWN BY: EJD CHECKED BY: NKU McDonough Associates Inc. Engineers / Architects



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	24
STA. 92+00	TO STA. 107+99.21			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 83971				



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
 DETAILED GRADING PLANS

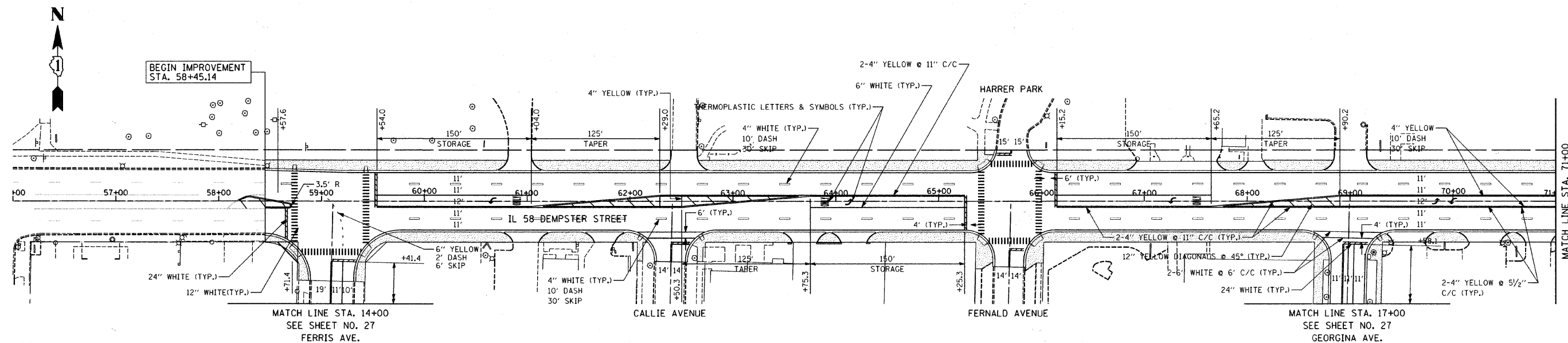
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 DATE: 10-16-09

DRAWN BY: EJD  
 CHECKED BY: NKU

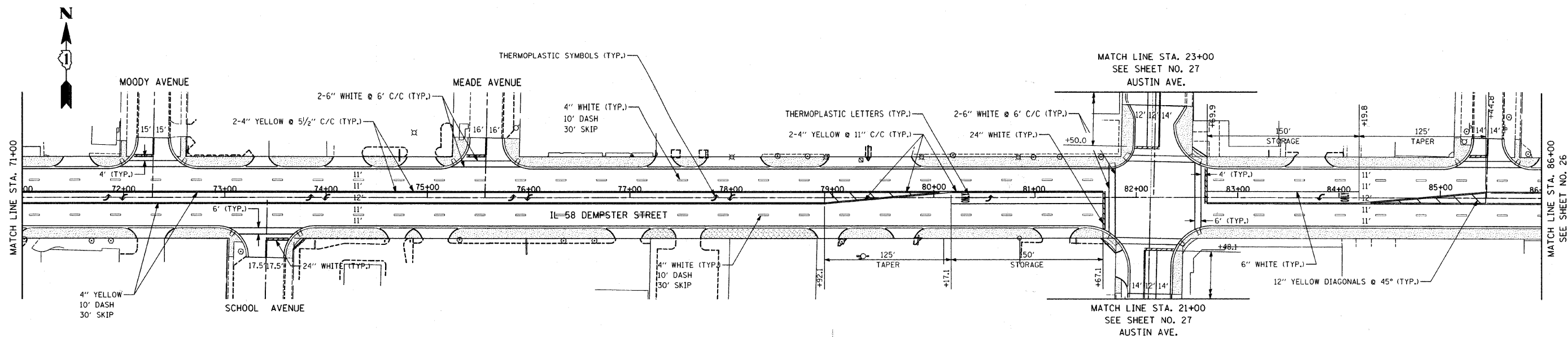
**McDonough Associates Inc.**  
 Engineers / Architects



F.A.M. No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	25
STA. _____ TO STA. _____		FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT		
CONTRACT # 83971				



NOTE:  
RAISED REFLECTIVE PAVEMENT MARKERS SHALL  
BE INSTALLED PER STANDARD 781001



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
PAVEMENT MARKING PLANS

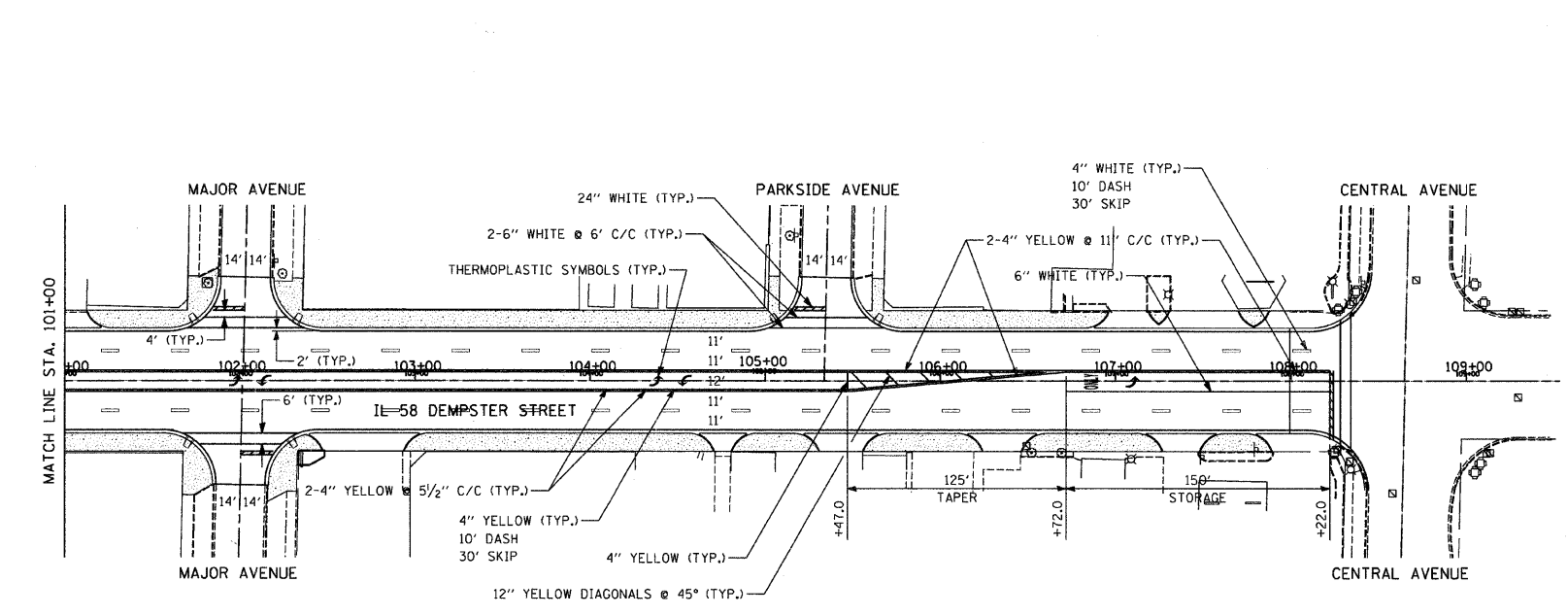
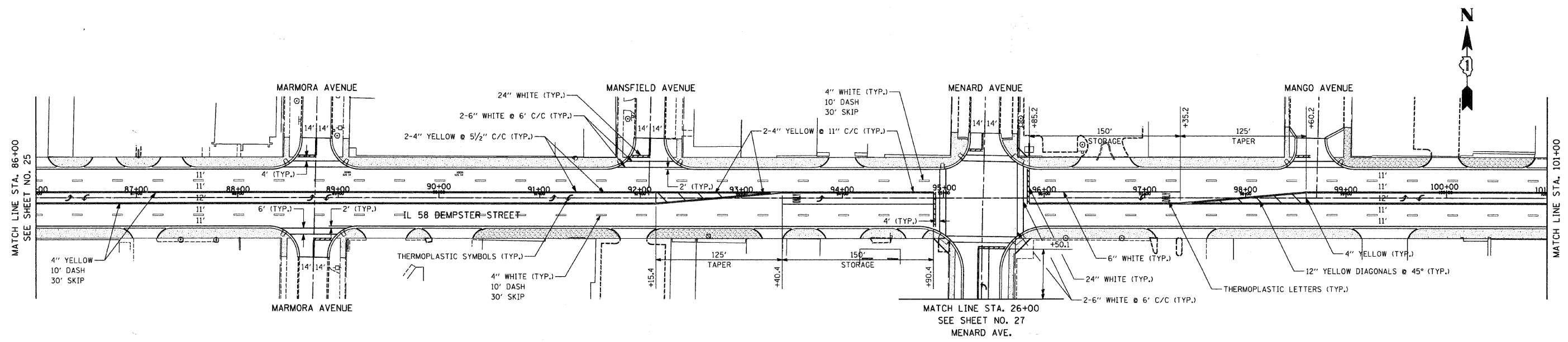
SCALE: 1"=50'  
DATE: 10-16-09

DRAWN BY: DMB  
CHECKED BY: NKU

**McDonough Associates Inc.**  
Engineers / Architects

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	26
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 83971



REVISIONS	
NAME	DATE

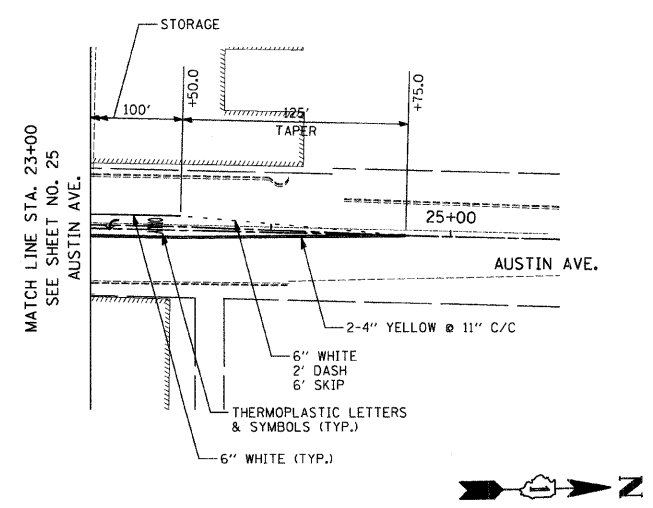
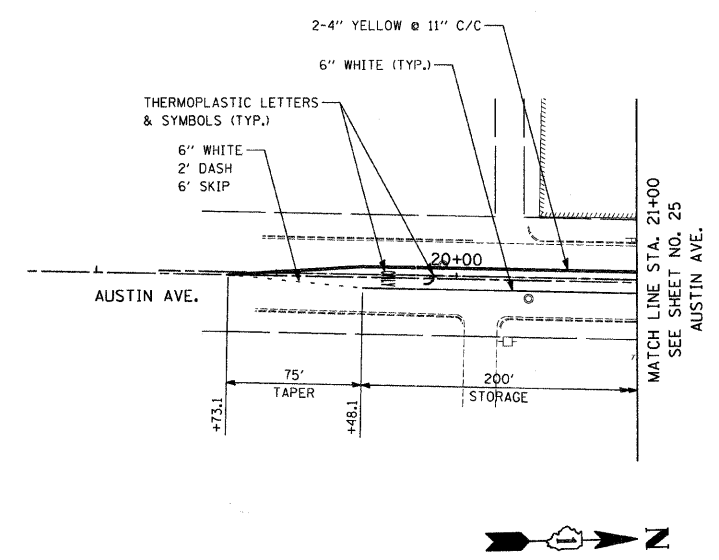
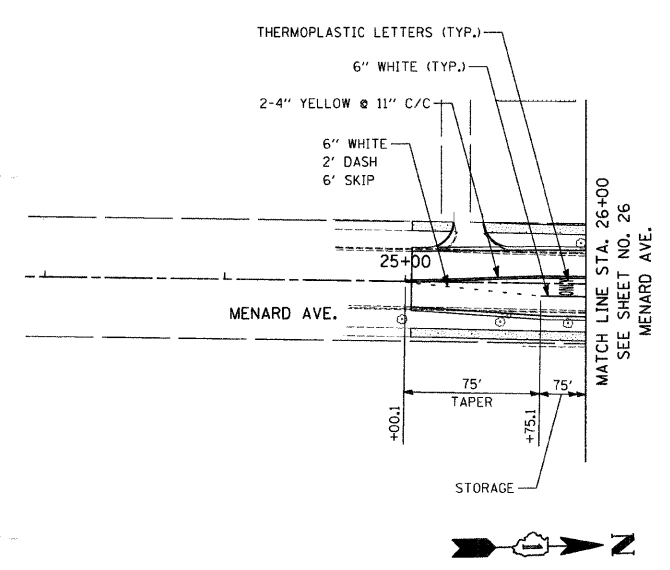
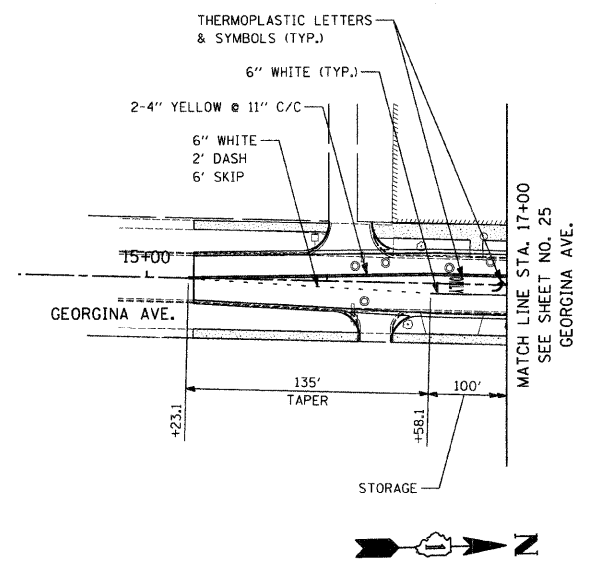
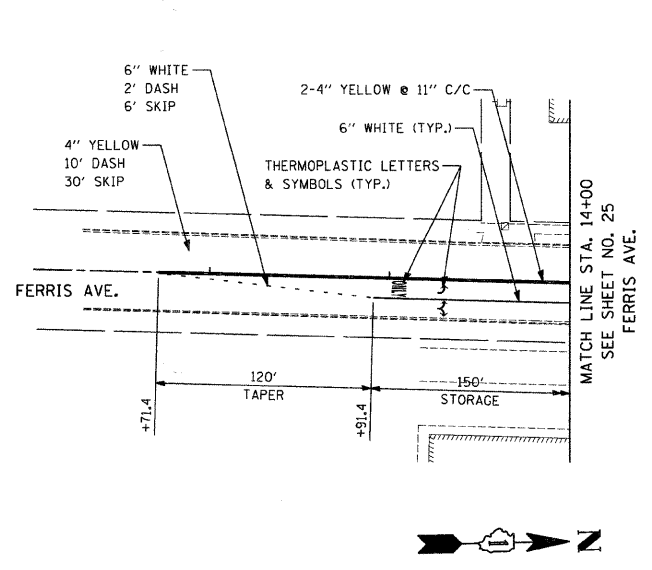
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**PAVEMENT MARKING PLAN**

SCALE: 1"=50'  
 DATE: 10-16-09

DRAWN BY: DMB  
 CHECKED BY: NKU

**McDonough Associates Inc.**  
 Engineers / Architects

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	27
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 83971				



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**PAVEMENT MARKING PLAN**

SCALE: 1"=50'  
 DATE: 10-16-09

DRAWN BY: DMB  
 CHECKED BY: NKU

**McDonough Associates Inc.**  
 Engineers / Architects

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	28
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 83971



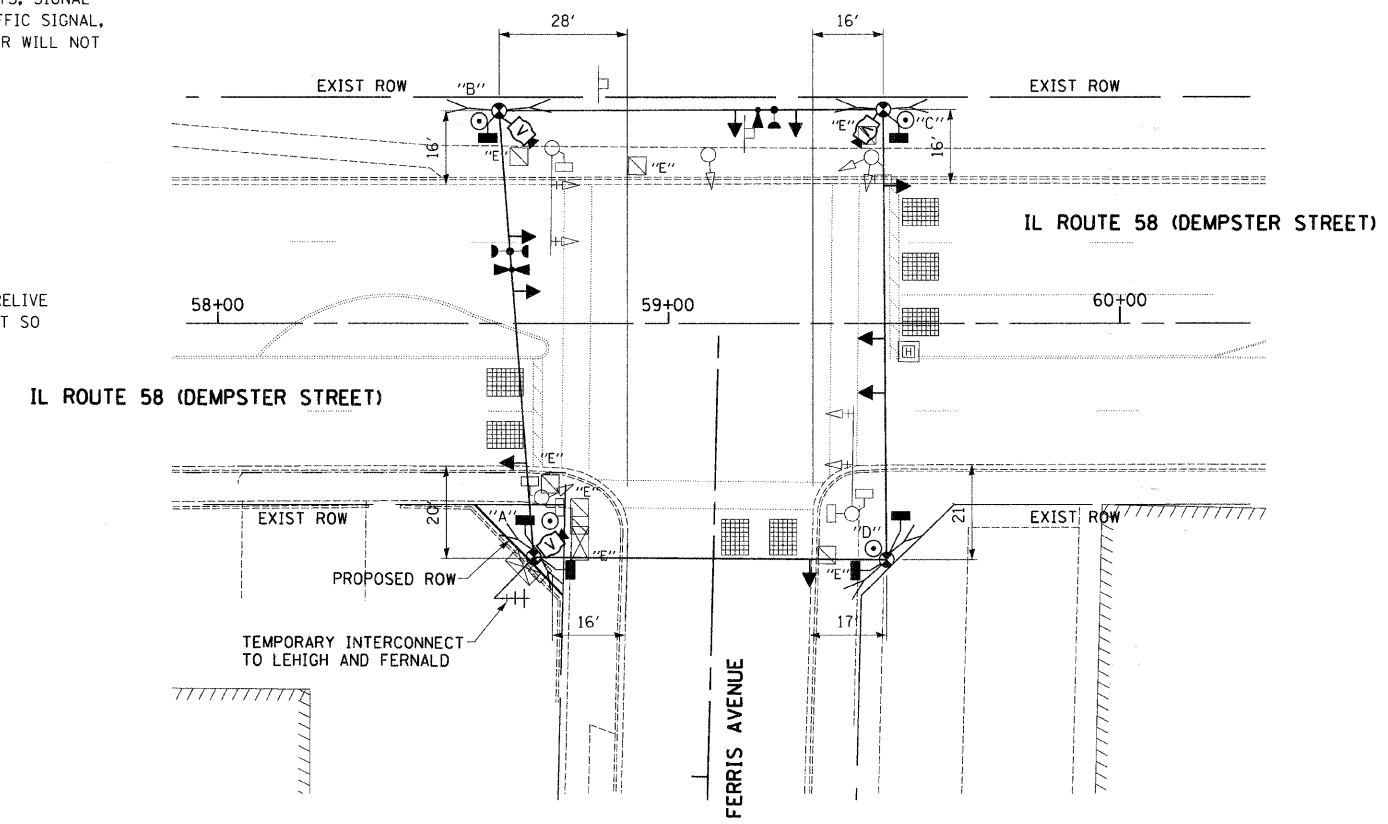
**TRAFFIC SIGNAL NOTES:**

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

THE TRAFFIC CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH EXISTING ADJACENT SYSTEM.

**TEMPORARY RADIO INTERCONNECT NOTES:**

1. INSTALL RADIO MODEM IN TEMPORARY CONTROLLER CABINET.
2. INSTALL ANTENNA ON TEMPORARY WOOD POLE OR OTHER SUITABLE TEMPORARY LOCATION.
3. SUGGESTED ANTENNA LOCATIONS SHOWN ON THE PLANS ARE SUBJECT TO CHANGE BASED ON ACTUAL CONDITIONS IN THE FIELD. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE DUTY TO LOCATE AND INSTALL THE EQUIPMENT SO AS TO ENSURE THE SYSTEM PERFORMANCE IN ACCORDANCE WITH THE SPECIFICATIONS.



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

- 1 EACH CONTROLLER AND CABINET, COMPLETE
- 2 EACH MAST ARM ASSEMBLY AND POLE
- 3 EACH SIGNAL POST
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 2 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 1 EACH SERVICE INSTALLATION

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**FERRIS AVENUE  
 TEMPORARY TRAFFIC SIGNAL PLAN**

SCALE: 1"=20'  
 DATE: 10-16-09

DRAWN BY: DMB  
 DESIGNED BY: DMB  
 CHECKED BY: NKU

**McDonough Associates Inc.**  
 Engineers / Architects

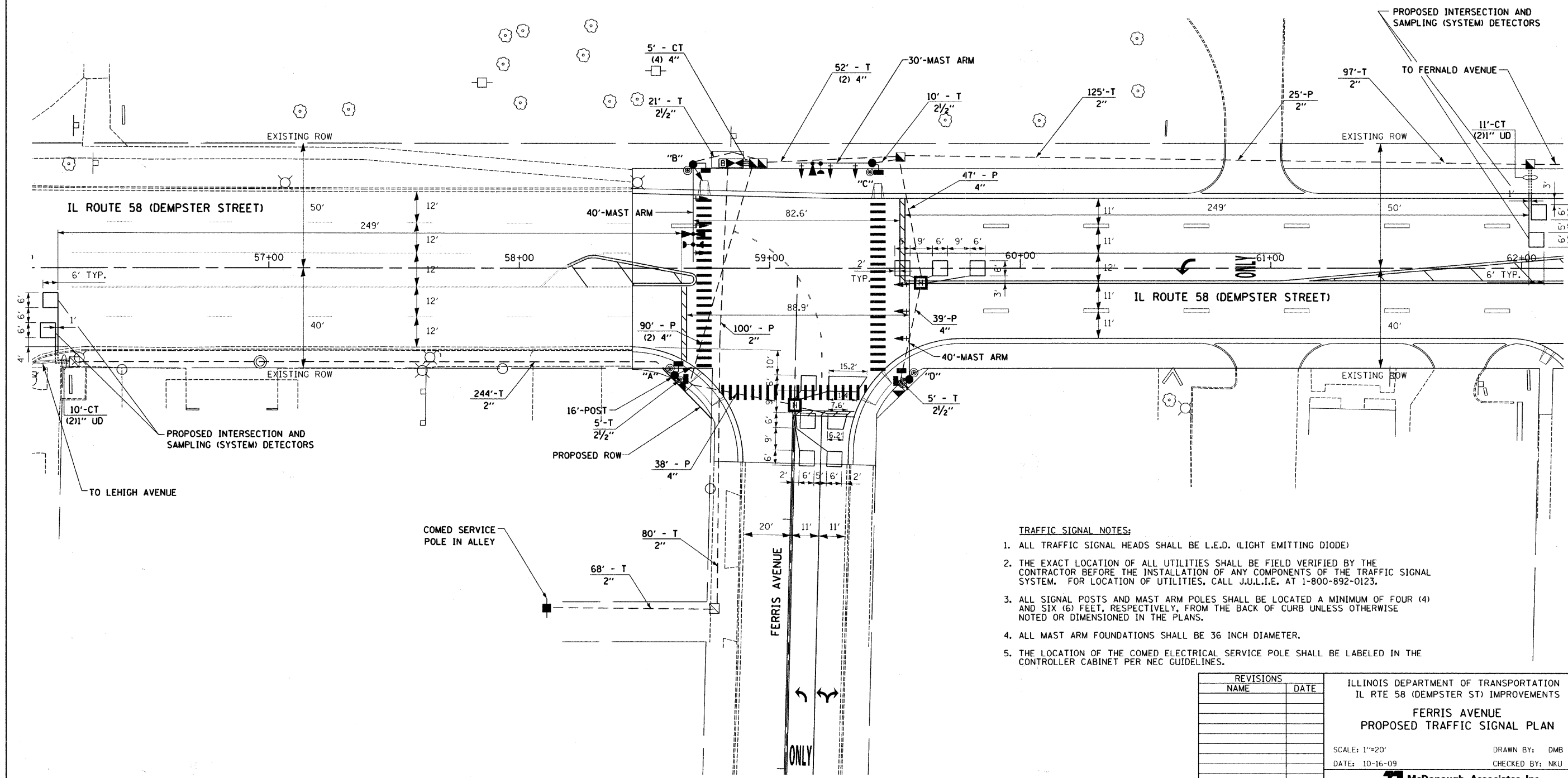


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	30
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 83971



THE TRAFFIC CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH EXISTING ADJACENT SYSTEM.



- TRAFFIC SIGNAL NOTES:**
1. ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE)
  2. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE TRAFFIC SIGNAL SYSTEM. FOR LOCATION OF UTILITIES, CALL J.U.L.I.E. AT 1-800-892-0123.
  3. ALL SIGNAL POSTS AND MAST ARM POLES SHALL BE LOCATED A MINIMUM OF FOUR (4) AND SIX (6) FEET, RESPECTIVELY, FROM THE BACK OF CURB UNLESS OTHERWISE NOTED OR DIMENSIONED IN THE PLANS.
  4. ALL MAST ARM FOUNDATIONS SHALL BE 36 INCH DIAMETER.
  5. THE LOCATION OF THE COMED ELECTRICAL SERVICE POLE SHALL BE LABELED IN THE CONTROLLER CABINET PER NEC GUIDELINES.

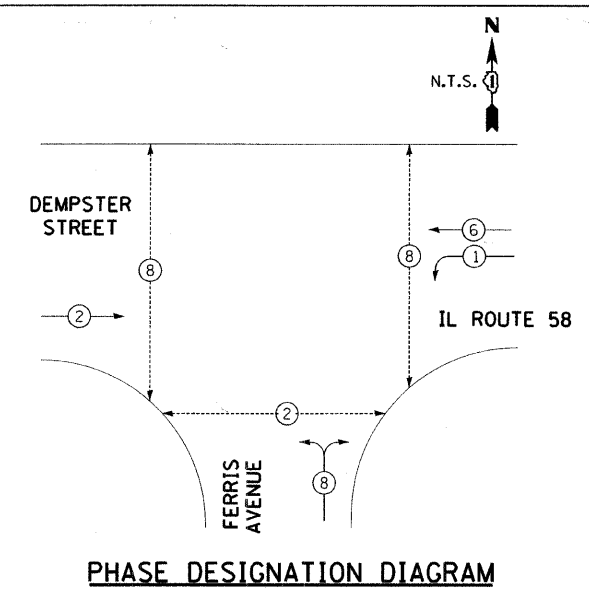
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**FERRIS AVENUE  
 PROPOSED TRAFFIC SIGNAL PLAN**

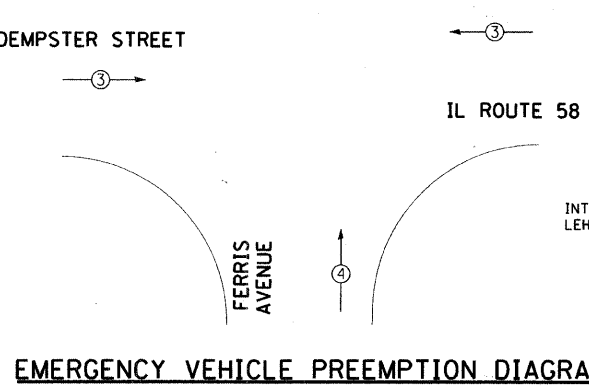
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 DATE: 10-16-09

DRAWN BY: DMB  
 CHECKED BY: NKU

**McDonough Associates Inc.**  
 Engineers / Architects

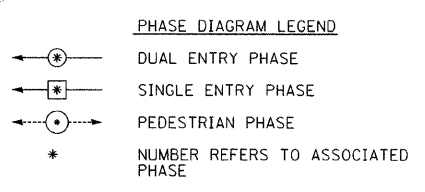


PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	←	↑

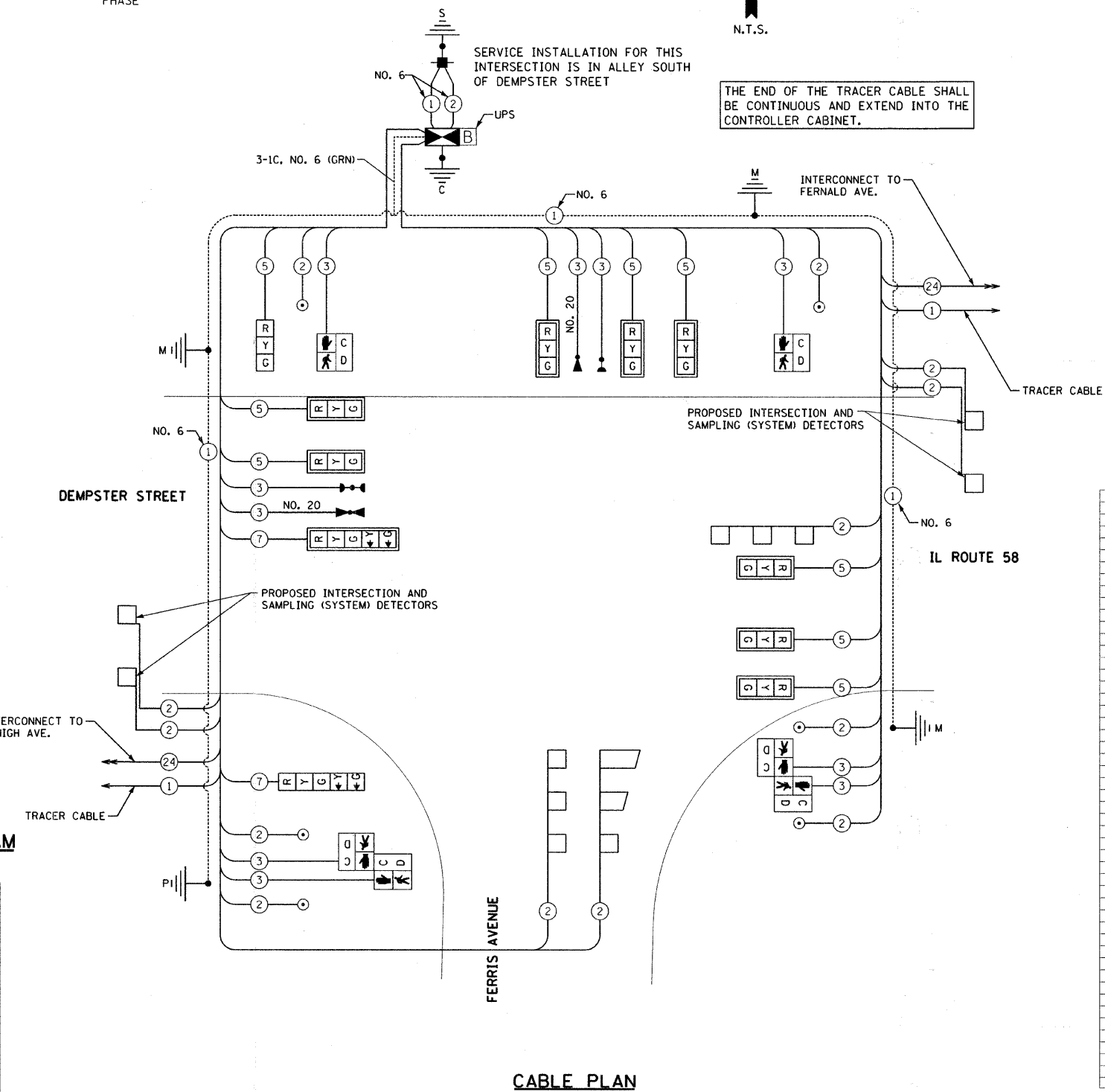


I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED)	11	135	17	0.50	93.5
(YELLOW)	11	135	25	0.25	68.75
(GREEN)	11	135	15	0.25	41.25
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	12	90	25	1.00	300.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN	0	84	35	0.05	0.0
FLASHER	0		25	0.50	0.0
ENERGY COST TO:				TOTAL =	608.30

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: CINDY ANTHONY-BIAGGI  
 PHONE: (847) 816-5322  
 COMPANY: COMMONWEALTH EDISON



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



**SCHEDULE OF QUANTITIES**

DESCRIPTION	QUANTITY	UNIT
SIGN PANEL - TYPE 1	13.5	SO FT
SIGN PANEL - TYPE 2	15	SO FT
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	614	FOOT
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	41	FOOT
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	62	FOOT
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	125	FOOT
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	214	FOOT
HANDHOLE	4	EACH
HEAVY-DUTY HANDHOLE	2	EACH
DOUBLE HANDHOLE	1	EACH
TRENCH AND BACKFILL FOR ELECTRICAL WORK	117	FOOT
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	1	EACH
TRANSCEIVER - FIBER OPTIC	1	EACH
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	430	FOOT
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	1,068	FOOT
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	1,550	FOOT
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	240	FOOT
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	2,703	FOOT
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	250	FOOT
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	1	EACH
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	1	EACH
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	2	EACH
CONCRETE FOUNDATION, TYPE A	12	FOOT
CONCRETE FOUNDATION, TYPE C	4	FOOT
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	45	FOOT
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	8	EACH
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	1	EACH
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	1	EACH
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	1	EACH
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	2	EACH
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	2	EACH
TRAFFIC SIGNAL BACKPLATE	9	EACH
INDUCTIVE LOOP DETECTOR	7	EACH
DETECTOR LOOP, TYPE 1	846	FOOT
LIGHT DETECTOR	2	EACH
LIGHT DETECTOR AMPLIFIER	1	EACH
PEDESTRIAN PUSH-BUTTON	6	EACH
TEMPORARY TRAFFIC SIGNAL INSTALLATION	1	EACH
REMOVE ELECTRIC CABLE FROM CONDUIT	250	FOOT
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	1	EACH
REMOVE EXISTING HANDHOLE	6	EACH
REMOVE EXISTING CONCRETE FOUNDATION	6	EACH
ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1C (GREEN)	410	FOOT
SERVICE INSTALLATION - POLE MOUNTED	1	EACH
UNINTERRUPTIBLE POWER SUPPLY	1	EACH
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	278	FOOT
TEMPORARY TRAFFIC SIGNAL TIMINGS	1	EACH

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION IL RTE 58 (DEMPSTER ST) IMPROVEMENTS FERRIS AVENUE PROPOSED CABLE PLAN
NAME	DATE	

SCALE: N.T.S.  
 DATE: 10-16-09  
 DRAWN BY: DMB  
 DESIGNED BY: DMB  
 CHECKED BY: NKU

**McDonough Associates Inc.**  
 Engineers / Architects

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	32
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 83971



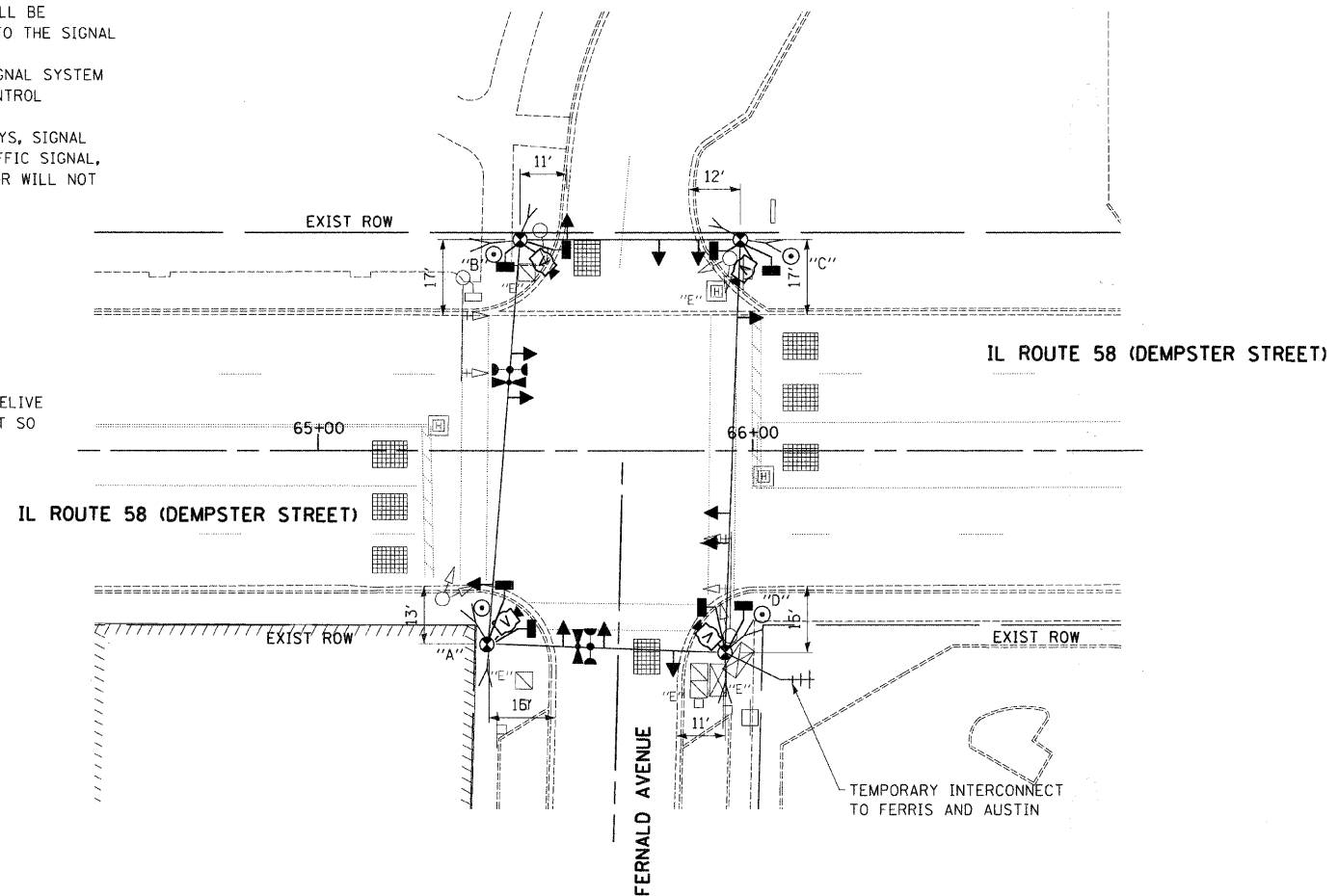
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- 2 EACH MAST ARM ASSEMBLY AND POLE
- 3 EACH SIGNAL POST
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 3-SECTION, 5-SECTION
- 2 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 1 EACH SERVICE INSTALLATION

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
 IL 58 (DEMPSTER STREET)  
 AND FERNALD AVENUE  
 TEMPORARY TRAFFIC SIGNAL PLAN

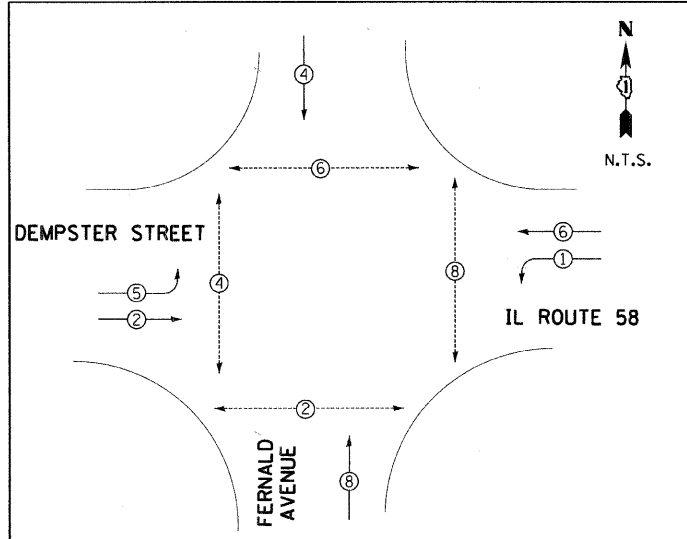
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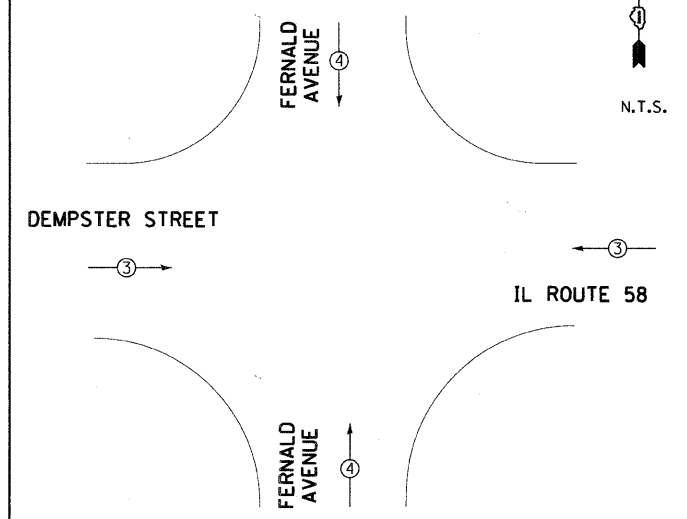
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	33
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 83971

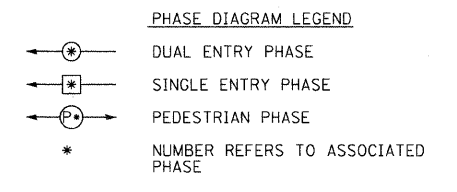


**TEMPORARY PHASE DESIGNATION DIAGRAM**

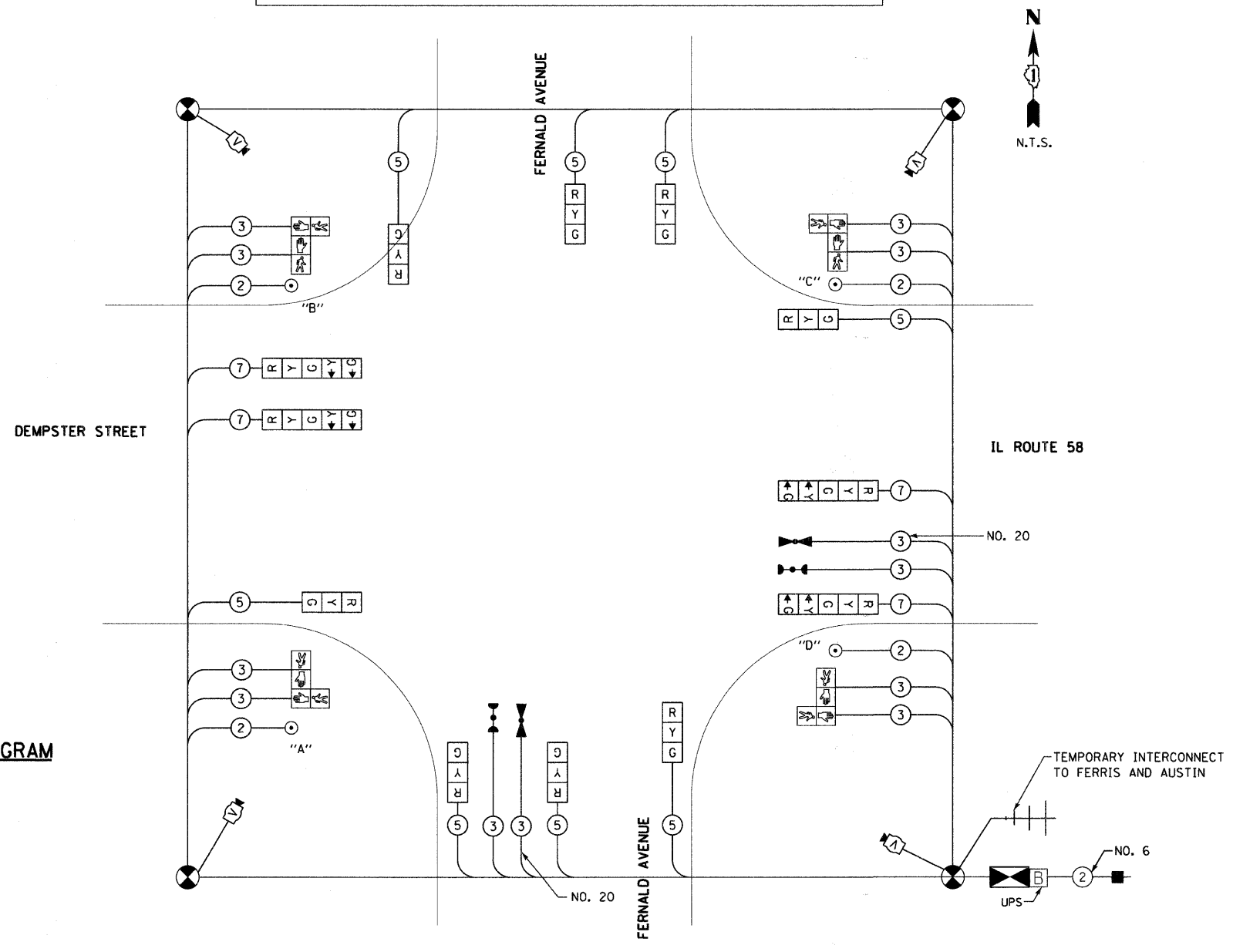
PROPOSED EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTORS	3 4
MOVEMENT	← → ↑ ↓



**TEMPORARY EMERGENCY VEHICLE PREEMPTION DIAGRAM**



TEMPORARY RADIO INTERCONNECT MAY BE USED ON THIS PROJECT AS SHOWN IN THE PLANS. RADIO ANTENNAS SHOULD BE INSTALLED ON THE WOOD POLE ADJACENT TO THE TEMPORARY CONTROLLER. ALL WORK RELATED TO THE INSTALLATION AND ENSURING PROPER OPERATION OF THE TEMPORARY INTERCONNECT SHALL BE INCIDENTAL TO THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".



**TEMPORARY CABLE PLAN**

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATION	
SIGNAL (RED)	12	135	17	0.50	102.0
(YELLOW)	12	135	25	0.25	75.0
(GREEN)	12	135	15	0.25	45.0
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN	0	84	35	0.05	0.0
FLASHER	0		25	0.50	0.0
ENERGY COST TO:	TOTAL =				531.6

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: CINDY ANTHONY-BIAGGI  
 PHONE: (847) 816-5322  
 COMPANY: COMMONWEALTH EDISON

PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4  
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6  
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8  
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 8 AND 2

REVISIONS	
NAME	DATE

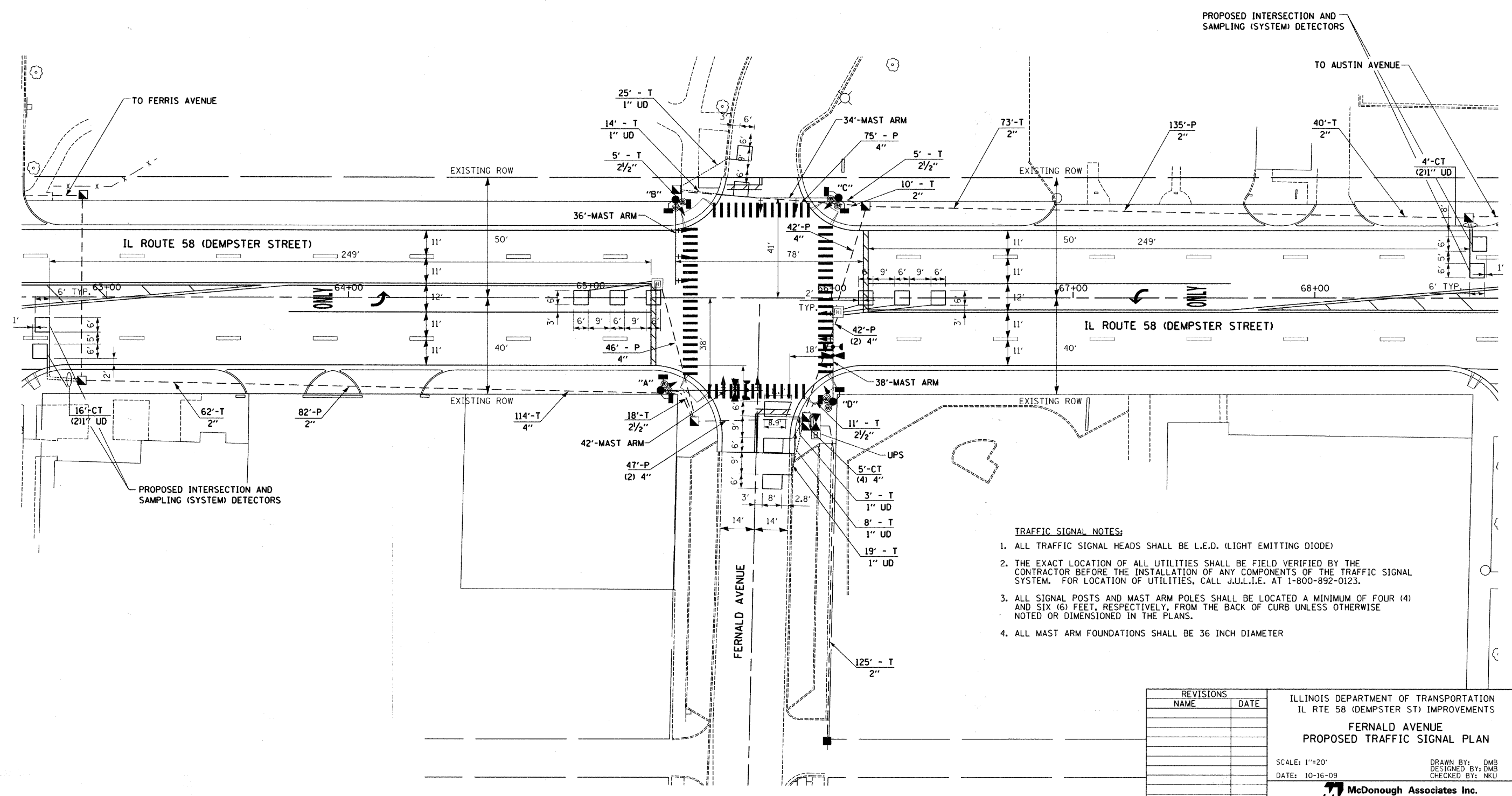
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**IL 58 (DEMPSTER STREET) AND FERNALD AVENUE TEMPORARY CABLE PLAN**  
 SCALE: N.T.S. DRAWN BY: DMB  
 DATE: 10-16-09 CHECKED BY: NKU  
 McDonough Associates Inc.  
 Engineers / Architects

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	34
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 83971



THE TRAFFIC CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH EXISTING ADJACENT SYSTEM.



**TRAFFIC SIGNAL NOTES:**

1. ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE)
2. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE TRAFFIC SIGNAL SYSTEM. FOR LOCATION OF UTILITIES, CALL J.U.L.I.E. AT 1-800-892-0123.
3. ALL SIGNAL POSTS AND MAST ARM POLES SHALL BE LOCATED A MINIMUM OF FOUR (4) AND SIX (6) FEET, RESPECTIVELY, FROM THE BACK OF CURB UNLESS OTHERWISE NOTED OR DIMENSIONED IN THE PLANS.
4. ALL MAST ARM FOUNDATIONS SHALL BE 36 INCH DIAMETER

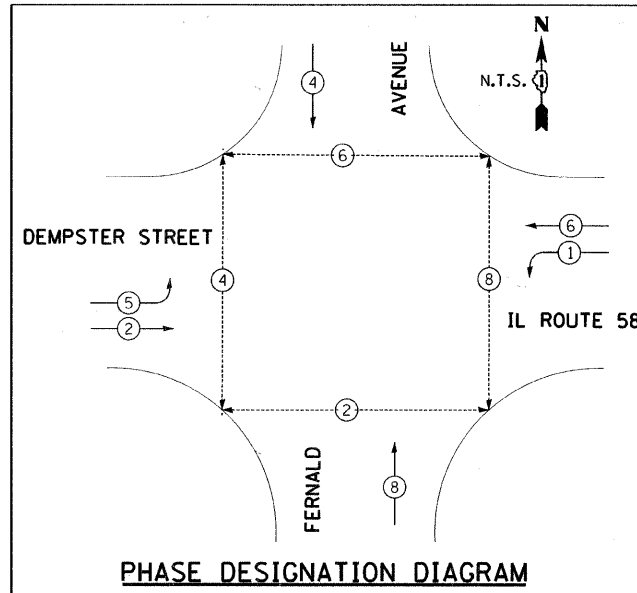
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**FERNALD AVENUE  
 PROPOSED TRAFFIC SIGNAL PLAN**

SCALE: 1"=20'  
 DATE: 10-16-09

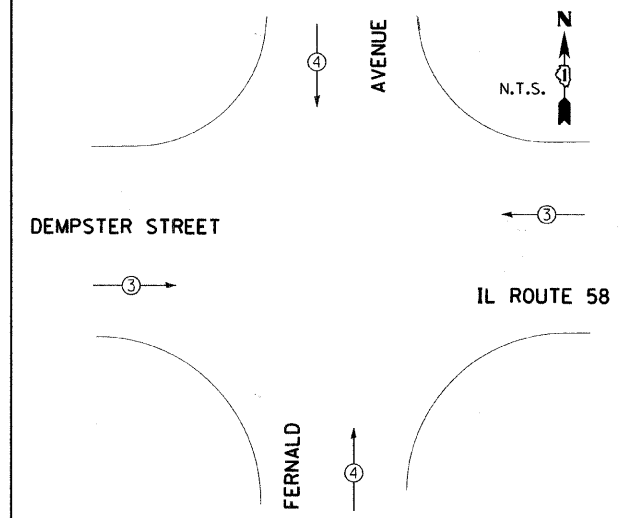
DRAWN BY: DMB  
 DESIGNED BY: DMB  
 CHECKED BY: NKU

**McDonough Associates Inc.**  
 Engineers / Architects



**PHASE DESIGNATION DIAGRAM**

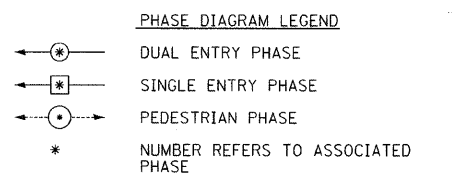
PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	← →	↑ ↓



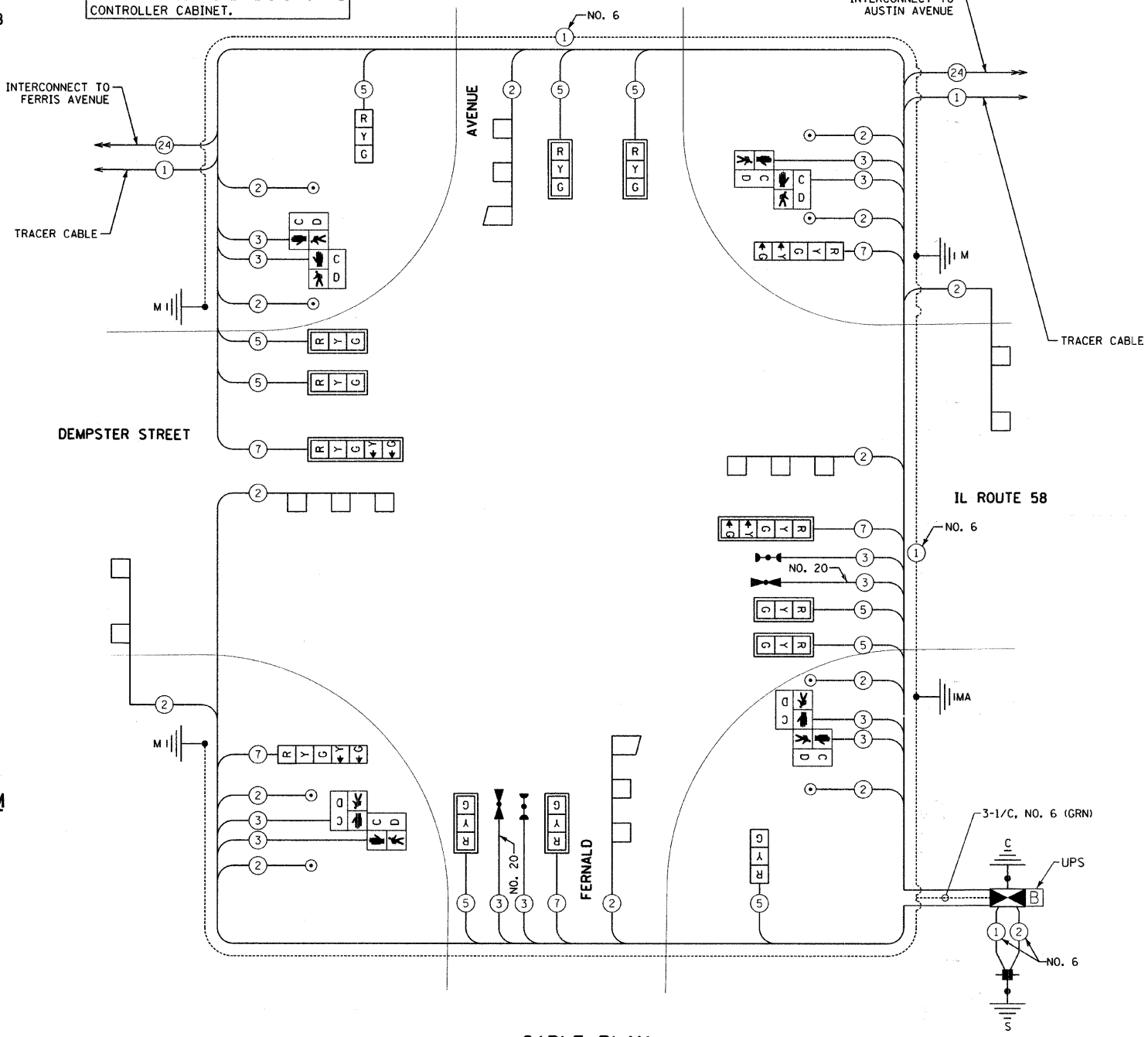
**EMERGENCY VEHICLE PREEMPTION DIAGRAM**

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	14	135	17	0.50	119.0
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	16	90	25	1.00	400.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN	0	84	35	0.05	0.0
FLASHER	0	25		0.50	0.0
ENERGY COST TO:	TOTAL =				768.6

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: CINDY ANTHONY-BIAGGI  
 PHONE: (847) 816-5322  
 COMPANY: COMMONWEALTH EDISON



THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.



**CABLE PLAN**

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

**SCHEDULE OF QUANTITIES**

SIGN PANEL - TYPE 1	50 FT	15
SIGN PANEL - TYPE 2	50 FT	30
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	414
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	39
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	217
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	252
HANDHOLE	EACH	5
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	463
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	459
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,405
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,490
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	700
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2,580
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	150
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	6
DETECTOR LOOP, TYPE I	FOOT	1,124
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	1
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	4
REMOVE EXISTING CONCRETE FOUNDATION	EACH	6
ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1C (GREEN)	FOOT	395
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	415
TEMPORARY TRAFFIC SIGNAL TIMINGS	EACH	1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**FERNALD AVENUE PROPOSED CABLE PLAN**  
 SCALE: N.T.S.  
 DATE: 10-16-09  
 DRAWN BY: DMB  
 DESIGNED BY: DMB  
 CHECKED BY: NKU  
**McDonough Associates Inc.**  
 Engineers / Architects

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	36
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 83971				



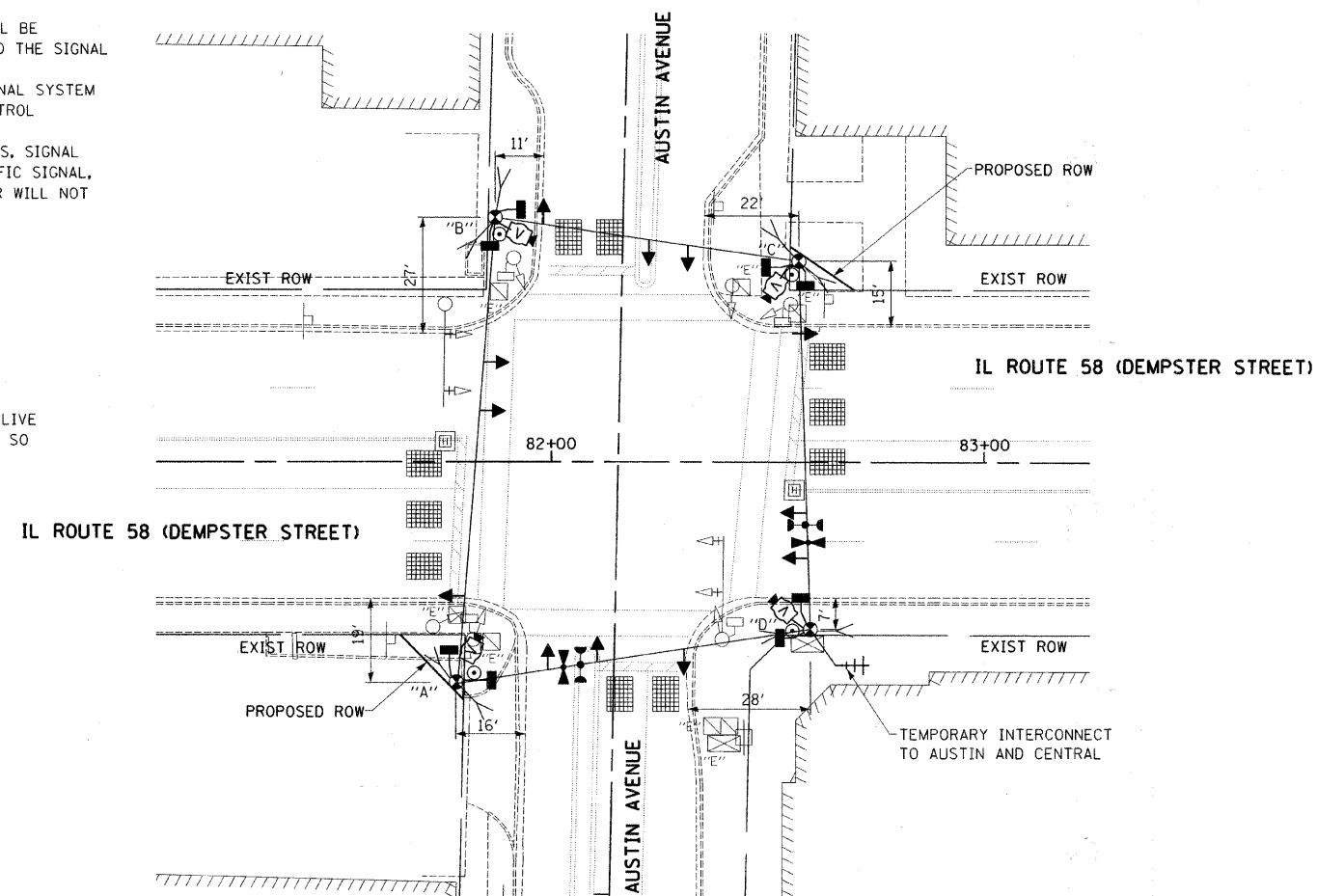
**TRAFFIC SIGNAL NOTES:**

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1. INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

**TEMPORARY RADIO INTERCONNECT NOTES:**

1. INSTALL RADIO MODEM IN TEMPORARY CONTROLLER CABINET.
2. INSTALL ANTENNA ON TEMPORARY WOOD POLE OR OTHER SUITABLE TEMPORARY LOCATION.
3. SUGGESTED ANTENNA LOCATIONS SHOWN ON THE PLANS ARE SUBJECT TO CHANGE BASED ON ACTUAL CONDITIONS IN THE FIELD. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE DUTY TO LOCATE AND INSTALL THE EQUIPMENT SO AS TO ENSURE THE SYSTEM PERFORMANCE IN ACCORDANCE WITH THE SPECIFICATIONS.

THE TRAFFIC CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH EXISTING ADJACENT SYSTEM.



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

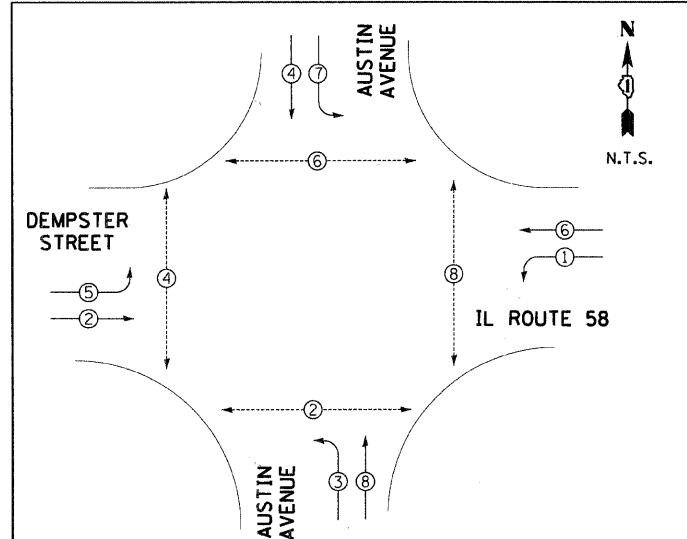
- 1 EACH CONTROLLER AND CABINET, COMPLETE
- 2 EACH MAST ARM ASSEMBLY AND POLE
- 5 EACH SIGNAL POST
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 8 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 1 EACH SERVICE INSTALLATION

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  AUSTIN AVENUE TEMPORARY TRAFFIC SIGNAL PLAN
NAME	DATE	

SCALE: 1"=20'      DRAWN BY: DMB  
DATE: 10-16-09      CHECKED BY: NKU

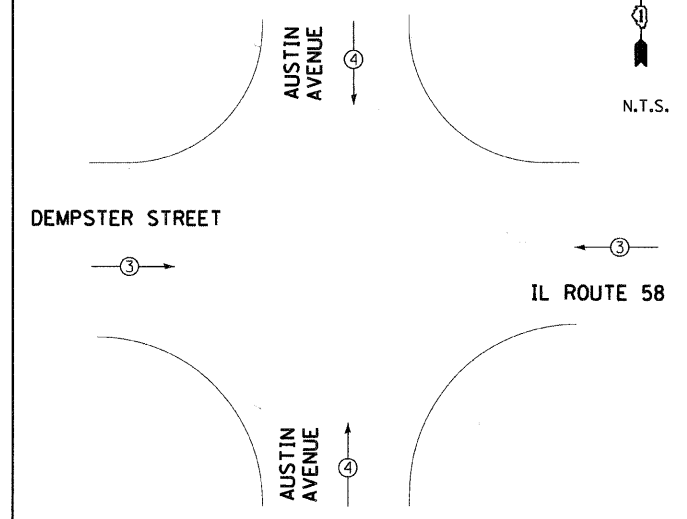
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	37
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 83971



**TEMPORARY PHASE DESIGNATION DIAGRAM**

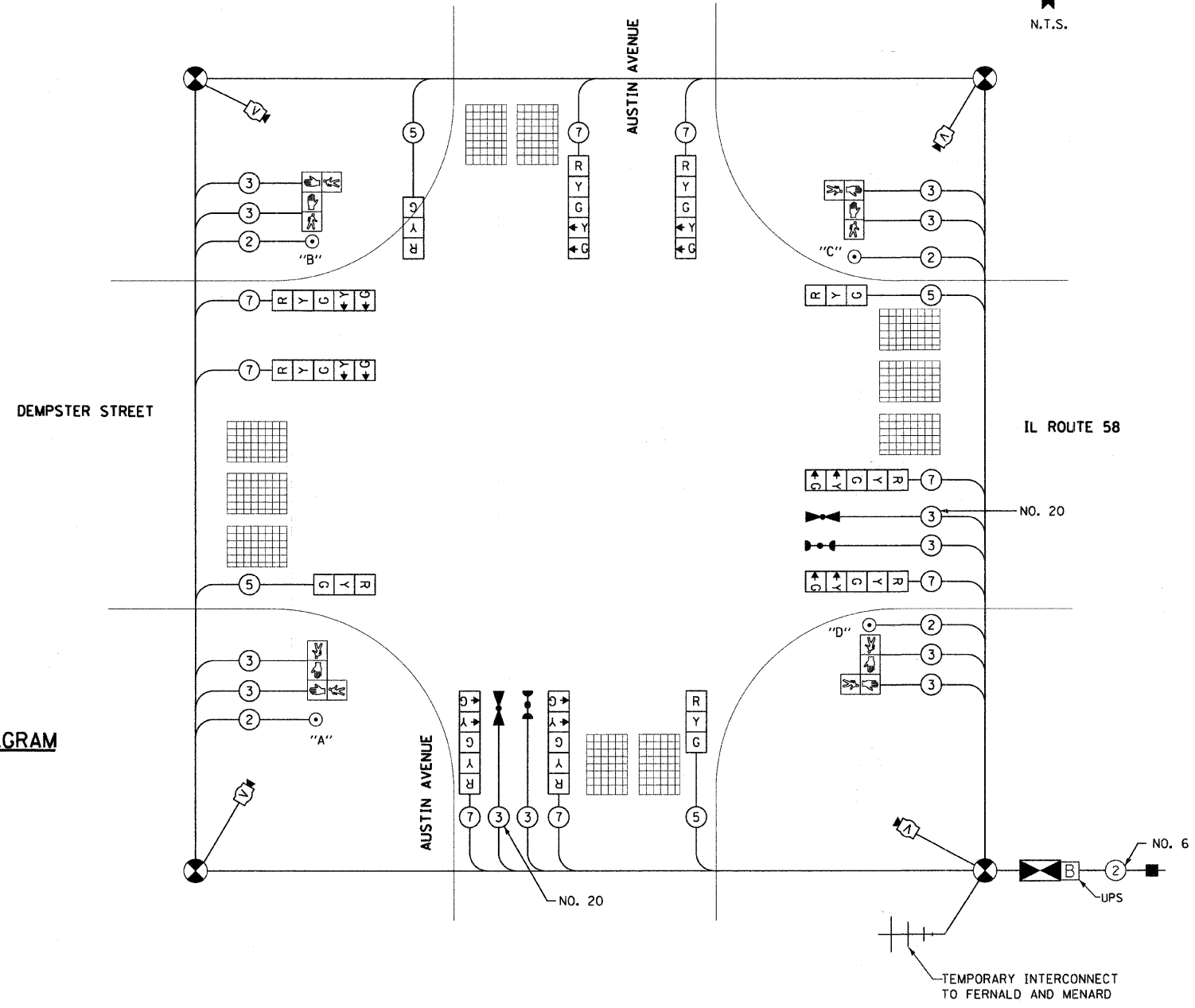
PROPOSED EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTORS	3 4
MOVEMENT	← → ↑ ↓



**TEMPORARY EMERGENCY VEHICLE PREEMPTION DIAGRAM**

- PHASE DIAGRAM LEGEND**
- ← ⊙ → DUAL ENTRY PHASE
  - ← ⊠ → SINGLE ENTRY PHASE
  - ← ⊙ → PEDESTRIAN PHASE
  - \* NUMBER REFERS TO ASSOCIATED PHASE

TEMPORARY RADIO INTERCONNECT MAY BE USED ON THIS PROJECT AS SHOWN IN THE PLANS. RADIO ANTENNAS SHOULD BE INSTALLED ON THE WOOD POLE ADJACENT TO THE TEMPORARY CONTROLLER. ALL WORK RELATED TO THE INSTALLATION AND ENSURING PROPER OPERATION OF THE TEMPORARY INTERCONNECT SHALL BE INCIDENTAL TO THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".



**TEMPORARY CABLE PLAN**

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE (INCAND.)	LED	% OPERATION	
SIGNAL (RED)	12	135	17	0.50	102.0
(YELLOW)	12	135	25	0.25	75.0
(GREEN)	12	135	15	0.25	45.0
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN	0	84	35	0.05	0.0
FLASHER	0		25	0.50	0.0
ENERGY COST TO:	TOTAL =				541.2

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: CINDY ANTHONY-BIAGGI  
 PHONE: (847) 816-5322  
 COMPANY: COMMONWEALTH EDISON

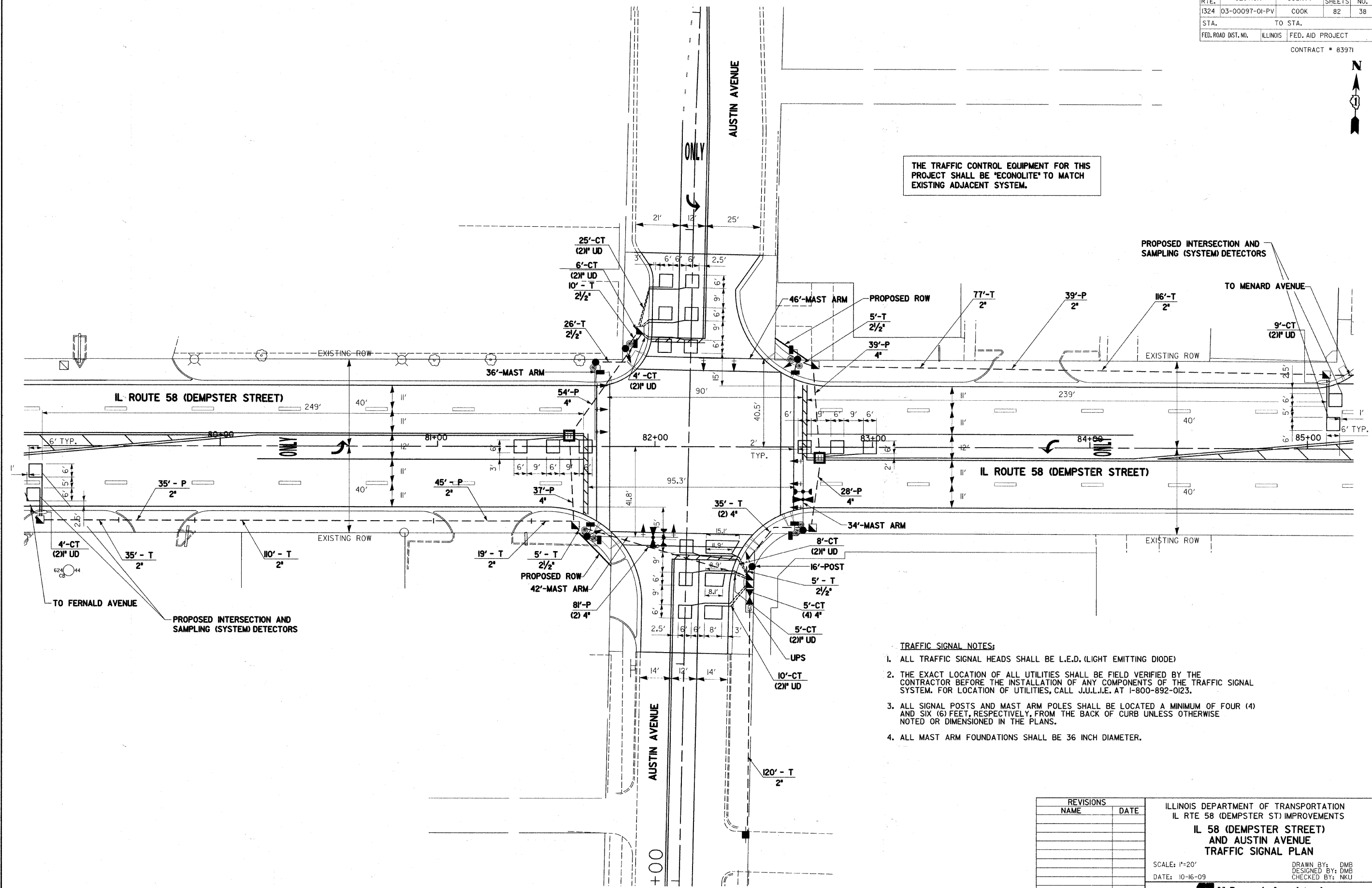
- PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
- PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
- PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
- PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 8 AND 2

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**AUSTIN AVENUE  
 TEMPORARY CABLE PLAN**  
 SCALE: N.T.S. DRAWN BY: DMB  
 DATE: 10-16-09 CHECKED BY: NKU  
**McDonough Associates Inc.**  
 Engineers / Architects



THE TRAFFIC CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE 'ECONOLITE' TO MATCH EXISTING ADJACENT SYSTEM.



- TRAFFIC SIGNAL NOTES:**
1. ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE)
  2. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE TRAFFIC SIGNAL SYSTEM. FOR LOCATION OF UTILITIES, CALL J.U.L.I.E. AT 1-800-892-0123.
  3. ALL SIGNAL POSTS AND MAST ARM POLES SHALL BE LOCATED A MINIMUM OF FOUR (4) AND SIX (6) FEET, RESPECTIVELY, FROM THE BACK OF CURB UNLESS OTHERWISE NOTED OR DIMENSIONED IN THE PLANS.
  4. ALL MAST ARM FOUNDATIONS SHALL BE 36 INCH DIAMETER.

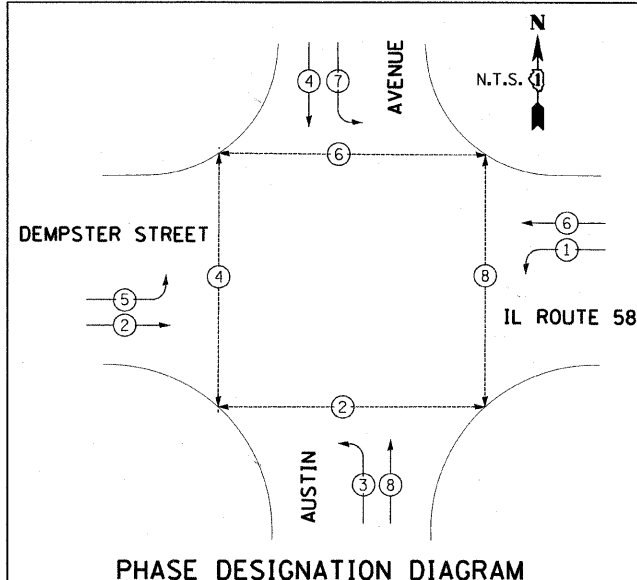
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**IL 58 (DEMPSTER STREET)  
 AND AUSTIN AVENUE  
 TRAFFIC SIGNAL PLAN**

SCALE: 1"=20'  
 DATE: 10-16-09

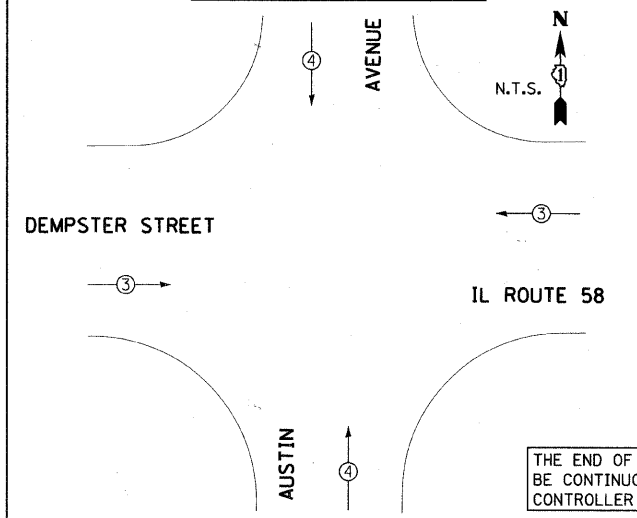
DRAWN BY: DMB  
 DESIGNED BY: DMB  
 CHECKED BY: NKU

**McDonough Associates Inc.**  
 Engineers / Architects



**PHASE DESIGNATION DIAGRAM**

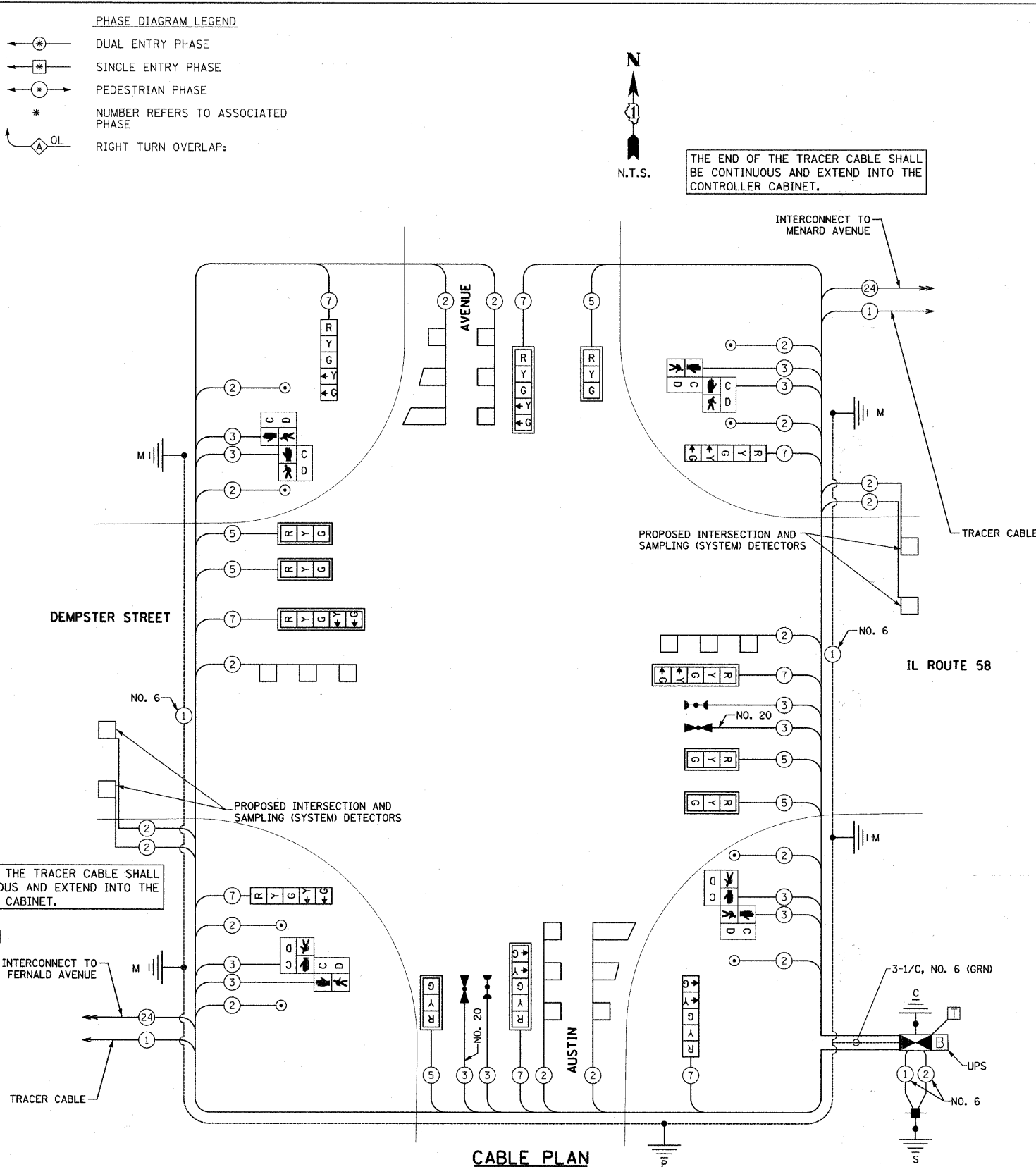
PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	←	↑



**EMERGENCY VEHICLE PREEMPTION DIAGRAM**

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE	INCAND.	LED	
SIGNAL (RED)	14	135	17	0.50	119.0
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	16	90	25	1.00	400.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN	0	84	35	0.05	0.0
FLASHER	0	25	0.50		0.0
ENERGY COST TO:	TOTAL =				778.2

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: CINDY ANTHONY-BIAGGI  
 PHONE: (847) 816-5322  
 COMPANY: COMMONWEALTH EDISON



**CABLE PLAN**

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

**SCHEDULE OF QUANTITIES**

SIGN PANEL - TYPE 1	50 FT	15
SIGN PANEL - TYPE 2	50 FT	30
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	477
CONDUIT IN TRENCH, 1 1/2" DIA., GALVANIZED STEEL	FOOT	57
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	119
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	231
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	544
FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	545
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,622
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,170
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,480
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	3,453
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	125
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
DRILL EXISTING HANDHOLE	EACH	10
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	10
DETECTOR LOOP, TYPE I	FOOT	1,373
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	6
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1C (GREEN)	FOOT	430
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	464
TEMPORARY TRAFFIC SIGNAL TIMINGS	EACH	1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
 IL 58 (DEMPSTER STREET)  
 AND AUSTIN AVENUE  
 CABLE PLAN  
 SCALE: N.T.S. DRAWN BY: DMB  
 DATE: 10-16-09 CHECKED BY: NKU  
 McDonough Associates Inc.  
 Engineers / Architects

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	40
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 83971				



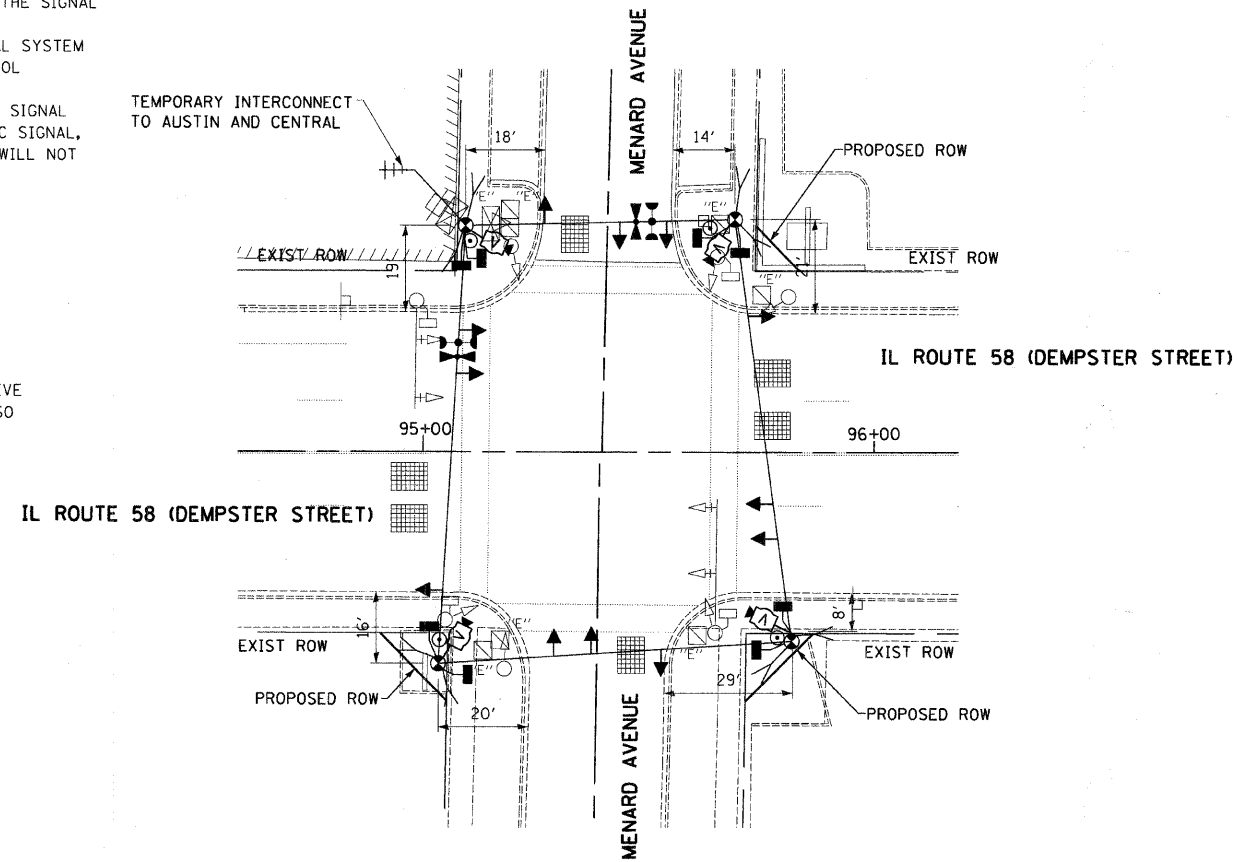
**TRAFFIC SIGNAL NOTES:**

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

**TEMPORARY RADIO INTERCONNECT NOTES:**

1. INSTALL RADIO MODEM IN TEMPORARY CONTROLLER CABINET.
2. INSTALL ANTENNA ON TEMPORARY WOOD POLE OR OTHER SUITABLE TEMPORARY LOCATION.
3. SUGGESTED ANTENNA LOCATIONS SHOWN ON THE PLANS ARE SUBJECT TO CHANGE BASED ON ACTUAL CONDITIONS IN THE FIELD. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE DUTY TO LOCATE AND INSTALL THE EQUIPMENT SO AS TO ENSURE THE SYSTEM PERFORMANCE IN ACCORDANCE WITH THE SPECIFICATIONS.

THE TRAFFIC CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH EXISTING ADJACENT SYSTEM.



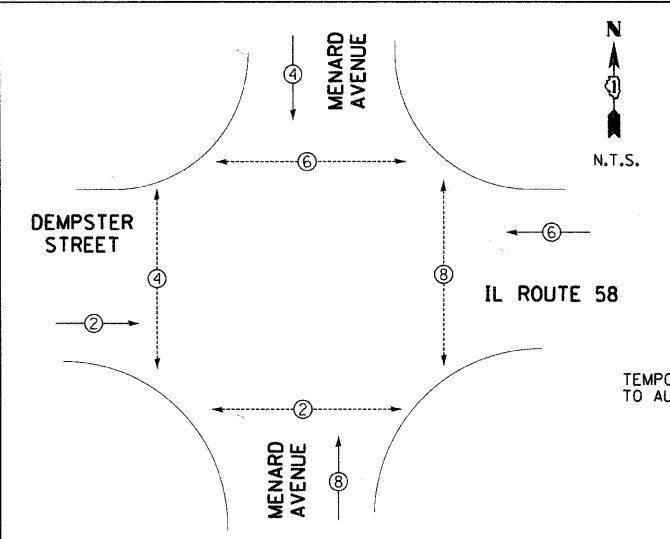
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE OF THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH CONTROLLER AND CABINET, COMPLETE
- 2 EACH MAST ARM ASSEMBLY AND POLE
- 6 EACH SIGNAL POST
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 10 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 1 EACH SERVICE INSTALLATION

REVISIONS	
NAME	DATE

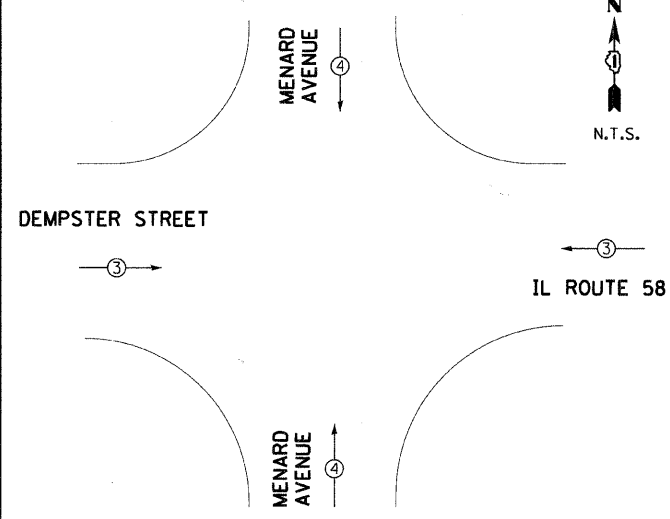
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**MENARD AVENUE  
 TEMPORARY TRAFFIC SIGNAL PLAN**  
 SCALE: 1"=20' DRAWN BY: DMB  
 DATE: 10-16-09 CHECKED BY: NKU  
 McDonough Associates Inc.  
 Engineers / Architects





**TEMPORARY PHASE DESIGNATION DIAGRAM**

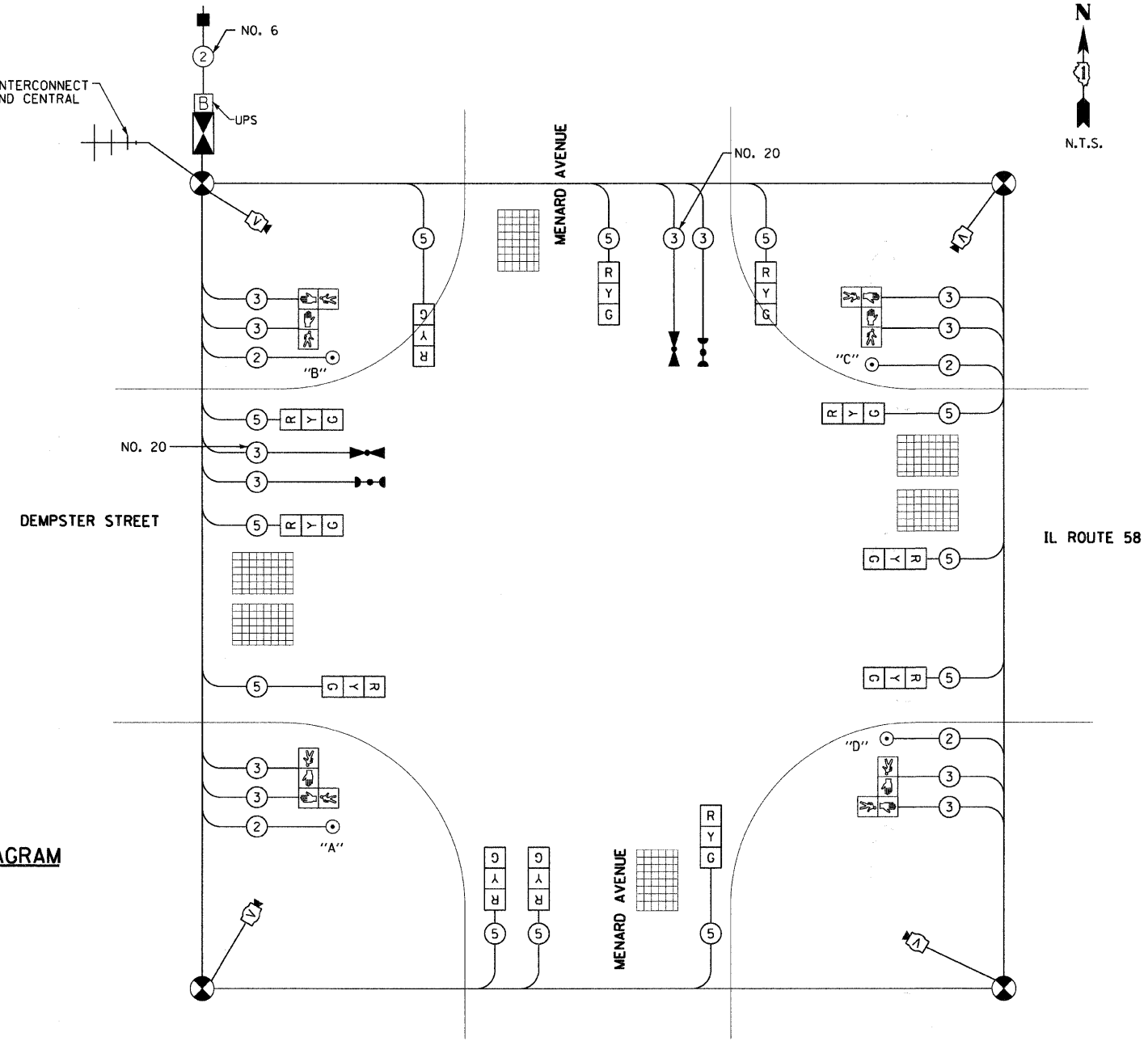
PROPOSED EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTORS	3 4
MOVEMENT	← → ↑ ↓



**TEMPORARY EMERGENCY VEHICLE PREEMPTION DIAGRAM**

- PHASE DIAGRAM LEGEND**
- ← ⊙ → DUAL ENTRY PHASE
  - ← ⊠ → SINGLE ENTRY PHASE
  - ← ⊙ P → PEDESTRIAN PHASE
  - \* NUMBER REFERS TO ASSOCIATED PHASE

TEMPORARY RADIO INTERCONNECT MAY BE USED ON THIS PROJECT AS SHOWN IN THE PLANS. RADIO ANTENNAS SHOULD BE INSTALLED ON THE WOOD POLE ADJACENT TO THE TEMPORARY CONTROLLER. ALL WORK RELATED TO THE INSTALLATION AND ENSURING PROPER OPERATION OF THE TEMPORARY INTERCONNECT SHALL BE INCIDENTAL TO THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".



**TEMPORARY CABLE PLAN**

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED)	12	135	17	0.50	102.0
(YELLOW)	12	135	25	0.25	75.0
(GREEN)	12	135	15	0.25	45.0
ARROW	0	135	12	0.10	0.0
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN	0	84	35	0.05	0.0
FLASHER	0		25	0.50	0.0
ENERGY COST TO:	TOTAL =				522.0

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: CINDY ANTHONY-BIAGGI  
 PHONE: (847) 816-5322  
 COMPANY: COMMONWEALTH EDISON

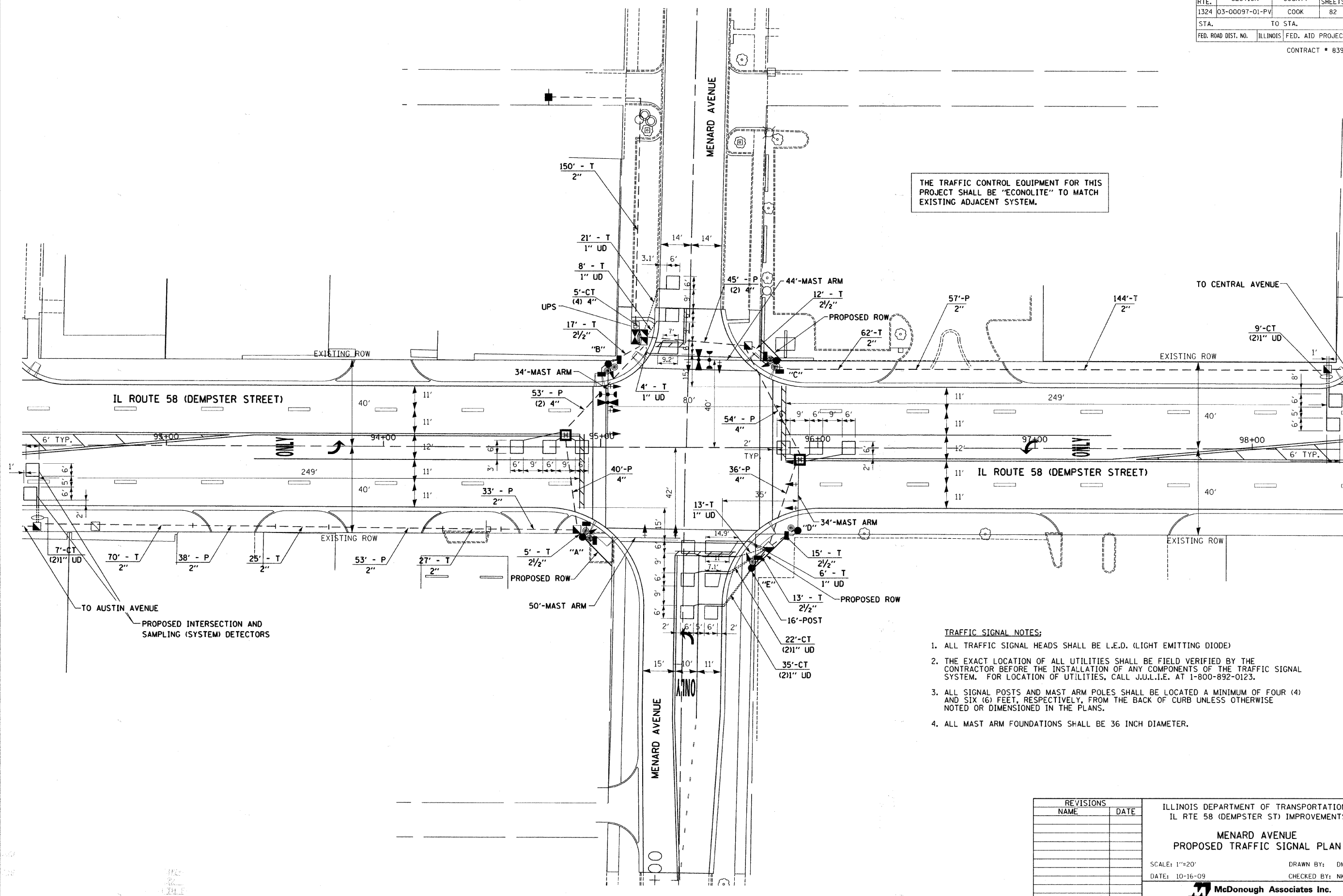
- PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
- PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
- PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
- PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 8 AND 2

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**MENARD AVENUE  
 TEMPORARY CABLE PLAN**  
 SCALE: N.T.S. DRAWN BY: DMB  
 DATE: 10-16-09 CHECKED BY: NKU  
 McDonough Associates Inc.  
 Engineers / Architects

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	42
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 83971



THE TRAFFIC CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH EXISTING ADJACENT SYSTEM.

**TRAFFIC SIGNAL NOTES:**

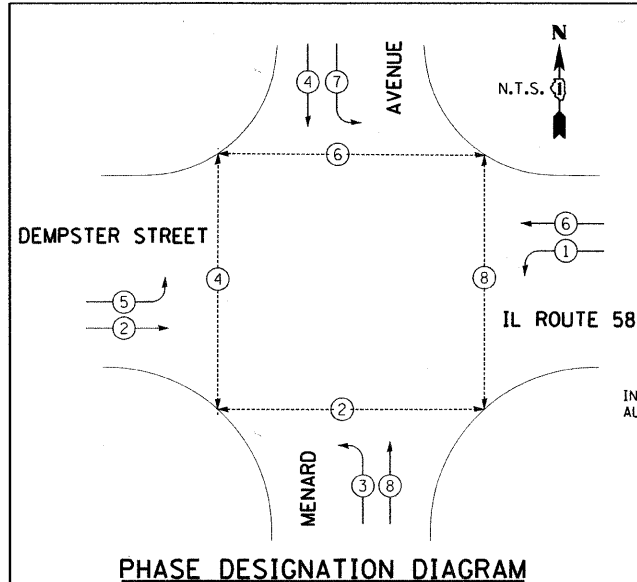
1. ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE)
2. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE TRAFFIC SIGNAL SYSTEM. FOR LOCATION OF UTILITIES, CALL J.U.L.I.E. AT 1-800-892-0123.
3. ALL SIGNAL POSTS AND MAST ARM POLES SHALL BE LOCATED A MINIMUM OF FOUR (4) AND SIX (6) FEET, RESPECTIVELY, FROM THE BACK OF CURB UNLESS OTHERWISE NOTED OR DIMENSIONED IN THE PLANS.
4. ALL MAST ARM FOUNDATIONS SHALL BE 36 INCH DIAMETER.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**MENARD AVENUE  
 PROPOSED TRAFFIC SIGNAL PLAN**

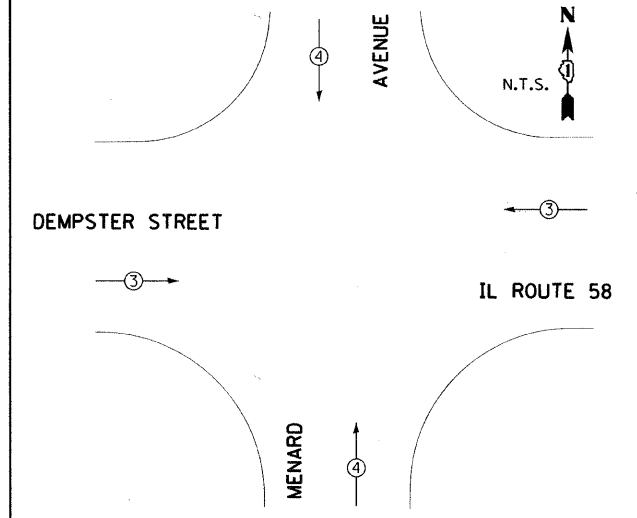
SCALE: 1"=20'  
 DATE: 10-16-09  
 DRAWN BY: DMB  
 CHECKED BY: NKU





**PHASE DESIGNATION DIAGRAM**

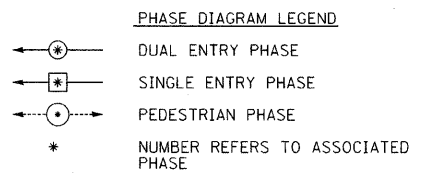
PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	← →	↑ ↓



**EMERGENCY VEHICLE PREEMPTION DIAGRAM**

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED) (YELLOW) (GREEN)	14	135	17	0.50	119.0
	14	135	25	0.25	87.5
	14	135	15	0.25	52.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	16	90	25	1.00	400.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN	0	84	35	0.05	0.0
FLASHER	0		25	0.50	0.0
ENERGY COST TO:				TOTAL =	778.2

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: CINDY ANTHONY-BIAGGI  
 PHONE: (847) 816-5322  
 COMPANY: COMMONWEALTH EDISON



THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

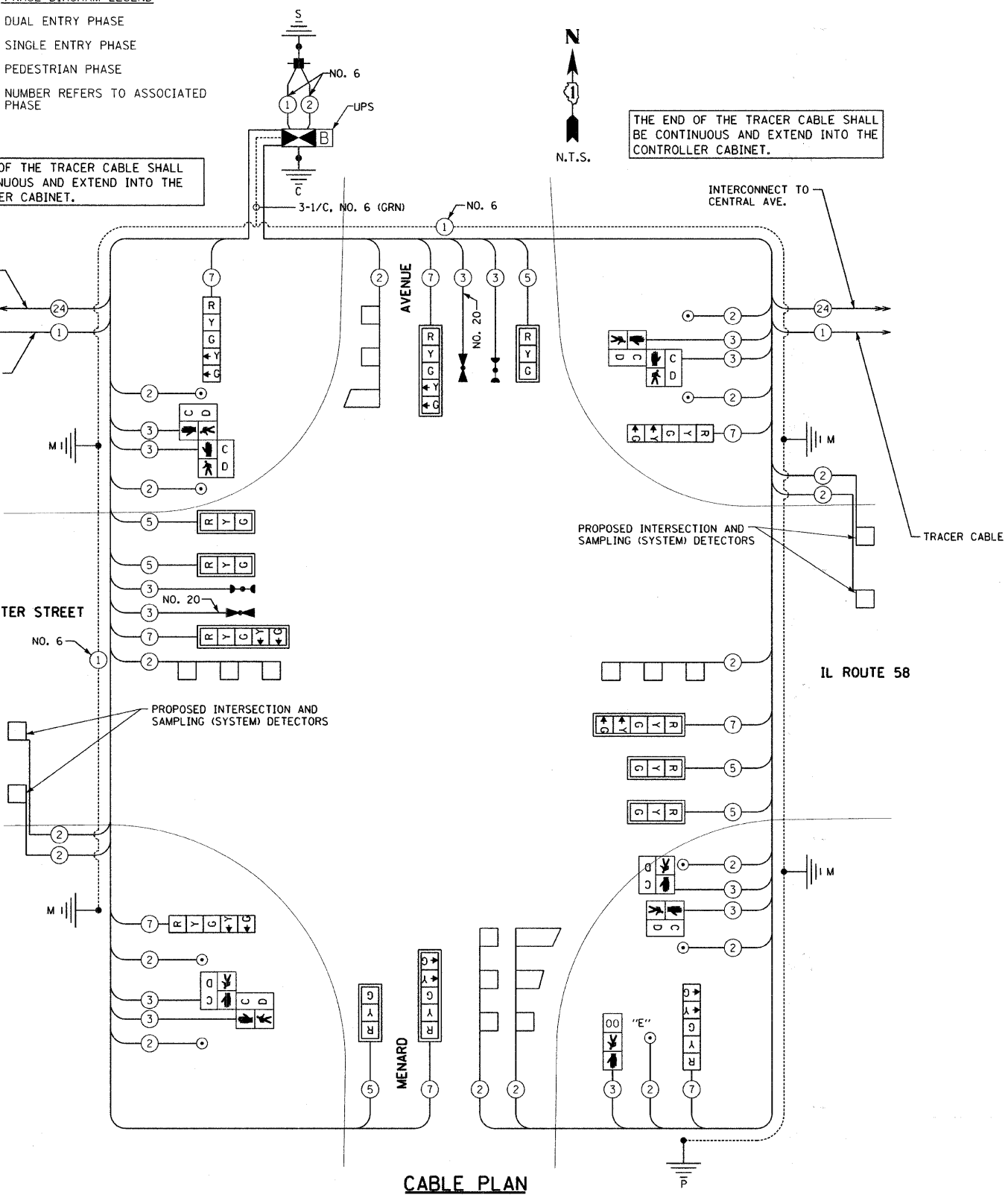
INTERCONNECT TO AUSTIN AVE.

TRACER CABLE

DEMPSTER STREET

PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

**CABLE PLAN**



THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

INTERCONNECT TO CENTRAL AVE.

IL ROUTE 58

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

**SCHEDULE OF QUANTITIES**

DESCRIPTION	QUANTITY	UNIT
SIGN PANEL - TYPE 1	15	SO FT
SIGN PANEL - TYPE 2	30	SO FT
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	478	FOOT
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	62	FOOT
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	10	FOOT
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	181	FOOT
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	229	FOOT
HANDHOLE	5	EACH
HEAVY-DUTY HANDHOLE	2	EACH
DOUBLE HANDHOLE	1	EACH
TRENCH AND BACKFILL FOR ELECTRICAL WORK	550	FOOT
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	1	EACH
TRANSCEIVER - FIBER OPTIC	1	EACH
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	680	FOOT
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	1,271	FOOT
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	1,010	FOOT
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	1,340	FOOT
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	3,188	FOOT
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	165	FOOT
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	1	EACH
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	2	EACH
STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	1	EACH
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	1	EACH
CONCRETE FOUNDATION, TYPE A	4	FOOT
CONCRETE FOUNDATION, TYPE C	4	FOOT
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	60	FOOT
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	6	EACH
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	4	EACH
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	4	EACH
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	2	EACH
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	3	EACH
TRAFFIC SIGNAL BACKPLATE	10	EACH
INDUCTIVE LOOP DETECTOR	9	EACH
DETECTOR LOOP, TYPE I	9	FOOT
LIGHT DETECTOR	1,138	FOOT
LIGHT DETECTOR AMPLIFIER	2	EACH
PEDESTRIAN PUSH-BUTTON	1	EACH
TEMPORARY TRAFFIC SIGNAL INSTALLATION	8	EACH
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	1	EACH
REMOVE EXISTING HANDHOLE	1	EACH
REMOVE EXISTING CONCRETE FOUNDATION	6	EACH
ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1C (GREEN)	415	FOOT
SERVICE INSTALLATION - POLE MOUNTED	1	EACH
UNINTERRUPTIBLE POWER SUPPLY	1	EACH
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	237	FOOT
TEMPORARY TRAFFIC SIGNAL TIMINGS	1	EACH

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**MENARD AVENUE PROPOSED CABLE PLAN**  
 SCALE: N.T.S. DRAWN BY: DMB  
 DATE: 10-16-09 CHECKED BY: NKU

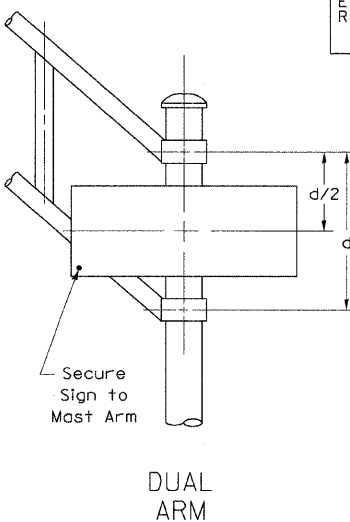
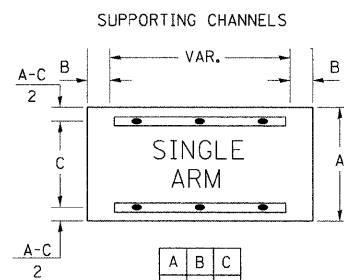
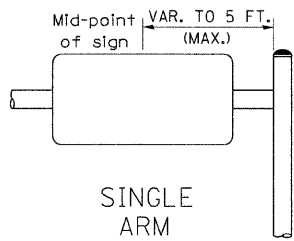
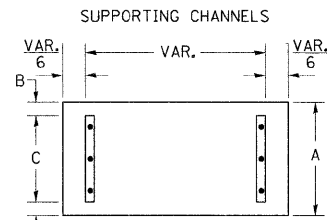
**GENERAL NOTES**

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 834001, 834006 AND 834011, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" X 6'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
- THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 6'-0".
- ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL PLOES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:

- |                      |                               |
|----------------------|-------------------------------|
| A.K.T. CORPORATION   | AMERICAN FABRICATION CO.      |
| SCHAUMBURG, IL       | CHICAGO HEIGHTS, IL           |
| TUCKER COMPANY, INC. | WESTERN TRAFFIC CONTROL, INC. |
| WAUWATOSA, WI        | CICERO, IL                    |

**PARTS LISTING:**

- |              |   |
|--------------|---|
| SIGN CHANNEL | PART #HPN053 (MED. CHANNEL)                   |
| SIGN SCREWS  | 1/4" X 14 X 1" H.W.H. #3                      |
|              | SELF TAPPING WITH NEOPREEM WASHER             |
| BRACKETS     | PART #HPN034 (UNIVERSAL)                      |
|              | CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING |
- OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE PRODUCT.



EXAMPLE, 2 DENOTES 3/8"

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

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

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

SERIES	SECOND LETTER															
	a c d e		b h i k l		f w		j		s t		v y		x		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
adghj	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17
imngu	12	14	16	17	11	12	05	06	11	12	11	12	12	14	12	14
bfkops	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
c e	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
r	06	10	12	14	06	10	03	03	05	06	05	06	06	10	06	10
t z	12	14	16	17	12	14	06	10	11	12	11	12	12	14	12	14
v y	11	12	14	15	11	12	05	06	06	10	06	10	11	12	11	12
w	11	12	14	15	11	12	05	06	11	12	11	12	11	12	12	14
x	12	14	16	17	11	12	05	06	11	12	11	12	11	12	12	14

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

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

**UPPER AND LOWER CASE**

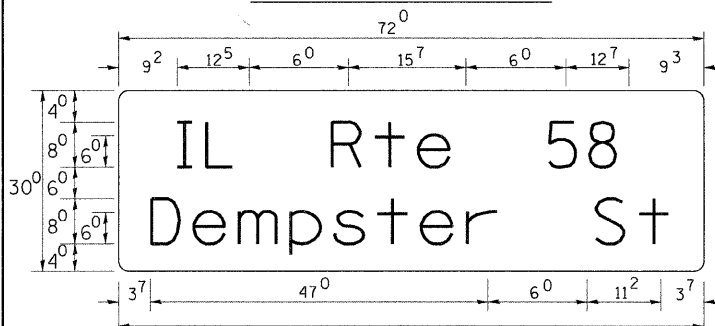
**LETTER WIDTHS**

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

NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>
2	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
3	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
4	3 <sup>5</sup>	4 <sup>3</sup>	4 <sup>7</sup>	5 <sup>7</sup>
5	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
6	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
7	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
8	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
9	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
0	3 <sup>4</sup>	4 <sup>2</sup>	4 <sup>5</sup>	5 <sup>5</sup>

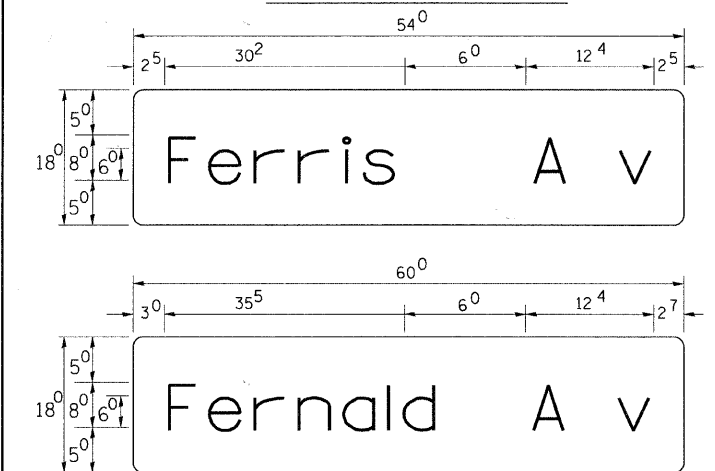
NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS.

PANEL SIGN DESIGN TYPE 2



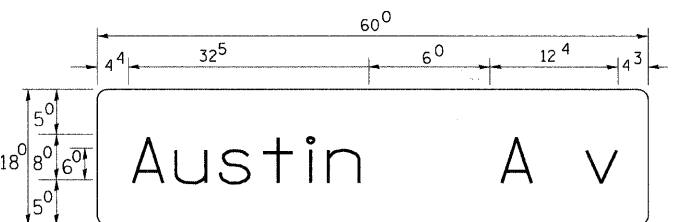
15.0 Sq. Ft. each  
2 Required  
Design Series D

PANEL SIGN DESIGN TYPE 1

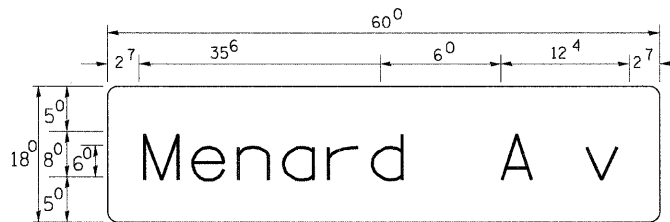


6.75 Sq. Ft. each  
2 Required  
Design Series D

7.5 Sq. Ft. each  
2 Required  
Design Series D



7.5 Sq. Ft. each  
2 Required  
Design Series D



7.5 Sq. Ft. each  
2 Required  
Design Series D

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

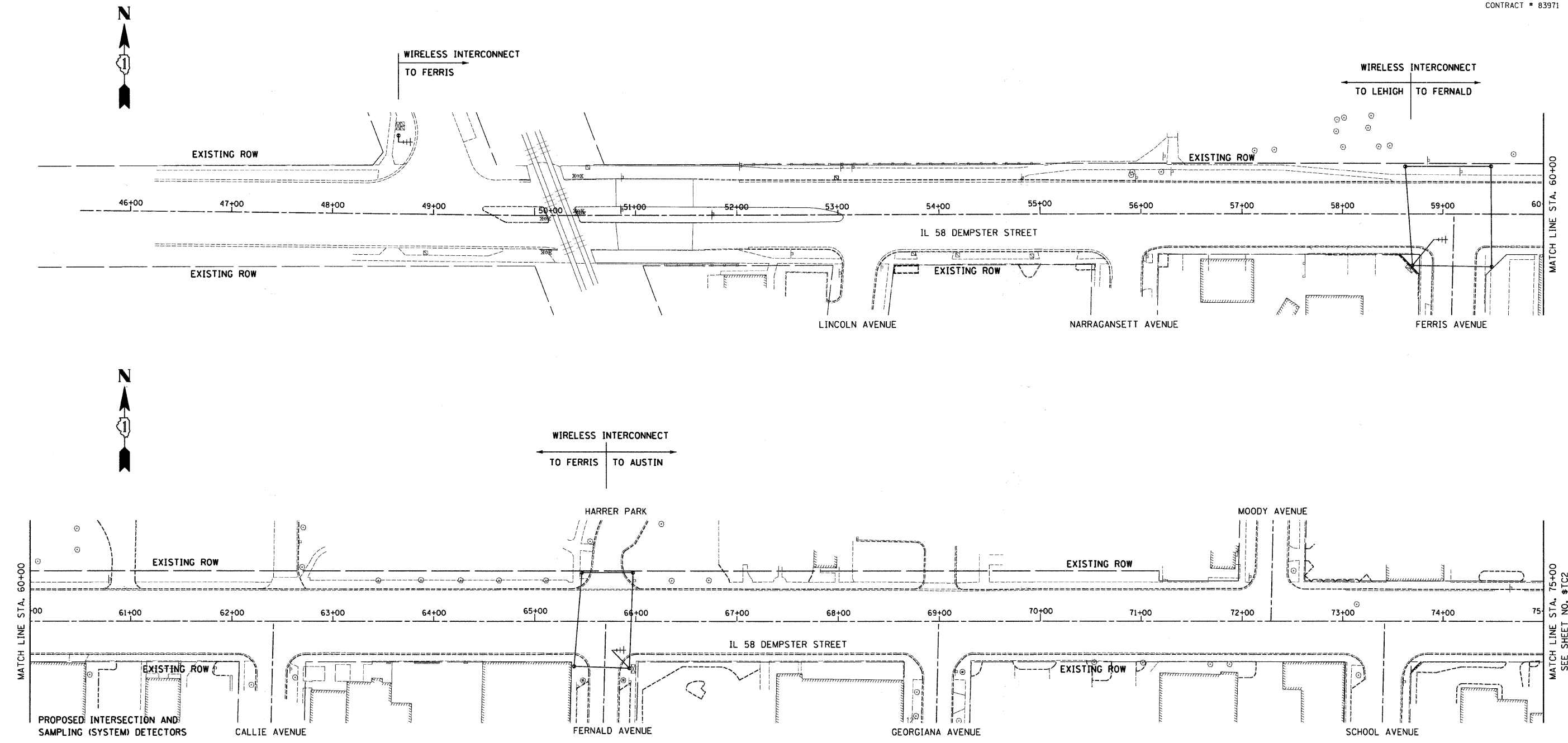
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**MAST ARM MOUNTED STREET NAME SIGNS**

SCALE: N.T.S. DRAWN BY: BA  
DATE: 10-16-09 CHECKED BY: RY

**McDonough Associates Inc.**  
Engineers / Architects

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	45
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 83971				



THE TRAFFIC CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH EXISTING ADJACENT SYSTEM.

REVISIONS	
NAME	DATE

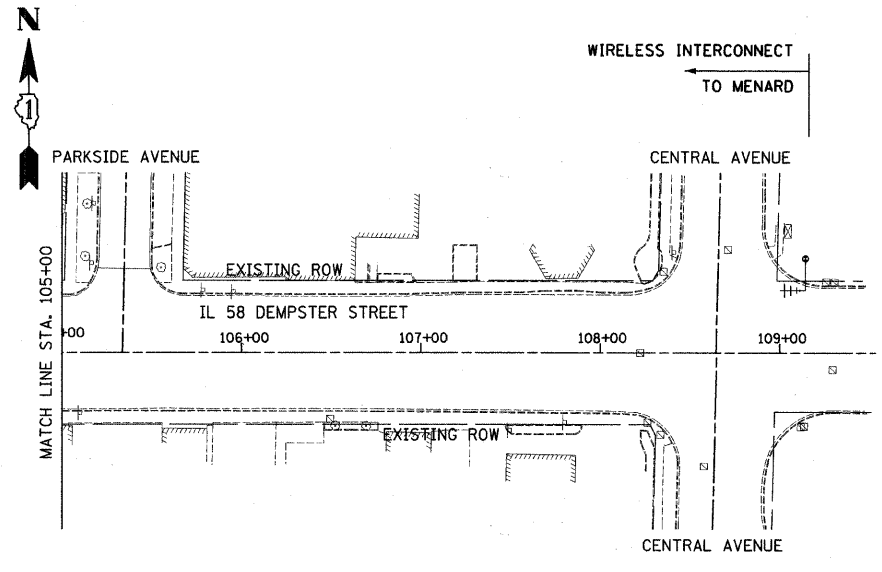
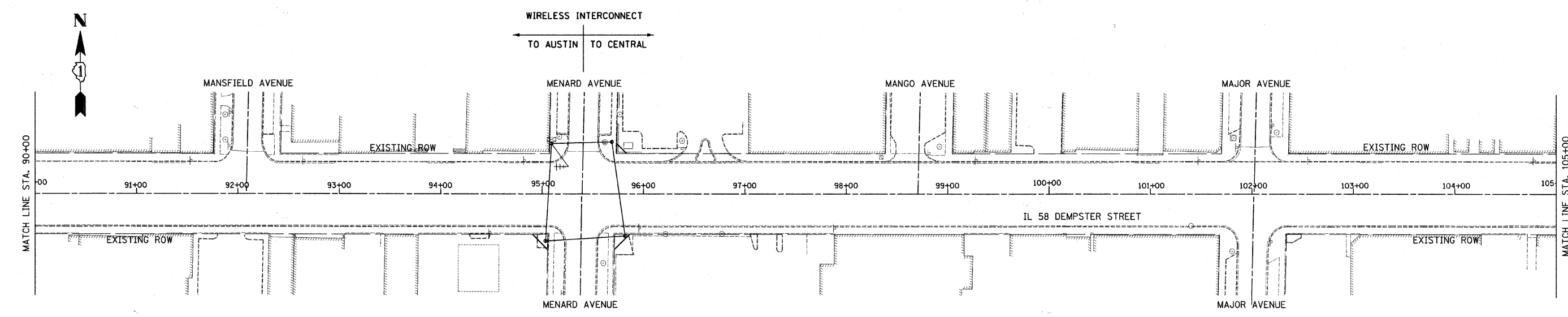
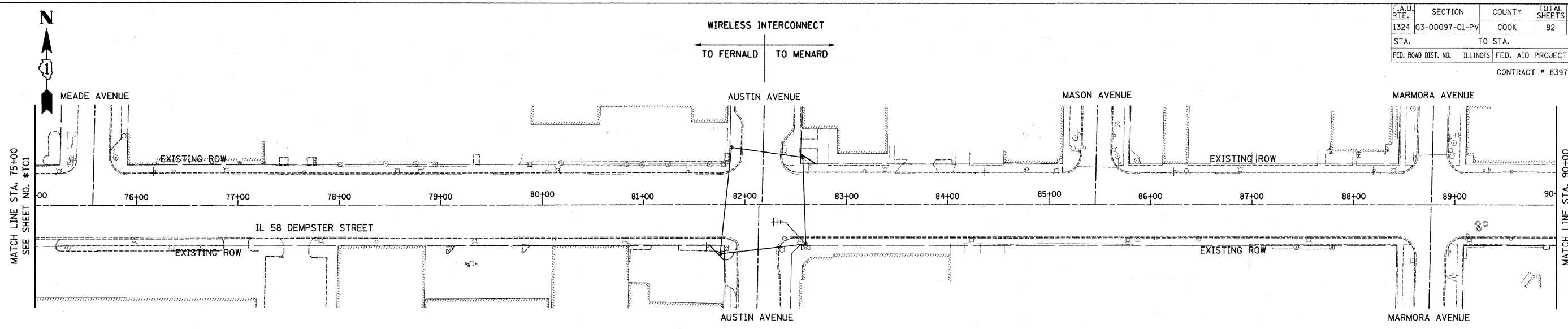
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**TEMPORARY INTERCONNECT PLAN**

SCALE: 1" = 50'  
 DATE: 10-16-09

DRAWN BY: NKU  
 CHECKED BY: RY

**McDonough Associates Inc.**  
 Engineers / Architects

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	46
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 83971				



THE TRAFFIC CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH EXISTING ADJACENT SYSTEM.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
 TEMPORARY INTERCONNECT PLAN

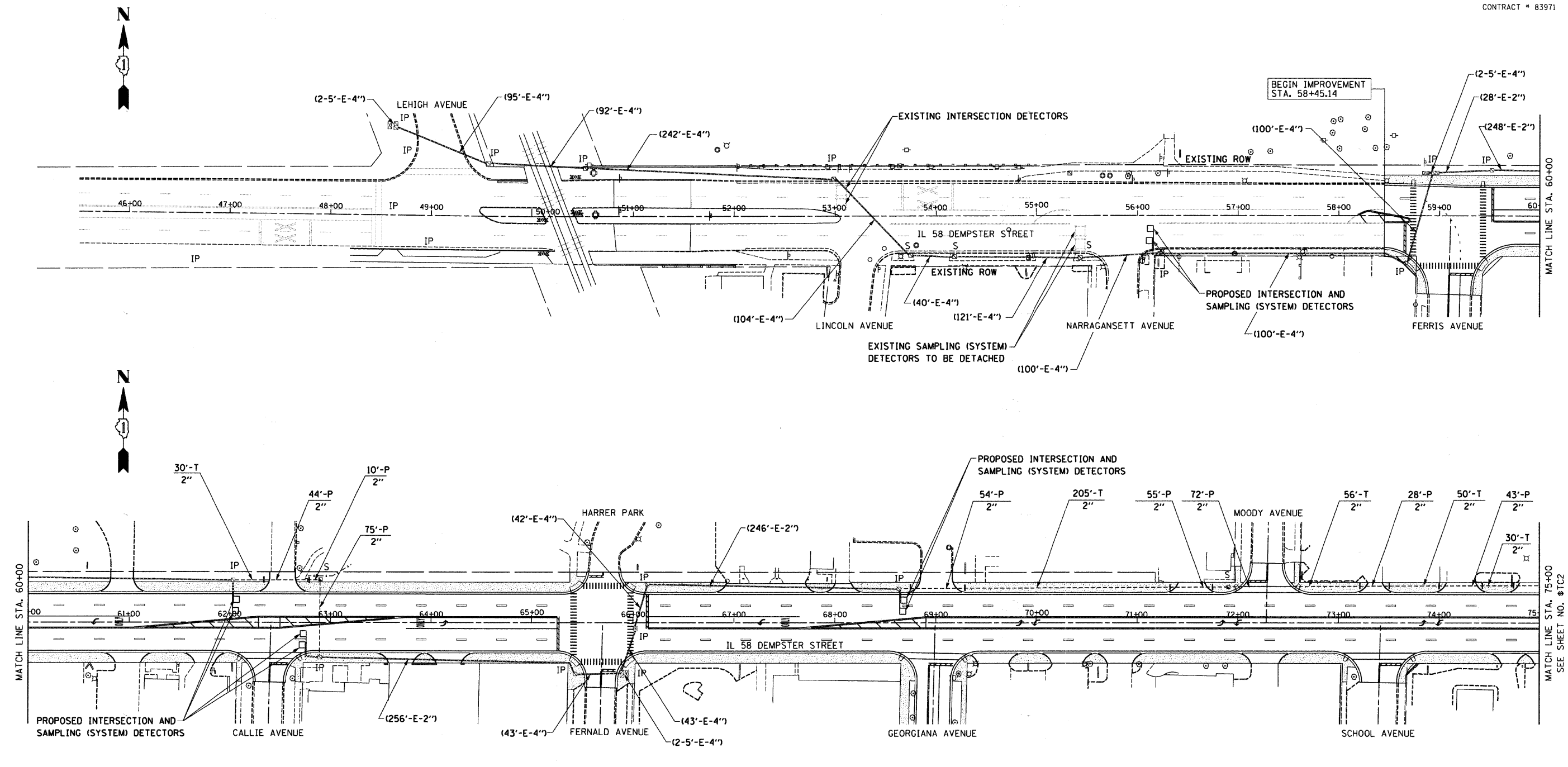
SCALE: 1" = 50'  
 DATE: 10-16-09

DRAWN BY: NKU  
 CHECKED BY: RY

**McDonough Associates Inc.**  
 Engineers / Architects



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	48
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 83971				



**INTERCONNECT PLAN LEGEND**

	PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	[Symbol]	[Symbol]
DETECTOR LOOP	[Symbol]	[Symbol]
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	I

THE TRAFFIC CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH EXISTING ADJACENT SYSTEM.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**INTERCONNECT PLAN**

SCALE: 1" = 50'  
 DATE: 10-16-09

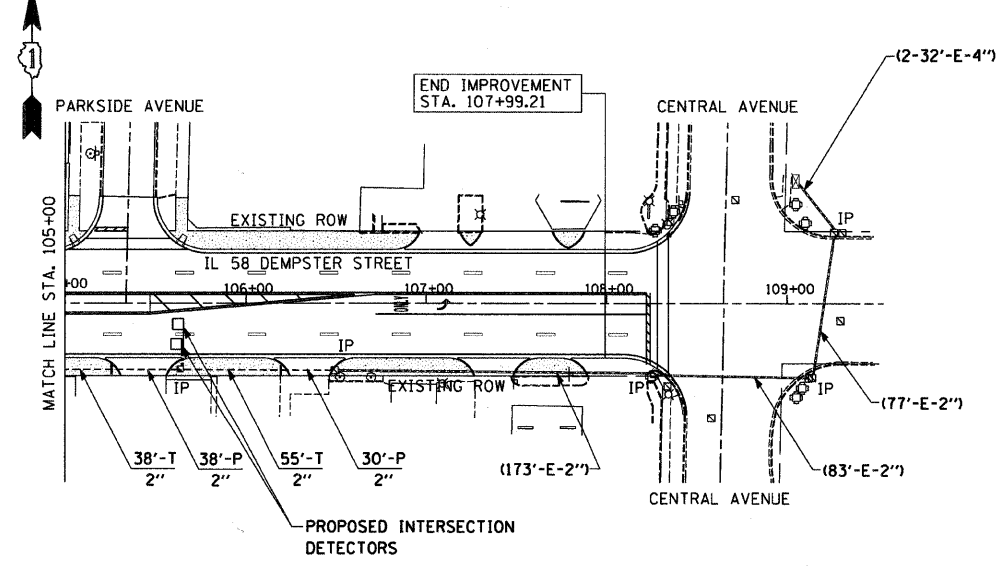
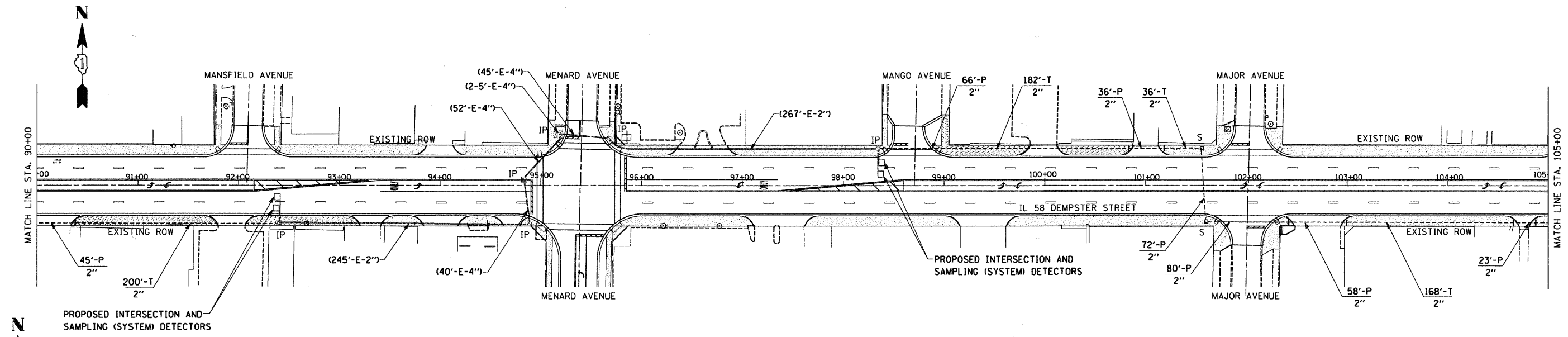
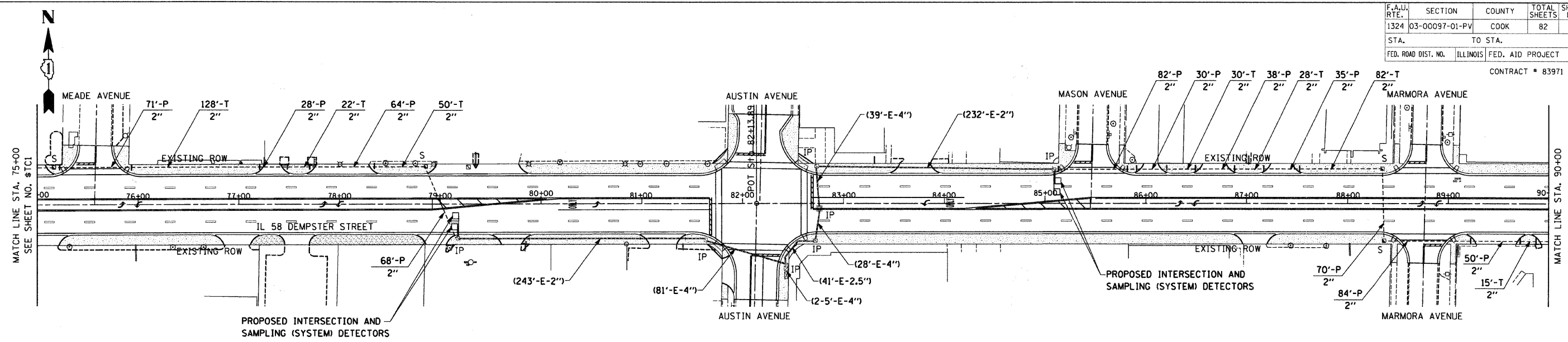
DRAWN BY: NKU  
 CHECKED BY: RY

**McDonough Associates Inc.**  
 Engineers / Architects



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	49
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 83971



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER		
HANDHOLE		
DOUBLE HANDHOLE		
HEAVY DUTY HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
DETECTOR LOOP		
UNIT DUCT		
SYSTEM		
INTERSECTION		

THE TRAFFIC CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH EXISTING ADJACENT SYSTEM.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**INTERCONNECT PLAN**

SCALE: 1" = 50'  
 DATE: 10-16-09

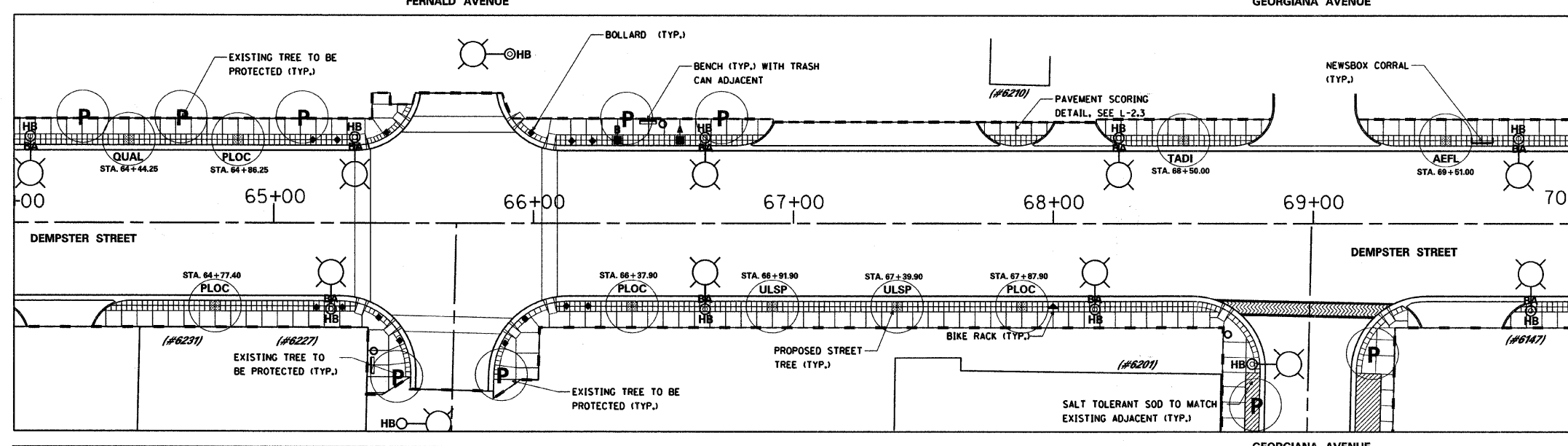
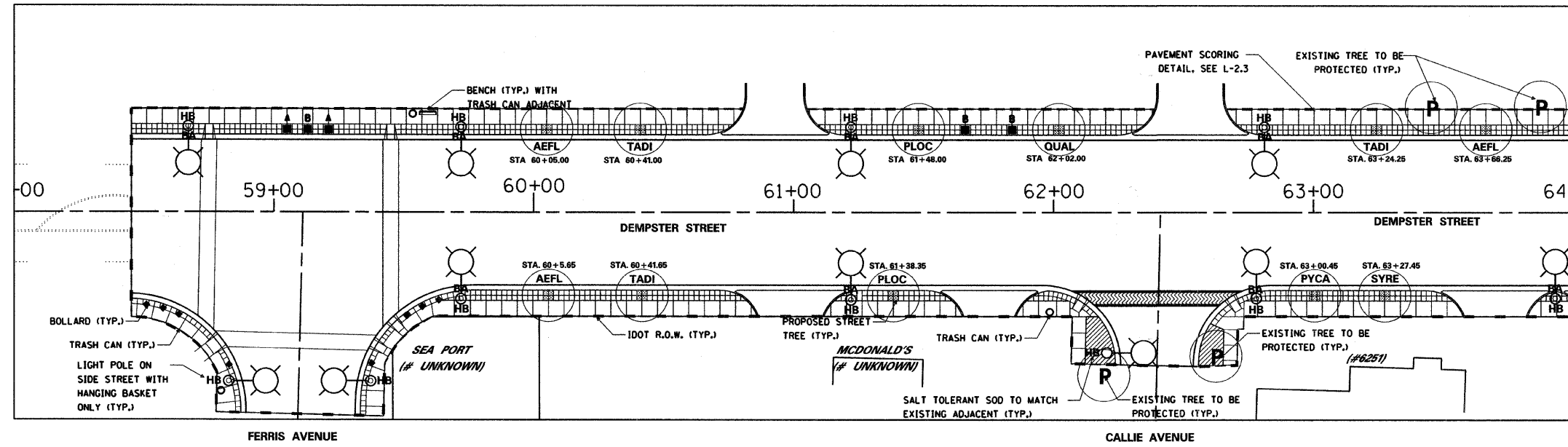
DRAWN BY: NKU  
 CHECKED BY: RY

McDonough Associates Inc.  
 Engineers / Architects



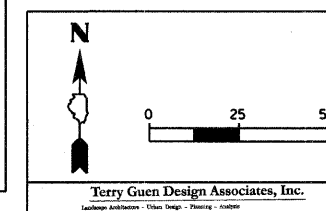
F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	03-00097-01-PV	COOK	82	51
STA. 58+00		TO STA. 70+00		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
CONTRACT # 83971				

- NOTES:
- PERMANENT STREET FURNISHINGS LOCATED TO MAINTAIN MINIMUM 6 FOOT CLEAR SIDEWALK ACCESS ADJACENT TO BUILDINGS.
  - PROVIDE C.U. STRUCTURAL SOIL FOR STREET TREE PLANTINGS. SEE SHEETS L-2.1 AND L-2.2.
  - MAXIMUM PAVEMENT WIDTH AS SHOWN. NOTIFY VILLAGE OF MORTON GROVE TO REVIEW SITE CONDITIONS WHERE NEW PAVEMENT DOES NOT MEET BUILDING LINE. OWNER TO DIRECT WORK BASED UPON CONTRACTOR ESTIMATE FOR TOTAL PROJECT AREAS.
  - TREE LOCATIONS ARE INDICATED ON PLAN BY "STA. XX+XX.XX". ALL TREES LOCATED 32.0' FROM CENTERLINE OF ROAD (TYP.), EXCEPT WHERE NOTED OTHERWISE. COORDINATE TREE PITS TO FALL EVENLY WITH PAVEMENT AND PAVEMENT SCORE PATTERNS PER DETAIL.
  - ALL STREET TREES TO BE PLANTED IN THE CENTER OF A 10'x25'x3' DEEP PROFILE OF C.U. STRUCTURAL SOIL.
  - WATER, GATORBAGS, FOR INSTALL AND ESTABLISHMENT OF PLANTS, AND ALL MAINTENANCE ACTIVITIES BEFORE THE END OF CONTRACT TO BE PROVIDED CONTRACTOR, PLANT MAINTENANCE ACTIVITIES TO BE PROVIDED BY THE VILLAGE OF MORTON GROVE, AT END OF CONTRACT ONLY.
  - SIDEWALK PAVING SCORE LINES. SEE LANDSCAPE DETAILS.
  - LIGHT STANDARDS, CURB CUTS, ADA ACCESS RAMP INDICATED FOR COORDINATION PURPOSES, SEE ENGINEER'S DOCUMENTS FOR LAYOUT AND DETAILS.
  - PERMANENT STREET FURNISHINGS SHOP DRAWINGS: CONTRACTOR TO SUBMIT SHOP DRAWINGS INDICATING DIMENSIONS, LOCATIONS OF ALL PERMANENT STREET FURNISHINGS FOR REVIEW BY VILLAGE OF MORTON GROVE FOR DRAWING APPROVAL. FIELD MARK APPROVED DRAWN LOCATIONS FOR ENGINEER PRIOR TO INSTALLATION OF FOUNDATIONS FOR FURNITURE.



**KEY:**

	BENCH		SODDING, SALT TOLERANT (TYP.)		NEWSBOX CORRAL		EXISTING TREE TO BE PROTECTED (#5801)		APPROXIMATE STREET ADDRESS
	TRASH CAN		LIGHT STANDARD WITH BANNER ARM (STREET SIDE) & HANGING BASKET ARM (SIDEWALK SIDE)		TREE STATION LOCATION AND SPECIES INFORMATION STA. XX+XX.XX XXXX		EXISTING TREE TO BE REMOVED		APPROXIMATE IDOT R.O.W.
	BIKE RACK		LIGHT STANDARD ON SIDE STREET WITH HANGING BASKET ONLY		STAMPED ASPHALT CROSSWALK				
	PLANTER BOX (SEE DETAILS)								
	BOLLARD								



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS

**LANDSCAPE AND FURNISHINGS PLAN**

SCALE: 1" = 25'  
DATE: 10-16-09

DRAWN BY: TH  
CHECKED BY: TG

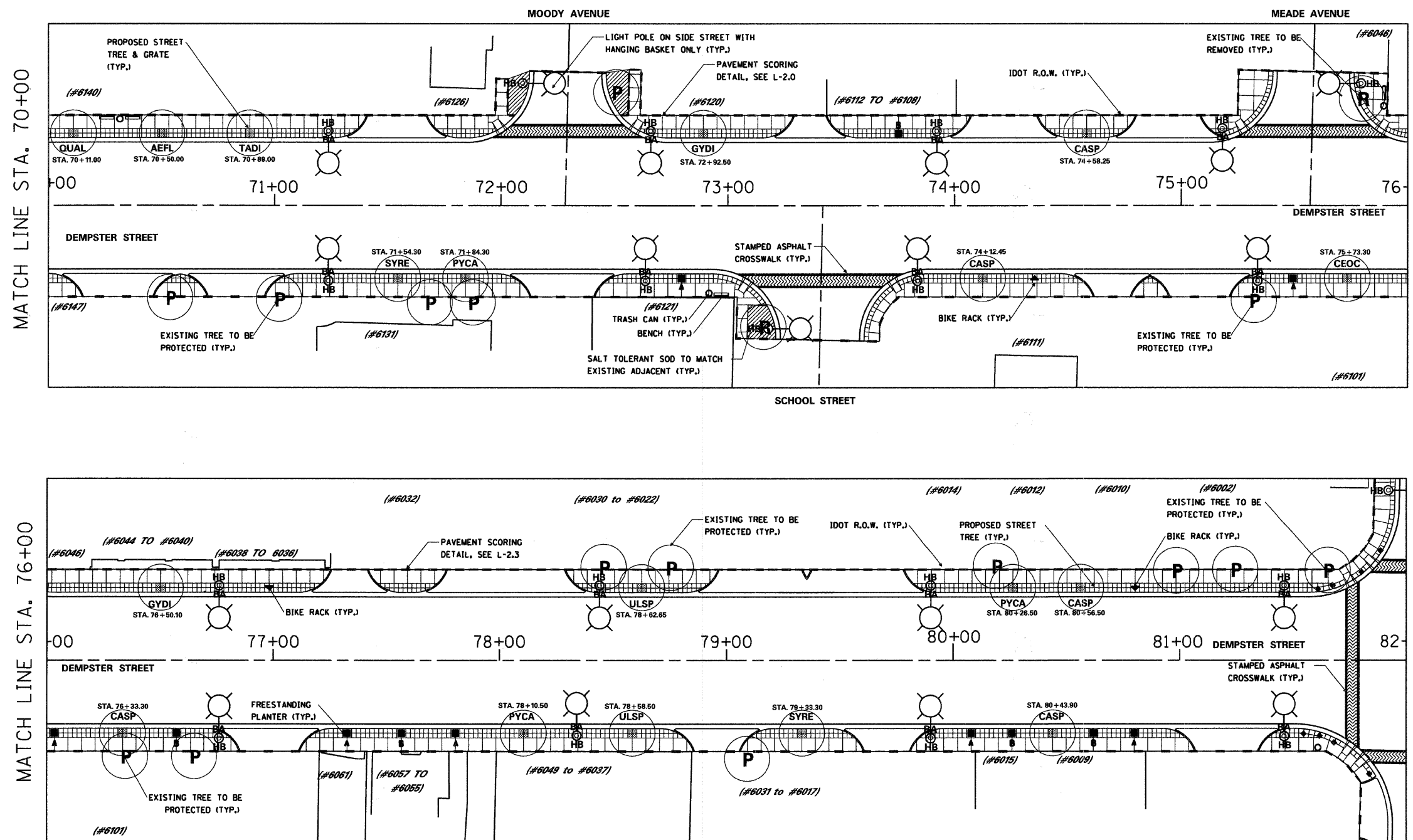
**McDonough Associates Inc.**  
Engineers / Architects

FILES  
DATES  
TIMES

F.A.P. R.F.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	03-00097-01-PV	COOK	82	52
STA. 70+00		TO STA. 82+00		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

CONTRACT # 83971

- NOTES:
- PERMANENT STREET FURNISHINGS LOCATED TO MAINTAIN MINIMUM 6 FOOT CLEAR SIDEWALK ACCESS ADJACENT TO BUILDINGS.
  - PROVIDE C.J. STRUCTURAL SOIL FOR STREET TREE PLANTINGS. SEE SHEETS L-2.1 AND L-2.2.
  - MAXIMUM PAVEMENT WIDTH AS SHOWN. NOTIFY VILLAGE OF MORTON GROVE TO REVIEW SITE CONDITIONS WHERE NEW PAVEMENT DOES NOT MEET BUILDING LINE. OWNER TO DIRECT WORK BASED UPON CONTRACTOR ESTIMATE FOR TOTAL PROJECT AREAS.
  - TREE LOCATIONS ARE INDICATED ON PLAN BY "STA. XX+XX.XX". ALL TREES LOCATED 32.0' FROM CENTERLINE OF ROAD (TYP.), EXCEPT WHERE NOTED OTHERWISE. COORDINATE TREE PITS TO FALL EVENLY WITH PAVEMENT AND PAVEMENT SCORE PATTERNS PER DETAIL.
  - ALL STREET TREES TO BE PLANTED IN THE CENTER OF A 10'x25'x3' DEEP PROFILE OF C.J. STRUCTURAL SOIL.
  - WATER, GATORBAGS, FOR INSTALL AND ESTABLISHMENT OF PLANTS, AND ALL MAINTENANCE ACTIVITIES BEFORE THE END OF CONTRACT TO BE PROVIDED CONTRACTOR, PLANT MAINTENANCE ACTIVITIES TO BE PROVIDED BY THE VILLAGE OF MORTON GROVE, AT END OF CONTRACT ONLY.
  - SIDEWALK PAVING SCORE LINES, SEE LANDSCAPE DETAILS.
  - LIGHT STANDARDS, CURB CUTS, ADA ACCESS RAMP INDICATED FOR COORDINATION PURPOSES, SEE ENGINEER'S DOCUMENTS FOR LAYOUT AND DETAILS.
  - PERMANENT STREET FURNISHINGS SHOP DRAWINGS: CONTRACTOR TO SUBMIT SHOP DRAWINGS INDICATING DIMENSIONS, LOCATIONS OF ALL PERMANENT STREET FURNISHINGS FOR REVIEW BY VILLAGE OF MORTON GROVE FOR DRAWING APPROVAL. FIELD MARK APPROVED DRAWN LOCATIONS FOR ENGINEER PRIOR TO INSTALLATION OF FOUNDATIONS FOR FURNITURE.



MATCH LINE STA. 70+00

MATCH LINE STA. 76+00

MATCH LINE STA. 76+00

MATCH LINE STA. 82+00

L-1.1  
SHEET NUMBER

**KEY:**

	BENCH		SODDING, SALT TOLERANT (TYP.)		NEWSBOX CORRAL		EXISTING TREE TO BE PROTECTED		EXISTING TREE TO BE REMOVED		APPROXIMATE STREET ADDRESS
	TRASH CAN		LIGHT STANDARD WITH BANNER ARM (STREET SIDE) & HANGING BASKET ARM (SIDEWALK SIDE)		TREE STATION LOCATION AND SPECIES INFORMATION		EXISTING TREE TO BE PLANTED IN 10' WIDE x 25' LONG x 3' DEEP PROFILE OF C.U. STRUCTURAL SOIL, SEE DETAILS		STAMPED ASPHALT CROSSWALK		APPROXIMATE IDOT R.O.W.
	BIKE RACK		LIGHT STANDARD ON SIDE STREET WITH HANGING BASKET ONLY (SIDEWALK SIDE OF LIGHT POLE)		STREET TREE AND 4'x4' GRATE. TREE TO BE PLANTED IN 10' WIDE x 25' LONG x 3' DEEP PROFILE OF C.U. STRUCTURAL SOIL, SEE DETAILS						
	PLANTER BOX (SEE DETAILS)		LIGHT POLE								
	BOLLARD										

**REVISIONS**

NAME	DATE

Scale: 1" = 25'

DATE: 10-16-09

Terry Guen Design Associates, Inc.  
Landscape Architecture - Urban Design - Planning - Analysis  
Chicago, Illinois

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
LANDSCAPE AND FURNISHINGS PLAN

SCALE: 1" = 25'

DATE: 10-16-09

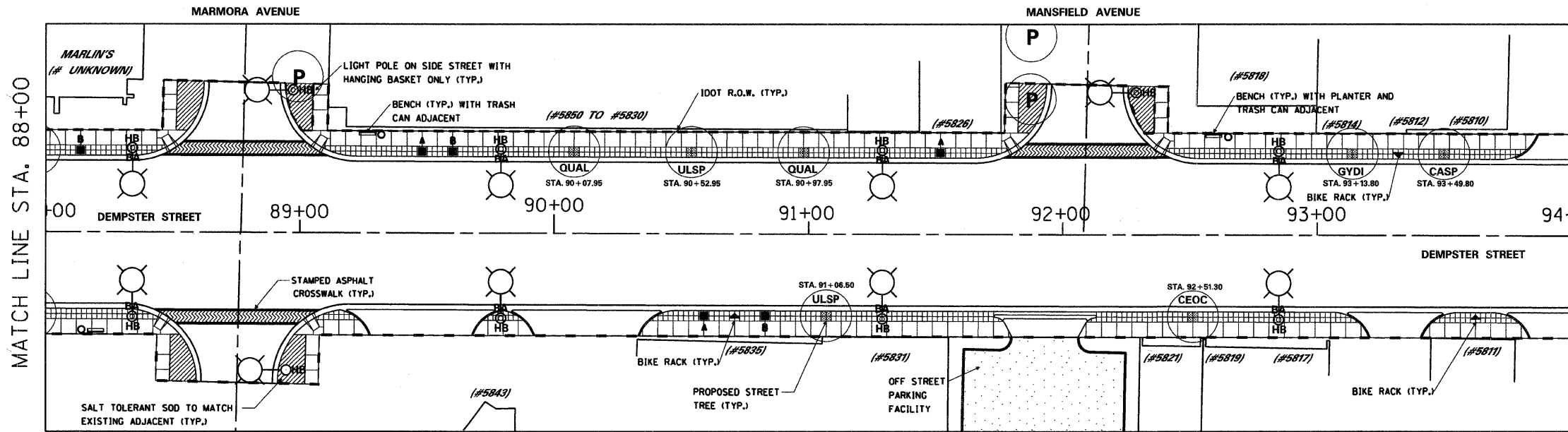
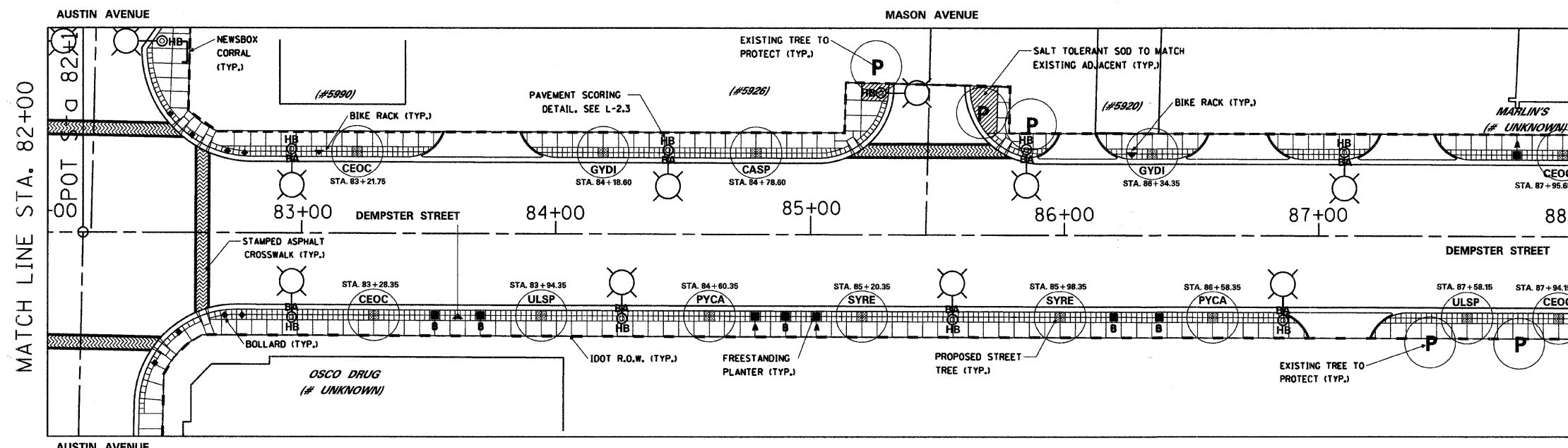
DRAWN BY: TH  
CHECKED BY: TG

McDonough Associates Inc.  
Engineers / Architects

FILES  
DATES  
TIMES

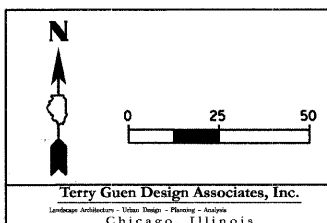
F.A.P. RYE:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	03-00097-01-PV	COOK	82	53
STA. 82+00		TO STA. 94+00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT # 83971				

- NOTES:
- PERMANENT STREET FURNISHINGS LOCATED TO MAINTAIN MINIMUM 6 FOOT CLEAR SIDEWALK ACCESS ADJACENT TO BUILDINGS.
  - PROVIDE C.U. STRUCTURAL SOIL FOR STREET TREE PLANTINGS. SEE SHEETS L-2.1 AND L-2.2.
  - MAXIMUM PAVEMENT WIDTH AS SHOWN. NOTIFY VILLAGE OF MORTON GROVE TO REVIEW SITE CONDITIONS WHERE NEW PAVEMENT DOES NOT MEET BUILDING LINE. OWNER TO DIRECT WORK BASED UPON CONTRACTOR ESTIMATE FOR TOTAL PROJECT AREAS.
  - TREE LOCATIONS ARE INDICATED ON PLAN BY "STA. XX+XX.XX". ALL TREES LOCATED 32.0' FROM CENTERLINE OF ROAD (TYP.), EXCEPT WHERE NOTED OTHERWISE. COORDINATE TREE PITS TO FALL EVENLY WITH PAVEMENT AND PAVEMENT SCORE PATTERNS PER DETAIL.
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  - SIDEWALK PAVING SCORE LINES. SEE LANDSCAPE DETAILS.
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**KEY:**

	BENCH		SOD REPAIR AREA WITH 8" DRAINAGE SUBBASE, 8" REPLACEMENT OF TOPSOIL, & SALT TOLERANT SOD		NEWSBOX CORRAL		EXISTING TREE TO BE PROTECTED		APPROXIMATE STREET ADDRESS
	TRASH CAN		LIGHT STANDARD WITH BANNER ARM (STREET SIDE) & HANGING BASKET ARM (SIDEWALK SIDE)		TREE STATION LOCATION AND SPECIES INFORMATION		EXISTING TREE TO BE REMOVED		APPROXIMATE IDOT R.O.W.
	BIKE RACK		LIGHT STANDARD ON SIDE STREET WITH HANGING BASKET ONLY (SIDEWALK SIDE OF LIGHT POLE)		STREET TREE AND 4'x4' GRATE. TREE TO BE PLANTED IN 10' WIDE x 25' LONG x 3' DEEP PROFILE OF CU STRUCTURAL SOIL. SEE DETAILS		STAMPED ASPHALT CROSSWALK		
	PLANTER BOX (SEE DETAILS)								
	BOLLARD								



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS

**LANDSCAPE AND FURNISHINGS PLAN**

SCALE: 1" = 25'  
DATE: 10-16-09

DRAWN BY: TH  
CHECKED BY: TG

**McDonough Associates Inc.**  
Engineers / Architects

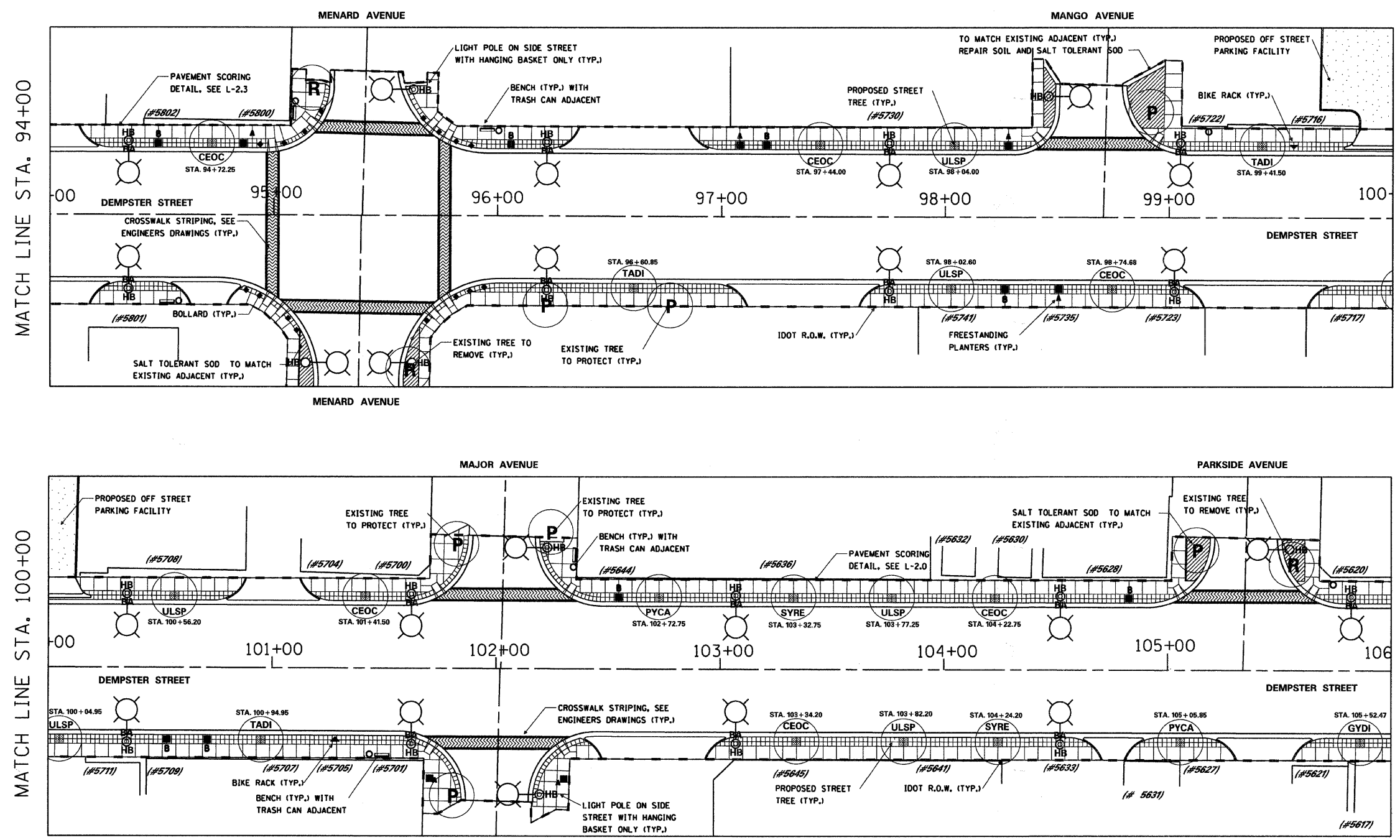
L-1.2

SHEET NUMBER

FILES  
DATES  
TIMES

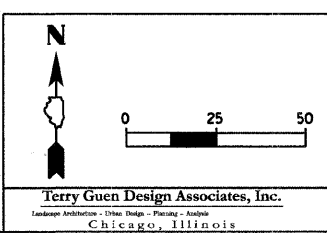
F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	03-00097-01-PV	COOK	82	54
STA. 94+00		TO STA. 106+00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT # 83971				

- NOTES:
- PERMANENT STREET FURNISHINGS LOCATED TO MAINTAIN MINIMUM 6 FOOT CLEAR SIDEWALK ACCESS ADJACENT TO BUILDINGS.
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  - TREE LOCATIONS ARE INDICATED ON PLAN BY "STA. XX+XX.XX". ALL TREES LOCATED 32.0' FROM CENTERLINE OF ROAD (TYP.), EXCEPT WHERE NOTED OTHERWISE. COORDINATE TREE PITS TO FALL EVENLY WITH PAVEMENT AND PAVEMENT SCORE PATTERNS PER DETAIL.
  - ALL STREET TREES TO BE PLANTED IN THE CENTER OF A 10'x25'x3' DEEP PROFILE OF C.U. STRUCTURAL SOIL.
  - WATER, GATORBAGS, FOR INSTALL AND ESTABLISHMENT OF PLANTS, AND ALL MAINTENANCE ACTIVITIES BEFORE THE END OF CONTRACT TO BE PROVIDED CONTRACTOR. PLANT MAINTENANCE ACTIVITIES TO BE PROVIDED BY THE VILLAGE OF MORTON GROVE, AT END OF CONTRACT ONLY.
  - SIDEWALK PAVING SCORE LINES, SEE LANDSCAPE DETAILS.
  - LIGHT STANDARDS, CURB CUTS, ADA ACCESS RAMP INDICATED FOR COORDINATION PURPOSES, SEE ENGINEER'S DOCUMENTS FOR LAYOUT AND DETAILS.
  - PERMANENT STREET FURNISHINGS SHOP DRAWINGS: CONTRACTOR TO SUBMIT SHOP DRAWINGS INDICATING DIMENSIONS, LOCATIONS OF ALL PERMANENT STREET FURNISHINGS FOR REVIEW BY VILLAGE OF MORTON GROVE FOR DRAWING APPROVAL. FIELD MARK APPROVED DRAWN LOCATIONS FOR ENGINEER PRIOR TO INSTALLATION OF FOUNDATIONS FOR FURNITURE.



**KEY:**

	BENCH		SOD REPAIR AREA WITH 8" DRAINAGE SUBBASE, 8" REPLACEMENT OF TOPSOIL, & SALT TOLERANT SOD		NEWSBOX CORRAL		EXISTING TREE TO BE PROTECTED (#5601)		APPROXIMATE STREET ADDRESS
	TRASH CAN		LIGHT STANDARD WITH BANNER ARM (STREET SIDE) & HANGING BASKET ARM (SIDEWALK SIDE)		TREE STATION LOCATION AND SPECIES INFORMATION		EXISTING TREE TO BE REMOVED		APPROXIMATE IDOT R.O.W.
	BIKE RACK		LIGHT STANDARD ON SIDE STREET WITH HANGING BASKET ONLY		STREET TREE AND 4'x4' GRATE TREE TO BE PLANTED IN 10' WIDE x 25' LONG x 3' DEEP PROFILE OF CU STRUCTURAL SOIL, SEE DETAILS		STAMPED ASPHALT CROSSWALK		
	PLANTER BOX (SEE DETAILS)								
	BOLLARD								



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**LANDSCAPE AND FURNISHINGS PLAN**

SCALE: 1" = 25'  
DATE: 10-16-09  
DRAWN BY: TH  
CHECKED BY: TG

Terry Guen Design Associates, Inc.  
Landscape Architecture - Urban Design - Planning - Analysis  
Chicago, Illinois

McDonough Associates Inc.  
Engineers / Architects

L-1.3  
SHEET NUMBER

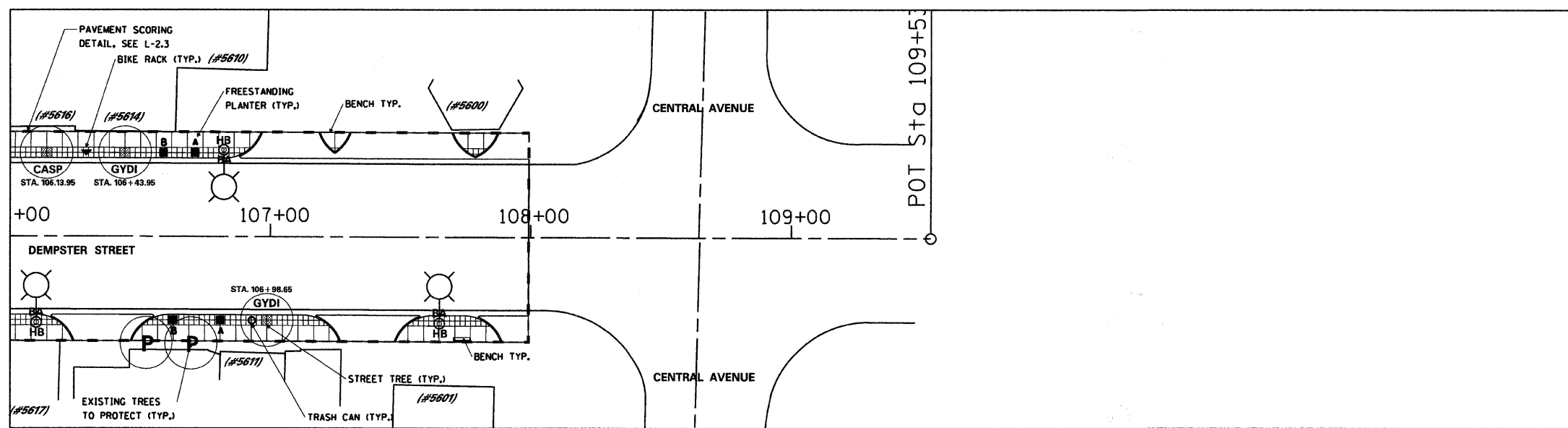
FILES  
DATES  
TIMES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	03-00097-01-PV	COOK	82	55
STA. 106+00		TO STA. 108+00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT # 83971

- NOTES:
- PERMANENT STREET FURNISHINGS LOCATED TO MAINTAIN MINIMUM 6 FOOT CLEAR SIDEWALK ACCESS ADJACENT TO BUILDINGS.
  - PROVIDE C.U. STRUCTURAL SOIL FOR STREET TREE PLANTINGS. SEE SHEETS L-2.1 AND L-2.2.
  - MAXIMUM PAVEMENT WIDTH AS SHOWN. NOTIFY VILLAGE OF MORTON GROVE TO REVIEW SITE CONDITIONS WHERE NEW PAVEMENT DOES NOT MEET BUILDING LINE. OWNER TO DIRECT WORK BASED UPON CONTRACTOR ESTIMATE FOR TOTAL PROJECT AREAS.
  - TREE LOCATIONS ARE INDICATED ON PLAN BY "STA. XX+XX.XX". ALL TREES LOCATED 32.0' FROM CENTERLINE OF ROAD (TYP.), EXCEPT WHERE NOTED OTHERWISE. COORDINATE TREE PITS TO FALL EVENLY WITH PAVEMENT AND PAVEMENT SCORE PATTERNS PER DETAIL.
  - ALL STREET TREES TO BE PLANTED IN THE CENTER OF A 10'x25'x3' DEEP PROFILE OF C.U. STRUCTURAL SOIL.
  - WATER, GATORBAGS, FOR INSTALL AND ESTABLISHMENT OF PLANTS, AND ALL MAINTENANCE ACTIVITIES BEFORE THE END OF CONTRACT TO BE PROVIDED CONTRACTOR, PLANT MAINTENANCE ACTIVITIES TO BE PROVIDED BY THE VILLAGE OF MORTON GROVE, AT END OF CONTRACT ONLY.
  - SIDEWALK PAVING SCORE LINES, SEE LANDSCAPE DETAILS.
  - LIGHT STANDARDS, CURB CUTS, ADA ACCESS RAMP INDICATED FOR COORDINATION PURPOSES, SEE ENGINEER'S DOCUMENTS FOR LAYOUT AND DETAILS.
  - PERMANENT STREET FURNISHINGS SHOP DRAWINGS; CONTRACTOR TO SUBMIT SHOP DRAWINGS INDICATING DIMENSIONS, LOCATIONS OF ALL PERMANENT STREET FURNISHINGS FOR REVIEW BY VILLAGE OF MORTON GROVE FOR DRAWING APPROVAL. FIELD MARK APPROVED DRAWN LOCATIONS FOR ENGINEER PRIOR TO INSTALLATION OF FOUNDATIONS FOR FURNITURE.

MATCH LINE STA. 106+00



**KEY:**

	BENCH		SOD REPAIR AREA WITH 8" DRAINAGE SUBBASE, 8" REPLACEMENT OF TOPSOIL, & SALT TOLERANT SOD		NEWSBOX CORRAL		EXISTING TREE TO BE PROTECTED (#5601)		APPROXIMATE STREET ADDRESS
	TRASH CAN		LIGHT STANDARD WITH BANNER ARM (STREET SIDE) & HANGING BASKET ARM (SIDEWALK SIDE)		TREE STATION LOCATION AND SPECIES INFORMATION		EXISTING TREE TO BE REMOVED		APPROXIMATE IDOT R.O.W.
	BIKE RACK		LIGHT STANDARD ON SIDE STREET WITH HANGING BASKET ONLY		STREET TREE AND 4'x4' GRATE. TREE TO BE PLANTED IN 10' WIDE x 25' LONG x 3' DEEP PROFILE OF CU STRUCTURAL SOIL, SEE DETAILS		STAMPED ASPHALT CROSSWALK		
	PLANTER BOX (SEE DETAILS)								
	BOLLARD								

L-1.4  
SHEET NUMBER

  Terry Guen Design Associates, Inc. <small>Landscaping Architecture - Urban Design - Planning - Analysis Chicago, Illinois</small>	<b>REVISIONS</b> NAME      DATE		ILLINOIS DEPARTMENT OF TRANSPORTATION IL RTE 58 (DEMPSTER ST) IMPROVEMENTS <b>LANDSCAPE AND FURNISHINGS PLAN</b>  SCALE: 1" = 25' DATE: 10-16-09 McDonough Associates Inc. <small>Engineers / Architects</small>
	DRAWN BY: TH CHECKED BY: TG		

FILES  
DATES  
TIMES

KEY	BOTANICAL NAME	COMMON NAME	L-1.0 T	L-1.0 B	L-1.1 T	L-1.1 B	L-1.2 T	L-1.2 B	L-1.3 T	L-1.3 B	L-1.4 T	TOTALS
AEFL	AESCLUS FLAVA	YELLOW BUCKEYE	3	1	1	0	0	0	0	0	0	5
CASP	CATALPA SPECIOSA	NORTHERN CATALPA	0	0	2	3	1	1	0	0	1	8
CEOC	CELTIS OCCIDENTALIS 'PRAIRIE PRIDE'	PRAIRIE PRIDE' HACKBERRY	0	0	1	0	4	1	3	3	0	12
GYDI	GYMNOCLADUS DIOICUS	KENTUCKY COFFEE TREE	0	0	1	1	2	1	0	1	2	8
PLOC	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	2	4	0	0	0	0	0	0	0	6
PYCA	PYRUS CALERYANA	CALLERY PEAR	1	0	1	2	2	0	0	2	0	8
QUAL	QUERCUS ALBA	WHITE OAK	1	1	1	0	0	2	0	0	0	5
SYRE	SYRINGA RETICULATA	JAPANESE TREE LILAC	1	0	1	1	2	0	0	2	0	7
TADI	TAXODIUM DISTICHUM	BALD CYPRESS	3	1	1	0	0	0	2	1	0	8
ULSP	ULMUS JAPONICA x ULMUS WILSONIANA 'MORTON'	HYBRID ELM	0	2	0	2	2	2	2	4	0	14
			11	9	9	9	13	7	7	13	3	81

① TREE SCHEDULE

KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	L-1.0 T	L-1.0 B	L-1.1 T	L-1.1 B	L-1.2 T	L-1.2 B	L-1.3 T	L-1.3 B	L-1.4 T	TOTALS
EP	3	ECHINACEA PURPUREA 'MAGNUS'	PURPLE CONEFLOWER	6	3	6	15	9	9	12	6	6	72
IB	3	IPOMOEA BATATAS 'BLACKIE'	SWEET POTATOE	6	3	6	15	9	9	12	6	6	72
PR	1	PENNISETUM SETACEUM 'RUBRUM'	PURPLE FOUNTAIN GRASS	2	1	2	5	3	3	4	2	2	24
				14	7	14	35	21	21	28	14	14	168

② PLANTER PLANTING SCHEDULE: POT TYPE A

KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	L-1.0 T	L-1.0 B	L-1.1 T	L-1.1 B	L-1.2 T	L-1.2 B	L-1.3 T	L-1.3 B	L-1.4 T	TOTALS
AH	3	ARCTOTIS X HYBRIDA 'SILVER PINK'	AFRICAN DAISY	9	3	3	12	15	9	12	12	6	81
CA	1	CALAMGROSTIS ACUTIFLORA 'KARL FOERSTER'	KARL FOERSTER FETHER REED GRASS	3	1	1	4	5	3	4	4	2	27
SP	3	SECREASEA PALLIDA	PURPLE HEART	9	3	3	12	15	9	12	12	6	81
				21	7	7	28	35	21	28	28	14	189

③ PLANTER PLANTING SCHEDULE: POT TYPE B

ITEM	SHEET NUMBER									
	L-1.0 T	L-1.0 B	L-1.1 T	L-1.1 B	L-1.2 T	L-1.2 B	L-1.3 T	L-1.3 B	L-1.4 T	TOTALS
TRASH RECEPTACLES	2	3	3	1	0	3	4	3	1	20
BIKE RACK	0	1	1	2	3	3	1	1	1	13
PLANTER BOX	5	2	3	9	8	6	8	6	4	51
BENCH	1	2	4	0	0	3	3	2	1	16
NEWS BOX CORRAL	0	1	0	0	1	0	0	0	0	2
TREE GRATE	11	9	9	9	13	7	7	13	3	81
STREET TREE	11	9	9	9	13	7	7	13	3	81
SALT TOLERANT SOD (SF)	292	826	442	0	230	983	691	314	0	3778
TREES TO BE PROTECTED	4	9	6	9	5	3	3	5	2	46
TREES TO BE REMOVED	0	0	2	0	0	0	2	0	0	4
BANNER ARMS (SET OF 2)	8	9	8	8	8	8	8	9	3	69
HANGING BASKET ASSEMBLIES	11	12	10	9	10	11	12	12	3	90
BOLLARDS	8	14	0	8	8	0	16	0	0	54
CUSTOMERIAL SOIL (CY)	306	250	250	250	361	194	194	361	83	2250
STAMPED ASPHALT (SF)	1523	1528	1067	416	1453	999	1751	999	0	9736

④ SITE FURNISHING SCHEDULE

L-2.0  
SHEET NUMBER

<p>Terry Guen Design Associates, Inc. Landscape Architecture - Urban Design - Planning - Analysis Chicago, Illinois</p>	REVISIONS		<p>ILLINOIS DEPARTMENT OF TRANSPORTATION IL RTE 58 (DEMPSTER ST) IMPROVEMENTS</p> <p>LANDSCAPE AND FURNISHINGS PLAN</p> <p>SCALE: NOT TO SCALE      DRAWN BY: TH</p> <p>DATE: 10-16-09      CHECKED BY: TG</p> <p><b>McDonough Associates Inc.</b> Engineers / Architects</p>
	NAME	DATE	

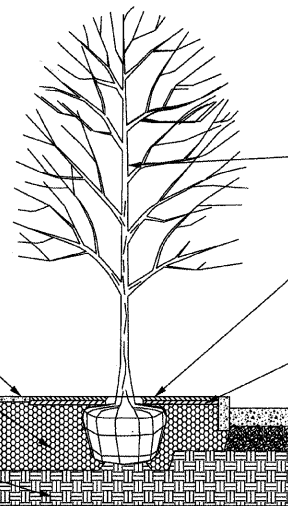


CU STRUCTURAL SOIL NOTES:  
 1. VOLUME OF CU STRUCTURAL SOIL SURROUNDING TREE BALL = 10' (W) x 25' (L) x 3' (D)  
 2. CU STRUCTURAL SOIL TO BE INSTALLED AT ALL PROPOSED TREE LOCATIONS  
 3. DETAIL SHOWS RELATIONSHIPS ONLY AND DOES NOT INDICATE ORDER OF INSTALLATION.

CONCRETE SIDEWALK (TYP.) SEE ENGINEERS DRAWINGS

3' STRUCTURAL SOIL MEDIA TO BE MACHINE TAMPED PER SPECIFICATIONS

COMPACTED SUBGRADE



PROPOSED STREET TREE INSTALLATION: SEE PLANTING DETAIL

PROPOSED TREE GRATE, SEE MANUFACTURERS SPECIFICATIONS FOR INSTALLATION

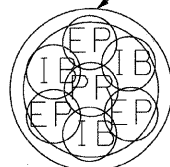
LAVAROCK STONE MULCH BETWEEN TREE GRATE AND STRUCTURAL SOIL. NO MULCH WITHIN 6" OF TREE TRUNK.

CURB AND ROADWAY, SEE ENGINEERS DRAWINGS

1 TREE IN TREE GRATE SECTION DETAIL  
N.T.S.

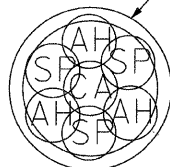
PROPOSED PLANTER, TYPE A

KEY	QUANTITY	BOTANICAL NAME	COMMON NAME
EP	3	ECHINACEA PURPUREA 'MAGNUS'	PURPLE CONEFLOWER
IB	3	IPOMOEA BATATAS 'BLACKIE'	SWEET POTATOE
PR	1	PENNISETUM SETACEUM 'RUBRUM'	PURPLE FOUNTAIN GRASS



PROPOSED PLANTER, TYPE B

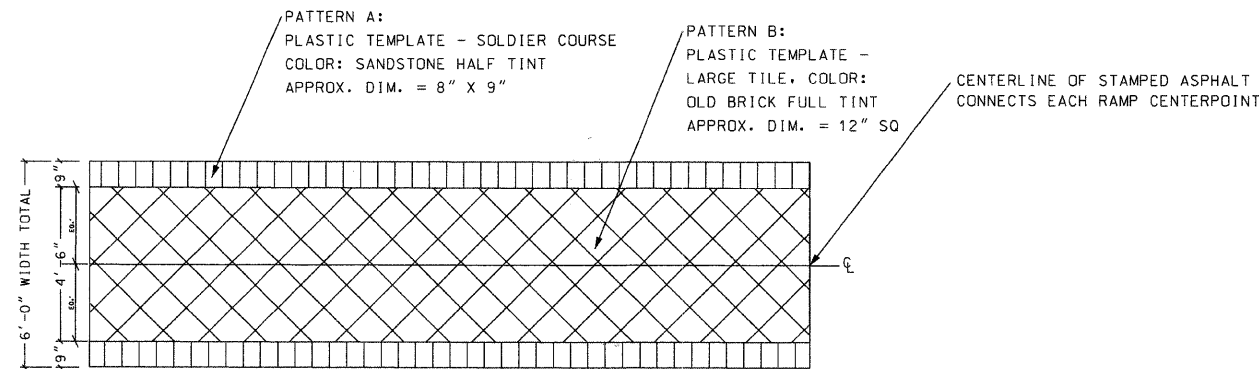
KEY	QUANTITY	BOTANICAL NAME	COMMON NAME
AH	3	ARCTOTIS X HYBRIDA 'SILVER PINK'	AFRICAN DAISY
CA	1	CALAMGROSTIS ACUTIFLORA 'KARL FOERSTER'	KARL FOERSTER FETHER REED GRASS
SP	3	SETCREASEA PALLIDA	PURPLE HEART



4 PLANTER BOX PLANTING DETAILS: POT TYPES A AND B  
N.T.S.

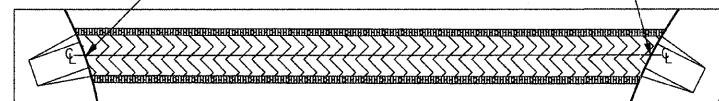
NOTES:  
 1. REVIEW EACH ASPHALT WALK LAYOUT IN FIELD WITH ENGINEER PRIOR TO INSTALLATION.

STAMPED ASPHALT NOTES:  
 1. SEE SPECIFICATIONS FOR INSTALLATION METHODS  
 2. THE SYSTEM MUST BE INSTALLED BY CONTRACTORS TRAINED IN STAMPING AND COATING ASPHALT SURFACES.  
 3. LIQUIDTINT TO BE ADDED ON JOB SITE. A "FULL TINT, HALF TINT, QUARTER TINT" REFERS TO THE PORTION OF 1 PINT OF LIQUIDTINT ADDED TO A 5 GALLON PAIL OF STENCILCOAT.  
 4. AS LITTLE AS 1 FLUID OUNCE AND AS MUCH AS 2 PINTS OF LIQUIDTINT CAN BE ADDED TO A 5 GALLON PAIL OF STENCILCOAT TO ACHIEVE THE DESIRED DEPTH OF COLOR.

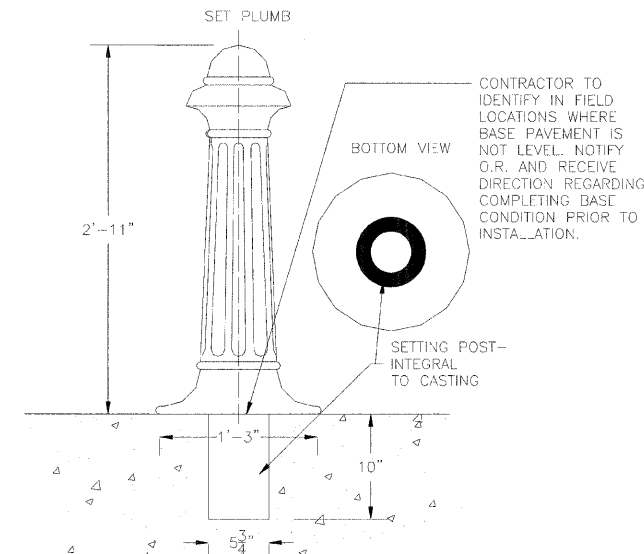


CENTERPOINT AT BOTTOM OF EACH ACCESSIBLE RAMP

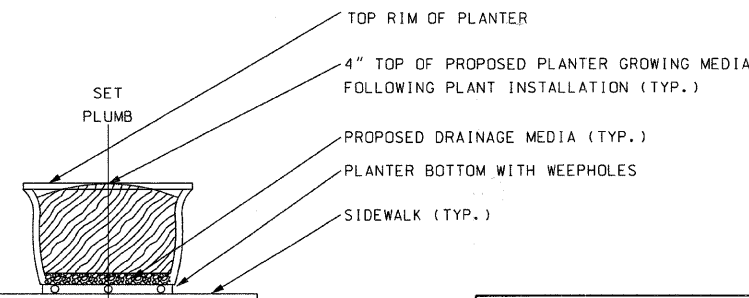
CENTERLINE OF STAMPED ASPHALT CONNECTS EACH RAMP CENTERPOINT



2 STAMPED ASPHALT WALK DETAIL  
N.T.S.



3 BOLLARD DETAIL  
N.T.S.



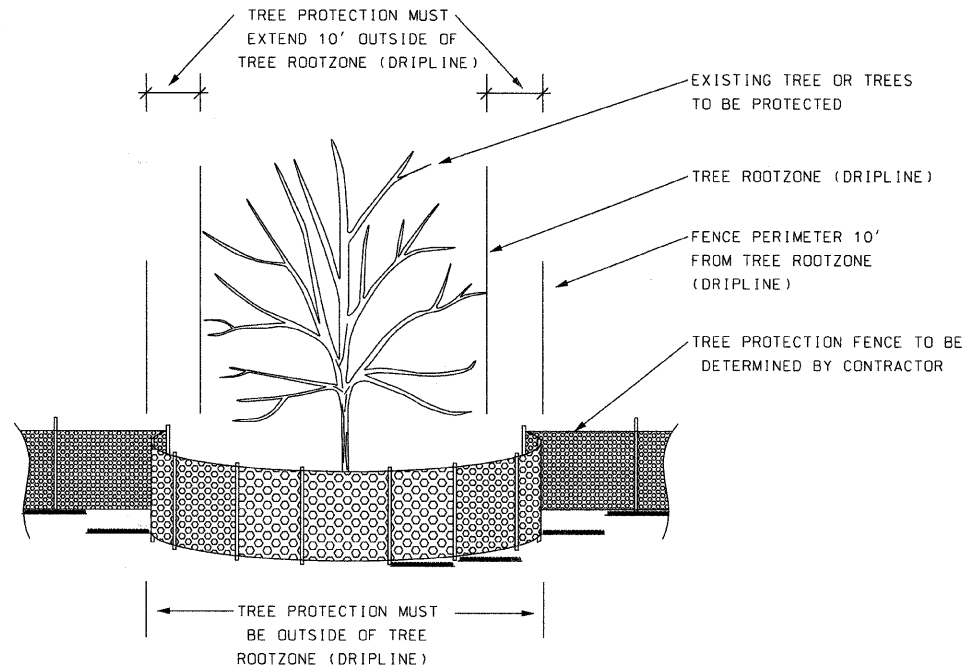
5 PLANTER DETAIL  
N.T.S.

L-2.1  
SHEET NUMBER

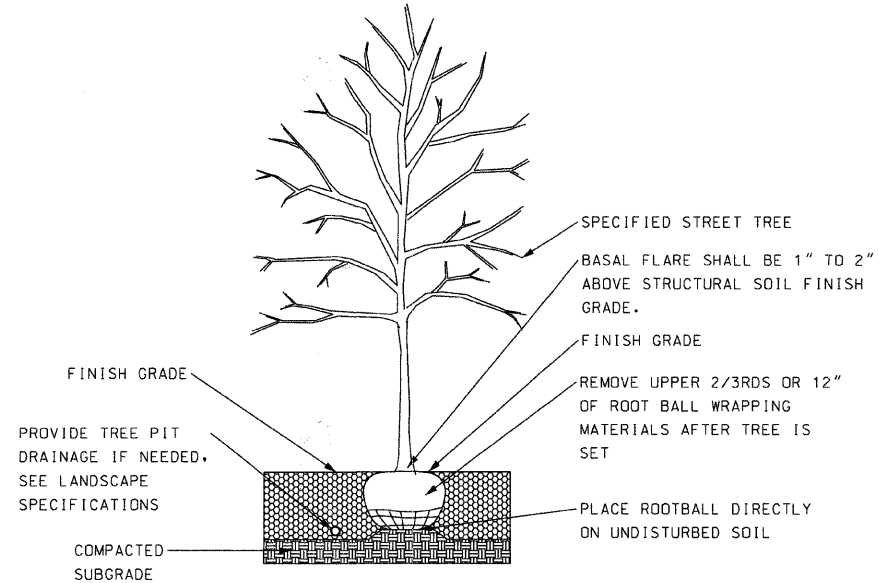
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION IL RTE 58 (DEMPSTER ST) IMPROVEMENTS
NAME	DATE	
		PLANTING DETAILS
Terry Guen Design Associates, Inc. Landscape Architecture - Urban Design - Planning - Analysis Chicago, Illinois		SCALE: NOT TO SCALE DATE: 10-16-09
		DRAWN BY: TH CHECKED BY: TG
		McDonough Associates Inc. Engineers / Architects

F.A.P. RYE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	03-00037-01-PV	COOK	82	58
STA. _____ TO STA. _____		FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT		
CONTRACT # 83971				

- NOTES:
1. CONSTRUCTION FENCE TO INCLUDE PERIMETER OF TREE(S) PROTECTION FENCE WHERE THESE INTERSECT.
  2. MAINTAIN TREE PROTECTION AND FENCE WITHIN LIMIT FENCE FOR THE DURATION OF THE PROJECT.
  3. MAINTAIN FENCE IN PLACE FOR THE DURATION OF THE CONSTRUCTION. NO STAGING, TRENCHING, DIGGING, TRAFFICKING, RE-GRADING OR OTHER IMPACT IN TREE PROTECTION AREA
  4. CONTRACTOR MUST COORDINATE PLACEMENT OF EROSION CONTROL FENCE WITH TREE PROTECTION TO ENSURE MAXIMUM PROTECTION OF ROOTS, AND SOIL IN CANOPY ZONE
  5. MAINTAIN AREA INSIDE FENCE, INCLUDING TREE WATERING, MOWING, TRASH REMOVAL, DURING CONSTRUCTION PERIOD.

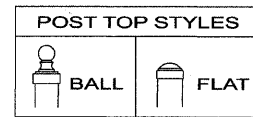
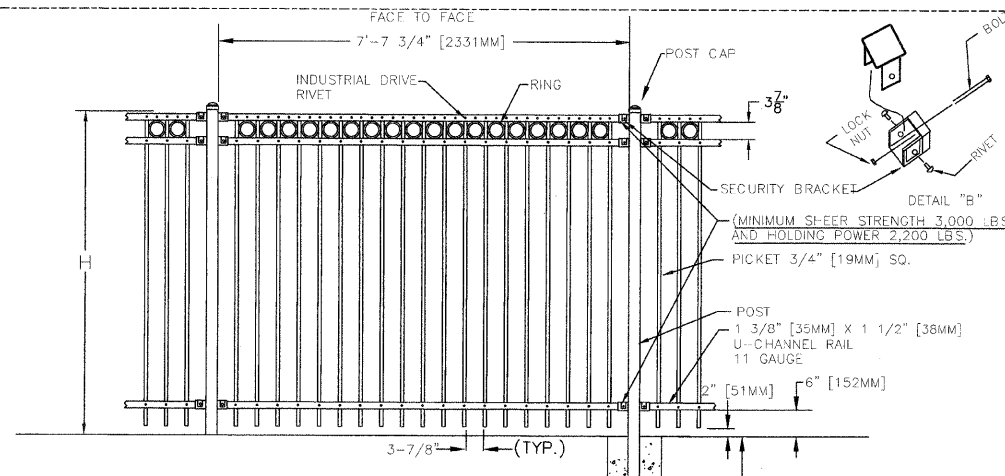


① TREE PROTECTION DETAIL  
N.T.S.



② TREE PLANTING DETAIL  
N.T.S.

- LANDSCAPE NOTES:
- 1) SEE DRAWINGS FOR SITE INFORMATION. CALL DIGGER AT (312) 744-7000 PRIOR TO EXCAVATING.
  - 2) TREE PLANTING PIT MUST DRAIN AND BE FREE OF CONSTRUCTION SCRAP, TRASH, DEBRIS, AND NON-SOIL MATERIAL.
  - 3) MAINTAIN TREE AND ADJACENT LANDSCAPE THROUGH CONSTRUCTION PERIOD AND PER VILLAGE OF MORTON GROVE DIRECTION.
  - 4) ARBORIST TO PRUNE TREE TO REMOVE BROKEN AND CROSSING BRANCHES, AS DIRECTED BY OWNER.
  - 5) WATER IN TREE DURING BACKFILLING PROCESS.
  - 6) TREE SHALL REMAIN ALIGNED AND PLUMB AFTER WATERING AND SETTLING. TOP OF ROOT BALL SHALL EXIST 1"-2" ABOVE FINISHED GRADE AND BELOW TREE GRATE. CONTRACTOR SHALL MEET FINISHED GRADE BELOW TREE GRATE WITH BACKFILL. CONTRACTOR SHALL RESET TREE IF TREE IS NOT IN CORRECT POSITION THREE MONTHS FOLLOWING INSTALLATION. NO DEADEN OR BRICKS SHALL BE USED TO STABILIZE TREE.
  - 7) CONTRACTOR SHALL NOT SHAVE ROOT BALLS.
  - 8) PROTECT TREE BALLS FROM HEAT AND DESSICATION DURING THE INSTALLATION PROCESS.
  - 9) COORDINATE TREE PLANTING WITH OTHER INSTALLATION SCHEDULES.
  - 10) IF TREES ARE INSTALLED PRIOR TO SIDEWALK, CONTRACTOR IS TO SURVEY TREES AFTER INSTALLATION TO ENSURE THEY WILL BE IN PROPER POSITION AFTER THIS SIDEWALK AND TREE FRAME AND GRATE INSTALLATION.
  - 11) REFER TO GENERAL NOTES AND ORDINANCE REQUIREMENTS.

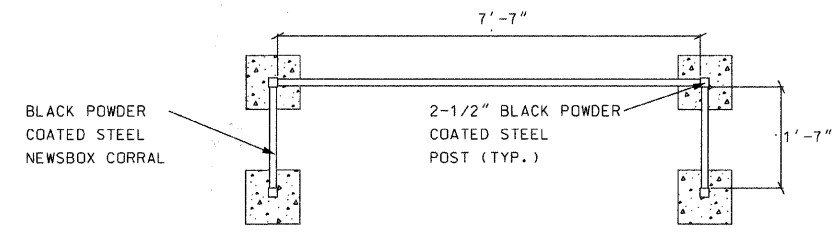


- NOTES:
1. SPECIFICATIONS SHOWN CAN BE CHANGED BY THE MANUFACTURER ONLY.
  2. FOOTING WIDTH TO BE (4)X POST WIDTH.
  3. OWNER'S REPRESENTATIVE TO PICK POST TOP SYLE PRIOR TO INSTALLATION.

NOM HEIGHT (H)
3'-0" [914MM]
3'-6" [1067MM]
4'-0" [1219MM]
5'-0" [1524MM]
6'-0" [1829MM]
7'-0" [2134MM]
8'-0" [2438MM]

③ BLACK POWDER COATED STEEL NEWSBOX CORRAL, SECTION  
N.T.S.

- NOTES:
1. DIMENSIONS FOR REFERENCE ONLY.
  2. SEE DETAIL 3 THIS SHEET FOR SPECIFIC FENCE DIMENSIONS.



④ BLACK POWDER COATED STEEL NEWSBOX CORRAL, PLAN  
N.T.S.

L-2.2  
SHEET NUMBER

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
TREE PROTECTION AND PLANTING & ALTERNATE PLANTING DETAILS  
SCALE: NOT TO SCALE DRAWN BY: TH  
DATE: 10-16-09 CHECKED BY: TG  
Terry Guen Design Associates, Inc.  
Landscape Architects - Urban Design - Planning - Analysis  
Chicago, Illinois  
McDonough Associates Inc.  
Engineers / Architects



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	60
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 83971

NOTES:

1. IN COMBINED SEWER AREAS, ALL COMBINED/STORM SEWER MANHOLES, CATCH BASINS, INLETS ETC., SHALL BE JOINED WITH WATERTIGHT FLEXIBLE RUBBER CONNECTORS CONFORMING TO ASTM C-443 & C-923, WITH STAINLESS STEEL BAND.
2. SEWER BEDDING AND BACKFILL MATERIAL TO BE CA-11 OR CA-13 AS PER MWRD GENERAL NOTE #6. THIS SUPERCEDES INFORMATION ON DETAILS INCLUDED IN THIS SHEET.

UNIQUE CHARACTER OF CONDUIT OR PIPE (INCHES)	MAXIMUM TRENCH WIDTH AT TOP OF CONDUIT OR PIPE (INCHES)
6	3'-3"
8	3'-2"
10	3'-2"
12	3'-6"
15	3'-6"
18	3'-10"
21	4'-4"
24	4'-8"
27	4'-11"
30	5'-3"
33	6'-0"
36	6'-4"
42	6'-11"
48	7'-5"
54	8'-7"
60	9'-2"
66	9'-9"
72	10'-4"
78	10'-11"
84	11'-6"
90	12'-0"
96	12'-6"
102	13'-3"
108	13'-10"

**Notes:**

1. Definition of one (1) Sack Slurry Mix - one (1) sack cement to one (1) cubic yard sand to be transit mixed and delivered.
2. Contractor is to remove and dispose of all excavated material off - site.
3. Contractor shall sawcut six (6") inches each side of the trench for removal. All sawcuts shall be full length.
4. Trenches shall not exceed five (5') feet in depth without proper shoring and permission. OSHA notification will be required.
5. Trench is to be excavated to firm, undisturbed soil. If over excavation is required to reach a firm trench bottom, the contractor shall fill the void with CAS and compact to obtain proper density and grade.
6. Instead of slurry backfill, the contractor at the Village's option, utilize Trench Backfill as specified in the 2007 "Standard Specifications for Road and Bridge Construction, latest edition." Compaction tests shall be required in locations approved by the Village and these tests shall be paid for by the contractor. Backfill and compaction will be performed on every other lift. All tests shall have 95% compaction or better. The contractor shall also furnish the Village with a copy of the final compaction report.
7. All bituminous and portland cement concrete pavement shall meet the requirements of and be constructed in accordance with the Standard Specifications for Road and Bridge Construction, latest edition.
8. Minimum thickness of pavement based on type of street.

**TRENCH BACKFILL**  
Village of Morton Grove  
CONSTRUCTION STANDARDS T - 1A

**TRENCH BACKFILL**  
Village of Morton Grove  
CONSTRUCTION STANDARDS T - 1

**EXIST. BIT. PAVEMENT ON P.C.C. ST.**

**EXIST. P.C.C. ST.**

**EXIST. BIT. PAVEMENT**

**NOTE**

1. For maximum trench width and General Notes see Std. T-1A
2. Instead of a Slurry backfill the contractor may at his option comply with Item 6 of STD. T-1A
3. Any Excavation in Parkway areas shall be Restored to original condition and to the satisfaction of the Village Engineer

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS

MISCELLANEOUS DETAILS

















SCALE: N.T.S.  
DATE: 10-16-09

DRAWN BY: NKU  
CHECKED BY: RY

**McDonough Associates Inc.**  
Engineers / Architects

**GENERAL ELECTRICAL NOTES:**

- ALL WORK AND MATERIALS SHALL COMPLY WITH THE LATEST CODES, STANDARDS NEC, IES, SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, AND THE VILLAGE OF MORTON GROVE ORDINANCES, UNLESS SPECIFICALLY NOTED IN THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL CALL J.U.L.I.E. (1-800-892-0123) 72 HOURS PRIOR TO EXCAVATION FOR UNDERGROUND UTILITY LOCATIONS. UTILITY LOCATIONS SHOWN ON PLANS ARE APPROXIMATE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL THE ABOVE AND BELOW GROUND UTILITIES, EVEN THOUGH THEY MAY NOT APPEAR ON THE PLANS. ANY DAMAGE DONE TO THE EXISTING UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- CONSULT AND COORDINATE WITH ALL TRADES AND AUTHORITIES INVOLVED TO AVOID INTERFERENCE WITH EXISTING AND NEW UNDERGROUND UTILITIES.
- ALL CONDUIT, EQUIPMENT AND APPURTENANCES ARE ILLUSTRATED DIAGRAMMATICALLY. THE ACTUAL LOCATION IN THE FIELD SHALL MEET THE APPROVAL OF THE ENGINEER.
- WHERE THE CONTRACTOR'S EXCAVATION MEETS AN OBSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR DIRECTIONS IN WRITING PRIOR TO FURTHER EXCAVATION. THE CONTRACTOR SHALL RESTORE ANY DAMAGE TO EXISTING SYSTEMS OR UTILITIES TO THE SATISFACTION OF THE ENGINEER. THIS WORK WILL BE CONSIDERED INCIDENTAL TO THIS CONTRACT.
- ALL LUMINAIRES SHALL BE ORIENTED WITH THE OPTICS PERPENDICULAR TO THE ROADWAY, UNLESS OTHERWISE INDICATED OR DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO ASCERTAIN EXISTING FIELD CONDITIONS BEFORE BIDDING ON THIS PROJECT.
- CONDUIT SHALL BE INSTALLED AT A MINIMUM DEPTH OF 30 INCHES BELOW GRADE AND POSITIONED IN THE FIELD TO AVOID CONFLICT WITH ROADWAY UNDERDRAINS AND OTHER EXISTING AND PROPOSED UTILITIES. THE CONTRACTOR SHALL INCREASE DEPTH OF UNIT DUCTS AND CONDUIT AS REQUIRED AT NO ADDITIONAL COST TO THE VILLAGE. COORDINATE RACEWAY DEPTHS WITH THE DETAILS AND THE ENGINEER.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO COMMENCING WORK AND COMPLY WITH STATE REGULATIONS REGARDING AIR, WATER AND NOISE POLLUTION.
- ALL EXISTING AREAS THAT ARE DAMAGED AS PART OF THIS WORK, INCLUDING BUT NOT LIMITED TO FENCING, CURB AND GUTTER, SIDEWALKS AND WHERE RESTORATION IS NOT COVERED BY APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS, SHALL BE RESTORED TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THIS CONTRACT. NO SEPARATE PAYMENT WILL BE MADE.
- ALL CONDUCTORS SHALL RUN CONTINUOUS WITHOUT ANY UNDERGROUND SPLICES. SPLICING OF CONDUCTORS WILL BE PERMITTED ONLY IN THE BASE OF THE LIGHTING UNITS UNLESS NOTED OTHERWISE.
- GROUNDING CONNECTIONS AT ALL EQUIPMENT FOUNDATIONS SHALL BE EXOTHERMICALLY WELDED, UNLESS NOTED OTHERWISE AND SHALL BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO POURING CONCRETE OR BACKFILLING, AS APPLICABLE.
- ALL EXISTING LIGHTING UNITS SHALL REMAIN OPERATIONAL FOR NORMAL NIGHT TIME HOURS UNTIL THE NEW SYSTEM HAS BEEN INSTALLED, TESTED AND ENERGIZED.
- CONTRACTOR SHALL COORDINATE ALL ELECTRICAL WORK WITH THE CONSTRUCTION STAGING PLANS.
- TO MAINTAIN THE STRUCTURAL INTEGRITY OF THE LIGHT POLES, THEY SHALL NOT BE ERECTED AND/OR LEFT TO STAND WITHOUT LUMINAIRES. THE CONTRACTOR WILL NOT BE PAID FOR POLES UNTIL LUMINAIRES ARE INSTALLED, ENERGIZED, TESTED AND ACCEPTED BY THE ENGINEER.
- NO EQUIPMENT OR MATERIAL SHALL BE DELIVERED TO THE JOB SITE PRIOR TO THE APPROVAL AND INSPECTION OF THE ENGINEER. ANY EQUIPMENT OR MATERIAL DELIVERED TO THE JOB SITE PRIOR TO APPROVAL AND INSPECTION SHALL BE REMOVED FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE.
- PROPOSED ROADWAY LIGHT POLES SHALL HAVE A SETBACK OF 2'-0" FROM THE BACK OF CURB TO THE FACE OF LIGHT POLES, UNLESS NOTED OTHERWISE ON THE PLANS OR DIRECTED BY THE ENGINEER.
- ALL CABLES SHALL BE TAGGED WITH INFORMATION PERTAINING TO THE DIRECTION THAT THE CABLE GOES AND THE VOLTAGE OF THE CIRCUIT IN EACH LIGHT BASE OR HANDHOLE. THE CONTRACTOR SHALL PLACE AN ACCURATE LAMINATED PLAN IN THE CONTROLLER. THE PLAN SHALL SHOW THE WIRING ARRANGEMENT (COLOR CODING IF APPLICABLE), VOLTAGE OF EACH LIGHTING CIRCUIT, WATTAGE OF EACH LAMP AND ANY OTHER PERTINENT INFORMATION THAT WOULD ASSIST IN THE TROUBLESHOOTING OF THE LIGHTING CIRCUITS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF UNIT DUCT PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.

ROADWAY ELECTRICAL SYMBOL	
SYMBOL	DESCRIPTION
	PROPOSED LIGHTING UNIT: XA1- "X" = CONTROLLER "A" = CIRCUIT NUMBER "1" = POLE NUMBER
	TYPE A, VILLAGE OF MORTON GROVE STANDARD DECORATIVE LIGHTING UNIT: FLUTED TAPERED STEEL POLE, 250W HPS ORNAMENTAL LUMINAIRE ON 6'-0" CROSS-ARM AT 32'-6" M.H.; 20A, 120V FESTOON RECEPTACLE
	I.D.O.T. STANDARD LIGHTING UNIT: 47'-6" M.H., 15' TRUSS ARM WITH 250W HPS LUMINAIRE M-C-III DISTRIBUTION
	EXISTING LIGHTING UNIT TO REMAIN
	EXISTING COMBINATION LIGHTING AND TRAFFIC POLE
	EXISTING LIGHTING UNIT TO BE REMOVED
	RACEWAY OR DIRECT BURIAL CABLE UNDERGROUND WITHOUT ENCASEMENT
	EXISTING UNDERGROUND CONDUIT TO REMAIN
	EXISTING UNDERGROUND CONDUIT TO BE REMOVED
	CONCEALED CONDUIT UNDERGROUND, TRENCHED OR PUSHED
	EXISTING LIGHTING CONTROLLER
	PROPOSED UTILITY SERVICE CONNECTION, POLE MOUNTED
	ELECTRIC UTILITY POLE
	ELECTRIC GROUND ROD
	GROUND LUG
	FUSE


ABBREVIATIONS	
SYMBOL	DESCRIPTION
A	AMPERE
AC	ALTERNATING CURRENT
AFG	ABOVE FINISHED GRADE
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
CB	CIRCUIT BREAKER
C.E.CO.	COMMONWEALTH EDISON COMPANY
CKT	CIRCUIT
CL	CLEARANCE
CP	CONTROL PANEL
DIA.	DIAMETER
FT	FEET OR FOOT
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
HPS	HIGH PRESSURE SODIUM
I.D.	INSIDE DIAMETER
I.D.O.T.	ILLINOIS DEPARTMENT OF TRANSPORTATION
KVA	KILOVOLT-AMPERE
KW	KILOWATTS
LTG	LIGHTING
LT	LEFT
MA	MAST ARM
MFG	MANUFACTURING
M.H.	MOUNTING HEIGHT
MIN.	MINIMUM
N.E.C.	NATIONAL ELECTRICAL CODE
NO./ #	NUMBER
N.T.S.	NOT TO SCALE
O.D.	OUTSIDE DIAMETER
P	POLE
PH	PHASE
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
RGSC	RIGID GALVANIZED STEEL CONDUIT
RT	RIGHT
S.S.	STAINLESS STEEL
STA.	STATION
STD	STANDARD
TYP.	TYPICAL
U.L.	UNDERWRITER'S LABORATORIES, INC.
U.N.O.	UNLESS NOTED OTHERWISE
V	VOLTAGE
W	WATT OR WIRE

EG-1

REVISIONS	
NAME	DATE

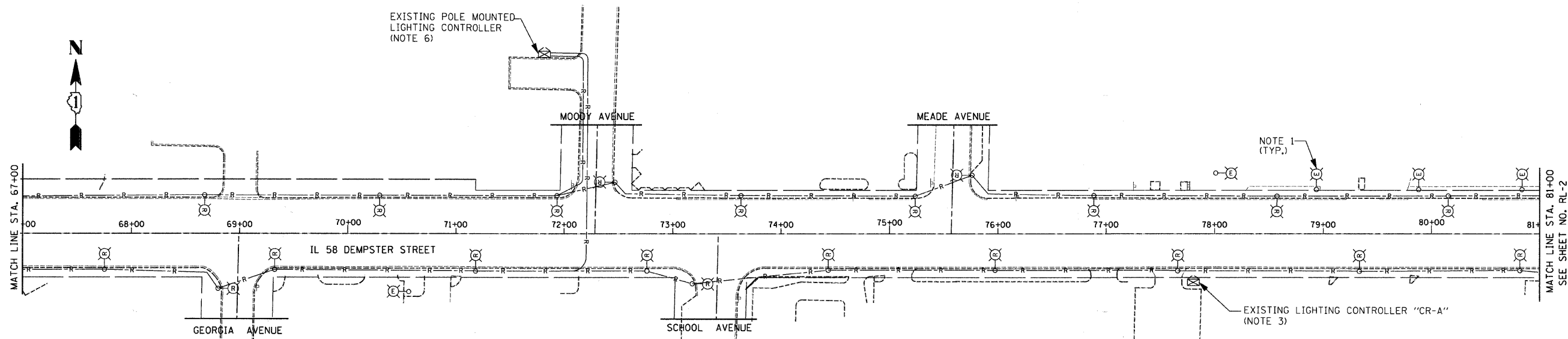
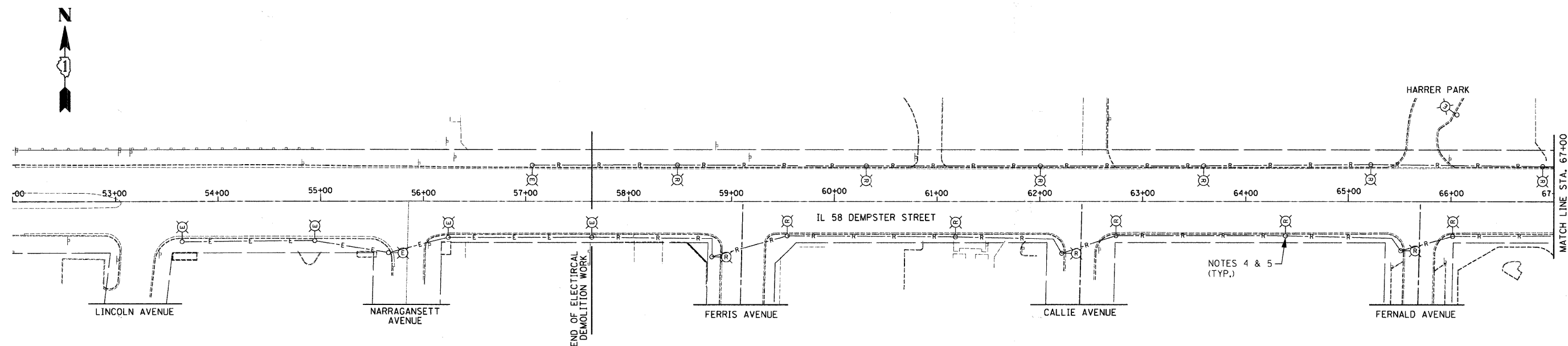
ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
ELECTRICAL SYMBOL LIST,  
ABBREVIATIONS & GENERAL NOTES

SCALE: N.T.S. DRAWN BY: RPK  
DATE: 10-16-09 CHECKED BY: KMY

 **McDonough Associates Inc.**  
Engineers / Architects

E.A.W. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	62
STA. _____ TO STA. _____		FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT		

CONTRACT # 83971



**LIGHTING CONSTRUCTION STAGING NOTES:**

- A. REMOVE ALL EXISTING LIGHT POLES ON THE SOUTH SIDE OF THE ROADWAY FIRST. THE EXISTING LIGHTING UNITS ON THE NORTH SIDE OF DEMPSTER STREET WILL PROVIDE TEMPORARY LIGHTING DURING THE CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN EXISTING LIGHTING SYSTEM IN ACCORDANCE WITH SPECIAL PROVISIONS DURING THE CONSTRUCTION.
- B. AFTER PROPOSED LIGHTING UNITS ARE INSTALLED ON THE SOUTH SIDE OF DEMPSTER STREET AND ENERGIZED, TESTED AND ACCEPTED BY THE ENGINEER, REMOVE ALL EXISTING LIGHT POLES LOCATED ON THE NORTH SIDE OF DEMPSTER STREET.

**NOTES:**

1. PRIVATE LIGHTING POLES TO REMAIN.
2. EXISTING LIGHTING SHALL BE USED FOR TEMPORARY LIGHTING. COORDINATE REMOVAL OF EXISTING LIGHTING UNIT WITH THE CONSTRUCTION STAGING.
3. EXISTING LIGHTING CONTROLLER "CR-A" SHALL REMAIN AND BE USED TO FEED NEW LIGHTING UNITS.
4. EXISTING LIGHTING UNITS SHALL BE REMOVED AND SALVAGED. THE ELECTRICAL WORK SHALL BE COORDINATED WITH THE CONSTRUCTION STAGING AND MAINTENANCE OF TRAFFIC PLANS. THE EXISTING LIGHTING SYSTEM ON ONE SIDE OF DEMPSTER STREET SHALL REMAIN OPERATIONAL UNTIL THE WORK IS COMPLETED ON THE OTHER SIDE OF DEMPSTER STREET.
5. EXISTING LIGHT POLE FOUNDATION SHALL BE REMOVED IN ACCORDANCE WITH I.D.O.T. STANDARD SPECIFICATIONS. THIS WORK SHALL BE INCLUDED IN "LIGHTING FOUNDATION REMOVAL" PAY ITEM.
6. THE EXISTING LIGHTING CONTROLLER SHALL REMAIN OPERATIONAL FOR NORMAL NIGHTTIME HOURS UNTIL THE NEW SYSTEM HAS BEEN INSTALLED AND ENERGIZED FROM CONTROLLER "CR-A". CONTRACTOR SHALL COORDINATE REMOVAL OF EXISTING SERVICE AND CONTROLLER WITH THE ENGINEER IN THE FIELD.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS

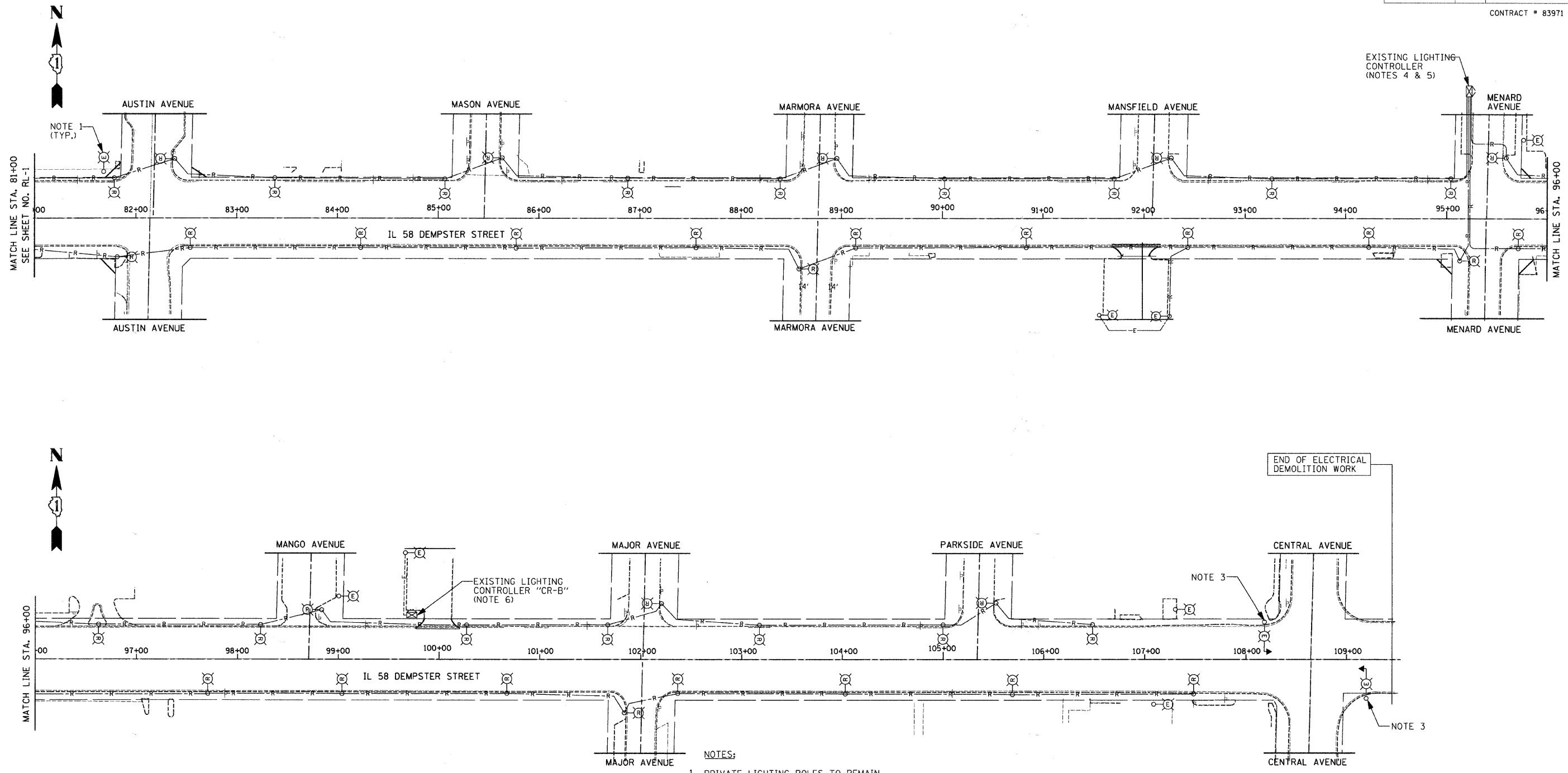
**EXISTING ROADWAY LIGHTING AND REMOVAL PLAN**

SCALE: 1" = 50'  
DATE: 10-16-09

DRAWN BY:  
CHECKED BY: KMY

**McDonough Associates Inc.**  
Engineers / Architects

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	63
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT
CONTRACT # 83971				



**LIGHTING CONSTRUCTION STAGING NOTES:**

- A. REMOVE ALL EXISTING LIGHT POLES ON THE SOUTH SIDE OF THE ROADWAY FIRST. THE EXISTING LIGHTING UNITS ON THE NORTH SIDE OF DEMPSTER STREET WILL PROVIDE TEMPORARY LIGHTING DURING THE CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN EXISTING LIGHTING SYSTEM IN ACCORDANCE WITH SPECIAL PROVISIONS DURING THE CONSTRUCTION.
- B. AFTER PROPOSED LIGHTING UNITS ARE INSTALLED ON THE SOUTH SIDE OF DEMPSTER STREET AND ENERGIZED, TESTED AND ACCEPTED BY THE ENGINEER, REMOVE ALL EXISTING LIGHT POLES LOCATED ON THE NORTH SIDE OF DEMPSTER STREET.

**NOTES:**

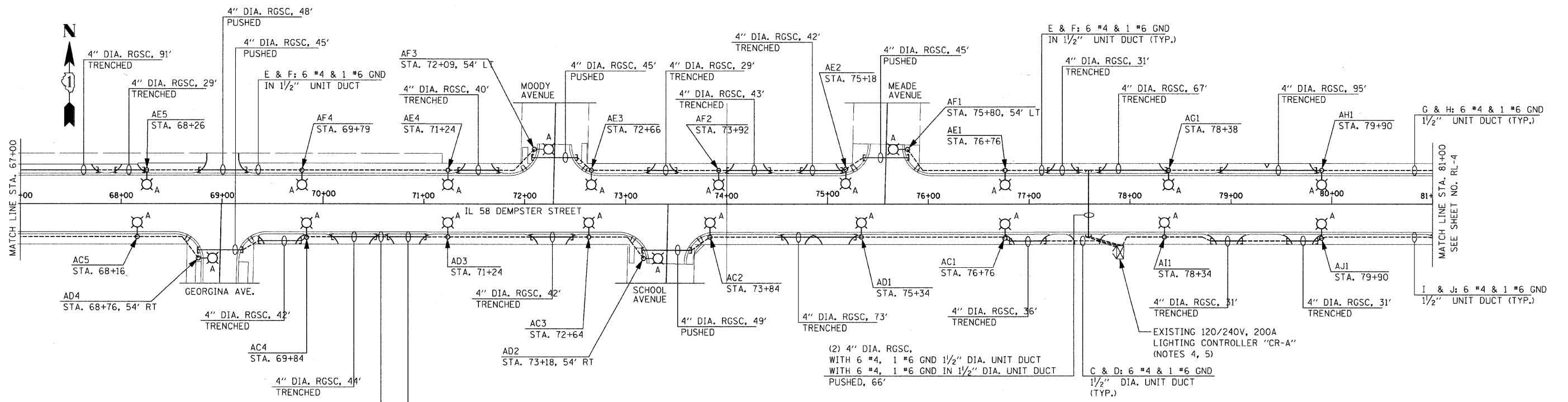
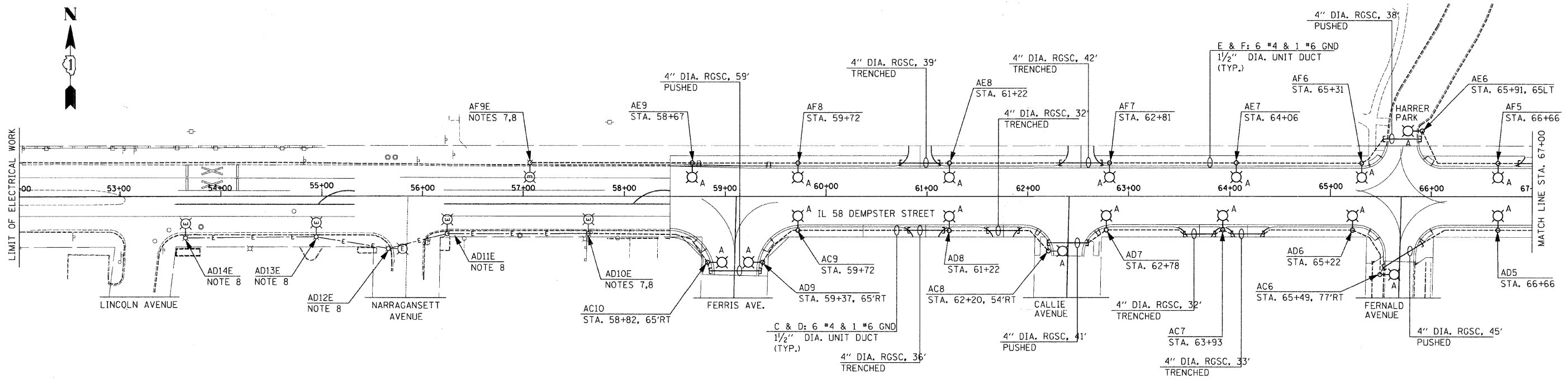
1. PRIVATE LIGHTING POLES TO REMAIN.
2. EXISTING LIGHTING SHALL BE USED FOR TEMPORARY LIGHTING. COORDINATE REMOVAL OF EXISTING LIGHTING UNIT WITH THE CONSTRUCTION STAGING.
3. EXISTING LUMINAIRE MOUNTED ON COMBINATION POLE TO BE REPLACED WITH NEW 400W, HPS, 240V LUMINAIRE. COMBINATION POLE TO REMAIN.
4. EXISTING LIGHTING UNITS SHALL BE REMOVED AND SALVAGED. THE ELECTRICAL WORK SHALL BE COORDINATED WITH THE CONSTRUCTION STAGING AND MAINTENANCE OF TRAFFIC PLANS. THE EXISTING LIGHTING SYSTEM ON ONE SIDE OF DEMPSTER STREET SHALL REMAIN OPERATIONAL UNTIL THE WORK IS COMPLETED ON THE OTHER SIDE OF DEMPSTER STREET.
5. EXISTING LIGHT POLE FOUNDATION SHALL BE REMOVED IN ACCORDANCE WITH I.D.O.T. STANDARD SPECIFICATIONS. THIS WORK SHALL BE INCLUDED IN "LIGHTING FOUNDATION REMOVAL" PAY ITEM.
6. THE EXISTING LIGHTING CONTROLLER SHALL REMAIN OPERATIONAL FOR NORMAL NIGHTTIME HOURS UNTIL THE NEW LIGHTING SYSTEM HAS BEEN INSTALLED AND ENERGIZED FROM EXISTING CONTROLLERS "CR-A" AND "CR-B". CONTRACTOR SHALL COORDINATE REMOVAL OF EXISTING SERVICE AND CONTROLLER WITH THE ENGINEER IN THE FIELD.
7. EXISTING LIGHTING CONTROLLER "CR-B" TO REMAIN AND SHALL BE USED TO FEED NEW LIGHTING UNITS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**EXISTING ROADWAY LIGHTING AND REMOVAL PLAN**  
 SCALE: 1" = 50'  
 DATE: 10-16-09  
 DRAWN BY: RPK  
 CHECKED BY: KMY  
**McDonough Associates Inc.**  
 Engineers / Architects

E.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	64
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 83971



- DISCONNECT AND ABANDON EXISTING CONDUIT 3'-0" BELOW GRADE AND CONNECT NEW UNIT DUCT TO EXISTING CIRCUIT. CONTRACTOR SHALL EXCAVATE AT EXISTING LIGHT POLE FOUNDATION, PULL EXISTING WIRING FROM EXISTING ELBOW AND INSTALL NEW WIRING IN EXISTING ELBOW AND SPLICE TO EXISTING CIRCUIT IN LIGHT POLE HANDHOLE. CHANGE OVER SHALL BE DONE DURING DAYLIGHT HOURS AFTER ALL OTHER WORK IS DONE. MAINTAIN EXISTING LIGHTING DURING HOURS OF DARKNESS. ALL MATERIAL AND LABOR FOR CONNECTING UNIT DUCT TO EXISTING LIGHT POLE SHALL BE INCLUDED IN THE "UNIT DUCT" PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.
- REMOVE EXISTING LIGHT POLE IDENTIFICATION DECAL AND PROVIDE NEW DECAL TO INDICATE THE REVISED LIGHTING UNIT DESIGNATION. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF "LIGHT POLE, ALUMINUM, 47/2" M.H., 15' MAST ARM" PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.

**NOTES:**

- REFER TO DRAWING RL-1 FOR LIGHTING CONSTRUCTION PHASING NOTES.
- REFER TO DRAWING ED-1 FOR TYPE "A" LIGHT POLE AND FOUNDATION DETAILS.
- ALL LIGHT POLES SHALL BE LOCATED 2'-0" FROM THE BACK OF BARRIER CURB TO THE FACE OF LIGHT POLES.
- REFER TO DRAWING ED-4 FOR EXISTING LIGHTING CONTROLLER "CR-A" ONE LINE DIAGRAM.
- REFER TO DRAWING ED-2 FOR EXISTING LIGHTING CONTROLLER "CR-A" DETAILS.
- REFER TO DRAWING ED-5 FOR LIGHT POLE BASE WIRING DETAILS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS

PROPOSED ROADWAY LIGHTING PLAN

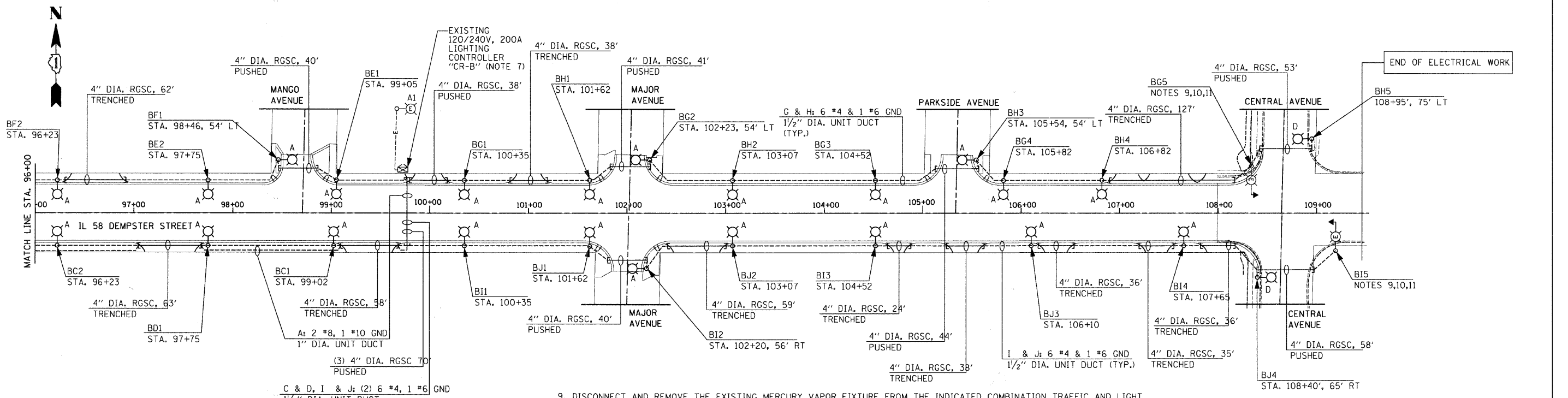
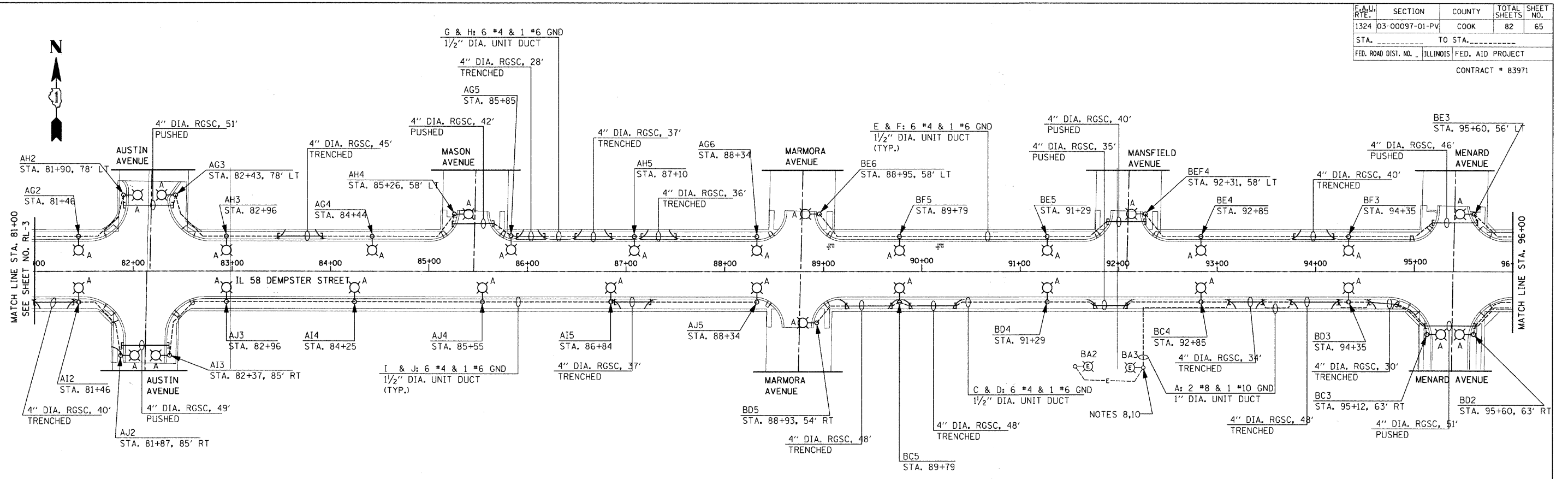
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DATE: 10-16-09

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E.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	65
STA. _____ TO STA. _____		FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT		
CONTRACT # 83971				



- NOTES:**
- REFER TO DRAWING RL-1 FOR LIGHTING CONSTRUCTION STAGING NOTES.
  - REFER TO DRAWING ED-1 FOR TYPE "A" LIGHT POLE AND FOUNDATION DETAILS.
  - REFER TO SHEET ED-5 FOR TYPE "ST" LIGHTING UNIT DETAIL.
  - REFER TO DRAWING ED-5 FOR LIGHT POLE BASE WIRING DETAILS.
  - ALL LIGHT POLES SHALL BE LOCATED 2'-0" FROM BACK OF CURB TO THE FACE OF LIGHT POLES.
  - REFER TO DRAWING ED-4 FOR LIGHTING CONTROLLER ONE-LINE DIAGRAMS.
  - REFER TO DRAWING ED-3 FOR EXISTING LIGHTING CONTROLLER "CR-B" DETAILS.
  - CONNECT EXISTING PARKING LOT LIGHTING UNITS TO CIRCUIT "A" OF EXISTING CONTROLLER "CR-B".

- DISCONNECT AND REMOVE THE EXISTING MERCURY VAPOR FIXTURE FROM THE INDICATED COMBINATION TRAFFIC AND LIGHT POLE. PROVIDE NEW 400W. HPS LUMINAIRE WITH CUT-OFF OPTICS. AS PART OF THIS WORK, REMOVED LIGHTING FIXTURE SHALL BE DISPOSED OF OFF-SITE LEGALLY. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF "LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT" PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.
- DISCONNECT AND ABANDON EXISTING CONDUIT 3'-0" BELOW GRADE AND CONNECT NEW UNIT DUCT TO EXISTING CIRCUIT. CONTRACTOR SHALL EXCAVATE AT EXISTING LIGHT POLE FOUNDATION, PULL EXISTING WIRING FROM EXISTING ELBOW AND INSTALL NEW WIRING IN EXISTING ELBOW AND SPLICE TO EXISTING CIRCUIT IN LIGHT POLE HANDHOLE. CHANGE OVER SHALL BE DONE DURING DAYLIGHT HOURS AFTER ALL OTHER WORK IS DONE. MAINTAIN EXISTING LIGHTING DURING HOURS OF DARKNESS. ALL MATERIAL AND LABOR FOR CONNECTING UNIT DUCT TO EXISTING LIGHT POLE SHALL BE INCLUDED IN THE "UNIT DUCT" PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.
- REMOVE EXISTING LIGHT POLE IDENTIFICATION DECAL AND PROVIDE NEW DECAL TO INDICATE THE REVISED LIGHTING UNIT DESIGNATION. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF "LIGHT POLE, ALUMINUM, 47 1/2 M.H., 15' MAST ARM" PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS

**PROPOSED ROADWAY LIGHTING PLAN**

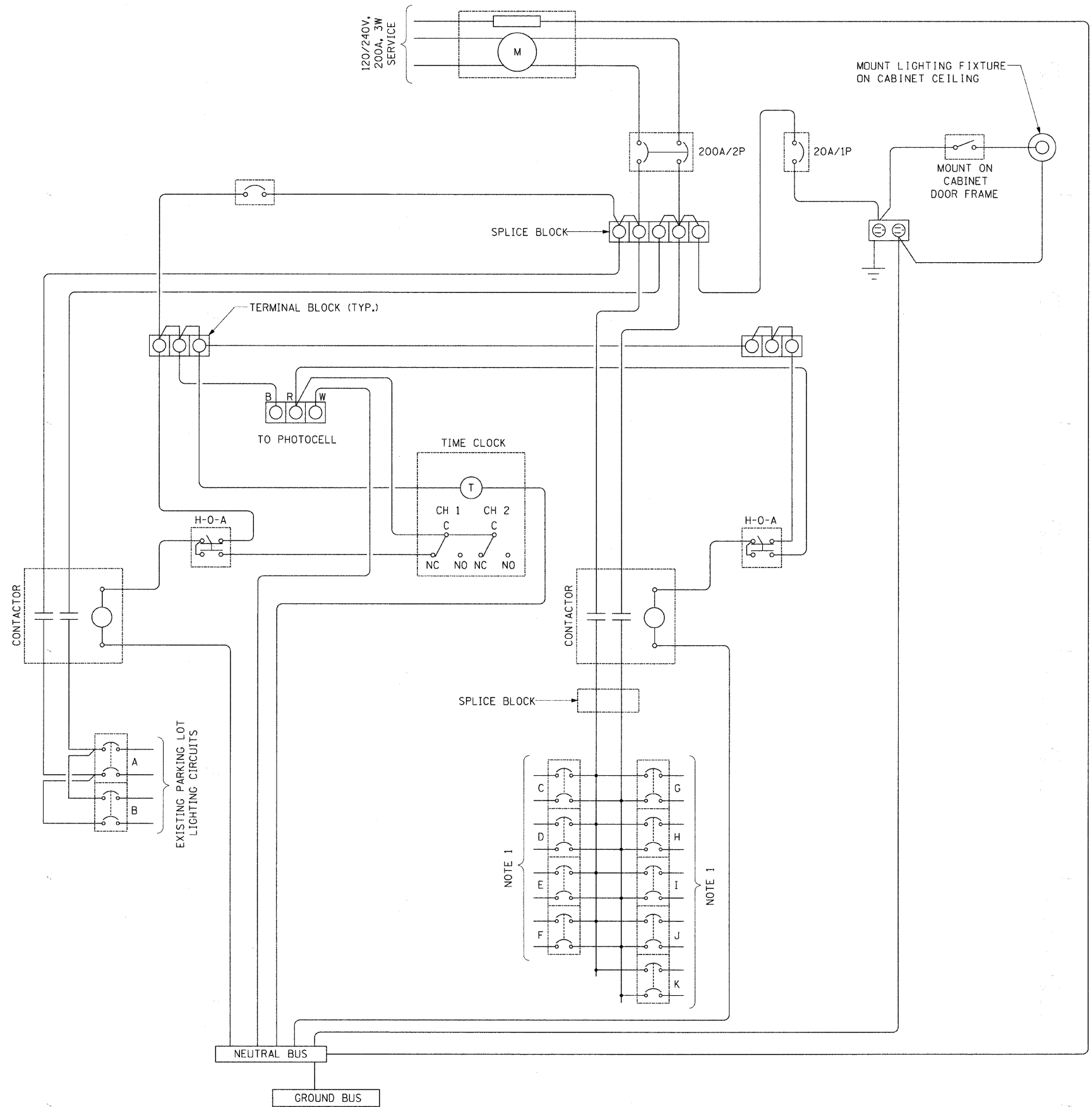
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DRAWN BY: RPK  
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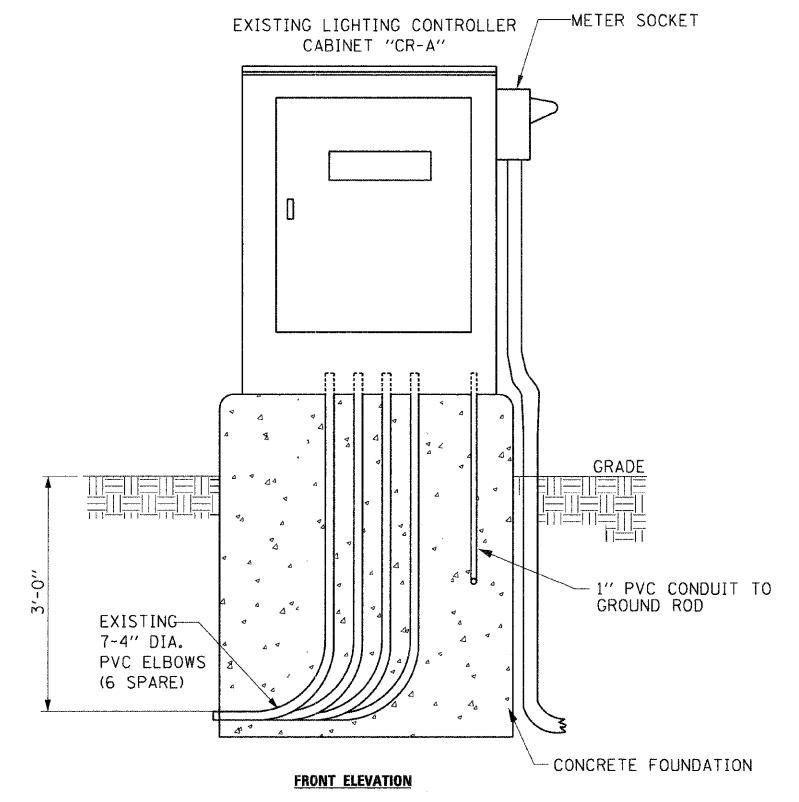


PLAN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	67
STA. _____ TO STA. _____		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		
CONTRACT # 83971				



**1** EXISTING LIGHTING CONTROLLER "CR-A" WIRING DIAGRAM  
N.T.S.

- NOTES:**
- SPARE, 2P, 240V, 30A CIRCUIT BREAKERS FOR PROPOSED DEMPSTER STREET ROADWAY LIGHTING CIRCUITS



**2** EXISTING LIGHTING CONTROLLER "CR-A"  
N.T.S.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
EXISTING LIGHTING CONTROLLER "CR-A" DETAILS

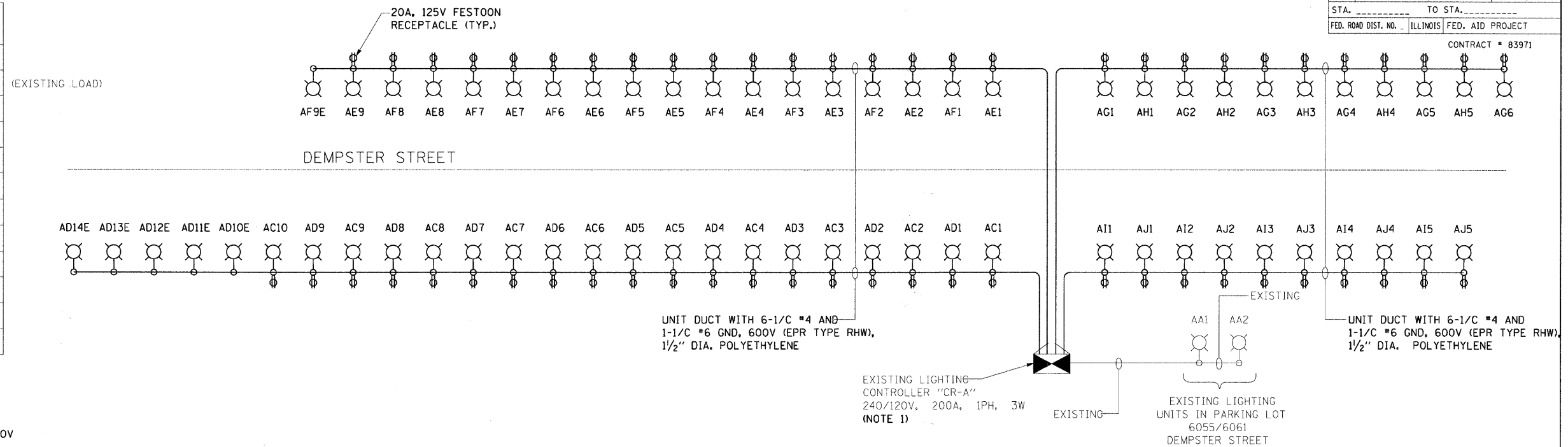
SCALE: N.T.S.      DRAWN BY: RPK  
DATE: 10-16-09      CHECKED BY: KMY





CIRCUIT	AMPS	VA
A	2.4	576
B	-	-
C	19.5	4,680
D	23.55	5,652
E	17.55	4,212
F	16.8	4,032
G	11.7	2,808
H	11.7	2,808
I	9.75	2,340
J	9.75	2,340
TOTAL	122.7	29,448

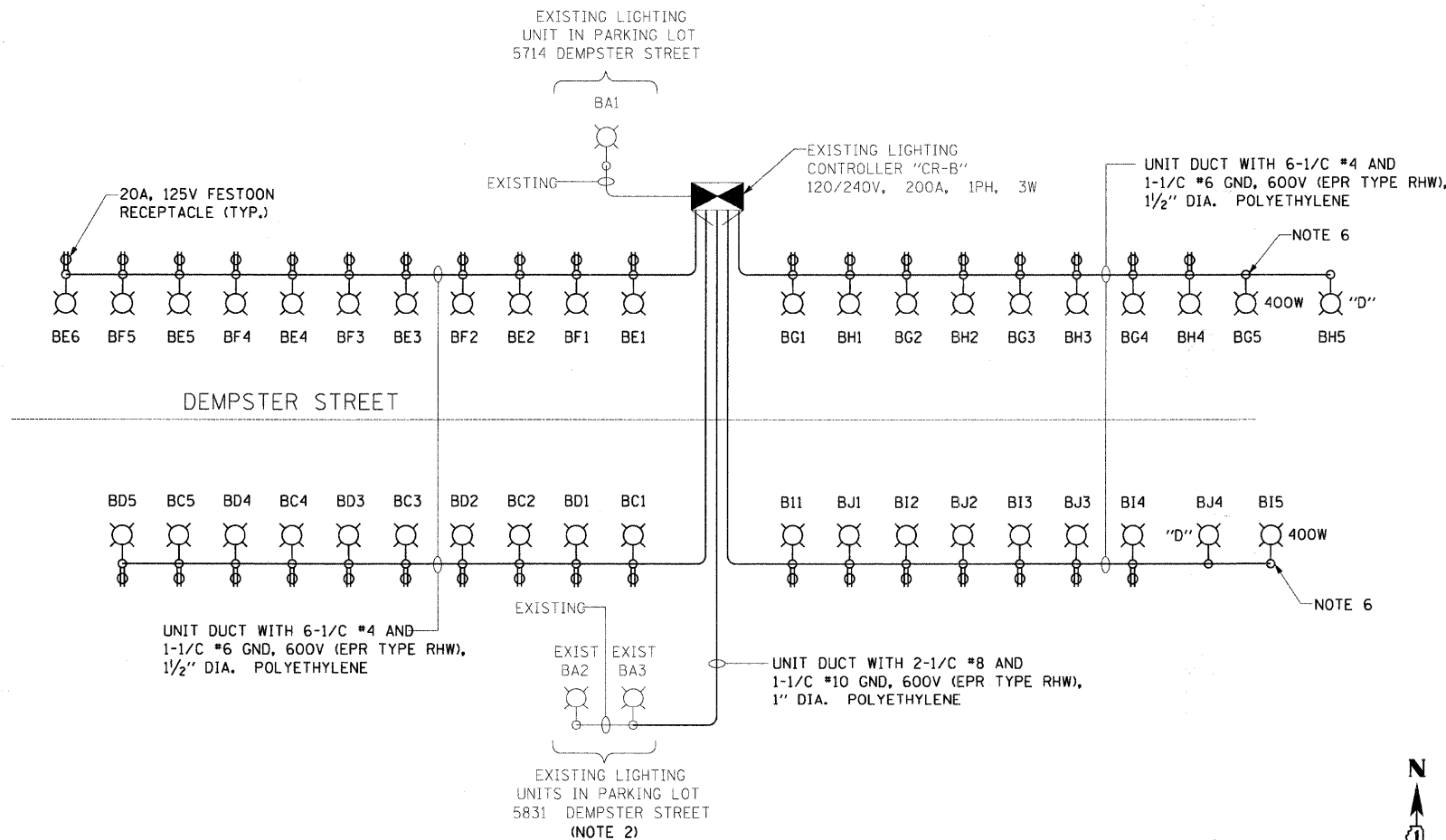
NOTE:  
LOAD TABULATION IS BASED ON THE FOLLOWING:  
250 HPS LUMINAIRE: 1.2 AMP AT 240V  
FESTOON RECEPTACLE: 1.5 AMP AT 120V



1 EXISTING LIGHTING CONTROLLER "CR-A" SINGLE LINE DIAGRAM  
N.T.S.

CIRCUIT	AMPS	VA
A	3.6	864
B	-	-
C	9.75	2,340
D	9.75	2,340
E	11.03	2,648
F	10.5	2,520
G	10.55	2,532
H	9.75	2,340
I	10.2	2,448
J	9.35	2,244
TOTAL	84.48	20,276

NOTE:  
LOAD TABULATION IS BASED ON THE FOLLOWING:  
250 HPS LUMINAIRE: 1.2 AMP AT 240V  
400 HPS LUMINAIRE: 2 AMP AT 240V  
FESTOON RECEPTACLE: 1.5 AMP AT 120V



- NOTES:
- CONNECT ALL NEW LIGHTING UNITS ALONG DEMPSTER STREET TO THE EXISTING SPARE 30A, 2P, 240V CIRCUIT BREAKERS LOCATED IN EXISTING CONTROLLERS "CR-A" AND "CR-B".
  - CONNECT EXISTING PARKING LOT UNITS TO THE EXISTING LIGHTING CONTROLLER "CR-B". THE UNITS SHALL BE CONNECTED TO THE SAME CIRCUIT AS EXISTING LIGHTING UNIT FOR PARKING LOT 5714 DEMPSTER STREET.
  - REFER TO SHEET EG-1 FOR SYMBOL LIST AND ABBREVIATIONS.
  - REFER TO SHEETS ED-2 AND ED-3 FOR EXISTING CONTROLLER "CR-A" AND "CR-B" DETAILS.
  - ALL PROPOSED LIGHTING UNITS ARE TYPE "A", UNLESS NOTED OTHERWISE.
  - NEW 400W, HPS, 240V LUMINAIRE INSTALLED ON EXISTING COMBINATION POLE.
  - ALL PROPOSED LUMINAIRES ARE 250W, HPS, UNLESS NOTED OTHERWISE.

2 EXISTING LIGHTING CONTROLLER "CR-B" SINGLE LINE DIAGRAM  
N.T.S.

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS

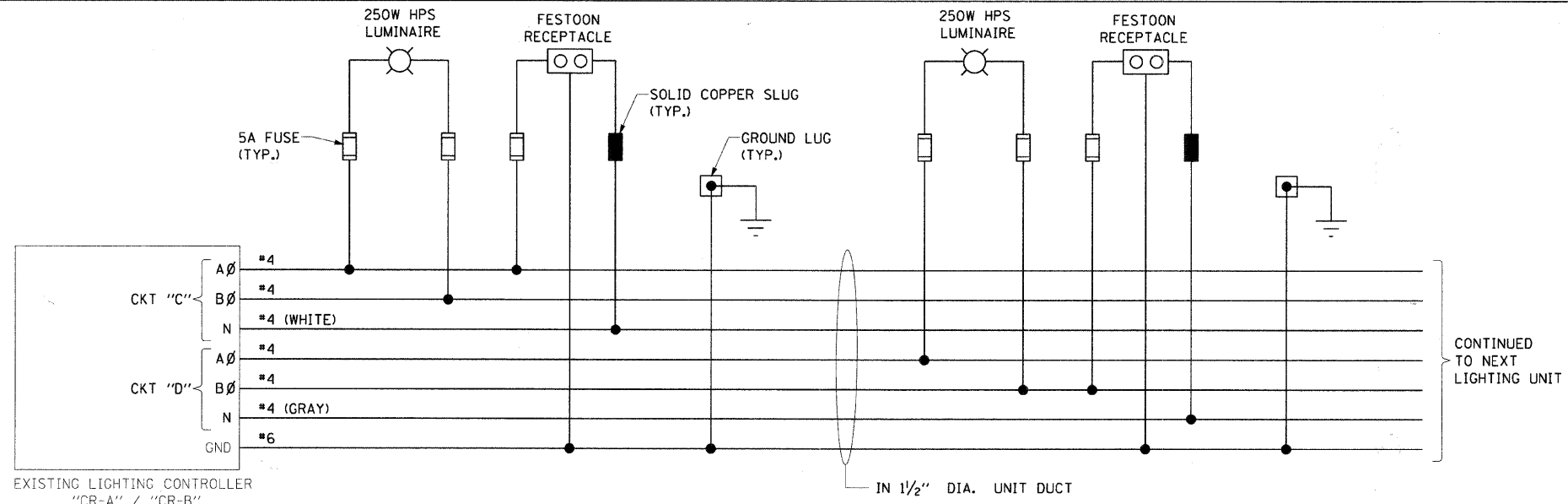
SINGLE LINE DIAGRAMS FOR EXISTING LIGHTING CONTROLLERS

SCALE: NONE  
DATE: 10-16-09

DRAWN BY: RPK  
CHECKED BY: KMY

McDonough Associates Inc.  
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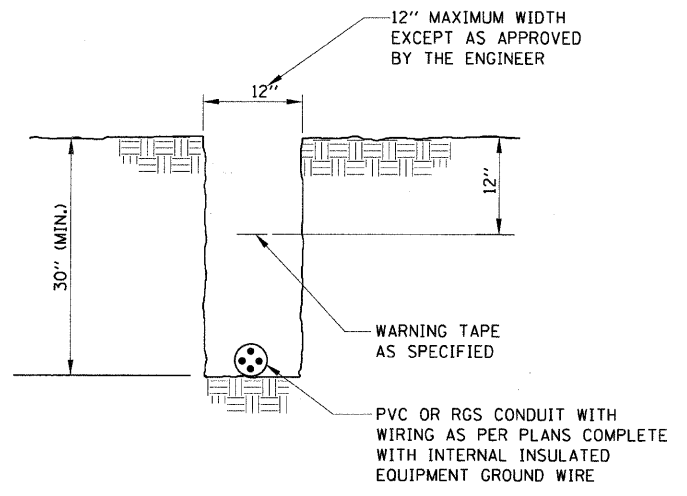




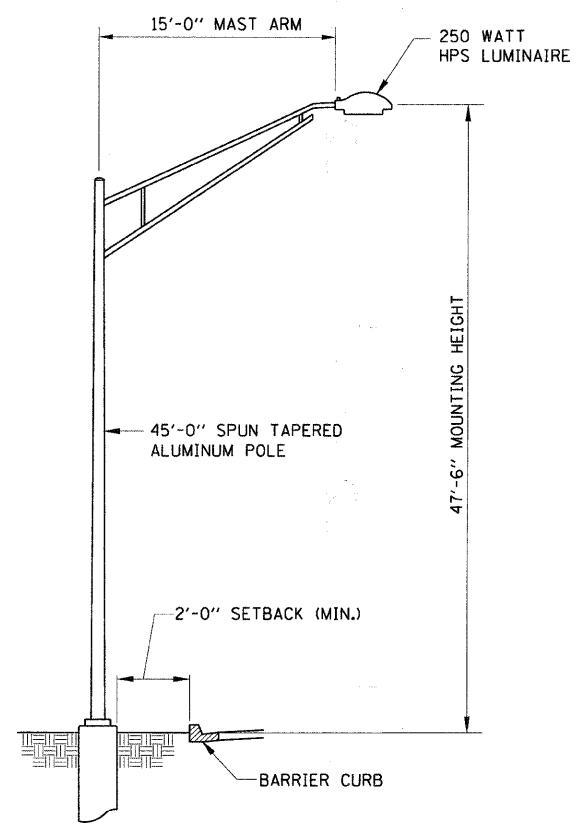
- NOTES:**
1. CONNECT NEW CIRCUITS TO THE EXISTING 30A, 2P, 240V SPARE CIRCUIT BREAKERS.
  2. REFER TO SHEET ED-4 FOR EXISTING LIGHTING CONTROLLERS "CR-A" AND "CR-B" SINGLE LINE DIAGRAMS.
  3. REFER TO DRAWING ED-1 FOR TYPICAL LIGHT POLE BASE WIRING DETAIL.
  4. FESTOON RECEPTACLE PHASE CONNECTION SHALL ALTERNATE BETWEEN AØ AND BØ WITHIN A CIRCUIT AND BETWEEN CIRCUITS, I.E.  
 C1 - AØ  
 D1 - BØ  
 C2 - BØ  
 D2 - AØ.

**1** TYPICAL WIRING DIAGRAM FOR CIRCUITS "C" & "D"  
 N.T.S. (NOTE: TYPICAL FOR ALL OTHER LIGHTING CONTROLLERS "CR-A" AND "CR-B" CIRCUITS)

EXISTING LIGHTING CONTROLLER  
 "CR-A" / "CR-B"  
 (NOTES 1, 2)



**2** TYPICAL TRENCH DETAIL  
 N.T.S.



**3** LIGHTING UNIT TYPE "D" - DETAIL  
 N.T.S.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS

LIGHT POLE AND WIRING DETAILS

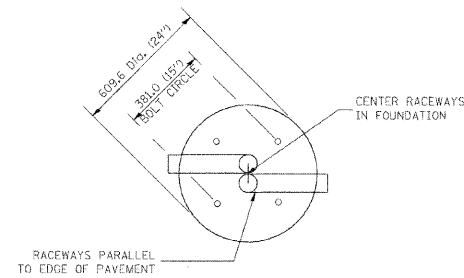
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 DATE: 10-16-09 CHECKED BY:

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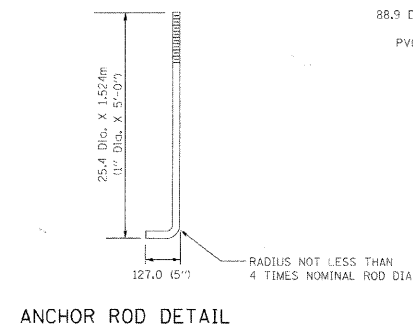
E.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	71
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. _____		ILLINOIS FED. AID PROJECT		
CONTRACT # 83971				

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

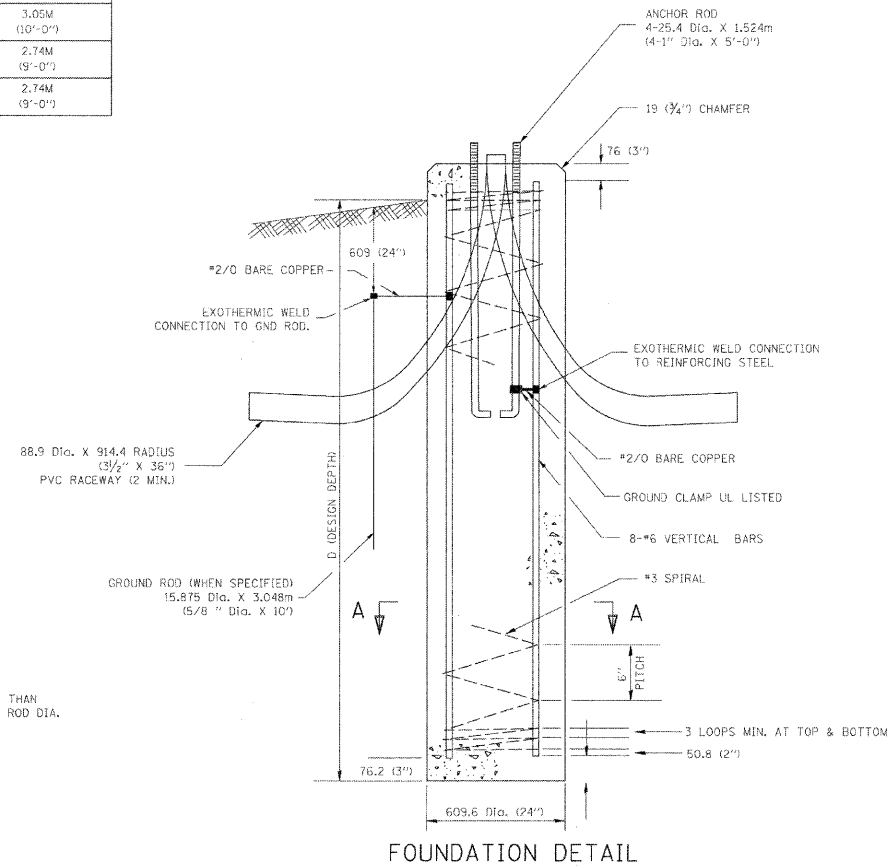
SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	3.96M (13'-0")	4.57M (15'-0")
MEDIUM CLAY Qu = 0.75 TON/SQ.FT	2.09M (9'-6")	3.23M (10'-9")
STIFF CLAY Qu = 1.50 TON/SQ. FT.	2.13M (7'-0")	2.44M (8'-0")
LOOSE SAND φ = 34°	2.74M (9'-0")	3.05M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



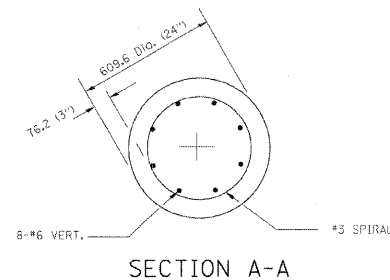
TOP VIEW



ANCHOR ROD DETAIL



FOUNDATION DETAIL



SECTION A-A

NOTES

- ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 1.5M (60 IN.) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 20MM (3/4-IN.).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020J3 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UMG (MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 150 MM (6 INCHES) WITH A MINIMUM OF 75 MM (3 INCHES) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 69.3MM (2 3/4") ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 152.4MM (6") PITCH OR MAY SUBSTITUTE #3 TIES, AT 304.8MM (12") D.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 25.4MM (1") ABOVE THE TOP OF THE FOUNDATION.

ED-6

REVISIONS	
NAME	DATE

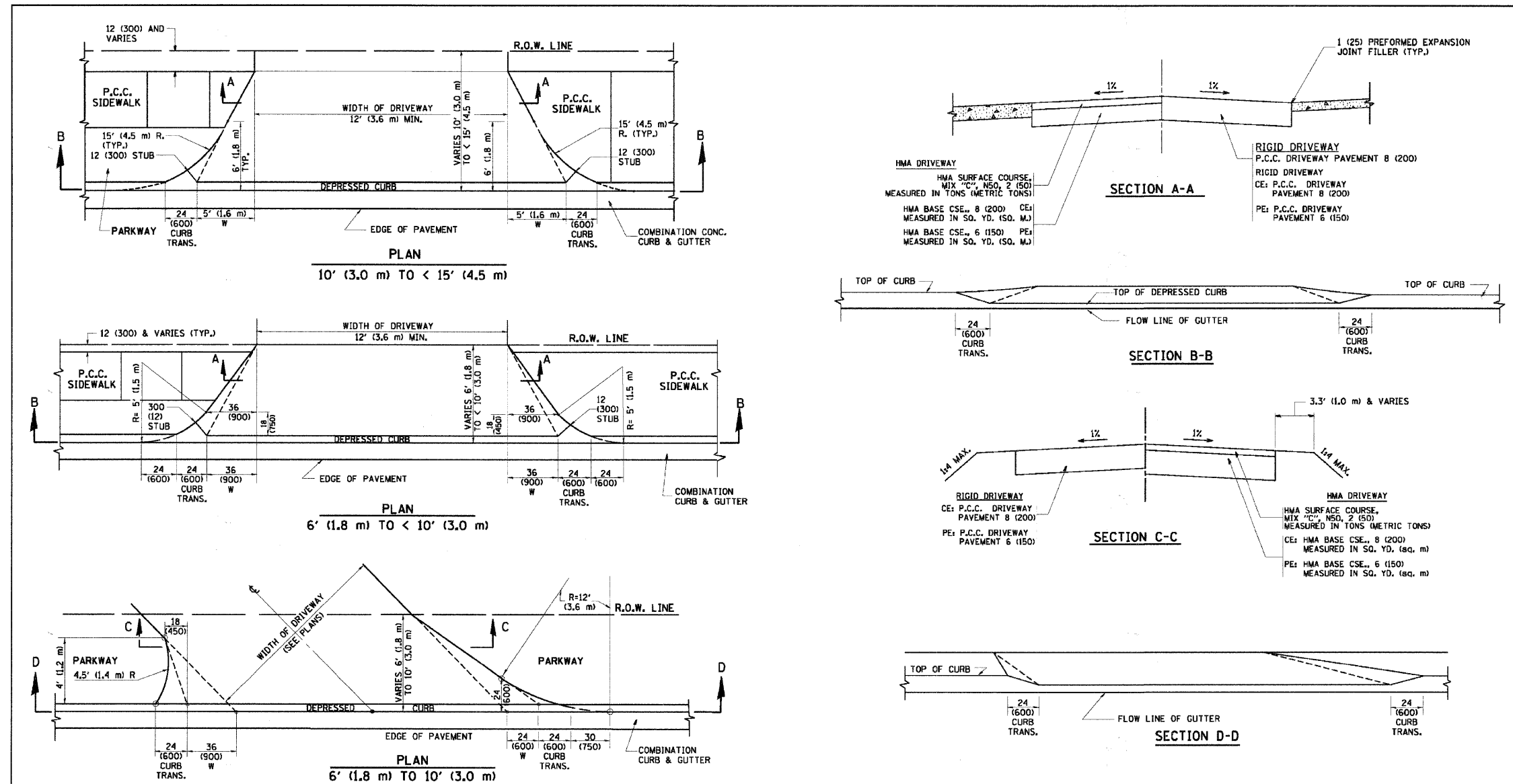
ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
LIGHT POLE TYPE "D" FOUNDATION  
DETAILS

SCALE: N.T.S. DRAWN BY: I.D.O.T.  
DATE: 10-16-09 CHECKED BY: KMY

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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	72
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 83971



**GENERAL NOTES**

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

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

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

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

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

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

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

FILE NAME: \\n\state\22\31\bd02.dgn	USER NAME: gajjanob	DESIGNED: R. SHAH	REVISED: T. HOLTZ 04-08-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DRIVEWAY DETAILS</b>		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN:	REVISED: M. GOMEZ 04-06-01		DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)							
		CHECKED:	REVISED: P. LOFLEUR 04-15-03		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.			BD400-02 (BD-02)			CONTRACT NO.	
		DATE: 11-06-95	REVISED: R. BORO 01-01-07		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							

REVISIONS	
NAME	DATE

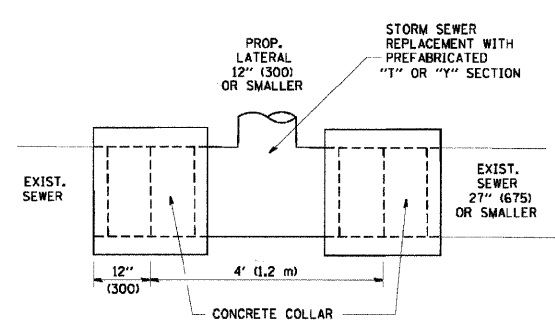
ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS

**BD-02 DRIVEWAY DETAILS**

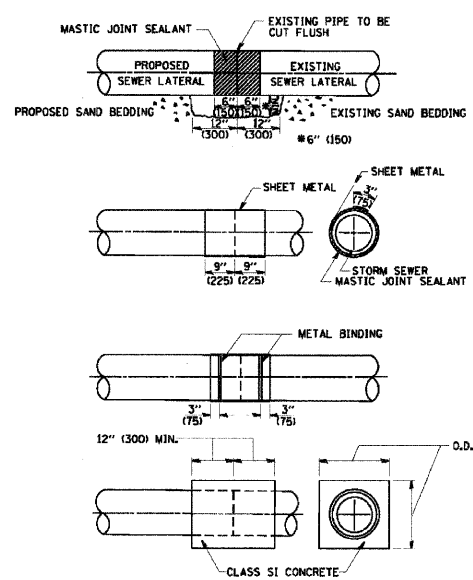
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DATE: 10-16-09 CHECKED BY: RY

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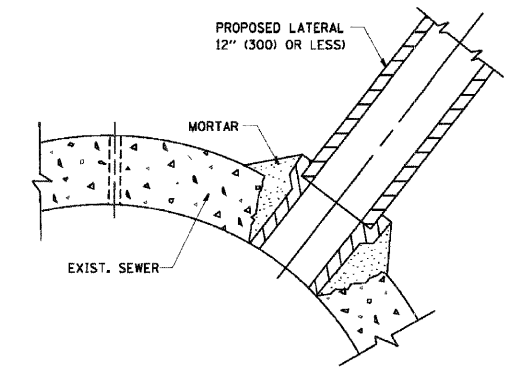


**DETAIL "A"**  
LATERAL CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER



**DETAIL "B"**  
CLASS SI CONCRETE COLLAR

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



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

**NOTES**

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

**CONSTRUCTION METHODS**  
I. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.  
II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:  
A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".  
B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".  
IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

**GENERAL**  
CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.  
CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

**BASIS OF PAYMENT**  
TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.  
REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.  
TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.  
CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

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

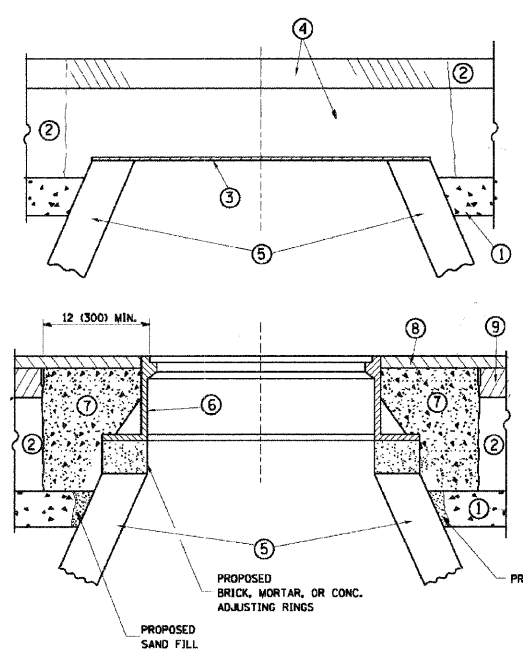
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PLOT SCALE = 58.889 / IN.	CHECKED - R. SHAH	REVISOR - R. SHAH	DATE - 07-25-90		SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	CONTRACT NO. BD580-01 (BD-7)		
PLOT DATE = 1/1/2008	DATE - 07-25-90	REVISOR - R. SHAH	DATE - 06-12-96					FED. ROAD DIST. NO. 1			ILLINOIS FED. AID PROJECT	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**BD-07 DETAIL OF STORM SEWER  
CONNECTION TO EXISTING SEWER**  
SCALE: N.T.S. DRAWN BY: NKU  
DATE: 10-16-09 CHECKED BY: RY  
**McDonough Associates Inc.**  
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	74
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 83971



- CONSTRUCTION PROCEDURES**
- STAGE 1 (BEFORE PAVEMENT MILLING)**
- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
  - B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
  - C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
  - D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1 1/2 (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 S1 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**
- ① SUB-BASE GRANULAR MATERIAL
  - ② EXISTING PAVEMENT
  - ③ 36 (900) DIAMETER METAL PLATE
  - ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
  - ⑤ EXISTING STRUCTURE
  - ⑥ FRAME AND LID (SEE NOTES)
  - ⑦ CLASS S1 CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
  - ⑧ PROPOSED HMA SURFACE COURSE
  - ⑨ PROPOSED HMA BINDER COURSE

**NOTES:**

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

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

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

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

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

**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

FILE NAME =	USER NAME = gqglamob1	DESIGNED - R. SHAN	REVISED - R. SHAN 03-10-95
W:\data\td\22434\10088.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 58.28281 1/2 IN	CHECKED -	REVISED - R. WIEDEMAN 05-14-04
	PLOT DATE = 1/4/2009	DATE - 10-25-94	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BD600-03 (BD-8)			
CONTRACT NO.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

REVISIONS	
NAME	DATE

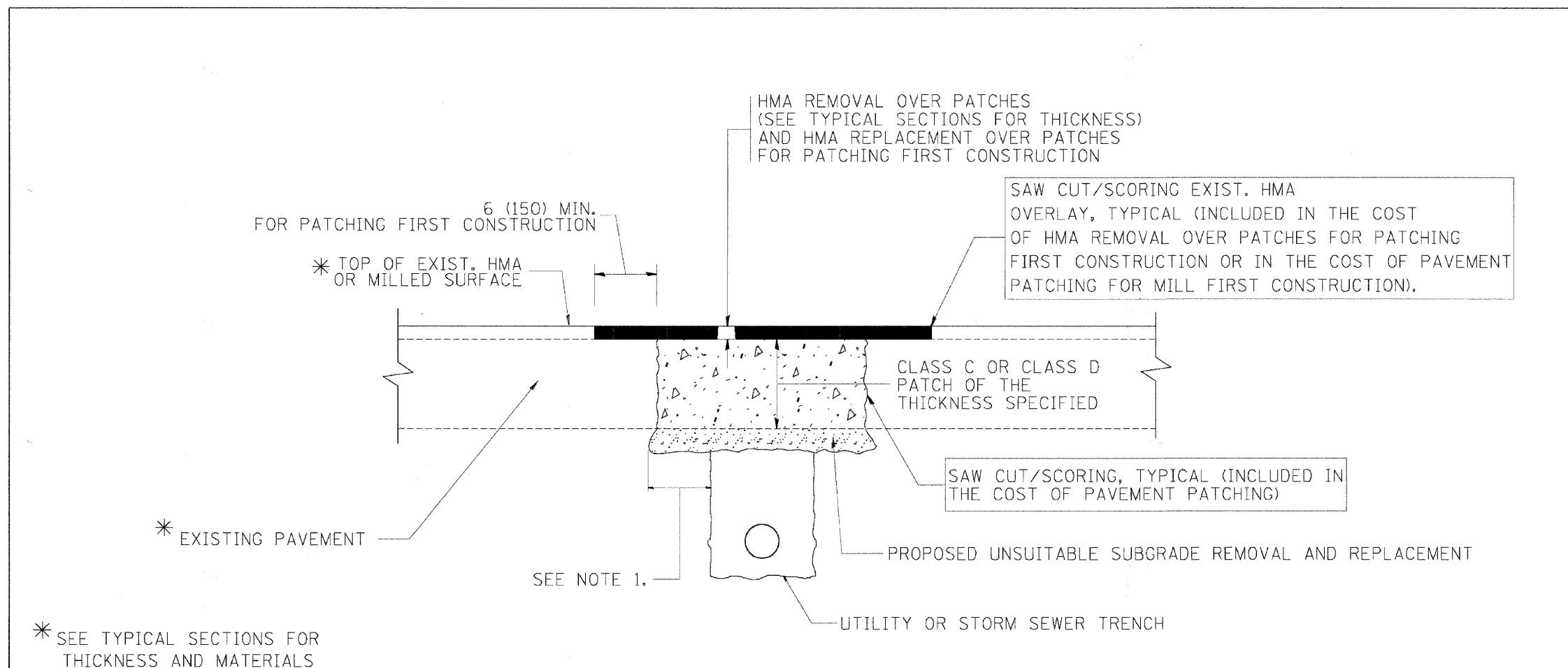
ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
BD-08 FRAMES AND LIDS ADJUSTMENT

SCALE: N.T.S. DRAWN BY: NKU  
DATE: 10-16-09 CHECKED BY: RY

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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	75
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 83971



- 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 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 OTHERWISE SHOWN.

FILE NAME =	USER NAME = bawerdj	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98
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	PLOT SCALE = 50.0000 1/2 IN.	CHECKED -	REVISED - R. BORO 09-04-07
	PLOT DATE = 10/27/2009	DATE - 10-25-94	REVISED - K. ENG 10-27-08

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR  
HMA SURFACED PAVEMENT

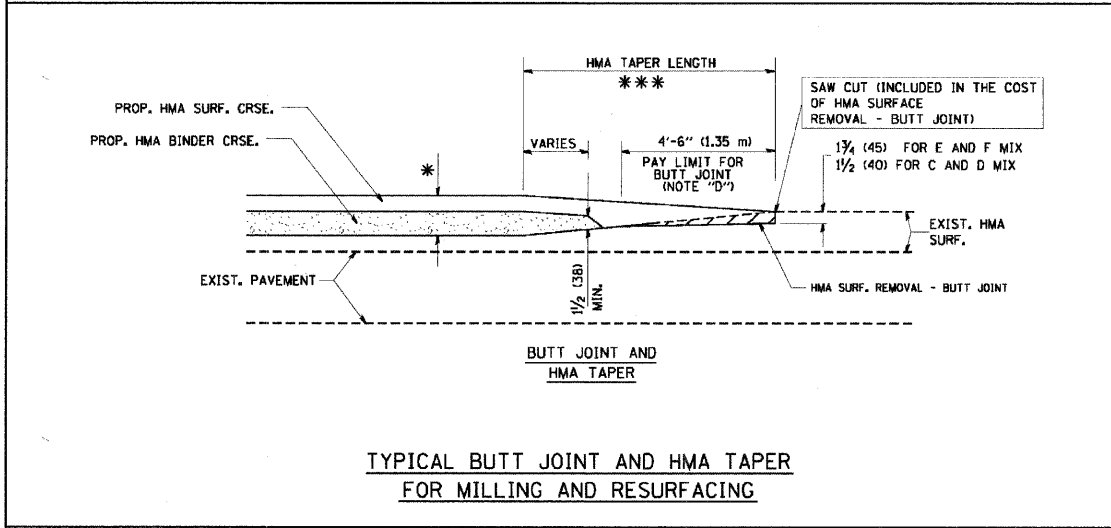
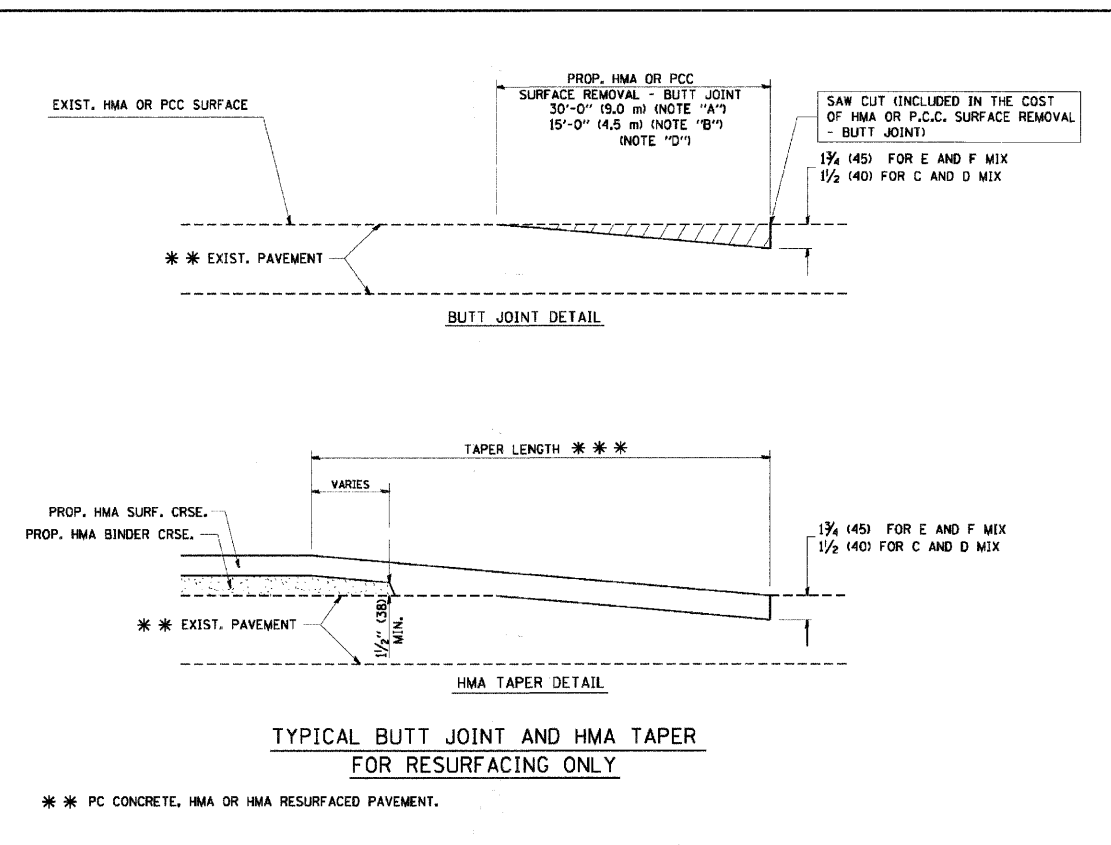
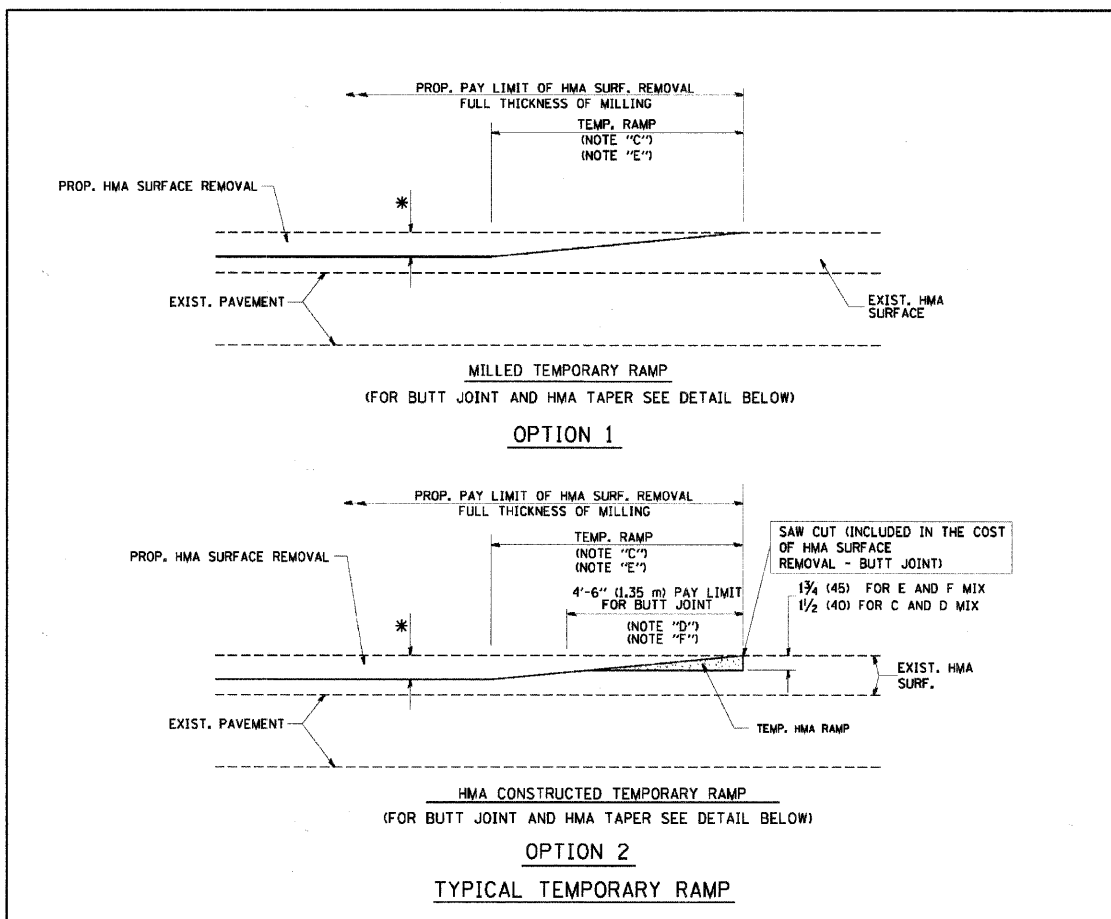
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BD400-04 (BD-22)			
SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA. TO STA.
FED. ROAD DIST. NO. 1 (ILLINOIS)		FED. AID PROJECT		

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**BD-22 PAVEMENT PATCHING FOR  
HMA SURFACED PAVEMENT**  
SCALE: N.T.S. DRAWN BY: NKU  
DATE: 10-16-09 CHECKED BY: RY  
**McDonough Associates Inc.**  
Engineers/Architects

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1324	03-00097-01-PV	COOK	82	76
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS		FED. AID PROJECT	

CONTRACT # 83971



**NOTES**

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

\* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

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

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

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

FILE NAME =	USER NAME = gajlenobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
\\nhd\stest\929\31\bd32.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000' / 1"	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/11/2009	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

<b>BUTT JOINT AND HMA TAPER DETAILS</b>		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	BD400-05	BD32	CONTRACT NO.
				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BD400-05	BD32	CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

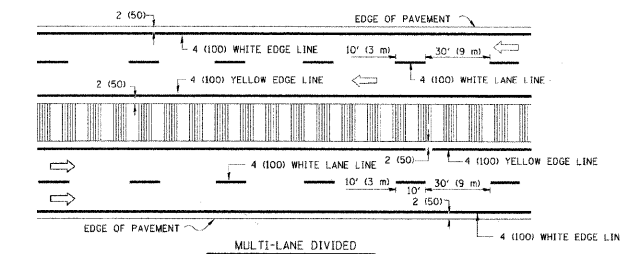
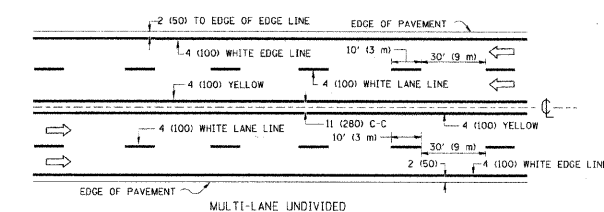
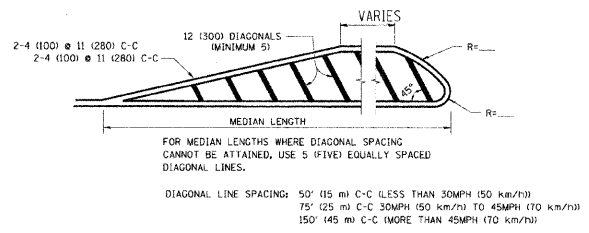
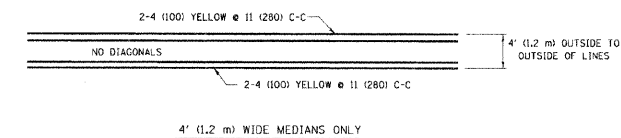
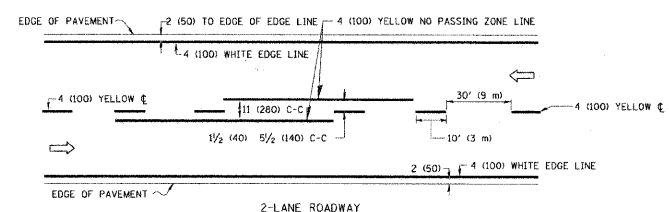
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
**BD-32 BUTT JOINTS AND HMA TAPER**

SCALE: N.T.S. DRAWN BY: NKU  
 DATE: 10-16-09 CHECKED BY: RY

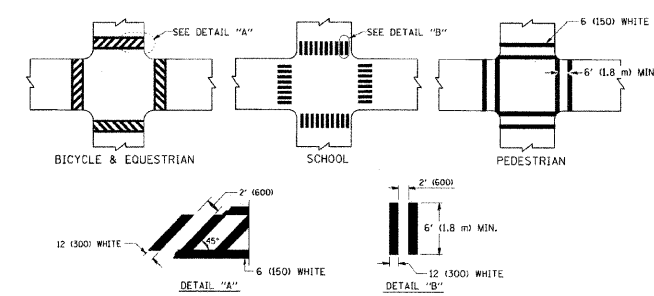
**McDonough Associates Inc.**  
 Engineers/Architects

CONTRACT # 83971

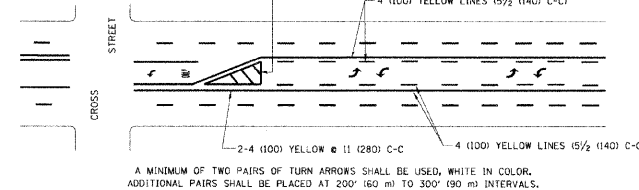


NOTE: MEDIANS WITH BARRIER CURBS DO NOT REQUIRE AN EDGE LINE

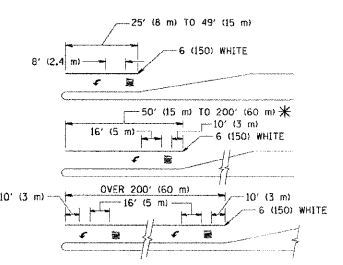
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



TYPICAL PAINTED MEDIAN MARKING

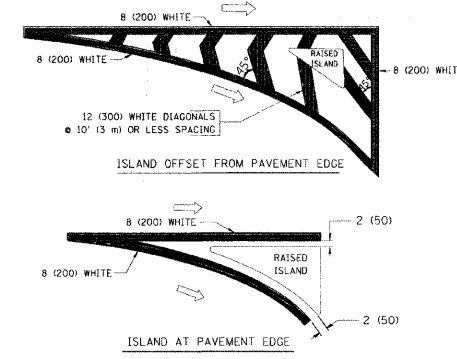


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.

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

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (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	WHITE	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) LINES 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; 5/2 (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 CROSSING 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" 15' (4.5 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 78000) AREA OF: "R"-3.6 SQ. FT. (0.33 m²) EACH "X"-54.0 SQ. 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' (22 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 78000.

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

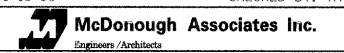
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		DRAWN		REVISED	C. JUCIUS 09-09-09
		CHECKED		REVISED	
		DATE	03-19-90	REVISED	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL PAVEMENT MARKINGS			TC-13			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		CONTRACT NO.	
		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
IL RTE 58 (DEMPSTER ST) IMPROVEMENTS  
TC-13 DISTRICT ONE TYPICAL PAVEMENT MARKINGS  
SCALE: N.T.S.  
DATE: 10-16-09  
DRAWN BY: NKU  
CHECKED BY: RY

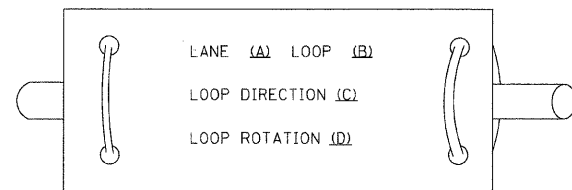




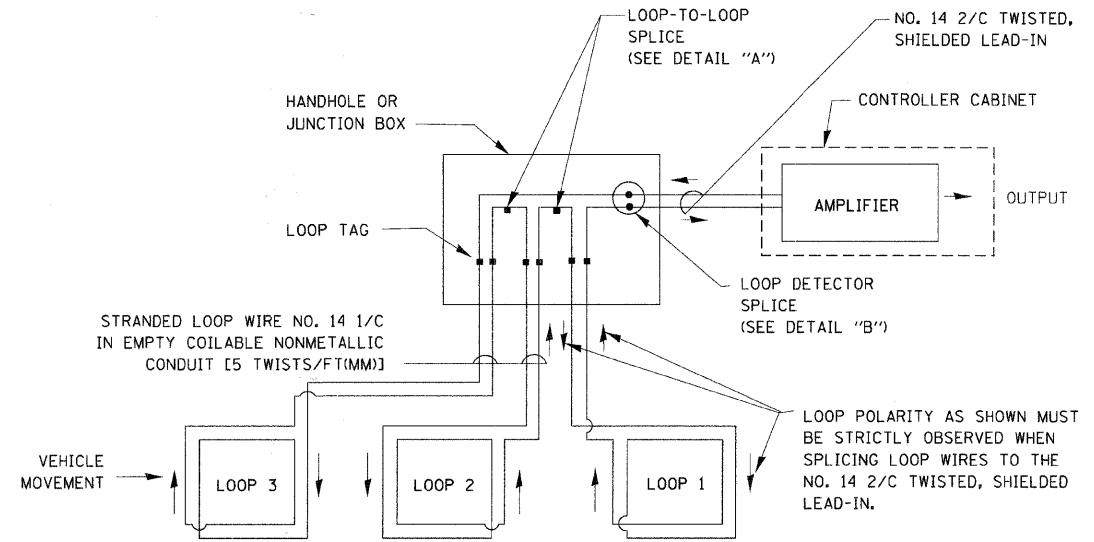
**LOOP DETECTOR NOTES**

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

**LOOP LEAD-IN CABLE TAG**

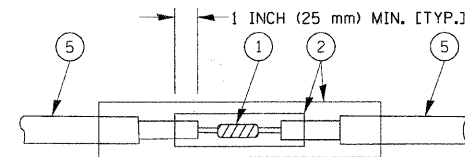


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

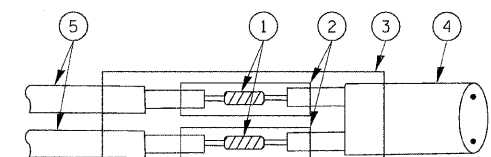


**DETECTOR LOOP WIRING SCHEMATIC**

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

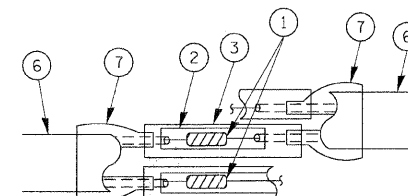


**DETAIL "A"  
LOOP-TO-LOOP SPLICE**

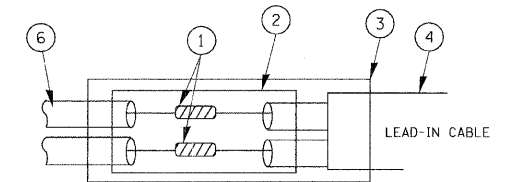


**DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE**

**TYPE I LOOP**



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



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

**LOOP DETECTOR SPLICE**

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

FILE NAME =	USER NAME = kanthaphixaybo	DESIGNED - DAD	REVISED -
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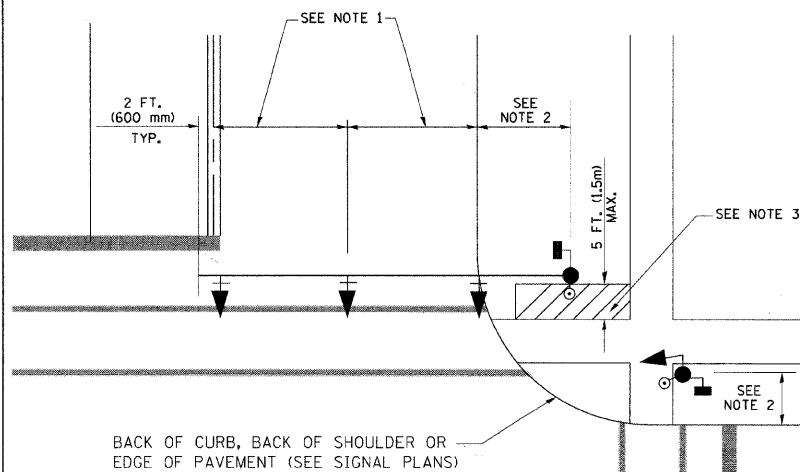
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: SHEET NO. 1 OF 6 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 3971	

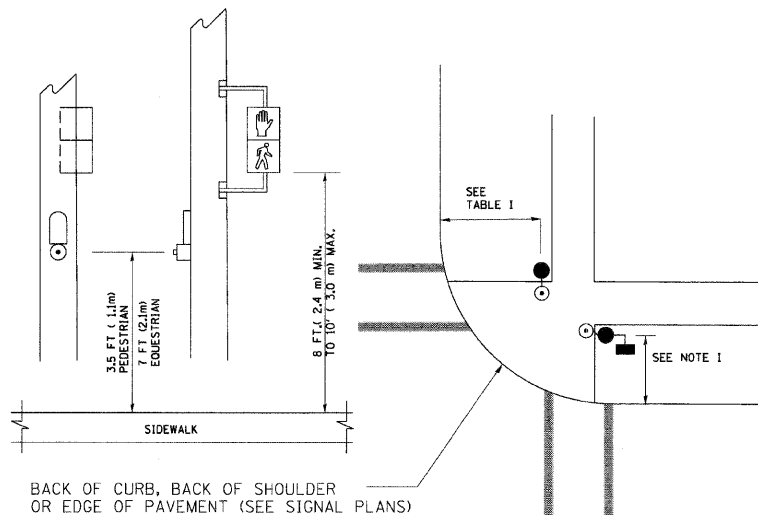
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST**  
 MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



**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."

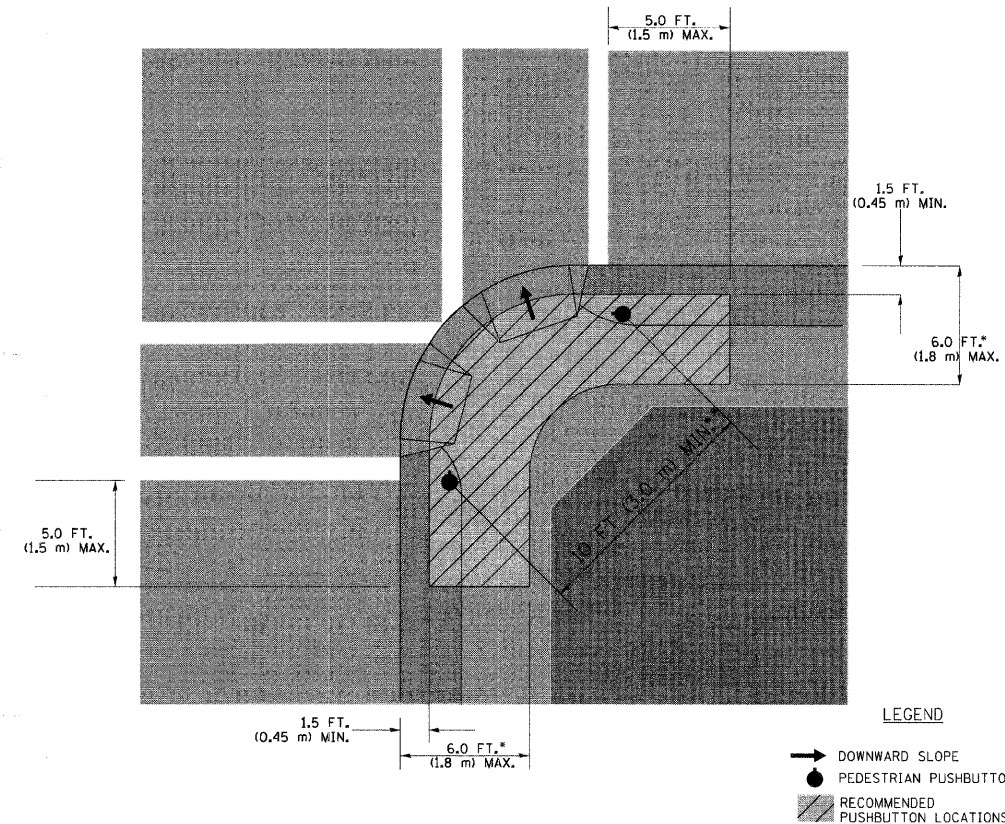
**PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST**



**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**

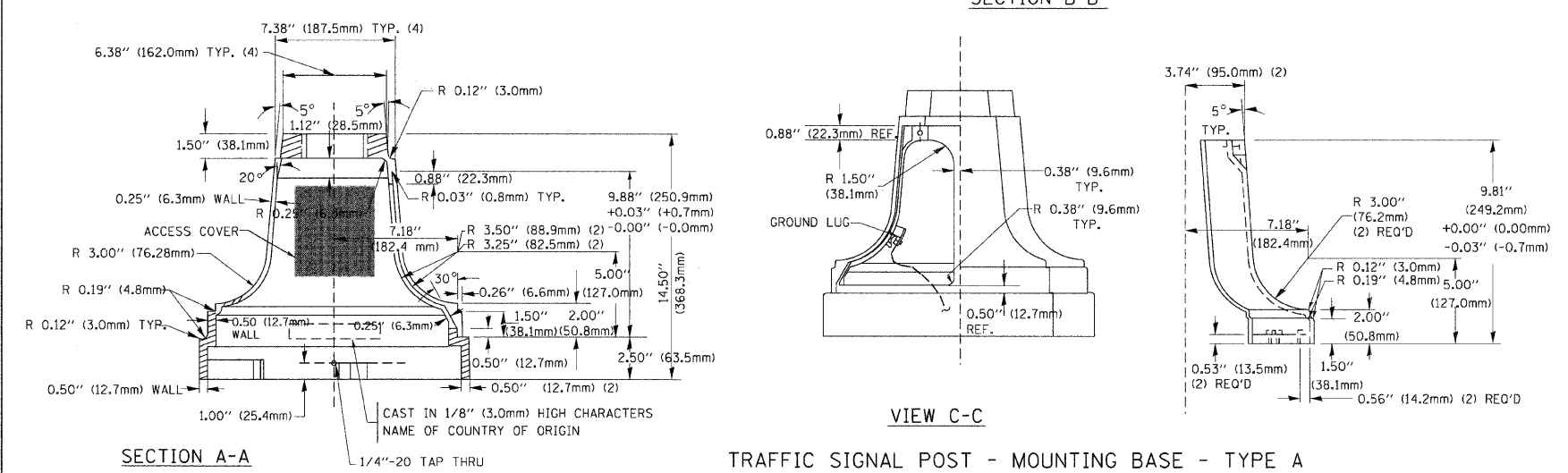
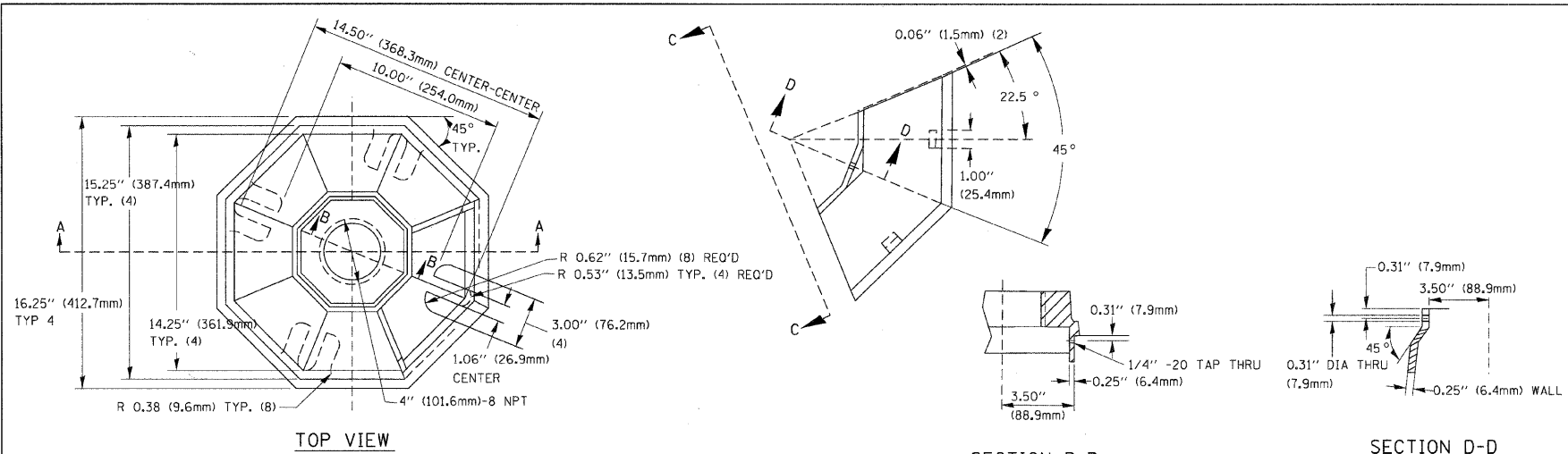
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 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:**

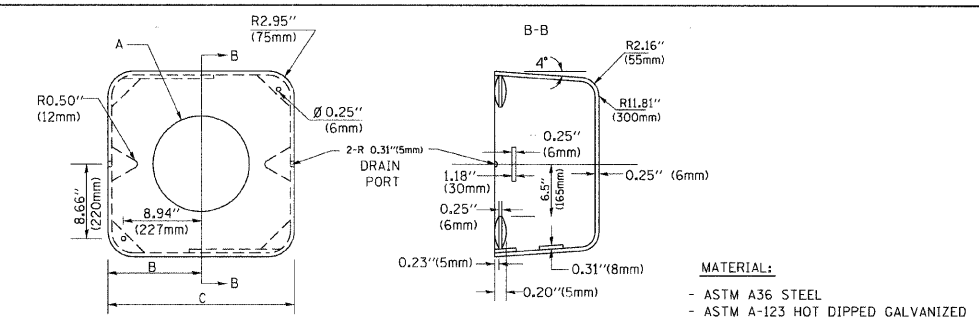
1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM 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.







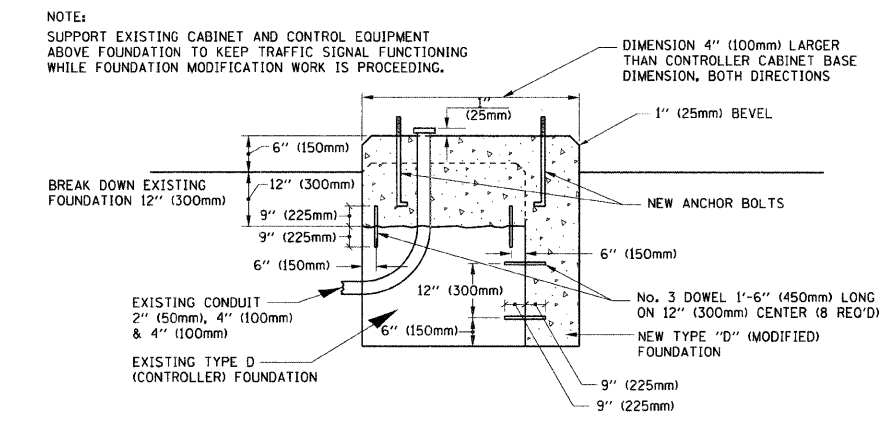
TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



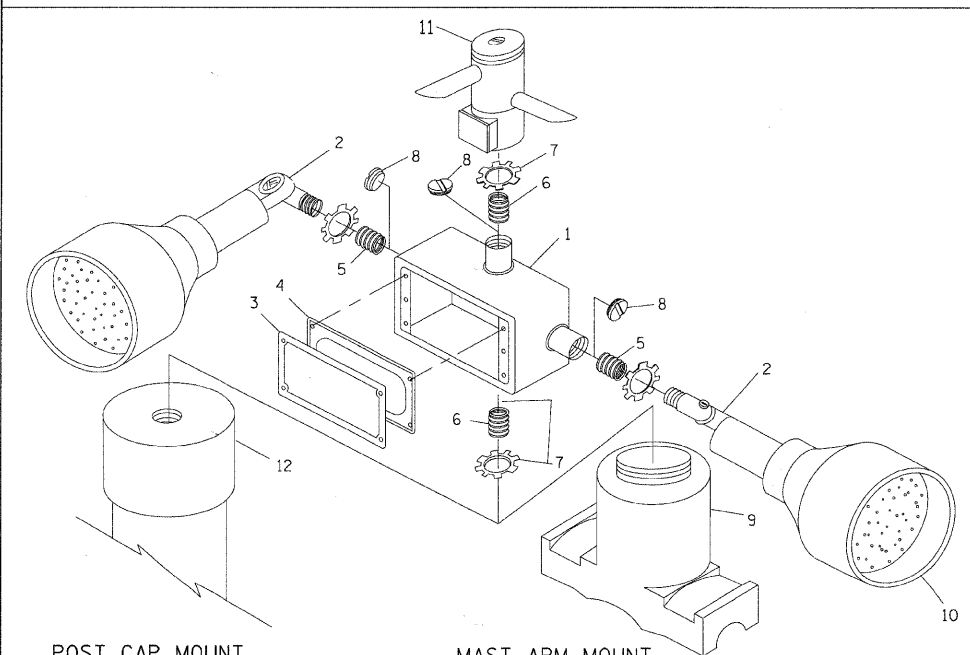
A	B	C	HEIGHT	WEIGHT
VARIES	9.5\"(241mm)	19\"(483mm)	7\"(178mm) - 12\"(300mm)	53 lbs (24kg)
VARIES	10.75\"(273mm)	21.5\"(546mm)	7\"(178mm) - 12\"(300mm)	68 lbs (31 kg)
VARIES	13.0\"(330mm)	26\"(660mm)	7\"(178mm) - 12\"(300mm)	81 lbs (37 kg)
VARIES	18.5\"(470mm)	37\"(940mm)	7\"(178mm) - 12\"(300mm)	126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

SHROUD

- NOTES:
- 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.



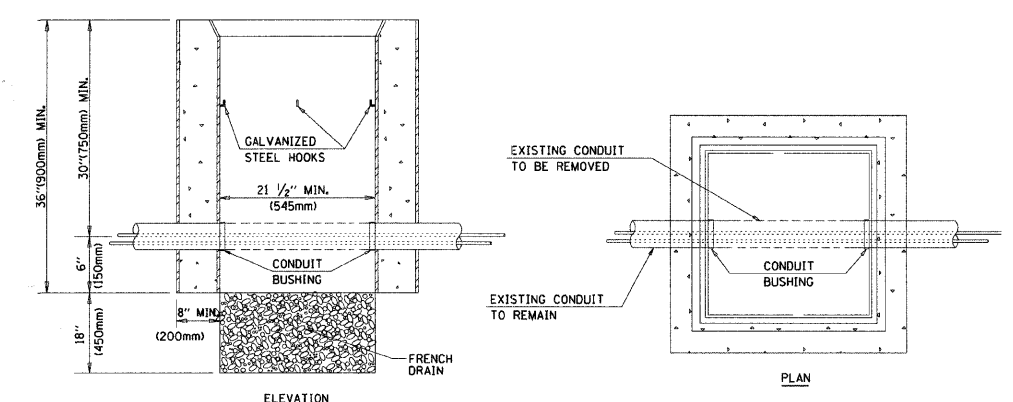
MODIFY EXISTING TYPE "D" FOUNDATION



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

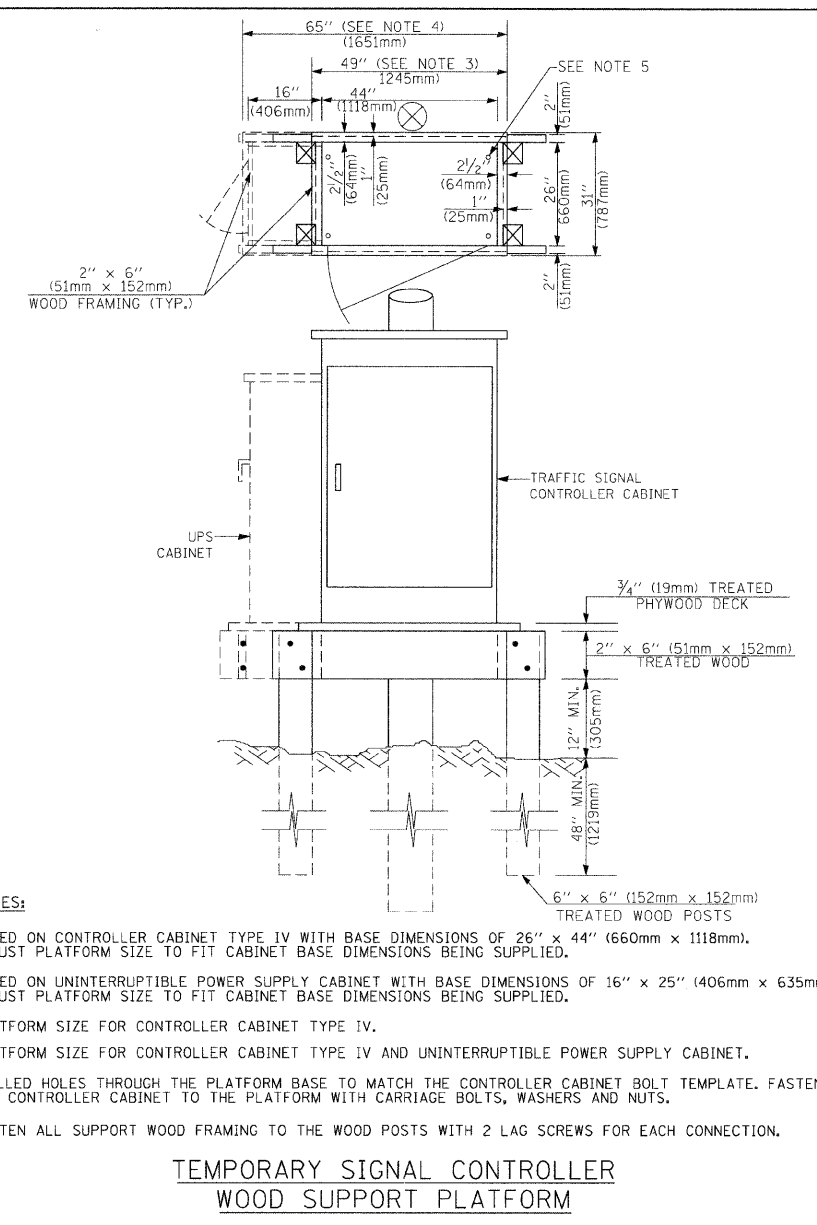
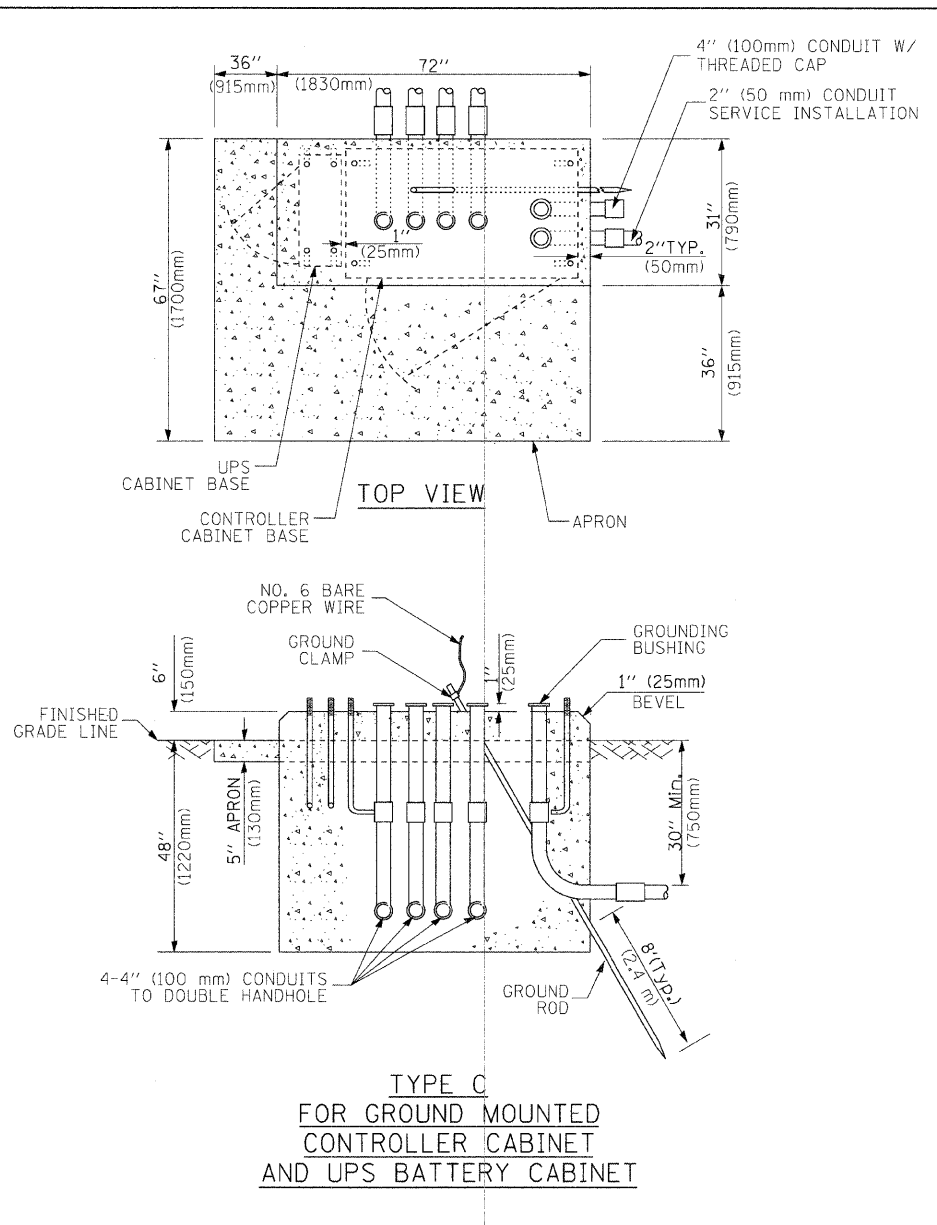
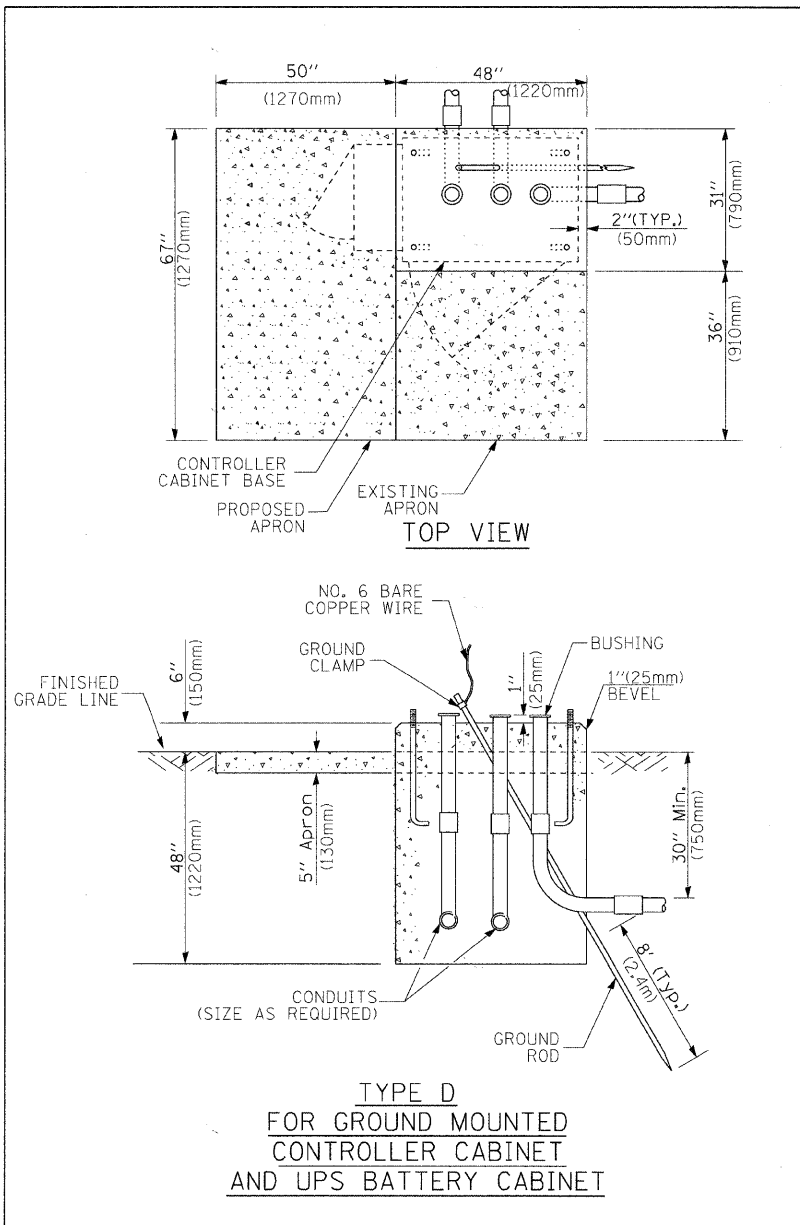
ITEM NO.	IDENTIFICATION
1	OUTLET BOX - GALV. 21 CU. IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\"(19 mm) CLOSE NIPPLE
7	3/4\"(19 mm) LOCKNUT
8	3/4\"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR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

- NOTES:
- 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-O-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.



- 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



- 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.

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

**CABLE SLACK**

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

**VERTICAL CABLE LENGTH**

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

**DEPTH OF FOUNDATION**

MAST ARM LENGTH	FOUNDATION DEPTH	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF REBARS	SIZE OF REBARS
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	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)
	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 (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.
  - 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 SMI2F			
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 SMI2F			
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			CT	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)			CNC	CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM			S	STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM			I	ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM	R			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	RL			SIGNAL POST AND FOUNDATION TO BE REMOVED			
GUY WIRE				ABANDON ITEM	A			INTERSECTION & SAMPLING (SYSTEM) DETECTOR			IS
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR			S
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			P
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			PP
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			PS
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				PREFORMED SAMPLING (SYSTEM) DETECTOR			PS
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED							
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID							
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER							
ILLUMINATED SIGN "NO LEFT TURN"				RADIO INTERCONNECT							
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO REPEATER							
DETECTOR LOOP, TYPE I				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED							
PREFORMED DETECTOR LOOP				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)							
MICROWAVE VEHICLE SENSOR											
VIDEO DETECTION CAMERA											
VIDEO DETECTION ZONE											
PAN, TILT, ZOOM CAMERA											
WIRELESS DETECTOR SENSOR											
WIRELESS ACCESS POINT											

## RAILROAD SYMBOLS

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