

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLANS FOR PROPOSED  
FEDERAL AID HIGHWAY**

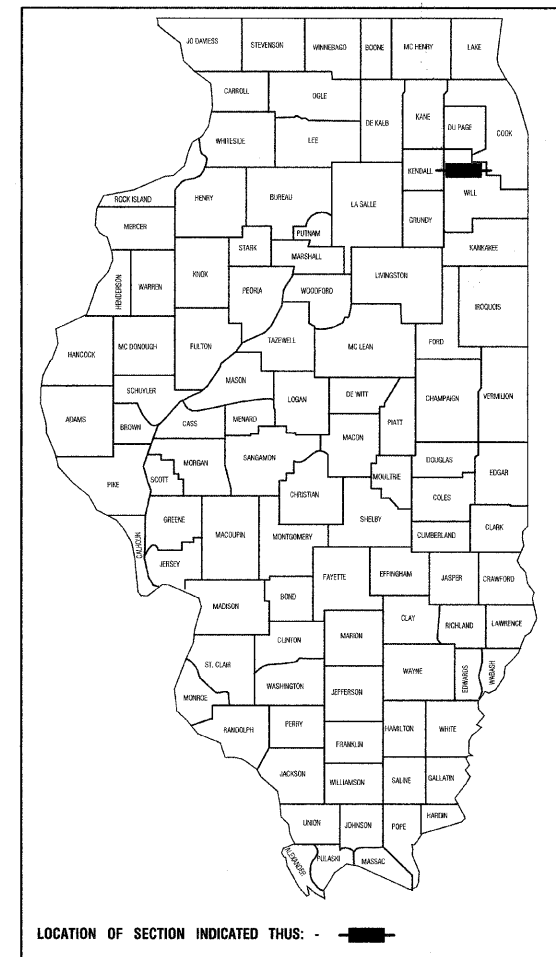
F.A.U. ROUTE 0285  
151ST STREET IMPROVEMENT  
ARCHER AVENUE (IL-171) TO FARRELL ROAD  
S.T.P. PROJECT NO.: M-8003-(100)  
SECTION NO.: 01-00052-00-FP  
CITY OF LOCKPORT  
WILL COUNTY  
C-91-403-01

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	01
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83956

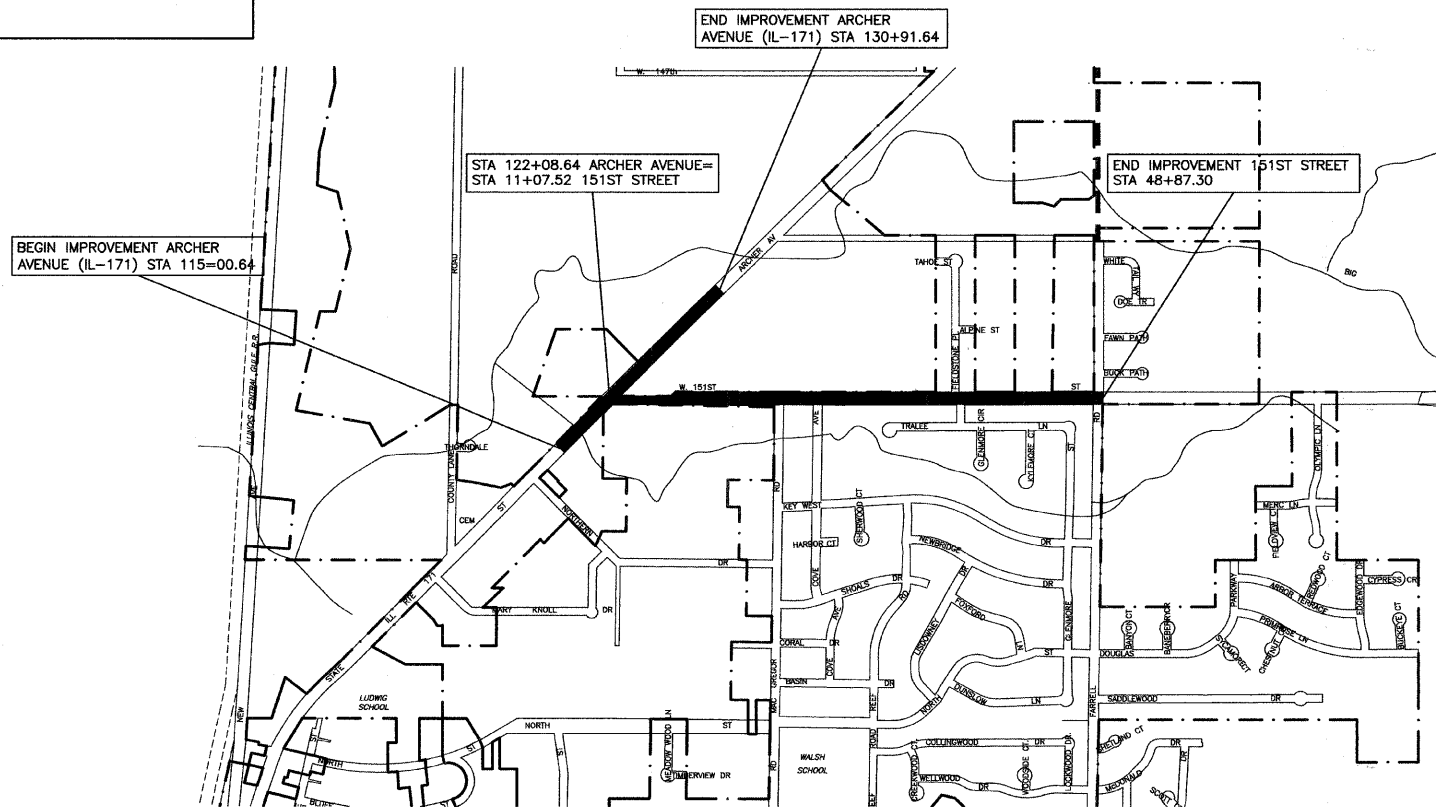
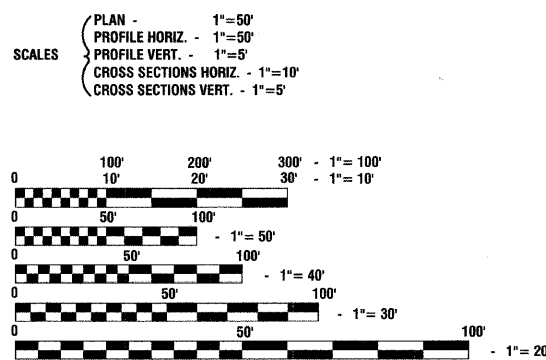
INDEX OF SHEETS  
SEE SHEET NO. 2

STATE STANDARDS  
SEE SHEET NO. 2



LOCATION OF SECTION INDICATED THIS: - [black rectangle]

DESIGN DESIGNATION - 151ST STREET ADT 7,000 (2030) - COLLECTOR PV=6,930 SU=70	
	<u>151ST STREET</u>
2000 ADT -	4,000
2030 ADT -	7,000
POSTED SPEED LIMIT -	35 mph
DESIGN PERIOD -	20 YEARS
DESIGN SPEED LIMIT -	40 mph
STREET CLASSIFICATION -	CLASS II



LOCATION MAP

GROSS LENGTH=5582.97 FEET=1.06 MILES  
NET LENGTH=5582.97 FEET=1.06 MILES

I.D.O.T. FEDERAL AID DESIGN ENGINEER: MARILYN SOLOMON 847-705-4407  
CONSULTANTS: ROBINSON ENGINEERING, LTD. 708-331-6700

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

CONTRACT NO. 83956

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

APPROVED 12-19 2007  
MAYOR, CITY OF LOCKPORT

PASSED DECEMBER 21 2007  
C. H. H. CHRISTOPHER HOLT  
REGION ONE ENGINEER OF LOCAL ROADS & STREETS

RELEASED FOR BID BASED ON LIMITED REVIEW January 2, 2008  
D. C. H. H. HOLT  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER

PRINTED BY THE AUTHORITY OF  
THE STATE OF ILLINOIS

DESCRIPTION OF IMPROVEMENT  
THIS IMPROVEMENT CONSISTS OF EARTH EXCAVATION, CONSTRUCTION OF STORM SEWERS AND DRAINAGE STRUCTURES, AND ROADWAY CONSTRUCTION. ALL INCIDENTAL WORK AS NECESSARY TO COMPLETE THE IMPROVEMENT SHOWN HEREIN AND AS DESCRIBED IN THE SPECIFICATIONS.

PREPARED BY OR UNDER THE DIRECT SUPERVISION OF:  
John Mohr  
12/18/07

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	02
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83956

INDEX OF SHEETS

- 1. TITLE SHEET
- 2. INDEX OF SHEETS, STATE STANDARDS
- 3. GENERAL NOTES
- 4.-6. SUMMARY OF QUANTITIES
- 7.-8. TYPICAL CROSS SECTIONS
- 9.-10. ALIGNMENT AND TIES
- 11.-18. PLAN AND PROFILE
- 19. DETOUR PLAN
- 20.-21. EROSION CONTROL PLAN AND LANDSCAPING
- 22.-29. DRAINAGE AND UTILITIES
- 30. INTERSECTION DETAILS
- 31.-32. PAVEMENT MARKING PLAN AND SIGNING PLAN
- 33. TRAFFIC SIGNAL PLAN
- 34. CABLE PLAN
- 35. MAST-ARM MOUNTED STREET SIGNS
- 36. CONSTRUCTION DETAILS
- 37.-59. CROSS SECTIONS
- 60.-71. DISTRICT ONE STANDARD DETAILS

STATE STANDARDS

- 000001-05 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001001-01 AREAS OF REINFORCEMENT BARS
- 280001-04 TEMPORARY EROSION CONTROL SYSTEMS
- 406201-01 MAILBOX TURNOUT
- 424001-05 CURB RAMPS FOR SIDEWALKS
- 542301-01 PRECAST REINFORCED CONCRETE FLARED END SECTION
- 542306-01 PRECAST REINFORCED CONCRETE ELLIPTICAL FLARED END SECTION
- 542311 GRATING FOR CONCRETE FLARED END SECTION
- 602001 CATCH BASINS, TYPE A
- 602011 CATCH BASINS, TYPE C
- 602301-01 INLET, TYPE A
- 602401-01 MANHOLE, TYPE A
- 602601-01 PRECAST REINFORCED CONCRETE FLAT TOP SLAB
- 602701-01 CAST IRON STEPS
- 604001-02 FRAME AND LIDS, TYPE 1
- 604036-01 GRATE, TYPE 8
- 604051-02 FRAME & GRATE, TYPE 11
- 604091-01 FRAME AND GRATE, TYPE 24
- 606001-03 CONCRETE CURB & COMBINATION CONCRETE CURB & GUTTER
- 606006-01 OUTLET FOR CONCRETE CURB AND GUTTER, TYPE B-6.24
- 701306-01 LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS - DAY ONLY, FOR SPEEDS > 45 MPH
- 701311-02 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
- 701326-02 LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING FOR SPEEDS > 45 MPH
- 701901 TRAFFIC CONTROL DEVICES
- 720001 SIGN PANEL MOUNTING DETAIL
- 720016-01 MAST ARM MOUNTED STREET NAME SIGNS
- 780001-01 TYPICAL PAVEMENT MARKINGS
- 781001-02 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
- 805001 ELECTRICAL SERVICE INSTALLATION DETAILS
- 814001-01 HANDHOLES
- 814006-01 DOUBLE HANDHOLES
- 857001 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
- 862001 UNINTERRUPTABLE POWER SUPPLY (UPS)
- 873001-01 TRAFFIC SIGNAL GROUNDING + BONDING
- 877001-03 STEEL MAST ARM ASSEMBLY AND POLE
- 878001-06 CONCRETE FOUNDATION DETAILS
- 880006 TRAFFIC SIGNAL MOUNTING DETAILS
- 886001 DETECTOR LOOP INSTALLATIONS
- 886006 TYPICAL LAYOUTS FOR DETECTOR LOOPS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
INDEX OF SHEETS & STATE STANDARDS**

SCALE: VERT. N/A  
HORIZ. N/A

DATE 11-21-07

DRAWN BY RG  
CHECKED BY JMN

FAA RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	03
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83956

**GENERAL NOTES**

- 1 ANY REFERENCE TO THE STANDARD SPECIFICATIONS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2007.
- 2 ITEMS OF WORK LISTED IN THE SUMMARY OF QUANTITIES WHICH ARE NOT SPECIFICALLY INDICATED IN THE PLANS SHALL BE PERFORMED AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3 DRAINAGE STRUCTURE ELEVATIONS: GRADES OF SEWER LINES WERE DETERMINED FROM AVAILABLE PLANS AND SURVEYS. ACCORDINGLY, AS DIRECTED BY THE ENGINEER, THE INVERTS OF THE PROPOSED DRAINAGE WILL BE REVISED TO MEET EXISTING FIELD CONDITIONS.
- 4 THE TOP OF ALL STRUCTURES SHALL BE FLUSH WITH THE ADJACENT SURFACE OR AT THE INDICATED ELEVATIONS SHOWN ON THE PLANS.
- 5 FRAME ELEVATIONS ARE GIVEN ONLY TO ASSIST IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF THE STRUCTURE. FRAMES ON ALL NEW STRUCTURES WILL BE ADJUSTED TO THE FINAL ELEVATION OF THE AREA IN WHICH THEY ARE LOCATED AS PART OF THE STRUCTURE COST.
- 6 WHEN, IN THE CONSTRUCTION OPERATION, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS OR OTHER DRAINAGE STRUCTURES SO THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH DAY BY THE CONTRACTOR AT HIS EXPENSE. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES SHALL BE FREE FROM ALL DIRT AND DEBRIS. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- 7 WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS OR CATCH BASINS. HE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS & SEWERS AND DISCHARGE SAME. HE SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET, AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY SEWER CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE. THIS WORK SHALL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- 8 THE CAST IRON FRAMES AND COVERS OF FILLED, ABANDONED OR REMOVED MANHOLES, INLETS AND CATCH BASINS OR THOSE FRAMES AND COVERS UPON STRUCTURES RECEIVING NEW FRAMES AND COVERS SHALL BE STOCKPILED WITHIN THE RIGHT-OF-WAY, AS DIRECTED BY THE ENGINEER, AND PICKED UP BY THE CITY.
- 9 THE APPROXIMATE LOCATION OF KNOWN PUBLIC UTILITIES ARE SHOWN ON THE PLANS. HOWEVER, THE DEPARTMENT DOES NOT GUARANTEE ITS ACCURACY. PRIOR TO COMMENCING OPERATIONS ON THE PROJECT WHICH MAY IN ANY WAY CREATE THE POSSIBILITY OF INVOLVEMENT WITH EXISTING UTILITIES, THE CONTRACTOR SHALL CONTACT THE FIRM (OR COMMUNITY) INVOLVED. ADJUSTMENT OF ALL PUBLIC UTILITIES WITHIN THE LIMITS OF THIS IMPROVEMENT WILL BE DONE BY THE RESPECTIVE OWNERS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO DELAYS OR INCONVENIENCE CAUSED BY THESE ADJUSTMENTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF UNDERGROUND INSTALLATION BEFORE STARTING CONSTRUCTION OPERATIONS.
- 10 ALL TRENCHES WITHIN 2 FEET OF PROPOSED PAVEMENT, DRIVEWAYS, AND SIDEWALKS SHALL BE BACKFILLED WITH TRENCH BACKFILL ONLY.
- 11 COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 SHALL BE INSTALLED WITH A THICKNESS EQUAL TO NINE INCHES (9").
- 12 THE CONTRACTOR SHALL PROTECT ALL TREES WITHIN AND ADJACENT TO THE CONSTRUCTION SITE DURING THE CLEARING AND SUBSEQUENT CONSTRUCTION OPERATIONS IN ACCORDANCE WITH SECTION 201 OF THE STANDARD SPECIFICATIONS. THOSE TREES TO BE REMOVED AS SHOWN IN THE PLANS SHALL BE DONE IN ACCORDANCE WITH SECTION 201 AND 202 OF THE STANDARD SPECIFICATIONS.
- 13 BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED).
- 14 THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
- 15 THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON VILLAGE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE VILLAGE.
- 16 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).
- 17 ALL STORM SEWERS FOR THIS PROJECT SHALL BE FURNISHED AND INSTALLED WITH RUBBER GASKETS IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR STORM SEWERS AS SPECIFIED.
- 18 THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK. THE CONTRACTOR SHALL ALSO CONTACT ROBINSON ENGINEERING (708) 331-6700 AND THE CITY OF LOCKPORT (815) 838-0549 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- 19 ALL HMA PAVING SHALL FOLLOW DESIGNATED DRIVING LANES AS SHOWN IN STRIPING DETAILS. NO LONGITUDINAL PAVING JOINT OR SEAMS ARE ALLOWED WITHIN THE DRIVING LANES. ALL LONGITUDINAL PAVING JOINTS OR SEAMS WILL BE BETWEEN THE DRIVING LANES.
- 20 POROUS GRANULAR EMBANKMENT, SPECIAL HAS BEEN PROVIDED FOR LOCATIONS WHERE SOILS TEND TO BE UNSTABLE WHEN WET. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGE WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE ENGINEER (BY USE OF A CONE PENETROMETER IN CONJUNCTION WITH THE IDOT SUBGRADE STABILITY MANUAL). IF UNSTABLE AND/OR UNSUITABLE MATERIALS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.
- 21 ALL PAVEMENT, CURB AND SIDEWALK REMOVALS SHALL BE MADE BY MEANS OF STRAIGHT SAW CUT JOINT. THE COST FOR SAW CUTTING SHALL BE INCIDENTAL TO THE CONTRACT.
- 22 CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES FOR TRAFFIC CONTROL AND PROTECTION IN ACCORDANCE WITH THE IDOT STANDARD SPECIFICATIONS ADOPTED JANUARY 1, 2007, THE LATEST EDITION OF THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AND THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.
- 23 THE CONTRACTOR SHALL MAKE EVERY ATTEMPT NOT TO DAMAGE EXISTING TREES.
- 24 10' TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER TO EXISTING CURB AND GUTTER, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEM OF WORK SPECIFIED.
- 25 ALL STORM SEWERS, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE STATE SPECIFICATIONS FOR REINFORCED CONCRETE CULVERT, STORM DRAIN AND SEWER PIPE A.A.S.H.T.O. DESIGNATION M170 (A.S.T.M. DESIGNATION C76), WITH A MINIMUM OF CLASS III.
- 26 THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS THROUGHOUT THE RECONSTRUCTION LIMITS AT ALL TIMES. IF DRIVEWAY ACCESS MUST BE RESTRICTED, THE CONTRACTOR SHALL NOTIFY THE RESIDENT IN WRITING 24 HOURS IN ADVANCE.
- 27 ALL SLOPE WIDENINGS SHALL BE BACKED INTO EXISTING SLOPES AND SLOPE WIDENING CONSTRUCTION SHALL BE PERFORMED PRIOR TO PAVEMENT/SUBGRADE CONSTRUCTION.
- 28 ALL EMBANKMENT WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATION.
- 29 TWO WEEKS PRIOR TO PLACING PERMANENT PAVEMENT MARKINGS, CONTACT CORA MATHIS, AREA TRAFFIC FIELD ENGINEER AT 815-485-6415.
- 30 ALL SLOPE WIDENING CONSTRUCTION SHALL BE PERFORMED PRIOR TO PAVEMENT AND SUBGRADE CONSTRUCTION.

REVISIONS	
NAME	DATE

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

**151ST STREET IMPROVEMENT  
GENERAL NOTES**

SCALE: VERT. N/A  
 HORIZ. N/A  
 DATE 11-21-07

DRAWN BY RG  
 CHECKED BY JMN

ROBINSON ENGINEERING, LTD.  
 17003 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473  
 (708) 381-6700 FAX (708) 381-8828  
 ILLINOIS DESIGN FIRM REGISTRATION NO. 18400108

01179-NOTE-01

F.A.U. RATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	04
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83956

SUMMARY OF QUANTITIES					PAVEMENT	MARKINGS	LANDSCAPE	DRAINAGE	SIGNALS	TRAINING	LOCAL AGENCY
S.I. CODE NO.	PAY ITEM	UNIT	TOTAL	CONSTRUCTION TYPE CODE							
				1000-2A	SFTY-1D	Y003	Y007	Y031-1F	Y080	CITY OF LOCKPORT	
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	652	652							
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	318	318							
20100500	TREE REMOVAL, ACRES	ACRE	0.9	0.9							
20101200	TREE ROOT PRUNING	EACH	30				30				
20200100	EARTH EXCAVATION	CU YD	16367	16367							
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	1637	1637							
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	1637	1637							
20800150	TRENCH BACKFILL	CU YD	5050					2150			2900
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	27923				27923				
21301072	EXPLORATION TRENCH 72" DEPTH	FOOT	90	90							
25000210	SEEDING, CLASS 2A	ACRE	2				2				
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	393				393				
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	393				393				
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	393				393				
25100630	EROSION CONTROL BLANKET	SQ YD	7566				7566				
25200110	SODDING, SALT TOLERANT	SQ YD	20357				20357				
25200200	SUPPLEMENTAL WATERING	UNIT	40				40				
28000300	TEMPORARY DITCH CHECKS	EACH	6				6				
28000510	INLET FILTERS	EACH	42				42				
28100101	STONE RIPRAP, CLASS A1	SQ YD	39				39				
28100107	STONE RIPRAP, CLASS A4	SQ YD	39				39				
28200200	FILTER FABRIC	SQ YD	30				30				
35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SQ YD	1791	1791							
35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	912	912							
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	11217	11217							
40600300	AGGREGATE (PRIME COAT)	TON	18	18							
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	178	178							
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	189	189							
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	2080	2080							
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	312	312							
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	986	986							
40701861	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 9"	SQ YD	16959	16959							
42300300	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH	SQ YD	117	117							
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	850	850							
42400800	DETECTABLE WARNINGS	SQ FT	88	88							
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	2840	2840							
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1252	1252							
44000600	SIDEWALK REMOVAL	SQ FT	950	950							
48101498	AGGREGATE SHOULDERS, TYPE B 4"	SQ YD	1392	1392							
54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	16					16			
54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	1					1			
54213681	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 36"	EACH	1					1			
54213687	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 42"	EACH	1					1			
54214713	PRECAST REINFORCED CONCRETE FLARED END SECTIONS - ELLIPTICAL, EQUIVALENT ROUND-SIZE 18"	EACH	2					2			
54247170	GRATING FOR CONCRETE FLARED END SECTION 36"	EACH	1					1			
54247180	GRATING FOR CONCRETE FLARED END SECTION 42"	EACH	1					1			
55019500	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 12"	FOOT	134					134			
55019600	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 15"	FOOT	692					692			
55019700	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 18"	FOOT	252					252			
55021600	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS III 12"	FOOT	722					722			
55021800	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS III 18"	FOOT	140					140			
55022500	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS III 42"	FOOT	426					426			

\* - INDICATES SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
SUMMARY OF QUANTITIES**

SCALE: VERT. N/A  
HORIZ. N/A

DATE: 11-21-07

DRAWN BY: RG  
CHECKED BY: JMN

F.A.U. RITE:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
0285	01-00052-00-FP	WILL	71	05
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956

SUMMARY OF QUANTITIES					PAVEMENT	MARKINGS	LANDSCAPE	DRAINAGE	SIGNALS	TRAINING	LOCAL AGENCY
S.I.	CODE NO.	PAY ITEM	UNIT	TOTAL	CONSTRUCTION TYPE CODE						NON-PARTICIPATING
					I000-2#	SFTY-1D	Y003	Y007	Y031-IF	Y080	CITY OF LOCKPORT
	55023700	STORM SEWERS, TYPE 3, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 12"	FOOT	511					511		
	55023800	STORM SEWERS, TYPE 3, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 15"	FOOT	937					937		
	55023900	STORM SEWERS, TYPE 3, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 18"	FOOT	97					97		
	55024100	STORM SEWERS, TYPE 3, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 24"	FOOT	1253					1253		
	55024500	STORM SEWERS, TYPE 3, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 36"	FOOT	576					576		
	55034200	STORM SEWERS, TYPE 1, REINFORCED CONCRETE ELLIPTICAL PIPE, SPAN 23, RISE 14	FOOT	192					192		
	55100500	STORM SEWER REMOVAL 12"	FOOT	252					252		
	55100700	STORM SEWER REMOVAL 15"	FOOT	1128					1128		
	55101200	STORM SEWER REMOVAL 24"	FOOT	159					159		
	55101300	STORM SEWER REMOVAL 27"	FOOT	31					31		
	56400100	FIRE HYDRANTS TO BE MOVED	EACH	2							2
	60107600	PIPE UNDERDRAINS 4"	FOOT	108					108		
	60200805	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 8 GRATE	EACH	1					1		
	60201105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	2					2		
	60201340	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	35					35		
	60203905	CATCH BASINS, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1					1		
	60207605	CATCH BASINS, TYPE C, TYPE 8 GRATE	EACH	1					1		
	60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	10					10		
	60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	12					12		
	60237470	INLETS, TYPE A, TYPE 24 FRAME AND GRATE	EACH	2					2		
	60248900	VALVE VAULTS, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	6							6
	60500060	REMOVING INLETS	EACH	2					2		
	60600095	CLASS SI CONCRETE (OUTLET)	CU YD	2					2		
	60600605	CONCRETE CURB, TYPE B	FOOT	55					55		
	60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	7424					7424		
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	9	9						
	67100100	MOBILIZATION	L SUM	1	1						
	70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1						
	70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1						
	70102550	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	EACH	1	1						
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	4032		4032					
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	6400		6400					
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	3477		3477					
*	72000100	SIGN PANEL - TYPE 1	SQ FT	172		172					
*	72000200	SIGN PANEL - TYPE 2	SQ FT	25		25					
	72900200	METAL POST, TYPE B	FOOT	312		312					
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	656		656					
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	18788		18788					
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1370		1370					
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	321		321					
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	290		290					
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	297		297					
*	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	24		24					
*	81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	315					315		
*	81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	76					76		
*	81000800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	20					20		
*	81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	39					39		
*	81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	402					402		
*	81018600	CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	41					41		
*	81018700	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	35					35		
*	81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	165					165		

\* - INDICATES SPECIALTY ITEMS

REVISIONS	
NAME	DATE
JAK	12-7-07
IDOT COMMENTS	12-20-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

151ST STREET IMPROVEMENT  
SUMMARY OF QUANTITIES

SCALE: VERT. N/A  
HORIZ. N/A

DATE 11-21-07

DRAWN BY RG  
CHECKED BY JMN

FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	06
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83956

SUMMARY OF QUANTITIES					PAVEMENT	MARKINGS	LANDSCAPE	DRAINAGE	SIGNALS	TRAINING	LOCAL AGENCY
S.I.	CODE NO.	PAY ITEM	UNIT	TOTAL	CONSTRUCTION TYPE CODE						NON-PARTICIPATING
					1000-2A	SFTY-1D	Y003	Y007	Y031-1F	Y080	CITY OF LOCKPORT
*	81400200	HEAVY-DUTY HANDHOLE	EACH	9					9		
*	81400300	DOUBLE HANDHOLE	EACH	1					1		
*	81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	516					516		
*	85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1					1		
*	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	345					345		
*	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1614					1614		
*	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1694					1694		
*	87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1935					1935		
*	87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	125					125		
*	87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1					1		
*	87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1					1		
*	87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1					1		
*	87700240	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1					1		
*	87700270	STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1					1		
*	87700280	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1					1		
*	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	8					8		
*	87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4					4		
*	87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30					30		
*	87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30					30		
*	88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4					4		
*	88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3					3		
*	88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4					4		
*	88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4					4		
*	88200110	TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	8					8		
*	88500100	INDUCTIVE LOOP DETECTOR	EACH	8					8		
*	88600100	DETECTOR LOOP, TYPE I	FOOT	811					811		
*	88700200	LIGHT DETECTOR	EACH	4					4		
*	88700300	LIGHT DETECTOR AMPLIFIER	EACH	1					1		
	X0322033	STORM SEWER (WATER MAIN REQUIREMENTS) 12 INCH	FOOT	17				17			
*	X0323153	ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1C (GREEN)	FOOT	500					500		
	X0323973	SEDIMENT CONTROL, SILT FENCE	FOOT	10344	10344						
	X0323974	SEDIMENT CONTROL, SILT FENCE MAINTENANCE	FOOT	1034	1034						
	X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	32	32						
	X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	5	5						
	X4023000	TEMPORARY ACCESS (ROAD)	EACH	8	8						
*	X8050015	SERVICE INSTALLATION - POLE MOUNTED	EACH	1					1		
*	XX000836	PRESSURE TESTING AND DISINFECTION	L SUM	1							1
*	XX002185	RELOCATE EXISTING LIGHT POLE	EACH	1	1						
*	XX003032	GATE VALVE, 12"	EACH	6							6
*	XX004731	CONNECTION TO EXISTING WATERMAIN	EACH	1							1
*	XX007262	DUCTILE IRON WATER MAIN, 12", CLASS 52, WITH POLYETHYLENE ENCASEMENT	FOOT	3200							3200
*	XX004760	FIRE HYDRANT WITH AUXILIARY VALVE, VALVE BOX AND TEE	EACH	7							7
	XX005656	INLET FILTER CLEANING	EACH	42	42						
*	XX005660	ELECTRIC CABLE IN CONDUIT, NO. 20 3/C TWISTED SHIELD	FOOT	345					345		
	XX006083	RELOCATE SIGN, SPECIAL	EACH	2	2						
*	XX006661	UNINTERRUPTABLE POWER SUPPLY	EACH	1					1		
*	XX011700	WATER MAIN FITTINGS	POUND	5000							5000
	Z0001050	AGGREGATE SUBGRADE 12"	SQ YD	23892	23892						
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1						
	Z0017400	DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED	EACH	4	4						
	Z0017700	DRAINAGE & UTILITY STRUCTURES TO BE RECONSTRUCTED	EACH	2	2						
	Z0022800	FENCE REMOVAL	FOOT	360	360						
	Z0076600	TRAINEES	HOURL	2000						2000	

\* - INDICATES SPECIALTY ITEMS

REVISIONS	
NAME	DATE
JAK	12-7-07
IDOT COMMENTS	12-20-07

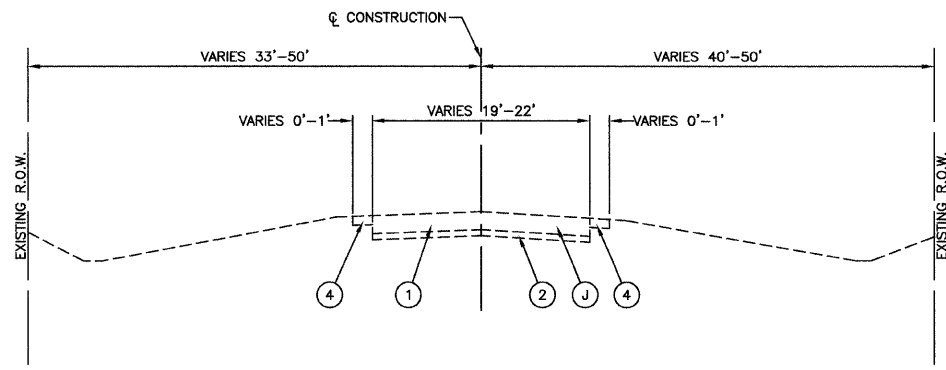
ILLINOIS DEPARTMENT OF TRANSPORTATION

151ST STREET IMPROVEMENT  
SUMMARY OF QUANTITIES

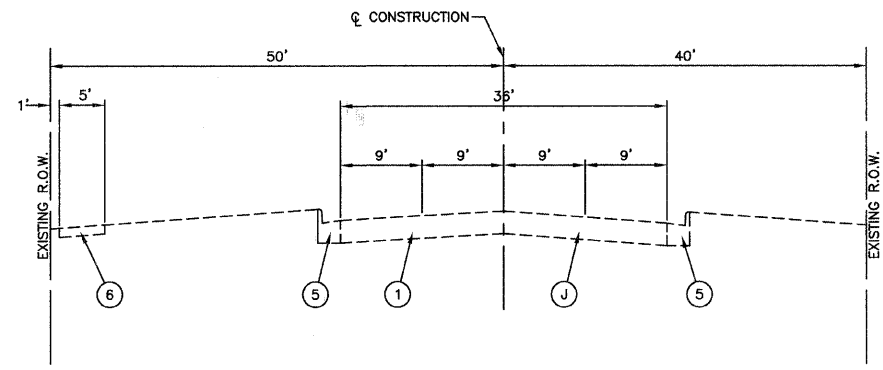
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HORIZ. N/A  
DATE 11-21-07  
DRAWN BY RG  
CHECKED BY JMN

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
0285	01-00052-00-PP	WILL	71	07
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

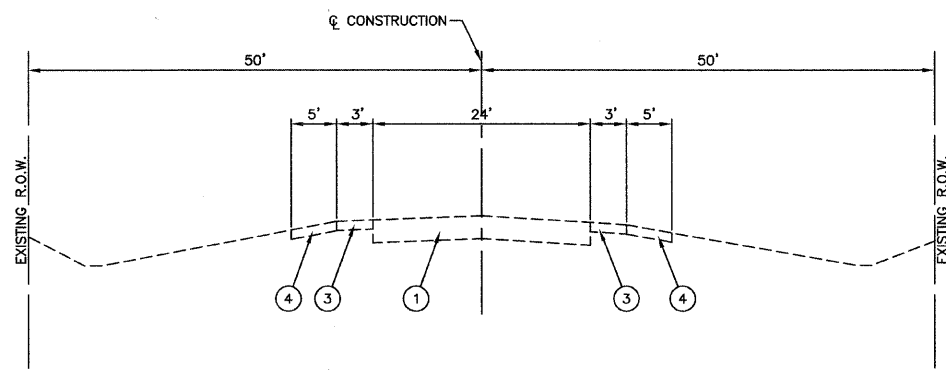
CONTRACT NO. 83956



**EXISTING TYPICAL CROSS SECTION**  
151ST STREET- STA 11+27.52 TO STA 35+60  
STA 38+90 TO STA 48+87.30



**EXISTING TYPICAL CROSS SECTION**  
151ST STREET- STA 35+60 TO STA 38+90



**EXISTING TYPICAL CROSS SECTION**  
IL RTE 171 (ARCHER AVE.) - STA 115+00.64 TO STA 130+91.64

**LEGEND**

- |   |  |
|---|--|
| (A) HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 9"   | (1) EXISTING HOT-MIX ASPHALT PAVEMENT - 5-3/4" TO 12"        |
| (B) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5mm), 2"   | (2) EXISTING SAND AND GRAVEL BASE COURSE - 4" TO 8"          |
| (C) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 10"  | (3) EXISTING HOT-MIX ASPHALT SHOULDER                        |
| (D) HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 (IL 9.5MM), 2"   | (4) EXISTING AGGREGATE SHOULDER                              |
| (E) HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL 19MM): PE-6", CE-8"  | (5) EXISTING COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12 |
| (F) AGGREGATE SUBGRADE, 12"   | (6) EXISTING P.C.C. SIDEWALK                                 |
| (G) AGGREGATE SHOULDERS, TYPE B-4"  |  |
| (H) COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24   |  |
| (I) SODDING, SALT TOLERANT; TOPSOIL, 4", WITH FERTILIZER NUTRIENTS<br>OR<br>SEEDING, CLASS 2A WITH FERTILIZER NUTRIENTS AND EROSION CONTROL BLANKET |  |
| (J) PAVEMENT REMOVAL (PAID FOR AS EARTH EXCAVATION)   |  |

REVISIONS	
NAME	DATE

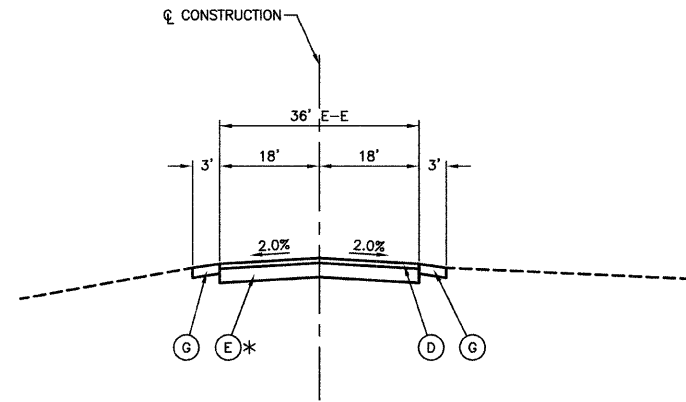
ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
TYPICAL CROSS SECTIONS**

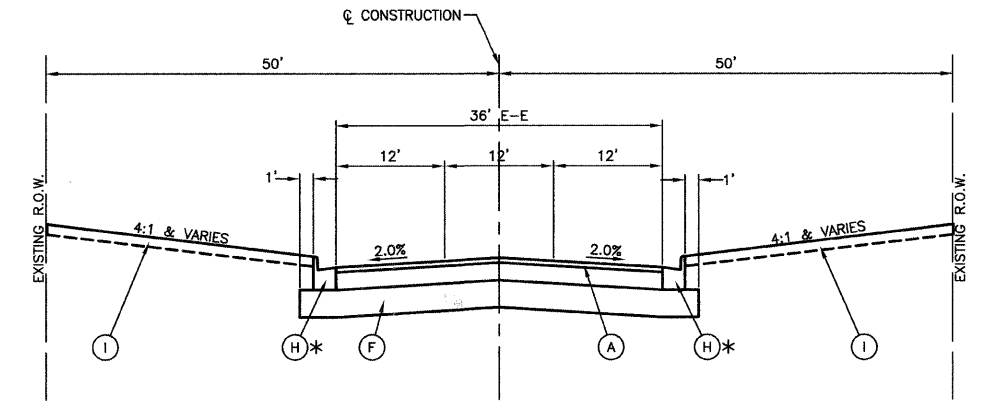
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HORIZ. N/A  
DATE 11-21-07

DRAWN BY RG  
CHECKED BY JMN

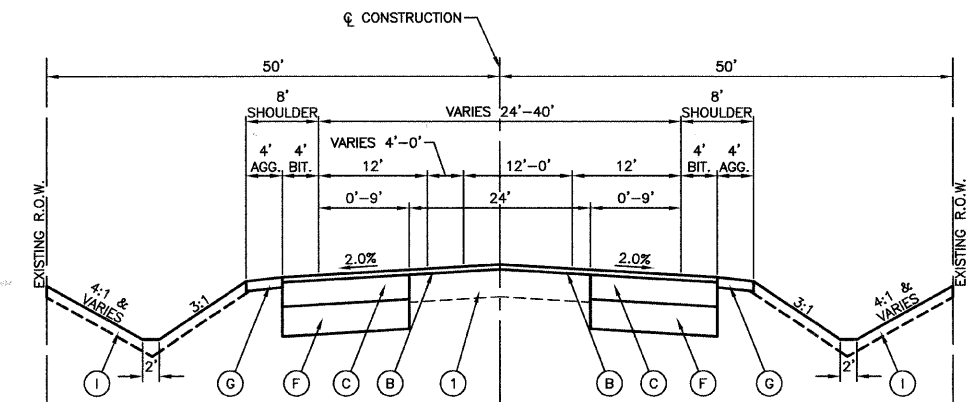
CONTRACT NO. 83956



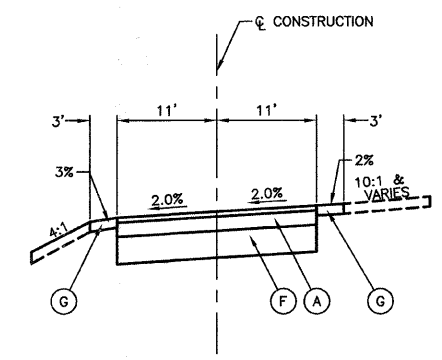
\* HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL 19MM): 8" (CE)  
**PROPOSED TYPICAL CROSS SECTION**  
 WEST PRIVATE DRIVE - STA 8+97.79 TO STA 10+43.18



\* CURB AND GUTTER BEGINS: STA. 12+13.94 LEFT  
 STA. 12+71.55 RIGHT  
**PROPOSED TYPICAL CROSS SECTION**  
 151ST STREET - STA 11+98.61 TO STA 48+87.30



**PROPOSED TYPICAL CROSS SECTION**  
 IL RTE 171 (ARCHER AVE.) - STA 115+00.64 TO STA 130+91.64



**PROPOSED TYPICAL CROSS SECTION**  
 151ST COURT - STA 81+25.71 TO STA 82+88.78

**EARTHWORK SCHEDULE**

ITEM	CUBIC YARD
EARTH EXCAVATION	16367
EMBANKMENT	3080*
CUT TO FILL	2678
TOPSOIL STRIPPING	3001
R&D OF UNSUIT	1637

\* NOTE: SHRINKAGE FACTOR = 15%

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AC TYPE	AIR VOIDS
HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 9"		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm), 2"	PG 64-22	4% @ 50 Gyr.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 7"	PG 64-22*	4% @ 50 Gyr.
RESURFACING (OVERLAY)		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5mm), 2"	PG 64-22	4% @ 70 Gyr.
LEVELING BINDER (MACHINE METHOD), N70, 3/4" & VARIES	PG 64-22	4% @ 70 Gyr.
PAVEMENT WIDENING		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5mm), 2"	PG 64-22	4% @ 70 Gyr.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 10"	PG 64-22*	4% @ 70 Gyr.
DRIVEWAYS		
HMA SURFACE COURSE, MIX "C" N50 (IL 9.5mm), 2"	PG 64-22	4% @ 50 Gyr.
HMA BASE COURSE (HMA BINDER IL-19mm); PE-6", CE-8"	PG 64-22*	4% @ 50 Gyr.

**NOTE:**

- THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.
- WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58 -22.
- LEVELING BINDER (MACHINE METHOD), N70 TO BE USED AS DIRECTED BY THE ENGINEER TO ACHIEVE A UNIFORM CROSS SLOPE OF 2%.

**LEGEND**

- (A) HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 9"
- (B) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5mm), 2"
- (C) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 10"
- (D) HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 (IL 9.5MM), 2"
- (E) HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL 19MM): PE-6", CE-8"
- (F) AGGREGATE SUBGRADE, 12"
- (G) AGGREGATE SHOULDERS, TYPE B-4"
- (H) COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- (I) SODDING, SALT TOLERANT; TOPSOIL, 4", WITH FERTILIZER NUTRIENTS OR SEEDING, CLASS 2A WITH FERTILIZER NUTRIENTS AND EROSION CONTROL BLANKET
- (J) PAVEMENT REMOVAL (PAID FOR AS EARTH EXCAVATION)
- (1) EXISTING HOT-MIX ASPHALT PAVEMENT - 5-3/4" TO 12"
- (2) EXISTING SAND AND GRAVEL BASE COURSE - 4" TO 8"
- (3) EXISTING HOT-MIX ASPHALT SHOULDER
- (4) EXISTING AGGREGATE SHOULDER
- (5) EXISTING COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12
- (6) EXISTING P.C.C. SIDEWALK

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
 TYPICAL CROSS SECTIONS**

SCALE: VERT. N/A  
 HORIZ. N/A  
 DATE: 11-21-07

DRAWN BY: RG  
 CHECKED BY: JMN

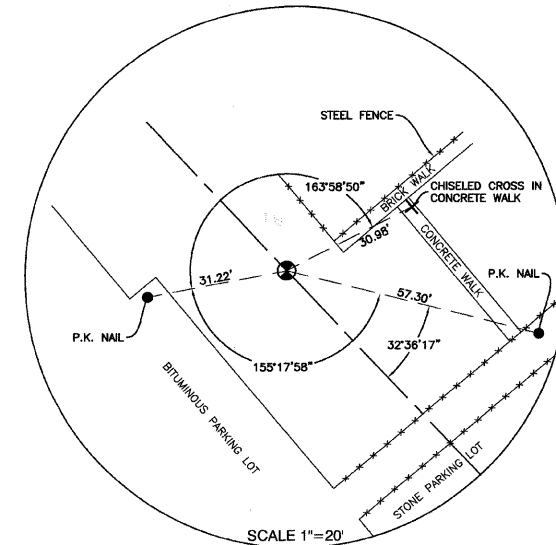
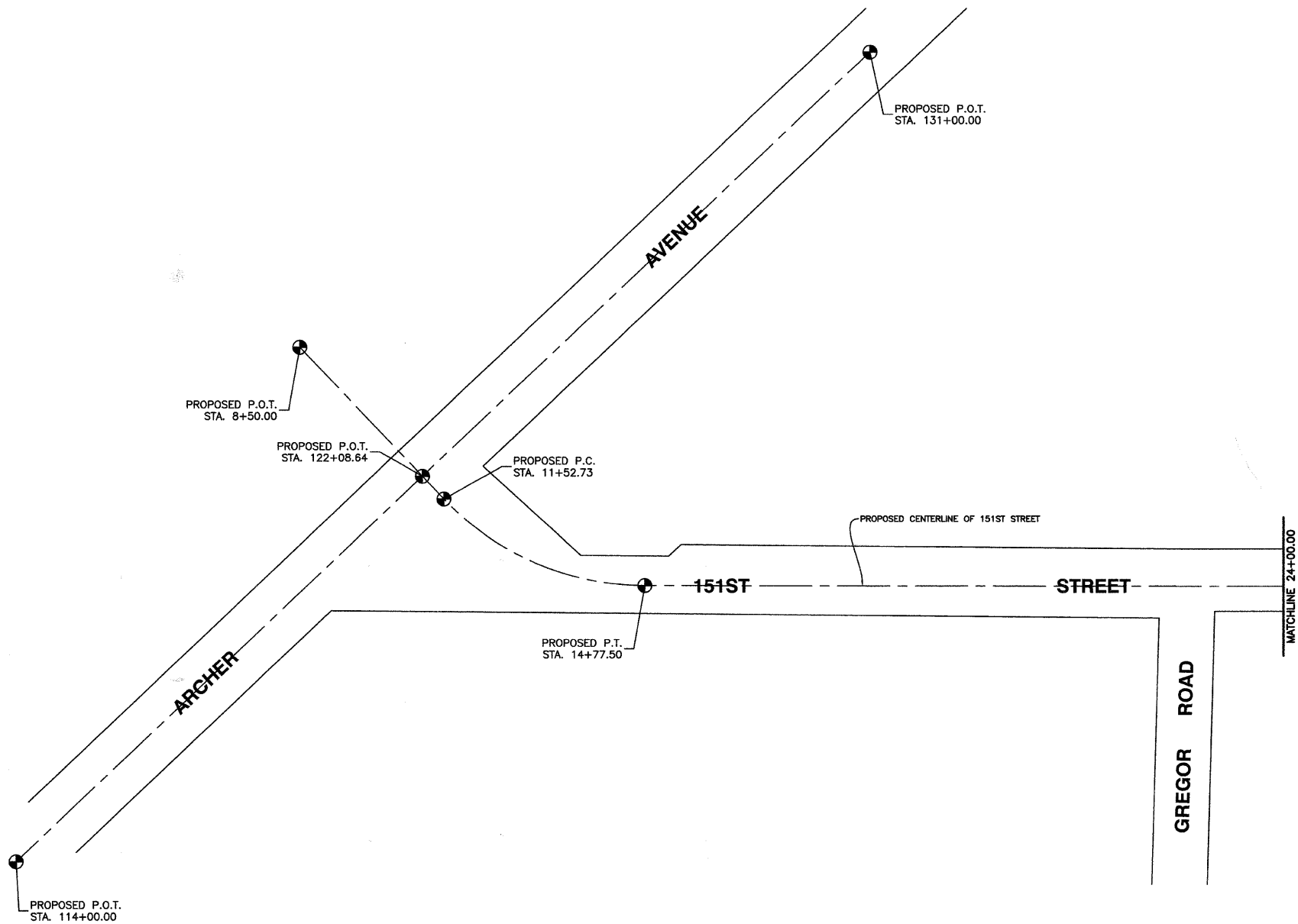
ROBINSON ENGINEERING, LTD.  
 7000 SOUTH PARK AVENUE, SOUTH HOLLAND, ILLINOIS 60473  
 (708) 381-6700 FAX (708) 381-8828  
 ILLINOIS DESIGN FIRM REGISTRATION NO. 194001128

01179-TYPX-01

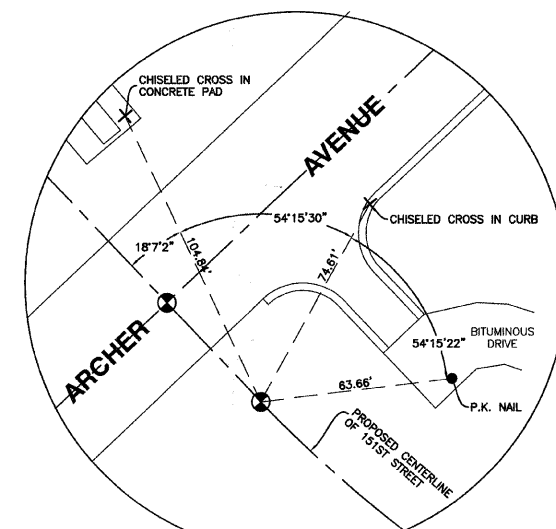


FAU. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	09
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

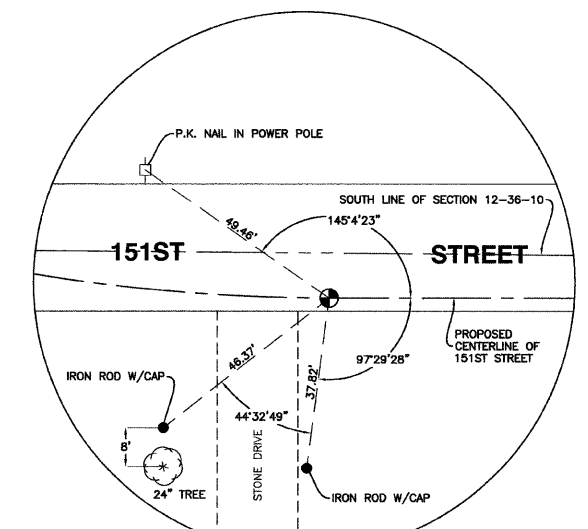
CONTRACT NO. 83956



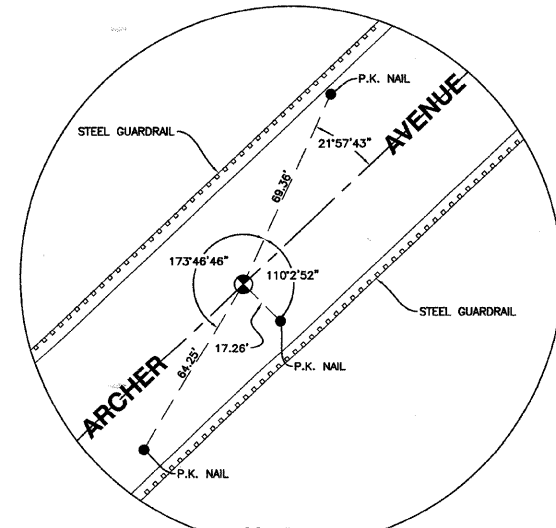
STATION 8+50.00  
IRON ROD W/CAP



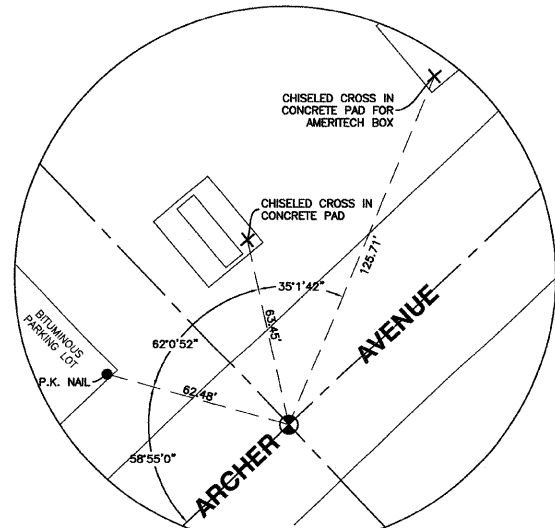
STATION 11+52.73  
IRON ROD W/CAP



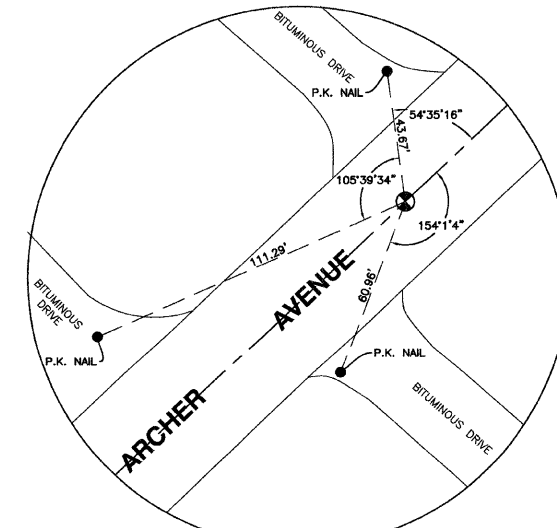
STATION 14+77.50  
P.K. NAIL



STATION 114+00.00  
P.K. NAIL



STATION 122+08.64  
P.K. NAIL



STATION 131+00.00  
P.K. NAIL

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
ALIGNMENT AND TIES  
ARCHER AVENUE  
& 151ST STREET**

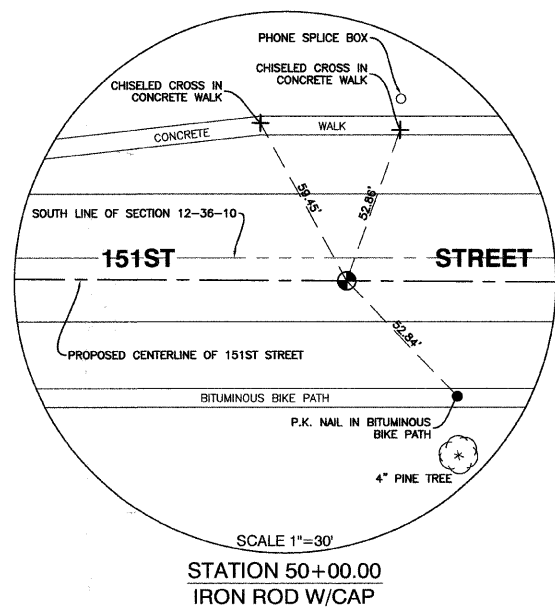
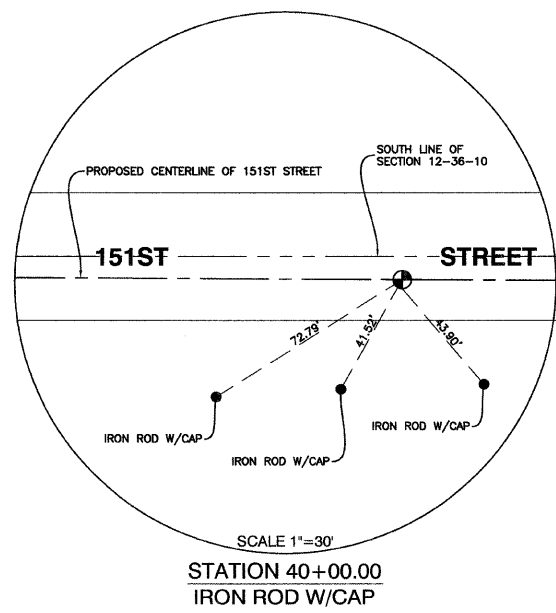
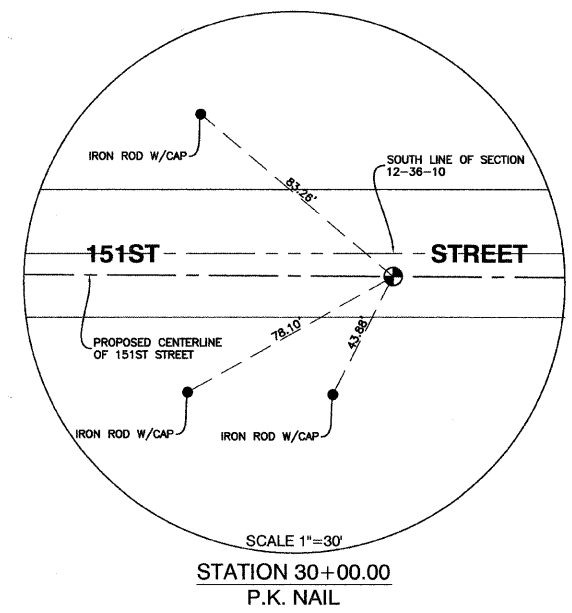
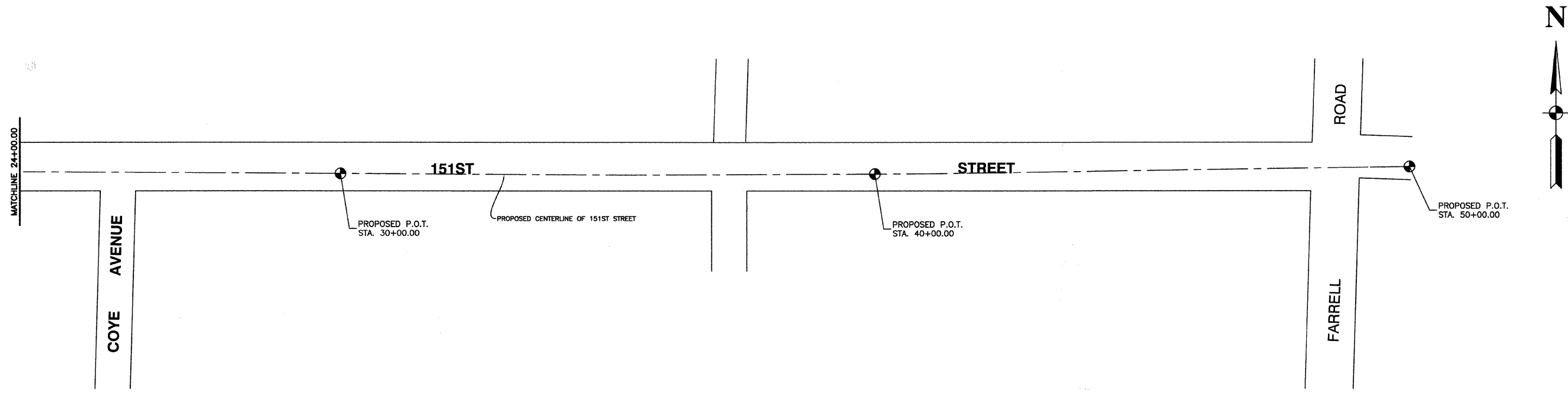
SCALE: VERT. N/A  
HORIZ. 1"=100'

DATE 11-21-07

DRAWN BY JD  
CHECKED BY JMN

FAU. RFE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	10
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83956



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
ALIGNMENT AND TIES  
ARCHER AVENUE  
& 151ST STREET**

SCALE: VERT. N/A  
HORIZ. 1"=100'

DATE 11-21-07

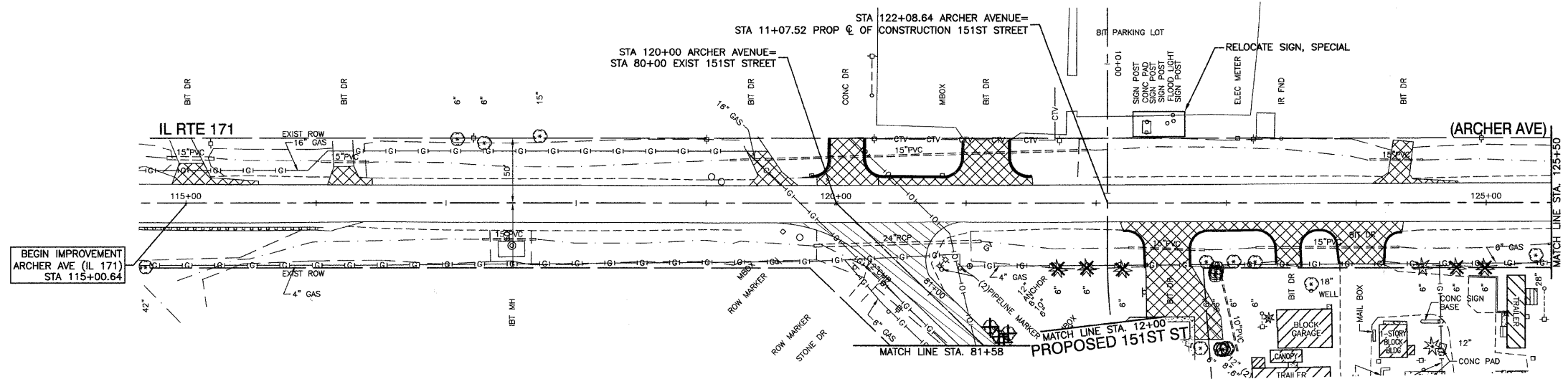
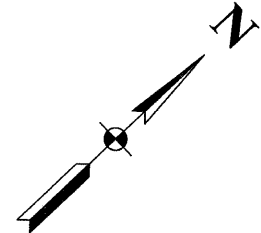
DRAWN BY JD  
CHECKED BY JMN

**ROBINSON ENGINEERING, LTD.**  
17000 SOUTH PARK AVENUE, SOUTH HOLLAND, ILLINOIS 60473  
708-351-6700 FAX 708-351-3628  
ILLINOIS DESIGN FIRM REGISTRATION NO. 184001158

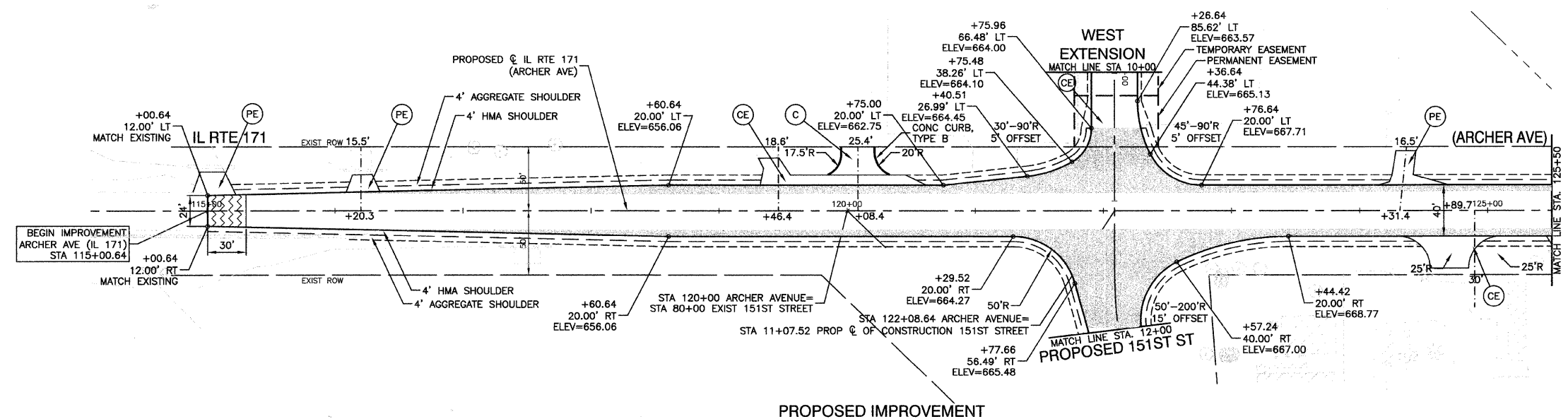
01179-TIES-01

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	11
STA. BEGIN IMPROV TO STA. 125+50				
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83956



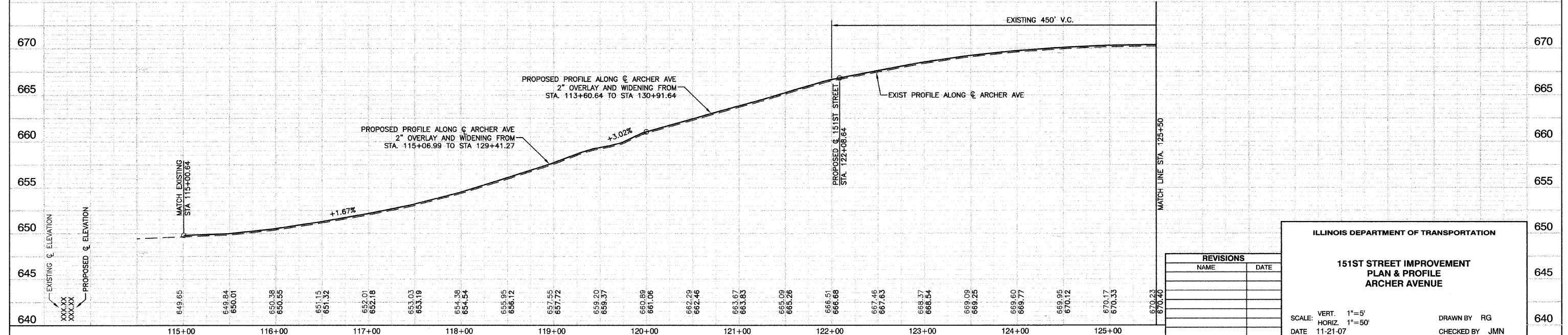
EXISTING CONDITIONS



PROPOSED IMPROVEMENT

LEGEND

- CURB REMOVAL
- PAVEMENT REMOVAL (PAID FOR AS EARTH EXCAVATION)
- DRIVEWAY PAVEMENT REMOVAL
- HMA SURFACE REMOVAL - BUTT JOINT
- PAVEMENT WIDENING  
-HMA SURFACE COURSE, MIX "D", N70, 2"  
-HMA BINDER COURSE, IL-19.0, N70, 10"  
-AGGREGATE SUBGRADE, 12"
- TREE REMOVAL
- P.C.C. DRIVEWAY, 7"
- HMA SURFACE COURSE, MIX "C", N50, 2"  
HMA BASE COURSE (HMA BINDER IL-19.0), 8"
- HMA SURFACE COURSE, MIX "C", N50, 2"  
HMA BASE COURSE (HMA BINDER IL-19.0), 6"
- C & G TYPE B-6.24
- 10' TRANSITION FROM C&G TYPE B-6.24 TO EXISTING CURB & GUTTER
- P.C.C. SIDEWALK, 5" (7" AT DRIVEWAYS)



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
PLAN & PROFILE  
ARCHER AVENUE**

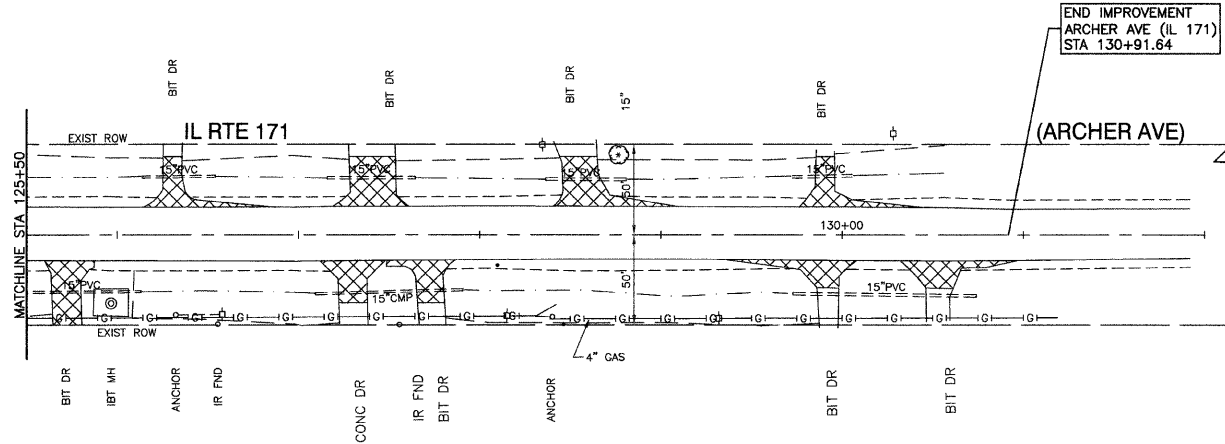
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HORIZ. 1"=50'

DATE 11-21-07

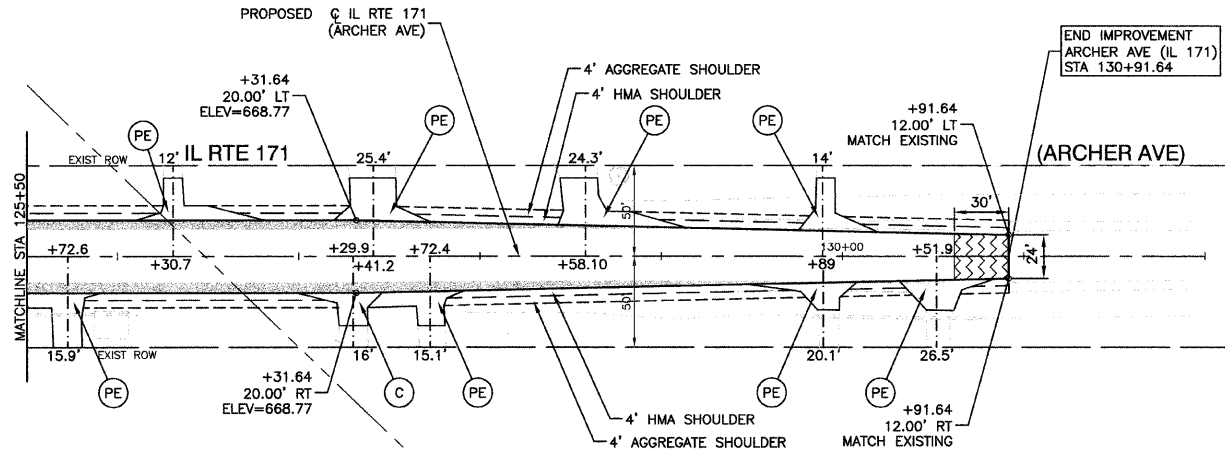
DRAWN BY RG  
CHECKED BY JMN

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
0285	01-00052-00-FP	WILL	71	12
STA. 125+50		TO STA. END IMPROVEMENT		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



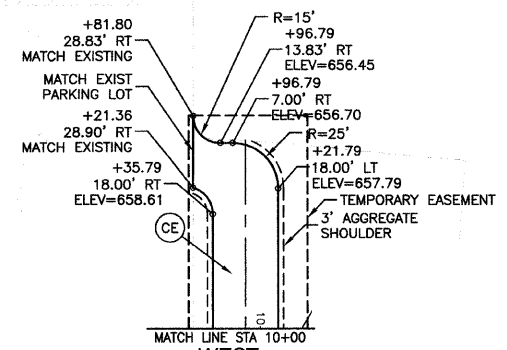
EXISTING CONDITION



PROPOSED IMPROVEMENT



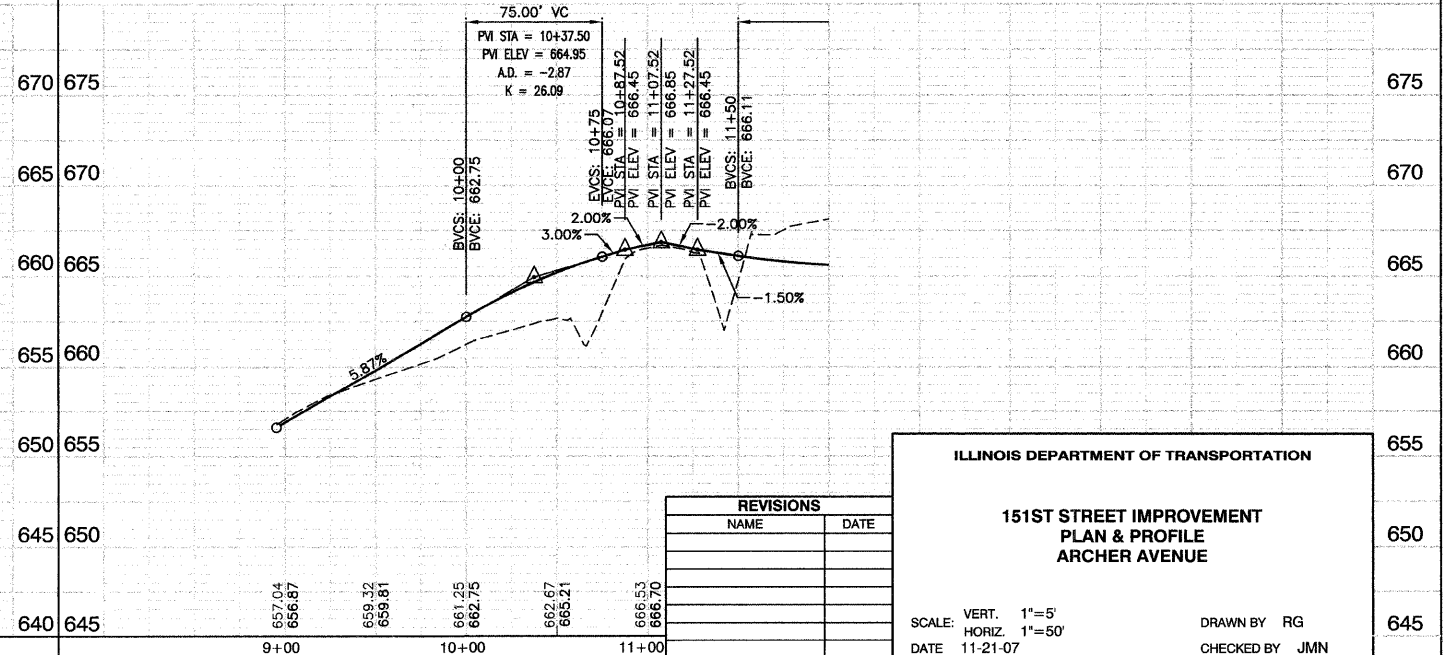
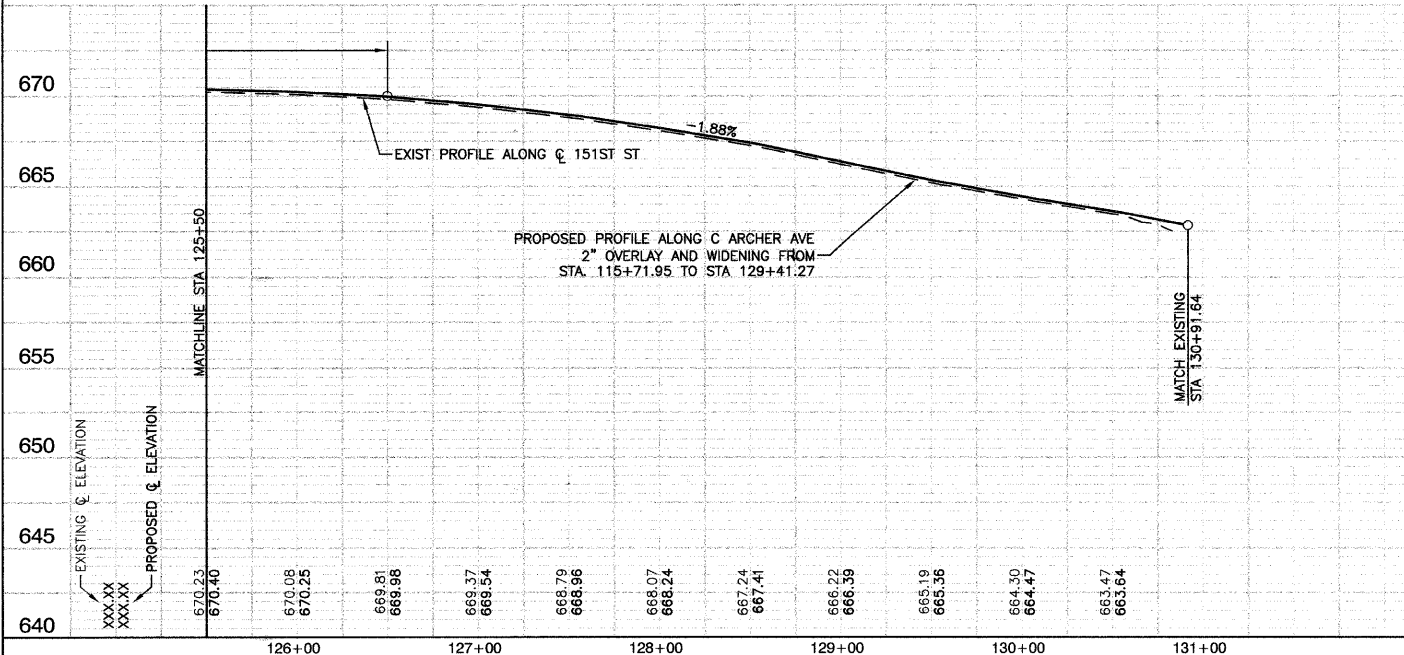
WEST EXTENSION EXISTING CONDITION



WEST EXTENSION PROPOSED IMPROVEMENT

LEGEND

- CURB REMOVAL
- PAVEMENT REMOVAL (PAID FOR AS EARTH EXCAVATION)
- DRIVEWAY PAVEMENT REMOVAL
- HMA SURFACE REMOVAL - BUTT JOINT
- PAVEMENT WIDENING
  - HMA SURFACE COURSE, MIX "D", N70, 2"
  - HMA BINDER COURSE, IL-19.0, N70, 10"
  - AGGREGATE SUBGRADE, 12"
- TREE REMOVAL
- P.C.C. DRIVEWAY, 7"
- HMA SURFACE COURSE, MIX "C", N50, 2"  
HMA BASE COURSE (HMA BINDER IL-19.0), 8"
- HMA SURFACE COURSE, MIX "C", N50, 2"  
HMA BASE COURSE (HMA BINDER IL-19.0), 6"
- C & G TYPE B-6.24
- 10' TRANSITION FROM C&G TYPE B-6.24 TO EXISTING CURB & GUTTER
- P.C.C. SIDEWALK, 5" (7" AT DRIVEWAYS)



REVISIONS	
NAME	DATE

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

**151ST STREET IMPROVEMENT  
PLAN & PROFILE  
ARCHER AVENUE**

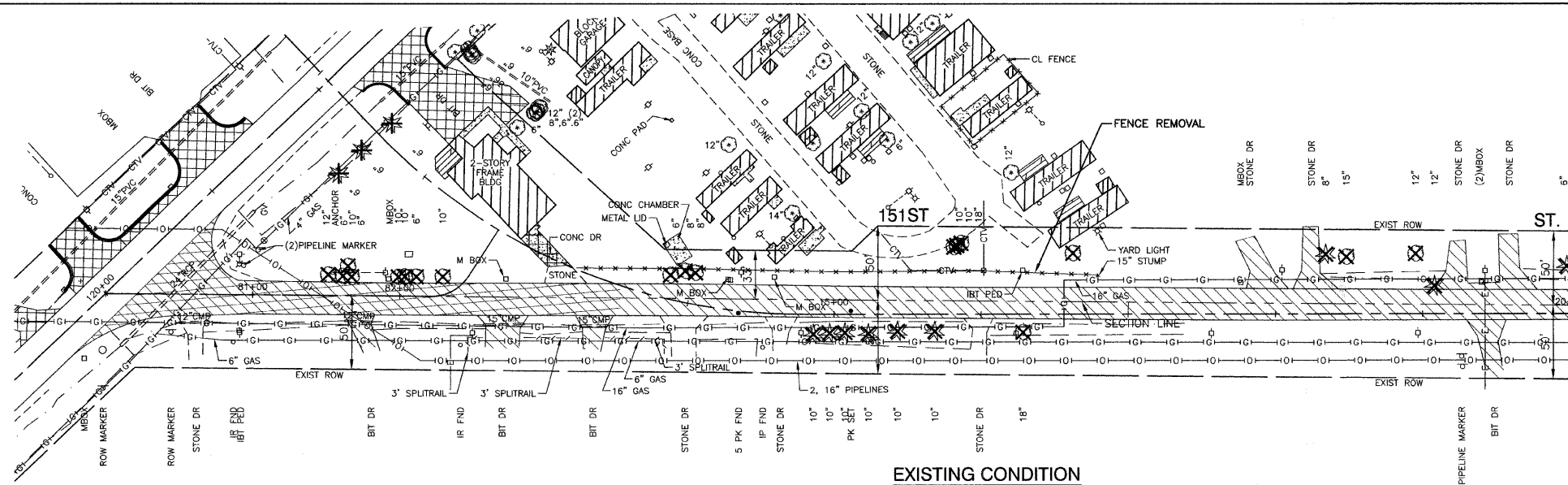
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HORIZ. 1"=50'

DATE 11-21-07

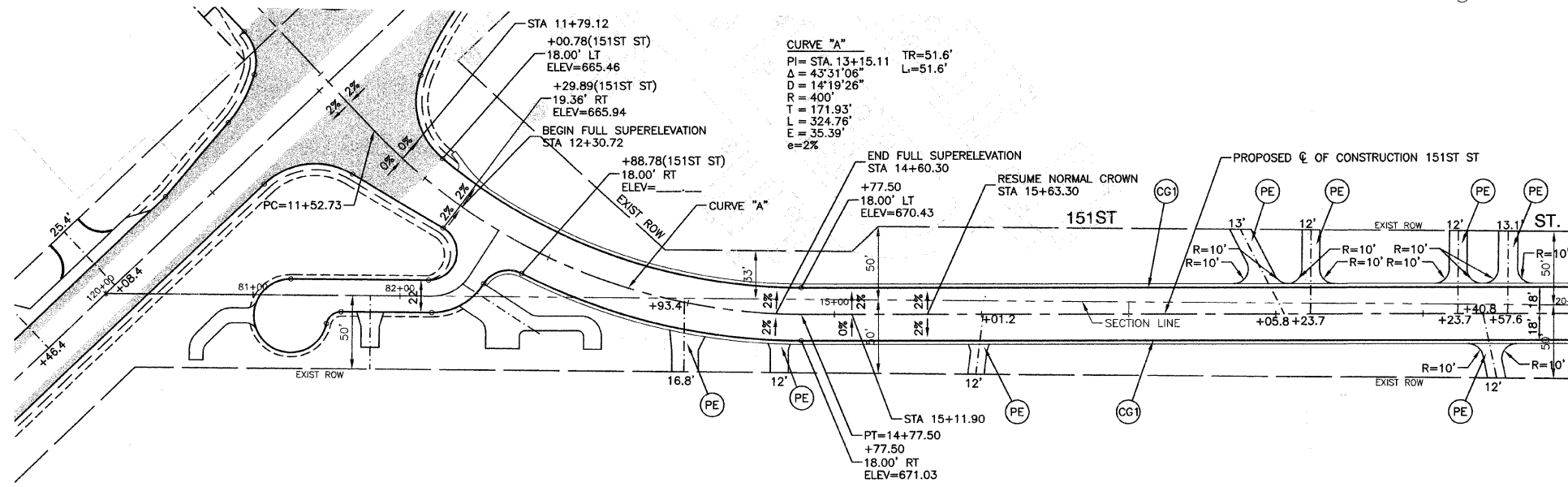
DRAWN BY RG  
CHECKED BY JMN

FAUL. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	13
STA. 12+00		TO STA. 20+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



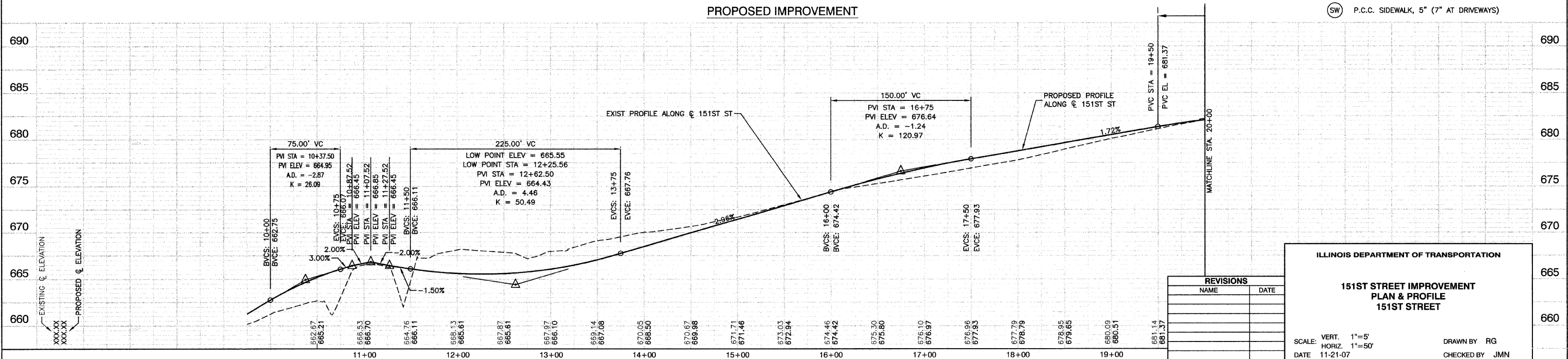
EXISTING CONDITION



PROPOSED IMPROVEMENT

LEGEND

- CURB REMOVAL
- PAVEMENT REMOVAL (PAID FOR AS EARTH EXCAVATION)
- DRIVEWAY PAVEMENT REMOVAL
- HMA SURFACE REMOVAL - BUTT JOINT
- PAVEMENT WIDENING
  - HMA SURFACE COURSE, MIX "D", N70, 2"
  - HMA BINDER COURSE, IL-19.0, N70, 10"
  - AGGREGATE SUBGRADE, 12"
- TREE REMOVAL
- P.C.C. DRIVEWAY, 7"
- HMA SURFACE COURSE, MIX "C", N50, 2"
- HMA BASE COURSE (HMA BINDER IL-19.0), 8"
- HMA SURFACE COURSE, MIX "C", N50, 2"
- HMA BASE COURSE (HMA BINDER IL-19.0), 6"
- C & G TYPE B-6.24
- 10' TRANSITION FROM C&G TYPE B-6.24 TO EXISTING CURB & GUTTER
- P.C.C. SIDEWALK, 5" (7" AT DRIVEWAYS)



REVISIONS	
NAME	DATE

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

**151ST STREET IMPROVEMENT  
PLAN & PROFILE  
151ST STREET**

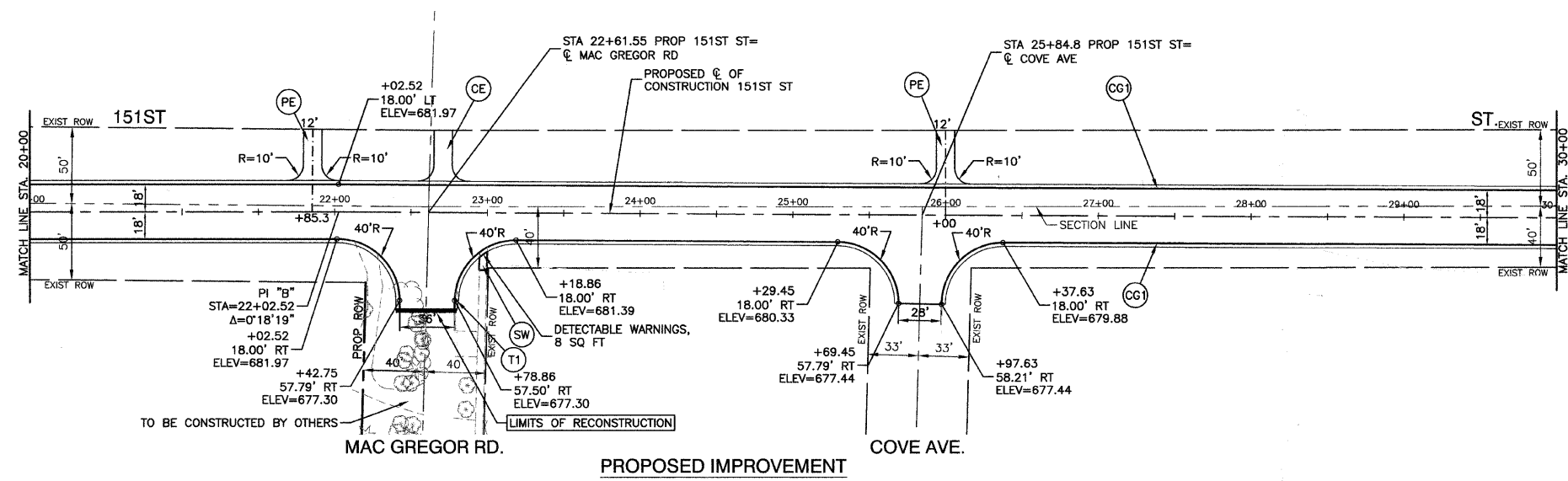
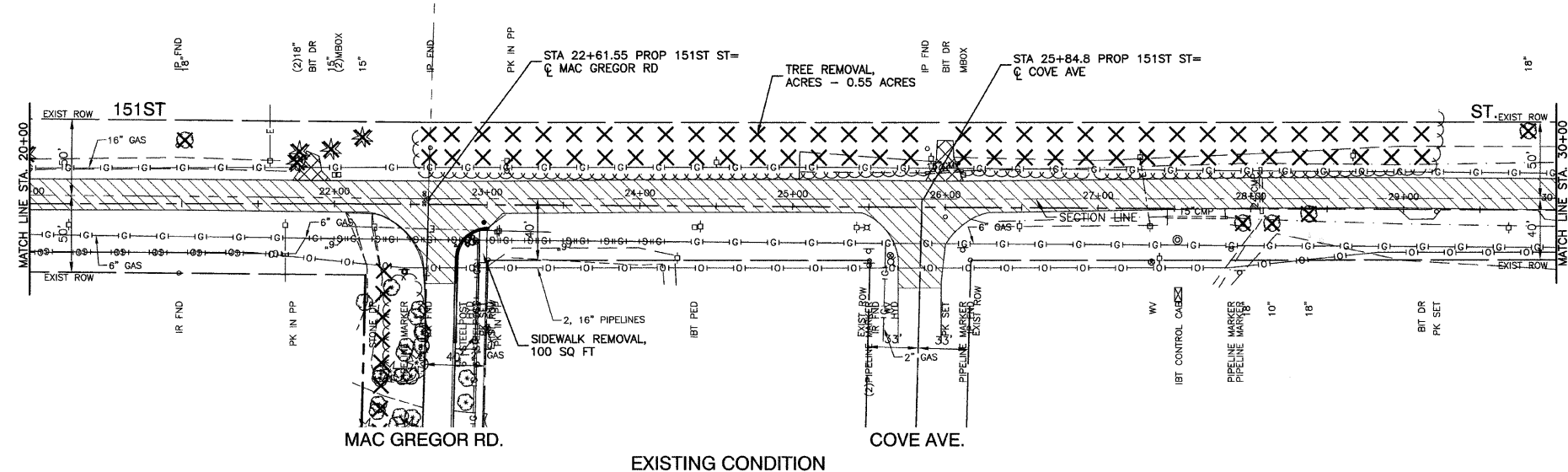
SCALE: VERT. 1"=5'  
HORIZ. 1"=50'

DATE 11-21-07

DRAWN BY RG  
CHECKED BY JMN

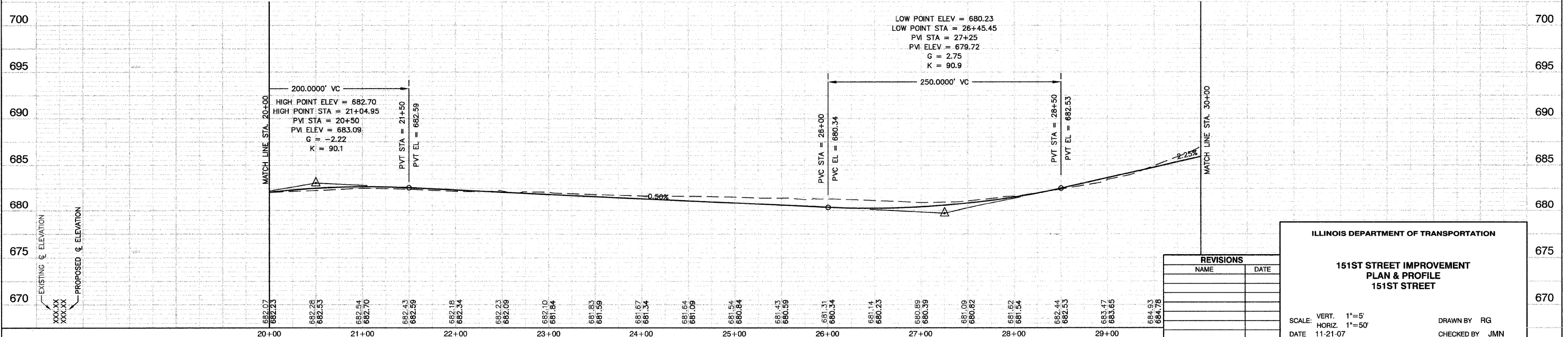
F.A.U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	14
STA. 20+00		TO STA. 30+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



LEGEND

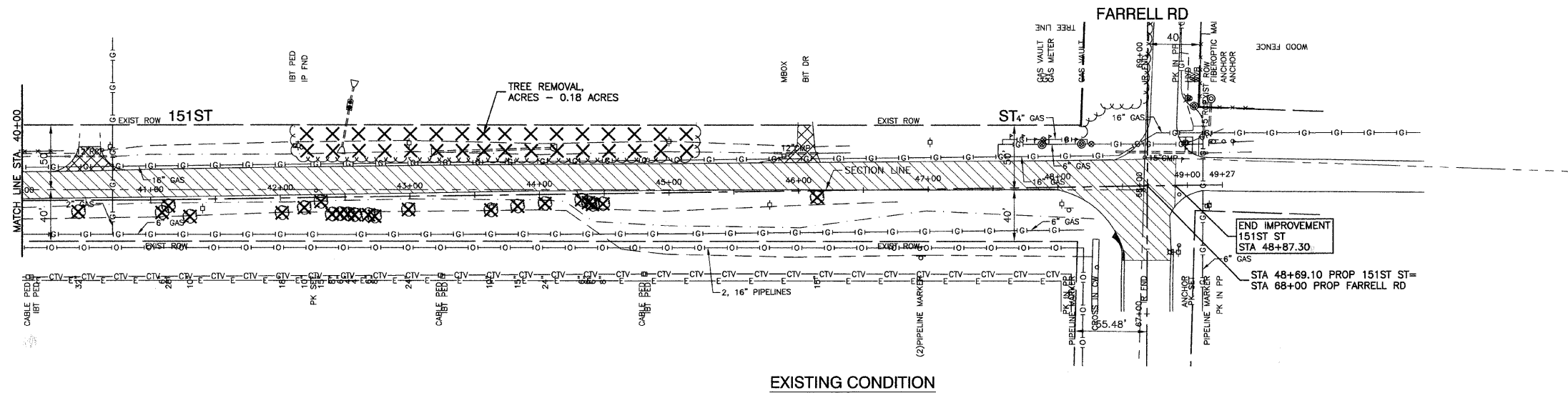
- CURB REMOVAL
- PAVEMENT REMOVAL (PAID FOR AS EARTH EXCAVATION)
- DRIVEWAY PAVEMENT REMOVAL
- HMA SURFACE REMOVAL - BUTT JOINT
- PAVEMENT WIDENING
  - HMA SURFACE COURSE, MIX "D", N70, 2"
  - HMA BINDER COURSE, IL-19.0, N70, 10"
  - AGGREGATE SUBGRADE, 12"
- TREE REMOVAL
- P.C.C. DRIVEWAY, 7"
- HMA SURFACE COURSE, MIX "C", N50, 2"  
HMA BASE COURSE (HMA BINDER IL-19.0), 8"
- HMA SURFACE COURSE, MIX "C", N50, 2"  
HMA BASE COURSE (HMA BINDER IL-19.0), 6"
- C & G TYPE B-6.24
- 10' TRANSITION FROM C&G TYPE B-6.24 TO EXISTING CURB & GUTTER
- P.C.C. SIDEWALK, 5" (7" AT DRIVEWAYS)



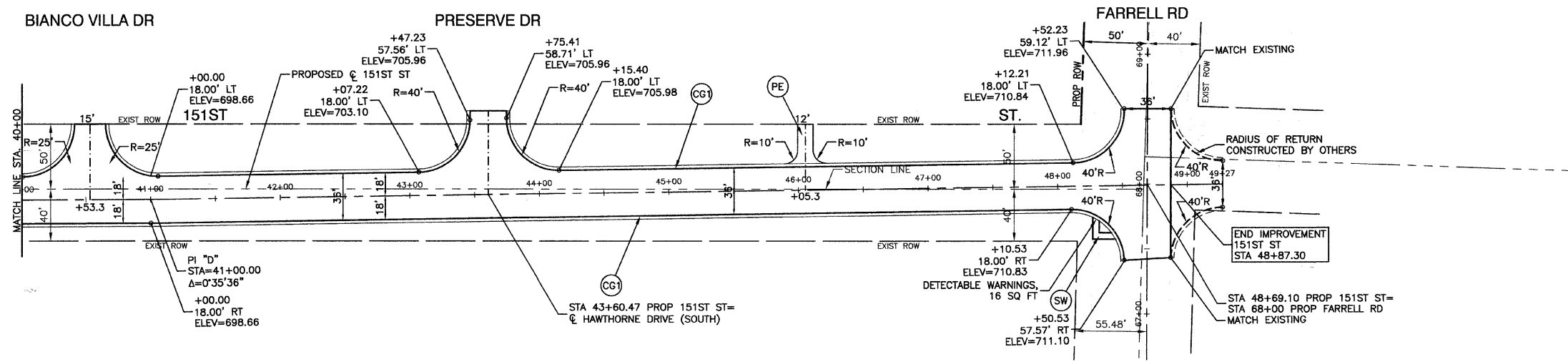


FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	16
STA. 40+00		TO STA. END IMPROVEMENT		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



EXISTING CONDITION

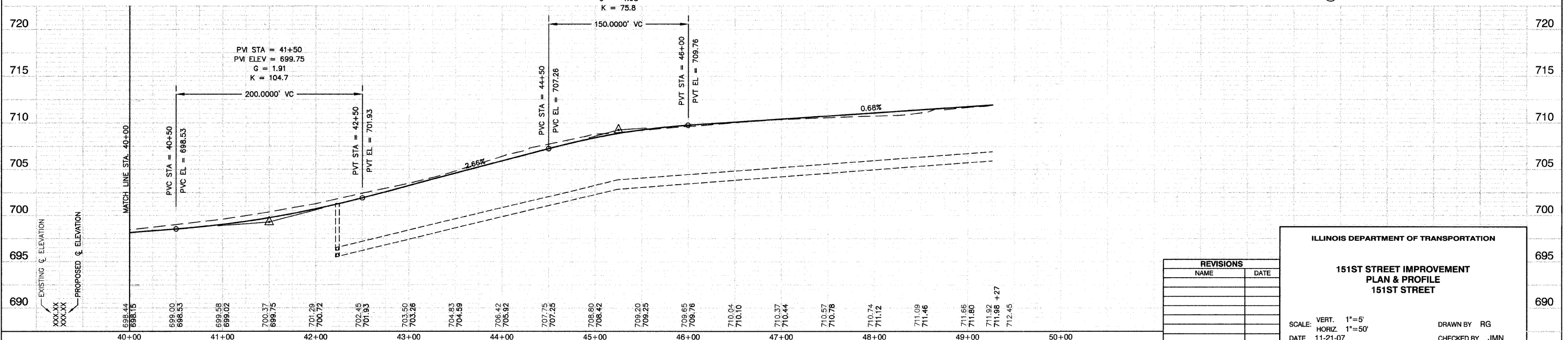


PROPOSED IMPROVEMENT

LEGEND

- CURB REMOVAL
- PAVEMENT REMOVAL (PAID FOR AS EARTH EXCAVATION)
- DRIVEWAY PAVEMENT REMOVAL
- HMA SURFACE REMOVAL - BUTT JOINT
- PAVEMENT WIDENING  
-HMA SURFACE COURSE, MIX "D", N70, 2"  
-HMA BINDER COURSE, IL-19.0, N70, 10"  
-AGGREGATE SUBGRADE, 12"
- TREE REMOVAL
- P.C.C. DRIVEWAY, 7"
- HMA SURFACE COURSE, MIX "C", N50, 2"  
HMA BASE COURSE (HMA BINDER IL-19.0), 8"
- HMA SURFACE COURSE, MIX "C", N50, 2"  
HMA BASE COURSE (HMA BINDER IL-19.0), 6"
- C & G TYPE B-6.24
- 10' TRANSITION FROM C&G TYPE B-6.24 TO EXISTING CURB & GUTTER
- P.C.C. SIDEWALK, 5" (7" AT DRIVEWAYS)

PM STA = 45+25  
PM ELEV = 708.88  
G = -1.98  
K = 75.8



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
PLAN & PROFILE  
151ST STREET**

SCALE: VERT. 1"=5'  
HORIZ. 1"=50'

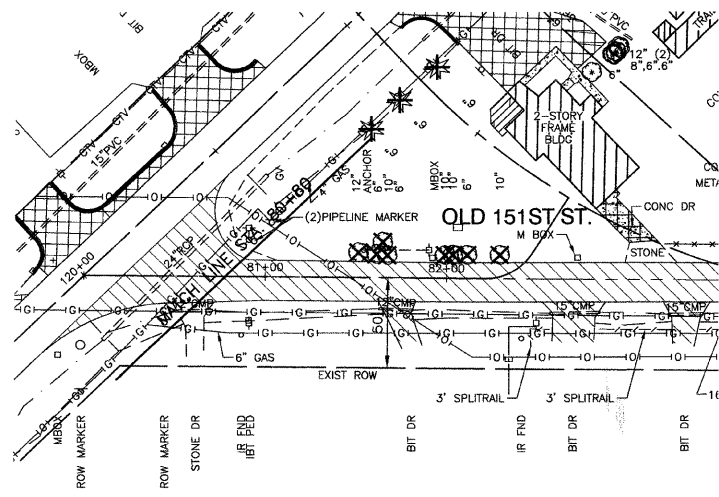
DATE 11-21-07

DRAWN BY RG  
CHECKED BY JMN

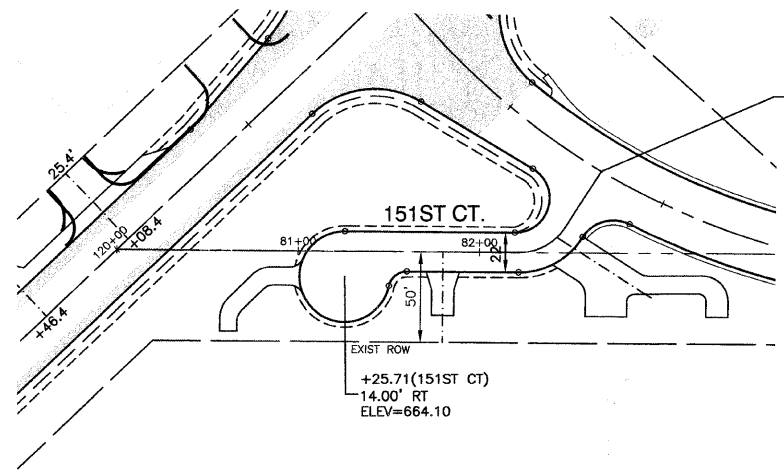


FAU. RFE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	17
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956

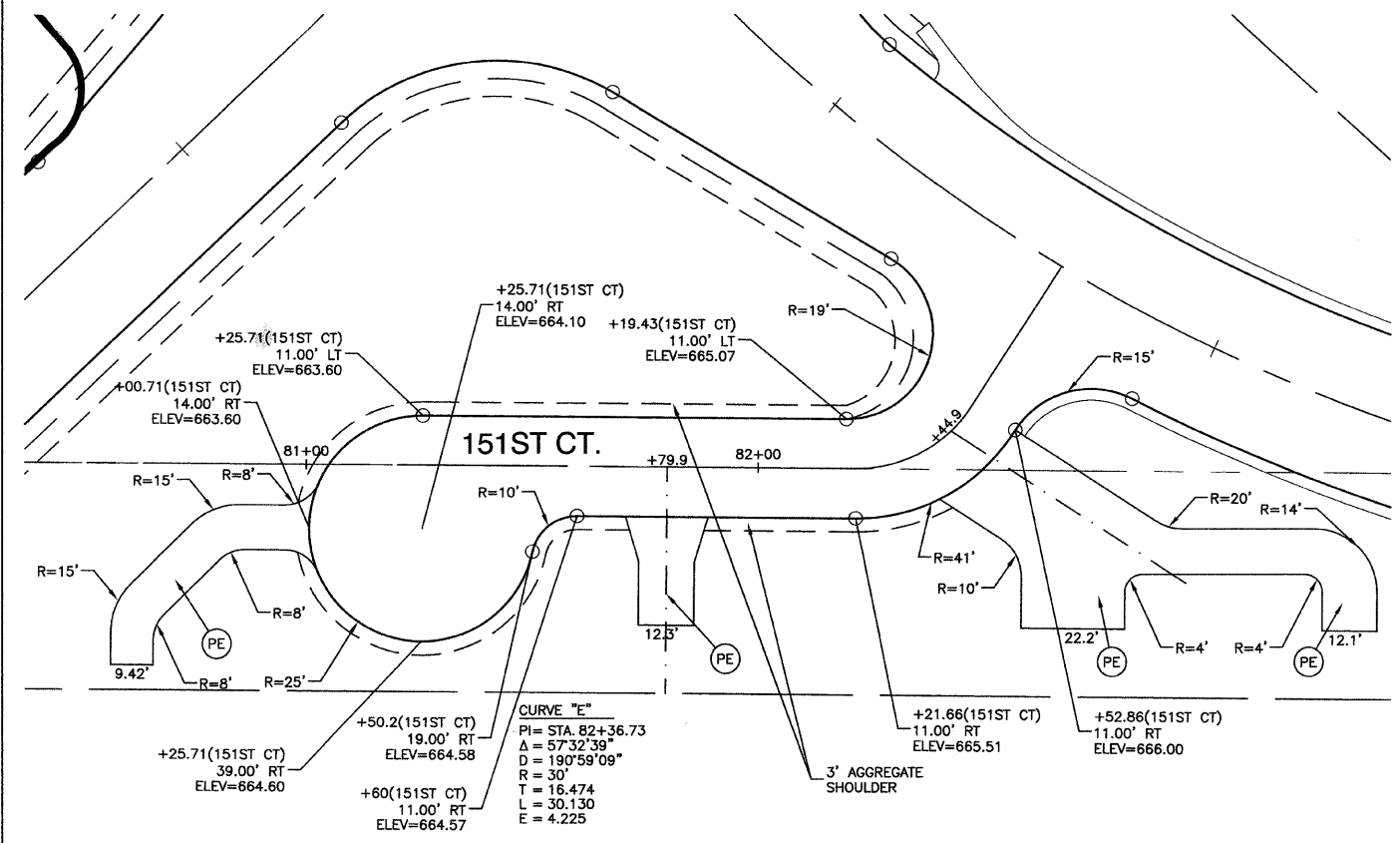


EXISTING CONDITION

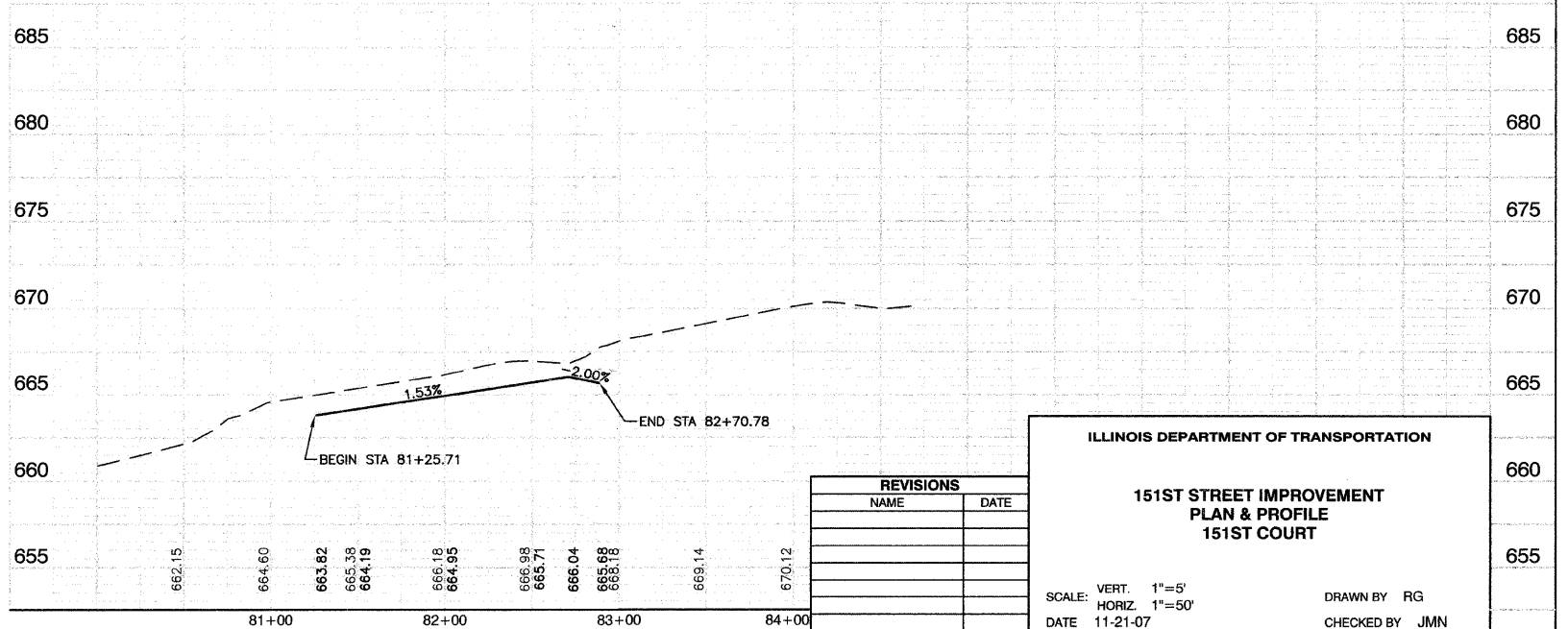


PROPOSED IMPROVEMENT

- LEGEND**
- CURB REMOVAL
  - PAVEMENT REMOVAL (PAID FOR AS EARTH EXCAVATION)
  - DRIVEWAY PAVEMENT REMOVAL
  - HMA SURFACE REMOVAL - BUTT JOINT
  - PAVEMENT WIDENING
    - HMA SURFACE COURSE, MIX "D", N70, 2"
    - HMA BINDER COURSE, IL-19.0, N70, 10"
    - AGGREGATE SUBGRADE, 12"
  - TREE REMOVAL
  - 
  - 
  - 
  - 
  - 
  - 
  - 
  -



PROPOSED IMPROVEMENT  
SCALE 1"=20'



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
PLAN & PROFILE  
151ST COURT**

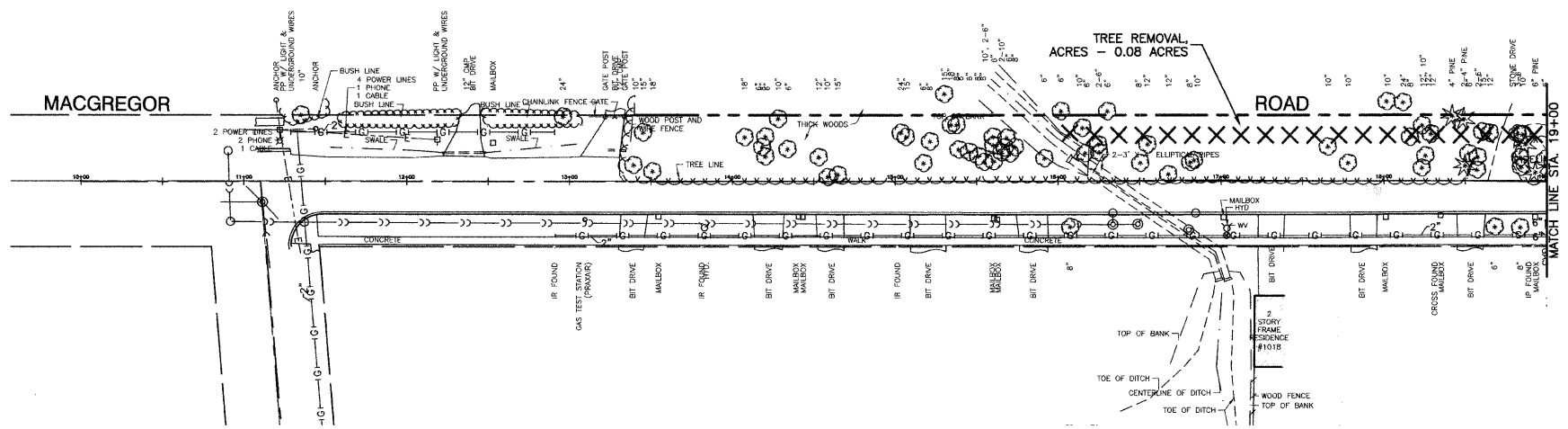
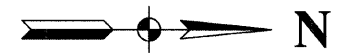
SCALE: VERT. 1"=5'  
HORIZ. 1"=50'

DATE 11-21-07

DRAWN BY RG  
CHECKED BY JMN

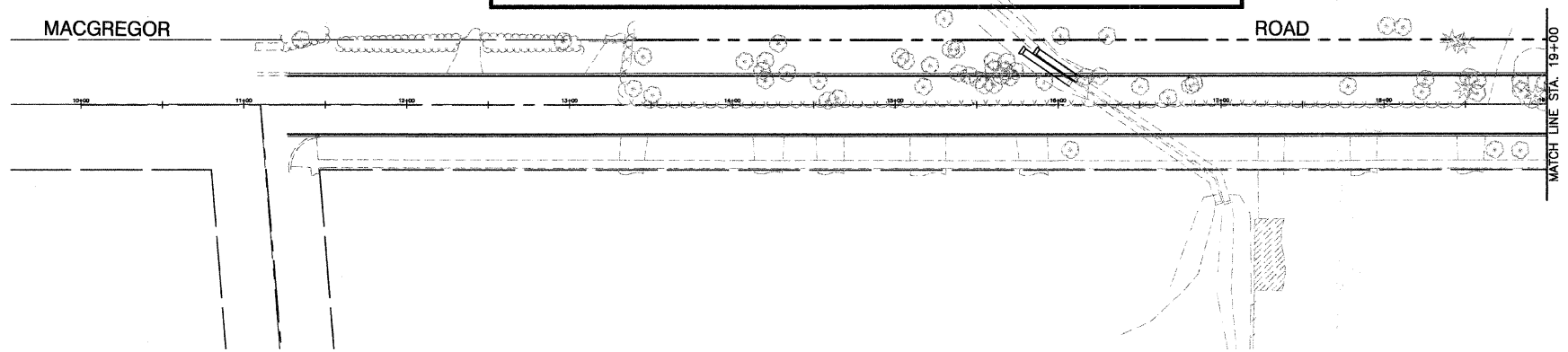
F.A.I. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
0285	01-00052-00-FP	WILL	71	18
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83956



EXISTING CONDITION

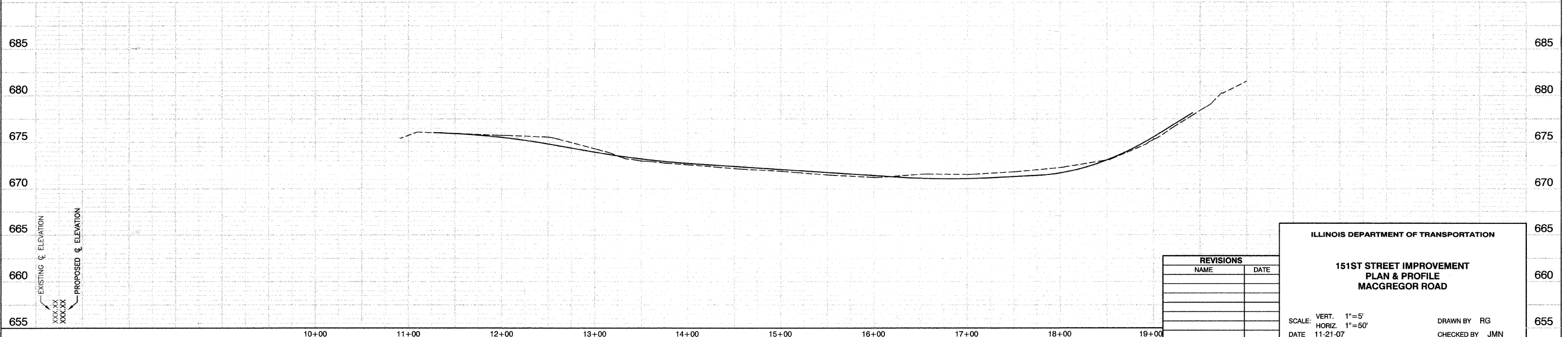
NOT IN CONTRACT  
FOR INFORMATION ONLY



PROPOSED IMPROVEMENT

**LEGEND**

- CURB REMOVAL
- PAVEMENT REMOVAL (PAID FOR AS EARTH EXCAVATION)
- DRIVEWAY PAVEMENT REMOVAL
- HMA SURFACE REMOVAL - BUTT JOINT
- PAVEMENT WIDENING  
-HMA SURFACE COURSE, MIX "D", N70, 2"  
-HMA BINDER COURSE, IL-19.0, N70, 10"  
-AGGREGATE SUBGRADE, 12"
- TREE REMOVAL
- P.C.C. DRIVEWAY, 7"
- HMA SURFACE COURSE, MIX "C", N50, 2"  
HMA BASE COURSE (HMA BINDER IL-19.0), 8"
- HMA SURFACE COURSE, MIX "C", N50, 2"  
HMA BASE COURSE (HMA BINDER IL-19.0), 6"
- C & G TYPE B-6.24
- 10' TRANSITION FROM C&G TYPE B-6.24 TO EXISTING CURB & GUTTER
- P.C.C. SIDEWALK, 5" (7" AT DRIVEWAYS)



REVISIONS	
NAME	DATE

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

**151ST STREET IMPROVEMENT  
PLAN & PROFILE  
MACGREGOR ROAD**

SCALE: VERT. 1"=5'  
HORIZ. 1"=50'

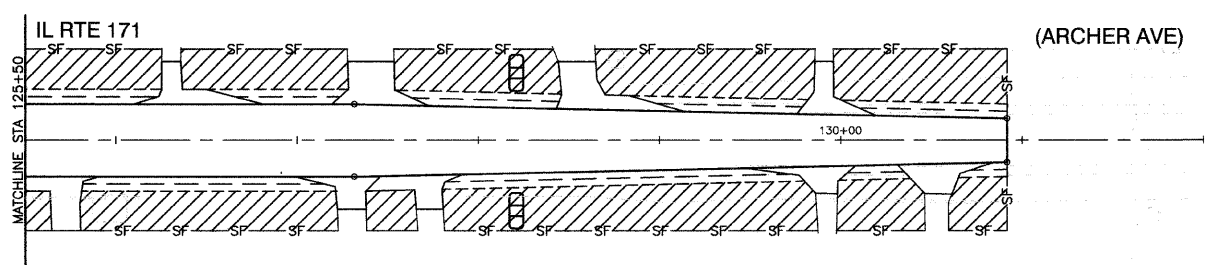
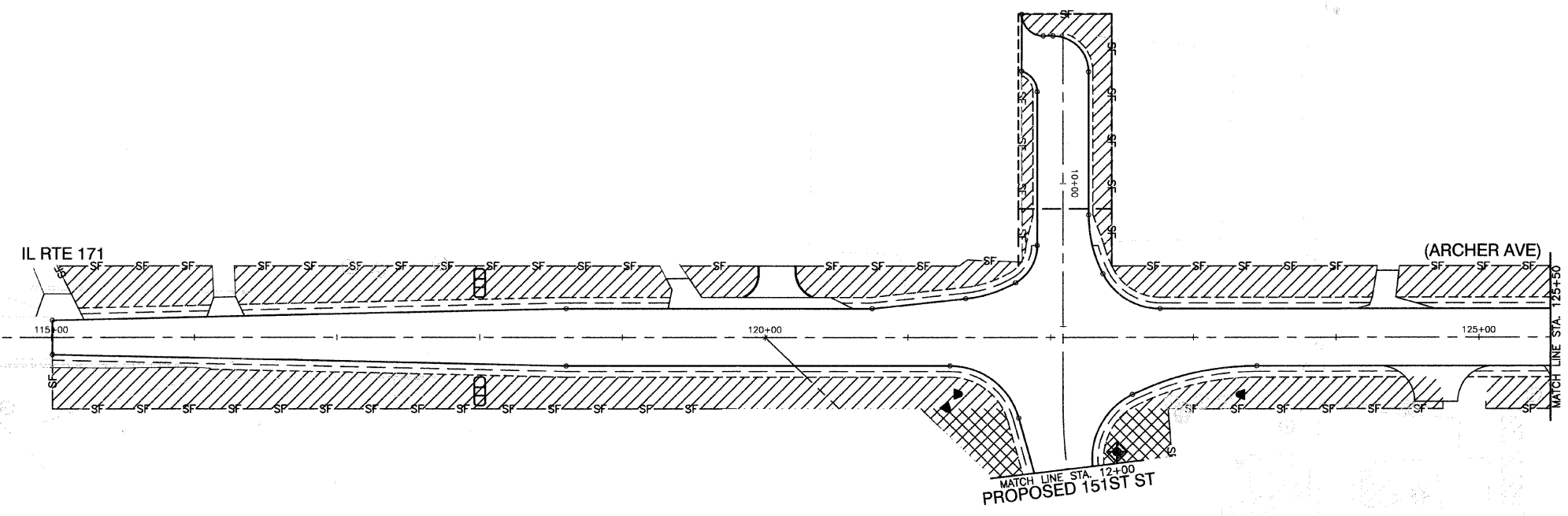
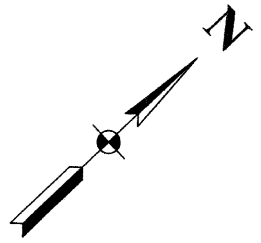
DATE 11-21-07

DRAWN BY RG  
CHECKED BY JMN



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	20
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83956



**LANDSCAPING LEGEND**

- TOPSOIL FURNISH AND PLACE, 4" SEEDING, CLASS 2A WITH EROSION CONTROL BLANKET
- NITROGEN FERTILIZER NUTRIENT
- PHOSPHORUS FERTILIZER NUTRIENT
- POTASSIUM FERTILIZER NUTRIENT
- TOPSOIL FURNISH AND PLACE, 4" SODDING, SALT TOLERANT
- NITROGEN FERTILIZER NUTRIENT
- PHOSPHORUS FERTILIZER NUTRIENT
- POTASSIUM FERTILIZER NUTRIENT
- SEDIMENT CONTROL, SILT FENCE
- INLET FILTERS
- TEMPORARY DITCH CHECKS

REVISIONS	
NAME	DATE

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

**151ST STREET IMPROVEMENT  
EROSION CONTROL PLAN & LANDSCAPING  
ARCHER AVENUE**

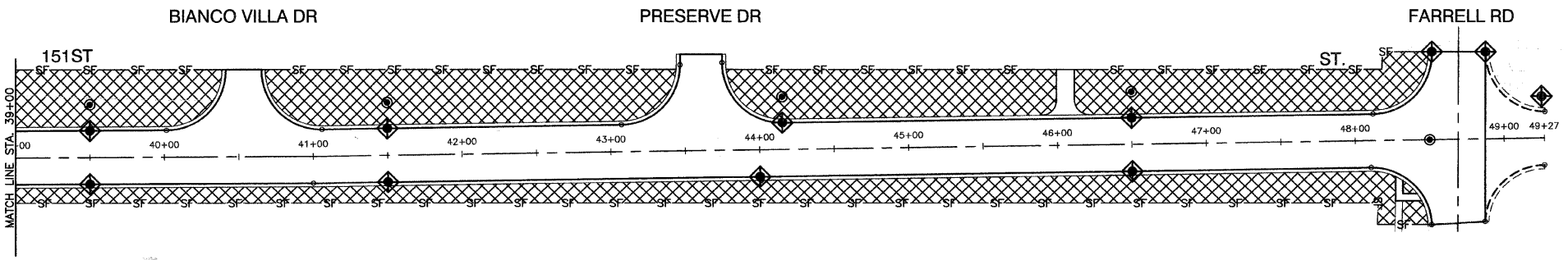
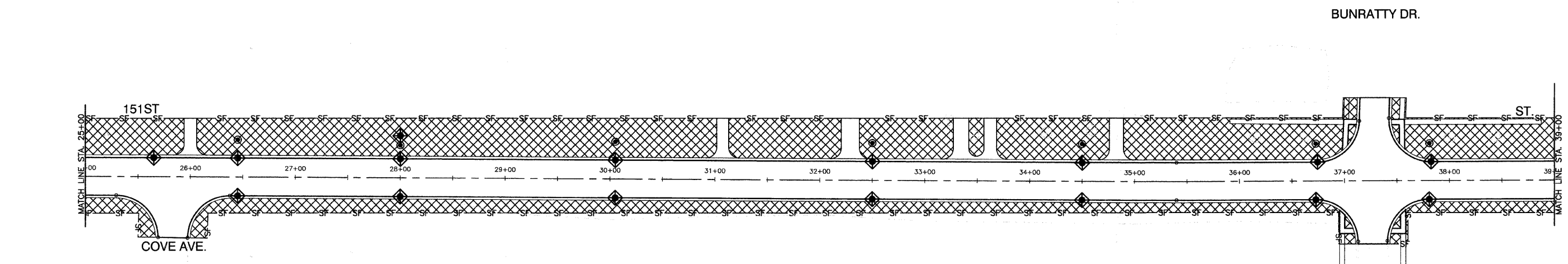
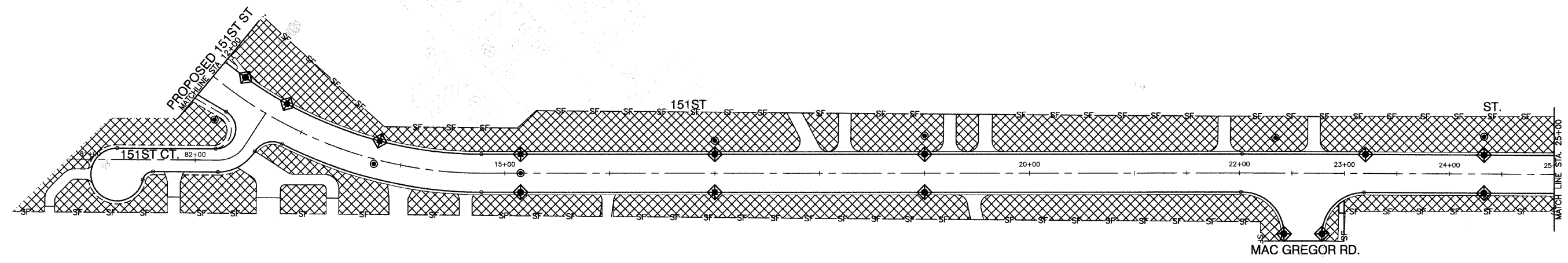
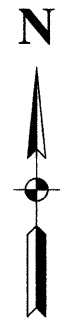
SCALE: VERT. N/A  
HORIZ. 1"=50'

DATE: 11-21-07

DRAWN BY: RG  
CHECKED BY: JMN

F.A.U. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-PP	WILL	71	21
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83956



**LANDSCAPING LEGEND**

- TOPSOIL FURNISH AND PLACE, 4" SEEDING, CLASS 2A WITH EROSION CONTROL BLANKET
- NITROGEN FERTILIZER NUTRIENT
- PHOSPHORUS FERTILIZER NUTRIENT
- POTASSIUM FERTILIZER NUTRIENT
- TOPSOIL FURNISH AND PLACE, 4" SODDING, SALT TOLERANT
- NITROGEN FERTILIZER NUTRIENT
- PHOSPHORUS FERTILIZER NUTRIENT
- POTASSIUM FERTILIZER NUTRIENT
- SEDIMENT CONTROL, SILT FENCE
- INLET FILTERS
- TEMPORARY DITCH CHECKS

REVISIONS	
NAME	DATE

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

**151ST STREET IMPROVEMENT  
EROSION CONTROL PLAN & LANDSCAPING  
151ST STREET**

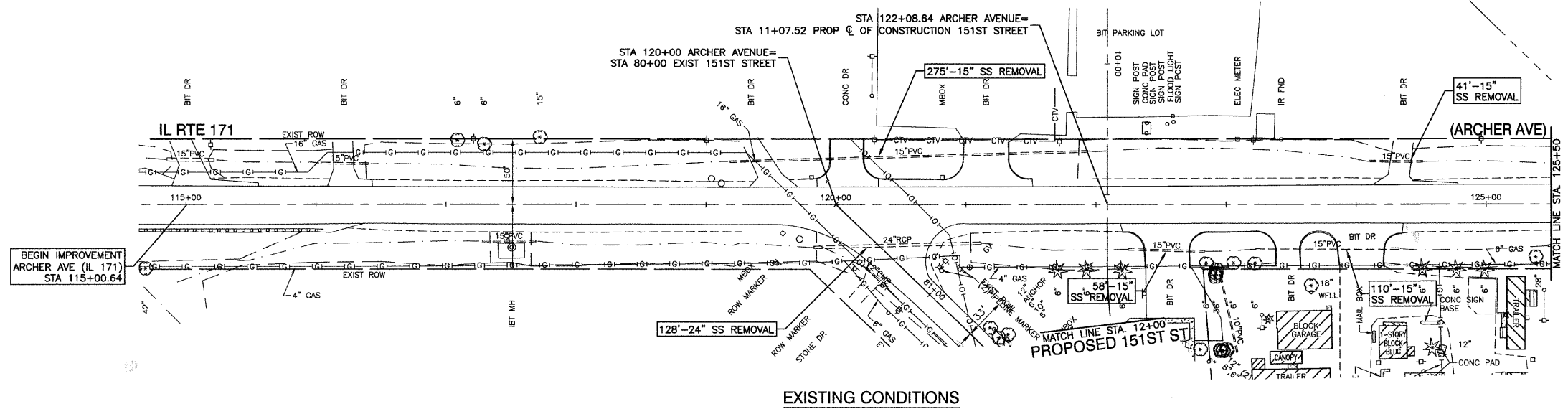
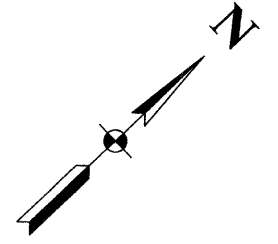
SCALE: VERT. N/A  
HORIZ. 1"=50'

DATE: 11-21-07

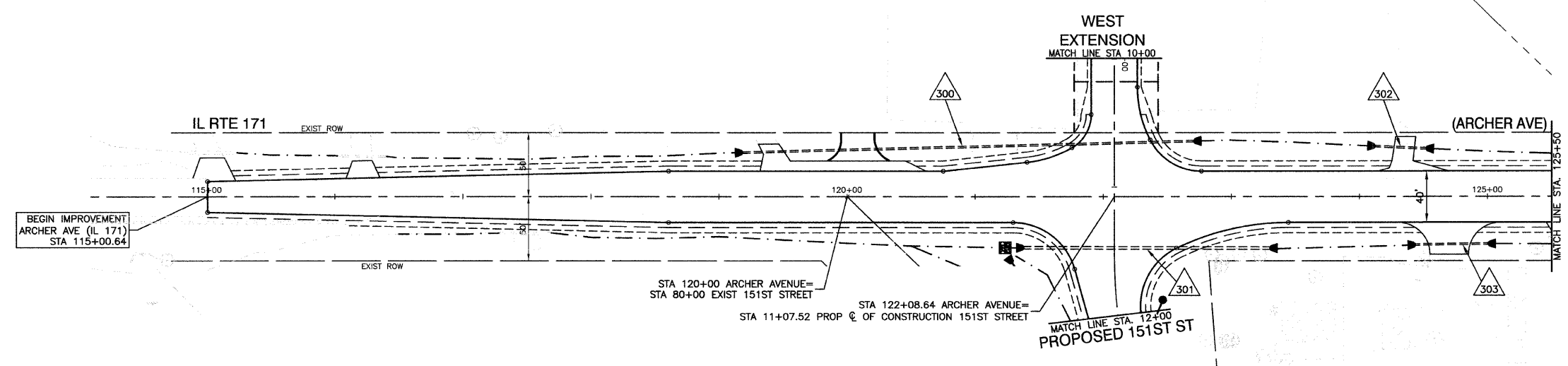
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CHECKED BY: JMN

FILE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	22
STA. BEGIN IMPROV TO STA. 125+50				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 83956

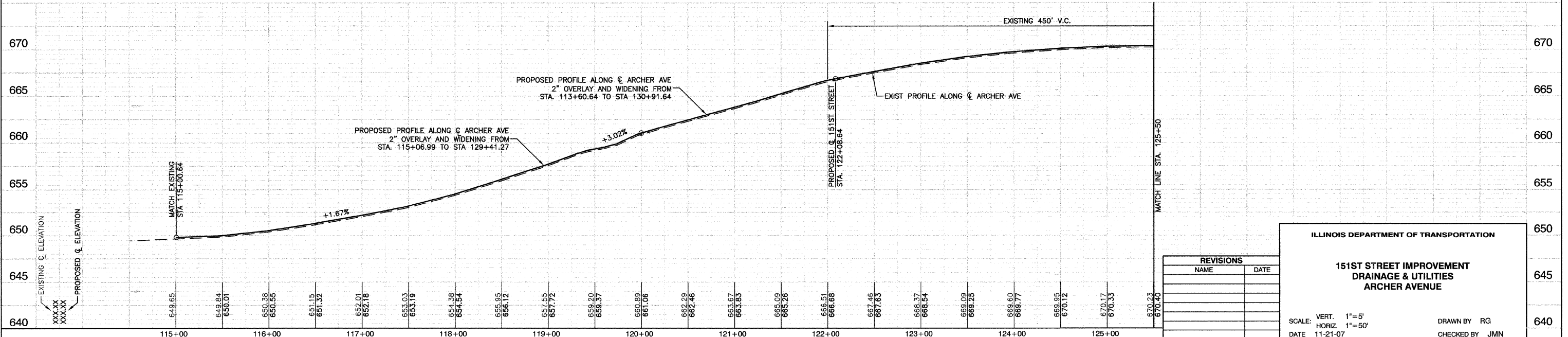


EXISTING CONDITIONS



PROPOSED IMPROVEMENT

- 352'-15" SST1 RCP CL IV @ 2.16% (37.5)  
W/2-PRECAST RC RES, 15"  
STA 119+18.44, 34.6' LT, SW INV=655.60  
STA 122+70.67, 43.4' LT, NE INV=663.20
- 192' SST1 RC ELLIPTICAL PIPE, SPAN 23", RISE 14" @ 2.08% (10.0)  
W/2-PRECAST RC RES, ELLIPTICAL, EQUIVALENT ROUND SIZE, 18"  
STA 121+38.04, 39.7' RT, SW INV=661.00  
STA 123+30.00, 40.0' RT, NE INV=665.00
- 40'-15" SST1 RCP CL IV @ 1.63% (3.5)  
W/2-PRECAST RC RES, 15"  
STA 124+12.14, 39.5' LT, SW INV=666.15  
STA 124+51.96, 37.6' LT, NE INV=666.80
- 57'-15" SST1 RCP CL IV @ 0.70% (5.0)  
W/2-PRECAST RC RES, 15"  
STA 124+61.56, 37.1' RT, SW INV=666.70  
STA 125+18.27, 36.5' RT, NE INV=667.10



REVISIONS	
NAME	DATE

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

**151ST STREET IMPROVEMENT  
DRAINAGE & UTILITIES  
ARCHER AVENUE**

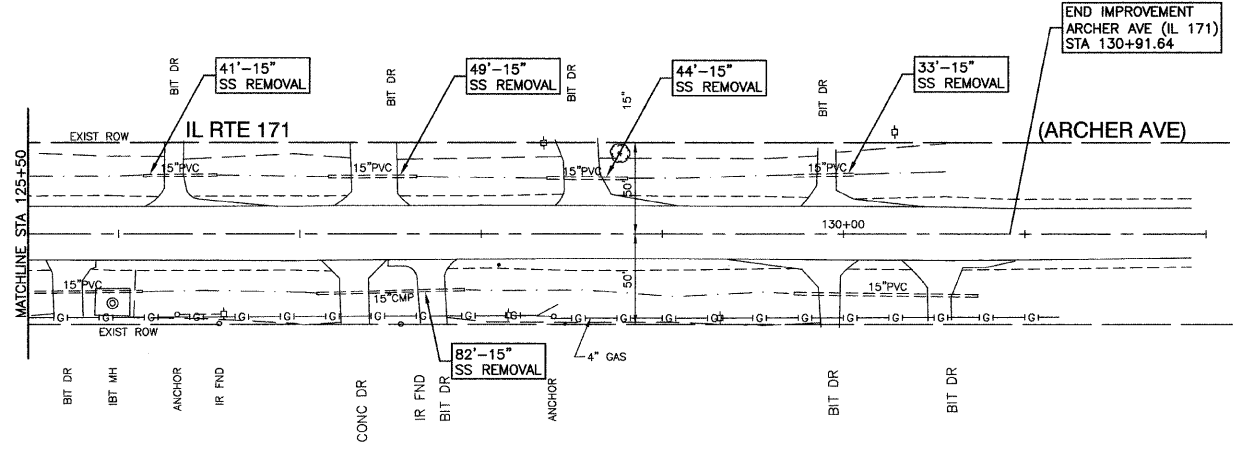
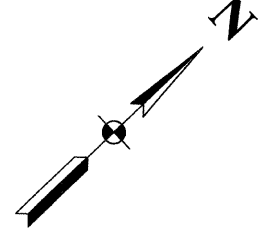
SCALE: VERT. 1"=5'  
HORIZ. 1"=50'

DATE: 11-21-07

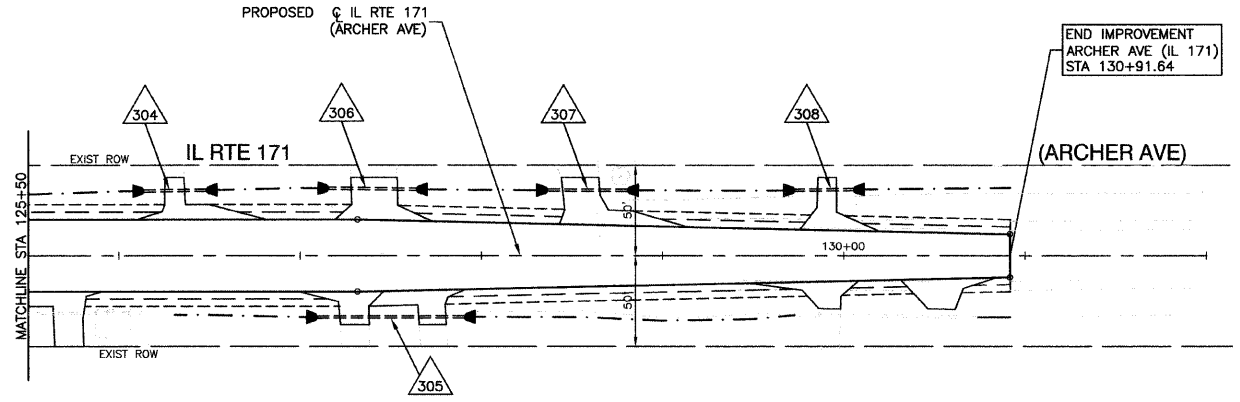
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CHECKED BY: JMN

FAU. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
0285	01-00052-00-FP	WILL	71	23
STA. 125+50		TO STA. END IMPROVEMENT		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956

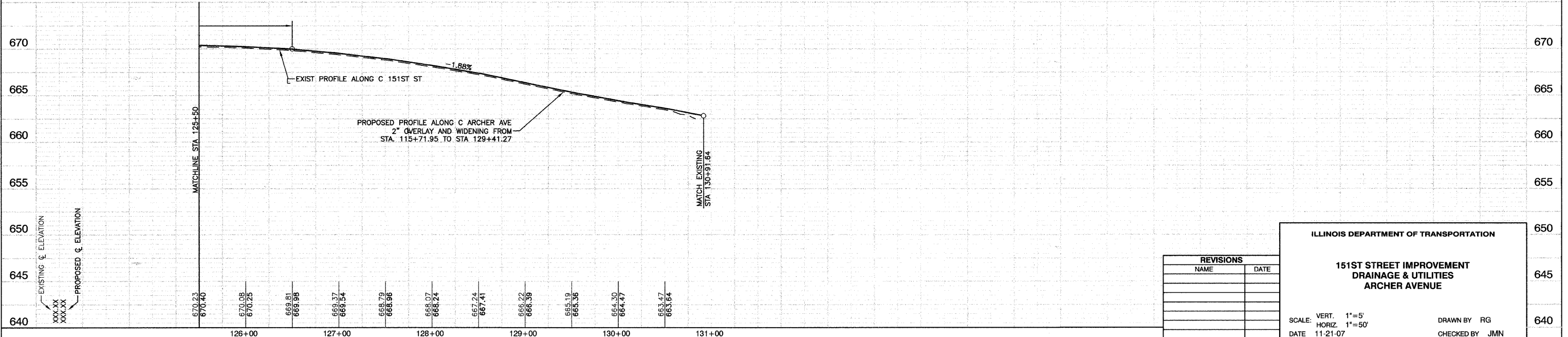


EXISTING CONDITION



PROPOSED IMPROVEMENT

- 304 35'-15" SST1 RCP CL IV @ 0.71% (4.0)  
W/2-PRECAST RC RES, 15"  
STA 126+13.65, 35.7' LT, SW INV=667.58  
STA 126+48.40, 36.1' LT, NE INV=667.33
- 305 81'-15" SST1 RCP CL IV @ 1.60% (10.0)  
W/2-PRECAST RC RES, 15"  
STA 127+09.32, 33.9' RT, SW INV=667.30  
STA 127+90.76, 33.8' RT, NE INV=666.00
- 306 49'-15" SST1 RCP CL IV @ 1.53% (6.0)  
W/2-PRECAST RC RES, 15"  
STA 127+15.66, 37.1' LT, SW INV=666.30  
STA 127+64.24, 36.6' LT, NE INV=665.55
- 307 45'-15" SST1 RCP CL IV @ 2.15% (5.0)  
W/2-PRECAST RC RES, 15"  
STA 128+36.33, 36.2' LT, SW INV=664.25  
STA 128+80.88, 36.1' LT, NE INV=663.28
- 308 33'-15" SST1 RCP CL IV @ 2.48% (3.0)  
W/2-PRECAST RC RES, 15"  
STA 129+72.66, 36.1' LT, SW INV=661.09  
STA 130+05.48, 36.5' LT, NE INV=660.27



REVISIONS	
NAME	DATE

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

**151ST STREET IMPROVEMENT  
DRAINAGE & UTILITIES  
ARCHER AVENUE**

SCALE: VERT. 1"=5'  
HORIZ. 1"=50'

DATE 11-21-07

DRAWN BY RG  
CHECKED BY JMN

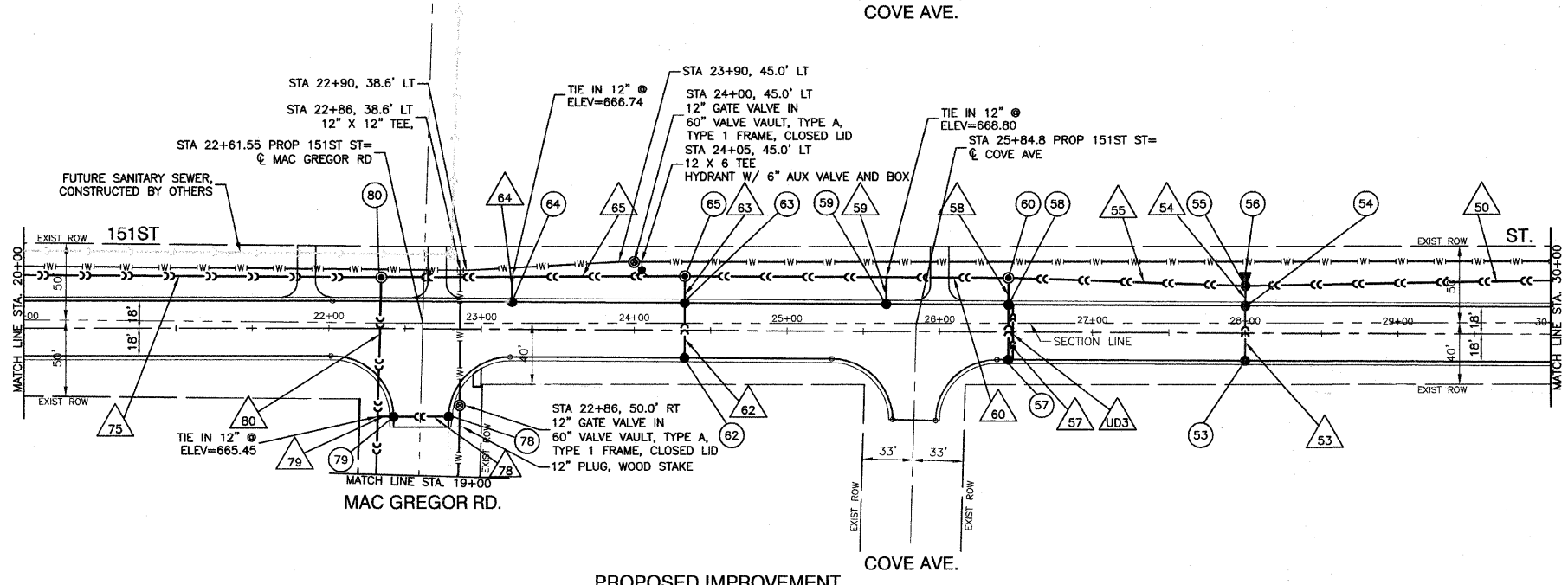
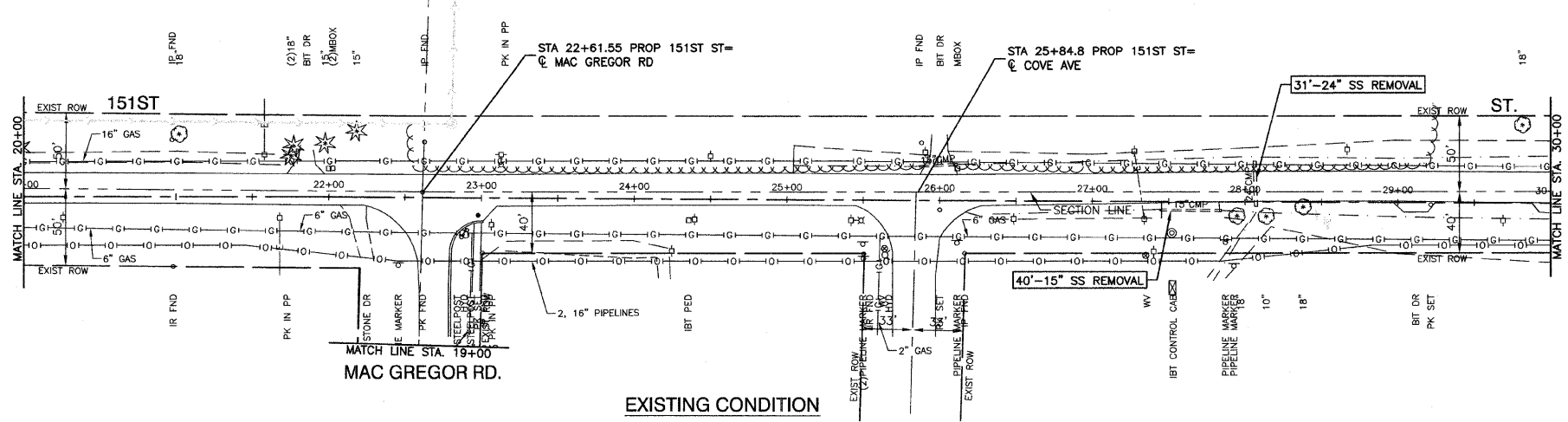




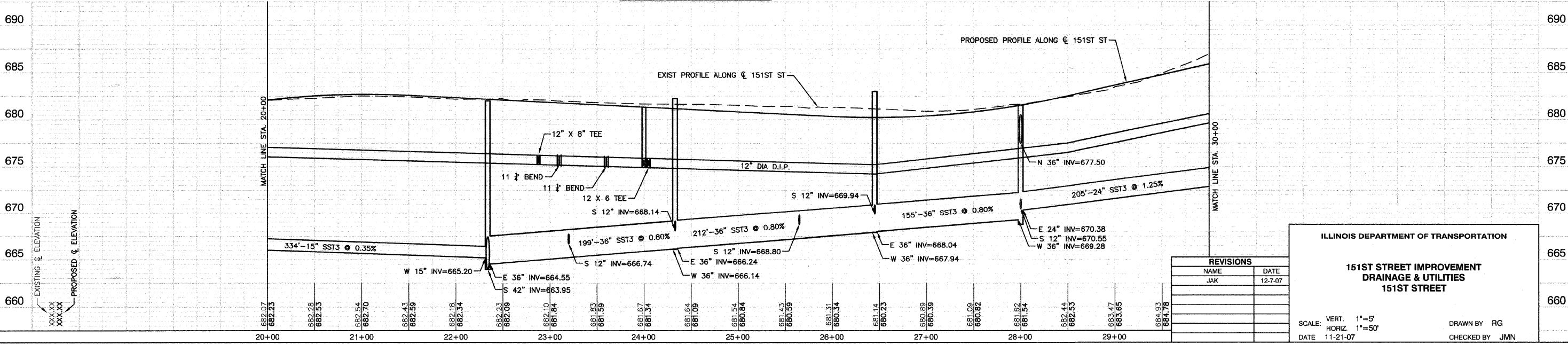
FAU. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	25
STA. 20+00	TO STA. 30+00			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956

53	STA 28+00, 18' RT CB TA 4' DIA T24 F&G RIM EL=681.18 N 12" INV=674.26	60	STA 26+45, 35.5' LT MH TA 5' DIA T1F+CL RIM EL=683.00 S 12" INV=669.94 E 36" INV=668.04 W 36" INV=667.94
54	STA 20+00, 18' LT CB TA 4' DIA T24 F&G RIM EL=681.18 S 12" INV=672.64 N 12" INV=670.64	62	STA 24+33, 18' RT CB TA 4' DIA T24 F&G RIM EL=680.81 N 12" INV=672.55
55	STA 28+00, 31' LT CB TA 5' DIA T1F+CL RIM EL=681.50 S 12" INV=670.55 N 36" INV=677.50 E 24" INV=670.38 W 36" INV=669.28	63	STA 24+33, 18' LT CB TA 4' DIA T24 F&G RIM EL=680.81 S 12" INV=670.93 N 12" INV=668.93
56	STA 28+00, 40' LT PRECAST RC FES, 36" FL EL=677.89 S 36" INV=677.50	64	STA 23+30, 18' LT CB TA 4' DIA T24 F&G RIM EL=681.38 N 12" INV=667.48
57	STA 26+45, 18' RT CB TA 4' DIA T24 F&G RIM EL=679.86 N 12" INV=673.65 N 4" UD INV=676.86	65	STA 24+33, 33.5' LT MH TA 5' DIA T1F+CL RIM EL=682.25 S 12" INV=668.14 E 36" INV=666.24 W 36" INV=666.14
58	STA 26+45, 18' LT CB TA 4' DIA T24 F&G RIM EL=679.86 S 12" INV=672.03 N 12" INV=670.03 S 4" UD INV=676.50	78	STA 22+79, 57.5' RT CB TA 4' T11 F&G RIM EL=677.67 W 12" INV=669.55
59	STA 25+65, 18' LT CB TA 4' DIA T24 F&G RIM EL=680.16 N 12" INV=669.59	79	STA 24+43, 57.8' RT CB TA 4' DIA T11 F&G RIM EL=667.92 W 12" INV=665.92
		80	STA 22+34, 33.5' LT MH TA 5' DIA T1F+CL RIM EL=682.00 W 15" INV=665.20 E 36" INV=664.55 S 42" INV=663.95



50	205'-24" SST3 CL IV @ 1.25% (0.0)
53	36'-12" SST2 CL III @ 4.50% (30.8)
54	18'-12" SST2 CL III @ 0.50% (4.0)
55	155'-36" SST3 CL IV @ 0.80% (0.0)
57	36'-12" SST2 CL III @ 4.50% (26.6)
58	18'-12" SST3 CL IV @ 0.50% (4.4)
59	18'-12" SST3 CL IV @ 4.50% (4.8)
60	212'-36" SST3 CL IV @ 0.80% (45.4)
62	36'-12" SST2 CL III @ 4.50% (23.2)
63	18'-12" SST3 CL IV @ 4.50% (1.9)
64	16'-12" SST3 CL IV @ 4.50% (4.9)
65	199'-36" SST3 CL IV @ 0.80% (0.0)
75	334'-15" SST3 CL IV @ 0.35% (106.5)
78	36'-12" SST3 CL IV @ 4.50% (37.9)
79	11'-12" SST3 CL IV @ 4.50% (5.7)
80	250'-42" SST2 CL III @ 0.28% (227.5)
UD3	36'-4" UD @ 1.00%



REVISIONS	
NAME	DATE
JAK	12-7-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
DRAINAGE & UTILITIES  
151ST STREET**

SCALE: VERT. 1"=5'  
HORIZ. 1"=50'

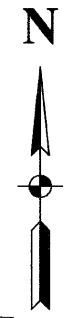
DATE 11-21-07 DRAWN BY RG  
CHECKED BY JMN

ROBINSON ENGINEERING, LTD.  
1708 SOUTH PARK AVENUE, SOUTH HAVEN, ILLINOIS 60473  
(708) 381-6700 FAX (708) 381-8828  
ILLINOIS DESIGN FIRM REGISTRATION NO. 18401128

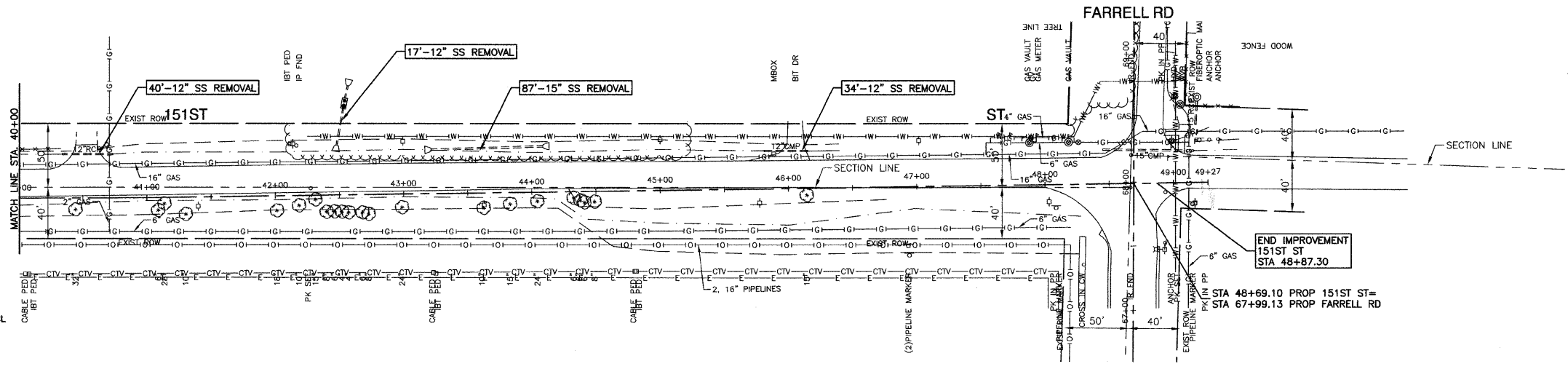


FILE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	27
STA. 40+00	TO STA. END IMPROVEMENT			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

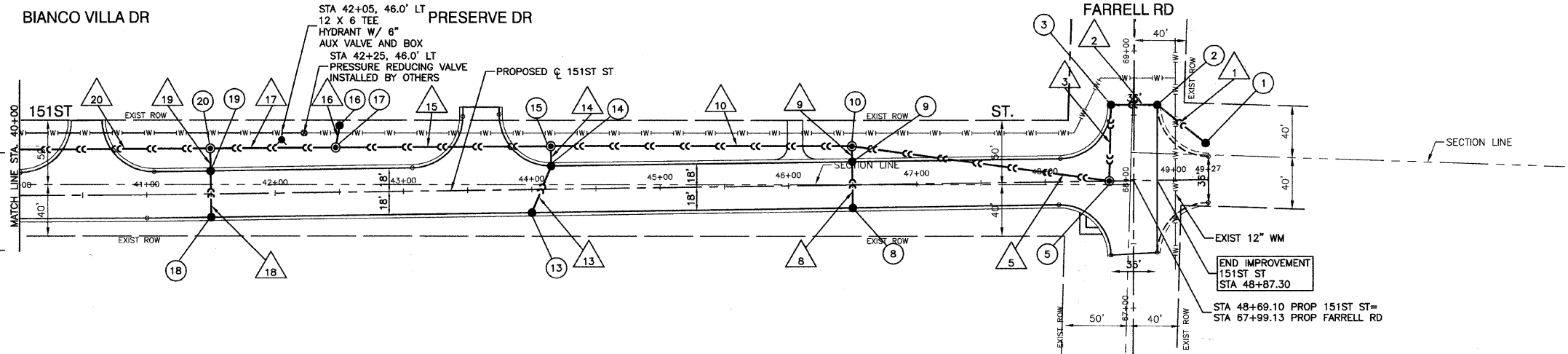
CONTRACT NO. 83956



1 STA 49+26, 28.3' LT CB TA 4" DIA T24 F&G RIM EL=710.40 NW 12" INV=702.18	13 STA 44+00, 18' RT CB TA 4" DIA T24 F&G RIM EL=705.56 NE 12" INV=698.20
2 STA 48+88, 58.6' LT CB TA 4" DIA T24 F&G RIM EL=711.96 SE 12" INV=701.94 W 12" INV=701.69	14 STA 44+15, 18' LT CB TA 4" DIA T24 F&G RIM EL=705.96 SW 12" INV=696.43 N 12" INV=694.43
3 STA 48+52, 59.2' LT CB TA 4" DIA T24 F&G RIM EL=711.96 S 12" INV=693.76 E 15" INV=701.51 S 12" INV=701.41	15 STA 44+15, 33.5' LT MH TA 4" DIA T1F+CL RIM EL=706.30 S 12" INV=693.76 E 15" INV=691.86 W 15" INV=691.76
5 STA 48+50, MH TA 4" DIA T1F+CL RIM EL=711.47 N 12" INV=700.81 NW 12" INV=700.71	16 STA 42+51, 51.9' LT MH TA 4" DIA T1F+CL RIM EL=702.50 EX. NE 12" INV=701.25 SW 12" INV=690.31
8 STA 46+50, 18' RT CB TA 4" DIA T24 F&G RIM EL=709.74 N 12" INV=702.71	18 STA 42+48, 34.8' LT MH TA 4" DIA T1F+CL RIM EL=702.00 NE 12" INV=690.05 E 15" INV=688.40 W 18" INV=688.05
9 STA 46+50, 18' LT CB TA 4" DIA T24 F&G RIM EL=709.74 S 12" INV=701.09 N 12" INV=699.09	19 STA 41+50, 18' RT CB TA 4" DIA T24 F&G RIM EL=699.39 S 12" INV=699.39 N 12" INV=692.01
10 STA 46+50, 30.0' LT MH TA 4" DIA T1F+CL RIM EL=710.00 S 12" INV=698.55 SE 12" INV=696.55 W 15" INV=696.55	20 STA 41+50, 35.5' LT MH TA 5" DIA T1F+CL RIM EL=700.50 S 12" INV=687.60 E 18" INV=686.10 W 24" INV=685.60

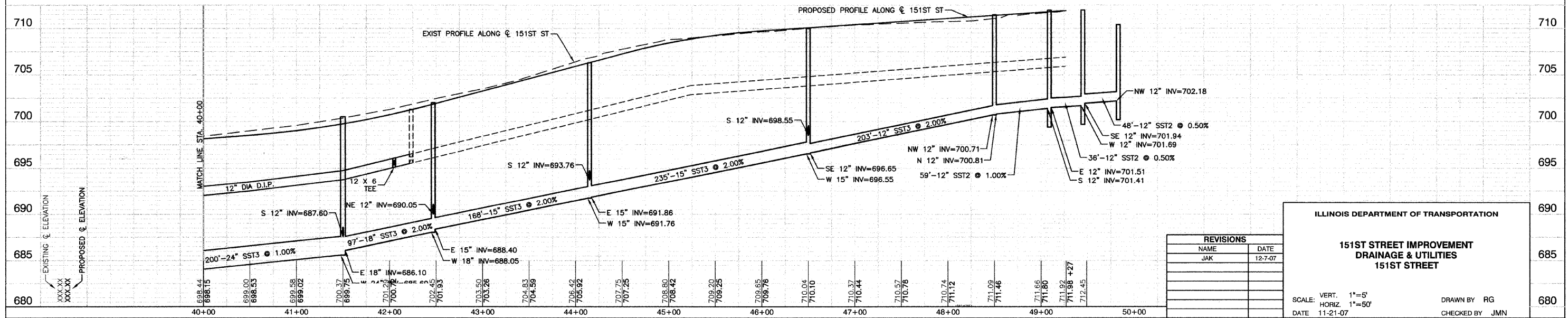


EXISTING CONDITION



PROPOSED IMPROVEMENT

1	48'-12" SST2 CL III @ 0.50% (0.0)
2	36'-12" SST2 CL III @ 0.50% (45.9)
3	59'-12" SST2 CL III @ 1.00% (78.1)
5	203'-12" SST3 CL IV @ 2.00% (208.4)
8	36'-12" SST2 CL III @ 4.50% (29.9)
9	12'-12" SST3 CL IV @ 4.50% (4.1)
10	235'-15" SST3 CL IV @ 2.00% (31.1)
13	39'-12" SST2 CL III @ 4.50% (37.5)
14	14'-12" SST3 CL IV @ 4.50% (4.6)
15	168'-15" SST3 CL IV @ 2.00% (108.0)
16	17'-12" SS WM REQ. @ 1.50% (0.0)
17	97'-18" SST3 CL IV @ 2.00% (0.0)
18	36'-12" SST2 CL III @ 4.50% (30.8)
19	18'-12" SST3 CL IV @ 4.50% (4.4)
20	200'-24" SST3 CL IV @ 1.00% (52.9)



REVISIONS	
NAME	DATE
JAK	12-7-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
DRAINAGE & UTILITIES  
151ST STREET**

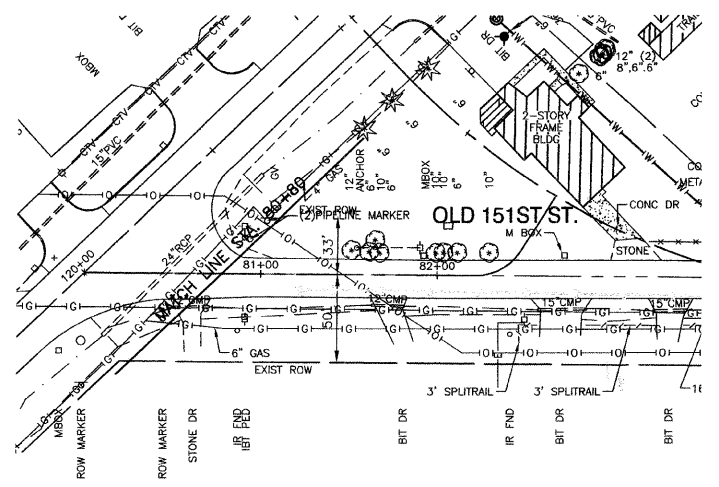
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HORIZ. 1"=50'

DATE 11-21-07

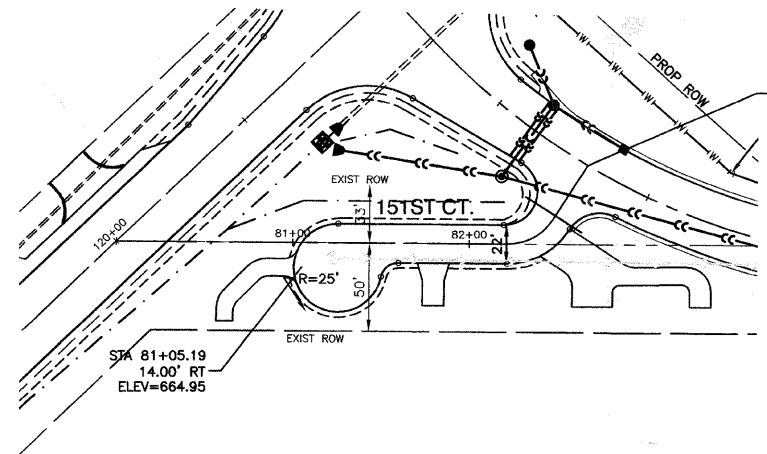
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CHECKED BY JMN

FILE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	28
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

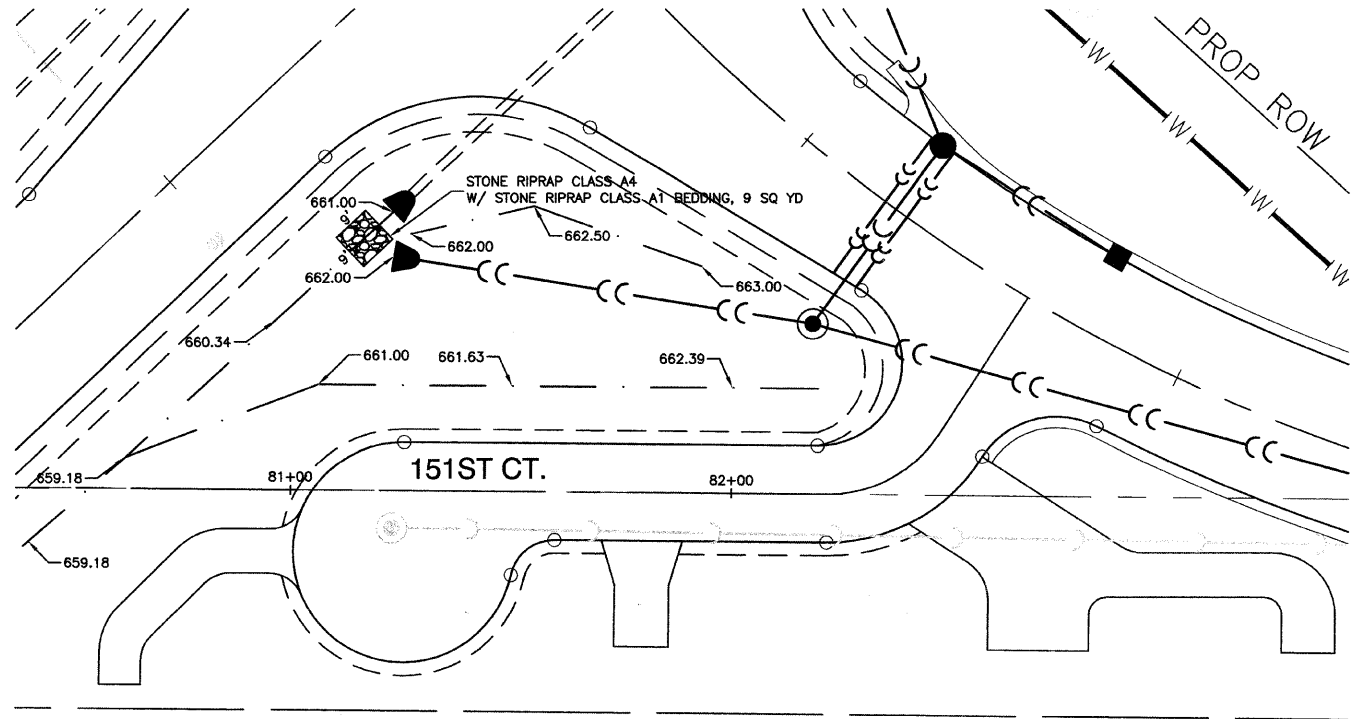
CONTRACT NO. 83956



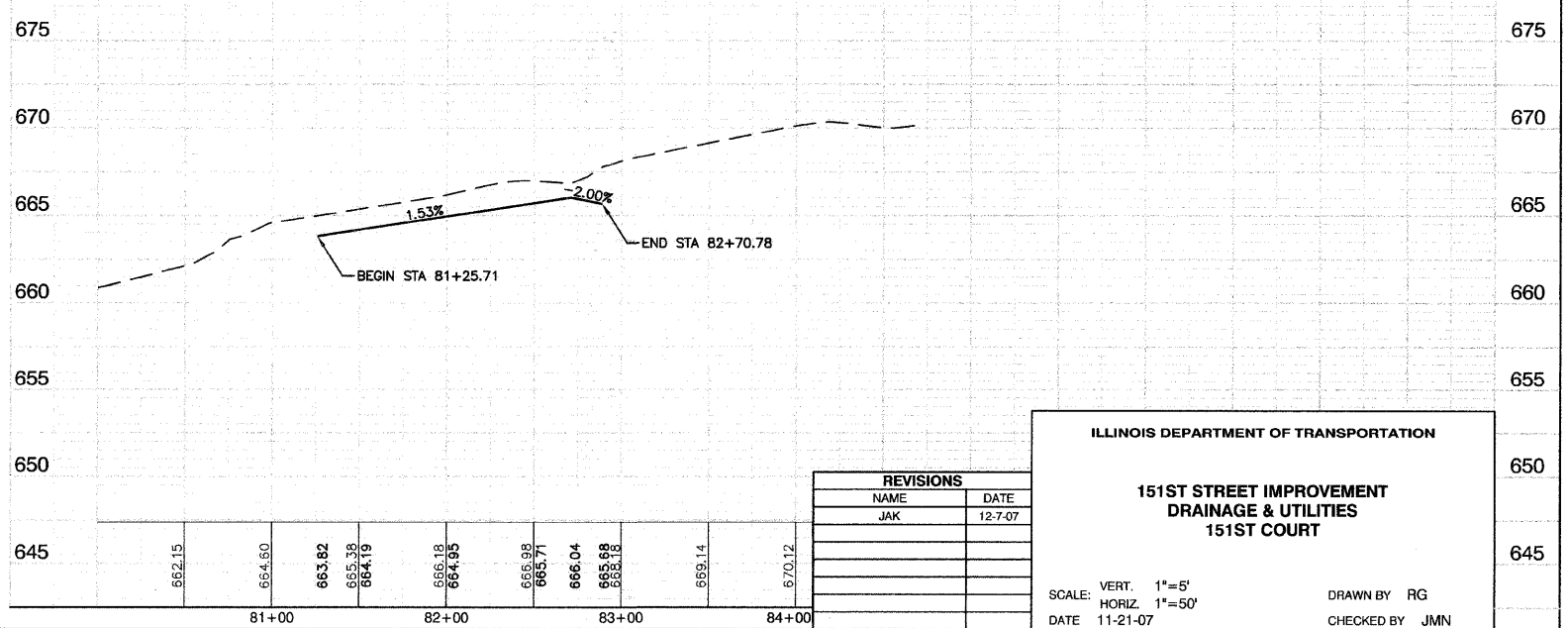
EXISTING CONDITION



PROPOSED IMPROVEMENT



PROPOSED IMPROVEMENT  
SCALE 1"=20'



REVISIONS	
NAME	DATE
JAK	12-7-07

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

**151ST STREET IMPROVEMENT  
DRAINAGE & UTILITIES  
151ST COURT**

SCALE: VERT. 1"=5'  
HORIZ. 1"=50'

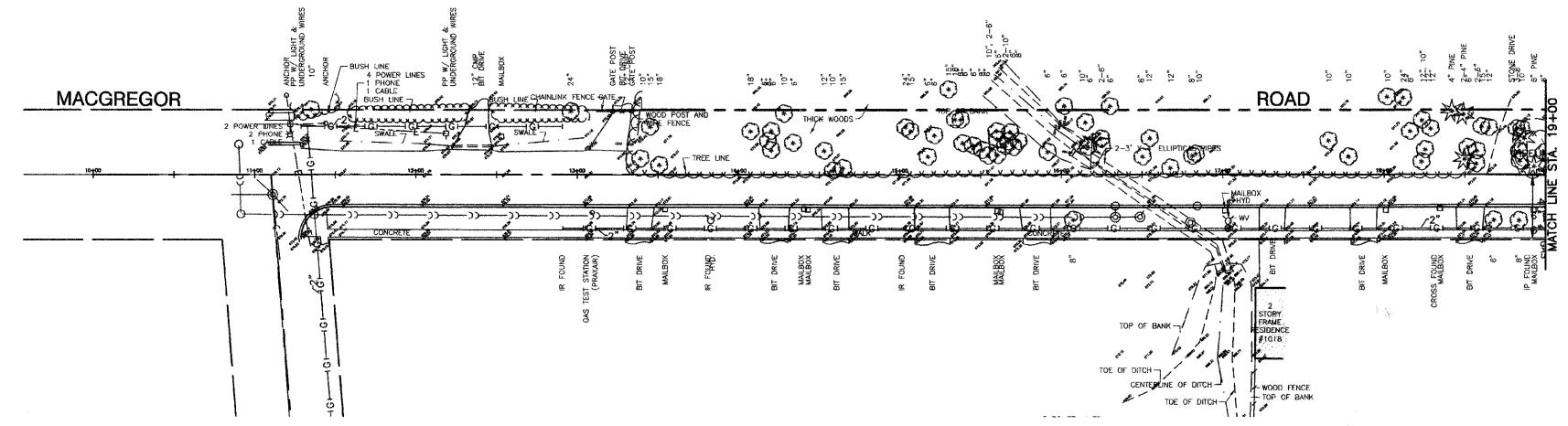
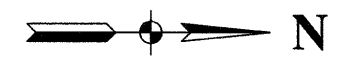
DATE 11-21-07

DRAWN BY RG  
CHECKED BY JMN

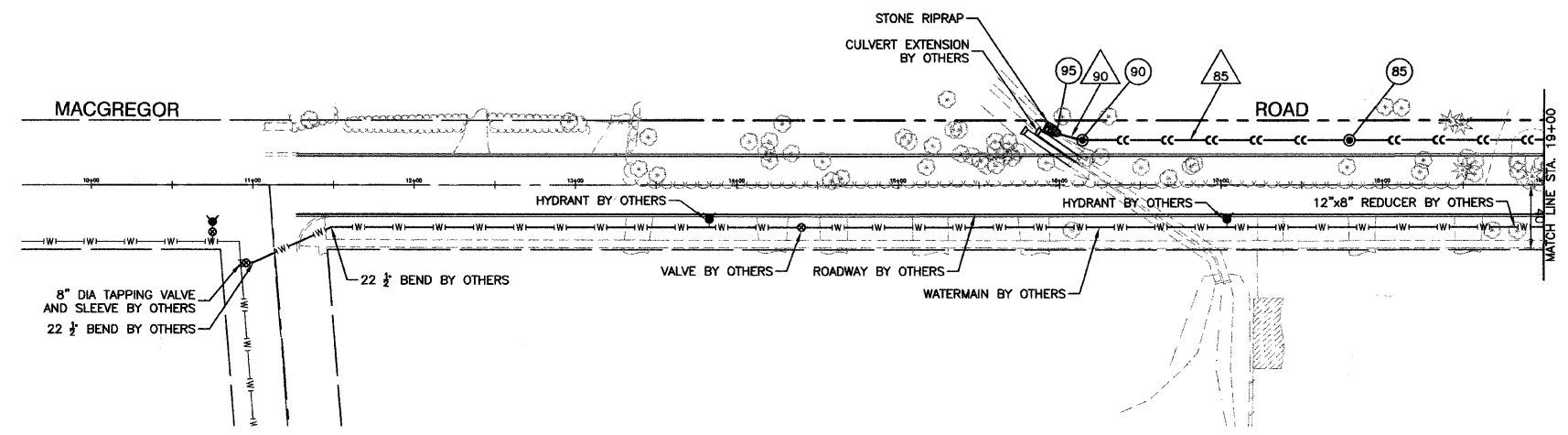
**ROBINSON ENGINEERING, LTD.**  
17000 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60478  
(708) 331-6700 FAX (708) 331-3629  
ILLINOIS DESIGN FIRM REGISTRATION NO. 194001228 01179-STRM-02

FAU. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	29
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



EXISTING CONDITION

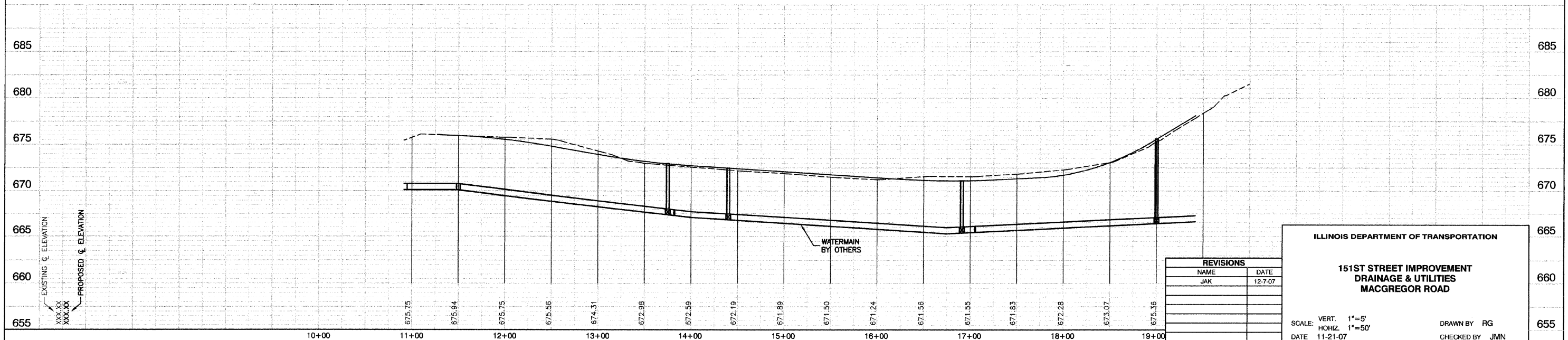


PROPOSED IMPROVEMENT

- 85 162'-42" SST2 RCP CL III @ 0.28% (0)
- 90 14'-42" SST2 RCP CL III @ 0.28% (0)

- 85  
STA 17+79, 28' LT  
MH TA 5" DIA T1F+CL  
RIM EL=671.00  
N 42" INV=663.25  
S 42" INV=663.15
- 90  
STA 16+14, 28' LT  
MH TA 5" DIA T1F+CL  
RIM EL=669.00  
N 42" INV=662.70  
SW 42" INV=662.54
- 95  
STA 16+00, 31.5' LT  
PRECAST RC FES, 42"  
INV=662.50  
W/ STONE RIPRAP,  
CL A4, 20 SQ YD

NOTE:  
ROADWAY AND WATERMAIN IMPROVEMENTS  
CONSTRUCTED BY OTHERS. FOR INFORMATION ONLY.



REVISIONS		
NAME	DATE	
JAK	12-7-07	

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
DRAINAGE & UTILITIES  
MACGREGOR ROAD**

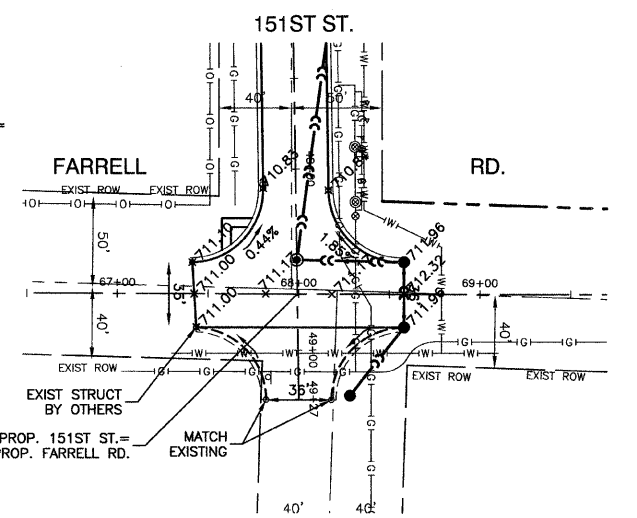
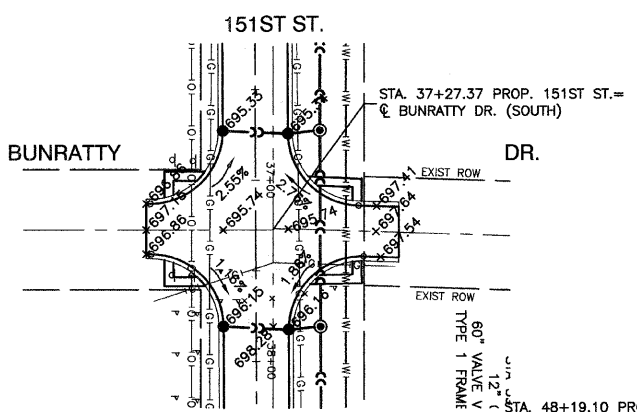
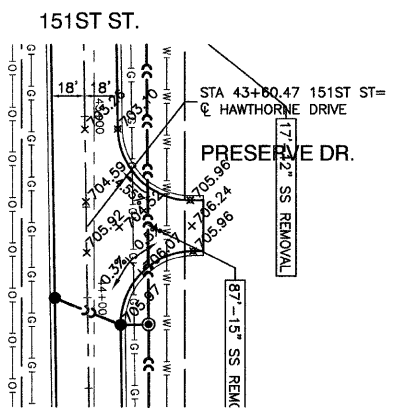
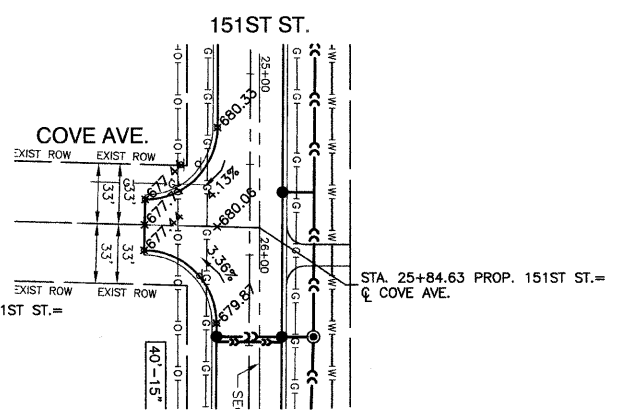
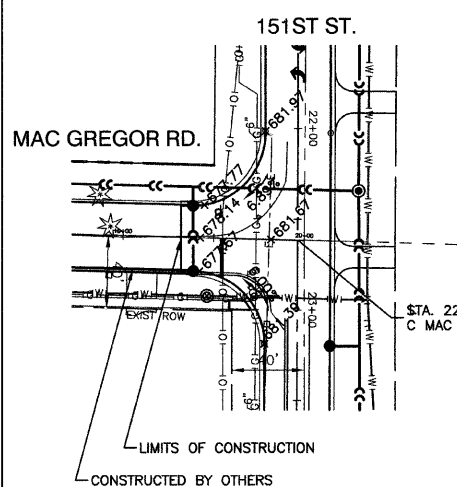
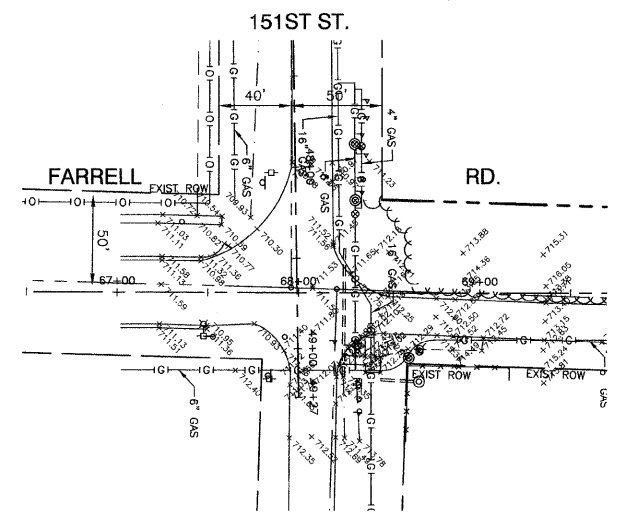
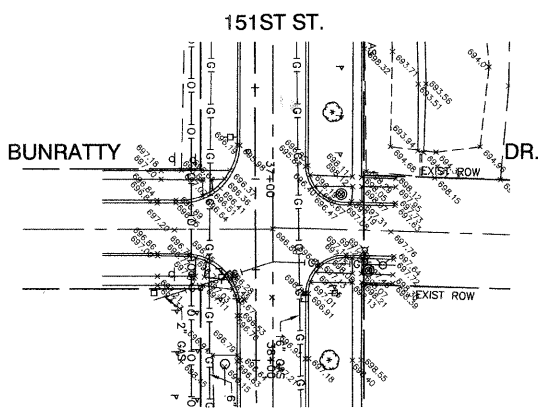
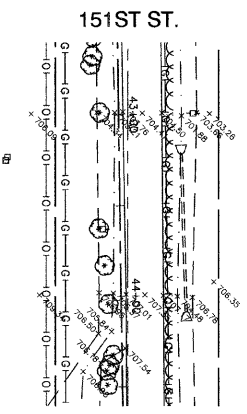
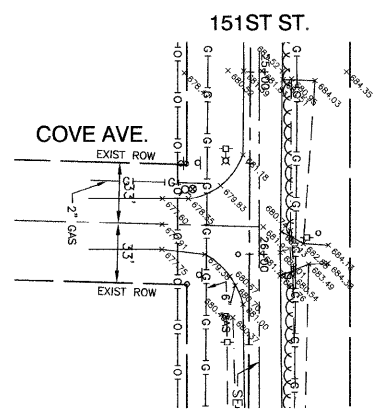
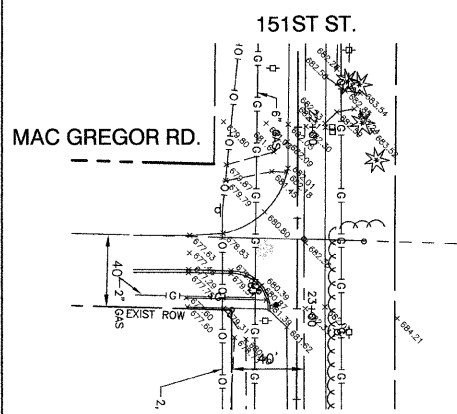
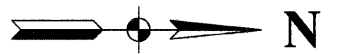
SCALE: VERT. 1"=5'  
HORIZ. 1"=50'

DATE 11-21-07

DRAWN BY RG  
CHECKED BY JMN

FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	30
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
INTERSECTION DETAILS**

SCALE: VERT. N/A  
HORIZ. 1"=50'

DATE: 11-21-07

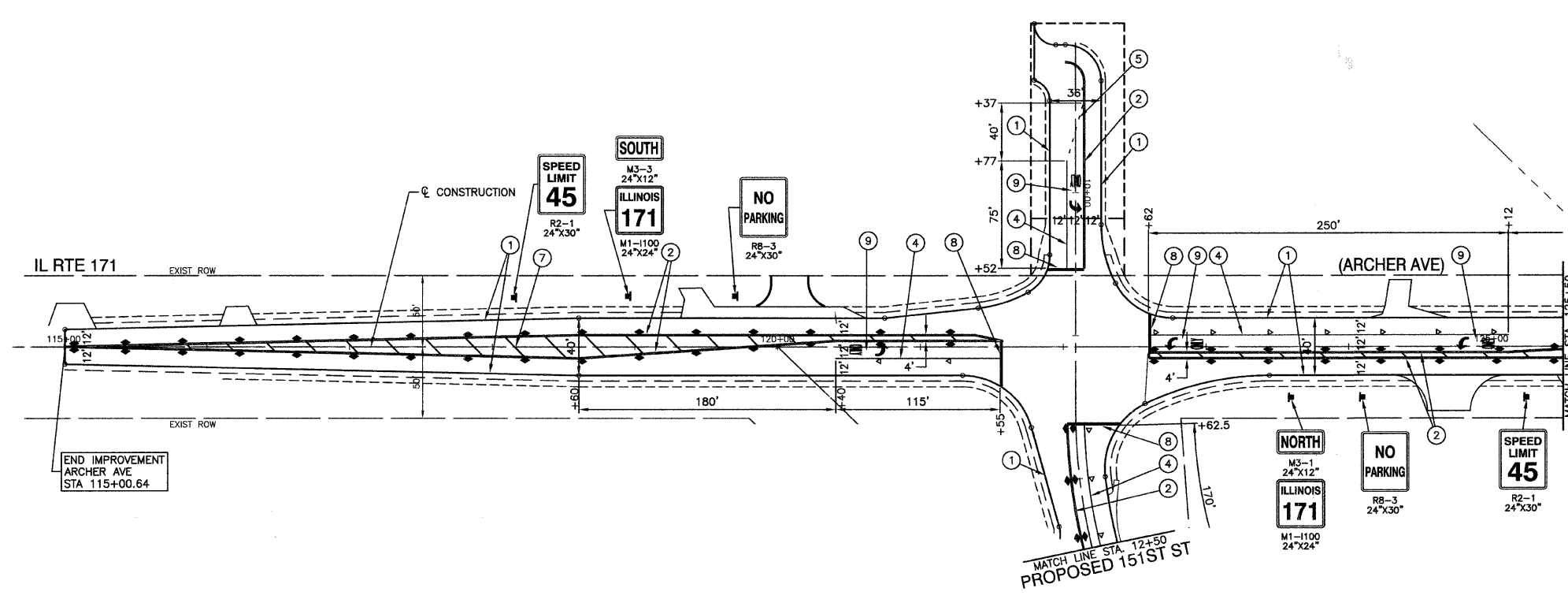
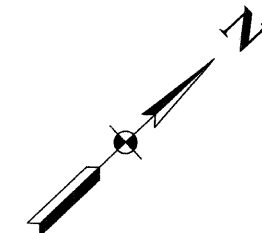
DRAWN BY: RG  
CHECKED BY: JMN

ROBINSON ENGINEERING, LTD.  
17000 SOUTH PARK AVENUE, SOUTH HOLLAND, ILLINOIS 60470  
(708) 381-8700 FAX (708) 381-8828  
ILLINOIS DESIGN FIRM REGISTRATION NO. 184001128

01179-INTR-01

FAU. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
0285	01-00052-00-FP	WILL	71	31
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



**PAVEMENT MARKING LEGEND**

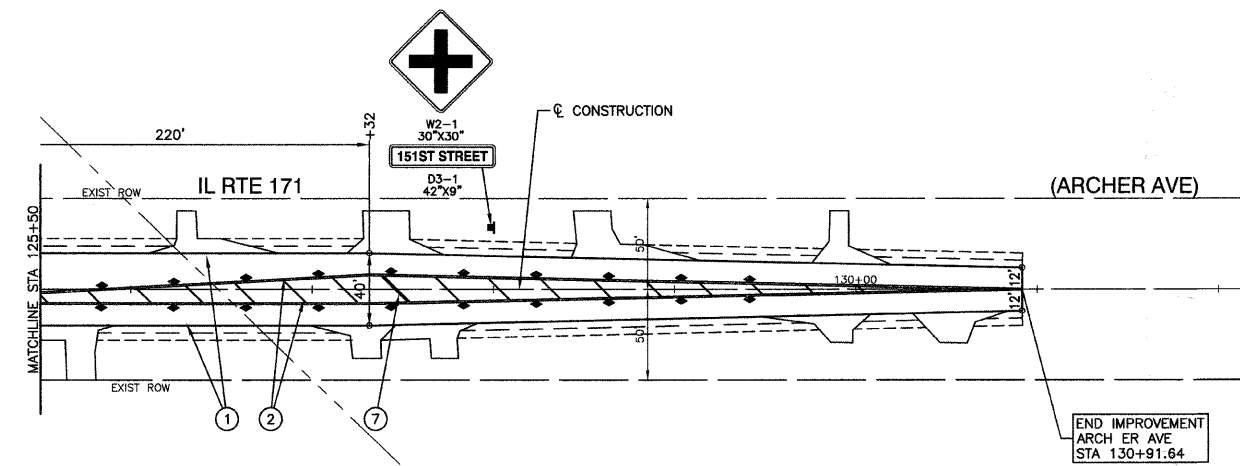
- ① THERMOPLASTIC PAVEMENT MARKING LINE, 4", WHITE LINE
  - ② THERMOPLASTIC PAVEMENT MARKING LINE, 4", DOUBLE YELLOW CENTER LINE (11" C-C)
  - ③ THERMOPLASTIC PAVEMENT MARKING LINE, 4", YELLOW CENTER LINE WITH YELLOW SKIP-DASH (5 1/2" C-C), (10' DASH, 30' SPACE)
  - ④ THERMOPLASTIC PAVEMENT MARKING LINE, 6", WHITE LANE LINE
  - ⑤ THERMOPLASTIC PAVEMENT MARKING LINE, 6", 6" WHITE SKIP-DASH (2' DASH, 6' SPACE)
  - ⑦ THERMOPLASTIC PAVEMENT MARKING LINE, 12", 12" YELLOW DIAGONAL (20" C-C)
  - ⑧ THERMOPLASTIC PAVEMENT MARKING LINE, 24", WHITE STOP BAR
  - ⑨ THERMOPLASTIC PAVEMENT MARKING-LETTERS & SYMBOLS
- ◀ RAISED REFLECTIVE PAVEMENT MARKER ONE-WAY CRYSTAL MARKER 40' C/C UNLESS OTHERWISE NOTED
  - ◀ RAISED REFLECTIVE PAVEMENT MARKER ONE-WAY AMBER MARKER 40' C/C UNLESS OTHERWISE NOTED
  - ◆ RAISED REFLECTIVE PAVEMENT MARKER TWO-WAY AMBER MARKER 40' C/C UNLESS OTHERWISE NOTED

**NOTES**

1. ALL PAVEMENT MARKING SHALL BE THERMOPLASTIC.
2. ANY EXISTING SIGNS THAT ARE NOT TO BE RELOCATED SHALL BE STOCKPILED IN THE RIGHT-OF-WAY AS DIRECTED BY THE ENGINEER AND PICKED UP BY THE VILLAGE OF LOCKPORT.

**PAVEMENT MARKING SCHEDULE**

THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS	-	146 SQ FT
THERMOPLASTIC PAVEMENT MARKING - LINE 4"	-	9700 FT
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	-	540 FT
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	-	102 FT
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	-	123 FT



REVISIONS	
NAME	DATE

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

**151ST STREET IMPROVEMENT  
PAVEMENT MARKING PLAN  
ARCHER AVENUE**

SCALE: VERT. N/A  
HORIZ. 1"=50'

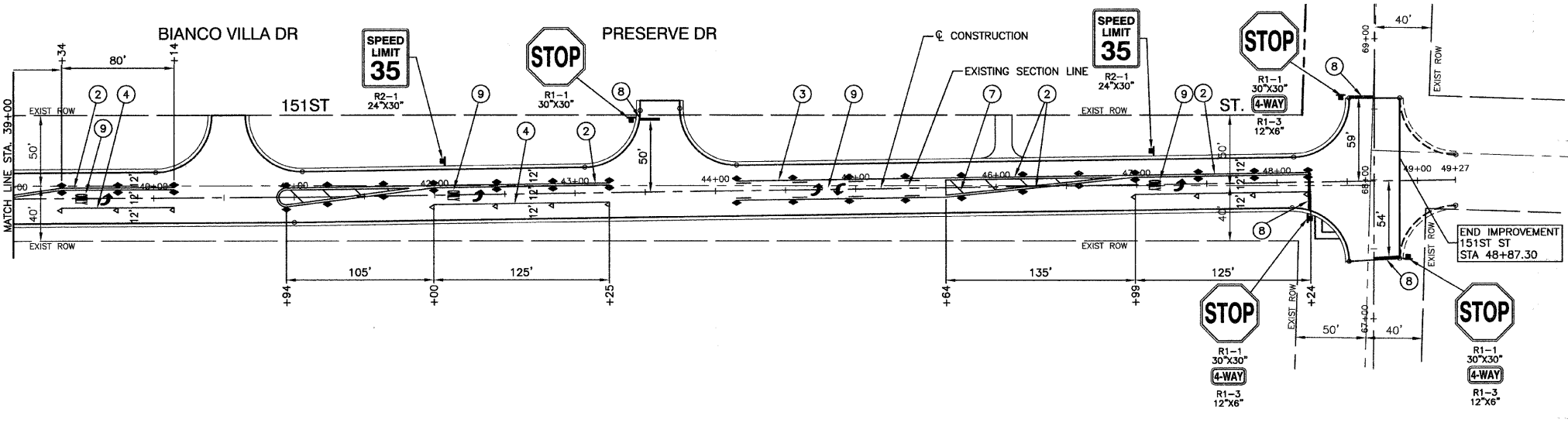
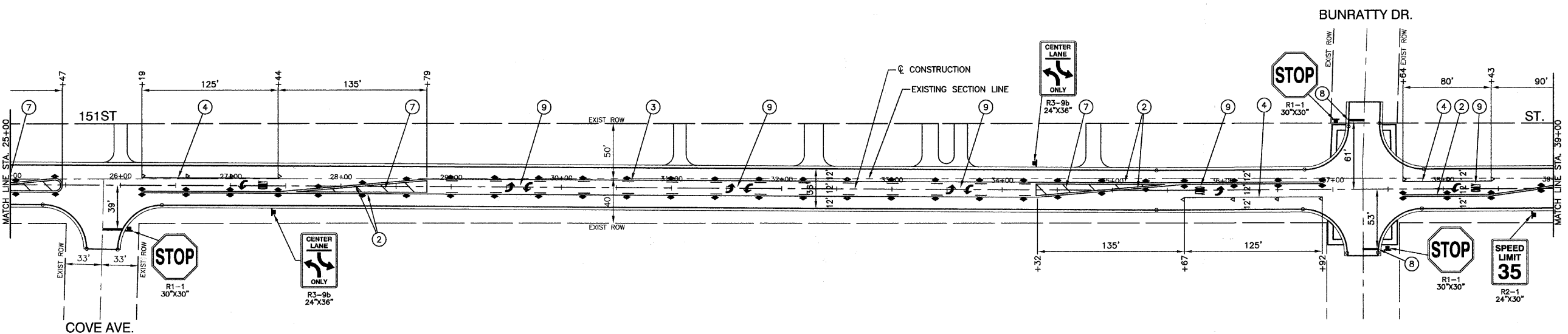
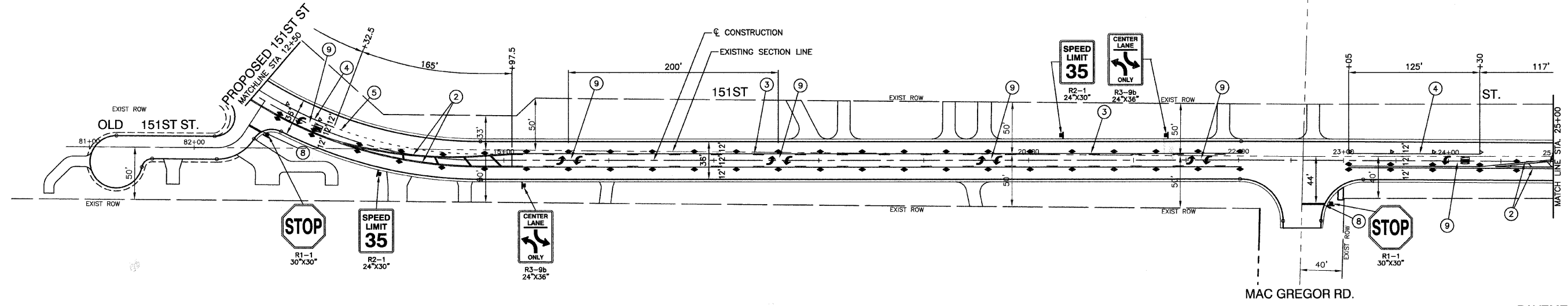
DATE: 11-21-07

DRAWN BY: RG  
CHECKED BY: JMN

FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	32
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956

N



**PAVEMENT MARKING LEGEND**

- ① THERMOPLASTIC PAVEMENT MARKING LINE, 4", WHITE LINE
- ② THERMOPLASTIC PAVEMENT MARKING LINE, 4", DOUBLE YELLOW CENTER LINE (11" C-C)
- ③ THERMOPLASTIC PAVEMENT MARKING LINE, 4", YELLOW CENTER LINE WITH YELLOW SKIP-DASH (5 1/2" C-C), (10" DASH, 30" SPACE)
- ④ THERMOPLASTIC PAVEMENT MARKING LINE, 6", WHITE LANE LINE
- ⑤ THERMOPLASTIC PAVEMENT MARKING LINE, 6", 6" WHITE SKIP-DASH (2" DASH, 6" SPACE)
- ⑦ THERMOPLASTIC PAVEMENT MARKING LINE, 12", 12" YELLOW DIAGONAL (20' C-C)
- ⑧ THERMOPLASTIC PAVEMENT MARKING LINE, 24", WHITE STOP BAR
- ⑨ THERMOPLASTIC PAVEMENT MARKING-LETTERS & SYMBOLS
- ◀ RAISED REFLECTIVE PAVEMENT MARKER ONE-WAY CRYSTAL MARKER 40' C/C UNLESS OTHERWISE NOTED
- ◀ RAISED REFLECTIVE PAVEMENT MARKER ONE-WAY AMBER MARKER 40' C/C UNLESS OTHERWISE NOTED
- ◀ RAISED REFLECTIVE PAVEMENT MARKER TWO-WAY AMBER MARKER 40' C/C UNLESS OTHERWISE NOTED

**NOTES**

- 1. ALL PAVEMENT MARKING SHALL BE THERMOPLASTIC.
- 2. ANY EXISTING SIGNS THAT ARE NOT TO BE RELOCATED SHALL BE STOCKPILED IN THE RIGHT-OF-WAY AS DIRECTED BY THE ENGINEER AND PICKED UP BY THE VILLAGE OF LOCKPORT.

**PAVEMENT MARKING SCHEDULE**

THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS	-	474 SQ FT
THERMOPLASTIC PAVEMENT MARKING - LINE 4"	-	9088 FT
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	-	830 FT
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	-	219 FT
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	-	167 FT

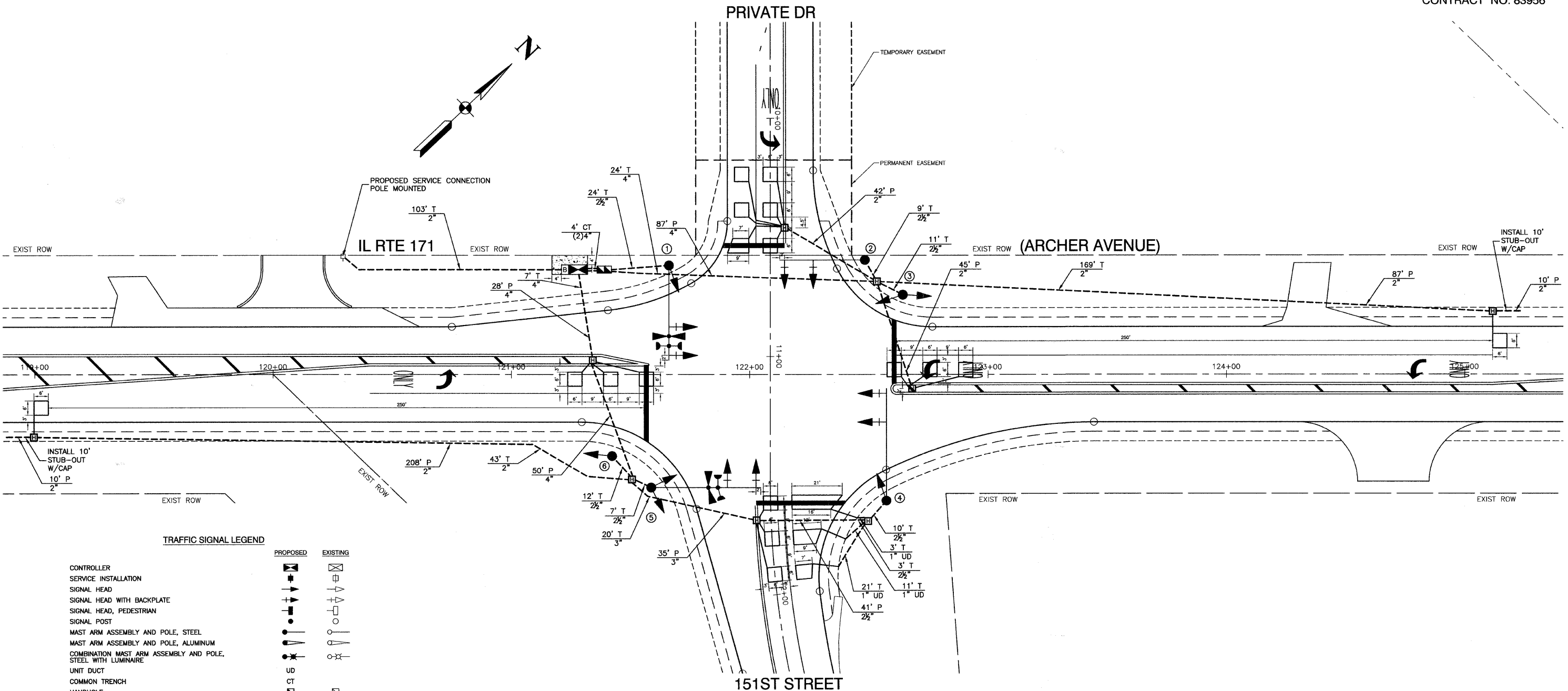
ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT PAVEMENT MARKING PLAN 151ST STREET**

REVISIONS	
NAME	DATE

SCALE: VERT. N/A  
 HORIZ. 1"=50'  
 DATE 11-21-07  
 DRAWN BY RG  
 CHECKED BY JMN





**TRAFFIC SIGNAL LEGEND**

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

#	STATION AND OFFSET	TYPE
1	STA 121+66.08, 45.76' LT	MAST ARM ASSEMBLY AND POLE, 40'
2	STA 122+48.32, 48.03' LT	MAST ARM ASSEMBLY AND POLE, 36'
3	STA 122+64.22, 33.42' LT	SIGNAL POST, 16'
4	STA 122+57.37, 52.97' RT	MAST ARM ASSEMBLY AND POLE, 48'
5	STA 121+58.84, 47.50' RT	MAST ARM ASSEMBLY AND POLE, 46'
6	STA 121+42.25, 57.00' RT	SIGNAL POST, 14'

REVISIONS	
NAME	DATE
IDOT COMMENTS	12-5-07
IDOT COMMENTS	12-14-07
IDOT COMMENTS	12-20-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT TRAFFIC SIGNAL PLAN**

SCALE: VERT. N/A  
 HORIZ. 1"=20'

DATE 11-21-07

DRAWN BY RG  
 CHECKED BY JMN

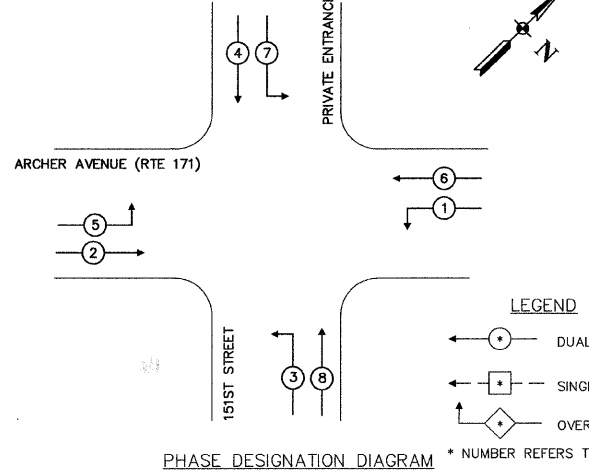
ROBINSON ENGINEERING, LTD.  
 17000 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60773  
 (708) 891-9100 FAX (708) 351-3828  
 ILLINOIS DESIGN FIRM REGISTRATION NO. 154001158

01179-SGNL-01

FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	34
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956

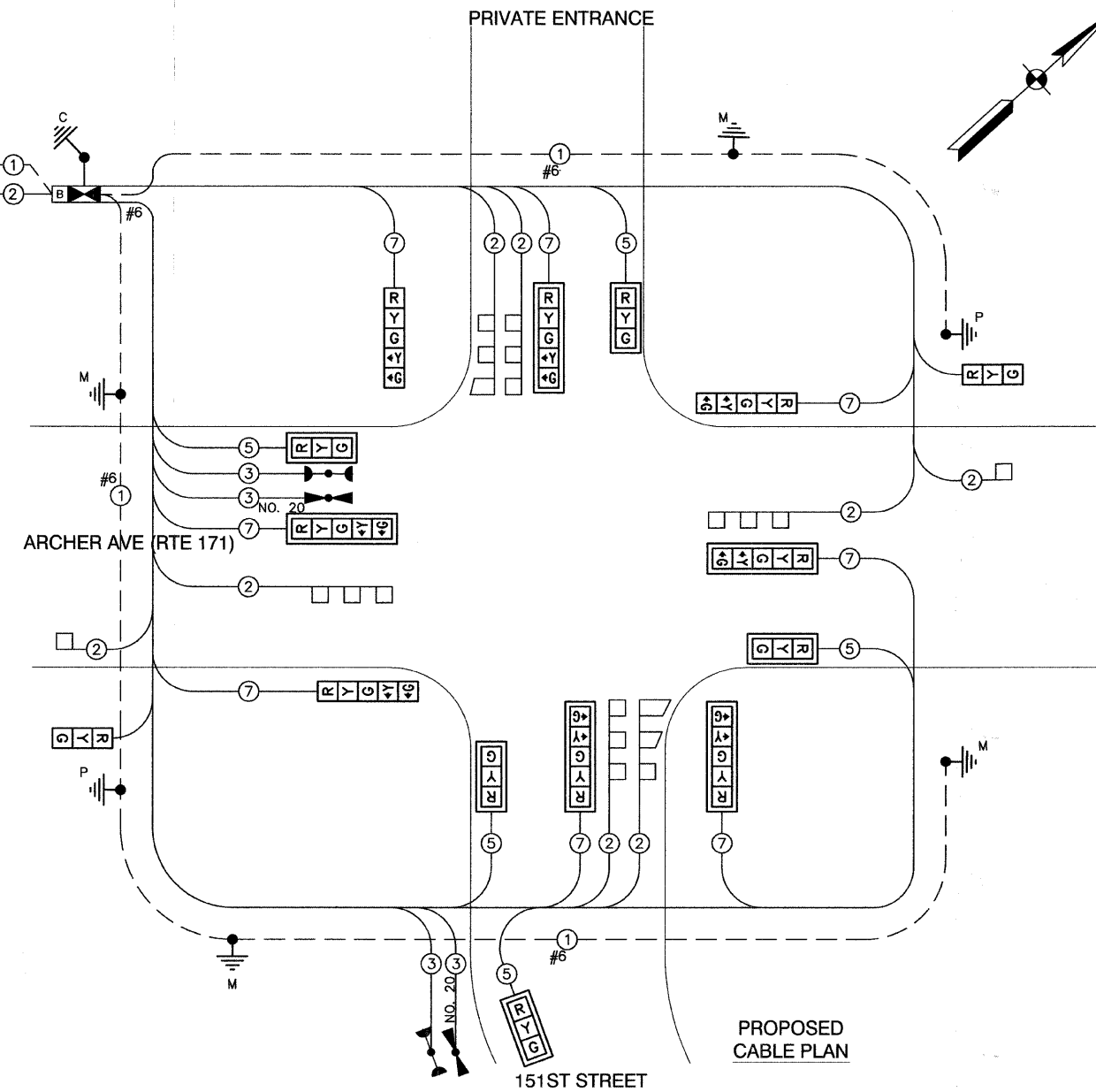
**PROPOSED CONTROLLER SEQUENCE**



PHASE DESIGNATION DIAGRAM \* NUMBER REFERS TO ASSOCIATED PHASE

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QUAN
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	315
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	76
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	39
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	402
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	41
CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	35
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	165
DOUBLE HANDHOLE	EACH	1
HEAVY DUTY HANDHOLE	EACH	9
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3/C	FOOT	345
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5/C	FOOT	1614
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7/C	FOOT	1694
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FOOT	345
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1935
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2/C	FOOT	125
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP, TYPE I	FOOT	811
LIGHT DETECTOR	EACH	4
LIGHT DETECTOR AMPLIFIER	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
SERVICE INSTALLATION, POLE MOUNT	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	516
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C (GREEN)	FOOT	500
SIGN PANEL, TYPE 1	SQ FT	12
SIGN PANEL, TYPE 2	SQ FT	25
UNINTERRUPTIBLE POWER SUPPLY	EACH	1

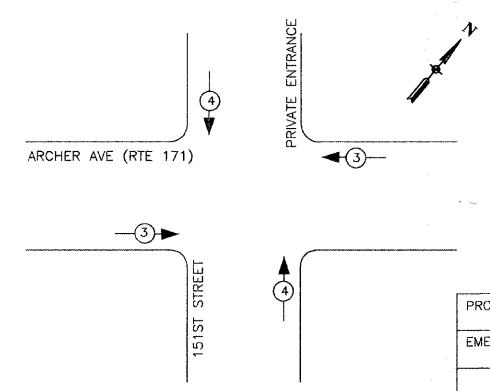


**PROPOSED CABLE PLAN**

**CABLE PLAN LEGEND**

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

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



PROPOSED EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTORS	3 4
MOVEMENT	— —

REVISIONS	
NAME	DATE
IDOT COMMENTS	12-5-07
IDOT COMMENTS	12-7-07
IDOT COMMENTS	12/20/07

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	15	135	17	0.50	128
(YELLOW)	15	135	25	0.25	94
(GREEN)	15	135	15	0.25	56
ARROW	16	135	12	0.10	19
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER					0.50
TOTAL =					397

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2'
E - M. ARM POLE		SIGNAL POST	2 (1.0)	(8m+L-0.8m)	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT CABLE PLAN**

SCALE: VERT. N/A  
HORIZ. N/A

DATE: 11-21-07

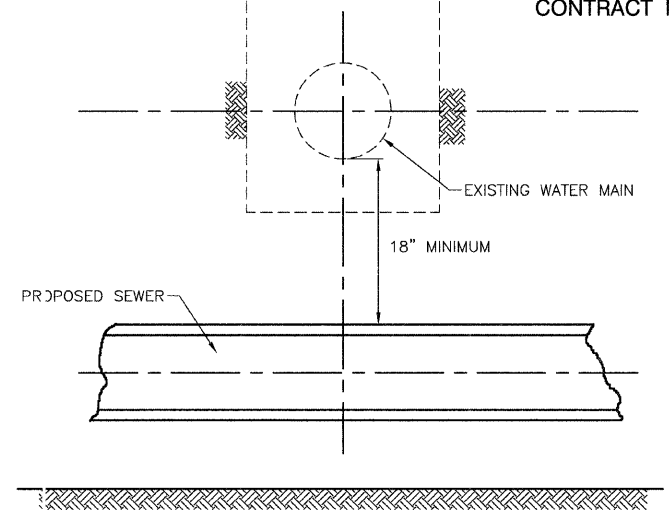
DRAWN BY: RG  
CHECKED BY: JMN

ROBINSON ENGINEERING, LTD.  
17000 SOUTH PARK AVENUE, SOUTH HOLLAND, ILLINOIS 60462  
(708) 381-8700 FAX (708) 381-3828  
ILLINOIS DESIGN FIRM REGISTRATION NO. 184601128



FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	36
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

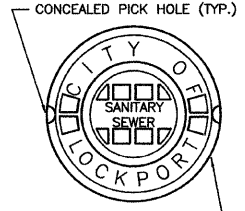
CONTRACT NO. 83956



**GUIDELINES**

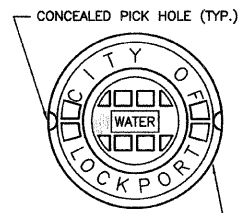
1. PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH.
2. MAINTAIN 18" MINIMUM VERTICAL SEPARATION FOR 10 FEET HORIZONTALLY

**WATER AND SEWER SEPARATION REQUIREMENTS  
PROPOSED SEWER LINE BELOW EXISTING WATER MAIN  
WITH 18" MINIMUM SEPARATION**



**SANITARY SEWER**  
NEENAH R-1710 W/WATERTIGHT LID  
EAST JORDAN 1050Z1 W/WATERTIGHT LID

**WATERMAIN**  
NEENAH R-1710 W/WATERTIGHT LID  
EAST JORDAN 1050Z1 W/WATERTIGHT LID



**STORM SEWER**  
PAVEMENT - OPEN LID  
NEENAH R-1710 W/TYP D GRATE  
EAST JORDAN 1050Z1 W/TYP M1 GRATE

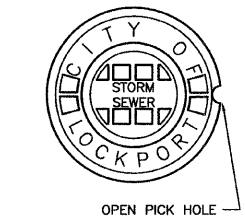
GRASSED AREA - OPEN LID  
NEENAH R-1710 W/TYP B GRATE  
NEENAH R-4340-B  
EAST JORDAN 1050Z1 W/TYP N GRATE  
EAST JORDAN 6527

PAVEMENT - CLOSED LID  
GRASSED AREA - CLOSED LID  
NEENAH R-1710 W/SOLID LID  
EAST JORDAN 1050Z1 W/TYP A LID

CURB & GUTTER - TYPE B6.12  
NEENAH R-3278-A  
EAST JORDAN 7221 W/T1 BACK & M1 GRATE

CURB & GUTTER - TYPE M3.12  
NEENAH R-3501-E2  
EAST JORDAN 7250

CURB & GUTTER - DEPRESSED  
NEENAH R-3525-L  
NEENAH R-3205  
EAST JORDAN 7210 W/TYP M3 GRATE  
EAST JORDAN 7464



OPEN PICK HOLE

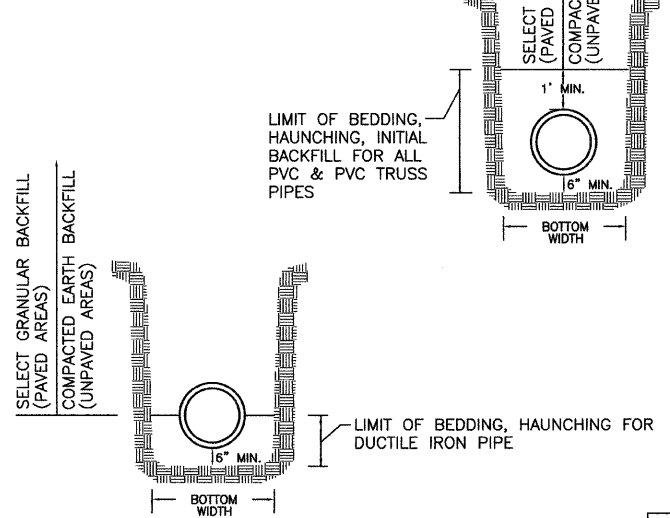
EXHIBIT #1001  
CITY OF LOCKPORT  
FRAME & LID  
DETAIL

ADOPTED: FEBRUARY 2002
REVISIONS

**MATERIALS**  
BEDDING, HAUNCHING, INITIAL BACKFILL  
IDOT GRADATION CA-7 OR CA-11

SELECT GRANULAR BACKFILL  
IDOT GRADATION CA-6, CA-7 OR CA-11

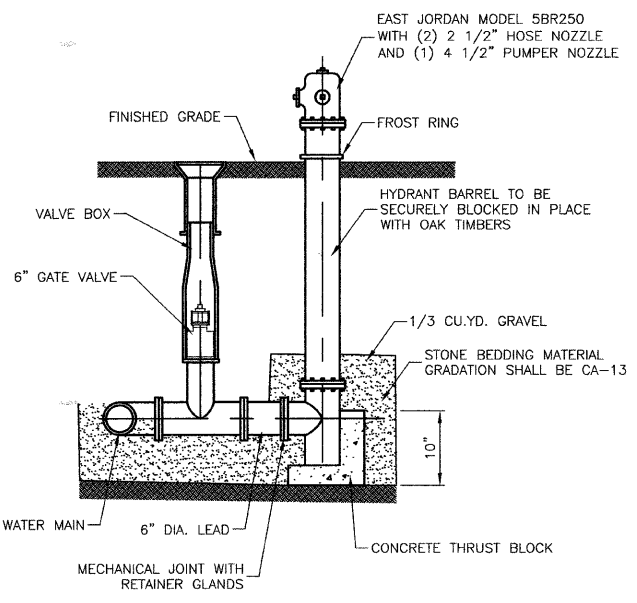
NO RECYCLED MATERIAL SUCH AS  
CRUSHED CONCRETE, ASPHALT MILLINGS, BLAST  
FURNACE SLAG, ETC. PERMITTED FOR USE AS  
BEDDING, HAUNCHING, BACKFILL



- NOTES:**
- PAVED AREA SHALL BE DEFINED AS ANY AREA WHERE THE LIMITS OF THE TRENCH FALL WITHIN 2' OF DRIVEWAYS, SIDEWALK, CURB & GUTTER, ROADWAY PAVEMENT, ETC.
  - MINIMUM BOTTOM WIDTH = O.D. + 2'
  - MAXIMUM BOTTOM WIDTH = O.D. + 3'

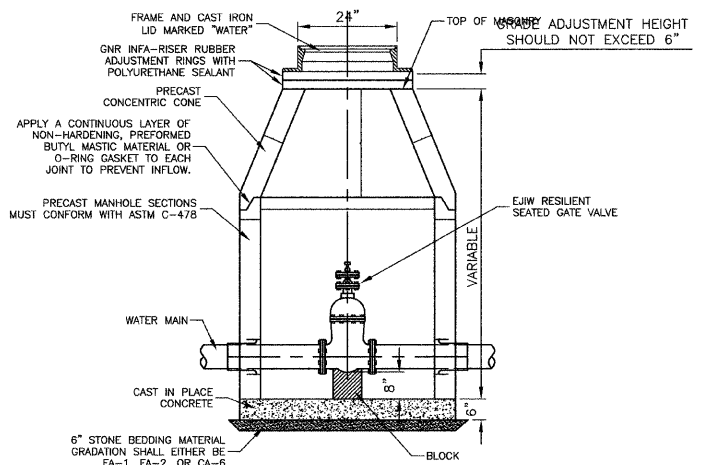
EXHIBIT #1006  
CITY OF LOCKPORT  
SANITARY SEWER  
TRENCH

ADOPTED: NOV. 20, 2000
REVISIONS



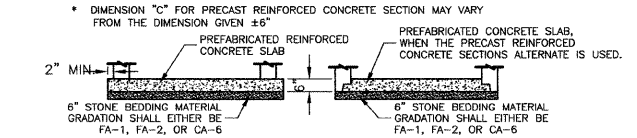
**FIRE HYDRANT INSTALLATION**

- NOTES:**
1. HYDRANTS SHALL BE INSTALLED FACING TOWARD THE CURB. NO HYDRANT SHALL BE INSTALLED WITHIN 48" OF ANY OBSTRUCTION NOR SHALL ANY OBSTRUCTION BE PLACED WITHIN 48" OF A HYDRANT.
  2. ALL VALVES SHALL OPEN COUNTER CLOCKWISE AND CLOSE CLOCKWISE WITH NON-RISING STEM.
  3. HYDRANT DRAIN HOLE SHALL BE FREE OF CONCRETE.



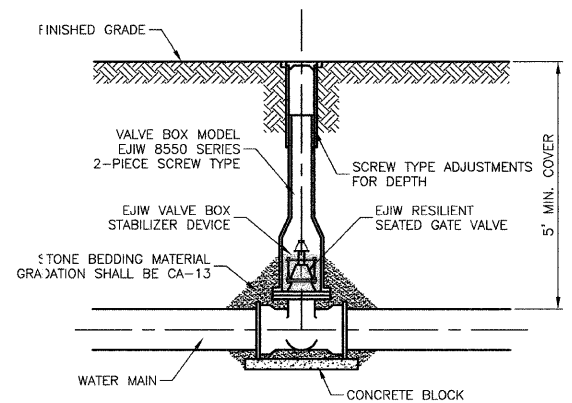
ALTERNATE MATERIALS FOR WALLS

	D	C	T
PRECAST REINFORCED CONCRETE SECTION	4'-0"	2'-6"	4'-0"
CONCRETE SECTION	5'-0"	3'-9"	5'-0"
CAST-IN-PLACE CONCRETE	4'-0"	2'-6"	6'-0"
	5'-0"	3'-9"	6'-0"



- NOTES:**
1. CONCENTRIC CONE REQUIRED (VALVE TO ALIGN W/ CENTER OF FRAME OPENING).
  2. USE 4'-0" FOR WATER MAIN SIZES 8" AND UNDER. 5'-0" FOR SIZES 10" AND ABOVE.
  3. VALVE VAULT TO CONFORM TO ASTM C-478.
  4. ALL VALVES SHALL BE EAST JORDAN IRON WORKS RESILIENT SEATED GATE VALVES.
  5. ALL VALVES SHALL OPEN COUNTER CLOCKWISE AND CLOSE CLOCKWISE WITH NON-RISING STEM.
  6. PROVIDE CA-6 AGGREGATE BACKFILL MATERIAL AROUND VALVE TO SUB-GRADE ELEVATION; IN PAVED AREAS.

**VALVE IN VAULT DETAIL**



**TYPICAL VALVE BOX INSTALLATION**

- NOTE:**
1. ALL VALVES SHALL OPEN COUNTER CLOCKWISE AND CLOSE CLOCKWISE WITH NON-RISING STEM.

REVISIONS	
NAME	DATE

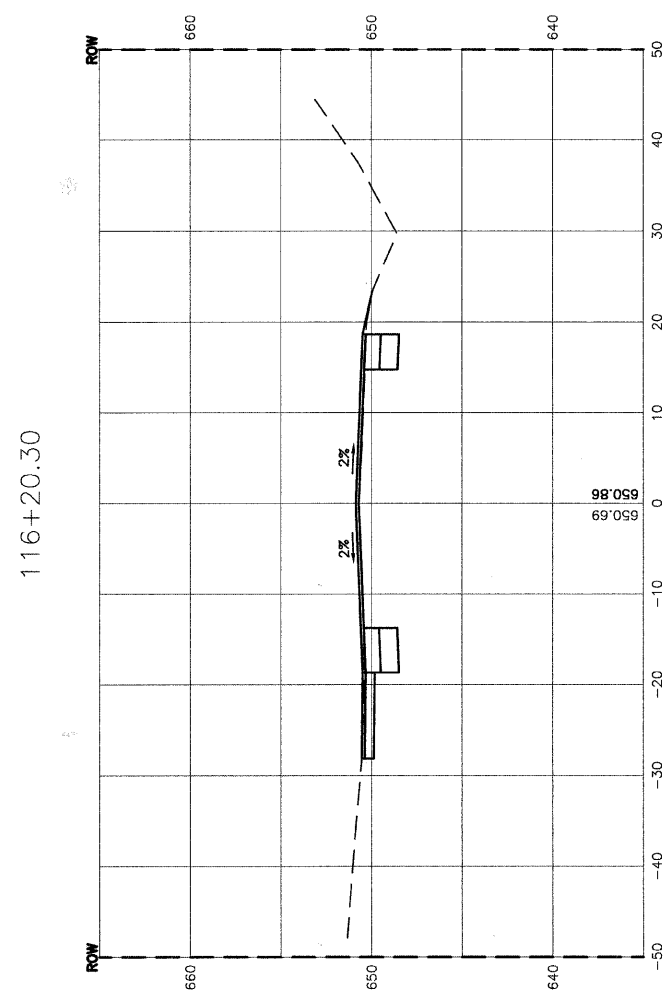
**ILLINOIS DEPARTMENT OF TRANSPORTATION**

**151ST STREET IMPROVEMENT  
CONSTRUCTION DETAILS**

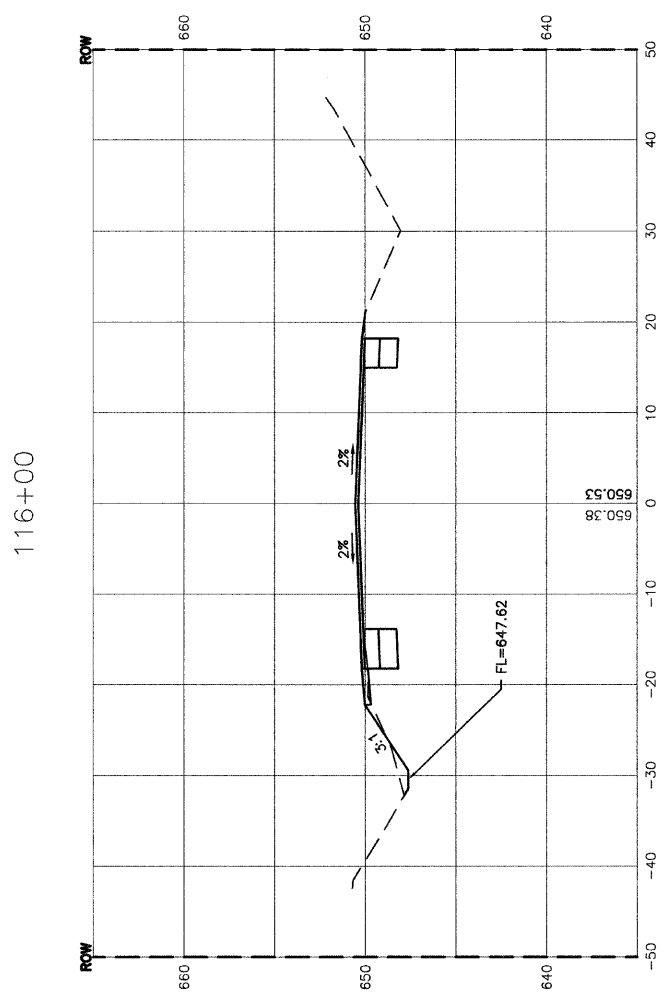
SCALE: VERT. N/A  
HORIZ. N/A  
DATE: 11-21-07  
DRAWN BY: RG  
CHECKED BY: JMN

FAA. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	37
STA. 115+00.64		TO STA. 116+20.30		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

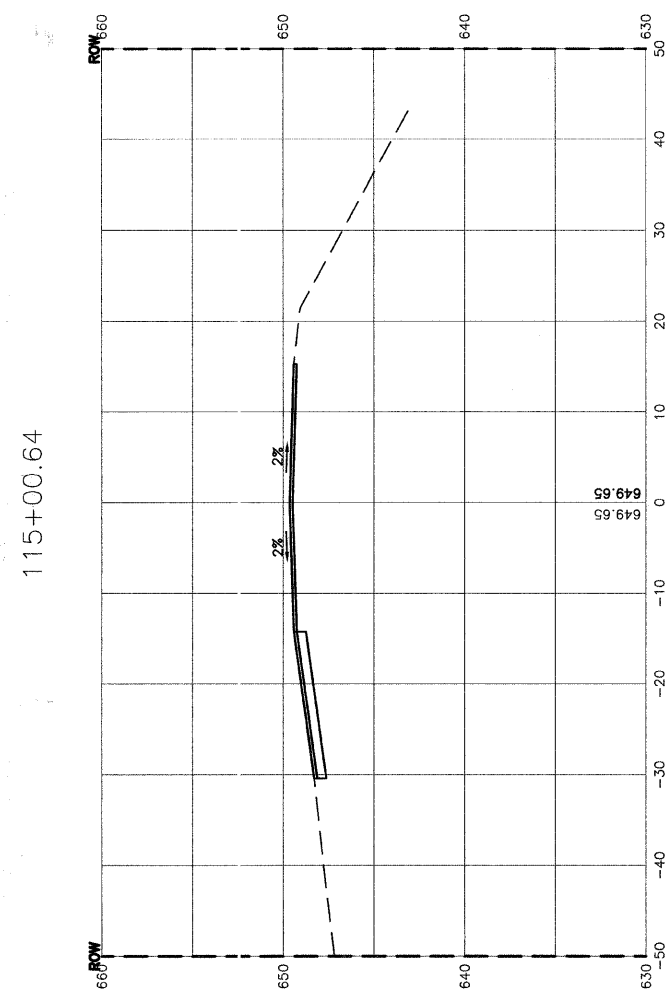
CONTRACT NO. 83956



CUT=21.9  
FILL=0.3



CUT=15.9  
FILL=0.7



CUT=10.9  
FILL=0

REVISIONS	
NAME	DATE

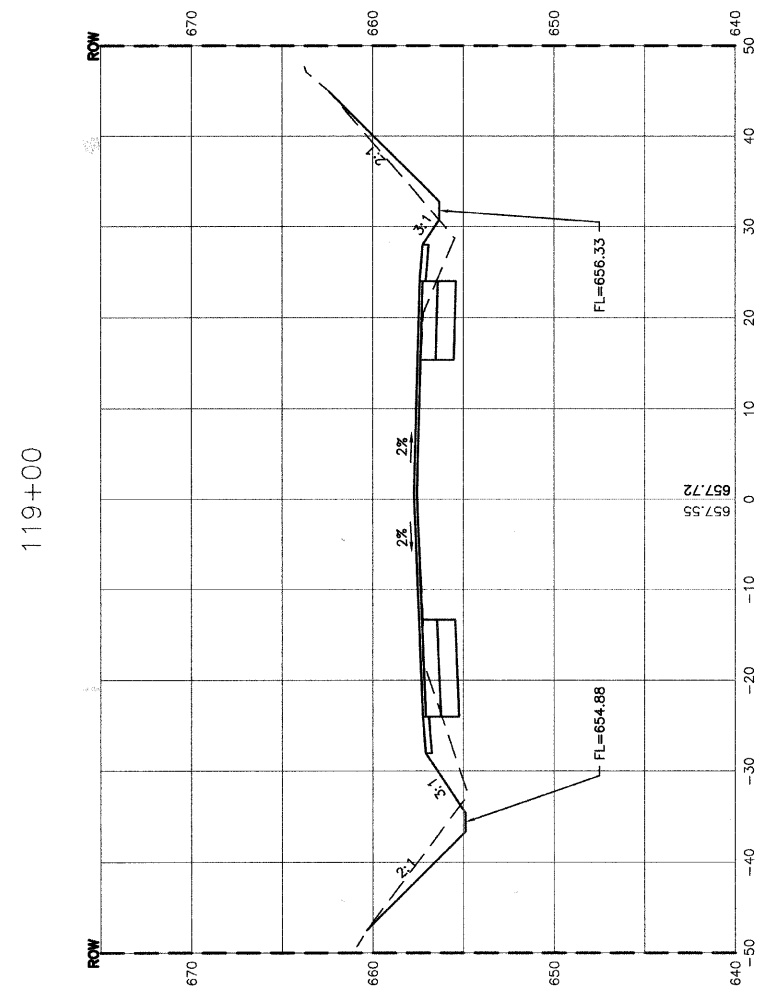
ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
CROSS SECTIONS  
ARCHER AVENUE**

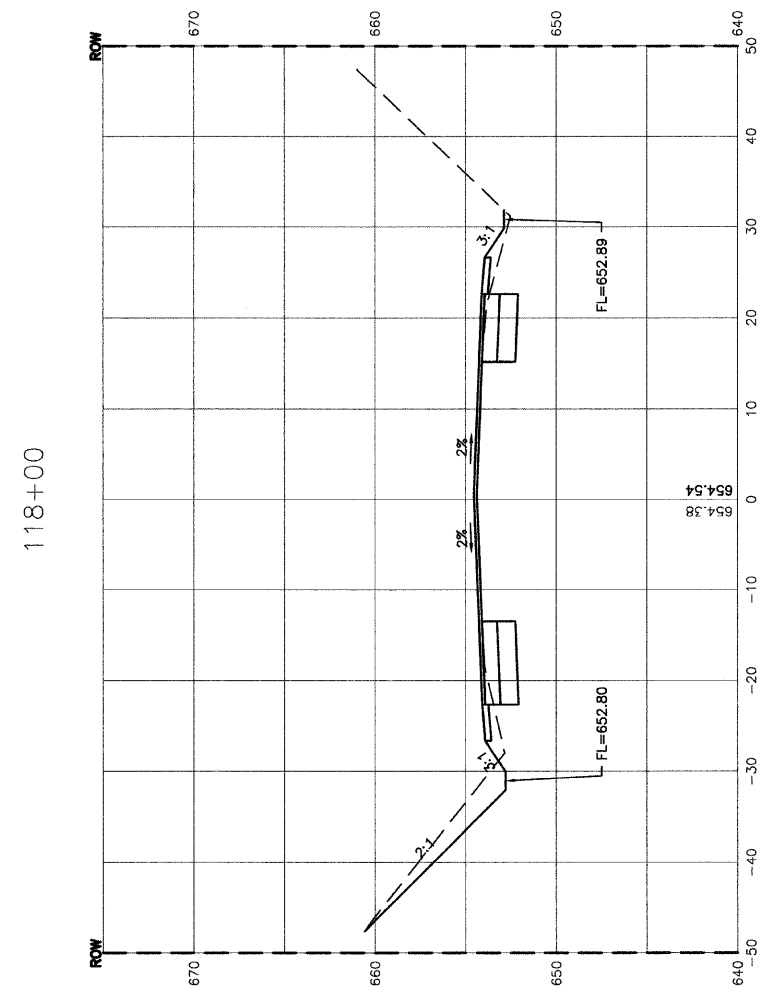
SCALE: VERT. 1"=5'  
HORIZ. 1"=10'  
DATE: 11-21-07  
DRAWN BY: RG  
CHECKED BY: JMN

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	38
STA. 117+00		TO STA. 119+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

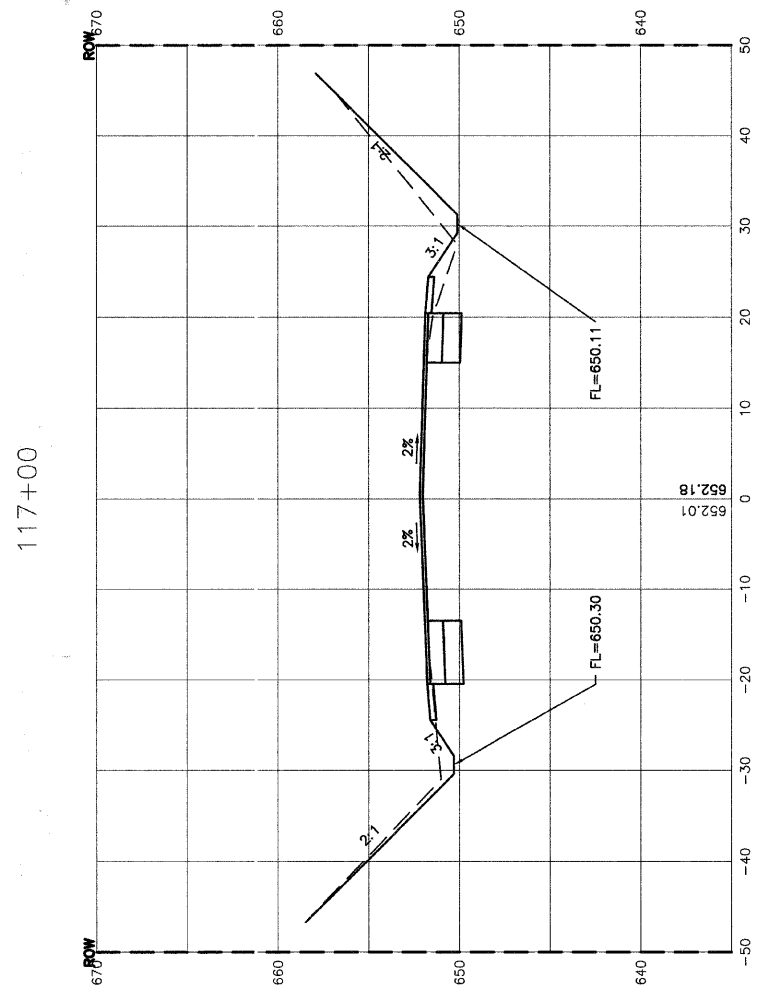
CONTRACT NO. 83956



CUT=47.3  
FILL=16.2



CUT=44.8  
FILL=6.3



CUT=41.3  
FILL=4.3

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
CROSS SECTIONS  
ARCHER AVENUE**

SCALE: VERT. 1"=5'  
HORIZ. 1"=10'

DATE 11-21-07

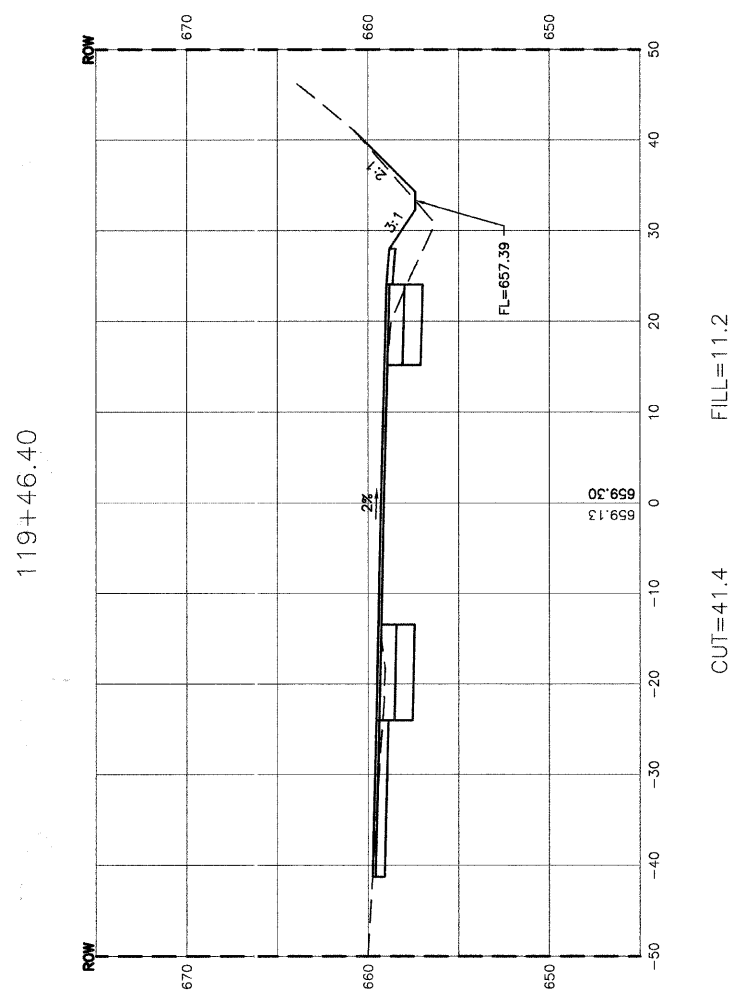
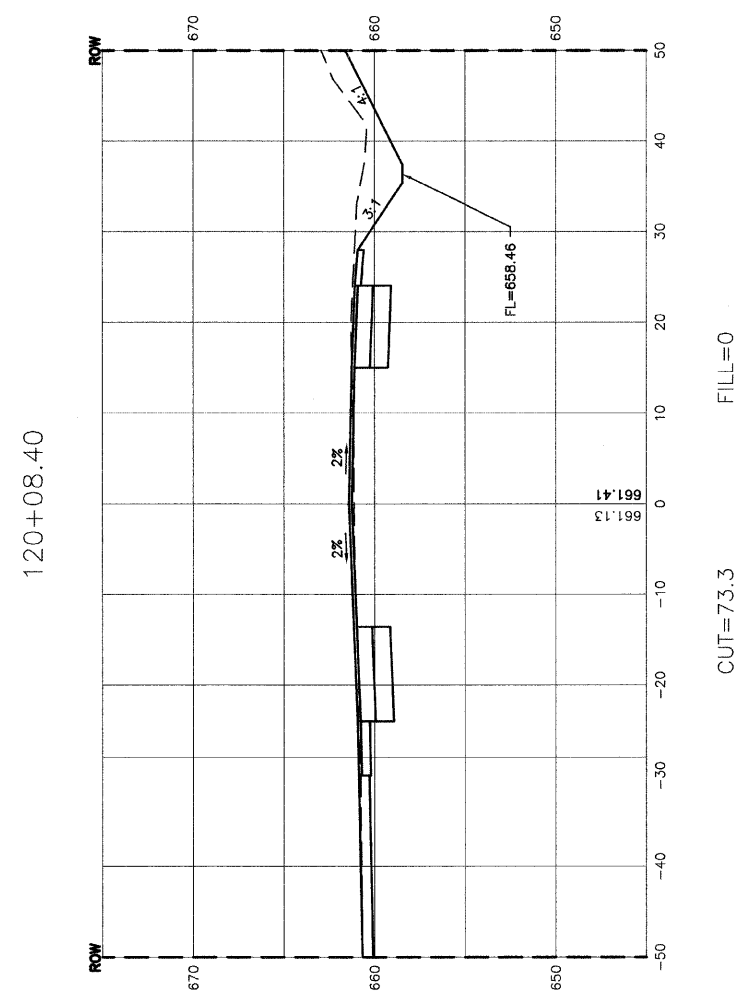
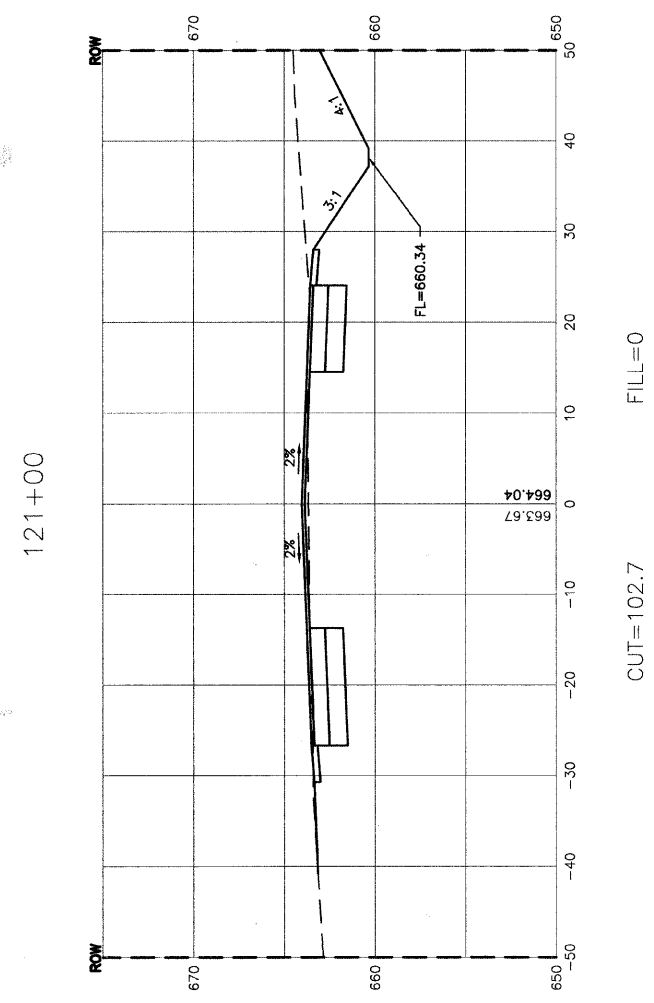
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ROBINSON ENGINEERING, LTD.  
17000 SOUTH PARK AVENUE, SOUTH HOLLAND, ILLINOIS 60473  
(708) 331-6700 FAX (708) 331-3888  
ILLINOIS DESIGN FIRM REGISTRATION NO. 184001138

01179\_02-XSCT-02

FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	39
STA. 119+46.40		TO STA. 121+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
CROSS SECTIONS  
ARCHER AVENUE**

SCALE: VERT. 1"=5'  
HORIZ. 1"=10'

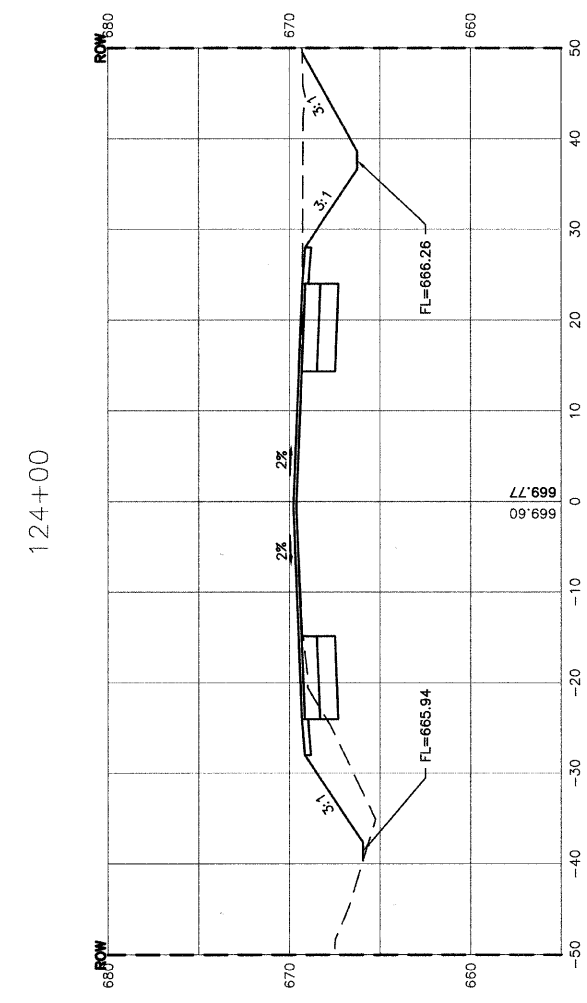
DATE 11-21-07

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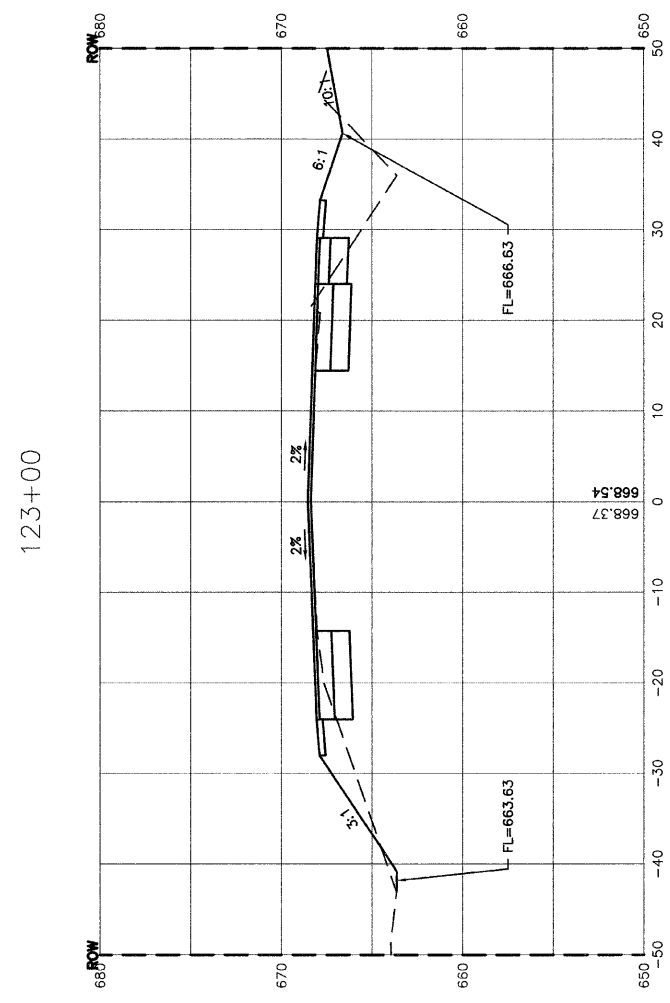
**ROBINSON ENGINEERING, LTD.**  
7700 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60472  
(708) 321-6700 FAX (708) 321-3828  
ILLINOIS DESIGN FIRM REGISTRATION NO. 194901128 01179\_02-XSCT-02

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	40
STA. 122+00		TO STA. 124+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

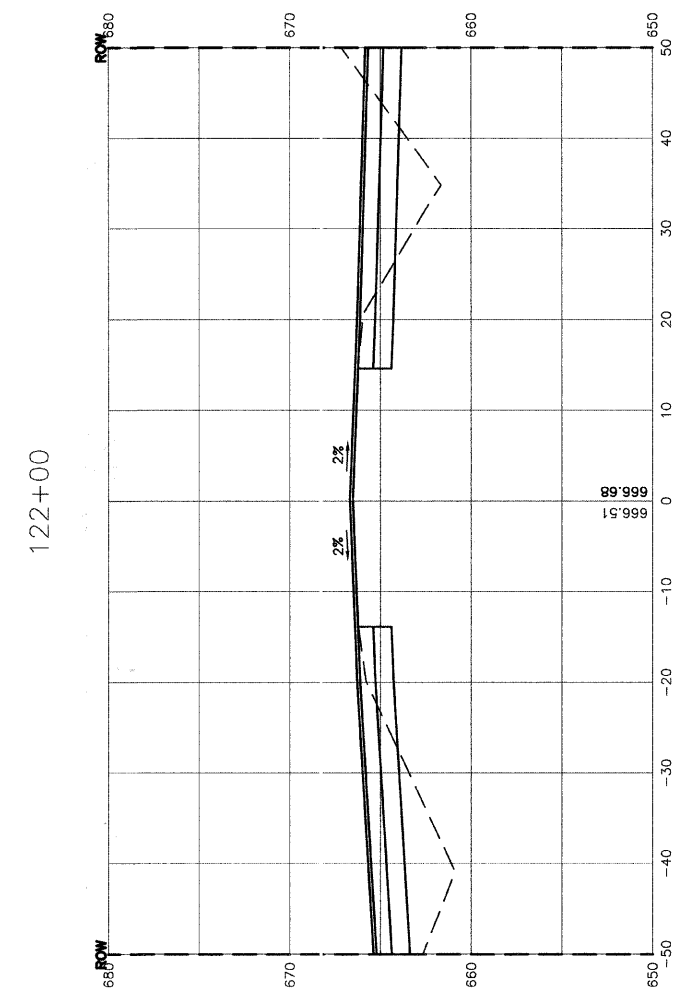
CONTRACT NO. 83956



CUT=69.0 FILL=21.6



CUT=37.2 FILL=44.0



CUT=45.7 FILL=52.0

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
CROSS SECTIONS  
ARCHER AVENUE**

SCALE: VERT. 1"=5'  
HORIZ. 1"=10'

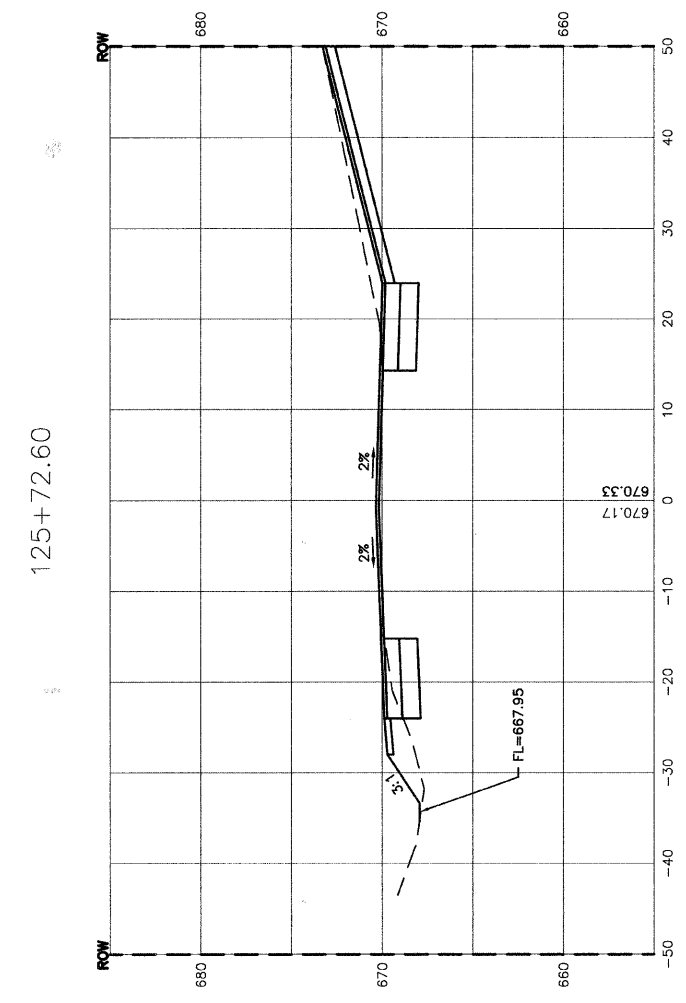
DATE 11-21-07

DRAWN BY RG  
CHECKED BY JMN

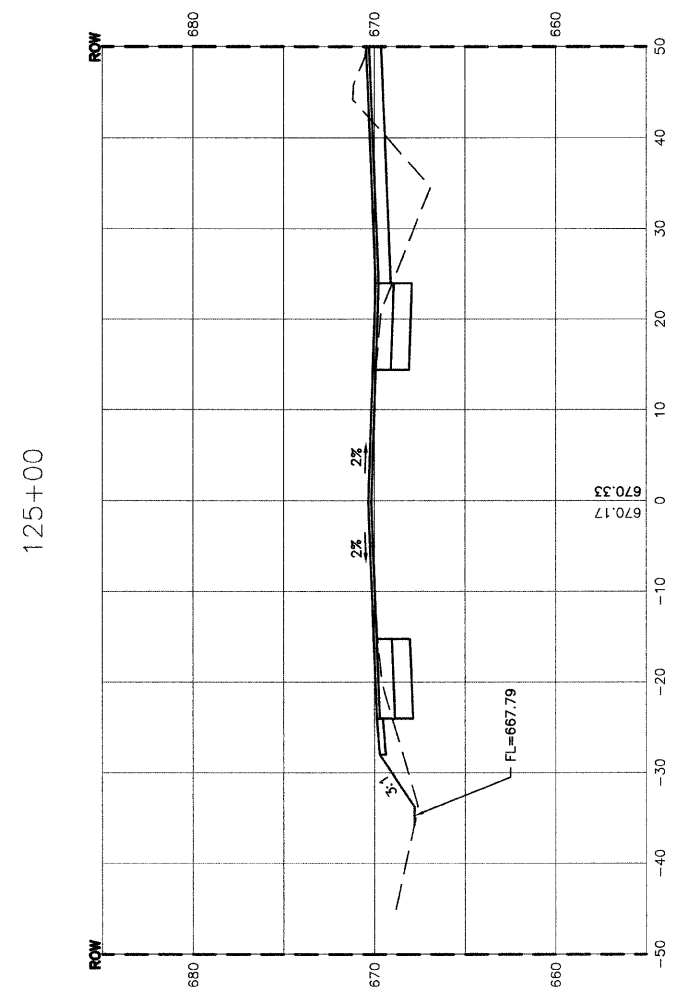


FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	41
STA. 124+31.40		TO STA. 125+72.60		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

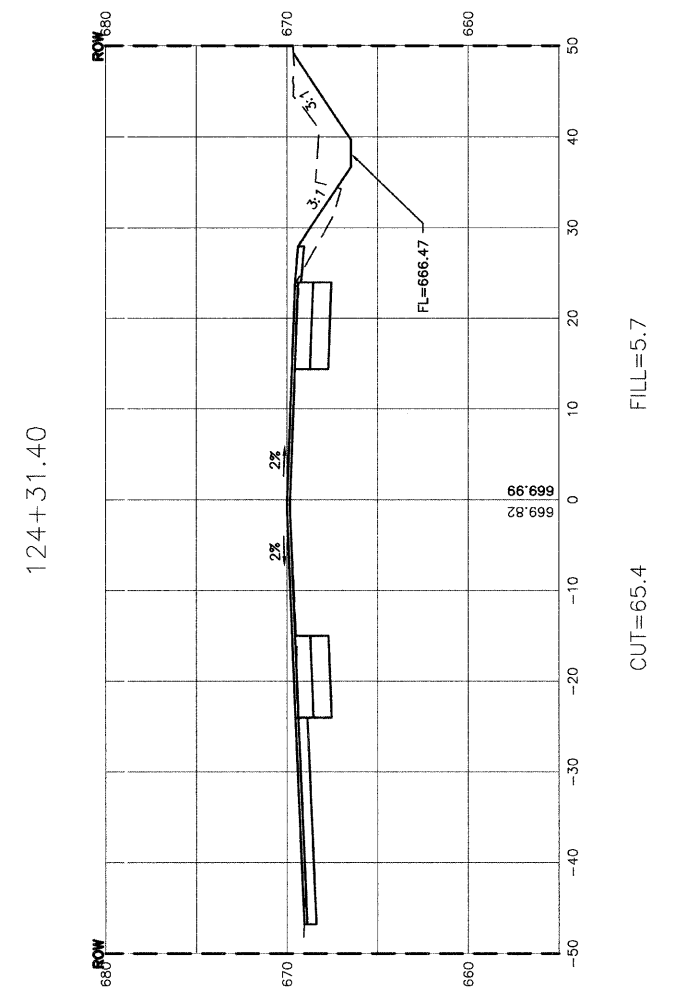
CONTRACT NO. 83956



CUT=60.3  
FILL=9.3



CUT=40.2  
FILL=27.5



CUT=65.4  
FILL=5.7

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
CROSS SECTIONS  
ARCHER AVENUE**

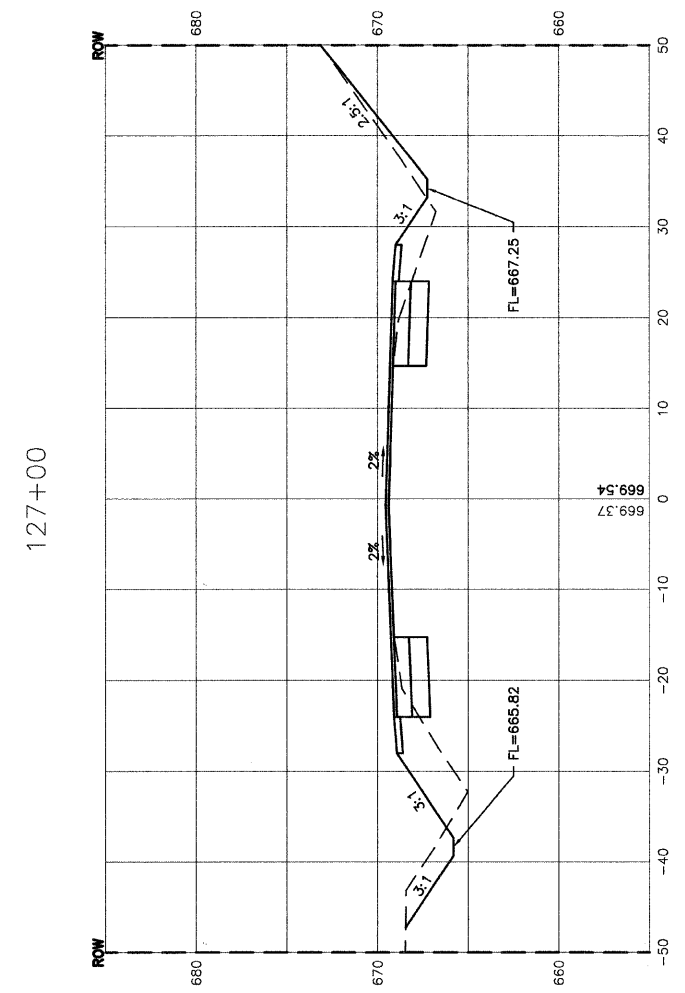
SCALE: VERT. 1"=5'  
HORIZ. 1"=10'

DATE 11-21-07

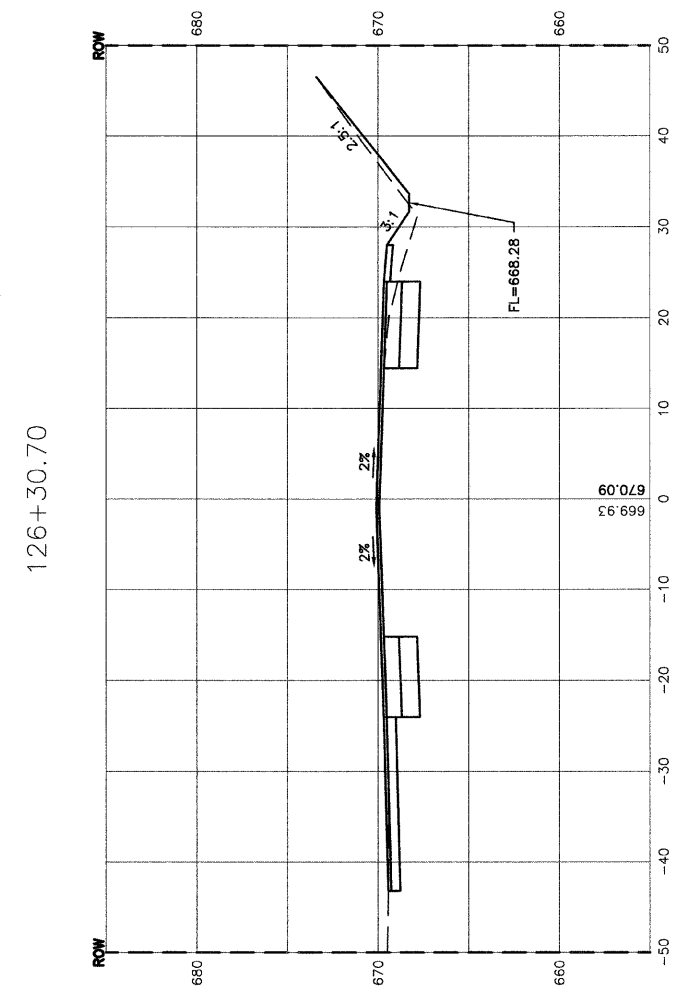
DRAWN BY RG  
CHECKED BY JMN

F.A.I. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	42
STA. 126+00		TO STA. 127+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

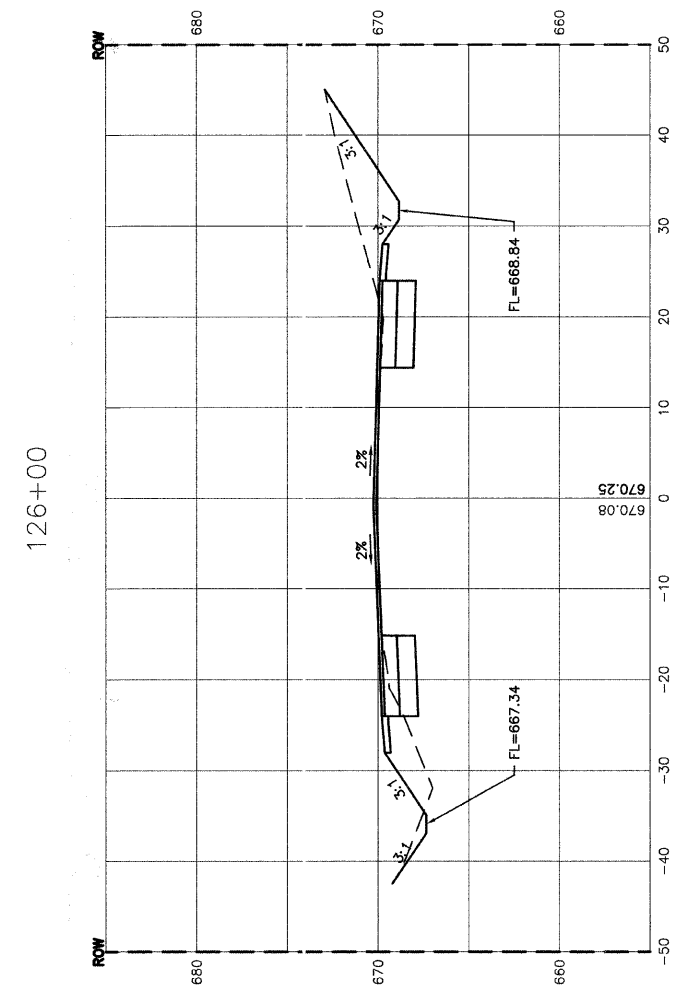
CONTRACT NO. 83956



CUT=44.0  
FILL=31.5



CUT=45.6  
FILL=5.9



CUT=62.4  
FILL=12.7

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
CROSS SECTIONS  
ARCHER AVENUE**

SCALE: VERT. 1"=5'  
HORIZ. 1"=10'

DATE 11-21-07

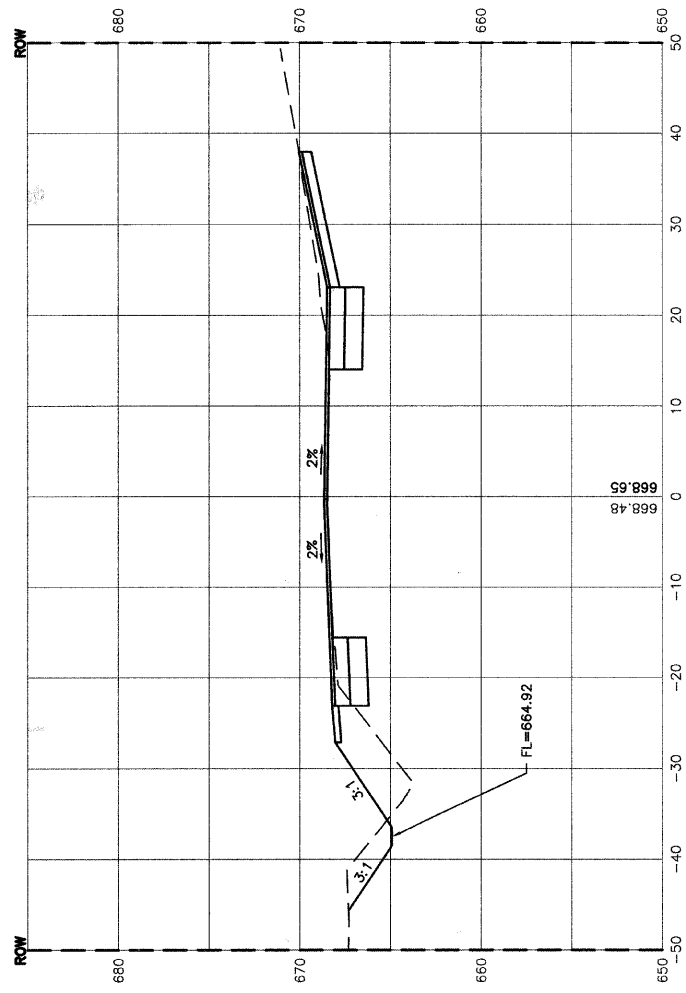
DRAWN BY RG  
CHECKED BY JMN

**ROBINSON ENGINEERING, LTD.**  
13000 SOUTH PARK AVENUE, SOUTH HOLLAND, ILLINOIS 60473  
(708) 381-6700 FAX (708) 381-8628  
ILLINOIS DESIGN FIRM REGISTRATION NO. 184001128 01179\_02-XSCT-02

FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	43
STA. 127+29.90		TO STA. 127+72.40		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

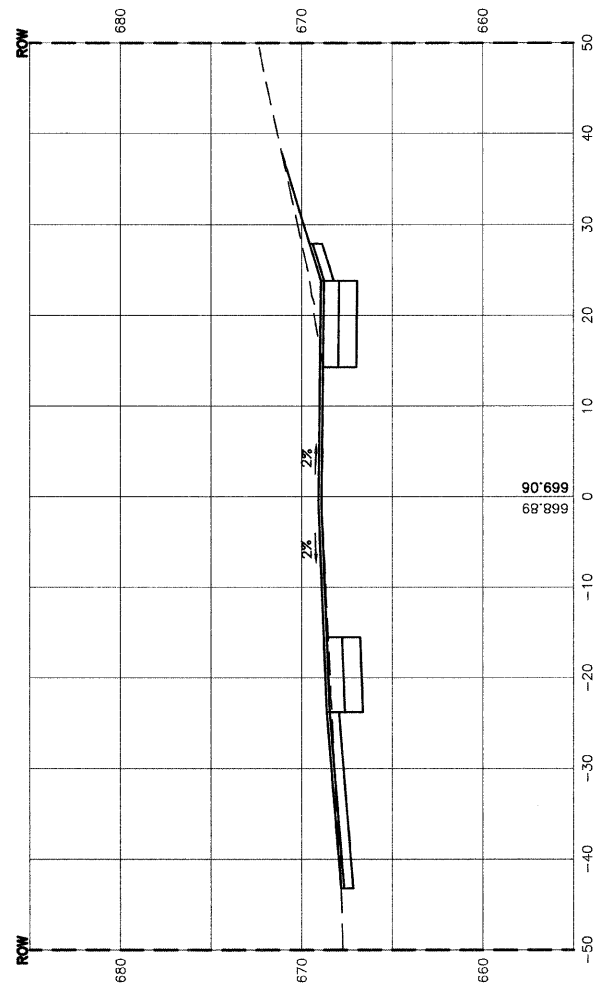
CONTRACT NO. 83956

127+72.40



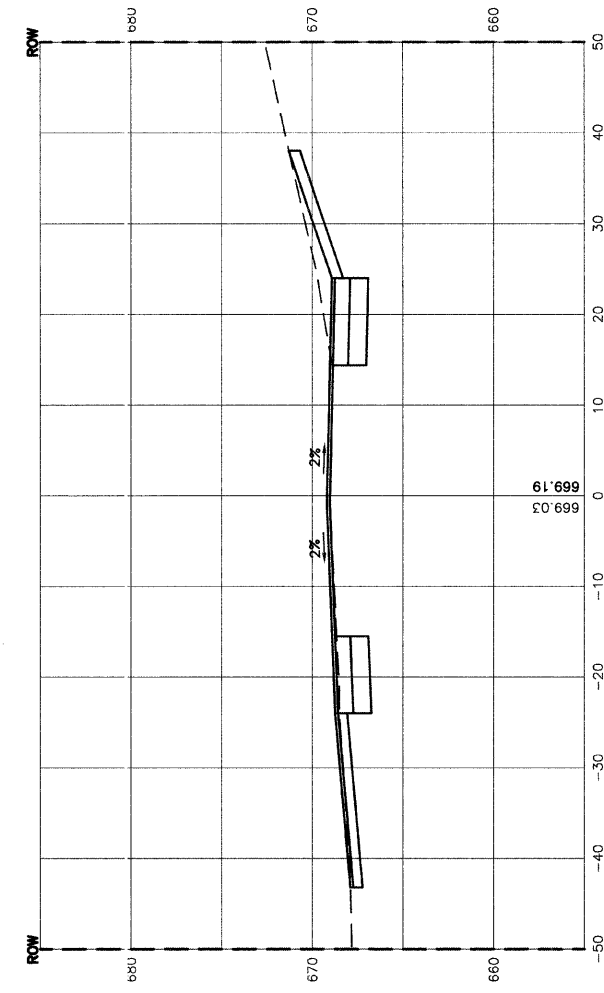
CUT=53.7  
FILL=24.2

127+41.20



CUT=53.4  
FILL=0

127+29.90



CUT=61.7  
FILL=0

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
CROSS SECTIONS  
ARCHER AVENUE**

SCALE: VERT. 1"=5'  
HORIZ. 1"=10'

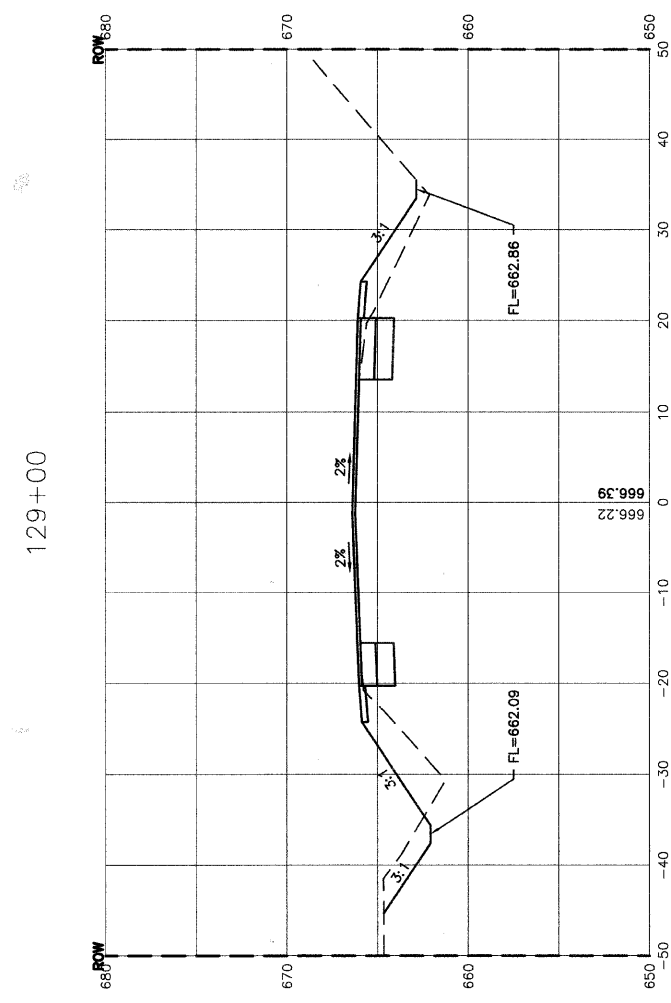
DRAWN BY RG  
CHECKED BY JMN

DATE 11-21-07

ROBINSON ENGINEERING, LTD.  
17000 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473  
(708) 291-0700 FAX (708) 381-3828  
ILLINOIS DESIGN FIRM REGISTRATION NO. 134001138 01179\_02-XSCT-02

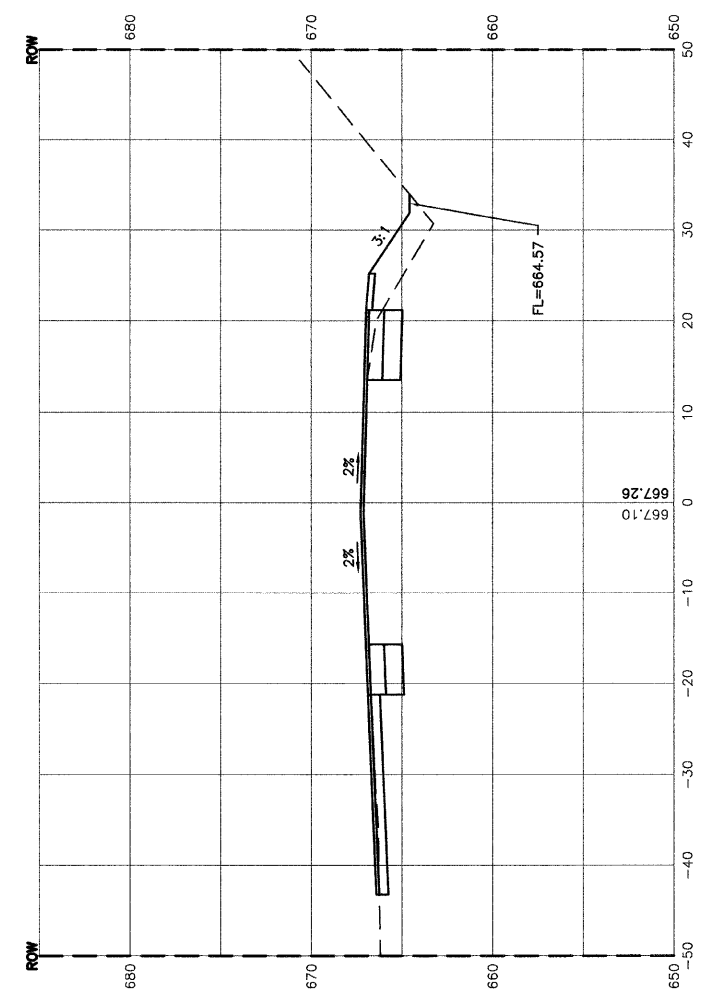
FAU. RFE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	44
STA. 128+00		TO STA. 129+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



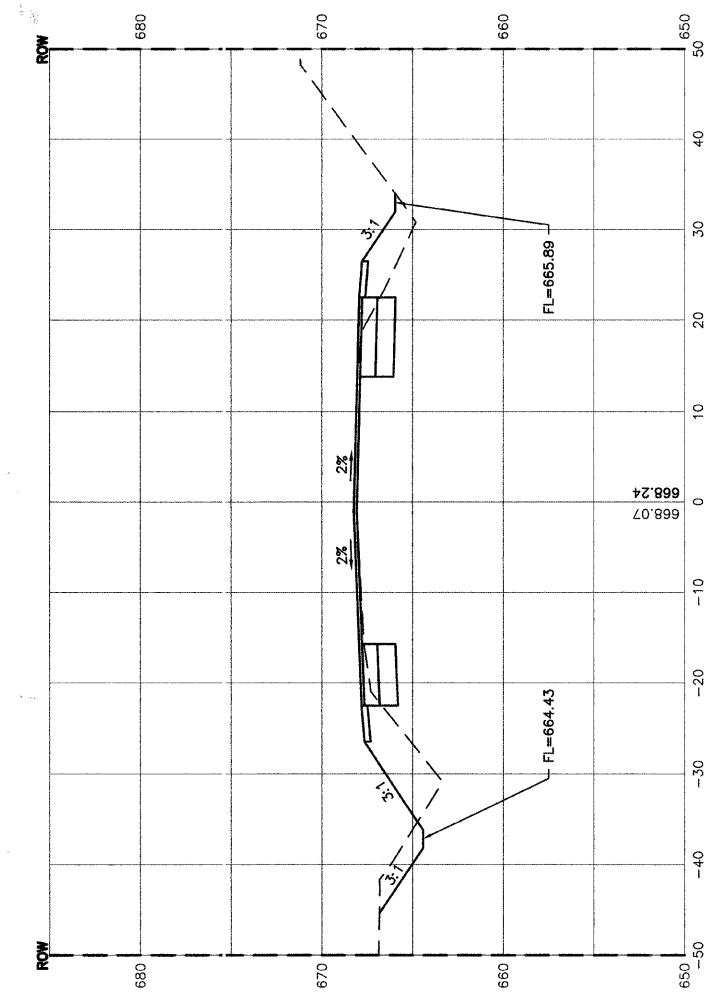
CUT=29.4 FILL=34.0

128+58.10



CUT=32.7 FILL=16.7

128+00



CUT=33.0 FILL=38.4

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
CROSS SECTIONS  
ARCHER AVENUE**

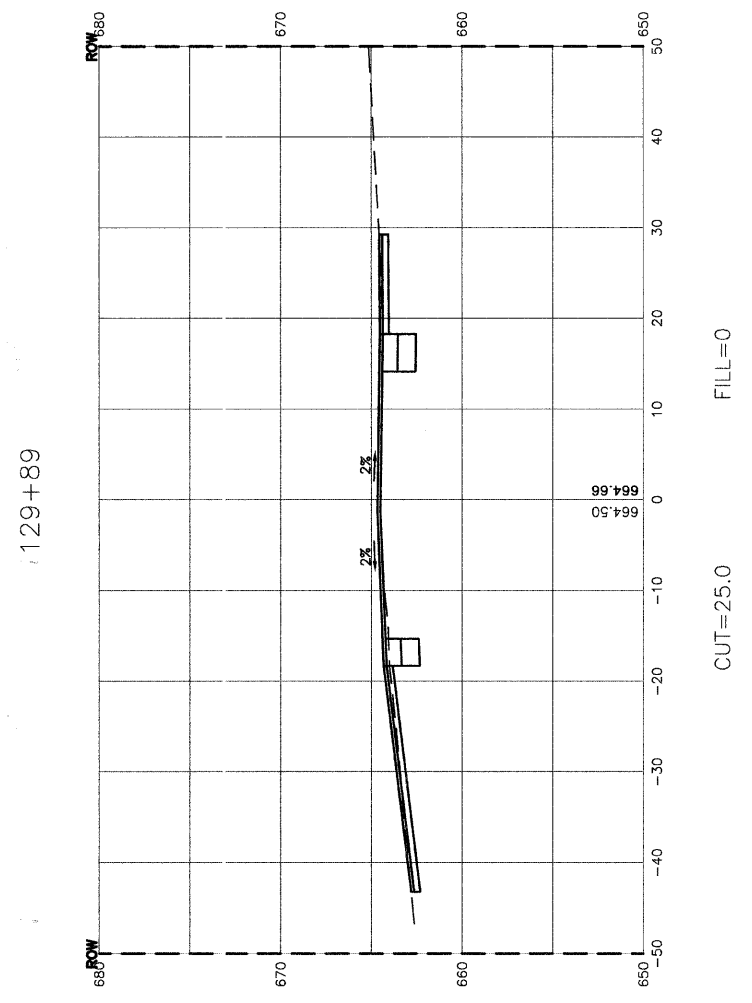
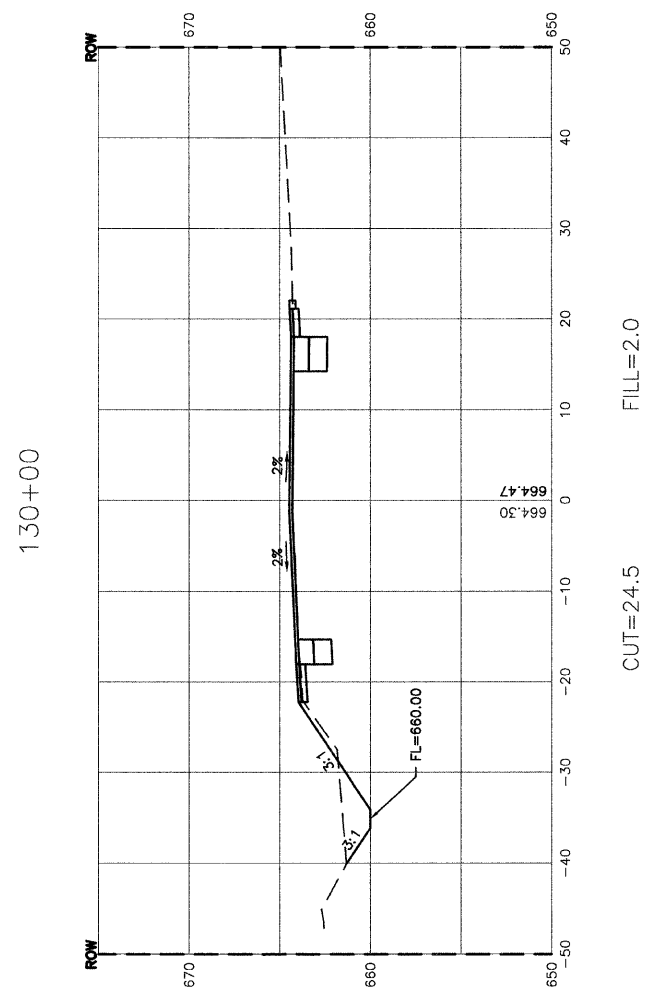
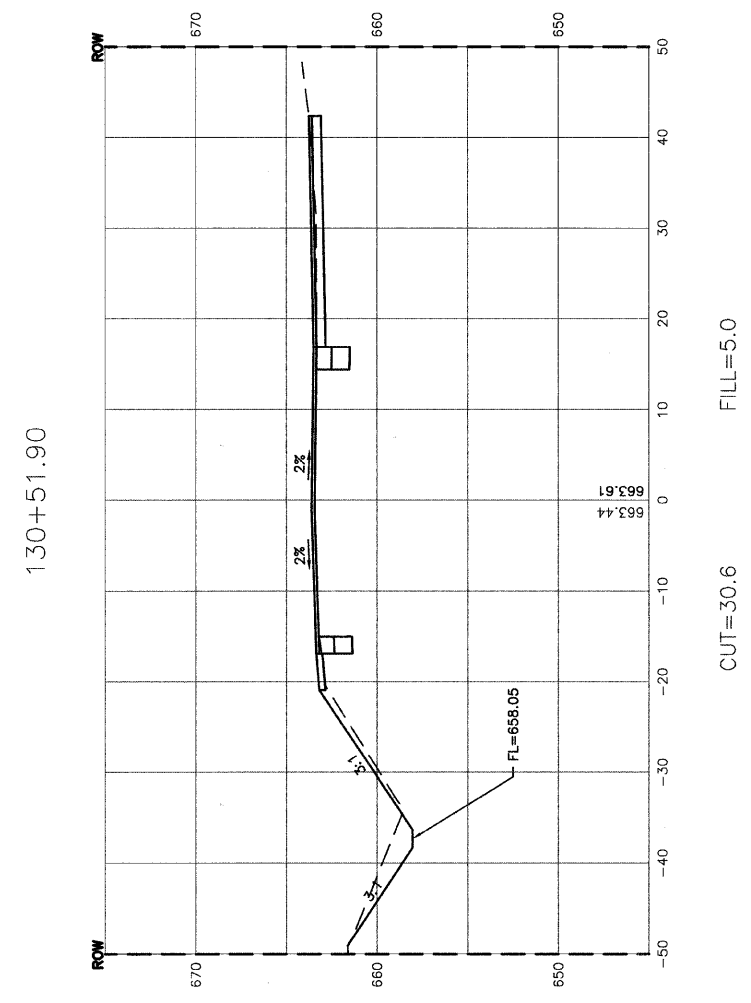
SCALE: VERT. 1"=5'  
HORIZ. 1"=10'

DATE 11-21-07

DRAWN BY RG  
CHECKED BY JMN

FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	45
STA. 129+89		TO STA. 130+51.90		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

151ST STREET IMPROVEMENT  
CROSS SECTIONS  
ARCHER AVENUE

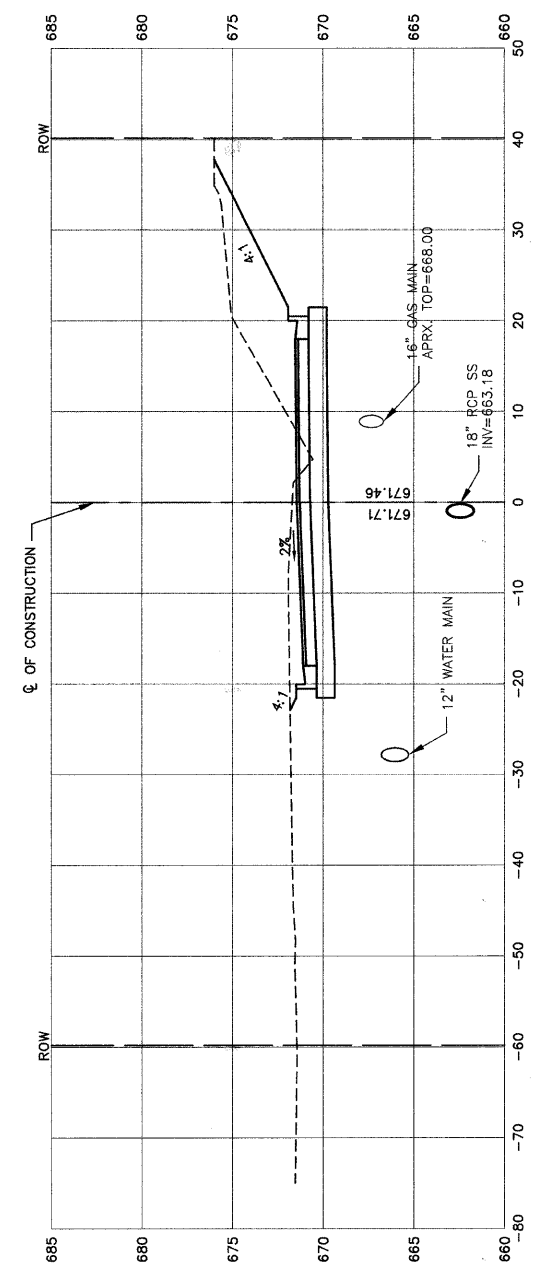
SCALE: VERT. 1"=5'  
HORIZ. 1"=10'

DATE 11-21-07

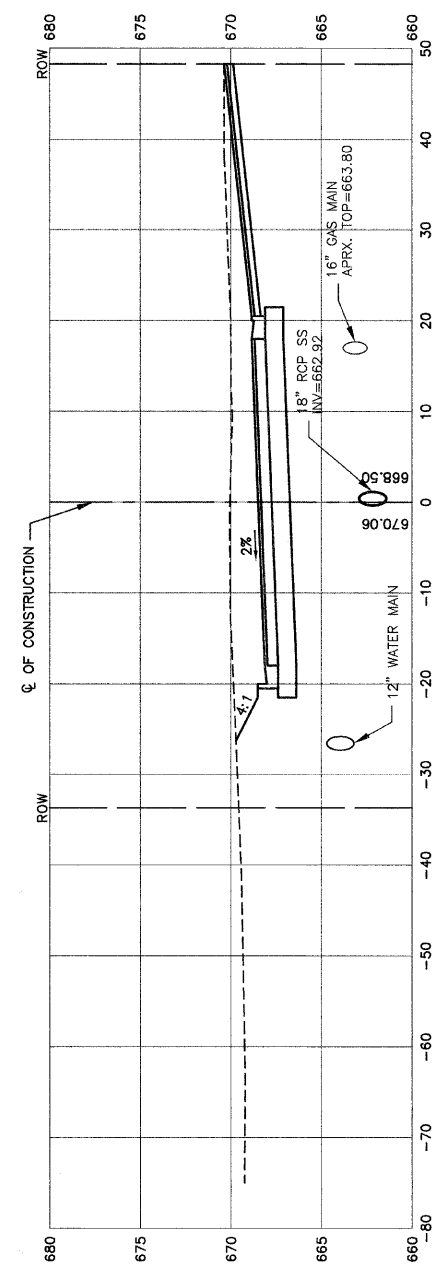
DRAWN BY RG  
CHECKED BY JMN

FAA. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	46
STA. 12+00		TO STA. 13+93.40		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

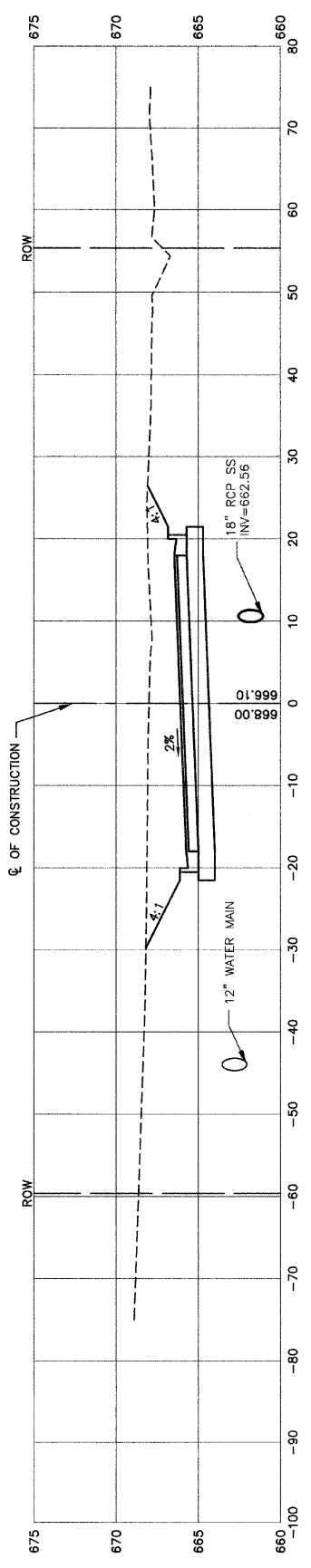
CONTRACT NO. 83956



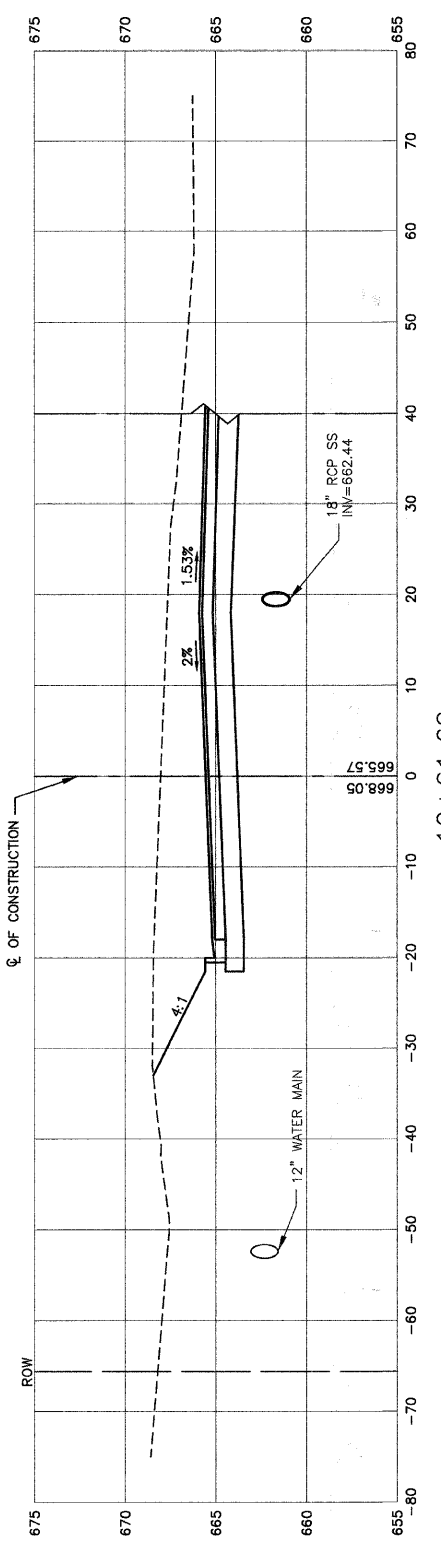
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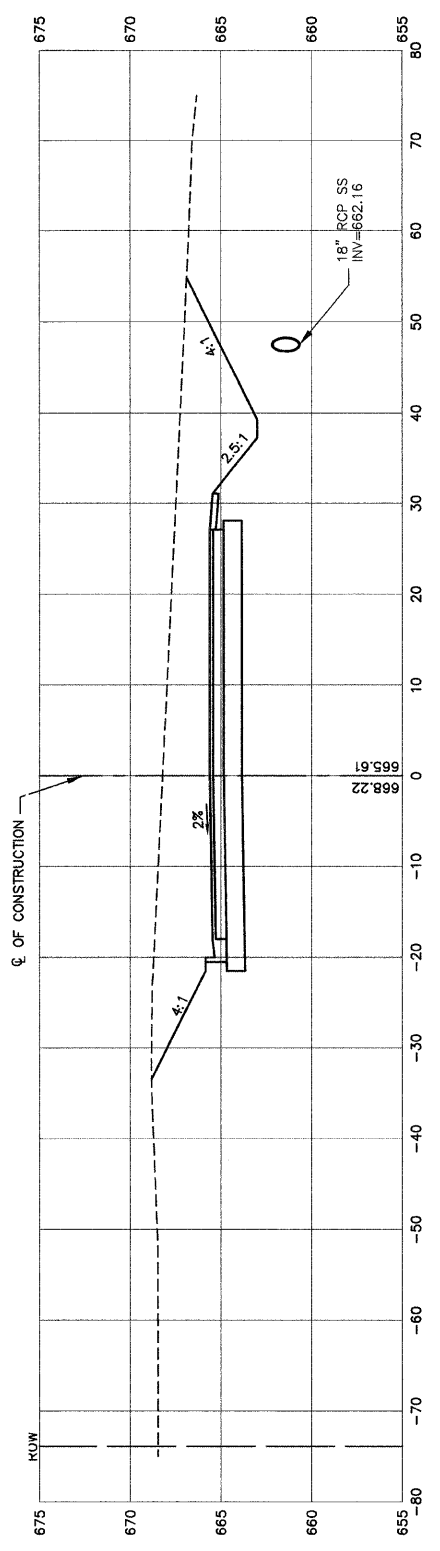
CUT=173 FILL=1



CUT=189 FILL=2



CUT=232 FILL=1



CUT=300 FILL=3

REVISIONS	
NAME	DATE

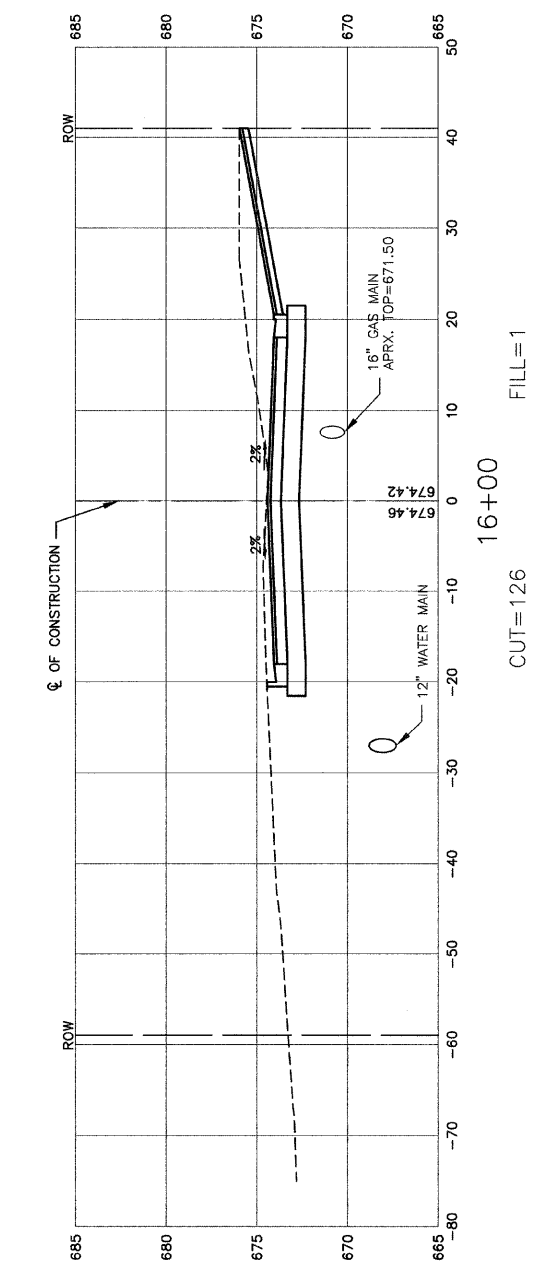
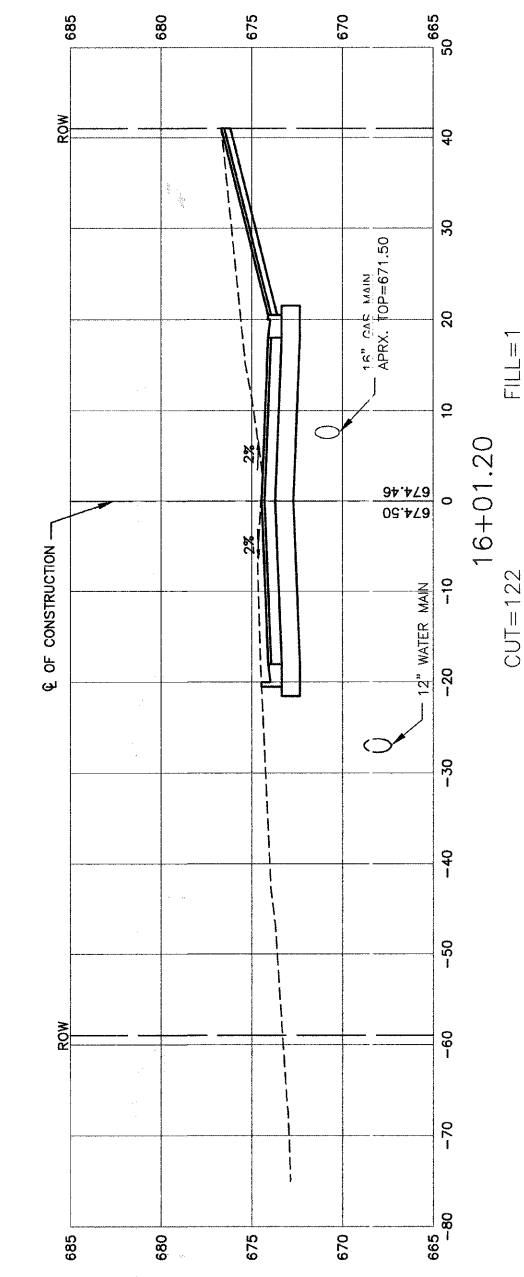
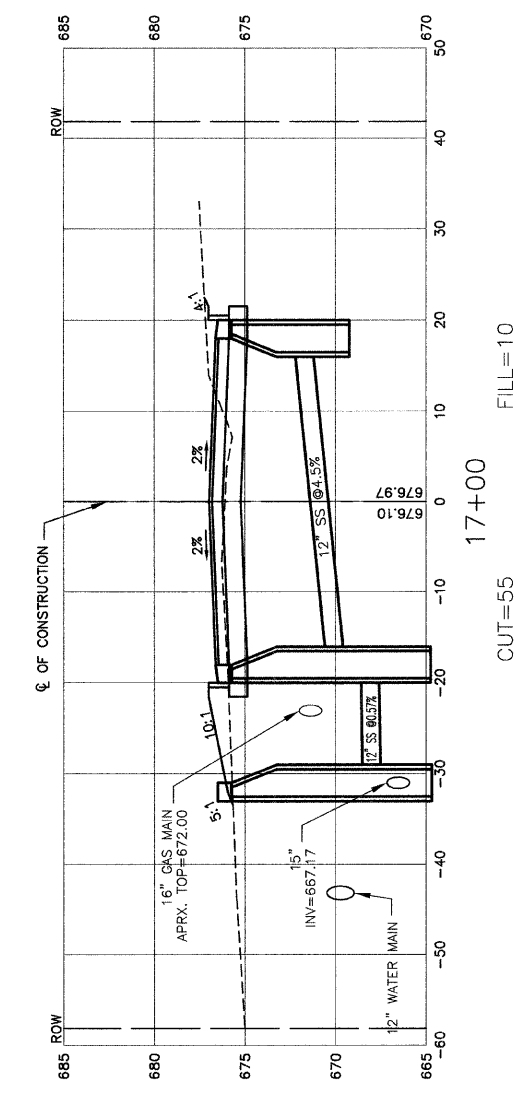
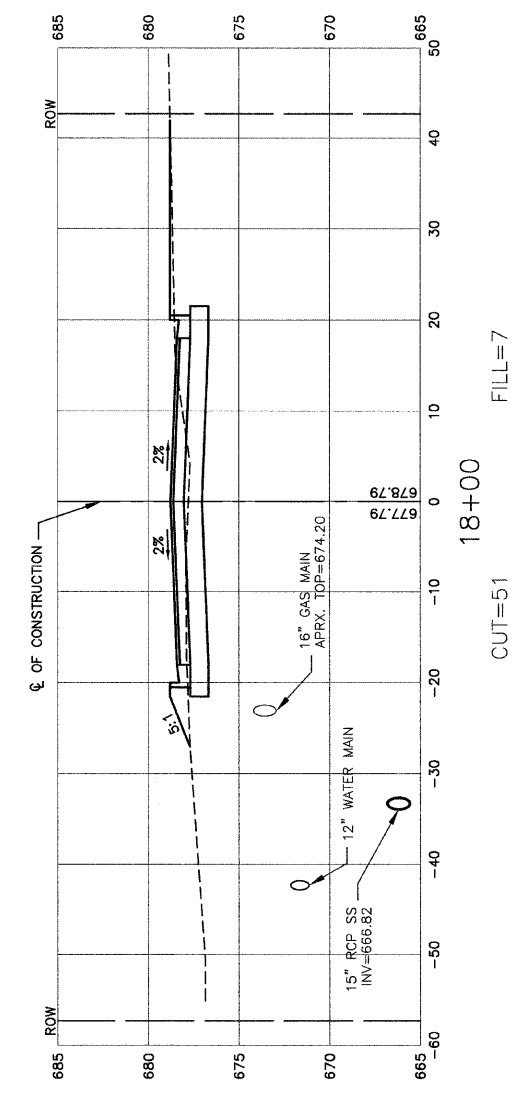
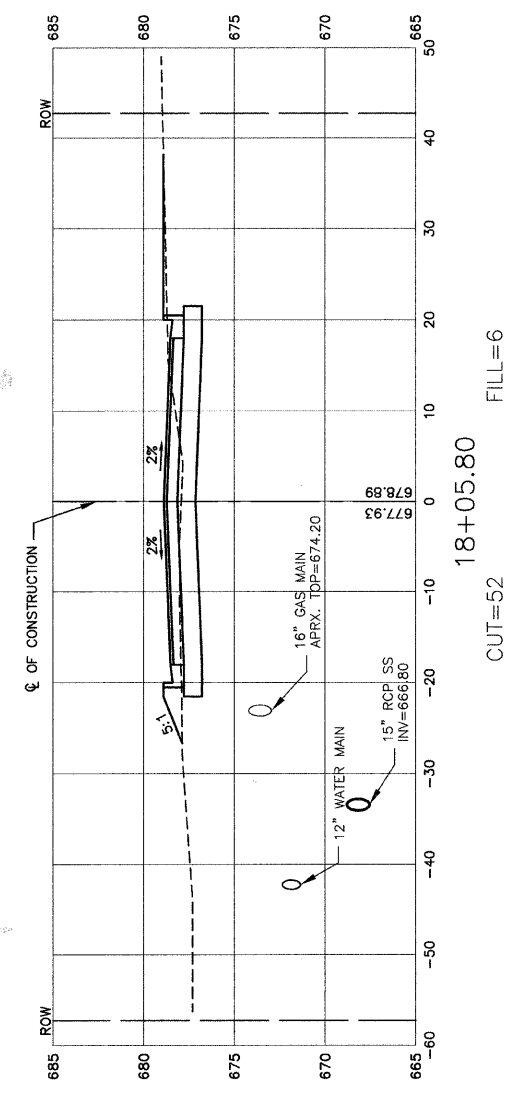
ILLINOIS DEPARTMENT OF TRANSPORTATION

151ST STREET IMPROVEMENT  
CROSS SECTIONS  
151ST STREET

SCALE: VERT. 1"=5'  
HORIZ. 1"=10'  
DATE 11-21-07  
DRAWN BY RG/DC  
CHECKED BY JMN

F.A.U. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
0285	01-00052-00-PP	WILL	71	47
STA. 14+00		TO STA. 16+01.20		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
CROSS SECTIONS  
151ST STREET**

SCALE: VERT. 1"=5'  
HORIZ. 1"=10'

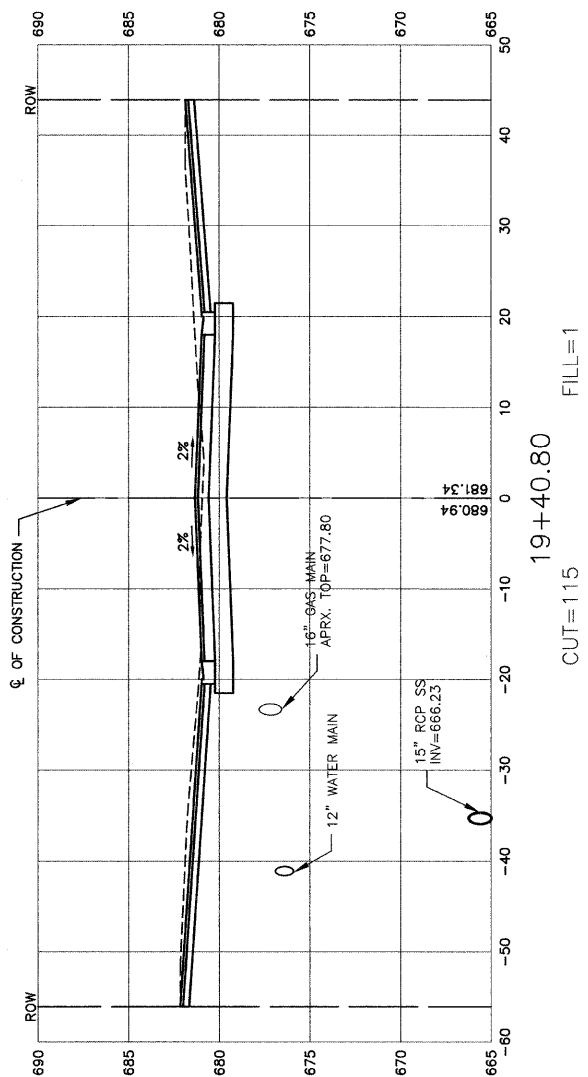
DATE 11-21-07

DRAWN BY RG/DC  
CHECKED BY JMN

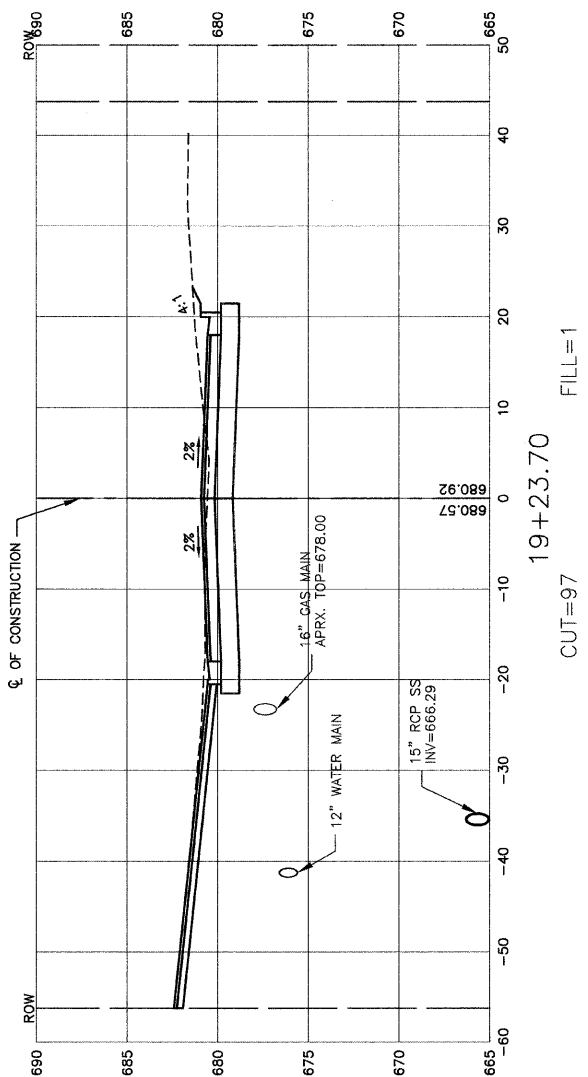
ROBINSON ENGINEERING, LTD.  
1700 SOUTH PARK AVENUE, SOUTH HOLLAND, ILLINOIS 60473  
708-381-6700 FAX 708-381-8828  
ILLINOIS DESIGN FIRM REGISTRATION NO. 134001138 01179\_02\_XSCT-01

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	48
STA. 17+00		TO STA. 19+23.70		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

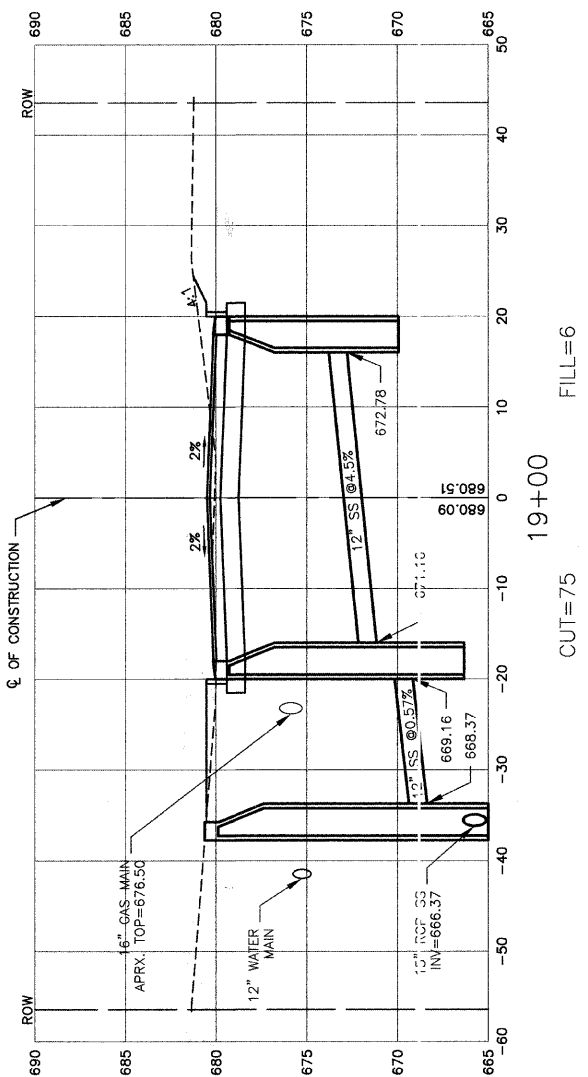
CONTRACT NO. 83956



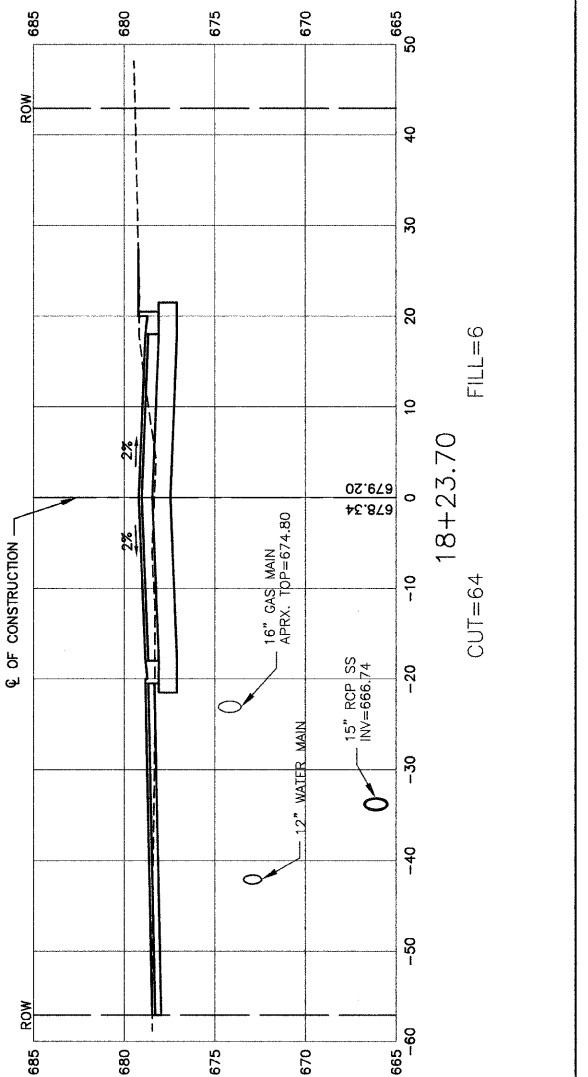
19+40.80  
CUT=115  
FILL=1



19+23.70  
CUT=97  
FILL=1



19+00  
CUT=75  
FILL=6



18+23.70  
CUT=64  
FILL=6

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
CROSS SECTIONS  
151ST STREET**

SCALE: VERT. 1"=5'  
HORIZ. 1"=10'

DATE 11-21-07

DRAWN BY RG/DC  
CHECKED BY JMN

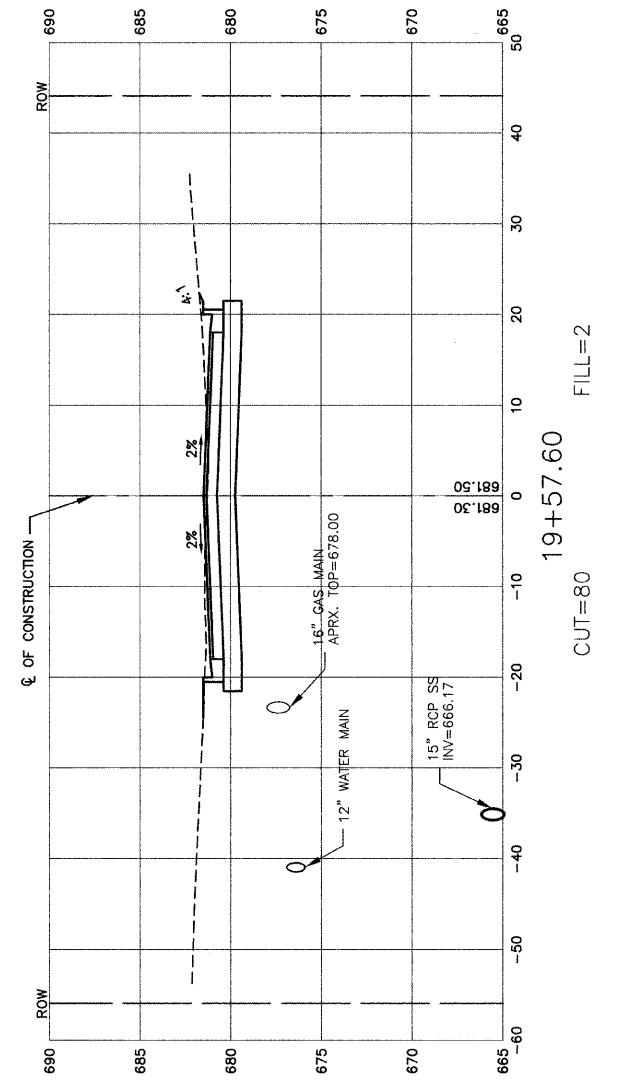
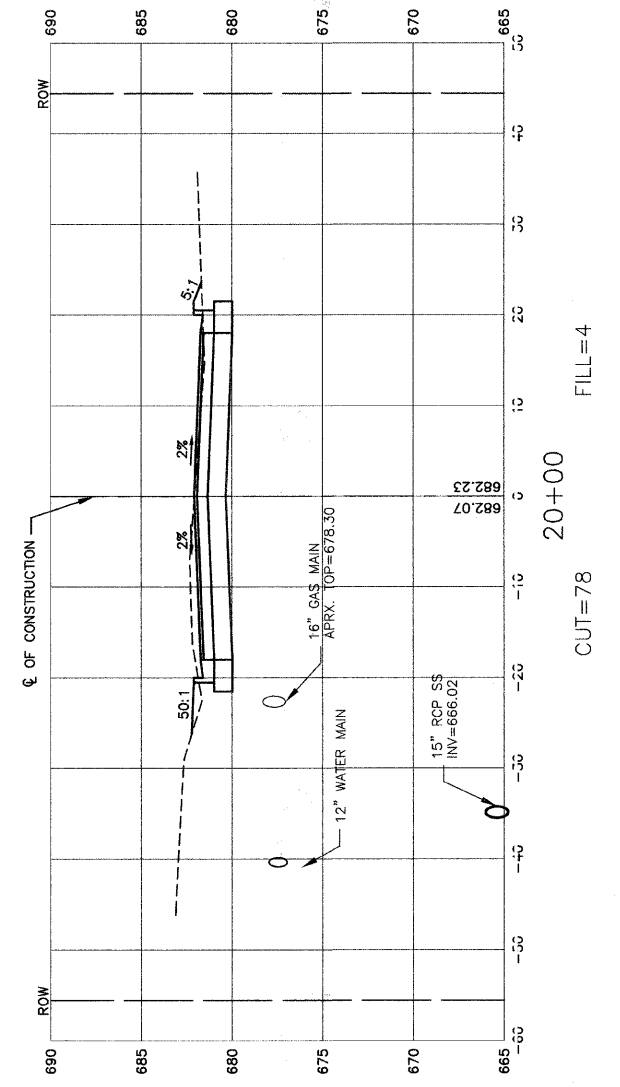
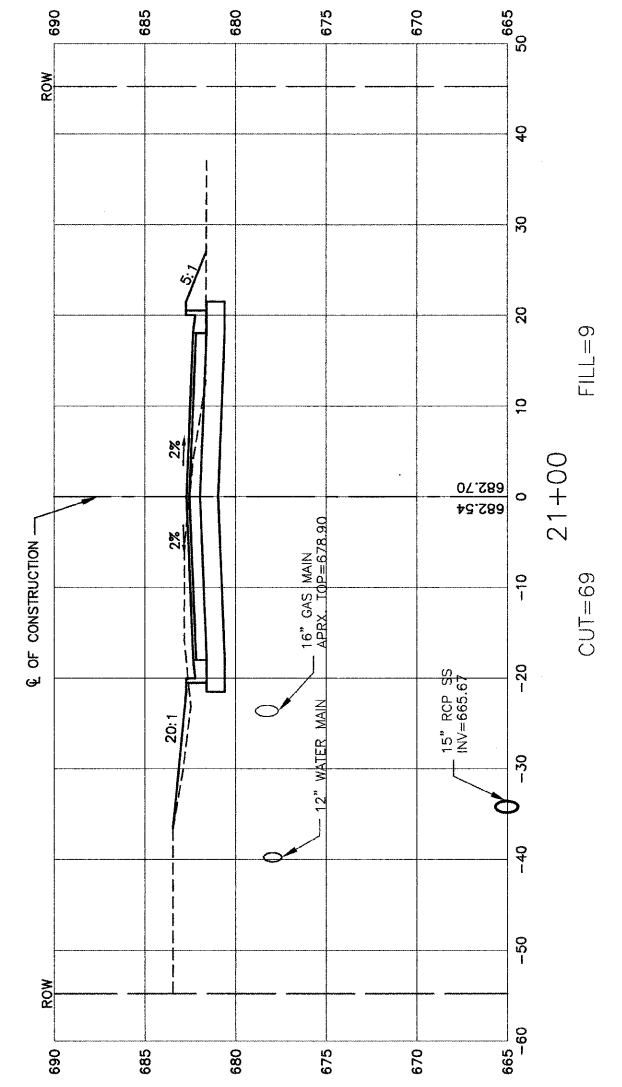
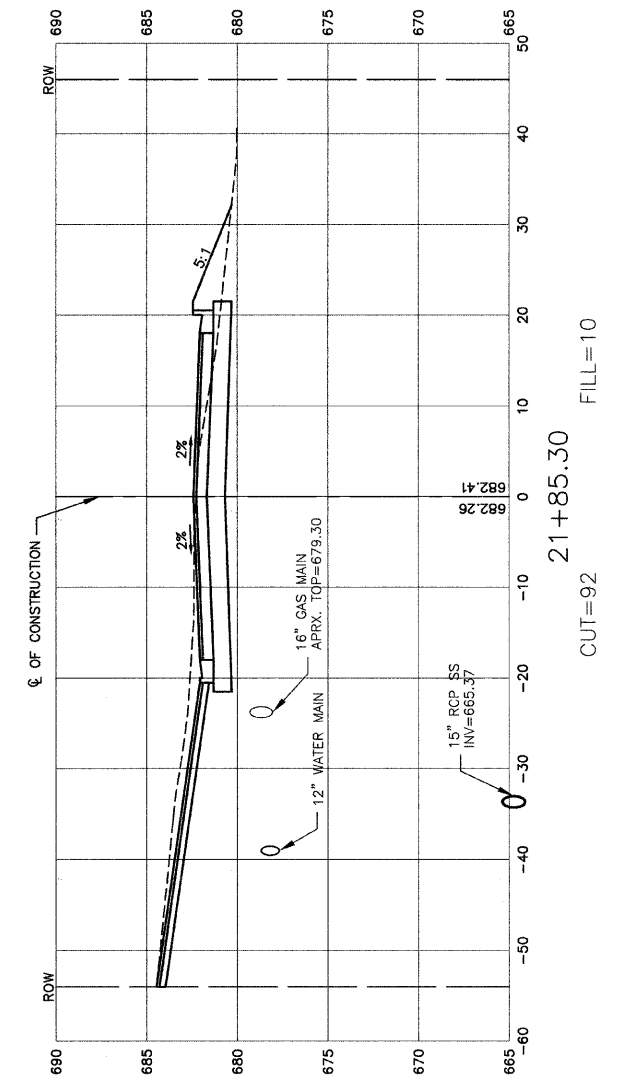
**ROBINSON ENGINEERING, LTD.**  
7000 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473  
708 331-6700 FAX 708 331-8828  
ILLINOIS DESIGN FIRM REGISTRATION NO. 134001128

01179\_02.XSCT-01



F.A.U. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	49
STA. 19+40.80		TO STA. 22+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
CROSS SECTIONS  
151ST STREET**

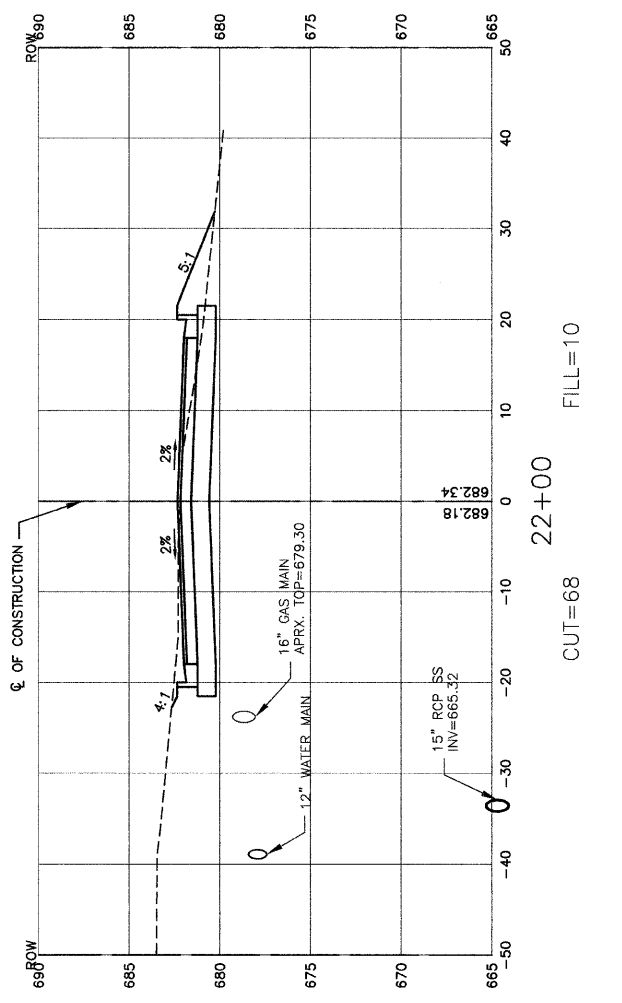
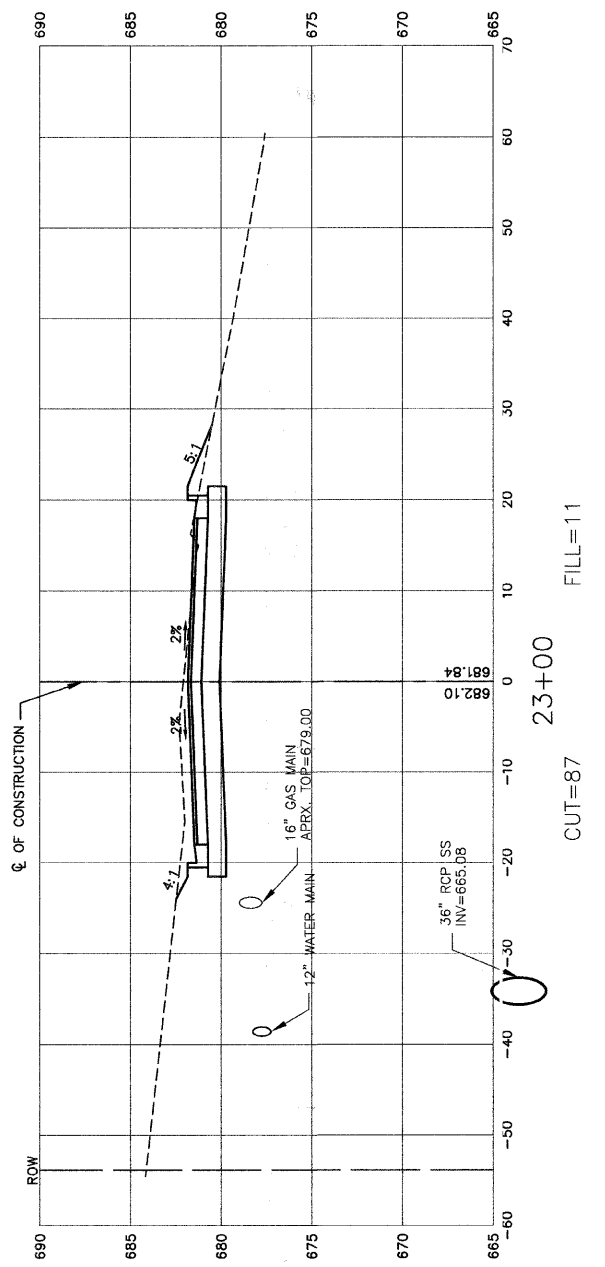
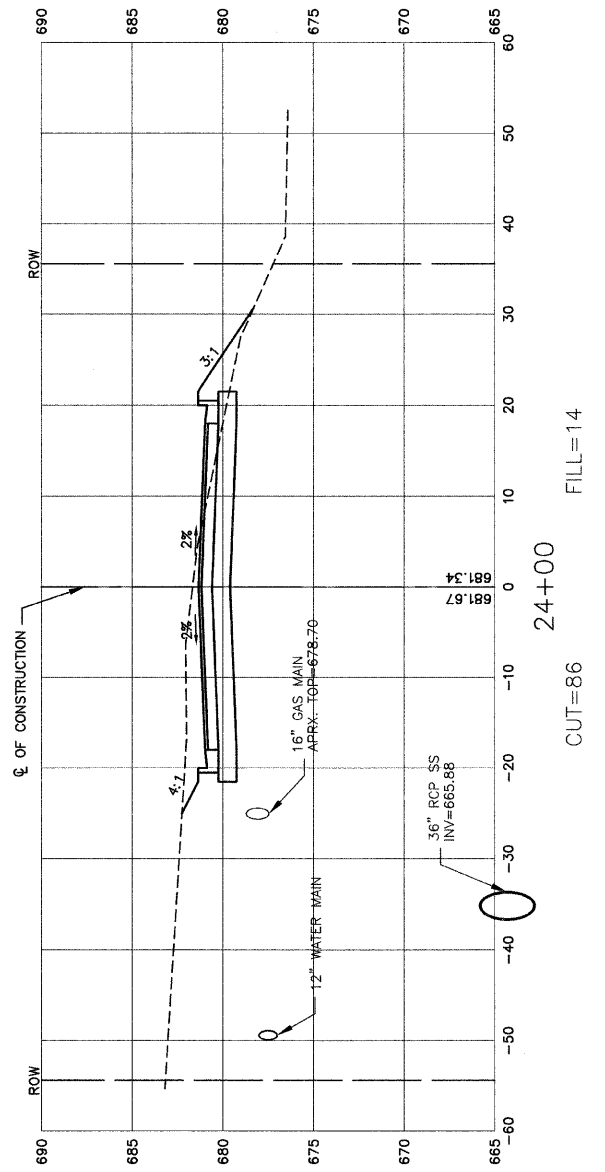
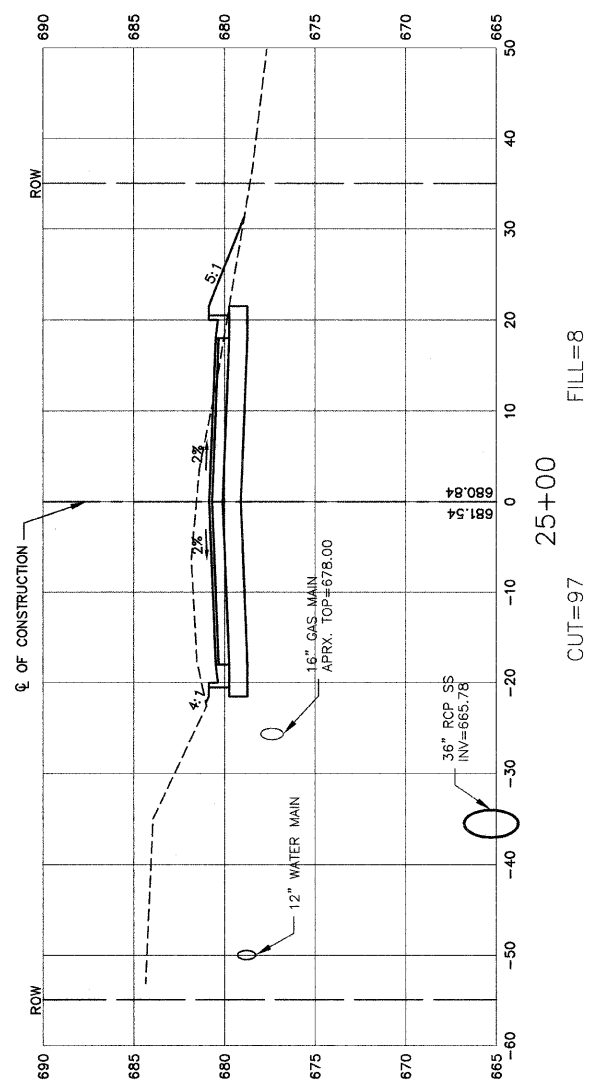
SCALE: VERT. 1"=5'  
HORIZ. 1"=10'

DATE 11-21-07

DRAWN BY RG/DC  
CHECKED BY JMN

FAU. RFE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	50
STA. 22+02.52		TO STA. 25+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

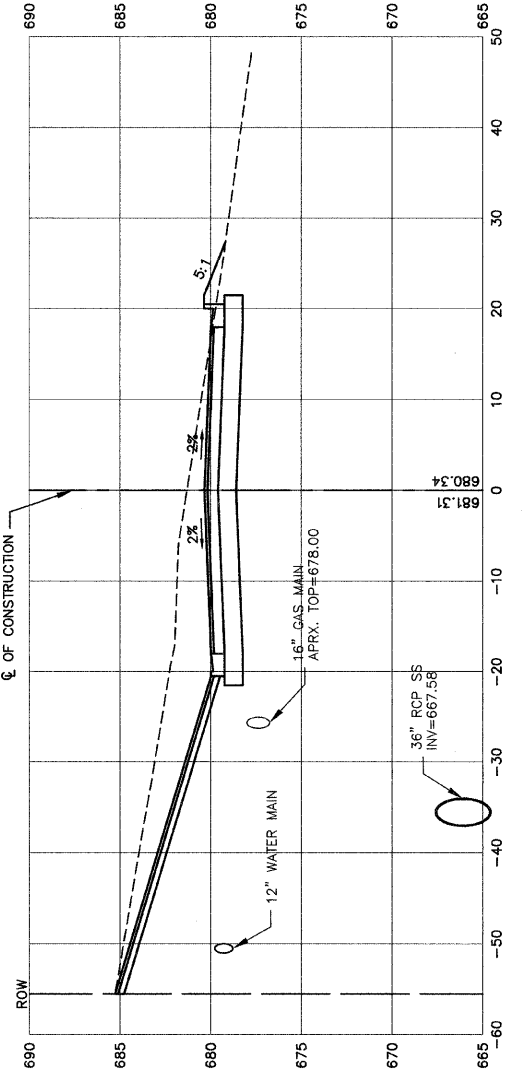
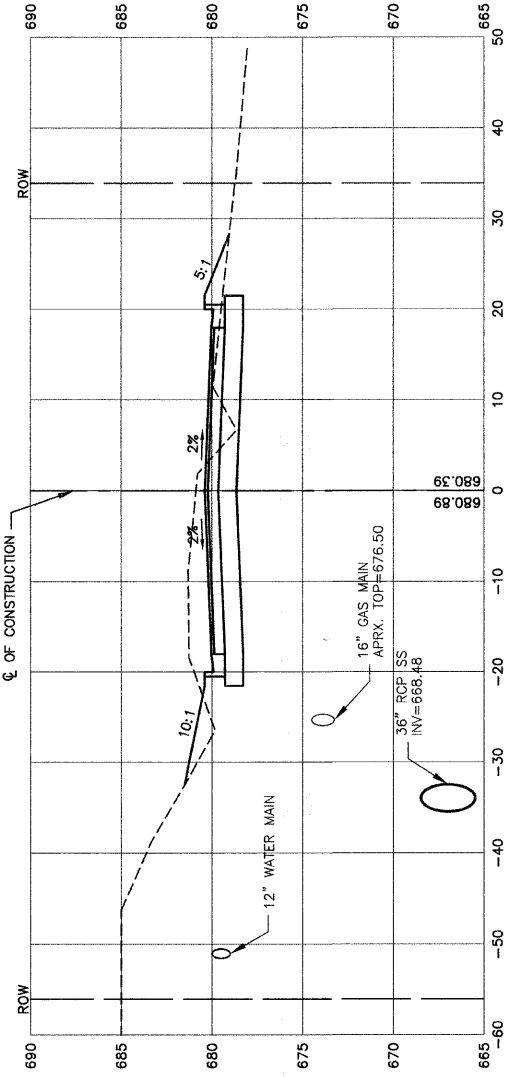
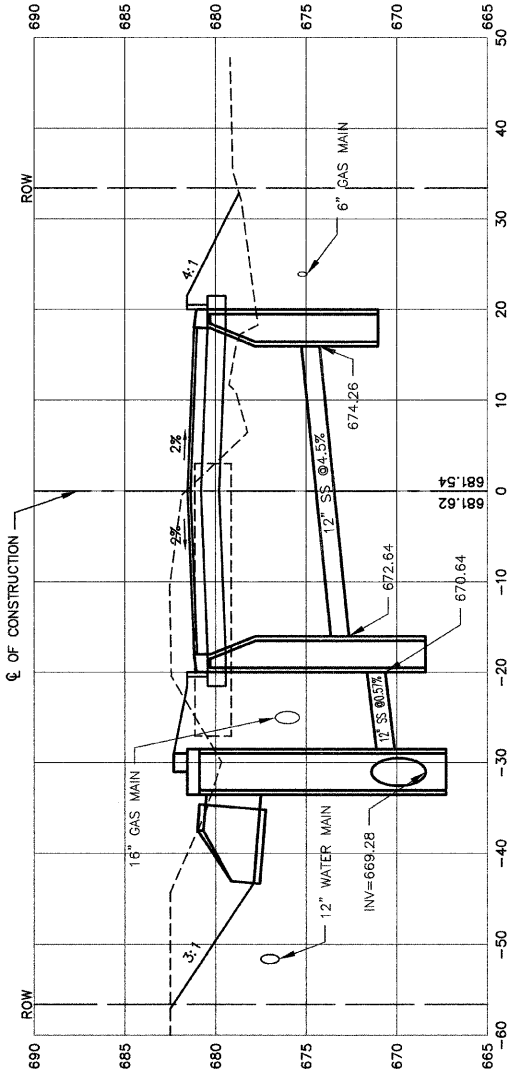
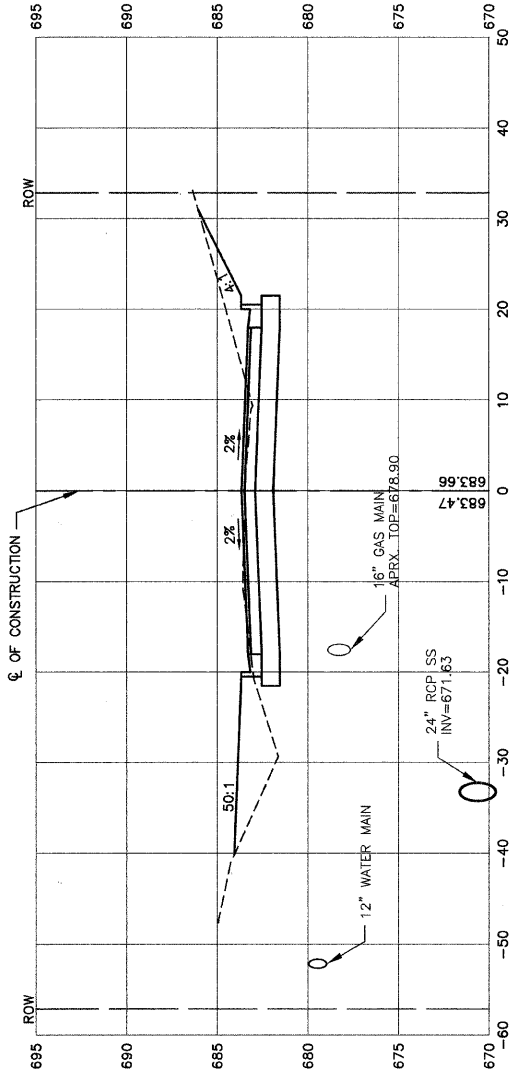
151ST STREET IMPROVEMENT  
CROSS SECTIONS  
151ST STREET

SCALE: VERT. 1"=5'  
HORIZ. 1"=10'  
DATE 11-21-07

DRAWN BY RG/DC  
CHECKED BY JMN

FAU. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	51
STA. 25+29.45		TO STA. 28+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
 CROSS SECTIONS  
 151ST STREET**

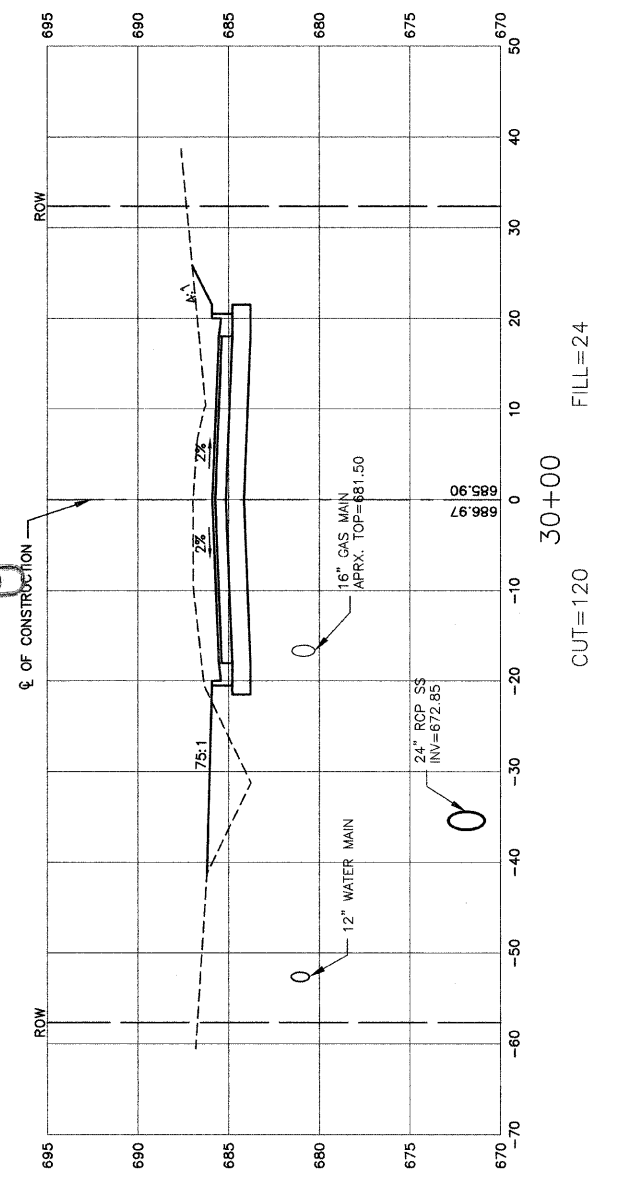
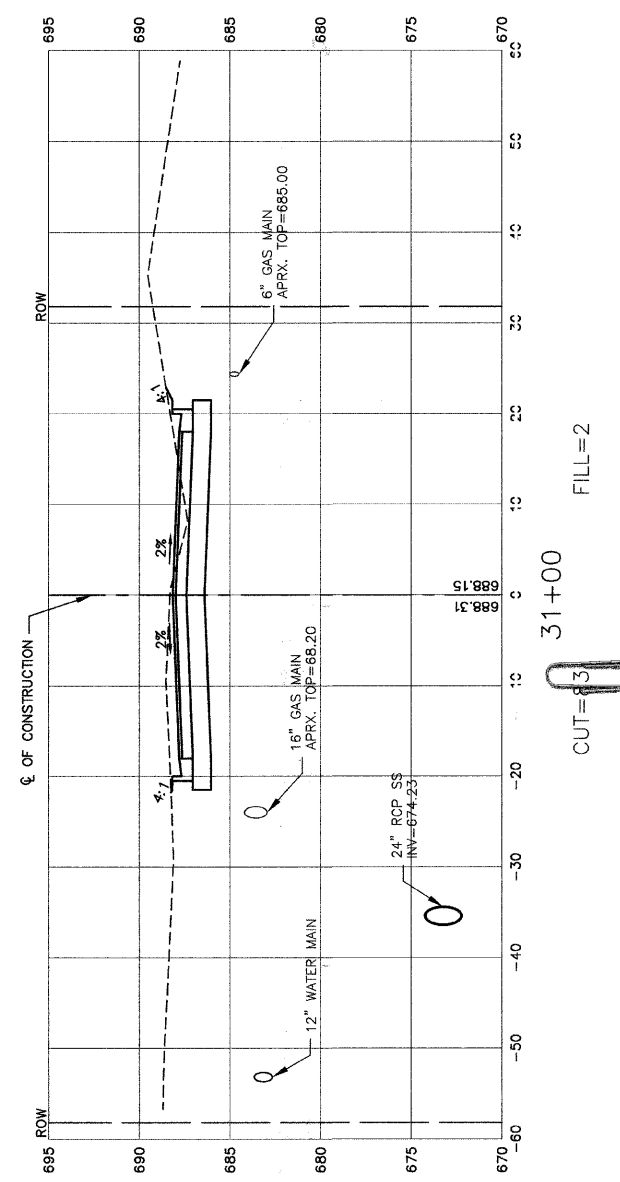
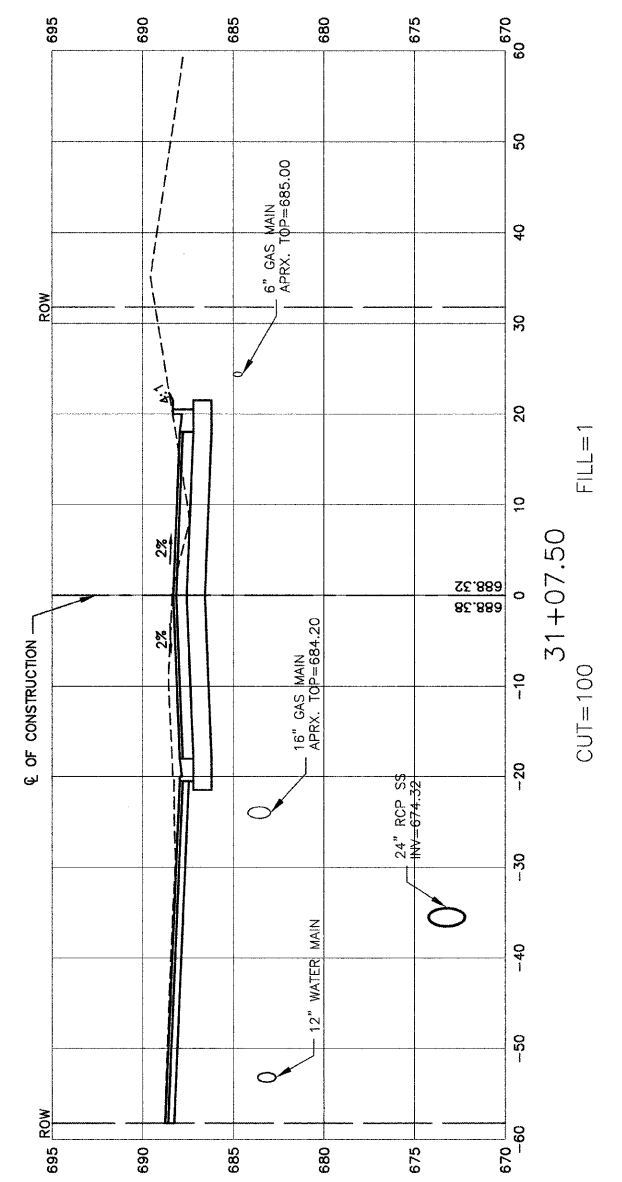
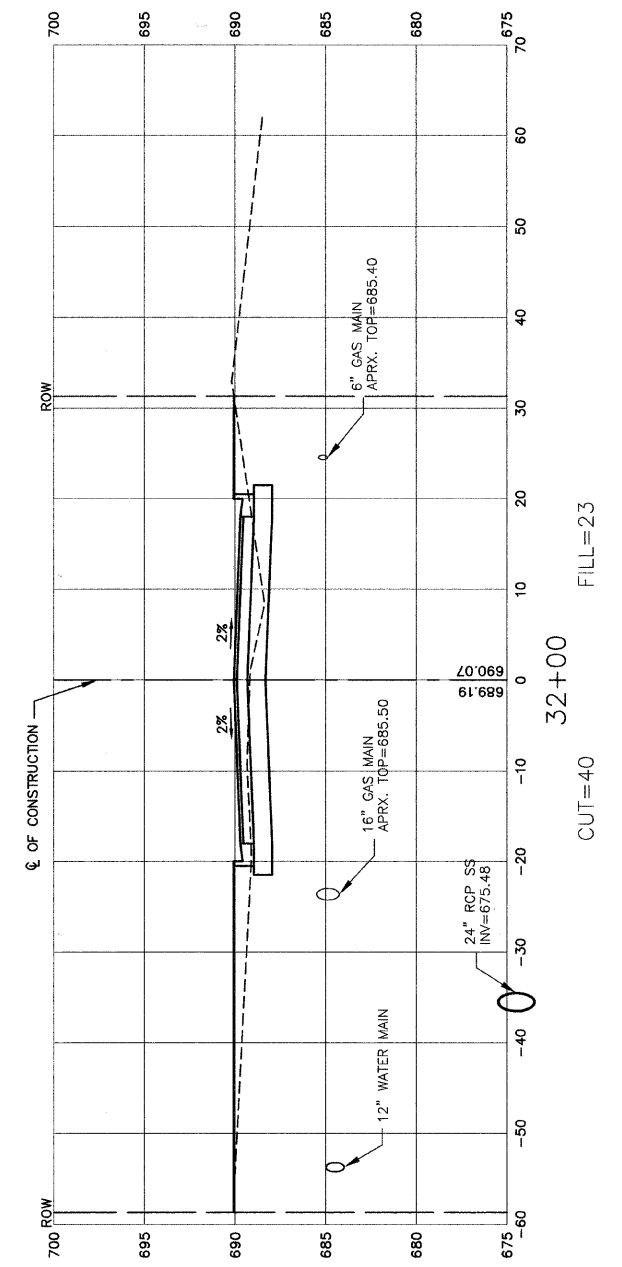
SCALE: VERT. 1"=5'  
 HORIZ. 1"=10'

DATE 11-21-07

DRAWN BY RG/DC  
 CHECKED BY JMN

FAUL. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	52
STA. 29+00		TO STA. 32+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956

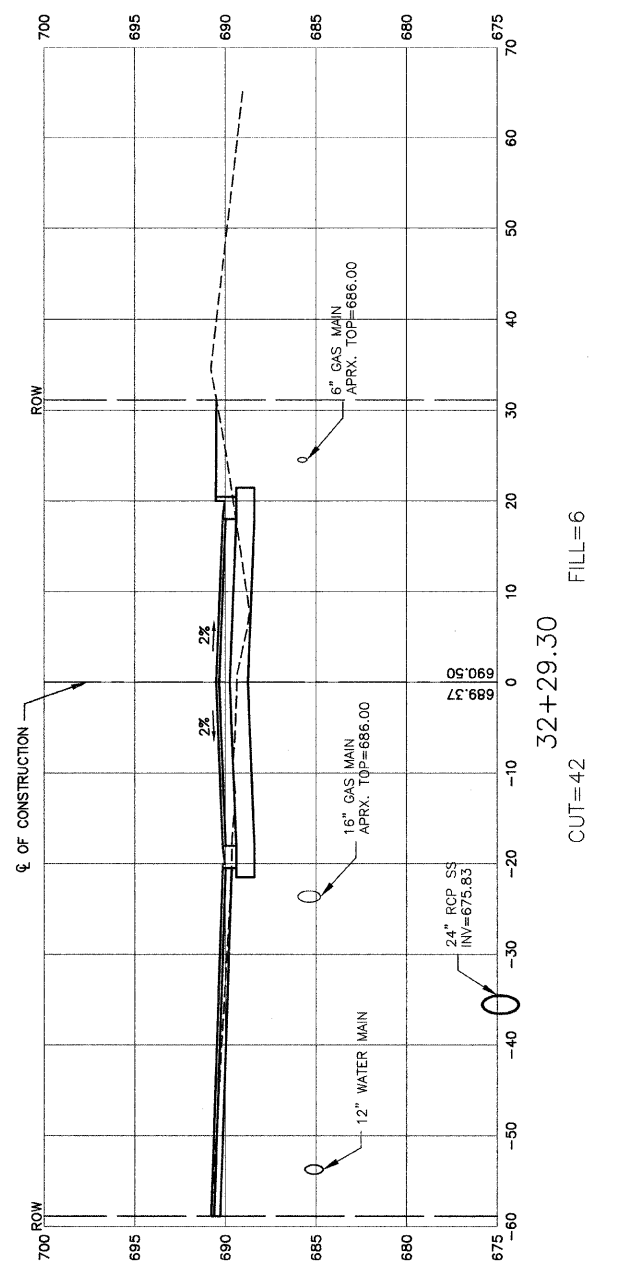
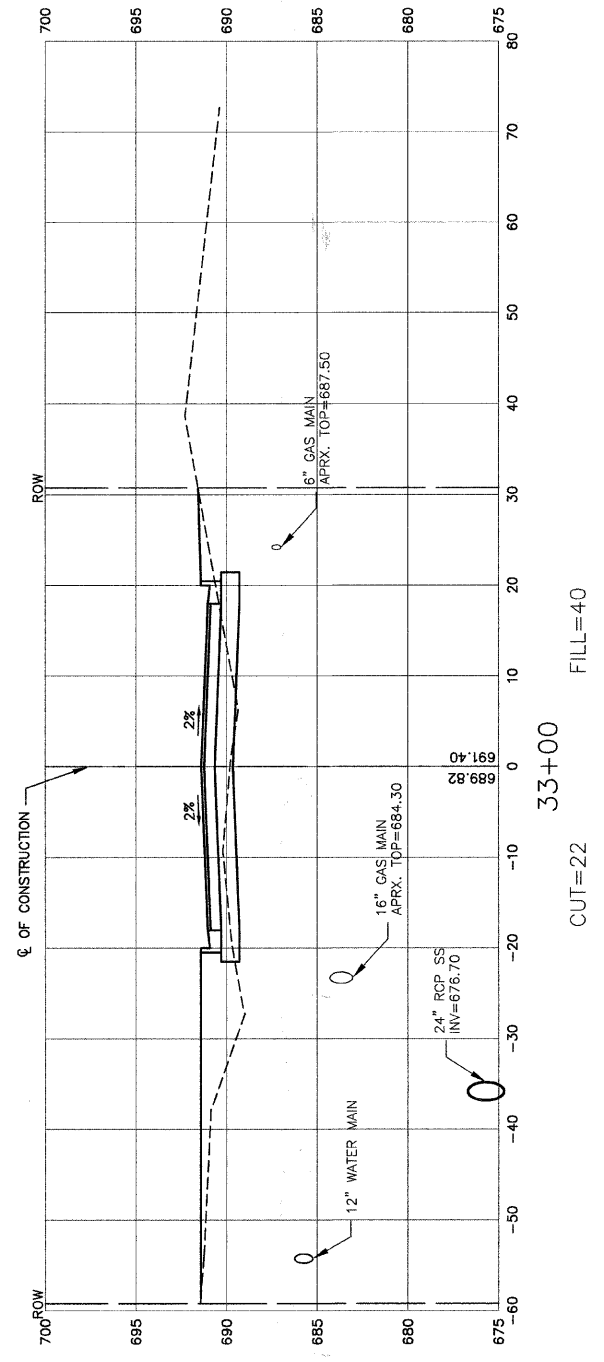
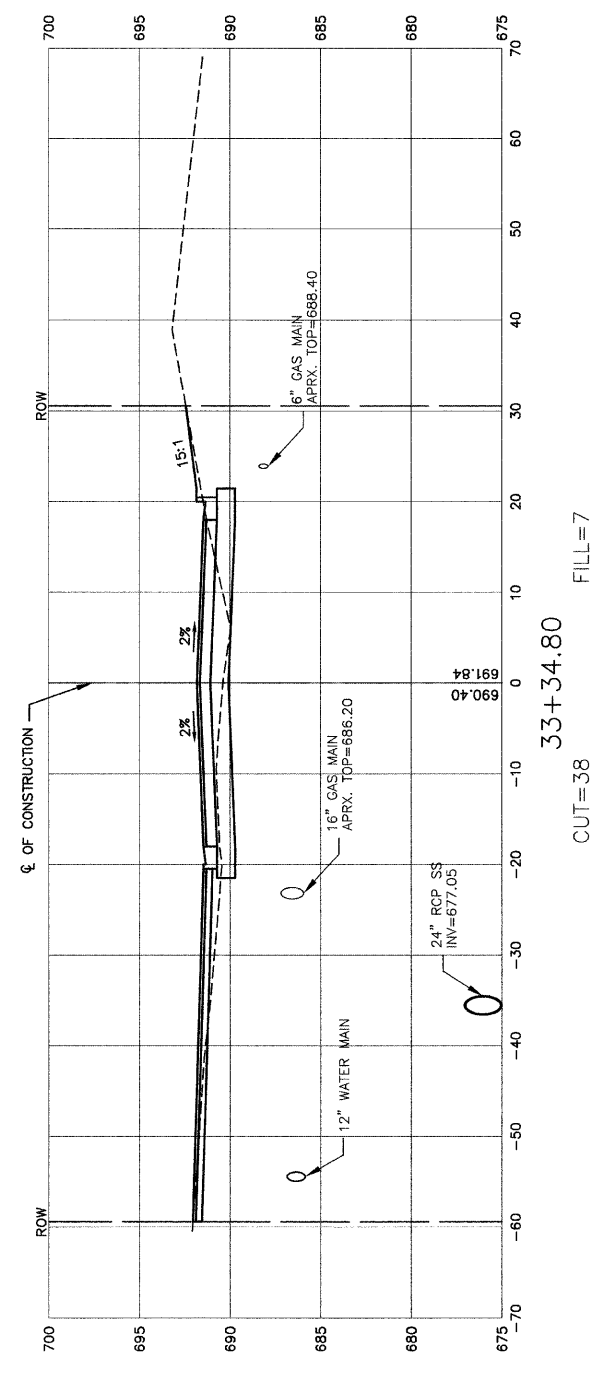
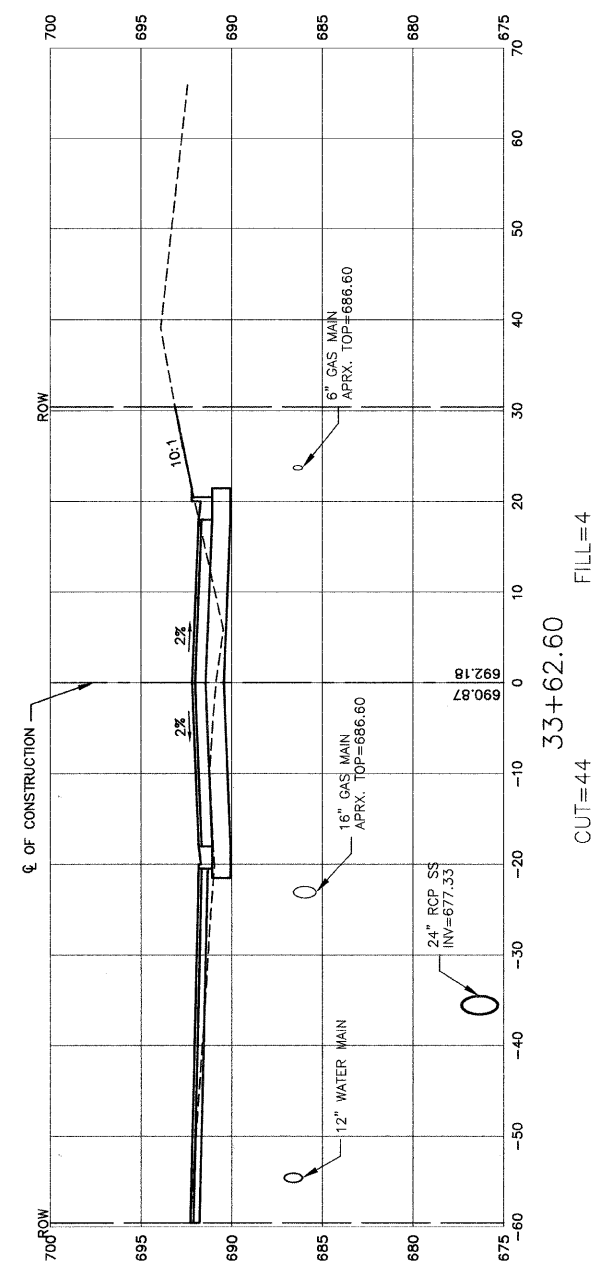


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
CROSS SECTIONS  
151ST STREET**

SCALE: VERT. 1"=5'  
HORIZ. 1"=10'  
DATE: 11-21-07  
DRAWN BY: RG/DC  
CHECKED BY: JMN



REVISIONS	
NAME	DATE

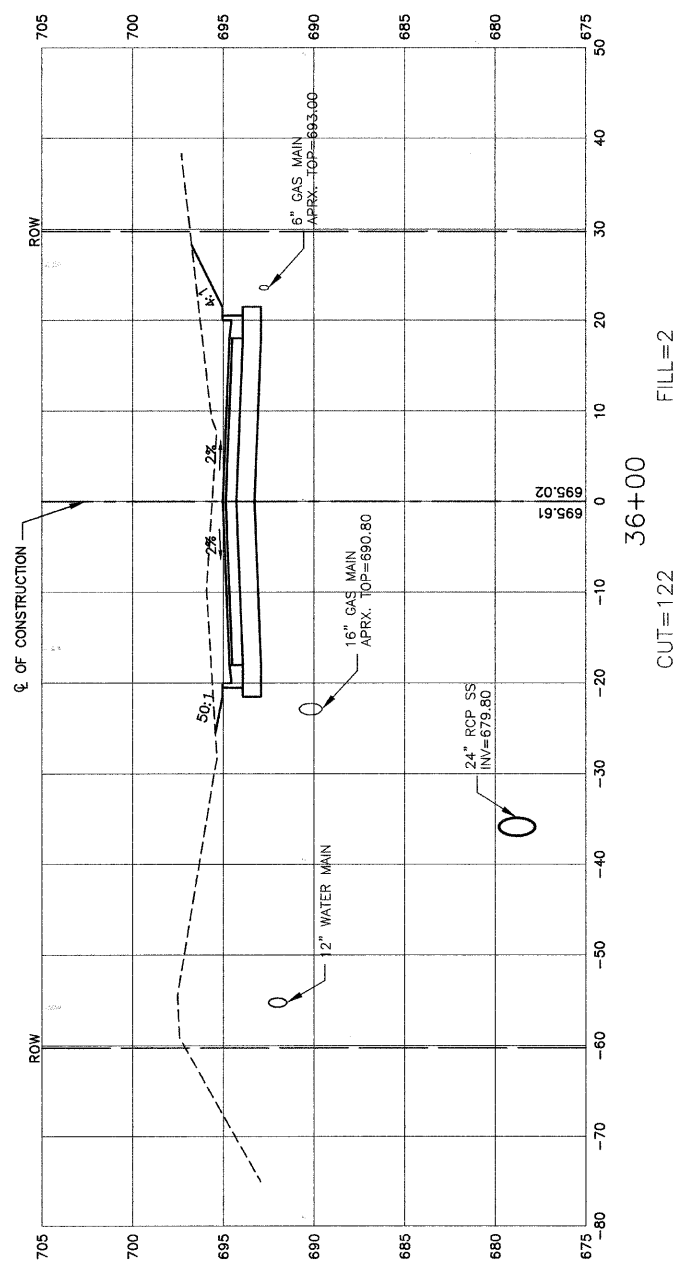
ILLINOIS DEPARTMENT OF TRANSPORTATION

151ST STREET IMPROVEMENT  
CROSS SECTIONS  
151ST STREET

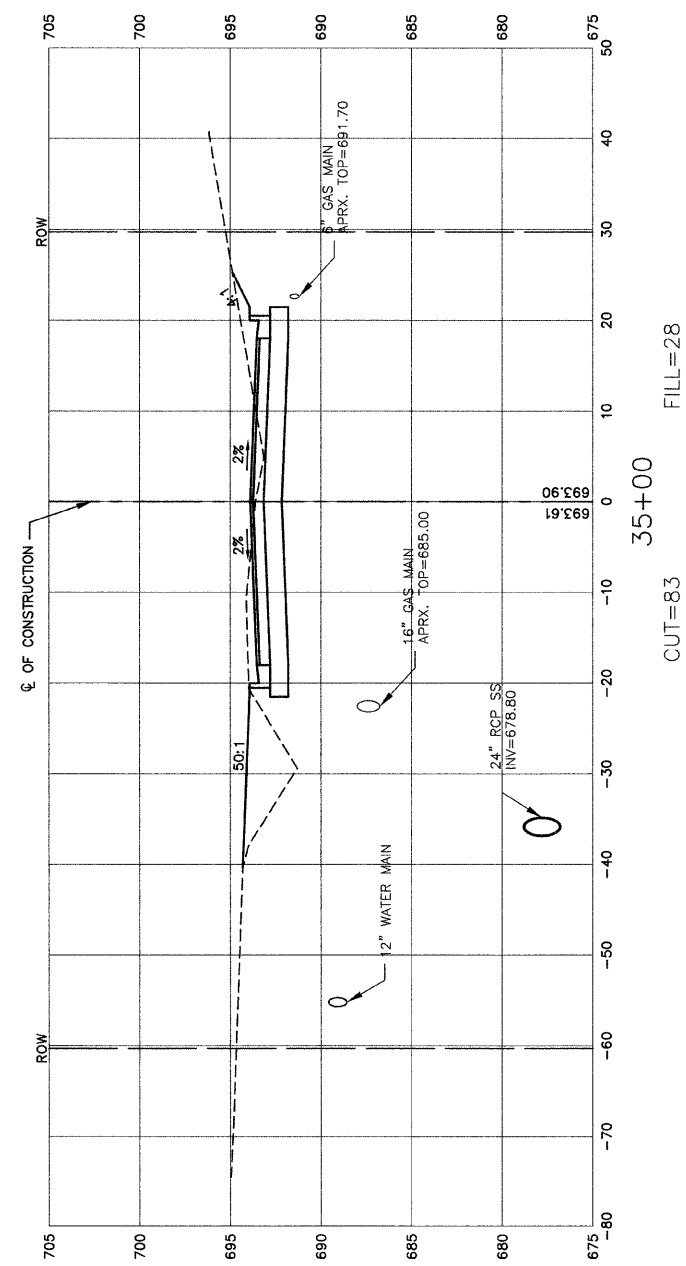
SCALE: VERT. 1"=5'  
HORIZ. 1"=10'  
DATE 11-21-07  
DRAWN BY RG/DC  
CHECKED BY JMN

FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	54
STA. 34+82.80		TO STA. 37+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

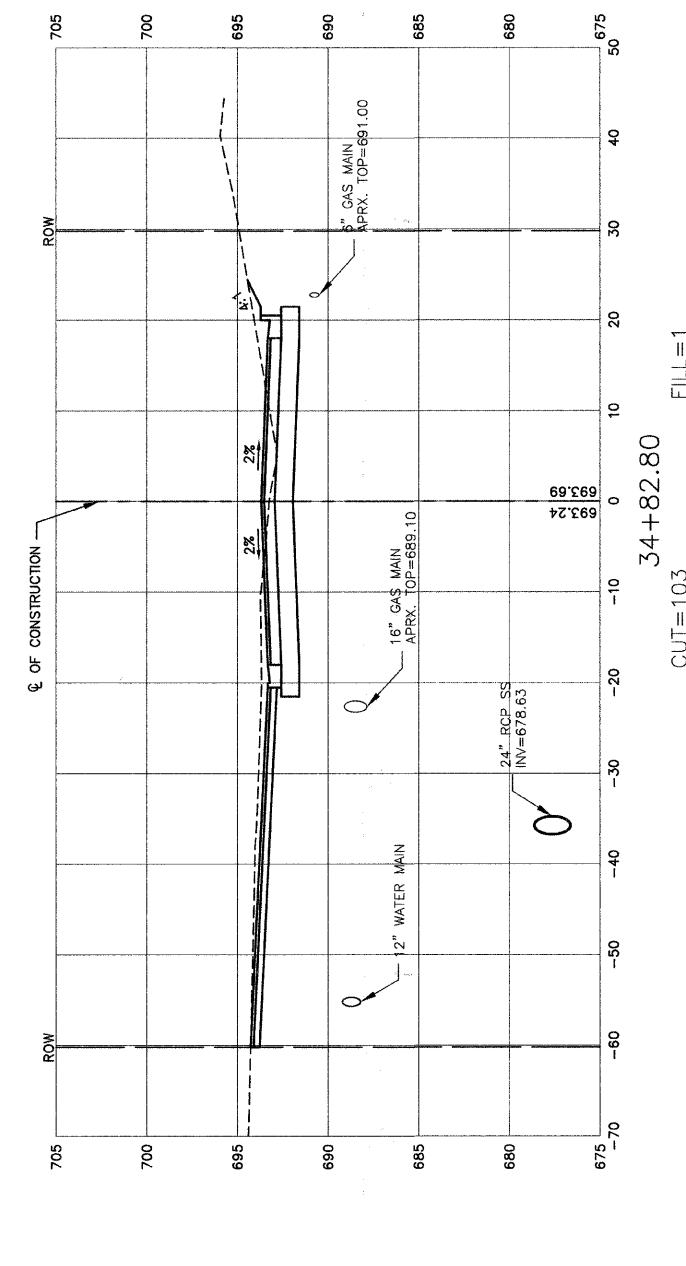
CONTRACT NO. 83956



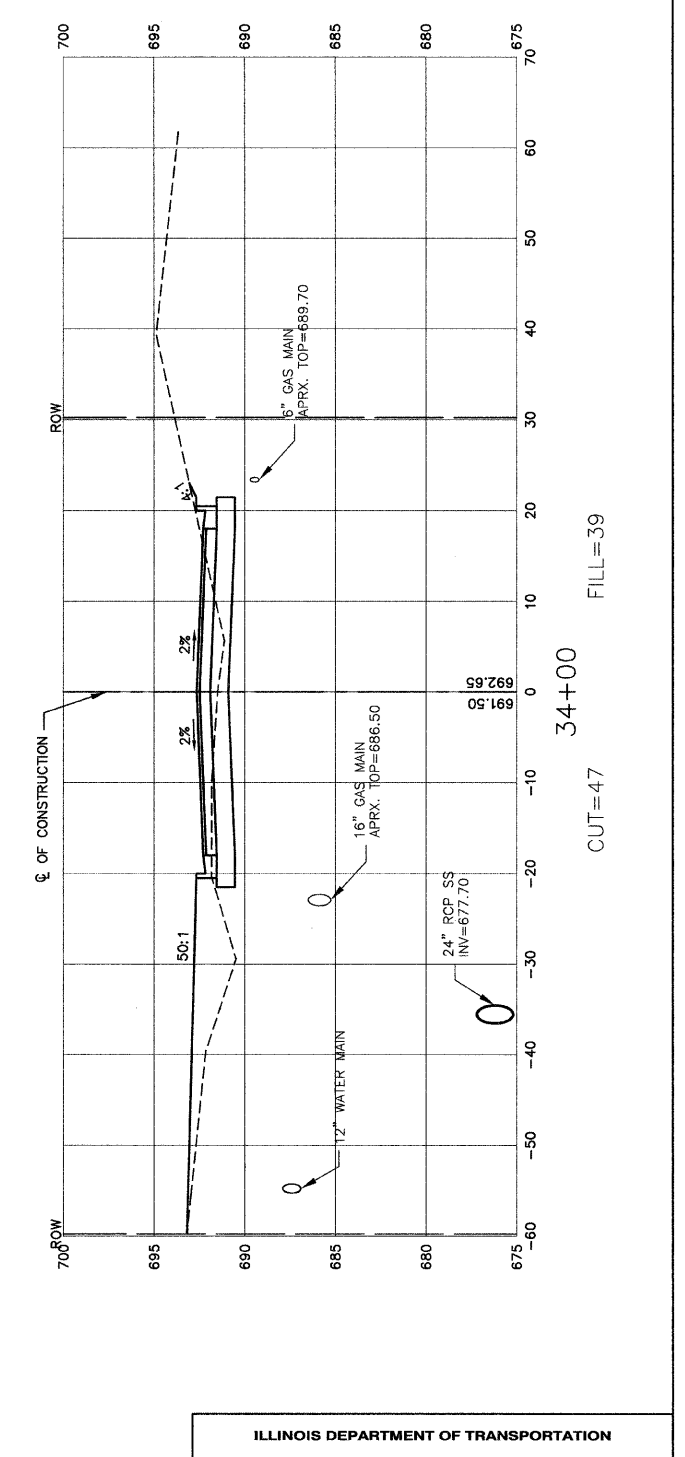
CUT=122 FILL=2



CUT=83 FILL=28



CUT=103 FILL=1



CUT=47 FILL=39

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

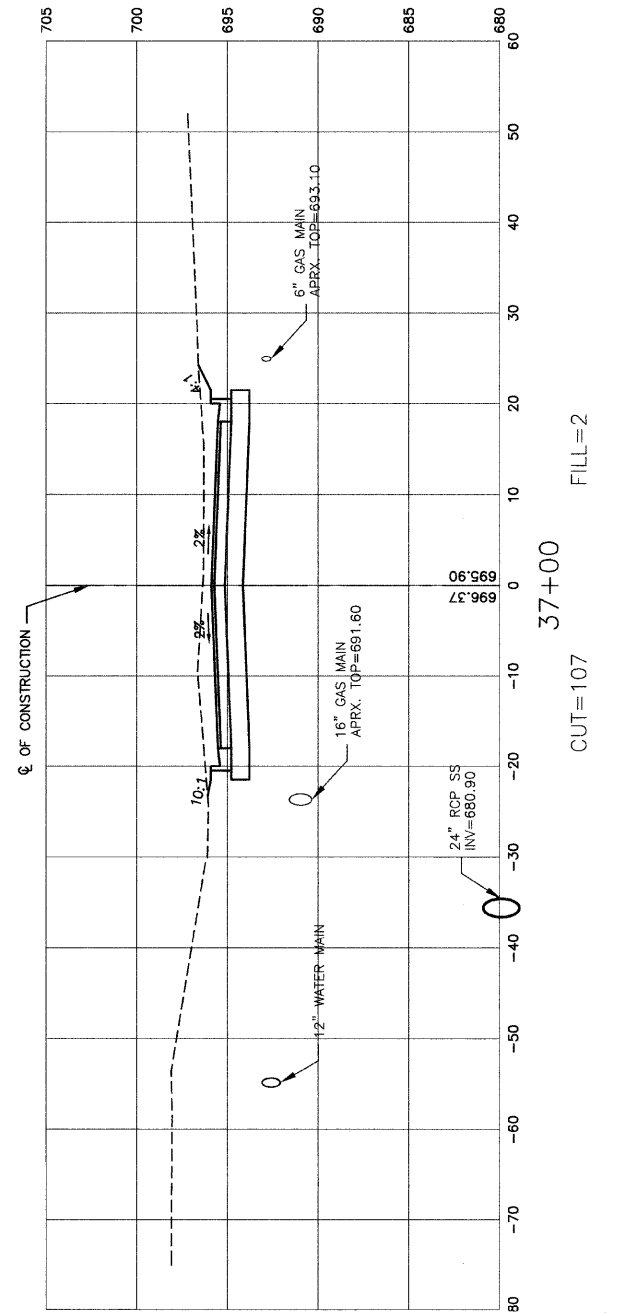
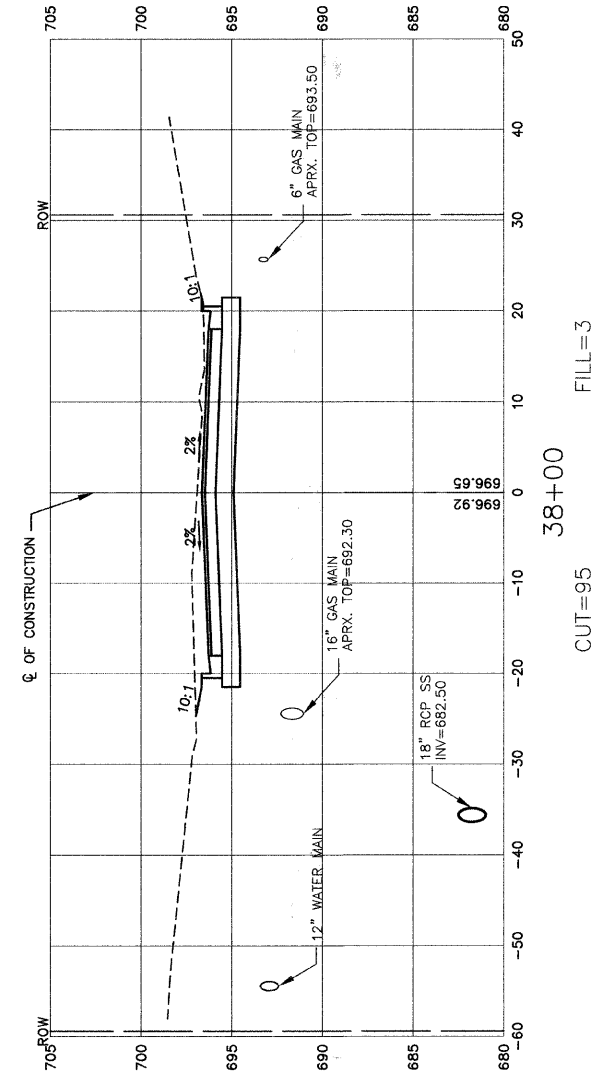
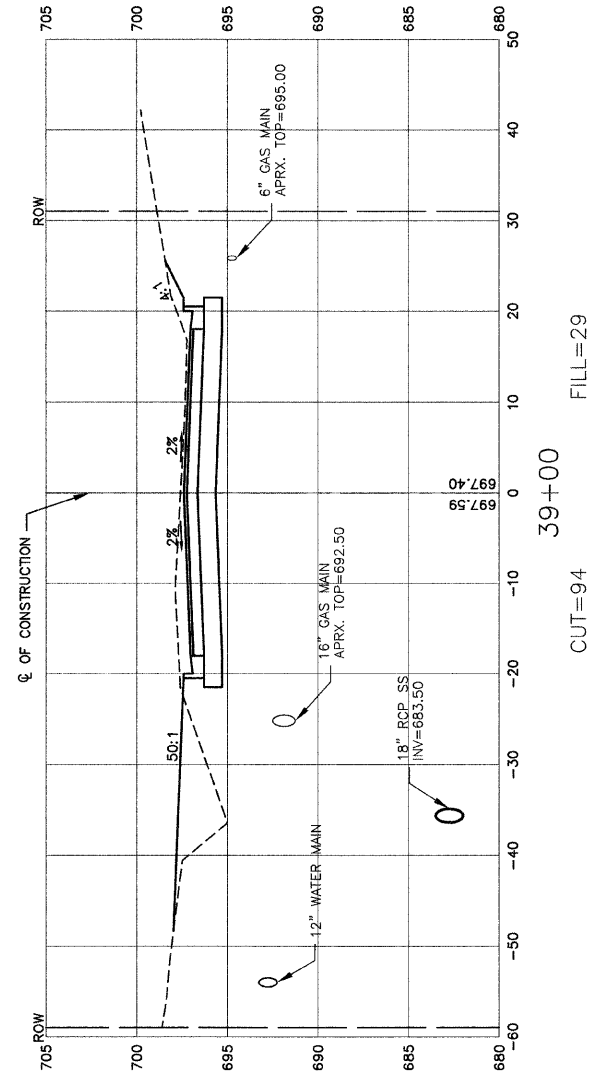
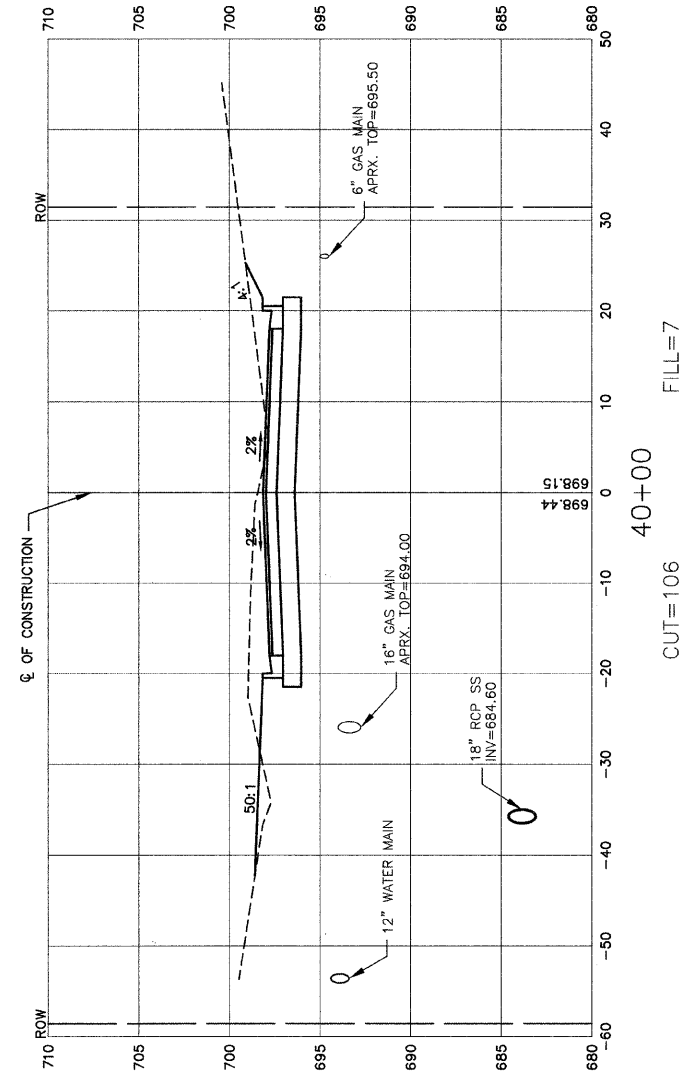
151ST STREET IMPROVEMENT  
CROSS SECTIONS  
151ST STREET

SCALE: VERT. 1"=5'  
HORIZ. 1"=10'  
DATE 11-21-07  
DRAWN BY RG/DC  
CHECKED BY JMN

ROBINSON ENGINEERING, LTD.  
1700 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473  
(708) 381-8700 FAX (708) 381-3828  
ILLINOIS DESIGN FIRM REGISTRATION NO. 184001181 01179\_02-XSCT-01

FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	55
STA. 37+82.49		TO STA. 40+53.30		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

151ST STREET IMPROVEMENT  
CROSS SECTIONS  
151ST STREET

SCALE: VERT. 1"=5'  
HORIZ. 1"=10'

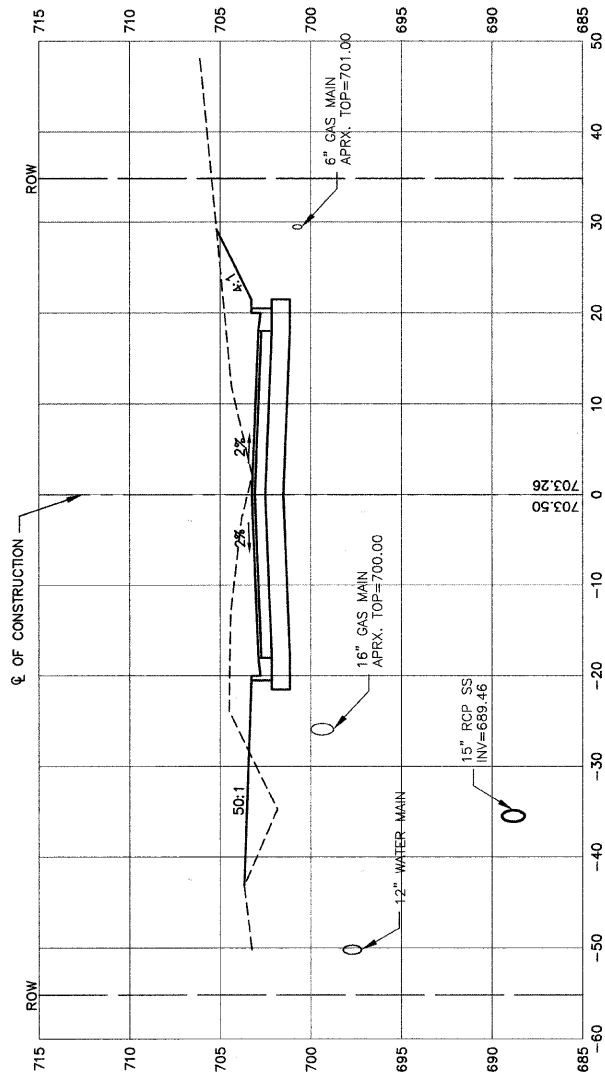
DRAWN BY RG/DC

DATE 11-21-07

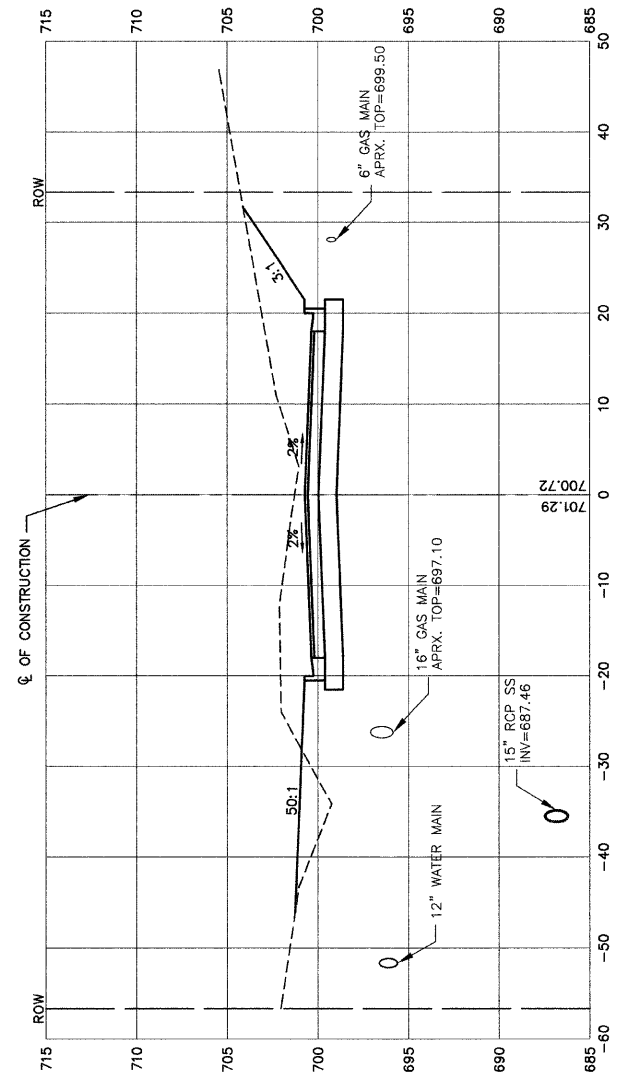
CHECKED BY JMN

ROBINSON ENGINEERING, LTD.  
1700 SOUTH PARK AVENUE, SOUTH HOLLAND, ILLINOIS 60473  
(708) 331-6700 FAX (708) 331-3805  
ILLINOIS DESIGN FIRM REGISTRATION NO. 184001128 01179\_02-XSCT-01

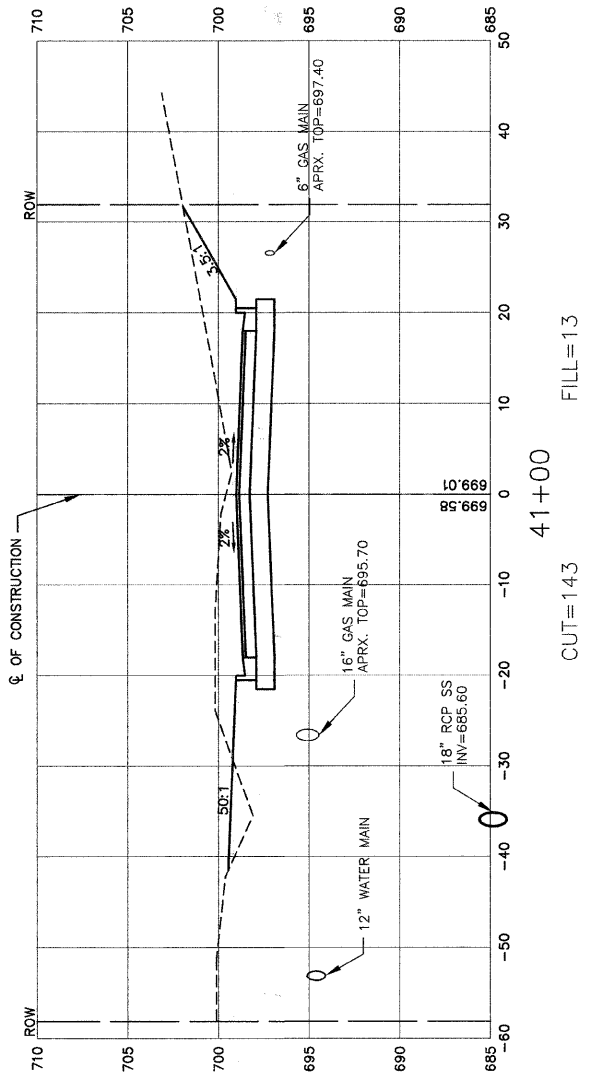
CONTRACT NO. 83956



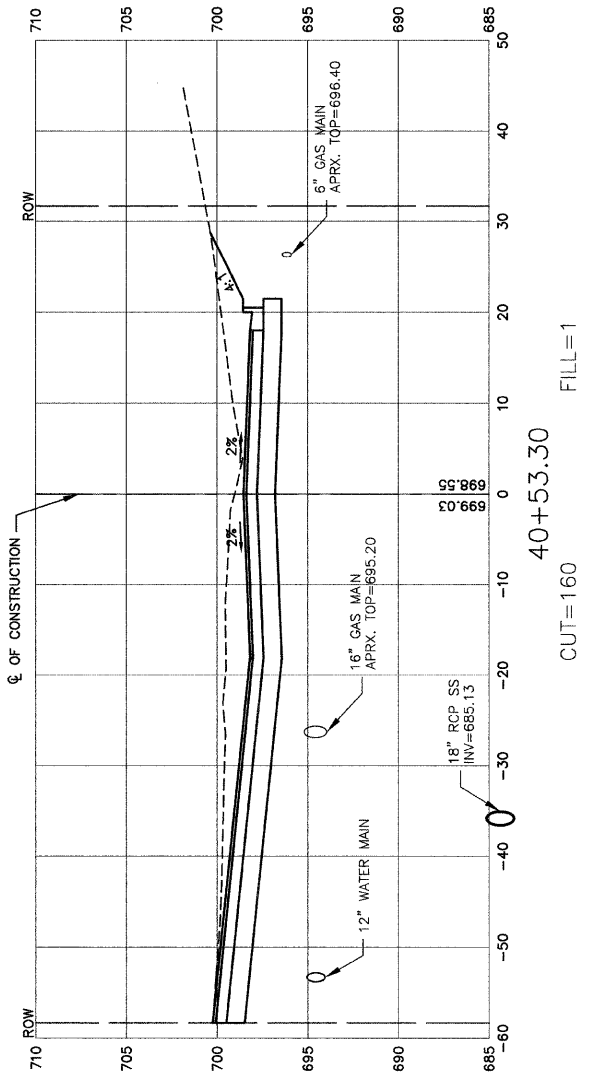
CUT=134  
43+00  
FILL=15



CUT=158  
42+00  
FILL=17



CUT=143  
41+00  
FILL=13



CUT=160  
40+53.30  
FILL=1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
CROSS SECTIONS  
151ST STREET**

SCALE: VERT. 1"=5'  
HORIZ. 1"=10'

DATE 11-21-07

DRAWN BY RG/DC  
CHECKED BY JMN

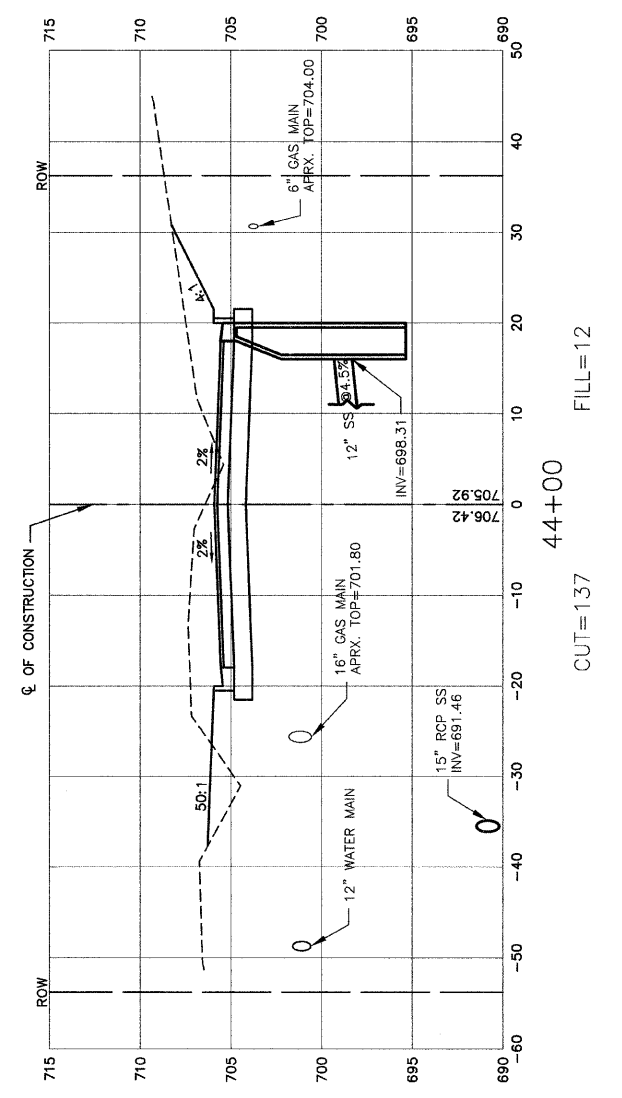
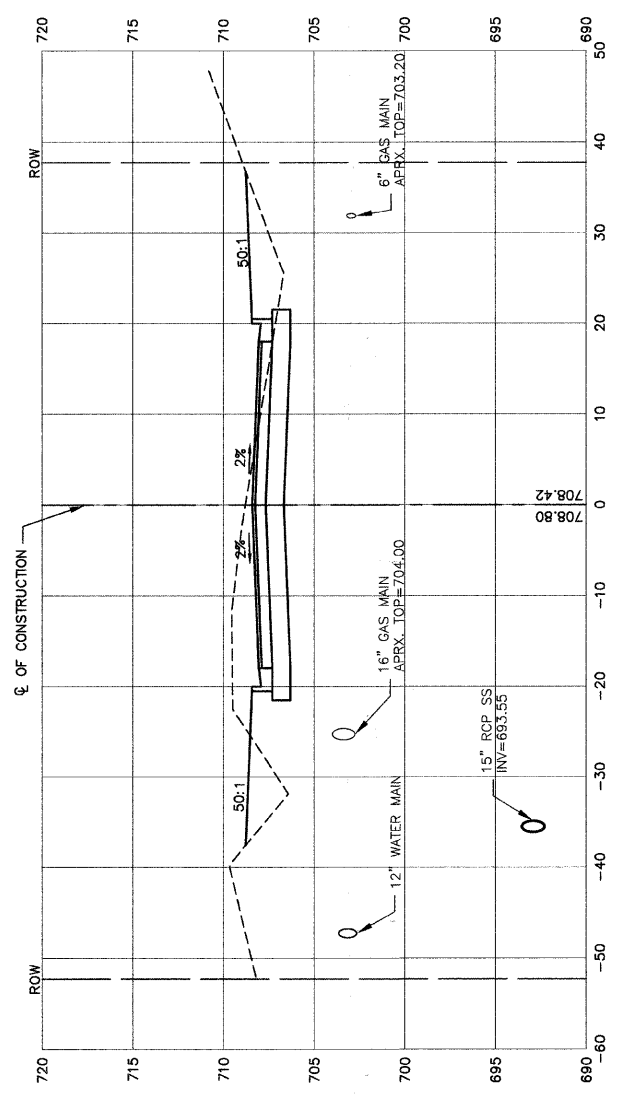
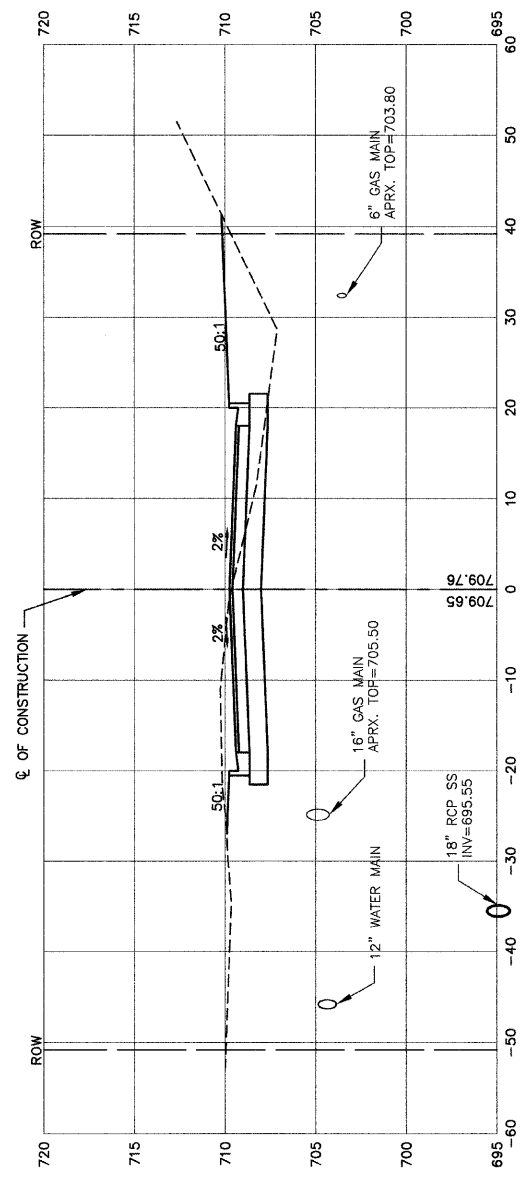
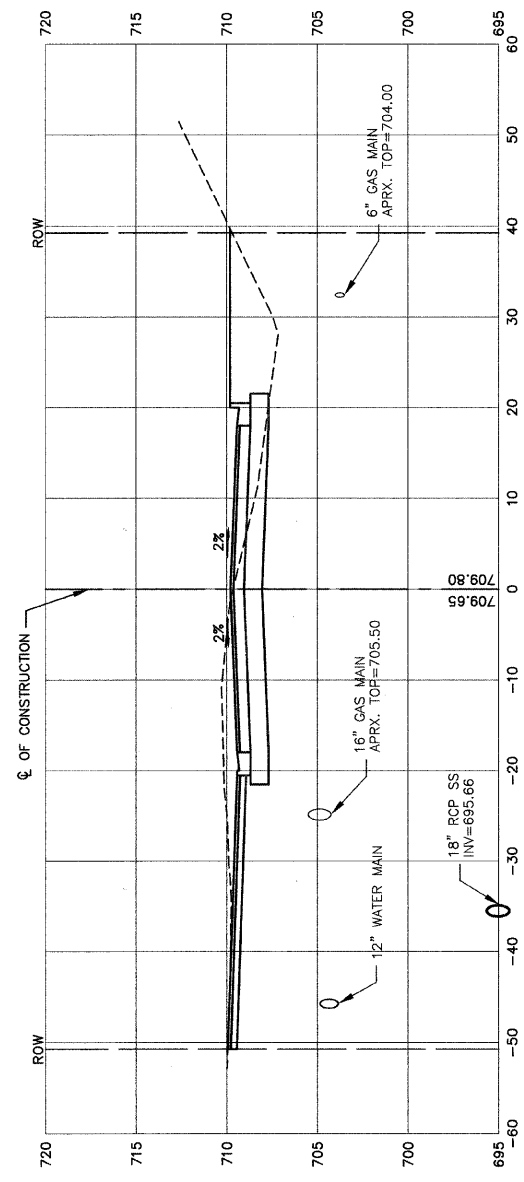
**ROBINSON ENGINEERING, LTD.**  
7008 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473  
708 381-6700 FAX 708 381-3828  
ILLINOIS DESIGN FIRM REGISTRATION NO. 184901184

01179\_02-XSCT-01



F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	57
STA. 44+15.40		TO STA. 47+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**151ST STREET IMPROVEMENT  
CROSS SECTIONS  
151ST STREET**

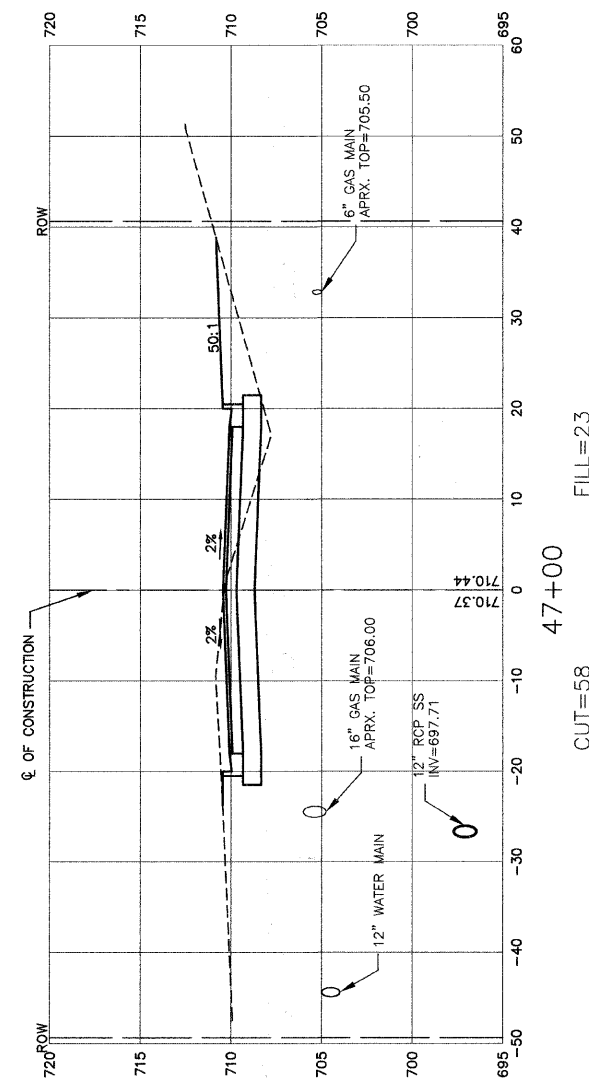
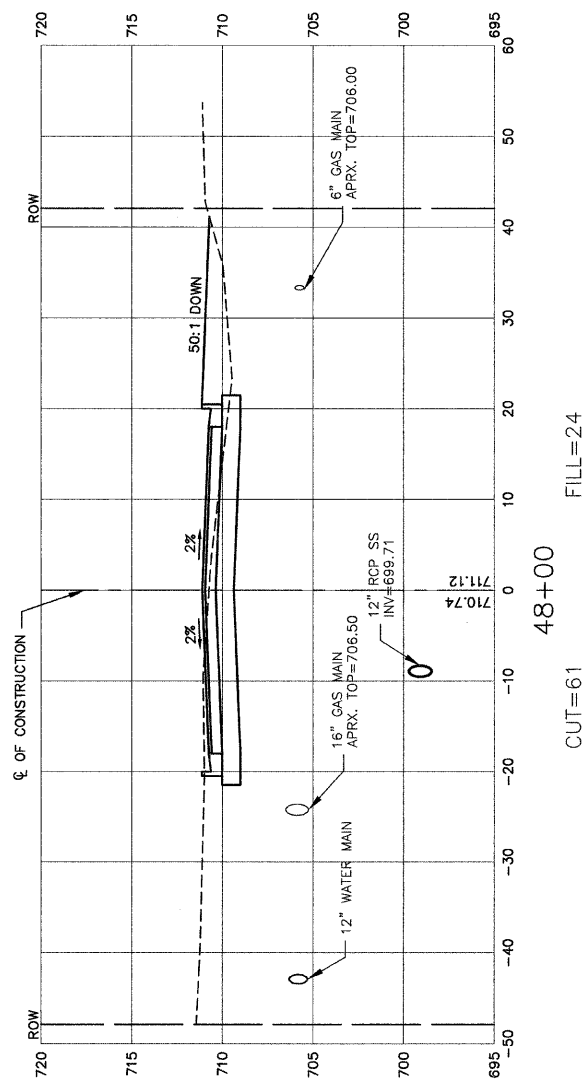
SCALE: VERT. 1"=5'  
HORIZ. 1"=10'

DATE 11-21-07

DRAWN BY RG/DC  
CHECKED BY JMN

FAU. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	58
STA. 48+00		TO STA. 49+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



REVISIONS	
NAME	DATE

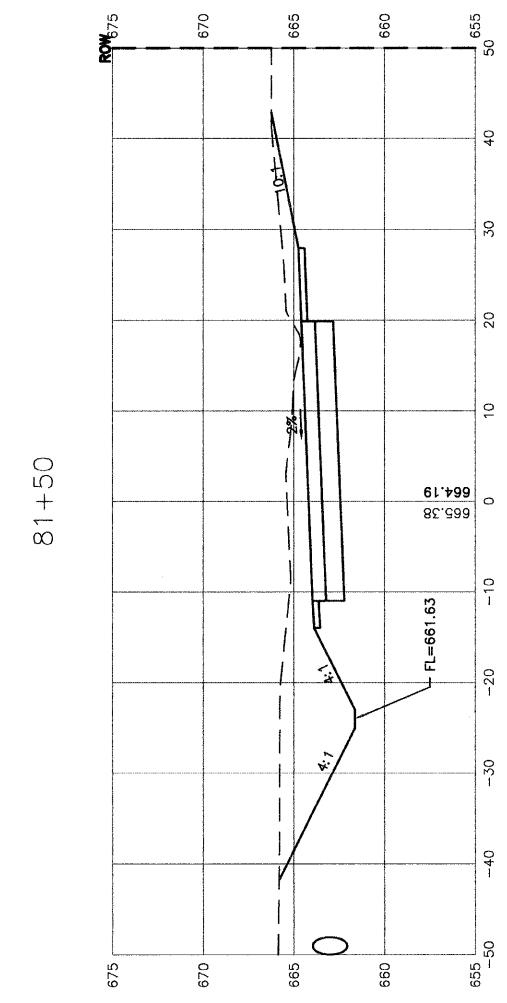
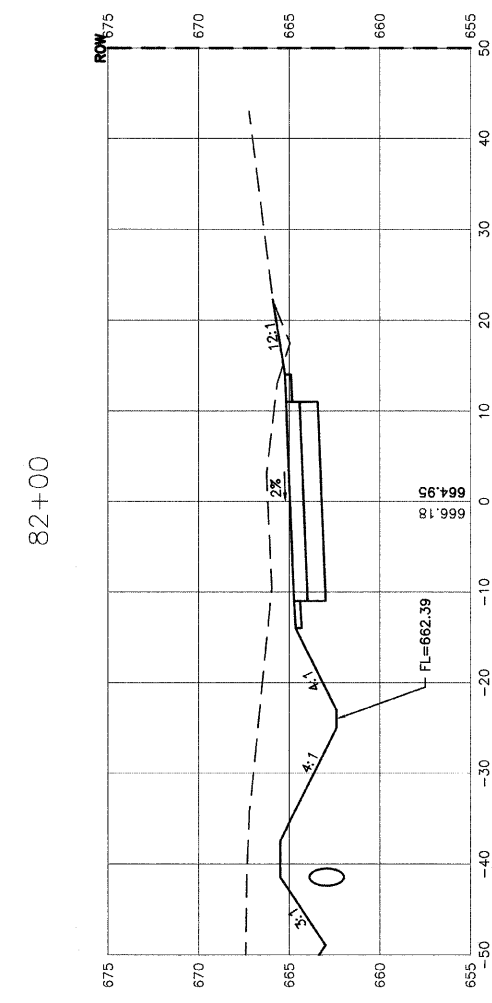
ILLINOIS DEPARTMENT OF TRANSPORTATION

151ST STREET IMPROVEMENT  
CROSS SECTIONS  
151ST STREET

SCALE: VERT. 1"=5'  
HORIZ. 1"=10'  
DATE 11-21-07  
DRAWN BY RG/DC  
CHECKED BY JMN

FAA RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	59
STA. 81+50		TO STA. 82+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



REVISIONS	
NAME	DATE

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

**151ST STREET IMPROVEMENT  
CROSS SECTIONS  
ARCHER AVENUE**

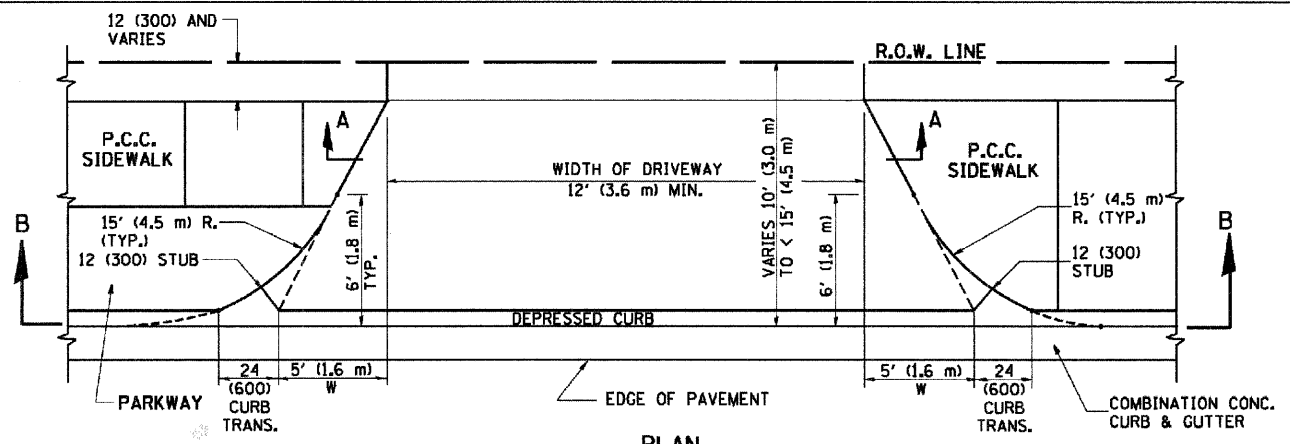
SCALE: VERT. 1"=5'  
HORIZ. 1"=10'

DATE 11-21-07

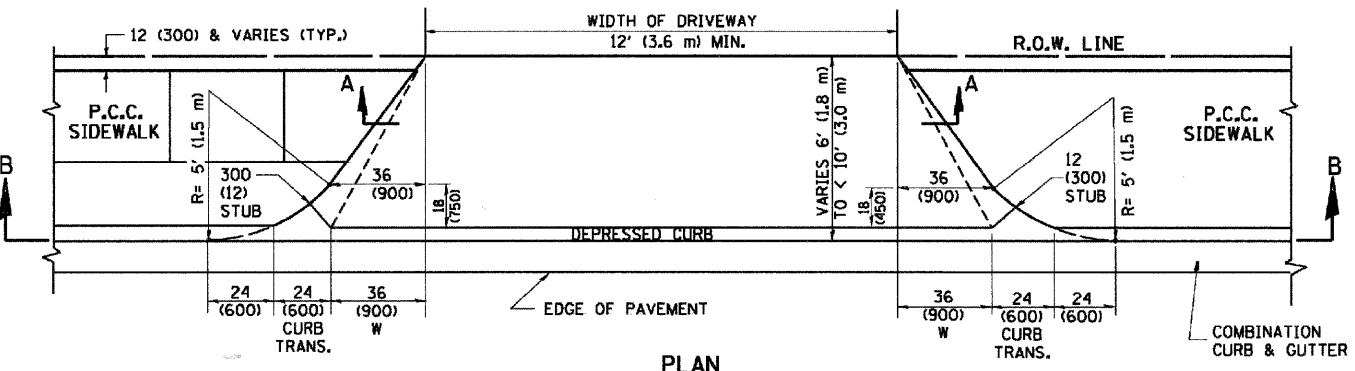
DRAWN BY RG  
CHECKED BY JMN

FAU. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-PP	WILL	71	60
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

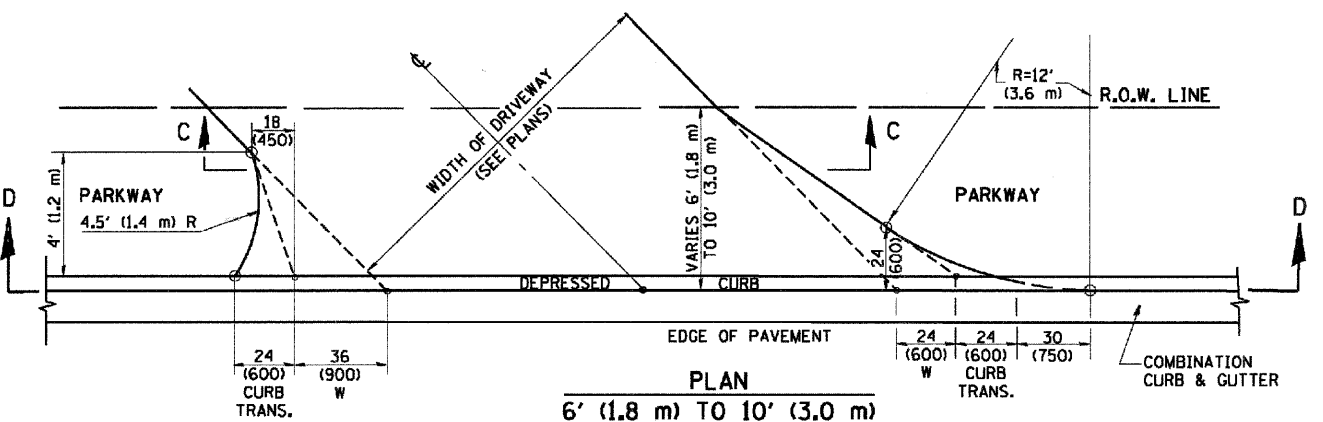
CONTRACT NO. 83956



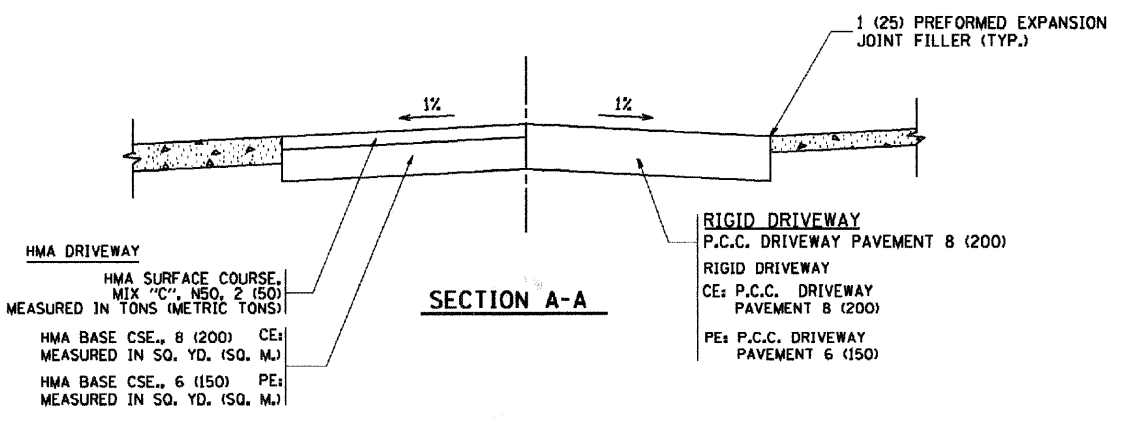
PLAN  
10' (3.0 m) TO < 15' (4.5 m)



PLAN  
6' (1.8 m) TO < 10' (3.0 m)

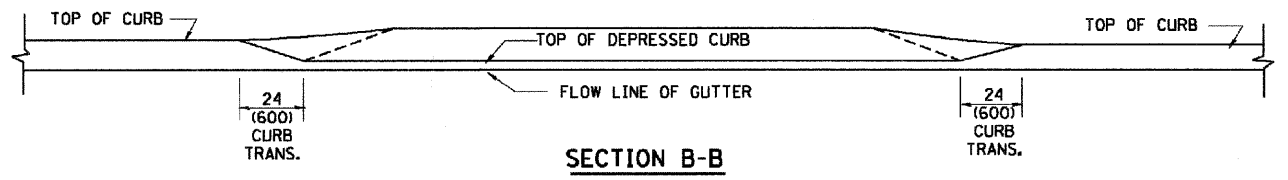


PLAN  
6' (1.8 m) TO 10' (3.0 m)

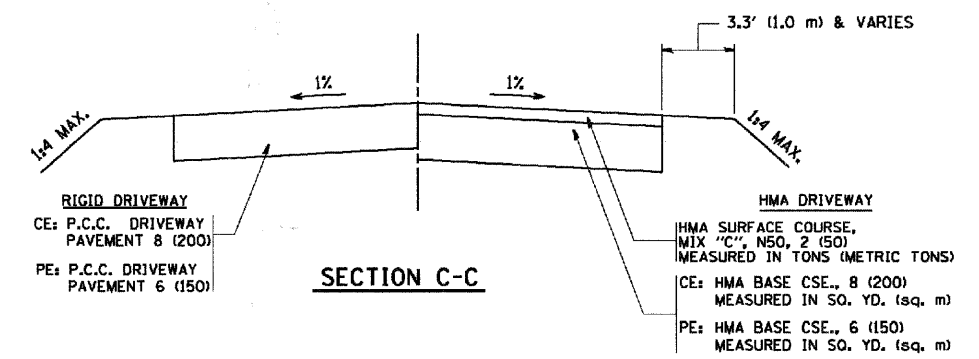


HMA DRIVEWAY  
HMA SURFACE COURSE, MIX "C", NSO, 2 (50) MEASURED IN TONS (METRIC TONS)  
HMA BASE CSE., 8 (200) CE: MEASURED IN SQ. YD. (SQ. M.)  
HMA BASE CSE., 6 (150) PE: MEASURED IN SQ. YD. (SQ. M.)

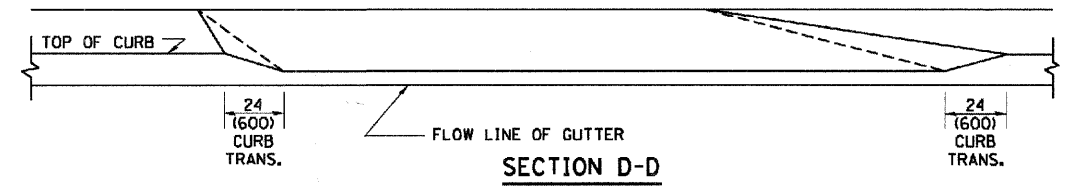
RIGID DRIVEWAY  
P.C.C. DRIVEWAY PAVEMENT 8 (200)  
RIGID DRIVEWAY CE: P.C.C. DRIVEWAY PAVEMENT 8 (200)  
PE: P.C.C. DRIVEWAY PAVEMENT 6 (150)



SECTION B-B



SECTION C-C



SECTION D-D

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.

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DRIVEWAY DETAILS  
DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)

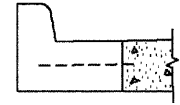
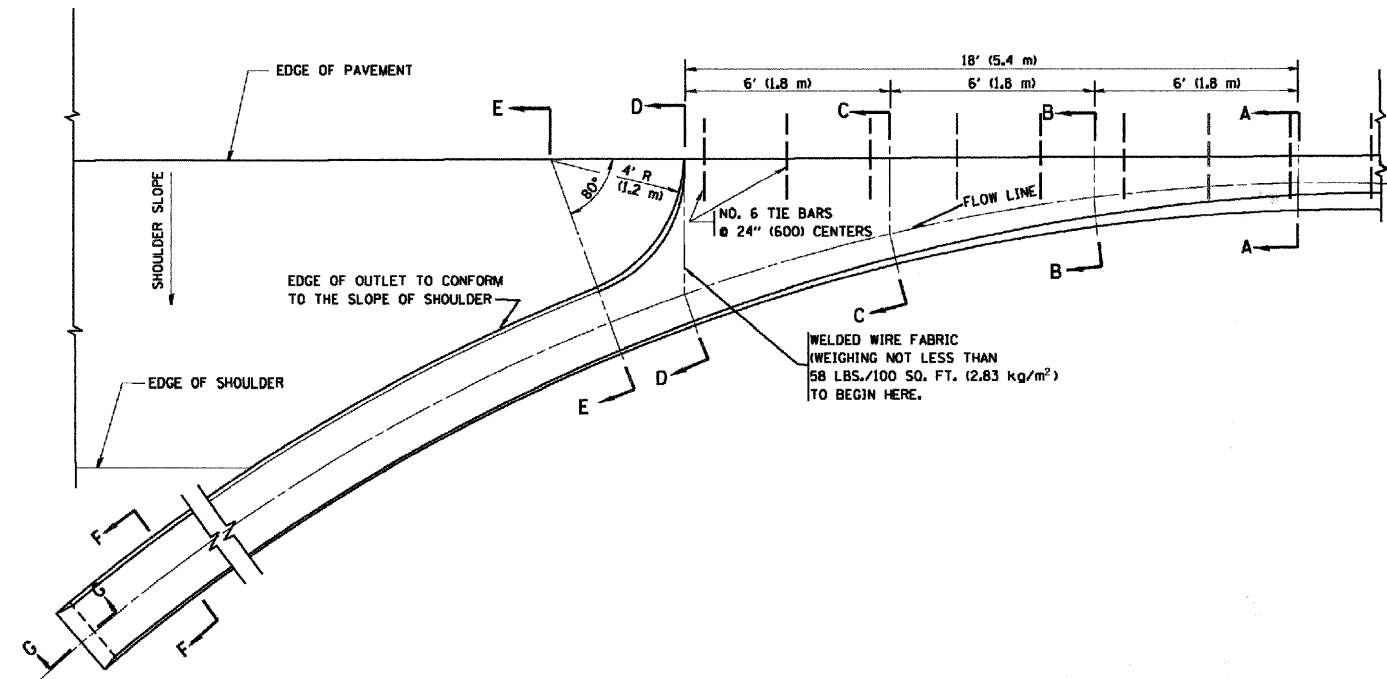
REVISIONS	
NAME	DATE
R. SHAH	11/06/95
J. POLLASTRINI	08/12/96
J. POLLASTRINI	12/14/96
A. ABBAS	03/21/97
T. HOLTZ	04/08/97
M. GOMEZ	04/06/01
P. LaFLEUR	04/15/03
R. BORO	01/01/07

SCALE: VERT. NONE  
HORIZ.

DRAWN BY  
CHECKED BY

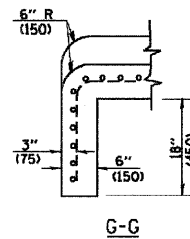
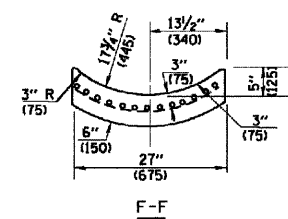
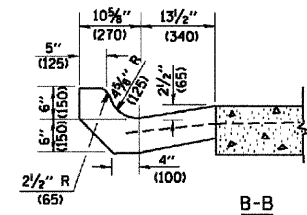
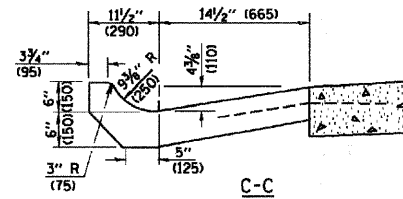
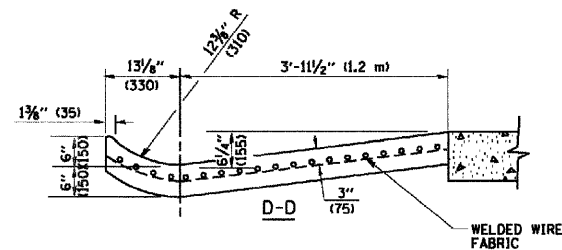
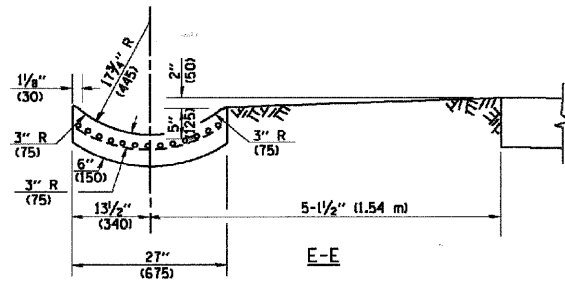
FAU. RFE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	61
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



A-A \*

\* DIMENSIONS OF THE CURB & GUTTER AT SECTION A-A ARE SHOWN ON STATE STANDARD 606001. FOR DETAILS OF OUTLET FOR CONCRETE CURB & GUTTER, TYPE B-6.24 (B-15.60) SEE STATE STANDARD 606006.



**GENERAL NOTES**

GUTTER OUTLET SHALL BE TIED TO THE PAVEMENT IN ACCORDANCE WITH DETAILS FOR LONGITUDINAL CONSTRUCTION JOINT SHOWN ON STANDARD 420001.

TIE BARS SHALL BE NO. 20 (NO.6) AT 24" (600) CENTERS UNLESS OTHERWISE SHOWN.

IF THE AVERAGE GRADE OF PAVEMENT FOR THE DISTANCE FROM SECTION A-A TO D-D EXCEEDS 2%, THIS DISTANCE SHALL BE INCREASED 6' (1.8 m) FOR EACH 1% INCREASE IN GRADE.

**QUANTITIES**

FOR SECTION A-A TO E-E AND CURTAIN WALL= 1.25 CU. YDS. (0.96 m<sup>3</sup>) CLASS S1 CONCRETE (OUTLET) FOR 9" (225) PAV'T. 1.27 CU. YDS. (0.96 m<sup>3</sup>) CLASS S1 CONCRETE (OUTLET) FOR 10" (250) PAV'T. FOR SECTION F-F= 0.045 CU. YDS. (0.03 m<sup>3</sup>) CLASS S1 CONCRETE PER FT. (m).

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

REVISIONS	
NAME	DATE
M. DE YONG	8/4/86
R. SHAH	09/09/94
R. SHAH	10/25/94
E. GOMEZ	12/21/00

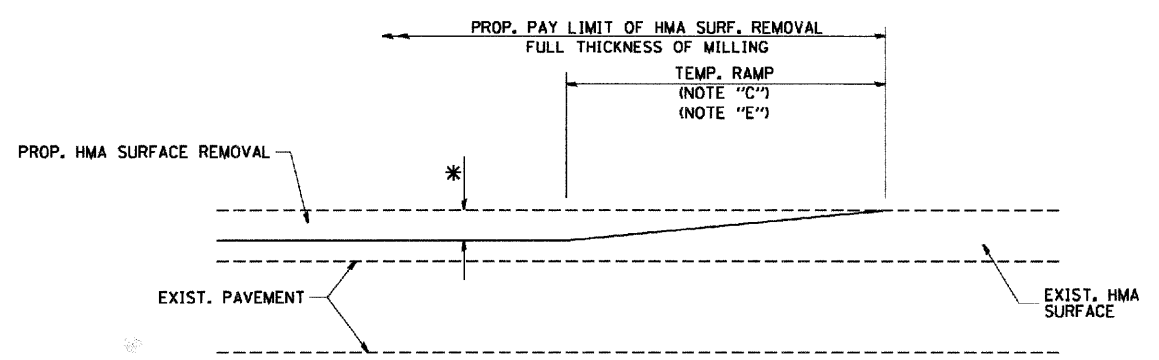
ILLINOIS DEPARTMENT OF TRANSPORTATION

**OUTLET FOR CONCRETE CURB AND GUTTER**

SCALE: VERT. NONE  
HORIZ.

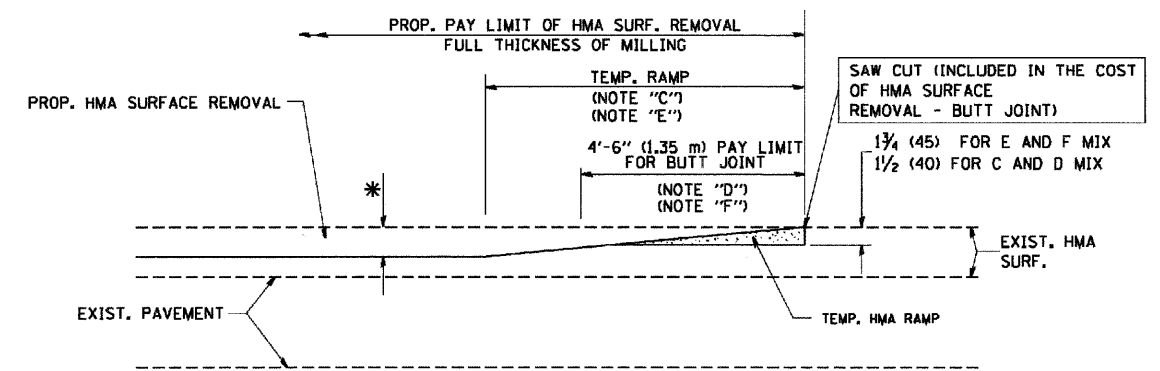
DRAWN BY  
CHECKED BY

CONTRACT NO. 83956



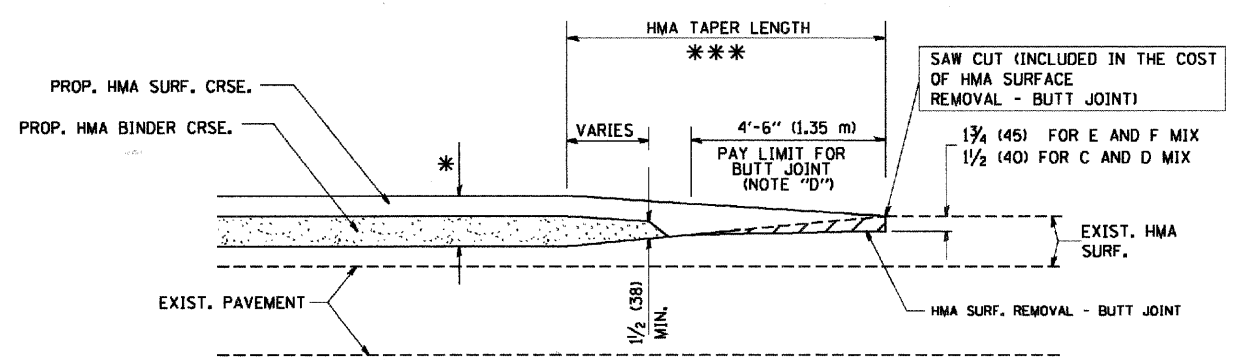
MILLED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1



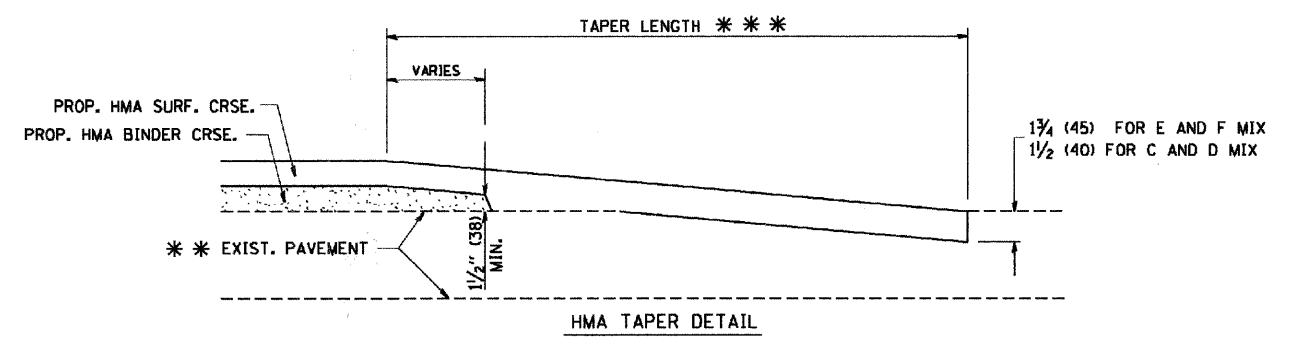
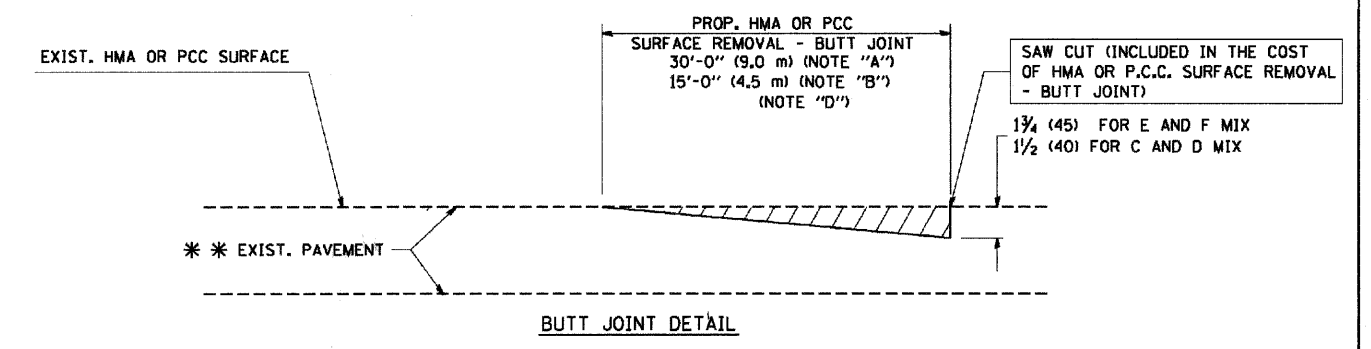
HMA CONSTRUCTED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2  
TYPICAL TEMPORARY RAMP



BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER  
FOR MILLING AND RESURFACING



TYPICAL BUTT JOINT AND HMA TAPER  
FOR RESURFACING ONLY

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

NOTES

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

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

BASIS OF PAYMENT:

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

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

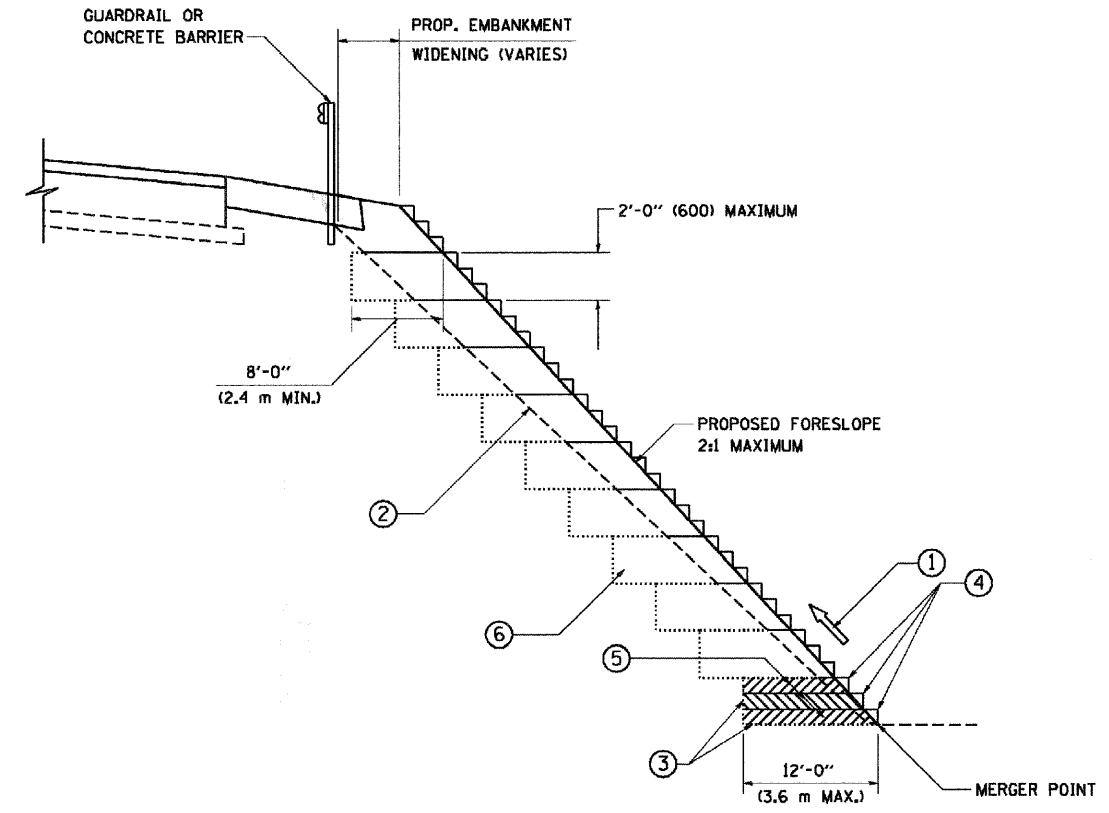
BUTT JOINT AND HMA TAPER  
DETAILS

SCALE: VERT. NONE  
HORIZ.

DRAWN BY  
CHECKED BY

F.A.I. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-PP	WILL	71	63
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956



TYPICAL BENCHING DETAIL FOR EMBANKMENT

NOTES:

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

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

REVISIONS	
NAME	DATE
	06/16/04

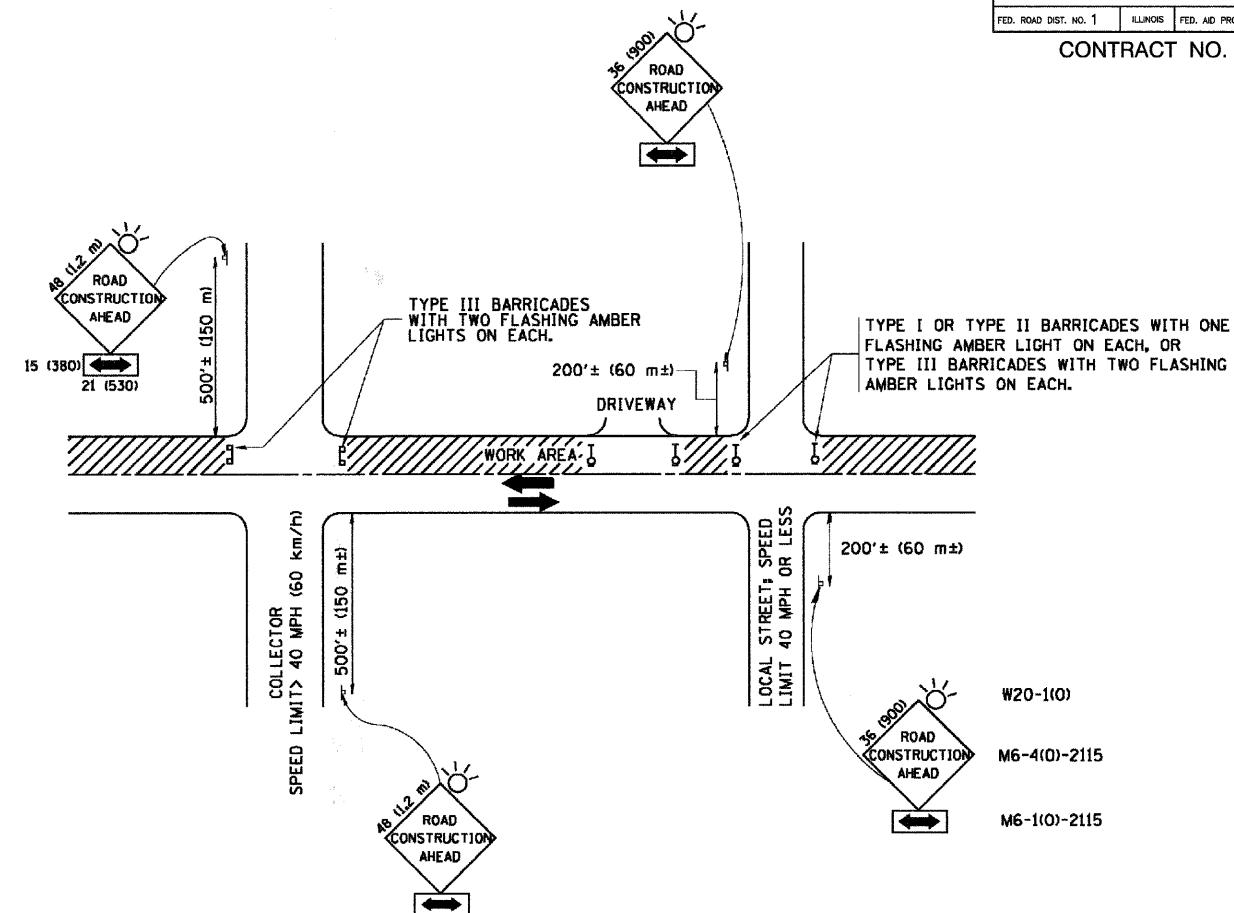
ILLINOIS DEPARTMENT OF TRANSPORTATION  
BENCHING DETAIL FOR EMBANKMENT WIDENING

SCALE: VERT. NONE  
HORIZ.

DRAWN BY: CADD  
CHECKED BY: S.E.B.

FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	64
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83956



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

#### NOTES:

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

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

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

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

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

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

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

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

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

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

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

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

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

REVISIONS	
NAME	DATE
LHA	6/789
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION  
TRAFFIC CONTROL AND PROTECTION  
FOR  
SIDE ROADS, INTERSECTIONS, AND  
DRIVEWAYS

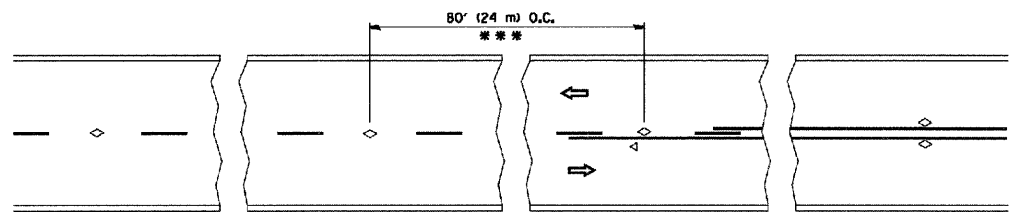
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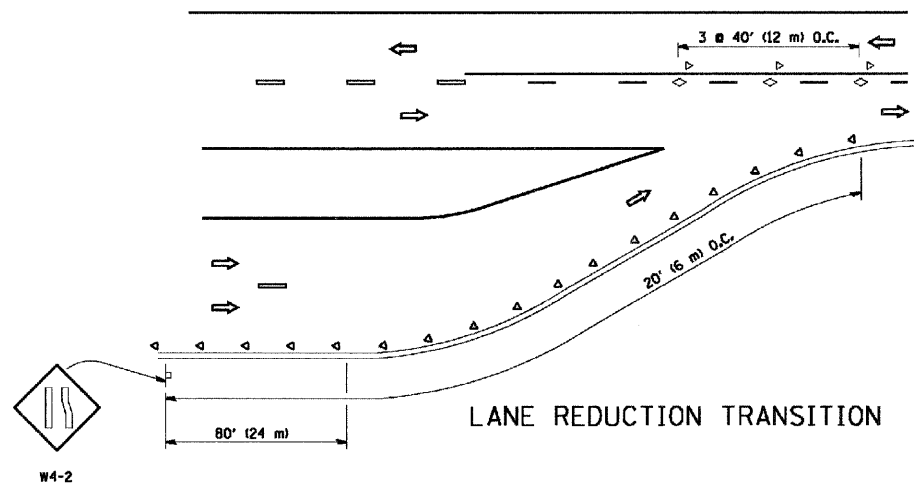
CHECKED BY

TC-10

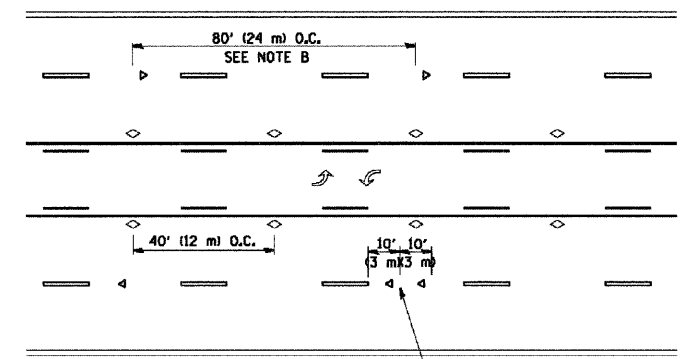




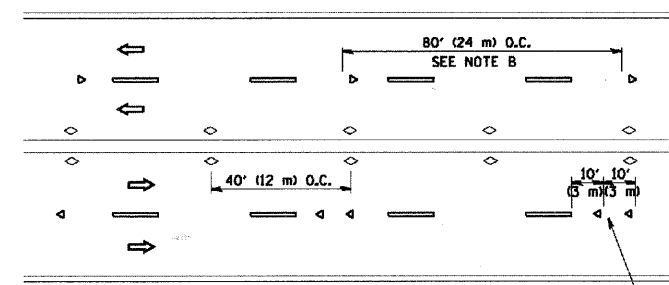
TWO-LANE/TWO-WAY



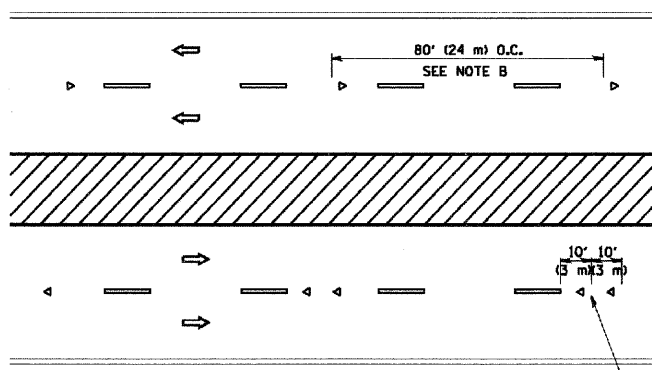
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

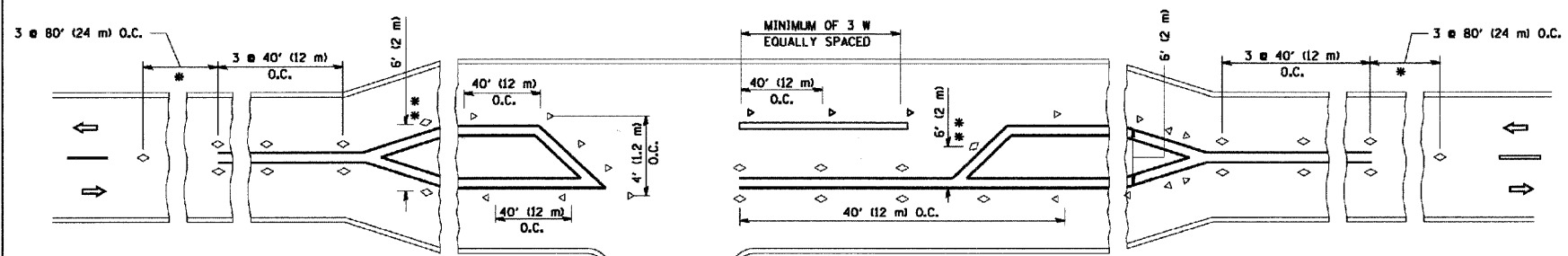
- YELLOW STRIPE
- WHITE STRIPE
- ◁ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/D)
- ◇ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H. (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
 \*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

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

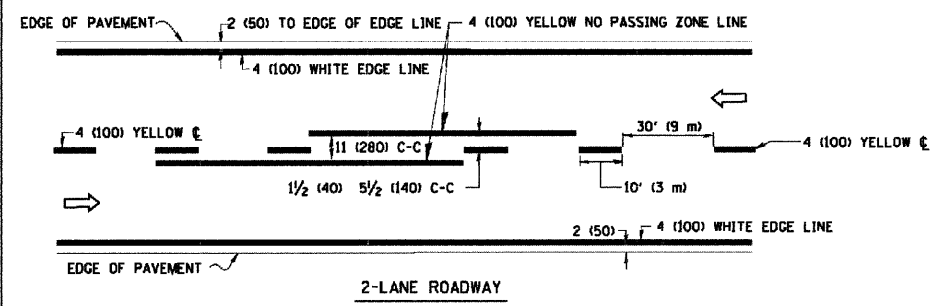
REVISIONS	
NAME	DATE
T. RAMMACHER	09-19-94
T. RAMMACHER	03-12-99
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 TYPICAL APPLICATIONS  
 RAISED REFLECTIVE PAVEMENT  
 MARKERS (SNOW-PLOW RESISTANT)

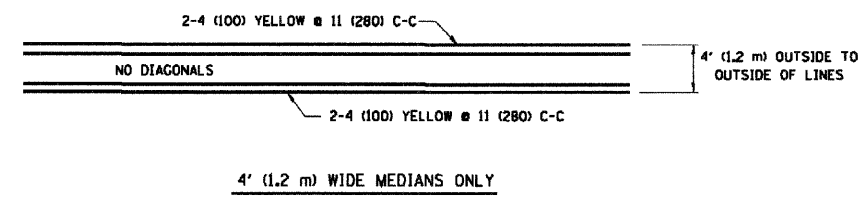
SCALE: NONE

DRAWN BY CADD  
 CHECKED BY

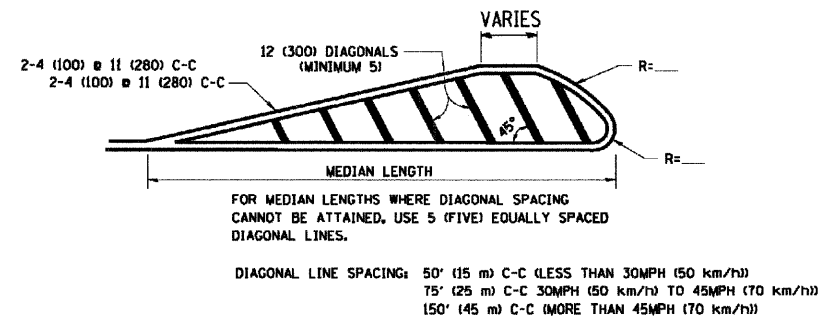
CONTRACT NO. 83956



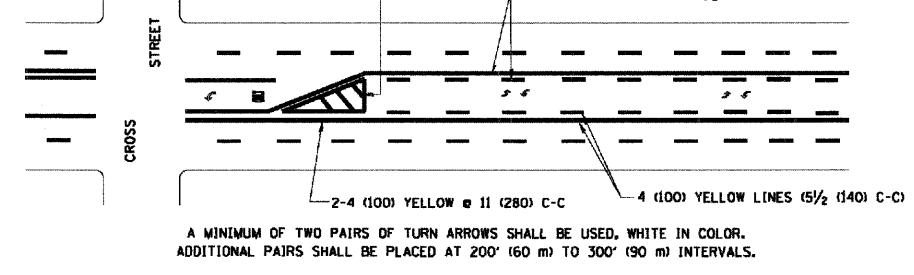
2-LANE ROADWAY



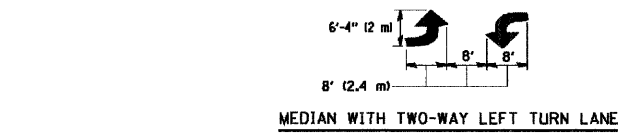
4' (1.2 m) WIDE MEDIANS ONLY



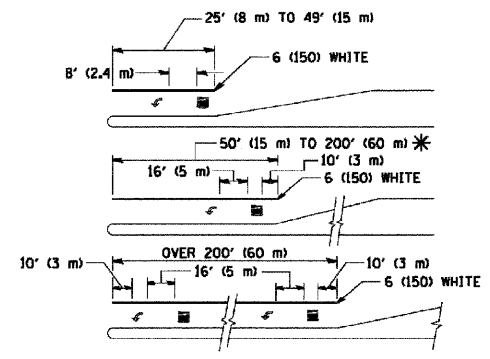
MEDIANS OVER 4' (1.2 m) WIDE



TYPICAL PAINTED MEDIAN MARKING



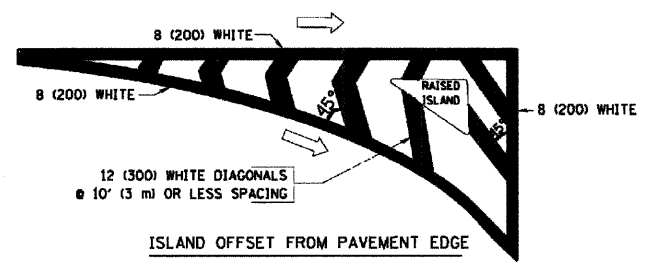
TYPICAL PAINTED MEDIAN MARKING



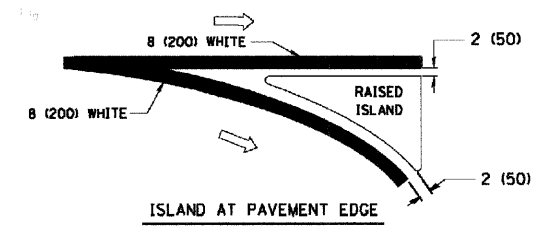
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
 \* AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
 \* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



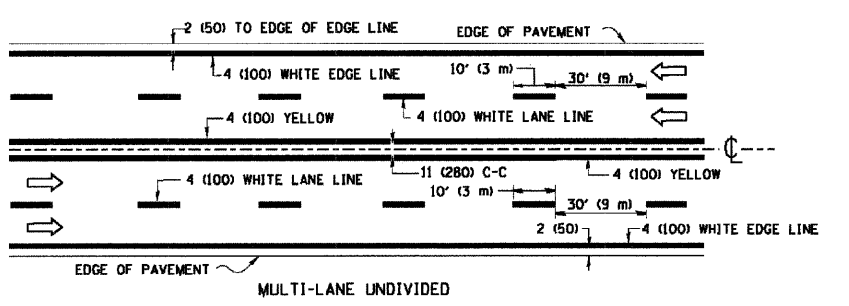
ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

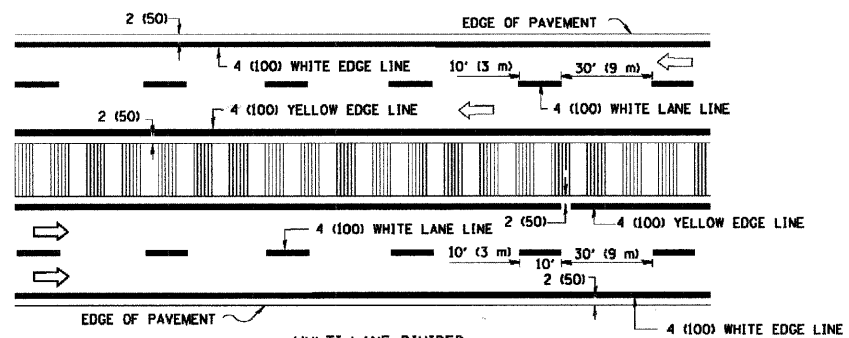
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES; FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100)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

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

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



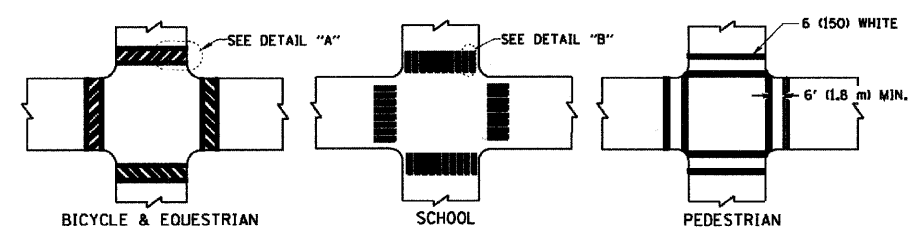
MULTI-LANE UNDIVIDED



MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

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

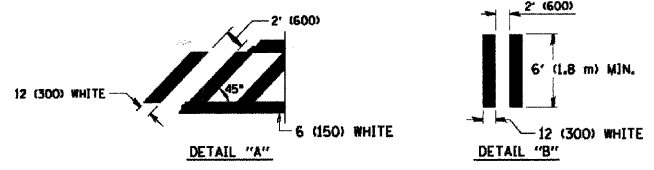
TYPICAL LANE AND EDGE LINE MARKING



BICYCLE & EQUESTRIAN

SCHOOL

PEDESTRIAN



TYPICAL CROSSWALK MARKING

REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DISTRICT ONE  
 TYPICAL PAVEMENT MARKINGS

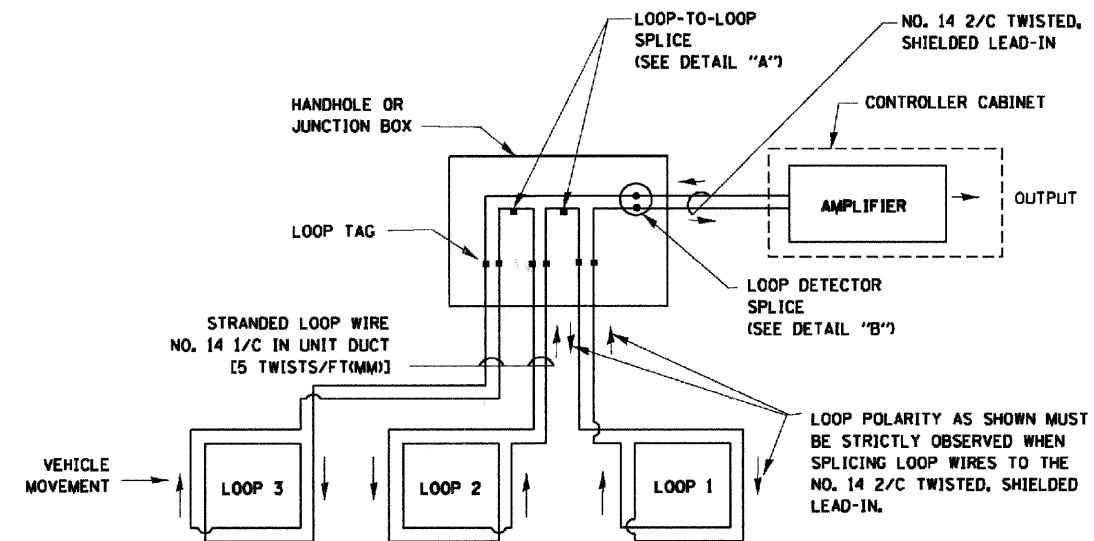
SCALE: NONE

DRAWN BY CADD  
 CHECKED BY

TC-13

### LOOP DETECTOR NOTES

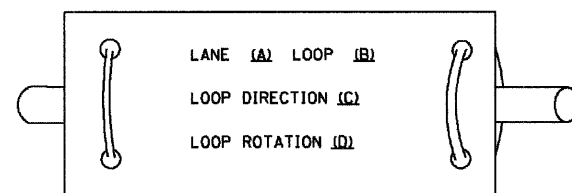
- EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED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



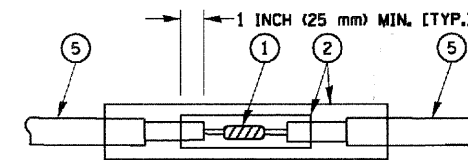
DETECTOR LOOP WIRING SCHEMATIC

- 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.

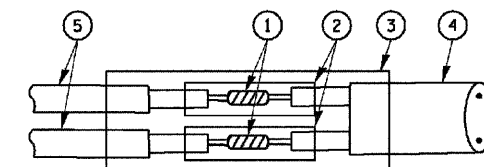
LOOP LEAD-IN CABLE TAG



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



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

#### LOOP DETECTOR SPLICE

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

REVISIONS	
NAME	DATE
CADD	5/30/00
ADD NOTE NO. 8	11/12/01
BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT ONE  
STANDARD TRAFFIC SIGNAL  
DESIGN DETAILS

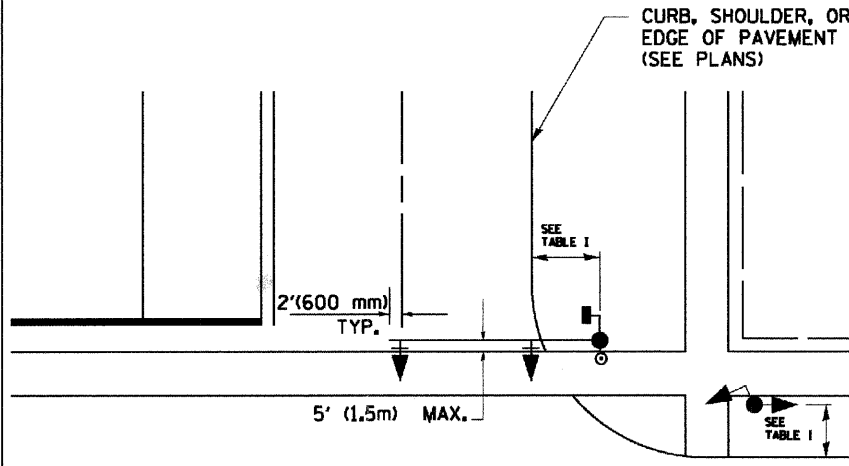
SCALE: NONE

DRAWN BY: RWP  
DESIGNED BY: DAD  
CHECKED BY: DAZ  
SHEET 1 OF 4

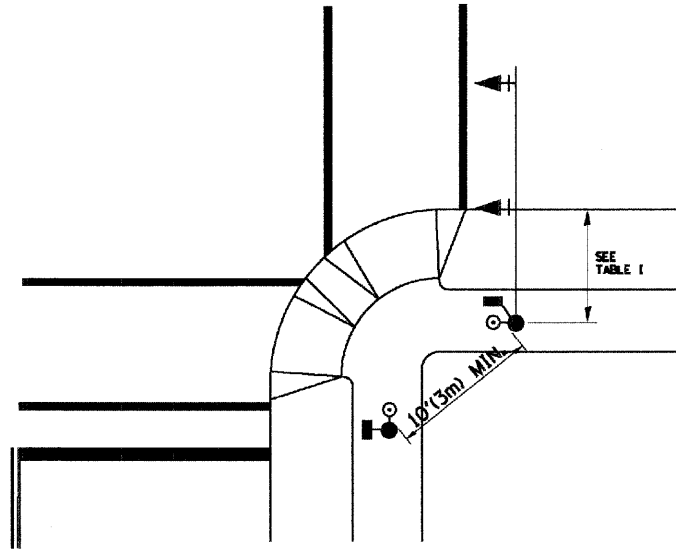
CONTRACT NO. 83956

**TRAFFIC SIGNAL MAST ARM AND POST**

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



**PEDESTRIAN SIGNAL PUSHBUTTON**



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

**NOTES:**

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.  
 AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.  
 PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:  
 A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.  
 B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.  
 C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.  
 D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).  
 E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

**PEDESTRIAN SIGNAL POST**

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

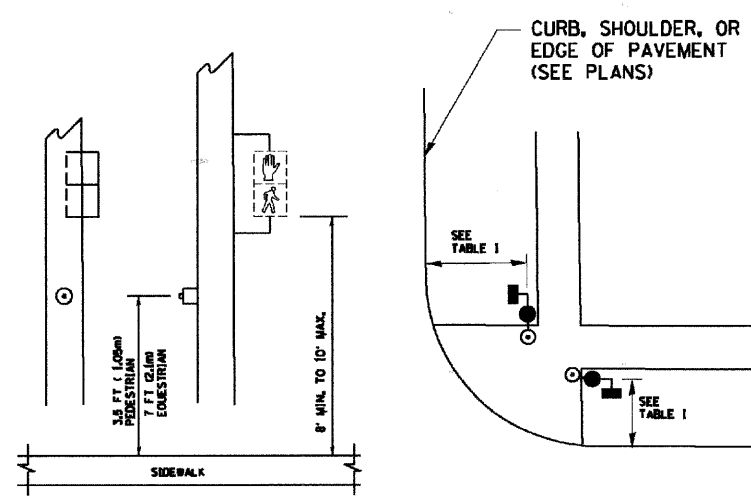


TABLE I

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

REVISIONS	
NAME	DATE
BUREAU OF TRAFFIC	1/01/02

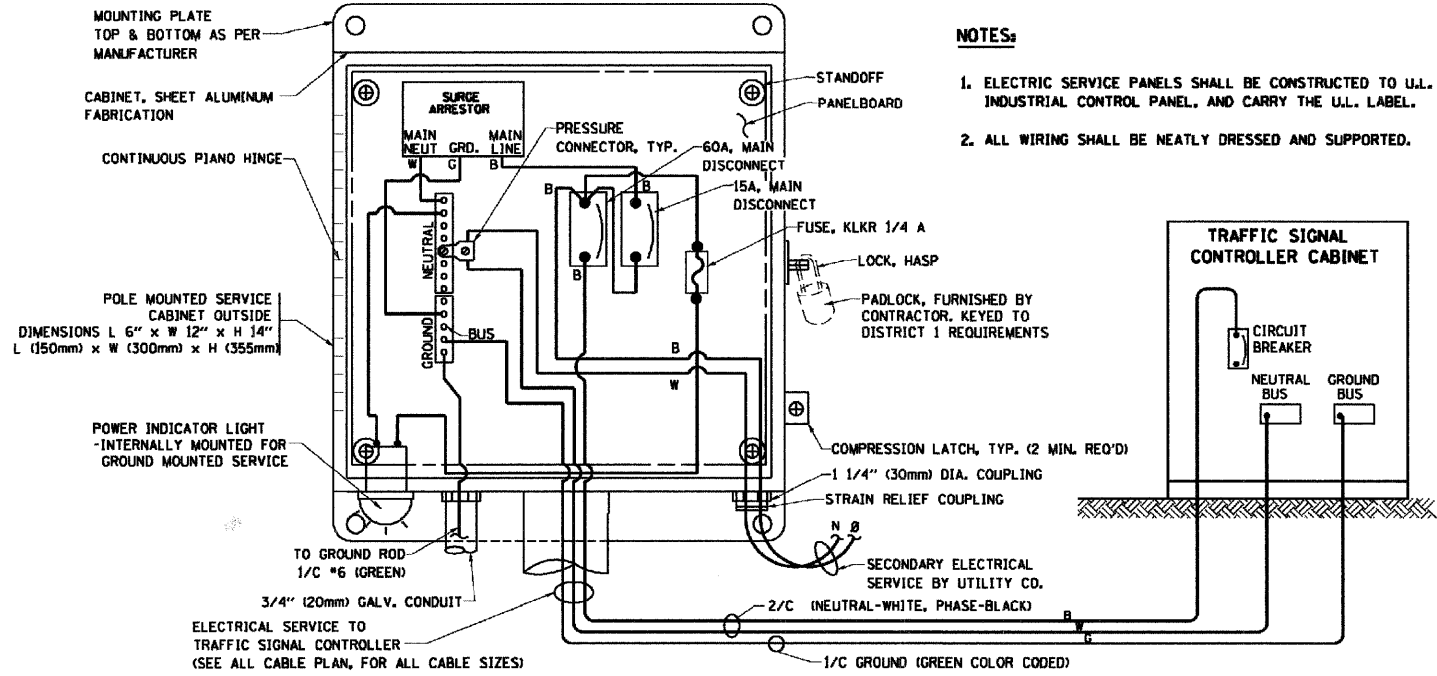
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DISTRICT 1  
 STANDARD TRAFFIC SIGNAL  
 DESIGN DETAILS

SCALE: NONE

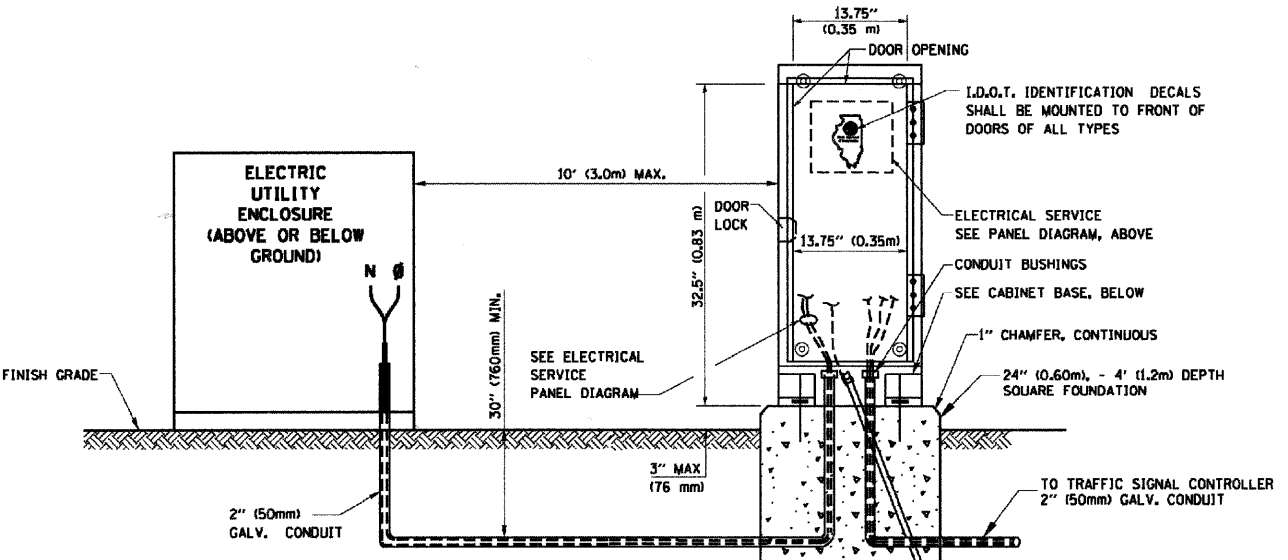
DRAWN BY: RWP  
 DESIGNED BY: DAD  
 CHECKED BY: DAZ  
 SHEET 2 OF 4

FAU. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	69
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

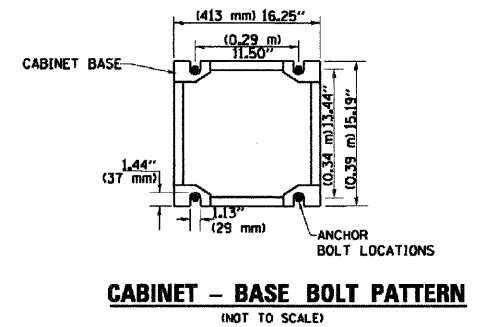
CONTRACT NO. 83956



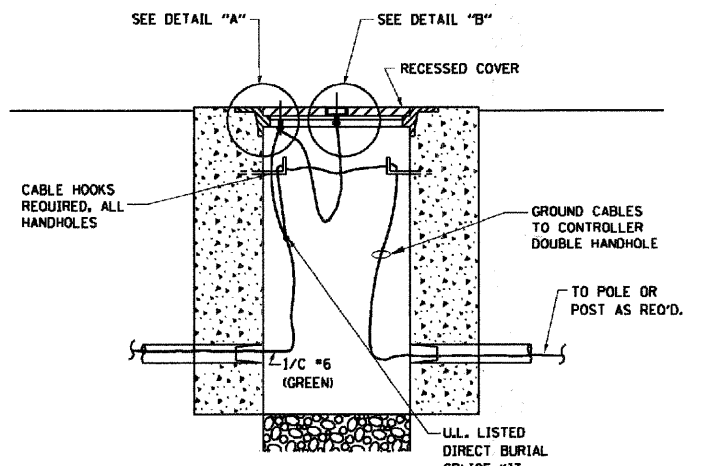
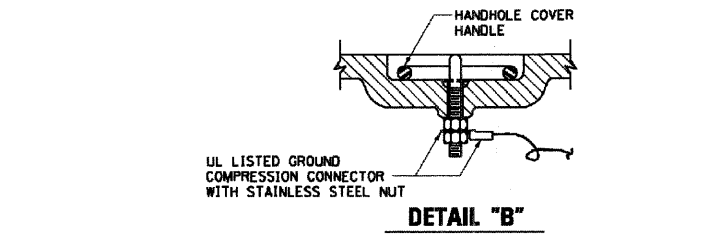
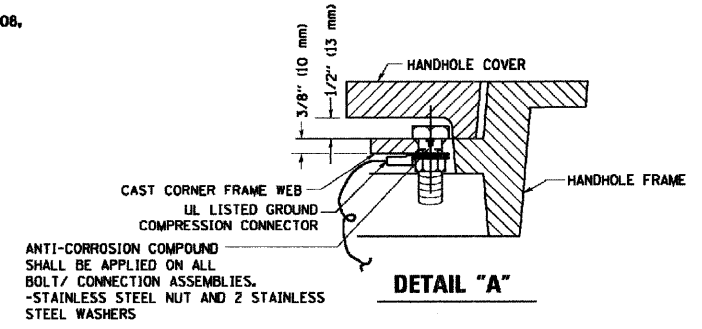
**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**  
SERVICE INSTALLATION POLE MOUNT (SHOWN)  
(NOT TO SCALE)



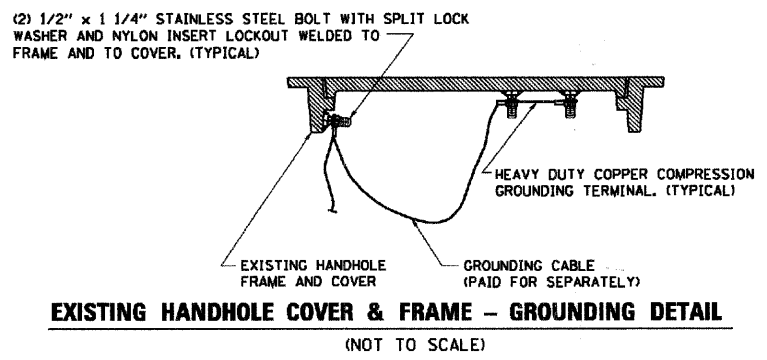
**SERVICE INSTALLATION GROUND MOUNT**  
(NOT TO SCALE)



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



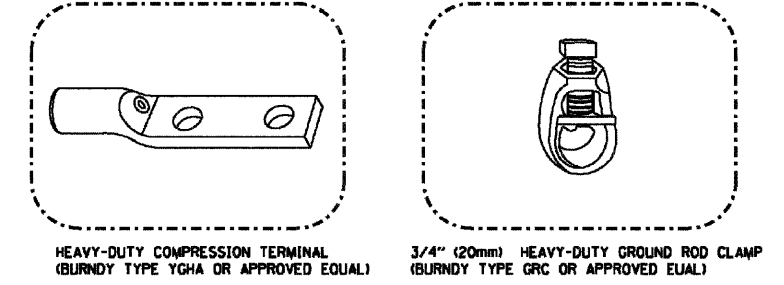
**HANDHOLE COVER & FRAME - GROUNDING DETAIL**  
(NOT TO SCALE)



**NOTES:**

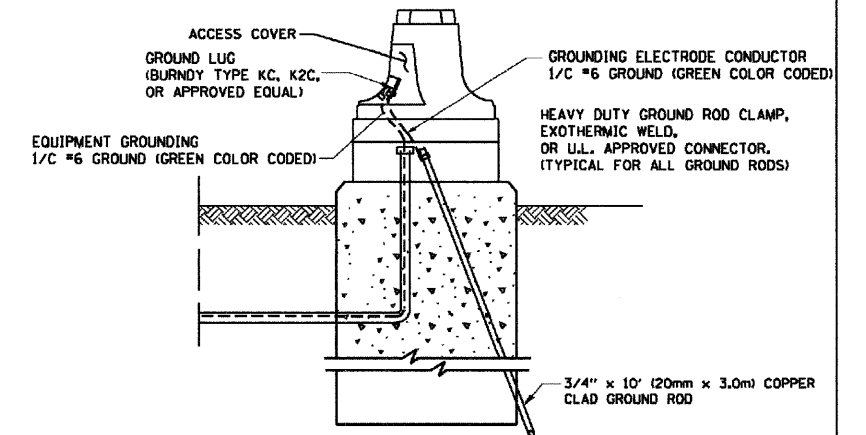
**GROUNDING SYSTEM**

- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD, ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
- THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



**NOTES:**

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



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

REVISIONS	
NAME	DATE
CADD	5/30/00
CADD	3/15/01
BUREAU OF TRAFFIC	1/01/02

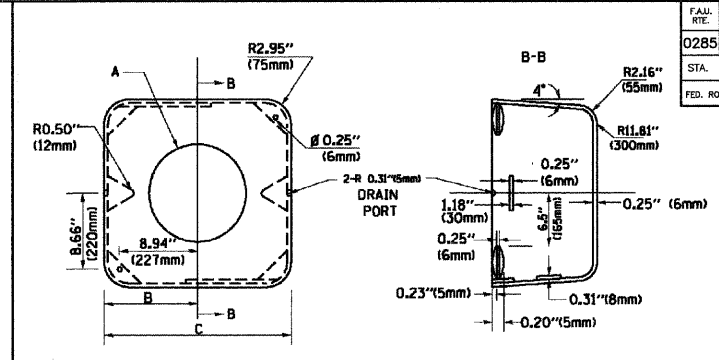
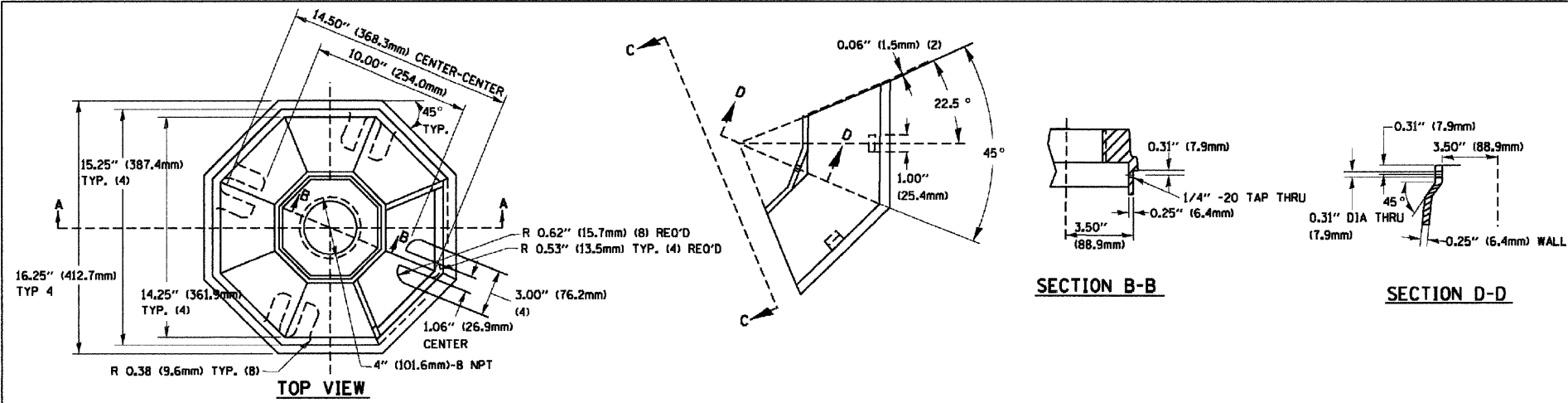
ILLINOIS DEPARTMENT OF TRANSPORTATION  
**DISTRICT ONE**  
STANDARD TRAFFIC SIGNAL  
DESIGN DETAILS

SCALE: NONE

DRAWN BY: RWP  
DESIGNED BY: DAD  
CHECKED BY: DAZ  
SHEET 3 OF 4

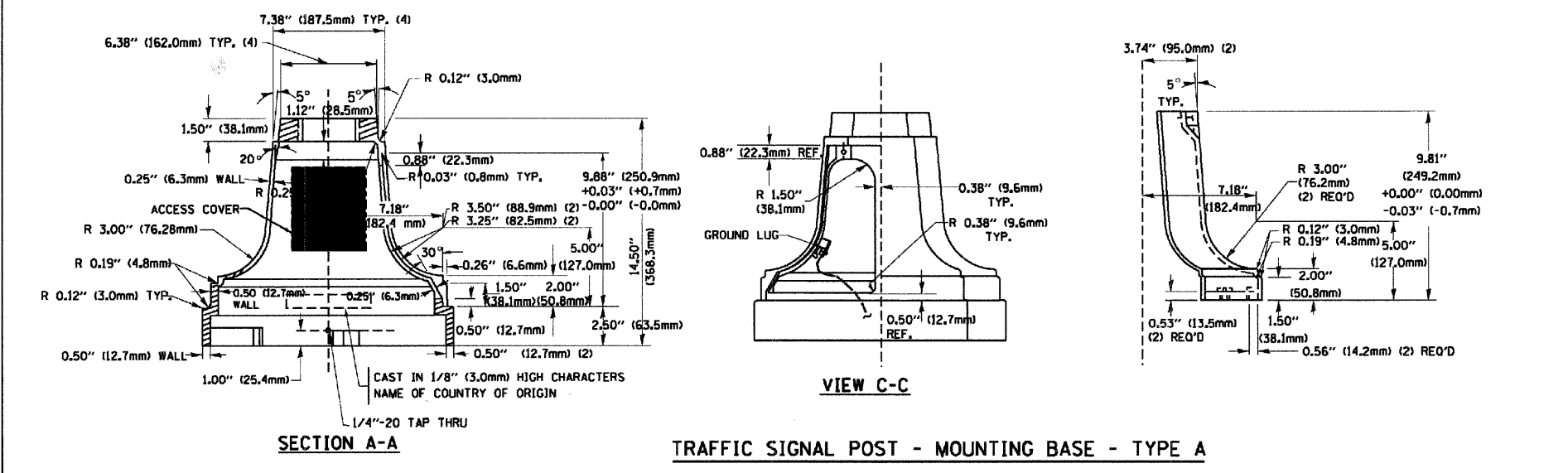
CONTRACT NO. 83956

MATERIAL:  
 - ASTM A48 CLASS 30 GREY IRON  
 - ASTM A123 HOT DIPPED GALVANIZED

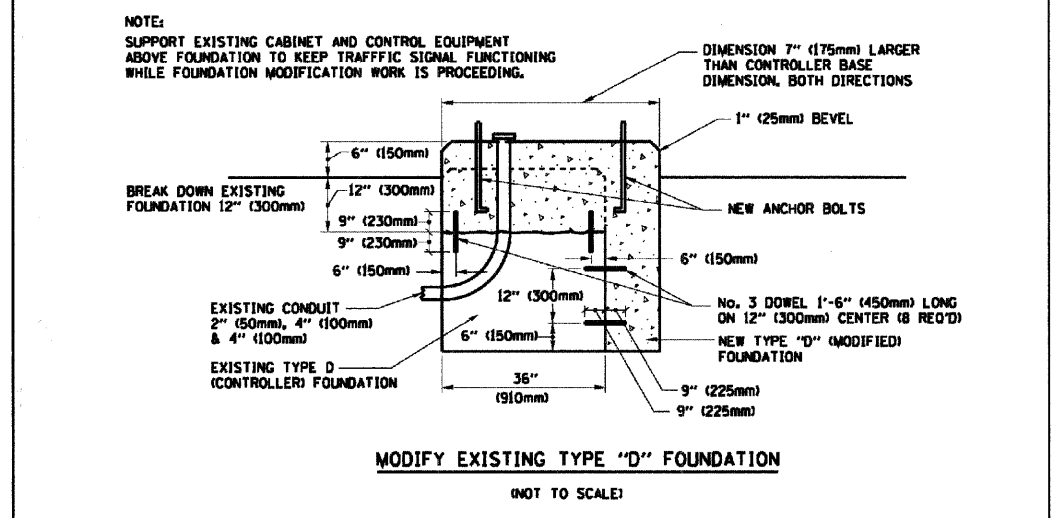


TYPE	A	B	C	HEIGHT	WEIGHT
I	Ø 10.125\" (257mm)	9.5\" (241mm)	19\" (483mm)	12\" (300mm)	24kg
II	Ø 11.125\" (283mm)	10.75\" (273mm)	21.5\" (546mm)	12\" (300mm)	26kg

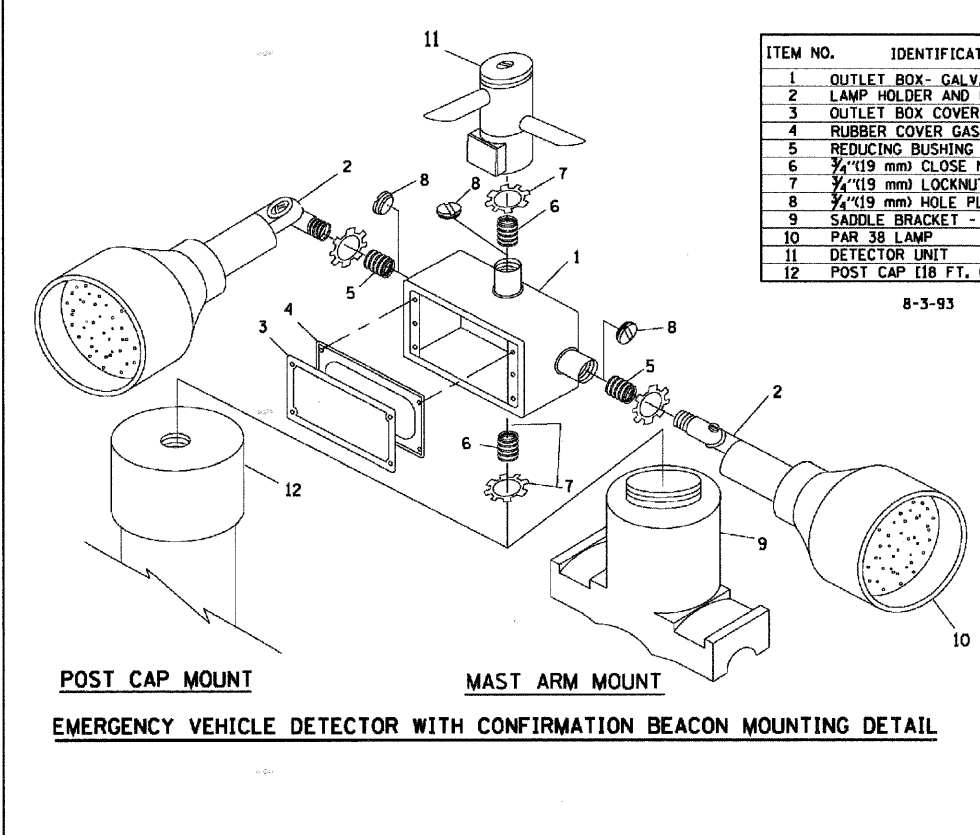
SHROUD DETAIL



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

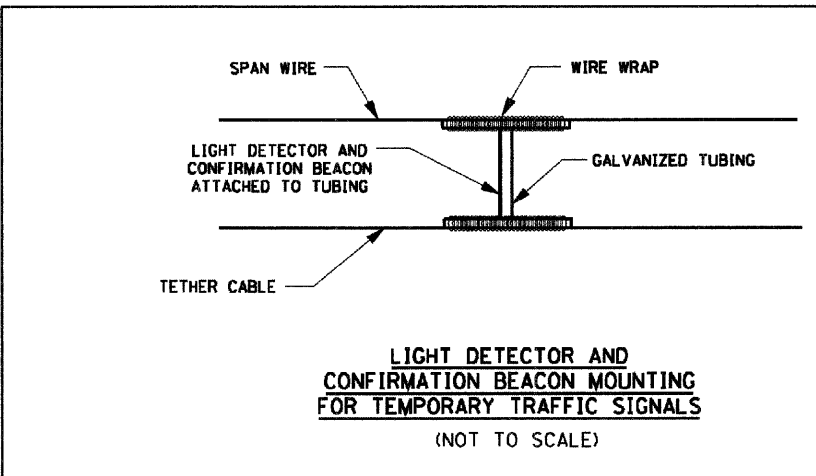


MODIFY EXISTING TYPE "D" FOUNDATION

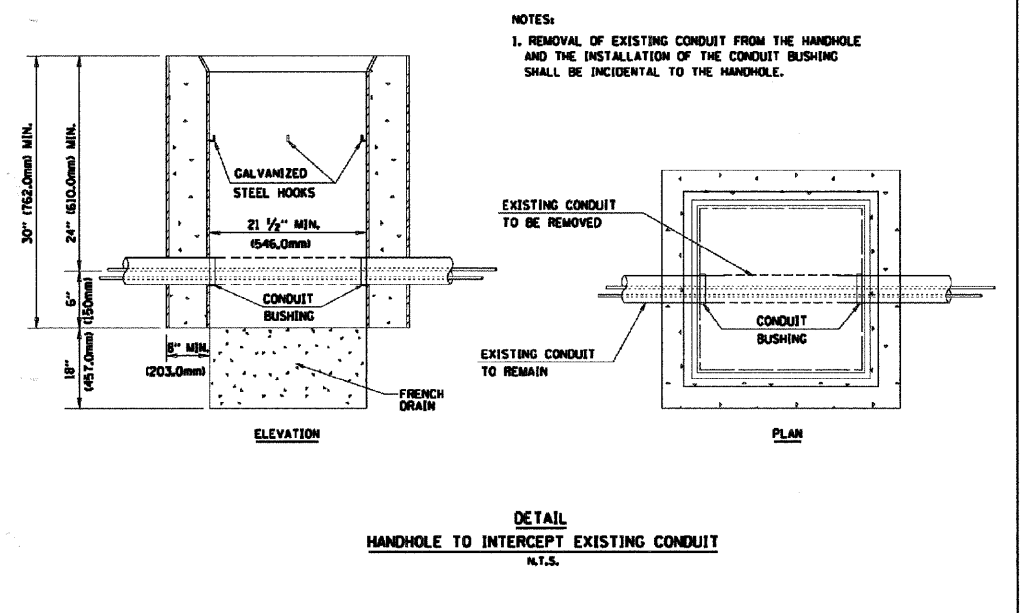


ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU. IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\" (19 mm) CLOSE NIPPLE
7	3/4\" (19 mm) LOCKNUT
8	3/4\" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP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



LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS (NOT TO SCALE)



REVISIONS	
NAME	DATE
BUREAU OF TRAFFIC	5/30/00
BUREAU OF TRAFFIC	3/15/01
BUREAU OF TRAFFIC	11/12/01
BUREAU OF TRAFFIC	1-01-02

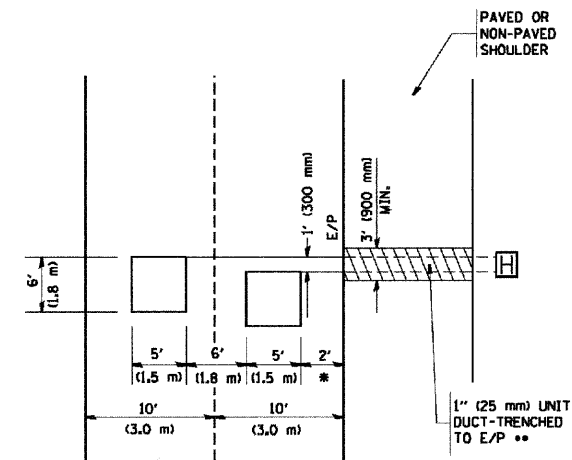
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DISTRICT ONE  
 STANDARD TRAFFIC SIGNAL  
 DESIGN DETAILS  
 SCALE: NONE  
 DRAWN BY: RWP  
 DESIGNED BY: DAD  
 CHECKED BY: DAZ  
 SHEET 4 OF 4  
 TS05

F.A.I. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0285	01-00052-00-FP	WILL	71	71
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83956

**LOOPS NEXT TO SHOULDERS**

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.

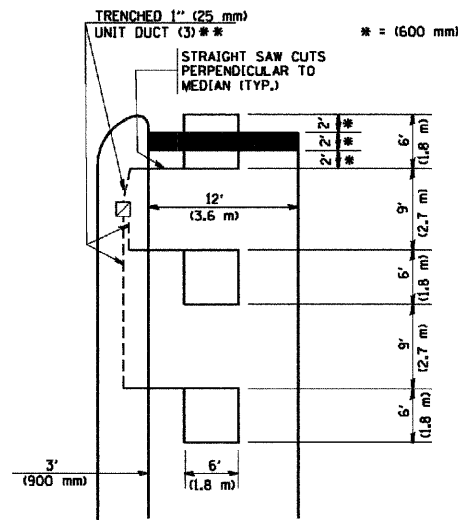


\* = (600 mm)

\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

**LEFT TURN LANES WITH MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH  
(PROTECTED / PERMITTED LEFT TURN PHASING)**

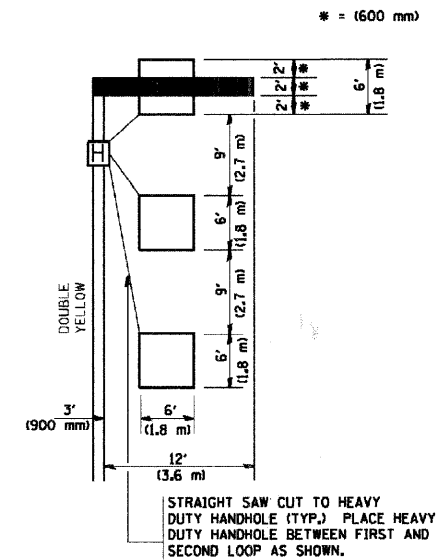
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

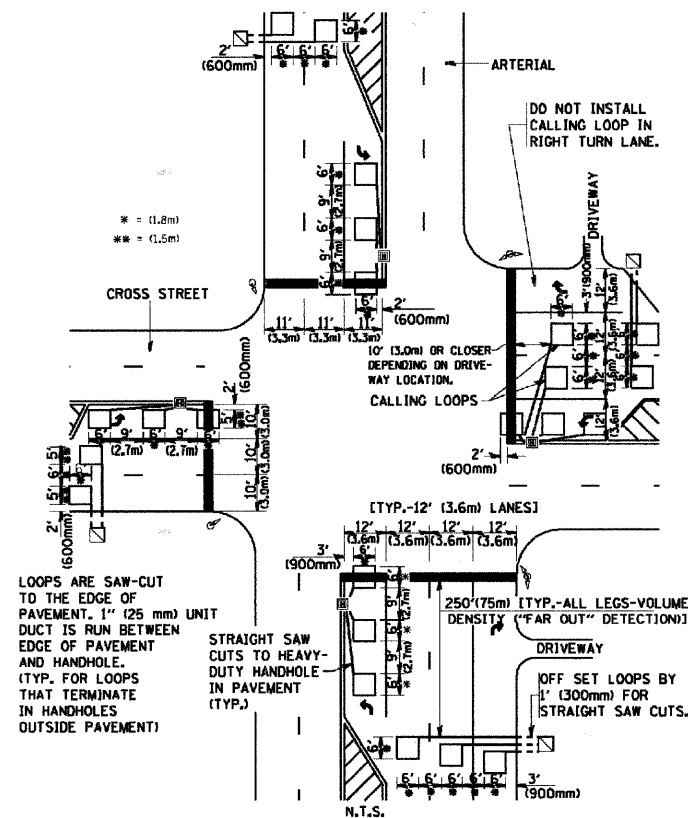
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**LEFT TURN LANES WITHOUT MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH  
(PROTECTED / PERMITTED LEFT TURN PHASING)**



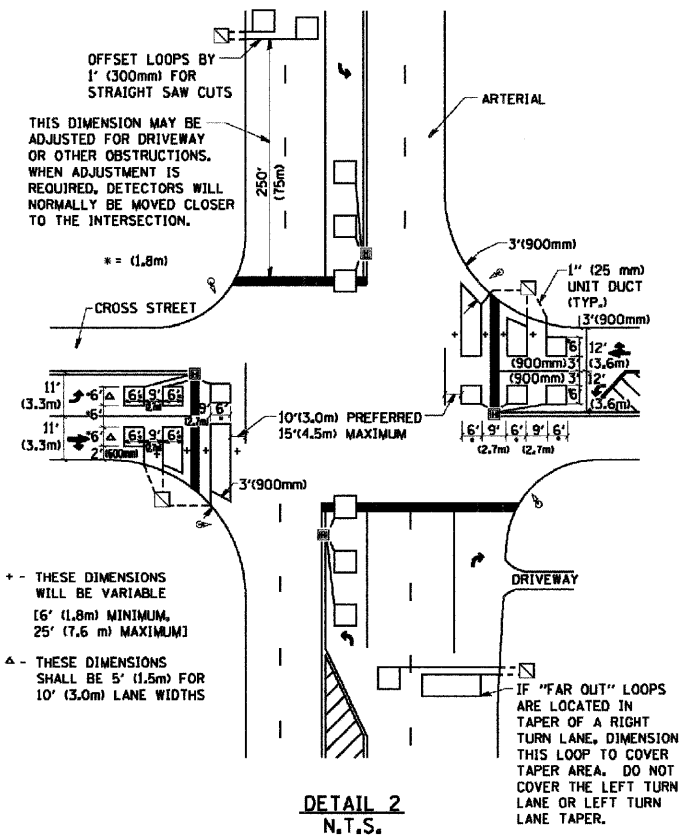
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



DETAIL 1  
N.T.S.

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



DETAIL 2  
N.T.S.

**NOTES:**

**VEHICLES LOOP DETECTORS**

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

**PLACEMENT OF DETECTORS**

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

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

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

**NOTE:**

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

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT 1  
DETECTOR LOOP  
INSTALLATION DETAILS  
FOR ROADWAY RESURFACING  
DESIGNED BY  
DRAWN BY CADD  
CHECKED BY R.K.J.  
TS07