

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	1
FED. ROAD DIST. NO. 1 ILLINOIS		FED. AID PROJECT		

CONTRACT NO.: 83738

FOR INDEX OF SHEETS, SEE SHEET NO. 2

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

## PLANS FOR PROPOSED FEDERAL AID PROJECT

FAP 336 ORCHARD ROAD AT FAU 1542 JERICO ROAD  
INTERSECTION IMPROVEMENTS  
SECTION 99-00232-00-WR  
PROJECT NO. F-CMF-0336(005)  
JOB NO. C-91-142-99  
KANE COUNTY



**DESIGN DESIGNATION:**

**FUNCTIONAL CLASSIFICATION:**

ORCHARD ROAD - FAP 336 - OTHER PRINCIPAL ARTERIAL (SRA)  
JERICO ROAD - FAU 1542 - MINOR ARTERIAL

**DESIGN TRAFFIC:**

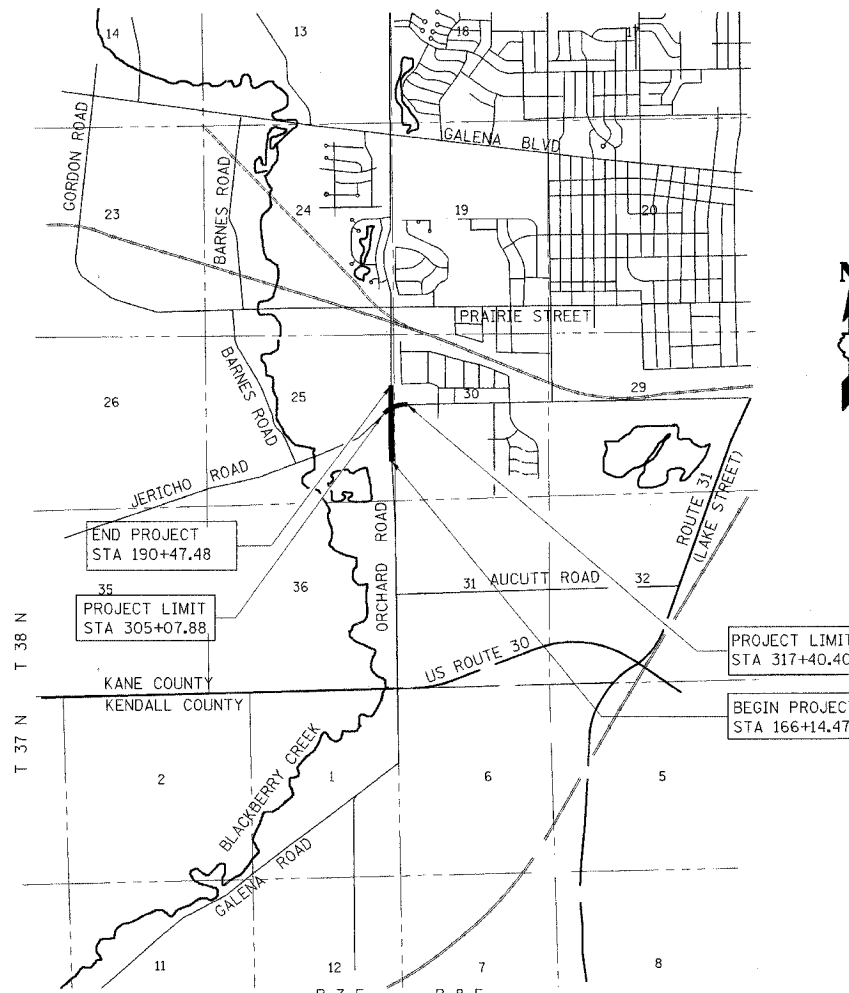
	ADT	DHV	% TRUCKS	
ORCHARD ROAD	38,000	3,195	6.5	AUCUTT ROAD TO JERICO ROAD
	37,000	3,195	6	NORTH OF JERICO ROAD
JERICO ROAD	5,000	895	2	WEST LEG
	10,000	810	6	EAST LEG

**POSTED SPEED:**

ORCHARD ROAD - 45 MPH  
JERICO ROAD - 45 MPH (WEST LEG)  
30 MPH (EAST LEG)

**DESIGN SPEED:**

ORCHARD ROAD - 45 MPH  
JERICO ROAD - 45 MPH



**LOCATION MAP**

NET LENGTH = 3666 FT = 0.69 MILES  
ORCHARD ROAD = 2433 FT. = 0.46 MILES  
JERICO ROAD = 1233 FT = 0.23 MILES

**DESCRIPTION OF PROJECT:**

THIS PROJECT CONSISTS OF THE REALIGNMENT AND RECONSTRUCTION OF THE ORCHARD ROAD/JERICO ROAD INTERSECTION, INCLUDING REPLACEMENT AND INSTALLATION OF NEW TRAFFIC SIGNALS, INSTALLATION OF INTERSECTION LIGHTING, CONSTRUCTION OF NEW STORM SEWERS, AND ALL INCIDENTAL AND COLLATERAL WORK AS NECESSARY TO COMPLETE THE IMPROVEMENT SHOWN HEREIN AND AS DESCRIBED IN THE SPECIFICATIONS

REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS      11/30/07      EXPIRES

"PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS"

APPROVED NOVEMBER 7 2005  
  
 KANE COUNTY DIVISION OF TRANSPORTATION

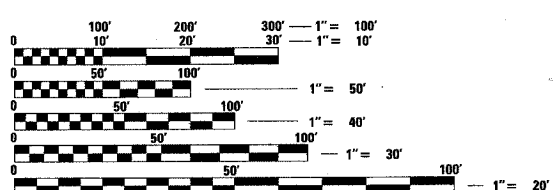
APPROVED NOVEMBER 8 2005  
  
 DISTRICT ENGINEER OF LOCAL ROADS & STREETS

APPROVED NOV. 10 2005  
  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



ILLINOIS PROFESSIONAL DESIGN  
FIRM LICENSE NO. 184-000813



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. 83738**

IDOT FEDERAL AID DESIGN ENGINEER - ABIGAIL BRINKS (947) 705-4233  
 847/705-4201, SCHALMURG, IL.  
 CONSULTANT  
 RJN GROUP, INC. 630/682-4700, WHEATON, IL  
 11/2/2005 4:39:30 PM C:\N17700\Cad\Design\N17700\_Cover\_Ldgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	2
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO.: 83738				


## INDEX OF SHEETS

1	COVER SHEET
2	SHEET INDEX AND STATE STANDARDS
3	GENERAL NOTES
4-6	SUMMARY OF QUANTITIES
7-9	TYPICAL SECTIONS - ORCHARD ROAD (166+14.47 TO 190+47.48)
10-11	TYPICAL SECTIONS - JERICHO ROAD (305+07.88 TO 317+40.40)
12-14	SCHEDULE OF QUANTITIES
15	ALIGNMENT PLAN / TIES AND BENCHMARKS
16	MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS AND NOTES - STAGE I
17-19	MAINTENANCE OF TRAFFIC - STAGE I
20	MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS AND NOTES - STAGE II
21-23	MAINTENANCE OF TRAFFIC - STAGE II
24	MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS AND NOTES - STAGE III
25-27	MAINTENANCE OF TRAFFIC - STAGE III
28	MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS AND NOTES - STAGE IIIA AND IIIB
29	MAINTENANCE OF TRAFFIC - STAGE IIIA
30-32	MAINTENANCE OF TRAFFIC - STAGE IIIB
33	MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS AND NOTES - STAGE IV
34-35	MAINTENANCE OF TRAFFIC - STAGE IV
36-37	ROADWAY PLAN AND PROFILE - ORCHARD ROAD (STA. 166+14.47 TO STA. 190+47.48)
38	ROADWAY PLAN AND PROFILE - JERICHO ROAD (STA. 305+07.88 TO 317+40.40)
39-41	DRAINAGE AND UTILITIES PLAN AND PROFILE - ORCHARD ROAD (STA. 166+14.47 TO STA. 190+47.48)
42	DRAINAGE AND UTILITIES PLAN AND PROFILE - JERICHO ROAD (STA. 305+07.88 TO 317+40.40)
43	CORNELL DETENTION BASIN PLANS
44	INTERSECTION DETAILS - JERICHO ROAD
45	INTERSECTION DETAIL - CORNELL AVENUE
46-47	PAVEMENT MARKING PLANS
48	LANDSCAPING - NOTES AND DETAILS
49-50	LANDSCAPING PLANS
51	EROSION CONTROL - NOTES AND DETAILS
52	EROSION CONTROL PLAN - ORCHARD ROAD (STA. 166+14.47 TO STA. 190+47.48)
53	EROSION CONTROL PLAN - JERICHO ROAD (STA. 305+07.88 TO 317+40.40)
54-55	TRAFFIC SIGNAL PLANS - INTERSECTION OF ORCHARD ROAD AND JERICHO ROAD
56-57	TEMPORARY TRAFFIC SIGNAL PLANS - INTERSECTION OF ORCHARD ROAD AND JERICHO ROAD
58	TRAFFIC SIGNAL INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES
59-63	TRAFFIC SIGNAL INTERCONNECT PLANS (JERICHO ROAD TO INDIAN TRAIL ROAD)
64	INTERSECTION LIGHTING - SUMMARY OF QUANTITIES, GENERAL NOTES, AND LEGEND
65	INTERSECTION LIGHTING - PLANS
66	INTERSECTION LIGHTING - SINGLE LINE DIAGRAM
67-70	INTERSECTION LIGHTING - DETAILS
71	BD02 DRIVEWAY DETAIL - DISTANCE BETWEEN R.O.W AND FACE OF CURB IS LESS THAN 15 FT.
72	BD22 PAVEMENT PATCHING FOR BITUMINOUS SURFACED PAVEMENT
73	BD32 BUTT JOINT AND BITUMINOUS TAPER DETAILS
74	BD51 BENCHING DETAIL FOR EMBANKMENT WIDENING
75	TC10 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
76	TC11 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)
77	TC13 DISTRICT ONE TYPICAL PAVEMENT MARKINGS
78	TC16 PAVEMENT MARKINGS LETTERS AND SYMBOLS FOR TRAFFIC STAGING
79	TC22 TEMPORARY INFORMATION SIGN
80	TS02 MAST ARM MOUNTED STREET NAME SIGN
81-84	TS05 STANDARD TRAFFIC SIGNAL DESIGN DETAILS
85-90	ROADWAY CROSS-SECTIONS - ORCHARD ROAD (STA. 163+00 TO STA. 191+00.01)
91-97	ROADWAY CROSS-SECTIONS - JERICHO ROAD (STA. 305+00.00 TO STA. 317+50.00)

## LIST OF STATE STANDARDS

000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-02	TEMPORARY EROSION CONTROL SYSTEM
420001-06	PAVEMENT JOINTS
420106-03	36' JOINTED PCC PAVEMENT
420111-01	PCC PAVEMENT ROUNDOUTS
424001-04	CURB RAMPS FOR SIDEWALKS
442201-01	CLASS C AND D PATCHES
542301	PRECAST REINFORCED CONCRETE FLARED END SECTION
542606	REINFORCED CONCRETE PIPE TEE
602001	CATCH BASIN, TYPE A
602011	CATCH BASIN, TYPE C
602301-01	INLET - TYPE A
602401-01	MANHOLE, TYPE A
602601	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
602701-01	CAST IRON STEPS
604001-02	FRAME AND LIDS, TYPE 1
604036-01	GRATE, TYPE B
604091-01	FRAME AND GRATE, TYPE 24
606001-02	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606006	OUTLETS FOR CONCRETE CURB AND GUTTER TYPE B-6.24
606301-02	PC CONCRETE ISLANDS AND MEDIANS
666001	RIGHT OF WAY MARKERS
701006-02	OFF ROAD OPERATIONS 2L, 2W 15' TO PAVEMENT EDGE FOR SPEEDS GREATER THAN OR EQUAL TO 45 MPH
701326-02	LANE CLOSURE 2L, 2W PAVEMENT WIDENING FOR SPEEDS GREATER THAN OR EQUAL TO 45 MPH
701426-02	LANE CLOSURE MULTILANE INTERMITTENT OR MOVING OPERATIONS FOR SPEEDS GREATER THAN OR EQUAL TO 45 MPH
701701-04	URBAN LANE CLOSURES MULTILANE INTERSECTION
702001-06	TRAFFIC CONTROL DEVICES
780001-01	TYPICAL PAVEMENT MARKING
805001	ELECTRICAL SERVICE INSTALLATION DETAILS
814001	CONCRETE HANDHOLES
814006	DOUBLE HANDHOLES
857001	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES (2 SHEETS)
877001-02	STEEL MAST ARM ASSEMBLY AND POLE
877011-02	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
878001-04	CONCRETE FOUNDATION DETAILS
880001	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
880006	TRAFFIC SIGNAL MOUNTING DETAILS
886001	DETECTOR LOOP INSTALLATIONS

8/22/2006 10:35:45 AM ks:\1177700\road\design\1177700\_sheets\_index\_1.dgn

 Excellence through Ownership  200 West Front Street Wheaton, IL 60187	REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION  <b>SHEET INDEX AND STATE STANDARDS</b>
	NAME	DATE	
SCALE: VERT.		DRAWN BY: RJN	
DATE: 11/04/05		CHECKED BY: SPF	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	3
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO.: 83738				

### SPECIFICATIONS, STANDARDS, AND SPECIAL PROVISIONS

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, "ADOPTED JANUARY 1, 2002; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS"; THE "STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION IN ILLINOIS," FIFTH EDITION; THE DETAILS IN THE PLANS; AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
2. ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST STANDARD OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION.
3. ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH ARTICLE 107.14 OF THE STANDARD SPECIFICATIONS.
4. THE CONTRACTOR SHALL AT ALL TIMES PROVIDE PROTECTION FOR TRAFFIC AS CALLED FOR IN THE APPLICATION OF TRAFFIC CONTROL DEVICES, THE STANDARD SPECIFICATIONS AND THE PLANS.
5. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS BITUMINOUS LIFTS.

### UTILITIES

1. THE CONTRACTOR SHALL COOPERATE WITH THE COUNTY AND STATE IF ANY UTILITY IMPROVEMENTS ARE REQUIRED BY THE COUNTY OR STATE WITHIN THE DURATION OF THE CONTRACT.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL UTILITIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF ALL UTILITY EQUIPMENT. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE STANDARD SPECIFICATIONS IF UTILITY RELOCATION, ADJUSTMENT, OR PROTECTION IS NECESSARY.
3. THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE, AND THEIR EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND AND SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

### STAKING

1. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS, PROPERTY CORNERS, AND REFERENCE MARKERS UNTIL THE OWNER, HIS AGENT, OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.
2. ALL RADII FOR PROPOSED CURB AND GUTTER ARE TO THE EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED. CURB AND GUTTER ELEVATIONS SHOWN AT POINTS OF CURVE, ETC., ARE EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.
3. STRUCTURE OFFSET LOCATIONS GIVEN ON THE DETAILED PLANS ARE TO THE FOLLOWING POINTS: A) FOR STRUCTURES FALLING IN THE CURB LINE TO EDGE OF PAVEMENT; B) FOR ALL OTHER STRUCTURES TO THE CENTER OF THE STRUCTURE.
4. ALL ELEVATIONS ARE ON U.S.G.S DATUM.
5. ALL OFFSET LOCATIONS GIVEN ON THE DETAILED PLANS FOR STRUCTURES, EDGE OF PAVEMENT, ETC. ARE FROM THE PROPOSED CENTERLINE AS SHOWN ON THE PLANS.

### SEWERS AND WATER MAINS

1. ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
2. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN IN AN OPERATING CONDITION TEMPORARY OUTLETS AND CONNECTIONS FOR ALL DRAINS, SEWERS, AND CATCH BASINS. THE CONTRACTOR SHALL PROVIDE FACILITIES WHICH HAVE THE CAPACITY TO RECEIVE AND DISCHARGE THE STORM WATER FLOW RATES NORMALLY ACCEPTED AND RELEASED BY EXISTING DRAINAGE FACILITIES. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
3. THE COST OF INTERCONNECTIONS BETWEEN THE PROPOSED AND EXISTING SEWER SYSTEMS AND PROPOSED AND EXISTING WATER MAIN SYSTEMS SHALL BE INCLUDED IN THE VARIOUS UNIT PRICES OF THE PROPOSED SYSTEM.
4. ALL FRAMES, GRATES, LIDS, AND BOXES SCHEDULED TO BE REMOVED FROM EXISTING STRUCTURES SHALL REMAIN THE PROPERTY OF THE COUNTY OR STATE, AS APPLICABLE. ANY ITEMS DAMAGED DURING REMOVAL SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE. THE COST OF SALVAGING EXISTING FRAMES, GRATES, LIDS, OR BOXES AND/OR STOCKPILING THEM ON THE JOB SITE FOR PICK-UP BY THE COUNTY OR STATE OR DELIVERY TO THE COUNTY OR STATE MAINTENANCE YARD SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
5. ALL FRAMES WITH CLOSED LIDS TO BE FURNISHED AS PART OF THIS CONTRACT SHALL HAVE CAST INTO THE LID ONE OF THE FOLLOWING WORDS: FOR STORM SEWER STRUCTURES-"STORM". FOR SANITARY SEWER STRUCTURES-"SANITARY". FOR WATER SYSTEM STRUCTURES-"WATER". ANY ADDITIONAL COST FOR THIS REQUIREMENT SHALL BE CONSIDERED INCIDENTAL TO THE FRAME AND CLOSED LID PROVIDED.
6. FRAME ELEVATIONS GIVEN ON THE PLANS ARE ONLY TO ASSIST THE CONTRACTOR IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF THE STRUCTURE. FRAMES ON ALL STRUCTURES WILL BE ADJUSTED TO THE FINAL ELEVATION AND CROSS SLOPE OF THE AREA IN WHICH THEY ARE LOCATED.
7. ALL STORM SEWERS SHALL BE RCCP, CLASS IV, UNLESS NOTED OTHERWISE ON THE PLANS.
8. THE REMOVAL OF EXISTING ENTRANCE CULVERTS SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

### BACKFILL

1. STORM SEWER, WATER MAIN, AND SANITARY SEWER SHALL BE BACKFILLED IN ACCORDANCE WITH ARTICLE 550.07, METHOD 1 ONLY, OR AS DIRECTED BY THE ENGINEER.
2. ALL TRENCH BACKFILL QUANTITIES FOR STORM AND SANITARY SEWER AND WATER MAIN HAVE BEEN COMPUTED AND SHALL BE PAID FOR IN ACCORDANCE WITH THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, BUREAU OF CONSTRUCTION TRENCH BACKFILL TABLE

### MISCELLANEOUS


1. THE CONTRACTOR SHALL MAINTAIN EXISTING SIDE STREET ACCESS, EXISTING DRIVEWAY ACCESS, AND PEDESTRIAN ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING CONSTRUCTION OF THE PROJECT. THIS ITEM SHALL BE INCLUDED IN THE ITEM 40200800 "AGGREGATE SURFACE COURSE TYPE B (TONS)."
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS BEFORE BIDDING ON THIS CONTRACT.
3. WHERE NEW WORK MEETS EXISTING FEATURES TO REMAIN, FIELD CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE PROCEEDING WITH CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
4. THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH ALL STATE REGULATIONS REGARDING AIR, WATER, AND NOISE POLLUTION. THE CONTRACTOR IS PROHIBITED FROM BURNING ANY MATERIAL WITHIN OR ADJACENT TO THE IMPROVEMENT.
5. ALL DISTURBED AREAS WITHIN THE PROJECT THAT ARE NOT OTHERWISE SURFACED SHALL BE SEEDED. SEED LIMITS SHOWN ON THE PLANS ARE THE MAXIMUM PAY WIDTHS FOR PAYMENT PURPOSES.
6. ALL TYPE I AND II BARRICADES SHALL BE WEIGHTED DOWN WITH TWO SANDBAGS EACH.
7. FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SANDBAGS PER BARRICADE.
8. THE CONTRACTOR SHALL PREPARE THE SUBGRADE IN ACCORDANCE WITH ARTICLE 301.03 OF THE STANDARD SPECIFICATIONS PRIOR TO THE REMOVAL OF ANY UNSUITABLE MATERIALS.
9. THE CONTRACTOR WILL BE REQUIRED TO TEMPORARILY RESET ALL EXISTING MAILBOXES WHICH INTERFERE WITH HIS CONSTRUCTION OPERATIONS, AND AFTER COMPLETION OF ROADWAY CONSTRUCTION, TO SET THEM IN THEIR PERMANENT LOCATIONS AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE IN CONFORMANCE WITH ARTICLE 107.20 OF THE STANDARD SPECIFICATIONS, AND THE COST WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
10. EXISTING PAVEMENT MUST BE SAWCUT PRIOR TO REMOVAL. THIS WILL BE INCLUDED IN THE COST OF THE PAVEMENT REMOVAL.

### SIGNING AND PAVEMENT MARKING

1. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR, ENGINEER AND KANE CO. DOT MAINTENANCE PERSONNEL SHALL INVENTORY THE LOCATION, SIZE, TYPE AND CONDITION OF ALL EXISTING SIGNS. ANY SIGN DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
2. ALL WORK INVOLVING SIGNS SHALL BE GOVERNED BY THE FOLLOWING REQUIREMENTS:
  - A) EXISTING SIGNS SHALL NOT BE REMOVED UNTIL PROGRESS OF WORK NECESSITATES IT.
  - B) THE CONTRACTOR WILL BE REQUIRED TO TEMPORARILY RESET ALL SUCH SIGNS THAT INTERFERE WITH HIS WORK DURING CONSTRUCTION OPERATIONS. ALL SUCH SIGNS MUST BE MAINTAINED STRAIGHT AND CLEAN FOR THE DURATION OF THE TEMPORARY SETTING AND MUST BE RE-ERECTED AT A TEMPORARY LOCATION IN A WORKMANLIKE MANNER AND BE VISIBLE TO TRAFFIC FOR WHICH IT IS INTENDED. THIS WORK WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
  - C) ALL REMOVED SIGNS WILL BE RETURNED TO THE COUNTY OR STATE, AS APPLICABLE.
  - D) LONGER POSTS MAY BE REQUIRED AT SOME TEMPORARY SIGN LOCATIONS TO MAINTAIN PROPER SIGN ELEVATIONS.
3. ALL POLYUREA TO BE INLAID. SEE SPECIAL PROVISIONS.
4. FINAL SIGN MATERIAL, LOCATIONS AND INSTALLATION WILL BE COMPLETED BY KANE COUNTY PERSONAL

THE FOLLOWING VALUES HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:


ITEM	VALUE	UNIT OF MEASURE
NITROGEN FERTILIZER NUTRIENTS (SODDED AREAS)	60 LB/ACRE	POUND
PHOSPHORUS FERTILIZER NUTRIENTS (SODDED AREAS)	60 LB/ACRE	POUND
POTASSIUM FERTILIZER NUTRIENTS (SODDED AREAS)	60 LB/ACRE	POUND
NITROGEN FERTILIZER NUTRIENTS (SEEDED AREAS)	90 LB/ACRE	POUND
PHOSPHORUS FERTILIZER NUTRIENTS (SEEDED AREAS)	90 LB/ACRE	POUND
POTASSIUM FERTILIZER NUTRIENTS (SEEDED AREAS)	90 LB/ACRE	POUND
SUB-BASE GRANULAR MATERIAL	114 LB/SQ YD/IN	TON

 Excellence through Ownership  200 West Front Street Wheaton, IL 60187	<b>REVISIONS</b> NAME      DATE		ILLINOIS DEPARTMENT OF TRANSPORTATION <b>KANE COUNTY DIVISION OF TRANSPORTATION</b> <b>ORCHARD ROAD RECONSTRUCTION</b>  <b>GENERAL NOTES</b>  SCALE: VERT.      DRAWN BY: RjN HORIZ.              CHECKED BY: SFP DATE: 11/04/05

SPECIALTY ITEM	ITEM #	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODES				
					ROADWAY J000-2A STU	ROADWAY J000-2A STA	HIGHWAY LIGHTING Y030-1E STU	ORCHARD RD. AT JERICO ROAD Y030-1F STA	TRAFFIC SIGNAL SYSTEM Y031-1F STA
	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	110	77	33			
	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	108	75	33			
	20100500	TREE REMOVAL, ACRES	ACRE	0.5	0.35	0.15			
	20101700	SUPPLEMENTAL WATERING	UNIT	144	100	44			
	20200100	EARTH EXCAVATION	CU YD	13,676	9,573	4,103			
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	10,105	10,105				
	20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	5,000	5,000				
	20400800	FURNISHED EXCAVATION	CU YD	2,580	1,800	780			
	20800150	TRENCH BACKFILL	CU YD	1,521	1,521				
	21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SO YD	12,000	12,000				
	21101625	TOPSOIL FURNISH AND PLACE, 6"	SO YD	24,395	24,395				
	21101665	TOPSOIL FURNISH AND PLACE, 18"	SO YD	1,440		1,440			
	21300010	EXPLORATION TRENCH, SPECIAL	FOOT	250	250				
*	25000100	SEEDING, CLASS 1	ACRE	1.5	1.5				
*	25000200	SEEDING, CLASS 2	ACRE	0.4	0.4				
*	25000210	SEEDING, CLASS 2A	ACRE	1.5	1.5				
*	25000300	SEEDING, CLASS 3	ACRE	0.8	0.8				
*	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	438	420	18			
*	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	438	420	18			
*	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	438	420	18			
*	25100125	MULCH, METHOD 3	ACRE	4.20	4.2				
*	25200110	SODDING, SALT TOLERANT	SO YD	4,791	3,351	1,440			
+	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	1,107	1,107				
	28000300	TEMPORARY DITCH CHECKS	EACH	14	14				
	28000400	PERIMETER EROSION BARRIER	FOOT	7,615	7,615				
	28000500	INLET AND PIPE PROTECTION	EACH	23	23				
	31101100	SUB-BASE GRANULAR MATERIAL, TYPE B	CU YD	619		619			
	31101600	SUB-BASE GRANULAR MATERIAL, TYPE B 8"	SO YD	1,888	1,888				
	31101810	SUB-BASE GRANULAR MATERIAL, TYPE B 12"	SO YD	20,408	17,844	2,564			
	40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	228	228				
	40400100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	5,159	3,659	1,500			
	40600300	AGGREGATE (PRIME COAT)	TON	31	21	10			
	40600980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SO YD	51	51				
	40601000	BITUMINOUS REPLACEMENT OVER PATCHES	TON	9	9				
	42000501	PORTLAND CEMENT CONCRETE PAVEMENT 10" (JOINTED)	SO YD	16,038	13,474	2,564			
	42001300	PROTECTIVE COAT	SO YD	18,291	15,727	2,564			
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SO FT	560		560			
	42400800	DETECTABLE WARNING	SO FT	120		120			
	44000006	BITUMINOUS SURFACE REMOVAL 1 1/2"	SO YD	3,585	3,585				
	44000100	PAVEMENT REMOVAL	SO YD	11,828	11,828				
	44000108	BITUMINOUS REMOVAL OVER PATCHES, 2"	SO YD	75	75				
	44000200	DRIVEWAY PAVEMENT REMOVAL	SO YD	943	943				
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	455	455				
	44201733	CLASS D PATCHES, TYPE III, 7 INCH	SO YD	22	22				

SPECIALTY ITEM	ITEM #	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODES				
					ROADWAY J000-2A STU	ROADWAY J000-2A STA	HIGHWAY LIGHTING Y030-1E STU	ORCHARD RD. AT JERICO ROAD Y030-1F STA	TRAFFIC SIGNAL SYSTEM Y031-1F STA
	44201827	CLASS D PATCHES, TYPE II, 15 INCH	SO YD	14	14				
	44201831	CLASS D PATCHES, TYPE III, 15 INCH	SO YD	18	18				
	44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	3,454	3,454				
	48101200	AGGREGATE SHOULDERS, TYPE B	TON	85	15	70			
	48202400	BITUMINOUS SHOULDERS SUPERPAVE 6"	SO YD	514	514				
	48202410	BITUMINOUS SHOULDERS SUPERPAVE 6 1/2"	SO YD	292	292				
	50105220	PIPE CULVERT REMOVAL	FOOT	86	86				
	542A0217	PIPE CULVERTS, CLASS A, TYPE 1 12"	FOOT	60	60				
	542A0220	PIPE CULVERTS, CLASS A, TYPE 1 15"	FOOT	49	49				
	542A0229	PIPE CULVERTS, CLASS A, TYPE 1 24"	FOOT	43	43				
	542A1099	PIPE CULVERTS, CLASS A, TYPE 2 54"	FOOT	136	136				
	54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	4	4				
	54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	2	2				
	54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	1	1				
	54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	5	5				
	54213699	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 54"	EACH	2	2				
	54247100	GRATING FOR CONCRETE FLARED END SECTION 15"	EACH	1	1				
	54247110	GRATING FOR CONCRETE FLARED END SECTION 18"	EACH	1	1				
	550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	617	617				
	550A0090	STORM SEWERS, CLASS A, TYPE 1 18"	FOOT	5	5				
	550A0120	STORM SEWERS, CLASS A, TYPE 1 24"	FOOT	339	339				
	550A0130	STORM SEWERS, CLASS A, TYPE 1 27"	FOOT	32	32				
	550A0140	STORM SEWERS, CLASS A, TYPE 1 30"	FOOT	480	480				
	550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	768	768				
	550A0360	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	209	209				
	550A0380	STORM SEWERS, CLASS A, TYPE 2 18"	FOOT	197	197				
	550A0400	STORM SEWERS, CLASS A, TYPE 2 21"	FOOT	115	115				
	550A0420	STORM SEWERS, CLASS A, TYPE 2 27"	FOOT	352	352				
	550A0430	STORM SEWERS, CLASS A, TYPE 2 30"	FOOT	332	332				
	550A2360	STORM SEWERS, RUBER GASKET, CLASS A, TYPE 1 24"	FOOT	10	10				
	550A2560	STORM SEWERS, RUBER GASKET, CLASS A, TYPE 2 24"	FOOT	150	150				
	550A2570	STORM SEWERS, RUBER GASKET, CLASS A, TYPE 2 27"	FOOT	181	181				
	56105200	WATER VALVES 12"	EACH	2	2				
	56105300	WATER VALVES 16"	EACH	1	1				
	56106600	ADJUSTING WATER MAIN 12"	FOOT	100	100				
	56106700	ADJUSTING WATER MAIN 16"	FOOT	100	100				

S:\8\2006\_9629\27\_4M\_K3\117700\Code\Design\117700\_Sum\_Quantities.es.dgn

 Excellence through Ownership  200 West Front Street Wheaton, IL 60187	REVISIONS NAME      DATE		ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION <b>SUMMARY OF QUANTITIES</b>  SCALE: VERT. DATE: 11/04/05 DRAWN BY: RJN CHECKED BY: SPF	



SPECIALTY ITEM	ITEM #	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODES				
					ROADWAY J000-2A STU	ROADWAY J000-2A STA	HIGHWAY LIGHTING Y030-1E STU	ORCHARD RD. AT JERICHO ROAD Y030-1F STA	TRAFFIC SIGNAL SYSTEM Y031-1F STA
60108200		PIPE UNDERDRAINS 6" (SPECIAL)	FOOT	40	40				
60200805		CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 8 GRATE	EACH	5	5				
60201340		CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	12	12				
60207605		CATCH BASINS, TYPE C, TYPE 8 GRATE	EACH	2	2				
60213800		RESTRICTED DEPTH CATCH BASINS, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1	1				
60214400		RESTRICTED DEPTH CATCH BASINS, 4'-DIAMETER, TYPE 8 GRATE	EACH	2	2				
60214714		RESTRICTED DEPTH CATCH BASINS, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	1	1				
60218300		MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	6	6				
60221000		MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1	1				
60221100		MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	4	4				
60225300		RESTRICTED DEPTH MANHOLES, 5'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	3	3				
60225400		RESTRICTED DEPTH MANHOLES, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	3	3				
60236200		INLETS, TYPE A, TYPE 8 GRATE	EACH	3	3				
60237470		INLETS, TYPE A, TYPE 24 FRAME AND GRATE	EACH	13	13				
60248900		VALVE VAULTS, TYPE A, 5 DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	3	3				
60250200		CATCH BASINS TO BE ADJUSTED	EACH	1	1				
60251740		CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 24 FRAME AND GRATE	EACH	1	1				
60260050		SANITARY MANHOLES TO BE RECONSTRUCTED	EACH	2	2				
60265700		VALVE VAULT TO BE ADJUSTED	EACH	7	7				
60266600		VALVE BOXES TO BE ADJUSTED	EACH	3	3				
60600095		CLASS SI CONCRETE (OUTLET)	CU YD	9	9				
60603500		COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.06	FOOT	37		37			
60603800		COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	530	530				
60605000		COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	6,791	4,500	2,291			
60605500		COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (VARIABLE WIDTH GUTTER FLAG)	FOOT	45	45				
60608300		COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.12	FOOT	38	38				
60608501		COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.12 (SPECIAL)	FOOT	25	25				
60618300		CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	1,003	218	785			
60620000		CONCRETE MEDIAN, TYPE SB-6.24	SQ FT	3,984		3,984			
67000400		ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	16	8	8			
67100100		MOBILIZATION	L SUM	1	0.7	0.3			
70100330		TRAFFIC CONTROL AND PROTECTION, STANDARD 701426	L SUM	1	0.7	0.3			
70100500		TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	0.7	0.3			
70101800		TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1	0.7	0.3			
70102635		TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.7	0.3			
70300100		SHORT-TERM PAVEMENT MARKING	FOOT	1,500	1,050	450			
70300210		TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	73	52	21			
70300220		TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	16,777	11,750	5,027			
70300240		TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	400	280	120			
70300260		TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	655	460	195			
70300280		TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	75	53	22			

SPECIALTY ITEM	ITEM #	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODES				
					ROADWAY J000-2A STU	ROADWAY J000-2A STA	HIGHWAY LIGHTING Y030-1E STU	ORCHARD RD. AT JERICHO ROAD Y030-1F STA	TRAFFIC SIGNAL SYSTEM Y031-1F STA
70300510		PAVEMENT MARKING TAPE, TYPE III - LETTERS AND SYMBOLS	SQ FT	364					
70300520		PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	38,035	26,625	11,410			
70300540		PAVEMENT MARKING TAPE, TYPE III 6"	FOOT	2,615	1,830	785			
70300560		PAVEMENT MARKING TAPE, TYPE III 12"	FOOT	1,803	1,262	541			
70300570		PAVEMENT MARKING TAPE, TYPE III 24"	FOOT	358	250	108			
70301000		WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	23,357	16,350	7,007			
72400100		REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	21	21				
78008200		POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS	SQ FT	546	382	164			
78008250		POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	180	126	54			
78008270		POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	216	151	65			
78300100		PAVEMENT MARKING REMOVAL	SQ FT	3,030	3,030				
78300200		RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	97	97				
80400100		ELECTRIC SERVICE INSTALLATION	EACH	1			1		
80400200		ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1			1		
80700140		GROUND ROD, 5/8" DIA. X 10 FT.	EACH	25			25		
81000600		CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	13,185				657	12,528
81000700		CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	194			60	134	
81000800		CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	12				12	
81000900		CONDUIT IN TRENCH, 3 1/2" DIA., GALVANIZED STEEL	FOOT	16				16	
81001000		CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	57				57	
81001100		CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	32				32	
81018500		CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	108					108
81018600		CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	270			270		
81018700		CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	54				54	
81018900		CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	212			74	138	
81019000		CONDUIT PUSHED, 5" DIA., GALVANIZED STEEL	FOOT	118				118	
81022200		CONDUIT ENCASED IN CONCRETE, 2 1/2" DIA., PVC	FOOT	60				60	
81400100		HANDHOLE	EACH	24				6	18
81400300		DOUBLE HANDHOLE	EACH	1				1	
81500200		TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	13,469			50	891	12,528
81702160		ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 1/0	FOOT	270			270		
82102250		LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	30				30	
82500505		LIGHTING CONTROLLER, SPECIAL	EACH	1				1	
83008400		LIGHT POLE, ALUMINUM, 40 FT. M.H., 10 FT. MAST ARM	EACH	24				24	
83600200		LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	240				240	
83800205		BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	24				24	

9/8/2006 9:29:43 AM ka:\117700\Cad\Design\117700\_Sum-Qty.dgn

**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 KANE COUNTY DIVISION OF TRANSPORTATION  
 ORCHARD ROAD RECONSTRUCTION  
**SUMMARY OF QUANTITIES**

SCALE: VERT.  
 HORIZ.  
 DATE: 11/04/05

DRAWN BY: RJN  
 CHECKED BY: SPF

SPECIALTY ITEM	ITEM #	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODES				
					ROADWAY J000-2A STU	ROADWAY J000-2A STA	HIGHWAY LIGHTING Y030-1E STU	ORCHARD RD. AT JERICHO ROAD Y030-1F STA	TRAFFIC SIGNAL SYSTEM Y031-1F STA
*	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	5					5
*	85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1				1	
*	86400100	TRANSCEIVER - FIBER OPTIC	EACH	1				1	
*	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	677				677	
*	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,245				1,245	
*	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	500				500	
*	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2,696				2,696	
*	87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,764				1,764	
*	87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	111				111	
*	87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4				4	
*	87702900	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	1				1	
*	87702910	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	1				1	
*	87702940	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT.	EACH	1				1	
*	87702950	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 44 FT.	EACH	1				1	
*	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16				16	
*	87800200	CONCRETE FOUNDATION, TYPE D	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	
*	87900200	DRILL EXISTING HANDHOLE	EACH	3					3
*	88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8				8	
*	88500200	INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT	EACH	4				4	
*	88700200	LIGHT DETECTOR	EACH	2				2	
*	88700300	LIGHT DETECTOR AMPLIFIER	EACH	1				1	
*	88800100	PEDESTRIAN PUSH-BUTTON	EACH	5				5	
*	89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1				1	
*	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1				1	
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	0.7	0.3			
	Z0019600	DUST CONTROL WATERING	UNIT	25	25				
Δ	Z0076600	TRAINEES	HOUR	500	500				
*	A2000120	TREE, ACER X FREEMANII AUTUMN BLAZE (AUTUMN BLAZE FREEMAN MAPLE), 2 1/2" CALIPER, BALLED AND BURLAPPED	EACH	10	10				
*	X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	103	103				
*	X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	14,629					14,629
*	X0323153	ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1C (GREEN)	FOOT	801				801	
*	X0323370	TRAFFIC SIGNAL BATTERY BACKUP	EACH	1				1	
*	X0323670	PREFORMED DETECTOR LOOP	FOOT	180				180	
	X0712400	TEMPORARY PAVEMENT	SQ YD	7,775	5,442	2,333			
	X0712600	TEMPORARY PAVEMENT RAMP	TON	60	60				
	X2510630	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	2,174	2,174				
	X3550300	BITUMINOUS BASE COURSE SUPERPAVE 6"	SQ YD	683	683				
	X3550500	BITUMINOUS BASE COURSE SUPERPAVE 8"	SQ YD	137	137				
	X3550610	BITUMINOUS BASE COURSE SUPERPAVE 9 1/2"	SQ YD	2,072	1,450	622			

SPECIALTY ITEM	ITEM #	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODES				
					ROADWAY J000-2A STU	ROADWAY J000-2A STA	HIGHWAY LIGHTING Y030-1E STU	ORCHARD RD. AT JERICHO ROAD Y030-1F STA	TRAFFIC SIGNAL SYSTEM Y031-1F STA
	X3560120	BITUMINOUS CONCRETE BASE COURSE WIDENING, SUPERPAVE 8 INCH	SQ YD	1,143					
	X4066414	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50	TON	356	100	256			
	X4066426	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	TON	404	297	107			
	X4066548	POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "E", N90	TON	410	286	124			
	X4066616	BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N70	TON	160		160			
	X4066658	POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N90	TON	389	283	106			
	X4067100	POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50	TON	590	525	65			
*	X8050015	SERVICE INSTALLATION - POLE MOUNTED	EACH	1				1	
*	X8710020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	14,749					14,749
*	X8801315	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED (SPECIAL)	EACH	2				2	
*	X8801405	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED (SPECIAL)	EACH	6				6	
*	X8801430	SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, SPECIAL	EACH	1				1	
*	X8801450	SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED (SPECIAL)	EACH	2				2	
*	X8803950	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, SPECIAL	EACH	2				2	
*	X8810400	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, BRACKET MOUNTED, SPECIAL	EACH	4				4	
*	X8810500	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, BRACKET MOUNTED, SPECIAL	EACH	1				1	
*	XX002856	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM	L SUM	1					1
	XX003306	TRENCH DRAIN	FOOT	1,185	1,185				
	XX004075	FIELD TILE REPLACEMENT	FOOT	50	50				
*	XX005660	ELECTRIC CABLE IN CONDUIT NO. 20 3/8 TWISTED, SHIELDED	FOOT	322				322	
*	XX006257	RECESSED REFLECTIVE PAVEMENT MARKER	EACH	160	160				
*	XX006516	POLYETHYLENE DUCT BORED AND PULLED, 1" DIA., WITH ELECTRIC CABLE, 600V (XLP-TYPE USE), 2-1/C NO. 4 AND 1/C NO. 6 GROUND	FOOT	5,000				5,000	
*	XX006673	RECESSED POLYUREA PAVEMENT MARKING, TYPE 2 - LINE 4"	FOOT	10148	7103	3045			
*	XX006674	RECESSED POLYUREA PAVEMENT MARKING, TYPE 2 - LINE 6"	FOOT	2681	1877	804			



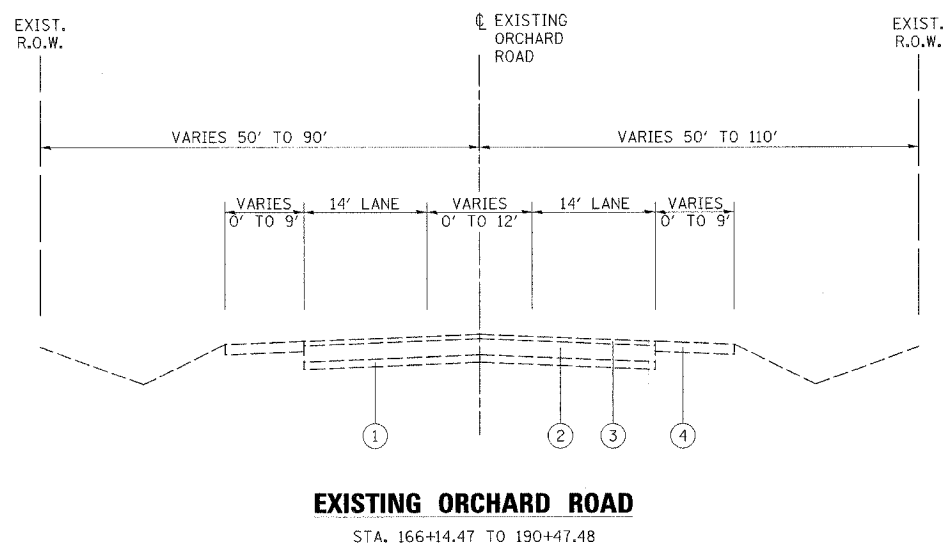
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION  
**SUMMARY OF QUANTITIES**

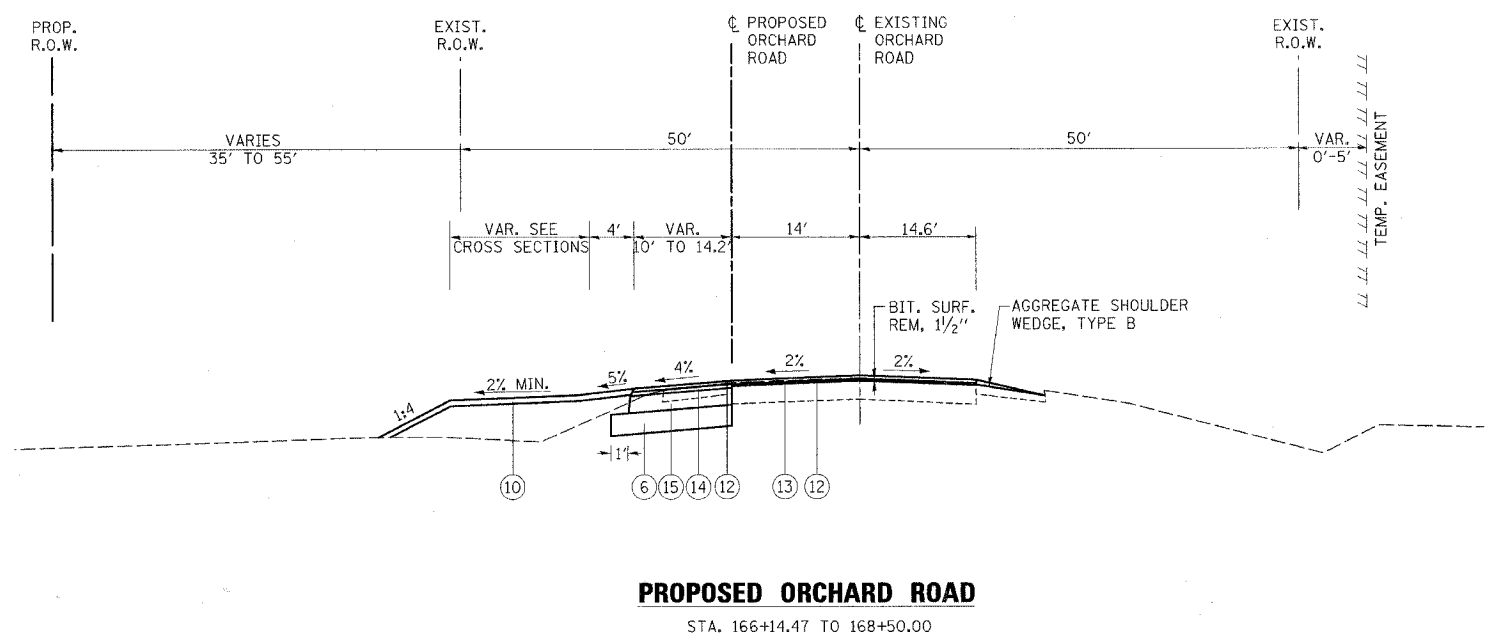
SCALE: VERT.      DRAWN BY: RJN  
 HORIZ.              CHECKED BY: SPF  
 DATE: 11/04/05

9/8/2006 9:29:49 AM k:\117700.Cad\Desig\117700\_Sum\_Quant1.res.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	7
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO.: 83738



STRUCTURAL DESIGN TRAFFIC:	Year <u>2020</u>	
PV = <u>30,723</u>	SU = <u>1,122</u>	MU = <u>1,155</u>
ROAD/STREET CLASSIFICATION:	Class <u>I</u>	
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:	P = <u>32 %</u> S = <u>45 %</u> M = <u>45 %</u>	
TRAFFIC FACTOR:	Actual TF = <u>6.38</u>	AC Type = <u>PG 70-22 (AC-20)</u>
	Minimum TF = <u>3.83</u>	
PG GRADE:	Binder = <u>SBS/SBR PG70-22</u>	Surface = <u>SBS/SBR PG70-22</u>
SUBGRADE SUPPORT RATING:	SSR = <u>Poor</u> Sta. <u>166+14.47</u> to <u>171+62.62</u>	



- LEGEND**
- ① EXISTING SUB-BASE GRANULAR MATERIAL
  - ② EXISTING POZZOLANIC BASE, 8 1/2"
  - ③ EXISTING BITUMINOUS OVERLAY, DEPTH VARIES 5" TO 7"
  - ④ EXISTING AGGREGATE SHOULDER, 6"
  - ⑤ PORTLAND CEMENT CONCRETE PAVEMENT 10" (JOINTED)-(STD 420106)
  - ⑥ SUB-BASE GRANULAR MATERIAL, TYPE B, 12"
  - ⑦ BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX C, N50, 2"
  - ⑧ SUB-BASE GRANULAR MATERIAL, TYPE B, 8"
  - ⑨ COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
  - ⑩ FURNISHING & PLACING TOPSOIL, 6"
  - ⑪ BITUMINOUS SHOULDER, SUPERPAVE, 6"
  - ⑫ POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX F, N90, 2"
  - ⑬ POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50, 3/4"
  - ⑭ POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N90, 2 1/4"
  - ⑮ BITUMINOUS BASE COURSE, SUPERPAVE, 9 1/2"
  - ⑯ BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70, 1 1/2"
  - ⑰ BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70, 2 1/4"
  - ⑱ BITUMINOUS BASE COURSE WIDENING, SUPERPAVE, 8"
  - ⑲ EXISTING BITUMINOUS PAVEMENT, THICKNESS AS NOTED
  - ⑳ STRIP REFLECTIVE CRACK CONTROL
  - ㉑ BITUMINOUS SHOULDER, SUPERPAVE, 6 1/2"
  - ㉒ NOT USED
  - ㉓ SAWED LONGITUDINAL JOINT WITH EPOXY COATED #6x30" TIE BARS @ 30" CTS. (COST OF SAW CUT AND TIE BAR INCLUDED WITH PCC PAVEMENT)
  - ㉔ LONGITUDINAL CONSTRUCTION JOINT WITH DRILL AND GROUT EPOXY COATED #6x24" TIE BARS @ 24" CTS. (COST OF TIE BARS AND PLACEMENT INCLUDED WITH PCC PAVEMENT)
  - ㉕ EPOXY COATED #6x24" TIE BARS @ 24" CTS. (COST OF TIE BARS AND PLACEMENT INCLUDED WITH PCC PAVEMENT)
  - ㉖ PAVEMENT REMOVAL (1 1/2" AVG.)
  - ㉗ EXISTING BITUMINOUS SHOULDER

**BITUMINOUS MIX REQUIREMENTS**

PAY ITEM	AC TYPE	VOIDS	MAX RAP %
CLASS D PATCHES, TYPE III, 7" IL-19	PG 64-22	4% @ 70 GYR	15
CLASS D PATCHES, TYPE II, III, 15" IL-19	PG 64-22	4% @ 70 GYR	15
BITUMINOUS REPLACEMENT OVER PATCHES, IL-19	PG 64-22	4% @ 70 GYR	15
BITUMINOUS SHOULDER, SUPERPAVE, 6" & 6 1/2"	PG 58-22	2% @ 30 GYR	50
BITUMINOUS BASE COURSE, SUPERPAVE, 6", 8" & 9 1/2"	PG 58-22	2% @ 50 GYR	50
BITUMINOUS CONCRETE BASE COURSE WIDENING, SUPERPAVE, 8"	PG 58-22	2% @ 50 GYR	50
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX C, N 50	PG 64-22	4% @ 50 GYR	15
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N 70	PG 64-22	4% @ 70 GYR	10
POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX F, N 90	SBS/SBR PG 70-22	4% @ 90 GYR	0
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N 70	PG 64-22	4% @ 70 GYR	15
POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N 90	SBS/SBR PG 70-22	4% @ 90 GYR	0
POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N 50	SBS/SBR PG 76-28	2.5% @ 50 GYR	0

THE UNIT WEIGHT USED TO CALCULATE ALL BITUMINOUS SURFACE MIXTURE QUANTITIES IS 112 POUNDS PER SQUARE YARD PER INCH.  
ADDITIONAL BITUMINOUS MIXTURES ARE SHOWN ON SHEET 16.

**ringroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

REVISIONS	
NAME	DATE

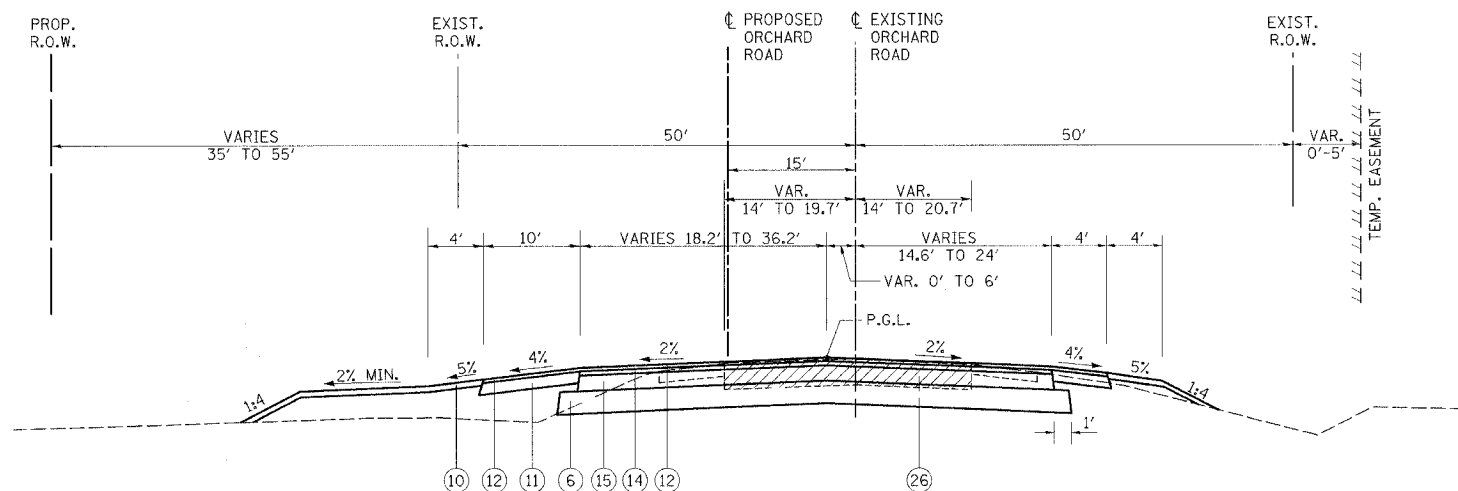
ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION  
**ORCHARD ROAD TYPICAL SECTIONS**

SCALE: VERT. \_\_\_\_\_  
HORIZ. \_\_\_\_\_  
DATE: 11/04/05

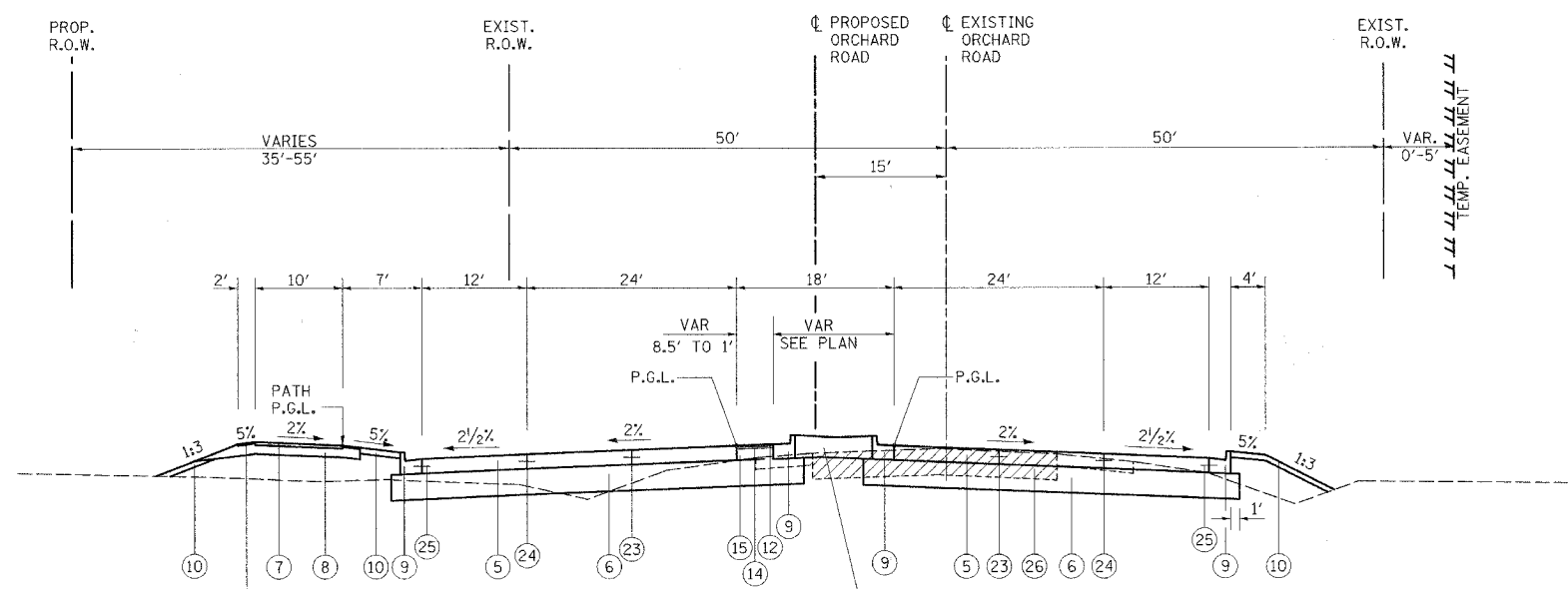
DRAWN BY: RJN  
CHECKED BY: SPF

11/6/2005 10:42:15 AM K:\117700\Ccd\Design\117700\_TYP\_SEC.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	8
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83738				



**PROPOSED ORCHARD ROAD**  
STA. 168+50.00 TO 171+62.62



**PROPOSED ORCHARD ROAD**  
STA. 171+62.62 TO 172+46.44

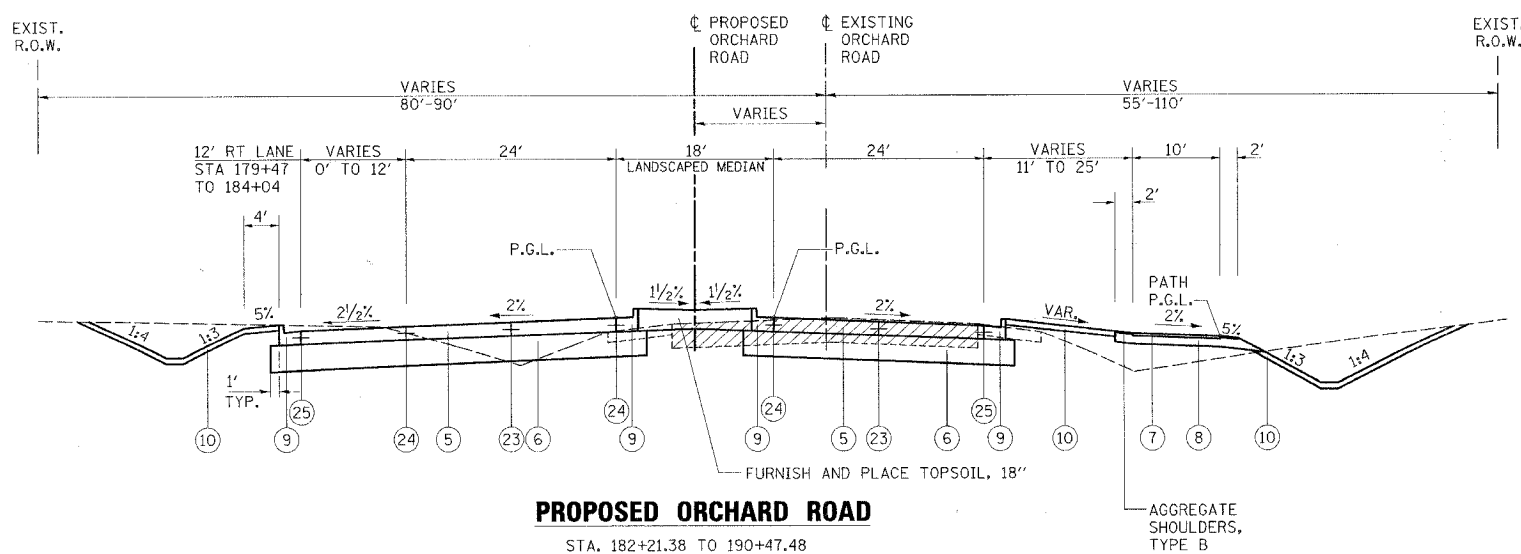
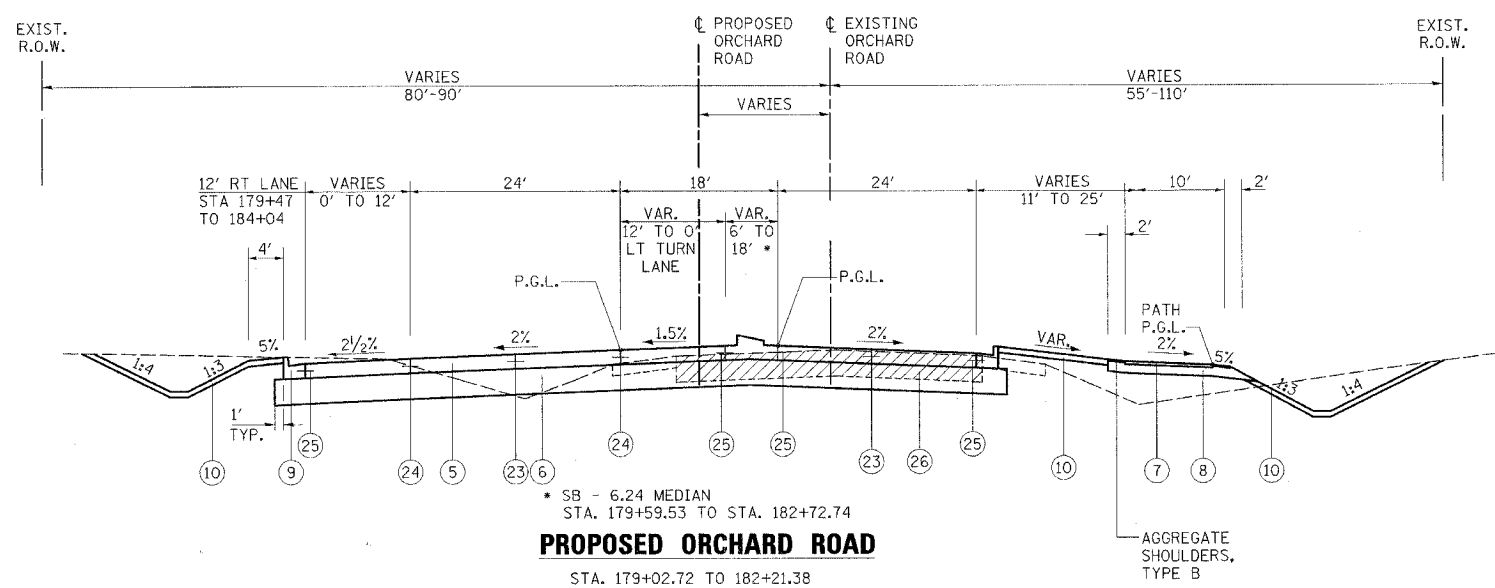
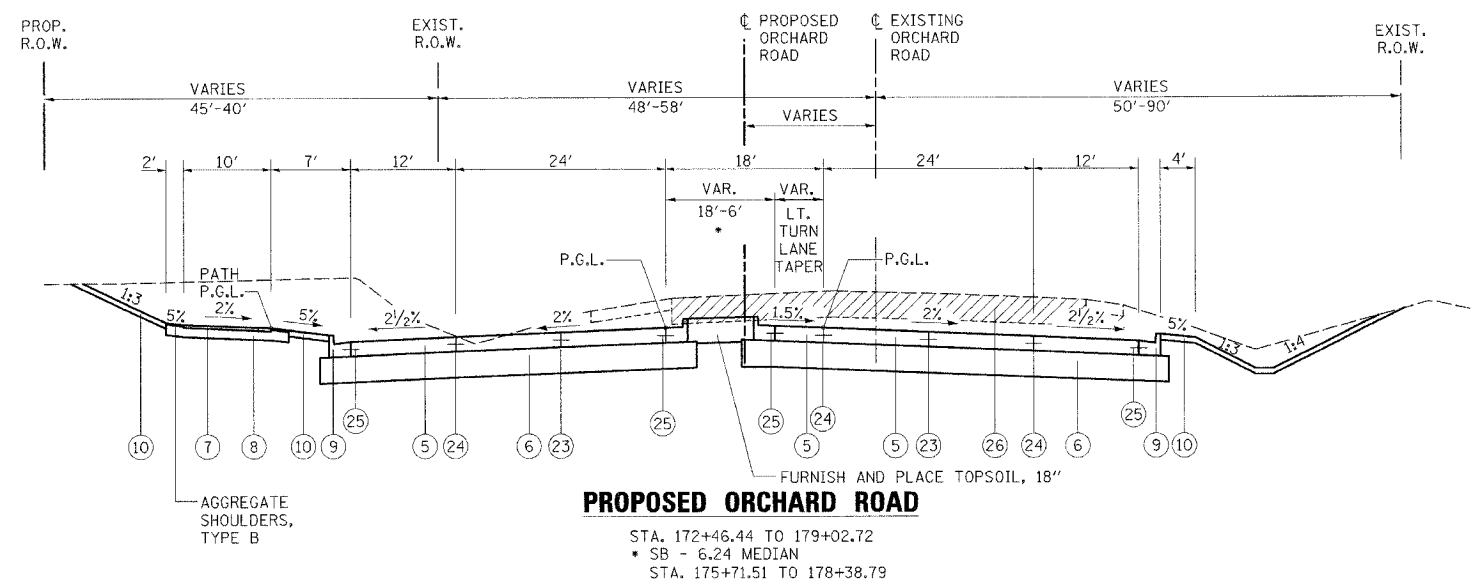
**LEGEND**

- ① EXISTING SUB-BASE GRANULAR MATERIAL
- ② EXISTING POZZOLANIC BASE, 8 1/2"
- ③ EXISTING BITUMINOUS OVERLAY, DEPTH VARIES 5" TO 7"
- ④ EXISTING AGGREGATE SHOULDER, 6"
- ⑤ PORTLAND CEMENT CONCRETE PAVEMENT 10" (JOINTED)-(STD 420106)
- ⑥ SUB-BASE GRANULAR MATERIAL, TYPE B, 12"
- ⑦ BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX C, N50, 2"
- ⑧ SUB-BASE GRANULAR MATERIAL, TYPE B, 8"
- ⑨ COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- ⑩ FURNISHING & PLACING TOPSOIL, 6"
- ⑪ BITUMINOUS SHOULDER, SUPERPAVE, 6"
- ⑫ POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX F, N90, 2"
- ⑬ POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50, 3/4"
- ⑭ POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N90, 2 1/4"
- ⑮ BITUMINOUS BASE COURSE, SUPERPAVE, 9 1/2"
- ⑯ BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70, 1 1/2"
- ⑰ BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70, 2 1/4"
- ⑱ BITUMINOUS BASE COURSE WIDENING, SUPERPAVE, 8"
- ⑲ EXISTING BITUMINOUS PAVEMENT, THICKNESS AS NOTED
- ⑳ STRIP REFLECTIVE CRACK CONTROL
- ㉑ BITUMINOUS SHOULDER, SUPERPAVE, 6 1/2"
- ㉒ NOT USED
- ㉓ SAWED LONGITUDINAL JOINT WITH EPOXY COATED #6x30" TIE BARS @ 30" CTS. (COST OF SAW CUT AND TIE BAR INCLUDED WITH PCC PAVEMENT)
- ㉔ LONGITUDINAL CONSTRUCTION JOINT WITH DRILL AND GROUT EPOXY COATED #6x24" TIE BARS @ 24" CTS. (COST OF TIE BARS AND PLACEMENT INCLUDED WITH PCC PAVEMENT)
- ㉕ EPOXY COATED #6x24" TIE BARS @ 24" CTS. (COST OF TIE BARS AND PLACEMENT INCLUDED WITH PCC PAVEMENT)
- ㉖ PAVEMENT REMOVAL (14 1/2" AVG.)
- ㉗ EXISTING BITUMINOUS SHOULDER

<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NAME</th> <th>DATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>		NAME	DATE									<p>ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION</p> <p><b>ORCHARD ROAD TYPICAL SECTIONS</b></p> <p>SCALE: VERT. HORIZ. DATE: 11/04/05</p> <p>DRAWN BY: RJN CHECKED BY: SPF</p>
	NAME	DATE											

11/6/2005 10:27:45 PM k:\117700\Cad\Design\117700\_TYP\_SEC.dwg

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	9
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO.: 63738				



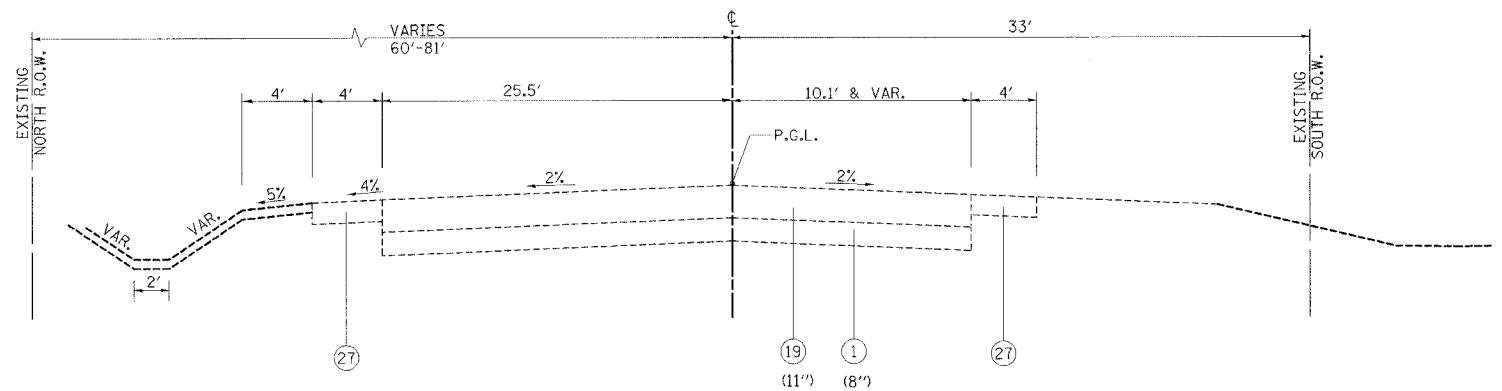
**LEGEND**

- ① EXISTING SUB-BASE GRANULAR MATERIAL
- ② EXISTING POZZOLANIC BASE, 8 1/2"
- ③ EXISTING BITUMINOUS OVERLAY, DEPTH VARIES 5" TO 7"
- ④ EXISTING AGGREGATE SHOULDER, 6"
- ⑤ PORTLAND CEMENT CONCRETE PAVEMENT 10" (JOINTED)-(STD 420106)
- ⑥ SUB-BASE GRANULAR MATERIAL, TYPE B, 12"
- ⑦ BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX C, N50, 2"
- ⑧ SUB-BASE GRANULAR MATERIAL, TYPE B, 8"
- ⑨ COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- ⑩ FURNISHING & PLACING TOPSOIL, 6"
- ⑪ BITUMINOUS SHOULDER, SUPERPAVE, 6"
- ⑫ POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX F, N90, 2"
- ⑬ POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50, 3/4"
- ⑭ POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N90, 2 1/4"
- ⑮ BITUMINOUS BASE COURSE, SUPERPAVE, 9 1/2"
- ⑯ BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70, 1 1/2"
- ⑰ BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70, 2 1/4"
- ⑱ BITUMINOUS BASE COURSE WIDENING, SUPERPAVE, 8"
- ⑲ EXISTING BITUMINOUS PAVEMENT, THICKNESS AS NOTED
- ⑳ STRIP REFLECTIVE CRACK CONTROL
- ㉑ BITUMINOUS SHOULDER, SUPERPAVE, 6 1/2"
- ㉒ NOT USED
- ㉓ SAWED LONGITUDINAL JOINT WITH EPOXY COATED #6x30" TIE BARS @ 30" CTS. (COST OF SAW CUT AND TIE BAR INCLUDED WITH PCC PAVEMENT)
- ㉔ LONGITUDINAL CONSTRUCTION JOINT WITH DRILL AND GROUT EPOXY COATED #6x24" TIE BARS @ 24" CTS. (COST OF TIE BARS AND PLACEMENT INCLUDED WITH PCC PAVEMENT)
- ㉕ EPOXY COATED #6x24" TIE BARS @ 24" CTS. (COST OF TIE BARS AND PLACEMENT INCLUDED WITH PCC PAVEMENT)
- ㉖ PAVEMENT REMOVAL (14 1/2" AVG.)
- ㉗ EXISTING BITUMINOUS SHOULDER

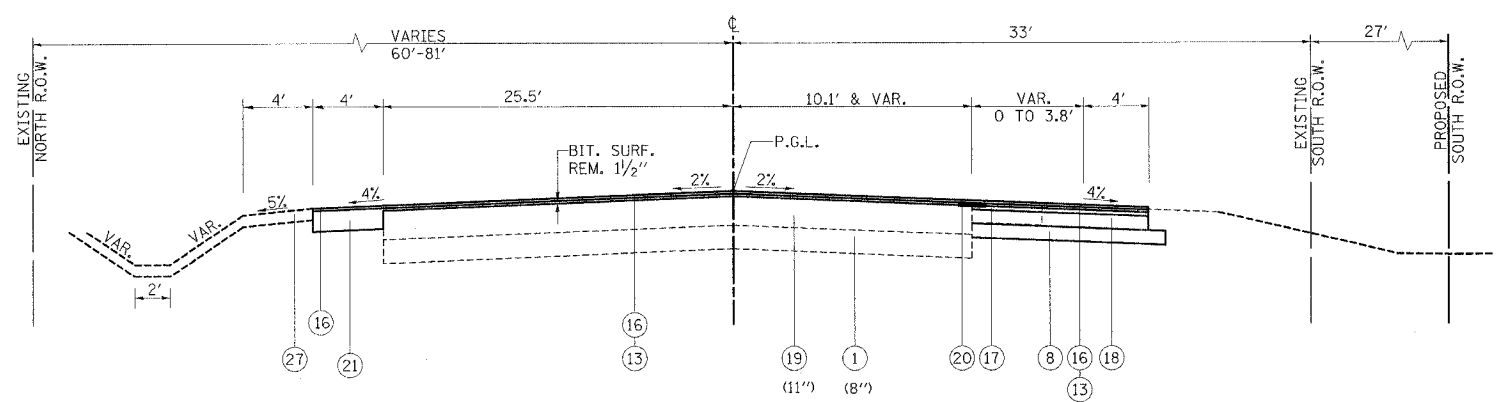
<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	<b>REVISIONS</b> NAME      DATE		ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION  <b>ORCHARD ROAD          TYPICAL SECTIONS</b>	
				SCALE: VERT. HORIZ.
				DATE: 11/04/05
				DRAWN BY: RJN CHECKED BY: SPF

11/6/2005 12:27:15 PM - K:\117700\Coord\Design\117700\_TYP\_SEC.dwg

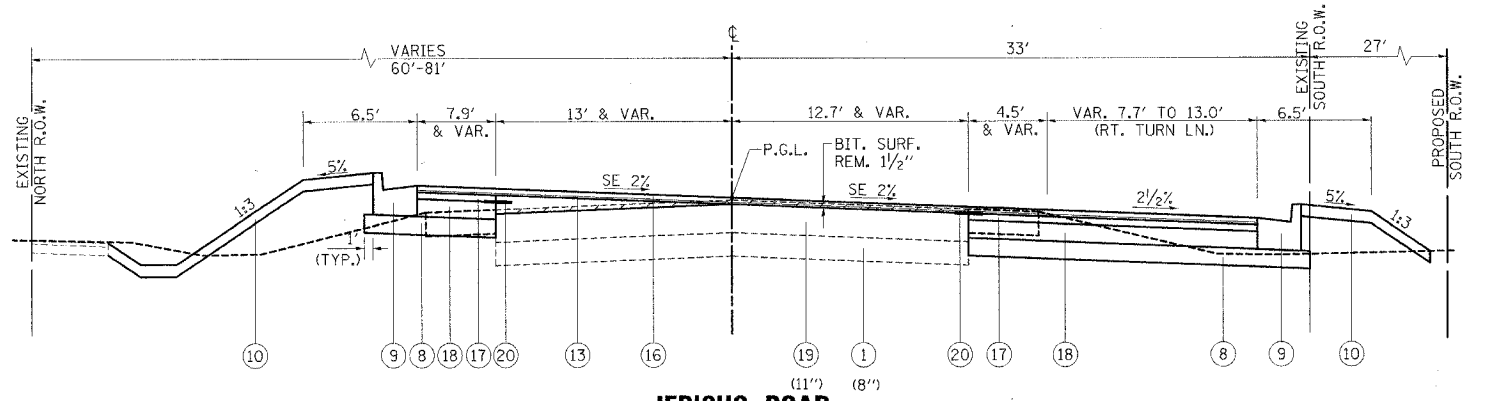
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	10
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO.: 83738				



**EXISTING JERICHO ROAD**  
STA. 305+07.88 TO STA. 317+40.40



**JERICHO ROAD**  
STA. 305+07.88 TO STA. 306+40.00



**JERICHO ROAD**  
STA. 306+40.00 TO STA. 308+12.98

- LEGEND**
- ① EXISTING SUB-BASE GRANULAR MATERIAL
  - ② EXISTING POZZOLANIC BASE, 8 1/2"
  - ③ EXISTING BITUMINOUS OVERLAY, DEPTH VARIES 5" TO 7"
  - ④ EXISTING AGGREGATE SHOULDER, 6"
  - ⑤ PORTLAND CEMENT CONCRETE PAVEMENT 10" (JOINTED)-(STD 420106)
  - ⑥ SUB-BASE GRANULAR MATERIAL, TYPE B, 12"
  - ⑦ BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX C, N50, 2"
  - ⑧ SUB-BASE GRANULAR MATERIAL, TYPE B, 8"
  - ⑨ COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
  - ⑩ FURNISHING & PLACING TOPSOIL, 6"
  - ⑪ BITUMINOUS SHOULDER, SUPERPAVE, 6"
  - ⑫ POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX F, N90, 2"
  - ⑬ POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50, 3/4"
  - ⑭ POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N90, 2 1/4"
  - ⑮ BITUMINOUS BASE COURSE, SUPERPAVE, 9 1/2"
  - ⑯ BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70, 1 1/2"
  - ⑰ BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70, 2 1/4"
  - ⑱ BITUMINOUS BASE COURSE WIDENING, SUPERPAVE, 8"
  - ⑲ EXISTING BITUMINOUS PAVEMENT, THICKNESS AS NOTED
  - ⑳ STRIP REFLECTIVE CRACK CONTROL
  - ㉑ BITUMINOUS SHOULDER, SUPERPAVE, 6 1/2"
  - ㉒ NOT USED
  - ㉓ SAWED LONGITUDINAL JOINT WITH EPOXY COATED #6x30" TIE BARS @ 30" CTS. (COST OF SAW CUT AND TIE BAR INCLUDED WITH PCC PAVEMENT)
  - ㉔ LONGITUDINAL CONSTRUCTION JOINT WITH DRILL AND GROUT EPOXY COATED #6x24" TIE BARS @ 24" CTS. (COST OF TIE BARS AND PLACEMENT INCLUDED WITH PCC PAVEMENT)
  - ㉕ EPOXY COATED #6x24" TIE BARS @ 24" CTS. (COST OF TIE BARS AND PLACEMENT INCLUDED WITH PCC PAVEMENT)
  - ㉖ PAVEMENT REMOVAL (1 1/2" AVG.)
  - ㉗ EXISTING BITUMINOUS SHOULDER

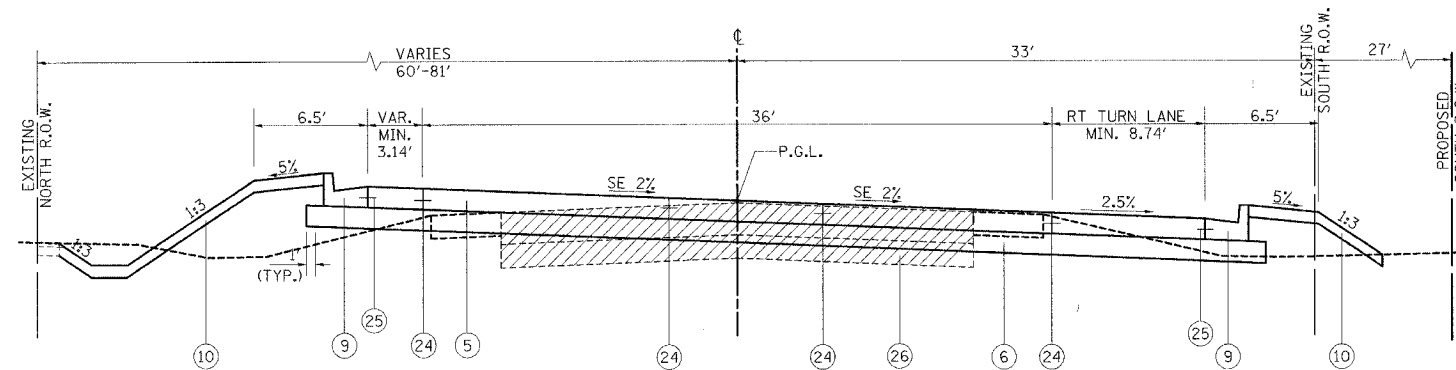
STRUCTURAL DESIGN TRAFFIC:	Year <u>2025</u>
PV = <u>9410</u>	SU = <u>400</u> MU = <u>190</u>
ROAD/STREET CLASSIFICATION:	Class <u>II</u>
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:	
P = <u>50 %</u>	S = <u>50 %</u> M = <u>50 %</u>
TRAFFIC FACTOR:	Actual TF = <u>1.19</u> AC Type = <u>PG 64-22 (AC-20)</u>
	Minimum TF = <u>0.5</u>
PG GRADE:	Binder = <u>PG64-22</u> Surface = <u>PG64-22</u>
SUBGRADE SUPPORT RATING:	SSR = <u>Poor</u> (Sta. <u>305+07.88</u> to <u>317+40.40</u> )

<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NAME</th> <th>DATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	NAME	DATE																					<p>ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION</p> <p><b>JERICHO ROAD TYPICAL SECTIONS</b></p> <p>SCALE: VERT. HORIZ. DATE: 11/04/05</p> <p>DRAWN BY: RJN CHECKED BY: SPF</p>
	NAME	DATE																						

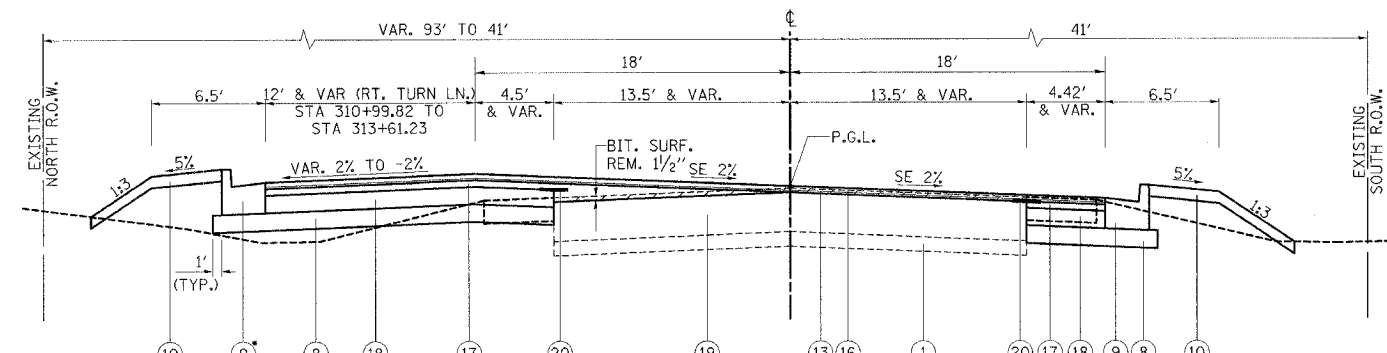
1/6/2005 12:27:15 PM I:\117700\Road\Design\117700\_TYP\_55C.Lisp



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	11
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO.: 83738				

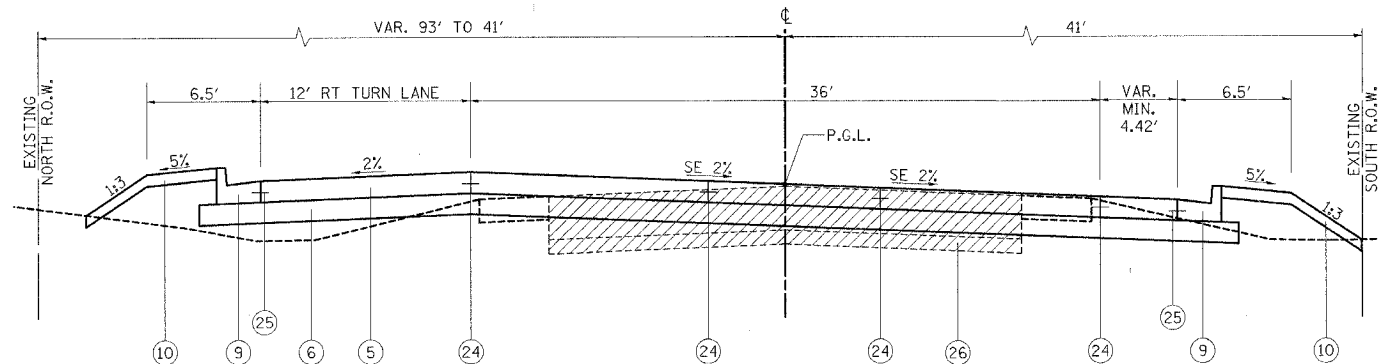


**JERICO ROAD**  
STA. 308+12.98 TO STA. 309+37.72

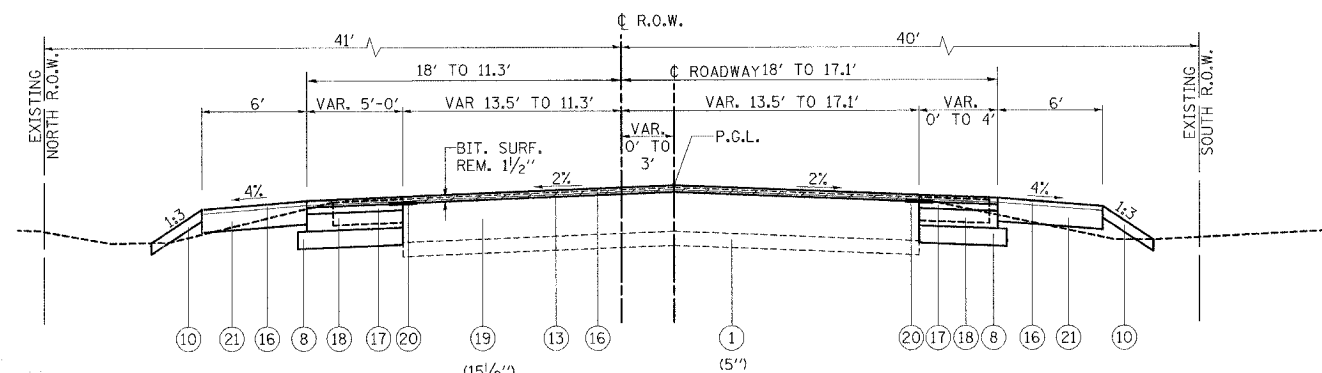


**JERICO ROAD**  
STA. 313+30 - STA. 317+40.18

**JERICO ROAD**  
STA. 311+29.56 TO STA. 314+16.73



**JERICO ROAD**  
STA. 310+36.62 TO STA. 311+29.56



**JERICO ROAD**  
STA. 314+16.73 TO STA. 317+40.40

**LEGEND**

- ① EXISTING SUB-BASE GRANULAR MATERIAL
- ② EXISTING POZZOLANIC BASE, 8 1/2"
- ③ EXISTING BITUMINOUS OVERLAY, DEPTH VARIES 5" TO 7"
- ④ EXISTING AGGREGATE SHOULDER, 6"
- ⑤ PORTLAND CEMENT CONCRETE PAVEMENT 10" (JOINTED)-(STD 420106)
- ⑥ SUB-BASE GRANULAR MATERIAL, TYPE B, 12"
- ⑦ BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX C, N50, 2"
- ⑧ SUB-BASE GRANULAR MATERIAL, TYPE B, 8"
- ⑨ COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- ⑩ FURNISHING & PLACING TOPSOIL, 6"
- ⑪ BITUMINOUS SHOULDER, SUPERPAVE, 6"
- ⑫ POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX F, N90, 2"
- ⑬ POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50, 3/4"
- ⑭ POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N90, 2 1/4"
- ⑮ BITUMINOUS BASE COURSE, SUPERPAVE, 9 1/2"
- ⑯ BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70, 1 1/2"
- ⑰ BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70, 2 1/4"

**LEGEND**

- ⑱ BITUMINOUS BASE COURSE WIDENING, SUPERPAVE, 8"
- ⑲ EXISTING BITUMINOUS PAVEMENT, THICKNESS AS NOTED
- ⑳ STRIP REFLECTIVE CRACK CONTROL
- ㉑ BITUMINOUS SHOULDER, SUPERPAVE, 6 1/2"
- ㉒ NOT USED
- ㉓ SAWED LONGITUDINAL JOINT WITH EPOXY COATED #6x30" TIE BARS @ 30" CTS. (COST OF SAW CUT AND TIE BAR INCLUDED WITH PCC PAVEMENT)
- ㉔ LONGITUDINAL CONSTRUCTION JOINT WITH DRILL AND GROUT EPOXY COATED #6x24" TIE BARS @ 24" CTS. (COST OF TIE BARS AND PLACEMENT INCLUDED WITH PCC PAVEMENT)
- ㉕ EPOXY COATED #6x24" TIE BARS @ 24" CTS. (COST OF TIE BARS AND PLACEMENT INCLUDED WITH PCC PAVEMENT)
- ㉖ PAVEMENT REMOVAL (14 1/2" AVG.)
- ㉗ EXISTING BITUMINOUS SHOULDER

<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	<b>REVISIONS</b> NAME      DATE		ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION  <b>JERICO ROAD</b> <b>TYPICAL SECTIONS</b>
	SCALE: VERT. HORIZ. DATE: 11/04/05		





PAVEMENT MARKING TAPE, TYPE III						
	LOCATION	4" LINE (FT.)	6" LINE (FT.)	12" LINE (FT.)	24" STOP BARS (FT.)	LETTERS & SYMBOLS (SQ. FT.)
STAGE II	ORCHARD (SOUTH)	5739	218	97	23	36.4
	ORCHARD (NORTH)	5026	182	558	24	36.4
	JERICO (WEST)	3173			17	
	JERICO (EAST)	2839			11	
	SUBTOTAL	16,777	400	655	75	72.8
STAGE III	ORCHARD (SOUTH)	6378	244	132	23	36.4
	CORNELL AVE	1371				
	ORCHARD (NORTH)	4063	191	565	24	36.4
	JERICO (WEST)				11	
	SUBTOTAL	12,056	435	697	69	72.8
STAGE IIIA	ORCHARD (SOUTH)	91			24	
	CORNELL AVE	501				
	ORCHARD (NORTH)	419			24	
	JERICO (WEST)	1757			11	
	SUBTOTAL	5484			70	
STAGE IIIB	ORCHARD (SOUTH)	5566	150	99	24	36.4
	ORCHARD (NORTH)	5533	253	557	24	36.4
	JERICO (WEST)	337			11	
	JERICO (EAST)				11	
	SUBTOTAL	11,436	403	656	70	72.8
STAGE IV	ORCHARD (SOUTH)	4717	603	450	36	72.8
	ORCHARD (NORTH)	3284	588		36	72.8
	JERICO (WEST)	498	246		25	36.4
	JERICO (EAST)	560	340		52	36.4
	SUBTOTAL	9059	1777	450	149	218.4
TOTAL	54,812	3015	2458	433	437	


INLET & PIPE PROTECTION		
LOCATION	OFFSET	INLET AND PIPE PROTECTION (EACH) 28000500
ORCHARD RD.		
168+39.00	163 RT	1
168+56.00	517 RT	1
169+11.00	46 LT	1
172+98.00	58 RT	1
179+43.00	70 LT	1
182+00.00	45 RT	1
182+82.00	80 RT	1
182+82.00	45 RT	1
184+00.00	48 RT	1
186+00.00	47 RT	1
188+00.00	45 RT	1
190+00.00	45 RT	1
JERICO RD.		
310+88.00	66 LT	1
310+96.00	71 LT	1
311+75.00	50 LT	1
312+37.00	43 LT	1
312+96.50	38 LT	1
313+12.00	33 RT	1
313+50.00	31 LT	1
314+00.00	38 LT	1
315+00.00	36 LT	1
316+48.00	32 LT	1
317+07.00	18 LT	1
TOTAL		23

TEMPORARY DITCH CHECKS		
LOCATION	OFFSET	TEMPORARY DITCH CHECKS (EACH) 28000300
ORCHARD RD.		
163+66.60	27.00 LT	1
164+42.30	26.00 LT	1
174+00.00	59.20 RT	1
175+98.86	62.91 RT	1
181+00.00	59.98 LT	1
183+00.00	51.56 LT	1
184+00.00	76.35 RT	1
185+00.00	45.31 LT	1
186+00.00	74.55 RT	1
187+00.00	44.75 LT	1
188+00.00	72.78 RT	1
JERICO RD.		
305+00.00	40.00 LT	1
307+07.66	28.58 LT	1
308+92.82	39.78 LT	1
TOTAL		14

SANITARY MANHOLES TO BE RECONSTRUCTED		
LOCATION	OFFSET	SANITARY MANHOLES TO BE RECONSTRUCTED (EACH) 60260050
JERICO RD.		
312+56.33	23.04 LT	1
316+30.59	19.09 LT	1
TOTAL		2

STRUCTURES TO BE ADJUSTED			
LOCATION	OFFSET	VALVE VAULT TO BE ADJUSTED (EACH) 60265700	VALVE BOXES TO BE ADJUSTED (EACH) 60266600
ORCHARD RD.			
172+14	91' RT	1	
172+17.88	76.9' RT	1	
172+67	86' RT	1	
175+26	60' RT	1	
JERICO RD.			
309+19.12	25.3' LT		1
309+20.41	12.5' RT		1
309+25.15	17.1' RT	1	
309+30.52	11.1' RT		1
310+47.19	18.0' RT	1	
317+01.24	18.1' RT	1	
TOTAL		7	3

9/22/2006 10:59:51AM k:\117700\cad\des\gr\_1\117700\_sch\_quant\figs-1-3.dgn

 Excellence through Ownership  200 West Front Street Wheaton, IL 60187	REVISIONS NAME      DATE		ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION  <b>SCHEDULE OF QUANTITIES</b>  SCALE: VERT.      DRAWN BY: RJN HORIZ.              CHECKED BY: SPF DATE: 11/04/05

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	15
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO.: 83738				

Curve OR-1  
P.I. Station 106+47.38 N 1,842,264.2471 E 972,834.5086  
Delta = 2° 42' 51" (LT)  
Degree = 0° 51' 25"  
Tangent = 158.374  
Length = 316.690  
Radius = 6,685.000  
External = 1.876  
P.C. Station 104+89.01 N 1,842,105.8735 E 972,834.9757  
P.T. Station 108+05.70 N 1,842,422.4210 E 972,826.5423

Curve OR-2  
P.I. Station 109+64.07 N 1,842,580.5949 E 972,818.5759  
Delta = 2° 42' 51" (RT)  
Degree = 0° 51' 25"  
Tangent = 158.374  
Length = 316.690  
Radius = 6,685.000  
External = 1.876  
P.C. Station 108+05.70 N 1,842,422.4210 E 972,826.5423  
P.T. Station 111+22.39 N 1,842,738.9685 E 972,818.1089

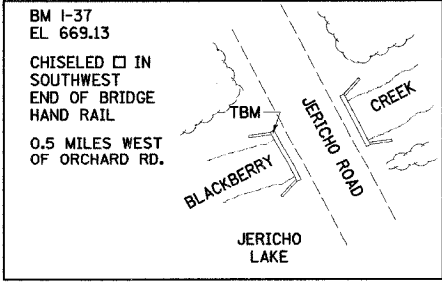
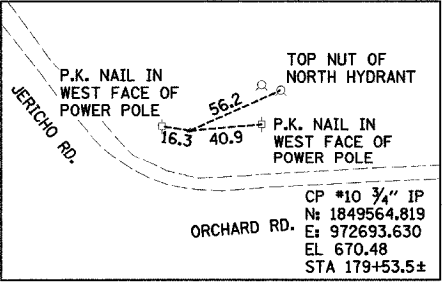
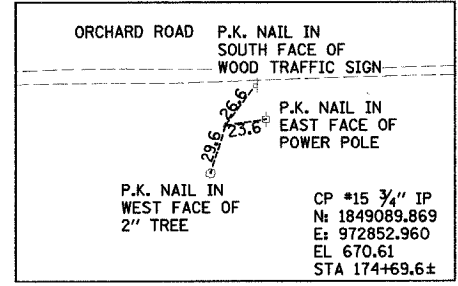
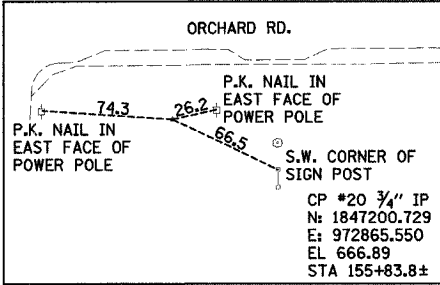
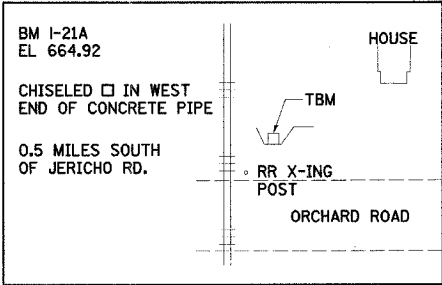
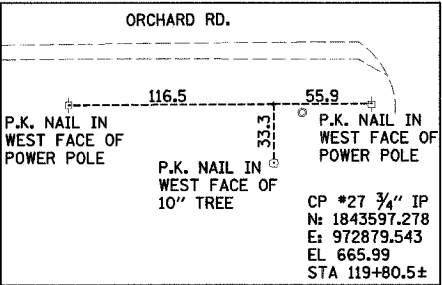
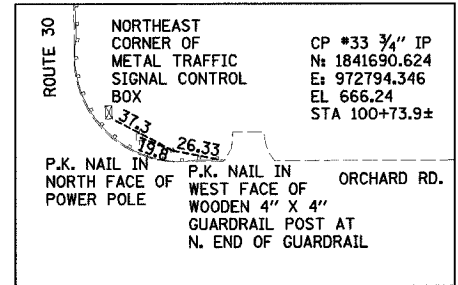
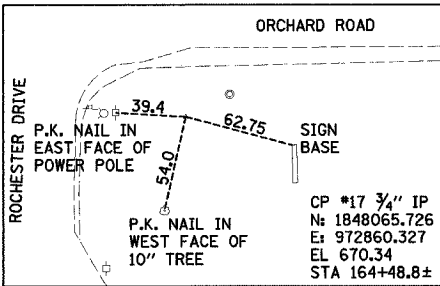
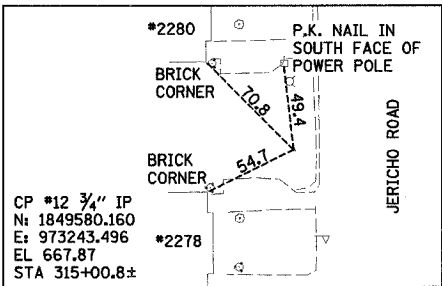
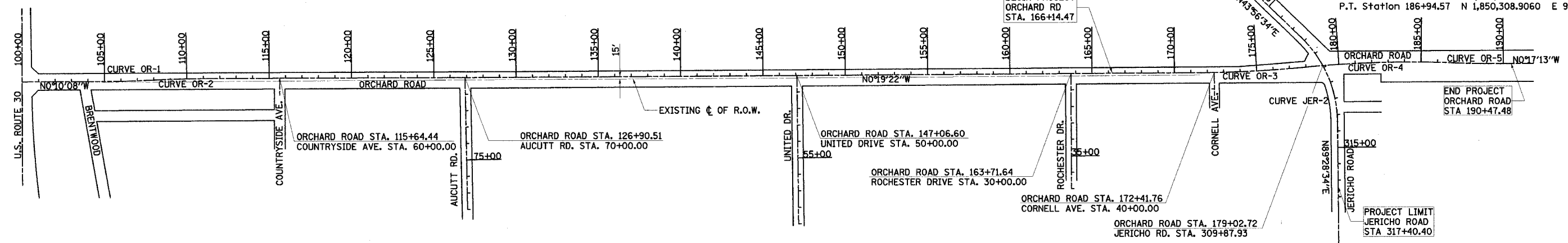
Curve OR-3  
P.I. Station 174+55.40 N 1,849,071.8954 E 972,786.5538  
Delta = 5° 00' 56" (LT)  
Degree = 0° 51' 25"  
Tangent = 292.775  
Length = 585.175  
Radius = 6,685.000  
External = 6.408  
P.C. Station 171+62.62 N 1,848,779.1256 E 972,788.2031  
P.T. Station 177+47.80 N 1,849,363.4001 E 972,759.3158

Curve OR-4  
P.I. Station 182+56.45 N 1,849,869.8471 E 972,711.9937  
Delta = 7° 31' 15" (RT)  
Degree = 0° 51' 25"  
Tangent = 439.378  
Length = 877.493  
Radius = 6,685.000  
External = 14.424  
P.C. Station 178+17.07 N 1,849,432.3751 E 972,752.8708  
P.T. Station 186+94.57 N 1,850,308.9060 E 972,728.7273

Curve OR-5  
P.I. Station 188+38.66 N 1,850,452.8924 E 972,734.2150  
Delta = 2° 28' 10" (LT)  
Degree = 0° 51' 25"  
Tangent = 144.091  
Length = 288.137  
Radius = 6,685.000  
External = 1.553  
P.C. Station 186+94.57 N 1,850,308.9060 E 972,728.7273  
P.T. Station 189+82.70 N 1,850,596.9816 E 972,733.4934

Curve JER-1  
P.I. Station 301+02.33 N 1,848,904.2496 E 972,109.8972  
Delta = 8° 10' 14" (LT)  
Degree = 3° 59' 57"  
Tangent = 102.327  
Length = 204.307  
Radius = 1,432.691  
External = 3.650  
P.C. Station 300+00.00 N 1,848,841.4104 E 972,029.1382  
P.T. Station 302+04.31 N 1,848,977.9285 E 972,180.9056

Curve JER-2  
P.I. Station 310+73.93 N 1,849,604.0885 E 972,784.3709  
Delta = 45° 32' 00" (RT)  
Degree = 7° 59' 54"  
Tangent = 300.632  
Length = 569.281  
Radius = 716.340  
External = 60.527  
P.C. Station 307+73.30 N 1,849,387.6232 E 972,575.7512  
P.T. Station 313+42.58 N 1,849,606.8378 E 973,084.9901



**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION  
**ALIGNMENT, TIES, AND BENCHMARKS**

SCALE: VERT.  
HORIZ.  
DATE: 11/04/05

DRAWN BY: RJN  
CHECKED BY: SPF

11/4/2005 3:33:08 PM R:\1177700\Xcd\Design\1177700-Alignment.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	16
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83738				

PROJECT CONSTRUCTION STAGE I

TRAFFIC MAINTENANCE:

ORCHARD ROAD - TRAFFIC SHALL BE MAINTAINED ON THE EXISTING ORCHARD ROAD PAVEMENT.

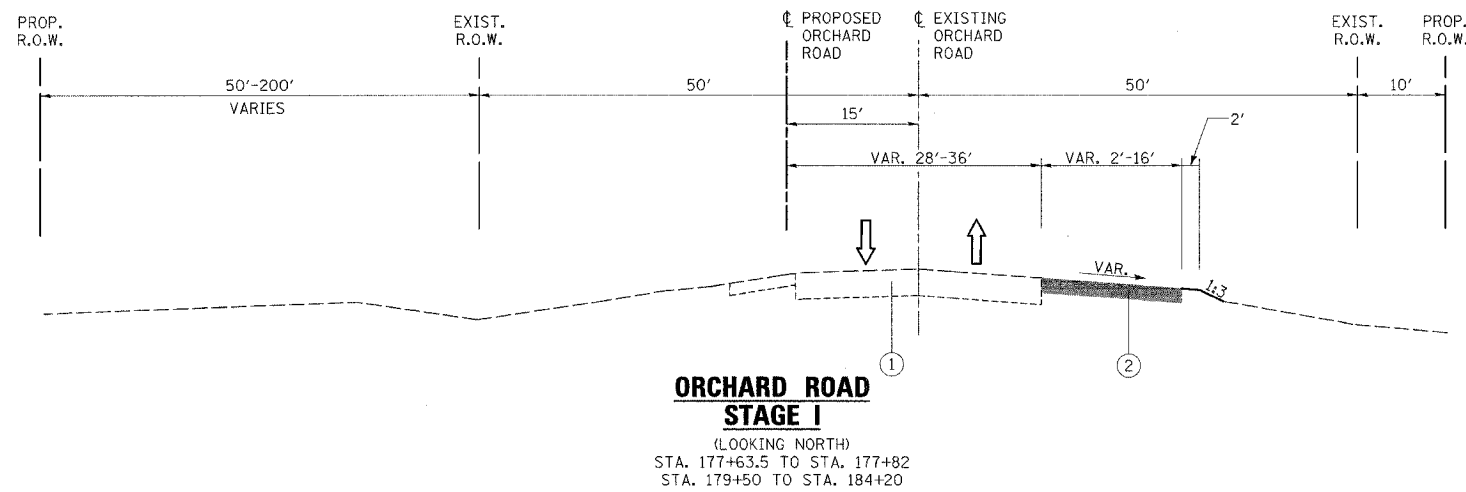
JERICO ROAD - TRAFFIC SHALL BE MAINTAINED ON THE EXISTING JERICO ROAD PAVEMENT.

CORNELL AVENUE - TRAFFIC SHALL BE MAINTAINED ON THE EXISTING SIDE STREET PAVEMENT.

THE FOLLOWING WORK ITEMS ARE TO BE COMPLETED DURING STAGE I:

- CONSTRUCT ALL TEMPORARY PAVEMENTS APPLYING STANDARD 701006 FOR TRAFFIC CONTROL AND PROTECTION.
- INSTALL TEMPORARY TRAFFIC SIGNAL AT ORCHARD AND JERICO INTERSECTION.
- CONSTRUCT STORM SEWER AND CULVERTS AT NORTHWEST CORNER OF ORCHARD & JERICO ROAD AND ALONG EAST LEG OF JERICO ROAD
- RECONSTRUCT SANITARY MANHOLE AT STA. 316+30.59, 19.09' LT. PRIOR TO PLACEMENT OF TEMPORARY PAVEMENT

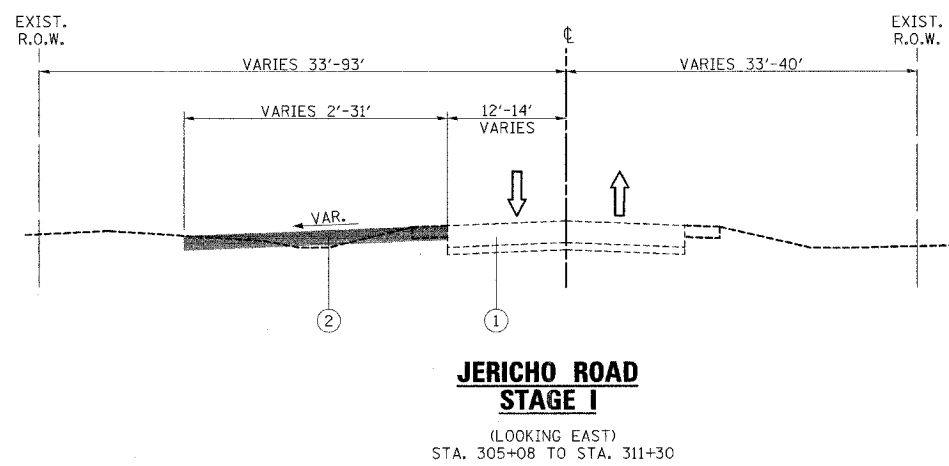
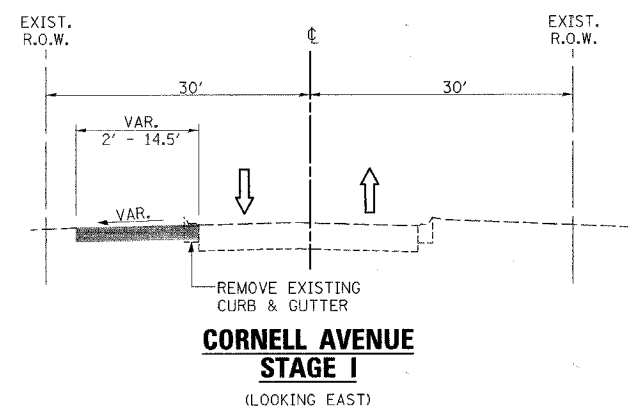
SEE SHEET 33 FOR ADDITIONAL MAINTENANCE OF TRAFFIC NOTES.



BITUMINOUS MIXTURE REQUIREMENTS

PAY ITEM	AC TYPE	VOIDS	MAX RAP %
TEMPORARY PAVEMENT			
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N50, 1 3/4"	PG 64-22	4% @ 50 GYR	15
BITUMINOUS BASE COURSE, SUPERPAVE, 8 1/4"	PG 58-22	2% @ 50 GYR	50

THE UNIT WEIGHT USED TO CALCULATE ALL BITUMINOUS SURFACE MIXTURE QUANTITIES IS 112 LBS/SQYD/IN



LEGEND

- ① EXISTING PAVEMENT
- ② TEMPORARY PAVEMENT, 10"
- ③ PROPOSED PAVEMENT
- ④ TEMPORARY PAVEMENT MARKING
- ⑤ TEMPORARY PAVEMENT RAMP

**rjngroup**  
Excellence through Ownership

200 West Front Street  
Wheaton, IL 60187

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION  
**MAINTENANCE OF TRAFFIC  
TYPICAL SECTIONS AND NOTES  
STAGE I**

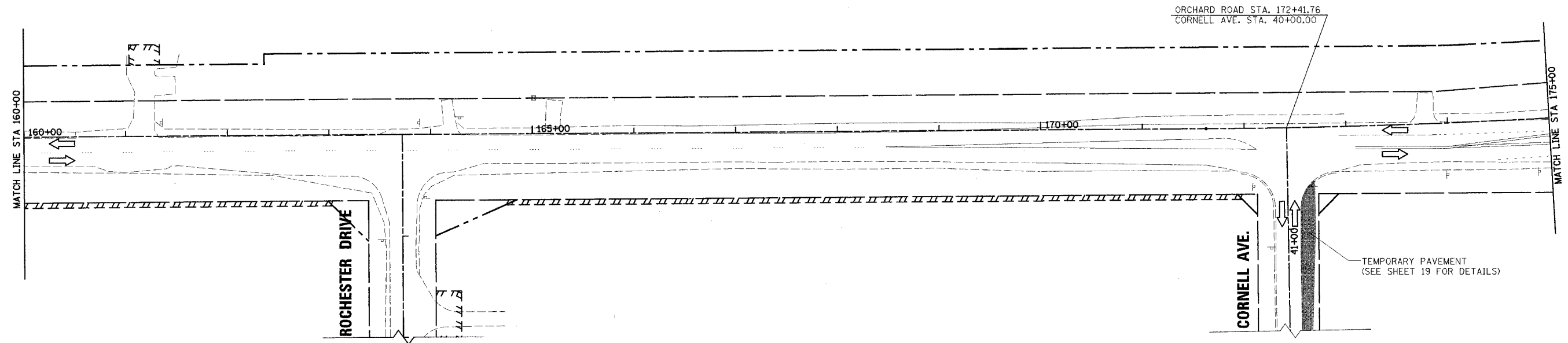
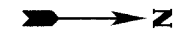
SCALE: VERT.  
HORIZ.  
DATE: 11/04/05

DRAWN BY: RJN  
CHECKED BY: SPF



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
536	99-00232-00-WR	KANE	97	17
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83738				

- LEGEND**
- TYPE I BARRICADE OR DRUM W/STEADY BURNING MONODIRECTIONAL LIGHT
  - ➔ LANE OF TRAFFIC
  - ⌊ TYPE III BARRICADE W/STEADY BURNING MONODIRECTIONAL LIGHT
  - ⌋ SIGN
  - ▨ WORK AREA
  - ▩ TEMPORARY PAVEMENT



**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

REVISIONS	
NAME	DATE

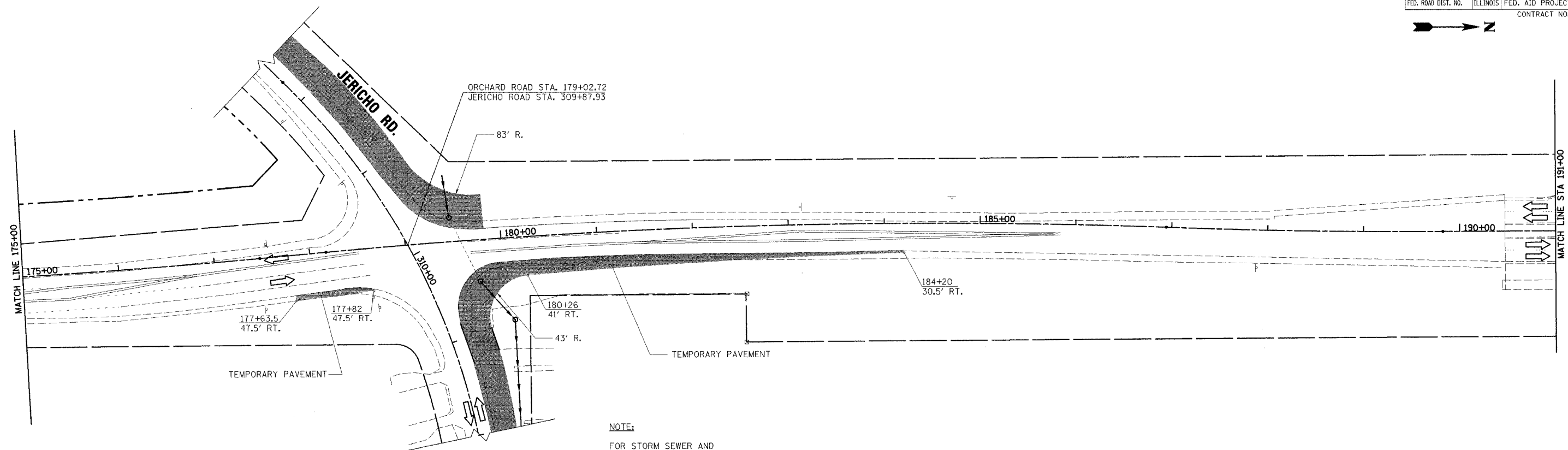
ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION  
**MAINTENANCE OF TRAFFIC  
STAGE I**

SCALE: VERT.  
HORIZ.  
DATE: 11/04/05

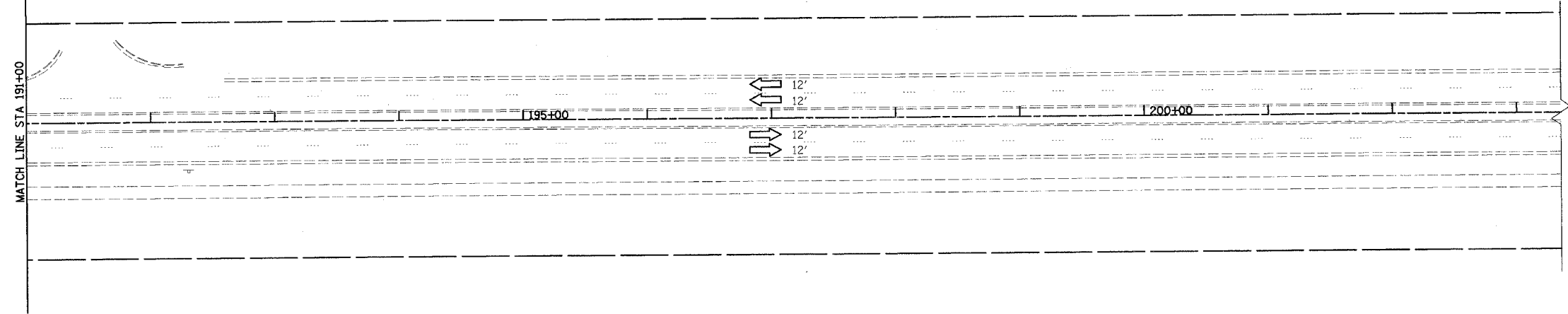
DRAWN BY: RJN  
CHECKED BY: SPF

11/4/2005 3:31:52 PM ks:\117700\cod\design\1177700\_stg01\_sht3.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	18
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO.: 83738



NOTE:  
 FOR STORM SEWER AND DRAINAGE STRUCTURE INFORMATION SEE STAGE-I PLAN WITH JERICHO ROAD SHEET 19



- LEGEND**
- TYPE I BARRICADE OR DRUM W/STEADY BURNING MONODIRECTIONAL LIGHT
  - ➔ LANE OF TRAFFIC
  - ⊥ TYPE III BARRICADE W/STEADY BURNING MONODIRECTIONAL LIGHT
  - ⊥ SIGN
  - ▨ WORK AREA
  - ▨ TEMPORARY PAVEMENT

11/4/2005 3:51:33 PM K:\1117700\cad\design\1117700\_stage1\_sht4.dgn

**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 KANE COUNTY DIVISION OF TRANSPORTATION  
 ORCHARD ROAD RECONSTRUCTION  
**MAINTENANCE OF TRAFFIC  
 STAGE I**

SCALE: VERT.  
 HORIZ.  
 DATE: 11/04/05

DRAWN BY: RJN  
 CHECKED BY: SPF



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	20
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83738				

PROJECT CONSTRUCTION STAGE II

TRAFFIC MAINTENANCE:

ORCHARD ROAD - TRAFFIC SHALL BE MAINTAINED ON THE EXISTING ORCHARD ROAD PAVEMENT WITH ONE LANE OF TRAFFIC IN EACH DIRECTION. SOUTHBOUND LEFT TURN LANES SHALL BE PROVIDED AT JERICHO ROAD. TRAFFIC CONTROL SHALL BE INSTALLED AS DETAILED IN THESE PLANS.

JERICHO ROAD - TEMPORARY PAVEMENT WILL BE CONSTRUCTED ALONG THE NORTH SIDE OF JERICHO ROAD TO MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION. TRAFFIC CONTROL SHALL BE INSTALLED AS DETAILED IN THESE PLANS.

CORNELL AVENUE - TRAFFIC SHALL BE MAINTAINED ON THE EXISTING SIDE STREET PAVEMENT.

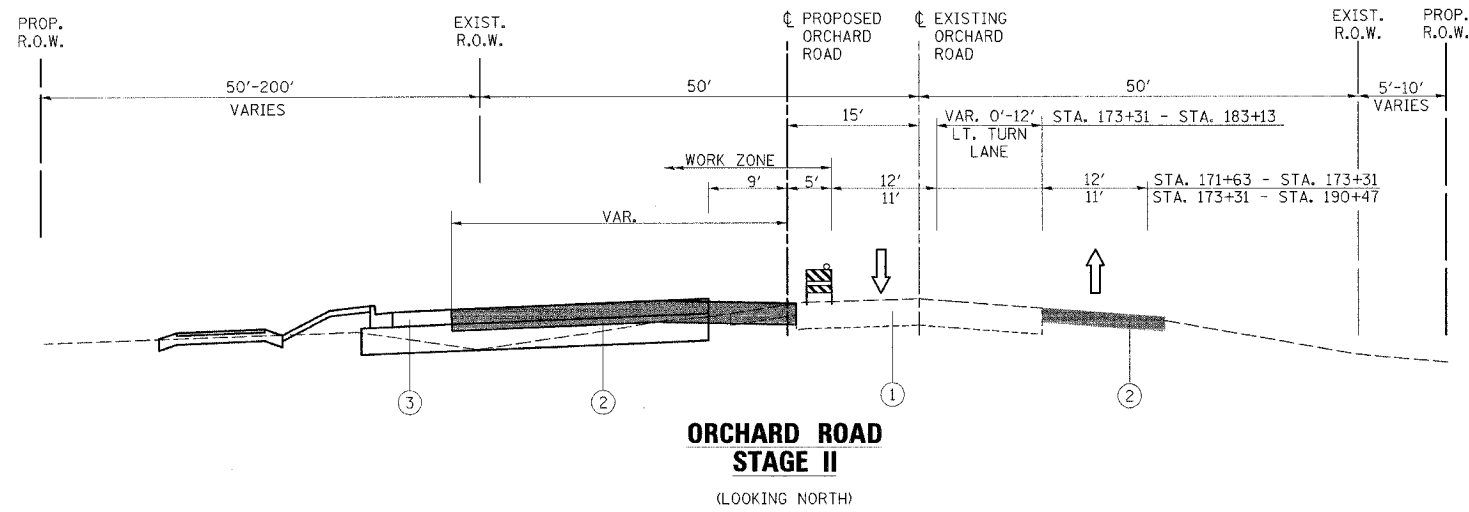
THE FOLLOWING WORK ITEMS ARE TO BE COMPLETED DURING STAGE II:

- TRAFFIC CONTROL ITEMS, TEMPORARY PAVEMENT MARKING AND OTHER TRAFFIC CONTROL DEVICES SHALL BE INSTALLED THROUGHOUT THE CONSTRUCTION AREA PRIOR TO WORK COMMENCING.
- GRADING AND EMBANKMENT CONSTRUCTION SHALL BE COMPLETED FOR THE ORCHARD ROAD, SOUTHBOUND LANES.
- CONSTRUCT STORM SEWER LATERALS AND TRUNK LINE SEWER FOR ORCHARD ROAD, SOUTHBOUND LANES.
- CONSTRUCT ORCHARD ROAD SOUTHBOUND PAVEMENT LANES AND OUTSIDE CURB AND GUTTER.
- CONSTRUCT PATH ALONG WEST SIDE OF ORCHARD ROAD, SOUTHBOUND LANES SOUTH OF JERICHO ROAD.
- CONSTRUCT SOUTHWEST PORTION OF THE INTERSECTION OF ORCHARD ROAD AND JERICHO ROAD
- INSTALL PERMANENT TRAFFIC SIGNALS AND STREET LIGHTING FOUNDATIONS ALONG SOUTHBOUND PAVEMENTS
- COMPLETE FINAL RESTORATION OF WEST EMBANKMENT SLOPES
- CONSTRUCT TEMPORARY PAVEMENT FOR ORCHARD ROAD TRANSITION STA 162+66.85 TO STA 171+62.62

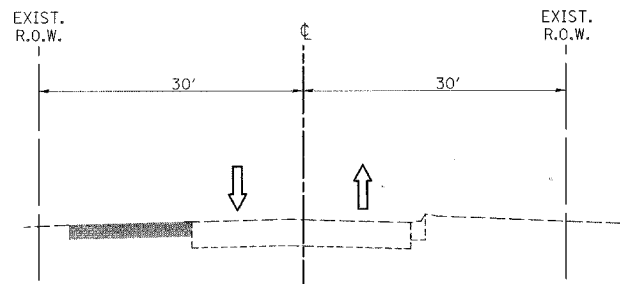
ALL TEMPORARY PAVEMENT MARKING, ON FINAL PAVEMENT SURFACES, SHALL BE PAVEMENT MARKING TAPE, TYPE III UNLESS NOTED OTHERWISE

SEE SHEET 33 FOR ADDITIONAL MAINTENANCE OF TRAFFIC NOTES

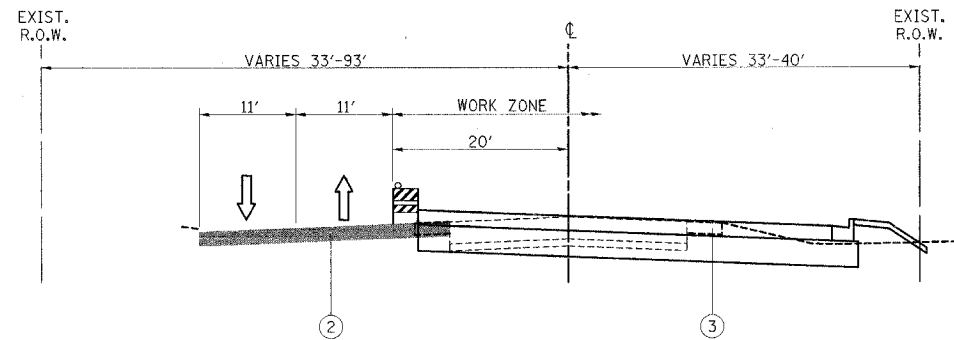
SEE SHEET 44 FOR STAGE CONSTRUCTION JOINTS



**ORCHARD ROAD  
STAGE II**  
(LOOKING NORTH)



**CORNELL AVENUE  
STAGE II**  
(LOOKING EAST)



**JERICHO ROAD  
STAGE II**  
(LOOKING EAST)  
STA. 305+08 TO STA. 311+30

**LEGEND**

- ① EXISTING PAVEMENT
- ② TEMPORARY PAVEMENT, 10"
- ③ PROPOSED PAVEMENT
- ④ TEMPORARY PAVEMENT MARKING
- ⑤ TEMPORARY PAVEMENT RAMP

**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

REVISIONS	
NAME	DATE

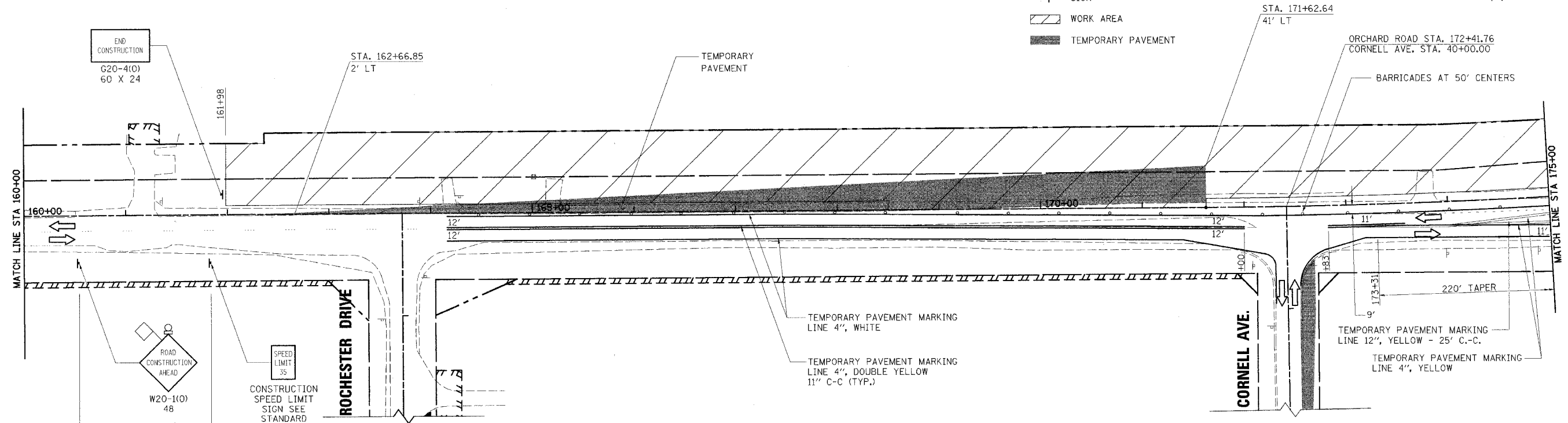
ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION  
**MAINTENANCE OF TRAFFIC  
TYPICAL SECTIONS AND NOTES  
STAGE II**

SCALE: VERT.  
HORIZ.  
DATE: 11/04/05

DRAWN BY: RJN  
CHECKED BY: SPF

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	21
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO.: 83738

- LEGEND**
- TYPE I BARRICADE OR DRUM W/STEADY BURNING MONODIRECTIONAL LIGHT
  - ➔ LANE OF TRAFFIC
  - ⌋ TYPE III BARRICADE W/STEADY BURNING MONODIRECTIONAL LIGHT
  - ⌋ SIGN
  - ▨ WORK AREA
  - ▨ TEMPORARY PAVEMENT



**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

REVISIONS	
NAME	DATE

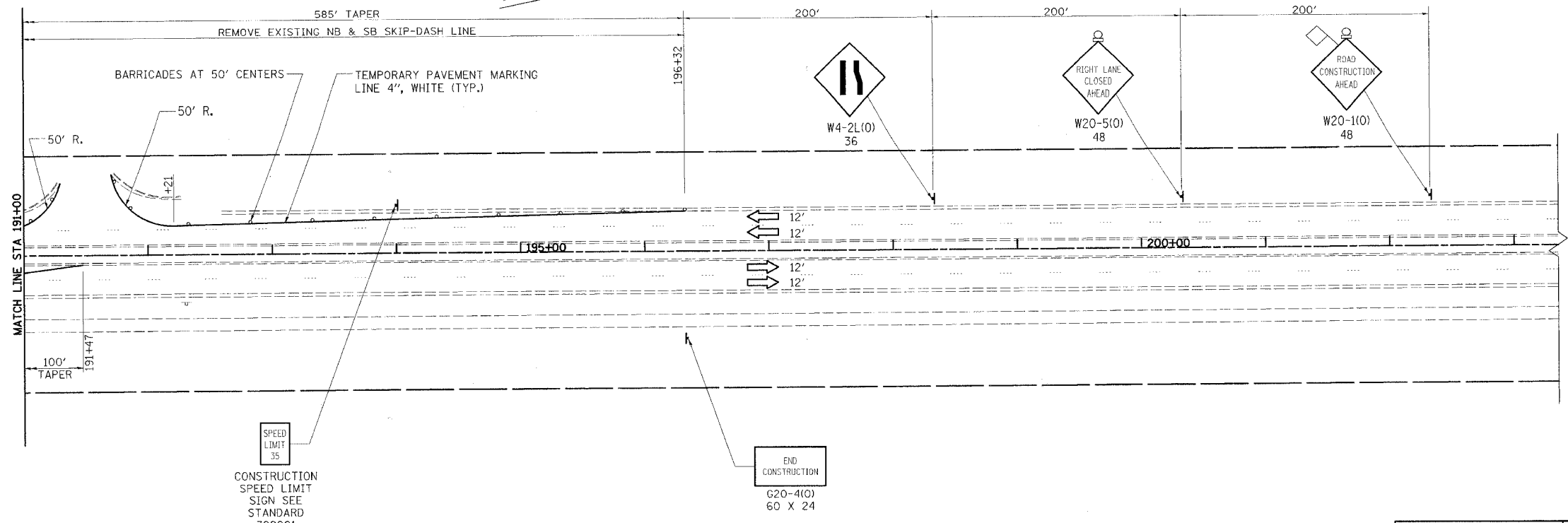
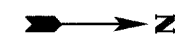
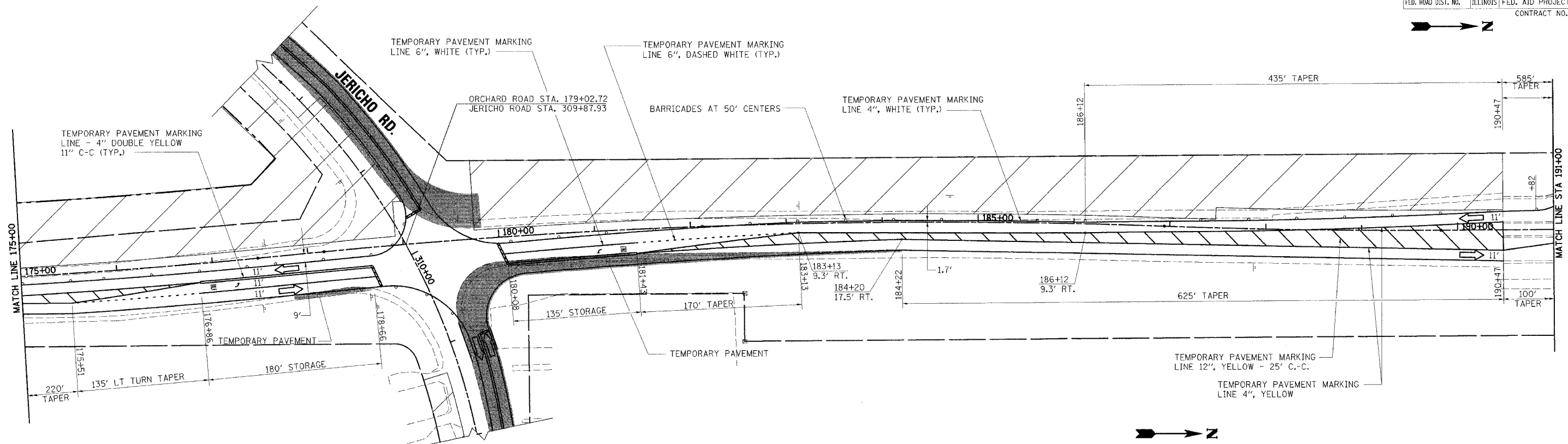
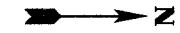
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 KANE COUNTY DIVISION OF TRANSPORTATION  
 ORCHARD ROAD RECONSTRUCTION  
**MAINTENANCE OF TRAFFIC  
 STAGE II**

SCALE: VERT. \_\_\_\_\_  
 HORIZ. \_\_\_\_\_  
 DATE: 11/04/05

DRAWN BY: RJN  
 CHECKED BY: SPF

11/4/2005 3:31:37 P.M. k:\1177700\cadd\design\1177700\_sfp022\_sht21.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	22
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO.: 83738



**LEGEND**

- TYPE I BARRICADE OR DRUM W/STEADY BURNING MONODIRECTIONAL LIGHT
- ➔ LANE OF TRAFFIC
- ⊥ TYPE III BARRICADE W/STEADY BURNING MONODIRECTIONAL LIGHT
- ⊥ SIGN
- ▨ WORK AREA
- ▨ TEMPORARY PAVEMENT

**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 KANE COUNTY DIVISION OF TRANSPORTATION  
 ORCHARD ROAD RECONSTRUCTION  
**MAINTENANCE OF TRAFFIC  
 STAGE II**

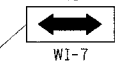
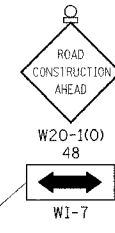
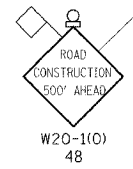
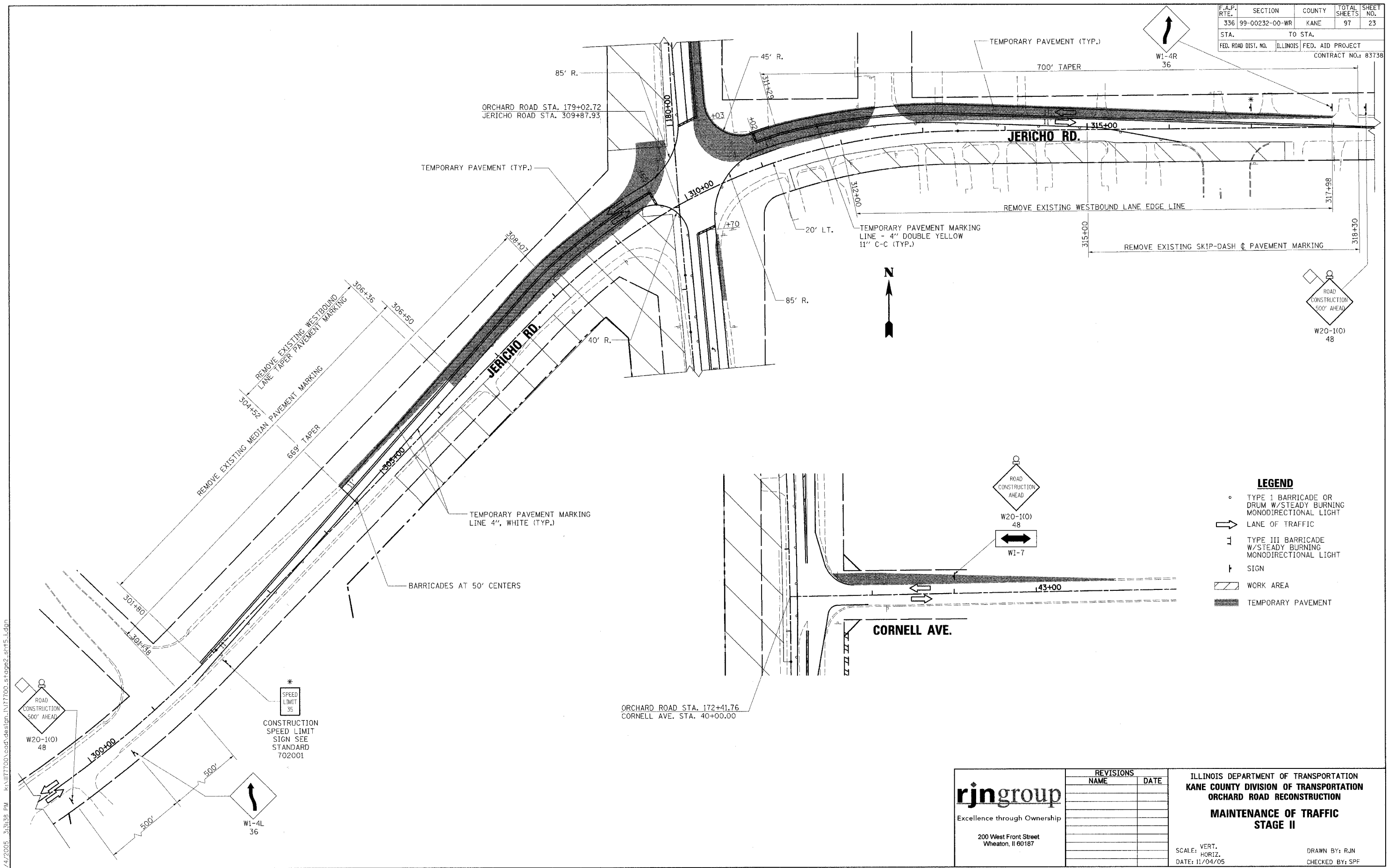
SCALE: VERT. \_\_\_\_\_  
 HORIZ. \_\_\_\_\_  
 DATE: 11/04/05

DRAWN BY: RJN  
 CHECKED BY: SPF

11/6/2005 12:31:09 PM k:\117700\Coat\Design\117700\_Stage2\_Sht4.dgn



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	23
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO.: 83738	



- LEGEND**
- TYPE I BARRICADE OR DRUM W/STEADY BURNING MONODIRECTIONAL LIGHT
  - ➔ LANE OF TRAFFIC
  - ⌊ TYPE III BARRICADE W/STEADY BURNING MONODIRECTIONAL LIGHT
  - ⌋ SIGN
  - ▨ WORK AREA
  - ▨ TEMPORARY PAVEMENT

\*  
SPEED LIMIT 35  
CONSTRUCTION SPEED LIMIT SIGN SEE STANDARD 702001

11/4/2005 3:31:38 PM ks:\117700\cad\design\117700\_srs022\_sht25.dgn

**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

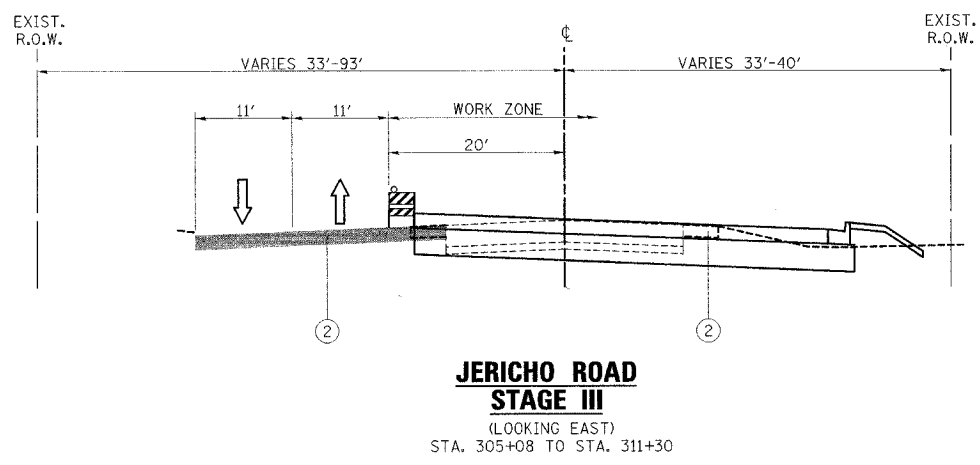
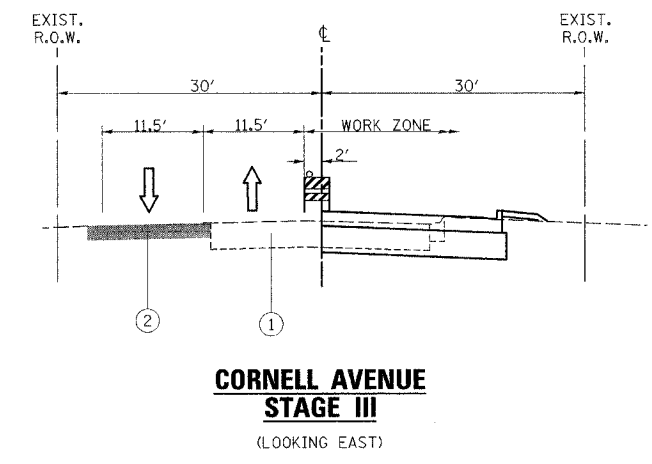
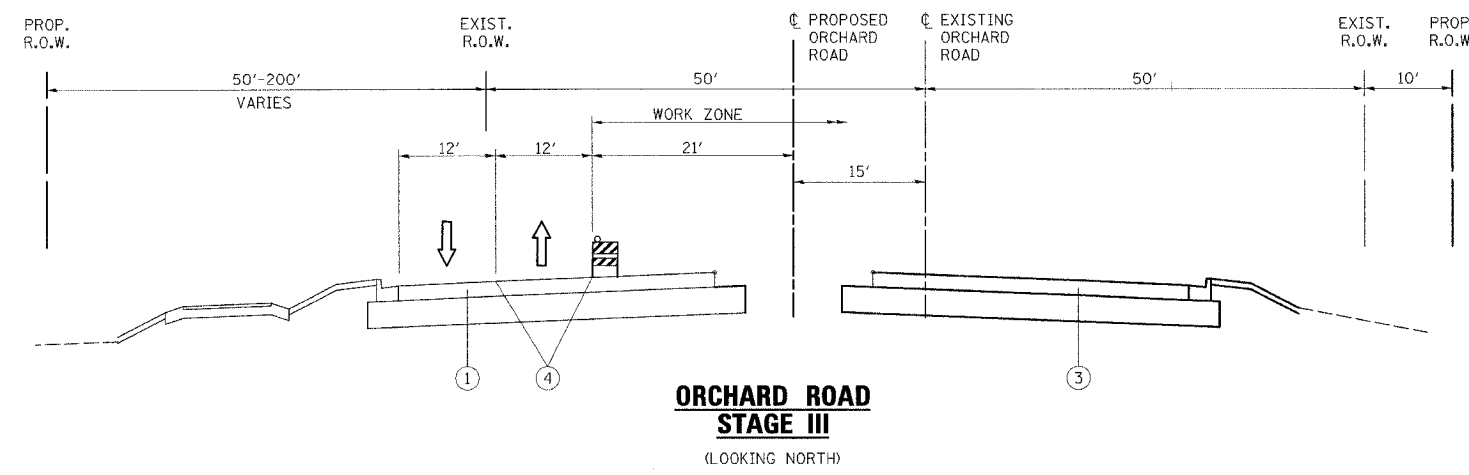
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION  
**MAINTENANCE OF TRAFFIC  
STAGE II**

SCALE: VERT.  
HORIZ.  
DATE: 11/04/05

DRAWN BY: RJN  
CHECKED BY: SPF

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	24
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO.: 83738



**PROJECT CONSTRUCTION STAGE III**

**TRAFFIC MAINTENANCE:**

ORCHARD ROAD - TRAFFIC SHALL BE MAINTAINED ON THE NEW ORCHARD ROAD PAVEMENT BUILT IN STAGE II WITH ONE LANE OF TRAFFIC IN EACH DIRECTION. SOUTHBOUND LEFT TURN LANES SHALL BE PROVIDED AT JERICO ROAD. TRAFFIC CONTROL SHALL BE INSTALLED AS DETAILED IN THESE PLANS.

JERICO ROAD - MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION. TRAFFIC CONTROL SHALL BE INSTALLED AS DETAILED IN THESE PLANS.

CORNELL AVENUE - TRAFFIC SHALL BE MAINTAINED ON THE EXISTING AND TEMPORARY SIDE STREET PAVEMENT WITH ONE LANE OF TRAFFIC IN EACH DIRECTION. TRAFFIC CONTROL SHALL BE INSTALLED AS DETAILED IN THESE PLANS

**THE FOLLOWING WORK ITEMS ARE TO BE COMPLETED DURING STAGE III:**

- TRAFFIC CONTROL ITEMS, TEMPORARY PAVEMENT MARKING AND OTHER TRAFFIC CONTROL DEVICES SHALL BE INSTALLED THROUGHOUT THE CONSTRUCTION AREA PRIOR TO WORK COMMENCING.
- GRADING AND EMBANKMENT CONSTRUCTION SHALL BE COMPLETED FOR ORCHARD ROAD NORTHBOUND LANES.
- STORM SEWER LATERALS SHALL BE EXTENDED FOR ORCHARD ROAD NORTHBOUND LANES.
- CONSTRUCT ORCHARD ROAD NORTHBOUND PAVEMENT LANES AND OUTSIDE CURB AND GUTTER.
- CONSTRUCT ORCHARD ROAD NORTHBOUND PAVEMENT FROM STA. 165+00 TO 190+47 FIRST IN PREPARATION FOR SUBSEQUENT TEMPORARY LANE TRAFFIC CHANGES
- CONSTRUCT SOUTHERN PORTION OF SIDE STREETS CONCRETE PAVEMENT AS SHOWN IN THESE PLANS
- CONSTRUCT SOUTHEAST PORTION OF THE INTERSECTION OF ORCHARD ROAD AND JERICO ROAD
- INSTALL PERMANENT TRAFFIC SIGNALS AND LIGHTING FOUNDATIONS ALONG NORTHBOUND PAVEMENTS
- COMPLETE FINAL RESTORATION OF EAST EMBANKMENT SLOPES

ALL TEMPORARY PAVEMENT MARKING, ON FINAL PAVEMENT SURFACES, SHALL BE PAVEMENT MARKING TAPE, TYPE III UNLESS NOTED OTHERWISE

SEE SHEET 33 FOR ADDITIONAL MAINTENANCE OF TRAFFIC NOTES.

**LEGEND**

- ① EXISTING PAVEMENT
- ② TEMPORARY PAVEMENT, 10"
- ③ PROPOSED PAVEMENT
- ④ TEMPORARY PAVEMENT MARKING
- ⑤ TEMPORARY PAVEMENT RAMP

**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION  
**MAINTENANCE OF TRAFFIC  
TYPICAL SECTIONS AND NOTES  
STAGE III**

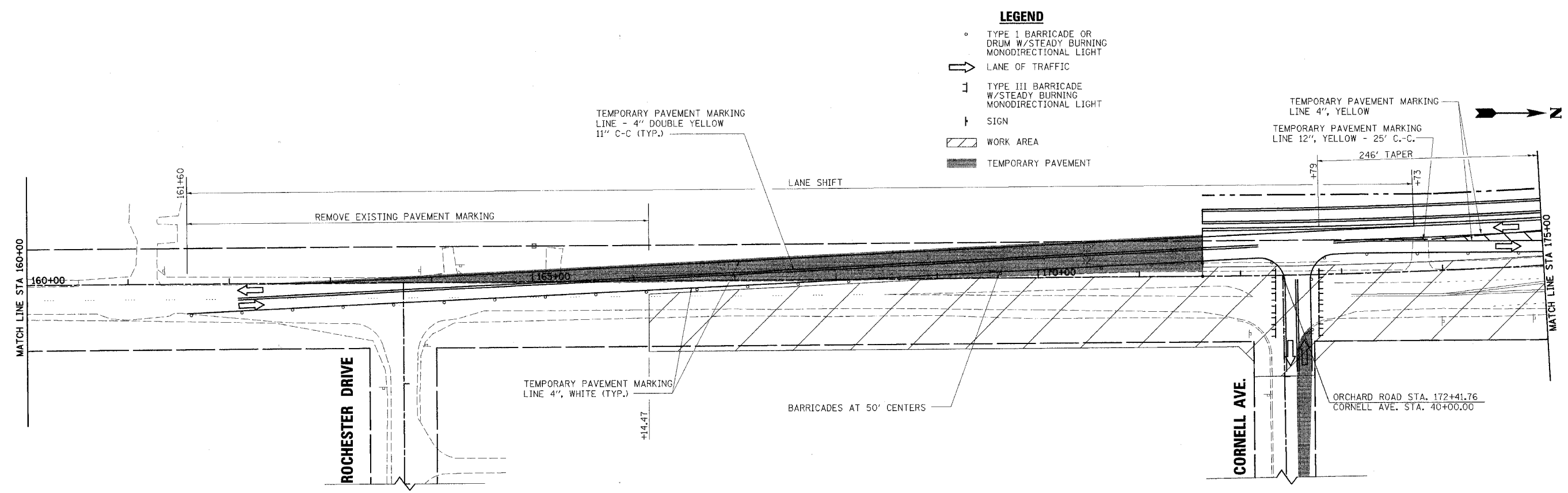
SCALE: VERT.  
HORIZ.  
DATE: 11/04/05

DRAWN BY: RJN  
CHECKED BY: SPF

11/4/2005 3:31:33 PM K:\117700\pad\design\117700\_sstage3\_sections.dgn

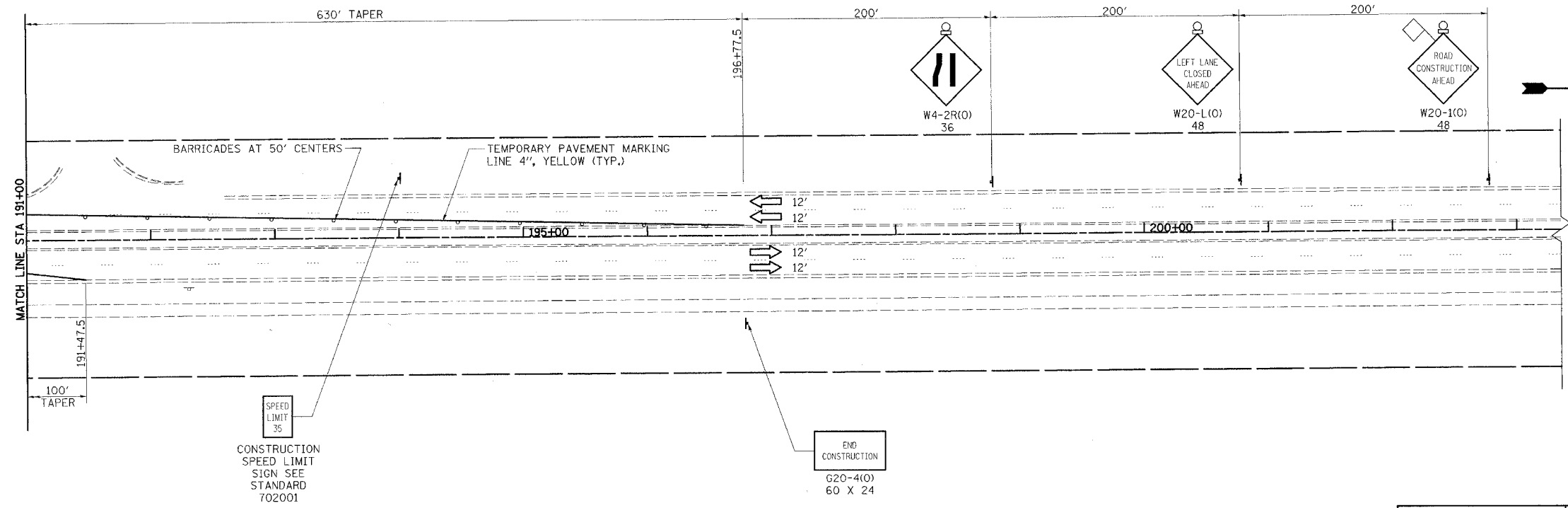
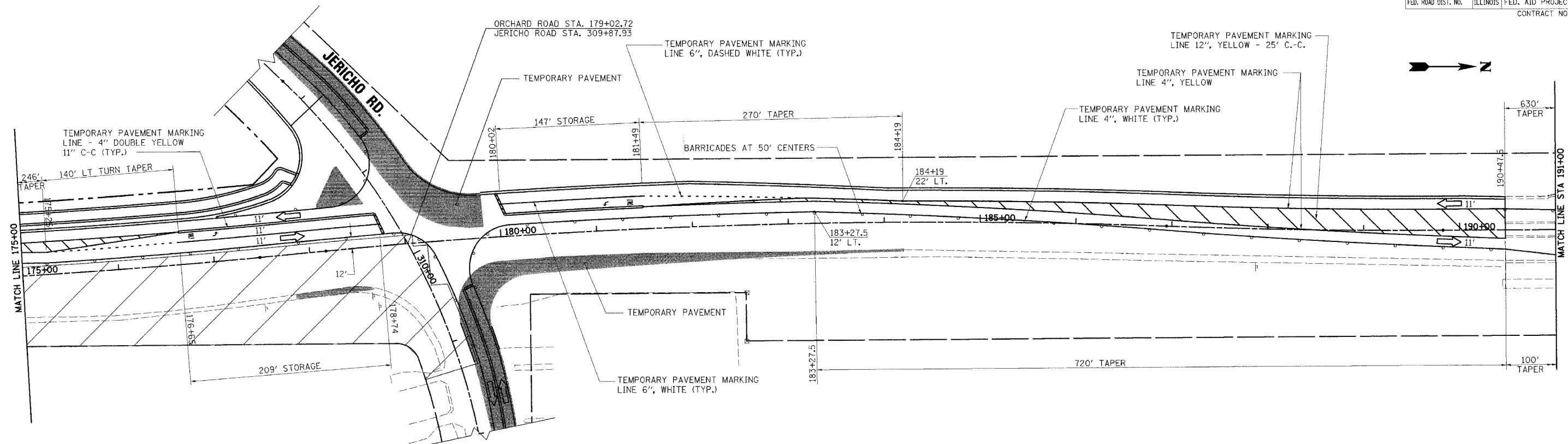
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	25
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83738				

11/6/2005 12:44:19 PM K:\117700\Doc\Design\117700\_Stage3\_Sht3.Ldgn



<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	REVISIONS		<p>ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION</p> <p><b>MAINTENANCE OF TRAFFIC STAGE III</b></p> <p>SCALE: VERT. _____ HORIZ. _____ DATE: 11/04/05</p> <p>DRAWN BY: R/JN CHECKED BY: SPF</p>
	NAME	DATE	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	26
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83738				

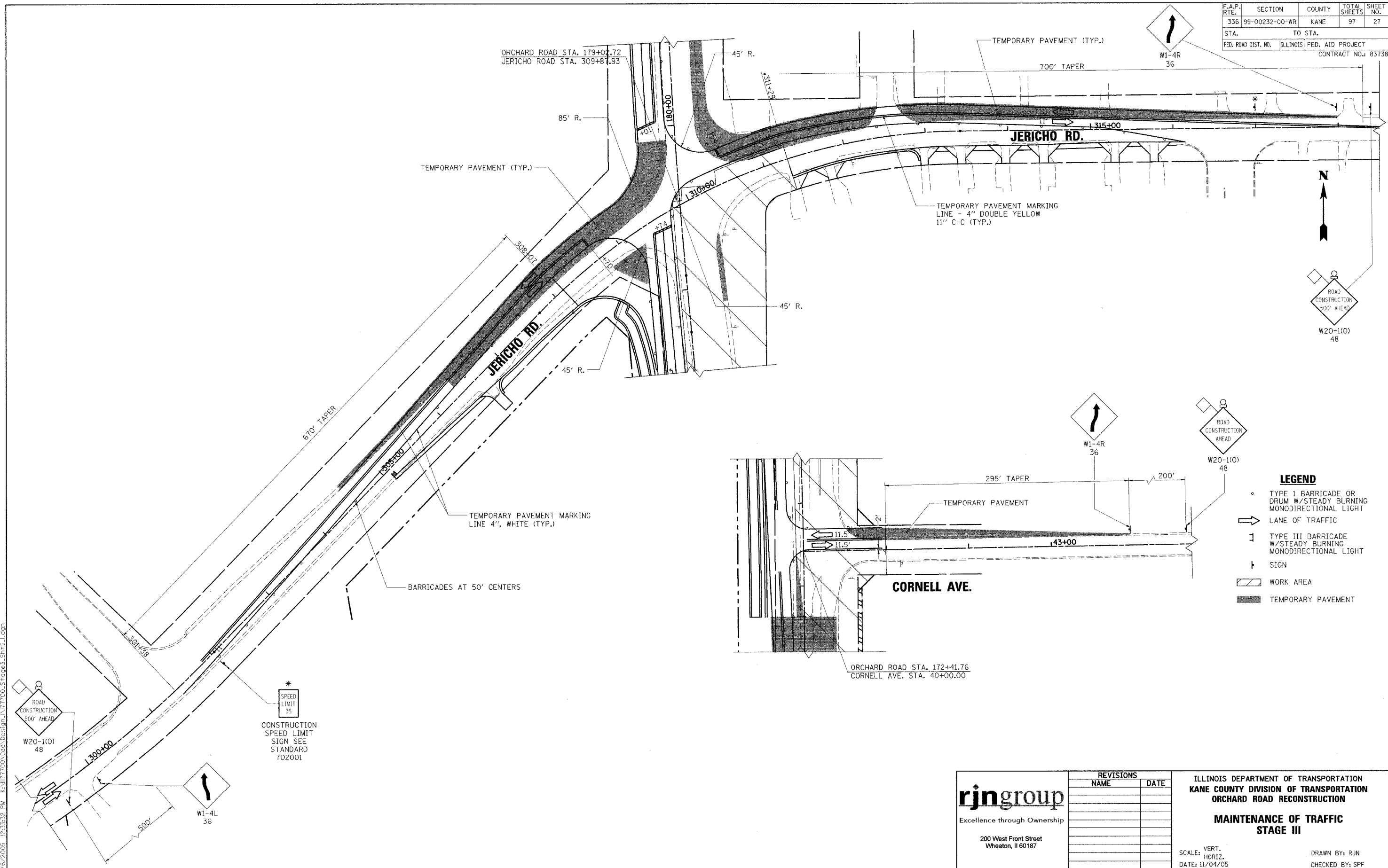


- LEGEND**
- TYPE I BARRICADE OR DRUM W/STEADY BURNING MONODIRECTIONAL LIGHT
  - ➔ LANE OF TRAFFIC
  - ⊥ TYPE III BARRICADE W/STEADY BURNING MONODIRECTIONAL LIGHT
  - ⊥ SIGN
  - ▨ WORK AREA
  - ▨ TEMPORARY PAVEMENT

11/4/2005 3:31:42 PM k:\117700\cd\des\gn\_117700\_st\sgb3\_sht4.dgn

<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION <b>MAINTENANCE OF TRAFFIC          STAGE III</b>
	NAME	DATE	
SCALE: VERT. HORIZ. DATE: 11/04/05		DRAWN BY: R/JN CHECKED BY: SPF	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	27
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO.: 83738				



11/6/2005 10:33:32 PM K:\M17700\Doc\Design\117700\_Stage3\_Sht5.Ldgn

**rjngroup**  
Excellence through Ownership

200 West Front Street  
Wheaton, IL 60187

REVISIONS	
NAME	DATE

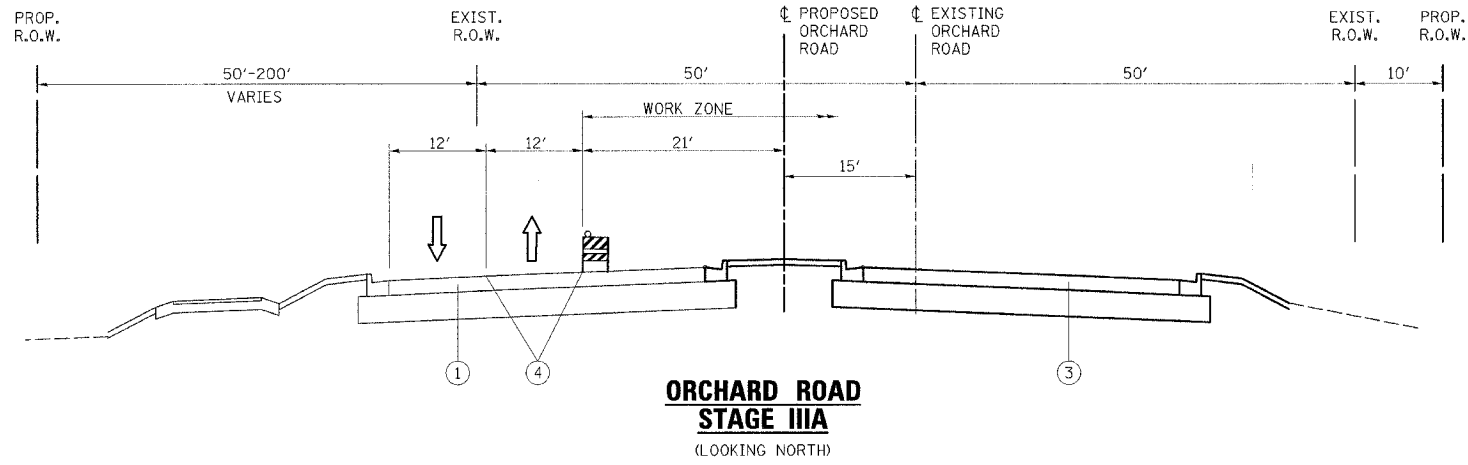
ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION

**MAINTENANCE OF TRAFFIC  
STAGE III**

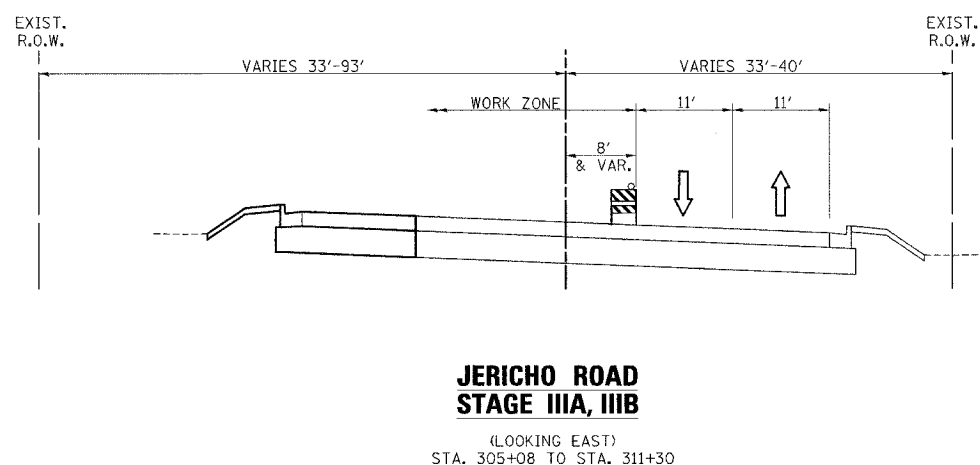
VERT. SCALE: HORIZ.  
DATE: 11/04/05

DRAWN BY: RJN  
CHECKED BY: SPF

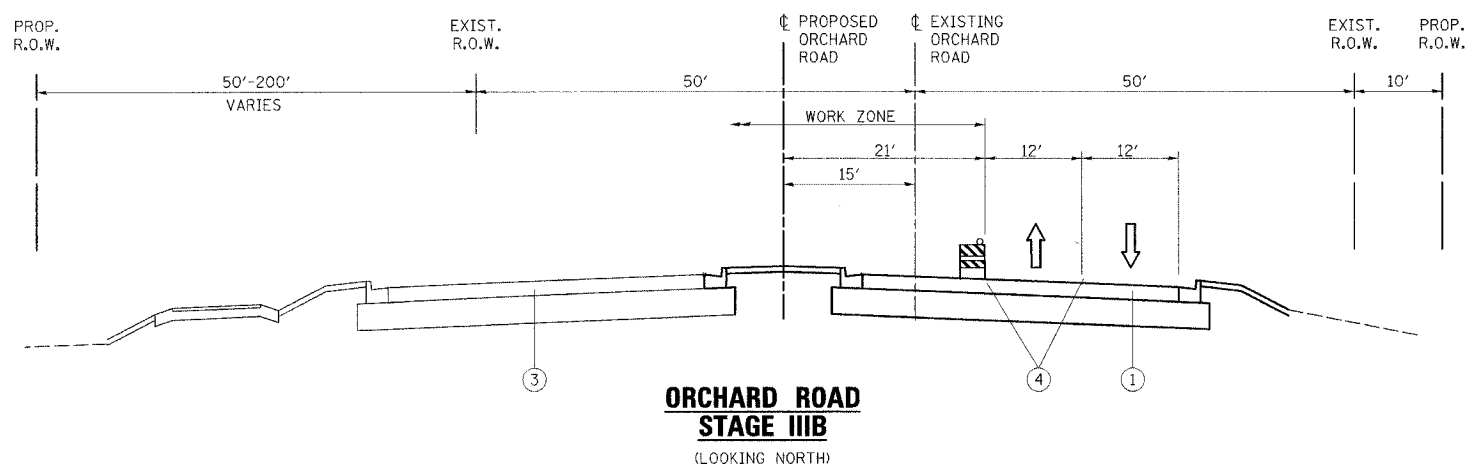
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	28
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83738				



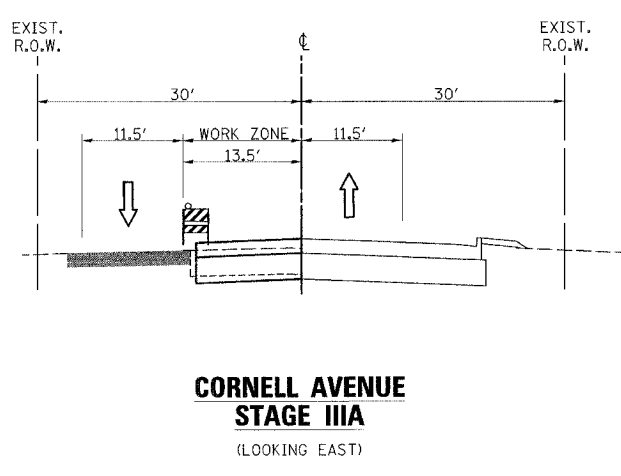
**ORCHARD ROAD  
STAGE IIIA**  
(LOOKING NORTH)



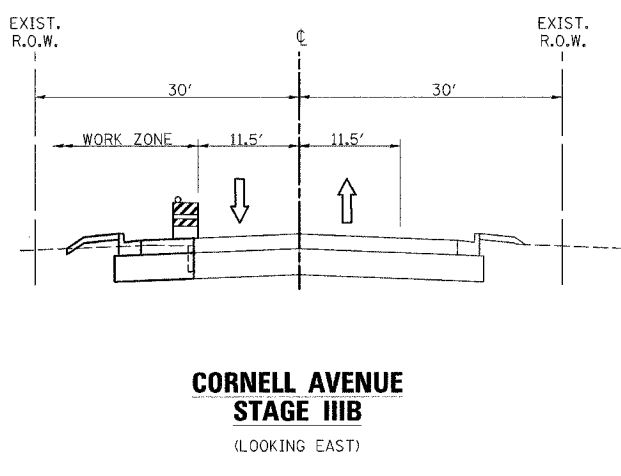
**JERICO ROAD  
STAGE IIIA, IIIB**  
(LOOKING EAST)  
STA. 305+08 TO STA. 311+30



**ORCHARD ROAD  
STAGE IIIB**  
(LOOKING NORTH)



**CORNELL AVENUE  
STAGE IIIA**  
(LOOKING EAST)



**CORNELL AVENUE  
STAGE IIIB**  
(LOOKING EAST)

**PROJECT CONSTRUCTION STAGE IIIA**

**TRAFFIC MAINTENANCE:**

ORCHARD ROAD - TRAFFIC SHALL BE MAINTAINED ON THE ORCHARD ROAD PAVEMENT BUILT IN STAGE II WITH ONE LANE OF TRAFFIC IN EACH DIRECTION. SOUTHBOUND LEFT TURN LANES SHALL BE PROVIDED AT JERICO ROAD. TRAFFIC CONTROL SHALL BE INSTALLED AS DETAILED IN THESE PLANS.

JERICO ROAD - TRAFFIC SHALL BE MAINTAINED ON THE PAVEMENT BUILT IN THE PREVIOUS STAGES ON THE SOUTH SIDE OF JERICO ROAD WITH ONE LANE OF TRAFFIC IN EACH DIRECTION. TRAFFIC CONTROL SHALL BE INSTALLED AS DETAILED IN THESE PLANS.

CORNELL AVENUE - TRAFFIC SHALL BE MAINTAINED ON THE EXISTING AND TEMPORARY SIDE STREET PAVEMENT WITH ONE LANE OF TRAFFIC IN EACH DIRECTION. TRAFFIC CONTROL SHALL BE INSTALLED AS DETAILED IN THESE PLANS.

**THE FOLLOWING WORK ITEMS ARE TO BE COMPLETED DURING STAGE IIIA:**

- TRAFFIC CONTROL ITEMS, TEMPORARY PAVEMENT MARKING AND OTHER TRAFFIC CONTROL DEVICES SHALL BE INSTALLED THROUGHOUT THE CONSTRUCTION AREA PRIOR TO WORK COMMENCING.
- CONSTRUCT CENTER PORTION OF SIDE STREET CONCRETE PAVEMENTS AS SHOWN IN THESE PLANS
- CONSTRUCT NORTHEAST PORTION OF THE INTERSECTION OF ORCHARD ROAD AND JERICO ROAD

ALL TEMPORARY PAVEMENT MARKING, ON FINAL PAVEMENT SURFACES, SHALL BE PAVEMENT MARKING TAPE, TYPE III UNLESS NOTED OTHERWISE

SEE SHEET 33 FOR ADDITIONAL MAINTENANCE OF TRAFFIC NOTES.

**PROJECT CONSTRUCTION STAGE IIIB**

**TRAFFIC MAINTENANCE:**

ORCHARD ROAD - TRAFFIC SHALL BE MAINTAINED ON THE ORCHARD ROAD PAVEMENT BUILT IN STAGE II WITH ONE LANE OF TRAFFIC IN EACH DIRECTION. SOUTHBOUND LEFT TURN LANES SHALL BE PROVIDED AT JERICO ROAD. TRAFFIC CONTROL SHALL BE INSTALLED AS DETAILED IN THESE PLANS.

JERICO ROAD - TRAFFIC SHALL BE MAINTAINED ON THE PAVEMENT BUILT IN THE PREVIOUS STAGES ON THE SOUTH SIDE OF JERICO ROAD WITH ONE LANE OF TRAFFIC IN EACH DIRECTION. TRAFFIC CONTROL SHALL BE INSTALLED AS DETAILED IN THESE PLANS.

CORNELL AVENUE - TRAFFIC SHALL BE MAINTAINED ON THE SIDE STREET PAVEMENT BUILT IN PREVIOUS STAGES WITH ONE LANE OF TRAFFIC IN EACH DIRECTION. TRAFFIC CONTROL SHALL BE INSTALLED AS DETAILED IN THESE PLANS.

**THE FOLLOWING WORK ITEMS ARE TO BE COMPLETED DURING STAGE IIIB:**

- TRAFFIC CONTROL ITEMS, TEMPORARY PAVEMENT MARKING AND OTHER TRAFFIC CONTROL DEVICES SHALL BE INSTALLED THROUGHOUT THE CONSTRUCTION AREA PRIOR TO WORK COMMENCING.
- CONSTRUCT NORTHERN PORTION OF SIDE STREET CONCRETE PAVEMENTS AS SHOWN IN THESE PLANS
- CONSTRUCT NORTHWEST PORTION OF THE INTERSECTION OF ORCHARD ROAD AND JERICO ROAD

ALL TEMPORARY PAVEMENT MARKING, ON FINAL PAVEMENT SURFACES, SHALL BE PAVEMENT MARKING TAPE, TYPE III UNLESS NOTED OTHERWISE

SEE SHEET 33 FOR ADDITIONAL MAINTENANCE OF TRAFFIC NOTES.

**LEGEND**

- ① EXISTING PAVEMENT
- ② TEMPORARY PAVEMENT, 10"
- ③ PROPOSED PAVEMENT
- ④ TEMPORARY PAVEMENT MARKING
- ⑤ TEMPORARY PAVEMENT RAMP

**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION  
**MAINTENANCE OF TRAFFIC  
TYPICAL SECTIONS AND NOTES  
STAGE IIIA & IIB**

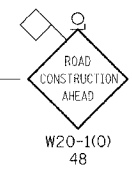
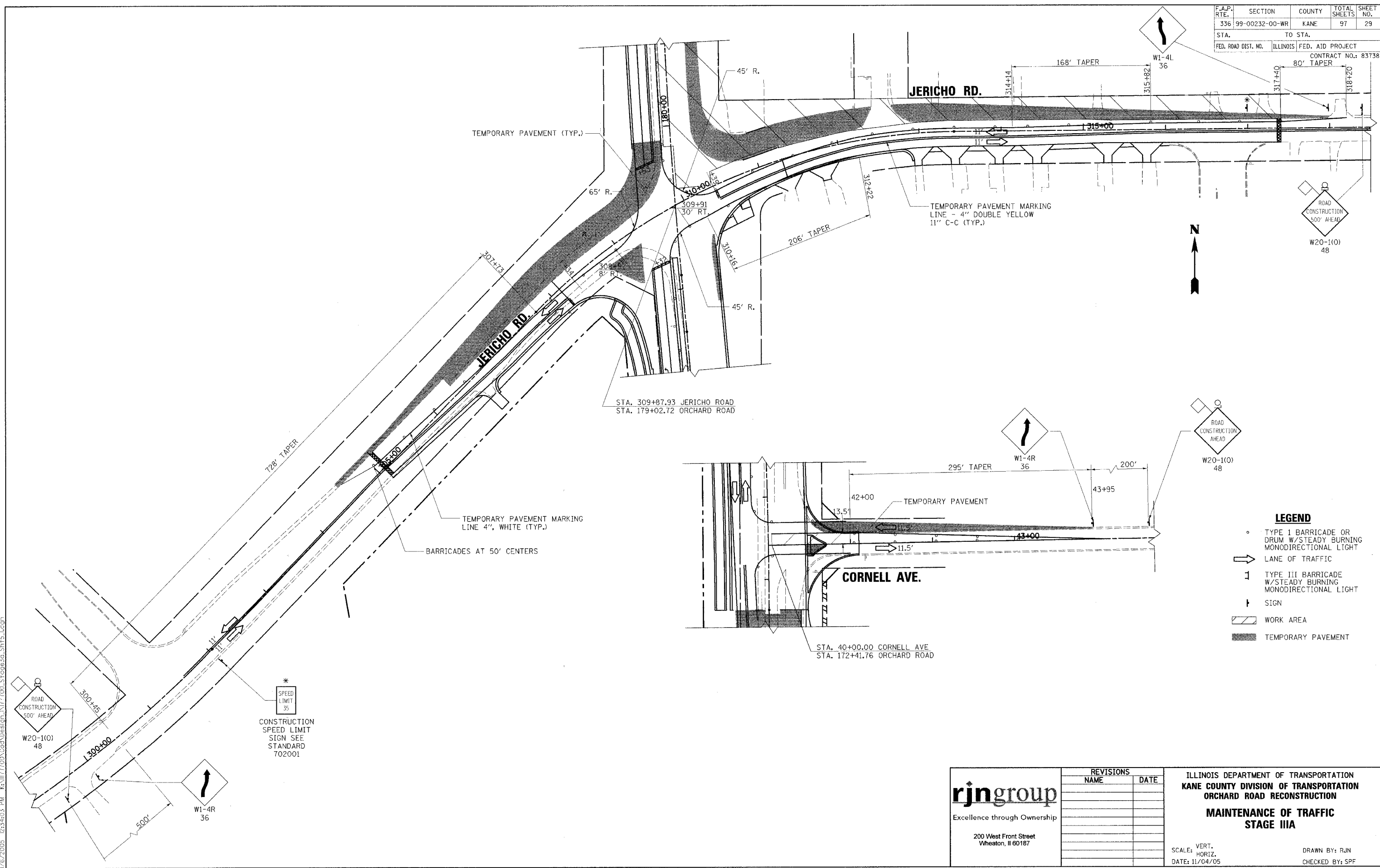
SCALE: VERT.  
HORIZ.  
DATE: 11/04/05

DRAWN BY: RJN  
CHECKED BY: SPF

11/4/2005 3:31:45 PM ks:\117700\cd\des\gn\_117700\_strcgs3cb\_sections.lidgn



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	29
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO.: 83738



- LEGEND**
- TYPE I BARRICADE OR DRUM W/STEADY BURNING MONODIRECTIONAL LIGHT
  - ➔ LANE OF TRAFFIC
  - 1 TYPE III BARRICADE W/STEADY BURNING MONODIRECTIONAL LIGHT
  - † SIGN
  - ▨ WORK AREA
  - ▨ TEMPORARY PAVEMENT

\*  
SPEED LIMIT 35  
CONSTRUCTION SPEED LIMIT SIGN SEE STANDARD 702001

**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION  
**MAINTENANCE OF TRAFFIC  
STAGE IIIA**

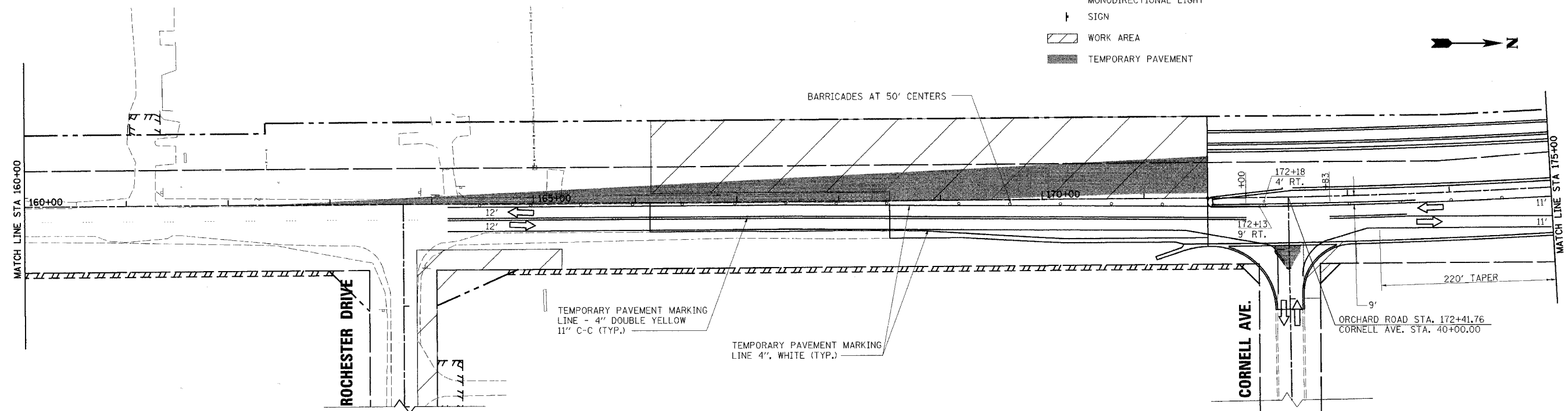
SCALE: VERT. \_\_\_\_\_  
HORIZ. \_\_\_\_\_  
DATE: 11/04/05

DRAWN BY: RJN  
CHECKED BY: SPF

11/6/2005 12:34:03 PM K:\117700\Cad\Design\117700\_Stage30\_Sht15.dwg

F.A.P. RTEL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	30
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83738				

- LEGEND**
- TYPE I BARRICADE OR DRUM W/STEADY BURNING MONODIRECTIONAL LIGHT
  - ➔ LANE OF TRAFFIC
  - ⌊ TYPE III BARRICADE W/STEADY BURNING MONODIRECTIONAL LIGHT
  - † SIGN
  - ▨ WORK AREA
  - TEMPORARY PAVEMENT



**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

REVISIONS	
NAME	DATE

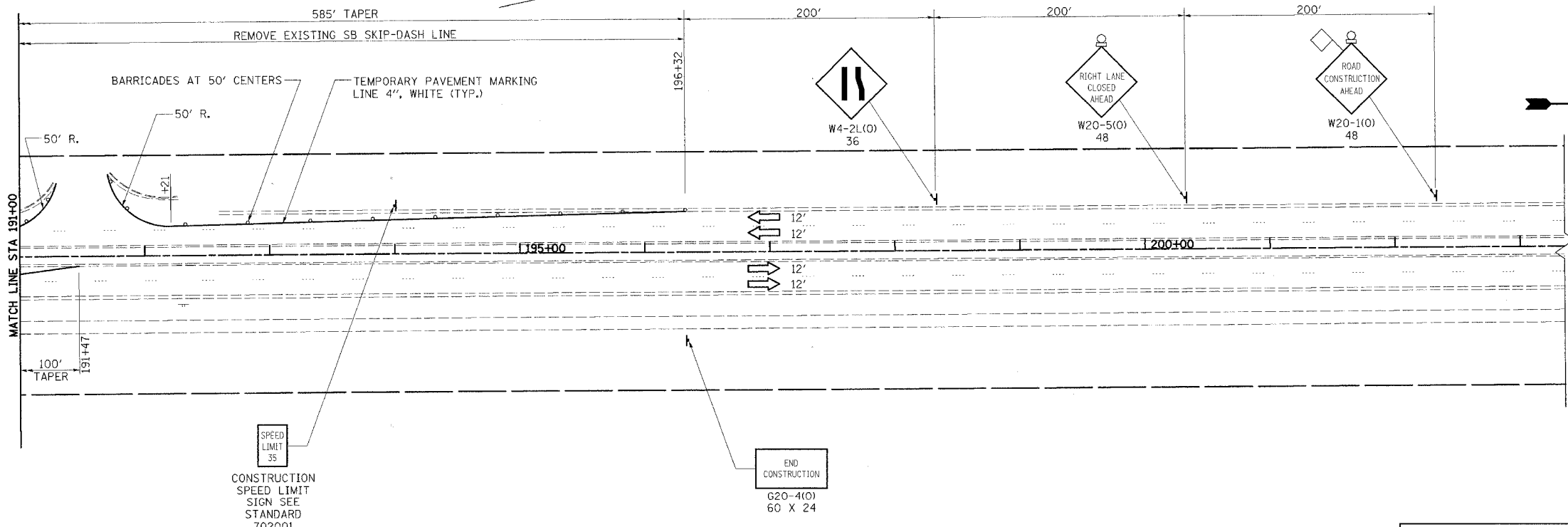
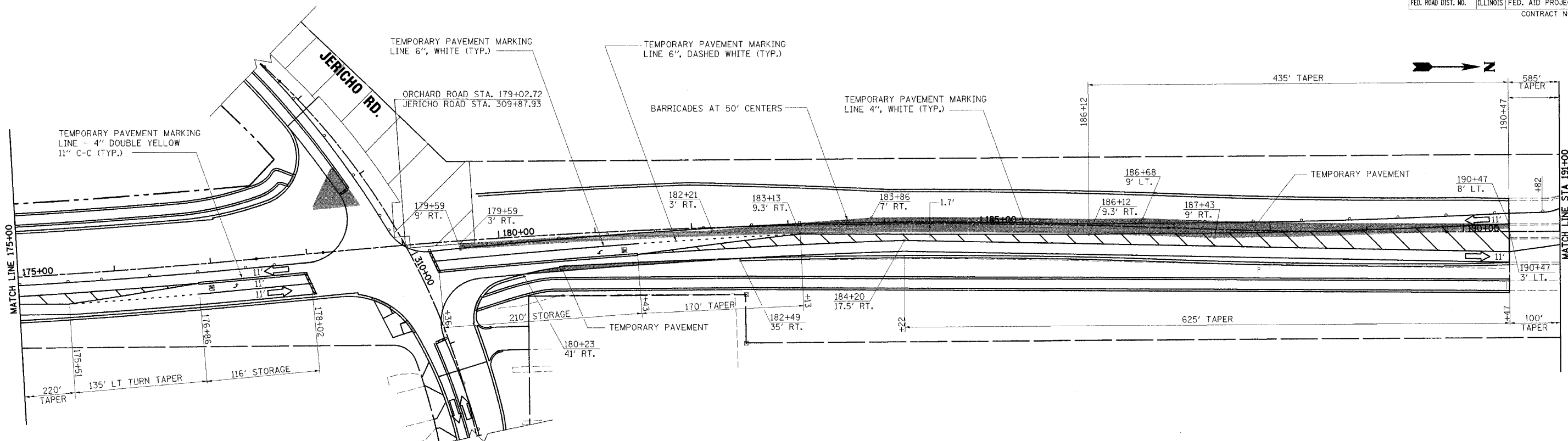
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 KANE COUNTY DIVISION OF TRANSPORTATION  
 ORCHARD ROAD RECONSTRUCTION  
**MAINTENANCE OF TRAFFIC  
 STAGE IIIB**

SCALE: VERT. \_\_\_\_\_  
 HORIZ. \_\_\_\_\_  
 DATE: 11/04/05

DRAWN BY: RJN  
 CHECKED BY: SPF

11/6/2005 2:38:27 PM K:\117700\Cad\Design\117700\_Stage3b\_Sht3.dwg

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	31
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO.: 83738



- LEGEND**
- TYPE I BARRICADE OR DRUM W/STEADY BURNING MONODIRECTIONAL LIGHT
  - ➔ LANE OF TRAFFIC
  - ⊥ TYPE III BARRICADE W/STEADY BURNING MONODIRECTIONAL LIGHT
  - ⊥ SIGN
  - ▨ WORK AREA
  - ▨ TEMPORARY PAVEMENT

11/4/2005 12:40:44 PM K:\1177700\Gcd\Design\1177700\_Stage3b\_Sht14.dgn

SPEED LIMIT 35  
CONSTRUCTION SPEED LIMIT SIGN SEE STANDARD 702001

END CONSTRUCTION  
G20-4(0)  
60 X 24

**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

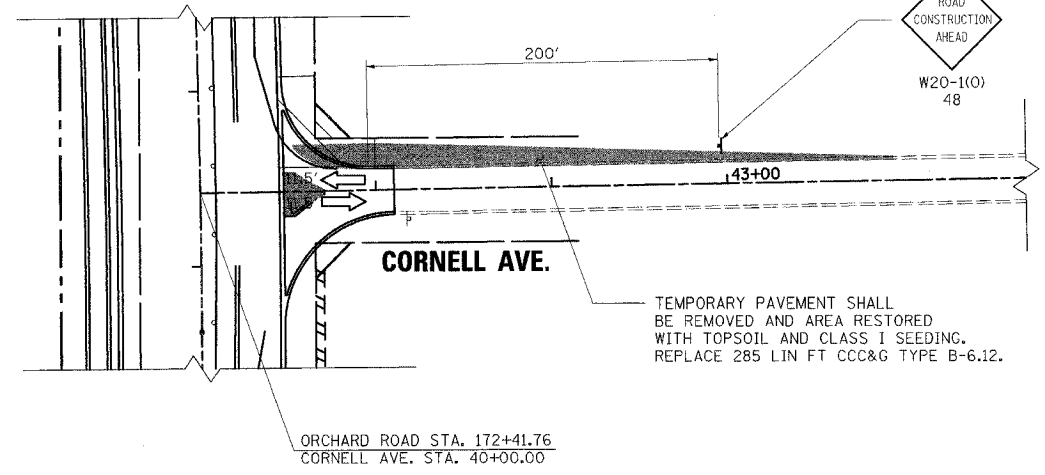
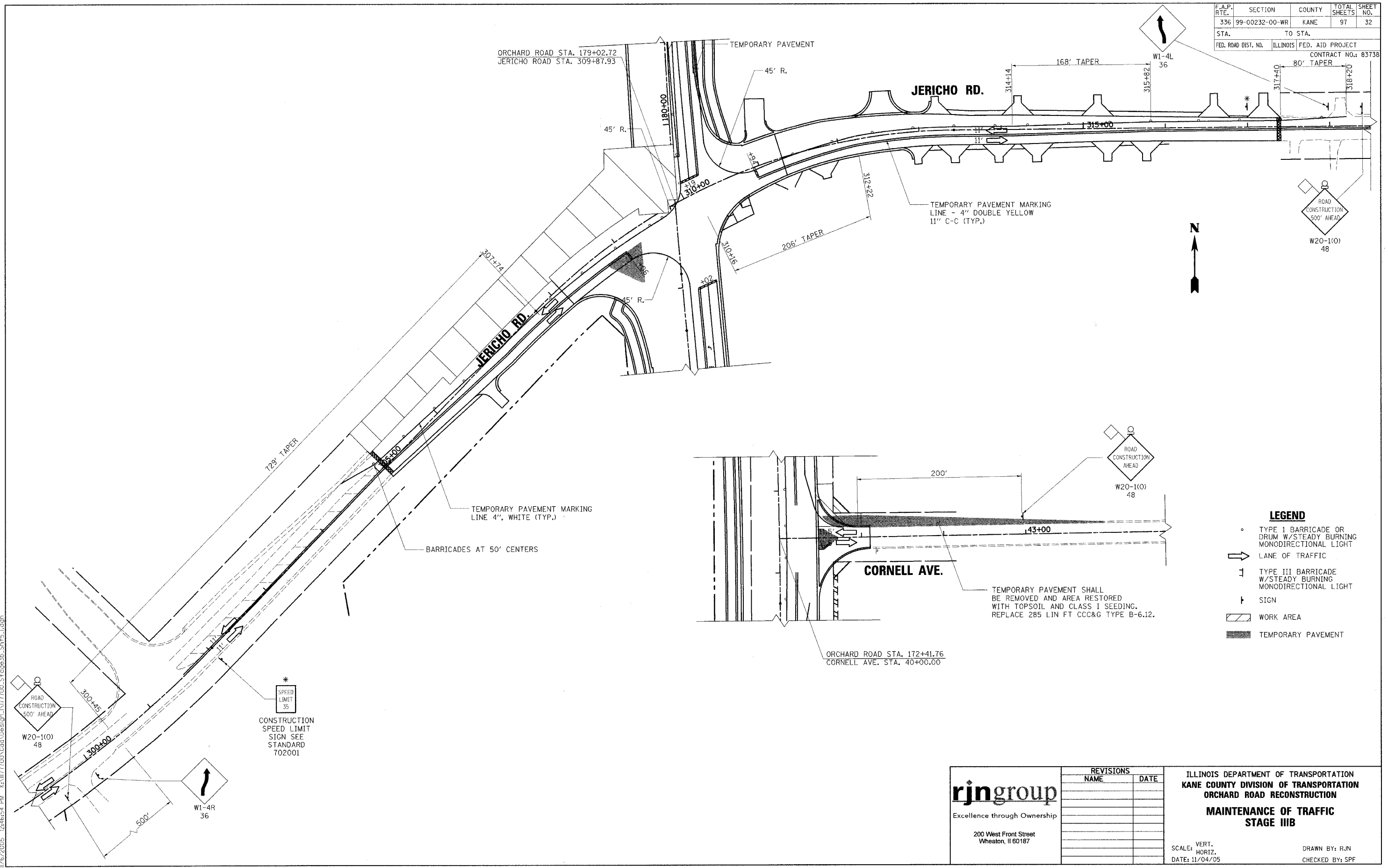
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION  
**MAINTENANCE OF TRAFFIC  
STAGE IIIB**

SCALE: VERT. \_\_\_\_\_  
HORIZ. \_\_\_\_\_  
DATE: 11/04/05

DRAWN BY: RJN  
CHECKED BY: SPF

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	32
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO.: 83738	



- LEGEND**
- TYPE I BARRICADE OR DRUM W/STEADY BURNING MONODIRECTIONAL LIGHT
  - ➔ LANE OF TRAFFIC
  - ⌈ TYPE III BARRICADE W/STEADY BURNING MONODIRECTIONAL LIGHT
  - ⌋ SIGN
  - ▨ WORK AREA
  - ▨ TEMPORARY PAVEMENT

11/6/2005 12:46:54 PM I:\1177700\Draw\Design\1177700\_S1raps3b\_Sht15.Ldgn

**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

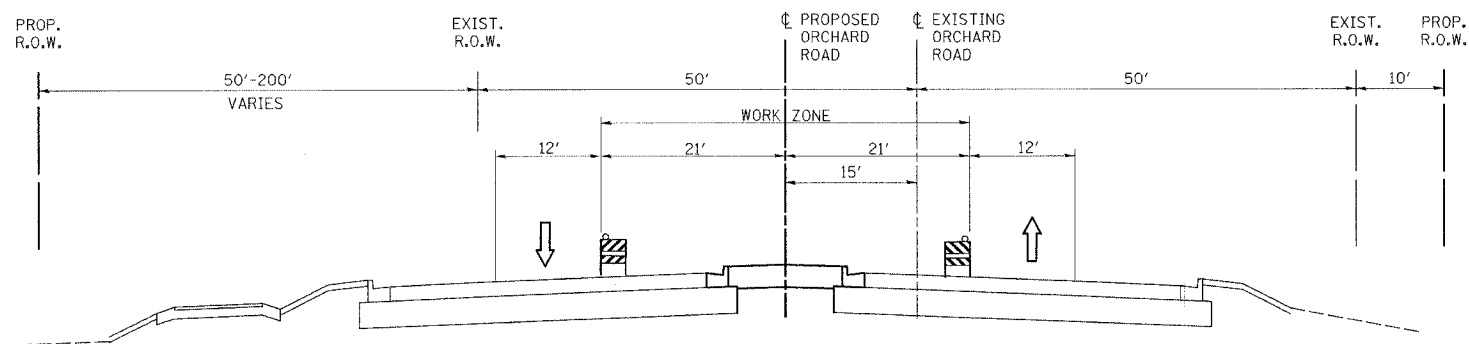
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION  
**MAINTENANCE OF TRAFFIC  
STAGE IIIB**

SCALE: VERT. \_\_\_\_\_  
HORIZ. \_\_\_\_\_  
DATE: 11/04/05

DRAWN BY: RJN  
CHECKED BY: SPF

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	33
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83738				



**ORCHARD ROAD  
STAGE IV**

STA. 155+41 TO STA. 190+47.5

**LEGEND**

- ① EXISTING PAVEMENT
- ② TEMPORARY PAVEMENT, 10"
- ③ PROPOSED PAVEMENT
- ④ TEMPORARY PAVEMENT MARKING
- ⑤ TEMPORARY PAVEMENT RAMP

**PROJECT CONSTRUCTION STAGE IV**

**TRAFFIC MAINTENANCE:**

ORCHARD ROAD - TRAFFIC SHALL BE MAINTAINED ON THE ORCHARD ROAD PAVEMENT BUILT IN PREVIOUS STAGES WITH ONE LANE OF TRAFFIC IN EACH DIRECTION. TRAFFIC CONTROL SHALL BE INSTALLED AS DETAILED IN THESE PLANS.

JERICO ROAD - TRAFFIC SHALL BE MAINTAINED ON THE PAVEMENT BUILT IN THE PREVIOUS STAGES ON JERICO ROAD WITH ONE LANE OF TRAFFIC IN EACH DIRECTION AND LEFT AND RIGHT TURN LANES AT ORCHARD ROAD. TRAFFIC CONTROL SHALL BE INSTALLED AS DETAILED IN THESE PLANS.

CORNELL AVENUE - TRAFFIC SHALL BE MAINTAINED ON THE SIDE STREET PAVEMENT BUILT IN PREVIOUS STAGES WITH ONE LANE OF TRAFFIC IN EACH DIRECTION. TRAFFIC CONTROL SHALL BE INSTALLED AS DETAILED IN THESE PLANS.

**THE FOLLOWING WORK ITEMS ARE TO BE COMPLETED DURING STAGE IV:**

- TRAFFIC CONTROL ITEMS, TEMPORARY PAVEMENT MARKING AND OTHER TRAFFIC CONTROL DEVICES SHALL BE INSTALLED THROUGHOUT THE CONSTRUCTION AREA PRIOR TO WORK COMMENCING.
- CONSTRUCT MEDIAN ON ORCHARD ROAD NORTH OF JERICO ROAD
- CONSTRUCT ISLANDS AT CORNELL AVENUE AND JERICO ROAD INTERSECTIONS WITH ORCHARD ROAD

**MAINTENANCE OF TRAFFIC NOTES**

ALL OF THE TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE TRAFFIC CONTROL PLANS OR THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" AND SHALL BE IN PLACE BEFORE CONSTRUCTION IS STARTED.

TEMPORARY TRAFFIC SIGNALS SHALL BE CONSTRUCTED AT THE JERICO ROAD INTERSECTION AND SHALL BE ADJUSTED TO ACCOMMODATE THE VARIOUS STAGES OF CONSTRUCTION SHOWN.

EXISTING STOP AND STOP AHEAD SIGNS ALONG ORCHARD ROAD SHALL BE RELOCATED TO CONTROL SIDE STREET OR ENTRANCE TRAFFIC FOR THE VARIOUS STAGES OF CONSTRUCTION.

THE TRAFFIC CONTROL PLANS SHALL SERVE AS A GUIDE FOR THE SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT. HOWEVER, THE CONTRACTOR MAY IMPROVE OR MODIFY THE TRAFFIC CONTROL PLANS FOR HIS CONSTRUCTION NEEDS BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CONTRACTOR PROPOSED TRAFFIC CONTROL PLANS SHALL BE SUBMITTED FOR THE WRITTEN APPROVAL OF THE ENGINEER.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND TRAFFIC CONTROL DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ADDITIONAL SIGNS, IF REQUIRED BY THE ENGINEER, SHALL BE PAID FOR IN SQUARE FEET FOR TEMPORARY INFORMATION SIGNING.

THE CONTRACTOR SHALL PROVIDE ADVANCE NOTICE CONSTRUCTION SIGNING. SIGNS SHALL BE ERECTED ONE WEEK IN ADVANCE OF THE START OF CONSTRUCTION. SIGNS SHALL BE TAKEN DOWN AS SOON AS THEY ARE NO LONGER APPLICABLE ON A CONTINUOUS BASIS AND RE-ERECTED AS APPROPRIATE. EXAMPLES OF SIGNS ARE AS FOLLOWS:

TEMPORARY LANE CLOSURE  
EXAMPLE: "PERIODIC LANE CLOSURES BEGIN (DATE)  
EXPECT DELAYS."

MAJOR PAVING OPERATIONS WHERE LANES WILL BE CLOSED OR RESTRICTED ON A SHORT TERM BASIS.  
EXAMPLE: "PAVEMENT POUR (DATE)  
EXPECT DELAYS."

THESE SIGNS SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING

REMOVAL OF ANY EXISTING PAVEMENT MARKINGS IN CONFLICT WITH THE TEMPORARY PAVEMENT MARKINGS FOR TRAFFIC CONTROL AND PROTECTION PLANS OR WITH THE PERMANENT STRIPING, SHALL BE PAID FOR AS PAVEMENT MARKING REMOVAL.

THE FOLLOWING TEMPORARY PAVEMENT MARKINGS SHALL BE PROVIDED AT ALL THE FOLLOWING LOCATIONS IN EACH OF THE VARIOUS STAGES OF CONSTRUCTION:

- 4in WHITE EDGE LINE - EACH EDGE (YELLOW FOR INSIDE EDGE)
- 4in WHITE SKIP DASH (30ft SKIP - 10ft DASH) - BETWEEN LANES
- 4in DOUBLE YELLOW - MEDIANS AND BETWEEN OPPOSING LANES
- 6in WHITE LANE LINE - STORAGE AREA OF LEFT OR RIGHT TURN BAY
- 6in WHITE SKIP DASH (6ft SKIP-2ft DASH) LEFT OR RIGHT TURN BAY
- 12in YELLOW DIAGONALS (20ft C-C) - MEDIANS AND CORES
- 2ft WHITE STOP BAR - ALL LOCATIONS
- WHITE LETTERS AND SYMBOLS - TURN LANES

IT WILL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE UP TO 32 INFORMATIONAL SIGNS ON TEMPORARY SUPPORTS FOR DRIVEWAYS. THESE SIGNS SHALL BE WHITE ON GREEN IN ACCORDANCE WITH THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES. THIS WORK WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT. IF MORE THAN 32 SIGNS ARE REQUIRED, THIS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT OF TEMPORARY INFORMATION SIGNING.

TEMPORARY PAVEMENT IS REQUIRED TO MAINTAIN THE REQUIRED TRAFFIC LANES AS SHOWN ON THE STAGING PLANS. TEMPORARY PAVEMENT SHALL BE CONSTRUCTED OF 10 INCHES OF BITUMINOUS BASE COURSE, SUPERPAVE MATERIAL, PAID FOR AS TEMPORARY PAVEMENT. REMOVAL OF THE TEMPORARY PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM.

TEMPORARY PAVEMENT RAMP IS REQUIRED TO MAINTAIN THE TRAFFIC ACROSS THE EXISTING ORCHARD ROAD AND JERICO ROAD PAVEMENT DURING STAGES AS SHOWN ON THE PLANS. AN ESTIMATED QUANTITY OF TONS HAS BEEN INCLUDED. REMOVAL OF THE TEMPORARY PAVEMENT RAMP SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM.

ALL FULL DEPTH SAW CUTTING NECESSARY FOR STAGED CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

THE SPEED LIMIT SIGN AS SHOWN IN STANDARD 702001 SHALL BE AVAILABLE FOR PLACEMENT ON ORCHARD ROAD AND ON JERICO ROAD FOR THE DURATION OF THE PROJECT AS DIRECTED BY THE ENGINEER. THIS ITEM WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCIDENTAL TO THE TRAFFIC CONTROL & PROTECTION SPECIAL.

TWO (2) MONO DIRECTIONAL FLASHING LIGHTS SHALL BE REQUIRED ON ALL TYPE III BARRICADES.

TYPE III BARRICADES SHALL BE PLACED ADJACENT TO ALL COMMERCIAL ENTRANCES PERPENDICULAR TO ORCHARD ROAD. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE TRAFFIC CONTROL PROTECTION SPECIAL.

"ROAD CONSTRUCTION AHEAD" AND "ARROW" SIGNS SHALL BE PLACED ON ALL SIDE STREETS IN ACCORDANCE WITH THE STAGING PLANS. THE EXACT LOCATION WILL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.

RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE LIMITS OF CONSTRUCTION THAT CONFLICT WITH STAGE CONFIGURATIONS SHALL HAVE THE LENSES REMOVED AS INCIDENTAL TO THE STAGE STRIPING. WHEN TRAFFIC IS RELOCATED TO THE FINAL LOCATION, THESE LENSES SHALL BE REPLACED. AS INCIDENTAL TO THE STAGE STRIPING.

REFLECTIVE SHEETING SHALL BE PROVIDED ON BOTH SIDES OF BARRICADES.

THE FURNISHING, INSTALLATION, RELOCATION AND REMOVAL OF ALL TRAFFIC CONTROL SIGNS, DETOUR SIGNS AND TRAFFIC CONTROL DEVICES SHOWN ON THESE STAGE CONSTRUCTION AND MAINTENANCE OF TRAFFIC PLANS AND THE APPLICABLE I.D.O.T. TRAFFIC CONTROL STANDARDS SHALL BE PAID FOR UNDER THE PAY ITEM "TRAFFIC CONTROL AND PROTECTION." THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL SIGNS AS REQUIRED BY THE ENGINEER, THE COST OF WHICH WILL ALSO BE INCLUDED IN "TRAFFIC CONTROL AND PROTECTION."

THE TEMPORARY TRAFFIC SIGNAL HEADS SHALL BE SHIFTED/MODIFIED AS NEEDED AT ALL THE LOCATIONS FOR ALL THE STAGES AND SUB STAGES AS DIRECTED AT THE SATISFACTION OF THE ENGINEER AND SHALL NOT BE PAID SEPARATELY BUT SHALL BE INCIDENTAL TO THE TEMPORARY TRAFFIC SIGNAL COST OF THE PARTICULAR INTERSECTION.

ALL TEMPORARY PAVEMENT MARKING, ON FINAL PAVEMENT SURFACES, SHALL BE PAVEMENT MARKING TAPE, TYPE III UNLESS NOTED OTHERWISE.

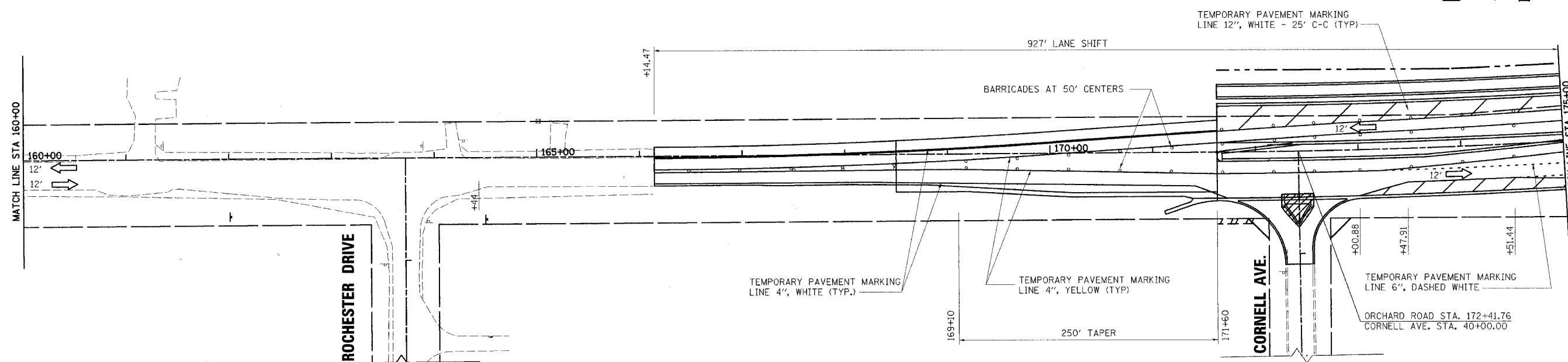
<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION <b>KANE COUNTY DIVISION OF TRANSPORTATION</b> <b>ORCHARD ROAD RECONSTRUCTION</b> <b>MAINTENANCE OF TRAFFIC</b> <b>TYPICAL SECTIONS AND NOTES</b> <b>STAGE IV</b>
	NAME	DATE	
SCALE: VERT.      DRAWN BY: RJN HORIZ.              CHECKED BY: SPF DATE: 11/04/05			

11/6/2005 12:41:52 PM K:\117700\Cad\Design\117700\_Stage4\_Sections.Ldgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	34
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83738				

**LEGEND**

- TYPE I BARRICADE OR DRUM W/STEADY BURNING MONODIRECTIONAL LIGHT
- ➔ LANE OF TRAFFIC
- ⊥ TYPE III BARRICADE W/STEADY BURNING MONODIRECTIONAL LIGHT
- ⊥ SIGN
- ▨ WORK AREA
- ▨ TEMPORARY PAVEMENT



I:\6\2005 12:48:30 PM K:\M\77700\Cad\Design\177700\_Stage4\_Sht3.Lcgm

**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

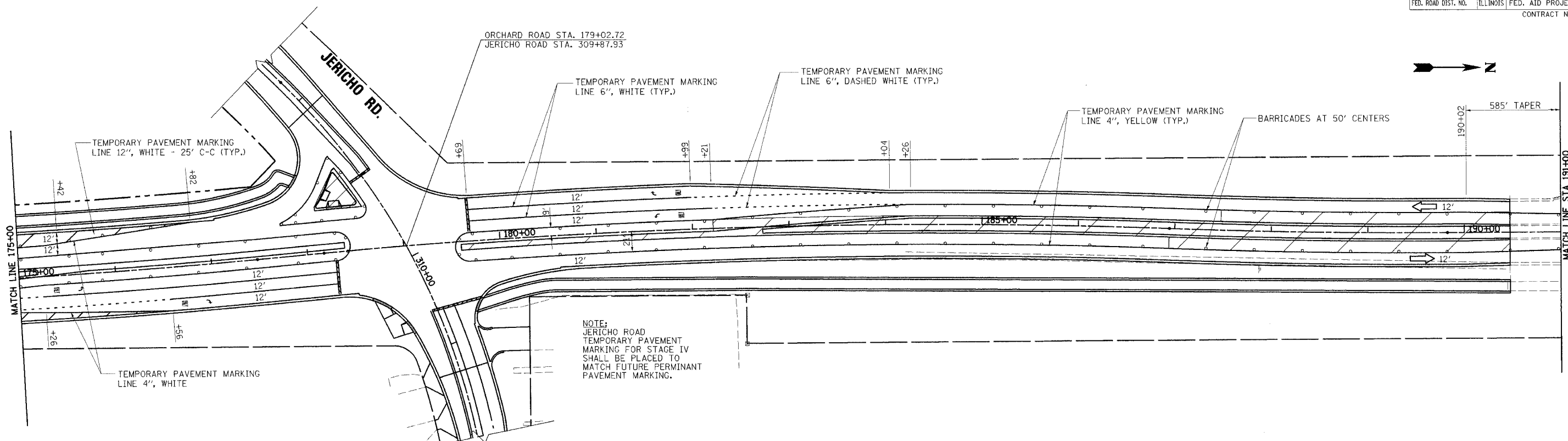
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 KANE COUNTY DIVISION OF TRANSPORTATION  
 ORCHARD ROAD RECONSTRUCTION  
**MAINTENANCE OF TRAFFIC  
 STAGE IV**

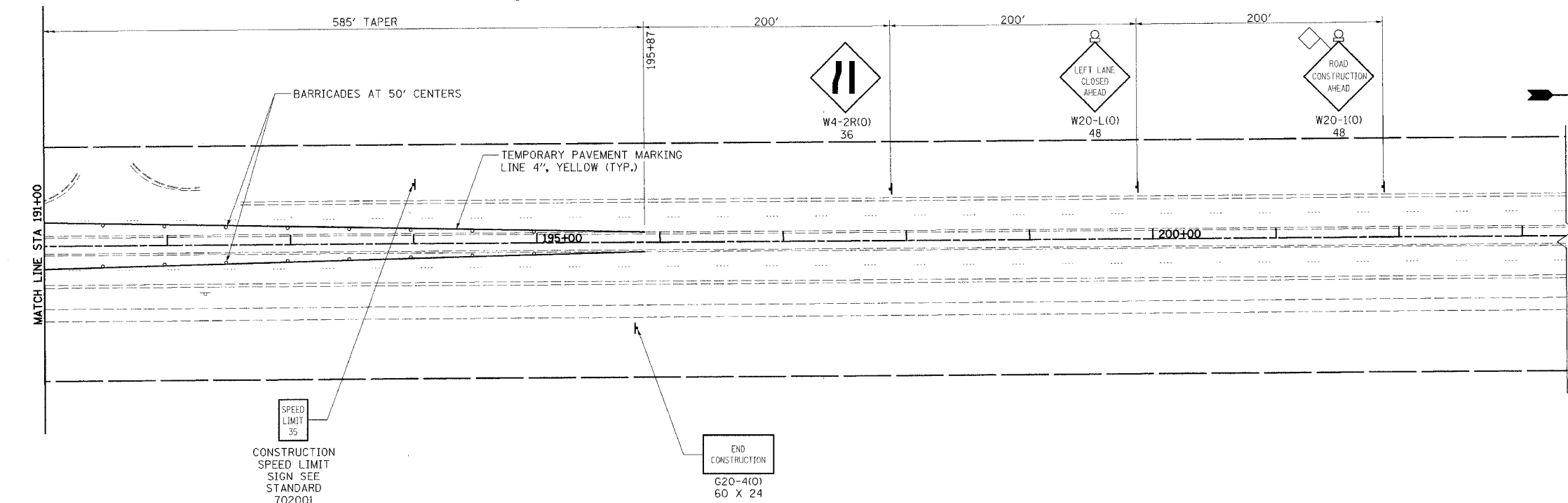
SCALE: VERT. \_\_\_\_\_  
 HORIZ. \_\_\_\_\_  
 DATE: 11/04/05

DRAWN BY: RJN  
 CHECKED BY: SPF

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	35
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO.: 83738



NOTE:  
 JERICHO ROAD  
 TEMPORARY PAVEMENT  
 MARKING FOR STAGE IV  
 SHALL BE PLACED TO  
 MATCH FUTURE PERMINANT  
 PAVEMENT MARKING.



**LEGEND**

- TYPE I BARRICADE OR DRUM W/STEADY BURNING MONODIRECTIONAL LIGHT
- ➔ LANE OF TRAFFIC
- ⌈ TYPE III BARRICADE W/STEADY BURNING MONODIRECTIONAL LIGHT
- ⌋ SIGN
- ▨ WORK AREA
- ▨ TEMPORARY PAVEMENT

I:\6\2005\244857.P4 K:\177700\Code\Design\177700\_Stage4\_Sht4.dgn

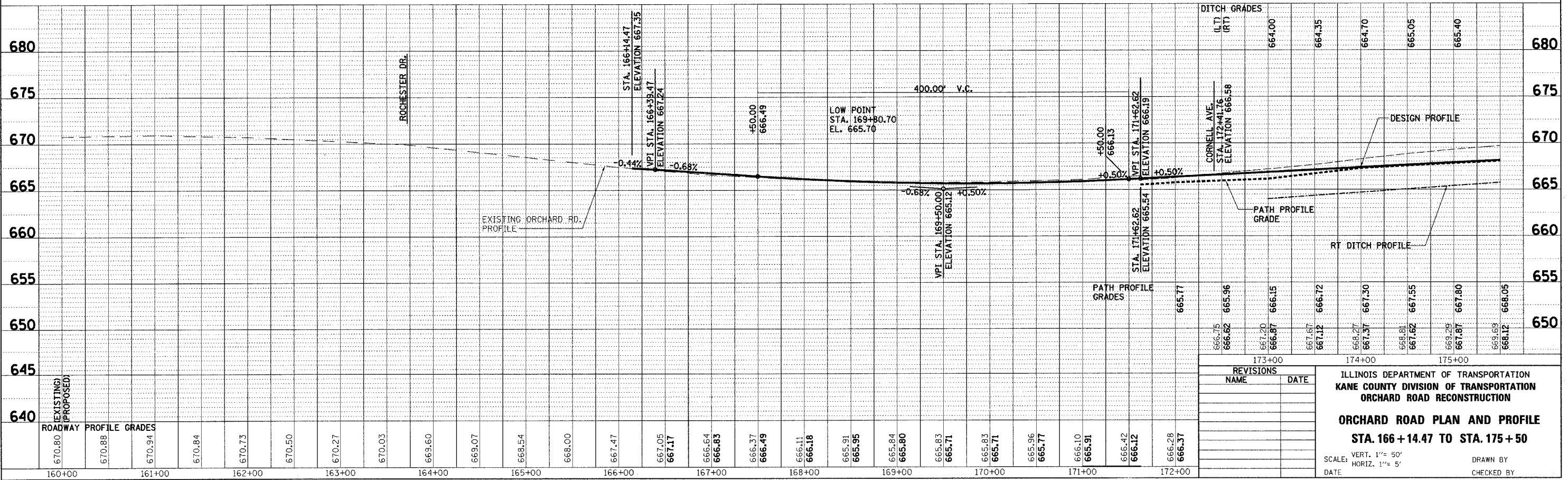
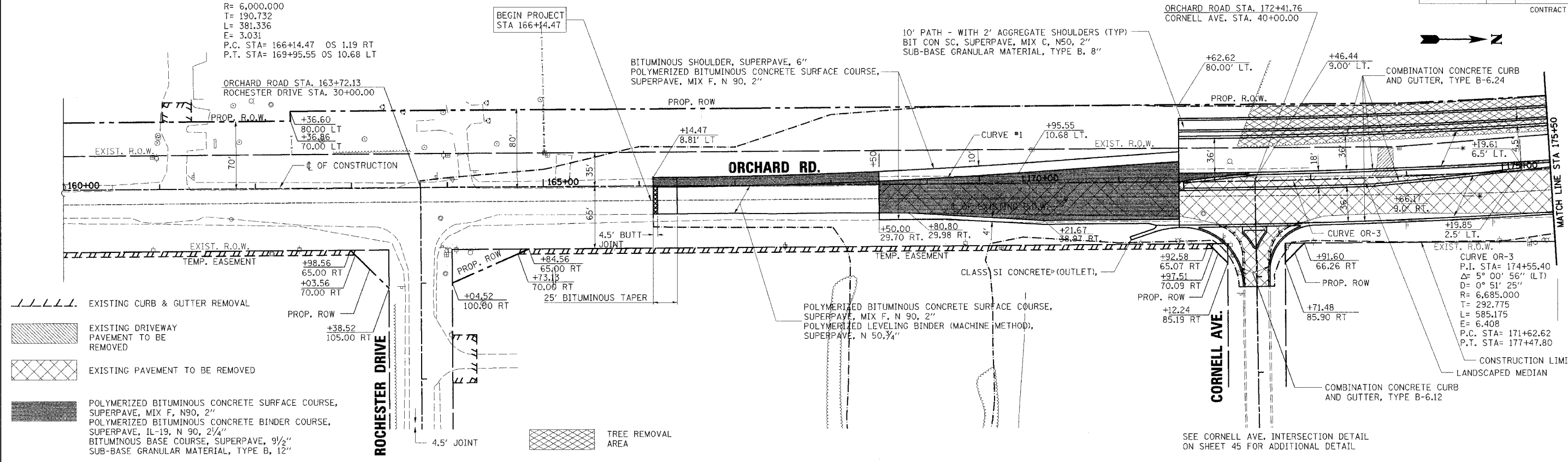
<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	<b>REVISIONS</b> NAME      DATE		ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION <b>MAINTENANCE OF TRAFFIC          STAGE IV</b>
			SCALE: VERT.      DRAWN BY: RJN HORIZ.              CHECKED BY: SFP DATE: 11/04/05

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	96	36
STA. 160+00		TO STA. 175+50		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO.: 83738				

CURVE #1  
P.I. STA= 168+05.20 OS 1.31 RT  
 $\Delta = 3^\circ 38' 29''$  (LT)  
 $D = 0^\circ 57' 18''$   
 $R = 6,000.000$   
 $T = 190.732$   
 $L = 381.336$   
 $E = 3.031$   
P.C. STA= 166+14.47 OS 1.19 RT  
P.T. STA= 169+95.55 OS 10.68 LT

\* PORTLAND CEMENT CONCRETE PAVEMENT 10" (JOINTED) (STD 420106)  
SUB-BASE GRANULAR MATERIAL, TYPE B, 12"

PLAN	DATE
BY	
REVISIONS	
NO.	DESCRIPTION



REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION <b>ORCHARD ROAD PLAN AND PROFILE</b> <b>STA. 166 + 14.47 TO STA. 175 + 50</b> SCALE: VERT. 1" = 50' HORIZ. 1" = 5' DATE: _____ DRAWN BY: _____ CHECKED BY: _____
NAME	DATE	

PROFILE	DATE
BY	
REVISIONS	
NO.	DESCRIPTION

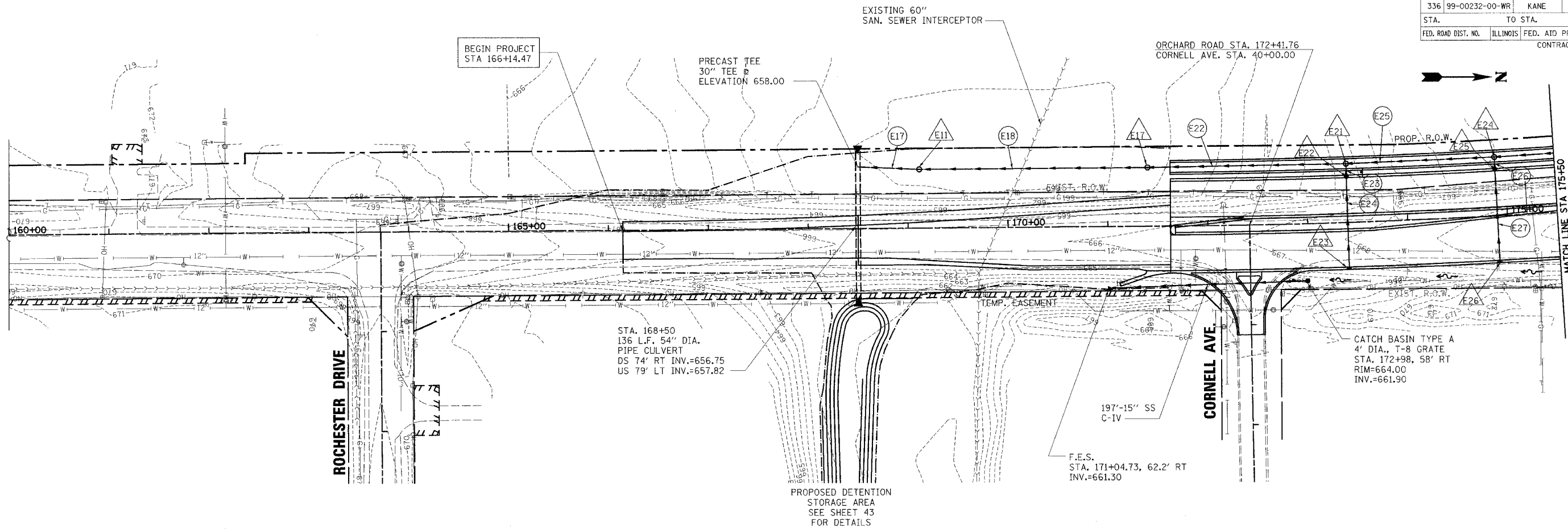
1/6/2005 12:49:48 PM c:\n17700\csm\Design\177700\_PP\_06.lcgn







F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	39
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO.: 83738	



NO.	STATION	OFFSET	STRUCTURE TYPE			DIA.	FRAME	RIM	NORTH INVERT	SOUTH INVERT	WEST INVERT	EAST INVERT	RESTRICTED DEPTH
			MH	CB	INLET								
E11	169+11.44	59.0' LT.	A			5'	T-1, CL	664.69	658.22	658.17	---	658.35	X
E12	NOT USED												
E13	NOT USED												
E14	NOT USED												
E15	NOT USED												
E16	NOT USED												
E17	171+40.00	59.0' LT.	A			5'	T-1, CL	665.58	658.95	658.90	---	---	X
E18	NOT USED												
E19	NOT USED												
E20	NOT USED												
E21	173+40.00	59.0' LT.	A			5'	T-1, CL	666.48	659.38	659.33	---	661.60	X
E22	173+40.00	45.0' LT.		A		4'	T-24 F&G	666.52	---	---	661.65	661.65	
E23	173+40.00	45.0' RT.			A	2'	T-24 F&G	666.52	---	---	662.08	---	
E24	174+90.00	59.0' LT.	A			5'	T-1, CL	667.99	659.87	659.82	---	662.29	
E25	174+90.00	45.0' LT.		A		4'	T-24 F&G	667.19	---	---	662.34	662.34	
E26	174+90.00	45.0' RT.			A	2'	T-24 F&G	667.19	---	---	663.21	---	

NO.	STRUCTURE - STRUCTURE	TYPE	DIA.	LIN. FT.	T.B. CU. YD.	SLOPE %
E12	NOT USED					
E13	NOT USED					
E14	NOT USED					
E15	NOT USED					
E16	NOT USED					
E17	54" CULVERT TO E11	TYPE 1	30"	58	35.5	0.30
E18	E11 TO E17	TYPE 1	30"	225	137.13	0.30
E19	NOT USED					
E20	NOT USED					
E21	NOT USED					
E22	E17 TO E21	TYPE 1	30"	197	130.1	0.30
E23	E21 TO E22	TYPE 1	12"	10	2.89	0.50
E24	E22 TO E23	TYPE 2	12"	88	18.92	0.50
E25	E21 TO E24	TYPE 2	30"	147	141.9	0.30
E26	E24 TO E25	TYPE 2	12"	10	3.31	0.50
E27	E25 TO E26	TYPE 2	12"	87	27.84	1.00

- △ DRAINAGE STRUCTURES
- DRAINAGE PIPES

9/8/2006 10:29:26 AM K:\177700\Cad\Design\177700\_DPP\_06.Lcgn

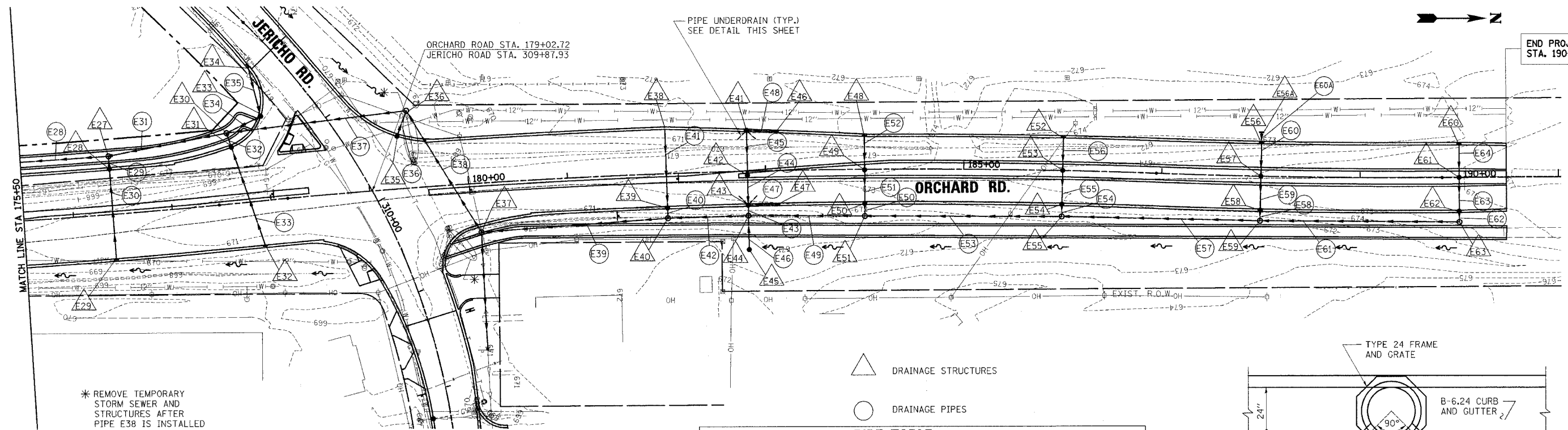


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 KANE COUNTY DIVISION OF TRANSPORTATION  
 ORCHARD ROAD RECONSTRUCTION  
**ORCHARD ROAD**  
**DRAINAGE AND UTILITIES PLAN**  
**STA. 160+00 TO STA. 175+50**

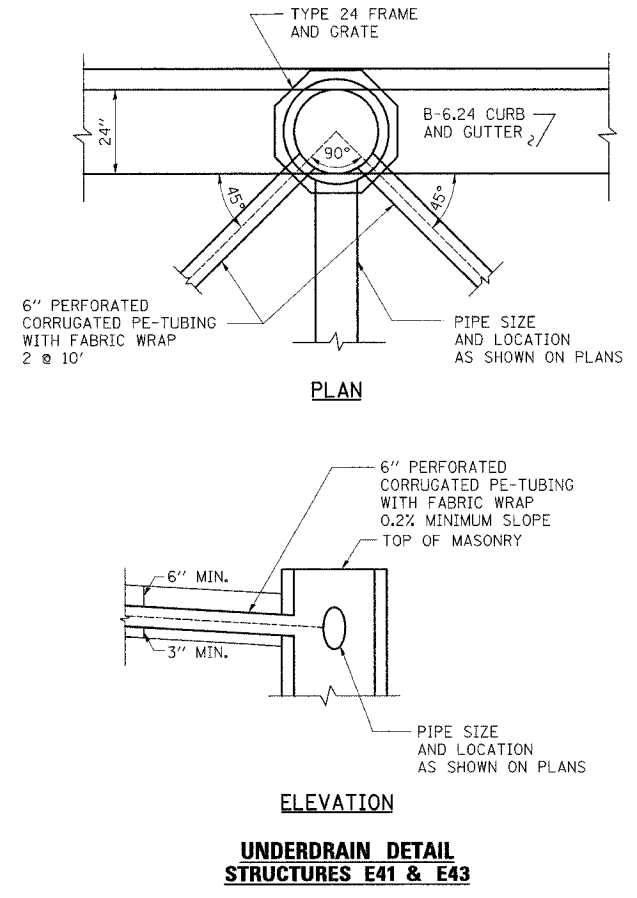
SCALE: VERT. \_\_\_\_\_  
 HORIZ. \_\_\_\_\_  
 DATE: 11/04/05

DRAWN BY: RJN  
 CHECKED BY: SPF



NO.	STATION	OFFSET	STRUCTURE TYPE	DIA.	FRAME	RIM	NORTH INVERT	SOUTH INVERT	WEST INVERT	EAST INVERT	RESTRICTED DEPTH
E27	176+40.00	59.0' LT.	A	5'	T-1, CL	668.67	660.43	660.38	---	662.58	---
E28	176+40.00	45.0' LT.	A	4'	T-24 F&G	667.87	---	---	662.66	662.66	---
E29	176+40.00	45.0' RT.	A	2'	T-24 F&G	667.87	---	---	663.27	---	---
E30	177+61.74	71.9' LT.	A	5'	T-1, CL	670.59	660.91	660.86	664.73	664.48	---
E31	177+65.37	56.91' LT.	A	4'	T-24 F&G	668.25	---	---	664.54	664.79	X
E32	177+90.00	45.0' RT.	A	2'	T-24 F&G	668.83	---	---	665.30	---	---
E33	177+97.66	85.31' LT.	A	4'	T-24 F&G	669.50	---	---	666.50	665.07	---
E34	308+07.50	26.53' RT.	A	2'	T-24 F&G	671.55	---	---	---	666.98	---
E35	179+31.80	53.3' LT.	A	4'	T-24 F&G	670.75	---	---	665.05	---	---
E36	174+38.77	78.25' LT.	A	5'	T-1, OL	668.50	662.00	661.54	---	664.88	X
E37	180+10.00	49.8' RT.	A	5'	T-1, CL	672.32	664.20	---	662.38	667.06	---
E38	182+00.00	45.0' LT.	A	2'	T-24 F&G	671.94	---	---	---	668.94	---
E39	182+00.00	33.0' RT.	A	4'	T-24 F&G	672.24	---	---	668.56	666.37	---
E40	182+00.00	45.0' RT.	A	5'	T-1, OL	672.15	664.82	664.57	666.32	---	---
E41	182+81.77	40.2' LT.	A	4'	T-24 F&G	671.94	668.85	---	---	666.44	---
E42	182+81.77	4.2' RT.	A	4'	T-8	672.61	---	---	666.22	666.22	---
E43	182+81.77	33.0' RT.	A	4'	T-24 F&G	672.12	669.12	---	666.08	666.08	---
E44	182+81.77	45.0' RT.	A	5'	T-1, OL	672.03	665.54	665.04	666.04	666.04	X
E45	182+81.77	74.0' RT.	A	4'	T-8	668.91	---	---	666.20	---	X
E46	183+11.77	38.7' LT.	A	2'	T-24 F&G	671.99	---	668.99	---	---	---
E47	183+11.77	33.0' RT.	A	2'	T-24 F&G	672.57	---	669.26	---	---	---
E48	184+00.00	33.3' LT.	A	2'	T-24 F&G	672.39	---	---	---	669.39	---
E49	184+00.00	0.8' RT.	A	4'	T-8	672.82	---	---	669.23	666.77	---
E50	184+00.00	33.0' RT.	A	4'	T-24 F&G	672.39	---	---	666.62	666.62	---
E51	184+00.00	47.3' RT.	A	4'	T-1, OL	672.18	666.08	665.83	666.58	---	---
E52	186+00.00	33.0' LT.	A	2'	T-24 F&G	673.47	---	---	---	670.47	---
E53	186+00.00	0.0' RT.	A	4'	T-8	673.89	---	---	670.31	667.36	---
E54	186+00.00	33.0' RT.	A	4'	T-24 F&G	673.47	---	---	667.21	667.21	---
E55	186+00.00	46.5' RT.	A	4'	T-1, OL	673.31	666.92	666.67	667.17	---	---
E56	188+00.00	33.0' LT.	A	2'	T-24 F&G	674.57	---	---	671.60	671.57	---
E57	188+00.00	0.0' RT.	A	4'	T-8	674.99	---	---	671.41	668.15	---
E58	188+00.00	33.0' RT.	A	4'	T-24 F&G	674.57	---	---	668.00	668.00	---
E59	188+00.00	45.0' RT.	A	4'	T-1, OL	674.48	667.96	667.71	667.96	---	---
E60	190+00.00	33.0' LT.	A	2'	T-24 F&G	675.68	---	---	---	672.68	---
E61	190+00.00	0.0' RT.	A	4'	T-8	676.10	---	---	672.52	669.13	---
E62	190+00.00	33.0' RT.	A	4'	T-24 F&G	675.68	---	---	668.98	668.98	---
E63	190+00.00	45.0' RT.	A	4'	T-1, OL	675.58	---	668.94	668.94	---	---
E56A	188+00.00	45.0' LT.	A	2'	T-8	673.00	---	---	---	671.65	---

NO.	STRUCTURE - STRUCTURE	TYPE	DIA.	LIN. FT.	T.B. CU. YD.	SLOPE %
E28	E24 TO E27	TYPE 2	27"	147	125.9	0.35
E29	E27 TO E28	TYPE 2	12"	12	4.34	0.70
E30	E28 TO E29	TYPE 2	12"	87	21.49	0.70
E31	E27 TO E30	TYPE 2	27"	122	125.46	0.35
E32	E30 TO E31	TYPE 2	15"	12	4.64	0.50
E33	E31 TO E32	TYPE 1	12"	103	18.95	0.50
E34	E30 TO E33	TYPE 2	12"	34	22.58	1.00
E35	E33 TO E34	TYPE 2	12"	48	16.90	1.00
E36	E36 TO E35	TYPE 2	12"	17	1.26	1.00
E37	E30 TO E36	TYPE 2	27"	181	95.97	0.20
E38	E36 TO E37	TYPE 2	24"	150	109.78	0.25
E39	E37 TO E40	TYPE 2	30"	185	174.58	0.20
E40	E40 TO E39	TYPE 2	12"	9	0.68	0.50
E41	E39 TO E38	TYPE 1	12"	77	25.49	0.50
E42	E40 TO E44	TYPE 2	27"	76	---	0.30
E43	E44 TO E43	TYPE 2	27"	7	0.43	0.50
E44	E43 TO E42	TYPE 2	12"	27	10.34	0.50
E45	E42 TO E41	TYPE 1	12"	43	15.57	0.50
E46	E44 TO E45	TYPE 1	27"	32	9.36	0.50
E47	E43 TO E47	TYPE 1	12"	28	10.72	0.50
E48	E41 TO E46	TYPE 1	12"	28	8.68	0.50
E49	E44 TO E51	TYPE 2	21"	115	---	0.25
E50	E51 TO E50	TYPE 2	12"	9	0.66	0.50
E51	E50 TO E49	TYPE 2	12"	30	10.56	0.50
E52	E49 TO E48	TYPE 1	12"	32	10.59	0.50
E53	E51 TO E55	TYPE 2	18"	197	---	0.30
E54	E54 TO E55	TYPE 2	12"	9	0.77	0.50
E55	E53 TO E54	TYPE 2	12"	30	18.96	0.50
E56	E52 TO E53	TYPE 1	12"	32	12.26	0.50
E57	E55 TO E59	TYPE 2	15"	197	---	0.40
E58	E59 TO E58	TYPE 2	12"	7	1.30	0.50
E59	E58 TO E57	TYPE 2	12"	30	20.40	0.50
E60	E57 TO E56	TYPE 1	12"	32	20.74	0.50
E61	E59 TO E63	TYPE 2	12"	197	---	0.50
E62	E63 TO E62	TYPE 2	12"	7	1.33	0.50
E63	E62 TO E61	TYPE 2	12"	30	20.88	0.50
E64	E61 TO E60	TYPE 1	12"	32	21.25	0.50
E60A	E56 TO E56A	TYPE 2	12"	10	---	0.50



\* PIPE SEGMENTS E37 AND E38 SHALL BE CONSTRUCTED OF WATER MAIN QUALITY RUBBER GASKETED REINFORCED CONCRETE PIPE MEETING THE REQUIREMENTS OF ASTM C361

**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

REVISIONS	
NAME	DATE

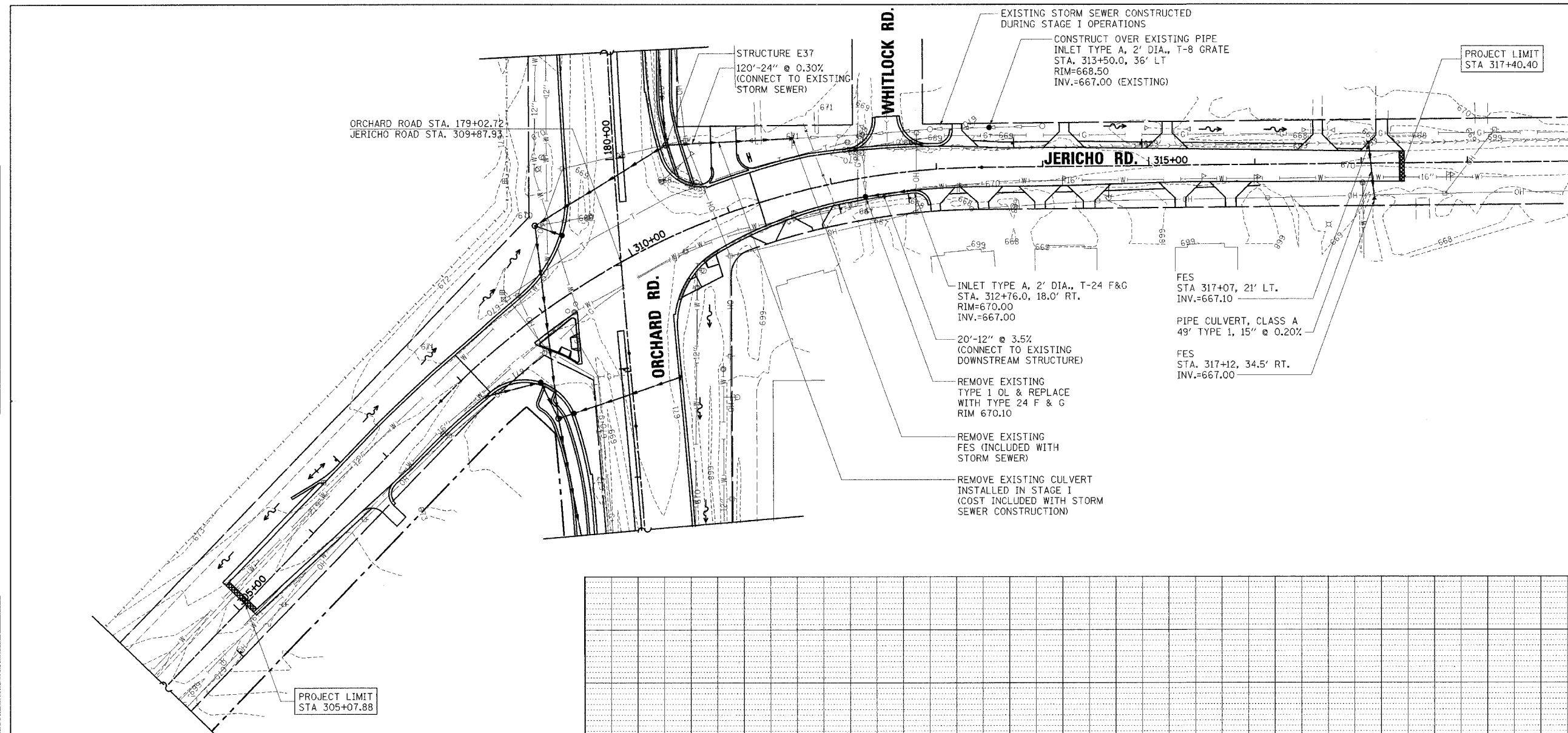
ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION  
**ORCHARD ROAD  
DRAINAGE AND UTILITIES PLAN  
STA. 175 + 50 TO STA. 190 + 47.48**  
SCALE: VERT. \_\_\_\_\_  
          HORIZ. \_\_\_\_\_  
DATE: 11/04/05  
DRAWN BY: RJN  
CHECKED BY: SPF

P:\B\2006 ID\29549 AM K\117700\GSA\DES\117700\_03P\_07.dgn



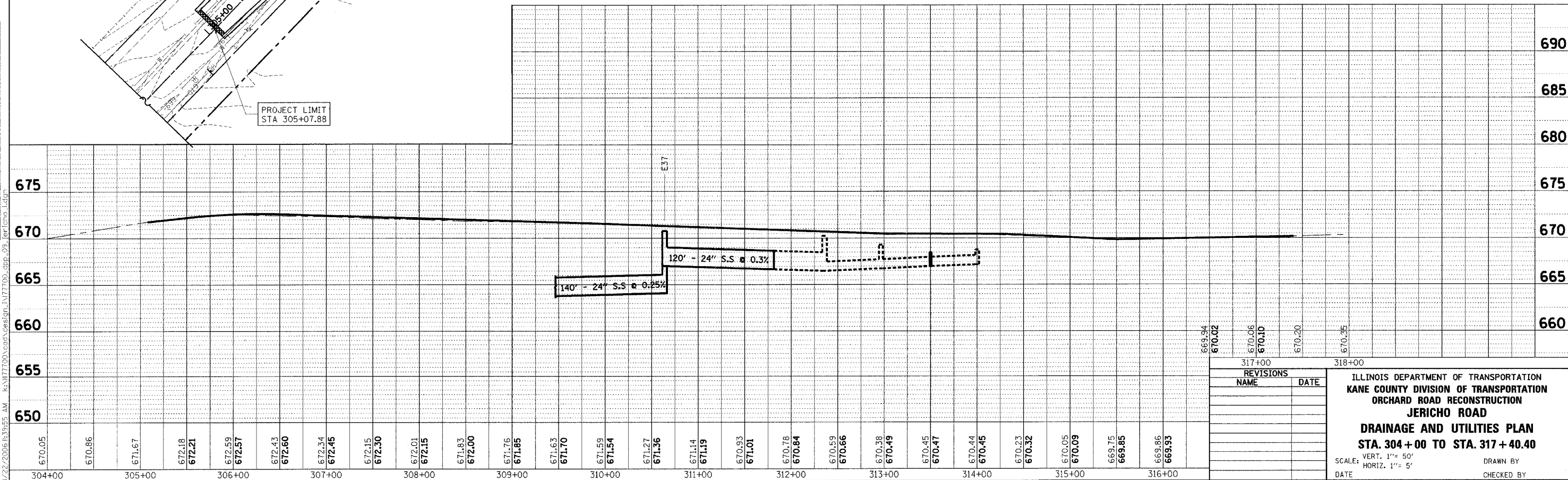


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	96	42
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO.: 83738	



**NOTES**

ADDITIONAL STORM SEWER AND CULVERT WORK WILL BE REQUIRED FOR STAGING OPERATIONS. SEE STAGE I MAINTENANCE OF TRAFFIC PLANS FOR MORE INFORMATION. WORK THIS SHEET WITH DRAINAGE PLANS FOR ORCHARD ROAD



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION  
JERICHO ROAD  
DRAINAGE AND UTILITIES PLAN  
STA. 304 + 00 TO STA. 317 + 40.40

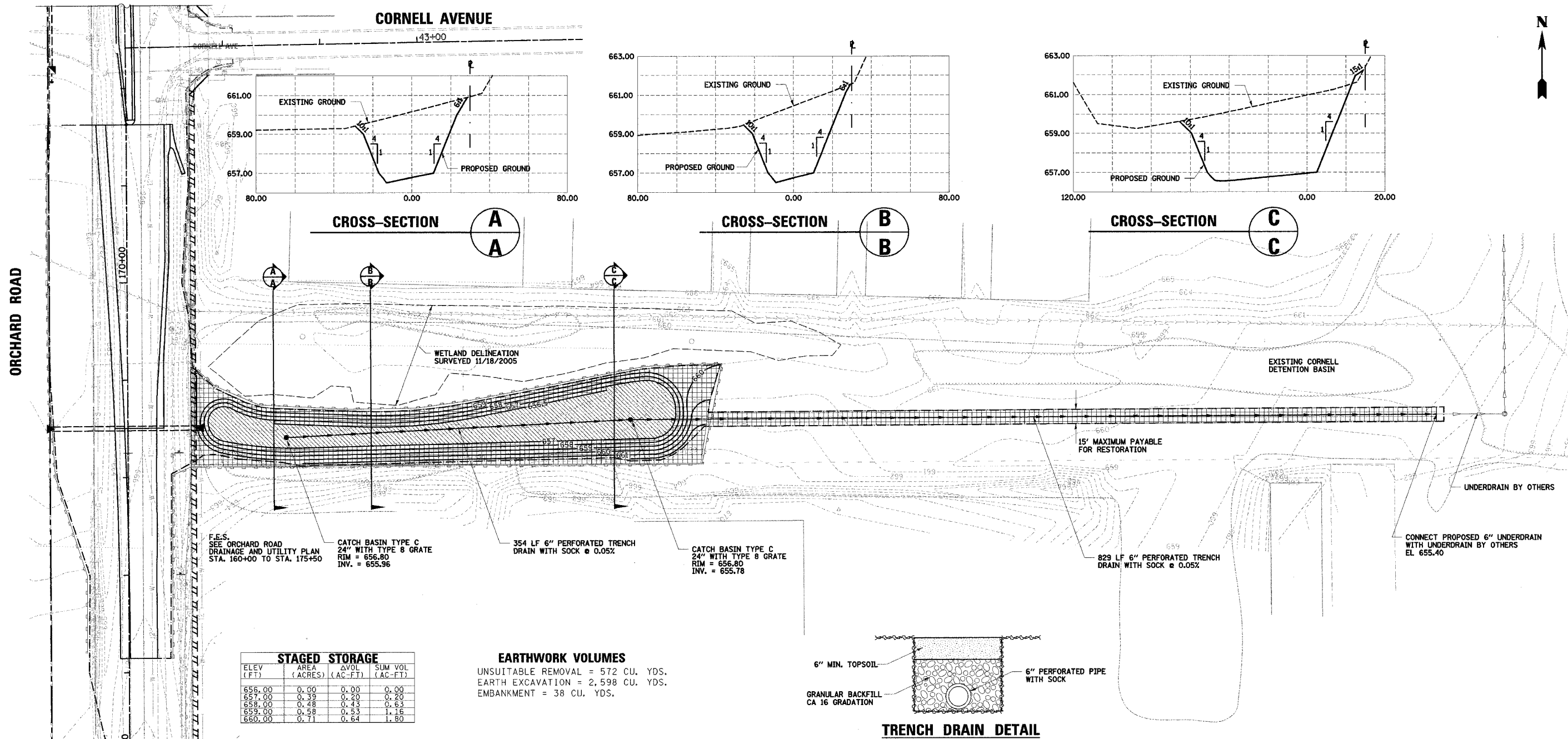
SCALE: VERT. 1" = 5'  
HORIZ. 1" = 5'

DATE \_\_\_\_\_ DRAWN BY \_\_\_\_\_  
CHECKED BY \_\_\_\_\_

PLAN	REVISION	DATE
NO.	BY	

PROFILE	REVISION	DATE
NO.	BY	

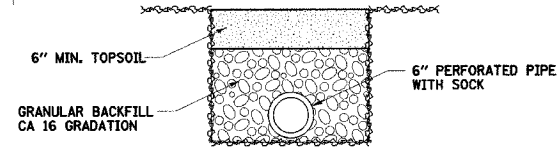
8/22/2006 10:34:55 AM ks:\117700\cdm\cases\117700\_dpp\_09\_117700.dgn



**STAGED STORAGE**

ELEV (FT)	AREA (ACRES)	ΔVOL (AC-FT)	SUM VOL (AC-FT)
656.00	0.00	0.00	0.00
657.00	0.39	0.20	0.20
658.00	0.48	0.43	0.63
659.00	0.58	0.53	1.16
660.00	0.71	0.64	1.80

**EARTHWORK VOLUMES**  
 UNSUITABLE REMOVAL = 572 CU. YDS.  
 EARTH EXCAVATION = 2,598 CU. YDS.  
 EMBANKMENT = 38 CU. YDS.



**DETENTION POND**

ITEM	UNIT	QUANTITY
SEEDING, CLASS 2A	ACRE	0.36
SEEDING, CLASS 3	ACRE	0.80
FURNISHING AND PLACING TOPSOIL, 6"	SQ. YD.	5615

**LEGEND**

	SEEDING CLASS 1		SODDING
	SEEDING CLASS 2		SEEDING CLASS 3
	SEEDING CLASS 2A		PROPOSED DECIDUOUS TREE

**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

**REVISIONS**

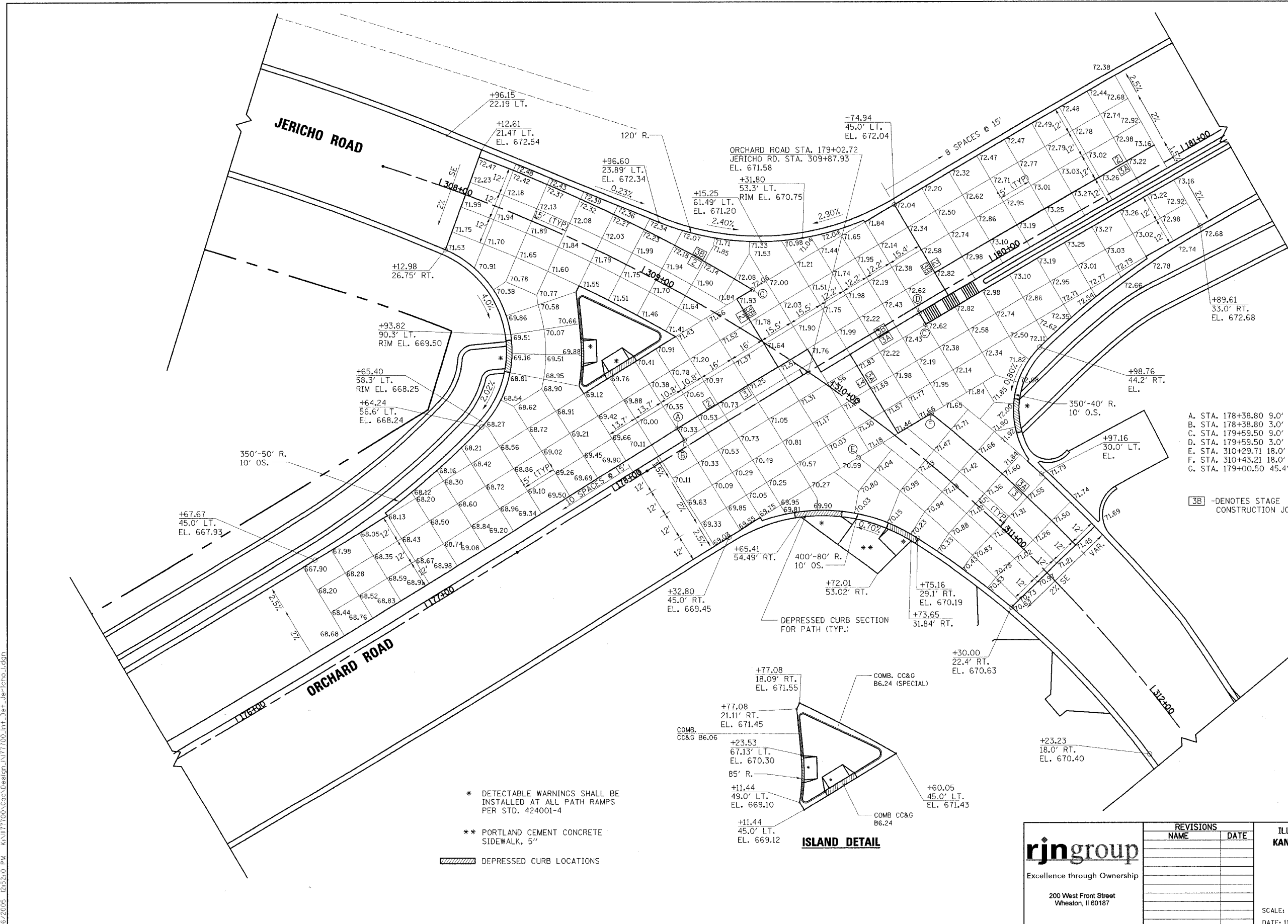
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 KANE COUNTY DIVISION OF TRANSPORTATION  
 ORCHARD ROAD RECONSTRUCTION  
**CORNELL AVENUE  
 DETENTION POND  
 IMPROVEMENT PLAN**

SCALE: VERT.      DRAWN BY: RJN  
 HORIZ.              CHECKED BY: SPF  
 DATE: 11/04/05

8/22/2006 14:39:56 AM ks:\117700\cadd\design\117700\_detention.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	44
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO.: 83738				



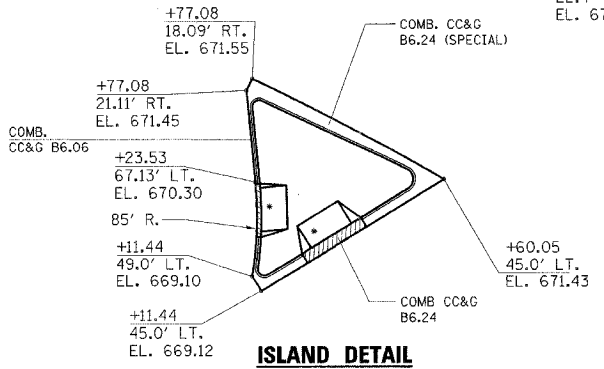
- A. STA. 178+38.80 9.0' LT. EL. 670.34
- B. STA. 178+38.80 3.0' LT. EL. 670.43
- C. STA. 179+59.50 9.0' RT. EL. 672.62
- D. STA. 179+59.50 3.0' RT. EL. 672.62
- E. STA. 310+29.71 18.0' RT. EL. 671.08
- F. STA. 310+43.21 18.0' LT. EL. 671.75
- G. STA. 179+00.50 45.4' LT. EL. 672.06

[3B] - DENOTES STAGE CONSTRUCTION JOINT

\* DETECTABLE WARNINGS SHALL BE INSTALLED AT ALL PATH RAMPS PER STD. 424001-4

\*\* PORTLAND CEMENT CONCRETE SIDEWALK, 5'

DEPRESSED CURB LOCATIONS



**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 KANE COUNTY DIVISION OF TRANSPORTATION  
 ORCHARD ROAD RECONSTRUCTION  
**INTERSECTION DETAIL  
 JERICHO ROAD**

SCALE: VERT. 1"=20'  
 HORIZ. 1"=20'  
 DATE: 11/04/05

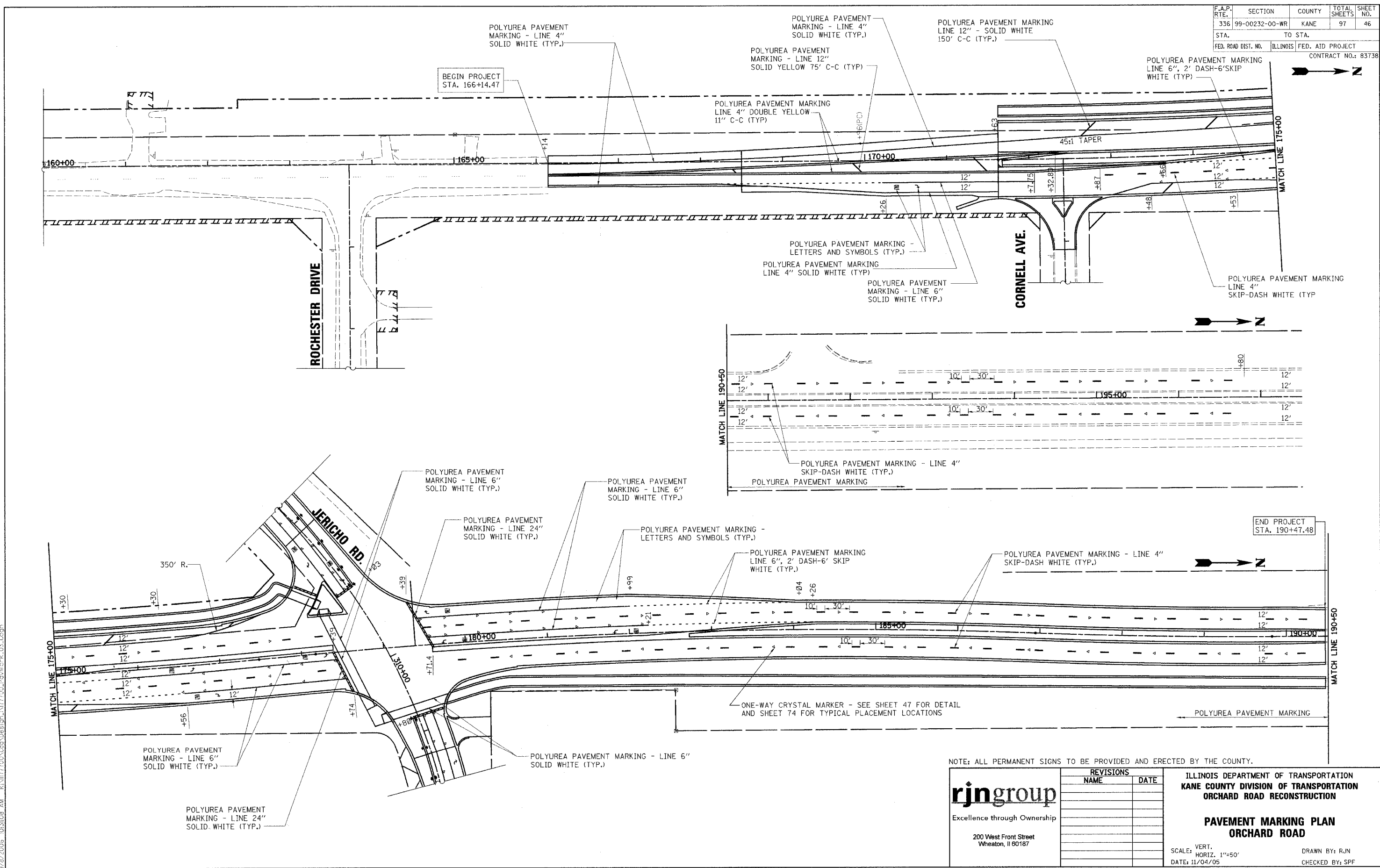
DRAWN BY: RJN  
 CHECKED BY: SPF

11/6/2005 12:52:10 PM K:\NIT7700\Cad\Design\NIT7700\_Int\_Det\_je-jericho.dwg





F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	46
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO.: 83738				



NOTE: ALL PERMANENT SIGNS TO BE PROVIDED AND ERECTED BY THE COUNTY.

**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 KANE COUNTY DIVISION OF TRANSPORTATION  
 ORCHARD ROAD RECONSTRUCTION

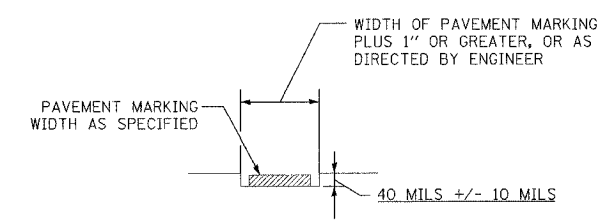
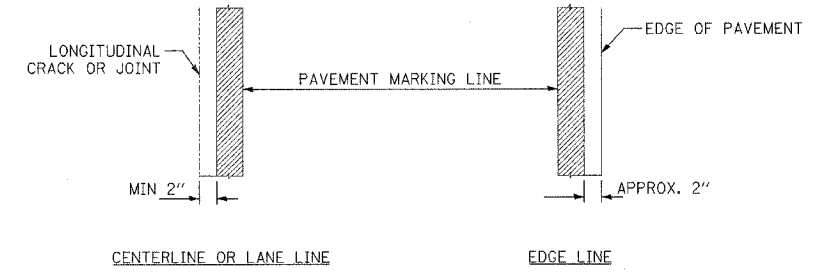
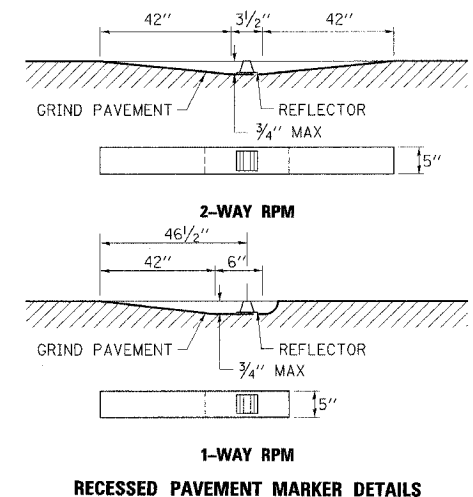
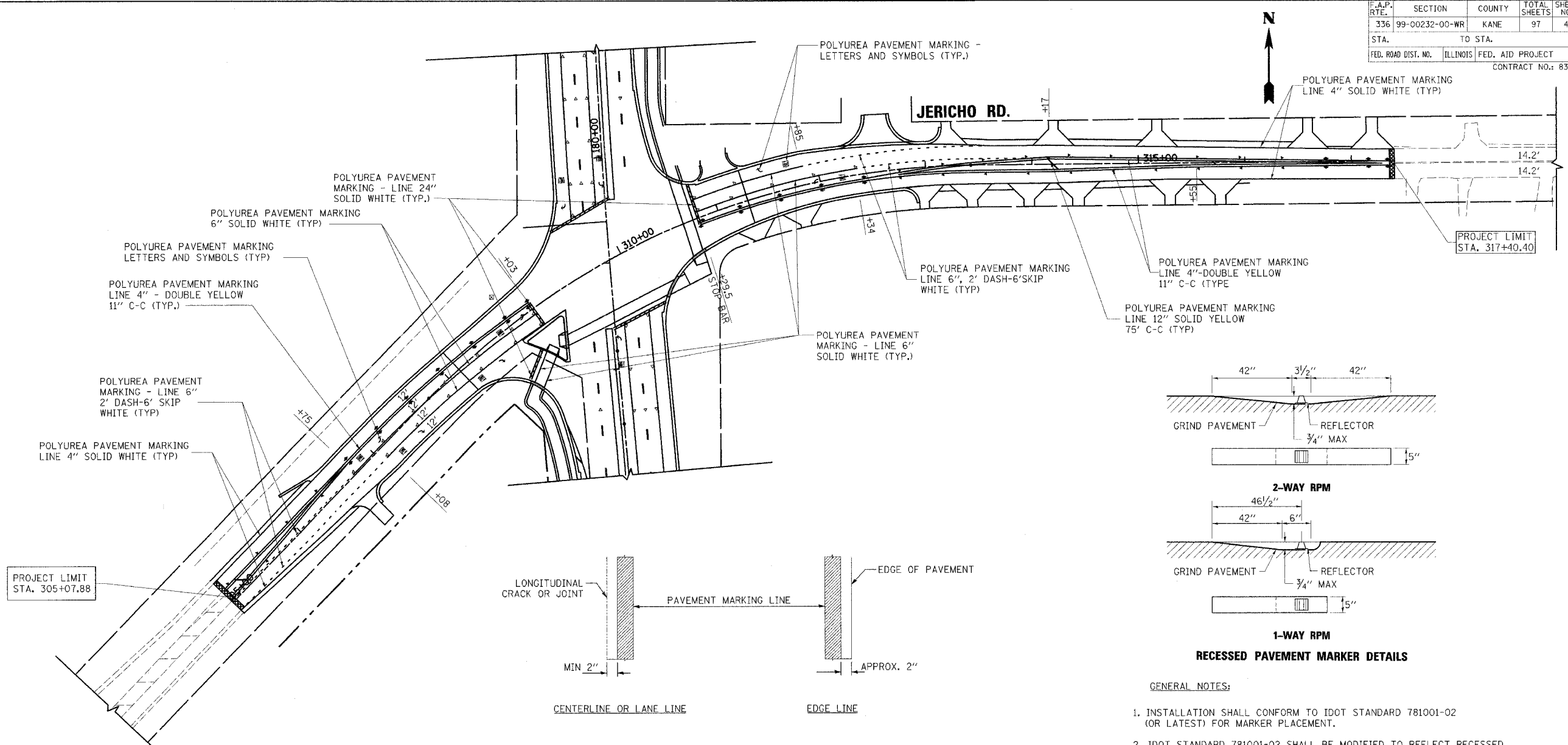
**PAVEMENT MARKING PLAN  
 ORCHARD ROAD**

SCALE: VERT. 1"=50'  
 HORIZ. 1"=50'  
 DATE: 11/04/05

DRAWN BY: RJN  
 CHECKED BY: SPF

9/8/2006 10:31:08 AM k:\1177700\Gcd\Deelgn\1177700\_PavMark\_03.Ldgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	47
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83738				



GROOVE INSTALLATION - 15 MIL POLYUREA THICKNESS  
FOR 20 MIL APPLICATION USE 45 MILS +/- 10 MILS

- GENERAL NOTES:
1. INSTALLATION SHALL CONFORM TO IDOT STANDARD 781001-02 (OR LATEST) FOR MARKER PLACEMENT.
  2. IDOT STANDARD 781001-02 SHALL BE MODIFIED TO REFLECT RECESSED PAVEMENT MARKERS INSTEAD OF RAISED PAVEMENT MARKERS.
- INSTALLATION NOTES:
1. SAW CUT TO DIMENSIONS SHOWN.
  2. SAW CUT AREAS TO BE DRY AND FREE OF MATERIAL THAT ADVERSELY AFFECTS THE ADHESIVE BOND.
  3. INSTALL THE REFLECTOR WITH AN APPROVED TWO-COMPONENT EPOXY ADHESIVE. EPOXY SHOULD NOT OBSCURE OR BLOCK THE LENS.
  4. INSTALL TOP OF REFLECTOR +/- 3/8" BELOW THE PAVEMENT SURFACE.
  5. REFLECTOR SHALL BE 3M SERIES 190 OR APPROVED EQUIVALENT.

- GENERAL NOTES:
1. UNLESS OTHERWISE ALLOWED BY THE ENGINEER, WAIT 10 DAYS OR LONGER TO GRIND A GROOVE INTO NEW ASPHALT PAVEMENT TO AVOID DAMAGE TO THE NEW PAVEMENT BY THE GROOVING AND CLEANING OPERATION.
  2. PAVEMENT MARKINGS SHALL CONFORM WITH IDOT HIGHWAY STANDARD 780001-01 (OR LATEST) UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR DETAILS ON THE SHEET.

NOTE: ALL PERMANENT SIGNS TO BE PROVIDED AND ERECTED BY THE COUNTY.

**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

REVISIONS	
NAME	DATE

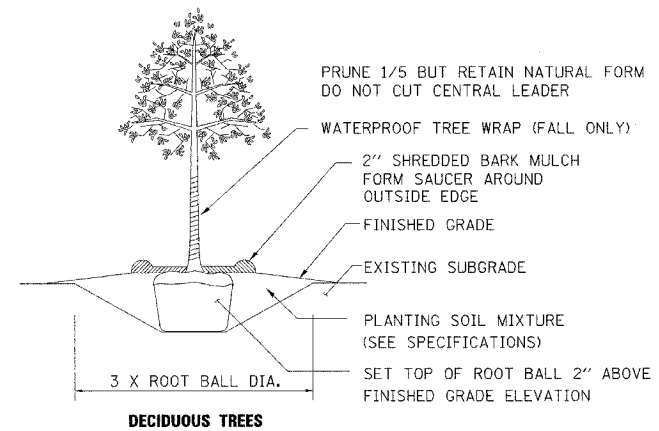
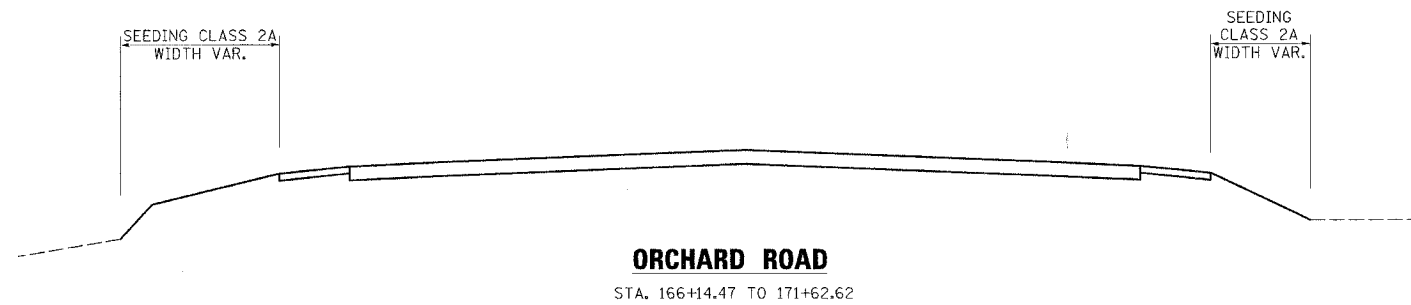
ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION  
**PAVEMENT MARKING PLAN  
JERICHO ROAD**

SCALE: VERT. 1"=50'  
DATE: 11/04/05

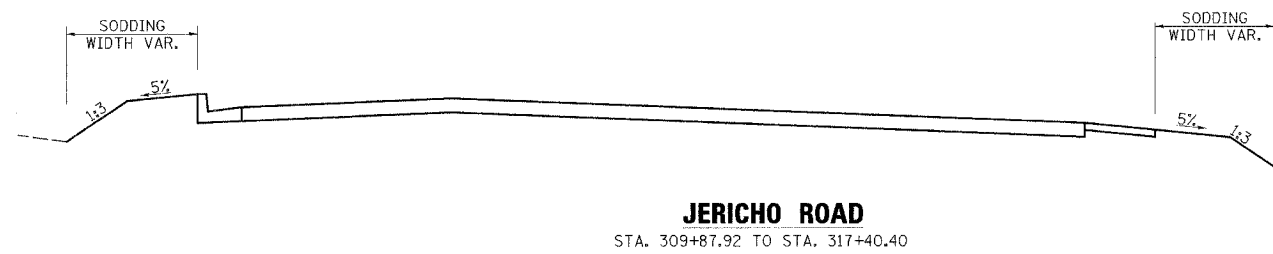
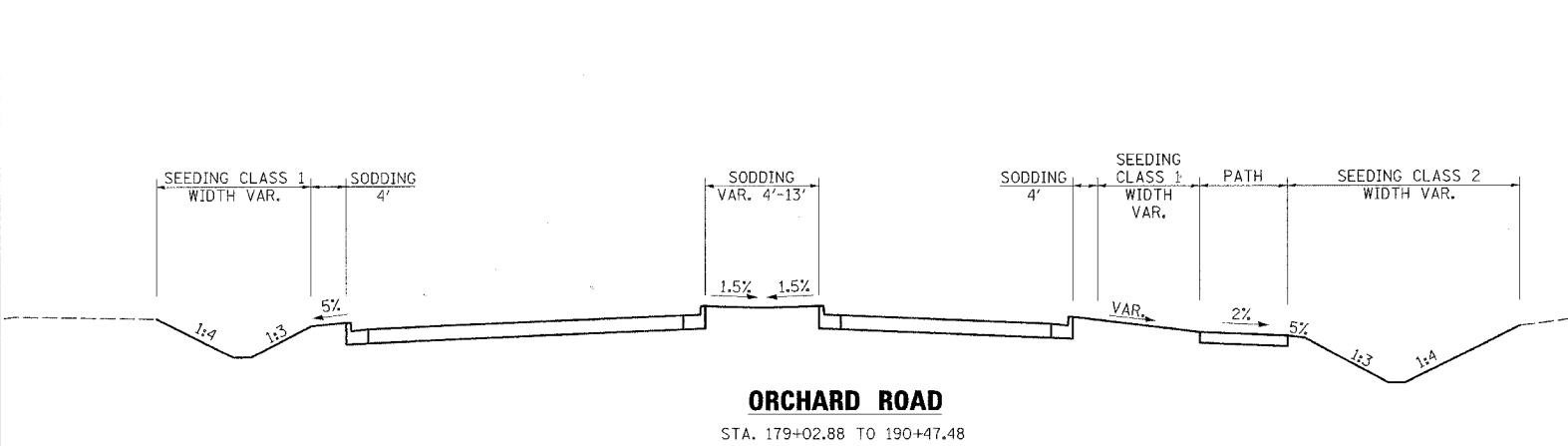
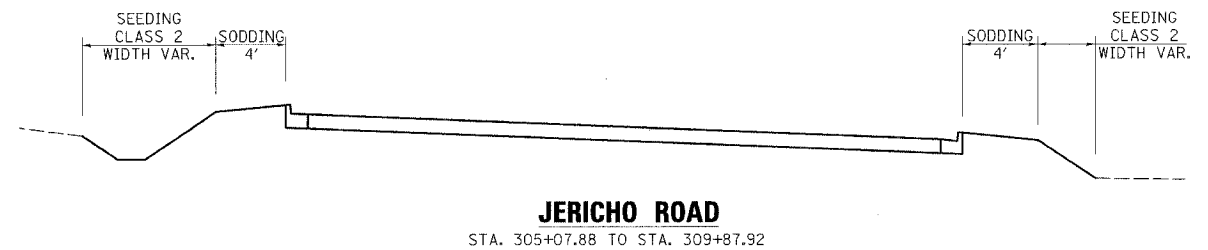
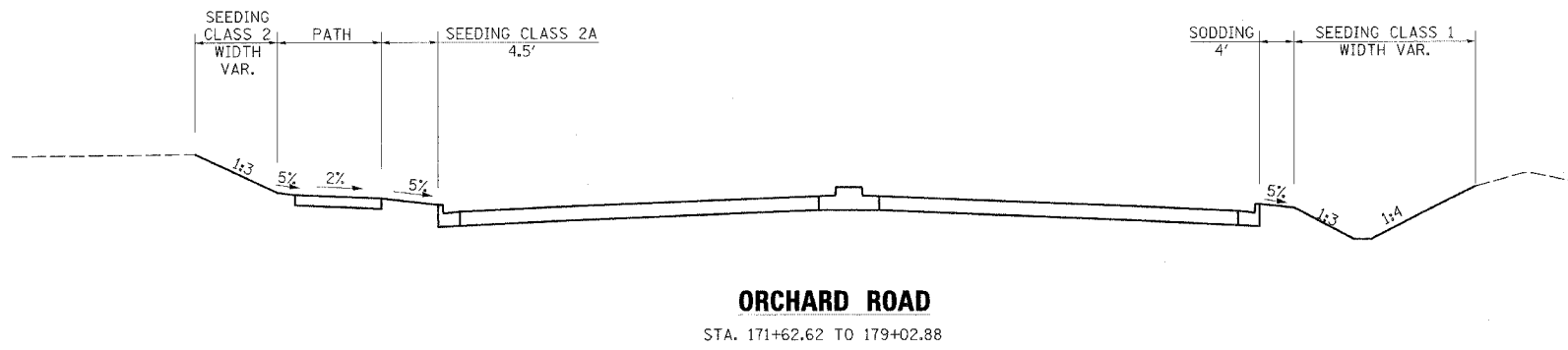
DRAWN BY: RJN  
CHECKED BY: SPF

9/8/2006 10:31:34 AM k:\NITTD00\Code\Design\NITTD00\_PavMark\_04.dwg

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	48
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83738				



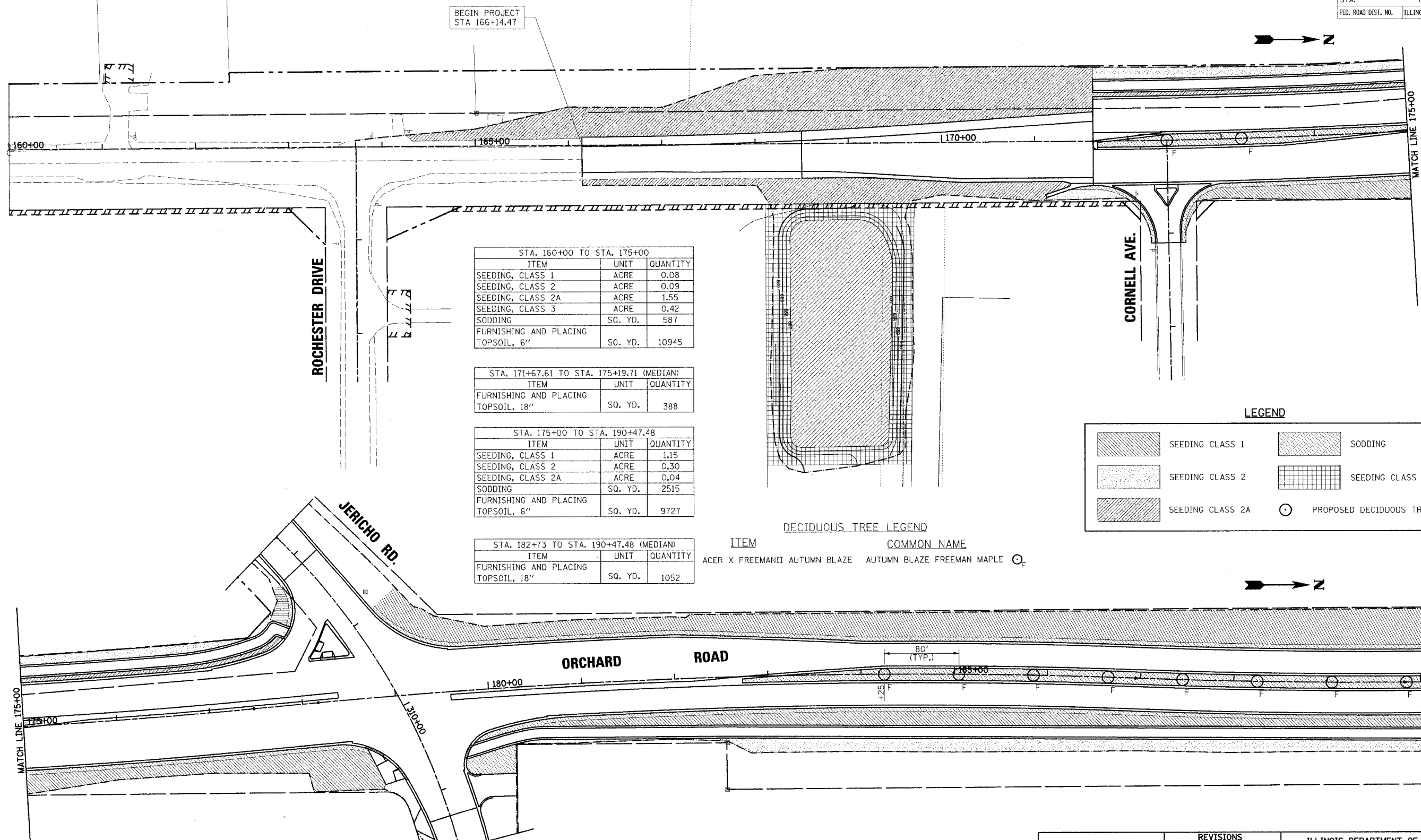
**PLANTING DETAIL**



<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	<b>REVISIONS</b>		ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION <b>ORCHARD ROAD RECONSTRUCTION</b>  <b>LANDSCAPING-NOTES AND DETAILS</b>  SCALE: VERT. HORIZ. DATE: 11/04/05
	NAME	DATE	
		DRAWN BY: RJN CHECKED BY: SPF	

11/4/2005 3:31:20 PM K:\117700\ccs\design\117700\_landscape-notes and details.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	49
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO.: 83738				



STA. 160+00 TO STA. 175+00

ITEM	UNIT	QUANTITY
SEEDING, CLASS 1	ACRE	0.08
SEEDING, CLASS 2	ACRE	0.09
SEEDING, CLASS 2A	ACRE	1.55
SEEDING, CLASS 3	ACRE	0.42
SODDING	SO. YD.	587
FURNISHING AND PLACING TOPSOIL, 6"	SO. YD.	10945

STA. 171+67.61 TO STA. 175+19.71 (MEDIAN)

ITEM	UNIT	QUANTITY
FURNISHING AND PLACING TOPSOIL, 18"	SO. YD.	388

STA. 175+00 TO STA. 190+47.48

ITEM	UNIT	QUANTITY
SEEDING, CLASS 1	ACRE	1.15
SEEDING, CLASS 2	ACRE	0.30
SEEDING, CLASS 2A	ACRE	0.04
SODDING	SO. YD.	2515
FURNISHING AND PLACING TOPSOIL, 6"	SO. YD.	9727

STA. 182+73 TO STA. 190+47.48 (MEDIAN)

ITEM	UNIT	QUANTITY
FURNISHING AND PLACING TOPSOIL, 18"	SO. YD.	1052

**LEGEND**

	SEEDING CLASS 1		SODDING
	SEEDING CLASS 2		SEEDING CLASS 3
	SEEDING CLASS 2A		PROPOSED DECIDUOUS TREE

**DECIDUOUS TREE LEGEND**

ITEM	COMMON NAME
	ACER X FREEMANII AUTUMN BLAZE
	AUTUMN BLAZE FREEMAN MAPLE

11/6/2005 10:44 PM F:\117700\Cad\Design\117700\_Landscape\_03.dgn

**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 KANE COUNTY DIVISION OF TRANSPORTATION  
 ORCHARD ROAD RECONSTRUCTION

**LANDSCAPING PLAN**

SCALE: VERT. 1" = 50'  
 HORIZ. 1" = 50'  
 DATE: 11/04/05

DRAWN BY: RJN  
 CHECKED BY: SPF

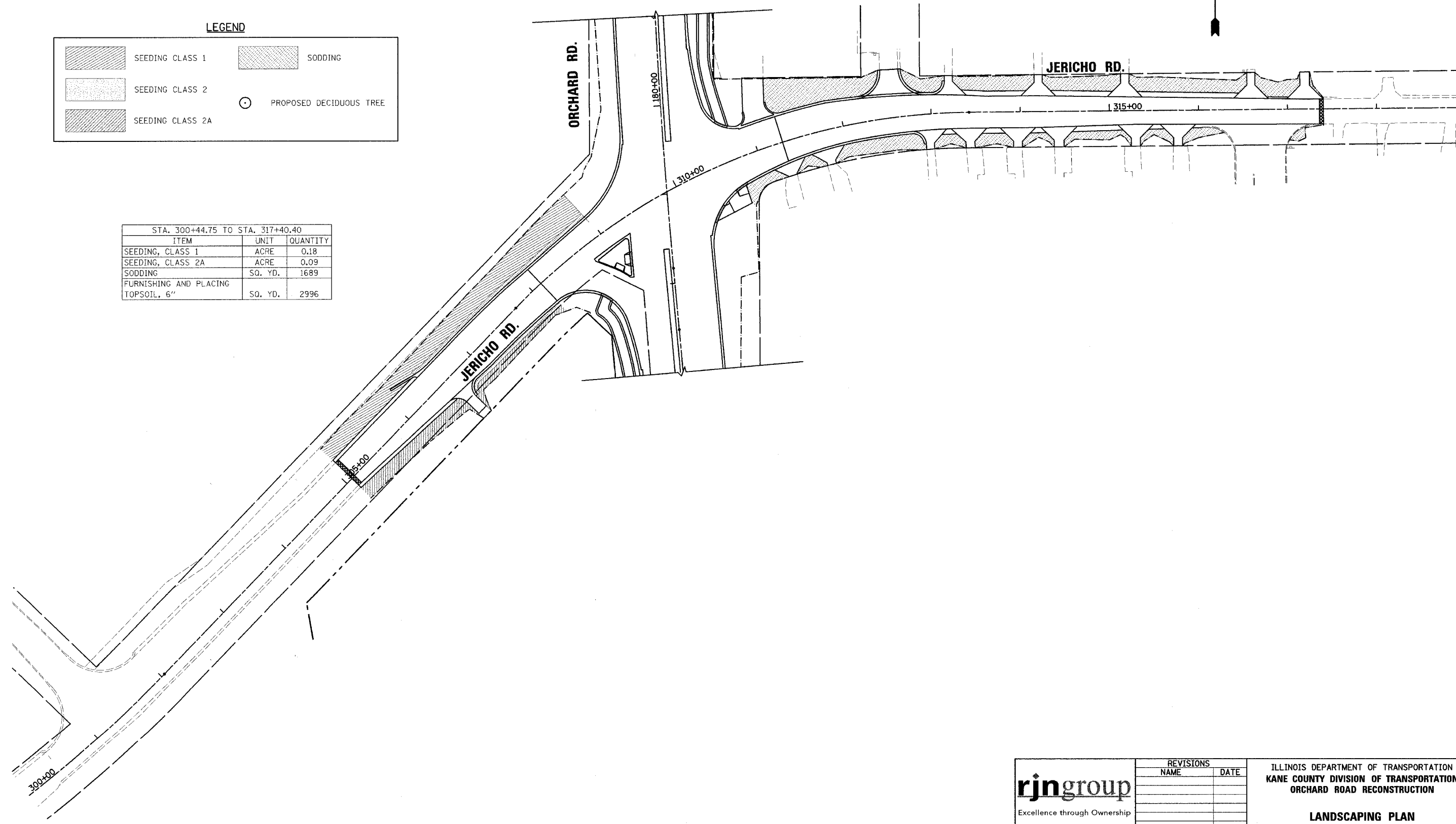
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	50
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO.: 83738



**LEGEND**

	SEEDING CLASS 1		SODDING
	SEEDING CLASS 2		PROPOSED DECIDUOUS TREE
	SEEDING CLASS 2A		

STA. 300+44.75 TO STA. 317+40.40		
ITEM	UNIT	QUANTITY
SEEDING, CLASS 1	ACRE	0.18
SEEDING, CLASS 2A	ACRE	0.09
SODDING	SQ. YD.	1689
FURNISHING AND PLACING TOPSOIL, 6"	SQ. YD.	2996



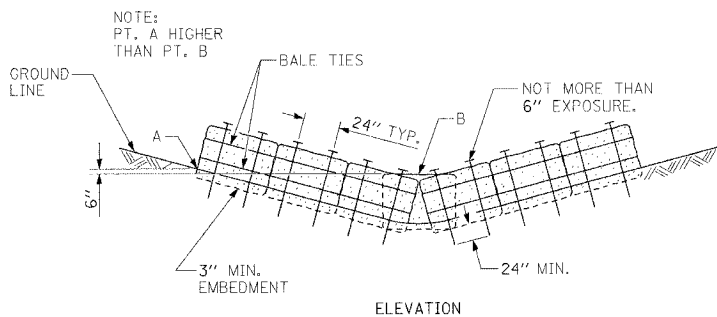
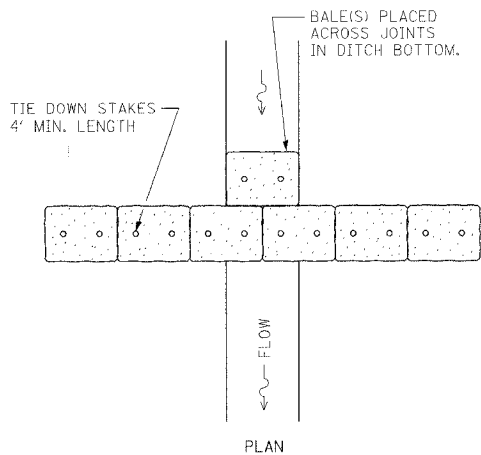
11/6/2005 14:20:00 PM K:\117700\Cad\Design\117700\_Landscape\_04.dgn

<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NAME</th> <th>DATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	NAME	DATE																			<p>ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION</p> <p><b>LANDSCAPING PLAN</b></p> <p>SCALE: VERT. _____ HORIZ. _____ DATE: 11/04/05</p> <p>DRAWN BY: RjN CHECKED BY: SPF</p>
	NAME	DATE																				

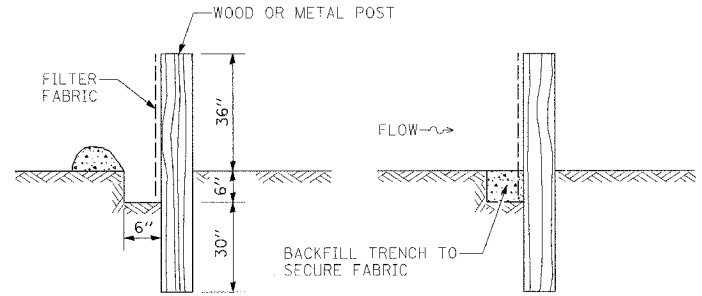
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	51
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83738				

**SEDIMENTATION AND EROSION CONTROL NOTES**

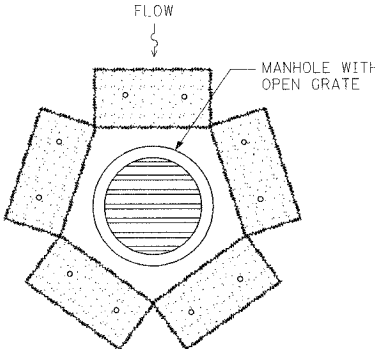
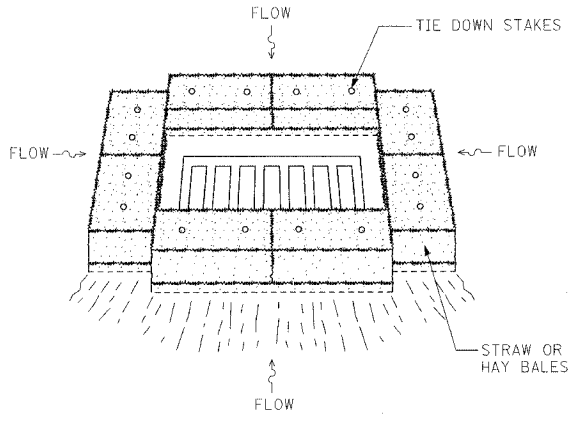
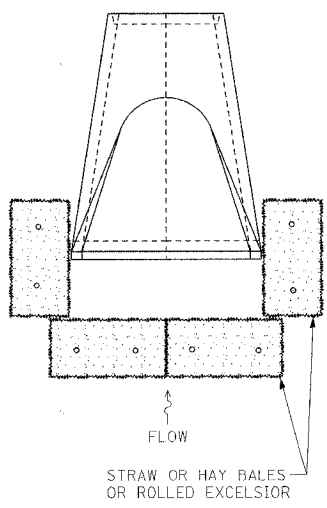
- SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL-STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS, AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
- SOIL-EROSION AND SEDIMENT-CONTROL FEATURES SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.
- DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN 7 CALENDAR DAYS OF THE END OF THE ACTIVE HYDROLOGIC DISTURBANCE, OR REDISTURBANCE.
- AREAS OR EMBANKMENTS HAVING SLOPES GREATER THAN 3H:1V SHALL BE STABILIZED WITH SOD, MAT, OR BLANKET IN COMBINATION WITH SEEDING.
- ALL STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY AN APPROPRIATE SEDIMENT-CONTROL MEASURE.
- ALL TEMPORARY EROSION AND SEDIMENT-CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
- ALL TEMPORARY AND PERMANENT EROSION-CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED BY THE CONTRACTOR AS NEEDED. THE PROPERTY OWNER SHALL BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE AND REPAIR.
- A STABILIZED MAT OF AGGREGATE UNDERLAIN WITH FILTER CLOTH (OR OTHER APPROPRIATE MEASURE) SHALL BE LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY, OR PARKING AREA. ANY SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY, OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT-DISPOSAL AREA.
- SOIL STOCKPILES SHALL NOT BE LOCATED IN A FLOOD-PRONE AREA OR A DESIGNATED BUFFER PROTECTING WATERS OF THE UNITED STATES.
- IF DE-WATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. DISCHARGES SHALL BE ROUTED THROUGH AN EFFECTIVE SEDIMENT-CONTROL MEASURE (e.g., SEDIMENT TRAP, SEDIMENT BASIN, OR OTHER APPROPRIATE MEASURE).
- THE EROSION-CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY.



**ROLLED EXCELSIOR OR STRAW BALES FOR DITCH CHECK**

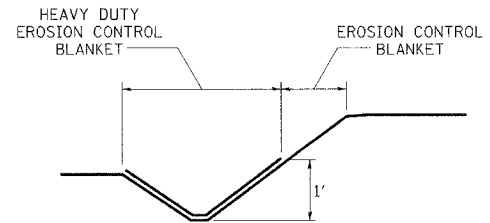


**SILT FILTER FENCE AS A PERIMETER EROSION BARRIER**



ALL STORM SEWER STRUCTURES HAVING OPEN GRATES SHALL HAVE BURLAP OR FILTER FABRIC UNDER GRATE.

**INLET AND PIPE PROTECTION**

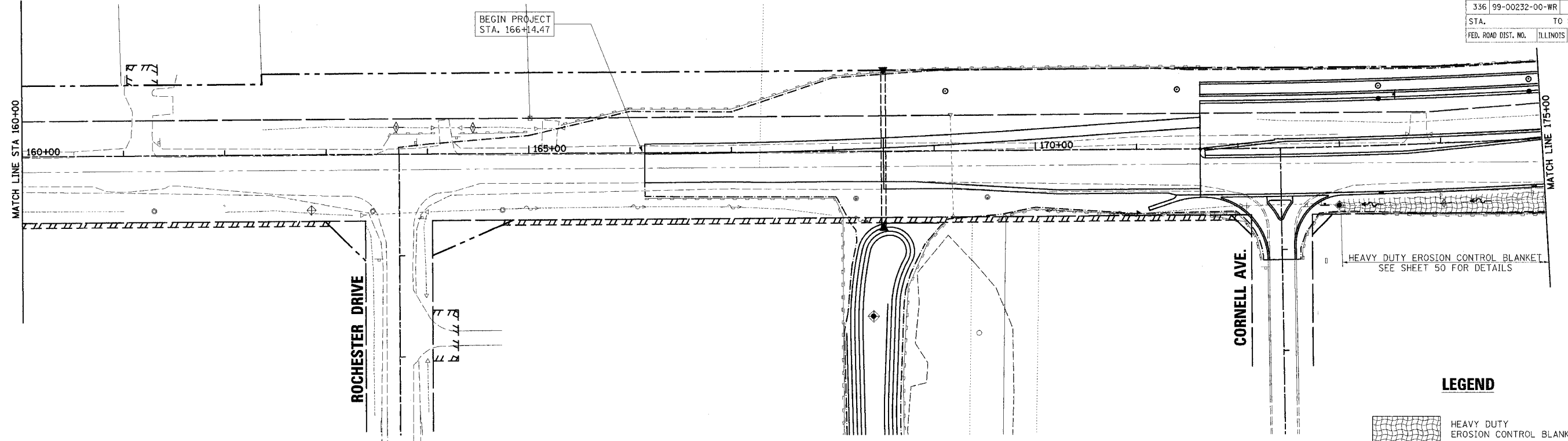


**TYPICAL APPLICATION OF HEAVY DUTY EROSION CONTROL BLANKET**

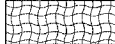




11/4/2005 3:33:46 PM K:\NIT7700\cadd\design\NIT7700\_erosionnotes.dgn

<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	<b>REVISIONS</b> NAME      DATE		ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION  <b>EROSION CONTROL NOTES &amp; DETAILS</b>  SCALE: VERT. HORIZ. DATE: 11/04/05
DRAWN BY: RJN CHECKED BY: SPF			

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	52
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO.: 83738				

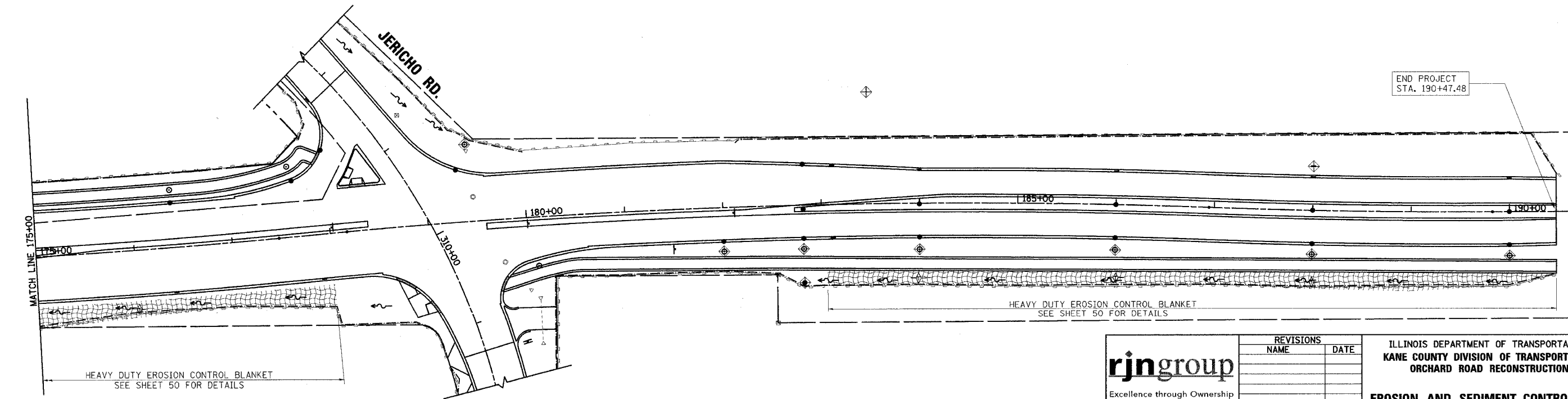


**LEGEND**

-  HEAVY DUTY EROSION CONTROL BLANKET
-  TEMPORARY DITCH CHECK
-  INLET AND PIPE PROTECTION
-  TEMPORARY FENCE
-  PERIMETER EROSION BARRIER

NOTES:  
 1: COORDINATE THE WORK ON THIS SHEET WITH THE LANDSCAPING PLANS  
 2: ALL SEEDED SURFACES SHALL BE COVERED WITH AN APPROVED EROSION CONTROL BLANKET WITHIN 7 CALENDAR DAYS OF FINAL GRADING

END PROJECT STA. 190+47.48



**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

REVISIONS	
NAME	DATE

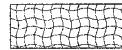


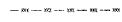

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 KANE COUNTY DIVISION OF TRANSPORTATION  
 ORCHARD ROAD RECONSTRUCTION  
**EROSION AND SEDIMENT CONTROL PLAN**  
 SCALE: VERT.      DRAWN BY: RJN  
           HORIZ.      CHECKED BY: SPF  
 DATE: 11/04/05

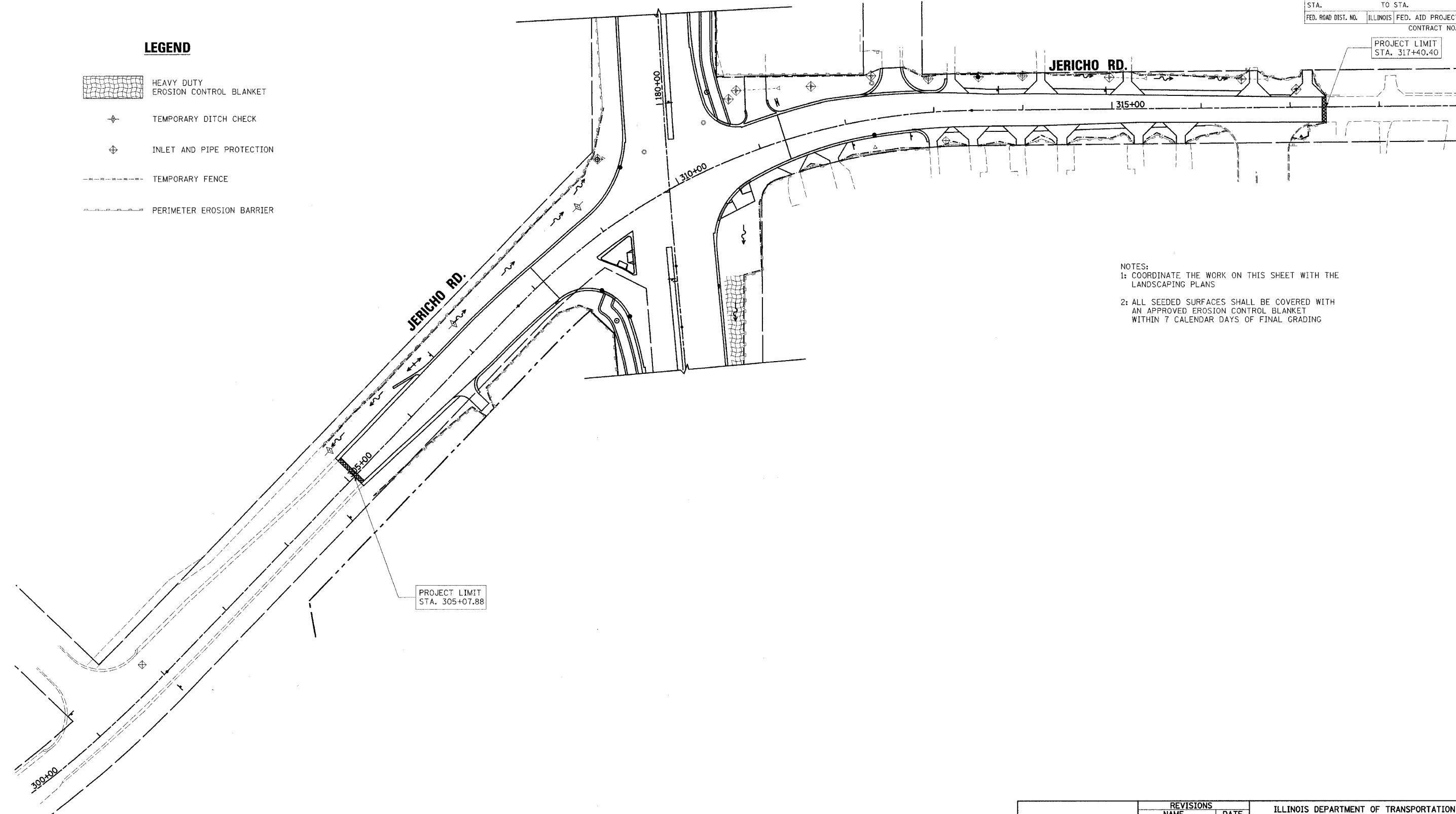
8/22/2006 14:59:56 AM s:\1117700\cadd\deslgn\1117700\_erosion\_03.dgn



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	53
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83758				


**LEGEND**

-  HEAVY DUTY EROSION CONTROL BLANKET
-  TEMPORARY DITCH CHECK
-  INLET AND PIPE PROTECTION
-  TEMPORARY FENCE
-  PERIMETER EROSION BARRIER



- NOTES:
- COORDINATE THE WORK ON THIS SHEET WITH THE LANDSCAPING PLANS
  - ALL SEEDED SURFACES SHALL BE COVERED WITH AN APPROVED EROSION CONTROL BLANKET WITHIN 7 CALENDAR DAYS OF FINAL GRADING

8/22/2006 10:59:57 AM K:\117700\cad\des\gr\117700\_erosion\_04.dgn

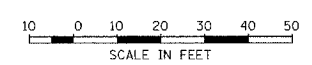
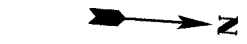
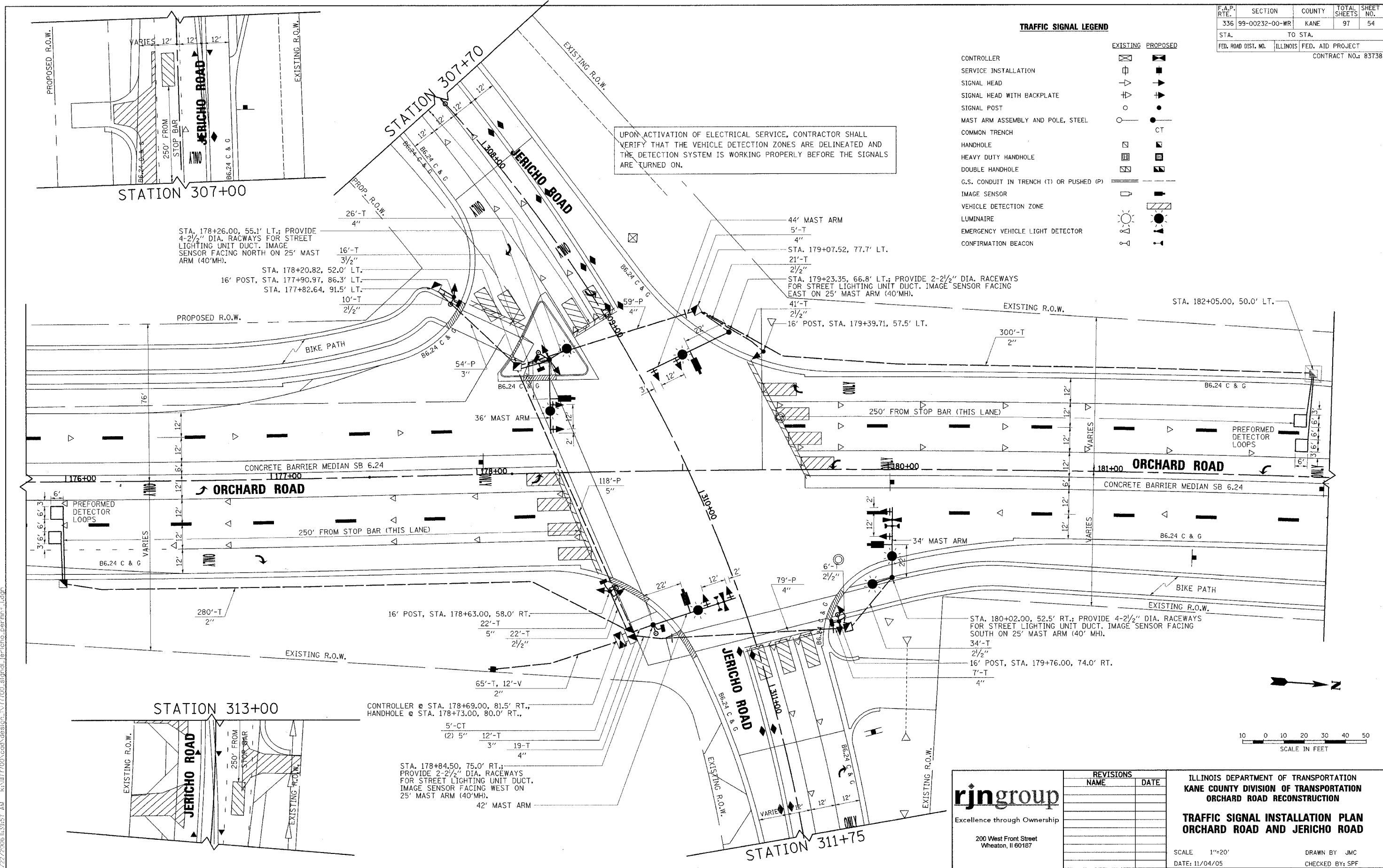
 Excellence through Ownership  200 West Front Street Wheaton, IL 60187	REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION  <b>EROSION AND SEDIMENT CONTROL PLAN</b>  SCALE: VERT. _____ HORIZ. _____ DATE: 11/04/05
	NAME	DATE	
DRAWN BY: RJN		CHECKED BY: SPF	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	54
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO.: 83738	

**TRAFFIC SIGNAL LEGEND**

	EXISTING	PROPOSED
CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL POST		
MAST ARM ASSEMBLY AND POLE, STEEL		
COMMON TRENCH		CT
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
IMAGE SENSOR		
VEHICLE DETECTION ZONE		
LUMINAIRE		
EMERGENCY VEHICLE LIGHT DETECTOR		
CONFIRMATION BEACON		

UPON ACTIVATION OF ELECTRICAL SERVICE, CONTRACTOR SHALL VERIFY THAT THE VEHICLE DETECTION ZONES ARE DELINEATED AND THE DETECTION SYSTEM IS WORKING PROPERLY BEFORE THE SIGNALS ARE TURNED ON.



**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

REVISIONS	
NAME	DATE

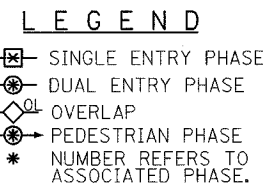
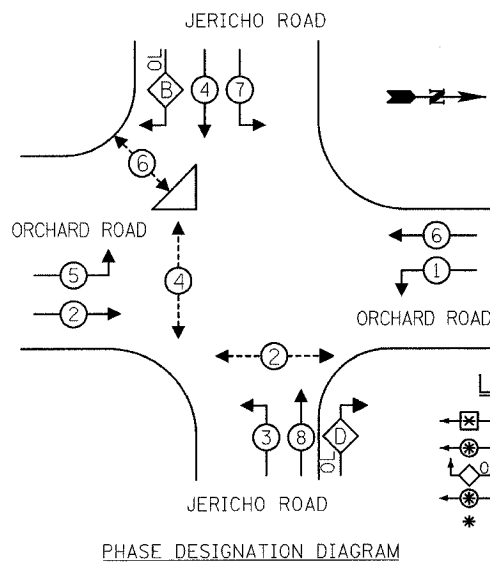
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 KANE COUNTY DIVISION OF TRANSPORTATION  
 ORCHARD ROAD RECONSTRUCTION  
**TRAFFIC SIGNAL INSTALLATION PLAN**  
**ORCHARD ROAD AND JERICHO ROAD**

SCALE 1"=20'  
 DATE: 11/04/05

DRAWN BY JMC  
 CHECKED BY: SPF

8/22/2006 10:39:57 AM ks:\117700\cadd\design\117700\_signal\_jericho\_permm.dgn

### CONTROLLER SEQUENCE



### RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5
D	= 8	+ 1

### SCHEDULE OF QUANTITIES

657	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	16	FOOT	CONCRETE FOUNDATION, TYPE A
134	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	1	EACH	TRANSCEIVER - FIBEROPTIC	4	FOOT	CONCRETE FOUNDATION, TYPE D
12	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	1245	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	30	FOOT	CONCRETE FOUNDATION, TYPE E
16	FOOT	CONDUIT IN TRENCH, 3 1/2" DIA., GALVANIZED STEEL	500	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	30	FOOT	CONCRETE FOUNDATION, TYPE E
57	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	2,696	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
32	FOOT	CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	1,764	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	4	EACH	INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT
54	FOOT	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	111	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1-PAIR	5	EACH	PEDESTRIAN PUSH-BUTTON
138	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	4	EACH	TEMPORARY TRAFFIC SIGNAL SERVICE, NO. 6 2C	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
118	FOOT	CONDUIT PUSHED, 5" DIA., GALVANIZED STEEL	1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	801	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C (GREEN)
60	FOOT	CONDUIT ENCASED IN CONCRETE, 2 1/2" DIA., PVC	1	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 34 FT.	1	EACH	TRAFFIC SIGNAL BATTERY BACKUP
6	EACH	HANDHOLE	1	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 36 FT.	180	FOOT	PREFORMED DETECTOR LOOP
1	EACH	DOUBLE HANDHOLE	1	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 42 FT.	1	EACH	SERVICE INSTALLATION - POLE MOUNTED SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED (SPECIAL)
891	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK	1	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 44 FT.	2	EACH	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, SPECIAL
						1	EACH	SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, 5-SECTION, MAST ARM MOUNTED, SPECIAL
						2	EACH	SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, 1-3-SECTION, 1-5 SECTION, BRACKET MOUNTED, SPECIAL
						4	EACH	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, BRACKET MOUNTED, SPECIAL
						1	EACH	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, BRACKET MOUNTED, SPECIAL
						2	EACH	LIGHT DETECTOR
						1	EACH	LIGHT DETECTOR AMPLIFIER
						322	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C TWISTED, SHIELDED

### TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE	% OPERATIONS	TOTAL WATTAGE
SIGNAL (RED)	16	10	0.50	80.0
(YELLOW)	16	18	0.25	72.0
(GREEN)	16	14	0.25	56.0
ARROW	12	9	0.10	10.8
PED. SIGNAL	6	7	1.00	42.0
CONTROLLER	1	100	1.00	100.0
ILLUM. SIGN				
FLASHER LED			0.50	
TOTAL =				360.80

ENERGY COSTS - BILLED TO: Village of Montgomery  
1300 S. Broadway  
Montgomery, IL 60538

ENERGY SUPPLY - CONTACT: Mr. Al Arends  
PHONE: (630) 691-4379  
COMPANY: Com Ed Customer Const. & Design

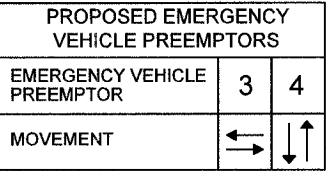
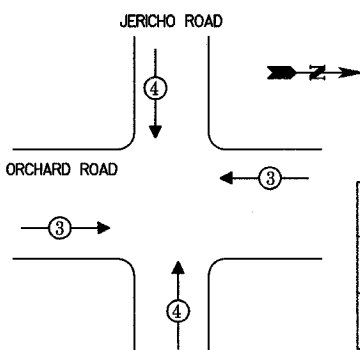
FOUNDATION (DEPTH) (FT.)	CABLE SLACK (FT.)	VERTICAL (FT.)
TYPE A - POST	HANDHOLE	ALL FOUNDATIONS
D - CONTROLLER	DOUBLE HANDHOLE	MAST ARM (L) POLE
E - M ARM POLE	SIGNAL POST	BRACKET MOUNTED
24"	10	13
30"	15	13.5
	1	13.5
	1	6

### - BILL OF MATERIALS - VIDEO DETECTION SYSTEM (ITERIS)

QTY.	UNIT	ITEM
4	EACH	ITERIS COLOR CAMERA, MODEL RZ-4
4	EACH	CAMERA BRACKET, PEDESTAL MOUNT
2	EACH	EDGE 2-2N PROCESSOR
1	EACH	9" MONITOR
4	EACH	VIDEO PATCH CABLE
4	EACH	SURGE SURRESTOR, PANEL MOUNT
4	EACH	CAMKIT2 CONNECTOR KIT
1	EACH	MOUSE (POINTING DEVICE)
1005	FOOT	BELDEN 8281, VIDEO CABLE
1005	FOOT	BELDEN NO. 16, 3/C STRANDED, POWER CABLE

NOTE: THE COST OF SUPPLYING AND INSTALLING THE BELDEN CABLES WILL BE CONSIDERED INCLUDED IN THE COST OF PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

### EMERGENCY VEHICLE PREEMPTION SEQUENCE



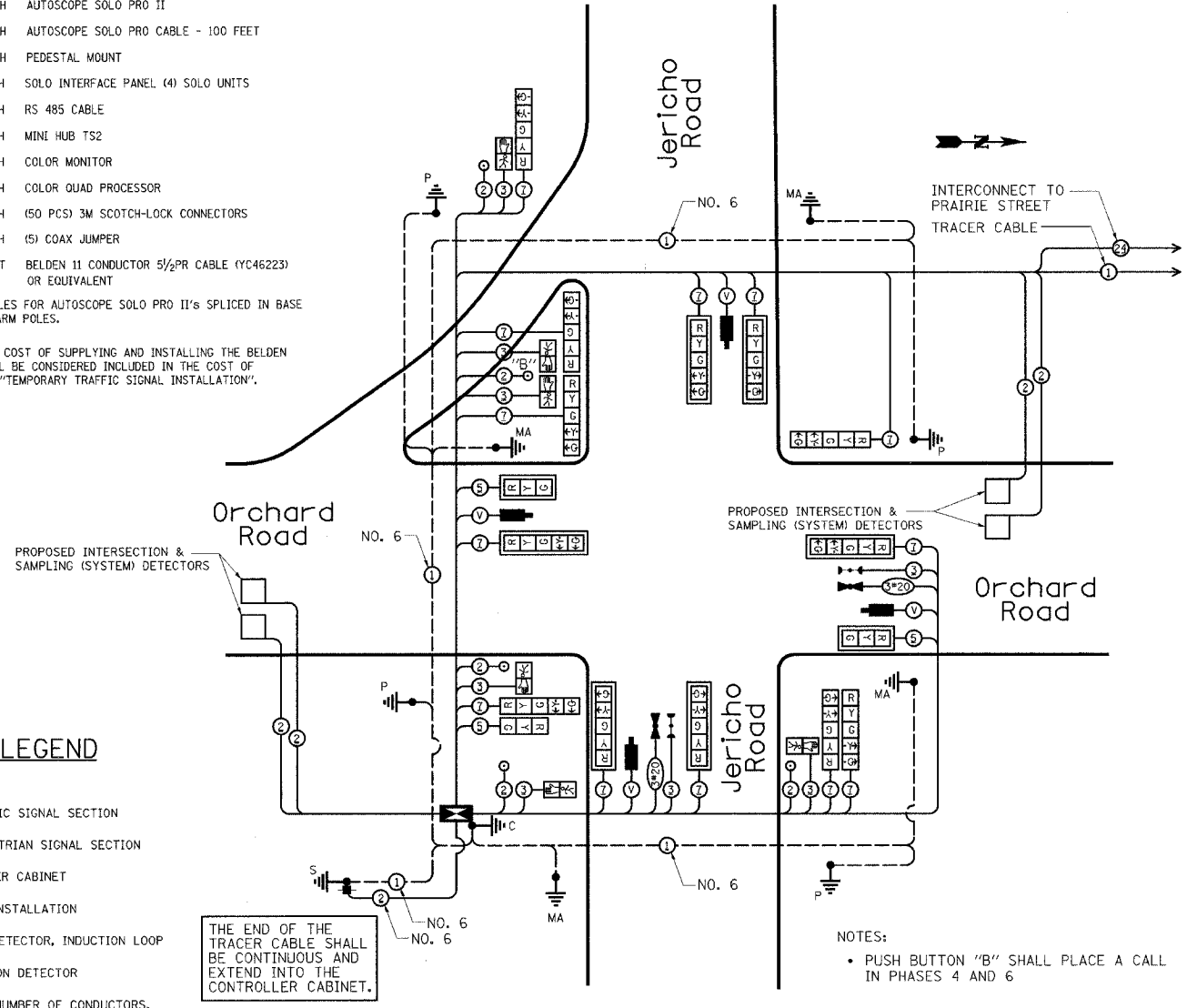
### - BILL OF MATERIALS - VIDEO DETECTION SYSTEM (AUTOSCOPE)

QTY.	UNIT	ITEM
4	EACH	AUTOSCOPE SOLO PRO II
4	EACH	AUTOSCOPE SOLO PRO CABLE - 100 FEET
4	EACH	PEDESTAL MOUNT
1	EACH	SOLO INTERFACE PANEL (4) SOLO UNITS
1	EACH	RS 485 CABLE
1	EACH	MINI HUB TS2
1	EACH	COLOR MONITOR
1	EACH	COLOR QUAD PROCESSOR
1	EACH	(50 PCS) 3M SCOTCH-LOCK CONNECTORS
1	EACH	(5) COAX JUMPER
1005	FOOT	BELDEN 11 CONDUCTOR 5/2PR CABLE (YC46223) OR EQUIVALENT

NOTE: CABLES FOR AUTOSCOPE SOLO PRO II'S SPLICED IN BASE OF MAST ARM POLES.

NOTE: THE COST OF SUPPLYING AND INSTALLING THE BELDEN CABLE WILL BE CONSIDERED INCLUDED IN THE COST OF PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

### CABLE PLAN



### CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
Ⓜ	Ⓜ	12" TRAFFIC SIGNAL SECTION
Ⓟ	Ⓟ	12" PEDESTRIAN SIGNAL SECTION
Ⓜ	Ⓜ	CONTROLLER CABINET
Ⓜ	Ⓜ	SERVICE INSTALLATION
Ⓜ	Ⓜ	VEHICLE DETECTOR, INDUCTION LOOP
Ⓜ	Ⓜ	PUSHBUTTON DETECTOR
Ⓜ	Ⓜ	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
Ⓜ	Ⓜ	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
Ⓜ	Ⓜ	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
Ⓜ	Ⓜ	SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD "E" INDICATES EXISTING SIGNAL HEAD OR EXISTING PEDESTRIAN SIGNAL HEAD
C	C	GROUND ROD AT CONTROLLER (C)
MA	MA	GROUND ROD AT MAST ARM POLE (MA)
P	P	GROUND ROD AT POST (P)
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
Ⓜ	Ⓜ	IMAGE SENSOR
Ⓜ	Ⓜ	AUTOSCOPE - VIDEO CABLE IN CONDUIT, NO. 16, 11/C, SHIELDED ITERIS - POWER AND VIDEO COAXIAL CABLE IN CONDUIT, NO. 16 3/C POWER AND NO. 20 SOLID BC COAXIAL
Ⓜ	Ⓜ	EMERGENCY VEHICLE LIGHT DETECTOR
Ⓜ	Ⓜ	CONFIRMATION BEACON

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

### NOTES:

- TRAFFIC CONTROL EQUIPMENT SHALL BE MANUFACTURED BY EAGLE TO MATCH ADJACENT SIGNAL SYSTEM.
- A BATTERY BACKUP SYSTEM, NOVUS XT 1000P-700 WATT (MANUFACTURED BY "ALPHA TECHNOLOGIES") SHALL BE INSTALLED IN THE TYPE IV CONTROLLER CABINET WITH A BSM-4 EXTERNAL BATTERY ENCLOSURE. THE EXTERNAL BATTERY ENCLOSURE SHOULD MOUNT TO THE POWER PANEL SIDE OF THE TYPE IV CABINET WITH 4 SHELVES TO STORE THE BATTERIES. THE SYSTEM SHALL BE CAPABLE OF 3-HOUR MINIMUM BATTERY LIFE TO PROVIDE ONE HOUR OF FULL FUNCTIONING SIGNAL AND 2 HOURS OF FLASHING RED.
- ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE), AND MANUFACTURED BY DIALITE OR APPROVED EQUIVALENT.
- ALL PEDESTRIAN TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE) WITH COUNTDOWN FEATURE AND MANUFACTURED BY DIALITE OR APPROVED EQUIVALENT.
- VIDEO DETECTION SYSTEM SHALL BE MANUFACTURED BY AUTOSCOPE OR ITERIS.
- STREET LIGHTING INSTALLED AND ENERGIZED AS PART OF THE ROADWAY LIGHTING PLANS.
- MAST ARM MOUNTED STREET NAME SIGNS SHALL BE INSTALLED BY THE KANE COUNTY HIGHWAY DEPARTMENT.
- THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT SHALL BE MANUFACTURED BY TOMAR.

**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

### REVISIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION

**CABLE PLAN AND PHASE DESIGNATION DIAGRAM ORCHARD ROAD AND JERICHO ROAD**

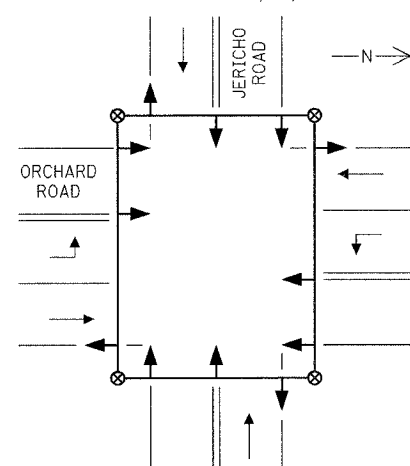
SCALE: DATE: 11/04/05 DRAWN BY: JMC CHECKED BY: SPF

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	56
STA.	TO STA.		FED. AID PROJECT	
			CONTRACT NO.: 83738	

**EXISTING EQUIPMENT TO BE REMOVED LEGEND**

- ◁ EXISTING TEMPORARY SIGNAL HEAD TO BE REMOVED
- ◻ "E" EXISTING TEMPORARY SERVICE INSTALLATION TO BE REMOVED
- ◻ "E" EXISTING TEMPORARY CONTROLLER AND FOUNDATION TO BE REMOVED
- ⊗ EXISTING TEMPORARY WOOD POLE TO BE REMOVED

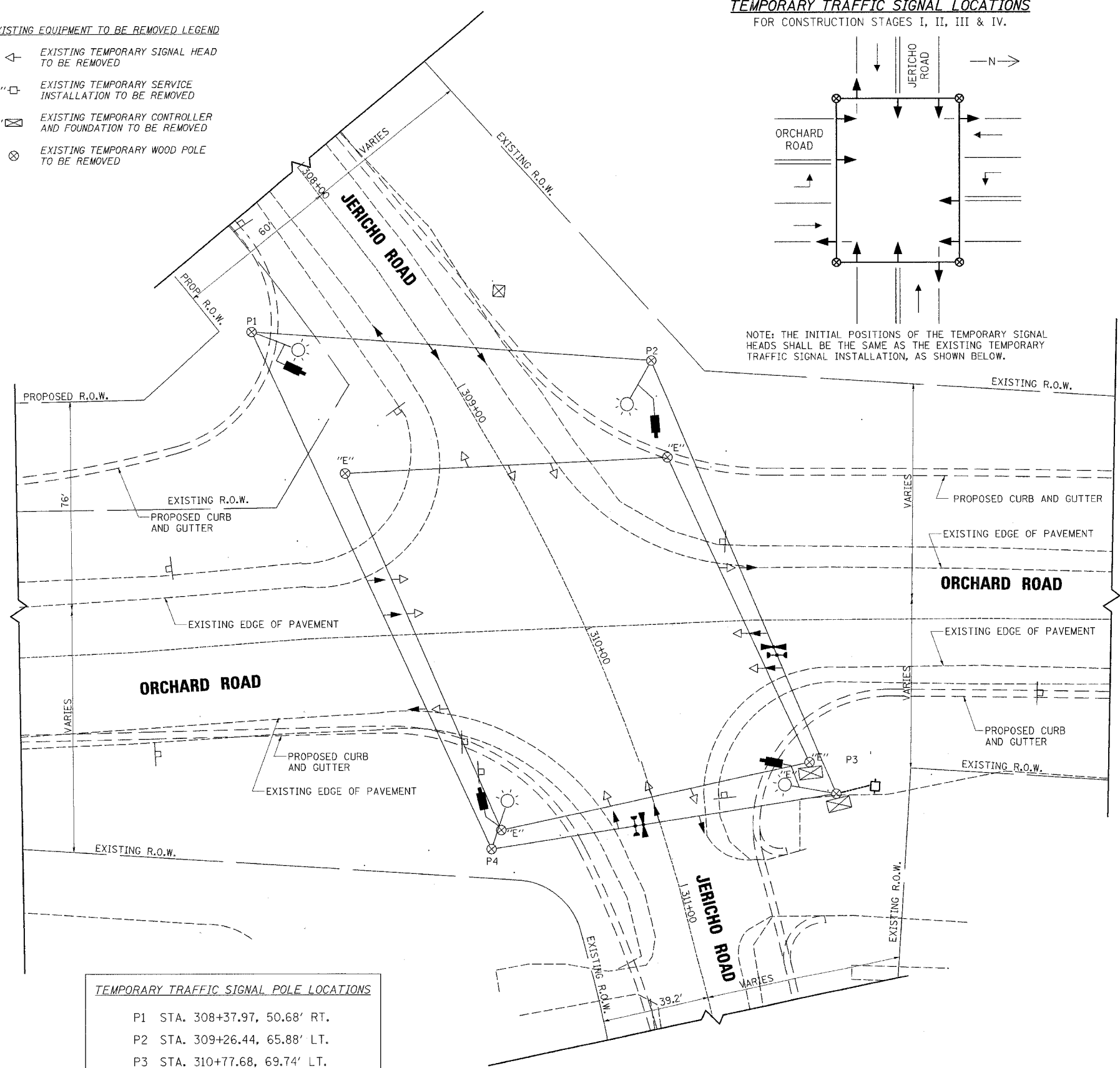
**TEMPORARY TRAFFIC SIGNAL LOCATIONS**  
FOR CONSTRUCTION STAGES I, II, III & IV.



NOTE: THE INITIAL POSITIONS OF THE TEMPORARY SIGNAL HEADS SHALL BE THE SAME AS THE EXISTING TEMPORARY TRAFFIC SIGNAL INSTALLATION, AS SHOWN BELOW.

**NOTES FOR TEMPORARY TRAFFIC SIGNALS**

1. ALL CONTROL EQUIPMENT FOR THE TEMPORARY TRAFFIC SIGNAL SHALL BE FURNISHED BY THE CONTRACTOR UNLESS OTHERWISE STATED IN THE PLANS.
2. CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED, CAPABLE OF SUPPLYING 255 SECONDS OF CYCLE LENGTH AND INDIVIDUAL PHASE LENGTH SETTINGS UP TO 99 SECONDS.
3. A DIGITAL TIME BASE COORDINATING UNIT SHALL BE SUPPLIED WITH EACH TEMPORARY TRAFFIC SIGNAL. COMPATIBLE TIME BASE COORDINATING UNITS SHALL BE SUPPLIED UPON REQUEST TO MATCH ADJACENT SYSTEMS OR ON PROJECTS CONTAINING MULTIPLE SIGNAL INSTALLATIONS. THE CONTROLLER SETTINGS SHALL BE SET IN THE FIELD AS DIRECTED BY THE ENGINEER.
4. ALL TRAFFIC SIGNAL SECTIONS SHALL BE 12 INCHES. THE TEMPORARY TRAFFIC SIGNAL HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
5. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED, AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE.
6. ALL LABOR AND MATERIAL TO COMPLY WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE BID PRICE OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION".
7. TEMPORARY VIDEO DETECTION SYSTEM AND TEMPORARY LIGHTING SHALL BE CONSIDERED AS PART OF THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".
8. CONTRACTOR TO VERIFY LOCATION AND DIRECTION OF MAST ARMS AND CAMERAS.
9. THE VIDEO VEHICLE DETECTION SYSTEM USED IN THE TEMPORARY SIGNAL SHALL BE RELOCATED TO THE PERMANENT SIGNAL WHEN THE PERMANENT SIGNAL IS INSTALLED AND READY. THE COST OF RELOCATING THE VIDEO VEHICLE DETECTION SYSTEM SHALL BE INCLUDED IN THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".
10. ALL EMERGENCY VEHICLE PREEMPTION EQUIPMENT (LIGHT DETECTORS, LIGHT DETECTOR AMPLIFIER, ETC.) AS SHOWN ON THE TEMPORARY TRAFFIC SIGNAL PLANS SHALL BE PROVIDED BY THE CONTRACTOR.



**TEMPORARY TRAFFIC SIGNAL LEGEND**

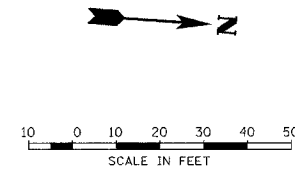
- ◁ TEMPORARY TRAFFIC SIGNAL HEAD, SPAN WIRE MOUNTED, ORIGINAL LOCATION.
- ⊗ TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT MINIMUM
- ◻ TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- ◻ TEMPORARY SERVICE INSTALLATION
- ☉ TEMPORARY LUMINAIRE WITH PHOTOCELL (400 WATT, MC-III) AND 15' MAST ARM, 40' MOUNTING HEIGHT
- IMAGE SENSOR
- TEMPORARY AERIAL SERVICE
- ◁ EMERGENCY VEHICLE LIGHT DETECTOR
- ◁ CONFIRMATION BEACON

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE COUNTY AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 1 EACH TRAFFIC SIGNAL CONTROLLER

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

- 4 EACH TEMPORARY WOOD POLE AND ACCESSORIES
- 12 EACH TEMPORARY TRAFFIC SIGNAL HEAD
- 1 EACH TEMPORARY CONTROLLER CABINET
- 1 EACH TEMPORARY SPAN WIRE, TETHER WIRE, CABLE AND ACCESSORIES



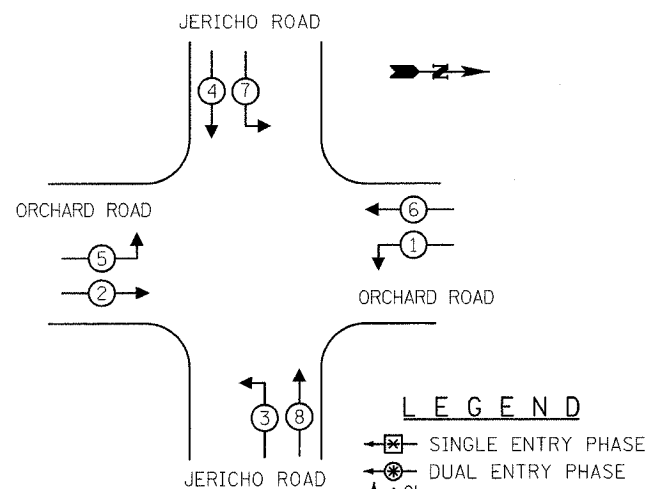
**TEMPORARY TRAFFIC SIGNAL POLE LOCATIONS**

P1	STA. 308+37.97, 50.68' RT.
P2	STA. 309+26.44, 65.88' LT.
P3	STA. 310+77.68, 69.74' LT.
P4	STA. 310+63.19, 61.73' RT.

<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NAME</th> <th>DATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>		NAME	DATE									<p>ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION <b>TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN</b> ORCHARD ROAD AND JERICO ROAD</p> <p>SCALE: 1"=20' DATE: 11/04/05</p> <p>DRAWN BY: JMC CHECKED BY: SPF</p>
	NAME	DATE											

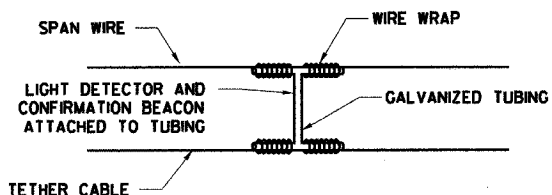
8/22/2006 10:53:58 AM ks:\117700\cadd\design\177700-signal\_rer\ortho-temp.dgn

### CONTROLLER SEQUENCE



#### PHASE DESIGNATION DIAGRAM

NOTE: DISABLE CONTROLLER SEQUENCE PHASE 3 + 7 IN THE CONTROL CABINET DURING CONSTRUCTION.



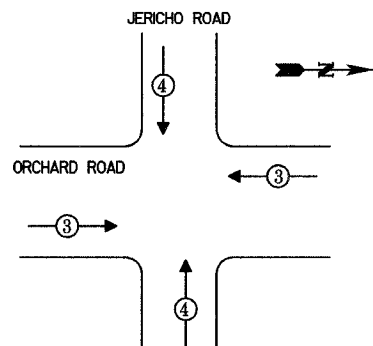
#### LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS

TEMPORARY TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE	% OPERATIONS	
SIGNAL (RED)	12	135	0.50	810
(YELLOW)	12	135	0.25	405
(GREEN)	12	135	0.25	405
ARROW	4	135	0.10	54
PED. SIGNAL	0	90	1.00	0
CONTROLLER	1	100	1.00	100
LUMINAIRE	4	400	0.50	800
ILLUM. SIGN				
FLASHER LED			0.50	
TOTAL =				2574

ENERGY COSTS - BILLED TO: Village of Montgomery  
 (ADDRESS) 1300 S. Broadway  
 Montgomery, IL 60538

ENERGY SUPPLY - CONTACT: Mr. Al Arands  
 PHONE: (630) 691-4379  
 COMPANY: Com Fct Customer Const. & Design

### EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

#### TEMPORARY CABLE PLAN LEGEND

- [R] TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12"
- [X] TEMPORARY CONTROLLER CABINET
- [E] TEMPORARY SERVICE INSTALLATION
- (6) INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- [S] IMAGE SENSOR
- [L] STREET LIGHT LUMINAIRE
- [V] AUTOSCOPE - VIDEO CABLE IN CONDUIT, NO. 16, 11/C, SHIELDED ITERIS - POWER AND VIDEO COAXIAL CABLE IN CONDUIT, NO. 16 3/C POWER AND NO. 20 SOLID BC COAXIAL
- [D] EMERGENCY VEHICLE LIGHT DETECTOR
- [B] CONFIRMATION BEACON

#### - BILL OF MATERIALS - VIDEO DETECTION SYSTEM (ITERIS)

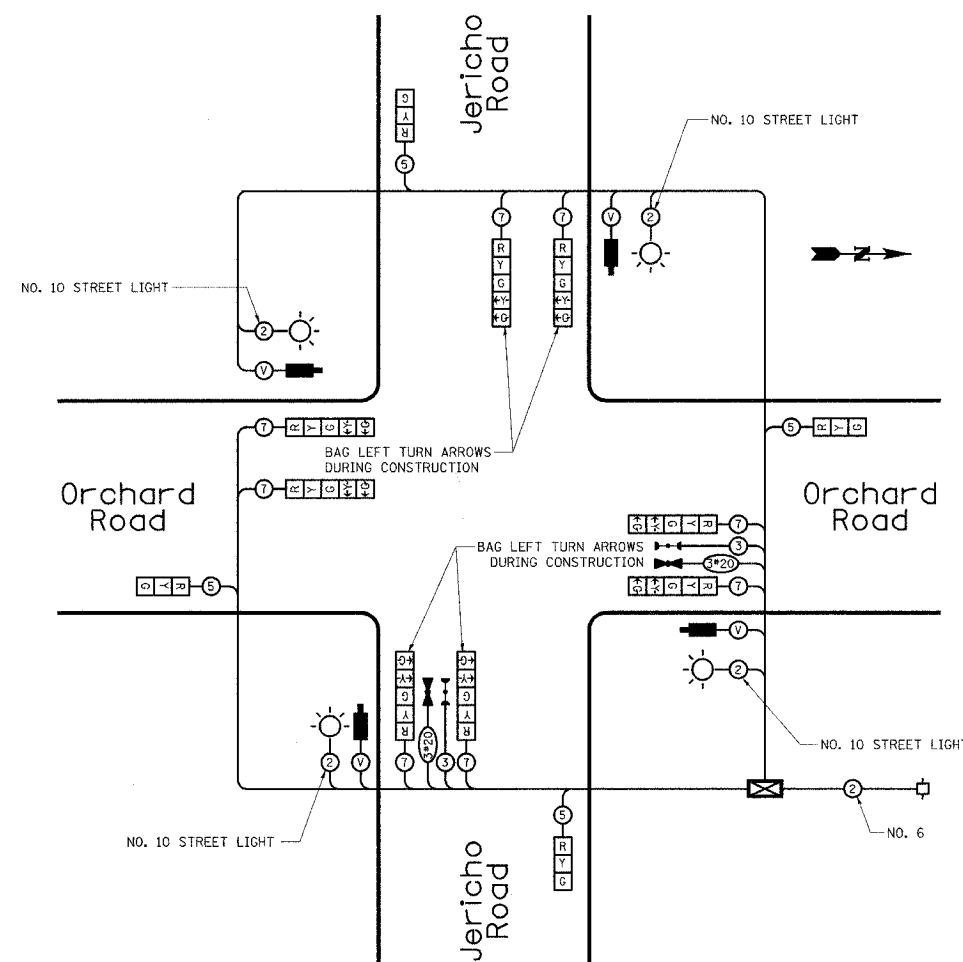
QTY.	UNIT	ITEM
4	EACH	ITERIS COLOR CAMERA, MODEL RZ-4
4	EACH	ITERIS PIGTAILN - 18"
4	EACH	CAMERA BRACKET, PEDESTAL MOUNT
2	EACH	EDGE 2-2N PROCESSOR
1	EACH	9" MONITOR
4	EACH	VIDEO PATCH CABLE
4	EACH	SURGE SURRESTOR, PANEL MOUNT
4	EACH	CAMKIT2 CONNECTOR KIT
1	EACH	POINTING DEVICE
772	FOOT	BELDEN 8281, VIDEO CABLE
772	FOOT	BELDEN NO. 16, 3/C STRANDED, POWER CABLE

#### - BILL OF MATERIALS - VIDEO DETECTION SYSTEM (AUTOSCOPE)

QTY.	UNIT	ITEM
4	EACH	AUTOSCOPE SOLO PRO II*
4	EACH	AUTOSCOPE SOLO PRO CABLE - 100 FEET*
4	EACH	POLE MOUNT
4	EACH	JUNCTION BOX - 1 SOLO UNIT
1	EACH	SOLO INTERFACE PANEL (4) SOLO UNITS*
1	EACH	RS 485 CABLE & IO CABLE*
1	EACH	MINI HUB FOR AUTOSCOPE SOLO PRO
1	EACH	COLOR MONITOR*
1	EACH	COLOR QUAD PROCESSOR*
1	EACH	(50 PCS) 3M SCOTCH-LOCK CONNECTORS
1	EACH	(5) COAX JUMPER*
772	FOOT	BELDEN 11 CONDUCTOR 5 1/2 PR CABLE (YC46223) OR EQUIVALENT

- \* ITEM TO BE REUSED IN PERMANENT TRAFFIC SIGNAL INSTALLATION.
- NOTES:  
 1. MINI HUB REQUIRES DETECTOR RACK WITH POWER SUPPLY. COST ASSOCIATED WITH SUPPLYING AND INSTALLING DETECTOR RACK AND POWER SUPPLY WILL BE CONSIDERED INCLUDED IN THE COST OF PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".  
 2. ABOVE SYSTEM COMPATIBLE WITH TS-1 CONTROLLER (TYPICALLY USED FOR TEMPS). TEMPORARY CABINETS WITH TS-2 CONTROLLERS CAN USE TS2 MINI HUB SUPPLIED WITH EQUIPMENT FOR PERMANENT CABINET.

### CABLE PLAN



#### NOTES:

- TRAFFIC CONTROL EQUIPMENT SHALL BE MANUFACTURED BY EAGLE.
- THE VIDEO VEHICLE DETECTION SYSTEM SHALL BE MANUFACTURED BY AUTOSCOPE OR ITERIS AND SHALL BE REUSED IN THE PERMANENT TRAFFIC SIGNAL INSTALLATION.
- BAG CONTROLLER SEQUENCE PHASE 3 + 7 DURING CONSTRUCTION AND DISABLE IN THE CONTROL CABINET.
- THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT SHALL BE MANUFACTURED BY TOMAR.

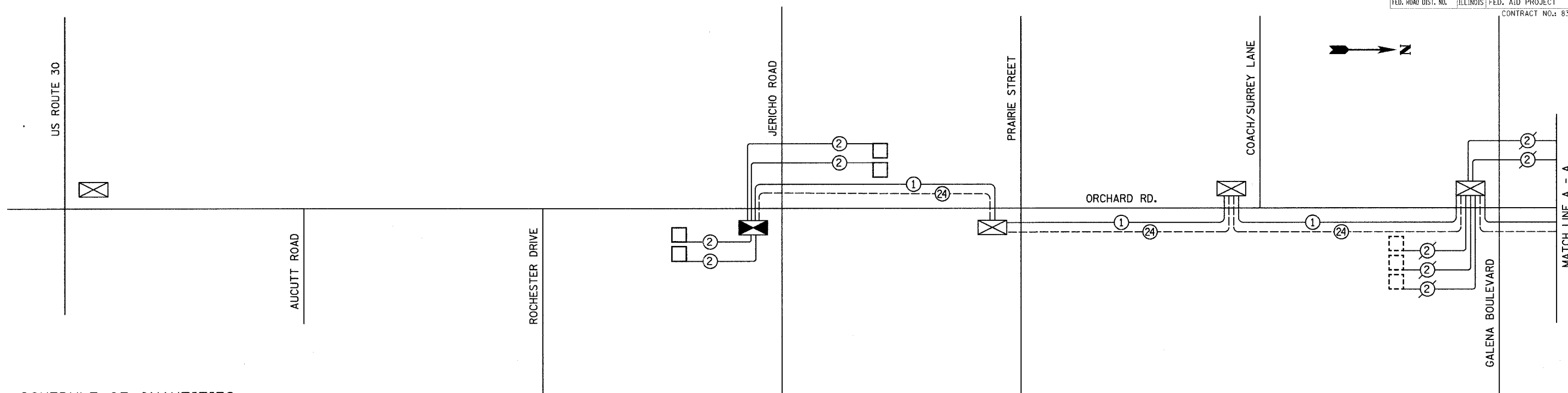
**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 KANE COUNTY DIVISION OF TRANSPORTATION  
 ORCHARD ROAD RECONSTRUCTION  
 TEMPORARY CABLE PLAN AND  
 TEMPORARY PHASE  
 DESIGNATION DIAGRAM  
 ORCHARD ROAD AND JERICHO ROAD

SCALE: DATE: 11/04/05  
 DRAWN BY: JMC  
 CHECKED BY: SFP

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	58
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83738				

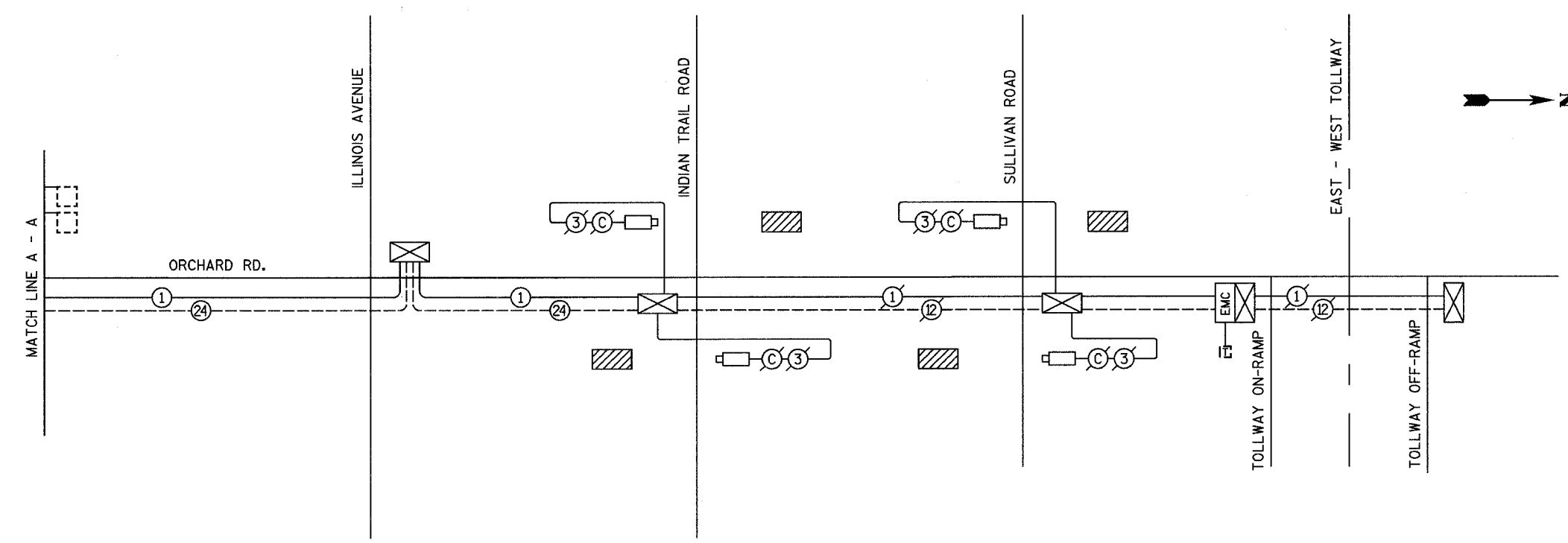


**SCHEDULE OF QUANTITIES**

12,528	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
108	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
18	EACH	HANDHOLE
12,528	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
5	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
3	EACH	DRILL EXISTING HANDHOLE
14,622	FOOT	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C
14,749	FOOT	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F
1	L.SUM	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM

**INTERCONNECT SCHEMATIC LEGEND**

EXISTING INTERSECTION CONTROLLER	
PROPOSED INTERSECTION CONTROLLER	
EXISTING MASTER CONTROLLER	
EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTOR	
PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTOR	
EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	
PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	
EXISTING INTERCONNECT CABLE IN CONDUIT, NO. 62.5/125 12F FIBER OPTIC CABLE	
PROPOSED LOOP DETECTOR CABLE IN CONDUIT, 2/C TWISTED, SHIELDED	
EXISTING ELECTRIC CABLE IN CONDUIT, 1/C (AS SPECIFIED)	
PROPOSED ELECTRIC CABLE IN CONDUIT, 1/C (AS SPECIFIED)	
EXISTING TELEPHONE CONNECTION	
EXISTING IMAGE SENSOR	
EXISTING COAXIAL CABLE IN CONDUIT	
EXISTING ELECTRIC CABLE IN CONDUIT, NO. 14 3/C	
EXISTING SAMPLING (SYSTEM) IMAGE SENSOR DETECTION ZONE	



1/14/2005 10:52:07 AM ks:\117700\Cad\Design\117700 IC Schematic1.dgn

**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

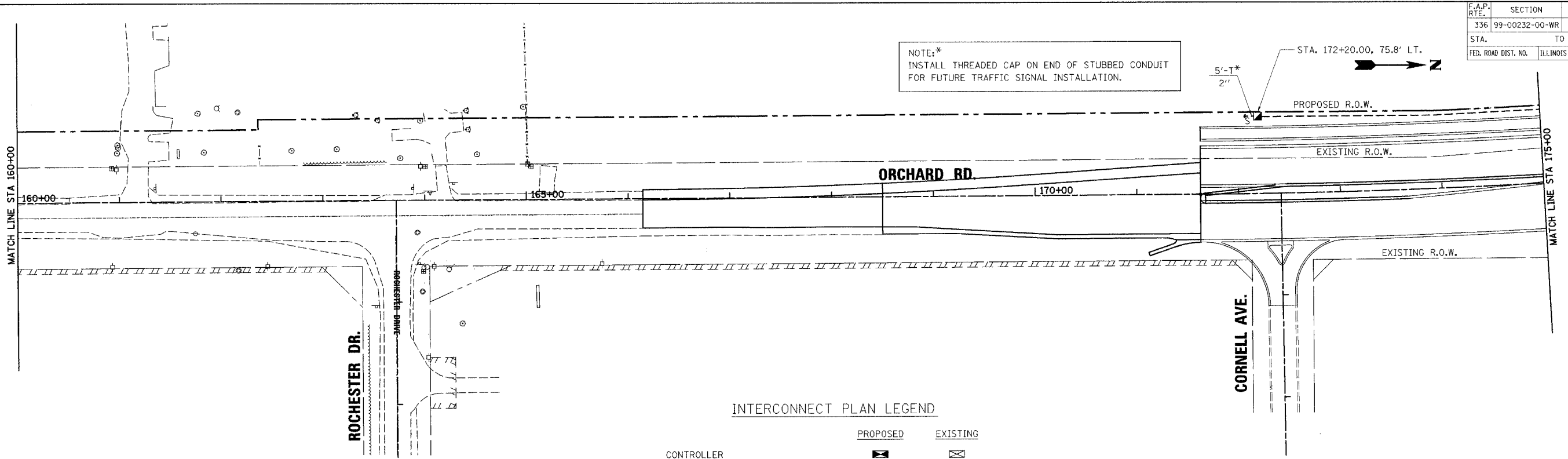
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 KANE COUNTY DIVISION OF TRANSPORTATION  
**ORCHARD ROAD RECONSTRUCTION**  
**INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES**  
 ORCHARD ROAD  
 FROM US ROUTE 30 TO INDIAN TRAIL ROAD  
 SCALE: 1"=50'  
 DATE: 11/04/05  
 DRAWN BY: JMC  
 CHECKED BY: SPF

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	59
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO.: 83738

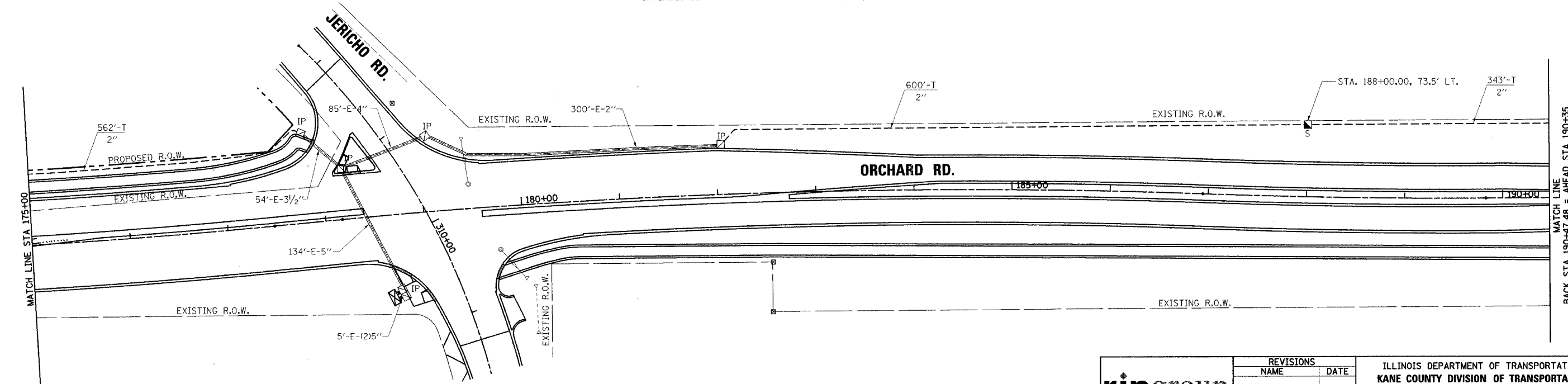
NOTE: \*  
INSTALL THREADED CAP ON END OF STUBBED CONDUIT FOR FUTURE TRAFFIC SIGNAL INSTALLATION.

5'-T\*  
2"  
STA. 172+20.00, 75.8' LT.



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER		
HANDHOLE		
DOUBLE HANDHOLE		
HEAVY-DUTY HANDHOLE		
G.S. CONDUIT IN TRENCH OR PUSHED		
DETECTOR LOOP		
SYSTEM	S	
INTERSECTION	IP	I



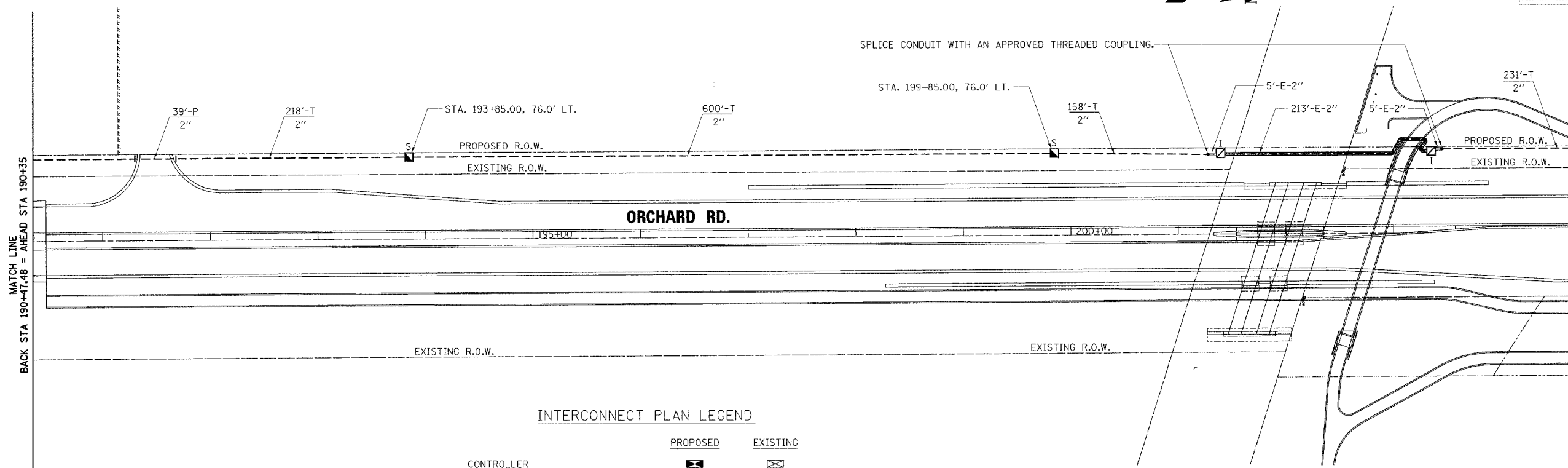
**rjngroup**  
Excellence through Ownership  
200 West Front Street  
Wheaton, IL 60187

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION  
**ORCHARD ROAD INTERCONNECT PLAN**  
SCALE 1"=50'  
DATE: 11/04/05  
DRAWN BY JMC  
CHECKED BY: SPF

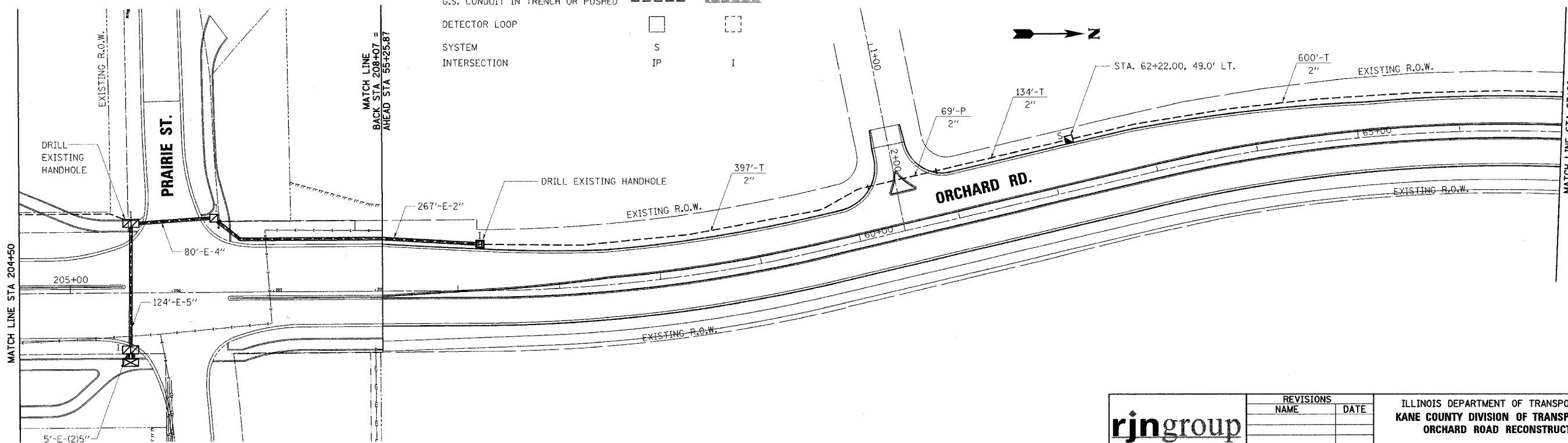
11/2/2005 10:07:42 AM K:\117700\Gcd\Design\117700\_Interconnect\_03.Lisp

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	60
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83738				



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER		
HANDHOLE		
DOUBLE HANDHOLE		
HEAVY-DUTY HANDHOLE		
G.S. CONDUIT IN TRENCH OR PUSHED		
DETECTOR LOOP		
SYSTEM	S	
INTERSECTION	IP	I



**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 KANE COUNTY DIVISION OF TRANSPORTATION  
 ORCHARD ROAD RECONSTRUCTION

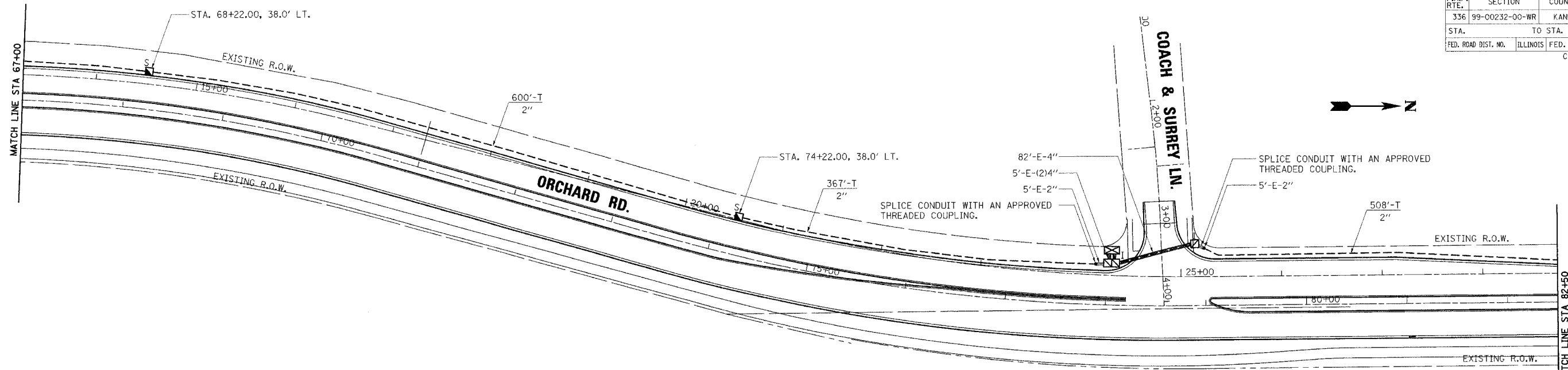
**ORCHARD ROAD INTERCONNECT PLAN**

SCALE 1"=50'  
 DATE: 11/04/05

DRAWN BY JMC  
 CHECKED BY: SPF

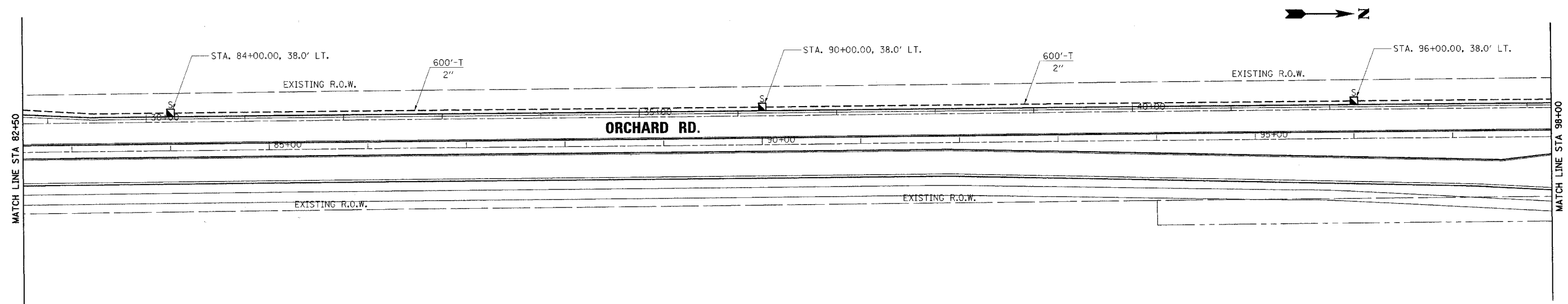


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	61
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83738				



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER		
HANDHOLE		
DOUBLE HANDHOLE		
HEAVY-DUTY HANDHOLE		
G.S. CONDUIT IN TRENCH OR PUSHED		
DETECTOR LOOP		
SYSTEM	S	
INTERSECTION	IP	I



**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

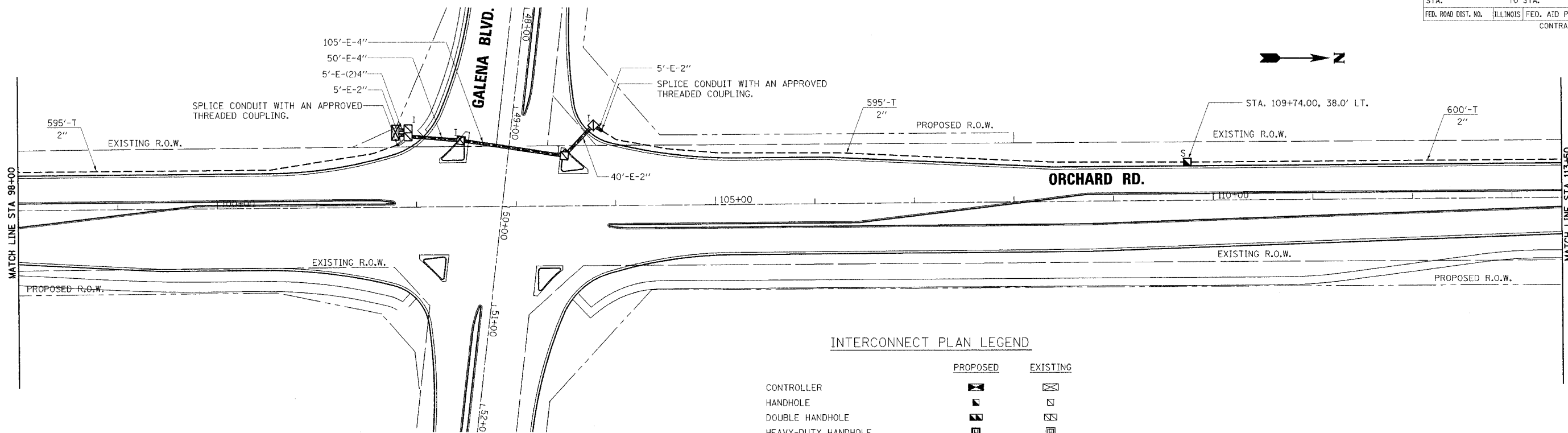
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 KANE COUNTY DIVISION OF TRANSPORTATION  
 ORCHARD ROAD RECONSTRUCTION  
**ORCHARD ROAD INTERCONNECT PLAN**

SCALE: 1"=50'  
 DATE: 11/04/05  
 DRAWN BY: JMC  
 CHECKED BY: SPF

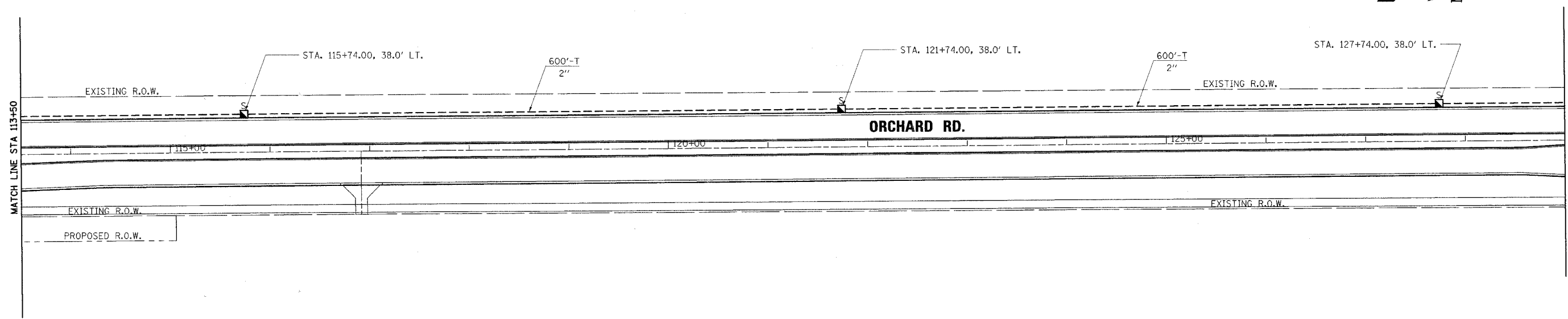
11/4/2005 10:50:45 AM H:\117700\cct\Design\117700-Interconnect\_05.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	62
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83738				



**INTERCONNECT PLAN LEGEND**

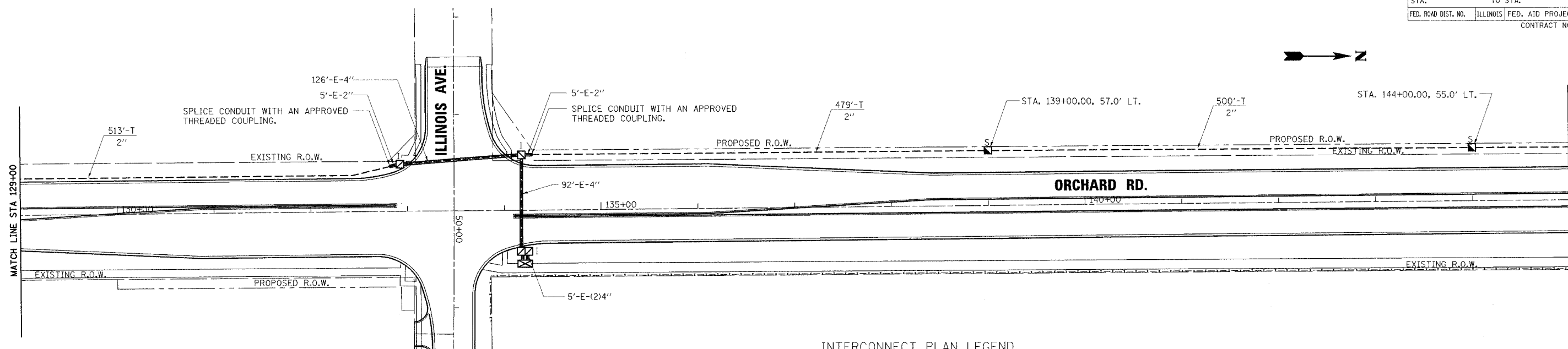
	PROPOSED	EXISTING
CONTROLLER	◀▶	◻
HANDHOLE	◻	◻
DOUBLE HANDHOLE	◻	◻
HEAVY-DUTY HANDHOLE	◻	◻
G.S. CONDUIT IN TRENCH OR PUSHED	---	---
DETECTOR LOOP	◻	◻
SYSTEM	S	S
INTERSECTION	IP	I



<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	<b>REVISIONS</b>		ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION  <b>ORCHARD ROAD INTERCONNECT PLAN</b>
	NAME	DATE	
			SCALE: 1"=50' DATE: 11/04/05

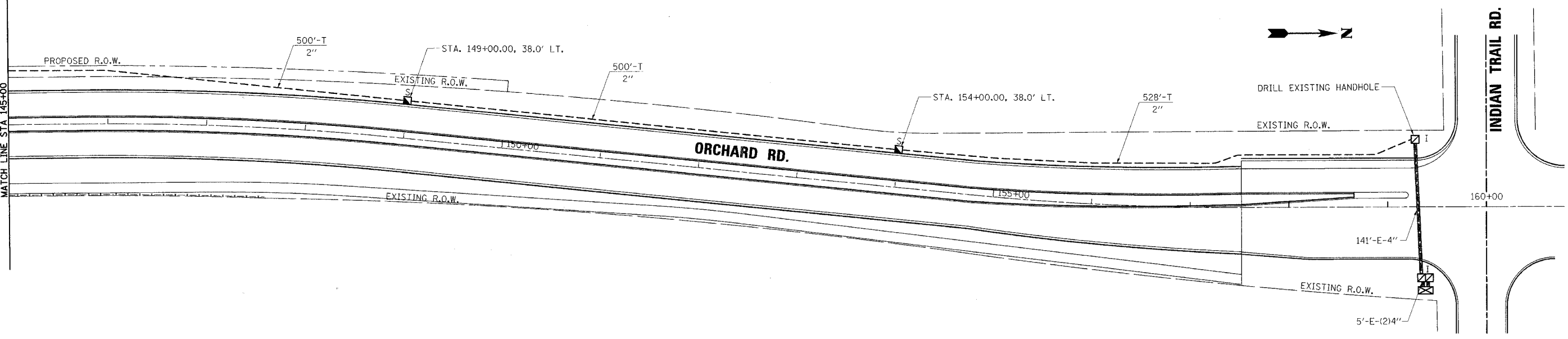
I:\4\2005\_105R09 AM\_KS\117700\Cad\Design\7700\_Interconnect\_06.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	63
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 83738				



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER		
HANDHOLE		
DOUBLE HANDHOLE		
HEAVY-DUTY HANDHOLE		
G.S. CONDUIT IN TRENCH OR PUSHED		
DETECTOR LOOP		
SYSTEM	S	
INTERSECTION	IP	I



 Excellence through Ownership  200 West Front Street Wheaton, IL 60187	REVISIONS NAME      DATE		ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION  <b>ORCHARD ROAD INTERCONNECT PLAN</b>  SCALE: 1"=50' DATE: 11/04/05
	(Empty revision table)		

11/4/2005 10:54:41 AM k:\1177700\Cad\Design\177700\_Interconnect\_07.dwg

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	17	6A
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 63128				

**SUMMARY OF QUANTITIES**

ITEM	UNIT	QUANTITY
GROUND ROD 3/4" DIA. x 10 FT	EACH	25
LIGHT POLE, ALUMINUM, 40 FT MH, 10 FT MAST ARM	EACH	24
ELECTRIC SERVICE INSTALLATION	EACH	1
LIGHTING CONTROLLER, SPECIAL	EACH	1
LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	240
LUMINAIRE, SODIUM VAPOR HORIZONTAL MOUNT, 250 WATT	EACH	30
ELECTRIC UTILITY SERVICE CONNECTION	L. SUM	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	50
BREAKAWAY DEVICE TRANSFORMER BASE 15" BOLT CIRCLE	EACH	24
CONDUIT IN TRENCH, 2 1/2" DIA GALVANISED STEEL	FOOT	60
CONDUIT PUSHED, 2 1/2" DIA GALVANISED STEEL	FOOT	270
CONDUIT PUSHED 4" DIA. GALVANISED STEEL	FOOT	74
ELECTRIC CABLE IN CONDUIT 600 V (XLP-TYPE USE-2) 1/C NO. 1/0	FOOT	270
POLYETHYLENE DUCT BORED AND PULLED, 1" DIA WITH ELECTRIC CABLE, 600 V (XLP-TYPE USE), 2-1/C NO.4 AND 1/C NO.6 GROUND	FOOT	5,000

**GENERAL NOTES**

- WHERE SEPARATE CIRCUIT RUNS ARE TO BE INSTALLED PARALLEL WITH EACH OTHER, ONE COMMON TRENCH SHALL BE USED AND SHALL BE MEASURED ONLY ONCE FOR PAYMENT, AS TRENCH AND BACKFILL FOR ELECTRICAL WORK.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLES FOR EXAMINATION AND CONFIRMATION WITH THE ENGINEER AT THE PRECONSTRUCTION INSPECTION. THE EXACT LOCATIONS OF ALL OTHER ROADWAY LIGHTING ITEMS, INCLUDING THE LIGHTING CONTROLLER(S), SHALL BE CONFIRMED WITH THE ENGINEER PRIOR TO STARTING WORK.
- THE RESPONSIBILITY FOR COORDINATING FINISHED GRADE ELEVATION WITH THE TOP OF THE FOUNDATION HEIGHTS SHALL BE REMAIN WITH THE CONTRACTOR.
- THE CONTRACTOR SHALL SUBMIT FOR THE RESIDENT ENGINEER APPROVAL, WITHIN 30 DAYS AFTER CONTRACT EXECUTION, EIGHT (8) COPIES OF APPROVABLE MANUFACTURER'S PRODUCT DATA AND DETAIL SHOP DRAWINGS TO THE ATTENTION OF KANE COUNTY DIVISION OF TRANSPORTATION 41W011 BURLINGTON ROAD, ST. CHARLES, IL 60175, TEL. 630-584-1170 THE FOLLOWING:
  - TRENCH: ELECTRICAL WARNING TAPE
  - FOUNDATION: CLASS "SI" CONCRETE, REINFORCEMENT, RACEWAYS, ANCHOR BOLTS WITH NUTS & WASHERS.
  - CONDUIT: CONDUIT AND CONDUIT FITTINGS.
  - GROUND ROD: GROUND ROD, COPPER WIRE, EXOTHERMIC WELD.
  - UNIT DUCT/CABLES: UNIT DUCT, CABLES
  - ELECTRIC CABLES: ELECTRIC CABLES
  - LIGHT POLE/ARM: POLE DETAILS, SHOP DRAWING, & WIND LOAD CALCULATIONS, POLE WIRE
  - LUMINAIRE: ROADWAY LUMINAIRE WITH BALLAST ASSEMBLY.
  - ELECTRICAL ITEMS: ELECTRIC TAPES, QUICK DISCONNECT WITH FUSE, LAMPS.
  - LIGHTING CONTROLLER: CIRCUITRY DETAIL, CATALOG ON MATERIALS, PAINT.
- UNIT DUCT SHALL BE 1" DIA. DUCT WITH 2 NO. 4 (BLACK-RED) 1/c NO.6 (GREEN) GROUND SOLID COLOR CODED INSULATED CONDUCTOR.
- THE CONTRACTOR SHALL SUBMIT FOUR (4) SET FULL SIZED COMPLETE, NEAT AND ACCURATE "RECORD DRAWINGS" PLAN SETS TO THE ENGINEER FOR REVIEW AND COMMENT, AS SPECIFIED. THE "RECORD DRAWINGS" SHALL BE UPDATED ON REGULAR BASIS AND DEPICT ALL ROADWAY LIGHTING MATERIAL INSTALLATIONS WITH ANY CHANGES INDICATED IN RED. "RECORD DRAWINGS" SHALL BE SUBMITTED AT LEAST 7 DAYS BEFORE SCHEDULING A FINAL INSPECTION.
- THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. AT (1-800-892-0123) TO LOCATE AND MARK/STAKE ALL UNDERGROUND UTILITIES.
- THE CONTRACTOR SHALL GIVE IN WRITING TO THE ENGINEER FOR REVIEW, CONSTRUCTION STAGING FOR THE PROPOSED ROADWAY LIGHTING WORK, AND THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE ENGINEER.
- THE LIGHT POLE SETBACK SHALL BE FROM THE BACK OF CURB TO THE FACE OF FOUNDATION.
  - 2.5 FT WHERE MULTIUSE PATH IS LOCATED
  - 7.5 FT ON OTHER POLE LOCATIONS
- RESTORATION OF PARKWAY AND PROJECT SITE SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS.
- THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES AND ORDINANCES.
- THE PROPOSED TRENCH SHALL BE 30 INCH BELOW FINISHED GRADE
- ALL ELECTRICAL EQUIPMENT AND PRODUCT SHALL BE U/L LISTED AND LABELED.

**LEGEND**

- EXISTING LIGHTING UNIT, TWIN ARM, REMAIN IN PLACE
- LIGHT POLE, ALUMINUM 40 FT MOUNTING HEIGHT, 10 FT MAST ARM 15" DIA BOLT CIRCLE. LUMINAIRE HIGH PRESSURE SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT CLEAR LAMP, 240 VOLT BALLAST CWA (AUTO REG) POLE MOUNTED ON BREAKAWAY TRANSFORMER BASE
- COMBINATION POLE, 40 FT MOUNTING HEIGHT, 8 FT MAST ARM. LUMINAIRE HIGH PRESSURE SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT CLEAR LAMP, 240 VOLT BALLAST CWA (AUTO REG)
- COMBINATION POLE, 40 FT MOUNTING HEIGHT, 2-8 FT MAST ARM. LUMINAIRE HIGH PRESSURE SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT CLEAR LAMP, 240 VOLT BALLAST CWA (AUTO REG)
- STA 19+42 — STATION NUMBER (TYP)
- B-7 — POLE NUMBER (TYP)
- LIGHTING CIRCUIT BREAKER DESIGNATION
- GROUND ROD, 3/4" DIA. x 10 FT
- UNIT DUCT WITH 2-1/C NO. 4 & 1/C NO. 6 GROUND, 600 V (XLP-TYPE USE) 1" DIA. POLYETHYLENE
- EXISTING UTILITY SERVICE POLE MOUNTED TRANSFORMER
- PROPOSED LIGHTING CONTROLLER
- ELECTRIC CABLE IN CONDUIT 600V (XLP - TYPE USE-2), 3- 1/C NO. 1/0
- CONDUIT IN TRENCH (T) OR PUSHED (P) GALVANIZED STEEL

LIGHT POLE AND ARM  
UNION METAL CATALOG NUMBER  
P09-Y194 -0.250" - 10'-0" x 6'-0" x 8" / 10 FT - 0.125" - 3'-0" OD  
• PAINTED IN POWDER COATED DARK BRONZE COLOR FINISH

LUMINAIRE  
GENERAL ELECTRIC MDCL-25-S-0-A-1-1-F-M-C-III-1-X  
CATALOG NUMBER  
• BALLAST TAPED FOR 240 VOLT CIRCUIT  
• PAINTED IN POWER COATED DARK BRONZE COLOR FINISH

⊗ THE CONTRACTOR SHALL FURNISH COLOR CHIP TO THE OWNER FOR APPROVAL

**CAUTION**

"THE CONTRACTOR SHALL VERIFY THAT THERE ARE NO CONFLICTS BETWEEN THE PROPOSED LIGHT POLE FOUNDATION LOCATIONS AND EXISTING UTILITIES, PROPOSED UTILITIES, EXISTING DRIVEWAYS, AND PROPOSED DRIVEWAYS. IF A CONFLICT IS FOUND, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER. IN THE EVENT OF A CONFLICT, THE CONTRACTOR SHALL OBTAIN WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED. FAILING TO SECURE SUCH INSTRUCTIONS, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE."

**NOTE:**

1. THE MATERIALS AND WORK FOR THIS PROJECT SHALL CONFORM TO THE LATEST APPLICABLE STANDARD SPECIFICATIONS AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS. ISSUED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION. SPECIAL PROVISIONS CHECK LIST IS ATTACHED WITH THIS PROJECT.



PROJECT DRAWINGS #E-1 TO #E-7 ARE PREPARED BY SUNJOY INC.



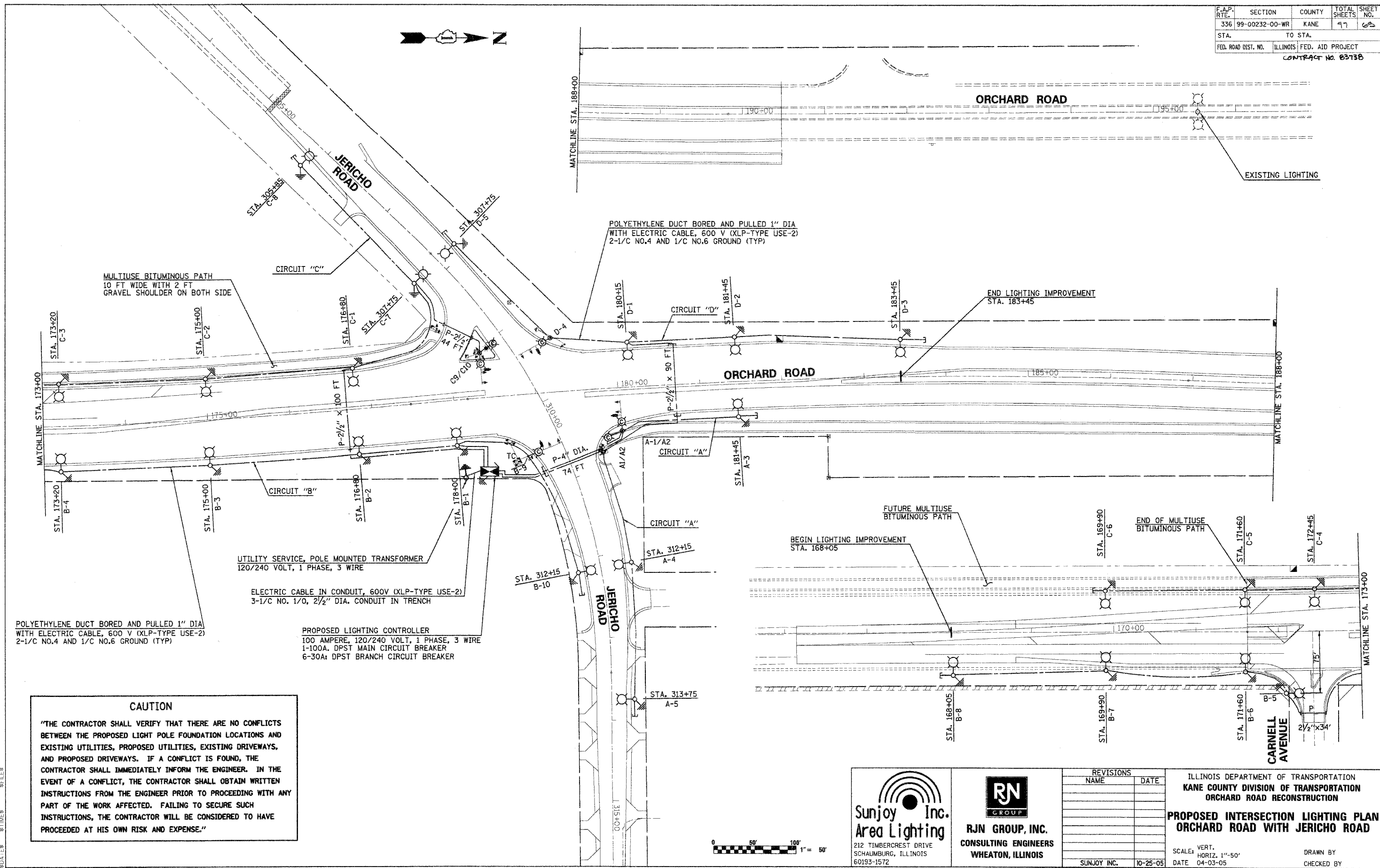
REVISIONS	
NAME	DATE
SUNJOY INC.	10-25-05

ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION  
**SUMMARY OF QUANTITIES,  
GENERAL NOTES AND LEGEND**

SCALE: VERT. NONE  
HORIZ. NONE  
DATE 04-03-05  
DRAWN BY  
CHECKED BY

C:\sunjoy\projects\orchard road\ss Oct. 31, 2005 2:12:51

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	62
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
CONTRACT NO. 0373B				



**CAUTION**

"THE CONTRACTOR SHALL VERIFY THAT THERE ARE NO CONFLICTS BETWEEN THE PROPOSED LIGHT POLE FOUNDATION LOCATIONS AND EXISTING UTILITIES, PROPOSED UTILITIES, EXISTING DRIVEWAYS, AND PROPOSED DRIVEWAYS. IF A CONFLICT IS FOUND, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER. IN THE EVENT OF A CONFLICT, THE CONTRACTOR SHALL OBTAIN WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED. FAILING TO SECURE SUCH INSTRUCTIONS, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE."

  
 Sunjoy Inc.  
 Area Lighting  
 212 TIMBERCREST DRIVE  
 SCHLAUMBURG, ILLINOIS  
 60193-1572

  
**RN**  
 GROUP  
 R/JN GROUP, INC.  
 CONSULTING ENGINEERS  
 WHEATON, ILLINOIS

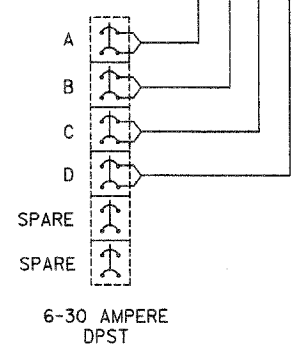
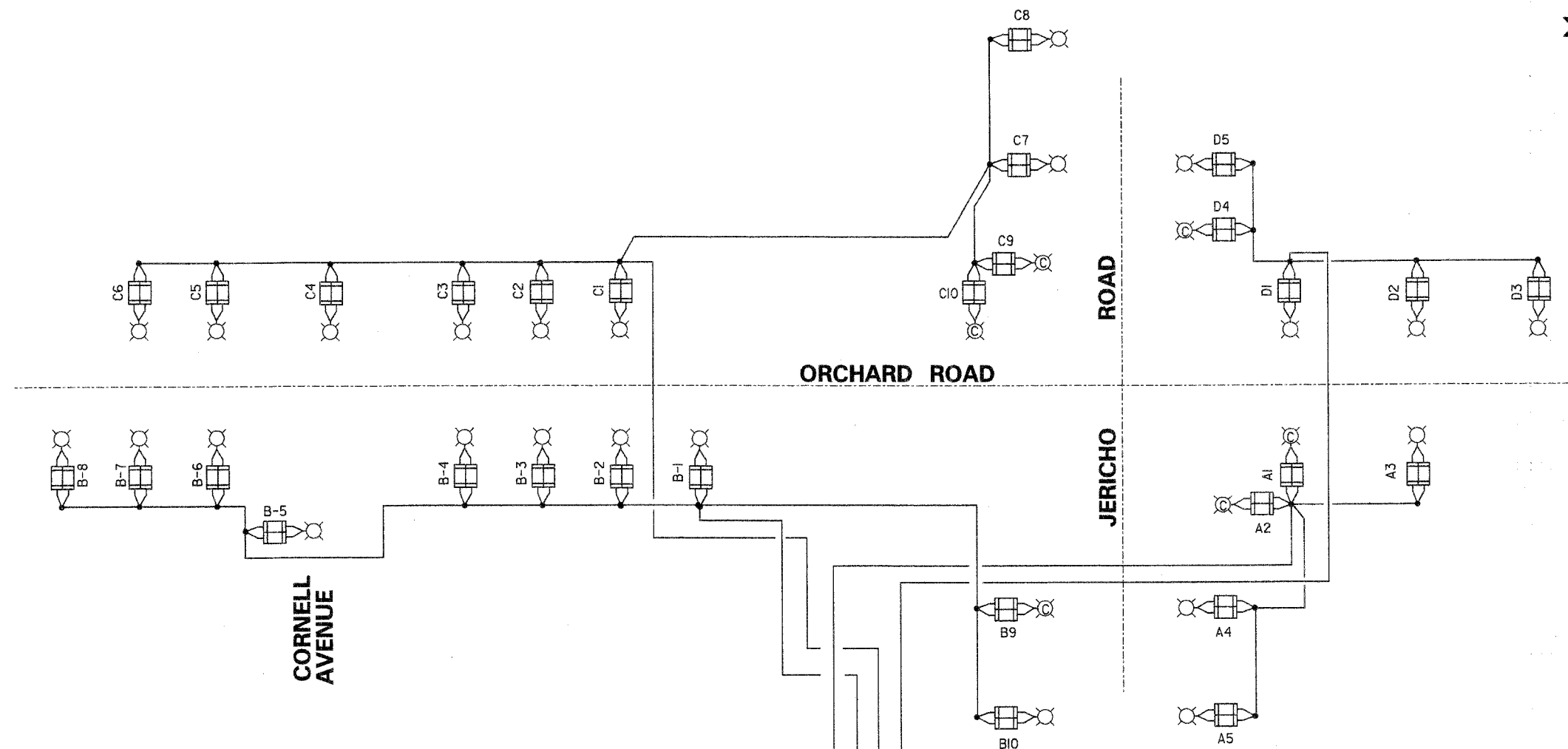
REVISIONS	
NAME	DATE
SUNJOY INC.	10-25-05

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 KANE COUNTY DIVISION OF TRANSPORTATION  
 ORCHARD ROAD RECONSTRUCTION  
**PROPOSED INTERSECTION LIGHTING PLAN  
 ORCHARD ROAD WITH JERICHO ROAD**

SCALE: VERT. 1"=50'  
 HORIZ. 1"=50'  
 DATE 04-03-05  
 DRAWN BY \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_

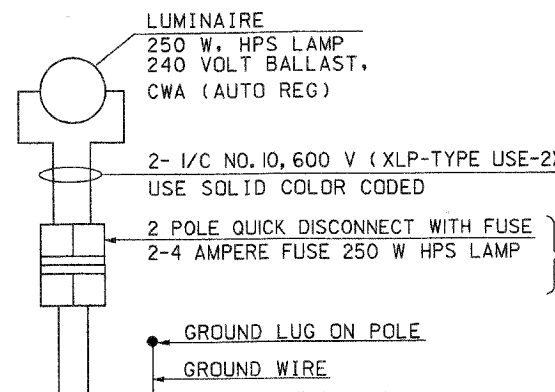


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	60
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT No. 6513B				



CIRCUIT	AMPERE @ 240 VOLT	WATTS
A	6.5	1,560
B	13	3,120
C	13	3,120
D	6.5	1,560
TOTAL	39	9,360

- SINGLE LINE LEGEND**
- LUMINAIRE, 250W HPS
  - COMBINATION POLE LUMINAIRE, 250W HPS
  - FUSE, 2-4 FOR 250 W HPS LAMP
  - CIRCUIT BREAKER
  - 2 1/C #4 & 1/C #6 GND IN UNIT DUCT
  - CONNECTION



DEVICE SHALL ELECTRICALLY AND MECHANICALLY DISCONNECT BOTH LOAD PHASE CONDUCTORS SIMULTANEOUSLY

UNIT DUCT WITH 2-1/C NO. 4 AND 1/C NO.6 GROUND 600 V (XLP TYPE USE) 1" DIA. POLYETHYLENE

DATES \$TIMES \$FILES\$

Sunjoy Inc.  
Area Lighting  
212 TIMBERCREST DRIVE  
SCHALMBURG, ILLINOIS  
60193-1572

RJN GROUP, INC.  
CONSULTING ENGINEERS  
WHEATON, ILLINOIS

REVISIONS	
NAME	DATE
SUNJOY INC.	10-25-05

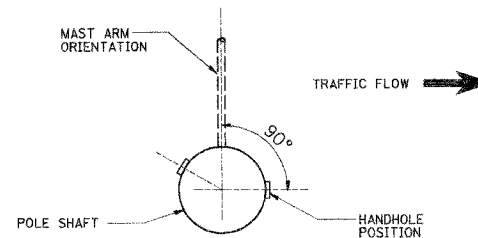
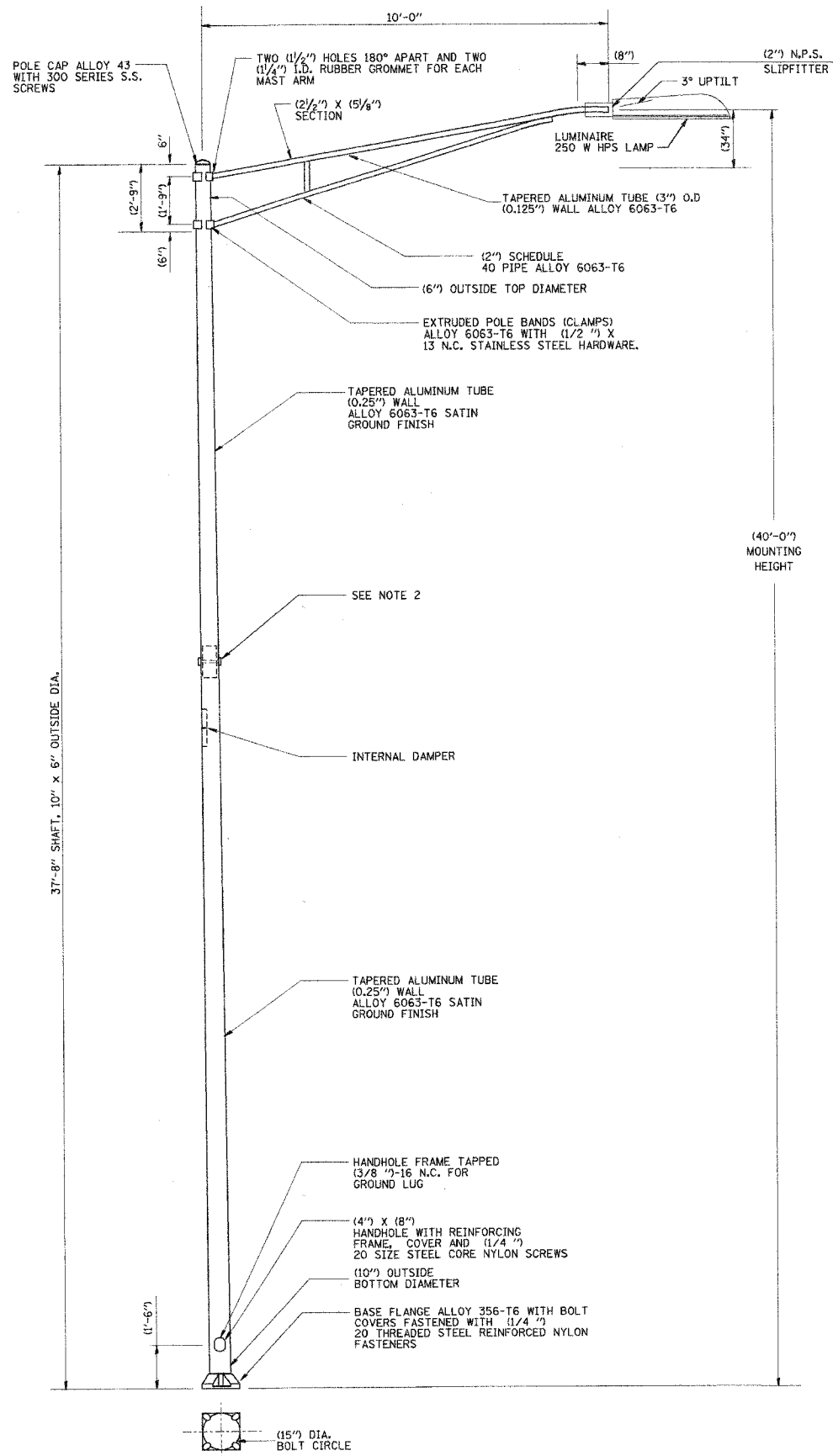
ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION

**SINGLE LINE DIAGRAM**

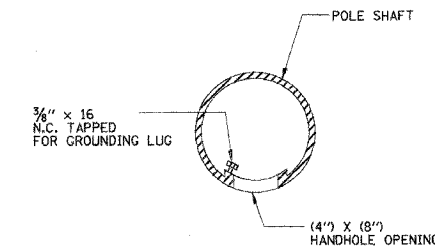
SCALE: VERT. NONE  
HORIZ. NONE  
DATE 04-03-05

DRAWN BY  
CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	67
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 63738				



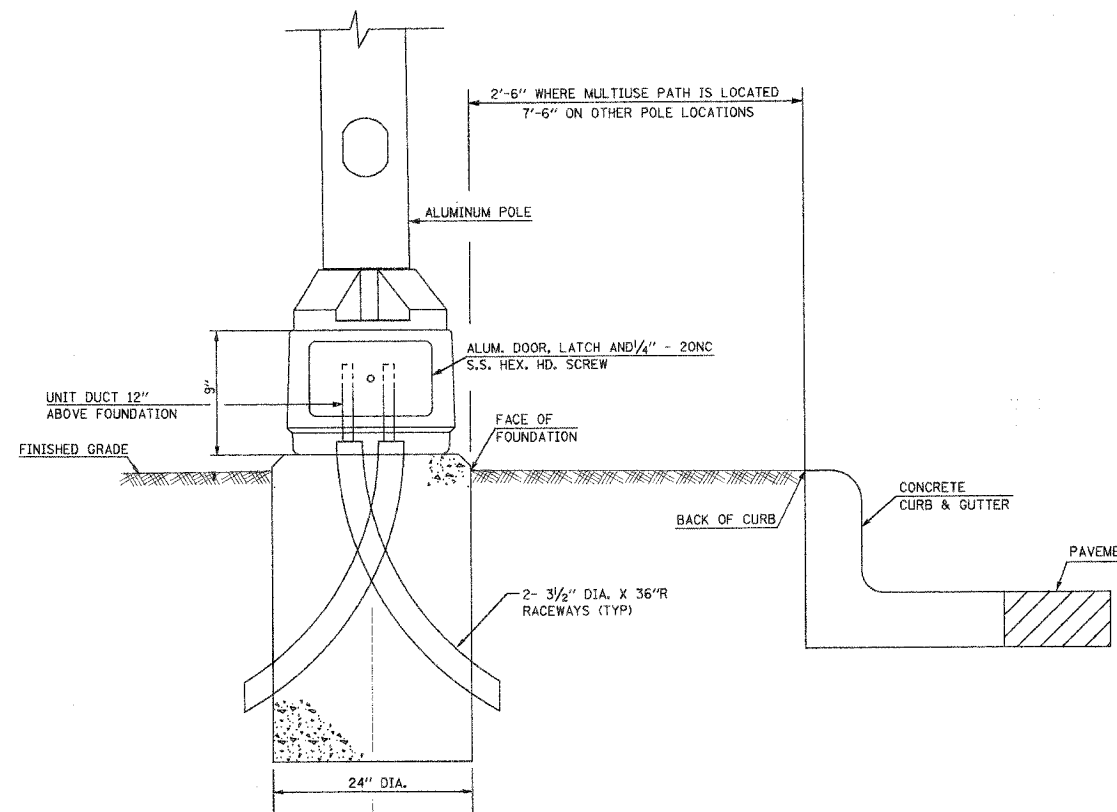
POSITION OF HANDHOLE IN RELATION TO TRAFFIC FLOW



HANDHOLE DETAIL (N.T.S.)

NOTES

- BOLT SLOTS SHALL BE (1/8") X (2/8") CENTERED ON BOLT CIRCLE.
- TWO PIECE SHAFT WILL BE MATCH MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. STUD BOLT WILL BE (5/8") DIA. WITH NUT, FLATWASHER, AND LOCK WASHER. THERE WILL BE NO THREADS ON THE BOLT INSIDE THE POLE SHAFT.
- LUMINAIRES ARE TO BE INSTALLED AS SOON AS POSSIBLE AFTER POLE ERECTION. THE POLE WILL NOT BE PAID FOR UNTIL THE LUMINAIRE IS INSTALLED.
- THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA.
- THE DUCT SHALL EXTEND INTO POLE A MINIMUM OF (12") ABOVE THE BASE.



**BREAKAWAY DEVICE, TRANSFORMER BASE**  
 COMPONENT PRODUCTS CAT. NO. TB-5-9. PAINTED IN BRONZE COLOR  
 THE BREAKAWAY TRANSFORMER BASE SHALL HAVE A LISTING OF APPROVAL BY FHWA COMPLIANCE TO 1985 AASHTO REQUIREMENTS.

LIGHT POLE AND ARM  
 UNION METAL CATALOG NUMBER  
 P09-Y194 -0.250" - 10'-0" x 6'-0" x 8" / 10 FT - 0.125" - 3'-0" OD  
 • PAINTED IN POWDER COATED DARK BRONZE COLOR FINISH

LUMINAIRE  
 GENERAL ELECTRIC MDCL-25-S-0-A-1-1-F-M-C-III-1-X  
 CATALOG NUMBER  
 • BALLAST TAPED FOR 240 VOLT CIRCUIT  
 • PAINTED IN POWDER COATED DARK BRONZE COLOR FINISH

⊗ THE CONTRACTOR SHALL FURNISH COLOR CHIP TO THE OWNER FOR APPROVAL

**Sunjoy Inc.**  
 Area Lighting  
 212 TIMBERCREST DRIVE  
 SCHAUMBURG, ILLINOIS  
 60193-1572

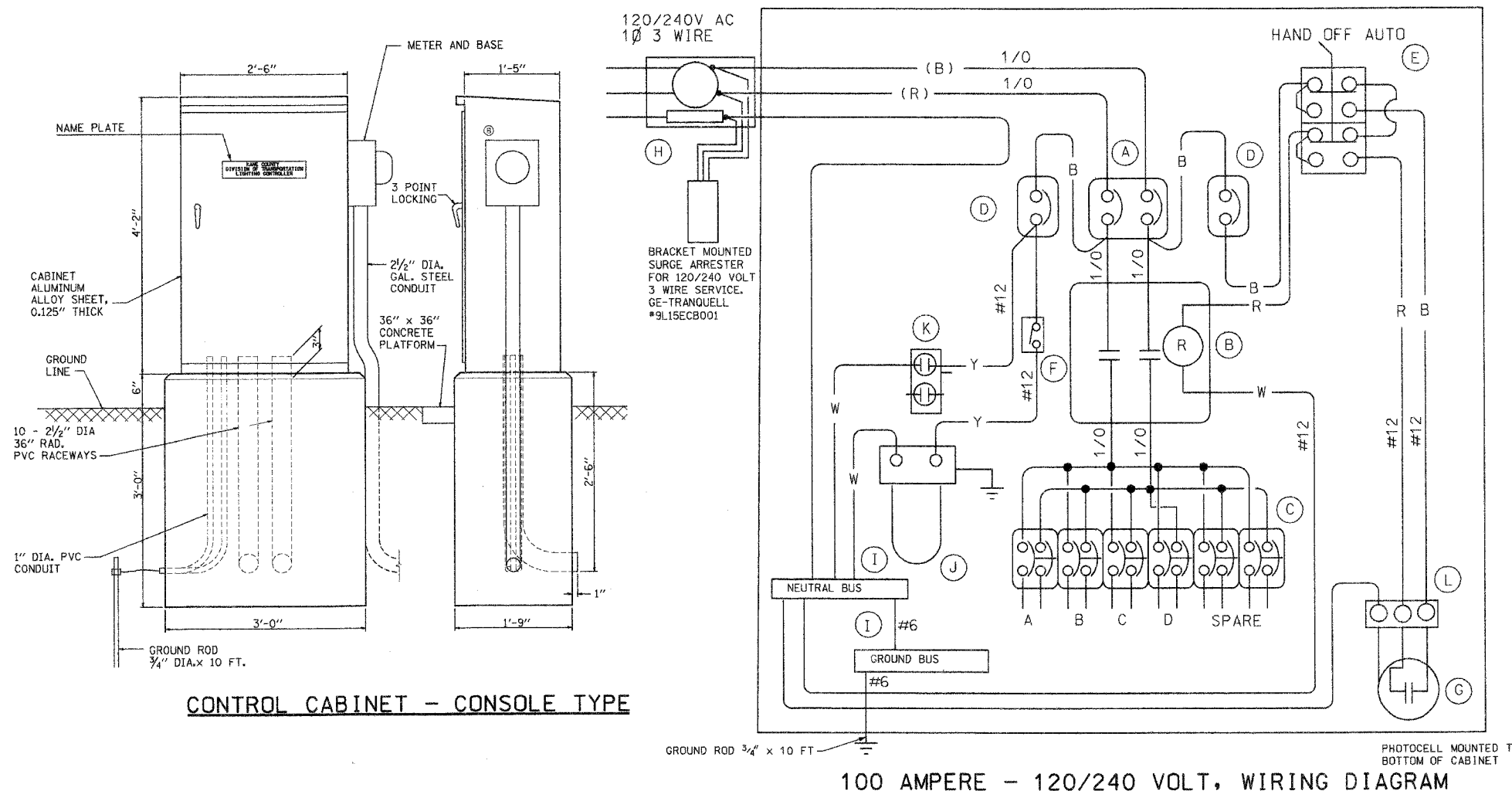
**RJN GROUP, INC.**  
 CONSULTING ENGINEERS  
 WHEATON, ILLINOIS

REVISIONS	
NAME	DATE
SUNJOY INC.	10-25-05

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**KANE COUNTY DIVISION OF TRANSPORTATION**  
**ORCHARD ROAD RECONSTRUCTION**  
**LIGHT POLE, ALUMINUM 40 FT MOUNTING HEIGHT**  
**SINGLE ARM,**  
**BREAKAWAY DEVICE, TRANSFORMER BASE**

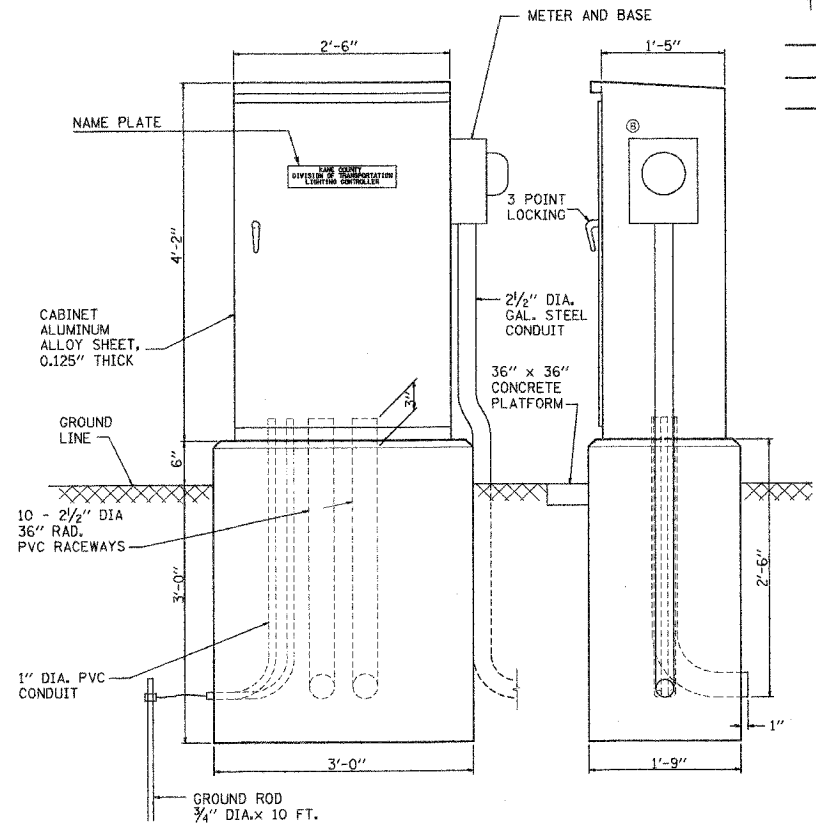
SCALE: VERT. HORIZ.  
 DATE 04-03-05

DRAWN BY  
 CHECKED BY



DEVICE SCHEDULE		
ITEM	QUANT.	DESCRIPTION
(A)	1	CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 2- POLE, 600 V. A.C., 225 A. FRAME, 125 A. NON-INTERCHANGABLE TRIP, BOLT-ON TYPE; INTERRUPTING CAPACITY OF NOT LESS THAN 22,000 RMS SYMMETRICAL AMPERES AT 480 V.
(B)	1	CONTACTOR 100A., 2 POLE ELECTRICALLY HELD WITH 120V COIL
(C)	6	30 A., 1 POLE BOLT-ON BRANCH BREAKERS EACH RATED 277 V. WITH INTERRUPTING CAPACITY OF NOT LESS THAN 10,000 RMS SYMMETRICAL AMPERES AT 240 V.
(D)	2	CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 1-POLE, 277 V., BOLT-ON TYPE, 15 A. WITH AN INTERRUPTING RATING OF NOT LESS THAN 10,000 RMS SYMMETRICAL AMPERES AT 240 V.
(E)	1	SELECTOR SWITCH, 3 POSITION, ON-OFF-AUTO
(F)	1	20 A. SPST MICRO SWITCH (MOUNT WITH ACTUATOR TO SWITCH WHEN DOOR OPENED)
(G)	1	PHOTOCELL, 120 VOLT COIL
(H)	1	SOCKET FOR ELECTRIC UTILITY COMPANY METER.
(I)	2	NEUTRAL/GROUND COPPER BUSS
(J)	1	60 WATT LIGHT FIXTURE, VAPOR TIGHT, WITH GLOBE AND GUARD AND MOUNTING BOX
(K)	1	GFI RECEPTACLE, 120 V., 20 A., PREMIUM SPEC. GRADE, NEMA REFERENCE 5-15R IN WEATHER-PROOF BOX WITH FLAP-TYPE COVER.
(L)	1	TERMINAL BLOCK COPPER

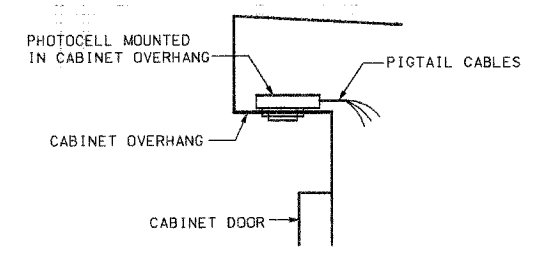
**CONTROL CABINET - CONSOLE TYPE**



**100 AMPERE - 120/240 VOLT, WIRING DIAGRAM**

**NOTES:**

- THE CABINET SHALL BE FABRICATED FROM 0.125" THICK ALUMINUM ALLOY SHEET AND SHALL BE REINFORCED WITH ALUMINUM ANGLES. THE CABINET DOOR SHALL BE NEMA TYPE 3R CONSTRUCTION WITH NEOPRENE GASKET. THE DOOR SHALL HAVE STAINLESS STEEL HINGES AND THREE POINT LOCKING SYSTEM.
- THE CONTRACTOR SHALL REMOVE VEGETATION AND TOPSOIL. LEVEL THE AREA IN FRONT OF THE CONTROL CABINET DOOR AND PLACE LENGTH WISE, PARALLEL TO CONTROL CABINET. A PRECAST PAD, 36"x36"x3" MINIMUM SIZE. THE COST OF LABOR AND MATERIALS SHALL BE INCIDENTAL TO THE CONTROL CABINET.
- CONTROL WIRE SHALL BE #12 AWG, 600V, TYPE "MTW" STRANDED COPPER GRAY SWITCH BOARD WIRE. THE ENDS OF ALL CONTROL WIRES SHALL BE IDENTIFIED.
- THE ELECTRIC METER BOX SHALL BE MOUNTED ON THE SIDE OF THE CONTROL CABINET, NEAR TO THE SERVICE POLE AND/OR AS DIRECTED BY THE ENGINEER.
- ALL CONTROL CABINET ITEMS SHALL HAVE SUITABLE IDENTIFICATION. OPEN CIRCUIT BREAKERS, CONTACTORS AND OTHER OPEN DEVICES SHALL HAVE PERMANENT SELF STICKING TAGS. DEVICES IN ENCLOSURES SHALL HAVE ENGRAVED 2-COLOR LAMINATED PLASTIC NAMEPLATES ATTACHED TO ENCLOSURES WITH SCREWS. NAMEPLATES SHALL BE ENGRAVED TO CORRESPOND TO DESIGNATIONS ON THE DRAWINGS. INTERNAL CABINET WIRING SHALL BE IDENTIFIED AS INDICATED OR AS DIRECTED BY THE ENGINEER BY MEANS OF SELF-STICKING TAGS APPLIED AT EACH CONNECTED END. IDENTIFICATION SHALL BE MADE BY THE CABINET MANUFACTURER.
- ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.  
R = RED    BL = BLUE    W = WHITE  
B = BLACK    Y = YELLOW    G = GREEN
- PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
- THE CABINET SHALL BE PRIMED AND PAINTED AS SPECIFIED. THE OUTSIDE SURFACE OF THE CONTROL CABINET SHALL HAVE A DARK BRONZE COLOR.
- THE HEADS OF CONNECTOR SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BUSS CONNECTION AND GREEN FOR GROUND BUSS CONNECTORS.
- ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
- THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".
- PROVIDE A HOLDER AND WATERPROOF POUCH ON THE INNER SIDE OF THE CONTROLLER DOOR. THE HOLDER AND POUCH SHALL BE MOUNTED SO THAT RAIN WATER OR CONDENSED WATER CANNOT ENTER THE POUCH WITH THE CABINET DOOR OPEN. FURNISH A LAMINATED APPROVED COPY OF THE "CONTROL CABINET WIRING DIAGRAM".
- THE CONTRACTOR SHALL OBTAIN ANCHOR BOLTS LOCATION TEMPLATE FROM THE FABRICATOR OF LIGHTING CONTROLLER
- THE CONTROLLER FABRICATION SHALL COMPLY TO ARTICLE 1068.01 OF THE STANDARD SPECIFICATIONS
- THE CONTROLLER CABINET DOOR SHOULD OPEN AWAY FROM THE STREET



**PHOTOCELL IN CABINET OVERHANG DETAIL**

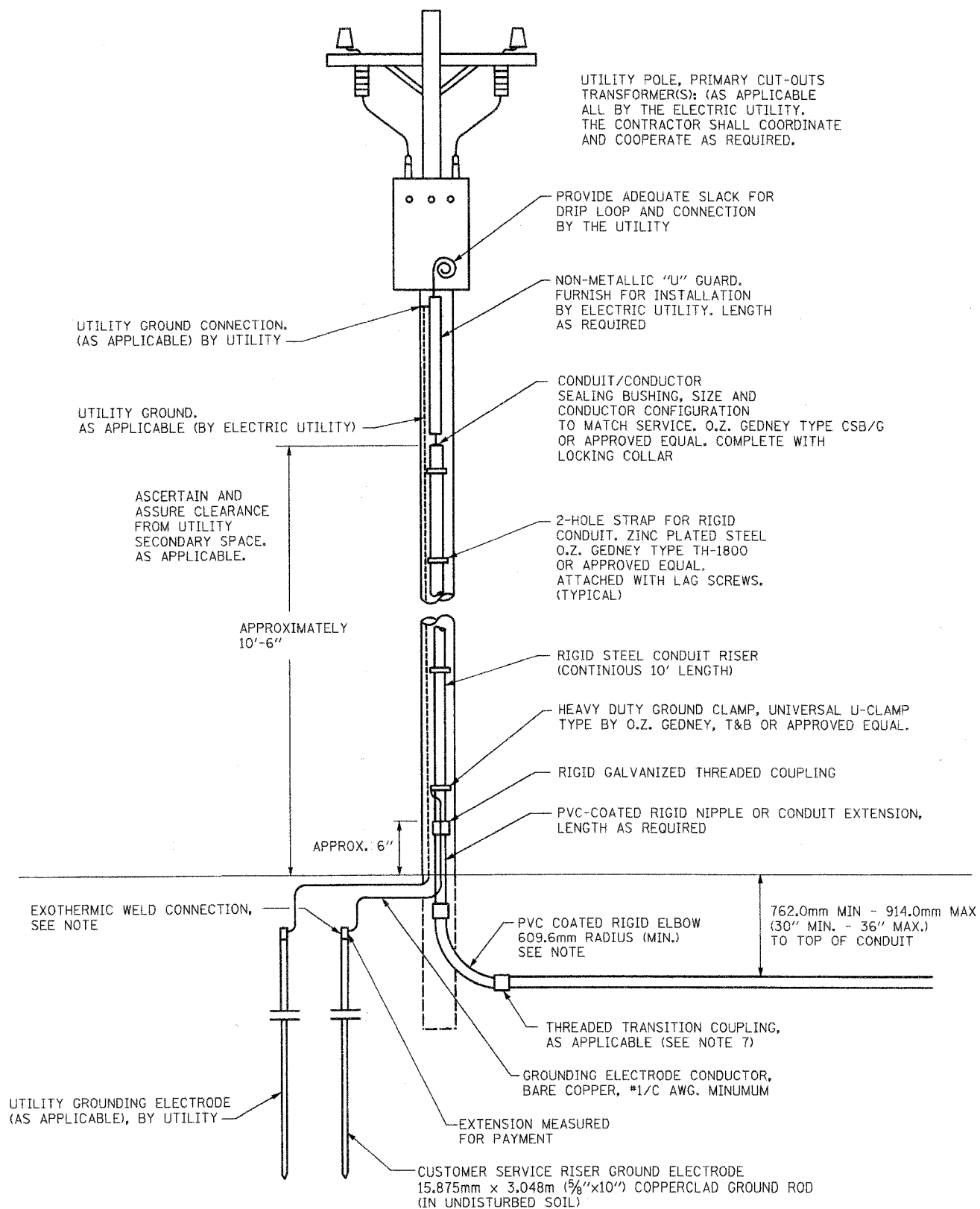
NOT TO SCALE

CONTROLLER DETAIL FROM KANE COUNTY DIVISION OF HIGHWAYS

 212 TIMBERCREST DRIVE SCHALMBURG, ILLINOIS 60193-1572	 <b>RJN GROUP, INC.</b> CONSULTING ENGINEERS WHEATON, ILLINOIS	REVISIONS NAME      DATE	ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION <b>LIGHTING CONTROLLER SPECIAL</b>
		SUNJOY INC.    10-25-05	



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	69
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO B373D				



**NOTES:**

- SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
- UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF ELECTRIC UTILITY SERVICE INSTALLATION.
- CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF SERVICE CONDUCTOR RACEWAY AS INDICATED.
- PVC COATED RACEWAY AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
- THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY 1/32" U" 3/32" GUARD INSTALLATION AND SERVICE CONNECTION.
- THE SERVICE METER SOCKET, AS APPLICABLE, MOUNTED ELSEWHERE AS INDICATED SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRICAL UTILITY SERVICE INSTALLATION PAY ITEM.
- THE SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALLIC TO NON METALLIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
- PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS, THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT. AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY. FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THIS UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION.

**PROPOSED SERVICE INSTALLATION  
POLE TOP MOUNTED TRANSFORMER**

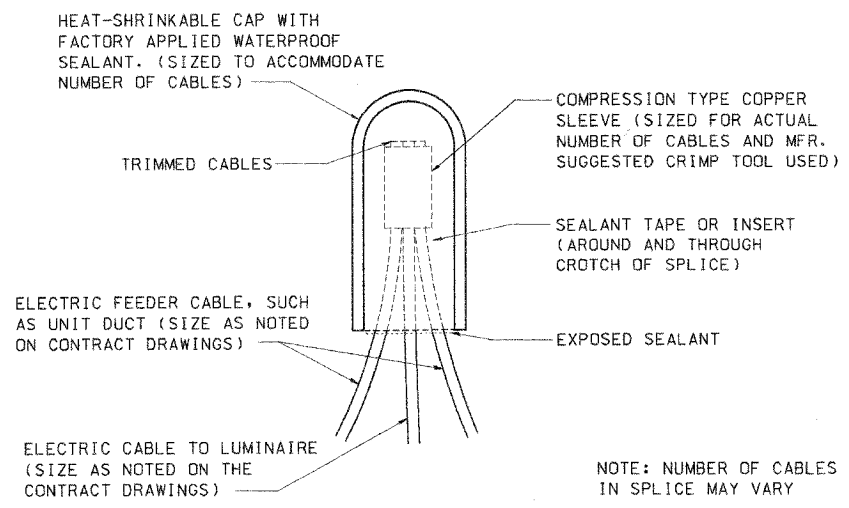
DETAILS FROM BEQ/IDOT 05-21-05

<p>Sunjoy Inc. Area Lighting</p> <p>212 TIMBERCREST DRIVE SCHAUMBURG, ILLINOIS 60193-1572</p>	<p>RN GROUP, INC. CONSULTING ENGINEERS WHEATON, ILLINOIS</p>	<b>REVISIONS</b> NAME      DATE		ILLINOIS DEPARTMENT OF TRANSPORTATION KANE COUNTY DIVISION OF TRANSPORTATION ORCHARD ROAD RECONSTRUCTION <b>ELECTRIC SERVICE INSTALLATION          ABOVE GROUND</b>
		SUNJOY INC.-DWG. ADDED 10-25-05		

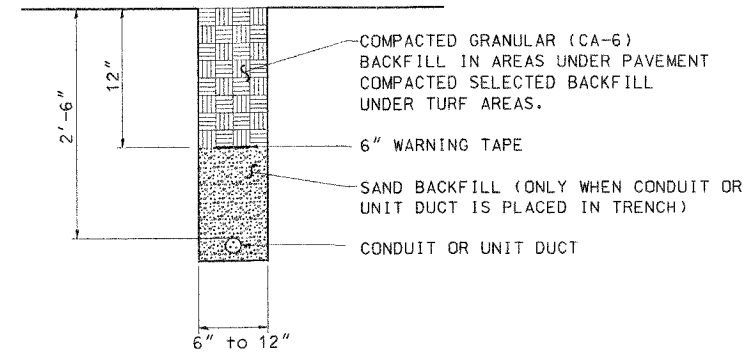
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	70
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO. B373B	

**NOTES: FOUNDATION**

1. THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE.
2. THE DESIGN DEPTH "D" OF FOUNDATION SHALL BE ACCORDING TO FIELD CONDITIONS.
3. EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER 24" IN DIAMETER.
4. THE CONTRACTOR SHALL USE #3 SPIRAL AT 6" PITCH OR AT HIS OPTION MAY SUBSTITUTE #3 TIES AT 12" O.C.
5. THE ANCHOR BOLTS TIED WITH REINFORCEMENT AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
6. CONCRETE SHALL BE CLASS "SI". CONCRETE FOUNDATION MUST BE CURED FOR (10) TEN DAYS BEFORE THE LIGHT STANDARD IS ERECTED.
7. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT POLE IS ERECTED.
8. ANCHOR BOLTS PROJECTION ABOVE THE TOP OF THE FOUNDATION SHALL BE ACCORDING TO THE REQUIREMENTS OF POLE MANUFACTURER.
9. RACEWAYS SHALL PROJECT 1" ABOVE THE TOP OF THE FOUNDATION.
10. REINFORCEMENT BARS SHALL COMPLY WITH ARTICLE 1006.10 OF THE STANDARD SPECIFICATION.
11. THE GROUND ROD, REINFORCING BAR AND ANCHOR BOLT SHALL BE TIED WITH #2 COPPER WIRE AND CONNECTION SHALL BE EXOTHERMIC WELD.



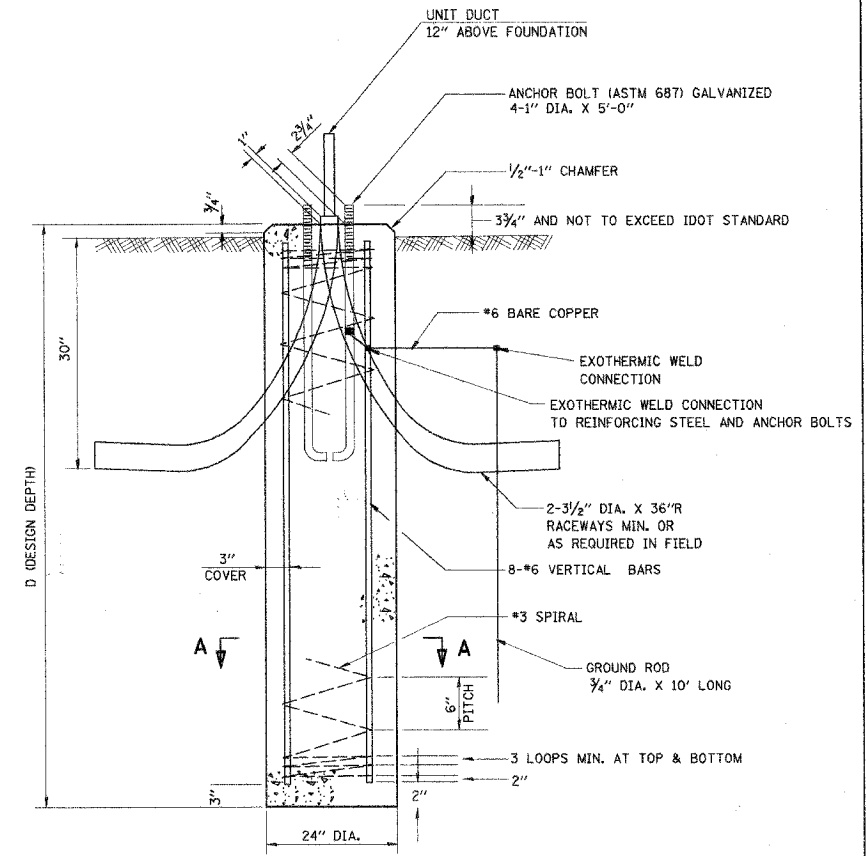
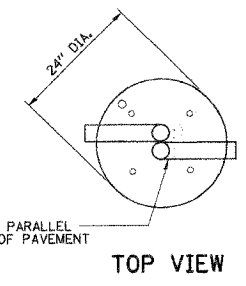
**SPLICING ELECTRIC CABLE**



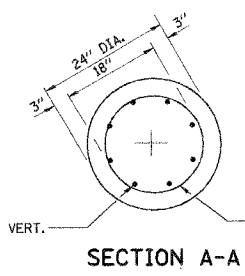
**TRENCH AND BACKFILL**

**FOUNDATION DESIGN TABLE**

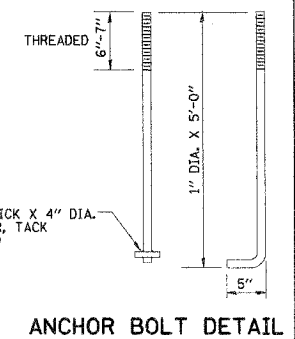
TYPE OF SOIL	DESIGN DEPTH OF FOUNDATION		REINFORCEMENT IN FOUNDATION			
	SINGLE ARM D	TWIN ARM D	SINGLE ARM		TWIN ARM	
			VERT BARS	SPIRAL	VERT BARS	SPIRAL
SOFT CLAY	3.962 m (13'-0")	4.572 m (15'-0")	8-#6x3.810 m (121'-0")	#3x37.186 m (122')	8-#6x4.343 m (14'-3")	#3x42.977 m (141')
MEDIUM CLAY	2.896 m (9'-6")	3.277 m (10'-9")	8-#6x2.743 m (9'-0")	#3x27.432 m (90')	8-#6x3.048 m (10'-0")	#3x30.480 m (100')
STIFF CLAY	2.134 m (7'-0")	2.438 m (8'-0")	8-#6x1.981 m (6'-6")	#3x20.112 m (66')	8-#6x2.286 m (7'-6")	#3x23.165 m (76')
LOOSE SAND	2.743 m (9'-0")	3.048 m (10'-0")	8-#6x2.591 m (8'-6")	#3x25.908 m (85')	8-#6x2.896 m (9'-6")	#3x28.651 m (94')
MEDIUM SAND	2.515 m (8'-3")	2.743 m (9'-0")	8-#6x2.438 m (8'-0")	#3x23.774 m (78')	8-#6x2.591 m (8'-6")	#3x25.908 m (85')
DENSE SAND	2.362 m (7'-9")	2.743 m (9'-0")	8-#6x2.286 m (7'-6")	#3x22.250 m (73')	8-#6x2.591 m (8'-6")	#3x25.908 m (85')
ROCK OR SOLIDIFIED SLAG	1.524 m (5'-0")	1.524 m (5'-0")	NONE	NONE	NONE	NONE



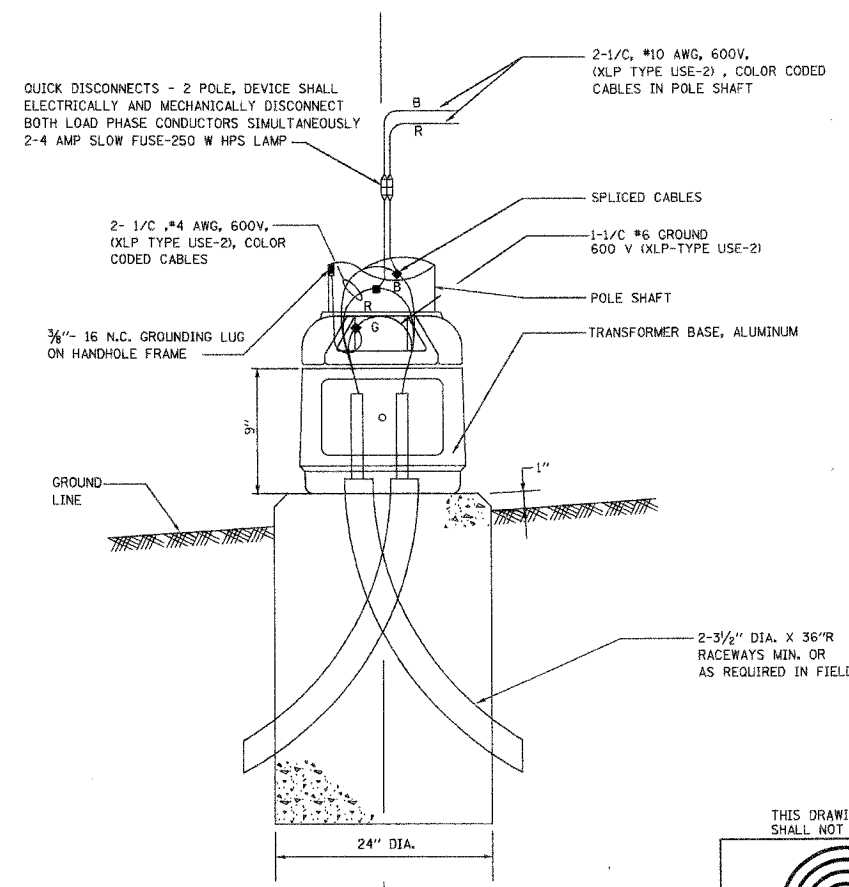
**FOUNDATION DETAIL**



**SECTION A-A**



**ANCHOR BOLT DETAIL**



**POLE BASE WIRING WITH QUICK DISCONNECTS AND BREAKAWAY DEVICE TRANSFORMER BASE, U/L LISTED**

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF SUNJOY INC. AND IS PROVIDED ONLY FOR THE PROJECT LISTED ON THIS DRAWING. THIS DRAWING SHALL NOT BE DUPLICATED, USED OR DISCLOSED, IN WHOLE OR IN PART, FOR ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF SUNJOY INC.

**Sunjoy Inc. Area Lighting**  
212 TIMBERCREST DRIVE  
SCHAUMBURG, ILLINOIS  
60193-1572

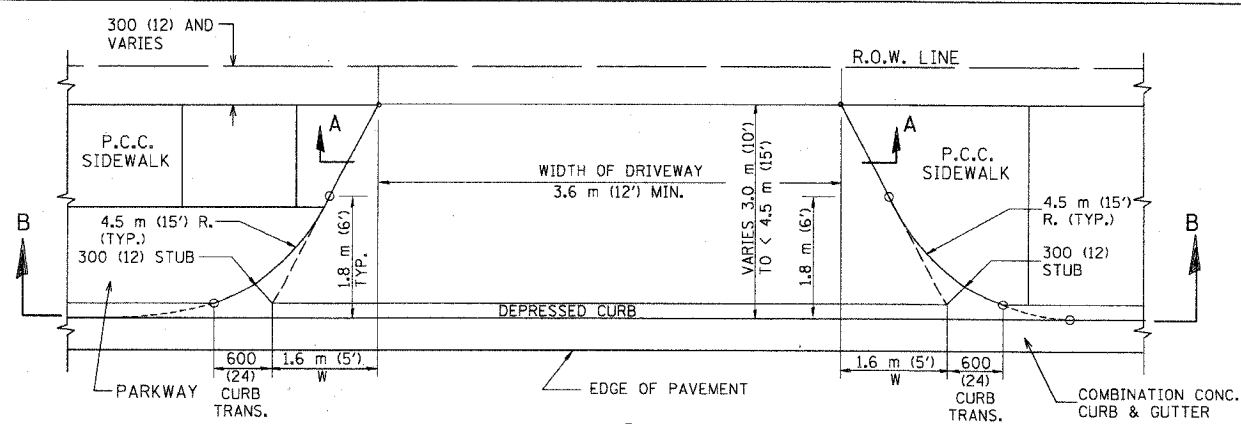
**RN GROUP**  
**RJN GROUP, INC.**  
CONSULTING ENGINEERS  
WHEATON, ILLINOIS

REVISIONS	
NAME	DATE
SUNJOY INC.	10-25-05

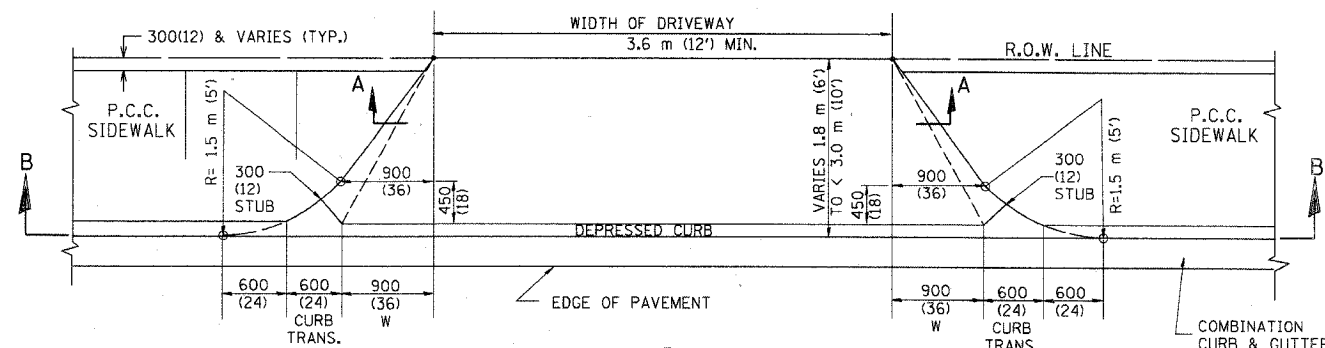
ILLINOIS DEPARTMENT OF TRANSPORTATION  
KANE COUNTY DIVISION OF TRANSPORTATION  
ORCHARD ROAD RECONSTRUCTION  
**LIGHT POLE, FOUNDATION 24" DIA. AND ELECTRICAL DETAILS**

SCALE: VERT. NONE HORIZ. DATE 04-03-05  
DRAWN BY CHECKED BY

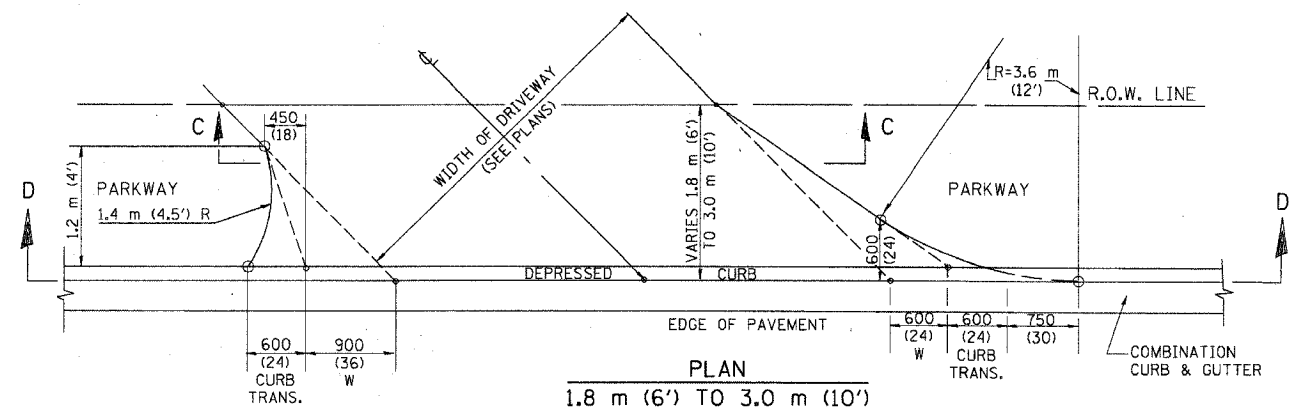
F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	LAKE	97	71
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83738				



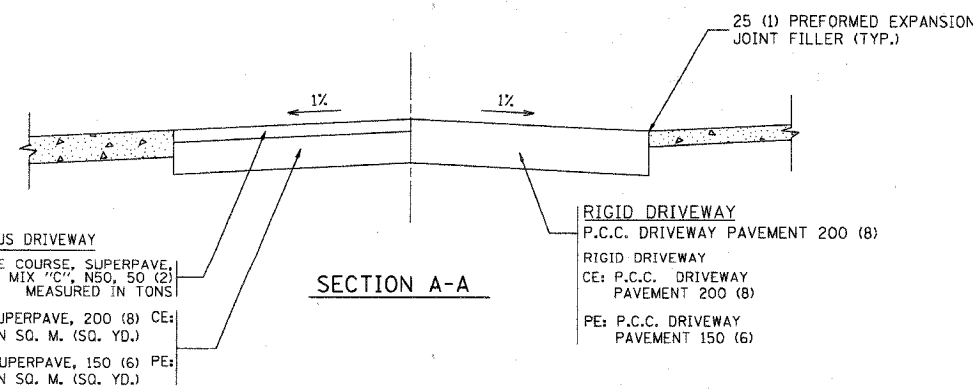
PLAN  
3.0 m (10') TO < 4.5 m (15')



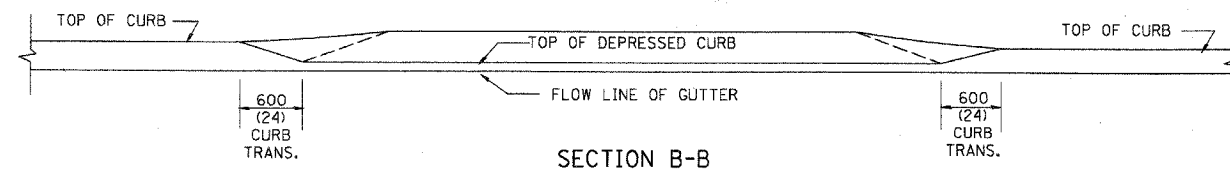
PLAN  
1.8 m (6') < 3.0 m (10')



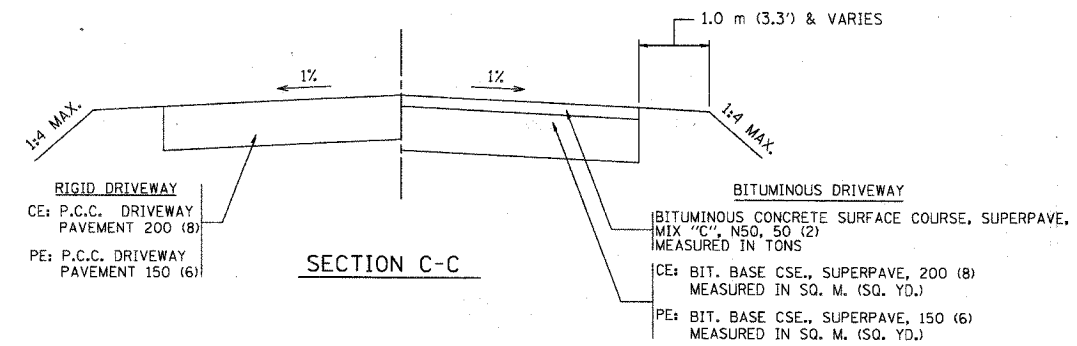
PLAN  
1.8 m (6') TO 3.0 m (10')



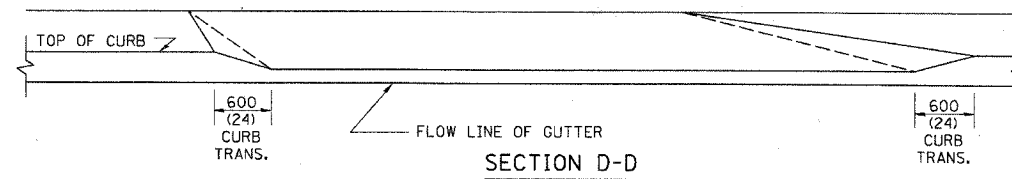
SECTION A-A



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 ILLUSTRATIONS 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 2.4 M (8'), 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.

25 (1) 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 900 (36) TO 1.5 m (5 FT.) PROPORTIONAL TO THE LENGTH (L), FROM 1.8 m (6 FT.) TO 3 m (10 FT.).

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS

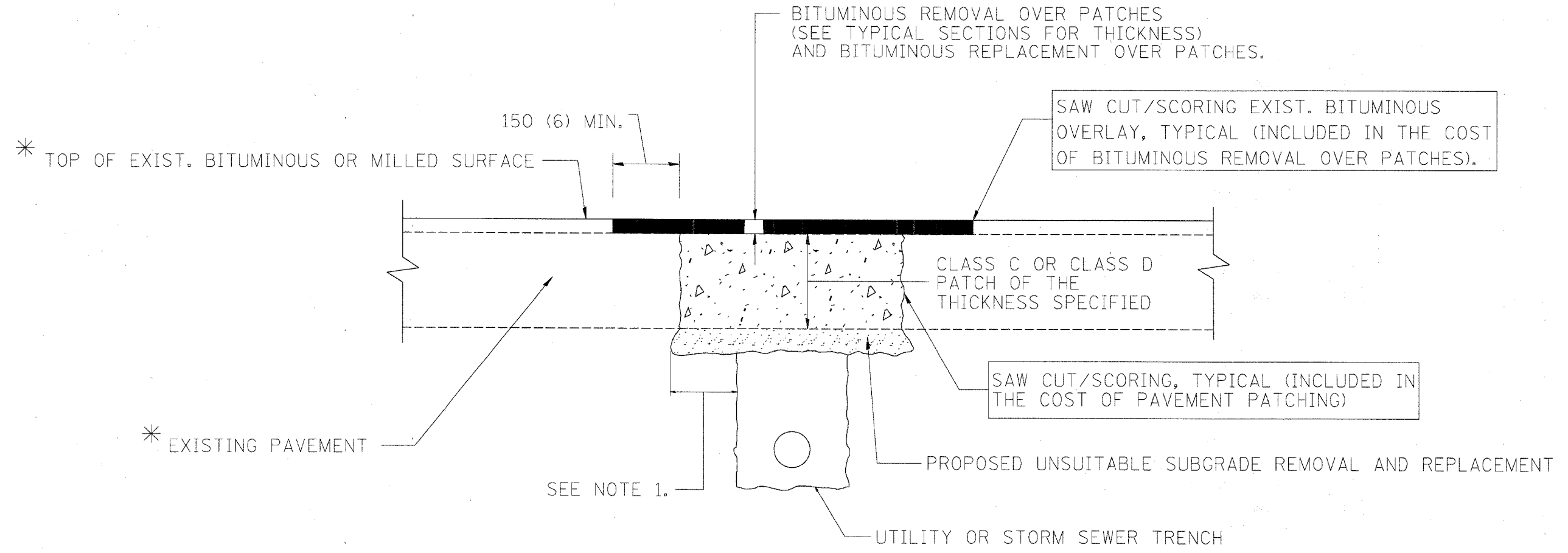
DISTANCE BETWEEN ROW AND FACE OF CURB < 4.5 m (15')

REVISIONS	
NAME	DATE
P. LAFLEUR	04/15/03
M. GOMEZ	04/06/01
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

SCALE: NONE  
DATE PLOTTED 04/17/2003

DRAWN BY: SG  
CHECKED BY: JFP  
BD400-02 (BD-02)

REVISION DATE: 04/15/03



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**NOTES:**

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

**SEQUENCE OF CONSTRUCTION**

1. REMOVE THE EXISTING BITUMINOUS MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE FULL DEPTH PATCHES
3. REPLACE BITUMINOUS MATERIAL OVER THE AREA TO BE PATCHED.

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

**PAVEMENT PATCHING FOR BITUMINOUS SURFACED PAVEMENT**

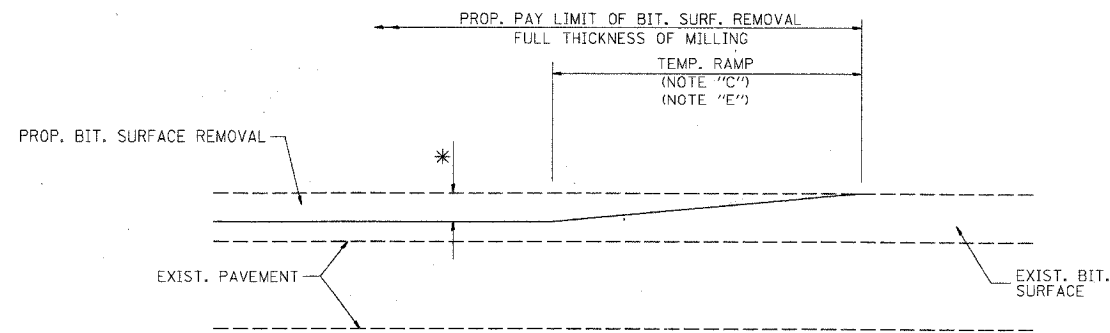
REVISIONS		REVISIONS	
NAME	DATE	NAME	DATE
R. SHAH	10/25/94	ART ABBAS	04/27/98
R. SHAH	01/14/95		
R. SHAH	03/23/95		
R. SHAH	04/24/95		
A. HOUSEH	03/15/96		
A. ABBAS	03/21/97		
A. ABBAS	01/20/98		

SCALE: NONE  
DATE 10/18/2002

DRAWN BY  
CHECKED BY

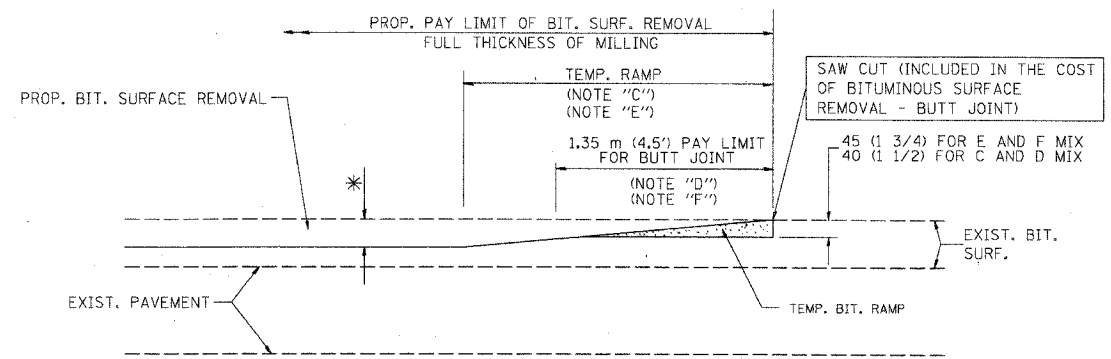
BD400-04 (BD-22)  
REVISION DATE: 04/27/98

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
930 PH-00232-00-ME	LANE	LAKE	97	17
STA.	TO STA.			
FED. ROAD DIST. NO.	BLINDS	FED. AID PROJECT		
CONTRACT NO. 8373B				



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

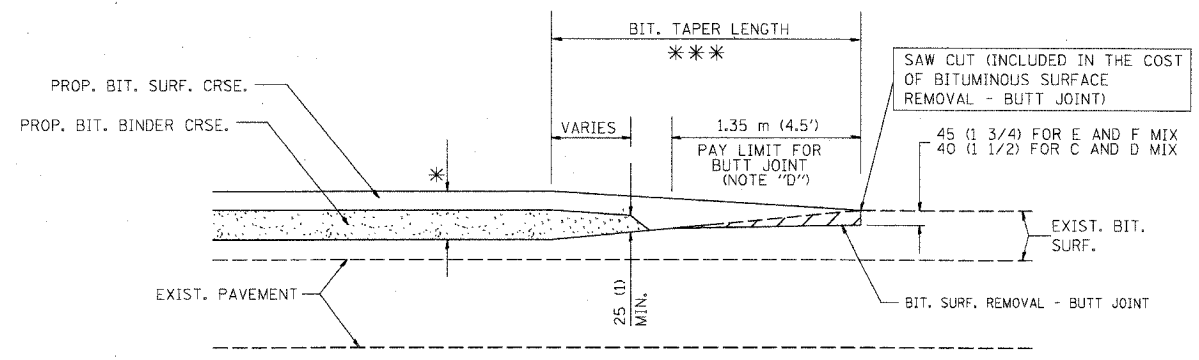
**OPTION 1**



BITUMINOUS CONSTRUCTED TEMPORARY RAMP  
(FOR BUTT JOINT AND BIT. TAPER SEE DETAIL BELOW)

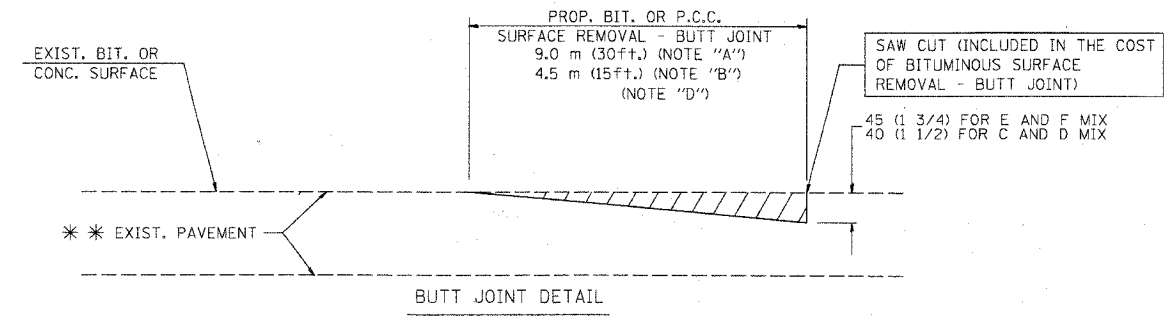
**OPTION 2**

**TYPICAL TEMPORARY RAMP**

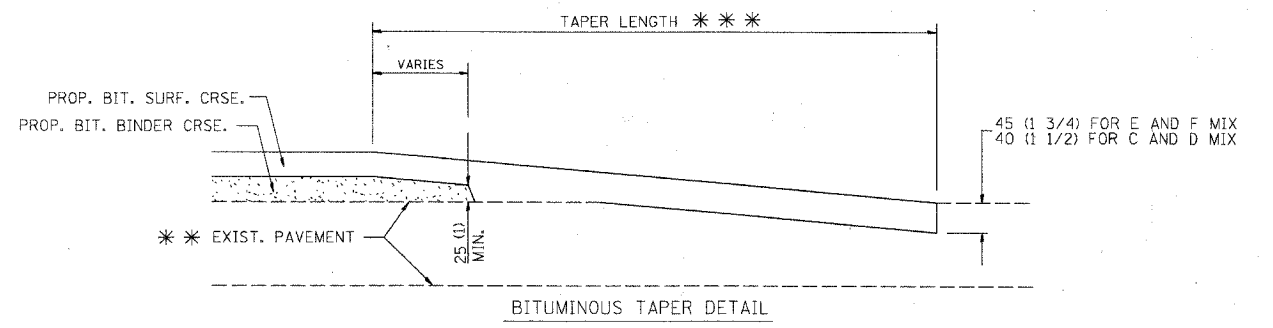


BUTT JOINT AND BITUMINOUS TAPER

**TYPICAL BUTT JOINT AND BITUMINOUS TAPER FOR MILLING AND RESURFACING**



BUTT JOINT DETAIL



BITUMINOUS TAPER DETAIL

**TYPICAL BUTT JOINT AND BITUMINOUS TAPER FOR RESURFACING ONLY**

\*\* PC CONCRETE, BITUMINOUS OR BITUMINOUS 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 BITUMINOUS SURFACE.
  - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED BITUMINOUS COURSES.
  - E: TAPER THE TEMP. RAMP AT A RATE OF 900 (3 ft.) PER INCH OF MILLING THICKNESS.
  - F: INSTALLATION AND REMOVAL OF THE 1.35 m (4.5') TEMP. BIT. RAMP WILL BE PAID AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT".
  - G: SEE ARTICLE 406.18 AND 406.24 OF THE STANDARD SPECIFICATIONS FOR "BITUMINOUS AND PCC SURFACE REMOVAL, BUTT JOINT".
- \*\* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

**BUTT JOINT AND BITUMINOUS TAPER DETAILS**

**BASIS OF PAYMENT:**

THE BUTT JOINT WILL BE PAID FOR PER SQUARE METER (SQUARE YARD.) AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT" OR AS "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

SCALE: NONE

DATE PLOTTED: 10/18/2002

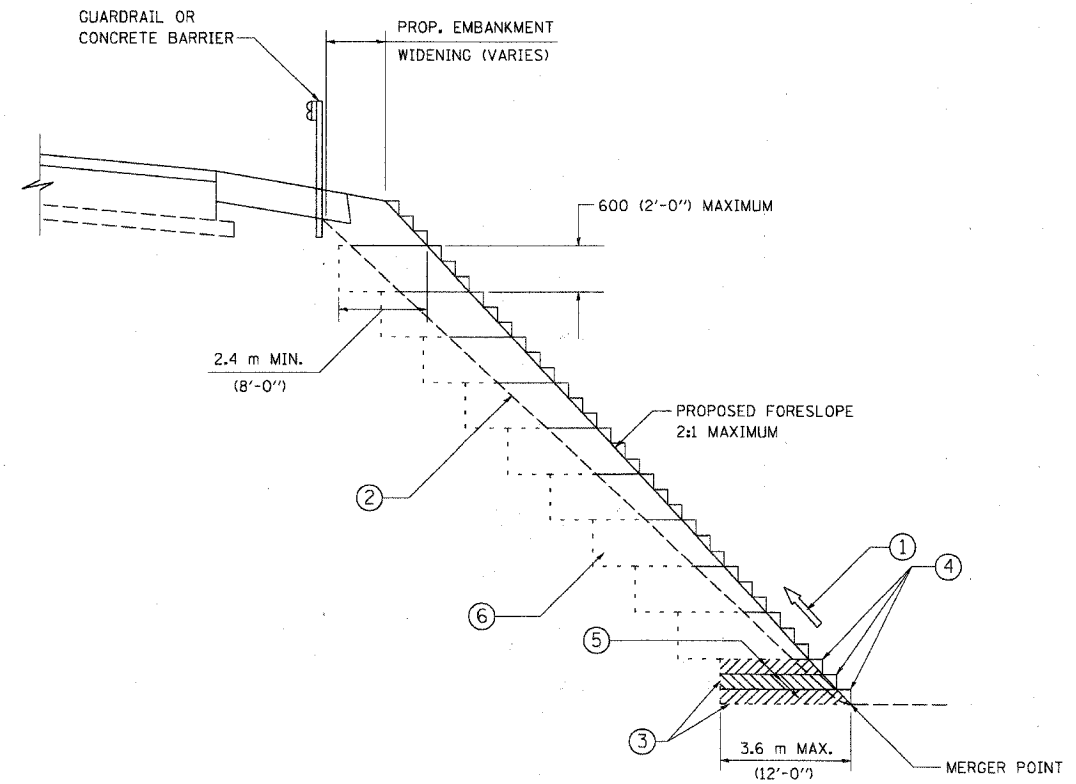
DRAWN BY

CHECKED BY

BD400-05 (VI-BD32)

REVISION DATE: 04/06/01

F. A. P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-0232-00-412	KANE	97	7A
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83738				



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 205.04 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 200 (8-INCH) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.06 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 (SPECIAL)". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

**BENCHING DETAIL  
FOR EMBANKMENT  
WIDENING**

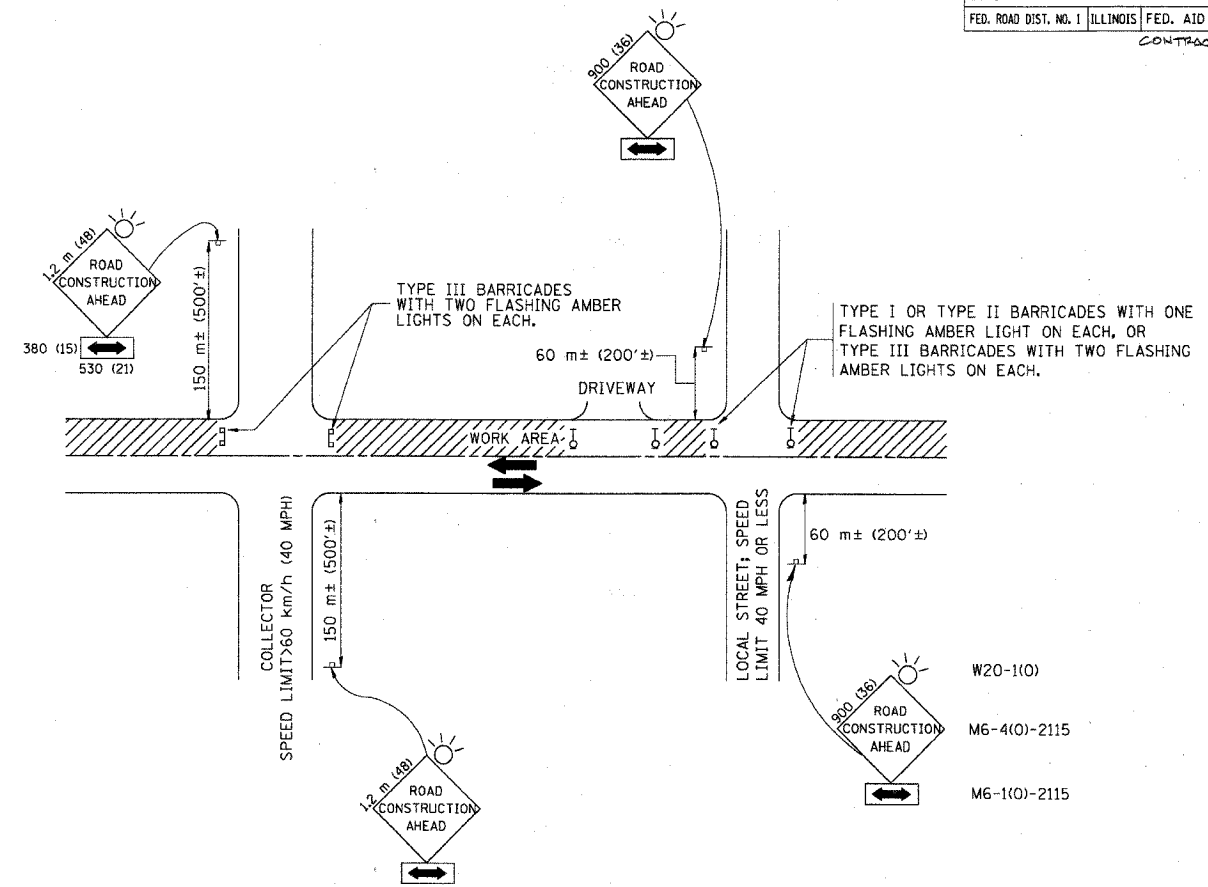
REVISIONS	
NAME	DATE

SCALE: NONE  
DATE 10/18/2002

DRAWN BY: CADD  
CHECKED BY: S.E.B.  
BD-51

REVISION DATE:

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	PA-0032-00-WR	KANE	97	75
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 83738				



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

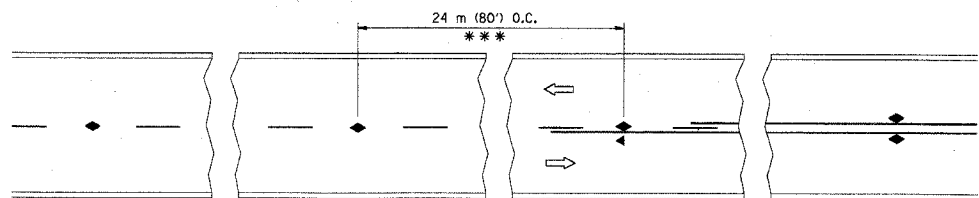
NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - ONE **ROAD CONSTRUCTION AHEAD** SIGN 900x900 (36x36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') IN ADVANCE OF THE MAIN ROUTE.
    - 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.
  - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - ONE **ROAD CONSTRUCTION AHEAD** SIGN 1.2 m x 1.2 m (48x48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') IN ADVANCE OF THE MAIN ROUTE.
    - 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.
  - 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.

REVISIONS	
NAME	DATE
LHA	6/89
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

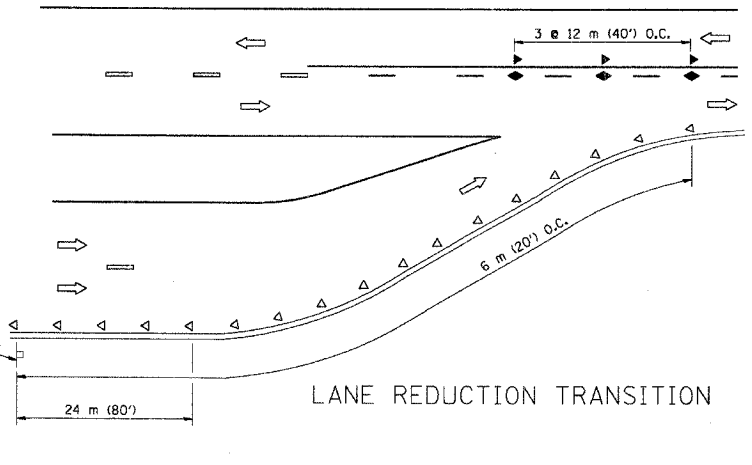
ILLINOIS DEPARTMENT OF TRANSPORTATION  
**TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

SCALE: VERT. \_\_\_\_\_  
 HORIZ. \_\_\_\_\_  
 DATE 10/18/2002  
 DRAWN BY \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_  
 TC-10

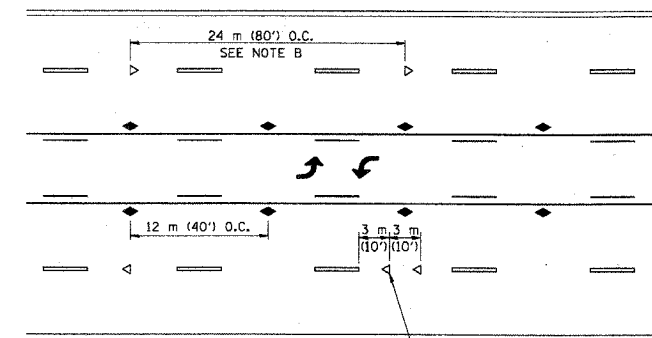


\*\*\* REDUCE TO 12 m (40') O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 70 km/h (45 M.P.H.) OR LESS.

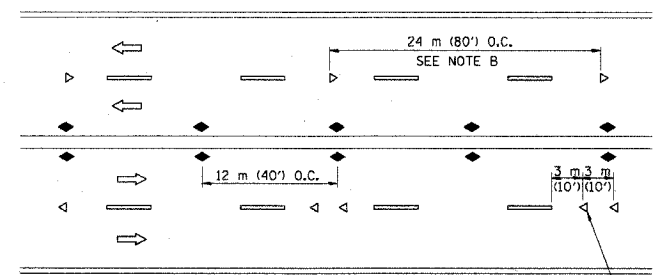
TWO-LANE/TWO-WAY



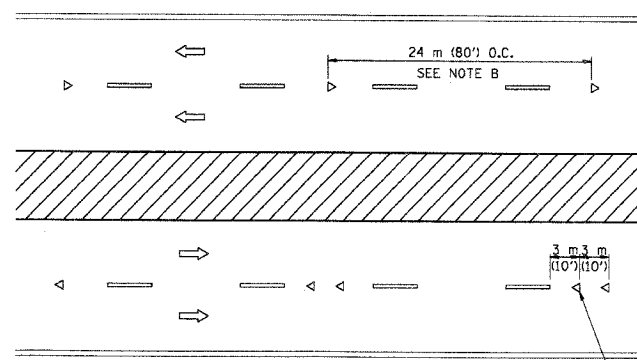
LANE REDUCTION TRANSITION



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 50 TO 75 (2 TO 3) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 150 m (500') IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

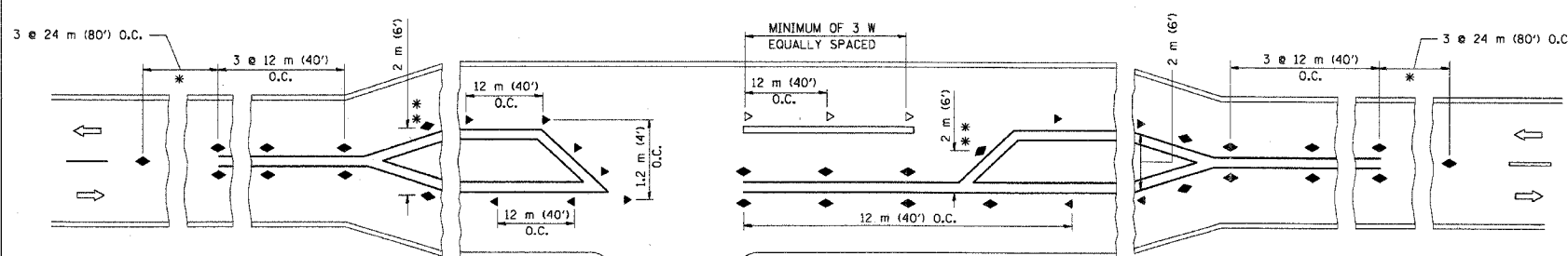
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

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 2 m (6') OR LESS USE TWO-WAY MARKERS.

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

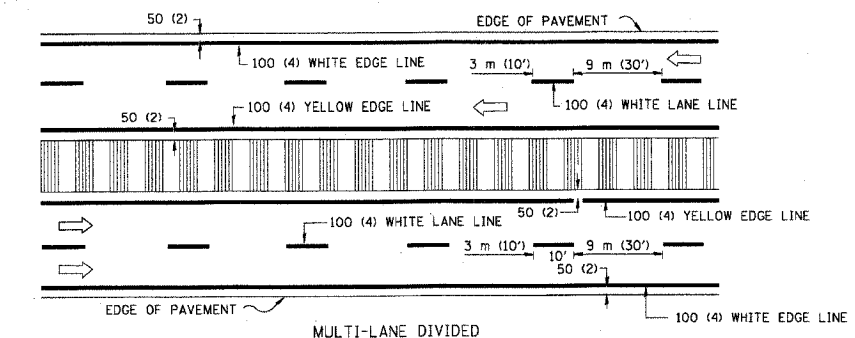
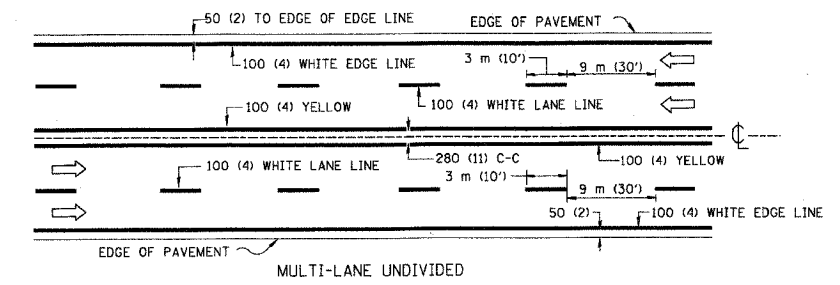
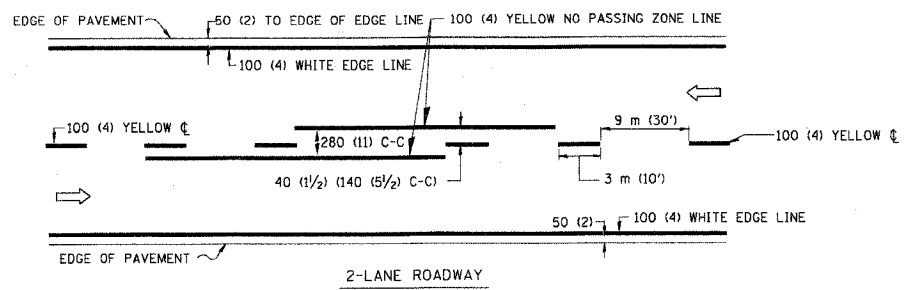
ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS  
 RAISED REFLECTIVE PAVEMENT MARKERS  
 (SNOW-PLOW RESISTANT)

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

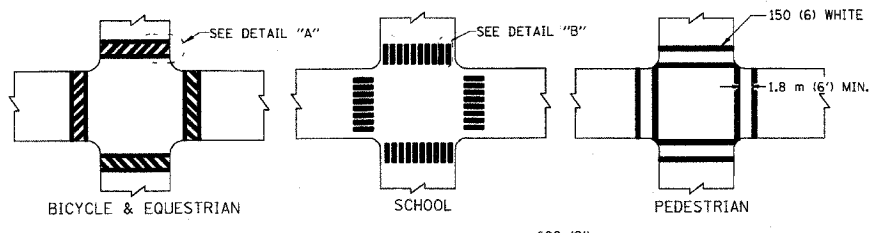
SCALE: NONE  
 DATE: 10/18/2002  
 DRAWN BY CADD  
 CHECKED BY



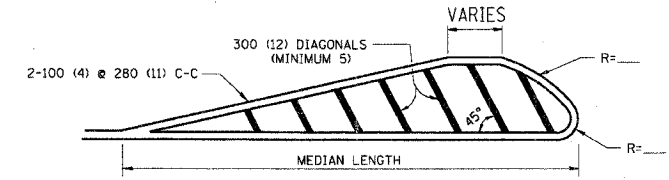
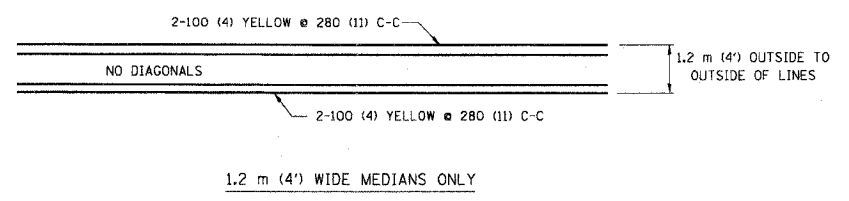


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

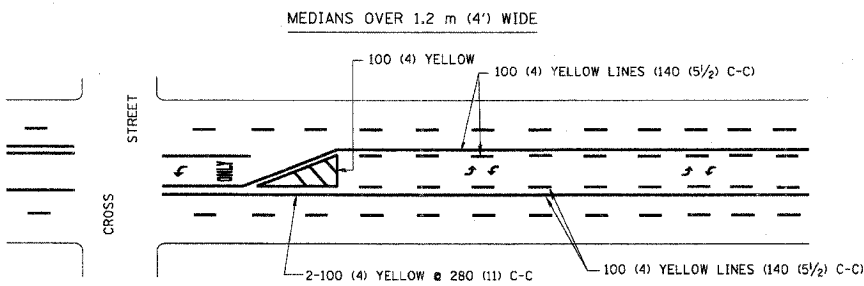
TYPICAL LANE AND EDGE LINE MARKING



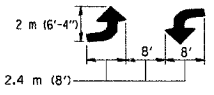
TYPICAL CROSSWALK MARKING



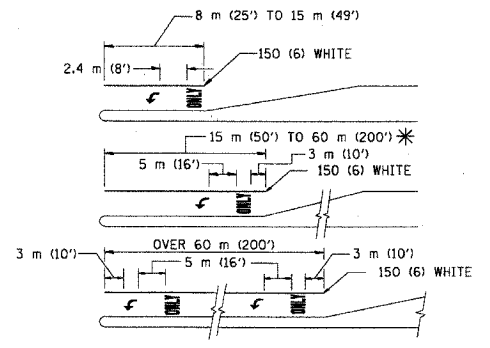
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.  
 DIAGONAL LINE SPACING: 15 m (50') C-C (LESS THAN 50 km/h (30 MPH))  
 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH))  
 45 m (150') C-C (MORE THAN 70 km/h (45 MPH))



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



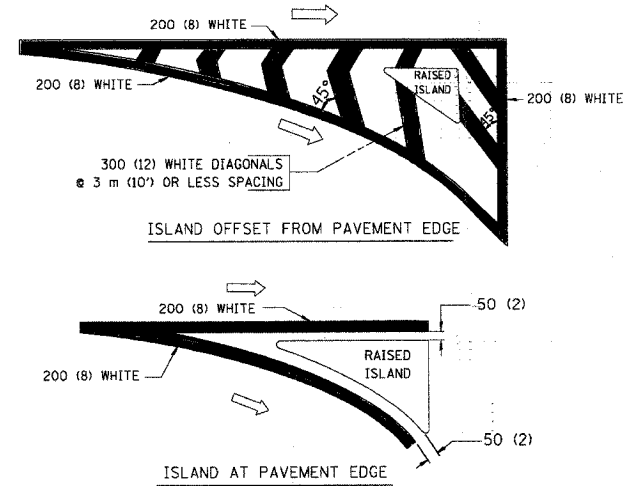
TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED.  
 \* AREA = 1.5 m<sup>2</sup> (15.6 SQ. FT.) ONLY AREA = 1.9 m<sup>2</sup> (20.8 SQ. FT.)

\* TURN LANES IN EXCESS OF 120 m (400') 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 ISLAND MARKING

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

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

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

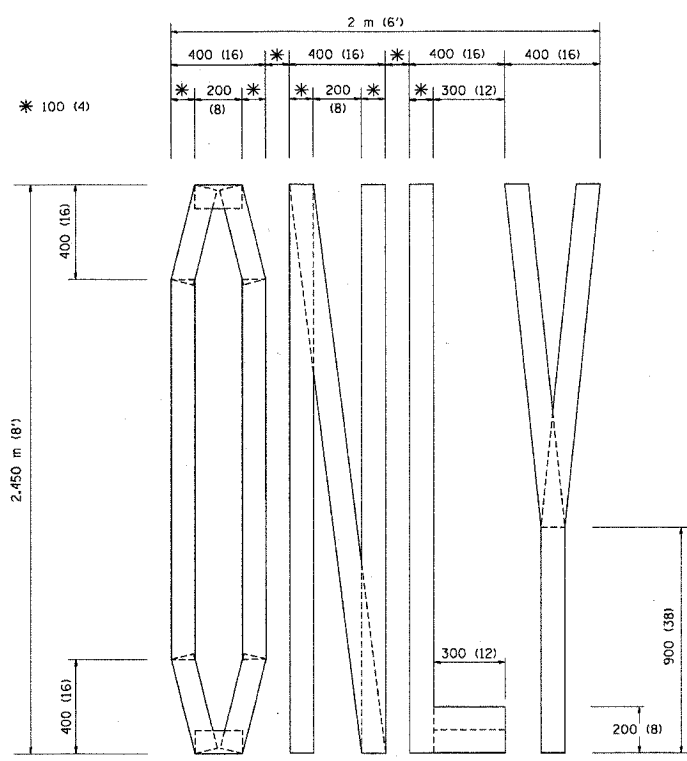
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DISTRICT ONE  
 TYPICAL PAVEMENT MARKINGS

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

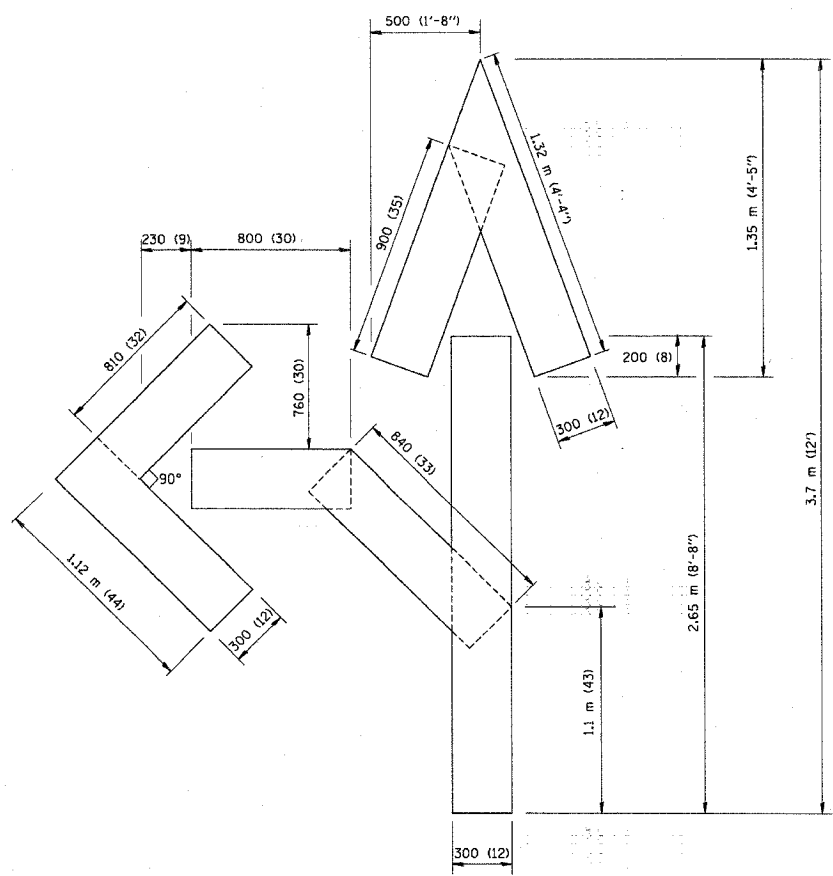
SCALE: NONE  
 DATE 10/18/2002  
 DRAWN BY CADD  
 CHECKED BY  
 TC-13

REVISION DATE: 01/06/00

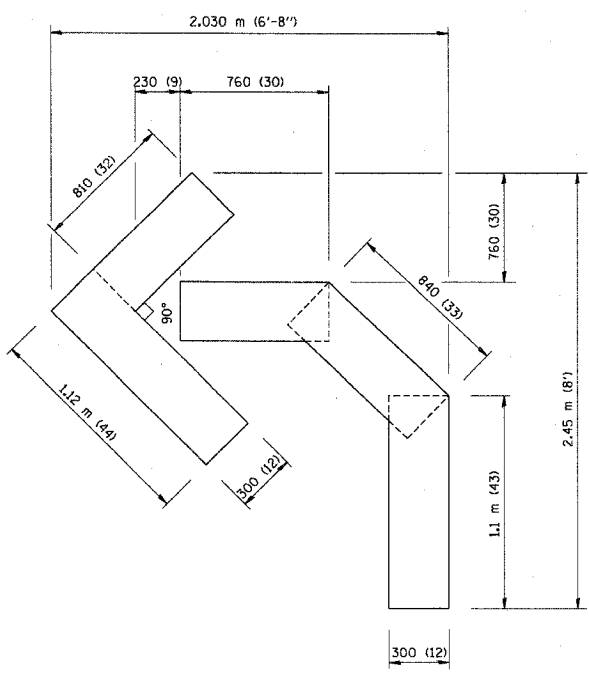
F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
93-0232-00-00	0232-00-00	KANE	07	78
STA.	TO STA.		FED. AID PROJECT	
			CONTRACT NO. 05758	



QUANTITY  
 100 (4) LINE = 19.7 m (64.1 ft.)  
 1.97 sq. m (21.1 sq. ft.)



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



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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

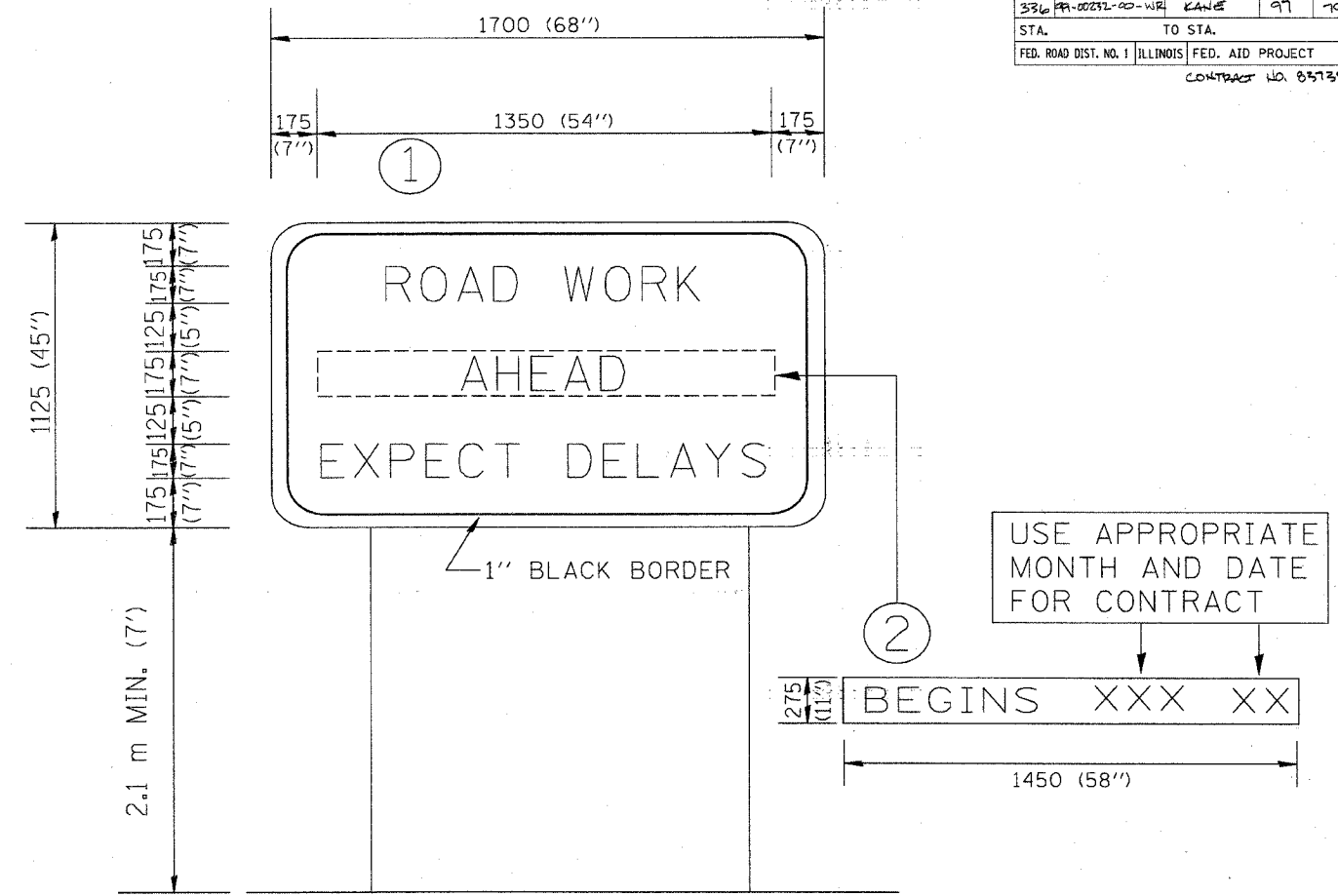
PAVEMENT MARKING  
 LETTERS AND SYMBOLS  
 FOR TRAFFIC STAGING

REVISIONS	
NAME	DATE
T. RAMMACHER	09/18/94
J. OBERLE	06/01/96
T. RAMMACHER	06/05/96
T. RAMMACHER	11/04/97
T. RAMMACHER	03/02/98
E. GOMEZ	08/28/00

SCALE: NONE  
 DATE 10/18/2002

DRAWN BY CADD  
 CHECKED BY

TC-16  
 REVISION DATE: 08/28/00



**NOTES:**

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

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

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION TEMPORARY INFORMATION SIGNING
NAME	DATE	
R. MIRS	9-15-97	
R. MIRS	12-11-97	
T. RAMMACHER	2-2-99	

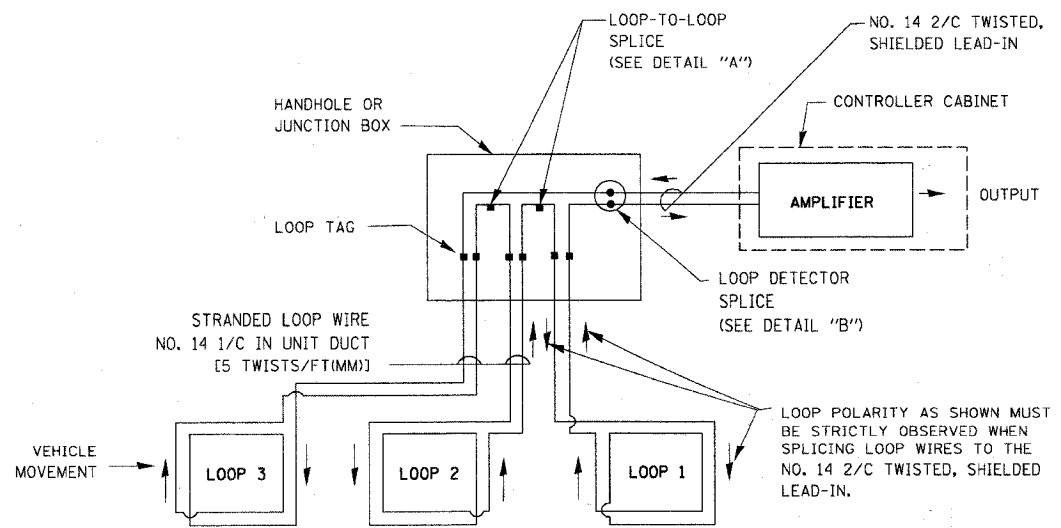
SCALE: DATE 10/18/2002 DRAWN BY: BUR. OF DESIGN CHECKED BY:



F.A.P. RITE:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-0232-00-W2	LAKE	97	81
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
CONTRACT NO. 85738				

**LOOP DETECTOR NOTES**

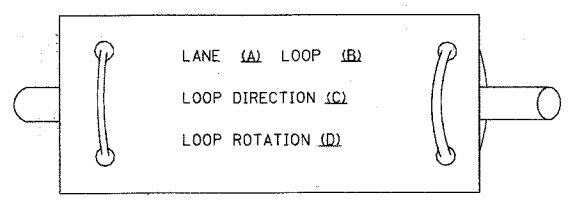
1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED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



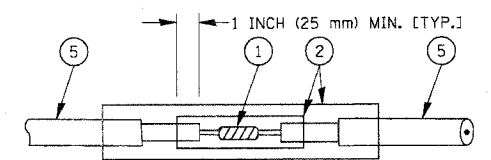
**DETECTOR LOOP WIRING SCHEMATIC**

- 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.

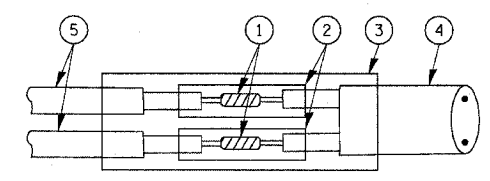
**LOOP LEAD-IN CABLE TAG**



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



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



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

**LOOP DETECTOR SPLICE**

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

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**

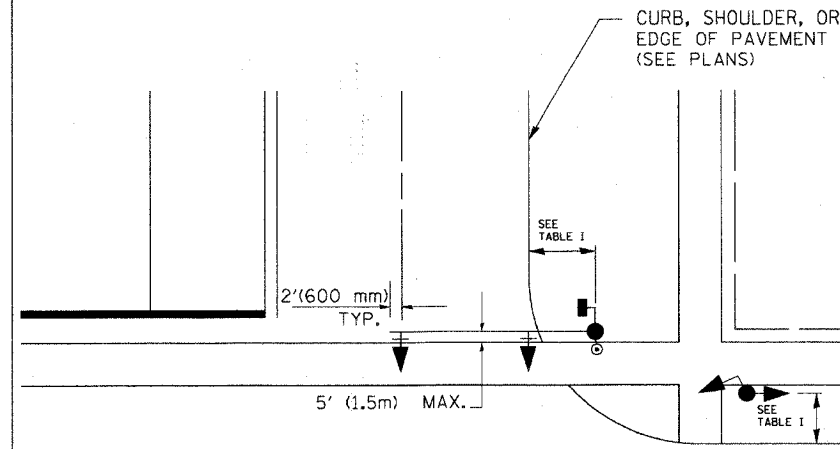
SCALE: VERT. NONE  
HORIZ.  
DATE 10/18/2002  
DRAWN BY: RWP  
DESIGNED BY: DAD  
CHECKED BY: DAZ  
SHEET 1 OF 4

10/18/2002  
c:\projects\diststd\std05.dgn  
VI-T-S05

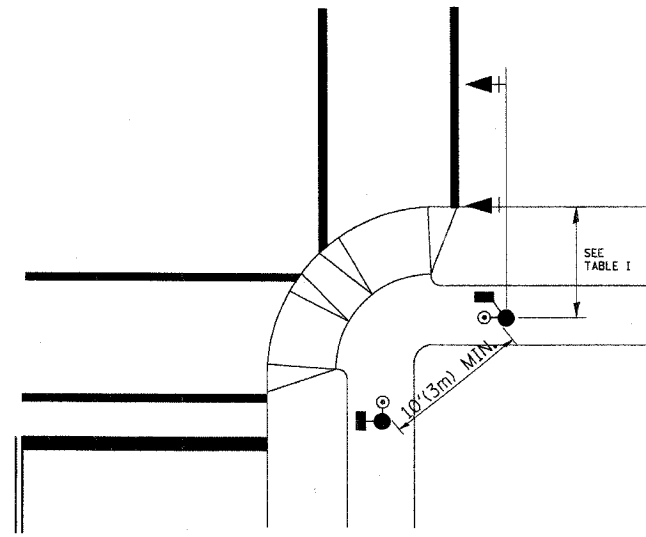
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
990	PA-00291-00-1/4	Kane	97	87
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 83736	

### 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

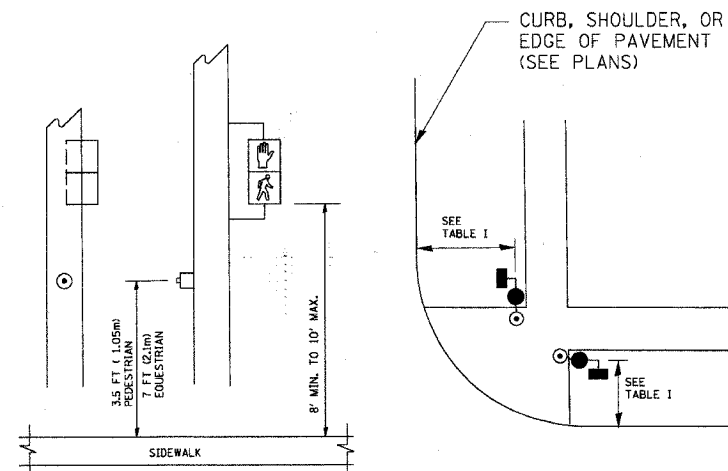


TABLE I

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

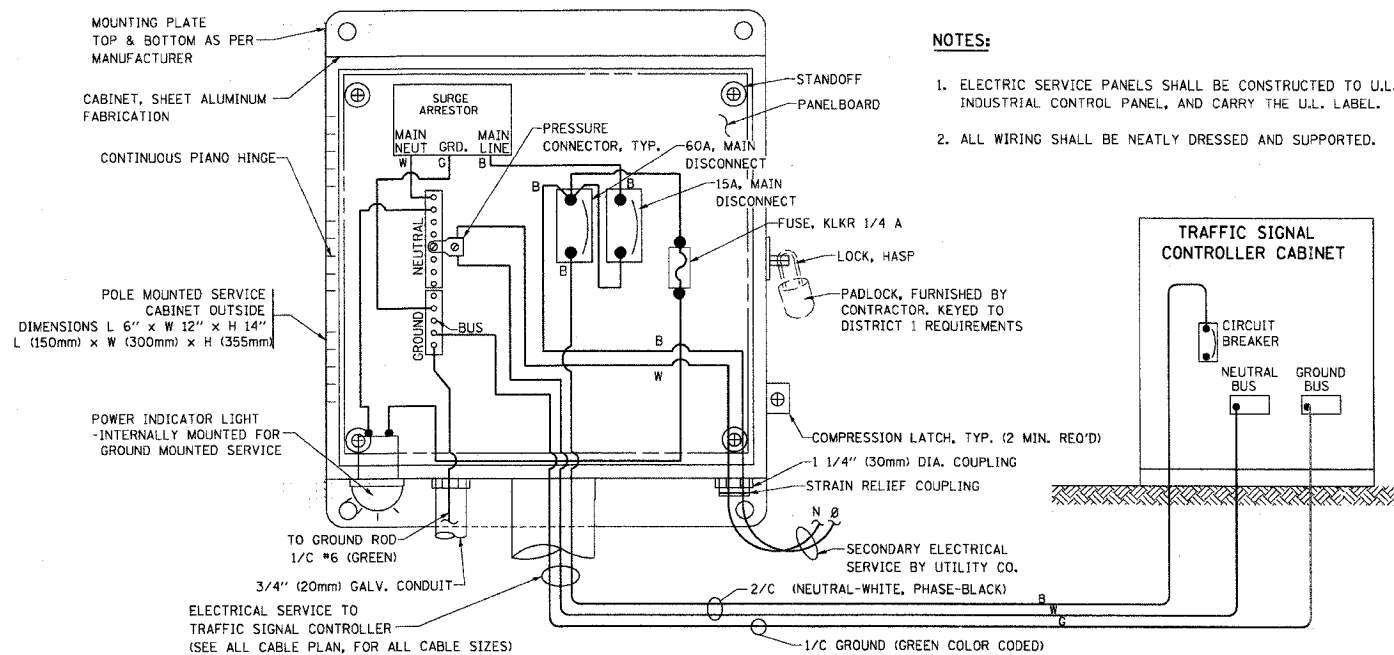
REVISIONS	
NAME	DATE
BUREAU OF TRAFFIC	1/01/02

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT 1  
STANDARD TRAFFIC SIGNAL  
DESIGN DETAILS

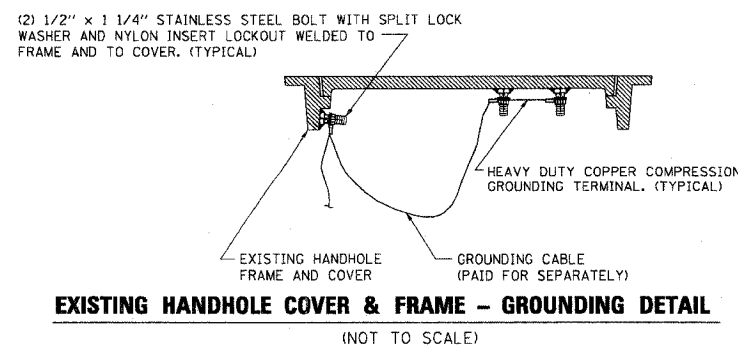
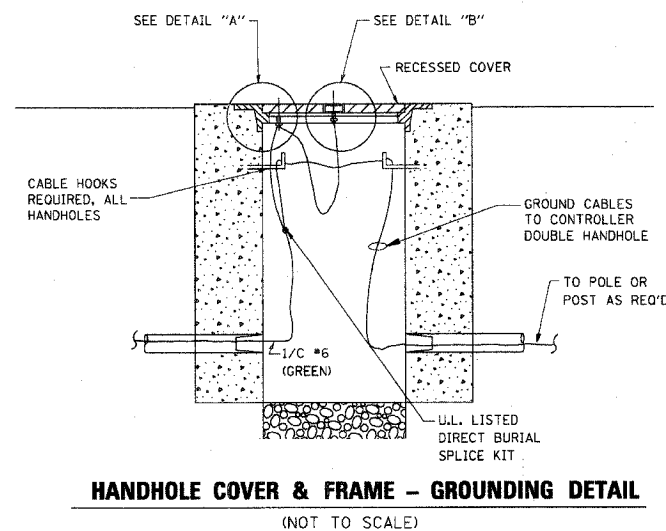
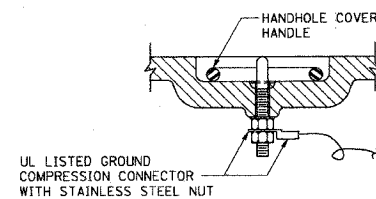
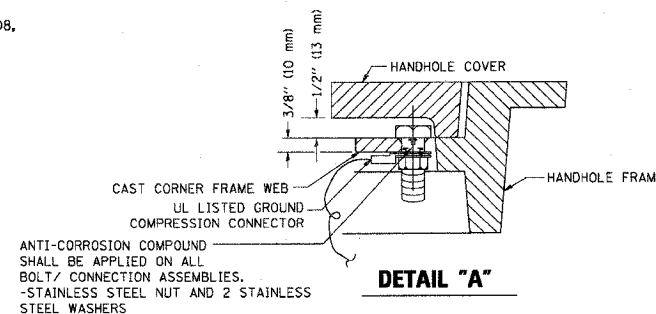
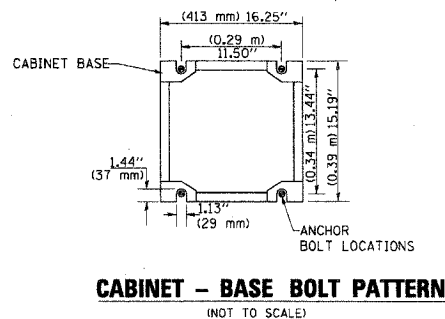
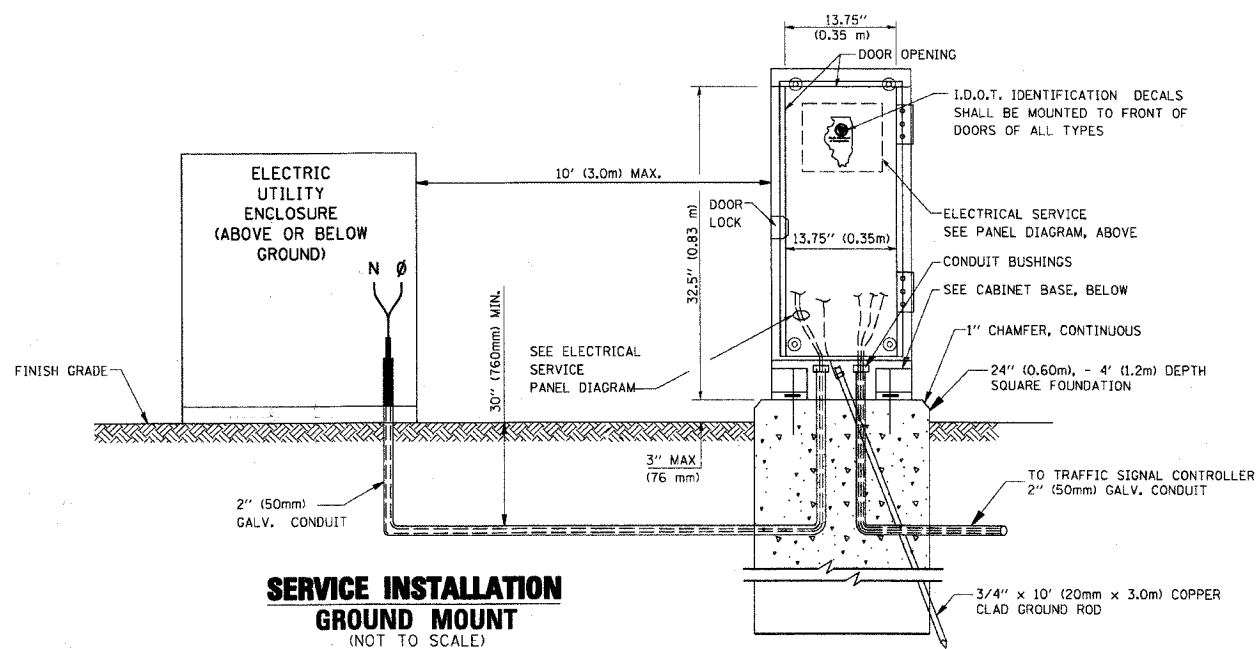
SCALE: VERT.  
HORIZ. NONE  
DATE 10/18/2002

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	95-00232-00-LR	KANE	97	83
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



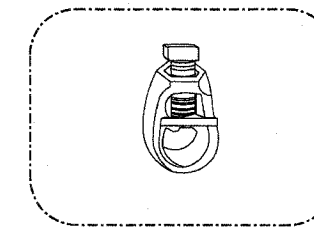
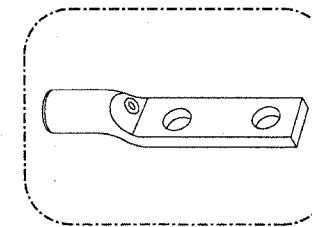
**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)  
SERVICE INSTALLATION POLE MOUNT (SHOWN)  
(NOT TO SCALE)**



**NOTES:**

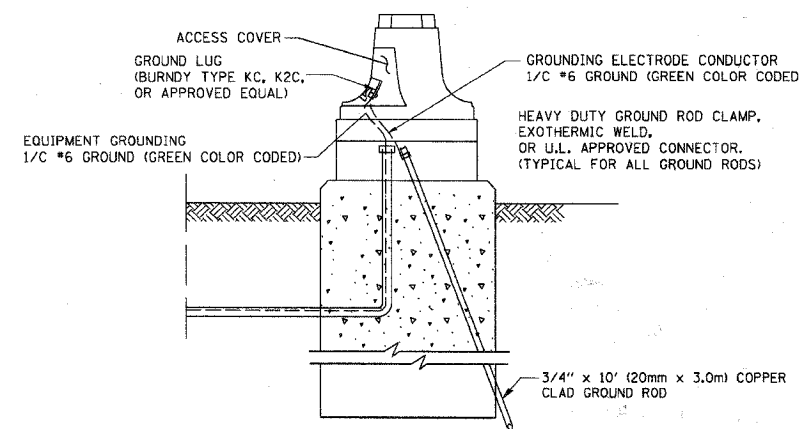
**GROUNDING SYSTEM**

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



**NOTES:**

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



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

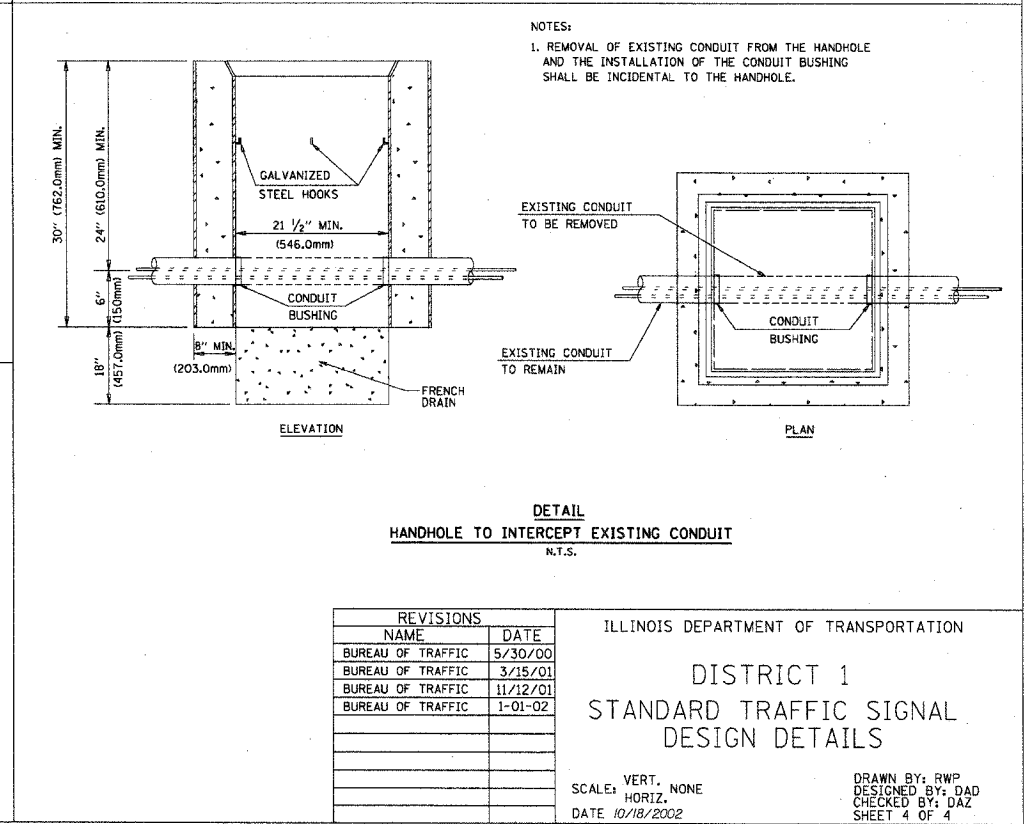
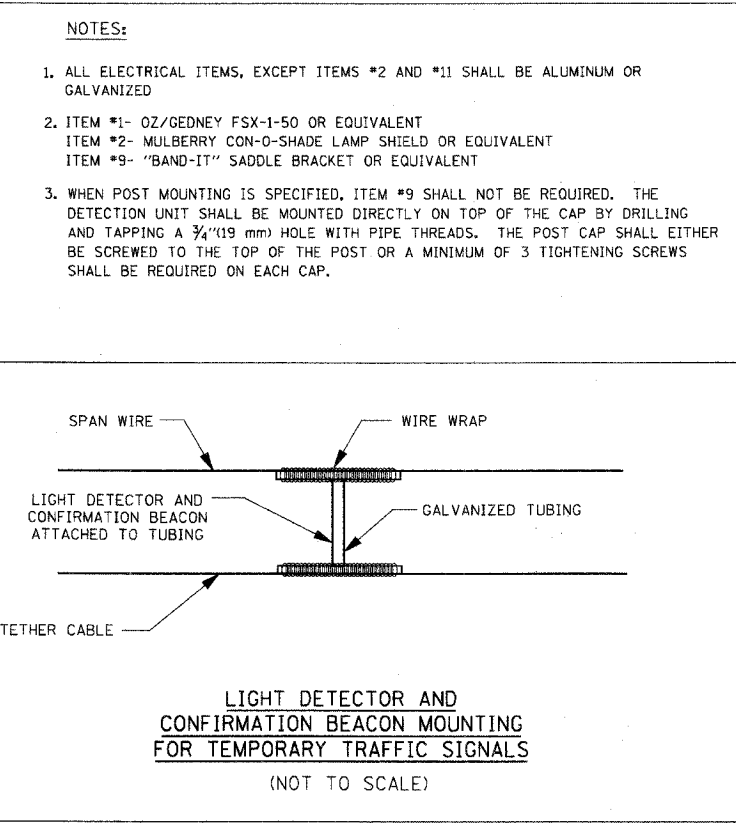
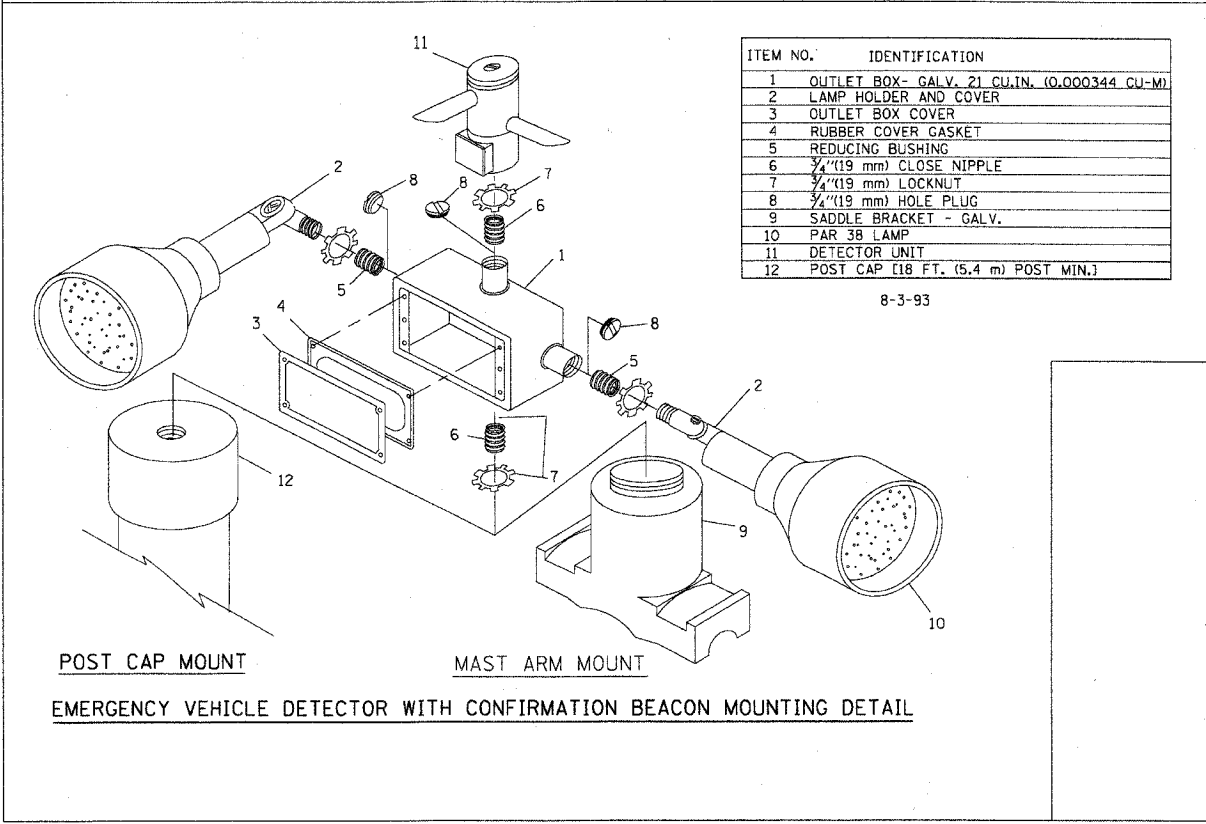
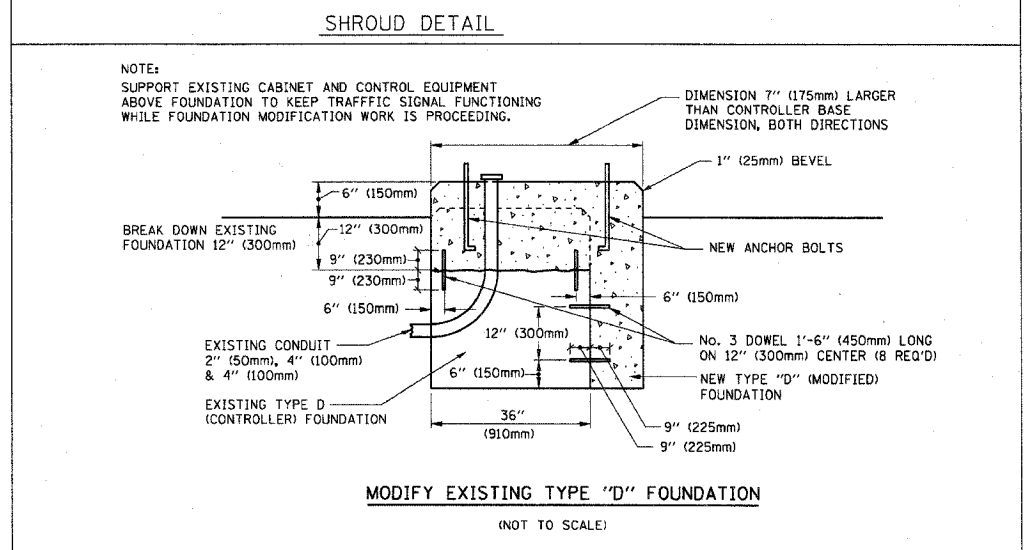
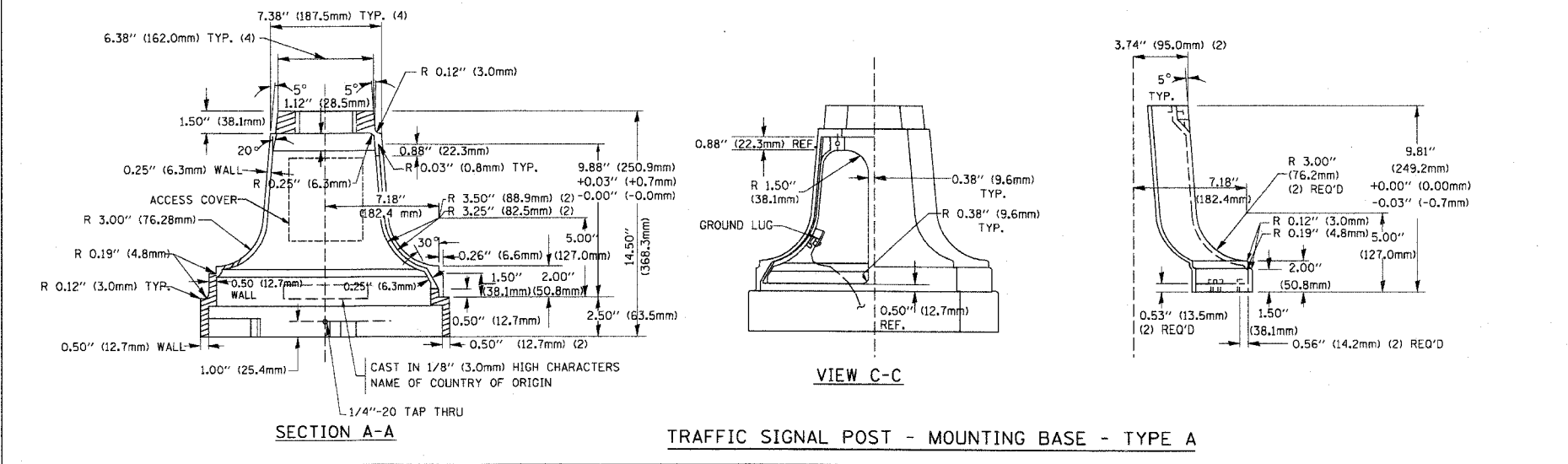
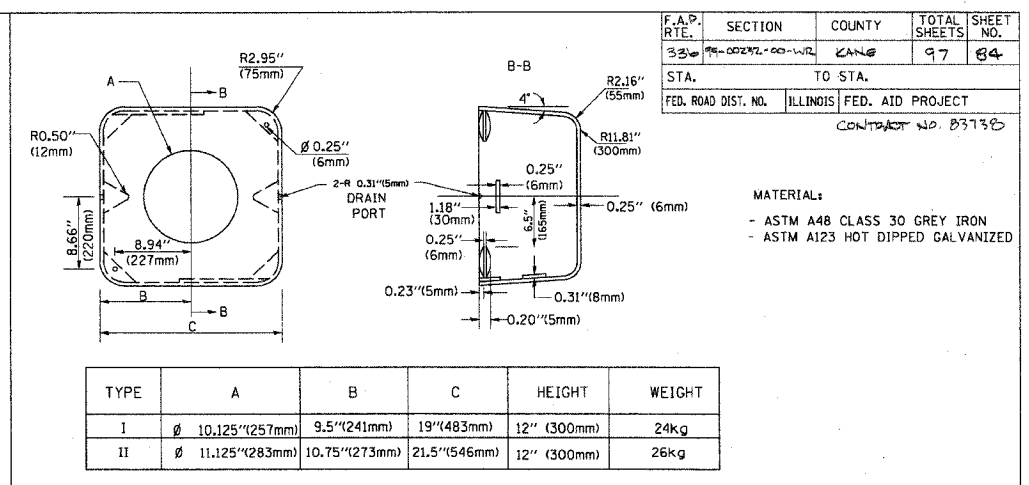
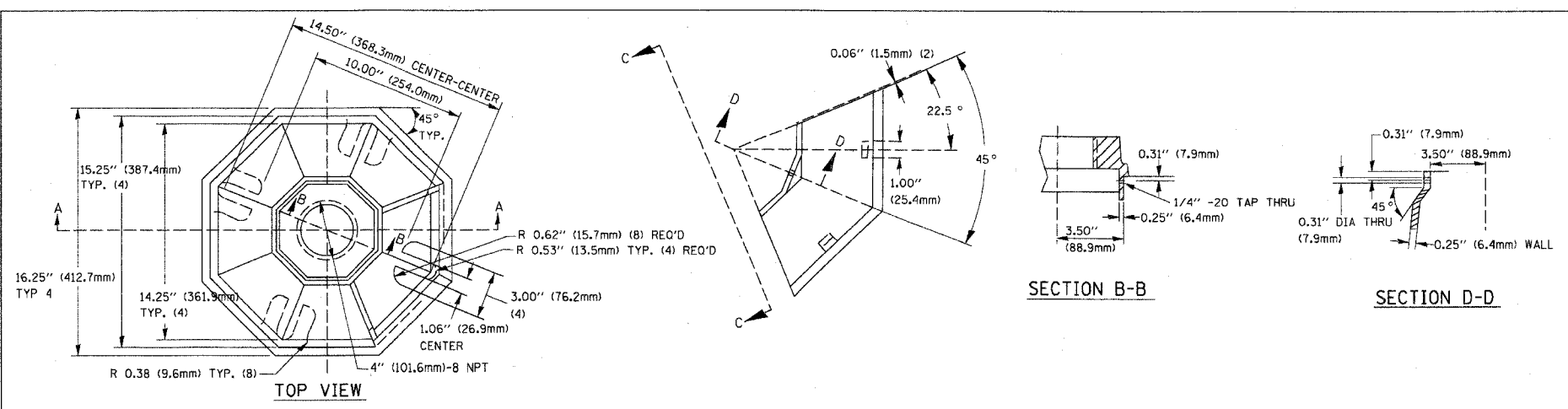
REVISIONS		
NAME	DATE	
CADD	5/30/00	
CADD	3/15/01	
BUREAU OF TRAFFIC	1/01/02	

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT 1  
STANDARD TRAFFIC SIGNAL  
DESIGN DETAILS

SCALE: VERT. NONE  
HORIZ.  
DATE 10/18/2002

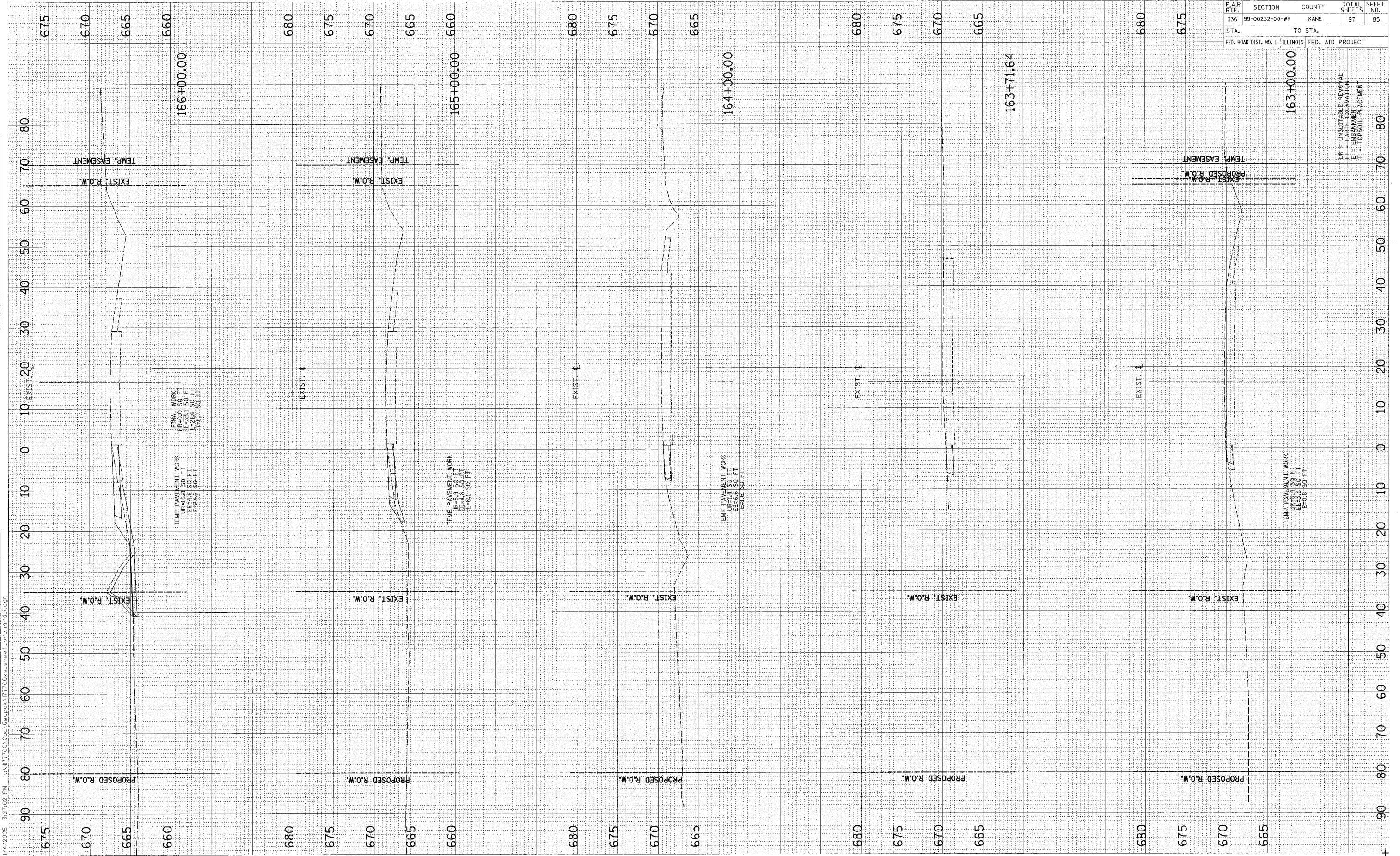
DRAWN BY: RWP  
DESIGNED BY: DAD  
CHECKED BY: DAZ  
SHEET 3 OF 4

F.A.P. SECTION COUNTY TOTAL SHEETS SHEET NO.	330 95-00292-00-102 ILLINOIS 97 84
STA. TO STA.	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	
CONTRACT NO. 837130	





F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	85
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



U = UNSUITABLE REMOVAL  
 E = EMBANKMENT  
 F = TOPSOIL PLACEMENT

1/4/2005 3:27:02 PM k:\117700\001\117700.dwg sheet\_07.dwg

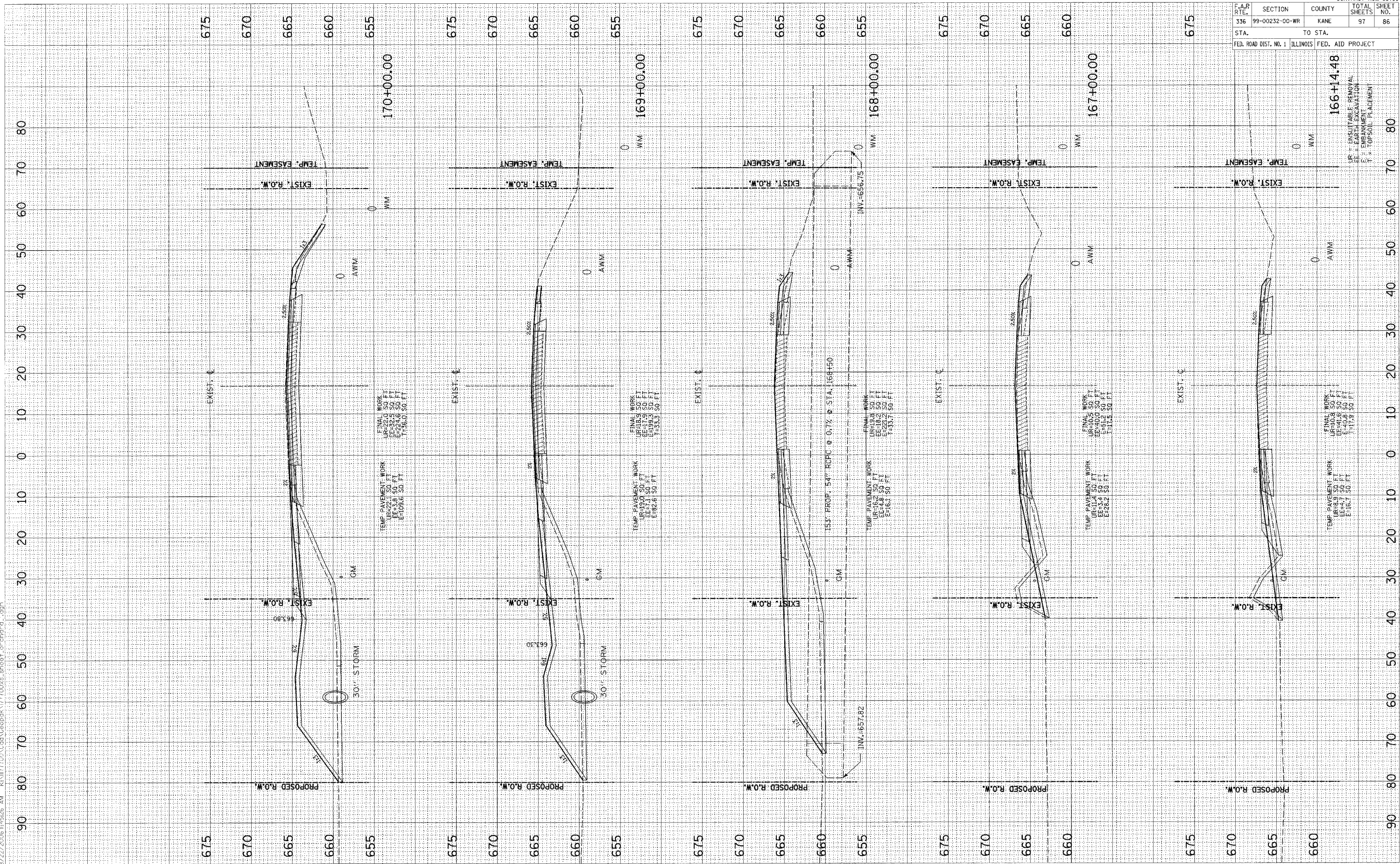
FINAL SURVEY	BY	DATE
NOTE BOOK		
AREAS CHECKED		

ORIGINAL SURVEY	BY	DATE
NOTE BOOK		
AREAS CHECKED		

ORIGINAL SURVEY	DATE
NOTED SURVEY	BY
NOTE BOOK	
AMPLAS	
TEMPLATE	
MS	

FINAL SURVEY	DATE
NOTED SURVEY	BY
NOTE BOOK	
AMPLAS	
TEMPLATE	
MS	

8/22/2006 8:45:26 AM K:\M17700\Cad\CADDOK\17700\AS-37001-07\019-d'.dgn



F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	86
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

166+14.48  
UR = UNSUITABLE REMOVAL  
EE = EARTH EXCAVATION  
E = ENHANCEMENT  
T = TOPSOIL PLACEMENT

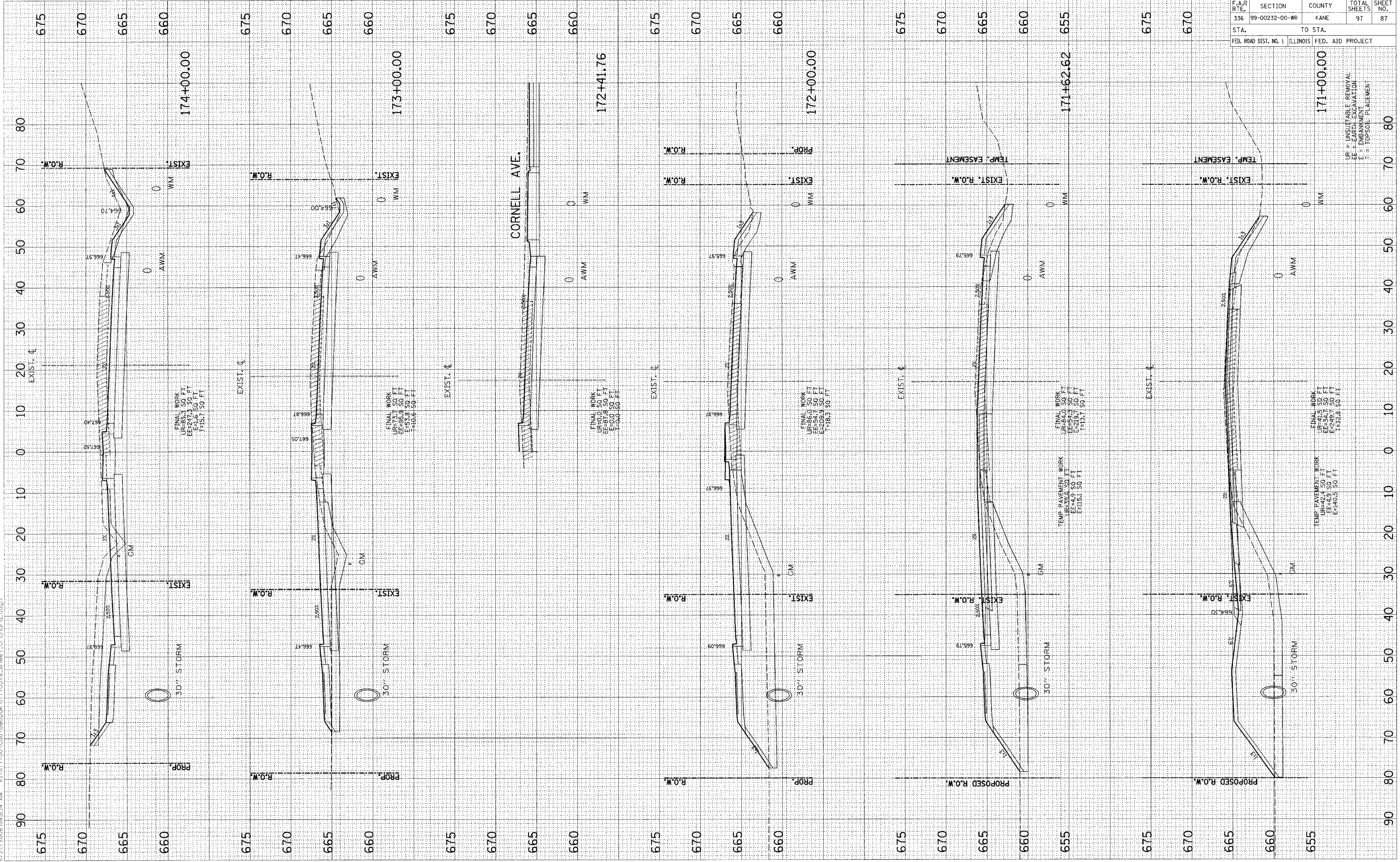
ORCHARD ROAD CROSS SECTIONS



E:\27\2006\114534.dwg 8/27/2006 11:45:34 AM k:\1117700\114534.dwg\1117700\114534.dwg

ORIGINAL SURVEY BY DATE  
SURVEYED BY DATE  
NOTE BOOK NO.  
TEMPERATURE AREAS CHECKED

FINAL SURVEY BY DATE  
SURVEYED BY DATE  
NOTE BOOK NO.  
TEMPERATURE AREAS CHECKED



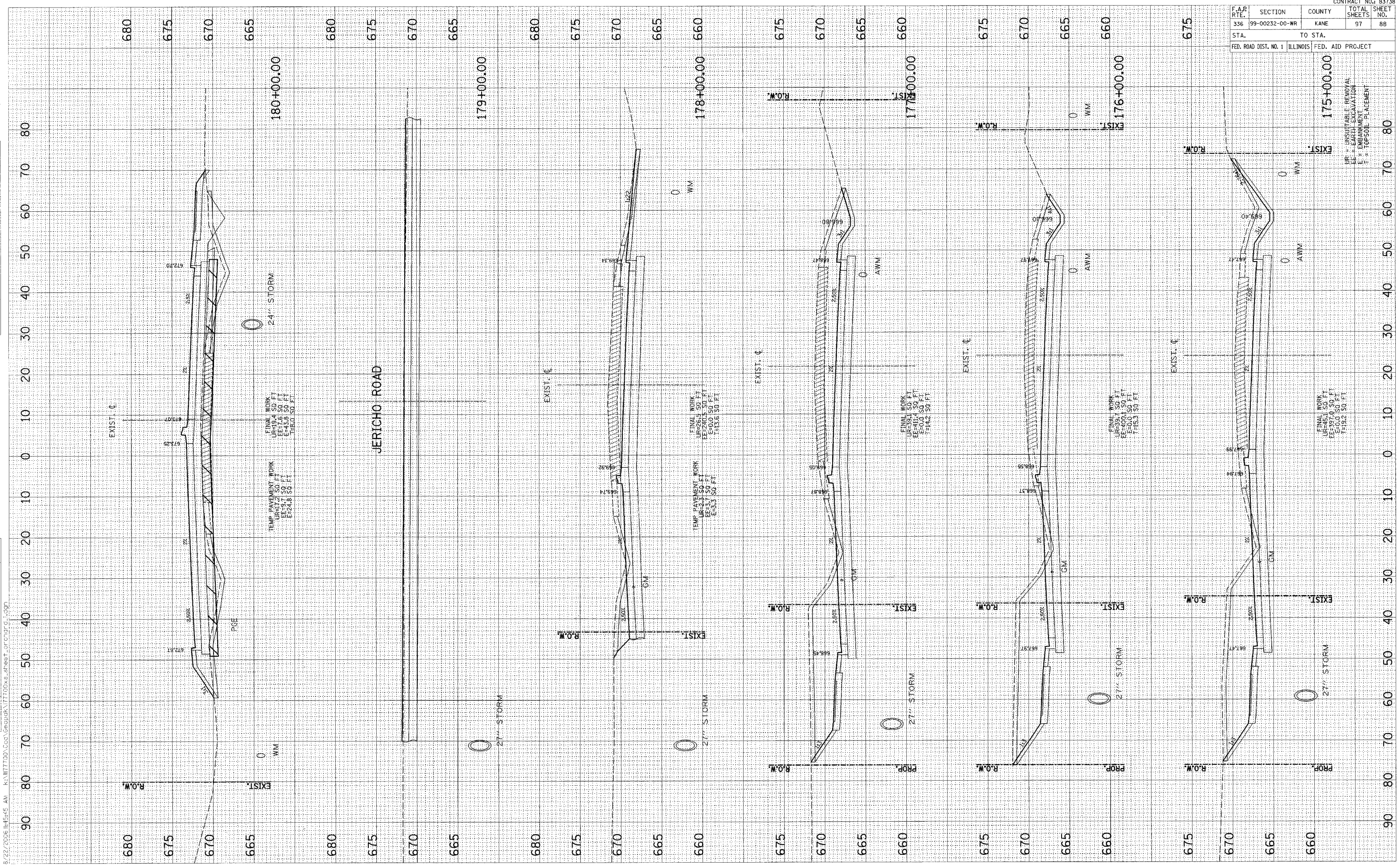
F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	87
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

UP = UNSUITABLE REMOVAL  
EE = EARTH EXCAVATION  
EM = EMBANKMENT  
T = TOP SOIL PLACEMENT

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	88
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	DATE
SURVEYED	BY
NOTE BOOK	
AREAS CHECKED	

ORIGINAL SURVEY	DATE
SURVEYED	BY
NOTE BOOK	
AREAS CHECKED	



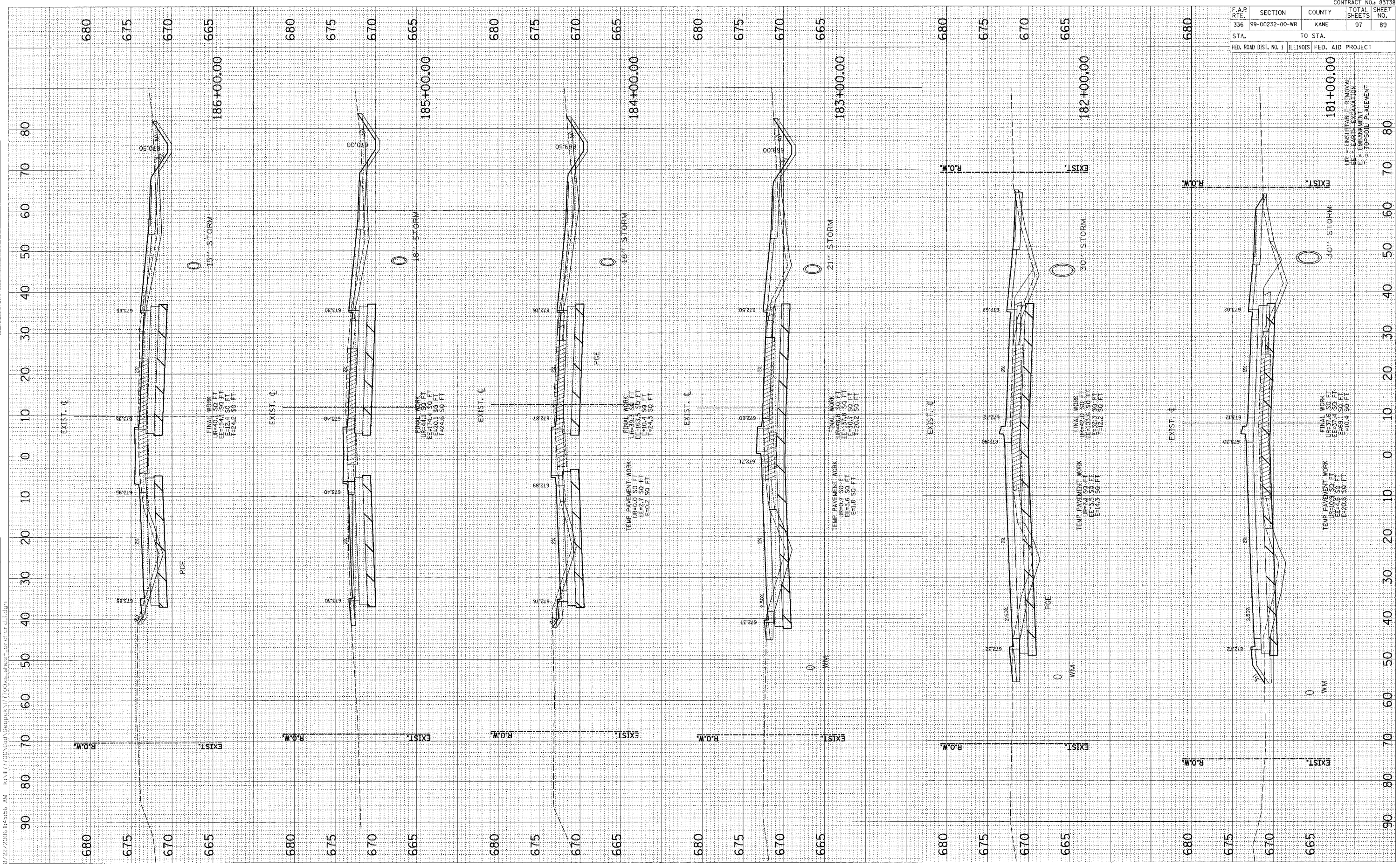
UR = UNSUITABLE REMOVAL  
 EE = EARTH EXCAVATION  
 E = EMBANKMENT  
 T = TOPSOIL PLACEMENT



8/22/2016 14:55:56 AM F:\11117700\00\Geopack\1117700x6\_81081\_02-01-16.dwg

ORIGINAL SURVEY	BY	DATE
SURVEYED		
NOTE BOOK		
AREAS CHECKED		
NO.		

FINAL SURVEY	BY	DATE
SURVEYED		
NOTE BOOK		
AREAS CHECKED		
NO.		



F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	89
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

UR = UNSUITABLE REMOVAL  
 EF = EXISTING FINISH  
 E = EXISTING GRADE  
 F = PROPOSED FINISH

F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	96	90
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

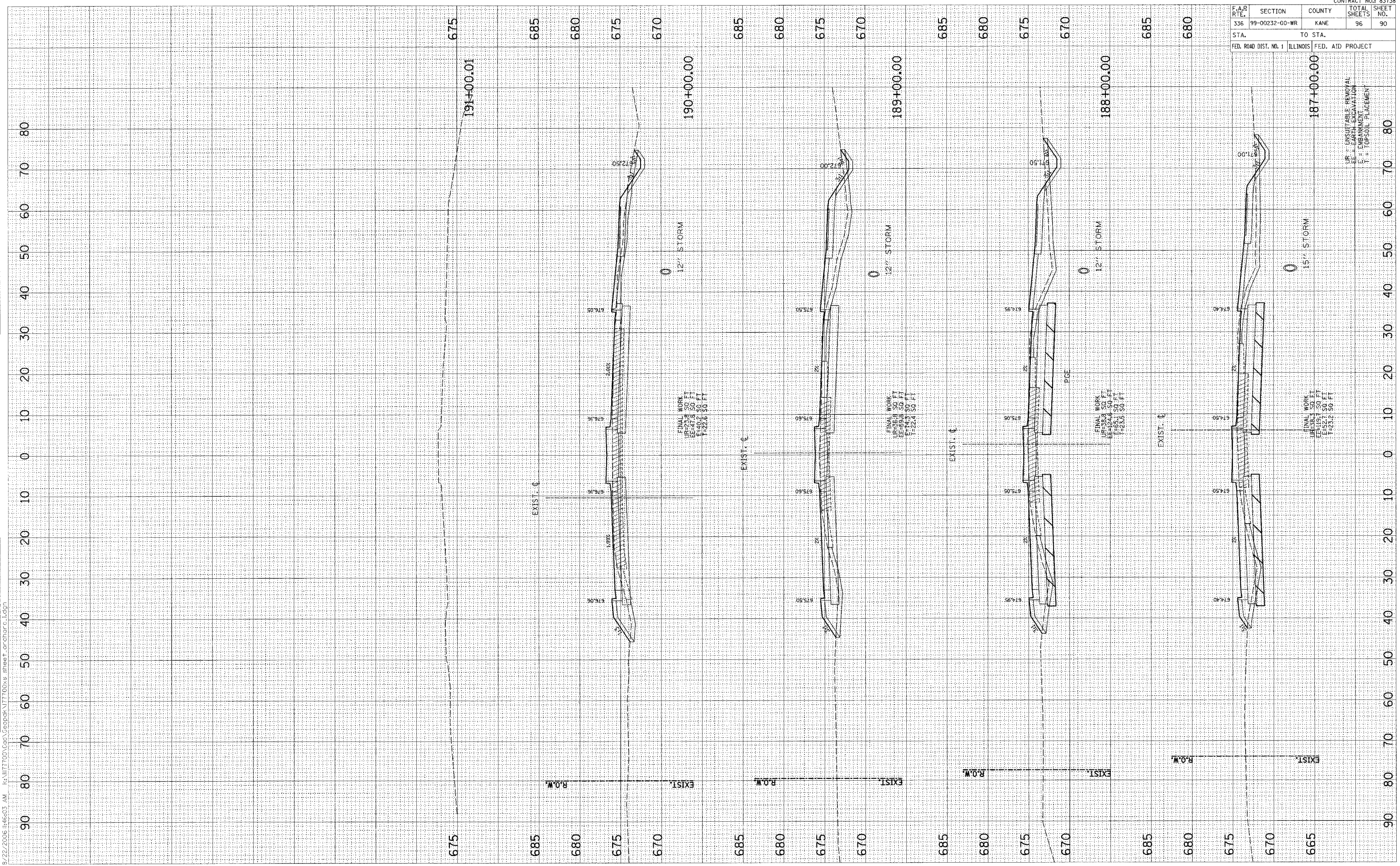
FINAL SURVEY

DATE	BY
NO.	AREAS CHECKED

ORIGINAL SURVEY

DATE	BY
NO.	AREAS CHECKED

9/22/2006 11:46:03 AM I:\117700\Doc\9900232-00\Sheet\orchard.cad



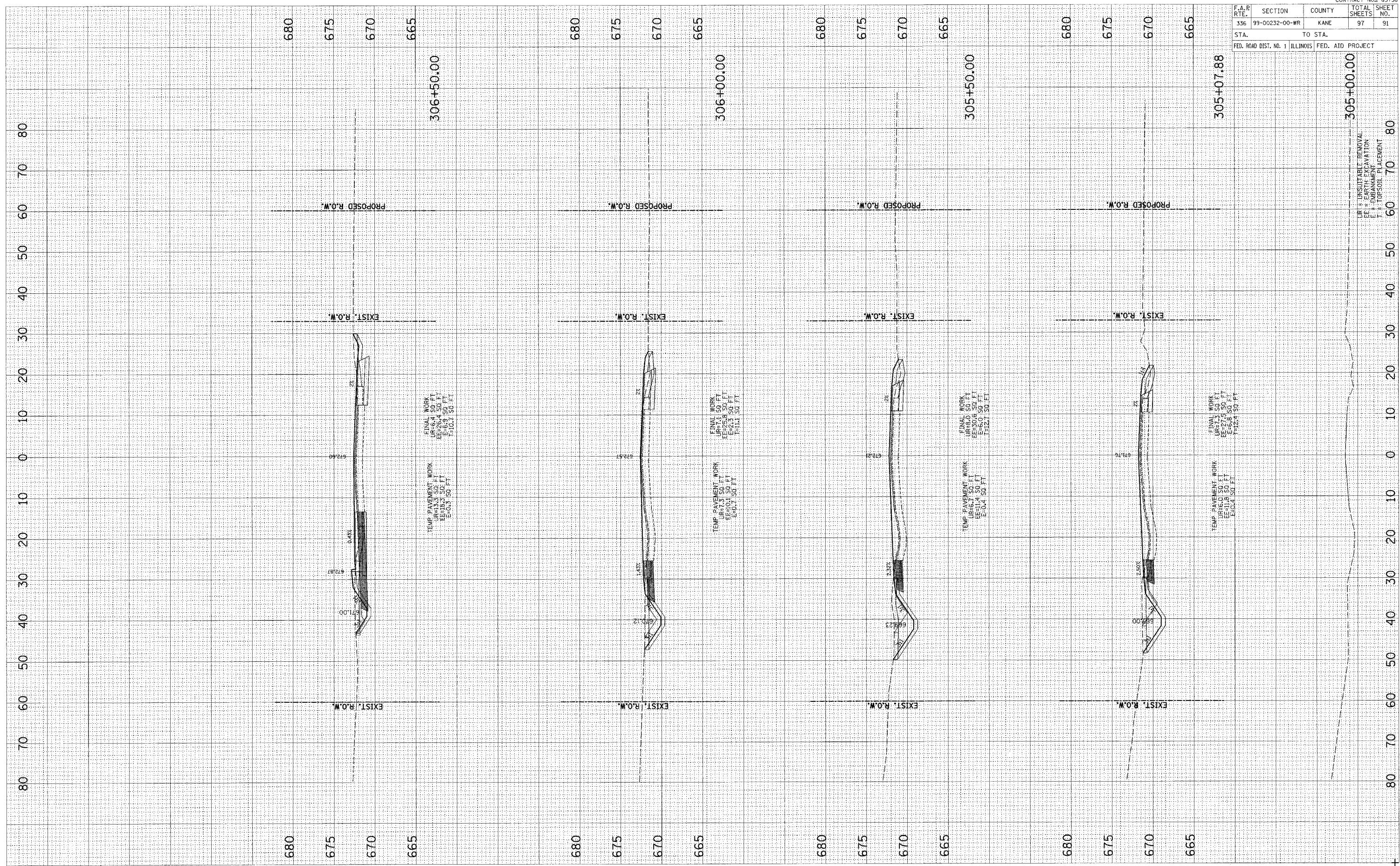
UP = UNSUITABLE REMOVAL  
 BE = EARTH EXCAVATION  
 F = EMBANKMENT  
 T = TOPSOIL PLACEMENT



F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	91
STA.	TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

FINAL SURVEY	CONVERTED	BY	DATE
NOTE BOOK	PLOTTED		
AREAS CHECKED	TEMPLATE		
MS.	AREAS CHECKED		

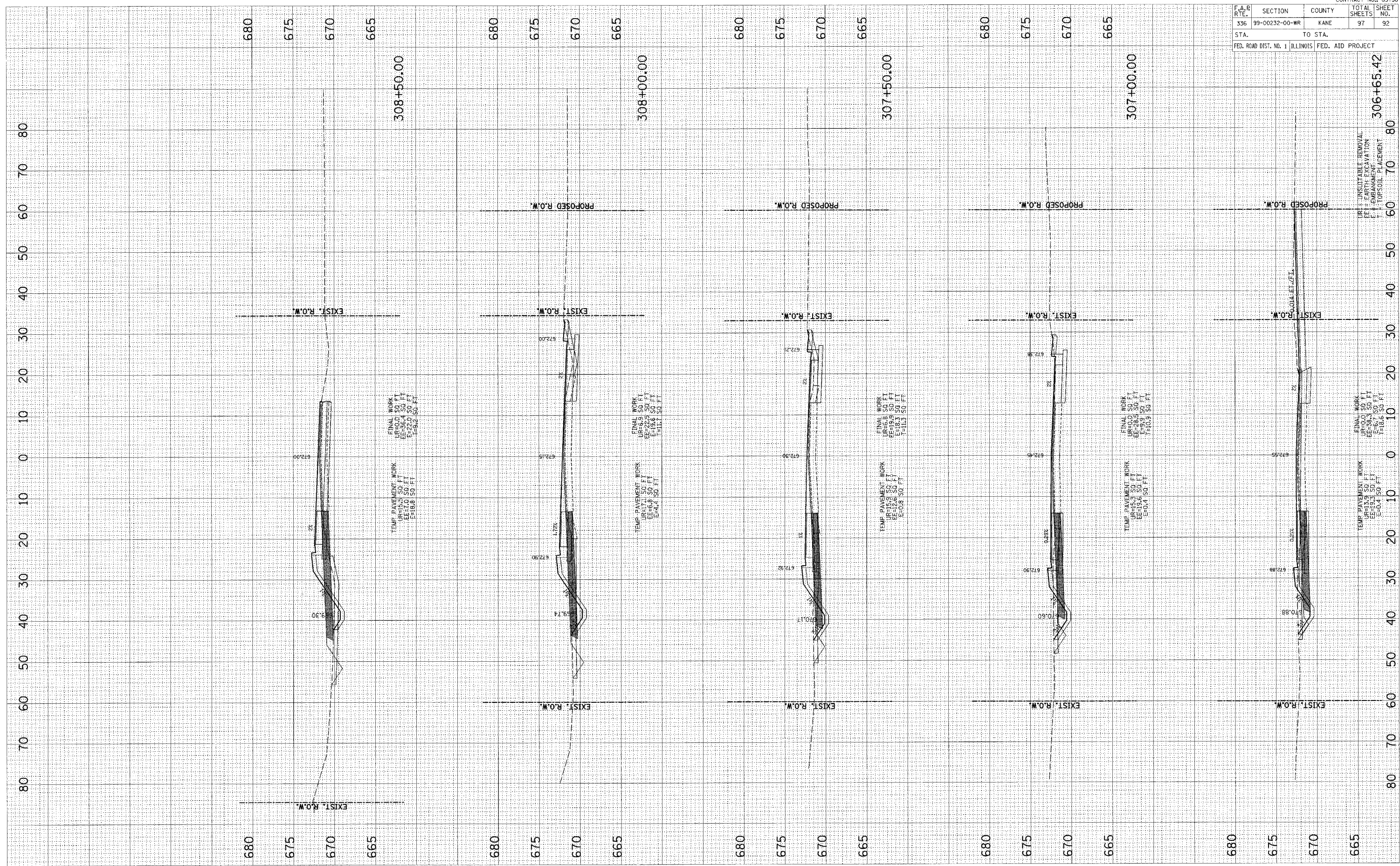
ORIGINAL SURVEY	CONVERTED	BY	DATE
NOTE BOOK	PLOTTED		
AREAS CHECKED	TEMPLATE		
MS.	AREAS CHECKED		



F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	92
STA.	TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

FINAL SURVEY	DATE
BY	
REVISIONS	
NO.	

ORIGINAL SURVEY	DATE
BY	
REVISIONS	
NO.	



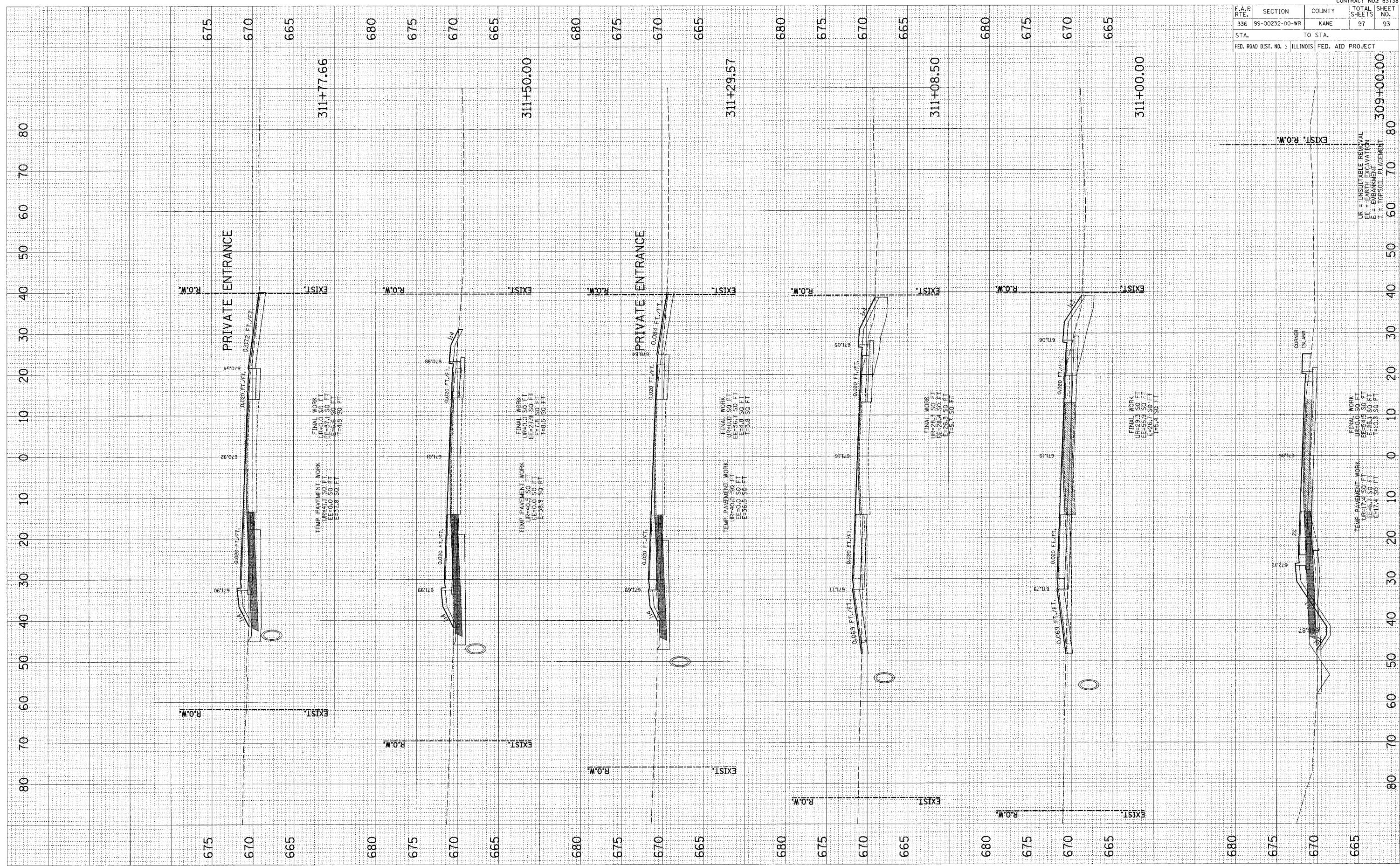
JERICHO ROAD CROSS SECTIONS



F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	93
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	DATE	BY
REVISED		
PLOTTED		
TEMPLATE		
AREAS CHECKED		
NOTE BOOK		
NO.		

ORIGINAL SURVEY	DATE	BY
REVISED		
PLOTTED		
TEMPLATE		
AREAS CHECKED		
NOTE BOOK		
NO.		

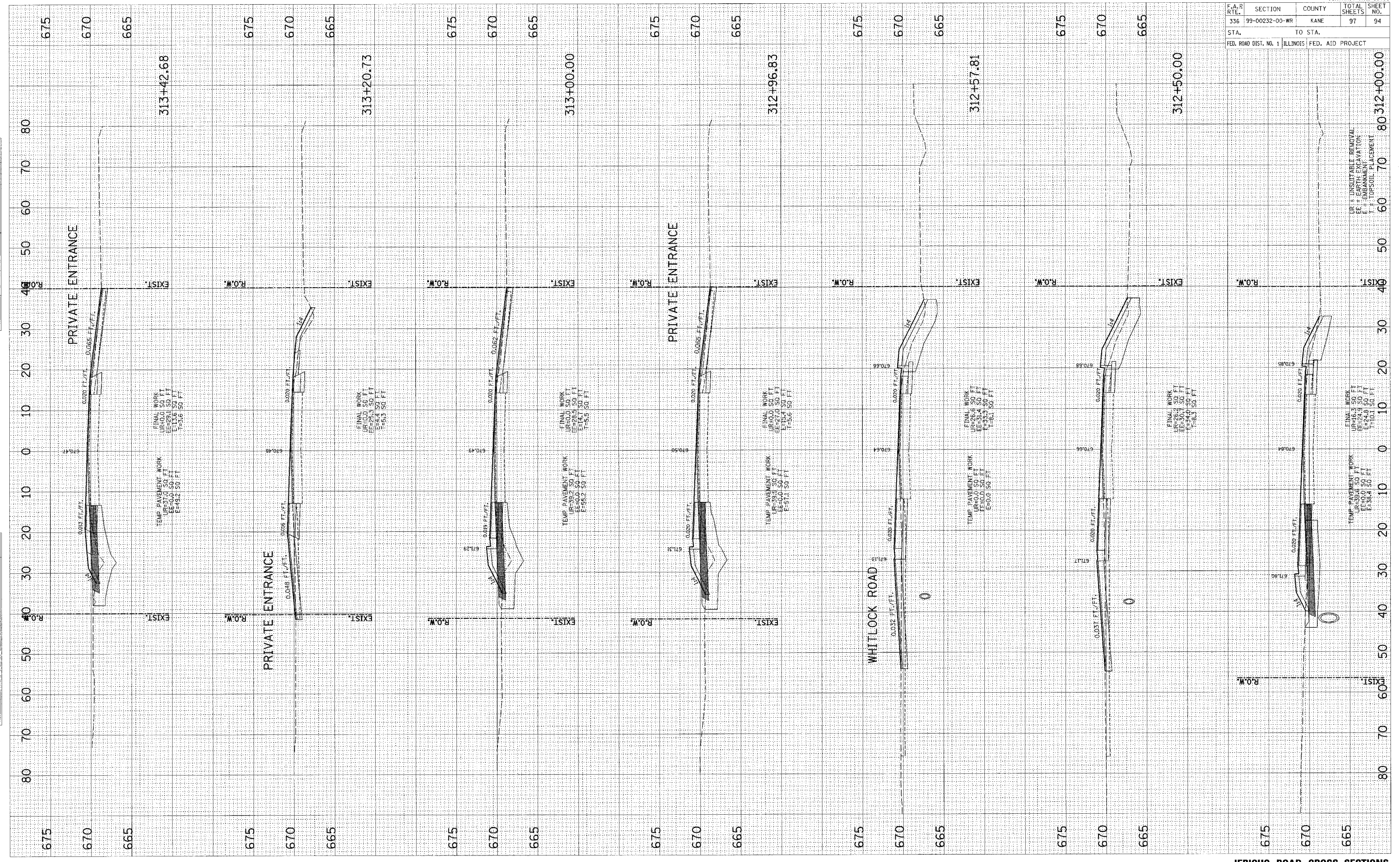


JERICHO ROAD CROSS SECTIONS

F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	94
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	BY	DATE
NOTED BOOK		
AREAS CHECKED		

ORIGINAL SURVEY	BY	DATE
NOTED BOOK		
AREAS CHECKED		

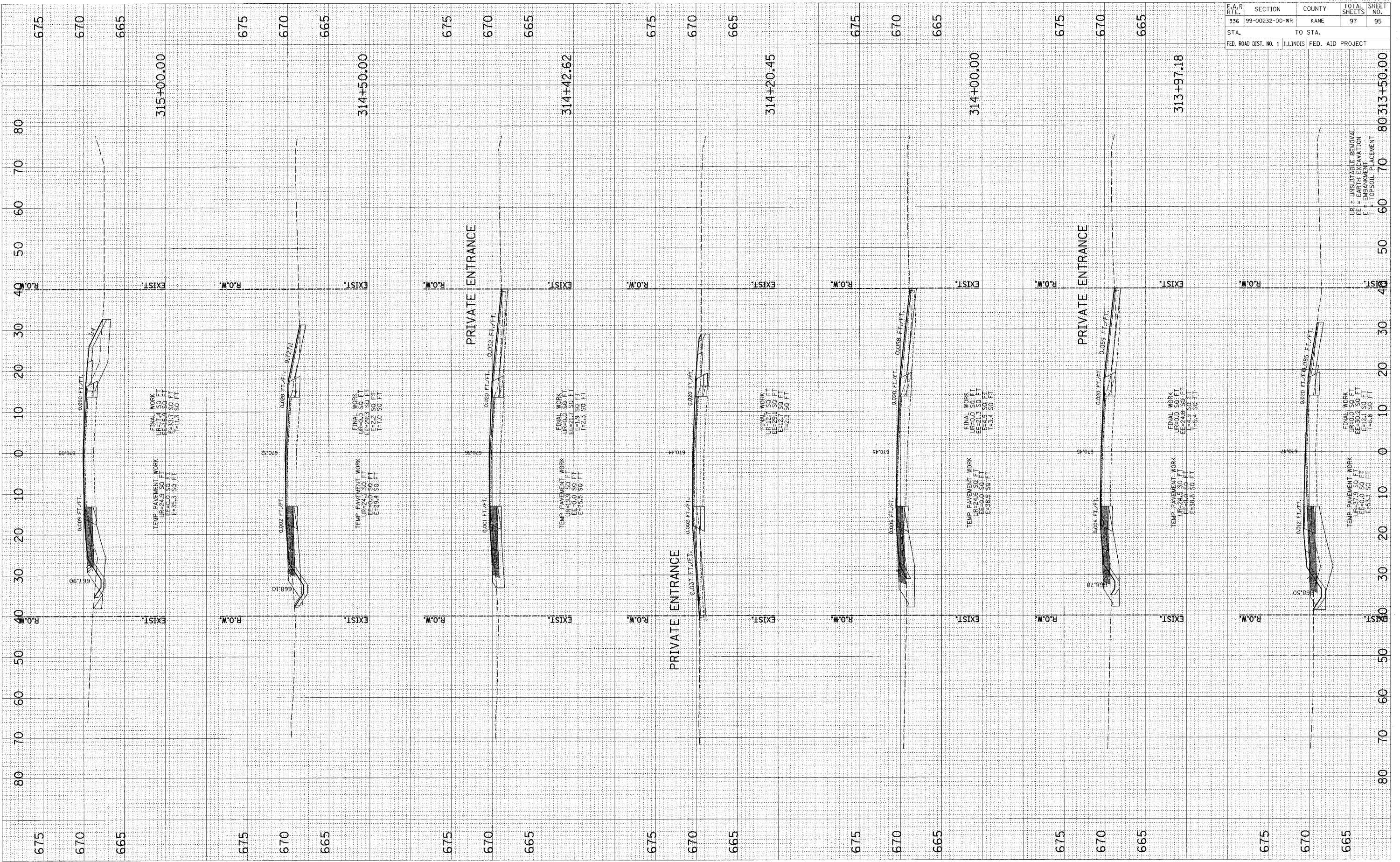




F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	95
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	BY	DATE
PLOTTED		
NOTE BOOK		
AREAS		
CHECKED		

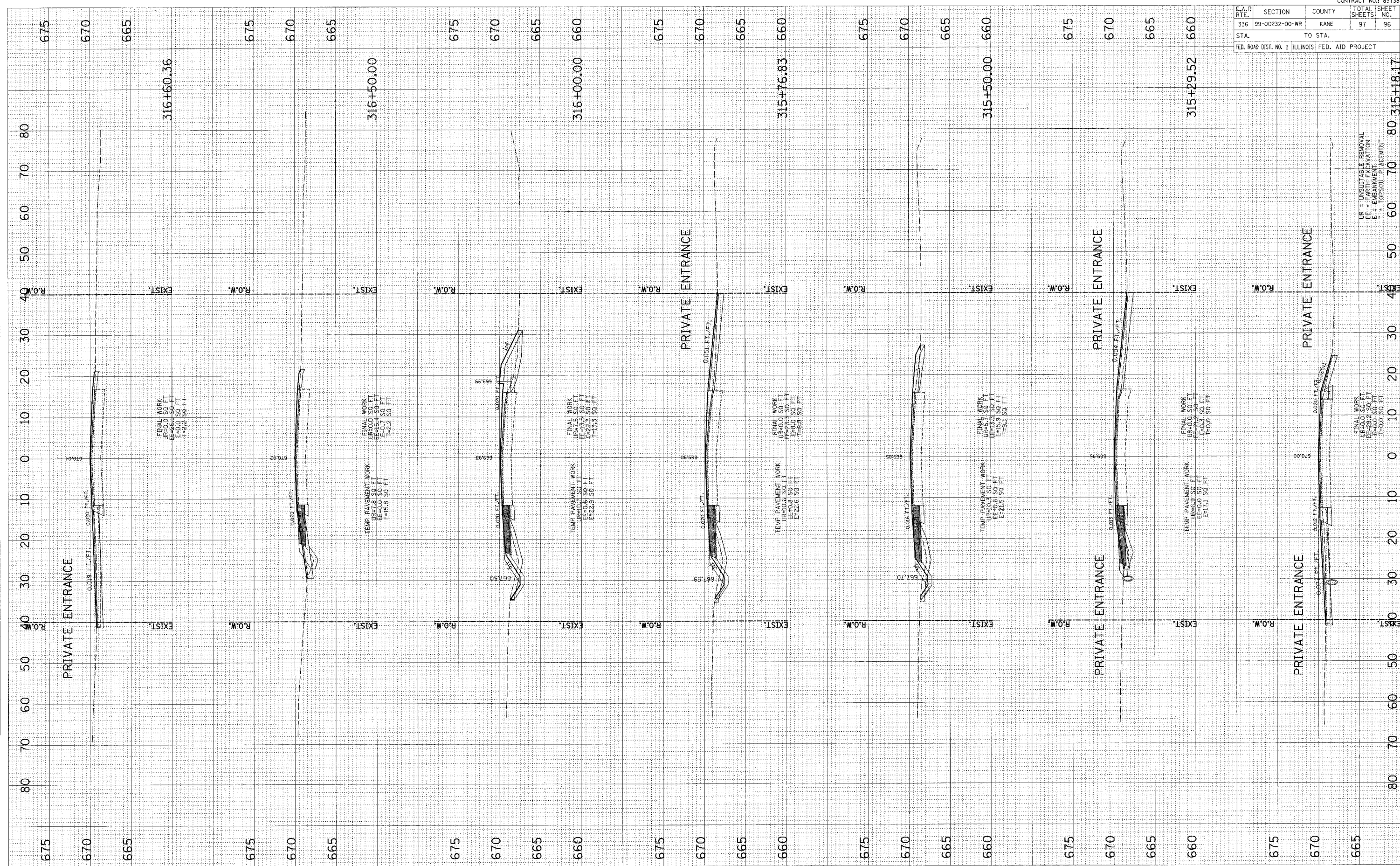
ORIGINAL SURVEY	BY	DATE
PLOTTED		
NOTE BOOK		
AREAS		
CHECKED		



F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	96
STA.		TO STA.		
FED. ROAD DIST. No. 1		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	DATE
BY	
NOTE BOOK	
AREAS CHECKED	

ORIGINAL SURVEY	DATE
BY	
NOTE BOOK	
AREAS CHECKED	



UR = UNSUITABLE REMOVAL  
 EE = EMBANKMENT  
 ES = TOPSOIL PLACEMENT  
 T = TOPSOIL PLACEMENT



F.A. B. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-00-WR	KANE	97	97
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	AREAS CHECKED		

