

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62418				

INDEX OF SHEETS

STATE STANDARDS

GENERAL NOTES

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STANDARD NO.	DESCRIPTION
000001-04	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001	AREAS OF REINFORCEMENT BARS
280001-02	TEMPORARY EROSION CONTROL SYSTEM
482001	BITUMINOUS SHOULDER DETAILS - ADJACENT TO FLEXIBLE PAVEMENT
515001-02	NAME PLATE FOR BRIDGES
601001	SUB-SURFACE DRAINS
601101	CONCRETE HEADWALL FOR PIPE DRAIN
602001	CATCH BASIN TYPE A
602601	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
604036-01	GRATE TYPE 8
606401	PAVED DITCH
630001-06	STEEL PLATE BEAM GUARDRAIL
630101-06	GUARDRAIL MOUNTED ON EXISTING CULVERTS
630201-03	PCC/BITUMINOUS STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-03	SHOULDER WIDENING FOR TYPE I GUARDRAIL TERMINALS
635001	DELINEATORS
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-01	REFLECTOR MARKER AND MOUNTING DETAILS
701001-01	OFF-RD OPERATION 2L, 2W, MORE THAN 4.5 (15') AWAY
701006-02	OFF-RD OPERATION 2L, 2W, 4.5 M (15') TO 600 MM (24") FROM PAVEMENT EDGE
702001-06	TRAFFIC CONTROL DEVICES
720001	SIGN PANEL MOUNTING DETAILS
720006	SIGN PANEL ERECTION DETAILS
720011	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
729001	APPLICATION OF TYPE A AND B METAL POSTS

- ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE APPLICABLE REQUIREMENT SET FORTH IN "THE CONSTRUCTION SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2002 THEREINAFTER REFERRED TO AS STANDARD SPECIFICATIONS, THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM MANUAL TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" IN EFFECT ON THE DATE OF INVITATION FOR BIDS; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" ADOPTED MARCH 1, 2005; INTERIM SPECIAL PROVISIONS AS INCLUDED IN THE CONTRACT DOCUMENTS; AND THE DETAILS AND STANDARDS CONTAINED IN THESE PLANS.
- BEFORE STARTING ANY EXCAVATIONS, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)
- THE LOCATIONS OF THE EXISTING UTILITIES, AS SHOWN ON THE DRAWINGS, REPRESENT DATA RECEIVED FROM VARIOUS SOURCES. IT IS NOT GUARANTEED TO BE CORRECT OR ALL INCLUSIVE. THE CONTRACTOR SHALL CONDUCT HIS OWN INVESTIGATIONS INTO THE LOCATION, SIZE, DEPTH, AND NATURE OF ANY AND ALL EXISTING UTILITIES WHICH MAY INTERFERE WITH THE WORK UNDER THIS CONTRACT. ANY EXISTING UTILITIES WHICH ARE TO REMAIN IN SERVICE SHALL BE FULLY PROTECTED BY THE CONTRACTOR AND ANY DAMAGE CAUSED BY THE CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED AT NO ADDITIONAL COST TO THE DEPARTMENT.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF OAK FOREST.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SANDBAGS ON EACH TYPE I OR TYPE II BARRICADE USED- ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL.
- ON STATE STANDARDS 482001 AGGREGATE SUBGRADE 300 MM (12") SHALL BE USED AS THE IMPROVED SUBGRADE AND SHALL BE PLACED UNDER THE SHOULDERS. THE ADDITIONAL THICKNESS OF AGGREGATE SUBGRADE UNDER THE SHOULDER SHALL BE INCLUDED IN THE COST PER SQUARE METER (SQ YARD) OF "AGGREGATE SUBGRADE 300 MM (12").
- ALL STORM SEWERS CONNECTIONS WITH PIPES 675 MM (27 INCHES) DIAMETER AND SMALLER SHALL BE MADE WITH PRECAST "TEE" OR "WYE" PIPES. FOR PROPOSED STORM SEWER PIPES LARGER THAN 675 MM (27 INCHES) DIAMETER, OPENINGS OF THE SPECIFIED DIAMETER SHALL BE MADE IN THE PIPE AT THE TIME IT IS MANUFACTURED. PRECAST "TEE" AND "WYE" PIPE CONNECTIONS FOR PROPOSED STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST FOR THE STORM SEWERS.
- ALL EXCAVATION AND EMBANKMENT LOCATIONS REQUIRING SEEDING OR SODDING SHALL BE CONSTRUCTED TO 4 IN BELOW FINISHED GRADE LINE TO ALLOW COMPOST PLACEMENT.
- PAVEMENT GRADES: THE GRADES SHOWN ON THE PLANS ARE FINISHED GRADES OF PROPOSED PAVEMENT OR SURFACE COURSE, UNLESS OTHERWISE INDICATED.
- MAINTENANCE OF TRAFFIC-GENERAL: TRAFFIC CONDITIONS, ACCIDENTS AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL RESPOND WITHIN 30 MINUTES OF THE TIME OF NOTIFICATION BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC CONTROL DEVICES.
- PROTECTION OF AND RESTORATION OF TRAFFIC SIGNS: PRIOR TO THE BEGINNING OF CONSTRUCTION OPERATIONS, THE CONTRACTOR WILL BE PROVIDED A SIGN LOG OF ALL EXISTING SIGNS WITHIN THE LIMITS OF THE CONSTRUCTION ZONE. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE SIGN LOG THROUGHOUT THE DURATION OF THIS PROJECT. ALL EXISTING TRAFFIC SIGNS SHALL MAINTAIN, FURNISH, AND REPLACE AT HIS EXPENSE, ANY TRAFFIC SIGN OR POST WHICH HAS BEEN DAMAGED OR LOST BY THE CONTRACTOR.
- ALL EXISTING SIGNING SHALL BE MAINTAINED IN PLACE UNTIL NEW SIGNING IS ERECTED. REMOVAL OF EXISTING SIGNING SHALL NOT PROCEED UNTIL DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL COVER EXISTING SIGNING TO PREVENT CONFUSION AS DIRECTED BY THE ENGINEER. THE COST OF THIS REQUIREMENT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- TRAFFIC CONTROL DEVICES: ALL TRAFFIC CONTROL DEVICES USED FOR THE MAINTENANCE OF TRAFFIC AS DETAILED ON THE PLANS SHALL BE REFLECTORIZED PRIOR TO INSTALLATION AND CLEANED AS NECESSARY THROUGHOUT THE DURATION OF THE CONTRACT.
- WHENEVER DURING CONSTRUCTION OPERATIONS ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES, TEMPORARY DITCHES OR GUTTERS SO THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS. ALL DRAINAGE STRUCTURES SHALL BE CLEANED AS NECESSARY TO INSURE THAT THEY ARE FREE FROM ALL DIRT AND DEBRIS PRIOR TO THE FINAL INSPECTION OF THE PROJECT. THIS WORK WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- CONTACT MS. PATRICE HARRIS, AREA TRAFFIC FIELD TECHNICIAN, AT (708) 597-9800 TWO WEEKS PRIOR TO INSTALLATION OF PERMANENT PAVEMENT MARKINGS.
- CONTACT STEVE LIPKIE OF THE ROADSIDE DEVELOPMENT UNIT 48 HOURS PRIOR TO SELECTIVE CLEARING AT 847-705-4171.

COMMITMENTS

- THIS PROJECT HAS BEEN SIGNED OFF IN-HOUSE FOR HAZMAT. IF THE PROPOSED SCOPE OF WORK CHANGES OR IF ADDITIONAL ROW/TEMPORARY EASEMENTS ARE REQUIRED, PLEASE CONTACT THE IDOT ENVIRONMENTAL STUDIES UNIT AT (847) 705-4101 TO DISCUSS ANY POTENTIAL IMPACTS.
- THE CONTRACTOR AND ENGINEER SHALL CONTACT THE MANAGEMENT OF CAELIC PARK (708-687-9323) 2 WEEKS PRIOR TO THE CLOSURE OF 147TH STREET.
- THE CONTRACTOR AND ENGINEER SHALL MEET WITH THE WILL-SOUTH COOK SOIL AND WATER CONSERVATION DISTRICT TO COORDINATE ALL IN-STREAM WORK ACTIVITIES.
- THE CONTRACTOR'S IN-STREAM WORK PLAN SHALL BE SUBMITTED TO THE DEPARTMENT FOR REVIEW AND APPROVAL.

8/30/2006 H:\IDOT\BRI\DOE\124062\DESIGN\NCI\11\116\02GENERAL NOTES.DGN

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 147th STREET OVER BOCA RIO DITCH
 F.A.U. 1602, SECTION 74 B-1
 COOK COUNTY
 INDEX OF SHEETS, STATE STANDARDS,
 AND GENERAL NOTES

SCALE: VERT. NOT TO SCALE DRAWN BY: TC
 DATE: AUGUST 2006 CHECKED BY: KMA

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	3

STA. TO STA.
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

URBAN
80% FED. / 20% STATE
CONTRACT NO. 62418

URBAN
80% FED. / 20% STATE

CONSTRUCTION
TYPE CODE

CONSTRUCTION
TYPE CODE

SUMMARY OF QUANTITIES				ROADWAY X02B-2A	CULVERT X02B-2A
CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY		
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	292	292	
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	30	30	
20101000	TEMPORARY FENCE	FOOT	266	266	
20101200	TREE ROOT PRUNING	EACH	15	15	
20200100	EARTH EXCAVATION	CU YD	858	858	
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	471	471	
20400800	FURNISHED EXCAVATION	CU YD	1237	1237	
20700420	POROUS GRANULAR EMBANKMENT, SUBGRADE	CU YD	100	100	
20800150	TRENCH BACKFILL	CU YD	54	54	
21101815	COMPOST FURNISH AND PLACE, 4"	SQ YD	3106	3106	
25000310	SEEDING, CLASS 4	ACRE	0.61	0.61	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	2.9	2.9	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	2.9	2.9	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	2.9	2.9	
25000775	SELECTIVE MOWING STAKES	EACH	3	3	
25003310	INTERSEEDING, CLASS 4	ACRE	0.27	0.27	
25100630	EROSION CONTROL BLANKET	SQ YD	2952	2952	
25200110	SODDING, SALT TOLERANT	SQ YD	154	154	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	61	61	
28000300	TEMPORARY DITCH CHECKS	EACH	22	22	
28000500	INLET AND PIPE PROTECTION	EACH	1	1	
28100107	STONE RIPRAP, CLASS A4	SQ YD	158.3		158.3
28200200	FILTER FABRIC	SQ YD	158.3		158.3
40300200	BITUMINOUS MATERIALS (PRIME COAT)	TON	5	5	
40600895	CONSTRUCTING TEST STRIP	EACH	2	2	
44000100	PAVEMENT REMOVAL	SQ YD	1182	1182	
44004300	PAVEMENT BREAKING	SQ YD	1058	1058	
48202600	BITUMINOUS SHOULDERS SUPERPAVE 8"	SQ YD	1805	1805	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50105220	PIPE CULVERT REMOVAL	FOOT	68	68	
51500100	NAME PLATES	EACH	1	1	
54001000	BOX CULVERT END SECTIONS	EACH	2		2
54011206	PRECAST CONCRETE BOX CULVERT 12' X 6'	FOOT	112		112
55019700	STORM SEWERS, TYPE I, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 18"	FOOT	233	233	
60100060	CONCRETE HEADWALL FOR PIPE DRAINS	EACH	4	4	
60107600	PIPE UNDERDRAINS 4"	FOOT	1681	1681	
60200805	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE B GRATE	EACH	1	1	
60266600	VALVE BOXES TO BE ADJUSTED	EACH	1	1	
60614600	PAVED DITCH (SPECIAL)	FOOT	159	159	
63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	1450	1450	
63000025	STEEL PLATE BEAM GUARD RAIL, ATTACHED TO STRUCTURES	FOOT	75	75	
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1	1	
63100169	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (FLARED)	EACH	3	3	
63200305	STEEL PLATE BEAM GUARD RAIL REMOVAL	FOOT	346	346	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12	
67100100	MOBILIZATION	L SUM	1	1	
70102550	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	EACH	1	1	
72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	8	8	

SUMMARY OF QUANTITIES				ROADWAY X02B-2A	CULVERT X02B-2A
CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY		
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3220	3220	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	42	42	
* 78200400	GUARDRAIL REFLECTORS	EACH	16	16	
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	3	3	
* 78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	42	42	
A2002374	TREE, BETULA NIGRA (RIVER BIRCH), 10' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED	EACH	3	3	
A2007116	TREE, QUERCUS RUBRA (RED OAK), 2" CALIPER, BALLED AND BURLAPPED	EACH	5	5	
B2000666	TREE, AMELANCHIER X GRANDIFLORA (APPLE SERVICEBERRY), 6' HEIGHT, SHRUB FORM, BALLED AND BURLAPPED	EACH	7	7	
C2003248	SHRUB, HAMAMELIS VERNALIS (VERNAL WITCH HAZEL), 4' HEIGHT, BALLED AND BURLAPPED	EACH	9	9	
C2003936	SHRUB, ILEX VERTICILLATA WINTER RED, (WINTER RED WINTERBERRY), 3' HEIGHT, BALLED AND BURLAPPED	EACH	25	25	
C2003963	SHRUB, ILEX VERTICILLATA 'SOUTHERN GENTLEMAN' (SOUTHERN GENTLEMAN WINTERBERRY), CONTAINER GROWN, 3-GALLON	EACH	15	15	
K0029622	BROADLEAF WEED CONTROL IN TURF	GALLON	1	1	
K0030450	PERENNIAL PLANTS, DAFFODIL BULBS	UNIT	2.5	2.5	
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	52	52	
X0322323	WEED CONTROL, TEASEL	GALLON	1	1	
X0322859	WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE	POUND	1.5	1.5	
X0323973	SEDIMENT CONTROL, SILT FENCE	FOOT	2040	2040	
X0323974	SEDIMENT CONTROL, SILT FENCE MAINTENANCE	FOOT	2040	2040	
X3550300	BITUMINOUS BASE COURSE SUPERPAVE 6"	SQ YD	164	164	
X3550500	BITUMINOUS BASE COURSE SUPERPAVE 8"	SQ YD	119	119	
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	2	2	
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	1	1	
X4023000	TEMPORARY ACCESS (ROAD)	EACH	1	1	
X4066414	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50	TON	31	31	
X4066426	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70	TON	240	240	
X4066614	BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N50	TON	270	270	
X4066616	BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N70	TON	571	571	
XX005314	BITUMINOUS DRIVEWAY REMOVAL	SQ YD	219	219	
Z0001050	AGGREGATE SUBGRADE 12"	SQ YD	3948	3948	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	
Z0064800	SELECTIVE CLEARING	UNIT	12	12	
XX003967	TURBIDITY CURTAIN	FOOT	108	108	

* SPECIALTY ITEMS

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REVISIONS	
NAME	DATE

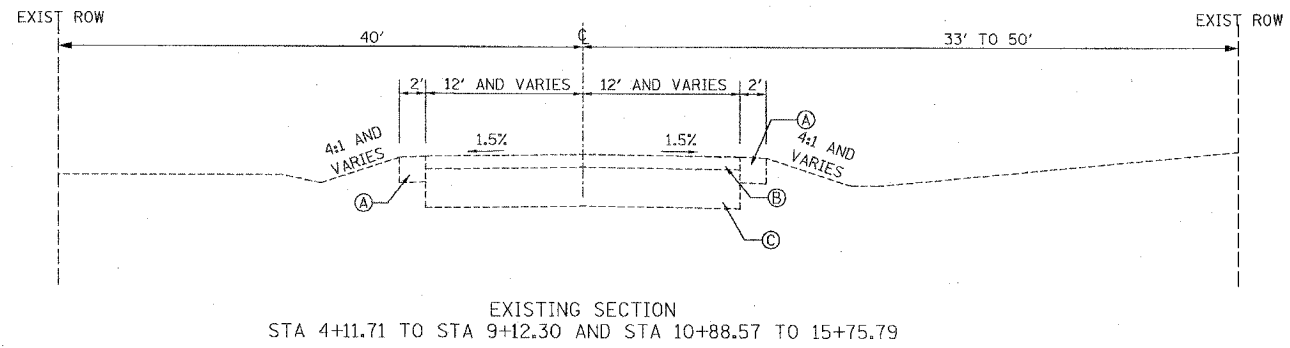
ILLINOIS DEPARTMENT OF TRANSPORTATION
147th STREET OVER BOCA RIO DITCH
F.A.U. 1602, SECTION 74 B-1
COOK COUNTY

SUMMARY OF QUANTITIES

SCALE: VERT. NOT TO SCALE DRAWN BY: TC
DATE: AUGUST 2006 CHECKED BY: KMA

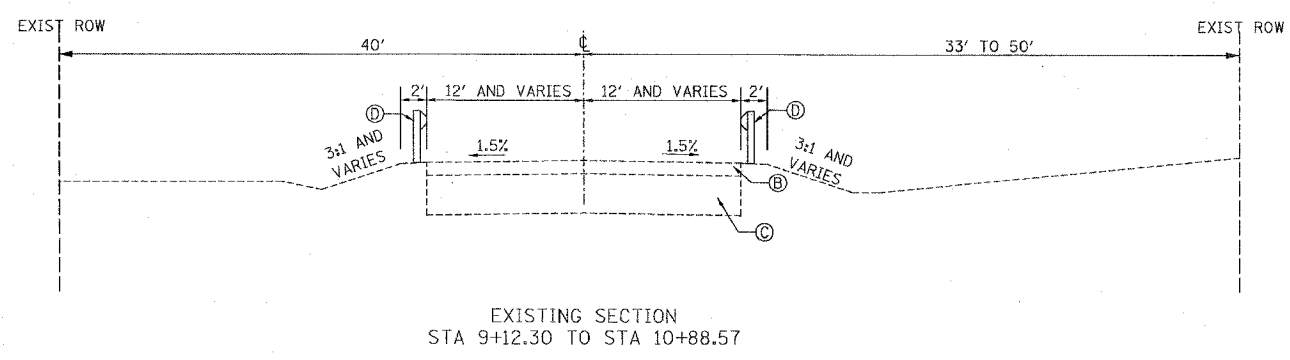
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	4
STA. 4+57.50		TO STA.15+30		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62418				



LEGEND - EXISTING

- (A) AGGREGATE SHOULDER, 6"
- (B) BITUMINOUS SURFACE COURSE, 3"
- (C) AGGREGATE BASE COURSE, 9"
- (D) GUARDRAIL



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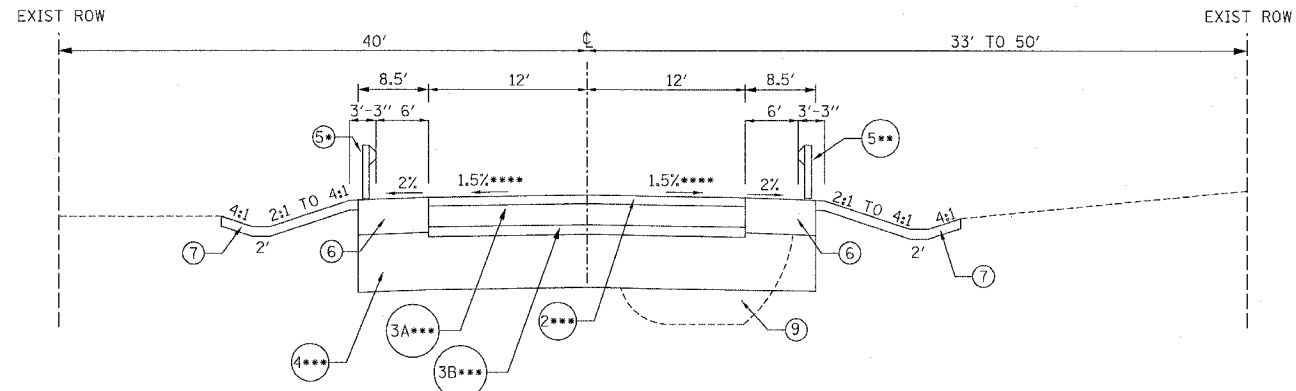
ILLINOIS DEPARTMENT OF TRANSPORTATION
 147th STREET OVER BOCA RIO DITCH
 F.A.U. 1602, SECTION 74 B-1
 COOK COUNTY

EXISTING TYPICAL SECTIONS

SCALE: VERT. NOT TO SCALE
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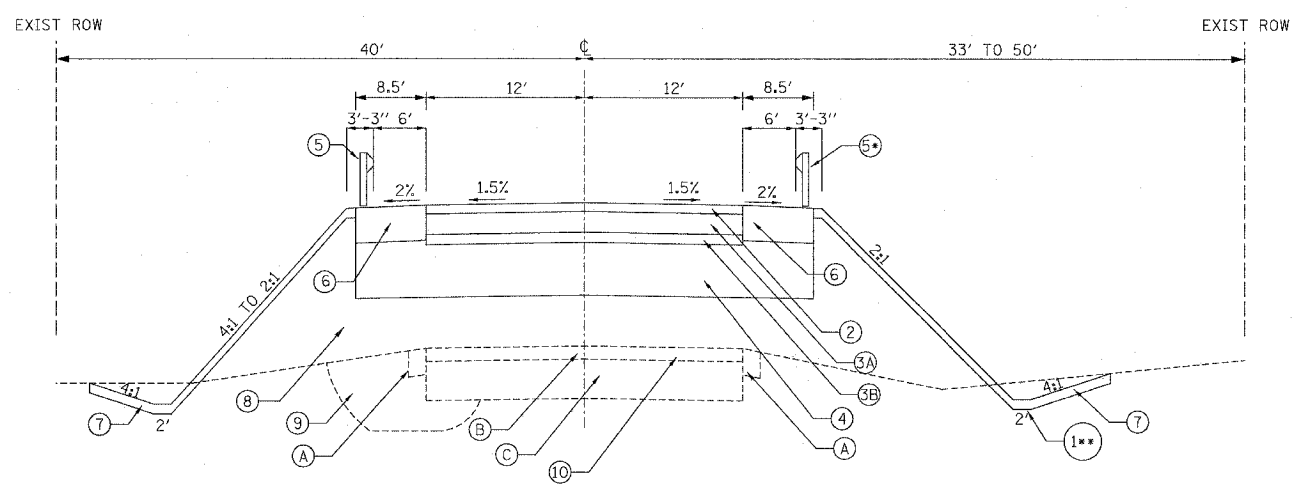
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	5
STA. 4+11.71		TO STA. 15+75.79		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62418				



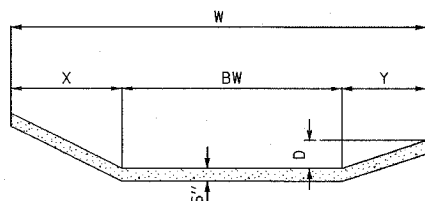
* STA 6+15 TO STA 8+06.49 AND STA 11+86.63 TO STA. 15+30
 ** STA 4+57.50 TO STA 8+06.49
 *** STA 6+20 TO STA 8+06.49 AND STA 11+86.63 TO STA 14+24.71
 **** PAVEMENT SLOPES SHALL BE ADJUSTED TO MATCH THE EXISTING PAVEMENT WITHIN 25' OF THE RECONSTRUCTION LIMITS OR AS DIRECTED BY THE ENGINEER.

PROPOSED SECTION
STA 4+11.71 TO STA 8+06.49 AND STA 11+86.63 TO STA. 15+75.79



* STA 8+06.49 TO STA 11+78.98
 ** STA 10+16.70 TO STA 11+74.96

PROPOSED SECTION
STA 8+06.49 TO STA 11+86.63



STATION	D	W	X	Y	BW
10+16.43 TO 11+00	3"	1'-5"	5"	8"	4"
11+00 TO 11+50	5"	3'-8"	11"	1'-4"	1'-6"
11+50 TO 11+74.96	5"	4'-1"	10"	1'-3"	2'

PAVED DITCH (SPECIAL)

STRUCTURAL PAVEMENT DESIGN

STRUCTURAL DESIGN TRAFFIC: Year 2016
 PV = 12,029 SU = 0 MU = 0
 ROAD/STREET CLASSIFICATION: Class 2
 PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:
 P = 32 S = 45 M = 45
 TRAFFIC FACTOR: Actual TF = 0.01 AC Type = 10
 Minimum TF = 0.50
 PG GRADE: Binder = 7 Surface = 2
 SUBGRADE SUPPORT RATING:
 SSR = POOR

LEGEND - EXISTING

- (A) AGGREGATE SHOULDER, 6"
- (B) BITUMINOUS SURFACE COURSE, 3"
- (C) AGGREGATE BASE COURSE, 9"

LEGEND - PROPOSED

- (1) PAVED DITCH
- (2) BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70, 2"
- (3A) BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70, 4 3/4"
- (3B) BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N50, 2 1/4"
- (4) AGGREGATE SUBGRADE, 12" (SEE GENERAL NOTE #7)
- (5) STEEL PLATE BEAM GUARDRAIL, TYPE A
- (6) BITUMINOUS SHOULDERS SUPERPAVE 8"
- (7) COMPOST FURNISH AND PLACE, 4"
- (8) FURNISHED EXCAVATION, VARIABLE DEPTH
- (9) POROUS GRANULAR EMBANKMENT, SUBGRADE (LOCATIONS TO BE DETERMINED BY THE ENGINEER)
- (10) PAVEMENT BREAKING

BITUMINOUS MIXTURE REQUIREMENT TABLE

ITEM	AC TYPE	VOIDS	MAX RAP %
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	PG 64-22	4% @ 70 GYR.	10
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70	PG 64-22/58-22	4% @ 70 GYR.	15/25
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N50	PG 58-22	4% @ 50 GYR.	25
BITUMINOUS BASE COURSE, SUPERPAVE (6" OR 8" THICKNESS)	PG 58-22	2% @ 50 GYR.	50
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50	PG 64-22	4% @ 50 GYR.	15
BITUMINOUS SHOULDER, SUPERPAVE	PG 58-22	2% @ 30 GYR.	50

THE UNIT WEIGHT USED FOR ALL BITUMINOUS SURFACE MIXTURES IS 112 LBS / SQ YD / IN

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ILLINOIS DEPARTMENT OF TRANSPORTATION
 147th STREET OVER BOCA RIO DITCH
 F.A.U. 1602, SECTION 74 B-1
 COOK COUNTY

PROPOSED TYPICAL SECTIONS

SCALE: VERT. NOT TO SCALE
 HORIZ. DATE: SEPTEMBER 2006

DRAWN BY: TC
 CHECKED BY: KMA

EARTHWORK, LANDSCAPING, EROSION CONTROL

PAY ITEM	UNIT	STA. 4+11.71 TO STA. 4+50	STA. 4+50 TO STA. 10+50	STA. 10+50 TO STA. 15+75.79	TOTAL
TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	0	242	50	292
TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	0	30	0	30
TEMPORARY FENCE	FOOT	0	247	19	266
TREE ROOT PRUNING	EACH	0	14	1	15
EARTH EXCAVATION	CU YD	11	353	495	858
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	5	282	184	471
FURNISHED EXCAVATION	CU YD	0	0	0	1237
POROUS GRANULAR EMBANKMENT, SUBGRADE	CU YD	0	100	0	100
TRENCH BACKFILL	CU YD	0	0	54	54
COMPOST FURNISH AND PLACE, 4"	SQ YD	48	2049	1009	3106
SEEDING, CLASS 4	ACRE	0.01	0.42	0.18	0.61
NITROGEN FERTILIZER NUTRIENT	POUND	0.0	0.3	2.6	2.9
PHOSPHORUS FERTILIZER NUTRIENT	POUND	0.0	0.3	2.6	2.9
POTASSIUM FERTILIZER NUTRIENT	POUND	0.0	0.3	2.6	2.9
SELECTIVE MOWING STAKES	EACH	0	2	1	3
INTERSEEDING, CLASS 4	ACRE	0.01	0.19	0.07	0.27
EROSION CONTROL BLANKET	SQ YD	48	2033	871	2952
SODDING, SALT TOLERANT	SQ YD	0	16	138	154
TEMPORARY EROSION CONTROL SEEDING	POUND	1	42	18	61
TEMPORARY DITCH CHECKS	EACH	0	12	10	22
INLET AND PIPE PROTECTION	EACH	0	0	1	1
STONE RIPRAP, CLASS A4	SQ YD	0	158	0	158
FILTER FABRIC	SQ YD	0	158	0	158
TREE, BETULA NIGRA (RIVER BIRCH), 10' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED	EACH	0	0	3	3
TREE, QUERCUS RUBRA (RED OAK), 2" CALIPER, BALLED AND BURLAPPED	EACH	0	0	5	5
TREE, AMELANCHIER X GRANDIFLORA (APPLE SERVICEBERRY), 6' HEIGHT, SHRUB FORM, BALLED AND BURLAPPED	EACH	0	7	0	7
SHRUB, HAMAMELIS VERNALIS (VERNAL WITCH HAZEL), 4' HEIGHT, BALLED AND BURLAPPED	EACH	0	9	0	9
SHRUB, ILEX VERTICILLATA WINTER RED, (WINTER RED WINTERBERRY), 3' HEIGHT, BALLED AND BURLAPPED	EACH	0	6	19	25
SHRUB, ILEX VERTICILLATA 'SOUTHERN GENTLEMAN' (SOUTHERN GENTLEMAN WINTERBERRY), CONTAINER GROWN, #3 GALLON	EACH	0	0	15	15
BROADLEAF WEED CONTROL IN TURF	GALLON	0	0	1	1
PERENNIAL PLANTS, DAFFODIL BULBS	UNIT	0	0	2.5	2.5
WEED CONTROL, TEASEL	GALLON	0	1	0	1
TEMPORARY CLEAR WATER DIVERSION	L SUM	0	1	0	1
WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE	POUND	0	0.7	0.8	1.5
SEDIMENT CONTROL, SILT FENCE	FOOT	57	1199	784	2040
SEDIMENT CONTROL, SILT FENCE MAINTENANCE	FOOT	57	1199	784	2040
SELECTIVE CLEARING	UNIT	1	8	3	12
TURBIDITY CURTAIN	FOOT	0	108	0	108

BASE COURSES

PAY ITEM	UNIT	STA. 4+11.71 TO STA. 4+50	STA. 4+50 TO STA. 10+50	STA. 10+50 TO STA. 15+75.79	TOTAL
AGGREGATE SUBGRADE 12"	SQ YD	43	2205	1700	3948
BITUMINOUS BASE COURSE SUPERPAVE 6"	SQ YD	0	0	164	164
BITUMINOUS BASE COURSE SUPERPAVE 8"	SQ YD	0	0	119	119

SURFACE COURSES, PAVEMENTS, REHABILITATION AND SHOULDERS

PAY ITEM	UNIT	STA. 4+11.71 TO STA. 4+50	STA. 4+50 TO STA. 10+50	STA. 10+50 TO STA. 15+75.79	TOTAL
BITUMINOUS MATERIALS (PRIME COAT)	TON	0	2	3	5
CONSTRUCTING TEST STRIP	EACH	0	1	1	2
PAVEMENT REMOVAL	SQ YD	0	524	658	1182
PAVEMENT BREAKING	SQ YD	0	678	380	1058
BITUMINOUS SHOULDERS SUPERPAVE 8"	SQ YD	43	1060	702	1805
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50 (2")	TON	0	0	31	31
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70 (2")	TON	0	128	112	240
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N50 (2 1/4")	TON	0	144	126	270
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N70 (4 3/4")	TON	0	305	266	571
BITUMINOUS DRIVEWAY REMOVAL	SQ YD	0	0	219	219
TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	0	0	2	2
TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	0	0	1	1
TEMPORARY ACCESS (ROAD)	EACH	0	0	1	1

TREE REMOVAL (6 TO 15 UNITS DIAMETER)		TREE REMOVAL (OVER 15 UNITS DIAMETER)	
STATION	OFFSET UNITS	STATION	OFFSET UNITS
6+11.9	23.9'RT 8	7+10.4	40.8'RT 10
6+52.9	25.8'RT 12	8+42.4	28.4'RT 10
6+53.0	26.9'RT 8	8+42.4	28.4'RT 10
6+63.7	24.6'RT 14	8+42.4	28.4'RT 10
6+72.4	24.2'RT 8	8+42.4	28.4'RT 10
7+00.2	24.1'RT 8	8+42.4	28.4'RT 10
7+00.6	41.9'RT 6	8+55.2	27.7'RT 6
7+05.3	41.8'RT 6	8+73.0	34.8'RT 8
SUBTOTAL 70		SUBTOTAL 74	

STRUCTURES					
PAY ITEM	UNIT	STA. 4+11.71 TO STA. 4+50	STA. 4+50 TO STA. 10+50	STA. 10+50 TO STA. 15+75.79	TOTAL
REMOVAL OF EXISTING STRUCTURES	EACH	0	1	0	1
PIPE CULVERT REMOVAL	FOOT	0	0	68	68
NAME PLATES	EACH	0	1	0	1
BOX CULVERT END SECTIONS	EACH	0	2	0	2
PRECAST CONCRETE BOX CULVERT 12' X 6'	FOOT	0	112	0	112
STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 18"	FOOT	0	33	200	233

INCIDENTAL CONSTRUCTION					
PAY ITEM	UNIT	STA. 4+11.71 TO STA. 4+50	STA. 4+50 TO STA. 10+50	STA. 10+50 TO STA. 15+75.79	TOTAL
CONCRETE HEADWALL FOR PIPE DRAINS	EACH	0	2	2	4
PIPE UNDERDRAINS 4"	FOOT	0	898	783	1681
CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE B GRATE	EACH	0	0	1	1
VALVE BOXES TO BE ADJUSTED	EACH	0	1	0	1
PAVED DITCH (SPECIAL)	FOOT	0	34	125	159
STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	0	875	575	1450
STEEL PLATE BEAM GUARD RAIL, ATTACHED TO STRUCTURES	FOOT	0	75	0	75
TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	0	0	1	1
TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (FLARED)	EACH	0	2	1	3
STEEL PLATE BEAM GUARD RAIL REMOVAL	FOOT	0	271	75	346
ENGINEER'S FIELD OFFICE, TYPE A	CAL MO				12
MOBILIZATION	L SUM				1
TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	EACH				1
TEMPORARY INFORMATION SIGNING	SQ FT				52
CONSTRUCTION LAYOUT	L SUM				1

SIGNING AND PAVEMENT MARKING					
PAY ITEM	UNIT	STA. 4+11.71 TO STA. 4+50	STA. 4+50 TO STA. 10+50	STA. 10+50 TO STA. 15+75.79	TOTAL
RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	1	2	5	8
THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	0	1720	1500	3220
RAISED REFLECTIVE PAVEMENT MARKER	EACH	0	22	20	42
GUARDRAIL REFLECTORS	EACH	0	7	9	16
TERMINAL MARKER - DIRECT APPLIED	EACH	0	2	1	3
RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	0	22	20	42

EARTHWORK SCHEDULE						
LOCATION	EARTH EXCAVATION	EARTH EXCAVATION TO BE USED IN EMBANKMENT ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE WASTE (+) or SHORTAGE (-)	UNSUITABLE MATERIAL	COMPOST FURNISH AND PLACE
	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD	SQUARE YARD
STA 4+11.71 TO STA. 4+50	11	9	1	8	5	48
STA. 4+50 TO STA. 10+50	353	300	1369	-1069	282	2049
STA. 10+50 TO STA. 15+75.79	495	421	597	-176	184	1009
TOTAL	858	729	1967	-1237	471	3106

SHRINKAGE FACTOR: EARTH EXCAVATION: 15%

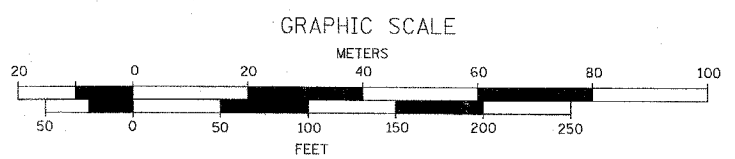
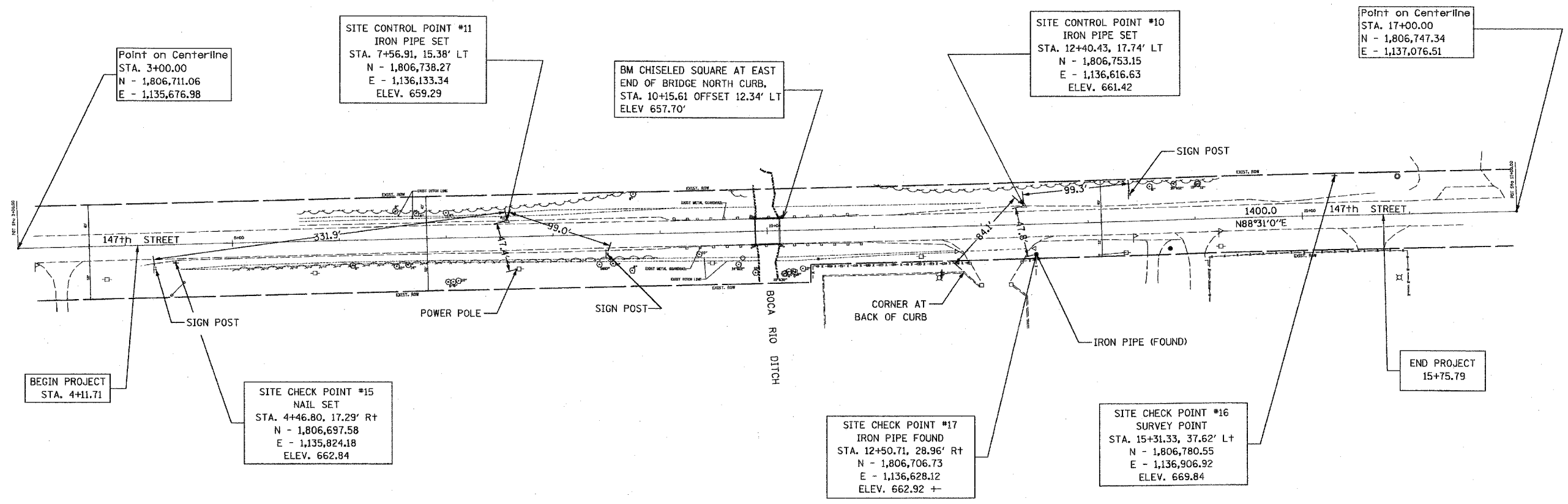
RHA&A
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 220 West River Drive, St. Charles, IL 60174
 Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 147th STREET OVER BOCA RIO DITCH
 F.A.U. 1602, SECTION 74 B-1
 COOK COUNTY
 SCHEDULE OF QUANTITIES
 SCALE: VERT. NOT TO SCALE
 HORIZ. DATE: SEPTEMBER 2006
 DRAWN BY: TC
 CHECKED BY: KMA

9/20/2006 H:\DOT\BRI\06\124062\DESIGN\GNDC\N1\LV8\06SCH.DGN

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	7
STA. 4+11.71		TO STA. 15+75.79		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62418				



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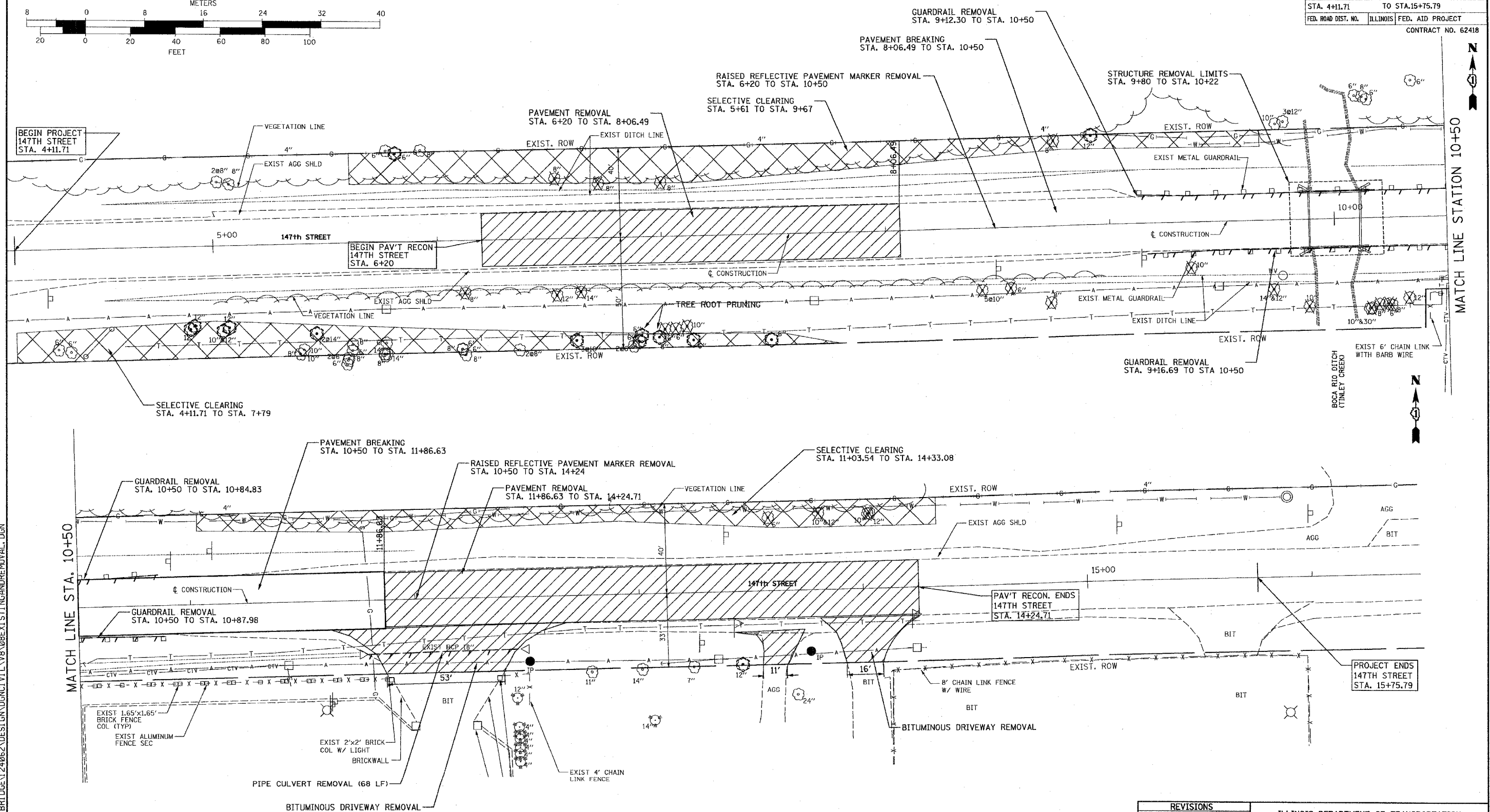
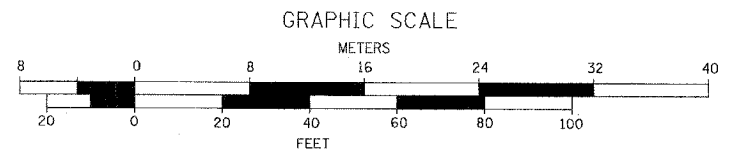
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 147th STREET OVER BOCA RIO DITCH
 F.A.U. 1602, SECTION 74 B-1
 COOK COUNTY
 ALIGNMENT, TIES, AND BENCHMARKS

SCALE: VERT. -
 HORIZ. 1" = 50'
 DATE: AUGUST 2006
 DRAWN BY: TC
 CHECKED BY: KMA

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	8
STA. 4+11.71		TO STA. 15+75.79		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
			CONTRACT NO. 62418	



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- SELECTIVE CLEARING
- TEMPORARY FENCING AND TREE ROOT PRUNING
- TREE REMOVAL

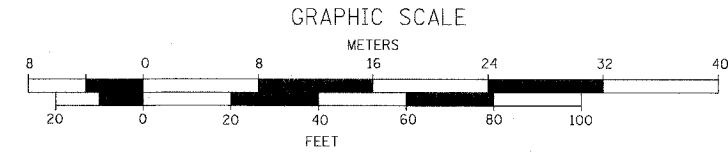
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 147th STREET OVER BOCA RIO DITCH
 F.A.U. 1602, SECTION 74 B-1
 COOK COUNTY
 EXISTING AND REMOVAL
 SCALE: VERT. 1"=20'
 HORIZ. DATE: AUGUST 2006
 DRAWN BY: TC
 CHECKED BY: KMA

MATCH LINE STATION 10+50

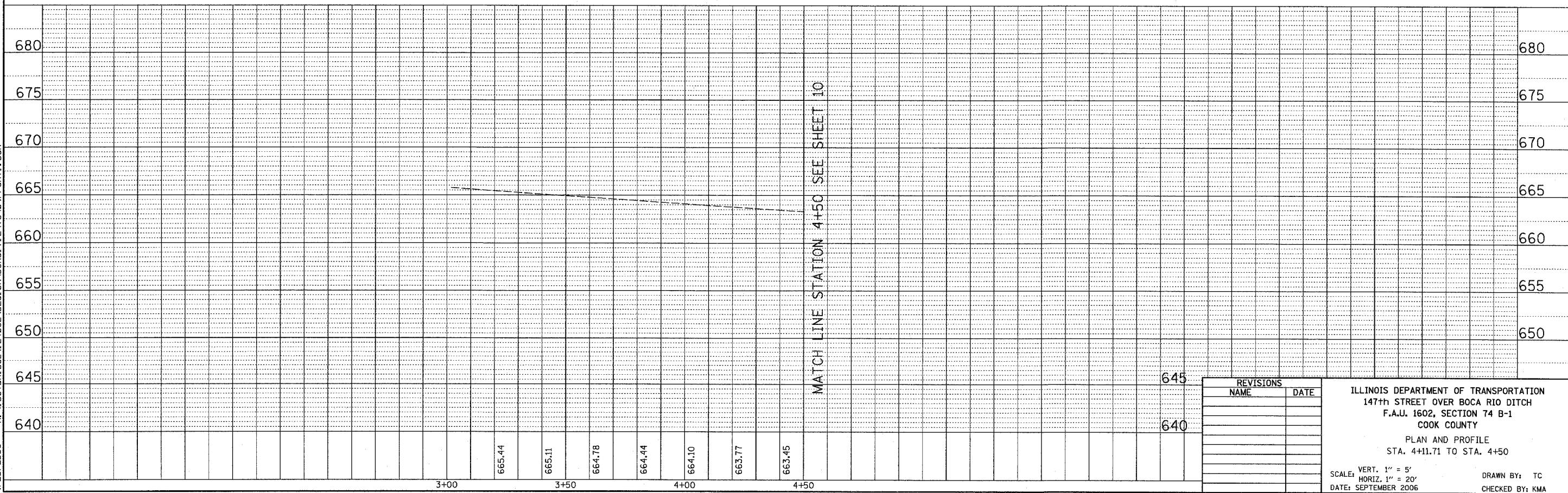
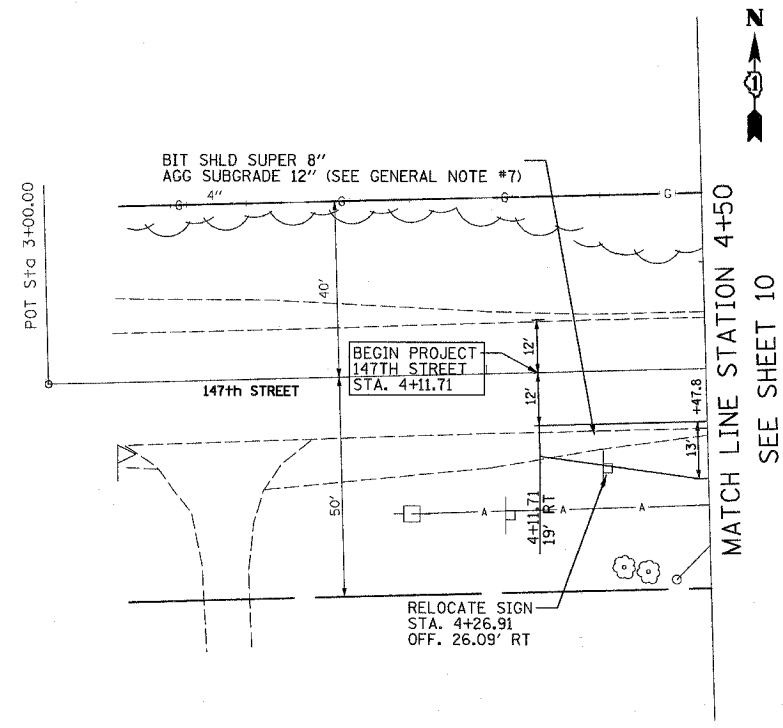
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1602	74 B-1	COOK	34	9
STA. 4+11.71		TO STA. 4+50		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62418				



PLAN	DATE
BY	
REVISIONS	
PLOTTED	
ALLOTTED	
CHECKED	
FILE NAME	
NO.	

PROFILE	DATE
BY	
REVISIONS	
PLOTTED	
ALLOTTED	
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FILE NAME	
NO.	

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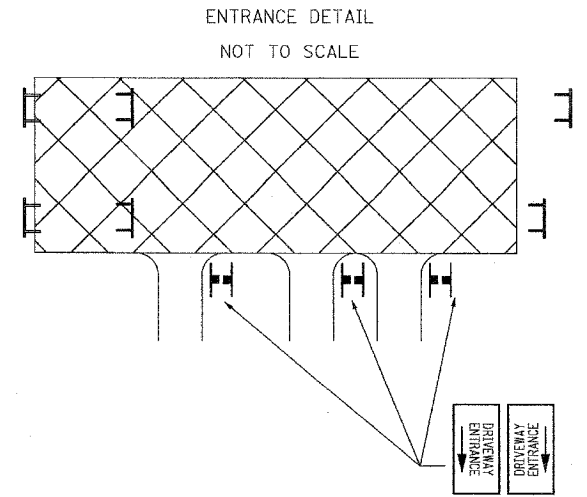
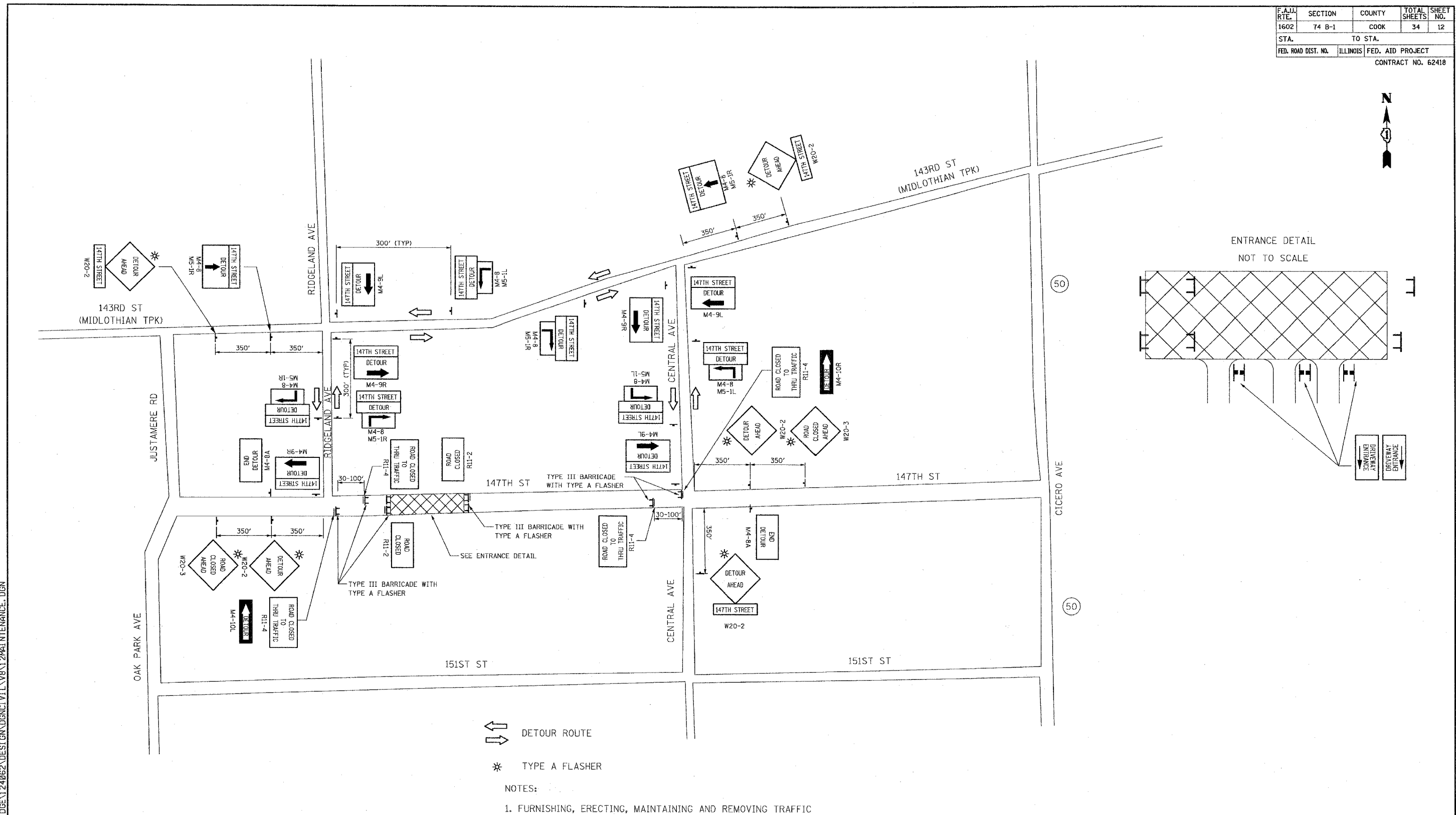


MATCH LINE STATION 4+50 SEE SHEET 10

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 147th STREET OVER BOCA RIO DITCH
 F.A.U. 1602, SECTION 74 B-1
 COOK COUNTY
 PLAN AND PROFILE
 STA. 4+11.71 TO STA. 4+50
 SCALE: VERT. 1" = 5'
 HORIZ. 1" = 20'
 DATE: SEPTEMBER 2006
 DRAWN BY: TC
 CHECKED BY: KMA

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	12
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62418				



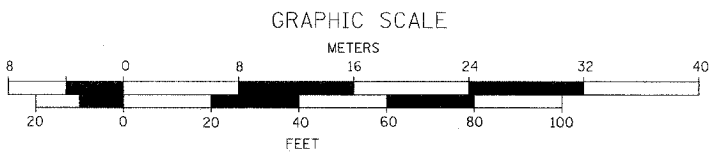
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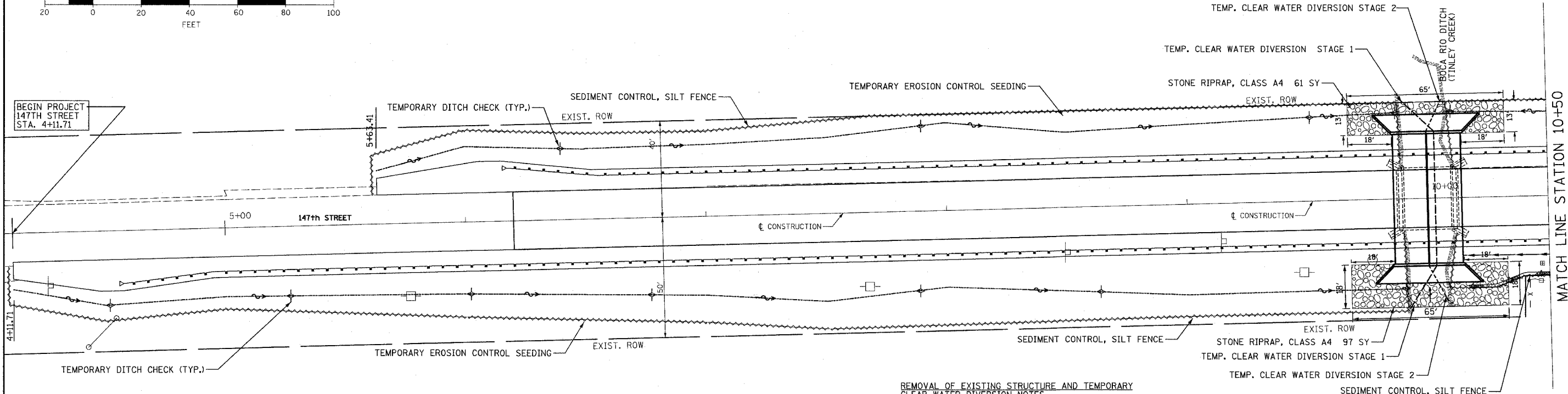
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 147th STREET OVER BOCA RIO DITCH
 F.A.U. 1602, SECTION 74 B-1
 COOK COUNTY
 MAINTENANCE OF TRAFFIC
 (DETOUR PLAN)

SCALE: VERT: NOT TO SCALE HORIZ: NOT TO SCALE
 DATE: AUGUST 2006 DRAWN BY: TC CHECKED BY: KMA

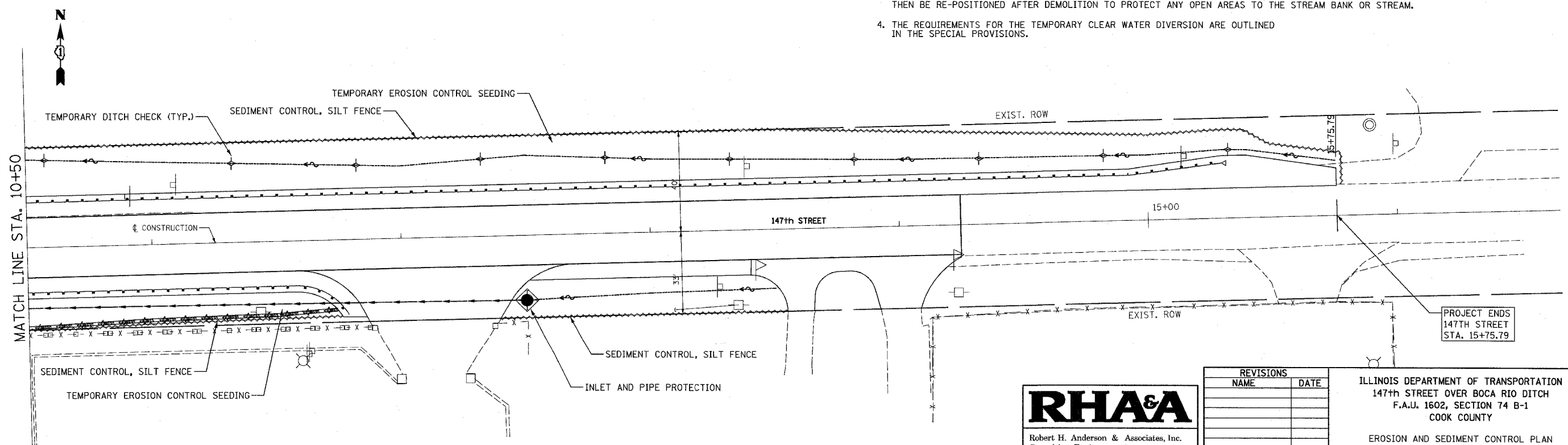


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	13
STA. 4+11.71		TO STA. 15+75.79		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62418				



REMOVAL OF EXISTING STRUCTURE AND TEMPORARY CLEAR WATER DIVERSION NOTES

1. PRIOR TO ANY WORK IN THE STREAM OR STREAMBED, THE CONTRACTOR SHALL HAVE INSTALLED THE SEDIMENT CONTROL SILT FENCE AND A TURBIDITY CURTAIN.
2. THE LOCATION OF THE TURBIDITY CURTAIN SHALL BE APPROVED BY THE ENGINEER AND THE WILL/SOUTH COOK SOIL AND WATER CONSERVATION DISTRICT.
3. THE SEDIMENT SILT CONTROL FENCE SHALL EXTEND UP TO THE EXISTING STRUCTURE PRIOR TO DEMOLITION AND THEN BE RE-POSITIONED AFTER DEMOLITION TO PROTECT ANY OPEN AREAS TO THE STREAM BANK OR STREAM.
4. THE REQUIREMENTS FOR THE TEMPORARY CLEAR WATER DIVERSION ARE OUTLINED IN THE SPECIAL PROVISIONS.



9/20/2006 H:\DOT\BRI DGE\124062\DESIGN\GN\GNCT\VL\W8\13\EROSIONCONTROL.DGN

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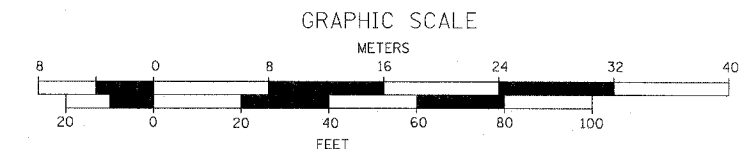
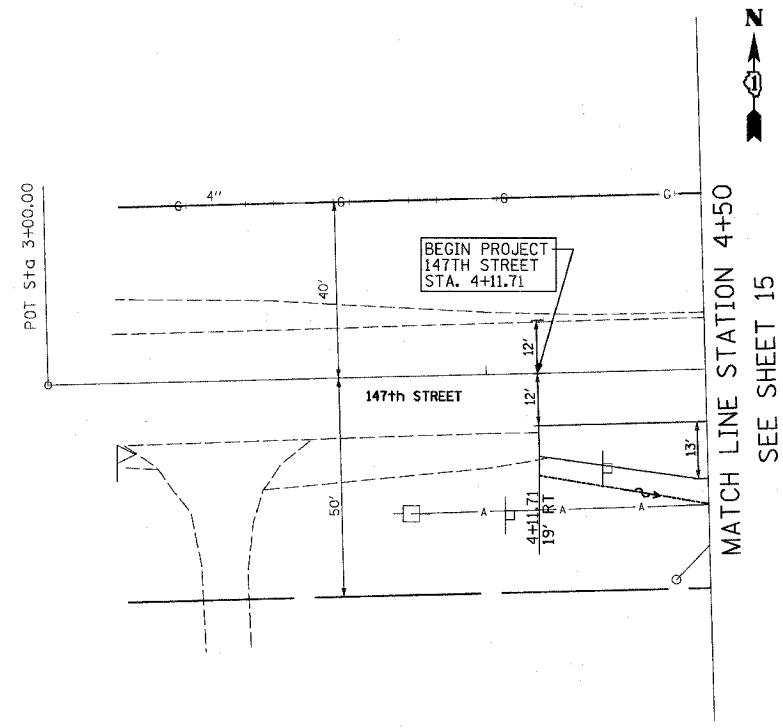
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 147th STREET OVER BOCA RIO DITCH
 F.A.U. 1602, SECTION 74 B-1
 COOK COUNTY
 EROSION AND SEDIMENT CONTROL PLAN
 SCALE: VERT. 1"=20'
 HORIZ. DATE: SEPTEMBER 2006
 DRAWN BY: TC
 CHECKED BY: KMA

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	14
STA. 4+11.71		TO STA. 4+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO. 62418

LEGEND FOR EXISTING AND PROPOSED DRAINAGE SYMBOLS

	Existing	Proposed
Ditch		
Channel		
Culvert Size - Type		
Bridge Location - Bridge No.		
Pump Sta. Location - Pump Sta. No.		
Storm Sewer		
Sanitary Sewer		
Culvert End Section		
Catch Basin		
Headwall / Endwall		
Inlet		
Manhole		

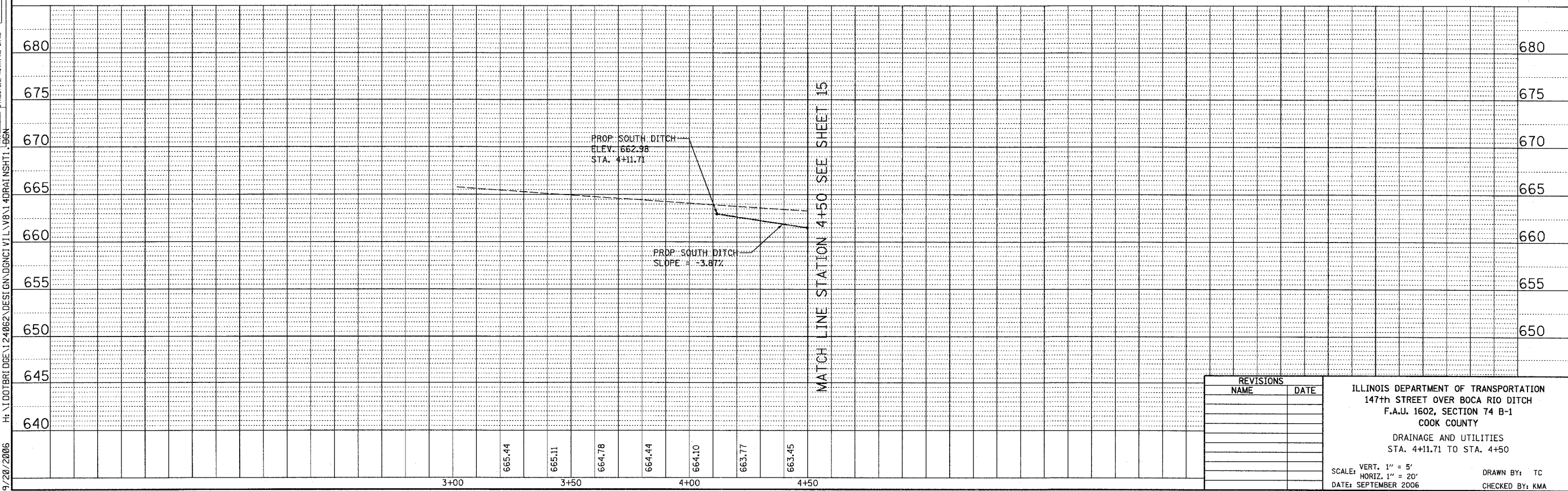


PLAN

BY	DATE
DESIGNED	
PLOTTED	
CHECKED	
ALIGNED	
NOTED	
FILED	
NO.	

PROFILE

BY	DATE
DESIGNED	
PLOTTED	
CHECKED	
STRUCTURE	
NOTATION	
NO.	



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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
147th STREET OVER BOCA RIO DITCH
F.A.U. 1602, SECTION 74 B-1
COOK COUNTY

DRAINAGE AND UTILITIES
STA. 4+11.71 TO STA. 4+50

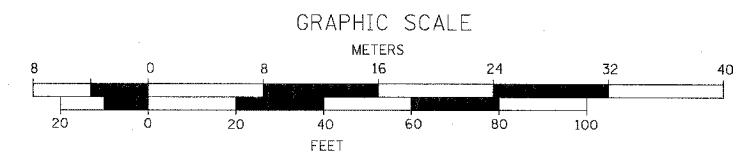
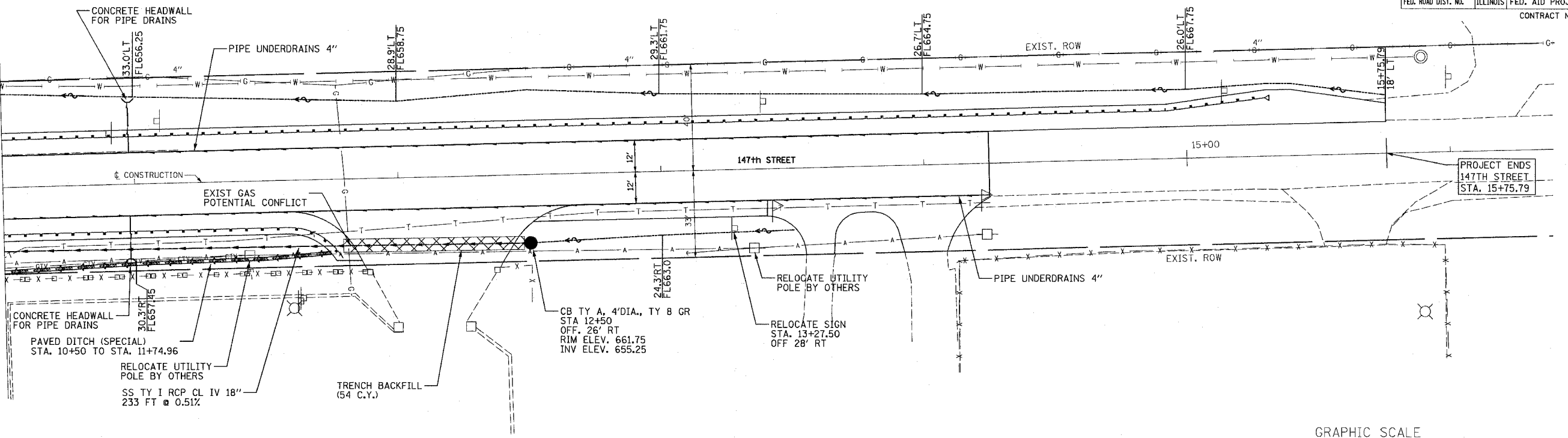
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HORIZ. 1" = 20'
DATE: SEPTEMBER 2006

DRAWN BY: TC
CHECKED BY: KMA

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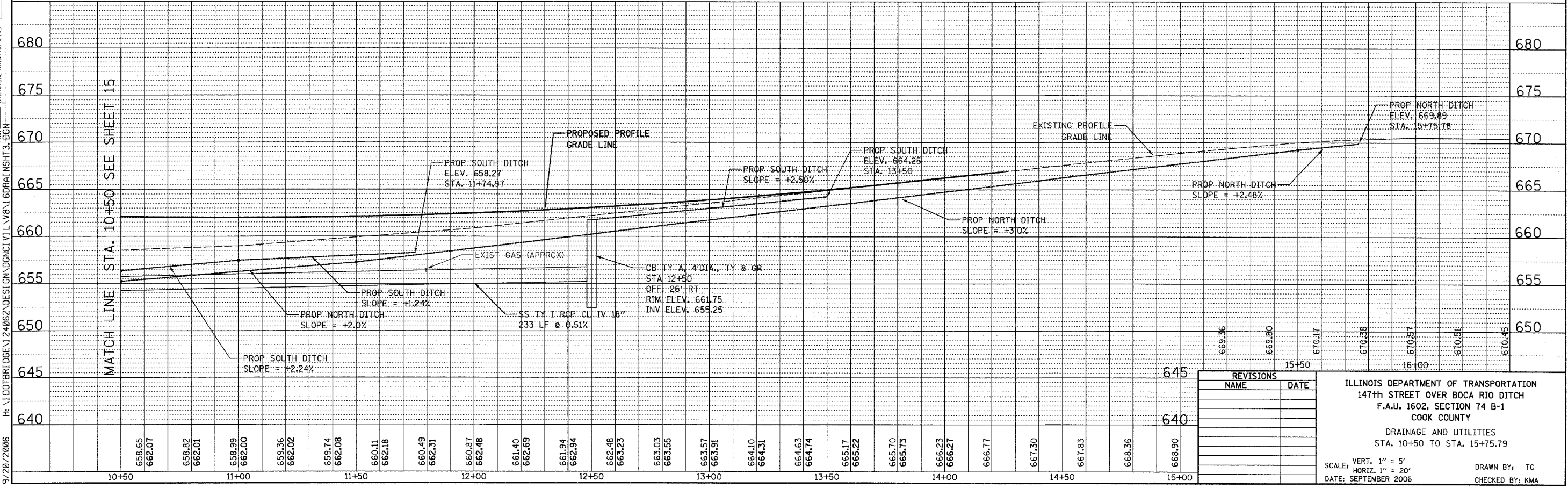
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS	NO.
1602	74 B-1	COOK	34	16
STA. 10+50		TO STA. 15+75.79		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62418				

MATCH LINE STA. 10+50
SEE SHEET 15



PLAN	REVISIONS	DATE
NO.	BY	

PROFILE	REVISIONS	DATE
NO.	BY	



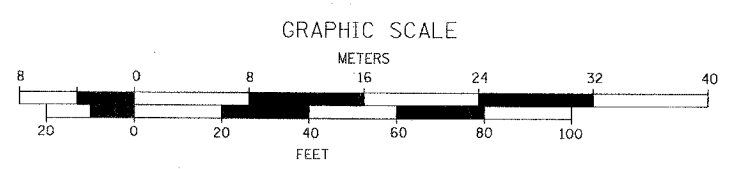
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 147th STREET OVER BOCA RIO DITCH
 F.A.U. 1602, SECTION 74 B-1
 COOK COUNTY
 DRAINAGE AND UTILITIES
 STA. 10+50 TO STA. 15+75.79

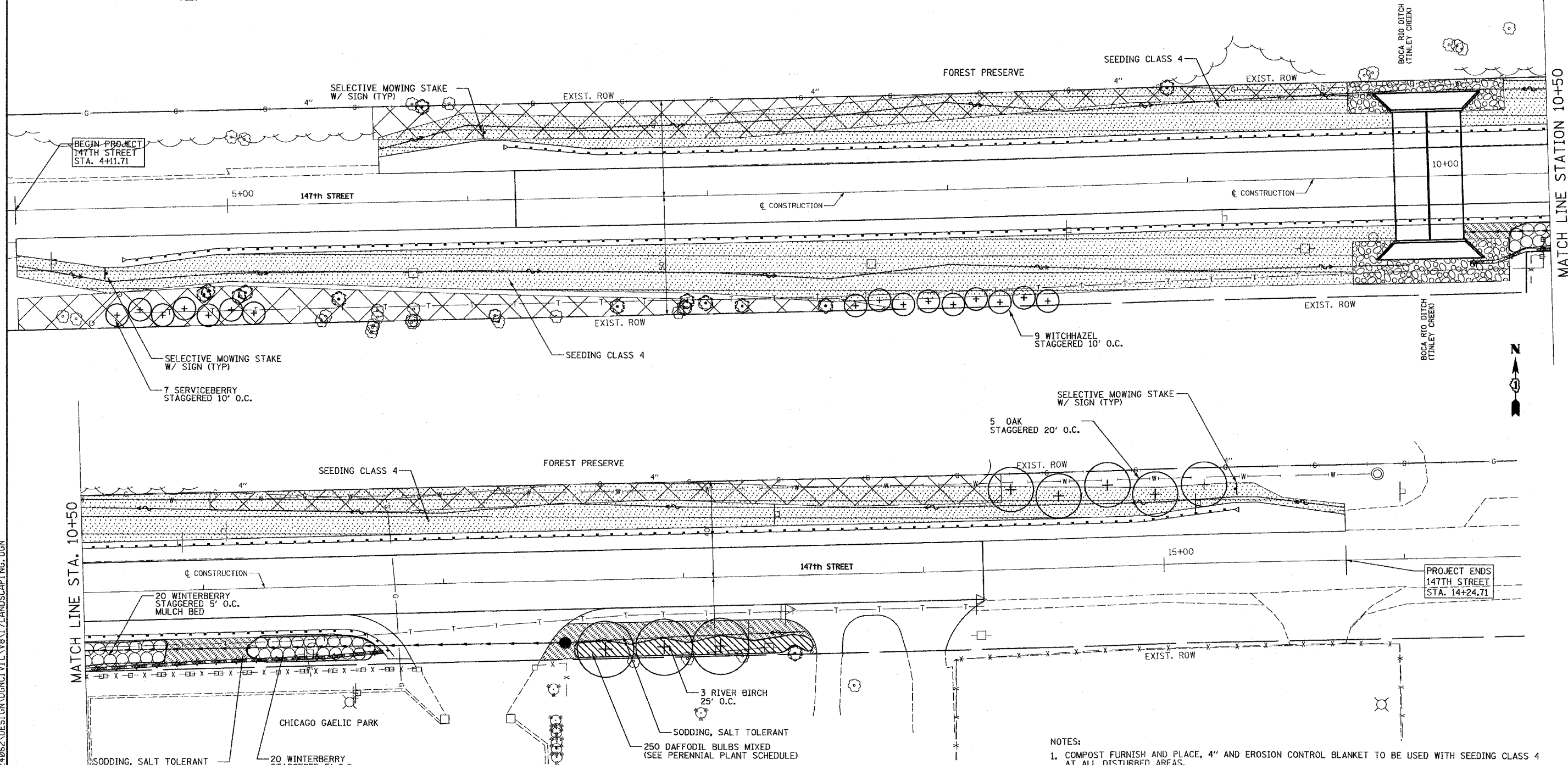
SCALE: VERT. 1" = 5'
 HORIZ. 1" = 20'
 DATE: SEPTEMBER 2006

DRAWN BY: TC
 CHECKED BY: KMA

9/20/2006



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	17
STA. 4+11.71		TO STA. 15+75.79		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62418				



MATCH LINE STA. 10+50

MATCH LINE STATION 10+50

LEGEND

	SEEDING CLASS 4
	INTERSEEDING CLASS 4 AND WEED CONTROL, BROADLEAF TO BE USED TO RESTORE UNDISTURBED AREAS.
	SODDING, SALT TOLERANT W/ FERTILIZER NUTRIENTS
	MOWSTAKE W/SIGN

ITEM	COMMON NAME	SIZE	UNIT	TOTAL
PERENNIAL PLANTS, DAFFODIL BULBS				
NARCISSUS 'BARRETT BROWNING'	BARRETT BROWNING DAFFODILS	DN 1	UNIT	0.75
NARCISSUS 'KISSPROOF'	KISSPROOF DAFFODILS	DN 1	UNIT	0.75
NARCISSUS 'PROFESSOR EINSTEIN'	PROFESSOR EINSTEIN DAFFODILS	DN 1	UNIT	1
TOTAL				2.5

NOTES:
 A UNIT IS EQUAL TO 100 BULBS.
 BULBS SHALL BE RANDOMLY SPACED BETWEEN 12" AND 24" APART.
 BULBS SHALL BE PLANTED DIRECTLY INTO TURF. NO BED PREPARATION IS NECESSARY

- NOTES:
- COMPOST FURNISH AND PLACE, 4" AND EROSION CONTROL BLANKET TO BE USED WITH SEEDING CLASS 4 AT ALL DISTURBED AREAS.
 - WEED CONTROL, TEASEL WILL BE APPLIED TO THE ENTIRE ROADSIDE AREA WITHIN THE ROW AND PROJECT LIMITS.

RHA&A
 Robert H. Anderson & Associates, Inc.
 Consulting Engineers
 Timbers Professional Center
 220 West River Drive, St. Charles, IL 60174
 Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS	
NAME	DATE
S. LIPKIE	11/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
 147th STREET OVER BOCA RIO DITCH
 F.A.U. 1602, SECTION 74 B-1
 COOK COUNTY

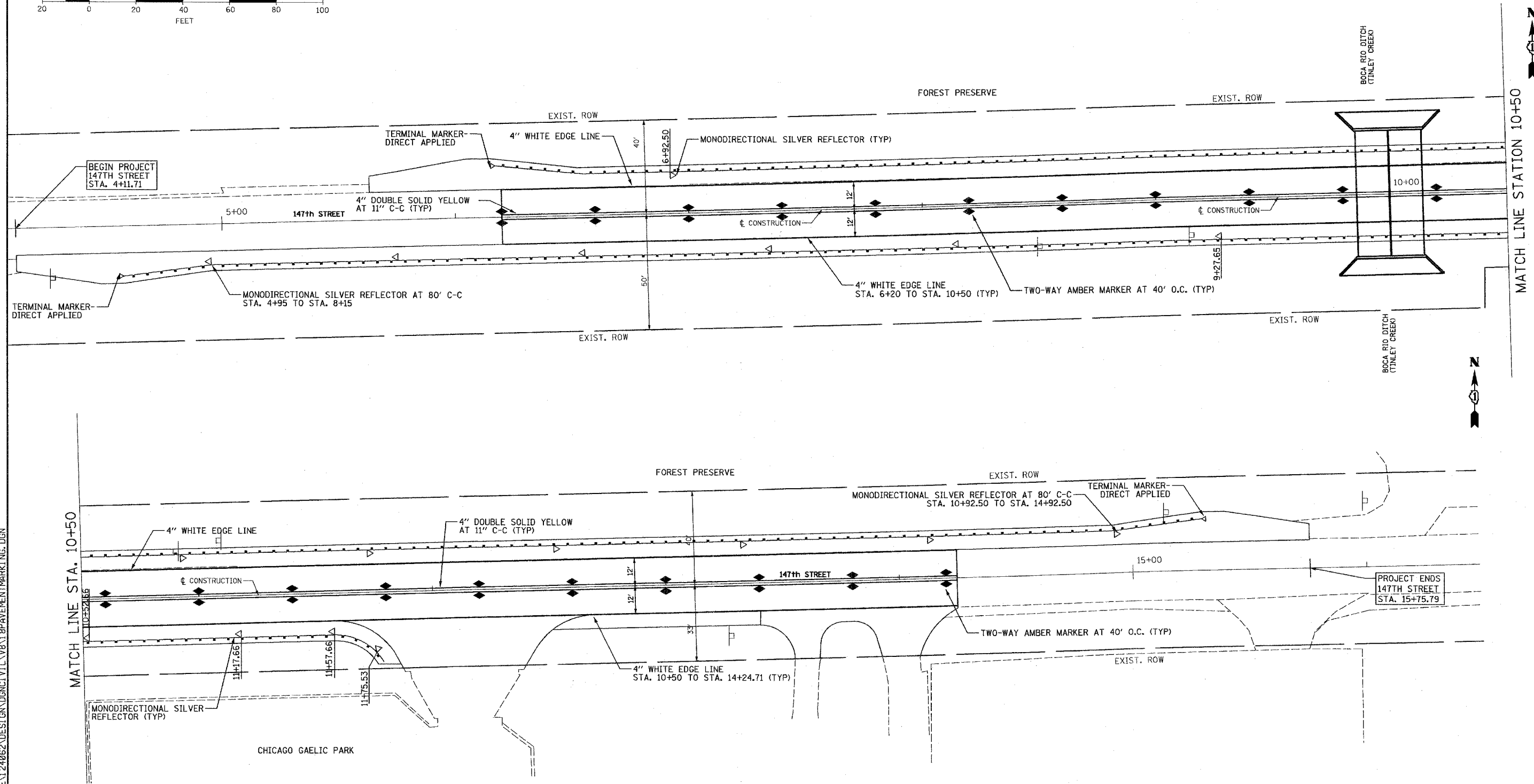
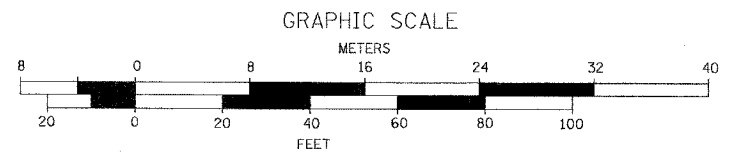
LANDSCAPING PLAN

SCALE: VERT. 1" = 20'
 HORIZ. DATE: AUGUST 2006

DRAWN BY: TC
 CHECKED BY: KMA

8/30/2006 H:\1\DOT\BRI\DOE\124962\DESIGN\LANDSCAPING.DGN

F.A.U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	18
STA. 4+11.71		TO STA. 15+75.79		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62418				



- NOTES:
1. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
 2. FOR DETAILS OF RAISED PAVEMENT MARKERS SEE TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS STANDARD.
 3. FOR DETAILS OF REFLECTORS SEE REFLECTOR AND TERMINAL MARKER PLACEMENT STANDARD.

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 Timbers Professional Center
 220 West River Drive, St. Charles, IL 60174
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 147th STREET OVER BOCA RIO DITCH
 F.A.U. 1602, SECTION 74 B-1
 COOK COUNTY
 PAVEMENT MARKING PLAN

SCALE: VERT. 1" = 20'
 HORIZ. DATE: AUGUST 2006

DRAWN BY: TC
 CHECKED BY: KMA

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BENCHMARKS

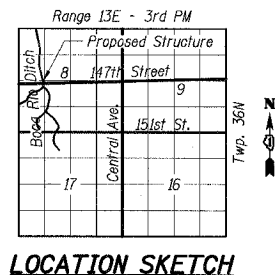
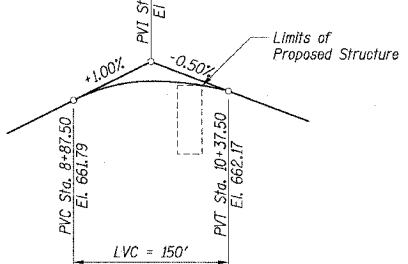
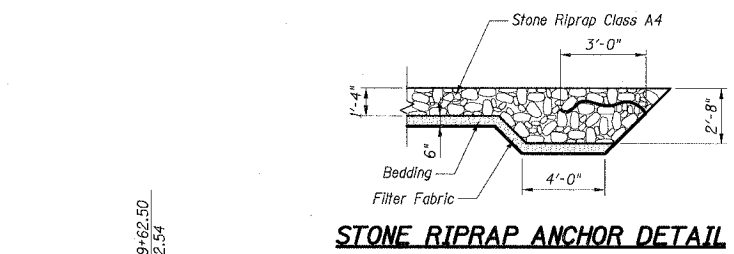
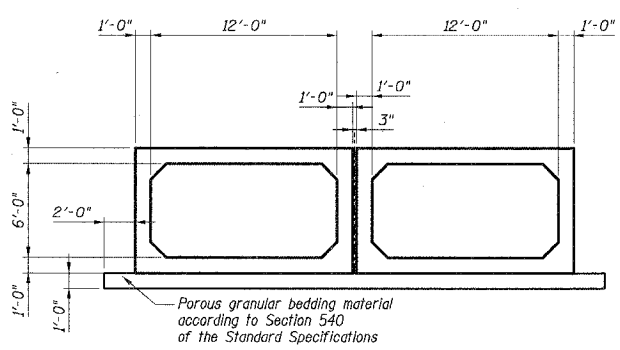
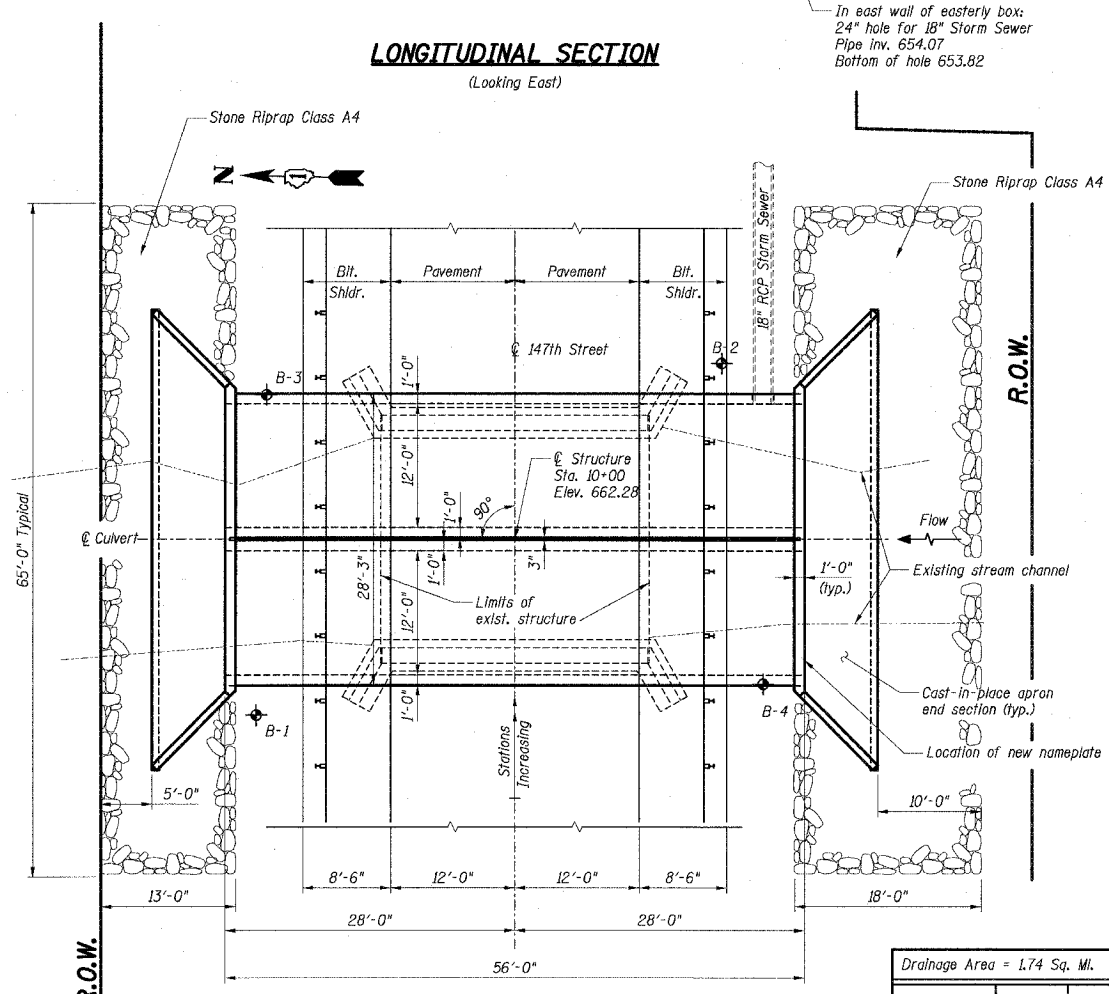
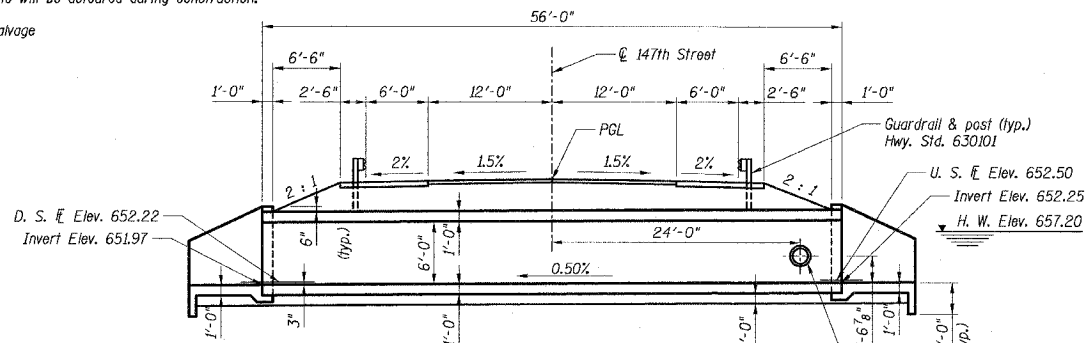
Chiseled square at east end of bridge north curb, Elevation 657.79

EXISTING STRUCTURE

S. N. 016-0571, built in 1922, is a single-span reinforced concrete slab bridge supported on concrete abutments with a length of 28'-0" back to back of abutments and a width of 24'-0" face to face of curbs.

Traffic will be detoured during construction.

No Salvage



DESIGN LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface

DESIGN SPECIFICATIONS

2002 AASHTO "Standard Specifications for Highway Bridges" and AASHTO M259 - Precast Reinforced Concrete Box Sections

DESIGN STRESSES

FIELD UNITS
 f'c = 3,500 psi
 fy = 60,000 psi (reinforcement)
 PRECAST UNITS
 f'c = 5,000 psi (minimum)
 fy = 65,000 psi (welded wire fabric)
 fy = 60,000 psi (reinforcement bars)

INDEX OF SHEETS

- S-1 General Plan
- S-2 End Section Details
- S-3 Soil Boring Logs

TOTAL BILL OF MATERIAL

Item	Unit	Total
STONE RIPRAP, CLASS A4	50 YD	158.3
FILTER FABRIC	50 YD	158.3
REMOVAL OF EXISTING STRUCTURES	EACH	1
PRECAST CONCRETE BOX CULVERT 12' X 6'	FOOT	112
BOX CULVERT END SECTIONS	EACH	2

STATION 10+00 (147th STREET)
 BUILT 20 BY
 STATE OF ILLINOIS
 F.A.U. ROUTE 1602, SEC. 74 B-1
 F.A. PROJECT
 LOADING HS-20
 STRUCTURE NO. 016-2846

NAME PLATE

DAVID L. SMOOT
 081-005861
 ST. CHARLES
 ILLINOIS
 STATE OF ILLINOIS

By: David L. Smoot
 Date: September 20, 2006
 License Expires: 11/30/2006

ROBERT H. ANDERSON & ASSOC.

WATERWAY INFORMATION

Drainage Area = 1.74 Sq. Mi. Low Grade Elev. = 661.7 at Sta. 10+00

Flood	Freq. Yr.	Q CFS	Opening - Sq. Ft.		Natural H. W. E.	Head - Ft.		Headwater Elev.	
			Exlst.	Prop.		Exlst.	Prop.	Exlst.	Prop.
	10	278	67	101	656.7	0.3	0.0	657.0	656.7
Design	50	439	67	113	657.2	0.9	0.2	658.1	657.4
Base	100	502	67	115	657.3	1.2	0.3	658.5	657.6
Overtopping									
Max. Calc.	500	853	67	130	657.9	1.5	0.9	659.4	658.8

SHEET S-1

Robert H. Anderson & Associates, Inc.
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 220 West River Drive, St. Charles, IL 60174
 Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 147th STREET OVER BOCA RIO DITCH
 F.A.U. ROUTE 1602, SECTION 74 B-1
 COOK COUNTY
 STRUCTURE NUMBER 016-2846

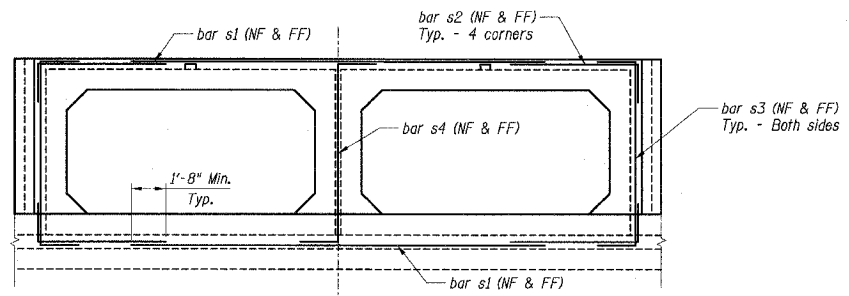
GENERAL PLAN

DRAWN BY: DLS
 CHECKED BY: JLR

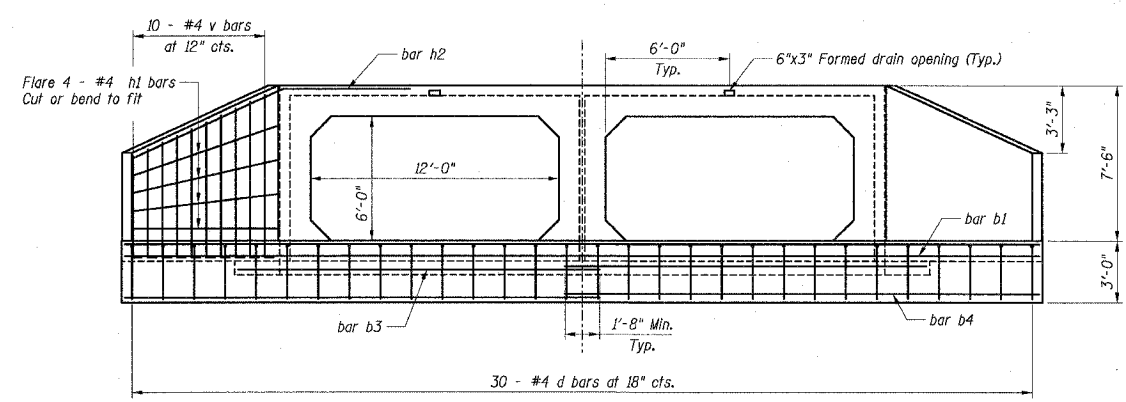
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9/20/2006 H:\DOT\BRI\06\1-24062\DESIGN\GN\GN1_90F32-1-24062GP.dgn

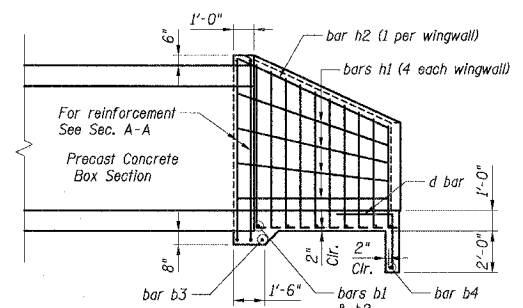
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1602	74 B-1	COOK	34	20
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62418				



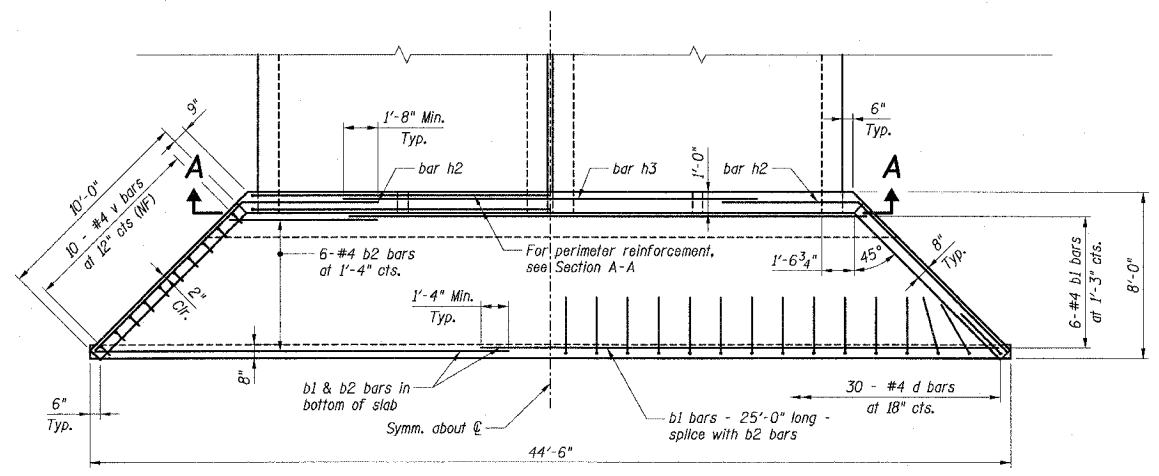
SECTION A-A
Perimeter Reinforcement



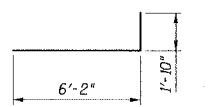
END ELEVATION



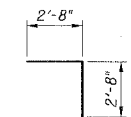
HALF SIDE ELEVATION



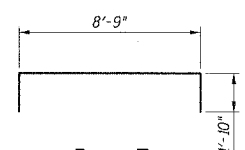
PLAN



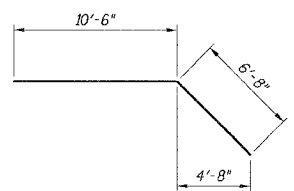
Bar s2



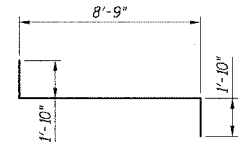
Bar d



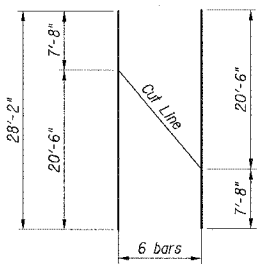
Bar s3



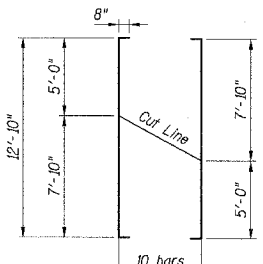
Bar h2



Bar s4



Bars b2



Bars v

BAR LIST

Bar	No.	Size	Length	Shape
b1	12	#4	25'-0"	—
b2*	6	#4	28'-2"	—
b3	4	#4	17'-6"	—
b4	4	#4	23'-0"	—
d	60	#4	5'-4"	—
h1	16	#4	10'-8"	—
h2	4	#4	17'-2"	—
h3	2	#4	20'-0"	—
s1	8	#4	20'-0"	—
s2	16	#4	8'-0"	—
s3	8	#4	12'-5"	—
s4	4	#4	12'-5"	—
v*	20	#4	14'-2"	—

*Cut bars according to bar cutting diagram

BILL OF MATERIAL

Item	Unit	Total
Concrete Structures	CU YD	34.7
Reinforcement Bars	POUNDS	1,297.0

Concrete Structures and Reinforcement Bar quantities are for reference only. The culvert end sections shall be paid for as Box Culvert End Sections - Each.

SHEET S-2

RHAA
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
147th STREET OVER BOCA RIO DITCH
F.A.U. ROUTE 1602, SECTION 74 B-1
COOK COUNTY
STRUCTURE NUMBER 016-2846
END SECTION DETAILS
DRAWN BY: DLS
CHECKED BY: JLR
DATE: SEPTEMBER 2006

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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	22
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62418				

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

Page 1 of 1
Date 12/31/03

ROUTE FAU 1602 DESCRIPTION 147th Street over Boca Rio Ditch, D-9-125-02

SECT. _____ STRUCT. NO. 016-0571(existing) DRILLED BY TSC/1-57,409

COUNTY Cook LOCATION _____ S. R., TWP. _____ 36N, RNC. _____ 13E

Boring No. B-1 Station 9+82 Offset 24.00 FT LT Surface Elev. 657.40 ft

DEPTH (ft)	DESCRIPTION	TESTS	REMARKS
0.0	Very stiff to stiff dark brown and black CLAY, moist to very moist	A-7-6	
2.25			
2.97			
28.0			
24.0			
18.5			
17.2			
14.4			
15.2			
3.0			
14.0 to 24.0 feet	CME 150 ATV Drill Rig (#53) CME Automatic Hammer 3.25" (83 mm) D HSA		
14.0-15.3 feet	Zones of Severe Fracturing		
15.3-17.2 feet			
18.0-20.0 feet			
24.0 feet	End of Rock Core		

SPT, (N) = Sum of last two blow values in sample. (Q) B-Bulge S-Shear P-Penetration Test
B-Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

Page 1 of 1
Date 12/31/03

ROUTE FAU 1602 DESCRIPTION 147th Street over Boca Rio Ditch, D-9-125-02

SECT. _____ STRUCT. NO. 016-0571(existing) DRILLED BY TSC/1-57,409

COUNTY Cook LOCATION _____ S. R., TWP. _____ 36N, RNC. _____ 13E

Boring No. B-2 Station 9+87 Offset 19.00 FT RT Surface Elev. 657.00 ft

DEPTH (ft)	DESCRIPTION	TESTS	REMARKS
0.0	FILL - Brown and dark brown CLAY LOAM, little black clay, very moist	A-6	
18.8			
28.0			
24.0			
18.5			
17.2			
14.4			
15.2			
3.0			
14.0 to 24.0 feet	CME 150 ATV Drill Rig (#53) CME Automatic Hammer 3.25" (83 mm) D HSA		
14.0-15.3 feet	Zones of Severe Fracturing		
15.3-17.2 feet			
18.0-20.0 feet			
24.0 feet	End of Rock Core		

Boring Performed by Hand Auger methods
Samples taken with split spoon sampler

SPT, (N) = Sum of last two blow values in sample. (Q) B-Bulge S-Shear P-Penetration Test
B-Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

Page 1 of 1
Date 2/9/04

ROUTE FAU 1602 DESCRIPTION 147th Street over Boca Rio Ditch, D-9-125-02

SECT. _____ STRUCT. NO. 016-0571(existing) DRILLED BY TSC/1-57,409

COUNTY Cook LOCATION _____ S. R., TWP. _____ 36N, RNC. _____ 13E

Boring No. B-3 Station 9+84 Offset 24.00 FT LT Surface Elev. 657.30 ft

DEPTH (ft)	DESCRIPTION	TESTS	REMARKS
0.0	FILL - Black SANDY LOAM, some crushed limestone gravel, very moist	A-2-4/A-4	
25.0			
36.7			
41.4			
13.9			
22.1			
17.5			
13.0			
5.6			
13.0 feet	Refusal at 13.0 feet on probable rock surface.		

GeoProbe on ATV Carrier (#294)
GP = Continuous 1.5" Diam. GeoProbe Samples

SPT, (N) = Sum of last two blow values in sample. (Q) B-Bulge S-Shear P-Penetration Test
B-Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

Page 1 of 1
Date 2/9/04

ROUTE FAU 1602 DESCRIPTION 147th Street over Boca Rio Ditch, D-9-125-02

SECT. _____ STRUCT. NO. 016-0571(existing) DRILLED BY TSC/1-57,409

COUNTY Cook LOCATION _____ S. R., TWP. _____ 36N, RNC. _____ 13E

Boring No. B-4 Station 9+86 Offset 24.00 FT RT Surface Elev. 655.70 ft

DEPTH (ft)	DESCRIPTION	TESTS	REMARKS
0.0	Black clayey TOPSOIL		
31.9			
25.6			
20.2			
19.9			
14.9			
10.0 feet	Refusal at 10.0 feet on probable rock surface.		

GeoProbe on ATV Carrier (#294)
GP = Continuous 1.5" Diam. GeoProbe Samples

SPT, (N) = Sum of last two blow values in sample. (Q) B-Bulge S-Shear P-Penetration Test
B-Stations, Depths, Offset, and Elevations are in Feet

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SHEET S-3

RH&A
Robert H. Anderson & Associates, Inc.
Consulting Engineers
Timbers Professional Center
220 West River Drive, St. Charles, IL 60174
Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS	
NAME	DATE

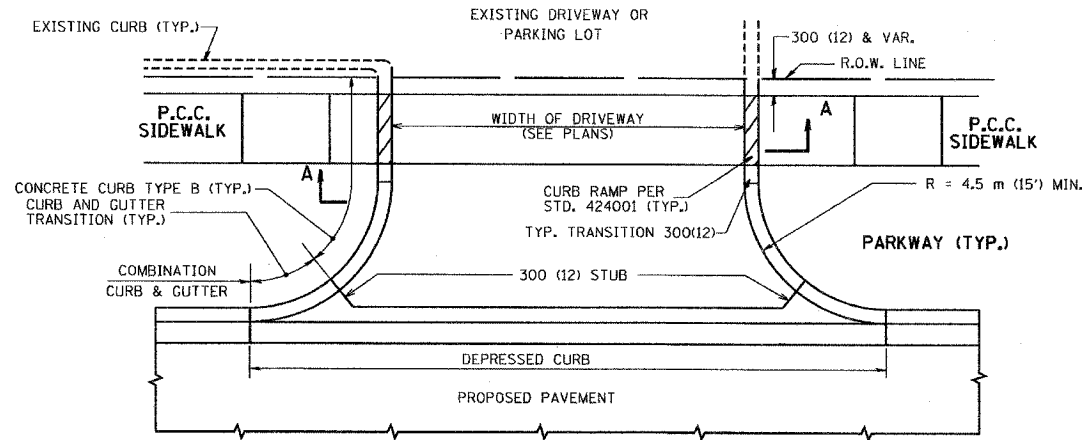
ILLINOIS DEPARTMENT OF TRANSPORTATION
147th STREET OVER BOCA RIO DITCH
F.A.U. ROUTE 1602, SECTION 74 B-1
COOK COUNTY
STRUCTURE NUMBER 016-2846

BORING LOGS

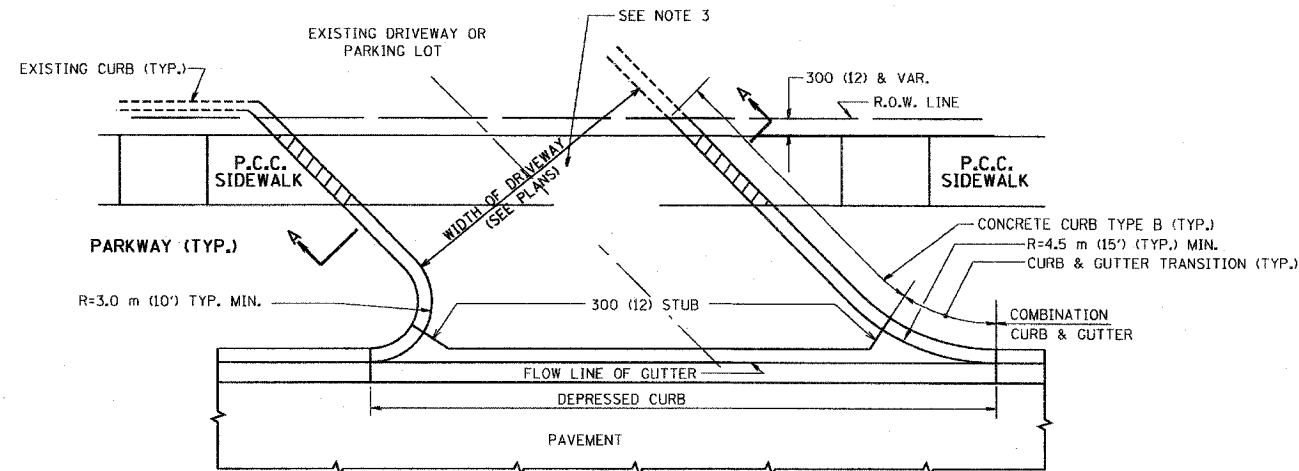
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DATE: SEPTEMBER 2006

9-25-06

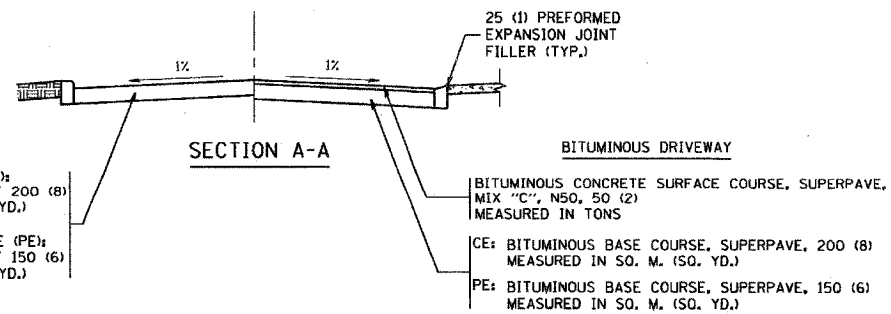
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	23
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



WITH CONCRETE CURB, TYPE B

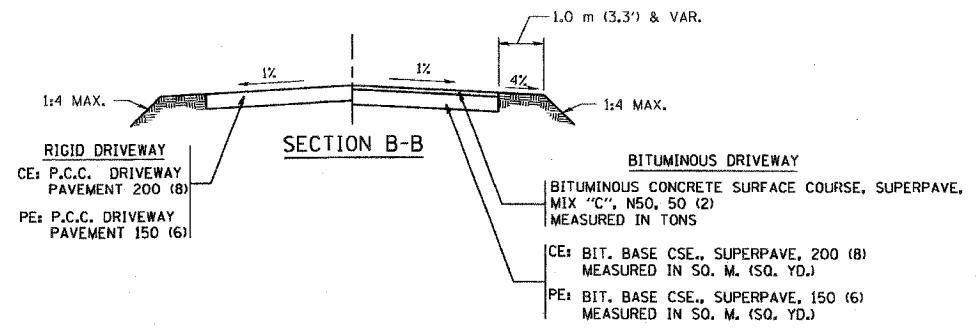
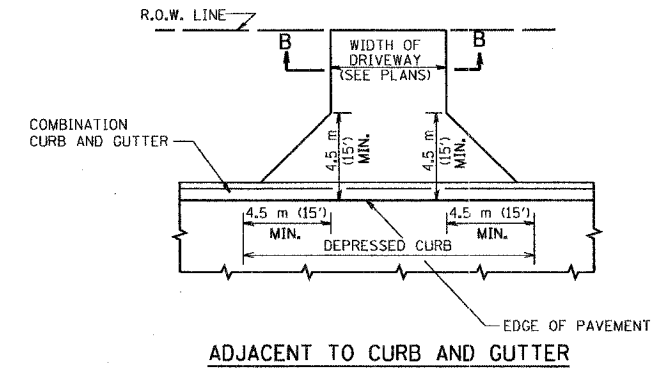
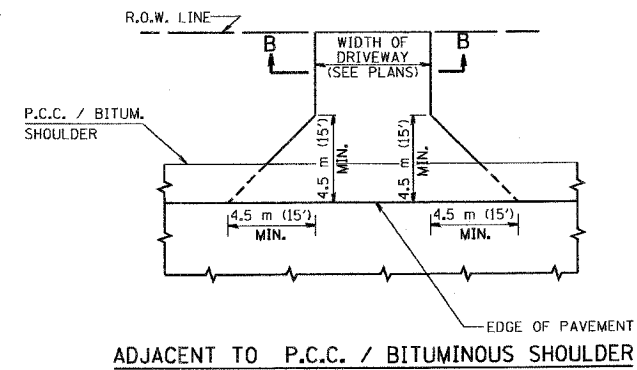


WITH CONCRETE CURB, TYPE B



RIGID DRIVEWAY
 COMMERCIAL ENTRANCE (CE):
 P.C.C. DRIVEWAY PAVEMENT 200 (8)
 MEASURED IN SO. M. (SQ. YD.)
 NON-COMMERCIAL ENTRANCE (PE):
 P.C.C. DRIVEWAY PAVEMENT 150 (6)
 MEASURED IN SO. M. (SQ. YD.)

BITUMINOUS DRIVEWAY
 BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE,
 MIX "C", N50, 50 (2)
 MEASURED IN TONS
 CE: BITUMINOUS BASE COURSE, SUPERPAVE, 200 (8)
 MEASURED IN SO. M. (SQ. YD.)
 PE: BITUMINOUS BASE COURSE, SUPERPAVE, 150 (6)
 MEASURED IN SO. M. (SQ. YD.)



GENERAL NOTES:

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

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

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

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

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.

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

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
DRIVEWAY DETAILS
 DISTANCE BETWEEN R.O.W. AND FACE OF CURB / EDGE OF SHOULDER >= 4.5 m (15')

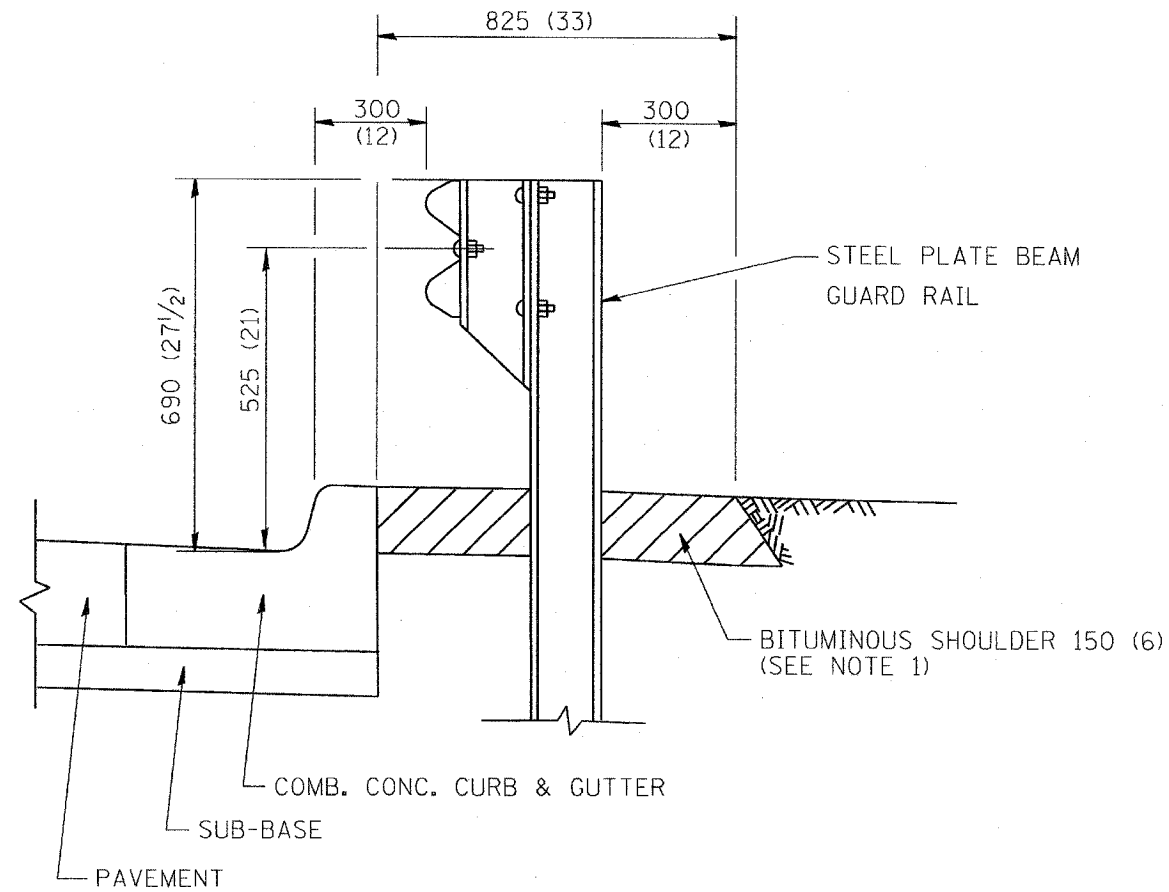
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DRAWN BY
 CHECKED BY

BD400-01 (BD-01)
 REVISION DATE: 04/15/03

PLOT DATE = 2/15/2006
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 USER NAME = gajjendran

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	24
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

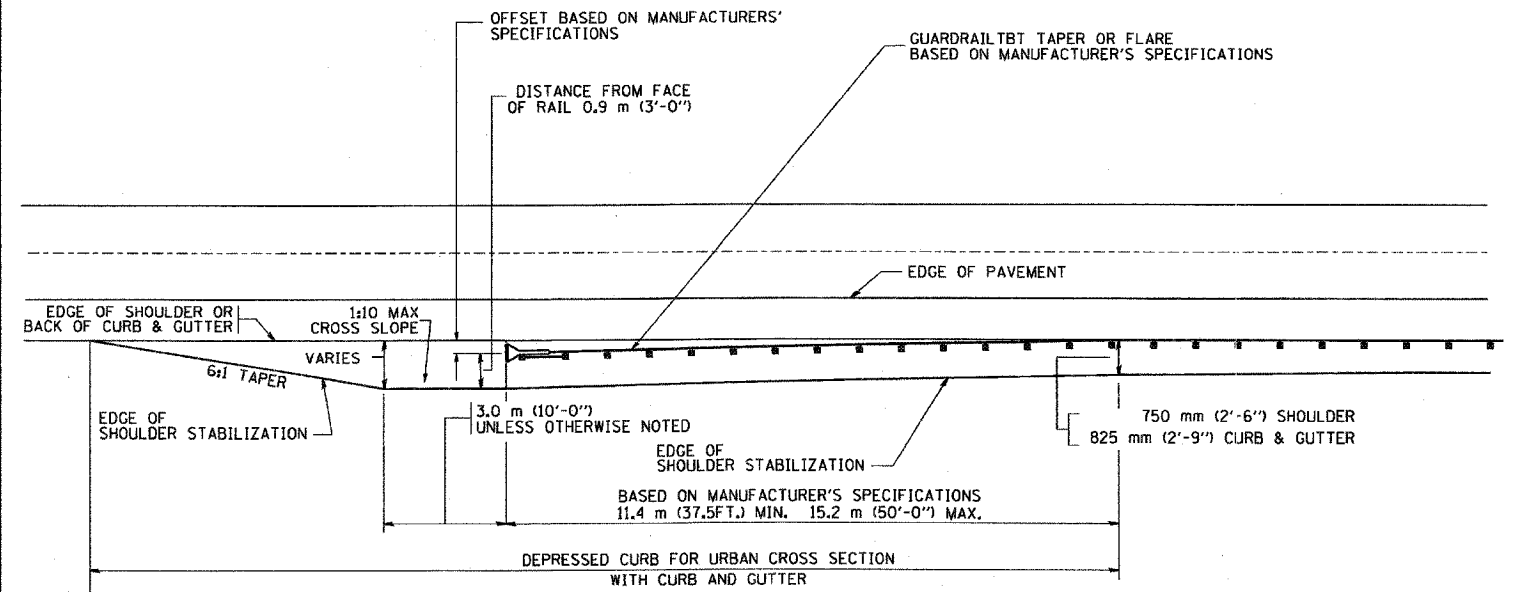


- NOTES: 1. THE BITUMINOUS SHOULDER SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL
2. GUARD RAIL MAY BE PLACED AT THE BACK OF CURB WHEN DIRECTED BY THE ENGINEER.

BASIS OF PAYMENT: BITUMINOUS SHOULDER 150 (6) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER m² (sq. yd.) AS "BITUMINOUS SHOULDER 150 (6)."

STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER
 [FOR ROADWAY SPEED 60 kmh (35 MPH) TO 70 kmh (45 MPH)]



STABILIZATION AT TBT TY. 1 SPL.

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

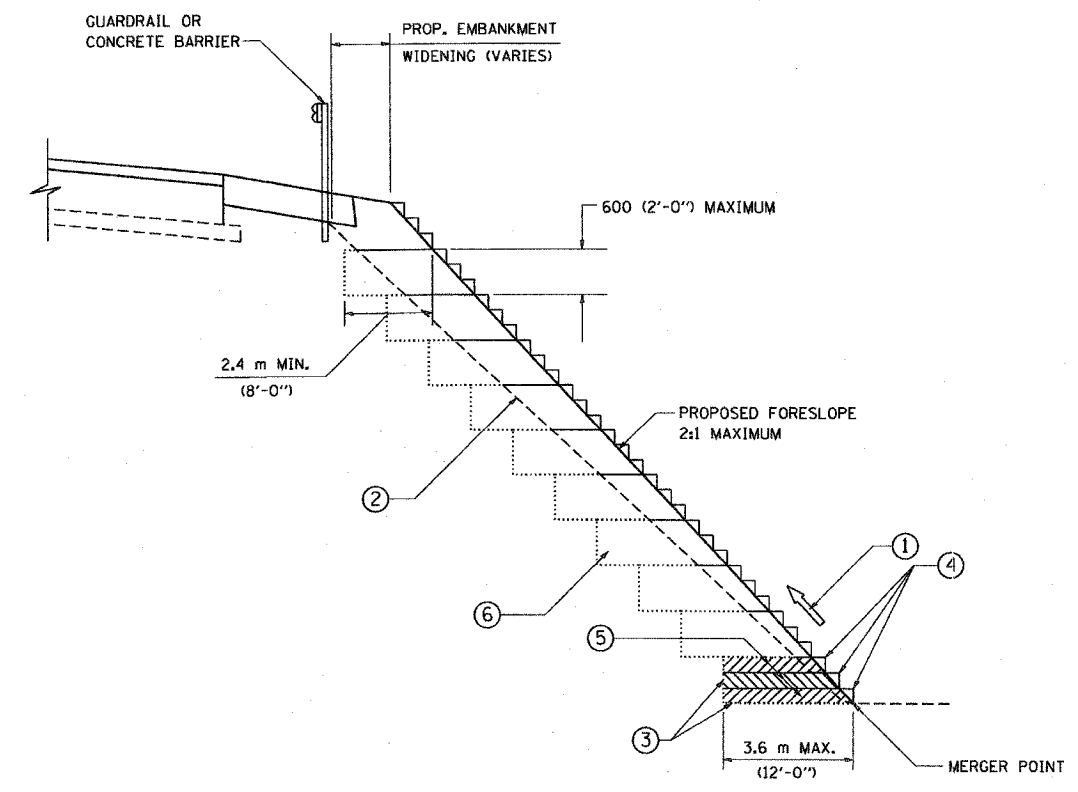
REVISIONS	
NAME	DATE
M. DE YONG	09-22-90
M. DE YONG	07-14-92
R. SHAH	09/09/94
R. SHAH	10/25/94
R. SHAH	02/23/95
A. ABBAS	03/21/97
E. GOMEZ	08/28/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER STABILIZATION AT TBT TY 1 SPL.

SCALE: VERT. DATE: 2/15/2006

DRAWN BY jls CHECKED BY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	25
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



**TYPICAL BENCHING DETAIL
FOR EMBANKMENT**

NOTES:

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

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**BENCHING DETAIL
FOR EMBANKMENT
WIDENING**

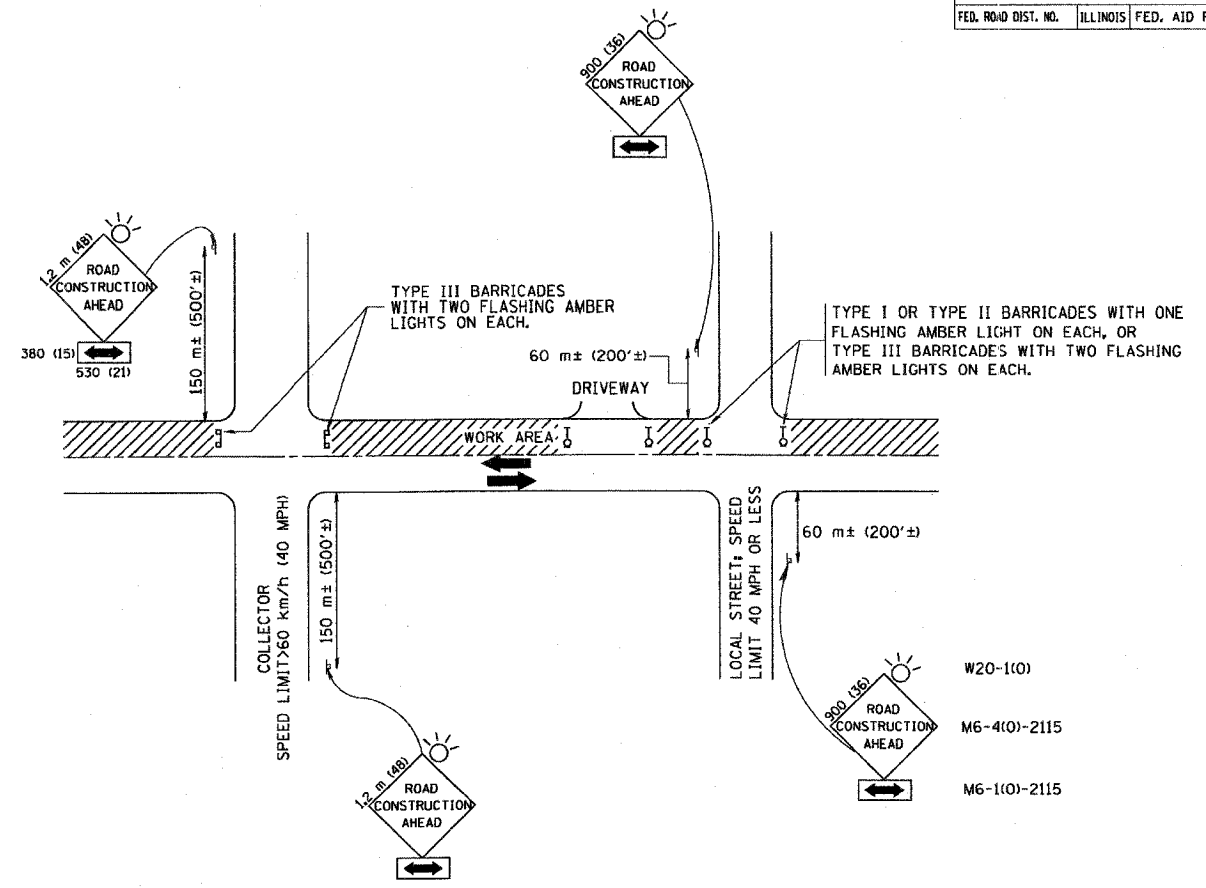
SCALE: VERT.
HORIZ.
DATE: 2/15/2006

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

REVISION DATE: 6-16-2004

PLOT DATE: 2/15/2006
FILE NAME: W:\GIS\150\1501.dwg
PLOT SCALE: 48,3999 / IN.
USER NAME: gajlinoast

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	26
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



W20-1(0)
M6-4(0)-2115
M6-1(0)-2115

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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
 - 1. SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) 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.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) 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.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

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

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

REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	05/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

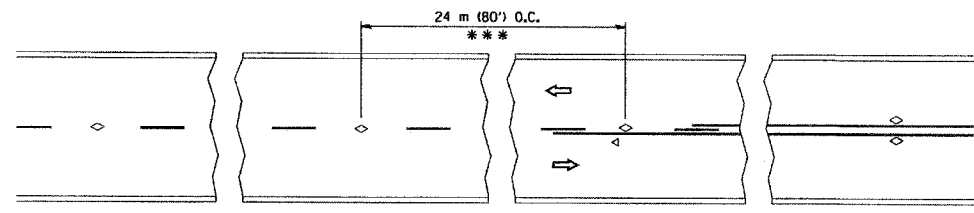
ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL AND PROTECTION
FOR
SIDE ROADS, INTERSECTIONS, AND
DRIVEWAYS

SCALE:
DATE: 2/15/2006

DRAWN BY
CHECKED BY
TC-10

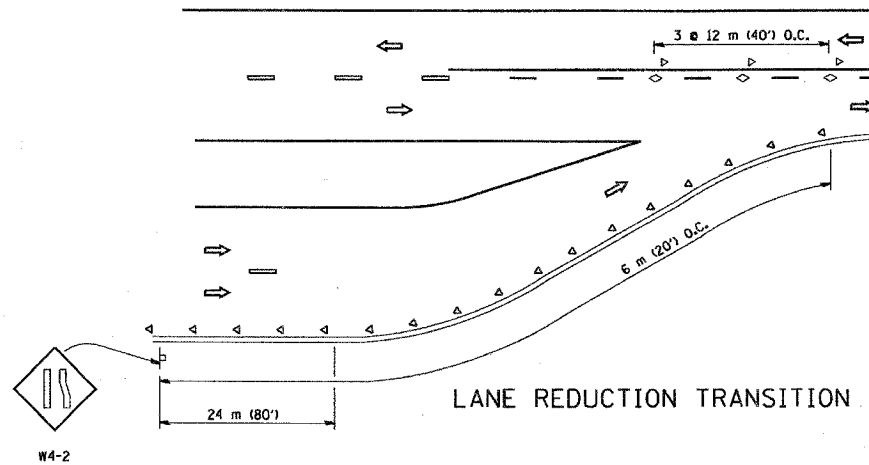
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PLOT SCALE = 800000 / 1" = 100000'
USER NAME = greglambert

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	27
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

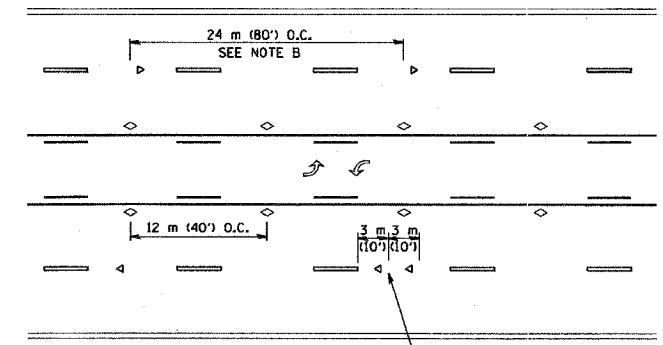


*** REDUCE TO 12 m (40') O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 70 km/h (45 M.P.H.) OR LESS.

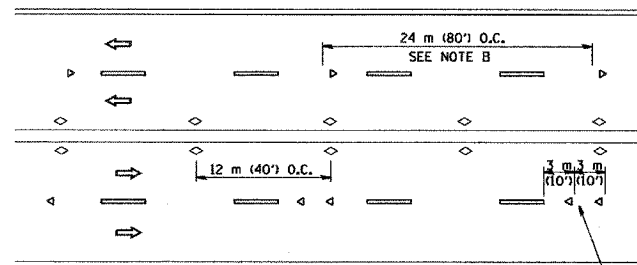
TWO-LANE/TWO-WAY



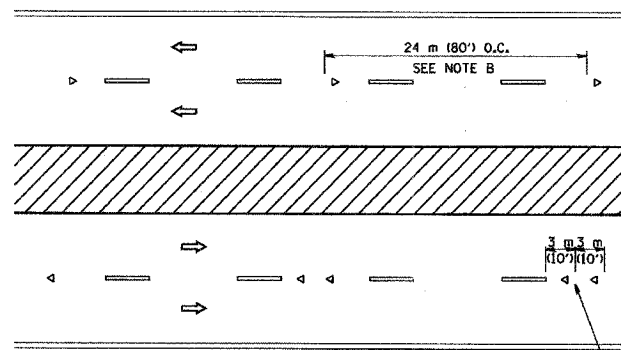
LANE REDUCTION TRANSITION



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.

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

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

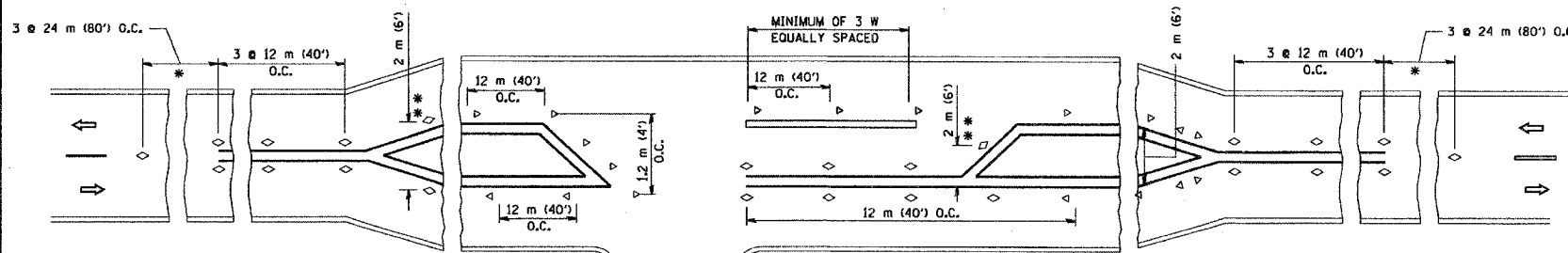
ILLINOIS DEPARTMENT OF TRANSPORTATION
TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT
MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE
DATE: 2/15/2006

DRAWN BY CADD
CHECKED BY TC-II

REVISION DATE: 01/06/00

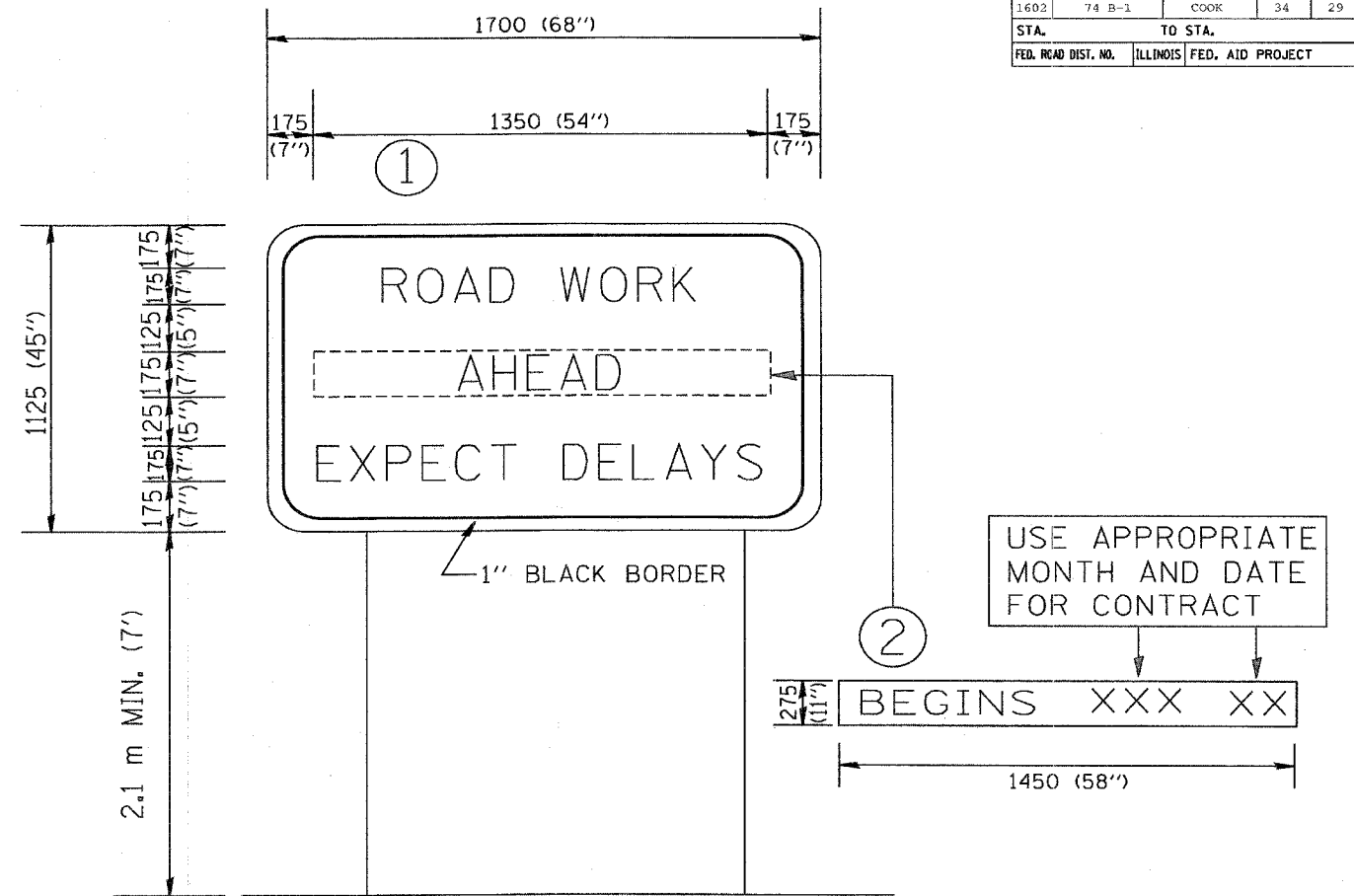
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PLOT SCALE = 1:1
USER NAME = greglenn



LEFT TURN

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	29
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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.)

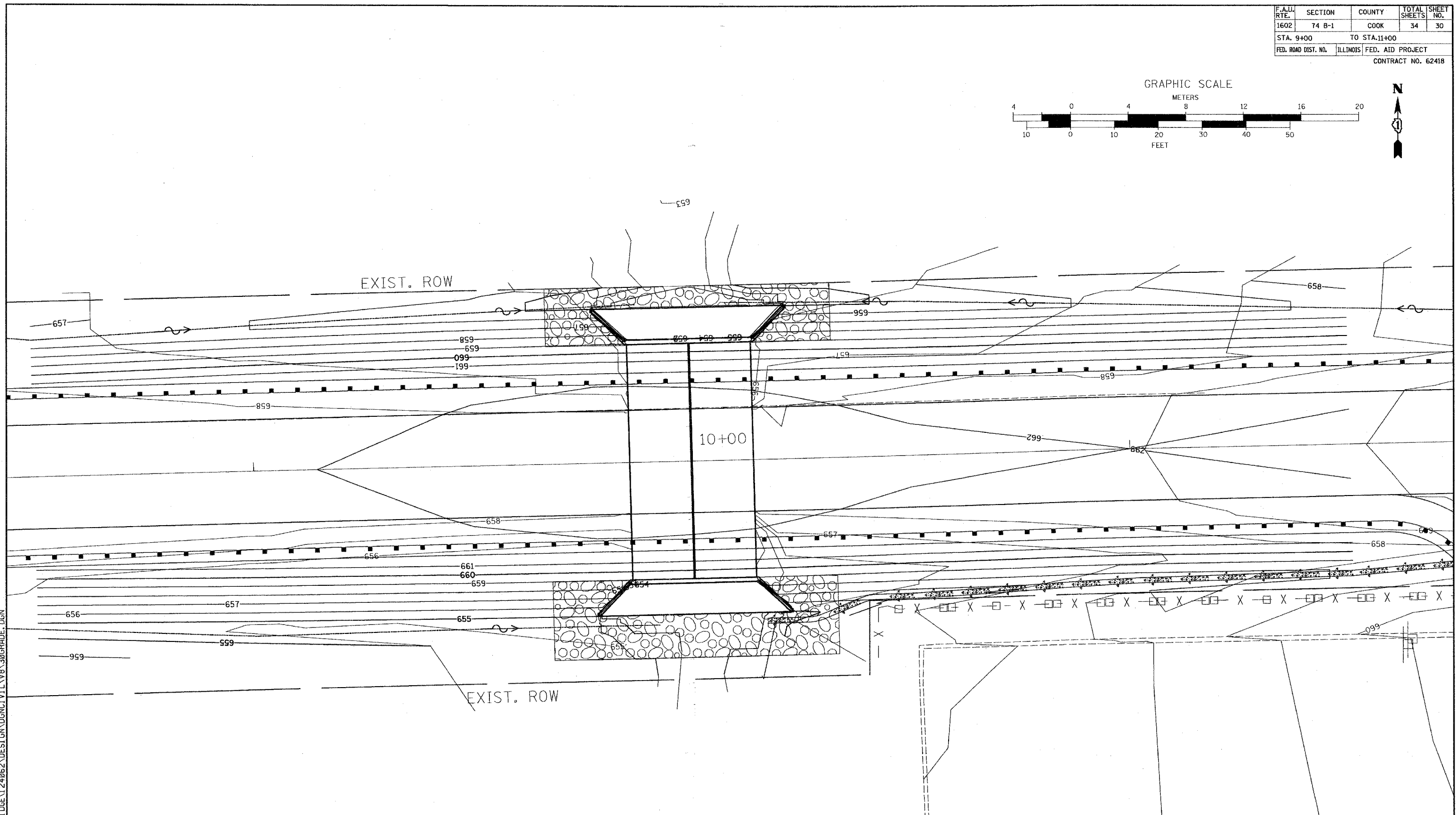
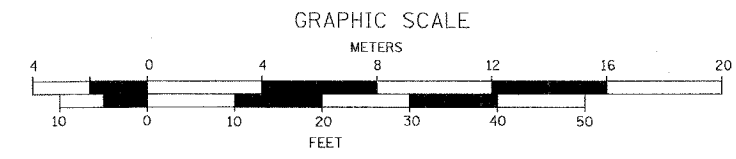
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY INFORMATION SIGNING
 SCALE: DATE: 2/15/2006
 DRAWN BY DESIGN
 CHECKED BY
 TC22
 REVISION DATE: 02/02/99

PLOT DATE = 2/15/2006
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 PLOT SCALE = 50.000 / IN.
 USER NAME = gottlieb

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	30
STA. 9+00		TO STA. 11+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62418				



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RH&A
 Robert H. Anderson & Associates, Inc.
 Consulting Engineers
 Timbers Professional Center
 220 West River Drive, St. Charles, IL 60174
 Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 147th STREET OVER BOCA RIO DITCH
 F.A.U. 1602, SECTION 74 B-1
 COOK COUNTY

GRADING PLAN

SCALE: VERT. 1" = 10'
 HORIZ. 1" = 10'
 DATE: AUGUST 2006

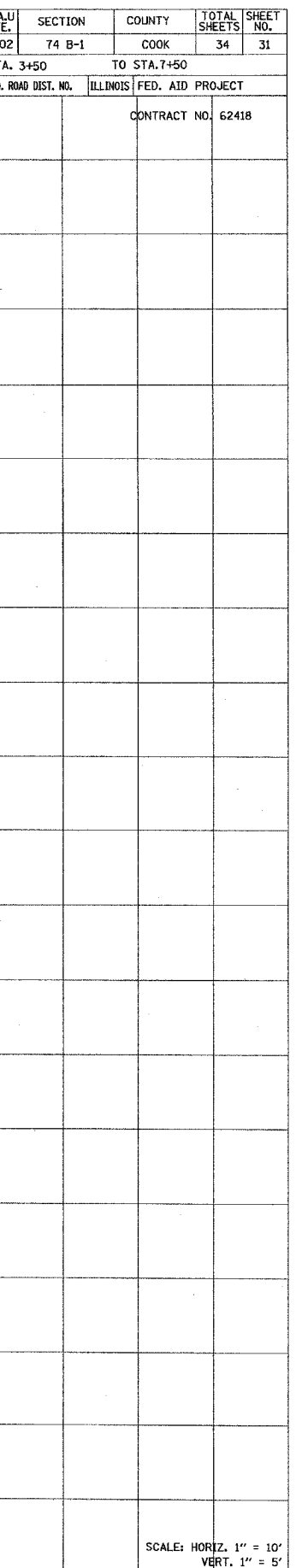
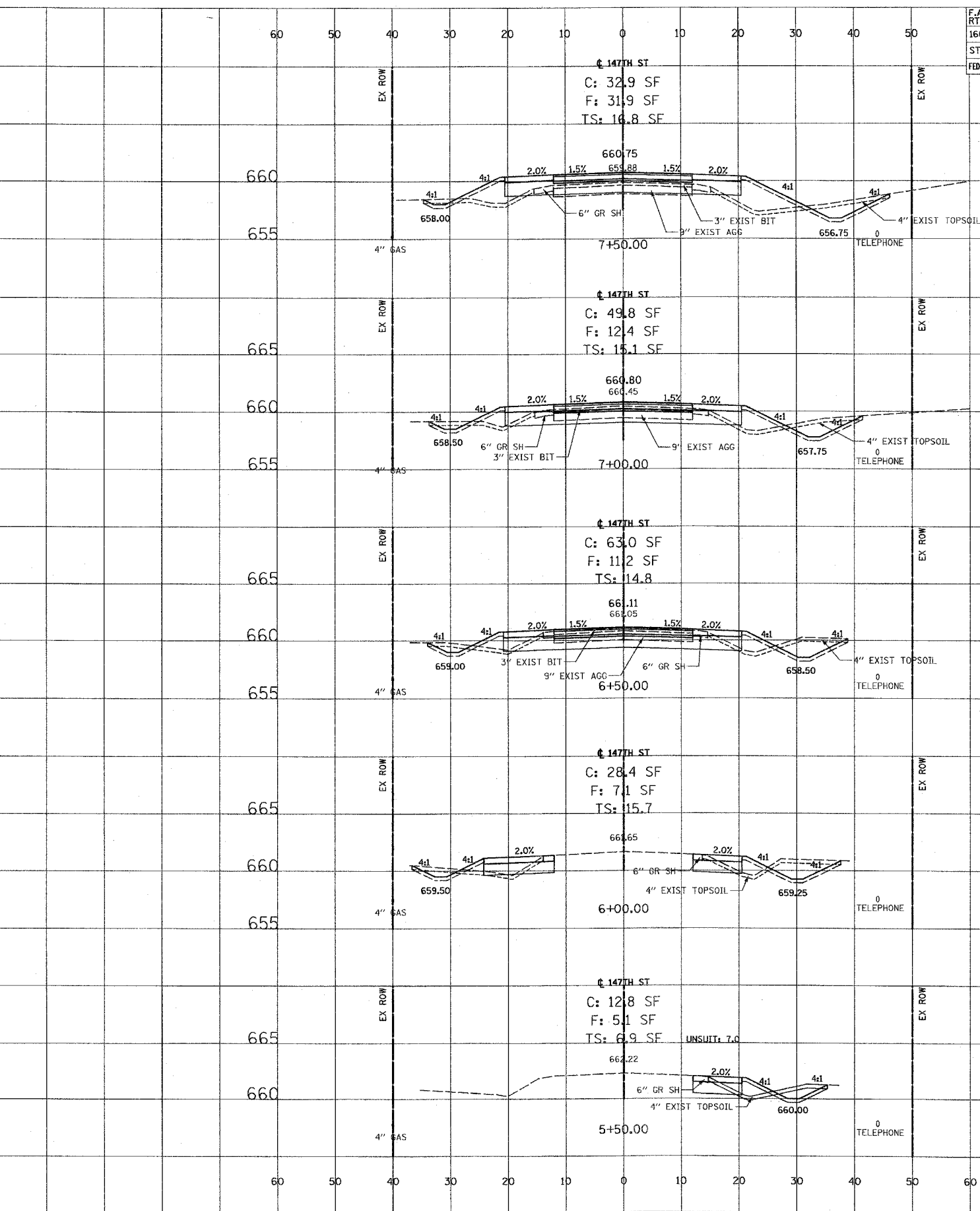
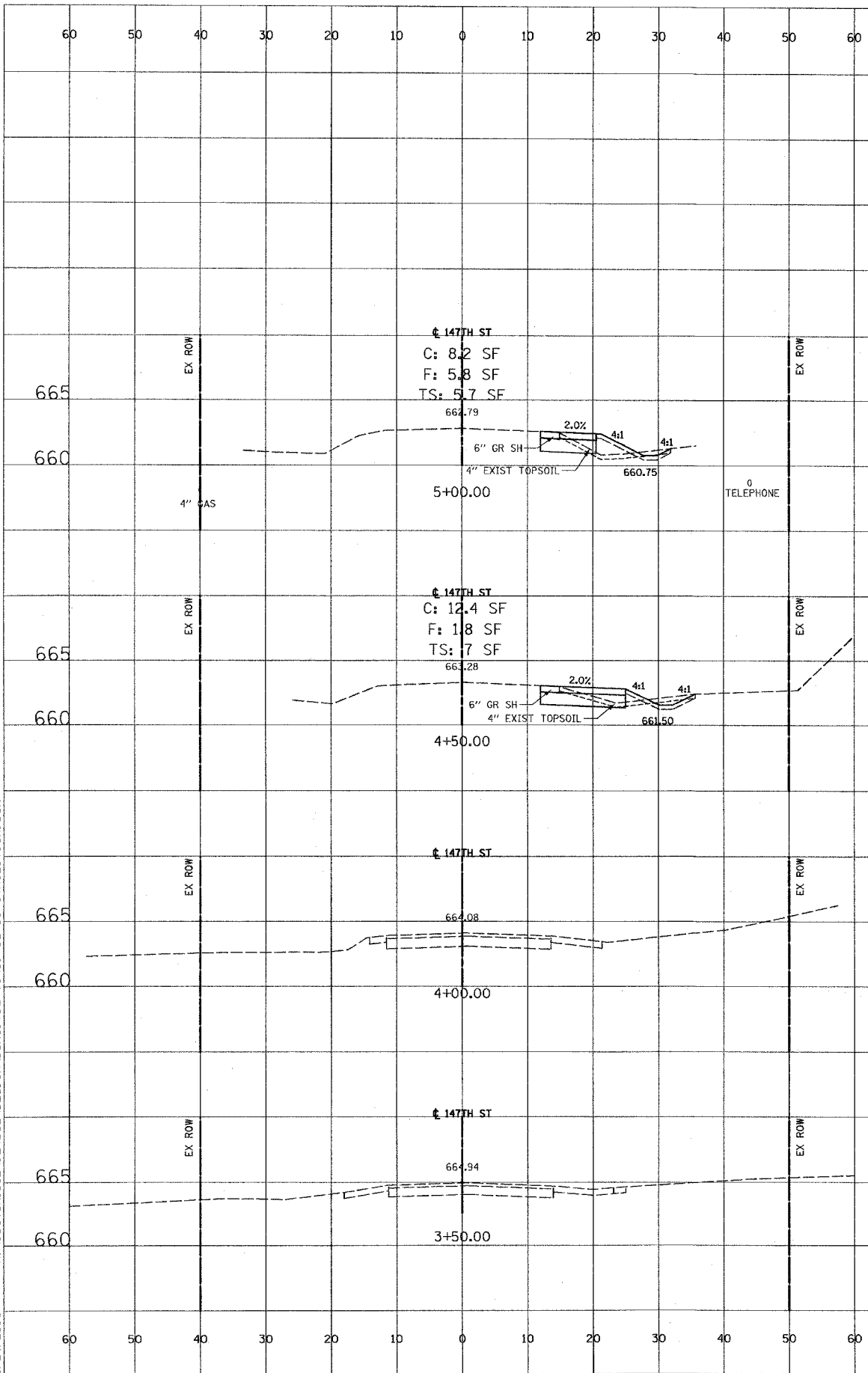
DRAWN BY: TC
 CHECKED BY: KMA

DATE	
BY	
FINAL SURVEY	
NOTED	
PLOTTED	
DATE	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
NOTED	
PLOTTED	
DATE	
AREAS CHECKED	
NO.	

8/29/2006 H:\1\DOT\BRI\05124\062\DESIGN\GN\GN\31-32-33-34\SECTION.DGN

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	31
STA. 3+50		TO STA. 7+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62418				

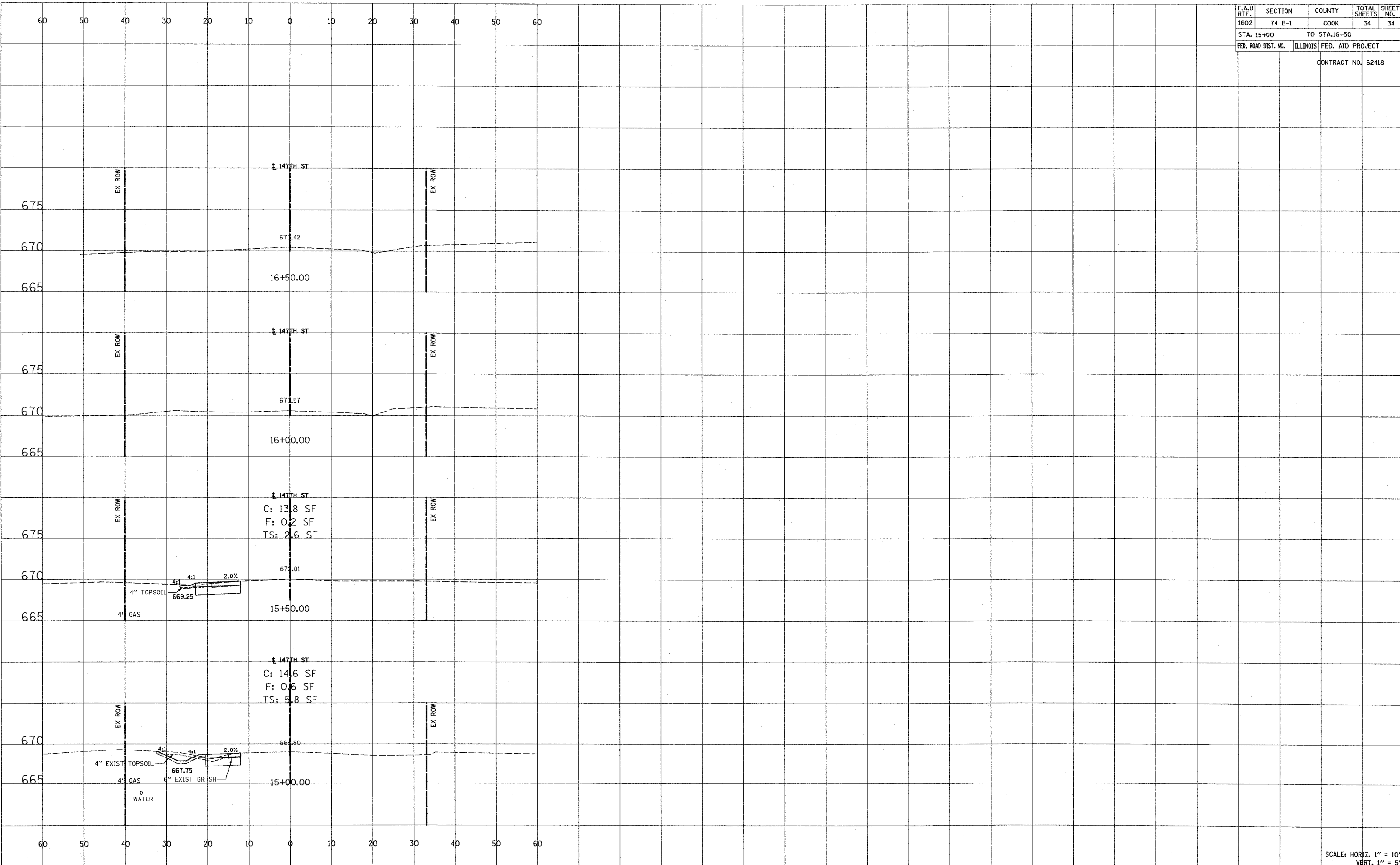


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	74 B-1	COOK	34	34
STA. 15+00		TO STA. 16+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62418				

FINAL SURVEY	DATE
SURVEYED	
BY	
NOTE BOOK	
NO.	
AREAS CHECKED	

ORIGINAL SURVEY	DATE
SURVEYED	
BY	
NOTE BOOK	
NO.	
AREAS CHECKED	

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 8/29/2006



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