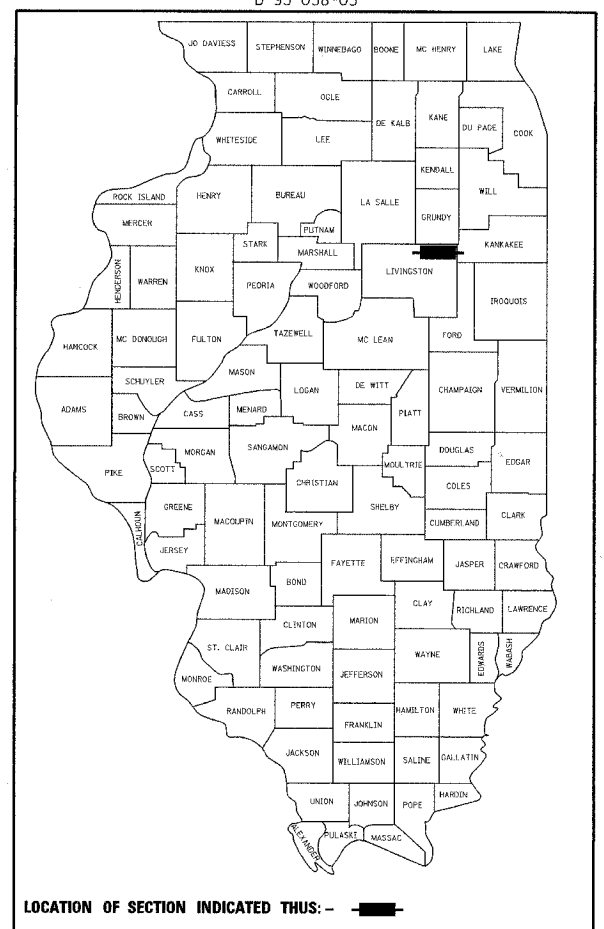


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
41	15-BR	LIVINGSTON	38	1

CONTRACT NO. 66665

P-93-034-04
D-93-038-05



FUNCTIONAL CLASSIFICATION - RURAL MINOR ARTERIAL
DESIGN SPEED = 55 MPH
POSTED SPEED = 55 MPH
2005 ADT = 3,000
2007 ADT = 3,150
P.V. = 75.0% S.U. = 5.0% M.U. = 20.0%

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED October 27, 2006
Debra A. Hurler
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

December 8, 2006
Eric E. Hamrick
 INTERIM ENGINEER OF DESIGN AND ENVIRONMENT

December 8, 2006
Milton R. See, P.E./D
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
HIGHWAY IMPROVEMENT
FAP ROUTE 41 (ILLINOIS ROUTE 17)
SECTION 15 BR
PROJECT BRF-0041 (127)
LIVINGSTON COUNTY

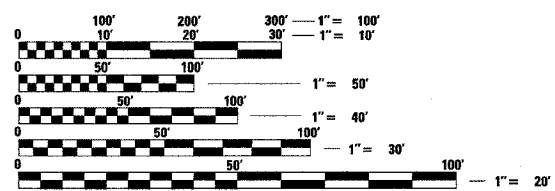
INDEX OF SHEETS

1. COVER SHEET
2. GENERAL NOTES
3. SUMMARY OF QUANTITIES
4. TYPICAL SECTIONS
5. SCHEDULE OF QUANTITIES
6. ALIGNMENT, TIES & BENCHMARKS
7. TRAFFIC CONTROL CONSTRUCTION STAGING NOTES AND DETAILS
8. TRAFFIC CONTROL CONSTRUCTION STAGING
- 9-10. PLAN AND PROFILE
11. EROSION CONTROL, LANDSCAPING & PAVEMENT MARKING PLAN
- 12-26. BRIDGE PLANS
- 27-28. DISTRICT DETAILS
- 29-38. CROSS SECTIONS

HIGHWAY STANDARDS

- | | |
|-----------|---|
| 000001-04 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 280001-03 | TEMPORARY EROSION CONTROL SYSTEMS |
| 420401-05 | BRIDGE APPROACH PAVEMENT |
| 482001-01 | HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT |
| 482011-02 | HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS |
| 515001-02 | NAME PLATE FOR BRIDGES |
| 601101 | CONCRETE HEADWALL FOR PIPE DRAIN |
| 630001-07 | STEEL PLATE BEAM GUARDRAIL |
| 630201-04 | PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL |
| 630301-04 | SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS |
| 631031-06 | TRAFFIC BARRIER TERMINAL, TYPE 6 |
| 635006-02 | REFLECTOR AND TERMINAL MARKER PLACEMENT |
| 635011-01 | REFLECTOR MARKER AND MOUNTING DETAILS |
| 701201-02 | LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH |
| 701301-02 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS |
| 701321-08 | LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER |
| 701326-02 | LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS > 45 MPH |
| 702001-06 | TRAFFIC CONTROL DEVICES |
| 720001 | SIGN PANEL MOUNTING DETAILS |
| 720006-01 | SIGN PANEL ERECTION DETAILS |
| 780001-01 | TYPICAL PAVEMENT MARKINGS |
| 781001-02 | TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS |

MICROFILMED _____
 REEL NUMBER _____
 AWARDED _____
 RESIDENT ENGINEER _____
 AS BUILT CHANGES WERE MADE ON THE FOLLOWING SHEETS _____

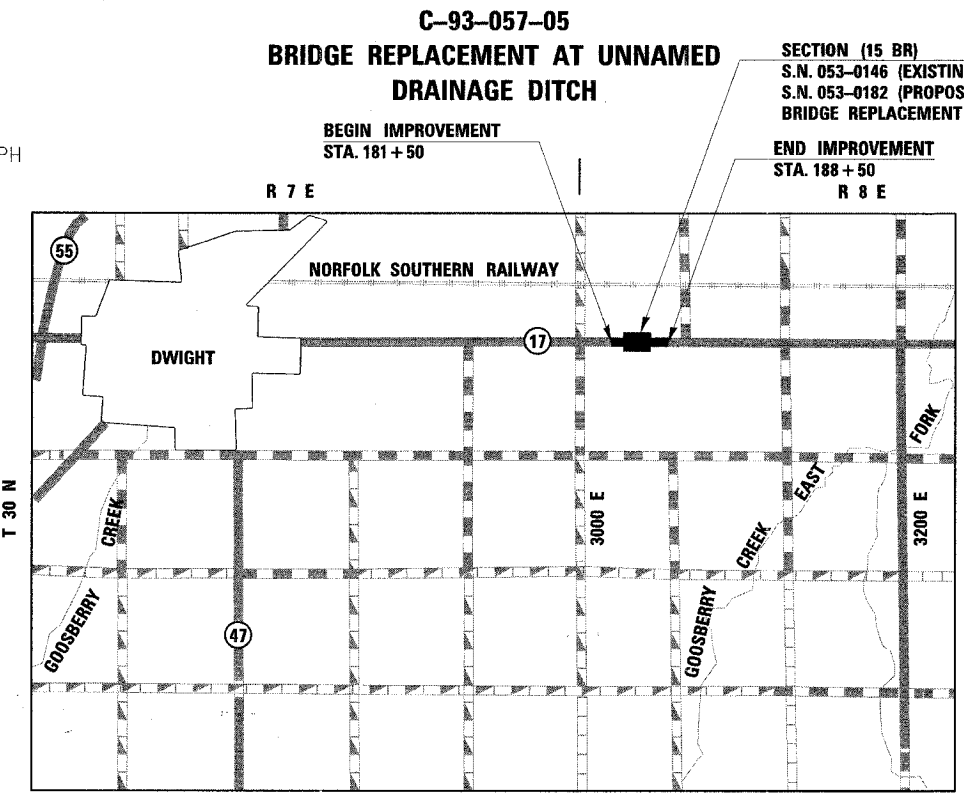


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

DISTRICT 3 NO. (815) 434-6131
 PROJECT ENGINEER: DAVID BROVIAK
 UNIT CHIEF: BRAD DUNCAN
 TOWNSHIP: ROUND GROVE

CONTRACT NO. 66665



GROSS & NET LENGTH = 700 FT. = 0.133 MI.

rjngroup License # 184-000813
 Excellence through Ownership
 200 West Front Street
 Wheaton, IL 60187

REGISTERED P.E., STATE OF ILLINOIS
 REGISTERED S.E., STATE OF ILLINOIS

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
41	15 BR	LIVINGSTON	38	2
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 66665

GENERAL NOTES – ROADWAY

1. SAW CUTTING OF PAVEMENTS, SHOULDERS, ETC., SHALL BE TO FULL DEPTH AND SHALL RESULT IN A CLEAN, STRAIGHT EDGE ON THE PORTION REMAINING. THE COST OF SAW CUTTING REMOVAL ITEMS SHALL BE INCLUDED IN THE UNIT PRICE OF THESE ITEMS.
2. THE THICKNESS OF HMA SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA IS PLACED.
3. EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.
4. THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.

GENERAL NOTES – TRAFFIC CONTROL & PROTECTION

1. STAGING PROCEDURES PRESENTED ARE THE SUGGESTED SEQUENCE OF OPERATIONS. AT HIS OPTION, THE CONTRACTOR MAY SUBMIT AN ALTERNATIVE STAGING PROPOSAL TO THE ENGINEER FOR HIS APPROVAL.
2. ALL TEMPORARY PAVEMENT MARKINGS PROPOSED WITHIN THE WORK AREA SHALL BE COMPLETED PRIOR TO THE CONSTRUCTION PHASE CHANGE.
4. BARRICADES: FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

GENERAL NOTES – UTILITIES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTICE REQUIRED)
2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
3. ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
4. MEMBERS OF J.U.L.I.E. KNOWN TO BE WITHIN THE LIMITS OF IMPROVEMENT ARE:
COMMONWEALTH EDISON
SBC
5. THE CONTRACTOR SHOULD BE AWARE THAT OVERHEAD ELECTRIC CABLES IN THE AREA MAY NOT BE INSULATED. EXTRA CARE SHOULD BE TAKEN WHEN WORKING AROUND OVERHEAD ELECTRIC FACILITIES IN ORDER TO AVOID ACCIDENTS.
6. ALL DAMAGE TO DEPARTMENT OWNED UNDERGROUND FACILITIES, CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTOR'S EXPENSE. THIS SHALL INCLUDE ALL TEMPORARY REPAIRS REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS. SPLICING CABLE SHALL BE REPLACED FROM POLE TO POLE OR CONTROLLER TO CONTROLLER.

GENERAL NOTES – EROSION CONTROL

1. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE STATE STANDARDS FOR THE ENTIRE DURATION OF THE CONTRACT, OR UNTIL SUCH TIME AS DIRECTED BY THE ENGINEER.
2. SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.
3. THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR (4) INCHES IN AREAS TO BE SEEDED OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF FURNISHED EXCAVATION.

GENERAL NOTES – MISCELLANEOUS

1. ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.
2. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT THE WRITTEN PERMISSION FROM THE DEPARTMENT.
3. ANY REFERENCE TO A STANDARD ON THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN LIST OF STANDARDS INCLUDED IN THESE PLANS.
4. ONLY THOSE TREES DESIGNATED BY THE ENGINEER OR LISTED IN THE TREE REMOVAL SCHEDULE SHALL BE REMOVED. THE CONTRACTOR SHALL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05	TONS / CU YD
BITUMINOUS MAT PRIME COAT	0.08	GAL / SQ YD OR
	0.375	GAL / SQ YD
AGGREGATE PRIME COAT	0.002	TONS / SQ YD
HMA SURFACING	112	LBS / SQ YD / IN
SHORT TERM PAVEMENT MARKING	10	FT /100 FT OF APPLICATION
MIX FOR CRACKS, JTS & FLGWYS	0.0003	TONS / SQ YD
LEVEL BINDER (HAND METHOD)	0.0005	TONS / SQ YD
SUPPLEMENTAL WATERING	3	GAL / SQ YD / APPLICATION
CALCIUM CHLORIDE	2	LB / SQ YD / APPLICATION
TEMPORARY DITCH CHECKS	5	TONS AGGREGATE

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT THREE

REVIEWED BY: *Rick Powell*
DISTRICT STUDIES & PLANS ENGINEER

DATE: 10-27-06

EXAMINED BY: *Shelby D...*
DISTRICT CONSTRUCTION ENGINEER

Shelby D...
DISTRICT MATERIALS ENGINEER

James D. H...
DISTRICT OPERATIONS ENGINEER

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 41 (IL 17)

GENERAL NOTES

SCALE: VERT. _____
HORIZ. _____
DATE: OCTOBER 20, 2006
DRAWN BY: NEC
CHECKED BY: SPF

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80% FED
20% STATE

SUMMARY OF QUANTITIES		UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
CODE #	PAY ITEM			I000-2A ROADWAY	X020-2A #053-0182 STRUCTURE
20200100	EARTH EXCAVATION	CU YD	239	239	
20400800	FURNISHED EXCAVATION	CU YD	44	44	
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	78		78
25000210	SEEDING, CLASS 2A	ACRE	0.2	0.2	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	14	14	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	14	14	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	14	14	
25100115	MULCH, METHOD 2	ACRE	0.2	0.2	
25100630	EROSION CONTROL BLANKET	SQ YD	89	89	
28000300	TEMPORARY DITCH CHECKS	EACH	4	4	
28000400	PERIMETER EROSION BARRIER	FOOT	1,342	1,342	
28100107	STONE RIPRAP, CLASS A4	SQ YD	569		569
28200200	FILTER FABRIC	SQ YD	569		569
31101200	SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	1,301	1,301	
40200900	AGGREGATE SURFACE COURSE, TYPE B	CU YD	1	1	
40300100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	207	207	
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	64	64	
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	217	217	
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	244	244	
42001300	PROTECTIVE COAT	SQ YD	244	244	
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	50	50	
44000100	PAVEMENT REMOVAL	SQ YD	32	32	
44000155	HOT-MIX ASPHALT SURFACE REMOVAL 1 1/2"	SQ YD	1,406	1,406	
44000700	APPROACH SLAB REMOVAL	SQ YD	160	160	
44004250	PAVED SHOULDER REMOVAL	SQ YD	1,345	1,345	
48101200	AGGREGATE SHOULDERS TYPE B	TON	20	20	
48203023	HOT-MIX ASPHALT SHOULDERS 6 1/2"	SQ YD	1,169	1,169	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50200100	STRUCTURE EXCAVATION	CU YD	201		201
50300100	FLOOR DRAINS	EACH	8		8
50300225	CONCRETE STRUCTURES	CU YD	140.6		140.6
50300255	CONCRETE SUPERSTRUCTURE	CU YD	223.4		223.4
50300260	BRIDGE DECK GROOVING	SQ YD	392		392
50300280	CONCRETE ENCASEMENT	CU YD	9.8		9.8
50300300	PROTECTIVE COAT	SQ YD	503		503
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	61,300		61,300
50800515	BAR SPLICERS	EACH	257		257

* SPECIALTY ITEM

80% FED
20% STATE

SUMMARY OF QUANTITIES		UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
CODE #	PAY ITEM			I000-2A ROADWAY	X020-2A #053-0182 STRUCTURE
51201600	FURNISHING STEEL PILES HP 12x53	FOOT	1,557		1,557
51202305	DRIVING PILES	FOOT	1,557		1,557
51203600	TEST PILE STEEL HP 12x53	EACH	2		2
51205200	TEMPORARY SHEET PILING	SQ FT	252		252
51500100	NAME PLATES	EACH	1		1
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	43		43
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	154		154
63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	300	300	
63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4	
63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	4	4	
63200310	GUARDRAIL REMOVAL	FOOT	630	630	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	5	5	
67100100	MOBILIZATION	L SUM	1	1	
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1	
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	10	10	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	3,753	3,753	
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	48	48	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	906	906	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	375	375	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	325	325	
78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	1,538	1,538	
78008230	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	290	290	
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	6	6	
78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	2	2	
78200410	GUARDRAIL MARKERS - TYPE A	EACH	6	6	
78200520	BARRIER WALL MARKERS - TYPE B	EACH	4	4	
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
78300100	PAVEMENT MARKING REMOVAL	SQ FT	340	340	
XX003404	TEMPORARY PAVEMENT, 8"	SQ YD	822	822	
X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1		1
X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH	1		1
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON - REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON - REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	24		24

* SPECIALTY ITEM ■ SFTY-3N



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200 West Front Street
Wheaton, IL 60187

REVISIONS	
NAME	DATE

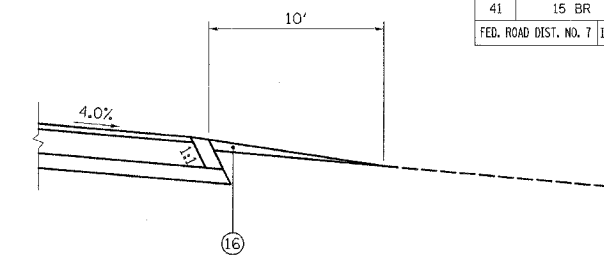
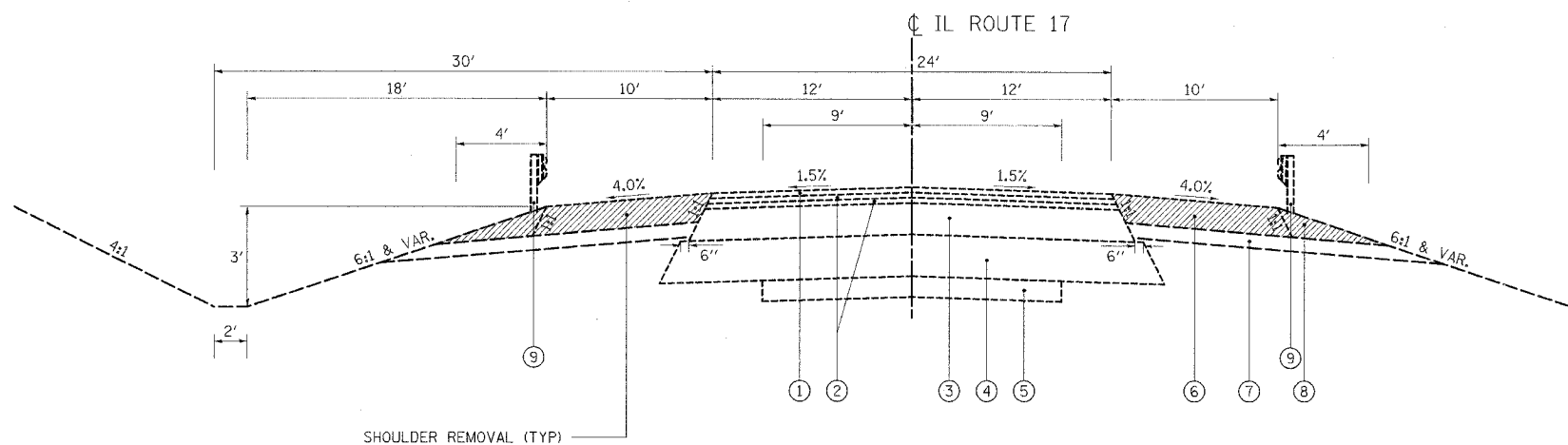
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 41 (IL 17)

SUMMARY OF QUANTITIES

SCALE: VERT.
HORIZ.
DATE: OCTOBER 20, 2006

DRAWN BY: NEC
CHECKED BY: SPF

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
41	15 BR	LIVINGSTON	38	4
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				
CONTRACT NO. 66665				



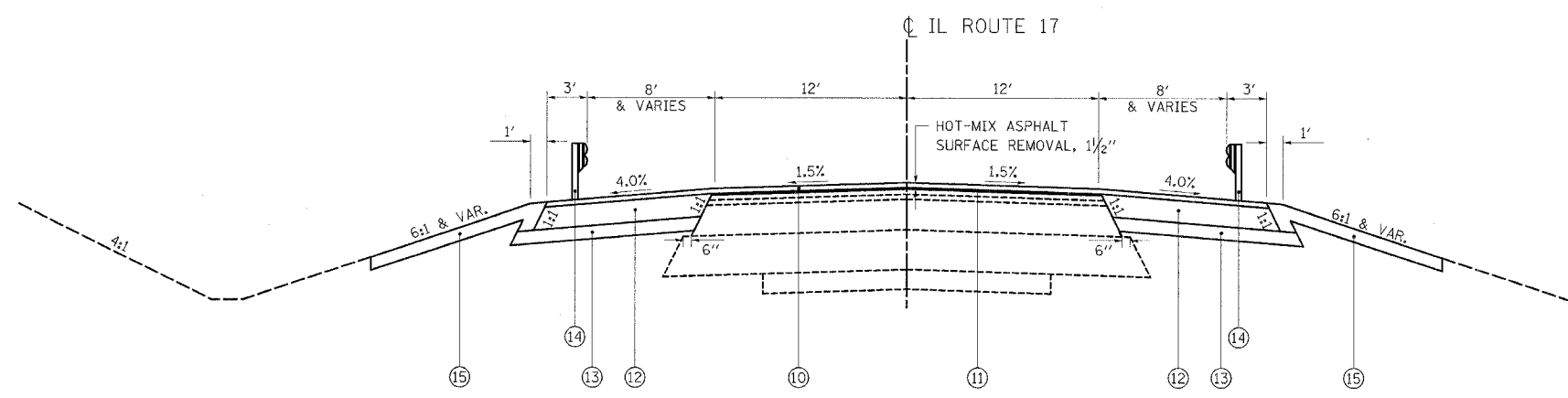
EXISTING TYPICAL SECTION

STA. 181+50.00 TO STA. 184+23.11
 APPROACH SLAB & BRIDGE OMISSION STA. 184+23.11 TO 185+86.89
 STA. 185+86.89 TO STA. 188+50.00

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

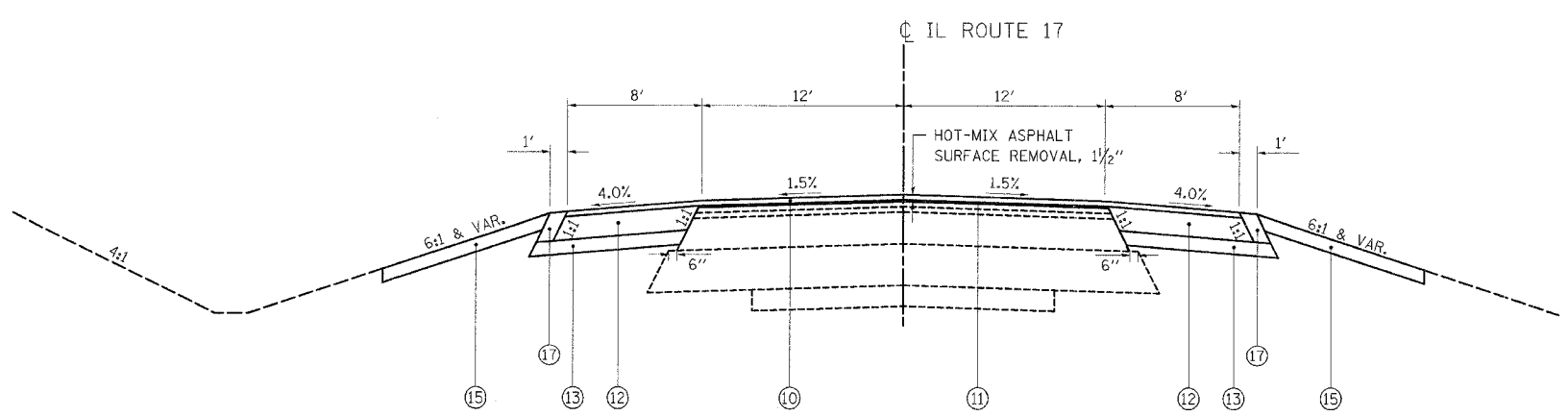
	HMA LEVEL BINDER	HMA SURFACE	HMA SHOULDER
PG GRADE	PG64-22	PG64-22	PG58-22
MAX % RAP ALLOWABLE **	25%	15%	50%
DESIGN AIR VOIDS	4.0% @ N50	4.0% @ N50	2.0% @ N30
MIXTURE COMPOSITION	IL 9.5	IL 12.5 OR IL 9.5	BAM
FRICITION AGGREGATE	SATISFACTION OF ENGINEER	MIXTURE C	NUCLEAR / CORES
DENSITY TEST METHOD		NUCLEAR / CORES	NUCLEAR / CORES

** IF RAP OPTION IS SELECTED, THE ASPHALT CEMENT GRADE MAY NEED TO BE ADJUSTED. THIS WILL BE DETERMINED BY THE ENGINEER.



PROPOSED TYPICAL SECTION

STA. 182+24.90 TO STA. 184+23.11
 APPROACH SLAB & BRIDGE OMISSION STA. 184+23.11 TO 185+86.89
 STA. 185+86.89 TO STA. 187+85.10



PROPOSED TYPICAL SECTION

STA. 181+50.00 TO STA. 182+24.90
 STA. 187+85.10 TO STA. 188+50.00

LEGEND

- ① EXISTING HMA SURFACE COURSE, CLASS I, 1 1/2"
- ② EXISTING HMA BINDER COURSE, 1 1/2"
- ③ EXISTING STABILIZED BASE COURSE, 9"
- ④ EXISTING STABILIZED BASE COURSE, 3" MIN., 12" MAX.
- ⑤ EXISTING P.C.C. PAVEMENT
- ⑥ EXISTING STABILIZED SHOULDERS, 8"
- ⑦ EXISTING SUB-BASE GRANULAR MATERIAL TYPE C, 4"
- ⑧ EXISTING AGGREGATE SHOULDERS, TYPE A
- ⑨ EXISTING GUARDRAIL
- ⑩ HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50, 1 1/2"
- ⑪ LEVELING BINDER (MACHINE METHOD), N50, VAR. DEPTH
- ⑫ HOT-MIX ASPHALT SHOULDERS, 6 1/2"
- ⑬ SUB-BASE GRANULAR MATERIAL, TYPE B 4"
- ⑭ PROPOSED GUARDRAIL
- ⑮ VEGETATION SUSTAINING TOPSOIL, 4" (SEE NOTE BELOW)
- ⑯ AGGREGATE SURFACE COURSE, TYPE B
- ⑰ AGGREGATE SHOULDERS, TYPE B

NOTE: REUSE EXISTING TOPSOIL WHENEVER POSSIBLE. WHEN EXISTING QUANTITY OF ON-SITE TOPSOIL IS DEFICIENT, VEGETATION SUSTAINING TOPSOIL WILL BE HAULED FROM OFF SITE AND PAID FOR AS FURNISHED EXCAVATION

<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.P. ROUTE 41 (IL 17) TYPICAL SECTIONS SCALE: VERT. NOT TO SCALE HORIZ. DATE: OCTOBER 20, 2006 DRAWN BY: NEC CHECKED BY: SPF
	NAME	DATE	

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
41	15 BR	LIVINGSTON	38	5
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 66665

PAVEMENT MARKING SCHEDULE								
LOCATION	TEMPORARY PAVEMENT MARKING LINE 4" (FOOT)	TEMPORARY PAVEMENT MARKING LINE 24" (FOOT)	WORK ZONE PAVEMENT MARKING REMOVAL (SQ FT)	PAVEMENT MARKING REMOVAL (SQ FT)	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 4" (FOOT)	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 6" (FOOT)	RAISED REFLECTIVE PAVEMENT MARKER (EACH)	RAISED REFLECTIVE PAVEMENT MARKER BRIDGE (EACH)
EASTBOUND								
STA. 181+50.00 TO 188+50.00					700			
CENTERLINE								
STA. 181+50.00 TO 188+50.00						290	3	2
STA. 181+50.00 TO 184+53.11							3	
STA. 184+53.11 TO 185+55.89								
STA. 185+55.89 TO 188+50.00								
WESTBOUND								
STA. 181+50.00 TO 188+50.00					838			
STAGE 1								
STA. 179+83.00 TO 190+86.00	1,890	24	261	280				
STAGE 2								
STA. 179+13.00 TO 190+34.00	1,863	24	645					
TOTAL	3,753	48	906	280	1,538	290	6	2

PAVEMENT SCHEDULE								
LOCATION	SUB-BASE GRANULAR MATERIAL TYPE B 4" (CU YD)	BITUMINOUS MATERIALS (PRIME COAT) (SQ YD)	PROTECTIVE COAT (SQ YD)	BRIDGE APPROACH PAVEMENT (SQ YD)	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) (SQ YD)	HOT-MIX ASPHALT SHOULDERS, 6 1/2" (SQ YD)	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 (TON)	LEVELING BINDER (MACHINE METHOD) N50 (TON)
EASTBOUND								
STA. 181+50.00 TO 184+17.11	315	51				288	54	20
STA. 184+17.11 TO 184+23.11	3				12.5	2		
STA. 184+23.11 TO 184+53.11	12		61	61		9		
STA. 185+56.89 TO 185+86.89	13		61	61		9		
STA. 185+86.89 TO 185+92.89	3				12.5	2		
STA. 185+92.89 TO 188+50.00	304	50				275	53	20
WESTBOUND								
STA. 181+50.00 TO 184+17.11	314	56				283	58	12
STA. 184+17.11 TO 184+23.11	3				12.5	2		
STA. 184+23.11 TO 184+53.11	13		61	61		9		
STA. 185+56.89 TO 185+86.89	12		61	61		9		
STA. 185+86.89 TO 185+92.89	3				12.5	2		
STA. 185+92.89 TO 188+50.00	306	50				279	52	12
TOTAL	1,301	207	244	244	50	1,169	217	64

PAVEMENT REMOVAL SCHEDULE				
LOCATION	PAVEMENT REMOVAL (SQ YD)	APPROACH SLAB REMOVAL (SQ YD)	PAVED SHOULDER REMOVAL (SQ YD)	HOT-MIX ASPHALT SURFACE REMOVAL 1 1/2" (SQ YD)
EASTBOUND				
STA. 181+50.00 TO 184+17.11			289	364
STA. 184+17.11 TO 184+23.11	8		7	
STA. 184+23.11 TO 184+53.11		40	33	
STA. 185+56.89 TO 185+86.89		40	37	
STA. 185+86.89 TO 185+92.89	8		7	
STA. 185+92.89 TO 188+50.00			303	357
WESTBOUND				
STA. 181+50.00 TO 184+17.11			310	360
STA. 184+17.11 TO 184+23.11	8		7	
STA. 184+23.11 TO 184+53.11		40	34	
STA. 185+56.89 TO 185+86.89		40	37	
STA. 185+86.89 TO 185+92.89	8		7	
STA. 185+92.89 TO 188+50.00			274	325
TOTAL	32	160	1,345	1,406

GUARDRAIL SCHEDULE				
LOCATION	STEEL PLATE BEAM GUARDRAIL, TYPE A (FOOT)	TRAFFIC BARRIER TERMINAL TYPE 6 (EACH)	TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL (TANGENT) (EACH)	GUARDRAIL REMOVAL (FOOT)
EASTBOUND				
STA. 181+50.00 TO 184+53.11	112.5	1	1	157
STA. 185+56.89 TO 188+50.00	37.5	1	1	157
WESTBOUND				
STA. 181+50.00 TO 184+53.11	37.5	1	1	156
STA. 185+56.89 TO 188+50.00	112.5	1	1	160
TOTAL	300	4	4	630

EARTHWORK SCHEDULE							
LOCATION	EARTH EXCAVATION (CU YD)	SUITABLE EARTH EXCAVATION (CU YD)	TOPSOIL STRIPPING (CU YD)	EMBANKMENT (CU YD)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (25%) (CU YD)	EARTHWORK BALANCE (+) WASTE (-) SHORTAGE (CU YD)	FURNISHED EXCAVATION (CU YD)
STA. 181+50.00 TO STA. 184+53.11	110	72	38	40	54	(+) 14	27
STA. 185+56.89 TO STA. 188+50.00	129	93	36	72	70	(-) 2	17

- EARTH EXCAVATION INCLUDES THE QUANTITY OF SUITABLE EARTH EXCAVATION AND TOPSOIL STRIPPING.
- TOPSOIL STRIPPING SHALL BE REUSED FOR VEGETATION SUSTAINING TOPSOIL WHENEVER POSSIBLE.
- FURNISHED EXCAVATION COVERS ANY VEGETATION SUSTAINING TOPSOIL THAT IS REQUIRED TO HAUL FROM OFF-SITE DUE TO A DEFICIENT QUANTITY OF ON-SITE TOPSOIL STRIPPING.

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Wheaton, IL 60187

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 41 (IL 17)

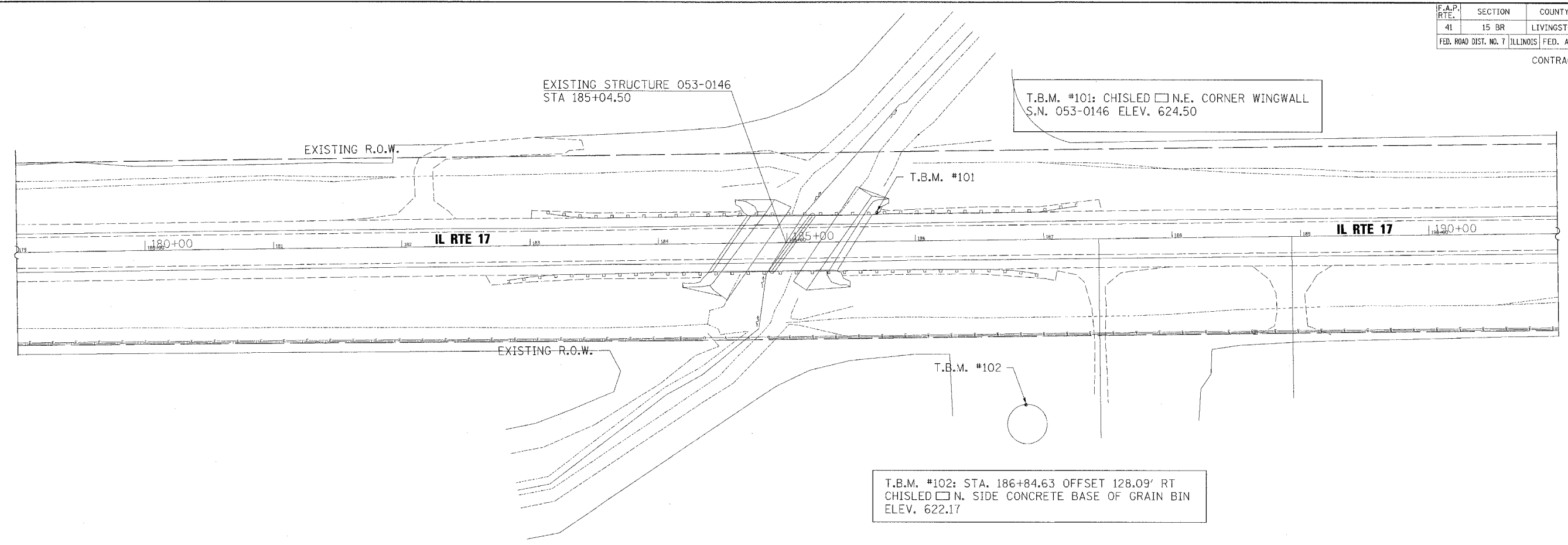
SCHEDULE OF QUANTITIES

SCALE: VERT.
HORIZ.
DATE: OCTOBER 20, 2006

DRAWN BY: NEC
CHECKED BY: SPF

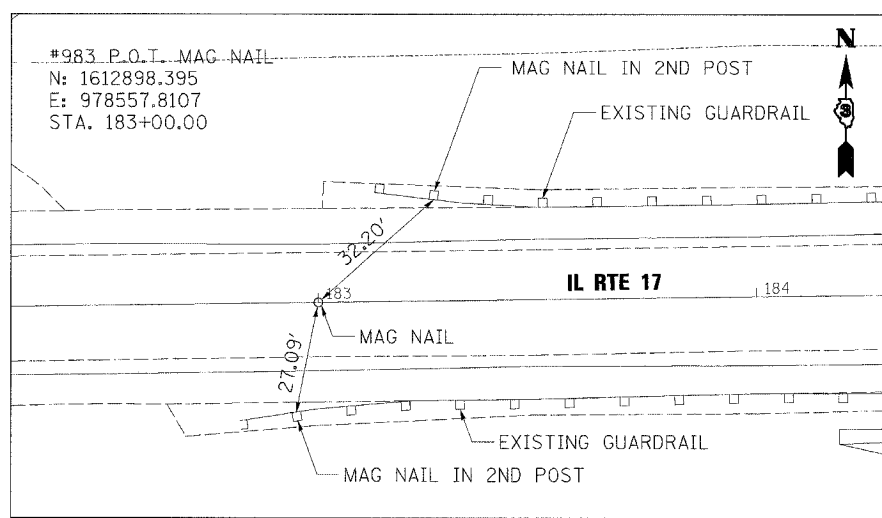
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
41	15 BR	LIVINGSTON	38	6
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 66665

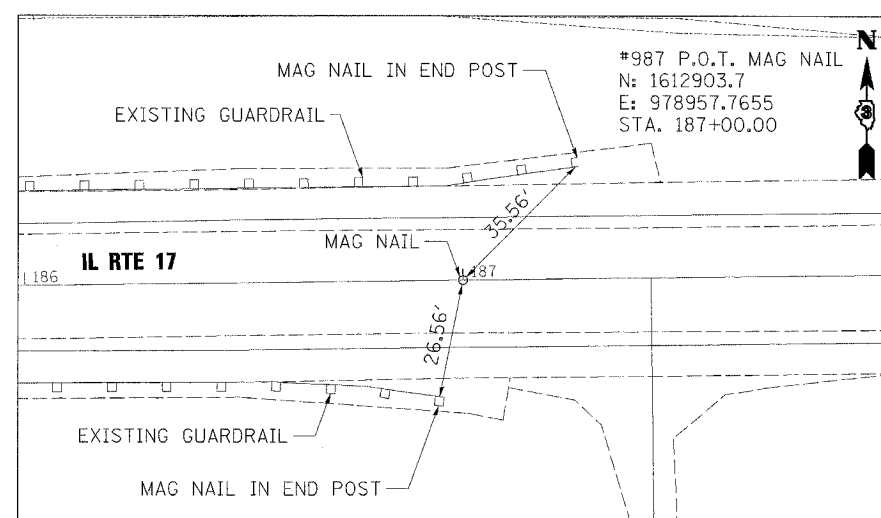


T.B.M. #101: CHISLED N.E. CORNER WINGWALL
S.N. 053-0146 ELEV. 624.50

T.B.M. #102: STA. 186+84.63 OFFSET 128.09' RT
CHISLED N. SIDE CONCRETE BASE OF GRAIN BIN
ELEV. 622.17



#983 P.O.T. MAG NAIL
N: 1612898.395
E: 978557.8107
STA. 183+00.00



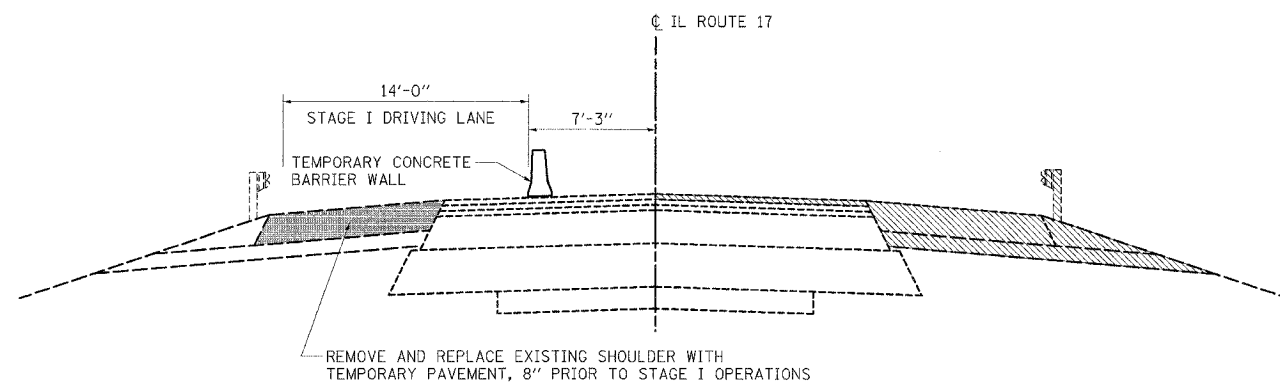
#987 P.O.T. MAG NAIL
N: 1612903.7
E: 978957.7655
STA. 187+00.00

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<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> </tbody> </table>	NAME	DATE															<p>ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.P. ROUTE 41 (IL 17)</p> <p>ALIGNMENT, TIES & BENCHMARKS</p> <p>SCALE: VERT. 1" = 40' HORIZ. 1" = 40' DATE: OCTOBER 20, 2006</p> <p>DRAWN BY: NEC CHECKED BY: SPF</p>
	NAME	DATE																

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
41	15 BR	LIVINGSTON	38	7
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

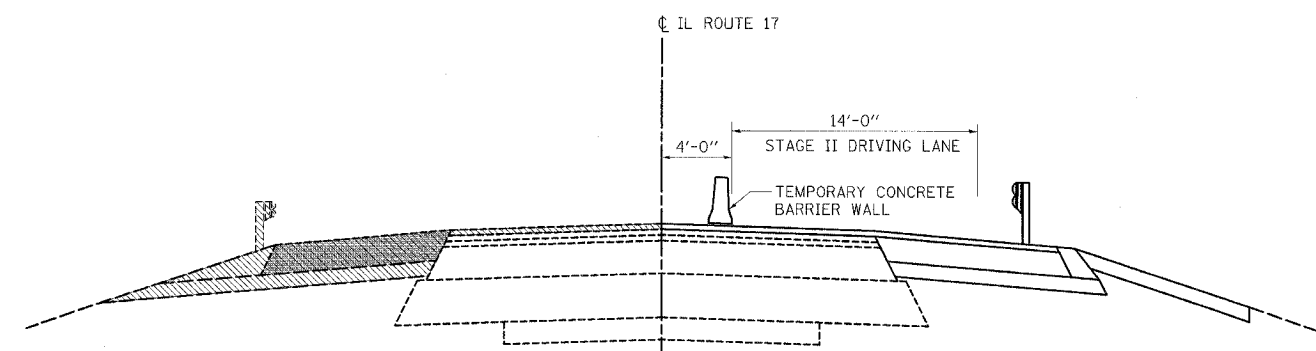
CONTRACT NO. 66665



REMOVE AND REPLACE EXISTING SHOULDER WITH TEMPORARY PAVEMENT, 8" PRIOR TO STAGE I OPERATIONS

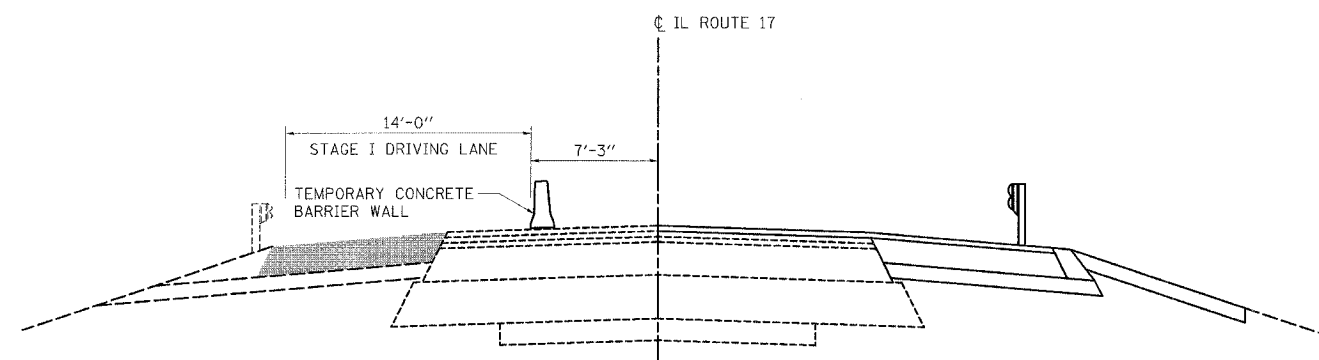
STAGE I REMOVAL

STA. 181 + 50.00 TO STA. 188 + 50.00



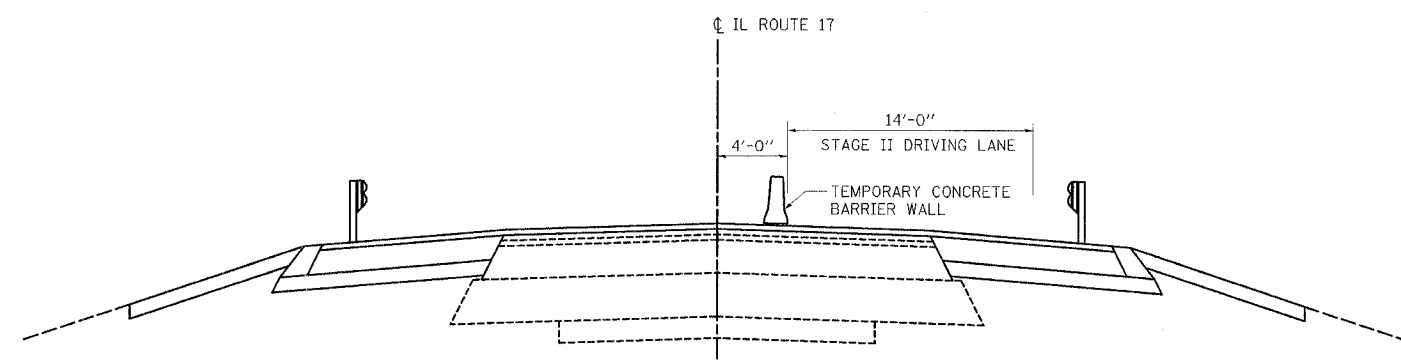
STAGE II REMOVAL

STA. 181 + 50.00 TO STA. 188 + 50.00



STAGE I CONSTRUCTION

STA. 181 + 50.00 TO STA. 188 + 50.00



STAGE II CONSTRUCTION

STA. 181 + 50.00 TO STA. 188 + 50.00

STAGE I CONSTRUCTION

1. INSTALL TRAFFIC CONTROL PER STANDARD 701326
2. REMOVE AND REPLACE WESTBOUND SHOULDER WITH TEMPORARY PAVEMENT
3. INSTALL TRAFFIC CONTROL PER STANDARD 701321 AND AS DETAILED IN THESE PLANS
4. REMOVE EXISTING EASTBOUND SHOULDER
5. REMOVE EXISTING EASTBOUND PAVEMENT
6. REMOVE EASTBOUND PORTION OF EXISTING STRUCTURE
7. CONSTRUCT EASTBOUND PORTION OF STRUCTURE
8. CONSTRUCT EASTBOUND SHOULDER
9. PLACE HOT-MIX ASPHALT CONCRETE SURFACE COURSE
10. INSTALL GUARDRAIL

STAGE II CONSTRUCTION

1. RELOCATE TRAFFIC CONTROL PER STANDARD 701321 AND AS DETAILED IN THESE PLANS
2. REMOVE TEMPORARY PAVEMENT AND EXISTING WESTBOUND SHOULDER
3. REMOVE EXISTING WESTBOUND PAVEMENT
4. REMOVE WESTBOUND PORTION OF EXISTING STRUCTURE
5. CONSTRUCT WESTBOUND PORTION OF STRUCTURE
6. CONSTRUCT WESTBOUND SHOULDER
7. PLACE HOT-MIX ASPHALT CONCRETE SURFACE COURSE
8. INSTALL GUARDRAIL

STAGE III CONSTRUCTION

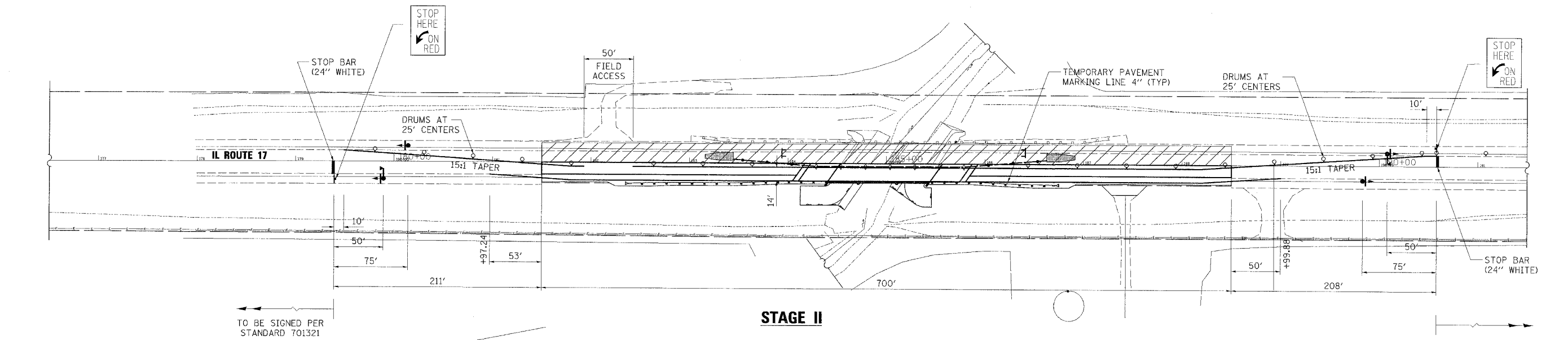
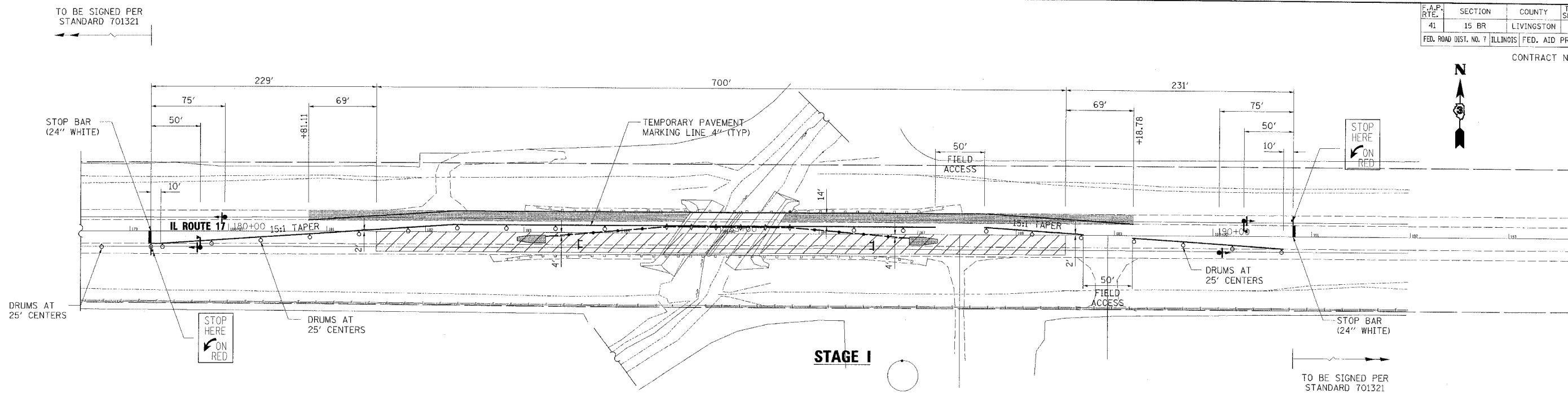
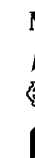
1. TRAFFIC CONTROL PER STANDARD 701201
2. PLACE PERMANENT PAVEMENT MARKINGS ON EASTBOUND AND WESTBOUND LANES
3. LANDSCAPE RESTORATION

<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	REVISIONS NAME DATE		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.P. ROUTE 41 (IL 17) TRAFFIC CONTROL CONSTRUCTION STAGING NOTES & DETAILS																			
	<table border="1"> <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> </table>																					

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
41	15 BR	LIVINGSTON	38	8
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 66665



LEGEND

- WORK AREA
- TEMPORARY PAVEMENT
- SIGN
- DRUM WITH STEADY BURNING LIGHT
- TRAFFIC SIGNAL WITH BACKPLATE
- TYPE C BIDIRECTIONAL REFLECTOR
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATOR (NON REDIRECTIVE) TEST LEVEL 3
- STEADY BURNING LIGHT AND DOUBLE VERTICAL PANELS
- TC 26 MICROWAVE
- TYPE III BARRICADE

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**TRAFFIC CONTROL
 CONSTRUCTION STAGING**

SCALE: VERT. 1" = 50'
 HORIZ. 1" = 50'
 DATE: OCTOBER 20, 2006

DRAWN BY: NEC
 CHECKED BY: SPF

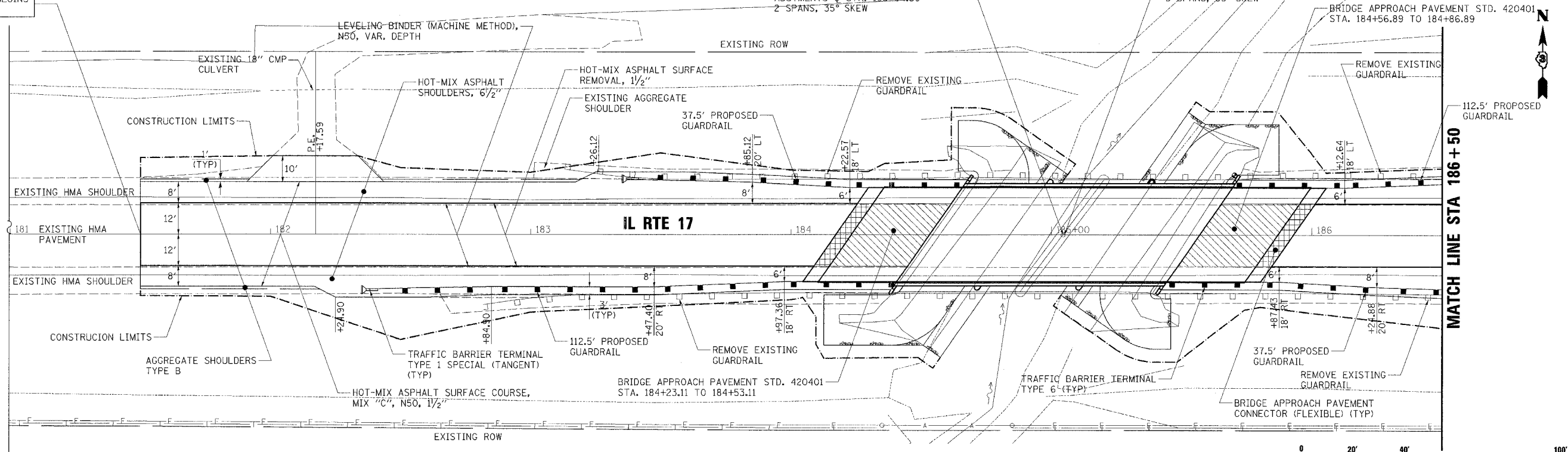
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
41	15 BR	LIVINGSTON	38
STA. 181+50		TO STA. 186+50	
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT	
CONTRACT NO. 66665			

LEGEND

- BRIDGE APPROACH SLAB REMOVAL
- PAVEMENT REMOVAL

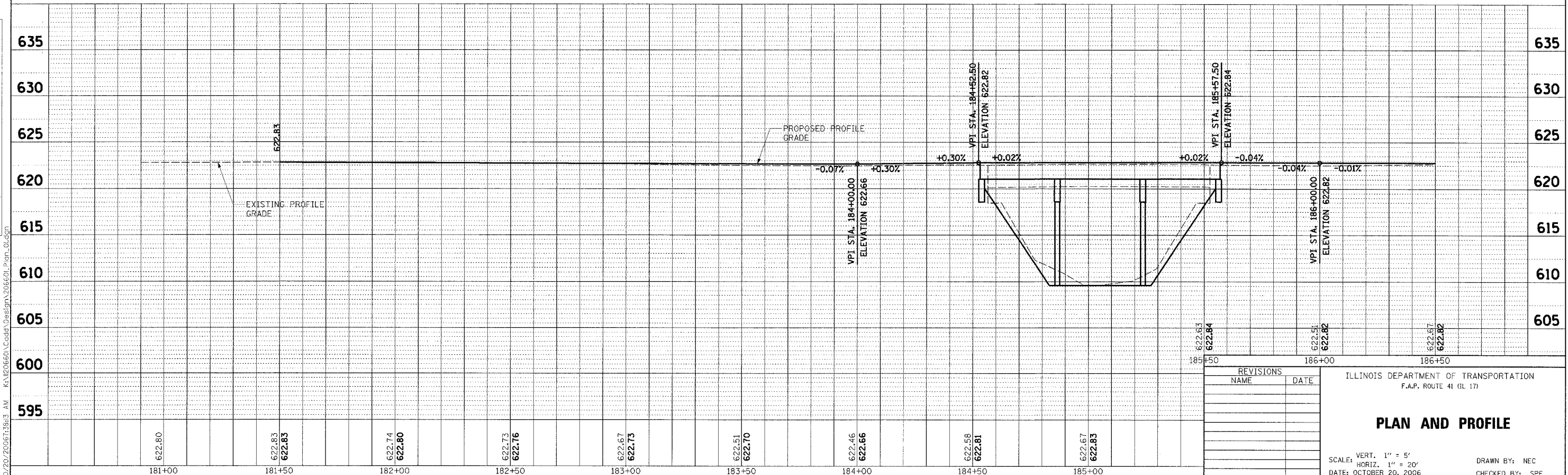
IMPROVEMENT BEGINS STA 181+50.00



MATCH LINE STA 186+50

PLAN	DATE	BY

PROFILE	DATE	BY



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 41 (IL 17)

PLAN AND PROFILE

SCALE: VERT. 1" = 5'
HORIZ. 1" = 20'

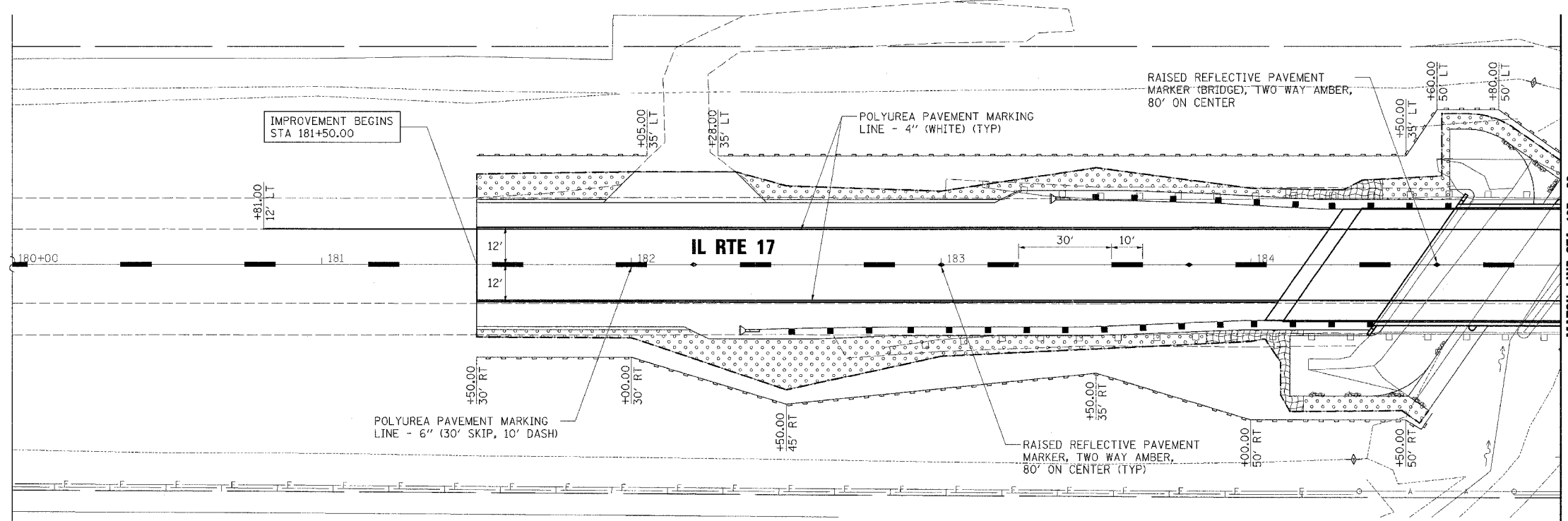
DATE: OCTOBER 20, 2006

DRAWN BY: NEC
CHECKED BY: SPF





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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
41	15 BR	LIVINGSTON	38	11
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

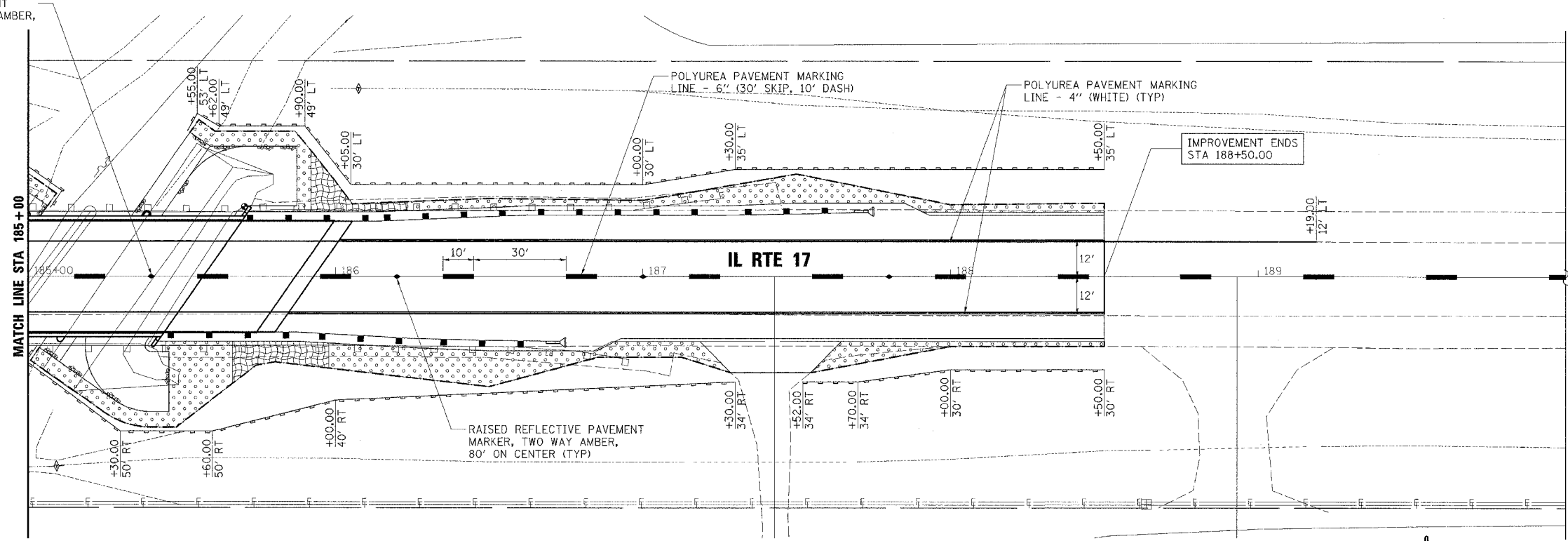
CONTRACT NO. 66665



LEGEND

-  SEEDING CLASS 2A
-  EROSION CONTROL BLANKET
-  PERIMETER EROSION BARRIER
-  TEMPORARY DITCH CHECK

RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE), TWO WAY AMBER, 80' ON CENTER



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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.P. ROUTE 41 (IL 17)
**EROSION CONTROL,
 LANDSCAPING & PAVEMENT
 MARKING PLAN**
 SCALE: VERT. 1" = 20'
 HORIZ. 1" = 20'
 DATE: OCTOBER 20, 2006
 DRAWN BY: NEC
 CHECKED BY: SPF

10/20/2006 8:08:34 AM K:\12056601\Cadd\Design\2066601\ErosionContr01.dgn

Bench Mark: Chiseled "□" on N.E. wingwall. Elev. 624.50.

Existing Structure: S.N. 053-0146, built 1974 as FA Rte 18 Section 15-BR. 104'-0" bk. to bk. abutments 46'-0" out to out deck. Precast, prestressed concrete deck beam, 21", on open pile bent abutments and a tapered solid wall concrete pier. Traffic to be maintained during construction utilizing stage construction.

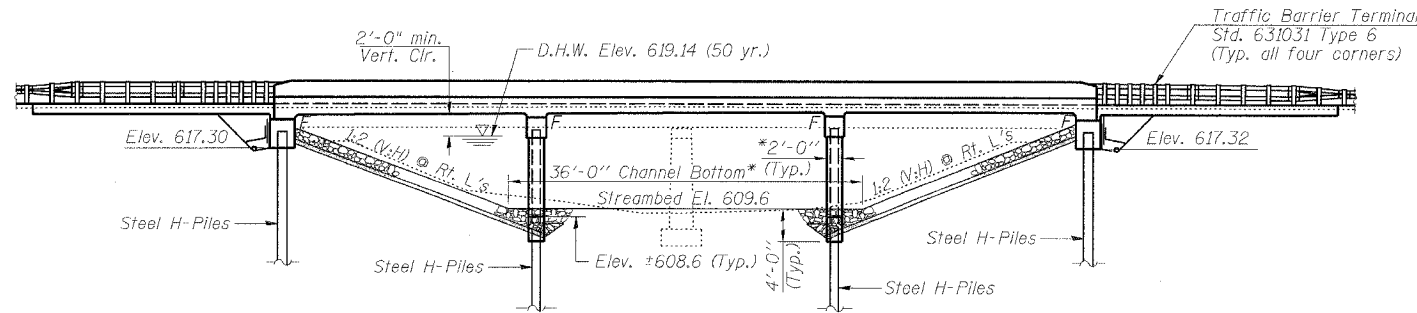
No Salvage.

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft)	West Abut.	Pier 1	Pier 2	East Abut.
	617.3	605.6	605.6	617.3

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 41	15BR	LIVINGSTON	38	12
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Contract #66665

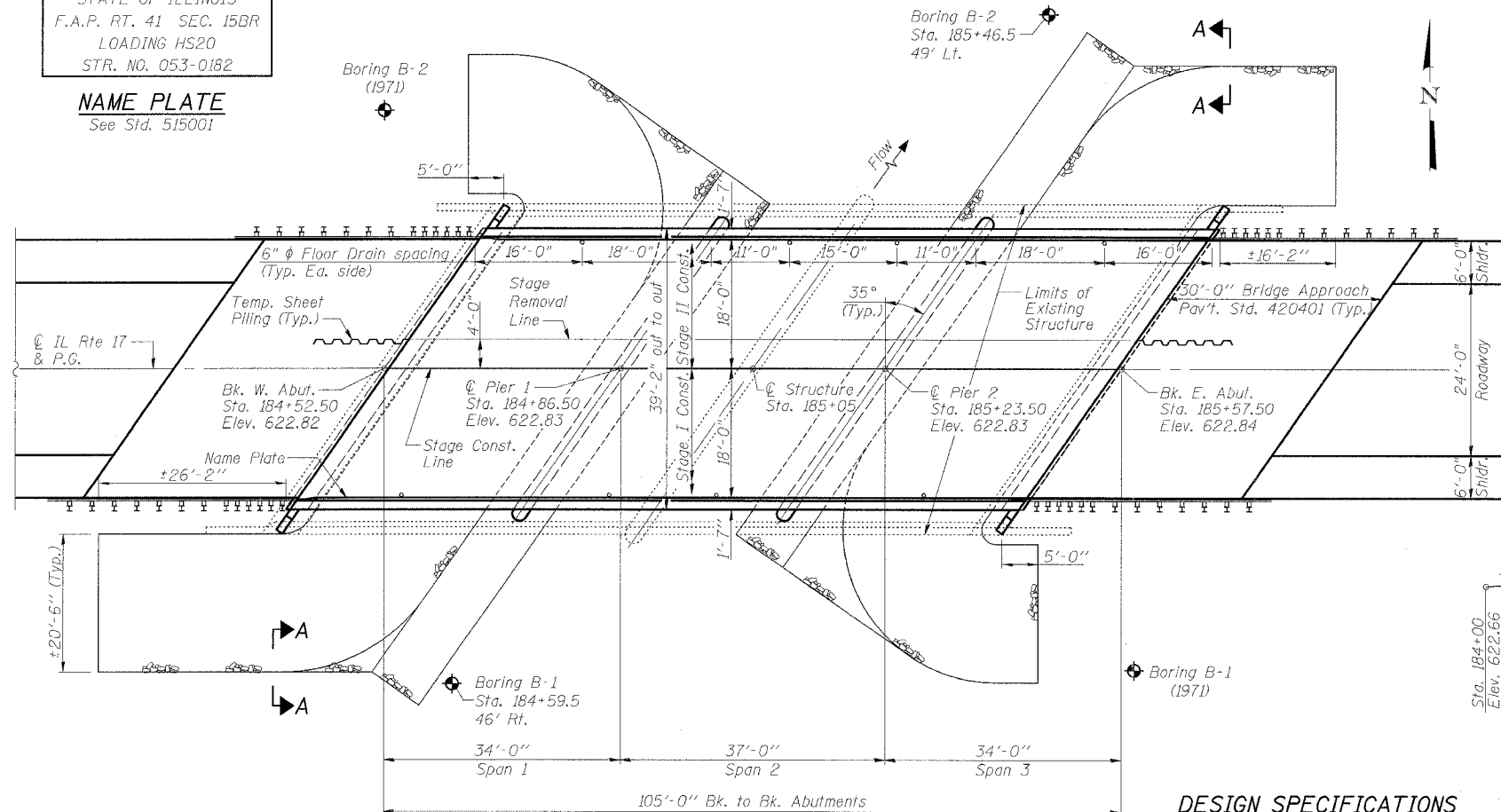


ELEVATION

*Measured perpendicular to C of pier

STATION 185+05
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RT. 41 SEC. 15BR
LOADING HS20
STR. NO. 053-0182

NAME PLATE
See Std. 515001

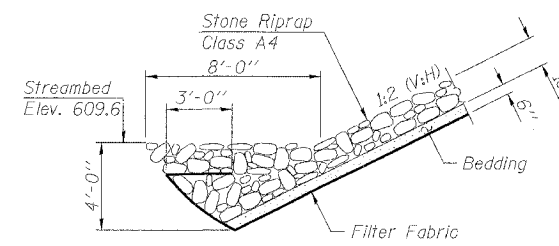


PLAN

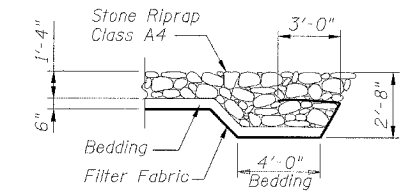
WATERWAY INFORMATION

Drainage Area = 15.11 sq. mi. Exist. Low Grade Elev. 622.5 ft. @ Sta. 184+00
Prop. Low Grade Elev. 622.8 ft. @ Sta. 181+00

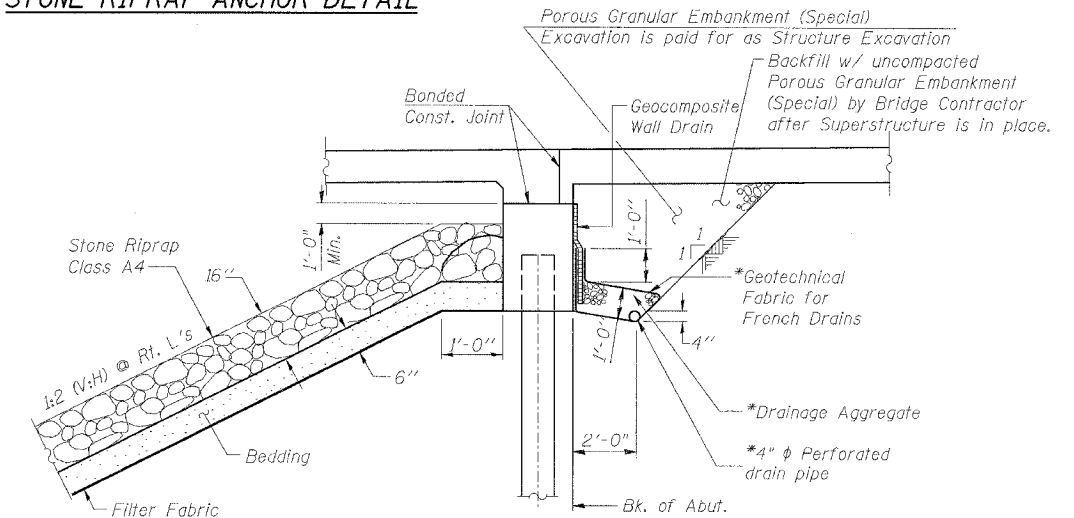
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater E.I.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	1009	402	413	618.5	0.3	0.3	618.8	618.8
Base	50	1470	447	454	619.1	0.4	0.4	619.5	619.5
Overtopping	100	1655	470	475	619.4	0.5	0.5	619.9	619.9
Max. Calc.	500	2082	501	504	619.8	0.7	0.7	620.5	620.5



STONE RIPRAP ANCHOR DETAIL

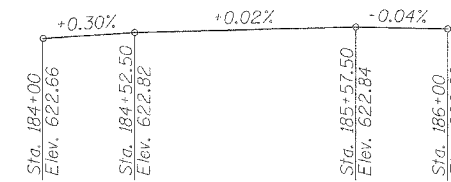


SECTION A-A

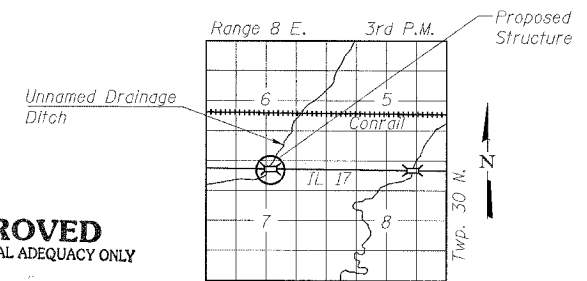


PIPE UNDERDRAIN & RIPRAP DETAIL
(Horizontal Dim. @ Rt. L's)

* Included in the cost of Pipe Underdrains for Structures.
Note: All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



PROFILE GRADE
(Located at C of Structure)



LOCATION SKETCH

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications

LOADING HS20-44

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

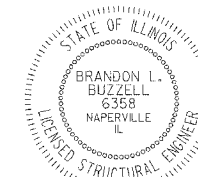
DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (reinforcement)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.042 g
Site Coefficient (S) = 1.2



Brandon Buzzell 10/14/06
Expires 11-30-08

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

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200 West Front Street
Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
IL 17 OVER UNNAMED DRAINAGE DITCH
FAP RTE 41 - SECTION 15BR
LIVINGSTON COUNTY
STATION 185+05
STRUCTURE NO. 053-0182

DATE: 10/20/2006

DRAWN BY JMT
CHECKED BY BLB

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		201	201
Floor Drains	Each	8		8
Concrete Superstructure	Cu. Yd.	223.4		223.4
Concrete Structures	Cu. Yd.		140.6	140.6
Reinforcement Bars, Epoxy Coated	Pound	49,560	11,740	61,300
Furnishing Steel Piles HP 12x53	Foot		1557	1557
Driving Piles	Foot		1557	1557
Test Pile Steel HP 12x53	Each		2	2
Name Plates	Each	1		1
Bridge Deck Grooving	Sq. Yd.	392		392
Protective Coat	Sq. Yd.	503		503
Bar Splicers	Each	187	70	257
Stone Riprap, Class A4	Sq. Yd.		569	569
Porous Granular Embankment, Special	Cu. Yd.		78	78
Geocomposite Wall Drain	Sq. Yd.		43	43
Filter Fabric	Sq. Yd.		569	569
Pipe Underdrains for Structures, 4"	Foot		154	154
Underwater Structure Excavation Protection, Location 1	Each		1	1
Underwater Structure Excavation Protection, Location 2	Each		1	1
Temporary Sheet Piling	Sq. Ft.		252	252
Concrete Encasement	Cu. Yd.		9.8	9.8
Asbestos Bearing Pad Removal	Each	24		24

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection.

The Contractor shall drive a total of two (2) test piles in a permanent location one (1) at the West Abutment and one (1) at Pier 2 as directed by the Engineer before ordering the remainder of piles.

All Construction joints shall be bonded.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

INDEX OF SHEETS

Sheet No.	Title
1.	General Plan and Elevation
2.	General Notes, Total Bill of Material and Index of Sheets
3.	Construction Staging
4.	Piling Layout
5.	Top of Slab Elevations
6.	Superstructure
7.	Superstructure Details
8.	Abutments
9.	Piers
10.	Bar Splicer Assembly Details
11.	Temporary Concrete Barrier for Stage Construction
12.-15.	Boring Logs

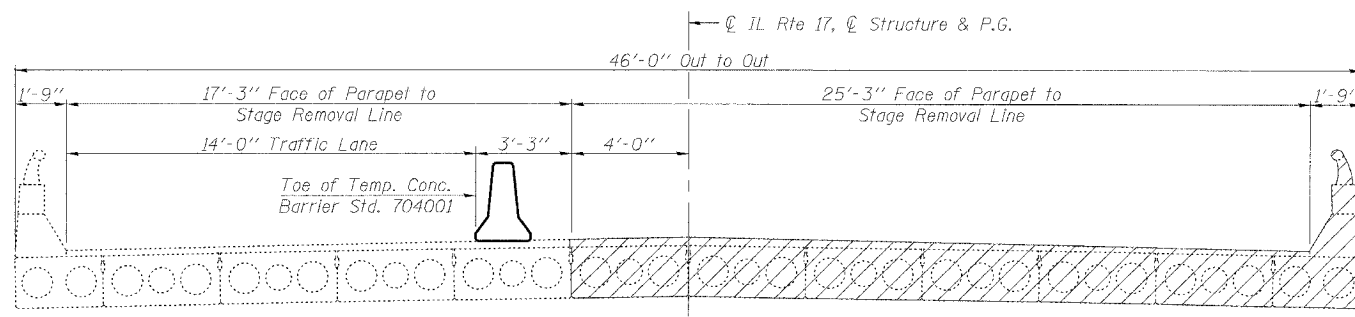
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200 West Front Street
Wheaton, IL 60187

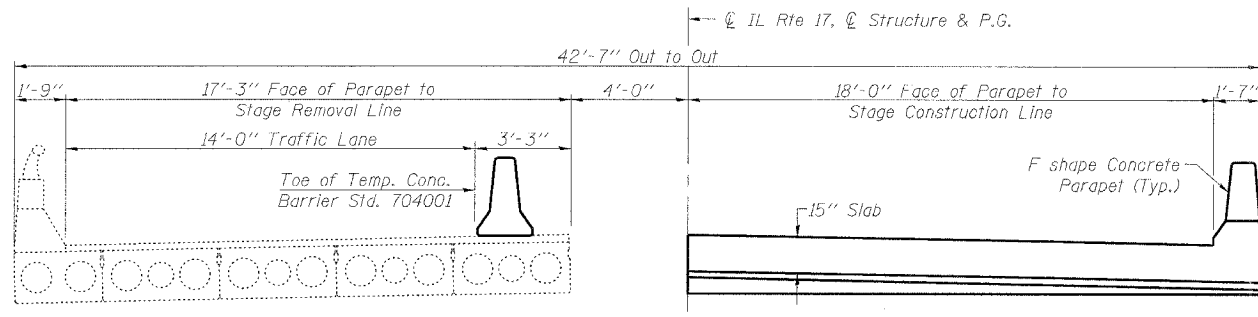
ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL NOTES, TOTAL BILL OF MATERIAL
AND INDEX OF SHEETS
IL 17 OVER UNNAMED DRAINAGE DITCH
FAP RTE 41 - SECTION 15BR
LIVINGSTON COUNTY
STATION 185+05
STRUCTURE NO. 053-0182
DATE: 10/20/2006
DRAWN BY JMT
CHECKED BY BLB

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 3
F.A.P. 41	15BR	LIVINGSTON	38	14	15 SHEETS
FED. RD. DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

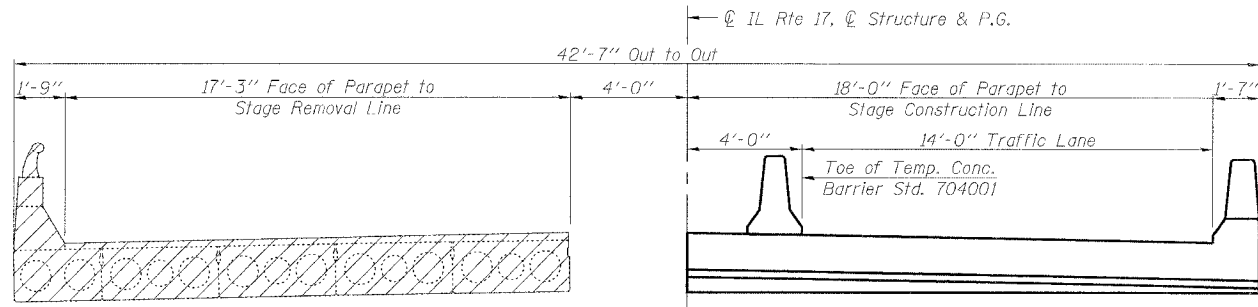
Contract #66665



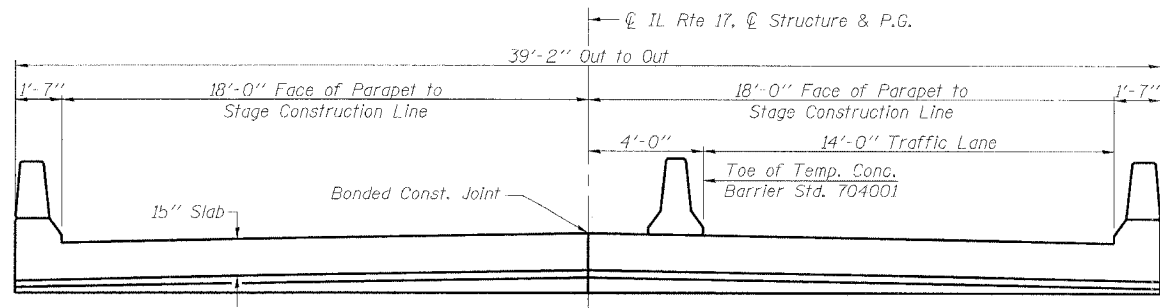
CROSS SECTION - STAGE I REMOVAL
(Looking East)



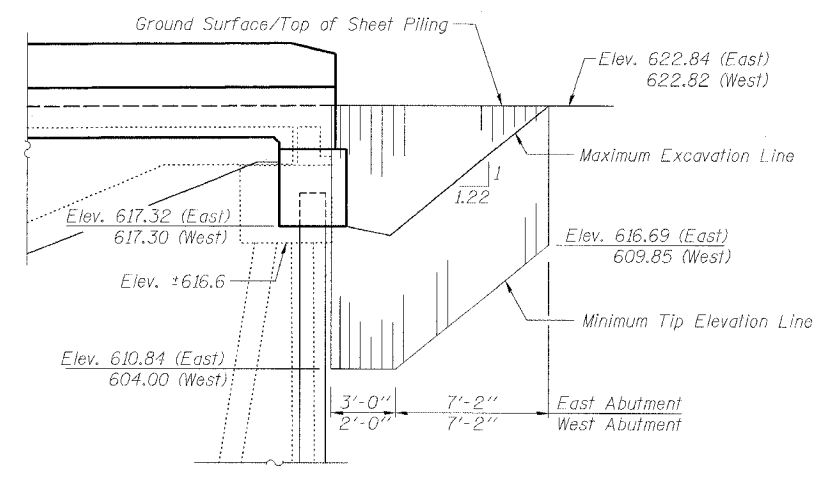
CROSS SECTION - STAGE I CONSTRUCTION
(Looking East)



CROSS SECTION - STAGE II REMOVAL
(Looking East)



CROSS SECTION - STAGE II CONSTRUCTION
(Looking East)



TEMPORARY SHEET PILING
The sheeting information shown is estimated.
Slopes and distances shown parallel to roadway centerline.

SEQUENCE OF STAGE REMOVAL AND CONSTRUCTION OF TEMPORARY SHEET PILING:

1. Install Temporary Sheet Piling for Stage I Construction.
2. Remove Stage I Superstructure.
3. Sawcut abutments and pier at Stage Removal Line.
4. Remove Stage I portions of abutments.
5. Proceed with Stage I Construction.
6. Adjust Temporary Sheet Piling for Stage II Construction.
7. Remove Stage II Superstructure.
8. Remove Stage II portions of abutments and pier.
9. Proceed with Stage II Construction.
10. Remove Temporary Sheet Piling when Stage II Construction is complete.

NOTES:

See Sheet 11 of 15 for Temporary Concrete Barrier Details. Removal of bituminous wearing surface and existing bridge rail is included with "Removal of Existing Structures". Pay Item for "Temporary Concrete Barrier" is included with Roadway Plans. Required Section Modulus for Temporary Sheet Piling must be greater than or equal to 3.0 in³/ft. If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans for lesser design requirements, then full design submittals with the required seals will be expected by the Department, for review and approval. Hard driving may be encountered during the sheet piling installation. The Contractor shall provide the appropriate driving equipment for the soil conditions indicated on the boring logs.

BILL OF MATERIAL

Item	Unit	Total
Temporary Sheet Piling	Sq. Ft.	252
Removal of Existing Structures	Each	1

LEGEND:

Removal of Existing Structures

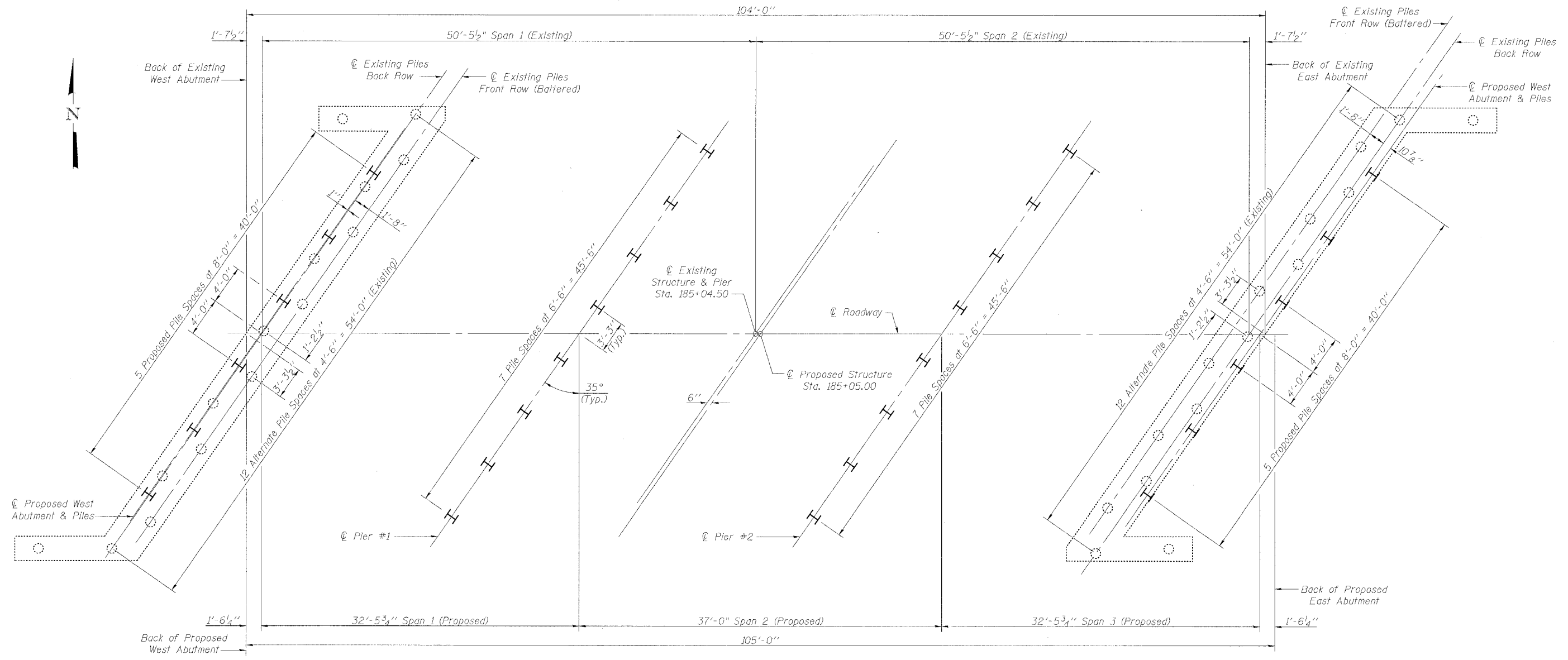
rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION STAGING
IL 17 OVER UNNAMED DRAINAGE DITCH
FAP RTE 41 - SECTION 15BR
LIVINGSTON COUNTY
STATION 185+05
STRUCTURE NO. 053-0182
DATE: 10/20/2006
DRAWN BY JMT
CHECKED BY BLB

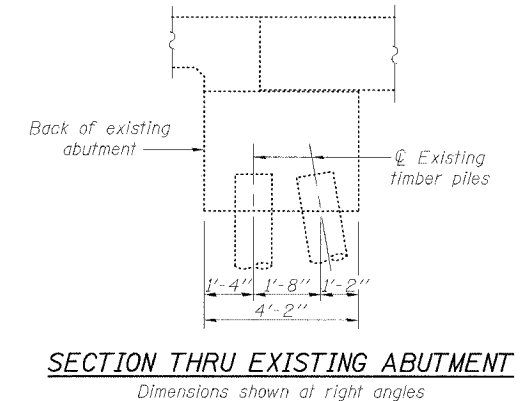
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ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO.
F.A.P. 41	15BR	LIVINGSTON	38	15
FED. ROAD DIST. NO. 7	ILLINOIS	PAID AID PROJECT		

Contract #66665



PILING LAYOUT PLAN



NOTE

Pile locations shown are based on existing drawings and are subject to nominal field variations. The proposed piles shall be driven as closely as possible to their intended locations. If the location of an existing timber pile conflicts with the location of a proposed pile, the pile location may be adjusted to miss the existing pile. Pile locations shall not deviate from the pile centerlines shown here. The maximum spacing along the pile centerline between any two piles shall be limited to a maximum of ten feet (10'). The Contractor shall notify the Engineer of all conflicts and the proposed adjustment prior to any driving of piles.

<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	<p>ILLINOIS DEPARTMENT OF TRANSPORTATION</p> <p>PILING LAYOUT IL 17 OVER UNNAMED DRAINAGE DITCH FAP RTE 41 - SECTION 15BR LIVINGSTON COUNTY STATION 185+05 STRUCTURE NO. 053-0182</p>
	<p>DATE: 10/20/2006</p> <p>DRAWN BY: BLB CHECKED BY: JMT</p>

12/17/2006 R:\1120663\Structures\Final Plans\Final Plans.dgn

Contract #66665

FACE N. PARAPET

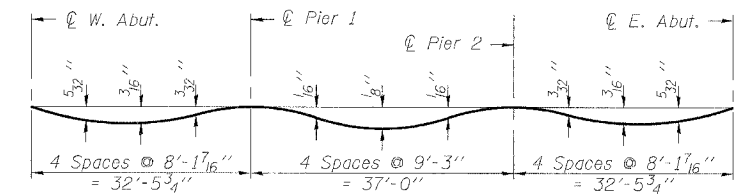
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	184+65.10	-18.000	622.510	622.510
@ W. Abut.	184+66.63	-18.000	622.510	622.510
A	184+76.63	-18.000	622.512	622.527
B	184+86.63	-18.000	622.514	622.527
@ Pier 1	184+99.10	-18.000	622.516	622.516
C	185+09.10	-18.000	622.518	622.524
D	185+19.10	-18.000	622.520	622.531
E	185+29.10	-18.000	622.522	622.525
@ Pier 2	185+36.10	-18.000	622.524	622.524
F	185+46.10	-18.000	622.526	622.536
G	185+56.10	-18.000	622.528	622.544
@ E. Abut.	185+68.58	-18.000	622.523	622.523
Back E. Abut.	185+70.10	-18.000	622.522	622.522

@ STRUCTURE, P.G., & STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	184+52.50	0.000	622.820	622.820
@ W. Abut.	184+54.03	0.000	622.820	622.820
A	184+64.03	0.000	622.822	622.837
B	184+74.03	0.000	622.824	622.837
@ Pier 1	184+86.50	0.000	622.826	622.826
C	184+96.50	0.000	622.828	622.834
D	185+06.50	0.000	622.830	622.841
E	185+16.50	0.000	622.832	622.835
@ Pier 2	185+23.50	0.000	622.834	622.834
F	185+33.50	0.000	622.836	622.846
G	185+43.50	0.000	622.838	622.854
@ E. Abut.	185+55.97	0.000	622.840	622.840
Back E. Abut.	185+57.50	0.000	622.840	622.840

FACE S. PARAPET

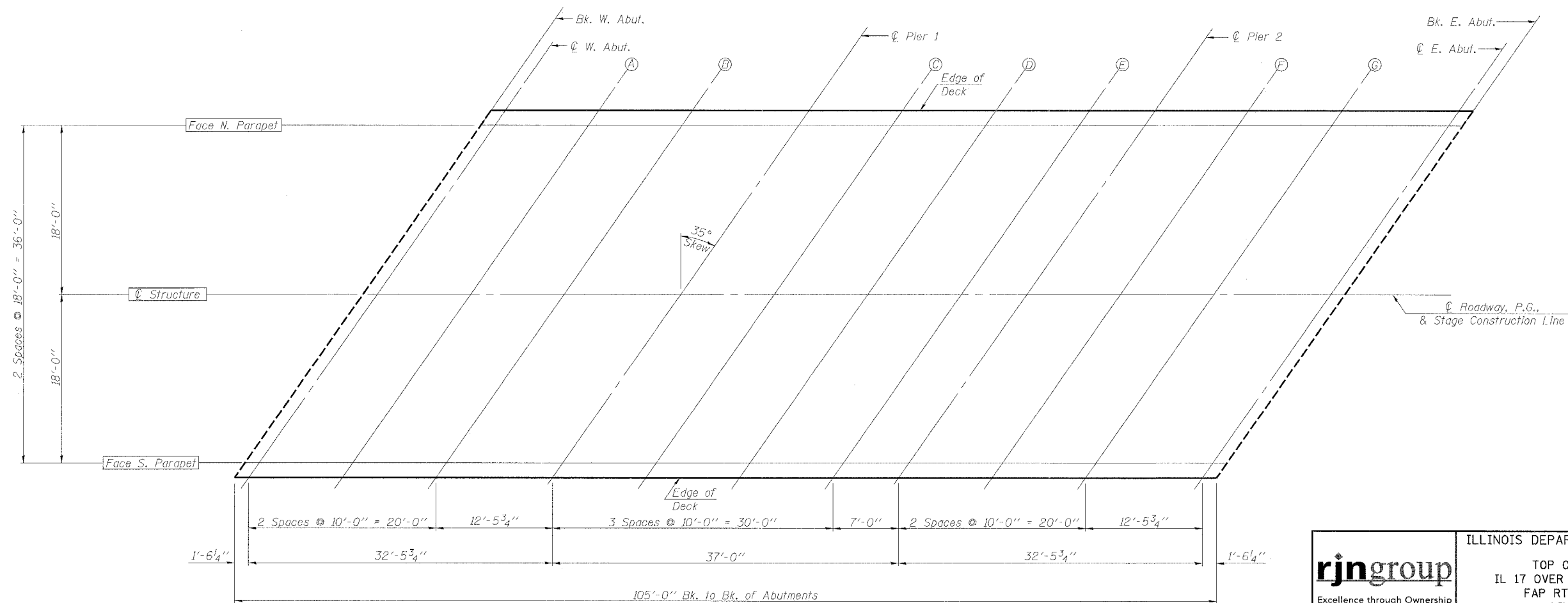
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	184+39.90	18.000	622.470	622.470
@ W. Abut.	184+41.42	18.000	622.474	622.474
A	184+51.42	18.000	622.504	622.519
B	184+61.42	18.000	622.509	622.522
@ Pier 1	184+73.90	18.000	622.511	622.511
C	184+83.90	18.000	622.513	622.519
D	184+93.90	18.000	622.515	622.526
E	185+03.90	18.000	622.517	622.520
@ Pier 2	185+10.90	18.000	622.519	622.519
F	185+20.90	18.000	622.521	622.531
G	185+30.90	18.000	622.523	622.539
@ E. Abut.	185+43.37	18.000	622.525	622.525
Back E. Abut.	185+44.90	18.000	622.525	622.525



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on this sheet.



PLAN

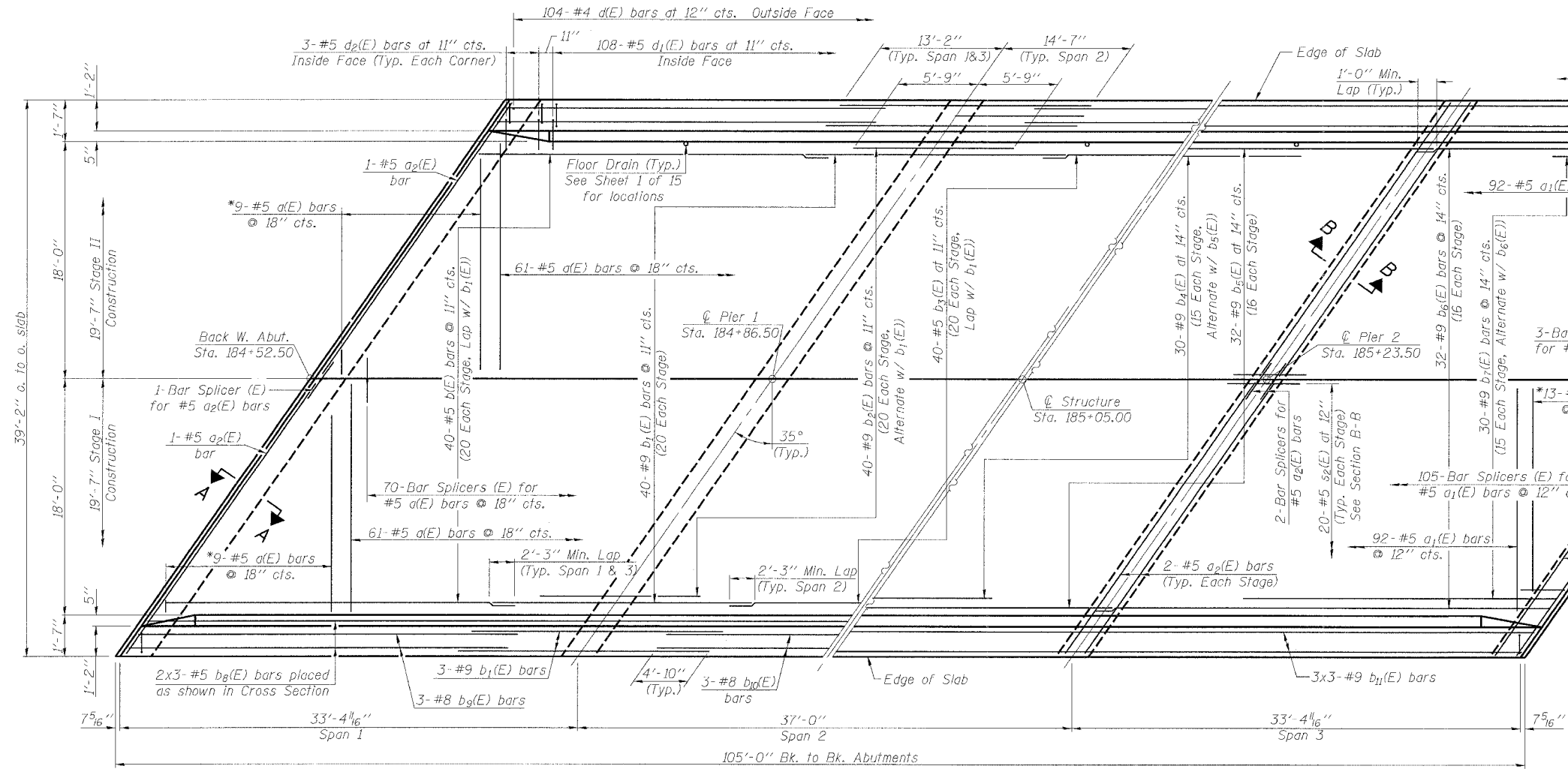
rjngroup
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Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
TOP OF SLAB ELEVATIONS
IL 17 OVER UNNAMED DRAINAGE DITCH
FAP RTE 41 - SECTION 15BR
LIVINGSTON COUNTY
STATION 185+05
STRUCTURE NO. 053-0182

DATE: 10/20/2006
DRAWN BY JMT
CHECKED BY BLB

10/19/2006 K:\11206665\Final\Plan\Final_Plan.dgn

Contract #66665



SHOWING TOP REINFORCEMENT

SLAB PLAN

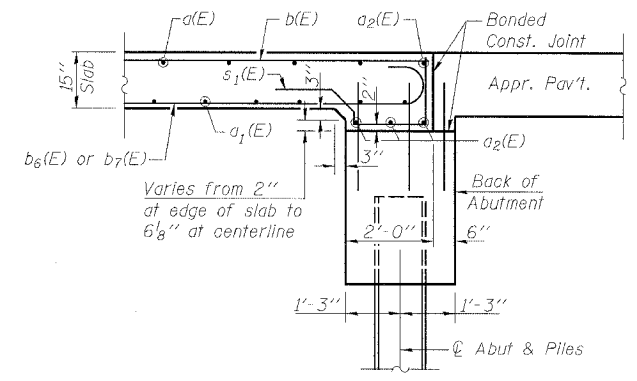
Parapet omitted for clarity
Symmetric about \bar{C}

SHOWING BOTTOM REINFORCEMENT

NOTES

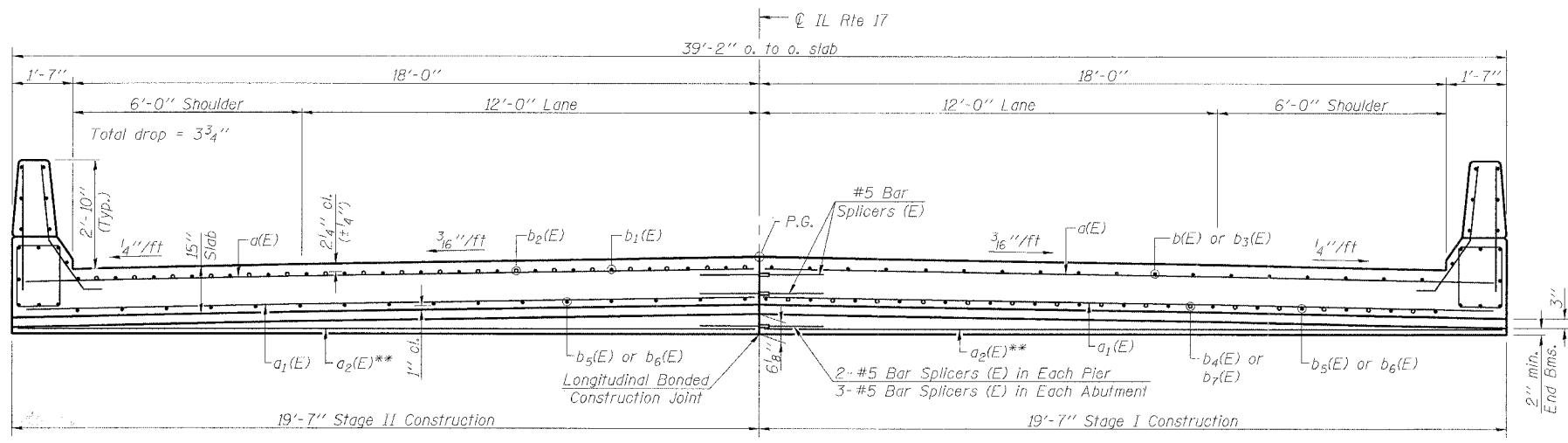
Minimum lap length for #5 bars = 2'-3", and #9 bars = 4'-5", unless noted otherwise.
See Sheet 7 of 15 for Superstructure Details, Parapet Details, Section B-B, and Bill of Material.
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 3x4-#8 etc. indicates 3 lines of bars with 4 lengths per line.
Tilt hook of $b_6(E)$ and $b_7(E)$ bars if necessary for 2'-4" clearance.

*Order $a(E)$ & $a_1(E)$ bars full length. Cut to fit skew and use remainder of bars in opposite end.



SECTION A-A THRU ABUTMENT

(Dimensions @ Rt. angles)



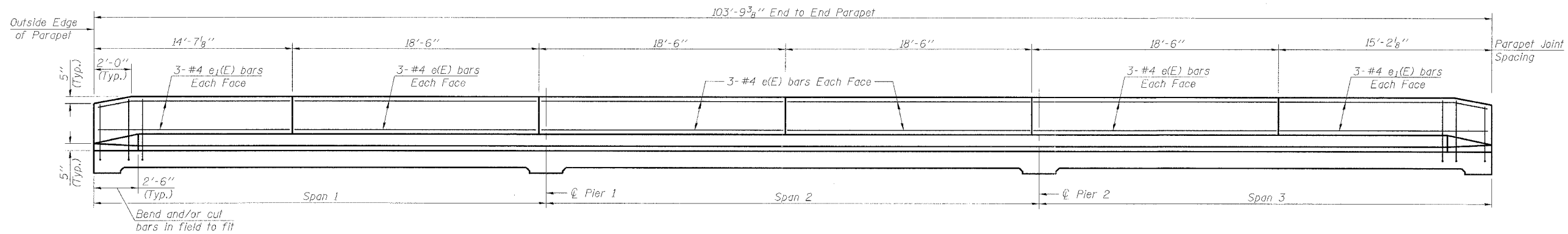
SLAB CROSS SECTION
(Looking East)

**Over Piers and Abutments. See Section A-A (this sheet) and Section B-B (Sheet 7 of 15).

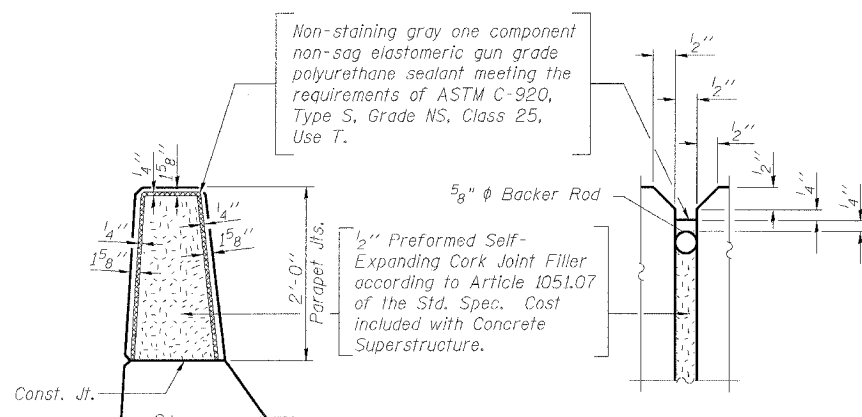
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Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE
IL 17 OVER UNNAMED DRAINAGE DITCH
FAP RTE 41 - SECTION 15BR
LIVINGSTON COUNTY
STATION 185+05
STRUCTURE NO. 053-0182
DATE: 10/20/2006
DRAWN BY JMT
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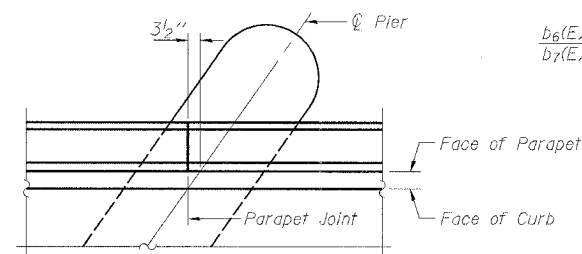
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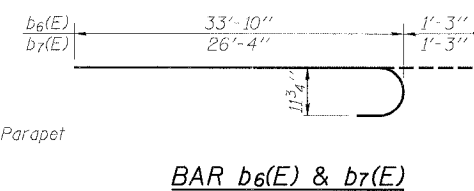
INSIDE ELEVATION OF PARAPET



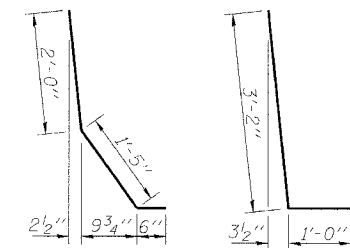
PARAPET JOINT DETAILS



PLAN VIEW AT PARAPET JOINT

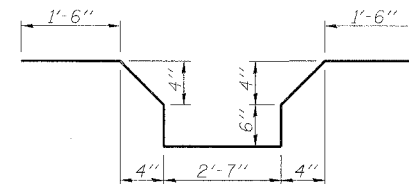


BAR b6(E) & b7(E)

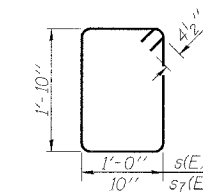


BAR d1(E)

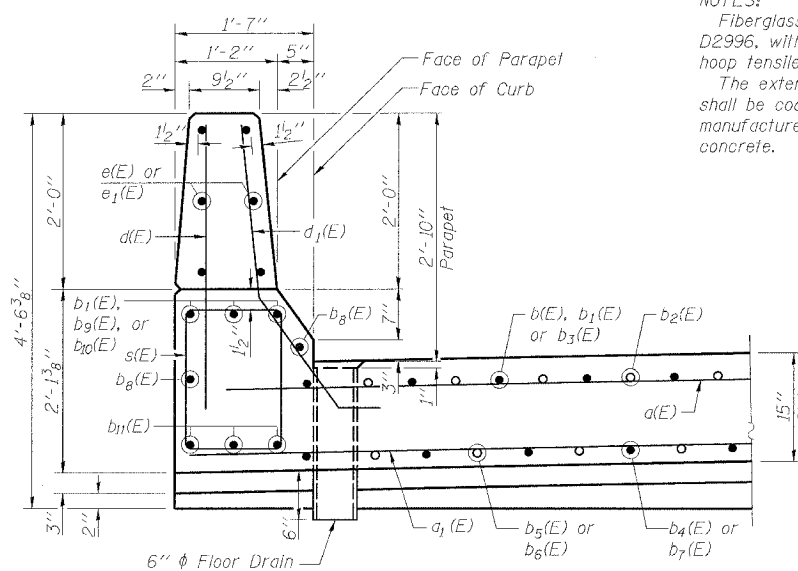
BAR d2(E)



BAR s2(E)

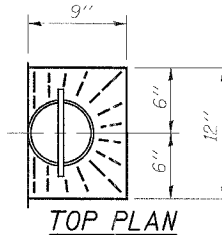


BAR s(E) & s7(E)

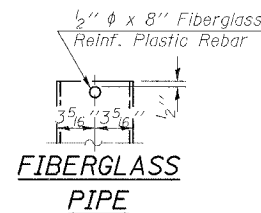


EDGE BEAM AND PARAPET CROSS SECTION

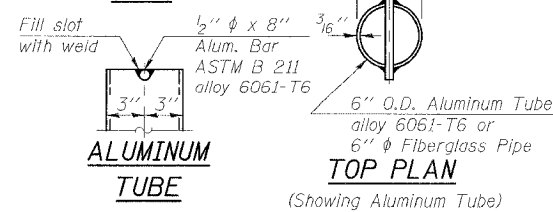
NOTES:
Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
The exterior surfaces of the floor drains shall be coated or pigmented by the manufacturer with a color that matches the concrete.



TOP PLAN



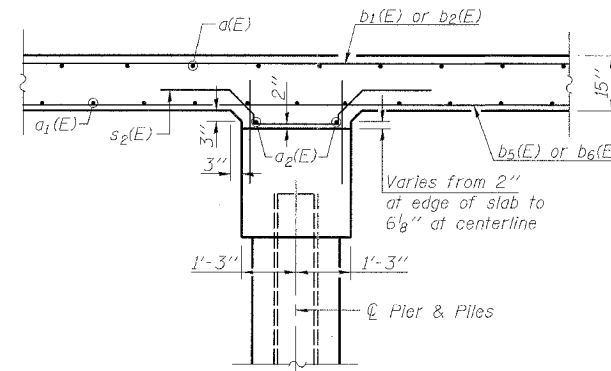
FIBERGLASS PIPE



ALUMINUM TUBE

TOP PLAN (Showing Aluminum Tube)

FLOOR DRAIN DETAILS



SECTION B-B @ PIER

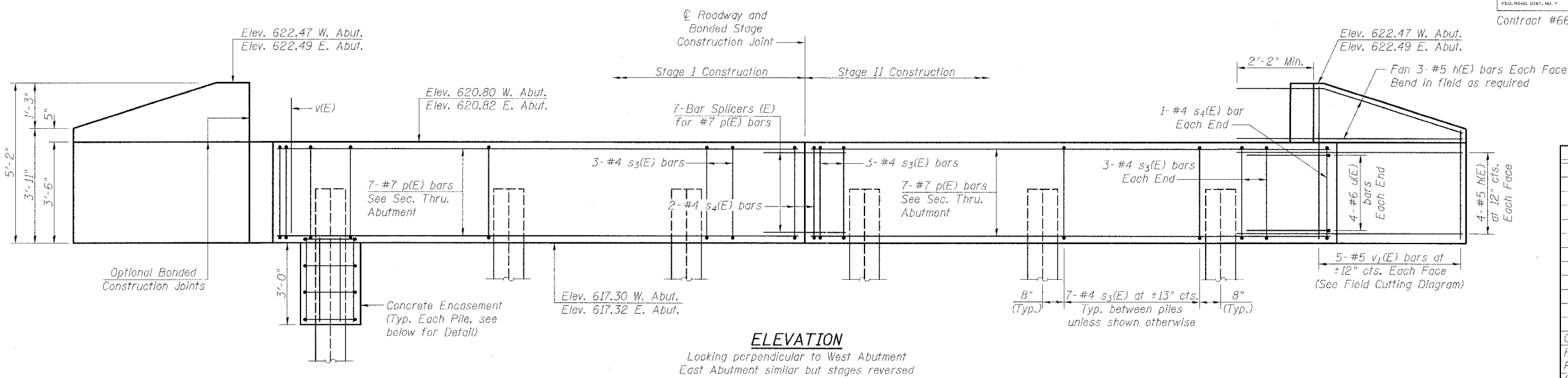
(Dimensions @ Rt. angles)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	140	#5	19'-3"	
a1(E)	210	#5	19'-3"	
a2(E)	24	#5	23'-7"	
b(E)	80	#5	22'-5"	
b1(E)	92	#9	27'-9"	
b2(E)	80	#9	11'-6"	
b3(E)	40	#5	12'-4"	
b4(E)	30	#9	20'-7"	
b5(E)	32	#9	38'-0"	
b6(E)	64	#9	35'-1"	
b7(E)	60	#9	27'-7"	
b8(E)	12	#5	36'-1"	
b9(E)	12	#8	28'-8"	
b10(E)	6	#8	25'-2"	
b11(E)	18	#9	37'-6"	
d(E)	208	#4	3'-0"	
d1(E)	216	#5	3'-11"	
d2(E)	12	#5	4'-2"	
e(E)	48	#4	18'-2"	
e1(E)	24	#4	15'-7"	
s(E)	196	#4	6'-5"	
s1(E)	80	#5	5'-10"	
s2(E)	80	#5	7'-6"	
s7(E)	12	#4	6'-1"	
Reinforcement Bars, Epoxy Coated		Pound	49,560	
Concrete Superstructure		Cu. Yds.	223.4	
Bar Splicers		Each	187	
Floor Drains		Each	8	

Reinforcement bars designated (E) shall be epoxy coated.

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	<p>DATE: 10/20/2006</p> <p>DRAWN BY JMT CHECKED BY BLB</p>

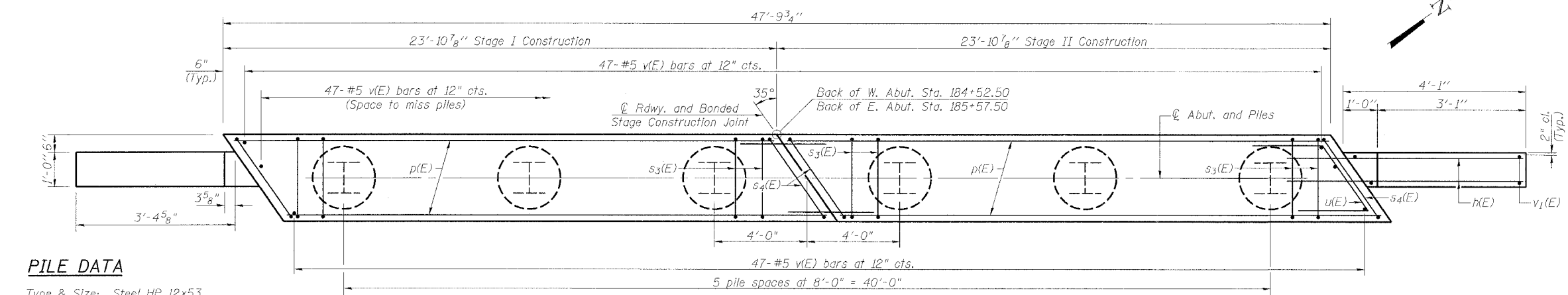


ELEVATION
Looking perpendicular to West Abutment
East Abutment similar but stages reversed

BILL OF MATERIAL
2 Abutments

Bar	No.	Size	Length	Shape
h(E)	56	#5	6'-4"	—
p(E)	28	#7	23'-7"	—
s3(E)	80	#4	11'-5"	□
s4(E)	8	#4	12'-5"	□
u(E)	16	#6	7'-8"	∟
v(E)	282	#5	3'-3"	—
v1(E)	20	#5	8'-5"	—
Concrete Structures		Cu. Yd.	33.6	
Furnishing Steel		Foot	535	
Piles HP 12x53		Foot	535	
Driving Piles		Foot	535	
Test Pile Steel HP 12x53		Each	1	
Reinforcement Bars, Epoxy Coated		Pound	3720	
Structure Excavation		Cu. Yd.	176*	
Bar Splicers		Each	14	
Concrete Encasement		Cu. Yd.	4.2	

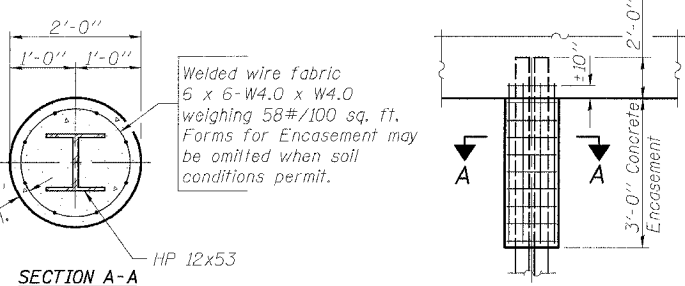
Reinforcement Bars designated (E) shall be epoxy coated.
*88 Cu. Yd. of Structure Excavation at each Abutment.



PLAN
West Abutment shown
East Abutment similar by rotation

PILE DATA

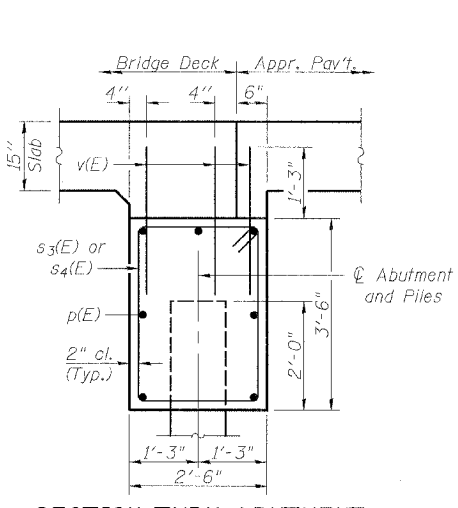
Type & Size: Steel HP 12x53
Nominal Required Bearing: 222 kips
Allowable Resistance Available: 74 kips
Est. Length: 45' (East Abutment)
53' (West Abutment)
No. Req'd: 6 (East Abutment)
5 (West Abutment) plus 1 Test Pile
The Steel H-piles shall be according to AASHTO M270 Grade 50.
The test pile shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.



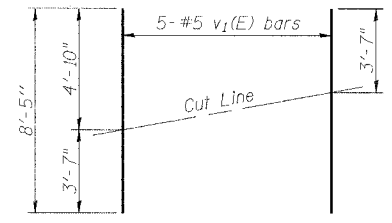
PILE ENCASEMENT DETAIL

NOTES

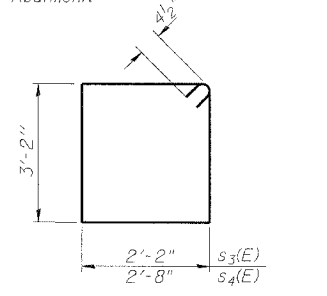
Pile locations may be adjusted in the field to avoid existing timber piles. If adjustments are necessary, maximum pile spacing shall be limited to 10 feet, and maximum spacing of s(E) bars shall be limited to 15 inches. Contractor shall notify the Engineer prior to making any such adjustments.
All edges shall have standard 3/4" chamfers.
See Sheet 10 of 15 for Bar Splicer Details.
See Sheet 4 of 15 for Piling Layout.



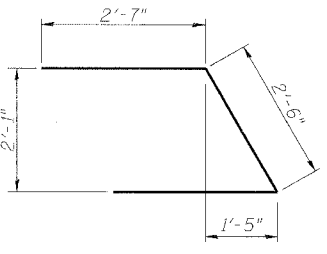
SECTION THRU ABUTMENT
Dimensions at right angles to abutment



FIELD CUTTING DIAGRAM
Order v1(E) full length. Cut as shown and use remainder of bars in opposite face.



BARS s3(E) & s4(E)



BAR u(E)

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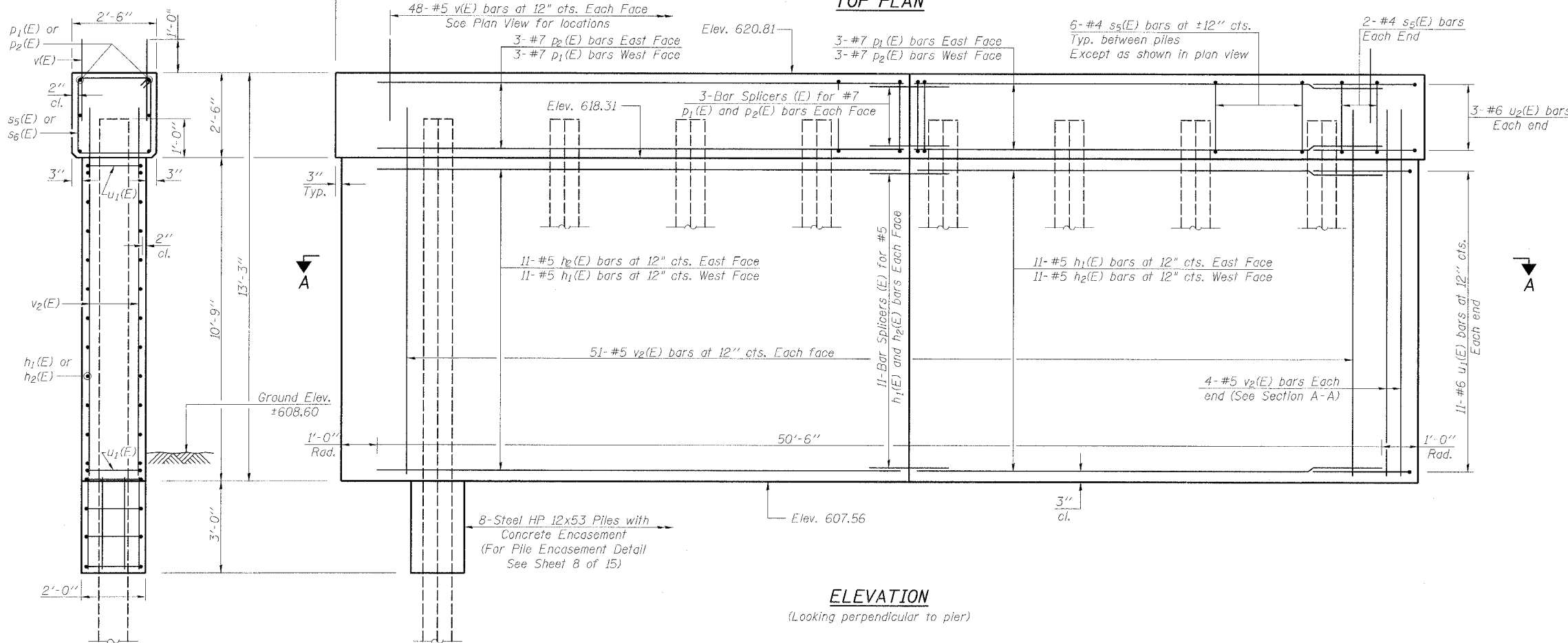
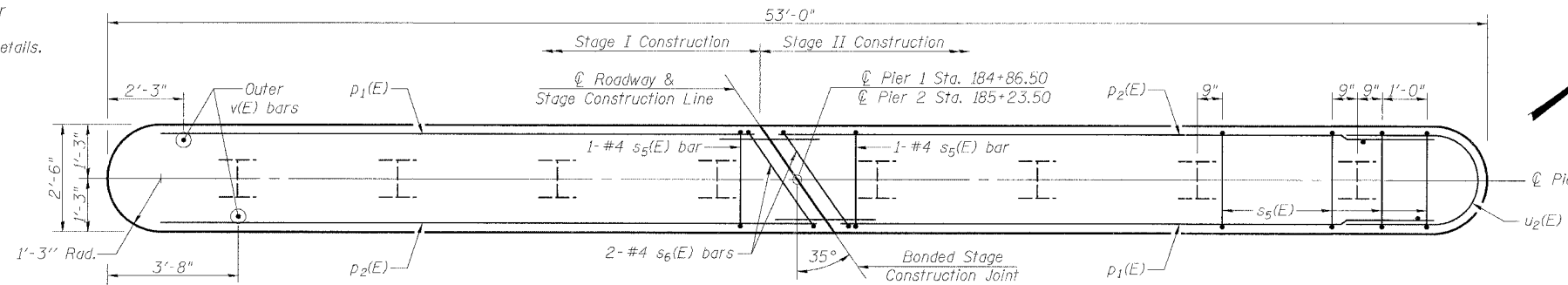
ILLINOIS DEPARTMENT OF TRANSPORTATION
ABUTMENTS
IL 17 OVER UNNAMED DRAINAGE DITCH
FAP RTE 41 - SECTION 15BR
LIVINGSTON COUNTY
STATION 185+05
STRUCTURE NO. 053-0182
DATE: 10/20/2006
DRAWN BY: BLB
CHECKED BY: JMT

10/19/2006 K:\11286801\Structure\Final Plans\Final Plans.dgn

Notes: All edges shall have standard $\frac{3}{4}$ " chamfers.
See Special Provisions for "Underwater Structure Excavation Protection".
See Sheet 10 of 15 for Bar Splicer Details.
See Sheet 4 of 15 for Piling Layout.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 9
F.A.P. 41	15BR	LIVINGSTON	38	20	15 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

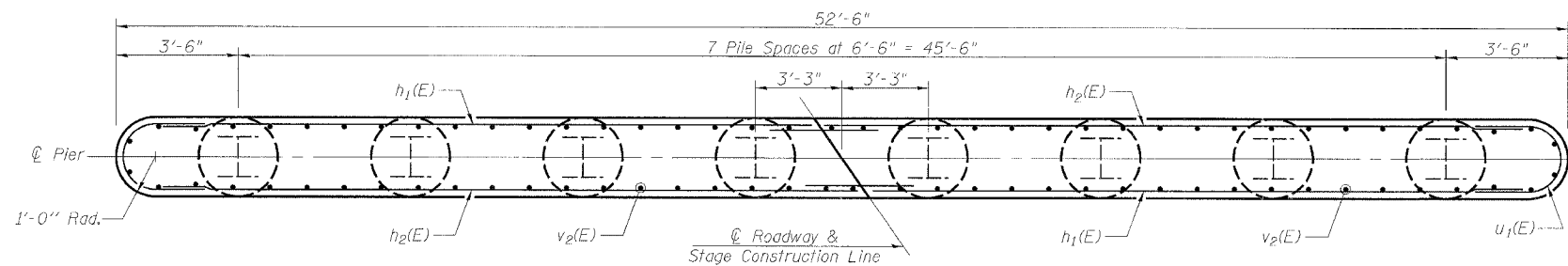
Contract #66665



END VIEW

PILE DATA

Type & Size: Steel HP 12x53
 Nominal Required Bearing: 300 kips
 Allowable Resistance Available: 100 kips
 Est. Length: 70' (Pier 1)
 66' (Pier 2)
 No. Req'd: 8 (Pier 1)
 7 (Pier 2) plus 1 Test Pile
 The Steel H-piles shall be according to AASHTO M270 Grade 50.
 The test pile shall be driven to 110 percent of the Nominal Required Bearing Indicated in the pile data information.

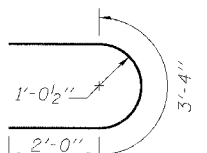
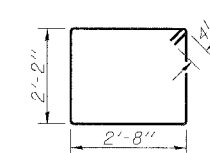
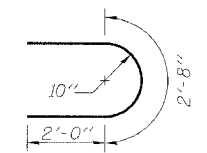
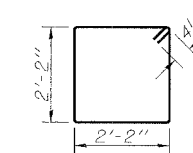


BILL OF MATERIAL
2 Piers

Bar	No.	Size	Length	Shape
h ₁ (E)	44	#5	24'-5"	—
h ₂ (E)	44	#5	25'-10"	—
p ₁ (E)	12	#7	24'-3"	—
p ₂ (E)	12	#7	26'-0"	—
s ₅ (E)	84	#4	9'-5"	□
s ₆ (E)	4	#4	10'-5"	□
u ₁ (E)	44	#6	6'-8"	U
u ₂ (E)	12	#6	7'-4"	U
v ₁ (E)	192	#5	3'-3"	—
v ₂ (E)	220	#5	11'-9"	—

Concrete Structures	Cu. Yd.	107.0
Furnishing Steel Piles HP 12x53	Foot	1022
Driving Piles	Foot	1022
Test Pile Steel HP 12x53	Each	1
Reinforcement Bars, Epoxy Coated	Pound	8020
Structure Excavation	Cu. Yd.	25*
Underwater Structure Excavation Protection, Location 1	Each	1
Underwater Structure Excavation Protection, Location 2	Each	1
Bar Splicers	Each	56
Concrete Encasement	Cu. Yd.	5.6

Reinforcement Bars designated (E) shall be epoxy coated.
 *12.5 Cu. Yd. of Structure Excavation at each Pier.



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ILLINOIS DEPARTMENT OF TRANSPORTATION

PIERS
 IL 17 OVER UNNAMED DRAINAGE DITCH
 FAP RTE 41 - SECTION 15BR
 LIVINGSTON COUNTY
 STATION 185+05
 STRUCTURE NO. 053-0182

DATE: 10/20/2006

DRAWN BY BLB
 CHECKED BY JMT

Contract #66665

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
 All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity = $1.25 \times f_y \times A_t$
(Tension in kips)
- ② Minimum *Pull-out Strength = $1.25 \times f_{sallow} \times A_t$
(Tension in kips)

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 f_{sallow} = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."

The diameter of this part is the same as the diameter of the bar spliced.

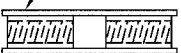
The diameter of this part is equal or larger than the diameter of bar spliced.

ROLLED THREAD DOWEL BAR



** ONE PIECE

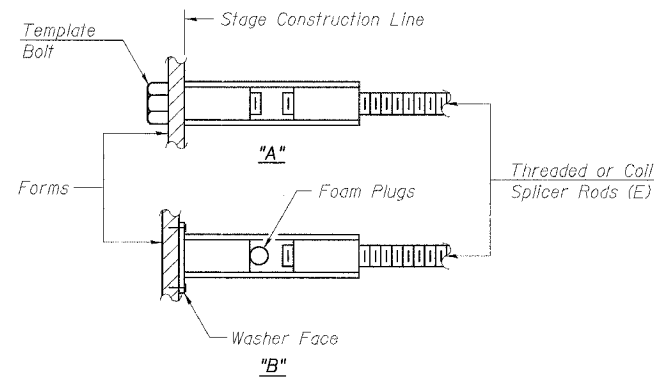
Wire Connector



WELDED SECTIONS

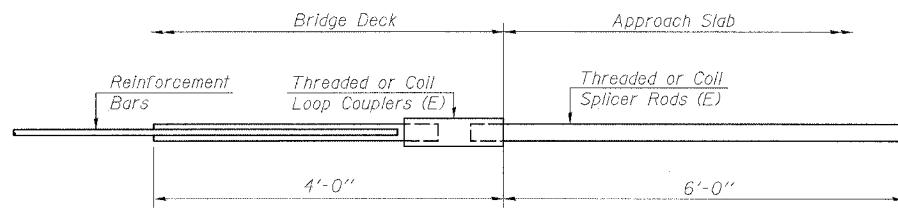
BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



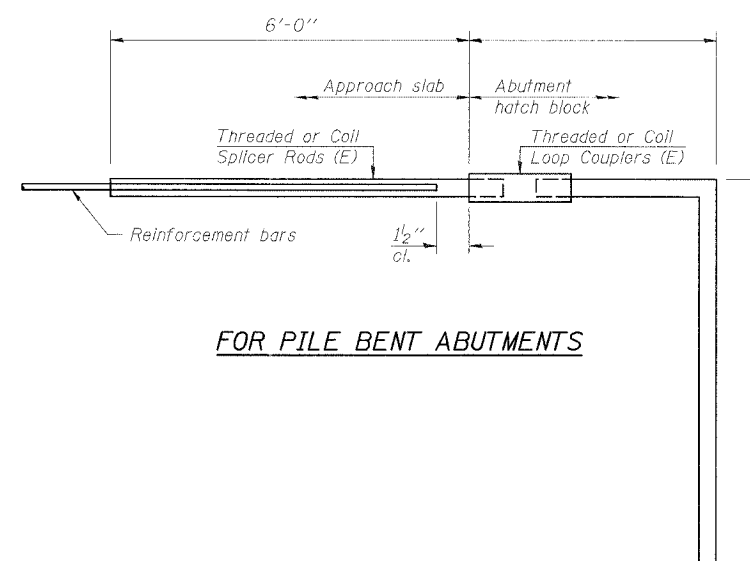
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



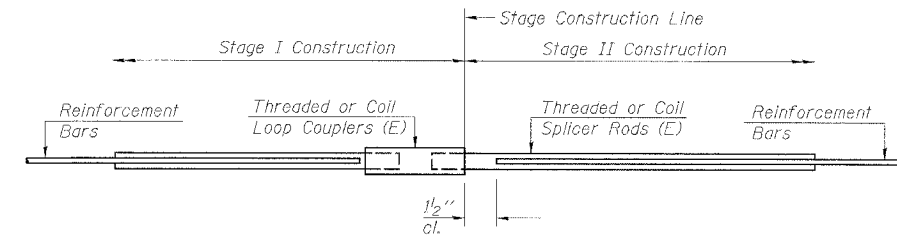
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = 0



FOR PILE BENT ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = 0



STANDARD

Bar Size	No. Assemblies Required	Location
#5	187	Deck Slab
#7	14	Abutment
#5	44	Pier
#7	12	Pier Cap

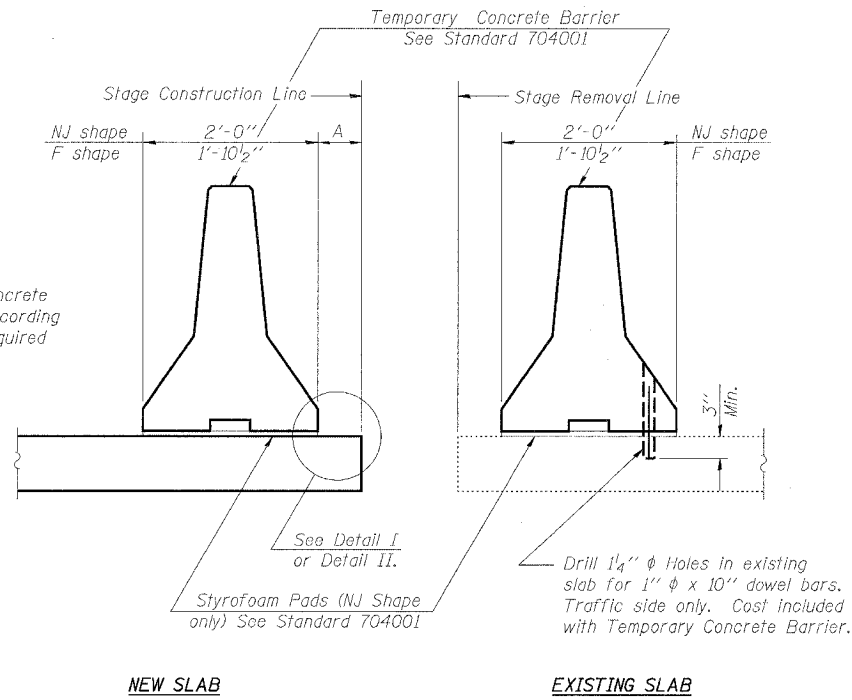
rjngroup
 Excellence through Ownership
 200 West Front Street
 Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
 BAR SPLICER ASSEMBLY DETAILS
 IL 17 OVER UNNAMED DRAINAGE DITCH
 FAP RTE 41 - SECTION 15BR
 LIVINGSTON COUNTY
 STATION 185+05
 STRUCTURE NO. 053-0182

DATE: 10/20/2006
 DRAWN BY JMT
 CHECKED BY BLB

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.	SHEET NO. 11
F.A.P. 41	15BR	LIVINGSTON	38	22	15 SHEETS
FED. ROAD DIST. NO. 7	BILLINGS	FED. AID PROJECT			

Contract #66665

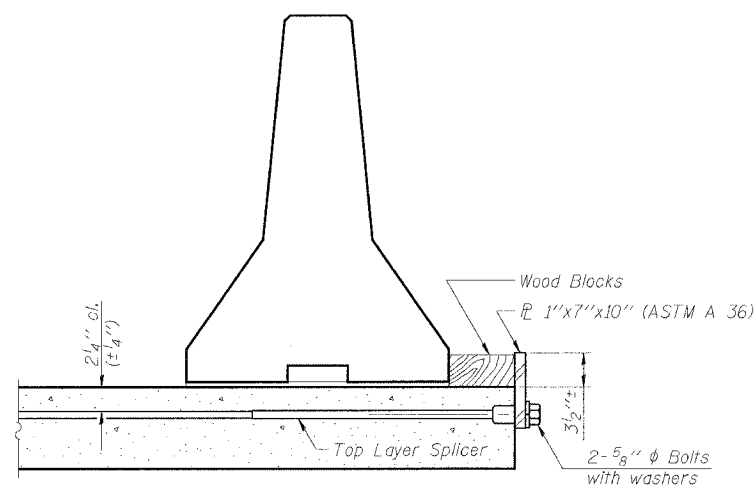


When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".

SECTIONS THRU SLAB

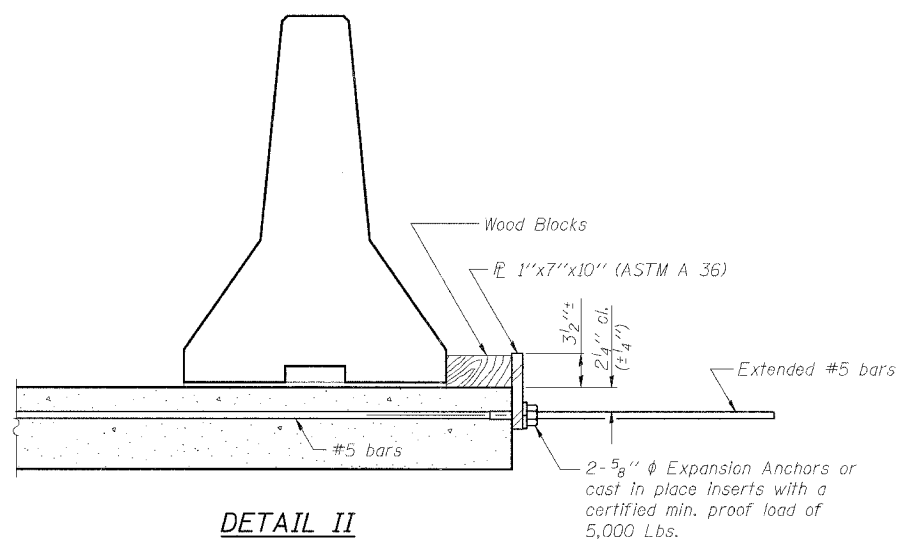
NOTES

- Detail I - With Bar Splicer or Couplers:**
Connect one (1) 1"x7"x10" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.
- Detail II - With Extended Reinforcement Bars:**
Connect one (1) 1"x7"x10" steel PL to the concrete slab with 2-5/8" φ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate C of each barrier panel.
- Cost of anchorage is included with Temporary Concrete Barrier.



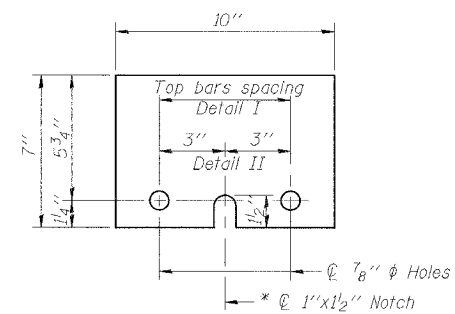
DETAIL I

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.



DETAIL II

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and all reinforcement bars are in place and the concrete is ready to be placed.



1"x7"x10"

* Required only with Detail II

<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	<p>ILLINOIS DEPARTMENT OF TRANSPORTATION</p> <p>TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION</p> <p>IL 17 OVER UNNAMED DRAINAGE DITCH</p> <p>FAP RTE 41 - SECTION 15BR</p> <p>LIVINGSTON COUNTY</p> <p>STATION 185+05</p> <p>STRUCTURE NO. 053-0182</p>
	<p>DATE: 10/20/2006</p> <p>DRAWN BY JMT CHECKED BY BLB</p>

Contract #66665



Illinois Department of Transportation
Division of Highways
District #9, Ottawa

SOIL BORING LOG

Page 1 of 2

Date 8/23/05

ROUTE FA Route 18 (Ill. 17) DESCRIPTION West Abutment SW quad LOGGED BY LM-IDOT
SECTION 15BR LOCATION SW 1/4 of SE 1/4, SEC. 6, TWP. 30N, RNG. 8E, 3rd PM
COUNTY Livingston DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO.	STATION	BORING NO.	STATION	OFFSET	GROUND SURFACE ELEV.	DEPTH (ft)	DIAMETER (in)	UNIT	MOISTURE (%)	DETERMINATION	DEPTH (ft)	DIAMETER (in)	UNIT	MOISTURE (%)	DETERMINATION
053-0146	185+04.5	1	184+59.5	46.00 ft	617.29										
						5					5				
						2					2				
						3					3				
						4					4				
						3	1.5	30.3			3	1.5	25.9		
						4					4				
						2					2				
						3					3				
						2					2				
						3					3				
						8	4.4	17.2			8	4.4	14.2		
						11					11				
						5					5				
						6	3.5	20.8			6	3.3	13.7		
						10					10				
						3					3				
						3	1.0	29.1			3	1.0	11.8		
						7					7				
						3					3				
						3	1.5	26.6			3	1.5			
						6					6				
						5					5				
						3					3				
						9					9				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)



Illinois Department of Transportation
Division of Highways
District #9, Ottawa

SOIL BORING LOG

Page 2 of 2

Date 8/23/05

ROUTE FA Route 18 (Ill. 17) DESCRIPTION West Abutment SW quad LOGGED BY LM-IDOT
SECTION 15BR LOCATION SW 1/4 of SE 1/4, SEC. 6, TWP. 30N, RNG. 8E, 3rd PM
COUNTY Livingston DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO.	STATION	BORING NO.	STATION	OFFSET	GROUND SURFACE ELEV.	DEPTH (ft)	DIAMETER (in)	UNIT	MOISTURE (%)	DETERMINATION	DEPTH (ft)	DIAMETER (in)	UNIT	MOISTURE (%)	DETERMINATION
053-0146	185+04.5	1	184+59.5	46.00 ft	617.29										
						11	4.8	12.6			11	4.0	14.7		
						15					15				
						4					4				
						2					2				
						3					3				
						4					4				
						3	1.5	30.3			3	1.5	25.9		
						4					4				
						2					2				
						3					3				
						2					2				
						3					3				
						8	4.4	17.2			8	4.4	14.2		
						11					11				
						5					5				
						6	3.5	20.8			6	3.3	13.7		
						10					10				
						3					3				
						3	1.0	29.1			3	1.0	11.8		
						7					7				
						3					3				
						3	1.5	26.6			3	1.5			
						6					6				
						5					5				
						3					3				
						9					9				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)



Excellence through Ownership

200 West Front Street
Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

BORING LOGS
IL 17 OVER UNNAMED DRAINAGE DITCH
FAP RTE 41 - SECTION 15BR
LIVINGSTON COUNTY
STATION 185+05
STRUCTURE NO. 053-0182

DATE: 10/20/2006

DRAWN BY JMT
CHECKED BY BLB



SOIL BORING LOG

Page 1 of 2

Date 8/24/05

ROUTE FA Route 18 (Ill 17) DESCRIPTION East Abutment NE quad LOGGED BY LM-IDOT
SECTION 15BR LOCATION SW 1/4 of SE 1/4, SEC. 6, TWP. 30N, RNG. 8E, 3rd PM
COUNTY Livingston DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO.	STATION	BORING NO.	STATION	OFFSET	GROUND SURFACE ELEV.	DEPTH (ft)	BLOWS (/ft)	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BLOWS (/ft)	UCS (tsf)	MOISTURE (%)
053-0146	185+04.5	2	185+46.5	49.00ft Lt	617.56					Surface Water Elev. 610.38 ft Stream Bed Elev. _____ ft Groundwater Elev.: First Encounter _____ ft Upon Completion 607.1 ft After _____ Hrs. _____ ft				
						0				Augered Brown Silty Clay Loam Fill	5	2.8	19.6	
					615.56	5				Hard Brown Clay Loam Fill	5	4.0	16.0	
					613.56	4	P				5	2.8	27.1	
						3				Very Stiff Brown/Gray Silty Clay Till	3	1.5	15.7	
					611.06	2	2.5	20.8		Stiff Gray Silty Clay Loam Till w/ layers Gray Silt	4	1.5	15.7	
						3	P				5	1.8	14.9	
						7	S			Hard Gray Silty Clay Loam Till	7	1.4	15.0	
						5					5	2.2	14.2	
						7	S				7	B		
						9	S				7			
						10					5			
						7	4.3	17.5			5	1.4	15.0	
						9	S				5	B		
						6					3			
						6	4.0	18.5		Very Stiff Gray Silty Clay Loam Till	5	2.2	14.2	
					603.56	9	S				7	B		
						3				Very Stiff Gray Silty Clay w/layers Silt & Very Fine Sand Varved Clay at 22'-23'	3			
						4	2.8	22.7			5	2.2	14.2	
						6	P				7	B		
						2					4	2.7	23.3	
						4	2.7	23.3			8	S		
						8	S				4			
						20	4				40	7		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Page 2 of 2

Date 8/24/05

ROUTE FA Route 18 (Ill 17) DESCRIPTION East Abutment NE quad LOGGED BY LM-IDOT
SECTION 15BR LOCATION SW 1/4 of SE 1/4, SEC. 6, TWP. 30N, RNG. 8E, 3rd PM
COUNTY Livingston DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO.	STATION	BORING NO.	STATION	OFFSET	GROUND SURFACE ELEV.	DEPTH (ft)	BLOWS (/ft)	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BLOWS (/ft)	UCS (tsf)	MOISTURE (%)
053-0146	185+04.5	2	185+46.5	49.00ft Lt	617.56					Surface Water Elev. 610.38 ft Stream Bed Elev. _____ ft Groundwater Elev.: First Encounter _____ ft Upon Completion 607.1 ft After _____ Hrs. _____ ft				
						9	3.8	13.0		Very Stiff Gray Silty Clay Loam Till (continued)	8	3.5	17.1	
						11	B				12	S		
						9					7			
						16	4.0	12.6			11	2.4	20.1	
						21	S			End of Boring	15	S		
						7					7			
						9	4.0	14.7			9			
						13	S				11	2.5	16.8	
						9					11	2.5	16.8	
						11	2.5	16.8			15	S		
						5					5			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)



Excellence through Ownership

200 West Front Street
Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

BORING LOGS
IL 17 OVER UNNAMED DRAINAGE DITCH
FAP RTE 41 - SECTION 15BR
LIVINGSTON COUNTY
STATION 185+05
STRUCTURE NO. 053-0182

DATE: 10/20/2006

DRAWN BY JMT
CHECKED BY BLB

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 2

ROUTE FA18 (IL 71) DESCRIPTION IL17 over a branch of the E. Fork of the Mazon River LOGGED BY W. Pearce Date 10/19/71

SECTION 15-BR LOCATION SE 14, SEC. 6, TWP. 30N, RNG. 8E, 3rd PM

COUNTY LaSalle DRILLING METHOD _____ HAMMER TYPE _____

STRUCT. NO.	Station	D E P T H	N C S	U C S	M O I S T	Surface Water Elev.	Stream Bed Elev.	D E P T H	B L O S	U C S	M O I S T
		(ft)		(tsf)	(%)	ft	ft	(ft)	(6")	(tsf)	(%)
053-0146	185+04.5					610.53					
BORING NO. <u>2</u>						Groundwater Elev.:					
Station <u>184+53</u>						First Encounter					
Offset <u>36.00ft Lt</u>						Upon Completion					
Ground Surface Elev. <u>617.93</u> ft						After					
						Hrs.					
Hard, light brown, Clay Till						Very stiff, gray, Clay Till (continued)					
						595.93					
						Stiff, gray, Silty Clay Till					
613.43						11 4.5 19.0					
Stiff, brownish gray, Clay Till						14 1.7 26.0					
611.93						8 1.6 25.0					
Hard, brownish gray to gray, Clay Till						33 8.2 17.0					
						38 6.8 18.0					
						28 5.6 16.0					
600.93						21 4.1 24.0					
Medium, gray, fine, Sand						15 2.7 15.0					
598.43						68 4.2 17.0					
Very stiff, gray, Clay Till						20 - -					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
N-Standard Penetration Test-Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".
Modified GCB 09-06

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 2 of 2

ROUTE FA18 (IL 71) DESCRIPTION IL17 over a branch of the E. Fork of the Mazon River LOGGED BY W. Pearce Date 10/19/71


SECTION 15-BR LOCATION SE 14, SEC. 6, TWP. 30N, RNG. 8E, 3rd PM

COUNTY LaSalle DRILLING METHOD _____ HAMMER TYPE _____

STRUCT. NO.	Station	D E P T H	N C S	U C S	M O I S T	Surface Water Elev.	Stream Bed Elev.	D E P T H	B L O S	U C S	M O I S T
		(ft)		(tsf)	(%)	ft	ft	(ft)	(6")	(tsf)	(%)
053-0146	185+04.5					610.53					
BORING NO. <u>2</u>						Groundwater Elev.:					
Station <u>184+53</u>						First Encounter					
Offset <u>36.00ft Lt</u>						Upon Completion					
Ground Surface Elev. <u>617.93</u> ft						After					
						Hrs.					
Hard, gray, Clay Till (continued)						56 6.7 12.0					
						572.93					
Hard, gray, Clay Till						38 7.0 11.0					
						30 5.8 13.0					
						31 5.8 13.0					
566.93						31 4.2 13.0					
End of Boring											

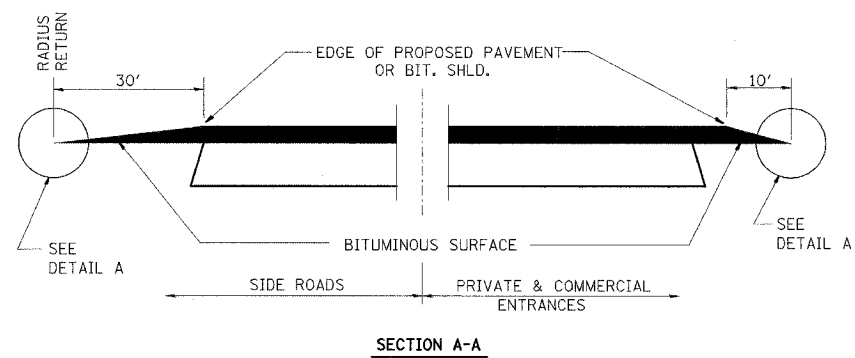
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
N-Standard Penetration Test-Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".
Modified GCB 09-06

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 Excellence through Ownership 200 West Front Street Wheaton, IL 60187	ILLINOIS DEPARTMENT OF TRANSPORTATION
	BORING LOGS IL 17 OVER UNNAMED DRAINAGE DITCH FAP RTE 41 - SECTION 15BR LIVINGSTON COUNTY STATION 185+05 STRUCTURE NO. 053-0182
	DATE: 10/20/2006
	DRAWN BY JMT CHECKED BY BLB

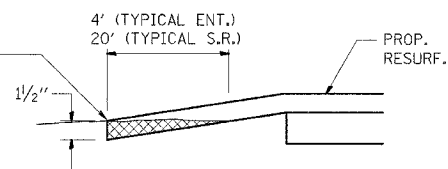
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
41	15 BR	LIVINGSTON	38	27
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 66665

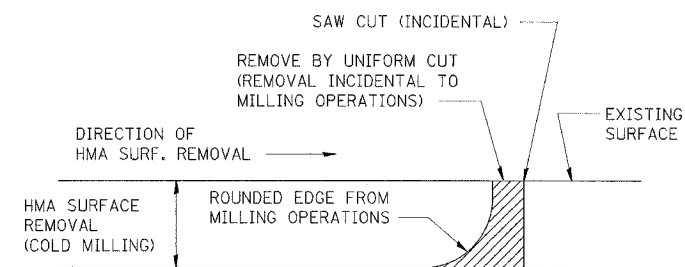


DETAILS AT ENTRANCES & SIDE ROADS

THE COST OF REMOVAL AT EXISTING HMA OR P.C.C. LOCATIONS SHALL BE PAID FOR PER SQ. YD. BY THE APPROPRIATE PAY ITEM. REMOVAL AT EXISTING AGG. LOCATIONS SHALL BE INCIDENTAL TO THE HOT-MIX ASPHALT. A-3 LOCATIONS SHALL BE FEATHER TAPERED.

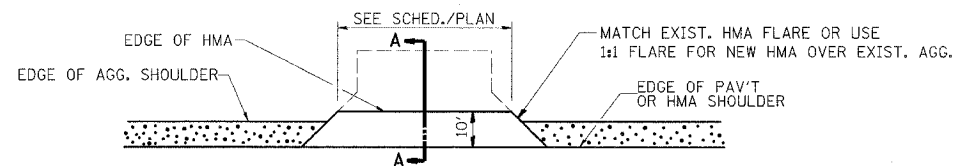


DETAIL A



NOTE: WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAW CUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL

HOT-MIX ASPHALT DETAIL AT BUTT JOINTS



PLAN AT PRIVATE & COMMERCIAL ENTRANCES

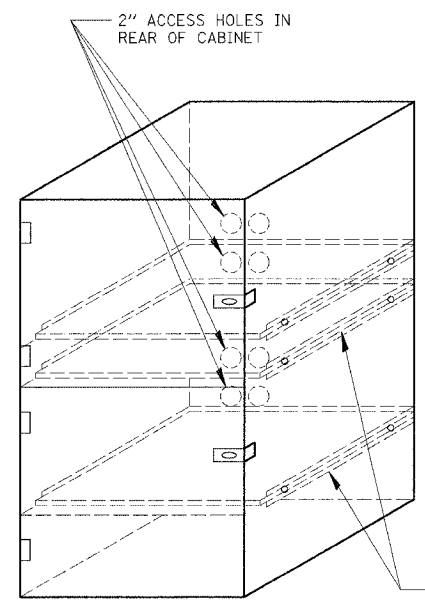
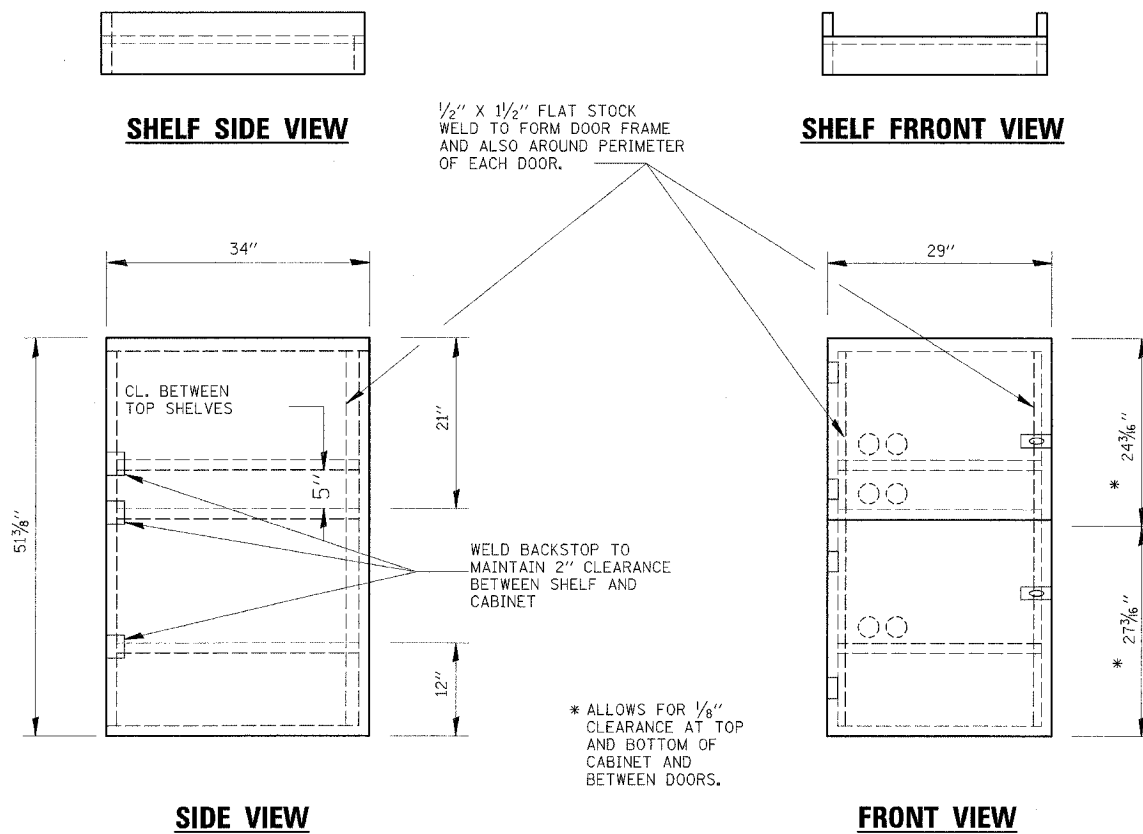
(DO NOT RESURFACE FIELD ENTRANCES)

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<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	REVISIONS NAME DATE		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.P. ROUTE 41 (IL 17)																					
	<table border="1"> <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> <tr><td> </td><td> </td></tr> </table>																							

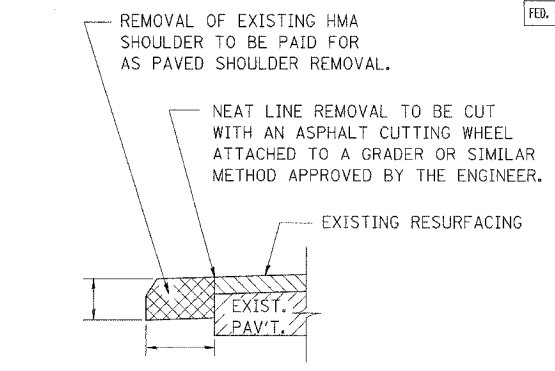
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS	NO.
41	15 BR	LIVINGSTON	38	28
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 66665

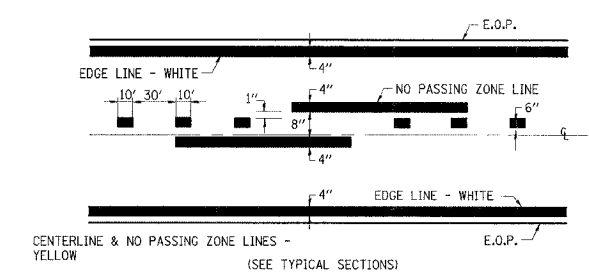


LOCKABLE COMPUTER CABINET

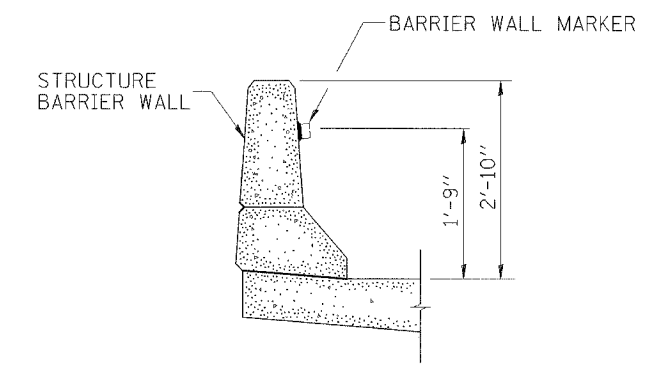
- NOTES:
1. USE 16 GAUGE STEEL FOR CABINET.
 2. THE TOP SHELF SHALL SLIDE IN OR OUT WITH THE TOP DOOR OPEN.
 3. ALL HINGES AND HASPS WILL BE WELDED TO THE CABINET.
 4. ALL EDGES SHALL BE GROUND SMOOTH.
 5. TWO (2" DIA.) ACCESS HOLES WILL BE REQUIRED FOR EACH SHELF.
 6. CABINET SHALL BE PAINTED WITH TWO COATS OF FLAT PAINT.
 7. 2 EACH MATCHING KEY PADLOCKS, WITH 3 KEYS PROVIDED, MASTER MODEL 3 T OR EQUIVALENT.
 8. 4 EACH PLAIN STEEL, NON-REMOVABLE PIN, NO HOLE 4"x4" SQUARE CORNER HINGES TO BE WELDED ON.
 9. 2 EACH EXTRA HEAVY, PLAIN STEEL, FIXED STAPLE, NO HOLE, 7 1/4" HASPS TO BE WELDED ON.



REMOVAL OF EXISTING HMA SHOULDER



PAVEMENT MARKING



BARRIER WALL MARKER

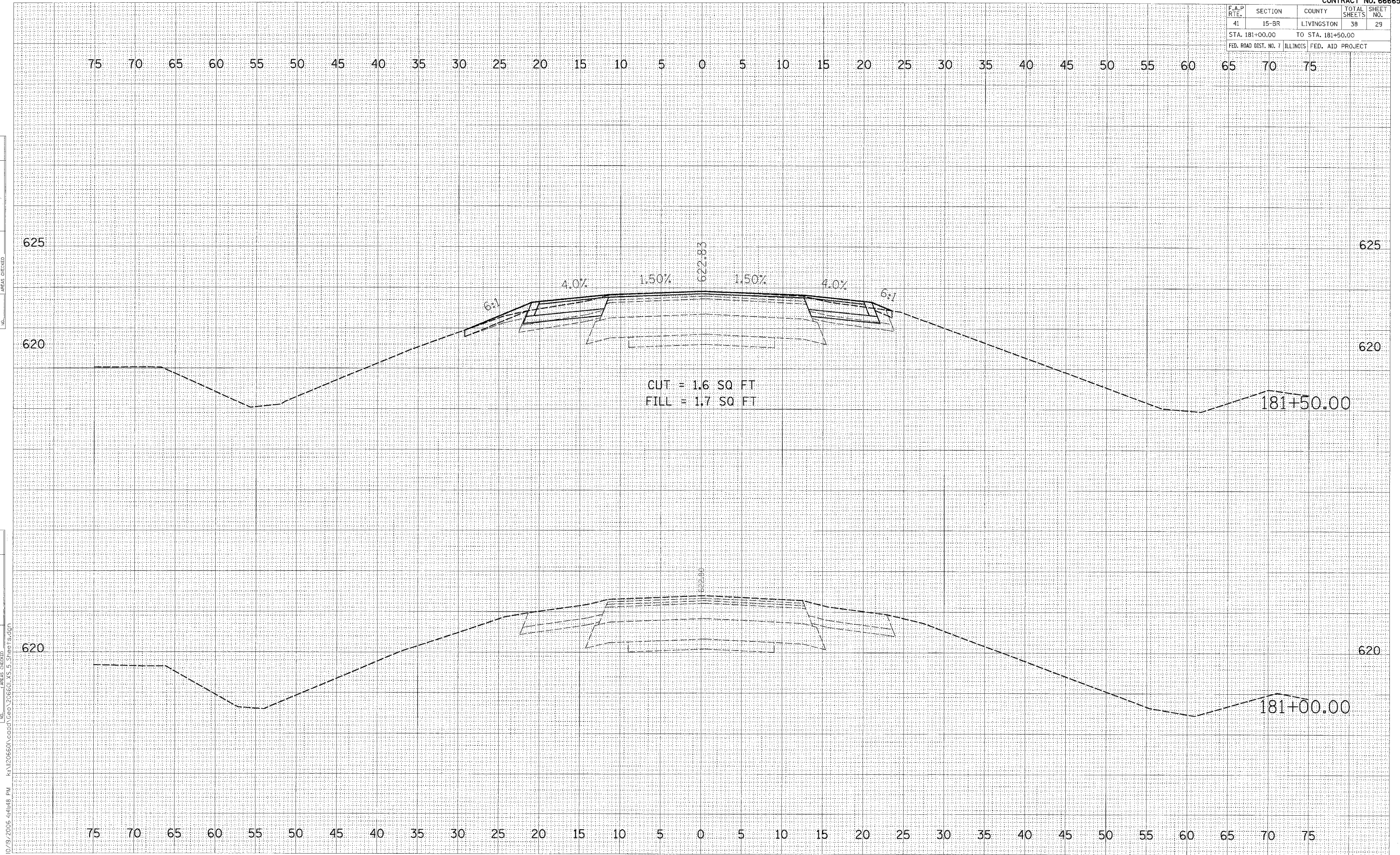
<p>Excellence through Ownership</p> <p>200 West Front Street Wheaton, IL 60187</p>	REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.P. ROUTE 41 (IL 17) DISTRICT DETAILS SCALE: VERT. HORIZ. DATE: OCTOBER 20, 2006 DRAWN BY: NEC CHECKED BY: SPF
	NAME	DATE	

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
41	15-BR	LIVINGSTON	38	29
STA. 181+00.00 TO STA. 181+50.00				
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

DATE	
BY	
FINAL SURVEY	
NOTE BOOK	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
NOTE BOOK	
AREAS CHECKED	



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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
41	15-BR	LIVINGSTON	38	30
STA. 182+00.00 TO STA. 182+50.00				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

BY	DATE

FINAL SURVEY	DATE

PLOTTED	DATE

NOTE BOOK	NO.

AREAS CHECKED

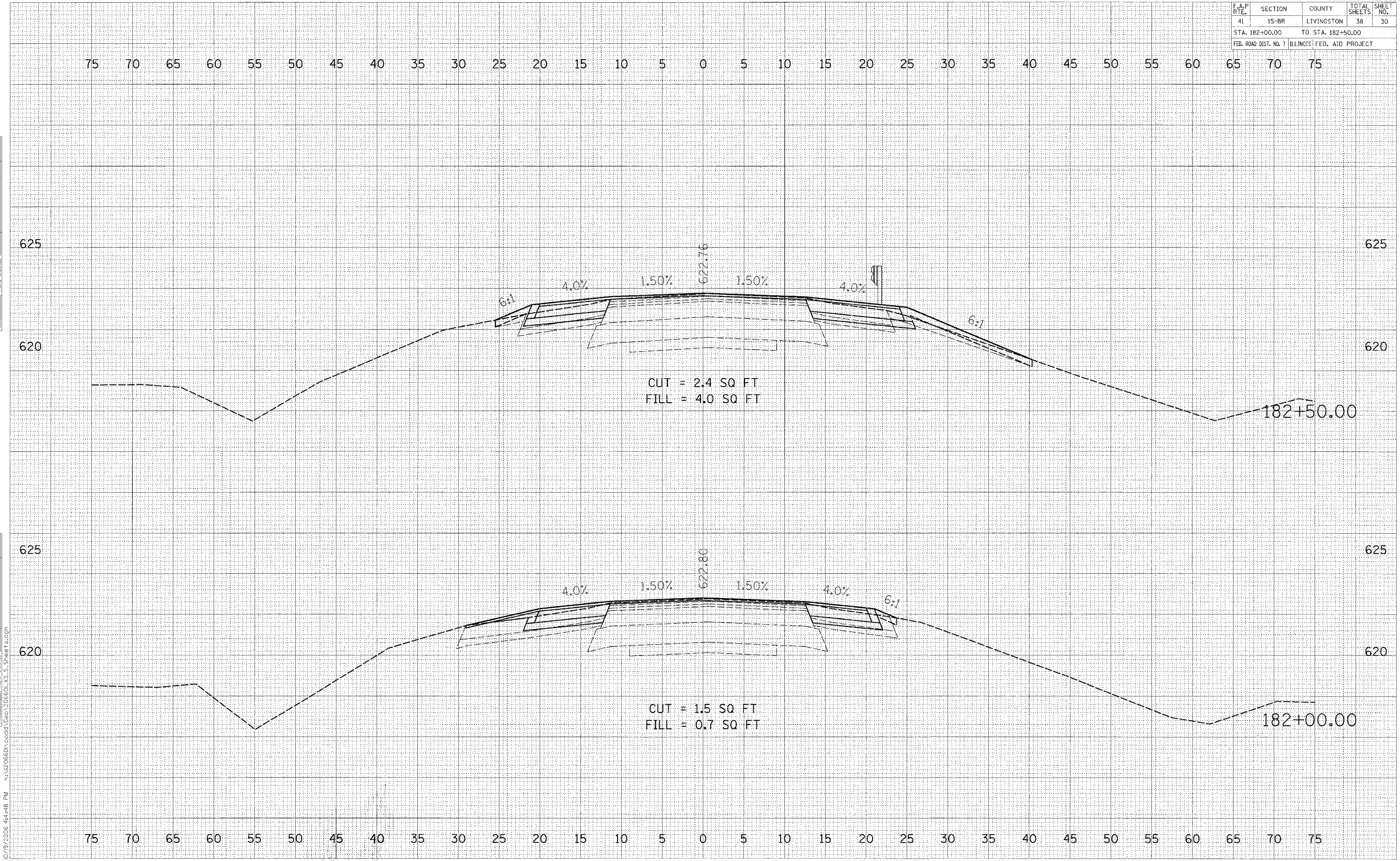
BY	DATE

ORIGINAL SURVEY	DATE

PLOTTED	DATE

NOTE BOOK	NO.

AREAS CHECKED

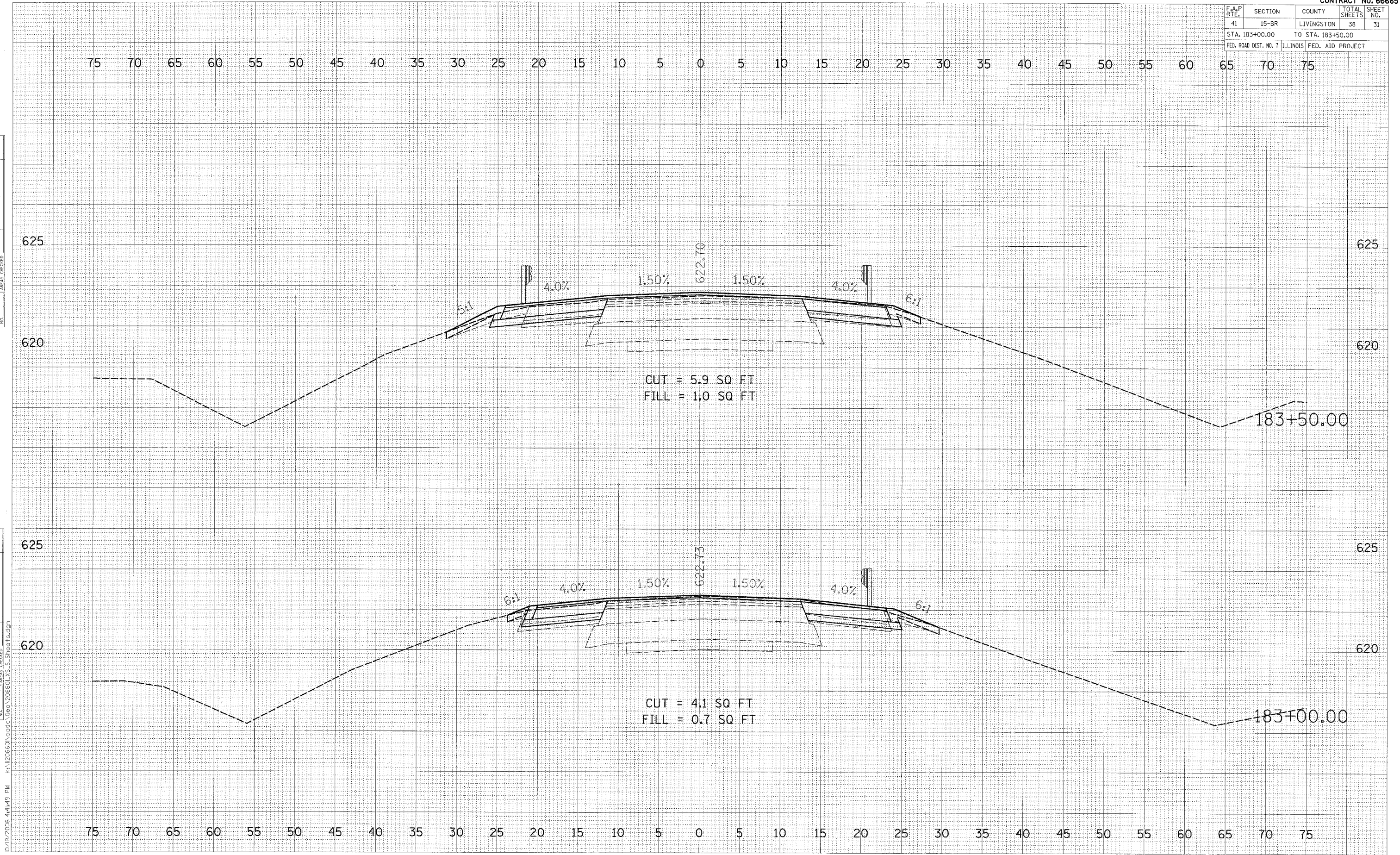


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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
41	15-BR	LIVINGSTON	38	31
STA. 183+00.00		TO STA. 183+50.00		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

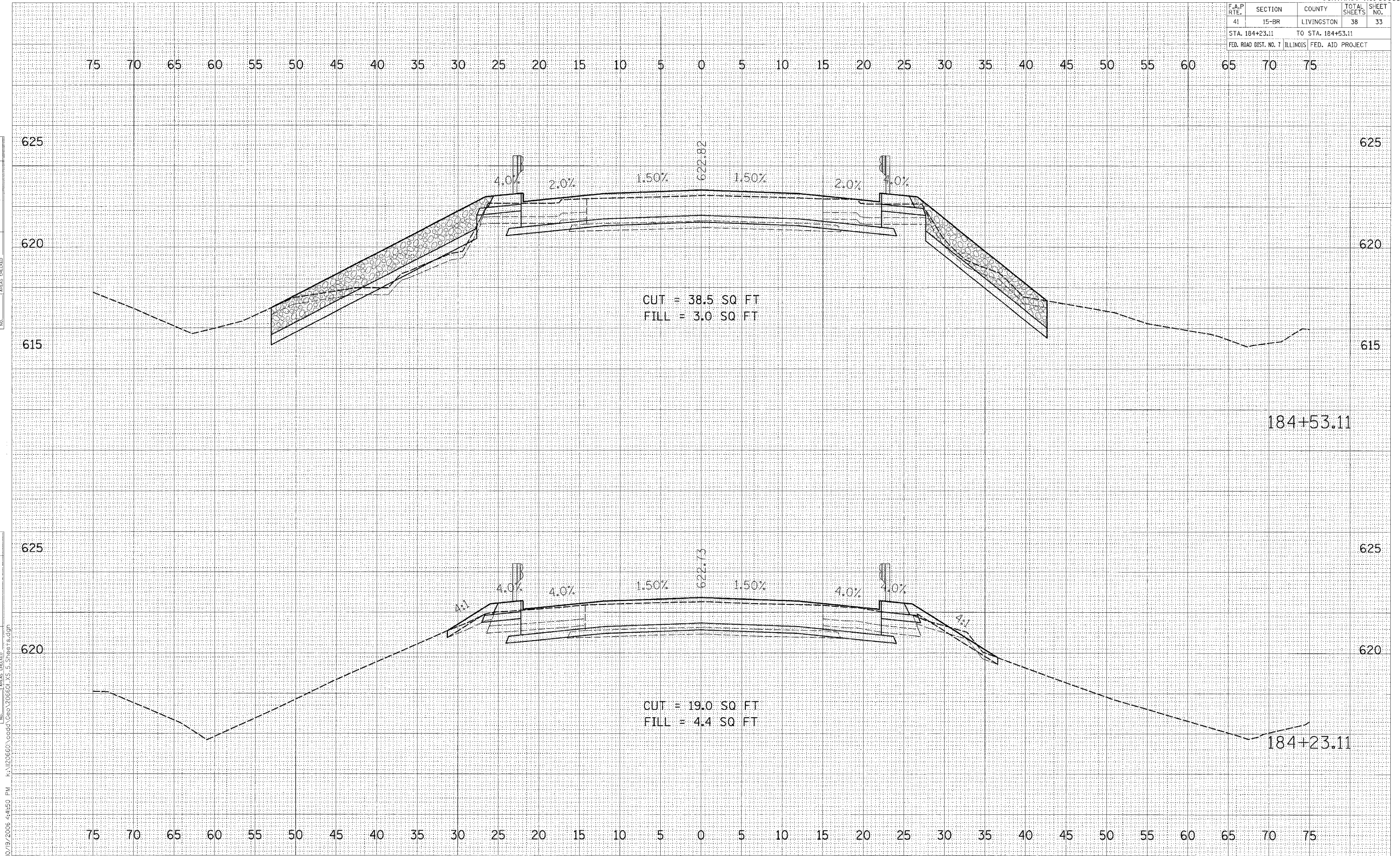


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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
41	15-BR	LIVINGSTON	38	33
STA. 184+23.11 TO STA. 184+53.11				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

FINAL SURVEY
 SURVEYED BY: _____
 DATE: _____
 NOTE BOOK NO.: _____
 TEMPLATE: _____
 AREAS CHECKED: _____

ORIGINAL SURVEY
 SURVEYED BY: _____
 DATE: _____
 NOTE BOOK NO.: _____
 TEMPLATE: _____
 AREAS CHECKED: _____



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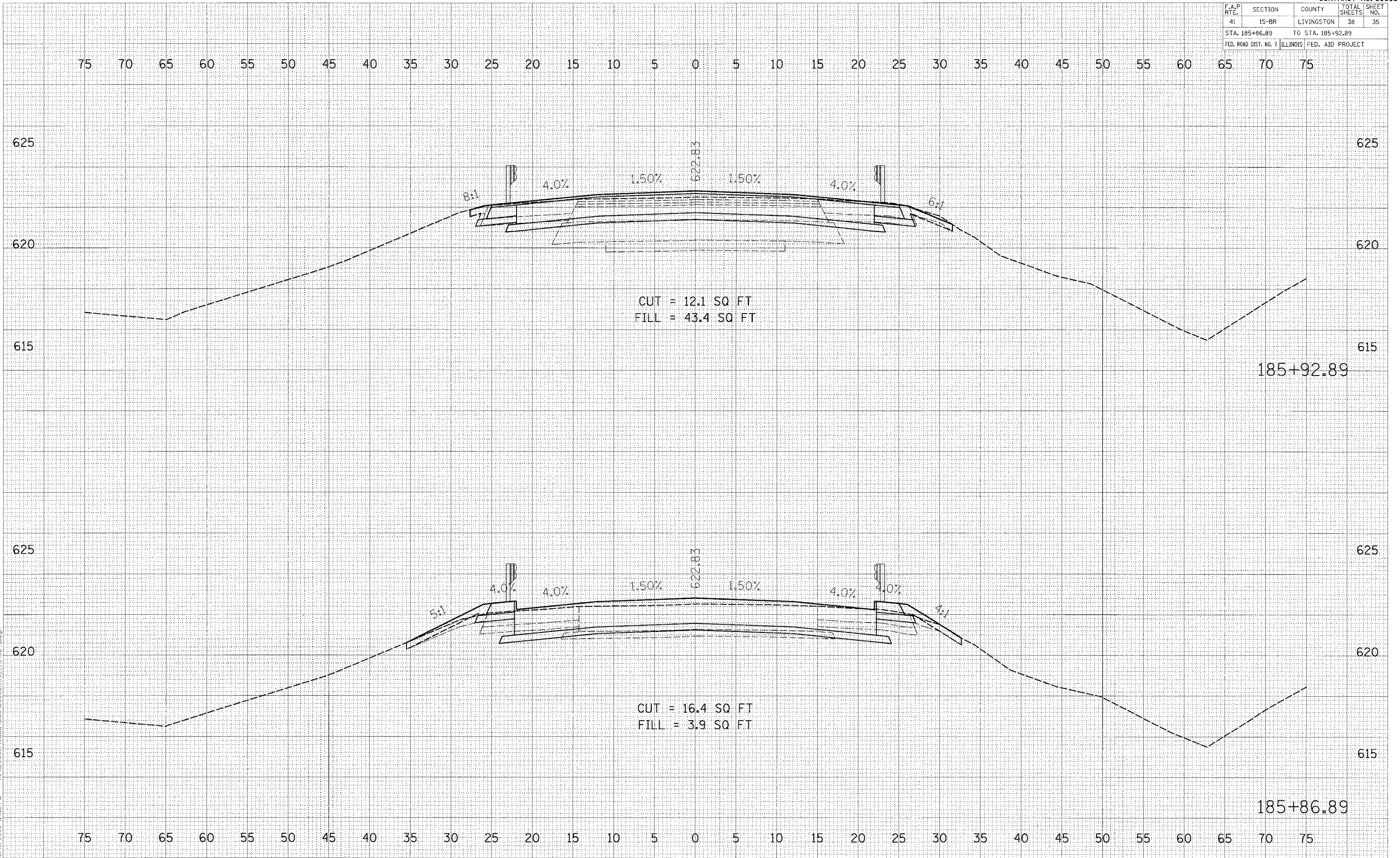
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
41	15-BR	LIVINGSTON	38	35
STA. 185+86.89 TO STA. 185+92.89			ILLINOIS FED. AID PROJECT	

BY	DATE

FINAL SURVEY	SURVEYED

NOTE BOOK	PLATTED

AREAS CHECKED	AREAS CHECKED



BY	DATE

ORIGINAL SURVEY	SURVEYED

NOTE BOOK	PLATTED

AREAS CHECKED	AREAS CHECKED

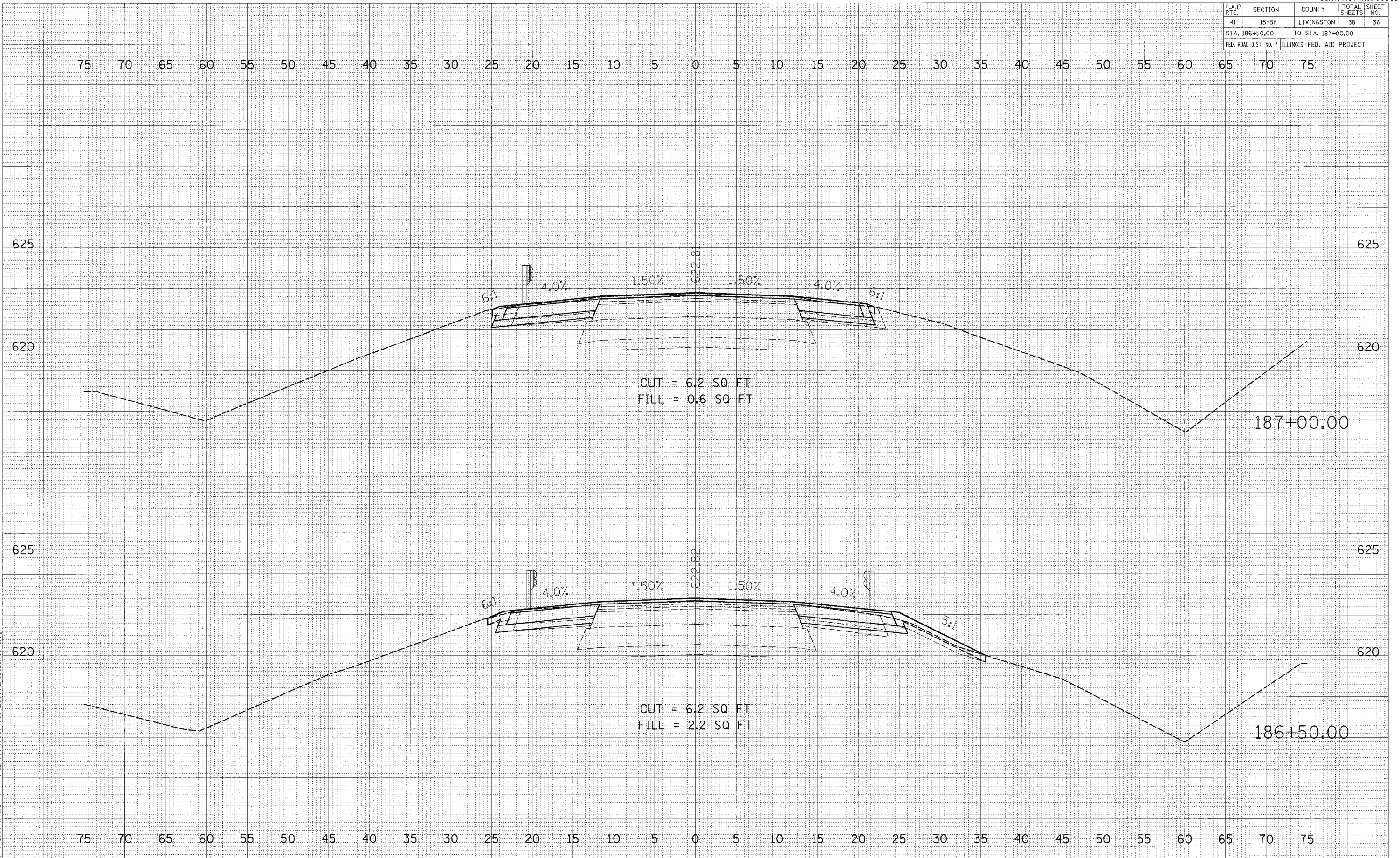
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
41	15-BR	LIVINGSTON	38	36
STA. 186+50.00		TO STA. 187+00.00		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

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

DATE	
BY	
ORIGINAL SURVEY	
SHIPPED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
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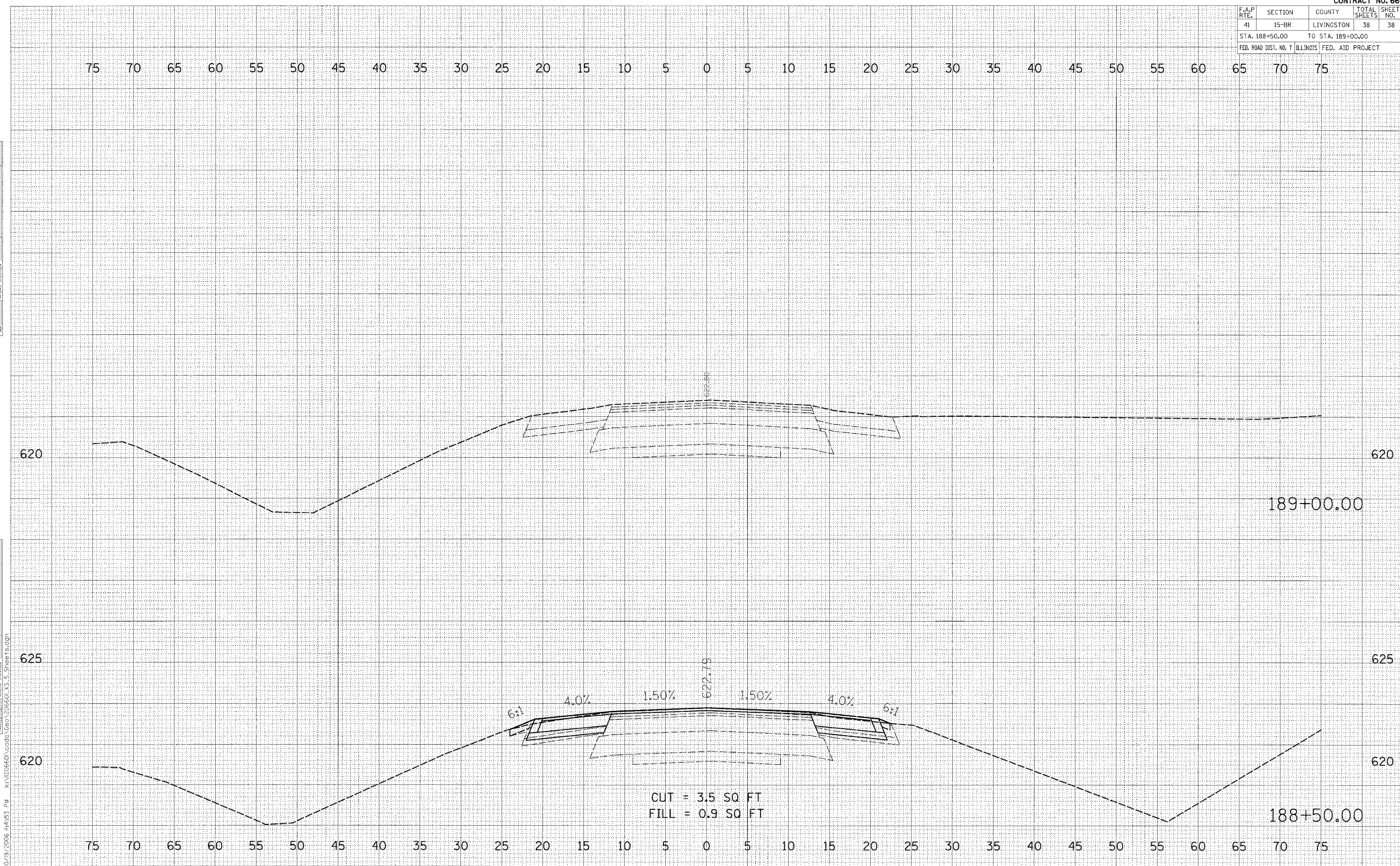
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
41	15-BR	LIVINGSTON	38	38
STA. 188+50.00 TO STA. 189+00.00				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

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

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



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