F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	1
FED. ROAD DIST. NO. 4	ILLINOIS	CONTRACT NO. 68573		

1-16-09 Letting, Item 092

PROJECT ENGINEER: MR. RICH DOTSON (309) 671-3455

CONSULTANT LIASON: MR. CHRIS MAUSHARD (309) 671-3453

MASTER INDEX OF SHEETS

1. COVER SHEET
2.-3. MASTER LIST OF STANDARDS, GENERAL NOTES, COMMITMENTS
4.-6. MASTER SUMMARY OF QUANTITIES
7. TEMPORARY DETOUR PLAN
8.-9. SN 062-0001 LOW WATER CROSSING PLAN/PROFILE
10.-18. SN 062-0001 LOW WATER CROSSING CROSS SECTIONS
19.-20. SN 062-0002 LOW WATER CROSSING PLAN/PROFILE
21.-32. SN 062-0002 LOW WATER CROSSING CROSS SECTIONS
33.-61. CONSTRUCTION PLANS, SN 062-0001 - SEE SHEET 33 FOR INDEX
62.-93. CONSTRUCTION PLANS, SN 062-0002 - SEE SHEET 62 FOR INDEX
94.-97. BRIDGE APPROACH PAVEMENT DETAIL

TRAFFIC DATA

ADT = 900 (2008)
SU = 3.8%
MU = 1.3%

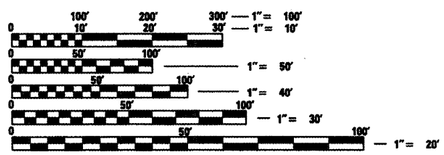
ADT = 1,350 (2028)

POSTED SPEED LIMIT

55 M.P.H.

DESIGN DESIGNATION

RURAL MAJOR COLLECTOR



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
OR 811

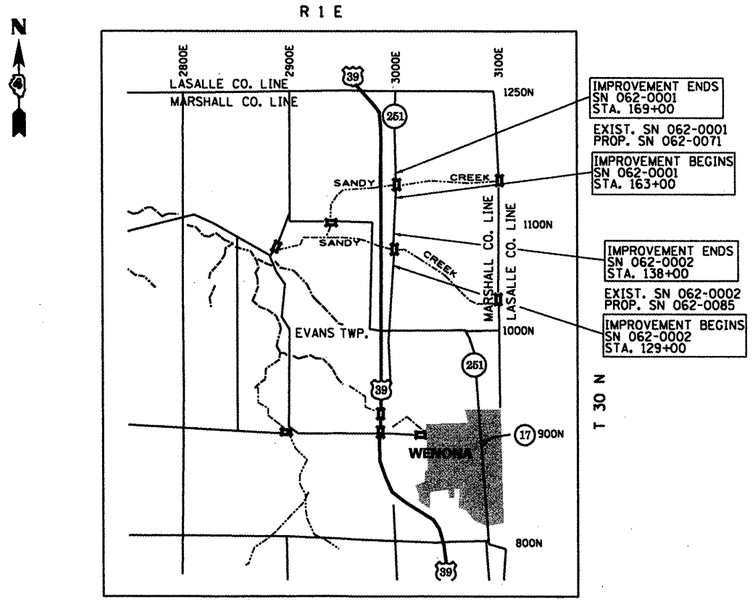
CONTRACT NO. 68573

CATALOG NO. 033201-00D

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

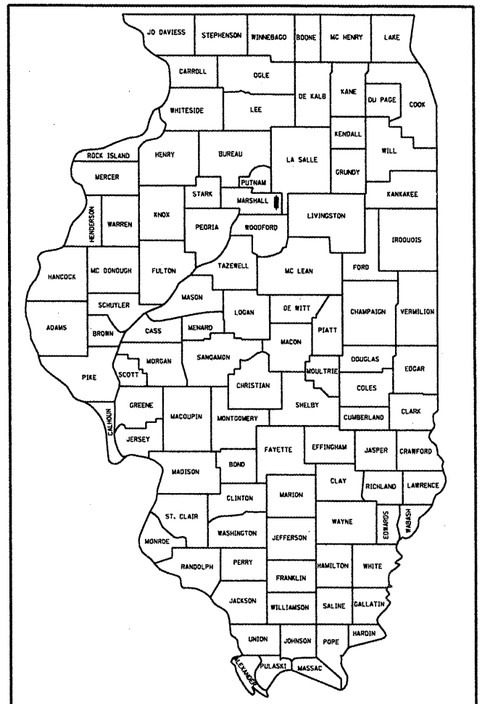
PROPOSED
HIGHWAY PLANS

FAS ROUTE 253 (IL 251)
SECTION 68(BR,BR-1)
PROJECT RS-0253(104)
MARSHALL COUNTY
BRIDGE REMOVAL AND REPLACEMENT
AND ROADWAY RECONSTRUCTION
C-94-047-06



TOTAL LENGTH OF PROJECT = 4000 FT
NET LENGTH OF IMPROVEMENT = 1500 FT

D-94-040-06



LOCATION OF SECTION INDICATED THUS:- ▬

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Oct 15, 20 08
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
December 5, 20 08
Erin E. Harm
Interim
ENGINEER OF DESIGN AND ENVIRONMENT
December 5 20 08
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

c:/projects/1125isandy/1125icover.dgn

HIGHWAY STANDARDS

001001-02 AREAS OF REINFORCEMENT BARS
280001-04 TEMPORARY EROSION CONTROL SYSTEMS
482001-02 HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-03 NAME PLATE FOR BRIDGES
630001-08 STEEL PLATE BEAM GUARDRAIL
630201-06 PCC/BITUMINOUS STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-05 SHOULDER WIDENING FOR TYPE I (SPECIAL) GUARDRAIL TERMINALS
631031-07 TRAFFIC BARRIER TERMINAL, TYPE 6
635006-03 REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02 REFLECTOR MARKER AND MOUNTING DETAILS
665001-02 WOVEN WIRE FENCE
701001-02 OFF-RD OPERATIONS 2L, 2W, MORE THAN 4.5m (15') AWAY
701006-03 OFF-RD OPERATIONS 2L, 2W 4.5m (15') TO 600mm (24") FROM PAVEMENT EDGE
701101-02 OFF-ROAD OPERATIONS, MULTILANE, 4.5m (15') TO 600mm (24") FROM PAVEMENT EDGE
701301-03 LANE CLOSURE 2L, 2W, SHORT TIME OPERATIONS
701311-03 LANE CLOSURE 2L, 2W MOVING OPERATIONS - DAY ONLY
701326-03 LANE CLOSURE 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS >= 45 MPH
701901-01 TRAFFIC CONTROL DEVICES
720001-01 SIGN PANEL MOUNTING DETAILS
720006-02 SIGN PANEL ERECTION DETAILS
720011-01 METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
729001-01 APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
780001-02 TYPICAL PAVEMENT MARKINGS
781001-03 TYPICAL APPLICATION RAISED REFLECTIVE PAVEMENT MARKERS
BLR 21-6 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
601101-01 CONCRETE HEADWALL FOR PIPE DRAIN

DISTRICT STANDARDS

630101-D4 GUARDRAIL EROSION TREATMENTS
667101-D4 PERMANENT SURVEY TIE AND PERMANENT SURVEY MARKERS

GENERAL NOTES

UTILITIES - LOCATIONS / INFORMATION ON PLANS

The locations of existing water mains, gas mains, sewers, electric power lines, telephone lines and other utilities as shown on the plans are based on careful field investigation and the best information available, but they are not guaranteed. Unless elevations are shown --- all utility locations shown on the cross sections are based on the approximate depth supplied by the utility company. It shall be the Contractor's responsibility to ascertain their exact location from the utility companies and by field inspection.

PLAN ELEVATIONS - U. S. G. S. MEAN SEA LEVEL DATUM

All elevations shown on the plans are established from U. S. G. S. mean sea level datum.

PROPERTY OWNER ACCESS REQUIREMENTS

Access must be maintained to all existing properties during construction per Article 107.09 unless arrangements are made in writing by the Contractor with the property owners with a copy to the Engineer for short-term closures.

CLEARING

At locations where clearing is indicated on the plans beyond the limits of the proposed excavation or embankment, the Contractor shall restore the disturbed earth by blading and shaping to blend with the adjacent ground. The clearing will not be paid for separately but shall be included in the cost of excavation pay items in the plans. Payment for reseeding or resodding will be as provided in the plans.

ENVIRONMENTAL REVIEWS

Prior to the use of any proposed borrow areas, use areas (temporary access roads, detours, run-arounds, etc.) and/or waste areas, the Contractor shall file the required environmental resource request surveys according to Section 107.22 of the Standard Specifications. These surveys are required in order for the Department to conduct cultural and biological resource surveys for the proposed site.

Prior to any waste materials being removed from the construction site the required environmental resource surveys will need to be obtained and filed by the Contractor. Excess waste products removed from the construction site shall be disposed of as required in Section 202.03 of the Standard Specifications.

Any protruding metal bars shall be removed prior to the disposal of broken concrete at approved disposal sites.

The required environmental resource documentation shall include the following:

- BDE Form 2289 (Environmental Survey Request)
- A location map showing the size limits and location of the use area
- Signed property owner agreement form-D4 P10100
- Color photographs depicting the use area
- Borrow Area Entry Agreement form-D4 P10101

Please note that a minimum of two weeks shall be allowed for the District to obtain the required environmental clearances.

SEEDING - SIDE SLOPE RIPPING

All slopes steeper than 3 to 1 and over 15 ft (4.5 m) in height shall be ripped This shall consist of ripping between 18 inches to 24 inches (450 mm to 600 mm) deep normal to the slope. The interval of ripping along the slope shall be 12 ft. (3.6 m). This work shall be done after the seed bed has been prepared but before any fertilizer or seed has been applied. The fertilizer and seed shall be applied within a 24-hour period after the ripping has been done. This work will not be paid for separately but will be included in the cost of the various items of seeding involved.

PAVEMENT STATIONING NUMBERS & PLACEMENT

The Contractor shall provide labor and materials required to imprint pavement station numbers in the finished surface of the pavement and/or overlay. The numbers shall be approximately 3/4 inch (20mm) wide, 5 inches (125 mm) high and 5/8 inch (15 mm) deep.

The pavement station numbers shall be installed as specified herein:

Interval - 200 feet (English stationing) or 100 meters (metric stationing)

Bottom of Numbers - 6 inches (150 mm) from the inside edge of the pavement marking

Location:
- 2,3, & 5 Lane Pavements - right edge of pavement in direction of increasing stations
- Multi-Lane Divided Roadways - outside edge of pavement in both directions
- Ramps - along baseline edge of pavement

Position - stations shall be placed so they can be read from the adjacent shoulder

Format - English (Metric) pavement stations shall use this format "XXX (XX+X00)" where X represents the pavement station

This work will not be paid for separately, but will be considered included in the cost of the associated pavement and/or overlay pay items.

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		DRAWN -	REVISED -
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	PLOT DATE = 10/10/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STANDARDS/GENERAL NOTES/COMMITMENTS

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

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	77	2
		CONTRACT NO. 68573		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

Mixture Use(s):	HMA BINDER COURSE	HMA SURF. COURSE	HMA SHOULDERS (SURFACE LIFT)	HMA SHOULDERS (LOWER LIFTS)	HMA PAV'T. CONNECTOR (FLEXIBLE)
AC/PC:	PG 64-22	PG 64-22	PG 64-22	PG 64-22	PG 64-22
RAP % (Max)**:	25%	15%	30%	30%	25%
Design Air Voids:	4.0% @ N=50	4.0% @ N=50	3.0% @ N=30	4.0% @ N=30	4.0% @ N=50
Mixture Composition: (Gradation Mixture)	IL 19.0	IL 9.5 OR IL 12.5	IL 9.5L	IL 19.0L	IL 19.0
Friction Aggregate	N.A.	MIXTURE D	MIXTURE C	N.A.	N.A.

** If the RAP option is selected, the asphalt cement grade may need to be adjusted; this will be determined by the Engineer.

PAVING SURFACE COURSE

Continuous paving operations on the main roadway shall be maintained at all times during the construction of the hot-mix asphalt surface. No interruptions for side roads, entrances, turn lanes, etc. will be allowed.

ORDERING LENGTH CONFIRMATION - DRAINAGE ITEMS

The Contractor shall consult with the Engineer in regard to the exact length of the box/pipe culverts, storm sewers, and/or pipe drains required prior to ordering these items.

EXISTING DRAINAGE PIPES CONNECTED TO NEW STRUCTURES

In accordance with Section 602 of the Standard Specifications, the connecting of existing drain tiles, pipe culverts, or storm sewers to the proposed drainage system structures will not be paid for separately but shall be considered as included in the pay items provided.

ENGINEERS FIELD OFFICE

Add the following sentence to the end of paragraph 670.02 (I) and 670.04 (e):
All of the telephone lines provided shall have unpublished numbers.

SIGNING

Sign locations may vary from the stations shown on the plans in accordance with directions from the Engineer at the time of construction. Sign locations may be adjusted in the field to avoid any found utilities.

All wood post locations shall be verified with the Bureau of Operations, Traffic Section, before installation.

PROJECT SPECIFIC GENERAL NOTES

The Contractor shall be responsible for protecting utility property from construction operations as outlined in article 107.31 of the Standard Specifications. The Contractor shall contact J.U.L.I.E. at least 48 hours prior to excavation to determine which utilities are in the area.

COMMITMENTS

Commitments are not to be altered without the written approval of all parties to which the commitment was made.

THE FOLLOWING AGENCIES SHALL BE CONTACTED AS SOON AS POSSIBLE AFTER THE AWARD DATE OF THE CONTRACT TO NOTIFY THEM OF THE DATE OF CLOSURE OF BOTH STRUCTURES:

WENONA CITY COUNCIL - JAMES KUPEC MAYOR 815-853-4227
WENONA AMBULANCE 815-853-0044
WENONA FIRE STATION 815-853-4321 or 815-674-8933
WENONA POLICE DEPARTMENT 815-853-4351
WENONA POST OFFICE 815-853-4707
FIELDCREST EAST SCHOOL 815-853-4331
FIELDCREST SCHOOL DISTRICT #6 309-432-2177
MARSHALL COUNTY ENGINEER 309-246-6401
MARSHALL COUNTY SHERRIFF DEPARTMENT 309-246-2115
LOSTANT FIRE DEPARTMENT 815-368-3066
LOSTANT POLICE DEPARTMENT 815-433-2161
LOSTANT POST OFFICE 815-368-3271
LOSTANT COMMUNITY SCHOOL DISTRICT #425 815-368-3392
EVANS TOWNSHIP COMMISSIONER 815-853-4679
ILLINOIS STATE POLICE DISTRICT 8 815-853-4321

PARCEL NO. 408Y002TE - COMMITMENT TO MR. RANDY BROWN TO RESTORE THE TEMPORARY EASEMENT AREA BACK TO IT'S ORIGINAL CONDITION UPON COMPLETION OF CONSTRUCTION. ANY FIELD TILES INTERCEPTED DURING CONSTRUCTION WILL BE REPAIRED BY THE CONTRACTOR

COMMITMENT TO ADACENT LANDOWNERS AT THE LOCATIONS OF BOTH STRUCTURES AND THE AREA BETWEEN EACH STRUCTURE TO PROVIDE CROSSOVER ACCESS AT ALL TIMES ACROSS EACH WATERWAY. ACCESS ACROSS EACH WATERWAY SHALL BE OF SUFFICIENT LENGTH AND WIDTH TO ACCOMMODATE ALL TYPES OF FARM IMPLEMENTRY.

A NATIONWIDE 404 PERMIT FOR IN-STREAM WORK AND SECTION 401 WATER QUALITY CERTIFICATION HAS BEEN ISSUED FOR BOTH STRUCTURES. A COPY OF EACH IS ON FILE AT THE RESIDENT ENGINEERS FIELD OFFICE.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STANDARDS/GENERAL NOTES/COMMITMENTS

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

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	3
		CONTRACT NO. 68573		

FED. ROAD DIST. NO. 4 | ILLINOIS | FED. AID PROJECT

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
				80/20 1000	80/20 SN 062-0001 X020-2A	80/20 SN 062-0002 X071-2A
20200100	EARTH EXCAVATION	CU YD	1140	1140		
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	92	92		
20300100	CHANNEL EXCAVATION	CU YD	965		600	365
20400800	FURNISHED EXCAVATION	CU YD	170	170		
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	145		48	97
21101615	TOPSOIL FURNISH AND PLACE 4"	SQ YD	5775	5775		
25000210	SEEDING, CLASS 2A	ACRE	1.4	1.4		
25000350	SEEDING, CLASS 7	ACRE	0.4	0.4		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	131	131		
25000500	PHOSPORUS FERTILIZER NUTRIENT	POUND	131	131		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	131	131		
25100115	MULCH, METHOD 2	ACRE	1.8	1.8		
25100630	EROSION CONTROL BLANKET	SQ YD	5618	5618		
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	192	192		
28000300	TEMPORARY DITCH CHECKS	EACH	14	14		
28000400	PERIMETER EROSION BARRIER	FOOT	4274	4274		
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	1243		423	820
28200200	FILTER FABRIC	SQ YD	1551		660	891
35100100	AGGREGATE BASE COURSE, TYPE A	TON	6	6		
35600720	HOT-MIX ASPHALT BASE COURSE WIDENING, 11"	SQ YD	254	254		
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	1.2	1.2		
40600300	AGGREGATE (PRIME COAT)	TON	1	1		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	951	951		
40603080	HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N50	TON	1674	1674		
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	466	466		
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	446		224	222
42001300	PROTECTIVE COAT	SQ YD	228	228		
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	86		46	40
44000100	PAVEMENT REMOVAL	SQ YD	669	669		
48101200	AGGREGATE SHOULDERS, TYPE B	TON	49	49		
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	685	685		
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1		1	
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1			1
50200100	STRUCTURE EXCAVATION	CU YD	473		132	341

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 251 SANDY CREEK MASTER SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	4
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

	CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 80/20 I000	80/20 SN 062-0001 X020-2A	80/20 SN 062-0002 X071-2A
	50300100	FLOOR DRAINS	EACH	14		6	8
	50300225	CONCRETE STRUCTURES	CU YD	123.5		93.1	30.4
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	257.7		145.9	111.8
	50300260	BRIDGE DECK GROOVING	SQ YD	506		249	257
	50300280	CONCRETE ENCASEMENT	CU YD	11.2		6.4	4.8
	50300300	PROTECTIVE COAT	SQ YD	667		328	339
	50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1			1
	50500505	STUD SHEAR CONNECTORS	EACH	1026			1026
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	63130		37550	25580
	50800515	BAR SPLICERS	EACH	64			64
	51201400	FURNISH STEEL PILES HP10X42	FOOT	436		436	
	51201600	FURNISH STEEL PILES HP12X53	FOOT	336			336
	51202305	DRIVING PILES	FOOT	772		436	336
	51203400	TEST PILE STEEL HP10X42	EACH	2		2	
	51203600	TEST PILE STEEL HP12X53	EACH	2			2
	51204650	PILE SHOES	EACH	14			14
	51500100	NAME PLATES	EACH	2		1	1
	52100520	ANCHOR BOLTS, 1"	EACH	24			24
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	104		38	66
	60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	254		120	134
*	63000000	STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	1412	1412		
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	8	8		
*	63100169	TRAFFIC BARRIER TERMINAL, TYPE 1(SPECIAL) FLARED	EACH	8	8		
	63200310	GUARDRAIL REMOVAL	FOOT	2243	2243		
	66502400	WOVEN WIRE FENCE TO BE REMOVED AND RE-ERECTED	FOOT	1374	1374		
	66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	2		1	1
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	7	7		
	67100100	MOBILIZATION	L SUM	1	1		
	70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1		
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	30		15	15
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	280	280		
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	120	120		
	72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	2		2	
*	78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	3083	3083		

*SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 251 SANDY CREEK MASTER SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	5
		CONTRACT NO. 68573		

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

SUMMARY OF QUANTITIES

	CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 80/20 I000	80/20 SN 062-0001 X020-2A	80/20 SN 062-0002 X071-2A
*	78005130	EPOXY PAVEMENT MARKING - LINE 6"	FOOT	375	375		
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	6	6		
*	78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	1		1	
*	78200200	BIDIRECTIONAL PRISMATIC BARRIER REFLECTOR	EACH	33	33		
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	12	12		
*	78200520	BARRIER WALL MARKERS, TYPE B	EACH	4		4	
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	8	8		
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	7	7		
	X0301512	GUARDRAIL AGGREGATE EROSION CONTROL	TON	399	399		
	X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1		1	
	X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH	1		1	
	X7011005	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	L SUM	1	1		
	X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	28	28		
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		

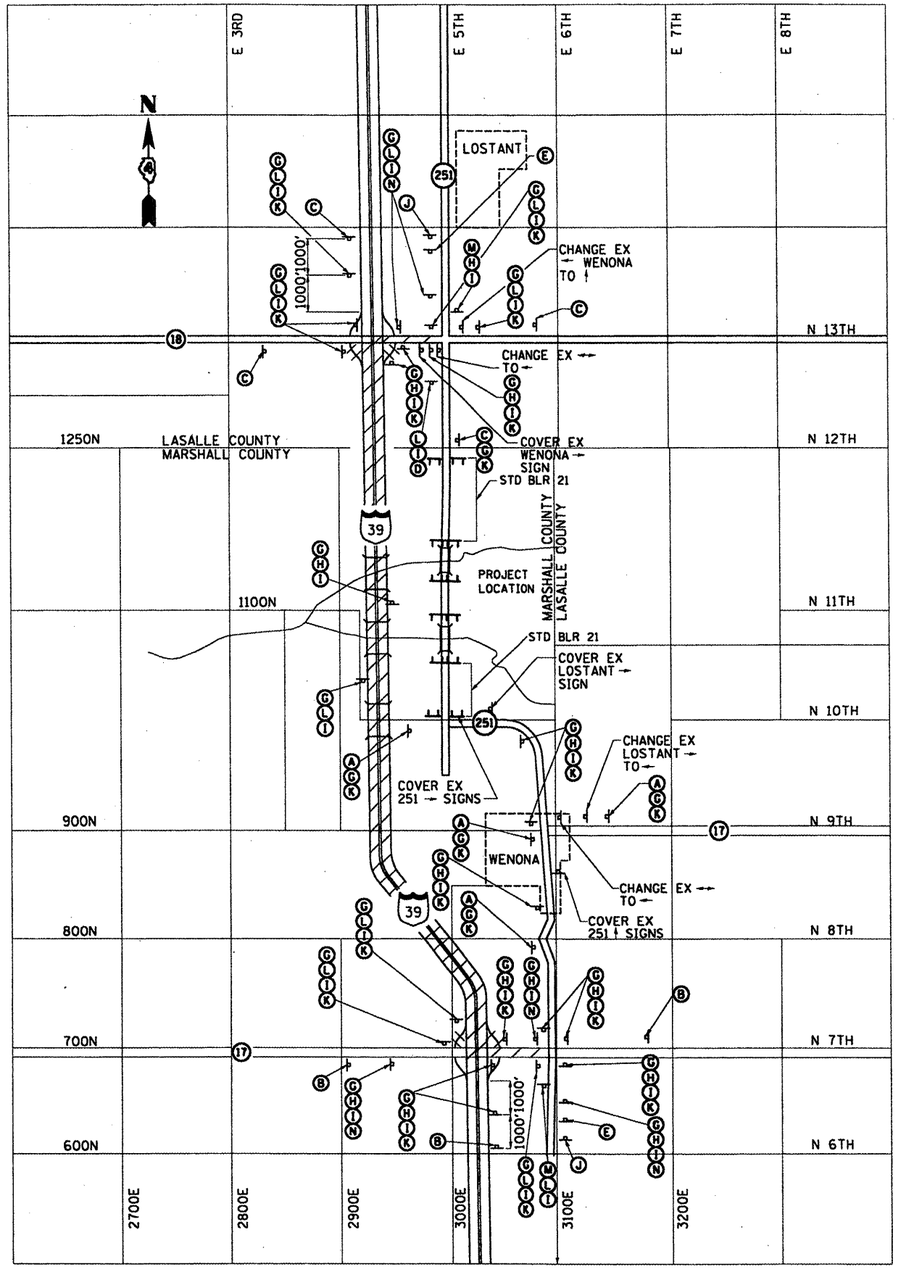
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	PLOT DATE = 9/8/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 251 SANDY CREEK MASTER SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	16
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TEMPORARY DETOUR PLAN

UNLESS OTHERWISE SHOWN, ALL SIGN SPACING TO BE LOCATED AS DIRECTED BY THE ENGINEER

DETOUR ROUTE

LEGEND

TYPE III BARRICADE WITH 2 FLASHING LIGHTS PER BARRICADE

SIGNS ON PERMANENT SUPPORTS

STANDARD 701901 "ROAD CLOSED TO ALL TRAFFIC" APPLICATION WITH ONE (F) MOUNTED ON BARRICADES

STANDARD 701901 "ROAD CLOSED TO THRU TRAFFIC" APPLICATION WITH ONE (O) MOUNTED ON EACH BARRICADE

GENERAL NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED AND MAINTAINED BY THE CONTRACTOR, UNLESS NOTED OTHERWISE.
2. ALL SIGNS NOT ATTACHED TO BARRICADES SHALL BE POST MOUNTED.
3. LOCATIONS OF TRAFFIC CONTROL DEVICES MAY BE ADJUSTED BY THE ENGINEER.
4. ALL TRAFFIC CONTROL SHOWN ON THIS SHEET SHALL BE PAID FOR PER LUMP SUM FOR TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR. OTHER ITEMS REQUIRED BY THE ENGINEER AND NOT SHOWN ON THIS DRAWING SHALL BE INCLUDED IN THE PAY ITEM AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
5. TEMPORARY CROSSINGS AT EACH STRUCTURE ARE PROVIDED FOR CONSTRUCTION PERSONNEL AND ADJACENT LAND OWNERS TO MOVE THEIR AGRICULTURAL EQUIPMENT. COORDINATION WITH THE ADJACENT LANDOWNERS WILL BE REQUIRED TO PROVIDE ACCESS FOR THEM AROUND THE BARRICADES.

SIGN LEGEND

NORTH IL 251 CLOSED IN XX MILES
R11-3-6030 (A)

IL 251 CLOSED XX MILES NORTH OF IL 17
R11-3-6030 (B)

IL 251 CLOSED XX MILES SOUTH OF IL 18
R11-3-6030 (C)

60" ROAD CLOSED 1 MILE AHEAD 24"
R11-3-6030 (D)

60" ROAD CLOSED XX MILES AHEAD 24"
R11-3-6030 (E)

ROAD CLOSED
R11-2-4830 (F)

DETOUR
M4-8-2412 (G)

NORTH
M3-2-2412 (H)

ILLINOIS 251
M1-1100-3024 (I)

DETOUR AHEAD
W20-2-4848 (J)

M6-2-2115 (K)
ORIENT SIGN (K) AS DIRECTED BY THE ENGINEER

SOUTH
M3-4-2412 (L)

END DETOUR
M4-8a-2418 (M)

M5-2-2115 OR M5-2-2115 (N)
ORIENT SIGN (N) AS DIRECTED BY THE ENGINEER

ROAD CLOSED TO THRU TRAFFIC
R11-4-6030 (O)

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		DRAWN -	REVISED -
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	PLOT DATE = 2/15/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

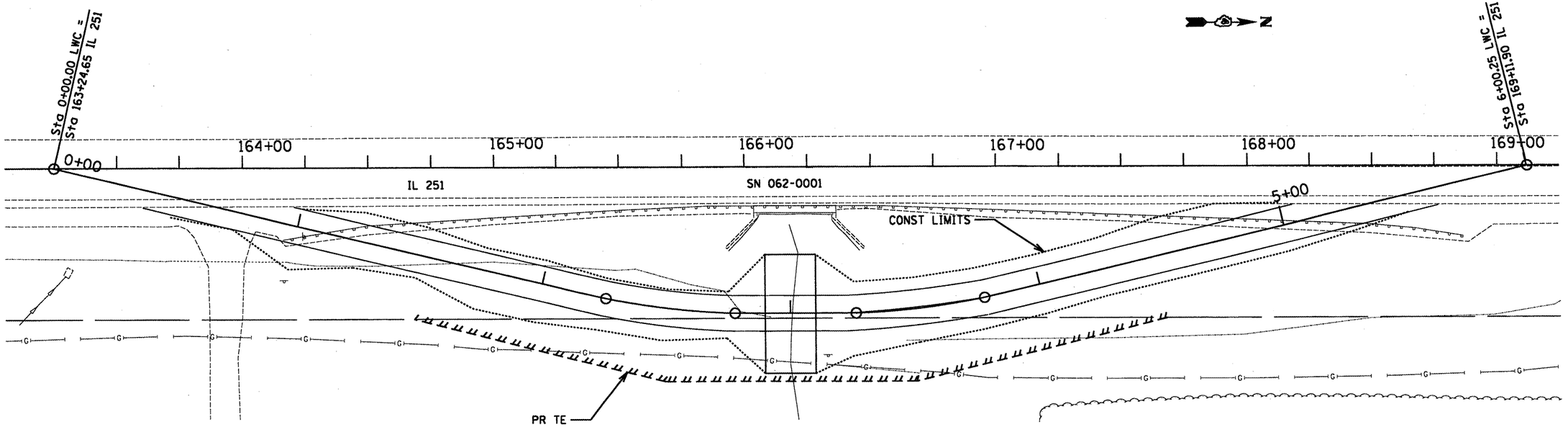
TEMPORARY DETOUR PLAN

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

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	7
		CONTRACT NO. 68573		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

NOTE

GAS UTILITY IS AN EXISTING 4" STEEL MAIN
OPERATING AT 500 PSIG ON A 720 PSIG SYSTEM.
DEPTH OF UTILITY VARIES BETWEEN 3'-7" TO
8'-4" ALONG THE CROSSOVER



PROP. CURVE ALT1CUR1
PI STA. = 2+52.10
Δ = 9° 52' 37" (LT)
D = 19° 05' 55"
R = 300.00'
T = 25.92'
L = 51.71'
E = 1.12'
P.C. STA. = 2+26.18 =
ML STA. 165+44.80, 52.03' RT OFFSET
P.T. STA. = 2+77.90 =
ML STA. 165+96.03, 57.96' RT OFFSET

PROP. CURVE ALT1CUR2
PI STA. = 3+51.81
Δ = 9° 52' 29" (LT)
D = 19° 05' 55"
R = 300.00'
T = 25.92'
L = 51.70'
E = 1.12'
P.C. STA. = 3+25.90 =
ML STA. 166+44.10, 58.00 RT OFFSET
P.T. STA. = 3+77.60 =
ML STA. 166+95.35, 51.92' RT OFFSET

LOW WATER CROSSING TO BE USED BY ADJACENT PROPERTY OWNERS AND CONSTRUCTION PERSONNEL ONLY DURING CONSTRUCTION. THE CROSSING SHOWN IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE LOW WATER CROSSING SHALL CONFORM TO THE SPECIAL PROVISION FOR HAUL ROAD STREAM CROSSINGS, OTHER TEMPORARY CROSSINGS, AND IN-STREAM WORK PADS.

NOTES

A MINIMUM ROADWAY TOP WIDTH OF 14 FEET SHALL BE MAINTAINED ALONG THE LENGTH OF THE CROSSING

THE MAXIMUM IN-STREAM ELEVATION OF THE CROSSING SHALL NOT EXCEED EL. 636.51

A MIMIMUM IN-STREAM CLEAR OPENING OF 48 SQUARE FEET SHALL BE MAINTAINED TO CONVEY STREAM FLOW

SEE CONSTRUCTION PLANS, SN 062-0001 FOR ALIGNMENT TIES AND BENCHMARK

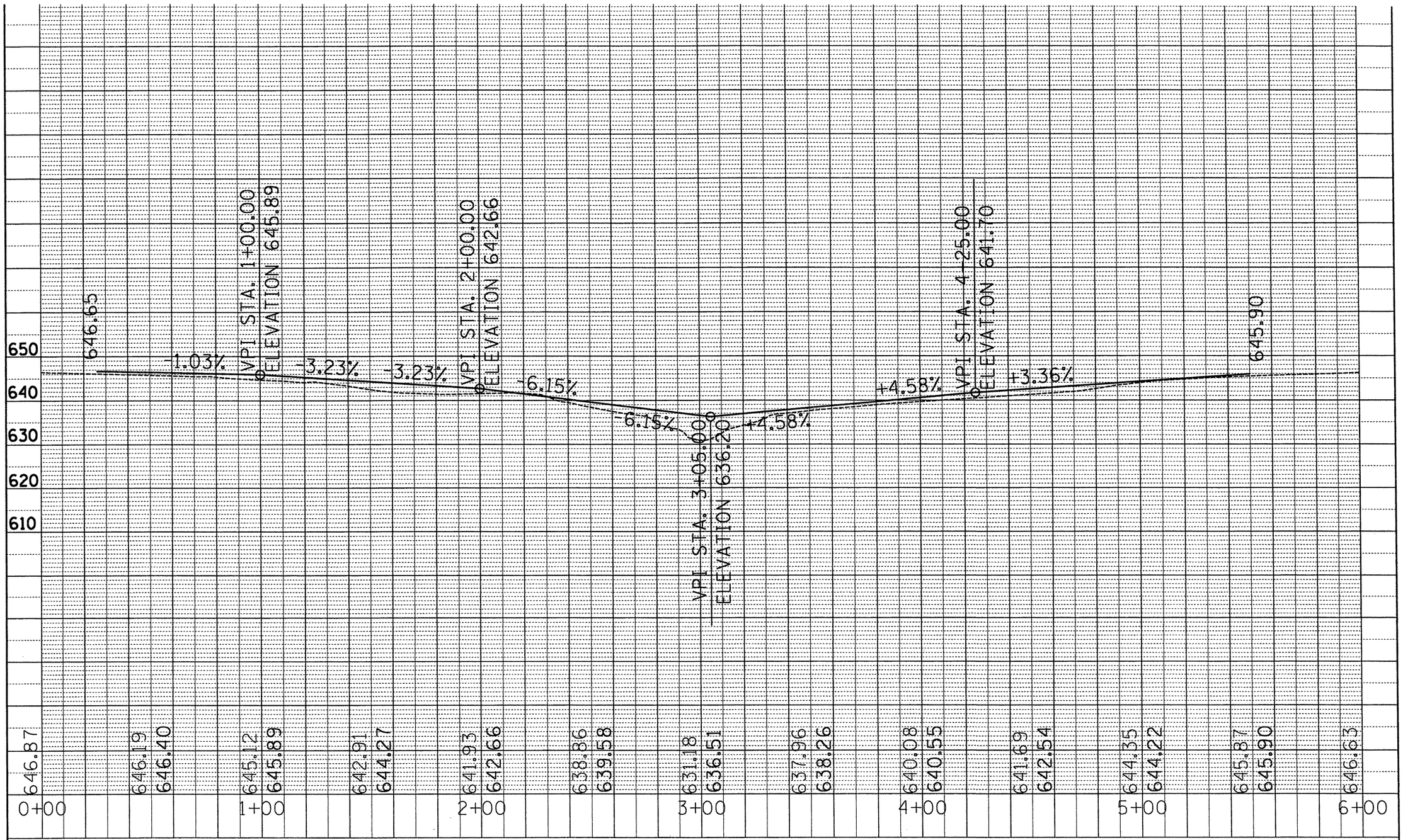
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	PLOT DATE = 9/10/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0001 LOW WATER CROSSING PLAN VIEW

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	8
	D-94-040-06	CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PLAN — SURVEYED / PLOTTED / ALIGNMENT CHECKED / GRADES CHECKED / NOTE BOOK / NO. / CADD FILE NAME / BY / DATE

PROFILE — SURVEYED / PLOTTED / GRADES CHECKED / NOTE BOOK / NO. / STRUCTURE NO(S)/FHWA OKD / BY / DATE

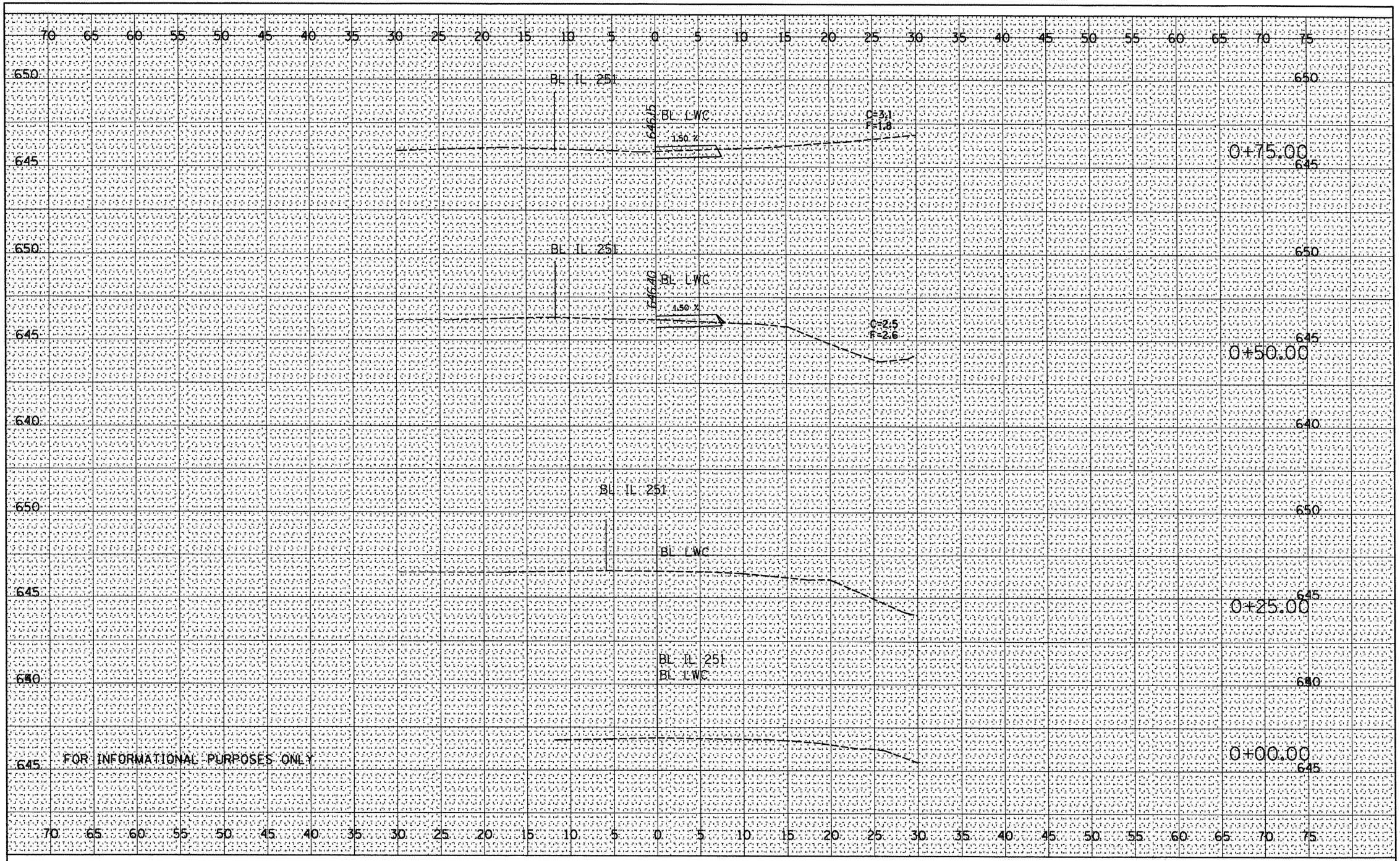
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0001 LOW WATER CROSSING PROFILE

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	9	9
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

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	PLOT DATE = 6/5/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0001 LOW WATER CROSSING CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	22	10
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

655

650

645

640

BL IL 251

BL LWC

644.27

1.50 %

1.50 %

4:1

643.17

643.31

12' ROW

C=4.1
F=18.2

1+50.00

BL IL 251

BL LWC

645.08

1.50 %

1.50 %

4:1

643.98

C=5.3
F=12.4

1+25.00

BL IL 251

BL LWC

645.89

1.50 %

1.50 %

4:1

643.73

C=1.4
F=15.7

1+00.00

FOR INFORMATIONAL PURPOSES ONLY

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

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

BY	DATE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

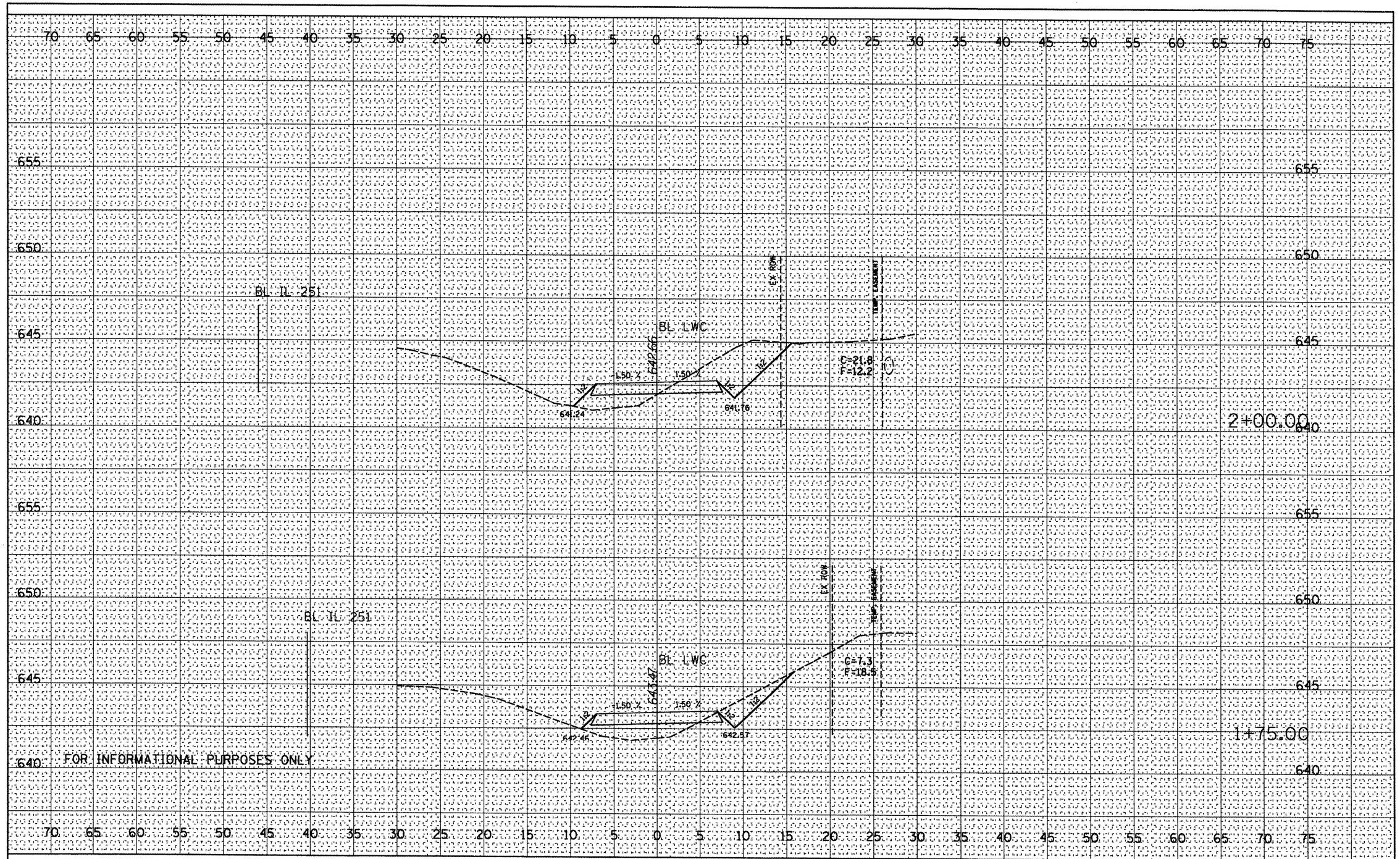
SN 062-0001 LOW WATER CROSSING CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	99	11
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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



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	PLOT DATE = 6/5/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0001 LOW WATER CROSSING CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	12
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

645
640
635

BL IL 251

BL LWC

EX ROW

639.78

1.50 %

1.50 %

4:1

4:1

639.18

638.00

C=4.4
F=8.4

TEMP. EASEMENT

2+50.00

630
645
640
635

BL IL 251

BL LWC

EX ROW

1.50 %

1.50 %

4:1

4:1

640.44

640.23

C=24.1
F=1.4

TEMP. EASEMENT

2+25.00

FOR INFORMATIONAL PURPOSES ONLY

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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

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	PLOT DATE = 6/5/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0001 LOW WATER CROSSING CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	13
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

640
635
630
625

BL IL 251

1.50 %
EX ROW
636.5
BL LWC
1.50 %
4:1
4:1
630.75
630.89
TEMP. EASEMENT
C=11.1
F=137.5

3+00.00

645
640
635
630

BL IL 251

BL LWC
EX ROW
638.05
1.50 %
1.50 %
4:1
4:1
637.17
636.75
TEMP. EASEMENT
C=0
F=20.1

2+75.00

FOR INFORMATIONAL PURPOSES ONLY

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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

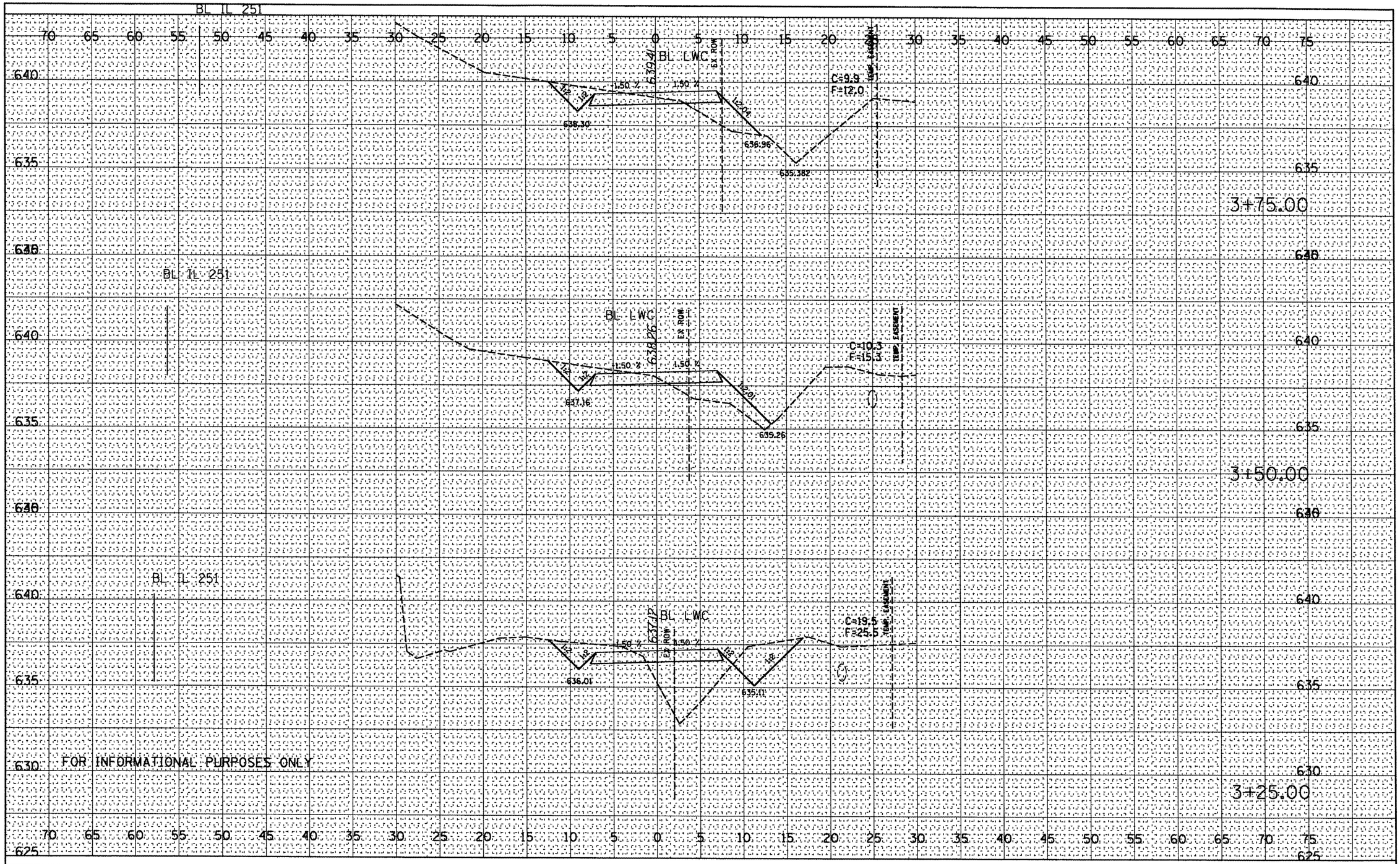
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	PLOT DATE = 6/5/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0001 LOW WATER CROSSING CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	14
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

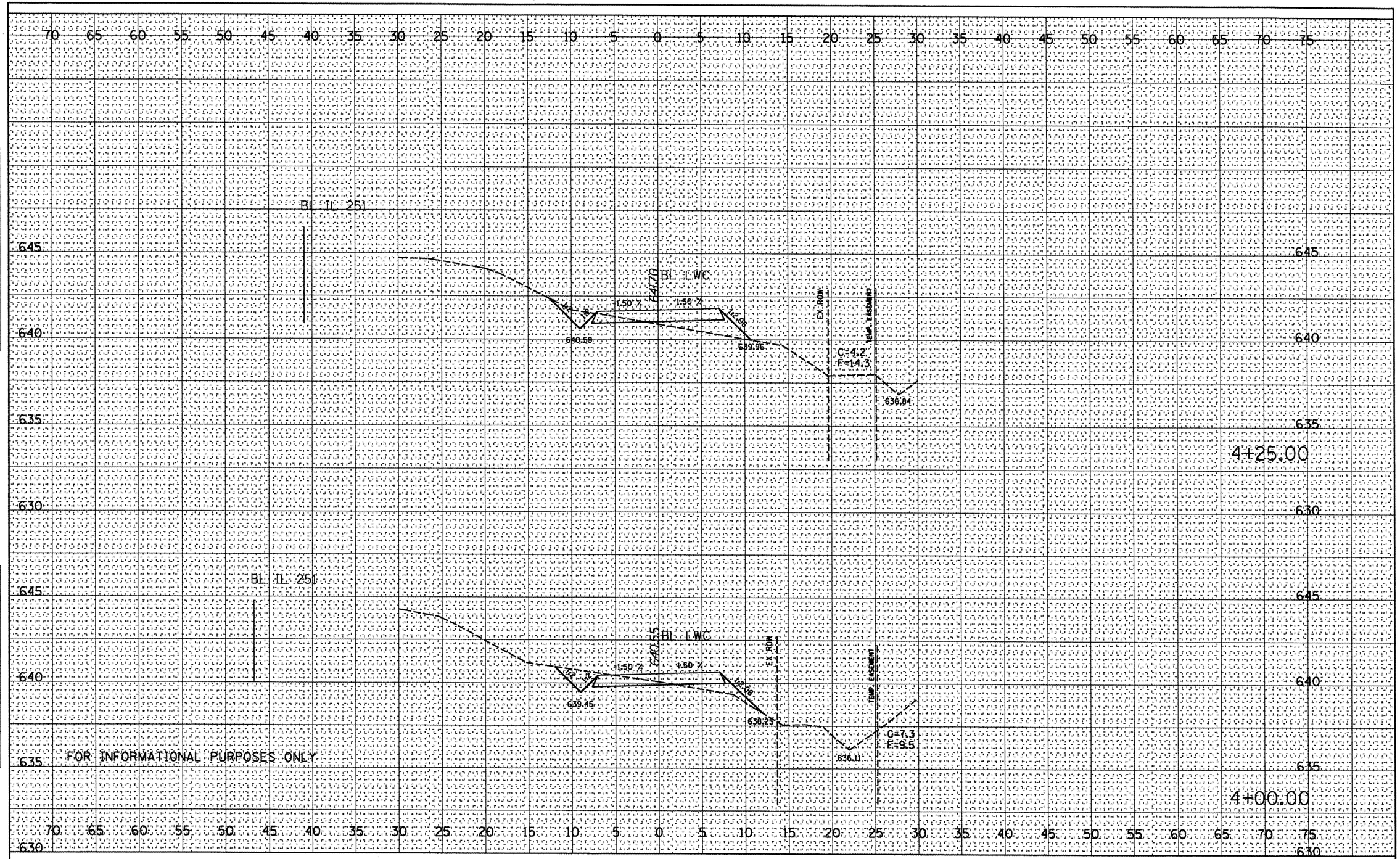
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	PLOT DATE = 6/5/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0001 LOW WATER CROSSING CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	15
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

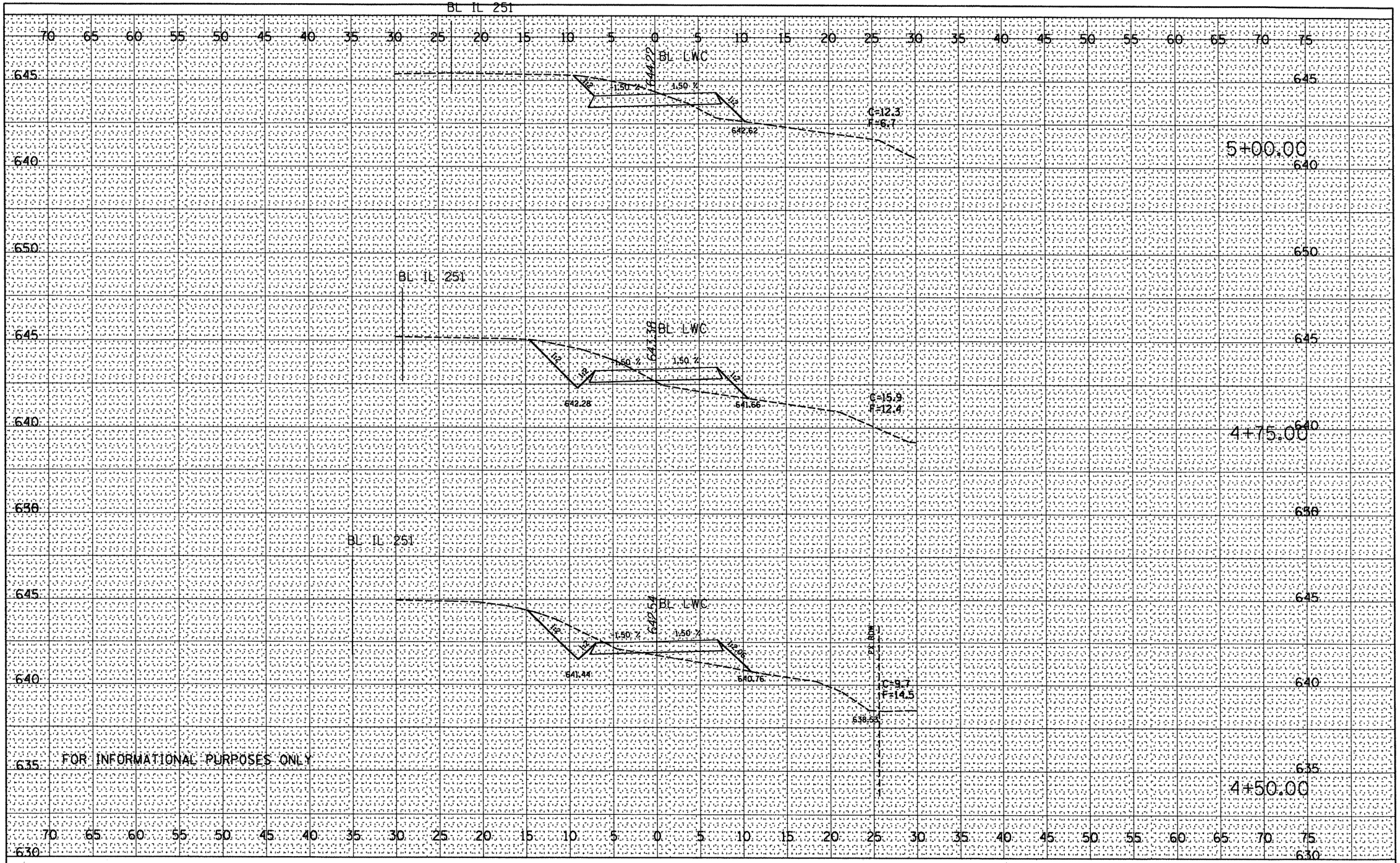
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0001 LOW WATER CROSSING CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	16
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
VOLUMES		
AREAS		
AREAS CHECKED		

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

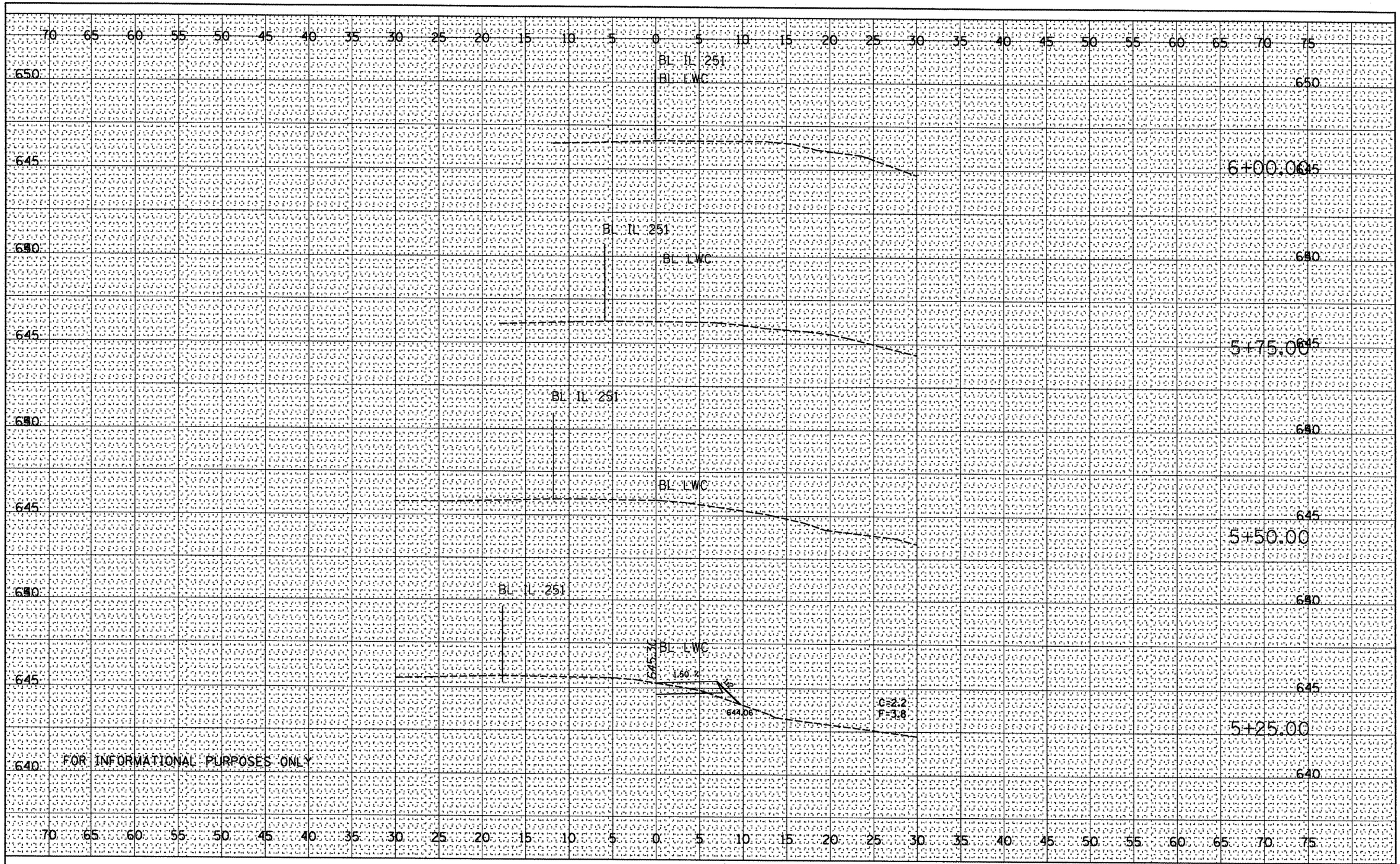
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	PLOT DATE = 6/5/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0001 LOW WATER CROSSING CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	17
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

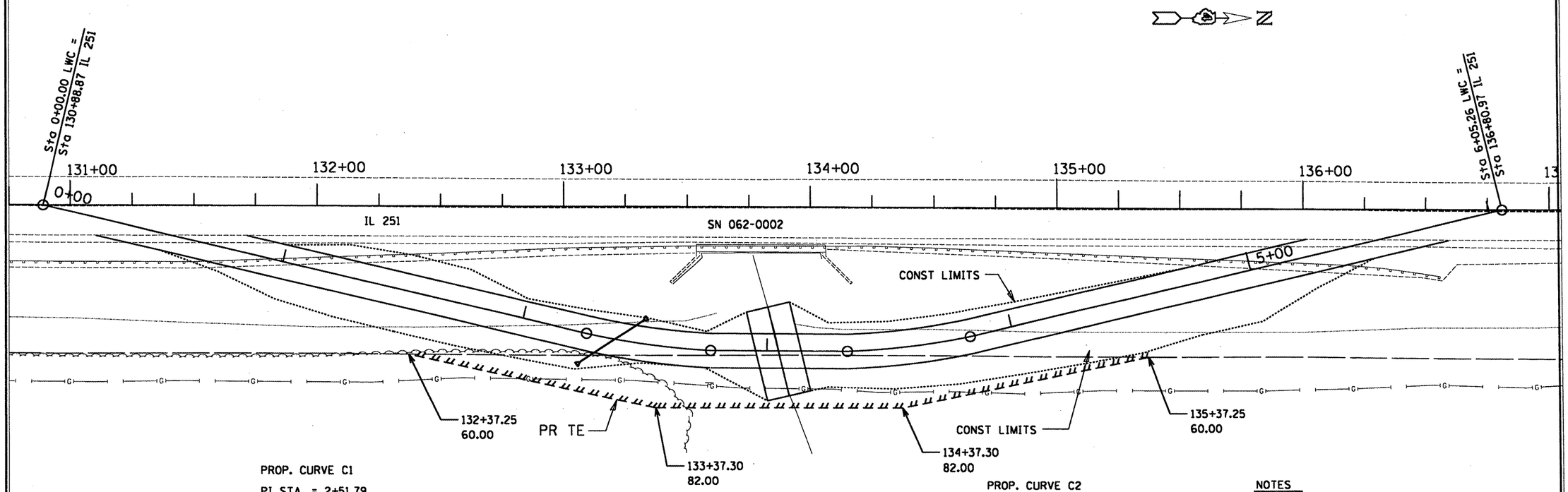
SN 062-0001 LOW WATER CROSSING CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	18
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

NOTE

EXISTING GAS UTILITY IS A 4" STEEL MAIN OPERATING AT 500 PSIG ON A 720 PSIG SYSTEM. DEPTH OF UTILITY VARIES BETWEEN 3'-6" TO 8'-4" ALONG THE CROSSOVER



PROP. CURVE C1

PI STA. = 2+51.79

Δ = 9° 39' 43" (LT)

D = 19° 05' 55"

R = 300.00'

T = 25.36'

L = 50.59'

E = 1.07'

P.C. STA. = 2+26.43 =

ML STA. 133+09.57, 51.04' RT OFFSET

P.T. STA. = 2+77.02 =

ML STA. 133+59.42, 58.04' RT OFFSET

LOW WATER CROSSING TO BE USED BY ADJACENT PROPERTY OWNERS AND CONSTRUCTION PERSONNEL ONLY DURING CONSTRUCTION. THE CROSSING SHOWN IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE LOW WATER CROSSING SHALL CONFORM TO THE SPECIAL PROVISION FOR HAUL ROAD STREAM CROSSINGS, OTHER TEMPORARY CROSSINGS, AND IN-STREAM WORK PADS.

PROP. CURVE C2

PI STA. = 3+57.77

Δ = 9° 34' 58" (LT)

D = 19° 05' 55"

R = 300.00'

T = 25.15'

L = 50.17'

E = 1.05'

P.C. STA. = 3+32.63 =

ML STA. 134+15.02, 58.53' RT OFFSET

P.T. STA. = 3+82.80 =

ML STA. 134+64.76, 52.34' RT OFFSET

NOTES

A MINIMUM ROADWAY TOP WIDTH OF 14 FEET SHALL BE MAINTAINED ALONG THE LENGTH OF THE CROSSING

THE MAXIMUM IN-STREAM ELEVATION OF THE CROSSING SHALL NOT EXCEED EL. 633.50

A MIMIMUM IN-STREAM CLEAR OPENING OF 35 SQUARE FEET SHALL BE MAINTAINED TO CONVEY STREAM FLOW

SEE CONSTRUCTION PLANS, SN 062-0002 FOR ALIGNMENT TIES AND BENCHMARK

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	PLOT DATE = 9/8/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0002 LOW WATER CROSSING PLAN VIEW

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	27	19
	D-94-040-06	CONTRACT NO. 68573		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
PLAN NOTED
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
R.M. NOTED
NOTE BOOK
NO.
PROCEDURE NOTATIONS CHKD
BY
DATE

640
630
620
610
600
550

-40.87
-1.01%
VPI STA. 1+00.00
ELEVATION 640.53
-3.45%
-3.45%
VPI STA. 3+04.00
ELEVATION 633.30
+3.73%
+3.73%
VPI STA. 5+00.00
ELEVATION 640.80
+1.22%
41.30

640.89
640.38
640.53
637.64
638.81
634.33
637.08
635.07
635.36
629.23
633.64
634.41
635.21
633.01
637.08
636.62
638.94
640.04
640.80
641.34

1+00
2+00
3+00
4+00
5+00

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DESIGNED -
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CHECKED -
DATE -
REVISED -
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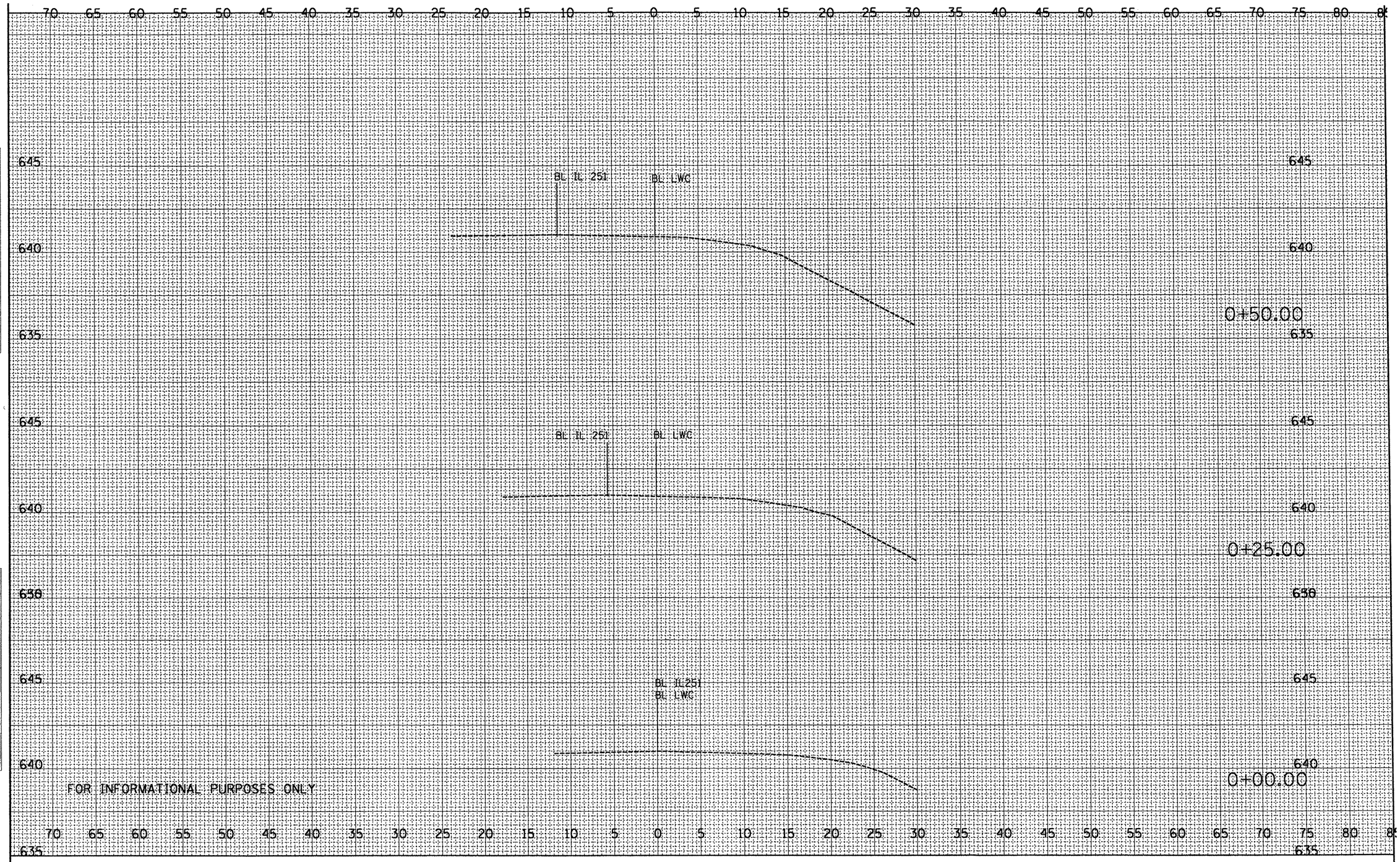
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0002 LOW WATER CROSSING PROFILE

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	20
	D-94-040-06	CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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



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

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	PLOT DATE = 5/7/2008	DATE -	REVISED -

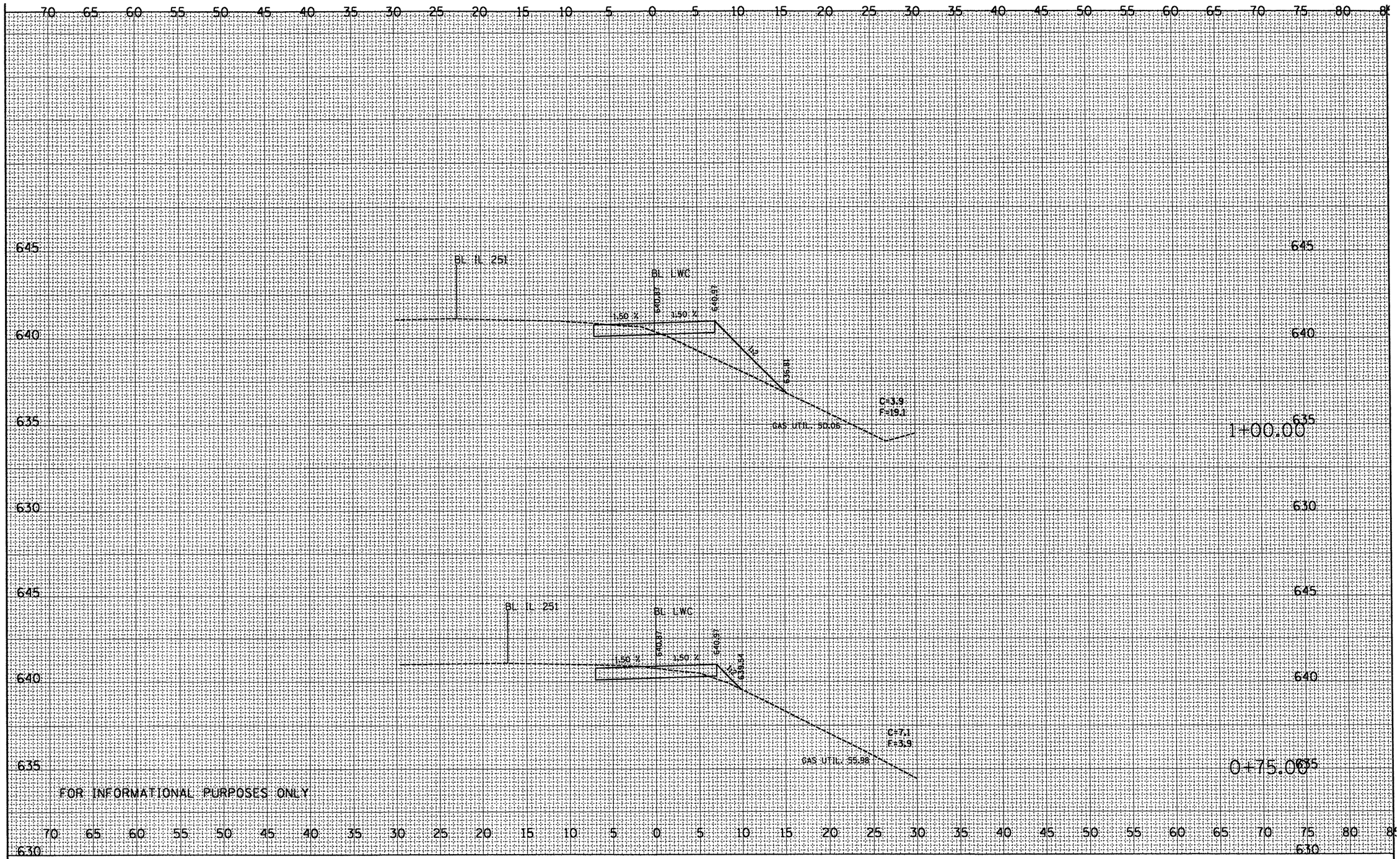
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0002 LOW WATER CROSSING CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	21
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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



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

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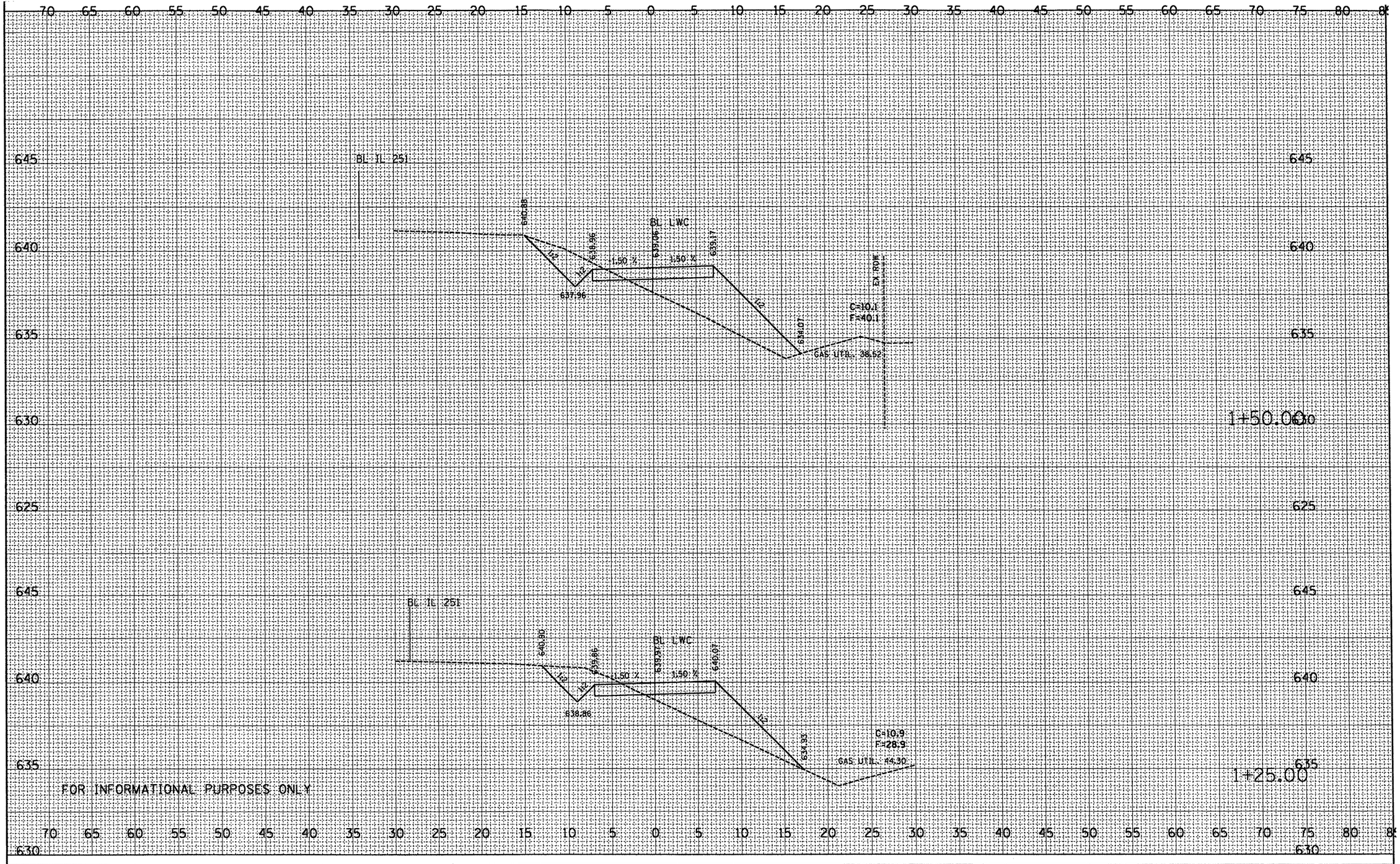
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0002 LOW WATER CROSSING CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	82
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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



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

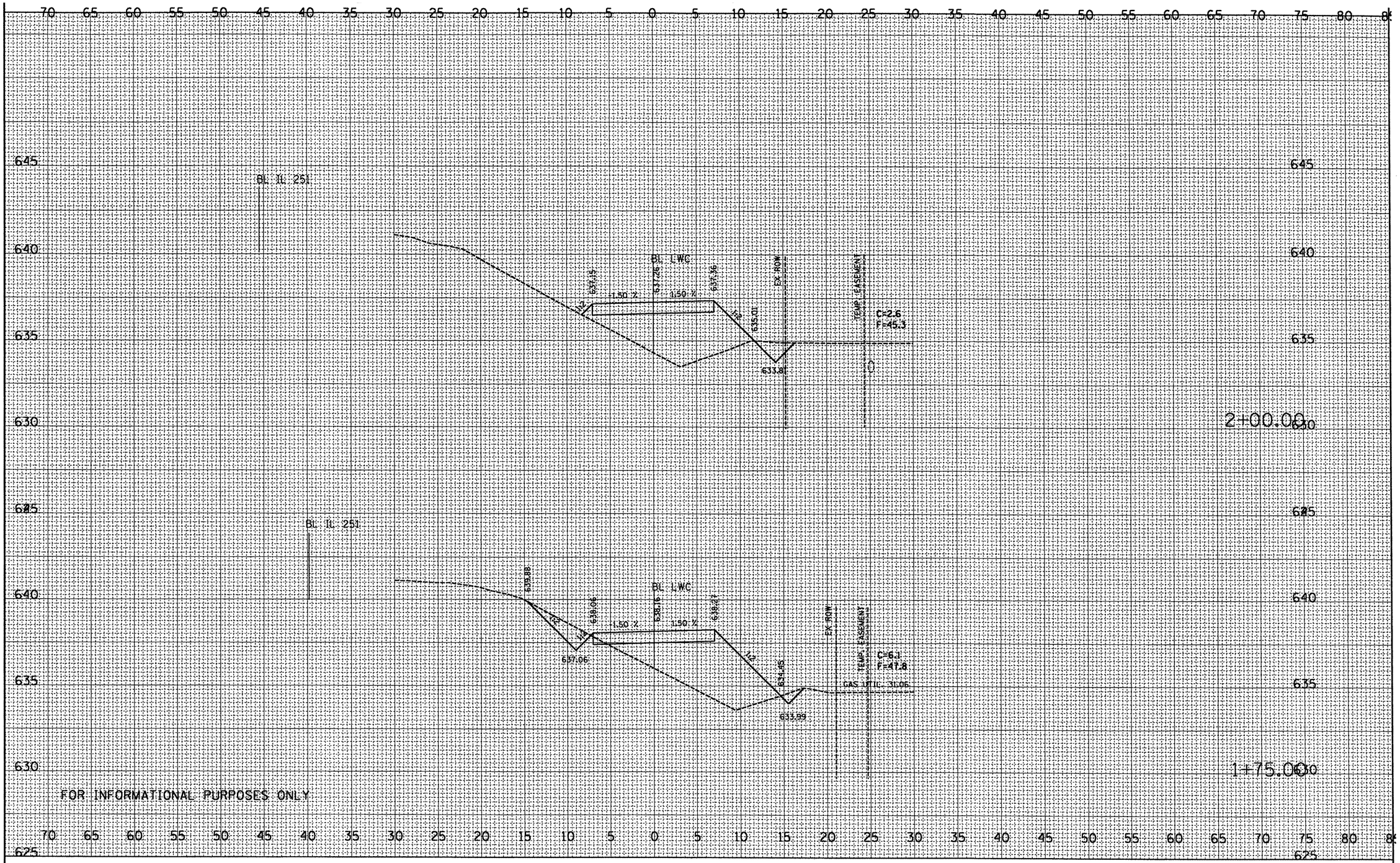
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	PLOT DATE = 5/7/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0002 LOW WATER CROSSING CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	23
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

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	PLOT DATE = 5/7/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

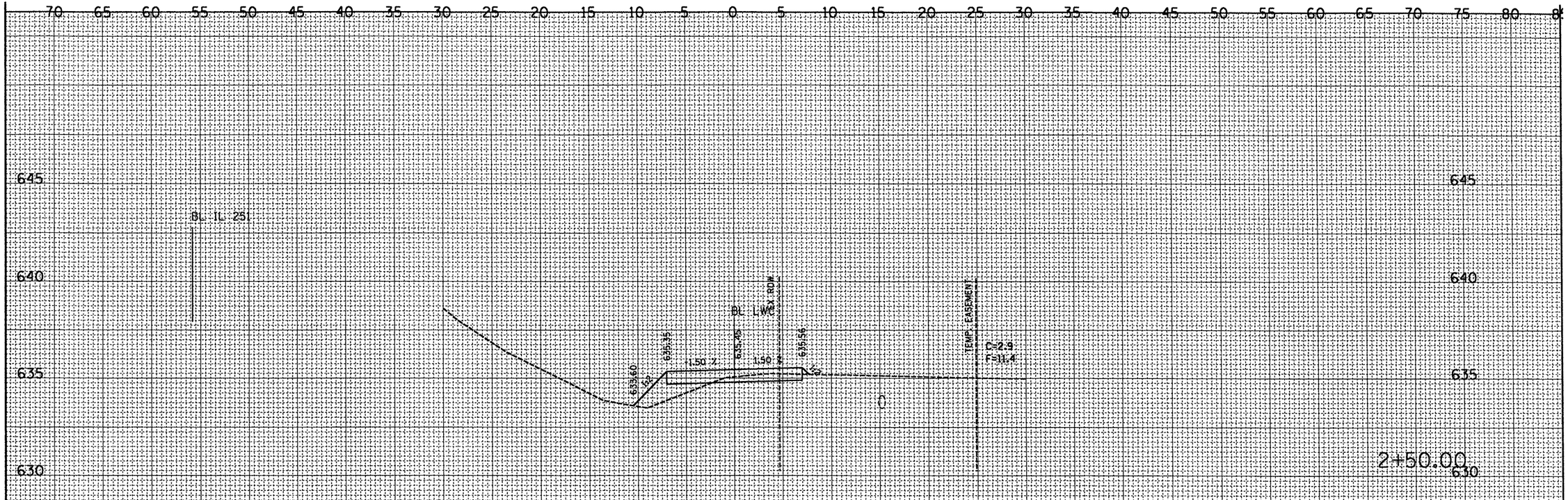
SN 062-0002 LOW WATER CROSSING CROSS SECTIONS

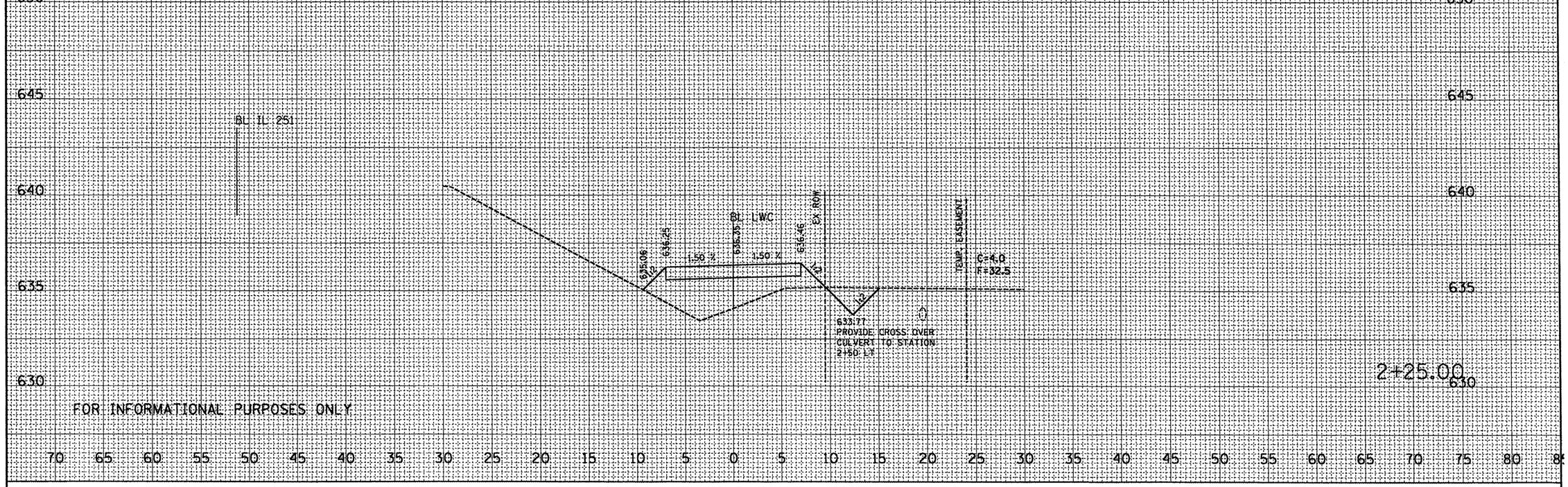
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	24
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

BY	DATE





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

BY	DATE

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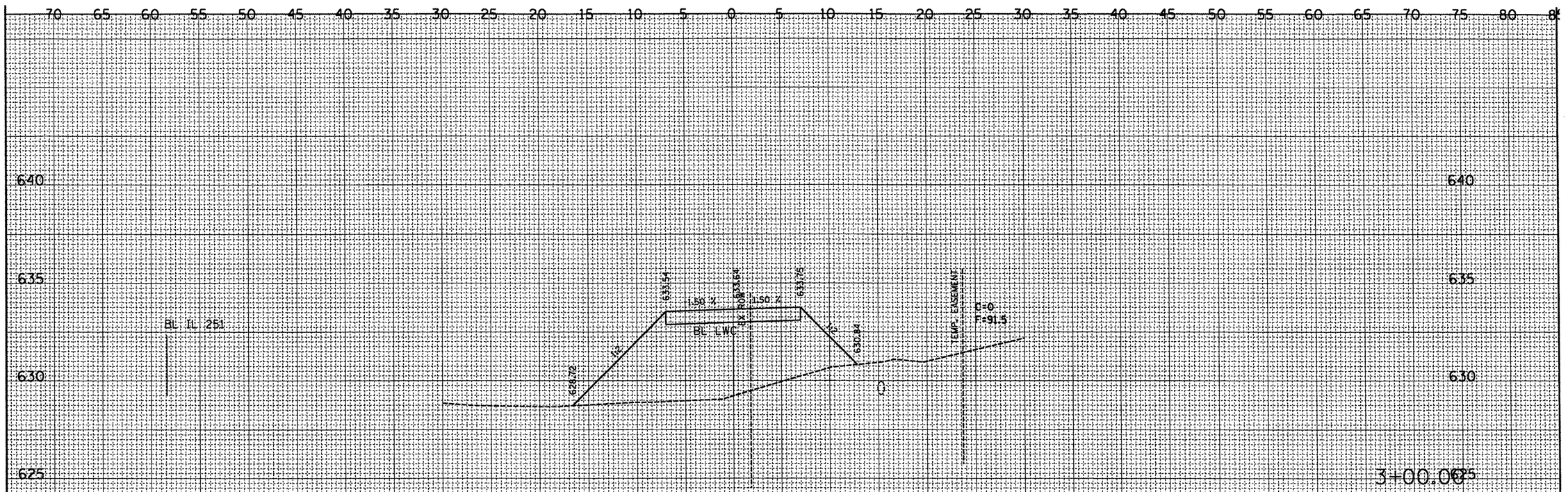
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0002 LOW WATER CROSSING CROSS SECTIONS

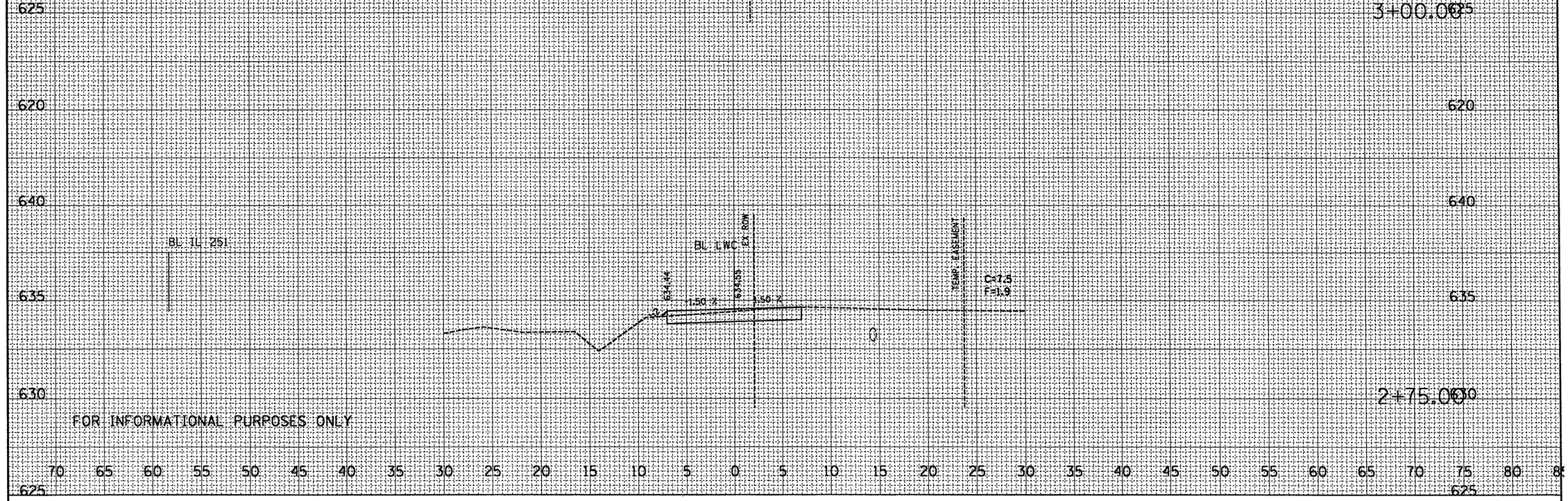
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	25
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TYPED AS-BUILT		
	AREAS		
	AREAS CHECKED		



ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TYPED AS-BUILT		
	AREAS		
	AREAS CHECKED		



FOR INFORMATIONAL PURPOSES ONLY

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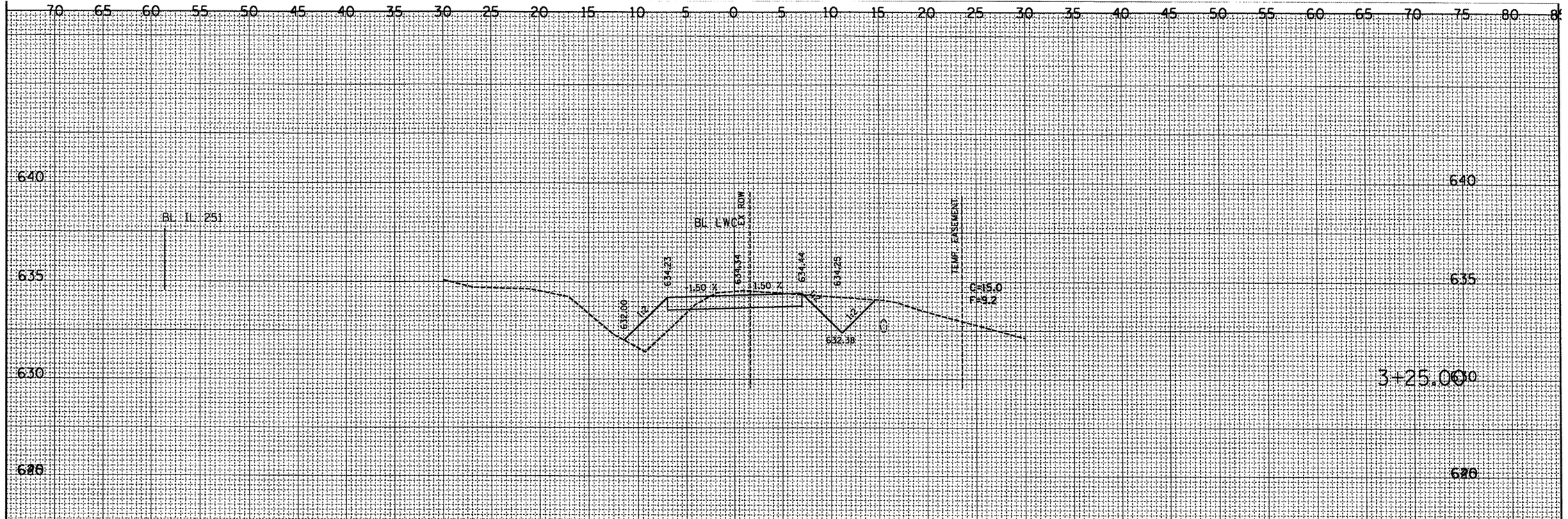
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0002 LOW WATER CROSSING CROSS SECTIONS

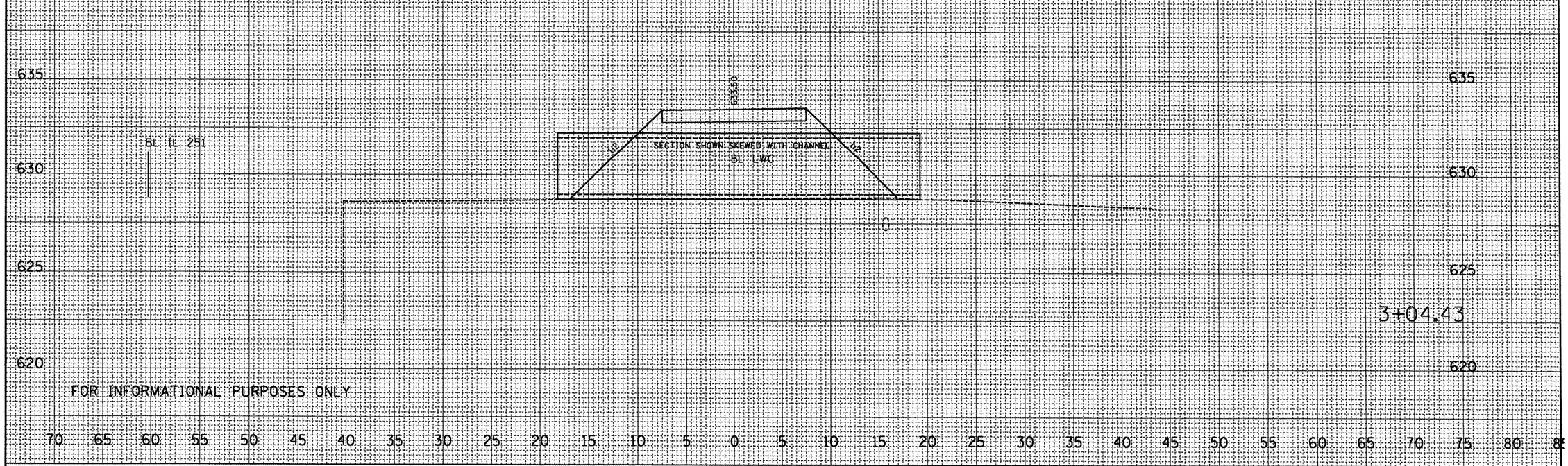
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F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	26
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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



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



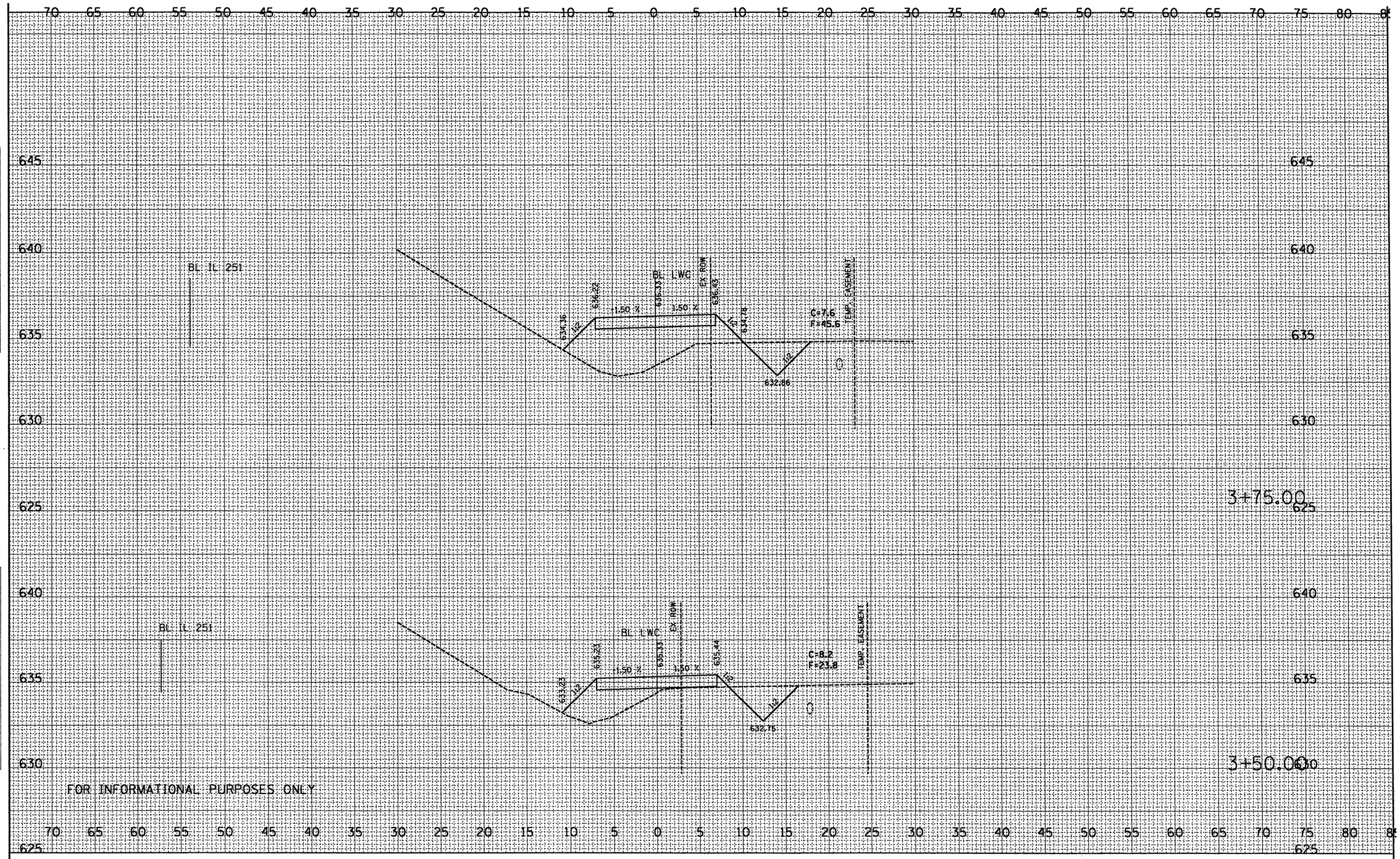
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0002 LOW WATER CROSSING CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	27
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

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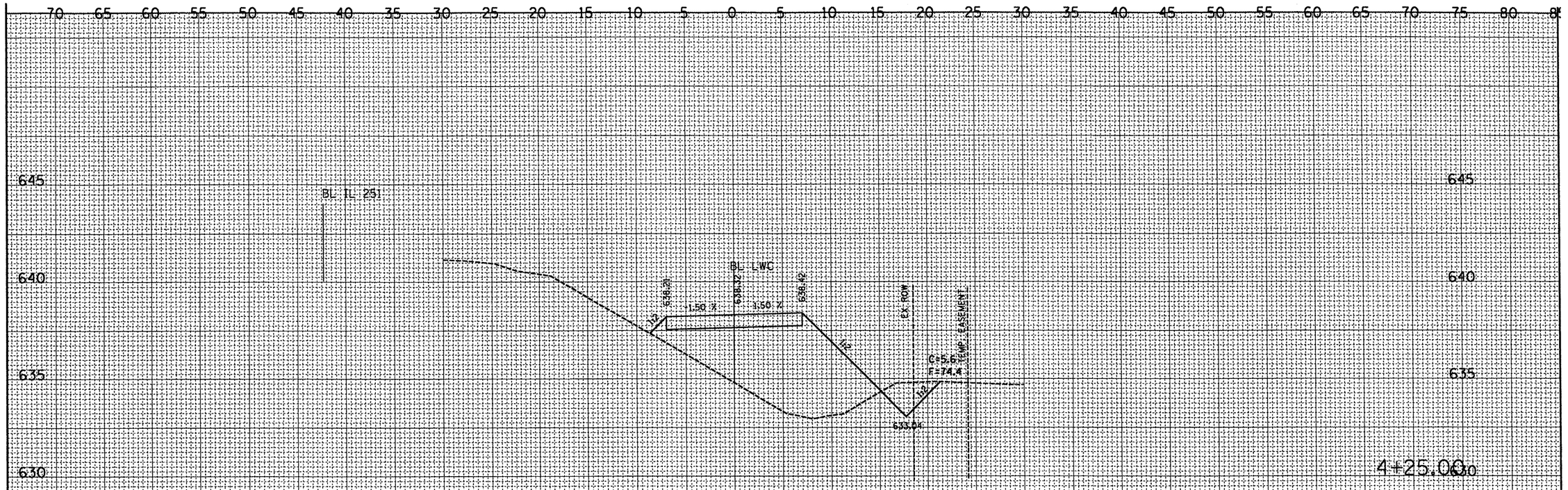
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0002 LOW WATER CROSSING CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	28
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	SURVEYED	PLOTTED	DRAWN AS-BUILT	AREAS	AREAS CHECKED
NO.		BY				DATE



ORIGINAL SURVEY	NOTE BOOK	SURVEYED	PLOTTED	DRAWN AS-BUILT	AREAS	AREAS CHECKED
NO.		BY				DATE

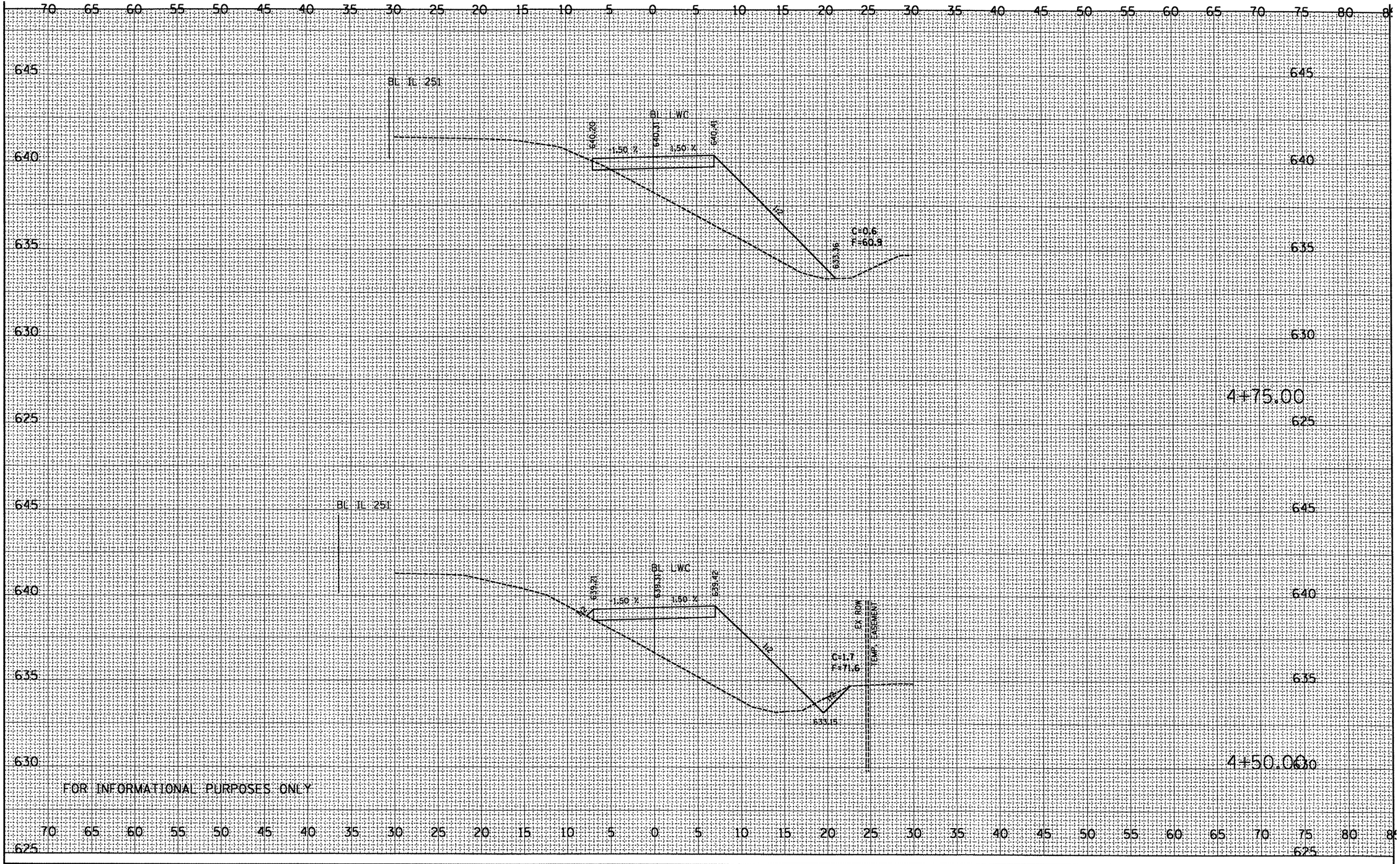
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0002 LOW WATER CROSSING CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	27
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NO.	NOTE BOOK	SURVEYED	PLOTTED	DRAWN	AREAS	AREAS CHECKED	BY	DATE

FINAL SURVEY

ORIGINAL SURVEY

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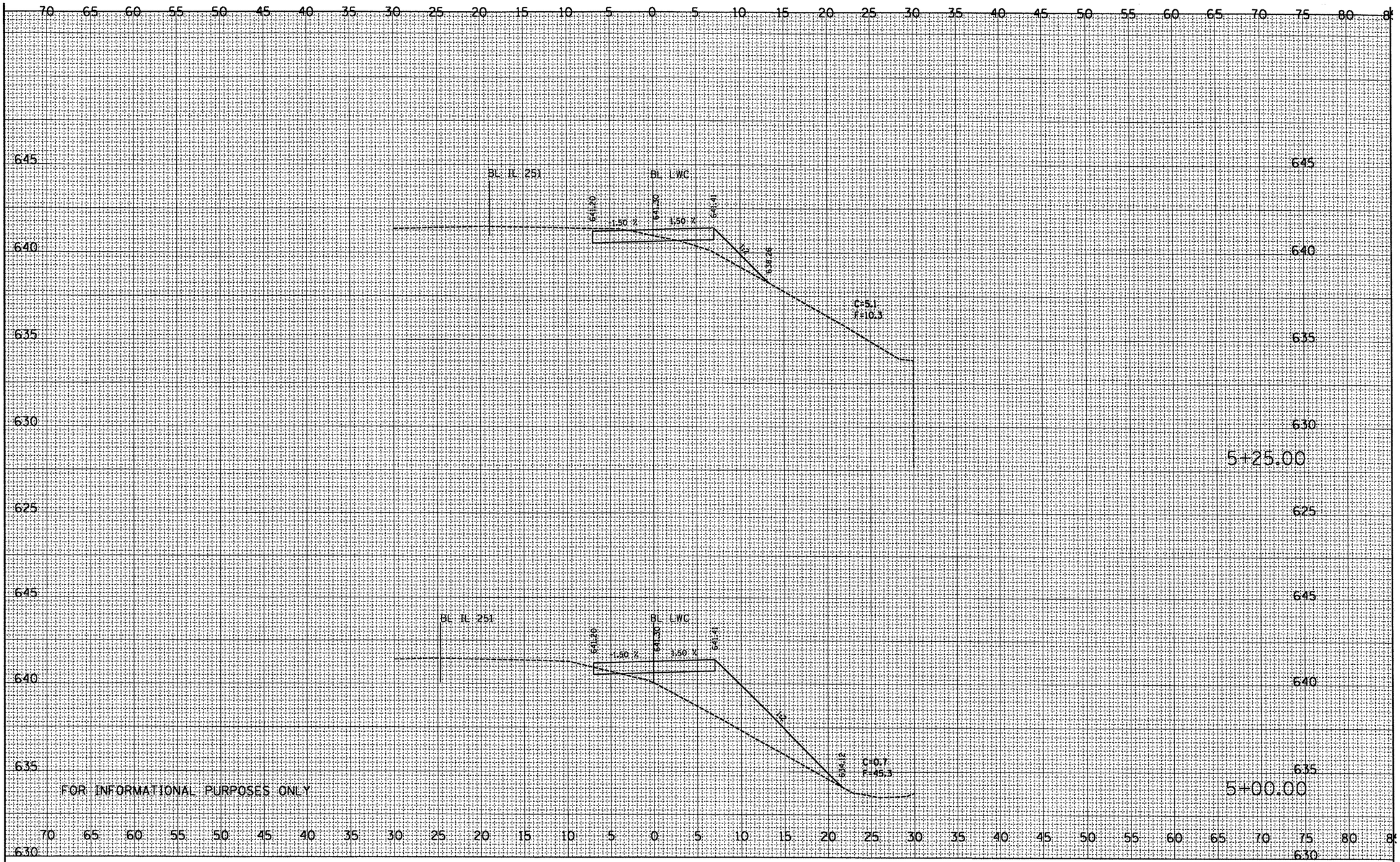
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0002 LOW WATER CROSSING CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	30
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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



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

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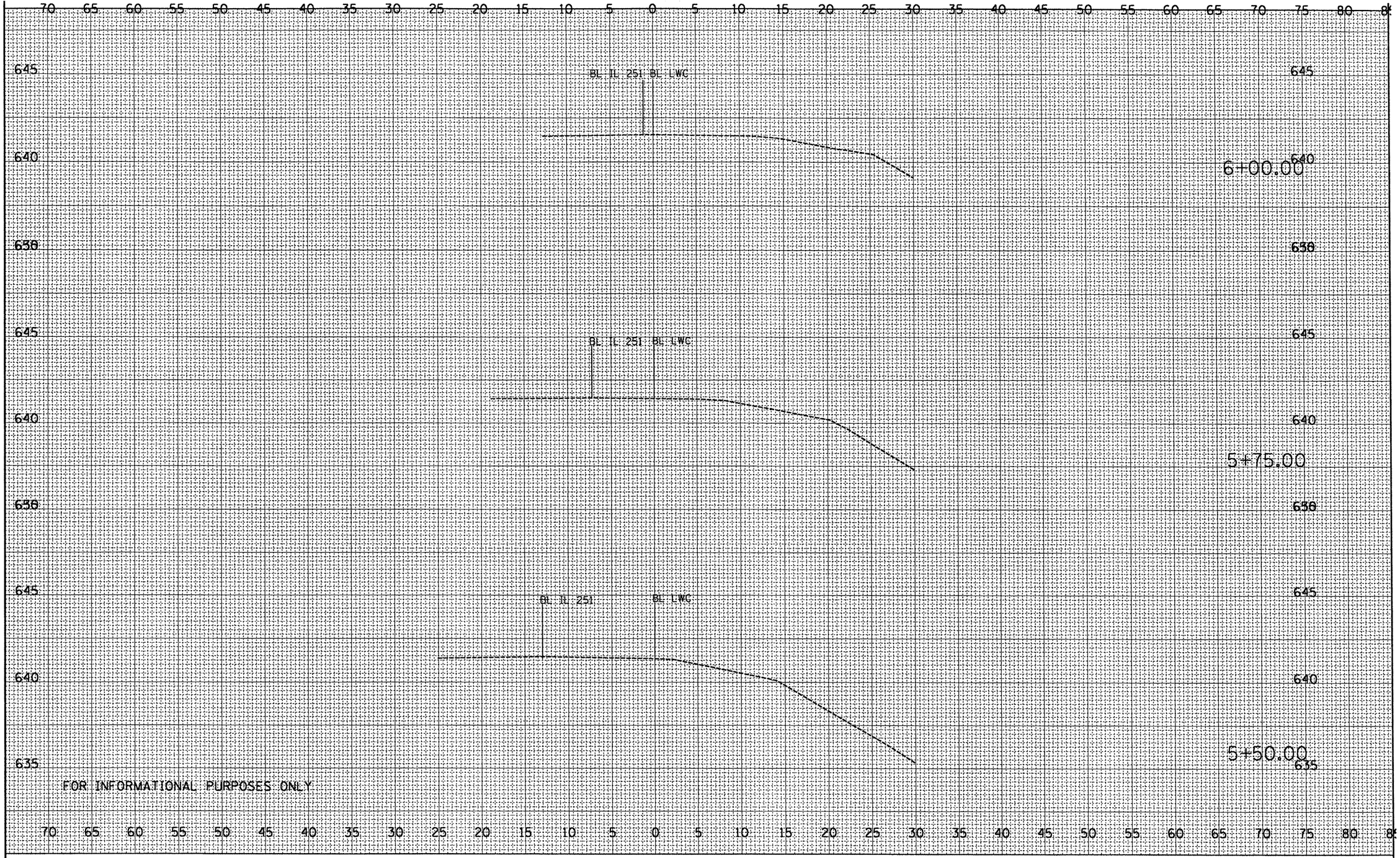
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0002 LOW WATER CROSSING CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	31
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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



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

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0002 LOW WATER CROSSING CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	32
		CONTRACT NO. 68573		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	33

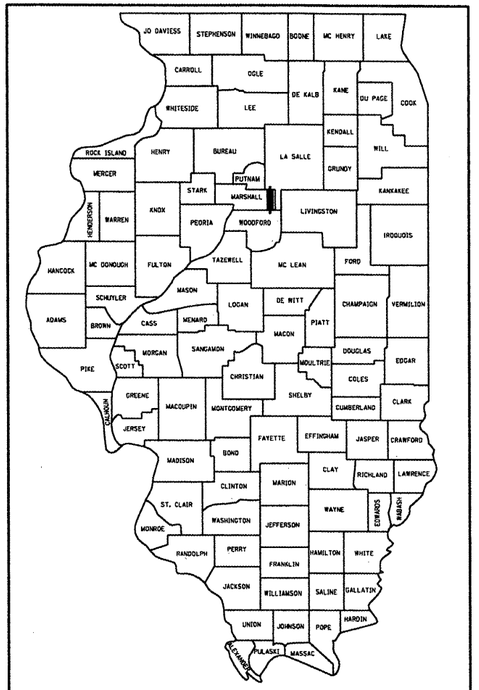
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

FAS ROUTE 253 (IL 251)
SECTION 68(BR,BR-1)

MARSHALL COUNTY
C-94-047-06
ILLINOIS ROUTE 251 OVER SANDY CREEK
STRUCTURE REPLACEMENT

D-94-040-06

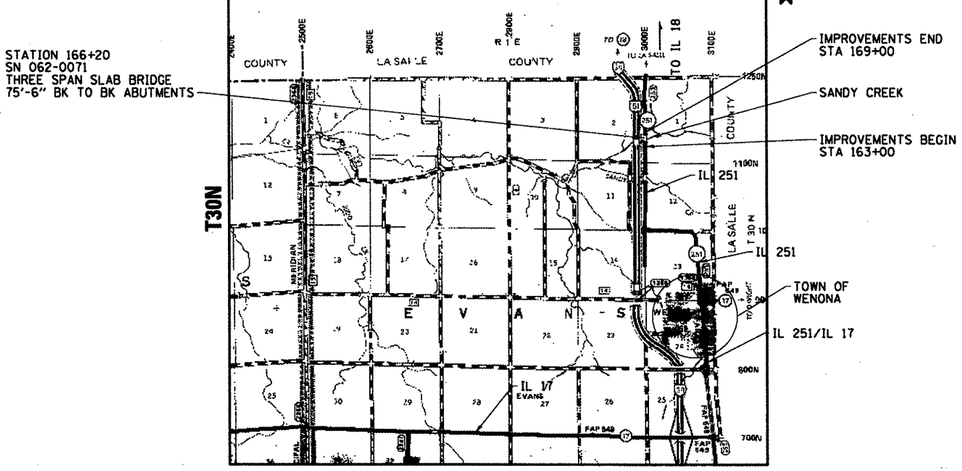


LOCATION OF SECTION INDICATED THUS: ▬

FUNCTIONAL CLASSIFICATION:	**MAJOR COLLECTOR (RURAL)**
DESIGN SPEED:	**55 mph**
POSTED SPEED:	**55 mph**
ADT:	**800 (2003)**
PV:	**91.9%**
SU:	**2.7%**
MU:	**5.4%**

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
	ROADWAY PLANS
33.	COVER SHEET
34.	SUMMARY OF QUANTITIES
35.	TYPICAL SECTIONS
36.-37.	SCHEDULES OF QUANTITIES
38.-40.	FAS RTE 253 (IL 251) PLAN AND PROFILE
41.	EROSION CONTROL AND DRAINAGE PLAN
42.-44.	MISCELLANEOUS DETAILS
	STRUCTURE PLANS
45.	GENERAL PLAN
46.	GENERAL DATA
47.	TOP OF SLAB ELEVATIONS
48.	SUPERSTRUCTURE
49.-50.	SUPERSTRUCTURE DETAILS
51.	ABUTMENTS
52.	PIERS
53.	SOIL BORINGS
	EXISTING STRUCTURE PLANS
54.-57.	EXISTING STRUCTURE PLANS
	CROSS SECTIONS
58.-61.	FAS RTE 253 (IL 251) CROSS SECTIONS



LOCATION MAP

SCALE

0 2 4 6 MILES

0 10000 20000 30000 FEET

GROSS LENGTH = 600 FT. = 0.114 MI.
NET LENGTH = 600 FT. = 0.114 MI.

0 20 40 60
SCALE IN FEET - PLAN & PROFILE

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

DESIGN ENGINEER: MR. CHRIS MAUSHARD 309-671-3464
PROJECT ENGINEER: RICH DOTSON 309-671-3455
TOWNSHIP: EVANS
CONTRACT NO.: 68573

ESCA
CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
URBANA, ILLINOIS

RICHARD D. PATTEN
37421
LICENSED
PROFESSIONAL
ENGINEER
OF
STATE OF ILLINOIS

Richard D. Patten DATE: 05/19/2006
ILLINOIS PROFESSIONAL LICENSE NO. 37421
(EXPIRATION DATE: 11-30-06)

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 80/20 I000	CONSTRUCTION TYPE CODE 80/20 X020-2A	
20200100	EARTH EXCAVATION	CU YD	70	70		
20300100	CHANNEL EXCAVATION	CU YD	600		600	
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	48		48	
21101615	TOPSOIL FURNISH AND PLACE 4"	SQ YD	694	694		
25000210	SEEDING, CLASS 2A	ACRE	0.4	0.4		
25000350	SEEDING, CLASS 7	ACRE	0.4	0.4		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	36	36		
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	36	36		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	36	36		
25100115	MULCH, METHOD 2	ACRE	0.8	0.8		
25100630	EROSION CONTROL BLANKET	SQ YD	216	216		
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	80	80		
28000300	TEMPORARY DITCH CHECKS	EACH	5	5		
28000400	PERIMETER EROSION BARRIER	FOOT	700	700		
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	423		423	
28200200	FILTER FABRIC	SQ YD	660		660	
35100100	AGGREGATE BASE COURSE, TYPE A	TON	6	6		
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	1.0	1.0		
40600982	HOT MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	434	434		
40603080	HOT MIX ASPHALT BINDER COURSE IL 19.0, N50	TON	220	220		
40603335	HOT MIX ASPHALT SURFACE COURSE, MIX D, N50	TON	233	233		
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	224		224	
42001300	PROTECTIVE COAT	SQ YD	228	228		
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	46	46		
44000100	PAVEMENT REMOVAL	SQ YD	369	369		
48101200	AGGREGATE SHOULDERS, TYPE B	TON	40	40		
48203029	HOT MIX ASPHALT SHOULDERS, 8"	SQ YD	685	685		
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1		1	
50200100	STRUCTURE EXCAVATION	CU YD	132		132	
50300100	FLOOR DRAINS	EACH	6		6	
50300225	CONCRETE STRUCTURES	CU YD	93.1		93.1	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	145.9		145.9	
50300260	BRIDGE DECK GROOVING	SQ YD	249		249	
50300280	CONCRETE ENCASEMENT	CU. YD.	6.4		6.4	

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 80/20 I000	CONSTRUCTION TYPE CODE 80/20 X020-2A	
50300300	PROTECTIVE COAT	SQ YD	328		328	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	37550		37550	
51201400	FURNISHING STEEL PILES, HP10X42	FOOT	436		436	
51202305	DRIVING PILES	FOOT	436		436	
51203400	TEST PILE STEEL HP10X42	EACH	2		2	
51500100	NAME PLATES	EACH	1		1	
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	38		38	
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	120		120	
63000000	STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	388	388		
63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4		
63100169	TRAFFIC BARRIER TERMINAL TYPE 1, SPL (FLARED)	EACH	4	4		
63200310	GUARDRAIL REMOVAL	FOOT	914	914		
66502400	WOVEN WIRE FENCE TO BE REMOVED AND RE-ERECTED	FOOT	470	470		
66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	1		1	
67000400	ENGINEERS FIELD OFFICE, TYPE A	CAL MO	3.5	3.5		
67100100	MOBILIZATION	L SUM	0.5	0.5		
70100500	TRAFFIC CONTROL AND PROTECTION, STD 701326	L SUM	0.5	0.5		
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DAY	15		15	
70300100	SHORT TERM PAVEMENT MARKING	FOOT	120	120		
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	40	40		
72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	2		2	
78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	1260	1260		
78005130	EPOXY PAVEMENT MARKING - LINE 6"	FOOT	150	150		
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	6	6		
78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	1		1	
78200410	GUARDRAIL MARKERS, TYPE A	EACH	8	8		
78200520	BARRIER WALL MARKERS, TYPE B	EACH	4		4	
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	7	7		
X5020501	UNDERWATER STR EXCAVATION PROTECTION - LOC 1	EACH	1		1	
X5020502	UNDERWATER STR EXCAVATION PROTECTION - LOC 2	EACH	1		1	
X7011005	TRAFFIC CONTROL AND PROTEC FOR TEMP DETOUR	L SUM	0.5	0.5		
X7015005	CHANGEABLE MESSAGE SIGN	CAL DAY	14	14		
Z0013798	CONSTRUCTION LAYOUT	L SUM	0.5	0.5		
Z0076600	TRAINEES	HOUR	250		250	

FOR INFORMATIONAL PURPOSES ONLY

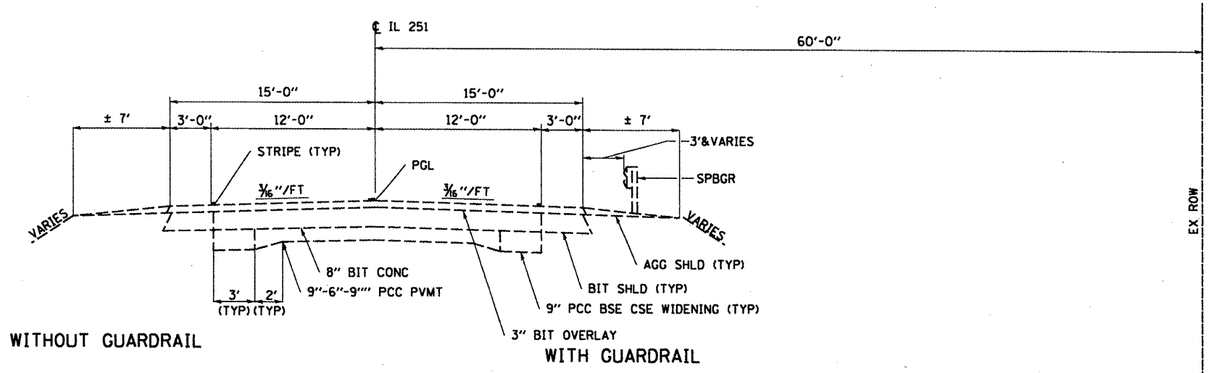
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

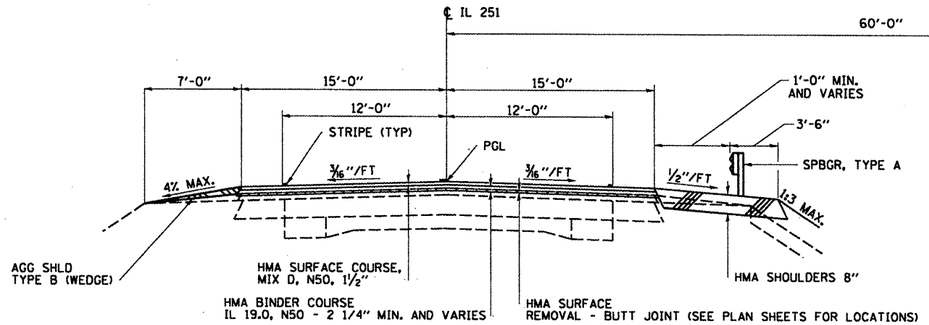
SUMMARY OF QUANTITIES – SN 062-0001

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

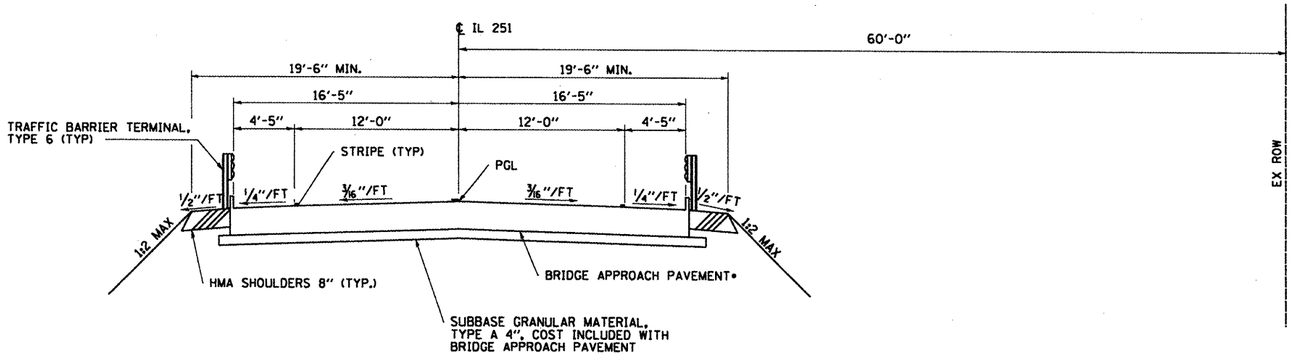
F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	34
		CONTRACT NO. 68573		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		



EXISTING TYPICAL ROADWAY SECTION
STA. 161+00.00 TO STA. 172+00.00
BRIDGE OMISSION STA. 166+03.50 TO STA. 166+36.50



PROPOSED TYPICAL ROADWAY SECTION
STA. 163+00.00 TO STA. 165+46.75
STA. 166+93.25 TO STA. 169+00.00



• WITH BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)

AT BRIDGE APPROACH PAVEMENT
PROPOSED TYPICAL ROADWAY SECTION
STA. 165+46.75 TO STA. 166+93.25
BRIDGE OMISSION STA. 165+82.75 TO STA. 166+57.25

NOTE:
TRANSITION CROSS SLOPES AS REQUIRED TO MATCH MAINLINE PAVING CROSS SLOPES

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0001 TYPICAL SECTIONS

SCALE: NONE | SHEET NO. __ OF ___ SHEETS | STA. _____ TO STA. _____

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	35
		CONTRACT NO. 68573		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

EARTHWORK SCHEDULE

LOCATION	SUITABLE EARTH EXCAVATION	SUITABLE EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	SUITABLE INCIDENTAL EXCAVATION MATERIAL	SUITABLE INCIDENTAL EXC. MATERIAL ADJUSTED FOR SHRINKAGE	EMBANKMENT (NOT A PAY ITEM)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD
NW QUADRANT CUTS & FILLS	35	26			41	-15
SW QUADRANT CUTS & FILLS	35	26			125	-99
NE QUADRANT CUTS & FILLS					56	-56
SE QUADRANT CUTS & FILLS					23	-23
STRUCTURE EXCAVATION			66	50		+50
CHANNEL EXCAVATION			300	225		+225
TOTALS	70	52	366	275	245	+82

NOTES:
1. EXCAVATION USED AS EMBANKMENT = (SUITABLE EARTH EXCAVATION + SUITABLE INCIDENTAL EXCAVATION)*0.75
2. TOPSOIL FURNISH AND PLACE 4" NOT INCLUDED IN THE ABOVE NUMBERS

GUARDRAIL SCHEDULE

LOCATION	SPBGR, TYPE A	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	TRAFFIC BARRIER TERMINAL, TYPE 6	GUARDRAIL MARKERS, TYPE A	BARRIER WALL MARKERS, TYPE B	TERMINAL MARKER, DIRECT APPLIED
	FOOT	EACH	EACH	EACH	EACH	EACH
STRUCTURE NO. 062-0071 - NORTHWEST	100	1	1	2		1
STRUCTURE NO. 062-0071 - SOUTHWEST	100	1	1	2		1
STRUCTURE NO. 062-0071 - NORTHEAST	100	1	1	2		1
STRUCTURE NO. 062-0071 - SOUTHEAST	87.5	1	1	2		1
STRUCTURE NO. 062-0071 - BRIDGE					4	
TOTALS	387.5	4	4	8	4	4

SEEDING SCHEDULE

LOCATION	SEEDING, CLASS 2A	SEEDING, CLASS 7	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	MULCH, METHOD 2
	ACRE	ACRE	POUND	POUND	POUND	ACRE
NW QUADRANT	0.08	0.08	7	7	7	0.16
SW QUADRANT	0.14	0.14	13	13	13	0.28
NE QUADRANT	0.10	0.10	9	9	9	0.20
SE QUADRANT	0.08	0.08	7	7	7	0.16
TOTALS	0.40	0.40	36	36	36	0.80

AGGREGATE SHOULDERS, TYPE B

LOCATION	TON
STRUCTURE NO. 062-0071 - NORTHWEST	7
STRUCTURE NO. 062-0071 - NORTHEAST	7
STRUCTURE NO. 062-0071 - SOUTHWEST	14
STRUCTURE NO. 062-0071 - SOUTHEAST	12
TOTAL	40

PAVEMENT REMOVAL

LOCATION	SQ YD
STA 165+46.75 TO BRIDGE	184
BRIDGE TO STA 166+93.25	185
TOTAL	369

PAVEMENT MARKING SCHEDULE

LOCATION	DESCRIPTION	SHORT-TERM PAVEMENT MARKING	EPOXY PAVEMENT MARKING - LINE	
			4"	6"
		FOOT	FOOT	FOOT
STA 163+00 TO STA 169+00	SOLID WHITE EDGE LINE		1200	
STA 163+00 TO STA 169+00	SKIP-DASH YELLOW CENTERLINE	60		150
STA 168+44 TO STA 169+00	SOLID YELLOW NO PASS LINE	60	60	
TOTALS		120	1260	150

PAVEMENT MARKERS SCHEDULE

LOCATION	RRPM (BRIDGE)	RRPM	RRPM REMOVAL
	EACH	EACH	EACH
NORTH OF BRIDGE		3	3
BRIDGE	1		
SOUTH OF BRIDGE		3	4
TOTALS	1	6	7

WORK ZONE PAVEMENT MARKING REMOVAL

LOCATION	PAVEMENT MARKING DESCRIPTION	WORK ZONE PAVEMENT MARKING REMOVAL
		SQ FT
CENTERLINE	SHORT-TERM	20
NO PASS LINE	SHORT-TERM	20
TOTAL		40

BRIDGE APPROACH PAVEMENT SCHEDULE

LOCATION	BRIDGE APPROACH PAVEMENT	PROTECTIVE COAT	CONNECTOR (FLEXIBLE)
	SQ YD	SQ YD	SQ YD
STRUCTURE NO. 062-0071 - NORTH APPROACH	112	114	23
STRUCTURE NO. 062-0071 - SOUTH APPROACH	112	114	23
TOTALS	224	228	46

HMA SURF REMOVAL - BUTT JOINT

LOCATION	SQ YD
NORTH END	244
SOUTH END	190
TOTAL	434

PAVING SCHEDULE

LOCATION	BITUMINOUS MATERIALS (PRIME COAT)	HMA SURFACE COURSE, MIX D, N50	HMA BINDER COURSE, IL 19.0, N50	HMA SHOULDERS 8"
	TON	TON	TON	SQ YD
STA 163+00 TO BRIDGE	0.56	70	130	326
BRIDGE TO STA 169+00	0.44	63	90	359
TOTALS	1.0	133	220	685

GUARDRAIL REMOVAL

LOCATION	FOOT
STRUCTURE NO. 062-0071 - NORTHWEST	225
STRUCTURE NO. 062-0071 - SOUTHWEST	252
STRUCTURE NO. 062-0071 - NORTHEAST	250
STRUCTURE NO. 062-0071 - SOUTHEAST	187
TOTAL	914

EROSION CONTROL SCHEDULE

LOCATION	EROSION CONTROL BLANKET	PERIMETER EROSION BARRIER	TEMPORARY EROSION CONTROL SEEDING (2 APPLICATIONS)	TEMPORARY DITCH CHECKS
	SQ YD	FOOT	POUND	EACH
STRUCTURE NO. 062-0071 - NORTHWEST	58		16	
STRUCTURE NO. 062-0071 - SOUTHWEST	55		28	
STRUCTURE NO. 062-0071 - NORTHEAST	52	380	20	
STRUCTURE NO. 062-0071 - SOUTHEAST	51	320	16	
STA 165+00, LT				1
STA 165+80, LT				1
STA 166+50, LT				1
STA 167+00, LT				1
STA 167+60, LT				1
TOTALS	216	700	80	5

ABUTMENT DRAINAGE SCHEDULE

LOCATION		PIPE UNDERDRAINS FOR STRUCTURES
		FOOT
STRUCTURE NO. 062-0071 - NW CORNER		30
STRUCTURE NO. 062-0071 - SW CORNER		30
STRUCTURE NO. 062-0071 - NE CORNER		30
STRUCTURE NO. 062-0071 - SE CORNER		30
TOTALS		120

WOVEN WIRE FENCE TO BE REMOVED AND RE-ERECTED

LOCATION	FOOT
STA 162+80 TO 165+26, LT	246
STA 166+97 TO 169+20, LT	224
TOTAL	470

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 062-0001 SCHEDULE OF QUANTITIES

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

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	37
		CONTRACT NO. 68573		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

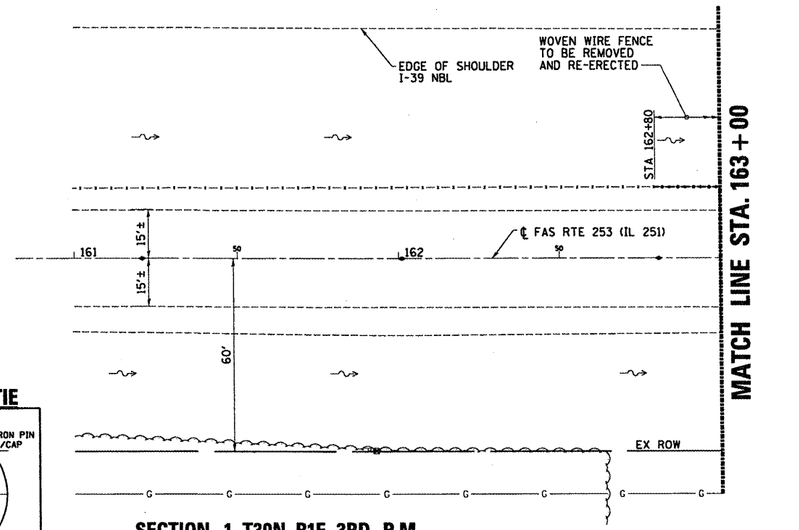
CONTRACT NO. 68573

FAS RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	35
STA 161+00		TO STA 163+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLAN — SURVEYED / DRAWN / ALIGNMENT CHECKED / GRADES CHECKED / TOTAL NO. SHEETS / CADD FILE NAME / NOTE BOOK / NO. / BY / DATE

PROFILE — SURVEYED / DRAWN / GRADES CHECKED / TOTAL NO. SHEETS / PLOTTING INSTRUCTNS CHKD / NOTE BOOK / NO. / BY / DATE

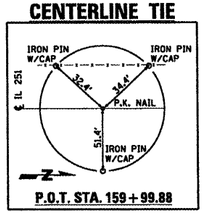
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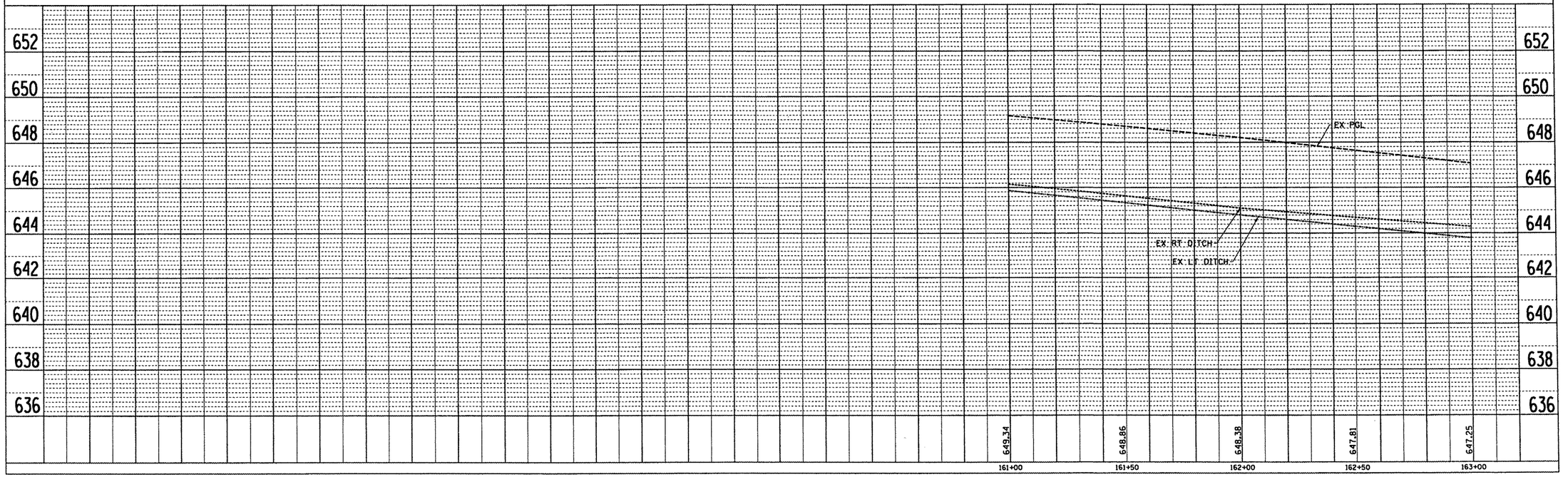
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0 20 40 60
SCALE IN FEET

CENTERLINE TIE



P.O.T. STA. 159 + 99.88



FAS RTE 253 (IL 251) PLAN & PROFILE
STA 161 + 00 TO STA 163 + 00

CONTRACT NO. 68573

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	39
STA 163+00	TO STA 169+00			
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

LEGEND

- PAVEMENT REMOVAL
- BITUMINOUS SURFACE REMOVAL - BUTT JOINT
- AGGREGATE SHOULDERS, TYPE B
- STONE DUMPED RIPRAP, CLASS A4 (SEE STRUCTURE PLANS)
- HOT MIXED ASPHALT SHOULDERS 8"

SECTION 2, T3ON, R1E, 3RD P.M.

MATCH LINE STA. 163+00

MATCH LINE STA. 169+00

SECTION 1, T3ON, R1E, 3RD P.M.

EDGE OF SHOULDER I-39 NBL

STA 165+26 32' LT

BEGIN CONNECTOR

BEGIN APPROACH PAVEMENT

EX WINGWALL

SANDY CREEK

END APPROACH PAVEMENT

END CONNECTOR

STA 166+97 30' LT

WOVEN WIRE FENCE TO BE REMOVED AND RE-ERECTED

163+00 IMPROVEMENTS BEGIN (BUTT JOINT)

169+00 IMPROVEMENTS END (BUTT JOINT)

+85 25.0' LT

+92 26.5' LT

+02 26.5' LT

+66 23.0' LT

+38 26.5' LT

+48 26.5' LT

163+57

GUARDRAIL REMOVAL

TBT TY 1 SPL (FLARED)

BRIDGE APPROACH PAVEMENT

100.0' SPBGR TY A ON TAPER

TBT TY 6

REMOVE SIGN PANEL ASSEMBLY AND DELIVER TO ENGINEER

168+27

164

165+00 SAWCUT

166

167

SAWCUT

℄ FAS RTE 253 (IL 251)

168

USE AGGREGATE BASE COURSE TYPE A AS REQUIRED TO SURFACE ENTRANCE TRANSITION

18" DIA CMP

+15 26.0' RT

87.5' SPBGR TY A ON TAPER

CENTER PR STRUCTURE NO. 062-0071 & EX STRUCTURE NO. 062-0001 ℄ STA 166+20

FLOW

EX ROW

STA 163+95 RE (AGG)

+38 26.5' RT

10'

15'

24'

60'

16'-0"

1:2

1:4

B.M. #1 ELEV. 649.14

CHISELED SQUARE ON WINGWALL AT NE CORNER BRIDGE ON NORTHBOUND LANE OF I-39. ELEVATION TAKEN FROM IDOT BRIDGE PLANS.

0 20 40 60

SCALE IN FEET

250' V.C.

225' V.C.

646 644 642 640 638 636 634 632 630

VPC STA 163+00 EL 647.25 (IMPROVEMENTS BEGIN (BUTT JOINT))

EX 18" DIA CMP

EX PGL

PR PGL

EX & PR LT DITCH

EX RT DITCH

VPT STA 165+50 EL 645.93

VPC STA 166+75 EL 645.36

VPT STA 169+00 EL 646.46 (IMPROVEMENTS END (BUTT JOINT))

0.17%

1.14%

D.H.W. EL 642.6 (50 YR)

1'-9" (TYP)

LIMITS OF POROUS GRANULAR EMBANKMENT (SPECIAL) (TYP.) SEE STRUCTURE PLANS

EL 636.2

PR STRUCTURE (TYP)

EX STRUCTURE (TYP)

STREAMBED EL 631.5±

(EX POL) (PROP POL)

PROPOSED VERTICAL CURVE DATA

VPI STA 164+25
EL 645.79
LENGTH = 250.00'
E = -0.31'
g_1 = -1.17%
g_2 = -0.17%
VPC STA 163+00
VPT STA 165+50

PROPOSED VERTICAL CURVE DATA

VPI STA 167+87.5
EL 645.17
LENGTH = 225.00'
E = -0.37'
g_1 = -0.17%
g_2 = +1.14%
VPC STA 166+75
VPT STA 169+00

163+00 163+50 164+00 164+50 165+00 165+50 166+00 166+50 167+00 167+50 168+00 168+50 169+00

647.25 647.25 | 646.61 646.72 | 646.06 646.28 | 645.55 645.54 | 645.08 645.71 | 644.79 645.58 | 644.53 645.38 | 644.32 645.31 | 644.61 645.34 | 644.99 645.40 | 645.37 645.60 | 645.92 645.56 | 646.46 646.46

DATE | BY | PLAN | SURVEYED | PLOTTED | CROSS SECTIONS | NOTE BOOK | NO. | ELEM. NOTED | STRUCTURE NOTATIONS CHKD | RT. OF WAY CHECKED | LAND FILE NAME

DATE | BY | PROFILE | SURVEYED | PLOTTED | CROSS SECTIONS | NOTE BOOK | NO. | ELEM. NOTED | STRUCTURE NOTATIONS CHKD

FAS RTE 253 (IL 251) PLAN & PROFILE

STA 163+00 TO STA 169+00

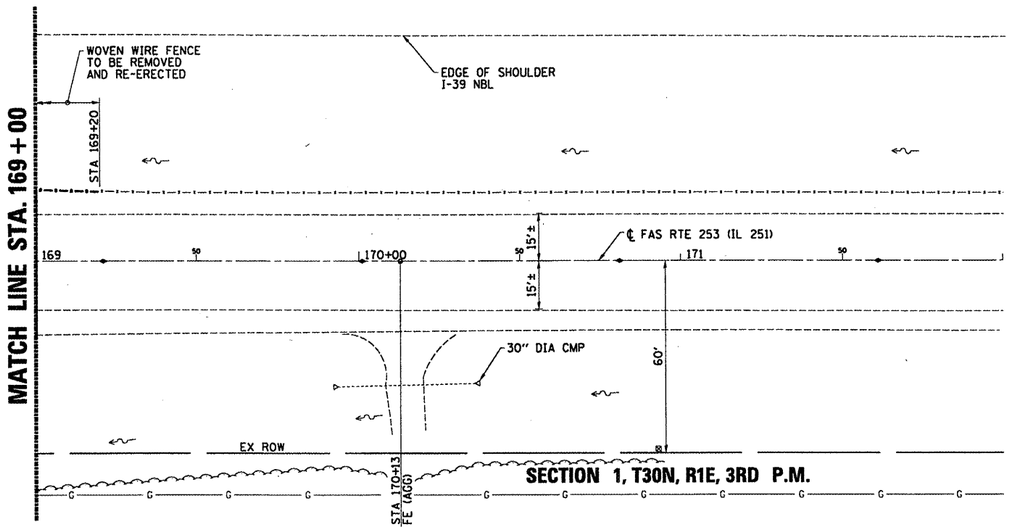
CONTRACT NO. 68573

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	40
STA 169+00		TO STA 172+00		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

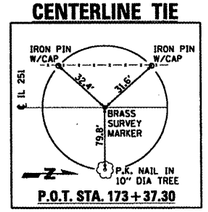
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NOTE BOOK
NO.
BOOK FILE NAME
BY
DATE

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PLOTTED
CHECKED
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NOTE BOOK
NO.
STRUCTURE NOTATIONS ADDED
BY
DATE

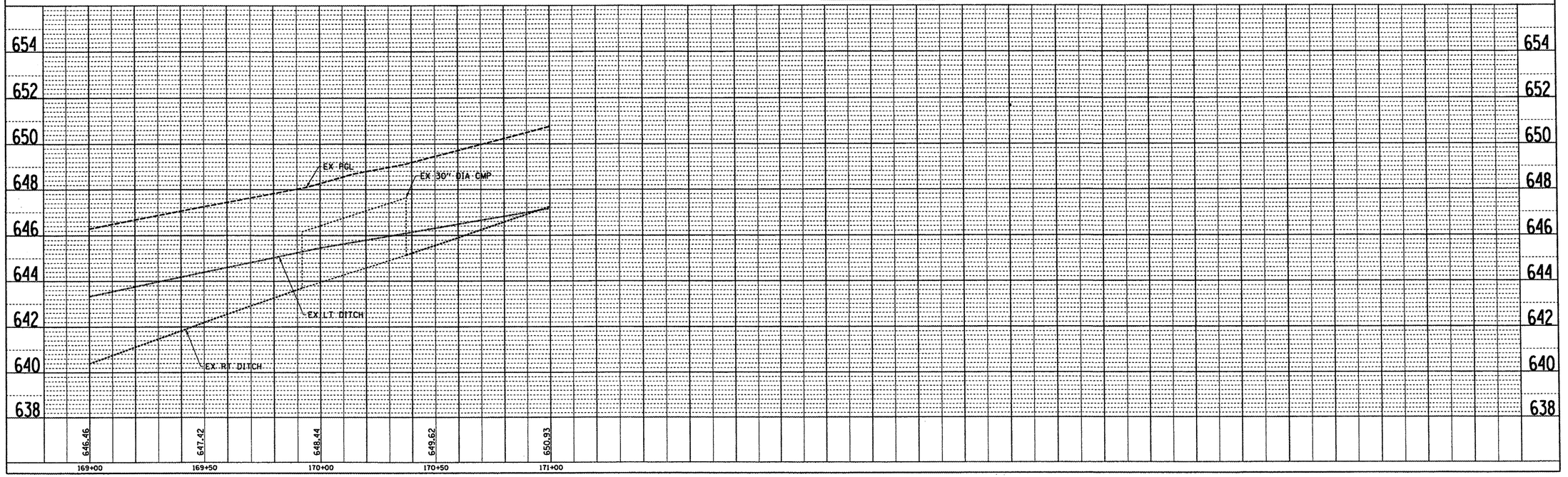
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CENTERLINE TIE



0 20 40 60
SCALE IN FEET



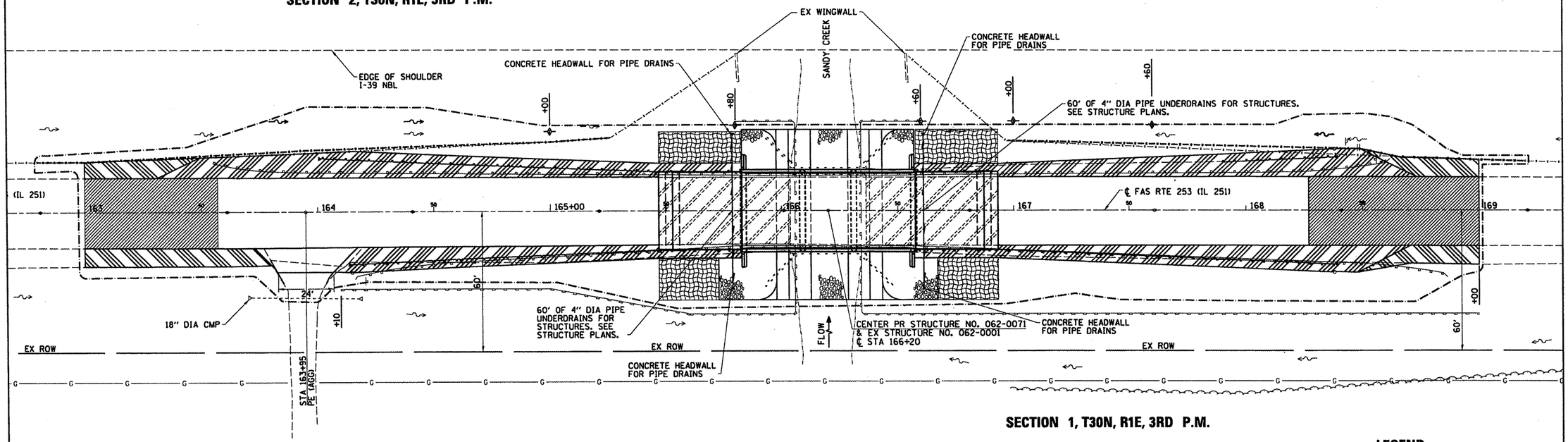
FAS RTE 253 (IL 251) PLAN & PROFILE
STA 169+00 TO STA 172+00

CONTRACT NO. 68573

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	17	4
STA. 163+00	TO STA. 169+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

0 20 40 60
SCALE IN FEET

SECTION 2, T30N, R1E, 3RD P.M.



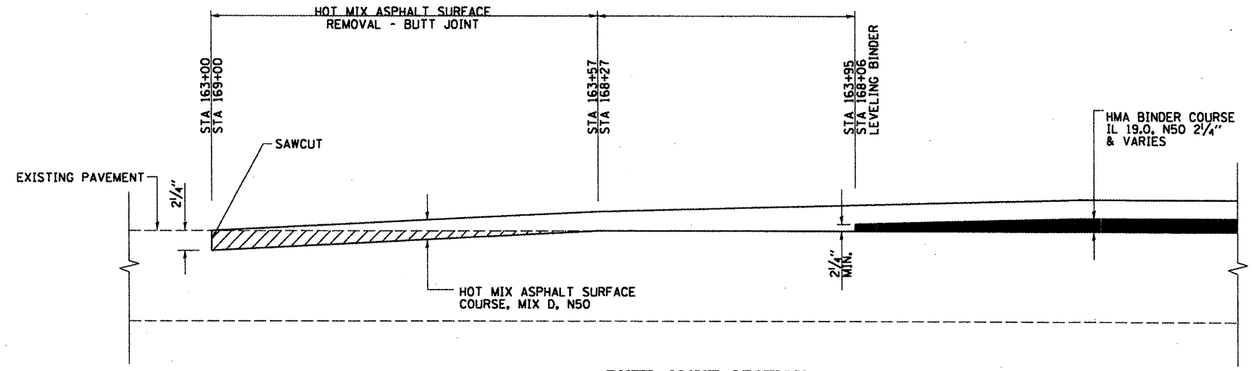
SECTION 1, T30N, R1E, 3RD P.M.

LEGEND

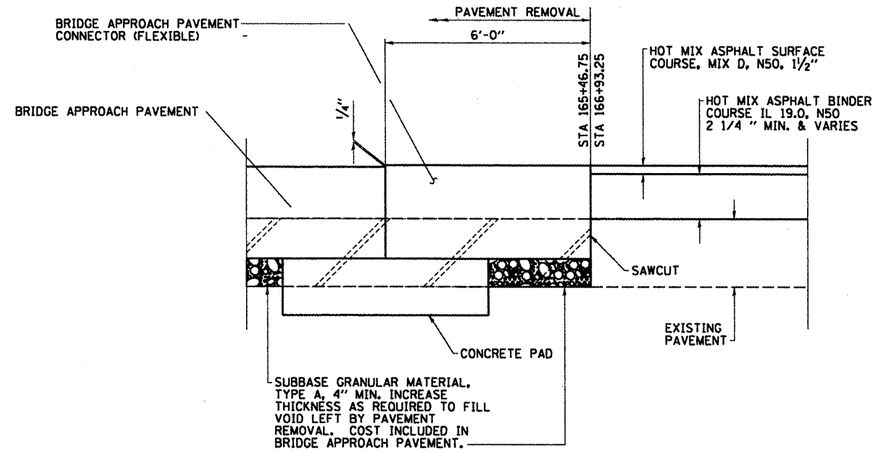
- PERIMETER EROSION BARRIER
- EROSION CONTROL BLANKET
- EXISTING DITCH FLOW
- PROPOSED DITCH FLOW
- CONSTRUCTION LIMITS
- TEMPORARY DITCH CHECK

ESCA CONSULTANTS, INC.		
DESIGNED BY:	ELH	10/05
DRAWN BY:	HAG	10/05
CHECKED BY:	ELH	05/06
APPROVED BY:	RDP	05/06

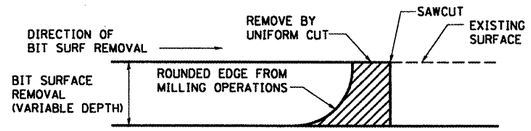
EROSION CONTROL AND DRAINAGE PLAN
FAS RTE 253 (IL 251)
SECTION 68BR-1
MARSHALL COUNTY



BUTT JOINT SECTION



BRIDGE APPROACH PAVEMENT SECTION



DETAIL AT BUTT JOINT

NOTE:
WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAWCUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE COST OF ALL WORK SHOWN IN THE DETAIL IS INCLUDED IN HMA SURFACE REMOVAL - BUTT JOINT. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL.

FILE NAME = c:\projects\i1251sandy\062000lmiscdet.dgn	USER NAME = maushardae	DESIGNED - ___	REVISED - ___
		DRAWN - ___	REVISED - ___
	PLOT SCALE = 100.0000 ' / IN.	CHECKED - ___	REVISED - ___
	PLOT DATE = 10/10/2008	DATE - _____	REVISED - ___

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

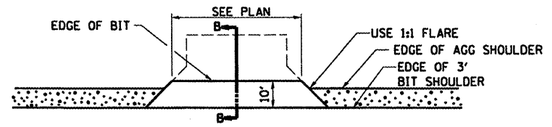
SN 062-0001 MISCELLANEOUS DETAILS

SCALE: NONE | SHEET NO. __ OF ___ SHEETS | STA. _____ TO STA. _____

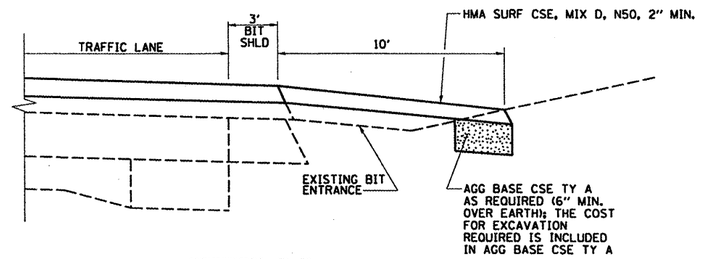
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	42
		CONTRACT NO. 68573		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 66398

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	478
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PLAN



SECTION B-B

ENTRANCE DETAILS

MISCELLANEOUS DETAILS
FAS RTE 253 (IL 251)
SECTION 68(BR,BR-1)
MARSHALL COUNTY

ESCA
CONSULTANTS, INC.

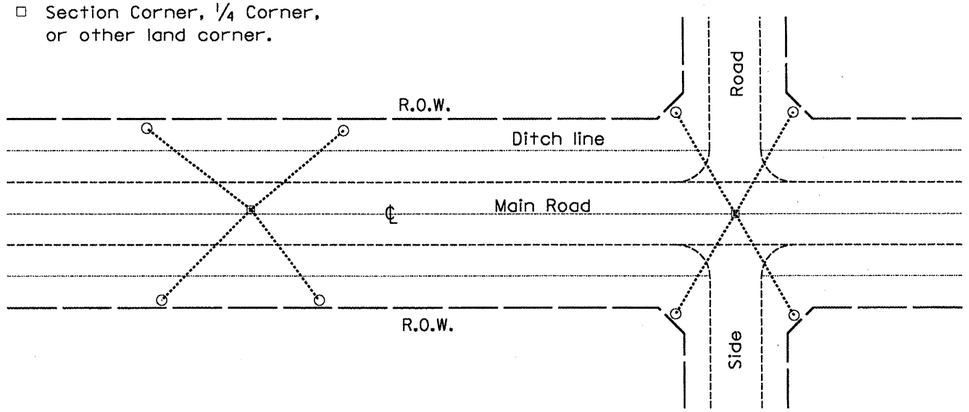
DESIGNED BY:	ELH	9/05
DRAWN BY:	JDK	9/05
CHECKED BY:	ELH	05/06
APPROVED BY:	RDP	05/06

CONTRACT NO. 68573

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BB,BR-1)	MARSHALL	97	44
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

PERMANENT SURVEY TIES

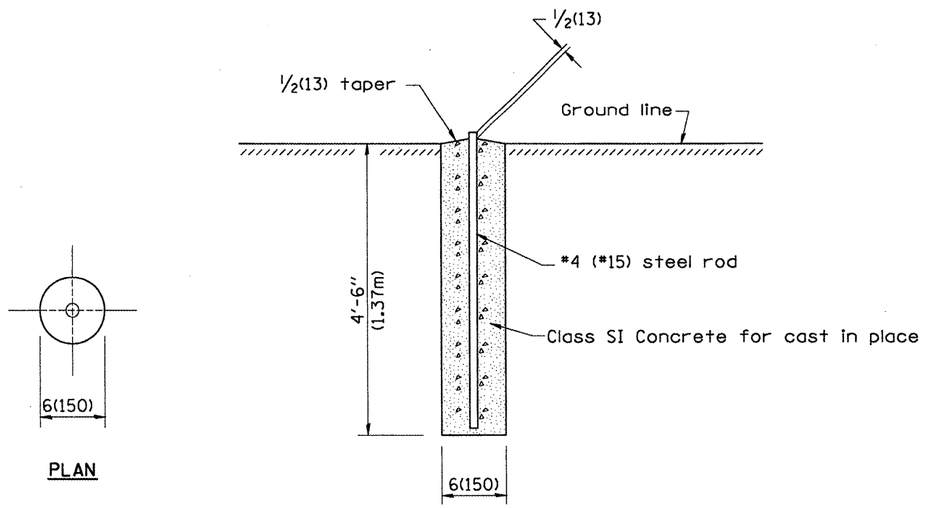
○ Permanent Survey Tie
□ Section Corner, 1/4 Corner, or other land corner.



TYPICAL APPLICATION

GENERAL NOTES

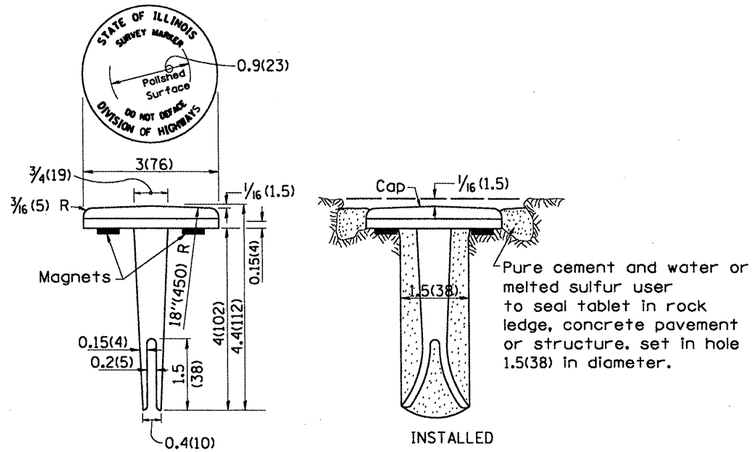
1. The marker shall be cast in place of Class SI Concrete.
2. Tie marker shall be installed after the final seeding has been completed unless otherwise specified by the Engineer.
3. The tie distances to the section corner shall be measured and recorded by the IDOT Chief of Surveys.



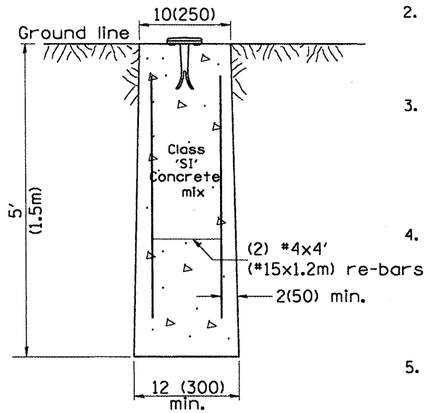
PLAN

SECTION

PERMANENT SURVEY MARKERS



BRONZE TABLET - No Scale
TYPE I



MARKER CAST IN PLACE
TYPE II

GENERAL NOTES

1. All type II markers shall be cast in place, and precast markers will not be allowed.
2. Two permanent magnets, each having a diameter of 3/4 (19) and a thickness of 1/4 (6), or equivalent, shall beattached to the underside of the tablet with an approved epoxy bonding agent.
3. The location of the markers shall be in accordance with the plans in general, the markers will be placed at the P.T.'s and P.C.'s of horizontal curves and spaces along the tangents in a way that a minimum of two markers are alway inter-visible, and not to exceed 1000' (300m).
4. The markers shall be placed under the direction of the Engineer and shall be installed in a workmanlike manner in order that there will be no further settlement or horizontal shifting. The monuments shall be placed in a way that the survey point will fall within the portion of the plaque provided for that purpose.
5. The project designation, the centerline station, the survey point, and the elevation shall be permanently marked by the use of metal dies after marker has been installed.

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

DATE	REVISIONS	BY
1-1-97	RENUM. D-3.01, NEW REVISION BOX	T.P.
	ADD DESIGNER NOTE, REVISED TITLE BOX	
7-7-98	ADD DESIGNER NOTE	J.A.
5-24-06	REMOVED GEN. NOTE UNDER TIES	M.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT CADD STANDARD

PERMANENT SURVEY TIE
&
PERMANENT SURVEY MARKERS TY.I - TY.II

CADD STD. NO. 667101-D4
SCALE: NOT DRAWN TO SCALE
DRAWN BY CADD
CHECKED BY

667101-D4

c:\projects-11251sandy-0620001\misc\det.dgn

BENCHMARK: #1-Chiseled square on wing wall at NE corner bridge on northbound lane of I-39. Elevation taken from Idot Bridge Plans, Elev. 649.14.

EXISTING STRUCTURE: SN 062-0001 is a single span reinforced concrete T-Beam structure supported on closed abutments. The structure has no skew. The structure was built in 1924 and was widened in 1956. The bridge is 33'-0" bk.-bk. abuts. and 36'-4" O.-O. deck with 30'-0" clear width between curbs. Existing structure is to be removed. A state route detour will be utilized for construction of the proposed bridge.

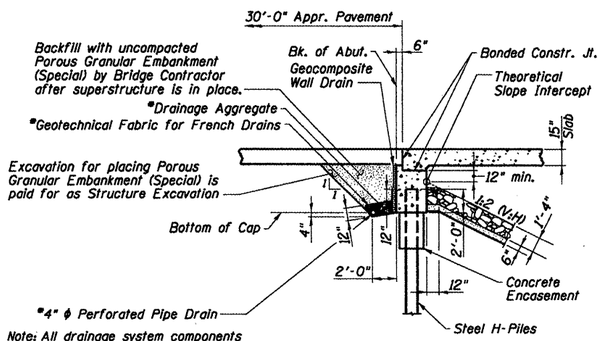
No salvage.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253	*	MARSHALL	97	45
STA		TO STA		
FED. ROAD DIST. NO. *		ILL. PROJECT-		
*68(BR.BR-1)		DWG. NO. 1 OF 9		

CONTRACT NO. 68573

STRUCTURE INDEX OF SHEETS

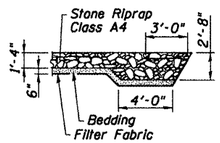
General Plan	Dwg. No. 1 of 9
General Data	Dwg. No. 2 of 9
Top of Slab Elevations	Dwg. No. 3 of 9
Superstructure	Dwg. No. 4 Of 9
Superstructure Details	Dwg. No. 5-6 of 9
Abutments	Dwg. No. 7 of 9
Piers	Dwg. No. 8 of 9
Soil Borings	Dwg. No. 9 of 9



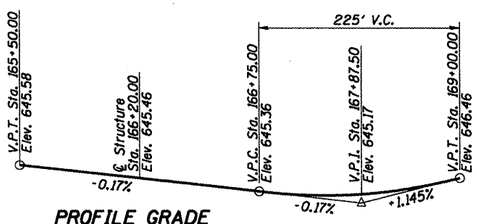
SECTION THRU INTEGRAL ABUTMENT

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 pipe shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101)."

* Included in the cost of Pipe Underdrains for Structures

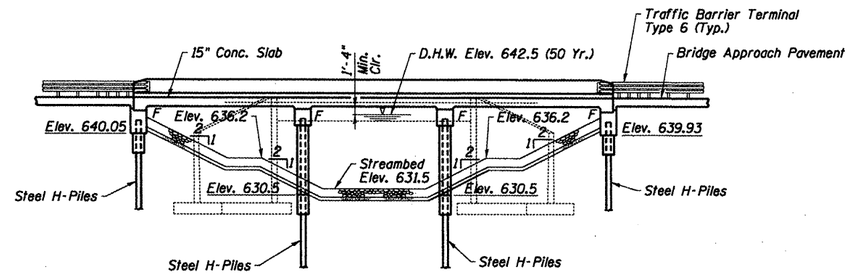


SECTION A-A

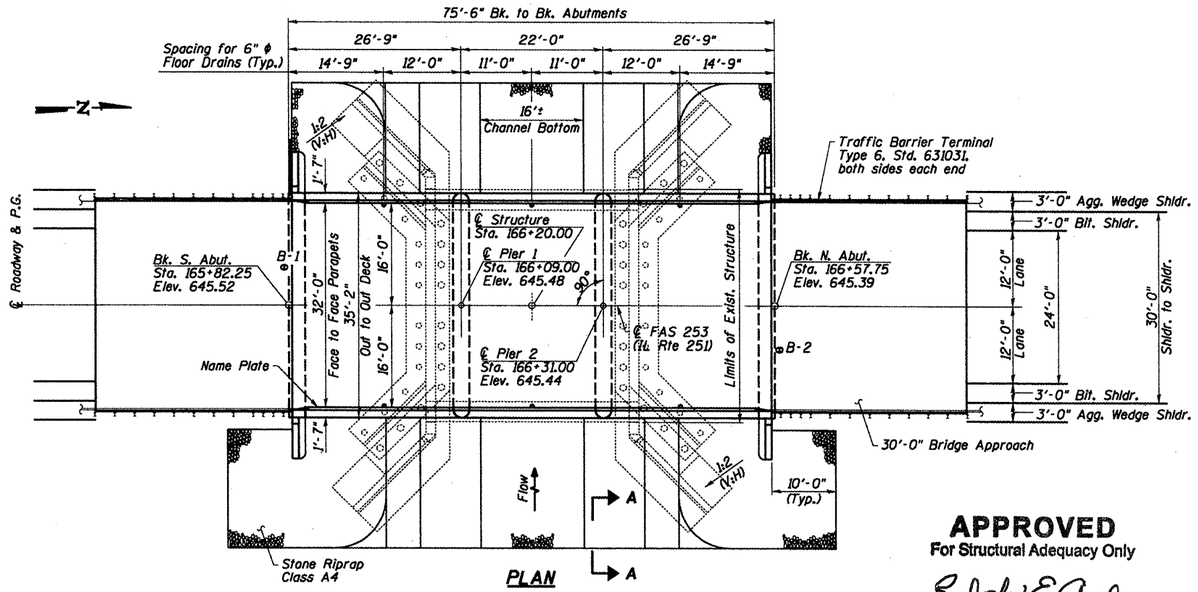


PROFILE GRADE

(Along ℄ Roadway)



ELEVATION



PLAN

DESIGN SCOUR ELEVATION TABLE

S. Abut.	Pier 1	Pier 2	N. Abut.
640.05	627.50	627.50	639.93

WATERWAY INFORMATION

Drainage Area = 9.9 Sq. Mi. — Exist. Low Grade Elev. = 644.50 Ft. @ Sta. 166+00; Prop. Low Grade Elev. = 645.34 Ft. @ Sta. 167+04

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head-Ft. Exist.	Head-Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	50	2060	269	440	642.5	1.1	0.0	643.6	642.5
Base	100	2365	269	469	643.0	1.5	0.0	644.5	643.0
Overtopping	100	2365	269	-	643.0	1.5	0.0	644.5	-
Max. Calc.	500	3065	269	523	643.9	1.3	0.0	645.2	643.9

DESIGN SPECIFICATIONS

2002 AASHTO

LOADING HS20-44

Allow 50 psf for future wearing surface.

DESIGN STRESSES

FIELD UNITS

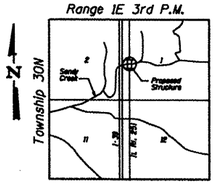
f'c = 3,500 psi
fy = 60,000 psi (Reinf.)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0

APPROVED
For Structural Adequacy Only
Ralph E Anderson
Engineer of Bridges & Structures

STATE OF ILLINOIS — RICHARD D. PAYNE — No. 4647 — LICENSED STRUCTURAL ENGINEER
EXPIRES 11-30-06
SIGNATURE
03-31-06
DATE



LOCATION SKETCH

GENERAL PLAN
IL ROUTE 251 OVER SANDY CREEK
FAS ROUTE 253 - SECTION 68(BR.BR-1)
MARSHALL COUNTY
STATION 166+20
STRUCTURE NO. 062-0071

DESIGNED BY:	ELH	11/05
DRAWN BY:	DWH	11/05
CHECKED BY:	ELH	05/06
APPROVED BY:	RDP	05/06

ESCA CONSULTANTS, INC.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253	0	MARSHALL	99	46
STA		TO STA		
FED. ROAD DIST. NO. 0		ILLINOIS	FED. AID PROJECT-	
*68(BR,BR-1)		DWG. NO. 2 OF 9		

CONTRACT NO. 68573

GENERAL NOTES

1. Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60 (IL Modified). See Special Provisions.
2. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
3. The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection.
4. The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of the piles.
5. Excavation behind existing abutment walls shall be done before removing the existing superstructure.
6. All construction joints shall be bonded.
7. The slipforming of the parapets is not allowed.

STATION 166+20
BUILT 200_ BY
STATE OF ILLINOIS
FAS ROUTE 253-SECTION 68BR-1
LOADING HS20-44
STR. NO. 062-0071

NAME PLATE
See Std. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		48	48
Stone Dumped Riprap, Class A4	Ton		423	423
Filter Fabric	Sq. Yd.		660	660
Removal of Existing Structures No. 1	Each			1
Structure Excavation	Cu. Yd.		132	132
Concrete Structures	Cu. Yd.		93.1	93.1
Concrete Superstructure	Cu. Yd.	145.9		145.9
Bridge Deck Grooving	Sq. Yd.	249		249
Protective Coat	Sq. Yd.	328		328
Reinforcement Bars, Epoxy Coated	Pound	27630	9920	37550
Furnishing Steel Piles HP10x42	Foot		436	436
Driving Piles	Foot		436	436
Test Pile Steel HP10x42	Each		2	2
Name Plates	Each	1		1
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1
Floor Drains	Each	6		6
Pipe Underdrains for Structures, 4"	Foot		120	120
Geocomposite Wall Drain	Sq. Yd.		38	38
Concrete Encasement	Cu. Yd.		6.4	6.4

GENERAL DATA
IL ROUTE 251 OVER
SANDY CREEK
FAS ROUTE 253 - SECTION 68(BR,BR-1)
MARSHALL COUNTY
STATION 166+20
STRUCTURE NO. 062-0071

ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	11/05
DRAWN BY:	DWH	11/05
CHECKED BY:	ELH	05/06
APPROVED BY:	RDP	05/06

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253	*	MARSHALL	47	47
STA		TO STA		
FED. ROAD DIST. NO. *	ILL. ROUTE	FED. AID PROJECT-		
*68(BR,BR-1)		DWG. NO. 3 OF 9		

CONTRACT NO. 68573

FACES OF EAST & WEST PARAPETS

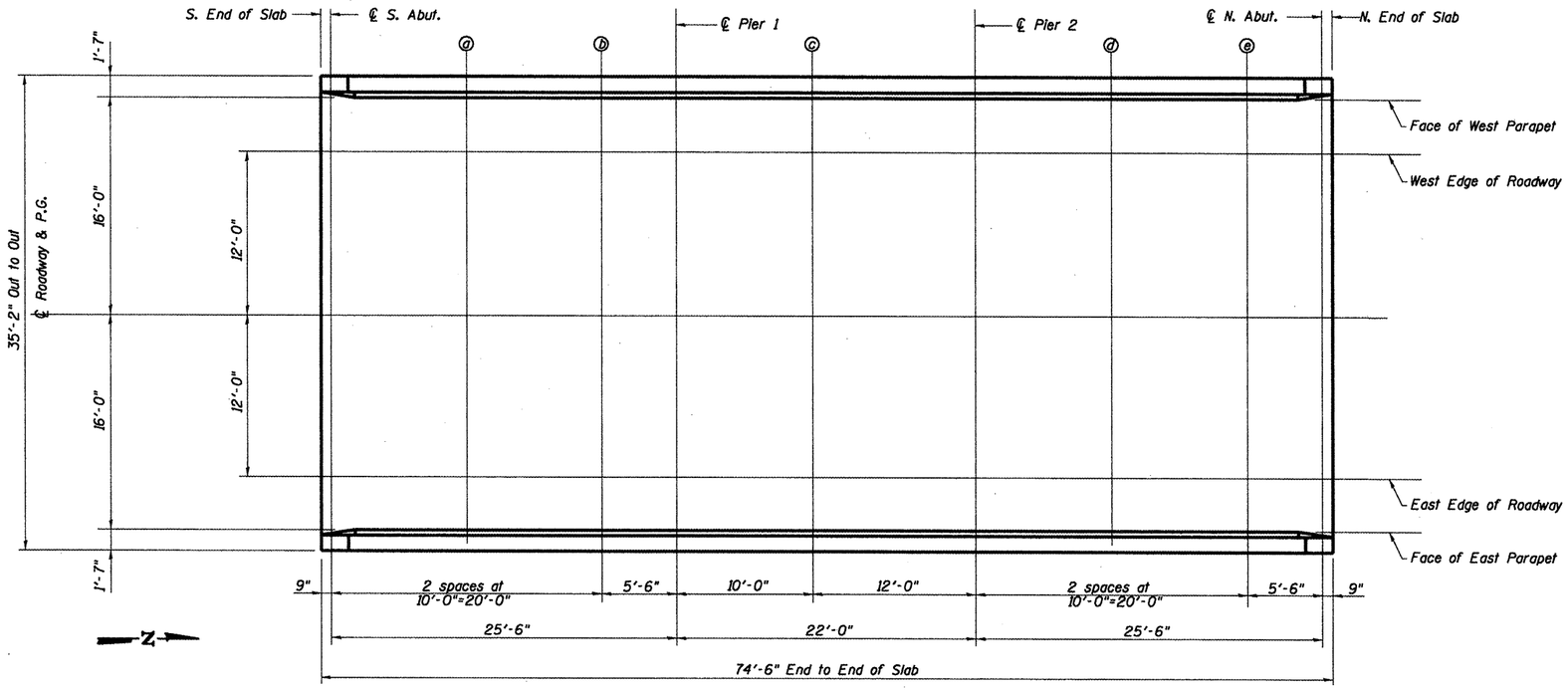
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	16582.750	-16.417	645.245	645.245
CL S. Abut.	16583.500	-16.292	645.246	645.246
a	16593.500	-16.000	645.235	645.239
b	16603.500	-16.000	645.218	645.220
CL Pier 1	16609.000	-16.000	645.209	645.209
c	16619.000	-16.000	645.192	645.191
CL Pier 2	16631.000	-16.000	645.171	645.171
d	16641.000	-16.000	645.154	645.158
e	16651.000	-16.000	645.137	645.140
CL N. Abut.	16656.500	-16.292	645.122	645.122
N. End of Slab	16657.250	-16.417	645.118	645.118

EAST & WEST EDGES OF ROADWAY

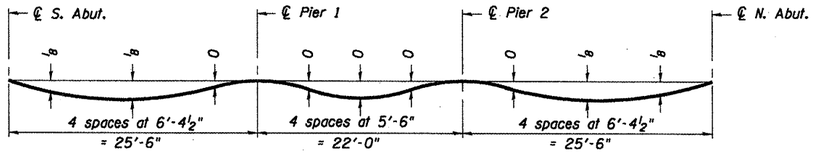
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	16582.750	-12.000	645.337	645.337
CL S. Abut.	16583.500	-12.000	645.336	645.336
a	16593.500	-12.000	645.319	645.324
b	16603.500	-12.000	645.302	645.304
CL Pier 1	16609.000	-12.000	645.292	645.292
c	16619.000	-12.000	645.275	645.274
CL Pier 2	16631.000	-12.000	645.255	645.255
d	16641.000	-12.000	645.238	645.242
e	16651.000	-12.000	645.221	645.224
CL N. Abut.	16656.500	-12.000	645.211	645.211
N. End of Slab	16657.250	-12.000	645.210	645.210

℄ OF ROADWAY & PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	16582.750	0.000	645.524	645.524
CL S. Abut.	16583.500	0.000	645.523	645.523
a	16593.500	0.000	645.506	645.514
b	16603.500	0.000	645.489	645.493
CL Pier 1	16609.000	0.000	645.480	645.480
c	16619.000	0.000	645.463	645.462
CL Pier 2	16631.000	0.000	645.442	645.442
d	16641.000	0.000	645.425	645.433
e	16651.000	0.000	645.408	645.414
CL N. Abut.	16656.500	0.000	645.399	645.399
N. End of Slab	16657.250	0.000	645.398	645.398



PLAN



DEAD LOAD DEFLECTION DIAGRAM

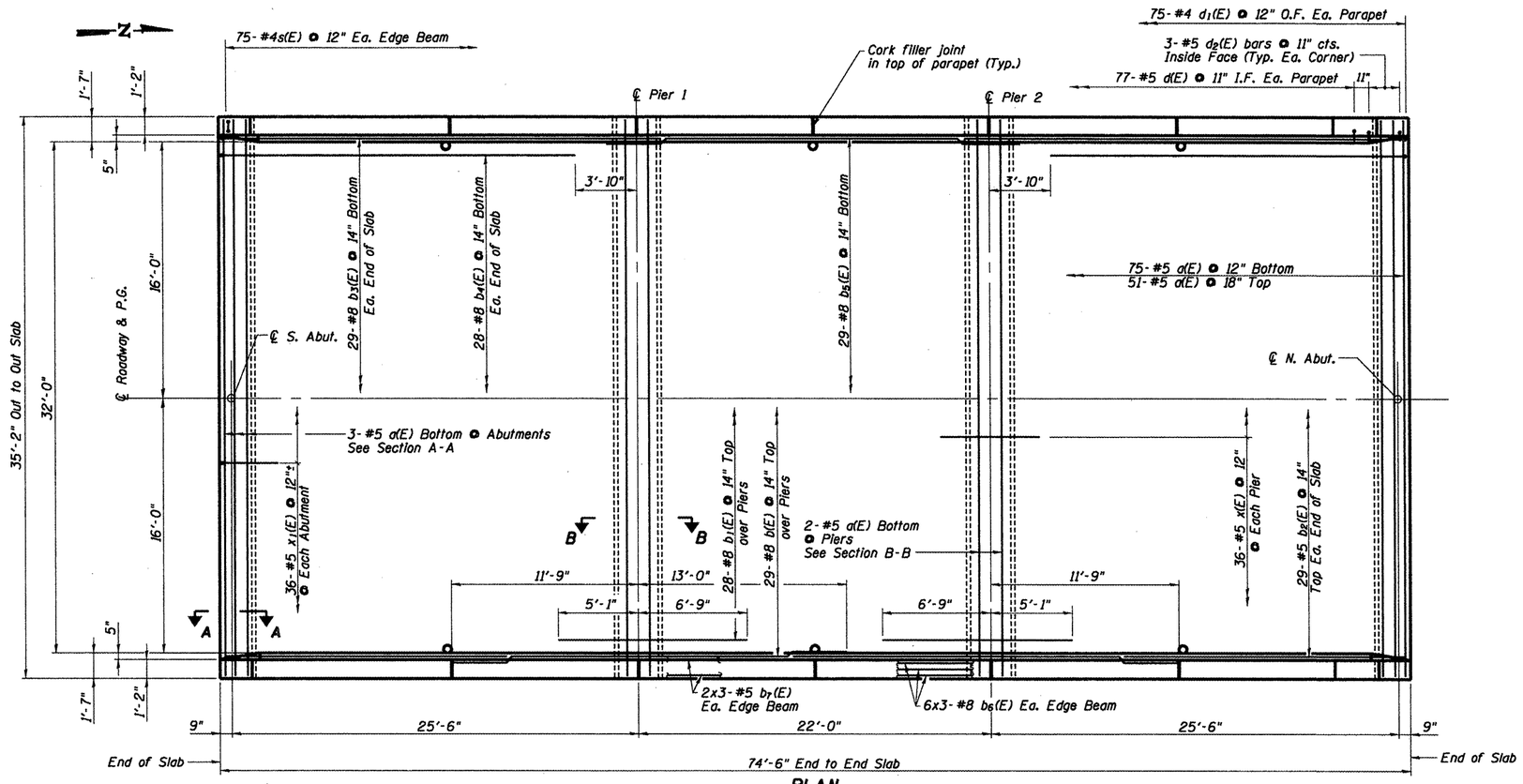
Note: (Includes weight of concrete only.)
The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflection as shown above.

ESCA CONSULTANTS, INC.		
DESIGNED BY:	ELH	11/05
DRAWN BY:	DWH	11/05
CHECKED BY:	ELH	05/06
APPROVED BY:	RDP	05/06

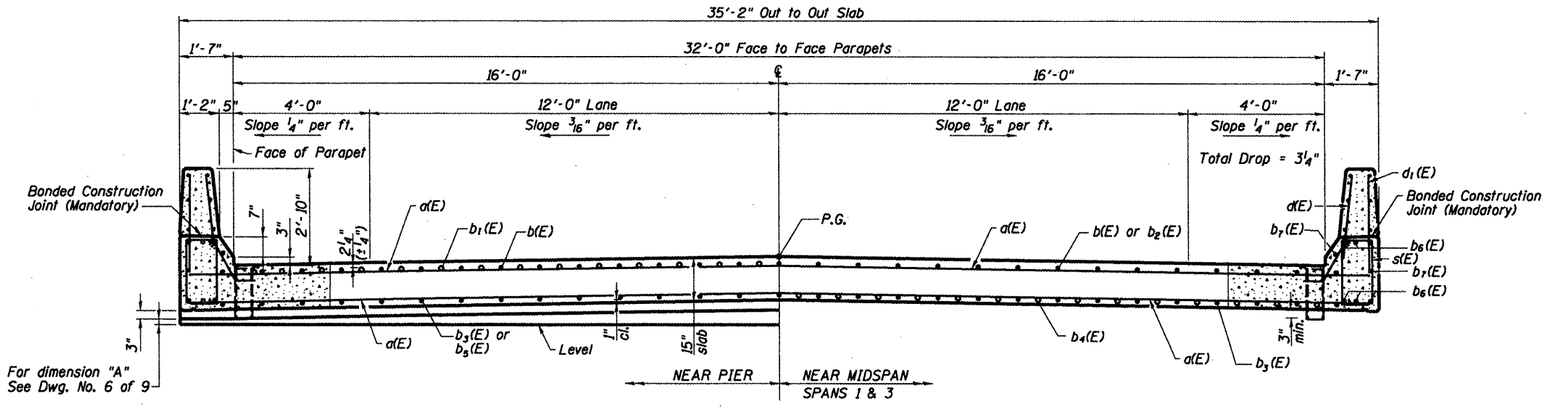
TOP OF SLAB ELEVATIONS
IL ROUTE 251 OVER
SANDY CREEK
FAS ROUTE 253 - SECTION 68(BR,BR-1)
MARSHALL COUNTY
STATION 166+20
STRUCTURE NO. 062-0071

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253	*	MARSHALL	97	48
STA		TO STA		
FED. ROAD DIST. NO. *		S.A. NOS.	FED. AID PROJECT-	
68(BR.BR-1)		DWG. NO. 4 OF 9		

CONTRACT NO. 68573



PLAN



CROSS SECTION
(Looking North)

NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Bars indicated thus: 32 x 4-#5 etc. indicates 32 lines of bars with 4 lengths per line.
3. See Dwg. Nos. 5 & 6 of 9 for Superstructure Details, Bill of Material, parapet reinforcement, and sections.

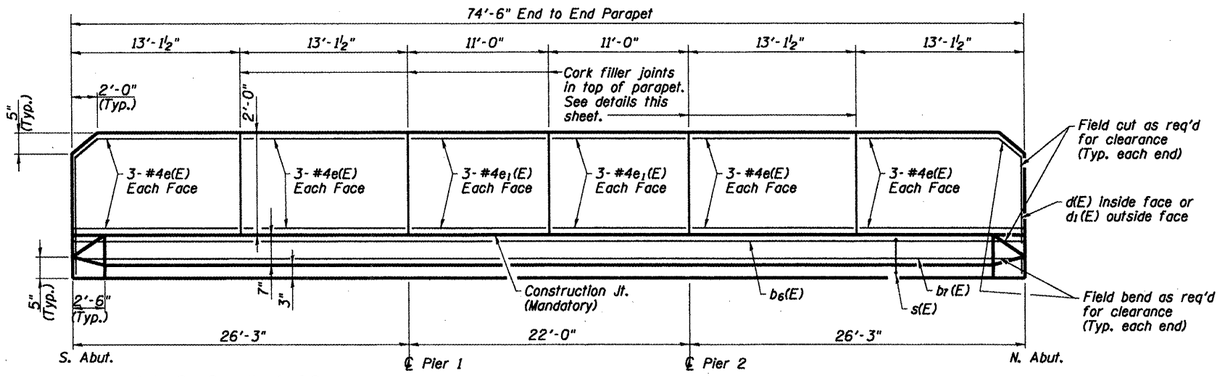
Min. Bar Lap
#4 - - - 1'-4"
#5 - - - 1'-10"
#8 - - - 3'-5" Bottom
3'-11" Top

ESCA CONSULTANTS, INC.		
DESIGNED BY:	ELH	11/05
DRAWN BY:	DWH	11/05
CHECKED BY:	ELH	05/06
APPROVED BY:	RDP	05/06

SUPERSTRUCTURE
IL ROUTE 251 OVER
SANDY CREEK
FAS ROUTE 253 - SECTION 68(BR.BR-1)
MARSHALL COUNTY
STATION 166+20
STRUCTURE NO. 062-0071

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253	*	MARSHALL	49	49
STA		TO STA		
FED. ROAD DIST. NO. *		S.A. PROJ.	FED. AID PROJECT-	
"68(BR,BR-1)		DWG. NO. 5 OF 9		

CONTRACT NO. 68573



Note: See Dwg. No. 4 of 9 for slab and edge beam reinforcement.

INSIDE ELEVATION OF PARAPET

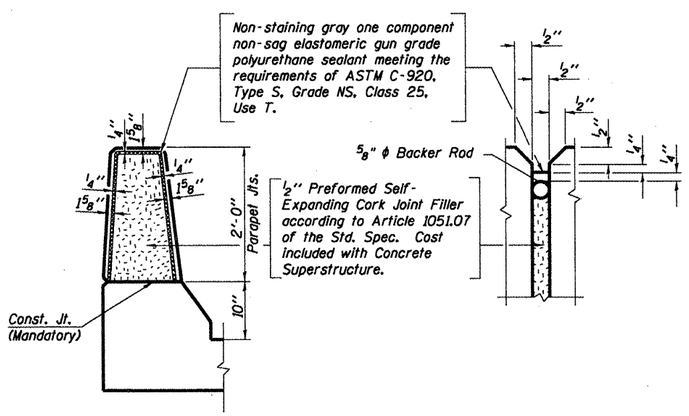
(West Parapet shown; East Parapet similar)

SUPERSTRUCTURE BILL OF MATERIAL

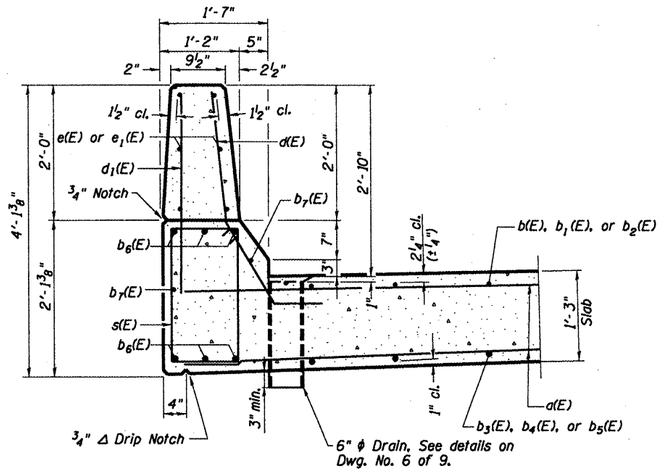
Bar	No.	Size	Length	Shape
d(E)	136	#5	34'-10"	
b(E)	58	#8	24'-9"	
b1(E)	56	#8	11'-10"	
b2(E)	58	#5	18'-3"	
b3(E)	58	#8	28'-8"	
b4(E)	56	#8	23'-4"	
b5(E)	29	#8	25'-10"	
b6(E)	36	#8	27'-4"	
b7(E)	12	#5	26'-0"	
d(E)	154	#5	3'-10"	
d1(E)	150	#4	3'-1"	
d2(E)	12	#5	3'-7"	
e(E)	48	#4	12'-9"	
e1(E)	24	#4	10'-8"	
s(E)	150	#4	6'-3"	
x(E)	72	#5	7'-0"	
x1(E)	72	#5	5'-2"	
Reinforcement Bars, Epoxy Coated			Pound	27630
Concrete Superstructure			Cu. Yd.	145.9

Reinforcement bars designated (E) shall be epoxy coated.

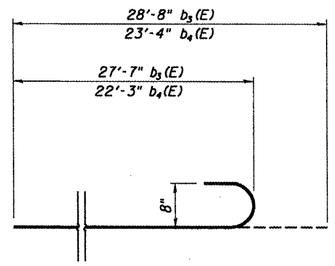
Name Plate to be mounted on inside face of parapet. See Dwg. Nos. 1 and 2 of 9.



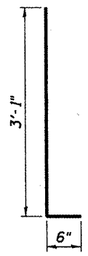
PARAPET JOINT DETAILS



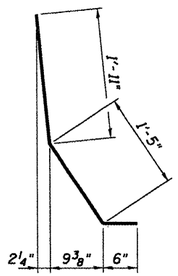
SECTION THRU PARAPET



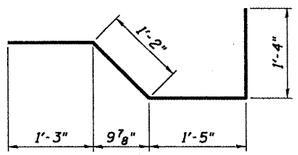
BARS b3(E) & b4(E)



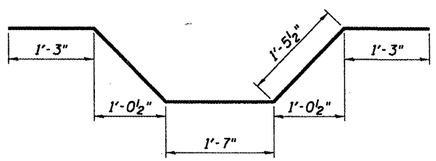
BAR d2(E)



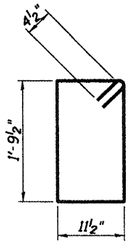
BAR d(E)



BAR x1(E)



BAR x(E)



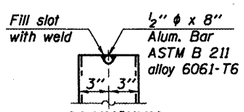
BAR s(E)

ESCA CONSULTANTS, INC.		
DESIGNED BY:	ELH	11/05
DRAWN BY:	DWH	11/05
CHECKED BY:	ELH	05/06
APPROVED BY:	RDP	05/06

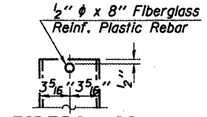
SUPERSTRUCTURE DETAILS
IL ROUTE 251 OVER
SANDY CREEK
FAS ROUTE 253 - SECTION 68(BR,BR-1)
MARSHALL COUNTY
STATION 166+20
STRUCTURE NO. 062-0071

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253	*	MARSHALL	9	5
STA		TO STA		
FED. ROAD DIST. NO. *	ILLINOIS	FED. AID PROJECT-		
*68(BR.BR-1)		DWG. NO. 6 OF 9		

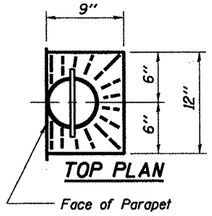
CONTRACT NO. 68573



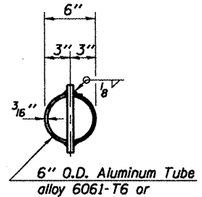
ALUMINUM TUBE



FIBERGLASS PIPE



TOP PLAN



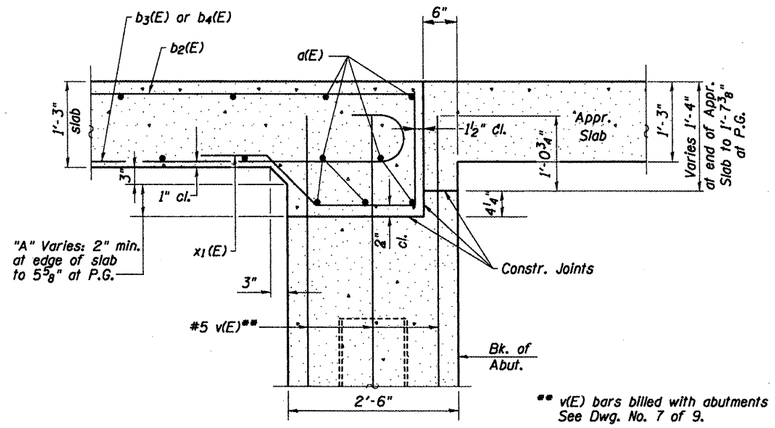
TOP PLAN
(Showing Aluminum Tube)

FLOOR DRAIN DETAILS

Notes:

Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum. The surface of the Fiberglass pipe shall be free of bond inhibiting agents.

The exterior surfaces of the Fiberglass Floor Drains shall be cleaned and given a washcoat pretreatment in accordance with Steel Structures Painting Council's Spec. SSPC-SP1 & SSPC-Paint 27 prior to painting with a vinyl enamel coat. The color shall be light grey Munsell No. 10Y 7/1. Painting of the Fiberglass Floor Drains will not be required when the exterior surfaces of the furnished drains are coated by the manufacturer with a pigment that matches the color of the concrete slab.

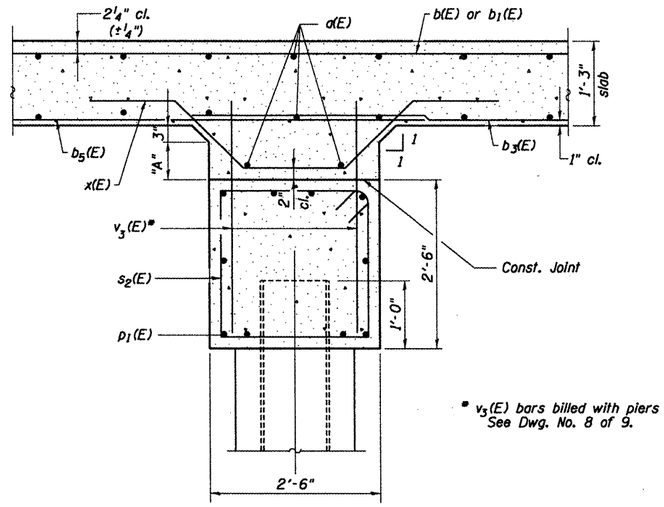


** v(E) bars billed with abutments
See Dwg. No. 7 of 9.

SECTION A-A

DIMENSION "A"

	Pier 1	Pier 2
West edge of superstructure	2"	2"
West edge of roadway	3⅜"	3⅜"
℄ Roadway & P.G.	5⅝"	5⅝"
East edge of roadway	3⅜"	3⅜"
East edge of superstructure	2"	2"



* v3(E) bars billed with piers
See Dwg. No. 8 of 9.

SECTION B-B

ESCA CONSULTANTS, INC.

DESIGNED BY:	ELH	11/05
DRAWN BY:	DWH	11/05
CHECKED BY:	ELH	05/06
APPROVED BY:	RDP	05/06

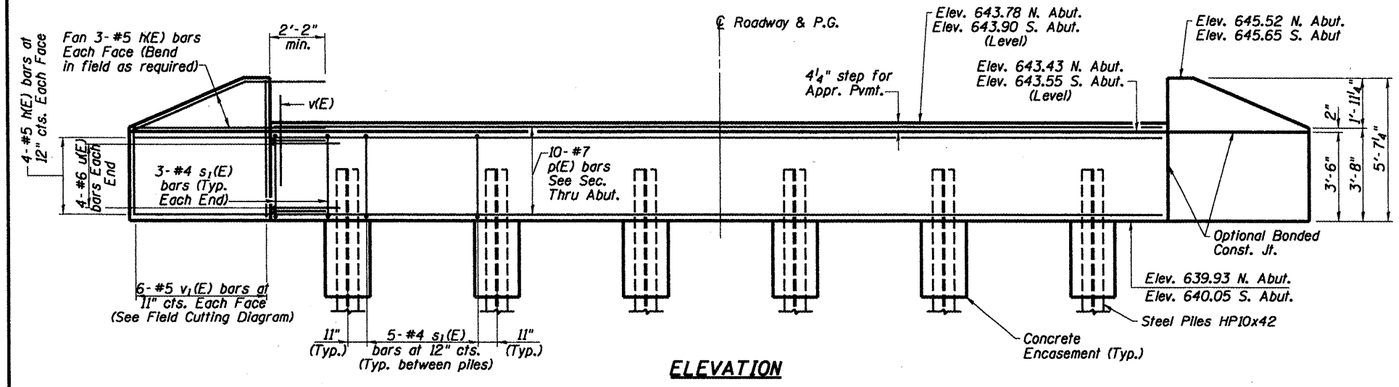
SUPERSTRUCTURE DETAILS
IL ROUTE 251 OVER
SANDY CREEK
FAS ROUTE 253 - SECTION 68(BR.BR-1)
MARSHALL COUNTY
STATION 166+20
STRUCTURE NO. 062-0071

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253	*	MARSHALL	9	5
STA		TO STA		
FED. ROAD DIST. NO. *		STATE	FED. AID PROJECT *	
*68(BR,BR-1)		DWG. NO. 7 OF 9		

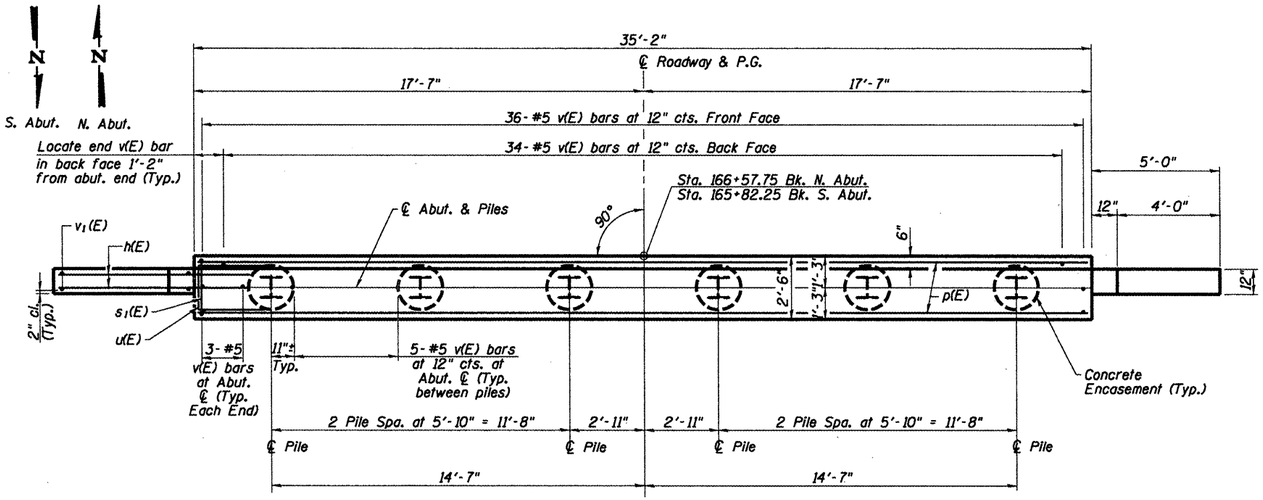
CONTRACT NO. 68573

NOTES

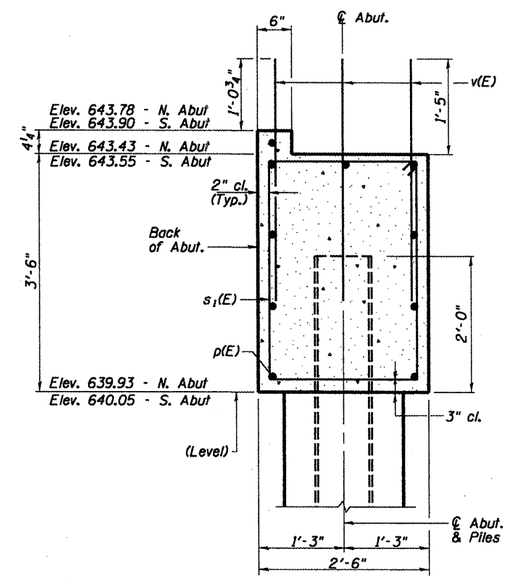
1. Reinforcement bars designated (E) shall be epoxy coated.
2. See Dwg. No. 1 of 9 for backfill and drainage required for abutment construction.



ELEVATION



PLAN



SECTION THRU ABUTMENT

ABUTMENT BILL OF MATERIAL

(FOR ONE ABUTMENT UNLESS NOTED OTHERWISE)

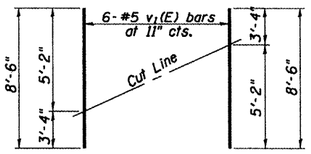
Bar	No.	Size	Length	Shape
h(E)	28	#5	7'-5"	
p(E)	10	#7	34'-10"	
s1(E)	31	#4	11'-3"	
u(E)	8	#6	7'-7"	
v(E)	101	#5	3'-7"	
v1(E)	12	#5	8'-6"	

		N. Abut.	S. Abut.
Concrete Structures	Cu. Yd.	13.5	13.5
Reinforcement Bars, Epoxy Coated	Pound	1740	1740
Structure Excavation	Cu. Yd.	56	56
Test Pile Steel HP10x42	Each	1	-
Furnishing Steel Piles HP10x42	Lin. Ft.	90	126
Driving Piles	Lin. Ft.	90	126
Geocomposite Wall Drain	Sq. Yd.	19	19
Pipe Underdrains for Structures, 4"	Foot	60	60
Concrete Encasement	Cu. Yd.	1.6	1.6

PILE DATA

Pile Type: Steel HP10x42
Nominal Required Bearing: 335 Kips
Allowable Resistance Available: 111 Kips
Estimated Length: 18' (N. Abut.)
21' (S. Abut.)
No. Required: 11+1 test pile north abutment: 12 total

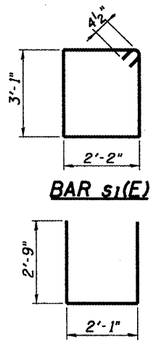
ESCA CONSULTANTS, INC.		
DESIGNED BY:	ELH	11/05
DRAWN BY:	DWH	11/05
CHECKED BY:	ELH	05/06
APPROVED BY:	RDP	05/06



BAR v1(E)

FIELD CUTTING DIAGRAM

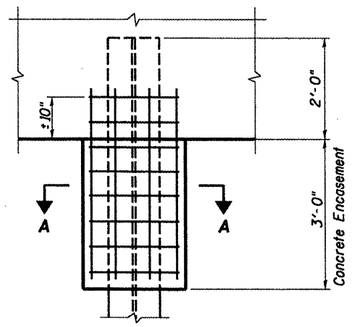
Order v1(E) full length. Cut as shown and use remainder of bars in oppposite face.



BAR s1(E)

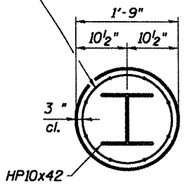
BAR u(E)

BAR BENDING DETAILS



ELEVATION

Welded wire fabric 6x6-W4.0xW4.0 weighing 58#/100 sq. ft.
The cost of excavation and reinforcement is included in the Concrete Encasement pay item. Forms for encasement may be omitted when soil conditions will permit.



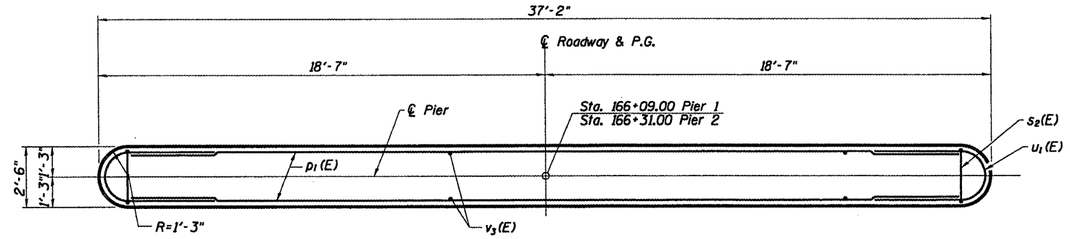
SECTION A-A

PILE ENCASEMENT DETAILS

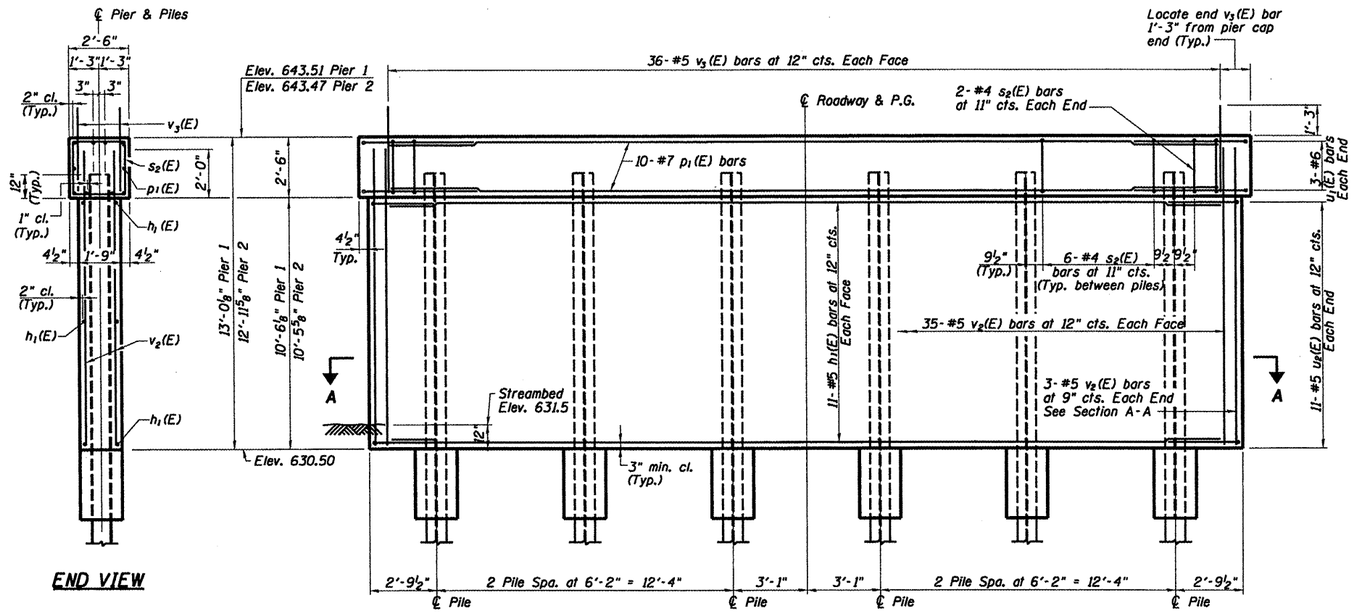
ABUTMENTS
IL ROUTE 251 OVER
SANDY CREEK
FAS ROUTE 253 - SECTION 68(BR,BR-1)
MARSHALL COUNTY
STATION 166+20
STRUCTURE NO. 062-0071

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253	*	MARSHALL	9	5
STA		TO STA		
FED. ROAD DIST. NO. *		ILLINOIS	FED. AID PROJECT-	
"68(BR,BR-1)"		DWG. NO. 8 OF 9		

CONTRACT NO. 68573

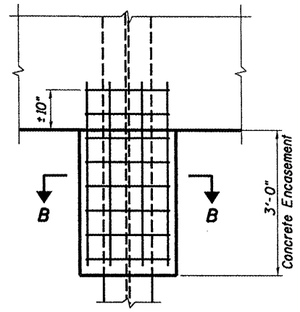


TOP PLAN



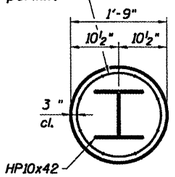
END VIEW

ELEVATION



ELEVATION

Welded wire fabric 6x6-W4.0xW4.0 weighing 58#/100 sq. ft.
The cost of excavation and reinforcement is included in the Concrete Encasement pay item. Forms for encasement may be omitted when soil conditions will permit.



SECTION B-B

PILE ENCASEMENT DETAILS

NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.

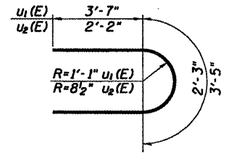
PIER BILL OF MATERIAL

(FOR ONE PIER UNLESS NOTED OTHERWISE)

Bar	No.	Size	Length	Shape
h_1(E)	22	#5	34'-8"	
p_1(E)	10	#7	34'-8"	
s_2(E)	34	#4	9'-5"	
u_1(E)	6	#6	10'-7"	
u_2(E)	22	#5	6'-7"	
v_2(E)	76	#5	12'-6"	
v_3(E)	72	#5	3'-6"	

		Pier 1	Pier 2
Concrete Structures	Cu. Yd.	33.1	33.0
Reinforcement Bars, Epoxy Coated	Pound	3220	3220
Structure Excavation	Cu. Yd.	10	10
Test Pile Steel HP10x42	Each	1	-
Furnishing Steel Piles HP10x42	Lin. Ft.	100	120
Driving Piles	Lin. Ft.	100	120
Underwater Structure Excavation Protection-Location 1	Each	1	
Underwater Structure Excavation Protection-Location 2	Each		1
Concrete Encasement	Cu. Yd.	1.6	1.6

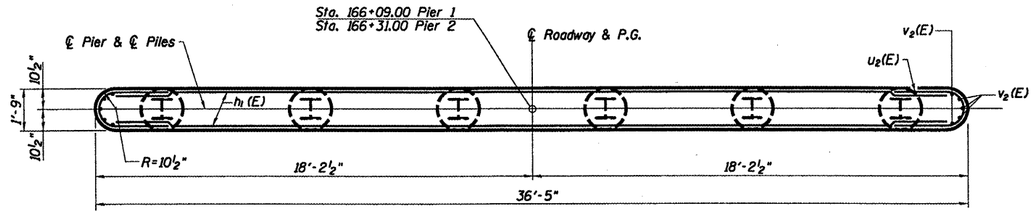
If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.



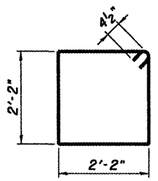
BARS u_1(E) & u_2(E)

PILE DATA

Pile Type: Steel HP10x42
Nominal Required Bearing: 335 Kips
Allowable Resistance Available: 111 Kips
Estimated Length: 20' (Pier 1)
20' (Pier 2)
No. Required: 11+1 test pile pier 1;
12 total



SECTION A-A



BAR s_2(E)

BAR BENDING DETAILS

ESCA CONSULTANTS, INC.		
DESIGNED BY:	ELH	11/05
DRAWN BY:	DWH	11/05
CHECKED BY:	ELH	05/06
APPROVED BY:	RDP	05/06

PIERS
IL ROUTE 251 OVER
SANDY CREEK
FAS ROUTE 253 - SECTION 68(BR,BR-1)
MARSHALL COUNTY
STATION 166+20
STRUCTURE NO. 062-0071

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253	*	MARSHALL	97	53
STA		TO STA		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT-		
*68(BR,BR-1)		DWG. NO. 9 OF 9		

CONTRACT NO. 68573

Illinois Department of Transportation
Division of Highways
District #3, Ottawa

SOIL BORING LOG

Page 1 of 1

Date 9/16/97

ROUTE FAS 253(IL 251) DESCRIPTION ILLINOIS 251 OVER SANDY CREEK NORTH OF WENONA LOGGED BY KW

SECTION (68)BR-1 LOCATION SW 1/4, SEC. 1, TWP. 30N, RNG. 1E, 3rd PM

COUNTY MARSHALL DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 062-0001 EXISTING
Station 1+660 1144.58 RT

BORING NO. 2 N. ABUT
Station 1+917.73 1144.58
Offset 7.6' @ 2.13m RT
Ground Surface Elev. 189.97 m

Surface Water Elev. 192.56 m
Stream Bed Elev. ____ m

Groundwater Elev.:
First Encounter 192.3 m ▽
Upon Completion 189.7 m ▽
After ____ Hrs. ____ m

DEPTH (m)	BLOWS (/150 mm)	UCS Qu (kPa)	MOIST (%)
		1.5P	
-1.5	2	1.0	
	3	48	26.0
	4	P	
	2	1.0	
-3.0	1	0.10	
	1	48	40.0
	2	P	
	3	1.0	
	5	-	47.0
	9	444	20.0
-4.6		B	
	6	6.0	
	8	576	20.0
	11	B	
	10	9.0	
	12	287	21.0
	15	-	16.0
-6.0			

BITUMINOUS & CONCRETE PAVEMENT Over Black SILTY CLAY
648.43 189.54
Stiff Black SILTY CLAY & some Brown SILTY CLAY TILL
637.2 194.33
Very Soft Black SILTY LOAM (Crumbly & Organic)
630.7 192.26 ▽
Hard Brown SILTY CLAY TILL
628.7 191.66
Hard Brown & Gray SILTY CLAY TILL
625.7 189.49
Very Stiff Mix of Brown SILTY CLAY TILL, Black SILTY CLAY & Weathered SHALE
623.9 190.73
Dense Gray SHALE

DEPTH (m)	BLOWS (/150 mm)	UCS Qu (kPa)	MOIST (%)
	22	4.5	
	53	484	15.0
	85	P	
	32		
	82	-	12.0
	-		

Dense Gray SHALE (continued)
607 488.69
End of Boring

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 #3, Ottawa

SOIL BORING LOG

Page 1 of 1

Date 9/16/97

ROUTE FAS 253(IL 251) DESCRIPTION ILLINOIS 251 OVER SANDY CREEK NORTH OF WENONA LOGGED BY KW

SECTION (68)BR-1 LOCATION SW 1/4, SEC. 1, TWP. 30N, RNG. 1E, 3rd PM

COUNTY MARSHALL DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 062-0001 EXISTING
Station 1+660 1144.58

BORING NO. 1 S. ABUT
Station 1+574.89 0+998.11
Offset 1.8 @ 4.88m LT 1143.5
Ground Surface Elev. 189.97 m

Surface Water Elev. 192.56 m
Stream Bed Elev. ____ m

Groundwater Elev.:
First Encounter 192.7 m ▽
Upon Completion 190.6 m ▽
After ____ Hrs. ____ m

DEPTH (m)	BLOWS (/150 mm)	UCS Qu (kPa)	MOIST (%)
		1.5P	
-1.5	2	0.5	
	2	48	25.0
	2	P	
	2	1.0	
-3.0	3	96	28.0
	4	P	
	3	1.0	
	4	96	-
	4	P	
	2	0.4	
	3	96	21.0
	4	B	
	4	93	
	5	348	18.0
	9	B	
	5	43	
	8	492	22.0
-6.0	15	B	

BITUMINOUS & CONCRETE PAVEMENT Over Black SILTY CLAY
641.35 189.79
Soft Black SILTY CLAY mixed with Pebbles
637.37 184.87
Stiff Black SILTY CLAY LOAM with Pebbles, Limestone Pieces & Thin SAND Seams
632.35 182.74 ▽
Soft Gray SILTY CLAY TILL
629.86 181.89
Very Stiff Gray CLAY TILL

DEPTH (m)	BLOWS (/150 mm)	UCS Qu (kPa)	MOIST (%)
	19	4.5	
	17	484	15.0
	25	P	
	19	4.5	
	34	484	14.0
	90	P	
	47	-	
	53		15.0
	-		18.0

Hard 25mm LIMESTONE Layer 488.32
Over Dense Gray & Black SHALE 611.34
BOND FORMATION
PENNSYLVANIAN SYSTEM
610.37 488.19
Dense Red Brown SHALE 188.32
End of Boring

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)

ESCA CONSULTANTS, INC.

DESIGNED BY:	ELH	11/05
DRAWN BY:	DWH	11/05
CHECKED BY:	ELH	05/06
APPROVED BY:	RDP	05/06

SOIL BORINGS
IL ROUTE 251 OVER
SANDY CREEK
FAS ROUTE 253 - SECTION 68(BR,BR-1)
MARSHALL COUNTY
STATION 166+20
STRUCTURE NO. 062-0071

CONTRACT NO. 68573

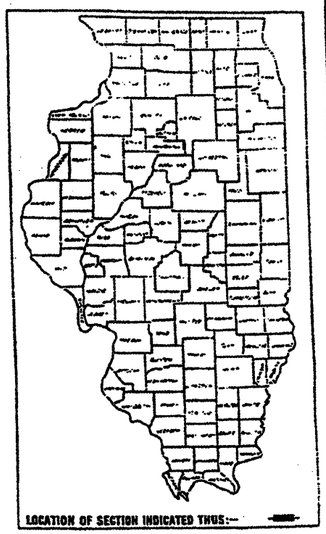
FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	54
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

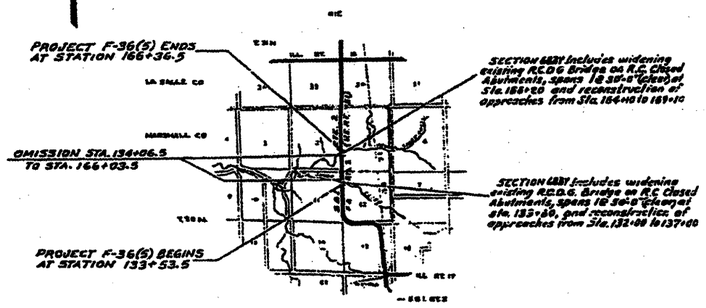
PLANS FOR PROPOSED STATE BOND ISSUE HIGHWAY

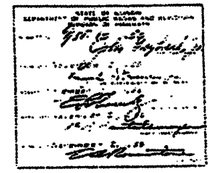
SCALES

S.B.I. ROUTE 2 SEC. 68BY
MARSHALL COUNTY
PROJECT F-36(5)



LOCATION OF SECTION INDICATED THUS:—





DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
APPROVED
DISTRICT ENGINEER — DATE

NET LENGTH OF SECTION 68BY = 86 FT. = 0.0163 MILES

MARSHALL COUNTY SECTION 68 BY S.B.I. ROUTE 2

FOR INFORMATION ONLY

EXISTING BRIDGE PLANS

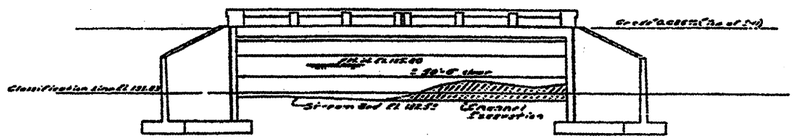
CONTRACT NO. 68573

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	53
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

E.N. : Top of S.W. Wing Wall
Elevation 133.80

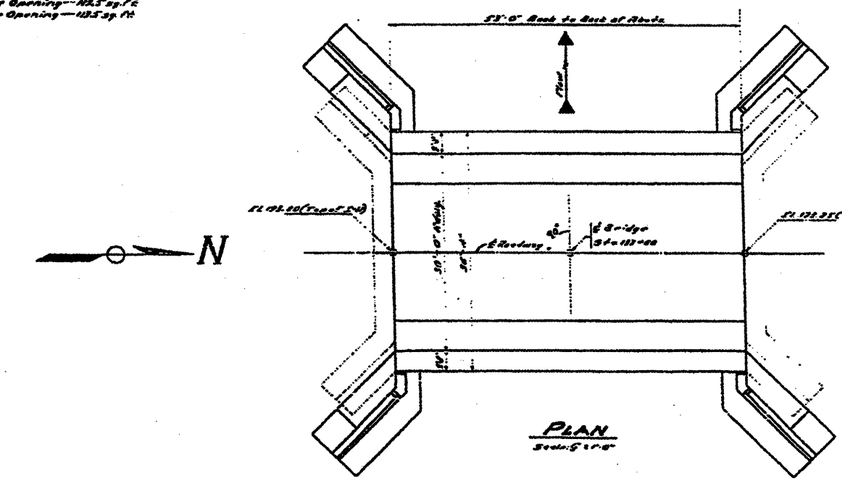
Existing Structure. RC Deck Girder
1 Span @ 39'-0" 31.0' Roadway
RC Abuts.-To be widened
Handrail and other concrete to be
removed as shown on plans.



ELEVATION
Scale 1/8"=1'-0"

WATERWAY INFORMATION

Drainage Area ——— 11,000 Acres
Character ——— Loess, Clay, Cultivated
Present Bridge Opening — 113.5 sq. ft.
Proposed Bridge Opening — 113.5 sq. ft.



PLAN
Scale 1/8"=1'-0"

GENERAL NOTES

Class A Concrete shall be used throughout except as noted. Standard Concrete shall be used in earth and paving.
The Concrete Girder and Floor Slab shall be poured in one continuous operation between joints on either side of end diaphragms except as noted. Joints shall be located as shown on plans.
The Floor Slab shall be finished to correspondence upon the approach pavements of Sec. 151 of the Standard Specs.
The Handrail shall not be poured until after the falsework has been removed.
The contract unit price for Excavation Rock, shall include Trenching, drilling holes, and placing Expansion Grout.
The back of proposed reinforced concrete walls, or from toe of slope, or toe of wall, to face of parapet shall be sloped 1" per foot.
Bank Filling behind abutments shall be in accordance with Art. 204.07 of the Standard Specifications.
No piles under the existing structure.
Contractor shall excavate Channel as shown between limits of right of way.

Boring No. 1
Sta. 131+24
39'-6" ℄

134.0			
132.5			Stiff Black Silty Clay Reworked
	6	4J	
130.0	12	4J	Hard Red & Blue Mottled Gravelly Clay
	18	4J	
127.5	24	4J	
	UF	4J	
125.0	30	4J	Hard Red & Brown Mottled Gravelly Clay
	36	4J	
122.5	42	4J	
	48	4J	Hard Red & Grey Mottled Clay
120.0	54	4J	
	60	4J	
117.5	66	4J	Soft Brown & Grey Shale
115.0	72	4J	

Boring No. 2
Sta. 131+73
39'-6" ℄

131.7			Stiff Black Silty Clay
130.0	6	4J	Very Stiff Dark Brown Mottled Clay
	12	4J	Hard Red Mottled Clay
127.5	18	4J	Hard Red Mottled Stoney Clay
	24	4J	
125.0	30	4J	Hard Olive Red Brown Clay
	36	4J	
122.5	42	4J	Hard Red Gray Laminated Clay & Silt
	48	4J	Hard Red Gray Laminated Clay-Silt & Numerous Clay Shale Concretion Zones
120.0	54	4J	
	60	4J	
117.5	66	4J	Soft Gray Shale
115.0	72	4J	

STATION 133+80
BUILT 195-BY
STATE OF ILLINOIS
SAFETY REINFORCED
CONCRETE GIRDER
LOADING H-15

NAME PLATE DATA
See Standard 218

STRESSES

f_c = 1200 lbs. per sq. in. Bend
f_c = 1400 lbs. per sq. in. Shear
f_c = 180 lbs. per sq. in. Bond
n = 10
Loading H 15-44

TOTAL BILL OF MATERIAL

ITEM		SUPER	SUB	TOTAL
Class X Concrete	Cu. Yds.	358	318	1361
Handrail Concrete	Cu. Yds.	22		22
Reinforcement Bars	Lbs.	31,140	37,010	141,150
Masonry Removal	Cu. Yds.	180	48	228
Excavation Rock	Cu. Yds.	12	48	60
Name Plates	Ea.	1		1
Class "A" Superstructure Concrete	Cu. Yds.			358
Class "B" Piers for Structure	Cu. Yds.			318
Bituminous Surface for Class 2A Floors				6
Structural Waterproofing (Primer Coat)	Gals.			1
Channel Excavation	Cu. Yds.			286

Note: 14" Slope wall fill of combined type of breaking 2000 lb. Manhattan and 350 lbs. Broken Stone
Total Miscellaneous quantities shown on plans are as follows:

DESIGNED	F. M. Abbott
CHECKED	W. H. Sommers
DRAWN	E.W.L. & C. Pettey
CHECKED	J.C.H.S.

July 23 1933
DIRECTOR W. H. Vanderveer
PASSED E. A. Murphy
APPROVED F. M. Baker

GENERAL PLAN & ELEVATION
S.B.I. RT. 2 SECTION 68 BY
MARSHALL COUNTY
STATION 133+80

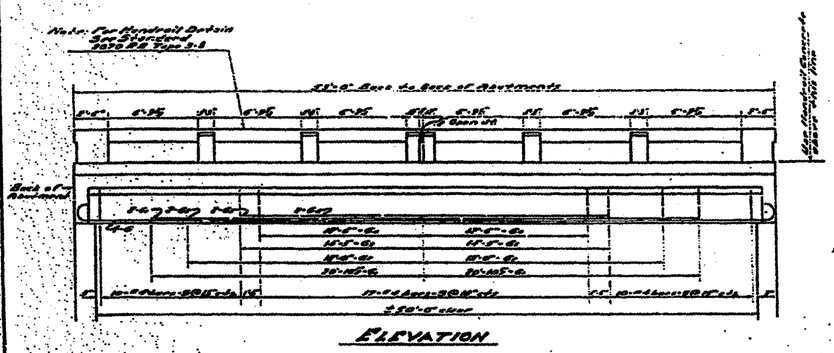
FOR INFORMATION ONLY

EXISTING BRIDGE PLANS

CONTRACT NO. 68573

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	56
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

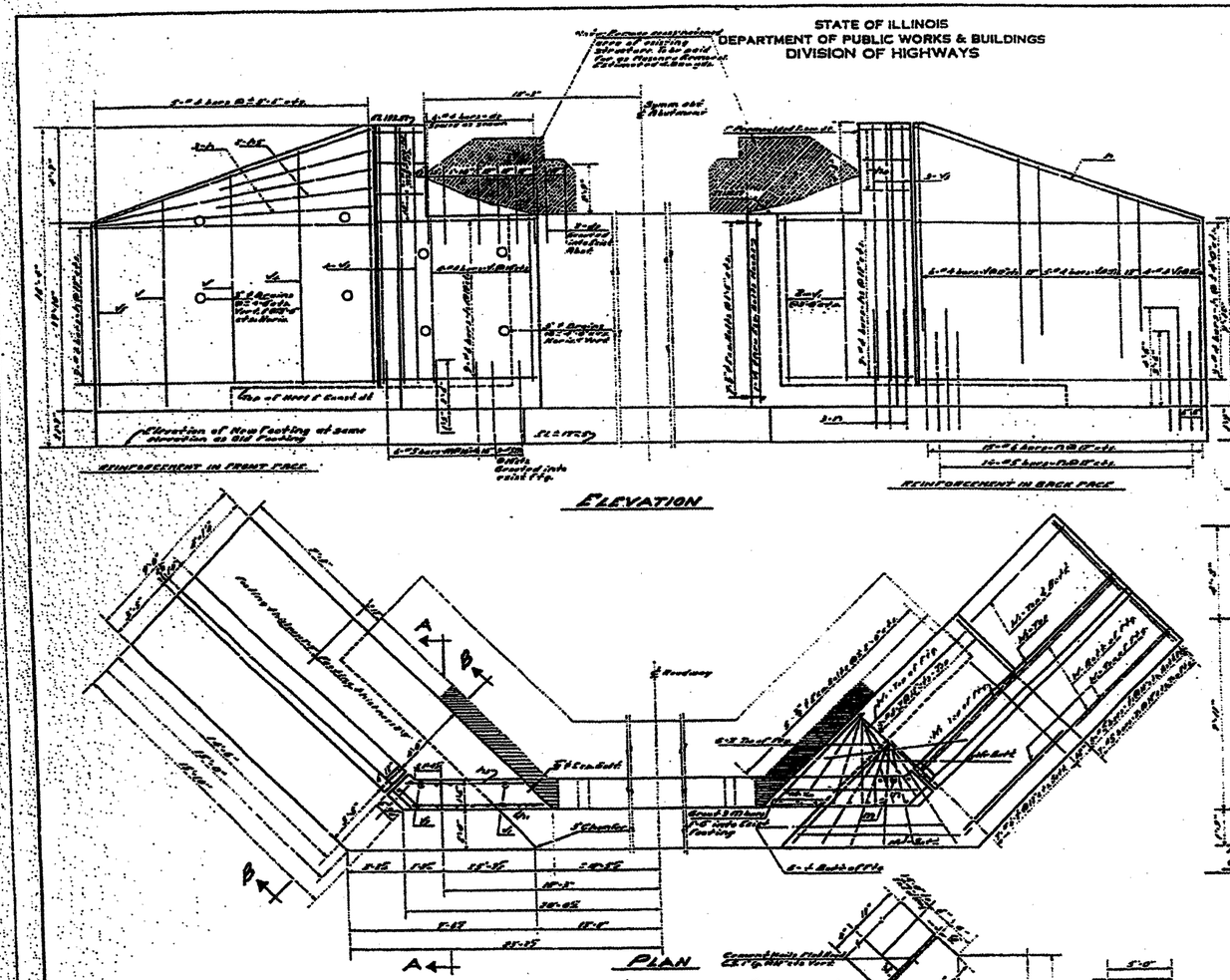
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS


Back of Abutment
Back of Abutment
Bench Mark Elevation 100.00
Span 3A
Span 3A
Span 3A

CONTRACT NO. 68573

FAS RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	27	21
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS


Elevation of New Footing at same elevation as Old Footing
REINFORCEMENT IN FRONT FACE
REINFORCEMENT IN BRICK FACE
Top of Wall & Coping
Backfill
Sand Backfill
Gravel Backfill
Concrete Backfill
Rolling Embankment
Existing Embankment
Existing Abutment
Existing Wing
Existing Bridge Seat
Existing Backwall
Existing Pedestal
Existing Footing
Existing Bridge Seat Elev.
Existing Backwall Elev.
Existing Pedestal Elev.
Existing Footing Elev.
Existing Bridge Seat Plan
Existing Backwall Plan
Existing Pedestal Plan
Existing Footing Plan
Existing Wing Plan
Existing Abutment Plan
Existing Bridge Seat Section
Existing Backwall Section
Existing Pedestal Section
Existing Footing Section
Existing Wing Section
Existing Abutment Section
Existing Bridge Seat Detail
Existing Backwall Detail
Existing Pedestal Detail
Existing Footing Detail
Existing Wing Detail
Existing Abutment Detail
Existing Bridge Seat Elevation
Existing Backwall Elevation
Existing Pedestal Elevation
Existing Footing Elevation
Existing Wing Elevation
Existing Abutment Elevation

CONTRACT NO. 68573

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	58
STA. 161+00.00		TO STA. 163+95.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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

SCALES
HORIZ. 1"=10'
VERT. 1"=5'

163+95.00 PE RT — EX 4" GAS — EX 18" DIA. CMP. CULVERT — EX ROW — POL 646.32 — 4.0% — EX. SPRUCE — MOWEN WIRE FENCE TO BE REMOVED AND RE-ERECTED — MATCH EX. DITCH ELEVATIONS — RIGHT TOPSOIL CUT=0.0 OTHER CUT=0.0 TOPSOIL FILL=0.0 OTHER FILL=0.0 — LEFT TOPSOIL CUT=36.4 OTHER CUT=6.3 SQ. FT. TOPSOIL FILL=19.8 OTHER FILL=112.8

163+71.00 — EX 4" GAS — EX ROW — POL 646.62 — MOWEN WIRE FENCE TO BE REMOVED AND RE-ERECTED — RIGHT TOPSOIL CUT=0.0 OTHER CUT=0.0 TOPSOIL FILL=0.0 OTHER FILL=65.0 — LEFT TOPSOIL CUT=0.0 OTHER CUT=0.0 TOPSOIL FILL=0.0 OTHER FILL=0.0

163+00.00 — EX 4" GAS — EX ROW — POL 647.25 — RIGHT TOPSOIL CUT=0.0 OTHER CUT=0.0 TOPSOIL FILL=0.0 OTHER FILL=65.0 — LEFT TOPSOIL CUT=0.0 OTHER CUT=0.0 TOPSOIL FILL=0.0 OTHER FILL=0.0

162+00.00 — EX 4" GAS — EX ROW — EX FENCE

161+00.00 — EX 4" GAS — EX ROW — EX FENCE

655 650 645 640

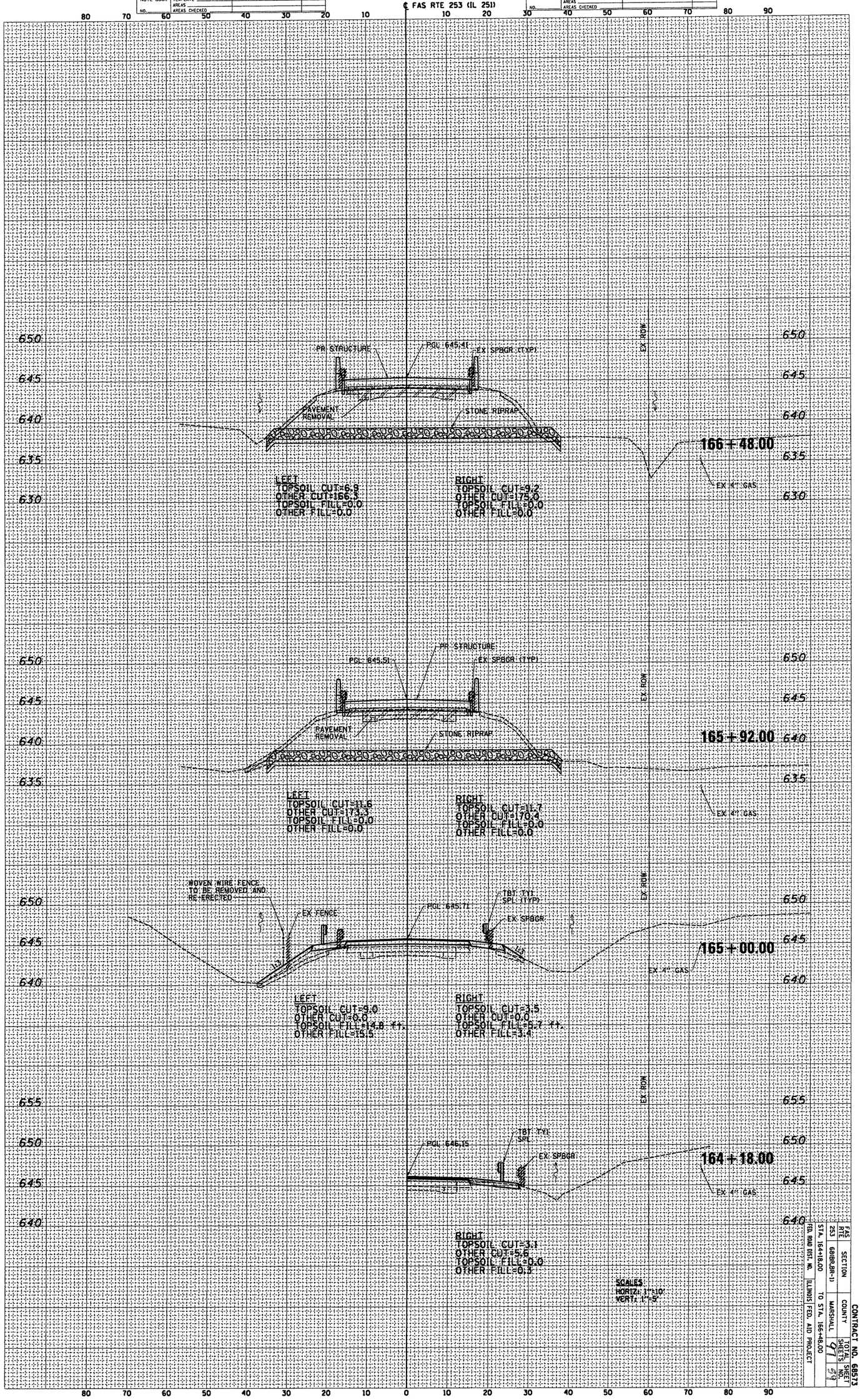
10 20 30 40 50 60 70 80 90

FAS RTE 253 (IL 251)

FAS RTE 253 (IL 251) CROSS SECTIONS
STA 161+00.00 TO STA 163+95.00

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

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



SCALES
HORTZ: 1"=10'
VERTZ: 1"=5'

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	94

STA. 164+18.00 TO STA. 166+48.00 | ILLINOIS | FED. AID PROJECT

FED. RDWY DIST. NO.

CONTRACT NO. 68573

FAS RTE 253 (IL 251) CROSS SECTIONS
STA 164+18.00 TO STA 166+48.00

CONTRACT NO. 68573

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	60
STA. 167+00.00		TO STA. 169+94.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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

SCALES
HORIZ. 1"=10'
VERT. 1"=5'

℄ FAS RTE 253 (IL 251)

EX ROW

EX 4" GAS

169+94.00

PGL 646.46

RIGHT
TOPSOIL CUT=0.0
OTHER CUT=0.0
TOPSOIL FILL=0.0
OTHER FILL=0.0

LEFT
TOPSOIL CUT=0.0
OTHER CUT=0.0
TOPSOIL FILL=0.0
OTHER FILL=0.30

WOVEN WIRE FENCE TO BE REMOVED AND RE-ERECTED

169+00.00

TBT (TYP.)
SPL (TYP.)
EX. SPBGR (TYP.)

PGL 645.60

RIGHT
TOPSOIL CUT=5.8
OTHER CUT=2.0
TOPSOIL FILL=8.0 ft.
OTHER FILL=5.2

LEFT
TOPSOIL CUT=5.5
OTHER CUT=4.0
TOPSOIL FILL=8.0 ft.
OTHER FILL=3.0

EX. FENCE

WOVEN WIRE FENCE TO BE REMOVED AND RE-ERECTED

168+00.00

SPBGR TY. A (TYP.)
EX. SPBGR (TYP.)

PGL 645.34

RIGHT
TOPSOIL CUT=6.5
OTHER CUT=0.3
TOPSOIL FILL=12.3 ft.
OTHER FILL=7.5

LEFT
TOPSOIL CUT=5.0
OTHER CUT=0.0
TOPSOIL FILL=9.3 ft.
OTHER FILL=6.9

167+00.00

FAS RTE 253 (IL 251) CROSS SECTIONS
STA 167+00.00 TO STA 169+94.00

CONTRACT NO. 68573

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	65
STA. 170+15.00		TO STA. 171+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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

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

FAS RTE 253 (IL 251)

EX. ROW
EX. 4" GAS
EX. FENCE
EX. 30" DIA. CMP CULVERT
171+00.00
170+37.00
170+15.00
FE RT

FAS RTE 253 (IL 251) CROSS SECTIONS

STA. 170+15.00 TO STA. 171+00.00

CONTRACT NO. 68573

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL 251	68 BR-1	MARSHALL	97	62

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROPOSED
HIGHWAY PLANS

F.A.S. 253 (IL 251)
SECTION 68 BR-1
PROJECT
MARSHALL COUNTY
BRIDGE REMOVAL AND REPLACEMENT AND APPROACH ROADWAY RECONSTRUCTION
C-94-047-06

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
62	COVER SHEET
63	SUMMARY OF QUANTITIES
64	TYPICAL SECTIONS
65	SCHEDULE OF QUANTITIES
66	ALIGNMENT, TIES & BENCHMARKS
67-68	PLAN & PROFILE
69	TEMPORARY EROSION CONTROL PLAN
70	PAVEMENT MARKING PLAN
71-86	STRUCTURAL PLANS
87-90	ROADWAY DETAILS
91-93	CROSS-SECTIONS

TRAFFIC DATA

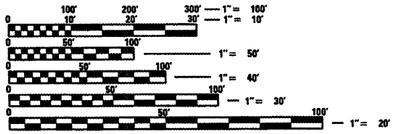
2008 ADT=900
SU= 3.8% MU= 1.3%
2028 ADT=1,350

POSTED SPEED LIMIT

55 M.P.H.

DESIGN DESIGNATION

162(28) RURAL MAJOR COLLECTOR

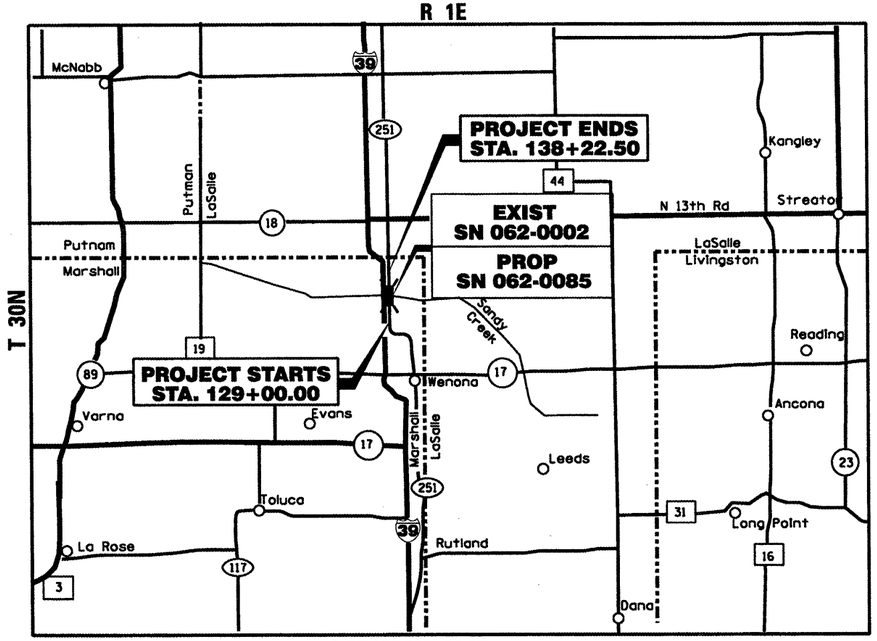


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

CONTRACT NO. 68573
CAT. NO. 033201-00D

R 1E



LOCATION MAP

SCALE: 0 6000' 12000' — 1"=6000'

TOTAL LENGTH OF PROJECT = 900'

D-94-040-06



LOCATION OF SECTION INDICATED THUS:-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED _____ 20 _____

_____
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

_____ 20 _____

_____
ENGINEER OF DESIGN AND ENVIRONMENT

_____ 20 _____

_____
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

OLUFEMI A. OLADEINDE
062-053701
REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

Signed: Olufemi A. Oladeinde 10/14/2008
Date

OLUFEMI A. OLADEINDE
LICENSE EXPIRES 11-30-2009

STRUCTURE DESIGNS, INCORPORATED
ARCHITECTS & ENGINEERS
PH:(773) 838-1780 • www.structuredesignsinc.com

CONSULTANT LIASON ENGR: MR. CHRIS MAUSHARD (309) 671-3464 PROJECT ENGR.: RICH DOTSON (309) 671-3455

CONTRACT NO. 68573

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68 BR-1	MARSHALL	97	63
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES–FOR INFORMATIONAL PURPOSE ONLY

S.P.	PAY ITEM CODE NO.	PAY ITEM DESCRIPTION	UNIT	TOTAL	ROADWAY RESURFACING	BRIDGE
					I000-2A	X071-2A
	20200100	EARTH EXCAVATION	CU YD	1,070	1,070	
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	92	92	
	20300100	CHANNEL EXCAVATION	CU YD	365		365
	20400800	FURNISHED EXCAVATION	CU YD	170	170	
	20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	97		97
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	5,081	5,081	
	25000210	SEEDING, CLASS 2A	ACRE	1	1	
	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	95	95	
	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	95	95	
	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	95	95	
	25100115	MULCH, METHOD 2	ACRE	1	1	
	25100630	EROSION CONTROL BLANKET	SQ YD	5,402	5,402	
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	112	112	
	28000300	TEMPORARY DITCH CHECKS	EACH	9	9	
	28000400	PERIMETER EROSION BARRIER	FOOT	3,574	3,574	
	28100807	STONE DUMPED RIPRAP, CLASS A4	TON	820		820
	28200200	FILTER FABRIC	SQ YD	891		891
	35600720	HOT-MIX ASPHALT BASE COURSE WIDENING, 11"	SQ YD	254	254	
	40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	0.2	0.2	
	40600300	AGGREGATE (PRIME COAT)	TON	1	1	
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	517	517	
	40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	1,454	1,454	
	40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	233	233	
	42001165	BRIDGE APPROACH PAVEMENT	SQ YD	222		222
	42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	40		40
	44000100	PAVEMENT REMOVAL	SQ YD	300	300	
	48101200	AGGREGATE SHOULDERS, TYPE B	TON	9	9	
	50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1		1
	50200100	STRUCTURE EXCAVATION	CU YD	335		335
	50300100	FLOOR DRAINS	EACH	8		8
	50300225	CONCRETE STRUCTURES	CU YD	30.4		30.4
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	111.8		111.8
	50300260	BRIDGE DECK GROOVING	SQ YD	257		257
	50300280	CONCRETE ENCASEMENT	CU YD	4.8		4.8
	50300300	PROTECTIVE COAT	SQ YD	339		339
	50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1
	50500505	STUD SHEAR CONNECTORS	EACH	1,026		1,026
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	25,580		25,580
	50800515	BAR SPLICERS	EACH	64		64
	51201600	FURNISHING STEEL PILES HP12X53	FOOT	336		336
	51202305	DRIVING PILES	FOOT	336		336
	51203600	TEST PILE STEEL HP12X53	EACH	2		2
	51204650	PILE SHOES	EACH	14		14
	51500100	NAME PLATES	EACH	1		1
	52100520	ANCHOR BOLTS, 1"	EACH	24		24
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	66		66
	60109580	PIPE UNDERDRAINS FOR STRUCTURE 4"	FOOT	134		134
	63000000	STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	1,024	1,024	
	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4	
	63100169	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (FLARED)	EACH	4	4	
	63200310	GUARDRAIL REMOVAL	FOOT	1,329	1,329	
	66502400	WOVEN WIRE FENCE TO BE REMOVED AND RE-ERECTED	FOOT	904	904	
	66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	1		1
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3.5	3.5	
	67100100	MOBILIZATION	L SUM	0.5	0.5	
	70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	0.5	0.5	
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	15		15
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	160	160	
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	80	80	
	78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	1,823	1,823	
	78005130	EPOXY PAVEMENT MARKING - LINE 6"	FOOT	225	225	
	78200200	BIDIRECTIONAL PRISMATIC BARRIER REFLECTOR	EACH	33	33	
	78200410	GUARDRAIL MARKERS, TYPE A	EACH	4	4	
	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
	X0301512	GUARDRAIL AGGREGATE EROSION CONTROL	TON	399	399	
	X7011005	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	L SUM	0.5	0.5	
	X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	14	14	
	Z0013798	CONSTRUCTION LAYOUT	L SUM	0.5	0.5	
	Z0076600	TRAINEES	HOUR	250		250

REVISIONS	
NAME	DATE
C. MAUSHARD	9/5/08

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

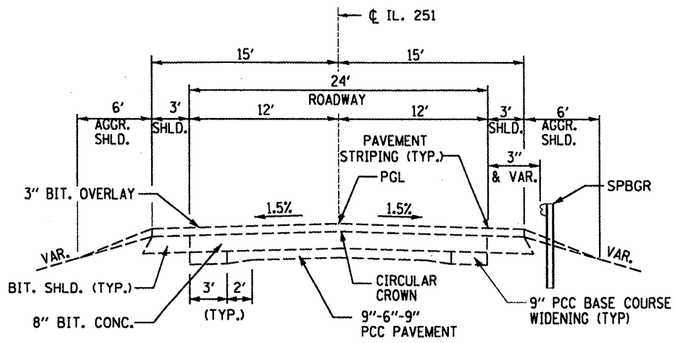
ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085

DESIGNED BY: A.G. DRAWN BY: T.C.S.
DATE: 05/02/2008 CHECKED BY: O.A.O.

c:projects-il251sandy-0620002summq.dgn

CONTRACT NO. 68573

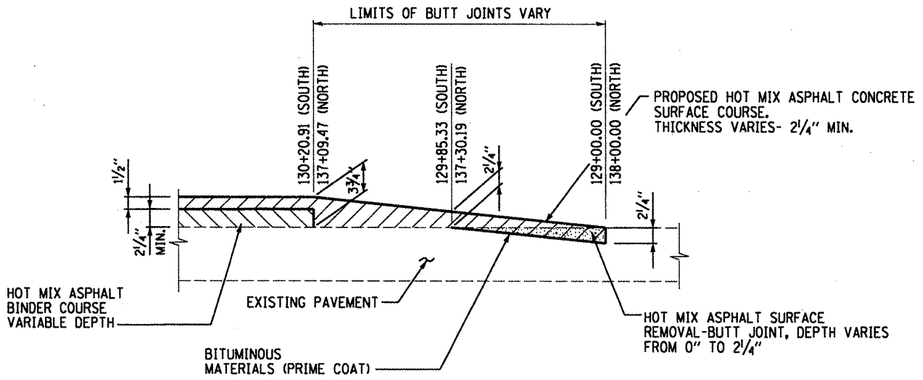
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68 BR-1	MARSHALL	97	64
STA. 129+00 TO STA. 138+00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



WITHOUT GUARDRAIL WITH GUARDRAIL

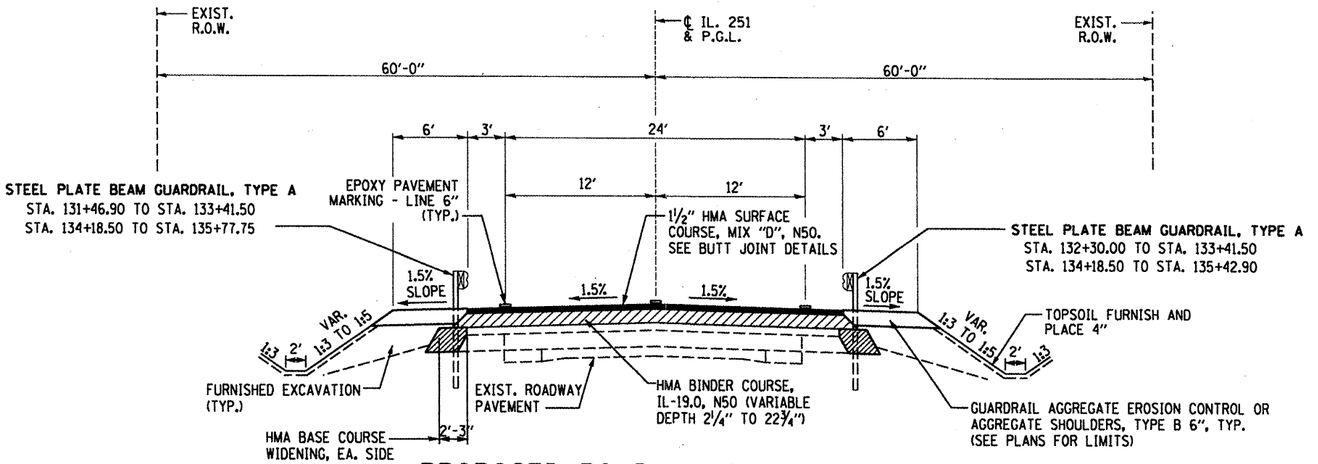
EXISTING ROADWAY TYPICAL SECTION

IL ROUTE 251
STA. 129+00 TO 138+00
BRIDGE OMISSION STA. 133+53.50 TO 134+06.50



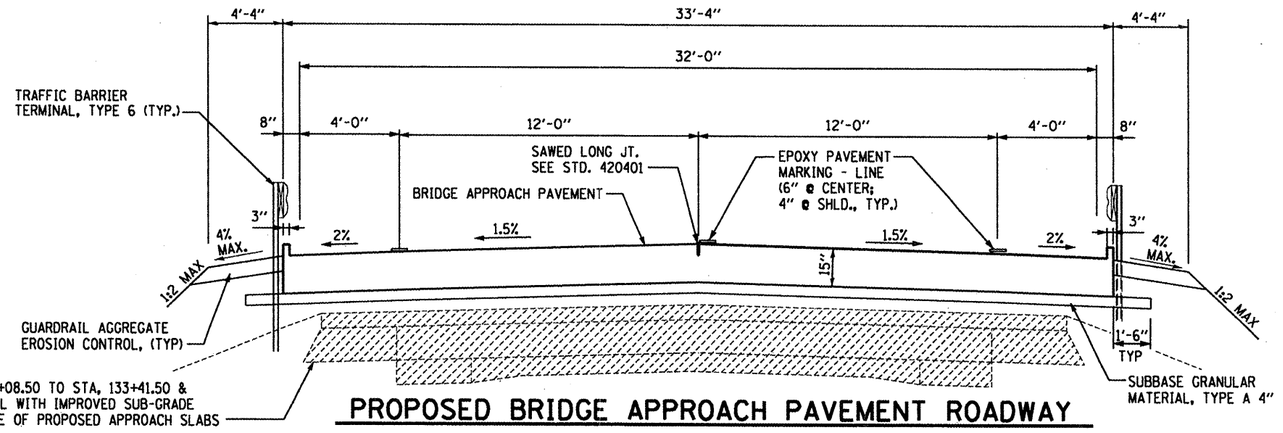
HOT MIX ASPHALT BUTT-JOINT DETAIL

NO SCALE



PROPOSED ROADWAY TYPICAL SECTION

IL ROUTE 251
- STA. 129+00 TO 133+05.50
- STA. 134+54.50 TO 138+00
- SEE ROADWAY DETAILS SHEET FOR PAVEMENT CONNECTOR LOCATIONS



PROPOSED BRIDGE APPROACH PAVEMENT ROADWAY TYPICAL SECTION

IL ROUTE 251
STA. 133+11.50 TO 133+41.50
BRIDGE OMISSION
STA. 134+18.50 TO 134+48.50

REVISIONS	
NAME	DATE

STRUCTURE DESIGNS, INCORPORATED
ARCHITECTS & ENGINEERS
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ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085

DESIGNED BY: A.G. DRAWN BY: T.C.S.
DATE: 05/02/2008 CHECKED BY: O.A.O.

CONTRACT NO. 68573

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	6B BR-1	MARSHALL	97	65
STA. 129+00 TO STA. 138+00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

EARTH WORK SCHEDULE

LOCATION	**	REMOVAL & DISPOSAL OF UNSUITABLE MATERIALS	SUITABLE EARTH EXCAVATION	SUITABLE EARTH EXC. ADJ. FOR SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)	TOPSOIL-FURNISH & PLACE 4"
	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	SQ YD
NORTHWEST QUADRANT		20.0	210.4	158	208	-50	1406
SOUTHWEST QUADRANT		24.4	190.2	141	271	-130	1440
NORTHEAST QUADRANT		20.5	157.1	120	285	-165	1055
SOUTHEAST QUADRANT		27.4	178.8	134	209	-75	1180
STRUCTURE EXCAVATION	335			250		+250	
CHANNEL EXCAVATION	365			0			
TOTALS		92	737	803	973	-170 *	5,081

NOTES

1. EXCAVATION USED AS EMBANKMENT = SUITABLE EARTH EXCAVATION x 0.75
2. TOPSOIL EXCAVATION AND PLACEMENT NOT INCLUDED IN THE ABOVE NUMBERS
- * TO BE PAID FOR AS FURNISHED EXCAVATION
- ** QUANTITIES PAID FOR AS STRUCTURE & CHANNEL EXCAVATIONS RESPECTIVELY

EROSION CONTROL SCHEDULE

LOCATION	EROSION CONTROL BLANKET	TEMPORARY EROSION CONTROL SEEDING	TEMPORARY DITCH CHECKS	PERIMETER EROSION BARRIER	GUARDRAIL AGGREGATE EROSION CONTROL
	SQ YD	POUND	EACH	FOOT	TON
NORTHWEST QUADRANT	1079.2	22.3	3	796.1	112.4
SOUTHWEST QUADRANT	1290.9	26.7	2	982.7	72.2
NORTHEAST QUADRANT	1455.1	30.1	3	805.0	98.3
SOUTHEAST QUADRANT	1577.4	32.6	1	989.9	116.5
TOTALS	5,402	112	9	3,574	399

MISCELLANEOUS PAY ITEMS SCHEDULE

LOCATION	DESCRIPTION	UNIT	QUANTITY
129+00.00 TO 138+22.50	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2
129+00.00 TO 138+22.50	MOBILIZATION	L SUM	0.5
129+00.00 TO 138+22.50	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	0.5
129+00.00 TO 138+22.50	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	0.5
129+00.00 TO 138+22.50	TRAFFIC CONTROL SURVEILLANCE	CAL DA	
129+00.00 TO 138+22.50	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	L SUM	0.5
129+00.00 TO 138+22.50	CHANGEABLE MESSAGE SIGN	CAL DA	14
129+00.00 TO 138+22.50	CONSTRUCTION LAYOUT	L SUM	0.5

BUTT JOINT SCHEDULE

LOCATION	HMA SURFACE REMOVAL - BUTT JOINT	BITUMINOUS MATERIAL (PRIME COAT)	AGGREGATE (PRIME COAT)
	SQ YD	TON	TON
NORTH END	233	0.1	1.43
SOUTH END	284	0.12	0.57
TOTALS	517	0.2	1.0

AGGREGATE SHOULDERS, TYPE B SCHEDULE

LOCATION	TON
NORTHTHWEST QUADRANT	0
SOUTHTHWEST QUADRANT	6.30
NORTHTHEAST QUADRANT	1.35
SOUTHTHEAST QUADRANT	1.35
TOTALS	9.0

GUARDRAIL SCHEDULE

LOCATION	STEEL PLATE BEAM GUARDRAIL, TYPE A	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	TRAFFIC BARRIER TERMINAL, TYPE 6	GUARDRAIL MARKERS TYPE A	BIDIRECTIONAL PRISMATIC BARRIER REFLECTOR	TERMINAL MARKER - DIRECT APPLIED EACH
	FOOT	EACH	EACH	EACH	EACH	
NORTHWEST QUADRANT	300.9	1	1	1	9	1
SOUTHWEST QUADRANT	160.9	1	1	1	8	1
NORTHEAST QUADRANT	250.9	1	1	1	8	1
SOUTHEAST QUADRANT	310.9	1	1	1	8	1
TOTALS	1,024	4	4	4	33	4

SEEDING SCHEDULE

LOCATION	SEEDING, CLASS 2A	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	MULCH, METHOD 2
	ACRE	POUND	POUND	POUND	ACRE
NORTHWEST QUADRANT	0.29	26	26	26	0.29
SOUTHWEST QUADRANT	0.30	27	27	27	0.30
NORTHEAST QUADRANT	0.22	20	20	20	0.22
SOUTHEAST QUADRANT	0.24	22	22	22	0.24
TOTALS	1.0	95	95	95	1.0

PAVEMENT MARKING SCHEDULE

LOCATION	DESCRIPTION	EPOXY PAVEMENT MARKING -LINE 4"	EPOXY PAVEMENT MARKING -LINE 6"
		FOOT	FOOT
STA. 129+00.00 TO 138+22.50 (LEFT)	SOLID WHITE EDGE LINE		922.5
STA. 129+00.00 TO 138+00.00 (CENTER)	SKIP-DASH YELLOW CENTERLINE	225	
STA. 129+00.00 TO 138+00.00 (RIGHT)	SOLID WHITE EDGE LINE		900
TOTALS		225	1,823

WORK ZONE PAVEMENT MARKING SCHEDULE

LOCATION	DESCRIPTION	SHORT-TERM PAVEMENT MARKING	WORK ZONE PAVEMENT MARKING REMOVAL
		FOOT	SQ FT
LEFT SHOULDER	6" X 4'-0" STRIPES @ 40' SPACING	36	18
CENTERLINE	6" X 4'-0" DIAGONAL STRIPES @ 100' SPACING	88	44
RIGHT SHOULDER	6" X 4'-0" STRIPES @ 40' SPACING	36	18
TOTALS		160	80

HMA BASE COURSE WIDENING, 11" SCHEDULE

LOCATION	SQ YD
NORTHWEST QUADRANT	62.1
SOUTHWEST QUADRANT	64.6
NORTHEAST QUADRANT	62.1
SOUTHEAST QUADRANT	64.6
TOTALS	254

BRIDGE APPROACH PAVEMENT SCHEDULE

LOCATION	BRIDGE APPROACH PAVEMENT	CONNECTOR (FLEXIBLE)
	SQ YD	SQ YD
STRUCTURE NO. 062-0085-NORTH APPROACH	111	20
STRUCTURE NO. 062-0085-SOUTH APPROACH	111	20
TOTALS	222	40

HMA PAVEMENT SCHEDULE

LOCATION	HMA SURFACE COURSE, MIX D, N50	HMA BINDER COURSE, IL-19.0, N50
	TON	TON
SOUTH OF BRIDGE	125.4	794.3
NORTH OF BRIDGE	107.6	659.2
TOTALS	233	1,454

GUARDRAIL REMOVAL SCHEDULE

LOCATION	FOOT
STA. 131+04.03 TO STA. 137+68.61 (LEFT)	665
STA. 129+91.76 TO STA. 136+59.91 (RIGHT)	664
TOTALS	1,329

PAVEMENT REMOVAL SCHEDULE

LOCATION	SQ YD
133+08.50 TO 133+53.50	150
134+06.50 TO 134+51.50	150
TOTALS	300

WOVEN WIRE FENCE TO BE REMOVED AND RE-ERECTED SCHEDULE

LOCATION	FOOT
129+00.00 TO 138+00.00 (LEFT)	904

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

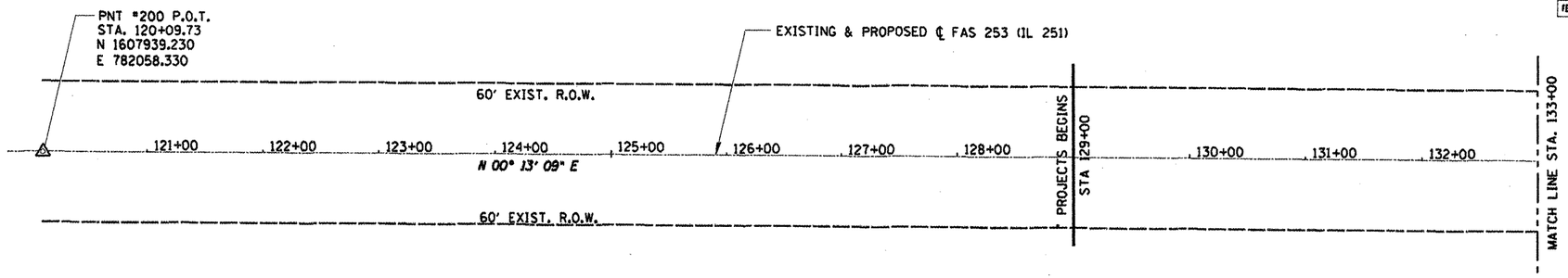
ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 6B BR-1
MARSHALL COUNTY
STA. 133+00.00 S.N. 062-0085

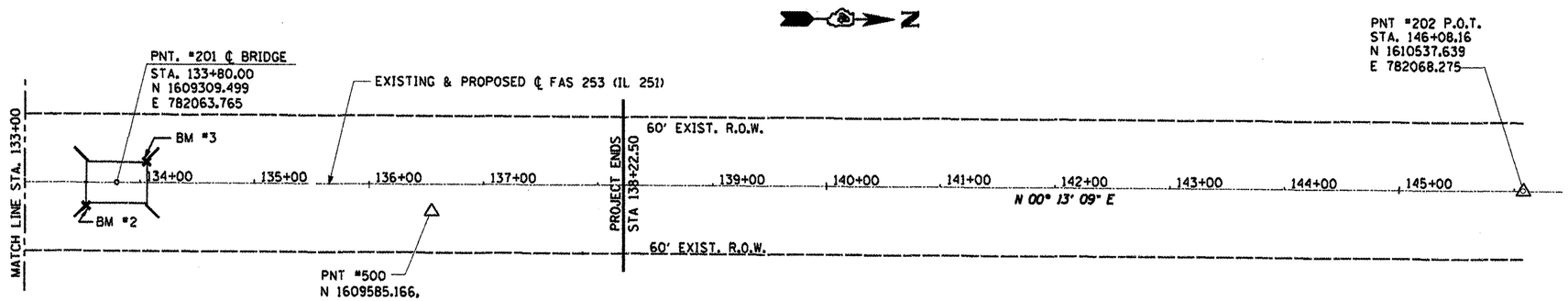
DESIGNED BY: A.G. DRAWN BY: T.C.S.
DATE: 05/02/2008 CHECKED BY: O.A.O.

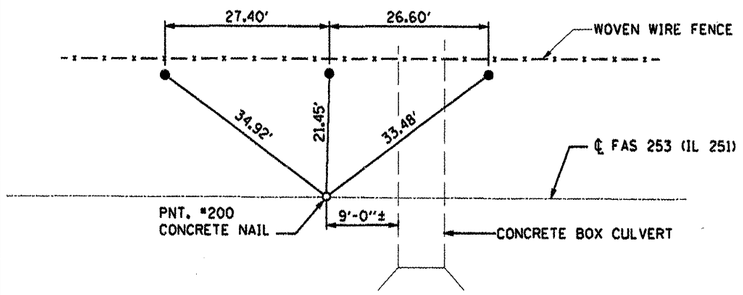
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CONTRACT NO. 68573

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68 BR-1	MARSHALL	97	66
STA. 129+00 TO STA. 138+00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

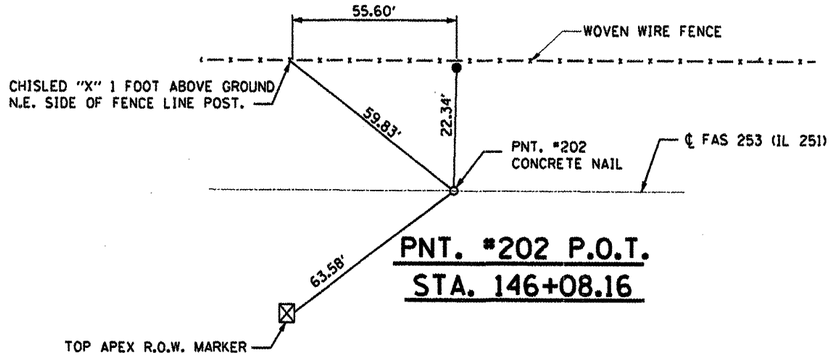






● DENOTES 5/8" Ø REBAR W/CAP

PNT. #200 P.O.T.
STA. 120+09.73



PNT. #202 P.O.T.
STA. 146+08.16

PNT #500	80d SPIKE IN GROUND STA. 136+55.76, 23.03' RT. ELEV. 640.55
BM #2	CHISELED "□" TOP OF S.E. ABUTMENT CORNER STA. 133+53.70, 20.96' RT. ELEV. 641.50
BM #3	CHISELED "□" TOP OF N.W. ABUTMENT CORNER STA. 134+06.25, 18.20' LT. ELEV. 641.63

REVISIONS	
NAME	DATE

STRUCTURE DESIGNS, INCORPORATED
ARCHITECTS & ENGINEERS
PH: (773) 338-1780 • www.structuredesigninc.com

ILLINOIS DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES & BENCHMARKS
ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085

DESIGNED BY: A.G. DRAWN BY: T.C.S.
DATE: 05/02/2008 CHECKED BY: O.A.O.

CONTRACT NO. 68573

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	6B BR-1	MARSHALL	97	67
STA. 129+00 TO STA. 138+00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLAN

EXIST. R.O.W.
PROJECT LIMITS STA. 129+00.00
EXIST. R.O.W.
60'-0"
60'-0"
℄ EXISTING DITCH
BEGIN OVERLAY
HOT-MIX-ASPHALT SURFACE REMOVAL (BUTT-JOINT)
PROPOSED HMA RESURFACING (SEE TYPICAL SECTION SHEETS)
℄ PROPOSED DITCH
℄ EXISTING DITCH
128+00
129+00
130+00
EXISTING & PROPOSED ℄ IL 251
131+00
132+00
+91.00
AGG. SHLDS., TY B 6"
C.R. AGG. EROSION CTRL
+00.00
+20.81
+50.00
+41.00
AGG. SHLDS., TY B 6"
C.R. AGG. EROSION CTRL
TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) - FLARED, TYP.
SHOULDER WIDENING TRANSITION FOR FLARED TERMINAL STD. 630301
CONSTRUCTION LIMITS
STEEL PLATE BEAM GUARDRAIL TYPE "A"
GUARDRAIL REMOVAL STA. 131+04.03 TO STA. 137+68.61
12'-0"
12'-0"
3'-0" HMA SHLD.
6'-0"
HMA BASE COURSE WIDENING, 11" (EA. SIDE) STA. 130+50.00 TO 133+08.50
GUARDRAIL REMOVAL STA. 129+91.74 TO STA. 136+55.91
3'-0" HMA SHLD.
6'-0"
STEEL PLATE BEAM GUARDRAIL TYPE "A"
℄ PROPOSED DITCH
℄ EXISTING DITCH
CONSTRUCTION LIMITS
SHOULDER WIDENING TRANSITION FOR FLARED TERMINAL STD. 630301
TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) - FLARED
MATCH LINE STA. 133+00.00
N

PLAN
SCALE : 1 INCH = 20 FEET
0 20 40 60 80 100

PROFILE

EX = 0.25'
K = 198
200.00' V.C.

RESURFACING LIMITS
EXISTING MEETS PROPOSED ELEVATION

VPC = 00.00
EL. 641.07

VPT = 00.00
EL. 641.70

VPI STA. 130+00.00
EL. 640.98

VPC = 99.00
EL. 642.93

-0.19%
-0.82%
0.8%
1.8%
0.6%
0.4%
0.8%
0.4%
0.4%

PROPOSED PROFILE GRADE LINE (PGL)
EXISTING PROFILE GRADE LINE (PGL)
EXIST. LT. DITCH
LT. DITCH
EXIST. RT. DITCH
RT. DITCH

637.7
635.9
635.6
634.7
636.9
636.3
636.1
635.7
635.3
633.6

	128+00	128+50	129+00	129+50	130+00	130+50	131+00	131+50	132+00	132+50	133+00
(EXISTING)	641.52	641.41	641.29	641.18	641.07	641.02	640.97	640.93	640.88	640.90	640.93
(PROPOSED)					641.07	641.04	641.04	641.01	641.14	641.23	641.36
	640.95	640.98	641.01	641.04	641.08	641.11	641.16	641.22	641.27	641.33	
	641.51	641.70	641.91	642.11	642.32	642.52	642.73	642.93	643.12	643.27	

644
642
640
638
636
634
632

PROFILE

FAS 253 (IL251) - STATIONS 129+00 TO 133+00

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CONTRACT NO. 68573

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	6B BR-1	MARSHALL	91	68
STA. 129+00 TO STA. 138+00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BRIDGE APPROACH PAVEMENT
TRAFFIC BARRIER TERMINAL, TYPE 6
℄ PROPOSED BRIDGE STA. 133+80
EXIST. BRIDGE
PROPOSED HMA RESURFACING (SEE TYPICAL SECTION SHEETS)
TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) - FLARED, TYP.
GUARDRAIL REMOVAL STA. 131+04.03 TO STA. 137+68.61
SHOULDER WIDENING TRANSITION FOR FLARED TERMINAL
12' CULV.
STONE RIP-RAP CLASS A4
TRAFFIC BARRIER TERMINAL, TYPE 6
WOVEN WIRE FENCE TO BE REMOVED AND RE-ERECTED
CONSTRUCTION LIMITS
℄ PROPOSED DITCH
℄ EXISTING DITCH
BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)
STEEL PLATE BEAM GUARDRAIL TYPE "A"
6'-0" C.R. AGG. EROSION CTRL
3'-0" HMA SHLD.
409.47
138+00.00 END OVERLAY
END OF C.R. AGG. EROSION CTRL. 138+22.50
EXIST. R.O.W.
STA. 133+00.00
+08.50
+31.50
+53.50
+06.50
+28.50
+51.50
133+00
134+00
135+00
136+00
137+00
138+00
SAW-CUT EXIST. PAV'T.
EXISTING & PROPOSED ℄ FAS 253 (IL 251)
12'-0"
12'-0"
MATCH LINE
+41.50
+18.50
BRIDGE APPROACH PAVEMENT
STEEL PLATE BEAM GUARDRAIL TYPE "A"
GUARDRAIL REMOVAL STA. 129+91.74 TO STA. 136+55.91
6'-0"
3'-0" HMA SHLD.
HMA BASE COURSE WIDENING, 11" (EA. SIDE) STA. 134+51.50 TO 137+00
HOT MIX-ASPHALT SURFACE REMOVAL (BUTT-JOINT)
PROJECT LIMIT STA.
60'-0"
60'-0"
TRAFFIC BARRIER TERMINAL, TYPE 6
LIMITS OF PAVEMENT REMOVAL
℄ PROPOSED DITCH
℄ EXISTING DITCH
CONSTRUCTION LIMITS
+50.00
+59.00
C.R. AGG. EROSION CTRL SHLDR., TY B 6"
TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) - FLARED, TYP.
BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)
SHOULDER WIDENING TRANSITION FOR FLARED TERMINAL STD. 630301
EXIST. R.O.W.

PLAN

SCALE : 1 INCH = 20 FEET
0 20 40 60 80 100

N

PLAN DATE | SURVEYED | BY
PLOT DATE | PLOTTED | CHECKED
NOTE BOOK | SCALE: NOTED | CHECKED
NO. | PLAN SHEET NO. | NOTATIONS DEPAR

PROFILE DATE | SURVEYED | BY
PLOT DATE | PLOTTED | CHECKED
NOTE BOOK | SCALE: NOTED | CHECKED
NO. | PROFILE SHEET NO. | NOTATIONS DEPAR

PLOT DATE : #DATE#
FILE NAME : #FILE#
CELL NAME : #CELL#
USER NAME : #USER#

644
642
640
638
636
634
632
630
628

VPI STA. 133+80.0
ELEVATION 644.00

PROPOSED PROFILE GRADE LINE (PGL)

-0.82% -0.73%

BRIDGE LOW BEAM EL. 639.70

100 YR. FLOOD EL. 638.3

EX = 0.50'
K = 168
260.00' V.C.

BK. S. ABUT. +41.50

BK. N. ABUT. +18.50

VPT 18.00 EL. 643.95

EXISTING PROFILE GRADE LINE (PGL)

EXIST. LT. DITCH

LT. DITCH 1%

EXIST. RT. DITCH

RT. DITCH

634.9
632.9
0.6%
633.2
0.4%
633.6
0.5%
633.9
0.4%
634.1
2.6%
636.7
638.4

EX = 0.38'
K = 132
200.00' V.C.

VPC 00.00 EL. 642.39

-0.73% -0.79%

VPT 00.00 EL. 642.45

RESURFACING LIMITS
EXISTING MEETS PROPOSED ELEVATION

VPI STA. 137+00.00
ELEVATION 641.66

STREAMBED EL. 628.65

PROFILE

133+00	133+50	134+00	134+50	135+00	135+50	136+00	136+50	137+00	137+50	138+00	138+50	139+00
641.33 (EXISTING)	641.33	641.34	641.31	641.30	641.24	641.27	641.29	641.32	641.37	641.41	641.46	641.51
643.27 (PROPOSED)	643.38	643.46	643.41	643.49	643.46	643.38	643.27	643.12	642.94	642.76	642.58	642.39

641.55	641.59	641.63	641.66	641.86	642.06	642.25	642.45	642.67	642.89	643.11	643.33	
642.24	642.12	642.06	642.04	642.08	642.15	642.28	642.45					

FAS 253 (IL251) - STATIONS 133+00 TO 138+22.50

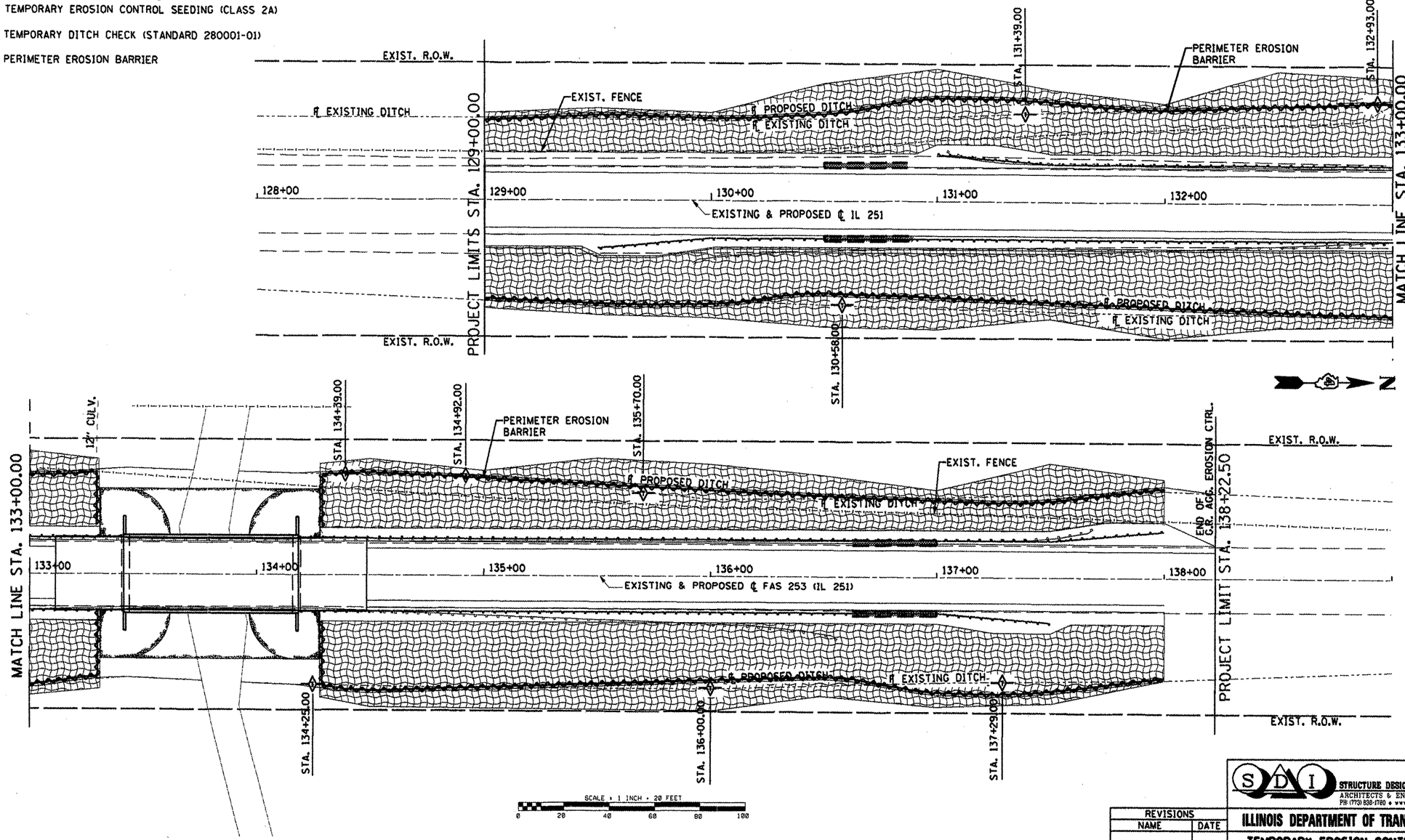
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CONTRACT NO. 68573

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68 BR-1	MARSHALL	97	69
STA. 129+00 TO STA. 138+00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LEGEND:

- EROSION CONTROL BLANKET & TEMPORARY EROSION CONTROL SEEDING (CLASS 2A)
- TEMPORARY DITCH CHECK (STANDARD 280001-01)
- PERIMETER EROSION BARRIER



REVISIONS	
NAME	DATE

STRUCTURE DESIGNS, INCORPORATED
ARCHITECTS & ENGINEERS
PH: (773) 838-1760 • www.structuredesignsinc.com

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY EROSION CONTROL PLAN

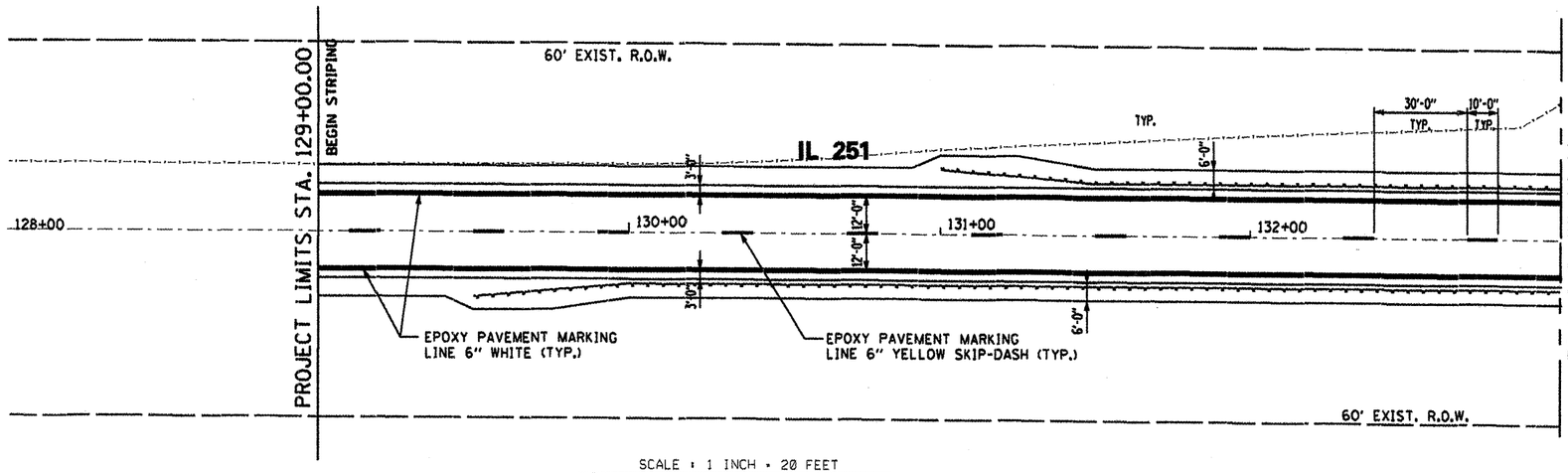
ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085

DESIGNED BY: A.G. DRAWN BY: T.C.S.
DATE: 05/02/2008 CHECKED BY: O.A.O.

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CONTRACT NO. 68573

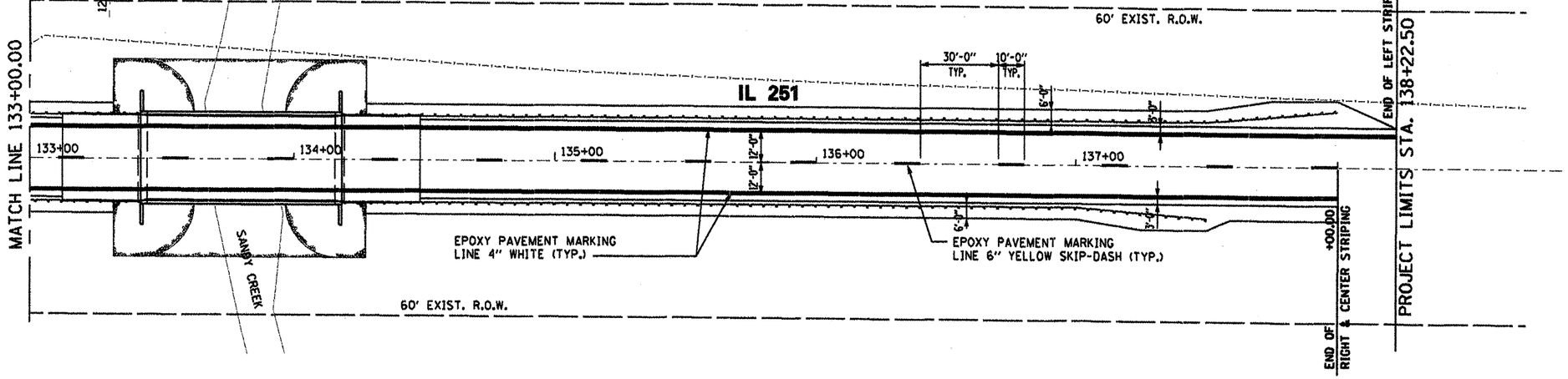
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68 BR-1	MARSHALL	97	70
STA. 129+00 TO STA. 138+00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SCALE : 1 INCH = 20 FEET

0 20 40 60 80 100

N



REVISIONS	
NAME	DATE

STRUCTURE DESIGNS, INCORPORATED
ARCHITECTS & ENGINEERS
PH: (773) 539-7100 • www.structuredesigninc.com

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING PLAN

ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+00.00 S.N. 062-0085

DESIGNED BY: A.G. DRAWN BY: T.C.S.
DATE: 05/02/2008 CHECKED BY: O.A.O.

CONTRACT 68573

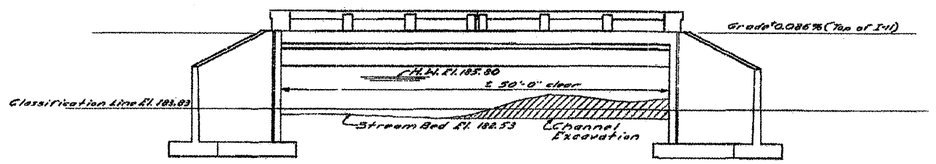
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

2	68B1 Marshall		4	SECT. NO. 1 / 2 SECT.
			F-3(6)	

Sheet 71 of 97

B.M. : Top of S.W. Wing Wall
Elevation 193.00

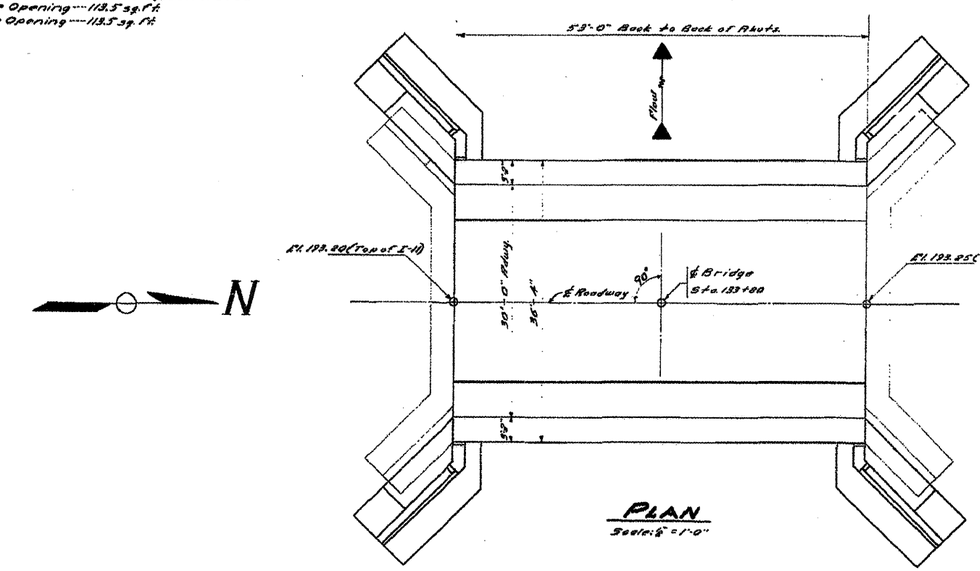
Existing Structure: R.C. Deck Girder
1 Span @ 50' 31.05 Roadway
R.C. Abuts. - To be widened
Handrail and other concrete to be removed as shown on plans.



ELEVATION
Scale: 3/8" = 1'-0"

WATERWAY INFORMATION

Drainage Area ..... 11,000 Acres
Character ..... Level, Clay, Cultivated
Present Bridge Opening ---- 113.5 sq. ft.
Proposed Bridge Opening ---- 113.5 sq. ft.

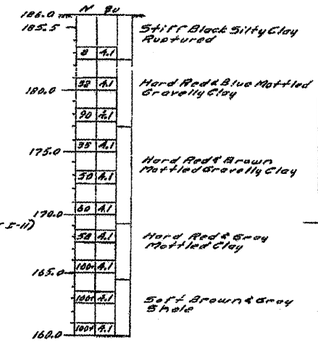


PLAN
Scale: 3/8" = 1'-0"

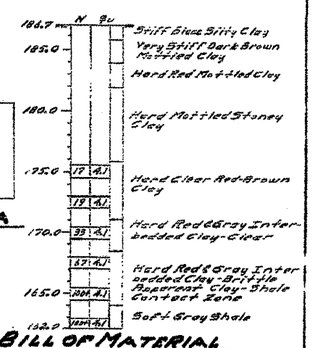
GENERAL NOTES

Class X Concrete shall be used thruout except as noted.
Handrail Concrete shall be used in rails and posts.
The Concrete Girder and Floor Slab shall be poured in one continuous operation between joints on either side of the existing structure except for work shown to be poured after falsework has been removed.
The Floor Slab shall be finished in accordance with the applicable provisions of Sec. 89 of the Standard Specs.
The Handrail shall not be poured until after the falsework has been removed.
The contract unit price for Expansion Bolts shall include furnishing, drilling holes, and setting Expansion Bolts.
The back of proposed main walls and wing walls, from top of slab or top of wall, to top of footing shall be waterproofed.
Back filling behind abutments shall be in accordance with Art. 504.10 of the Standard Specifications.
No piles under the existing structure.
Contractor shall excavate channel as shown between limits of right of way.

Boring No. 1
Sta. 134+06
85' Lt. ℄



Boring No. 2
Sta. 133+73
85' Lt. ℄



STATION 133+80
BUILT 195- BY
STATE OF ILLINOIS
S.B.I. RT. 2 SEC. 68 BY
F.A. PROJECT F-3(6)
LOADING H-20

NAME & DATA
See Standard 2113

Notes:
N = Blows per ft. of penetration of sampling spoon. Hammer wt. 350 lbs. Drop 18"
Su = Unconfined compressive strength in Tons per sq. ft.

STRESSES

f_s = 24,000 p.s.i. Reinf.
f_c = 1,400 p.s.i. Super
f_c = 800 p.s.i. Sub.
n = 10

Loading H20-44

TOTAL BILL OF MATERIAL

ITEM		SUPER	SUB	TOTAL
Class X Concrete	Cu. Yds.	55.5	92.8	148.3
Handrail Concrete	Cu. Yds.	8.5		8.5
Reinforcement Bars	Lbs.	9120	5010	14130
Masonry Removal	Cu. Yds.	17.0	4.0	21.0
Expansion Bolts	Ea.	12	48	60
Name Plates	Ea.			1
Class "A" Excav. for Struct.	Cu. Yds.			56.0
Class "B" Excav. for Struct.	Cu. Yds.			242.0
Bit. Conc. Surf. Co. Sub Class I	Tons			5
Bit. Materials (Prime Coat)	Gals.			6
Channel Excavation	Cu. Yds.			200

DESIGNED	F. M. Ashli
CHECKED	W. N. Sorenson
DRAWN	F.M.A. & C. Pulley
CHECKED	W.N.S.

July 22 1953

EXAMINED W. E. Hanson
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

PASSED E. Blumenschein
ENGINEER OF DESIGN

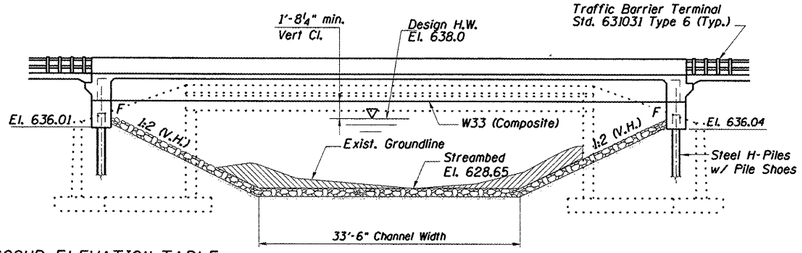
APPROVED F. M. Baker
CHIEF HIGHWAY ENGINEER

GENERAL PLAN & ELEVATION
S.B.I. RT. 2 SECTION 68 BY MARSHALL COUNTY
STATION 133+80

B.M. #2: Chiseled "X" in S.E. Headwall, Sta. 133+53.70, 20.96' Rt., Elev. 641.50

Existing Structure: S.N. 062-0002, originally constructed in 1924 and widened in 1956. Existing structure consists of 6 single span cast-in-place T-beams on closed abutments. 53' back to back of abutments and 36'-4" out out of deck.
Existing structure to be removed and replaced. Traffic is to be detoured.

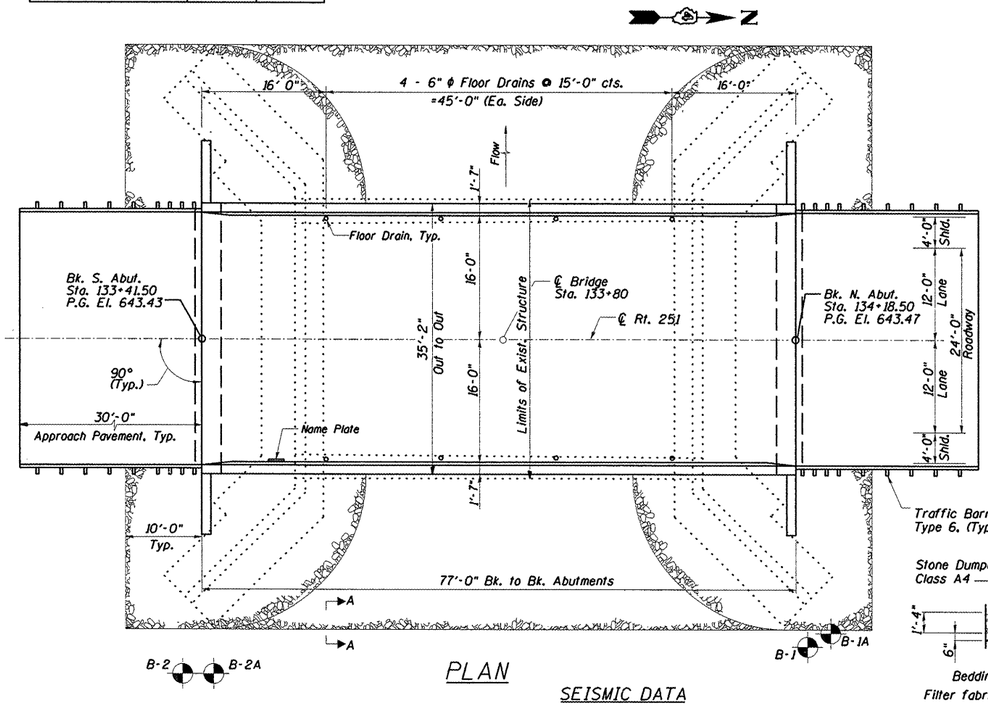
No salvage



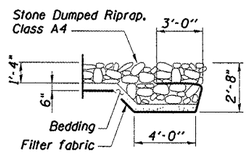
ELEVATION

DESIGN SCOUR ELEVATION TABLE

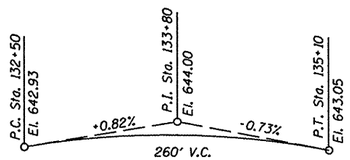
Design Scour Elevations	S. Abut.	N. Abut.
	636.01	636.04



PLAN



SECTION A-A



PROFILE GRADE

STATION 133+80
BUILT BY
STATE OF ILLINOIS
F.A. RT. 251 SEC. 68 BR-1
LOADING HL-93
STR. NO. 062-0085

NAME PLATE
See Std. 515001

INDEX OF BRIDGE SHEETS

Sheet No.	Title
1	General Plan and Elevation
2	Top of Slab Elevations
3-4	Top of Approach Slab Elevations
5	Superstructure Plan and Cross Section
6	Parapet Details
7	Concrete Diaphragm Details
8	Steel Framing Plan and Details
9	Beam Bearing & Abut. Backfill Details
10-11	Abutment Details
12	Steel H-Pile Details
13	Bar Splicers Assembly Details
14-15	Boring Logs

GENERAL NOTES

1. Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts in painted areas and M164 Type 3 in unpainted areas. Bolts $\frac{3}{4}$ in. ϕ, holes $\frac{15}{16}$ in. ϕ, unless otherwise noted.
2. Calculated weight of Structural Steel = 74,830 Pounds.
3. All structural steel shall be AASHTO M 270 Grade 50W.
4. No field welding is permitted except as specified in the contract documents.
5. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
6. Reinforcement bars designated (E) shall be epoxy coated.
7. Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Those areas shall be primed in the shop with a Department approved zinc rich primer. No field painting shall be required. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".
8. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
9. The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.
10. Slipforming of the parapets is not allowed.

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0

DESIGN SPECIFICATIONS
2007 LRFD AASHTO
4th Edition

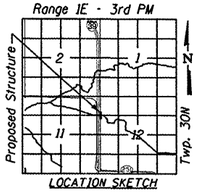
LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES
FIELD UNITS
New Construction
f'c = 3,500 p.s.i.
fy = 60,000 p.s.i. (Reinf.)
fy = 50,000 p.s.i. (M270 Grade 50W)

WATERWAY INFORMATION

Drainage Area = 14.5 sq. mi. Low Grade Elev. 641.1 ft. ℄ Sta. 130+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. ft Exist.	Opening Sq. ft Prop.	Nat. H.W.E. ft.	Head - ft. Exist.	Head - ft. Prop.	Headwater Elev. - El Exist.	Headwater Elev. - El Prop.
	10	1223	328	364	636.9	0.6	0.2	637.5	637.1
Design	50	1799	335	441	638.0	0.9	0.2	638.9	638.2
Base	100	2036	335	462	638.3	1.0	0.2	639.3	638.5
Max. Calc.	500	2589	335	529	639.2	1.4	0.2	640.6	639.4



LOCATION SKETCH

TOTAL BILL OF MATERIAL

ITEM	UNITS	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.	-	97	97
Stone Dumped Riprap, Class A4	Ton	-	820	820
Filter Fabric	Sq. Yd.	-	891	891
Removal of Existing Structures No. 2	Each	-	-	1
Structure Excavation	Cu. Yd.	-	340.6	340.6
Floor Drains	Each	8	-	8
Concrete Structures	Cu. Yd.	-	30.4	30.4
Concrete Superstructure	Cu. Yd.	111.8	-	111.8
Bridge Deck Grooving	Sq. Yd.	257	-	257
Concrete Encasement	Cu. Yd.	-	4.8	4.8
Protective Coat	Sq. Yd.	339	-	339
Furnishing and Erecting Structural Steel	L. Sum	1	-	1
Stud Shear Connectors	Each	1,026	-	1,026
Reinforcement Bars, Epoxy Coated	Pound	21,700	3,880	25,580
Bar Splicers	Each	64	-	64
Furnishing Steel Piles HP12x53	Foot	-	336	336
Driving Piles	Foot	-	336	336
Test Pile Steel HP12x53	Each	-	2	2
Pile Shoes	Each	-	14	14
Name Plates	Each	1	-	1
Anchor Bolts, 1"	Each	-	24	24
Geocomposite Wall Drain	Sq. Yd.	-	66	66
Pipe Underdrains for Structures 4"	Foot	-	134	134

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253 (IL 251)	68 BR-1	MARSHALL	97	72
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT:		

SHEET NO. 1
15 SHEETS

Contract #68573

APPROVED
For Structural Adequacy Only
Ralph E Anderson
Engineer of Bridges & Structures

Signed: Olufemi A. Olaleinde 10/17/2008
OLUFEMI A. OLALEINDE, P.E., S.E. Date
LICENSE EXPIRES 11-30-2010

OLUFEMI A. OLALEINDE 081-005196 CHICAGO — LICENSED STRUCTURAL ENGINEER — STATE OF ILLINOIS

STRUCTURE DESIGNS, INCORPORATED
ARCHITECTS & ENGINEERS
PH-(773) 838-1780 • www.structuredesignsinc.com

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

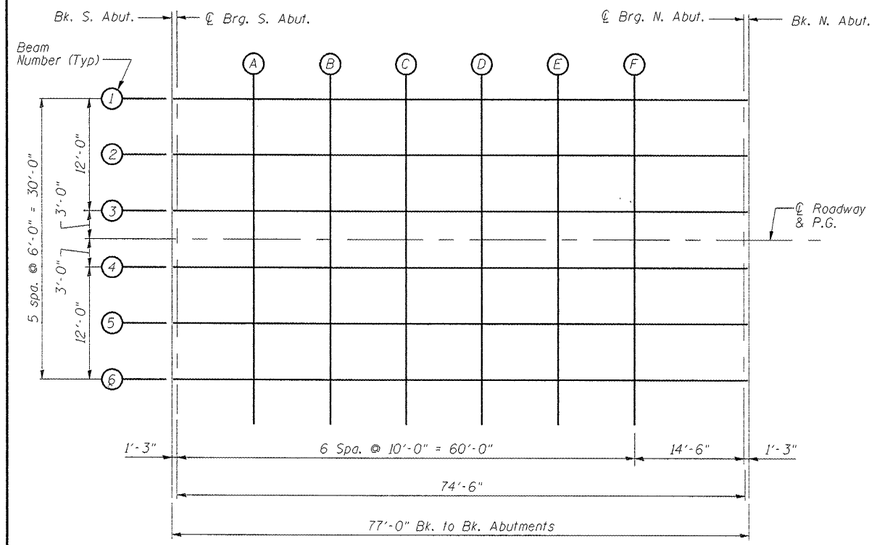
GENERAL PLAN AND ELEVATION
ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085

DESIGNED BY: S.G. DRAWN BY: T.C.S.
DATE: 11-20-08 CHECKED BY: O.A.O.

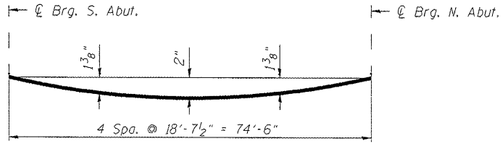
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253 (IL 251)	68 BR-1	MARSHALL	97	73
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 2
15 SHEETS



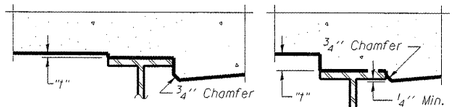
PLAN



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 below.



At Minimum Fillet

At Maximum Fillet

To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	133+41.50	15.00	643.19	643.19
℄ Brg. S. Abut.	133+42.75	15.00	643.19	643.19
A	133+52.75	15.00	643.21	643.28
B	133+62.75	15.00	643.23	643.36
C	133+72.75	15.00	643.24	643.41
D	133+82.75	15.00	643.25	643.42
E	133+92.75	15.00	643.25	643.40
F	134+02.75	15.00	643.24	643.34
℄ Brg. N. Abut.	134+17.25	15.00	643.22	643.22
Bk. N. Abut.	134+18.50	15.00	643.22	643.22

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	133+41.50	9.00	643.29	643.29
℄ Brg. S. Abut.	133+42.75	9.00	643.30	643.30
A	133+52.75	9.00	643.32	643.39
B	133+62.75	9.00	643.34	643.47
C	133+72.75	9.00	643.35	643.52
D	133+82.75	9.00	643.36	643.53
E	133+92.75	9.00	643.36	643.51
F	134+02.75	9.00	643.35	643.45
℄ Brg. N. Abut.	134+17.25	9.00	643.33	643.33
Bk. N. Abut.	134+18.50	9.00	643.33	643.33

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	133+41.50	3.00	643.39	643.39
℄ Brg. S. Abut.	133+42.75	3.00	643.39	643.39
A	133+52.75	3.00	643.42	643.49
B	133+62.75	3.00	643.43	643.57
C	133+72.75	3.00	643.45	643.61
D	133+82.75	3.00	643.45	643.63
E	133+92.75	3.00	643.45	643.60
F	134+02.75	3.00	643.44	643.55
℄ Brg. N. Abut.	134+17.25	3.00	643.43	643.43
Bk. N. Abut.	134+18.50	3.00	643.42	643.42

℄ ROADWAY & P.G.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	133+41.50	0.00	643.43	643.43
℄ Brg. S. Abut.	133+42.75	0.00	643.44	643.44
A	133+52.75	0.00	643.46	643.53
B	133+62.75	0.00	643.48	643.61
C	133+72.75	0.00	643.49	643.66
D	133+82.75	0.00	643.50	643.67
E	133+92.75	0.00	643.50	643.65
F	134+02.75	0.00	643.49	643.59
℄ Brg. N. Abut.	134+17.25	0.00	643.47	643.47
Bk. N. Abut.	134+18.50	0.00	643.47	643.47

BEAM 4

Contract #68573

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	133+41.50	-3.00	643.39	643.39
℄ Brg. S. Abut.	133+42.75	-3.00	643.39	643.39
A	133+52.75	-3.00	643.42	643.49
B	133+62.75	-3.00	643.43	643.57
C	133+72.75	-3.00	643.45	643.61
D	133+82.75	-3.00	643.45	643.63
E	133+92.75	-3.00	643.45	643.60
F	134+02.75	-3.00	643.44	643.55
℄ Brg. N. Abut.	134+17.25	-3.00	643.43	643.43
Bk. N. Abut.	134+18.50	-3.00	643.42	643.42

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	133+41.50	-9.00	643.29	643.29
℄ Brg. S. Abut.	133+42.75	-9.00	643.30	643.30
A	133+52.75	-9.00	643.32	643.39
B	133+62.75	-9.00	643.34	643.47
C	133+72.75	-9.00	643.35	643.52
D	133+82.75	-9.00	643.36	643.53
E	133+92.75	-9.00	643.36	643.51
F	134+02.75	-9.00	643.35	643.45
℄ Brg. N. Abut.	134+17.25	-9.00	643.33	643.33
Bk. N. Abut.	134+18.50	-9.00	643.33	643.33

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	133+41.50	-15.00	643.19	643.19
℄ Brg. S. Abut.	133+42.75	-15.00	643.19	643.19
A	133+52.75	-15.00	643.21	643.28
B	133+62.75	-15.00	643.23	643.36
C	133+72.75	-15.00	643.24	643.41
D	133+82.75	-15.00	643.25	643.42
E	133+92.75	-15.00	643.25	643.40
F	134+02.75	-15.00	643.24	643.34
℄ Brg. N. Abut.	134+17.25	-15.00	643.22	643.22
Bk. N. Abut.	134+18.50	-15.00	643.22	643.22

E-S

11-1-06

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085

DESIGNED BY: S.G. DRAWN BY: T.C.S.
DATE: 11-20-08 CHECKED BY: O.A.O.

R:\0507-010\DWG\Bridge\E-S.dgn 11/19/2008 6:02:18 PM

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253 (IL 251)	68 BR-1	MARSHALL	97	74
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 3
15 SHEETS

Contract #68573

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.	133+11.50	16.42	643.05
A	133+21.50	16.42	643.09
B	133+31.50	16.42	643.12
Bk. S. Abut.	133+41.50	16.42	643.16

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.	133+11.50	12.00	643.14
A	133+21.50	12.00	643.18
B	133+31.50	12.00	643.22
Bk. S. Abut.	133+41.50	12.00	643.25

℄ ROADWAY & PG

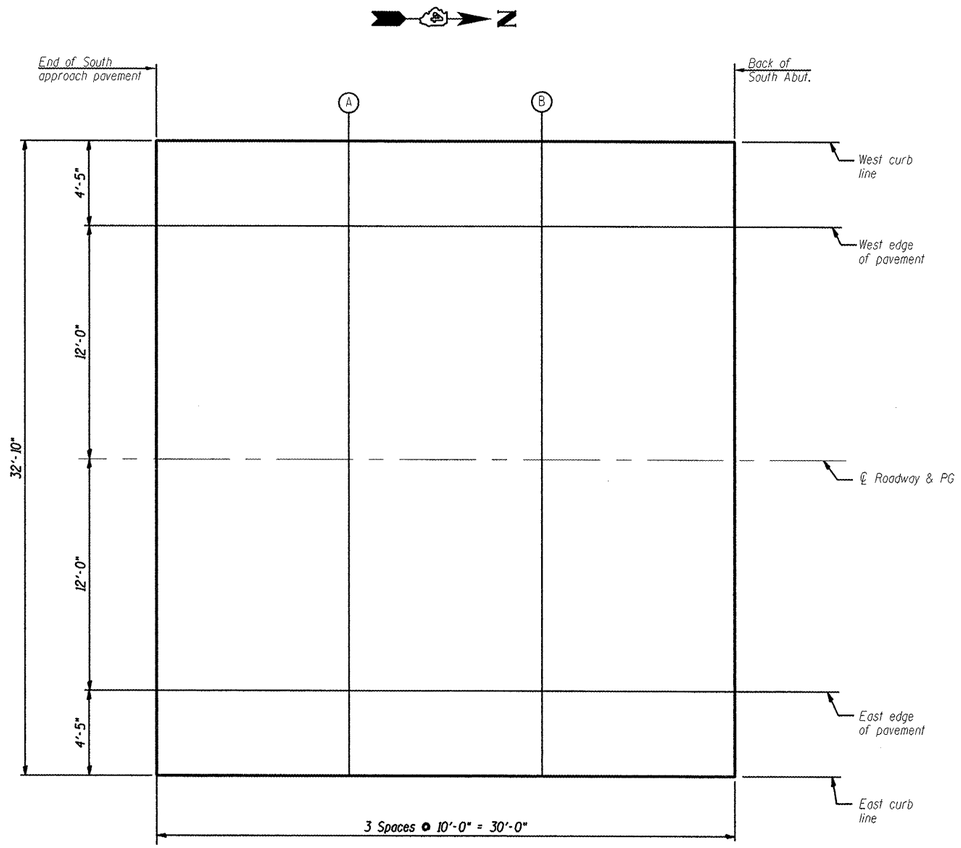
Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.	133+11.50	0.00	643.33
A	133+21.50	0.00	643.37
B	133+31.50	0.00	643.40
Bk. S. Abut.	133+41.50	0.00	643.43

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.	133+11.50	-12.00	643.14
A	133+21.50	-12.00	643.18
B	133+31.50	-12.00	643.22
Bk. S. Abut.	133+41.50	-12.00	643.25

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.	133+11.50	-16.42	643.05
A	133+21.50	-16.42	643.09
B	133+31.50	-16.42	643.12
Bk. S. Abut.	133+41.50	-16.42	643.16



PLAN

E-AS 9-3-07

REVISIONS	
NAME	DATE

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ILLINOIS DEPARTMENT OF TRANSPORTATION

TOP OF SOUTH APPROACH SLAB ELEVATIONS

ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085

DESIGNED BY: S.G. DRAWN BY: T.C.S.
DATE: 11-20-08 CHECKED BY: O.A.O.

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253 (IL 251)	68 BR-1	MARSHALL	97	75
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT#	

SHEET NO. 4
15 SHEETS

Contract #68573

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	134+18.50	16.42	643.19
A	134+28.50	16.42	643.17
B	134+38.50	16.42	643.14
End N. Appr. Pav't.	134+48.50	16.42	643.11

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	134+18.50	12.00	643.28
A	134+28.50	12.00	643.26
B	134+38.50	12.00	643.23
End N. Appr. Pav't.	134+48.50	12.00	643.20

℄ ROADWAY & PG

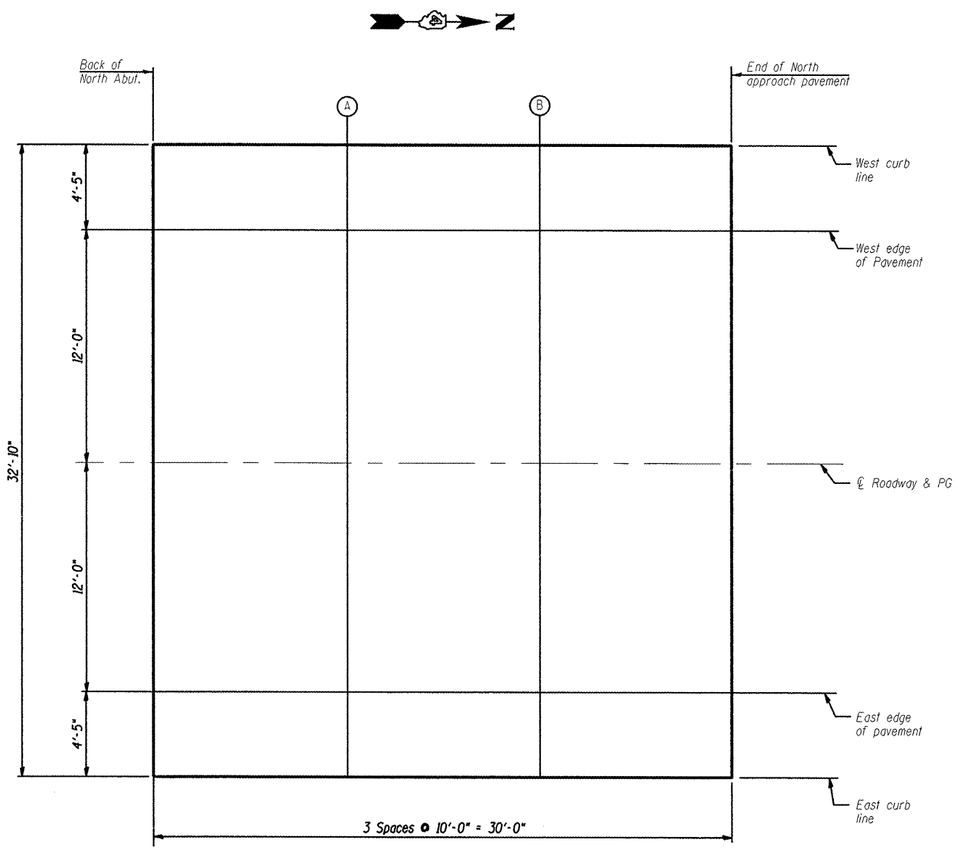
Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	134+18.50	0.00	643.47
A	134+28.50	0.00	643.45
B	134+38.50	0.00	643.42
End N. Appr. Pav't.	134+48.50	0.00	643.39

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	134+18.50	-12.00	643.28
A	134+28.50	-12.00	643.26
B	134+38.50	-12.00	643.23
End N. Appr. Pav't.	134+48.50	-12.00	643.20

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	134+18.50	-16.42	643.19
A	134+28.50	-16.42	643.17
B	134+38.50	-16.42	643.14
End N. Appr. Pav't.	134+48.50	-16.42	643.11



PLAN

REVISIONS	
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ILLINOIS DEPARTMENT OF TRANSPORTATION

TOP OF NORTH APPROACH SLAB ELEVATIONS

ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085

DESIGNED BY: S.G. DRAWN BY: T.C.S.
DATE: 11-20-08 CHECKED BY: O.A.O.

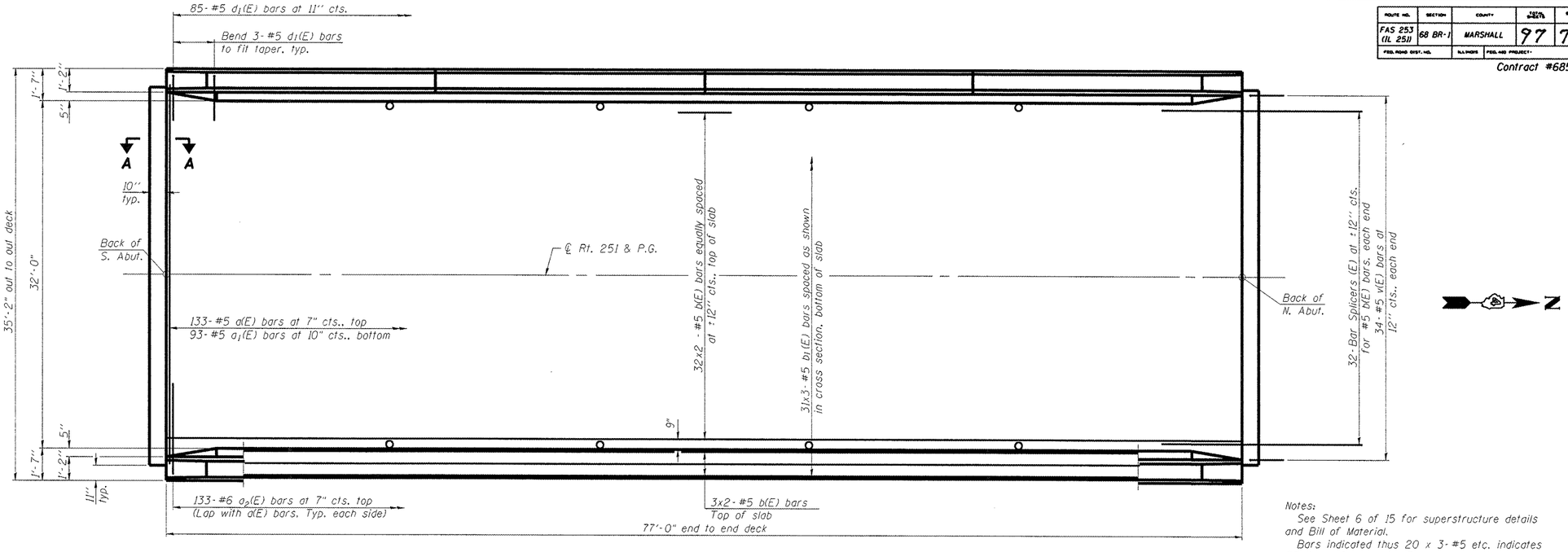
E-AS 9-3-07

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253 (IL 251)	68 BR-1	MARSHALL	97	76
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT:	

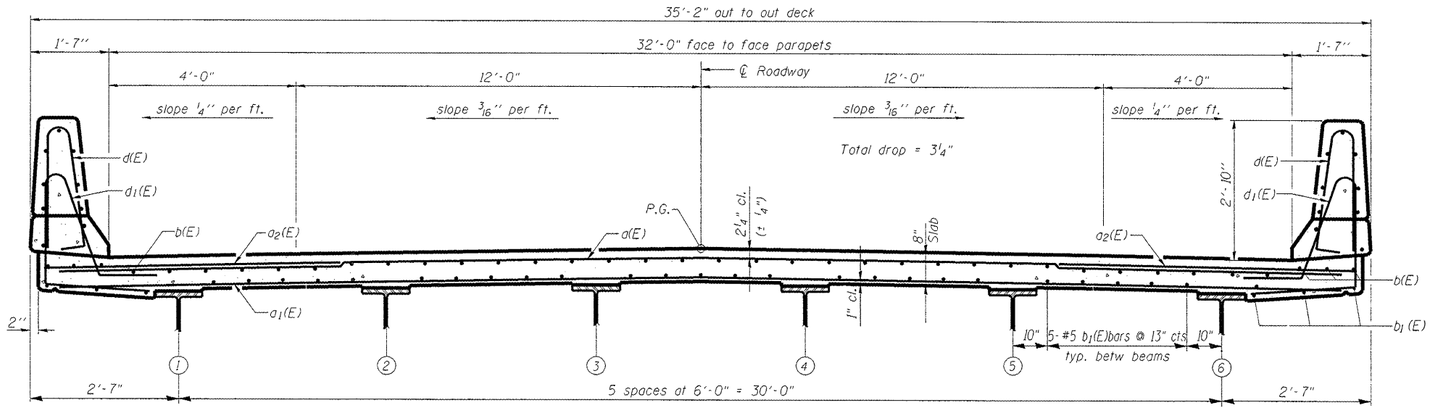
SHEET NO. 5
15 SHEETS

Contract #68573



PLAN

Notes:
See Sheet 6 of 15 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet 6 of 15 for parapet reinforcement.
Min. bar lap for #5 = 2'-2".



CROSS SECTION
(Looking North)

SI-1-0 9-3-07

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ILLINOIS DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE PLAN & CROSS SECTION

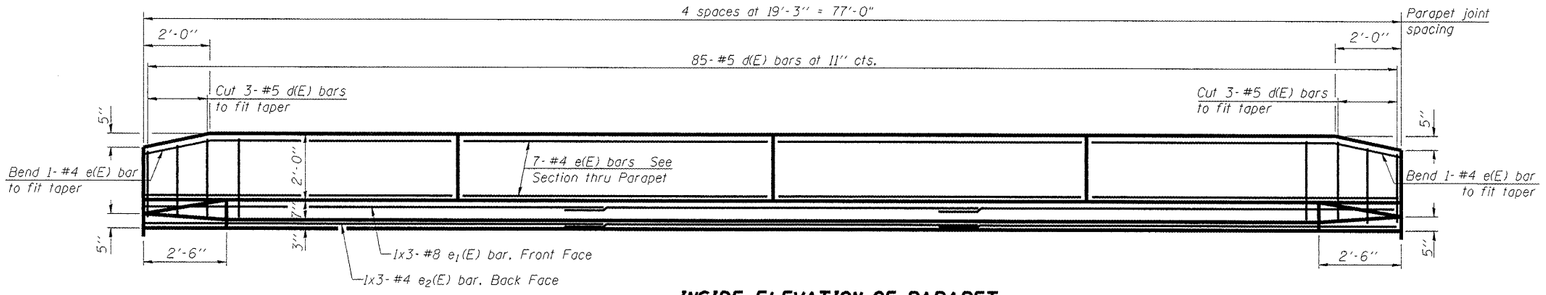
ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085

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DATE: 11-20-08 CHECKED BY: O.A.O.

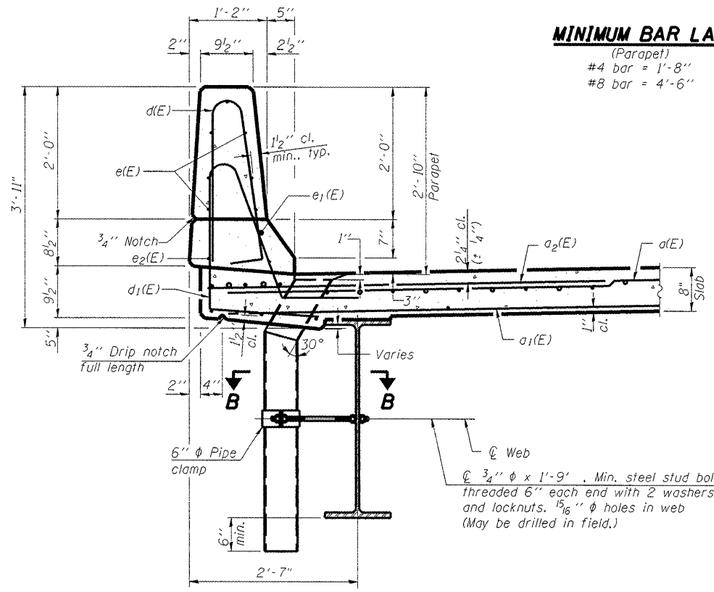
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253 (IL 251)	68 BR-1	MARSHALL	97	77
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT:		

SHEET NO. 6
15 SHEETS

Contract #68573



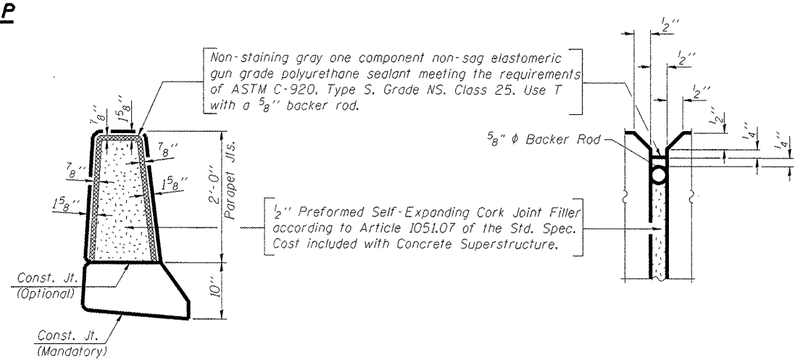
INSIDE ELEVATION OF PARAPET



SECTION THRU PARAPET

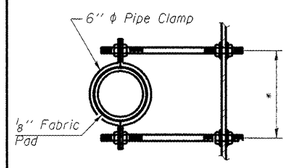
MINIMUM BAR LAP

(Parapet)
#4 bar = 1'-8"
#8 bar = 4'-6"



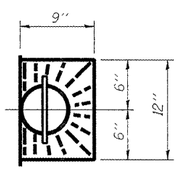
PARAPET JOINT DETAILS

Notes:
Floor drains need not be painted.
Fiberglass pipe shall conform to ASTM D 2996. with short-time rupture strength hoop tensile stress of 30.000 p.s.i. minimum.

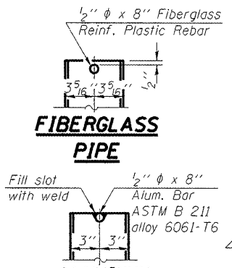


SECTION B-B

*Dimension as required by Pipe Clamp

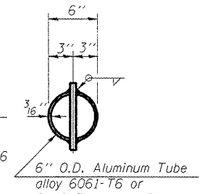


TOP PLAN



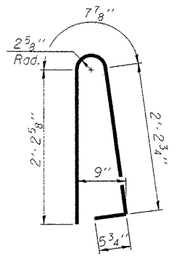
FIBERGLASS PIPE

ALUMINUM TUBE

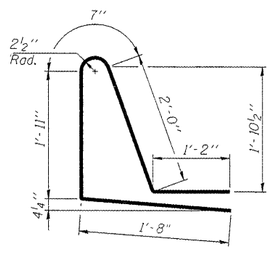


TOP PLAN

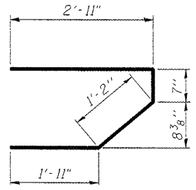
(Showing Aluminum Tube)



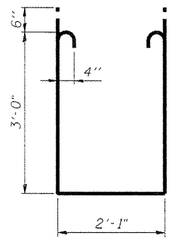
BAR d(E)



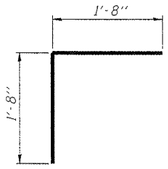
BAR d1(E)



BAR s(E)



BAR s1(E)



BAR v(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	133	#5	34'-0"	
a1(E)	93	#5	33'-6"	
a2(E)	266	#6	6'-0"	
b(E)	76	#5	39'-5"	
b1(E)	93	#5	27'-0"	
d(E)	170	#5	5'-7"	
d1(E)	170	#5	7'-4"	
e(E)	56	#4	18'-11"	
e1(E)	6	#8	28'-7"	
e2(E)	6	#4	26'-8"	
m(E)	4	#6	33'-0"	
m1(E)	6	#6	34'-10"	
m2(E)	12	#6	14'-0"	
m3(E)	10	#6	5'-8"	
m4(E)	4	#6	2'-3"	
s(E)	72	#5	6'-7"	
s1(E)	72	#4	9'-1"	
v(E)	68	#5	3'-4"	
Reinforcement Bars, Epoxy Coated			Pound	21,700
Concrete Superstructure			Cu. Yds.	111.8

Bars indicated thus 1x3-#5 etc. indicates 1 line of bars with 3 lengths per line.

REVISIONS	
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ILLINOIS DEPARTMENT OF TRANSPORTATION

PARAPET DETAILS

ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085

DESIGNED BY: S.G. DRAWN BY: T.C.S.
DATE: 11-20-08 CHECKED BY: O.A.O.

S-1-D

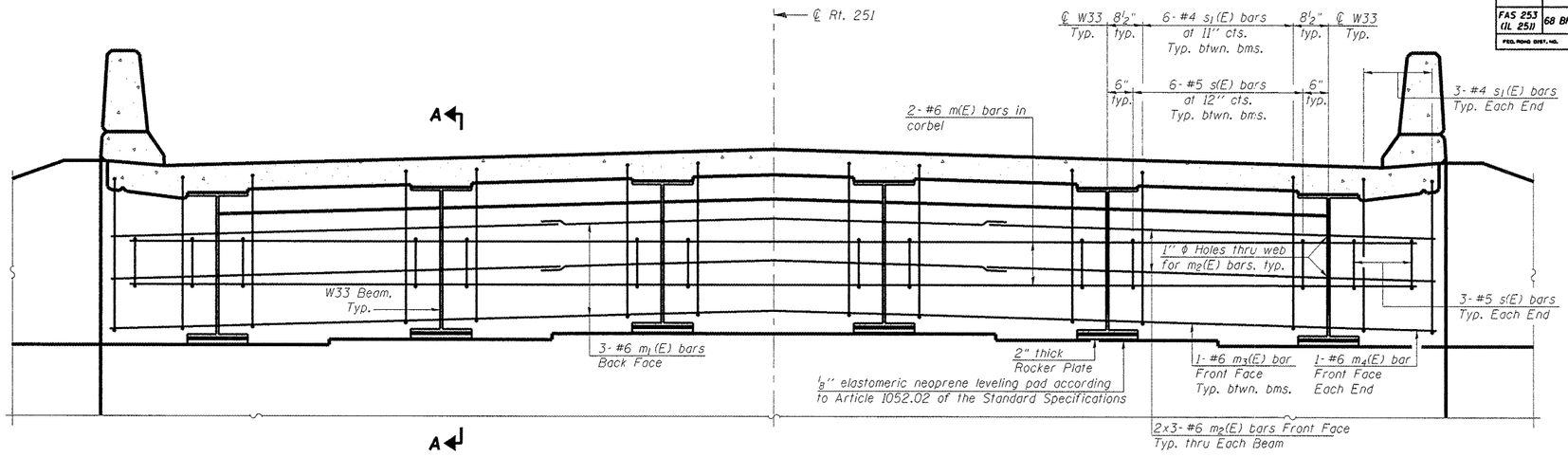
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253 (IL 251)	68 BR-1	MARSHALL	77	78
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT:		

SHEET NO. 7
15 SHEETS

Contract #68573

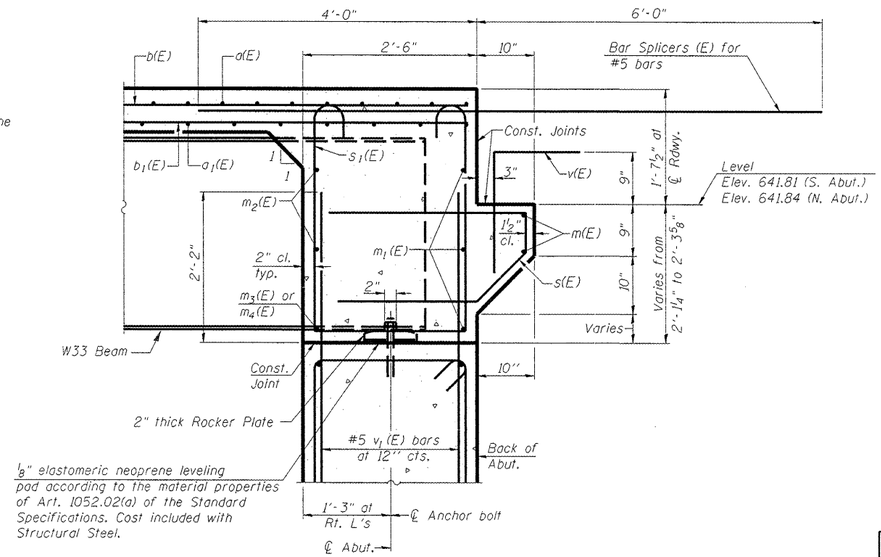


DIAPHRAGM ELEVATION AT ABUTMENT

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet 6 of 15.
Concrete in diaphragm is included with Concrete Superstructure on sheet 6 of 15.
For details of bars s(E) & s_1(E) see sheet 6 of 15.
The s(E) and s_1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

MIN. BAR LAP

#6 bar = 3'-7"



SECTION A-A

Dimensions at right angles to abutment, except as shown.
For details of Bar Splicers, see sheet 13 of 15.

REVISIONS	
NAME	DATE

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ILLINOIS DEPARTMENT OF TRANSPORTATION

CONCRETE DIAPHRAGM DETAILS

ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085

DESIGNED BY: S.G. DRAWN BY: T.C.S.
DATE: 11-20-08 CHECKED BY: O.A.O.

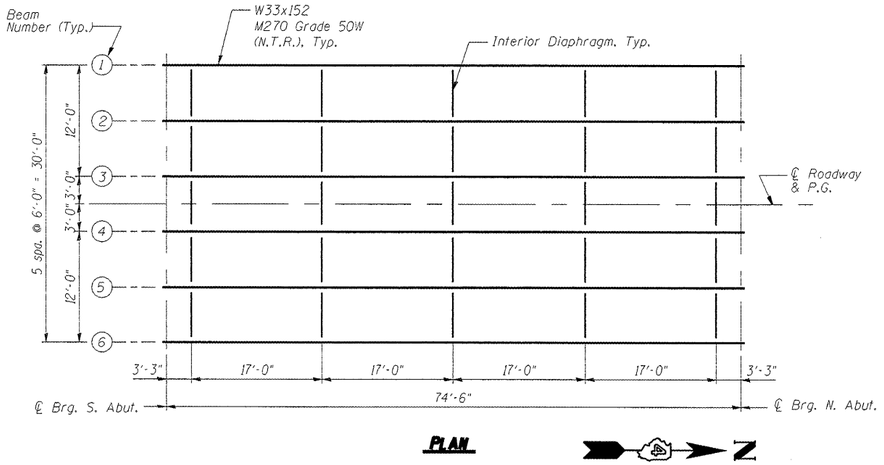
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253 (IL 251)	68 BR-1	MARSHALL	97	79
FED. ROAD DIST. NO.	ILL. ROUTE	FED. AID PROJECT		

SHEET NO. 8
15 SHEETS

Contract #68573



PLAN

INTERIOR GIRDER MOMENT TABLE		
		0.5 Sp.
I_S	(in^4)	8.160
$I_C(n)$	(in^4)	20.780
$I_C(3n)$	(in^4)	14.979
S_S	(in^3)	487.0
$S_C(n)$	(in^3)	702.2
$S_C(3n)$	(in^3)	629.1
DC1	(k/')	0.769
M_{DC1}	('k)	534.2
DC2	(k/')	0.15
M_{DC2}	('k)	104.0
DW	(k/')	0.266
M_{DW}	('k)	185.0
M_{LL} + Imp	('k)	1,006.9
M_U(Strength I)	('k)	2,837.5
$\phi r M_n$	('k)	3,464.7
f_S DC1	(ksi)	13.32
f_S DC2	(ksi)	1.98
f_S DW	(ksi)	3.53
f_S 1.3(LL+I)	(ksi)	22.36
f_S (Service II)	(ksi)	41.19
f_S (Total)(Strength I)	(ksi)	54.52
Vf	(k)	23.4

INTERIOR GIRDER REACTION TABLE HL93 Loading		
		Abut.
R_{DC1}	(k)	28.6
R_{DC2}	(k)	5.55
R_{DW}	(k)	9.95
R_{LL} + Imp	(k)	72.1
R_{Total}	(k)	116.2

I_S, S_S: Non-composite moment of inertia and section modulus of the steel section used for computing f_S (Total-Strength I. and Service II) due to non-composite dead loads (in.4 and in.3).

$I_C(n)$, $S_C(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_S (Total-Strength I. and Service II) due to short-term composite live loads (in.4 and in.3).

$I_C(3n)$, $S_C(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_S (Total-Strength I. and Service II) due to long-term composite (superimposed) dead loads (in.4 and in.3).

DC1: Un-factored non-composite dead load (kips/ft.).

M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

M_{LL} + Imp: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_U (Strength I): Factored design moment (kip-ft.).
1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{LL} + Imp

$\phi r M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).

f_S (Service II): Sum of stresses as computed from the moments below (ksi).
M_{DC1} + M_{DC2} + M_{DW} + 1.3 M_{LL} + Imp

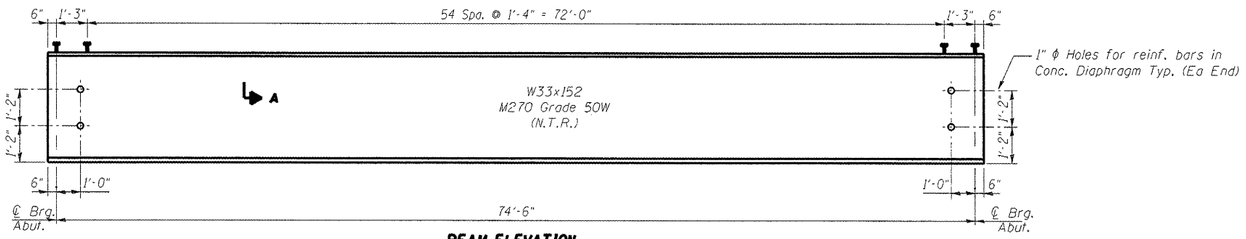
f_S (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).
1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{LL} + Imp

Vf: Factored shear range computed according to Article 6.10.10.

* TOP OF BEAM ELEVATIONS

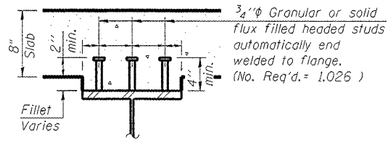
Beam Number	℄ Brg. S. Abut.	℄ Brg. N. Abut.
1	642.48	642.51
2	642.59	642.62
3	642.68	642.72
4	642.68	642.72
5	642.59	642.62
6	642.48	642.51

* For Fabrication only



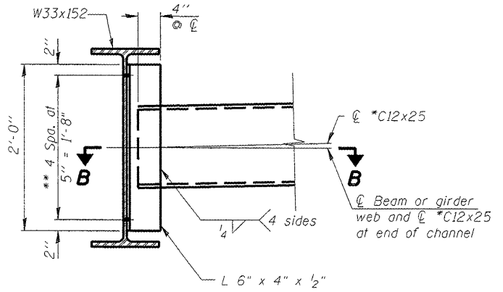
BEAM ELEVATION

Note:
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

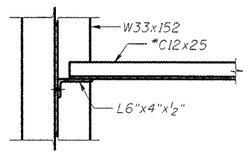


SECTION A-A

General Note:
All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.



INTERIOR DIAPHRAGM



SECTION B-B

Note:
Two hardened washers required for each set of oversized holes.

* C12x30 are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.

** 3/4" ϕ HS bolts, 15/16" ϕ holes

REVISIONS	
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ILLINOIS DEPARTMENT OF TRANSPORTATION

STEEL FRAMING PLAN AND DETAILS

ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085

DESIGNED BY: S.G. DRAWN BY: T.C.S.
DATE: 11-20-08 CHECKED BY: O.A.O.

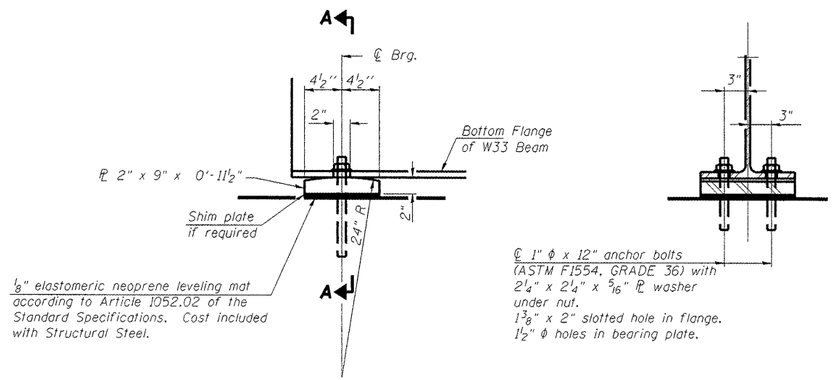
G-1 11-1-06

R:\0507-010\DWG\Bridge\G-1.dgn 11/19/2008 6:05:22 PM

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253 (IL 251)	68 BR-1	MARSHALL	77	80
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT:		

SHEET NO. 9
15 SHEETS

Contract #68573



⅛" elastomeric neoprene leveling mat according to Article 1052.02 of the Standard Specifications. Cost included with Structural Steel.

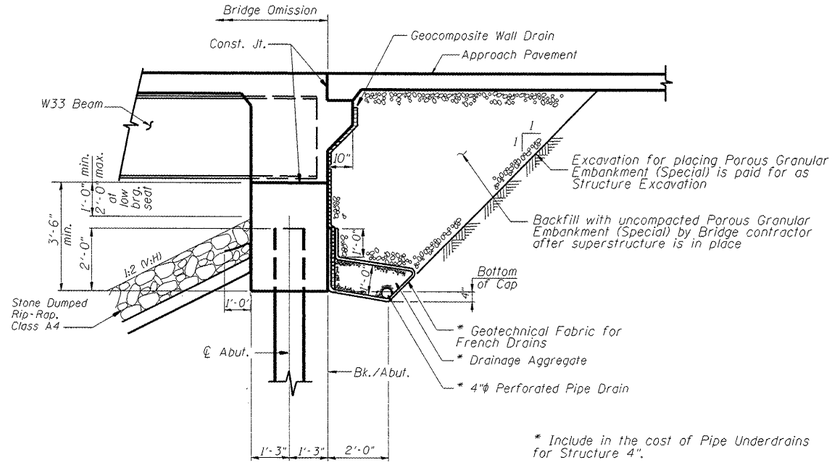
℄ 1" ϕ x 12" anchor bolts (ASTM F1554, GRADE 36) with 2¼" x 2¼" x 5/16" ℄ washer under nut.
1⅜" x 2" slotted hole in flange.
1½" ϕ holes in bearing plate.

ELEVATION AT ABUTMENT

SECTION A-A

FIXED BEARING

Notes:
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Anchor bolts may be either cast in place or installed in holes drilled after the supported member is in place.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.



* Include in the cost of Pipe Underdrains for Structure 4".

SECTION THRU ABUTMENT (TYP.)

Notes:
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)

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BEAM BEARING & ABUT. BACKFILL DETAILS

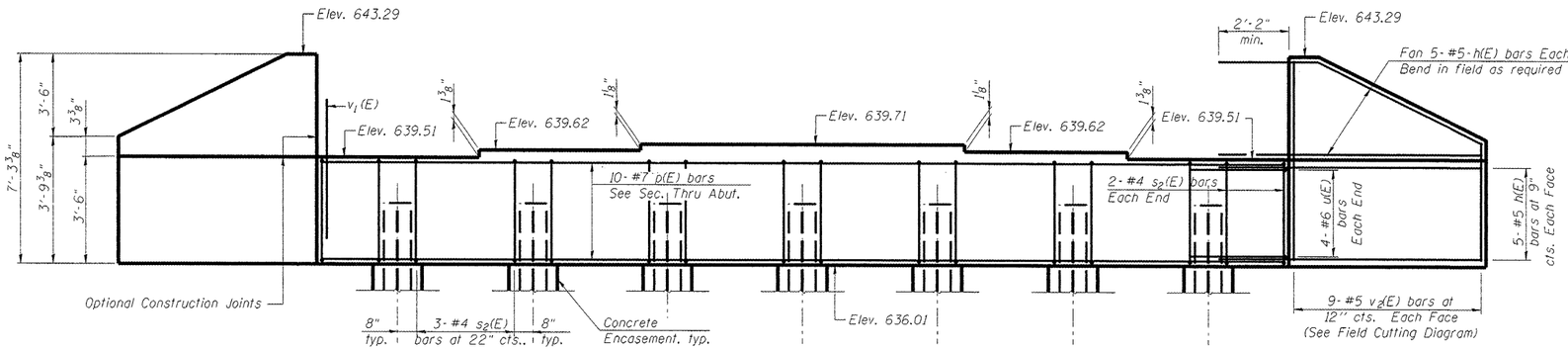
ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085

DESIGNED BY: S.G. DRAWN BY: T.C.S.
DATE: 11-20-08 CHECKED BY: O.A.O.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253 (IL 251)	68 BR-1	MARSHALL	97	81
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		

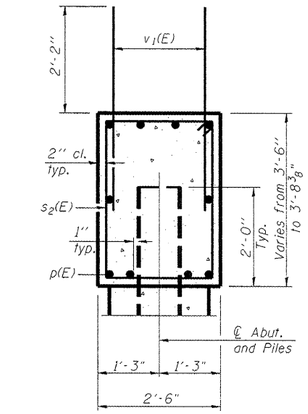
SHEET NO. 10
15 SHEETS

Contract #68573



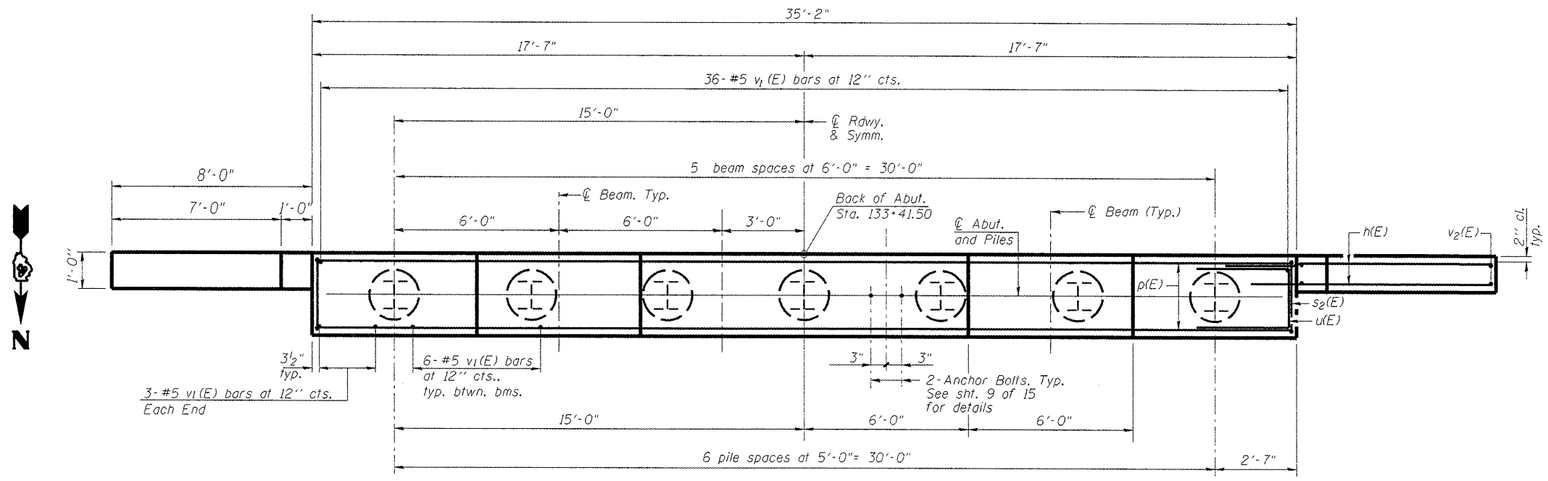
ELEVATION

Notes: Pour steps monolithically with cap.
For details of piles and concrete Encasement
See sheet 12 of 15



SEC. THRU ABUT.

See sheet 9 of 15 for Abutment Backfill details



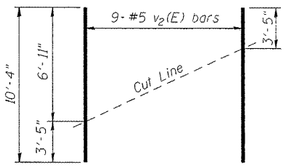
PLAN

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	40	#5	10'-10"	
p(E)	10	#7	34'-10"	
s2(E)	22	#4	11'-5"	
u(E)	8	#6	7'-3"	
v1(E)	72	#5	4'-4"	
v2(E)	18	#5	10'-4"	
Structure Excavation			Cu. Yd.	170.3
Concrete Structures			Cu. Yd.	15.2
Reinforcement Bars, Epoxy Coated			Pound	1,940
Furnishing Steel Piles HP12x53			Foot	168
Driving Piles			Foot	168
Test Pile Steel HP12x53			Each	1
Concrete Encasement			Cu. Yd.	2.4
Pile Shoes			Each	7

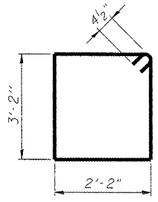
PILE DATA

Type: HP12x53 w/ Pile Shoes
Nominal Required Bearing: 419 K
Factored Resistance Available: 210 K
Est. Length: 28 ft.
No. Production Piles: 6
No. Test Piles: 1

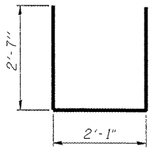


FIELD CUTTING DIAGRAM

Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



BAR s2(E)



BAR u(E)

REVISIONS	
NAME	DATE

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ILLINOIS DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT DETAILS

ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085

DESIGNED BY: S.G. DRAWN BY: T.C.S.
DATE: 11-20-08 CHECKED BY: O.A.O.

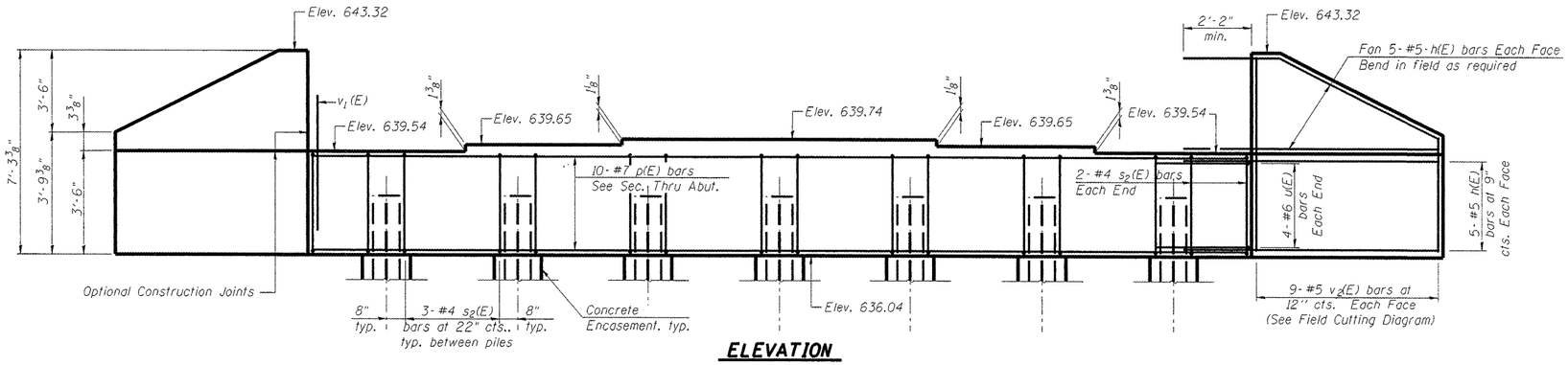
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253 (IL 251)	68 BR-1	MARSHALL	97	82
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

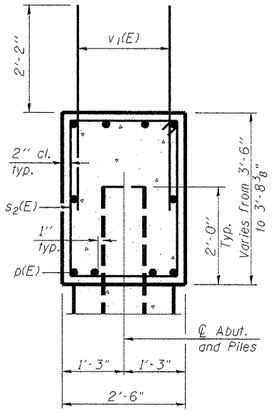
SHEET NO. 11
15 SHEETS

Contract #68573



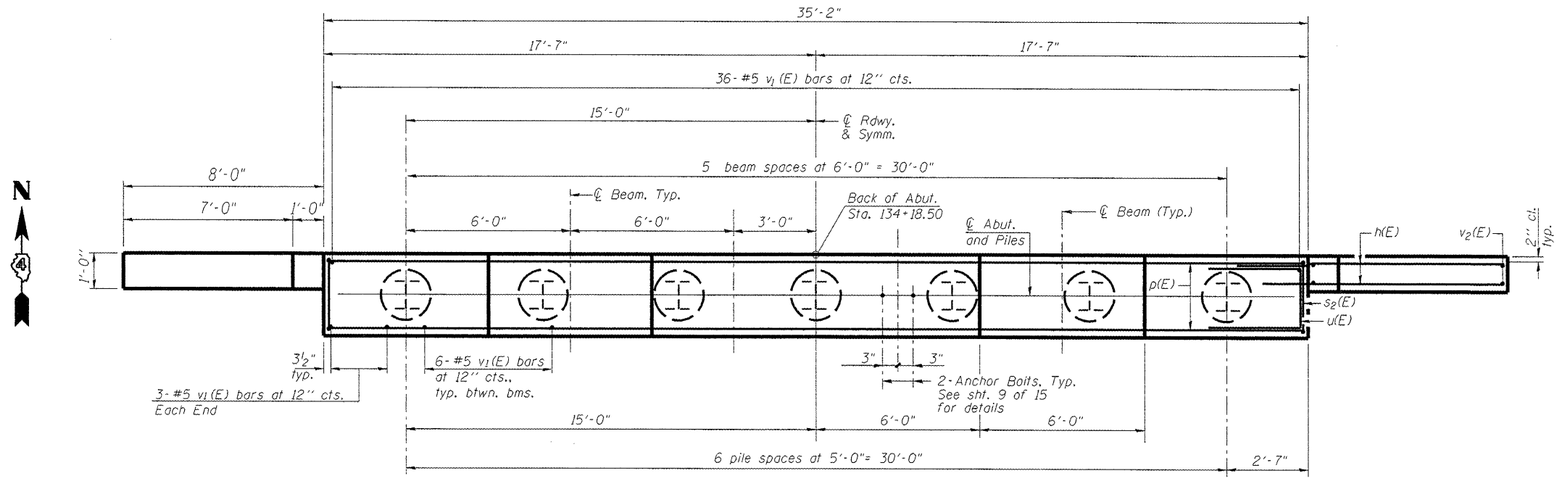
ELEVATION

Notes: Pour steps monolithically with cap.
For details of piles and concrete Encasement
See sheet 12 of 15



SEC. THRU ABUT.

See sheet 9 of 15 for Abutment Backfill details



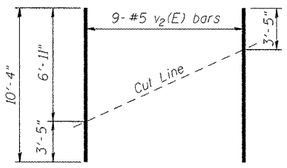
PLAN

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
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Test Pile Steel HP12x53			Each	1
Concrete Encasement			Cu. Yd.	2.4
Pile Shoes			Each	7

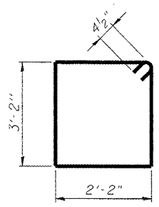
PILE DATA

Type: HP12x53 w/ Pile Shoes
Nominal Required Bearing: 419 K
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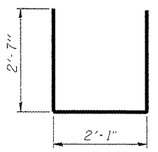


FIELD CUTTING DIAGRAM

Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



BAR s2(E)



BAR u(E)

REVISIONS	
NAME	DATE

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ILLINOIS DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT DETAILS

ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085

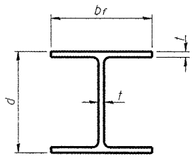
DESIGNED BY: S.G. DRAWN BY: T.C.S.
DATE: 11-20-08 CHECKED BY: O.A.O.

A1-0 11-1-06

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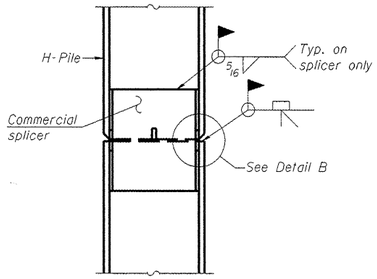
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253 (IL 251)	68 BR-1	MARSHALL	97	83
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET NO. 12
15 SHEETS
Contract #68573

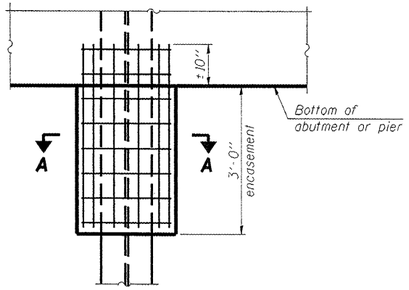


STEEL PILE TABLE

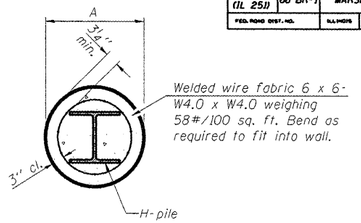
Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	11/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	11/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



ELEVATION



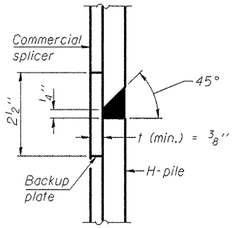
ELEVATION



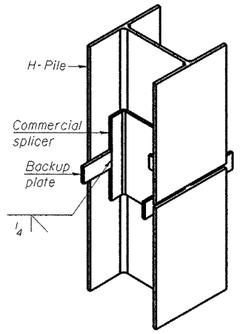
Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

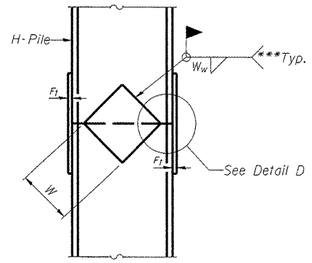
PILE ENCASEMENT



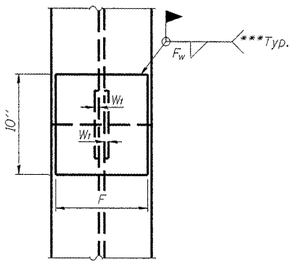
DETAIL "B"



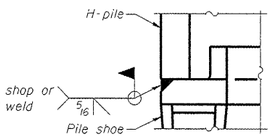
ISOMETRIC VIEW



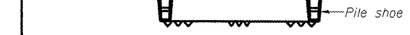
ELEVATION



END VIEW

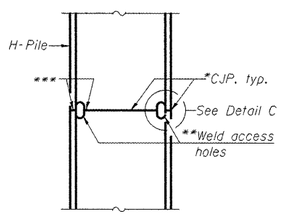


DETAIL A

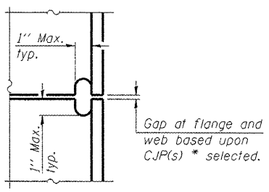


ELEVATION

H-PILE SHOE ATTACHMENT

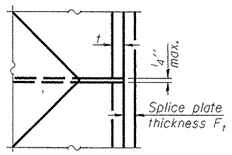


ELEVATION



DETAIL C

COMPLETE PENETRATION WELD SPLICE



DETAIL D

WELDED PLATE FIELD SPLICE

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

Designation	F	F_f	F_w	W	W_f	W_w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

*Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code - Steel.

**Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code - Steel.

***Interrupt welds 1/4" from end of each pile.

F-HP 9-3-07

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STEEL H-PILES DETAILS

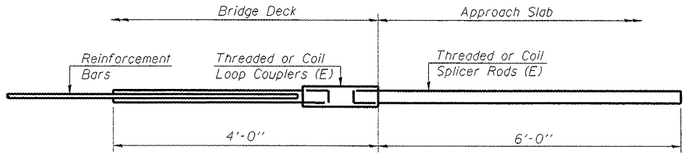
ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085

DESIGNED BY: S.G. DRAWN BY: T.C.S.
DATE: 11-20-08 CHECKED BY: O.A.O.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253 (IL 251)	68 BR-1	MARSHALL	97	84
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

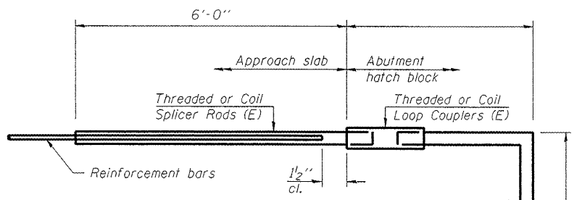
SHEET NO. 13
15 SHEETS

Contract #68573



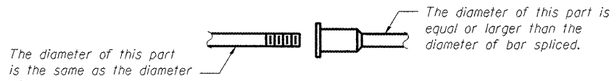
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 64



FOR STUB ABUTMENTS

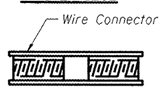
Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required =



ROLLED THREAD DOWEL BAR



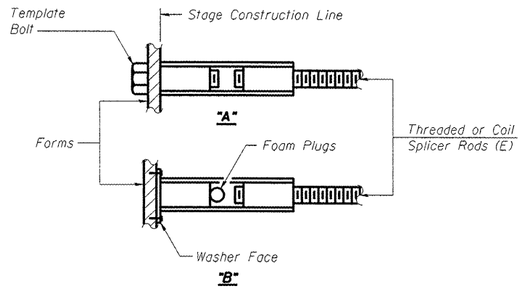
**** ONE PIECE**



WELDED SECTIONS

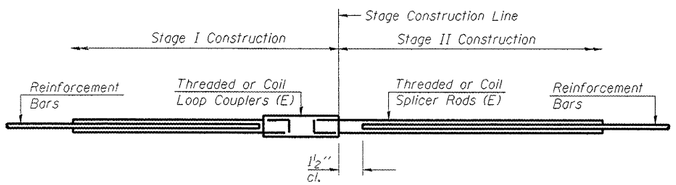
BAR SPLICER ASSEMBLY ALTERNATIVES

** 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.



STANDARD

Bar Size	No. Assemblies Required	Location

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 (Tension in kips) = 1.25 x fy x A_t
2. Minimum *Pull-out Strength (Tension in kips) = 0.66 x fy x A_t

Where fy = Yield strength of lapped reinforcement bars in ksi.
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	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8

BAR SPLICER ASSEMBLY DETAILS

BSD-1 11-1-06

STRUCTURE DESIGNS, INCORPORATED
ARCHITECTS & ENGINEERS
PH (773) 838-1780 ♦ www.structuredesignsinc.com

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

BAR SPLICERS ASSEMBLY DETAILS

ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085

DESIGNED BY: S.G. DRAWN BY: T.C.S.
DATE: 11-20-08 CHECKED BY: O.A.O.

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 253 (IL 251)	68 BR-1	MARSHALL	97	85
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET NO. 14
15 SHEETS

Contract #68573

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc

SOIL BORING LOG

Page 1 of 1

Date 12/02/02

ROUTE FAS 253 (IL 251) DESCRIPTION ILLINOIS 251 OVER SANDY CREEK NORTH OF WENONA LOGGED BY LM-IDOT

SECTION (68) BR-1 LOCATION NW 1/4, 3rd PM, SEC. 12, TWP. 30N, RNG. 1E, 629th PM

COUNTY Marshall DRILLING METHOD Hollow Stem Auger HAMMER TYPE AUTOMATIC

STRUCT. NO. 062-0002 Existing
Station 133+80

BORING NO. B-2 SOUTH ABUT
Station 133+39
Offset 44 ft RT
Ground Surface Elev. 634.1 ft

Surface Water Elev. 629.1 ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 629.1 ft ▼
Upon Completion 624.6 ft ▽
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Augered, black, Silty Clay Loam				
631.6				
Stiff, brown & gray, Silty Clay Loam	631.1	2 2 12	1.7B	27 9
Loose, brown, Silty Loam with Sand, Gravel & gray, weathered, Shale (fill)	▼ -5			
628.6		4 5 8	>4.5 P	18 17
Hard, red, weathered, Shale				
		3 6 8		15
	▽ -10			
		4 8 10	>4.5 P	12
		7 16 20		11
	-15			
618.6		8 15 22	>4.5 P	14 13
Hard, gray, Shale				
616.6				
Dense, gray, Limestone	616.1	120/4		4
End of boring. Boring continued with rock coring on 9/13/07 - See Rock Core Log.	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc

ROCK CORE LOG

Page 1 of 1

Date 09/13/07

ROUTE FAS 253 (IL 251) DESCRIPTION ILLINOIS 251 OVER SANDY CREEK NORTH OF WENONA LOGGED BY B. Ratajczyk

SECTION (68) BR-1 LOCATION NW 1/4, 3rd PM, SEC. 12, TWP. 30N, RNG. 1E

COUNTY Marshall CORING METHOD Rotary, surface set diamond bit

STRUCT. NO. 062-0002 Existing
Station 133+80

BORING NO. B-2A SOUTH ABUT
Station 133+43
Offset 44 ft RT
Ground Surface Elev. 633.6 ft

CORING BARREL TYPE & SIZE NW conv dbl bbl split inner
Core Diameter 2.1 in
Top of Rock Elev. 616.1 ft
Begin Core Elev. 615.6 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	RQD (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SHALE: Gray, calcareous (Core Run 1 - RMR Rating 29: IV - Poor Rock)		1	80	73	16	
613.8						
CLAYEY SHALE: Gray, calcareous (RMR Rating: IV - Poor Rock)	~20					1.8
611.3						
COAL (RMR Rating: IV - Poor Rock)						
610.7						
CLAYEY SHALE: Gray, calcareous (Core Run 2 - RMR Rating 29: IV - Poor Rock)		2	88	45	20	
609.6						
SHALE: Gray, calcareous (RMR Rating: IV - Poor Rock) Approximate 6 inch clayey shale deposit from approximately 24.5 to 25 feet. Moisture content tests performed on samples obtained from the following depths: 19.5 feet - 12 percent; Dry Density - 128 pcf 21 feet - 11 percent 23 feet - 10 percent 24.8 feet - 7 percent 26.9 feet - 3 percent 28.4 feet - 9 percent; Dry Density 136 pcf 30.8 feet - 18 percent 32.6 feet - 7 percent	~25					
Shear plane observed in core at approximately 29 feet.		3	93	58	19	37.8
604.1						
CLAYEY SHALE: Gray, calcareous (Core Run 3 - RMR Rating 34: IV - Poor Rock)	~30					
603.1						
SHALE: Gray, calcareous (RMR Rating: IV - Poor Rock)						
600.8						
CLAYEY SHALE: Gray, calcareous (RMR Rating: IV - Poor Rock)						
600.6						
Shale bedding appears horizontal. SPT sample obtained at 14.5 to 16 feet. Blow counts - 11, 23, 26. Brown, weathered clayey shale. SPT sample obtained at 17.5 to 19 feet. Blow counts - 50/4", 41/2", 8/1". Gray, clayey shale. Boring terminated at 33.0 ft.	~35					

Color pictures of the cores Yes
Cores will be stored for examination until Completion of Const.
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

STRUCTURE DESIGNS, INCORPORATED
ARCHITECTS & ENGINEERS
PH: (773) 638-1780 ♦ www.structuredesignsinc.com

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

BORING LOGS
ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085
DESIGNED BY: S.G. DRAWN BY: T.C.S.
DATE: 11-20-08 CHECKED BY: O.A.O.

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ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
FAS 253 (IL 251)	68 BR-1	MARSHALL	97	86
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET NO. 15
15 SHEETS

Contract #68573

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc

SOIL BORING LOG

Page 1 of 1

Date 12/02/02

ROUTE FAS 253 (IL 251) DESCRIPTION ILLINOIS 251 OVER SANDY CREEK NORTH OF WENONA LOGGED BY LM-IDOT

SECTION (68) BR-1 LOCATION NW 1/4, 3rd PM, SEC. 12, TWP. 30N, RNG. 1E, 629th PM

COUNTY Marshall DRILLING METHOD Hollow Stem Auger HAMMER TYPE AUTOMATIC

STRUCT. NO. 062-0002 Existing
Station 133+80

BORING NO. B-1 NORTH ABUT
Station 134+20
Offset 40 ft RT
Ground Surface Elev. 634.8 ft

Surface Water Elev. 629.1 ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Augered, Clay Loam, Gravel, Rip Rap, red weathered Shale (fill)			
	7		
	4	No	–
630.3	5	Recovery	
Medium, brown & gray, Clay Loam (fill) Large Limestone cobble @ 6.5'	-5		
	3		
	2	0.9	30
	14	B	
626.8	4		
Very stiff, red brown, weathered, Shale	6	1.0	29
	10	P	17
	-10		
	7		
	10	3.0	15
	14	P	
	7		
	12		11
	15		
	-15		
	12		
	16		12
	19		
	19		
	29		12
	40		
615.3	-20		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Hard, gray, calcareous, Shale Thin, Coal layers @ 24' (continued)	13		
	19	>4.5	13
	48	P	
	61		
	81		10
	64		
	-25		
	16		
	66		11
	88		
	56		
606.3	90		10
Dense, gray Limestone 605.8	100/4"		7
End of boring. Boring continued with rock coring on 9/12/07 – See Rock Core Log.	-30		
	-35		
	-40		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc

ROCK CORE LOG

Page 1 of 1

Date 09/12/07

ROUTE FAS 253 (IL 251) DESCRIPTION ILLINOIS 251 OVER SANDY CREEK NORTH OF WENONA LOGGED BY B. Rataiczyk

SECTION (68) BR-1 LOCATION NW 1/4, 3rd PM, SEC. 12, TWP. 30N, RNG. 1E

COUNTY Marshall CORING METHOD Rotary, surface set diamond bit

STRUCT. NO. 062-0002 Existing
Station 133+80

CORING BARREL TYPE & SIZE NW conv dbl bbl split inner
Core Diameter 2.1 in
Top of Rock Elev. 610.8 ft
Begin Core Elev. 610.3 ft

BORING NO. B-1A NORTH ABUT
Station 134+23
Offset 38 ft RT
Ground Surface Elev. 634.8 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	RQD (%)	CORE TIME (min/ft)	STRENGTH (tsf)
CLAYEY SHALE: Gray, calcareous (Core Run 1 – RMR Rating 21: IV – Poor Rock)	1	56	0	25	
-25					
608.3					
SHALE: Gray, calcareous (Core Run 2 – RMR Rating 26: IV – Poor Rock)	2	98	41	27	
Moisture content tests performed on samples obtained from the following depths: 25.5 feet – 10 percent 27.4 feet – 10 percent 29 feet – 10 percent; Dry Density – 135 pcf 31.5 feet – 11 percent; Dry Density – 130 pcf 35.1 feet – 11 percent					
-30	3	91	35	16	
37.2 feet – 12 percent 38.5 feet – 11 percent; Dry Density – 135 pcf (Core Run 3 – RMR Rating 29: IV – Poor Rock) Shear planes observed in core at the following depths: 32.7 feet 33 feet 33.5 feet 36 feet 37 feet 37.7 feet					25.4
Becomes light gray at 34 feet. (Core Run 4 – RMR Rating 29: IV – Poor Rock)					
-35	4	90	28	21	
Becomes brown at approximately 36 feet. Deposits of clayey shale (zones of weathering) intermittent in core. Becomes gray at 37 feet. Becomes brown at 37.8 feet.					33.8
595.3					
-40					
Shale bedding appears horizontal. SPT sampled obtained at 23.5 to 25 feet. Blow counts – 16, 100/5". Approximately 3 inches of coal observed in the bottom of the SPT sample. Boring terminated at 39.5 ft.					

Color pictures of the cores Yes
Cores will be stored for examination until Completion of Const.
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

REVISIONS	
NAME	DATE

STRUCTURE DESIGNS, INCORPORATED
ARCHITECTS & ENGINEERS
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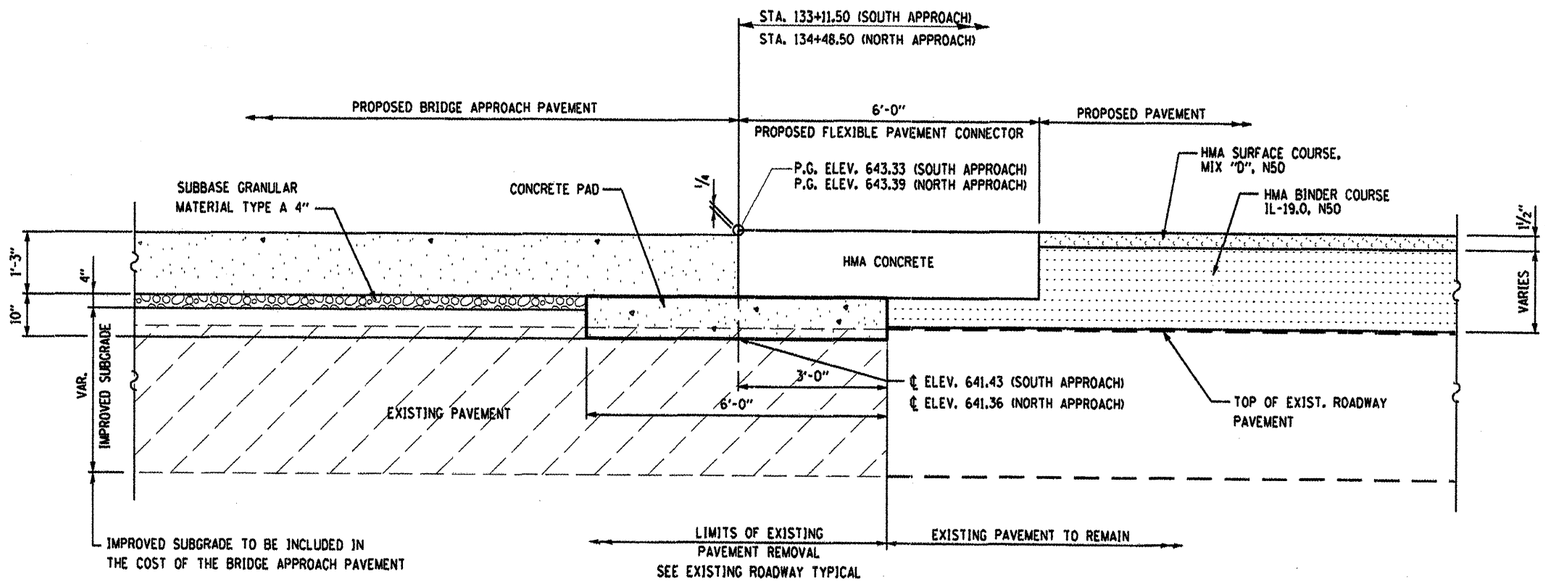
ILLINOIS DEPARTMENT OF TRANSPORTATION

BORING LOGS
ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085
DESIGNED BY: S.G. DRAWN BY: T.C.S.
DATE: 11-20-08 CHECKED BY: O.A.O.

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CONTRACT NO. 68573

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68 BR-1	MARSHALL	97	87
STA. 129+00 TO STA. 138+00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SECTION AT PAVEMENT CONNECTOR
(SHOWING TRANSITION BETWEEN BRIDGE APPROACH PAVEMENT AND APPROACH ROADWAY)

REVISIONS	
NAME	DATE

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ARCHITECTS & ENGINEERS
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ILLINOIS DEPARTMENT OF TRANSPORTATION

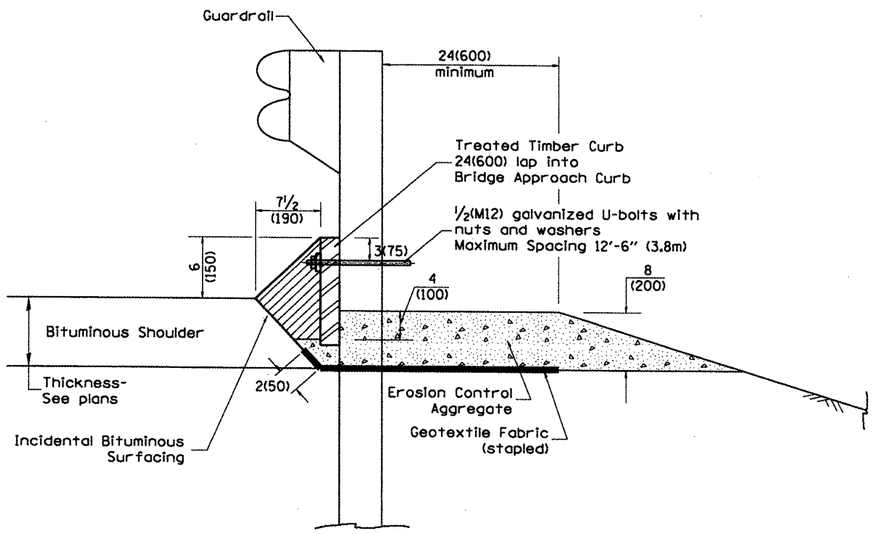
ROADWAY DETAILS
ILL. RTE. 251
OVER SANDY CREEK
F.A.S. 253 SEC. 68 BR-1
MARSHALL COUNTY
STA. 133+80.00 S.N. 062-0085

DESIGNED BY: A.G. DRAWN BY: T.C.S.
DATE: 05/02/2008 CHECKED BY: O.A.O.

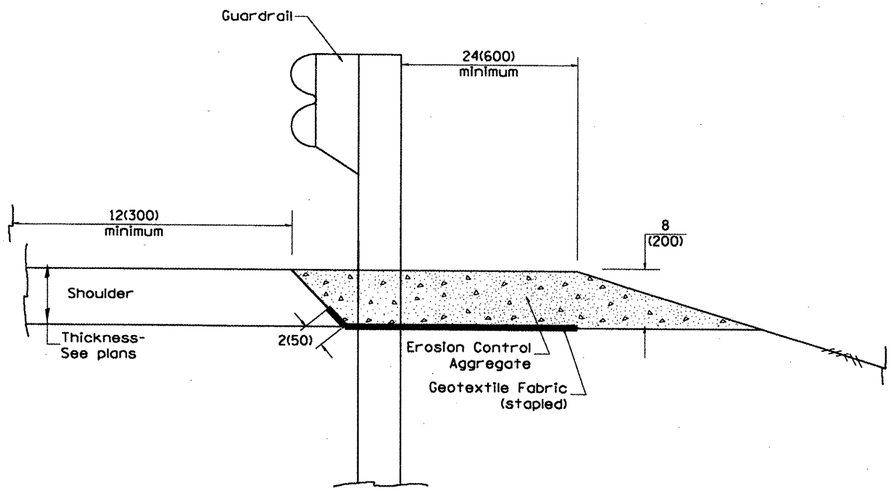
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CONTRACT NO. 68573

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BB,BB:1)	MARSHALL	22	22
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TYPICAL SECTION WITH EROSION CONTROL CURB



TYPICAL SECTION WITHOUT EROSION CONTROL CURB

GENERAL NOTES: EROSION CONTROL CURB

1. This work shall consist of grading as needed, installing hardware and treated timber boards, furnishing and placing mastic material and incidental bituminous surfacing in front of Steel Plate Beam Guardrail in accordance with Plan Details.

2. Timber shall be treated in accordance with Article 1007.12. All preservatives specified in the article will be allowed. Waterborne preservatives "asa" and "cca" shall have a minimum retention of 0.40 lbs./cu. ft. (6.4 kg/m³)

GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.

2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.

3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.

4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.

5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.

6. Materials shall meet the following requirements:

A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.

B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.

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

DATE	REVISIONS	BY
1-1-97	RENUM. C-22.01, NEW REVISION BOX	T.P.
3-1-97	CORRECT STD. NUMBERS IN NOTES PG. 2	J.A.
11-3-00	CORRECTION TO NOTES	M.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

GUARDRAIL EROSION CONTROL TREATMENTS

CADD STD NO. 630101-D4(1)
SCALE: NOT DRAWN TO SCALE

SHEET 1 OF 2
DRAWN BY CADD
CHECKED BY

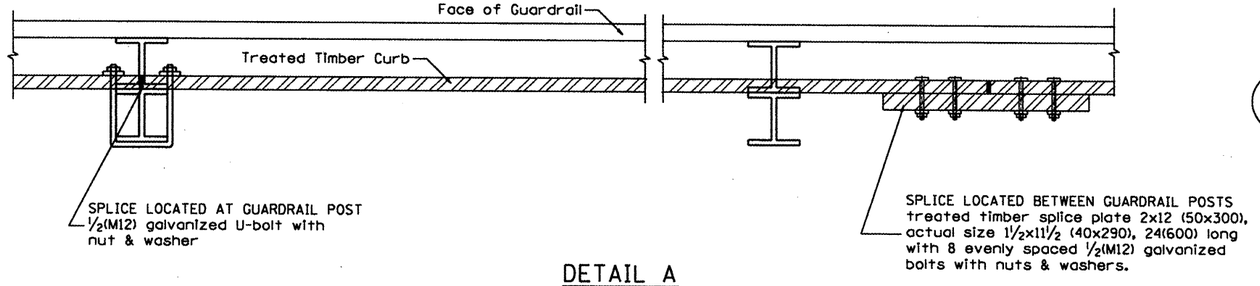
630101-D4(1)

$$DATE$$

DGN-ONLY

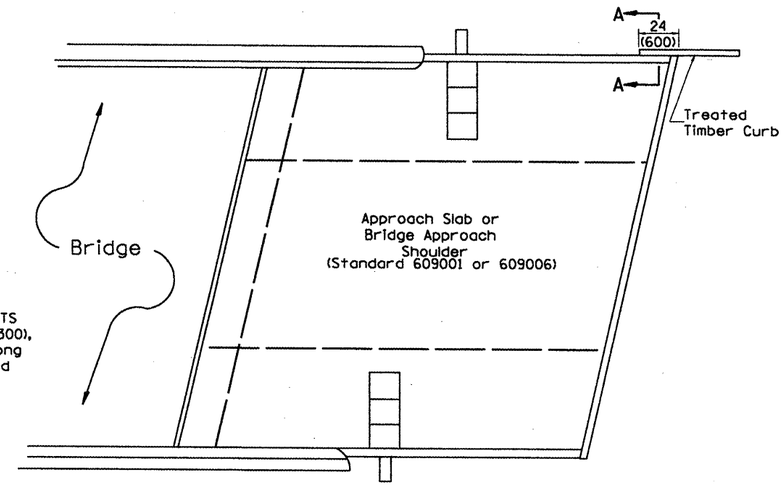
CONTRACT NO. 68573

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BB,BB:1)	MARSHALL	27	22
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



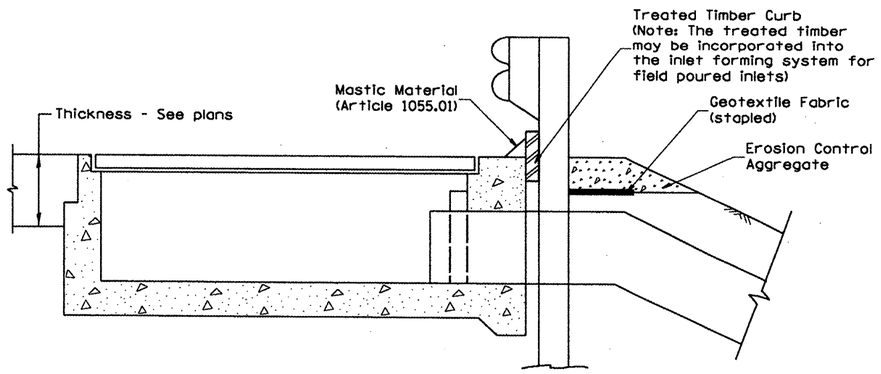
DETAIL A

(Typical Treated Timber Splices)

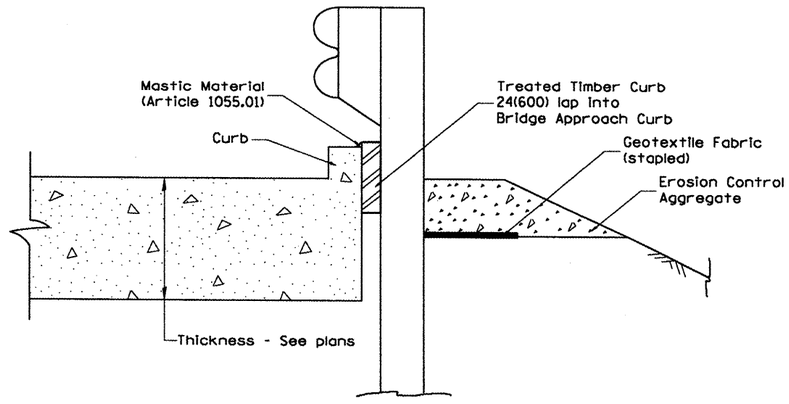


PLAN VIEW

APPROACH SLAB OR BRIDGE APPROACH SHOULDER
(STANDARD 609001 or 609006)



TYPICAL SECTION WITH EROSION CONTROL CURB
AT INLETS TYPE E & F (STANDARD 610001)



SECTION A-A

TYPICAL SECTION WITH EROSION CONTROL CURB
AT BRIDGE APPROACH CURB
(STANDARD 609001 OR 609006)

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

GUARDRAIL EROSION
CONTROL TREATMENTS

CADD STD NO. 630101-D4(2)

SCALE: NOT DRAWN TO SCALE

SHEET 2 OF 2

DRAWN BY CADD

CHECKED BY

$$DATE$$

DGN-ONLY

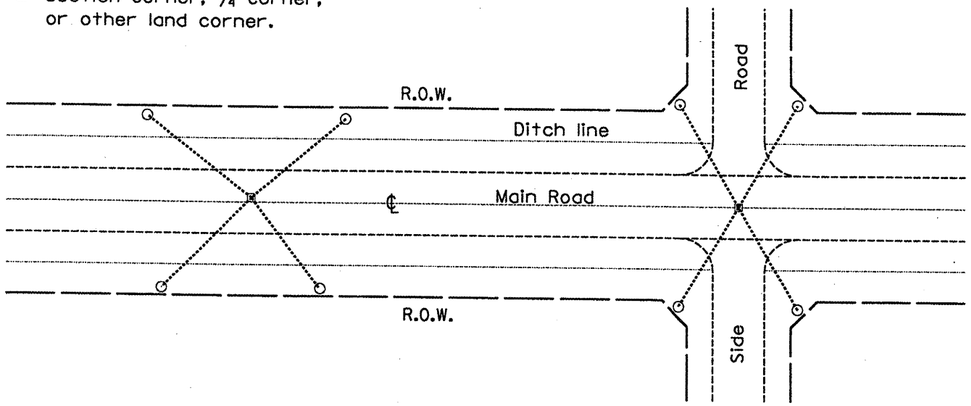
630101-D4(2)

CONTRACT NO. 68573

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	47	90
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PERMANENT SURVEY TIES

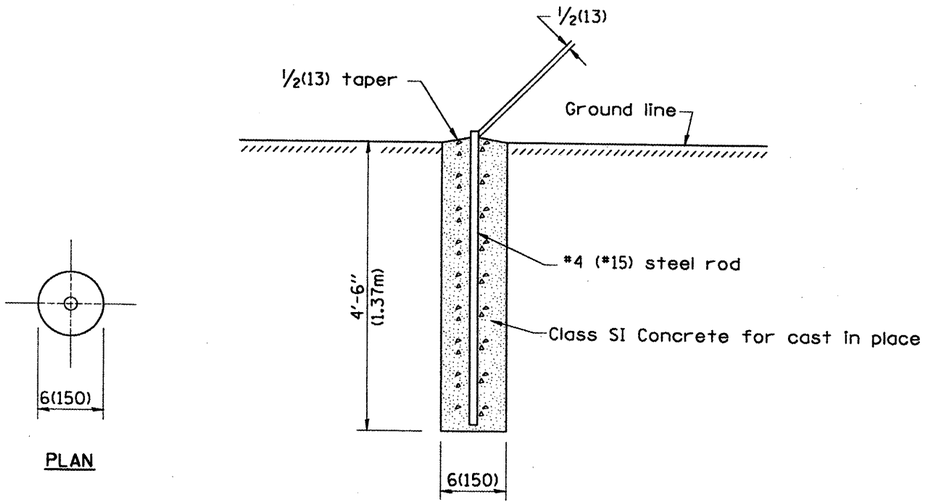
○ Permanent Survey Tie
□ Section Corner, 1/4 Corner, or other land corner.



TYPICAL APPLICATION

GENERAL NOTES

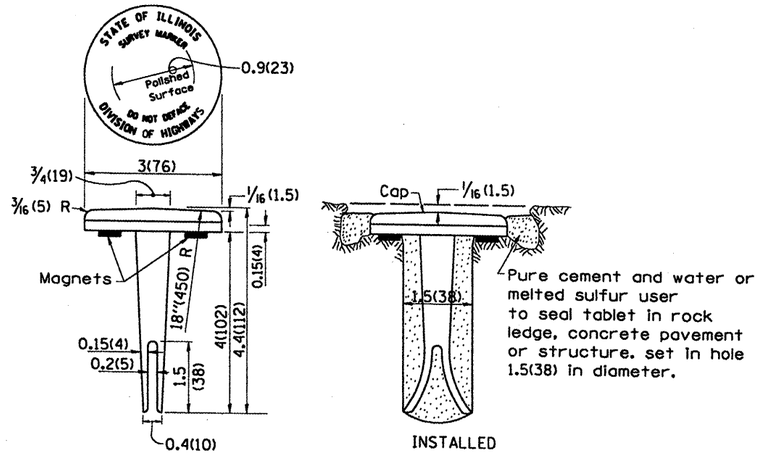
1. The marker shall be cast in place of Class SI Concrete.
2. Tie marker shall be installed after the final seeding has been completed unless otherwise specified by the Engineer.
3. The tie distances to the section corner shall be measured and recorded by the IDOT Chief of Surveys.



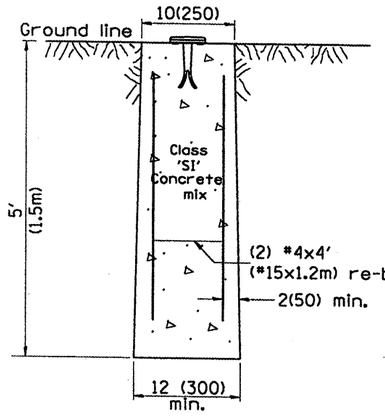
PLAN

SECTION

PERMANENT SURVEY MARKERS



BRONZE TABLET - No Scale
TYPE I



MARKER CAST IN PLACE
TYPE II

GENERAL NOTES

1. All type II markers shall be cast in place, and precast markers will not be allowed.
2. Two permanent magnets, each having a diameter of 3/4 (19) and a thickness of 1/4 (6), or equivalent, shall beattached to the underside of the tablet with an approved epoxy bonding agent.
3. The location of the markers shall be in accordance with the plans in general, the markers will be placed at the P.T.'s and P.C.'s of horizontal curves and spaces along the tangents in a way that a minimum of two markers are alway inter-visible, and not to exceed 1000' (300m).
4. The markers shall be placed under the direction of the Engineer and shall be installed in a workmanlike manner in order that there will be no further settlement or horizontal shifting. The monuments shall be placed in a way that the survey point will fall within the portion of the plaque provided for that purpose.
5. The project designation, the centerline station, the survey point, and the elevation shall be permanently marked by the use of metal dies after marker has been installed.

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

DATE	REVISIONS	BY
1-1-97	RENUM. D-3.01, NEW REVISION BOX	T.P.
	ADD DESIGNER NOTE, REVISED TITLE BOX	
7-7-98	ADD DESIGNER NOTE	J.A.
5-24-06	REMOVED GEN. NOTE UNDER TIES	M.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT CADD STANDARD

PERMANENT SURVEY TIE
&
PERMANENT SURVEY MARKERS TY.I - TY.II

CADD STD. NO. 667101-D4
SCALE: NOT DRAWN TO SCALE
DRAWN BY CADD
CHECKED BY

667101-D4

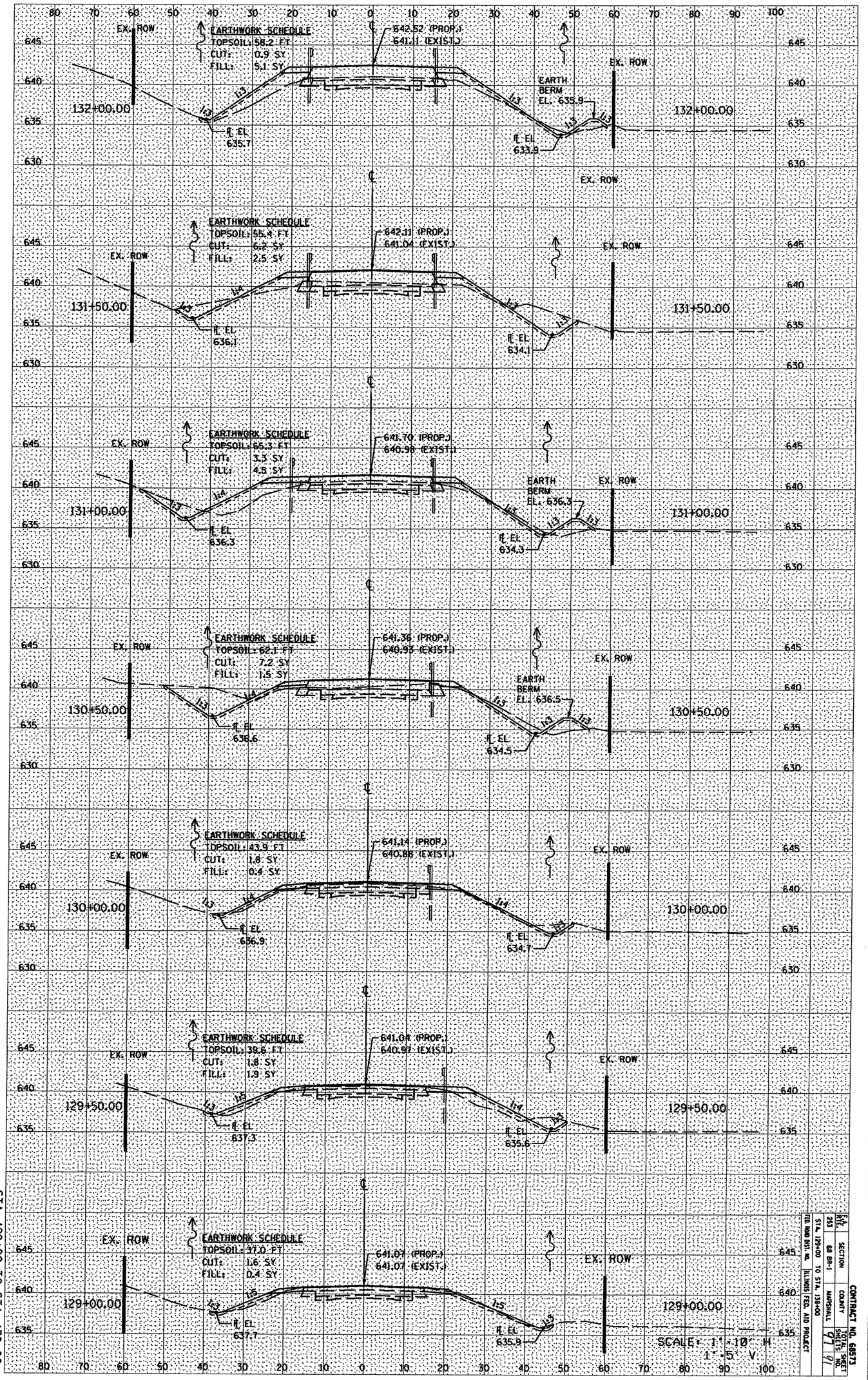
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NOTE BOOK	SURVEYED		
	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

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



STA. 129+00 TO STA. 132+00

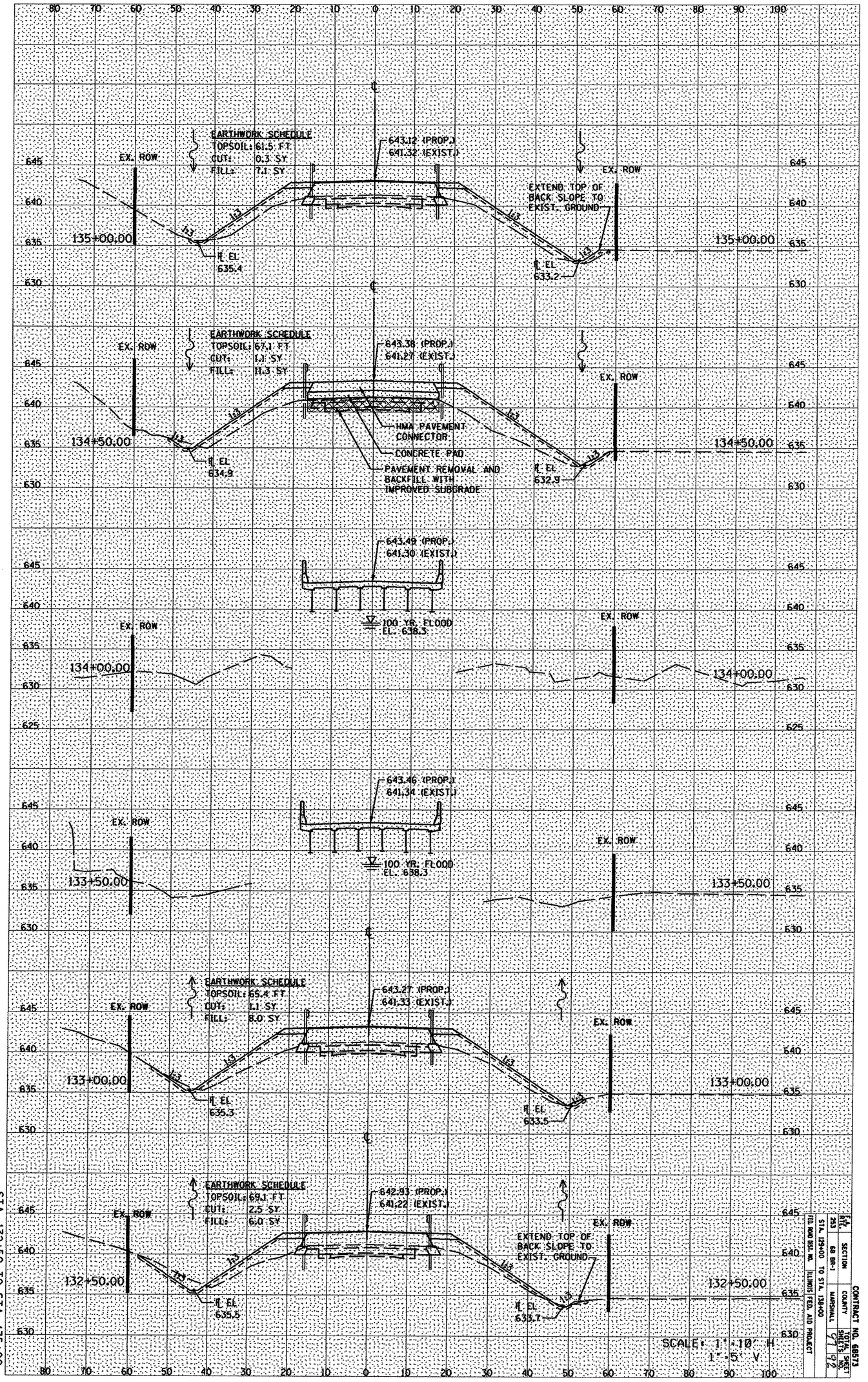
CONTRACT NO. 68573			
F.A.I. RTE. 253	SECTION 6B BR-1	TOTAL SHEETS 97	SHEET NO. 97
STA. 129+00 TO STA. 132+00	COUNTY MARSHALL		
TOT. NUM. DIST. NO.	ILLINOIS FED. AID PROJECT		

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	PLOTTED		
	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		

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



STA. 132+50 TO STA. 135+00

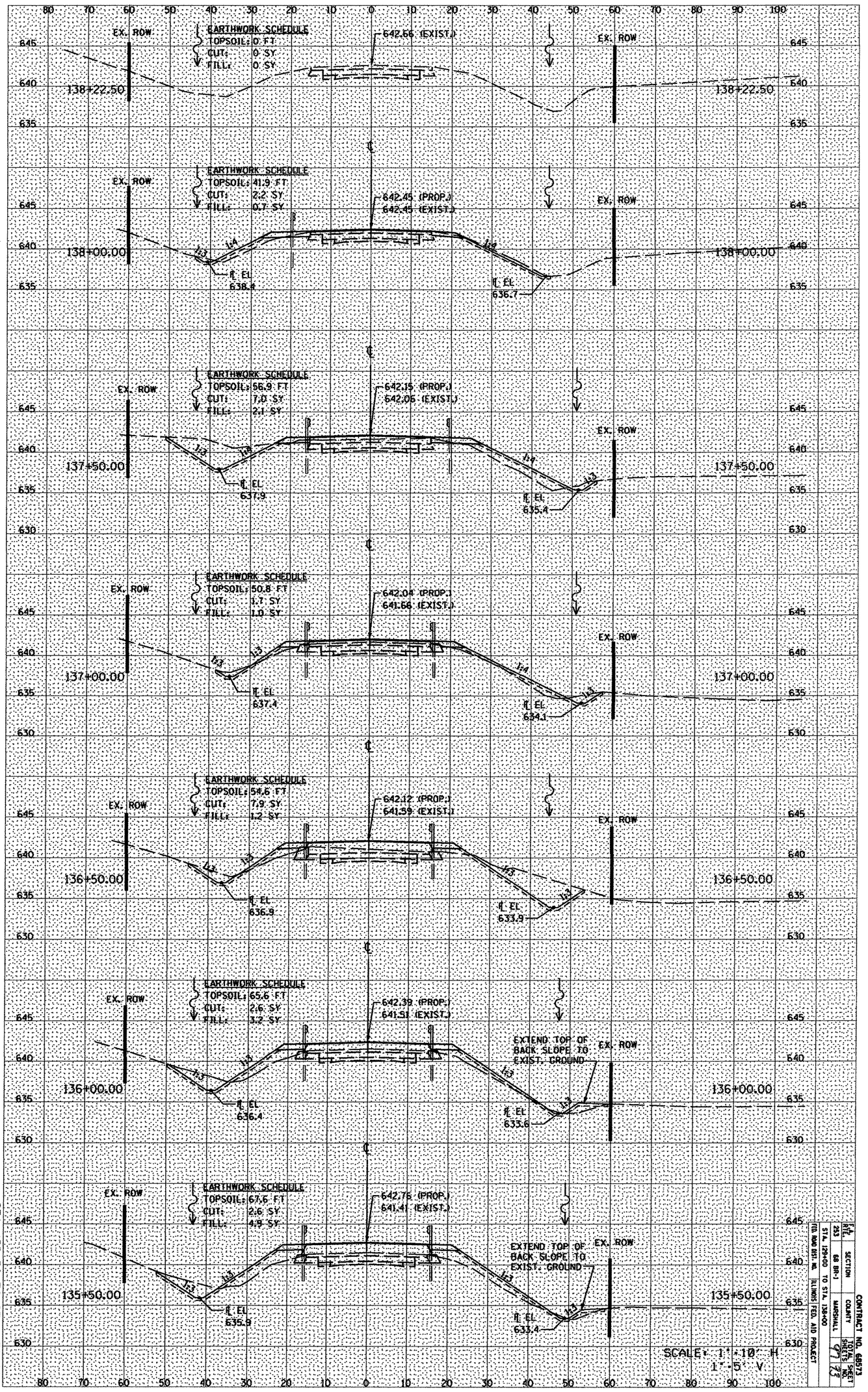
CONTRACT NO. 68573			
F.A.P. RTE. 251	SECTION 6B BR-1		
TD. ROD EST. NO.	COUNTY MARSHALL	TOTAL SHEETS 12	SHEET NO. 12
ILLINOIS FED. AID PROJECT	STA. 129+00 TO STA. 138+00		

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	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

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

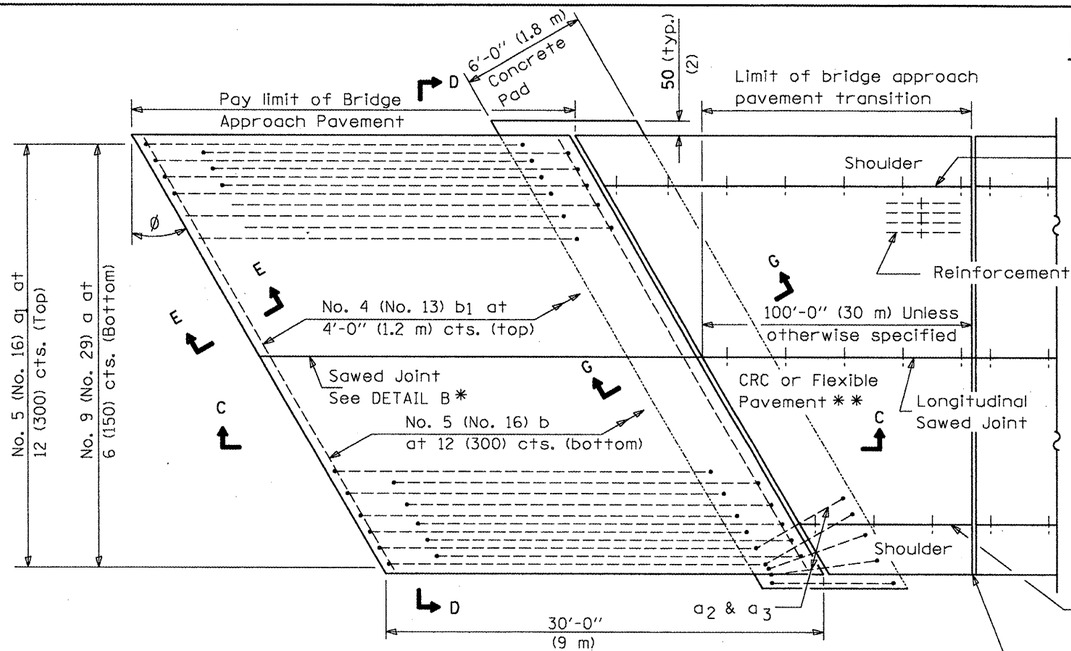


F.A. RTE.	SECTION	CONTRACT NO. 68573
253	68 BR-1	
STA. 129+00 TO STA. 138+00	COUNTY	SHEET NO.
ILLINOIS FED. AID PROJECT	MARSHALL	97 73

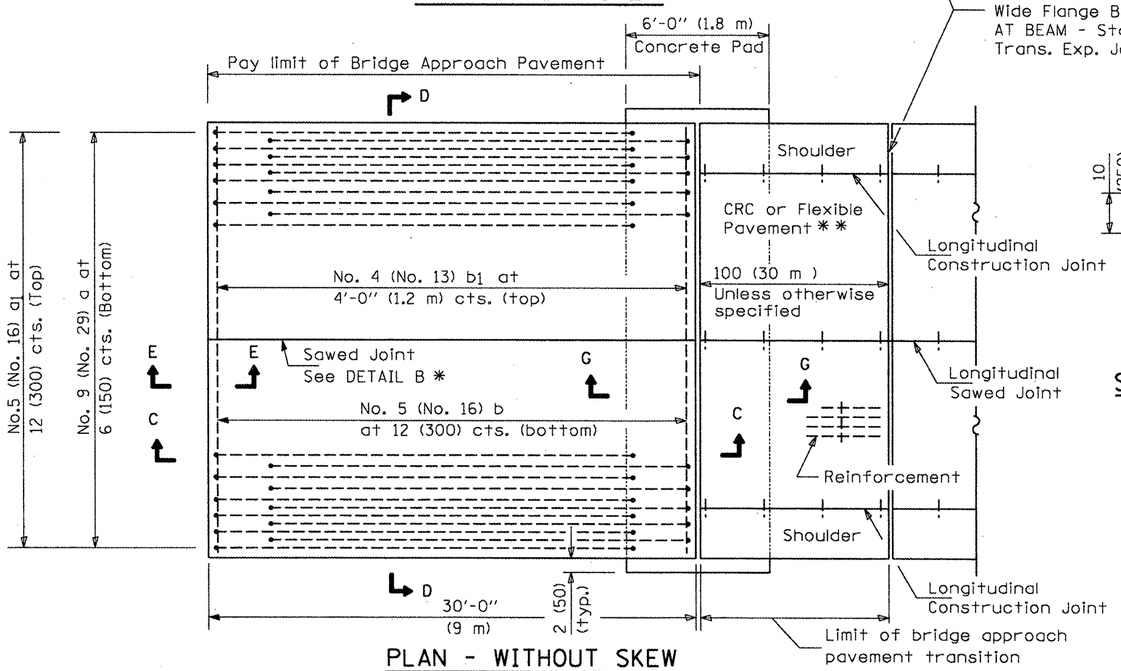
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F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	94
FED. ROAD DIST. NO. 4	ILLINOIS	CONTRACT NO. 68573		

NEW CONSTRUCTION

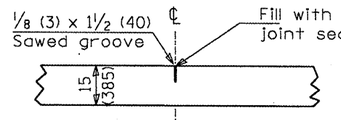


PLAN - WITH SKEW



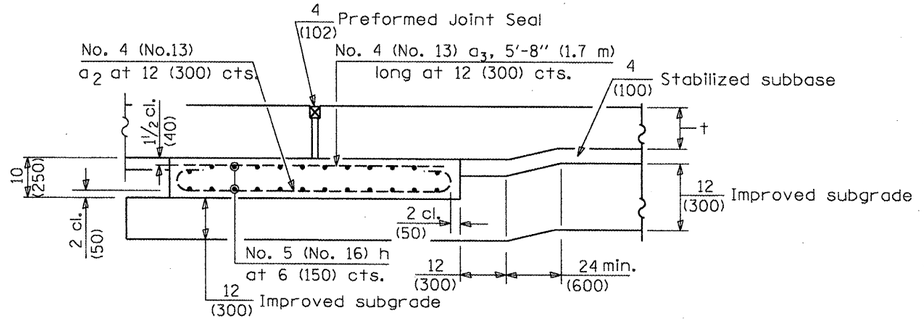
PLAN - WITHOUT SKEW

* Saw ℄ or lane edge if poured two or more lane widths at a time.
** Omit Reinforcement, tie bars and Long. sawed Jt. for Flexible Pavement.



DETAIL B *

(Reinforcement Not Shown)

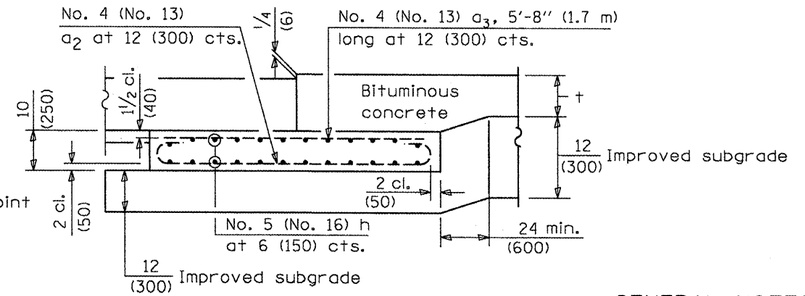


SECTION G-G - RIGID PAVEMENT

(Showing reinforcement)

Rigid Pavement only:

Wide Flange Beam Terminal Joint (See DETAIL AT BEAM - Standard 421101 or 421106) or 2 (50) Trans. Exp. Joint as detailed on Standard 420001.



SECTION G-G - FLEXIBLE PAVEMENT

(Showing reinforcement)

GENERAL NOTES

THICKNESS-"t"=Thickness of Pavement.

See Standard 421001 for reinforcement details not shown.

See Standard 420001 for joint details not shown.

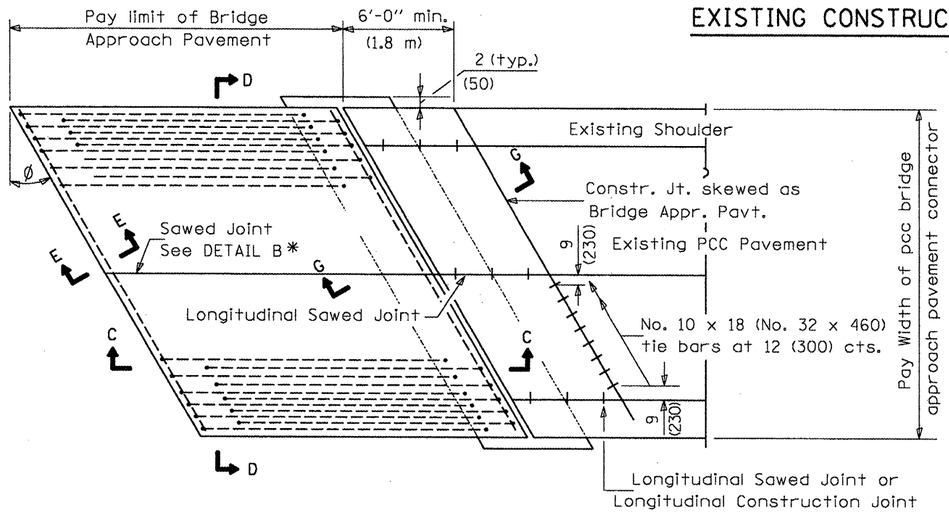
All dimensions are in inches (millimeters) unless otherwise shown.

BRIDGE APPROACH PAVEMENT

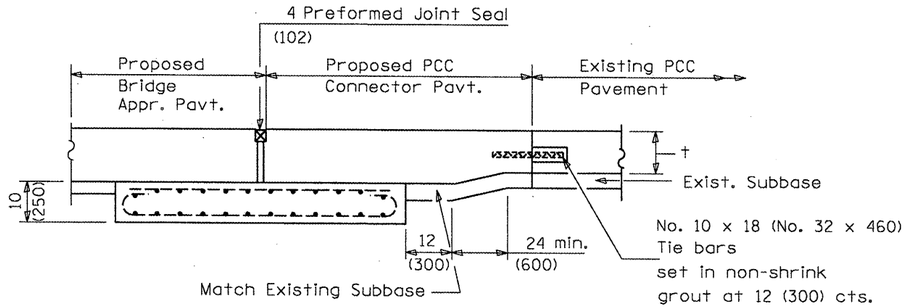
(Sheet 1 of 4)

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT NO. 68573		

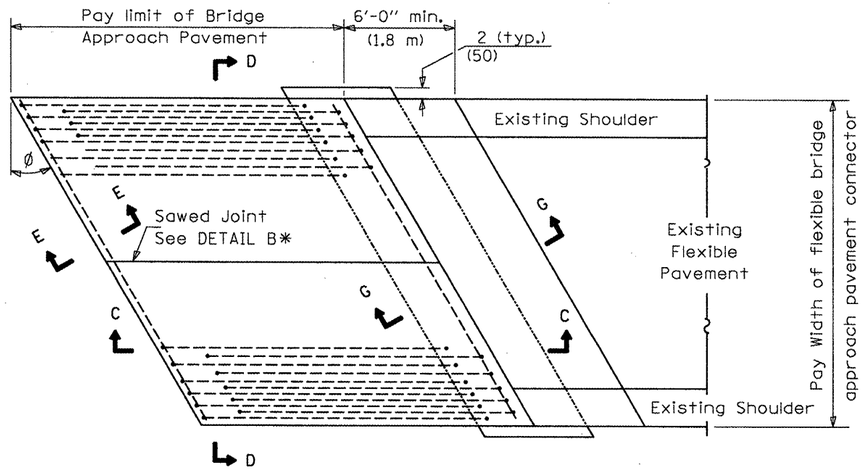
EXISTING CONSTRUCTION



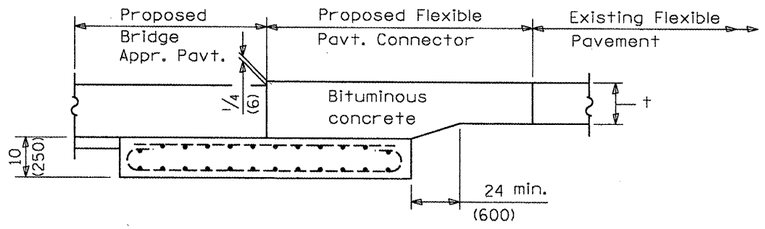
BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)



SECTION G-G - RIGID PAVEMENT



BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)

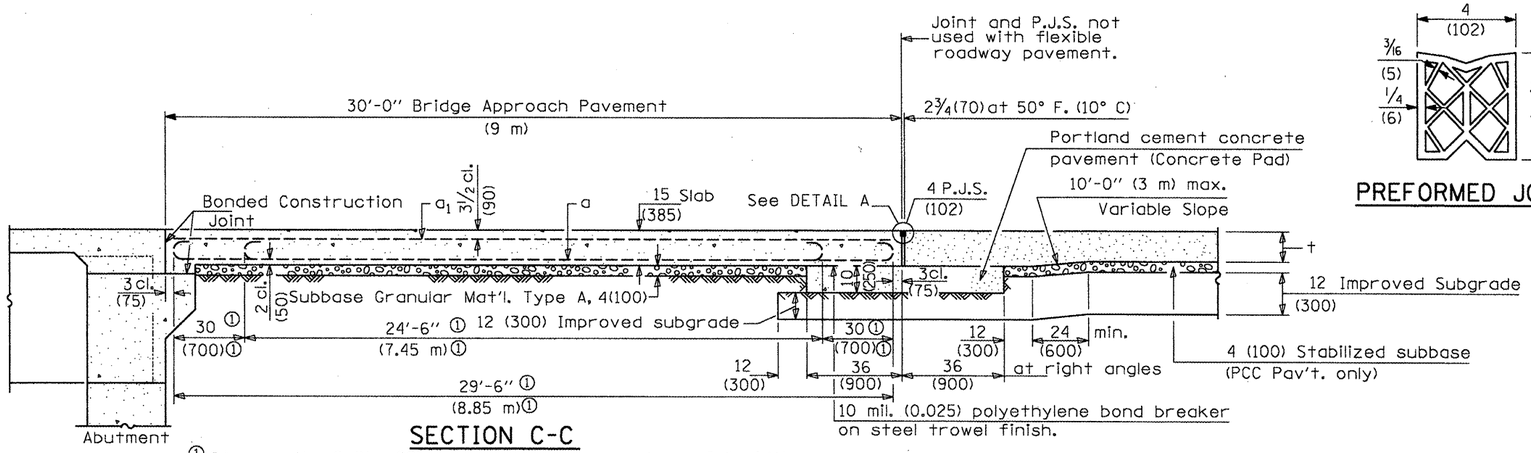


SECTION G-G - FLEXIBLE PAVEMENT

BRIDGE APPROACH PAVEMENT

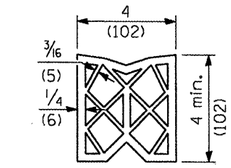
(Sheet 2 of 4)

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO. 4	ILLINOIS	CONTRACT NO. 68573		

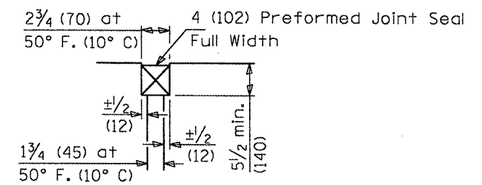


SECTION C-C

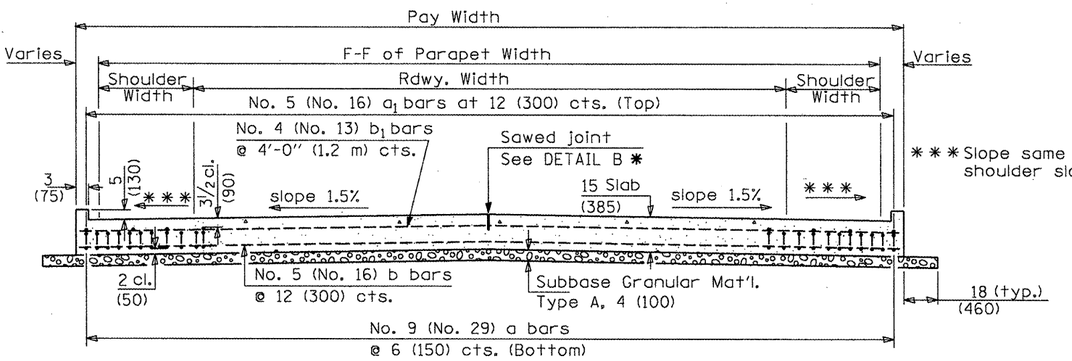
① Stagger No. 9 (No. 29) a bars as shown on plan - full width



PREFORMED JOINT SEAL



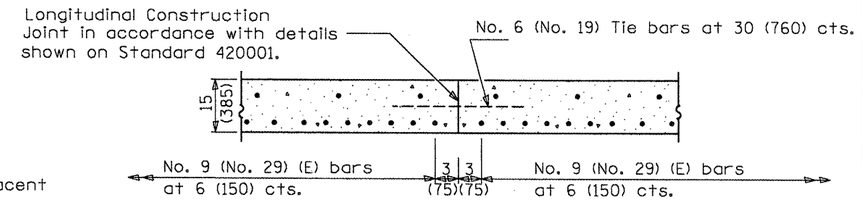
DETAIL A



✱✱✱ Slope same as adjacent shoulder slope.

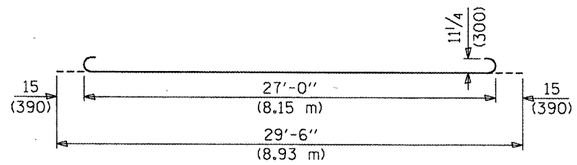
SECTION D-D

(See Plan for Dimensions not shown)

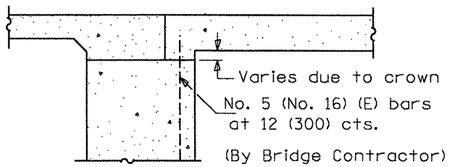


OPTIONAL LONGITUDINAL CONSTRUCTION JOINT

As approved by the Engineer, the Contractor may elect to reduce the widths of pour by use of the Optional Longitudinal Construction Joint shown. Joints shall be located at the edge of a traffic lane.

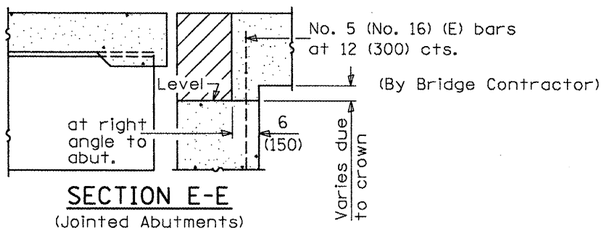


BAR a



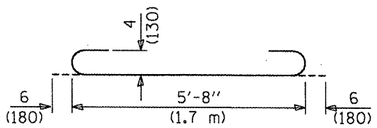
SECTION E-E

(Integral Abutments)



SECTION E-E

(Jointed Abutments)



BAR a_2

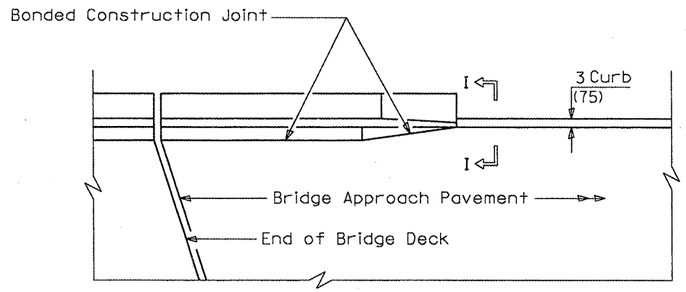
DESIGN STRESSES

fy = 60,000 p.s.i. (400 MPa)
f'c = 3,500 p.s.i. (24 MPa)
n = 8.5

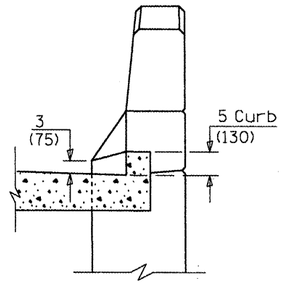
BRIDGE APPROACH PAVEMENT

(Sheet 3 of 4)

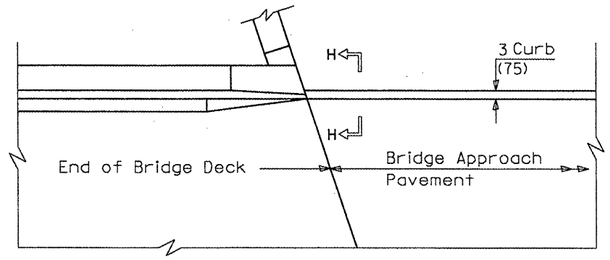
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
253	68(BR,BR-1)	MARSHALL	97	97
FED. ROAD DIST. NO. 4	ILLINOIS	CONTRACT NO. 68573		



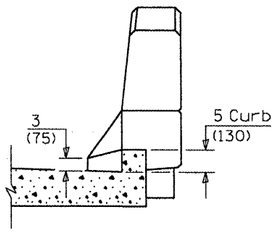
PARAPET TO CURB TRANSITION
PILE BENT ABUTMENT



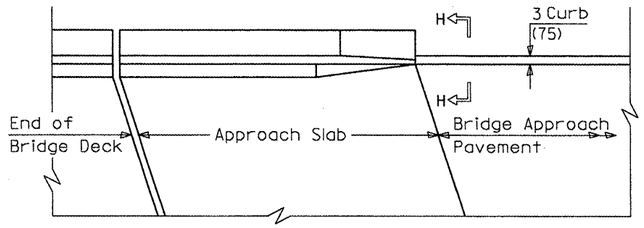
SECTION I - I



PARAPET TO CURB TRANSITION
INTEGRAL ABUTMENT



SECTION H - H



PARAPET TO CURB TRANSITION
VAULTED ABUTMENT

BRIDGE APPROACH PAVEMENT

(Sheet 4 of 4)