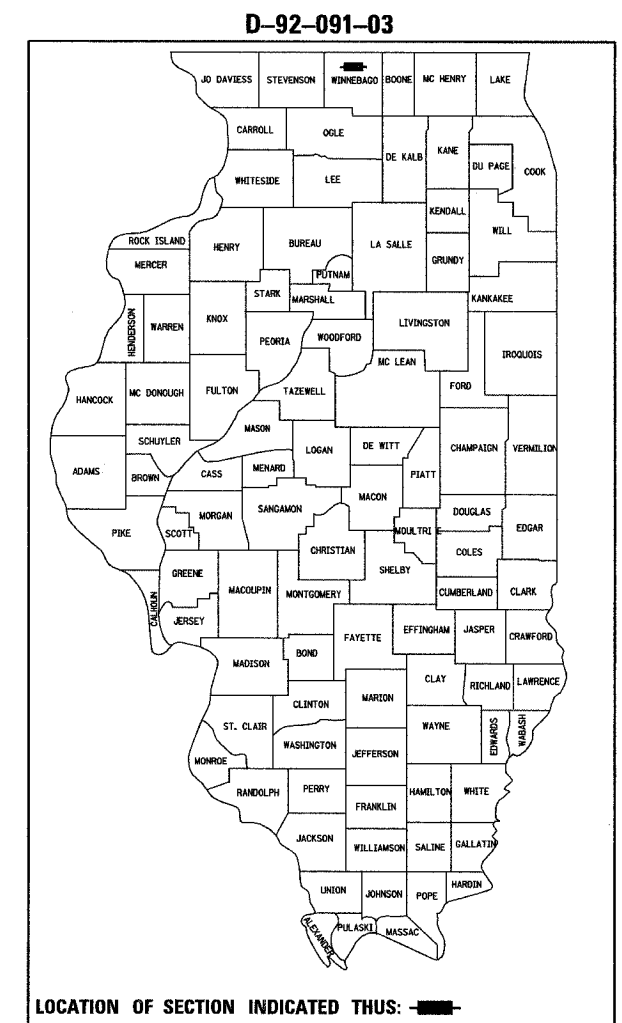


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	115BR-1	WINNEBAGO	36	1

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANS FOR PROPOSED FEDERAL AID HIGHWAY

**FAP ROUTE 505 (IL 75)
SECTION 115BR-1
OVER TIMOTHY CREEK
WINNEBAGO COUNTY
PROJECT NO. BRF-0505(018)**

C-92-083-06
R. 1 E. 3rd P.M.



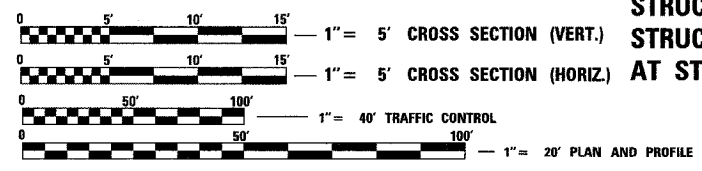
INDEX OF SHEETS

- 1. COVER SHEET
- 2. GENERAL NOTES
- 3. SUMMARY OF QUANTITIES
- 4. TYPICAL SECTIONS
- 5. VERTICAL AND HORIZONTAL CONTROL
- 6.-7. SCHEDULE OF QUANTITIES
- 8. PLAN AND PROFILE IL RTE 75
- 9. TRAFFIC CONTROL PLANS
- 10.-19. STRUCTURAL PLANS
- 20.-21. SOIL BORINGS
- 22.-29. EXISTING BRIDGE PLANS (FOR INFORMATION ONLY)
- 30. DETAIL OF BITUMINOUS SHOULDER AT GUARD RAIL (23.4)
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- STOP LINE SIGN FOR TEMPORARY SIGNALS (99.4)
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- 32.-35. WITNESS MARKER + PERMANENT SURVEY MARKERS, TYPE II (66.2)

HIGHWAY STANDARDS

- 000001-04 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001001-01 AREA OF REINFORCEMENT BARS
- 280001-03 TEMPORARY EROSION CONTROL SYSTEMS
- 482001-01 BITUMINOUS SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
- 515001-02 NAME PLATE FOR BRIDGES
- 630001-07 STEEL PLATE BEAM GUARDRAIL
- 630201-04 PCC/BITUMINOUS STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
- 630301-04 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
- 635001 DELINEATORS
- 635006-02 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 635011-01 REFLECTOR MARKER AND MOUNTING DETAILS
- 667101 PERMANENT SURVEY MARKERS
- 701006-02 OFF-ROAD OPERATIONS, 2L, 2W 4.5 M (15') TO 600 MM (24") FROM EDGE OF PAVEMENT
- 701011-01 OFF-ROAD OPERATIONS 2L, 2W, DAY ONLY
- 701301-02 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701306-01 LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH
- 701311-02 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
- 701321-08 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
- 701326-02 LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS ≥ 45 MPH
- 702001-06 TRAFFIC CONTROL DEVICES
- 704001-03 TEMPORARY CONCRETE BARRIER
- 720011 METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
- 780001-01 TYPICAL PAVEMENT MARKINGS
- 781001-02 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

TRAFFIC DATA
HIGHWAY CLASSIFICATION: RURAL MINOR ARTERIAL
2008 ADT = 2700
DESIGN SPEED 55 MPH
POSTED SPEED 55 MPH



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.

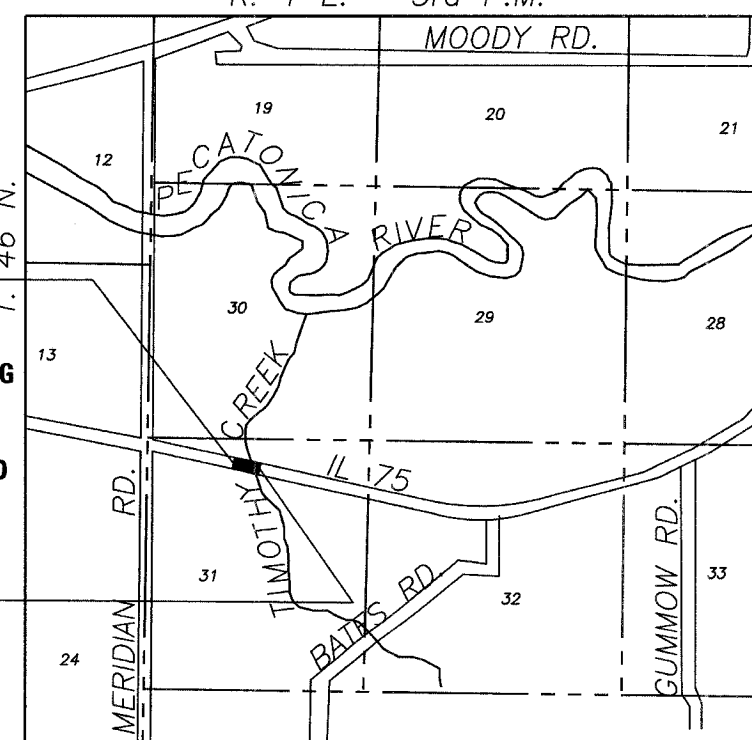
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123

CONTRACT NO. 64940

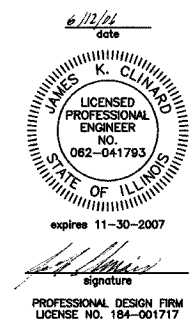
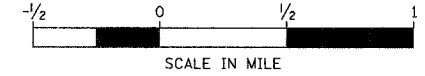
**IMPROVEMENT BEGINS
STA. 60 + 06**

**SECTION 115BR-1
INCLUDES THE REMOVAL OF EXISTING
STRUCTURE NO. 101-0114 AND
CONSTRUCTION OF THE NEW
STRUCTURE 101-0183, A THREE SIDED
STRUCTURE OVER TIMOTHY CREEK
AT STA 63 + 23.20**

**IMPROVEMENT ENDS
STA. 65 + 90**



NET LENGTH OF SECTION 584 FEET (0.111 MILES)
GROSS LENGTH OF SECTION 584 FEET (0.111 MILES)



Signature
PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-001717

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED June 22, 2006

Gregory L. Mountain
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

August 18, 2006
Mike Hine
ENGINEER OF DESIGN AND ENVIRONMENT

August 18, 2006
Milton R. Seco, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

DISTRICT 2 DIXON IL
**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

CHAMLIN & ASSOCIATES
PERU ILLINOIS MORRIS

PROJECT ENGINEER
BECKY MARRUFFO

SQUAD LEADER
THOMAS HALLA 815-284-5993

SENIOR SQUAD LEADER
MIKE YUSEF 815-284-5354

JAMES K. CLINARD
CHAMLIN & ASSOCIATES
815-223-3344

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	115BR-1	WINNEBAGO	35	2
STA.		TO STA.		
FED. ROAD DIST. NO. 2		ILLINOIS	FED. AID PROJECT	

GENERAL NOTES

COMMITMENTS

- THE REMOVAL OF BITUMINOUS SURFACING NOT ON A RIGID TYPE BASE REMOVED IN CONJUNCTION WITH THE BASE SHALL BE REMOVED AS EARTH EXCAVATION. THE REMOVAL OF BITUMINOUS SURFACING ON A RIGID TYPE BASE REMOVED IN CONJUNCTION WITH THE BASE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PAVEMENT REMOVAL OF THE TYPE SPECIFIED.
- THE FINAL TOP FOUR INCHES OF SOIL IN ANY RIGHT-OF-WAY AREA DISTURBED BY THE CONTRACTOR MUST BE CAPABLE OF SUPPORTING VEGETATION. THE SOIL MUST BE FROM THE A HORIZON (ZERO TO 2' DEEP) OF SOIL PROFILES OF LOCAL SOILS.
- THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS. SEEDING CLASS 2A SALT TOLERANT ROAD MIXTURE SHALL BE USED, EXCEPT IN FRONT OF PROPERTIES WHERE THE GRASS WILL BE MOWED, THEN USE SEEDING, CLASS 1 LAWN MIXTURE. THIS WORK WILL BE INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR EARTH EXCAVATION.
- FERTILIZER SHALL BE APPLIED TO ALL DISTURBED AREAS AND INCORPORATED INTO THE SEEDBED PRIOR TO SEEDING OR PLACEMENT OF SOIL AT THE RATE SPECIFIED IN SECTIONS 250 AND 252 OF THE STANDARD SPECIFICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
- MULCH METHOD 2 SHALL BE APPLIED OVER ALL SEEDED AREAS. THIS SHALL BE INCLUDED IN THE COST OF THE EARTH EXCAVATION.
- PREVIOUSLY PUGMILLED STOCKPILES OF "TYPE A" OLDER THAN 1 MONTH WILL NOT BE APPROVED FOR USE UNTIL A MOISTURE CHECK IS RUN TO VERIFY MOISTURE CONTENT. MATERIAL SHIPPED TO PROJECTS WITHOUT BEING TESTED WILL NOT BE ACCEPTED.
- THE SUBGRADE ON THIS PROJECT, EXCLUSIVE OF ROCK CUT AREAS IS SCHEDULED TO BE IMPROVED TO A 12" DEPTH ACCORDING TO MECHANISTIC PAVEMENT DESIGN. THE AREAS SCHEDULED TO BE IMPROVED TO A DEPTH GREATER THAN 12" ARE ESTIMATED BASED ON THE ORIGINAL GEOTECHNICAL INVESTIGATION. THE SUBGRADE SHALL BE PROCESSED IN ACCORDANCE WITH ARTICLE 301.03 OF THE STANDARD SPECIFICATIONS BEFORE THE ENGINEER SHALL DETERMINE THE LIMITS AND THE ADDITIONAL THICKNESS OF IMPROVEMENT REQUIRED, IF ANY.
- EXCEPT FOR THE TOP 3", ALL AGGREGATE BASES AND SUBBASES 12" IN THICKNESS SHALL BE CONSTRUCTED OF AGGREGATE GRADATION CA-2. IF THE SPECIFIED THICKNESS EXCEEDS 12" THE BASES OR SUBBASES SHALL BE CONSTRUCTED OF TOPSIZE 6" BREAKER-RUN CRUSHED STONE WITH 100% BY WEIGHT, PASSING THE 4" SIEVE AND 15% TO 40% BY WEIGHT, PASSING THE 2" SIZE SIEVE, EXCEPT FOR THE TOP 3". THE BREAKER-RUN CRUSHED STONE SHALL BE REASONABLY UNIFORMLY GRADED FROM COARSE TO FINE AND BE TAKEN FROM A QUARRY LEDGE CAPABLE OF PRODUCING CLASS "D" QUALITY AGGREGATE. THE TOP 3" SHALL BE GRADATION CA-6 OR CA-10 REGARDLESS OF THICKNESS. THE WATER NECESSARY TO ACHIEVE COMPACTION IN ALL BUT THE TOP 3" LAYER MAY BE ADDED AFTER THE SUBBASE OR BASE COURSE IS PLACED ON THE GRADE.

9. THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE DESIGN	SURFACE	BINDER	TOP LIFT SHOULDER	BOTTOM LIFTS SHOULDER	BIT. BASE CSE
PG: PG 64-22	PG 64-22	PG 64-22	PG58-22	PG58-22	PG58-22
RAP: (MAX)	15	25	30	30	30
DESIGN AIR VOIDS	4.2@NSO	4.2@NSO	3@NSO	2@NSO	2@NSO
MIXTURE COMPOSITION (GRADATION MIXTURE)	IL 9.5 OR 12.5	IL 19.0	IL 9.5 OR 12.5	BAM	BAM
FRICITION AGGREGATE	D	N/A	C	N/A	N/A
20 YEAR ESAL	1.5	1.5	N/A	N/A	N/A

- ON FULL DEPTH PAVEMENT, SHOULDER WIDTHS OF 6 FT. OR LESS MAYBE PLACED, AT THE CONTRACTOR'S OPTION, SIMULTANEOUSLY WITH THE ADJACENT TRAFFIC LANE FOR BOTH THE BINDER AND SURFACE COURSE, PROVIDED THE CROSS SLOPE OF BOTH THE PAVEMENT AND SHOULDER CAN BE SATISFACTORILY OBTAINED. THE SHOULDER WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR BITUMINOUS SHOULDERS OF THE THICKNESS SPECIFIED ON THE PLANS.
- INSTALL A "TO ACTUATE SIGNAL" SIGN FOR THE TRAFFIC SIGNAL DETECTOR LOOPS. THE DETAIL OF THIS SIGN IS INCLUDED IN THE PLANS. THIS WORK WILL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION STANDARD 701321.
- BITUMINOUS AND AGGREGATE PRIME COAT SHALL BE PLACED IN ACCORDANCE WITH SECTION 406 OF THE STANDARD SPECIFICATIONS. THE COST OF THE PRIME COATS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER TON FOR BITUMINOUS CONCRETE SURFACE COURSE OF THE TYPE SPECIFIED.
- A NATIONWIDE 404 PERMIT HAS BEEN ISSUED FOR THIS PROJECT AND THE CONDITIONS OF THAT PERMIT MUST BE ADHERED TO.
- THE NEW NUMBER FOR THIS STRUCTURE WILL BE 101-0183.
- THE CONTRACTOR SHALL SUBMIT FOUR COPIES OF THE REQUIRED SHOP DRAWINGS FOR REVIEW AND APPROVAL TO THE BUREAU OF BRIDGES AND STRUCTURES, 2300 SOUTH DIRKSEN PARKWAY, SPRINGFIELD, IL 62764. AFTER APPROVAL OF INITIAL SUBMITTAL, THE CONTRACTOR SHALL SUBMIT ONE SET OF SHOP DRAWINGS TO ERIC HARM, ENGINEER OF MATERIALS, 126 EAST ASH STREET, SPRINGFIELD, IL 62706, AND EIGHT (8) SETS OF SHOP DRAWINGS TO BE DISTRIBUTED TO:
 - DISTRICT 2 DISTRICT ENGINEER (1)
 - FABRICATOR (1)
 - CONTRACTOR (2)
 - RESIDENT ENGINEER (2)
 - DISTRICT 2 BUREAU OF MATERIALS (2)
- THE REVIEW AND APPROVAL OF TEMPORARY SHEET PILING WILL REQUIRE 4 TO 6 WEEKS. THE CONTRACTOR SHALL SCHEDULE HIS WORK ACCORDINGLY.

- THE BORING LOGS FOR THIS STRUCTURE INDICATE THAT GROUNDWATER LEVELS MAY ENCRACH ON THE CONSTRUCTION LIMITS OF THIS STRUCTURE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL THE GROUND WATER AND DIVERT THE STREAM FLOW DURING CONSTRUCTION IN ORDER TO KEEP THE CONSTRUCTION AREA FREE OF WATER. THE METHOD OF CONTROLLING THE WATER SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER AND THE COST SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THREE-SIDED PRECAST CONCRETE STRUCTURES 36' X 11'.
- CULVERT AND BRIDGE FLOWS MUST BE MAINTAINED THROUGHOUT THE PROJECT. NORMAL FLOW SHALL BE ALLOWED TO PASS AT THE RATE IT ENTERS THE JOBSITE. HIGH FLOWS SHALL BE ALLOWED TO PASS WITHOUT CAUSING DAMAGE TO UPSTREAM PROPERTIES.
- THE CONTRACTOR SHALL SUPPLY THE RESIDENT ENGINEER WITH THE MANUFACTURER'S INSTALLATION REQUIREMENTS FOR THE TYPE OF STEEL PLATE BEAM GUARDRAIL TERMINAL TYPE 1 SPECIAL (TANGENT) OR STEEL PLATE BEAM GUARDRAIL TERMINAL TYPE 1 SPECIAL (FLARED).
- ONE 16D GALVANIZED NAIL SHALL BE USED TO TOE NAIL THE WOOD BLOCK OUT TO THE WOOD POST ON ALL TRAFFIC BARRIER TERMINAL TYPE 1 SPECIALS.
- DELINEATORS SHALL BE INSTALLED AS SHOWN ON STANDARD 635001, EXCEPT THAT THE POST SHALL BE ROTATED 180° AND ONLY METAL-BACKED DELINEATORS SHALL BE PERMITTED.
- DELINEATORS SHALL BE PLACED AT THE ENDS OF APPROACH GUARDRAIL TERMINAL SECTIONS, AND AT EACH HEADWALL OR END SECTION OF AR CULVERTS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR DELINEATORS.
- PERMANENT SURVEY MARKERS, TYPE II, SHALL BE SET AT INTERVALS OF 1 MILE OR AS DIRECTED BY THE ENGINEER. BRIDGE OR CULVERT PROJECTS SHALL HAVE ONE SURVEY MARKER PLACED NEAR THE STRUCTURE. ESTIMATED: 2 EACH.
- PERMANENT SURVEY MARKERS, TYPE II SHALL BE CAST-IN-PLACE AS SHOWN ON DISTRICT STANDARD 66.2
- THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A DESCRIPTION OF LOCATION, ELEVATION, AND COORDINATES FOR EACH PERMANENT SURVEY MARKER. THE ENGINEER SHALL SUBMIT THIS INFORMATION TO THE SURVEY CREW.
- WORK ON THIS PROJECT WILL BE IN PROGRESS AT THE SAME TIME AS WORK ON ADJACENT PROJECTS.

WORK ON THESE PROJECTS SHALL BE SCHEDULED TO KEEP INTERFERENCE BETWEEN ALL THE PROJECTS TO A MINIMUM. THE CONTRACTORS SHALL INFORM EACH OTHER OF PROGRESS OF THE PROJECTS AND GIVE FAIR WARNING TO THE OTHER CONTRACTORS WHEN A PROBLEM MIGHT BE ENCOUNTERED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED FOR NON-EMERGENCY WORK. THE JULIE NUMBER IS 800-892-0123. THE FOLLOWING LISTED UTILITIES LOCATED WITHIN THE PROJECT LIMITS OR IMMEDIATELY ADJACENT TO THE PROJECT CONSTRUCTION LIMITS ARE MEMBERS OF JULIE:

COMMONWEALTH EDISON CO.	ELECTRIC
VERIZON	TELEPHONE
NICOR GAS CO.	GAS
CHARTER COMM	COMMUNICATIONS

FOLLOWING ARE THE KNOWN UTILITIES LOCATED WITHIN THE PROJECT LIMITS OR IMMEDIATELY ADJACENT TO THE PROJECT CONSTRUCTION LIMITS WHICH ARE NOT MEMBERS OF JULIE AND SHOULD BE NOTIFIED INDIVIDUALLY BY THE CONTRACTOR:

IDOT-DISTRICT 2	GOVERNMENT
819 DEPOT AVENUE	(815) 284-5469
DIXON, IL 61021	
- THE APPLICABLE PORTIONS OF ARTICLE 105.07 OF THE STANDARD SPECIFICATION SHALL APPLY EXCEPT FOR THE FOLLOWING: THE CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE THE VERTICAL DEPTHS OF THE UNDERGROUND UTILITIES WHICH MAY INTERFERE WITH CONSTRUCTION OPERATIONS. THIS WORK WILL NOT BE MEASURED OR PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICE FOR THE ITEM OF CONSTRUCTION INVOLVED.

PER SB 699 (90 DAY UTILITY RELOCATION LAW), ONCE RIGHT-OF-WAY IS CLEAR TO AWARD THE PROJECT, A NOTICE WILL BE SENT TO THE UTILITY COMPANIES INSTRUCTING THEM TO HAVE THEIR FACILITIES RELOCATED WITHIN 90 DAYS. ESTIMATED DATE RELOCATION COMPLETE = LETTING DATE + 135 DAYS.
- CADD DATA WILL BE AVAILABLE TO CONTRACTORS AND CONSULTANTS WORKING ON THIS PROJECT. THIS INFORMATION WILL BE PROVIDED UPON REQUEST AS MICROSTATION CADD FILES AND GEOPAK COORDINATE GEOMETRY FILES ONLY. IF DATA IS REQUIRED IN OTHER FORMATS IT WILL BE YOUR RESPONSIBILITY TO MAKE THESE CONVERSIONS. IF ANY DISCREPANCY OR INCONSISTENCY ARISES BETWEEN THE ELECTRONIC DATA AND THE INFORMATION ON THE HARD COPY, THE INFORMATION ON THE HARD COPY SHOULD BE USED. CONTACT THE DISTRICT'S PROJECT ENGINEER TO REQUEST THESE FILES.
- BACKFILL MATERIAL SHALL BE INSTALLED AS NOTED ON THE PROVISIONS FOR THREE SIDED PRECAST CONCRETE STRUCTURE. THE BACKFILL MATERIAL GRADATION, COMPACTION AND INSTALLATION METHOD SHALL CONFORM TO THE PRE-CAST STRUCTURE MANUFACTURER'S REQUIREMENTS. THIS WORK SHALL BE INCLUDED IN THE CONTRACT PRICE PER METER (FOOT) FOR THREE SIDED PRECAST CONCRETE STRUCTURES OF THE SIZE SPECIFIED, AS INDICATED IN THE PROVISIONS AND PLAN NOTES.

- THERE ARE TWO JURISDICTIONAL WETLANDS LOCATED WITHIN THE PROJECT AREA, BUT BEYOND THE CONSTRUCTION LIMITS. THESE WILL NOT BE IMPACTED BY PROJECT CONSTRUCTION.
- THESE WETLANDS ARE SHOWN ON THE PLAN SHEET IN THE DESIGN REPORT AND WILL BE SHOWN ON THE CONTRACT PLANS.
- APPROXIMATELY FOUR MONTHS PRIOR TO PROJECT LETTING AND PRIOR TO THE SUBMITTAL OF FINAL PLANS BY THE CONSULTANT TO THE DEPARTMENT, AN INSPECTION OF THE EXISTING STRUCTURE SHALL BE CONDUCTED TO EVALUATE WHETHER STAGE CONSTRUCTION REMAINS FEASIBLE BASED ON THE DETERIORATED CONDITION OF THE DECK BEAMS. RECOMMENDATIONS ON STAGING FEASIBILITY AND REPLACEMENT OF DETERIORATED DECK BEAMS SHOULD BE SUBMITTED TO THE DEPARTMENT'S BRIDGE MAINTENANCE ENGINEER FOR REVIEW AND CONCURRENCE. THE BEAM REMOVAL AND REPLACEMENT PLAN SHOULD BE REVISED AS NECESSARY BASED ON THE RESULTS OF THE INSPECTION. IF IT IS DETERMINED THAT STAGE CONSTRUCTION IS NO LONGER FEASIBLE AND ROAD CLOSURE IS NECESSARY, COORDINATION WITH LOCAL AGENCIES SHOULD BE CONDUCTED PER DEPARTMENT POLICIES.
- ONE MONTH PRIOR TO THE START OF CONSTRUCTION, THE RESIDENT ENGINEER SHALL CONTACT PROPERTY OWNER, MARK SHEDD (815/629-2563), TO ALLOW HIM SUFFICIENT TIME TO REMOVE FENCES CURRENTLY LOCATED ON STATE RIGHT-OF-WAY. MR. SHEDD HAS ALSO REQUESTED A MEETING WITH THE RESIDENT ENGINEER PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL CONTACT THE ADJACENT PROPERTY OWNERS ONE (1) WEEK PRIOR TO WORK BEGINNING TO ALLOW FOR ARRANGEMENTS WITH THEIR LIVESTOCK. NOTICE SHALL BE DOCUMENTED AND A COPY GIVEN TO THE RESIDENT ENGINEER. CONSIDERATION AND COOPERATION SHALL BE PROVIDED BETWEEN THE CONTRACTOR AND THE ADJACENT PROPERTY OWNERS AS REQUIRED.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
FAP 505 (IL 75)
SECTION 115BR-1
WINNEBAGO COUNTY

SCALE: VERT.
HORIZ.
DATE 11/05

DRAWN BY NOE
CHECKED BY JKC

PLOT DATE = 4/06
FILE NAME = ZPR0303NOTES.DGN
PLOT SCALE = NONE
USER NAME = CHRIS

FAP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	115BR-1	WINNEBAGO	26	3
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

Item No.	Item	Unit	Total QUANTITY	80% FED 20% STATE X028-2A	
				ROADWAY	BRIDGE
20101000	TEMPORARY FENCE	FOOT	360	360	--
20200100	EARTH EXCAVATION	CU YD	249	249	--
20300100	CHANNEL EXCAVATION	CU YD	37	37	--
28000400	PERIMETER EROSION BARRIER	FOOT	155	155	--
28100107	STONE RIPRAP, CLASS A4	SO YD	402	--	402
31100910	SUB-BASE GRANULAR MATERIAL, TYPE A 12"	SO YD	584	584	--
35101400	AGGREGATE BASE COURSE, TYPE B	TON	85	85	--
35650300	BASE COURSE WIDENING 8"	SO YD	280	280	--
40600990	TEMPORARY RAMP	SO YD	47	47	--
44000100	PAVEMENT REMOVAL	SO YD	344	344	--
48101200	AGGREGATE SHOULDERS, TYPE B	TON	36	36	--
48202400	BITUMINOUS SHOULDERS SUPERPAVE 6"	SO YD	227	227	--
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	--	1
50300225	CONCRETE STRUCTURES	CU YD	74.9	--	74.9
50800105	REINFORCEMENT BARS	POUND	5900	--	5900
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1280	--	1280
51201000	FURNISHING METAL PILE SHELLS 12"	FOOT	2003	--	2003
51202600	DRIVING AND FILLING SHELLS	FOOT	2003	--	2003
51203200	TEST PILE METAL SHELLS	EACH	1	--	1
51205200	TEMPORARY SHEET PILING	SO FT	2046	--	2046
51500100	NAME PLATES	EACH	1	--	1
* 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	537.5	537.5	--
* 63000005	STEEL PLATE BEAM GUARD RAIL, TYPE B	FOOT	100	100	--
* 63000025	STEEL PLATE BEAM GUARD RAIL, ATTACHED TO STRUCTURES	FOOT	75	75	--
* 63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	4	4	--
63200310	GUARDRAIL REMOVAL	FOOT	393	393	--
63500105	DELINEATORS	EACH	4	4	--
66700305	PERMANENT SURVEY MARKERS, TYPE II	EACH	2	2	--
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MD	4	4	--

Item No.	Item	Unit	Total QUANTITY	80% FED 20% STATE	
				ROADWAY	BRIDGE
67100100	MOBILIZATION	L SUM	1	1	--
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	--
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1	--
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1	--
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	5	5	--
* 70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	--
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	124	124	--
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	1993	1993	--
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	24	24	--
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	754	754	--
70400100	TEMPORARY CONCRETE BARRIER	FOOT	475	475	--
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	475	475	--
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	1250	1250	--
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	2	2	--
78200410	GUARDRAIL MARKERS, TYPE A	EACH	10	10	--
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	--
78300100	PAVEMENT MARKING REMOVAL	SO FT	417	417	--
X0324032	THREE-SIDED PRECAST CONCRETE STRUCTURES 36' X 11'	FOOT	41.9	--	41.9
X4066414	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX "C", N50	TON	11	11	--
X4073146	BITUMINOUS CONCRETE PAVEMENT (FULL-DEPTH), SUPERPAVE, 13 1/4"	SO YD	533	533	--
Z0002600	BAR SPLICERS	EACH	24	--	24
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	--
28200200	FILTER FABRIC	SO YD	402	--	402
+ Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2	--
+ Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2	--

* SPECIALTY ITEM
 † SFTY-3N

PLOT DATE = 04/08
 FILE NAME = Z891035SUMQUANT
 PLOT SCALE = NONE
 USER NAME = CHHS

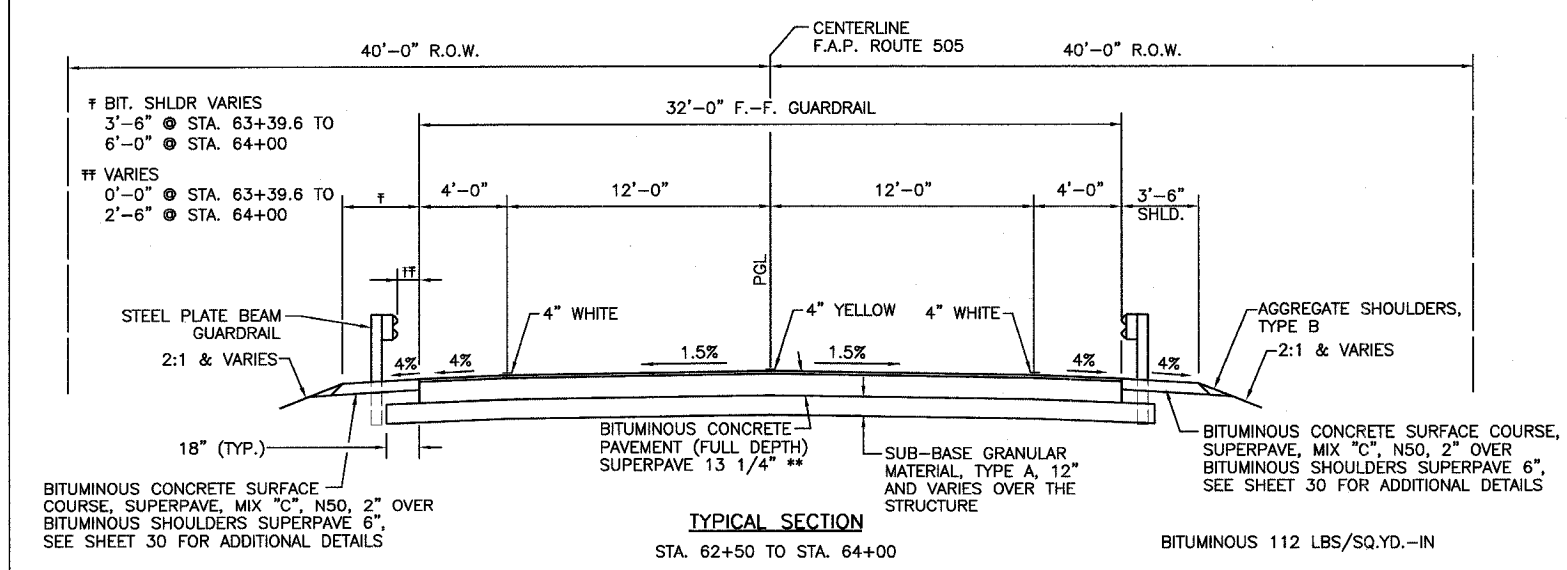
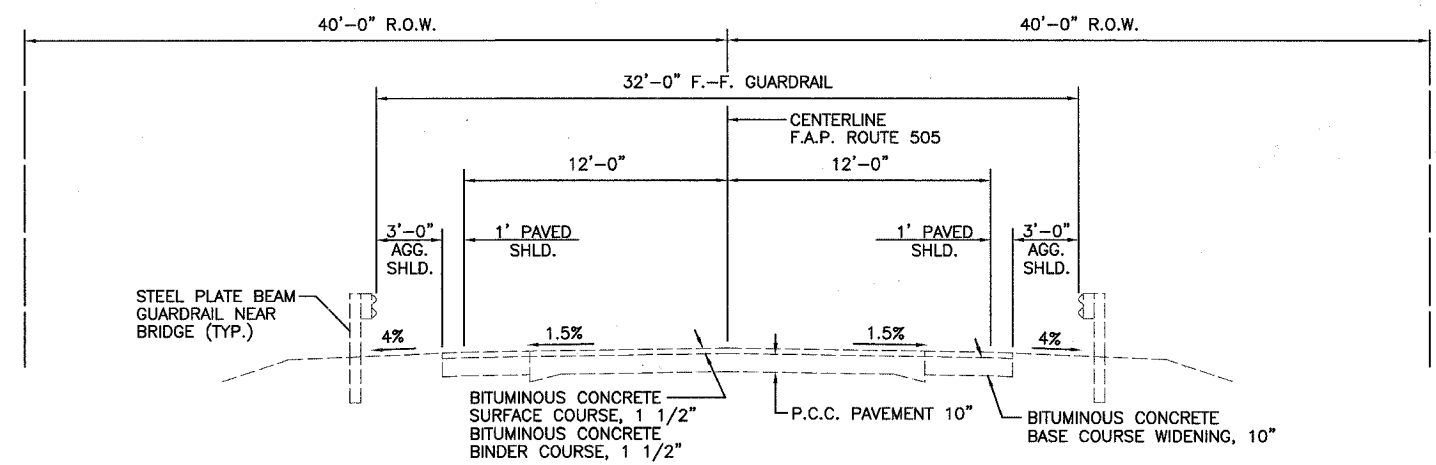
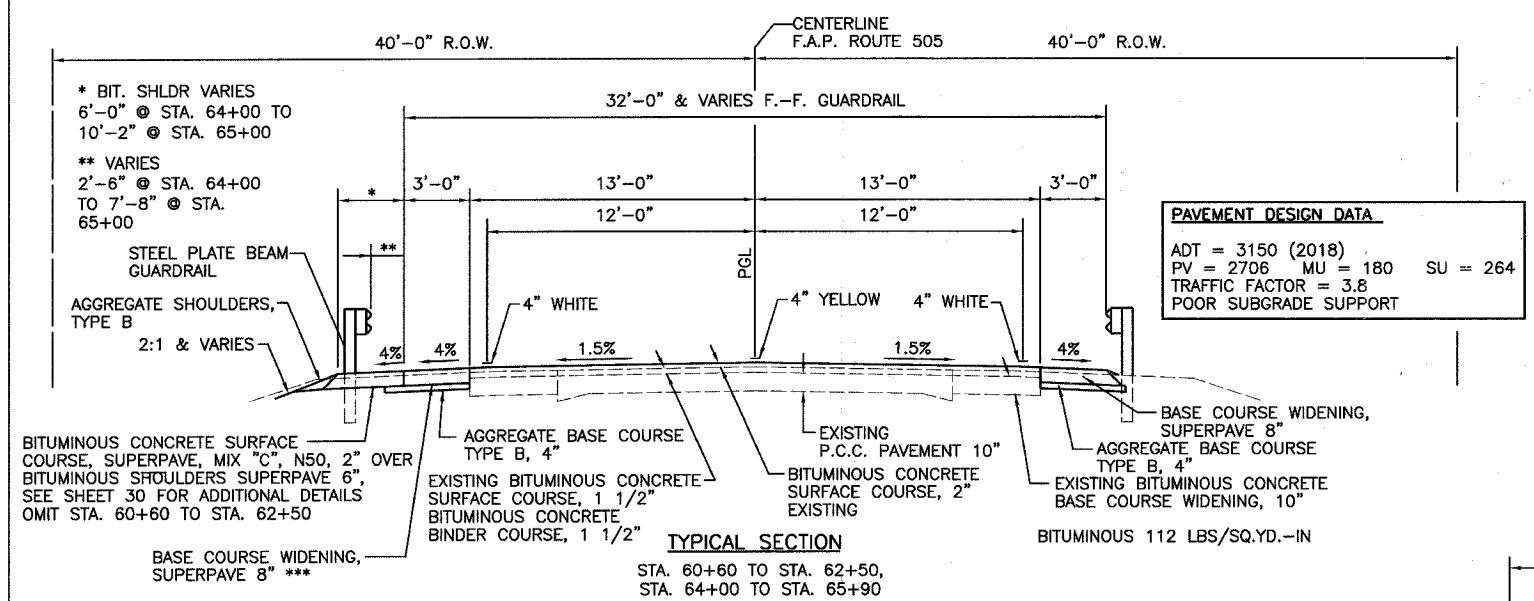
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUMMARY OF QUANTITIES
 FAP 505 (IL 75)
 SECTION 115BR-1
 WINNEBAGO COUNTY

SCALE: VERT.
 HORIZ.
 DATE 06/06

DRAWN BY NV
 CHECKED BY JXC

CONTRACT NO. 64940			
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
505	115BR-1	WINNEBAGO	35
STA.	TO STA.		SHEET NO.
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	4



** 2" BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N50
 1 1/4" BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N50

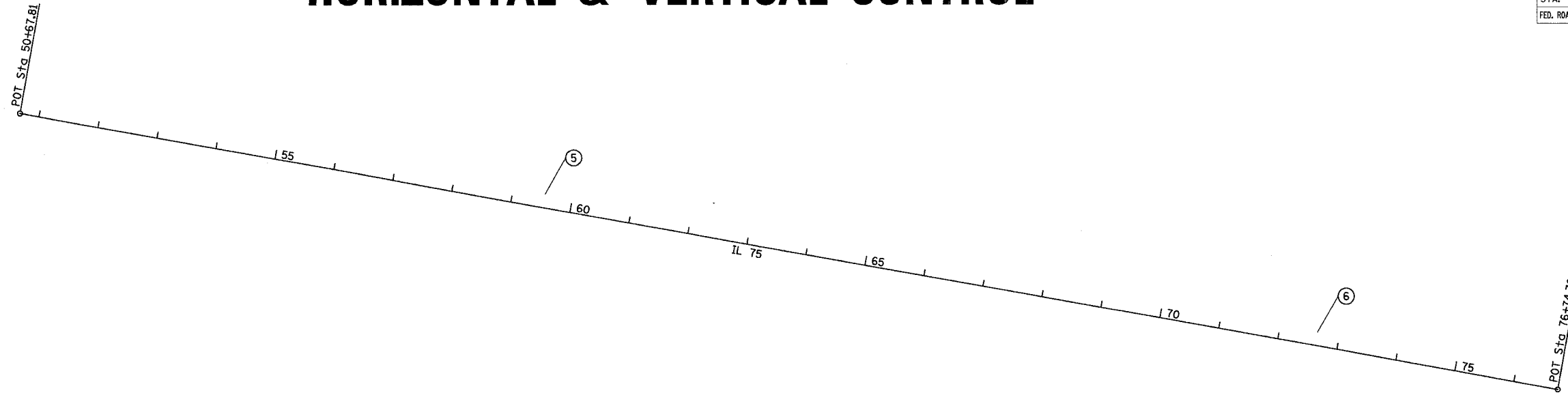
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TYPICAL SECTIONS
 FAP 505 (IL 75)
 SECTION 115BR-1
 WINNEBAGO COUNTY
 SCALE: VERT. 1" = 800'
 HORIZ. 1" = 800'
 DATE 12/05
 DRAWN BY NOE
 CHECKED BY JKC

PLOT DATE = 04/08
 PLOT SCALE = 1" = 800'
 USER NAME = CHANS

HORIZONTAL & VERTICAL CONTROL

CONTRACT NO. 64940				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	115BR-1	WINNEBAGO	35	5
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



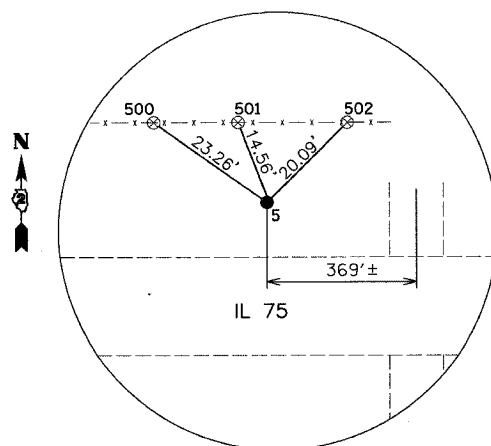
Chain ALIGN75 contains:
21 22

Beginning chain ALIGN75 description

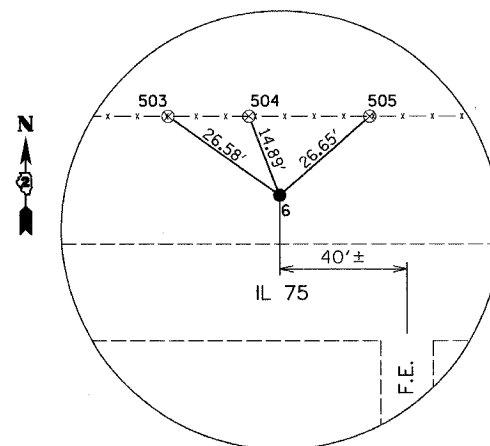
Point 21	N 2,098,949.6100	E 2,564,994.0700	Sta 50+67.810
Course from 21 to 22	S 79° 46' 20.57" E	Dist 2,606.5680	
Point 22	N 2,098,486.7900	E 2,567,559.2200	Sta 76+74.378

Ending chain ALIGN75 description

REFERENCE TIES				
POINT	CHAIN	STATION	OFFSET	DESCRIPTION
500	ALIGN 75	59+30.92	35.55' LT.	SURVEY NAIL & SQUARE WASHER IN WOOD FENCE POST
501	ALIGN 75	59+46.98	35.26' LT.	SURVEY NAIL & SQUARE WASHER IN WOOD FENCE POST
502	ALIGN 75	59+77.27	35.38' LT.	SURVEY NAIL & SQUARE WASHER IN WOOD FENCE POST
503	ALIGN 75	72+44.78	37.22' LT.	SURVEY NAIL & SQUARE WASHER IN WOOD FENCE POST
504	ALIGN 75	72+61.74	36.78' LT.	SURVEY NAIL & SQUARE WASHER IN WOOD FENCE POST
505	ALIGN 75	72+76.88	36.77' LT.	SURVEY NAIL & SQUARE WASHER IN WOOD FENCE POST



HORIZONTAL CONTROL
POINT No. 5



HORIZONTAL CONTROL
POINT No. 6

HORIZONTAL CONTROL POINTS							
POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
5	2098814.568	2565870.048	731.78	ALIGN 75	59+53.85	22.64' LT.	IRON ROD CAPPED
6	2098582.296	2567158.508	732.06	ALIGN 75	72+63.08	22.84' LT.	IRON ROD CAPPED

BENCH MARKS							
POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
406	2098703.950	2566258.260	728.74	ALIGN 75	63+55.53	17.29' RT.	CHISELED SQUARE TOP OF S.E. WING WALL OF BRIDGE
407	2098844.380	2565439.250	733.61	ALIGN 75	55+24.60	24.51' RT.	CHISELED SQUARE EAST HEADWALL 3RD P.E. OF STRUCTURE

TEMPORARY FENCE *	
LOCATION	FOOT
AS DIRECTED BY ENGINEER	360
TOTAL	360

* SEE COMMITMENTS ON SHEET 2 OF 35

PAVEMENT REMOVAL	
LOCATION	SQ YD
STA 62+50 TO STA 63+09.94 (STAGE I)	92
STA 63+42.19 TO STA 64+00 (STAGE I)	88
STA 62+50 TO STA 63+02.44 (STAGE II)	72
STA 63+36.35 TO STA 64+00 (STAGE II)	92
TOTAL	344

EARTHWORK QUANTITIES				
LOCATION	THEORETICAL		SHORTAGE (-) OR EXCESS (+)	REMARKS
	CUT	FILL		
	CU YD	CU YD	CU YD	
	(A)	(B)	[(A)0.75]-(B)	(C)
IL 75				
STAGE I	121	7	84	--
STAGE II	128	39	57	--
TOTAL	249	46	141	
	PAY ITEM 20200100	FOR INFO ONLY		

PAVEMENT SCHEDULE										
LOCATION (STA. TO STA.)	31100910 SUB-BASE MATERIAL, TYPE A 12"	35101400 AGGREGATE BASE COURSE, TYPE B	35650300 BASE COURSE WIDENING, 8"	40600990 TEMPORARY RAMP	48101200 AGGREGATE SHOULDERS, TYPE B	48202400 BITUMINOUS SUPERPAVE 6"	X4073146 CONCRETE PAVEMENT (FULL DEPTH), SUPERPAVE, 13 1/4"	X4066414 CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50		
									SQ YD	TON
STA 60+60 TO STA 62+77.58 (STAGE 1)			24	80						
STA 63+54 TO STA 65+90 (STAGE 1)			24	77						
STA 60+60 TO STA 62+50 (STAGE 2)			18	59						
STA 64+00 TO STA 65+90 (STAGE 2)			19	64						
STA 62+50 TO STA 64+00 (STAGE 1)	292			22	18	58	250	1		
STA 62+50 TO STA 64+00 (STAGE 2)	292			25	18	169	283	10		
TOTAL	584	85	280	47	36	227	533	11		

CHANNEL EXCAVATION	
LOCATION	CU YD
AS DIRECTED BY ENGINEER	37
TOTAL	37

PERIMETER EROSION BARRIER	
LOCATION	FOOT
LT, STA 62+50 TO STA 62+80	30
LT, STA 63+50 TO STA 64+75	125
TOTAL	155

REVISIONS	
NAME	DATE

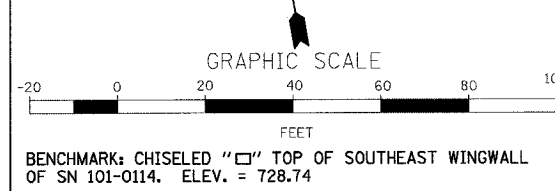
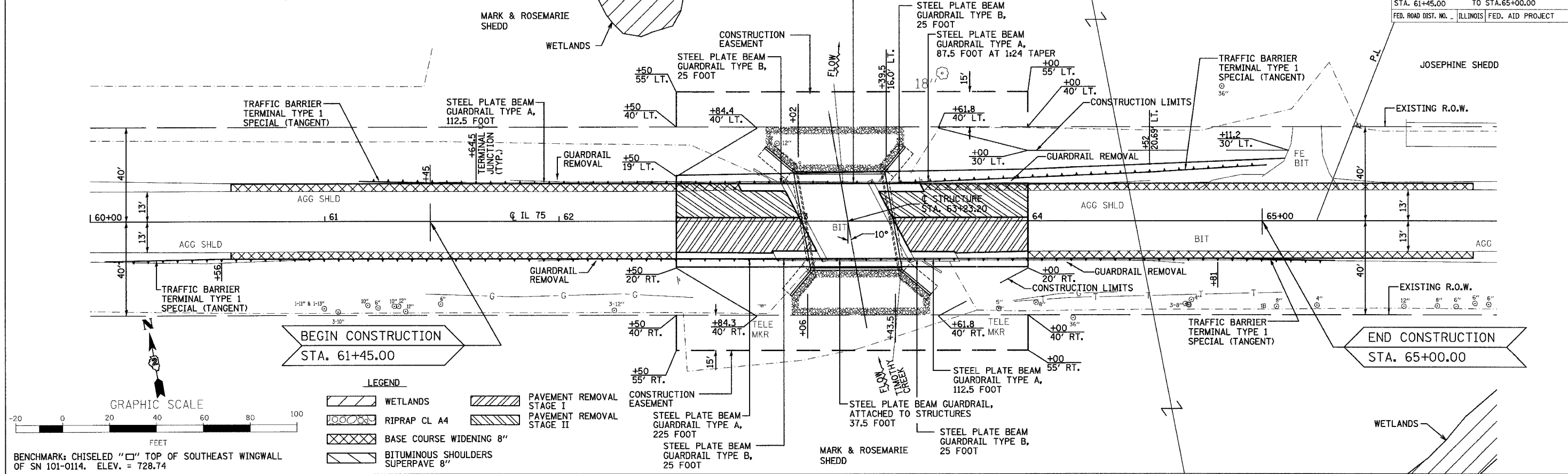
ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF
 QUANTITIES
 FAP 505 (IL 75)
 SECTION 115BR-1
 WINNEBAGO COUNTY

SCALE: VERT. _____
 HORIZ. _____
 DATE: 12/05

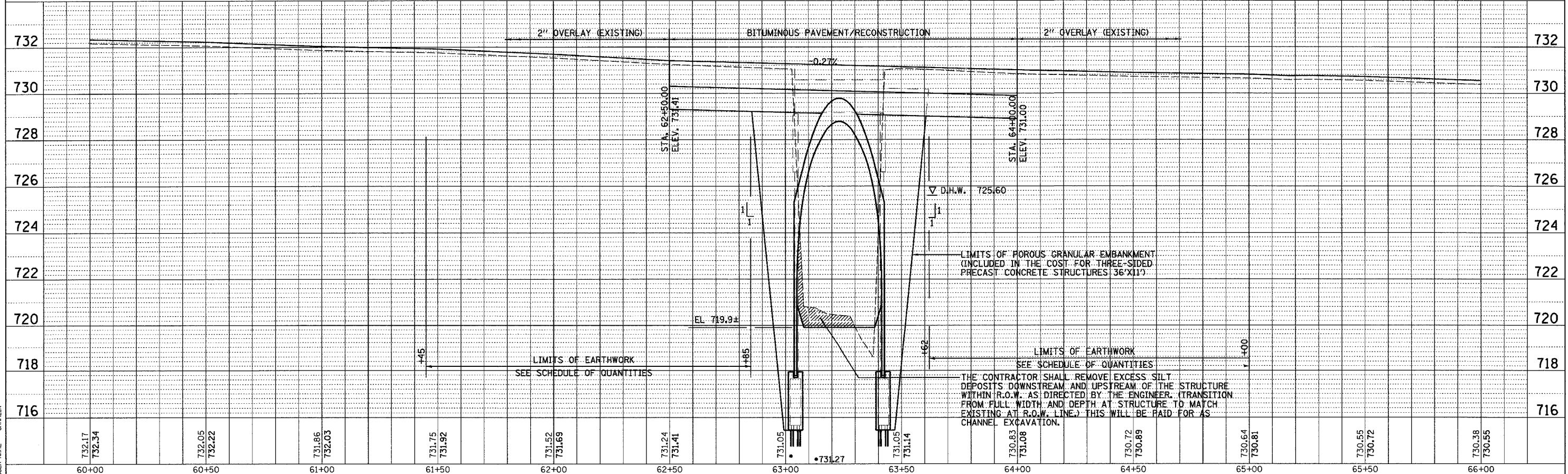
DRAWN BY NOE
 CHECKED BY JKC

CONTRACT NO. 64940	
F.A.P. RTE.	SECTION
505	115BR-1
COUNTY	TOTAL SHEETS
WINNEBAGO	35
SHEET NO.	8
STA. 61+45.00 TO STA. 65+00.00	
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT	

NOTE: LIMITS OF CHANNEL EXCAVATION ARE INTENDED TO MATCH LIMITS OF RIPRAP



- LEGEND**
- WETLANDS
 - RIPRAP CL A4
 - BASE COURSE WIDENING 8"
 - BITUMINOUS SHOULDERS SUPERPAVE 8"
 - PAVEMENT REMOVAL STAGE I
 - PAVEMENT REMOVAL STAGE II
 - CONSTRUCTION EASEMENT
 - STEEL PLATE BEAM GUARDRAIL TYPE A, 225 FOOT
 - STEEL PLATE BEAM GUARDRAIL TYPE B, 25 FOOT

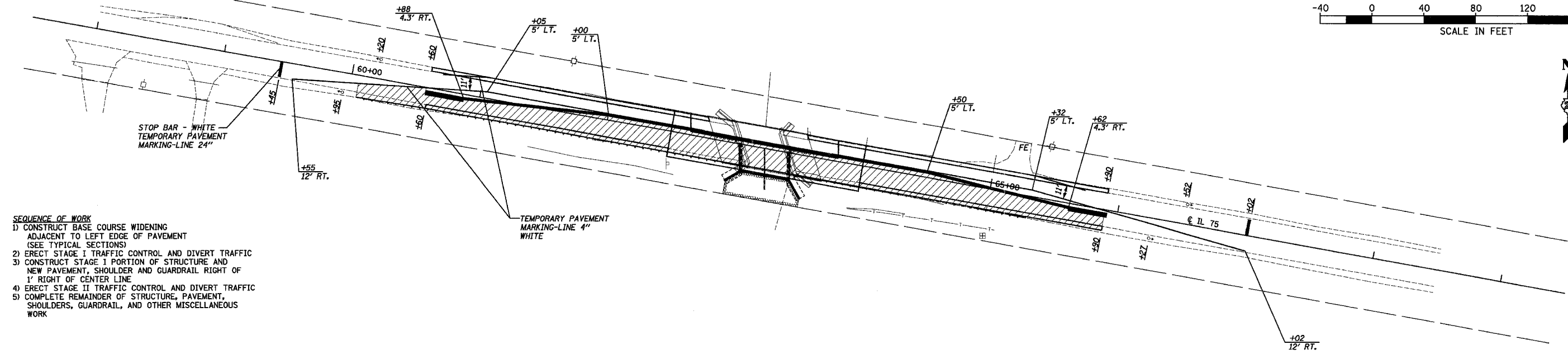
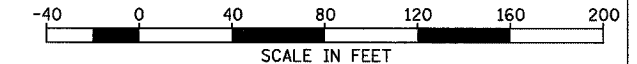


DATE: _____
 BY: _____
 PLAN: _____
 SURVEYED: _____
 PLOTTED: _____
 CHECKED: _____
 NOTE BOOK NO.: _____
 ROAD FILE NAME: _____

DATE: _____
 BY: _____
 PROFILE: _____
 SURVEYED: _____
 PLOTTED: _____
 CHECKED: _____
 NOTE BOOK NO.: _____
 STRUCTURE NOTATION: _____

DATE: 01/08
 PLOT SCALE: 1/8" = 1'-0"
 USER NAME: CHAMLIN

CONTRACT NO. 64940				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	115BR-1	WINNEBAGO	35	9
STA.		TO STA.		
FED. ROAD DIST. NO. -		ILLINOIS FED. AID PROJECT		

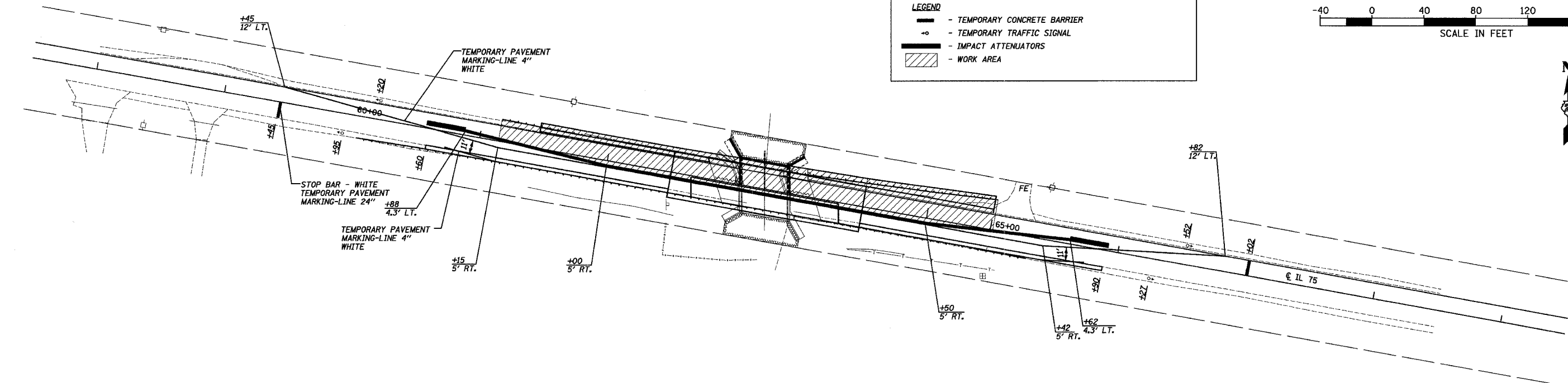
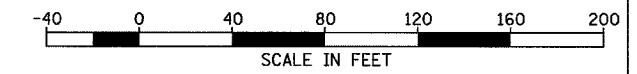


- SEQUENCE OF WORK**
- 1) CONSTRUCT BASE COURSE WIDENING ADJACENT TO LEFT EDGE OF PAVEMENT (SEE TYPICAL SECTIONS)
 - 2) ERECT STAGE I TRAFFIC CONTROL AND DIVERT TRAFFIC
 - 3) CONSTRUCT STAGE I PORTION OF STRUCTURE AND NEW PAVEMENT, SHOULDER AND GUARDRAIL RIGHT OF 1' RIGHT OF CENTER LINE
 - 4) ERECT STAGE II TRAFFIC CONTROL AND DIVERT TRAFFIC
 - 5) COMPLETE REMAINDER OF STRUCTURE, PAVEMENT, SHOULDERS, GUARDRAIL, AND OTHER MISCELLANEOUS WORK

STAGE I

- NOTES**
1. ADVANCE WARNING SIGNS, BARRIER WALL TREATMENT AND PAVEMENT MARKERS SHALL BE IN ACCORDANCE WITH HIGHWAY STANDARD 701321
 2. FOR ADDITIONAL DETAILS SEE HIGHWAY STANDARD 701321
 3. R10-6A-2430 SIGN AT STOP BAR SHALL BE SUPPLEMENTED WITH "TO ACTUATE SIGNAL" SIGN SEE SHEET 31

- LEGEND**
- TEMPORARY CONCRETE BARRIER
 - TEMPORARY TRAFFIC SIGNAL
 - IMPACT ATTENUATORS
 - WORK AREA



STAGE II

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL PLAN
 FAP 505 (IL 75)
 SECTION 115BR-1
 WINNEBAGO COUNTY

SCALE: VERT. 1" = 40'
 HORIZ. 1" = 40'
 DATE 03/06
 DRAWN BY NOE
 CHECKED BY JKC

PLOT DATE = 04/06
 FILE NAME = Z09103TRAFCONTL
 PLOT SCALE = 1" = 40'
 USER NAME = CHMS

Benchmark: Chiseled "□" top of southeast wingwall of SN 101-0114. Elev. = 728.74

Existing Structure: SN 101-0114 to be removed. Originally built in 1928 as SBI Route 75 Section 115. In 1971, SBI 75, Section 115BR replaced and widened the original superstructure. Single span prestressed concrete box beam with closed abutments on timber piles. 38'-4 3/4" Bk. to Bk. Abutments.

One lane traffic to be maintained using stage construction.

No Salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET
FAP 505	115 BR-1	WINNEBAGO	35	10
FED. ROAD DIST. NO.	ALIGNED	FED. AID PROJECT		

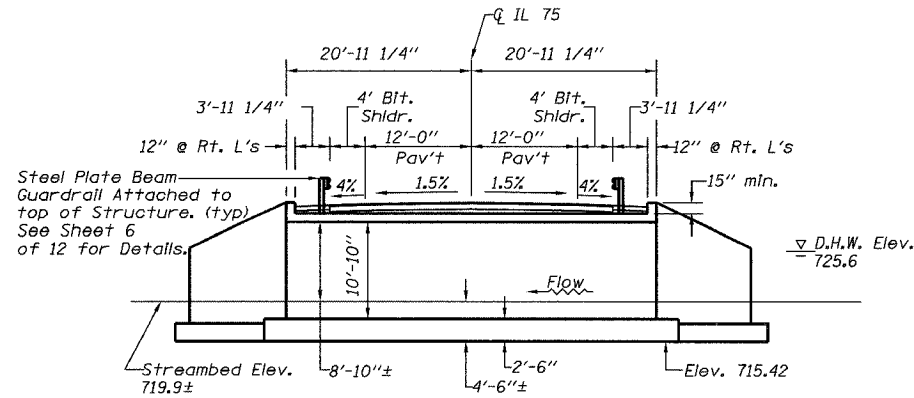
Contract #64940

WATERWAY INFORMATION

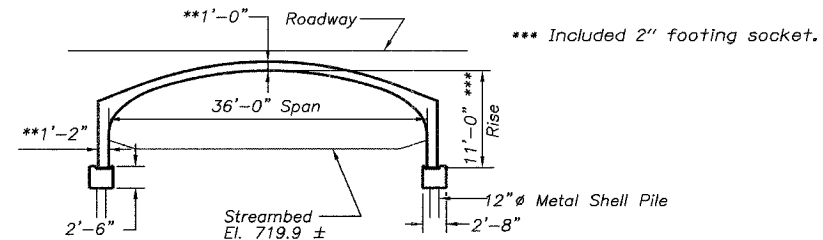
Drainage Area= 8.2 Sq. Mi. Low Grade Elev.= 730.3 (Exist./Prop.) @ Sta. 67+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater Elev.	
			Exlst.	Prop.		Exlst.	Prop.	Exlst.	Prop.
	10	918	143	178	725.1	0.8	0.7	725.9	725.8
Design	50	1371	159	193	725.6	1.4	1.2	727.0	726.8
Base	100	1556	162	196	725.7	1.7	1.5	727.4	727.2
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	1988	171	205	726.0	2.5	2.1	728.5	728.1

10-Year velocity through existing bridge= 6.4 Fps
10-Year velocity through prop. bridge= 5.2 Fps

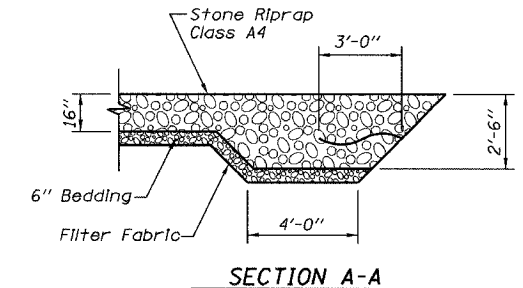


PROPOSED LONGITUDINAL SECTION
Looking East
(Dimensions are at Rt. L's to Roadway unless noted)

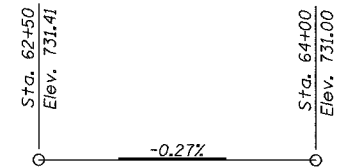


SECTION THRU STRUCTURE
(At Rt. L's to Structure)

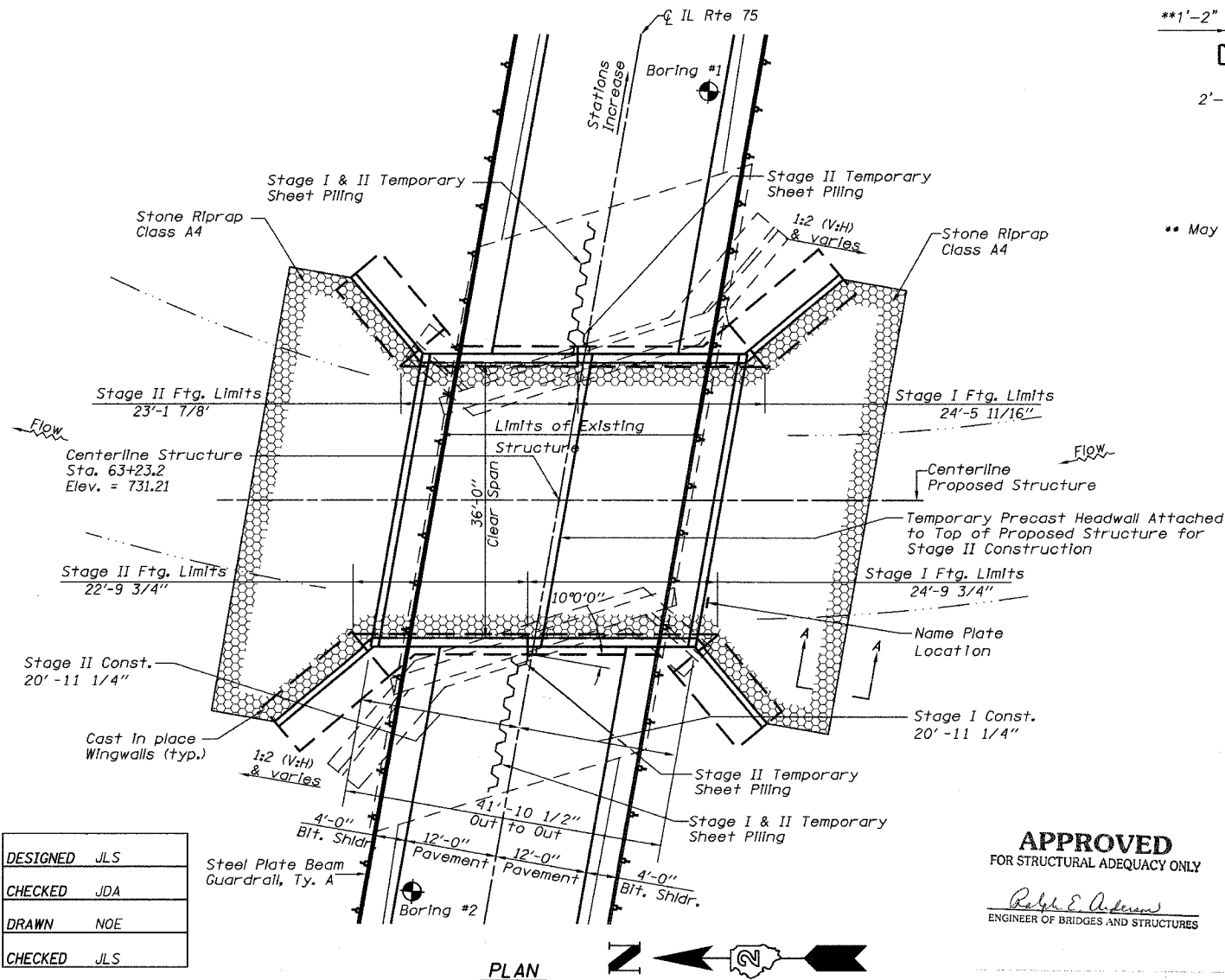
** May vary per pre-caster's final design.



SECTION A-A



PROFILE GRADE
(Along Centerline Roadway)



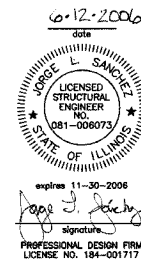
PLAN

STATION 63+23.20
BUILT 200. BY
STATE OF ILLINOIS
F.A.P. RT. 505 SEC. 115BR-1
LOADING HS20
STR. NO. 101-0183

NAME PLATE DETAIL
See Std. 515001

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Robert E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES



DESIGN SPECIFICATIONS

2002 AASHTO

LOADING HS20-44

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

DESIGN STRESSES

Field Units

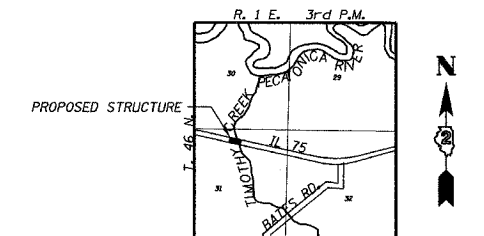
f'c = 3,500 psi
fy = 60,000 psi (reinforcement)

Precast Units

f'c = 5,000 psi
fy = 60,000 psi (reinforcement)
fy = 65,000 psi (welded wire fabric)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.032
Site Coefficient (S) = 1.2



LOCATION SKETCH

GENERAL PLAN
IL RTE 75 OVER
TIMOTHY CREEK
FAP ROUTE 505
SECTION 115BR-1
WINNEBAGO COUNTY
STA. 63+23.20
SN 101-0183

CHAMBLIN & ASSOCIATES
PERU ILLINOIS MORRIS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	FEET	POST	SHEET NO. 2 OF 12 SHEETS
FAP 505	115 BR-1	WINNEBAGO	35	11	
FED. ROAD DIST. NO.		ALIGNED	FED. AID PROJECT		

Contract #64940

General Notes

- Reinforcement bars shall conform to the requirements of AASHTO M31, or M322 Grade 60.
- The option of using precast footings is not allowed.
- The option of using precast wingwalls is not allowed.
- The footing design is based on the following maximum reactions applied at the top of the footing/pedestal wall:
Exterior footings: 18.9 kip/foot (vertical), 6.8 kip/foot (horizontal).
- The Contractor shall verify that the selected structure meets these design parameters. If the design parameters are exceeded, a complete footing design with calculations, details and the required seals shall be submitted for review and approval.
- The contractor shall drive one (1) metal shell test pile in a permanent location at the east structure footing as directed by the Engineer before ordering the remainder of metal shell piles.
- Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
- Excavation behind existing abutment walls shall be done before removing the existing superstructure. The Contractor shall sawcut the existing abutments at the stage removal line before Stage I removal.
- Excavation for wingwalls shall be considered included in cost of concrete structures.
- Soil borings taken at this structure indicate that the ground water elevation may be above the bottom of footing elevation. The Contractor shall be responsible for dewatering the excavation as necessary for removal of the existing foundations and construction of the new work. The Contractor may use either well points or dewatering wells. Ground water level may be affected by Timothy Creek and fluctuations should be expected. Cost included with Three-Sided Precast Concrete Structures.
- Backfill material shall be installed as noted on the provisions for Three Sided Precast Concrete Structure. The backfill material gradation, compaction and installation method shall conform to the pre-cast structure manufacturer's requirements. This work shall be included in the contract unit price per meter (foot) for Three Sided Precast Concrete Structures of the size specified, as indicated in the provisions and plan notes.

TOTAL BILL OF MATERIALS				
ITEM	UNIT	SUPER	SUB	TOTAL
STONE RIPRAP, CLASS A4	SQ YD			402
REMOVAL OF EXISTING STRUCTURES	EACH			1
CONCRETE STRUCTURES	CU YD		74.9	74.9
REINFORCEMENT BARS	POUND		5900	5900
REINFORCEMENT BARS, EPOXY COATED	POUND		1280	1280
FURNISHING METAL PILE SHELLS 12"	FOOT		2003	2003
DRIVING AND FILLING SHELLS	FOOT		2003	2003
TEST PILE METAL SHELLS	EACH		1	1
TEMPORARY SHEET PILING	SQ FT			2046
NAME PLATES	EACH	1		1
THREE-SIDED PRECAST CONCRETE STRUCTURES 36'X11'	FOOT	41.9		41.9
BAR SPLICERS	EACH		24	24
FILTER FABRIC	SQ YD			402

For Quantity of Steel Plate Guardrail, Attached to Structures see roadway plans.

Index of Bridge Plans

- General Plan
- General Notes and Bill of Materials
- Construction Staging Details
- Footing Details
- Pile Layout
- Corner Details
- Wingwall Details
- Bar Splicer Assembly Details
- Temporary Concrete Barrier Details
- Concrete Pile Details
- 11-12. Soil Borings

DESIGNED	JLS
CHECKED	JDA
DRAWN	NOE
CHECKED	JLS

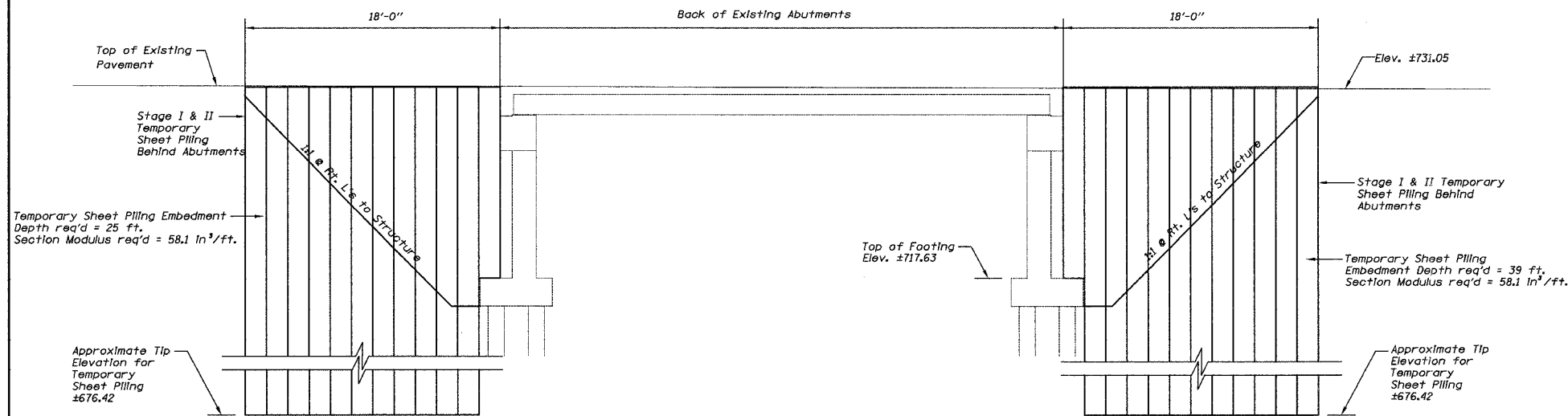
GENERAL NOTES AND BILL OF MATERIALS
IL RTE 75 OVER
TIMOTHY CREEK
FAP ROUTE 505
SECTION 115BR-1
WINNEBAGO COUNTY
STA. 63+23.20
SN 101-0183

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
FAP 505	115 BR-1	WINNEBAGO	35	12
FEL ROAD DIST. NO.	ALIGNED	FEL. AND PROJECT		

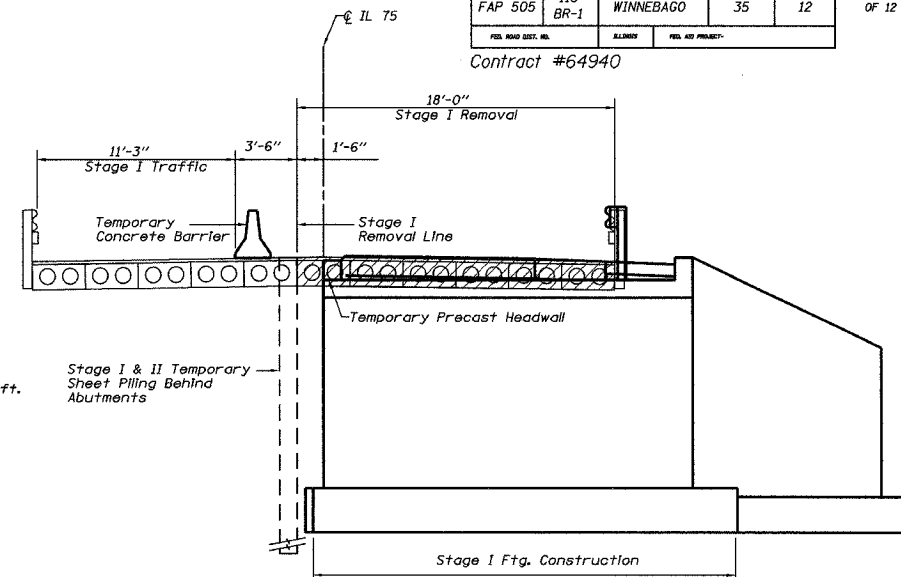
SHEET NO. 3
OF 12 SHEETS

Contract #64940



STAGE I TEMPORARY SHEET PILING

Looking North



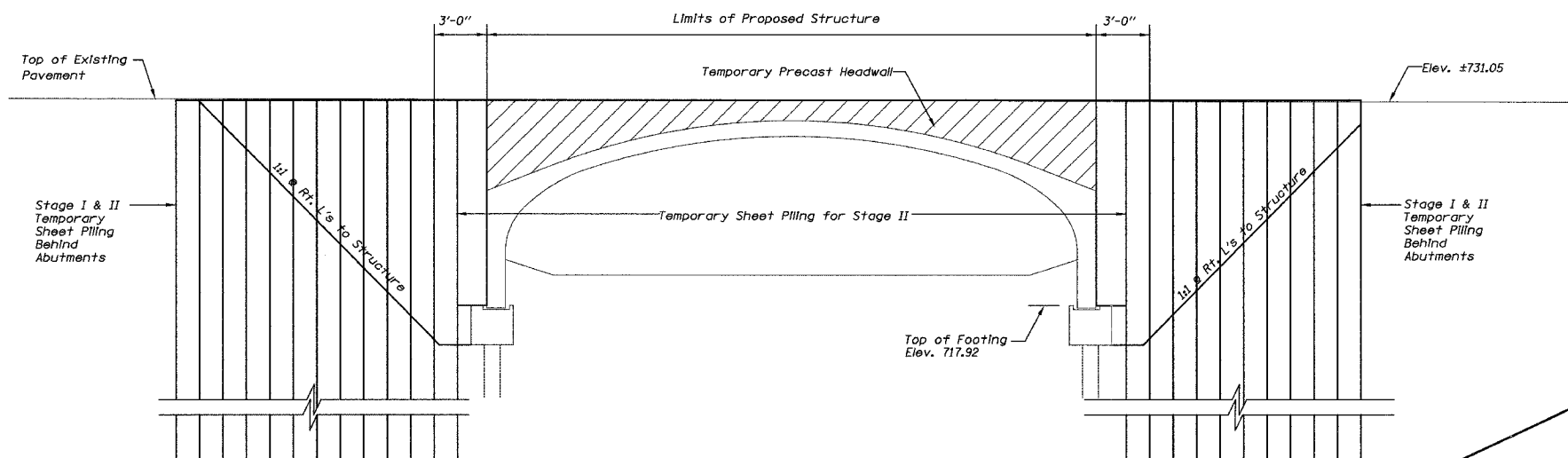
STAGE I

Looking up Station
(Dimensions are at Rt. L's to Roadway unless noted)

Notes:
Because the existing abutments are restrained top and bottom, excavating the soil behind, or bracing the existing abutments shall be required prior to removing the existing bridge superstructure.

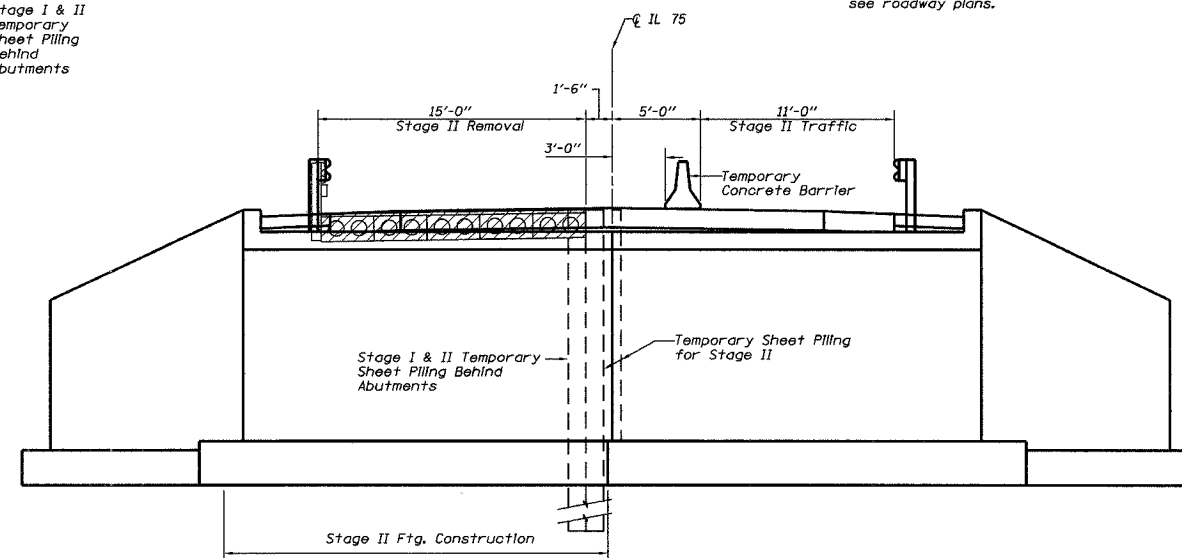
For details of temporary concrete barrier see sheet 9 of 12.

For quantity of temporary concrete barrier see roadway plans.



STAGE II TEMPORARY SHEET PILING

Looking North

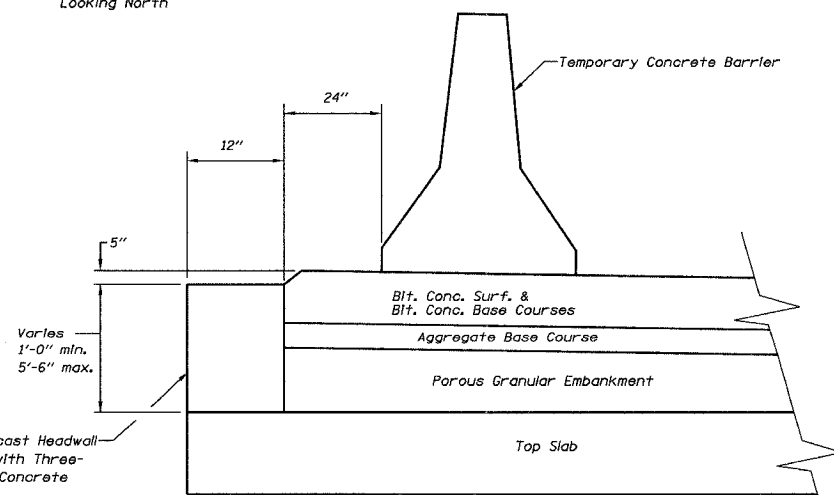


STAGE II

Looking up Station
(Dimensions are at Rt. L's to Roadway unless noted)

Notes:
If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer. The contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.

The Temporary Precast Headwall design and attachment details shall be the responsibility of the Precast Producer. Drilling and grouting bars into the precast unit will not be allowed. Cost included with Three-Sided Precast Concrete Structures.



STAGE II TEMPORARY HEADWALL DETAIL

DESIGNED	JLS
CHECKED	JDA
DRAWN	NOE
CHECKED	JLS

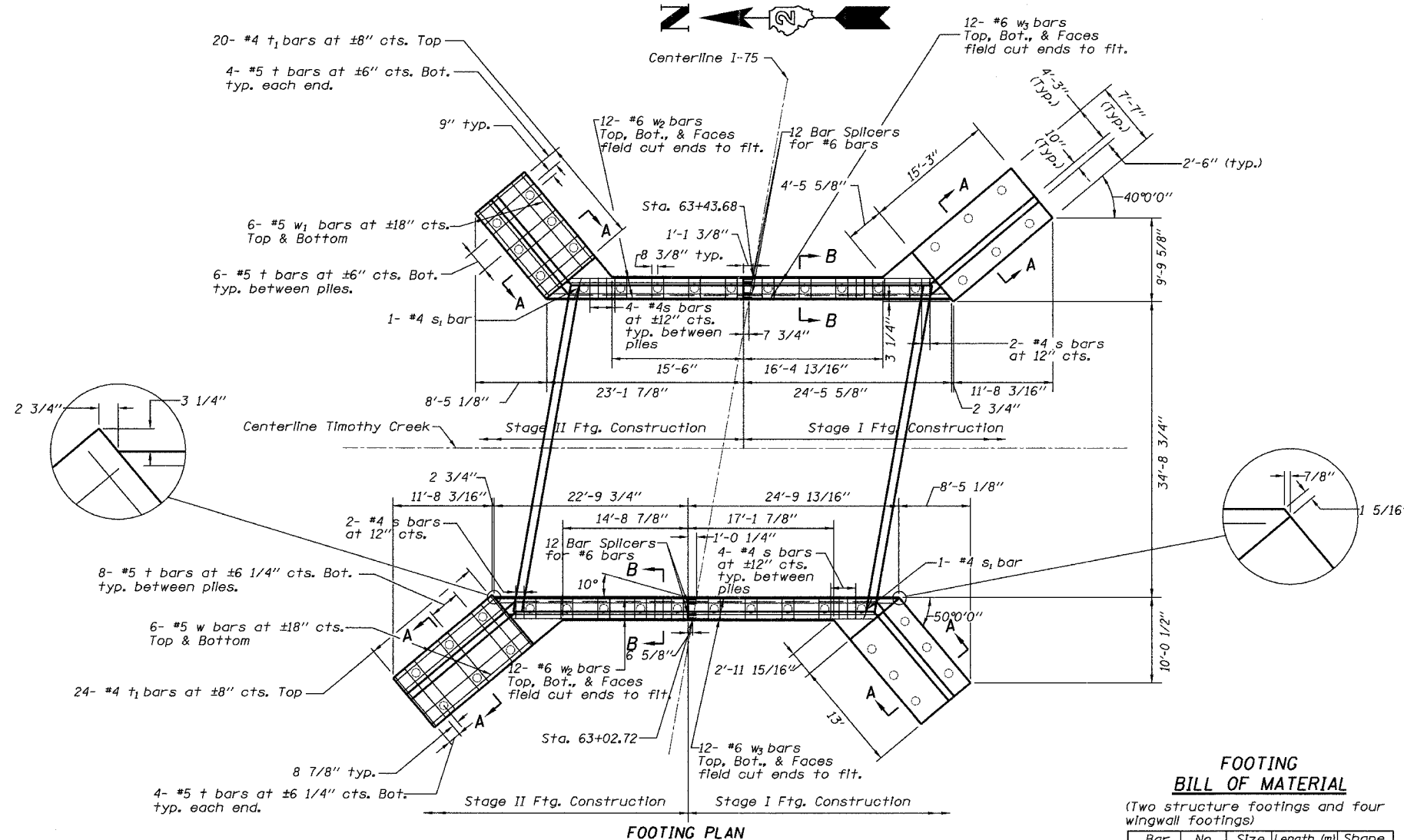
STAGE CONSTRUCTION DETAILS
IL RTE 75 OVER
TIMOTHY CREEK
FAP ROUTE 505
SECTION 115BR-1
WINNEBAGO COUNTY
STA. 63+23.20
SN 101-0183

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET
FAP 505	115 BR-1	WINNEBAGO	35	13
FED. ROAD DIST. NO.	CLASS.	FED. AID PROJECT		

SHEET NO. 4
OF 12 SHEETS

Contract #64940



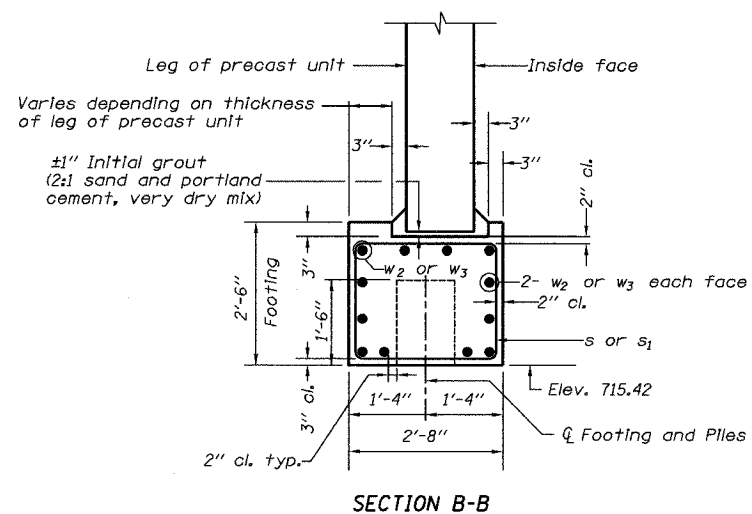
FOOTING PLAN

FOOTING
BILL OF MATERIAL

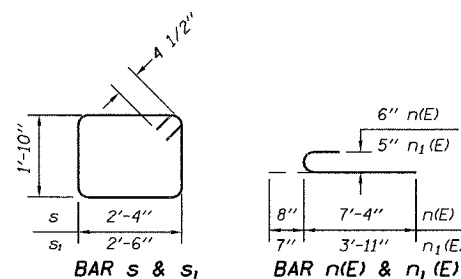
(Two structure footings and four wingwall footings)

Bar	No.	Size	Length (m)	Shape
n(E)	78	#6	8'-0"	—
n ₁ (E)	74	#5	4'-6"	—
s	76	#4	9'-1"	□
s ₁	2	#4	9'-5"	□
t	88	#5	7'-3"	—
t ₁	88	#4	7'-3"	—
w	24	#5	15'-0"	—
w ₁	24	#5	12'-9"	—
w ₂	24	#6	22'-10"	—
w ₃	24	#6	24'-6"	—

Note:
Excavation for Three-Sided Structure and Wingwalls will not be paid for separately but shall be considered included in the cost for Concrete Structures and Three-Sided Precast Concrete Structures.



SECTION B-B



Notes:
See sheet 6 of 12 for Corner Details.
See sheet 7 of 12 for Section A-A.
See sheet 7 of 12 for n(E) and n₁(E) bar placement and spacing.

DESIGNED	JLS
CHECKED	JDA
DRAWN	NOE
CHECKED	JLS

WORK THIS SHEET WITH
SHEET 7.

FOOTING DETAILS
IL RTE 75 OVER
TIMOTHY CREEK
FAP ROUTE 505
SECTION 115BR-1
WINNEBAGO COUNTY
STA. 63+23.20
SN 101-0183

Concrete Structures	Cu Yd	53.6
Reinforcement Bars, Epoxy Coated	Pound	1280
Reinforcement Bars	Pound	3970
Furnishing Metal Pile Shells 12"	Foot	2003
Driving and Filling Shells	Foot	2003
Test Pile Metal Shells	Each	1
Bar Splicers	Each	24

Reinforcement Bars designated (E) shall be epoxy coated.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
FAP 505	115 BR-1	WINNEBAGO	35	14
FED. ROAD DIST. NO.	ALPMS	FED. AID PROJECT		

Contract #64940

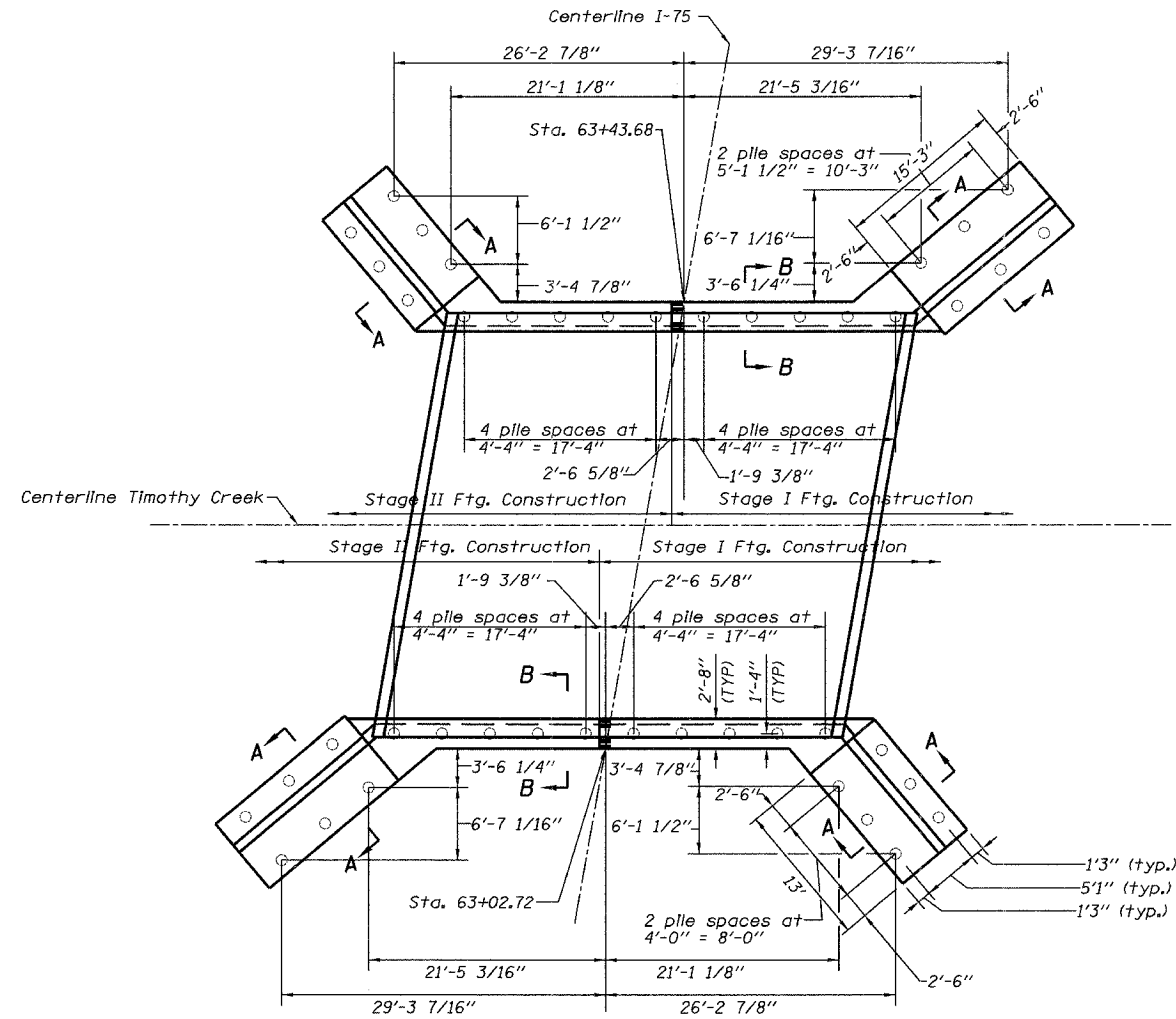
PILE DATA

East Abutment Type: 12" Ø Metal Shells
Capacity: 43 Ton
Est. Length: 45'
No. Required: 9 Plus 1 Test Pile

West Abutment Type: 12" Ø Metal Shells
Capacity: 43 Ton
Est. Length: 53'
No. Required: 10

East Wingwalls Type: 12" Ø Metal Shells
Capacity: 32 Ton
Est. Length: 43'
No. Required: 12

West Wingwalls Type: 12" Ø Metal Shells
Capacity: 32 Ton
Est. Length: 46'
No. Required: 12



Notes:
See Sheet 4 of 12 for Section B-B.
See Sheet 7 of 12 for Section A-A.

DESIGNED	JLS
CHECKED	JDA
DRAWN	NOE
CHECKED	JLS

PILE LAYOUT
IL RTE 75 OVER
TIMOTHY CREEK
FAP ROUTE 505
SECTION 115BR-1
WINNEBAGO COUNTY
STA. 63+23.20
SN 101-0183

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
FAP 505	115 BR-1	WINNEBAGO	35	15
FEL ROAD DIST. NO.	ILLINOIS	FEL. AD. PROJECT		

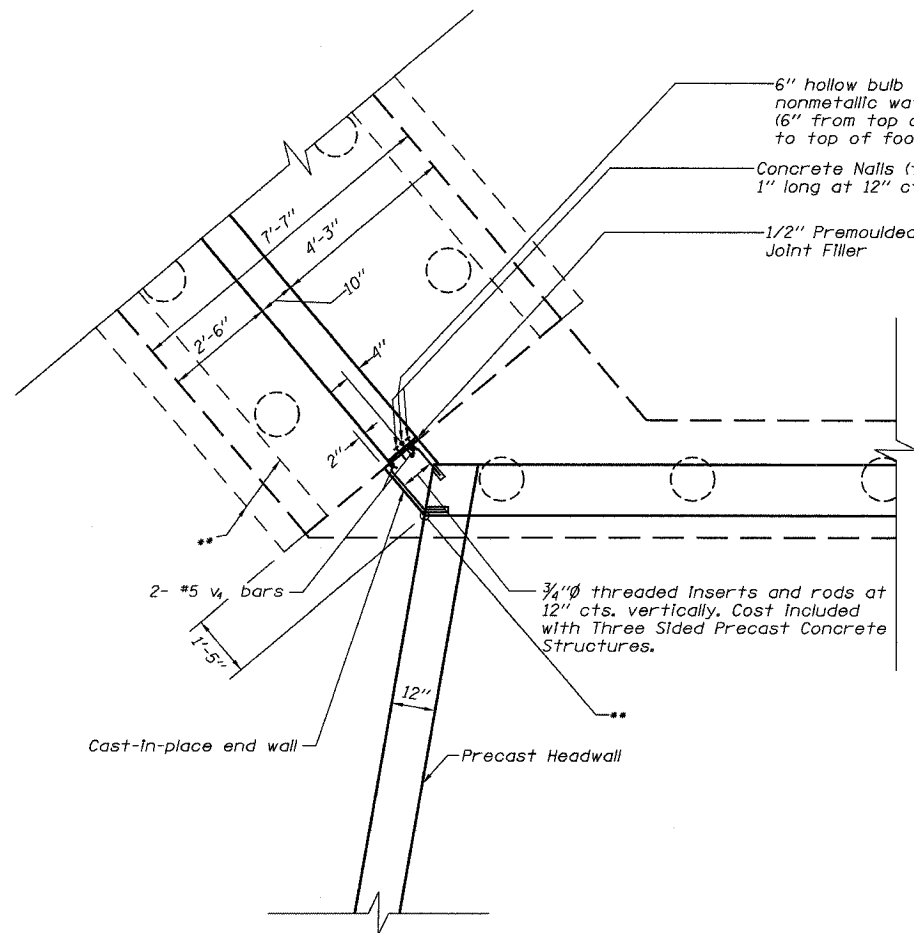
Contract #64940

Notes:
Precast headwall details shall be submitted to the Engineer For Approval.
Cost of Precast Headwalls, P.J.F. Waterseal, and nails shall be included with cost of Three-Sided Precast Concrete Structures.

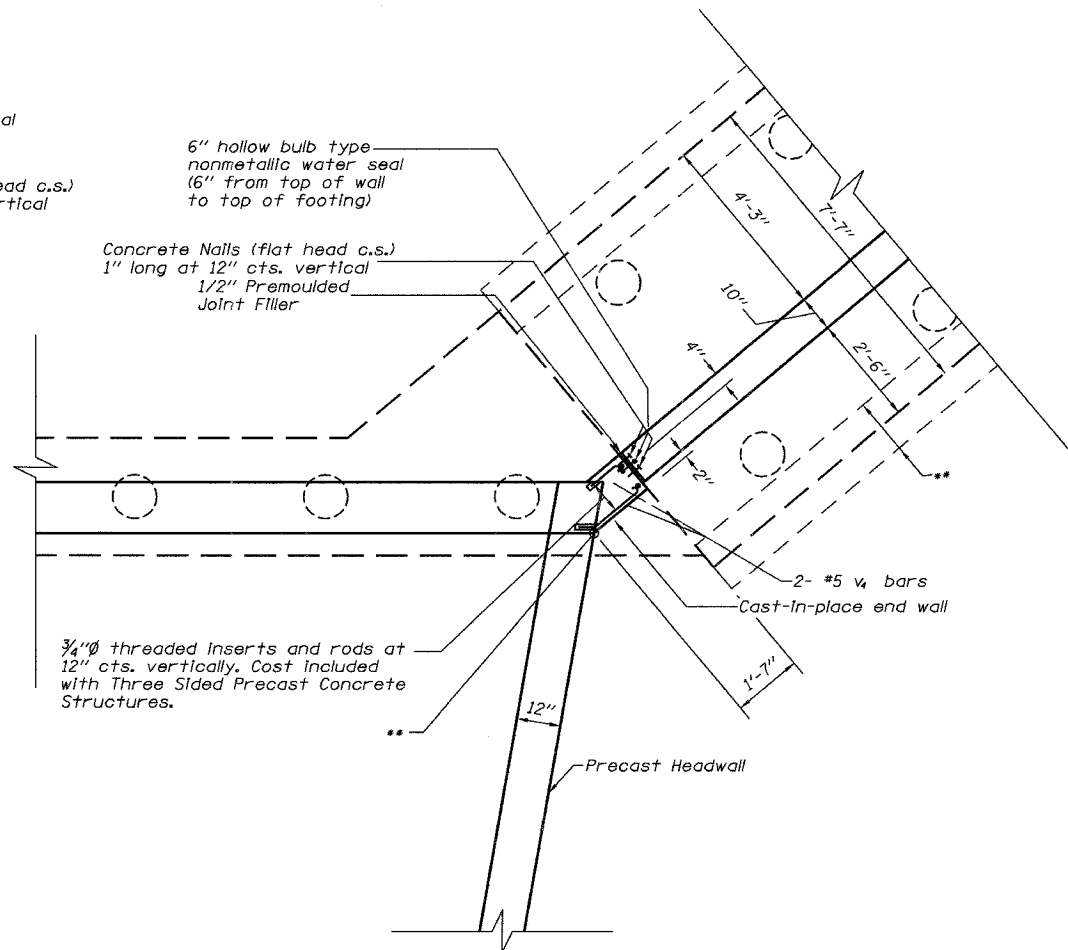
Posts shall be installed plumb by mounting baseplate flush against Top Slab and cutting posts to match slope.

For quantity of Steel Plate Guardrail Attached to Structure see roadway plans.

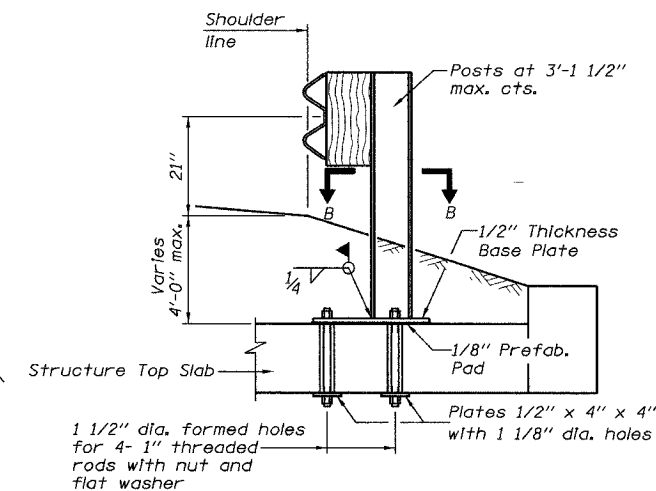
For details of guardrail elements not shown, see Standard 630001.



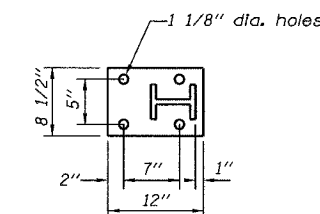
NORTHEAST AND SOUTHWEST
CORNER DETAIL



NORTHWEST AND SOUTHEAST
CORNER DETAIL



GUARDRAIL ATTACHMENT DETAIL



SECTION B-B

Note:
The contractor shall coordinate placement of guardrail posts for steel plate beam guardrail attached to structures with the precast supplier for the three sided concrete structure. Posts shall be located to provide adequate edge distance for anchor bolts for post base plates near joints in precast concrete segments. Post locations may be adjusted perpendicular to the guardrail by increasing the depth of the wood blockout by up to 6"

** The location of the inside corner of the precast leg may vary due to tolerances in the precast segments. The cast-in-place end walls shall be poured after the precast units and headwall are in place. The wing footings and wingwalls shall be poured after the headwalls and end walls are in place. A slight adjustment in the placement of the wingwall and its footing may be necessary to align the wingwall with the end wall as shown.

DESIGNED	JLS
CHECKED	JDA
DRAWN	NOE
CHECKED	JLS

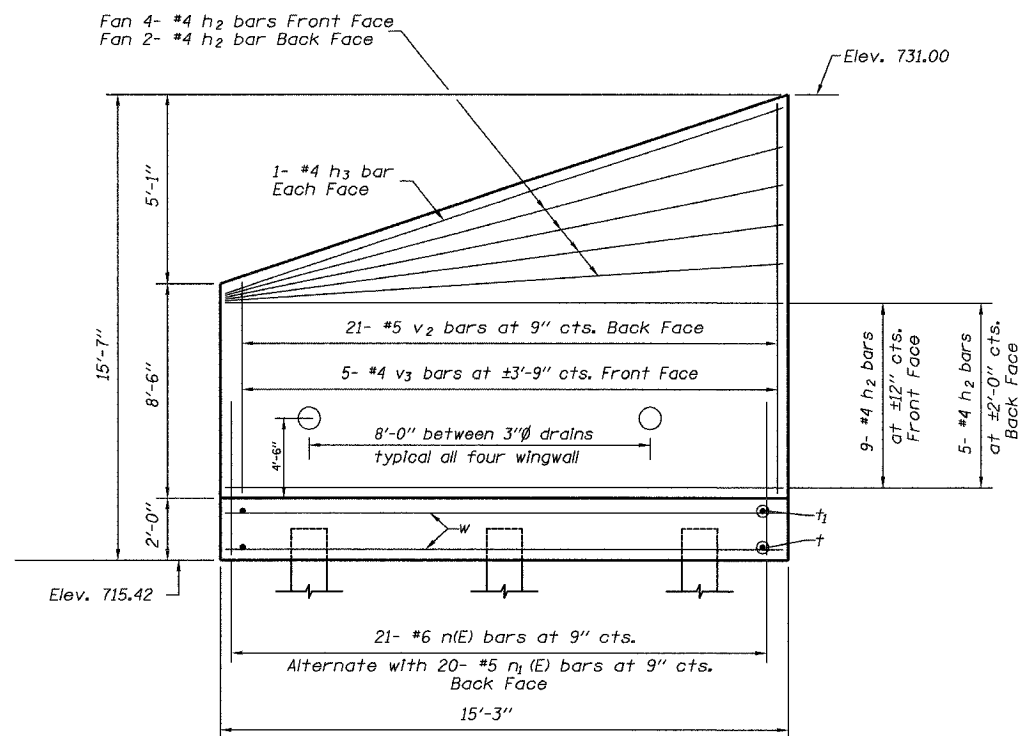
CORNER DETAILS
IL RTE 75 OVER
TIMOTHY CREEK
FAP ROUTE 505
SECTION 115BR-1
WINNEBAGO COUNTY
STA. 63+23.20
SN 101-0183

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

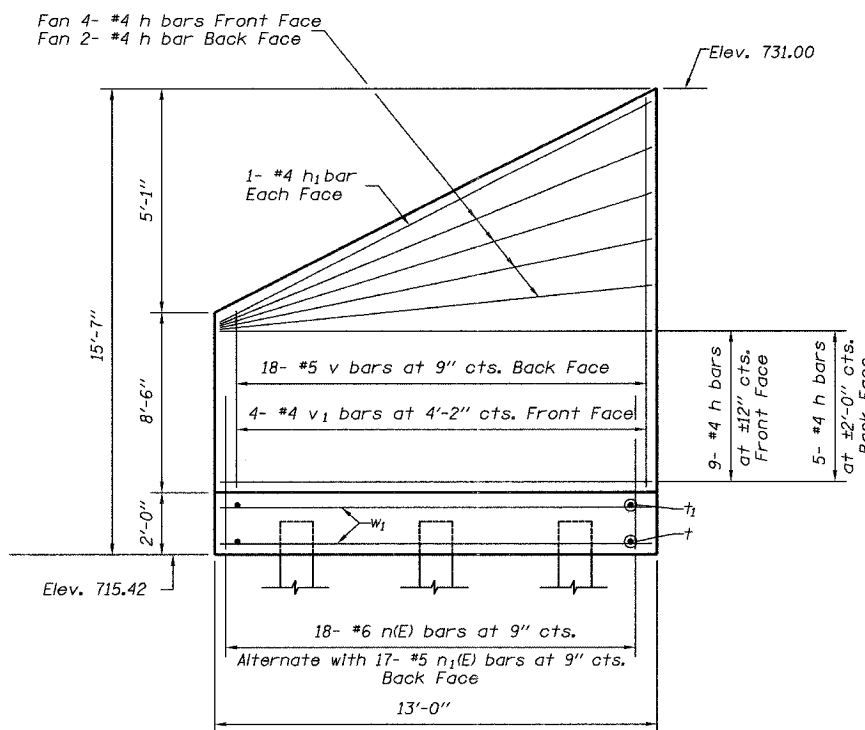
ROUTE NO.	SECTION	COUNTY	POST MILES	SHEET NO.
FAP 505	115 BR-1	WINNEBAGO	35	16
FED. ROAD DIST. NO.	ALIGNED	FED. AID PROJECT		

SHEET NO. 7
OF 12 SHEETS

Contract #64940



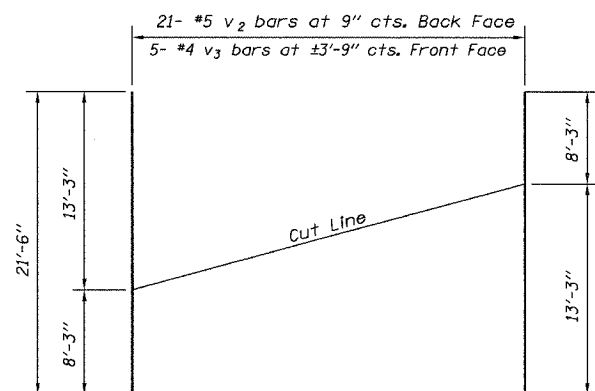
**NORTHWEST AND SOUTHEAST
WINGWALL ELEVATION**



**NORTHEAST AND SOUTHWEST
WINGWALL ELEVATION**

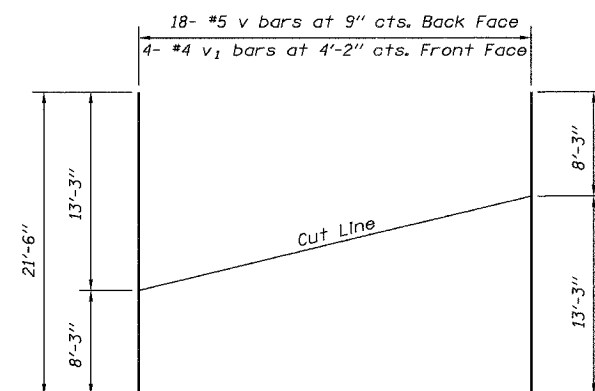
Notes:

See sheet 4 of 12 for location of Section A-A.
See sheet 6 of 12 for end wall details and location of v4 bars.
n(E), n1(E), t, t1, w and w1 bars are included in the Bill of material on sheet 4 of 12.



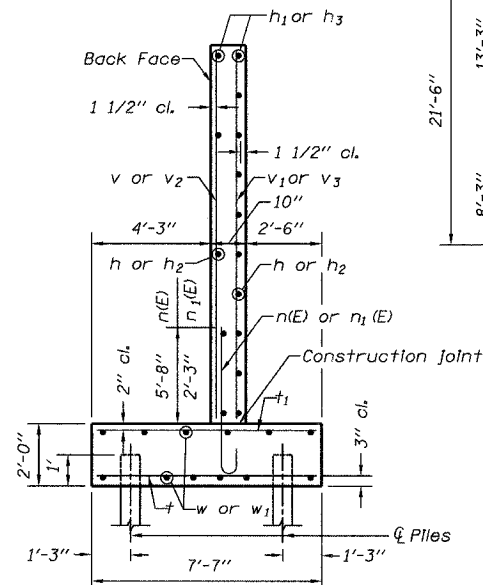
FIELD CUTTING DIAGRAM

Order v2 and v3 bars full length.
Cut to fit and use remainder
in other wingwall.



FIELD CUTTING DIAGRAM

Order v and v1 bars full length.
Cut to fit and use remainder
in other wingwall.



SECTION A-A

**WINGWALL
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape	
h	40	#4	12'-9"	—	
h1	4	#4	13'-8"	—	
h2	40	#4	15'-0"	—	
h3	4	#4	15'-9"	—	
v	18	#5	21'-6"	—	
v1	4	#4	21'-6"	—	
v2	21	#5	21'-6"	—	
v3	5	#4	21'-6"	—	
v4	8	#5	12'-11"	—	
Concrete Structures				Cu Yd	21.3
Reinforcement Bars				Pound	1930

Reinforcement Bars designated (E) shall be epoxy coated.

Includes Concrete Structures for end walls. Concrete Structures for Wingwall footings not included.

DESIGNED	JLS
CHECKED	JDA
DRAWN	NOE
CHECKED	JLS

**WINGWALL DETAILS
IL RTE 75 OVER
TIMOTHY CREEK
FAP ROUTE 505
SECTION 115BR-1
WINNEBAGO COUNTY
STA. 63+23.20
SN 101-0183**

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET
FAP 505	115 BR-1	WINNEBAGO	35	17
FED. ROAD DIST. NO.	ALIGNED	FED. AID PROJECT		

Contract #64940

SHEET NO. 8
OF 12 SHEETS

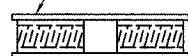
The diameter of this part is the same as the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR



** ONE PIECE

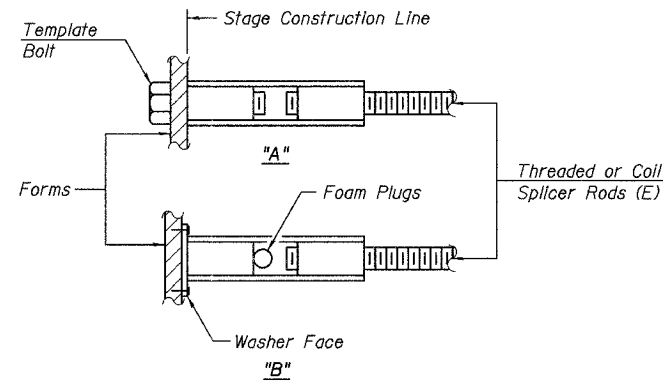
Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

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



INSTALLATION AND SETTING METHODS

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

NOTES

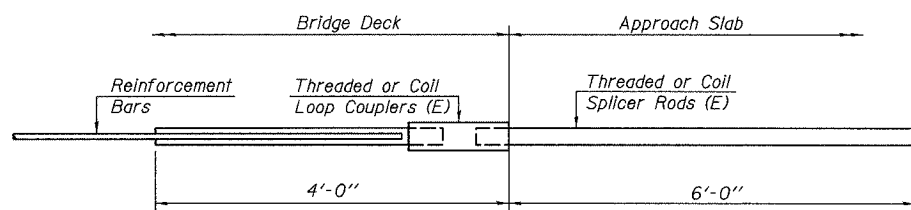
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
All reinforcement bars shall be lapped and tied to the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

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

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

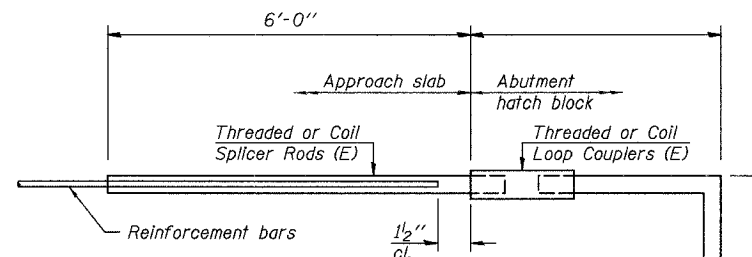
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

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



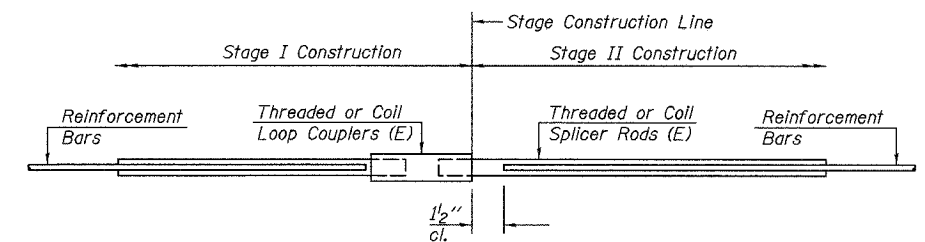
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

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



FOR PILE BENT ABUTMENTS

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



STANDARD

Bar Size	No. Assemblies Required	Location
#6	24	Footing

BAR SPLICER ASSEMBLY DETAILS
IL RTE 75 OVER
TIMOTHY CREEK
FAP ROUTE 505
SECTION 115BR-1
WINNEBAGO COUNTY
STA. 63+23.20
SN 101-0183

DESIGNED	JLS
CHECKED	JDA
DRAWN	NOE
CHECKED	JLS

BSD-1

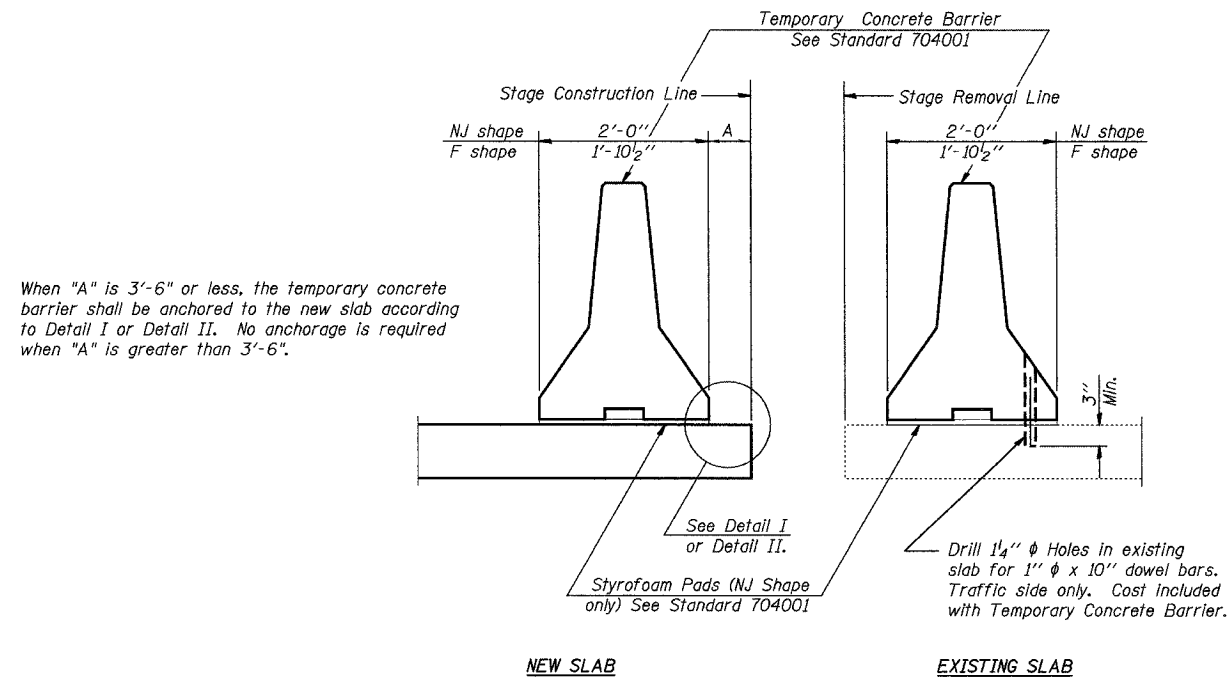
10-22-04

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET
FAP 505	115 BR-1	WINNEBAGO	35	18
FED. ROAD DIST. NO.	ALIGNED	FED. AID PROJECT		

Contract #64940

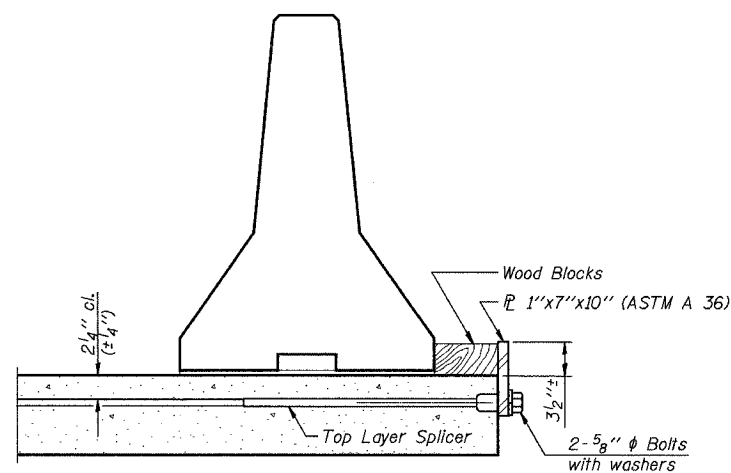
SHEET NO. 9
OF 12 SHEETS



SECTIONS THRU SLAB

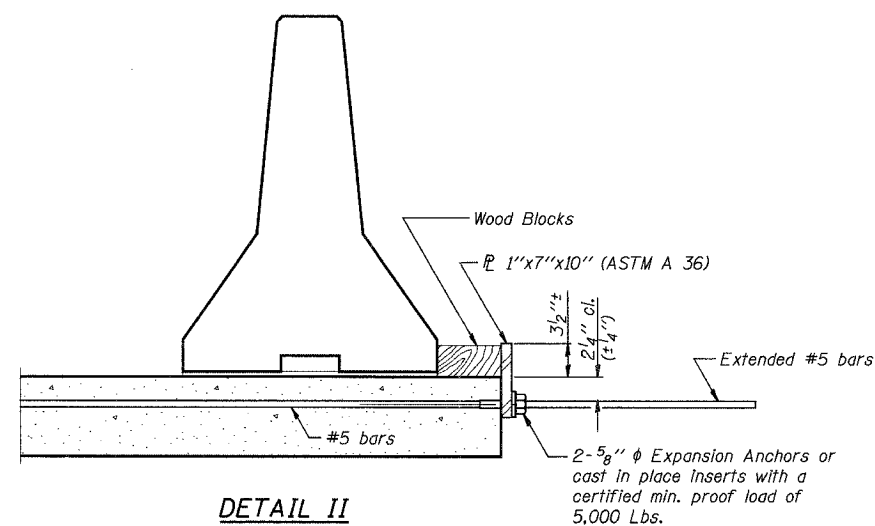
NOTES

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



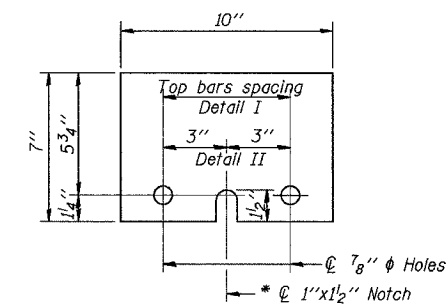
DETAIL I

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



DETAIL II

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



1"x7"x10"

* Required only with Detail II

DESIGNED	JLS
CHECKED	JDA
DRAWN	NOE
CHECKED	JLS

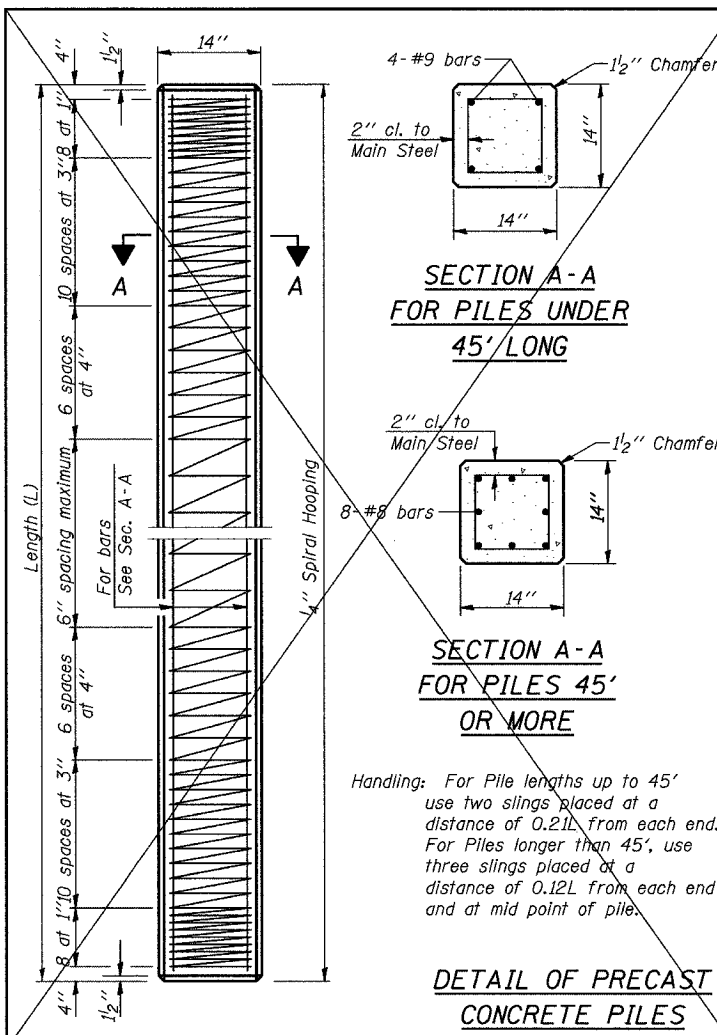
R-27

10-22-04

TEMPORARY CONCRETE BARRIER DETAILS
IL RTE 75 OVER
TIMOTHY CREEK
FAP ROUTE 505
SECTION 115BR-1
WINNEBAGO COUNTY
STA. 63+23.20
SN 101-0183

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	DATE	SHEET NO.
FAP 505	115 BR-1	WINNEBAGO	35	19
SHEET NO. 10 OF 12 SHEETS				

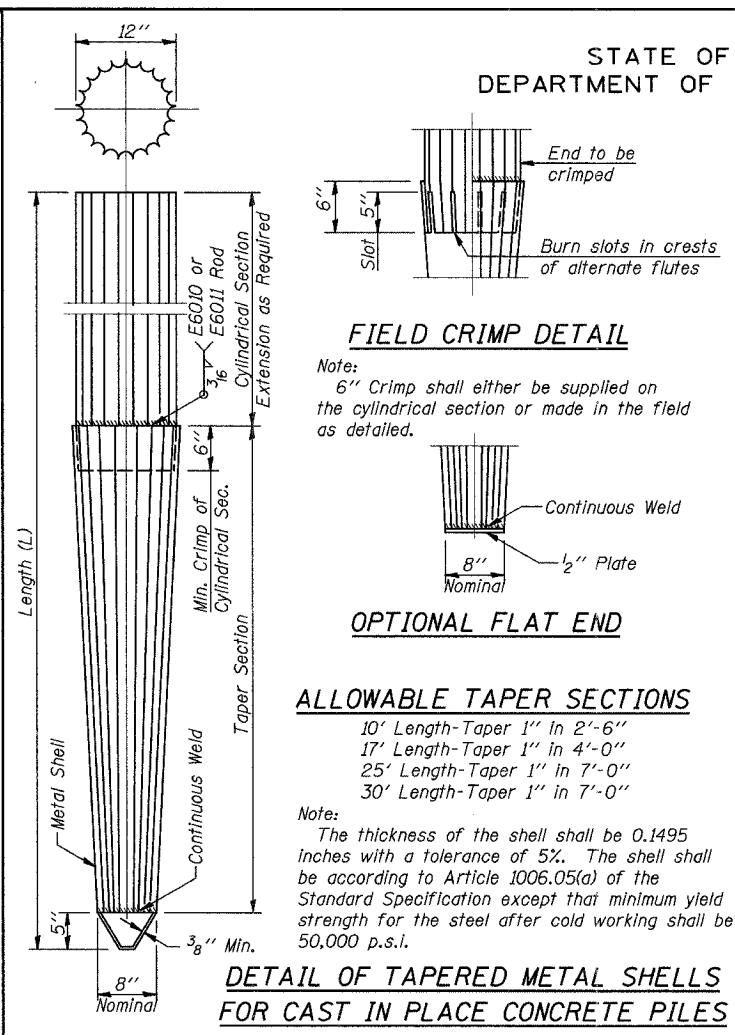


**SECTION A-A
FOR PILES UNDER
45' LONG**

**SECTION A-A
FOR PILES 45'
OR MORE**

Handling: For Pile lengths up to 45' use two slings placed at a distance of 0.21L from each end. For Piles longer than 45', use three slings placed at a distance of 0.12L from each end and at midpoint of pile.

**DETAIL OF PRECAST
CONCRETE PILES**



FIELD CRIMP DETAIL

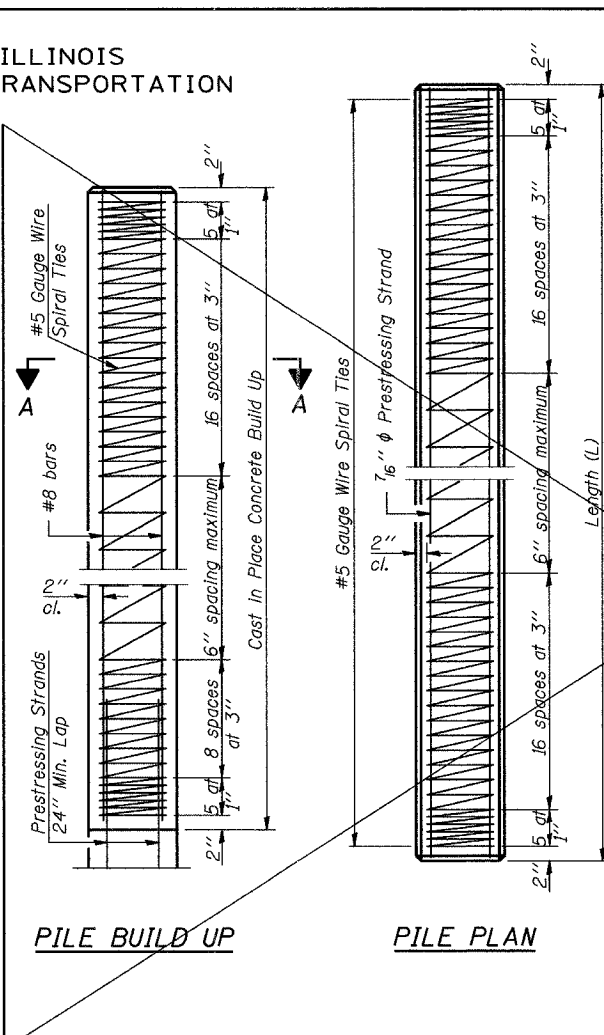
Note: 6" Crimp shall either be supplied on the cylindrical section or made in the field as detailed.

OPTIONAL FLAT END

ALLOWABLE TAPER SECTIONS

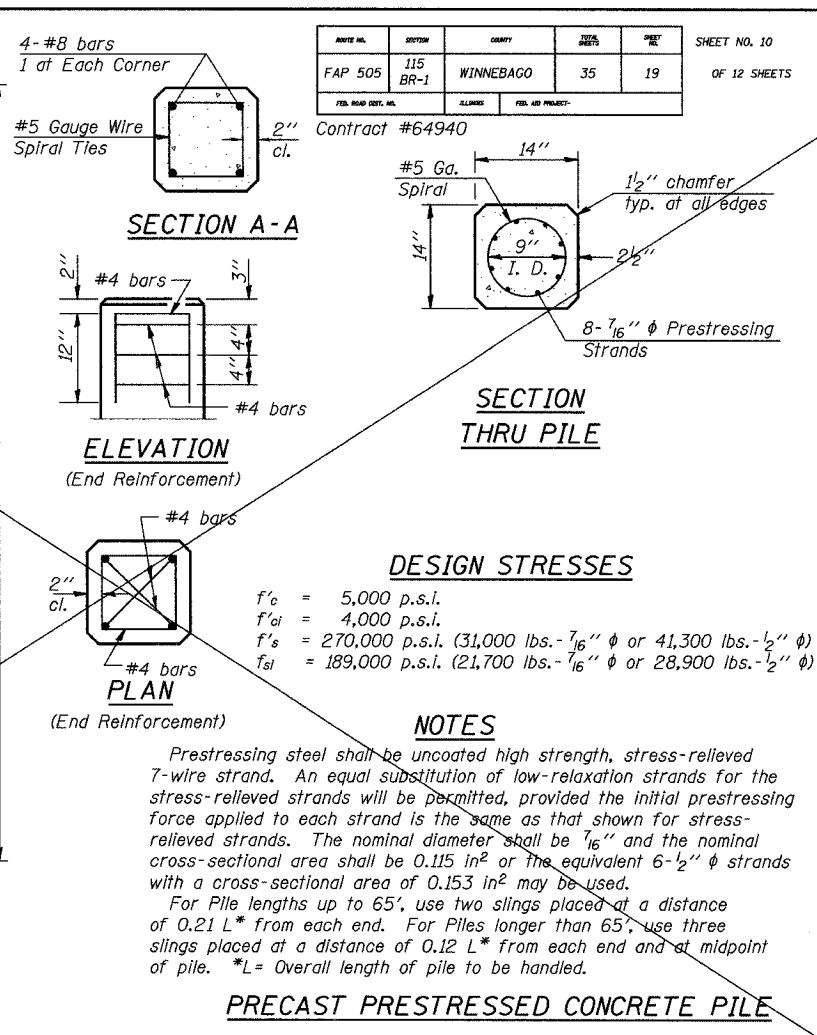
Note: The thickness of the shell shall be 0.1495 inches with a tolerance of 5%. The shell shall be according to Article 1006.05(a) of the Standard Specification except that minimum yield strength for the steel after cold working shall be 50,000 p.s.i.

**DETAIL OF TAPERED METAL SHELLS
FOR CAST IN PLACE CONCRETE PILES**



PILE BUILD UP

PILE PLAN



SECTION A-A

**ELEVATION
(End Reinforcement)**

**SECTION
THRU PILE**

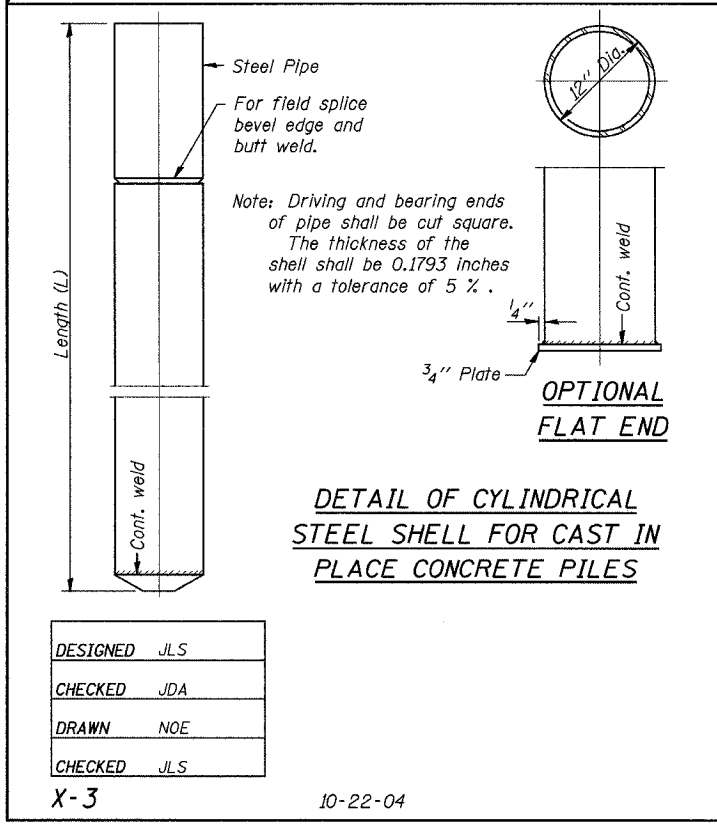
DESIGN STRESSES

$f'_c = 5,000$ p.s.i.
 $f'_{ci} = 4,000$ p.s.i.
 $f'_s = 270,000$ p.s.i. (31,000 lbs. - $\frac{7}{16}$ " ϕ or 41,300 lbs. - $\frac{1}{2}$ " ϕ)
 $f'_{sl} = 189,000$ p.s.i. (21,700 lbs. - $\frac{7}{16}$ " ϕ or 28,900 lbs. - $\frac{1}{2}$ " ϕ)

NOTES

Prestressing steel shall be uncoated high strength, stress-relieved 7-wire strand. An equal substitution of low-relaxation strands for the stress-relieved strands will be permitted, provided the initial prestressing force applied to each strand is the same as that shown for stress-relieved strands. The nominal diameter shall be $\frac{7}{16}$ " and the nominal cross-sectional area shall be 0.115 in² or the equivalent 6- $\frac{1}{2}$ " ϕ strands with a cross-sectional area of 0.153 in² may be used.
For Pile lengths up to 65', use two slings placed at a distance of 0.21 L* from each end. For Piles longer than 65', use three slings placed at a distance of 0.12 L* from each end and at midpoint of pile. *L = Overall length of pile to be handled.

PRECAST PRESTRESSED CONCRETE PILE

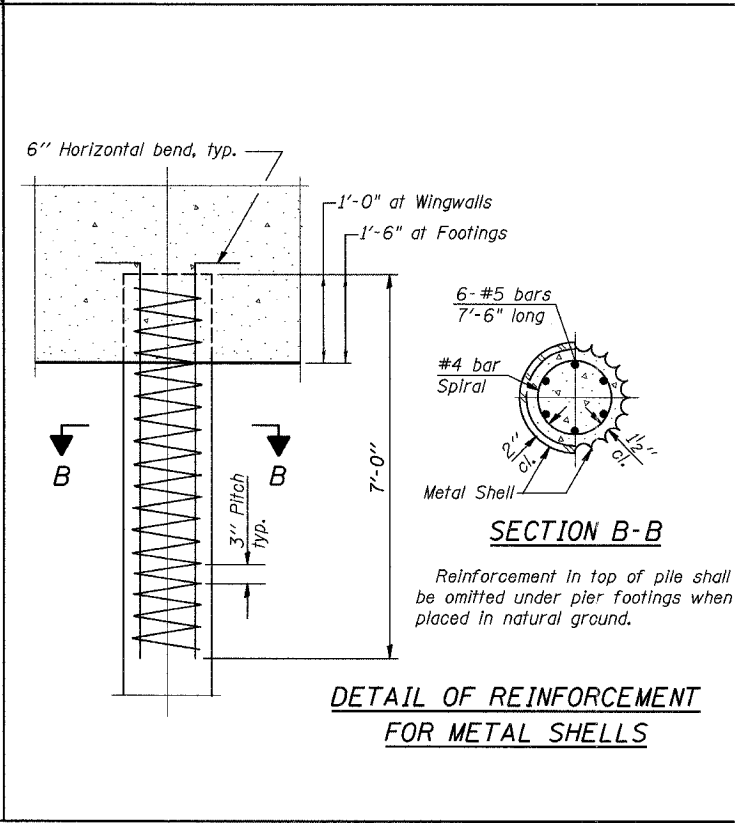


**OPTIONAL
FLAT END**

**DETAIL OF CYLINDRICAL
STEEL SHELL FOR CAST IN
PLACE CONCRETE PILES**

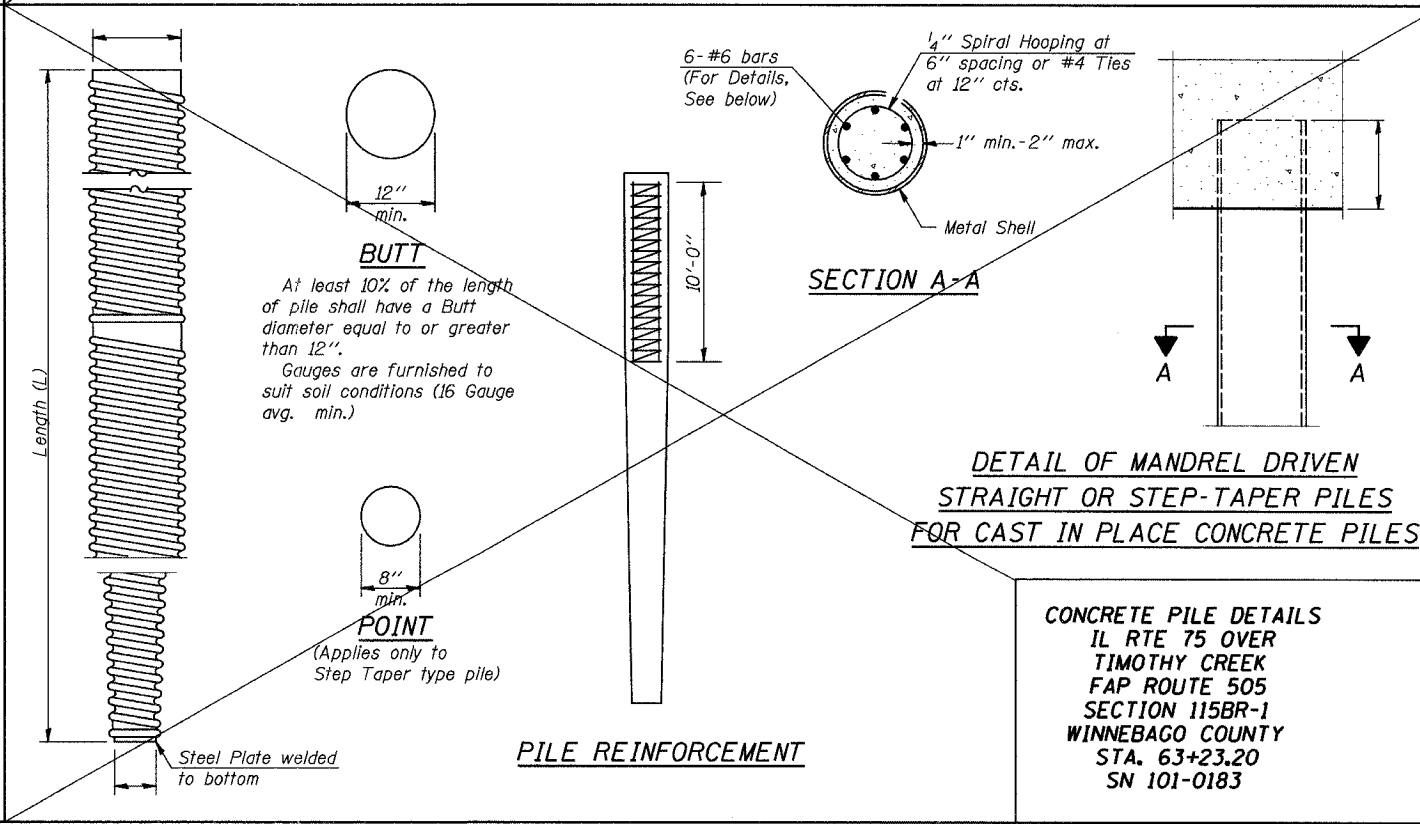
DESIGNED	JLS
CHECKED	JDA
DRAWN	NOE
CHECKED	JLS

X-3 10-22-04



SECTION B-B

**DETAIL OF REINFORCEMENT
FOR METAL SHELLS**



SECTION A-A

**DETAIL OF MANDREL DRIVEN
STRAIGHT OR STEP-TAPER PILES
FOR CAST IN PLACE CONCRETE PILES**

**CONCRETE PILE DETAILS
IL RTE 75 OVER
TIMOTHY CREEK
FAP ROUTE 505
SECTION 115BR-1
WINNEBAGO COUNTY
STA. 63+23.20
SN 101-0183**

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	BLDG.	DATE
FAP 505	115 BR-1	WINNEBAGO	35	21
FED. ROAD DIST. NO.	ALIGNED	FED. AID PROJECT		

Contract #64940

Illinois Department of Transportation
Division of Highways IDOT

SOIL BORING LOG

Page 1 of 2

Date 1/21/04

ROUTE IL 75 DESCRIPTION P92-091-03 IL 75 over Timothy Creek, 1/2 mile east of Meridian Road LOGGED BY C. Jenkins

SECTION LOCATION Rockton Twp. - NW, SEC. 31, TWP. 46N, RNG. 1E

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE C-45

STRUCT. NO. Station 70+94

BORING NO. B-2 Station 70+40 Offset 10.00ft Lt Cl Ground Surface Elev. 99.8 ft

Description	D	B	U	M	Surface Water Elev.	D	B	U	M	Groundwater Elev.:	D	B	U	M
Asphalt					89.0									
STIFF tan/gray SANDY LOAM			1.2	15	88.5									
			P											
MEDIUM tan/gray SILTY LOAM	2		0.7	20										
	2		P											
STIFF black SILTY LOAM	2		1.2	26										
	2		P											
MEDIUM gray SANDY LOAM	2		0.7	14										
	2		P											
MEDIUM gray/black SILTY LOAM	2		0.7	24										
	2		P											
LOOSE tan fine SAND	2													
	2													
Same as above	1													
	2													
Same as above	1													
	2													
Same as above	1													
	2													
Same as above	1													

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 IDOT

SOIL BORING LOG

Page 2 of 2

Date 1/21/04

ROUTE IL 75 DESCRIPTION P92-091-03 IL 75 over Timothy Creek, 1/2 mile east of Meridian Road LOGGED BY C. Jenkins

SECTION LOCATION Rockton Twp. - NW, SEC. 31, TWP. 46N, RNG. 1E

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE C-45

STRUCT. NO. Station 70+94

BORING NO. B-2 Station 70+40 Offset 10.00ft Lt Cl Ground Surface Elev. 99.8 ft

Description	D	B	U	M	Surface Water Elev.	D	B	U	M	Groundwater Elev.:	D	B	U	M
Wash MEDIUM gray/tan fine SAND (continued)	3				89.0									
	6				88.5									
	9													
Wash MEDIUM tan fine SAND with some GRAVEL (continued)	6													
	13													
	18													
Wash MEDIUM tan fine SAND	1													
	2													
	5													
Wash MEDIUM tan SANDY GRAVEL	5													
	6													
	10													
Wash MEDIUM tan fine SAND	1													
	2													
	3													
Wash VERY DENSE tan well-cemented SANDY GRAVEL	2													
	5													
	7													
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)

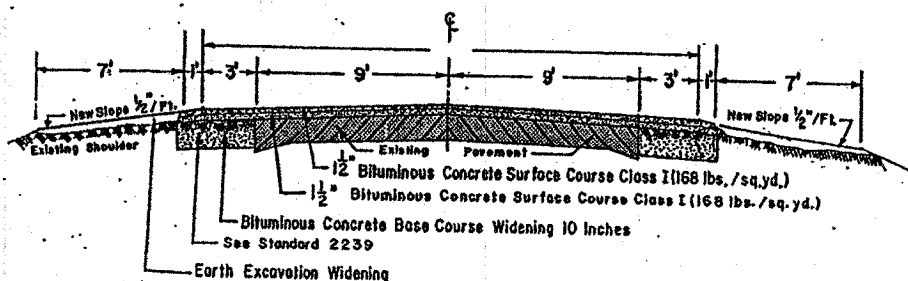
DESIGNED	JLS
CHECKED	JDA
DRAWN	NOE
CHECKED	JLS

SOIL BORINGS
IL RTE 75 OVER
TIMOTHY CREEK
FAP ROUTE 505
SECTION 115BR-1
WINNEBAGO COUNTY
STA. 63+23.20
SN 101-0183

TYPICAL SECTIONS

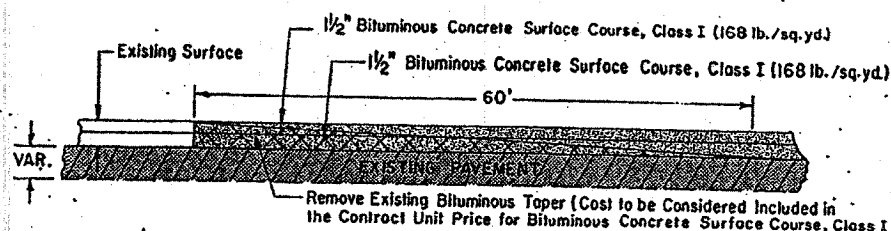
NO SCALE

MAIN LINE



NOTE: The thickness of Bituminous Mixture shown on the plans is the nominal thickness. Deviations from the nominal thickness will be permitted when such deviations occur due to irregularities in the existing base or surface on which the Bituminous Mixture is placed.

BUTT JOINT



GENERAL NOTES

ENTIRE SECTION INSPECTED AND APPROVED AS TO POLICY.
 DATE MAY 27 1977
 DISTRICT ENGINEER D. E. Swinark

THE CONTRACTOR SHALL ERECT THE BARRICADES CONFORMING TO STANDARDS 2298 & 2299

AT THE LOCATIONS WHERE EXCAVATION QUANTITIES ON THE PLANS ARE INDICATED AS HAVING BEEN ESTIMATED, THE ENGINEER WILL OBTAIN ORIGINAL AND FINAL CROSS SECTIONS TO DETERMINE PAY QUANTITIES.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

THE CONTRACTOR SHALL REMOVE ALL DELINEATORS AND GUARD RAIL WHICH ARE NOT TO BE LEFT IN PLACE. UNUSABLE MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT HIS EXPENSE. SALVAGEABLE MATERIAL SHALL BE STORED ON THE STATES RIGHT OF WAY AND SHALL BECOME THE PROPERTY OF THE DIVISION OF HIGHWAYS OF THE STATE OF ILLINOIS.

SUMMARY OF QUANTITIES

CODE NO.	ITEM	CONSTRUCTION TYPE UNIT	CODE X080 QUANTITY
20J001	TREE REMOVAL (6 TO 15 INCH DIAMETER)	IN DIA	50
202004*	EARTH EXCAVATION (WIDENING)	CU YD	8
306007	BITUMINOUS CONCRETE BASE COURSE WIDENING 8 INCH	SQ YD	35
406008*	BITUMINOUS CONCRETE SURFACE COURSE CLASS I	TON	88
408005	PORTLAND CEMENT CONCRETE PAVEMENT 10 INCH	SQ YD	33
408013	PAVEMENT FABRIC	SQ YD	33
501016	REMOVAL OF EXISTING SUPERSTRUCTURE	EACH	1
501022	CONCRETE REMOVAL	CU YD	10.4
501026	EXPANSION BOLTS 3/4 INCH	EACH	104.
504003	CLASS X CONCRETE	CU YD	16.6
605001*	PRECAST CONCRETE BRIDGE SLAB	SQ FT	299
605004*	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	1261
508012	STEEL RAILING, TYPE W	LIN FT	138
512001	REINFORCEMENT BARS	POUND	2120
620026	PAVEMENT REMOVAL AND PORTLAND CEMENT CONCRETE REPLACEMENT TYPE 2 10 INCH	SQ YD	9
628001*	STEEL PLATE BEAM GUARD RAIL, SINGLE RAIL	LIN FT	300
628015	TEMPORARY GUARD RAIL	LIN FT	39
633002	WOOD GUARD RAIL REMOVAL	LIN FT	160
646002	ENGINEER'S FIELD OFFICE, TYPE B	EACH	1
X62801*	TERMINAL SECTION SINGLE RAIL	EACH	4
Z10178*	COAL TAR INTERLAYER PROTECTIVE COAT	SQ YD	158
-XZ1014*	TRAFFIC CONTROL & PROTECTION STANDARD 2309	EACH	1

* SEE SPECIAL PROVISIONS

SCHEDULE OF QUANTITIES

TREE REMOVAL (6-15 INCH DIAMETER)	ENTIRE SECTION	50	IN DIA
EARTH EXCAVATION (WIDENING)	ENTIRE SECTION	8	CU YDS
BITUMINOUS CONCRETE BASE COURSE WIDENING 8"	ENTIRE SECTION	35	SQ YDS
BITUMINOUS CONCRETE SURFACE COURSE, CLASS I	BRIDGE DECK	16	
	MAINLINE	72	
	TOTAL	88	TONS
STEEL PLATE BEAM GUARD RAIL, SINGLE RAIL	ENTIRE SECTION (4 AT 75')	300	LIN FT
WOOD GUARD RAIL REMOVAL	ENTIRE SECTION (4 AT 40')	160	LIN FT
ENGINEER'S FIELD OFFICE, TYPE B	ENTIRE SECTION	1	EACH
TERMINAL SECTION, SINGLE RAIL	ENTIRE SECTION (1 @ each end=4)	4	EACH
TRAFFIC CONTROL & PROTECTION STANDARD 2309	ENTIRE SECTION	1	EACH

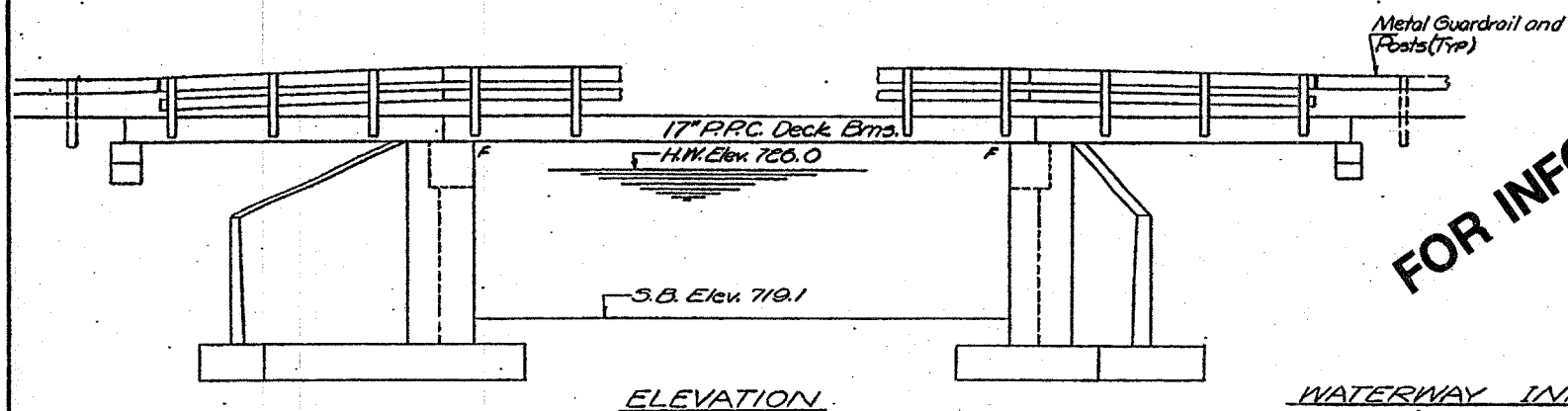
FOR INFORMATION ONLY

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
SBI 76	115BR	WINNEBAGO	8	2

B.M. Chiseled on the East wingwall at Sta. 70+13.20
 Exist. Structure: Built as 36" R.C. Deck Girders, Substr. is R.C. Closed
 Abutments. Superstr. to be removed by Bridge Contractor.
 No Salvage.
 Traffic to be maintained by using stage construction.

STATE OF ILLINOIS

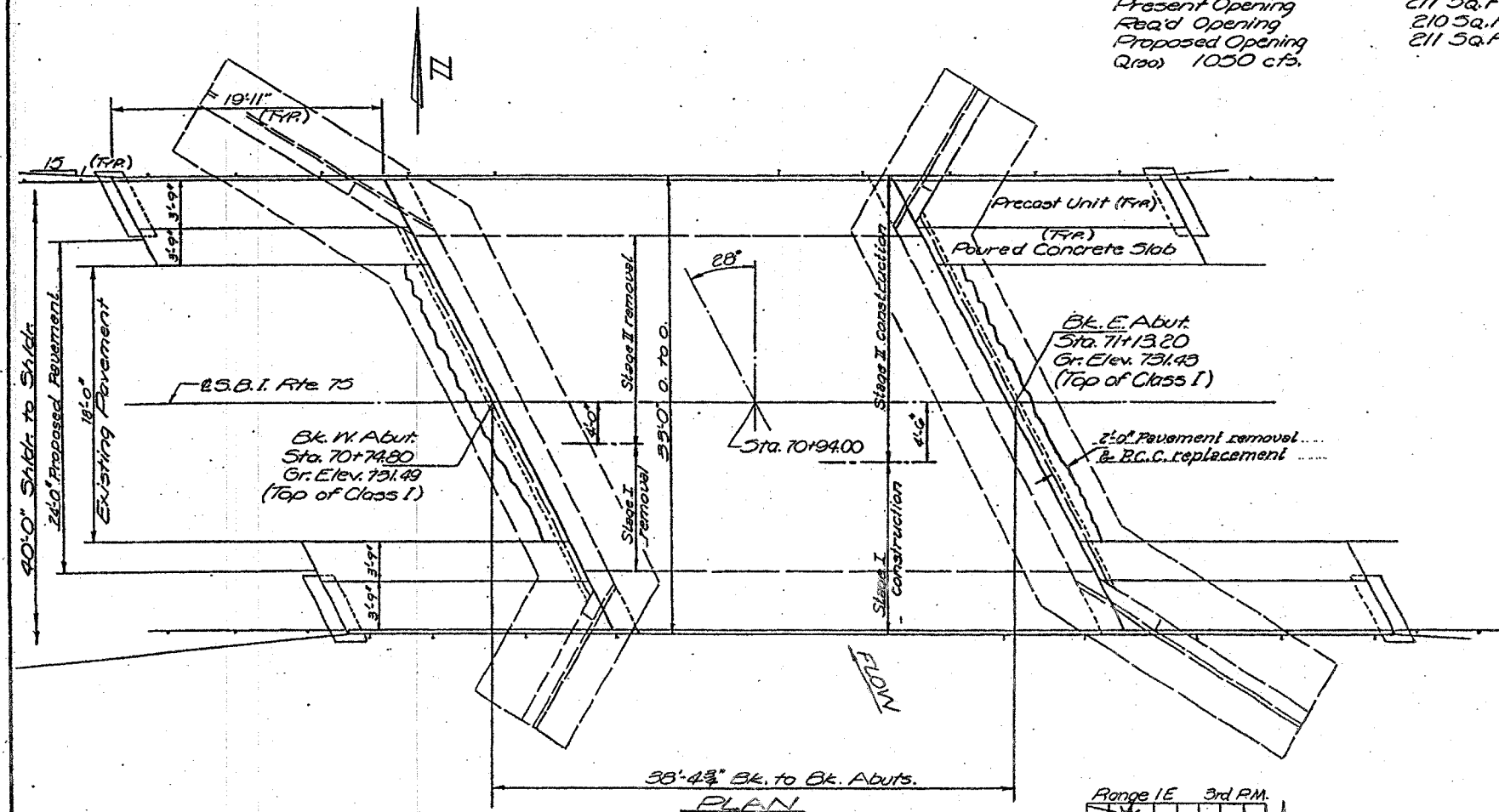
PROJECT NO.	SECTION	COUNTY	TOWNSHIP	RANGE	SHEET NO.
1178A	WHITESBORO	8	3		1
					6 SHEETS



ELEVATION

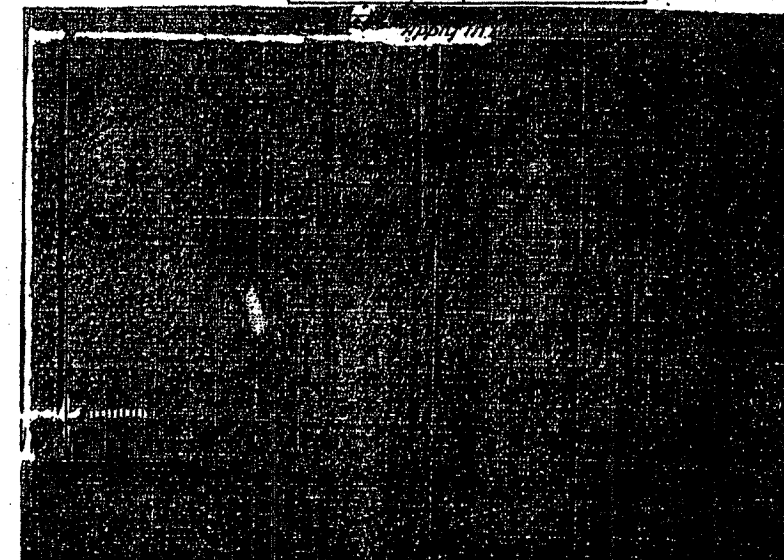
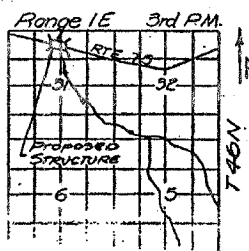
FOR INFORMATION ONLY

WATERWAY INFORMATION
 Drainage Area: 5750 Acres
 Character: level, rolling, sand, clay, cultivated
 Present Opening: 211 Sq. Ft.
 Road Opening: 210 Sq. Ft.
 Proposed Opening: 211 Sq. Ft.
 Q₁₀₀: 1050 cfs.



DESIGN STRESSES

FIELD UNITS PRECAST PRESTRESSED UNITS
 f_c = 1000 psi (Sub.) f_c = 5000 psi
 f_s = 20000 psi (Reinf.) f_c = 4000 psi
 v_c = 75 psi (Footings) f_s = 248000 psi
 n = 10 f_s = 175620 psi



GENERAL NOTES
 All reinforcement bars shall be lapped 24 diameters unless otherwise shown.
 It shall be the responsibility of the Contractor to verify all dimensions & conditions existing in the field prior to construction & ordering of materials.
 An alternate strand pattern using Extra High Strength prestressing strand (270 k.s.i.) is permitted.
 Expansion bolts shall consist of self-drilling expansion shields & 3/8" hooked bolts. Hooked bolts shall extend a minimum of 12" into new concrete except as otherwise shown.
 Shoulder transition to wingwall shall be shaped with broken concrete - cost incidental.
 Limits of coal tar interlayer protective coat shall be from 2' back of abutments & out to out of deck.

BILL OF MATERIAL

ITEM	UNIT	SUB.	SUPER.	TOTAL
Portland Cement Concrete Pavement (10')	Sq. yds.			33
Pavement Fabric	Sq. yds.			33
Concrete Removal	Cu. yds.	10.4		10.4
Expansion Bolts (3/8")	Each	56	48	104
Class X Concrete	Cu. yds.	14.8	1.8	16.6
Precast Concrete Bridge Slab	Sq. ft.			239
Precast Prestressed Concrete Deck Beams (17")	Sq. ft.			1261
Steel Bailing, Type W	Lin. ft.		138	138
Reinforcement bars	Lbs.	2,120		2,120
Pavement Removal & R.C.C. Replacement, Type 2 (10')	Sq. yds.			9
Removal of Existing Superstructures	Each			1
Coal Tar Interlayer Protective Coat	Sq. yds.			158
Bituminous Concrete Surface Course	Tons			16
Temporary Guardrail	Lin. ft.		39	39

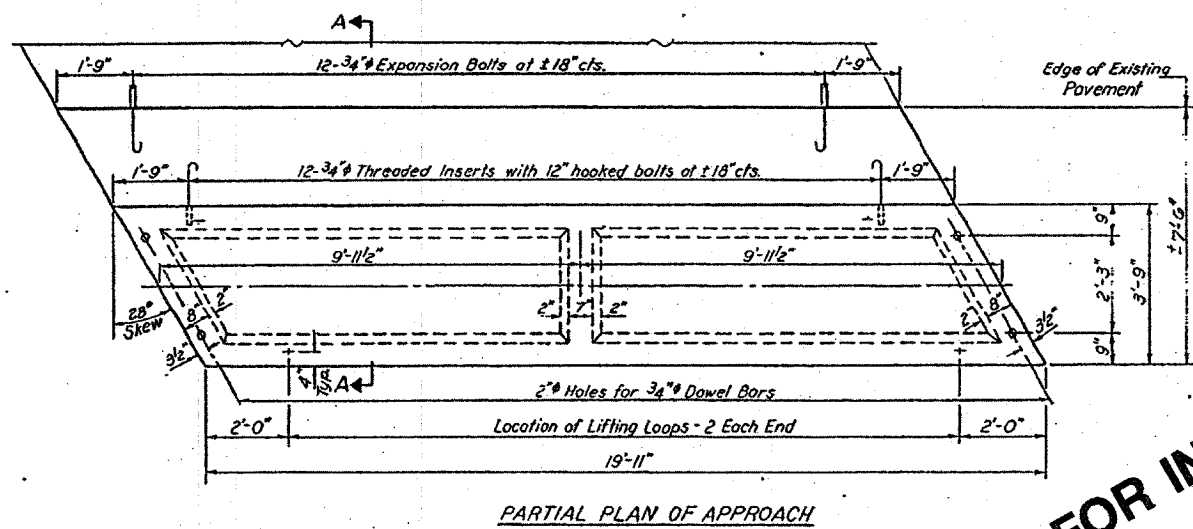
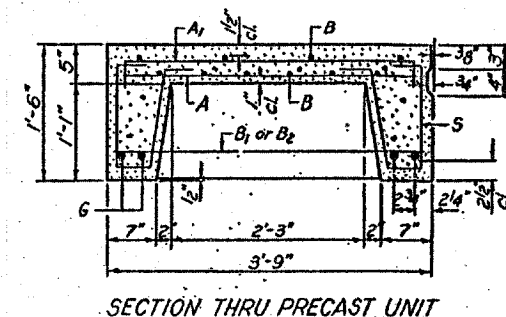
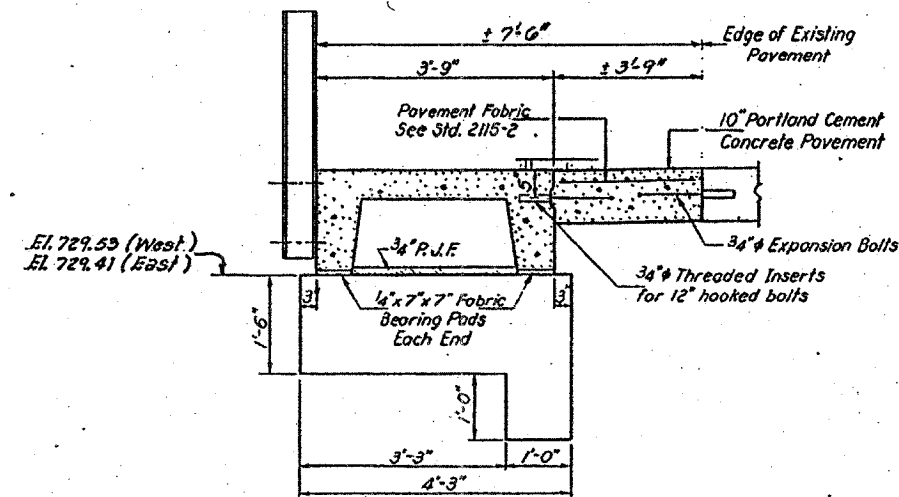
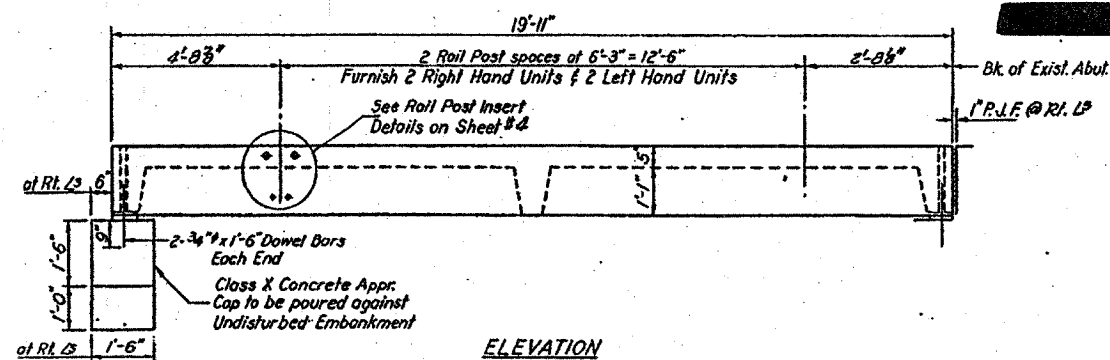
GENERAL PLAN & ELEVATION

DESIGNED: *D. McDaniel*
 CHECKED: *M. Chittum*
 EXAMINED: *C. E. Hummer*
 PASSED: *H. G. Dammann*

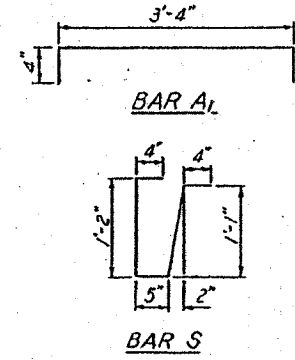
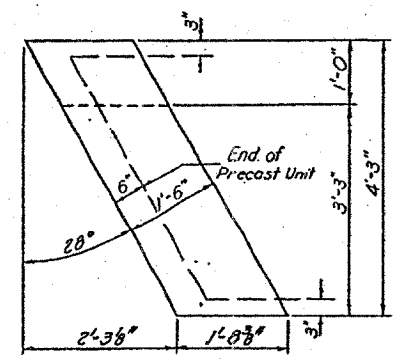
APR 27 1971
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF ILLINOIS

STATE OF ILLINOIS

DATE	NO.	BY	CHKD.	APP'D.	SHEET NO.
7/3	1158R	WINNEBAGO	B	4	6
P.C. BRIDGE DIV. 7					6 SHEETS



FOR INFORMATION ONLY



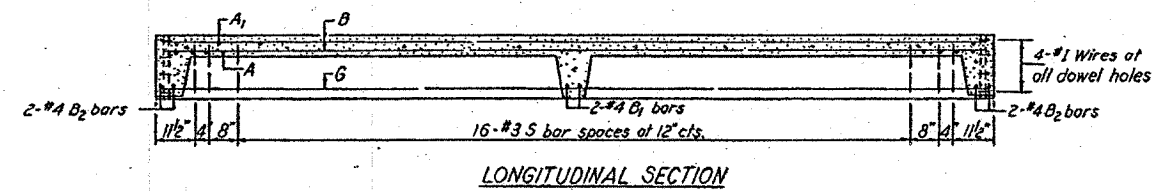
BAR LIST - ONE UNIT

Reinforcement to be cast into slab

Bar	No	Size	Length	Shape
A	33	#4	3'-3"	—
A1	27	#4	4'-0"	—
B	10	#4	19'-6"	—
B1	2	#4	3'-6"	—
B2	4	#4	4'-0"	—
S	4	#10	19'-6"	—
3	42	#3	3'-4"	U

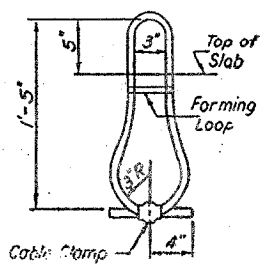
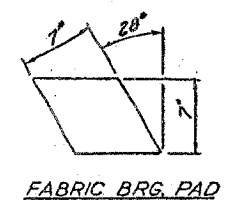
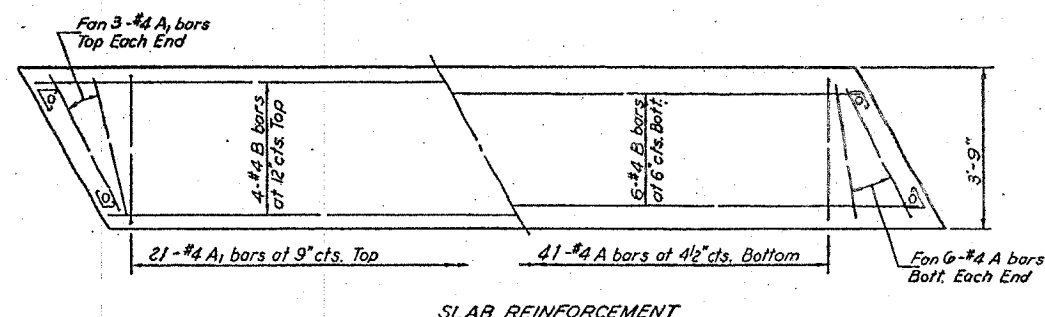
NOTES

Unless otherwise approved by the Engineer, lifting loops shall be 1/2" 6x19 class wire rope with fiber core and shall have a minimum ultimate strength of 18,700 lbs. Loops shall be burned off after slab has been erected. Holes shall be drilled and anchor dowels grouted in place. Cost of reinforcement and accessories cast into the slab unit, bearing pads, furnishing, drilling for, placing and grouting anchor dowels and 3/4" hooked bolts is included in Unit bid price for "Precast Concrete Bridge Slab." The Precast Concrete Bridge Slab shall be erected and aligned with the exterior face of the exterior Deck Beam after Deck Beams are in final position.



BILL OF MATERIAL

Item	Unit	Quantity
Precast Concrete Bridge Slab	Sq. Ft.	299
Portland Cement Concrete Pavement (10)	Sq. Yds.	33
Pavement Fabric	Sq. Yds.	33
Expansion Bolts 3/4"	Each	48
Class X Concrete	Cu. Yds.	1.8



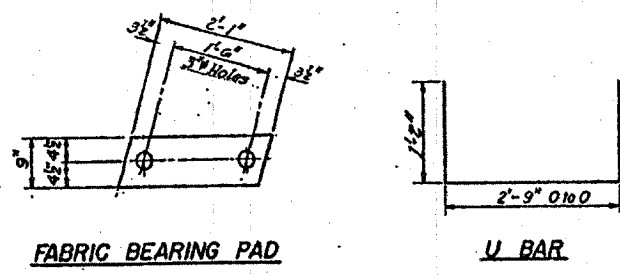
STRESSES

f_c = 4,500 psi.
f_t = 1,800 psi.
f_s = 1,000 psi.
n = 8

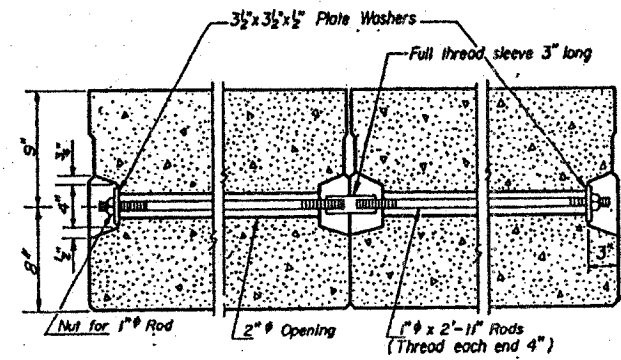
APPROACH DETAILS

DESIGNED: *James McCormick*
 CHECKED: *Michael Ormrod*
 DRAWN: *J.L. Armstrong*
 EXAMINED: *[Signature]*
 PASSED: *[Signature]*
 APR 27 1971

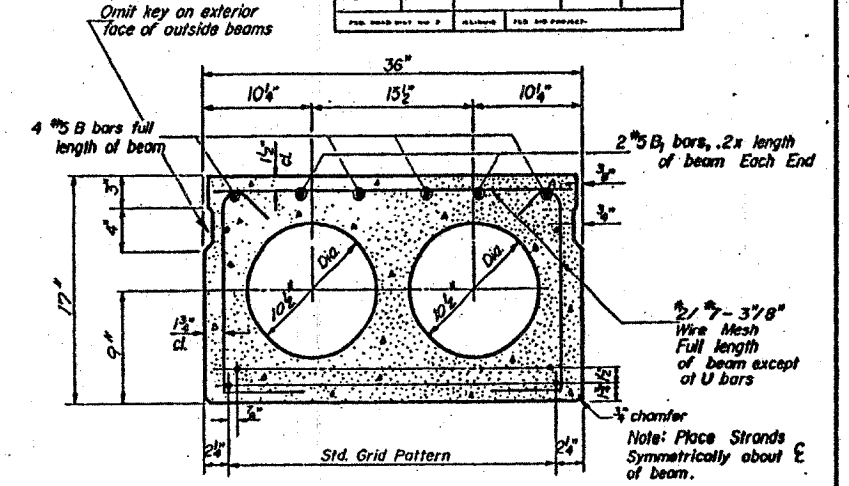
ROUTE NO.	SECTION	PROJECT	SHEET NO.	SHEETS
75	115 BR	WINHEM90	8	5
SHEET NO. 3		6 SHEETS		



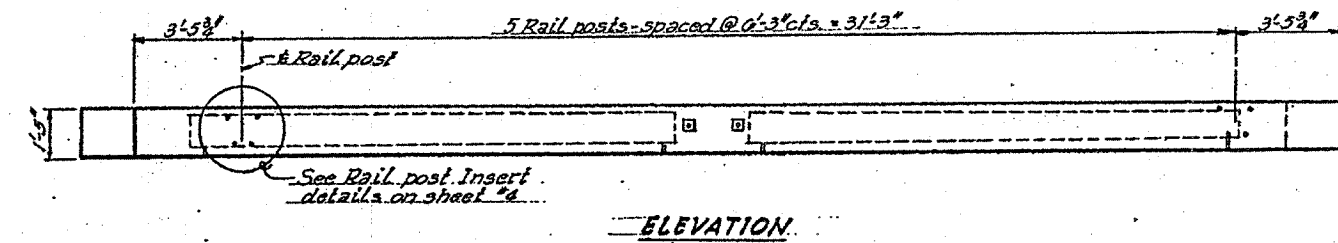
FOR INFORMATION ONLY



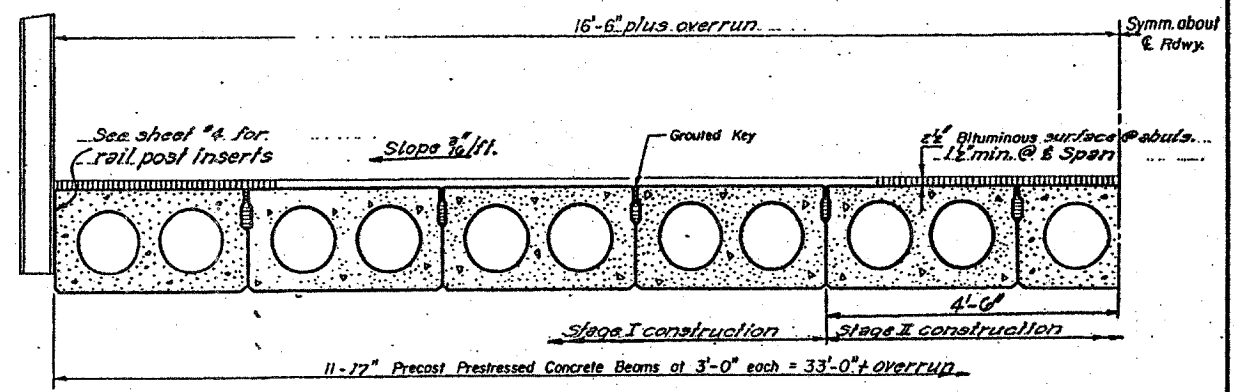
TYPICAL TRANSVERSE TIE ASSEMBLY



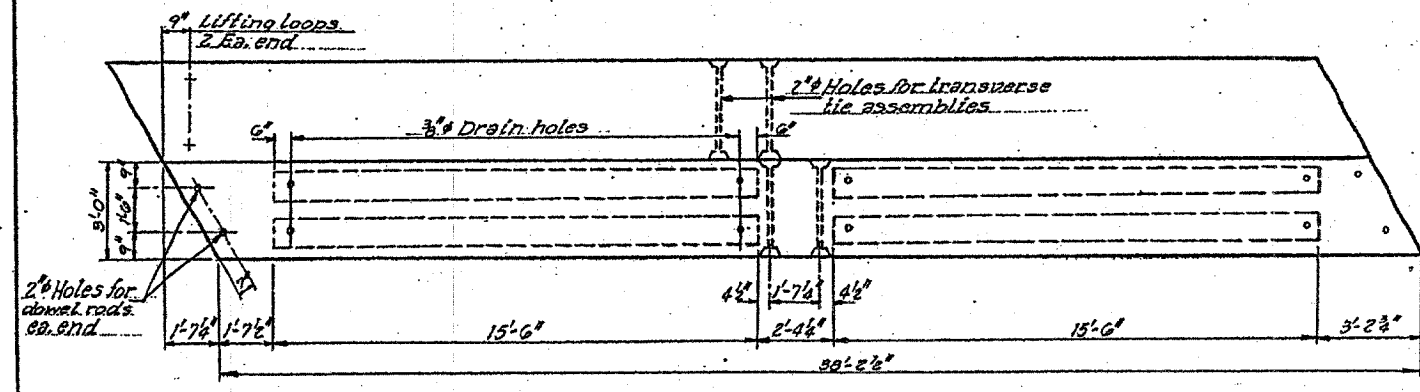
TYPICAL SECTION
 18 - 7/16" Strands Each Strand Stressed to 18,900 lbs.
 14 - Strands 1 1/2" up 2 - Strands 3 1/4" up 2 - Strands 12" up



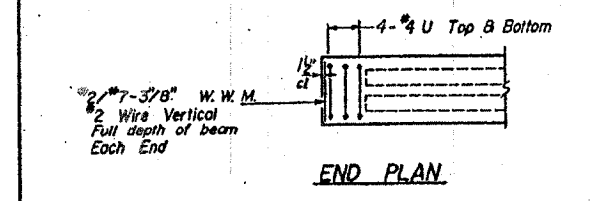
ELEVATION



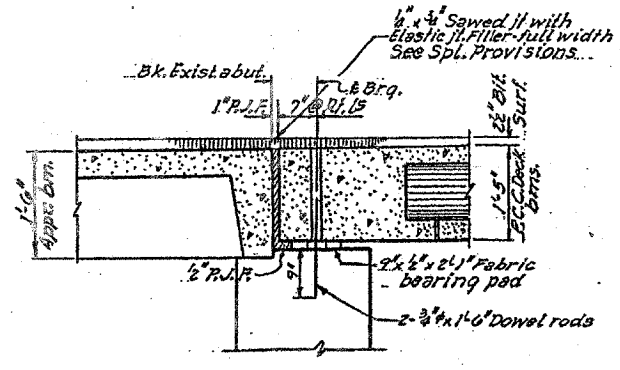
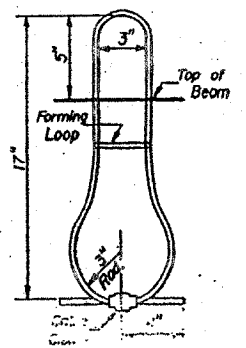
HALF CROSS SECTION
 (Looking West)



PARTIAL PLAN



END PLAN



GENERAL NOTES

Pressing steel shall be non-galvanized high strength, stress-relieved 7-wire strand. The nominal diameter shall be 7/16" and the nominal cross-sectional area shall be 0.109 sq. in. Lifting loops shall be 2" diameter, 6x19 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 18,700 lbs. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside beam shall be filled with grout after transverse tie assembly is in place. Longitudinal shear keys shall be packed with a very dry mix of 2:1 sand and P.C. mortar.

After fabrication the transverse tie assemblies (tie rods, nuts, washers and sleeves) shall be hot-dipped galvanized in accordance with A.S.T.M. Designation: A153. Cost of reinforcement and accessories cast into the beam, of bearing pads, of armor angles, and of grouting longitudinal shear keys is included in unit price bid for "Precast Prestressed Concrete Deck Beams."

After beams have been erected, holes for dowel anchors shall be drilled into the concrete at the anchor dowels provided in place.

BILL OF MATERIAL

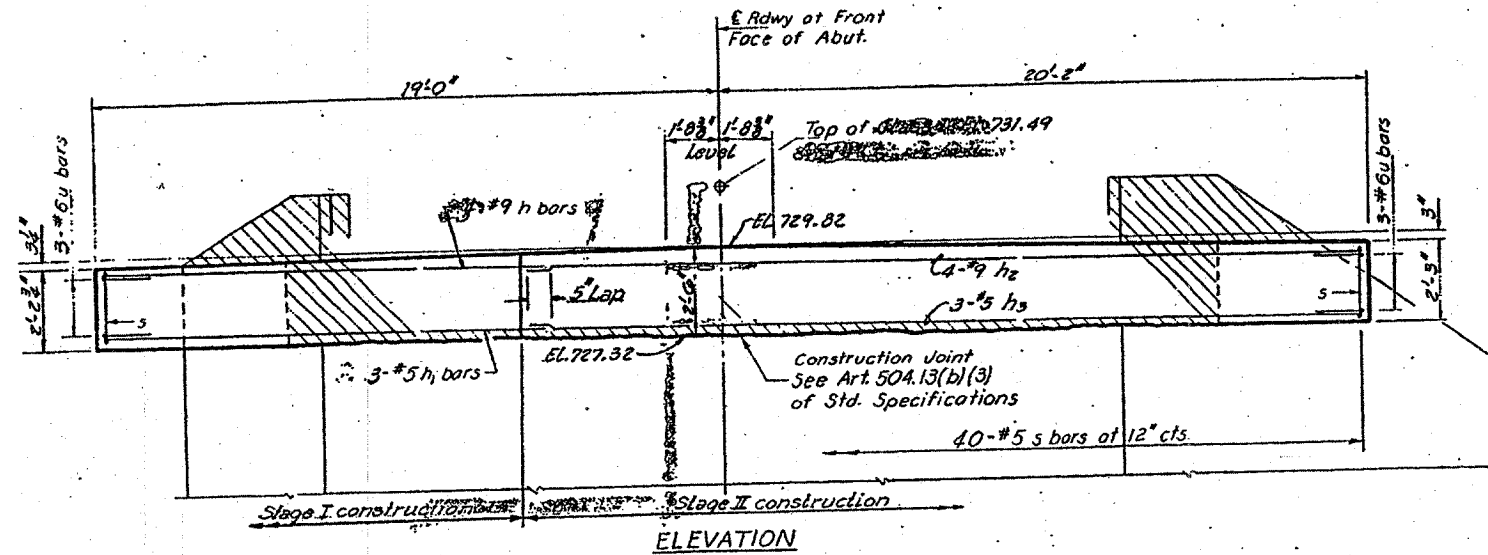
Item	Unit	Quantity
Precast Prestressed Concrete Deck Beams (17")	Sq. Ft.	1,267
Removal of Existing Superstructure	Each	1

SUPERSTRUCTURE

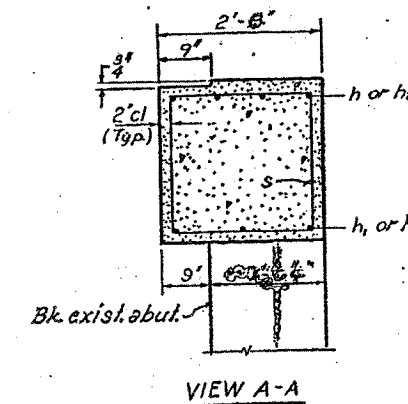
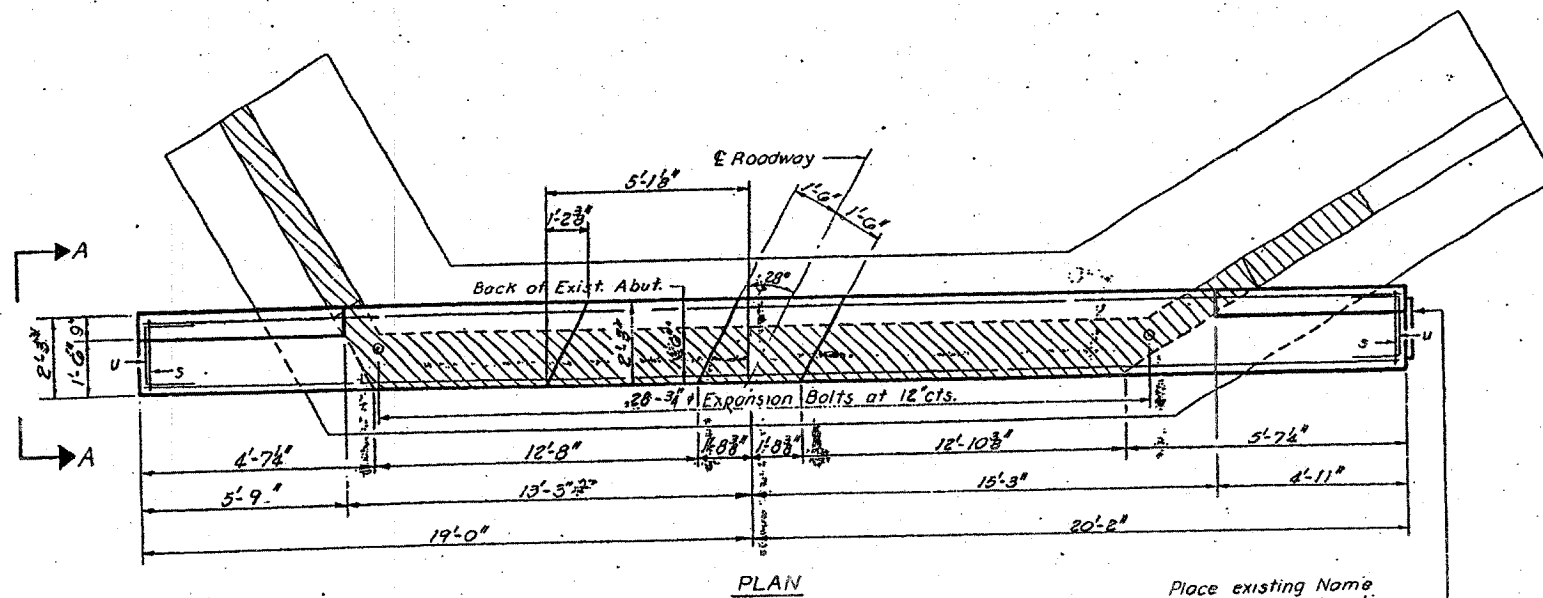
DESIGNED *Steve McLeod*
 EXAMINED *[Signature]* APRIL 27 1971
 CHECKED *[Signature]*
 PASSED *[Signature]*

STATE OF ILLINOIS

PROJECT NO.	DISTRICT	CONTRACT	SHEET NO.	TOTAL SHEETS
75	1152A	WINNEBAGO	8	7
DESIGNED BY		DRAWN BY		DATE
J. P. S. JONES		R. P. S. JONES		APR 27 1971



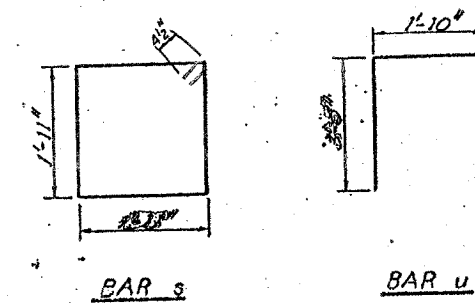
FOR INFORMATION ONLY



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	4	#9	14'-3"	—
h ₁	3	#5	14'-3"	—
h ₂	4	#9	23'-9"	—
h ₃	3	#5	23'-9"	—
s	40	#5	8'-5"	□
u	6	#6	7'-10"	□
Class X Concrete			Cu. Yds.	7.4
Reinforcement Bars			Lbs.	1060
Expansion Bolts			Each.	28
Concrete Removal			Cu. Yds.	4.9

Notes:
 Hatched area indicates Concrete Removal. Reinforcement extending into removed area shall be cleaned and incorporated into the new construction.
 Expansion Bolts shall be anchored in sound concrete.
 All edges shall have standard 3/4 chamfers

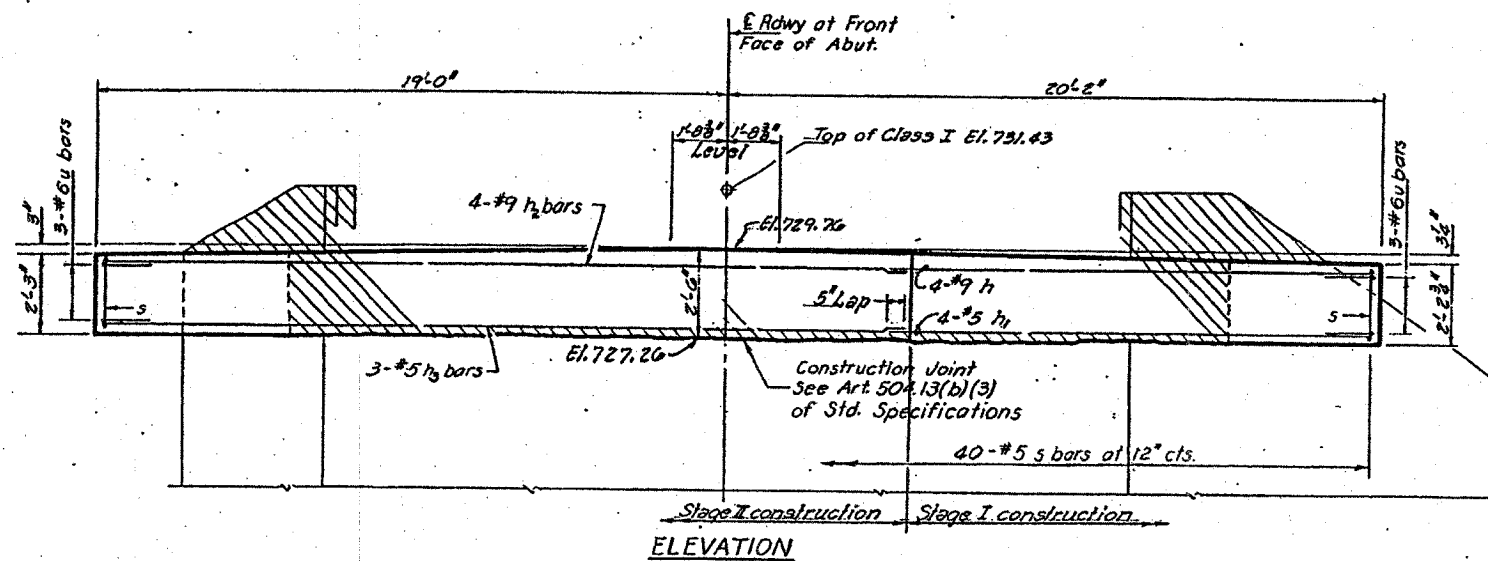


WEST ABUTMENT
 S.B.I. RT. 75 SEC. 115 BR
 WINNEBAGO COUNTY
 STATION 70+58

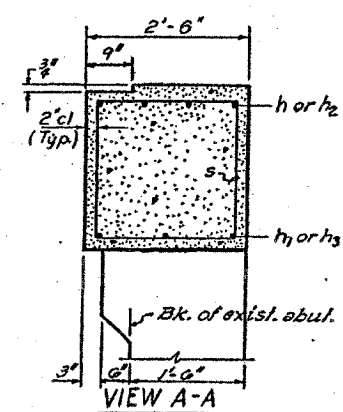
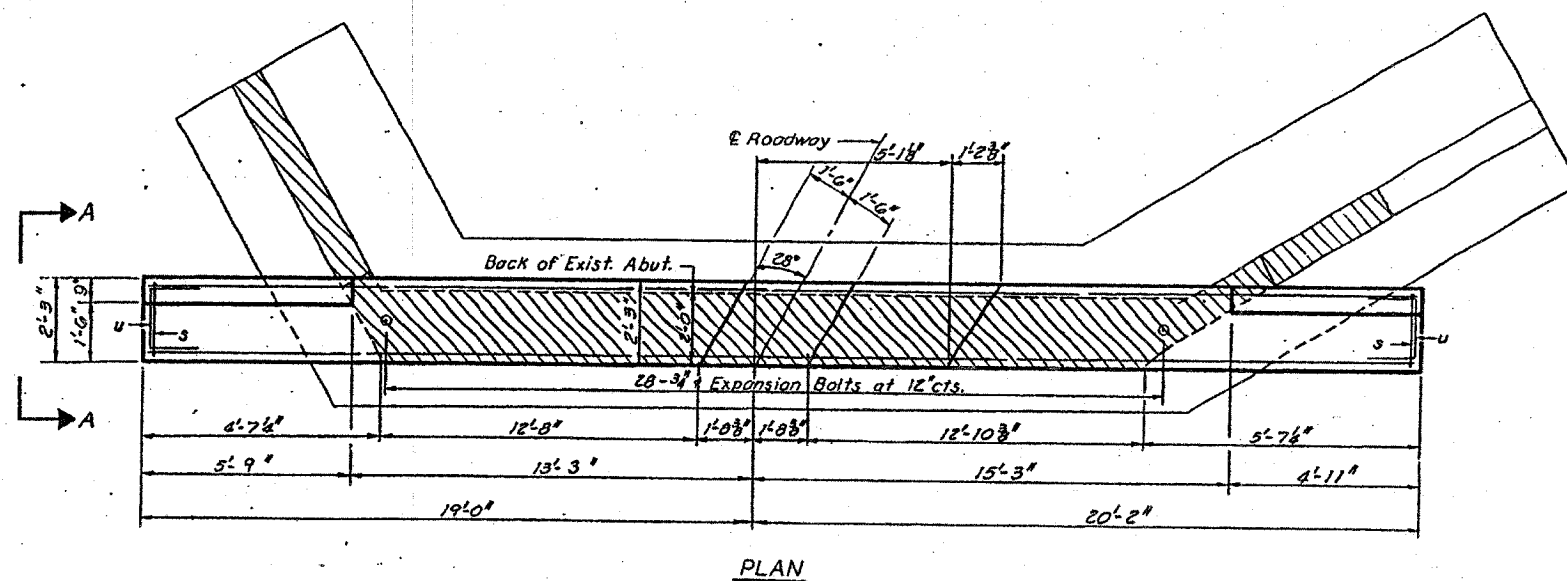
DESIGNED *John McCombs*
 CHECKED *M. P. S. Jones*
 EXAMINED *[Signature]*
 PASSED *[Signature]*
 APR 27 1971

STATE OF ILLINOIS

DATE	NO.	BY	CHKD.	DATE	NO.	BY	CHKD.	SHEET NO.
4-17-75	1188	WINNEBAGO	8	8				6
<small>ILL. ROAD DIST. NO. 7</small>								<small>0 SHEETS</small>



FOR INFORMATION ONLY

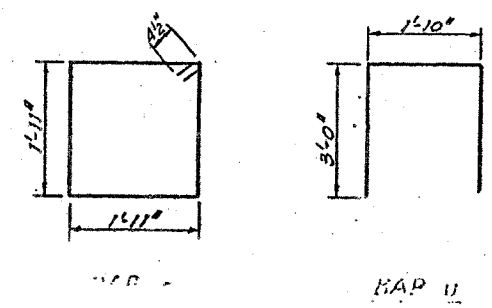


BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1	4	#9	14'-3"	—
h2	3	#5	14'-3"	—
h3	4	#9	23'-9"	—
h3	3	#5	23'-9"	—
s	40	#5	8'-5"	□
u	6	#6	7'-10"	□
Class X Concrete		Cu. Yds.	7.4	
Reinforcement Bars		Lbs.	1060	
Expansion Bolts		Each	28	
Concrete Removal		Cu. Yds.	5.5	

Notes:
 Hatched area indicates Concrete Removal. Reinforcement extending into removed area shall be cleaned and incorporated into the new construction.
 Expansion Bolts shall be anchored in sound concrete.
 All edges shall have standard 3/4 chamfers

DESIGNED: *John McLaughlin*
 EXAMINED: *[Signature]* April 27 1975
 CHECKED: *[Signature]*
 PASSED: *[Signature]*

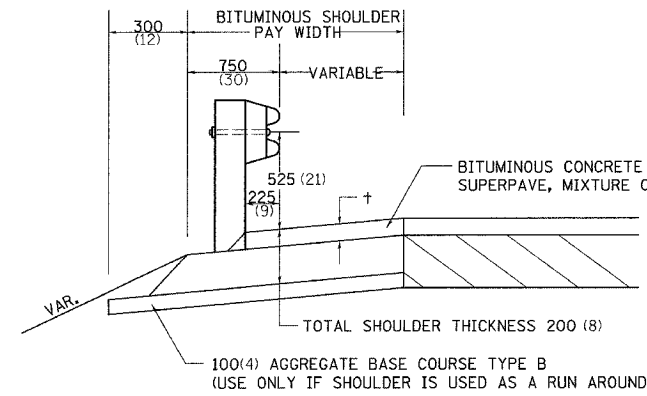


EAST ABUTMENT
 COUNTY

281
 1188
 Winnebago
 Dist. 7

CONTRACT NO. 64940				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	115BR-1	WINNEBAGO	35	30
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

DETAIL OF BITUMINOUS SHOULDER AT GUARD RAIL



† = SEE TYPICAL SECTIONS FOR THICKNESS

GENERAL NOTES

THE TOP LIFT SHALL NOT BE PLACED BEHIND THE GUARDRAIL POSTS. WHEN PLACING THE TOP LIFT THE RAIL MUST BE REMOVED FROM THE POSTS. THE POST SHALL NOT BE REMOVED.

THE HEIGHT OF THE GUARD RAIL SHALL BE SET 525 (21) FROM THE FINISHED SURFACE.

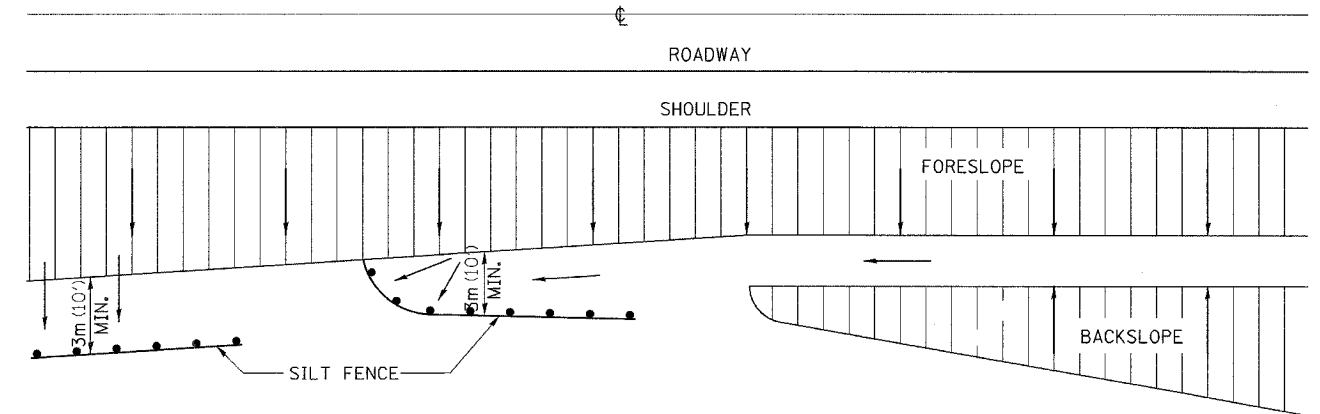
THE BITUMINOUS SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C, N50. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C, N50, AND SQUARE METER (SQUARE YARD) FOR BITUMINOUS SHOULDERS SUPERPAVE OF THE THICKNESS SPECIFIED. THE REMOVAL & REINSTALLATION OF THE GUARDRAIL WILL BE INCLUDED IN THE COST OF THE BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C, N50.

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

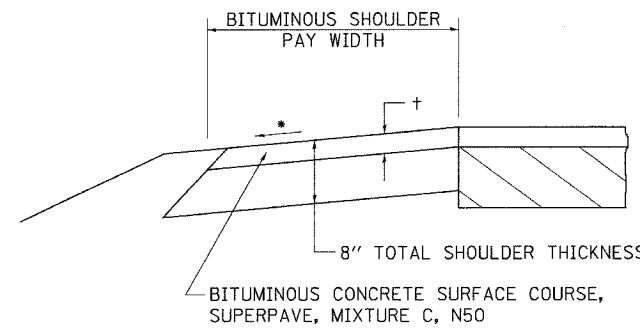
DETAIL OF BITUMINOUS SHOULDER AT GUARD RAIL 23.4

REVISED 1-17-02

EROSION CONTROL DETAILS FOR SILT FENCE



BITUMINOUS SHOULDER



† = SEE TYPICAL SECTIONS FOR THICKNESS

GENERAL NOTES

THE BITUMINOUS SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C, N50. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C, N50, AND SQUARE YARD FOR BITUMINOUS SHOULDERS SUPERPAVE OF THE THICKNESS SPECIFIED.

USE BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C, N50, WHEN RESURFACING EXISTING BITUMINOUS SHOULDERS. THE THICKNESS IS SHOWN ON THE TYPICAL SECTIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C, N50.

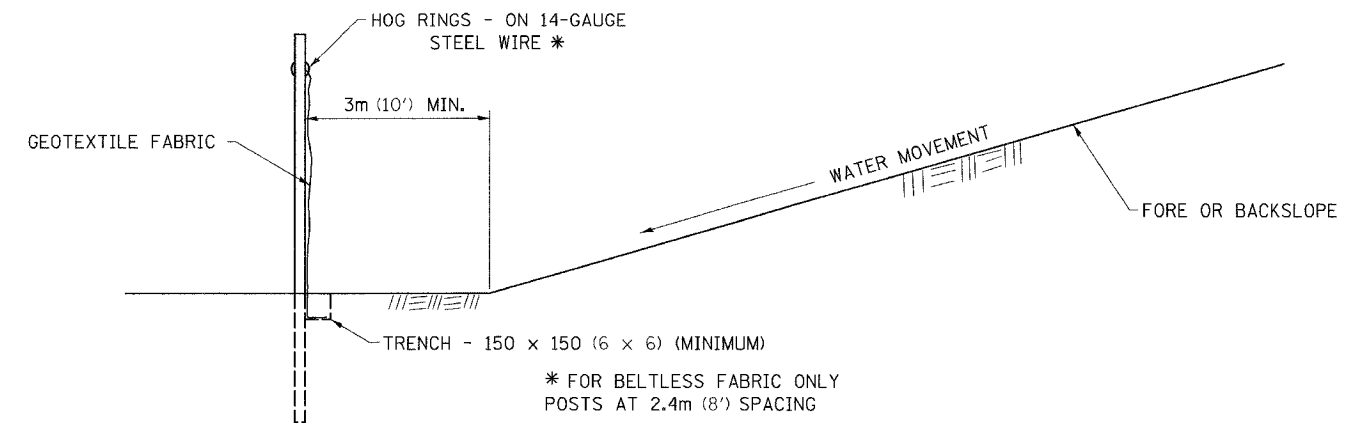
REMOVAL OF MATERIAL FOR PLACEMENT OF THE BITUMINOUS SHOULDER TO BE PAID FOR IN UNITS FOR EXCAVATING AND GRADING EXISTING SHOULDERS OR IN CUBIC YARDS FOR EARTH EXCAVATION OR EARTH EXCAVATION WIDENING.

* 4% WHEN MAINLINE IS ON TANGENT. FOR CROSS SLOPE ON SUPERELEVATION SECTION, SEE HIGHWAY STANDARD 482001 OR 482006.

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

BITUMINOUS SHOULDER 23.4a

REVISED 5-30-03



DETAILS OF SILT FENCE

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

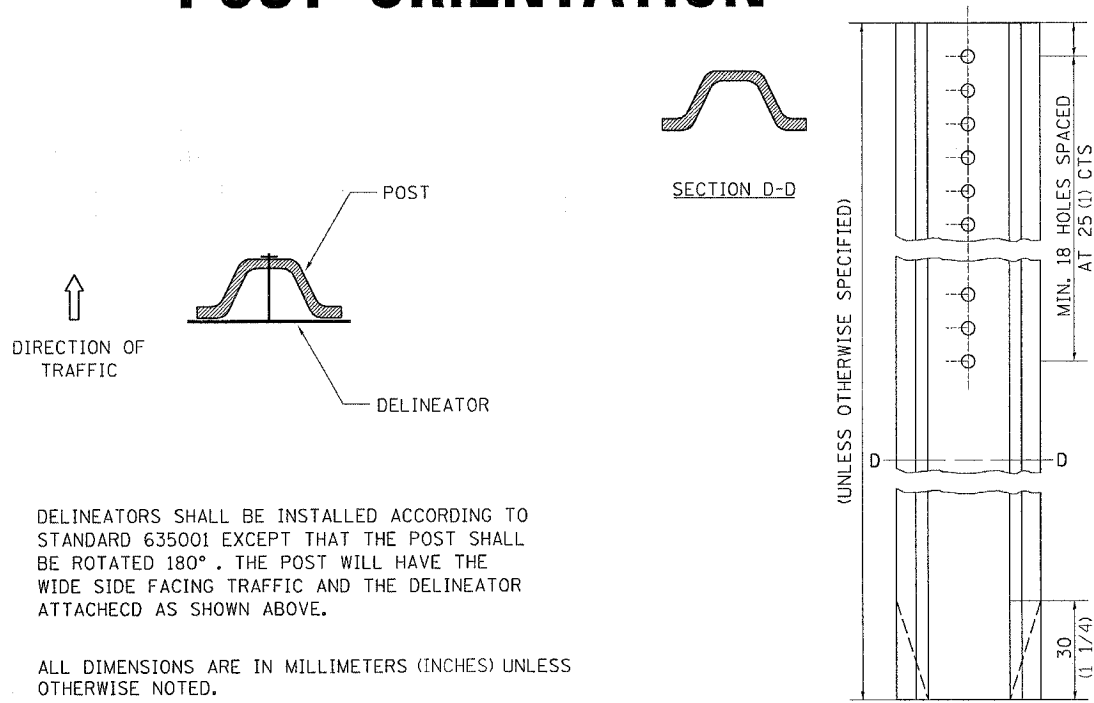
EROSION CONTROL DETAILS FOR SILT FENCE 29.2

REVISED 10-22-01

PLOT DATE = 04/06
 PLOT NAME = 115BR115
 PLOT SCALE = NTS
 REFERENCE = NA

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	115BR-1	WINNEBAGO	35	31
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

DELINEATOR AND POST ORIENTATION



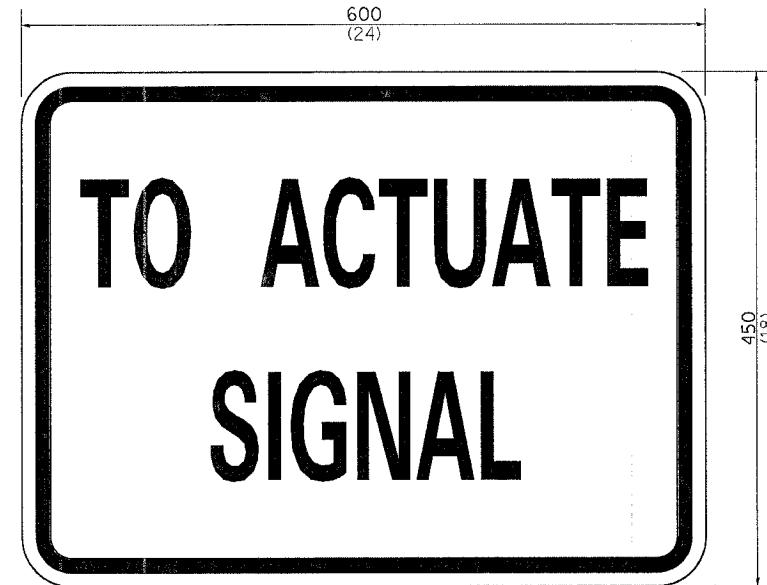
DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180°. THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE DELINEATOR ATTACHED AS SHOWN ABOVE.

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

DELINEATOR AND POST ORIENTATION 37.4

REVISED 1-31-00

STOP LINE SIGN FOR TEMPORARY SIGNALS



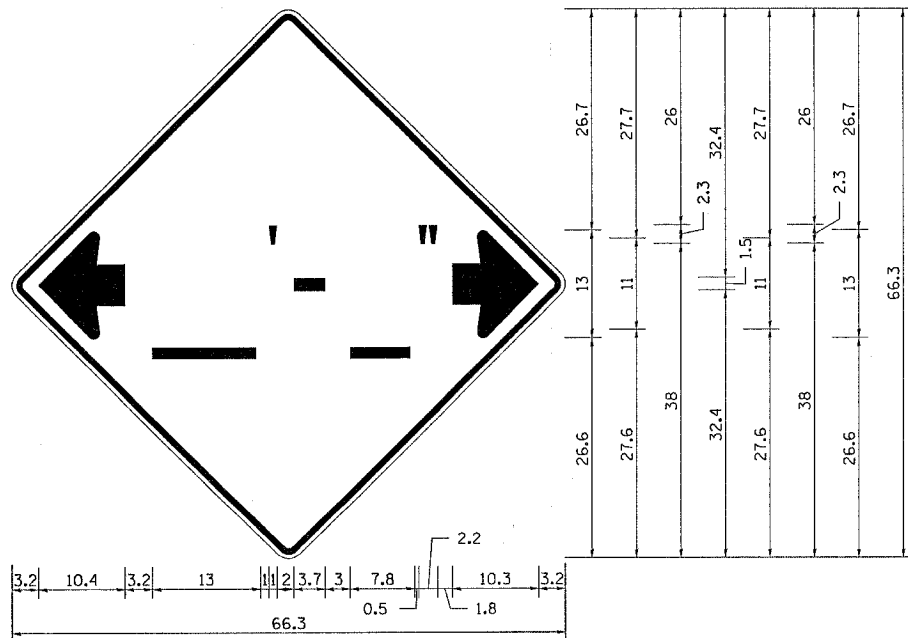
SIZE: 600(24) x 450(18)
 100(4) CAPITAL LETTERS - BLACK
 13 (1/2) BORDER - BLACK
 WHITE REFLECTIVE - TYPE B
 ENGINEERING GRADE SHEETING

GENERAL NOTE:
 THIS SIGN SHALL BE INSTALLED AT THE STOP LINE AS DIRECTED BY ENGINEER.
 ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

STOP LINE SIGN FOR TEMPORARY SIGNALS 99.4

REVISED 8-7-90

INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES)



NOTES
 W12-2 - Horizontal Clearance Sign
 48.0" across sides, 1.9" Radius,
 0.8" Border, 0.5" Indent, Black on
 Orange; Standard Arrow Custom
 10.4" X 8.1" 180° Black 11 Inch
 D Series Lettering; Standard Arrow
 Custom 10.4" X 8.1" 0°

All work to furnish and install these signs shall be included in the cost of the Traffic Control Standards and shall not be paid for separately.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

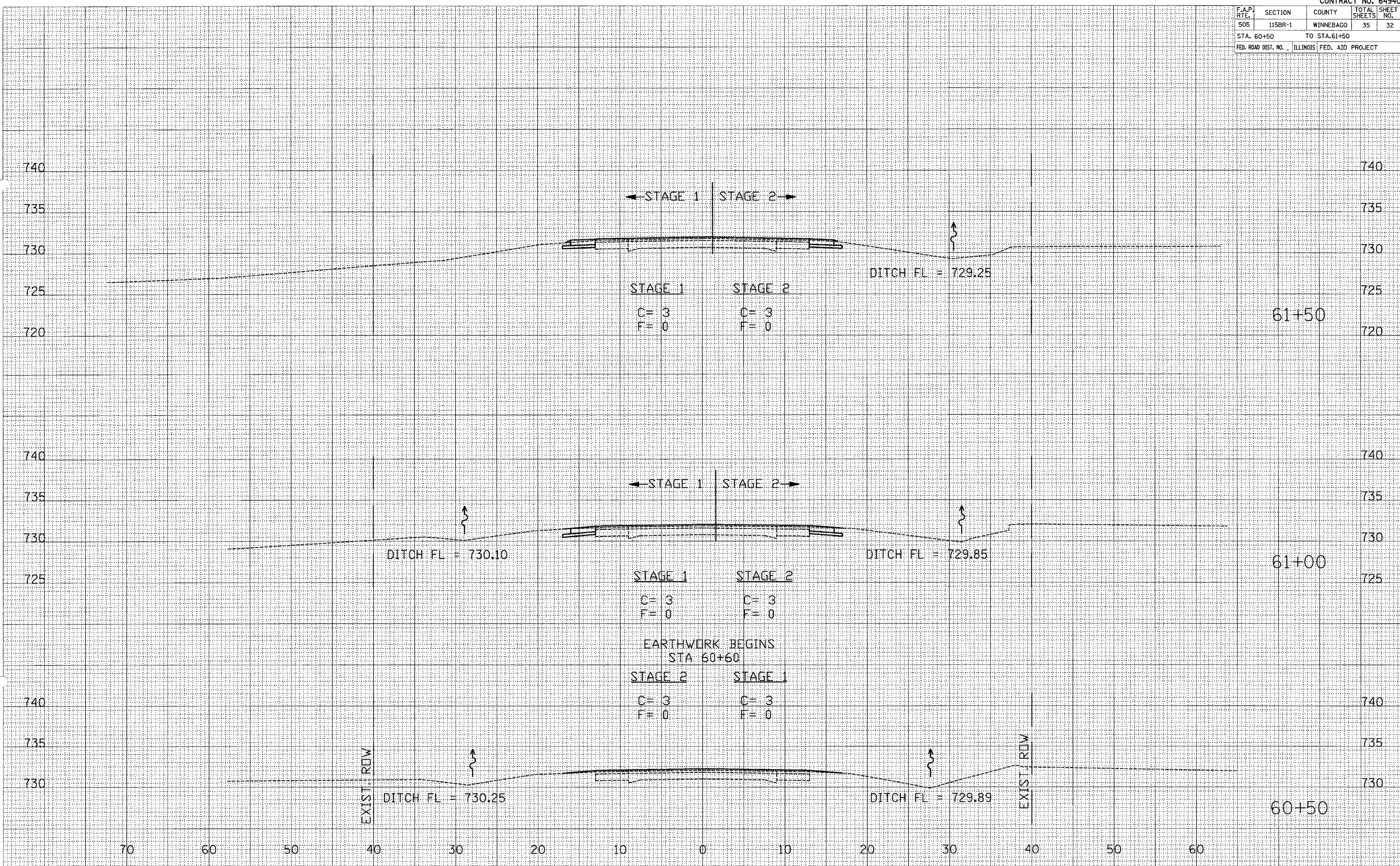
INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES) 39.4

REVISED 6-29-05

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	115BR-1	WINNEBAGO	35	32
STA. 60+50		TO STA. 61+50		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

SURVEYED _____
 PLOTTED _____
 NOTE BOOK _____
 TEMPLATE _____
 AREAS CHECKED _____
 NO. _____

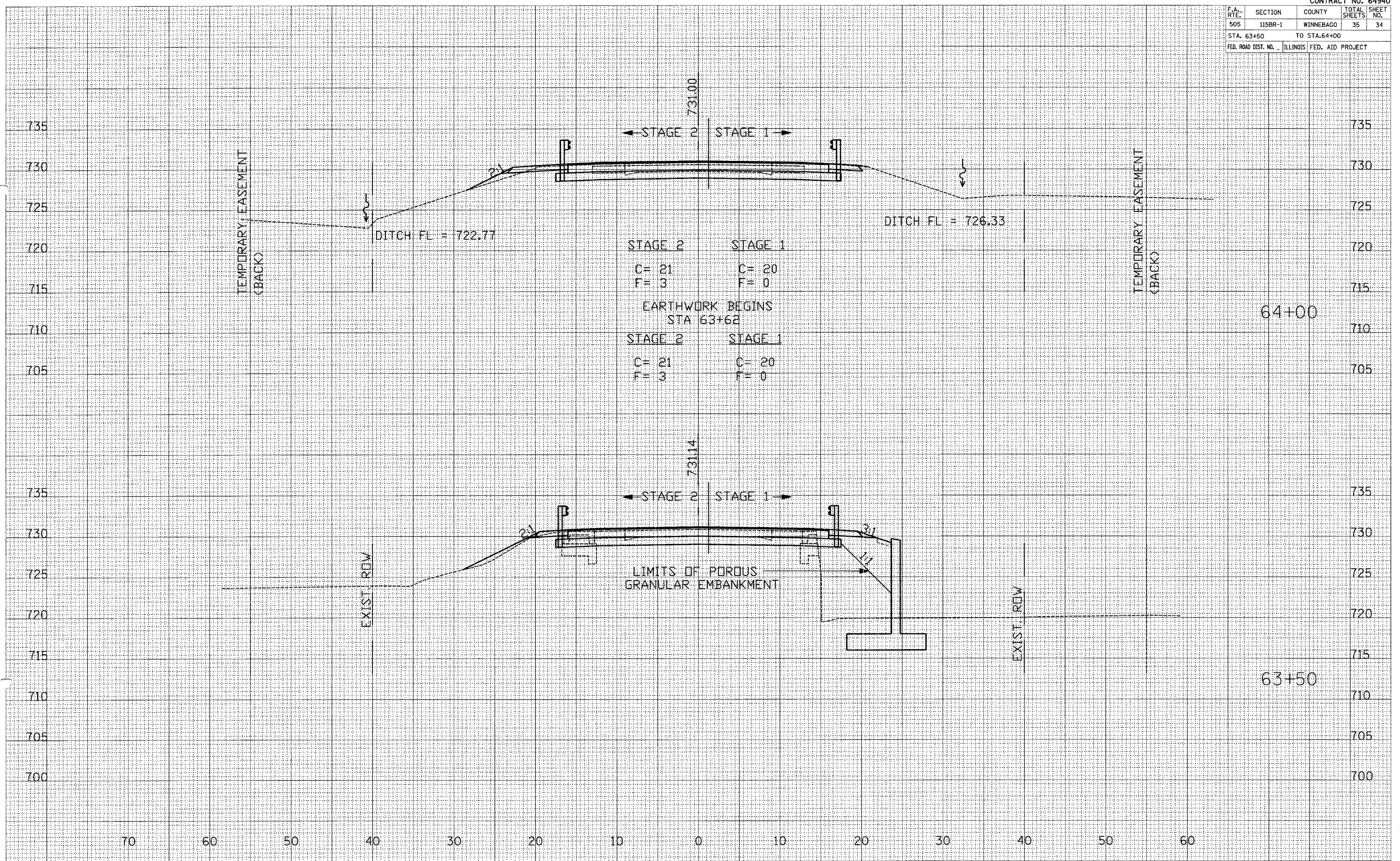
SURVEYED _____
 PLOTTED _____
 NOTE BOOK _____
 TEMPLATE _____
 AREAS CHECKED _____
 NO. _____



CONTRACT NO. 64940				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	115BR-1	WINNEBAGO	35	34
STA. 63+50		TO STA. 64+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CHECKED	DATE
LAG	
ARR	
WSE	
UP	

SURVEY	DATE
NOTE BOOK	
AREA	
AREAS CHECKED	



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	115BR-1	WINNEBAGO	35	35
STA. 64+50		TO STA. 65+50		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

EARTHWORK ENDS
STA 65+90

STAGE 1 STAGE 2

C= 3 C= 3
F= 0 F= 0

← STAGE 1 STAGE 2 →

DITCH FL = 728.26

DITCH FL = 728.56

STAGE 1 STAGE 2

C= 3 C= 3
F= 0 F= 0

← STAGE 2 STAGE 1 →

DITCH FL = 729.03

STAGE 2 STAGE 1

C= 3 C= 3
F= 5 F= 0

← STAGE 2 STAGE 1 →

DITCH FL = 723.88

DITCH FL = 726.36

STAGE 2 STAGE 1

C= 3 C= 3
F= 11 F= 0

EXIST. ROW

EXIST. ROW

65+50

65+00

64+50

NO. AREAS CHECKED
AREAS CHECKED
TEMPLATE
NO. SURVEY

NO. AREAS CHECKED
AREAS CHECKED
TEMPLATE
NO. SURVEY

70 60 50 40 30 20 10 0 10 20 30 40 50 60