4-25-08 Letting, Item 099

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(116-C-BRI-1	HENDERSON	14	1
FED. ROAD DIST. NO.	IL 164	CONTRACT NO. 68774		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

FAP ROUTE 657 (IL 164)
SECTION (116-C-BR)I-1
HENDERSON COUNTY
EMERGENCY BRIDGE BEAM REPLACEMENT
C-94-011-08

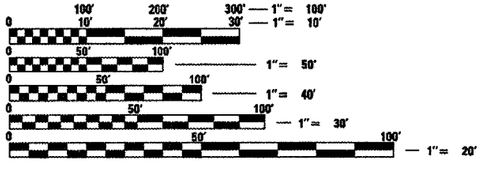
INDEX OF SHEETS

LIST OF STANDARDS

701011-01 701901
701301-02 704001-04
701321-04 780001-01
701326-02

DESIGN DESIGNATION

ADT = 1,450 (2007)
SU = 70
MU = 100



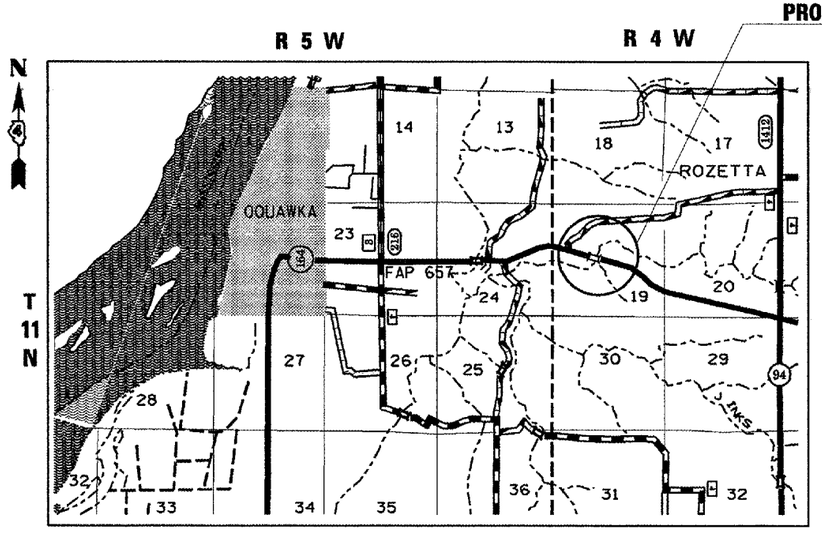
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT MANAGER RICHARD DOTSON
PROJECT DESIGNER TERRISA WORSFOLD

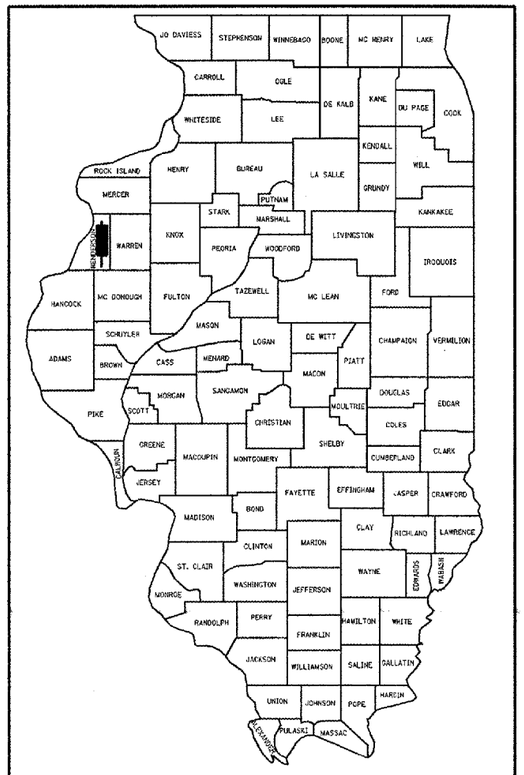
CONTRACT NO. 68774

PROPOSED IMPROVEMENT



GROSS LENGTH OF PROJECT 703 FT (0.13 MILE)
NET LENGTH OF PROJECT 703 FT (0.13 MILE)

D-94-011-08



LOCATION OF SECTION INDICATED THUS:- ▬

DESCRIPTION:
EMERGENCY BRIDGE BEAM REPLACEMENT (6 BEAMS) ON STRUCTURE CARRYING IL 164 OVER SMITH CREEK STA 150+75 (S.N. 036-0038) 2.3 MILES EAST OF OQUAWKA.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Feb 6 20 08
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
March 21 20 08
Eric E. Harm
Interim ENGINEER OF DESIGN AND ENVIRONMENT
March 21 20 08
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

COMMITMENTS

NO COMMITMENTS HAVE BEEN MADE FOR THIS PROJECT.

BITUMINOUS CONCRETE MIXTURE REQUIREMENTS

The following mixture requirements are applicable for this Project. Contract 68774 IL 164 over Smith Creek.

	WATERPROOFING/ LEVELING BINDER	SURFACE (DECK)	SHOULDER-BINDER COURSE 10" TOTAL
Mixture Use(s):	Sand Mix/Leveling Binder	Surface Course	Binder course
RAP % (Max)**:	SBS or SBR 70-22	64-22	PG 64-22
AC/PG:	0%	15%	25%
Design Air Voids:	2.5% @ N=50	4.0% @ N=50	4.0% @ N=50
Mixture Composition: (Gradation Mixture)	IL 4.75	IL 9.5 or 12.5	IL 19.0
Friction Aggregate	N/A	Mix D	N/A

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

Notes: Individual lift thickness of each mix type will be no less than 3 X nominal maximum aggregate size and no more than 6 X nominal maximum aggregate size.

The asphalt sand seal protection layer specified in Section 581 of the Standard Specifications shall be omitted and replaced with the Sand Mix/Leveling Binder.

The "Sand Mix/Leveling Binder" will be paid for separately by the ton as leveling Binder (Hand Method), N50.

PROJECT SPECIFIC NOTES

No right of way has been purchased for this project. The Contractor shall make the neccessary arrangements for access required for their operations.

GENERAL NOTES

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

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.

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 upublished numbers.

FILE NAME = c:\projects\ill64bridge\plan01a.dgn	USER NAME = mcfaddenjk	DESIGNED -	REVISED -
		DRAWN -	REVISED -

STATE OF ILLINOIS

GENERAL NOTES -- COMMITMENTS -- PROJECT SPECIFIC NOTES

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
557	(116-C-BRPV-1	HENDERSON	14	2

SUMMARY OF QUANTITIES

CODE NO.	ITEM	100% STATE SAFETY-2A HENDERSON COUNTY UNIT	RURAL	TOTAL
20200500	EARTH EXCAVATION (WIDENING)	CU YD	91	91
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	4	4
40600525	LEVELING BINDER (HAND METHOD), N50	TON	9	9
40603335	HOT- MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	13.6	13.6
44001005	HOT-MIX ASPHALT SURFACE REMOVAL	SQ YD	26.3	26.3
48203037	HOT-MIX ASPHALT SHOULDERS, 10"	SQ YD	325	325
50102400	CONCRETE REMOVAL	CU YD	13.0	13.0
50300255	CONCRETE SUPERSTRUCTURE	CU YD	13.0	13.0
50300300	PROTECTIVE COAT	SQ YD	49	49
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	1,015	1,015
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1,350	1,350
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	121	121
58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	515	515
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3
67100100	MOBILIZATION	L SUM	1	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1

CODE NO.	ITEM	100% STATE SAFETY-2A HENDERSON COUNTY UNIT	RURAL	TOTAL
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	8	8
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
70106700	TEMPORARY RUMBLE STRIP	EACH	6	6
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	176	176
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	704	704
70400100	TEMPORARY CONCRETE BARRIER	FOOT	425	425
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	425	425
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1582	1582
* 78200530	BARRIER WALL REFLECTOR, TYPE C	EACH	4	4
78300100	PAVEMENT MARKING REMOVAL	SQ FT	294	294
X0320047	REMOVAL OF EXISTING PRECAST PRESTRESSED CONCRETE DECK BEAMS	SQ FT	1,030	1,030
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	14	14
Z0001900	ASBETOS BEARING PAD REMOVAL	EACH	6	6
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL3	EACH	2	2

*SPECIALTY ITEM

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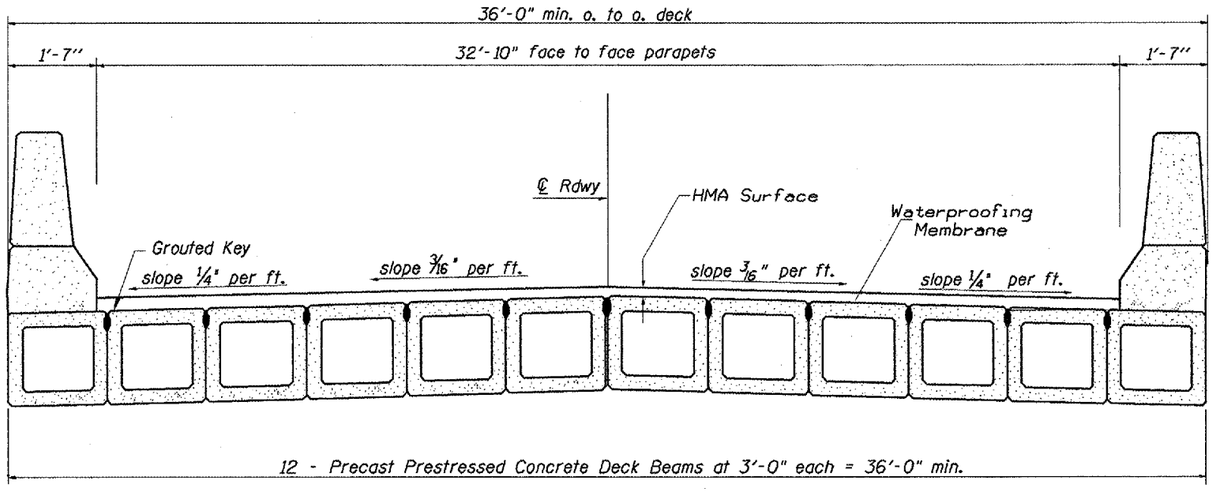
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

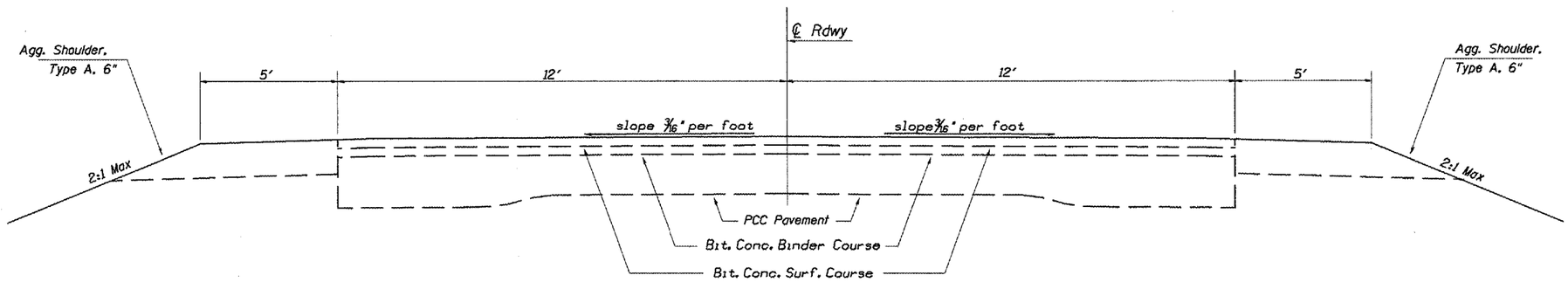
SUMMARY OF QUANTITIES

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(116-C-BRI)-1	HENDERSON	14	3

TYPICAL SECTIONS



EXISTING BRIDGE DECK



EXISTING PAVEMENT TYPICAL SECTION

LT. & RT. STA. 149+92 TO STA. 150+16
LT. & RT. STA. 151+34 TO STA. 151+58

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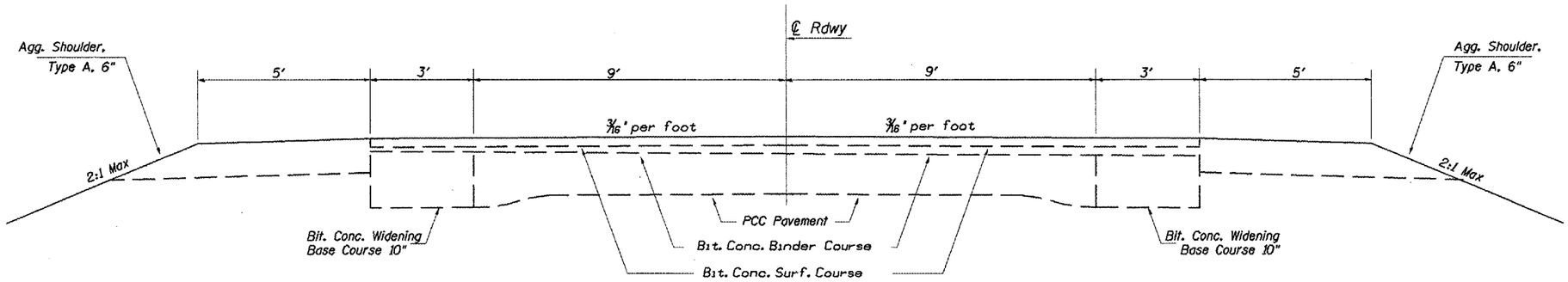
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(116-C-BR)I1	HENDERSON	14	4
		CONTRACT NO. 68774		

TYPICAL SECTIONS



EXISTING PAVEMENT TYPICAL SECTION

LT. & RT. STA. 147+22 TO STA. 149+92
LT. & RT. STA. 151+88 TO STA. 154+25

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STATE OF ILLINOIS

GENERAL NOTES

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(116-C-BR)I-1	HENDERSON	14	5

SCHEDULE OF QUANTITIES

LOCATIONS STA. TO STA.	HMA SURF CSE MIX "D" N50	HMA SURF REM	BIT MAT (PRIME COAT) 0.03 GAL/SQ YD	LEVELING BINDER (HAND METHOD), N50
STA. 150+160 TO 151+34	TON	SQ YD	GALLON	TON
BRIDGE DECK	13.6	26.3	4	9*
TOTAL	13.6	26.3	4	9*

* Estimated quantity for waterproofing lift and leveling binder lift

LOCATIONS STA. TO STA.	CONCRETE REMOVAL	CONCRETE SUPERSTRUCTURE	REINFORCEMENT BARS EPOXY COATED
STA. 150+160 TO 151+34	CU YD	CU YD	POUND
PARAPETS	13.0	13.0	1,350
TOTAL	13.0	13.0	1,350

LOCATIONS STA. TO STA.	P P CONC DECK BEAM (27" DEPTH)	REM OF EXIST P P CONC DECK BEAMS	ASBESTOS BEARING PAD REMOVAL
STA. 150+160 TO 151+34	SQ FT	SQ FT	EACH
STRUCTURE	1,015	1,030	6
TOTAL	1,015	1,030	6

LOCATIONS STA. TO STA.	WATERPROOFING MEMBRANE SYSTEM
STA. 150+160 TO 151+34	SQ YD
STRUCTURE	121
TOTAL	121

LOCATIONS STA. TO STA.	PROTECTIVE COAT
STA. 150+160 TO 151+34	SQ YD
PARAPETS	49
TOTAL	49

LOCATIONS STA. TO STA.	P C MORTAR FAIRING COURSE
STA. 150+160 TO 151+34	FOOT
STRUCTURE	515
TOTAL	515

LOCATIONS STA. TO STA.	SHORT - TERM PAVEMENT MARKING
SKIP DASH	FOOT
STA. 147+22 TO 154+25	176
TOTAL	176

LOCATIONS STA. TO STA.	CHANGEABLE MESSAGE SIGN
	CAL DAY
* East of Job	7
* West of Job	7
TOTAL	14

* To be placed 7 days prior to placing Barrier Wall at locations designated by the Engineer.

LOCATIONS STA. TO STA.	TEMPORARY CONCRETE BARRIER	RELOCATE TEMP CONC BARRIER
	FOOT	FOOT
TAPER STA. 148+62.5 TO 149+84.5	125	125
TANGENT STA. 149+87.5 TO 151+62.5	175	175
TAPER STA. 151+62.5 TO 152+87.5	125	125
TOTAL	425	425

LOCATIONS STA. TO STA.	IMPACT ATT TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	IMPACT ATT RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3
	EACH	EACH
STA. 148+62.5	1	1
STA. 152+87.5	1	1
TOTAL	2	2

LOCATIONS STA. TO STA.	BARRIER WALL REFLECTOR, TYPE C
PARAPETS	EACH
STA. 150+16 TO 151+34	4
TOTAL	4

LOCATIONS STA. TO STA.	MOBILIZATION	T C & PROT STANDARD 701321	ENGINEER FIELD OFFICE TYPE A	TEMPORARY BRIDGE TRAFFIC SIGNAL	TEMPORARY RUMBLE STRIP
	L SUM	EACH	CAL. MO.	EACH	EACH
JOBSITE	1	1	3	1	6
TOTAL	1	1	3	1	6

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(116-C-BRJI)	HENDERSON	14	6
		CONTRACT NO. 68774		

SCHEDULE OF QUANTITIES

LOCATIONS STA. TO STA.	HMA SHOULDERS 10	EARTH EXCAVATION WIDENING
	SQ YD	CU YD
RT STA 147+22 TO 150+10	160	45
RT STA 151+28 TO 154+25	165	46
TOTAL	325	91

LOCATIONS STA. TO STA.	T C & PROT STANDARD 701326	TR CONT SURVEILLANCE
	L SUM	CAL DAY
JOBSITE	1	8
TOTAL	1	8

LOCATIONS STA. TO STA.	WORK ZONE PAVEMENT MARKING REMOVAL
	SQ FT
STAGE 1 ℄ STA 147+22 TO 154+25	235
STAGE 1 EDGELINE STA 148+10 TO 154+25	138
STAGE 2 ℄ STA 147+22 TO 154+25	235
STOPBARS	96
TOTAL	704

LOCATIONS STA. TO STA.	PAVT MARKING REMOVAL
	SQ FT
STAGE 1 EDGELINE RT STA 147+22 TO 154+25	235
STAGE 1 CENTERLINE RT STA 147+22 TO 154+25	59
TOTAL	294

LOCATIONS STA. TO STA.	PAINT PAVEMENT MARKING LINE 4
	FOOT
EDGELINE RT STA 147+22 TO 154+25	703
EDGELINE LT STA 147+22 TO 154+25	703
SKIP DASH ℄ STA. 147+22 TO 154+25	176
TOTAL	1582

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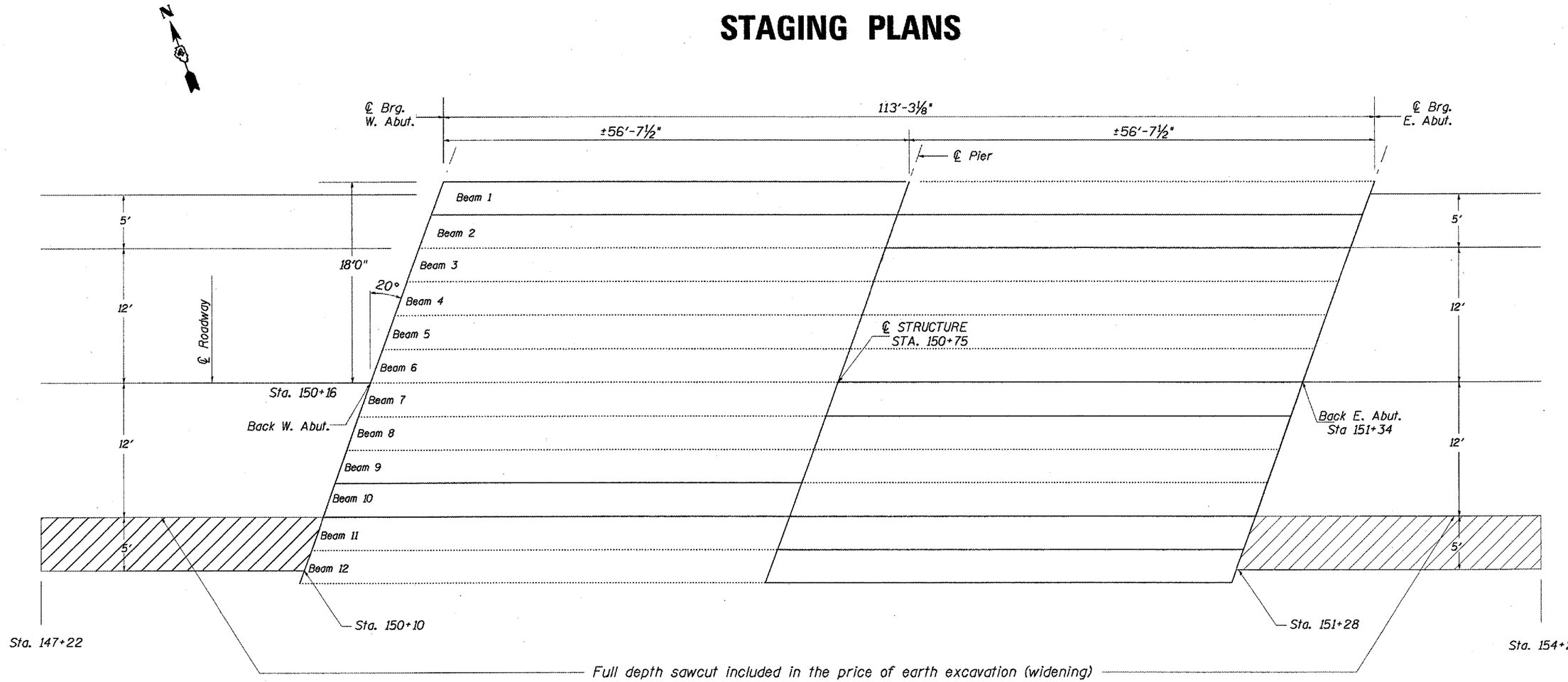
STATE OF ILLINOIS

SUMMARY OF QUANTITIES

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(116-C-BRI)1	HENDERSON	14	7

STAGING PLANS



Earth Excavation (Widening) & Hot-Mix Asphalt Shoulder 10

PRESTAGE:
Utilize Traffic Control and Protection Standard 701326 and the pay items for Earth Excavation (Widening) and Hot-Mix Asphalt Shoulder 10 to upgrade the South Shoulder prior to stage construction.

NOTE:
The foreslope adjacent to the shoulder upgrade shall be graded to the top of the shoulder and seeded as directed by the Engineer. The cost shall be included in the EARTH EXCAVATION (WIDENING).

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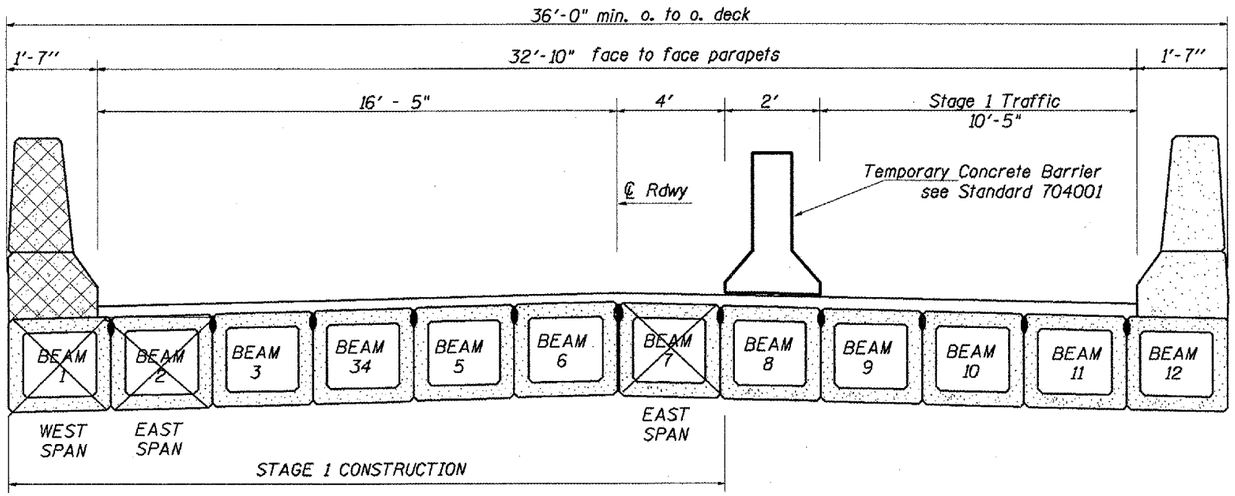
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING PLANS

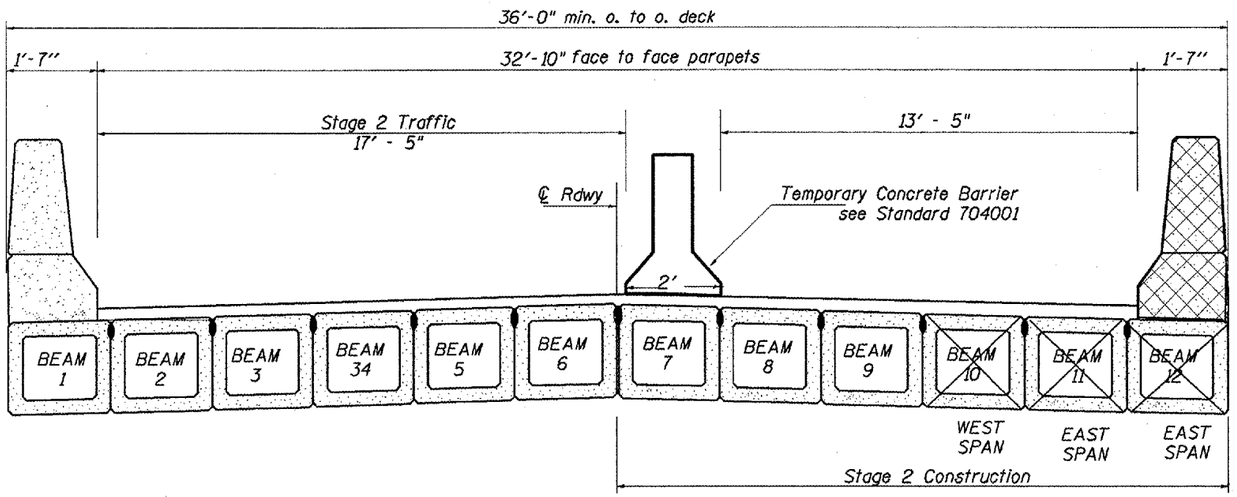
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657	(116-C-BRI)-1	HENDERSON	14	8
		CONTRACT NO. 68774		

STAGING

STAGE 1



STAGE 2



NOTE:
Five W12-1103 signs, as described in the width restriction signing Special Provisions, will be required. Two signs shall be placed at the intersection of US 34 and IL 164. Three signs shall be placed at the intersection of IL 94 and IL 164. Two sign assembly A's containing W12-1101 and W12-1102 signs as described in the width restriction signing Special Provision are also required. One shall be placed between Oquawka and the project and one between Gladstone and Oquawka. These signs shall be located at the direction of the Engineer. The costs shall be included with the cost of the TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

Refer to Highway Standard 701321

High intensity flashing lights shall be placed on the RCA signs as directed by the Engineer.

The cost for all material, labor & equipment required to remove and reinstall the guardrail end section attached to the concrete parapet at Beam #1 and Beam #12 shall be included in the cost of Concrete Superstructure.

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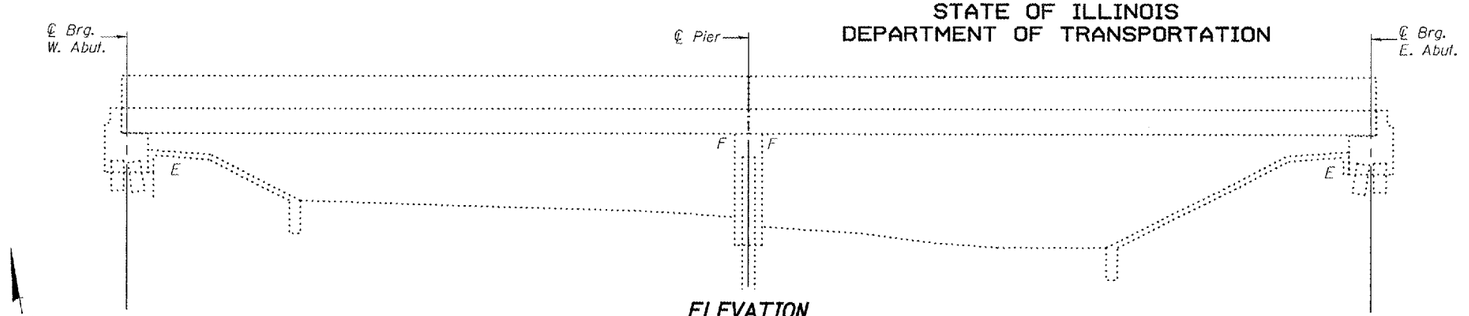
		DRAWN -	REVISED -							

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

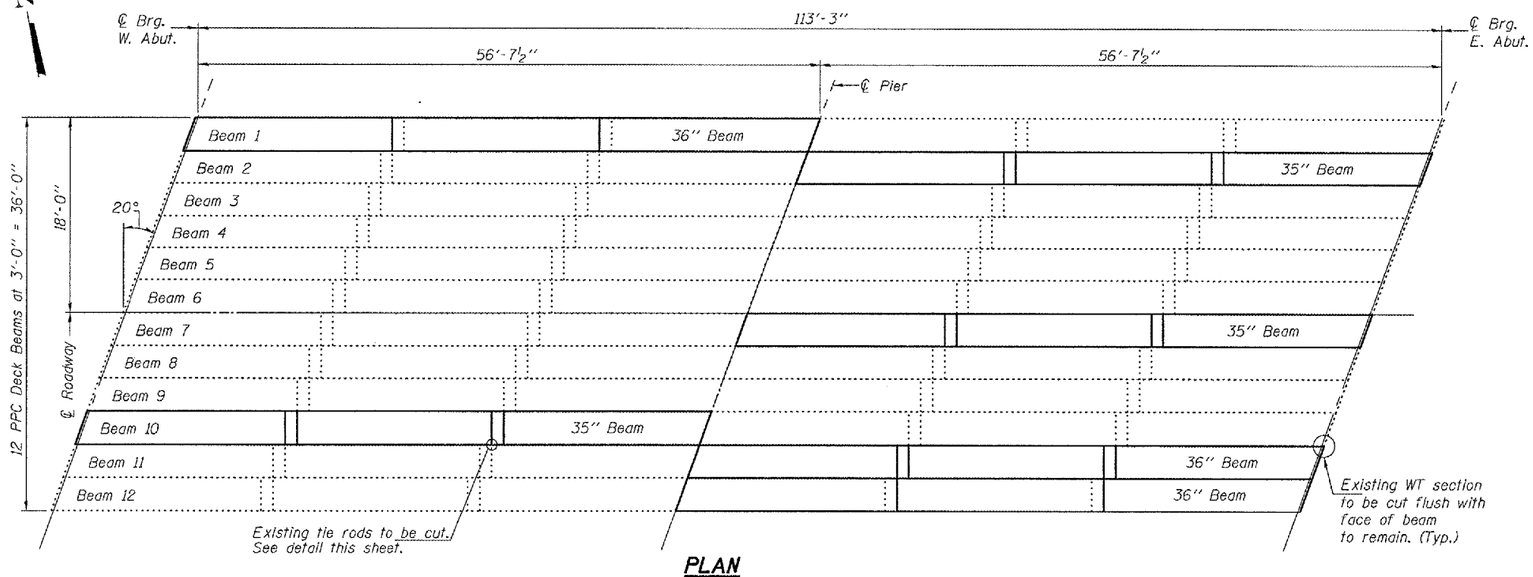
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657		Henderson	14	10
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
5 SHEETS

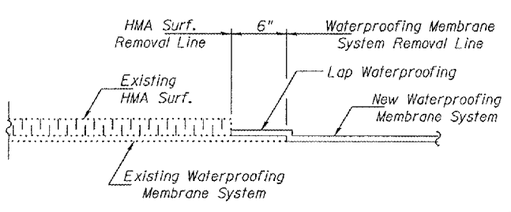
Contract Number: 68774



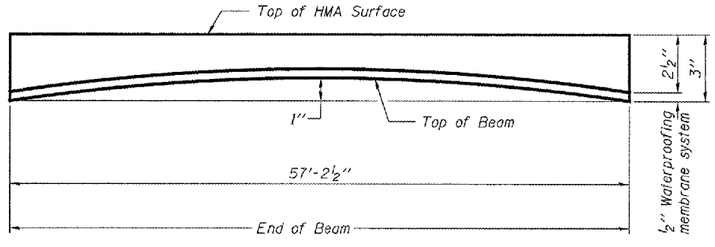
ELEVATION



PLAN



WATERPROOFING TREATMENT



ANTICIPATED INITIAL CAMBER DIAGRAM

DESIGNED	Adrian T. Hallgoway	
CHECKED		Steffen
DRAWN	ATH	AJB
CHECKED		

FEBRUARY 26, 2008

EXAMINED — ENGINEER OF STRUCTURAL SERVICES

PASSED — ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
RALPH E. ANDERSON
081-004625
SPRINGFIELD
LICENSED STRUCTURAL ENGINEER

Expires: November 30, 2008

DESIGN STRESSES

FIELD UNITS

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

PRECAST PRESTRESSED UNITS

f'c = 5,000 psi
f'ci = 4,000 psi
f's = 270,000 psi (½" ϕ low lax strands)
f'si = 201,960 psi (½" ϕ low lax strands)

GENERAL NOTES

Any damage done to the bridge during beam removal shall be repaired by the Contractor. Cost to be included in the cost of Removal of Existing PPC Deck Beams.

The top surface of the beams shall be finished according to the IDOT Manual for Fabrication of Precast Prestressed Concrete Products.

Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.

The contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the contractors responsibility to account for the condition of the beams when developing construction procedures.

If the contractor's procedure for placement of beams involves placement of cranes or other heavy equipment on the bridge, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the existing beams. To distribute load to multiple beams and protect the existing surface, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying beams.

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

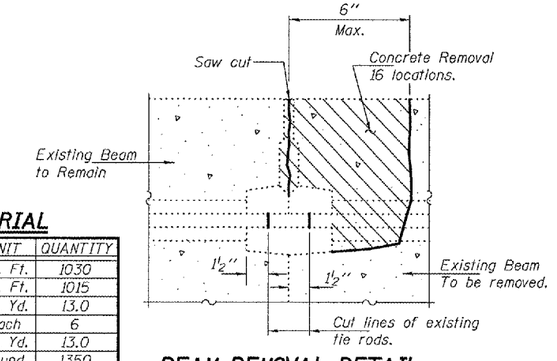
Protective coat shall not be applied to surfaces to which waterproofing membrane system is applied.

Temporary concrete barrier shall only be anchored into the overlay and not into the PPC Deck Beams.

All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with PPC Deck Beams (27" Depth).

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Removal of Existing PPC Deck Beams	Sq. Ft.	1030
PPC Deck Beams (27" Depth)	Sq. Ft.	1015
Concrete Removal	Cu. Yd.	13.0
Asbestos Bearing Pad Removal	Each	6
Concrete Superstructures	Cu. Yd.	13.0
Reinforcement Bars, Epoxy Coated	Pound	1350
HMA Surface Removal	Sq. Yd.	26.3
HMA Surface Course Mix "D" N50	Tons	13.6
PC Mortar Fairing Course	Foot	515
Waterproofing Membrane System	Sq. Yd.	121
Protective Coat	Sq. Yd.	49



BEAM REMOVAL DETAIL AT TRANSVERSE TIES

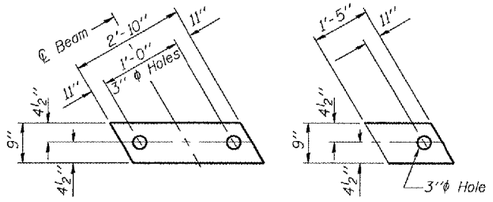
PLAN AND ELEVATION
FA RT. 657 OVER SMITH CREEK
HENDERSON COUNTY
SN 036-0038

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657		Henderson	14	11
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

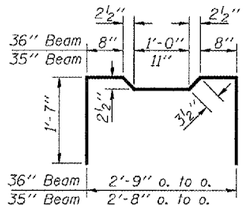
SHEET NO. 2
5 SHEETS

Contract Number: 68774

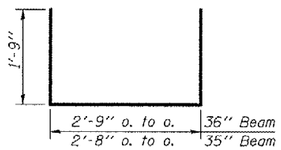


FIXED FABRIC BEARING PAD **FIXED FABRIC ADJUSTING SHIM**

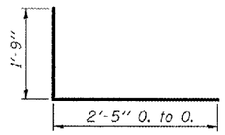
(For Expansion Ends Omit Holes)



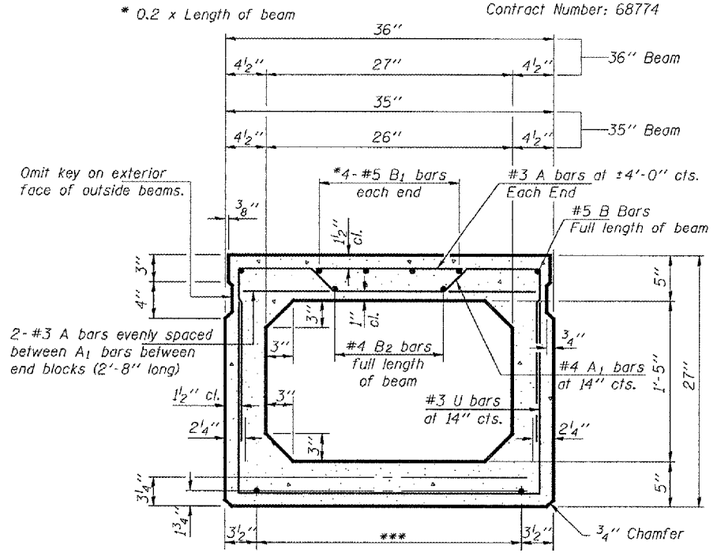
BAR A1



BARS U & U1

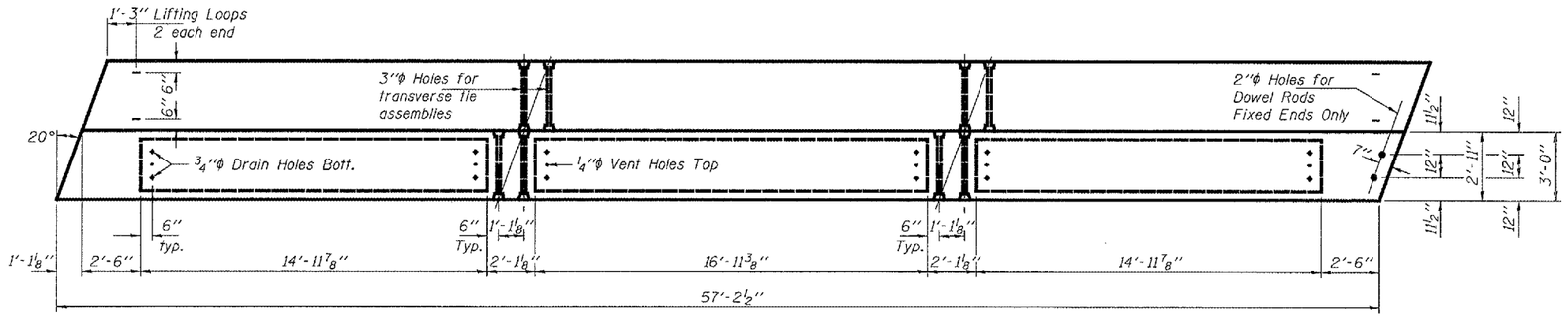


BAR D

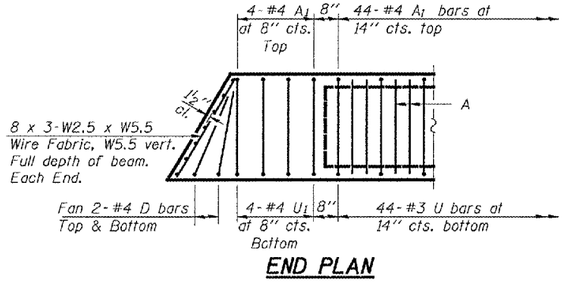


TYPICAL SECTION

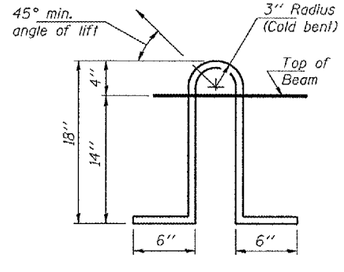
12-½" ϕ Strands, Each Strand Stressed to 30,900 Lbs.
8-Strands 1¾" up, 4-Strands 3¼" up



BEAM PLAN



END PLAN



LIFTING LOOP DETAIL

DESIGNED	ATH
CHECKED	AJB
DRAWN	Steffen
CHECKED	ATH AJB

FEBRUARY 26, 2008
EXAMINED — ENGINEER OF STRUCTURAL SERVICES
PASSED — ENGINEER OF BRIDGES AND STRUCTURES

*** TRANSVERSE PLACEMENT GUIDELINES

1. Place strands symmetrically about centerline of beam.
2. The minimum distance from center to center of strands in all directions shall be 2".
3. The minimum clearance from strand to dowel hole shall be ½".
4. The minimum clearance from strand to void shall be 1½".

Vertical placement of strands shall not be adjusted to satisfy the above guidelines.

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.
Lifting loops shall be 2-½"ϕ-270 ksi strands, as shown.
The 1"ϕ 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 shall be filled with grout after transverse tie assembly is in place.
Non prestressing steel shall conform to ASTM A 706 (IL MOD), Grade 60.
The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two ⅛" fabric adjusting shims of the dimensions shown shall be provided for each beam.
Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key.
Corrosion Inhibitor, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
Required Release Strength, f'ci, shall be 4000 p.s.i.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms.	Sq. Ft.	1015

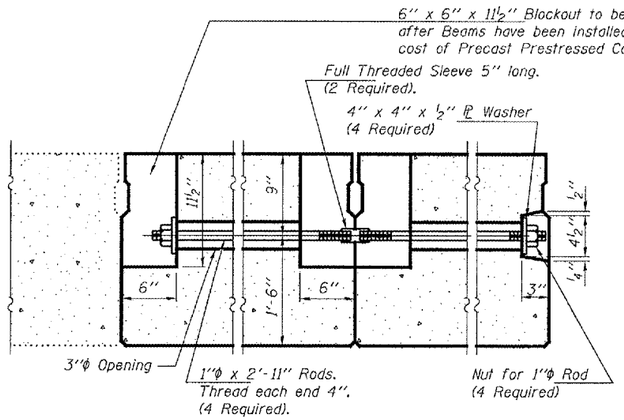
REPAIR DETAILS
FA RT. 657
HENDERSON COUNTY
SN 036-0038

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

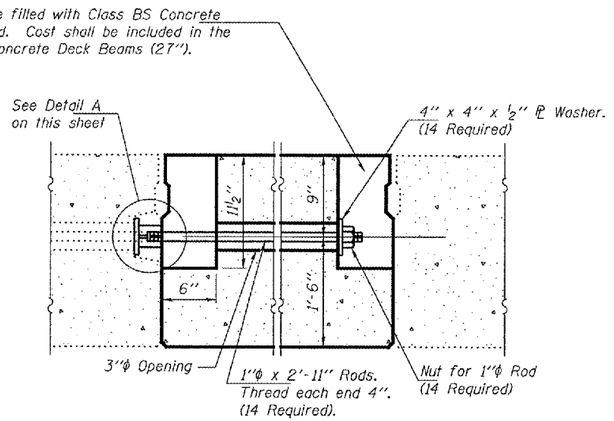
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657		Henderson	14	12
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 3
5 SHEETS

Contract Number: 68774

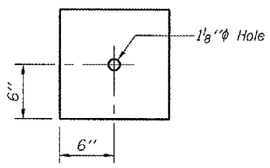


TRANSVERSE TIE ASSEMBLY
(Typ. Span 2 Beams 11 & 12 Replacement)

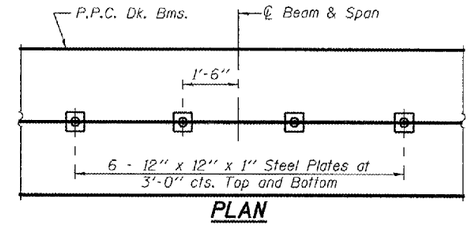


TRANSVERSE TIE ASSEMBLY
(Typ. Span 1 Beam 10 & Span 2 Beams 2, 7 & 11 Replacement)

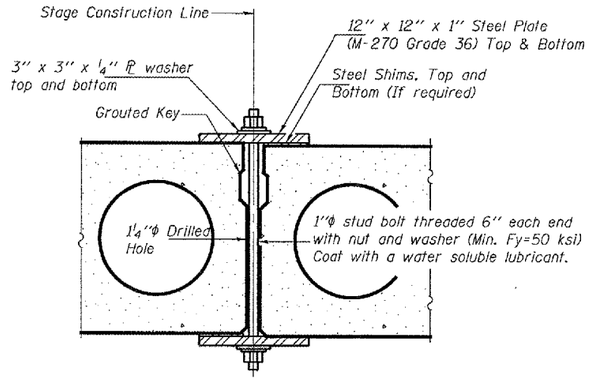
Notes:
See Special Provisions for Stage Construction Precast Prestressed Concrete Deck Beams.
See Stage Construction Detail for traffic lane. Cost is included with Precast Prestressed Concrete Deck Beams.



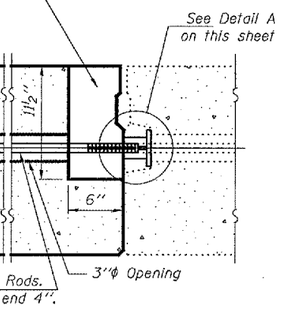
CLAMPING PLATE



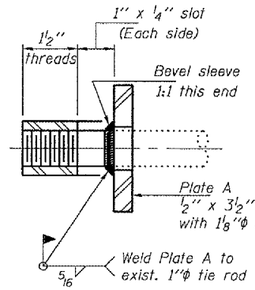
PLAN



SECTION



TRANSVERSE TIE ASSEMBLY
(Typ. Span 1 Beam 1 Replacement)



SECTION A-A
(16 Required)

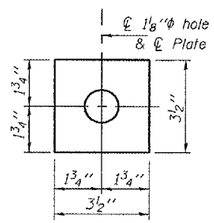
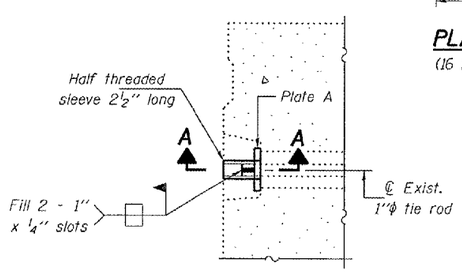
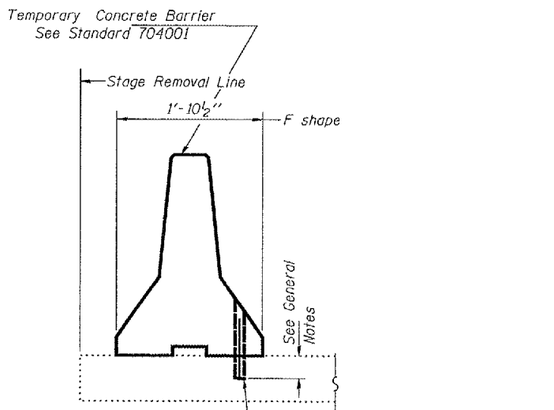


PLATE A
(16 Required)



DETAIL A



TEMPORARY CONCRETE BARRIER
See Roadway Plans for Quantity

DESIGNED	ATH
CHECKED	AJB
DRAWN	Steffen
CHECKED	ATH AJB

FEBRUARY 26, 2008
EXAMINED — ENGINEER OF STRUCTURAL SERVICES
PASSED — ENGINEER OF BRIDGES AND STRUCTURES

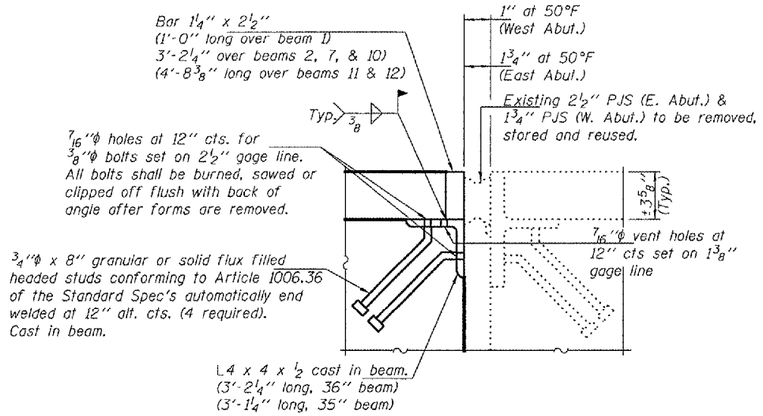
REPAIR DETAILS
FA RT. 657
HENDERSON COUNTY
SN 036-0038

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657		Henderson	14	13
FED. HIGHWAY DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

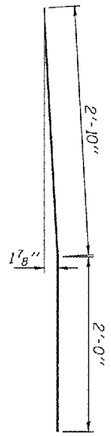
SHEET NO. 4
5 SHEETS

Contract Number: 68774

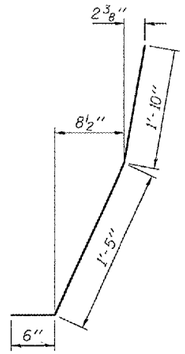


ABUTMENT JOINT DETAIL

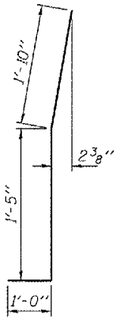
(Cost included with PPC Deck Beams)



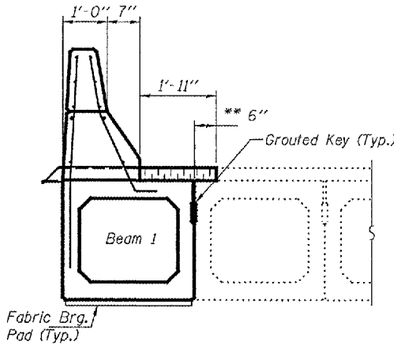
BAR D(E)

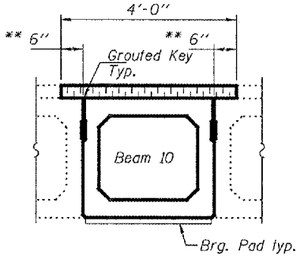


BAR D1(E)



BAR D2(E)

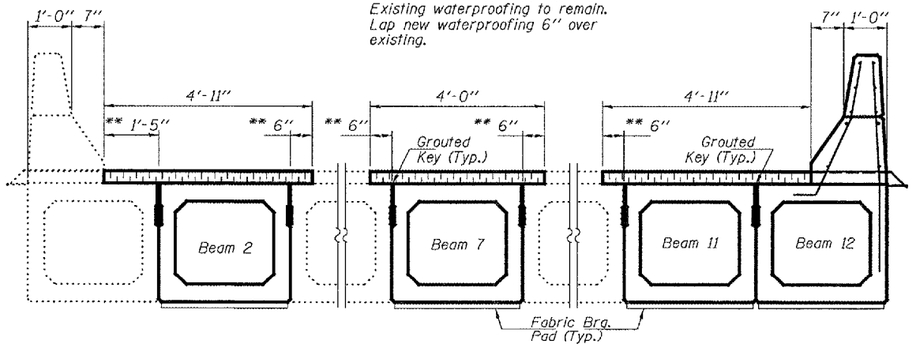




PARTIAL CROSS SECTION

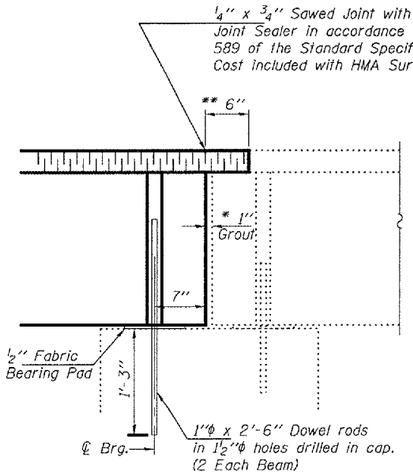
(Span 1, Looking East)

** Limits of HMA Surface Removal.
Existing waterproofing to remain.
Lap new waterproofing 6" over
existing.



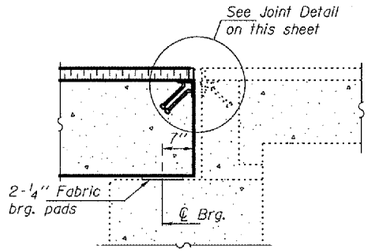
PARTIAL CROSS SECTION

(Span 2, Looking East)



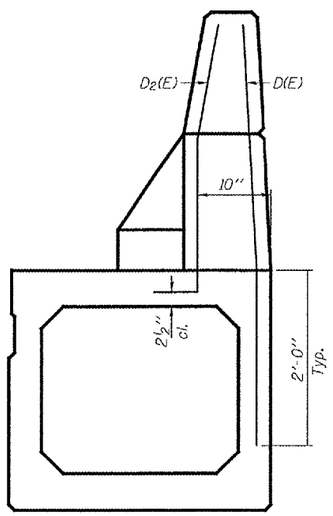
TYPICAL SECTION AT PIER

* 1" Jt. shall be filled with non-shrink grout.
1" dimension may vary to accommodate
tolerance in beam lengths.

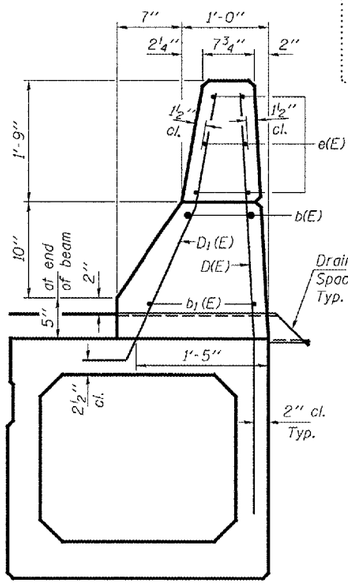


TYPICAL ABUTMENT JOINT

Notes :
After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.
All horizontal dimensions are at right angles to beam ends.

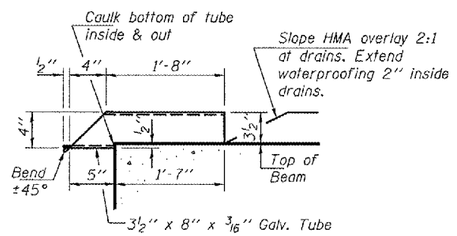


END VIEW OF CURB



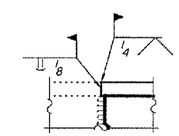
SECTION THRU CURB

See sheet 5 of 5 for spacing of bars D(E), $D_1(E)$ & $D_2(E)$ to be cast with Fascia Beams 1 & 12



DRAIN DETAIL

Cost included with
Concrete Superstructure



ELEVATION NEW JOINT ℄ TO EXISTNIG JOINT ℄

DESIGNED	ATH
CHECKED	AJB
DRAWN	Steffen
CHECKED	ATH AJB

FEBRUARY 26, 2008
EXAMINED — ENGINEER OF STRUCTURAL SERVICES
PASSED — ENGINEER OF BRIDGES AND STRUCTURES

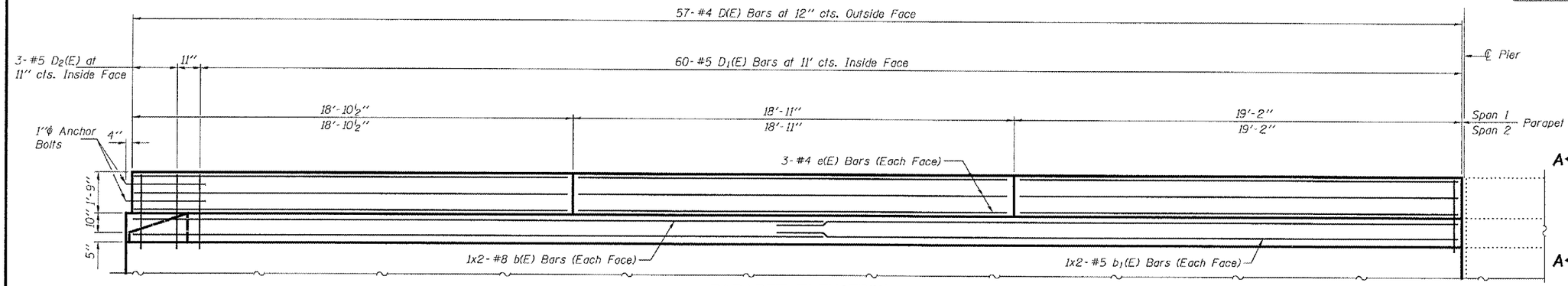
REPAIR DETAILS
FA RT. 657
HENDERSON COUNTY
SN 036-0038

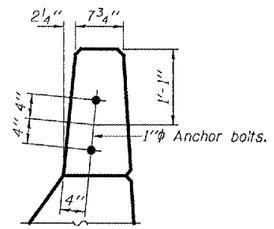
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
657		Henderson	14	14
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 5
5 SHEETS

Contract Number: 68774



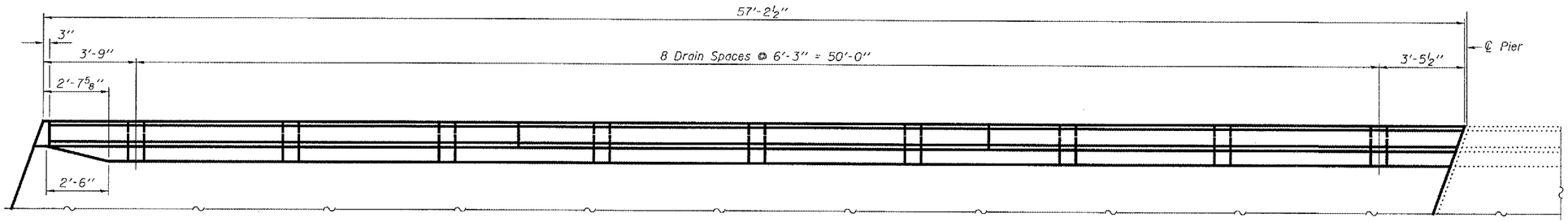


VIEW A-A

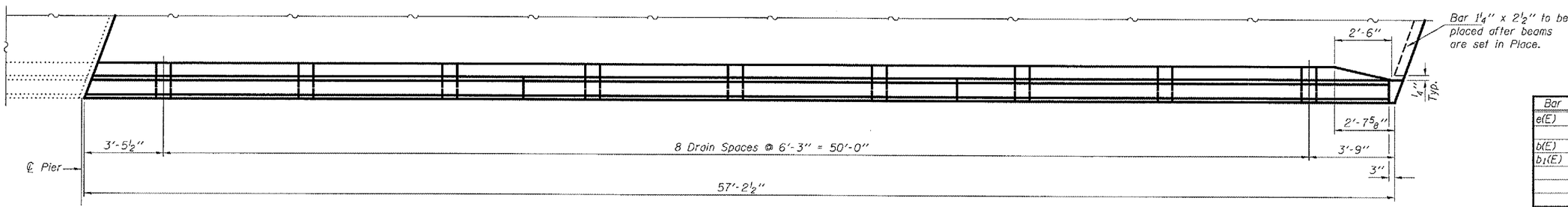
PARAPET ELEVATION

Minimum Bar Laps

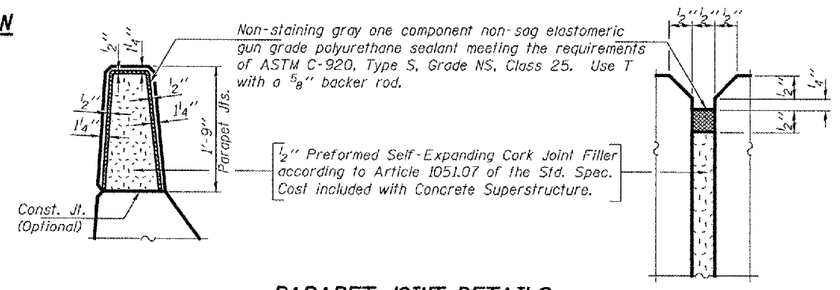
#5 Bar = 2'-2"
#8 Bar = 4'-5"



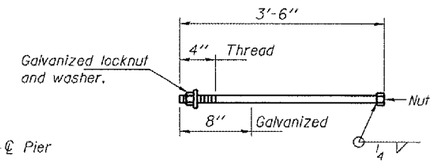
PARAPET PLAN
Span 1



PARAPET PLAN
Span 2



PARAPET JOINT DETAILS



1"ϕ ANCHOR ROD
(Cost Included with Concrete Superstructure)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
e(E)	36	#4	18'-7"	——
b(E)	8	#8	30'-9"	——
b1(E)	8	#5	29'-7"	——
Reinforcement Bars, Epoxy Coated			Pound	1350
Concrete Superstructure			Cu. Yds.	13.0

Bars indicated thus 1 x 2-#5 etc. indicates 1 lines of bars with 2 lengths per line.

DESIGNED	ATH
CHECKED	AJB
DRAWN	Steffen
CHECKED	ATH AJB

FEBRUARY 26, 2008
EXAMINED — ENGINEER OF STRUCTURAL SERVICES
PASSED — Ralph E. Anderson, ENGINEER OF BRIDGES AND STRUCTURES

REPAIR DETAILS
FA RT. 657
HENDERSON COUNTY
SN 036-0038