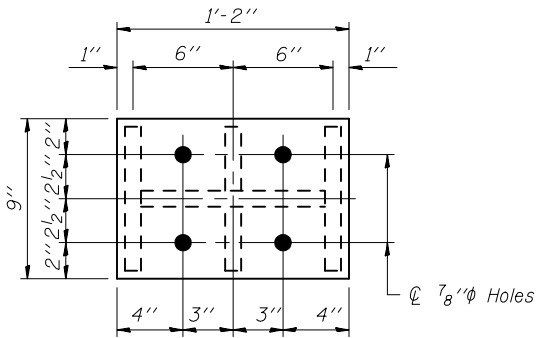


ROUTE NO.	DISTRICT	COUNTY	SECTION	SHEET
FAI 74	*	MCLEAN	160	101
FBI ROAD DIST. NO.		SHEET NO.		FBI JOB PROJECT

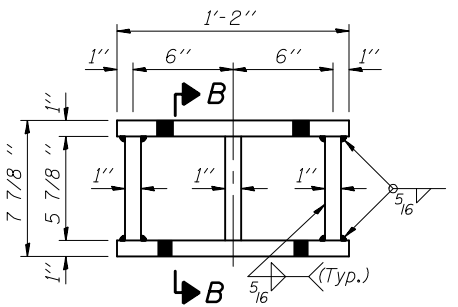
Sheet 2 of 4 Sheets

• 57-20(1) & (57-4,5,6)RS-3

CONTRACT NO. 70505



PLAN TOP AND BOTTOM PLATE



STEEL EXTENSION DETAIL

SHIM PLATES "4" DIMENSIONS

Beam #	3	5	12	14
W. Abuts.	-	11/16"	3/16"	11/16"
E. Abuts.	1/8"	3/4"	1/8"	3/4"

Note: There are existing lighting conduits along the south fascia beam of the Eastbound Structure and the north fascia beam of the Westbound Structure that will need to be temporarily relocated during bearing replacement. The cost of this relocation will be included in the cost of bearing replacement. Should the lighting system or conduit be damaged, it shall be repaired at the contractor's expense.

GIRDER REACTIONS

RP	(K)	21.2
Rt	(K)	38.0
Imp.	(K)	11.1
R (Total)	(K)	70.3

Notes: Diaphragm removal and replacement may be required to facilitate drilling holes. Cost shall be included in the cost of Furnishing and Erecting Structural Steel.

Steel extensions, shim plates, and connection bolts are included in Furnishing and Erecting Structural Steel.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.

Min. jack capacity = 35 Tons.

The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

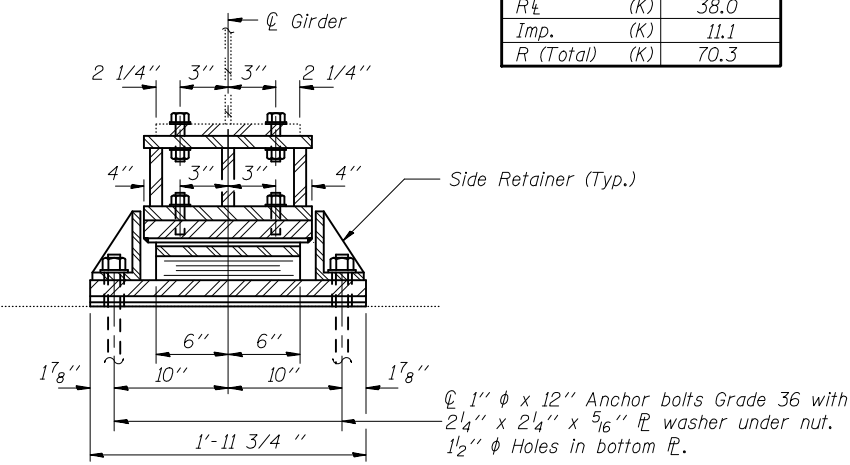
Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

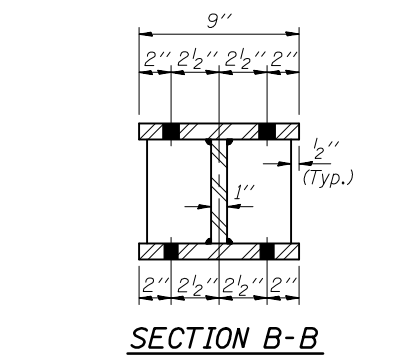
Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.05 of the Standards Specifications.

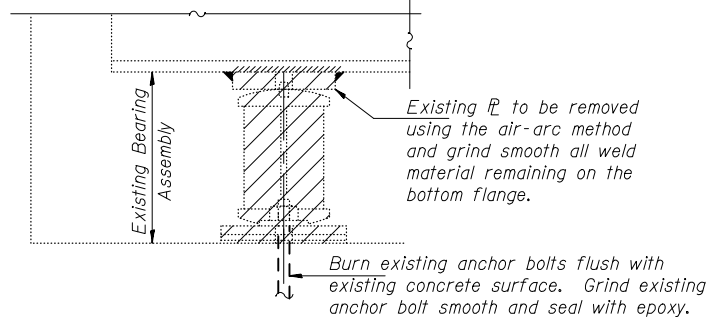
Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type II.



SECTION A-A

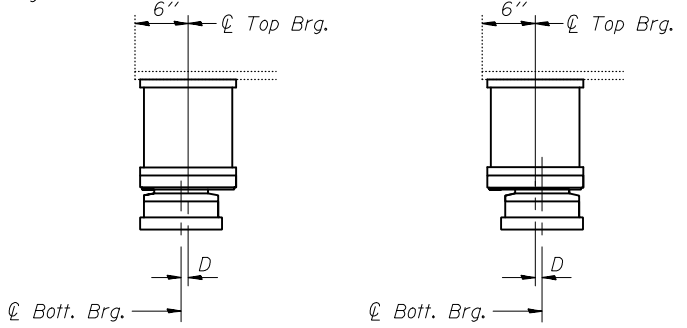


SECTION B-B



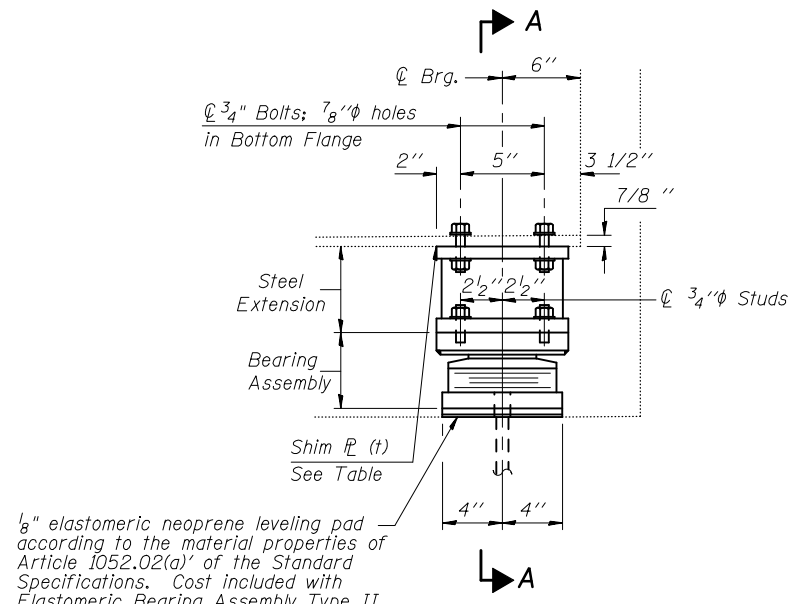
EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.



SETTING ANCHOR BOLTS AT EXP. BRG.

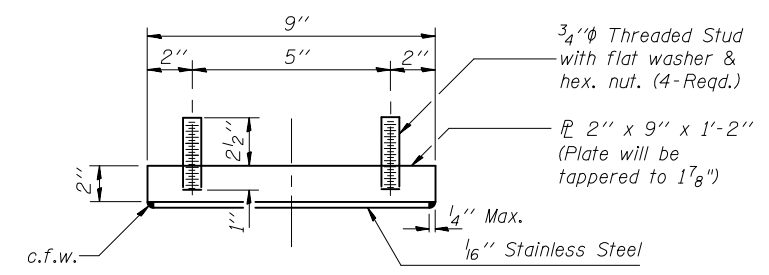
D=1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.



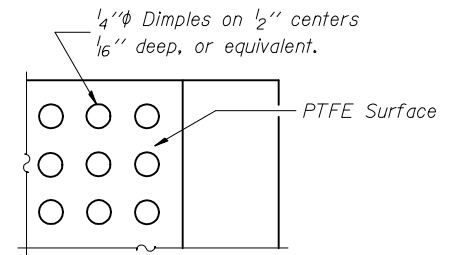
ELEVATION AT ABUTMENTS

1/8" elastomeric neoprene leveling pad according to the material properties of Article 1052.02(a) of the Standard Specifications. Cost included with Elastomeric Bearing Assembly Type II.

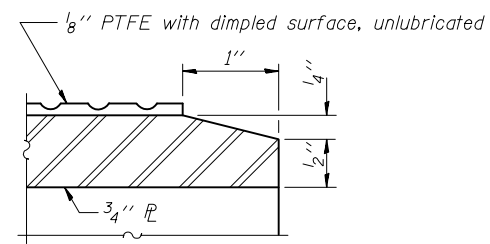
TYPE II TFE ELASTOMERIC EXP. BRG.



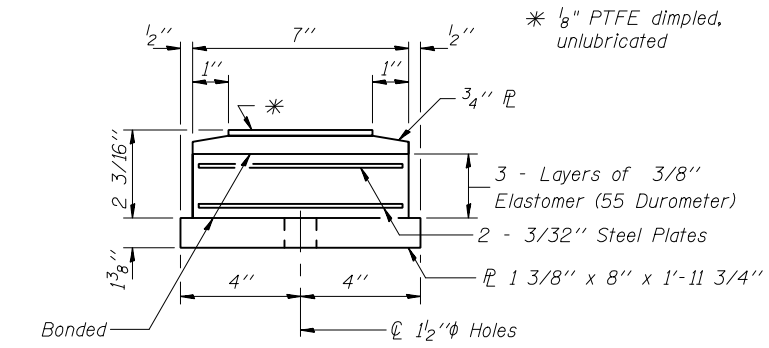
TOP BEARING ASSEMBLY



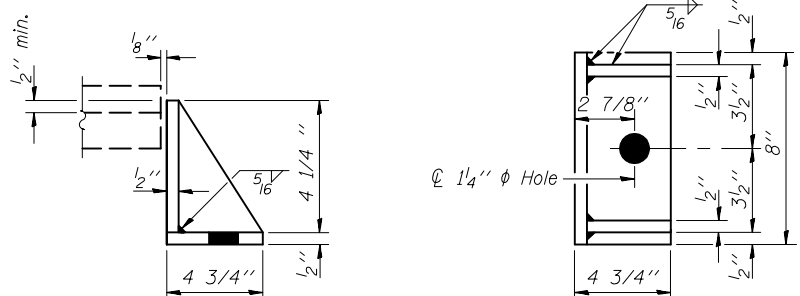
PLAN-PTFE SURFACE



SECTION THRU PTFE



BOTTOM BEARING ASSEMBLY



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

DESIGNED	JDA
CHECKED	JKC
DRAWN	NET
CHECKED	JDA

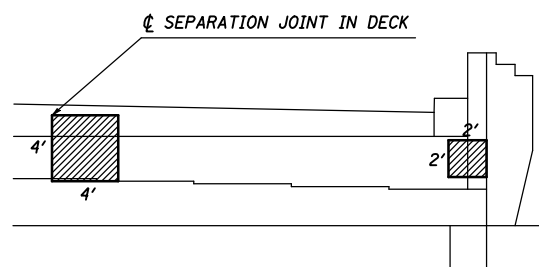
BEARING DETAILS
F.A.I. ROUTE 74 OVER U.S. 51
SECTION 57-20(1) (57-4,5,6)RS-3
MCLEAN COUNTY
SN 057-0047 (EB)
SN 057-0048 (WB)
STA. 719+63.58

DATE	NO.	BY	REV.	DATE
FAI 74	*	MCLEAN	160	102
FILE NO.	DATE	BY	REV.	DATE

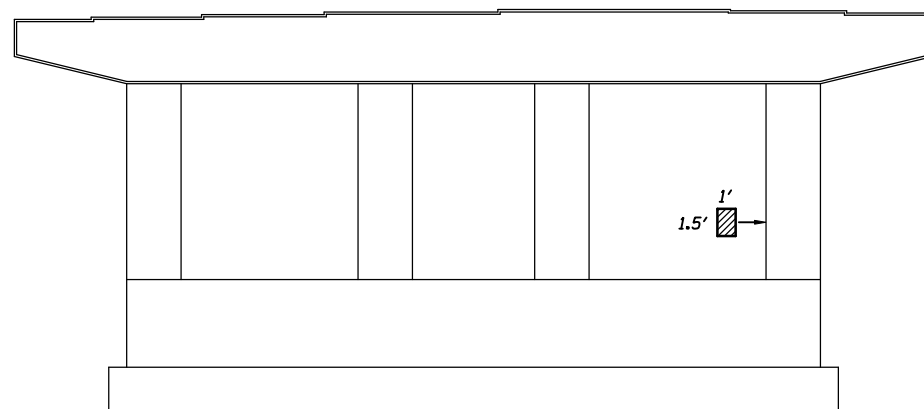
Sheet 3
of 4 Sheets

• 57-20(1) & (57-4,5,6)RS-3

CONTRACT NO. 70505

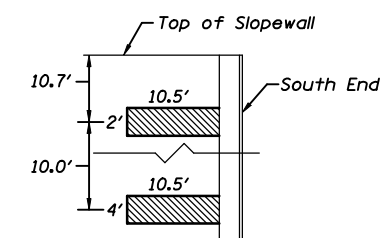


WEST ABUTMENT
(Looking West)
(North End)
SN 057-0047 (EB)

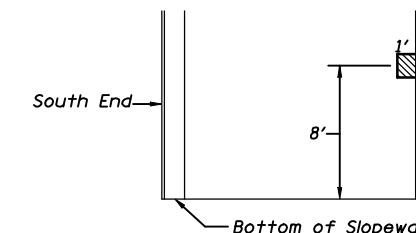


EAST ELEVATION
(Looking West)

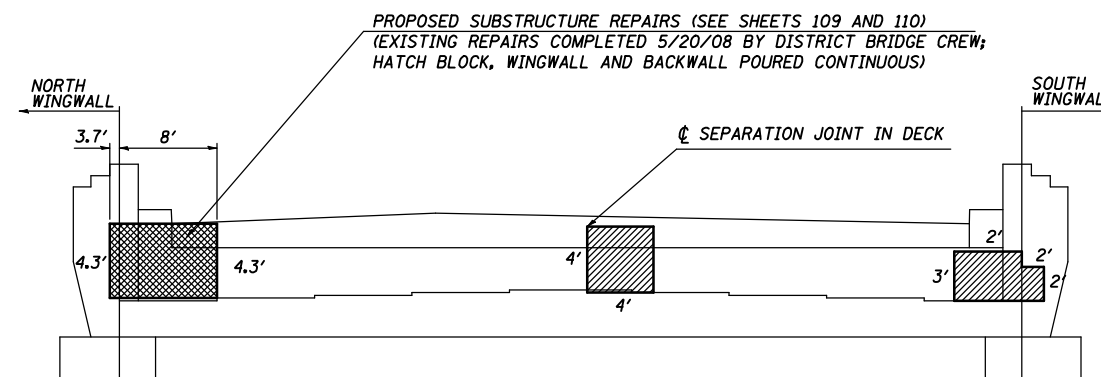
PIER 6
SN 057-0047 (EB)



EAST SLOPEWALL
(Looking East)
SN 057-0047 (EB)



WEST SLOPEWALL
(Looking West)
SN 057-0047 (EB)



EAST ABUTMENT
(Looking East)
SN 057-0047 (EB)

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less Than 5')
- Slopewall Removal Slopewall, 4 Inch

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less Than 5')	Sq. Ft.	48
Slopewall Removal	Sq. Yd.	7.1
Slopewall, 4 Inch	Sq. Yd.	7.1

DESIGNED	JDA
CHECKED	JKC
DRAWN	NET
CHECKED	JDA

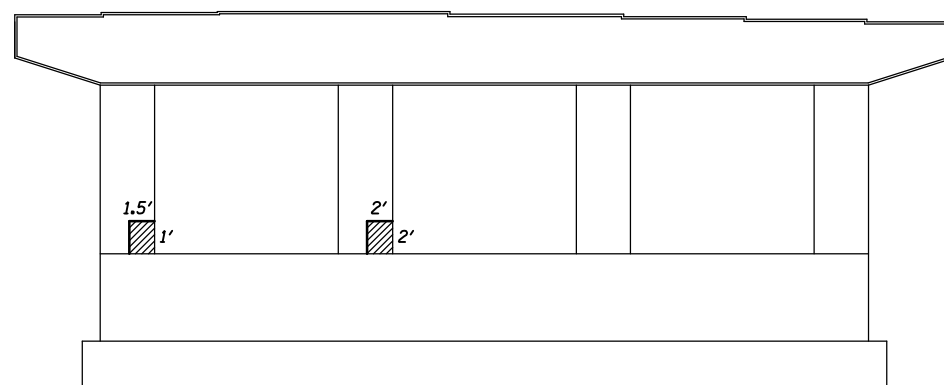
PIER, ABUTMENT, AND SLOPEWALL REPAIR
F.A.I. ROUTE 74 OVER U.S. 51
SECTION 57-20(1) & (57-4,5,6)RS-3
MCLEAN COUNTY
SN 057-0047 (EB)
SN 057-0048 (WB)
STA. 719+63.58

DATE	NO.	BY	REV.	DATE
FAI 74	*	MCLEAN	160	103
FILE NO.	DATE	BY	REV.	DATE

Sheet 4
of 4 Sheets

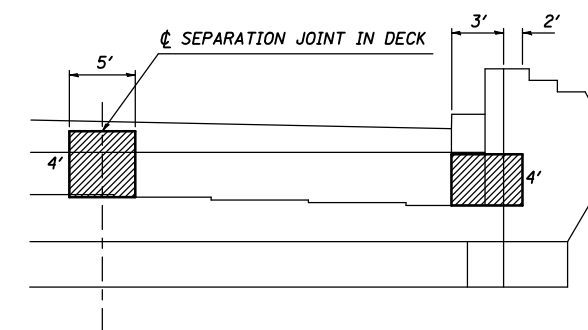
• 57-20(1) & (57-4,5,6)RS-3

CONTRACT NO. 70505



WEST ELEVATION
(Looking East)

PIER 3
SN 057-0048 (WB)



SOUTHEAST WINGWALL AND ABUTMENT
(Looking East)
SN 057-0048 (WB)

LEGEND

 Structural Repair of Concrete
(Depth Equal to or Less Than 5')

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less Than 5')	Sq. Ft.	46

DESIGNED	JDA
CHECKED	JKC
DRAWN	NET
CHECKED	JDA

PIER, ABUTMENT, AND WINGWALL REPAIR
F.A.I. ROUTE 74 OVER U.S. 51
SECTION 57-20(1) & (57-4,5,6)RS-3
MCLEAN COUNTY
SN 057-0047 (EB)
SN 057-0048 (WB)
STA. 719+63.58

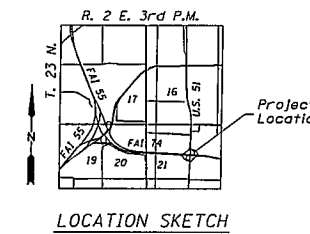
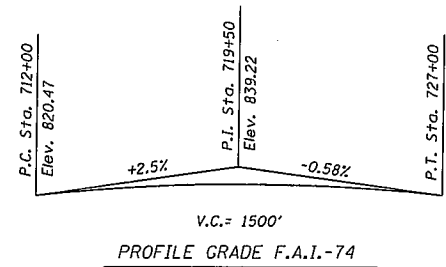
Benchmark: BM #1 on center top of slope drain headwall at Sta.48+60, 50' west of edge of southbound pavement Elev. = 815.96

Existing Structure: The existing dual four-span structures were built in 1963 as F.A.I. Route 74. The 7 inch R.C. slabs were supported on W30 X Beams. The existing structures are 181'-2" Back to Back of Abutments and vary from 52'-4 9/16" to 54'-7 1/16" Out to Out of Decks.

In 1991, the concrete deck was replaced and the substructure was repaired.

See additional proposed work on this sheet for description of proposed improvements.

Traffic to be maintained using Stage Construction.



ADDITIONAL PROPOSED WORK

1. Partial deck removal and replacement.
2. Add shear stud connectors at abutment end of beams.
3. Removal and replacement of portion of backwall and wingwall of EB structure.
4. Replace all four abutment PJS expansion joints with preformed joint strip seal.

BILL OF MATERIALS

Item	Unit	Super.	Sub.	Total
CONCRETE REMOVAL	CU YD	44.3	19.0	63.3
CONCRETE SUPERSTRUCTURE	CU YD	44.3	19.0	63.3
PROTECTIVE COAT	SO YD	192.5	--	192.5
REINFORCEMENT BARS, EPOXY COATED	POUND	8800	3150	11950
PREFORMED JOINT STRIP SEAL	FOOT	214.0	--	214.0
BAR SPLICERS	EACH	104	--	104
SHEAR STUD CONNECTORS	EACH	864	--	864

QUANTITIES FOR TEMPORARY CONCRETE BARRIER AND RELOCATE TEMPORARY CONCRETE BARRIER INCLUDED IN ROADWAY PLANS.

GENERAL NOTES

The deck ends, hatch blocks and approach pavement shall have its final surface tined according to Article 420.09 (e) (1) of the Standard Specifications. Cost to be included with concrete superstructure.

Plan dimensions and details relative to the existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make the 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 work. However, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

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

Reinforcement bars designated (E) shall be epoxy coated.

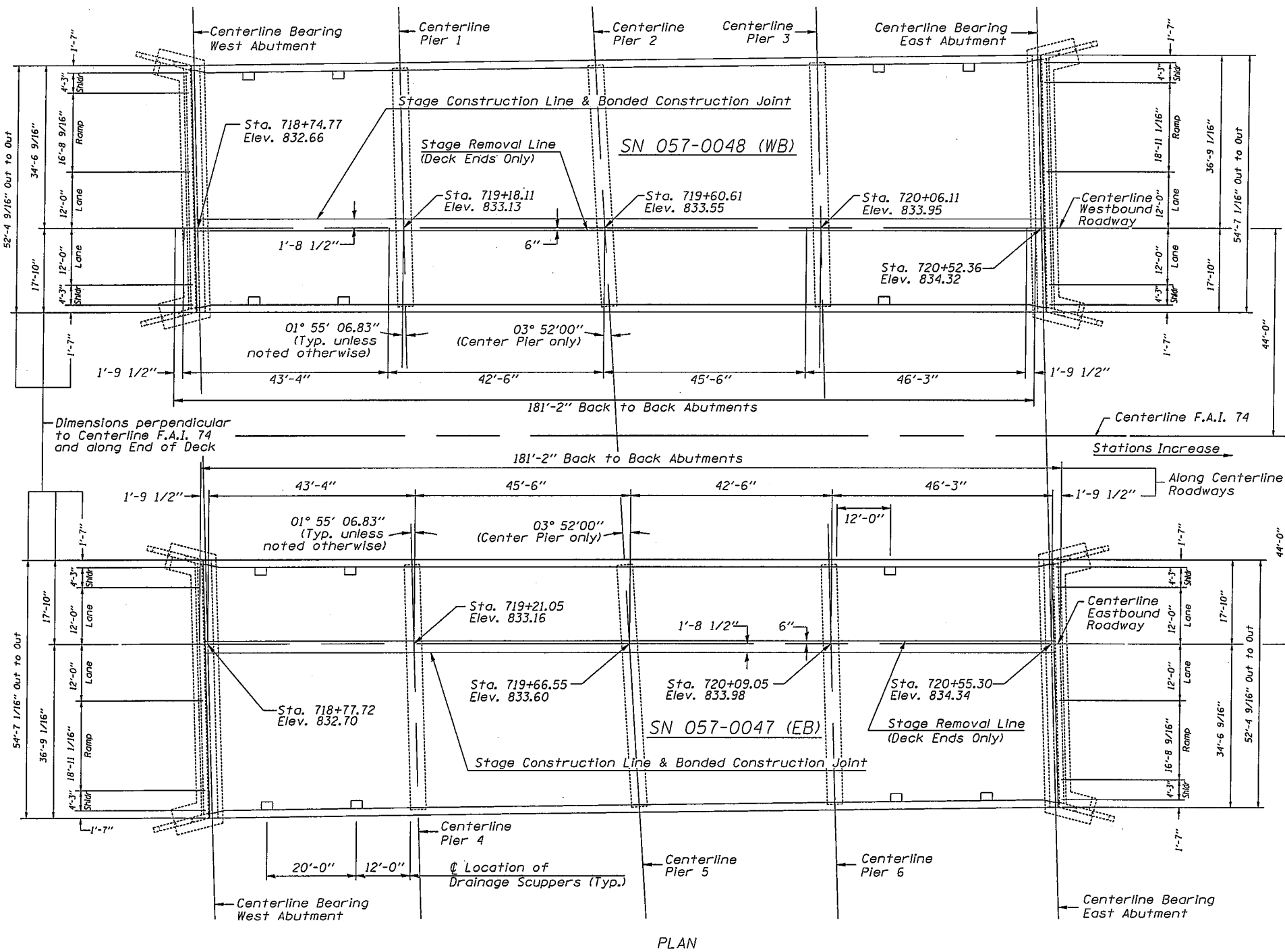
Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surface in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

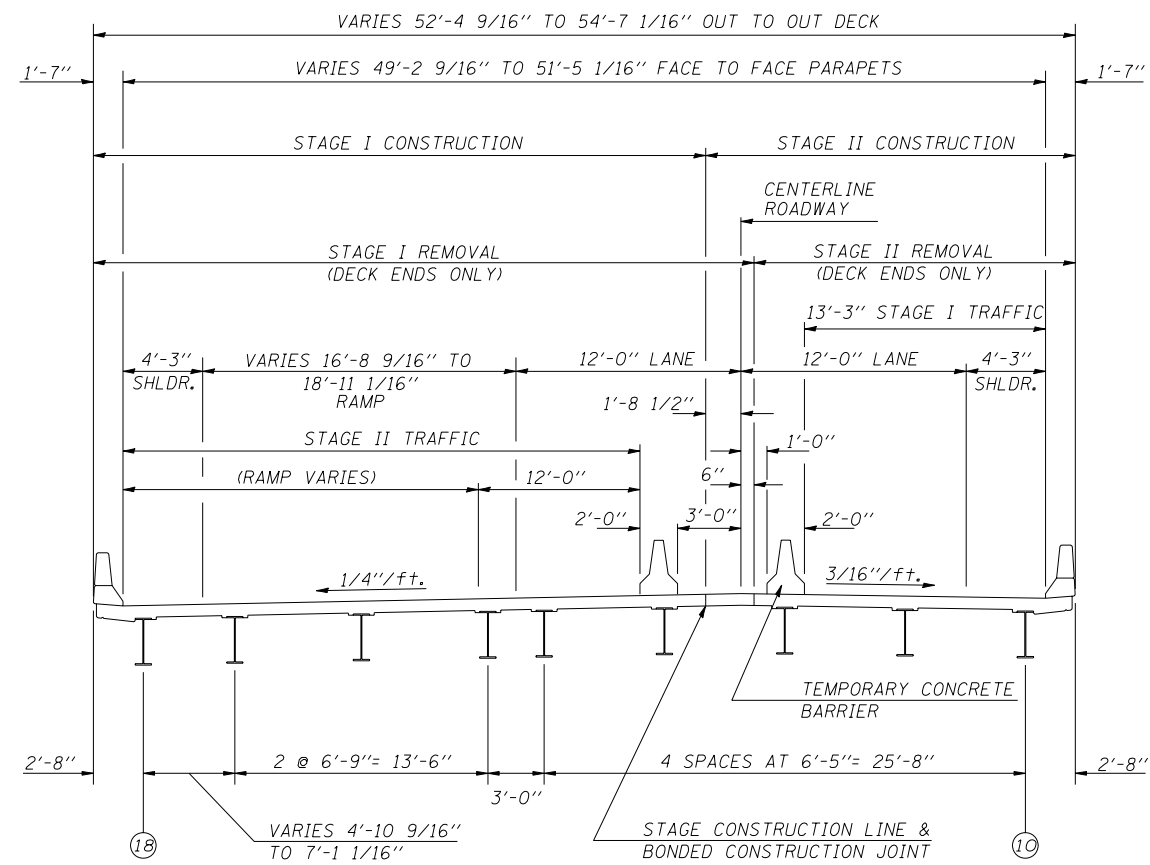
Joint openings shall be adjusted according to article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50° F.

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

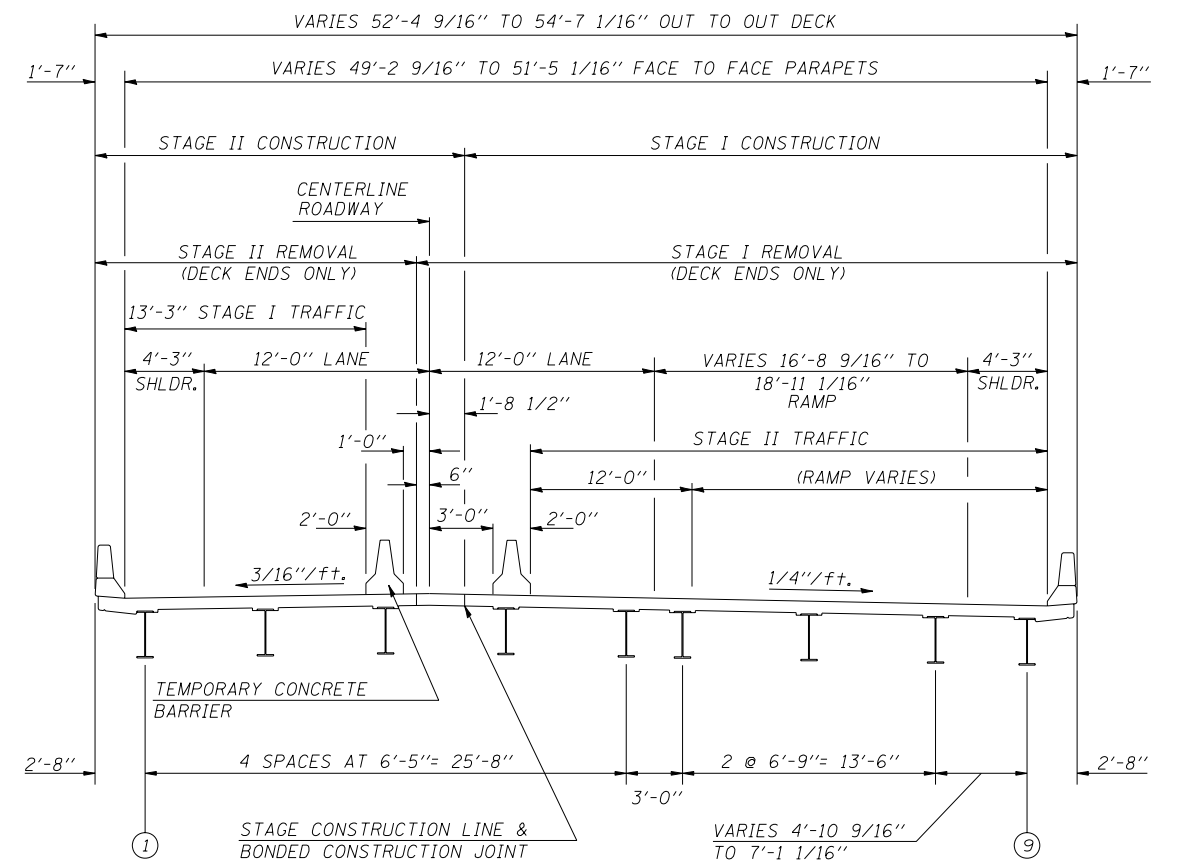


PLAN

FILE NAME =	USER NAME = #USER#	DESIGNED - GMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*FILE#		DRAWN - GMS	REVISED -		S.N. 057-0047 & S.N. 057-0048		74	57-20(1)&57-4,5,6)R-3	MCLEAN	160	104
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	PLOT DATE = #DATE#	DATE -	REVISED -				FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



CROSS SECTION (SN 057-0048)



CROSS SECTION (SN 057-0047)

LOOKING EAST

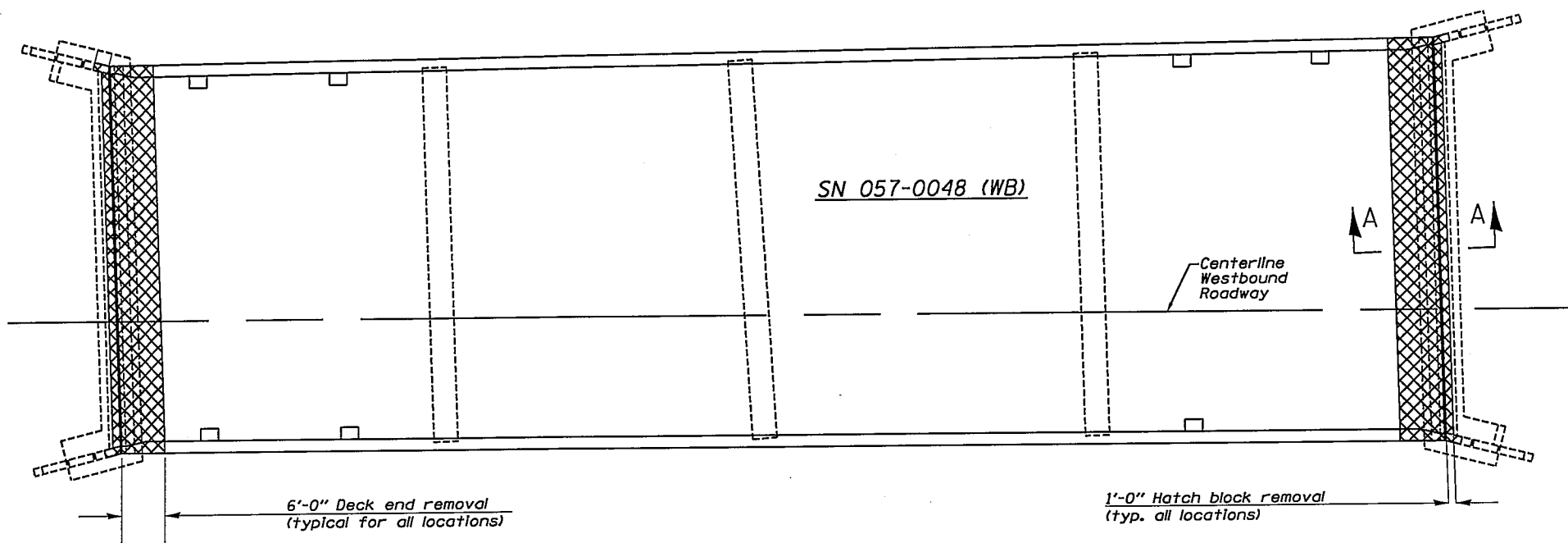
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

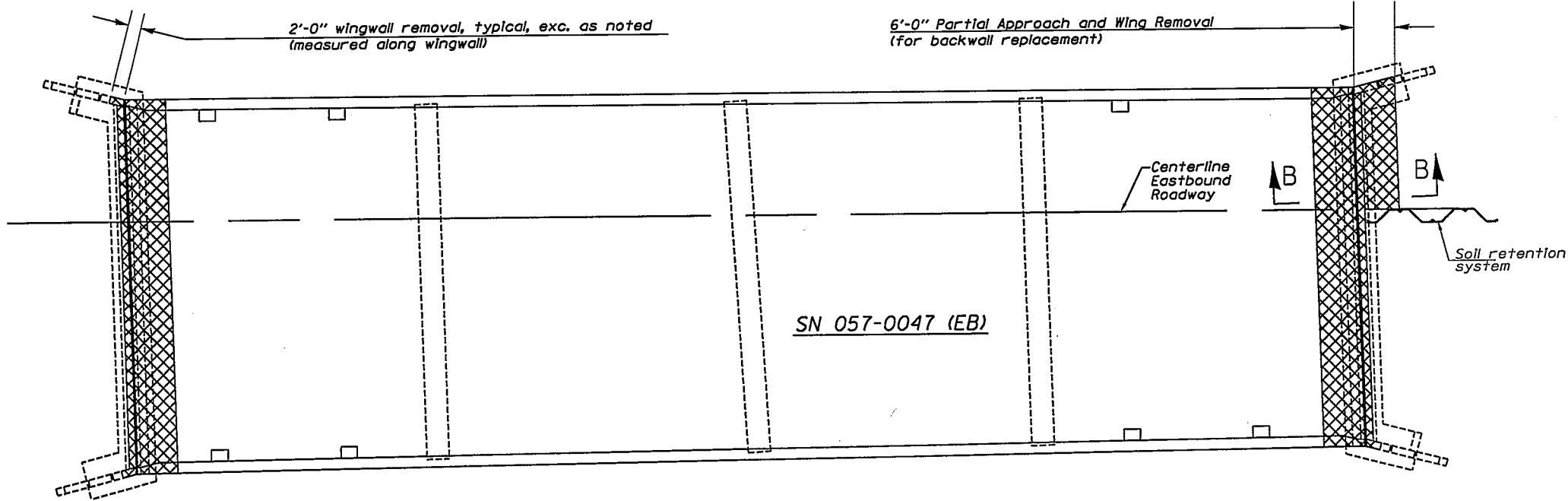
STAGE CONSTRUCTION

SCALE: SHEET NO. 2A OF 11A SHEETS STA. TO STA.

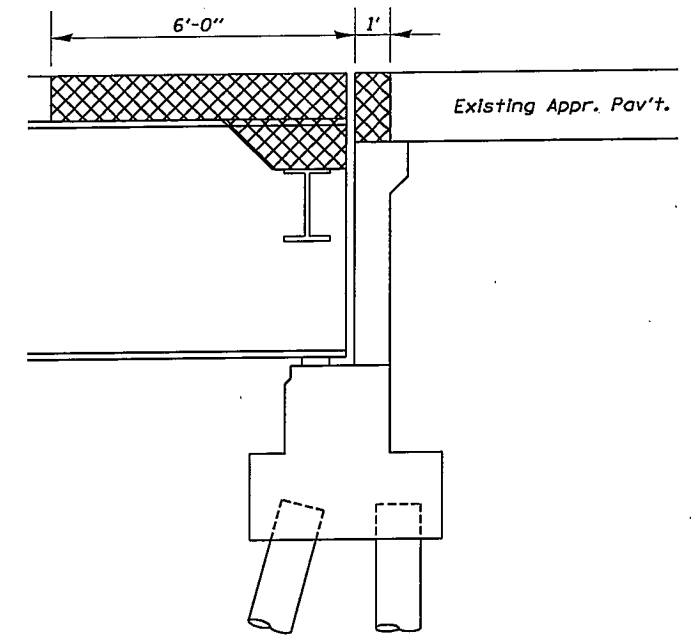
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	57-20(1)&57-4,5,6JR-3	MCLEAN	160	105
CONTRACT NO. 70505				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



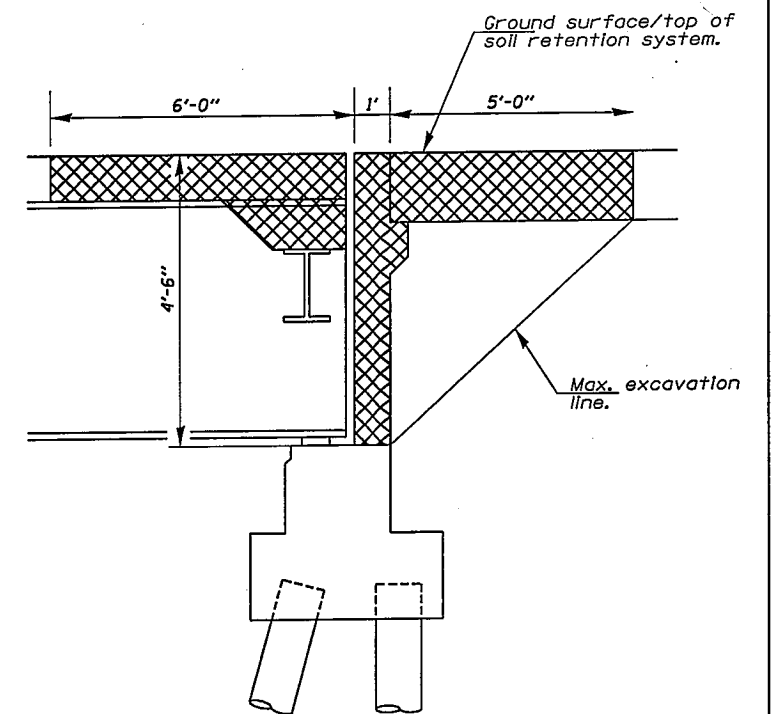
Cost of soil retention system and excavation is included with Concrete Removal. Cost of backfilling is included with Concrete Structures.



Plan View: Concrete Removal



Section A-A
Typical for joint replacement and shear stud connectors



Section B-B
Typical for joint and backwall replacement and shear stud connectors

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#FILE#

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PLOT DATE = #DATE#

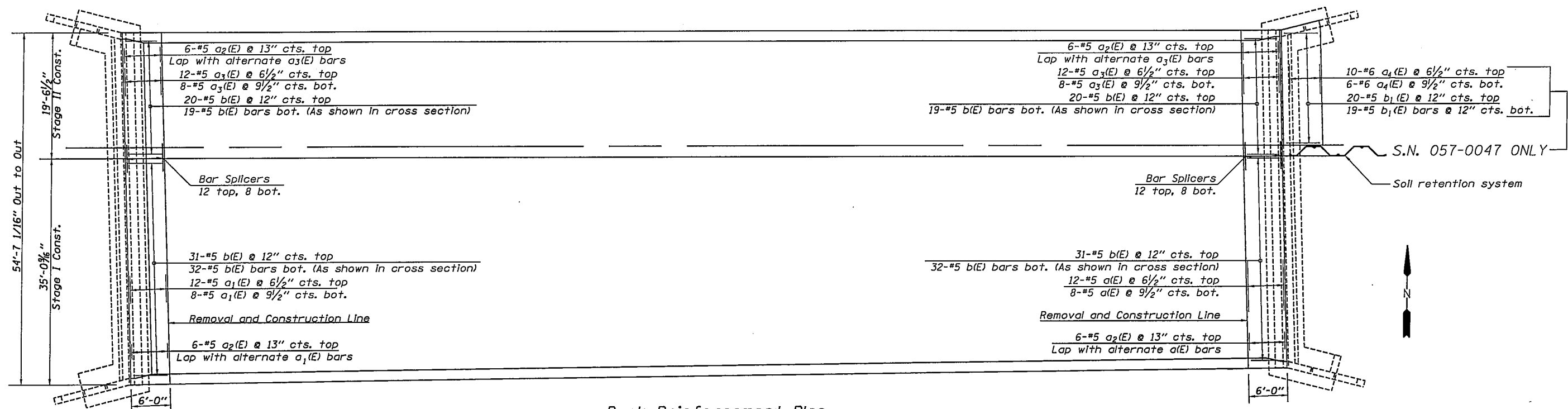
DESIGNED - GMS	REVISED -
DRAWN - GMS	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

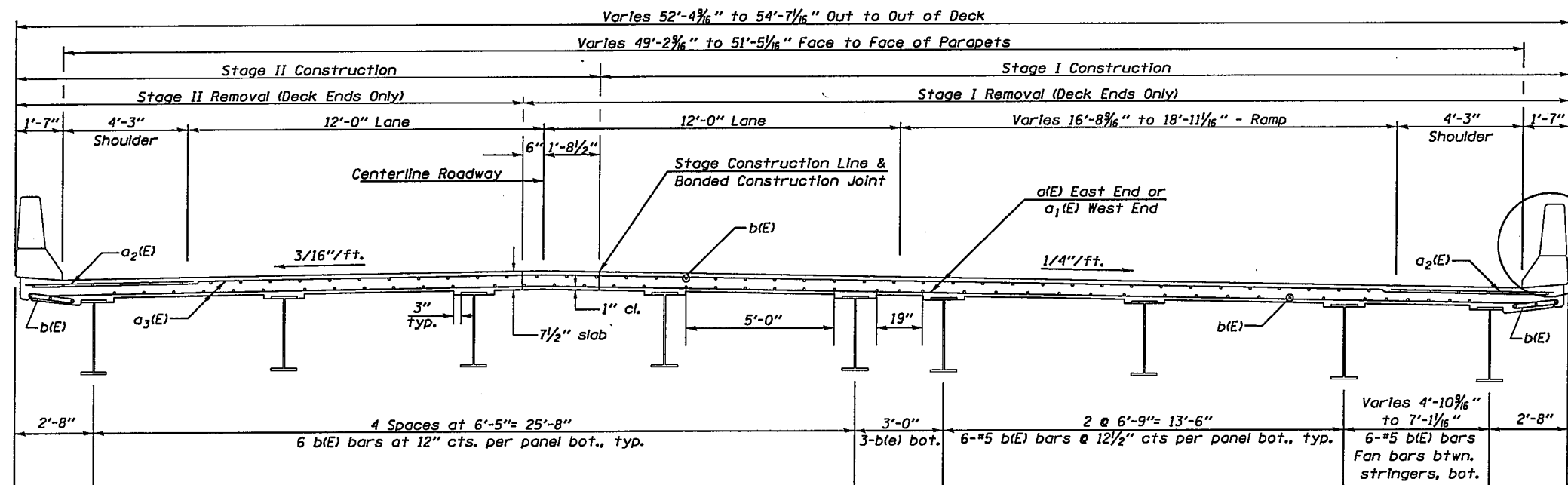
CONCRETE REMOVAL PLAN
S.N. 057-0047 & 057-0048

SCALE: SHEET NO. 3A OF 11A SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	57-2011&157-4.5.61R-3	MCLEAN	160	106
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 70505	



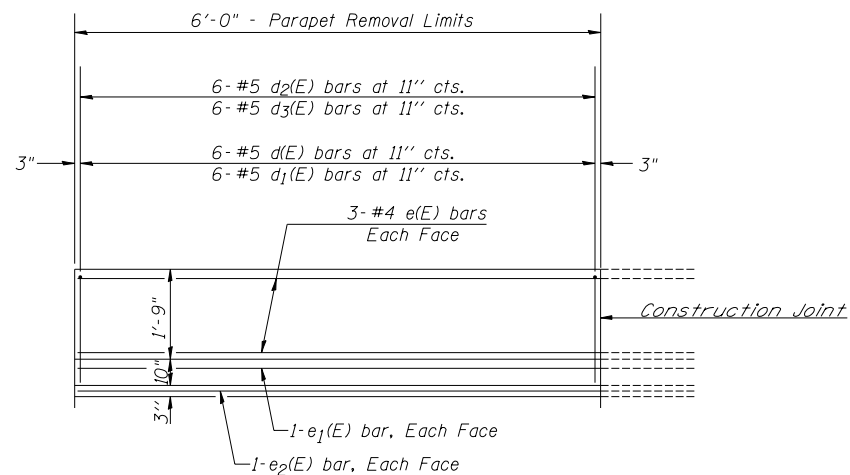
Deck Reinforcement Plan
057-0047 deck shown, 057-0048 similar by 180° rotation



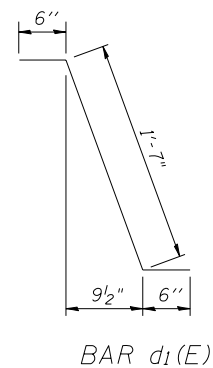
Deck Cross Section - Looking East
057-0047 deck shown, 057-0048 similar by 180° rotation

• See Sheet 5A for Superstructure Bill of Materials and details of reinforcement bars.

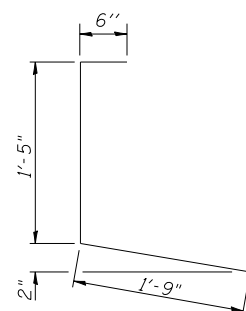
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		DATE	REVISED -									



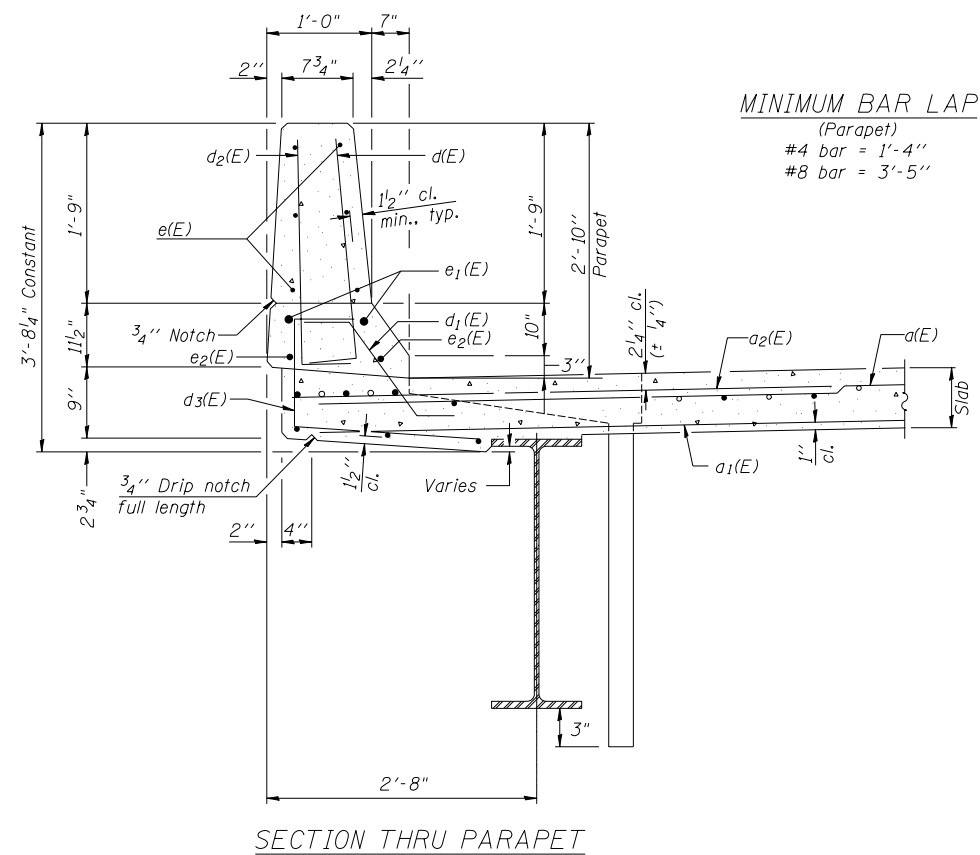
BARS d(E) & d2(E)



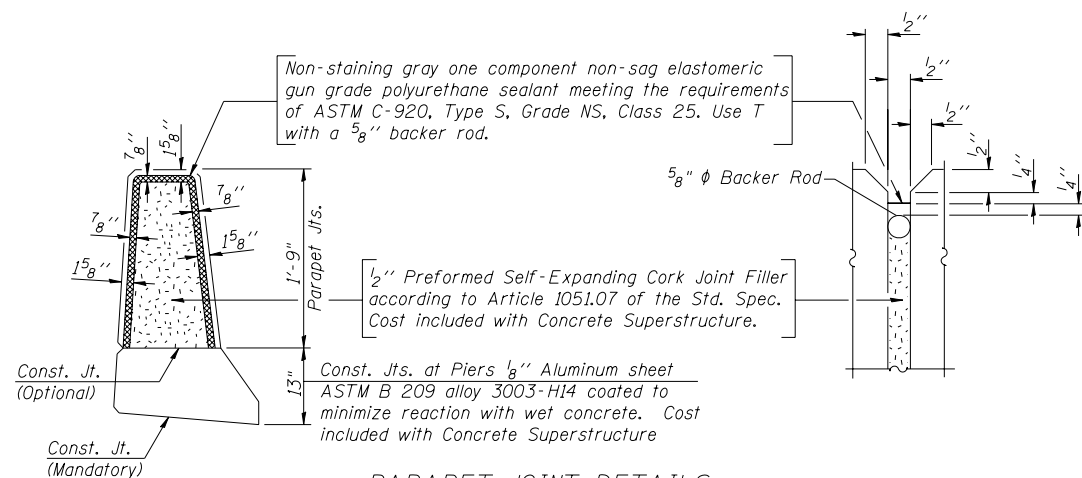
BAR d1(E)



BAR d3(E)



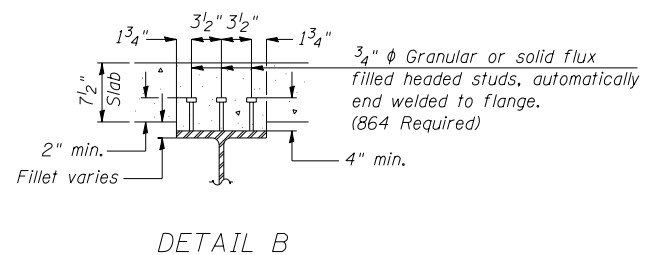
SECTION THRU PARAPET



PARAPET JOINT DETAILS

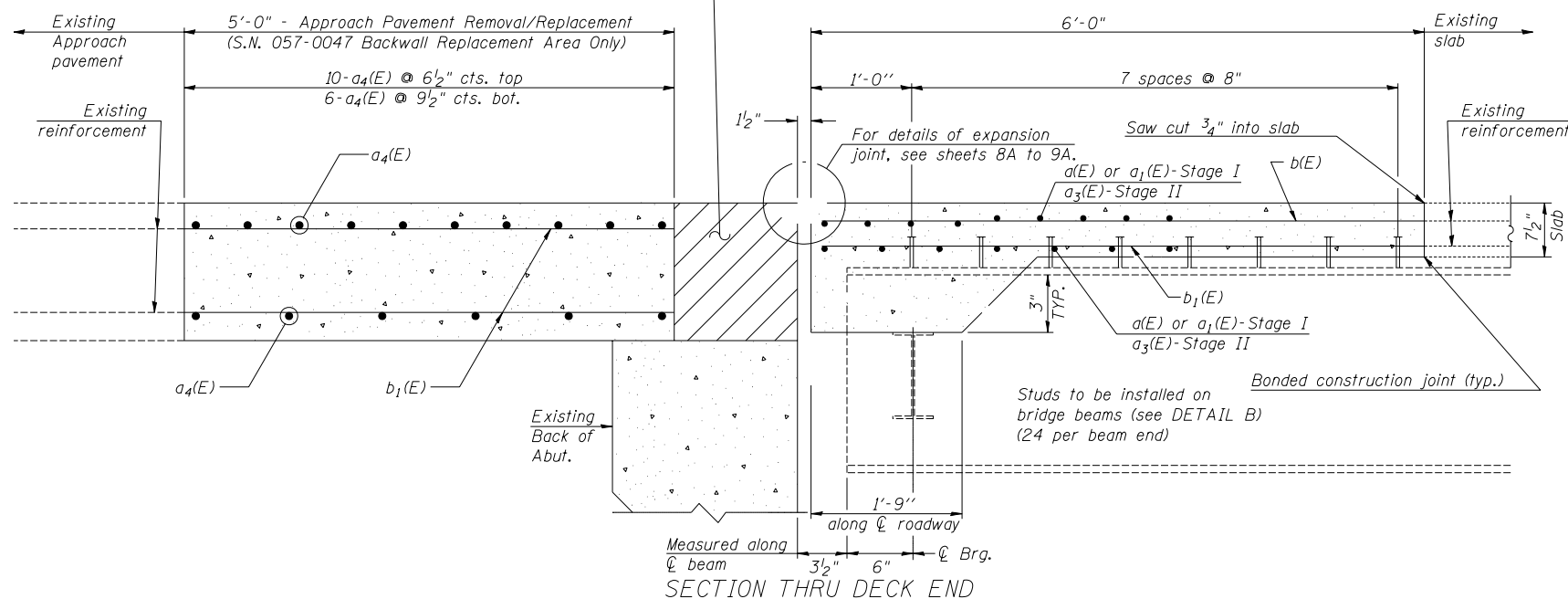
NOTE:

Dimensions are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on Base Sheet E.J-SSJ.



DETAIL B

Hatched area to be poured after superstructure forms have been removed. Quantity of concrete included with Concrete Superstructure. (See sheets 6A & 7A for reinforcement details)

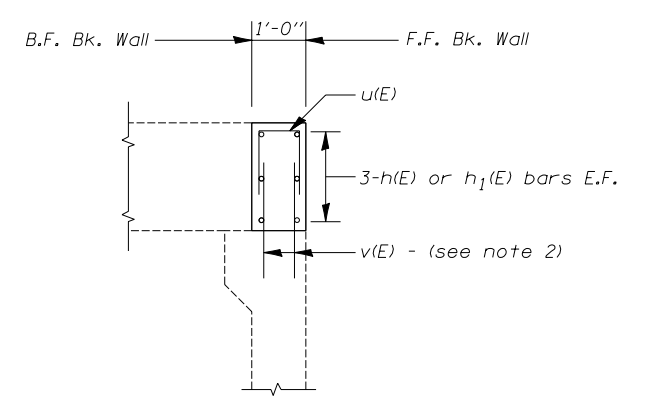
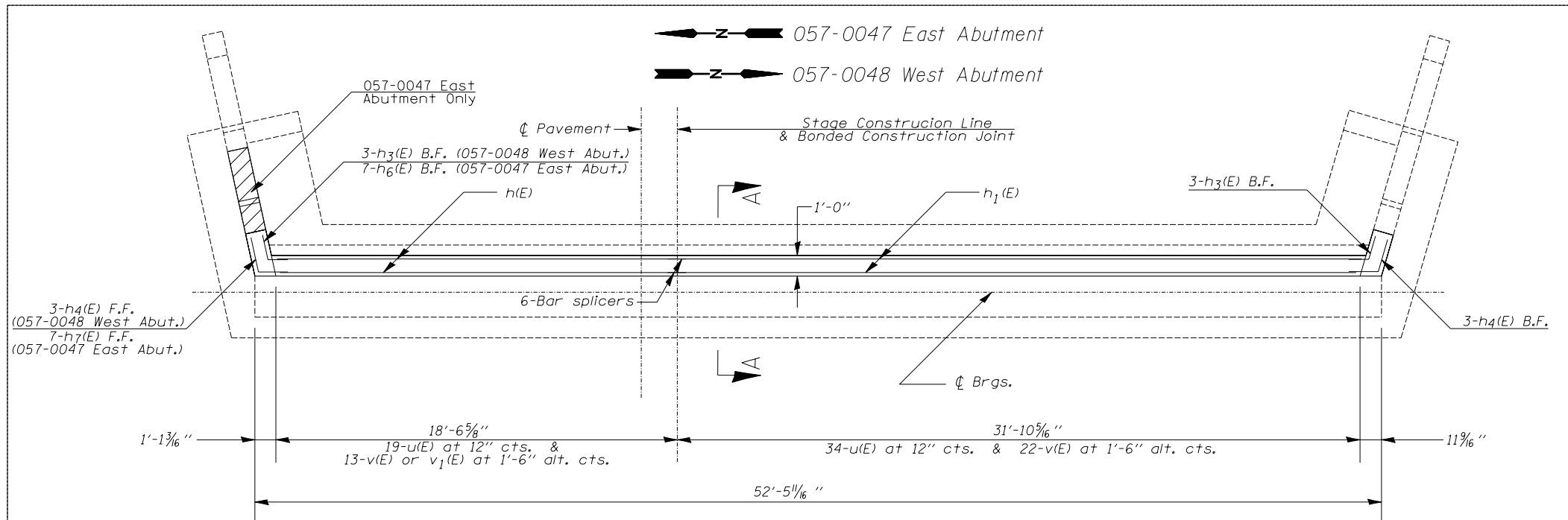


SECTION THRU DECK END

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	40	#5	33'-4"	—
a1(E)	40	#5	35'-3"	—
a2(E)	48	#6	6'-0"	—
a3(E)	80	#5	16'-8"	—
a4(E)	20	#6	16'-8"	—
b(E)	408	#5	5'-8"	—
b1(E)	39	#5	4'-8"	—
d(E)	48	#5	3'-0"	—
d1(E)	48	#5	2'-7"	—
d2(E)	48	#4	3'-0"	—
d3(E)	48	#4	3'-8"	—
e(E)	48	#4	5'-8"	—
e1(E)	16	#8	5'-8"	—
e2(E)	16	#5	5'-8"	—
Reinforcement Bars, Epoxy Coated		Pound	8800	
Concrete Removal		Cu. Yds.	44.3	
Concrete Superstructure		Cu. Yds.	44.3	
Shear Stud Connectors		Each	864	
Bar Splicers		Each	80	

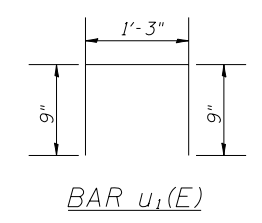
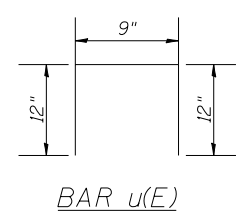
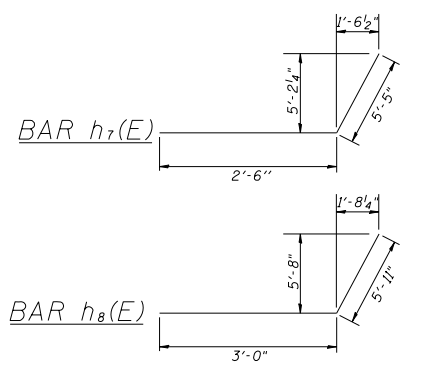
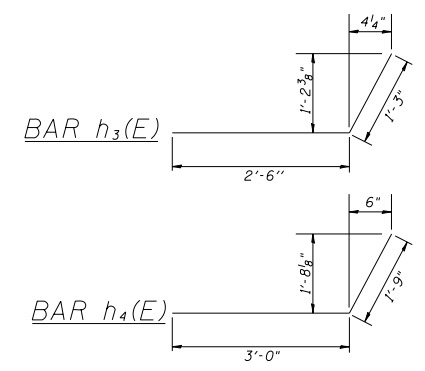
SUPERSTRUCTURE DETAILS
STRUCTURE NO. 057-0047 (EB)
STRUCTURE NO. 057-0048 (WB)



SECTION A-A
(Typical for joint replacement)

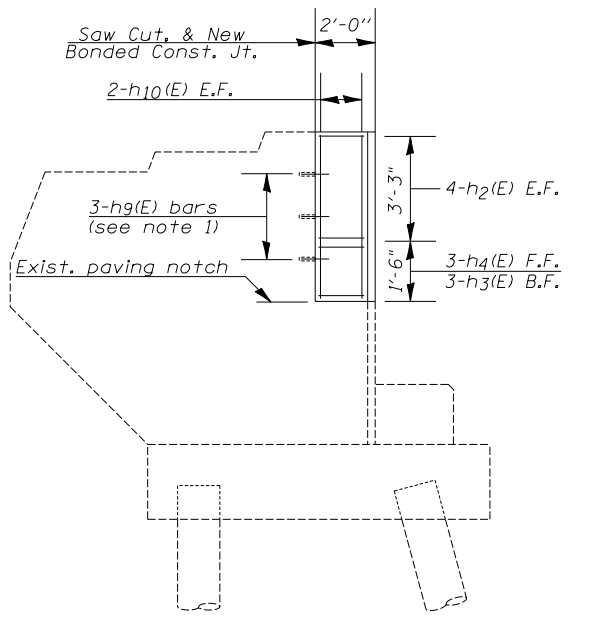
NOTES:

- Epoxy grout h₉(E) bars in 9" Min. drilled holes according to Article 584 of the Standard Specs.
- Epoxy grout #5-v(E) & v₁(E) bars in 7/8" dia. min. drilled holes (see Spec. Prov.) The method of grout application shall be approved by the engineer. The cost shall be incidental to the cost of reinforcement bars, epoxy coated.

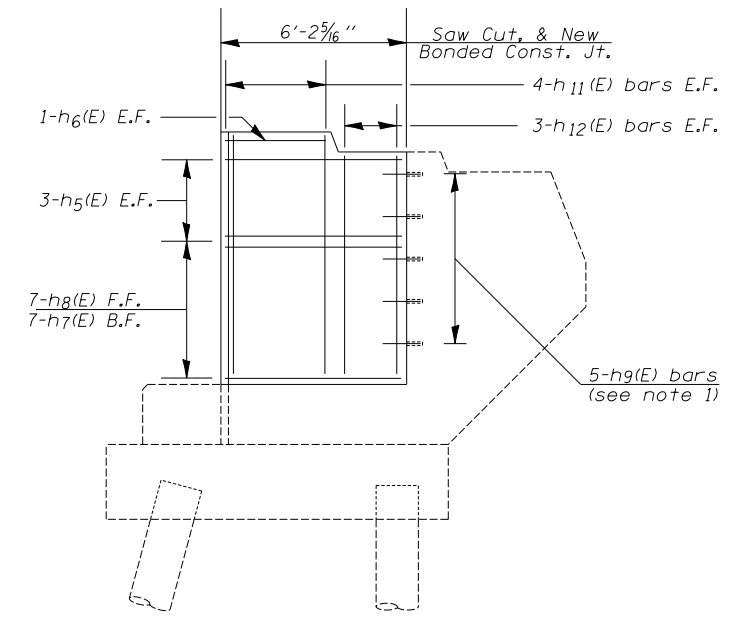


TWO ABUTMENTS
BILL OF MATERIAL

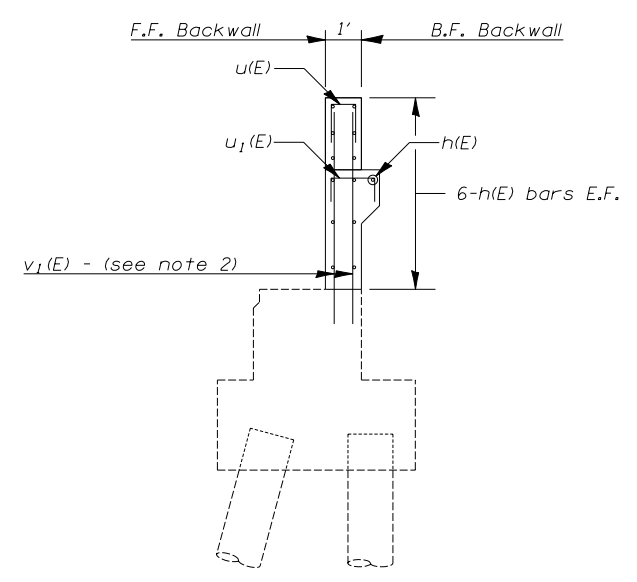
Bar	No.	Size	Length	Shape
h(E)	19	#6	16'-8"	—
h ₁ (E)	12	#6	33'-2"	—
h ₂ (E)	24	#4	1'-8"	—
h ₃ (E)	9	#4	3'-9"	—
h ₄ (E)	9	#4	4'-9"	—
h ₅ (E)	6	#4	5'-10"	—
h ₆ (E)	2	#4	3'-4"	—
h ₇ (E)	7	#4	7'-11"	—
h ₈ (E)	7	#4	8'-11"	—
h ₉ (E)	14	#6	2'-0"	—
h ₁₀ (E)	12	#4	4'-3"	—
h ₁₁ (E)	8	#4	7'-2"	—
h ₁₂ (E)	6	#4	6'-6"	—
u(E)	106	#4	2'-9"	□
u ₁ (E)	16	#4	2'-9"	□
v(E)	58	#4	1'-9"	—
v ₁ (E)	12	#4	4'-6"	—
Reinforcement Bars, Epoxy Coated			Pound	1730
Concrete Removal			Cu. Yds.	11.1
Concrete Superstructure			Cu. Yds.	11.1
Bar Splicers			Each	12



WINGWALL REINFORCEMENT
057-0048 West Abutment
057-0047 East Abutment, South Wing



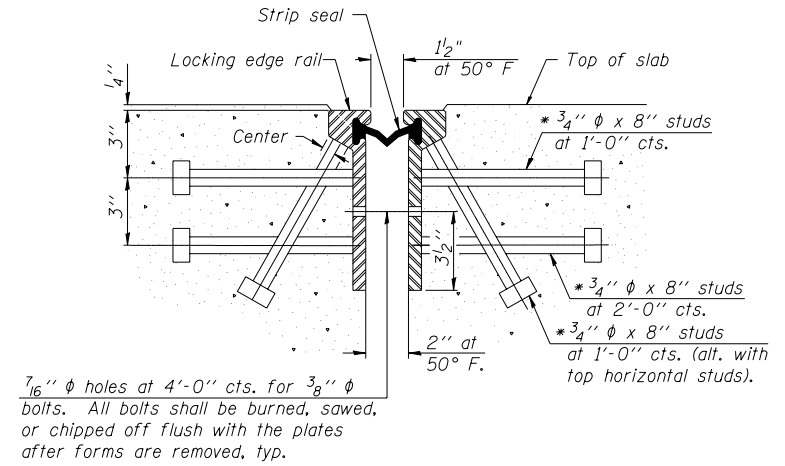
WINGWALL REINFORCEMENT
057-0047 East Abutment, North Wing



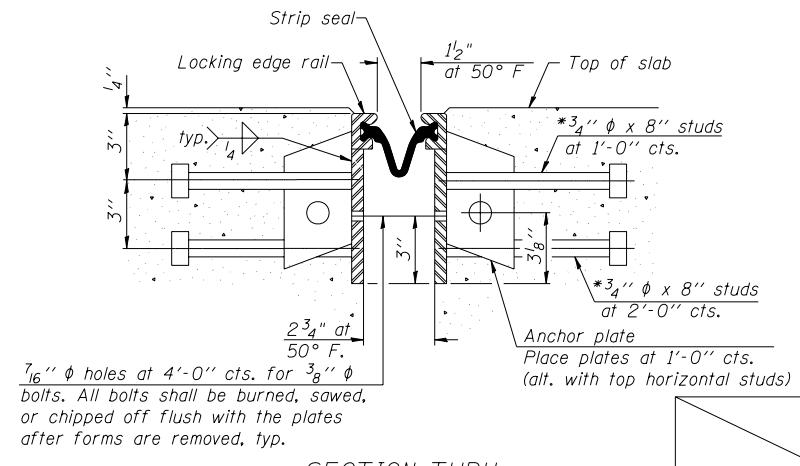
SECTION THRU ABUTMENT
(At backwall replacement area - 057-0047 East Abut.)

For wing dimensions, see sheet 7A of 11A

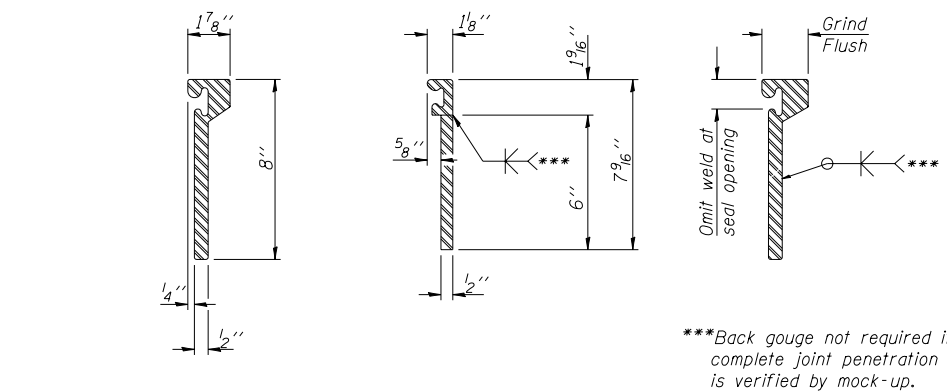
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



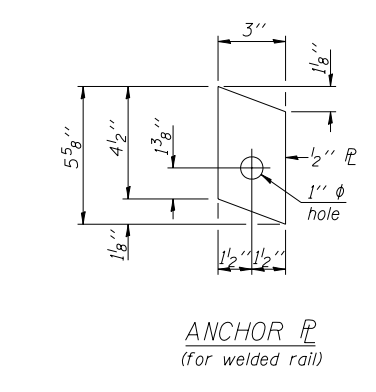
SECTION THRU ROLLED RAIL JOINT



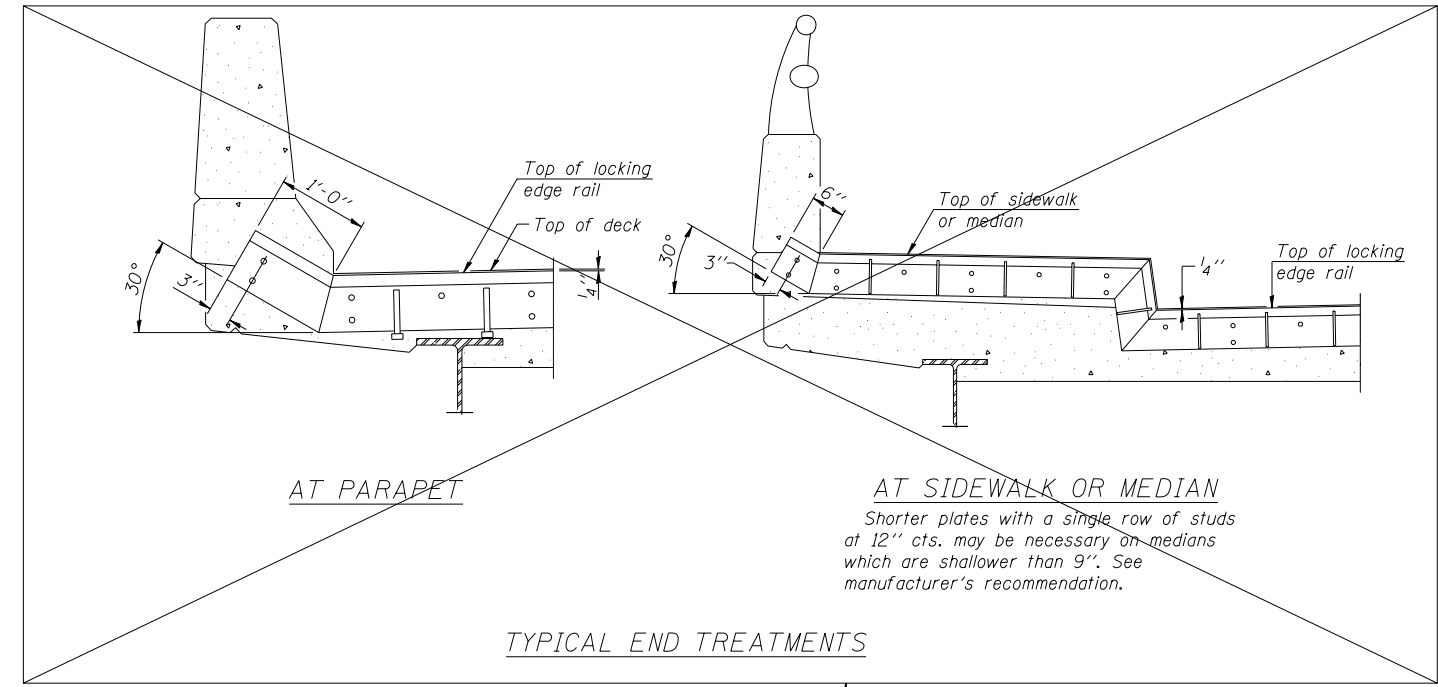
SECTION THRU WELDED RAIL JOINT



ROLLED EXTRUDED RAIL WELDED RAIL LOCKING EDGE RAIL SPLICE
The inside of the locking edge rail groove shall be free of weld residue.

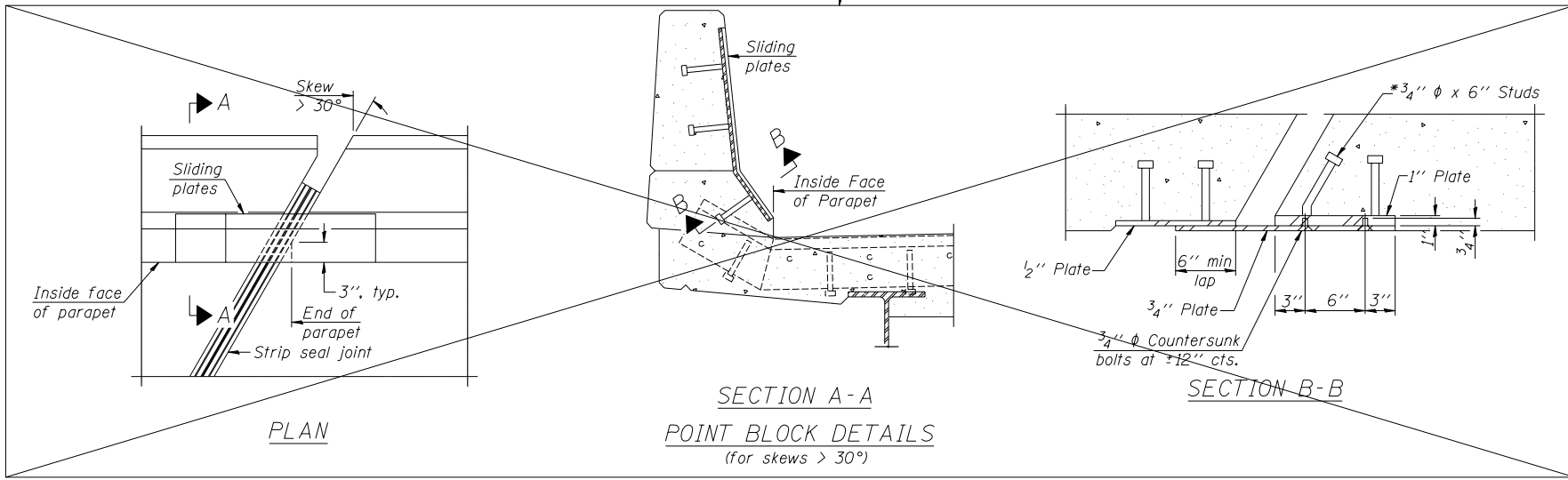


ANCHOR PLATE (for welded rail)



TYPICAL END TREATMENTS
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

* SEE DISTRICT 5 PREFORMED JOINT STRIP SEAL DETAIL, SHEET 9A OF 11A.



PLAN SECTION A-A POINT BLOCK DETAILS (for skews > 30°)

Notes:
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.
The manufacturer's recommended installation methods shall be followed.
The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

BILL OF MATERIAL

Item	Unit	Total
Prefomed Joint Strip Seal	Foot	214

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 057-0047 (EB)
STRUCTURE NO. 057-0048 (WB)

EJ-SSJ

10-1-08

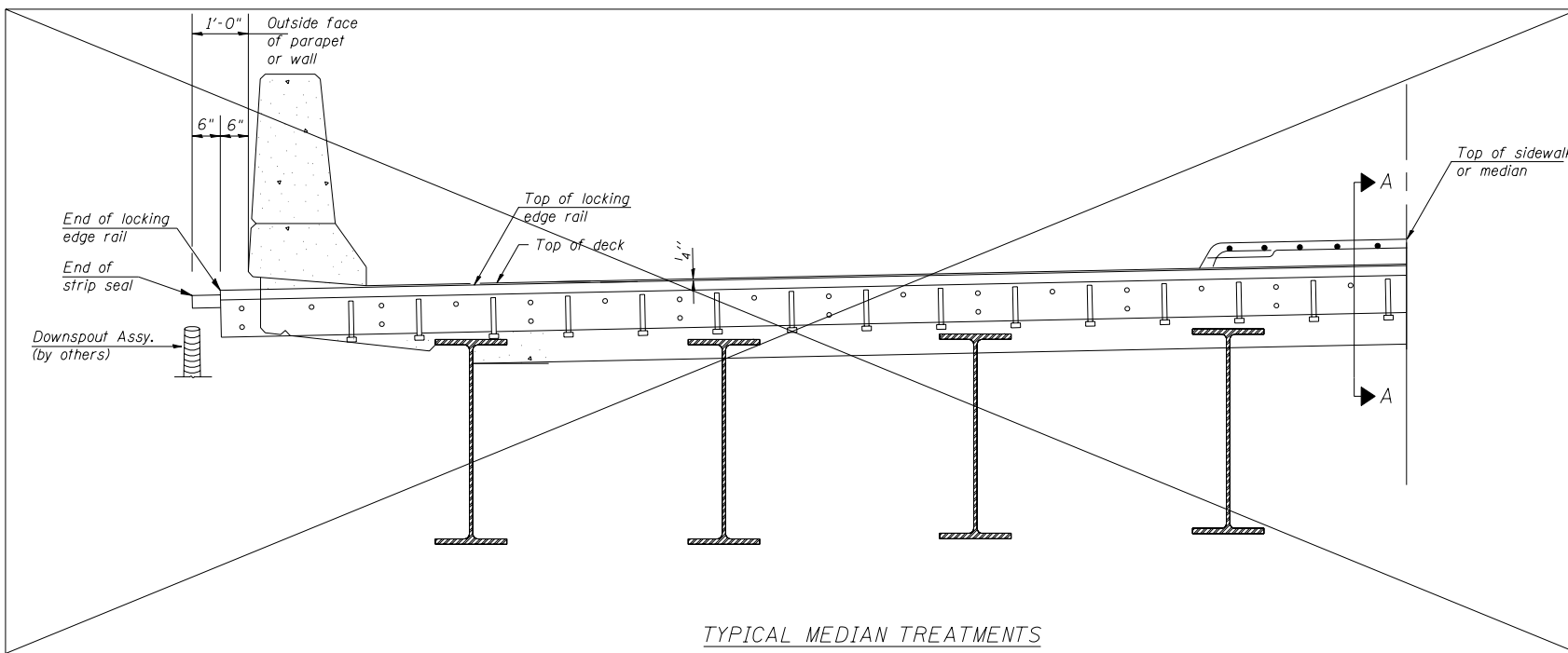
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*FILE#		DRAWN - GMS	REVISED -
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	PLOT DATE = *DATE*	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

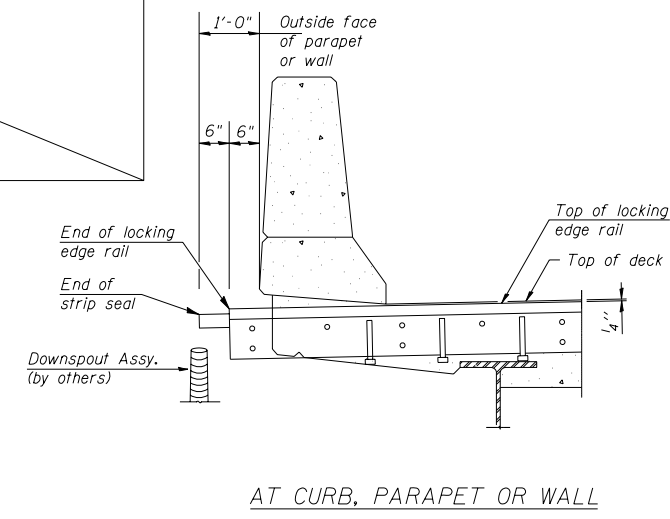
PREFORMED JOINT STRIP SEAL
S.N. 057-0047 (EB) & S.N. 057-0048 (WB)

SCALE:	SHEET NO. 8A OF 11A SHEETS	STA.	TO STA.
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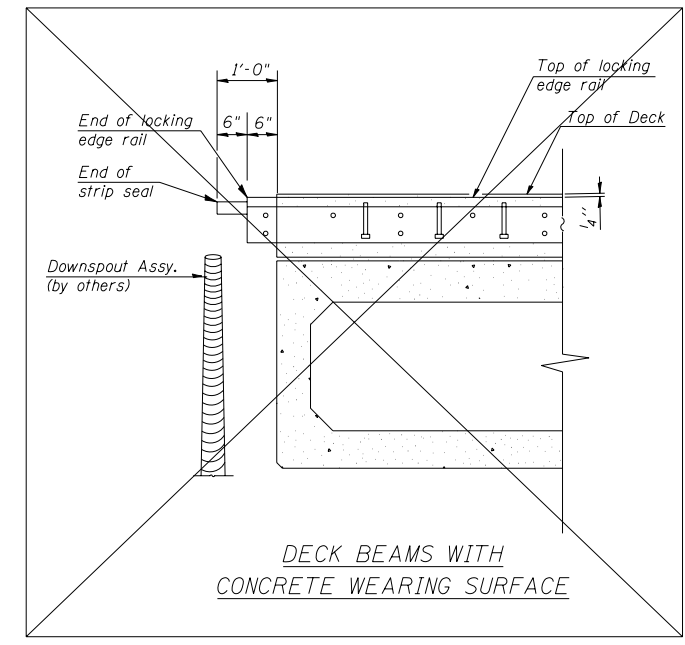
F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	57-20(1)&57-4,5,6R-3	MCLEAN	160	111
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 70505	



TYPICAL MEDIAN TREATMENTS

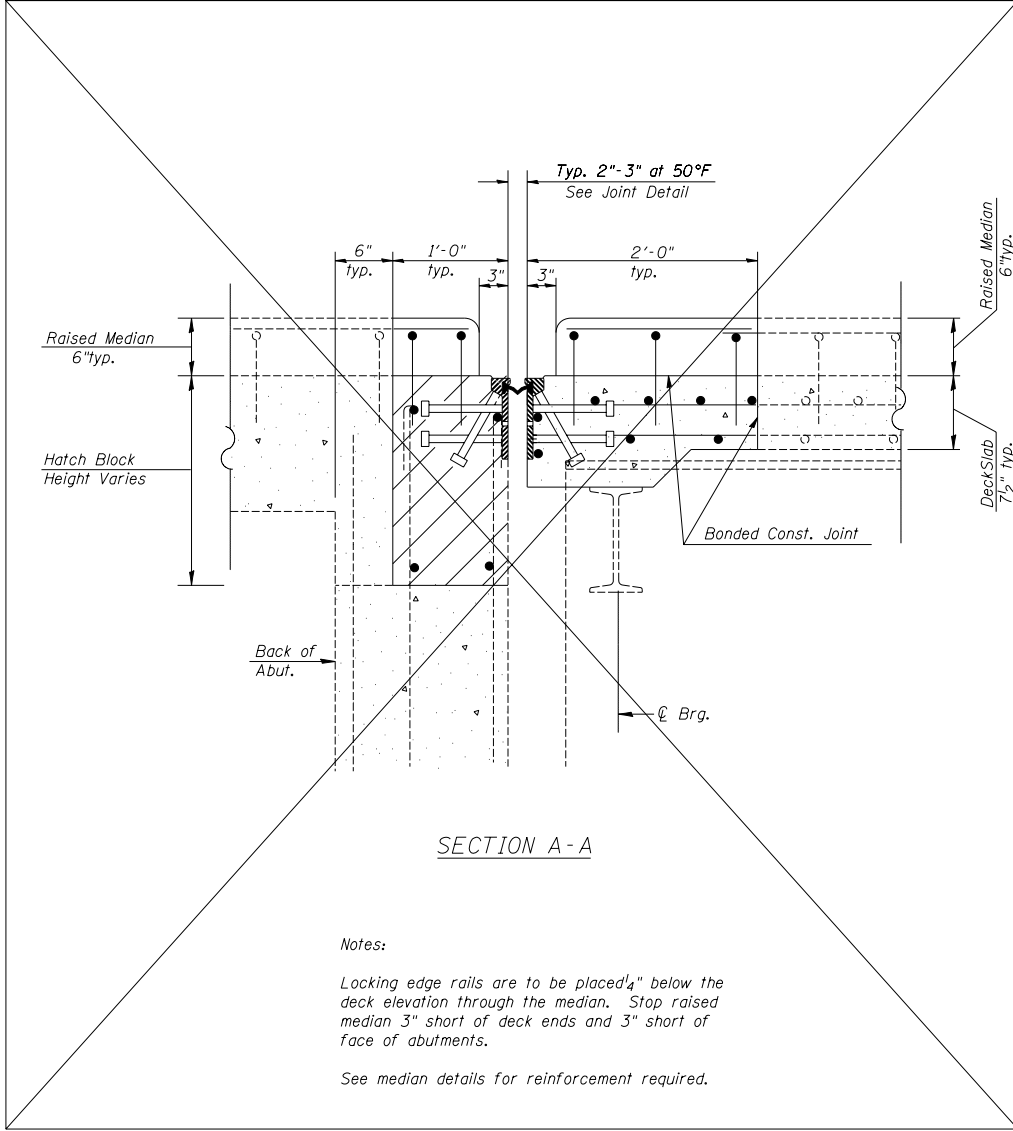


AT CURB, PARAPET OR WALL



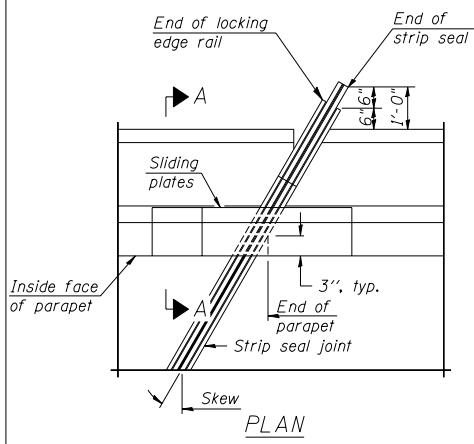
DECK BEAMS WITH CONCRETE WEARING SURFACE

TYPICAL END TREATMENTS

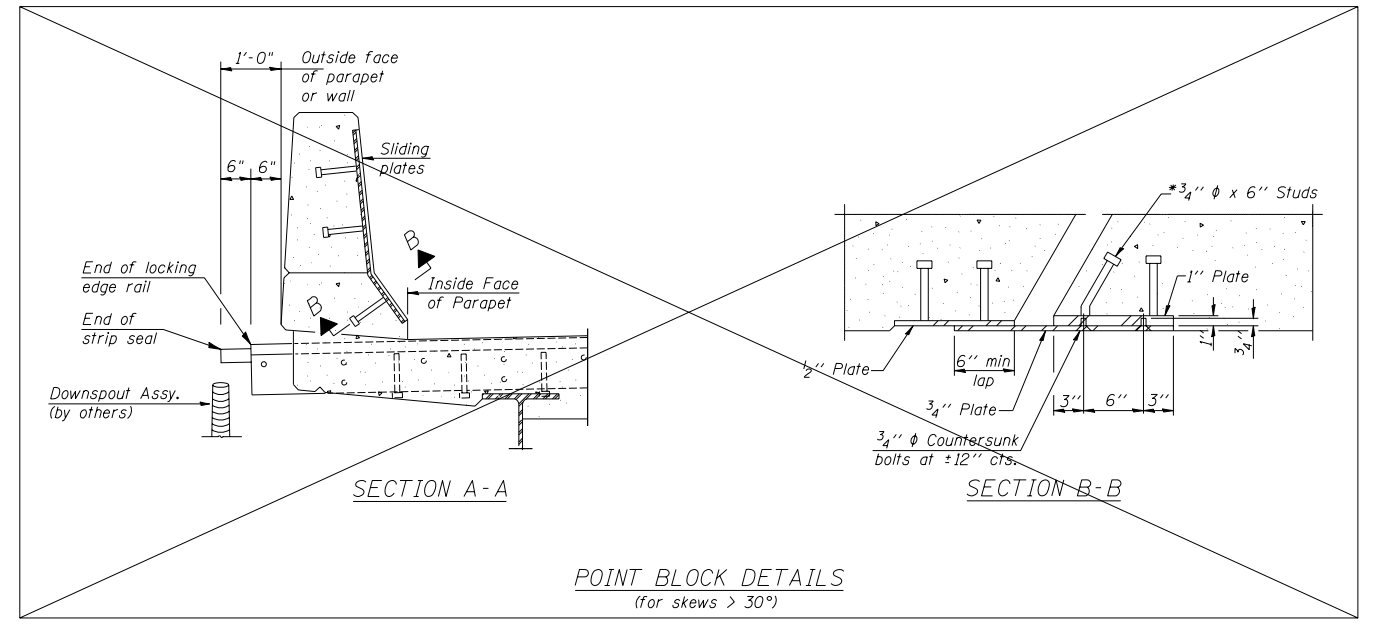


SECTION A-A

Notes:
 Locking edge rails are to be placed 1/4" below the deck elevation through the median. Stop raised median 3" short of deck ends and 3" short of face of abutments.
 See median details for reinforcement required.



PLAN



POINT BLOCK DETAILS (for skews > 30°)

FILE NAME =
 \$FILEL\$

USER NAME = \$USER\$
 PLOT SCALE = \$SCALE\$
 PLOT DATE = \$DATE\$

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

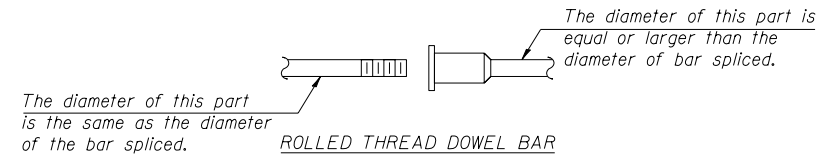
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DISTRICT 5 PREFORMED JOINT STRIP SEAL DETAILS

SCALE: SHEET NO. 9A OF 11A SHEETS STA. TO STA.

DISTRICT 5 DETAIL NO. 52000AAA

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	57-20(1)&57-4,5,6R-3	MCLEAN	160	112
				CONTRACT NO. 70505
ILLINOIS FED. AID PROJECT				



ROLLED THREAD DOWEL BAR



** ONE PIECE

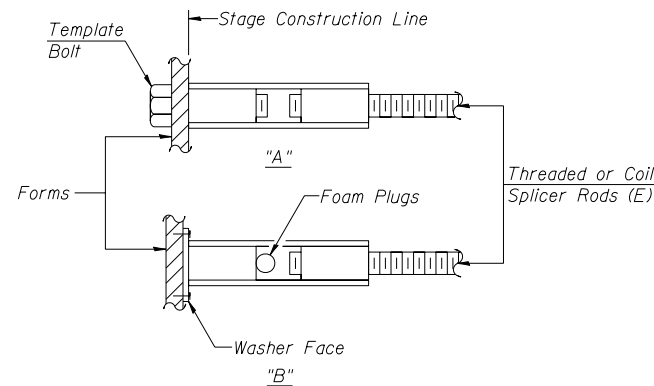
Wire Connector



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

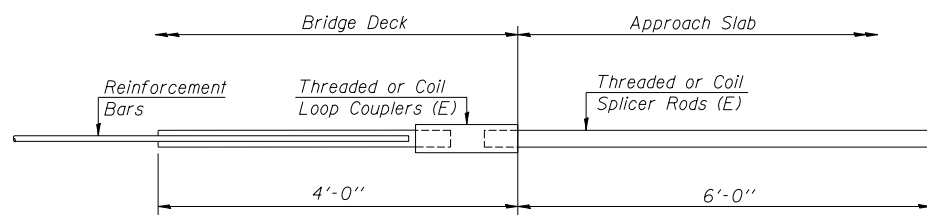
"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.

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:

- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
- ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$

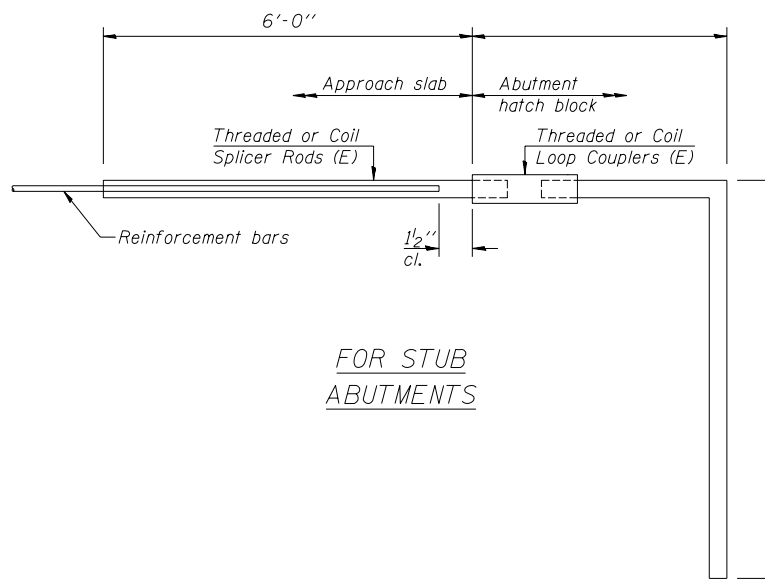
Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-2"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



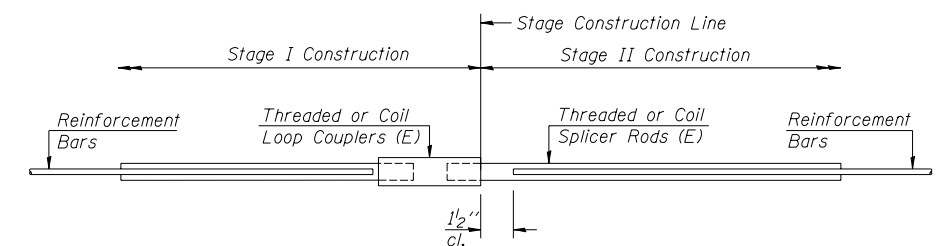
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

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



FOR STUB ABUTMENTS

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



STANDARD

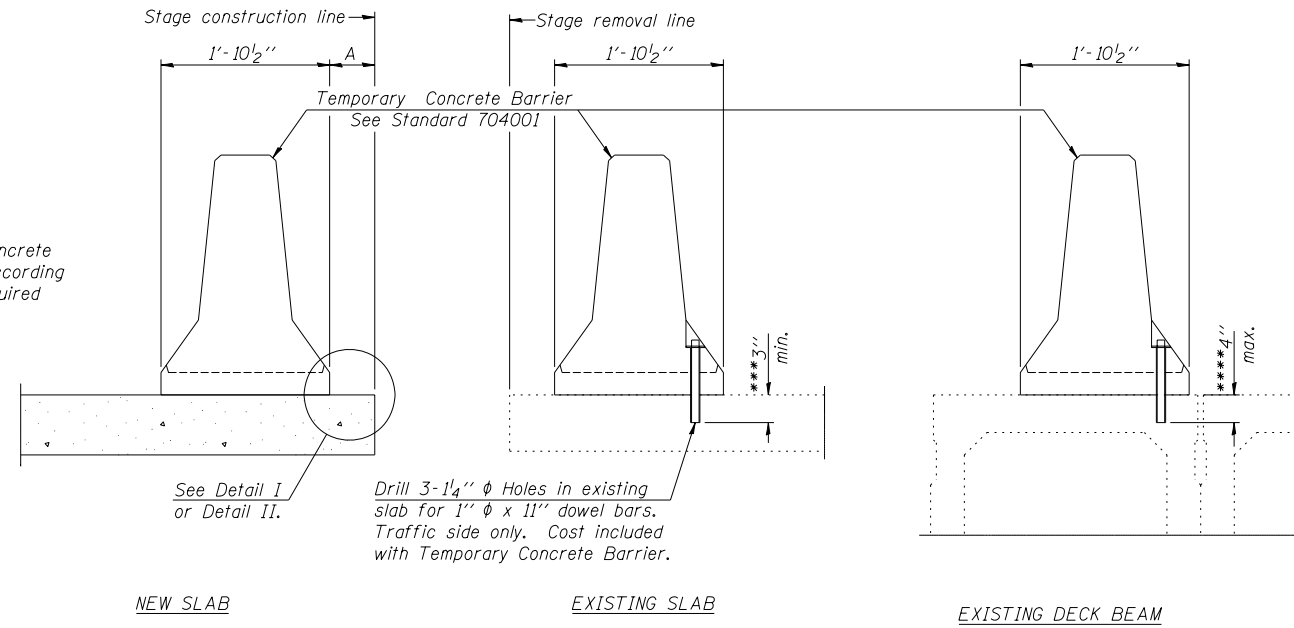
Bar Size	No. Assemblies Required	Location
#5	80	Deck Ends
#6	24	Approach Pav't.

BAR SPLICER ASSEMBLY DETAILS
 STRUCTURE NO. 057-0047 (EB)
 STRUCTURE NO. 057-0048 (WB)

BSD-1

10-1-08

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



See Detail I or Detail II.

Drill 3-1/4" ϕ Holes in existing slab for 1" ϕ x 11" dowel bars. Traffic side only. Cost included with Temporary Concrete Barrier.

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{L} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

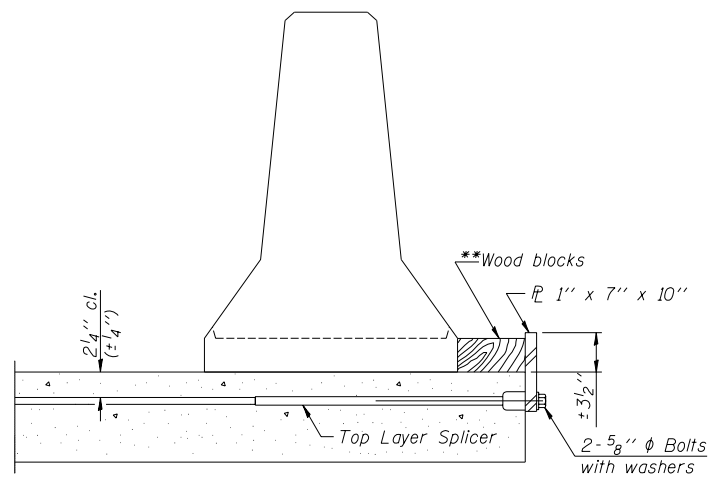
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel \bar{L} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" 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.

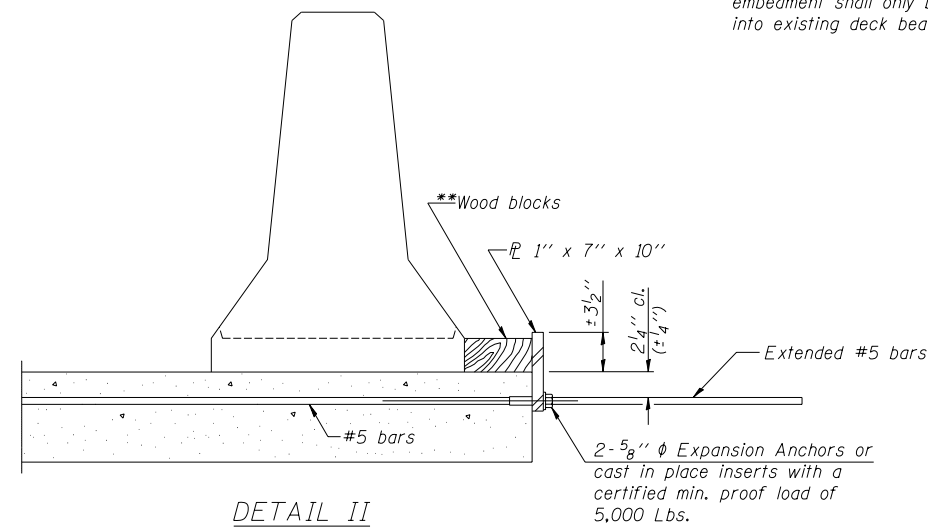
SECTIONS THRU SLAB OR DECK BEAM

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.

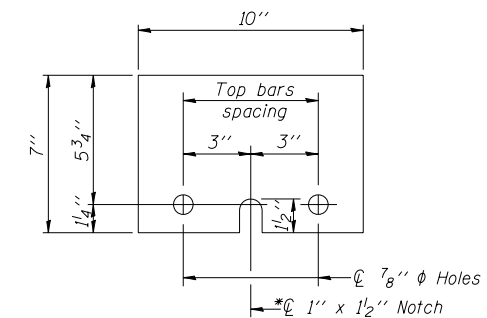


DETAIL I



DETAIL II

**Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.



STEEL RETAINER \bar{L} 1" x 7" x 10"

* Required only with Detail II

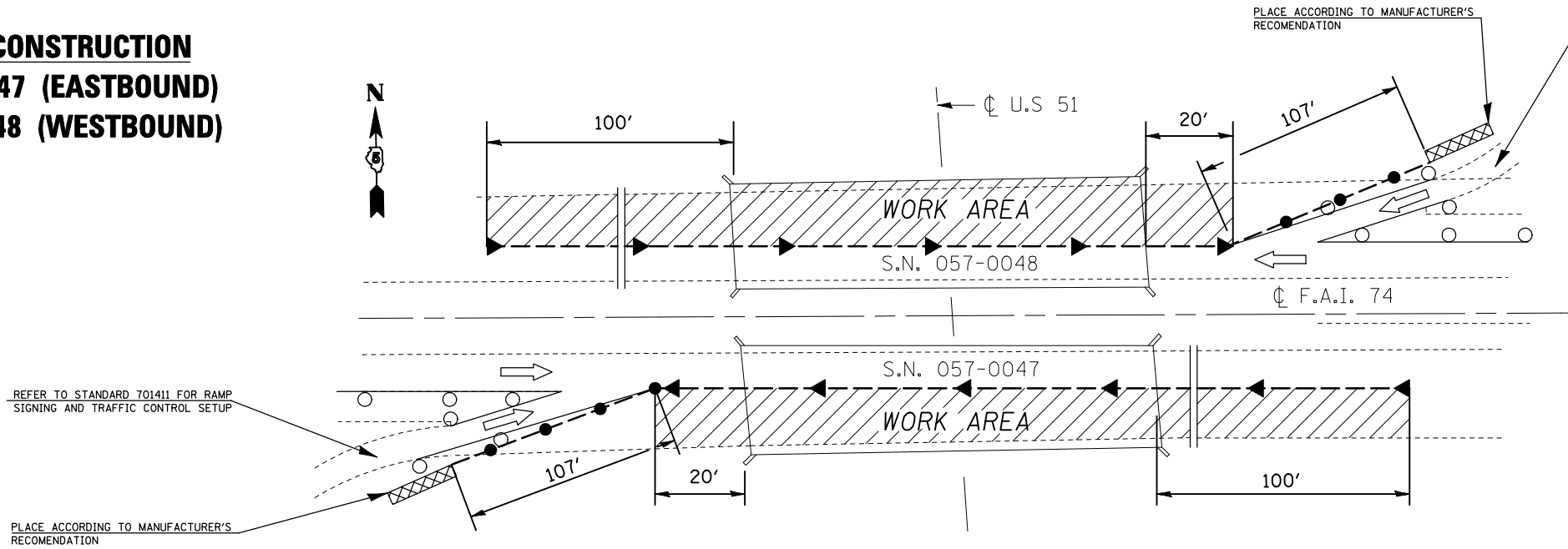
**TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
STRUCTURE NO. 057-0047 (EB)
STRUCTURE NO. 057-0048 (WB)**

R-27

10-1-08

FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION S.N. 057-0047 (EB) & S.N. 057-0048 (WB)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = *SCALE*	DRAWN -	REVISED -			74	57-20(1)&57-4,5,6R-3	MCLEAN	160	114
	PLOT DATE = *DATE*	CHECKED -	REVISED -			CONTRACT NO. 70505				
		DATE -	REVISED -			FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

STAGE I CONSTRUCTION
S.N. 057-0047 (EASTBOUND)
S.N. 057-0048 (WESTBOUND)



REFER TO STANDARD 701411 FOR RAMP SIGNING AND TRAFFIC CONTROL SETUP

70400100 TEMPRARY CONCRETE BARRIER

	STATION	STATION	FOOT
STAGE I CONSTRUCTION			
057-0047	717+43.72	721+55.30	411.8
057-0048	717+74.77	721+79.36	404.6
TOTAL =			816.2

PLAN NOTES:

ALL STAGING DETAILS SET UP IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION 701402.

PRIOR TO BARRIER PLACEMENT TRAFFIC CONTROL SHALL BE SET UP IN ACCORDANCE WITH STANDARD 701406.

TRAFFIC CONTROL DETAILS NOT SHOWN ARE TO CONFORM WITH STANDARD 701400 AND 701402.

MESSAGE BOARD SHALL BE PLACED TWO WEEKS PRIOR TO CONSTRUCTION AND MAY BE ADJUSTED TO MEET FIELD CONDITIONS.

RESIDENT ENGINEER AND TRAFFIC CONTROL SUPERVISOR SHALL PROVIDE APPROPRIATE MESSAGE FOR CMS.

RAISED REFLECTIVE PAVEMENT MARKERS AFFECTED BY THE PROPOSED CONSTRUCTION SHALL BE REPLACED. THIS COST SHALL BE INCIDENTAL TO THE VARIOUS TRAFFIC CONTROL PAY ITEMS.

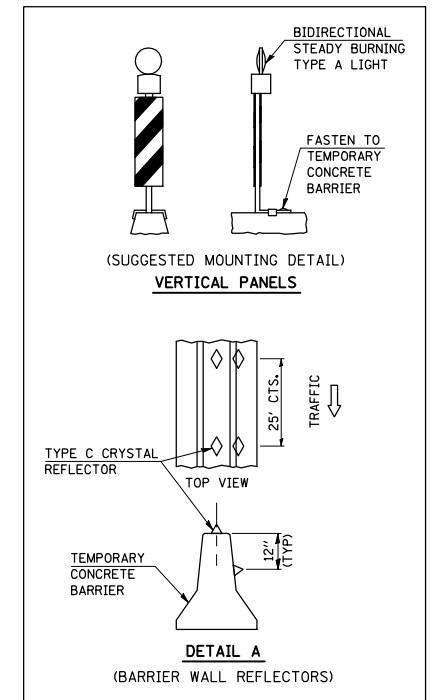
REFLECTORS AND VERTICAL PANELS FOR BARRIER WALL, BRIDGE RAIL AND GUARDRAIL SHALL BE INCLUDED IN THE COST FOR THE APPLICABLE TRAFFIC CONTROL PAY ITEMS.

ATTACH VERTICAL PANELS TO THE LEFT GUARDRAIL AT 25 FOOT CENTERS DURING STAGE II. THIS COST WILL BE INCIDENTAL TO STANDARD 701402.

REFLECTORIZED TEMPORARY MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND ALONG-SIDE THE WORK AREA. THE EDGE LINE SHALL BE YELLOW FOR LEFT LANE CLOSURES. COST FOR THE PLACEMENT AND REMOVAL SHALL BE INCLUDED IN COST FOR APPLICABLE TRAFFIC CONTROL PAY ITEM.

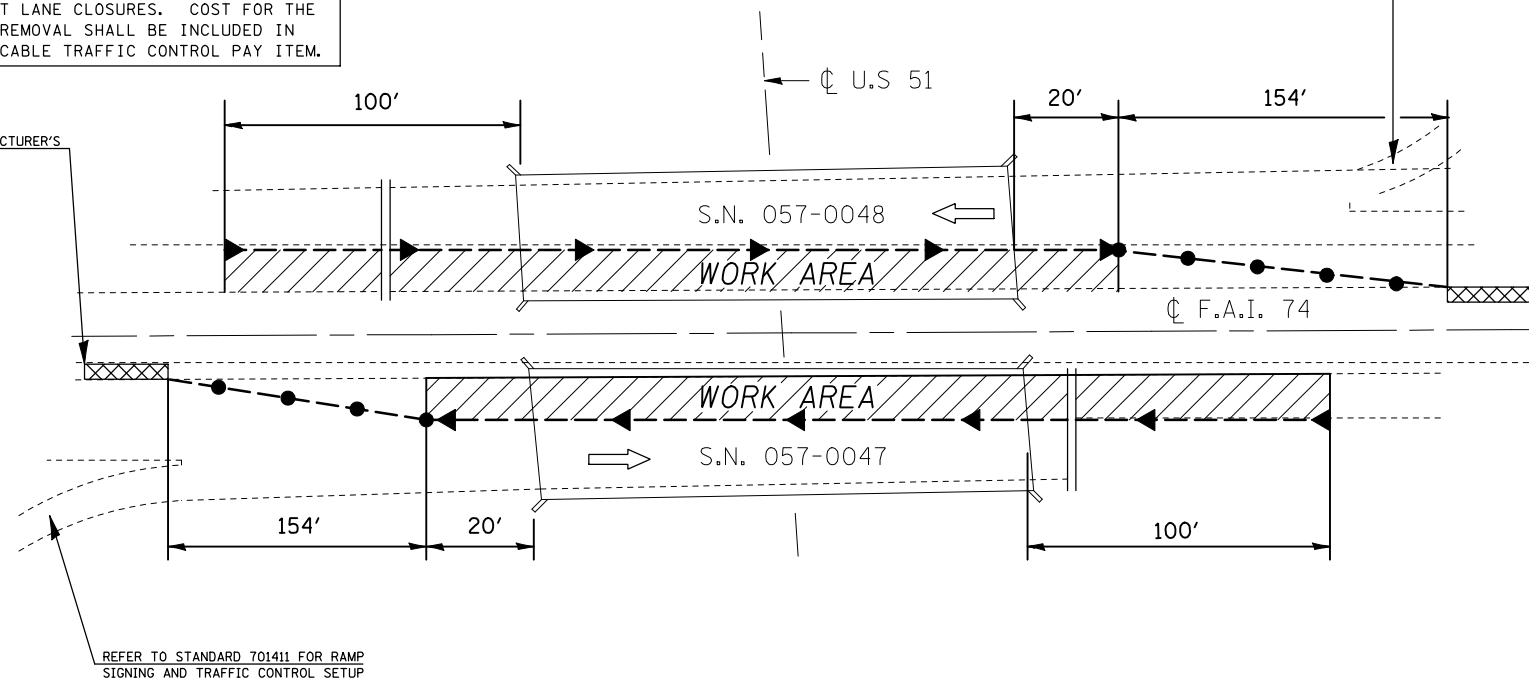
SYMBOLS

- ◀ AMBER MONODIRECTIONAL REFLECTOR 25' CTS
- ◁ CRYSTAL MONODIRECTIONAL REFLECTOR 25' CTS
- TEMPORARY CONCRETE BARRIER
- VERTICAL PANELS WITH STEADY BURNING LIGHTS ALONG TAPER 25' CTS
- ▣ IMPACT ATTENUATOR



STAGE II CONSTRUCTION
S.N. 057-0047 (EASTBOUND)
S.N. 057-0048 (WESTBOUND)

PLACE ACCORDING TO MANUFACTURER'S RECOMMENDATION



REFER TO STANDARD 701411 FOR RAMP SIGNING AND TRAFFIC CONTROL SETUP

PLACE ACCORDING TO MANUFACTURER'S RECOMMENDATION

70400100 TEMPRARY CONCRETE BARRIER

	STATION	STATION	FOOT
STAGE II CONSTRUCTION			
SN 057-0047	716+96.72	717+43.72	47.0
SN 057-0048	721+79.36	722+26.36	47.0
TOTAL =			94.0

70400100 TEMPRARY CONCRETE BARRIER

	STATION	STATION	FOOT
STAGE II CONSTRUCTION			
SN 057-0047	716+96.72	717+43.72	47.0
SN 057-0048	721+79.36	722+26.36	47.0
TOTAL =			94.0

SHEET 1 OF 1

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED -
ct:\pw\work\PWID01\SHERRERJM\dms83233\Brdge Staging Details.dgn		DRAWN - JMS	REVISED -
		CHECKED - JMS	REVISED -
		DATE - 01-26-2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL STAGING
S.N. 057-0047 & S.N. 057-0048

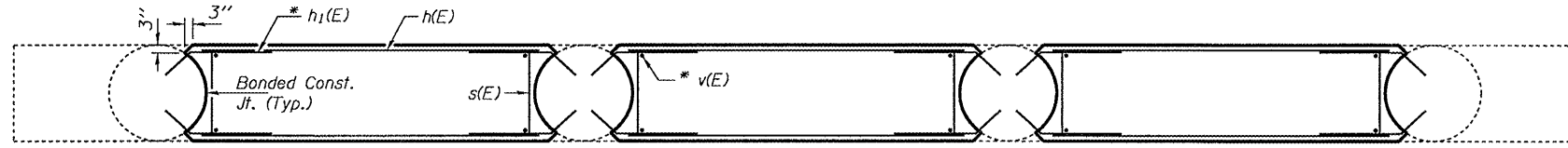
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	57-20(1) & (57-4,5,6)RS-3	MCLEAN	160	115
CONTRACT NO. 70505				
ILLINOIS FED. AID PROJECT				

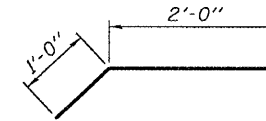
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

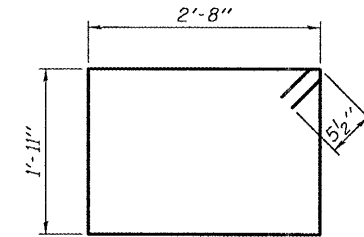
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
Reinforcement bars designated (E) shall be epoxy coated.
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing 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 at the unit price bid for the work.



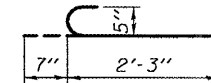
SECTION B-B



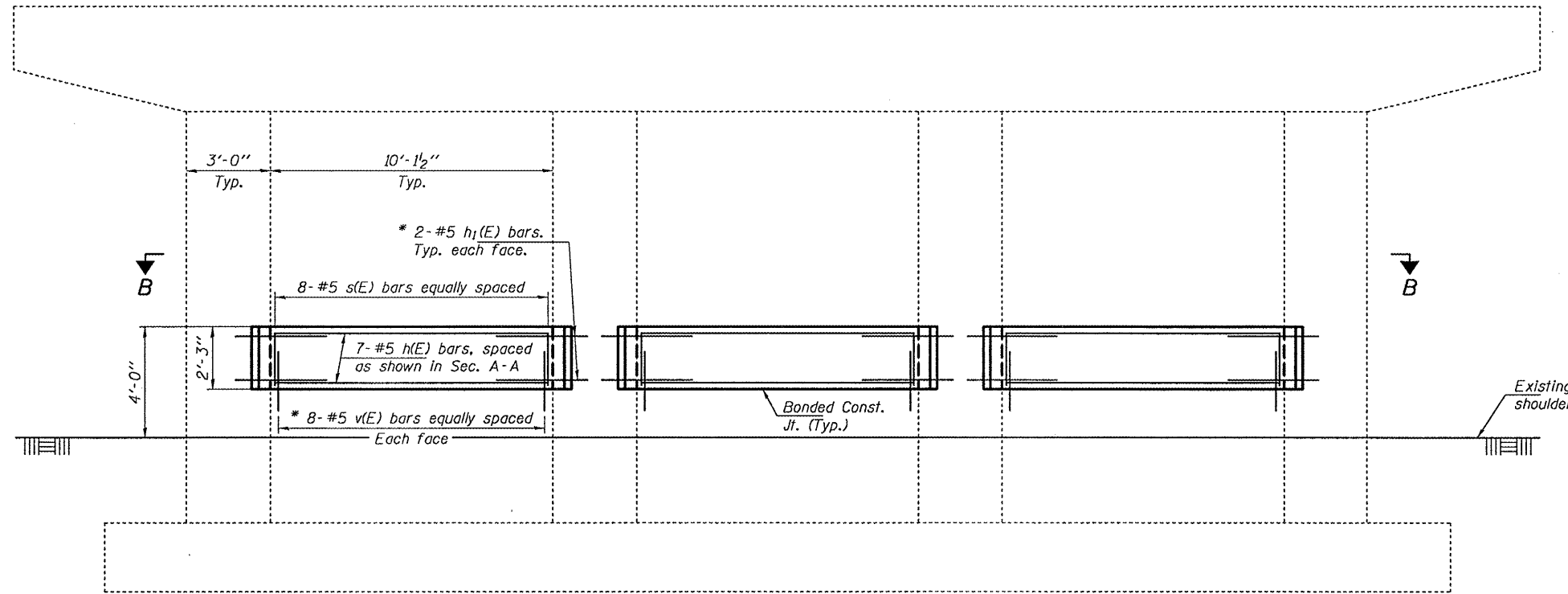
BAR h1(E)



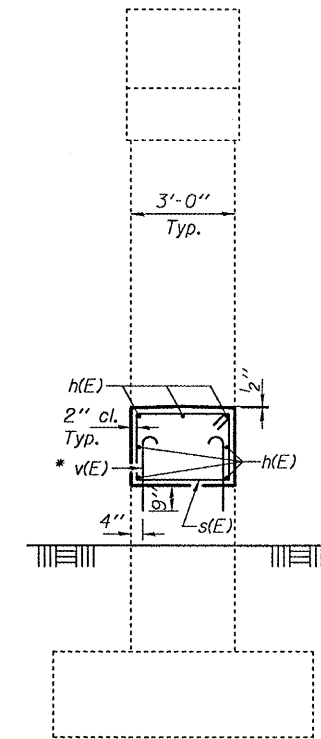
BAR s(E)



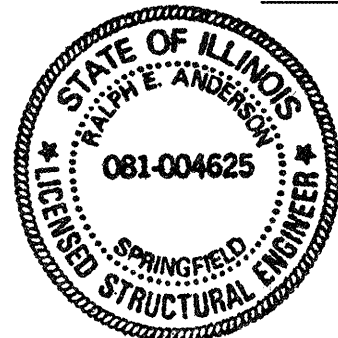
BAR v(E)



ELEVATION



SECTION A-A



EXPIRES 11-30-2010

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	21	#5	9'-10"	—
h1(E)	24	#5	3'-0"	—
s(E)	24	#5	10'-1"	□
v(E)	48	#5	2'-10"	—
Concrete Structures			Cu. Yd.	8.0
Reinforcement Bars, Epoxy Coated			Pound	680

* Epoxy grout h1(E) & v(E) bars in 9" min. holes according to Article 584 of the Standard Specifications.

**CRASH WALL EXTENSION
WEST PIER 4
INTERSTATE SAFETY 2007
SN 057-0047**

DESIGNED *Vic for A. Veliz*
CHECKED *David A. Baliva*
DRAWN *baliva*
CHECKED *VAV JAB*

MARCH 3, 2009
EXAMINED *Ralph E. Anderson*
PASSED *Ralph E. Anderson*
ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES

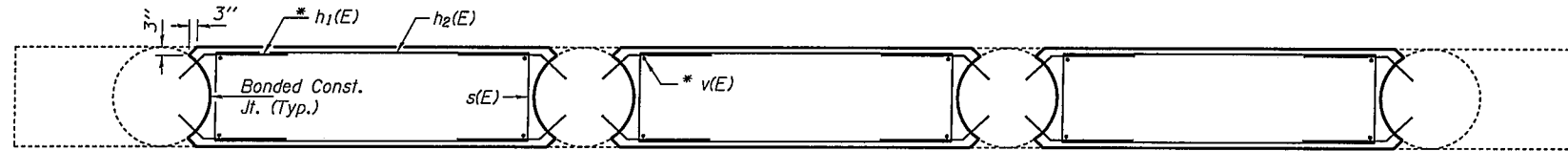
SHEET NO. 1 4 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	57-20(1) & (57-4,5-6)RS-3	MC LEAN	160	116
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 70505					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

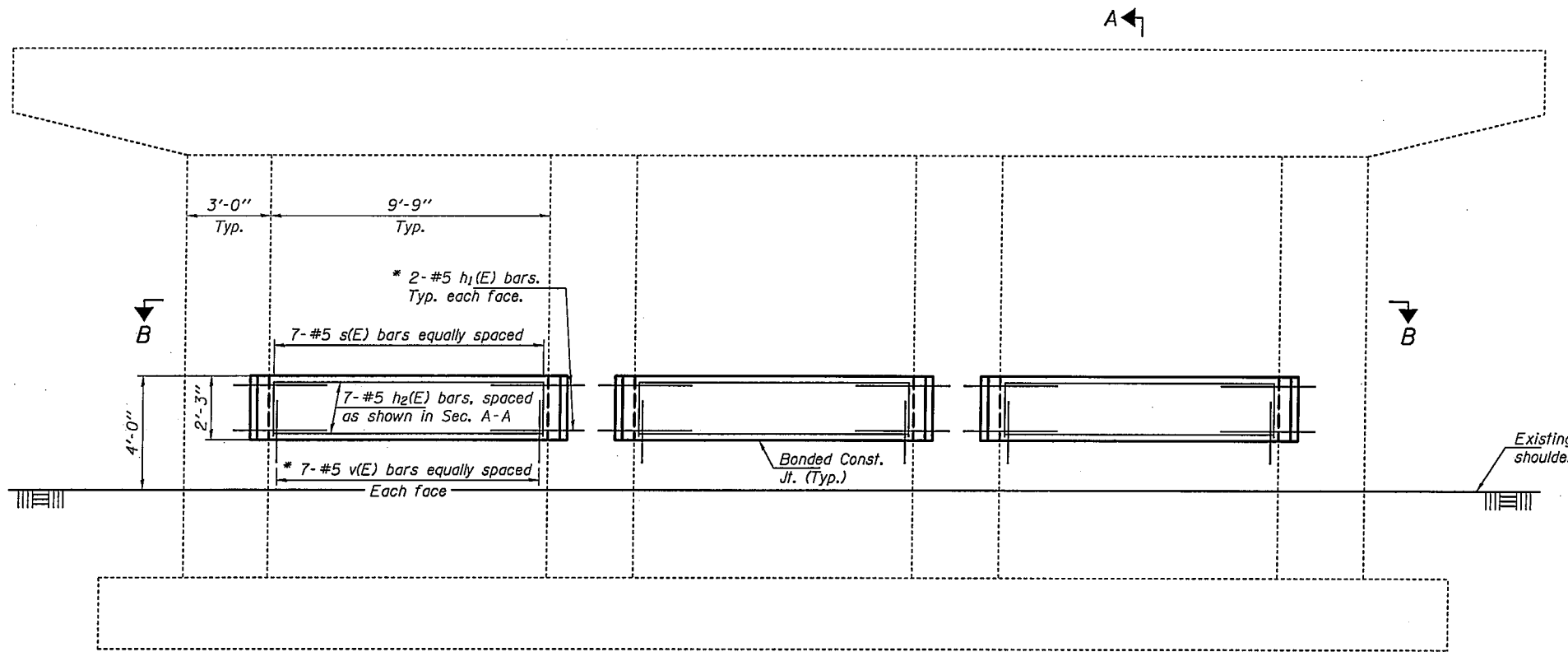
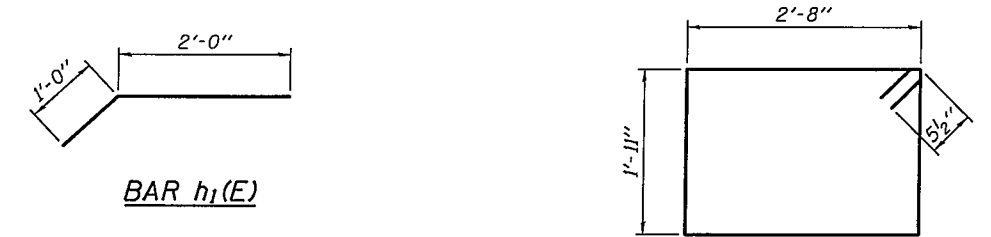
GENERAL NOTES

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

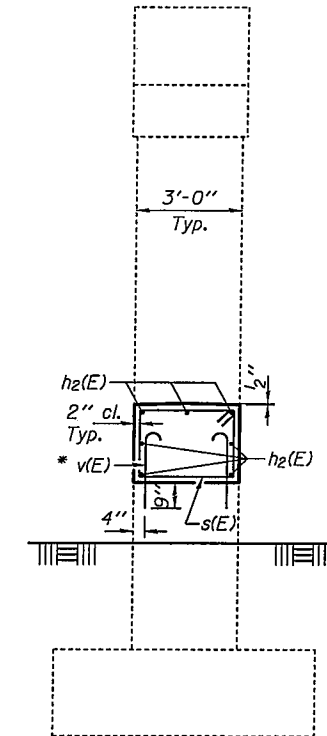
Reinforcement bars designated (E) shall be epoxy coated.
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to 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 at the unit price bid for the work.



SECTION B-B



ELEVATION



SECTION A-A

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₁ (E)	24	#5	3'-0"	—
h ₂ (E)	21	#5	9'-6"	—
s(E)	21	#5	10'-1"	□
v(E)	42	#5	2'-10"	—
Concrete Structures			Cu. Yd.	7.7
Reinforcement Bars, Epoxy Coated			Pound	630

* Epoxy grout h₁(E) & v(E) bars in 9" min. holes according to Article 584 of the Standard Specifications.

**CRASH WALL EXTENSION
EAST PIER 6
INTERSTATE SAFETY 2007
SN 057-0047**

DESIGNED	VHV
CHECKED	DAB
DRAWN	baliva
CHECKED	VHV DAB

MARCH 3, 2009
EXAMINED *Carl Proyer*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

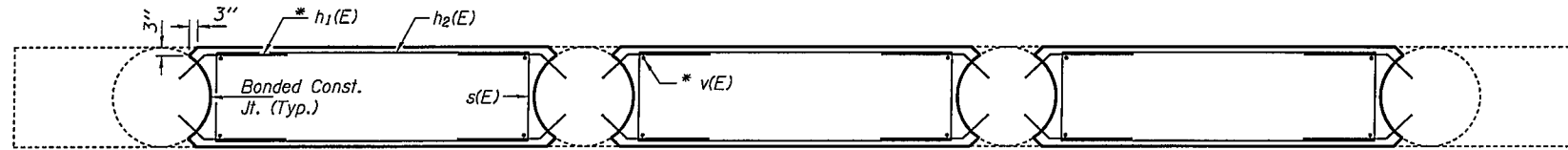
SHEET NO. 2 4 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	57-20(I) & (57-4,5-6)RS-3	MC LEAN	160	117
FED. ROAD DIST. NO.			ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 70505					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

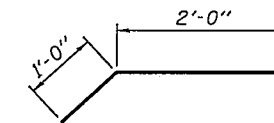
GENERAL NOTES

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

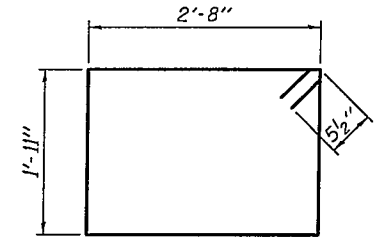
Reinforcement bars designated (E) shall be epoxy coated.
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to 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 at the unit price bid for the work.



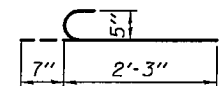
SECTION B-B



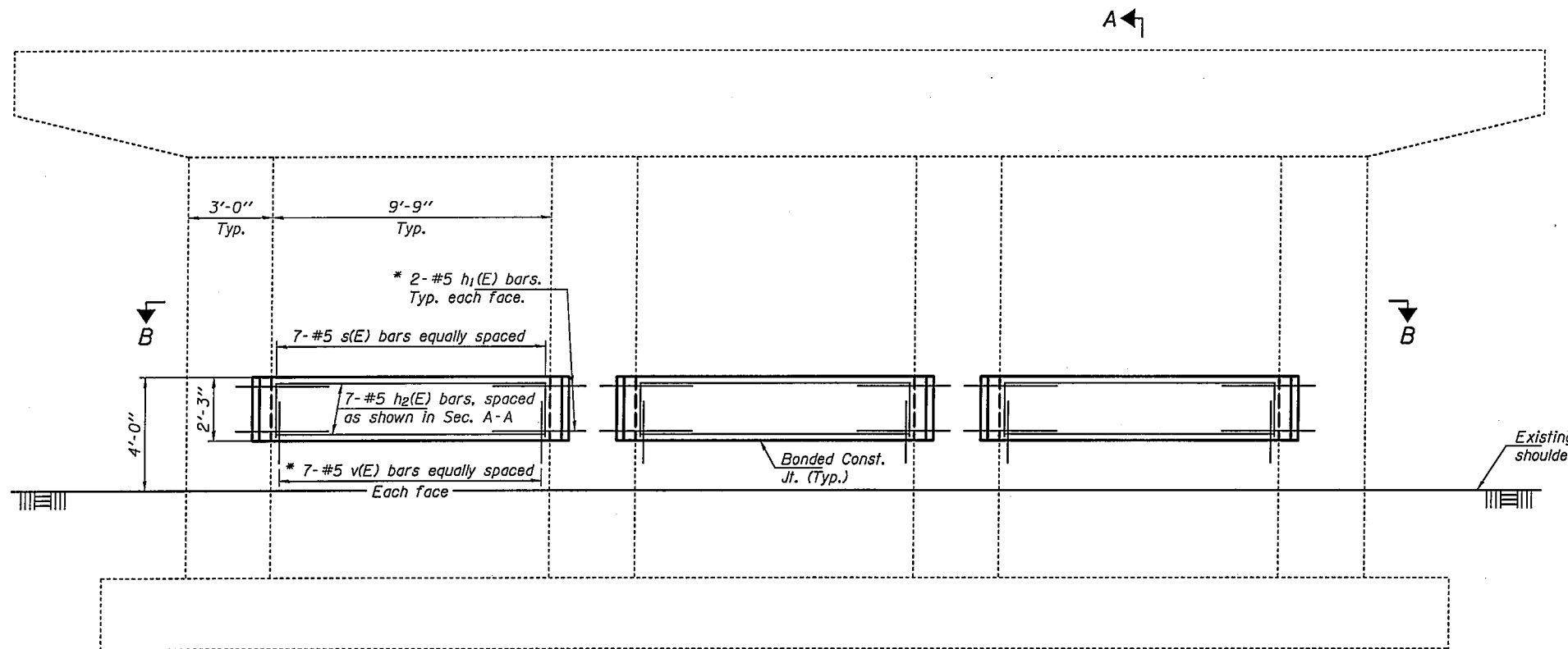
BAR h1(E)



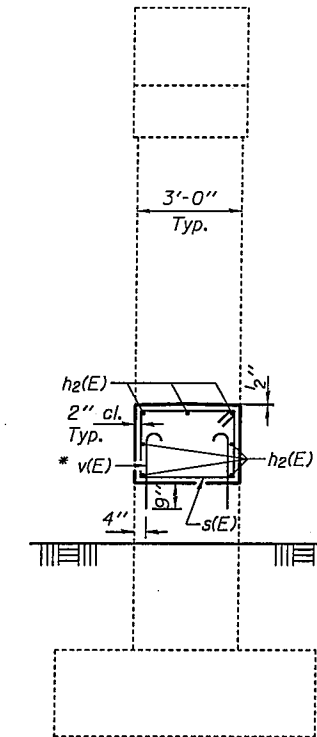
BAR s(E)



BAR v(E)



ELEVATION



SECTION A-A

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	24	#5	3'-0"	—
h2(E)	21	#5	9'-6"	—
s(E)	21	#5	10'-1"	□
v(E)	42	#5	2'-10"	—
Concrete Structures			Cu. Yd.	7.7
Reinforcement Bars, Epoxy Coated			Pound	630

* Epoxy grout h1(E) & v(E) bars in 9" min. holes according to Article 584 of the Standard Specifications.

**CRASH WALL EXTENSION
WEST PIER 1
INTERSTATE SAFETY 2007
SN 057-0048**

DESIGNED	VHV
CHECKED	DAB
DRAWN	balliva
CHECKED	VHV DAB

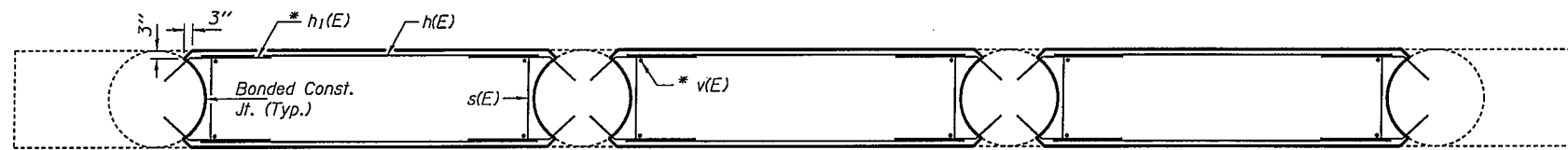
MARCH 3, 2009
EXAMINED *Carl Perry*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 3 4 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	57-20(I) & (57-4,5-6)RS-3	MC LEAN	160	118
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		

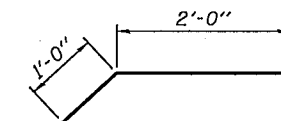
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

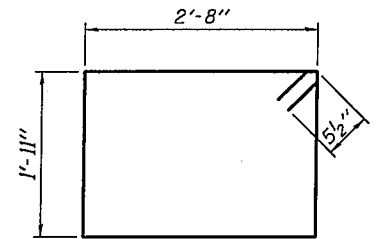
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
Reinforcement bars designated (E) shall be epoxy coated.
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing 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 at the unit price bid for the work.



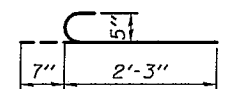
SECTION B-B



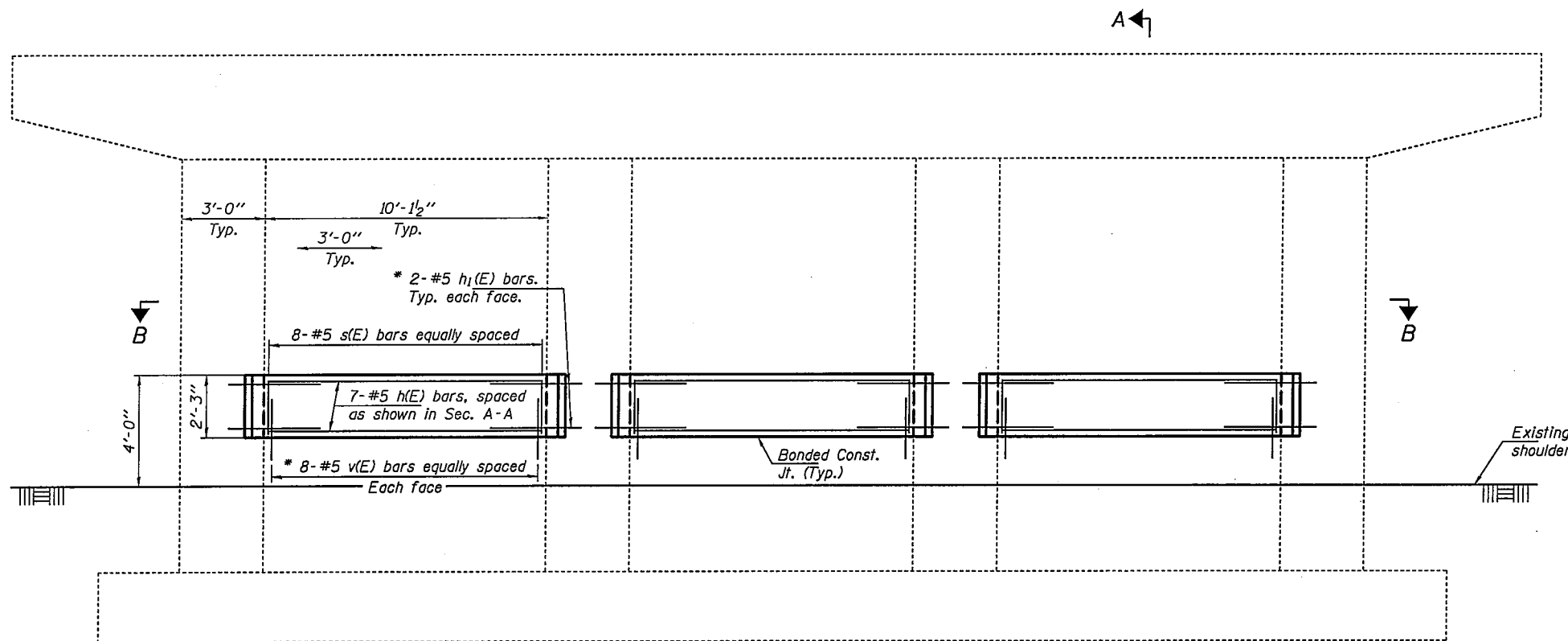
BAR h₁(E)



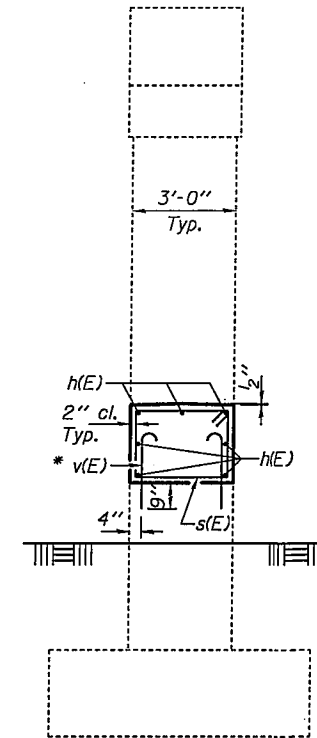
BAR s(E)



BAR v(E)



ELEVATION



SECTION A-A

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	21	#5	9'-10"	—
h ₁ (E)	24	#5	3'-0"	—
s(E)	24	#5	10'-1"	□
v(E)	48	#5	2'-10"	—
Concrete Structures			Cu. Yd.	8.0
Reinforcement Bars, Epoxy Coated			Pound	680

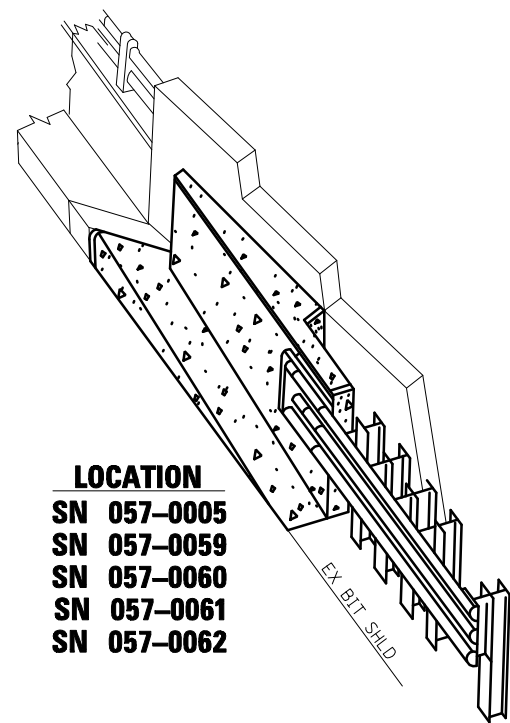
* Epoxy grout h₁(E) & v(E) bars in 9" min. holes according to Article 584 of the Standard Specifications.

**CRASH WALL EXTENSION
EAST PIER 3
INTERSTATE SAFETY 2007
SN 057-0048**

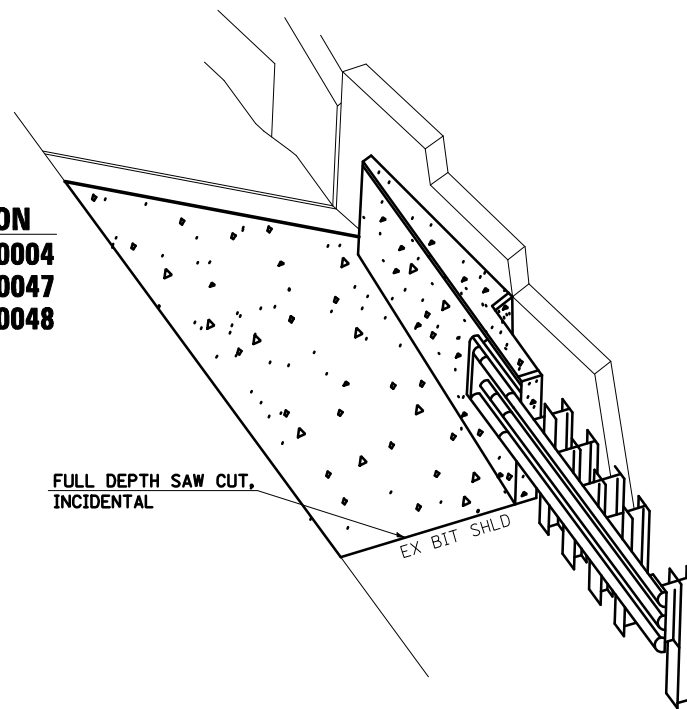
DESIGNED	VHV
CHECKED	DAB
DRAWN	ballva
CHECKED	VHV DAB

MARCH 3, 2009
EXAMINED *Carl Proyer*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

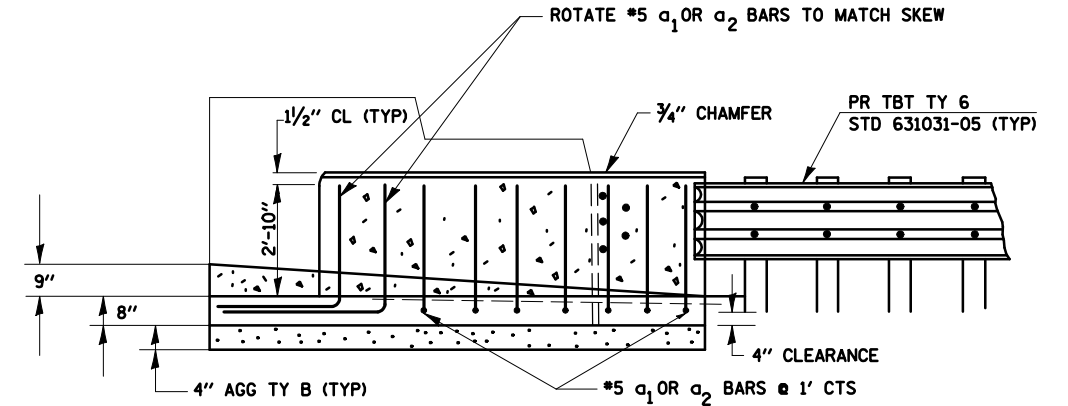
SHEET NO. 4 4 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	57-20(I) & (57-4,5-6)RS-3	MC LEAN	160	119
FED. ROAD DIST. NO.			ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 70505					



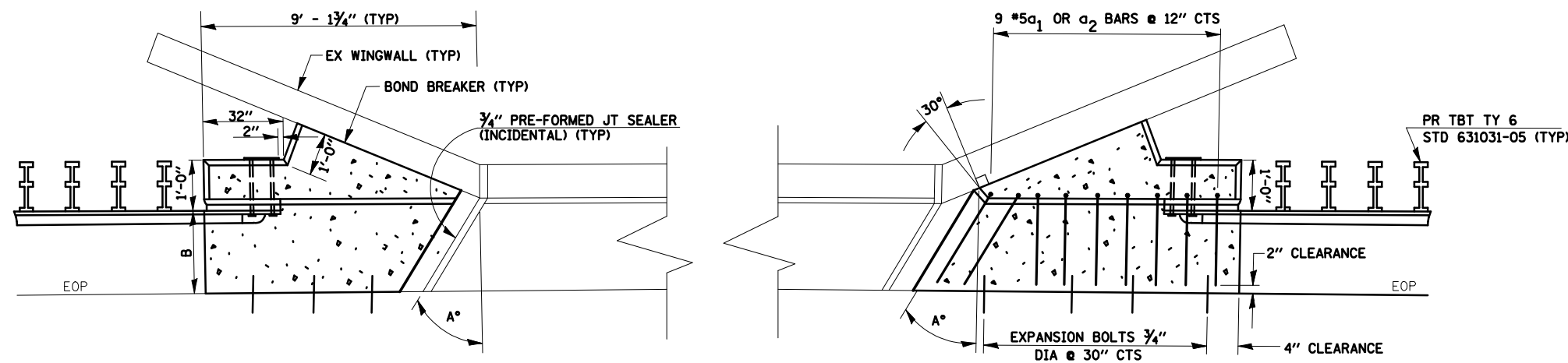
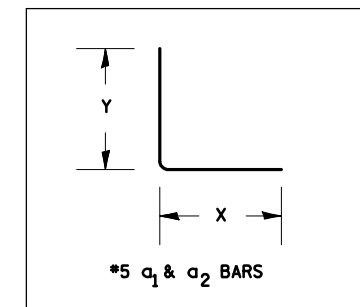
LOCATION
 SN 057-0004
 SN 057-0047
 SN 057-0048



PRESPECTIVE



**ELEVATION
 SHOWING REINFORCEMENT**



PLAN VIEW

TABLE OF DIMENSIONS

LOCATION	(A)	(B)	REINFORCEMENT BARS			
	SKEW ANGLE	BASE WIDTH	BAR	SIZE	DIMENSION X	DIMENSION Y
SN 057-0047	1°-55'-06.83"	4'-3"	a2	#5	4'-3"	2'-10"
SN 057-0048	1°-55'-06.83"	4'-3"	a2	#5	4'-3"	2'-10"
SN 057-0059	4°-01'-50"	1'-10"	a1	#5	1'-10"	2'-10"
SN 057-0062	58°-48'-30"	1'-10"	a1	#5	1'-10"	2'-10"

TOTAL BILL OF MATERIALS

ITEM	UNIT	057-0047	** 057-0048	057-0059	057-0062	TOTAL
BITUMINOUS SHOULDER REMOVAL	SQ YD	18	13	5	5	41
REINFORCEMENT BARS, EPOXY COATED	PDS	270	200	176	176	822
AGGREGATE BASE COURSE TYPE B	TON	5.2	4	2.1	2.1	13.4
EXPANSIONS BOLTS 3/4"	EACH	16	12	16	16	60
CONCRETE SUPERS-STRUCTURE	CU YD	13.3	10	7	7	37.3

NOTE: ** NE QUADRANT OF SN 057-0048 IS COMPLETE, NO WORK NEEDED IN THIS QUADRANT.

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED -
ct:\pw\work\PWID01\SHERERJM\dms83233\70605details.dgn		DRAWN - JMS	REVISED -
PLOT SCALE = 100.0000' / IN.		CHECKED -	REVISED -
PLOT DATE = 1/29/2009		DATE - 6/03/2008	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

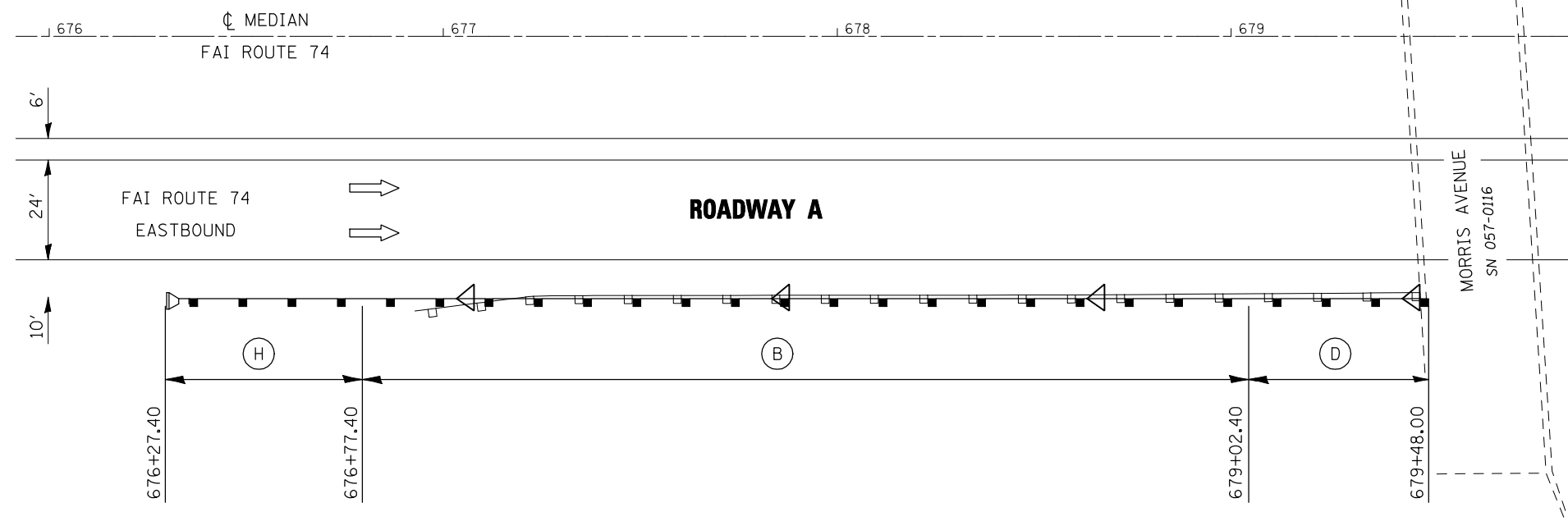
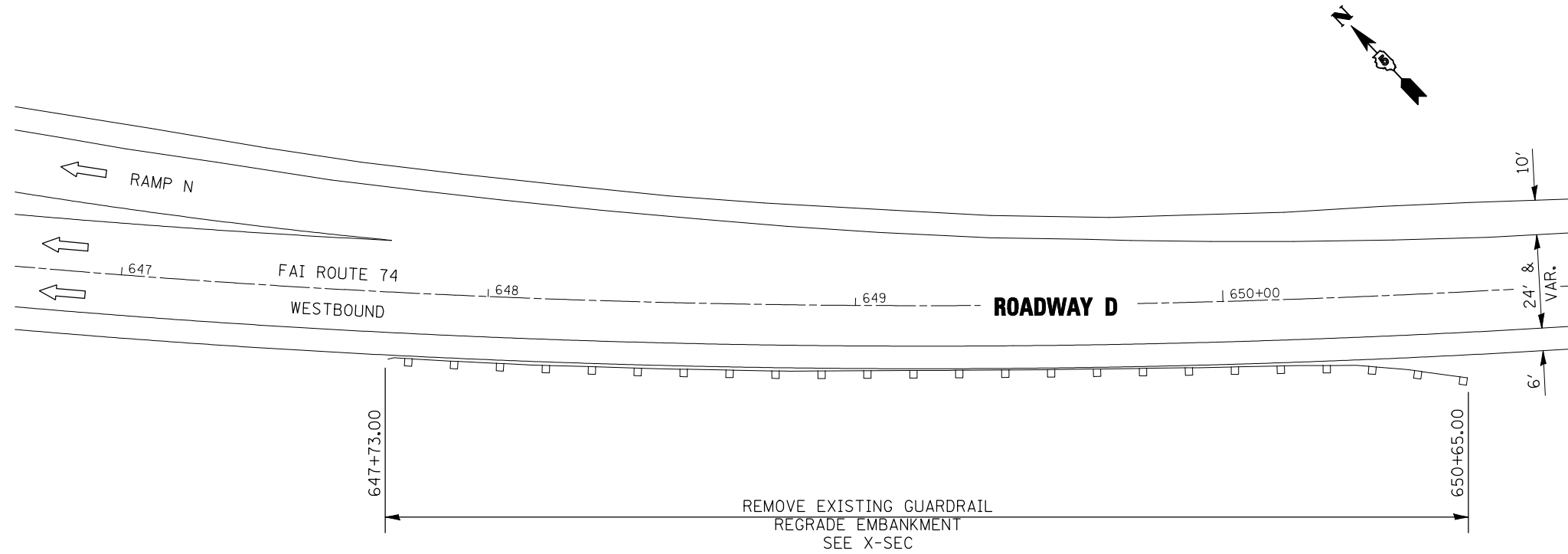
**DETAIL FOR TYPE 6 TERMINAL ATTACHMENT
 TO PARAPET WALL**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	57-20(1)&(57-4,5,6)RS-3	MCLEAN	160	120
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70505	

DETAIL FOR GUARDRAIL LOCATIONS

NOT TO SCALE



- (B) STEEL PLATE BEAM GUARDRAIL, TYPE A
- (D) TRAFFIC BARRIER TERMINAL, TYPE 6
- (E) TRAFFIC BARRIER TERMINAL, TYPE 2
- (H) TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT



DETAIL NOTES

Drawings are not to scale.

Engineer shall verify all existing guardrail quantities in the field prior to beginning work.

All guardrail work shown in the details shall conform to various specifications, details, standards and specifications.

Shoulder Widening for Type 1 (Special) Terminals shall be constructed prior to construction of new guardrail. See Standard 630301-04 for Details.

Shoulder Widening shall be seeded with Class 2A and Class 7 Seed after completion.

No rock, stones, millings, or broken concrete shall be permitted within a vertical distance of 12" from the surface of the finished grade of the shoulder widening.

78200410 GUARDRAIL MARKERS = 4.0 EACH

- * GUARDRAIL MARKERS
- ◁ MONODIRECTIONAL SILVER
- ◀ MONODIRECTIONAL AMBER

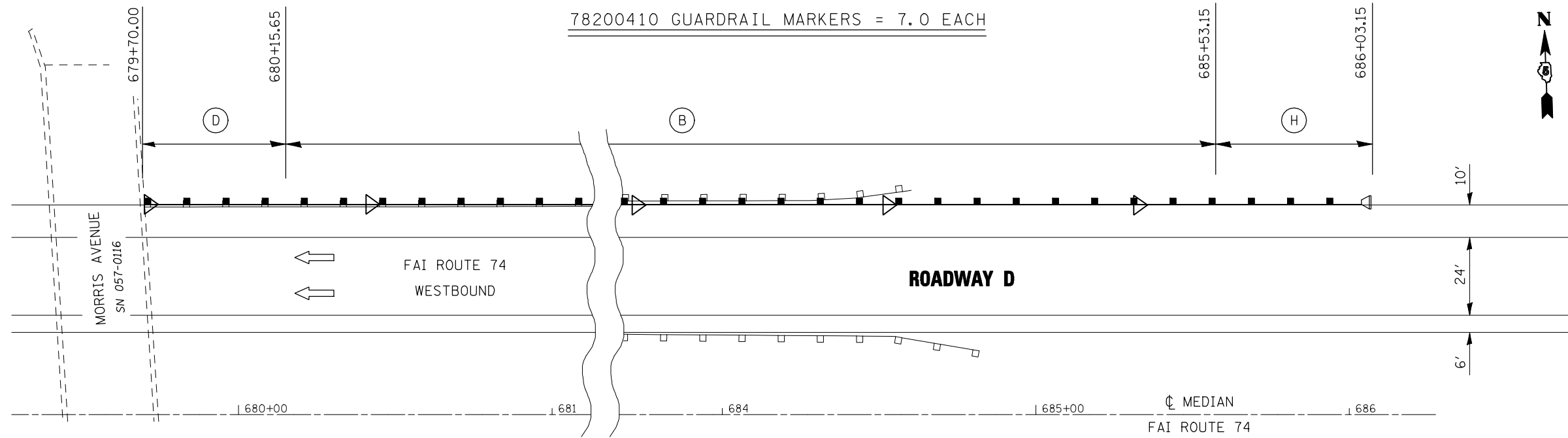
* SEE STD(S): 635006-02
635011-01

SHEET 1 OF 12

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAIL FOR GUARDRAIL LOCATIONS			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\PWIDOT\SHERERJM\dms83233\70505guardrail.dgn		DRAWN - JRP	REVISED - ---		74	57-20(1) & (57-4,5,6)RS-3	MCLEAN	160	121			
PLOT SCALE = 40.0000' / IN.		CHECKED - JMS	REVISED - ---		SCALE: NONE SHEET NO. 1 OF 12 SHEETS STA. _____ TO STA. _____			CONTRACT NO. 70505				
PLOT DATE = 1/29/2009		DATE - 11-07-08	REVISED - ---		FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT							

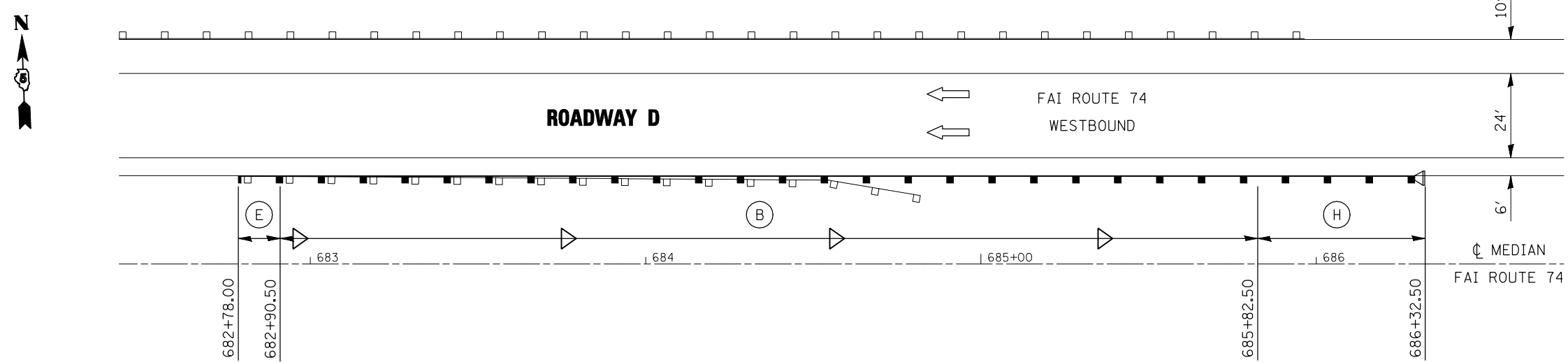
DETAIL FOR GUARDRAIL LOCATIONS

NOT TO SCALE



78200410 GUARDRAIL MARKERS = 7.0 EACH

- (B) STEEL PLATE BEAM GUARDRAIL, TYPE A
- (D) TRAFFIC BARRIER TERMINAL, TYPE 6
- (E) TRAFFIC BARRIER TERMINAL, TYPE 2
- (H) TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT



78200410 GUARDRAIL MARKERS = 4.0 EACH

- * GUARDRAIL MARKERS
- ◁ MONODIRECTIONAL SILVER
- ◄ MONODIRECTIONAL AMBER

* SEE STD(S): 635006-02
635011-01

DETAIL NOTES

Drawings are not to scale.

Engineer shall verify all existing guardrail quantities in the field prior to beginning work.

All guardrail work shown in the details shall conform to various specifications, details, standards and specifications.

Shoulder Widening for Type 1 (Special) Terminals shall be constructed prior to construction of new guardrail. See Standard 630301-04 for Details.

Shoulder Widening shall be seeded with Class 2A and Class 7 Seed after completion.

No rock, stones, millings, or broken concrete shall be permitted within a vertical distance of 12" from the surface of the finished grade of the shoulder widening.

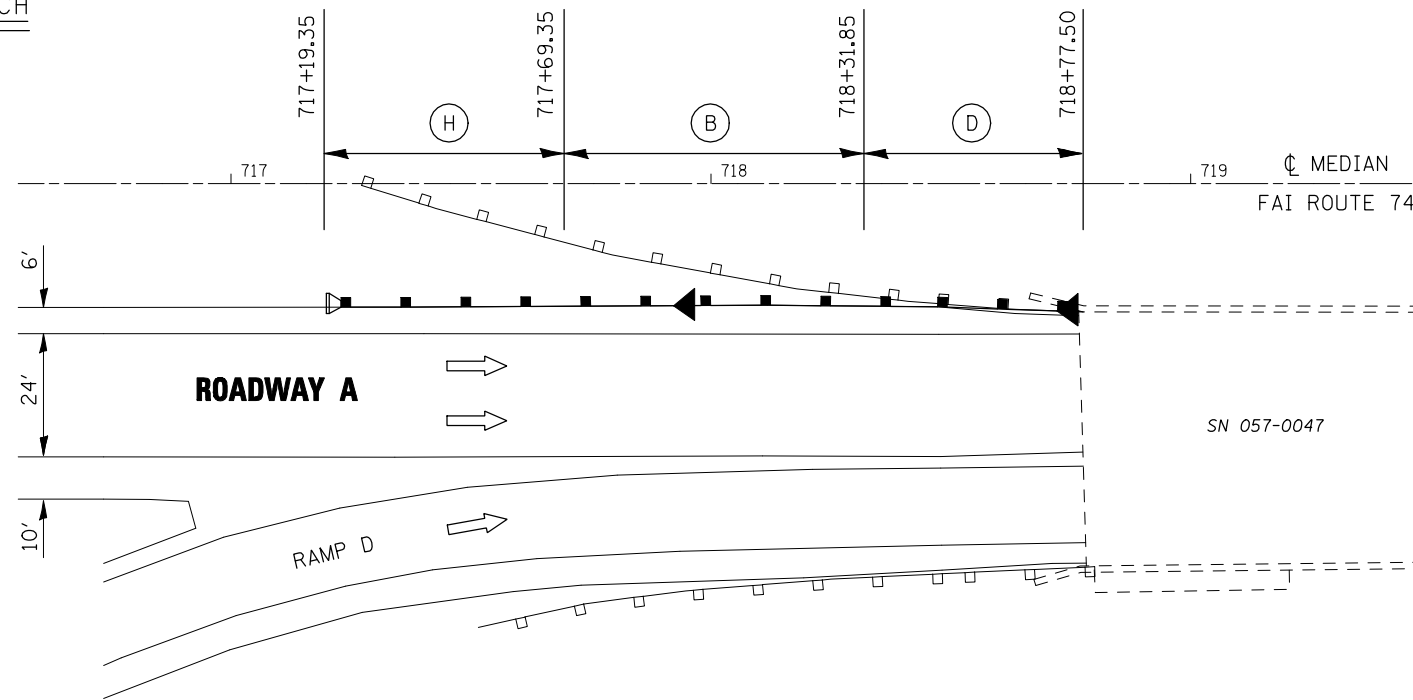
SHEET 2 OF 12

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAIL FOR GUARDRAIL LOCATIONS			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\PWIDOT\SHERRERJM\dms83233\70505guardrail.dgn		DRAWN - JRP	REVISED - ---		74	57-20(1) & (57-4,5,6)RS-3	MCLEAN	160	122			
PLOT SCALE = 40.0000' / IN.		CHECKED - JMS	REVISED - ---		SCALE: NONE SHEET NO. 2 OF 12 SHEETS STA. _____ TO STA. _____			CONTRACT NO. 70505				
PLOT DATE = 1/29/2009		DATE - 11-07-08	REVISED - ---		FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT							

DETAIL FOR GUARDRAIL LOCATIONS

NOT TO SCALE

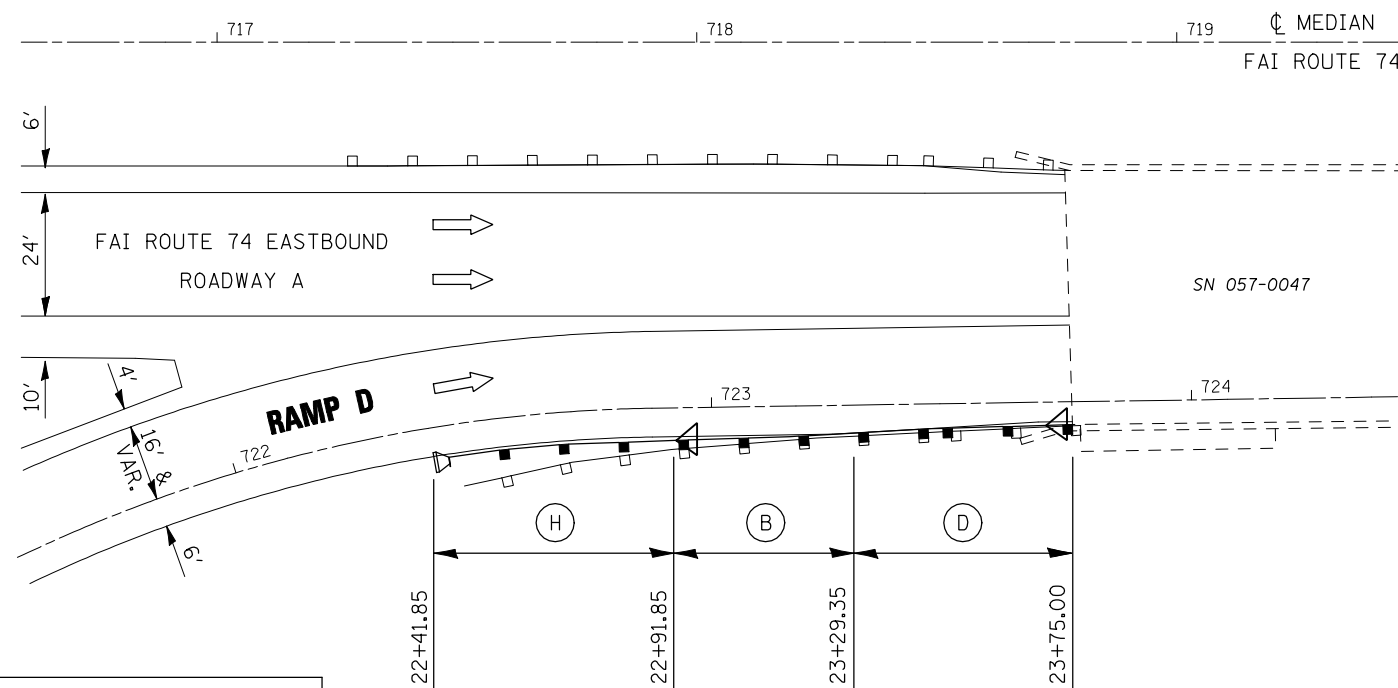
78200410 GUARDRAIL MARKERS = 2.0 EACH



SEE DETAIL FOR TYPE 6 TERMINAL ATTACHMENT TO PARAPET WALL

- (B) STEEL PLATE BEAM GUARDRAIL, TYPE A
- (D) TRAFFIC BARRIER TERMINAL, TYPE 6
- (E) TRAFFIC BARRIER TERMINAL, TYPE 2
- (H) TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT

78200410 GUARDRAIL MARKERS = 2.0 EACH



SEE DETAIL FOR TYPE 6 TERMINAL ATTACHMENT TO PARAPET WALL

- * GUARDRAIL MARKERS
- ◁ MONODIRECTIONAL SILVER
- ◀ MONODIRECTIONAL AMBER
- * SEE STD(S): 635006-02
635011-01

DETAIL NOTES

Drawings are not to scale.

Engineer shall verify all existing guardrail quantities in the field prior to beginning work.

All guardrail work shown in the details shall conform to various specifications, details, standards and specifications.

Shoulder Widening for Type 1 (Special) Terminals shall be constructed prior to construction of new guardrail. See Standard 630301-04 for Details.

Shoulder Widening shall be seeded with Class 2A and Class 7 Seed after completion.

No rock, stones, millings, or broken concrete shall be permitted within a vertical distance of 12" from the surface of the finished grade of the shoulder widening.

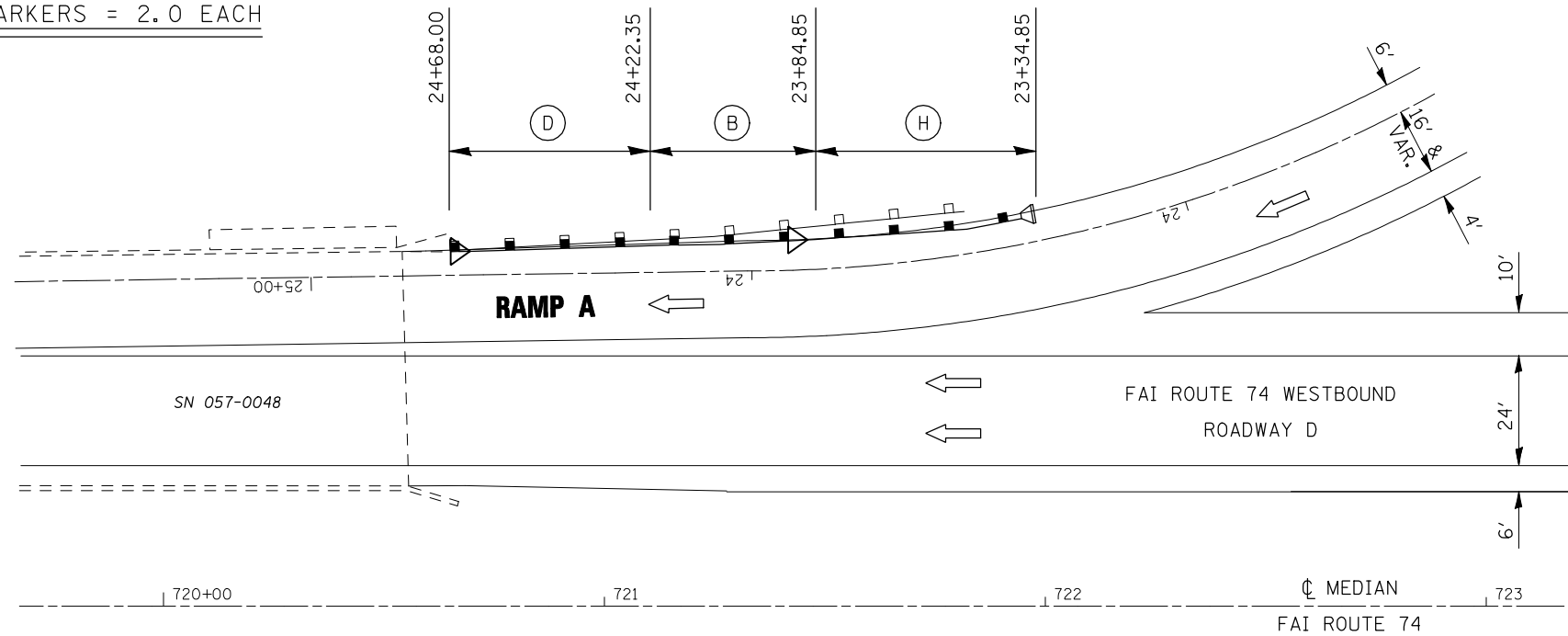
SHEET 3 OF 12

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAIL FOR GUARDRAIL LOCATIONS	F.A.I. RTE. =	SECTION =	COUNTY =	TOTAL SHEETS =	SHEET NO. =	
ct:\pwork\PWIDOT\SHERERJM\dms83233\78200410guardrail.dgn		DRAWN - JRP	REVISED - ---			74	57-20(1) & (57-4,5,6)RS-3	MCLEAN	160	123	
PLOT SCALE = 40.0000' / IN.		CHECKED - JMS	REVISED - ---			CONTRACT NO. 70505					
PLOT DATE = 1/29/2009		DATE - 11-07-08	REVISED - ---			FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					

DETAIL FOR GUARDRAIL LOCATIONS

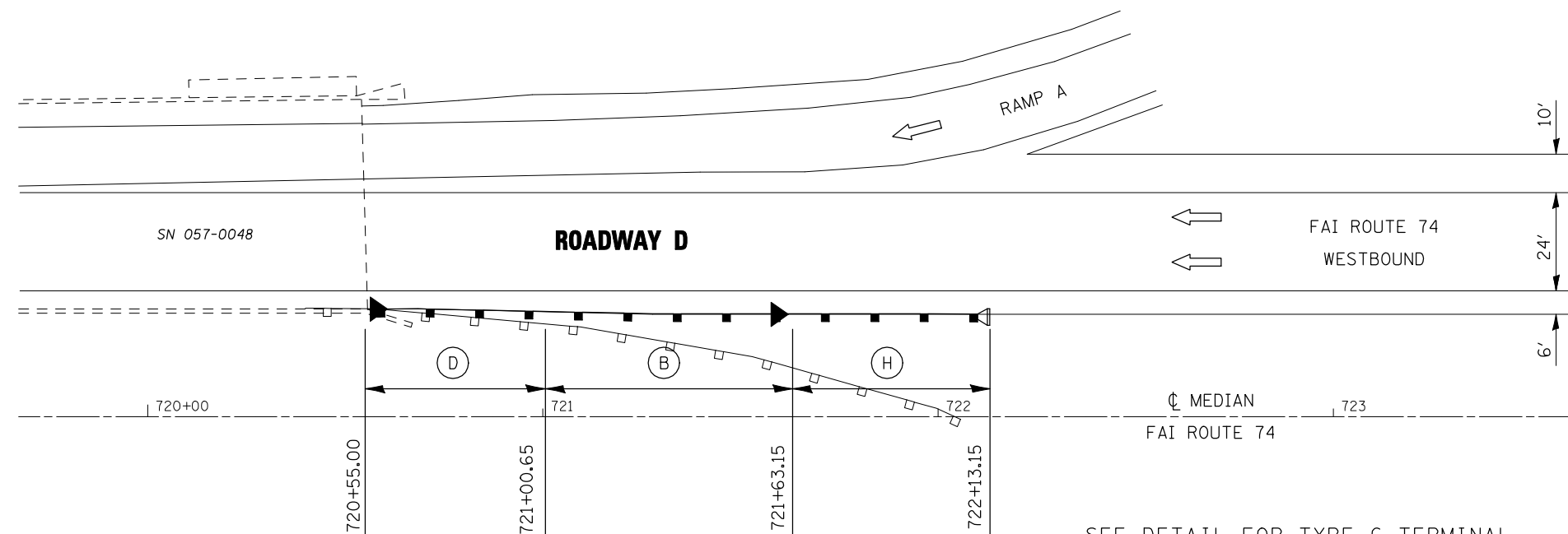
NOT TO SCALE

78200410 GUARDRAIL MARKERS = 2.0 EACH



SEE DETAIL FOR TYPE 6 TERMINAL ATTACHMENT TO PARAPET WALL

- (B) STEEL PLATE BEAM GUARDRAIL, TYPE A
- (D) TRAFFIC BARRIER TERMINAL, TYPE 6
- (E) TRAFFIC BARRIER TERMINAL, TYPE 2
- (H) TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT



SEE DETAIL FOR TYPE 6 TERMINAL ATTACHMENT TO PARAPET WALL

- * GUARDRAIL MARKERS
- ◁ MONODIRECTIONAL SILVER
- ◀ MONODIRECTIONAL AMBER
- * SEE STD(S): 635006-02
635011-01

DETAIL NOTES

Drawings are not to scale.

Engineer shall verify all existing guardrail quantities in the field prior to beginning work.

All guardrail work shown in the details shall conform to various specifications, details, standards and specifications.

Shoulder Widening for Type 1 (Special) Terminals shall be constructed prior to construction of new guardrail. See Standard 630301-04 for Details.

Shoulder Widening shall be seeded with Class 2A and Class 7 Seed after completion.

No rock, stones, millings, or broken concrete shall be permitted within a vertical distance of 12" from the surface of the finished grade of the shoulder widening.

78200410 GUARDRAIL MARKERS = 2.0 EACH

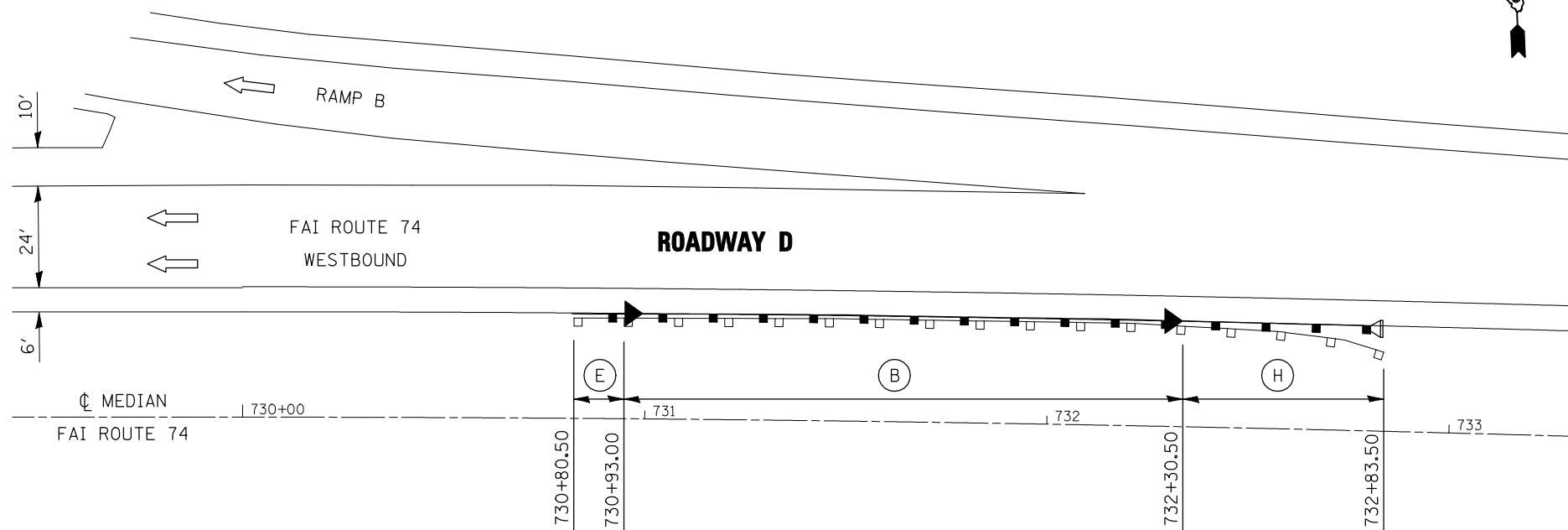
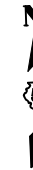
SHEET 4 OF 12

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAIL FOR GUARDRAIL LOCATIONS			F.A.I. RTE. = 74	SECTION = 57-20(1) & (57-4,5,6)RS-3	COUNTY = MCLEAN	TOTAL SHEETS = 160	SHEET NO. = 124
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		CHECKED - JMS	REVISED - ---		FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT							
		DATE - 11-07-08	REVISED - ---									

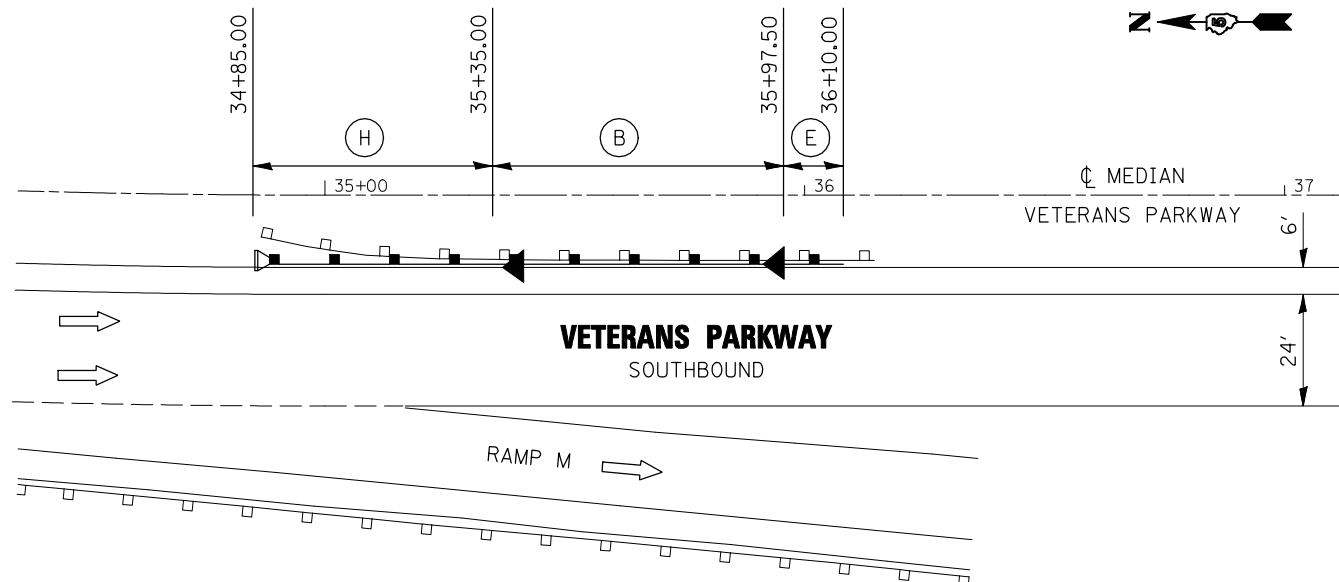
DETAIL FOR GUARDRAIL LOCATIONS

NOT TO SCALE

78200410 GUARDRAIL MARKERS = 2.0 EACH



- (B) STEEL PLATE BEAM GUARDRAIL, TYPE A
- (D) TRAFFIC BARRIER TERMINAL, TYPE 6
- (E) TRAFFIC BARRIER TERMINAL, TYPE 2
- (H) TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT



- * GUARDRAIL MARKERS
- ◁ MONODIRECTIONAL SILVER
- ◀ MONODIRECTIONAL AMBER
- * SEE STD(S): 635006-02
635011-01

DETAIL NOTES

Drawings are not to scale.

Engineer shall verify all existing guardrail quantities in the field prior to beginning work.

All guardrail work shown in the details shall conform to various specifications, details, standards and specifications.

Shoulder Widening for Type 1 (Special) Terminals shall be constructed prior to construction of new guardrail. See Standard 630301-04 for Details.

Shoulder Widening shall be seeded with Class 2A and Class 7 Seed after completion.

No rock, stones, millings, or broken concrete shall be permitted within a vertical distance of 12" from the surface of the finished grade of the shoulder widening.

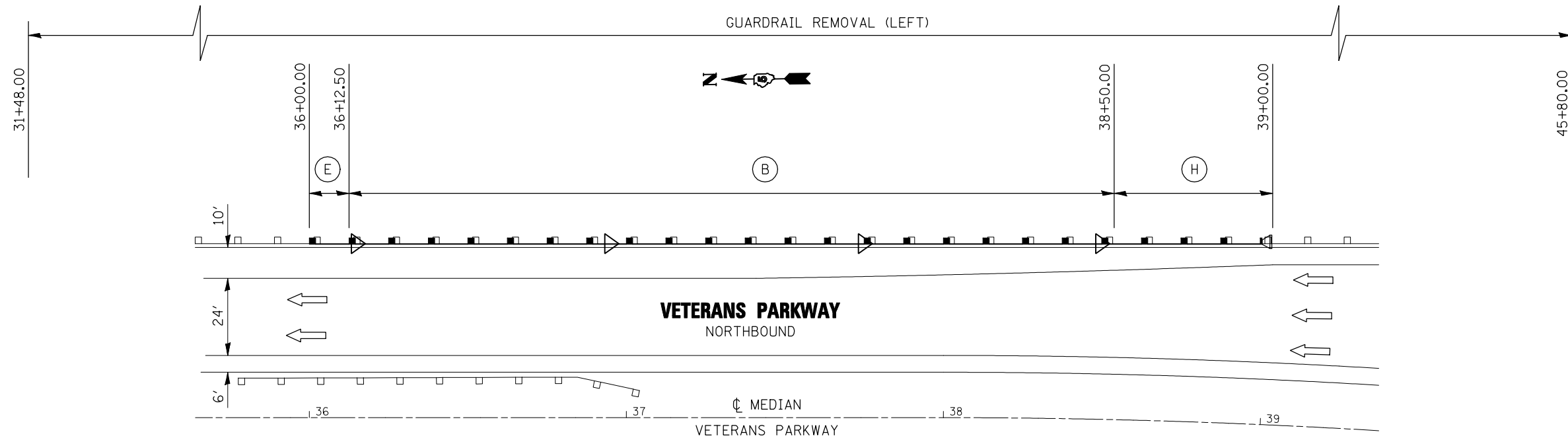
78200410 GUARDRAIL MARKERS = 2.0 EACH

SHEET 5 OF 12

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAIL FOR GUARDRAIL LOCATIONS			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\PWIDOT\SHERRERJM\dms83233\70505guardrail.dgn		DRAWN - JRP	REVISED - ---		74	57-20(1) & (57-4,5,6)RS-3	MCLEAN	160	125			
PLOT SCALE = 40.0000' / IN.		CHECKED - JMS	REVISED - ---		SCALE: NONE SHEET NO. 5 OF 12 SHEETS STA. _____ TO STA. _____			CONTRACT NO. 70505				
PLOT DATE = 1/29/2009		DATE - 11-07-08	REVISED - ---		FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT							

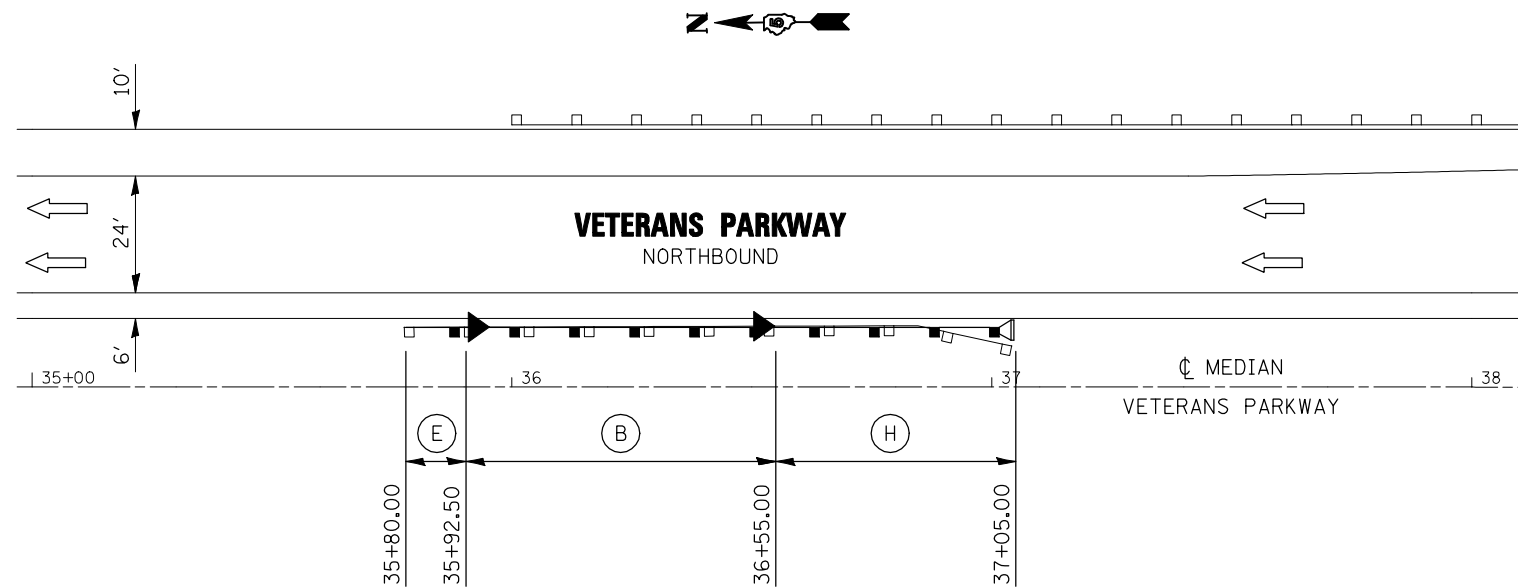
DETAIL FOR GUARDRAIL LOCATIONS

NOT TO SCALE



78200410 GUARDRAIL MARKERS = 4.0 EACH

- (B) STEEL PLATE BEAM GUARDRAIL, TYPE A
- (D) TRAFFIC BARRIER TERMINAL, TYPE 6
- (E) TRAFFIC BARRIER TERMINAL, TYPE 2
- (H) TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT



78200410 GUARDRAIL MARKERS = 2.0 EACH

- * GUARDRAIL MARKERS
- ◁ MONODIRECTIONAL SILVER
- ◀ MONODIRECTIONAL AMBER
- * SEE STD(S): 635006-02
635011-01

DETAIL NOTES

Drawings are not to scale.

Engineer shall verify all existing guardrail quantities in the field prior to beginning work.

All guardrail work shown in the details shall conform to various specifications, details, standards and specifications.

Shoulder Widening for Type 1 (Special) Terminals shall be constructed prior to construction of new guardrail. See Standard 630301-04 for Details.

Shoulder Widening shall be seeded with Class 2A and Class 7 Seed after completion.

No rock, stones, millings, or broken concrete shall be permitted within a vertical distance of 12" from the surface of the finished grade of the shoulder widening.

SHEET 6 OF 12

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED - ---
ct\pwork\PWIDOT\SHERERJM\dms83233\70505guardrail.dgn		DRAWN - JRP	REVISED - ---
		CHECKED - JMS	REVISED - ---
		DATE - 11-07-08	REVISED - ---

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

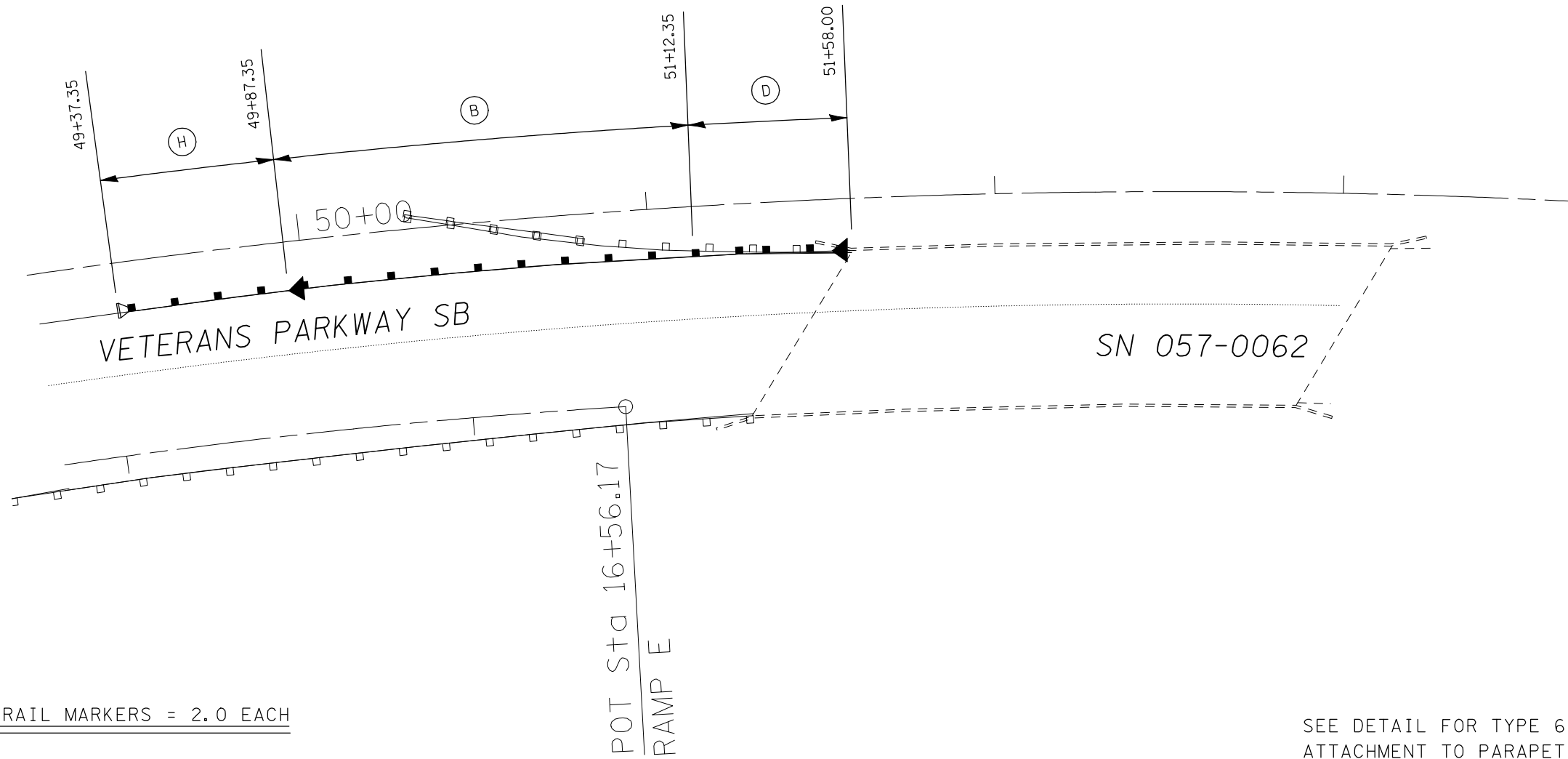
DETAIL FOR GUARDRAIL LOCATIONS

SCALE: NONE SHEET NO. 6 OF 12 SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	57-20(1) & (57-4,5,6)RS-3	MCLEAN	160	126
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT			CONTRACT NO. 70505	

DETAIL FOR GUARDRAIL LOCATIONS

NOT TO SCALE



78200410 GUARDRAIL MARKERS = 2.0 EACH

SEE DETAIL FOR TYPE 6 TERMINAL ATTACHMENT TO PARAPET WALL

- (B) STEEL PLATE BEAM GUARDRAIL, TYPE A
- (D) TRAFFIC BARRIER TERMINAL, TYPE 6
- (E) TRAFFIC BARRIER TERMINAL, TYPE 2
- (H) TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT

DETAIL NOTES	
<p>Drawings are not to scale.</p> <p>Engineer shall verify all existing guardrail quantities in the field prior to beginning work.</p> <p>All guardrail work shown in the details shall conform to various specifications, details, standards and specifications.</p>	<p>Shoulder Widening for Type 1 (Special) Terminals shall be constructed prior to construction of new guardrail. See Standard 630301-04 for Details.</p> <p>Shoulder Widening shall be seeded with Class 2A and Class 7 Seed after completion.</p> <p>No rock, stones, millings, or broken concrete shall be permitted within a vertical distance of 12" from the surface of the finished grade of the shoulder widening.</p>

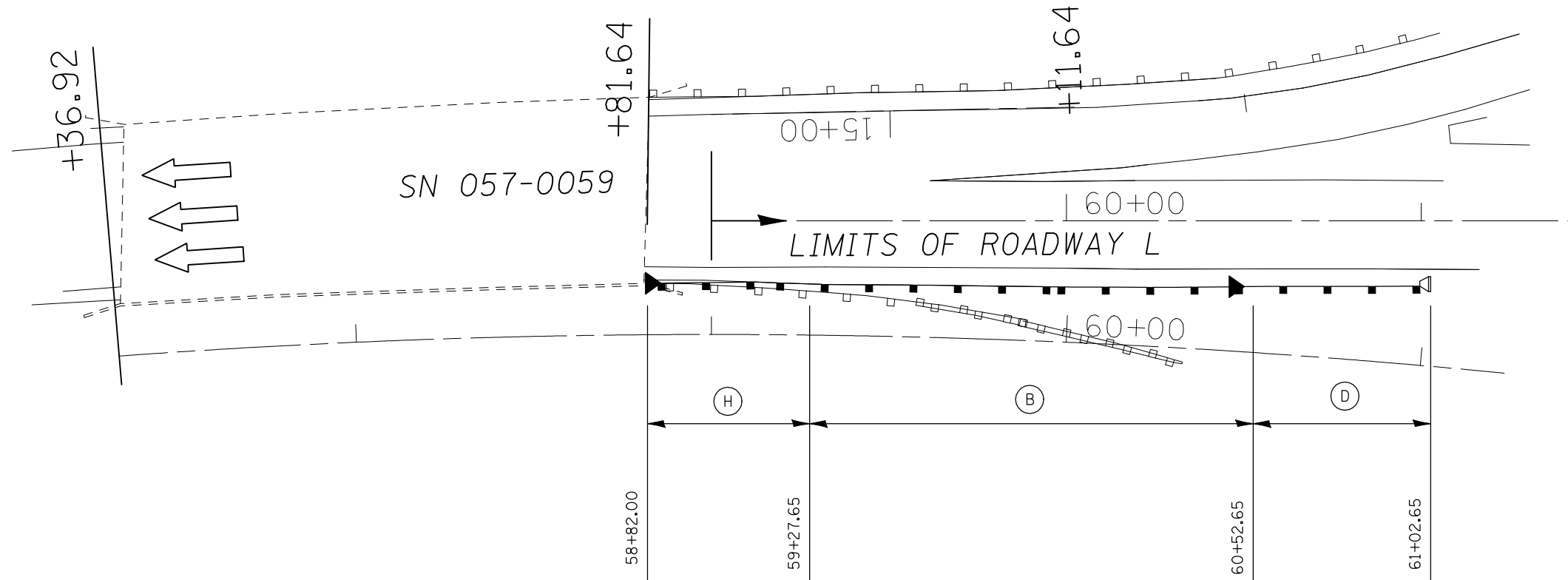
- * GUARDRAIL MARKERS
- ◁ MONODIRECTIONAL SILVER
- ◀ MONODIRECTIONAL AMBER
- * SEE STD(S): 635006-02
635011-01

SHEET 7 OF 12

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAIL FOR GUARDRAIL LOCATIONS	F.A.I. RTE.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pw\work\PWIDOT\SHERRERJM\dms83233\70505guardrail.dgn	PLOT SCALE = 40.0000' / IN.	DRAWN - JRP	REVISED - ---			74	57-20(1) & (57-4,5,6)RS-3	MCLEAN	160	127	
PLOT DATE = 1/29/2009	DATE - 11-07-08	CHECKED - JMS	REVISED - ---			SCALE: NONE		SHEET NO. 7 OF 12 SHEETS		STA. _____ TO STA. _____	
						CONTRACT NO. 70505					

DETAIL FOR GUARDRAIL LOCATIONS

NOT TO SCALE



78200410 GUARDRAIL MARKERS = 2.0 EACH

SEE DETAIL FOR TYPE 6 TERMINAL ATTACHMENT TO PARAPET WALL

- (B) STEEL PLATE BEAM GUARDRAIL, TYPE A
- (D) TRAFFIC BARRIER TERMINAL, TYPE 6
- (E) TRAFFIC BARRIER TERMINAL, TYPE 2
- (H) TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT

DETAIL NOTES	
<p>Drawings are not to scale.</p> <p>Engineer shall verify all existing guardrail quantities in the field prior to beginning work.</p> <p>All guardrail work shown in the details shall conform to various specifications, details, standards and specifications.</p>	<p>Shoulder Widening for Type 1 (Special) Terminals shall be constructed prior to construction of new guardrail. See Standard 630301-04 for Details.</p> <p>Shoulder Widening shall be seeded with Class 2A and Class 7 Seed after completion.</p> <p>No rock, stones, millings, or broken concrete shall be permitted within a vertical distance of 12" from the surface of the finished grade of the shoulder widening.</p>

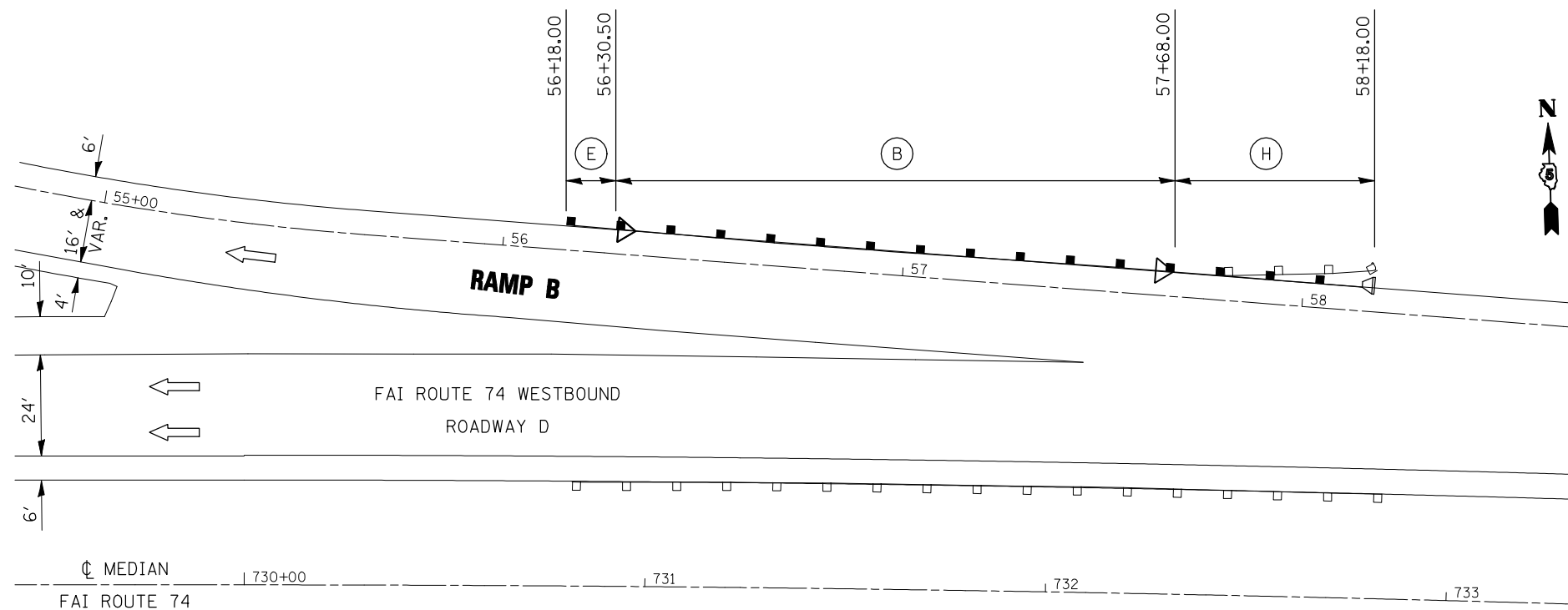
- * GUARDRAIL MARKERS
- ◁ MONODIRECTIONAL SILVER
- ◀ MONODIRECTIONAL AMBER
- * SEE STD(S): 635006-02
635011-01

SHEET 8 OF 12

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAIL FOR GUARDRAIL LOCATIONS			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\PWIDOT\SHERERJM\dms83233\70505guardrail.dgn		DRAWN - JRP	REVISED - ---		74	57-20(1) & (57-4,5,6)RS-3	MCLEAN	160	128			
PLOT SCALE = 40.0000' / IN.		CHECKED - JMS	REVISED - ---		SCALE: NONE SHEET NO. 8 OF 12 SHEETS STA. _____ TO STA. _____			CONTRACT NO. 70505				
PLOT DATE = 1/29/2009		DATE - 11-07-08	REVISED - ---		FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT							

DETAIL FOR GUARDRAIL LOCATIONS

NOT TO SCALE

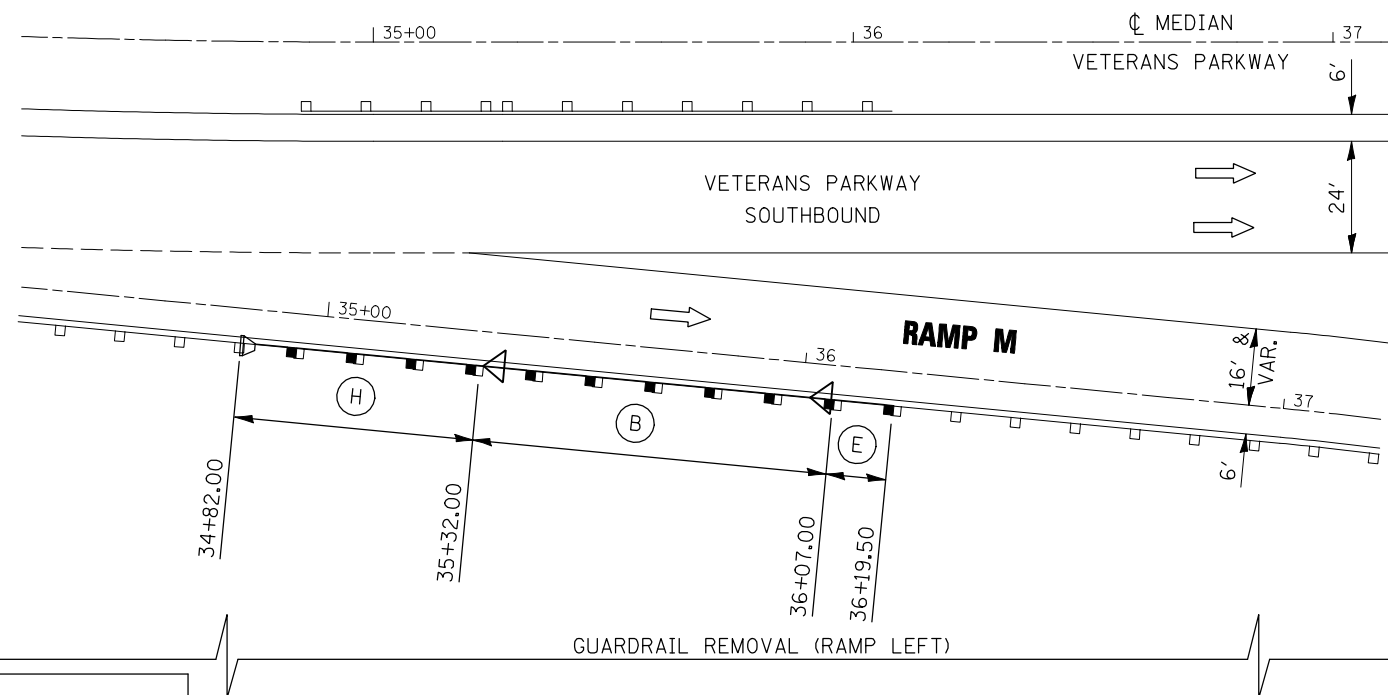


78200410 GUARDRAIL MARKERS = 2.0 EACH

- (B) STEEL PLATE BEAM GUARDRAIL, TYPE A
- (D) TRAFFIC BARRIER TERMINAL, TYPE 6
- (E) TRAFFIC BARRIER TERMINAL, TYPE 2
- (H) TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT

- * GUARDRAIL MARKERS
- ◁ MONODIRECTIONAL SILVER
- ◀ MONODIRECTIONAL AMBER
- * SEE STD(S): 635006-02
635011-01

78200410 GUARDRAIL MARKERS = 2.0 EACH



DETAIL NOTES

Drawings are not to scale.

Engineer shall verify all existing guardrail quantities in the field prior to beginning work.

All guardrail work shown in the details shall conform to various specifications, details, standards and specifications.

Shoulder Widening for Type 1 (Special) Terminals shall be constructed prior to construction of new guardrail. See Standard 630301-04 for Details.

Shoulder Widening shall be seeded with Class 2A and Class 7 Seed after completion.

No rock, stones, millings, or broken concrete shall be permitted within a vertical distance of 12" from the surface of the finished grade of the shoulder widening.

SHEET 9 OF 12

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED - ---
ct:\pw\work\PWIDOT\SHERERJM\dms83233\70505guardrail.dgn		DRAWN - JRP	REVISED - ---
		CHECKED - JMS	REVISED - ---
		DATE - 11-07-08	REVISED - ---

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL FOR GUARDRAIL LOCATIONS

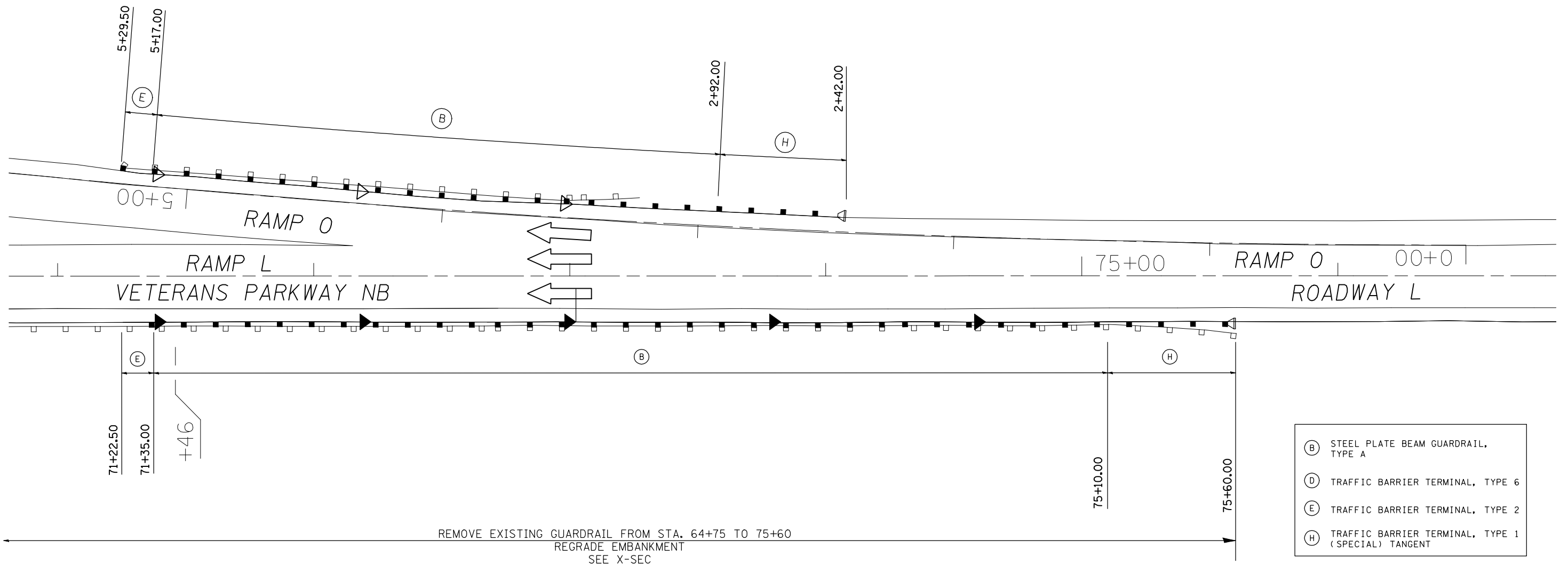
SCALE: NONE SHEET NO. 9 OF 12 SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	57-20(1) & (57-4,5,6)RS-3	MCLEAN	160	129
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70505	

DETAIL FOR GUARDRAIL LOCATIONS

NOT TO SCALE

78200410 GUARDRAIL MARKERS = 3.0 EACH



- (B) STEEL PLATE BEAM GUARDRAIL, TYPE A
- (D) TRAFFIC BARRIER TERMINAL, TYPE 6
- (E) TRAFFIC BARRIER TERMINAL, TYPE 2
- (H) TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT

- * GUARDRAIL MARKERS
- ◁ MONODIRECTIONAL SILVER
- ◀ MONODIRECTIONAL AMBER
- * SEE STD(S): 635006-02
635011-01

DETAIL NOTES

Drawings are not to scale.

Engineer shall verify all existing guardrail quantities in the field prior to beginning work.

All guardrail work shown in the details shall conform to various specifications, details, standards and specifications.

Shoulder Widening for Type 1 (Special) Terminals shall be constructed prior to construction of new guardrail. See Standard 630301-04 for Details.

Shoulder Widening shall be seeded with Class 2A and Class 7 Seed after completion.

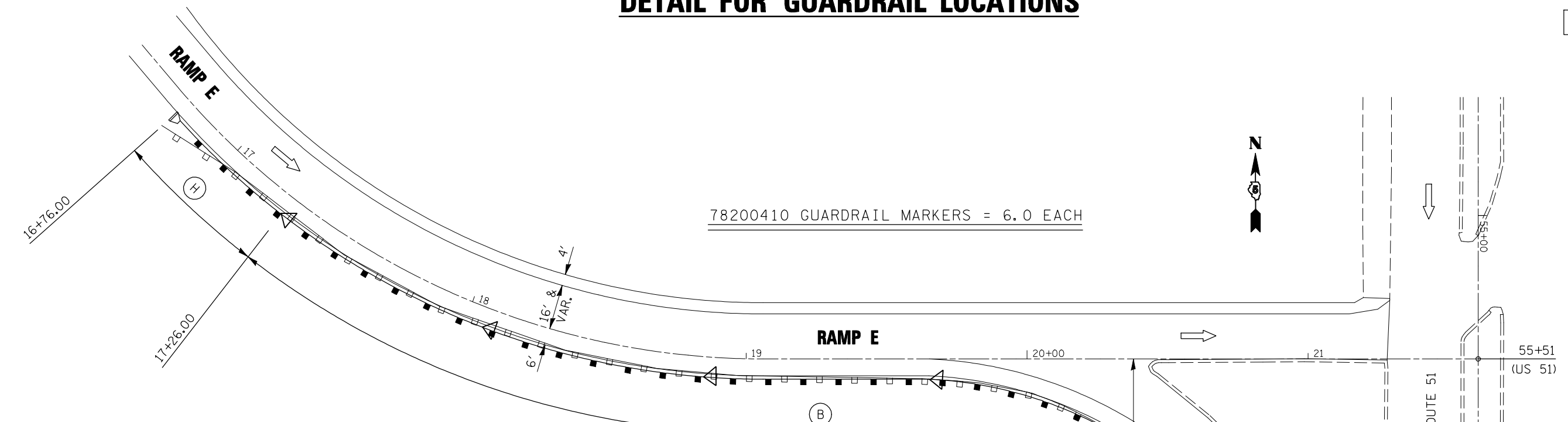
No rock, stones, millings, or broken concrete shall be permitted within a vertical distance of 12" from the surface of the finished grade of the shoulder widening.

78200410 GUARDRAIL MARKERS = 5.0 EACH

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAIL FOR GUARDRAIL LOCATIONS	F.A.I. RTE.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pw\work\PIWIDOT\SHERRERJM\dms83233\78200410guardrail.dgn	PLOT SCALE = 40.0000' / IN.	DRAWN - JRP	REVISED - ---			74	57-20(1) & (57-4,5,6)RS-3	MCLEAN	160	130	
PLOT DATE = 1/29/2009	DATE - 11-07-08	CHECKED - JMS	REVISED - ---			CONTRACT NO. 70505					
						FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					

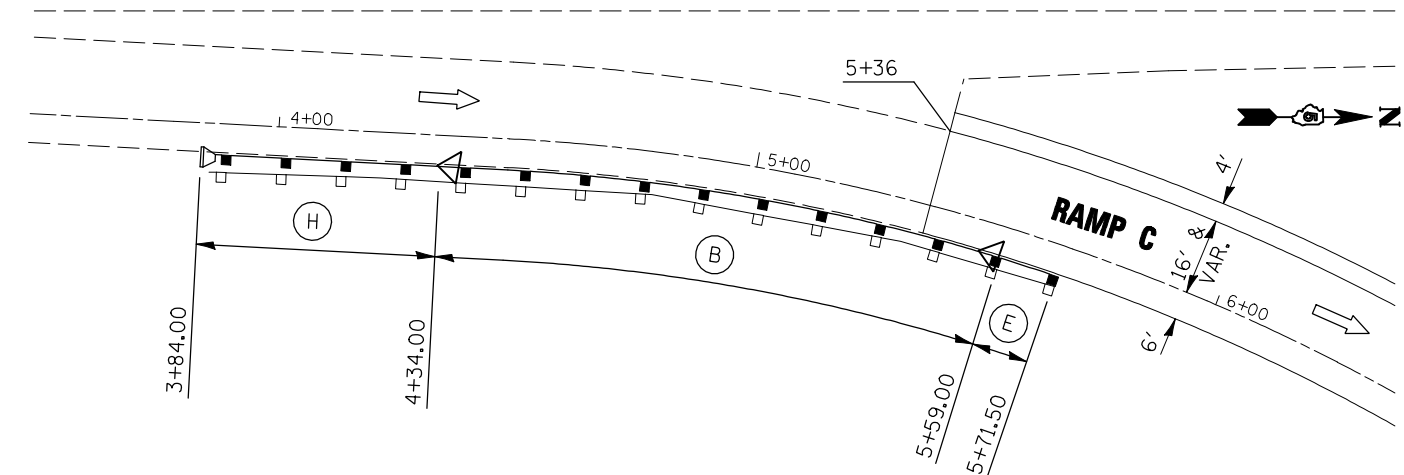
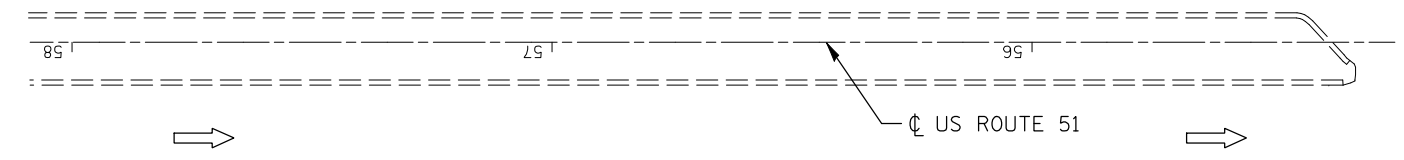
DETAIL FOR GUARDRAIL LOCATIONS

NOT TO SCALE



- (B) STEEL PLATE BEAM GUARDRAIL, TYPE A
- (D) TRAFFIC BARRIER TERMINAL, TYPE 6
- (E) TRAFFIC BARRIER TERMINAL, TYPE 2
- (H) TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT

- * GUARDRAIL MARKERS
- ◁ MONODIRECTIONAL SILVER
- ◄ MONODIRECTIONAL AMBER
- * SEE STD(S): 635006-02
635011-01



78200410 GUARDRAIL MARKERS = 2.0 EACH

DETAIL NOTES

Drawings are not to scale.

Engineer shall verify all existing guardrail quantities in the field prior to beginning work.

All guardrail work shown in the details shall conform to various specifications, details, standards and specifications.

Shoulder Widening for Type 1 (Special) Terminals shall be constructed prior to construction of new guardrail. See Standard 630301-04 for Details.

Shoulder Widening shall be seeded with Class 2A and Class 7 Seed after completion.

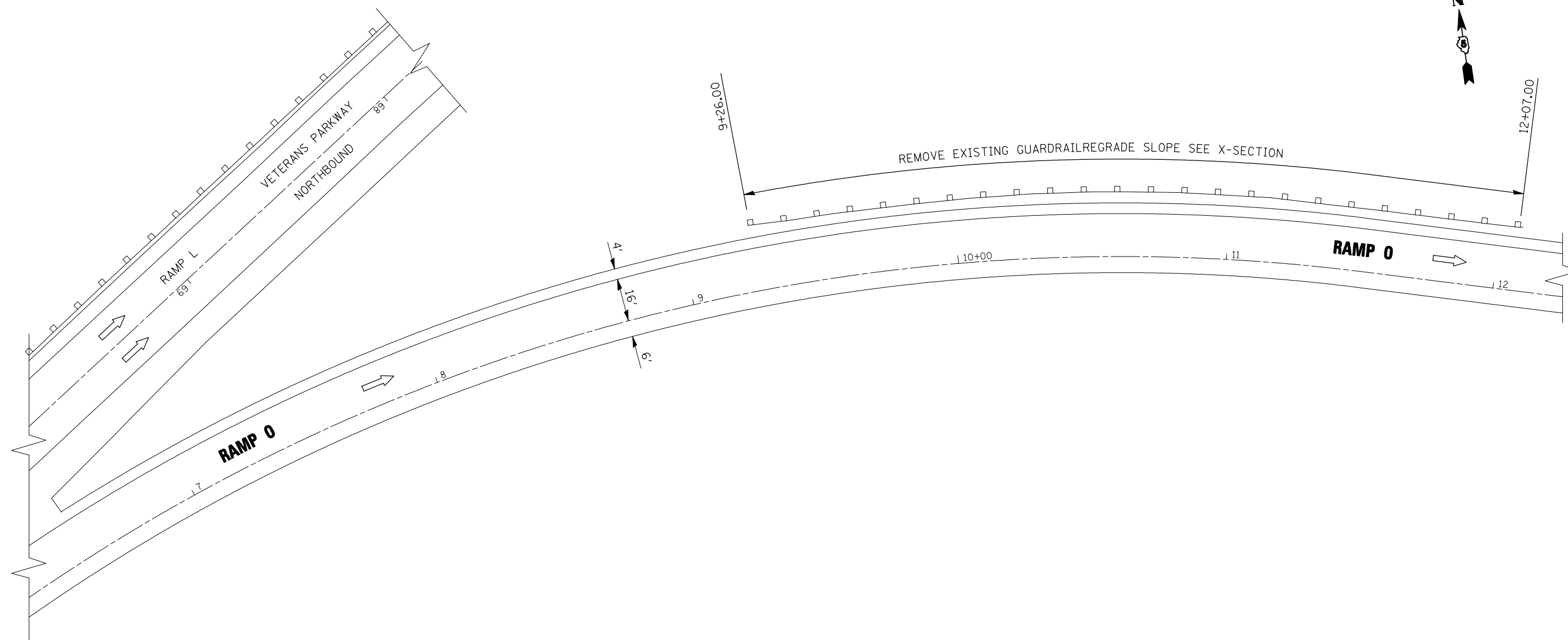
No rock, stones, millings, or broken concrete shall be permitted within a vertical distance of 12" from the surface of the finished grade of the shoulder widening.

* US RTE 51 STATIONS

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAIL FOR GUARDRAIL LOCATIONS			F.A.I. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\PIWIDOT\SHERERJM\dms83233\70505guardrail.dgn		DRAWN - JRP	REVISED - ---		74	57-20(1) & (57-4,5,6)RS-3	MCLEAN	160	131			
PLOT SCALE = 40.0000' / IN.		CHECKED - JMS	REVISED - ---		CONTRACT NO. 70505							
PLOT DATE = 1/29/2009		DATE - 11-07-08	REVISED - ---		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							

DETAIL FOR GUARDRAIL LOCATIONS

NOT TO SCALE



SHEET 12 OF 12

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED - ---
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	PLOT DATE = 1/29/2009	DATE - 11-07-08	REVISED - ---

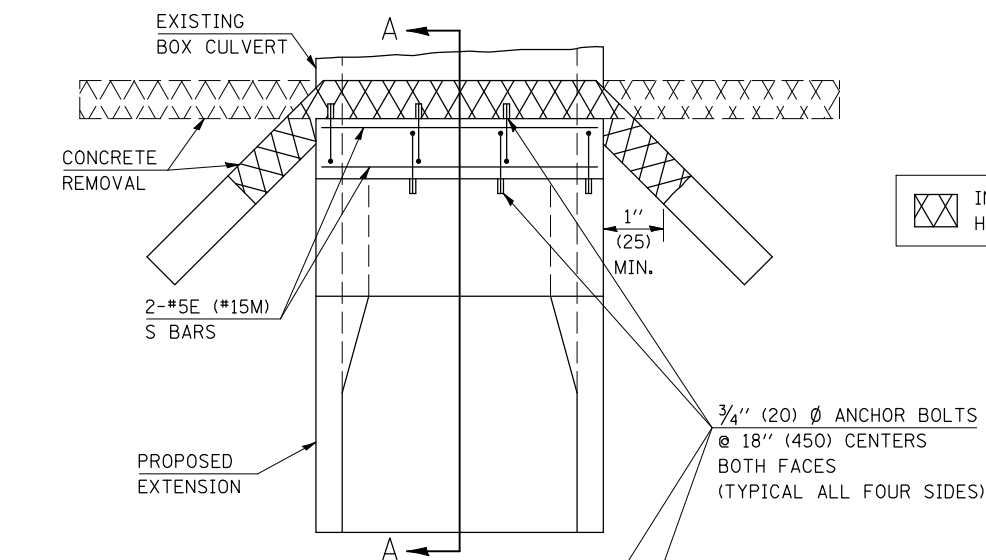
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETAIL FOR GUARDRAIL LOCATIONS

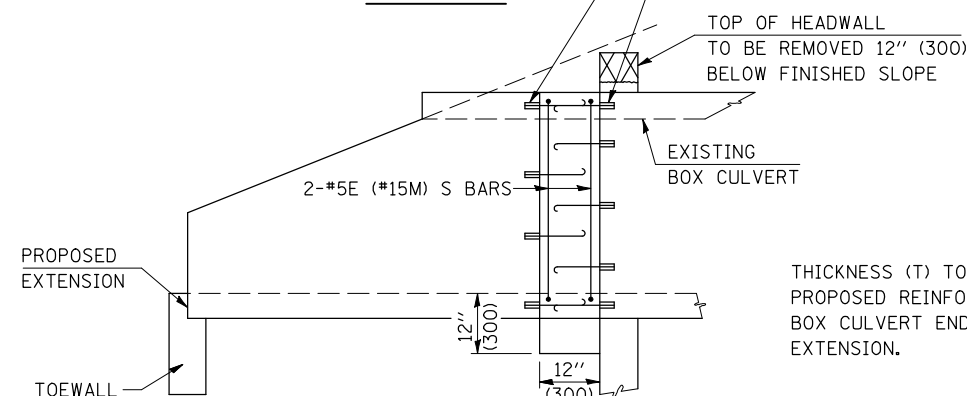
SCALE: NONE SHEET NO. 12 OF 12 SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	57-20(1) & (57-4,5,6)RS-3	MCLEAN	160	132
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT			CONTRACT NO. 70505	

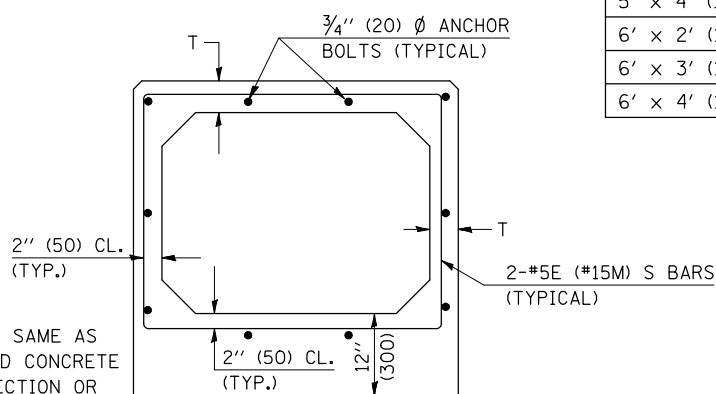
WITH PRECAST END SECTION



PLAN VIEW



SECTION A-A



END VIEW

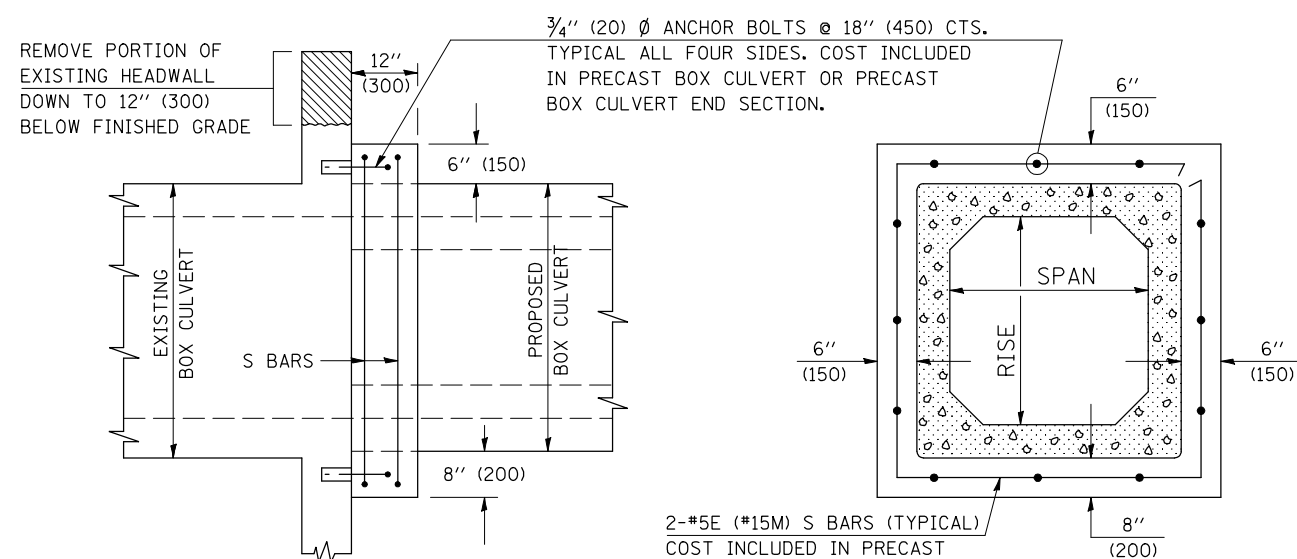
THICKNESS (T) TO BE SAME AS PROPOSED REINFORCED CONCRETE BOX CULVERT END SECTION OR EXTENSION.

TABULATION		
SPAN x RISE	CLASS MS CONC. CU. YD. (m ³) (EST.)	EXPANSION BOLTS 3/4" (EACH)
2' x 2' (600 x 600)	0.26 (0.20)	8
3' x 2' (900 x 600)	0.30 (0.23)	8
3' x 3' (900 x 900)	0.34 (0.26)	8
4' x 2' (1200 x 600)	0.36 (0.28)	10
4' x 3' (1200 x 900)	0.39 (0.30)	10
4' x 4' (1200 x 1200)	0.43 (0.33)	12
5' x 2' (1500 x 600)	0.41 (0.31)	12
5' x 3' (1500 x 900)	0.45 (0.34)	12
5' x 4' (1500 x 1200)	0.49 (0.37)	14
6' x 2' (1800 x 600)	0.47 (0.36)	14
6' x 3' (1800 x 900)	0.51 (0.39)	14
6' x 4' (1800 x 1200)	0.54 (0.41)	16

GENERAL NOTES

- ANCHOR BOLTS, MEETING THE REQUIREMENTS OF ARTICLE 1006.09 OF THE STANDARD SPECIFICATIONS, SHALL EXTEND A MINIMUM OF 9" (225 mm) INTO THE NEW CONCRETE.
- REINFORCEMENT BARS SHALL MEET THE REQUIREMENTS OF ARTICLE 1006.10 OF THE STANDARD SPECIFICATIONS.
- CLASS SI CONCRETE SHALL BE USED THROUGHOUT.
- THE PRECAST END SECTION WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR BOX CULVERT END SECTIONS OF THE CULVERT NUMBER SPECIFIED WHICH PRICE SHALL INCLUDE THE CONCRETE COLLAR, ANCHOR BOLTS, REINFORCEMENT AND TOEWALL IF ANY.
- ANY PRECAST BOX CULVERT BARREL SECTIONS PLACED AS PART OF THE EXTENSION WILL BE IN ACCORDANCE WITH APPLICABLE PORTIONS OF SECTION 540 OF THE SPECIFICATIONS EXCEPT THAT END SECTIONS WILL BE PAID FOR AS STATED ABOVE.

WITH PRECAST BOX CULVERT



SIDE VIEW

END VIEW

2-#5E (#15M) S BARS (TYPICAL) COST INCLUDED IN PRECAST BOX CULVERT OR PRECAST BOX CULVERT END SECTION.

3/4" (20) Ø ANCHOR BOLTS @ 18" (450) CTS. TYPICAL ALL FOUR SIDES. COST INCLUDED IN PRECAST BOX CULVERT OR PRECAST BOX CULVERT END SECTION.

SCHEDULE OF BOX CULVERT EXTENSION

STATION	RDWY D	MED	50300220	54002020
			CLASS MS CONC CU YD	EXPN BOLTS 3/4" EACH
648+30			0.45	12.0
37+50			0.45	12.0
TOTAL =			0.9	24.0

GENERAL NOTES

- THIS WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTIONS 503 AND 540 OF THE STANDARD SPECIFICATIONS, EXCEPT THAT WHEN PRECAST END SECTIONS ARE USED, THE CONCRETE COLLAR, EXPANSION BOLTS, AND REINFORCEMENT BARS SHOWN ON THIS DETAIL SHALL BE INCLUDED IN THE PAY ITEM FOR BOX CULVERT END SECTIONS.
- WHEN CAST-IN-PLACE END SECTIONS ARE USED, THE VARIOUS ITEMS FOR CONCRETE BOX CULVERTS, REINFORCEMENT BARS, AND EXPANSION BOLTS WILL BE COMPUTED AND INCLUDED IN THE PLAN QUANTITIES FOR THESE PAY ITEMS.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 5 DETAIL NO. 5400AAAA

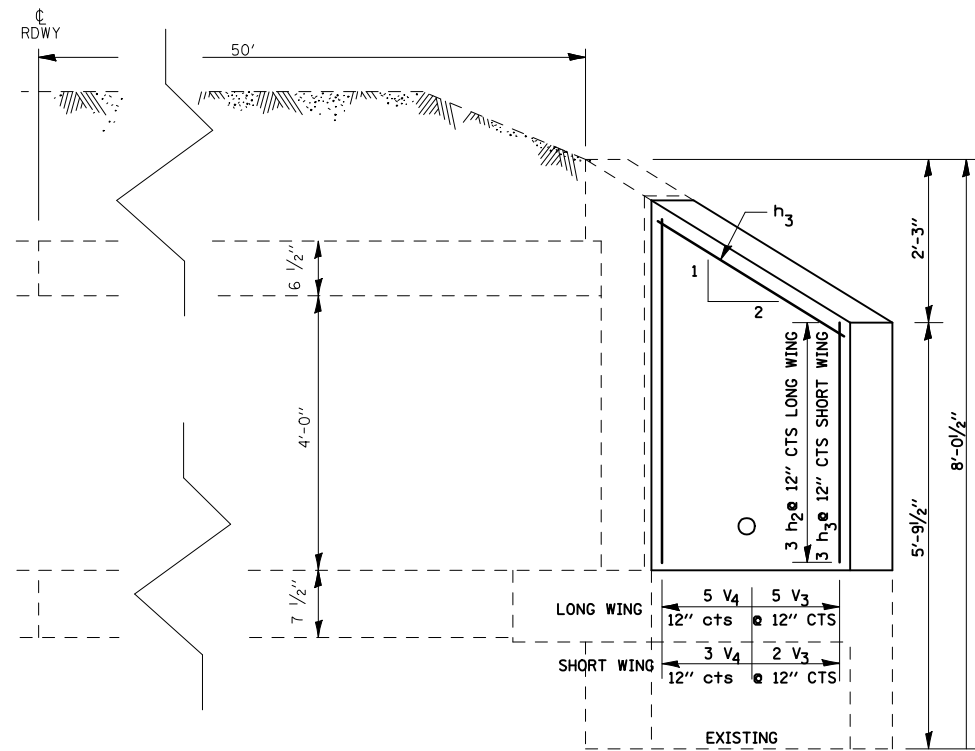
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PLOT SCALE = 40.0000' / IN.		CHECKED -	REVISED -
PLOT DATE = 2/3/2009		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

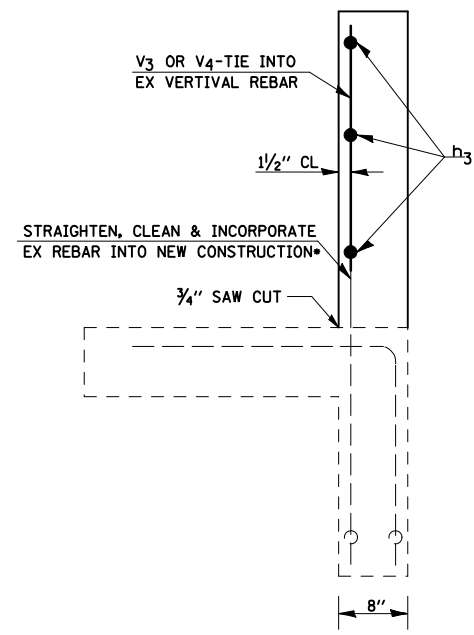
BOX CULVERT EXTENSION

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	57-20(1) & (57-4,5,6)RS-3	MCLEAN	160	133
CONTRACT NO. 70505				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

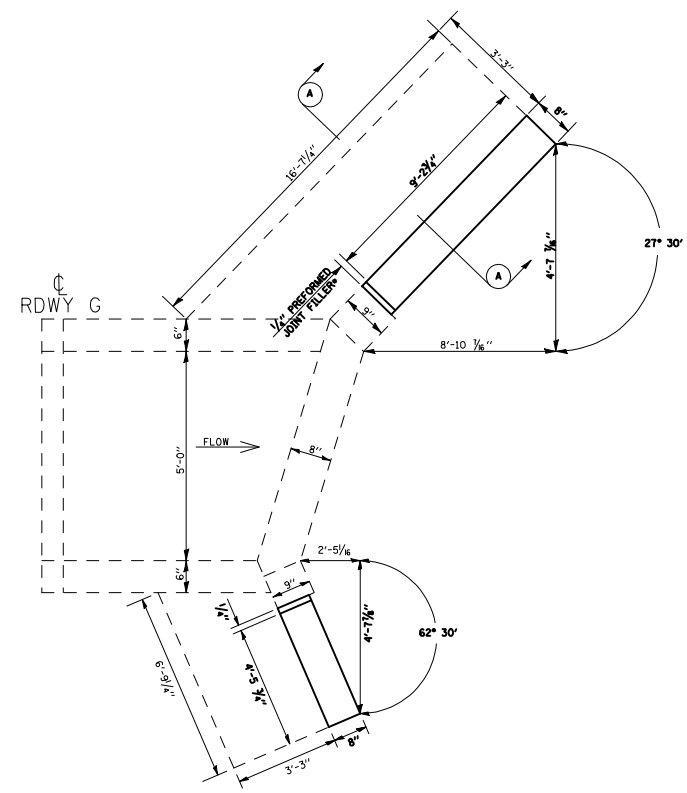


HALF ELEVATION

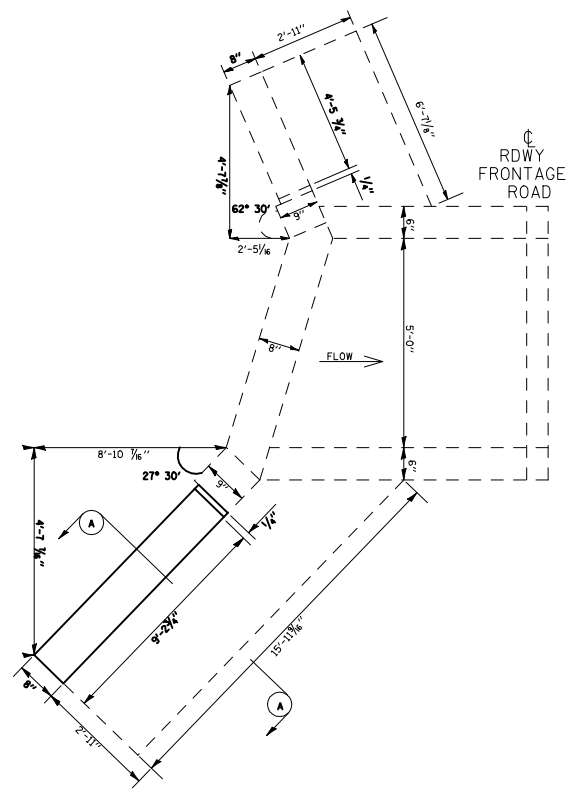


SECTION A-A

BILL OF MATERIAL			
BAR	NO	SIZE	LENGTH
h2	4	No. 4	4'-3"
h3	8	No. 4	9'-0"
V3	12	No. 4	2'-9"
V4	13	No. 4	4'-3"
CONCRETE REMOVAL			2.2 cu yd
CONCRETE STRUCTURE			2.2 cu yd
REINFORCEMENT REBARS			118 lbs

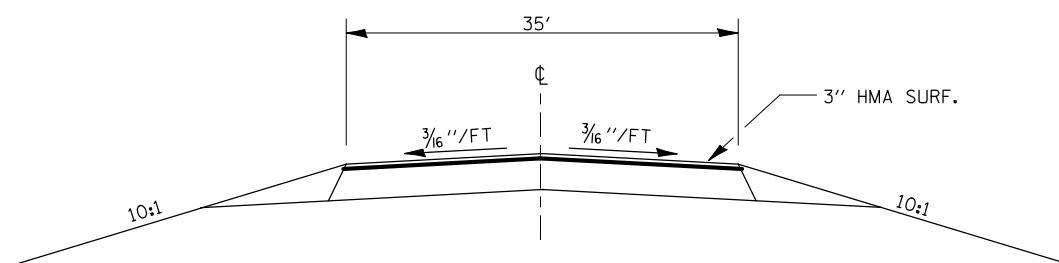
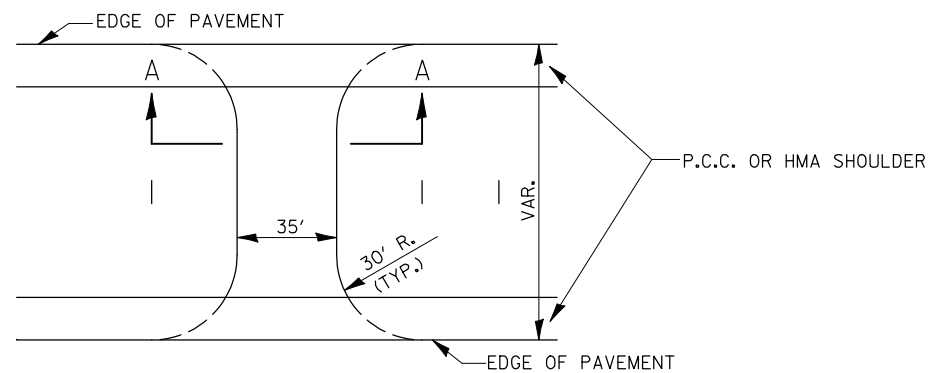


PLAN VIEW



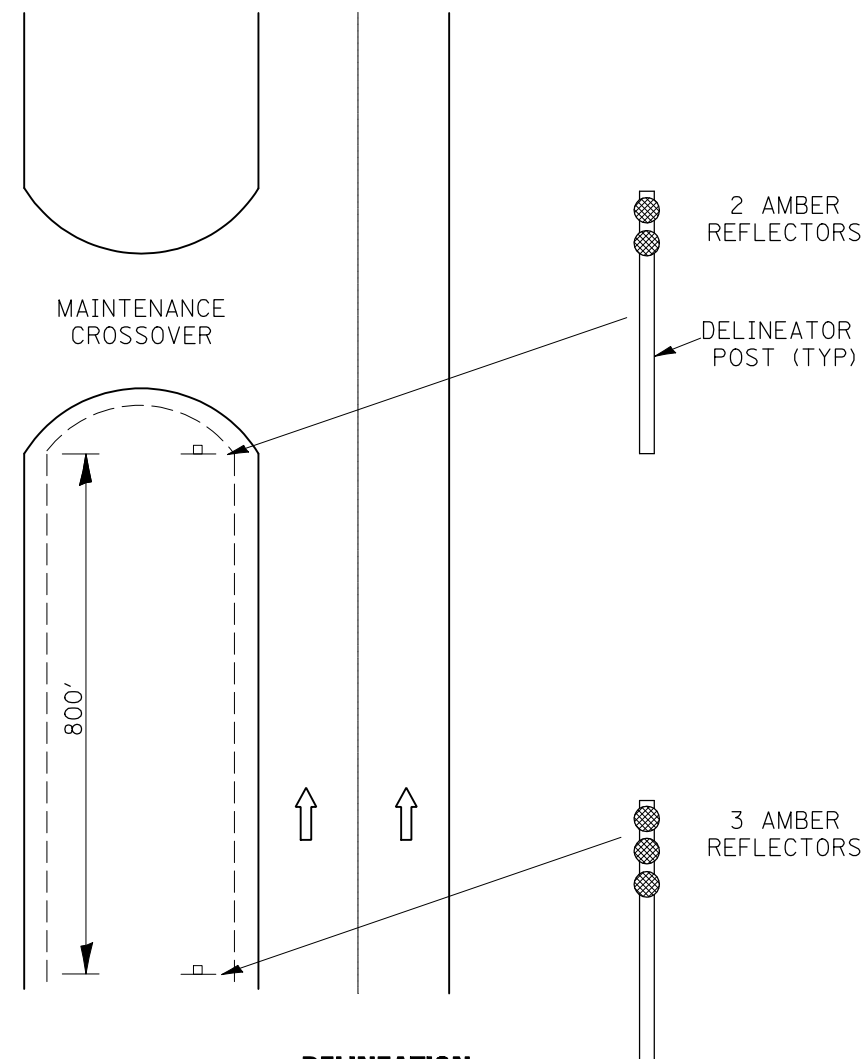
WORK TO INCLUDE REPAIR TO BOTH EAST WINDWALLS FOR BOX CULVERT UNDER RDWY G AND FOR LONG WINGWALL (WEST END) UNDER FRONTAGE ROAD

*COST INCL. IN CONC STRUCTURES



SECTION A-A

HMA MAINTENANCE CROSSOVER



DELINEATION FOR MAINTENANCE CROSSOVER (TYPICAL FOR BOTH DIRECTIONS)

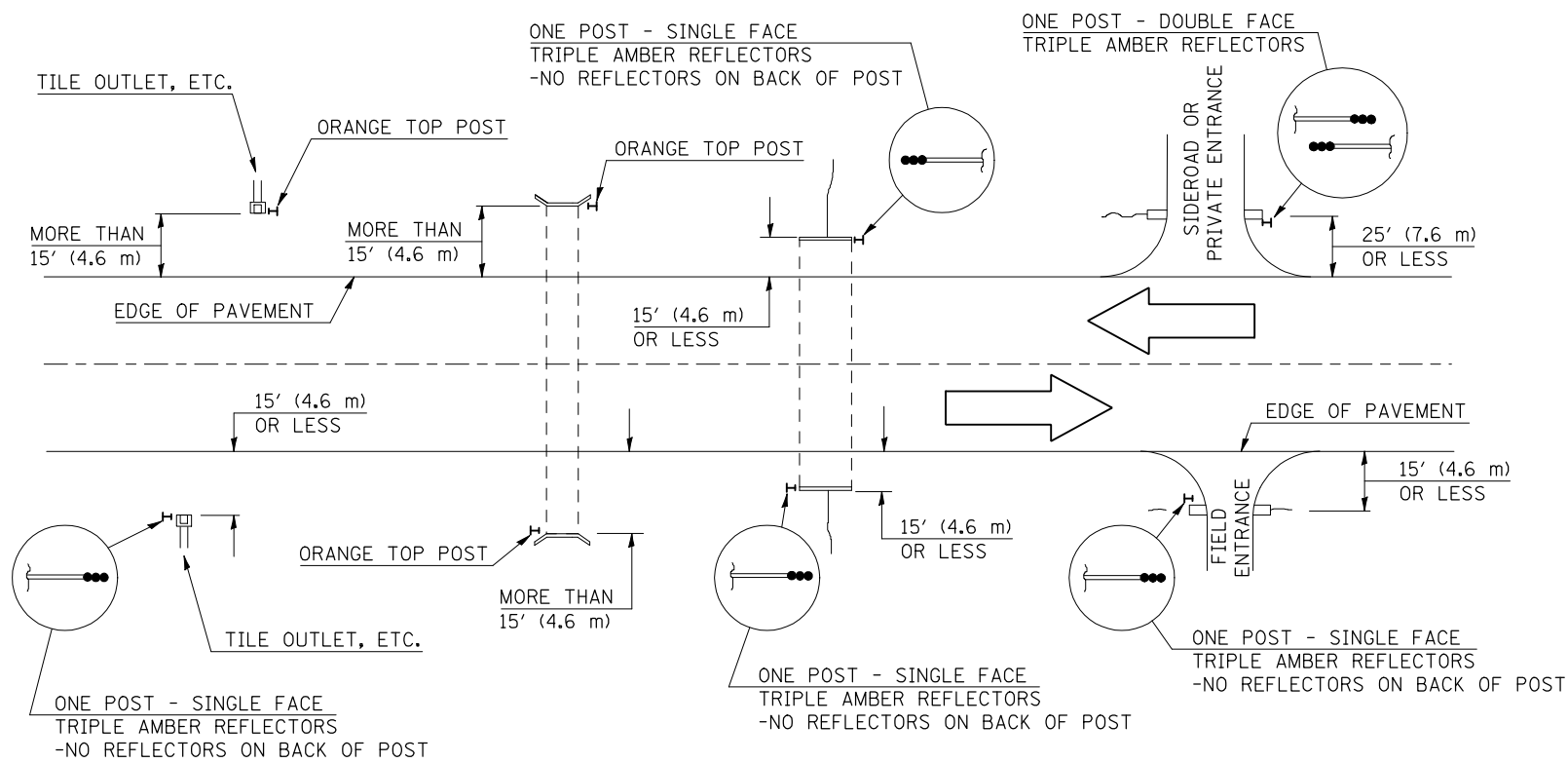
FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED -
ct:\pw\work\PWIDOT\SHERERJM\dms83233\70505\details.dgn		DRAWN - JMS	REVISED -
		CHECKED -	REVISED -
		DATE - 6/03/2008	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

MISCELLANEOUS DETAILS			
SCALE: NO SCALE	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	57-20(11)&(57-4,5,6)RS-3	MCLEAN	160	135
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70505	

IDENTIFICATION OF ROADSIDE HAZARDS FOR TWO-LANE ROADWAYS



BILL OF MATERIALS

DELINEATOR TYPE	SINGLE FACE	DOUBLE FACE	NO REFLECTOR	TOTAL DELINEATORS
SINGLE CRYSTAL		N/A	N/A	
DOUBLE CRYSTAL			N/A	
SINGLE AMBER			N/A	
DOUBLE AMBER		N/A	N/A	
TRIPLE AMBER			N/A	
ORANGE TOP	N/A	N/A		
			TOTAL	

NOTES

DELINEATORS FOR ROADSIDE HAZARDS SHALL ONLY BE PLACED AT LOCATIONS WHERE THERE IS NO GUARDRAIL, OR OTHER PERMANENT BARRIER, ON THE SAME SIDE OF ROAD AS THE HAZARD.

DELINEATORS FOR ROADSIDE HAZARDS SHALL ONLY BE PLACED AT LOCATIONS WHERE DELINEATORS ARE NOT IN PLACE ALONG THE EDGE OF SHOULDER.

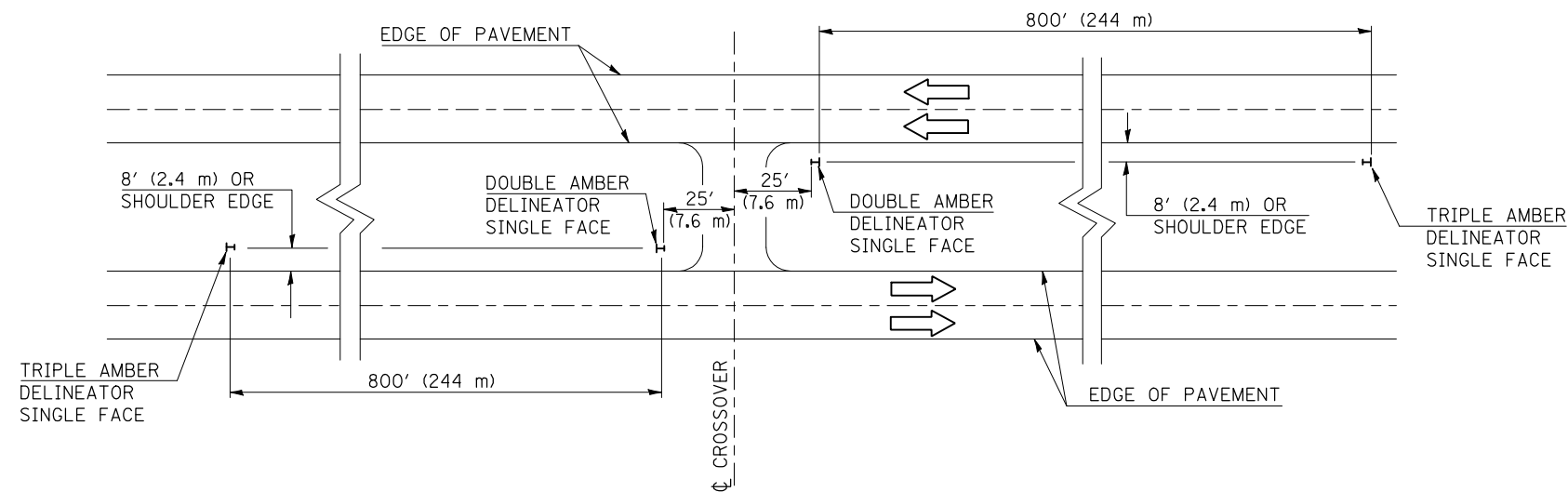
EACH POST SHALL BE CONSIDERED AS ONE DELINEATOR FOR PAYMENT, REGARDLESS OF THE NUMBER OF DELINEATORS ATTACHED TO IT.

POSTS INDICATED AS "ORANGE TOP" SHALL HAVE NO REFLECTORS. THEY SHALL HAVE THE TOP 12" (300 mm) (MINIMUM) OF THE POST PAINTED A BRIGHT ORANGE COLOR SIMILAR TO CONSTRUCTION SIGNS, AND SHALL MEET THE APPROVAL OF THE ENGINEER. FLUORESCENT PAINT OR OTHER SPECIAL RETROREFLECTIVE COATINGS WILL NOT BE REQUIRED.

FOR ONE-WAY ROADWAYS THE APPLICATION SHALL BE SIMILAR WITH DELINEATORS PLACED ON THE TRAFFIC APPROACH SIDE OF HAZARDS AND OBJECTS. ONLY SINGLE FACE DELINEATORS WILL BE REQUIRED ON ONE-WAY ROADWAYS.

FOR OTHER DELINEATOR APPLICATIONS, REFER TO HIGHWAY STANDARD 635001.

MEDIAN DELINEATORS AT CROSSOVER
(FOR INTERSTATES, EXPRESSWAYS, DUAL HIGHWAYS)



Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DESIGNER NOTE: SEE PPM 70-07

DISTRICT 5 DETAIL NO. 63500105

FILE NAME =	USER NAME = shererjm	DESIGNED -	REVISED - 12/06
ct:\pw\work\PWIDOT\SHERERJM\dms83233\70505\details.dgn		DRAWN -	REVISED -
PLOT SCALE = 40.0000 ' / IN.		CHECKED -	REVISED -
PLOT DATE = 1/29/2009		DATE -	REVISED -

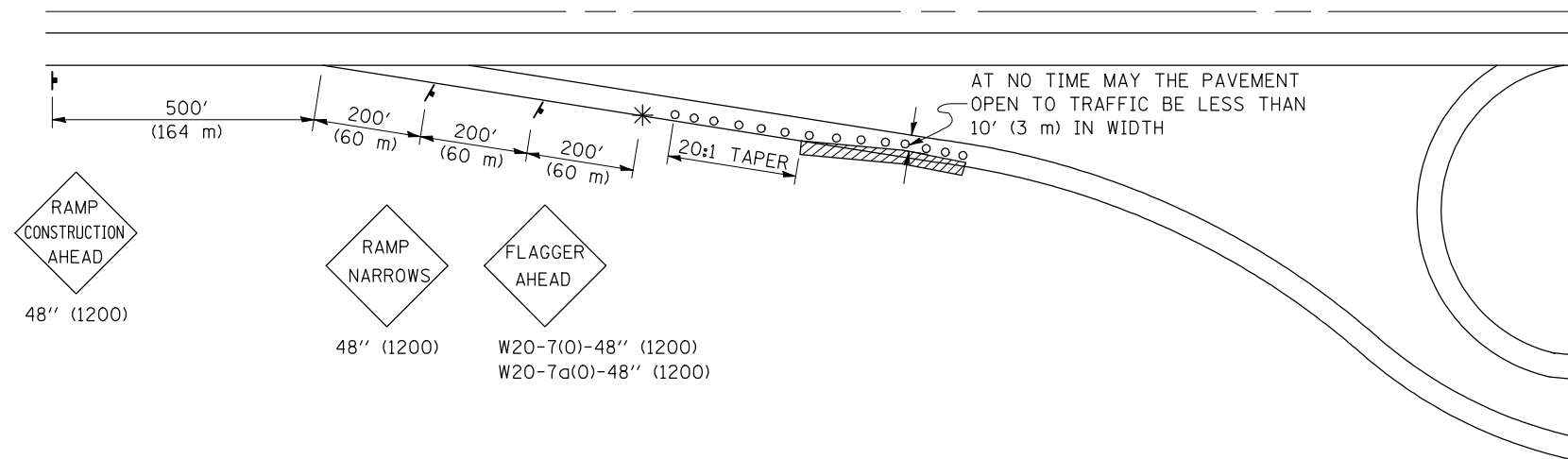
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DELINEATORS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	57-20(1) & (57-4,5,6)RS-3	MCLEAN	160	136
CONTRACT NO. 70505				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

**APPLICATION NO. 1
DAY OPERATION ONLY
PARTIAL RAMP CLOSURE**



GENERAL NOTES

CONSTRUCTION OPERATIONS SHALL BE CONFINED TO AN AREA NARROW ENOUGH THAT A MINIMUM OF 10' (3 m) OF PAVEMENT SHALL BE OPEN TO TRAFFIC AT ALL TIMES.

FULL WIDTH PAVEMENT ON THE RAMPS SHALL BE OPEN TO TRAFFIC AT NIGHT.

WHEN NO WORK IS BEING PERFORMED, THE FLAGGER WILL NOT BE REQUIRED. IF THE FLAGGER IS NOT PRESENT, THE FLAGGER SIGNS SHALL BE REMOVED OR COVERED.

ALL SIGNS SHALL BE POST MOUNTED IF WORK IN THE AREA EXCEEDS FOUR DAYS OF DAYTIME OPERATIONS.

LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.

ALL VEHICLES, EQUIPMENT, WORKERS (EXCEPT FLAGGER) AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE DISTRICT ENGINEER.

SYMBOLS

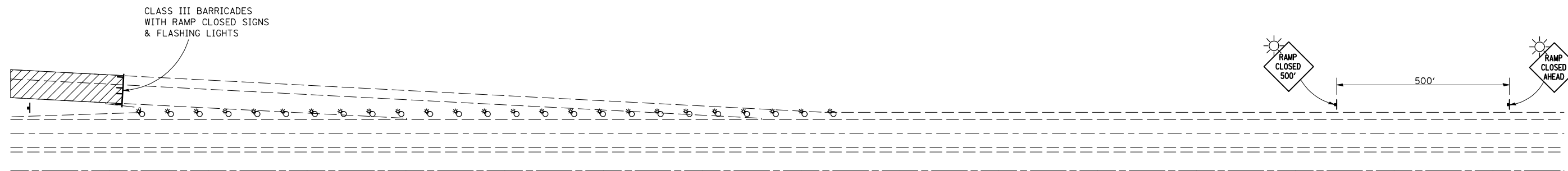
- (APPLICATION NO. 1) TYPE I OR II BARRICADES OR DRUMS @ 50' (15 m) CTS.
- ⊗ (APPLICATION NO. 2) TYPE I OR II BARRICADES OR DRUMS @ 25' (7.5 m) CTS. W/STEADY BURNING LIGHTS
- * (APPLICATION NO. 1) FLAGGER PLACED AS DIRECTED BY THE ENGINEER
- † SIGN ON PORTABLE OR PERMANENT SUPPORT
- ▨ WORK AREA

TYPICAL APPLICATIONS

- PAVEMENT PATCHING
- PIPE UNDERDRAINS
- HMA RESURFACING

Traffic Control for all ramps shall be in accordance with the appropriate application of plan detail TRAFFIC CONTROL FOR RAMPS and will not be paid for separately, but shall be included in the contract lump sum prices for Traffic Control and Protection, Standard 701401 and Traffic Control and Protection, Standard 701406.

**APPLICATION NO. 2
RAMP CLOSURE**



GENERAL NOTES

STEADY BURN LIGHTS ARE NOT REQUIRED FOR DAYTIME OPERATIONS.

CONTACT THE DISTRICT TRAFFIC OPERATIONS ENGINEER AT 217-465-4181, ONE WEEK PRIOR TO CLOSING THE RAMP.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = shererjm	DESIGNED -	REVISED - 11/06
ct:\pw\work\PWIDOT\SHERERJM\dms83233\70505details.dgn		DRAWN -	REVISED -
	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/29/2009	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

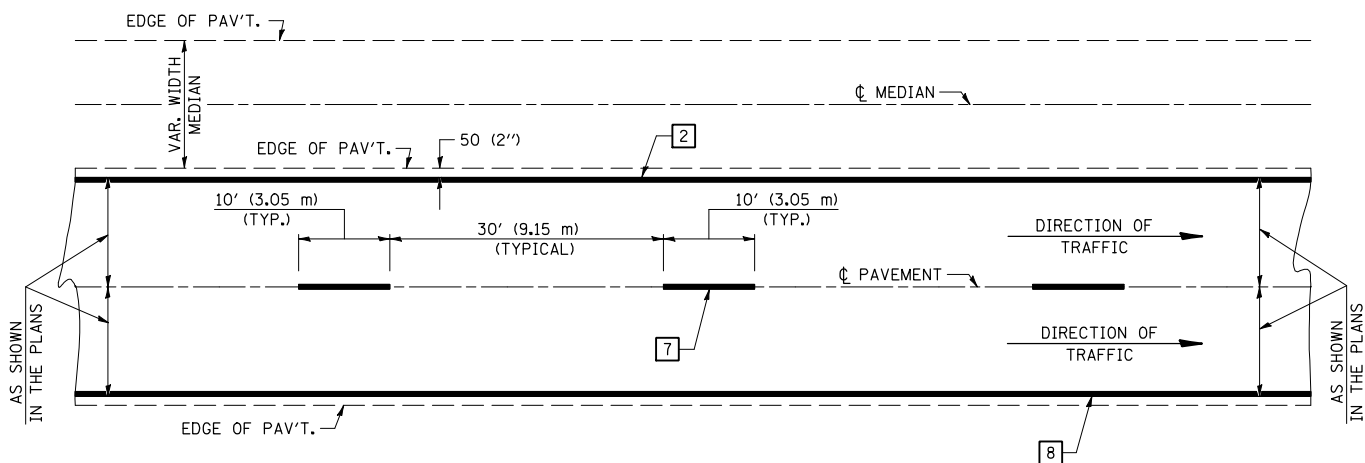
TRAFFIC CONTROL FOR RAMPS

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

DISTRICT 5 DETAIL NO. 70103710

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	57-20(1) & (57-4,5,6)RS-3	MCLEAN	160	137
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70505	

CENTERLINE INTERSTATE OR MULTI-LANE TWO WAY DIVIDED HIGHWAY

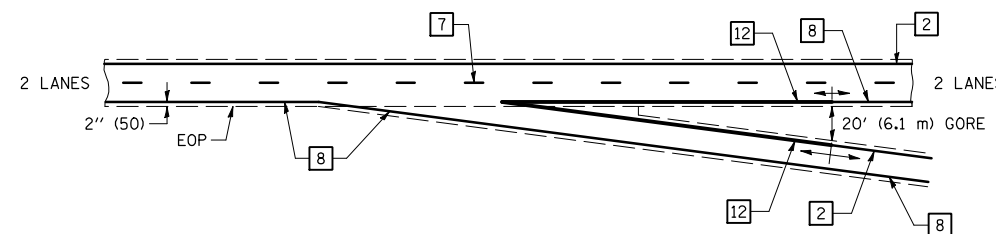


NOTE: PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.

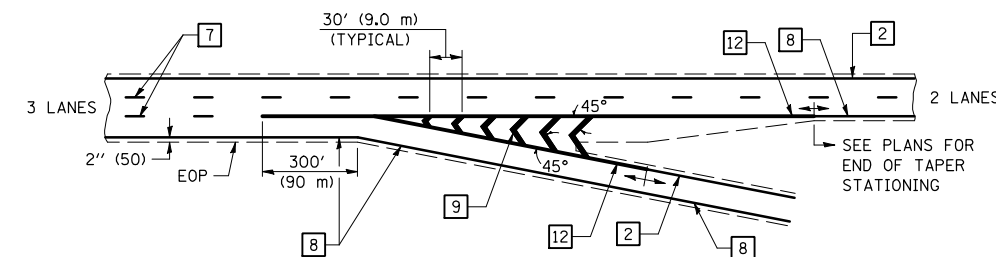
NOTE: SEE ARTICLES 780.04 & 781.03 FOR LOCATION OF STRIPES AND MARKERS RELATIVE TO EDGES OR JOINTS.

FOR RAISED REFLECTIVE PAVEMENT MARKERS, REFER TO STANDARD 781001.

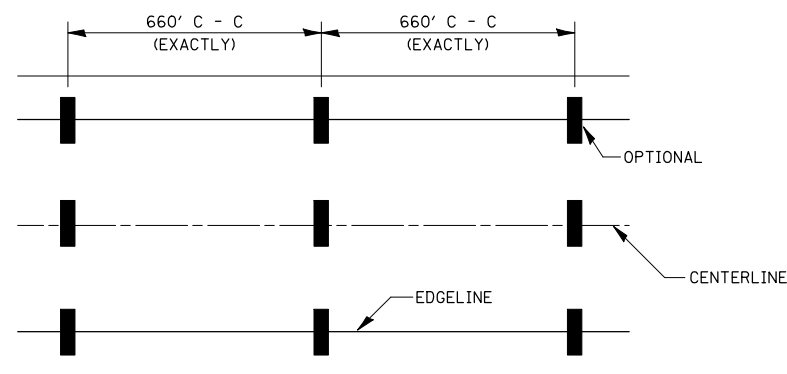
TYPICAL EXIT RAMP TERMINAL



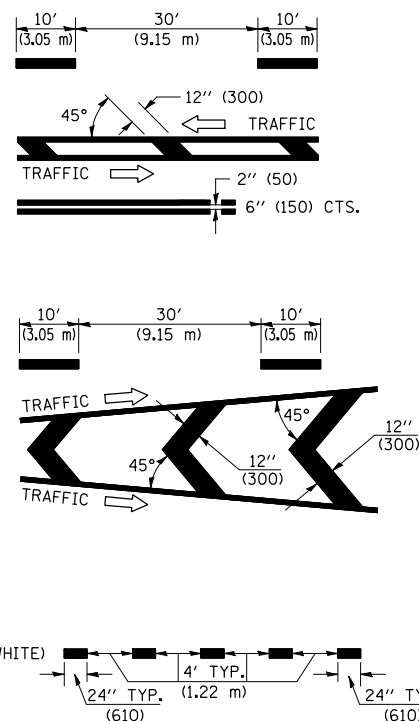
EXIT RAMP TERMINAL with EXCLUSIVE (auxiliary) LANE



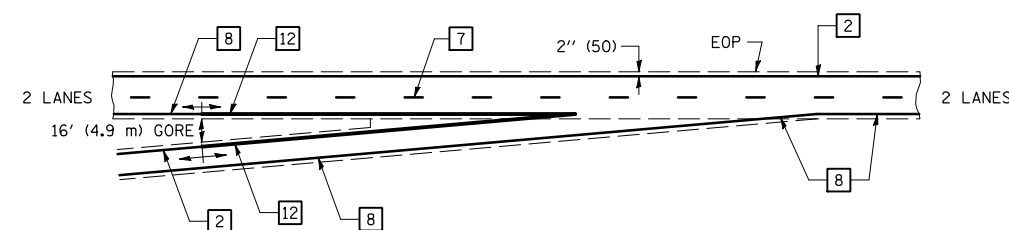
TYPICAL PAVEMENT MARKING LEGEND



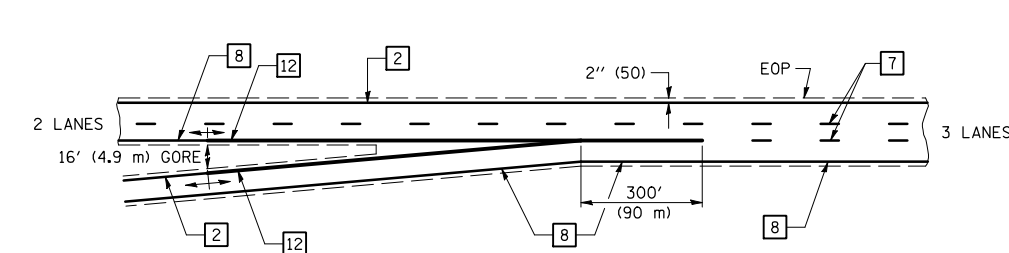
- 1 4" (100) SKIP-DASH (YELLOW)
- 2 4" (100) SOLID (YELLOW)
- 3 12" (300) DIAGONAL (YELLOW)
- 4 4" (100) DOUBLE YELLOW (NARROW)
- 5 RESERVED
- 6 RESERVED
- 7 4" (100) SKIP-DASH (WHITE)
- 8 4" (100) SOLID (WHITE)
- 9 12" (300) DIAGONAL (WHITE)
- 10 6" (150) SOLID (WHITE)
- 11 24" (600) STOP BAR (WHITE)
- 12 8" (200) SOLID (WHITE)
- 13 4" (100) LANE LINE EXTENSIONS (WHITE)



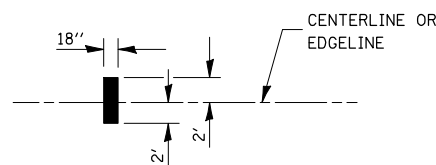
TYPICAL ENTRANCE RAMP TERMINAL



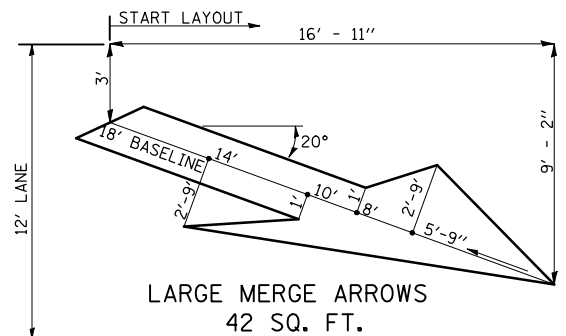
ENTRANCE RAMP TERMINAL with EXCLUSIVE LANE



IT WILL BE NECESSARY TO HAVE A REPRESENTATIVE OF THE STATE POLICE PRESENT SO THAT THE ACCURACY OF MEASUREMENT CAN BE ATTESTED TO IN COURT.



AERIAL SPEED CHECK ZONES



Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = shererjm	DESIGNED -	REVISED - 11/06
ct:\pw\work\PWIDOT\SHERERJM\dms83233\70505details.dgn		DRAWN -	REVISED -
PLOT SCALE = 40.0000' / IN.		CHECKED -	REVISED -
PLOT DATE = 1/29/2009		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PAVEMENT MARKING (INTERSTATE & MULTI-LANE APPLICATIONS)

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

DISTRICT 5 DETAIL NO. 7800BBBB

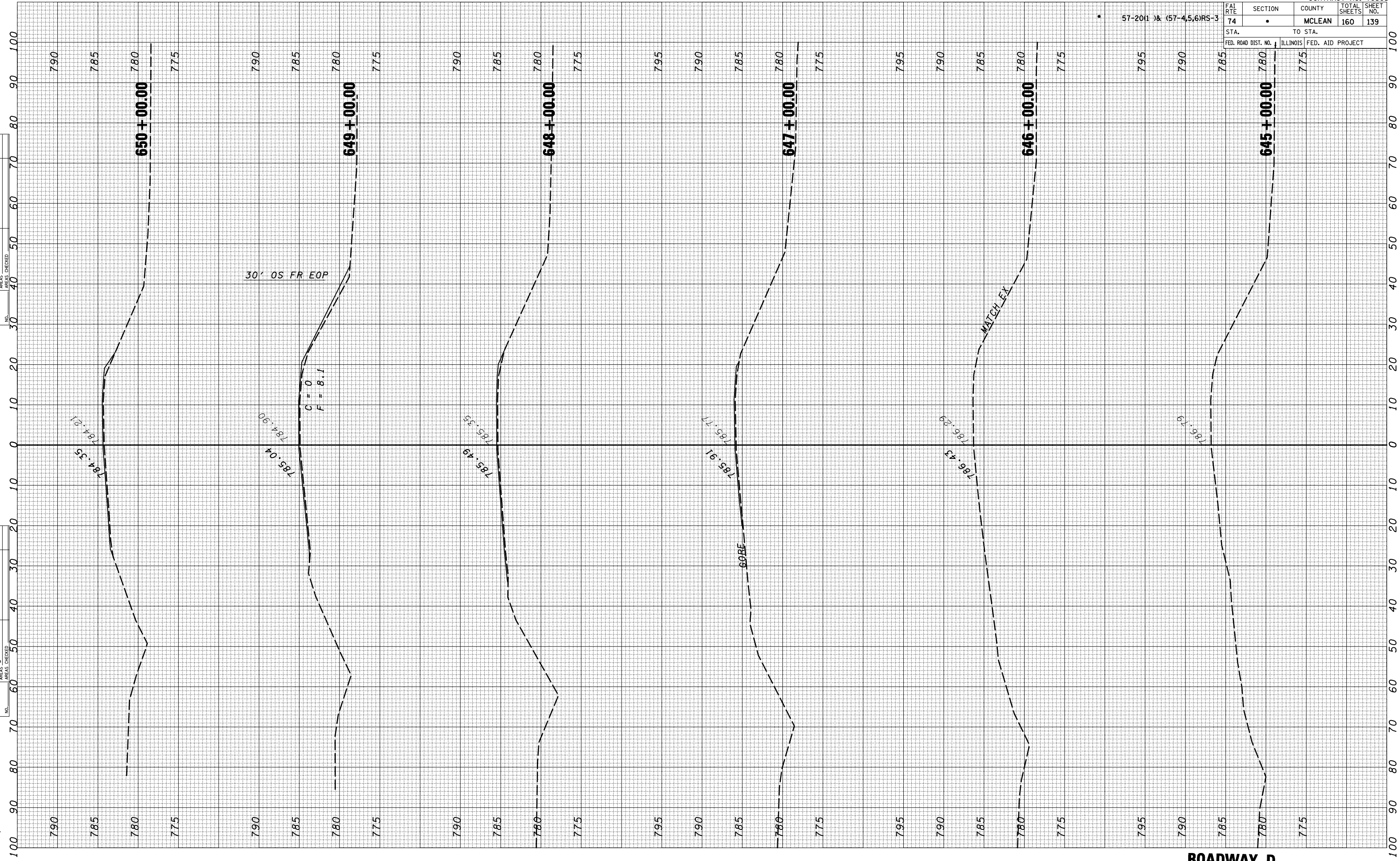
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	57-20(1) & (57-4,5,6)RS-3	MCLEAN	160	138
CONTRACT NO. 70505				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

FED. ROAD DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	•	MCLEAN	160	139
STA.		TO STA.		
ILLINOIS		FED. AID PROJECT		

NO.	AREAS CHECKED	DATE	BY

NO.	AREAS CHECKED	DATE	BY

* DATE - TIME *
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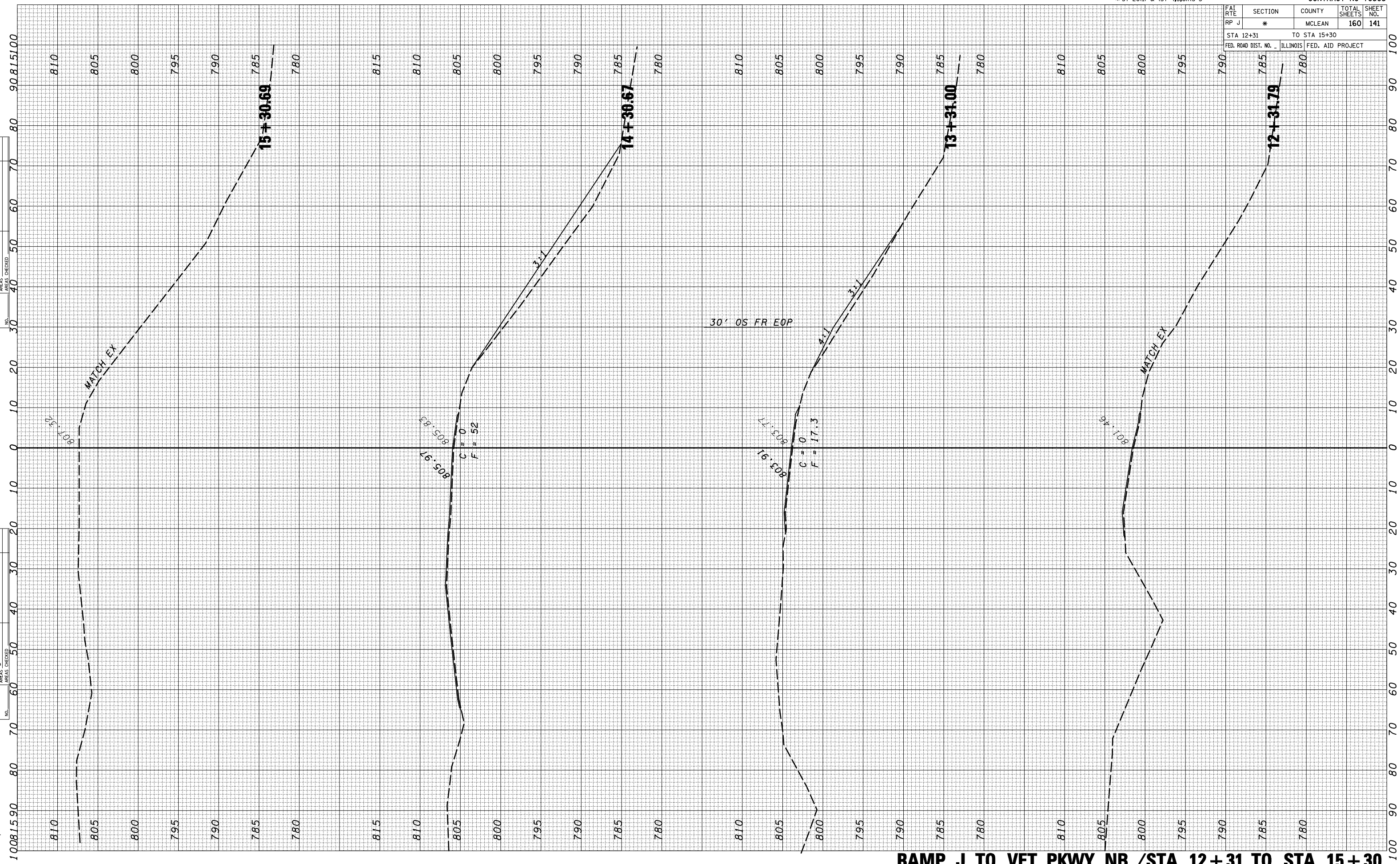
ROADWAY D

FAL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
RP J	*	MCLEAN	160	141
STA 12+31		TO STA 15+30		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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

ORIGINAL SURVEY	SURVEYED	BY	DATE
NO.	PLOTTED		
	AREAS CHECKED		

DATE-TIME
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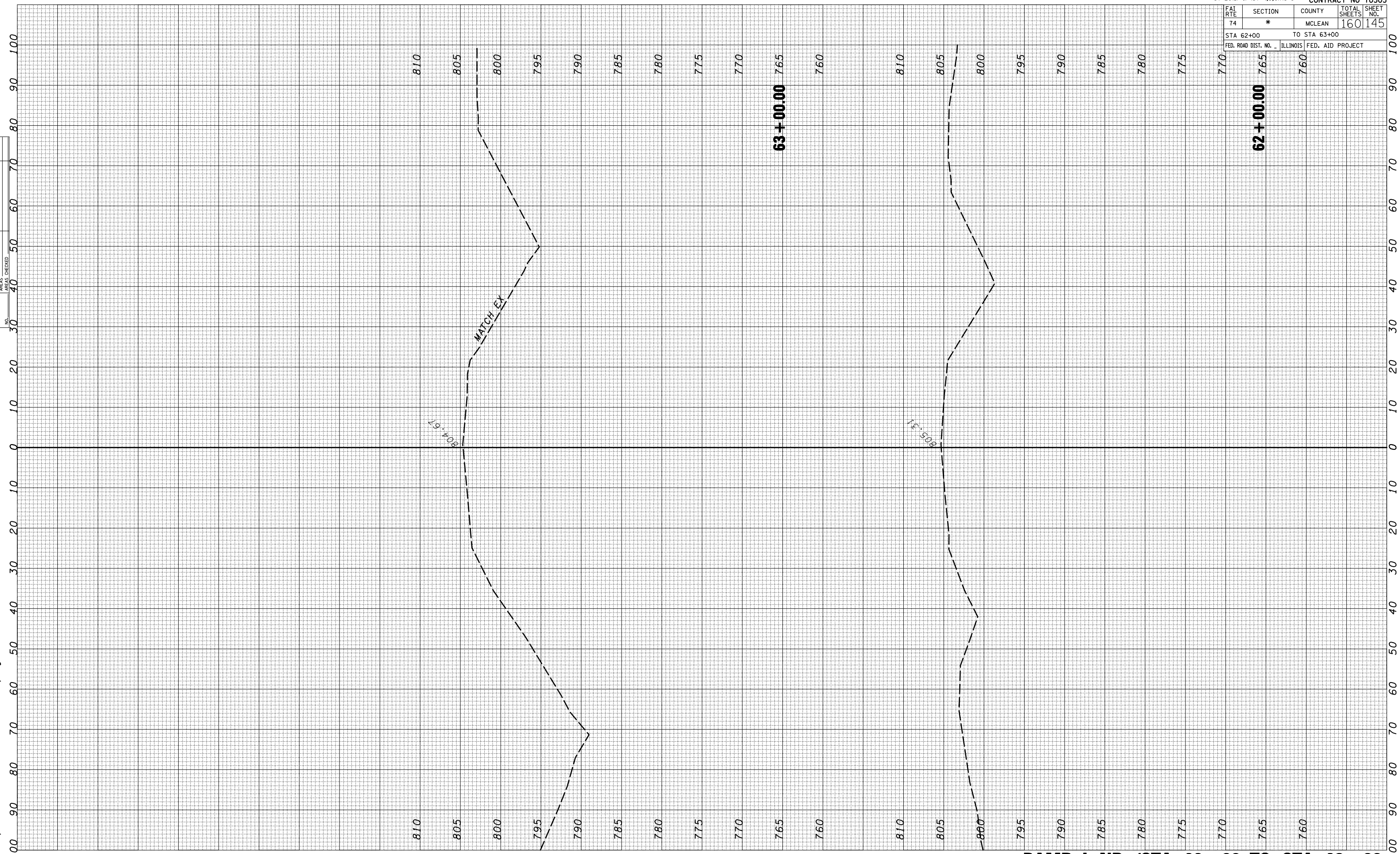


RAMP J TO VET PKWY NB /STA 12+31 TO STA 15+30

FAI RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	MCLEAN	160	145
STA 62+00		TO STA 63+00		
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT				

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	APPROVED		
	AREAS CHECKED		

* DATE-TIME*
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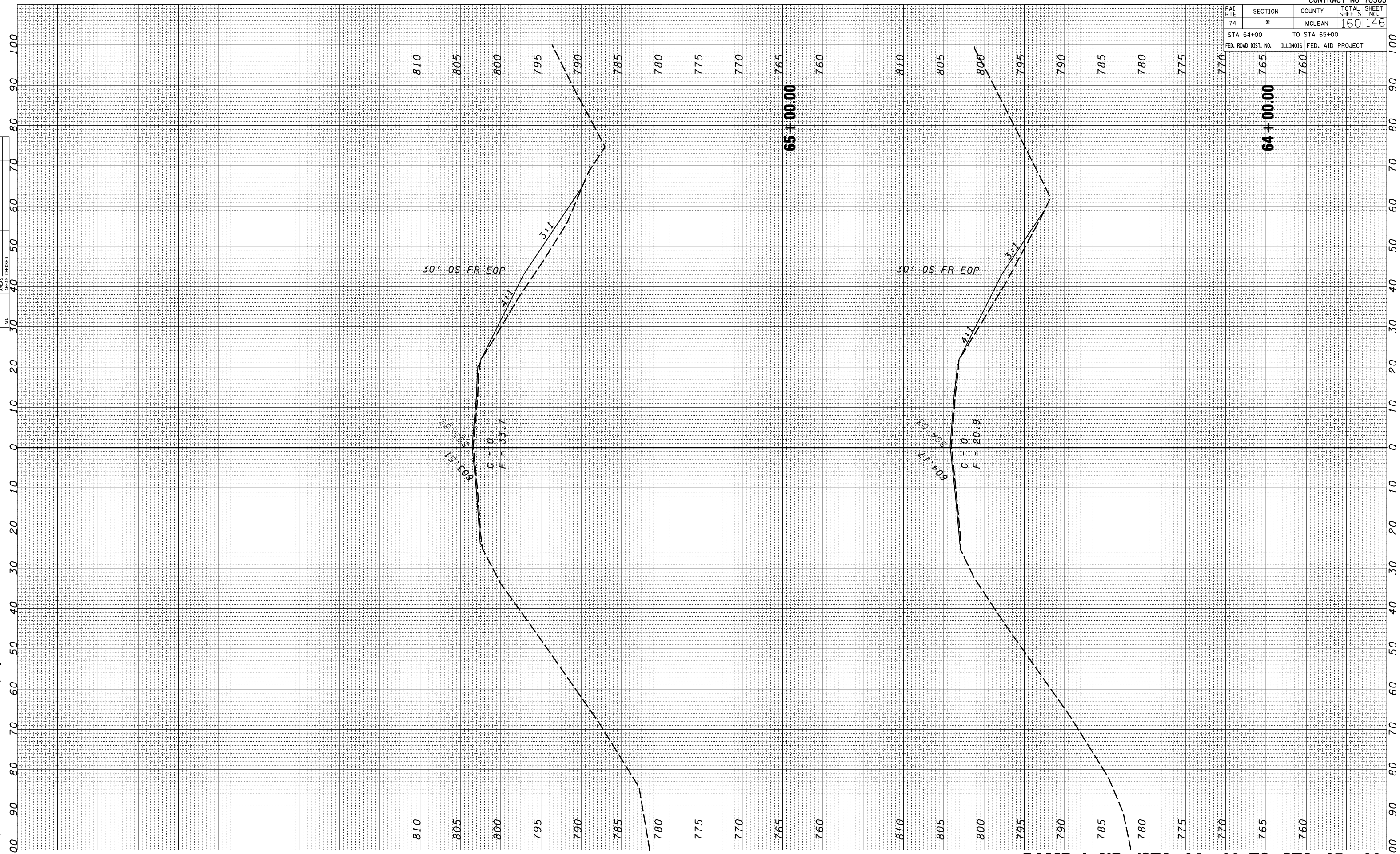


RAMP L NB / STA 62+00 TO STA 63+00

FAI RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	MCLEAN	160	146
STA 64+00		TO STA 65+00		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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

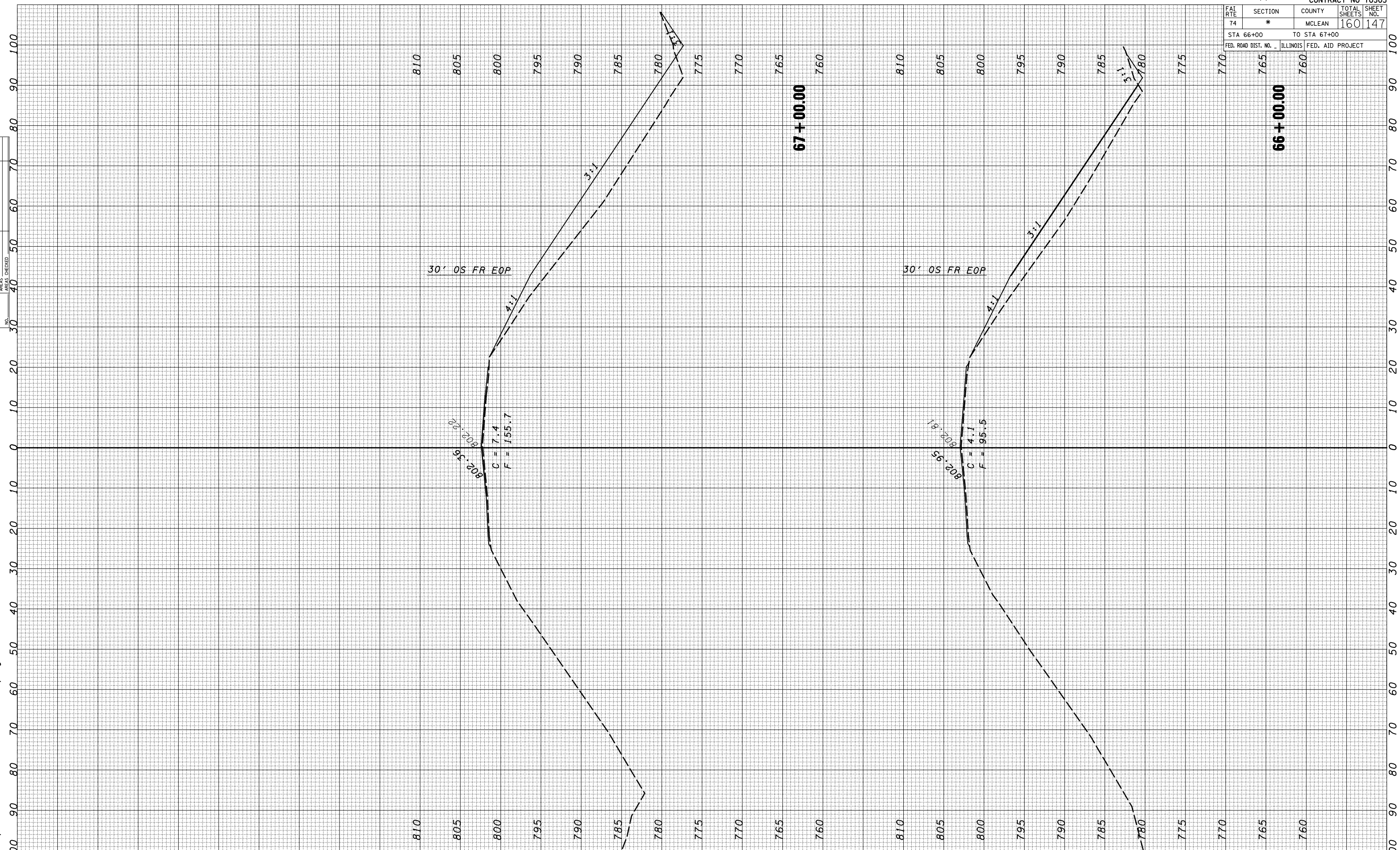
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RAMP L NB / STA 64+00 TO STA 65+00

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	APPROVED		
	AREAS CHECKED		

* DATE-TIME*
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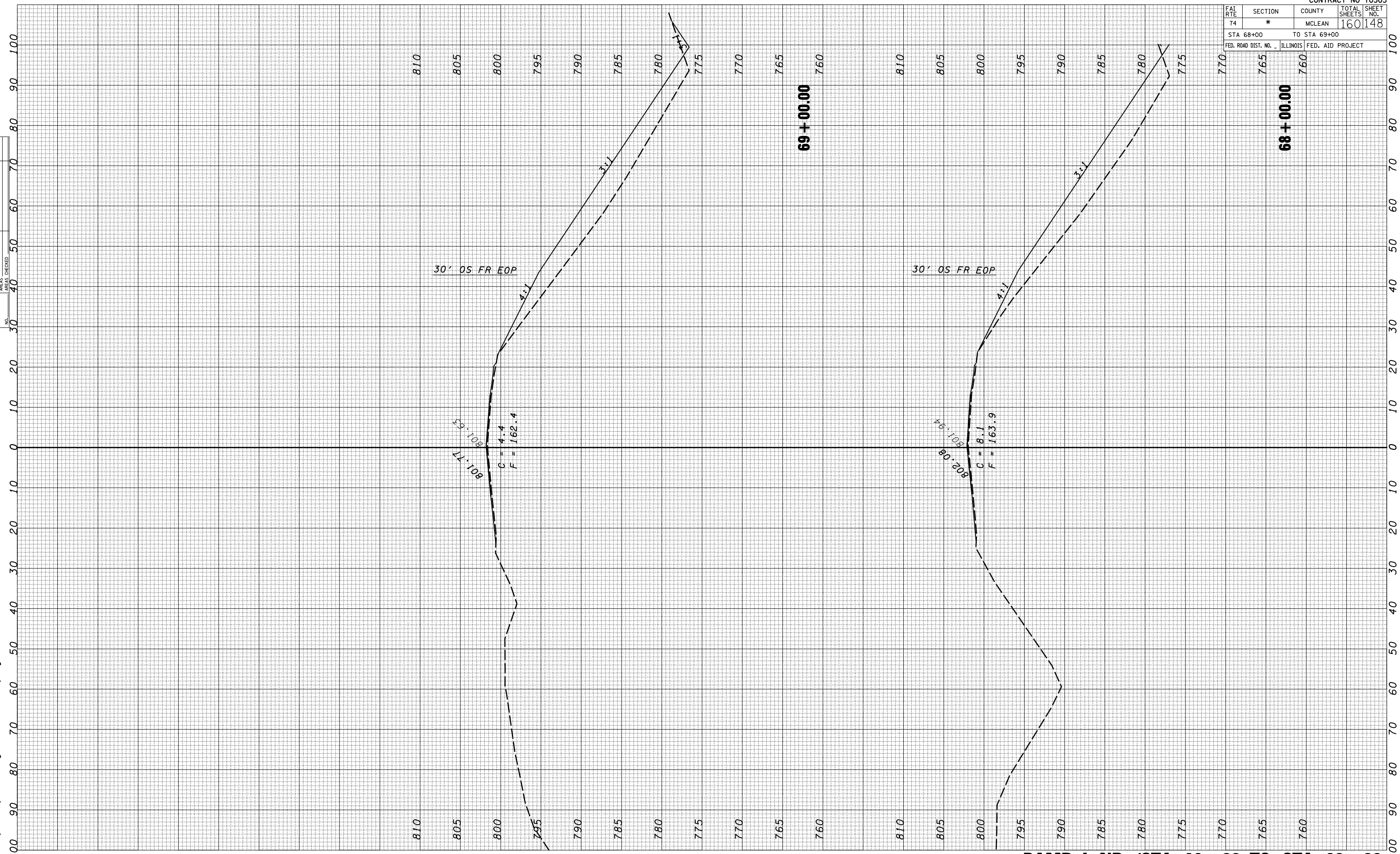


RAMP L NB / STA 66+00 TO STA 67+00

FAL RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	MCLEAN	160	148
STA 68+00		TO STA 69+00		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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

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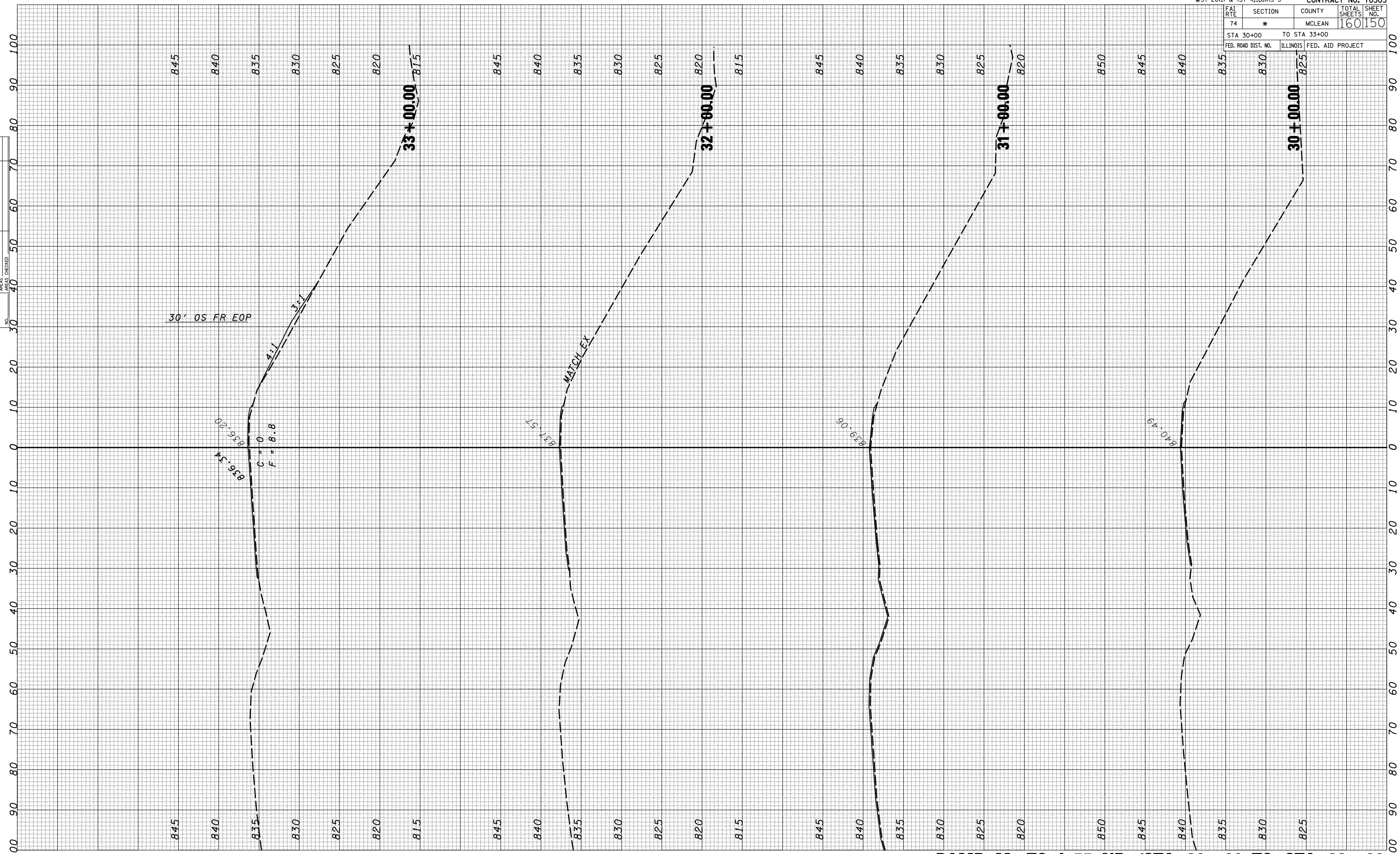


RAMP L NB / STA 68+00 TO STA 69+00

FAI	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	MCLEAN	160	150
STA 30+00		TO STA 33+00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

NO.	DATE	BY

DATE-TIME
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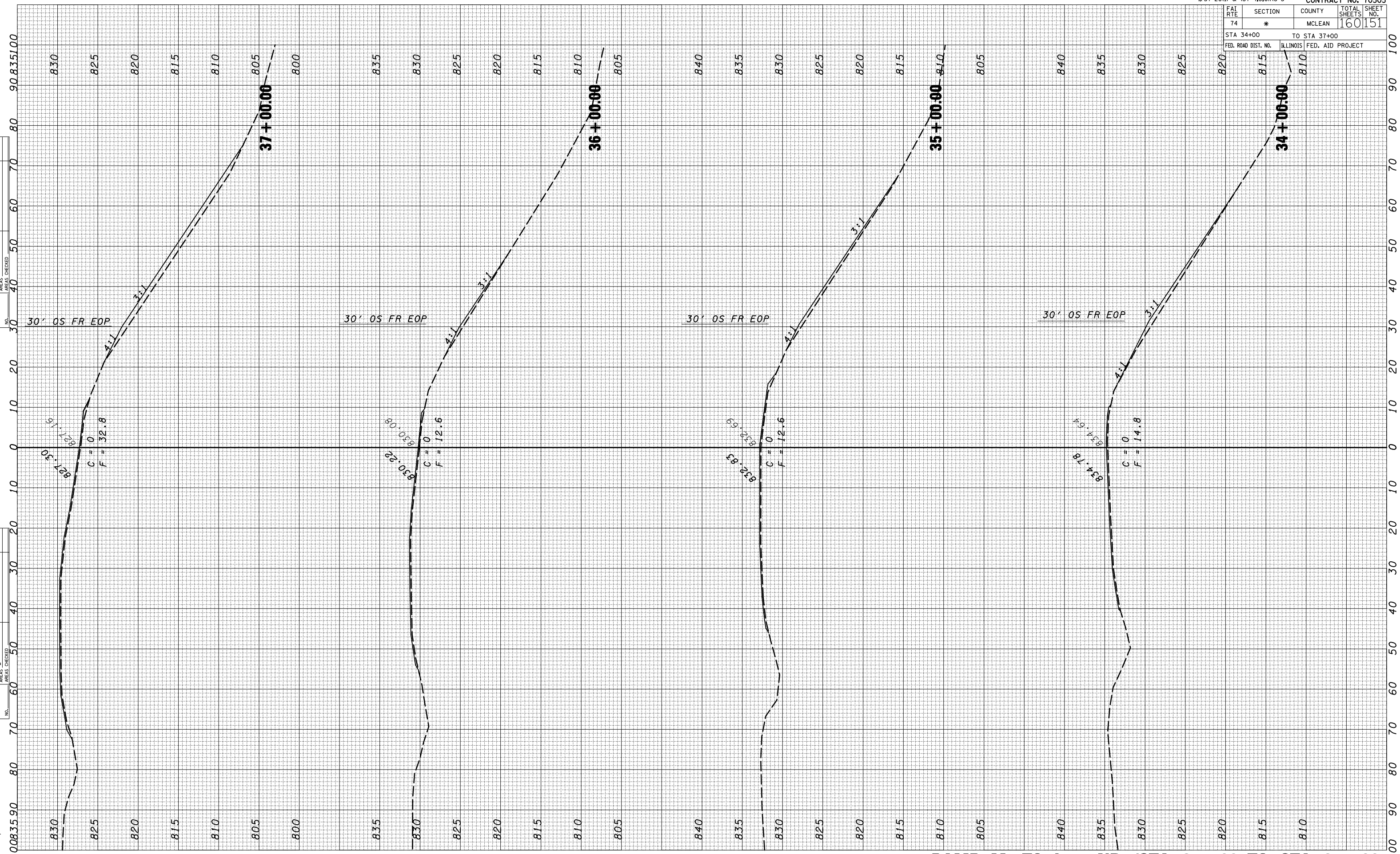
RAMP M TO I-55 NB /STA 30+00 TO STA 33+00

FAI RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	MCLEAN	160	151
STA 34+00		TO STA 37+00		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

NO.	DATE	BY

NO.	DATE	BY

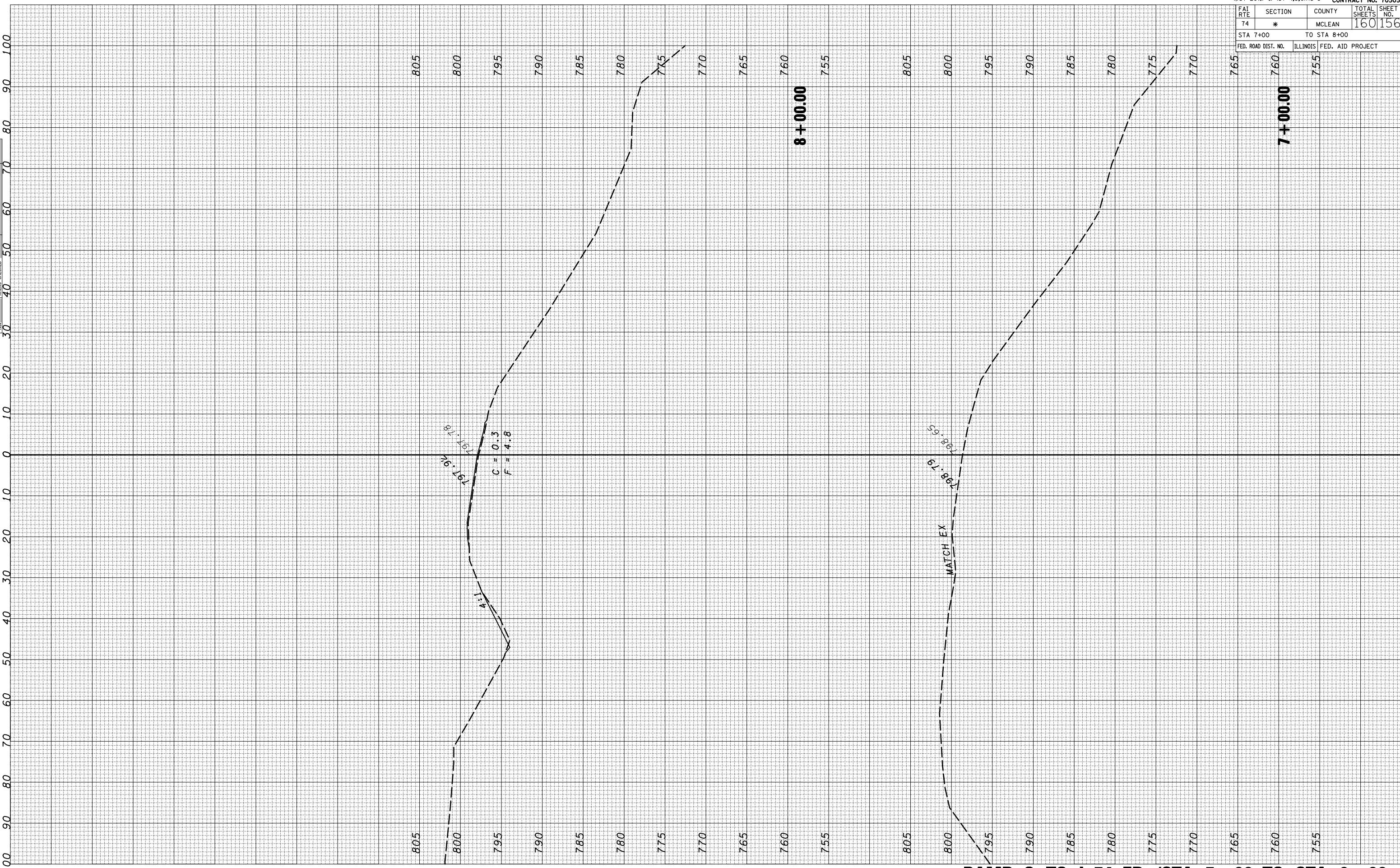
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RAMP M TO I-55 NB / STA 34+00 TO STA 37+00

FAI RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	MCLEAN	160	156
STA 7+00		TO STA 8+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	CHECKED		
	AREAS CHECKED		

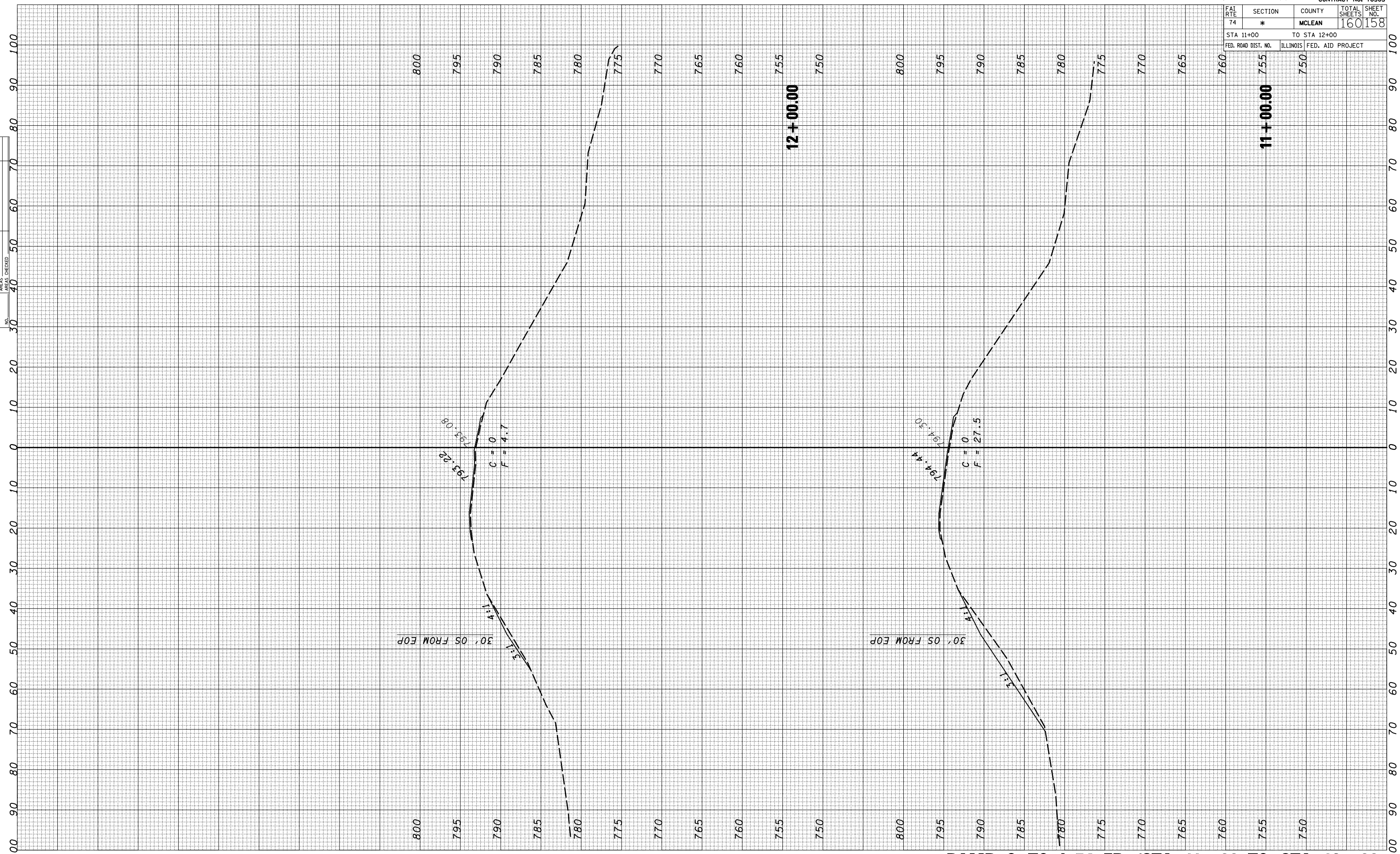


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RAMP 0 TO I-74 EB / STA 7+00 TO STA 8+00

FAI RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	MCLEAN	160	158
STA 11+00		TO STA 12+00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	CHECKED		
	AREAS CHECKED		



12+00.00

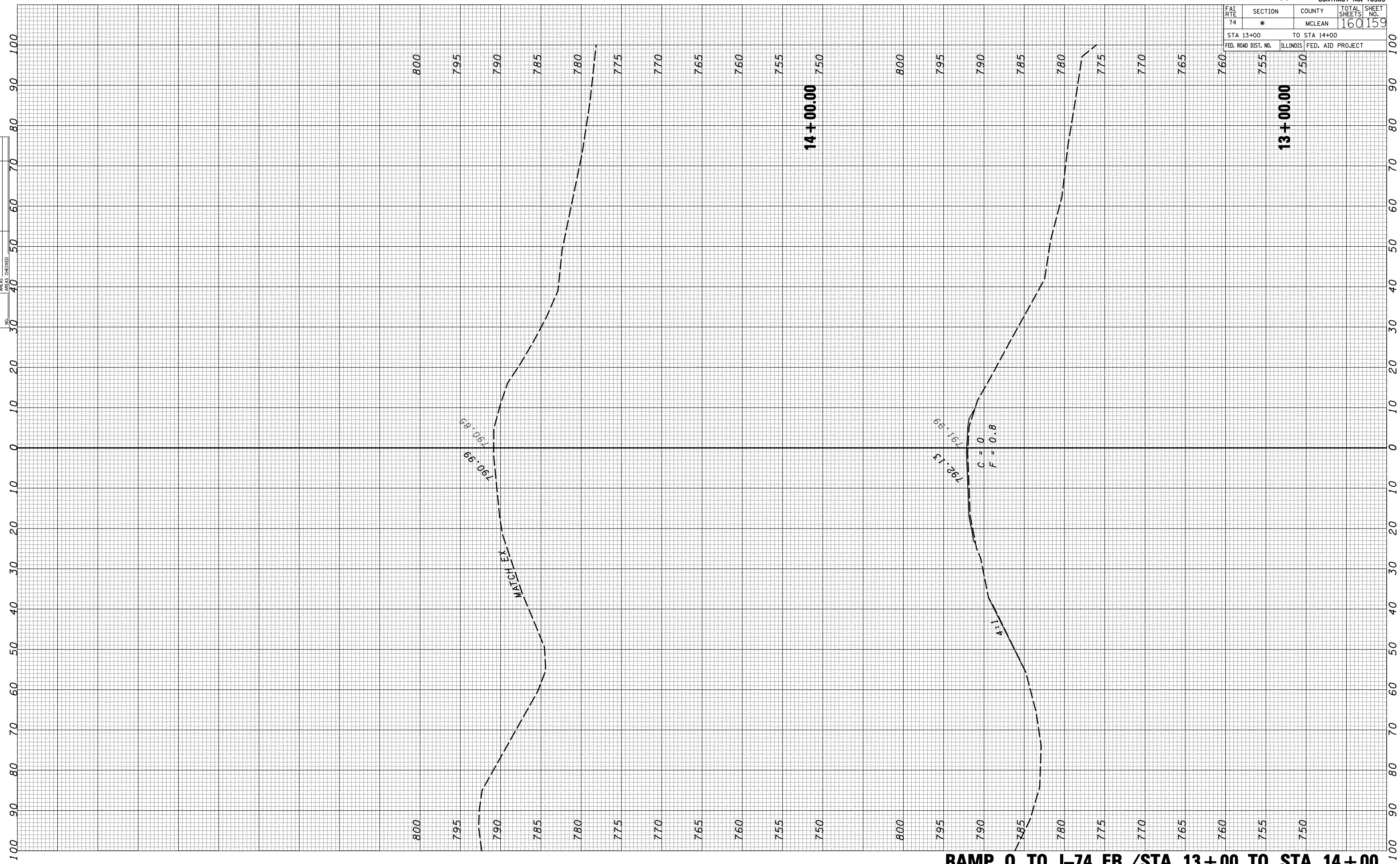
11+00.00

RAMP 0 TO I-74 EB /STA 11+00 TO STA 12+00

DATE-TIME
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FAL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	MCLEAN	160	159
STA 13+00		TO STA 14+00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	CHECKED		
	AREAS CHECKED		

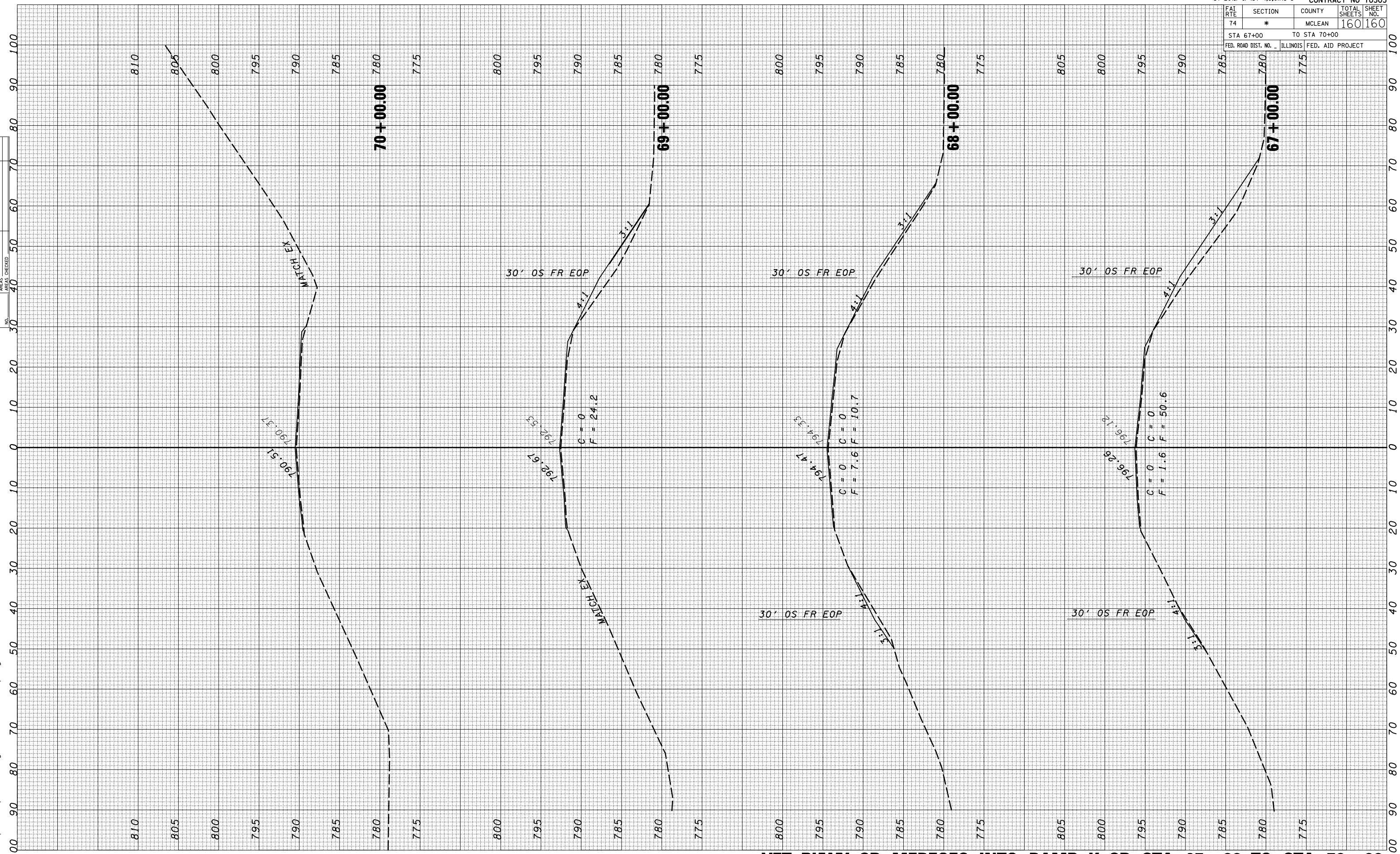


RAMP 0 TO I-74 EB / STA 13+00 TO STA 14+00

FAI RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	MCLEAN	160	160
STA 67+00		TO STA 70+00		
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT				

NO.	DATE	BY

* DATE-TIME*
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VET PKWY SB MERGES INTO RAMP K SB STA 67+00 TO STA 70+00