

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	2005-0561	WILL	20	1

CONTRACT NO.: 60A44

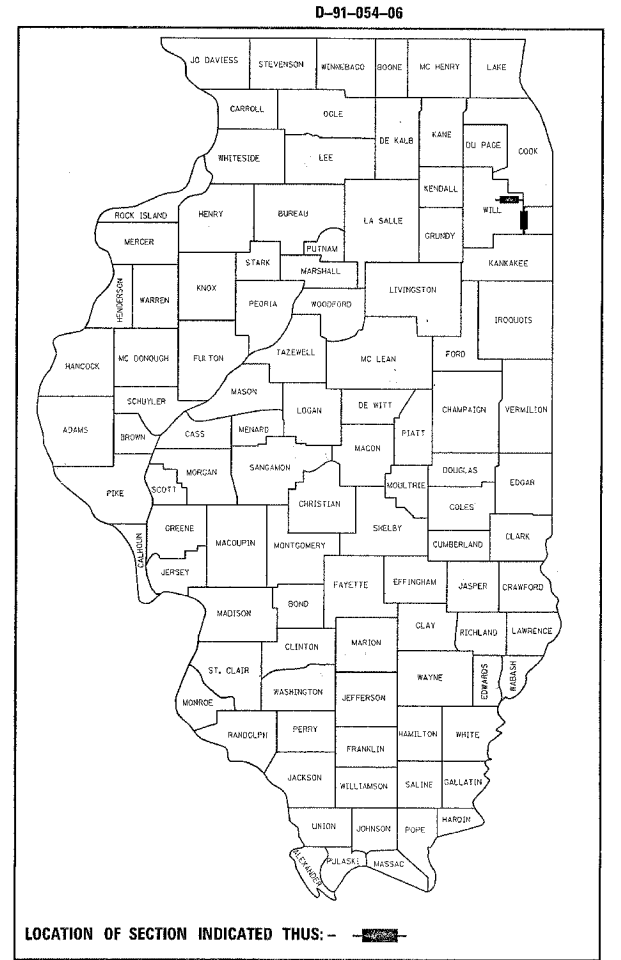
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED HIGHWAY PLANS

LOCATION 1: F.A.I. RTE. 57 (I-57)
AT PEOTONE WEIGH STATION
LOCATION 2: F.A.I. RTE. 80 (I-80)
AT FRANKFORT WEIGH STATION

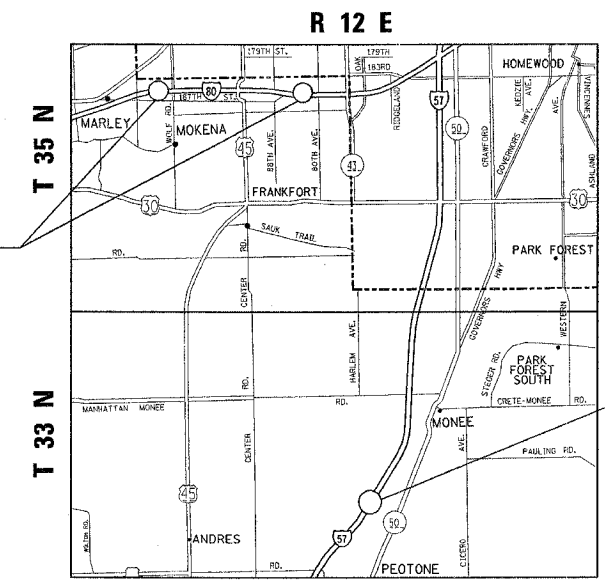
WEIGH STATION REPAIRS
SECTION: 2005-0561
WILL COUNTY
C-91-054-06



LOCATION 1: IMPROVEMENT LOCATED IN THE VILLAGE OF PEOTONE

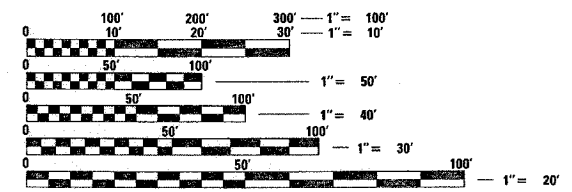
LOCATION 2: IMPROVEMENT LOCATED IN THE FRANKFORT TOWNSHIP

LOCATION 2 : I-80 AT FRANKFORT WEIGH STATION



LOCATION 1 : I-57 AT PEOTONE WEIGH STATION

LOCATION 1: PEOTONE TOWNSHIP
LOCATION 2: FRANKFORT TOWNSHIP



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

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

CONTRACT NO. 60A44

LOCATION 1: I-57 AT PEOTONE WEIGH STATION

TRAFFIC DATA:
2005 ADT: 34,000
SPEED LIMIT: 65 MPH

LOCATION 2: I-80 AT FRANKFORT WEIGH STATION

TRAFFIC DATA:
2005 ADT: 101,800
SPEED LIMIT: 65 MPH

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 12/21/2005

Diane M. O'Keefe / *col*
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

February 3, 2006
Mike Hise / *RD*
ENGINEER OF DESIGN AND ENVIRONMENT

February 3, 2006
Milton R. Sees / *P.E. RD*
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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DIST. 1 - PLAN PREPARATION ENGINEER: KEN ENG / J. CHANG (847) 705-4432

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		100% STATE Y222		
				LOCATION 1 RURAL	LOCATION 2 URBAN	
42001200	PAVEMENT FABRIC	SQ YD	90	90		
42001300	PROTECTIVE COAT	SQ YD	497.8	248.9	248.9	
44200929	CLASS B PATCHES, TYPE I, 8 INCH	SQ YD	37	37		
44200934	CLASS B PATCHES, TYPE II, 8 INCH	SQ YD	53	53		
44200942	CLASS B PATCHES, TYPE III, 8 INCH	SQ YD	41	41		
44200944	CLASS B PATCHES, TYPE IV, 8 INCH	SQ YD	48	48		
44213200	SAW CUTS	FOOT	680	680		
45200100	JOINT OR CRACK ROUTING (PC CONCRETE PAVEMENT AND SHOULDER)	FOOT	168	168		
45200300	JOINT OR CRACK FILLING	POUND	392	392		
50102400	CONCRETE REMOVAL	CU YD	55.3	35.2	20.1	
50104800	REMOVAL OF EXISTING CONCRETE DECK	L SUM	1	0.5	0.5	
50300225	CONCRETE STRUCTURES	CU YD	55.3	35.2	20.1	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	83.0	41.5	41.5	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	20,240	10,120	10,120	
50600600	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1		
50600700	CLEANING AND PAINTING STEEL BRIDGE NO. 2	L SUM	1		1	
50606401	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO.1	L SUM	1	1		
50606402	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO.2	L SUM	1		1	
50800105	REINFORCEMENT BARS	POUND	5180	2640	2540	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	29920	14960	14960	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	2	2	
67100100	MOBILIZATION	L SUM	1	0.5	0.5	
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	0.5	0.5	
Z0017202	DOWEL BARS 1 1/2"	EACH	178	178		
X0324265	JACK REMOVE AND REPLACE LOAD CELLS	L SUM	1	0.5	0.5	

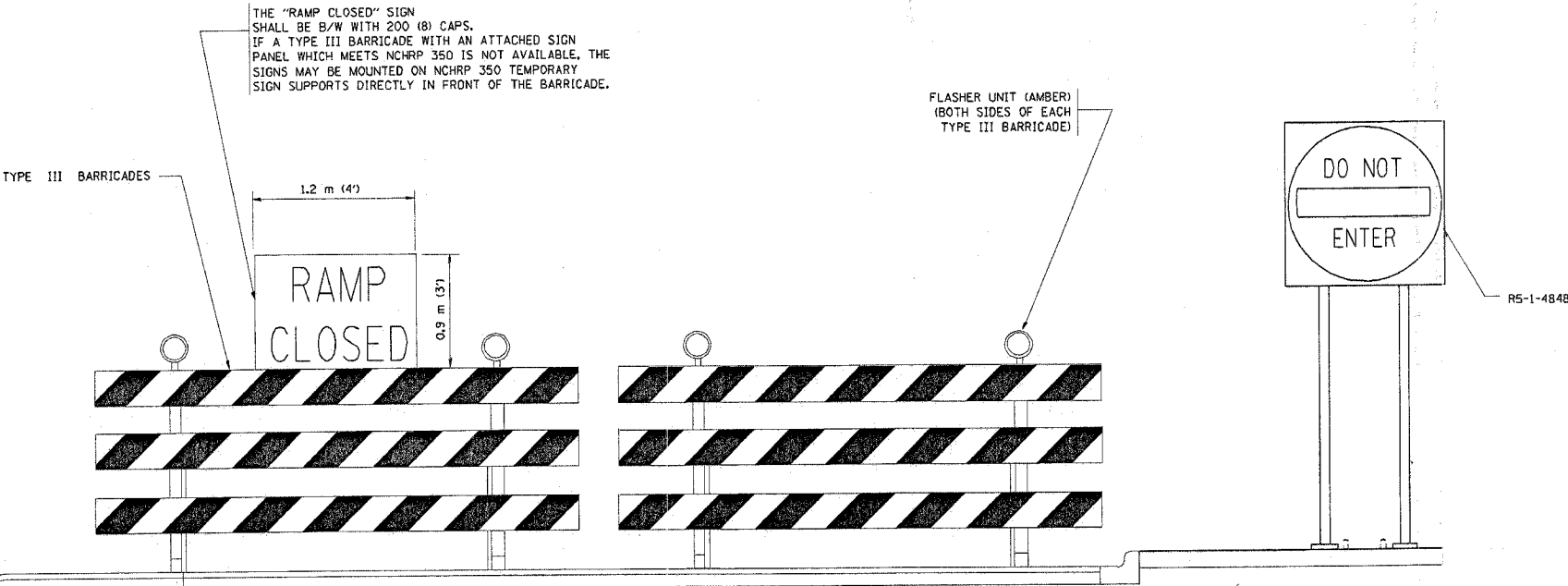
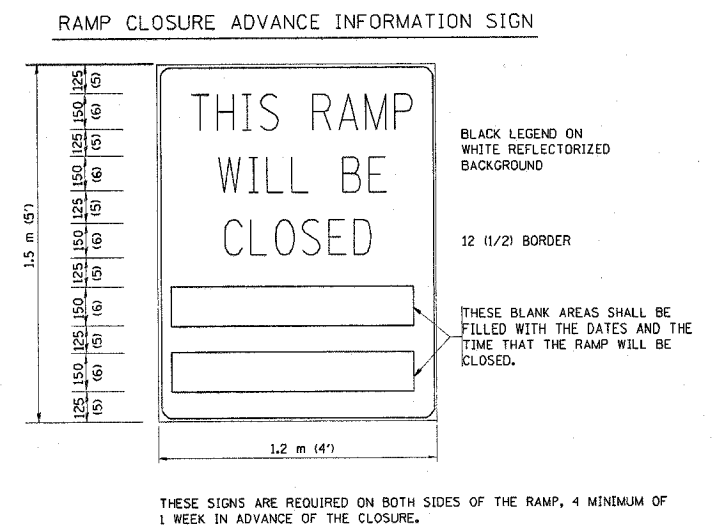
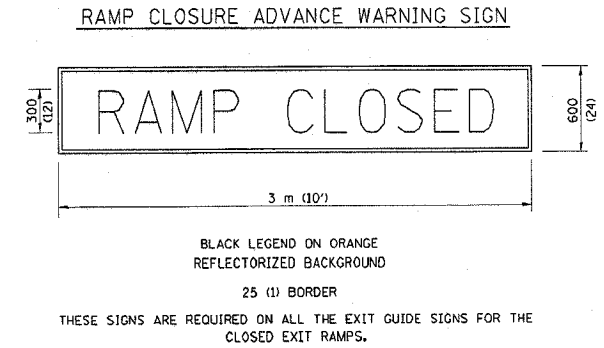
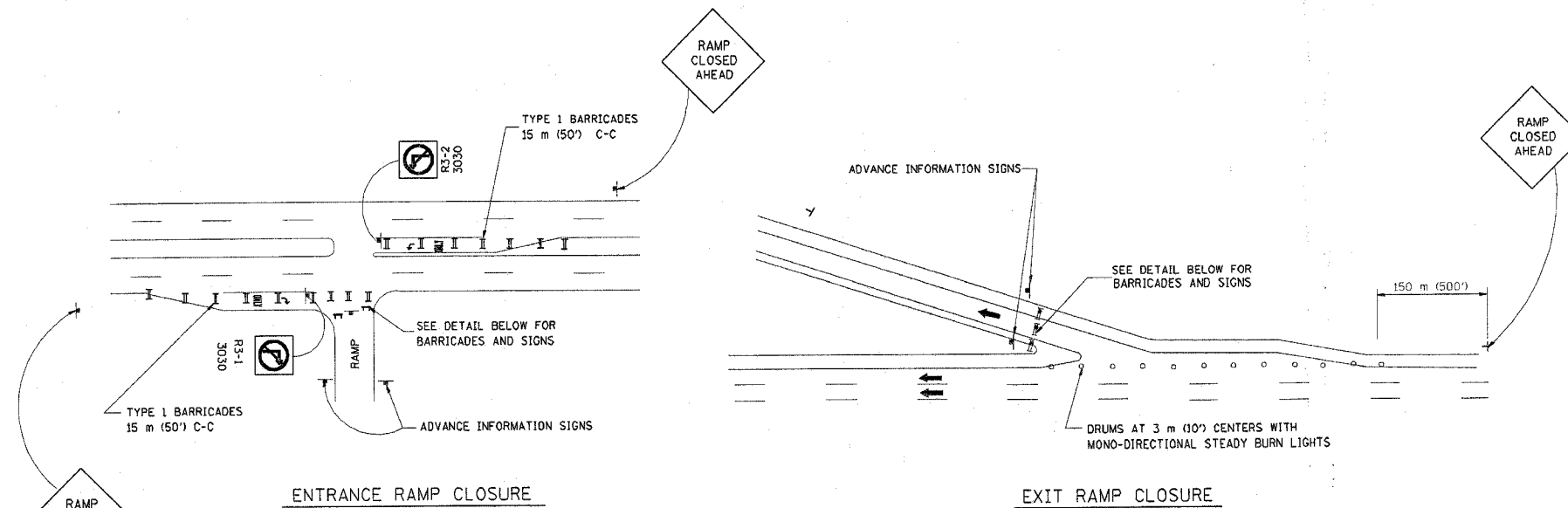
SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE															
CODE NO	ITEM	UNIT																	

12/19/2005 8:03:46 AM C:\054056\054056.dwg

Rev.

REVISIONS	
NAME	DATE

F.A.T. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/80	2005-0561	WILL	20	4
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



DETAIL FOR REQUIRED BARRICADES & SIGNS

- GENERAL NOTES:
- CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 700 (28) HIGH.
 - STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
 - A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES.
 - FOR DAYTIME RAMP CLOSURES, LASTING 6 HOURS OR LESS, THE CONTRACTOR MAY ELIMINATE THE ADVANCE WARNING SIGNS ON THE EXIT GUIDE SIGNS.
 - ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED.
 - THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND PROTECTION.
 - AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.

- NOTES:
- CONES MAY BE SUBSTITUTED FOR TYPE I AND TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28" IN HEIGHT.
 - STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
 - THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS.
 - ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED TWENTY FOUR (24) HOURS IN LENGTH.

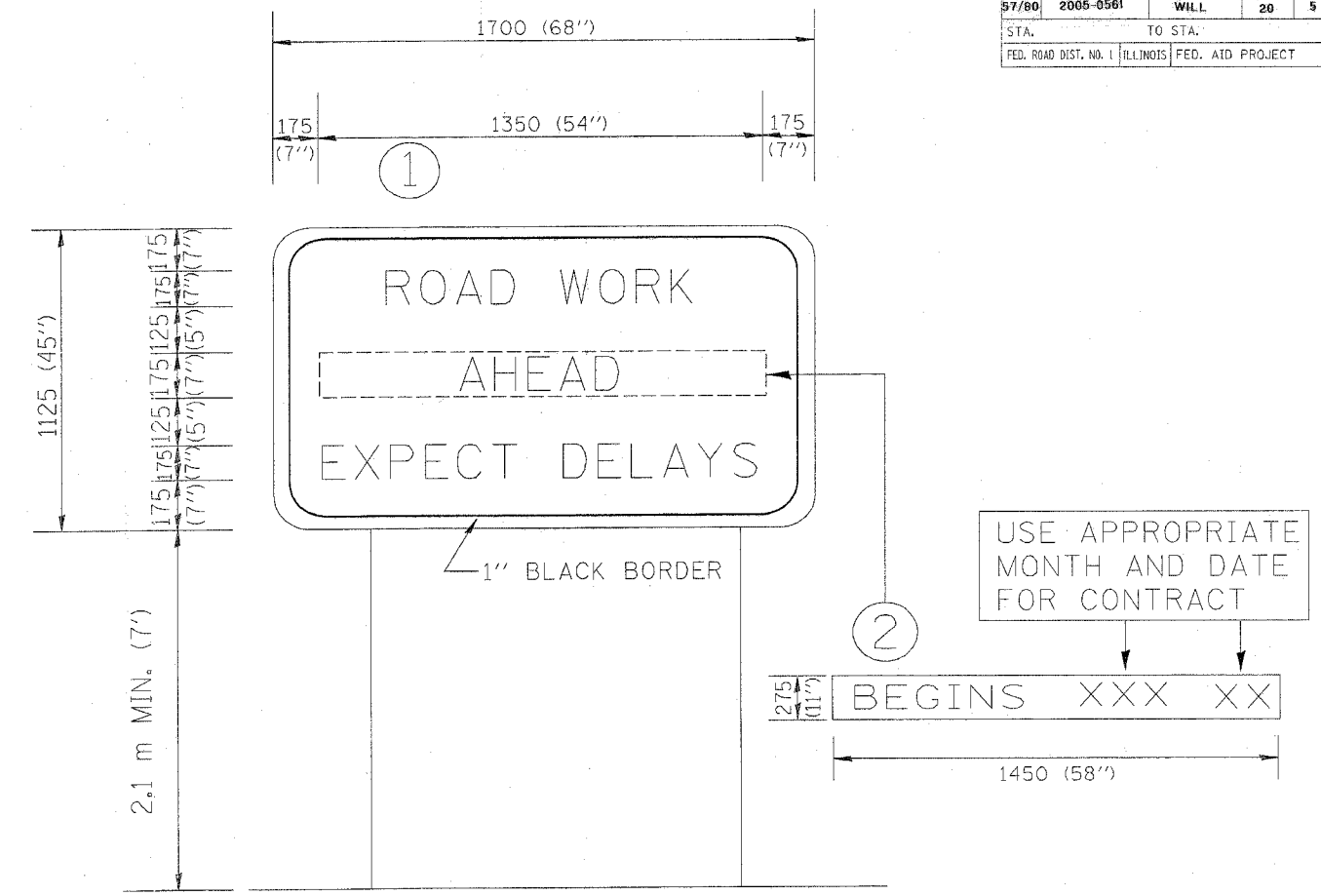
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FREEWAY
ENTRANCE AND EXIT RAMP
CLOSURE DETAILS**

REVISIONS	
NAME	DATE
DWS	2-83
DWS	1/90
DWS	9/94
DWS	12/94
DWS/JAF	12/02
Revise devices to meet NCHRP 350	4/03

SCALE: NONE
DATE 05/06/2003
DRAWN BY
CHECKED BY
TC-8

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
97/80	2005-0561	WILL	20	5
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 2.3 SQ. M. (25.70 SQ. FT.)

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

REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY INFORMATION SIGNING
 SCALE: DATE 10/18/2002
 DRAWN BY: BUR. OF DESIGN
 CHECKED BY:
 TC22
 REVISION DATE: 02/02/99

Existing Structure: Weigh Stations at Frankfort were originally built in 1969 as F.A.I. Route 80, Section (99-5, 99-5-1)I-1, Project I-80-4(104) 142 Will County. The existing concrete deck and upper 1'-0" of concrete pit perimeter are to be removed and replaced. Traffic will be detoured.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. 1
F.A.I. 80	2005-0561	Will	6	20	7 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract #60A44

INDEX OF SHEETS

1. General Data
- 2-3. General Plan & Elevation
4. Concrete Removal Details
5. Concrete Deck Details
- 6-7. Concrete Pit Details

SCOPE OF WORK

1. Remove and replace concrete decks of the 4 platform scales.
2. Clean and paint structural steel.
3. Remove and replace the top 1'-0" of the concrete pit on the perimeter of the 4 platform scales.

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322, Grade 60.
Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.
All construction joints shall be bonded.
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
The cost of any structure excavation shall be included with Concrete Removal.
Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All existing steel shall be cleaned per Near White Blast Cleaning-SSPC-SP10. All existing steel shall be painted according to the requirements of Paint System 1-02/E/U. The color of the final finish coat shall be Gray, Munsell No 5B 7/1.
The SSPC-QP1 and SSPC-QP2 Painting Contractor Certifications will not be required for for this Bridge.
Field welding of construction accessories will not be permitted to beams.
Prior to pouring the new concrete deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04.
The Contractor shall fine the concrete surface of the platforms according to Article 420.11(e)(1) of the Standard Specifications. Cost included in Concrete Superstructure.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Superstructure	Cu. Yd.	41.5		41.5
Removal of Existing Concrete Deck	L. Sum	0.5		0.5
Reinforcement Bars, Epoxy Coated	Pound	14960		14960
Concrete Removal	Cu. Yd.		20.1	20.1
Protective Coat	Sq. Yd.	248.9		248.9
Furnishing and Erecting Structural Steel	Pound		10120	10120
Concrete Structures	Cu. Yd.		20.1	20.1
Reinforcement Bars	Pound		2540	2540
Cleaning and Painting Steel Bridge No. 2	L. Sum			1
Containment and Disposal of Lead Paint Cleaning Residues No. 2	L. Sum			1
Jack, Remove and Replace Load Cells	L. Sum			0.5

LOADING HS20-44

No future wearing surface allowed

DESIGN SPECIFICATIONS

1996 AASHTO w/ 1997 thru 2002 Interims

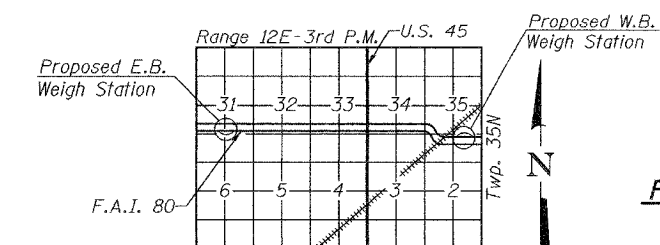
DESIGN STRESSES

NEW CONSTRUCTION

$f'_c = 3,500$ psi (Deck and Pit)
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 36,000$ psi (Structural Steel AASHTO M270 Grade 36)

FIELD UNITS

$f'_c = 1,000$ psi (Pit)
 $f_s = 20,000$ psi (Reinforcement)
 $f_s = 20,000$ psi (Structural Steel)



LOCATION SKETCH

GENERAL DATA
FRANKFORT WEIGH STATIONS
F.A.I. ROUTE 80 SECTION 2005-0561
WILL COUNTY
STA. 1212+05.06 (W.B.) &
STA. 989+44.94 (E.B.)

DESIGNED	Stephen M. Ryan
CHECKED	[Signature]
DRAWN	R. Sommer
CHECKED	SMR/PAL/SEM

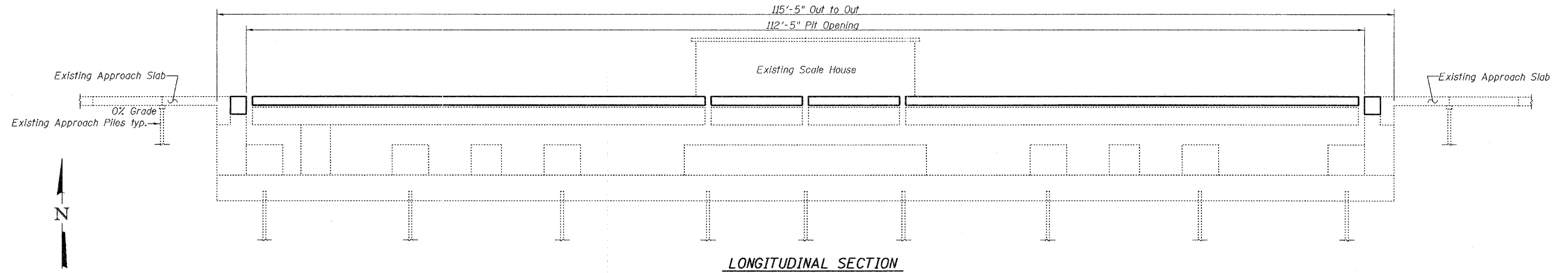
EXAMINED January 20, 2006
[Signature]
ENGINEER OF BRIDGE DESIGN
PASSED [Signature]
ENGINEER OF BRIDGES AND STRUCTURES



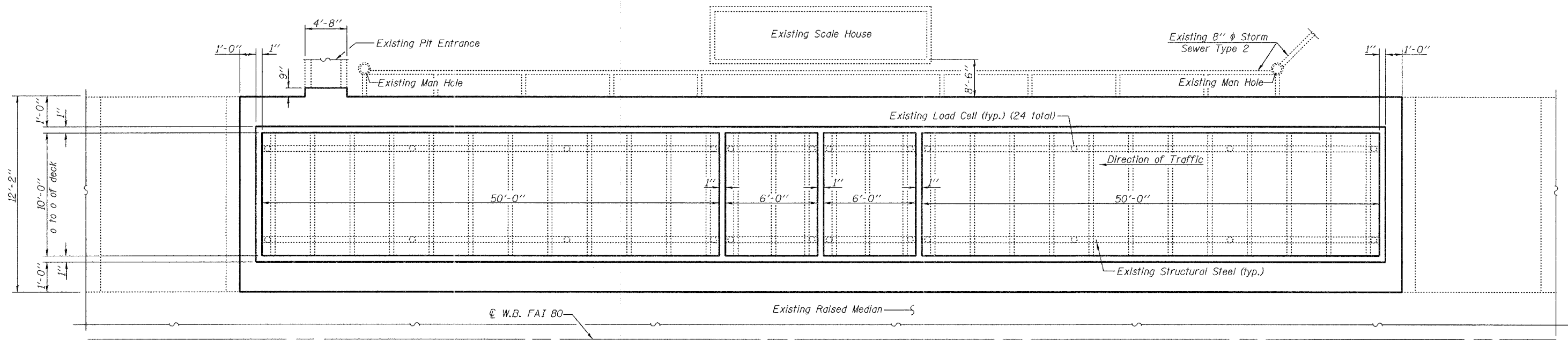
EXPIRES 11-30-2006

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.	SHEET NO. 2 7 SHEETS
F.A.I. 80	2005- 0561	Will	7	20	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	Contract #60A44		



LONGITUDINAL SECTION



PLAN
(W.B. Structure-Weigh Station #1)

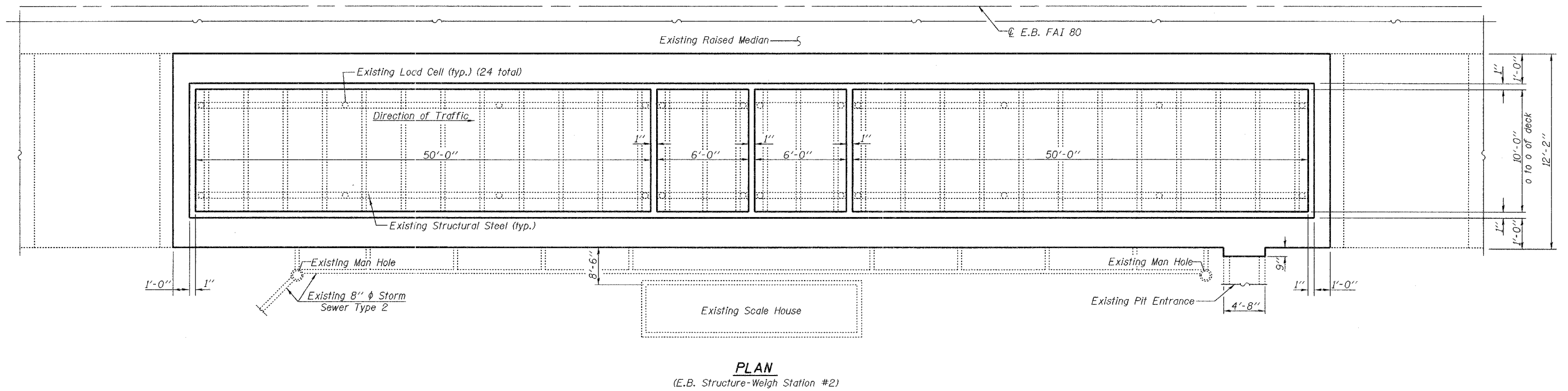
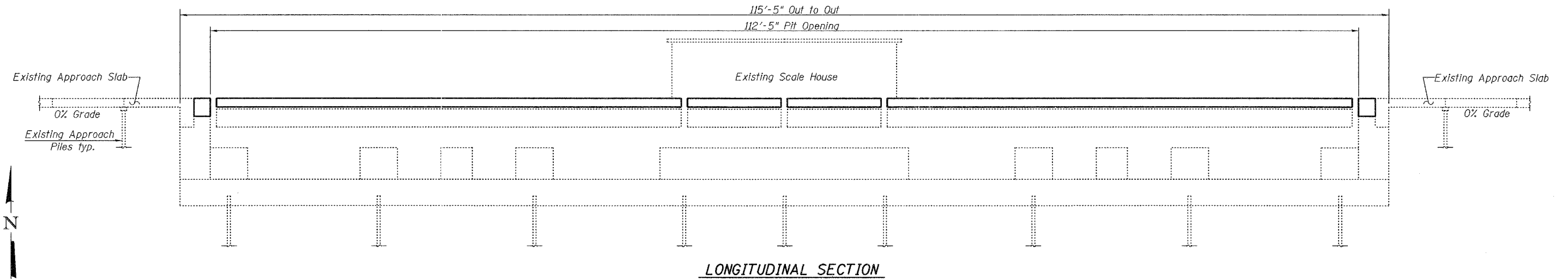
DESIGNED	Stephen M. Ryan
CHECKED	Phillip R. Litchfield
DRAWN	R. Sommer
CHECKED	SMR/PRL/SEM

EXAMINED	Thomas J. Domagala	January 20, 2006
PASSED	Ralph E. Anderson	

GENERAL PLAN & ELEVATION
W.B. FRANKFORT WEIGH STATION
F.A.I. ROUTE 80 SECT. 2005-0561
WILL COUNTY
STA. 1212+05.06

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO. 3
F.A.I. 80	2005-0561	Will	8	20	7 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-	Contract #60A44		



DESIGNED	Stephen M. Ryan
CHECKED	Phillip R. Litchfield
DRAWN	R. Sommer
CHECKED	SMR/PRL/SEM

January 20, 2006

EXAMINED *Thomas J. Domagalaki*
ENGINEER OF BRIDGE DESIGN

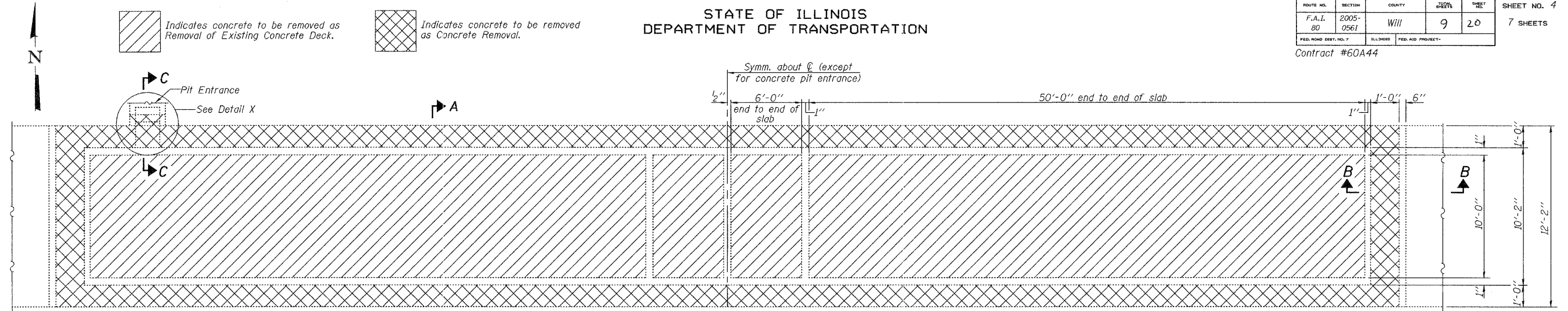
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

GENERAL PLAN & ELEVATION
E.B. FRANKFORT WEIGH STATION
F.A.I. ROUTE 80 SECT. 2005-0561
WILL COUNTY
STA. 989+44.94

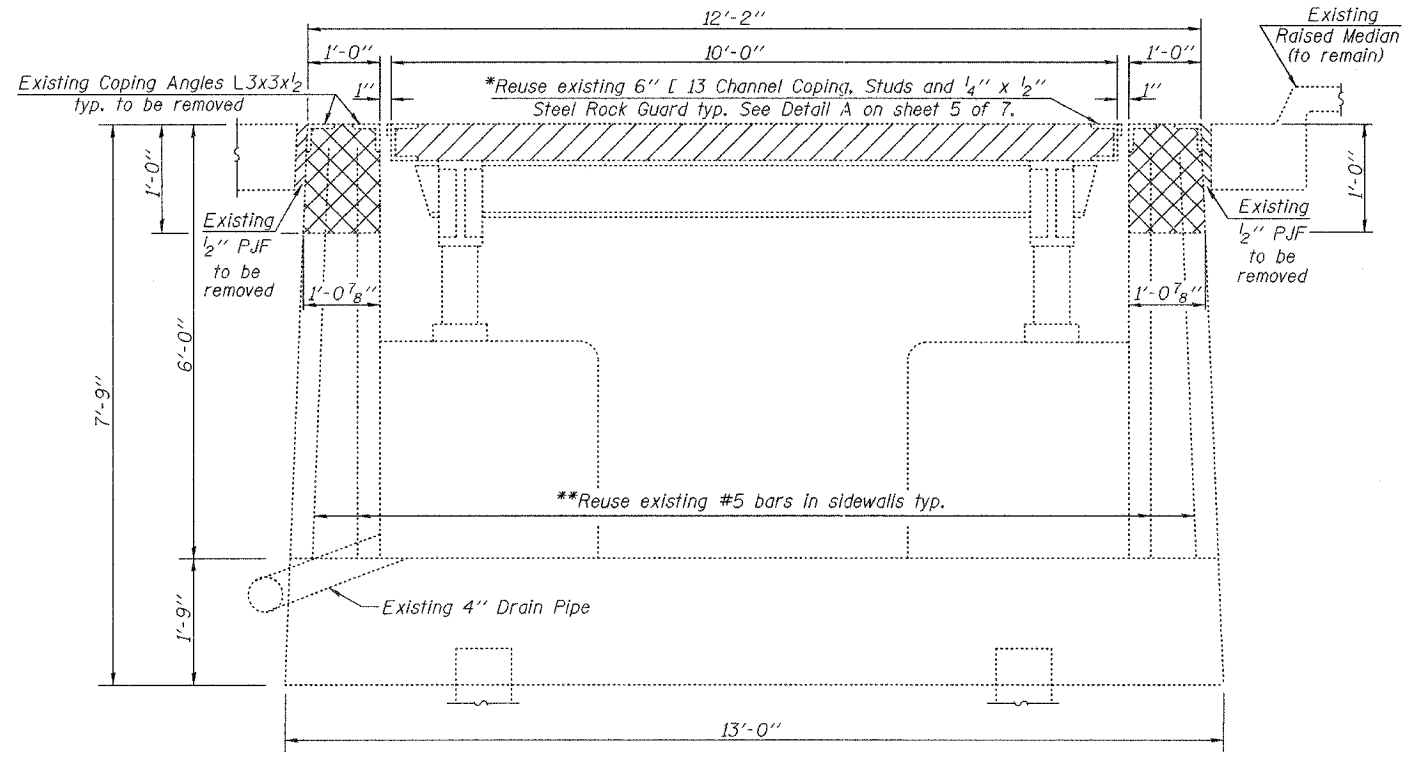
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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FED. ROAD DIST. NO. 7	ILL. INDS.	FED. AID PROJECT-			

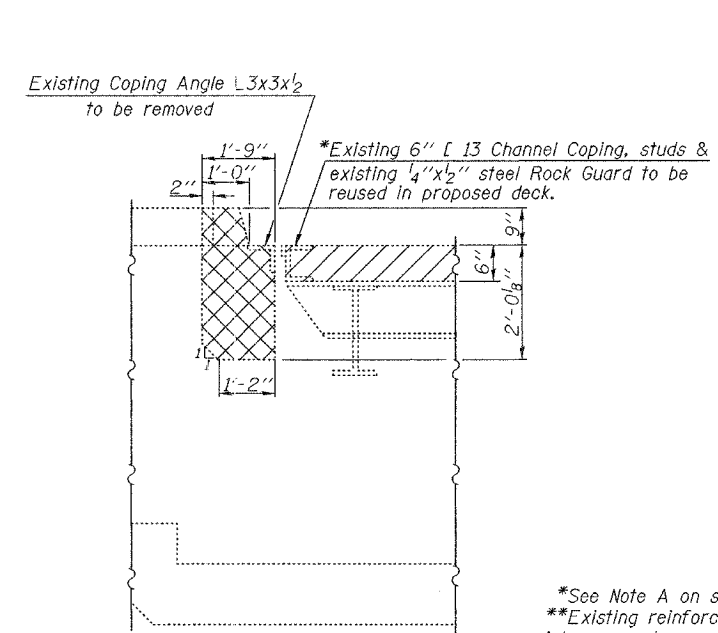
Contract #60A44



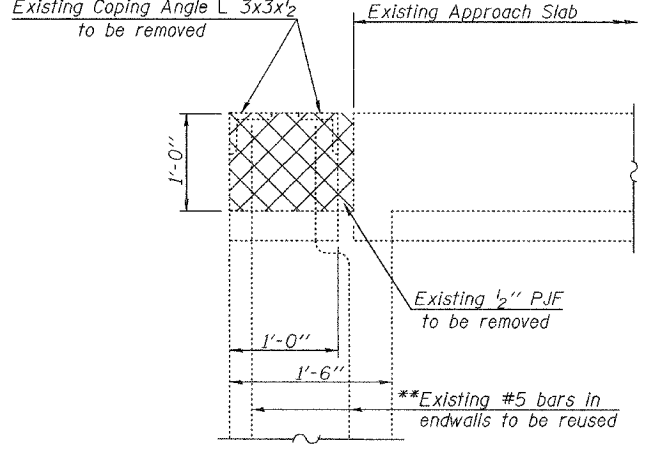
PLAN
(Coping not shown)
(W.B. shown & E.B. similar)



SECTION A-A



SECTION C-C



SECTION B-B

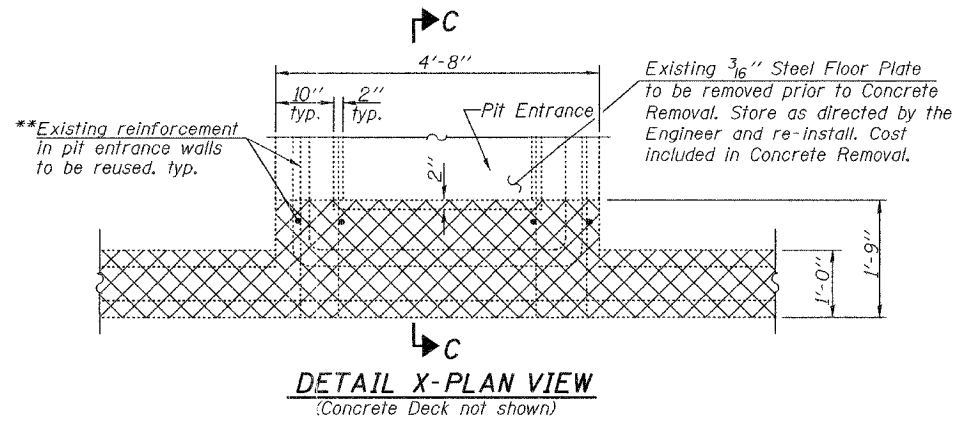
*See Note A on sht. 5 of 7.
**Existing reinforcement extending into removed areas shall be cleaned, straightened and incorporated into the new construction. Cost included with Concrete Removal.

Note: Cost of removal of coping angles (L3x3x1/2) and PJF included in Concrete Removal.

**BILL OF MATERIAL
FOR BOTH W.B. & E.B.**

Item	Unit	Total
Concrete Removal	Cu. Yd.	20.1
Removal of Existing Concrete Deck	L. Sum	0.5

**CONCRETE REMOVAL DETAILS
FRANKFORT WEIGH STATIONS
F.A.I. ROUTE 80 SECTION 2005-0561
WILL COUNTY
STA. 1212+05.06 (W.B.) &
STA. 989+44.94 (E.B.)**



DETAIL X-PLAN VIEW
(Concrete Deck not shown)

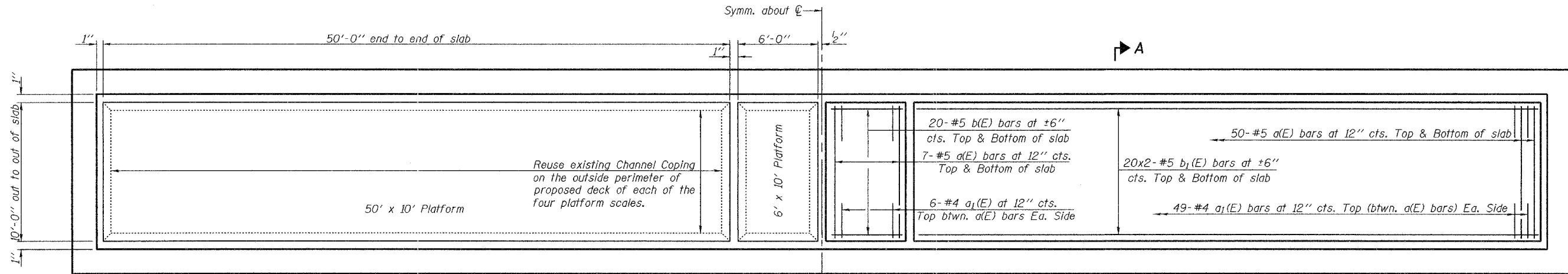
DESIGNED	Stephen M. Ryan
CHECKED	Phillip R. Litchfield
DRAWN	R. Sommer
CHECKED	SMR/PRL/SEM

EXAMINED	Thomas J. Domagalaki	January 20, 2006
PASSED	Ralph E. Anderson	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 5 7 SHEETS
F.A.I. 80	2005-0561	Will	10	20	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract #60A44



SHOWING CHANNEL COPING

PLAN
CONCRETE DECK
(Pit entrance not shown)

SHOWING REINFORCEMENT

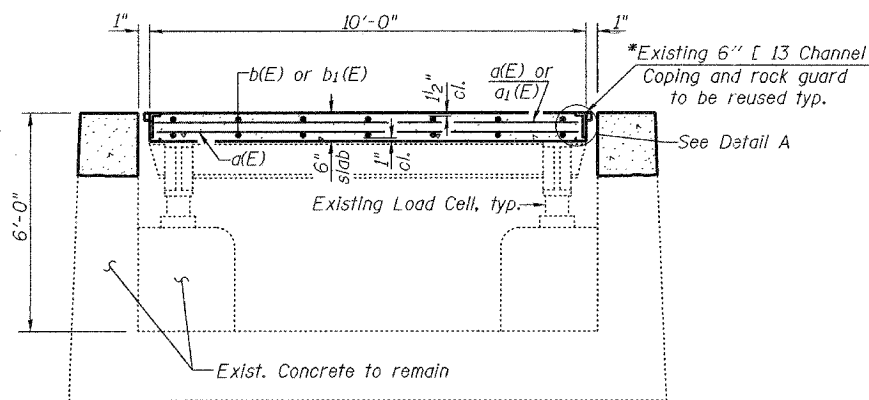
MIN. BAR LAP
#5 Bar = 1'-8"

**BILL OF MATERIAL
FOR BOTH W.B. & E.B.**

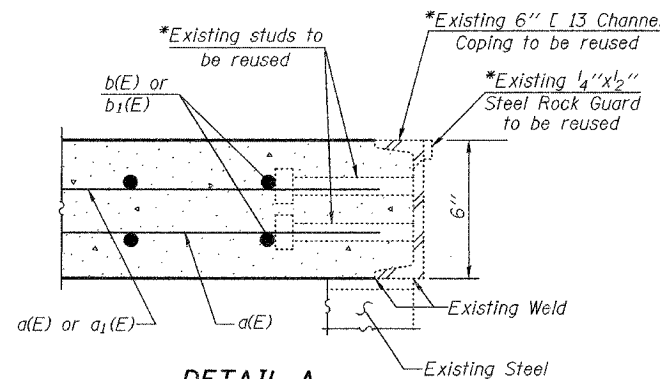
Bar	No.	Size	Length	Shape
a(E)	456	#5	9'-9"	—
a ₁ (E)	440	#4	2'-9"	—
b(E)	160	#5	5'-6"	—
b ₁ (E)	320	#5	25'-9"	—
Reinforcement Bars, Epoxy Coated			Pound	14960
Conc. Superstructure			Cu. Yd.	41.5

Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 20x2-#5 etc. indicates 20 lines of bars with 2 lengths per line.

**CONCRETE DECK DETAILS
FRANKFORT WEIGH STATIONS
F.A.I. ROUTE 80 SECTION 2005-0561
WILL COUNTY
STA. 1212+05.06 (W.B.) &
STA. 989+44.94 (E.B.)**



SECTION A-A
*See Note A



DETAIL A
*See Note A

Note A:
*The Contractor has the option to remove the existing channel coping (with existing studs and rock guards) which is welded to the existing steel and replace it with new channel coping (with new studs and rock guards). If the Contractor chooses to do this, the Bureau of Bridges and Structures shall be contacted for weld information, the Contractor shall take care not to damage the existing steel which is to be reused, and there shall be no extra cost to the department.

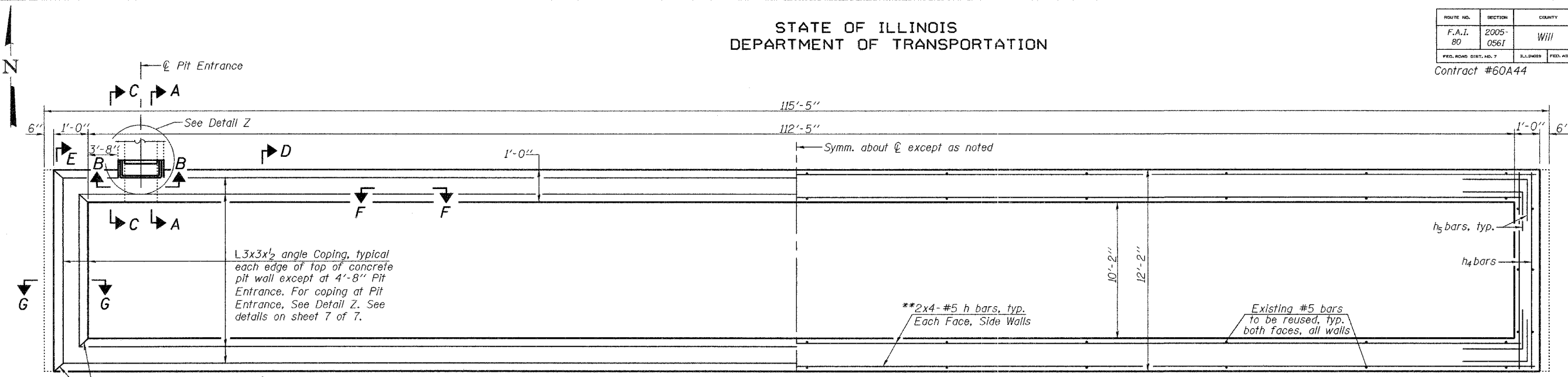
DESIGNED	Stephen M. Ryan
CHECKED	Phillip R. Litchfield
DRAWN	R. Sommer
CHECKED	SMR/PRL/SEM

EXAMINED	January 20, 2006	Thomas J. Domagala
PASSED		Ralph E. Anderson

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO. 6
F.A.I. 80	2005-0561	Will	11	20	7 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract #60A44

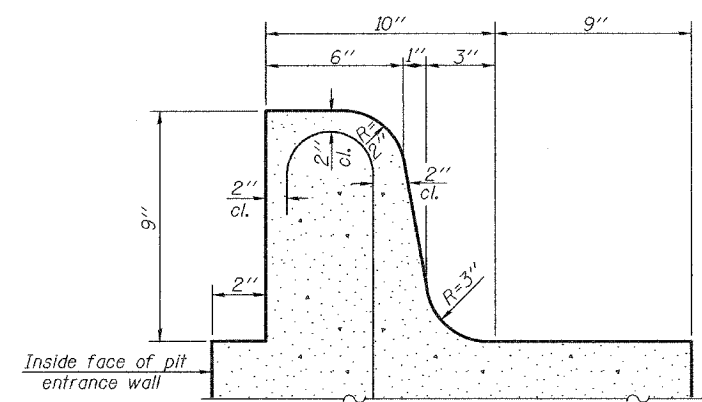


SHOWING ANGLE COPING

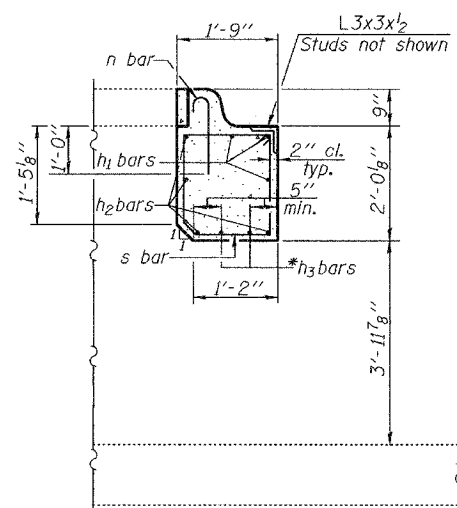
PLAN CONCRETE PIT

(Platform decks, existing steel, existing concrete pedestals and approach slab not shown) (W.B. shown & E.B. similar)

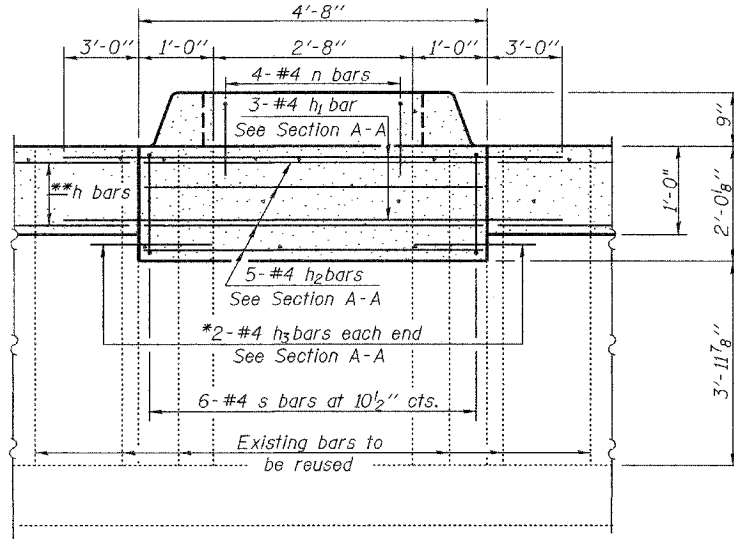
SHOWING REINFORCEMENT



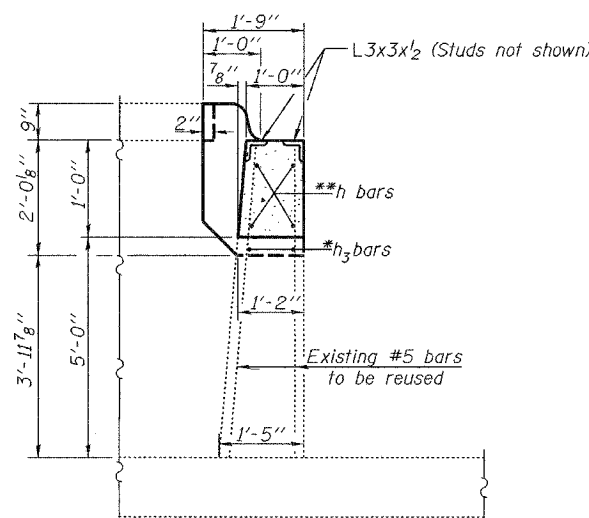
CURB DETAIL
(For Pit Entrance)



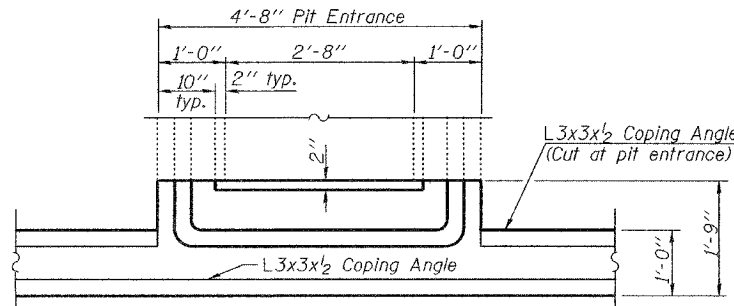
SECTION A-A



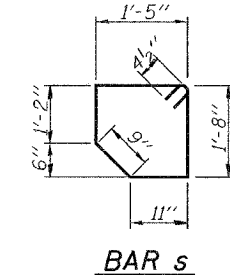
SECTION B-B
(Coping angles not shown)



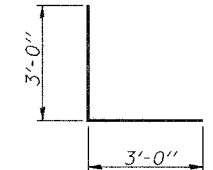
SECTION C-C



DETAIL Z-PLAN VIEW
AT PIT ENTRANCE
(Reinforcement not shown)



BAR s



BAR h5



BAR n

MIN. BAR LAP
#5 Bar = 3'-0"

BILL OF MATERIAL
FOR BOTH W.B. & E.B.

Bar	No.	Size	Length	Shape
h	64	#5	29'-10"	—
h1	6	#4	10'-8"	—
h2	10	#4	4'-4"	—
h3	8	#4	2'-5"	—
h4	16	#5	11'-10"	—
h5	32	#5	6'-0"	L
n	8	#4	2'-1"	U
s	12	#4	6'-8"	□
Reinforcement Bars		Pound	2540	
Conc. Structures		Cu. Yd.	20.1	

Bars indicated thus 2x4-#5 etc. indicates 2 lines of bars with 4 lengths per line.

CONCRETE PIT DETAILS
FRANKFORT WEIGH STATIONS
F.A.I. ROUTE 80 SECTION 2005-0561
WILL COUNTY
STA. 1212+05.06 (W.B.) &
STA. 989+44.94 (E.B.)

DESIGNED	Stephen M. Ryan
CHECKED	Phillip R. Litchfield
DRAWN	R. Sommer
CHECKED	SMR/PRL/SEM

EXAMINED	Thomas J. Domagala	January 20, 2006
PASSED	Ralph E. Anderson	

Notes: See sheet 7 of 7 for Sections D-D, E-E, F-F and G-G.
Existing reinforcement extending into removed areas shall be cleaned, straightened and incorporated into the new construction. Cost included with Concrete Removal.
*Epoxy grout h3 bars in 9" min. drilled holes according to Section 584 of the Standard Specifications.
**Cut h bar reinforcement in the wall at pit entrance. See Section B-B.

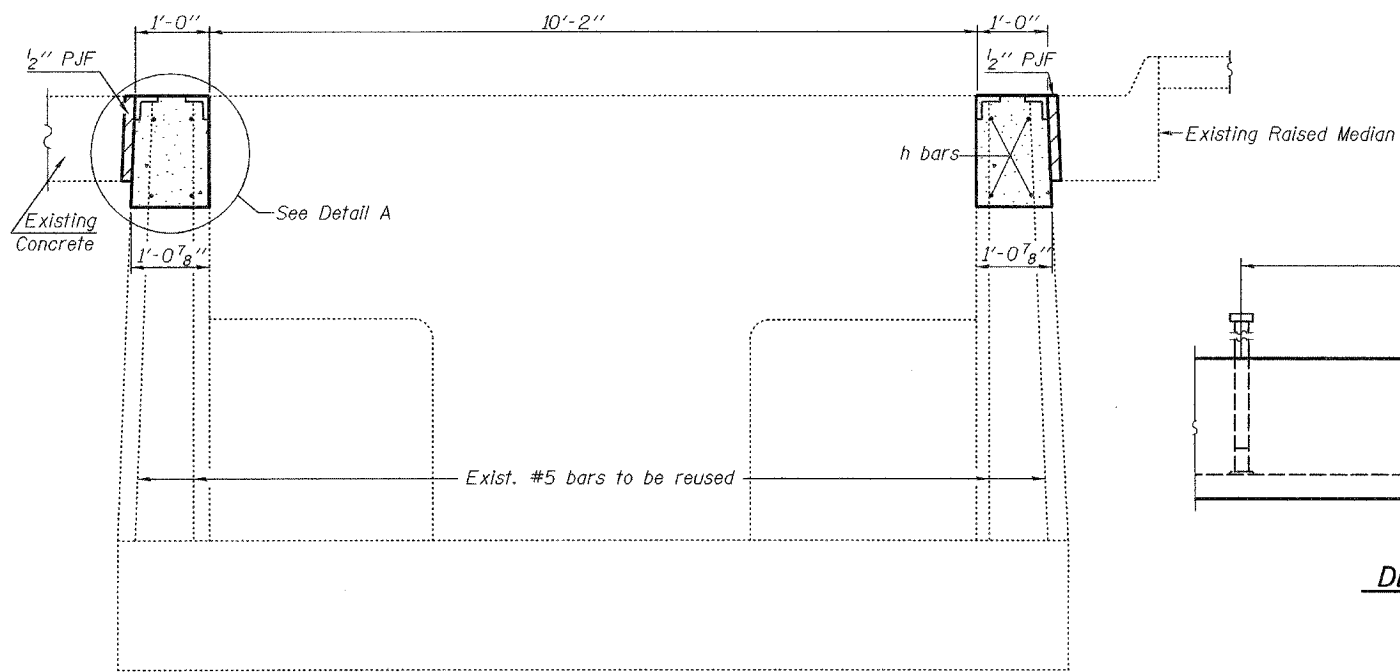
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 80	2005-0561	Will	12	20
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

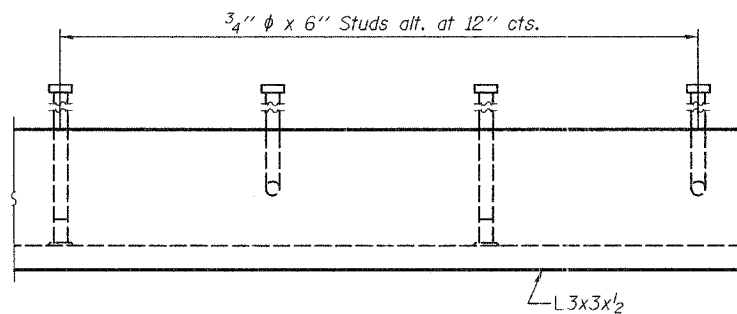
SHEET NO. 7

7 SHEETS

Contract #60A44

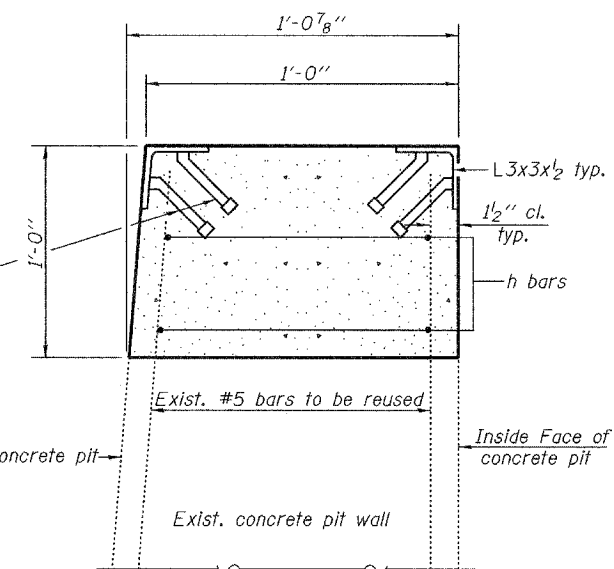


SECTION D-D
(Thru Endwalls)



DETAIL OF ANGLE COPING

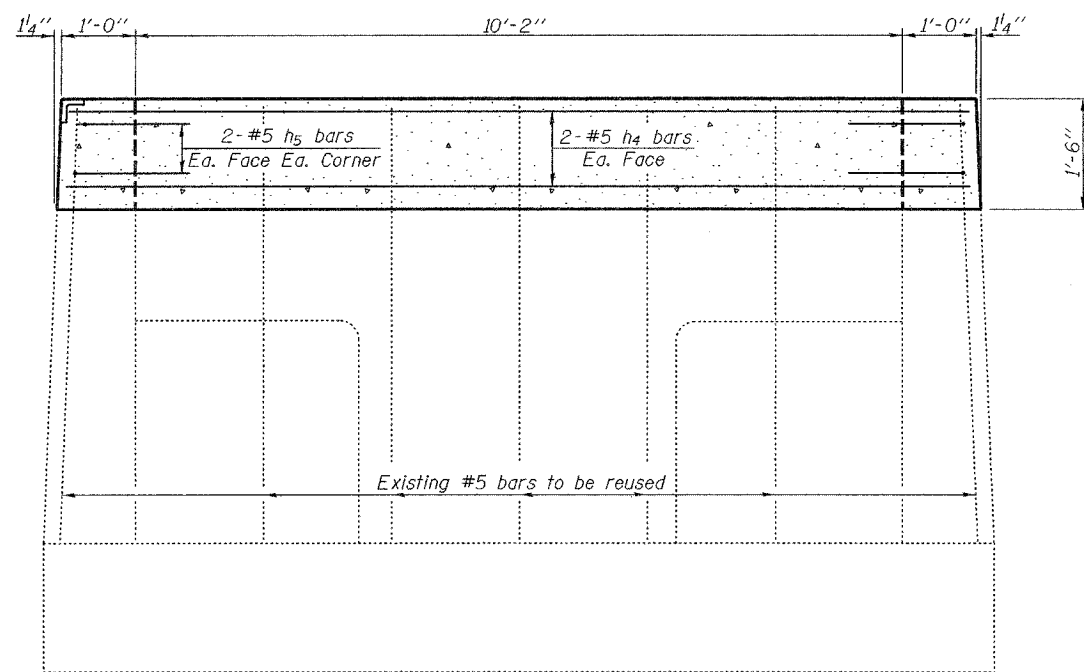
3/4" ϕ x 6" Granular or solid flux filled headed studs conforming to Article 1006.32 of the Standard Specifications, automatically end welded to angle. See Detail of Angle Coping for spacing. (No. Required = 495)



DETAIL A

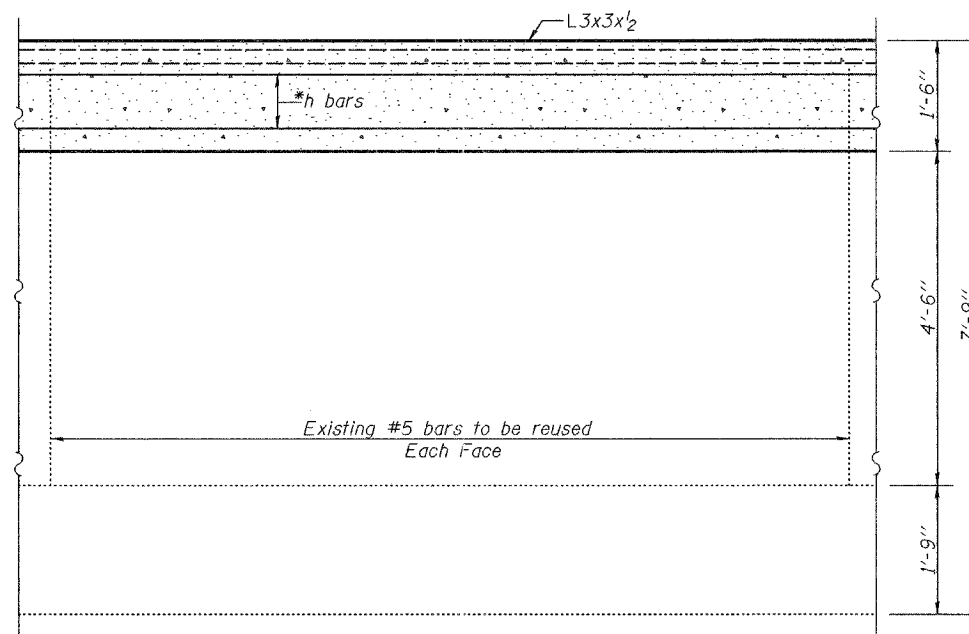
(Side walls shown, End walls similar.)

After welding, angles and studs shall be galvanized according to AASHTO M111. No field painting required. Angle coping and studs paid for as Furnishing and Erecting Structural Steel. (495'-8" length of Angle Coping required)



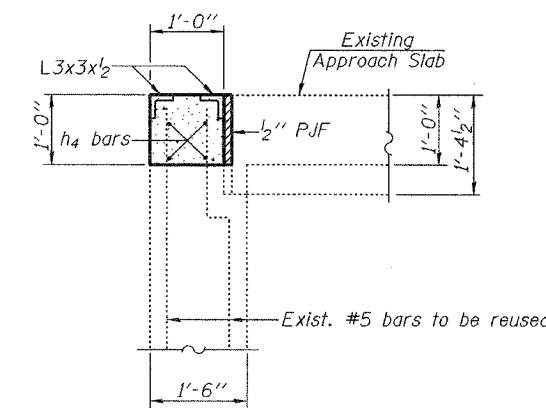
SECTION E-E
(Thru Endwalls)

(Existing concrete outside pit not shown)
(Coping angle L3x3x1/2 and approach slab not shown)



SECTION F-F
(Thru Sidewalls)

*Cut h bar reinforcement in the wall at pit entrance.



SECTION G-G

Showing Approach Slab, Concrete Pit and Coping angles. Concrete Deck, Scale Components, Structural Steel and studs not shown.

CONCRETE PIT DETAILS
FRANKFORT WEIGH STATIONS
F.A.I. ROUTE 80 SECTION 2005-0561
WILL COUNTY
STA. 1212+05.06 (W.B.) &
STA. 989+44.94 (E.B.)

DESIGNED	Stephen M. Ryan
CHECKED	Phillip R. Litchfield
DRAWN	R. Sommer
CHECKED	SMR/PRL/SEM

EXAMINED	Thomas J. Domagalaki	January 20, 2006
PASSED	Ralph E. Anderson	

Existing Structure: Weigh Stations at Peotone were originally built in 1969 as F.A.I. Route 57, Section (99-2)I-1, Project I-57-7(197) 332 Will County. The existing concrete deck and upper 1'-6" of concrete pit perimeter are to be removed and replaced. Traffic will be detoured.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	2005-0561	Will	13	20
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1
8 SHEETS

Contract #60A44

INDEX OF SHEETS

1. General Data
- 2-3. General Plan & Elevation
4. Concrete Removal Details
5. Concrete Deck Details
- 6-8. Concrete Pit Details

SCOPE OF WORK

1. Remove and replace concrete decks of the 4 platform scales.
2. Clean and paint structural steel.
3. Remove and replace the top 1'-6" of the concrete pit on the perimeter of the 4 platform scales.

GENERAL NOTES

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

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

All construction joints shall be bonded.

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

The cost of any structure excavation shall be included with Concrete Removal.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All existing steel shall be cleaned per Near White Blast Cleaning-SSPC-SPI0. All existing steel shall be painted according to the requirements of Paint System 1-0Z/E/U. The color of the final finish coat shall be Gray, Munsell No 5B 7/1.

The SSPC-QP1 and SSPC-QP2 Painting Contractor Certifications will not be required for for this Bridge.

Field welding of construction accessories will not be permitted to beams.

Prior to pouring the new concrete deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete.

All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04.

The Contractor shall fine the concrete surface of the platforms according to Article 420.11(e)(1) of the Standard Specifications. Cost included in Concrete Superstructure.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Superstructure	Cu. Yd.	41.5		41.5
Removal of Existing Concrete Deck	L. Sum	0.5		0.5
Reinforcement Bars, Epoxy Coated	Pound	14960		14960
Concrete Removal	Cu. Yd.		35.2	35.2
Protective Coat	Sq. Yd.	248.9		248.9
Furnishing and Erecting Structural Steel	Pound		10120	10120
Concrete Structures	Cu. Yd.		35.2	35.2
Reinforcement Bars	Pound		2640	2640
Cleaning and Painting Steel	L. Sum			1
Containment and Disposal of Lead	L. Sum			1
Paint Cleaning Residues No. 1	L. Sum			1
Jack, Remove and Replace Load Cells	L. Sum			0.5

LOADING HS20-44

No future wearing surface allowed

DESIGN SPECIFICATIONS

1996 AASHTO w/ 1997 thru 2002 Interims

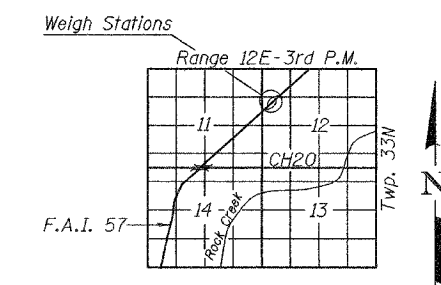
DESIGN STRESSES

NEW CONSTRUCTION

- $f'_c = 3,500$ psi (Deck and Pit)
- $f_y = 60,000$ psi (Reinforcement)
- $f_y = 36,000$ psi (Structural Steel AASHTO M270 Grade 36)

FIELD UNITS

- $f'_c = 1,000$ psi (Pit)
- $f_s = 20,000$ psi (Reinforcement)
- $f_s = 20,000$ psi (Structural Steel)



LOCATION SKETCH

GENERAL DATA
PEOTONE WEIGH STATIONS
F.A.I. ROUTE 57 SECTION 2005-0561
WILL COUNTY
STA. 1091+65.06 (S.B.) &
STA. 1073+09.94 (N.B.)

DESIGNED	Stephen M. Ryan
CHECKED	Philip R. Sommer
DRAWN	R. Sommer
CHECKED	SMR/PRL/SEM

January 20, 2006
EXAMINED
PASSED
ENGINEER OF BRIDGE DESIGN
ENGINEER OF BRIDGES AND STRUCTURES

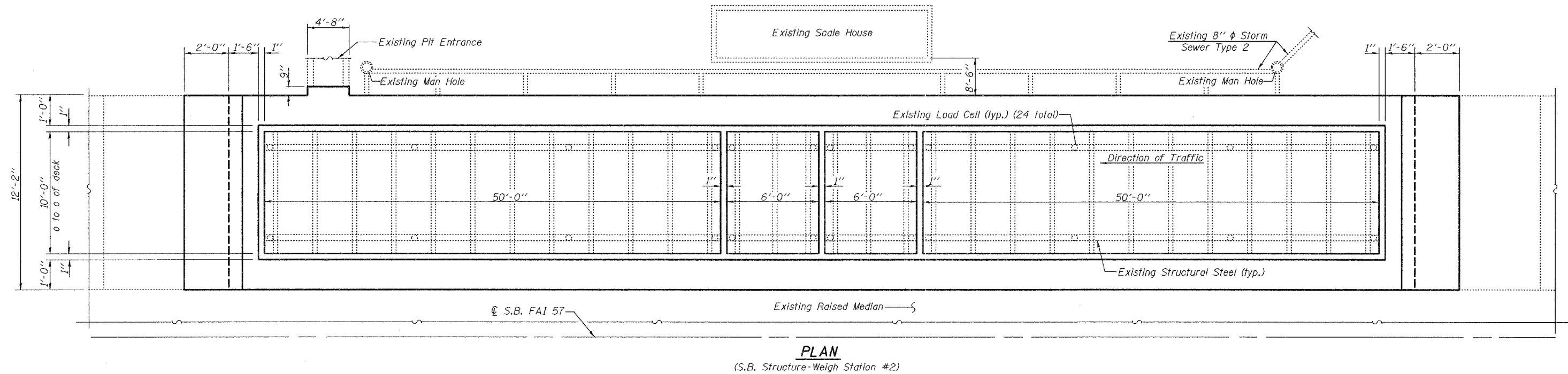
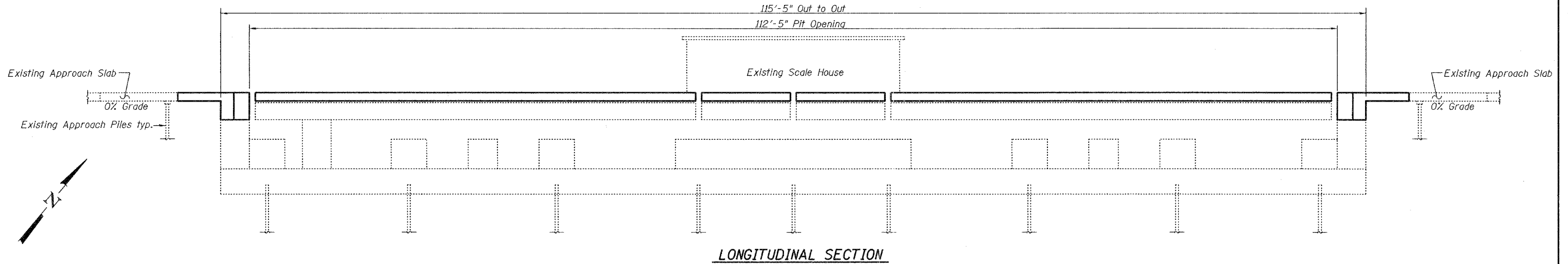


EXPIRES 11-30-2006

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2
F.A.I. 57	2005-0561	Will	14	20	8 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS		FED. AID PROJECT		

Contract #60A44



DESIGNED	Stephen M. Ryan
CHECKED	Phillip R. Litchfield
DRAWN	R. Sommer
CHECKED	SMR/PRL/SEM

January 20, 2006

EXAMINED *Thomas J. Domagalaki*
ENGINEER OF BRIDGE DESIGN

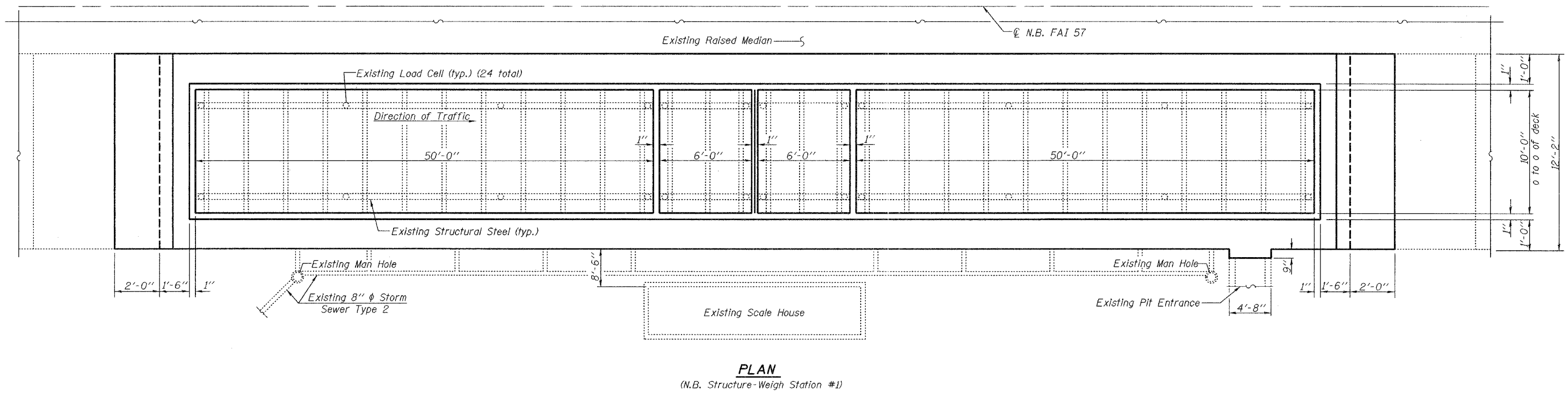
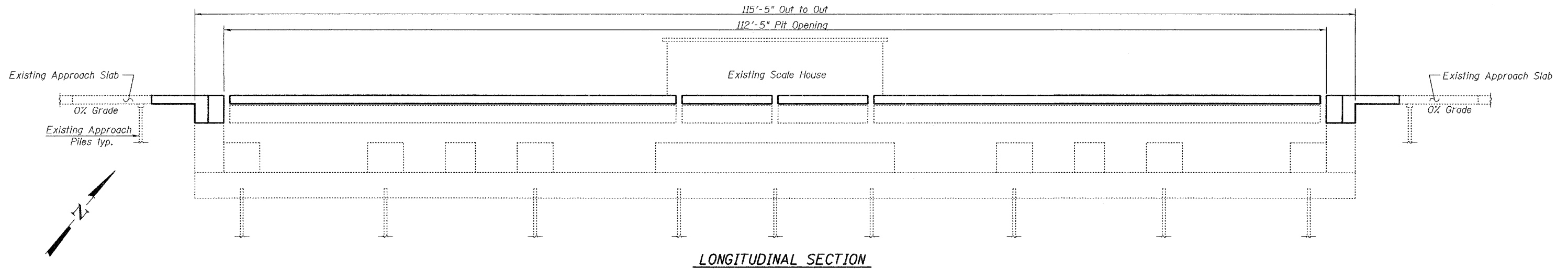
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

GENERAL PLAN & ELEVATION
S.B. PEOTONE WEIGH STATION
F.A.I. ROUTE 57 SECT. 2005-0561
WILL COUNTY
STA. 1091+65.06

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 3
F.A.I. 57	2005-0561	Will	15	20	8 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS		FED. AID PROJECT		

Contract #60A44



DESIGNED	Stephen M. Ryan
CHECKED	Phillip R. Litchfield
DRAWN	R. Sommer
CHECKED	SMR/PRL/SEM

January 20, 2006

EXAMINED *Thomas J. Demagala*
ENGINEER OF BRIDGE DESIGN

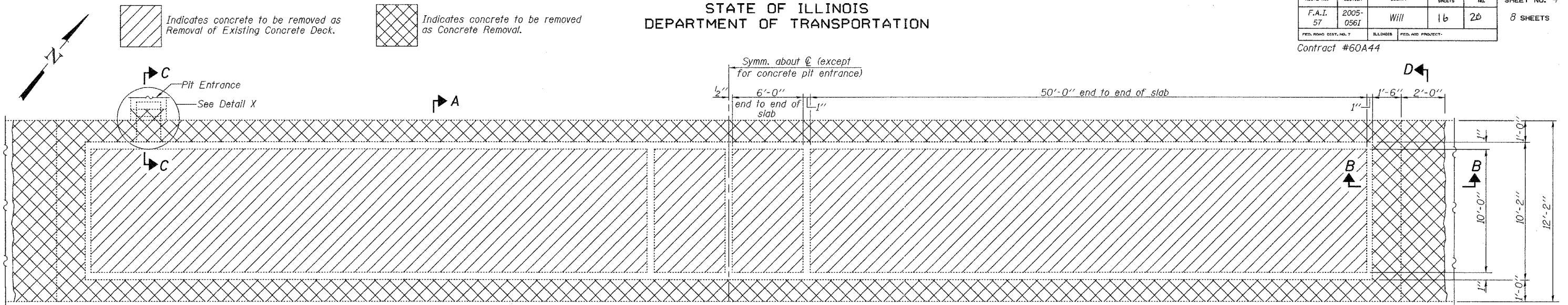
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

GENERAL PLAN & ELEVATION
N.B. PEOTONE WEIGH STATION
F.A.I. ROUTE 57 SECT. 2005-0561
WILL COUNTY
STA. 1073+09.94

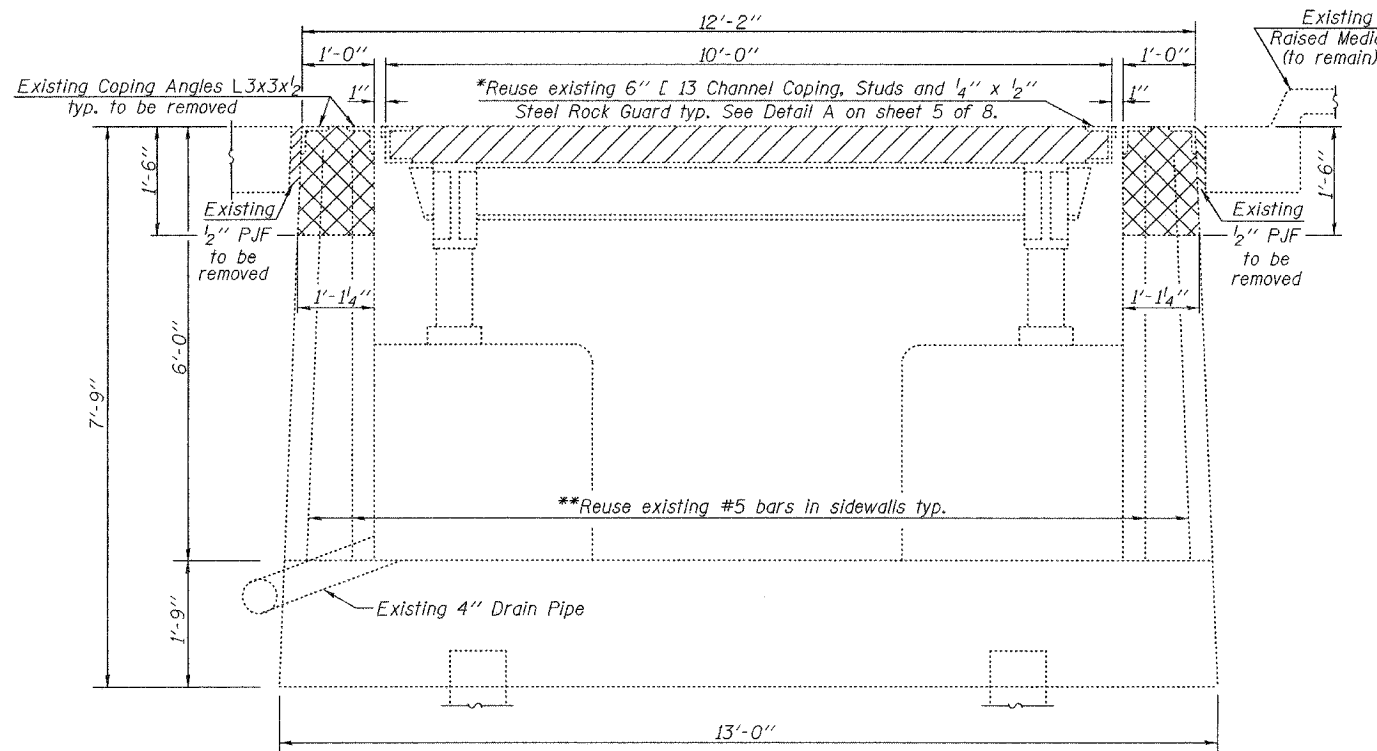
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.	SHEET NO. 4
F.A.I. 57	2005-0561	Will	16	26	8 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

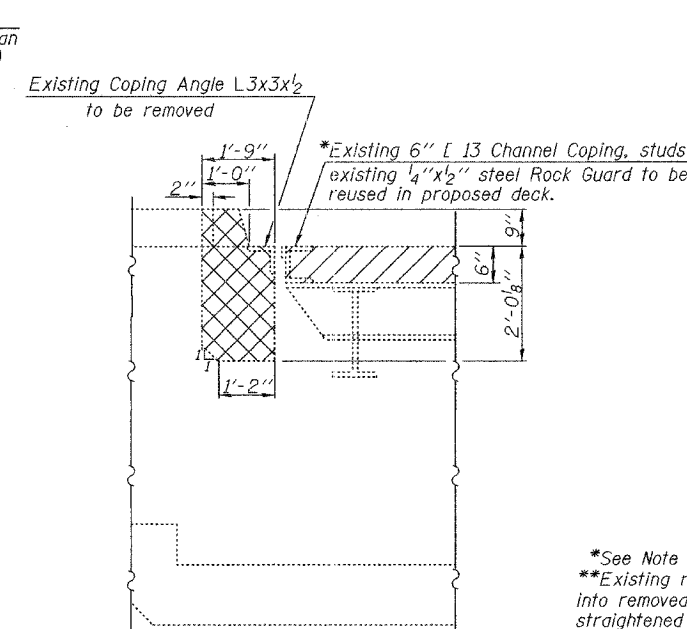
Contract #60A44



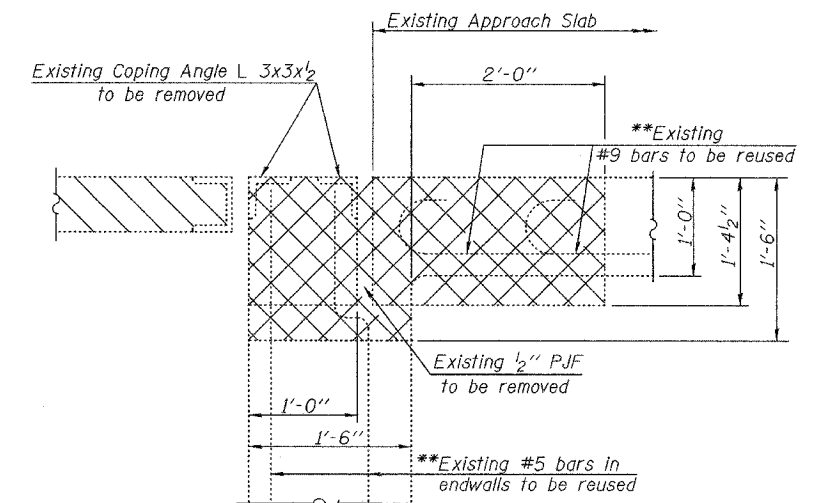
PLAN
(Coping not shown)
(S.B. shown & N.B. similar)



SECTION A-A



SECTION C-C



SECTION B-B

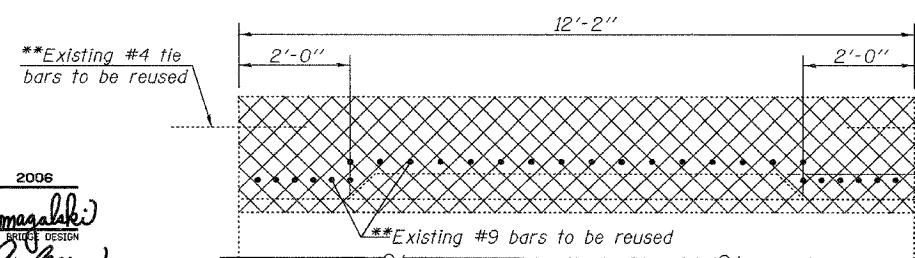
*See Note A on sht. 5 of 8.
**Existing reinforcement extending into removed areas shall be cleaned, straightened and incorporated into the new construction. Cost included with Concrete Removal.

Note: Cost of removal of coping angles (L3x3x1/2) and P/JF included in Concrete Removal.

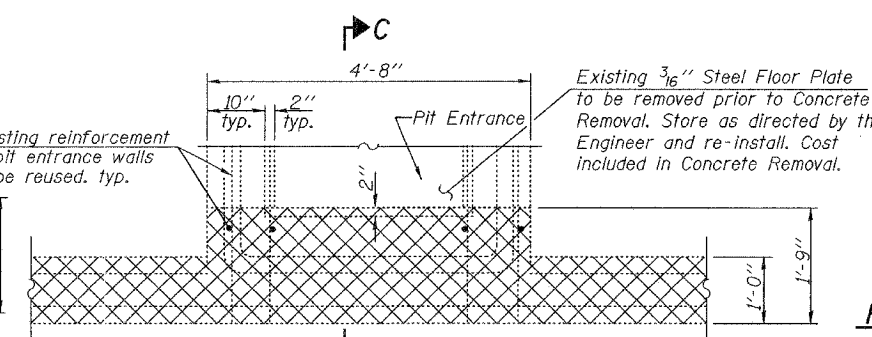
**BILL OF MATERIAL
FOR BOTH N.B. & S.B.**

Item	Unit	Total
Concrete Removal	Cu. Yd.	35.2
Removal of Existing Concrete Deck	L. Sum	0.5

**CONCRETE REMOVAL DETAILS
PEOTONE WEIGH STATIONS
F.A.I. ROUTE 57 SECTION 2005-0561
WILL COUNTY
STA. 1091+65.06 (S.B.) &
STA. 1073+09.94 (N.B.)**



SECTION D-D
(Thru existing approach slab)



DETAIL X-PLAN VIEW
(Concrete Deck not shown)

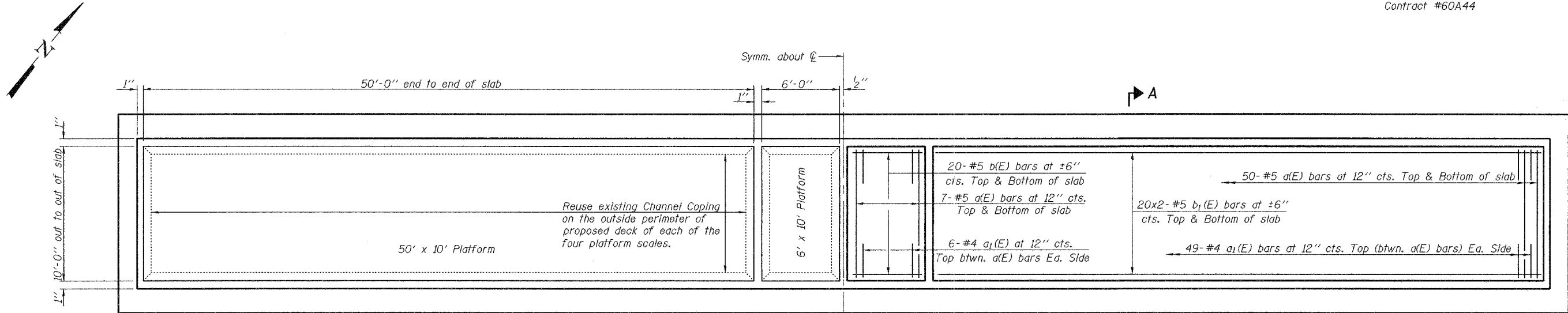
DESIGNED	Stephen M. Ryan
CHECKED	Phillip R. Litchfield
DRAWN	R. Sommer
CHECKED	SMR/PRL/SEM

EXAMINED	January 20, 2006	Thomas J. Demagala
PASSED		Ralph E. Anderson

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO.
F.A.I. 57	2005- 0561	Will	17 20	5
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Contract #60A44



SHOWING CHANNEL COPING

PLAN
CONCRETE DECK
(Pit entrance not shown)

SHOWING REINFORCEMENT

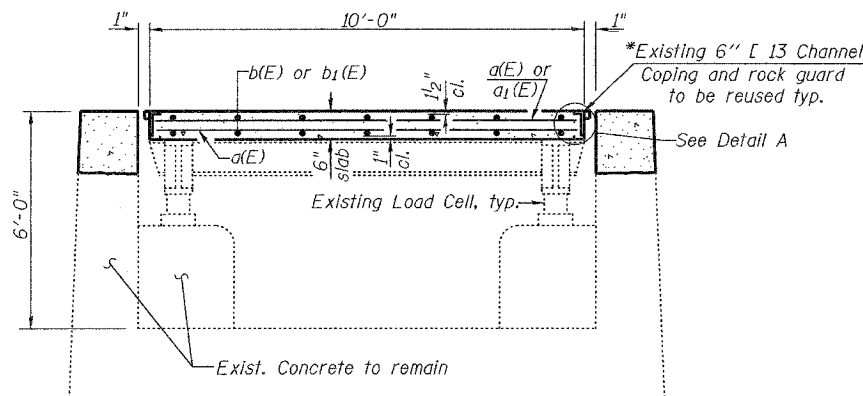
MIN. BAR LAP
#5 Bar = 1'-8"

BILL OF MATERIAL
FOR BOTH N.B. & S.B.

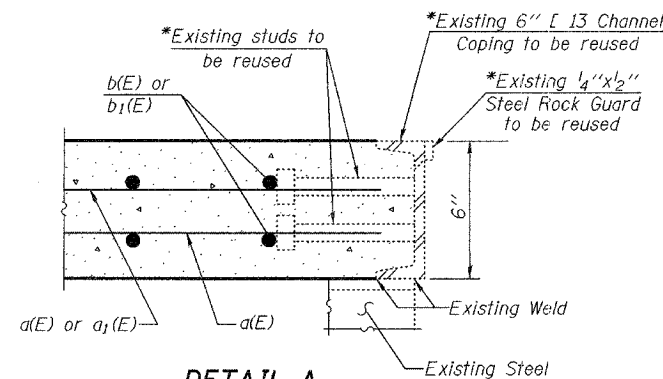
Bar	No.	Size	Length	Shape
a(E)	456	#5	9'-9"	—
a1(E)	440	#4	2'-9"	—
b(E)	160	#5	5'-6"	—
b1(E)	320	#5	25'-9"	—
Reinforcement Bars, Epoxy Coated			Pound	14960
Conc. Superstructure			Cu. Yd.	41.5

Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 20x2-#5 etc. indicates 20 lines of bars with 2 lengths per line.

CONCRETE DECK DETAILS
PEOTONE WEIGH STATIONS
F.A.I. ROUTE 57 SECTION 2005-0561
WILL COUNTY
STA. 1091+65.06 (S.B.) &
STA. 1073+09.94 (N.B.)



SECTION A-A
*See Note A



DETAIL A
*See Note A

Note A:
*The Contractor has the option to remove the existing channel coping (with existing studs and rock guards) which is welded to the existing steel and replace it with new channel coping (with new studs and rock guards). If the Contractor chooses to do this, the Bureau of Bridges and Structures shall be contacted for weld information, the Contractor shall take care not to damage the existing steel which is to be reused, and there shall be no extra cost to the department.

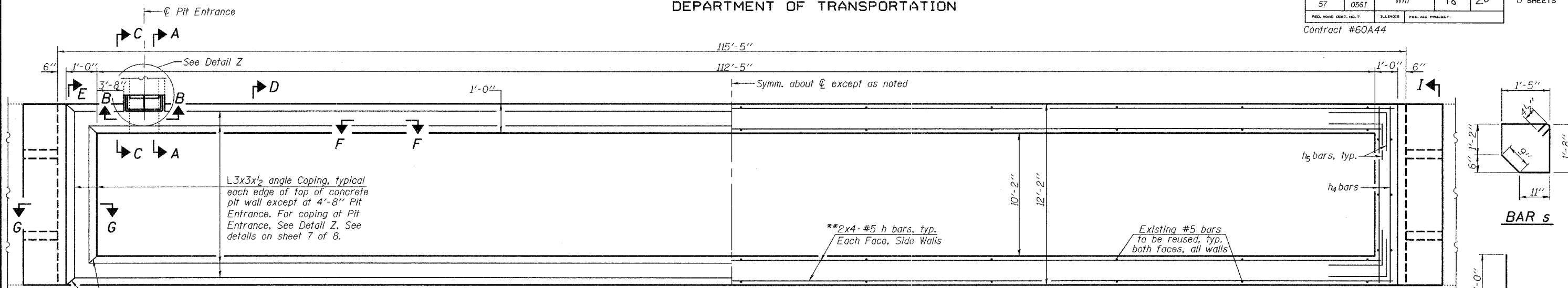
DESIGNED	Stephen M. Ryan
CHECKED	Phillip R. Litchfield
DRAWN	R. Sommer
CHECKED	SMR/PRL/SEM

EXAMINED	January 20, 2006	Thomas J. Domagala
PASSED		Ralph E. Anderson

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO.
F.A.I. 57	2005- 0561	Will	18	20	8 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

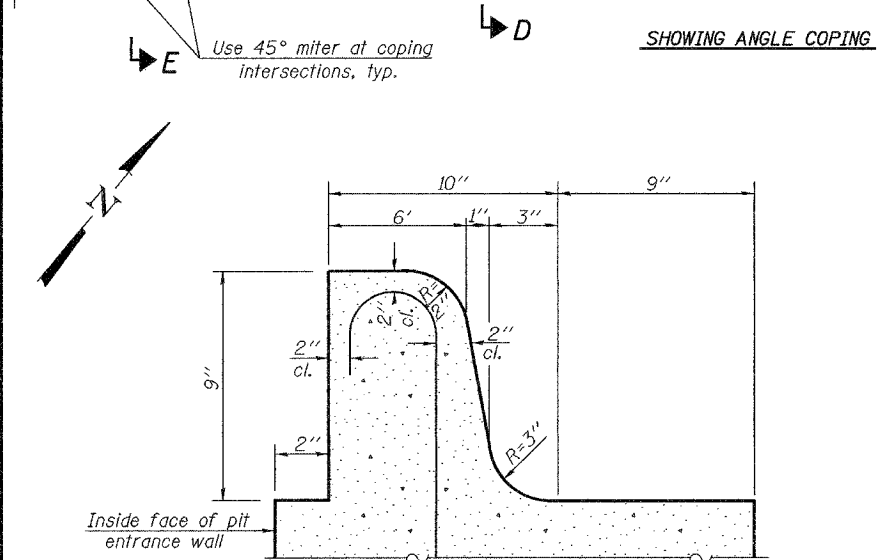
Contract #60A44



PLAN CONCRETE PIT

(Platform decks, existing steel and existing concrete pedestals not shown) (S.B. shown & N.B. similar)

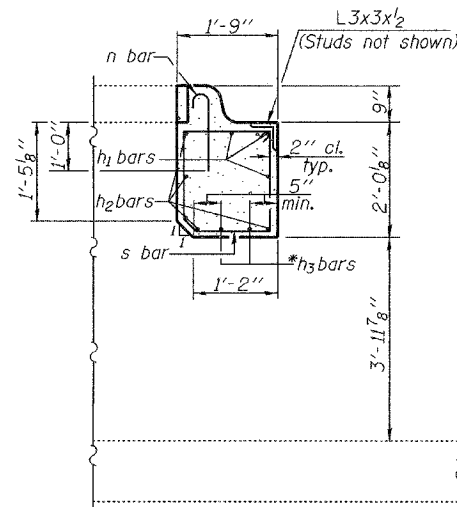
SHOWING REINFORCEMENT



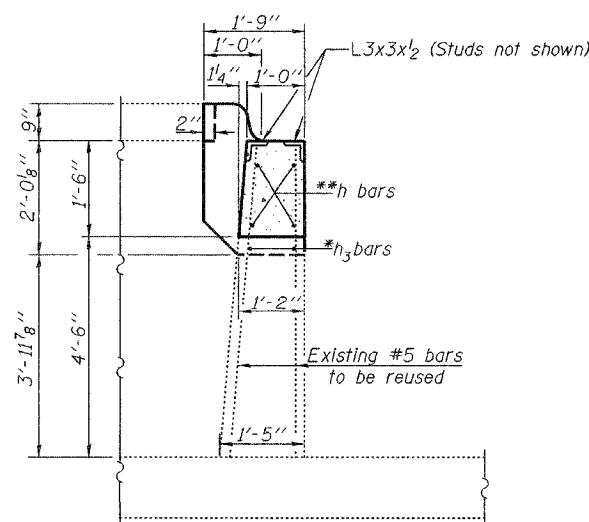
CURB DETAIL
(For Pit Entrance)

Notes: See sheets 7 & 8 of 8 for Sections D-D, E-E, F-F, G-G, I-I and View H-H. Existing reinforcement extending into removed areas shall be cleaned, straightened and incorporated into the new construction. Cost included with Concrete Removal.

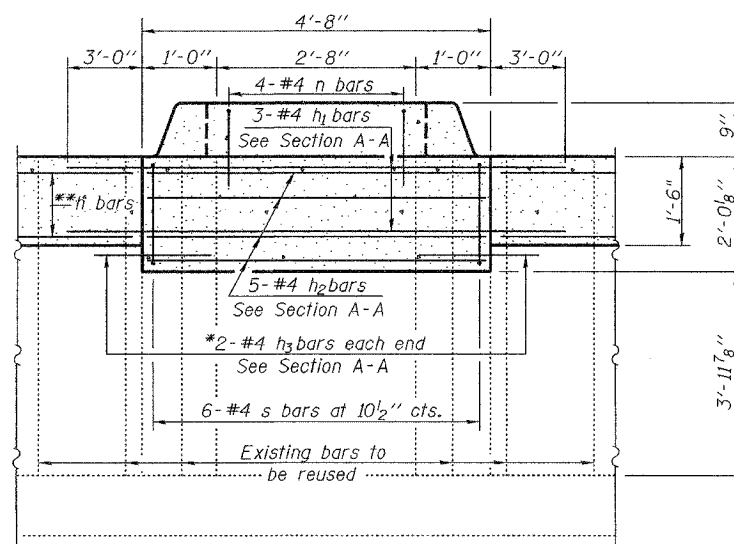
*Epoxy grout h₃ bars in 9" min. drilled holes according to Section 584 of the Standard Specifications.
**Cut h bar reinforcement in the wall at pit entrance. See Section B-B.



SECTION A-A

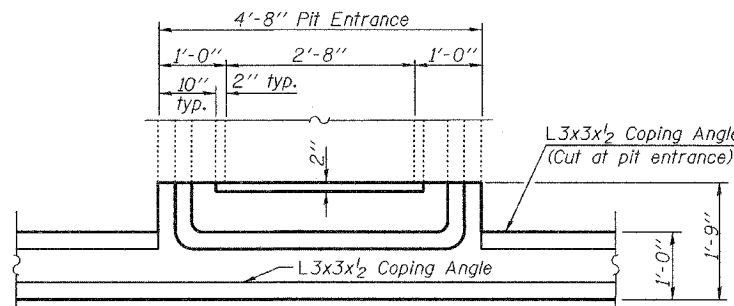


SECTION C-C



SECTION B-B

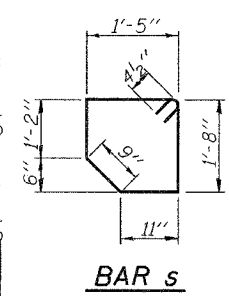
(Coping angles not shown)



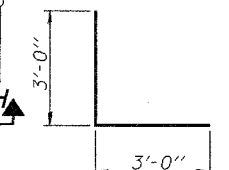
DETAIL Z-PLAN VIEW AT PIT ENTRANCE

(Reinforcement not shown)

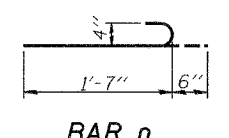
MIN. BAR LAP
#5 Bar = 3'-0"



BAR s



BAR h5



BAR n

BILL OF MATERIAL FOR BOTH N.B. & S.B.

Bar	No.	Size	Length	Shape
h	64	#5	29'-10"	—
h ₁	6	#4	10'-8"	—
h ₂	10	#4	4'-4"	—
h ₃	8	#4	2'-5"	—
h ₄	16	#5	11'-10"	—
h ₅	32	#5	6'-0"	L
b ₂	8	#5	11'-10"	—
n	8	#4	2'-1"	U
s	12	#4	6'-8"	□
Reinforcement Bars		Pound	2640	
Conc. Structures		Cu. Yd.	35.2	

Bars indicated thus 2x4-#5 etc. indicates 2 lines of bars with 4 lengths per line.

CONCRETE PIT DETAILS
PEOTONE WEIGH STATIONS
F.A.I. ROUTE 57 SECTION 2005-0561
WILL COUNTY
STA. 1091+65.06 (S.B.) &
STA. 1073+09.94 (N.B.)

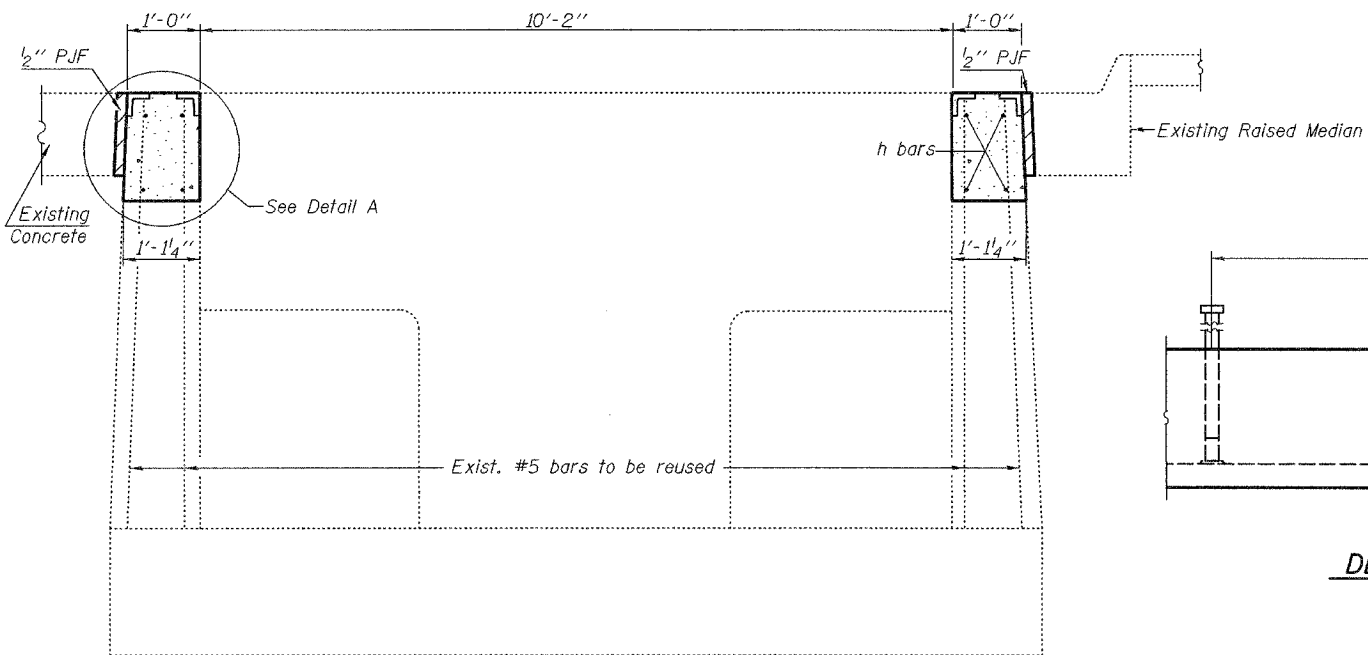
DESIGNED	Stephen M. Ryan
CHECKED	Phillip R. Litchfield
DRAWN	R. Sommer
CHECKED	SMR/PRL/SEM

EXAMINED	Thomas J. Domagala	January 20, 2006
PASSED	Ralph E. Anderson	

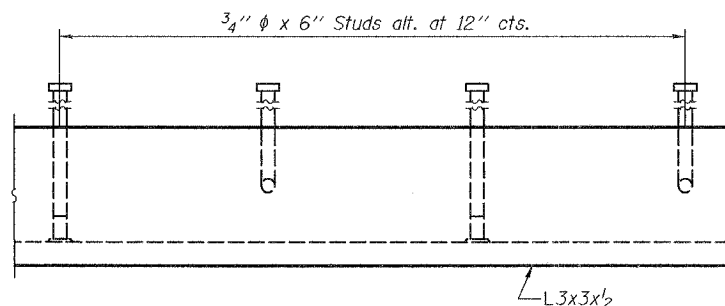
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. 7
F.A.I. 57	2005-0561	Will	19	20	8 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

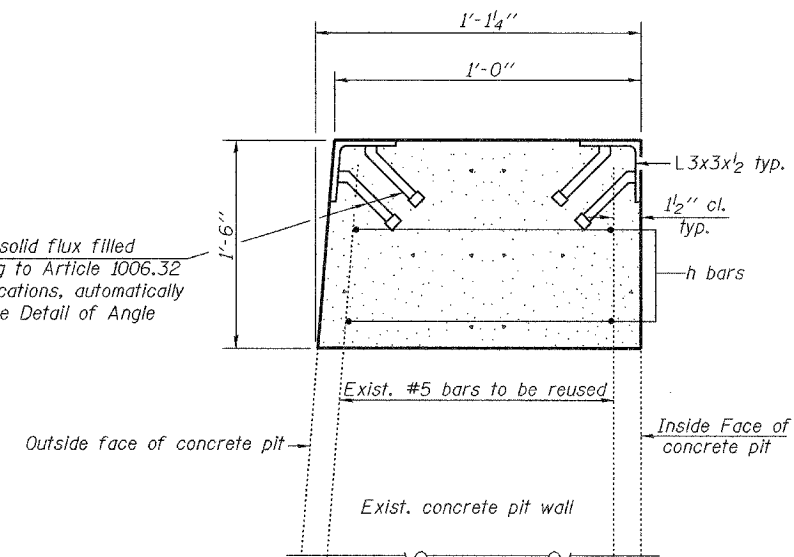
Contract #60A44



SECTION D-D
(Thru Endwalls)



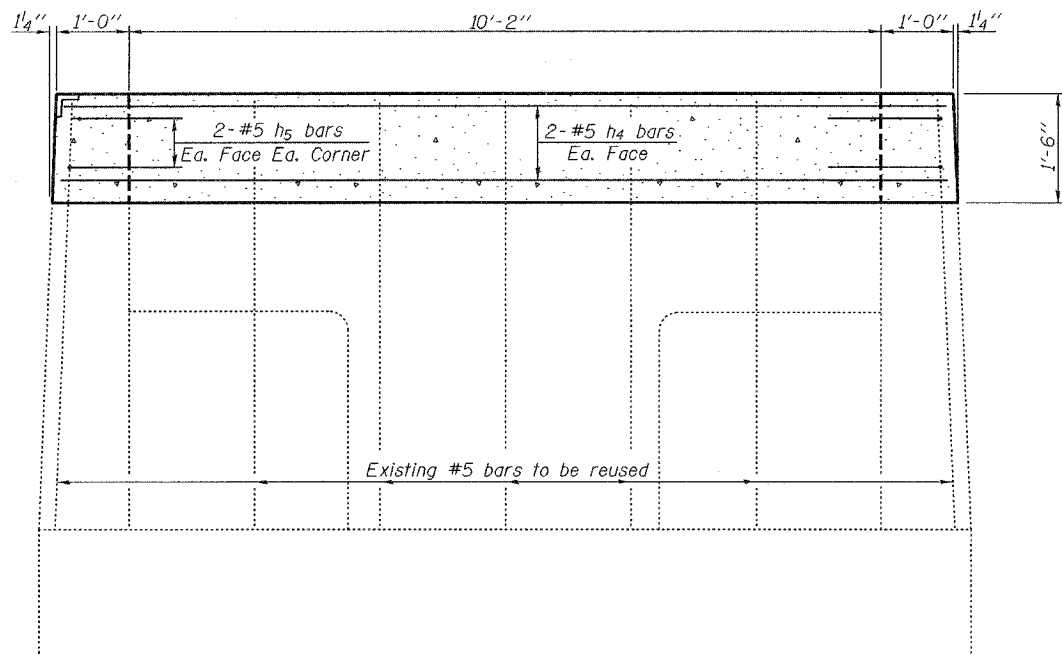
DETAIL OF ANGLE COPING



DETAIL A

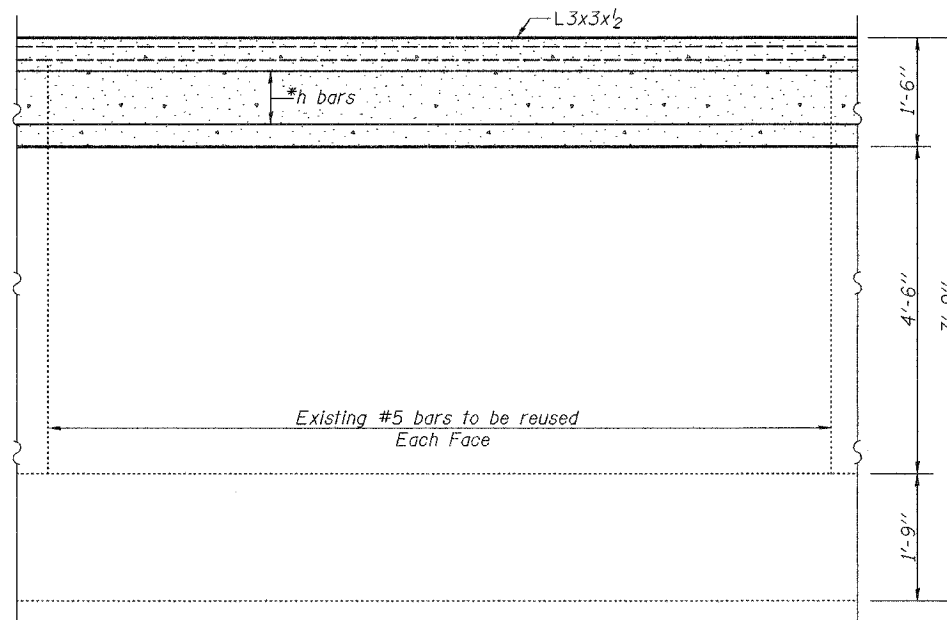
(Side walls shown, End walls similar.)

After welding, angles and studs shall be galvanized according to AASHTO M11. No field painting required. Angle coping and studs paid for as Furnishing and Erecting Structural Steel. (495'-8" length of Angle Coping required)



SECTION E-E

(Thru Endwalls)
(Existing concrete outside pit not shown)
(Coping angle L3x3x1/2 not shown)



SECTION F-F

(Thru Sidewalls)

*Cut h bar reinforcement in the wall at pit entrance.

DESIGNED	Stephen M. Ryan
CHECKED	Phillip R. Litchfield
DRAWN	R. Sommer
CHECKED	SMR/PRL/SEM

EXAMINED	January 20, 2006	Thomas J. Danagalaki
PASSED		Ralph E. Anderson

CONCRETE PIT DETAILS
PEOTONE WEIGH STATIONS
F.A.I. ROUTE 57 SECTION 2005-0561
WILL COUNTY
STA. 1091+65.06 (S.B.) &
STA. 1073+09.94 (N.B.)

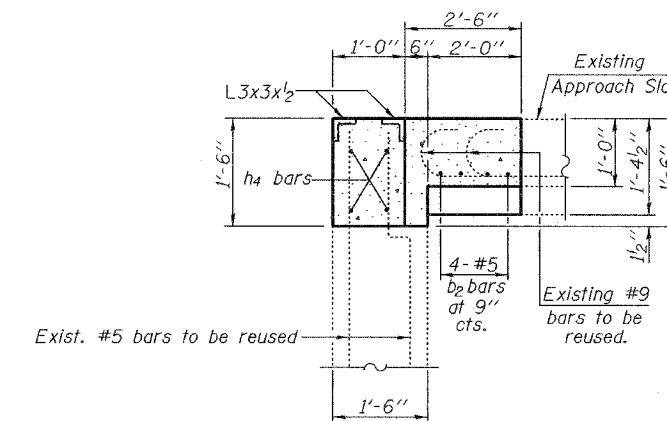
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	2005-0561	Will	20	20
FED. AID DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Contract #60A44

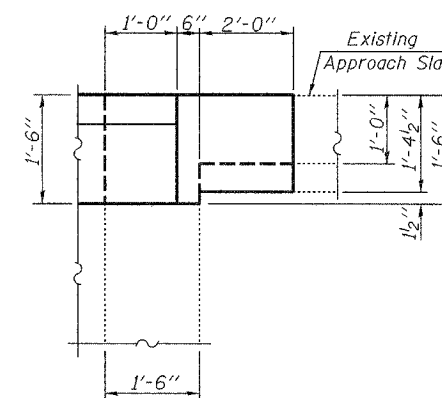
SHEET NO. 8

8 SHEETS



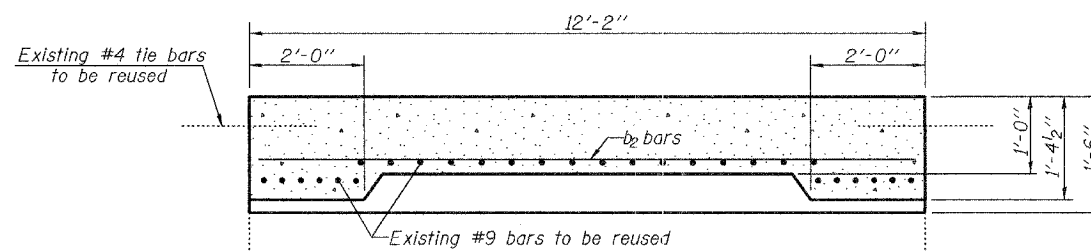
SECTION G-G

Showing Approach Slab, Concrete Pit and Coping angles. Concrete Deck, Scale Components, Structural Steel and studs not shown.



VIEW H-H

Showing Approach Slab, Concrete Pit and Coping Angle. Concrete Deck, Scale Components and Structural Steel not shown.



SECTION I-I

DESIGNED	Stephen M. Ryan
CHECKED	Phillip R. Litchfield
DRAWN	R. Sommer
CHECKED	SMR/PRL/SEM

January 20, 2006
 EXAMINED *Thomas J. Demagalaki*
 ENGINEER OF BRIDGE DESIGN
 PASSED *Ralph E. Anderson*
 ENGINEER OF BRIDGES AND STRUCTURES

CONCRETE PIT DETAILS
PEOTONE WEIGH STATIONS
F.A.I. ROUTE 57 SECTION 2005-0561
WILL COUNTY
STA. 1091+65.06 (S.B.) &
STA. 1073+09.94 (N.B.)