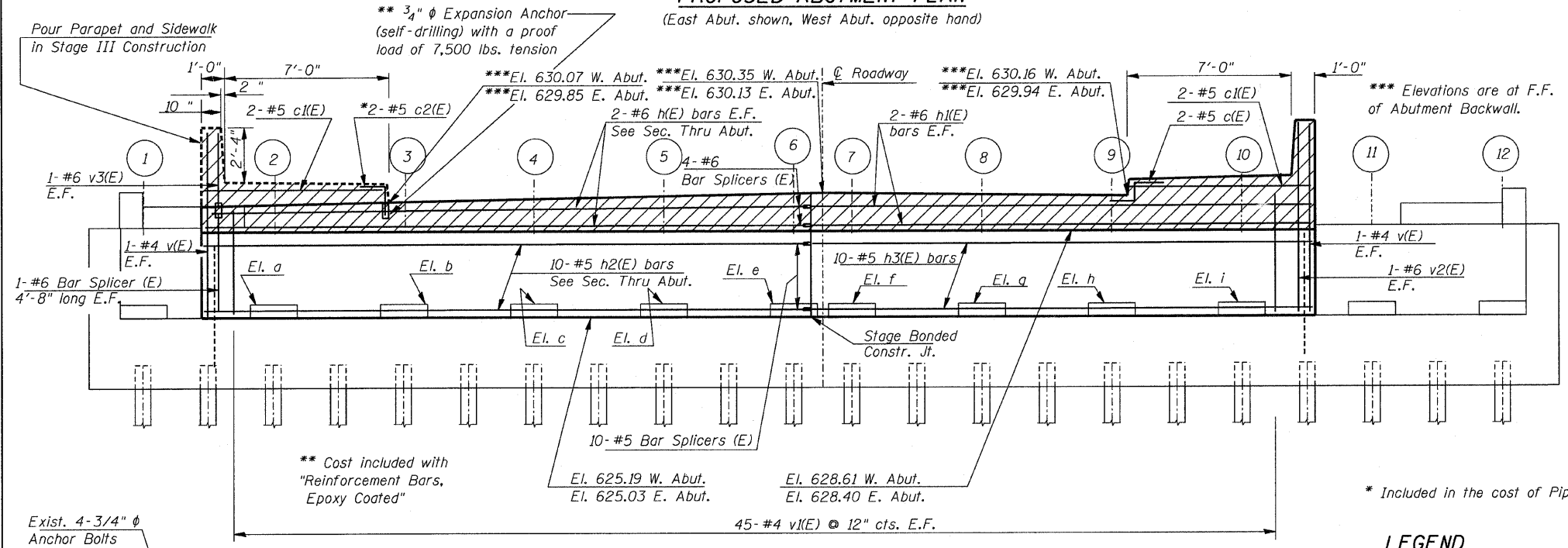


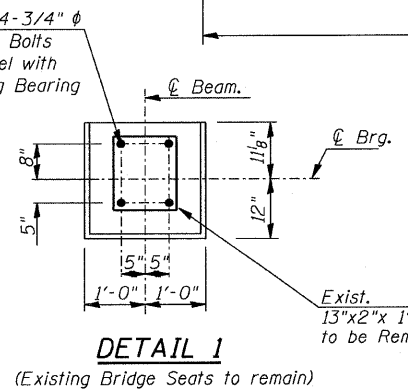
PROPOSED ABUTMENT PLAN
 (East Abut. shown, West Abut. opposite hand)



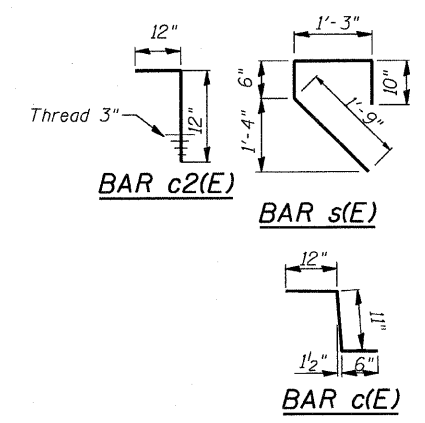
PROPOSED ABUTMENT ELEVATION
 (East Abut. shown, West Abut. opposite hand)

Location	El. a (At Beam 2)	El. b (At Beam 3)	El. c (At Beam 4)	El. d (At Beam 5)	El. e (At Beam 6)	El. f (At Beam 7)	El. g (At Beam 8)	El. h (At Beam 9)	El. i (At Beam 10)
W. Abut.	625.29	625.41	625.52	625.61	625.65	625.65	625.61	625.52	625.41
E. Abut.	625.13	625.25	625.36	625.45	625.49	625.49	625.45	625.36	625.25

EXIST. BRG. SEAT ELEVATIONS



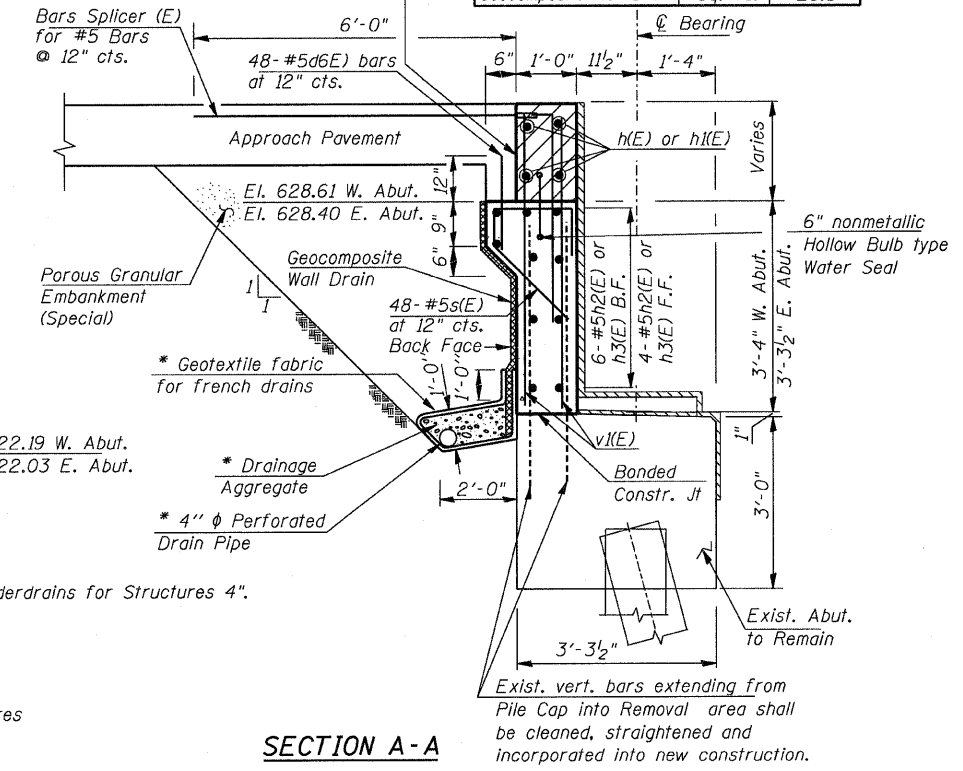
DETAIL 1
 (Existing Bridge Seats to remain)



BILL OF MATERIAL
 (For two Abutments)

Bar	No.	Size	Length	Shape	
c (E)	4	#5	2'-5"		
c1(E)	8	#5	7'-9"		
c2(E)	4	#5	2'-0"		
d6(E)	96	#5	1'-6"		
h(E)	8	#6	25'-9"		
h1(E)	8	#6	21'-3"		
h2(E)	20	#5	25'-9"		
h3(E)	20	#5	21'-3"		
s(E)	96	#5	4'-4"		
v(E)	8	#4	7'-9"		
v1(E)	180	#4	4'-8"		
v2(E)	4	#6	7'-9"		
v3(E)	4	#6	3'-2"		
Concrete Structures				Cu. Yd.	13.4
Reinforcement Bars, Epoxy Coated				Pound	2930
Structure Excavation				Cu. Yd.	84.3
Porous Granular Embankment (Special)				Cu. Yd.	84.3
Concrete Sealer				Sq. Ft.	777
Pipe Underdrains for Structures 4"				Ft.	120
Geocomposite Wall Drain				Sq. Yd.	26.5

Hatched area to be poured after superstructure falsework has been removed. Quantity of concrete included with Concrete Superstructure.



SECTION A-A

LEGEND

- Concrete Structures
- Concrete Sealer
- Geocomposite Wall Drain

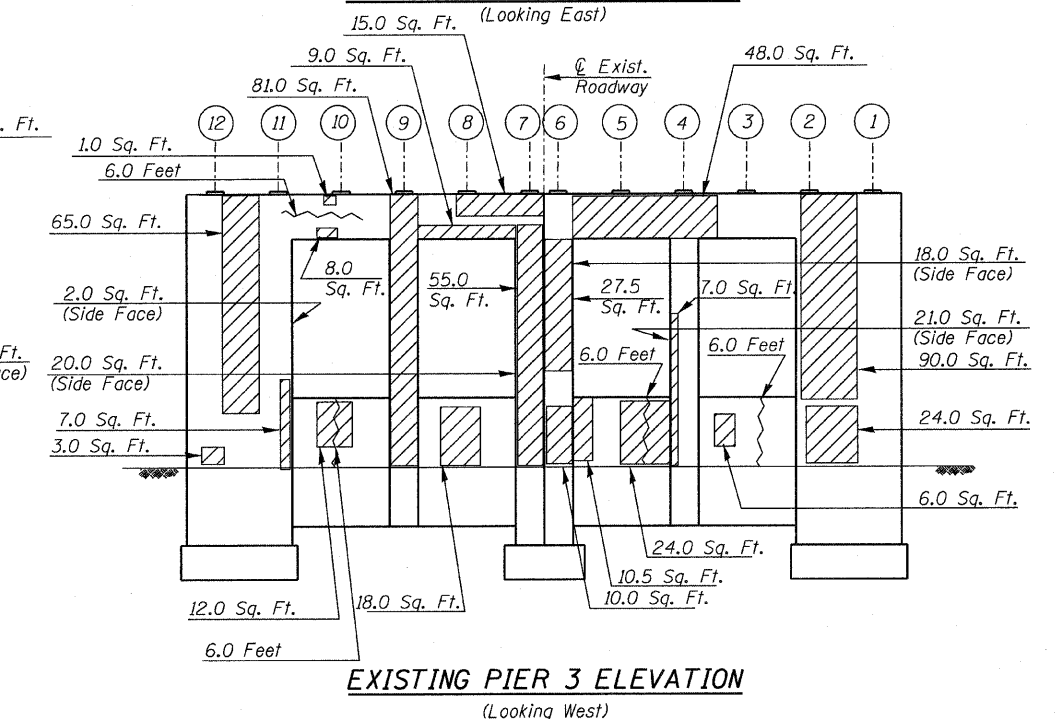
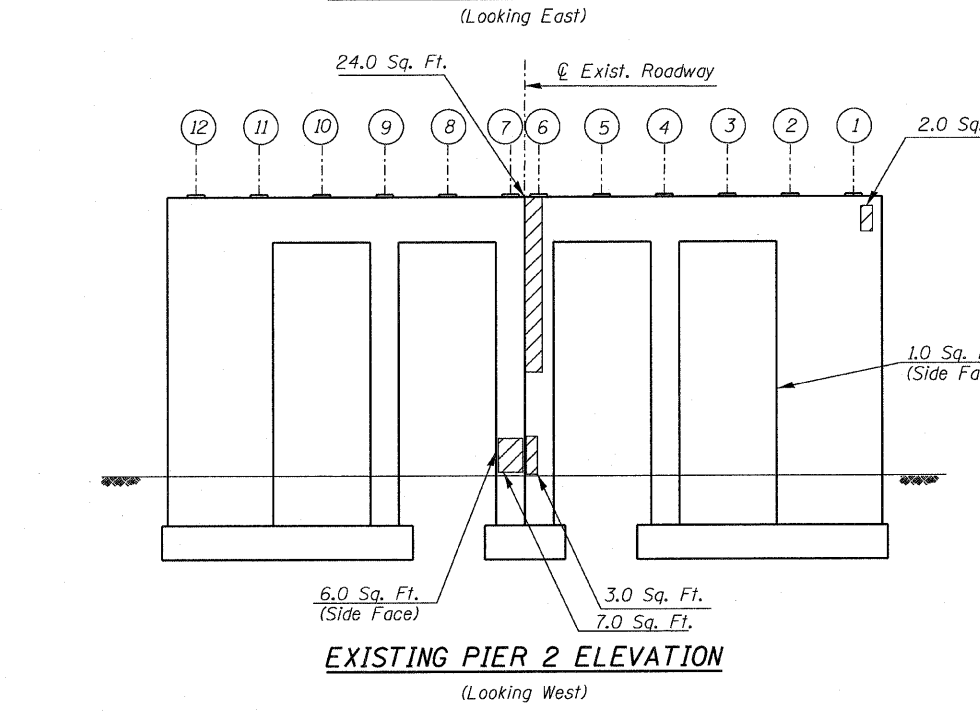
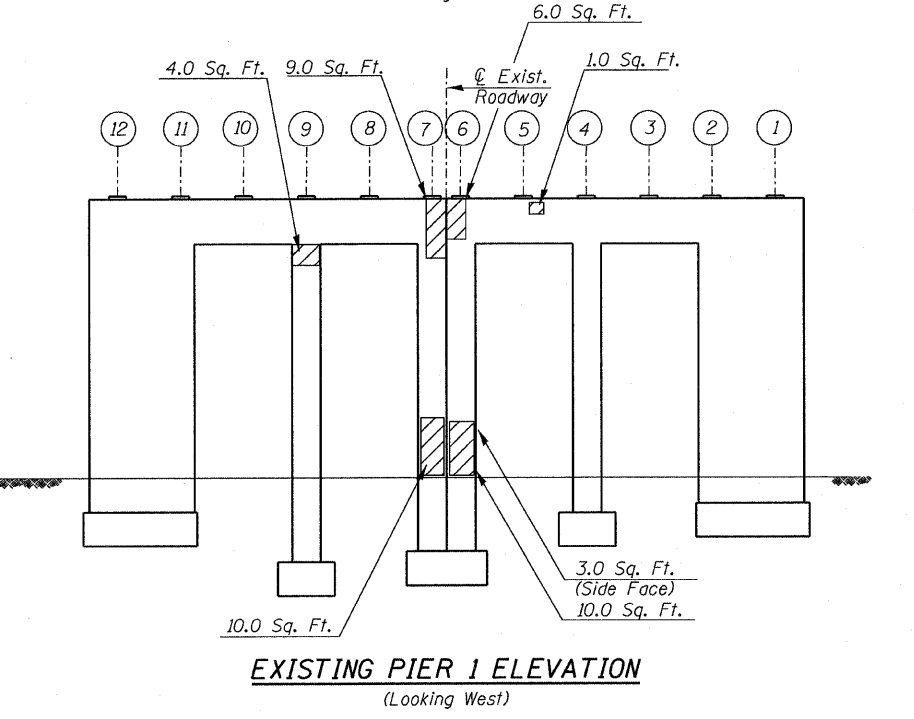
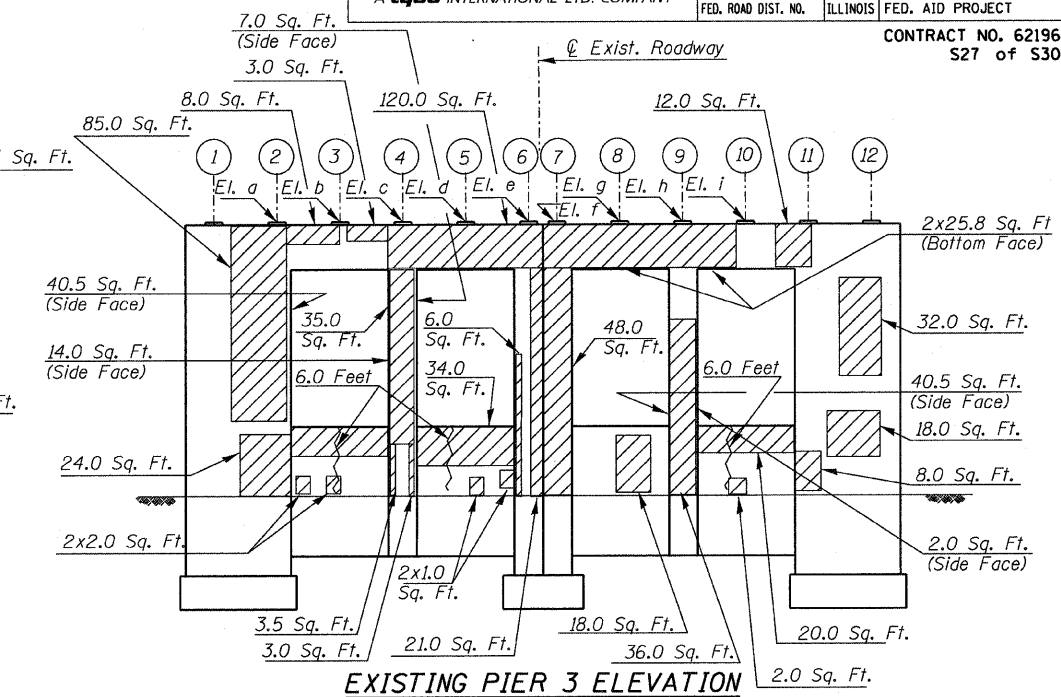
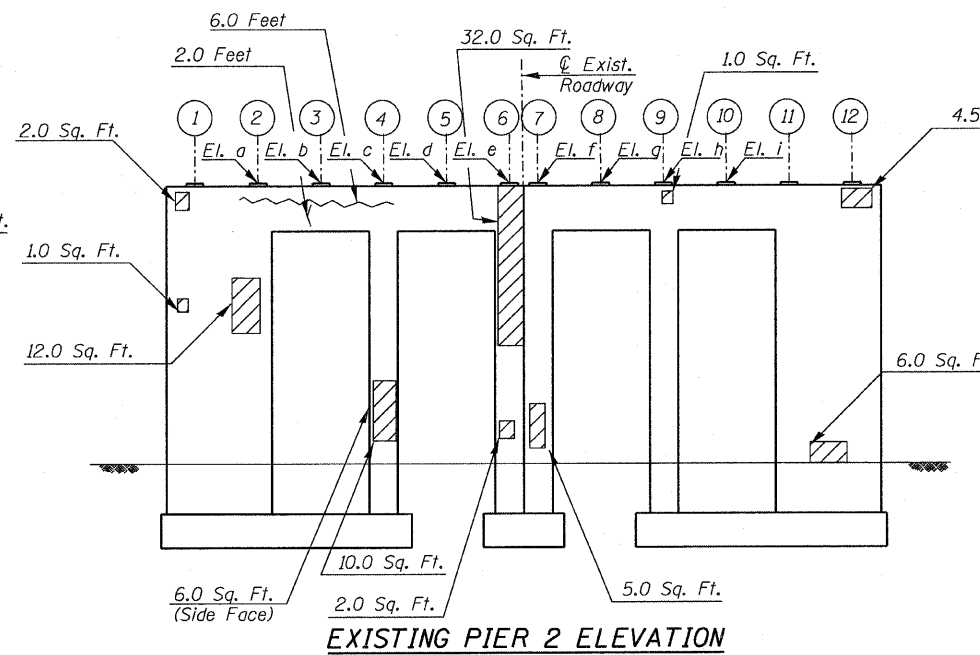
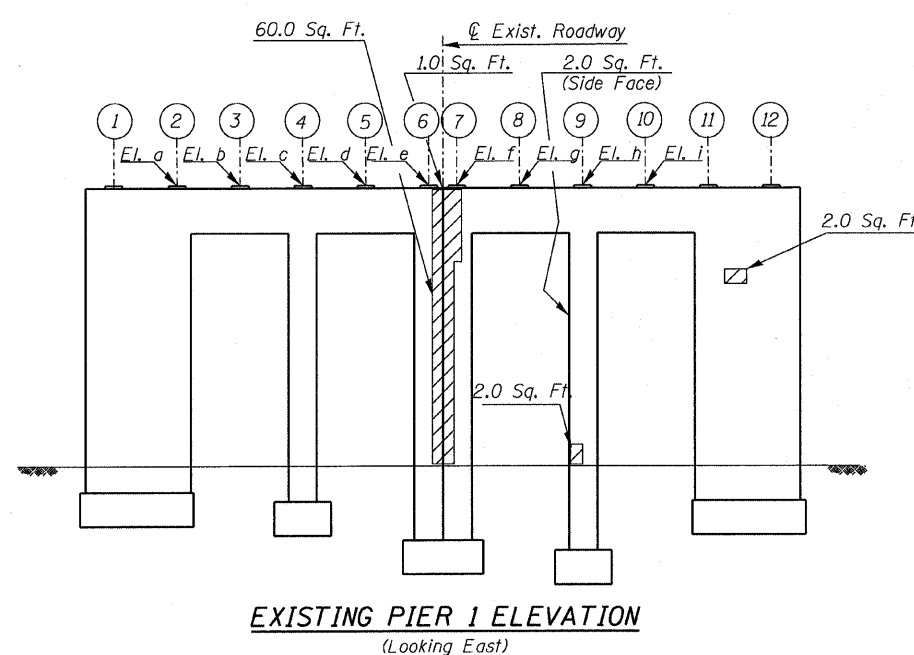
- Notes:
- 4" Perforated pipe drain shall extend through existing wingwalls and discharge to the slope wall.
 - Costs of coring holes through slopewalls and providing rodent shields at both ends is included in price of pay item.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PROPOSED ABUTMENT DETAILS
 31 ST. STREET OVER M.J. & C.W.I.R.R.
 F.A.U. ROUTE 1463 SECTION 159-1010.1B
 COOK COUNTY
 STATION 217+09.66
 STR. NO. 016-0871

SCALE: VERT. HORIZ.
 DATE: APRIL 2008

DRAWN BY: JHR
 CHECKED BY: CLS



Location	El. a (Beam 2)	El. b (Beam 3)	El. c (Beam 4)	El. d (Beam 5)	El. e (Beam 6)	El. f (Beam 7)	El. g (Beam 8)	El. h (Beam 9)	El. i (Beam 10)
Pier 1	626.42	626.54	626.66	626.77	626.79	626.79	626.75	626.66	626.54
Pier 2	628.44	628.56	628.67	628.76	628.80	628.80	628.76	628.67	628.56
Pier 3	628.75	628.87	628.98	629.07	629.11	629.11	629.07	628.98	628.87

EXIST. BRG. SEAT ELEVATIONS

Note:
Quantities & locations are for information purposes only. It shall be the Contractor's responsibility to verify such dimensions & 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 scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

BILL OF MATERIAL

Item	Unit	Total
Epoxy Crack Injection	Foot	50.0
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	1510.6
Concrete Removal	Cu. Yd.	-----

LEGEND

Epoxy Crack Injection

Structural Repair of Concrete (Depth equal to or less than 5")

Concrete Removal

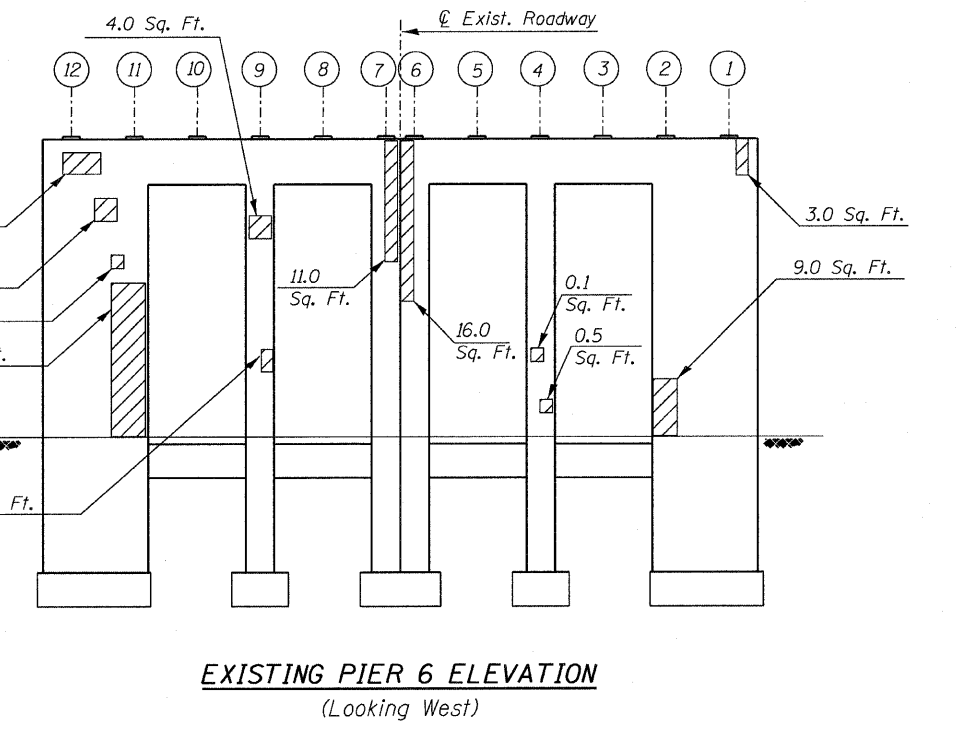
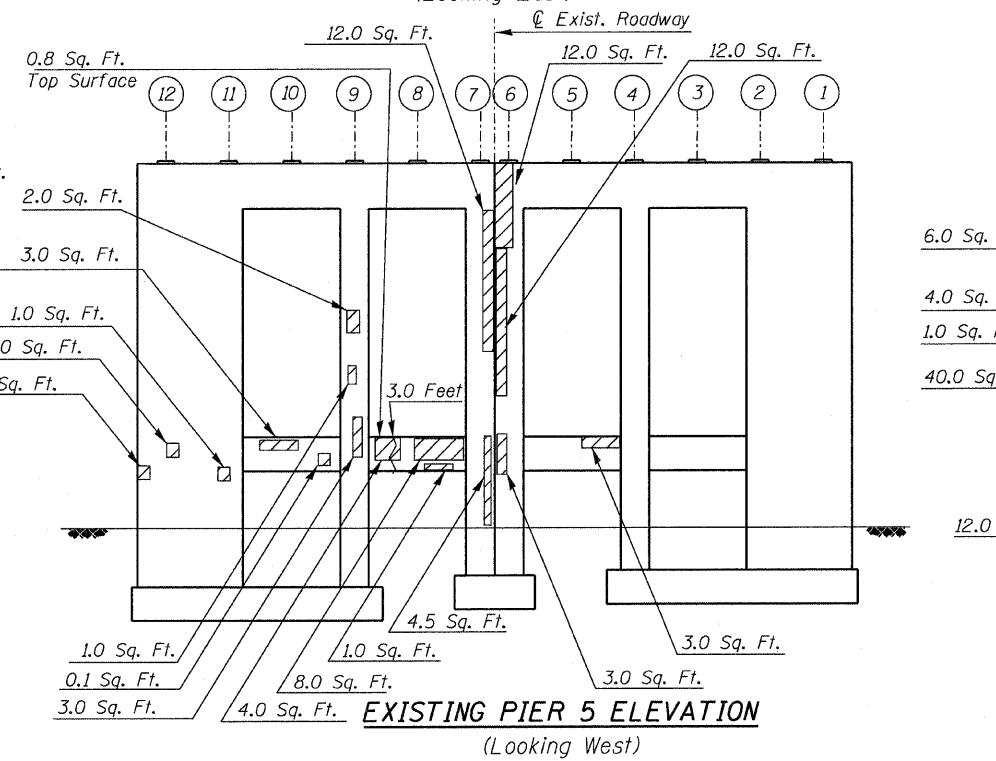
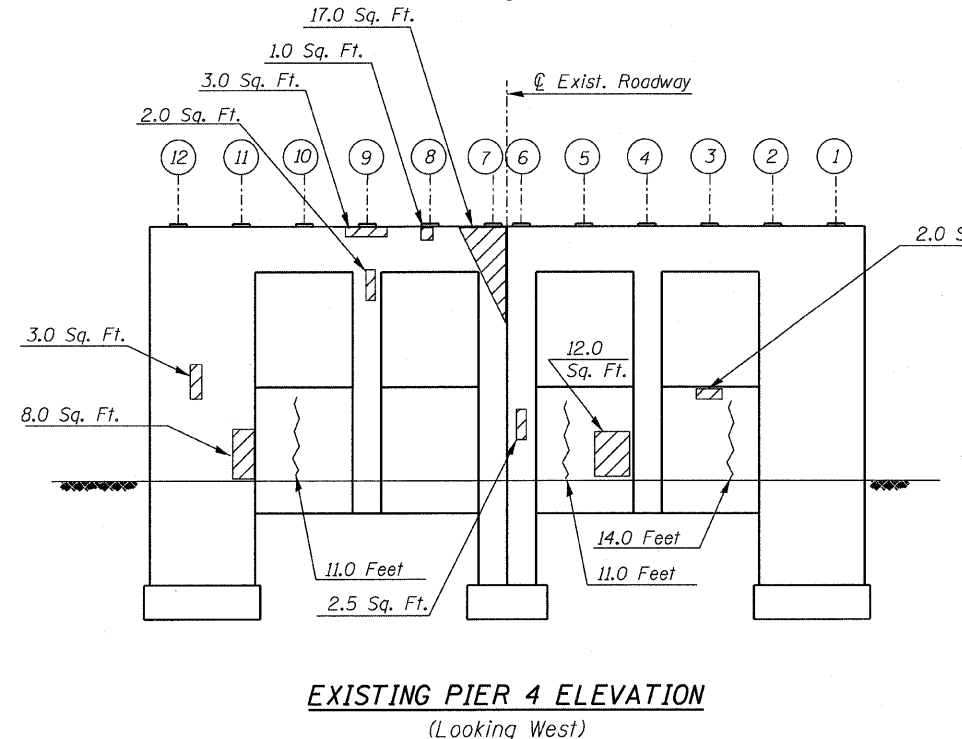
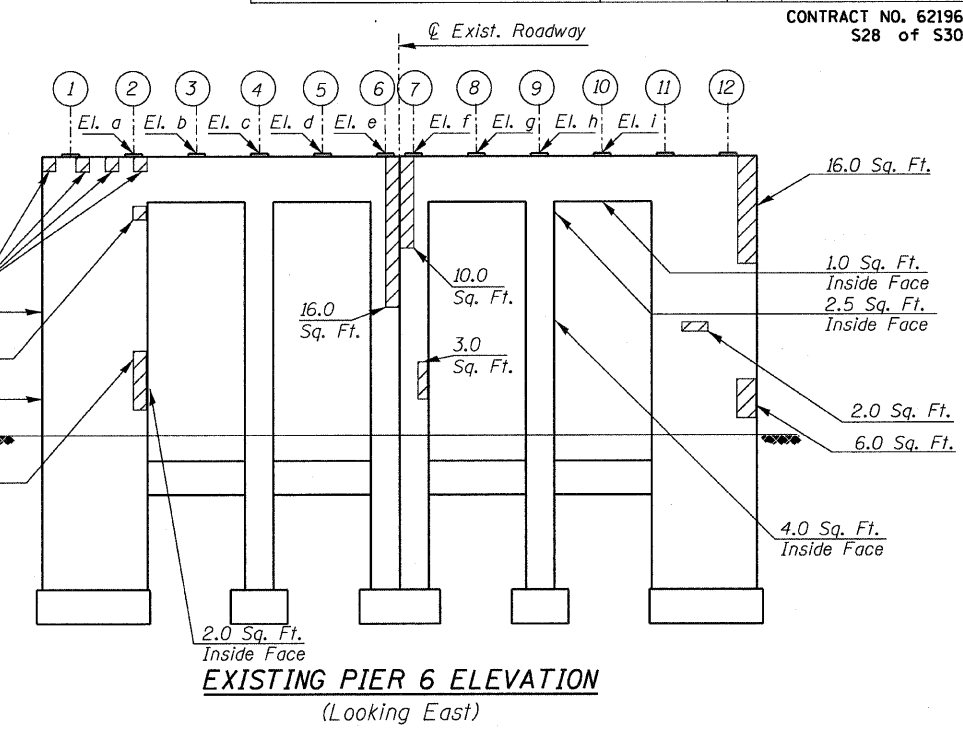
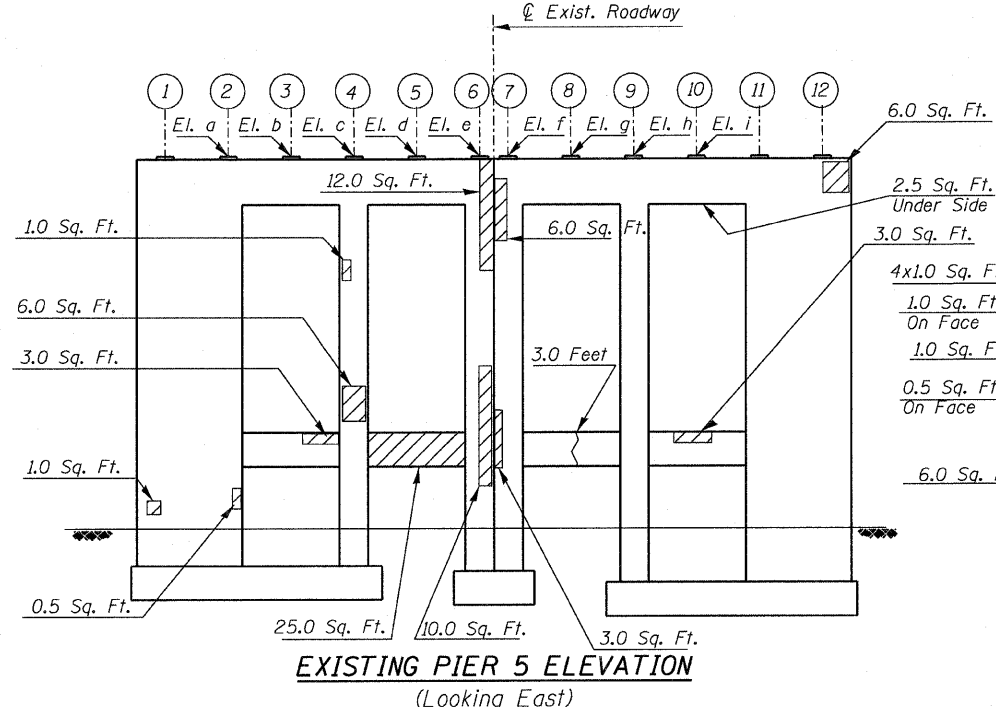
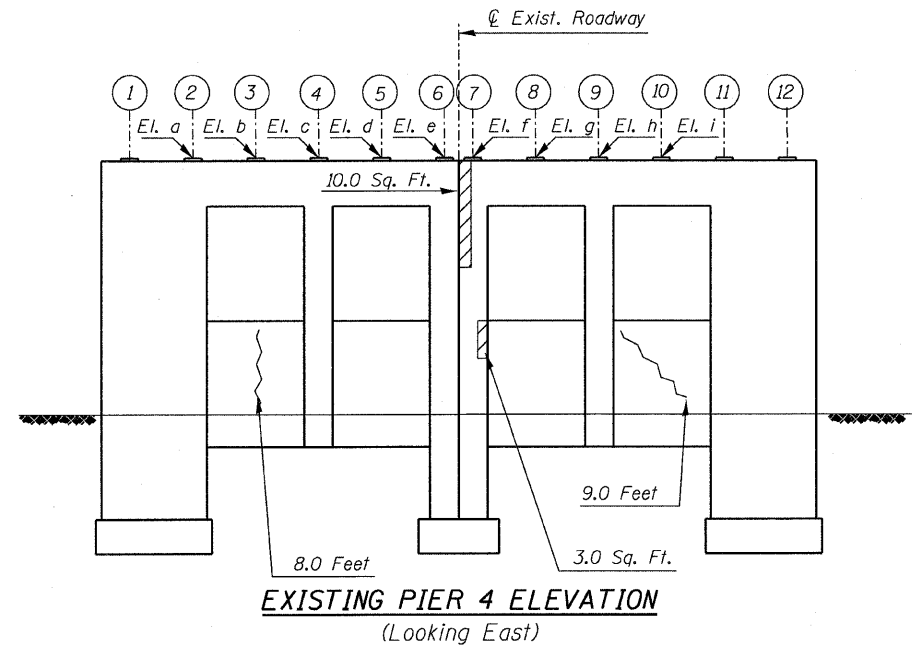
REVISIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PIER REPAIRS
31 ST. STREET OVER M.J. & C.W.I.R.R.
F.A.U. ROUTE 1463 SECTION 159-1010.1B
COOK COUNTY
STATION 217+09.66
STR. NO. 016-0871

SCALE: VERT. _____
HORIZ. _____
DATE: JANUARY 2008

DRAWN BY: JHR
CHECKED BY: CLS



	El. a (Beam 2)	El. b (Beam 3)	El. c (Beam 4)	El. d (Beam 5)	El. e (Beam 6)	El. f (Beam 7)	El. g (Beam 8)	El. h (Beam 9)	El. i (Beam 10)
Pier 4	628.35	628.46	628.58	628.67	628.71	628.71	628.67	628.58	628.46
Pier 5	628.54	628.65	628.77	628.86	628.90	628.90	628.86	628.77	628.65
Pier 6	626.35	626.46	626.58	626.67	626.71	626.71	626.67	626.58	626.46

EXIST. BRG. SEATS ELEVATION

BILL OF MATERIAL

Item	Unit	Total
Epoxy Crack Injection	Foot	59.0
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	392.5
Concrete Removal	Cu. Yd.	---

Note:
 Quantities & locations are for information purposes only. It shall be the Contractor's responsibility to verify such dimensions & 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 scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

LEGEND

- Epoxy Crack Injection
- Structural Repair of Concrete (Depth equal to or less than 5")
- Concrete Removal

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PIER REPAIRS
 31 ST. STREET OVER M.J. & C.W.I.R.R.
 F.A.U. ROUTE 1463 SECTION 159-1010.1B
 COOK COUNTY
 STATION 217+09.66
 STR. NO. 016-0871

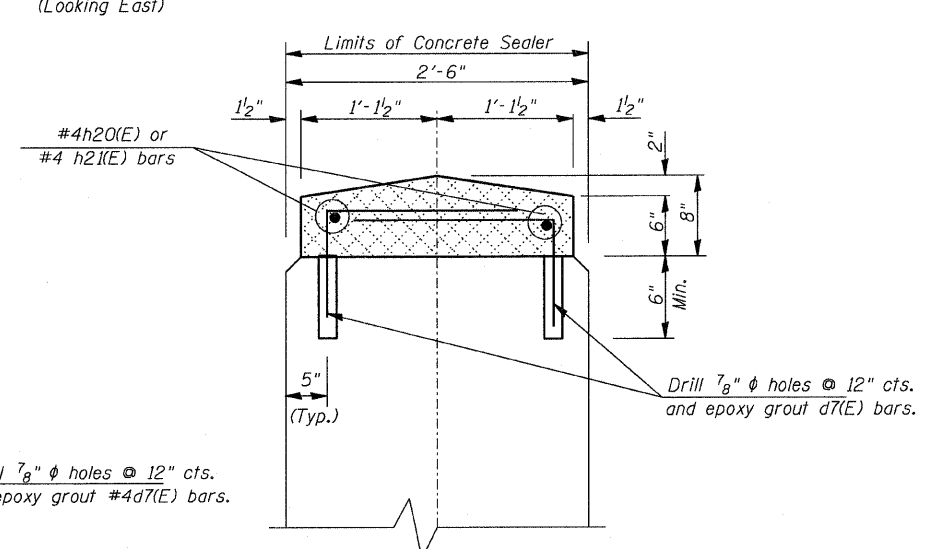
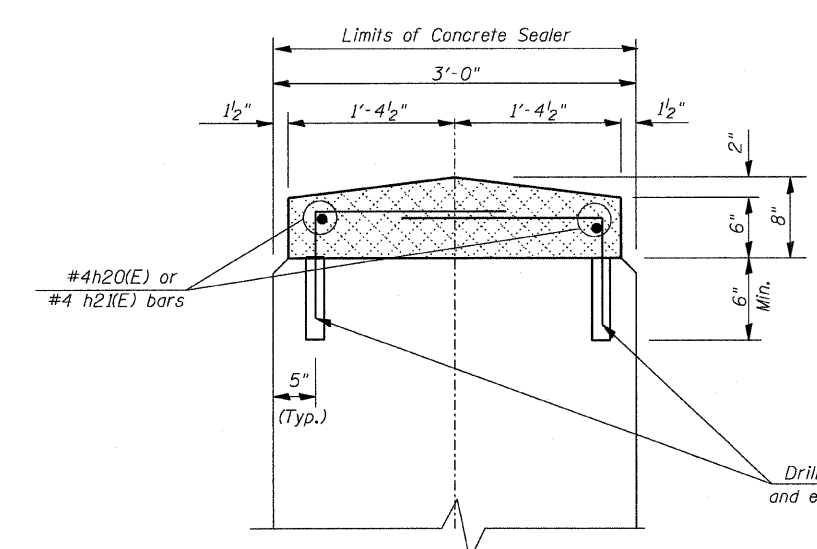
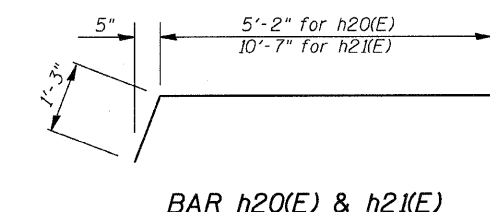
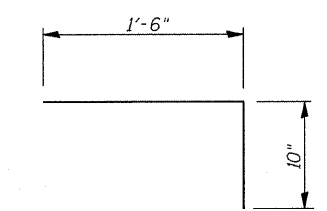
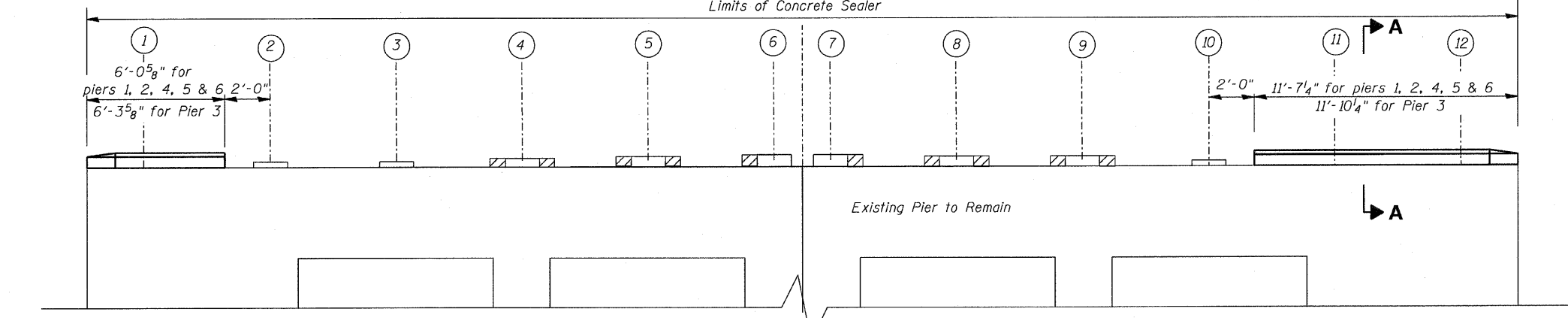
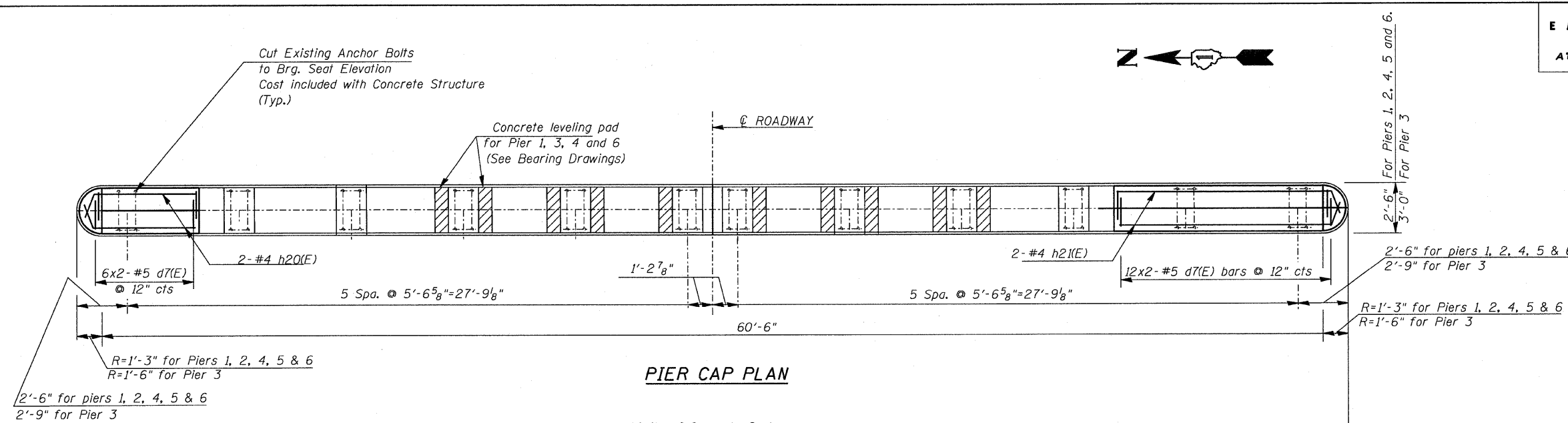
SCALE: VERT. HORIZ.
 DATE: JANUARY 2008

DRAWN BY: JHR
 CHECKED BY: CLS

BILL OF MATERIAL
 FOR PIERS 1 THRU 6.

Bar	No.	Size	Length	Shape
d7(E)	228	#4	2'-4"	┌
h20(E)	12	#4	6'-5"	┌
h21(E)	12	#4	11'-10"	┌
Concrete Structures		Cu. Yd.	5.4	
Reinforcement Bars, Epoxy Coated		Pound	500	
Concrete Sealer		Sq. Ft.	978	

CONTRACT NO. 62196
 S29 of S30



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PROPOSED PIER DETAILS
 31 ST. STREET OVER M.J. & C.W.I.R.R.
 F.A.U. ROUTE 1463 SECTION 159-1010.1B
 COOK COUNTY
 STATION 217+09.66
 STR. NO. 016-0871

SCALE: VERT. _____
 HORIZ. _____

DATE: APRIL 2008

DRAWN BY: JHR
 CHECKED BY: CLS

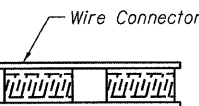
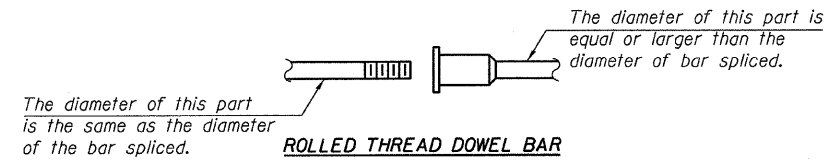
NOTES

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) = $0.66 \times f_y \times A_t$

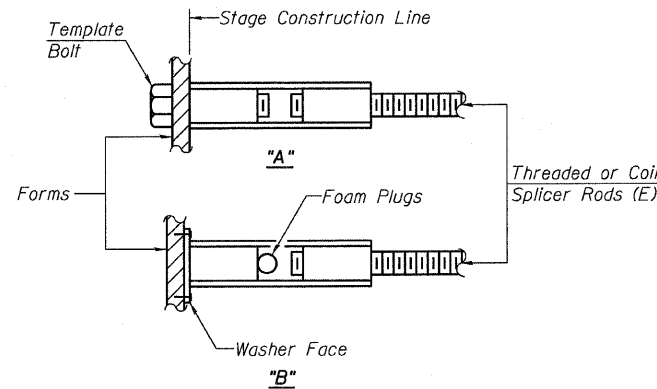
Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

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



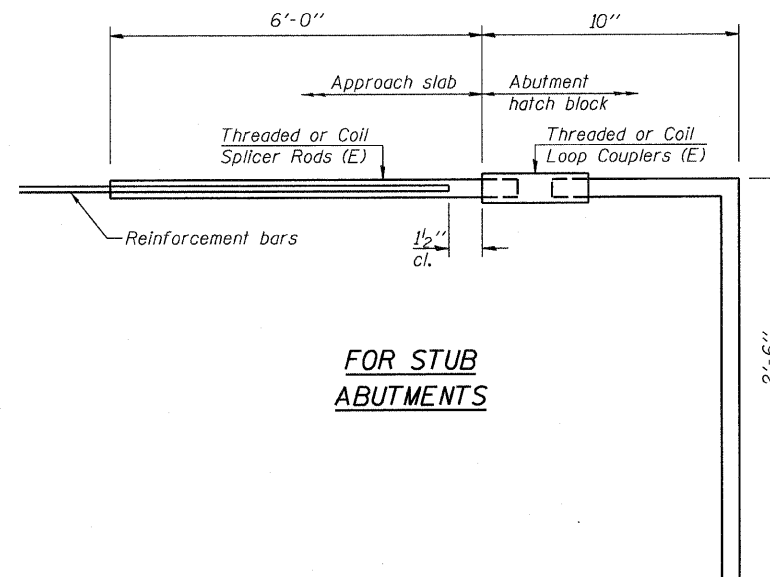
BAR SPLICER ASSEMBLY ALTERNATIVES

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

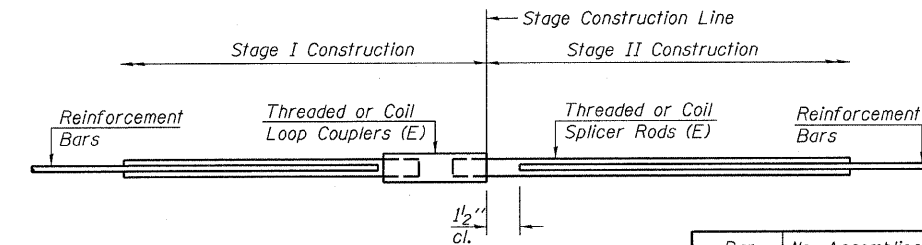


INSTALLATION AND SETTING METHODS

"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.



Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 96



STANDARD

Bar Size	No. Assemblies Required	Location
#4	16	Approach
#5	1,285	Deck
#5	20	Abutment
#5	108	Approach
#6	16	Deck
#6	12	Abutment

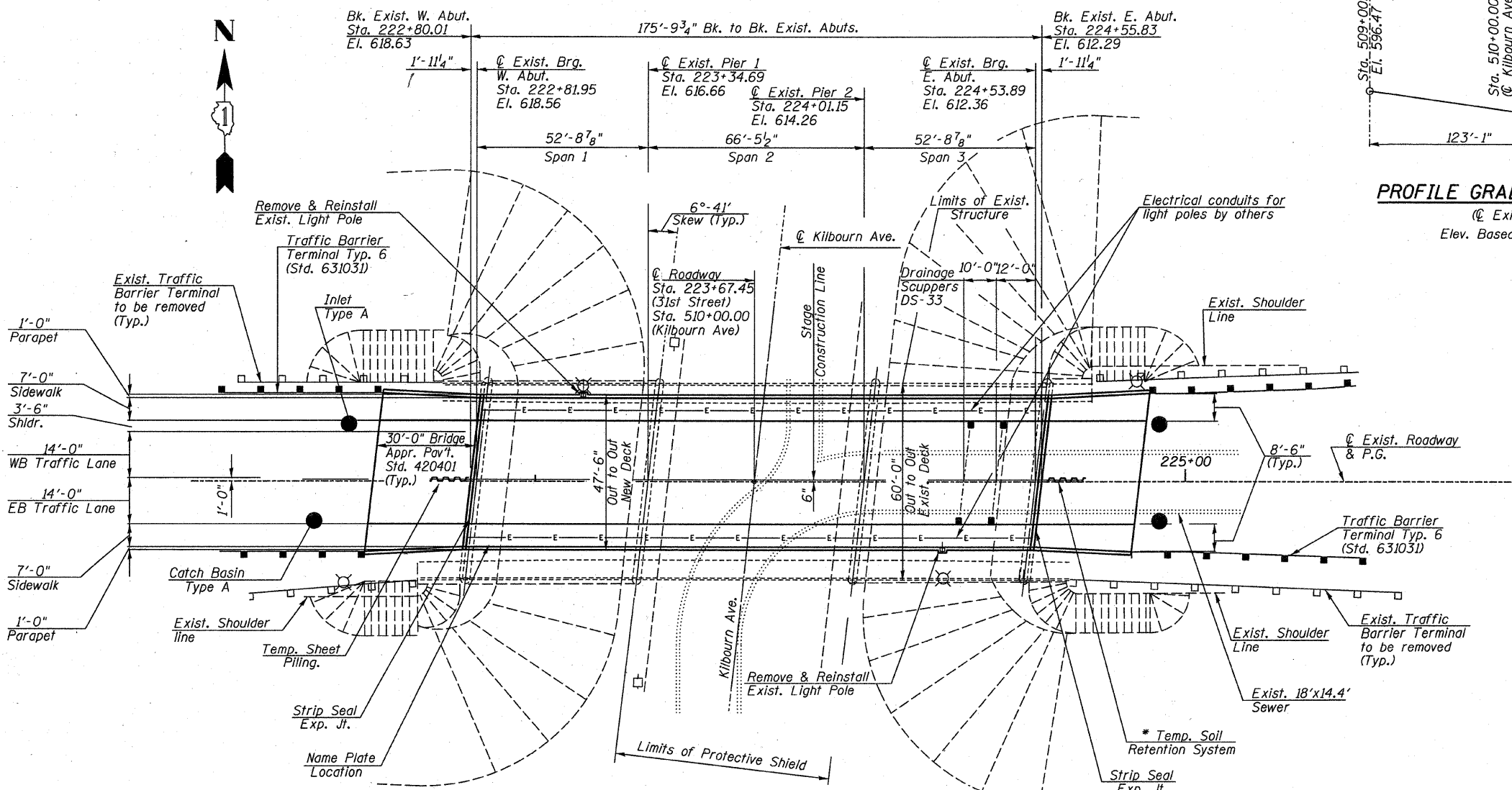
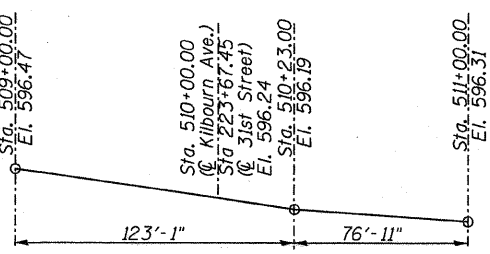
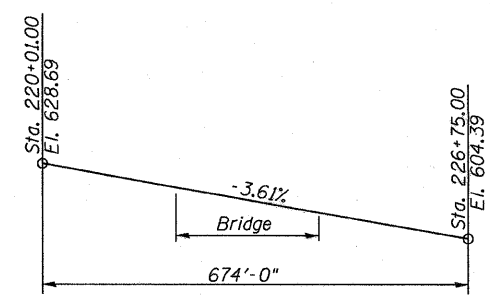
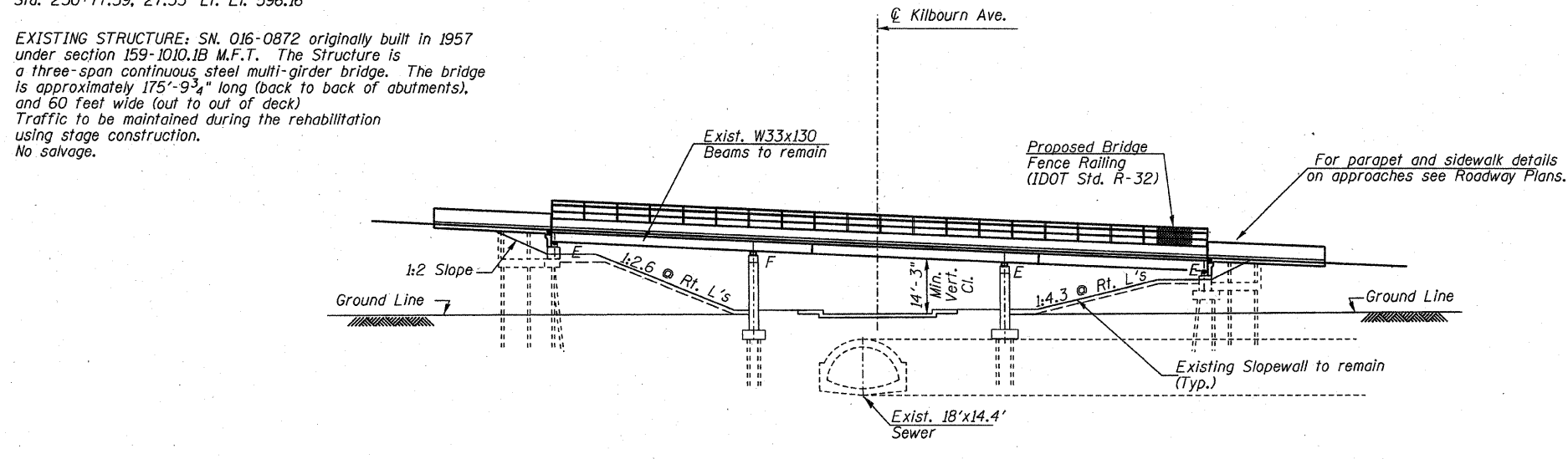
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BAR SPLICER ASSEMBLY DETAILS
 31 ST. STREET OVER M.J. & C.W.I.R.R.
 F.A.U. ROUTE 1463 SECTION 159-1010.1B
 COOK COUNTY
 STATION 217+09.66
 STR. NO. 016-0871

SCALE: VERT. _____ HORIZ. _____
 DATE: JANUARY 2008 DRAWN BY: JHR CHECKED BY: CLS

BENCHMARK BM103
Set chiseled cross on sidewalk on NE corner of the intersection of 31st Street and Kostner Avenue Sta. 230+77.59, 27.33' Lt. El. 596.16

EXISTING STRUCTURE: SN. 016-0872 originally built in 1957 under section 159-1010.1B M.F.T. The Structure is a three-span continuous steel multi-girder bridge. The bridge is approximately 175'-9 3/4" long (back to back of abutments), and 60 feet wide (out to out of deck). Traffic to be maintained during the rehabilitation using stage construction. No salvage.



LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.

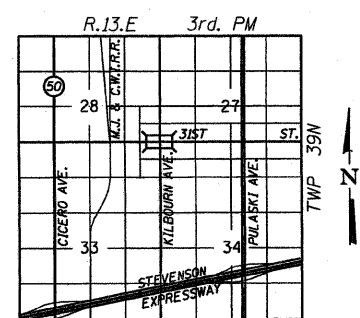
DESIGN SPECIFICATIONS
2002 AASHTO Standard Specification for Highway Bridges

DESIGN STRESSES
(NEW CONSTRUCTION)
 $f'_c = 3,500$ psi
 $f_y = 36,000$ psi (AASHTO M270, Gr. 36)
 $f_y = 60,000$ psi (reinforcement)

(EXISTING CONSTRUCTION)
 $f'_c = 800$ psi (w/Earth pressure)
 $f_y = 33,000$ psi (structural steel)
 $f_y = 40,000$ psi (reinforcement)

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

DAVID S. BROWARS
REGISTERED STRUCTURAL ENGINEER
ILLINOIS
Exp 11/30/2008



APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

Notes:
1. For approach pavement, see roadway drawings.
2. For quantity of "Remove & Reinstall Light Poles", see roadway drawings.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION
31 ST. STREET OVER KILBOURN AVE.
F.A.U. ROUTE 1463 SECTION 159-1010.1B
COOK COUNTY
STATION 223+67.45
STR. NO. 016-0872

SCALE: VERT. HORIZ.
DATE JANUARY 2008

DRAWN BY JHR
CHECKED BY CLS

GENERAL NOTES

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

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

No field welding is permitted except as specified in the contract documents.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All beams and other structural steel within 5 ft (measured along the beam) of either side of deck joints shall be cleaned per Near White Blast Cleaning - SSPC-SP10. The interior surfaces and bottom of the bottom flange of beams 6 and 7 shall be cleaned per Power Tool Cleaning - Commercial Grade. All remaining structural steel shall be cleaned per Power Tool Cleaning - Modified SSPC-SP3.

The designated areas cleaned per Near White Blast Cleaning - SSPC-SP10 and per Power Tool Cleaned - Commercial Grade shall be painted according to the requirements of Paint System 1 - OZ/E/U. The designated areas cleaned per Power Tool Cleaning - Modified SSPC-SP3 shall be painted according to the requirements of Paint System 2 - PS/EM/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the proposed fascia beams (Beams 2 and 11) shall be Reddish Brown Munsell No. 2.5 YR 3/4.

The Inorganic zinc rich primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior surfaces shall be gray, Munsell No 5B 7/1. See special provision for "Cleaning and Painting of New Metal Structures."

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 surfaces 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.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by an individual acceptable to the Engineer. Any cracks that cannot be removed by grinding 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

All existing construction accessories welded to the top flange over the piers between the quarter points of the beams shall be removed. The remaining weld shall be ground smooth and inspected for cracks using magnetic particle testing. Any cracks that cannot be removed by grinding approximately 1/8 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of this work will be paid for according to Article 109.04 of the Standard Specifications.

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

All construction joints shall be bonded.

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts 3/4" φ holes 1 5/16" φ unless otherwise noted.

Concrete Sealer shall be applied to the designated areas of the Abutments & Piers.

GENERAL NOTES (CONT.)

If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Two 1/2 in. & Two 1/4 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Slipforming of the parapets is not allowed.

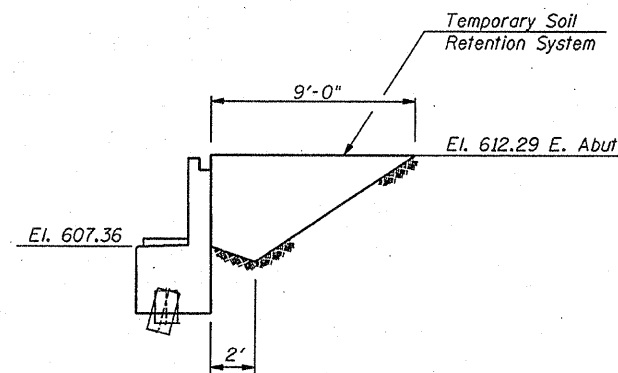
Calculated weight of structural steel removal = 81,250 lbs.

INDEX OF STRUCTURAL SHEETS

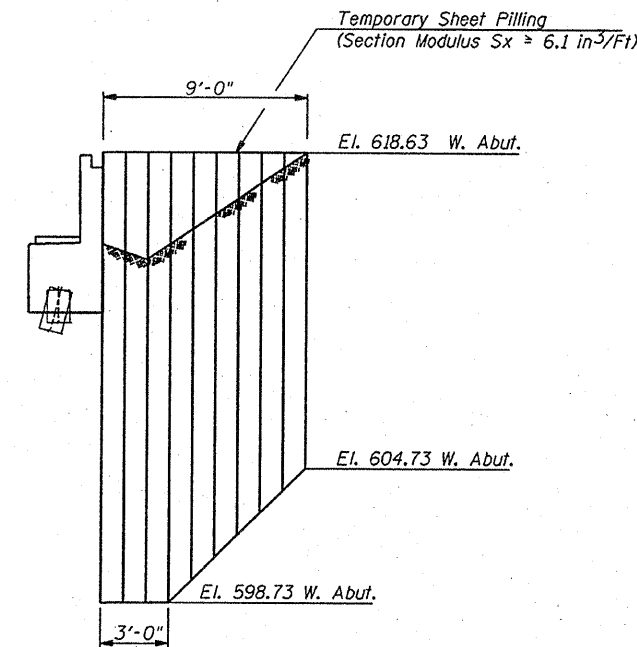
- S1. GENERAL PLAN & ELEVATION
- S2. GENERAL NOTES & BILL OF MATERIAL
- S3. STAGE CONSTRUCTION
- S4. TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
- S5-S6. TOP OF SLAB ELEVATIONS
- S7. TOP OF APPROACH SLAB ELEVATIONS
- S8. SUPERSTRUCTURE PLAN
- S9. SUPERSTRUCTURE CROSS-SECTION
- S10. PARAPET & SIDEWALK DETAILS
- S11. SUPERSTRUCTURE DETAILS
- S12. PREFORMED JOINT STRIP SEAL
- S13. DRAINAGE SCUPPER DS-33
- S14. BRIDGE FENCE RAILING
- S15. FRAMING PLAN
- S16-S17. ELASTOMERIC BEARING ASSEMBLY
- S18. WEST ABUTMENT REPAIRS
- S19. EAST ABUTMENT REPAIRS
- S20. PROPOSED ABUTMENT DETAILS
- S21. PIER REPAIRS
- S22. PROPOSED PIER DETAILS
- S23. BAR SPLICER ASSEMBLY DETAILS

BRIDGE BILL OF MATERIAL

DESCRIPTION	UNIT	SUPER	SUB	TOTAL
POROUS GRANULAR EMBANKMENT (SPECIAL)	CU YD		74	74
CONCRETE REMOVAL	CU YD		11.6	11.6
STRUCTURE EXCAVATION	CU YD		74	74
CONCRETE STRUCTURES	CU YD		15.3	15.3
CONCRETE SUPERSTRUCTURE	CU YD	326.7		326.7
BRIDGE DECK GROOVING	SQ YD	568		568
PROTECTIVE COAT	SQ YD	1028		1028
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	9		9
ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	18		18
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SQ FT		233.7	233.7
FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	4305		4305
STUD SHEAR CONNECTORS	EACH	3618		3618
JACK AND REMOVE EXISTING BEARINGS	EACH	27		27
STRUCTURAL STEEL REMOVAL	L SUM	0.2		0.2
CLEANING AND PAINTING STEEL BRIDGE, NO. 2 (SN 016-0872)	L SUM	1		1
REINFORCEMENT BARS, EPOXY COATED	POUND	58460	3200	61660
TEMPORARY SHEET PILING	SQ FT		161	161
NAME PLATES	EACH	1		1
EPOXY CRACK INJECTION	FOOT		82	82
BRIDGE FENCE RAILING	FOOT	345		345
DRAINAGE SCUPPERS, DS-33	EACH	4		4
CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	L SUM	0.5		0.5
PREFORMED JOINT STRIP SEAL	FOOT	97		97
REMOVAL OF EXISTING CONCRETE DECK	EACH	1		1
BAR SPLICERS	EACH	460	246	706
PROTECTIVE SHIELD	SQ YD	455		455
TEMPORARY SOIL RETENTION SYSTEM	SQ FT		27	27
CONCRETE SEALER	SQ FT		1089	1089
TEMPORARY WALKWAY	L SUM	0.5		0.5
ANCHOR BOLTS, 1"	EACH	36		36
ANCHOR BOLTS, 1 1/4"	EACH	16		16
PIPE UNDERDRAINS FOR STRUCTURES, 4"	FOOT		120	120
GEOCOMPOSITE WALL DRAIN	SQ YD		25.8	25.8



TEMPORARY SOIL RETENTION SYSTEM ELEVATION



TEMPORARY SHEET PILING ELEVATION

If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

REVISIONS	
NAME	DATE

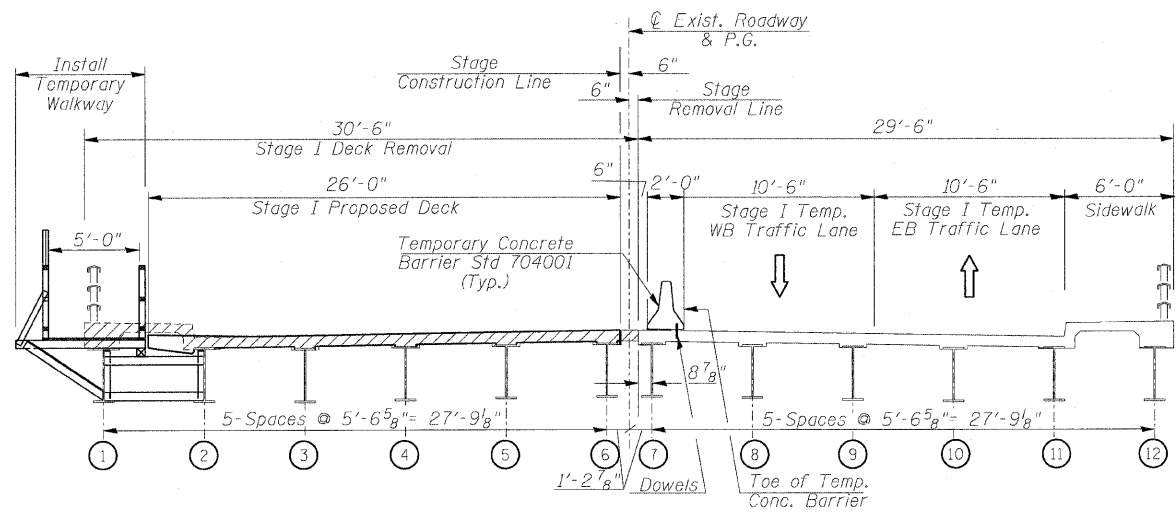
STATION 223+67.45
REBUILT 200_ BY
STATE OF ILLINOIS
F.A.U. RT. 1463 SEC. 159-1010.1B
LOADING HS20-44
STR. NO. 016-0872

NAME PLATE
(See Std. 515001)

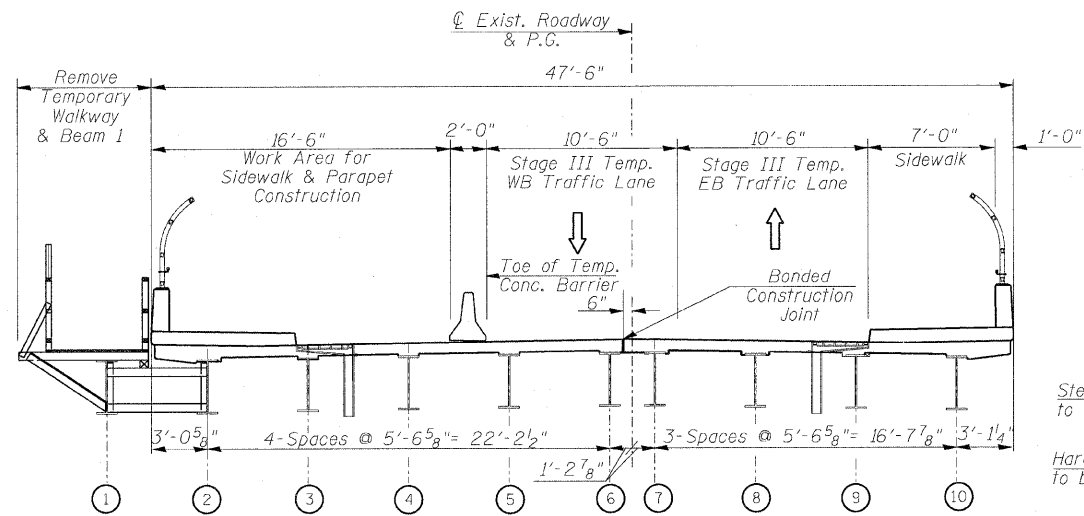
One existing Name Plate shall be cleaned & relocated adjacent to new Name Plate. Cost included with Name Plates.

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL NOTES & BILL OF MATERIAL
31 ST. STREET OVER KILBOURN AVE.
F.A.U. ROUTE 1463 SECTION 159-1010.1B
COOK COUNTY
STATION 223+67.45
STR. NO. 016-0872

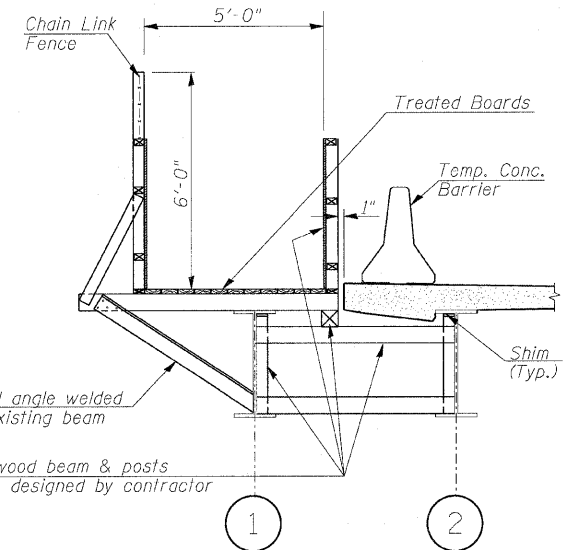
SCALE: VERT. DRAWN BY JHR
 HORIZ. CHECKED BY CLS
DATE JUNE 2008



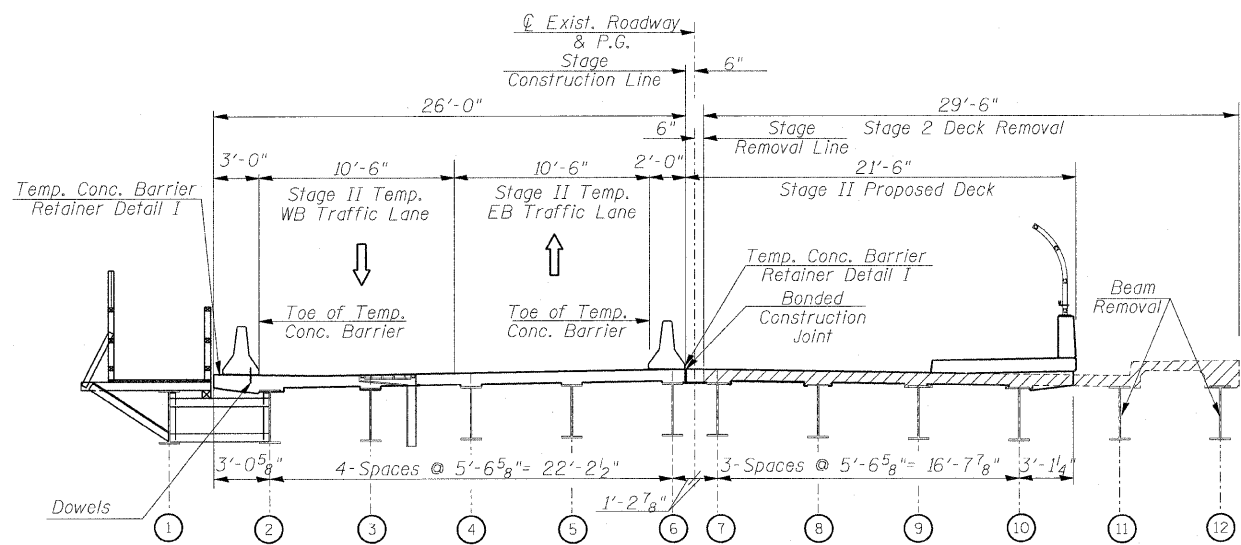
STAGE I CONSTRUCTION
 (Looking East)



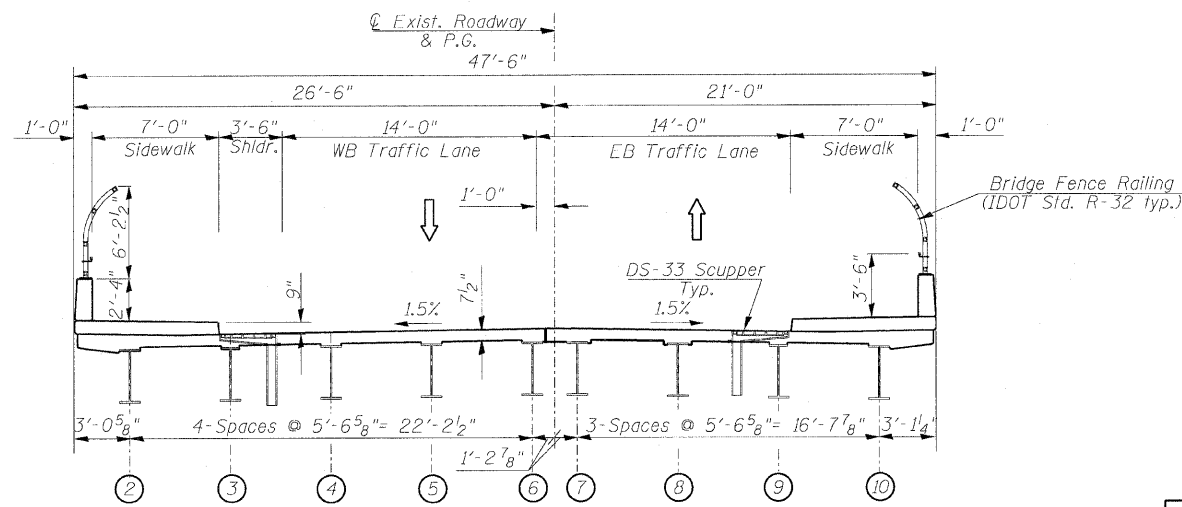
STAGE III CONSTRUCTION
 (Looking East)



TEMPORARY WALKWAY DETAIL
 Existing diaphragms between steel beams 1 & 2 to remain until removal of temporary walkway.



STAGE II CONSTRUCTION
 (Looking East)



PROPOSED CROSS SECTION
 (Looking East)

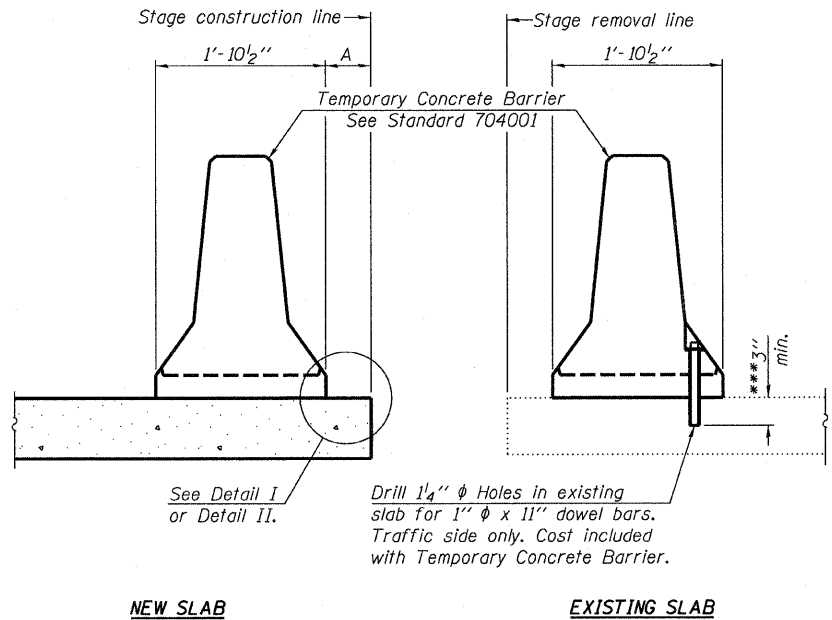
BILL OF MATERIAL

Item	Unit	Total
Temporary Walkway	L Sum	0.5

Note:
 For quantity of Temporary Concrete Barrier, see roadway plans.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STAGE CONSTRUCTION
 31 ST. STREET OVER KILBOURN AVE.
 F.A.U. ROUTE 1463 SECTION 159-1010.1B
 COOK COUNTY
 STATION 223+67.45
 STR. NO. 016-0872
 SCALE: VERT. _____ DRAWN BY JHR
 HORIZ. _____ DATE JANUARY 2008 CHECKED BY CLS



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".

When "A" is 1'-1 1/2" (N. edge of deck during Stage II), the temporary concrete barrier shall be anchored to the new slab using 1" dowels bars using the detail for securing temporary concrete barriers to existing slabs.

NOTES

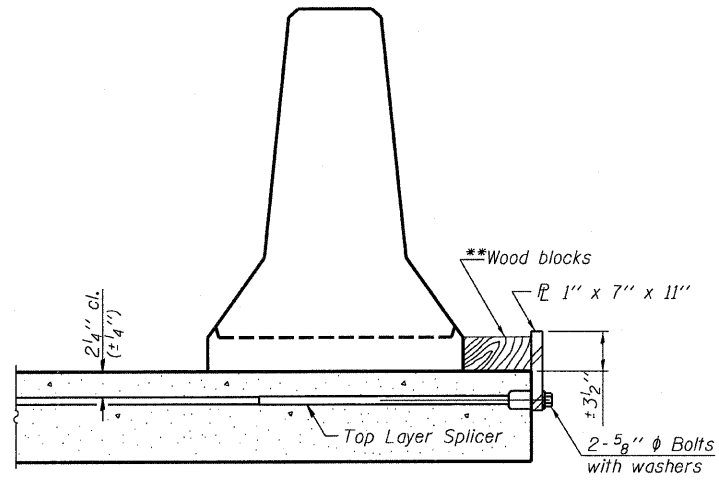
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x11" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate CL of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x11" steel PL 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 CL of each barrier panel.

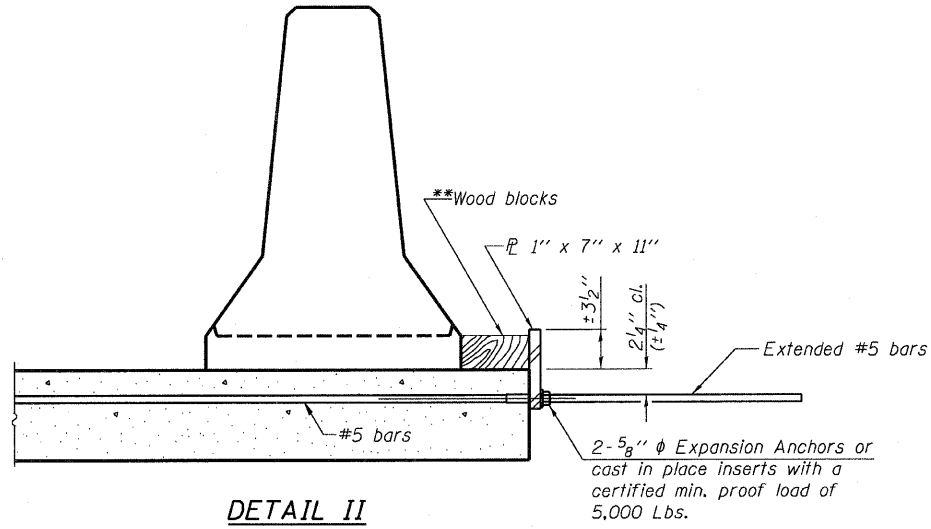
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 11" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

SECTIONS THRU SLAB

***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.

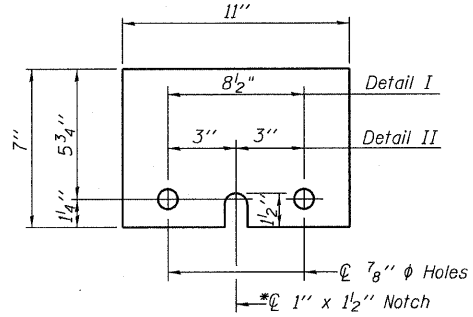


DETAIL I



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 PL 1" x 7" x 11"

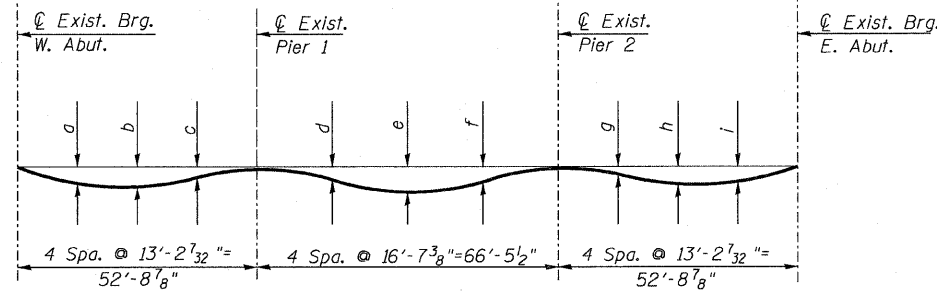
* Required only with Detail II

Note:
For quantity of Temporary Concrete Barrier, see roadway plans.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
31 ST. STREET OVER KILBOURN AVE.
F.A.U. ROUTE 1463 SECTION 159-1010.1B
COOK COUNTY
STATION 223+67.45
STR. NO. 016-0872

SCALE: VERT. DRAWN BY JHR
 HORIZ. CHECKED BY CLS
DATE JANUARY 2008



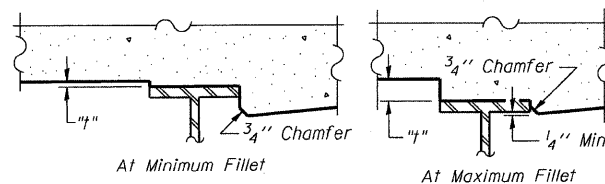
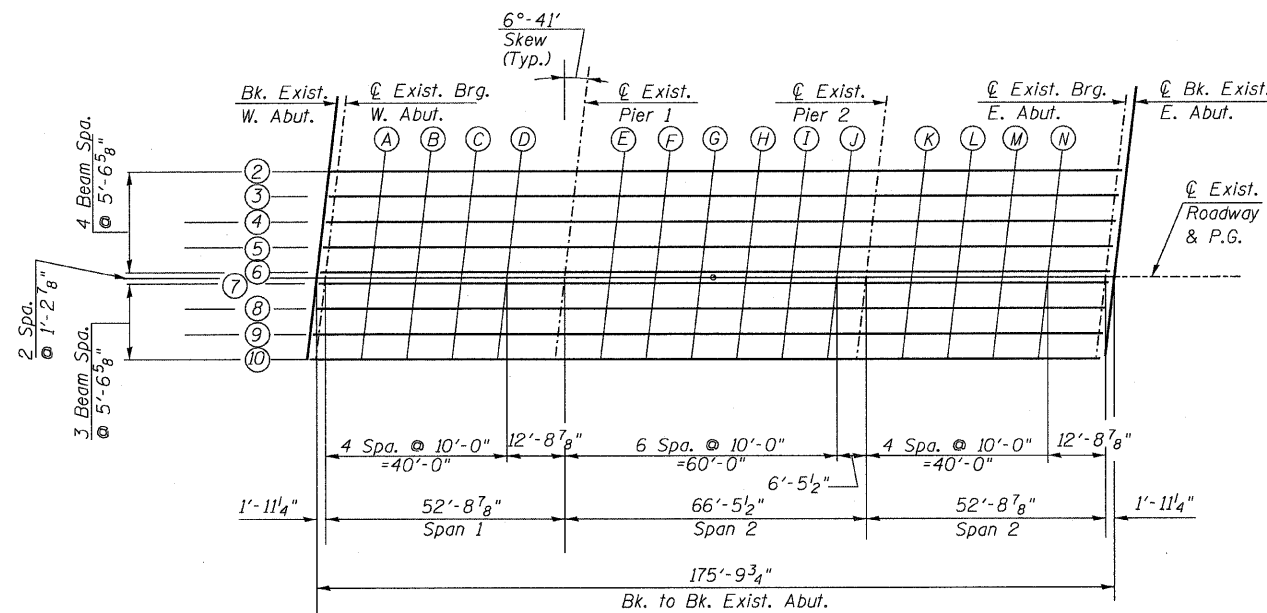
DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown here and on Sheet S6.

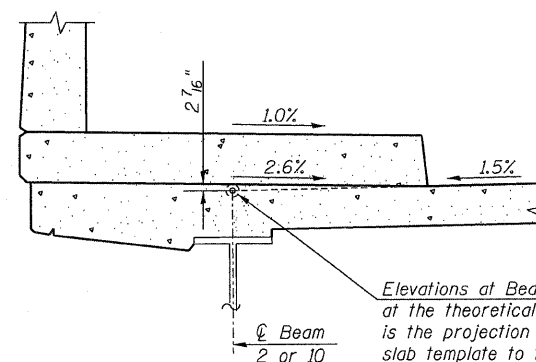
DEAD LOAD DEFLECTION DIAGRAM TABLE

Beams	a	b	c	d	e	f	g	h	i
2 & 10	0 1/4"	0 1/4"	0 1/8"	0 1/4"	0 3/8"	0 1/4"	0 1/8"	0 1/4"	0 1/4"
3-5, 8 & 9	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0 1/4"	0 1/8"	0 1/8"	0 1/8"	0 1/8"
6 & 7	0 1/8"	0 1/8"	0"	0 1/8"	0 1/4"	0 1/8"	0"	0 1/8"	0 1/8"



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown here and Sheet S6, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



Elevations at Beams 2 & 10 are given at the theoretical top of slab which is the projection of the roadway slab template to the centerline of beam.

PROJECTION UNDER SIDEWALK DETAIL

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	222+82.76	-23.448	618.18	618.18
Centerline Brg. W. Abut.	222+84.70	-23.448	618.11	618.11
A	222+94.70	-23.448	617.75	617.76
B	223+04.70	-23.448	617.39	617.41
C	223+14.70	-23.448	617.03	617.05
D	223+24.70	-23.448	616.67	616.67
Centerline Pier 1	223+37.44	-23.448	616.21	616.21
E	223+47.44	-23.448	615.85	615.85
F	223+57.44	-23.448	615.49	615.51
G	223+67.44	-23.448	615.12	615.15
H	223+77.44	-23.448	614.76	614.79
I	223+87.44	-23.448	614.40	614.42
J	223+97.44	-23.448	614.04	614.05
Centerline Pier 2	224+03.90	-23.448	613.81	613.81
K	224+13.90	-23.448	613.45	613.45
L	224+23.90	-23.448	613.09	613.10
M	224+33.90	-23.448	612.73	612.75
N	224+43.90	-23.448	612.37	612.38
Centerline Brg. E. Abut.	224+56.64	-23.448	611.91	611.91
Bk. E. Abut.	224+58.58	-23.448	611.84	611.84

NORTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	222+82.18	-18.500	618.27	618.27
Centerline Brg. W. Abut.	222+84.12	-18.500	618.20	618.20
A	222+94.12	-18.500	617.84	617.85
B	223+04.12	-18.500	617.48	617.50
C	223+14.12	-18.500	617.12	617.14
D	223+24.12	-18.500	616.76	616.77
Centerline Pier 1	223+36.86	-18.500	616.30	616.30
E	223+46.86	-18.500	615.94	615.95
F	223+56.86	-18.500	615.58	615.60
G	223+66.86	-18.500	615.22	615.24
H	223+76.86	-18.500	614.86	614.88
I	223+86.86	-18.500	614.50	614.51
J	223+96.86	-18.500	614.14	614.14
Centerline Pier 2	224+03.32	-18.500	613.90	613.90
K	224+13.32	-18.500	613.54	613.55
L	224+23.32	-18.500	613.18	613.20
M	224+33.32	-18.500	612.82	612.84
N	224+43.32	-18.500	612.46	612.47
Centerline Brg. E. Abut.	224+56.00	-18.500	612.00	612.00
Bk. E. Abut.	224+58.00	-18.500	611.93	611.93

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	222+82.11	-17.896	618.29	618.29
Centerline Brg. W. Abut.	222+84.05	-17.896	618.22	618.22
A	222+94.05	-17.896	617.86	617.87
B	223+04.05	-17.896	617.49	617.51
C	223+14.05	-17.896	617.13	617.15
D	223+24.05	-17.896	616.77	616.78
Centerline Pier 1	223+36.79	-17.896	616.31	616.31
E	223+46.79	-17.896	615.95	615.96
F	223+56.79	-17.896	615.59	615.61
G	223+66.79	-17.896	615.23	615.25
H	223+76.79	-17.896	614.87	614.89
I	223+86.79	-17.896	614.51	614.52
J	223+96.79	-17.896	614.15	614.15
Centerline Pier 2	224+03.24	-17.896	613.92	613.92
K	224+13.24	-17.896	613.56	613.56
L	224+23.24	-17.896	613.19	613.21
M	224+33.24	-17.896	612.83	612.85
N	224+43.24	-17.896	612.47	612.49
Centerline Brg. E. Abut.	224+55.98	-17.896	612.01	612.01
Bk. E. Abut.	224+57.92	-17.896	611.94	611.94

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	222+81.46	-12.344	618.39	618.39
Centerline Brg. W. Abut.	222+83.40	-12.344	618.32	618.32
A	222+93.40	-12.344	617.96	617.97
B	223+03.40	-12.344	617.60	617.62
C	223+13.40	-12.344	617.24	617.25
D	223+23.40	-12.344	616.88	616.89
Centerline Pier 1	223+36.14	-12.344	616.42	616.42
E	223+46.14	-12.344	616.06	616.07
F	223+56.14	-12.344	615.70	615.71
G	223+66.14	-12.344	615.34	615.36
H	223+76.14	-12.344	614.98	615.00
I	223+86.14	-12.344	614.62	614.63
J	223+96.14	-12.344	614.26	614.26
Centerline Pier 2	224+02.59	-12.344	614.02	614.02
K	224+12.59	-12.344	613.66	613.67
L	224+22.59	-12.344	613.30	613.31
M	224+32.59	-12.344	612.94	612.96
N	224+42.59	-12.344	612.58	612.59
Centerline Brg. E. Abut.	224+55.33	-12.344	612.12	612.12
Bk. E. Abut.	224+57.27	-12.344	612.05	612.05

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TOP OF SLAB ELEVATIONS
 31 ST. STREET OVER KILBOURN AVE.
 F.A.U. ROUTE 1463 SECTION 159-1010.1B
 COOK COUNTY
 STATION 223+67.45
 STR. NO. 016-0872
 SCALE: VERT. DRAWN BY JHR
 HORIZ. DATE JANUARY 2008 CHECKED BY CLS

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	222+80.81	-6.792	618.50	618.50
⊕ Brg. W. Abut.	222+82.75	-6.792	618.43	618.43
A	222+92.75	-6.792	618.07	618.08
B	223+02.75	-6.792	617.71	617.72
C	223+12.75	-6.792	617.35	617.36
D	223+22.75	-6.792	616.99	616.99
⊕ Pier 1	223+35.49	-6.792	616.53	616.53
E	223+45.49	-6.792	616.17	616.17
F	223+55.49	-6.792	615.81	615.82
G	223+65.49	-6.792	615.44	615.47
H	223+75.49	-6.792	615.08	615.10
I	223+85.49	-6.792	614.72	614.74
J	223+95.49	-6.792	614.36	614.37
⊕ Pier 2	224+01.94	-6.792	614.13	614.13
K	224+11.94	-6.792	613.77	613.77
L	224+21.94	-6.792	613.41	613.42
M	224+31.94	-6.792	613.05	613.06
N	224+41.94	-6.792	612.69	612.70
⊕ Brg. E. Abut.	224+54.68	-6.792	612.23	612.23
Bk. E. Abut.	224+56.62	-6.792	612.16	612.16

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	222+80.15	-1.240	618.61	618.61
⊕ Brg. W. Abut.	222+82.10	-1.240	618.54	618.54
A	222+92.10	-1.240	618.18	618.18
B	223+02.10	-1.240	617.81	617.83
C	223+12.10	-1.240	617.45	617.46
D	223+22.10	-1.240	617.09	617.10
⊕ Pier 1	223+34.83	-1.240	616.63	616.63
E	223+44.83	-1.240	616.27	616.28
F	223+54.83	-1.240	615.91	615.92
G	223+64.83	-1.240	615.55	615.57
H	223+74.83	-1.240	615.19	615.21
I	223+84.83	-1.240	614.83	614.84
J	223+94.83	-1.240	614.47	614.47
⊕ Pier 2	224+01.29	-1.240	614.24	614.24
K	224+11.29	-1.240	613.88	613.88
L	224+21.29	-1.240	613.52	613.52
M	224+31.29	-1.240	613.15	613.17
N	224+41.29	-1.240	612.79	612.80
⊕ Brg. E. Abut.	224+54.03	-1.240	612.33	612.33
Bk. E. Abut.	224+55.97	-1.240	612.26	612.26

STAGE CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	222+80.07	-0.500	618.62	618.62
⊕ Brg. W. Abut.	222+82.01	-0.500	618.55	618.55
A	222+92.01	-0.500	618.19	618.20
B	223+02.01	-0.500	617.83	617.84
C	223+12.01	-0.500	617.47	617.48
D	223+22.01	-0.500	617.11	617.11
⊕ Pier 1	223+34.75	-0.500	616.65	616.65
E	223+44.75	-0.500	616.29	616.29
F	223+54.75	-0.500	615.92	615.94
G	223+64.75	-0.500	615.56	615.58
H	223+74.75	-0.500	615.20	615.22
I	223+84.75	-0.500	614.84	614.85
J	223+94.75	-0.500	614.48	614.48
⊕ Pier 2	224+01.21	-0.500	614.25	614.25
K	224+11.21	-0.500	613.89	613.89
L	224+21.21	-0.500	613.53	613.53
M	224+31.21	-0.500	613.16	613.18
N	224+41.21	-0.500	612.80	612.81
⊕ Brg. E. Abut.	224+53.95	-0.500	612.34	612.34
Bk. E. Abut.	224+55.89	-0.500	612.27	612.27

⊕ EXIST. ROADWAY & P.G.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	222+80.01	0.000	618.63	618.63
⊕ Brg. W. Abut.	222+81.95	0.000	618.56	618.56
A	222+91.95	0.000	618.20	618.21
B	223+01.95	0.000	617.84	617.85
C	223+11.95	0.000	617.48	617.49
D	223+21.95	0.000	617.12	617.12
⊕ Pier 1	223+34.69	0.000	616.66	616.66
E	223+44.69	0.000	616.30	616.30
F	223+54.69	0.000	615.93	615.95
G	223+64.69	0.000	615.57	615.59
H	223+74.69	0.000	615.21	615.23
I	223+84.69	0.000	614.85	614.86
J	223+94.69	0.000	614.49	614.49
⊕ Pier 2	224+01.15	0.000	614.26	614.26
K	224+11.15	0.000	613.90	613.90
L	224+21.15	0.000	613.53	613.54
M	224+31.15	0.000	613.17	613.19
N	224+41.15	0.000	612.81	612.82
⊕ Brg. E. Abut.	224+53.89	0.000	612.35	612.35
Bk. E. Abut.	224+55.83	0.000	612.29	612.29

BEAM 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	222+79.86	1.240	618.62	618.62
⊕ Brg. W. Abut.	222+81.80	1.240	618.55	618.55
A	222+91.80	1.240	618.19	618.19
B	223+01.80	1.240	617.83	617.84
C	223+11.80	1.240	617.46	617.47
D	223+21.80	1.240	617.10	617.11
⊕ Pier 1	223+34.54	1.240	616.64	616.64
E	223+44.54	1.240	616.28	616.29
F	223+54.54	1.240	615.92	615.93
G	223+64.54	1.240	615.56	615.58
H	223+74.54	1.240	615.20	615.22
I	223+84.54	1.240	614.84	614.85
J	223+94.54	1.240	614.48	614.48
⊕ Pier 2	224+01.00	1.240	614.25	614.25
K	224+11.00	1.240	613.89	613.89
L	224+21.00	1.240	613.53	613.53
M	224+31.00	1.240	613.17	613.18
N	224+41.00	1.240	612.81	612.81
⊕ Brg. E. Abut.	224+53.74	1.240	612.35	612.35
Bk. E. Abut.	224+55.68	1.240	612.27	612.27

BEAM 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	222+79.21	6.792	618.56	618.56
⊕ Brg. W. Abut.	222+81.15	6.792	618.49	618.50
A	222+91.15	6.792	618.13	618.14
B	223+01.15	6.792	617.77	617.78
C	223+11.15	6.792	617.40	617.41
D	223+21.15	6.792	617.04	617.04
⊕ Pier 1	223+33.89	6.792	616.58	616.58
E	223+43.89	6.792	616.22	616.22
F	223+53.89	6.792	615.86	615.86
G	223+63.89	6.792	615.50	615.50
H	223+73.89	6.792	615.14	615.14
I	223+83.89	6.792	614.78	614.78
J	223+93.89	6.792	614.42	614.42
⊕ Pier 2	224+00.35	6.792	614.19	614.19
K	224+10.35	6.792	613.83	613.83
L	224+20.35	6.792	613.47	613.47
M	224+30.35	6.792	613.11	613.11
N	224+40.35	6.792	612.74	612.74
⊕ Brg. E. Abut.	224+53.09	6.792	612.29	612.29
Bk. E. Abut.	224+55.03	6.792	612.21	612.21

BEAM 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	222+78.56	12.344	618.50	618.50
⊕ Brg. W. Abut.	222+80.50	12.344	618.43	618.44
A	222+90.50	12.344	618.07	618.08
B	223+00.50	12.344	617.71	617.72
C	223+10.50	12.344	617.34	617.36
D	223+20.50	12.344	616.98	616.98
⊕ Pier 1	223+33.24	12.344	616.52	616.52
E	223+43.24	12.344	616.16	616.16
F	223+53.24	12.344	615.80	615.80
G	223+63.24	12.344	615.44	615.44
H	223+73.24	12.344	615.08	615.08
I	223+83.24	12.344	614.72	614.72
J	223+93.24	12.344	614.36	614.36
⊕ Pier 2	223+99.70	12.344	614.13	614.13
K	224+09.70	12.344	613.77	613.77
L	224+19.70	12.344	613.41	613.41
M	224+29.70	12.344	613.05	613.05
N	224+39.70	12.344	612.68	612.68
⊕ Brg. E. Abut.	224+52.44	12.344	612.23	612.23
Bk. E. Abut.	224+54.38	12.344	612.16	612.16

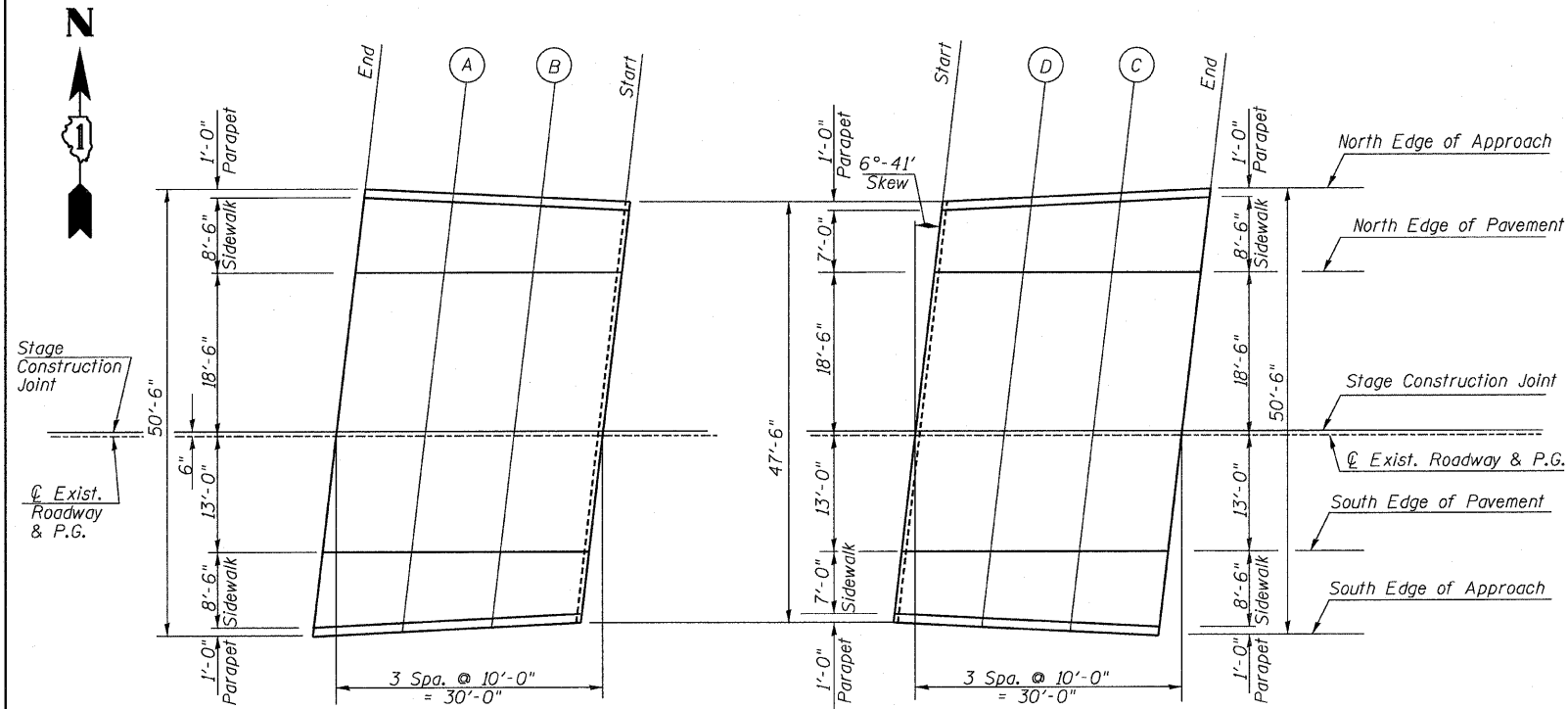
SOUTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	222+78.49	13.000	618.49	618.49
⊕ Brg. W. Abut.	222+80.43	13.000	618.42	618.42
A	222+90.43	13.000	618.06	618.07
B	223+00.43	13.000	617.70	617.71
C	223+10.43	13.000	617.34	617.35
D	223+20.43	13.000	616.98	616.98
⊕ Pier 1	223+33.17	13.000	616.52	616.52
E	223+43.17	13.000	616.16	616.16
F	223+53.17	13.000	615.80	615.81
G	223+63.17	13.000	615.44	615.46
H	223+73.17	13.000	615.07	615.09
I	223+83.17	13.000	614.71	614.73
J	223+93.17	13.000	614.35	614.36
⊕ Pier 2	223+99.62	13.000	614.12	614.12
K	224+09.62	13.000	613.76	613.76
L	224+19.62	13.000	613.40	613.41
M	224+29.62	13.000	613.04	613.05
N	224+39.62	13.000	612.68	612.69
⊕ Brg. E. Abut.	224+52.36	13.000	612.22	612.22
Bk. E. Abut.	224+54.30	13.000	612.15	612.15

BEAM 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	222+77.91	17.896	618.44	618.44
⊕ Brg. W. Abut.	222+79.85	17.896	618.37	618.39
A	222+89.85	17.896	618.01	618.03
B	222+99.85	17.896	617.65	617.66
C	223+09.85	17.896	617.29	617.30
D	223+19.85	17.896	616.92	616.92
⊕ Pier 1	223+32.59	17.896	616.46	616.46
E	223+42.59	17.896	616.10	616.10
F	223+52.59	17.896	615.74	615.74
G	223+62.59	17.896	615.38	615.38
H	223+72.59	17.896	615.02	615.02
I	223+82.59	17.896	614.66	614.66
J	223+92.59	17.896	614.30	614.30
⊕ Pier 2	223+99.05	17.896	614.07	614.07
K	224+09.05	17.896	613.71	613.71
L	224+19.05	17.896	613.35	613.35
M	224+29.05	17.896	612.99	612.99
N	224+39.05	17.896	612.62	612.62
⊕ Brg. E. Abut.	224+51.79	17.896	612.17	612.17
Bk. E. Abut.	224+53.73	17.896	612.10	612.10

REVISIONS	
NAME	DATE



PLAN (W. APPR. PAV'T.)

PLAN (E. APPR. PAV'T.)

NORTH EDGE OF APPR.

Location	Station	Offset	Theoretical Grade Elevations
End W. Appr. Slab	222+53.29	28.00	619.17
A	222+63.23	27.50	618.82
B	222+73.17	27.00	618.47
Start W. Appr. Slab	222+83.12	26.50	618.12
Start E. Appr. Slab	224+58.94	26.50	611.78
D	224+68.99	27.00	611.41
C	224+79.05	27.50	611.04
End E. Appr. Slab	224+89.11	28.00	610.67

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End W. Appr. Slab	222+52.18	18.50	619.36
A	222+62.18	18.50	619.00
B	222+72.18	18.50	618.64
Start W. Appr. Slab	222+82.18	18.50	618.27
Start E. Appr. Slab	224+58.00	18.50	611.93
D	224+68.00	18.50	611.57
C	224+78.00	18.50	611.21
End E. Appr. Slab	224+88.00	18.50	610.85

STAGE CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations
End W. Appr. Slab	222+50.24	0.50	619.70
A	222+60.19	0.50	619.34
B	222+70.13	0.50	618.98
Start W. Appr. Slab	222+80.07	0.50	618.62
Start E. Appr. Slab	224+55.89	0.50	612.28
D	224+65.89	0.50	611.92
C	224+75.89	0.50	611.56
End E. Appr. Slab	224+85.89	0.50	611.20

EXIST. ROADWAY & P.G.

Location	Station	Offset	Theoretical Grade Elevations
End W. Appr. Slab	222+50.01	0.00	619.71
A	222+60.01	0.00	619.35
B	222+70.01	0.00	618.99
Start W. Appr. Slab	222+80.01	0.00	618.63
Start E. Appr. Slab	224+55.83	0.00	612.29
D	224+65.83	0.00	611.93
C	224+75.83	0.00	611.57
End E. Appr. Slab	224+85.83	0.00	611.21

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End W. Appr. Slab	222+53.06	-13.00	619.41
A	222+61.53	-13.00	619.10
B	222+70.01	-13.00	618.80
Start W. Appr. Slab	222+78.49	-13.00	618.49
Start E. Appr. Slab	224+54.31	-13.00	612.15
D	224+64.31	-13.00	611.79
C	224+74.31	-13.00	611.43
End E. Appr. Slab	224+84.31	-13.00	611.07

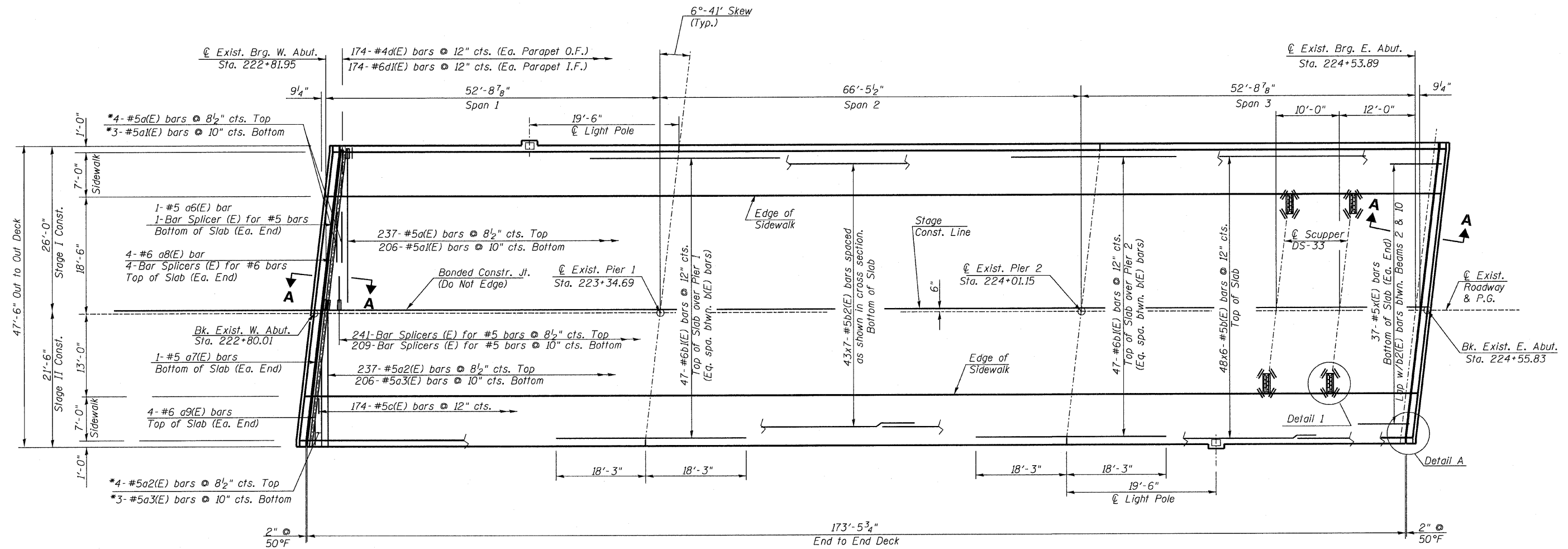
SOUTH EDGE OF APPR.

Location	Station	Offset	Theoretical Grade Elevations
End W. Appr. Slab	222+47.37	-22.50	619.47
A	222+57.43	-22.00	619.11
B	222+67.49	-21.50	618.76
Start W. Appr. Slab	222+77.55	-21.00	618.40
Start E. Appr. Slab	224+53.37	-21.00	612.06
D	224+63.31	-21.50	611.70
C	224+73.25	-22.00	611.33
End E. Appr. Slab	224+83.19	-22.50	610.97

REVISIONS	
NAME	DATE

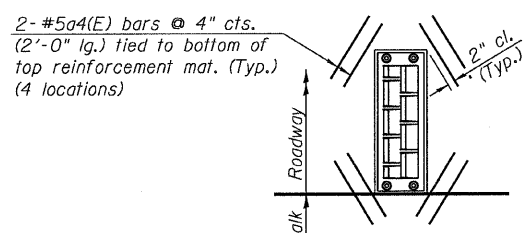
ILLINOIS DEPARTMENT OF TRANSPORTATION
 TOP OF APPROACH
 SLAB ELEVATIONS
 31 ST. STREET OVER KILBOURN AVE.
 F.A.U. ROUTE 1463 SECTION 159-1010.1B
 COOK COUNTY
 STATION 223+67.45
 STR. NO. 016-0872

SCALE: VERT. DRAWN BY JHR
 HORIZ. CHECKED BY CLS
 DATE JANUARY 2008

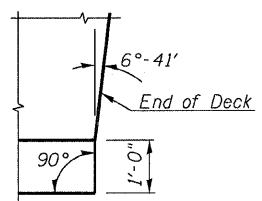


DECK PLAN

* Order a(E), a1(E), a2(E), & a3(E) bars full length. Cut to fit skew & use remainder of bars in other end.



DETAIL 1
(Scupper DS-33 Reinforcement)



DETAIL A

TYP. LAP SPLICE

Bar	Lap
#5	2'-2"
#6	2'-7"

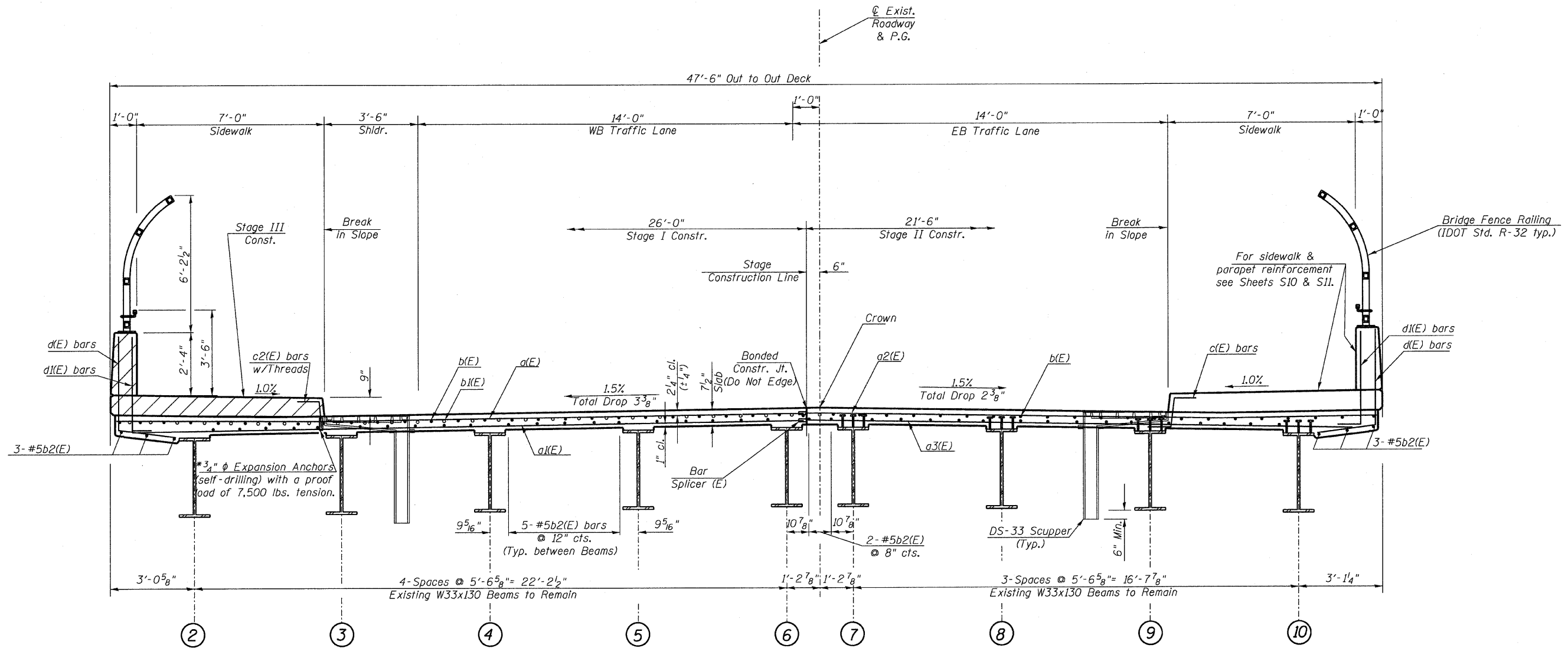
- Notes:
1. Work this sheet with Sheets S8 thru S11.
 2. See Sheet S12 for expansion joint details.
 3. See Sheet S13 for drainage scupper details.
 4. See Sheet S14 for bridge fence railing details.
 5. Bar indicated thus 20x3-#5, etc. indicates 20 lines of bars with 3 lengths per line.
 6. Cut longitudinal reinforcement to clear scuppers.
 7. See Sheet S11 for Section A-A.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE PLAN
31 ST. STREET OVER KILBOURN AVE.
F.A.U. ROUTE 1463 SECTION 159-1010.1B
COOK COUNTY
STATION 223+67.45
STR. NO. 016-0872

SCALE: VERT. _____
HORIZ. _____
DATE JANUARY 2008

DRAWN BY JHR
CHECKED BY CLS



* Cost included with "Reinforcement Bars, Epoxy Coated."

NEAR PIER

PROPOSED CROSS SECTION

(Looking East)

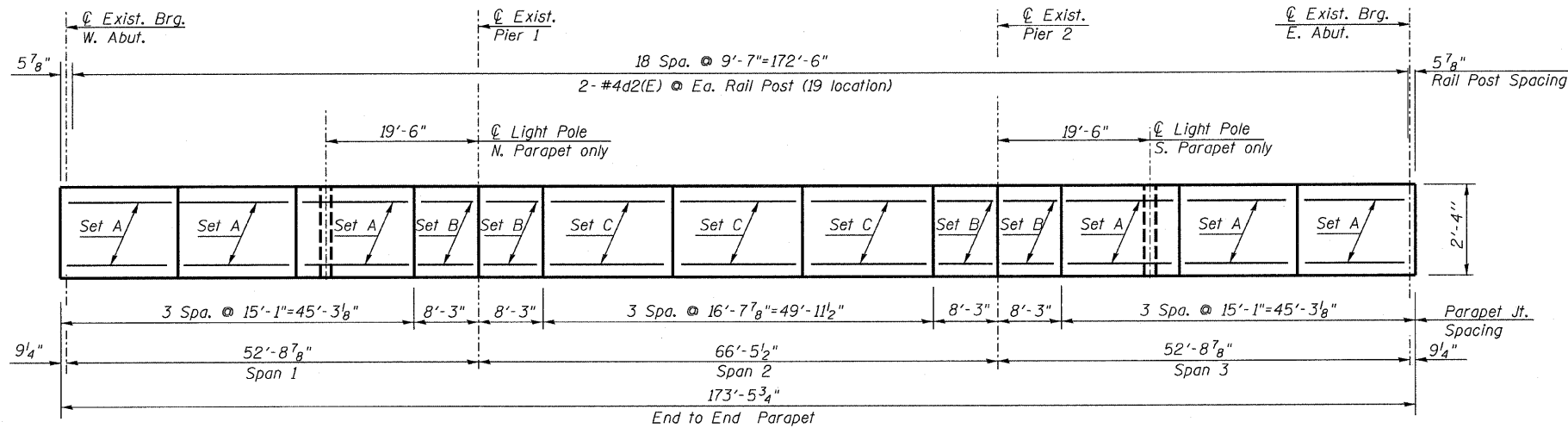
NEAR MIDSPAN

Notes:

1. Work this sheet with Sheets S8 thru S11.
2. See Sheet S12 for expansion joint details.
3. See Sheet S13 for drainage scupper details.
4. See Sheet S14 for bridge fence railing details.
5. Bar indicated thus 20x3-#5, etc. indicates 20 lines of bars with 3 lengths per line.
6. Cut longitudinal reinforcement to clear scuppers.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE CROSS SECTION
31 ST. STREET OVER KILBOURN AVE.
F.A.U. ROUTE 1463 SECTION 159-1010.1B
COOK COUNTY
STATION 223+67.45
STR. NO. 016-0872
SCALE: VERT. DRAWN BY JHR
 HORIZ. DATE JANUARY 2008 CHECKED BY CLS

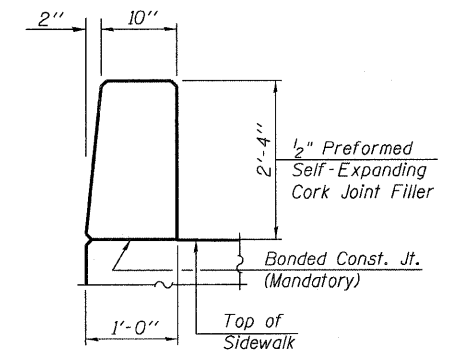


Set A (6 locations)
3-#4e(E) bars @ E.F.

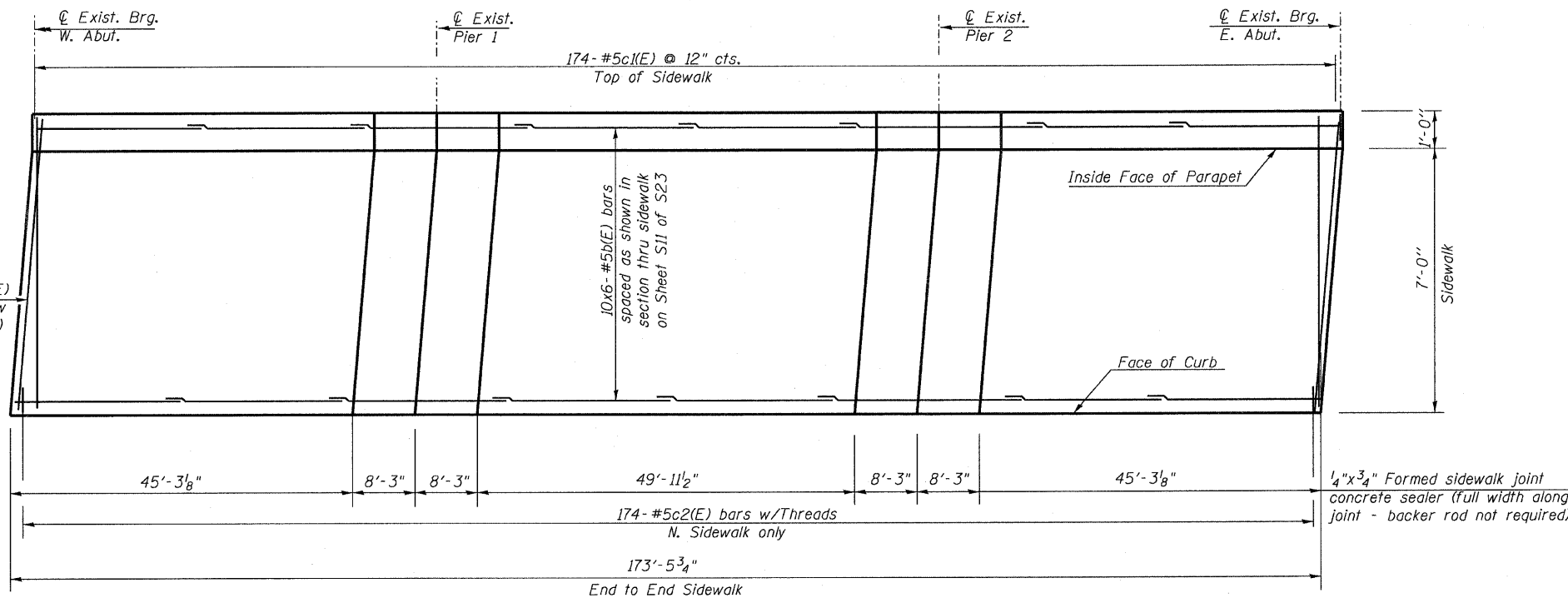
Set B (4 locations)
3-#4e1(E) bars @ E.F.

Set C (3 locations)
3-#4e2(E) bars @ E.F.

INSIDE ELEVATION OF NORTH PARAPET
(South Parapet Opposite Hand)



PARAPET JOINT DETAILS



NORTH SIDEWALK PLAN
(South Sidewalk Opposite Hand)

TYP. LAP SPLICE

Bar	Lap
#5	2'-2"

- Notes:
1. Work this sheet with Sheets S8 thru S11.
 2. See Sheet S12 for expansion joint details.
 3. See Sheet S13 for drainage scupper details.
 4. See Sheet S14 for bridge fence railing details.
 5. Bar indicated thus 20x3-#5, etc. indicates 20 lines of bars with 3 lengths per line.
 6. Cut longitudinal reinforcement to clear scuppers.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PARAPET & SIDEWALKS DETAILS
31 ST. STREET OVER KILBOURN AVE.
F.A.U. ROUTE 1463 SECTION 159-1010.1B
COOK COUNTY
STATION 223+67.45
STR. NO. 016-0872

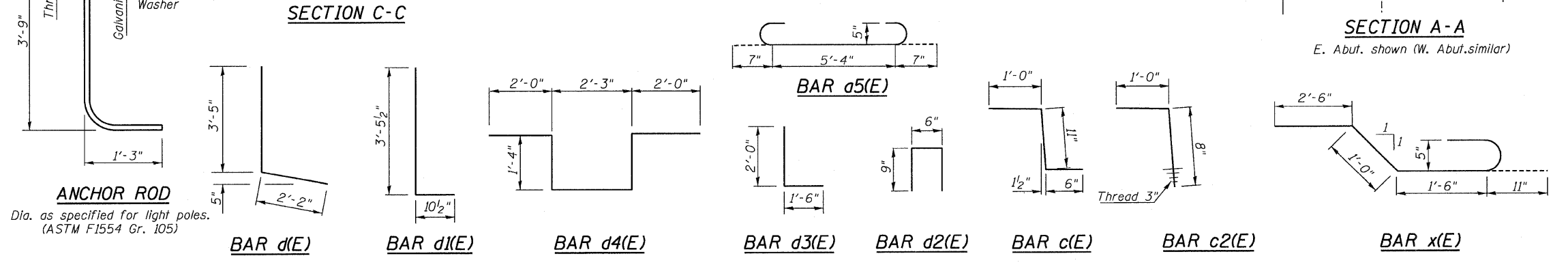
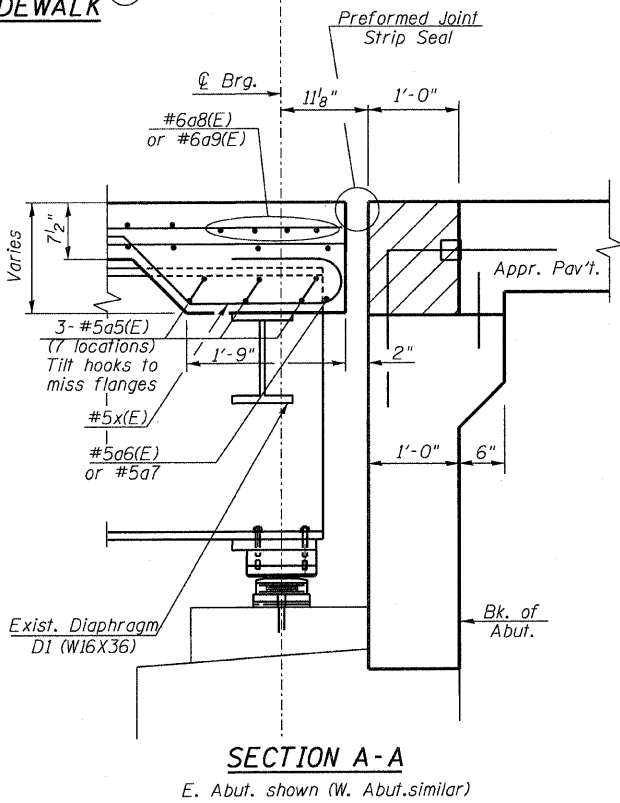
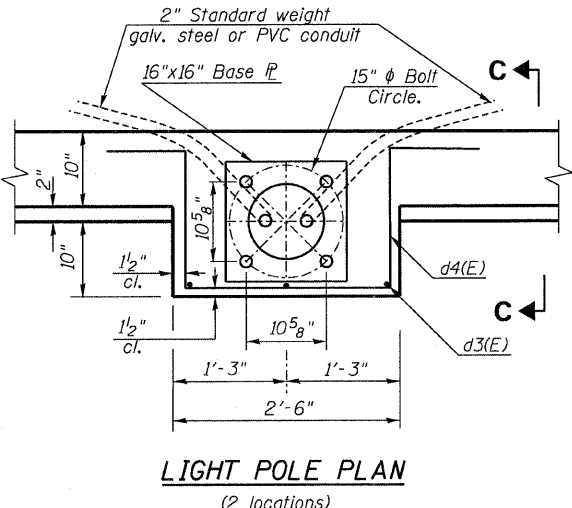
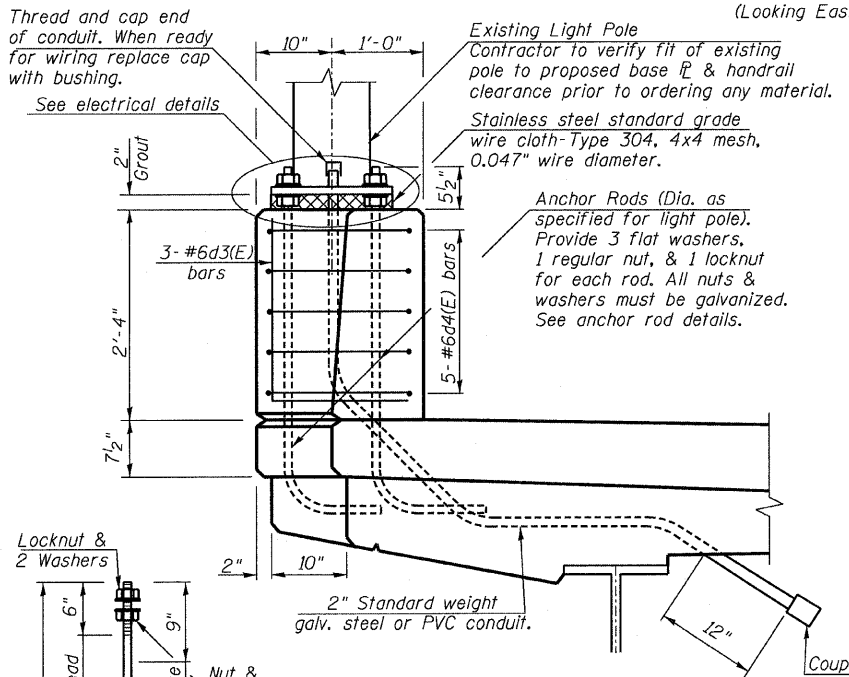
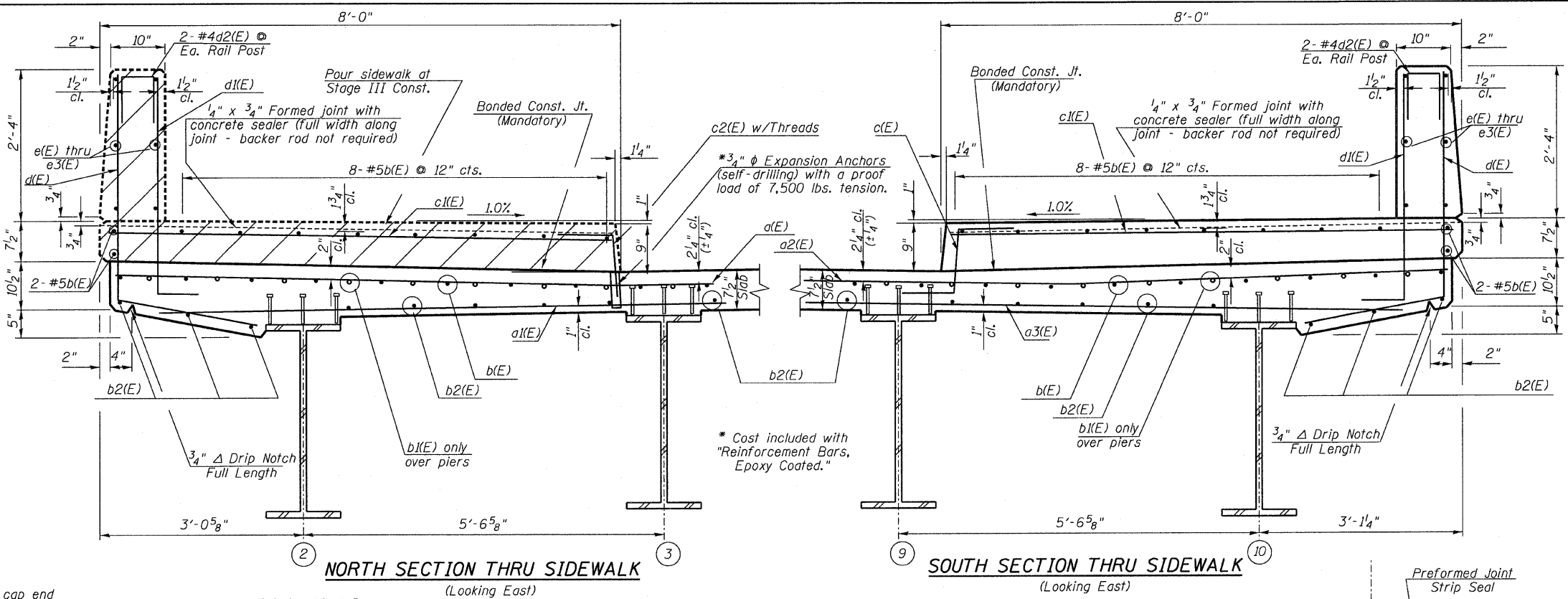
SCALE: VERT. DRAWN BY JHR
HORIZ. CHECKED BY CLS
DATE JANUARY 2008

**SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
d(E)	241	#5	25'-6"	—
a1(E)	209	#5	25'-2"	—
a2(E)	241	#5	21'-0"	—
a3(E)	209	#5	20'-8"	—
a4(E)	32	#5	2'-0"	—
a5(E)	42	#5	6'-6"	—
a6(E)	2	#5	22'-9"	—
a7(E)	2	#5	18'-3"	—
a8(E)	8	#6	25'-8"	—
a9(E)	8	#6	21'-2"	—
b(E)	408	#5	30'-9"	—
b1(E)	94	#6	36'-6"	—
b2(E)	301	#5	26'-8"	—
c(E)	174	#5	2'-5"	—
c1(E)	348	#5	7'-8"	—
c2(E)	174	#5	1'-8"	—
d(E)	348	#4	5'-7"	L
d1(E)	348	#6	4'-4"	L
d2(E)	76	#4	2'-0"	L
d3(E)	6	#6	3'-6"	L
d4(E)	10	#6	8'-11"	L
e(E)	72	#4	14'-9"	—
e1(E)	48	#4	7'-8"	—
e2(E)	36	#4	16'-4"	—
x(E)	74	#5	5'-11"	—
Concrete Superstructure		Cu. Yd.	326.7	
Reinforcement Bars, Epoxy Coated		Pound	58,460	
Bridge Deck Grooving		Sq. Yd.	568	
Protective Coat		Sq. Yd.	1,028	

** Bar has a threaded end.

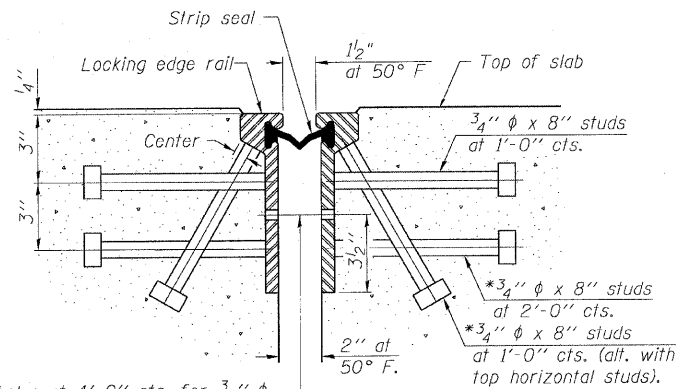
- Notes:
1. Work this sheet with Sheets S8 thru S11.
 2. See Sheet S12 for expansion joint details.
 3. See Sheet S13 for drainage scupper details.
 4. See Sheet S14 for bridge fence railing details.
 5. Bar indicated thus 20x3-#5, etc. indicates 20 lines of bars with 3 lengths per line.
 6. Cut longitudinal reinforcement to clear scuppers.



REVISIONS	
NAME	DATE

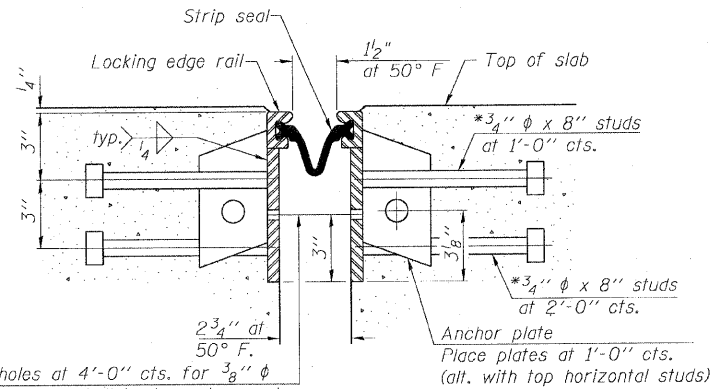
ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE DETAILS
 31 ST. STREET OVER KILBOURN AVE.
 F.A.U. ROUTE 1463 SECTION 159-1010.1B
 COOK COUNTY
 STATION 223+67.45
 STR. NO. 016-0872
 SCALE: VERT. DRAWN BY JHR
 HORIZ. DATE JANUARY 2008 CHECKED BY CLS

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



7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

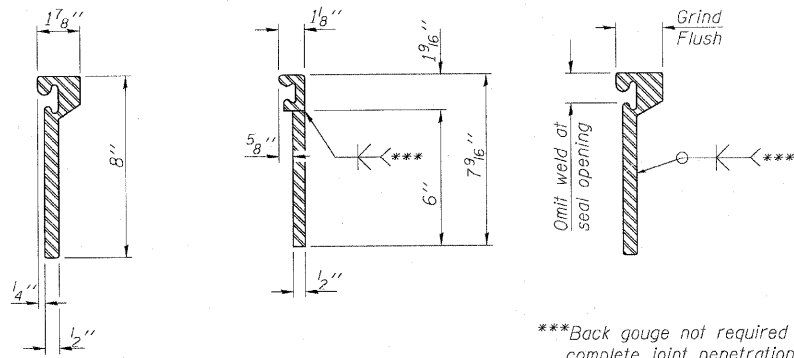
SECTION THRU ROLLED RAIL JOINT



7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU WELDED RAIL JOINT

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.
Cost of all sliding plates, stud shear connectors, & connections shall be included with "Preformed Joint Strip Seal".
Exposed surfaces of top sliding plates shall be textured to meet all ADA requirements.



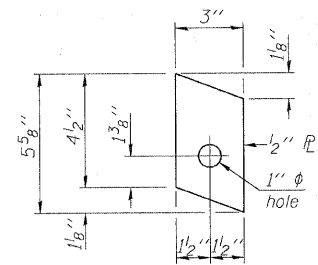
***Back gouge not required if complete joint penetration is verified by mock-up.

ROLLED (EXTRUDED) RAIL WELDED RAIL

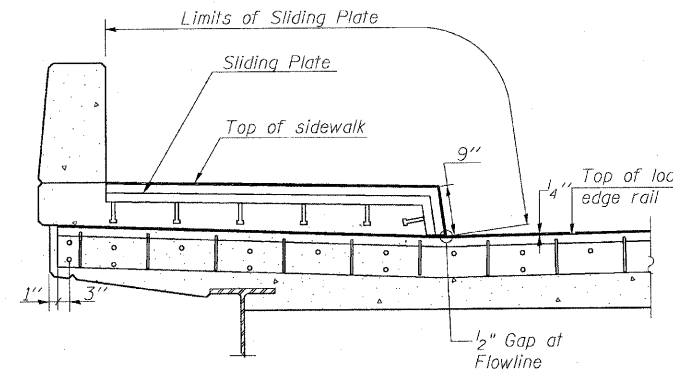
LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residuc.

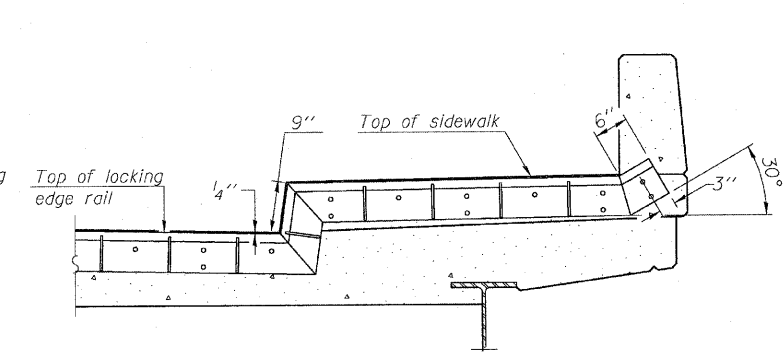
LOCKING EDGE RAILS



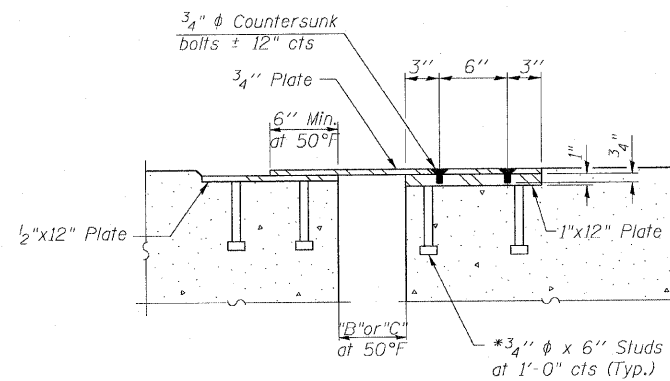
ANCHOR PLATE (for welded rail)



TYPICAL END TREATMENT AT NORTH SIDEWALK (Looking East)



TYPICAL END TREATMENT AT SOUTH SIDEWALK (Looking East)



SECTION THRU SLIDING PLATE

BILL OF MATERIAL

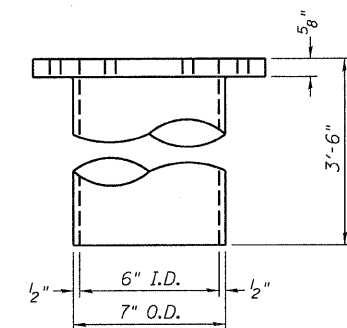
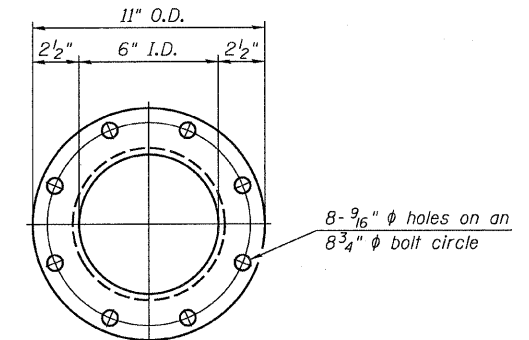
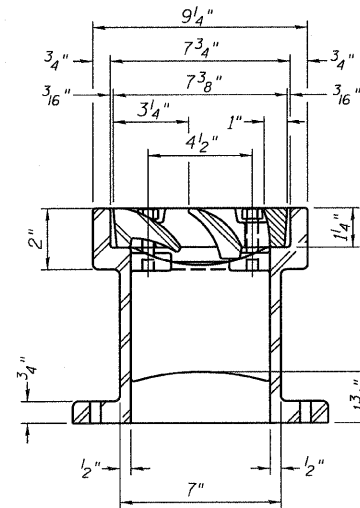
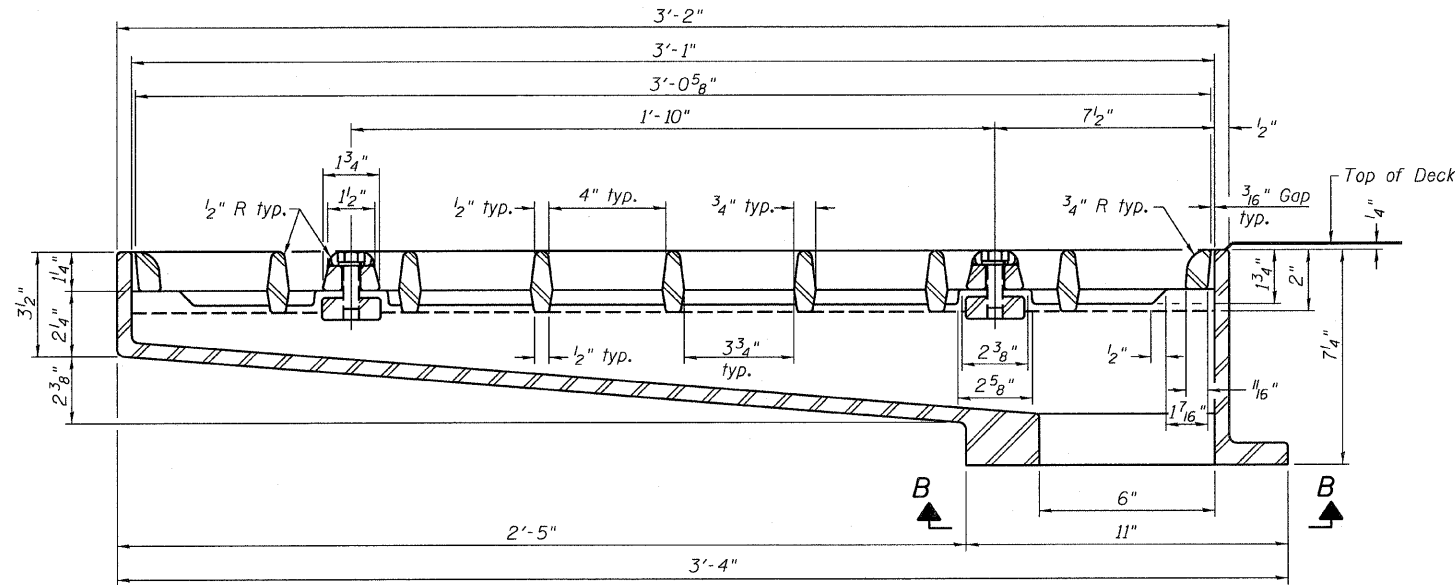
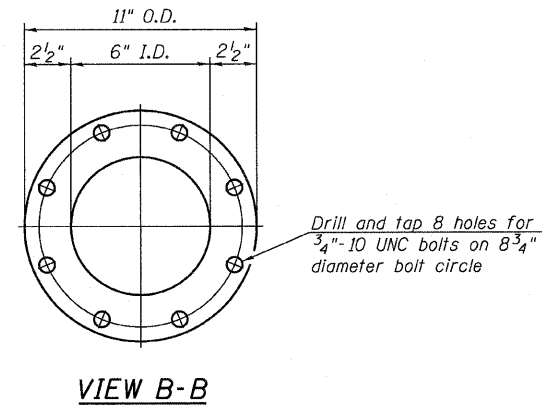
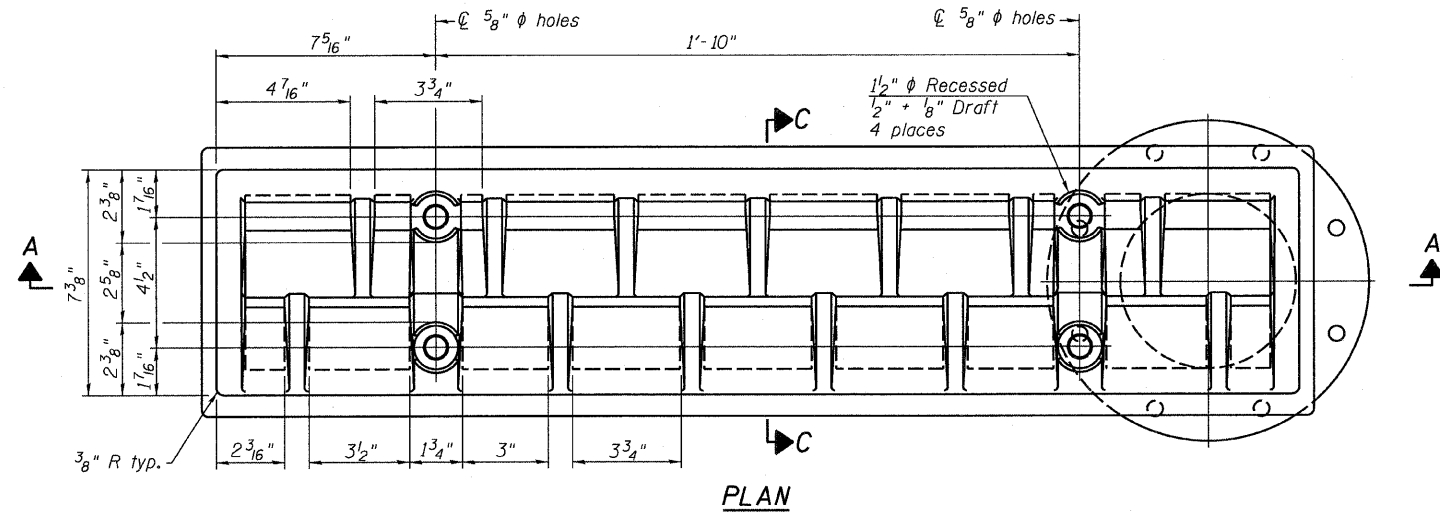
Item	Unit	Total
Preformed Joint Strip Seal	Foot	97

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PREFORMED JOINT STRIP SEAL
31 ST. STREET OVER KILBOURN AVE.
F.A.U. ROUTE 1463 SECTION 159-1010.1B
COOK COUNTY
STATION 223+67.45
STR. NO. 016-0872
SCALE: VERT. HORIZ.
DATE JUNE 2008
DRAWN BY JHR
CHECKED BY CLS

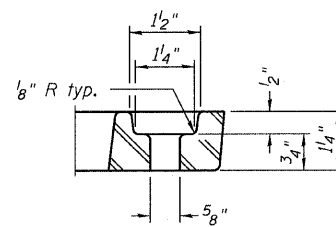
Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.
 Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.
 Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.
 As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.
 Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.
 The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.
 Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-33.
 Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

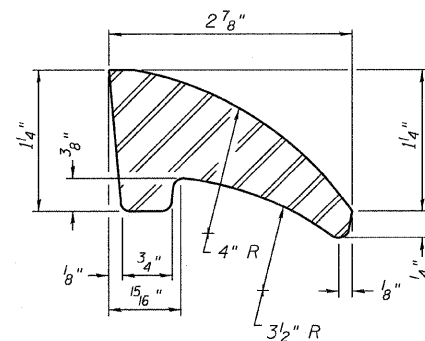


DOWNSPOUT

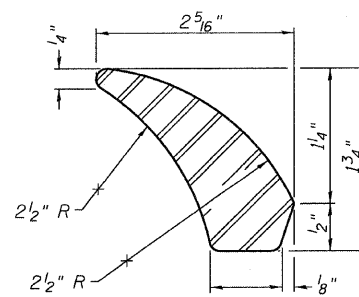
SECTION A-A
See Sheet S9 of S23 for scupper location relative to parapet.



BOLT HOLE DETAIL



FIRST VANE DETAIL



SECOND VANE DETAIL

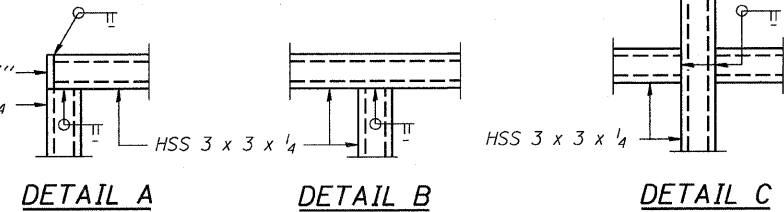
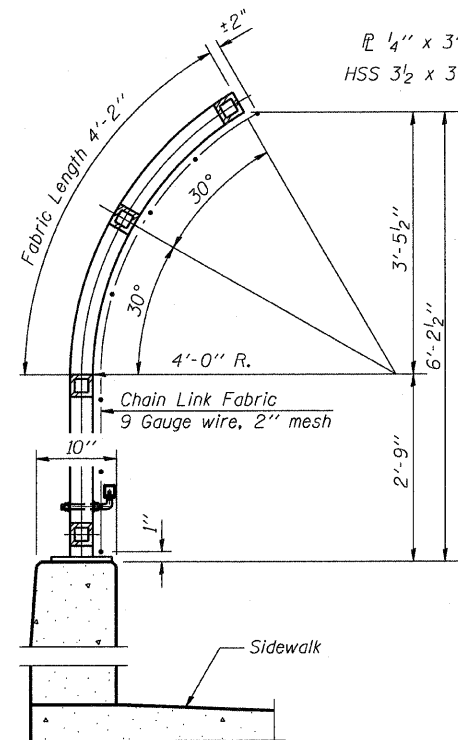
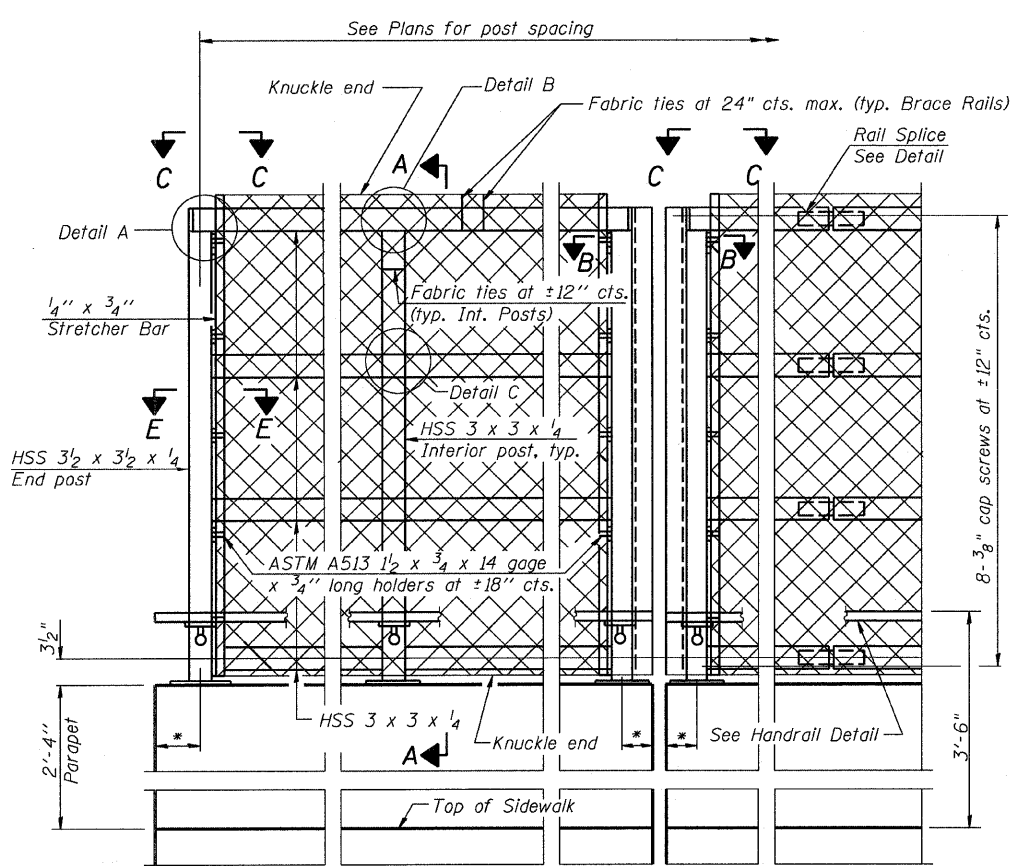
BILL OF MATERIAL

Item	Unit	Total
Drainage Scupper, DS-33	Each	4

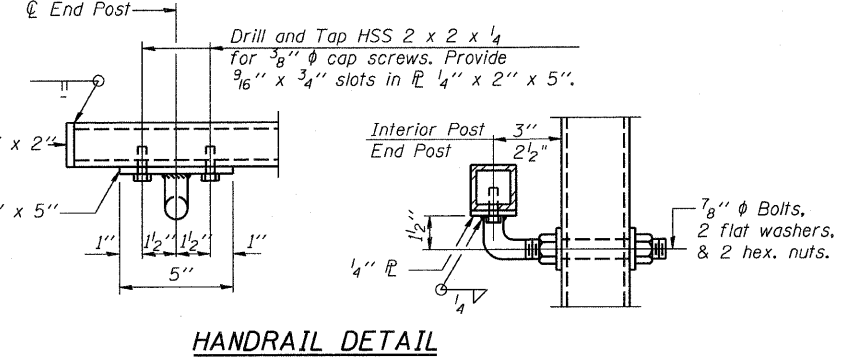
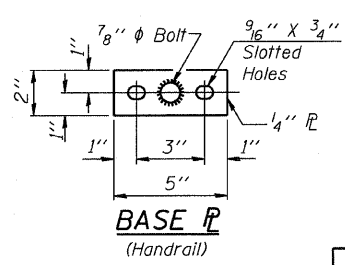
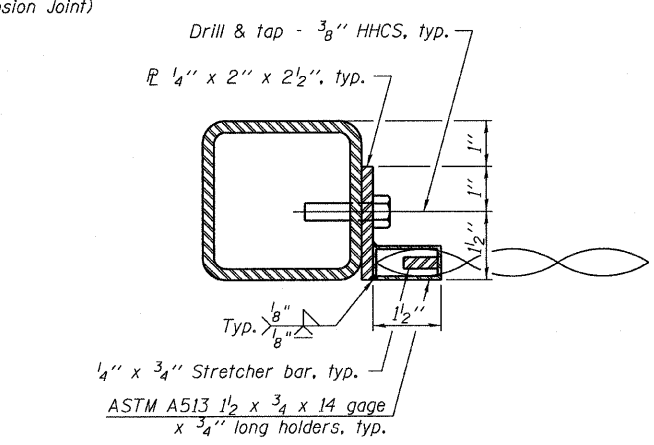
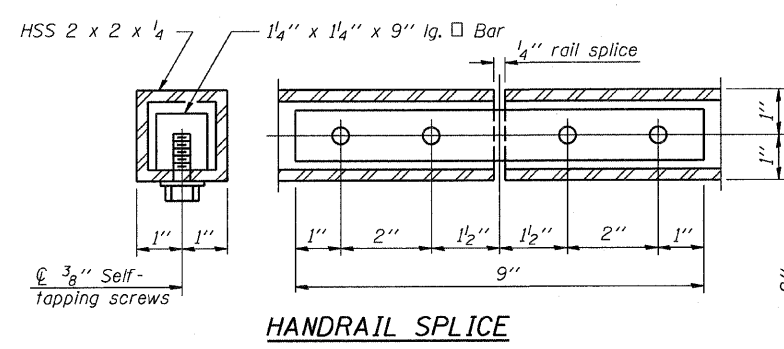
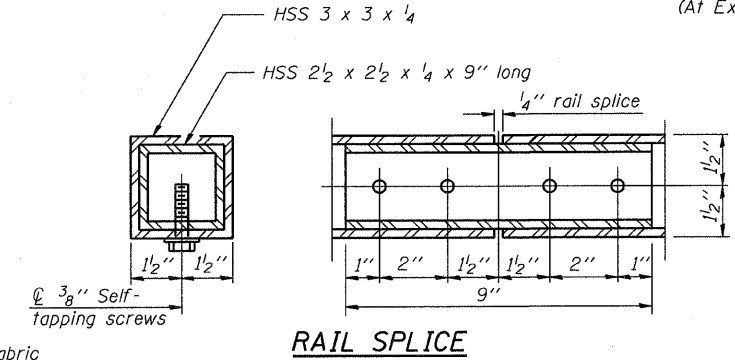
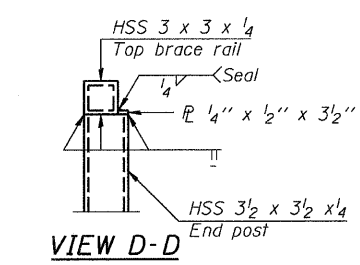
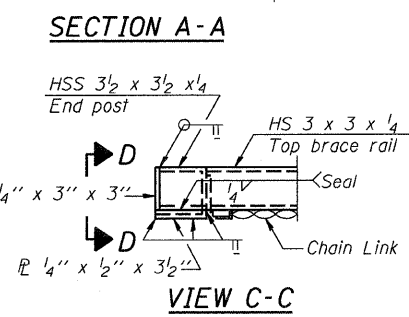
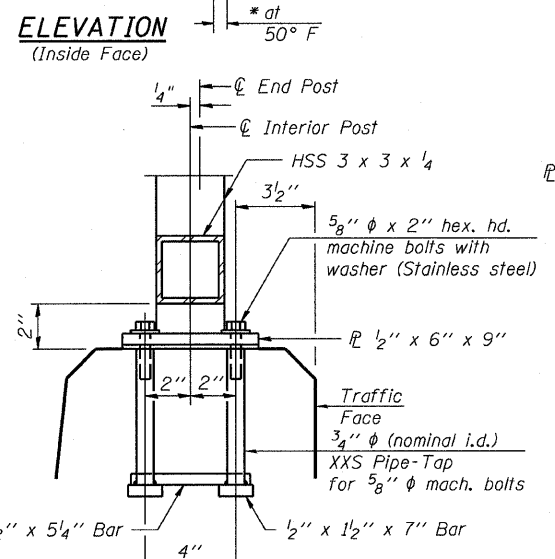
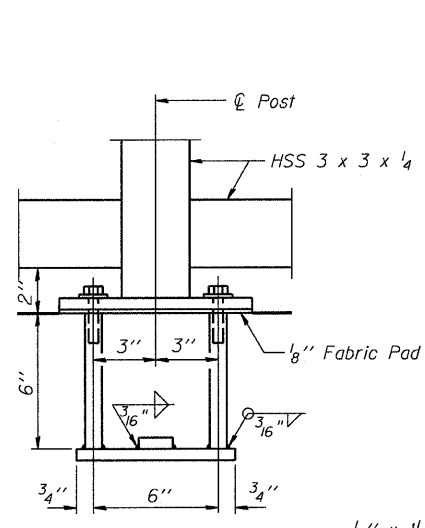
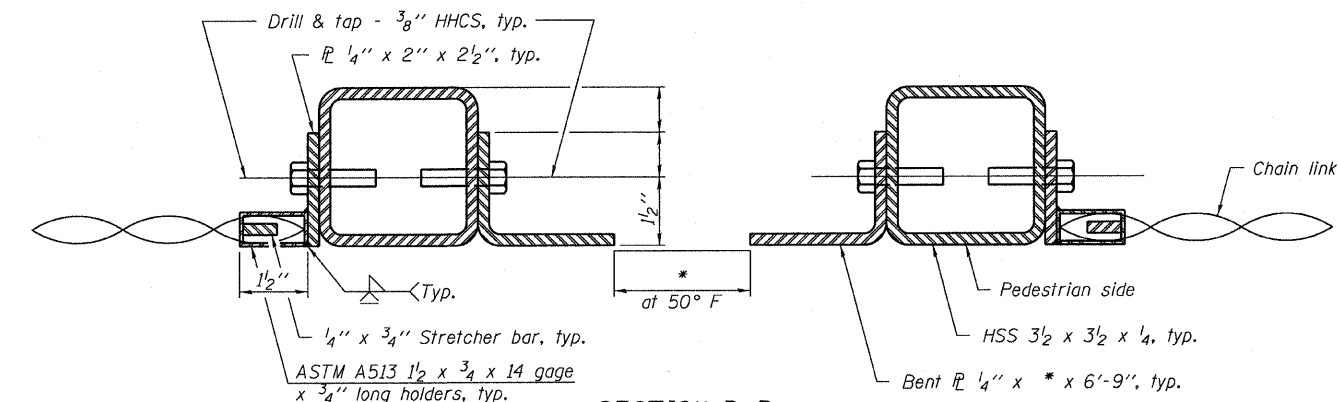
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DRAINAGE SCUPPER DS-33
 31 ST. STREET OVER KILBOURN AVE.
 F.A.U. ROUTE 1463 SECTION 159-1010.1B
 COOK COUNTY
 STATION 223+67.45
 STR. NO. 016-0872

SCALE: VERT. DATE JANUARY 2008
 HORIZ. DRAWN BY JHR
 CHECKED BY CLS



All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

*Variable - See Plans
 (10'-0" Maximum Post Spacing)

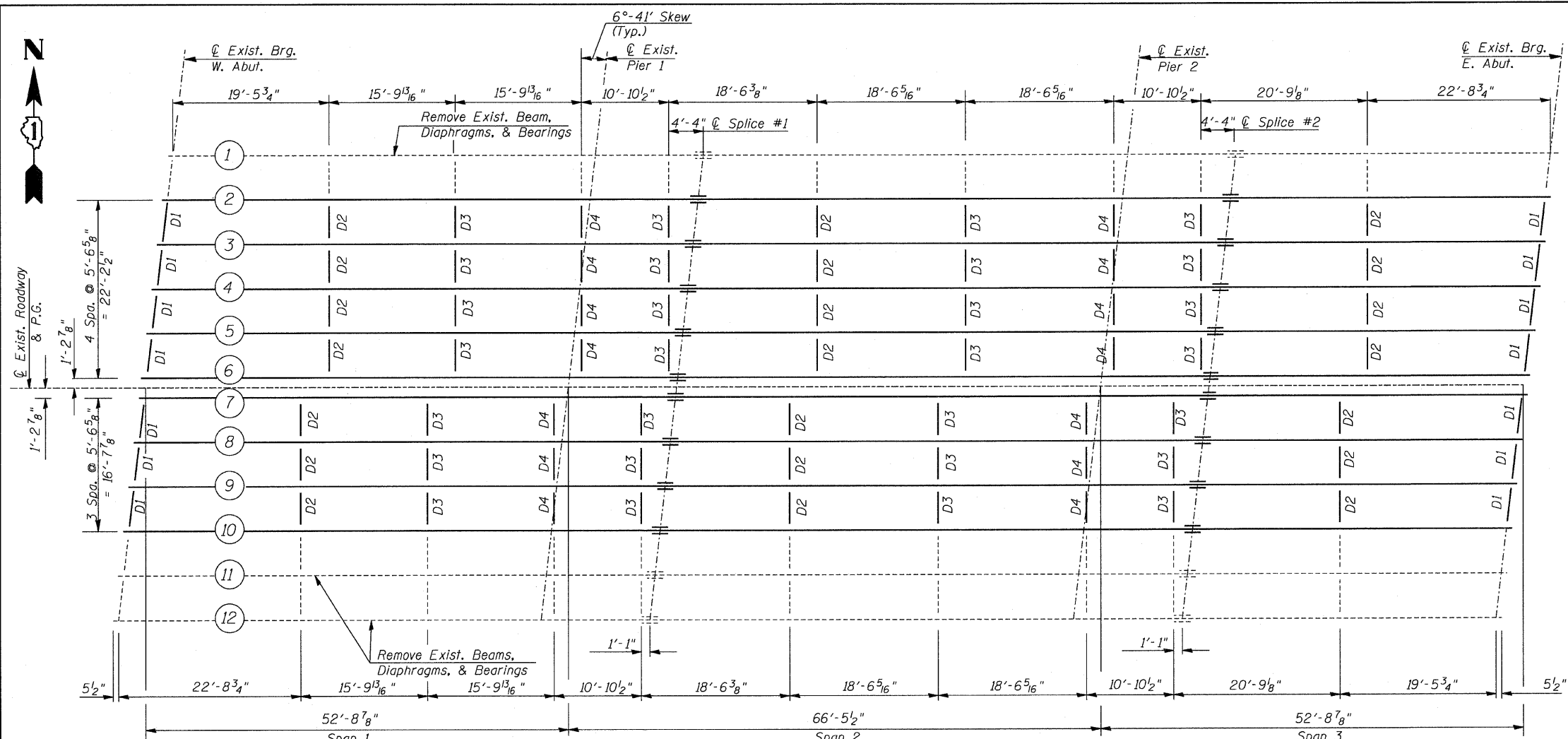
BILL OF MATERIAL

Item	Unit	Total
Bridge Fence Railing	Foot	345

ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE FENCE RAILING
 31 ST. STREET OVER KILBOURN AVE.
 F.A.U. ROUTE 1463 SECTION 159-1010.1B
 COOK COUNTY
 STATION 223+67.45
 STR. NO. 016-0872

REVISIONS	
NAME	DATE

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 DRAWN BY JHR
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INTERIOR BEAM MOMENT TABLE

Property	Unit	0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.6 Sp. 3
Is	(in ⁴)	6,710	6,710	6,710	6,710	6,710
Ic (n)	(in ⁴)	16,285	---	16,285	---	16,285
Ic (3n)	(in ⁴)	11,900	---	11,900	---	11,900
Ss	(in ³)	405.6	405.6	405.6	405.6	405.6
Sc (n)	(in ³)	571.3	---	571.3	---	571.3
Sc (3n)	(in ³)	515.3	---	515.3	---	515.3
Z	(in ³)	---	467.0	---	467.0	---
DL	(k/ft)	0.683	1.124	0.683	1.124	0.683
M DL	(k)	129.3	384.5	130.5	384.5	129.3
s DL	(k/ft)	0.441	---	0.441	---	0.441
Ms DL	(k)	92.0	---	105.6	---	92.0
M LL	(k)	291.4	174.3	328.1	174.3	291.4
M (Imp)	(k)	82.2	47.2	85.6	47.2	82.2
5/3*[M LL + M (Imp)]	(k)	622.7	369.2	689.5	369.2	622.7
Ma	(k)	1,097.2	979.8	1,203.3	979.8	1,097.2
Mu	(k)	2,113.2	1,284.3	2,113.2	1,284.3	2,113.2
fs DL non-comp	(ksi)	3.83	11.38	3.86	11.38	3.83
fs DL (comp)	(ksi)	2.14	---	2.46	---	2.14
fs 5/3*(LL + Imp)	(ksi)	13.08	10.92	14.48	10.92	13.08
fs (Overload)	(ksi)	19.05	22.30	20.80	22.30	19.05
fs (Total)	(ksi)	---	---	---	---	---
VR	(k)	45.9	---	34.9	---	45.9

INTERIOR BEAM REACTION TABLE

Reaction	W. Abut.	Pier 1	Pier 2	E. Abut.
R DL (K)	22.4	74.3	74.3	22.4
R LL (K)	33.3	37.7	37.7	33.3
Imp. (K)	9.4	10.2	10.2	9.4
R (Total) (K)	65.1	122.2	122.2	65.1

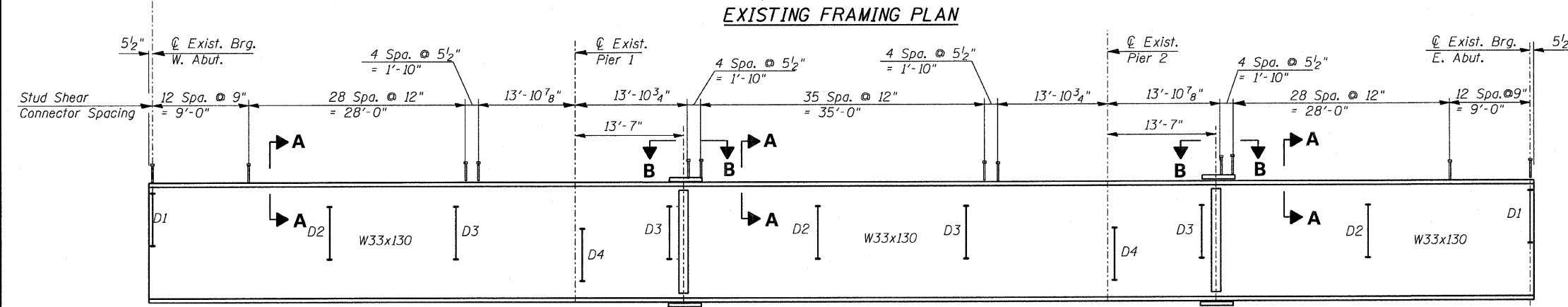
MINIMUM JACK CAPACITY TABLE

Reaction	W. Abut.	Pier 1	Pier 2	E. Abut.
R DL (Steel) (K)	2.9	10.0	---	2.9
Min. Jack (K)	4.4	15.0	---	4.4

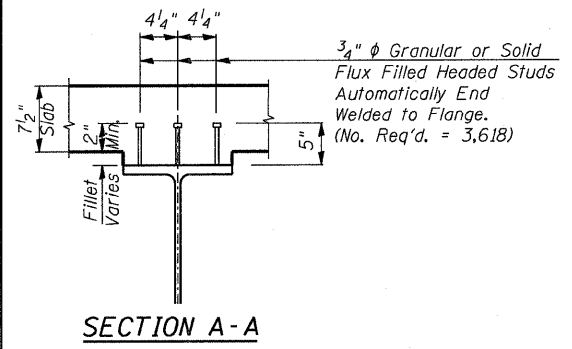
BILL OF MATERIAL

Item	Unit	Total
Stud Shear Connectors	Each	3,618
Structural Steel Removal	Pound	81,250
Jack and Remove Existing Bearings	Each	27
Cleaning and Painting Steel Bridge, No. 2	L. Sum	1
Containment and Disposal of Lead Paint Cleaning Residues	L. Sum	0.5

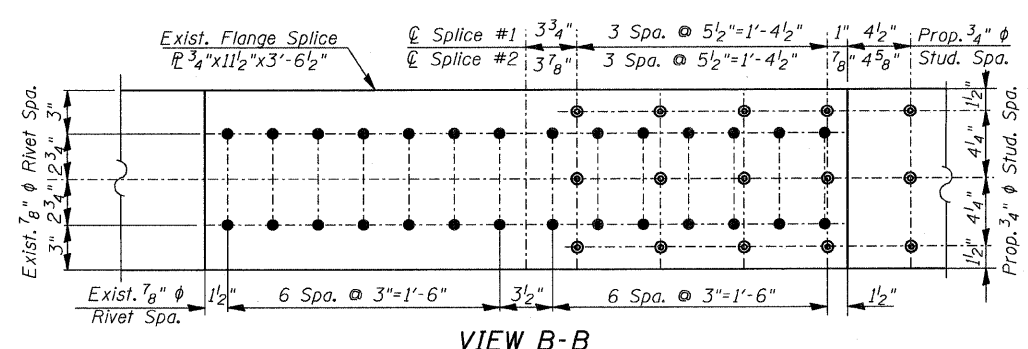
* Includes jacking & removal of existing rocker & roller bearings at the Abutments & Pier 2 (Beams 2-10 only). Fixed bearings at Pier 1 (Beams 2-10 only) are to remain in place. Removal of all remaining bearings is included with "Structural Steel Removal".



EXISTING BEAM ELEVATION



SECTION A-A



VIEW B-B

- Notes:
- All dimensions and other info for the existing steel beams and diaphragms were taken from existing bridge plans (not as-builts).
 - The Contractor shall verify all dimensions in the field.
 - The Contractor shall submit for approval by the Engineer plans for jacking existing superstructure prior to commencing any work at the bearings. This submittal shall be prepared and sealed by a licensed Structural Engineer in Illinois.
 - Jacking and removing existing bearings shall be done after the existing deck removal is completed and before the new deck is poured.
 - The new structural steel and bearings shall be in place and the jacks shall be lowered before the new concrete deck is poured.

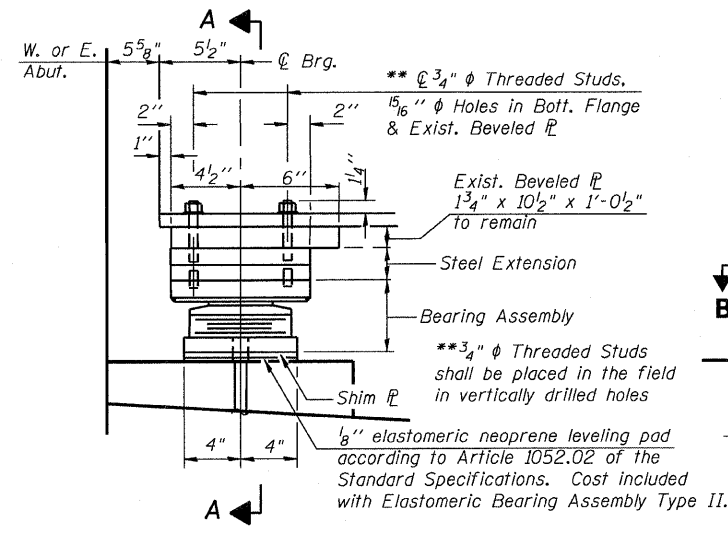
REVISIONS

NAME	DATE

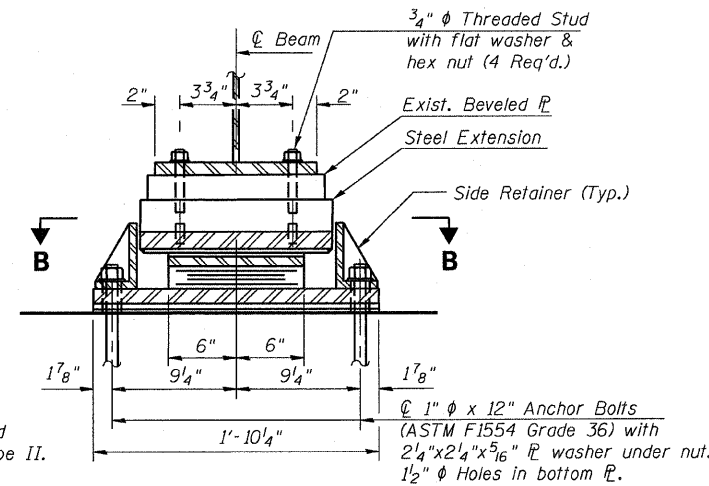
ILLINOIS DEPARTMENT OF TRANSPORTATION
FRAMING PLAN
 31 ST. STREET OVER KILBOURN AVE.
 F.A.U. ROUTE 1463 SECTION 159-1010.1B
 COOK COUNTY
 STATION 223+67.45
 STR. NO. 016-0872

SCALE: VERT. HORIZ.
 DATE APRIL 2008

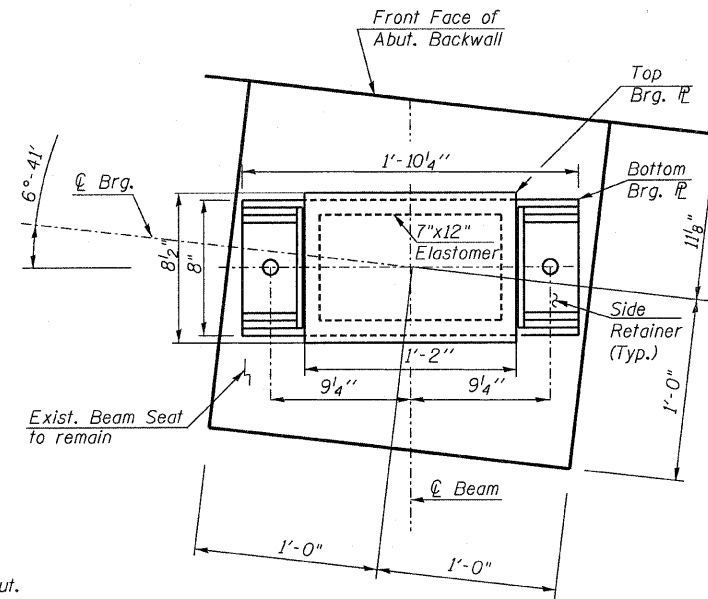
DRAWN BY JHR
 CHECKED BY CLS



ELEVATION AT ABUT.

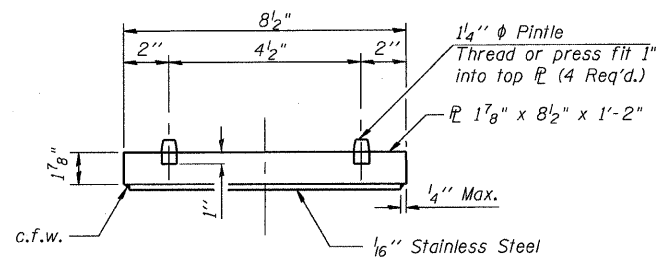


SECTION A-A

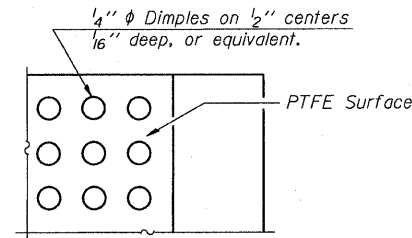


SECTION B-B

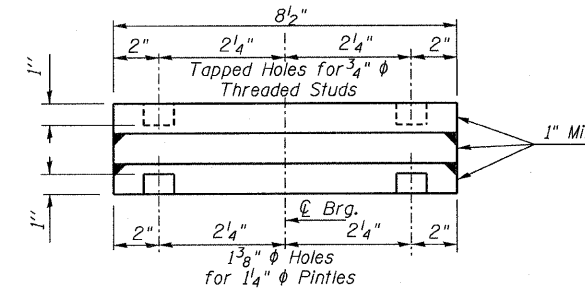
TYPE II ELASTOMERIC EXP. BRG.



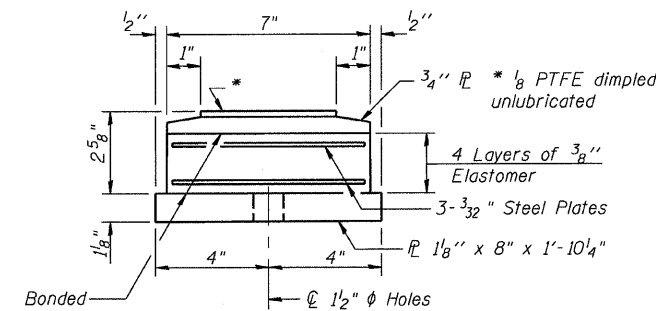
TOP BEARING ASSEMBLY



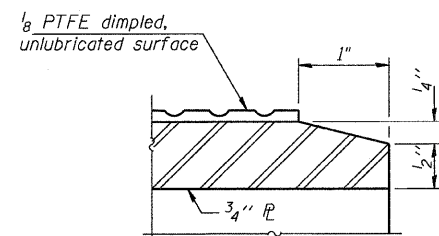
PLAN-PTFE SURFACE



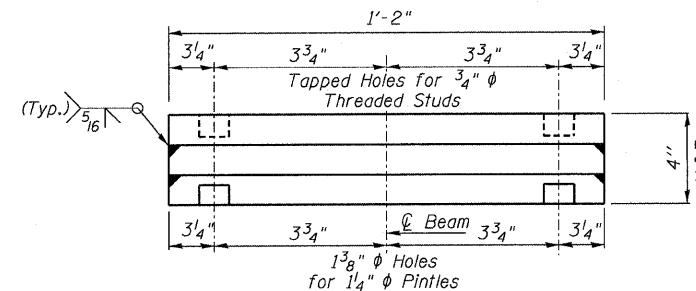
ELEVATION STEEL EXTENSION



BOTTOM BEARING ASSEMBLY

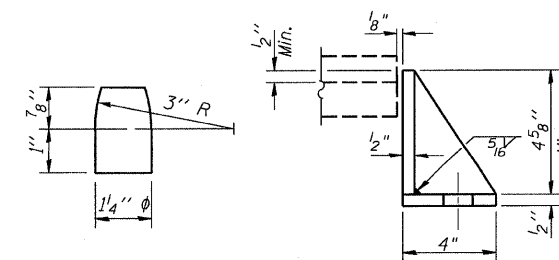


SECTION THRU PTFE

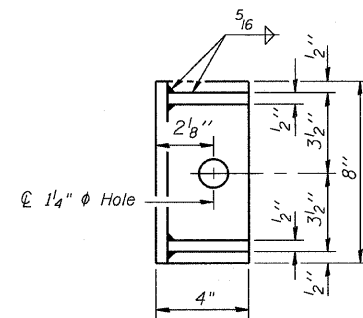


END VIEW STEEL EXTENSION

V.I.F.=Verify in Field

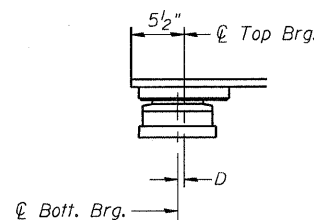


PINTLE



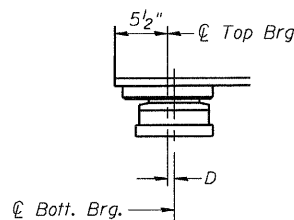
SIDE RETAINER

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



BELOW 50°F.

(Move bott. brg. away from fixed brg.)



ABOVE 50°F.

(Move bott. brg. toward fixed brg.)

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.

Notes:

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

Anchor bolts for Type II bearings shall be placed in holes drilled through 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 521.06 of the Standard Specifications.

Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

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

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 36.

Two 1/8" & two 1/4" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

All side retainers, anchor bolts, nuts, washers and pintoles shall be galvanized according to AASHTO M111 or M232 (as applicable).

H.S. bolts in bearing assembly shall be galvanized according to AASHTO M298 Class 50.

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

BILL OF MATERIAL

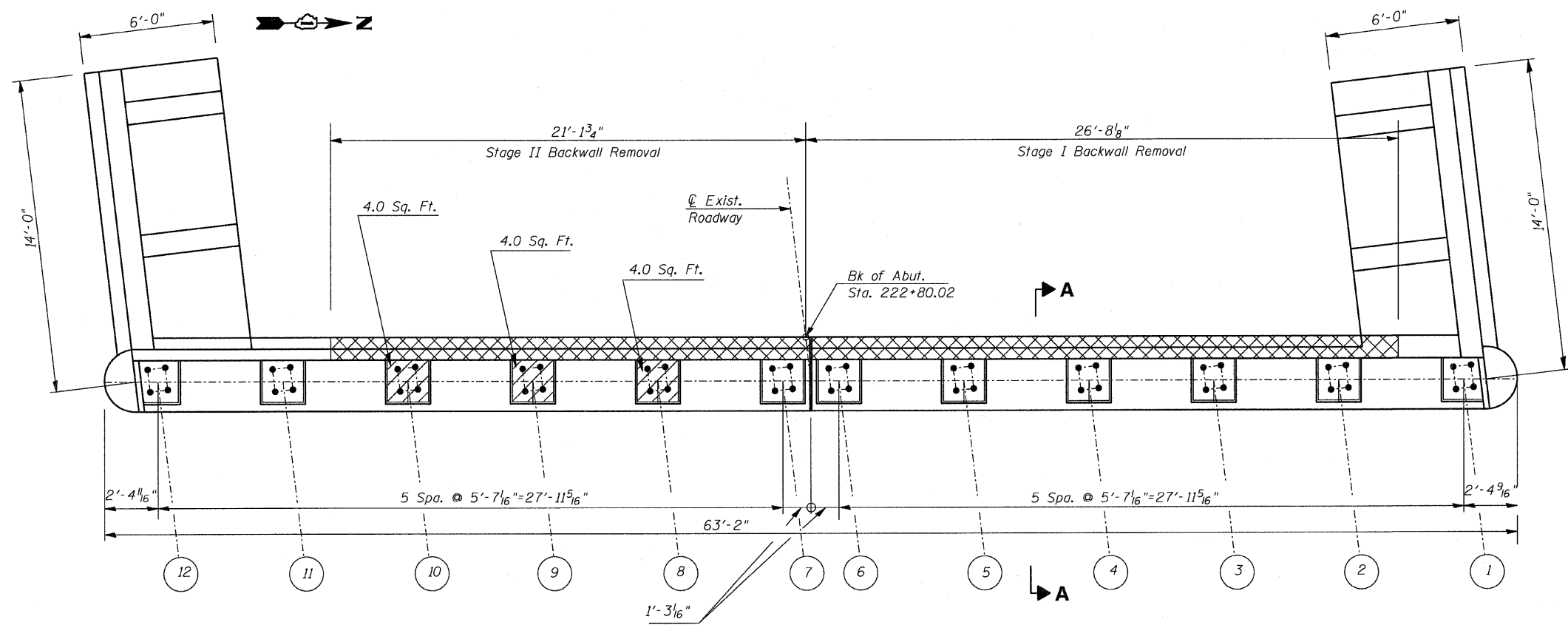
Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	18
*** Furnishing and Erecting Structural Steel	Pound	2,430
Anchor Bolts, 1"	Each	36

***Includes weight of 18 steel extensions only.

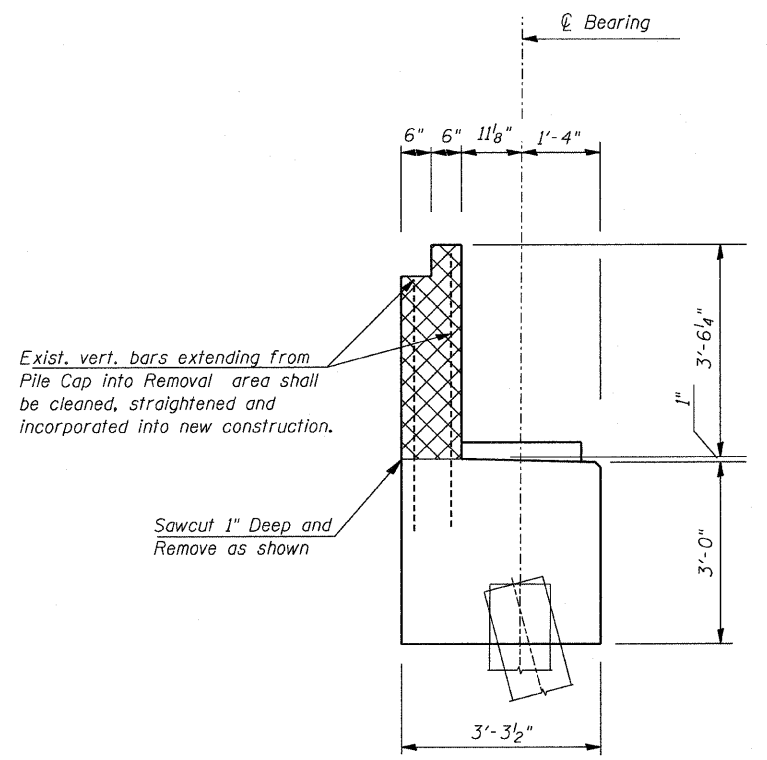
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ELASTOMERIC BEARING ASSEMBLY
 31 ST. STREET OVER KILBOURN AVE.
 F.A.U. ROUTE 1463 SECTION 159-1010.1B
 COOK COUNTY
 STATION 223+67.45
 STR. NO. 016-0872

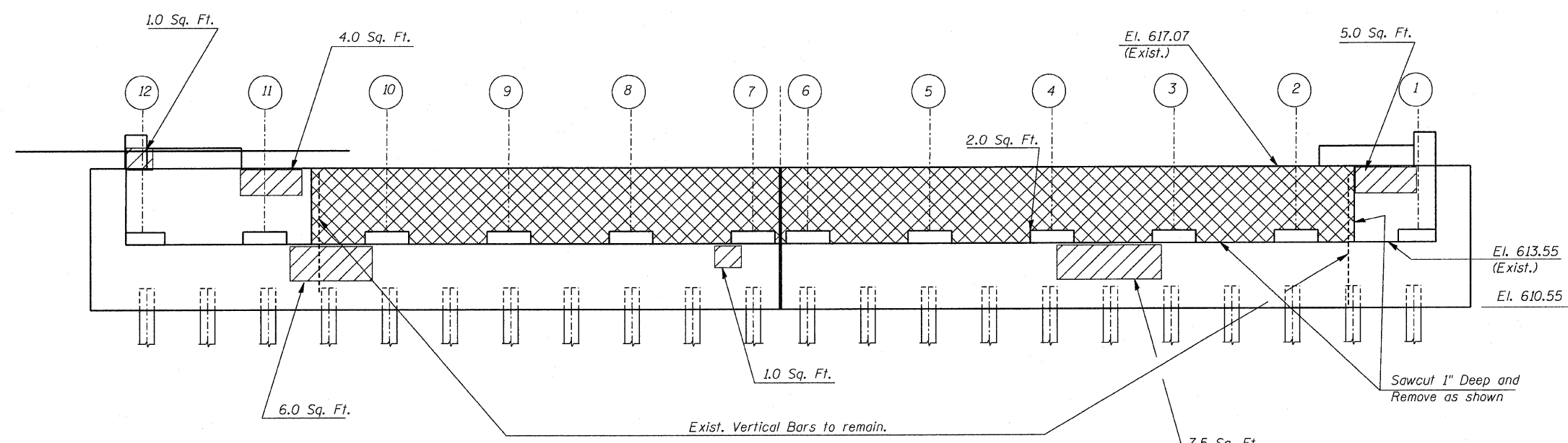
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WEST ABUTMENT PLAN
 (Showing Repair & Removal)



SECTION A-A



WEST ABUTMENT ELEVATION
 (Showing Repair & Removal)

LEGEND

- Epoxy Crack Injection
- Structural Repair of Concrete (Depth equal to or less than 5")
- Concrete Removal

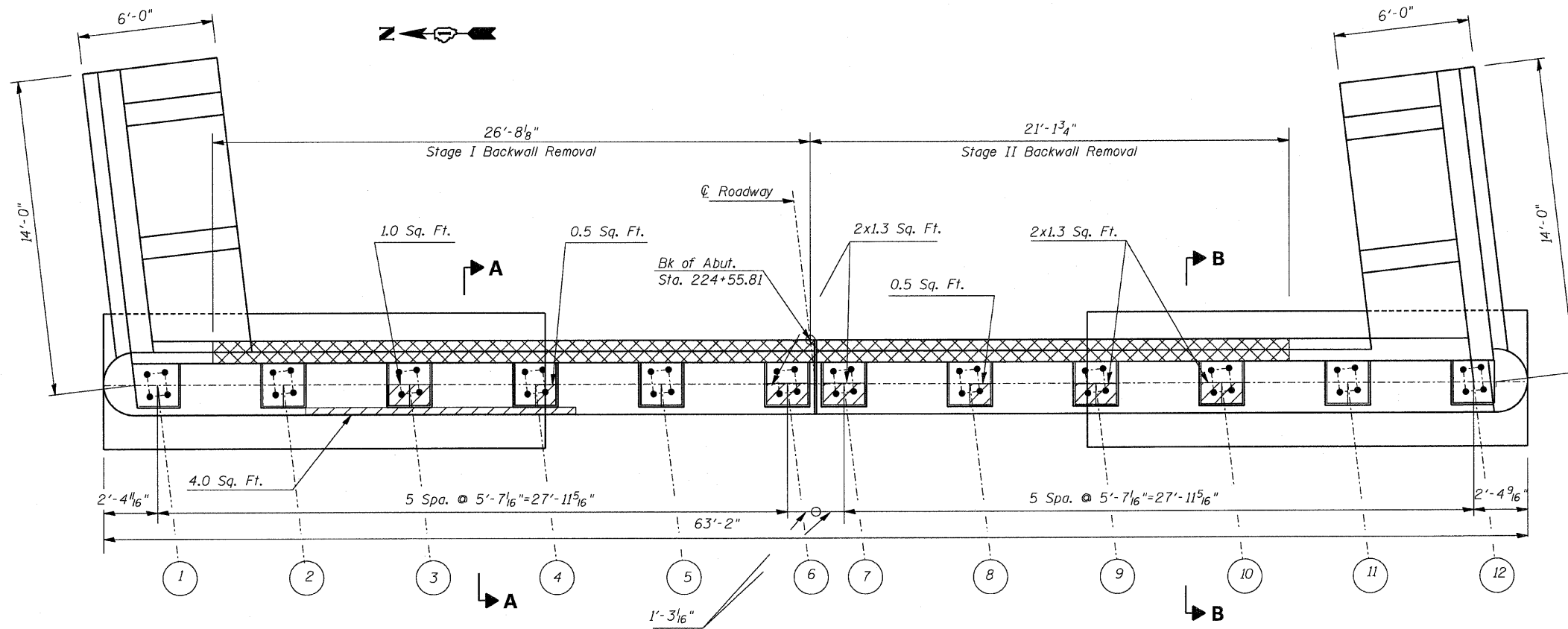
BILL OF MATERIAL

Item	Unit	Total
Epoxy Crack Injection	Foot	---
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	38.5
Concrete Removal	Cu. Yd.	5.8

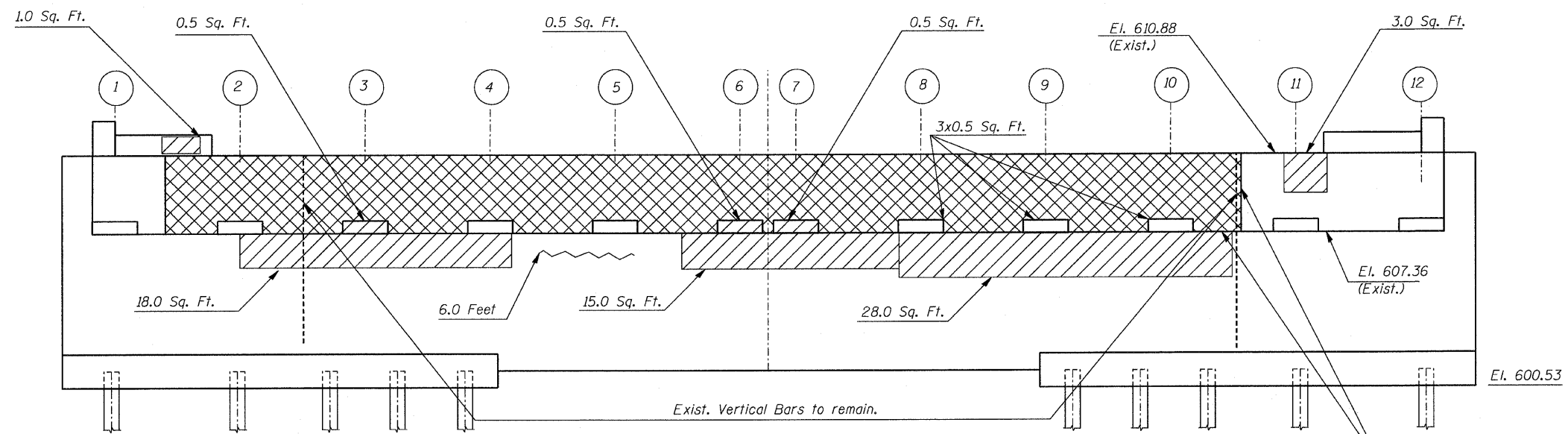
Note:
 Quantities & locations are for information purposes only. It shall be the Contractor's responsibility to verify such dimensions & details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
WEST ABUTMENT REPAIRS
 31 ST. STREET OVER KILBOURN AVE.
 F.A.U. ROUTE 1463 SECTION 159-1010.1B
 COOK COUNTY
 STATION 223+67.45
 STR. NO. 016-0872
 SCALE: VERT. DATE APRIL 2008
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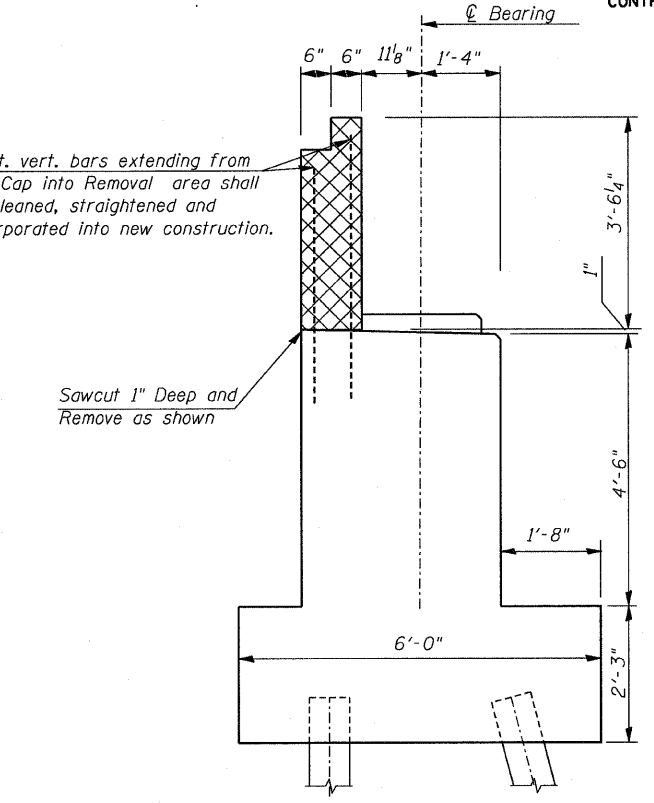
EAST ABUTMENT PLAN
(Showing Repair & Removal)



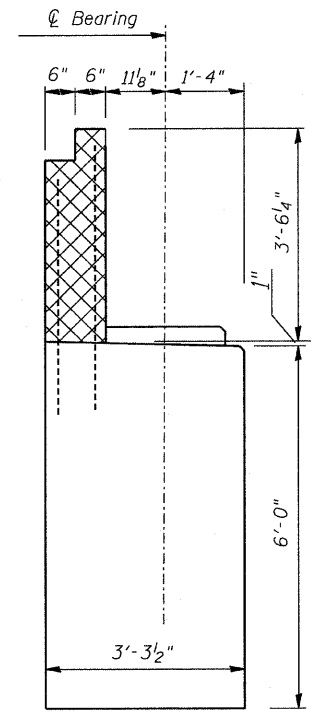
EAST ABUTMENT ELEVATION
(Showing Repair & Removal)

Exist. vert. bars extending from Pile Cap into Removal area shall be cleaned, straightened and incorporated into new construction.

Sawcut 1" Deep and Remove as shown



SECTION A-A



SECTION B-B

Note:
Quantities & locations are for information purposes only. It shall be the Contractor's responsibility to verify such dimensions & 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 scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

LEGEND

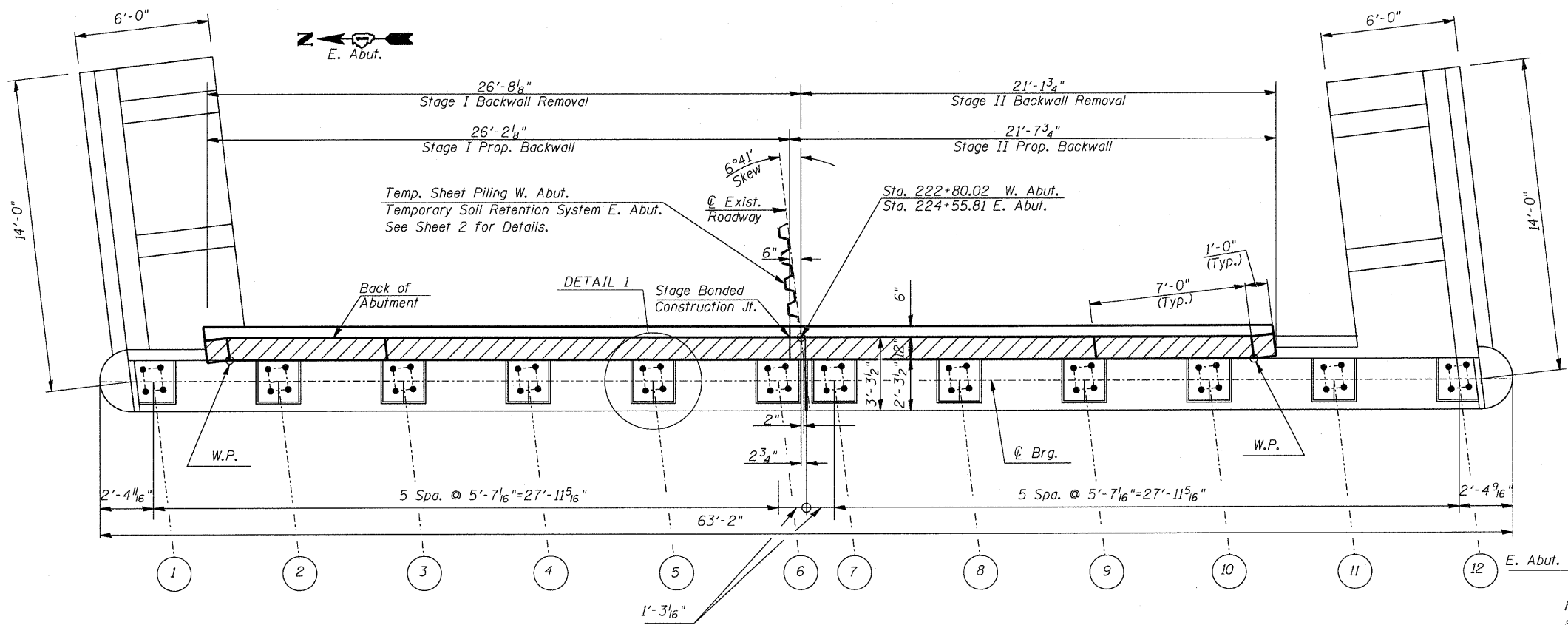
- Epoxy Crack Injection
- Structural Repair of Concrete (Depth equal to or less than 5")
- Concrete Removal

BILL OF MATERIAL

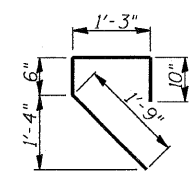
Item	Unit	Total
Epoxy Crack Injection	Foot	6.0
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	79.2
Concrete Removal	Cu. Yd.	5.8

REVISIONS	
NAME	DATE

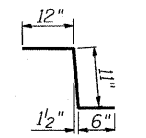
ILLINOIS DEPARTMENT OF TRANSPORTATION
EAST ABUTMENT REPAIRS
31 ST. STREET OVER KILBOURN AVE.
F.A.U. ROUTE 1463 SECTION 159-1010.1B
COOK COUNTY
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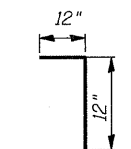
PROPOSED ABUTMENT PLAN
(East Abut. shown, West Abut. opposite hand)



BAR s(E)



BAR c(E)

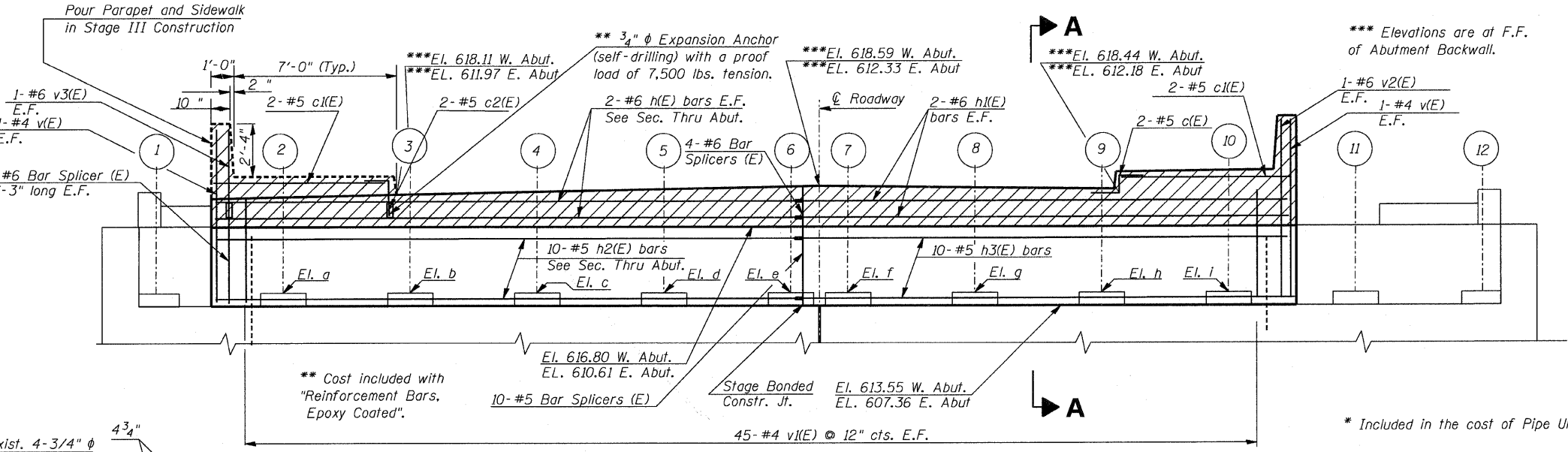


BAR c2(E)

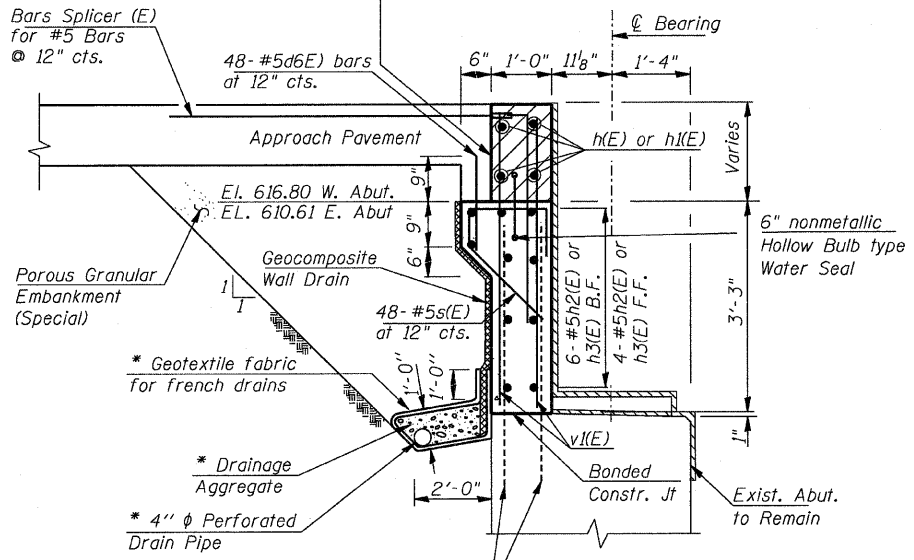
BILL OF MATERIAL
(For two Abutments)

Bar	No.	Size	Length	Shape
c(E)	4	#5	2'-5"	
c1(E)	8	#5	7'-9"	
c2(E)	4	#5	2'-0"	
d6(E)	96	#5	1'-6"	
h(E)	8	#6	25'-9"	
h1(E)	8	#6	21'-3"	
h2(E)	20	#5	25'-9"	
h3(E)	20	#5	21'-3"	
s(E)	96	#5	4'-4"	
v(E)	8	#4	7'-5"	
v1(E)	180	#4	4'-4"	
v2(E)	4	#6	7'-2"	
v3(E)	4	#6	3'-2"	
Concrete Structures		Cu. Yd.	13.4	
Reinforcement Bars, Epoxy Coated		Pound	2930	
Structure Excavation		Cu. Yd.	74	
Porous Granular Embankment (Special)		Cu. Yd.	74	
Concrete Sealer		Sq. Ft.	772	
Pipe Underdrains for Structures 4"		Ft.	120	
Geocomposite Wall Drain		Sq. Yd.	25.8	

Hatched area to be poured after superstructure falsework has been removed. Quantity of concrete included with Concrete Superstructure.



PROPOSED ABUTMENT ELEVATION
(East Abut. shown, West Abut. opposite hand)



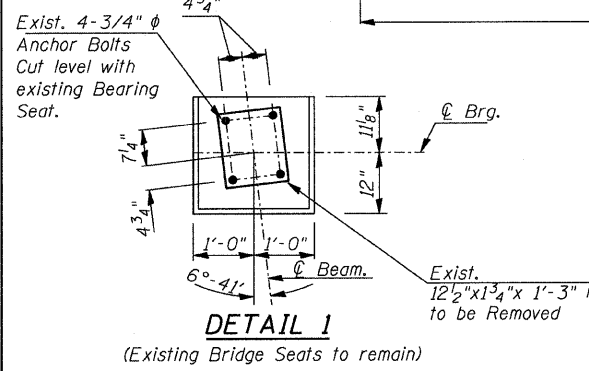
SECTION A-A

	El. a (At Beam 2)	El. b (At Beam 3)	El. c (At Beam 4)	El. d (At Beam 5)	El. e (At Beam 6)	El. f (At Beam 7)	El. g (At Beam 8)	El. h (At Beam 9)	El. i (At Beam 10)
W. Abut.	613.68	613.81	613.95	614.07	614.13	614.14	614.13	614.06	613.97
E. Abut.	607.49	607.62	607.76	607.88	607.94	607.95	607.94	607.87	607.78

EXIST. BRG. SEAT ELEVATIONS

LEGEND

- Concrete Structures
- Concrete Sealer
- Geocomposite Wall Drain



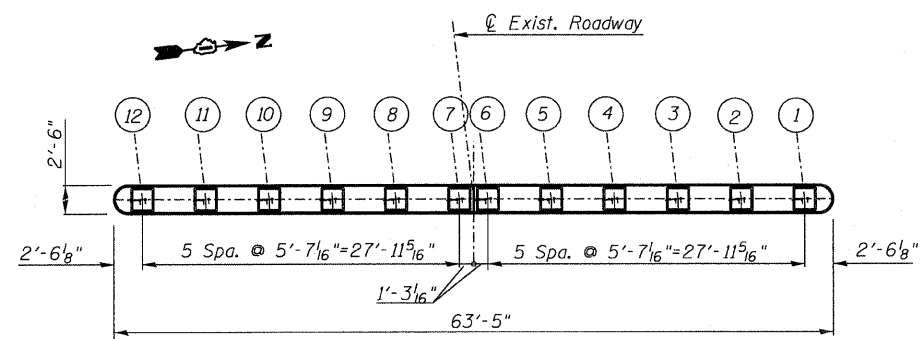
DETAIL 1

(Existing Bridge Seats to remain)

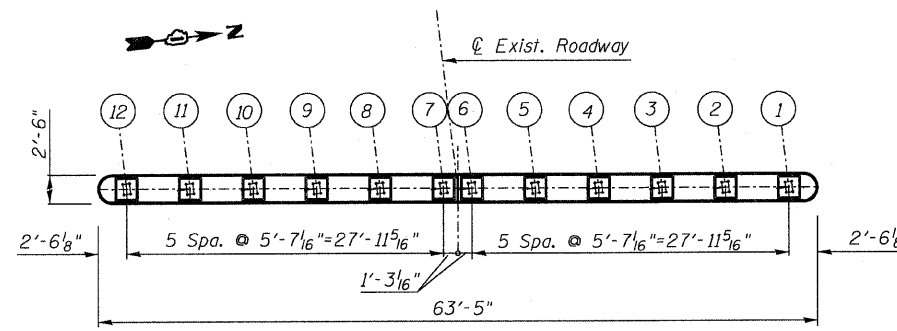
Notes:
1. 4" Perforated pipe drain shall extend through existing wingwalls and discharge to the slope wall.
2. Costs of coring holes through slopewalls and providing rodent shields at both ends is included in price of pay item.

REVISIONS	
NAME	DATE

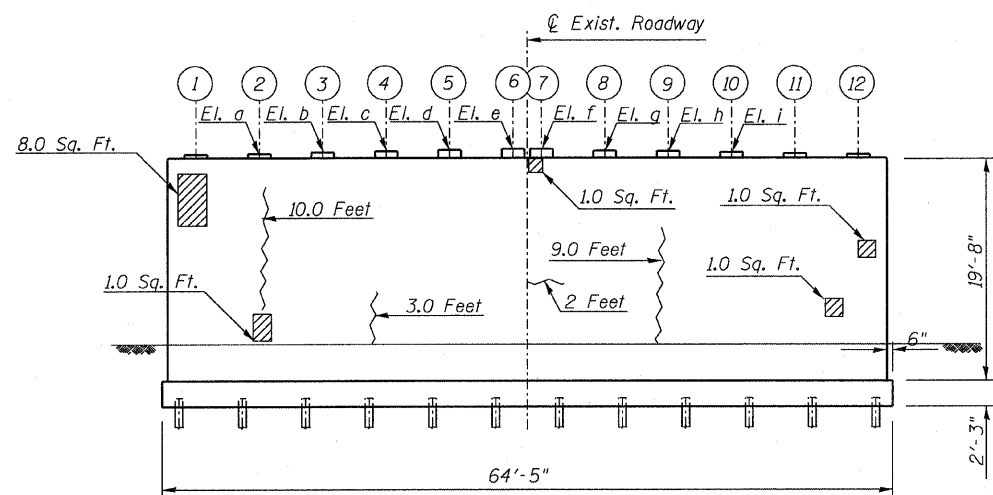
ILLINOIS DEPARTMENT OF TRANSPORTATION
PROPOSED ABUTMENT DETAILS
31 ST. STREET OVER KILBOURN AVE.
F.A.U. ROUTE 1463 SECTION 159-1010.1B
COOK COUNTY
STATION 223+67.45
STR. NO. 016-0872
SCALE: VERT. DRAWN BY JHR
HORIZ. CHECKED BY CLS
DATE APRIL 2008



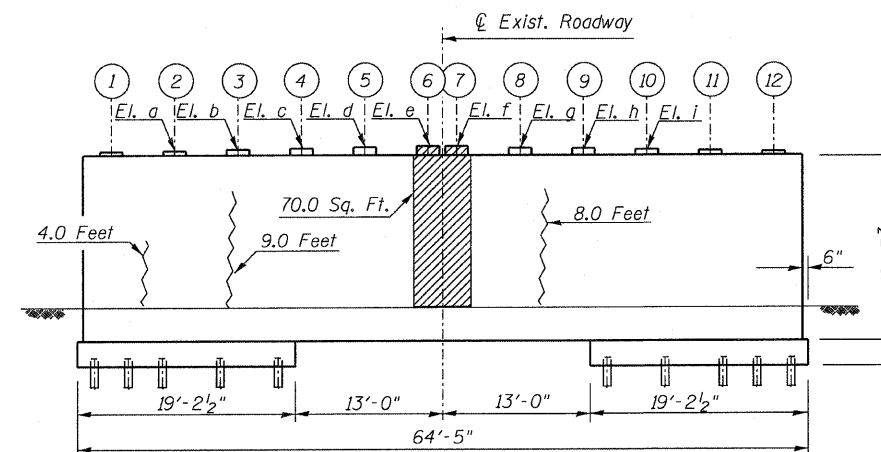
EXISTING PIER 1 PLAN



EXISTING PIER 2 PLAN

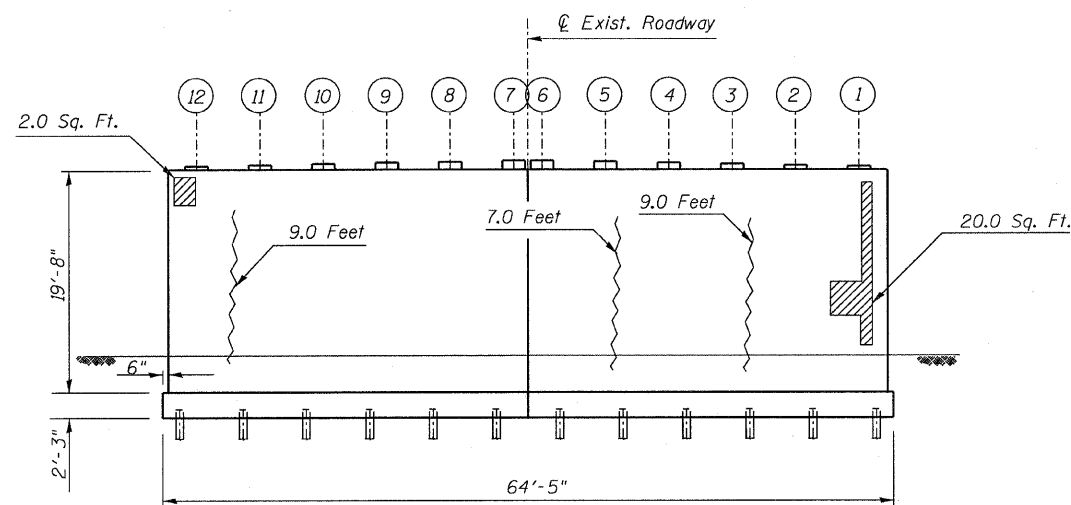


EXISTING PIER 1 ELEVATION
 (Looking East)

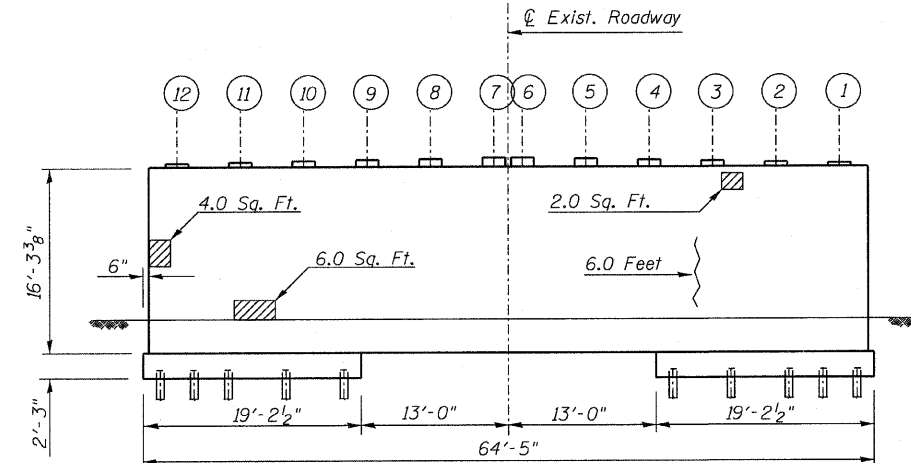


EXISTING PIER 2 ELEVATION
 (Looking East)

Note:
 Quantities & locations are for information purposes only. It shall be the Contractor's responsibility to verify such dimensions & 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 scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.



EXISTING PIER 1 ELEVATION
 (Looking West)



EXISTING PIER 2 ELEVATION
 (Looking West)

LEGEND

- Epoxy Crack Injection
- Structural Repair of Concrete (Depth equal to or less than 5")
- Concrete Removal

BILL OF MATERIAL

Item	Unit	Total
Epoxy Crack Injection	Foot	76.0
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	116.0
Concrete Removal	Cu. Yd.	—

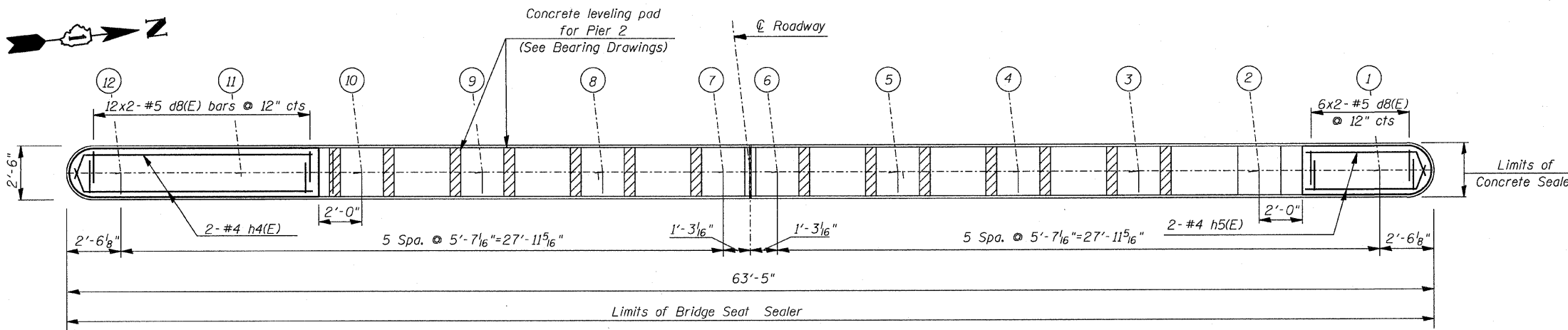
Location	El. a (Beam 2)	El. b (Beam 3)	El. c (Beam 4)	El. d (Beam 5)	El. e (Beam 6)	El. f (Beam 7)	El. g (Beam 8)	El. h (Beam 9)	El. i (Beam 10)
Pier 1	612.35	612.49	612.63	612.74	612.81	612.82	612.80	612.73	612.64
Pier 2	608.97	609.11	609.25	609.36	620.42	609.43	609.42	609.35	609.26

EXIST. BRG. SEAT ELEVATIONS

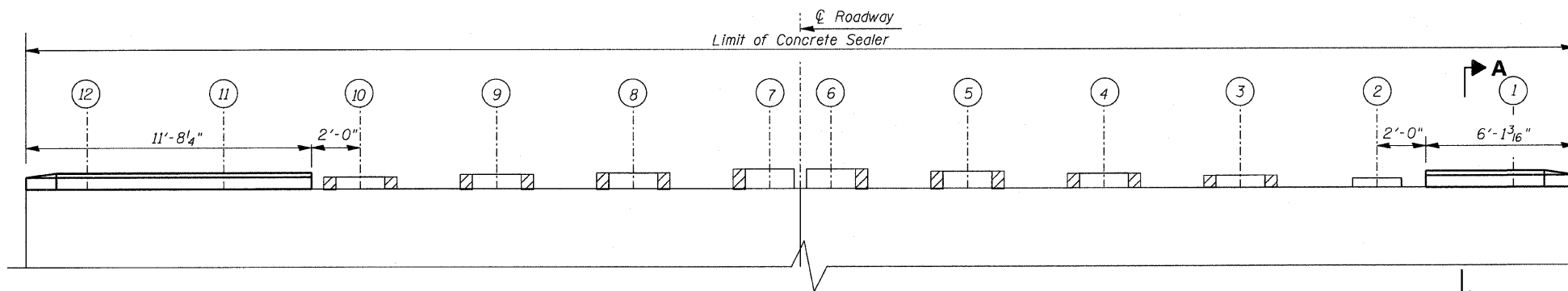
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PIER REPAIRS
 31 ST. STREET OVER KILBOURN AVE.
 F.A.U. ROUTE 1463 SECTION 159-1010.1B
 COOK COUNTY
 STATION 223+67.45
 STR. NO. 016-0872

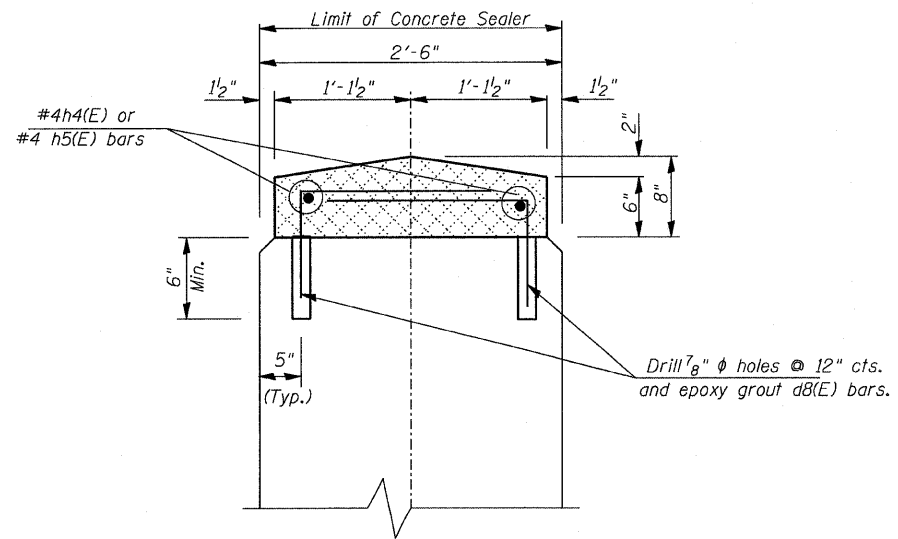
SCALE: VERT. DATE JANUARY 2008
 HORIZ. DRAWN BY JHR
 CHECKED BY CLS



PIER CAP PLAN



PIER CAP ELEVATION
(Looking West)



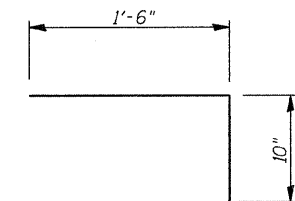
SECTION A-A
FOR PIERS 1 & 2

EARTH TECH A TUGO INTERNATIONAL LTD. COMPANY	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1463	1010.1B	COOK	171	127
STA.		TO STA.			
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

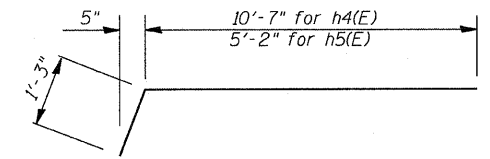
CONTRACT NO. 62196
S22 of S23

BILL OF MATERIAL
FOR PIER 1 AND 2

Bar	No.	Size	Length	Shape
dB(E)	72	#4	2'-4"	┌
h4(E)	4	#4	11'-10"	┌
h5(E)	4	#4	6'-5"	┌
Concrete Structures		Cu. Yd.	1.7	
Reinforcement Bars, Epoxy Coated		Pound	160	
Concrete Sealer		Sq. Ft.	317	



BAR dB(E)
BAR d7(E)



BAR h4(E) & h5(E)

REVISIONS	
NAME	DATE

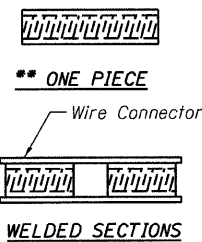
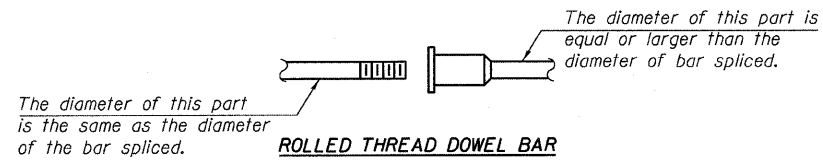
ILLINOIS DEPARTMENT OF TRANSPORTATION
PROPOSED PIER DETAILS
31 ST. STREET OVER KILBOURN AVE.
F.A.U. ROUTE 1463 SECTION 159-1010.1B
COOK COUNTY
STATION 223+67.45
STR. NO. 016-0872
SCALE: VERT. _____ DRAWN BY JHR
HORIZ. _____ DATE APRIL 2008 CHECKED BY CLS

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:

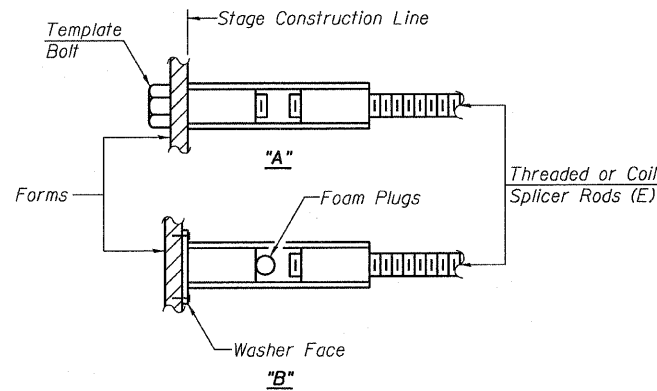
- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_1$
 - ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_1$
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_1 = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

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



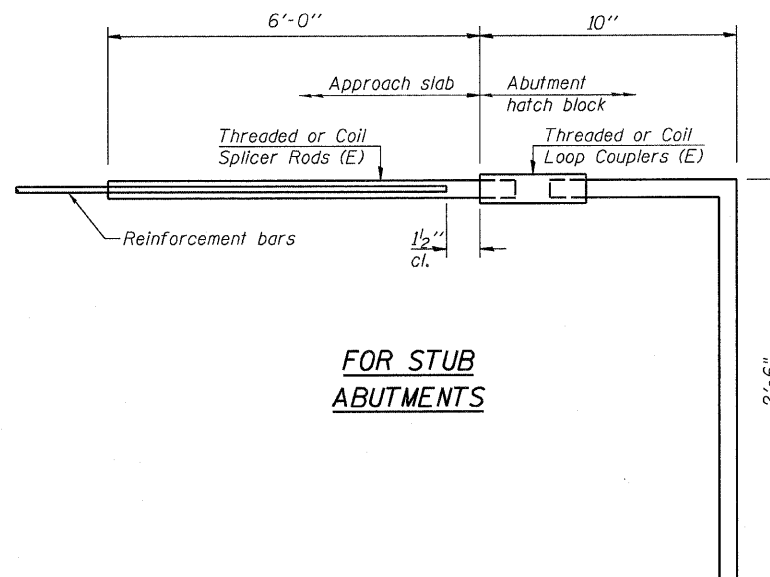
BAR SPLICER ASSEMBLY ALTERNATIVES

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

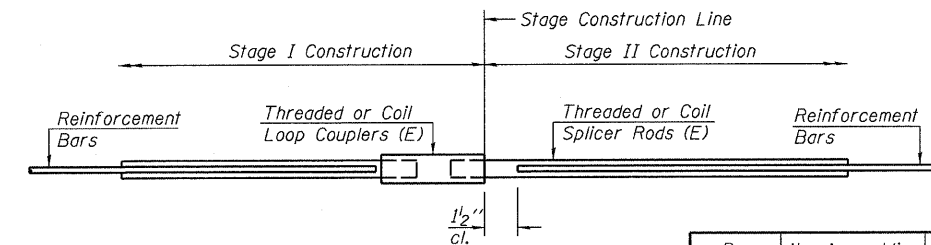


INSTALLATION AND SETTING METHODS

"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.



Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 96



STANDARD

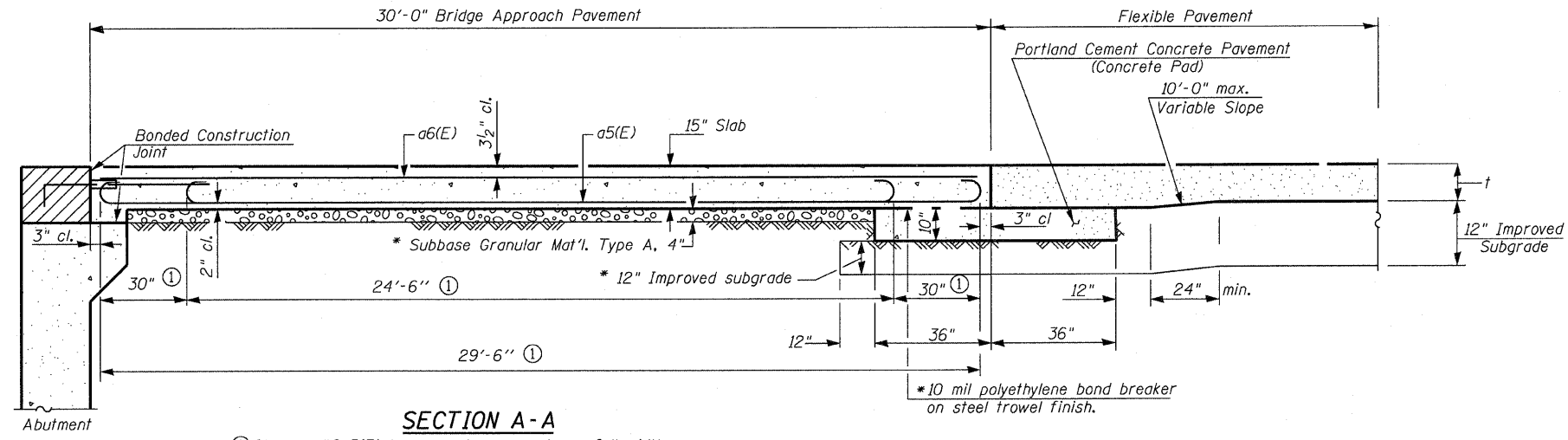
Bar Size	No. Assemblies Required	Location
#4	14	Approach
#5	452	Deck
#5	20	Abutment
#5	104	Approach
#6	8	Deck
#6	12	Abutment

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BAR SPLICER ASSEMBLY DETAILS
 31 ST. STREET OVER KILBOURN AVE.
 F.A.U. ROUTE 1463 SECTION 159-1010.1B
 COOK COUNTY
 STATION 223+67.45
 STR. NO. 016-0872

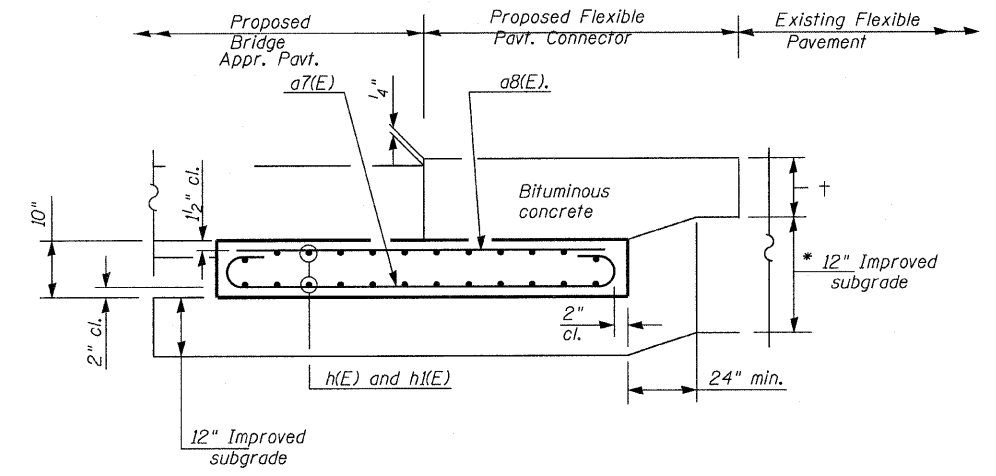
SCALE: VERT. _____
 HORIZ. _____
 DATE JANUARY 2008

DRAWN BY JHR
 CHECKED BY CLS



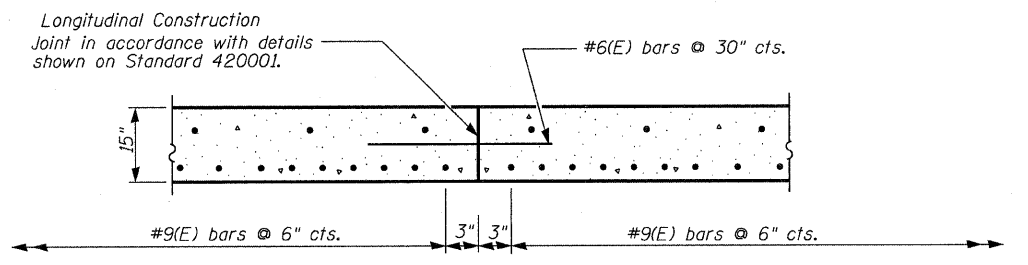
SECTION A-A

① Stagger #9a5(E) bars as shown on plan - full width



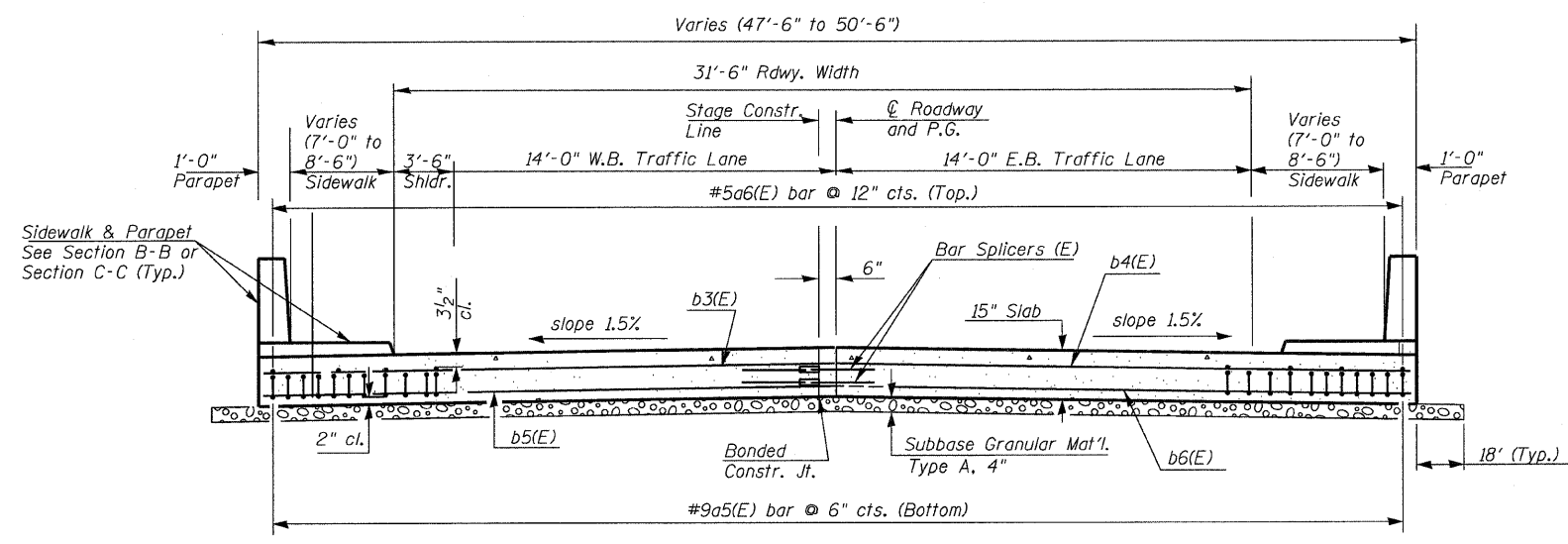
SECTION G-G - FLEXIBLE PAVEMENT

(Showing reinforcement)



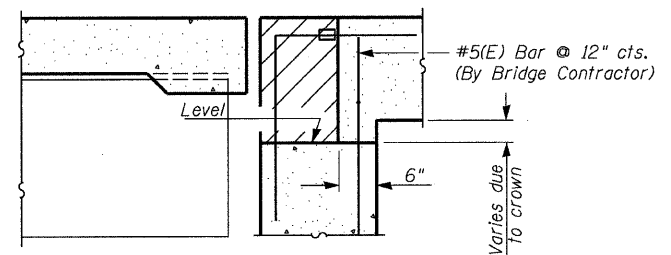
OPTIONAL LONGITUDINAL CONSTRUCTION JOINT

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



SECTION D-D

(See Plan for Dimensions not shown)
 (Looking East)

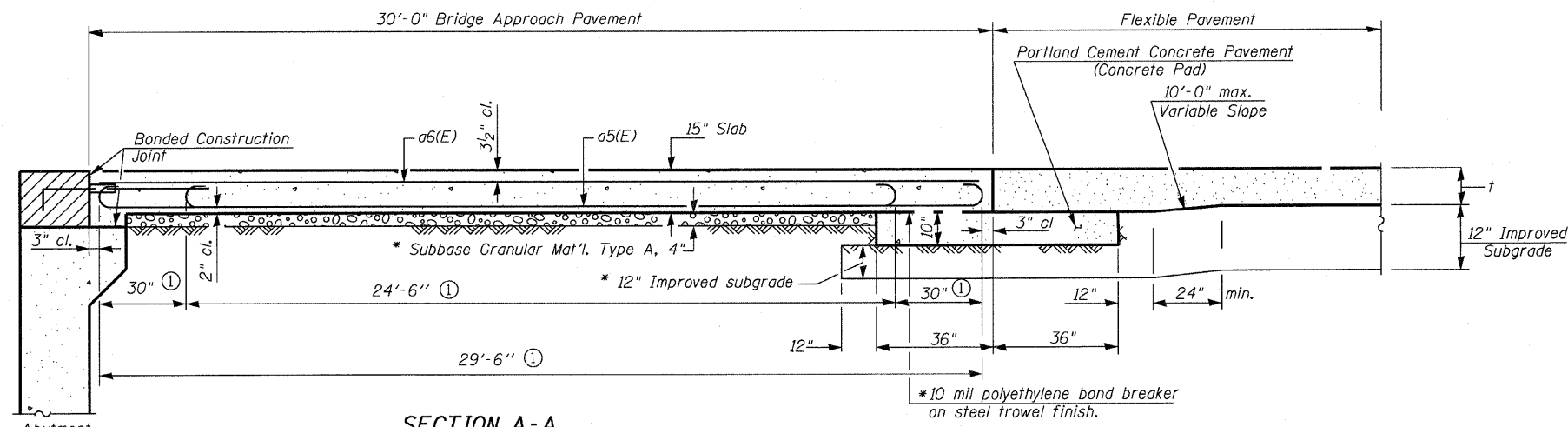


SECTION E-E

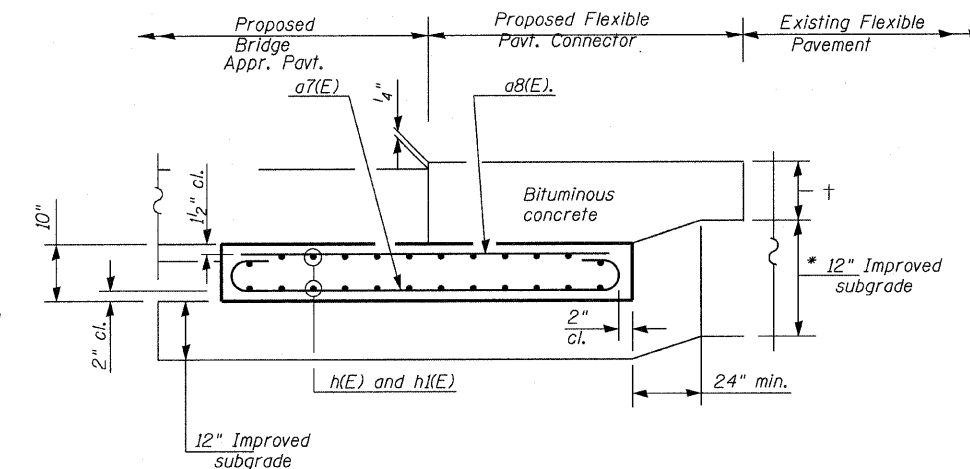
NOTES:
 Reinforcement bars designated (E) shall be epoxy coated.
 * Cost included with Bridge Approach Pavement (Special)

REVISIONS	
NAME	DATE

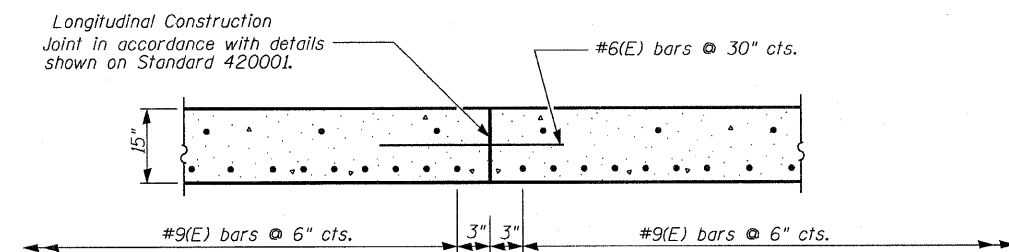
ILLINOIS DEPARTMENT OF TRANSPORTATION
APPROACH PAVEMENT DETAILS
 31 ST. STREET OVER M.J. & C.W.I.R.R.
 F.A.U. ROUTE 1463 SECTION 159-1010.1B
 COOK COUNTY
 STATION 217+09.66
 STR. NO. 016-0871
 SCALE: VERT. _____ DRAWN BY JHR
 HORIZ. _____
 DATE JANUARY 2008 CHECKED BY CLS



① Stagger #9a5(E) bars as shown on plan - full width

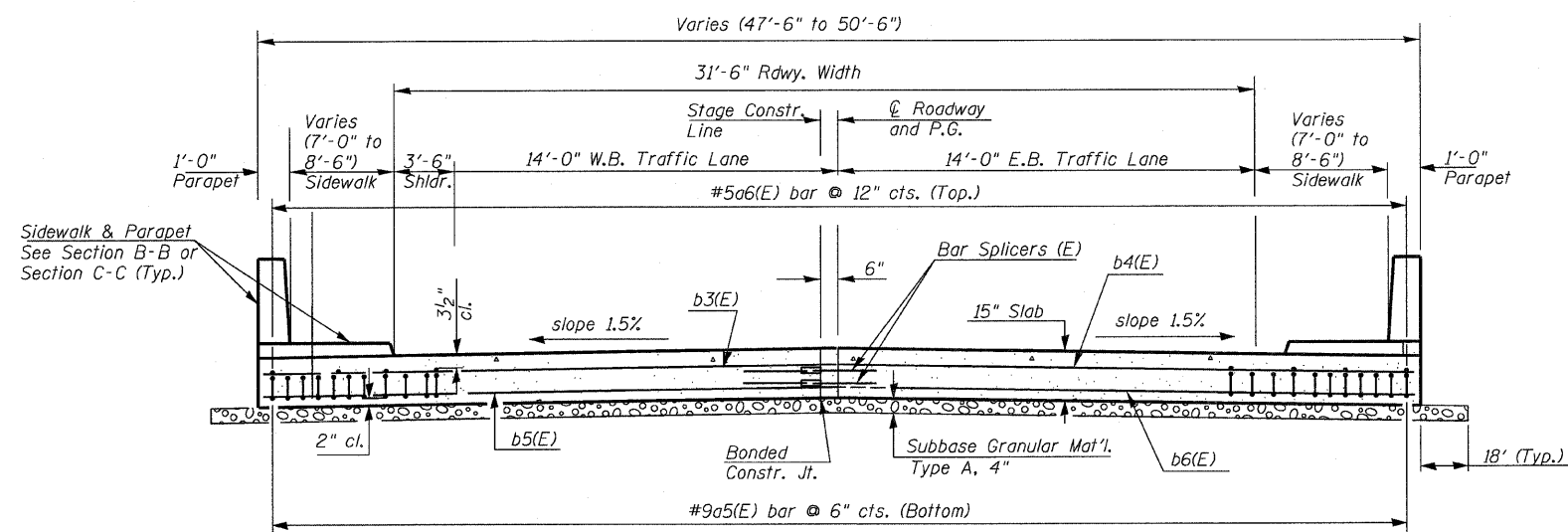


SECTION G-G - FLEXIBLE PAVEMENT
 (Showing reinforcement)

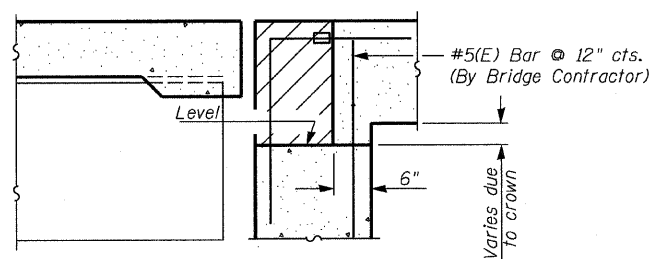


OPTIONAL LONGITUDINAL CONSTRUCTION JOINT

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



SECTION D-D
 (See Plan for Dimensions not shown)
 (Looking East)



SECTION E-E

NOTES:
 Reinforcement bars designated (E) shall be epoxy coated.
 * Cost included with Bridge Approach Pavement (Special)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
APPROACH PAVEMENT DETAILS
 31 ST. STREET OVER KILBOURN AVE.
 F.A.U. ROUTE 1463 SECTION 159-1010.1B
 COOK COUNTY
 STATION 223+67.45
 STR. NO. 016-0872

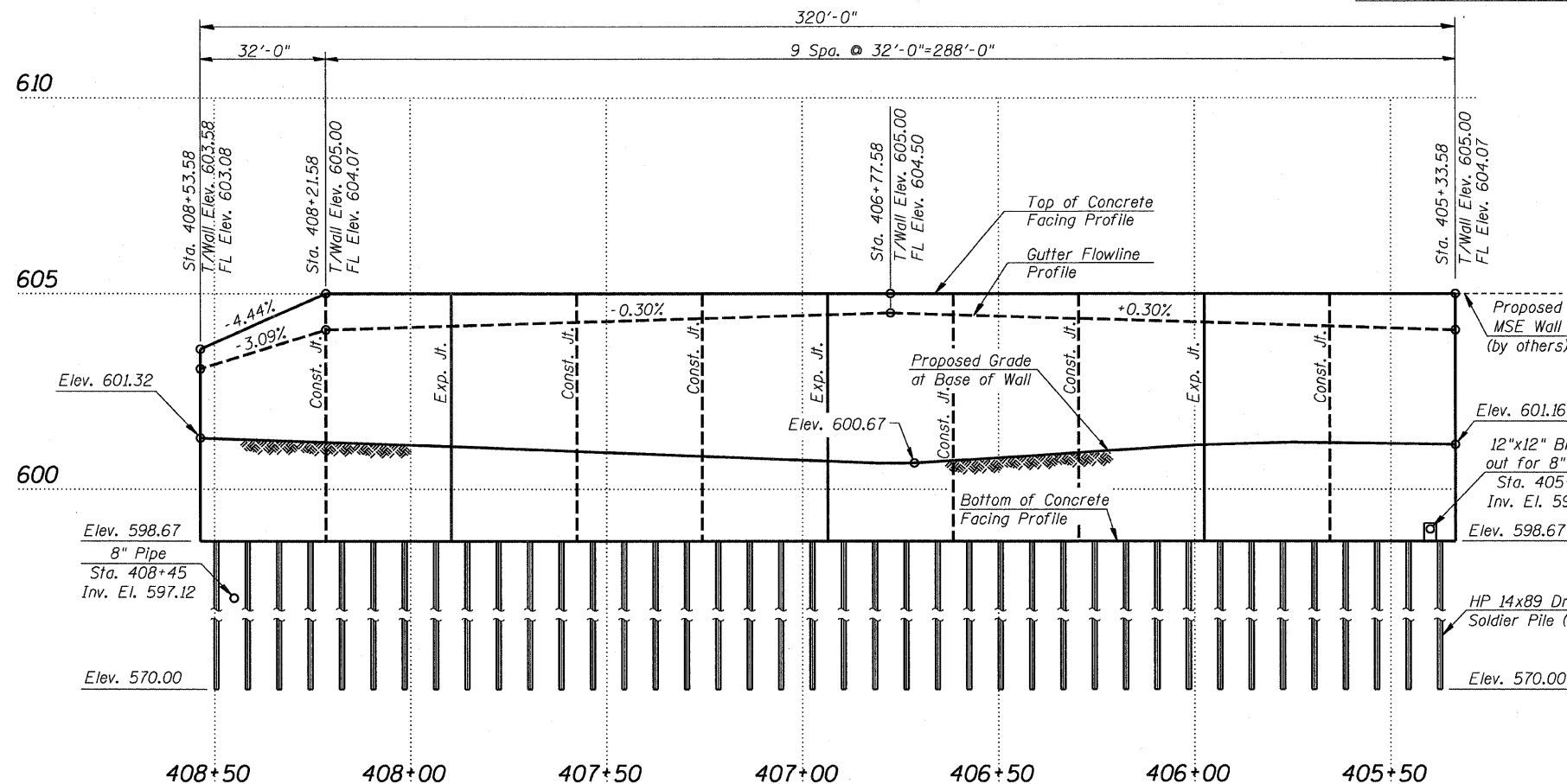
SCALE: VERT. DRAWN BY JHR
 HORIZ. CHECKED BY CLS
 DATE JANUARY 2008

BENCHMARK BM 105
Set chiseled cross on sidewalk on SE corner of
the intersection of 31st Street and Cicero Avenue
Sta. 204+82.95, 34.21' Rt. El. 602.15

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
1463	1010.1B	COOK	171 133
STA. 405+33.58	TO STA. 408+53.58	ILLINOIS FED. AID PROJECT	
FED. ROAD DIST. NO.	CONTRACT NO. 62196 SI of 56		

TOTAL BILL OF MATERIAL

Item	Unit	Quantity
Concrete Structures	Cu. Yd.	74.2
Concrete Sealer	Sq. Ft.	1,684
Stud Shear Connectors	Each	274
Untreated Timber Lagging	Sq. Ft.	1,333
Reinforcement Bars, Epoxy Coated	Pound	8,800
Furnishing Soldier Piles (HP Section)	Foot	1,331
Driving Soldier Piles	Foot	1,331
Geocomposite Wall Drain	Sq. Yd.	153
Pipe Underdrains 4" (Special)	Foot	10
Pipe Underdrains for Structures 4"	Foot	320



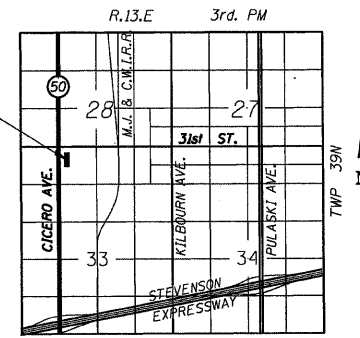
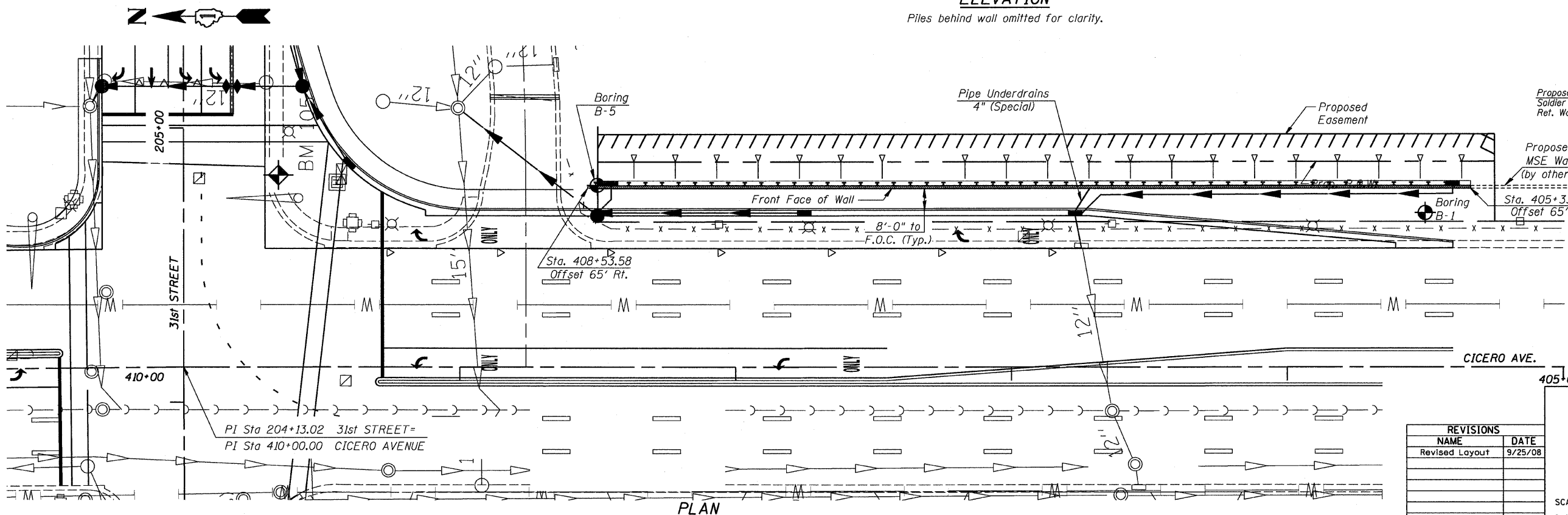
GENERAL NOTES
Concrete Sealer shall be applied to all exposed surfaces of the concrete facing.
All exposed concrete edges shall be chamfered 3/4" except as noted.
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
Reinforcement bars designated (E) shall be epoxy coated.

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications for Highway Bridges

DESIGN STRESSES
FIELD UNITS
f_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 36,000 psi (M270, Gr. 36)



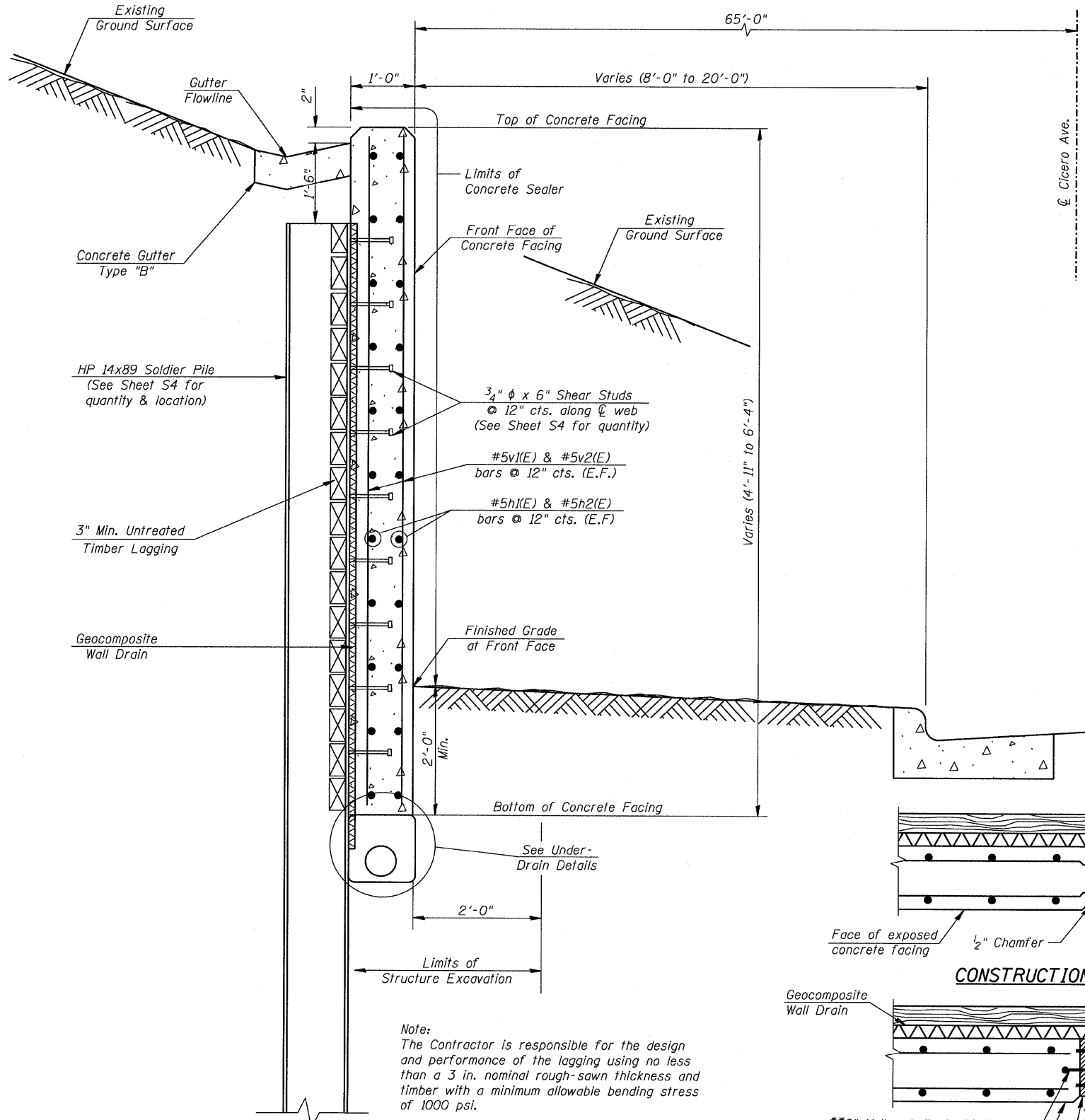
ELEVATION
Piles behind wall omitted for clarity.



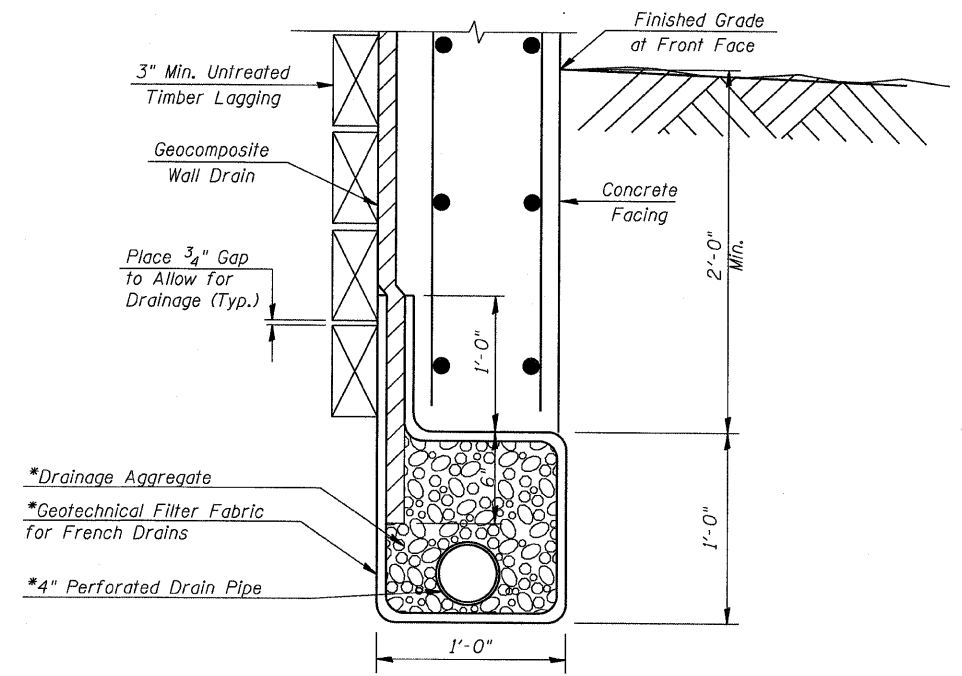
Notes:
1. See Sheet 13 (Earthwork Schedule) for "Structure Excavation" quantity & Sheets 168-170 for cross sections used to quantify this excavation.
2. See Sheet 37 for proposed drainage & utility locations.

REVISIONS	
NAME	DATE
Revised Layout	9/25/08

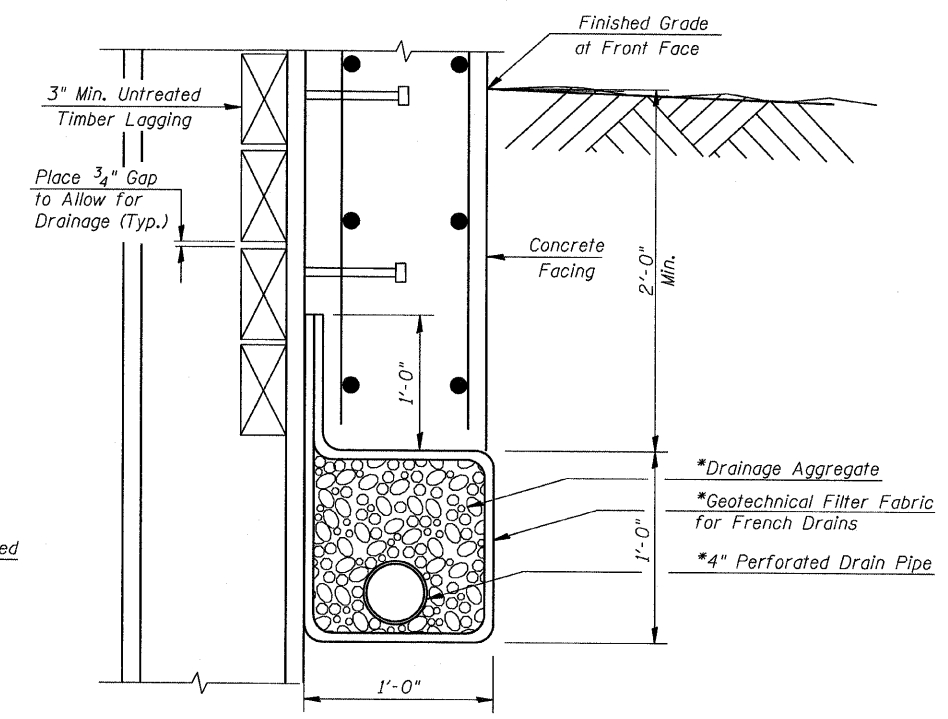
ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION
CICERO AVE. RETAINING WALL
IL ROUTE 50 SECTION 1010.1B
COOK COUNTY
STATION 405+33.58 TO 408+53.58
STR. NO. 016-W981
SCALE: VERT. N.T.S. DRAWN BY GF
DATE SEPTEMBER 25, 2008 CHECKED BY CLS



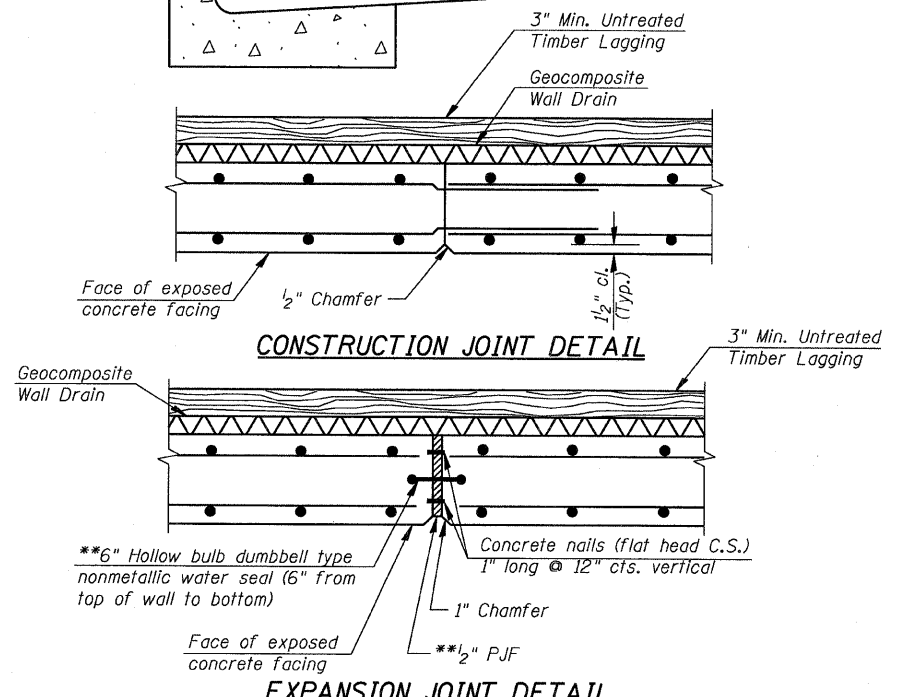
**TYPICAL SECTION THRU
DRIVEN SOLDIER PILE
WALL WITH C.I.P. FACING**



**UNDERDRAIN DETAIL
BETWEEN SOLDIER PILES**



**UNDERDRAIN DETAIL
AT SOLDIER PILES**



CONSTRUCTION JOINT DETAIL

EXPANSION JOINT DETAIL

*Cost included with "Pipe Underdrains for Structures."
**Cost included with "Concrete Structures."

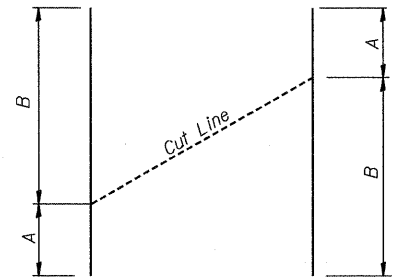
REVISIONS	
NAME	DATE
Revised Layout	9/25/08

ILLINOIS DEPARTMENT OF TRANSPORTATION
RETAINING WALL DETAILS
CICERO AVE. RETAINING WALL
IL ROUTE 50 SECTION 1010.1B
COOK COUNTY
STATION 405+33.58 TO 408+53.58
STR. NO. 016-W981

SCALE: VERT. N.T.S. DRAWN BY GF
DATE SEPTEMBER 25, 2008 CHECKED BY CLS

BILL OF MATERIAL

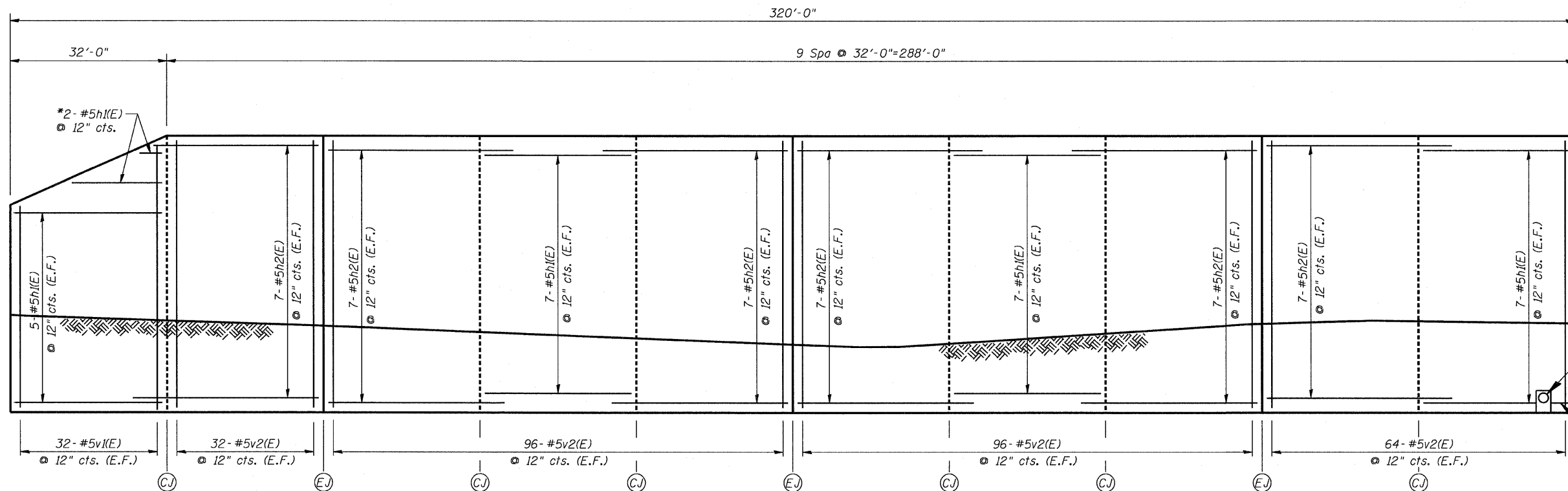
Bar	No.	Size	Length	Shape	
h1(E)	54	#5	31'-9"	—	
h2(E)	84	#5	34'-3"	—	
v1(E)	32	#5	10'-9"	—	
v2(E)	576	#5	6'-1"	—	
Reinforcement Bars, Epoxy Coated				Pound	8,800



FIELD CUTTING DIAGRAM

Order #5v1(E) bars full length. Cut as shown & use remainder of bars in opposite face.

Bar	A	B
v1(E)	4'-8"	6'-1"



12"x12" Block-out for 8" Pipe
Sta. 405+40
Inv. El. 598.88

Trim bottom #5h1(E) bar as necessary to clear pipe blockout

*Order #5h1(E) bars full length. Cut to fill angle & use remainder of bars in opposite face.

TYP. LAP SPLICE

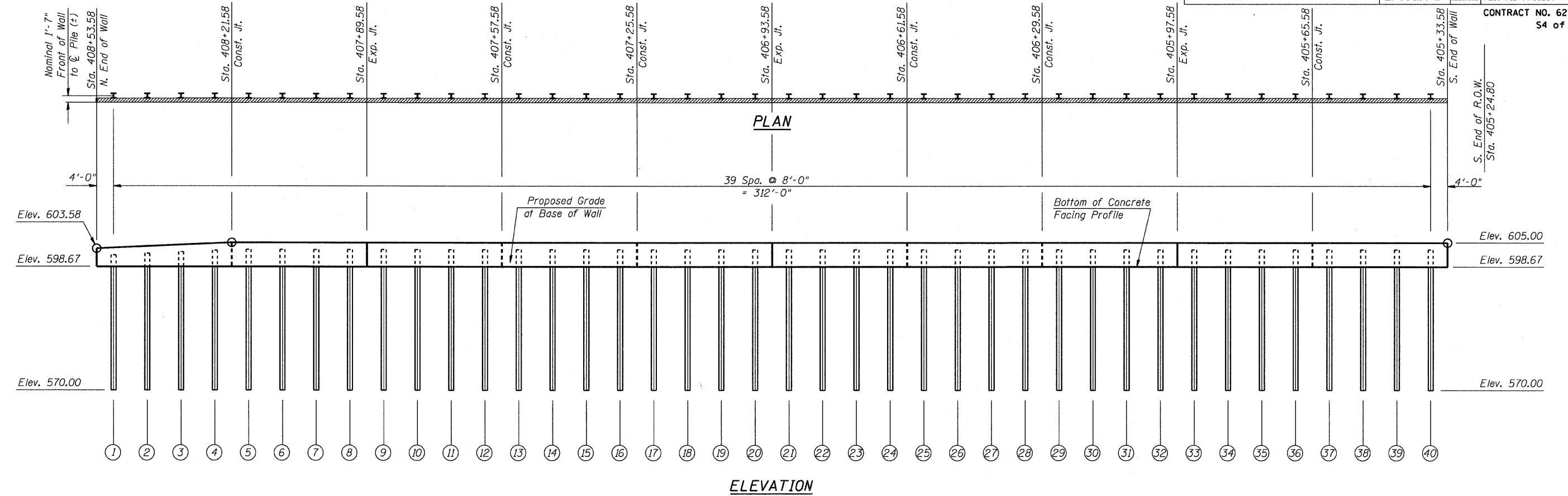
Bar	Lap
#5	2'-2"

REVISIONS	
NAME	DATE
Revised Layout	9/25/08

ILLINOIS DEPARTMENT OF TRANSPORTATION
RETAINING WALL REINFORCEMENT

CICERO AVE. RETAINING WALL
IL ROUTE 50 SECTION 1010.1B
COOK COUNTY
STATION 405+33.58 TO 408+53.58
STR. NO. 016-W981

SCALE: VERT. N.T.S. DRAWN BY CF
HORIZ. DATE SEPTEMBER 25, 2008 CHECKED BY CLS



PILE TABLE

Pile No	Pile Size	Station	Offset (Ft.)	Top of Wall El. (Ft.)	Top of Pile El. (Ft.)	Bottom of Pile El. (Ft.)	Est. Length (Ft.)	No. Shear Studs
1	HP 14x89	408+49.58	66.58	603.76	602.09	570.00	32.09	5
2	HP 14x89	408+41.58	66.58	604.11	602.45	570.00	32.45	5
3	HP 14x89	408+33.58	66.58	604.47	602.80	570.00	32.80	6
4	HP 14x89	408+25.58	66.58	604.82	603.16	570.00	33.16	6
5	HP 14x89	408+17.58	66.58	605.00	603.33	570.00	33.33	7
6	HP 14x89	408+09.58	66.58	605.00	603.33	570.00	33.33	7
7	HP 14x89	408+01.58	66.58	605.00	603.33	570.00	33.33	7
8	HP 14x89	407+93.58	66.58	605.00	603.33	570.00	33.33	7
9	HP 14x89	407+85.58	66.58	605.00	603.33	570.00	33.33	7
10	HP 14x89	407+77.58	66.58	605.00	603.33	570.00	33.33	7
11	HP 14x89	407+69.58	66.58	605.00	603.33	570.00	33.33	7
12	HP 14x89	407+61.58	66.58	605.00	603.33	570.00	33.33	7
13	HP 14x89	407+53.58	66.58	605.00	603.33	570.00	33.33	7
14	HP 14x89	407+45.58	66.58	605.00	603.33	570.00	33.33	7
15	HP 14x89	407+37.58	66.58	605.00	603.33	570.00	33.33	7
16	HP 14x89	407+29.58	66.58	605.00	603.33	570.00	33.33	7
17	HP 14x89	407+21.58	66.58	605.00	603.33	570.00	33.33	7
18	HP 14x89	407+13.58	66.58	605.00	603.33	570.00	33.33	7
19	HP 14x89	407+05.58	66.58	605.00	603.33	570.00	33.33	7
20	HP 14x89	406+97.58	66.58	605.00	603.33	570.00	33.33	7

PILE TABLE (CONT.)

Pile No	Pile Size	Station	Offset (Ft.)	Top of Wall El. (Ft.)	Top of Pile El. (Ft.)	Bottom of Pile El. (Ft.)	Est. Length (Ft.)	No. Shear Studs
21	HP 14x89	406+89.58	66.58	605.00	603.33	570.00	33.33	7
22	HP 14x89	406+81.58	66.58	605.00	603.33	570.00	33.33	7
23	HP 14x89	406+73.58	66.58	605.00	603.33	570.00	33.33	7
24	HP 14x89	406+65.58	66.58	605.00	603.33	570.00	33.33	7
25	HP 14x89	406+57.58	66.58	605.00	603.33	570.00	33.33	7
26	HP 14x89	406+49.58	66.58	605.00	603.33	570.00	33.33	7
27	HP 14x89	406+41.58	66.58	605.00	603.33	570.00	33.33	7
28	HP 14x89	406+33.58	66.58	605.00	603.33	570.00	33.33	7
29	HP 14x89	406+25.58	66.58	605.00	603.33	570.00	33.33	7
30	HP 14x89	406+17.58	66.58	605.00	603.33	570.00	33.33	7
31	HP 14x89	406+09.58	66.58	605.00	603.33	570.00	33.33	7
32	HP 14x89	406+01.58	66.58	605.00	603.33	570.00	33.33	7
33	HP 14x89	405+93.58	66.58	605.00	603.33	570.00	33.33	7
34	HP 14x89	405+85.58	66.58	605.00	603.33	570.00	33.33	7
35	HP 14x89	405+77.58	66.58	605.00	603.33	570.00	33.33	7
36	HP 14x89	405+69.58	66.58	605.00	603.33	570.00	33.33	7
37	HP 14x89	405+61.58	66.58	605.00	603.33	570.00	33.33	7
38	HP 14x89	405+53.58	66.58	605.00	603.33	570.00	33.33	7
39	HP 14x89	405+45.58	66.58	605.00	603.33	570.00	33.33	7
40	HP 14x89	405+37.58	66.58	605.00	603.33	570.00	33.33	7

REVISIONS	
NAME	DATE
Revised Layout	9/25/08

ILLINOIS DEPARTMENT OF TRANSPORTATION
SOLDIER PILE PLAN & ELEVATION
 CICERO AVE. RETAINING WALL
 IL ROUTE 50 SECTION 1010.1B
 COOK COUNTY
 STATION 405+33.58 TO 408+53.58
 STR. NO. 016-W981
 SCALE: VERT. N.T.S. DRAWN BY OF
 HORIZ. DATE SEPTEMBER 25, 2008 CHECKED BY CLS

SOIL BORING LOG

PAGE 1 of 4
DATE 9/14/2004
LOGGED BY D&G Drilling
OBA JOB No. 04118

ROUTE F.A.U. 1463 (31st Street) DESCRIPTION 31st Street over CW RR & Kilbourn Avenue
SECTION 1010.1B LOCATION Cicero Avenue Retaining Wall South of 31st Street
COUNTY Cook-District One DRILLING METHOD 4.25" Hollow Stem Auger HAMMER TYPE Mobil Automatic

STRUCT. NO. Retaining Wall
Station 405+50 to 408+50 Cicero Ave.
BORING NO. B-1
Station 405+50
Offset: 56' Right
Ground Surface Elev. 607.8

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a

DEPTH (ft)	U.C.S. (psi)	MOIST. (%)	TEST
0			
1			
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Blind Drill from 0.0' to -6.0'

Drillers Observation:
Miscellaneous Brick, Wood, Gravel, Cinders, Clay, Asphalt & Metal (Fill)

Miscellaneous Brick, Wood, Gravel, Cinders, Clay, Asphalt & Metal - very loose to dense (Fill), Saturated Strong Oil/Creosote odor noted.

Miscellaneous Brick, Wood, Gravel, Cinders, Clay, Asphalt & Metal - very loose to dense (Fill)

Strong Oil/Creosote odor noted.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%) NR-No Recovery.

SOIL BORING LOG

PAGE 2 of 4
DATE 9/14/2004
LOGGED BY D&G Drilling
OBA JOB No. 04118

ROUTE F.A.U. 1463 (31st Street) DESCRIPTION 31st Street over CW RR & Kilbourn Avenue
SECTION 1010.1B LOCATION Cicero Avenue Retaining Wall South of 31st Street
COUNTY Cook-District One DRILLING METHOD 4.25" Hollow Stem Auger HAMMER TYPE Mobil Automatic

STRUCT. NO. Retaining Wall
Station 405+50 to 408+50 Cicero Ave.
BORING NO. B-1
Station 405+50
Offset: 56' Right
Ground Surface Elev. 607.8

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a

DEPTH (ft)	U.C.S. (psi)	MOIST. (%)	TEST
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Blind Drill from -50.0' to -138.0'

Drillers Observation:
Miscellaneous Brick, Wood, Gravel, Cinders, Clay, Asphalt & Metal (Fill)
Strong Oil/Creosote odor noted.

Miscellaneous Brick, Wood, Gravel, Cinders, Clay, Asphalt & Metal - very loose to dense (Fill), Saturated Strong Oil/Creosote odor noted.

Blind Drill from -50.0' to -138.0'

Drillers Observation:
Miscellaneous Brick, Wood, Gravel, Cinders, Clay, Asphalt & Metal (Fill)
Strong Oil/Creosote odor noted.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%) NR-No Recovery.

SOIL BORING LOG

PAGE 3 of 4
DATE 9/14/2004
LOGGED BY D&G Drilling
OBA JOB No. 04118

ROUTE F.A.U. 1463 (31st Street) DESCRIPTION 31st Street over CW RR & Kilbourn Avenue
SECTION 1010.1B LOCATION Cicero Avenue Retaining Wall South of 31st Street
COUNTY Cook-District One DRILLING METHOD 4.25" Hollow Stem Auger HAMMER TYPE Mobil Automatic

STRUCT. NO. Retaining Wall
Station 405+50 to 408+50 Cicero Ave.
BORING NO. B-1
Station 405+50
Offset: 56' Right
Ground Surface Elev. 607.8

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a

DEPTH (ft)	U.C.S. (psi)	MOIST. (%)	TEST
0			
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Blind Drill from -50.0' to -138.0'

Drillers Observation:
Miscellaneous Brick, Wood, Gravel, Cinders, Clay, Asphalt & Metal (Fill)
Strong Oil/Creosote odor noted.

Miscellaneous Brick, Wood, Gravel, Cinders, Clay, Asphalt & Metal - very loose to dense (Fill), Saturated Strong Oil/Creosote odor noted.

Blind Drill from -50.0' to -138.0'

Drillers Observation:
Miscellaneous Brick, Wood, Gravel, Cinders, Clay, Asphalt & Metal (Fill)
Strong Oil/Creosote odor noted.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%) NR-No Recovery.

SOIL BORING LOG

PAGE 4 of 4
DATE 9/14/2004
LOGGED BY D&G Drilling
OBA JOB No. 04118

ROUTE F.A.U. 1463 (31st Street) DESCRIPTION 31st Street over CW RR & Kilbourn Avenue
SECTION 1010.1B LOCATION Cicero Avenue Retaining Wall South of 31st Street
COUNTY Cook-District One DRILLING METHOD 4.25" Hollow Stem Auger HAMMER TYPE Mobil Automatic

STRUCT. NO. Retaining Wall
Station 405+50 to 408+50 Cicero Ave.
BORING NO. B-1
Station 405+50
Offset: 56' Right
Ground Surface Elev. 607.8

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a

DEPTH (ft)	U.C.S. (psi)	MOIST. (%)	TEST
0			
1			
2			
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Blind Drill from -50.0' to -138.0'

Drillers Observation:
Miscellaneous Brick, Wood, Gravel, Cinders, Clay, Asphalt & Metal (Fill)
Strong Oil/Creosote odor noted.

Light gray to gray with horizontal to wavy bedding. Fine grained with few small vugs. Some light horizontal fractures throughout. Horizontal fractures at -140.1', -141.1', -143.4', -144.4', -145.6', -146.2', -147.1', -147.5' & -148.4'.

RECOVERY=100.0%
RQD=99.1%

End of Boring @ -148.5'
Hollow Stem Augers to -50.0'
Rotary Drilling to Completion
138.0' 4" Casing Used
139.0' 3" Casing Used

Run 1

Drillers Observation:
Apparent Bedrock

Run 1 (-139.0' to -148.5')
Silurian System, Niagaran Series Dolomite

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%) NR-No Recovery.

ROCK CORE LOG

PAGE 1 of 1
DATE 9/14/2004
LOGGED BY D&G Drilling
OBA JOB No. 04118

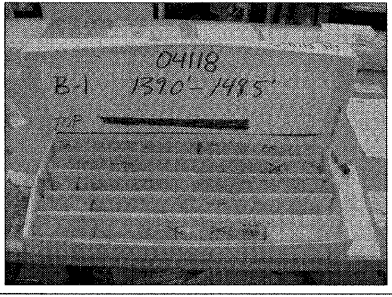
ROUTE F.A.U. 1463 (31st Street) DESCRIPTION 31st Street over CW RR & Kilbourn Avenue
SECTION 1010.1B LOCATION Cicero Avenue Retaining Wall South of 31st Street
COUNTY Cook-District One CORING METHOD Rotary Wash

STRUCT. NO. Retaining Wall
Station 405+50 to 408+50 Cicero Av Core Diameter 2.0 in
BORING NO. B-1
Station 405+50
Offset: 56' Right
Ground Surface Elev. 607.8

CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Top of Rock Elev. 488.8
Begin Core Elev. 488.8

DEPTH (ft)	RECOVERY (%)	UCS (psi)	TEST
0			
1	100.0	99.1	n/a
2			
3			
4			
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7			
8			
9			
10			

Run 1 (-139.0' to -148.5')
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE
Light gray to gray with horizontal to wavy bedding. Fine grained with few small vugs. Some light horizontal fractures throughout. Horizontal fractures at -140.1', -141.1', -143.4', -144.4', -145.6', -146.2', -147.1', -147.5' & -148.4'.



Color pictures of the cores are _____ Cores will be stored for examination for _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING B-1

CICERO AVE. RETAINING WALL
IL ROUTE 50 SECTION 1010.1B
COOK COUNTY
STATION 405+33.58 TO 408+53.58
STR. NO. 016-W981

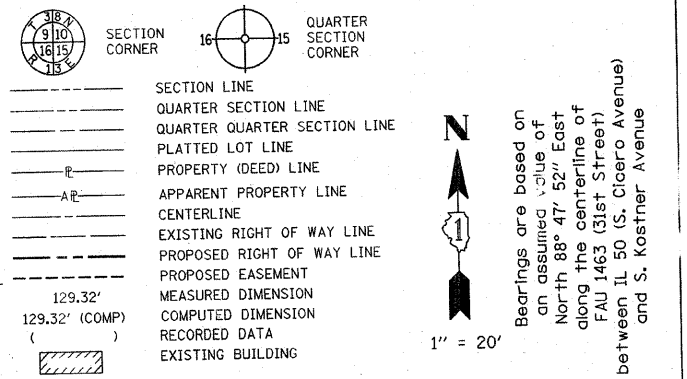
REVISIONS	
NAME	DATE
Revised Layout	9/25/08

SCALE: VERT. N.T.S.
DATE: SEPTEMBER 25, 2008

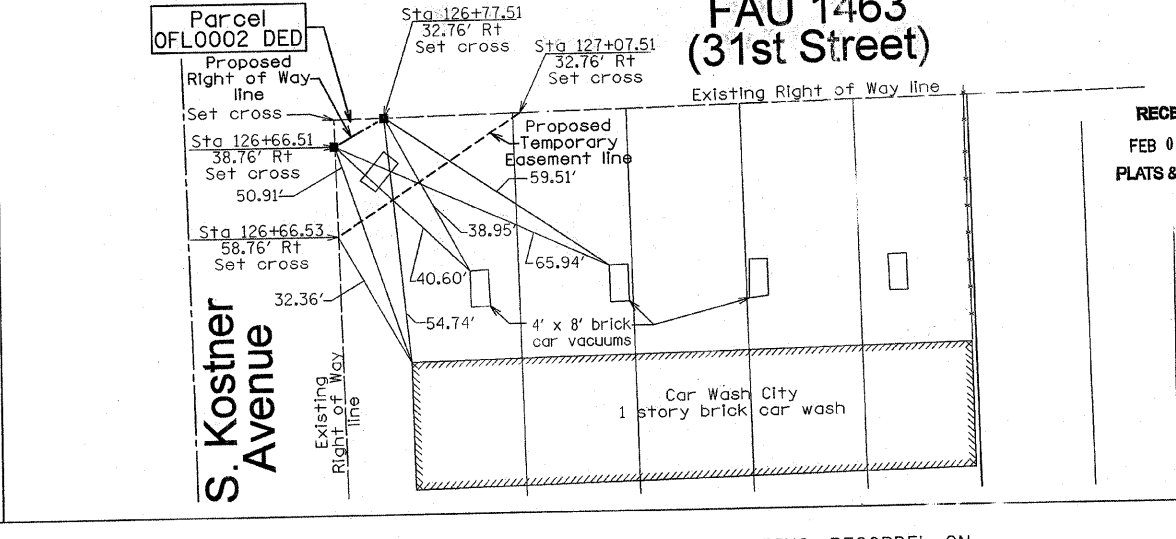
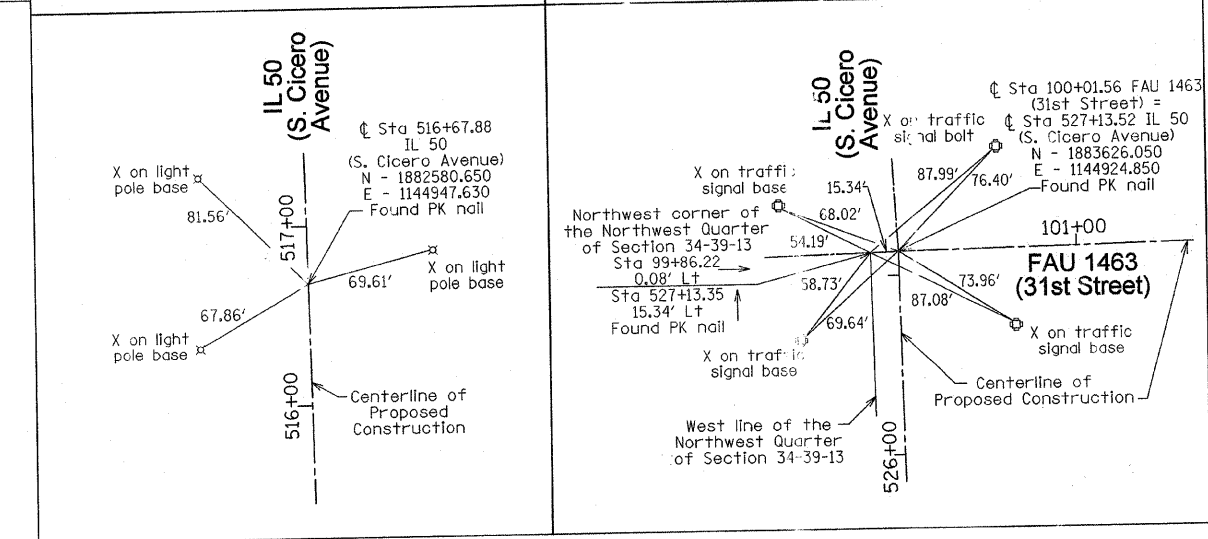
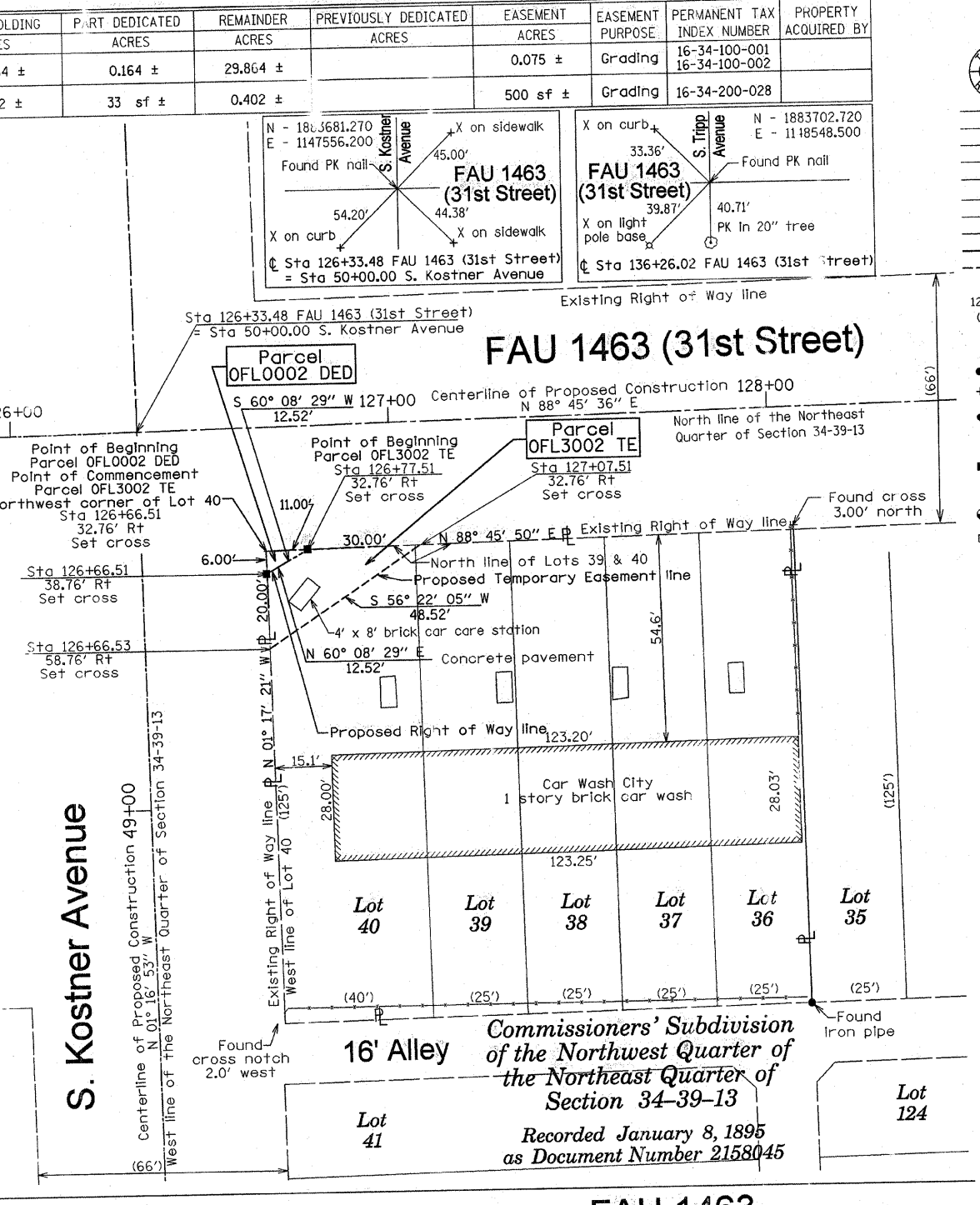
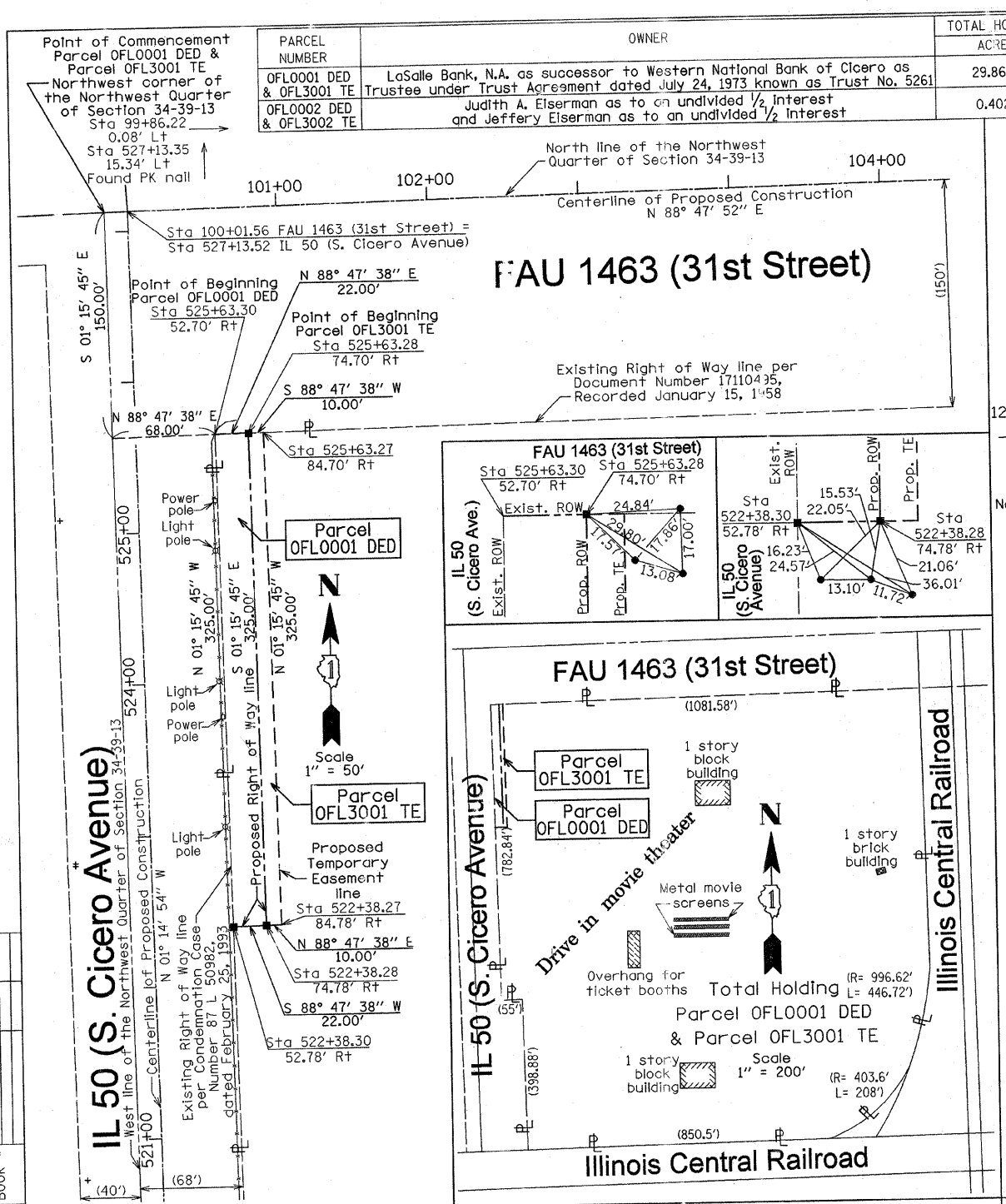
DRAWN BY: GF
CHECKED BY: CLS

PARCEL NUMBER	OWNER	TOTAL HOLDING	PART DEDICATED	REMAINDER	PREVIOUSLY DEDICATED	EASEMENT	EASEMENT PURPOSE	PERMANENT TAX INDEX NUMBER	PROPERTY ACQUIRED BY
		ACRES	ACRES	ACRES	ACRES	ACRES			
OFL0001 DED & OFL3001 TE	LaSalle Bank, N.A. as successor to Western National Bank of Cicero as Trustee under Trust Agreement dated July 24, 1973 known as Trust No. 5261	29.864 ±	0.164 ±	29.864 ±		0.075 ±	Grading	16-34-100-001 16-34-100-002	
OFL0002 DED & OFL3002 TE	Judith A. Elserman as to an undivided 1/2 interest and Jeffrey Elserman as to an undivided 1/2 interest	0.402 ±	33 sf ±	0.402 ±		500 sf ±	Grading	16-34-200-028	

LEGEND



Bearings are based on an assumed value of North 88° 47' 52" East along the centerline of FAU 1463 (31st Street) and S. Kostner Avenue



● IRON PIPE OR ROD FOUND ○ SET 5/8" x 30" REBAR
+ CUT CROSS FOUND OR SET PK ● FOUND PK NAIL PK ○ SET PK NAIL

T1 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8" IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
T2
T3

■ STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

⊙ PERMANENT SURVEY MARKER, I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)

□ RIGHT OF WAY STAKING PROPOSED TO BE SET.

STATE OF ILLINOIS } S.S.
COUNTY OF COOK }

THIS IS TO CERTIFY THAT I, WILLIAM J. FLEMING, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 34, TOWNSHIP 39 NORTH, RANGE 13 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY; THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY; THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

DATED AT CHICAGO, ILLINOIS THIS 7TH DAY OF FEBRUARY, A.D. 2007.

Wm. J. Fleming
WILLIAM J. FLEMING
ILLINOIS PROFESSIONAL LAND SURVEYOR 35-3226
EXPIRES 11/30/2008

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
ENGINEERS & LAND SURVEYORS
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60614
(773) 399-0112
Illinois Professional Design Corporation 184-000938

Coordinates are based on an assumed value of North 1883681.270 - East 1147556.200 on the found PK nail at the intersection of the centerline of FAU 1463 (31st Street) and the centerline of S. Kostner Avenue

Station	Offset	North	East
227	527+13.35 15.34' Lt	1883625.738	1144909.973
236	525+63.30 52.70' Rt	1883477.012	1144980.809
250	525+63.28 74.70' Rt	1883477.475	1145002.804
253	525+63.27 84.70' Rt	1883477.686	1145012.801
252	522+38.30 52.78' Rt	1883152.091	1144987.970
251	522+38.28 74.78' Rt	1883152.554	1145009.965
254	522+38.27 87.78' Rt	1883152.764	1145019.963
222	126+66.51 32.76' Rt	1883649.236	1147589.929
256	126+66.51 38.76' Rt	1883643.238	1147590.064
257	126+66.53 58.76' Rt	1883623.243	1147590.514
255	126+77.51 32.76' Rt	1883649.474	1147600.927
258	127+07.51 32.76' Rt	1883650.121	1147630.920

REVISION

DATE	DESCRIPTION
07/30/03	Add 0001 Rev 0001 TE Rev 0002 Rev 0002 TE
10/20/03	Change 0001 to 0001 DED Change 0002 to 0002 DED
02/07/07	Updated TE Parcel Nos.

PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
FAU 1463 (31st STREET)

SECTION IL 50 (CICERO AVE) TO KOSTNER A. E
COOK COUNTY JOB NO. R-90-019-02
STATION 100+00 TO STATION 128+00
SCALE: 1" = 20' SHEET 2 OF 2

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

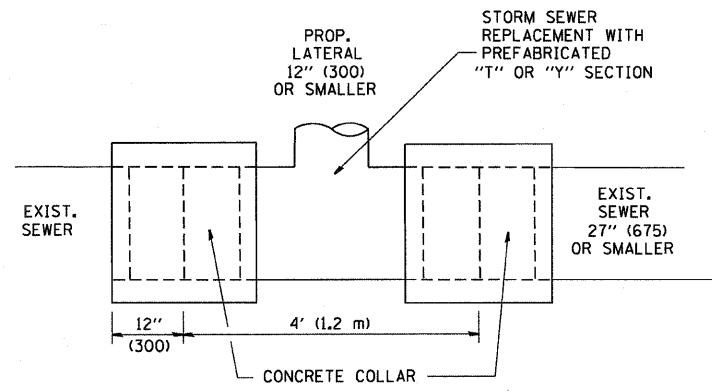
SHEET 1 OF 2 IS A COVER SHEET AND IS NOT RECORDED

AS DOCUMENT NO.

BY	DATE	MADE	CHECKED	PLATTED	BOOK #

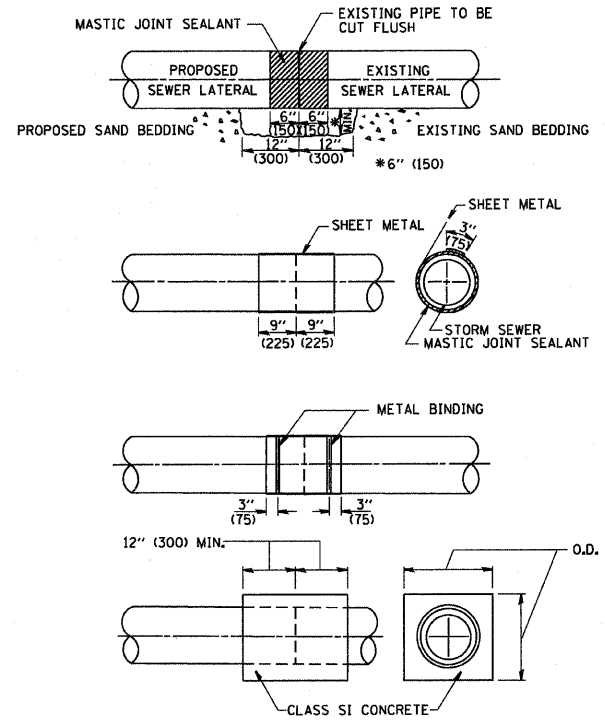
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	140

STA.	TO STA.
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT



DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER

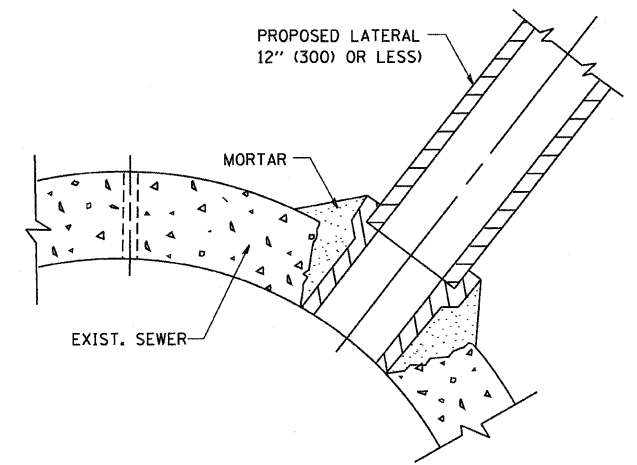


DETAIL "B"

CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

- CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
- APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
- BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12' x 6' (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
- CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERENCE OF THE PIPE PLUS 3" (75) LONG.
- WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
- LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
- PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
- WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OZZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
- PLACE CLASS SI CONCRETE AROUND THE JOINT.



DETAIL "C"

PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

- THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
 - CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
 - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
 - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".
- IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

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

REVISIONS	
NAME	DATE
M. DE YONG	07/25/90
M. DE YONG	02/05/92
M. DE YONG	05/08/92
R. SHAH	09/09/94
R. SHAH	10/25/94
R. SHAH	06/12/96

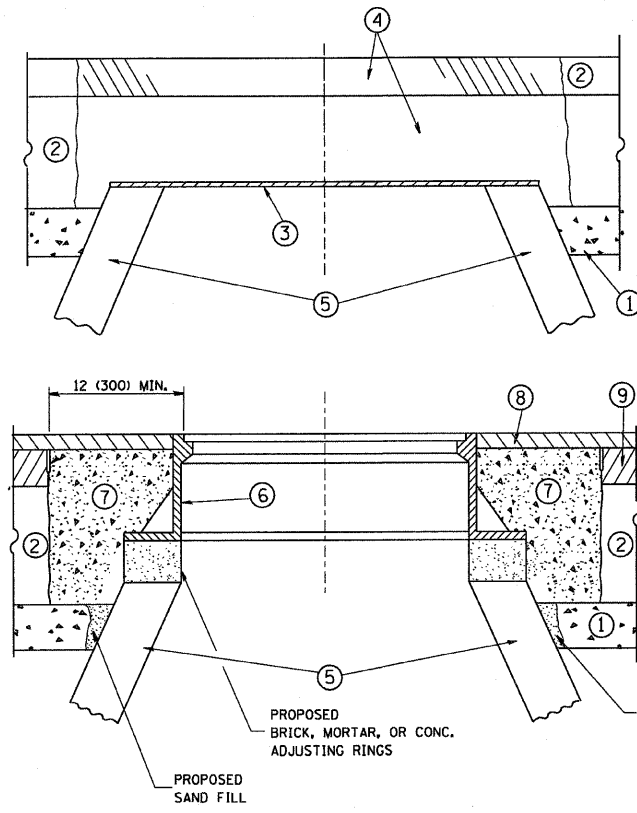
ILLINOIS DEPARTMENT OF TRANSPORTATION
DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER

SCALE: VERT. NONE
 HORIZ. _____

DRAWN BY _____
 CHECKED BY _____

PLOT DATE = 7/8/98
 FILE NAME = K:\projects\bd5007.dgn
 PLOT SCALE = 0.8000 / IN.
 USER NAME = bauerdl

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	141
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS SI CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

LEGEND

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

REVISIONS	
NAME	DATE
R. SHAH	10/25/94
R. SHAH	01/30/95
R. SHAH	03/10/95
A. ABBAS	03/21/97
R. WIEDEMANN	05/14/04
R. BORO	01/01/07

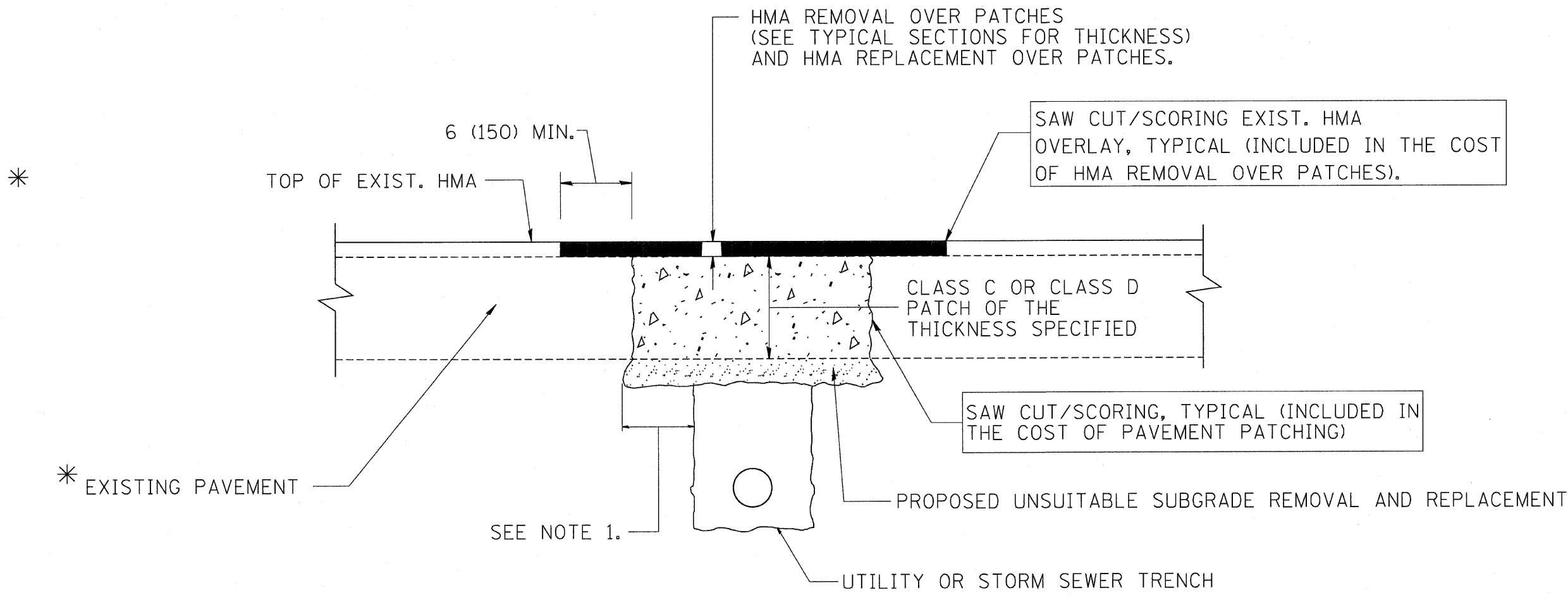
ILLINOIS DEPARTMENT OF TRANSPORTATION
**DETAILS FOR
FRAMES AND LIDS ADJUSTMENT
WITH MILLING**

SCALE: VERT. NONE
HORIZ.

DRAWN BY
CHECKED BY

BD600-03 (BD-8)

PLOT DATE = 2/6/2007
FILE NAME = K:\data\cfd\bd80.dgn
PLOT SCALE = 80.0000 / IN.
USER NAME = bbornd



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE FULL DEPTH PATCHES
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

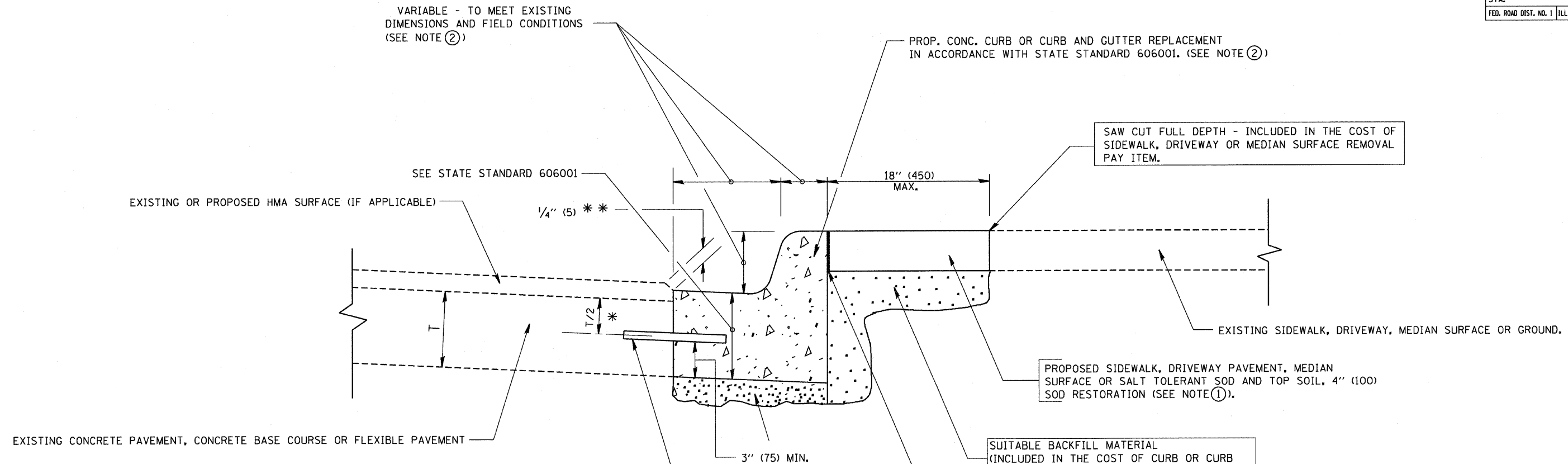
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
R. SHAH	10/25/94
R. SHAH	01/14/95
R. SHAH	03/23/95
R. SHAH	04/24/95
A. HOUSEH	03/15/96
A. ABBAS	03/21/97
A. ABBAS	01/20/98
ART ABBAS	04/27/98
R. BORO	01/01/07
R. BORO	09/04/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

SCALE: VERT. NONE
HORIZ. NONE
DRAWN BY
CHECKED BY
BD400-04 (BD-22)

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	143
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	



- * 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
- * * IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SALT TOLERANT SOD AND TOP SOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

- ② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.
- ③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.
- ④ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ⑤ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ⑥ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.
- ⑦ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

BASIS OF PAYMENT:
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

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

REVISIONS	
NAME	DATE
A. HOUSEH	03/11/94
R. SHAH	02/24/95
R. SHAH	03/02/95
R. SHAH	08/19/96
R. SHAH	09/12/96
R. SHAH	09/19/96
R. SHAH	10/03/96
A. ABBAS	03/21/97
M. GOMEZ	01/22/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

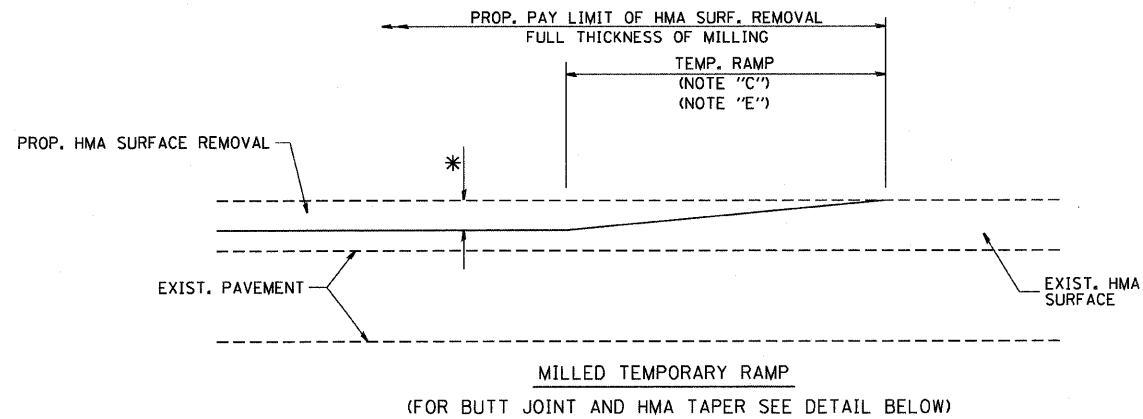
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

SCALE: VERT. NONE
HORIZ. DRAWN BY
CHECKED BY

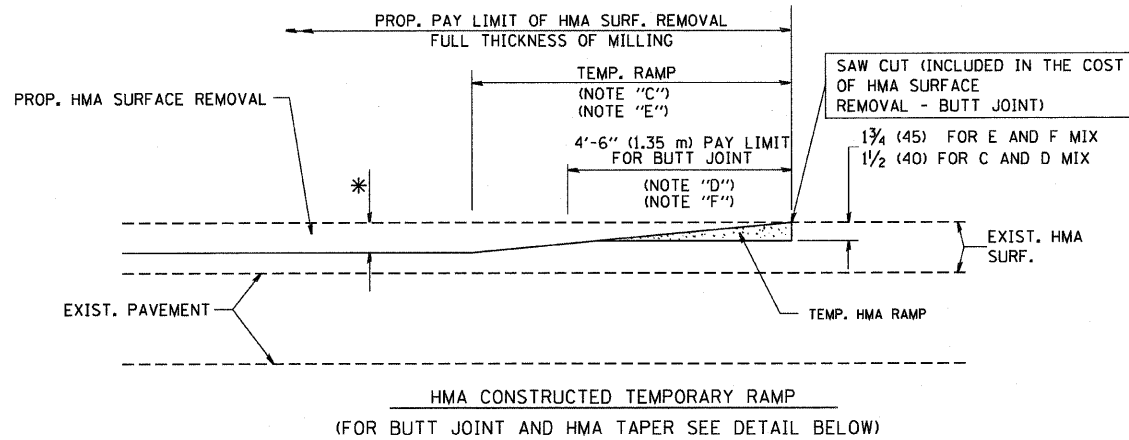
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

PLOT DATE = 3/15/2007
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PLOT SCALE = 80.0000 / IN.
USER NAME = bbornd

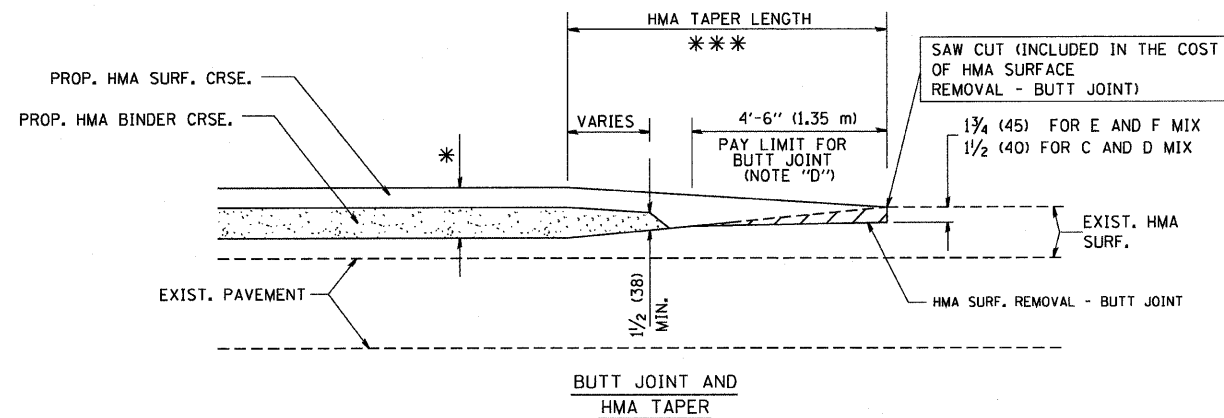
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	144
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	



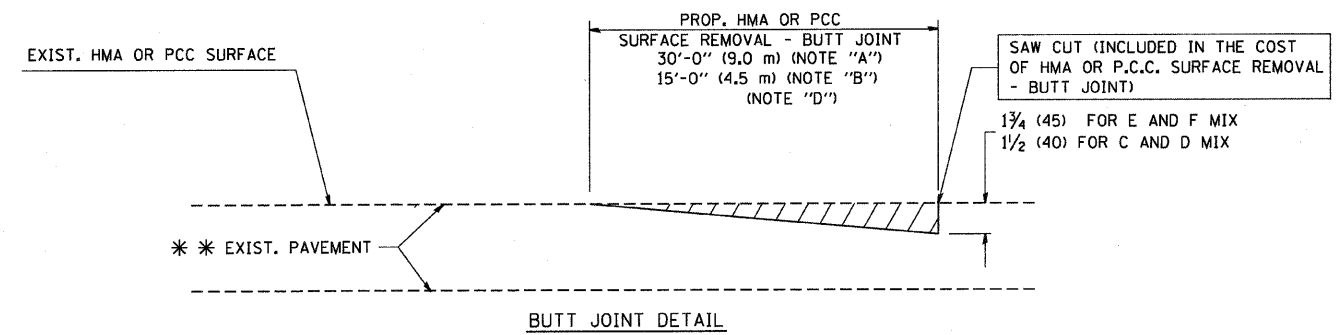
OPTION 1



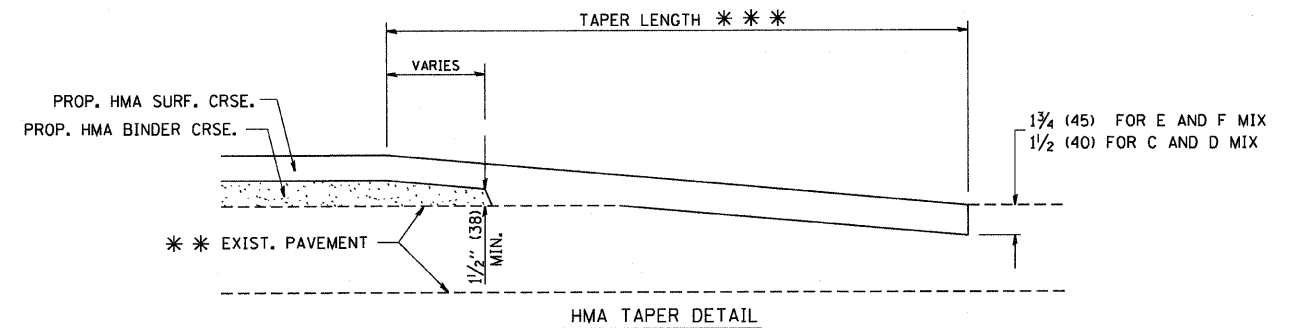
OPTION 2
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER
FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER
FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

*** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

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

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

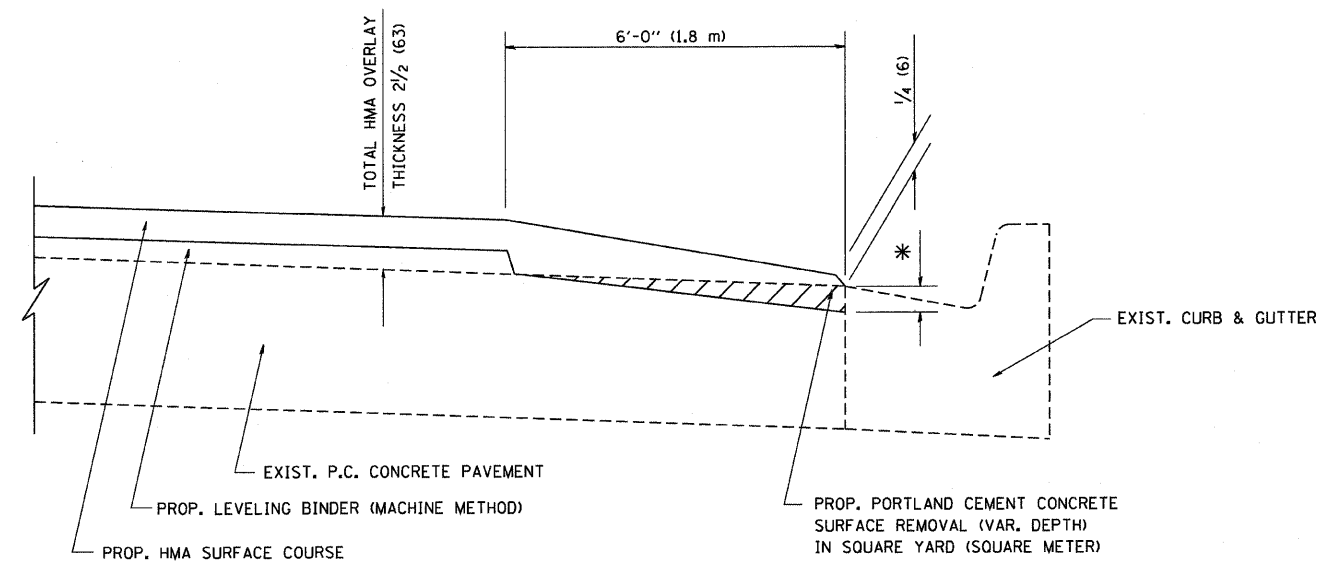
BUTT JOINT AND HMA TAPER DETAILS

SCALE: VERT. NONE
HORIZ.

DRAWN BY
CHECKED BY

BD400-05 (VI-BD32)

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	145
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	



HMA TAPER AT
EDGE OF P.C.C PAVEMENT

HMA SURFACE	THICKNESS	LEVELING BINDER	THICKNESS	* MILLING AT GUTTER FLAG
C OR D	1 1/2 (38)	1	(25)	1/4 (33)
F	1 3/4 (44)	3/4	(19)	1/2 (38)

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

REVISIONS	
NAME	DATE
R. SHAH	09/10/94
R. SHAH	10/25/94
A. ABBAS	05/05/99
E. GOMEZ	12/21/00
R. BORO	01/01/07

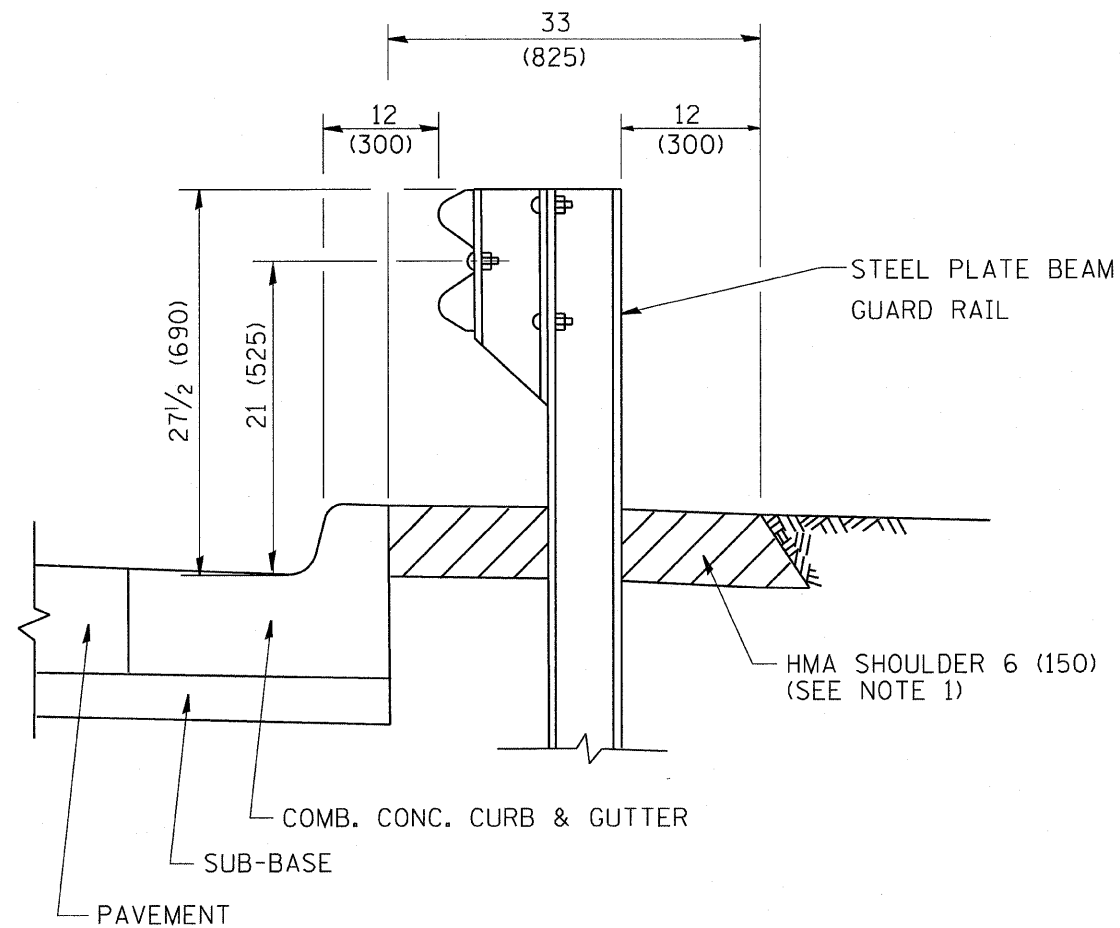
ILLINOIS DEPARTMENT OF TRANSPORTATION

HMA TAPER AT
EDGE OF P.C.C. PAVEMENT

SCALE: VERT. NONE
HORIZ. NONE
DRAWN BY Jls
CHECKED BY A. ABBAS

PLOT DATE = 2/6/2007
FILE NAME = K:\gis\assn\bd400-06.dgn
PLOT SCALE = 0.00000 / IN.
USER NAME = board1

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

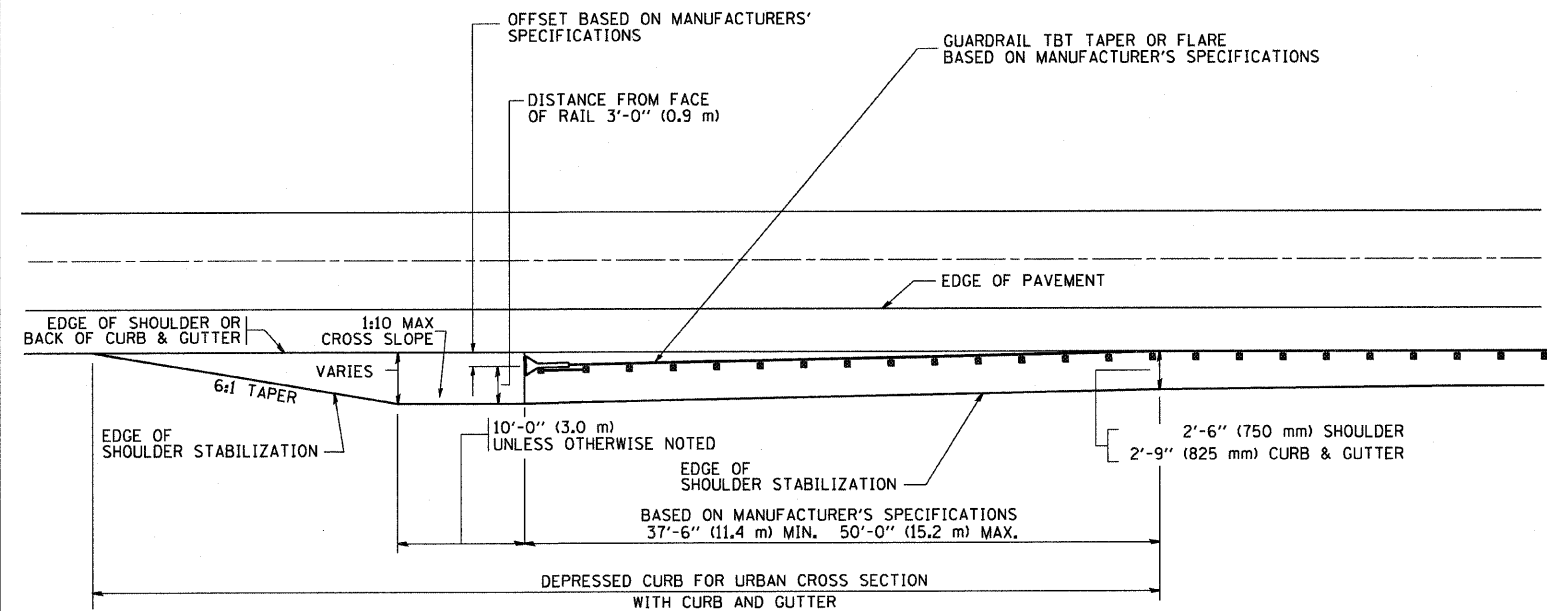


- NOTES: 1. THE HMA SHOULDER SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL
2. GUARD RAIL MAY BE PLACED AT THE BACK OF CURB WHEN DIRECTED BY THE ENGINEER.

BASIS OF PAYMENT: HMA SHOULDER 6 (150) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SHOULDER 6" (150 mm)".

STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER
 [FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]



STABILIZATION AT TBT TY. 1 SPL.

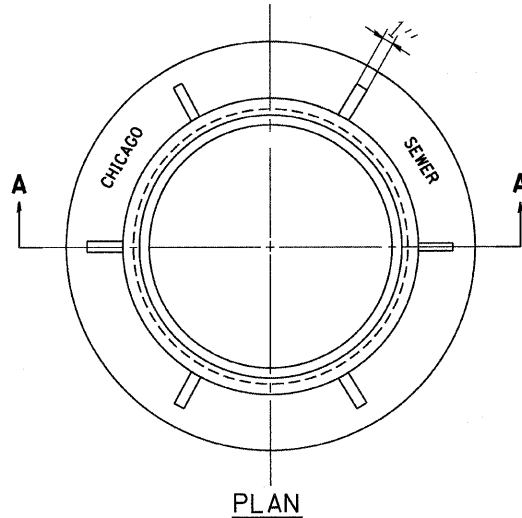
TBT = TRAFFIC BARRIER TERMINAL
 ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
M. DE YONG	09-22-90
M. DE YONG	07-14-92
R. SHAH	09/09/94
R. SHAH	10/25/94
R. SHAH	02/23/95
A. ABBAS	03/21/97
E. COMEZ	08/28/00
R. BORO	01/01/07

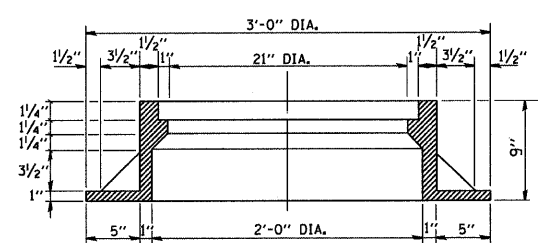
ILLINOIS DEPARTMENT OF TRANSPORTATION
DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER STABILIZATION AT TBT TY 1 SPL.

SCALE: VERT. NONE
 HORIZ. DRAWN BY jls
 CHECKED BY

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	147
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



PLAN

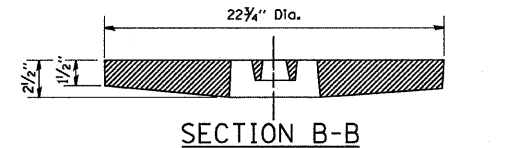


SECTION A-A

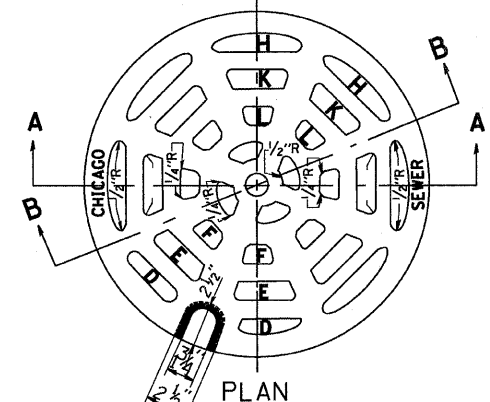
NOTE: METAL PLATES MUST BE FURNISHED FOR PERFORATED LIDS ON MANHOLES

CHICAGO STANDARD MANHOLE FRAME

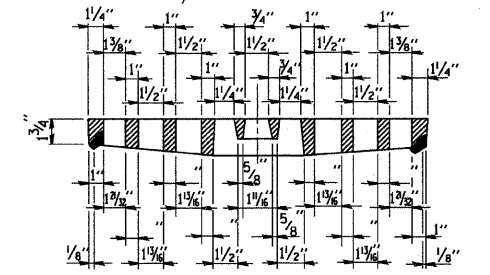
SCALE: 1/2"=1'-0"
MATERIAL: CAST IRON



SECTION B-B



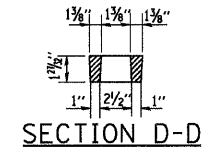
PLAN



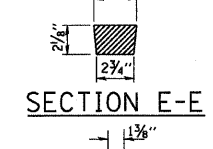
SECTION A-A

PERFORATED LID FOR CATCH BASINS & MANHOLES

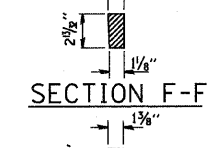
SCALE: 2"=1'-0"
MATERIAL: CAST IRON



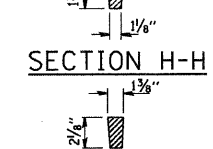
SECTION D-D



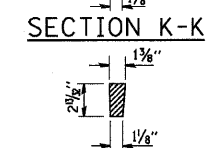
SECTION E-E



SECTION F-F

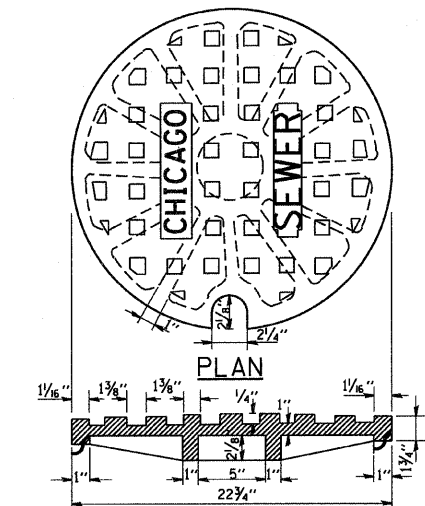


SECTION H-H



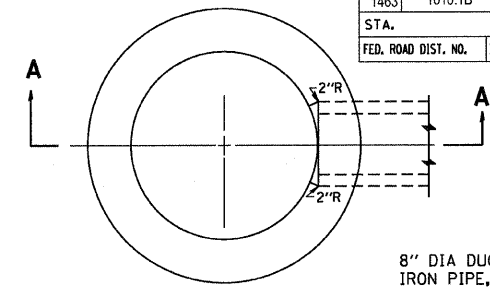
SECTION K-K

SECTION L-L



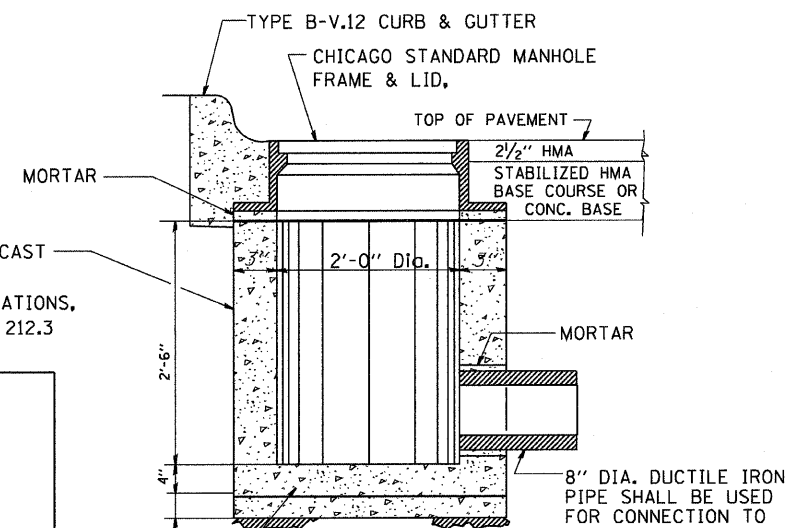
SOLID LID FOR MANHOLES

SCALE: NONE
MATERIAL: CAST IRON



PLAN

(FRAME & LID NOT SHOWN)



SECTION A-A

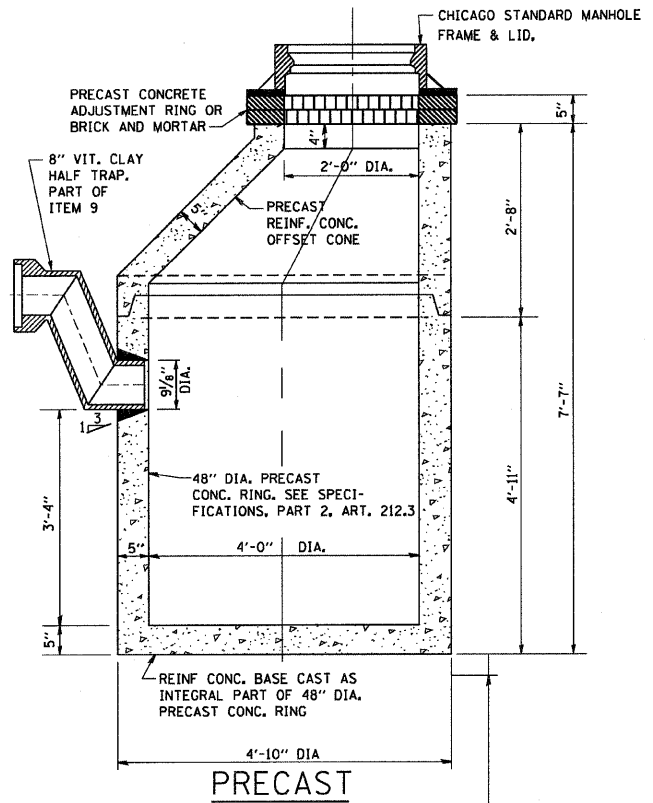
REINFC. CONC. BASE CAST AS INTEGRAL PART OF 24" DIA. PRECAST CONC. RING
6" MINIMUM GRANULAR EMBEDMENT UNDER ALL INLETS. FURNISHING AND INSTALLING GRANULAR EMBEDMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 12

STANDARD INLETS

SCALE 1"=1'-0"
ITEM 12

THIS INLET DETAIL IS SOMETIMES REFERRED TO AS "CHICAGO STANDARD INLET, TYPE A"

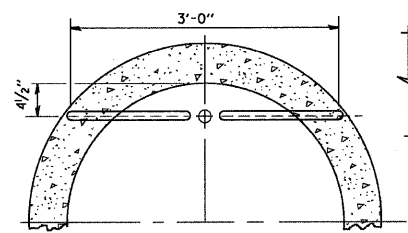
NOTE: INLETS SHALL NOT BE CONSTRUCTED UNLESS IT IS IMPOSSIBLE TO CONSTRUCT A CATCH BASIN. THE CONTRACTOR SHALL HAVE THE DEPARTMENT OF SEWERS APPROVAL BEFORE CONSTRUCTING INLETS.



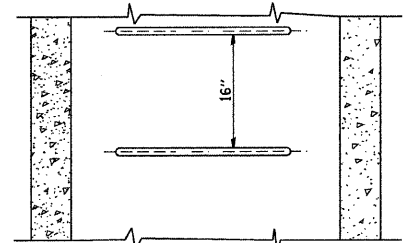
NOTE: 6" MINIMUM GRANULAR EMBEDMENT UNDER ALL CATCH BASINS

STANDARD CATCH BASINS

SCALE: 3/4"=1'-0"
ITEM 9

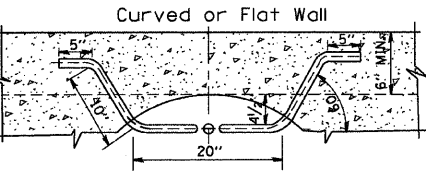


PLAN

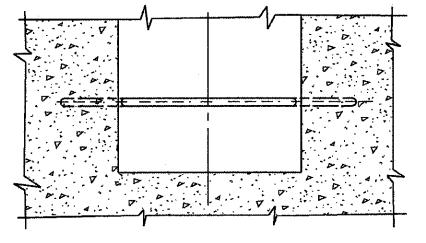


ELEVATION TYPE X

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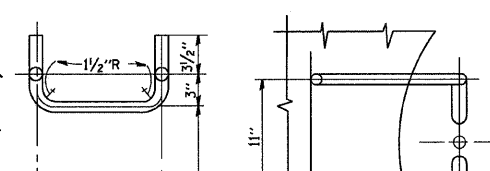


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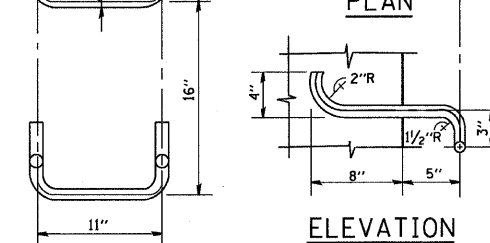


ELEVATION TYPE Y

SCALE: 1"=1'-0"



PLAN



ELEVATION

HANDHOLD-TYPE Z RUNG

Scale: 1/2"=1'-0"

ALL LADDER RUNGS SHALL BE ALUMINUM OR GALVANIZED WROUGHT IRON AS SPECIFIED IN THE SPECIFICATIONS, PART 2, ARTICLE 214.2. RUNGS SHALL BE 1" DIAMETER OR OF A SHAPE HAVING AN EQUIVALENT CROSS-SECTIONAL AREA.

STANDARD LADDER RUNGS

PLOT DATE = 3/15/2007
FILE NAME = K:\address\bd47.dgn
PLOT SCALE = 86.88888 / IN.
USER NAME = bward

REVISIONS	
NAME	DATE
M. GOMEZ	01/25/01

CITY OF CHICAGO
DEPARTMENT OF SEWERS
ENGINEERING DIVISION

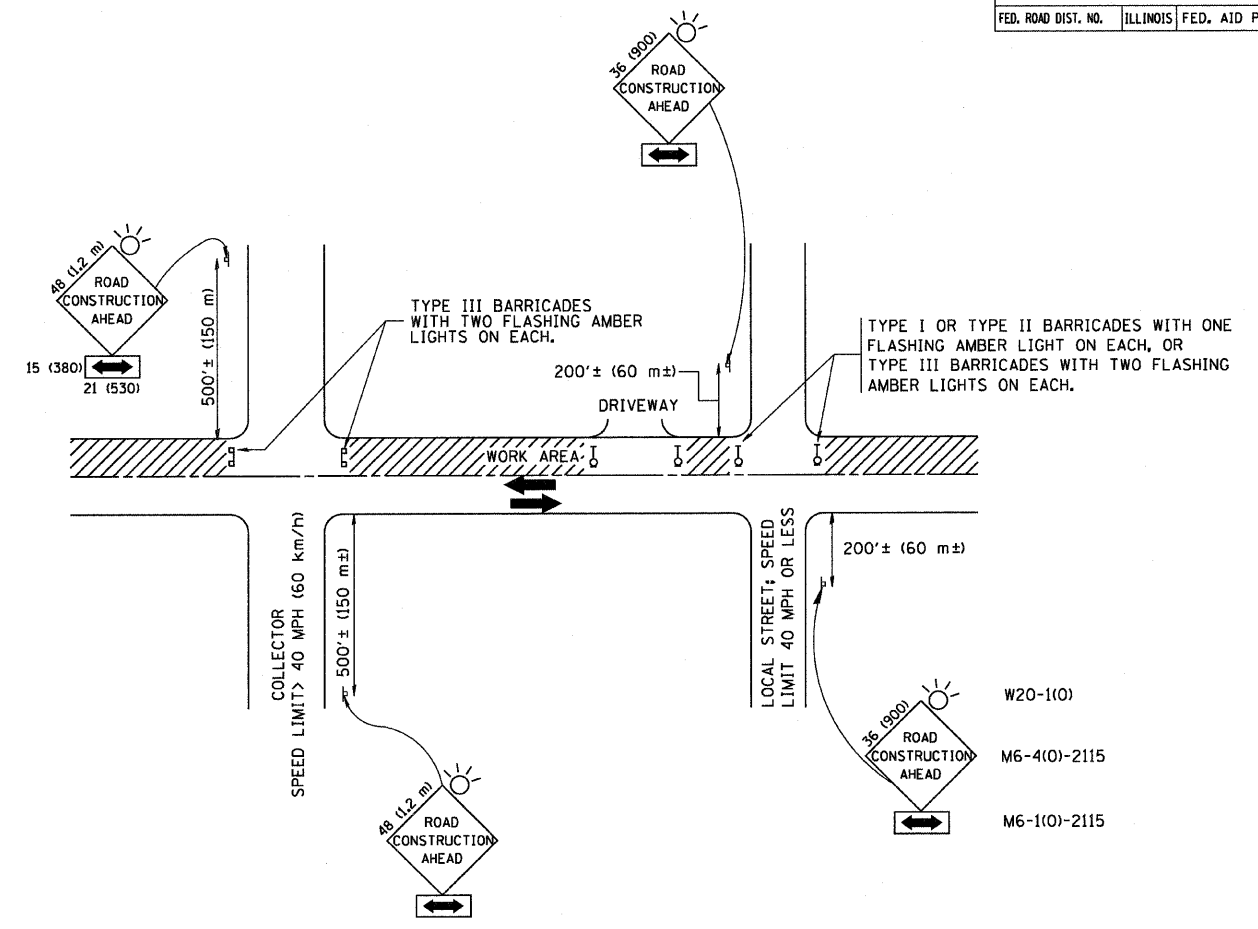
ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO CATCH BASIN, INLET AND MANHOLE DETAILS

SCALE: VERT. NONE
HORIZ.

DRAWN BY
CHECKED BY

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	148
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS**
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:**
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.**
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.**

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

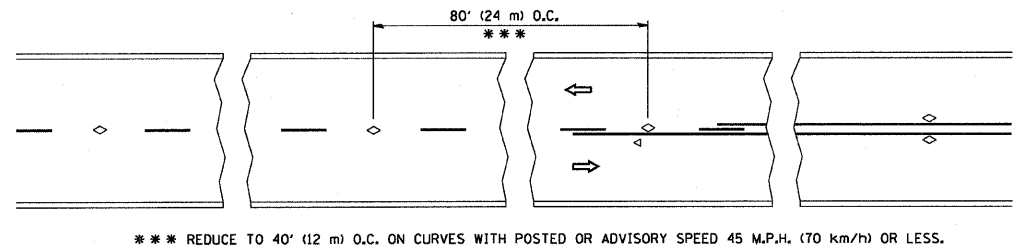
REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

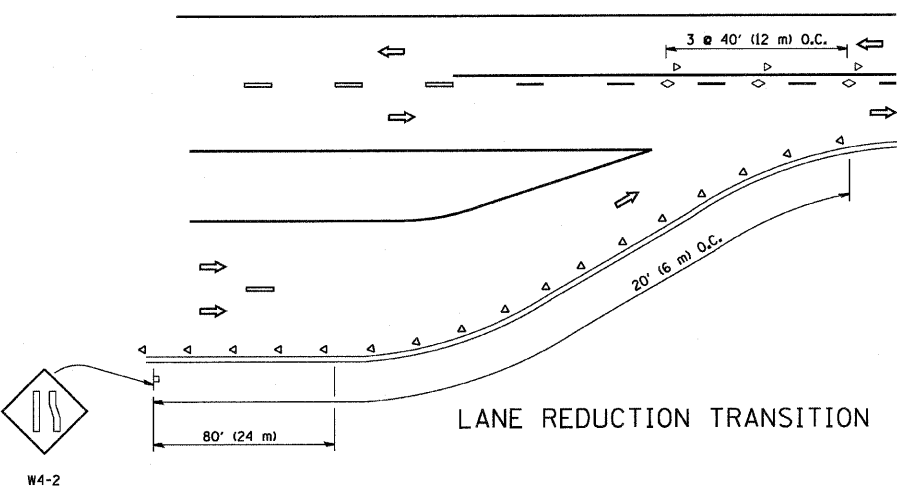
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 CHECKED BY
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 USER NAME = bauerd

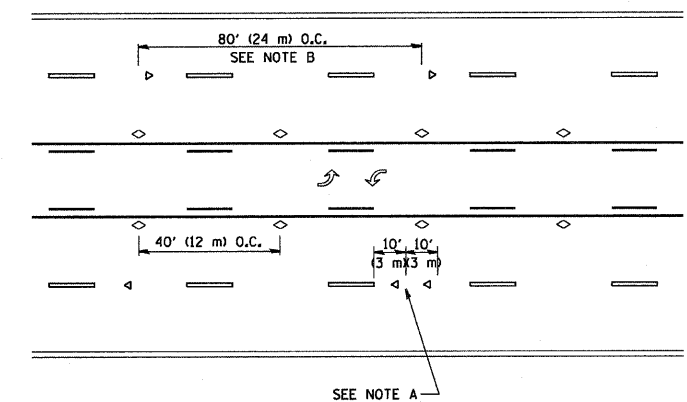
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	149
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



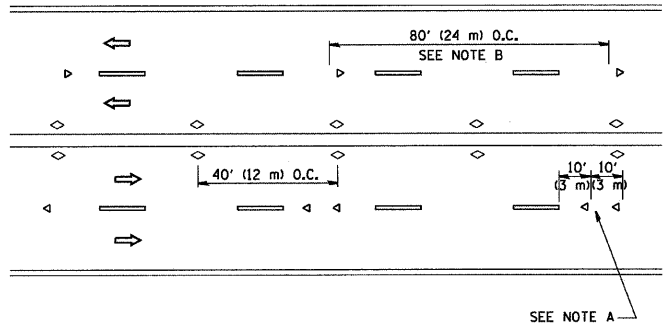
TWO-LANE/TWO-WAY



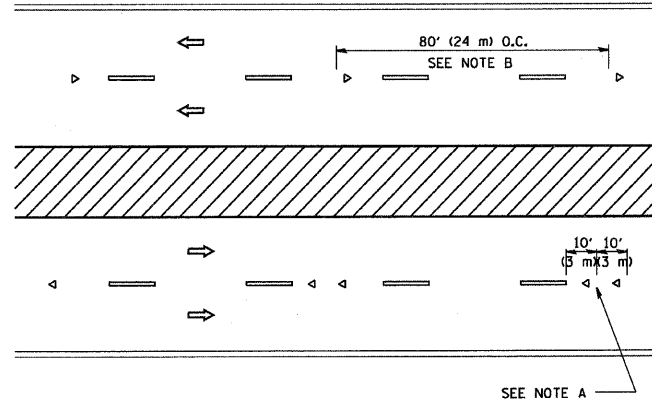
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

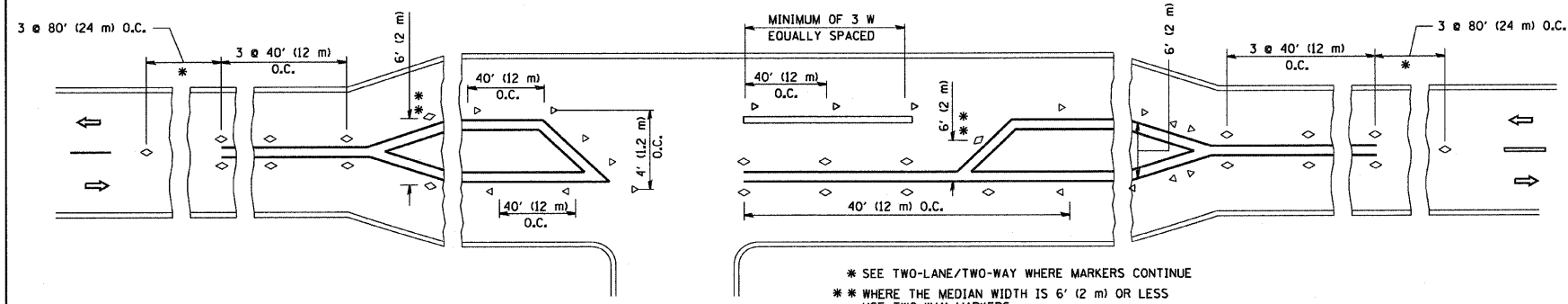
- YELLOW STRIPE
- WHITE STRIPE
- ◁ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◊ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



- * SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
- ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

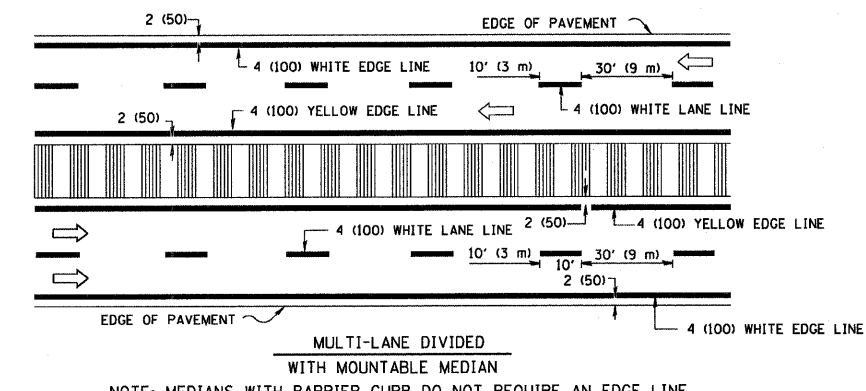
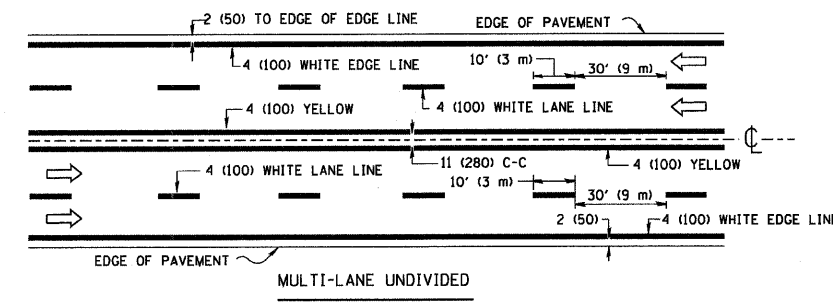
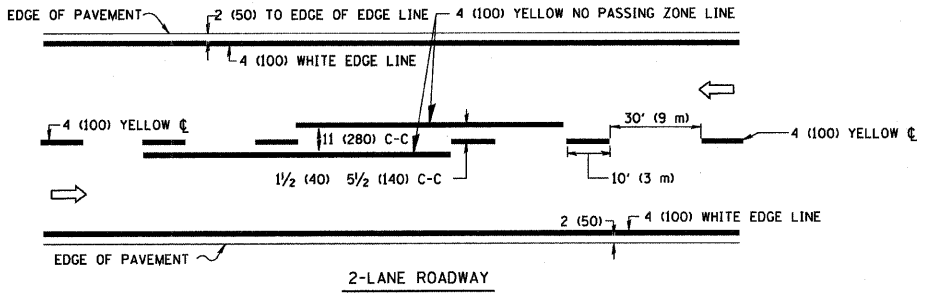
All dimensions are in inches (millimeters) unless otherwise shown.

REVISIONS	
NAME	DATE
T. RAMMACHER	09-19-94
T. RAMMACHER	03-12-99
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION
TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT
MARKERS (SNOW-PLOW RESISTANT)

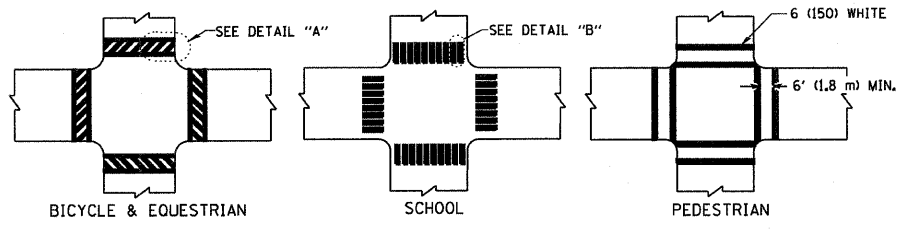
SCALE: NONE
DRAWN BY CADD
CHECKED BY
TC-11

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA. TO STA.		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		

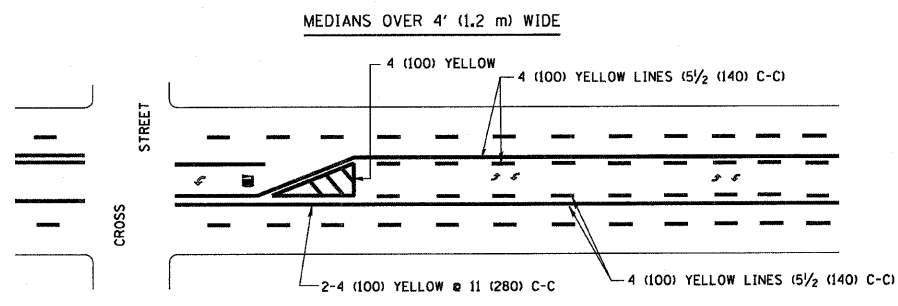
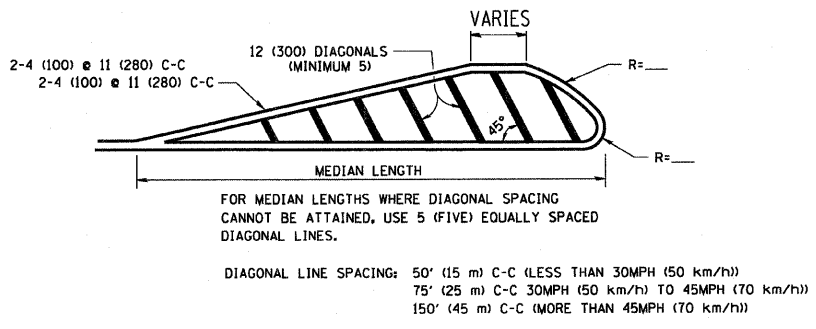
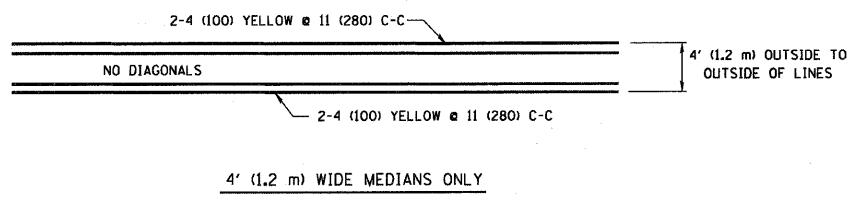


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

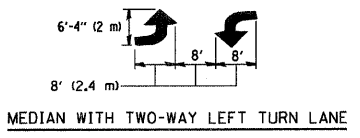
TYPICAL LANE AND EDGE LINE MARKING



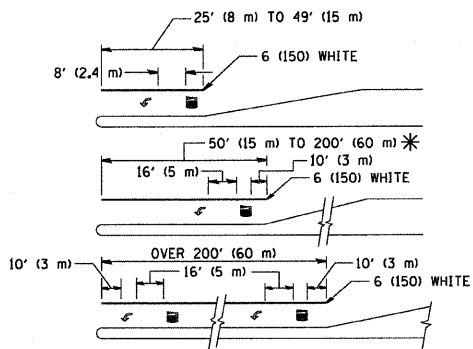
TYPICAL CROSSWALK MARKING



A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.

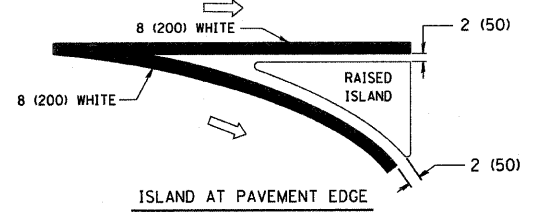
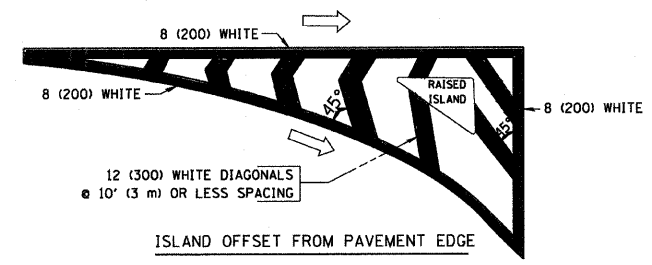


TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)
 * TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS 18" (2.4m)	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C (30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

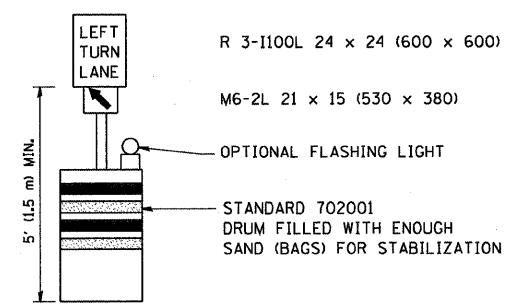
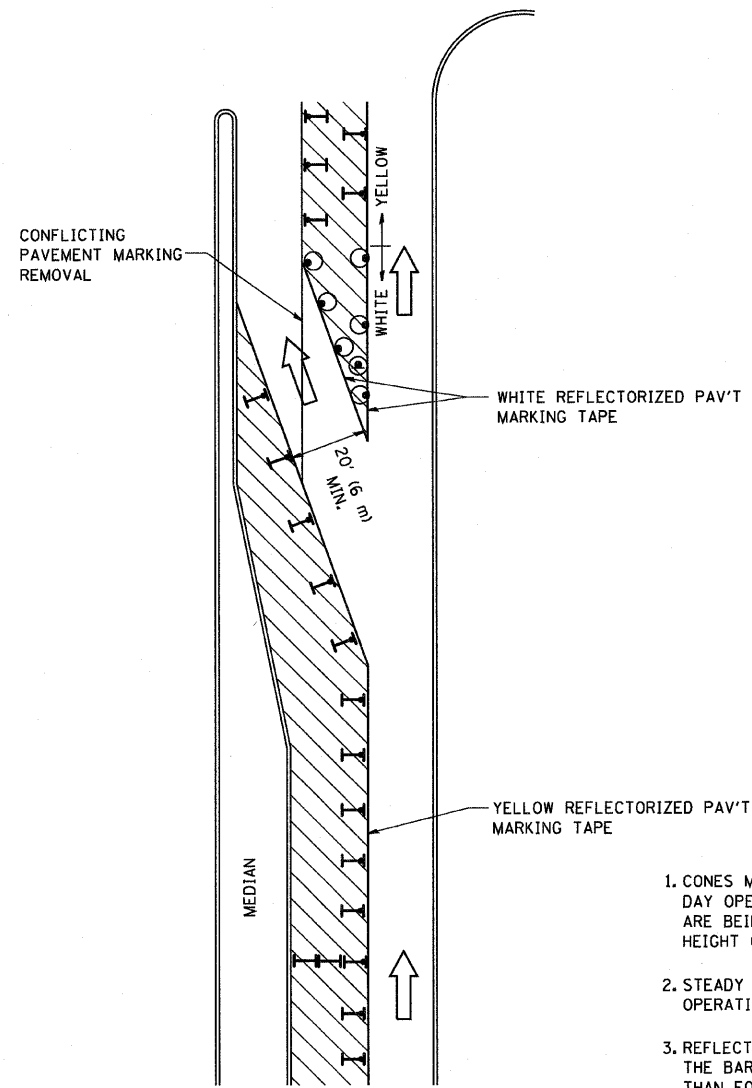
REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT ONE
 TYPICAL PAVEMENT MARKINGS

SCALE: NONE
 DRAWN BY CADD
 CHECKED BY
 TC-13

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 USER NAME = baumrdl

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

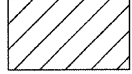







GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

LEGEND

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

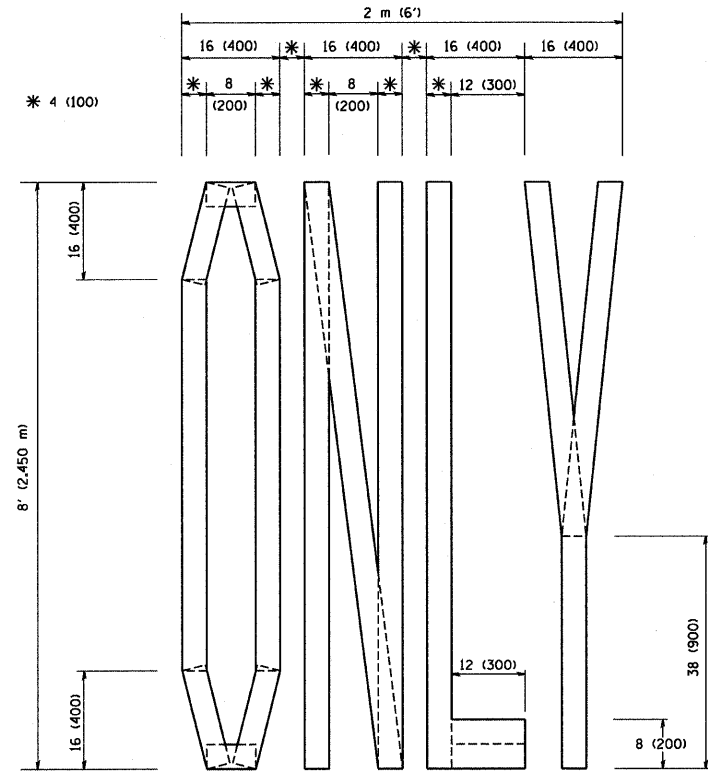
REVISIONS	
NAME	DATE
T. RAMMACHER	09/08/94
A. HOUSEH	11/07/95
A. HOUSEH	10/12/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL AND PROTECTION
 AT TURN BAYS
 (TO REMAIN OPEN TO TRAFFIC)**

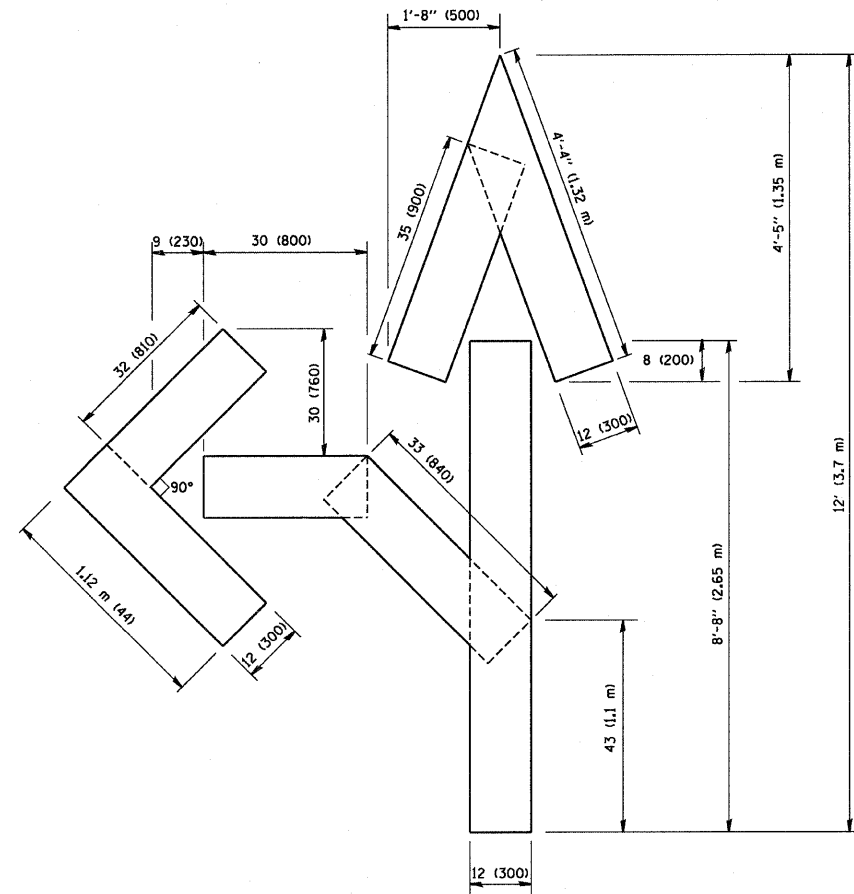
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 USER NAME = bwardl

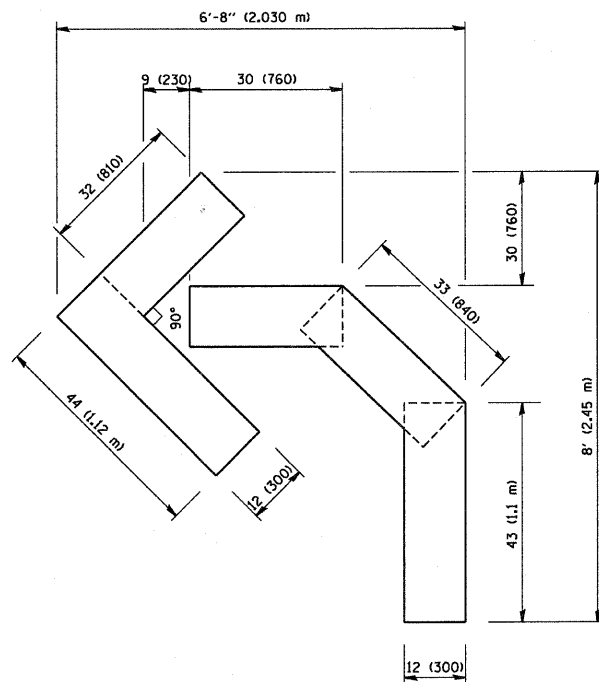
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	152
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



QUANTITY
 4 (100) LINE = 64.1 ft. (19.7 m)
 21.1 sq. ft. (1.97 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.3 m)
 27.5 sq. ft. (2.53 sq. m)



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.39 sq. m)

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

REVISIONS	
NAME	DATE
T. RAMMACHER	09/18/94
J. OBERLE	06/01/96
T. RAMMACHER	06/05/96
T. RAMMACHER	11/04/97
T. RAMMACHER	03/02/98
E. GOMEZ	08/28/00

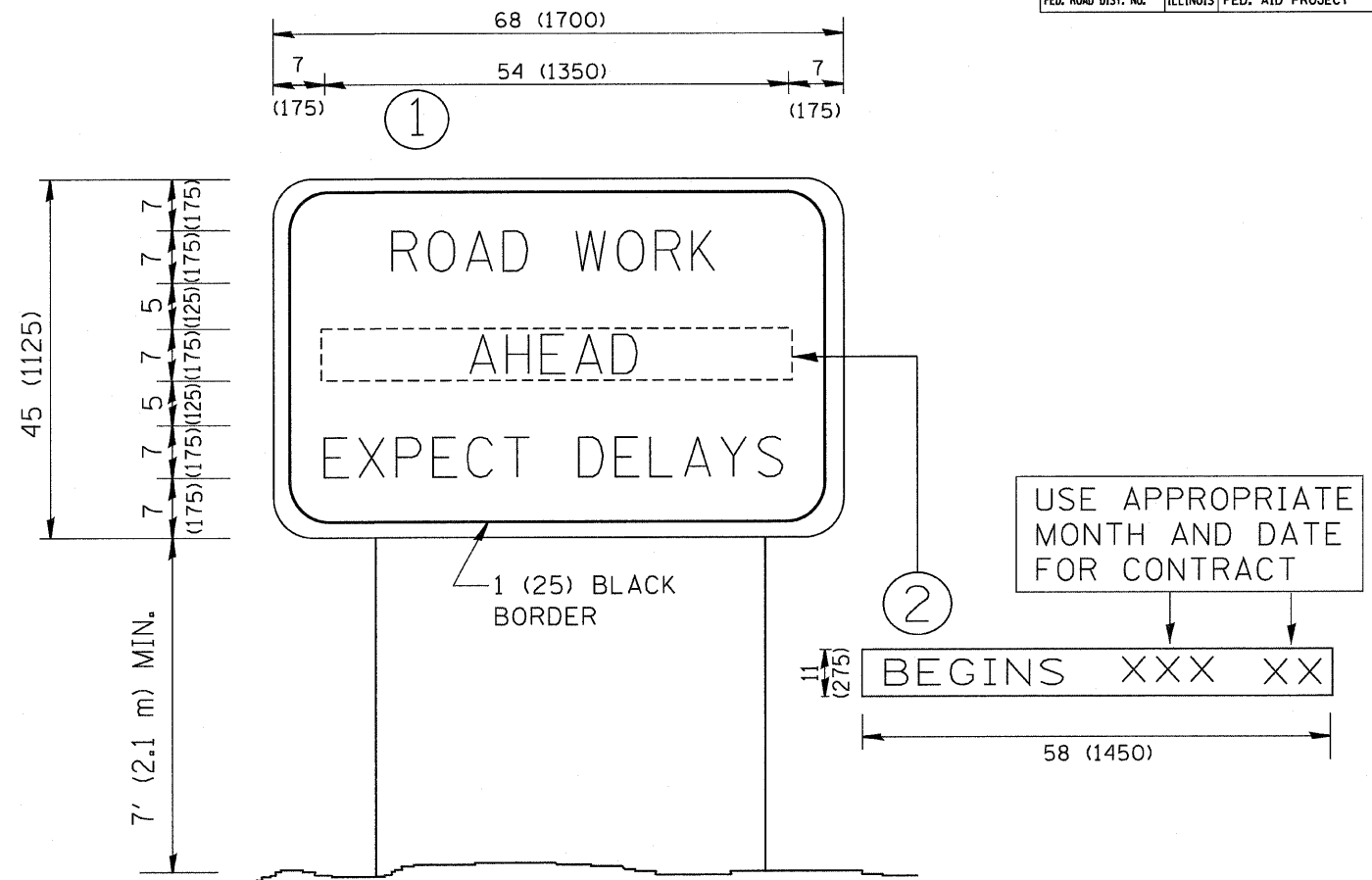
ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING
 LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING

SCALE: NONE

DRAWN BY CADD
 CHECKED BY

F.A.W. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	153
STA.		TO STA.		
FED. ROAD DIST. NO.	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 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99
C. JUCIUS	1-31-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

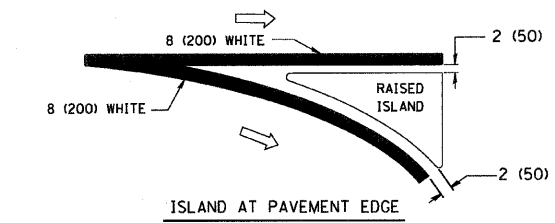
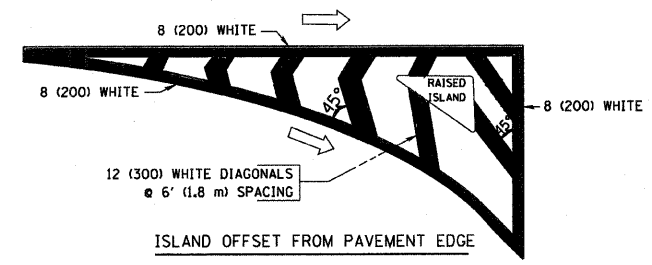
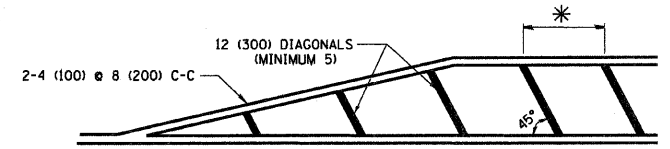
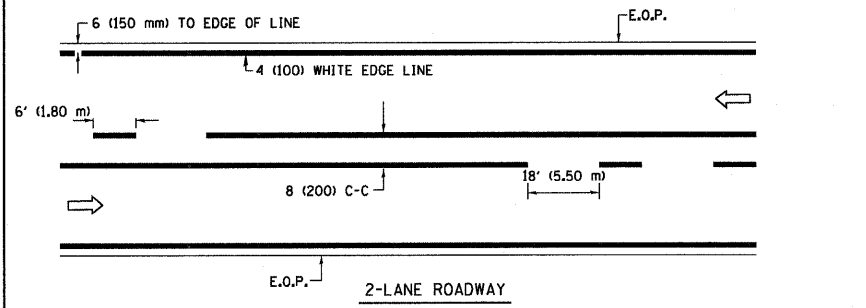
SCALE: NONE

DRAWN BY DESIGN

CHECKED BY

TC22

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	154
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

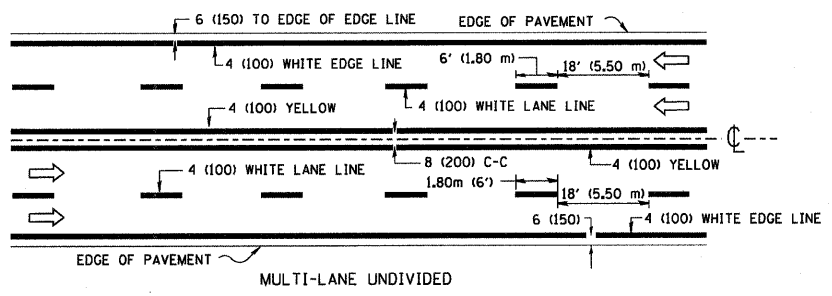


TYPICAL ISLAND MARKING

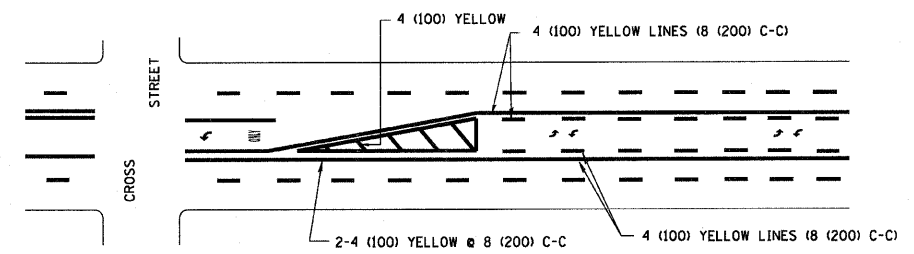
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	6' (1.80 m) LINE WITH 18' (5.50 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	8 (200) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	8 (200) C-C
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	6' (1.80 m) LINE WITH 18' (5.50 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS 18" (2.4 m)	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4 m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	6' (1.8 m) LINE WITH 18' (5.50 m) SPACE FOR SKIP-DASH; 8 (200) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 4 (150) 12 (300) @ 45° 8 (200) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2'-4" (700) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45°	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	8 (200) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 20' (6.1 m) (LESS THAN 30 MPH (50 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STREET MARKING STANDARDS, PRINTED BY CITY OF CHICAGO, DEPARTMENT OF TRANSPORTATION, BUREAU OF TRAFFIC.

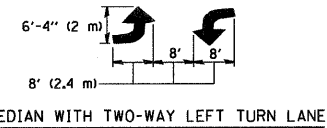
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.



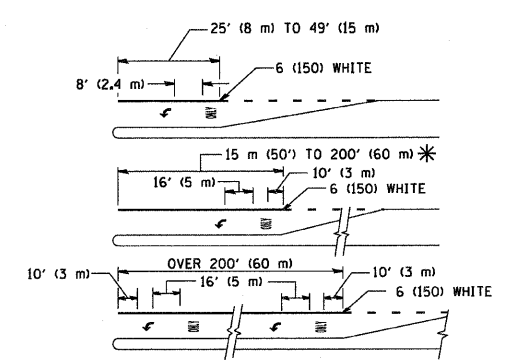
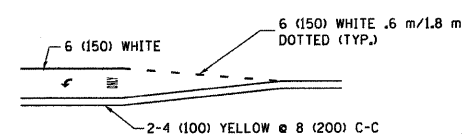
PAINTED MEDIANS



A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



TYPICAL PAINTED MEDIAN MARKING

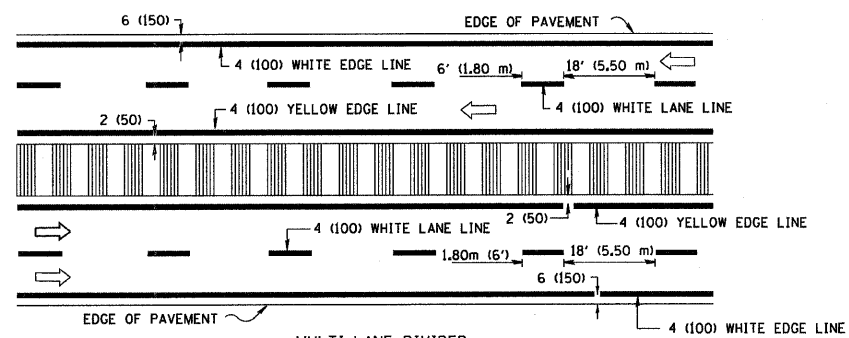


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.8 SQ. FT. (1.47 m²) ONLY AREA = 22.9 SQ. FT. (2.13 m²)

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

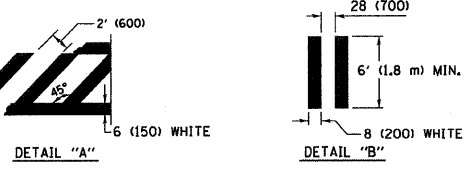
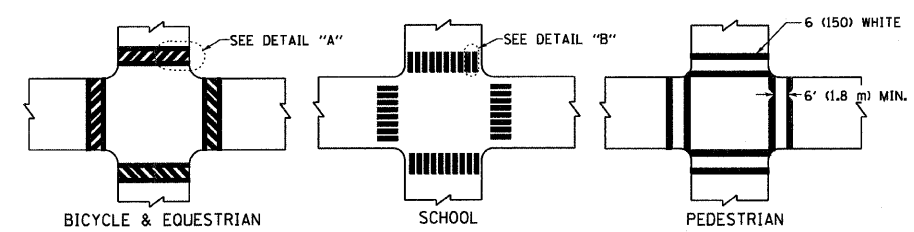
TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

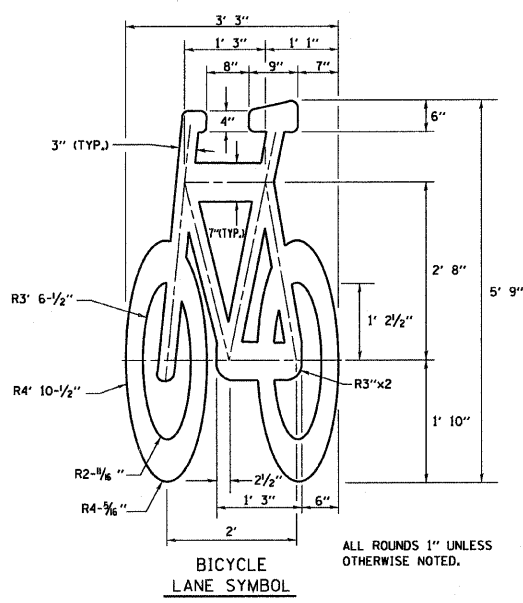
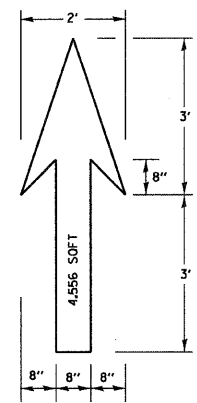


TYPICAL CROSSWALK MARKING

REVISIONS	
NAME	DATE
T. RAMMACHER	12/07/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
CITY OF CHICAGO
TYPICAL PAVEMENT MARKINGS

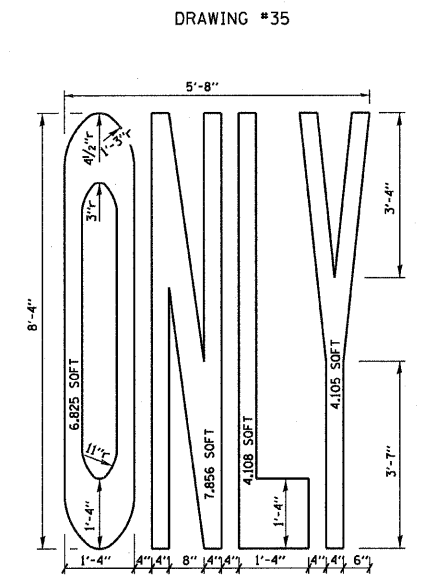
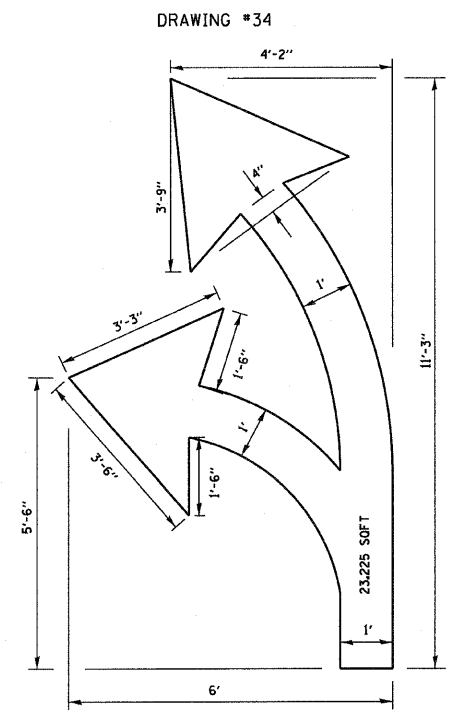
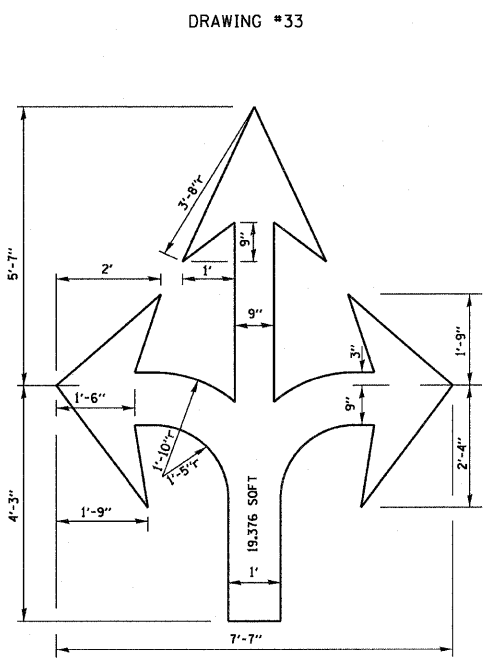
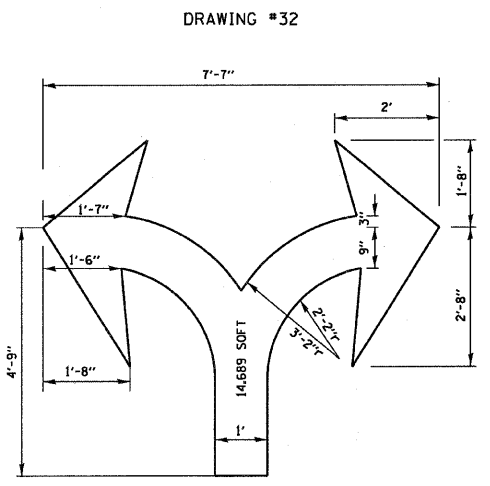
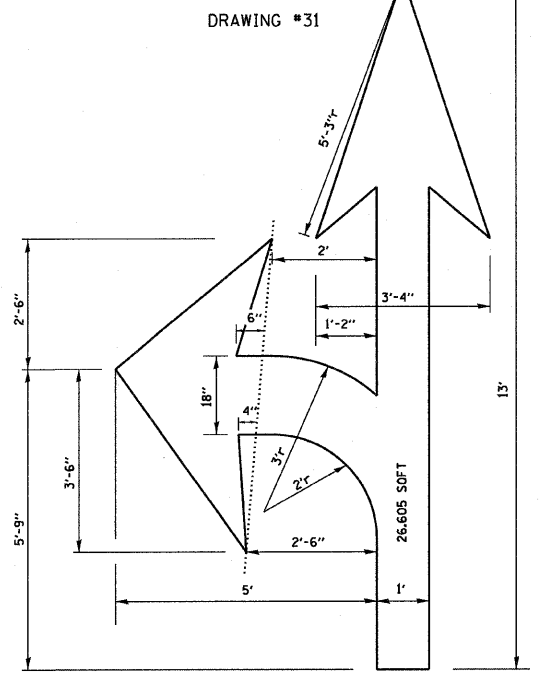
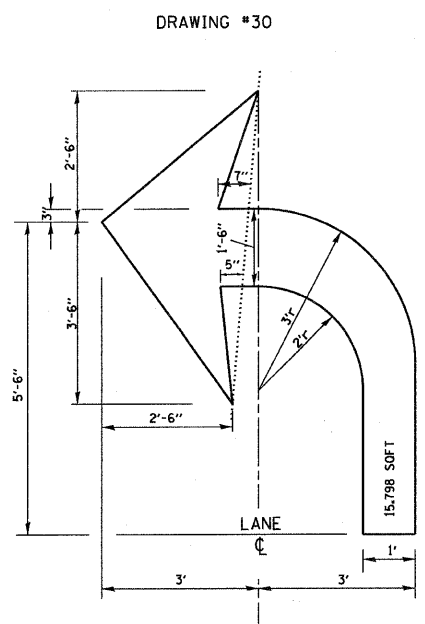
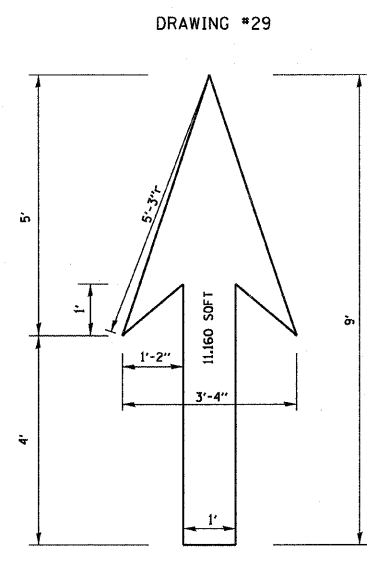
SCALE: NONE
DRAWN BY CADD
CHECKED BY
TC-24



NOTE:
 1.) FOR BIKE LANE SYMBOLS ONLY, USE PRE-FORMED THERMOPLASTIC WITH A MINIMUM THICKNESS OF 90 MILS, MINIMUM SKID RESISTANCE VALUE OF 60 BPN, & A MINIMUM INDEX OF REFRACTION OF 1.50.
 2.) THE RESIDENT ENGINEER SHALL CONTACT MR. BEN GOMBERG AT 312-744-8093 AT LEAST ONE CALENDAR WEEK PRIOR TO INSTALLING BIKE LANE SYMBOLS.

TYPICAL BIKE LANE SYMBOLS
DRAWING #28

PLOT DATE = 3/7/2007
 FILE NAME = K:\asst\acc24.dgn
 PLOT SCALE = 80.0000 / 1" =
 USER NAME = bauerdl



NOTE:
ALL MARKINGS SHALL BE SOLID WHITE UNLESS OTHERWISE NOTED IN THE PLANS

REVISIONS	
NAME	DATE
T. RAMMACHER	12/07/00

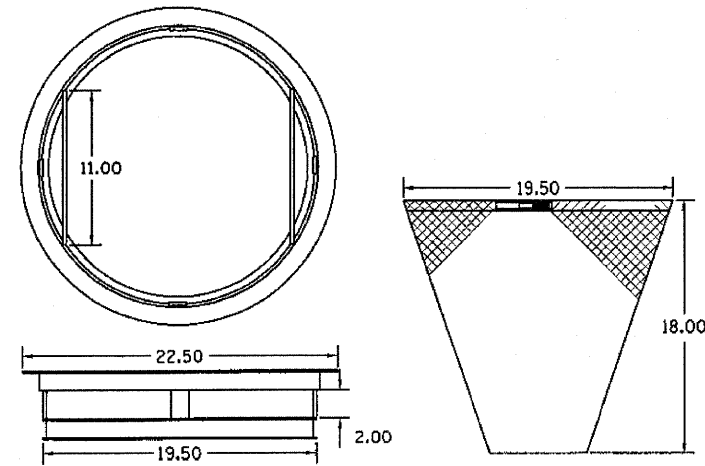
ILLINOIS DEPARTMENT OF TRANSPORTATION
CITY OF CHICAGO
 TYPICAL PAVEMENT MARKINGS

SCALE: NONE
 DRAWN BY
 CHECKED BY
 TC-24

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463		COOK	171	156
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

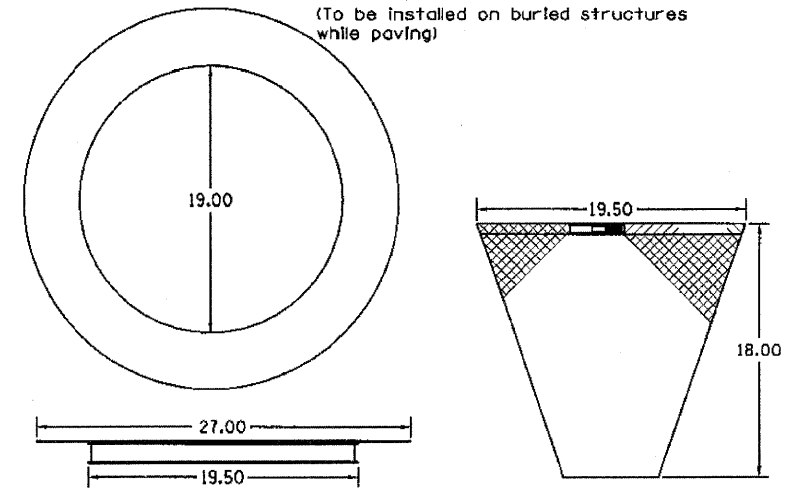
*1010.1B

TYPE I INLET FILTER



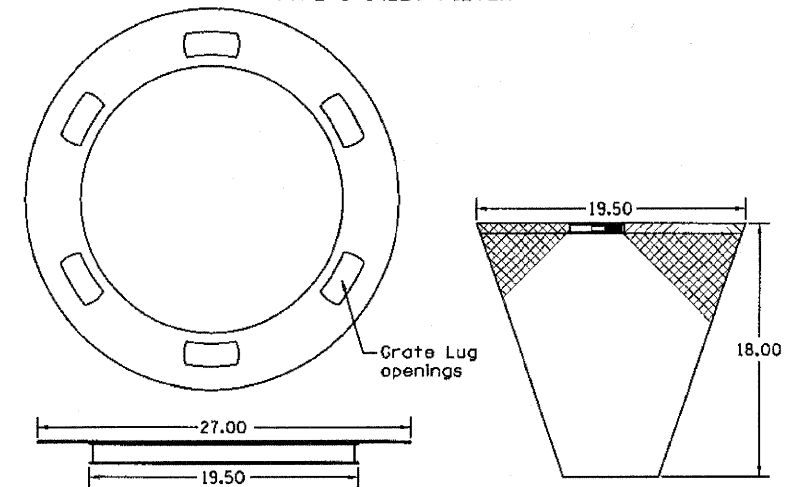
NOTES:
 FRAME: Top ring shall be fabricated from 1 1/4" x 1 1/4" x 1/8" angle. Base ring shall be fabricated from 1 1/2" x 1/2" x 1/8" channel. Handles and suspension brackets shall be fabricated from 1 1/4" x 1/4" flat stock. Domestic steel conforming to ASTM-A36.
 SEDIMENT BAGS: Shall be fabricated from 4 oz./sq. yd. non-woven polypropylene geotextile and shall be reinforced with polyester mesh. The bag shall be secured to the base ring with a stainless steel strap and lock.

CATCH BASIN & INLET FILTER
 (To be installed on buried structures while paving)



NOTES:
 FRAME: Flange shall be fabricated from 1/8" flat stock. Base ring shall be fabricated from 1 1/2" x 1/2" x 1/8" channel. Domestic steel conforming to ASTM-A36.
 SEDIMENT BAG: Shall be fabricated from 4 oz./sq. yd. non-woven polypropylene geotextile and shall be reinforced with polyester mesh. The bag shall be secured to the base ring with a stainless steel strap and lock.

TYPE B INLET FILTER



NOTES:
 FRAME: Flange shall be fabricated from 1/8" flat stock. Base ring shall be fabricated from 1 1/2" x 1/2" x 1/8" channel. Domestic steel conforming to ASTM-A36.
 SEDIMENT BAG: Shall be fabricated from 4 oz./sq. yd. non-woven polypropylene geotextile and shall be reinforced with polyester mesh. The bag shall be secured to the base ring with a stainless steel strap and lock.

NOTE: ALL UNITS ARE IN INCHES UNLESS OTHERWISE NOTED

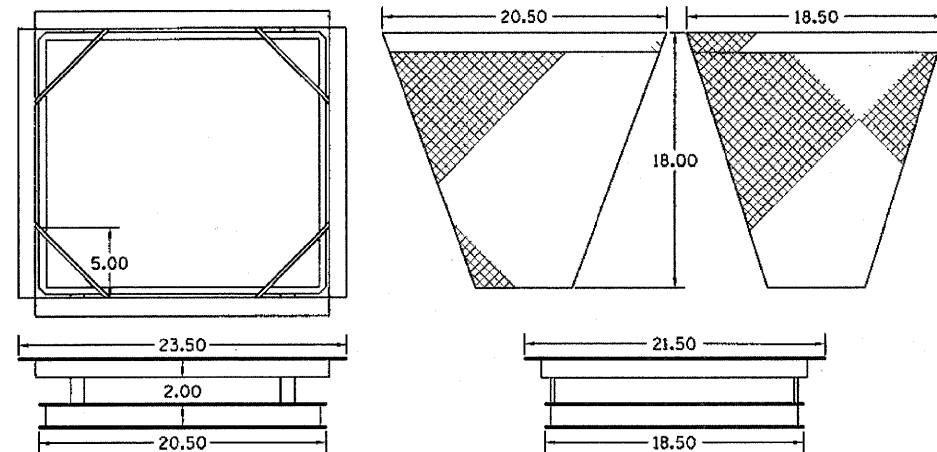
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		INLET FILTER DETAILS (SHEET 1 OF 2)
SCALE NONE		DRAWN BY
DATE		CHECKED BY

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	•	COOK	171	157
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

•1010.1B

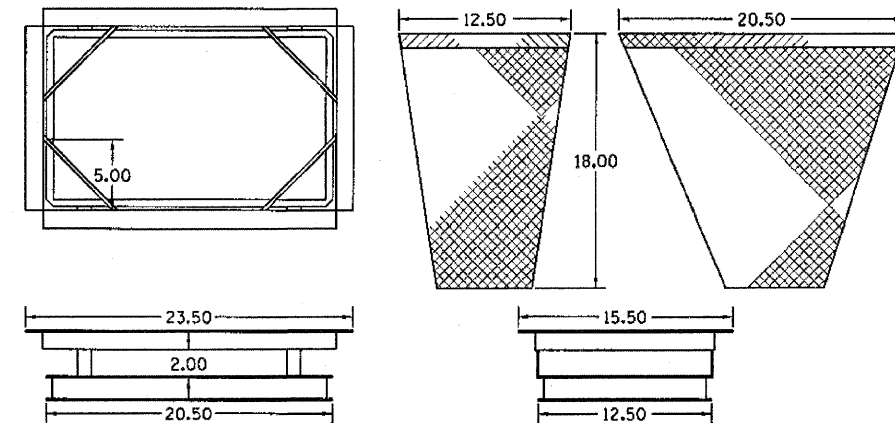
TYPE 24 INLET FILTER

NOTES:
 FRAME: Top piece shall be fabricated from 1 1/4" x 1 1/4" x 1/8" angle.
 Base piece shall be fabricated from 1 1/2" x 1/2" x 1/8" channel. Handles and suspension brackets shall be fabricated from 1 1/4" x 1/4" flat stock. Domestic steel conforming to ASTM-A36.
 SEDIMENT BAG: Shall be fabricated from 4 oz./sq. yd. non-woven polypropylene geotextile and shall be reinforced with polyester mesh. The bag shall be secured to the base piece with a stainless steel strap and lock.



TYPE 23 INLET FILTER

NOTES:
 FRAME: Top piece shall be fabricated from 1 1/4" x 1 1/4" x 1/8" angle.
 Base piece shall be fabricated from 1 1/2" x 1/2" x 1/8" channel. Handles and suspension brackets shall be fabricated from 1 1/4" x 1/4" flat stock. Domestic steel conforming to ASTM-A36.
 SEDIMENT BAG: Shall be fabricated from 4 oz./sq. yd. non-woven polypropylene geotextile and shall be reinforced with polyester mesh. The bag shall be secured to the base piece with a stainless steel strap and lock.



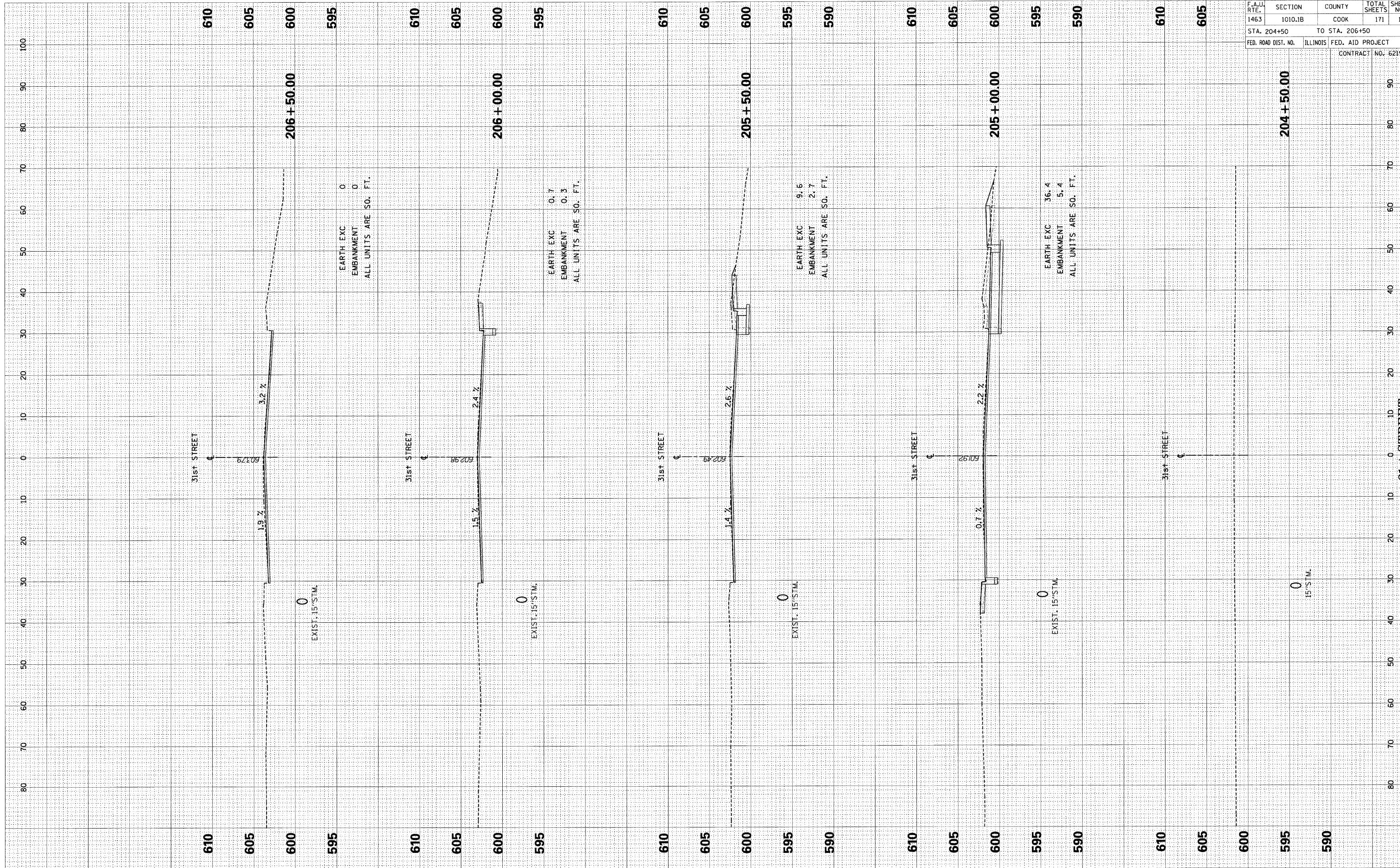
NOTE: ALL UNITS ARE IN INCHES
 UNLESS OTHERWISE NOTED

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		INLET FILTER DETAILS (SHEET 2 OF 2)
SCALE NONE		DRAWN BY
DATE		CHECKED BY

ORIGINAL SURVEY PLOTTED
NOTE BOOK NO. AREAS CHECKED

FINAL SURVEY PLOTTED
NOTE BOOK NO. AREAS CHECKED

BY DATE



0
EXIST. 15'STM.

0
EXIST. 15'STM.

0
EXIST. 15'STM.

0
EXIST. 15'STM.

0
15'STM.

EARTH EXC 0
EMBANKMENT 0
ALL UNITS ARE SQ. FT.

EARTH EXC 0.7
EMBANKMENT 0.3
ALL UNITS ARE SQ. FT.

EARTH EXC 9.6
EMBANKMENT 2.7
ALL UNITS ARE SQ. FT.

EARTH EXC 36.4
EMBANKMENT 5.4
ALL UNITS ARE SQ. FT.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	158
STA. 204+50		TO STA. 206+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
		CONTRACT NO.	62196	

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

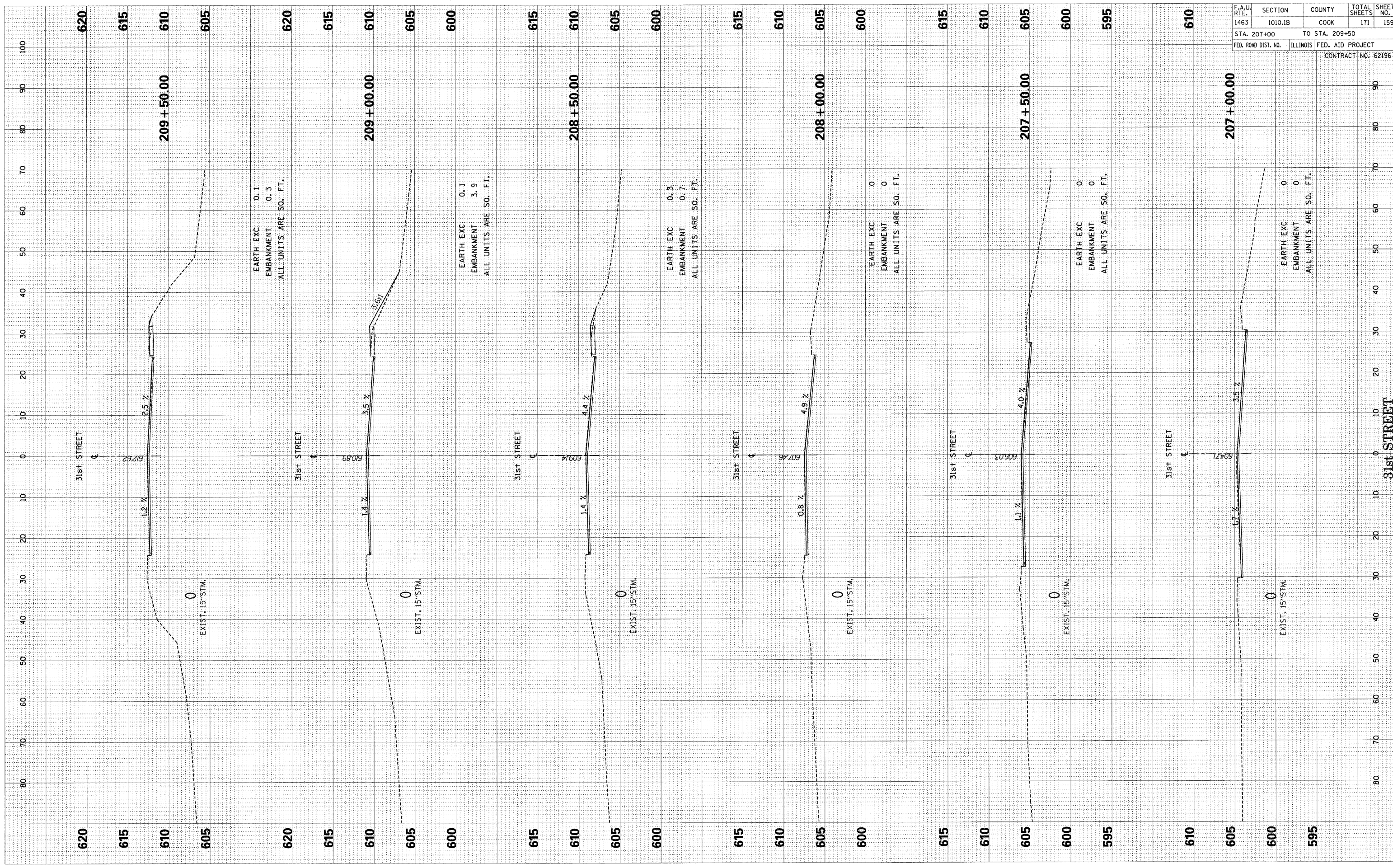
ORIGINAL SURVEYED PLOTTED
 SURVEY PLOTTED
 NOTE BOOK TEMPLATE
 NO. AREAS CHECKED

BY

BY

DATE

DATE

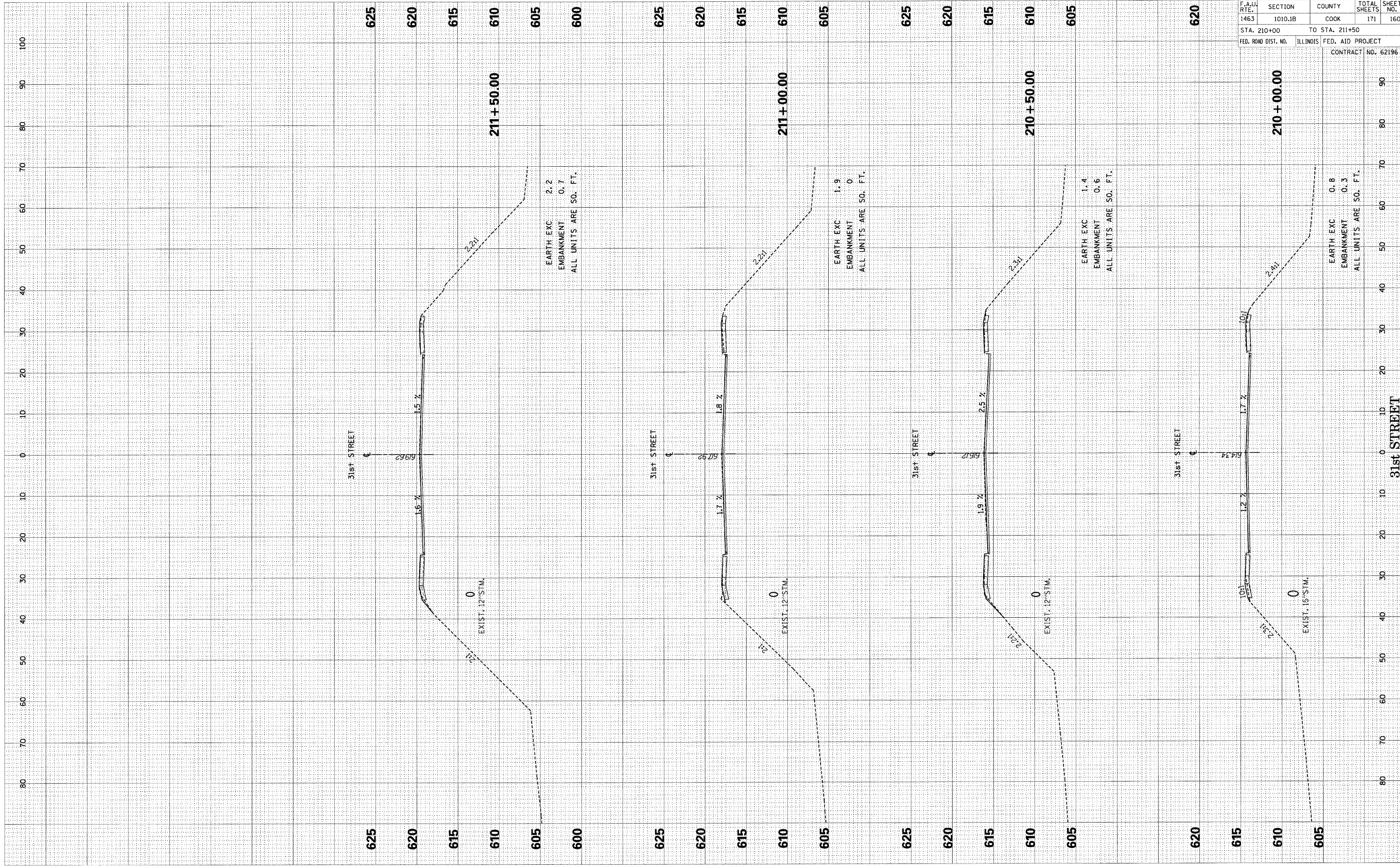


F.A.U. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	159
STA. 207+00		TO STA. 209+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO. 62196

31st STREET

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

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



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	160
STA. 210+00		TO STA. 211+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO. 62196

EARTH EXC 2.2
 EMBANKMENT 0.7
 ALL UNITS ARE SQ. FT.

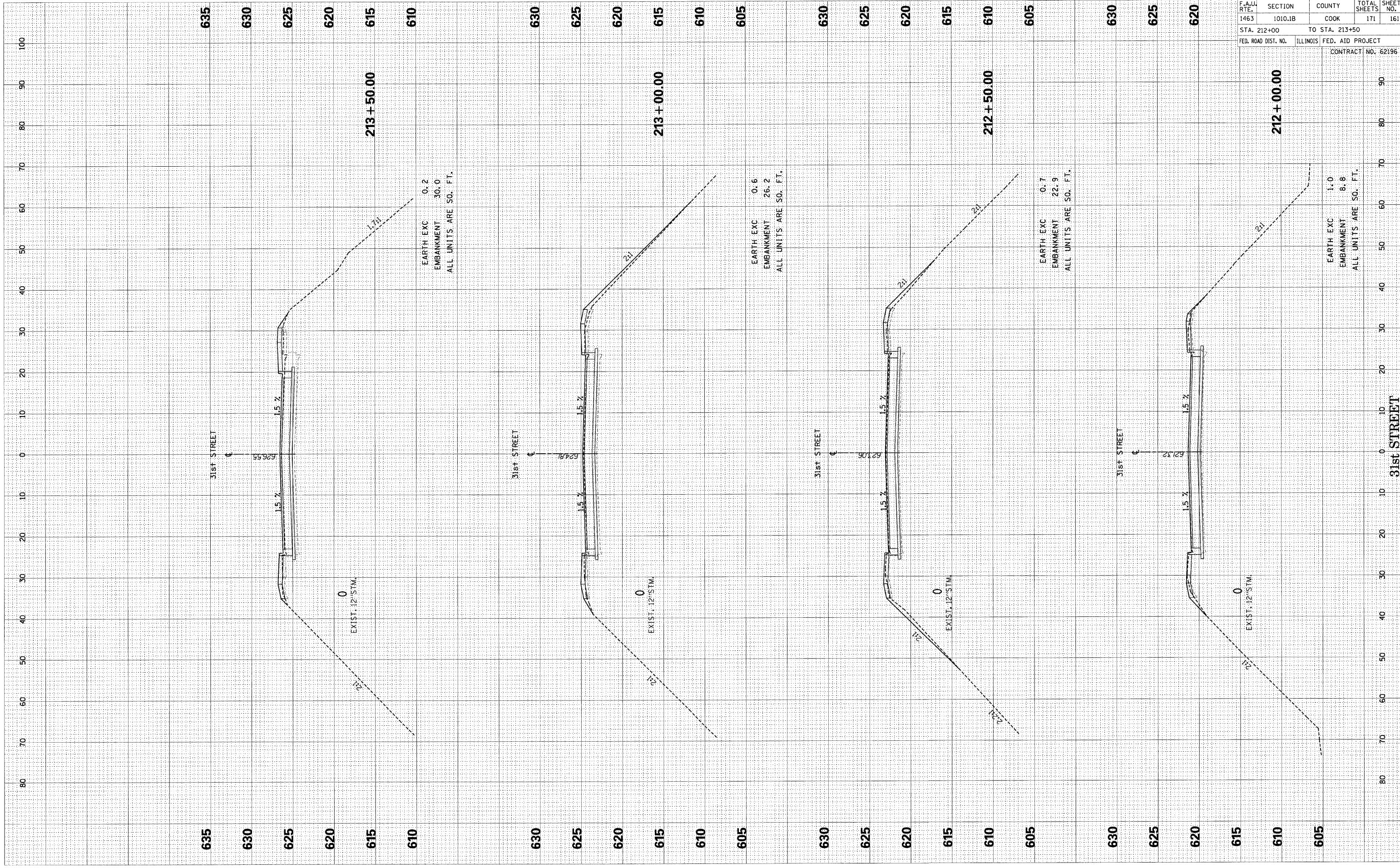
EARTH EXC 1.9
 EMBANKMENT 0
 ALL UNITS ARE SQ. FT.

EARTH EXC 1.4
 EMBANKMENT 0.6
 ALL UNITS ARE SQ. FT.

EARTH EXC 0.8
 EMBANKMENT 0.3
 ALL UNITS ARE SQ. FT.

FINAL SURVEY SURVEYED BY DATE
 FLOTTED TEMPLATE NO. 1463
 NOTE BOOK NO. 1010.1B
 AREAS CHECKED

ORIGINAL SURVEY SURVEYED BY DATE
 FLOTTED TEMPLATE NO. 1463
 NOTE BOOK NO. 1010.1B
 AREAS CHECKED



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	161
STA. 212+00		TO STA. 213+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO. 62196

EARTH EXC 0.2
 EMBANKMENT 30.0
 ALL UNITS ARE SQ. FT.

EARTH EXC 0.6
 EMBANKMENT 26.2
 ALL UNITS ARE SQ. FT.

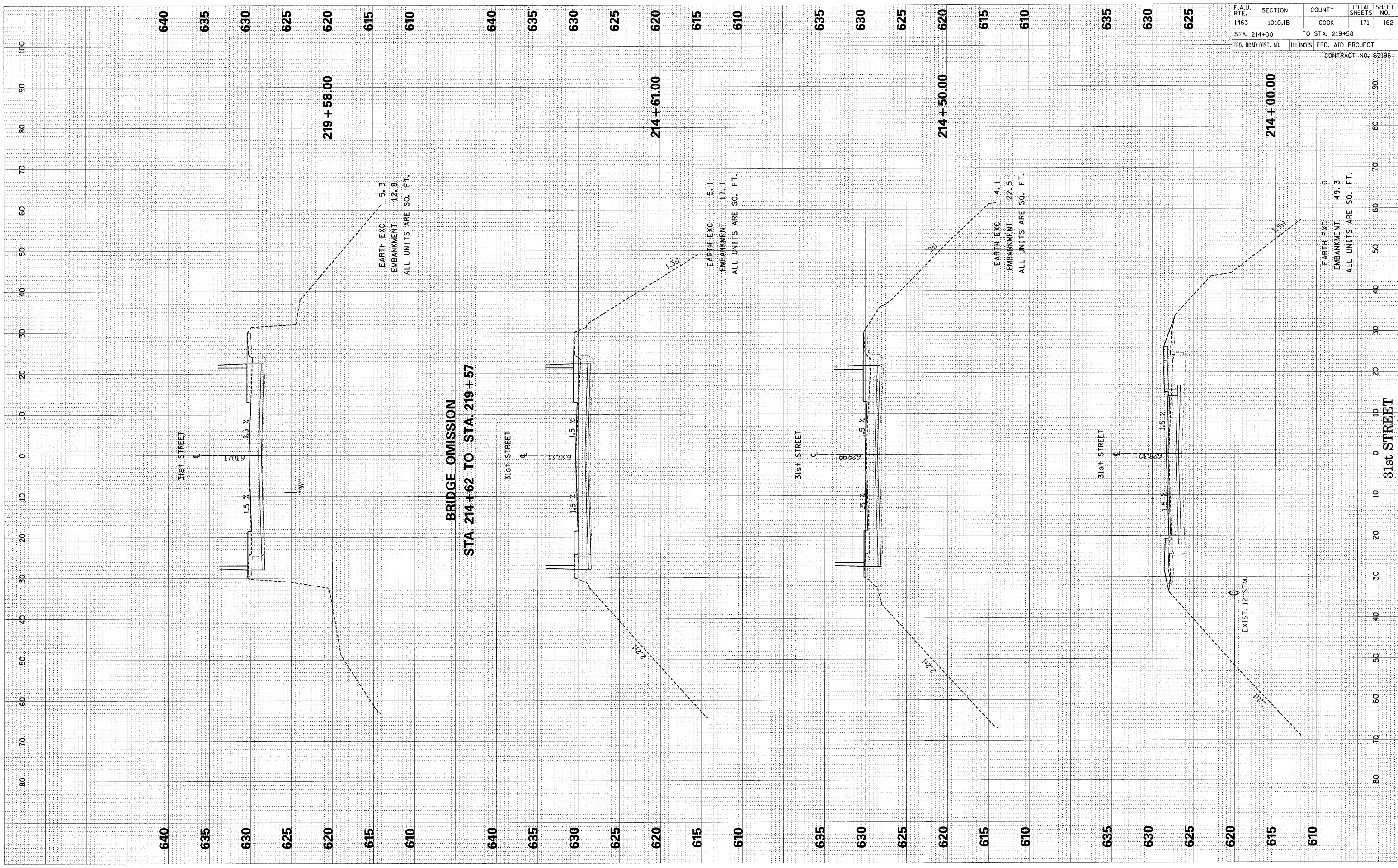
EARTH EXC 0.7
 EMBANKMENT 22.9
 ALL UNITS ARE SQ. FT.

EARTH EXC 1.0
 EMBANKMENT 8.8
 ALL UNITS ARE SQ. FT.

FINAL SURVEY SURVEYED PLOTTED NOTE BOOK NO. BY DATE

ORIGINAL SURVEY SURVEYED PLOTTED NOTE BOOK NO. BY DATE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	162
STA. 214+00		TO STA. 219+58		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62196				



EARTH EXC 5.3
EMBANKMENT 12.8
ALL UNITS ARE SQ. FT.

EARTH EXC 5.1
EMBANKMENT 17.1
ALL UNITS ARE SQ. FT.

EARTH EXC 4.1
EMBANKMENT 22.5
ALL UNITS ARE SQ. FT.

EARTH EXC 0
EMBANKMENT 49.3
ALL UNITS ARE SQ. FT.

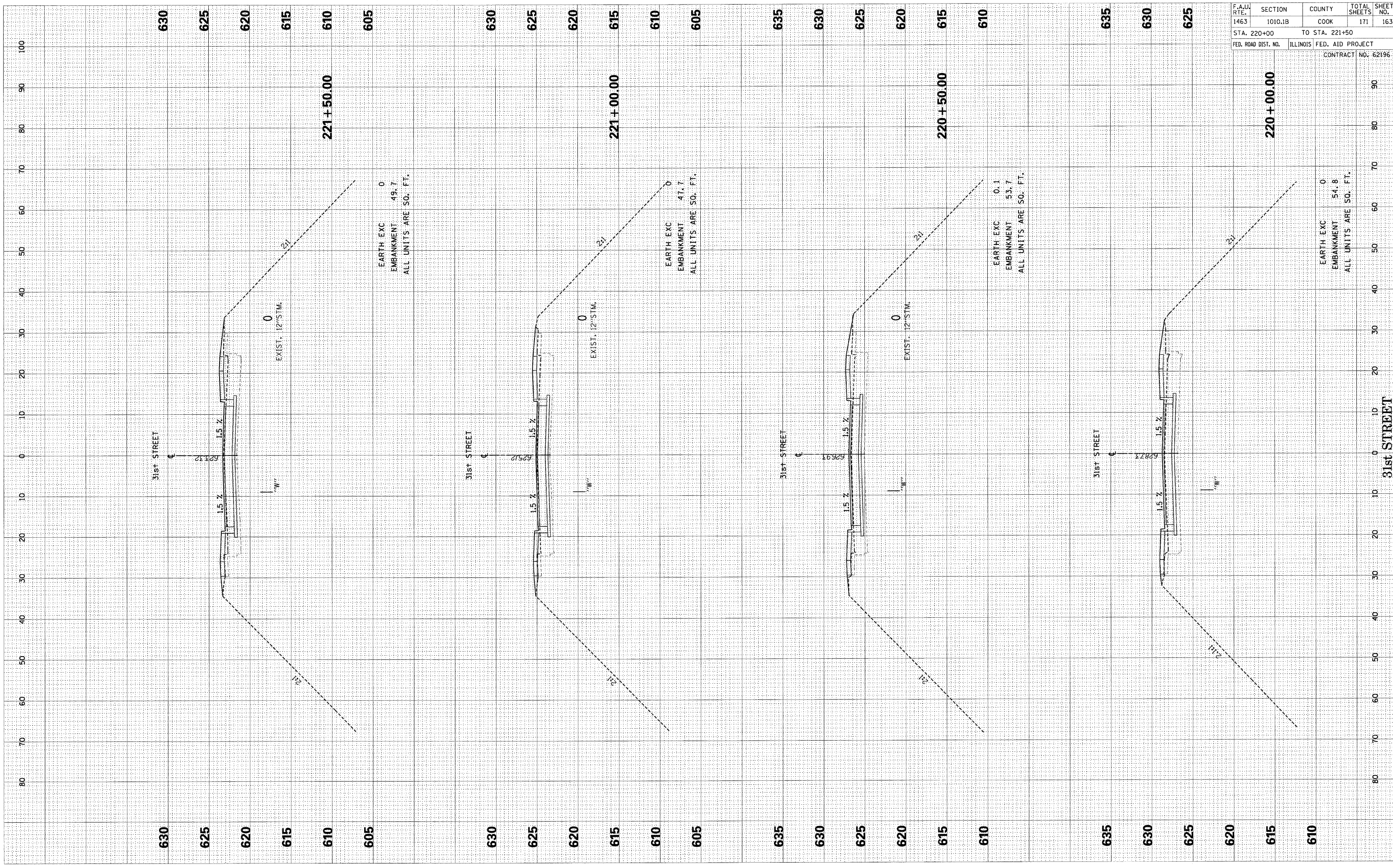
BRIDGE OMISSION
STA. 214+62 TO STA. 219+57

EXIST. 12" STM.

31st STREET

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

BY DATE
 BY DATE

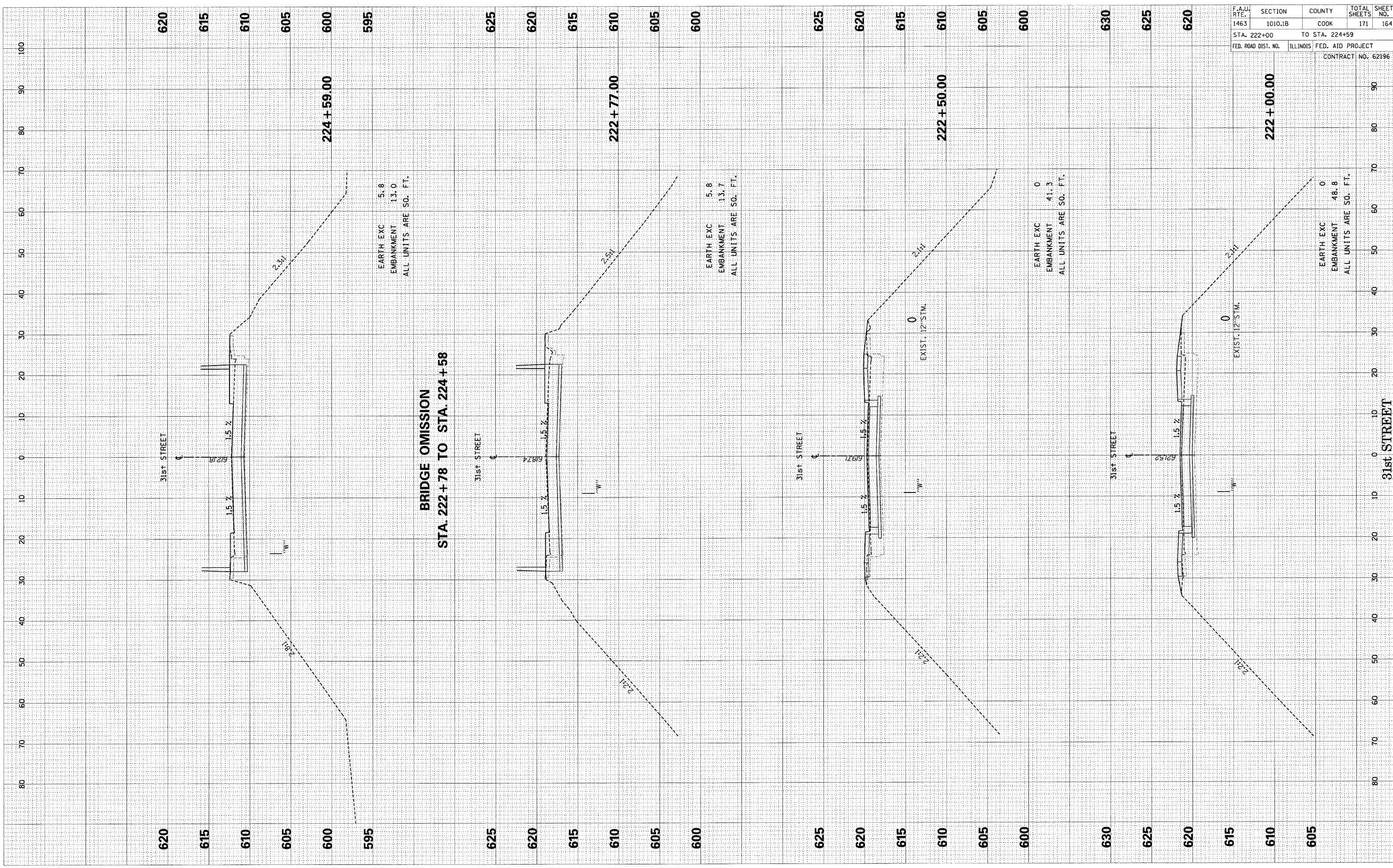


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	163
STA. 220+00		TO STA. 221+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO. 62196

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

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

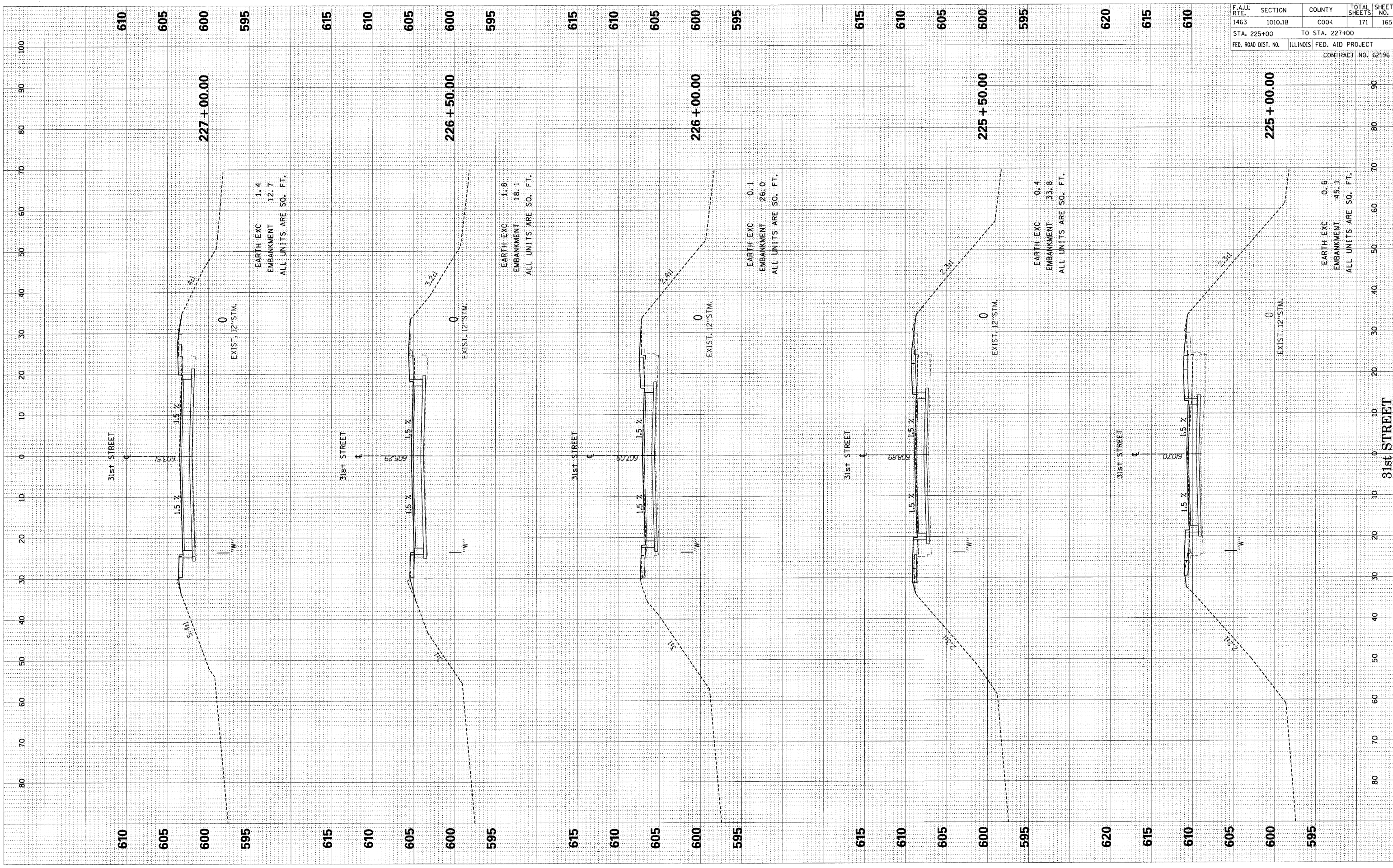
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	164
STA. 222+00		TO STA. 224+59		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
		CONTRACT NO. 62196		



31st STREET

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

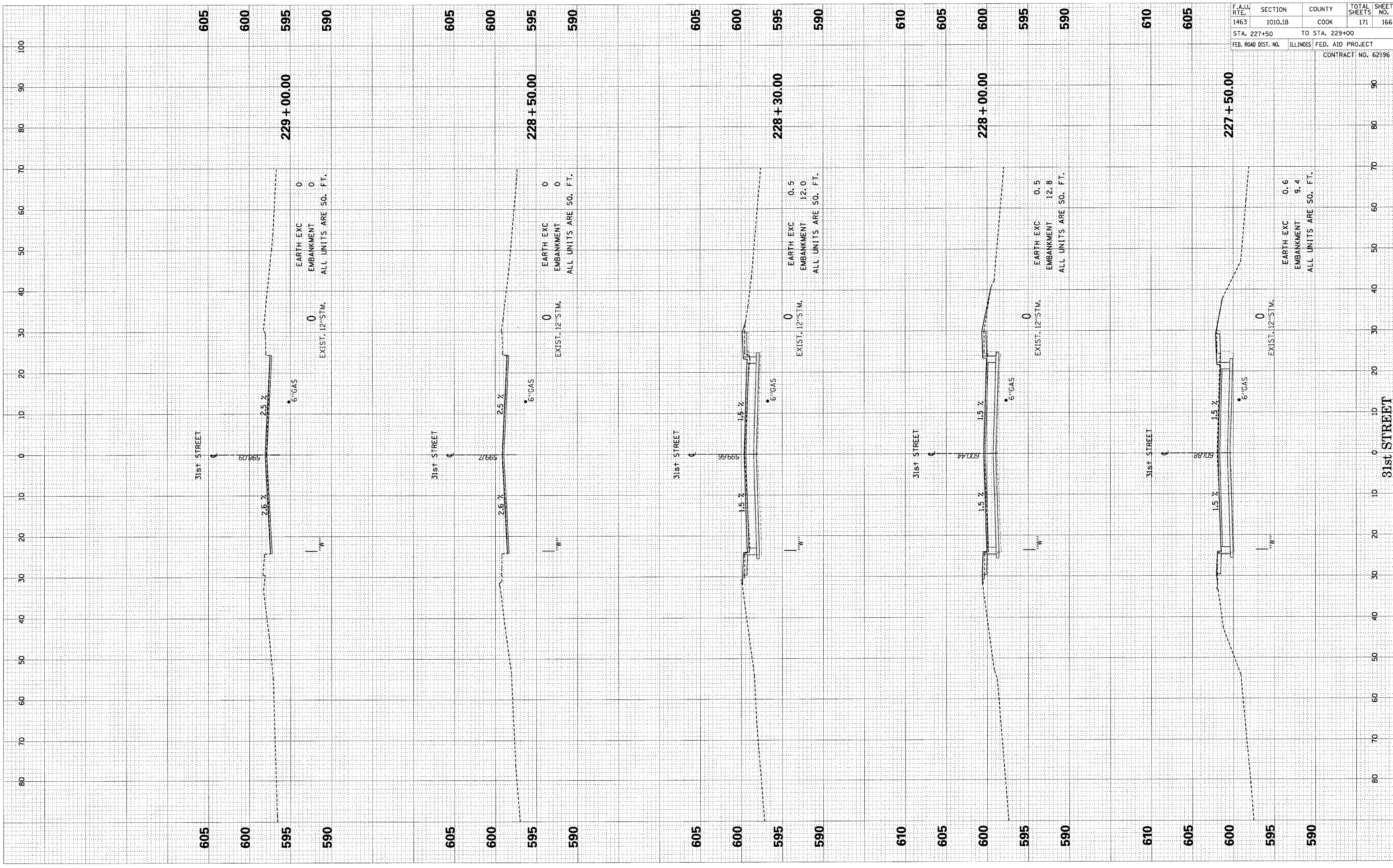
BY DATE
 SURVEYED
 PLOTTED
 TEMPLATE
 AREAS CHECKED



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	165
STA. 225+00		TO STA. 227+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO. 62196

ORIGINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED NO. BY DATE

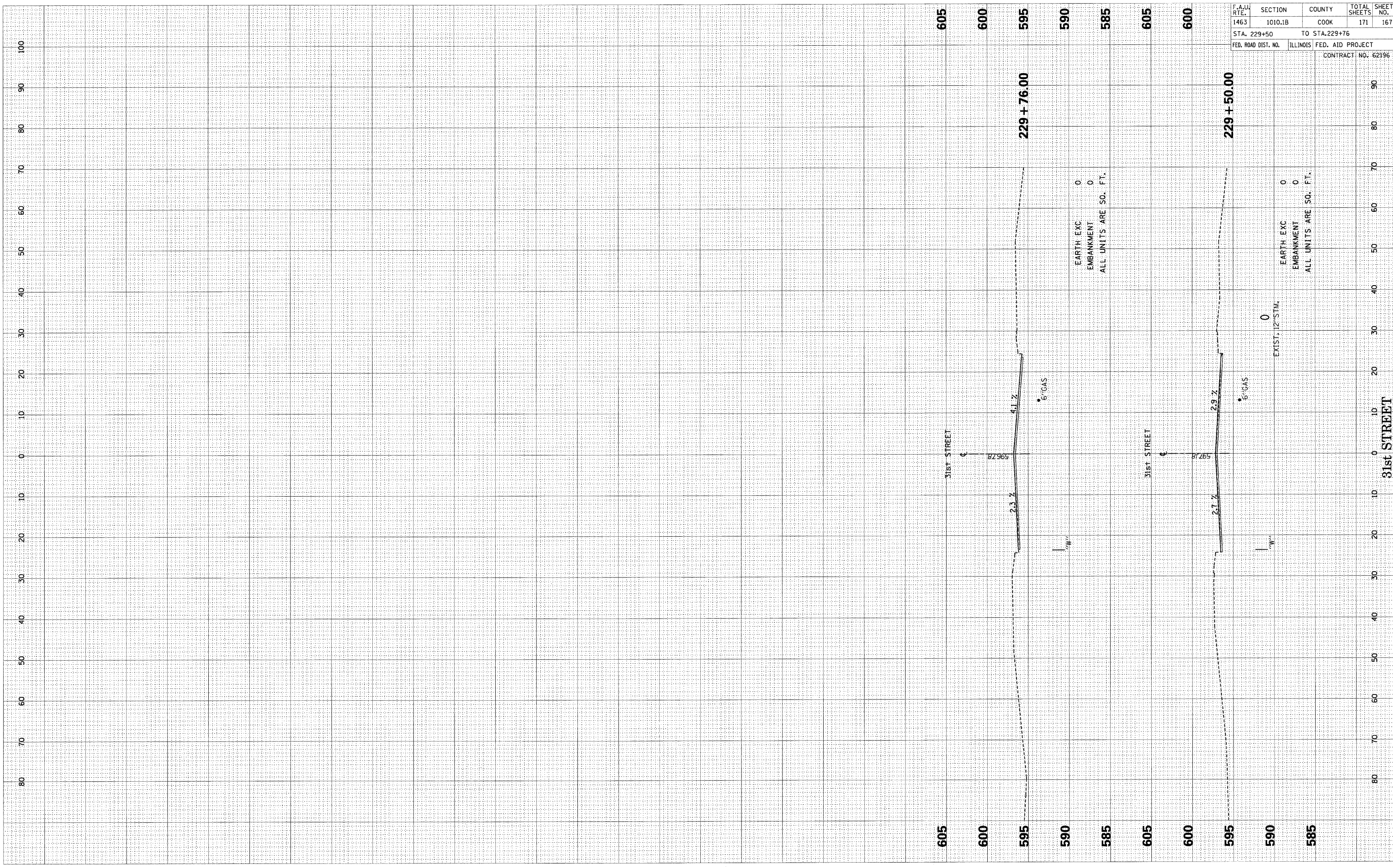
FINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED NO. BY DATE



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	166
STA. 227+50		TO STA. 229+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO. 62196

ORIGINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED NO. _____ BY _____ DATE _____

FINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED NO. _____ BY _____ DATE _____



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	167
STA. 229+50		TO STA. 229+76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO. 62196

EARTH EXC 0
 EMBANKMENT 0
 ALL UNITS ARE SO. FT.

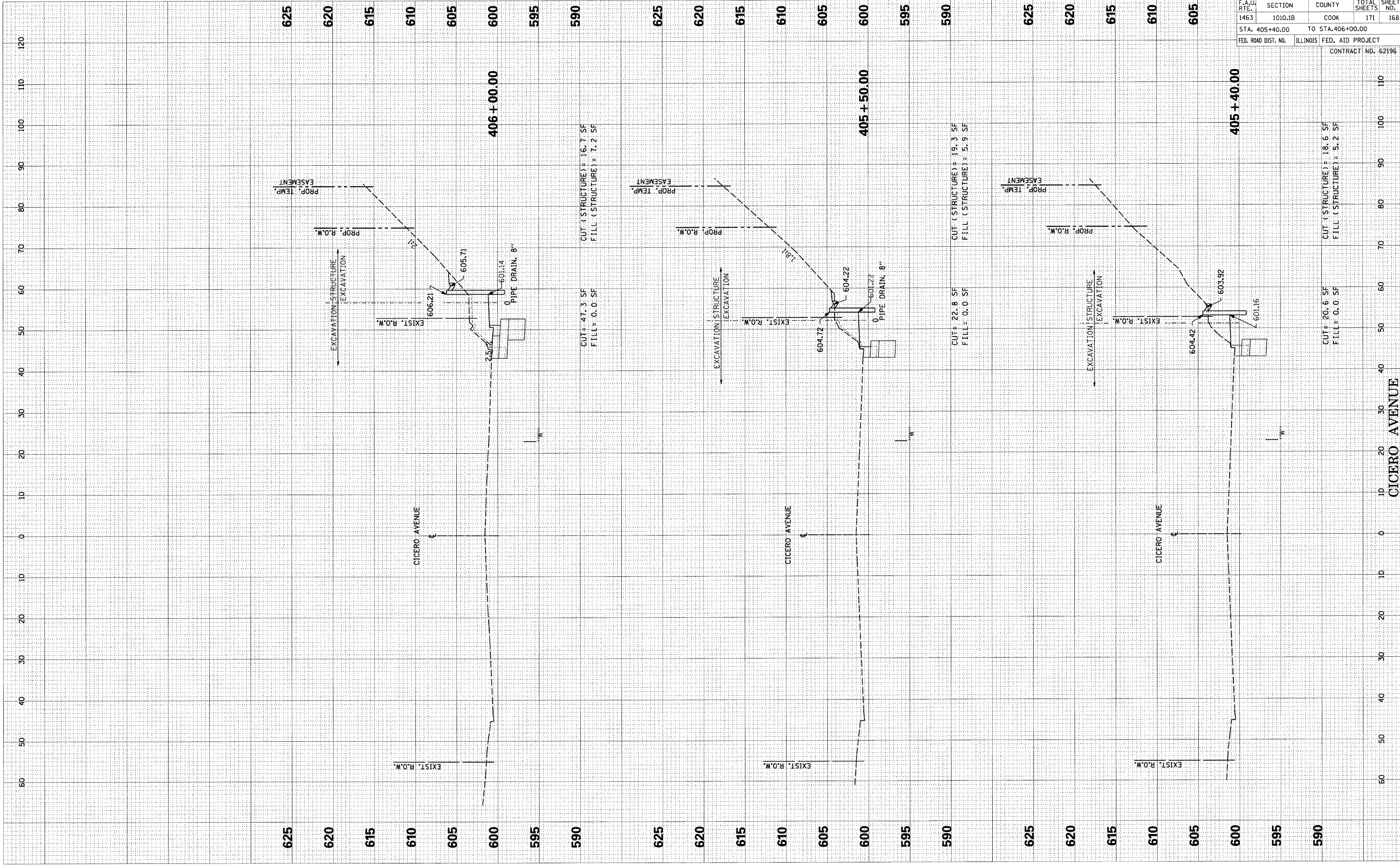
EARTH EXC 0
 EMBANKMENT 0
 ALL UNITS ARE SO. FT.

EXIST. 12" STM.

31st STREET

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

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



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	168
STA. 405+40.00		TO STA. 406+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO. 62196

CUT (STRUCTURE) = 18.6 SF
 FILL (STRUCTURE) = 5.2 SF

CUT (STRUCTURE) = 19.3 SF
 FILL (STRUCTURE) = 5.9 SF

CUT (STRUCTURE) = 20.6 SF
 FILL (STRUCTURE) = 5.2 SF

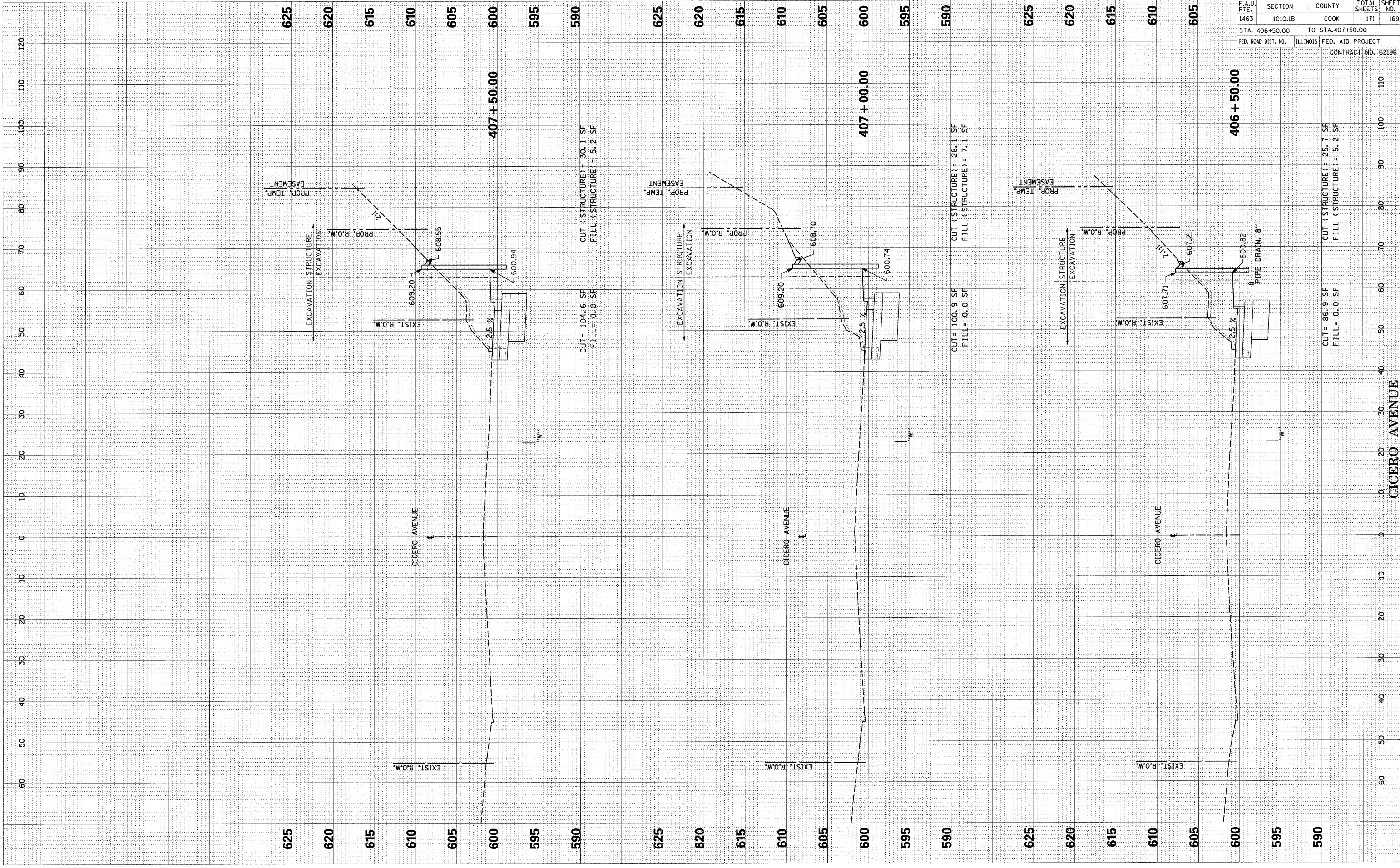
CICERO AVENUE

CICERO AVENUE

CICERO AVENUE

ORIGINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED NO. BY DATE

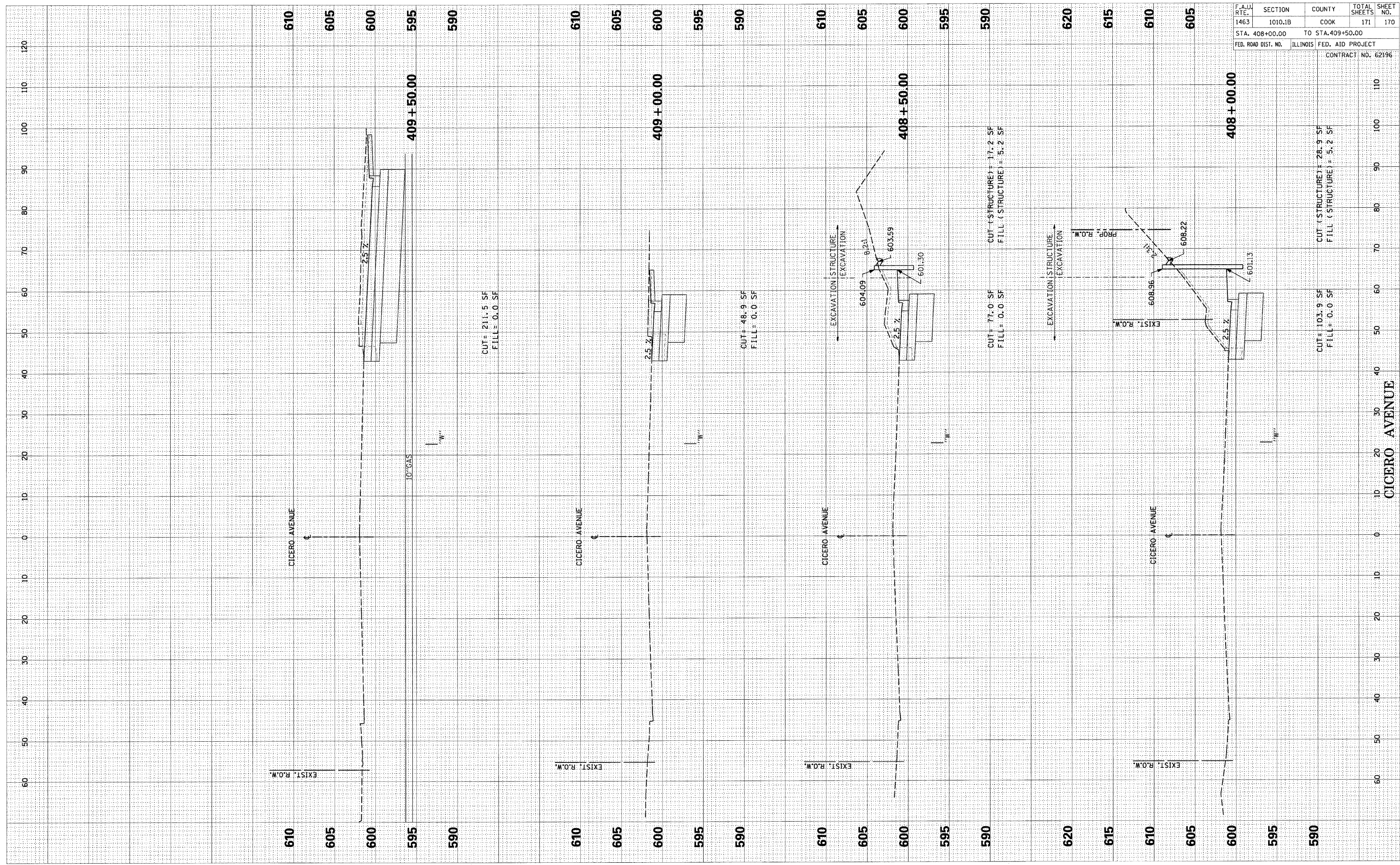
FINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED NO. BY DATE



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	169
STA. 406+50.00		TO STA. 407+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
				CONTRACT NO. 62196

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

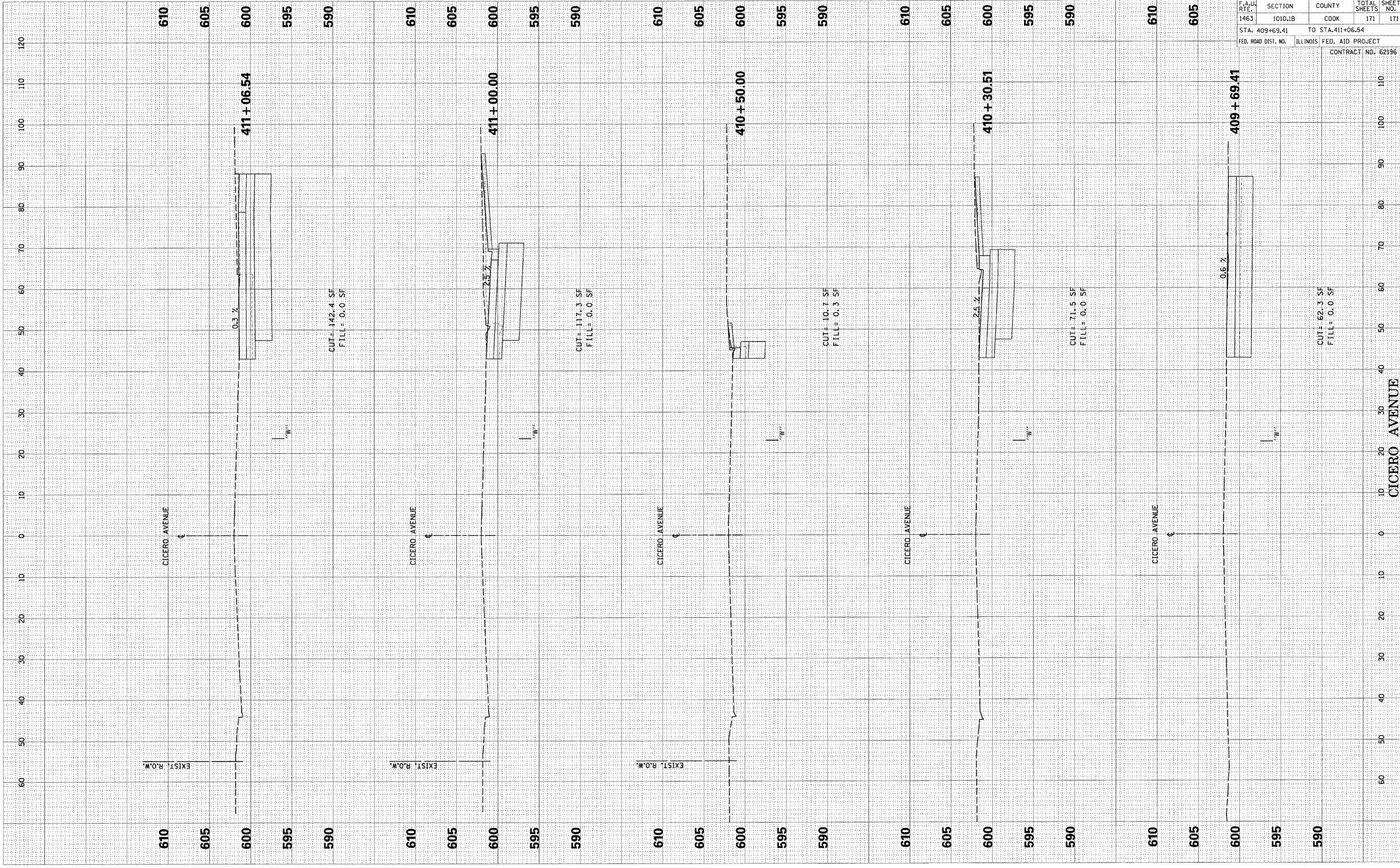
FINAL SURVEY SURVEYED
 SURVEY PLOTTED
 NOTE BOOK TEMPLATE
 NO. _____
 BY _____ DATE _____
 AREAS CHECKED _____



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	170
STA. 408+00.00		TO STA. 409+50.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 62196		

ORIGINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED

FINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1463	1010.1B	COOK	171	171
STA. 409+69.41		TO STA. 411+06.54		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
		CONTRACT NO. 62196		