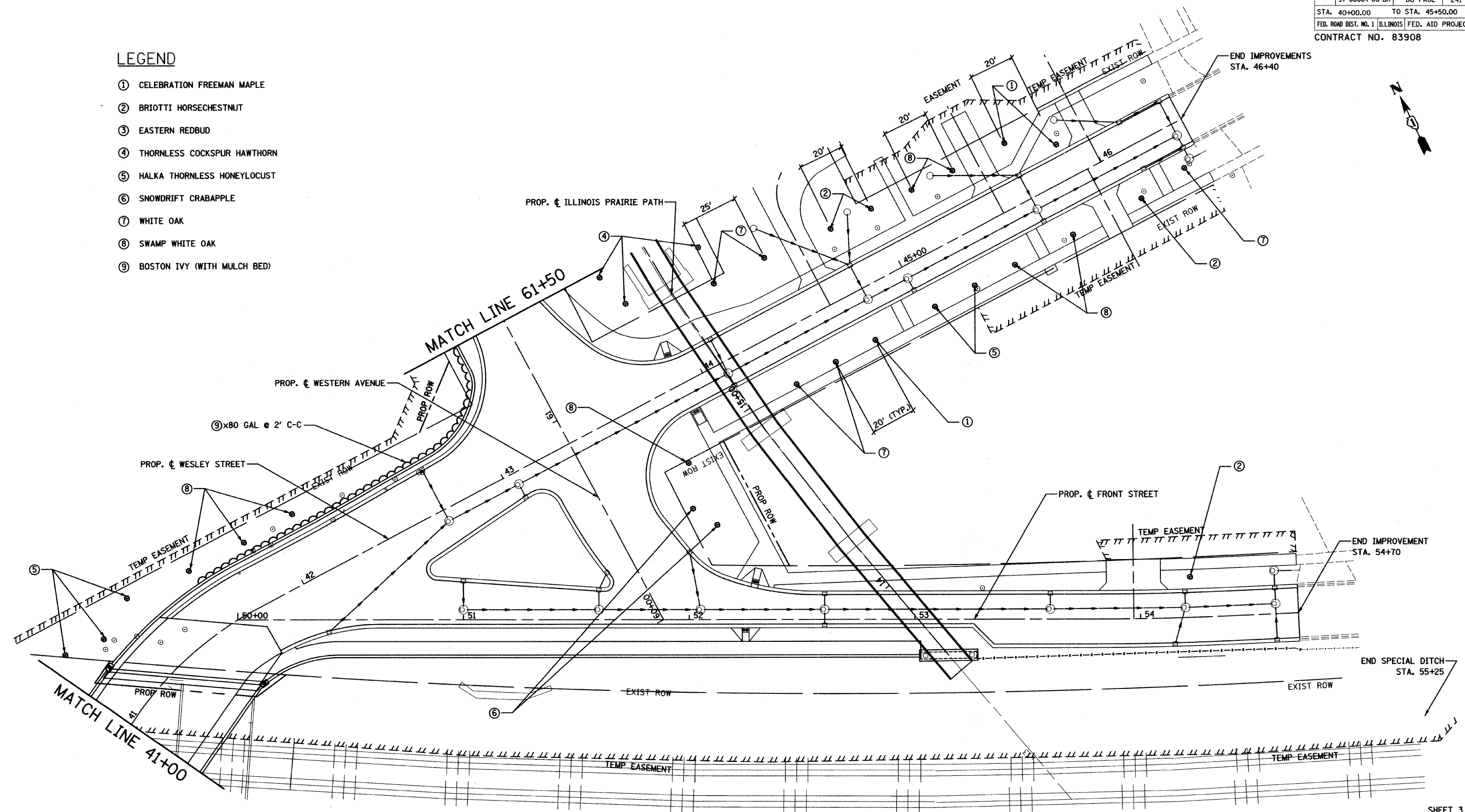


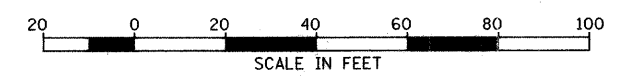
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
97-00084-00-BR	DU PAGE	241	101	
STA. 40+00.00		TO STA. 45+50.00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 83908				

LEGEND

- ① CELEBRATION FREEMAN MAPLE
- ② BRIOTTI HORSECHESTNUT
- ③ EASTERN REDBUD
- ④ THORNLESS COCKSPUR HAWTHORN
- ⑤ HALKA THORNLESS HONEYLOCUST
- ⑥ SNOWDRIFT CRABAPPLE
- ⑦ WHITE OAK
- ⑧ SWAMP WHITE OAK
- ⑨ BOSTON IVY (WITH MULCH BED)



SHEET 3 OF 4



REVISIONS	
NAME	DATE

CITY OF WHEATON
 MANCHESTER ROAD / WESLEY STREET
 OVER UNION PACIFIC RAILROAD

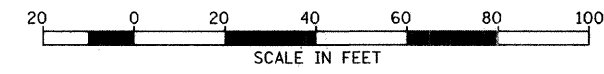
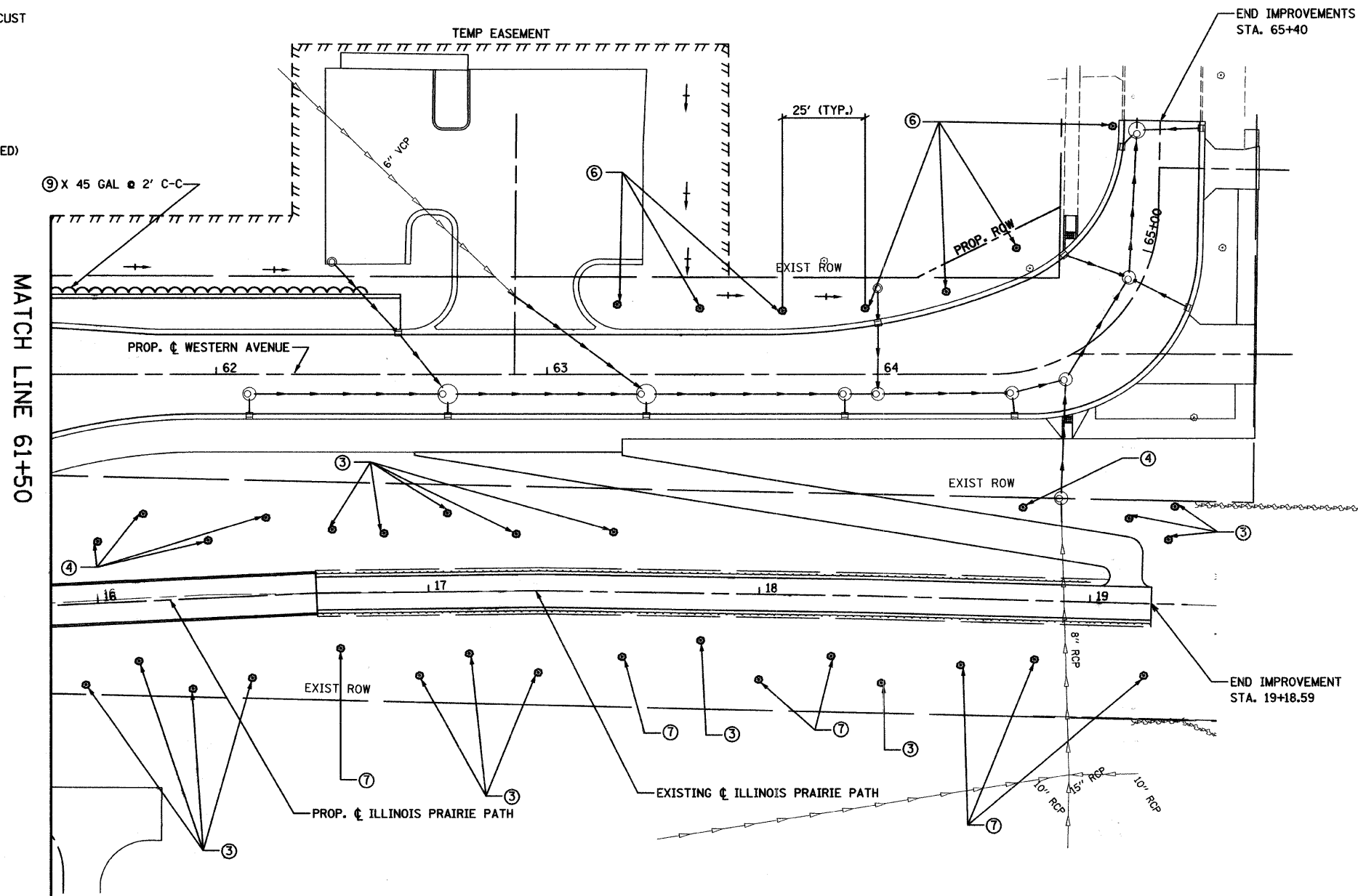
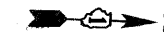
LANDSCAPE PLANTING PLAN

SCALE: VERT. 1" = 20'
 HORIZ. 1" = 20'
 DATE 6/4/2008

DRAWN BY MBT
 CHECKED BY ALT

LEGEND

- ① CELEBRATION FREEMAN MAPLE
- ② BRIOTTI HORSECHESTNUT
- ③ EASTERN REDBUD
- ④ THORNLESS COCKSPUR HAWTHORN
- ⑤ HALKA THORNLESS HONEYLOCUST
- ⑥ SNOWDRIFT CRABAPPLE
- ⑦ WHITE OAK
- ⑧ SWAMP WHITE OAK
- ⑨ BOSTON IVY (WITH MULCH BED)



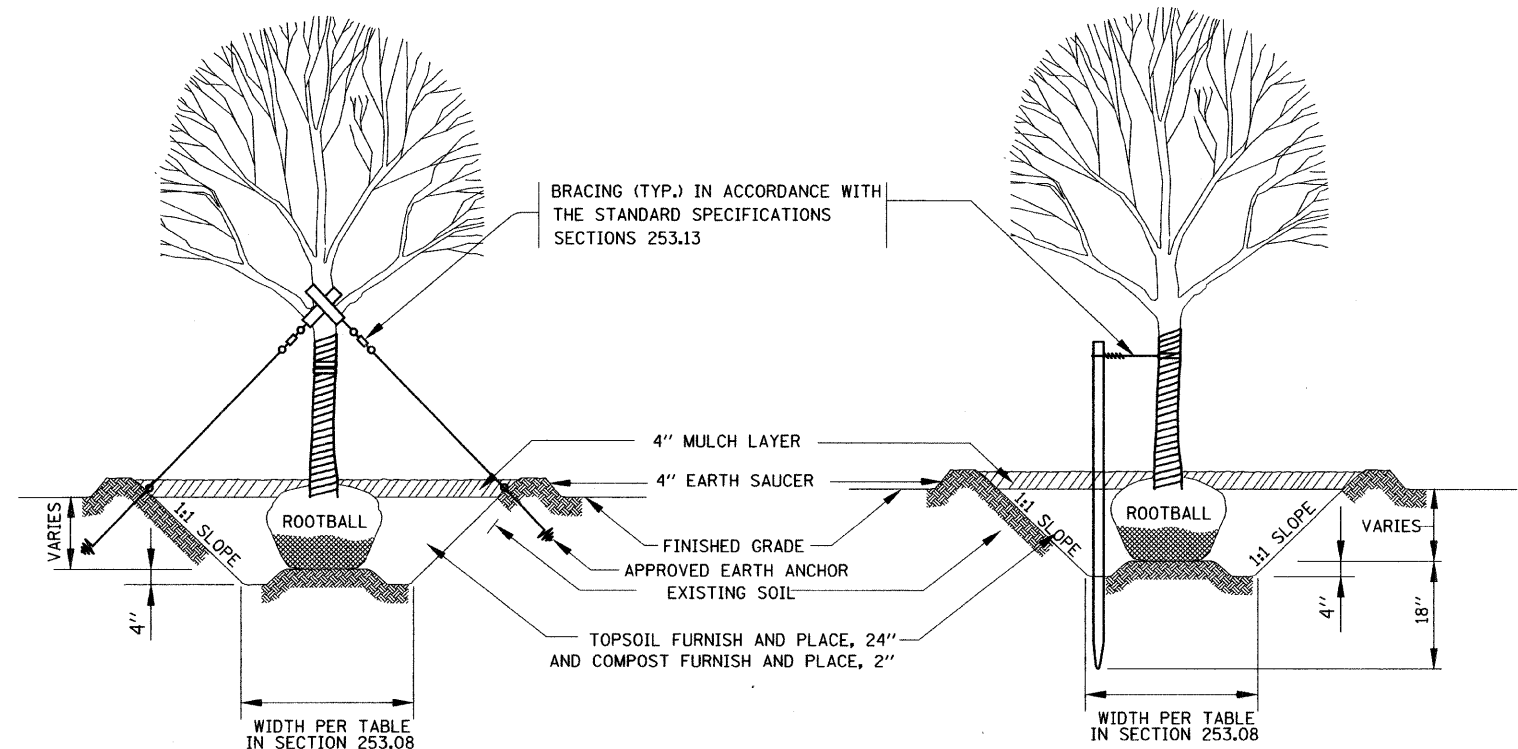
REVISIONS	
NAME	DATE

CITY OF WHEATON
 MANCHESTER ROAD / WESLEY STREET
 OVER UNION PACIFIC RAILROAD

LANDSCAPE PLANTING PLAN

SCALE: VERT. 1" = 20'
 HORIZ. 1" = 20'
 DATE 6/4/2008

DRAWN BY MBT
 CHECKED BY ALT

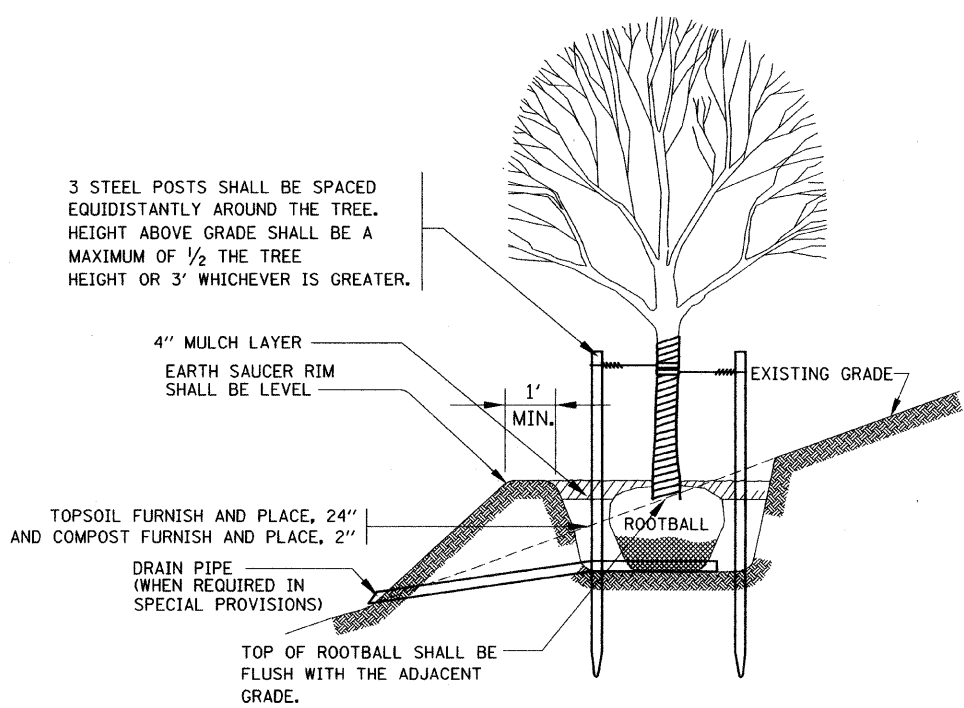


DECIDUOUS TREE PLANTING DETAIL
(4-1/2" CALIPER AND LARGER)

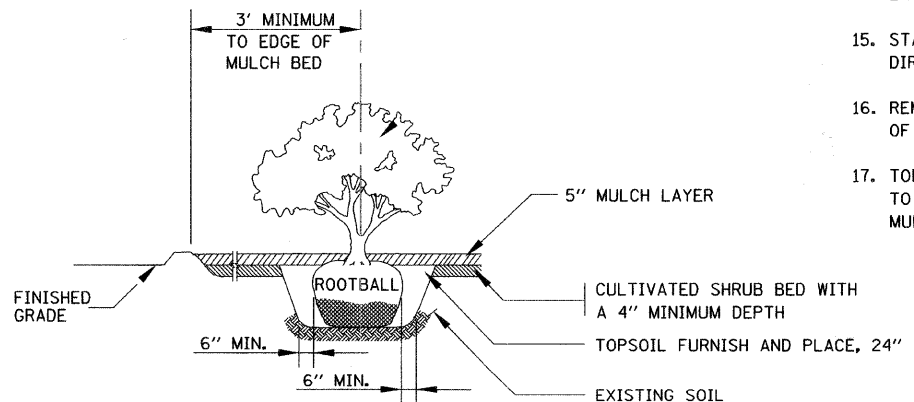
DECIDUOUS TREE PLANTING DETAIL
GREATER THAN 4 FT HEIGHT AND LESS THAN 4-1/2" CALIPER)

PLANTING NOTES

1. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UNDERGROUND UTILITIES, FIBER OPTICS, STORM SEWERS AND DRAINAGE STRUCTURES IN THE FIELD PRIOR TO THE EXCAVATION OF ANY PLANT PITS OR PLANTING BEDS. LOCATIONS OF TREE AND SHRUB PLANTINGS SHALL BE ADJUSTED TO AVOID DAMAGING ANY UNDERGROUND FEATURES.
2. THE PLANT LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS SHALL BE ADJUSTED AS REQUIRED IN THE FIELD BY THE ENGINEER.
- TREES SHALL BE SPACED A MINIMUM OF FIVE (5) FEET FROM FENCES.
3. TREE AND SHRUB PLANTINGS SHALL NOT BLOCK ACCESS TO GATES IN FENCES.
4. TREES PLANTED IN TURF AREAS SHALL BE SPACED A MINIMUM OF TEN (10) FEET FROM THE EDGE OF A SHRUB BED.
5. TREES SHALL BE SPACED A MINIMUM OF TEN (10) FEET FROM NOISEWALLS OR OTHER STRUCTURES.
6. DITCHES SHALL BE KEPT CLEAR OF PLANTINGS. THE MINIMUM VERTICAL DISTANCE BETWEEN DITCH BOTTOMS AND PLANTS SHALL BE THREE (3) FEET.
7. IF DURING EXCAVATION, A PLANT HOLE OR PLANTING BED SHOWS POOR DRAINAGE, STANDING WATER OR AN IMPERVIOUS STRATUM OF SOIL, THE CONTRACTOR SHALL CEASE EXCAVATION AND SHALL NOTIFY THE ENGINEER. THE PLANT(S) SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER AND THE HOLES OR BED SHALL BE FILLED IN AND RESTORED TO MATCH THE CONDITION AND VEGETATION OF THE ADJACENT AREA.
8. IMPROPERLY PRUNED PLANTINGS WILL BE REJECTED AND REPLACEMENTS WILL IMMEDIATELY BE MADE BY THE CONTRACTOR.
9. THE SIDES OF ALL PLANT PITS SHALL BE LOOSENEED TO DISJOIN ANY GLAZING WHICH MAY OCCUR DURING THE DIGGING OPERATION.
10. TREE WRAPPING SHALL EXTEND TO THE LOWEST MAJOR BRANCH.
11. TOP OF ROOTBALL SHALL BE APPROXIMATELY 2 INCHES ABOVE ADJACENT FINISHED GRADE.
12. SHRUB PLANTINGS:
 13. A. UNLESS NOTED OTHERWISE, ALL SHRUBS SHALL BE PLANTED IN MULCHED BEDS. THE EDGE OF THE MULCH BED SHALL EXTEND A MINIMUM OF THREE (3) FEET BEYOND THE CENTERS OF THE PERIPHERAL PLANTS IN THE BED.
 - B. THE EDGE OF A MULCH BED FOR SHRUB PLANTINGS ADJACENT TO A WALL, FENCE, GUARDRAIL OR OTHER FIXED OBJECT SHALL EXTEND TO THE OBJECT. THE PERIPHERAL PLANTS IN THE BED SHALL NOT BE PLANTED WITHIN FIVE (5) FEET OF THE OBJECT.
 - C. WHEN A TREE IS LOCATED IN A SHRUB BED, THE MINIMUM DISTANCE BETWEEN THE TREE AND THE ADJACENT SHRUBS SHALL BE SIX (6) FEET.
14. THE CONTRACTOR SHALL RESTORE ALL AREAS, OBJECTS AND VEGETATION DISTURBED BY THE LANDSCAPE OPERATIONS TO ORIGINAL CONDITIONS.
15. STAKES, GUYWIRES AND ALL TREE SUPPORTS SHALL BE REMOVED AFTER ONE YEAR OR AS DIRECTED BY THE LANDSCAPE ARCHITECT.
16. REMOVE ALL TWINE, ROPE, WIRE AND BURLAP FROM TOP HALF OF ROOT BALL. THE LOWER HALF OF BURLAP SHALL BE FOLDED TOWARD THE BOTTOM OF THE ROOTBALL.
17. TOPSOIL FURNISH AND PLACE, 24" AND COMPOST FURNISH AND PLACE, 2" IS REQUIRED TO BE USED AS SHOWN IN THE DETAIL AND IS CONSIDERED INCIDENTAL TO THE ITEM BEING PLANTED. MULCH AS SHOWN IN THE DETAIL IS ALSO CONSIDERED INCIDENTAL TO THE ITEM BEING PLANTED.



STEEP SLOPE PLANTING DETAIL



SHRUB PLANTING DETAIL

REVISIONS	
NAME	DATE

CITY OF WHEATON
 MANCHESTER ROAD / WESLEY STREET
 OVER UNION PACIFIC RAILROAD
 LANDSCAPE PLANTING DETAIL
 SCALE: VERT. DATE 6/4/2008
 DRAWN BY DW
 CHECKED BY JLC

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	•	241	104
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				

Bench Mark: Cut on Southwestern corner of concrete bridge abutment of Illinois Prairie Path Bridge over U.P.R.R., Elev. 741.47

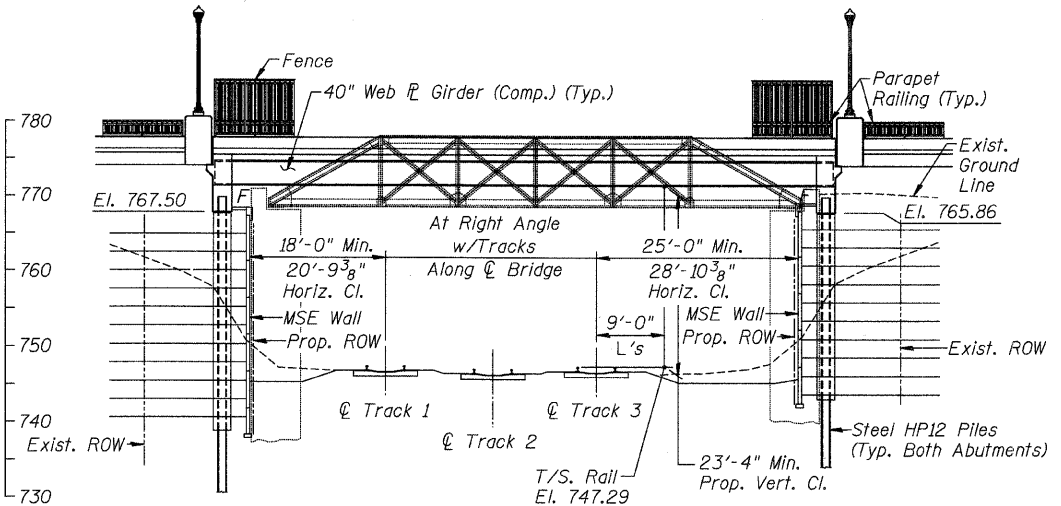
Existing Structure: S.N. 022-7203 single span (64'-1 1/2") steel through truss bridge originally fabricated in 1887, lengthened to 71'-6" and moved to present location in 1916, with timber deck placed in 1956 and new asphalt overlay, 32'-0" c. to c. truss.

Proposed Structure: S.N. 022-7204 single span deck plate girder bridge.

The contractor shall remove the existing superstructure and substructure and replace the existing with a new bridge.

The road shall be kept closed during construction. Work on the bridge shall be limited between 9:00 am to 3:30 pm Monday through Friday.

Salvage - none.

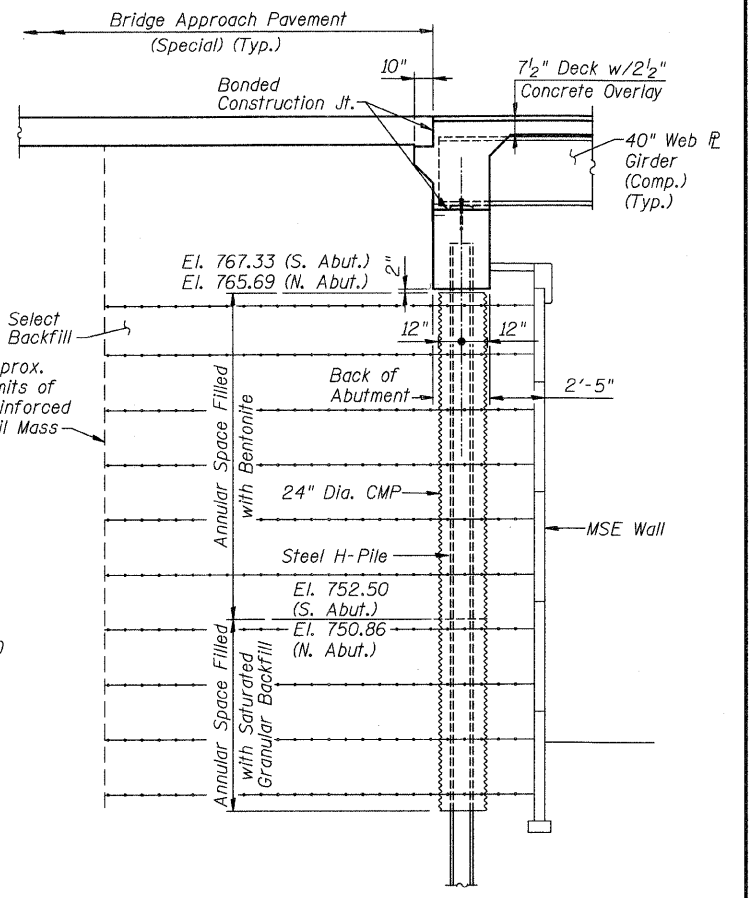


ELEVATION
(At Right Angle w/Tracks) Looking West

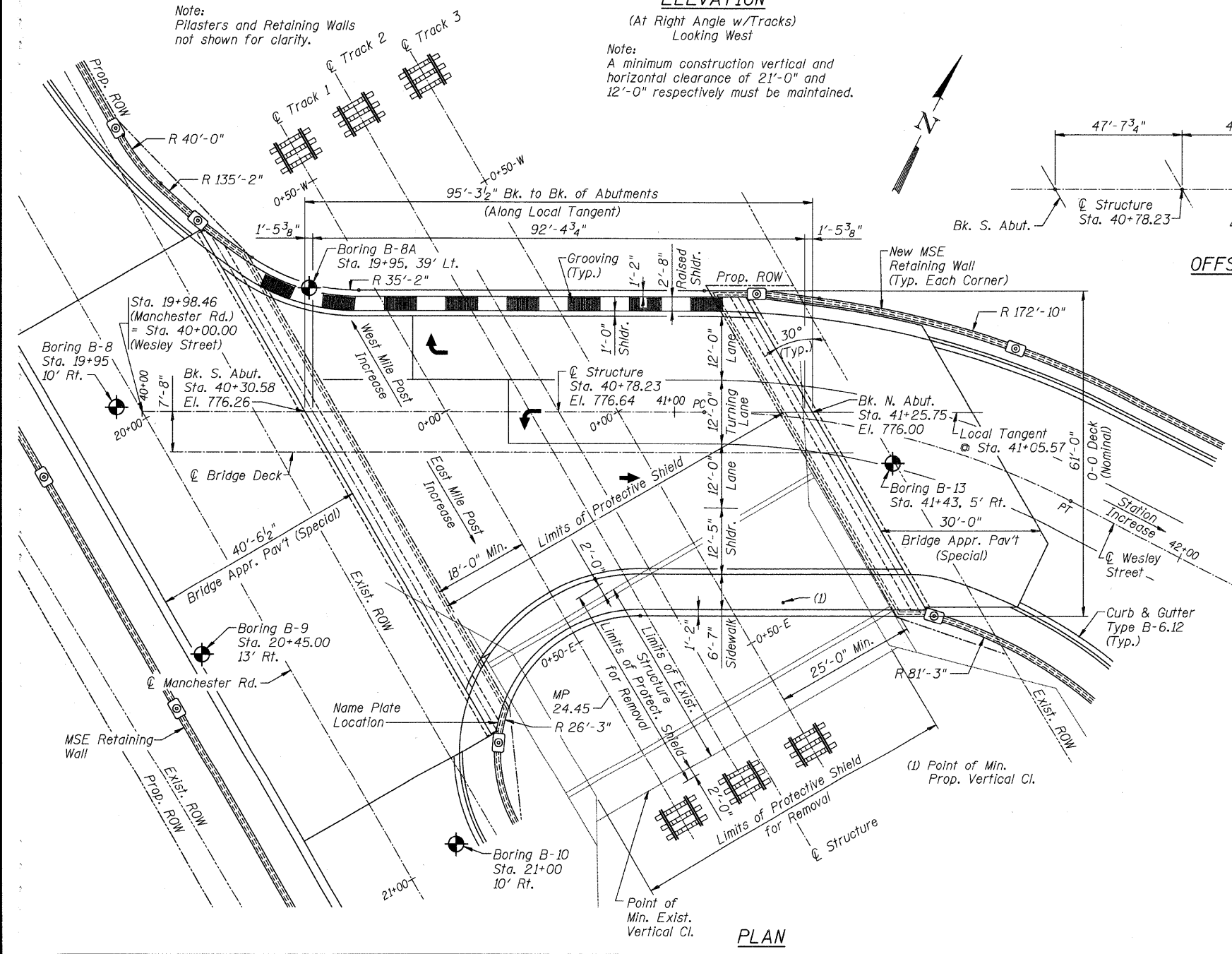
Note: A minimum construction vertical and horizontal clearance of 21'-0" and 12'-0" respectively must be maintained.

STATION 40+78.23
BUILT 20__ BY
STATE OF ILLINOIS
FAU ROUTE 1432
SEC. 97-00084-00-BR
LOADING HS20-16-44
STR. NO. 022-7204

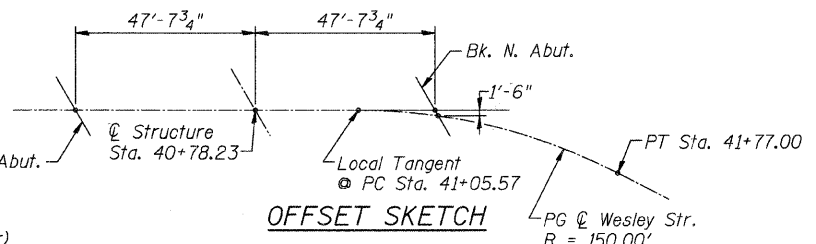
NAME PLATE
(See Std. 515001)



SECTION THRU INTEGRAL ABUTMENTS
(Dimensions are @ Rt. L's)



PLAN



OFFSET SKETCH

NOTES:

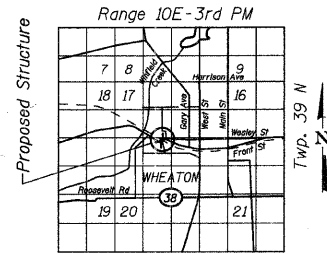
1. For Index of Sheets, see Sht. S-2.
2. For Profiles of UPRR Tracks, see Sht. S-2.
3. For MSE Retaining Wall General Plan and Elevation see Sht. S-26 and S-27.

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specifications for Highway Bridges".



Barry S. Kravitz
Licensed Structural Engineer
(Illinois Structural Engineer's Seal)

MY LICENSE EXPIRES NOV 30 2010



LOCATION SKETCH



CITY OF WHEATON		
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD		
BRIDGE GENERAL PLAN AND ELEVATION		
DRAWN	JM	SHEET NO.
CHECKED	VEVS	
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

S-1

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	105
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
* FAU 3549/ FAU 1432				

GENERAL NOTES

- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts 3/4" φ, open holes 1/2" φ, unless otherwise noted.
- Calculated weight of Structural Steel = 193,088 lbs.
AASHTO M270 Gr. 50 = 179,907 lbs.
AASHTO M270 Gr. 36 = 13,181 lbs.
- The organic zinc rich primer/epoxy/urethane paint system shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. 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 fascia beams shall be redish brown, Munsell No. 2.5YR 3/4. See Special Provision for "Cleaning and Painting New Metal Structures."
- Field welding of construction accessories will not be permitted to beams or girders.
- Anchor bolts shall be set before bolting diaphragms over supports.
- The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams, the tension flanges, webs and all connection plate material except fill plates.
- Reinforcement bars shall conform to the requirements of ASTM A 706, Gr 60 (LL Modified). See Special Provisions.
- Reinforcement Bars designated (E) shall be epoxy coated.
- The Contractor shall drive 1 Steel HP12x53 test pile to 110% of the nominal required bearing specified in a permanent location at the South Abutment or as directed by the Engineer before ordering the remainder of piles.
- The existing structural steel coating may contain lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project.
- Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.
- Conduits to be provided in parapet for sidewalk and roadway lighting.
- All Construction joints shall be bonded.
- The proposed bridge structure shall not change the quantity and/or characteristic of the flow in the railway ditches and/or drainage structures.
- Cost for PVC electrical conduit in parapets shall be included in cost for Concrete Superstructure. See lighting drawings for conduit plan location.

TOTAL BILL OF MATERIAL

	UNIT	SUPER	SUB	TOTAL
Removal and Disposal of Unsuitable Material	Cu. Yd	-	2,295	2,295
* Porous Granular Embankment, Subgrade	Cu. Yd.	-	2,295	2,295
* Bridge Approach Pavement (Special)	Sq. Yd.	671	-	671
* Removal of Existing Structures No. 1	Each	-	-	1
* Concrete Retaining Wall Removal	Foot	-	508	508
* Removal of Existing Sub-structures	L. Sum	-	1	1
Protective Shield	Sq. Yd.	913	-	913
Concrete Structures	Cu. Yd.	-	85.2	85.2
Concrete Superstructure	Cu. Yd.	1,161.9	-	1,161.9
Bridge Deck Grooving	Sq. Yd.	569	-	569
* Protective Coat	Sq. Yd.	2,599	-	2,599
Furnishing and Erecting Structural Steel Bridge No. 1	L. Sum	1	-	1
Stud Shear Connectors	Each	1,652	-	1,652
Reinforcement Bars, Epoxy Coated	Pound	162,530	7,060	169,590
Bar Splicers	Each	149	-	149
* Parapet Railing	Foot	1,740	-	1,740
Furnishing Steel Piles, HP12x53	Foot	-	1,848	1,848
Driving Piles	Foot	-	1,848	1,848
Test Pile Steel, HP12x53	Each	-	1	1
Name Plates	Each	1	-	1
Waterproofing Membrane System	Sq. Yd.	328	-	328
* Bridge Fence Parapet Mounted	Foot	197	-	197
* Temporary Earth Retention System	Each	-	1	1
* Temporary Soil Retention System	Sq. Ft.	-	80	80
* Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	-	38,739	38,739
* Bridge Deck Microsilica Concrete Overlay 2 1/2"	Sq. Yd.	569	-	569
* Pile Casing, CMP 24" Dia.	Foot	-	610	610

* Indicates Pay Item governed by a Special Provision.

INDEX OF SHEETS

- Bridge General Plan and Elevation
- General Notes, Index and Bill of Material
- Top of Slab Elevations Layout
- 5 Top of Slab Elevations
- 6 Superstructure Plan
- 7-8 Superstructure Details
- 9-10 Diaphragm Details
- 11 Parapet Railing and Fence Details
- 12 Framing Plan
- 13-16 Steel Details
- 17 Rocker Plate Bearing Details
- 18 Anchor Bolt Details
- 19-20 S. Abutment Details
- 21 N. Abutment Details
- 22 Pile and CMP Details
- 23 Bar Splicer Details
- 24 S. Bridge Approach Pavement
- 25 N. Bridge Approach Pavement
- 26 MSE Retaining Wall - Wesley St. and Front St.
- 27 MSE Retaining Wall - Manchester Rd.
- 28 MSE Retaining Wall Sections
- 29-30 MSE Retaining Wall Details
- 31-33 Anchorage Slab and Parapet Plan
- 34 Anchorage Slab, Parapet and Pilaster Details

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.042
Site Coefficient (S) = 1.2

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications

DESIGN STRESSES

Field Units
f'c = 4,000 psi (Superstructure and Precast Panels)
f'c = 3,500 psi (Substructure)
fy = 60,000 psi (Reinf.)
fy = 50,000 psi (AASHTO M270 Grade 50)

LOADING HS20-44

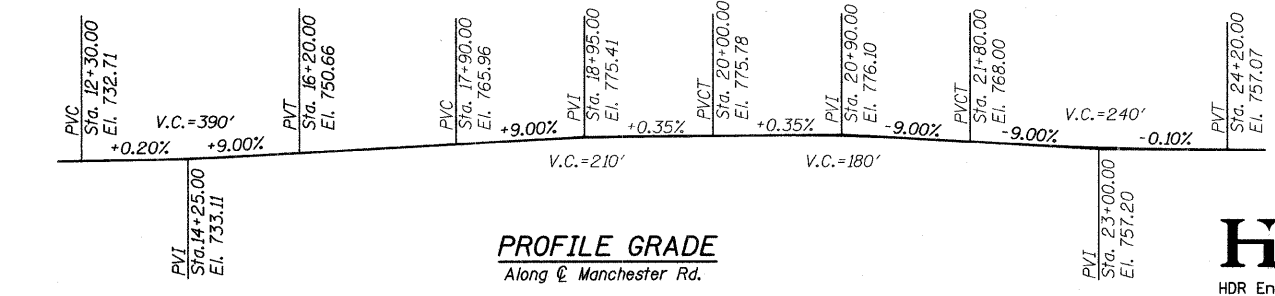
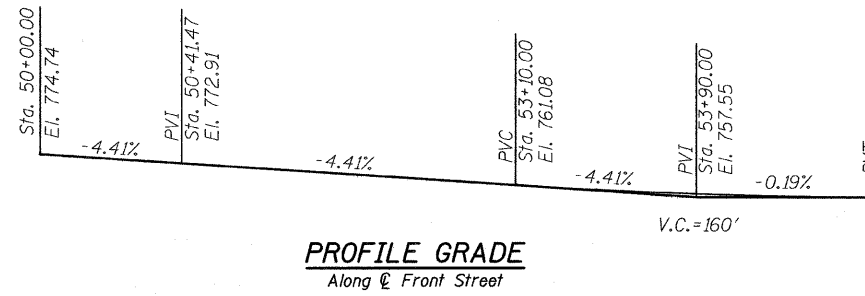
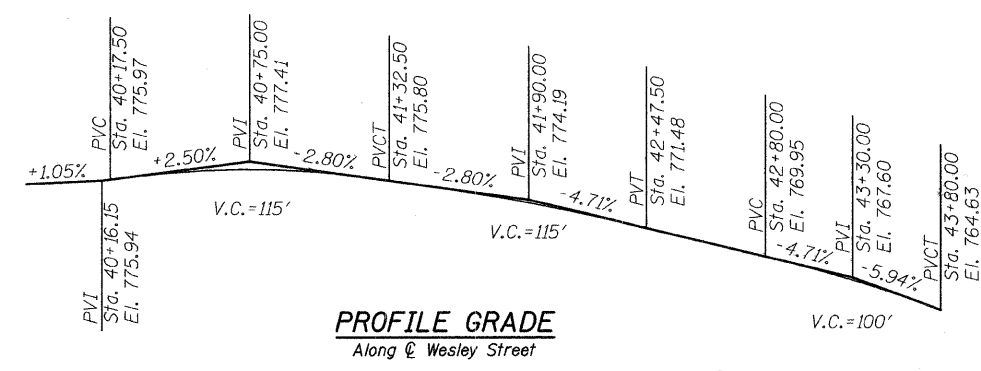
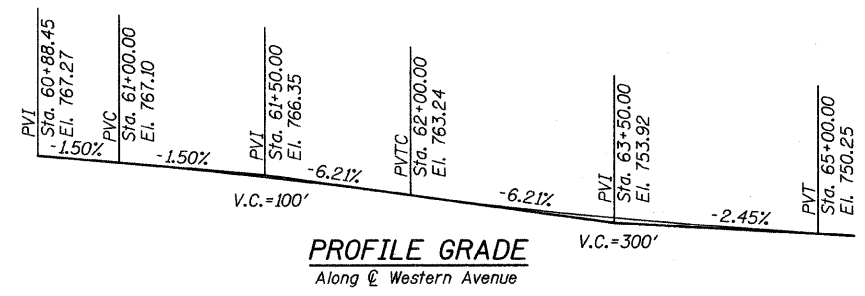
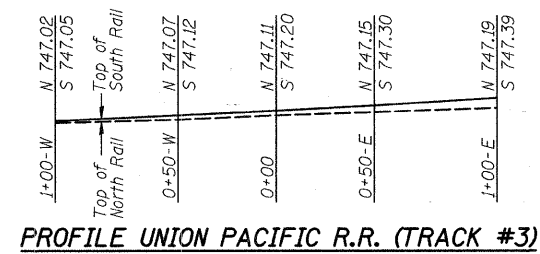
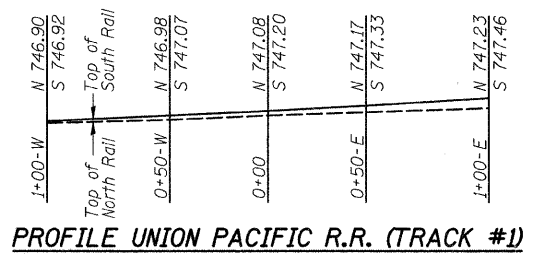
Allow 50 #/sq. ft. for future wearing surface in addition to 2 1/2" overlay.

LOADING MSE RETAINING WALL

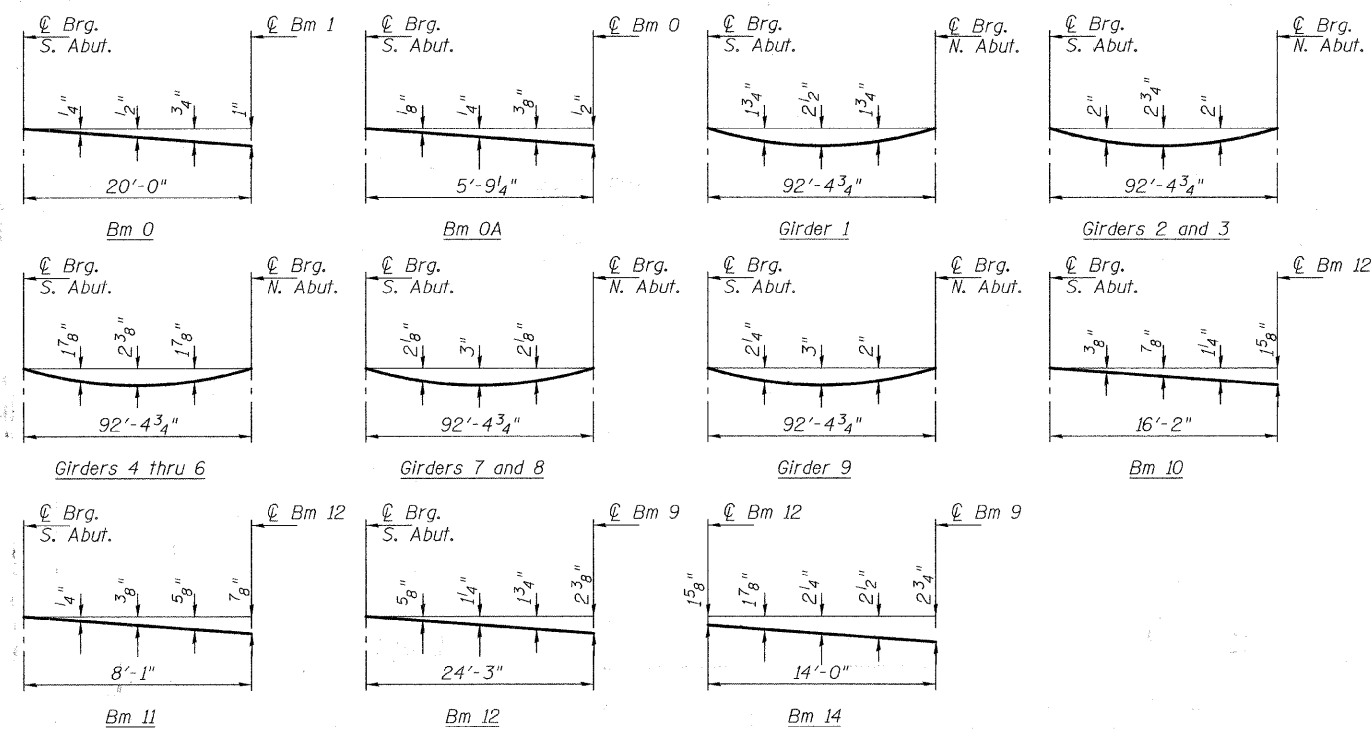
Equivalent Fluid Lateral Soil Pressure = 40 psf
Traffic Surcharge = 2 feet of fill

PROP. CURVE

Wesley Street	Manchester Road
PI STA. = 41+67.39	PI STA. = 22+64.67
Δ = 27° 17' 08" (RT)	Δ = 58° 08' 34" (RT)
D = 38° 11' 50"	D = 76° 23' 40"
R = 150.00'	R = 75.00'
T = 36.41'	T = 41.70'
L = 71.43'	L = 76.11'
E = 4.36'	E = 10.81'
e = N/A	e = N/A
T.R. = N/A	T.R. = N/A
S.E. RUN = N/A	S.E. RUN = N/A
P.C. STA = 41+05.57	P.C. STA = 22+22.98
P.T. STA = 41+77.00	P.T. STA = 22+99.09



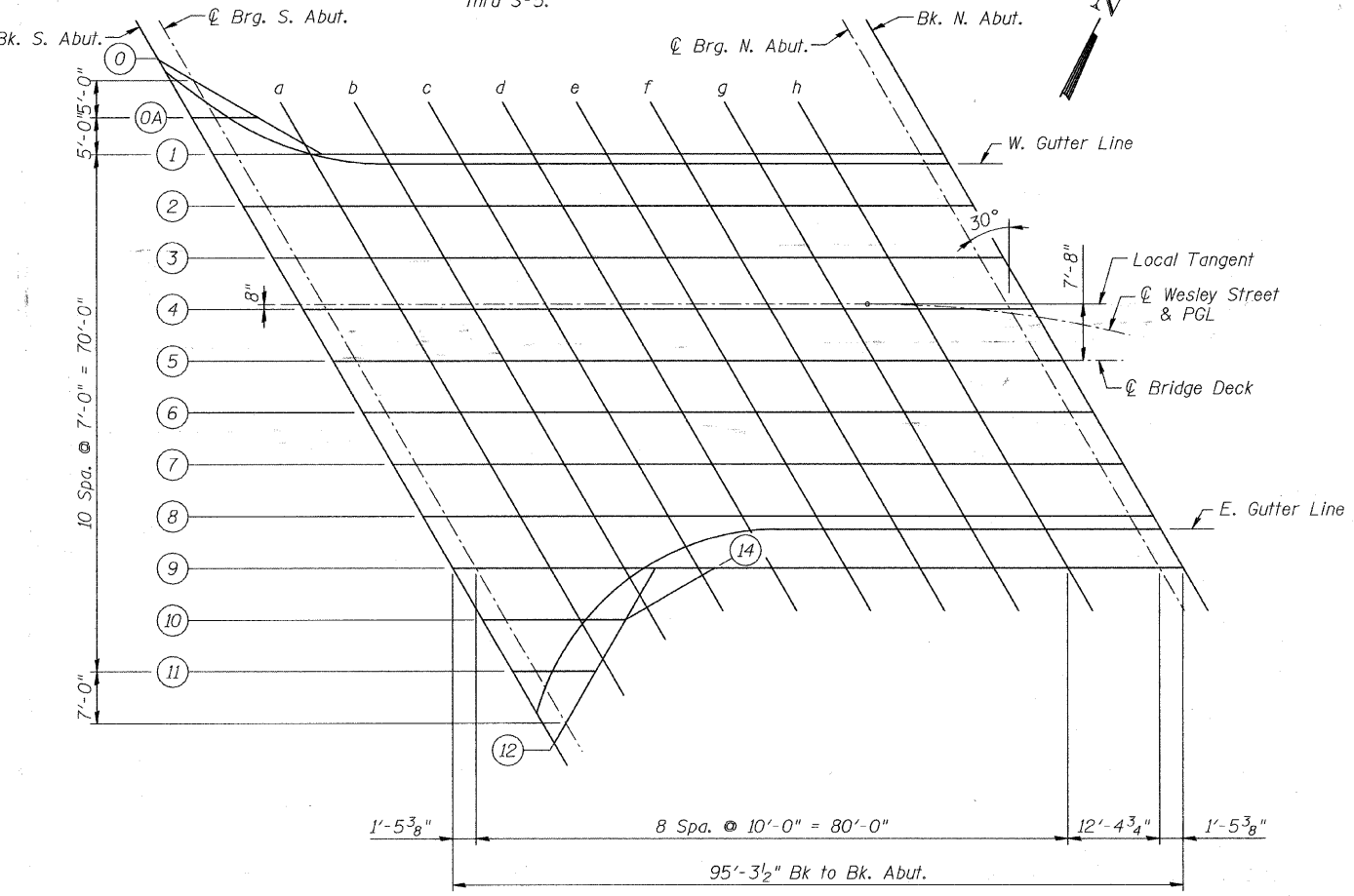
CITY OF WHEATON	
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD	
GENERAL NOTES, INDEX AND BILL OF MATERIAL	
DRAWN	JM
CHECKED	VEVS
APPROVED	BSK
DATE	06/04/2008
SCALE	NONE
SHEET NO. S-2	



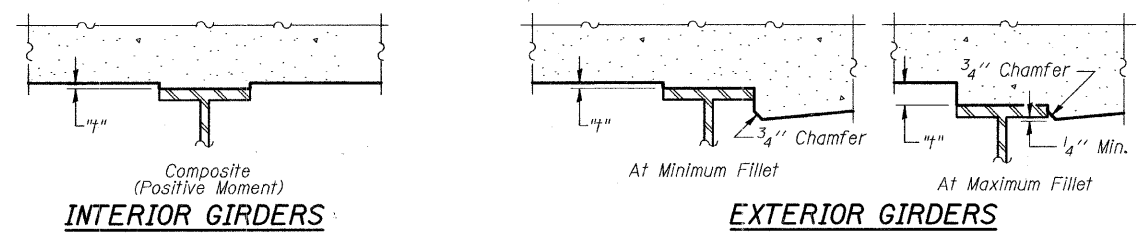
DEAD LOAD DEFLECTION DIAGRAM

(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 on sheets S-3 thru S-5.



PLAN

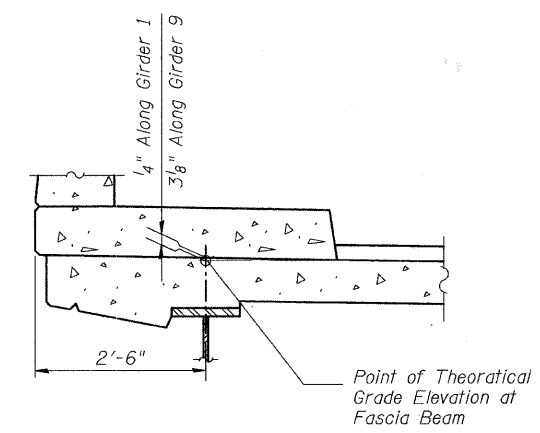


INTERIOR GIRDERS

EXTERIOR GIRDERS

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

FILLET HEIGHTS



SECTION THRU PARAPET

BEAM 0

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk./S. Abut.	40+12.35	-31.58	776.374	776.374
☉ Brg. S. Abut.	40+14.51	-30.33	776.378	776.378
Int. w/ Bm. 0a	40+23.17	-25.33	776.488	776.531
End Bm. 0	40+31.83	-20.33	776.590	776.673

BEAM 0A

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk./S. Abut.	40+15.96	-25.33	776.318	776.318
☉ Brg. S. Abut.	40+17.40	-25.33	776.351	776.351
End Bm. 0a	40+23.17	-25.33	776.488	776.531

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk./S. Abut.	40+18.84	-20.33	776.312	776.312
☉ Brg. S. Abut.	40+20.29	-20.33	776.347	776.347
a	40+30.29	-20.33	776.561	776.634
b	40+40.29	-20.33	776.729	776.863
c	40+50.29	-20.33	776.851	777.028
d	40+60.29	-20.33	776.927	777.128
e	40+70.29	-20.33	776.956	777.160
f	40+80.29	-20.33	776.940	777.123
g	40+90.29	-20.33	776.878	777.020
h	41+00.29	-20.33	776.769	776.853
☉ Brg. N. Abut.	41+11.84	-20.48	776.589	776.589
Bk./N. Abut.	41+13.11	-20.55	776.566	776.566

CITY OF WHEATON

MANCHESTER ROAD/ WESLEY STREET
OVER UNION PACIFIC RAILROAD

**TOP OF SLAB ELEVATIONS
LAYOUT**

DRAWN	JM	SHEET NO. S-3
CHECKED	VEVS	
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

HDR
HDR Engineering, Inc.

W. GUTTER LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk./S. Abut.	40+13.74	-29.17	776.352	-
☉ Brg. S. Abut.	40+16.23	-27.36	776.352	-
a	40+30.27	-20.36	776.561	-
b	40+41.06	-19.00	776.720	776.866
c	40+51.06	-19.00	776.838	777.035
d	40+61.06	-19.00	776.910	777.136
e	40+71.06	-19.00	776.937	777.165
f	40+81.06	-19.00	776.917	777.122
g	40+91.06	-19.00	776.851	777.011
h	41+01.06	-19.00	776.739	776.834
☉ Brg. N. Abut.	41+12.67	-19.00	776.551	776.551
Bk./N. Abut.	41+14.58	-19.00	776.514	776.514

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk./S. Abut.	40+22.89	-13.33	776.302	776.302
☉ Brg. S. Abut.	40+24.33	-13.33	776.334	776.334
a	40+34.33	-13.33	776.529	776.608
b	40+44.33	-13.33	776.679	776.825
c	40+54.33	-13.33	776.782	776.979
d	40+64.33	-13.33	776.839	777.064
e	40+74.33	-13.33	776.850	777.078
f	40+84.33	-13.33	776.815	777.021
g	40+94.33	-13.33	776.734	776.894
h	41+04.33	-13.33	776.607	776.702
☉ Brg. N. Abut.	41+15.81	-13.71	776.410	776.410
Bk./N. Abut.	41+17.12	-13.82	776.385	776.385

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk./S. Abut.	40+26.93	-6.33	776.284	776.284
☉ Brg. S. Abut.	40+28.37	-6.33	776.313	776.313
a	40+38.37	-6.33	776.490	776.569
b	40+48.37	-6.33	776.621	776.767
c	40+58.37	-6.33	776.706	776.903
d	40+68.37	-6.33	776.744	776.969
e	40+78.37	-6.33	776.737	776.965
f	40+88.37	-6.33	776.683	776.889
g	40+98.37	-6.33	776.583	776.743
h	41+08.26	-6.36	776.440	776.535
☉ Brg. N. Abut.	41+20.11	-7.07	776.219	776.219
Bk./N. Abut.	41+21.48	-7.22	776.190	776.190

☉ WESLEY STR., PGL & CROWN

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk./S. Abut.	40+30.58	0.00	776.261	776.261
☉ Brg. S. Abut.	40+32.03	0.00	776.288	776.288
a	40+42.03	0.00	776.448	776.525
b	40+52.03	0.00	776.562	776.705
c	40+62.03	0.00	776.630	776.822
d	40+72.03	0.00	776.652	776.871
e	40+82.03	0.00	776.627	776.850
f	40+92.03	0.00	776.557	776.757
g	41+02.03	0.00	776.441	776.596
h	41+12.11	0.00	776.276	776.369
☉ Brg. N. Abut.	41+25.23	0.00	775.993	775.993
Bk./N. Abut.	41+26.81	0.00	775.953	775.953

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk./S. Abut.	40+30.97	0.67	776.252	776.252
☉ Brg. S. Abut.	40+32.41	0.67	776.279	776.279
a	40+42.41	0.67	776.437	776.513
b	40+52.41	0.67	776.549	776.692
c	40+62.41	0.67	776.615	776.807
d	40+72.41	0.67	776.635	776.854
e	40+82.41	0.67	776.609	776.831
f	40+92.41	0.67	776.537	776.737
g	41+02.41	0.67	776.418	776.574
h	41+12.44	0.51	776.257	776.350
☉ Brg. N. Abut.	41+24.80	-0.57	776.012	776.012
Bk./N. Abut.	41+26.22	-0.76	775.979	775.979

GIRDER 5 & ☉ STRUCTURE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk./S. Abut.	40+35.01	7.67	776.149	776.149
☉ Brg. S. Abut.	40+36.45	7.67	776.173	776.173
a	40+46.45	7.67	776.313	776.389
b	40+56.45	7.67	776.406	776.549
c	40+66.45	7.67	776.454	776.646
d	40+76.45	7.67	776.455	776.674
e	40+86.45	7.67	776.410	776.632
f	40+96.45	7.67	776.319	776.520
g	41+06.50	7.66	776.182	776.337
h	41+17.02	7.25	775.998	776.090
☉ Brg. N. Abut.	41+29.90	5.77	775.728	775.728
Bk./N. Abut.	41+31.37	5.53	775.694	775.694

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk./S. Abut.	40+39.05	14.67	776.039	776.039
☉ Brg. S. Abut.	40+40.50	14.67	776.060	776.060
a	40+50.50	14.67	776.181	776.257
b	40+60.50	14.67	776.256	776.399
c	40+70.50	14.67	776.285	776.477
d	40+80.50	14.67	776.268	776.487
e	40+90.50	14.67	776.204	776.426
f	41+00.50	14.67	776.095	776.295
g	41+11.03	14.58	775.932	776.087
h	41+22.05	13.85	775.723	775.815
☉ Brg. N. Abut.	41+35.46	11.93	775.364	775.364
Bk./N. Abut.	41+36.99	11.64	775.300	775.300

GIRDER 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk./S. Abut.	40+43.09	21.67	775.921	775.921
☉ Brg. S. Abut.	40+44.54	21.67	775.940	775.940
a	40+54.54	21.67	776.042	776.127
b	40+64.54	21.67	776.098	776.257
c	40+74.54	21.67	776.108	776.322
d	40+84.54	21.67	776.072	776.316
e	40+94.54	21.67	775.990	776.237
f	41+04.54	21.67	775.862	776.085
g	41+16.03	21.35	775.666	775.839
h	41+27.58	20.27	775.427	775.529
☉ Brg. N. Abut.	41+41.53	17.89	774.935	774.935
Bk./N. Abut.	41+43.12	17.54	774.872	774.872

GIRDER 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk./S. Abut.	40+47.13	28.67	775.796	775.796
☉ Brg. S. Abut.	40+48.58	28.67	775.811	775.811
a	40+58.58	28.67	775.895	775.980
b	40+68.58	28.67	775.933	776.091
c	40+78.58	28.67	775.924	776.138
d	40+88.58	28.67	775.870	776.114
e	40+98.58	28.67	775.769	776.016
f	41+09.29	28.63	775.611	775.834
g	41+21.59	27.97	775.380	775.553
h	41+33.68	26.50	775.083	775.186
☉ Brg. N. Abut.	41+48.16	23.60	774.494	774.494
Bk./N. Abut.	41+49.80	23.19	774.431	774.431

EAST GUTTER LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk./S. Abut.	40+61.41	53.39	775.292	-
☉ Brg. S. Abut.	40+61.97	51.86	775.333	-
a	40+66.98	43.22	775.566	-
b	40+73.41	37.04	775.725	-
c	40+80.98	32.83	775.811	-
d	40+89.71	30.64	775.812	-
e	40+99.59	30.42	775.713	775.960
f	41+10.61	30.35	775.545	775.768
g	41+23.07	29.60	775.305	775.478
h	41+35.30	28.03	774.969	775.072
☉ Brg. N. Abut.	41+49.92	24.99	774.381	774.381
Bk./N. Abut.	41+51.57	24.56	774.319	774.319

GIRDER 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk./S. Abut.	40+51.18	35.67	775.663	775.663
☉ Brg. S. Abut.	40+52.62	35.67	775.676	775.676
a	40+62.62	35.67	775.741	775.831
b	40+72.62	35.67	775.760	775.931
c	40+82.62	35.67	775.733	775.958
d	40+92.62	35.67	775.660	775.906
e	41+02.62	35.67	775.540	775.781
f	41+14.81	35.45	775.338	775.551
g	41+27.77	34.40	775.068	775.231
h	41+40.42	32.51	774.621	774.717
☉ Brg. N. Abut.	41+55.41	29.05	774.039	774.039
Bk./N. Abut.	41+57.10	28.57	773.979	773.979

CITY OF WHEATON	
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD	
TOP OF SLAB ELEVATIONS	
DRAWN	JM
CHECKED	VEVS
APPROVED	BSK
DATE	06/04/2008
SCALE	NONE
S-4	



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FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	108
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				

• FAU 3549/ FAU 1432

BEAM 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk./S. Abut.	40+55.22	42.67	775.522	775.522
☉ Brg. S. Abut.	40+56.66	42.67	775.533	775.533
a	40+66.66	42.67	775.579	775.663
End Bm. 10	40+72.83	42.67	775.585	775.719

BEAM 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk./S. Abut.	40+59.26	49.67	775.374	775.374
☉ Brg. S. Abut.	40+60.70	49.67	775.382	775.382
End Bm. 11	40+68.79	49.67	775.408	775.476

BEAM 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk./S. Abut.	40+64.02	57.92	775.190	775.190
☉ Brg. S. Abut.	40+64.74	56.67	775.224	775.224
Int. w/ Bm. 11	40+68.79	49.67	775.408	775.476
Int. w/ Bms. 10 & 14	40+72.83	42.67	775.585	775.719
End Bm. 12	40+76.87	35.67	775.754	775.951

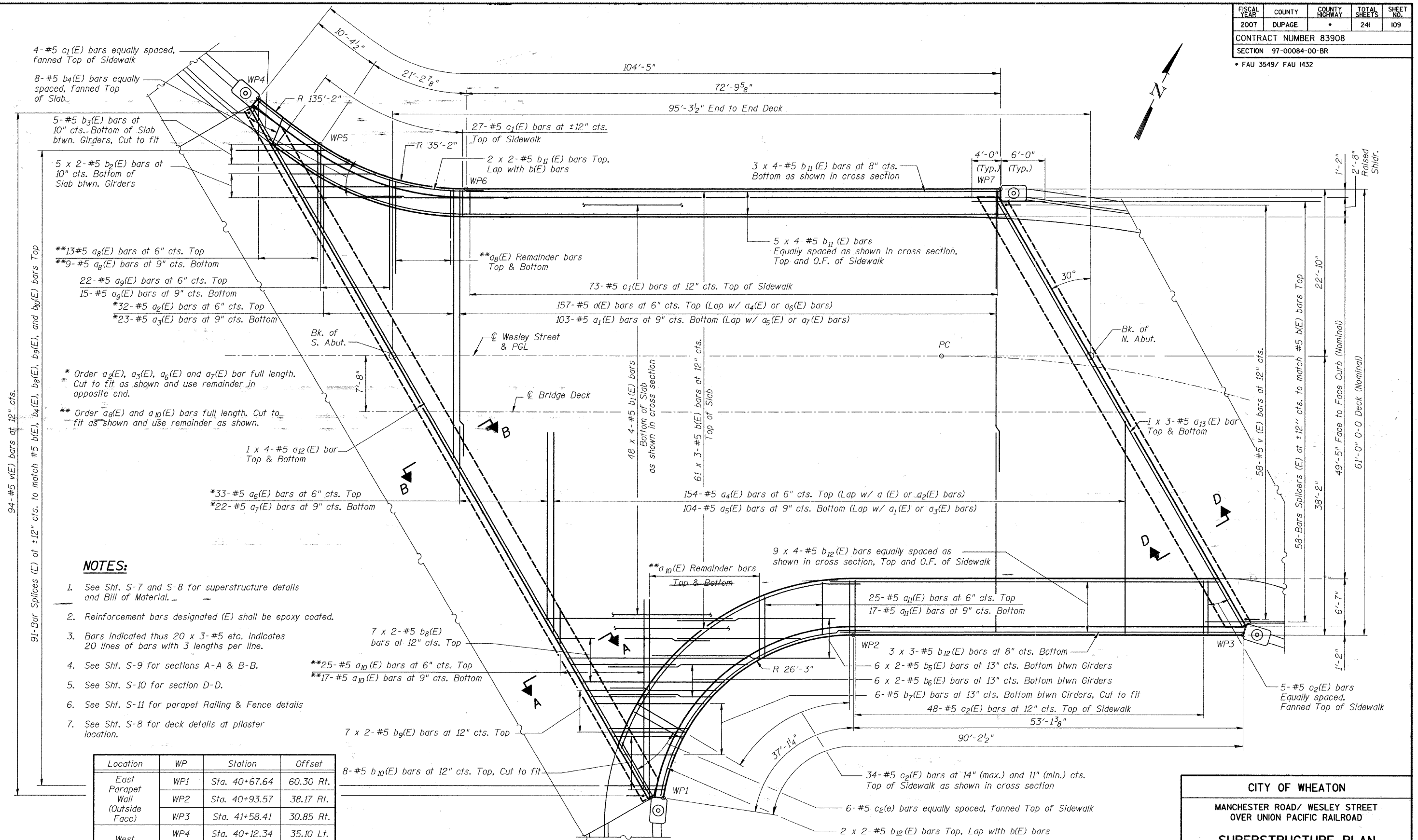
BEAM 14

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Int. w/ Bm. 12	40+72.84	42.67	775.585	775.719
End Bm. 14	40+84.97	35.67	775.720	775.952

CITY OF WHEATON	
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD	
TOP OF SLAB ELEVATIONS	
DRAWN	JM
CHECKED	VEVS
APPROVED	BSK
DATE	06/04/2008
SCALE	NONE
SHEET NO. S-5	



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4-#5 c₁(E) bars equally spaced, fanned Top of Sidewalk
 8-#5 b₄(E) bars equally spaced, fanned Top of Slab
 5-#5 b₃(E) bars at 10" cts. Bottom of Slab btwn. Girders, Cut to fit
 5 x 2-#5 b₂(E) bars at 10" cts. Bottom of Slab btwn. Girders
 **13#5 a₈(E) bars at 6" cts. Top
 **9-#5 a₉(E) bars at 9" cts. Bottom
 22-#5 a₉(E) bars at 6" cts. Top
 15-#5 a₉(E) bars at 9" cts. Bottom
 *32-#5 a₂(E) bars at 6" cts. Top
 *23-#5 a₃(E) bars at 9" cts. Bottom
 * Order a₂(E), a₃(E), a₆(E) and a₇(E) bar full length. Cut to fit as shown and use remainder in opposite end.
 ** Order a₈(E) and a₁₀(E) bars full length. Cut to fit as shown and use remainder as shown.

- NOTES:**
1. See Sht. S-7 and S-8 for superstructure details and Bill of Material.
 2. Reinforcement bars designated (E) shall be epoxy coated.
 3. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 4. See Sht. S-9 for sections A-A & B-B.
 5. See Sht. S-10 for section D-D.
 6. See Sht. S-11 for parapet Railing & Fence details
 7. See Sht. S-8 for deck details at pilaster location.

Location	WP	Station	Offset
East Parapet Wall (Outside Face)	WP1	Sta. 40+67.64	60.30 Rt.
	WP2	Sta. 40+93.57	38.17 Rt.
	WP3	Sta. 41+58.41	30.85 Rt.
West Parapet Wall (Outside Face)	WP4	Sta. 40+12.34	35.10 Lt.
	WP5	Sta. 40+20.68	28.93 Lt.
	WP6	Sta. 40+40.69	22.83 Lt.
	WP7	Sta. 41+12.44	23.01 Lt.

MIN. BAR LAP
 #5 - 1'-8"
 #6 - 2'-0"

PLAN



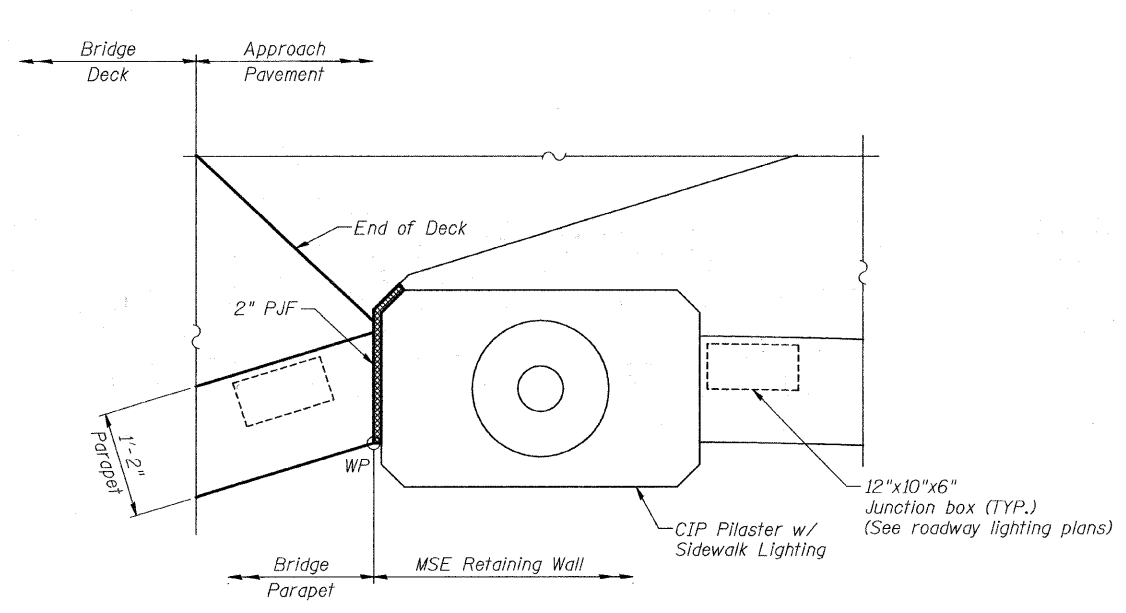
CITY OF WHEATON	
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD	
SUPERSTRUCTURE PLAN	
DRAWN	JM
CHECKED	VEVS
APPROVED	BSK
DATE	06/04/2008
SCALE	NONE
SHEET NO. S-6	

**SUPERSTRUCTURE
BILL OF MATERIAL**

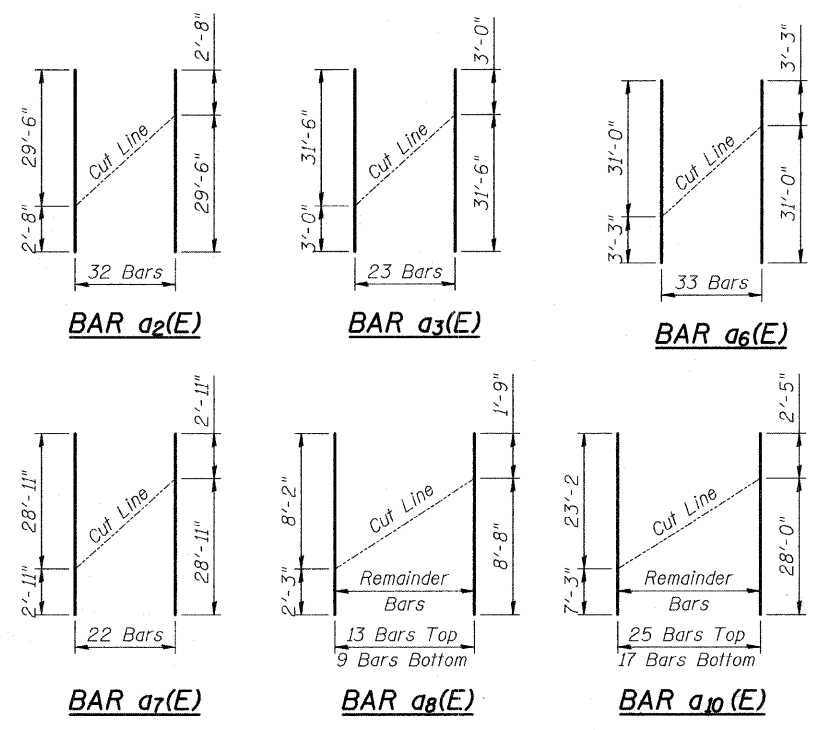
Bar	No.	Size	Length	Shape
a(E)	157	#5	30'-0"	—
a ₁ (E)	103	#5	32'-0"	—
a ₂ (E)	32	#5	32'-2"	—
a ₃ (E)	23	#5	34'-1"	—
a ₄ (E)	154	#5	32'-0"	—
a ₅ (E)	104	#5	30'-0"	—
a ₆ (E)	33	#5	34'-3"	—
a ₇ (E)	22	#5	31'-10"	—
a ₈ (E)	22	#5	10'-5"	—
a ₉ (E)	37	#5	8'-8"	—
a ₁₀ (E)	42	#5	30'-5"	—
a ₁₁ (E)	42	#5	6'-10"	—
a ₁₂ (E)	8	#5	28'-6"	—
a ₁₃ (E)	6	#5	23'-8"	—
b(E)	183	#5	32'-9"	—
b ₁ (E)	192	#5	25'-0"	—
b ₂ (E)	10	#5	11'-9"	—
b ₃ (E)	5	#5	9'-4"	—
b ₄ (E)	8	#5	14'-10"	—
b ₅ (E)	12	#5	22'-10"	—
b ₆ (E)	12	#5	11'-8"	—
b ₇ (E)	6	#5	11'-3"	—
b ₈ (E)	14	#5	17'-9"	—
b ₉ (E)	14	#5	9'-7"	—
b ₁₀ (E)	8	#5	8'-6"	—
b ₁₁ (E)	36	#5	27'-9"	—
b ₁₂ (E)	49	#5	32'-0"	—
c(E)	215	#5	2'-4"	┌
c ₁ (E)	104	#5	3'-5"	—
c ₂ (E)	93	#5	7'-3"	—
d(E)	215	#4	4'-10"	┌
d ₁ (E)	217	#6	4'-2"	┌
d ₂ (E)	78	#4	2'-0"	—
e(E)	18	#4	31'-10"	—
e ₁ (E)	18	#4	36'-1"	—
m(E)	6	#6	38'-0"	—
m ₁ (E)	9	#6	38'-2"	—
m ₂ (E)	46	#6	10'-0"	—
m ₃ (E)	2	#6	8'-5"	—
m ₄ (E)	4	#6	7'-7"	—
m ₅ (E)	16	#6	7'-9"	—
m ₆ (E)	1	#6	23'-11"	—
m ₇ (E)	1	#6	2'-8"	—
m ₈ (E)	1	#6	11'-2"	—
m ₉ (E)	1	#6	3'-0"	—
m ₁₀ (E)	4	#6	34'-6"	—
m ₁₁ (E)	6	#6	35'-2"	—
m ₁₂ (E)	2	#6	1'-7"	—
s(E)	153	#5	6'-5"	┌
s ₁ (E)	37	#4	10'-1"	┌
s ₂ (E)	116	#4	11'-3"	┌
v(E)	152	#5	3'-6"	┌

Item	Unit	Quantity
Reinforcement Bars, Epoxy Coated	Pound	48,000
Bar Splicers	Each	149
Concrete Superstructure	Cu. Yd.	261.6
Bridge Deck Microsilica Concrete Overlay 2 1/2"	Sq. Yd.	569
Bridge Deck Grooving	Sq. Yd.	569
Protective Coat	Sq. Yd.	752

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

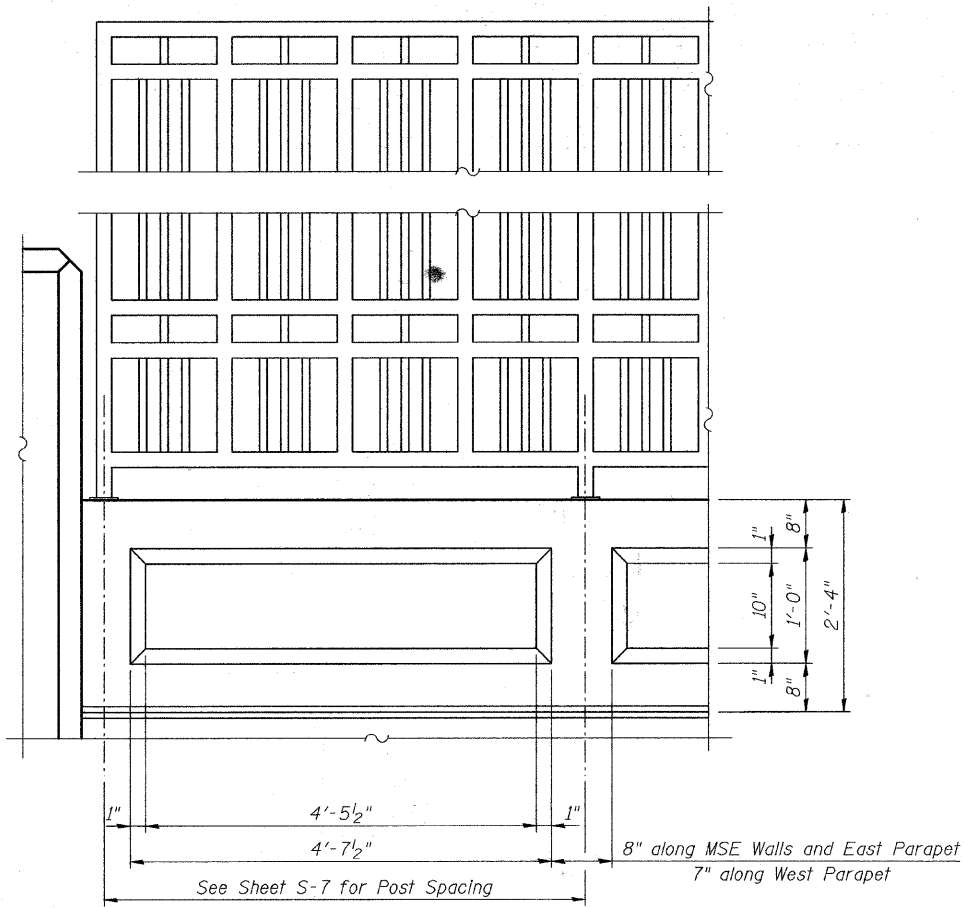
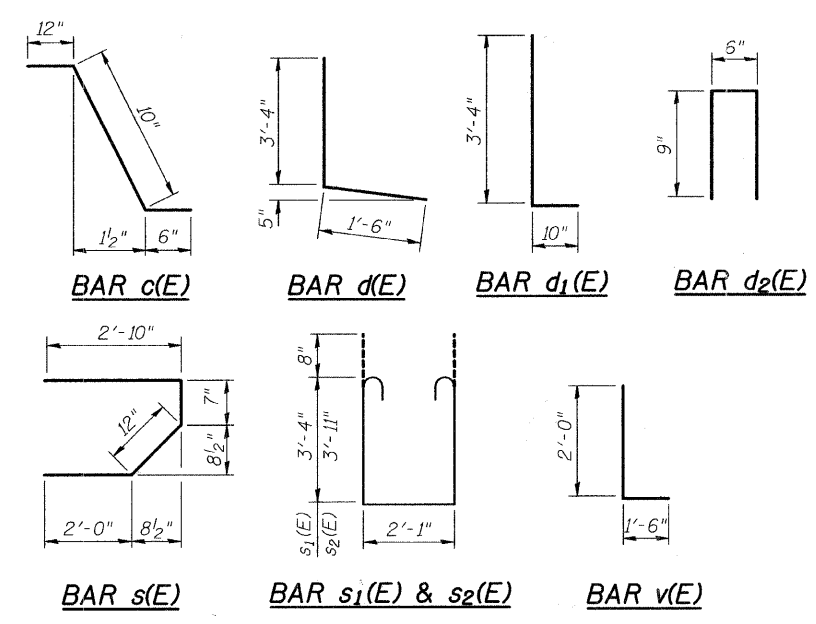


DETAIL AT PILASTER (TYP.)



FIELD CUTTING DIAGRAMS

Order bars full length. Cut to fit as shown and use remainder in opposite end as shown

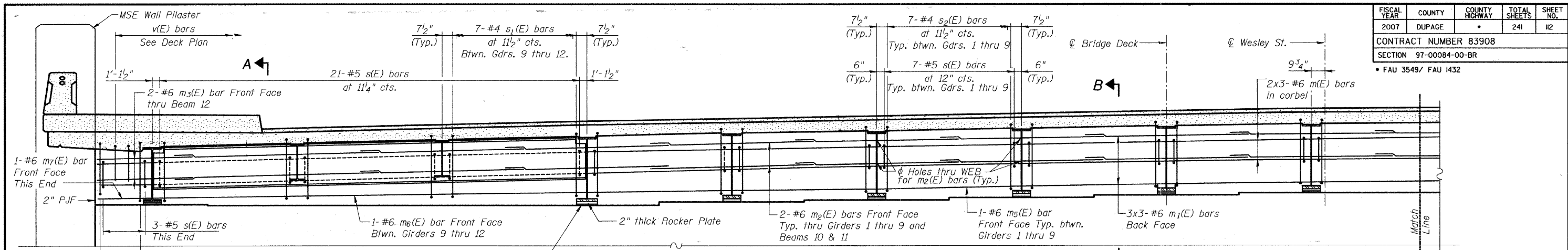


PARAPET WALL ARCHITECTURAL TREATMENT DETAILS

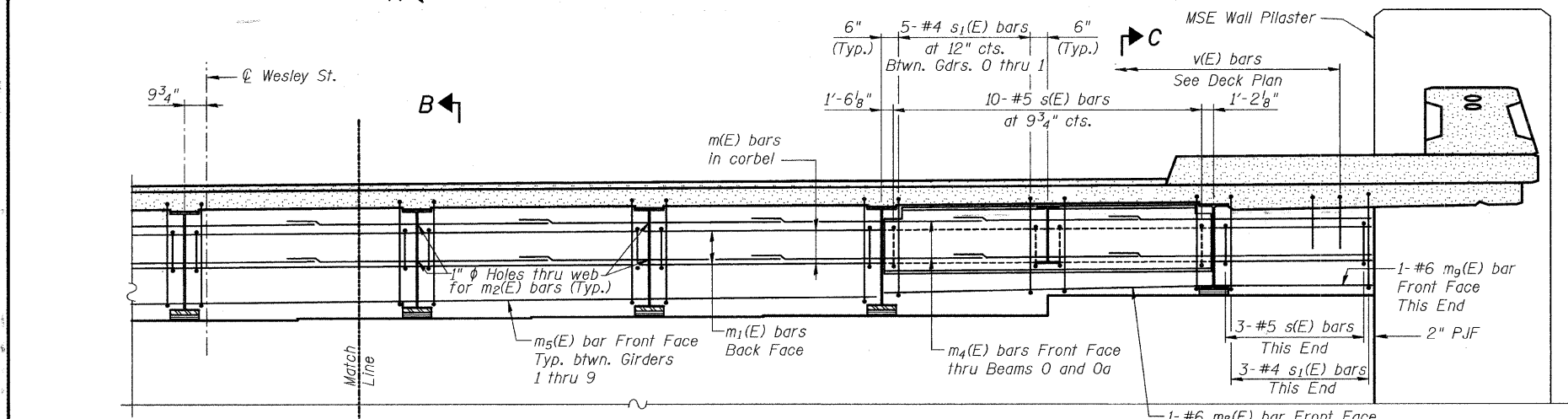
CITY OF WHEATON	
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD	
SUPERSTRUCTURE DETAILS	
DRAWN	JM
CHECKED	VEVS
APPROVED	BSK
DATE	06/04/2008
SCALE	NONE
SHEET NO. S-8	



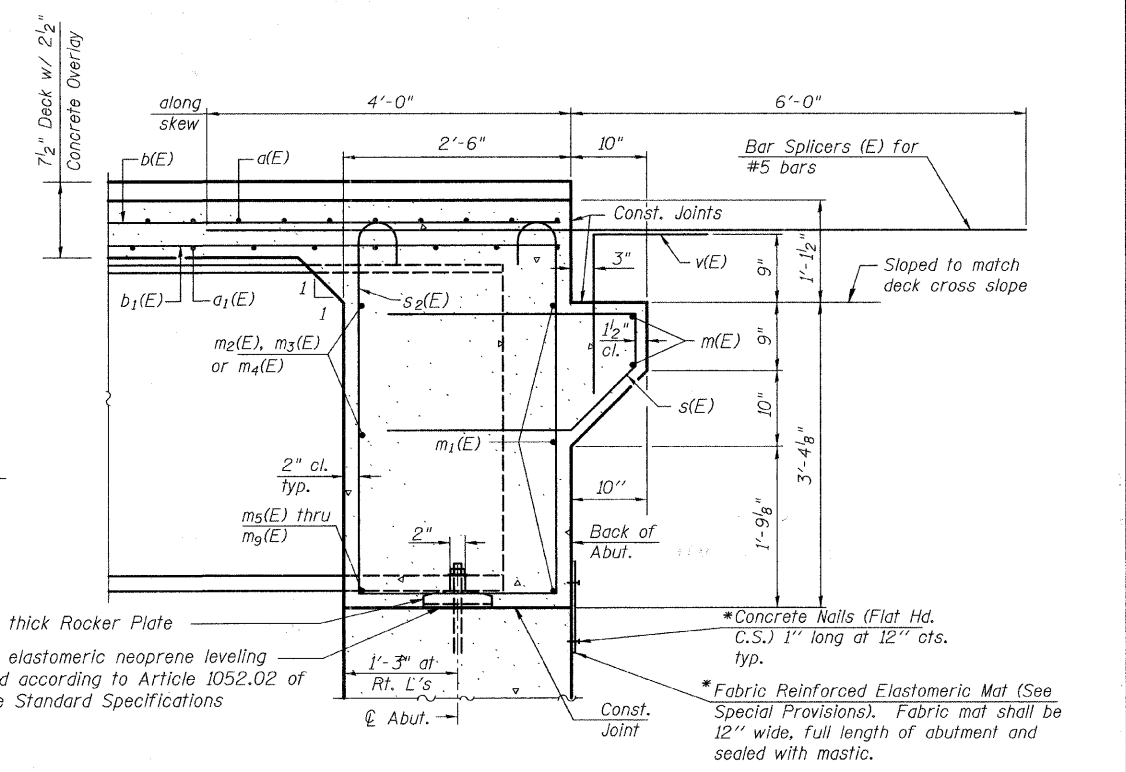
FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE		241	112
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
FAU 3549/ FAU 1432				



DIAPHRAGM SECTION AT S. ABUTMENT
(Along Centerline Bearing) (Looking South)



DIAPHRAGM SECTION AT S. ABUTMENT
(Along Centerline Bearing) (Looking South)

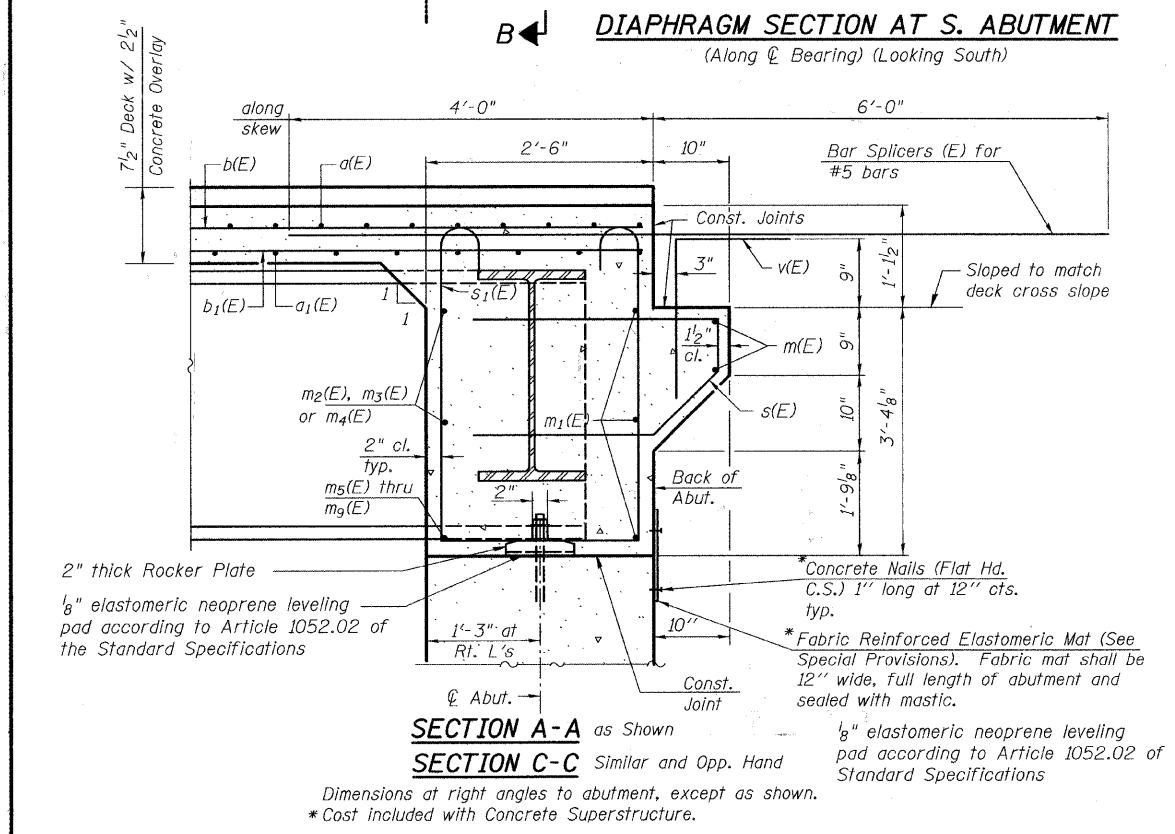


SECTION B-B

Dimensions at right angles to abutment, except as shown.
*Cost included with Concrete Superstructure.

MIN. BAR LAP
#6 bar = 2'-9"

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet S-8.
Concrete in diaphragm is included with Concrete Superstructure on sheet S-8.
For details of bars s(E), s1(E), s2(E) and v(E) see sheet S-8.
The s(E), s1(E) and s2(E) bars shall be placed parallel to the girders. Spacing for these bars shall be at right angles to the girders.
For bearing details see sheet S-17.



SECTION A-A as Shown

SECTION C-C Similar and Opp. Hand

Dimensions at right angles to abutment, except as shown.
*Cost included with Concrete Superstructure.

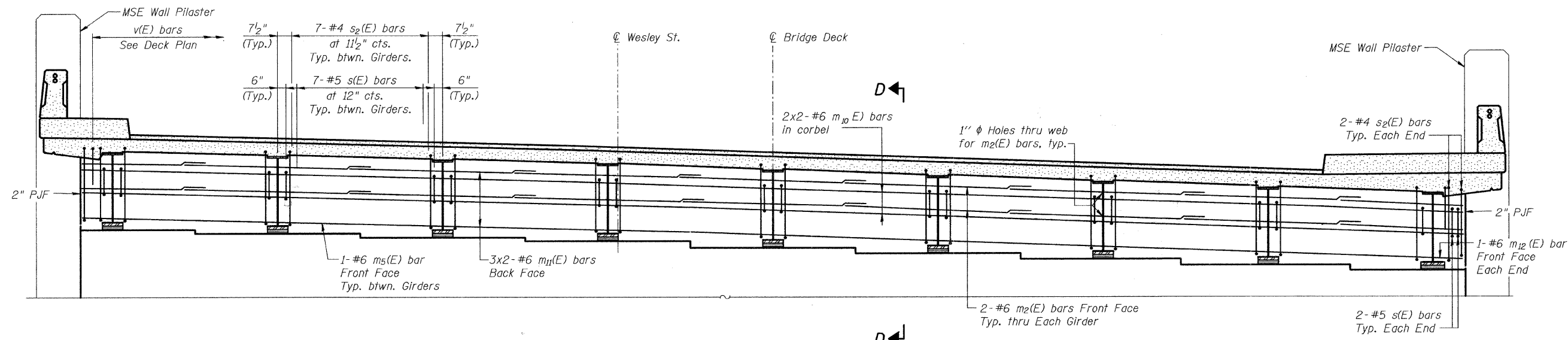
CITY OF WHEATON	
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD	
DIAPHRAGM DETAILS	
DRAWN	JM
CHECKED	VEVS
APPROVED	BSK
DATE	06/04/2008
SCALE	NONE
SHEET NO. S-9	

HDR
HDR Engineering, Inc.

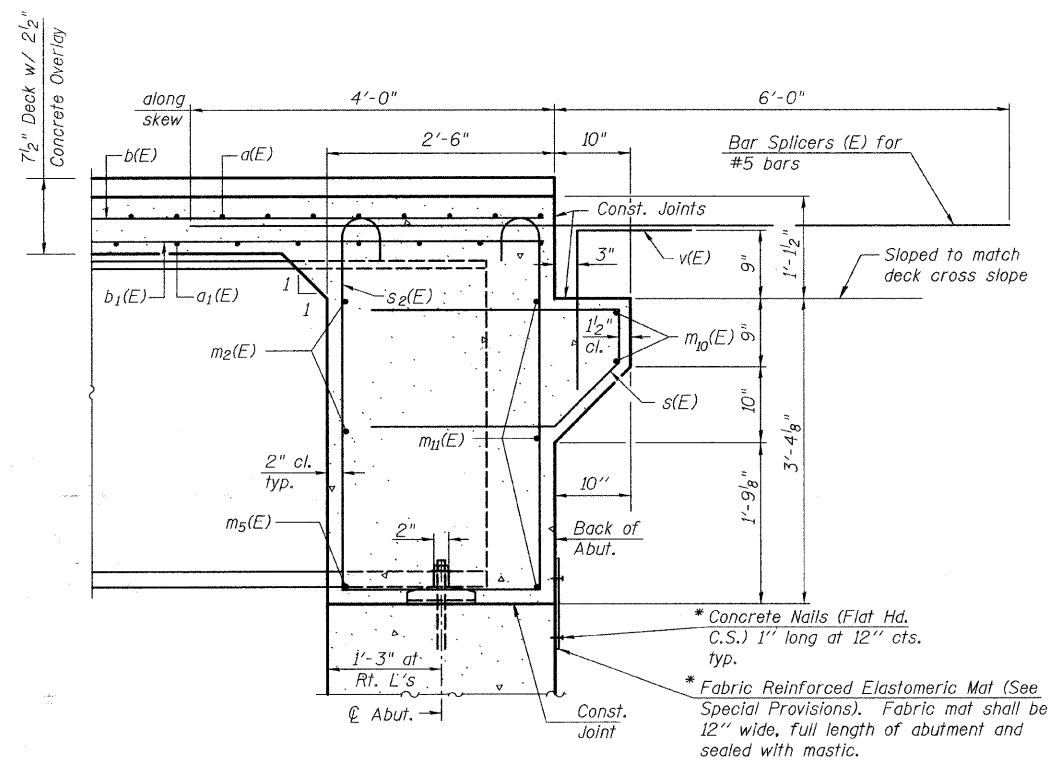
FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	•	241	113

CONTRACT NUMBER 83908
SECTION 97-00084-00-BR

• FAU 3549/ FAU 1432



DIAPHRAGM SECTION AT N. ABUTMENT
(Along ϕ Bearing) (Looking North)



SECTION D-D

Dimensions at right angles to abutment, except as shown.
* Cost included with Concrete Superstructure.

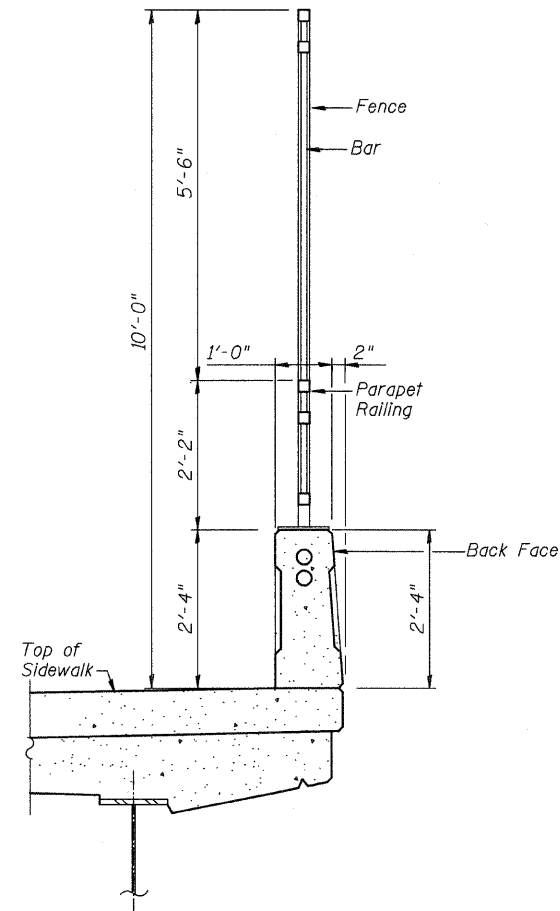
MIN. BAR LAP
#6 bar = 2'-9"

Notes:
Reinforcement bars in diaphragm are billed with superstructure on Sht. S-8.
Concrete in diaphragm is included with Concrete Superstructure on Sht. S-8.
For details of bars s(E), s1(E), s2(E) and v(E) see Sht. S-8.
The s(E), s1(E) and s2(E) bars shall be placed parallel to the girders. Spacing for these bars shall be at right angles to the girders.
For bearing details see Sht. S-17.

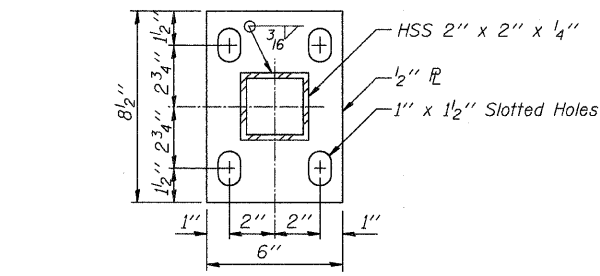
CITY OF WHEATON		
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD		
DIAPHRAGM DETAILS		
DRAWN	JM	SHEET NO.
CHECKED	VEVS	S-10
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

HDR
HDR Engineering, Inc.

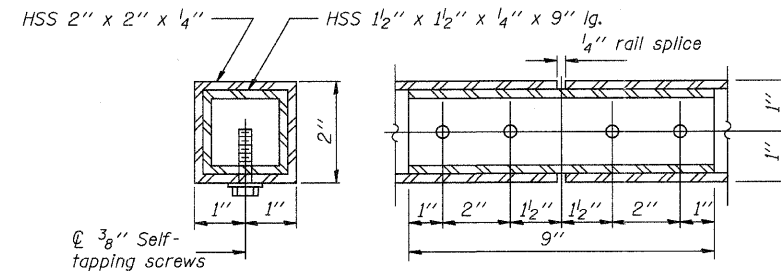
FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	114
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
* FAU 3549/ FAU 1432				



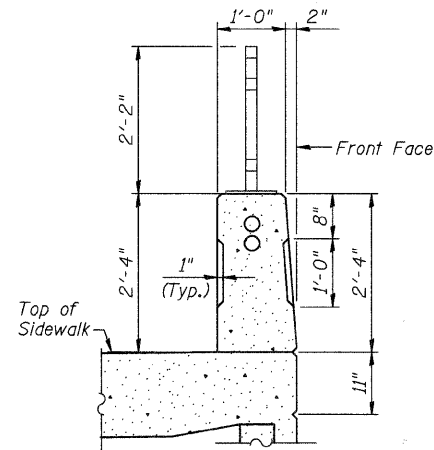
SECTION THRU SIDEWALK



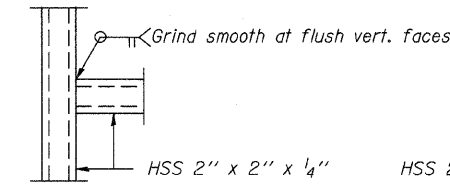
BASE PLATE



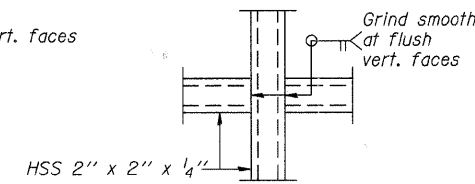
RAIL SPLICE



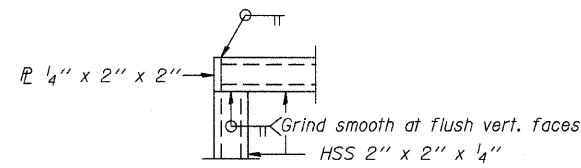
SECTION THRU MSE WALL



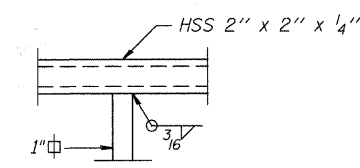
DETAIL A



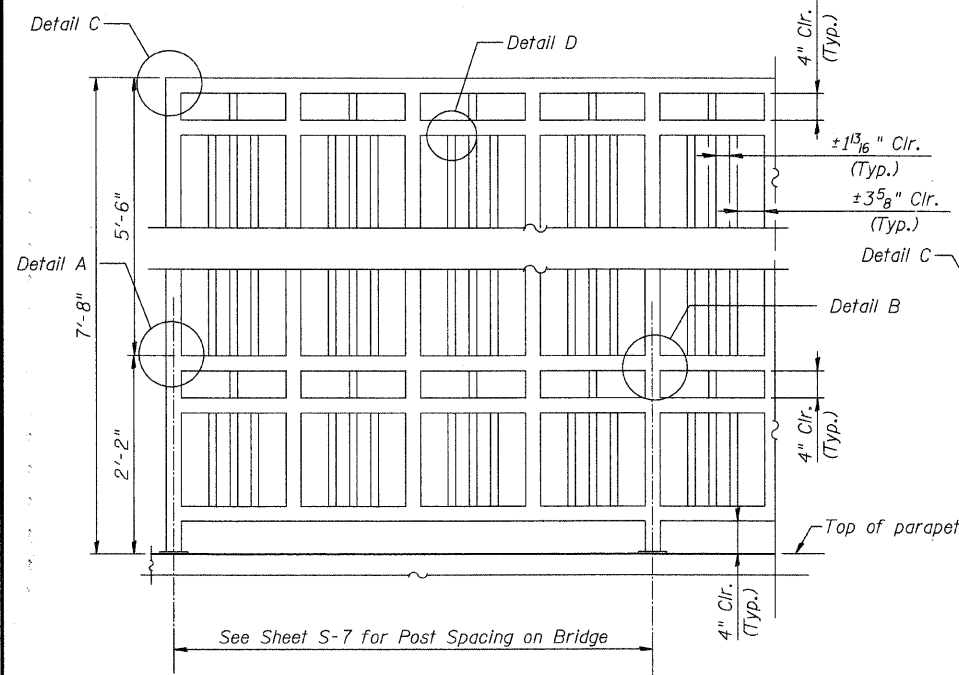
DETAIL B



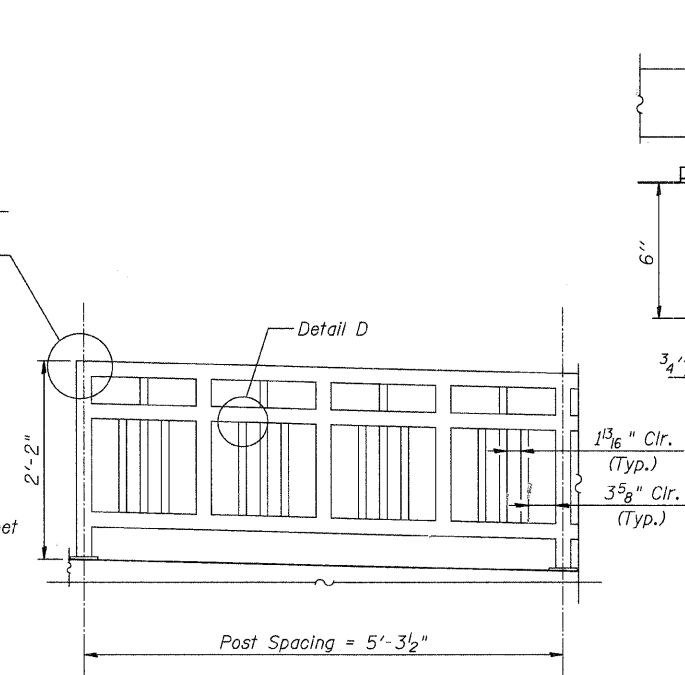
DETAIL C



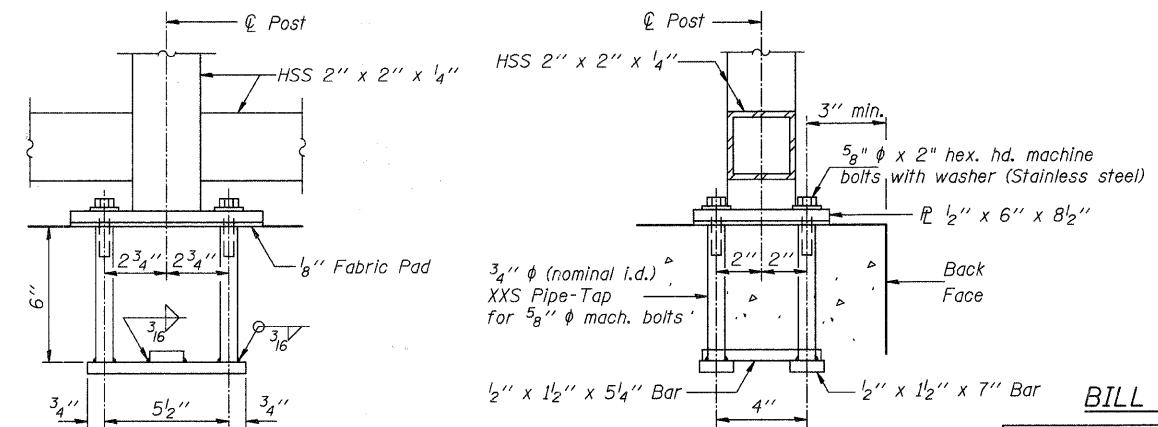
DETAIL D



BRIDGE FENCE RAILING ELEVATION



MSE WALL PARAPET RAILING ELEVATION



ANCHOR BOLT DETAILS

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

BILL OF MATERIAL

Item	Unit	Quantity
Bridge Fence Parapet Mounted	Foot	197
Parapet Railing	Foot	1,740

CITY OF WHEATON		
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD		
PARAPET RAILING AND FENCE DETAILS		
DRAWN	JM	SHEET NO.
CHECKED	VEVS	
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

HDR
HDR Engineering, Inc.

S-11

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	#5
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
* FAU 3549/ FAU 1432				

	GIRDER MOMENT TABLE	
	INT. GIRDER 7	EXT. GIRDER 9
	0.5 Span	0.5 Span
I_s	17,114	18,119
$I_c (n)$	46,864	48,760
$I_c (3n)$	34,324	35,103
S_s	984	1,112
$S_c (n)$	1,346	1,500
$S_c (3n)$	1,246	1,386
ϕ	0.918	0.824
$M\phi$	980	1,072*
$s\phi$	0.989	0.892
$M_s\phi$	1,055	1,147
M_t	880	909*
$M (Imp)$	203	209*
$^5_3[M_t + M(Imp)]$	1,805	1,863
M_a	4,996	5,307
M_u	6,353	6,841
$fs\phi$ non-comp (k.s.i.)	12.0	11.6
$fs\phi$ comp (k.s.i.)	10.2	9.9
$fs^5_3(L+Imp)$ (k.s.i.)	16.1	14.9
fs (Overload) (k.s.i.)	38.3	36.4
VR	51	49

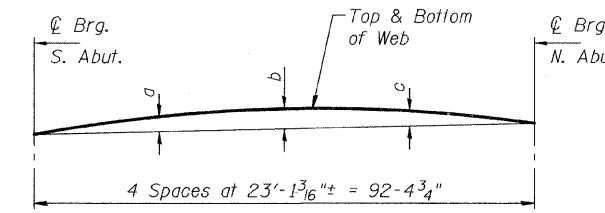
I_s and S_s are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).
 $I_c(n)$ and $S_c(n)$ are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.
 $I_c(3n)$ and $S_c(3n)$ are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads. (see AASHTO 10.38)
 VR is the maximum Live Load + Impact shear range in span.
 M_a (Applied Moment) = $1.3[M\phi + M_s\phi + ^5_3(M_t + M(Imp))]$.
 The Plastic Moment capacity (M_u) is computed according to AASHTO 10.50.1.1.
 fs (Overload) is the sum of the stresses due to $M\phi + M_s\phi + ^5_3(M_t + M(Imp))$.

* Values include additional dead load and live load from Beams 12 and 14.

	GIRDER REACTION TABLE			
	INT. GIRDER 7		EXT. GIRDER 9	
	S. Abut.	N. Abut.	S. Abut.	N. Abut.
$R\phi$	88	88	111	87
R_t	41	41	40	40
Imp.	10	10	9	9
R (Total)	139	139	160	136

Notes:

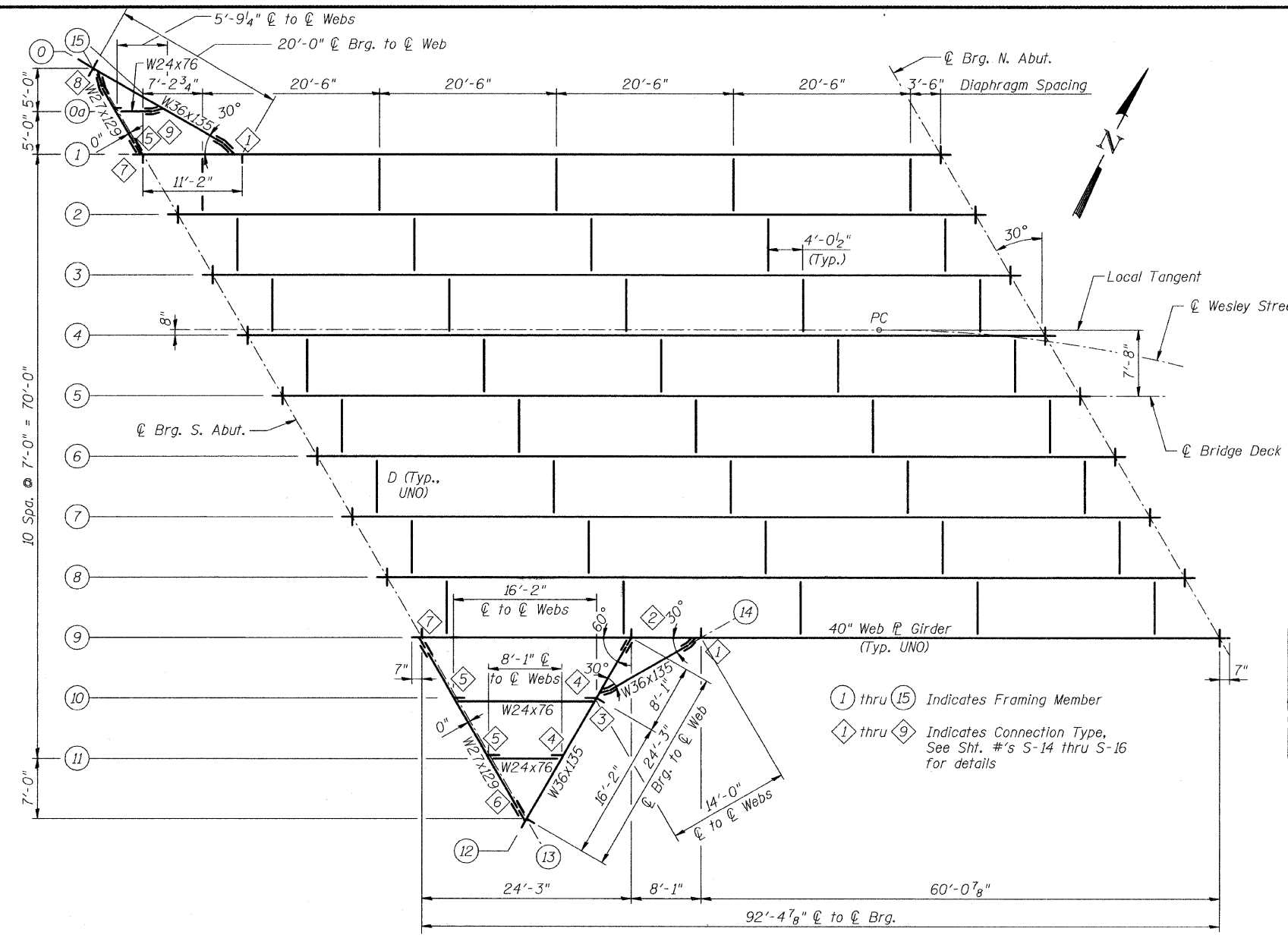
- "NTR" denotes plates to which notch toughness requirements (Zone 2) are applicable.
- All webs, flanges, bearing stiffeners and connection plates shall be M270 Gr.50.



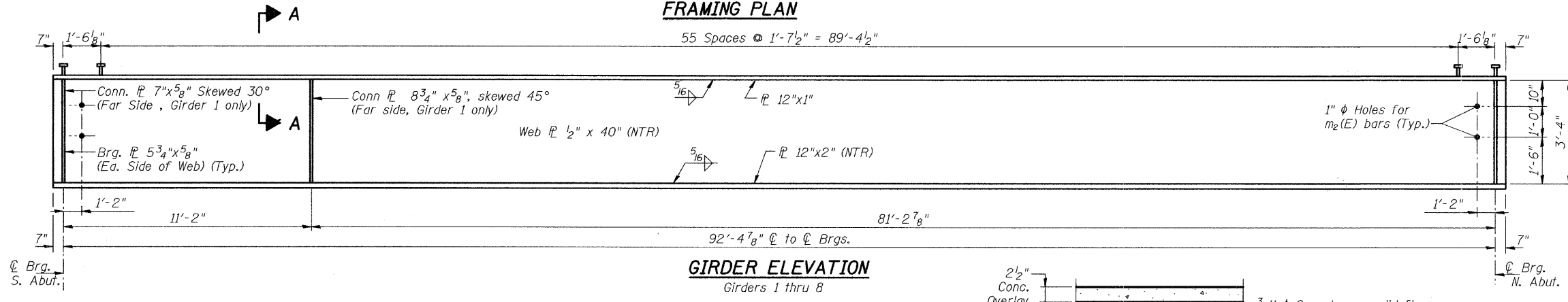
CAMBER DIAGRAM
Girders 1 thru 9
See Table

CAMBER DIMENSIONS			
Girder(s)	a	b	c
1-5	6 1/4"	8 1/2"	6 1/2"
6	6 3/4"	9 1/4"	7"
7	7 1/8"	10 1/8"	8 1/4"
8	7 1/2"	11"	9 1/8"
9	8 1/4"	11 1/8"	9 3/4"

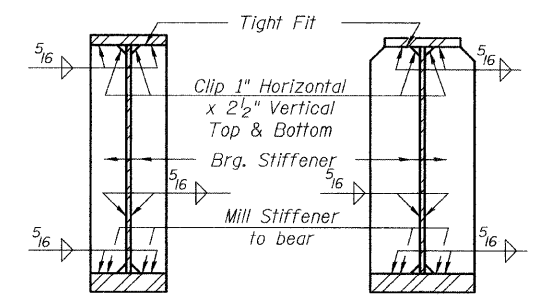
Location	TOP OF WEB ELEVATIONS (For FABRICATION ONLY)								
	Girder Numbers								
© Brg S. Abut.	775.35	775.33	775.31	775.28	775.17	775.06	774.94	774.81	774.68
© Brg N. Abut.	775.59	775.41	775.22	775.01	774.73	774.36	773.94	773.49	773.04



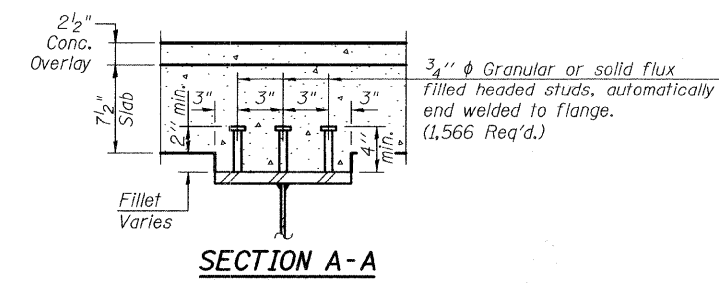
FRAMING PLAN



GIRDER ELEVATION
Girders 1 thru 8



SECTION AT ABUTMENT



SECTION A-A

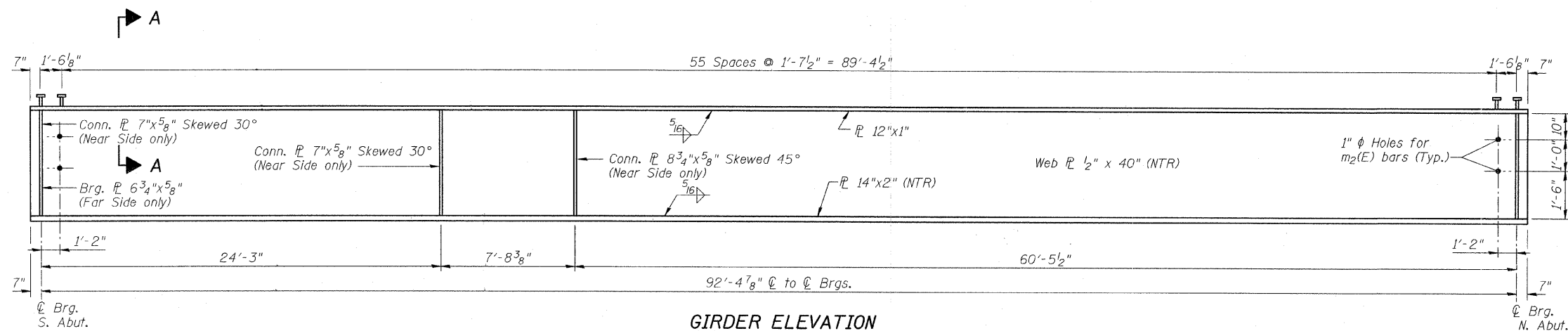
CITY OF WHEATON
MANCHESTER ROAD/ WESLEY STREET
OVER UNION PACIFIC RAILROAD

FRAMING PLAN

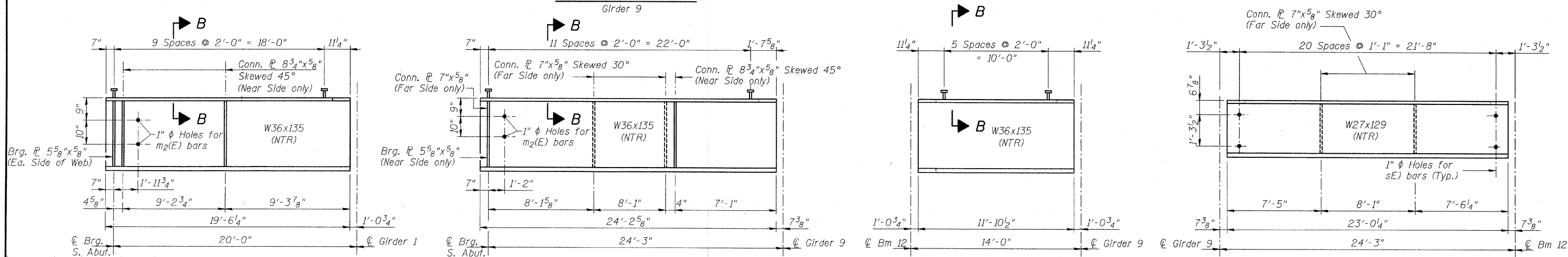
DRAWN	JM	SHEET NO.
CHECKED	VEVS	S-12
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	



FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	•	241	116
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				



GIRDER ELEVATION
Girder 9

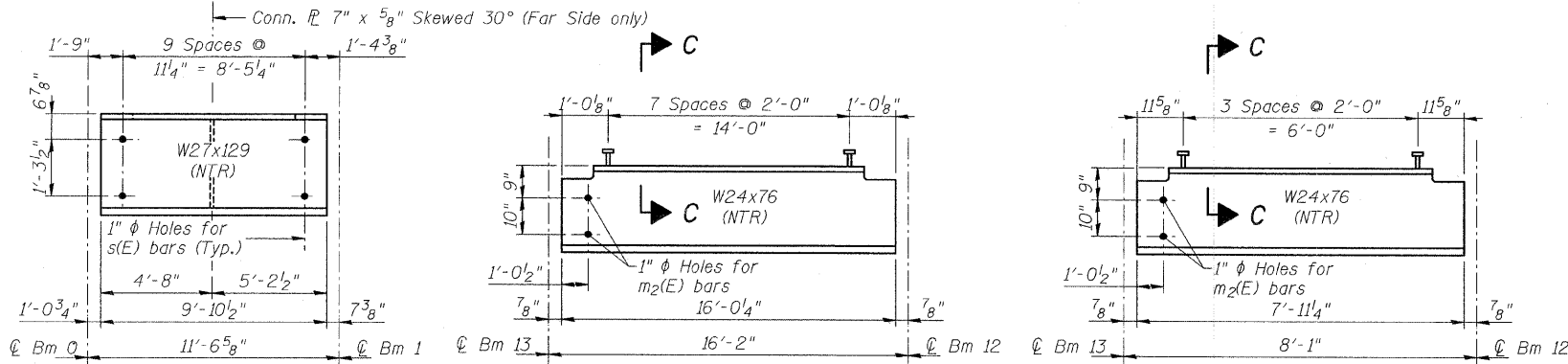


BEAM ELEVATION
Bm 0

BEAM ELEVATION
Bm 12

BEAM ELEVATION
Bm 14

BEAM ELEVATION
Bm 13

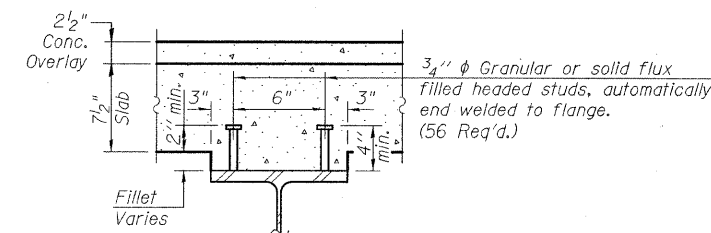


BEAM ELEVATION
Bm 15

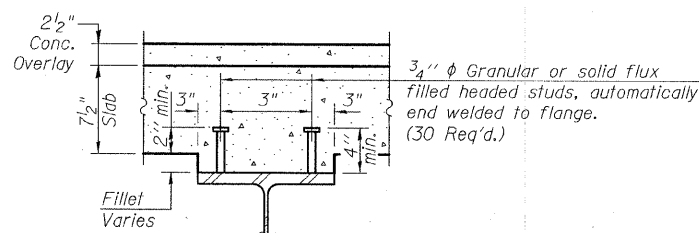
BEAM ELEVATION
Bm 11

BEAM ELEVATION
Bm 0a

- Notes:
- "NTR" denotes plates to which notch toughness requirements (Zone 2) are applicable.
 - All rolled shapes, webs, flanges, bearing stiffeners and connection plates shall be M270 Gr. 50.
 - See Sht. S-12 for Section A-A.



SECTION B-B

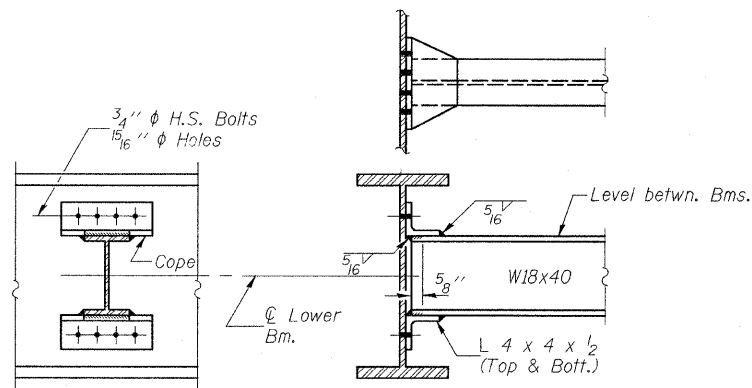


SECTION C-C

CITY OF WHEATON	
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD	
STEEL DETAILS	
DRAWN	JM
CHECKED	VEVS
APPROVED	BSK
DATE	06/04/2008
SCALE	NONE
SHEET NO.	
S-13	

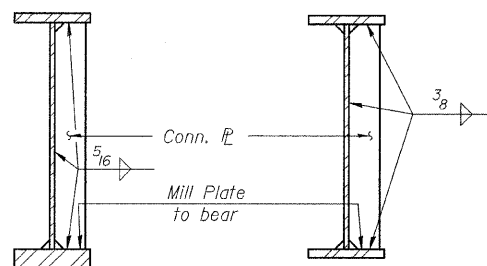
HDR
HDR Engineer-Ing, Inc.

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	117
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				



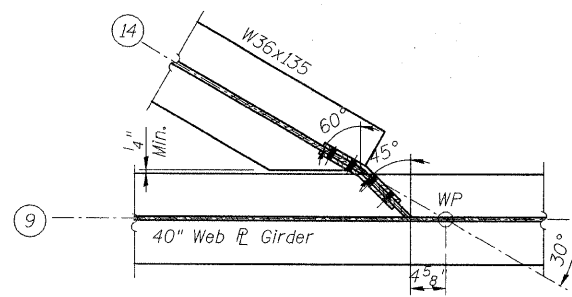
DIAPHRAGM D
(40 Required)
(M 270 Gr. 36)

Note: Two hardened washers shall be required over all oversize holes for diaphragms.

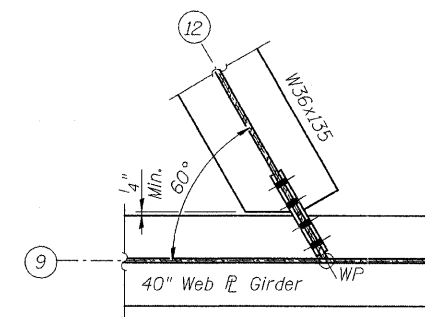


Conn. Type 1 thru 5 and Type 9 Conn. Type 6 thru 8

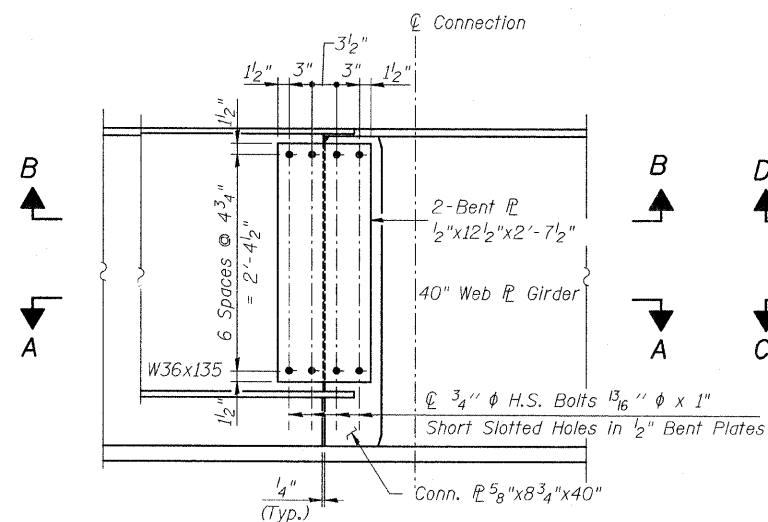
SECTION AT WELDED CONNECTION PLATE



SECTION B-B

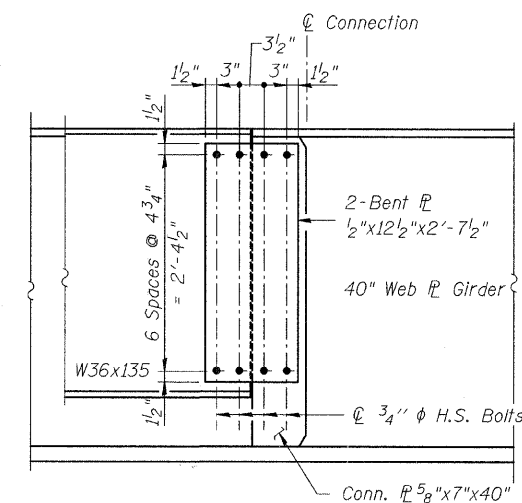


SECTION D-D

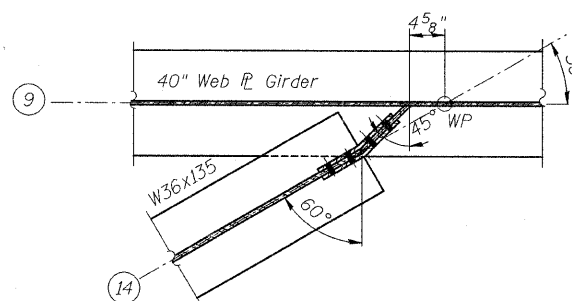


CONNECTION TYPE 1

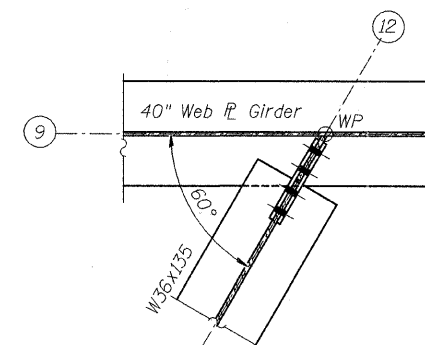
Girder 9 at Beam 14 shown
Girder 1 at Beam 0 similar



CONNECTION TYPE 2



SECTION A-A



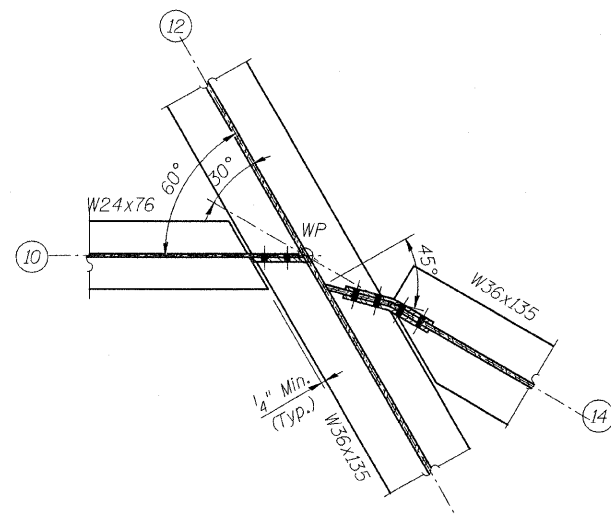
SECTION C-C

- Notes:
1. For Connection Details Type 3 thru 6, see Sht. S-15.
 2. For Connection Details Type 7 thru 9, see Sht. S-16.
 3. Connection Plates shall be M270 Gr. 50 (NTR).

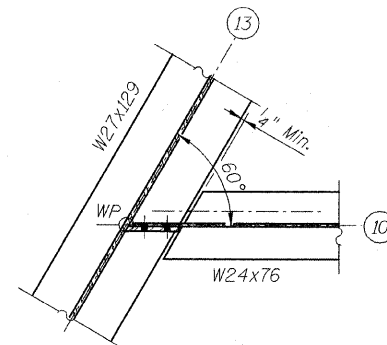
CITY OF WHEATON	
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD	
STEEL DETAILS	
DRAWN JM	SHEET NO.
CHECKED VEVS	S-14
APPROVED BSK	
DATE 06/04/2008	
SCALE NONE	

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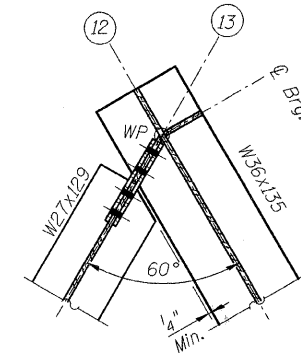
FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	118
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				



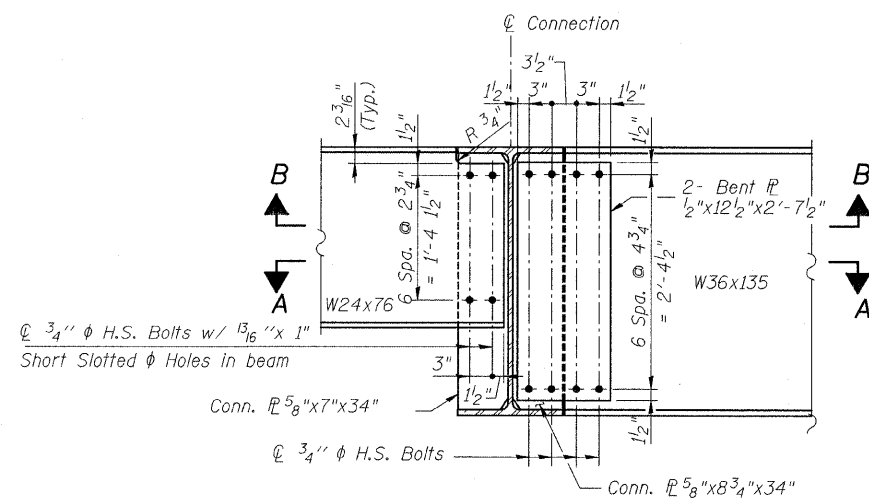
SECTION B-B



SECTION D-D

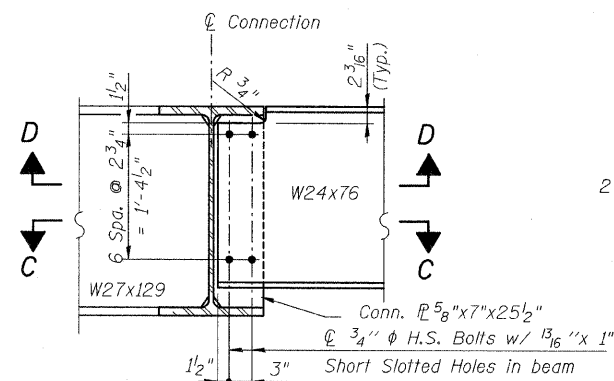


SECTION F-F



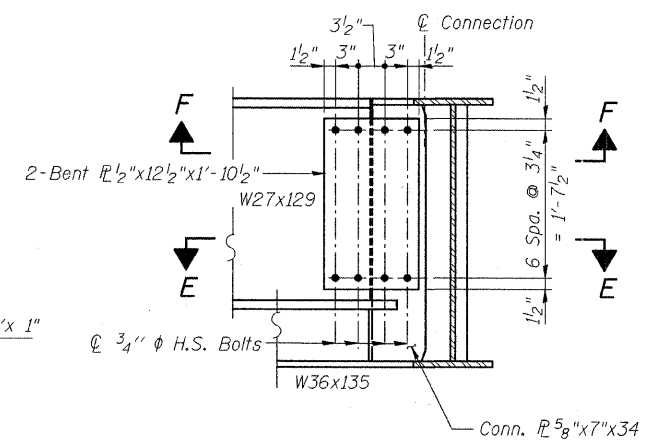
CONNECTION TYPE 3 & TYPE 4

Beam (12) at Beam (10) shown (Conn. Type 4)
Beam (12) at Beam (11) similar

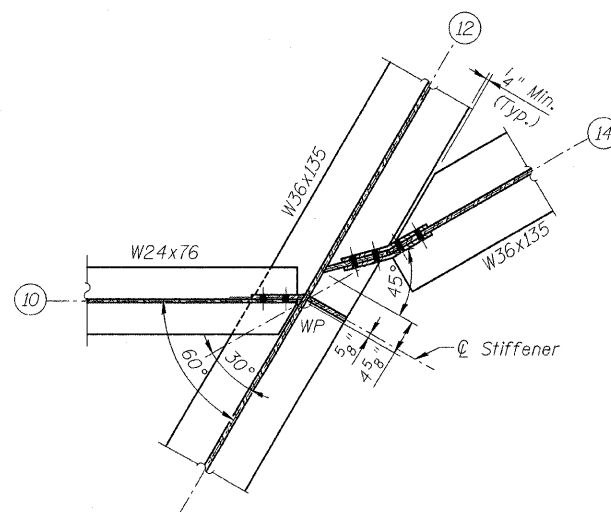


CONNECTION TYPE 5

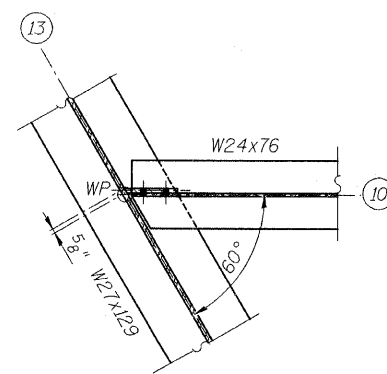
Beam (10) at Beam (13) shown
Beam (11) at Beam (13) } similar
Beam (0a) at Beam (15) }



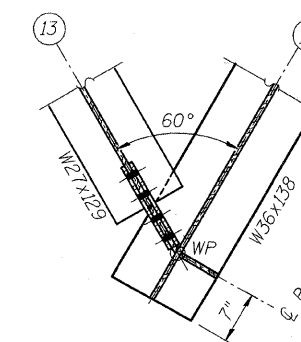
CONNECTION TYPE 6



SECTION A-A



SECTION C-C



SECTION E-E

Notes:

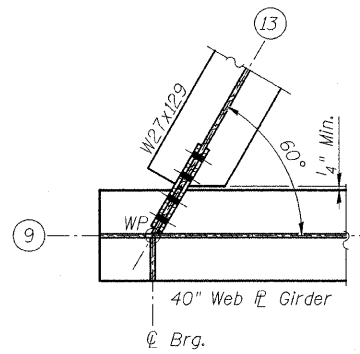
1. For Connection Details Type 1 and 2, see Sht. S-14.
2. For Connection Details Type 7 thru 9, see Sht. S-16.
3. All Connection Plates shall be M270 Gr. 50 (NTR).

SECTION G-G

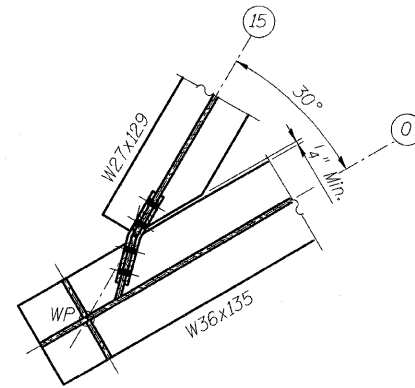
CITY OF WHEATON	
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD	
STEEL DETAILS	
DRAWN	JM
CHECKED	VEVS
APPROVED	BSK
DATE	06/04/2008
SCALE	NONE
SHEET NO.	
S-15	

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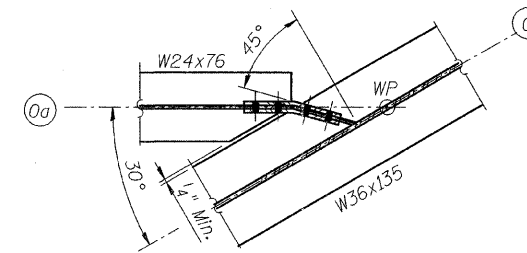
FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	119
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
* FAU 3549/ FAU 1432				



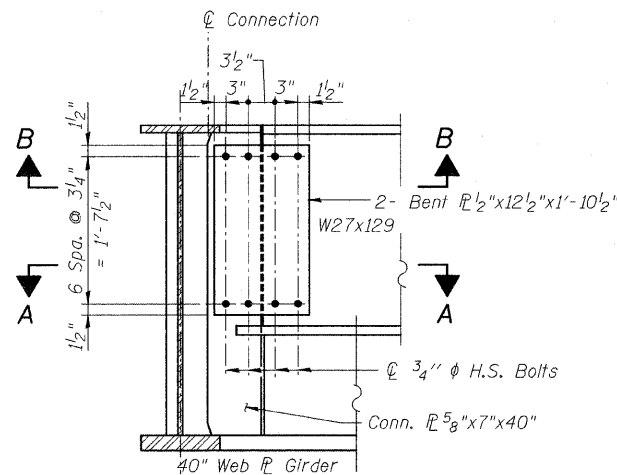
SECTION B-B



SECTION D-D

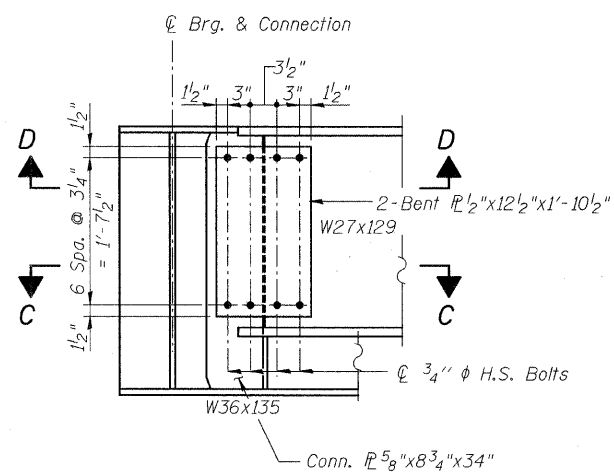


SECTION F-F

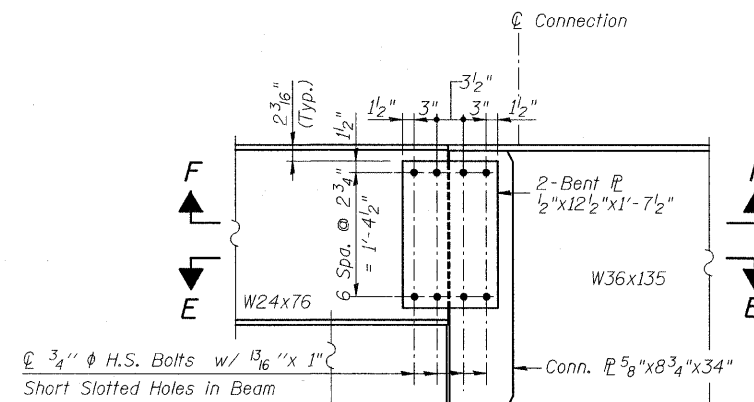


CONNECTION TYPE 7

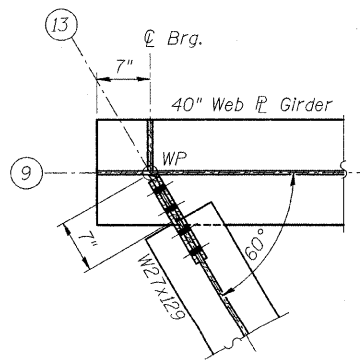
Girder 9 at Beam 13 shown
Girder 1 at Beam 15 similar, opposite



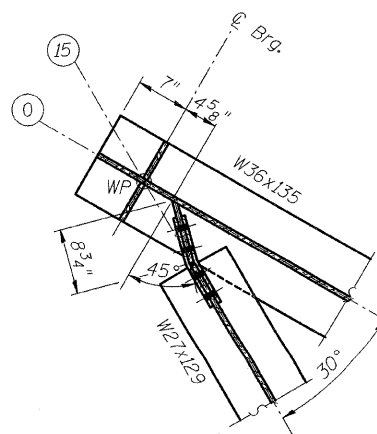
CONNECTION TYPE 8



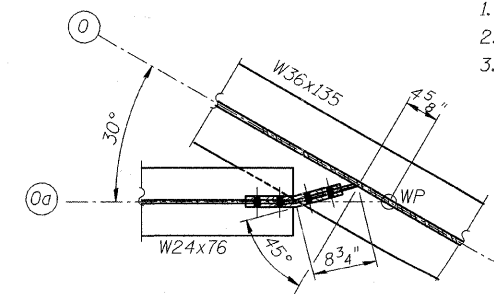
CONNECTION TYPE 9



SECTION A-A



SECTION C-C



SECTION E-E

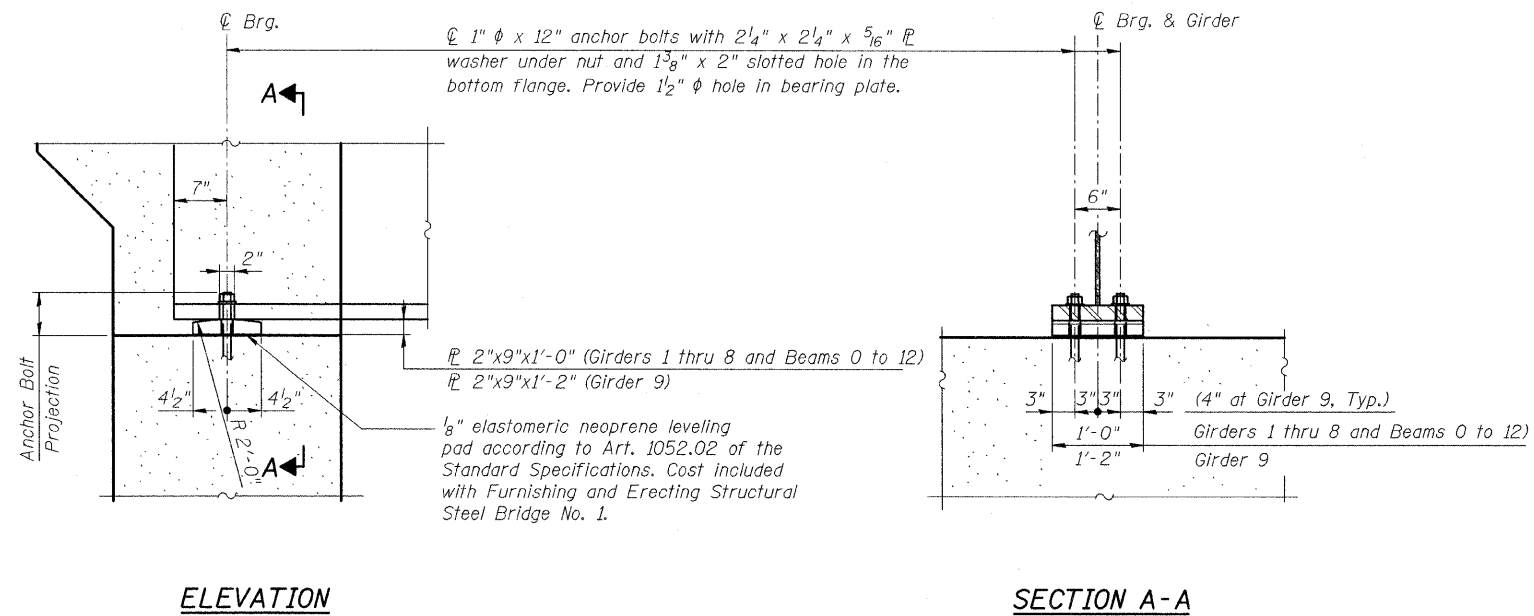
Notes:

1. For Connection Details Type 1 and 2, see Sht. S-14.
2. For Connection Details Type 3 thru 6, see Sht. S-15.
3. All Connection Plates shall be M270 Gr. 50 (NTR).

CITY OF WHEATON		
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD		
STEEL DETAILS		
DRAWN	JM	SHEET NO.
CHECKED	VEVS	S-16
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

HDR
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FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	120
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
* FAU 3549/ FAU 1432				



ROCKER PLATE BEARING

- 18 for Girders 1 thru 8 and Beams 0 and 12
- 2 for Girder 9
- 20 Total

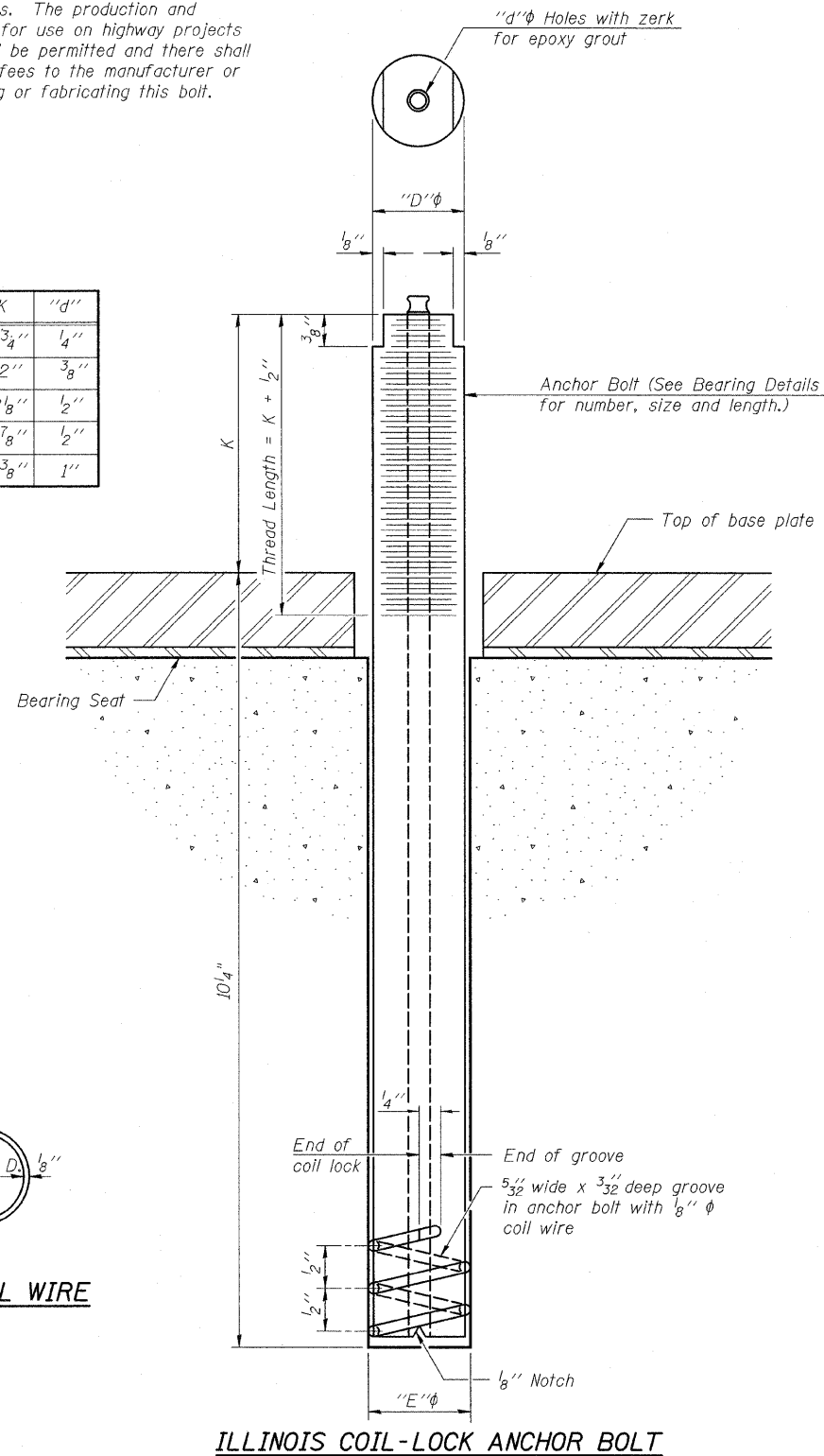
Weight included in Structural Steel (AASHTO M270 Gr.50).

CITY OF WHEATON		
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD		
ROCKER PLATE BEARING DETAILS		
DRAWN	JM	SHEET NO.
CHECKED	VEVS	S-17
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

HDR
HDR Engineering, Inc.

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

D	E	H	K	"d"
1"	1 1/8"	1 3/16"	1 3/4"	1/4"
1 1/4"	1 3/8"	1 1/16"	2"	3/8"
1 1/2"	1 5/8"	1 5/16"	2 1/8"	1/2"
2"	2 1/8"	1 13/16"	2 7/8"	1/2"
2 1/2"	2 5/8"	2 5/16"	3 3/8"	1"



MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.
 The coil wire shall be made of any suitable soft steel wire.
 The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.
 The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.

- The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
1. A threaded rod stud with nut and washer of the type specified.
 2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Location	Type
S. Abut.	A307
N. Abut.	A307

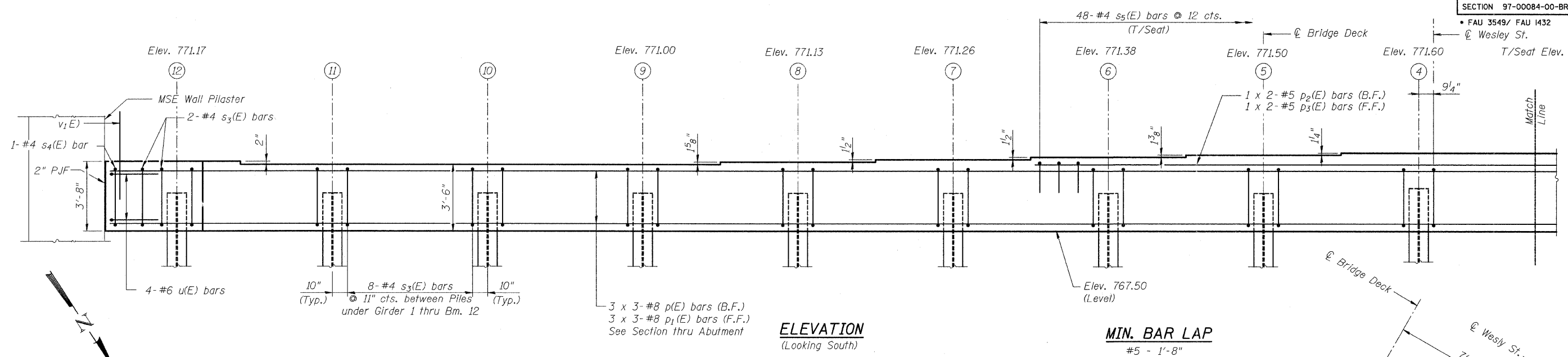
ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted.
 Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.
 The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for Furnishing and Erecting Structural Steel Bridge No. 1.

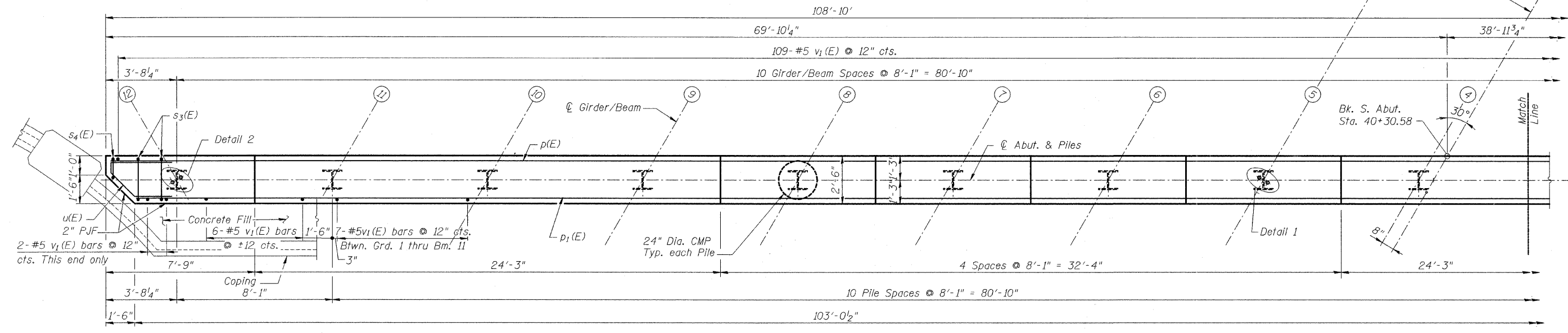
FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	•	241	122
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				

• FAU 3549/ FAU 1432
 • Wesley St.
 T/Seat Elev.

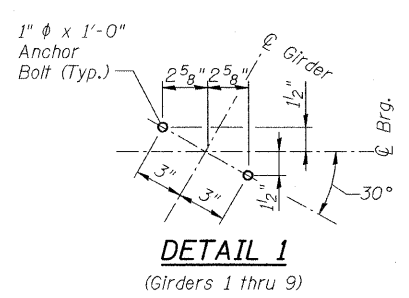


ELEVATION
(Looking South)

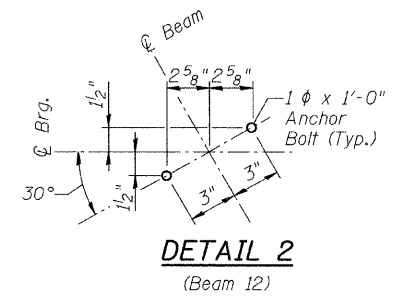
MIN. BAR LAP
 #5 - 1'-8"
 #8 - 3'-5"



PLAN



DETAIL 1
(Girders 1 thru 9)



DETAIL 2
(Beam 12)

- Notes:
1. See Sht. S-20 for Abutment continuation, sections and details not shown here and Bill of Material.
 2. Bars indicated thus 10 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 3. Four steps monolithic with cap.

CITY OF WHEATON		
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD		
S. ABUTMENT DETAILS		
DRAWN	JM	SHEET NO.
CHECKED	VEVS	S-19
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

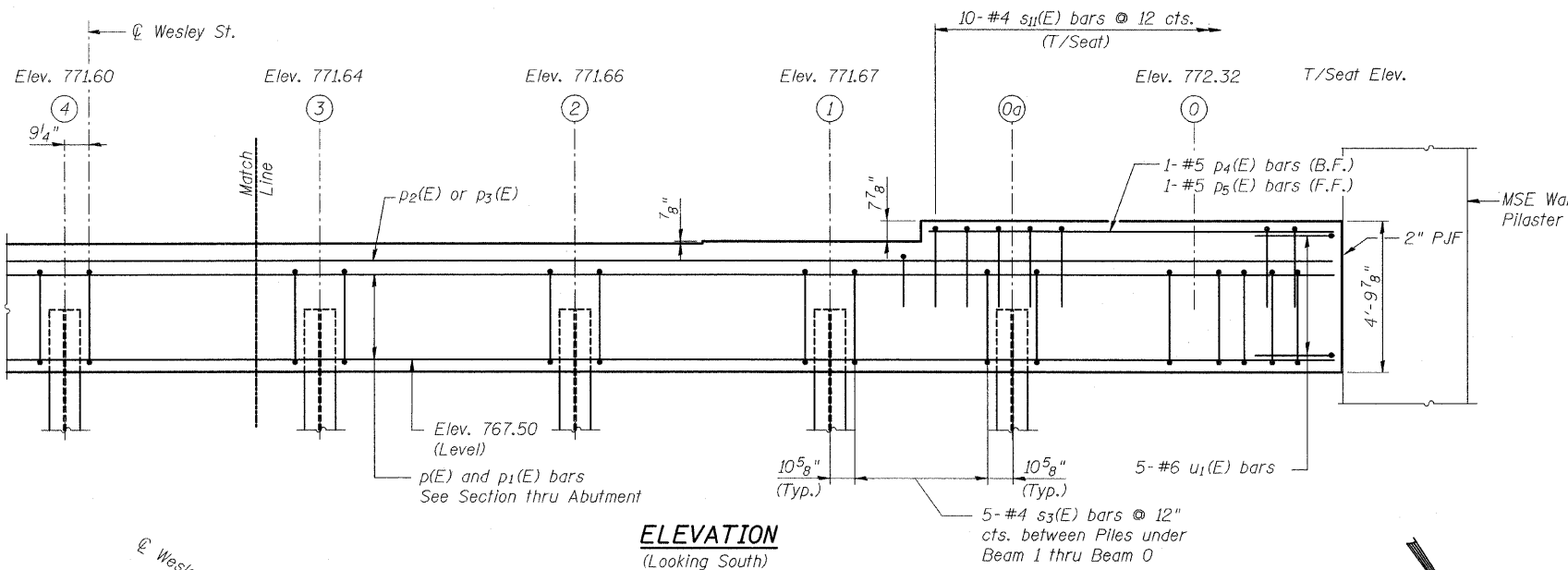
HDR
 HDR Engineering, Inc.

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	•	241	123
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				

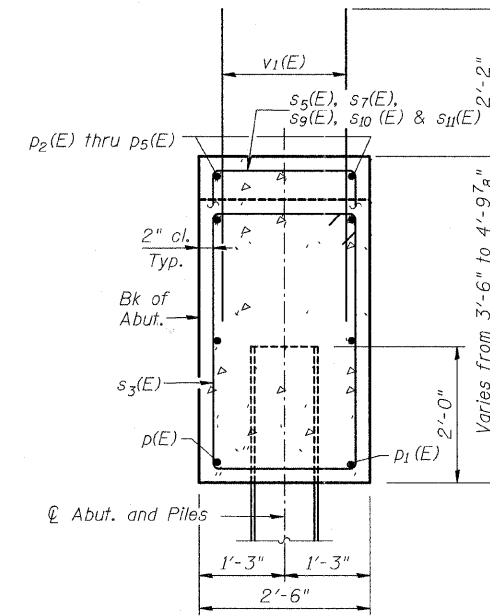
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
p(E)	9	#8	38'-6"	—
p ₁ (E)	9	#8	36'-6"	—
p ₂ (E)	2	#5	31'-0"	—
p ₃ (E)	2	#5	28'-11"	—
p ₄ (E)	1	#5	13'-0"	—
p ₅ (E)	1	#5	8'-9"	—
s ₃ (E)	100	#4	11'-1"	□
s ₄ (E)	2	#4	8'-7"	□
s ₅ (E)	48	#4	5'-7"	□
s ₆ (E)	1	#4	10'-3"	□
s ₇ (E)	1	#4	4'-2"	□
s ₈ (E)	1	#4	9'-5"	□
s ₉ (E)	1	#4	3'-9"	□
s ₁₀ (E)	1	#4	3'-4"	□
s ₁₁ (E)	10	#4	7'-5"	□
u(E)	4	#6	6'-7"	↖
u ₁ (E)	5	#6	8'-5"	↗
v ₁ (E)	197	#5	4'-4"	—
Concrete Structures		Cu. Yd.	40.8	
Reinforcement Bars, Epoxy Coated		Pound	3,950	

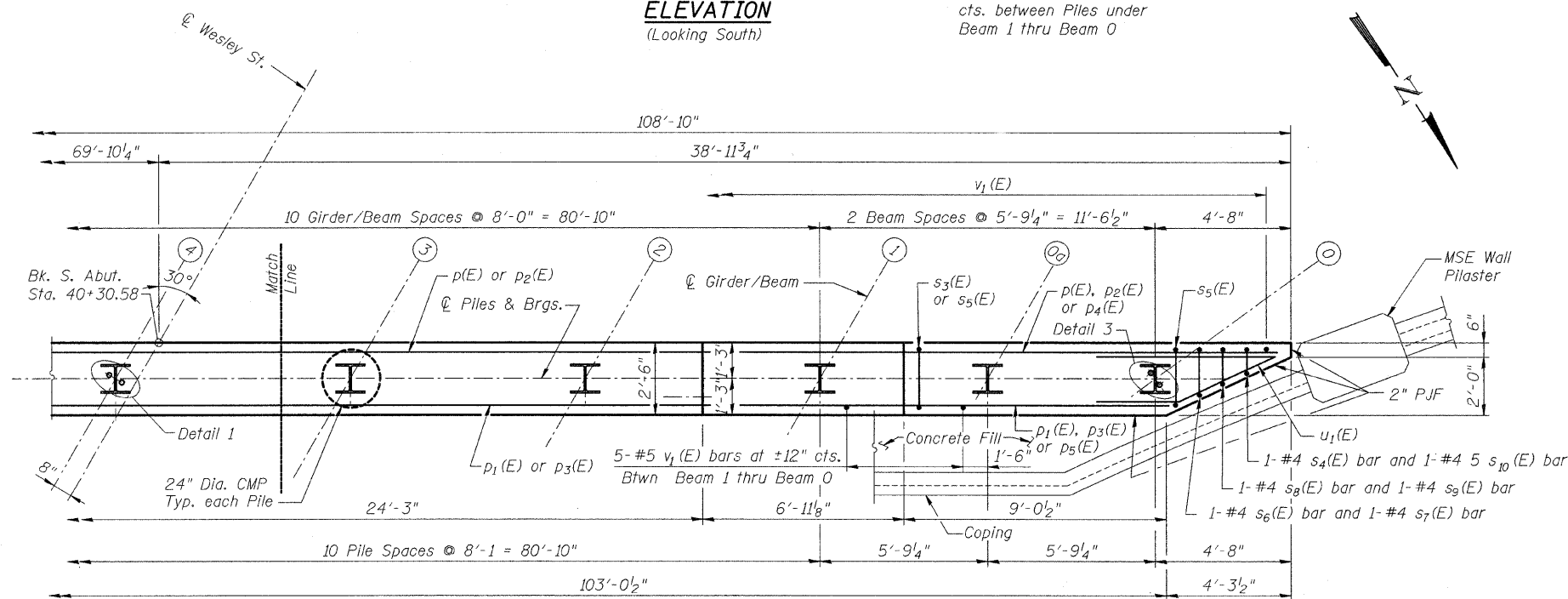
Bars indicated thus 1 x 2-#5 etc. indicates 1 line of bars with 2 lengths per line.



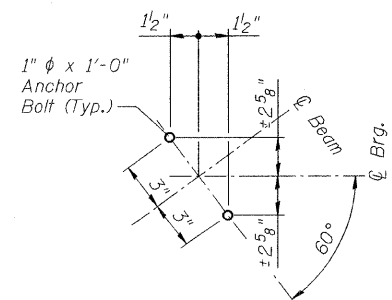
ELEVATION
(Looking South)



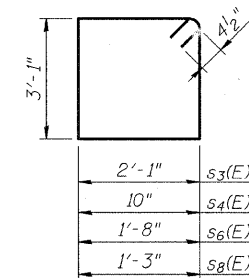
TYP. ABUTMENT SECTION



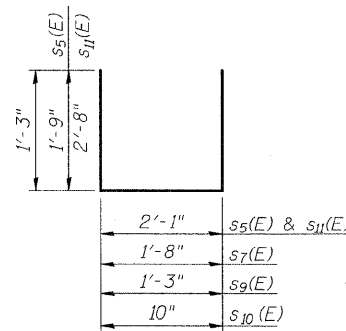
PLAN



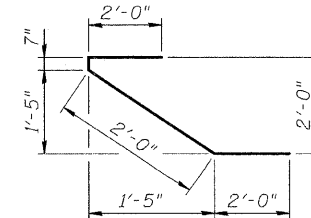
DETAIL 3
(Beam 0)



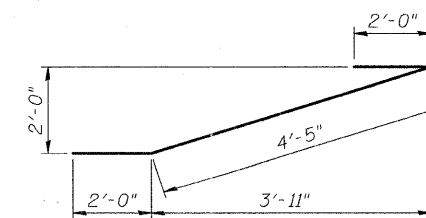
BARS s₃(E), s₄(E), s₆(E) AND s₈(E)



BARS s₅(E), s₇(E), s₉(E), s₁₀(E) AND s₁₁(E)



BARS u(E)



BARS u₁(E)

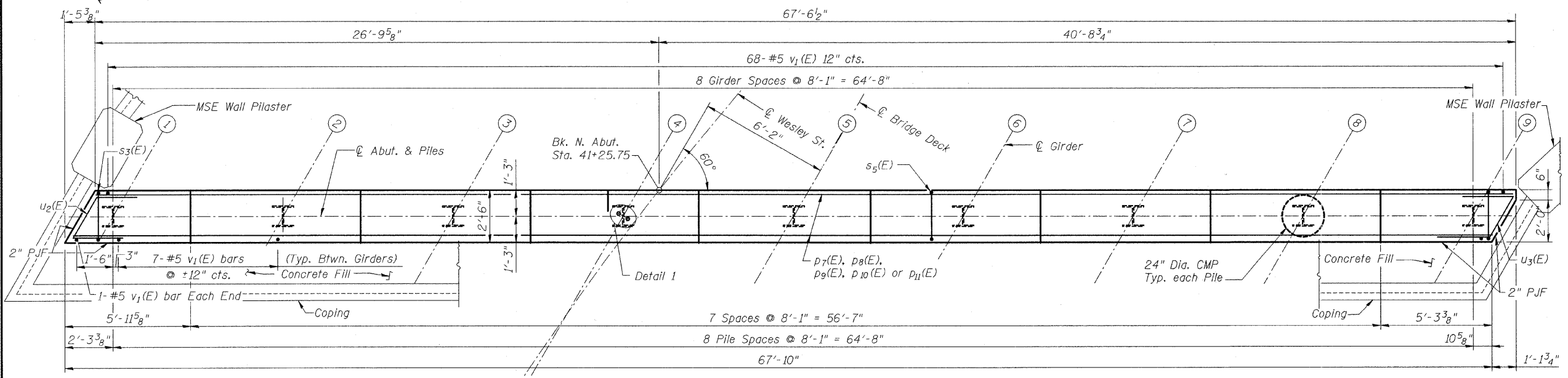
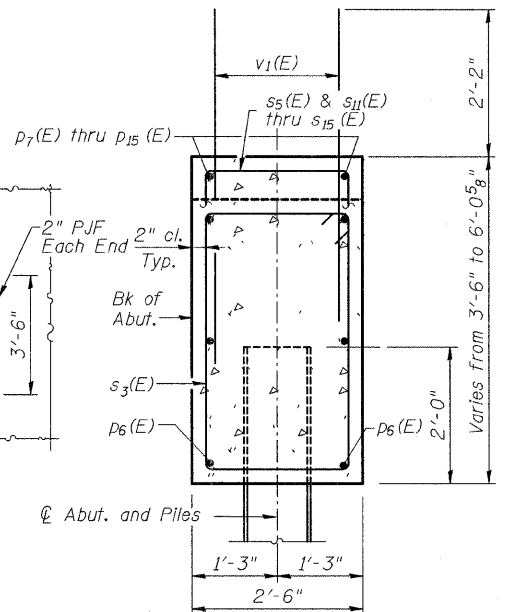
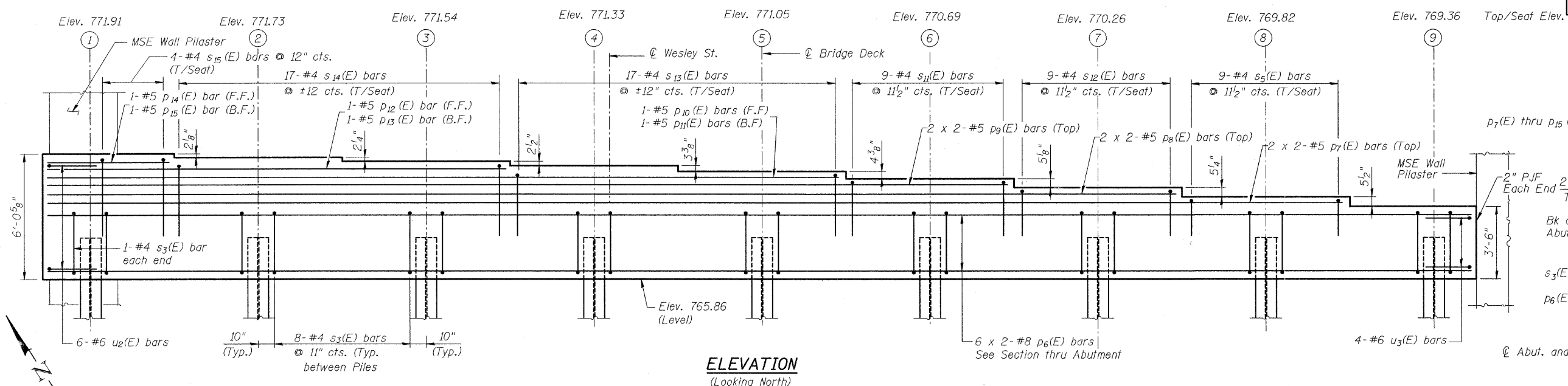
CITY OF WHEATON

MANCHESTER ROAD/ WESLEY STREET
OVER UNION PACIFIC RAILROAD

S. ABUTMENT DETAILS

DRAWN	JM	SHEET NO.
CHECKED	VEVS	S-20
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

HDR
HDR Engineering, Inc.



BILL OF MATERIAL

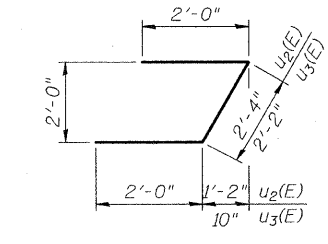
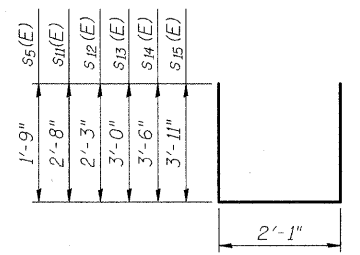
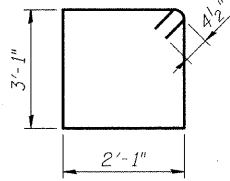
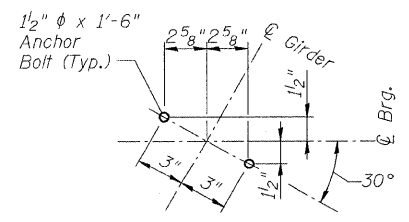
Bar	No.	Size	Length	Shape
p6(E)	12	#8	35'-5"	—
p7(E)	4	#5	32'-0"	—
p8(E)	4	#5	27'-11"	—
p9(E)	4	#5	23'-11"	—
p10(E)	1	#5	38'-0"	—
p11(E)	1	#5	36'-6"	—
p12(E)	1	#5	21'-10"	—
p13(E)	1	#5	20'-4"	—
p14(E)	1	#5	5'-8"	—
p15(E)	1	#5	4'-2"	—
s3(E)	66	#4	11'-1"	□
s5(E)	9	#4	5'-7"	U
s11(E)	9	#4	7'-5"	U
s12(E)	9	#4	6'-7"	U
s13(E)	17	#4	8'-1"	U
s14(E)	17	#4	9'-1"	U
s15(E)	4	#4	9'-11"	U
u2(E)	6	#6	6'-4"	U
u3(E)	4	#6	6'-2"	U
v1(E)	126	#5	4'-4"	—
Concrete Structures		Cu. Yd.	29.9	
Reinforcement Bars, Epoxy Coated		Pound	3,110	

MIN. BAR LAP

#5 - 1'-8"
#8 - 3'-5"

Notes:

- Bars indicated thus 10 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
- Pour steps monolithic with cap.



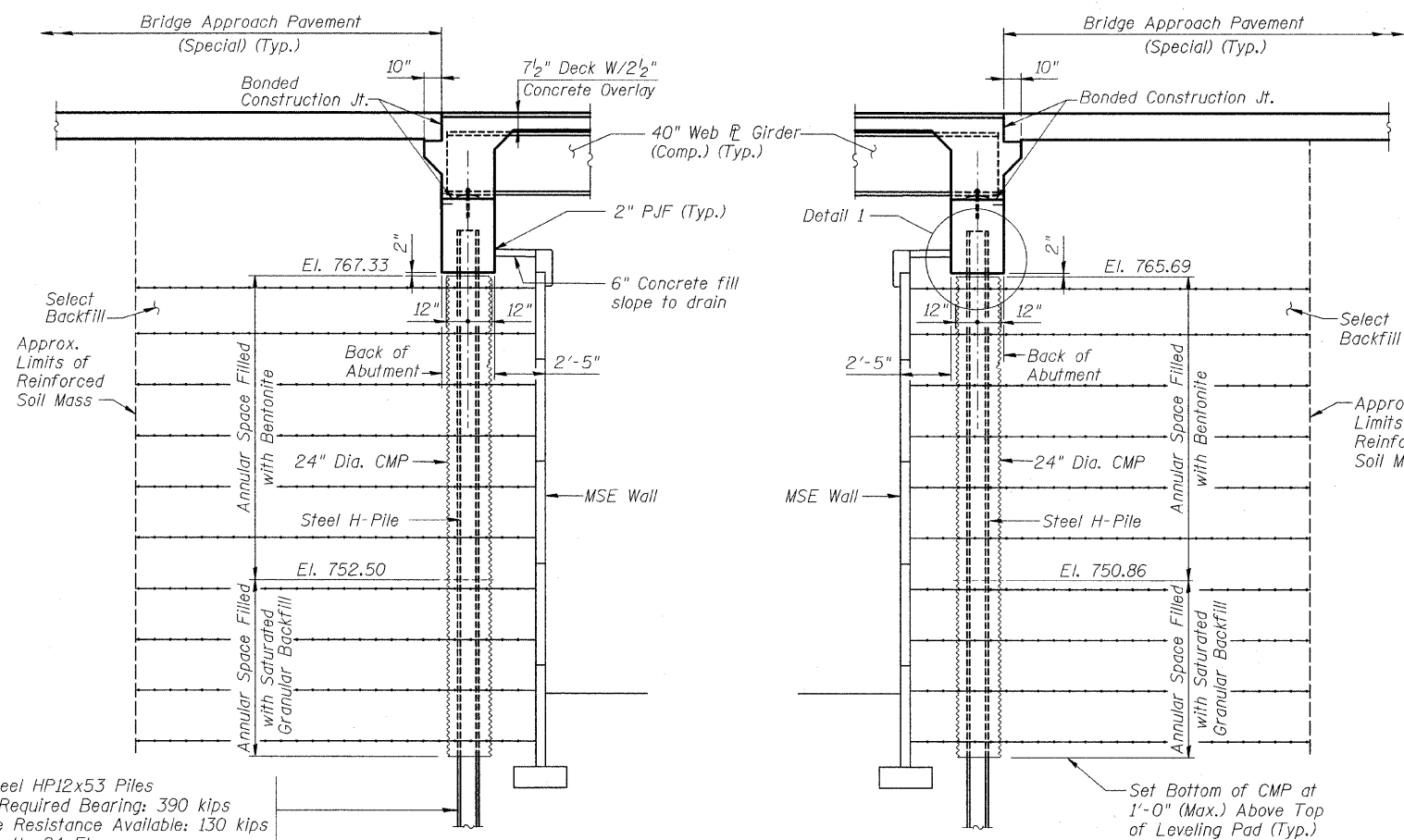
CITY OF WHEATON
MANCHESTER ROAD/ WESLEY STREET
OVER UNION PACIFIC RAILROAD
N. ABUTMENT DETAILS

DRAWN	JM	SHEET NO.
CHECKED	VEVS	S-21
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	



FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	125
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				

• FAU 3549/ FAU 1432

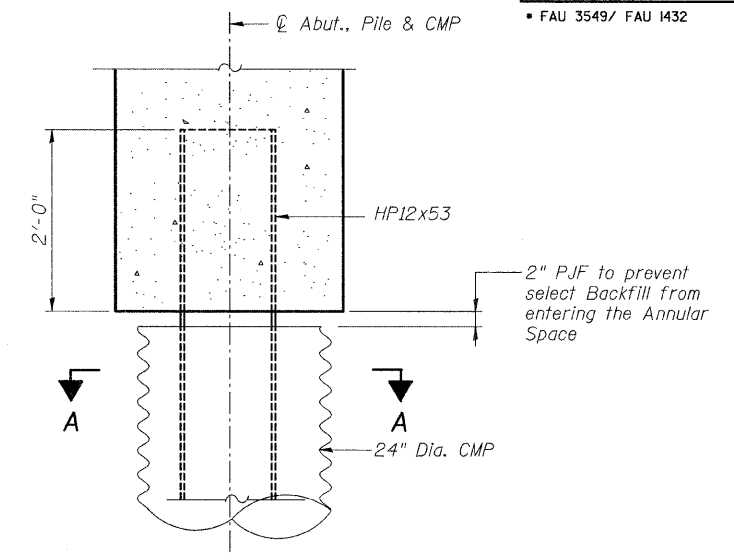


Type: Steel HP12x53 Piles
 Nominal Required Bearing: 390 kips
 Allowable Resistance Available: 130 kips
 Est. Length: 84 Ft.
 (Typ. Both Abutments)
 Test Piles: One Test Pile at South Abutment.

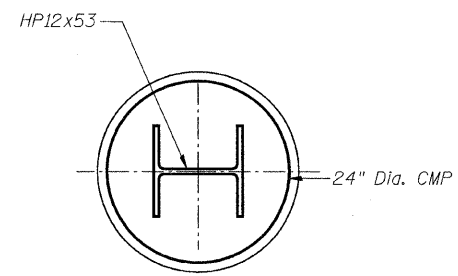
SECTION THRU INTEGRAL ABUTMENTS
 (Dimensions are @ Rt. L's)

Notes:

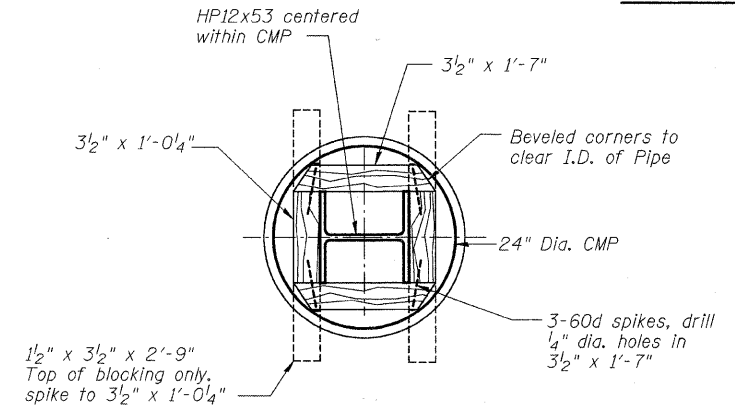
1. Annular space between H-Pile and CMP to be first partially filled with saturated granular backfill to an elevation 15'-0" below the pile cap and then filled to the top of the CMP with bentonite.
2. Provide a 2" gap between the bottom of the pile cap and the top of the CMP to allow independent movement of the piles within the CMP.
3. Pile Casing, CMP, 24" Dia. Pay item includes all costs for furnishing and placing CMP, Blocking Material, Bentonite Fill and Saturated Granular Backfill at both abutments. Length based on CMP extending from 2" below the bottom of the abutment to the top of the MSE Wall leveling pad. The CMP shall meet the requirements for CMP entrance under 23 feet of fill. The bentonite slurry shall be as according to the Special Provisions.
4. Blocking at the top of the CMP is required to maintain position of CMP casings during the MSE Wall placement.
5. See Retaining Wall Drawings for soil reinforcement and panel details.
6. The Steel H-piles shall be according to AASHTO M270 Grade 50.
7. The test pile shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.



DETAIL 1



SECTION A-A



CMP BLOCKING DETAIL

One required at top and bottom of CMP. Bottom blocking shall be treated material and shall remain in place. Top blocking shall be removed prior to backfilling inside the CMP. Cost for this work shall be included in the price bid for Pile Casing, CMP, 24" Dia.

BILL OF MATERIAL

Item	Unit	Total
Furnishing Steel Piles, HP12x53	Foot	1,848
Driving Piles Test Pile Steel, HP12x53	Foot	1,848
Pile Casing, CMP, 24" Dia.	Each	1
	Foot	610

CITY OF WHEATON
 MANCHESTER ROAD/ WESLEY STREET
 OVER UNION PACIFIC RAILROAD
PILE AND CMP DETAILS

DRAWN	JM	SHEET NO.
CHECKED	VEVS	S-22
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	



• FAU 3549/ FAU 1432

NOTES

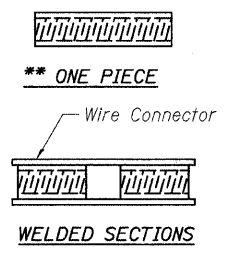
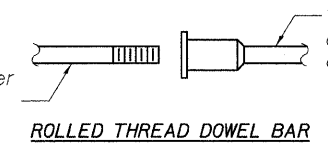
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
 All reinforcement bars shall be lapped and tied to the 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 = $1.25 \times f_y \times A_t$
(Tension in kips)
 - ② Minimum *Pull-out Strength = $0.66 \times f_y \times A_t$
(Tension in kips)
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-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

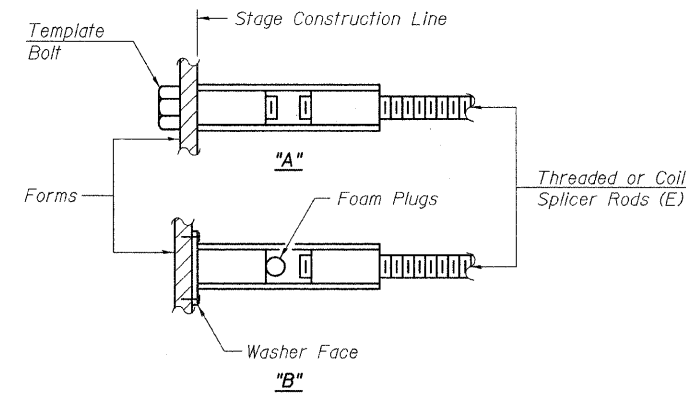
Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."

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



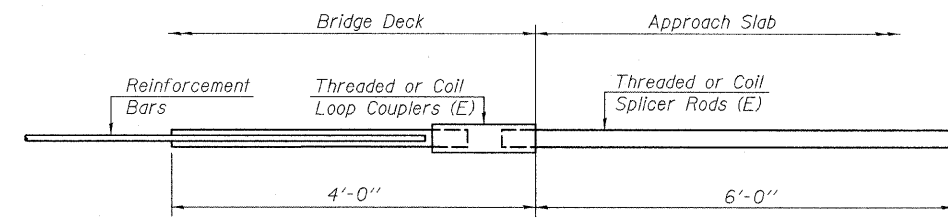
BAR SPLICER ASSEMBLY ALTERNATIVES

** 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.



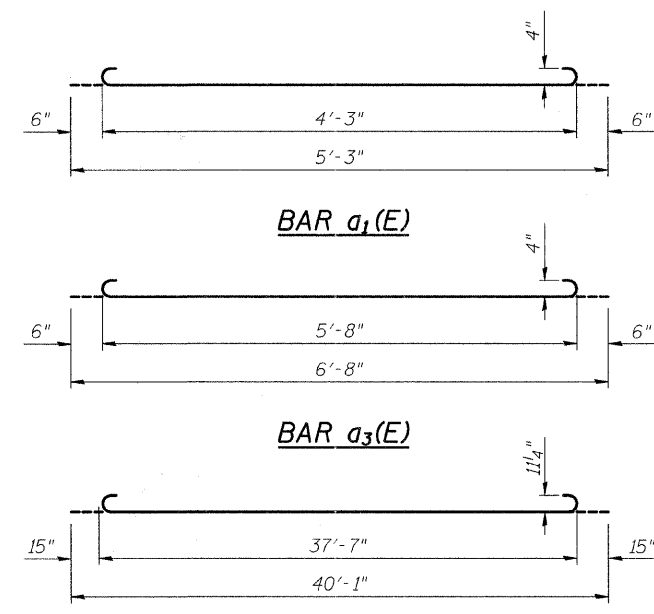
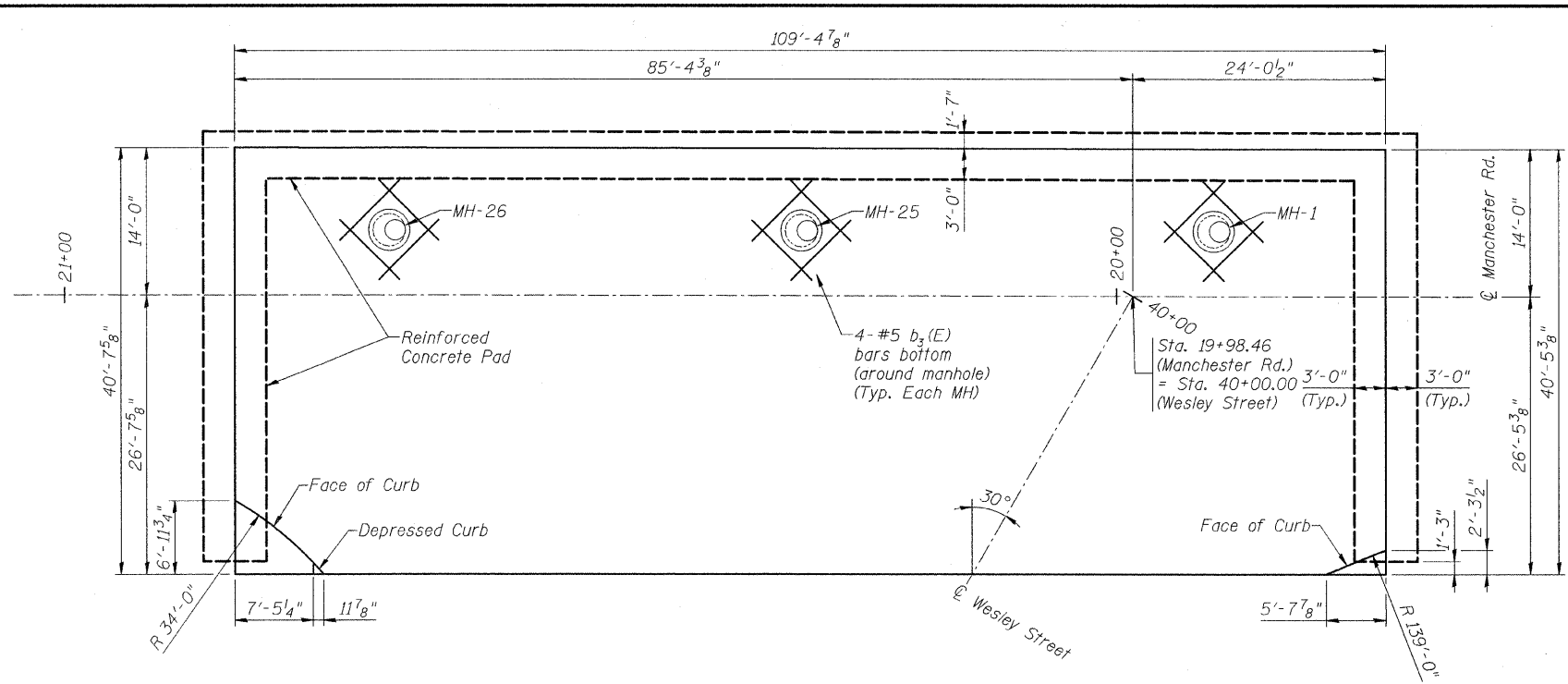
FOR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 149

CITY OF WHEATON		
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD		
BAR SPLICER DETAILS		
DRAWN	JM	SHEET NO.
CHECKED	VEYS	S-23
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

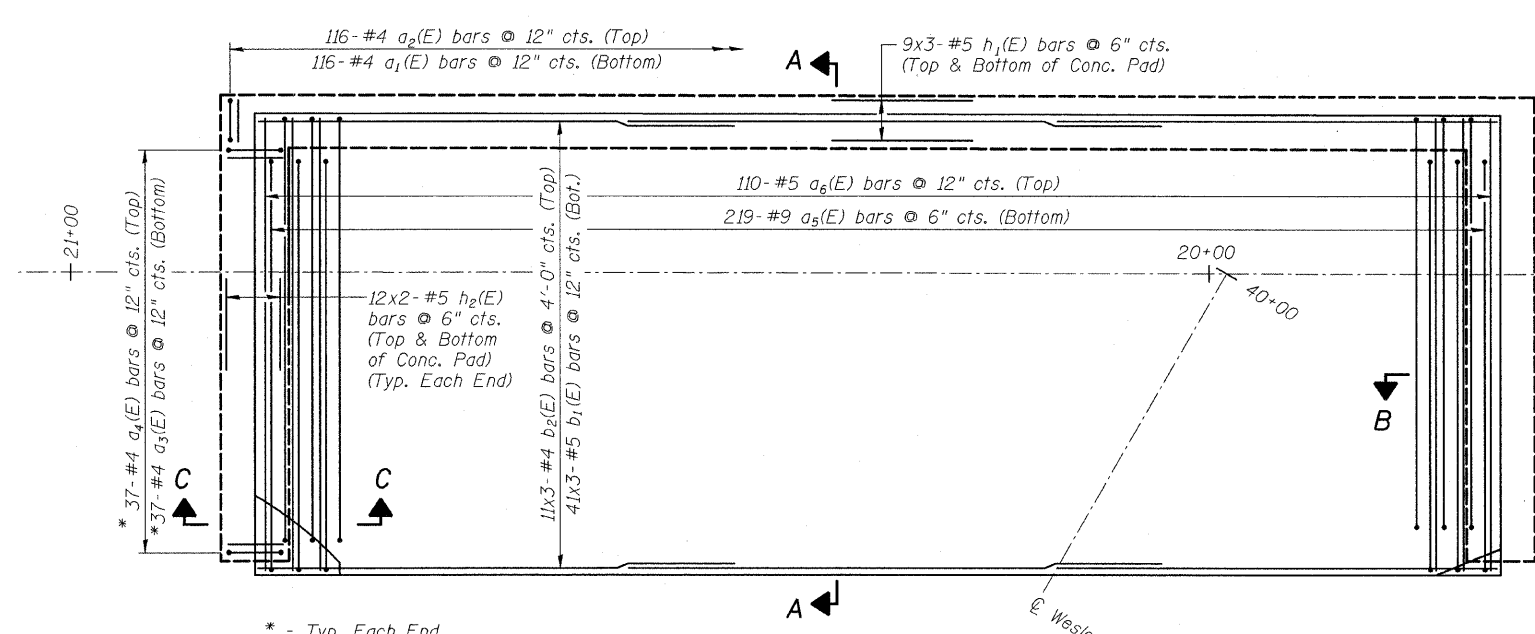


FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	•	241	127
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				



BAR No.	No.	Size	Length	Shape
a ₁ (E)	116	#4	5'-3"	(U)
a ₂ (E)	116	#4	4'-3"	—
a ₃ (E)	74	#4	6'-8"	(U)
a ₄ (E)	74	#4	5'-8"	—
a ₅ (E)	219	#9	40'-1"	(U)
a ₆ (E)	110	#5	40'-1"	—
b ₁ (E)	123	#5	37'-10"	—
b ₂ (E)	33	#4	37'-6"	—
b ₃ (E)	12	#5	8'-0"	—
h ₁ (E)	54	#5	39'-10"	—
h ₂ (E)	96	#5	21'-5"	—

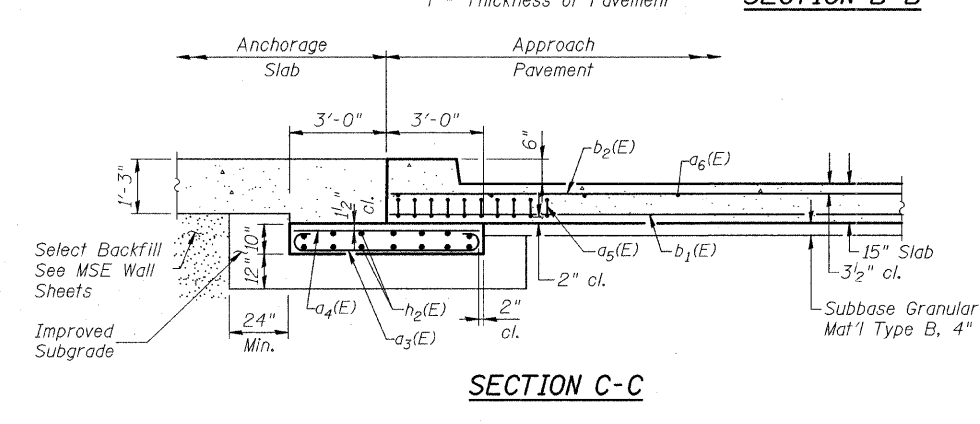
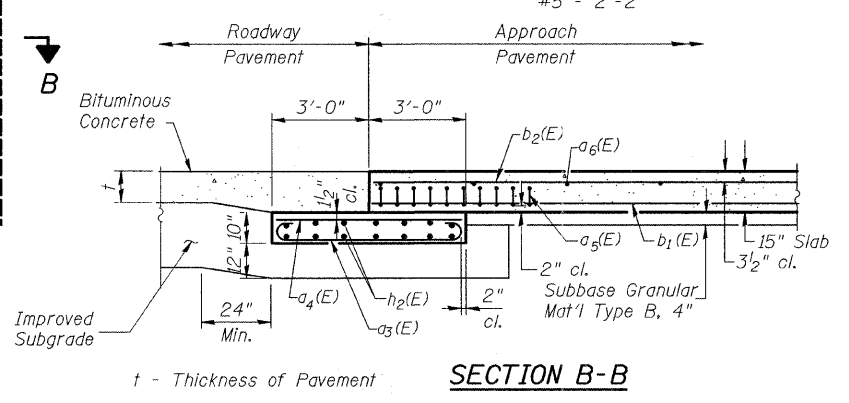
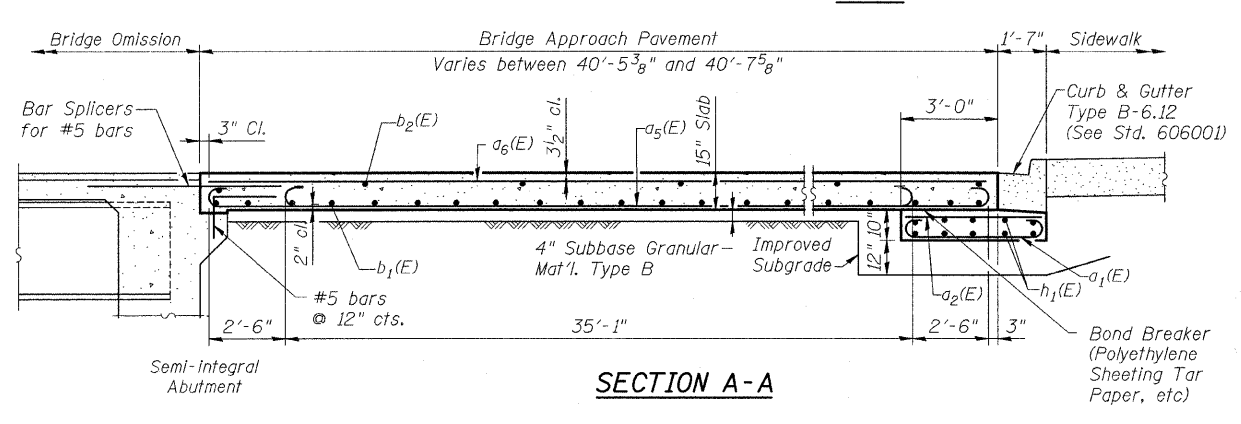
Bars indicated thus 1 x 2-#5 etc. indicates 1 line of bars with 2 lengths per line.



MIN. BAR LAP
#4 - 1'-8"
#5 - 2'-2"

Item	Unit	Total
Bridge Approach Pavement (Special)	Sq. Yd.	493

- Notes:
- Details per Standard 420401 except as noted.
 - Reinforcement bars, bar splicers, tie bars, preformed joint seals, sub-base, improved subgrade, and bond breaker will be included with Bridge Approach Pavement (Special).
 - Bridge Approach Pavement (Special) shall be paid for at the contract unit price per square yard.
 - Bridge Approach Pavement (Special) will be measured for payment in place and the area computed in square yards. The length will be measured along the centerline of the surface of the roadway. The width will be the width of pavement as shown on the plans.
 - In computing the area for pavement for Bridge Approach Pavement (Special), a deduction will be made for the area displaced by the inlet.



CITY OF WHEATON
MANCHESTER ROAD/ WESLEY STREET
OVER UNION PACIFIC RAILROAD
S. BRIDGE APPROACH PAVEMENT

DRAWN	JM	SHEET NO.
CHECKED	VEVS	S-24
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

HDR
HDR Engineering, Inc.

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	128
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				

FAU 3549/ FAU 1432
REINFORCING BARS

BAR	No.	Size	Length	Shape
a ₁₄ (E)	65	#4	6'-8"	U
a ₁₅ (E)	65	#4	5'-8"	—
a ₁₆ (E)	2	#4	9'-6"	U
a ₁₇ (E)	2	#4	8'-6"	—
a ₁₈ (E)	82	#9	29'-6"	U
a ₁₉ (E)	41	#5	29'-6"	—
a ₂₀ (E)	46	#9	18'-3"	U
a ₂₁ (E)	12	#5	28'-8"	—
b ₂₇ (E)	52	#5	34'-2"	—
b ₂₈ (E)	14	#4	33'-11"	—
h(E)	24	#5	14'-6"	—
h ₁ (E)	48	#5	23'-4"	—

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

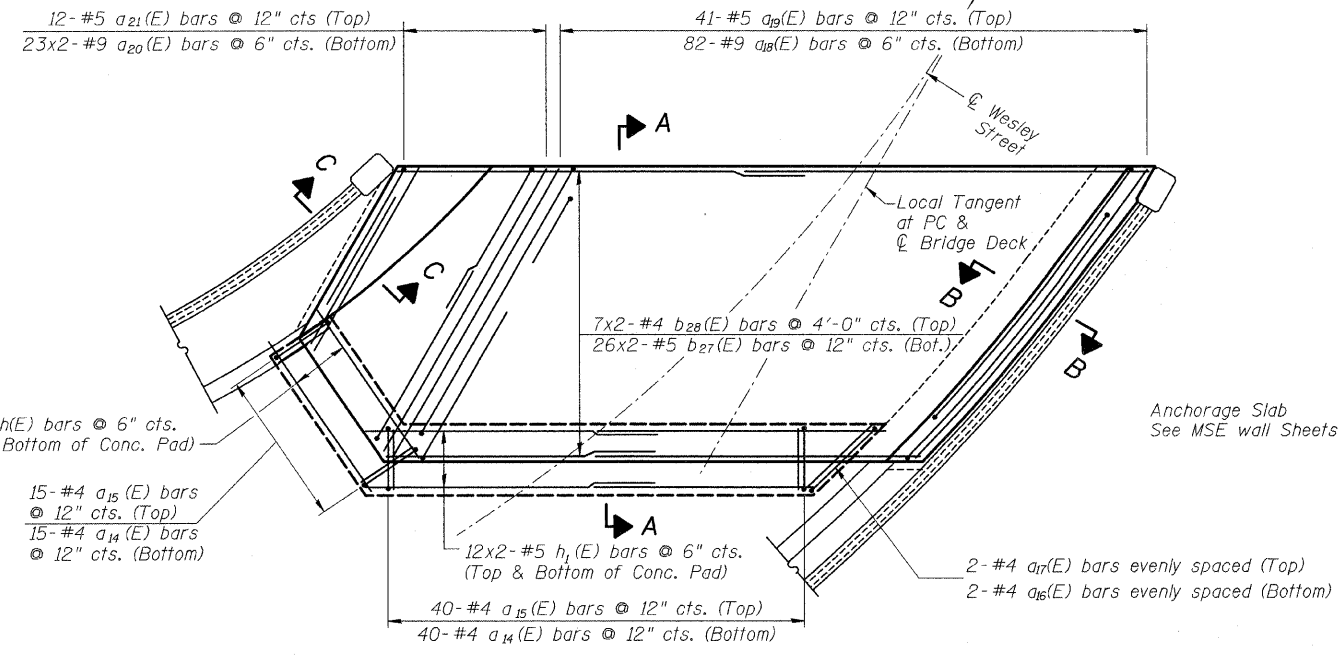
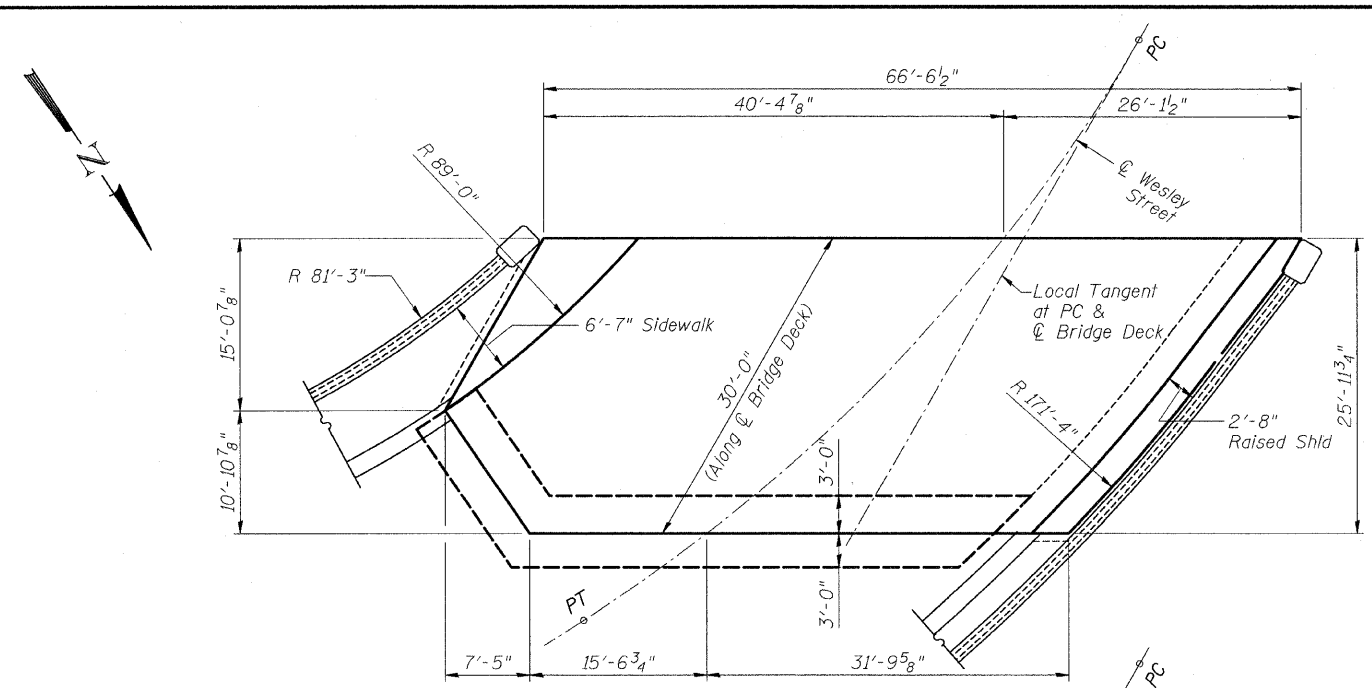
BILL OF MATERIALS

Item	Unit	Total
Bridge Approach Pavement (Special)	Sq. Yd.	178

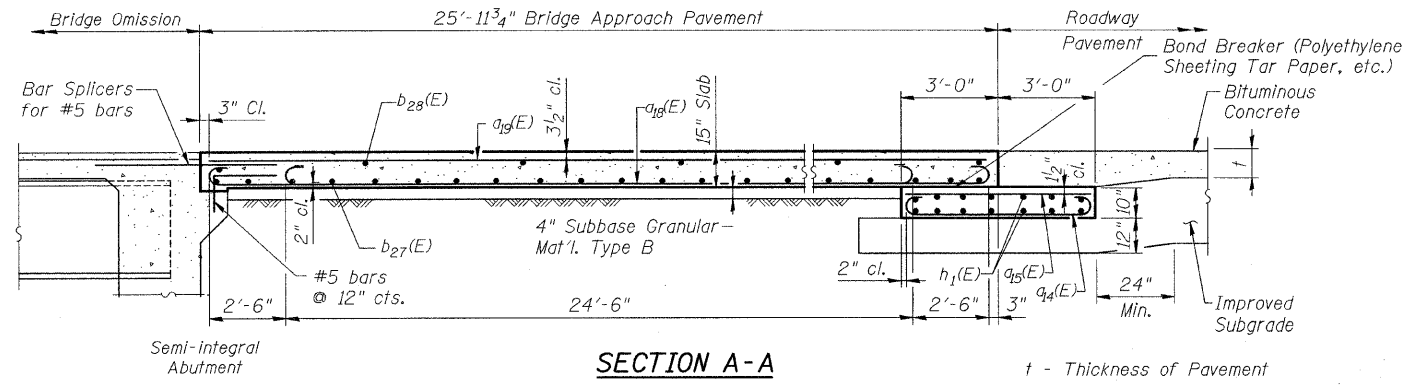
- Notes:
- Details per Standard 420401 except as noted.
 - Reinforcement bars, bar splicers, tie bars, preformed joint seals, sub-base, improved subgrade, and bond breaker will be included with Bridge Approach Pavement (Special).
 - Bridge Approach Pavement (Special) shall be paid for at the contract unit price per square yard.
 - Bridge Approach Pavement (Special) will be measured for payment in place and the area computed in square yards. The length will be measured along the centerline of the surface of the roadway. The width will be the width of pavement as shown on the plans.
 - In computing the area for pavement for Bridge Approach Pavement (Special), a deduction will be made for the area displaced by the inlet.
 - For anchorage slab, sidewalk and raised shoulder reinforcement, see Retaining Wall Plans.

CITY OF WHEATON
MANCHESTER ROAD/ WESLEY STREET
OVER UNION PACIFIC RAILROAD
N. BRIDGE APPROACH PAVEMENT

DRAWN	JM	SHEET NO.
CHECKED	VEVS	S-25
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

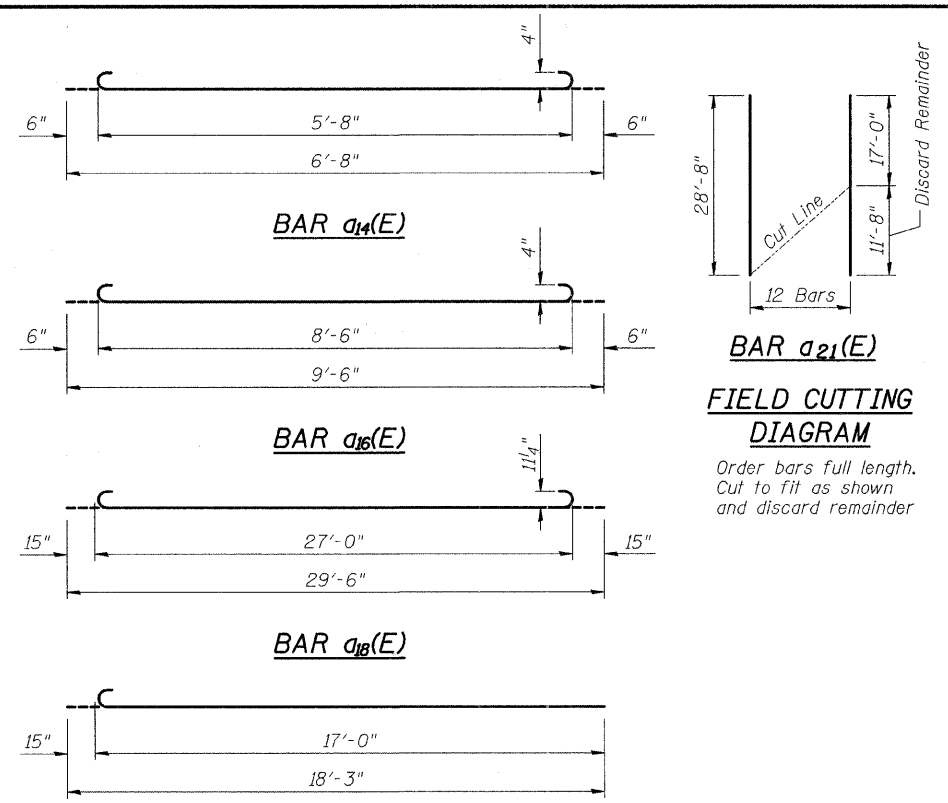


NORTH APPROACH PAVEMENT PLAN



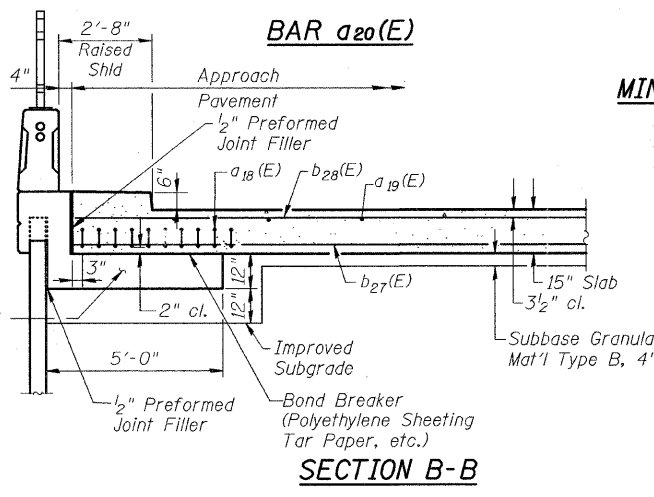
SECTION A-A

t - Thickness of Pavement



FIELD CUTTING DIAGRAM

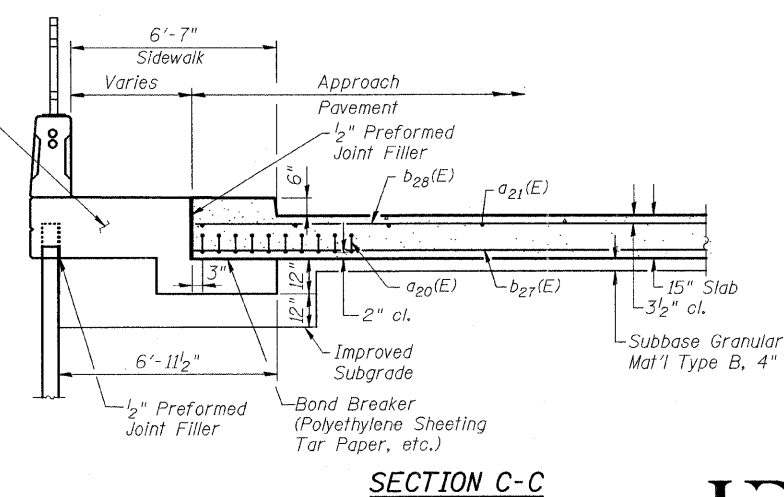
Order bars full length. Cut to fit as shown and discard remainder



SECTION B-B

MIN. BAR LAP

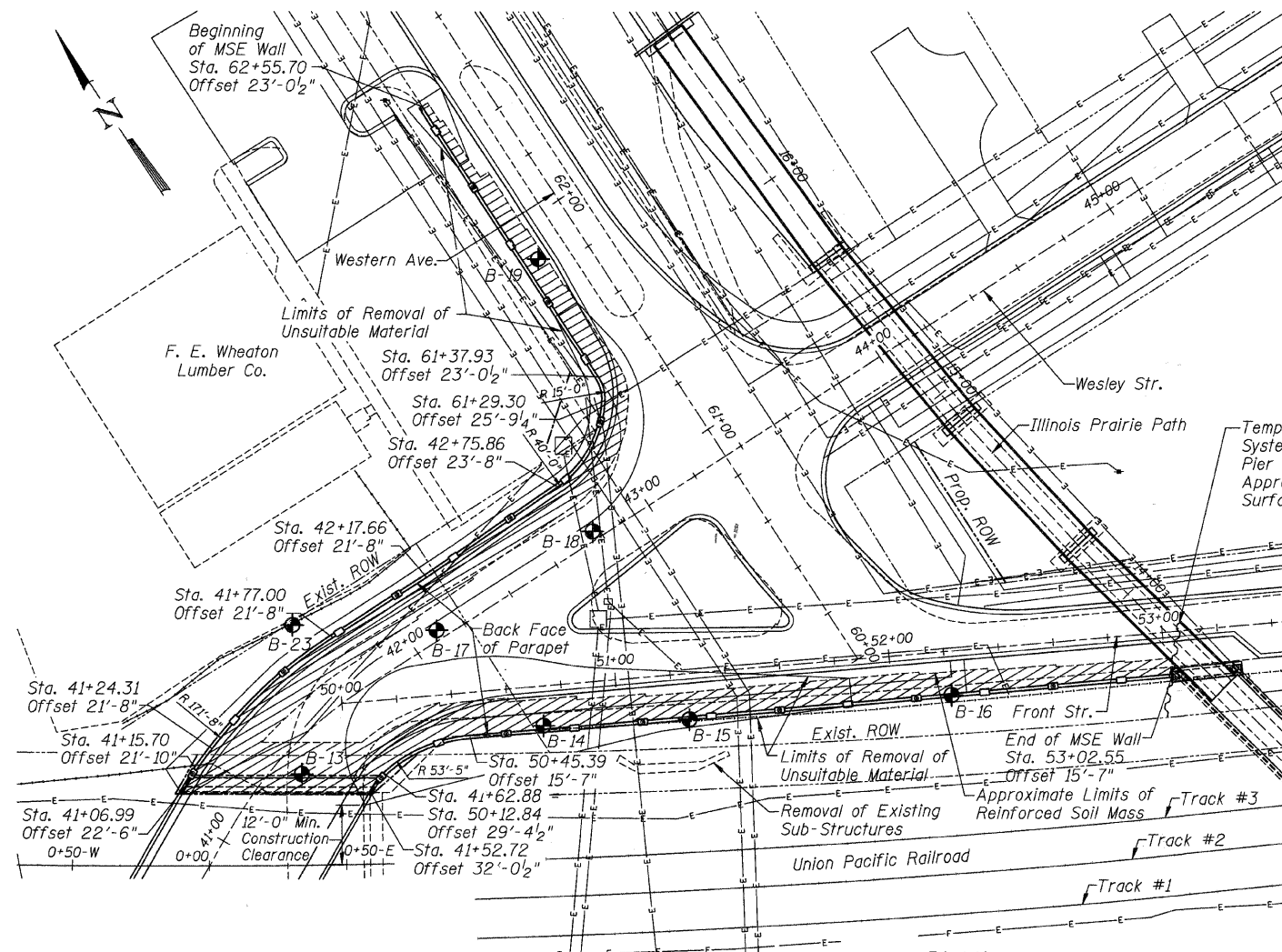
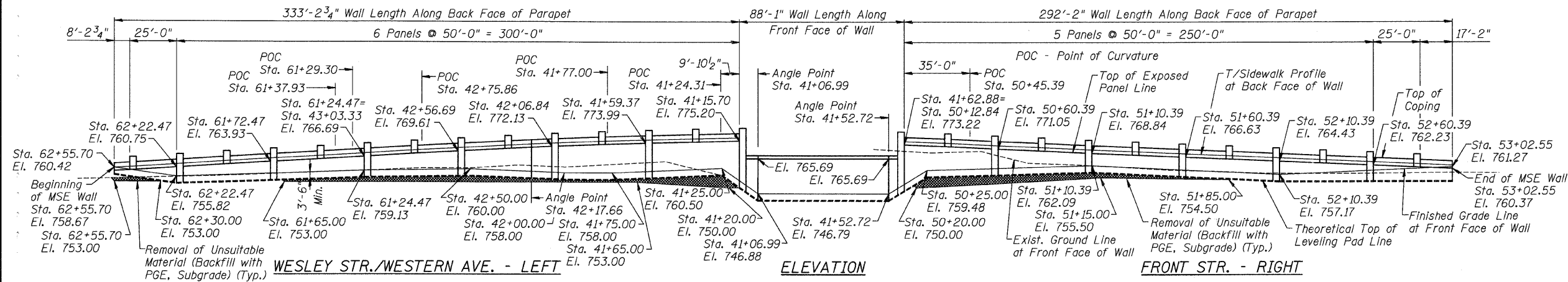
- #4 - 1'-8"
- #5 - 2'-2"
- #9 - 5'-9"



SECTION C-C



FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	•	241	129
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				

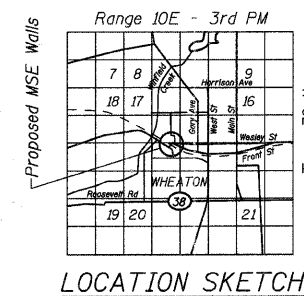


Existing Structure: none
 Salvage: none

LEGEND

- Reinforced Soil Mass
- Removal of Unsuitable Material
- Soil Boring

Note:
 Internal Wall Stability has not been consider for this drawing.
 The Supplier/ Designer shall be responsible for all internal stability aspects of the wall design.



BILL OF MATERIAL

Item	Unit	Quantity
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	9,688
Removal and Disposal of Unsuitable Material	Cu. Yd.	1,034
Porous Granular Embankment, Subgrade	Cu. Yd.	1,034
Temporary Soil Retention System	Sq. Ft.	80

CITY OF WHEATON

MANCHESTER ROAD/ WESLEY STREET
 OVER UNION PACIFIC RAILROAD

MSE RETAINING WALL

WESLEY ST. AND FRONT ST.

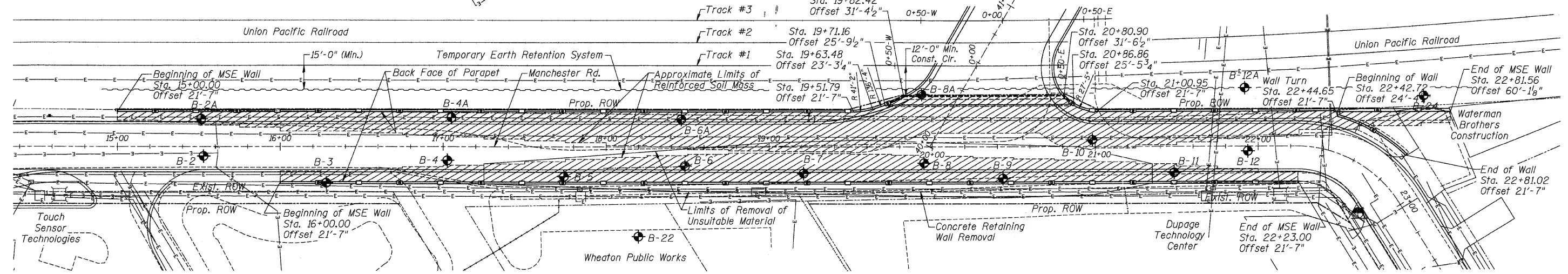
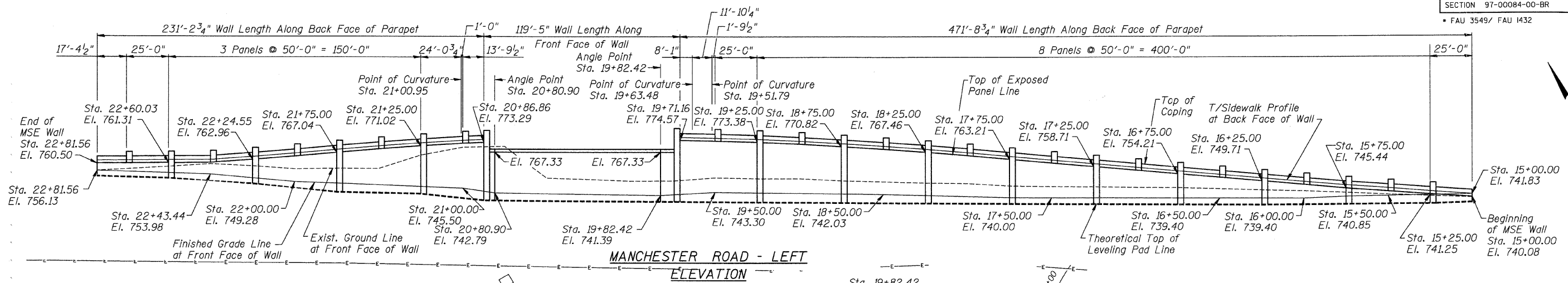
DRAWN	JM	SHEET NO.
CHECKED	VEVS	
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

S-26

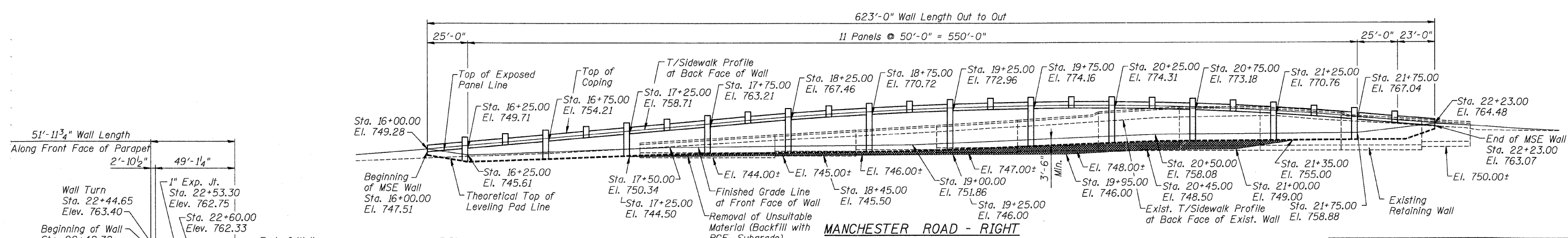
HDR
 HDR Engineering, Inc.

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	130
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				

FAU 3549/ FAU 1432



PLAN



MANCHESTER ROAD - RIGHT ELEVATION

BILL OF MATERIAL

Item	Unit	Quantity
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	29,051
Removal and Disposal of Unsuitable Material	Cu. Yd.	1,261
Porous Granular Embankment, Subgrade	Cu. Yd.	1,261
Temporary Earth Retention System	Each	1

Notes:
Internal Wall Stability has not been consider for this drawing.
The Supplier/ Designer shall be responsible for all internal stability aspects of the wall design.

The Theoretical Top of Leveling Pad elevation along Manchester Road (Left) is based on future UPRR ditch elevations rather than the shown Finished Grade Line at Front Face of Wall

LEGEND

- Reinforced Soil Mass
- Removal of Unsuitable Material
- Soil Boring

CITY OF WHEATON

MANCHESTER ROAD/ WESLEY STREET
OVER UNION PACIFIC RAILROAD

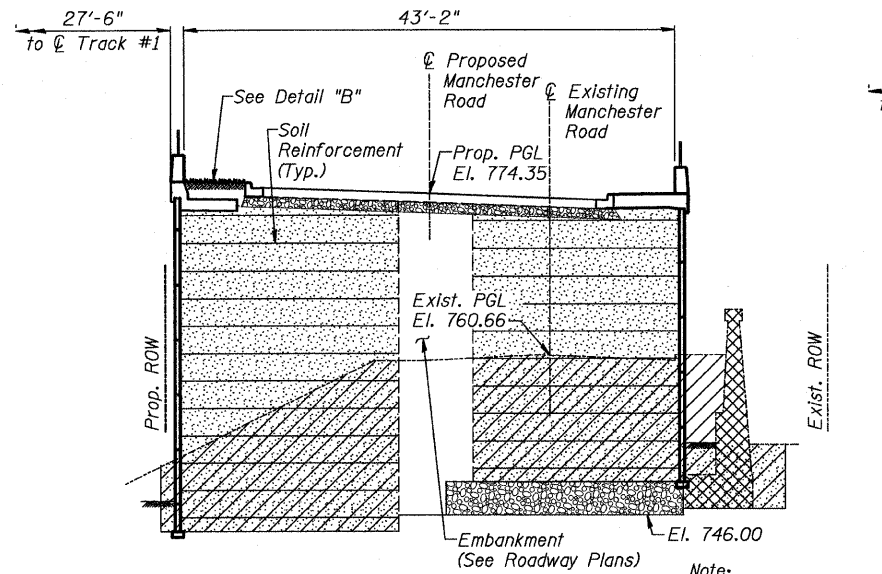
**MSE RETAINING WALL
MANCHESTER ROAD**

DRAWN	JM	SHEET NO.
CHECKED	VEVS	
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

S-27

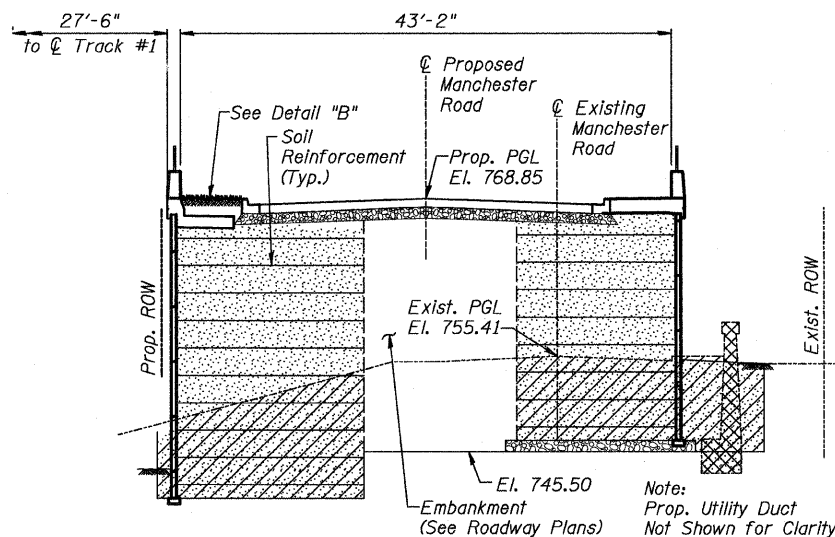


MANCHESTER ROAD - LEFT ELEVATION
(Along Waterman Brothers Construction West R)



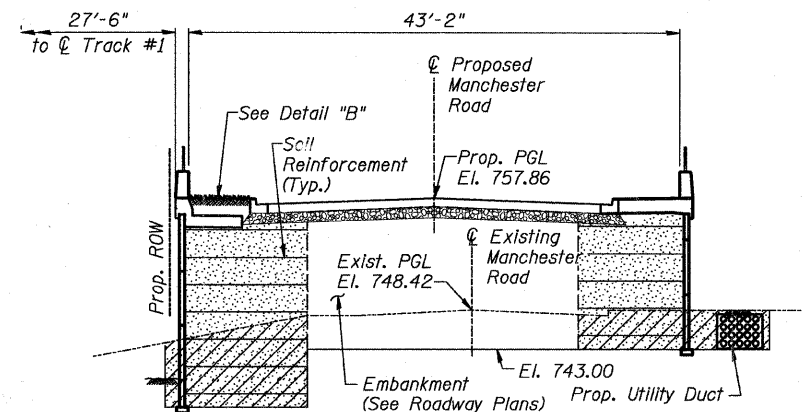
CROSS SECTION @ STA. 19+25.00

Note:
Prop. Utility Duct
Not Shown for Clarity



CROSS SECTION @ STA. 18+25.00

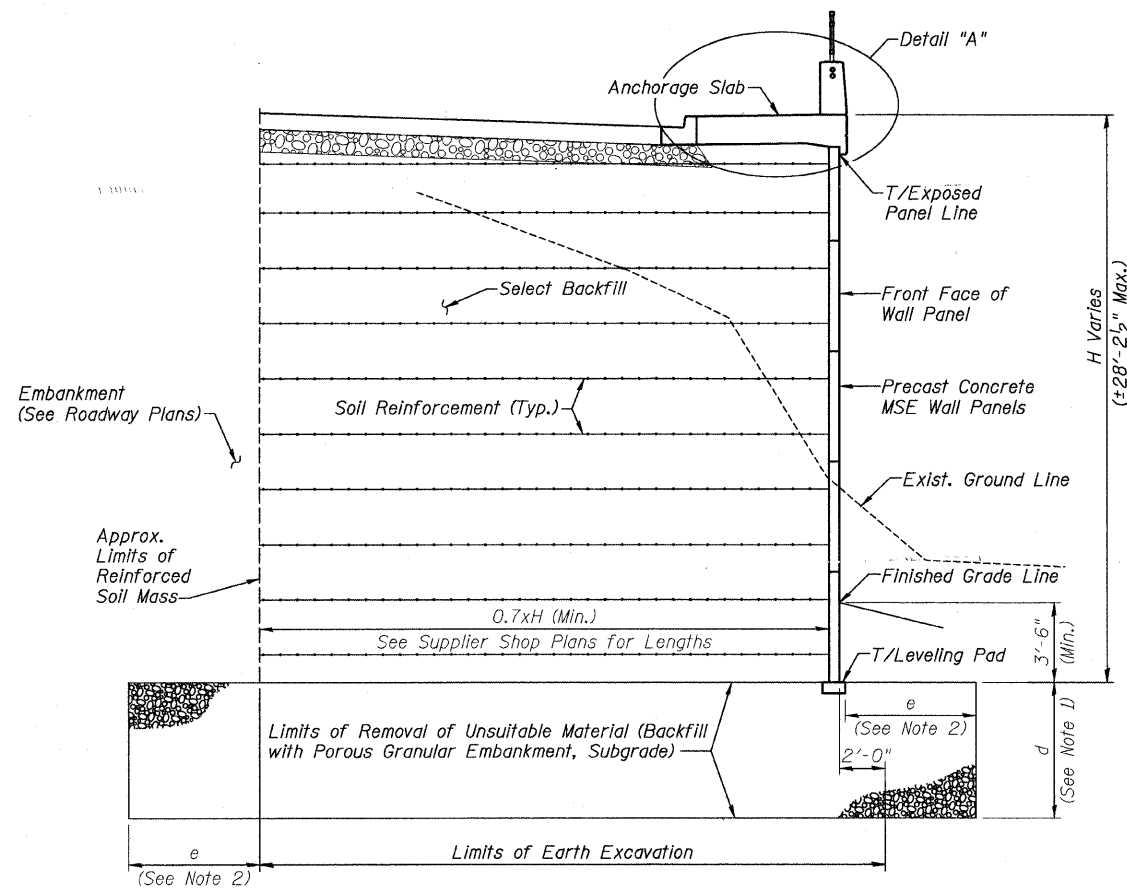
Note:
Prop. Utility Duct
Not Shown for Clarity



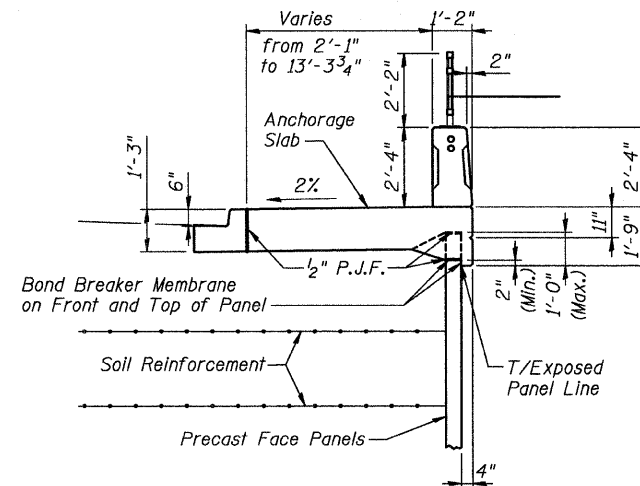
CROSS SECTION @ STA. 17+00.00

BILL OF MATERIAL

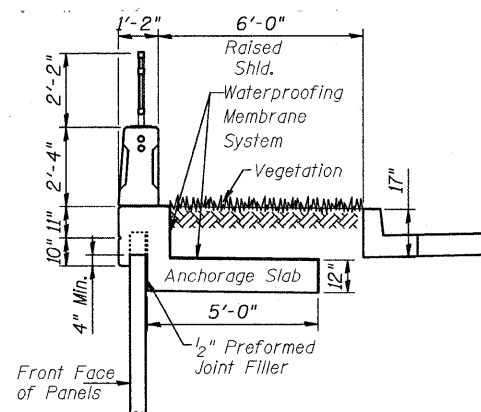
Item	Unit	Quantity
Concrete Retaining Wall Removal	Foot	508



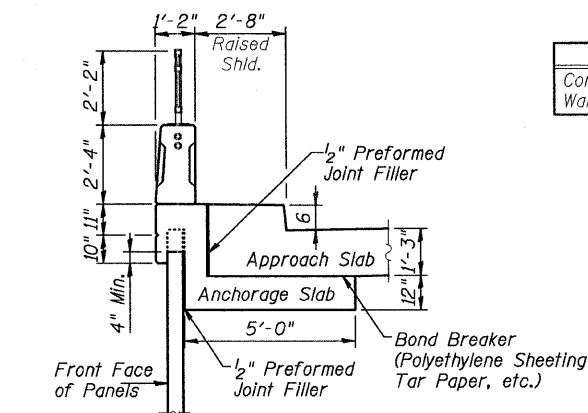
SECTION THRU MSE WALL
(Dimensions are @ Rt. L's)



DETAIL "A"



DETAIL "B"



SECTION THRU NORTH APPROACH SLAB
(Dimensions are @ Rt. L's)

NOTES:

- For Limits of Removal of Unsuitable Material see sheets S-26 and S-27.
- Edge distance "e" is the same as the Removal Depth "d".
- Sidewalk/Anchorage slab slope not to exceed two percent.

LEGEND

- Earth Excavation
- Select Backfill
- Removal of Unsuitable Material and Backfill with Porous Granular Embankment, Subgrade
- Concrete Removal

CITY OF WHEATON

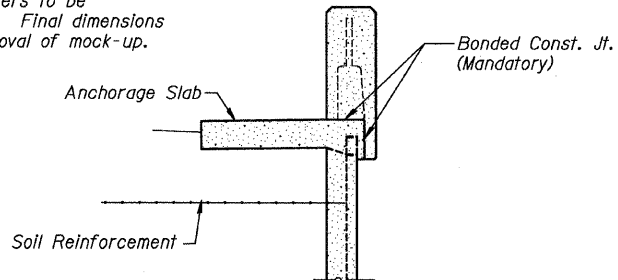
MANCHESTER ROAD/ WESLEY STREET
OVER UNION PACIFIC RAILROAD
**MSE RETAINING WALL
SECTIONS**

DRAWN	JM	SHEET NO.
CHECKED	VEVS	S-28
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

HDR
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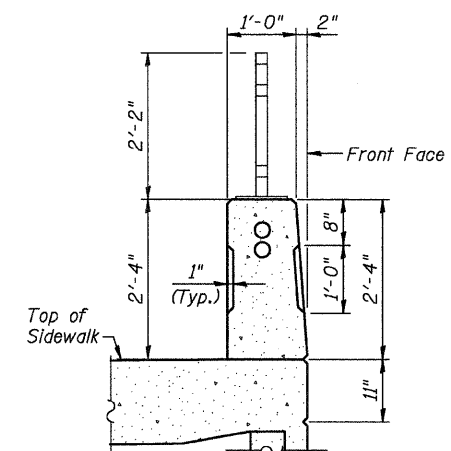
FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE		241	132
CONTRACT NUMBER B3908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				

*Fluting in all Pilasters to be developed as shown. Final dimensions are subject to approval of mock-up.

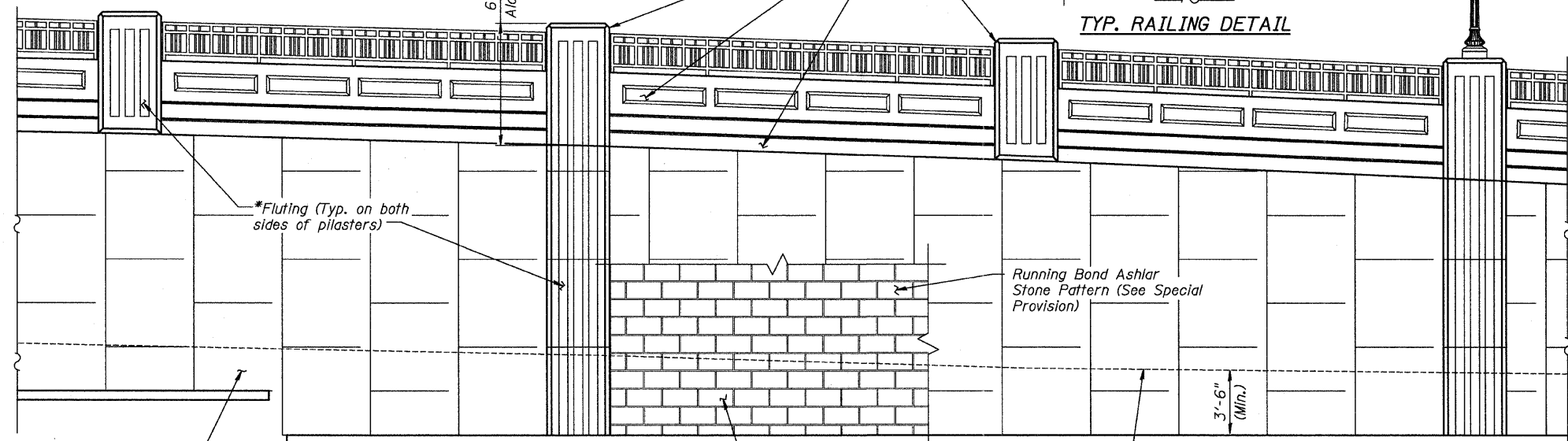
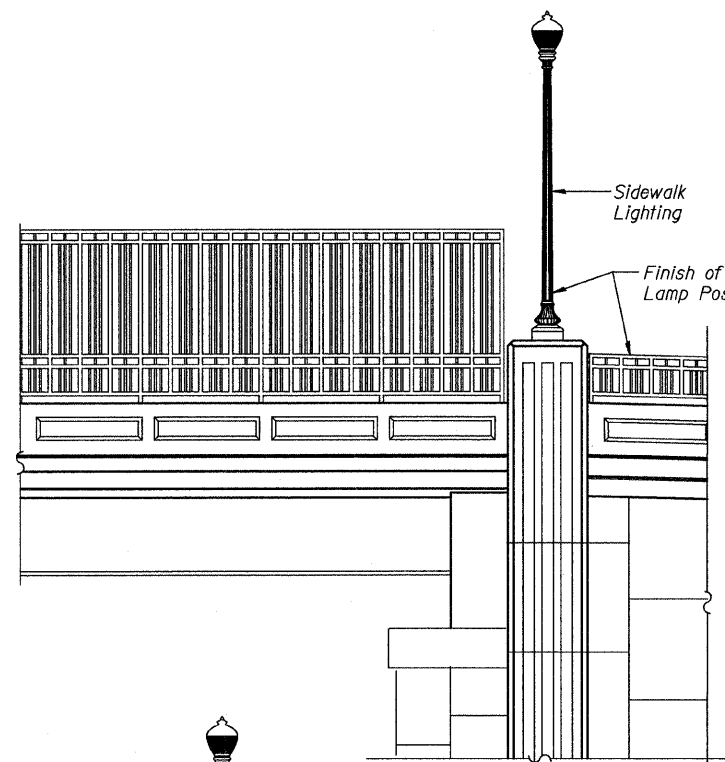


SECTION C-C

Pilasters, Parapet (Both Sides & Top) and Front Face of Anchorage Slab to be Finished with Concrete Stain Color 2. Cost of Stain Included in Concrete Superstructure

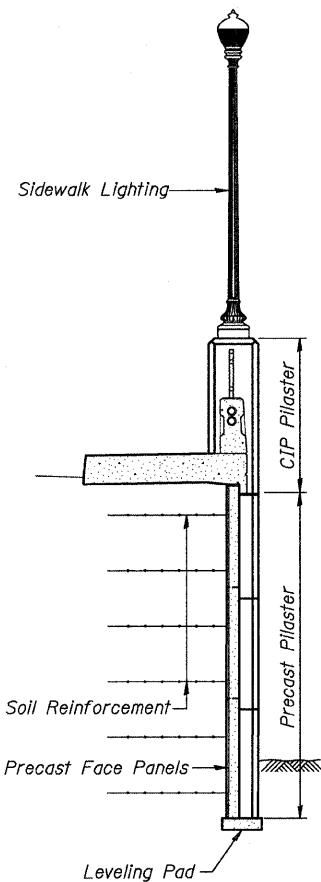


TYP. RAILING DETAIL

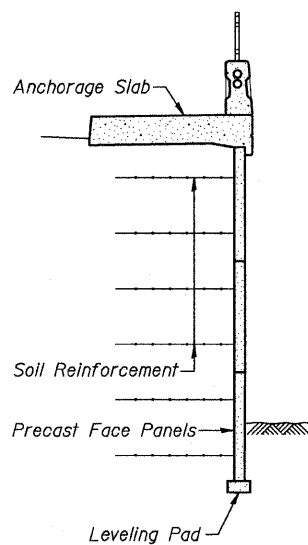


TYPICAL ELEVATION

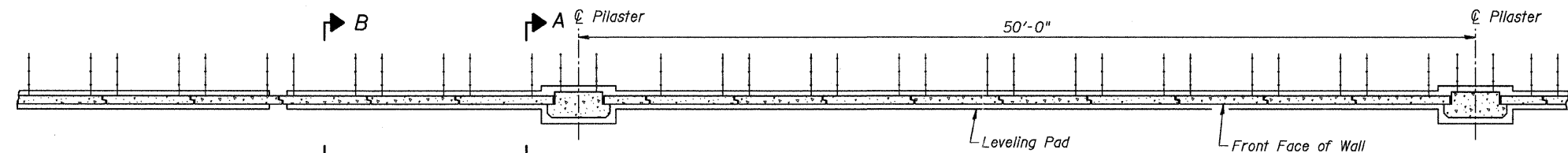
Architectural Finish at MSE Wall to Include Running Bond Limestone with Nominal 12" x 24" Pattern Finish Stone with Concrete Stain Color 1. Cost of Pattern and Stain Included in Mechanically Stabilized Earth Retaining Wall



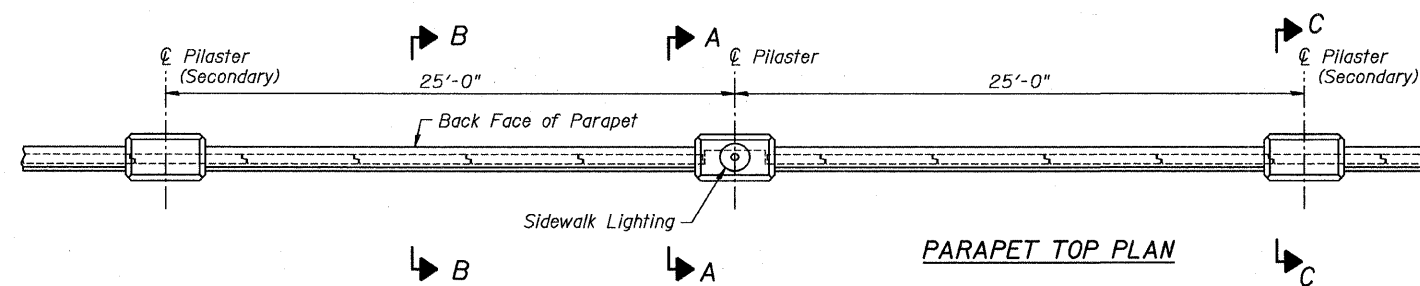
SECTION A-A



SECTION B-B



LEVELING PAD PLAN



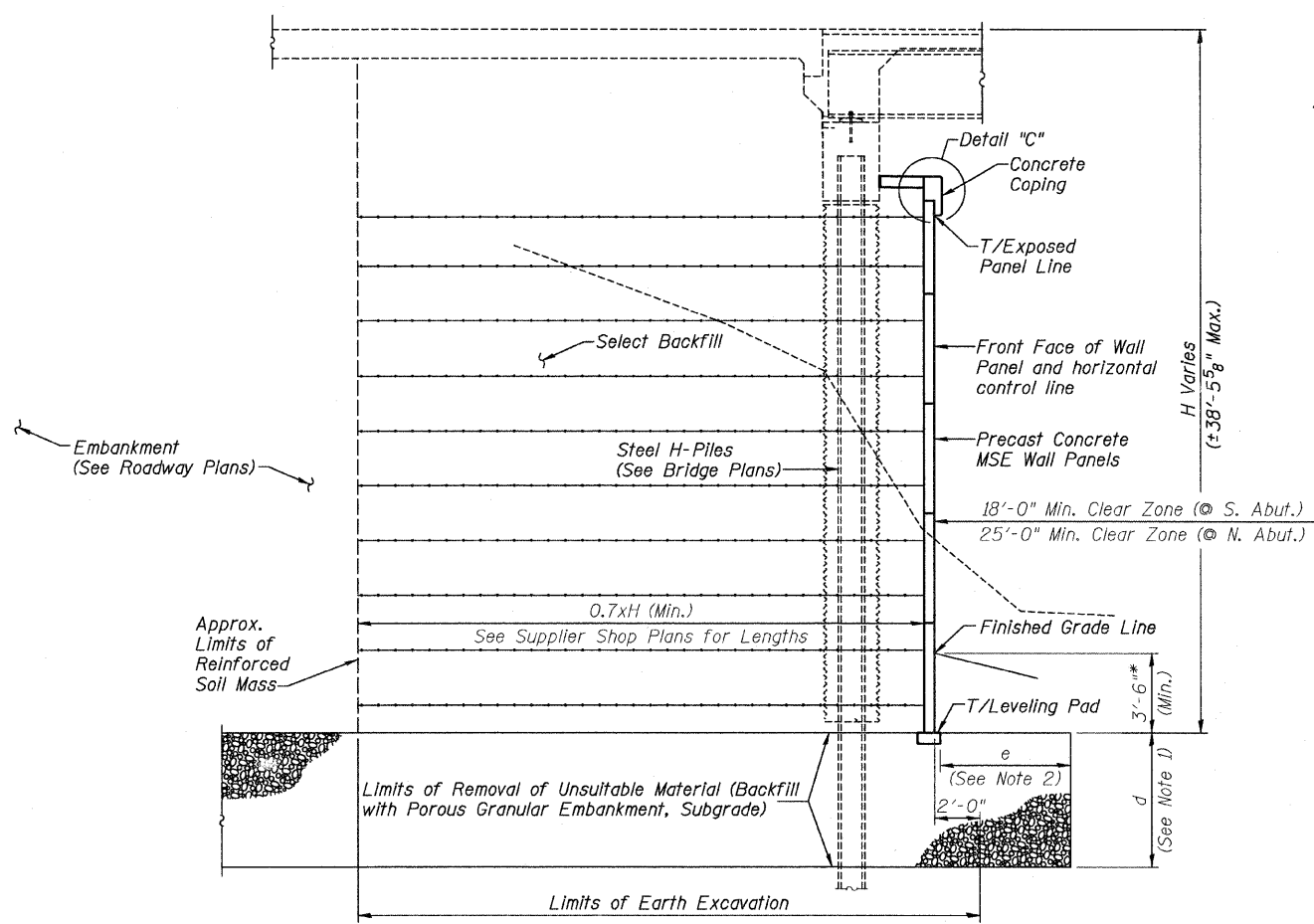
PARAPET TOP PLAN

Note:
For railing spacing see sheet S-11.

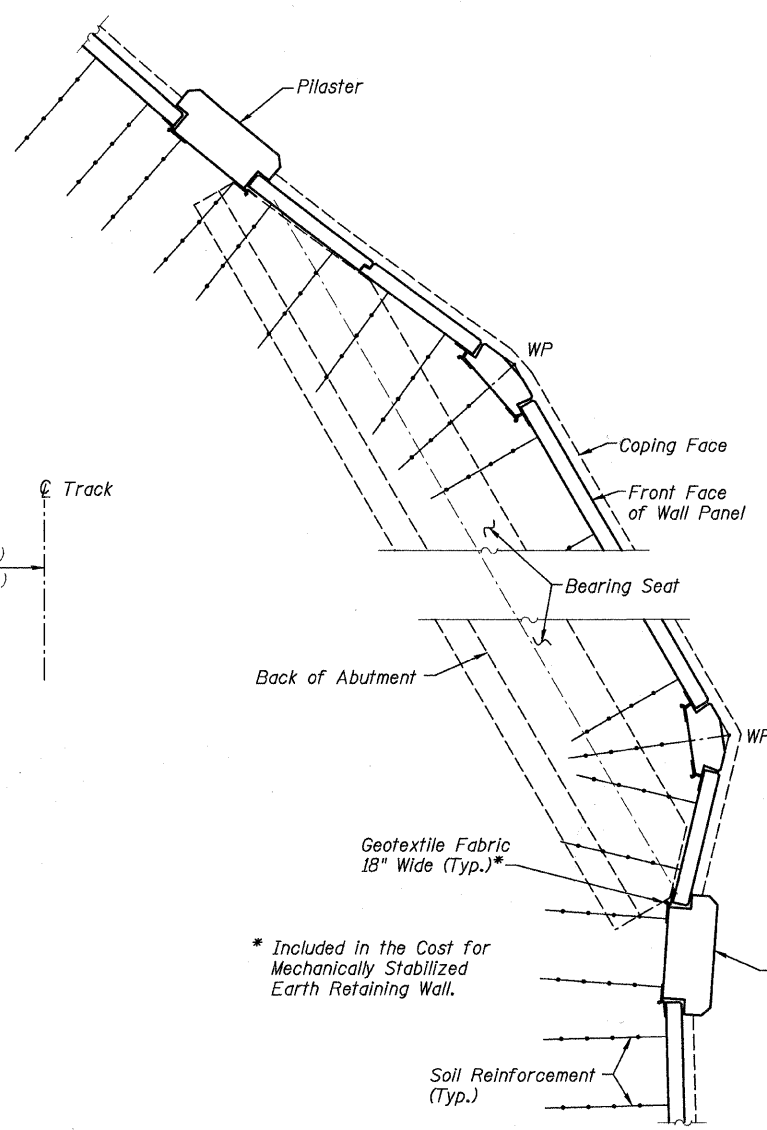
CITY OF WHEATON		
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD		
MSE RETAINING WALL WALL DETAILS		
DRAWN	JM	SHEET NO.
CHECKED	VEVS	S-29
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

HDR
HDR Engineering, Inc.

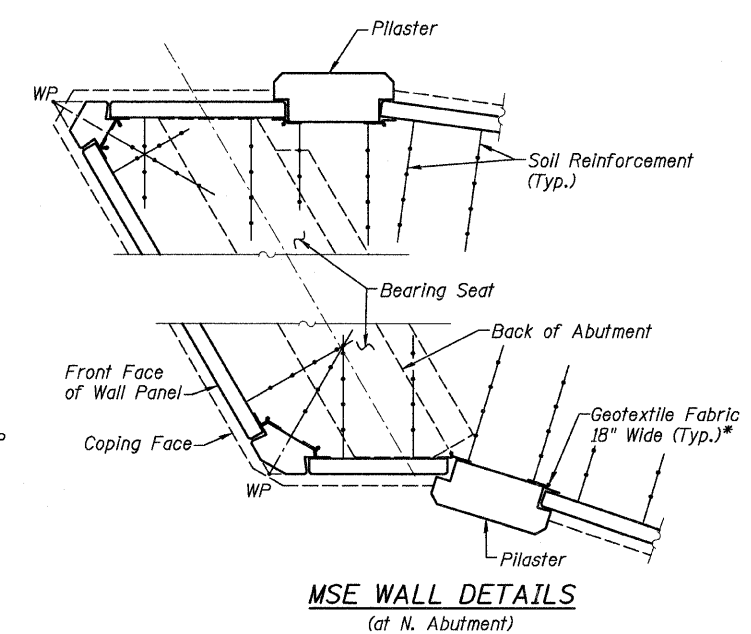
FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	133
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
* FAU 3549/ FAU 1432				



SECTION THRU INTEGRAL ABUTMENT
(Dimensions are @ Rt. L's)

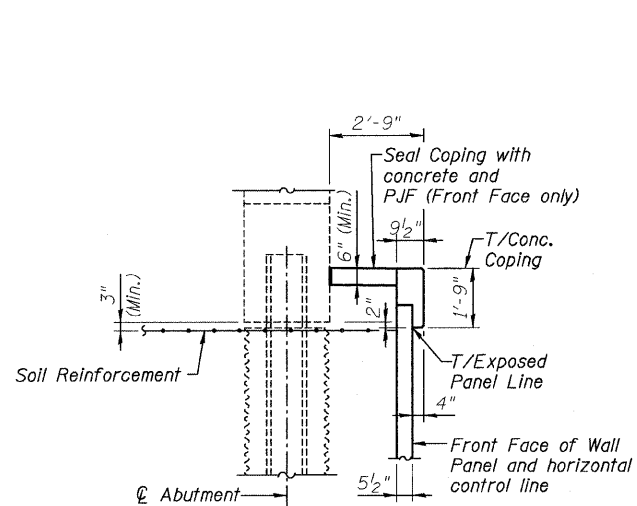


MSE WALL DETAILS
(at S. Abutment)

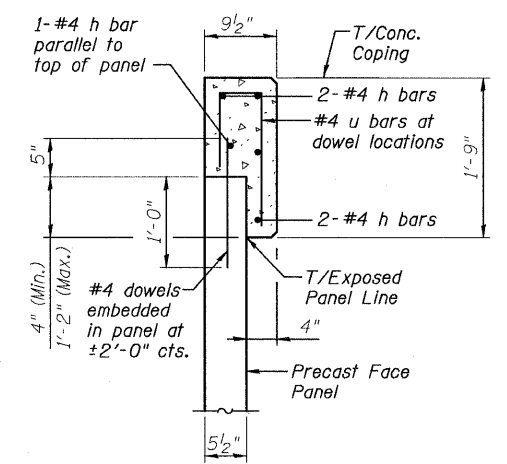


MSE WALL DETAILS
(at N. Abutment)

- NOTES:**
1. For Limits of Removal of Unsuitable Material see sheets S-26 and S-27.
 2. Edge distance "e" is the same as the Removal Depth "d".
 3. Portions of the MSE Wall in front of the North and South Abutments do not require the removal of unsuitable material. See sheets S-26 and S-27.
 4. Concrete coping and concrete fill between the coping and the bridge abutments are included in the cost for Mechanically Stabilized Earth Retaining wall.

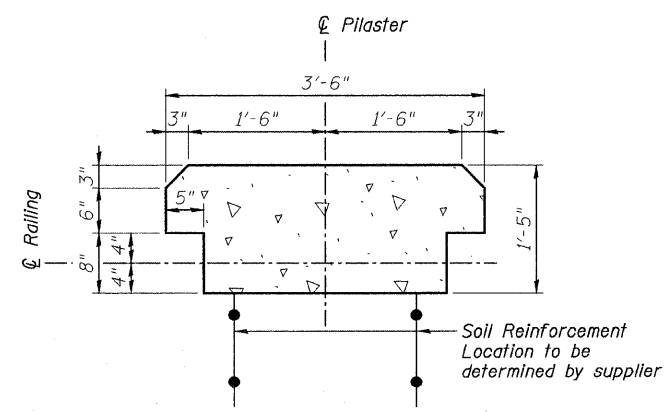


DETAIL "C"



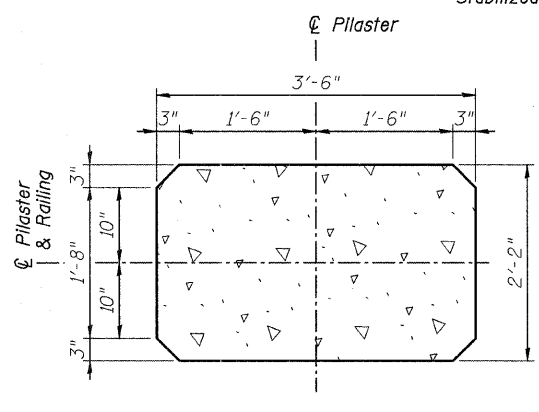
TYPICAL COPING REINFORCEMENT DETAIL

Note:
Coping concrete and reinforcement are included in cost for Mechanically Stabilized Earth Retaining Wall.



PRECAST PILASTER DETAIL

Cost for Precast Pilaster Included in the cost for Mechanically Stabilized Earth Retaining Wall.

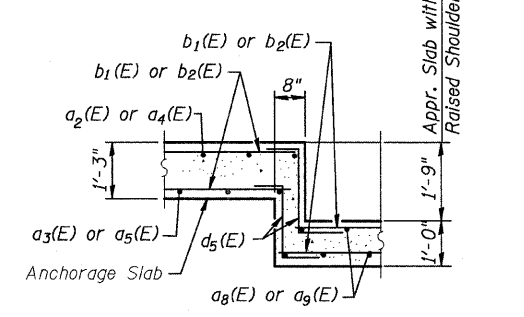
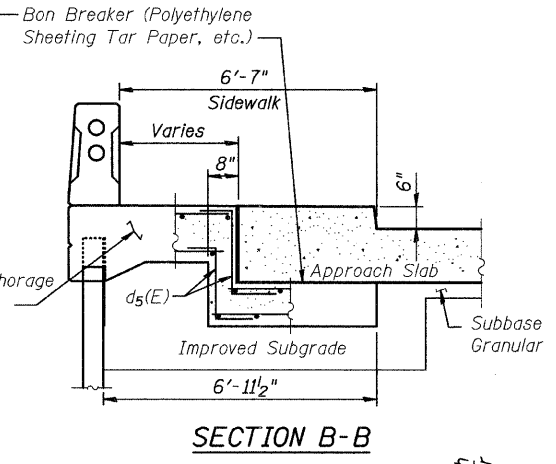
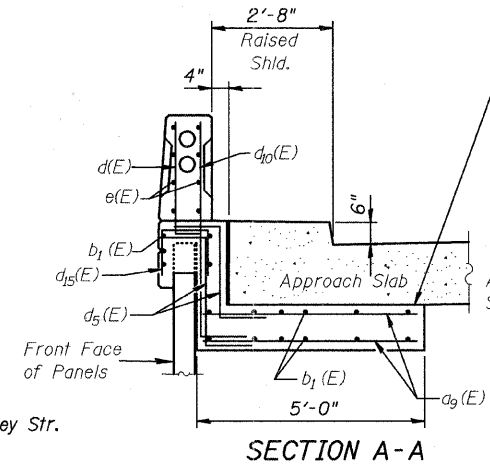
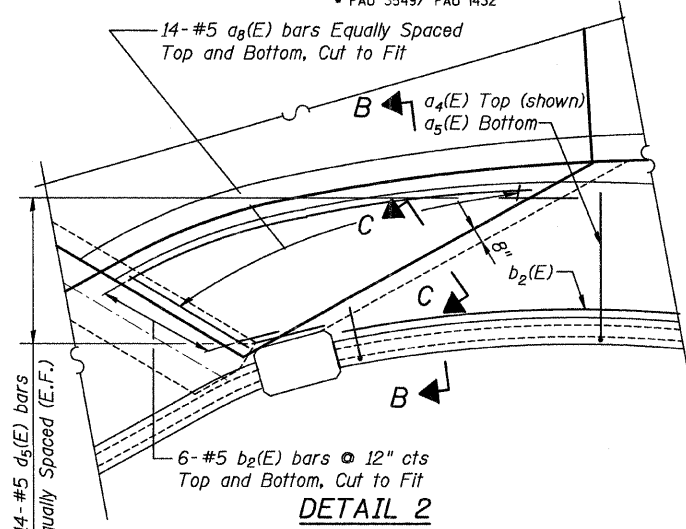
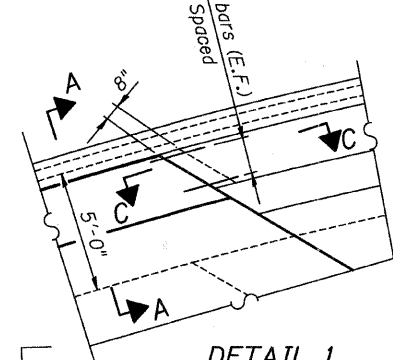
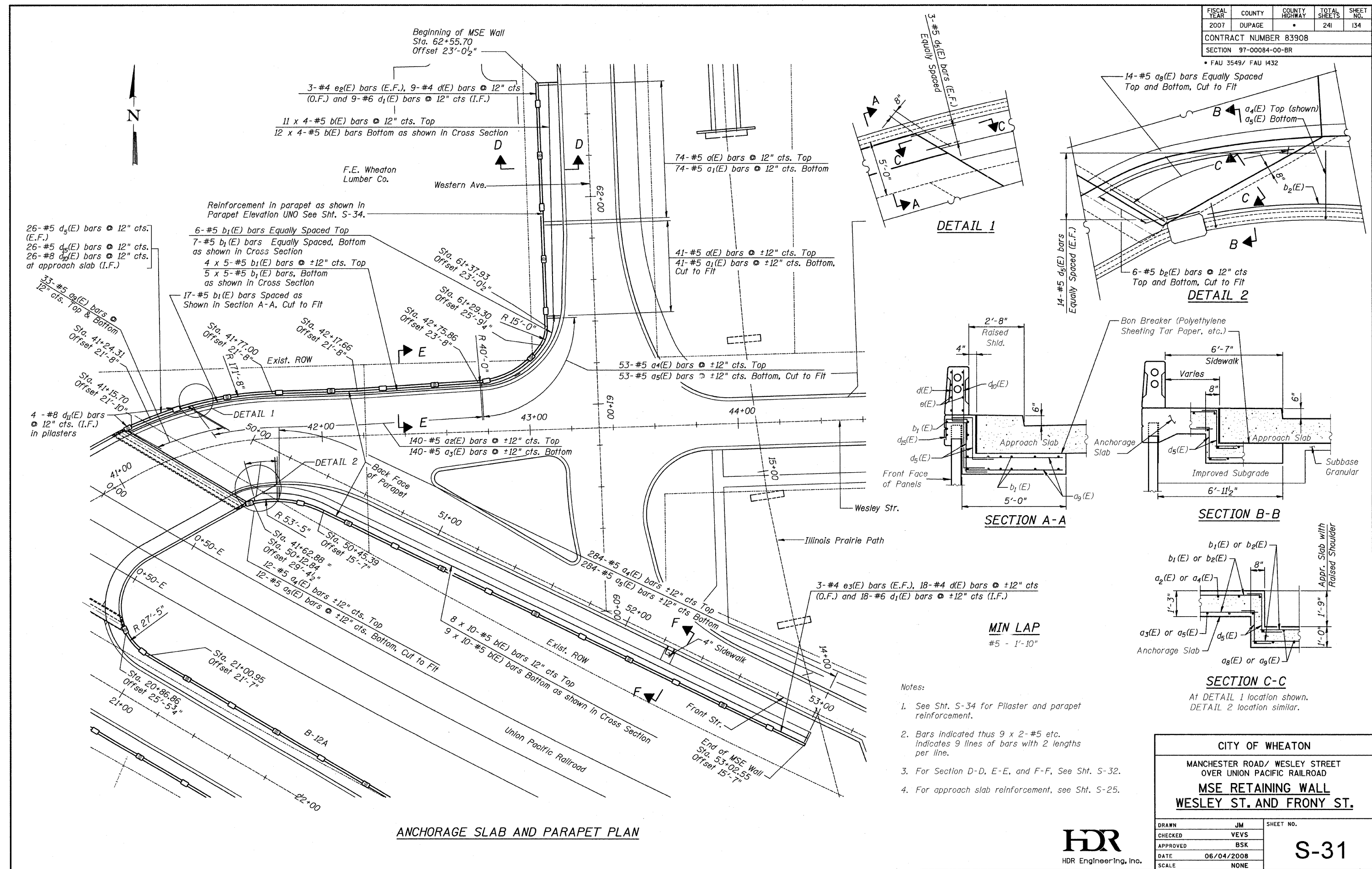


CIP PILASTER DETAIL

CITY OF WHEATON		SHEET NO.
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD		
MSE RETAINING WALL WALL DETAILS		
DRAWN	JM	S-30
CHECKED	VEVS	
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	



FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE		241	134
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
FAU 3549/ FAU 1432				



MIN LAP
#5 - 1'-10"

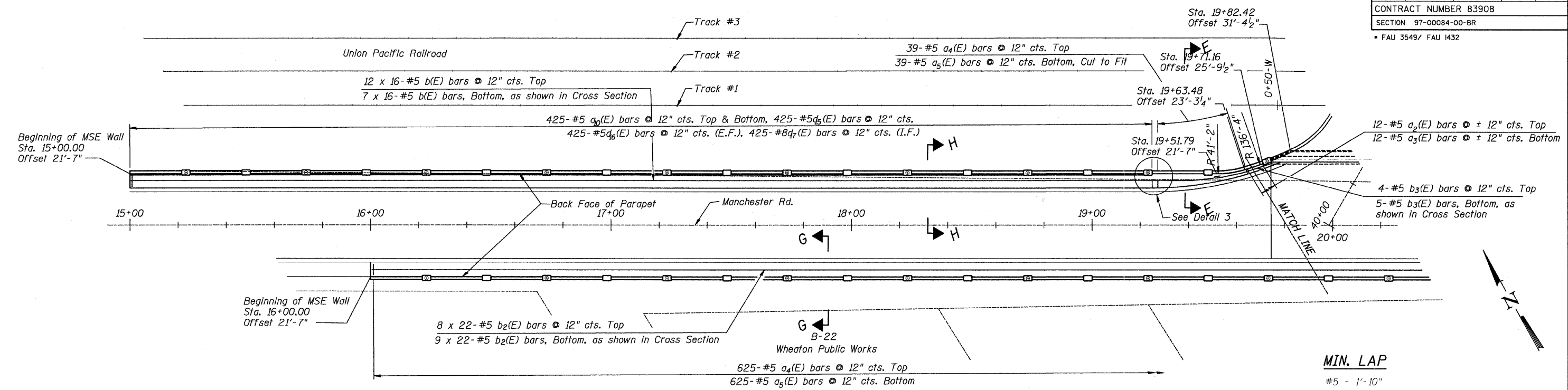
- Notes:
1. See Sht. S-34 for Pilaster and parapet reinforcement.
 2. Bars indicated thus 9 x 2-#5 etc. indicates 9 lines of bars with 2 lengths per line.
 3. For Section D-D, E-E, and F-F, See Sht. S-32.
 4. For approach slab reinforcement, see Sht. S-25.

ANCHORAGE SLAB AND PARAPET PLAN

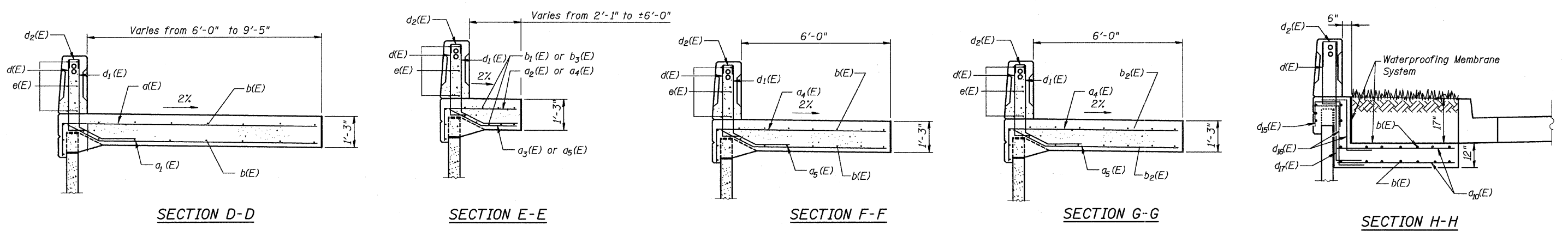
CITY OF WHEATON	
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD	
MSE RETAINING WALL WESLEY ST. AND FRONY ST.	
DRAWN	JM
CHECKED	VEVS
APPROVED	BSK
DATE	06/04/2008
SCALE	NONE
SHEET NO. S-31	



FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	•	241	135
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				



ANCHORAGE SLAB AND PARAPET PLAN



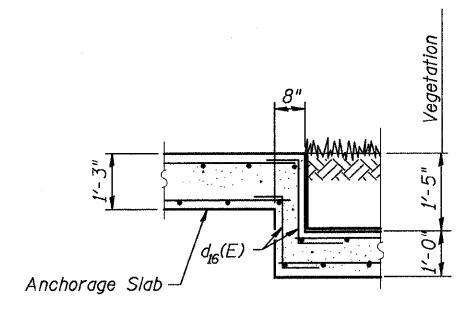
SECTION D-D

SECTION E-E

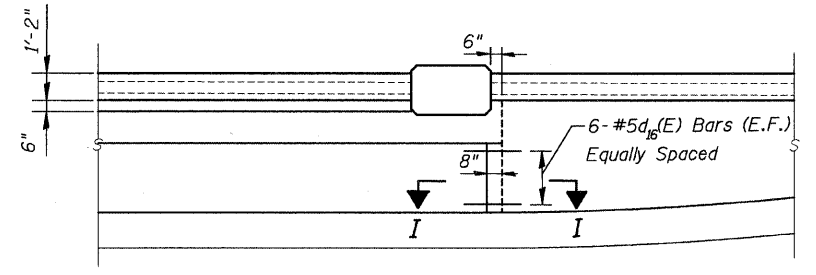
SECTION F-F

SECTION G-G

SECTION H-H



SECTION I-I



DETAIL 3

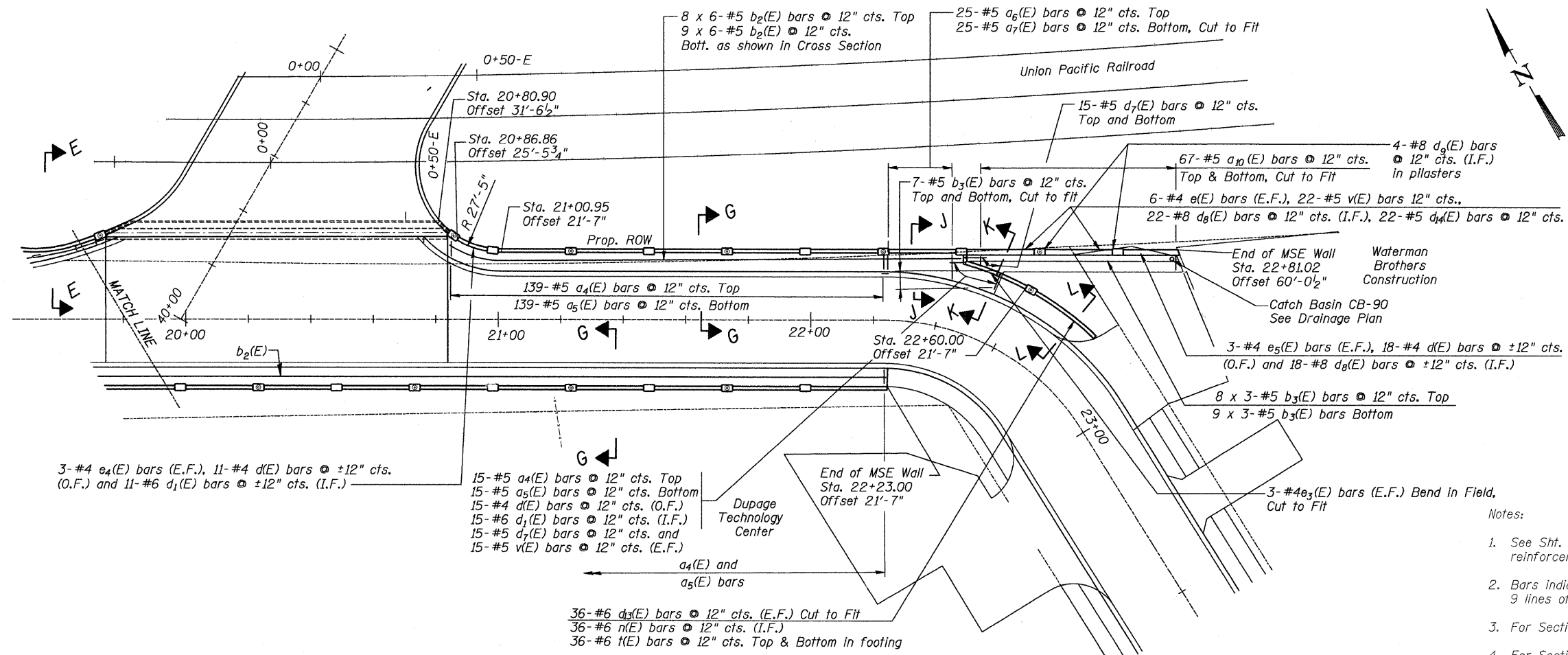
- Notes:
- See Sht. S-34 for Pilaster and parapet reinforcement.
 - Bars indicated thus 9 x 2-#5 etc. indicates 9 lines of bars with 2 lengths per line.

CITY OF WHEATON
 MANCHESTER ROAD/ WESLEY STREET
 OVER UNION PACIFIC RAILROAD
MSE RETAINING WALL
MANCHESTER RD.

DRAWN	JM	SHEET NO.
CHECKED	VEVS	S-32
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

HDR
 HDR Engineering, Inc.

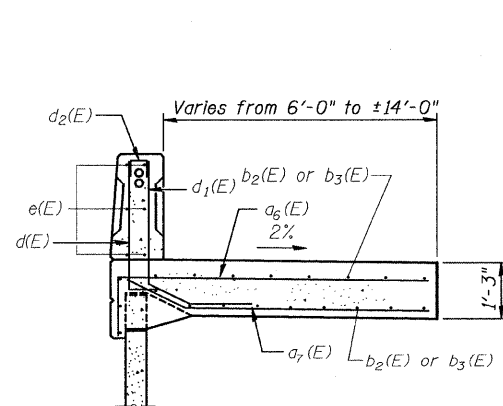
FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	136
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
* FAU 3549/ FAU 1432				



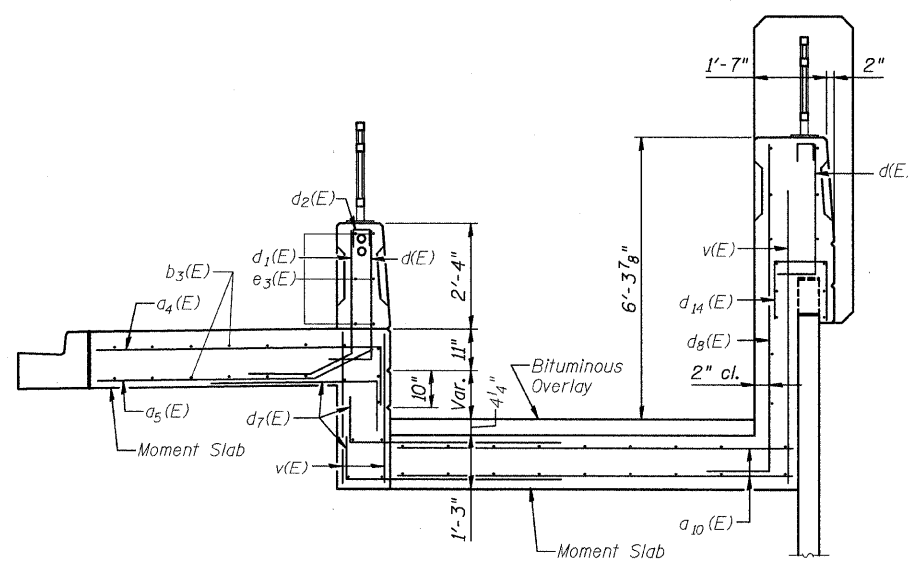
ANCHORAGE SLAB AND PARAPET PLAN

- Notes:
1. See Sht. S-34 for Pilaster and parapet reinforcement.
 2. Bars indicated thus 9 x 2-#5 etc. indicates 9 lines of bars with 2 lengths per line
 3. For Section E-E, and G-G, See Sht. S-32.
 4. For Section A-A thru Catch Basin, See Drainage Plans.

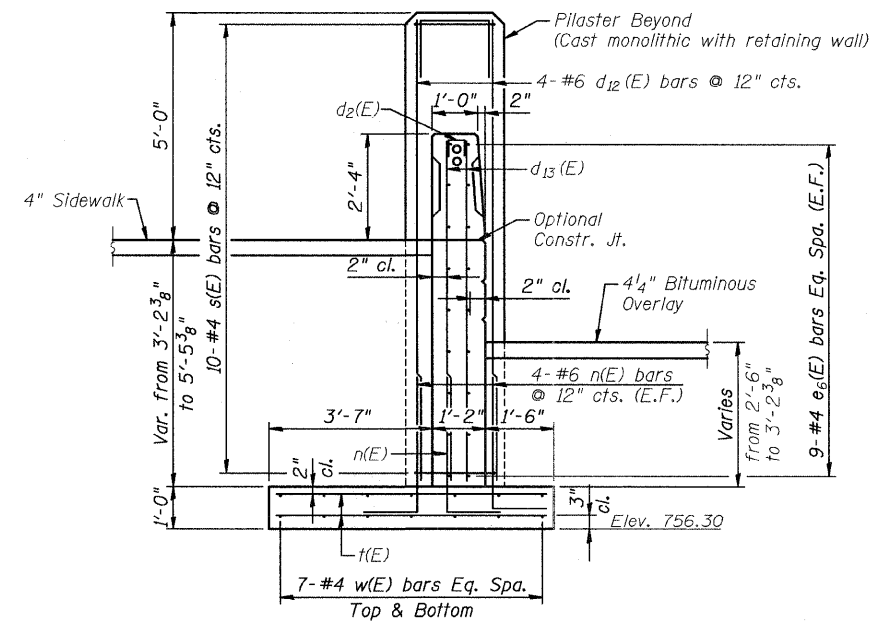
MIN. LAP
#5 - 1'-10"



SECTION J-J



SECTION K-K



SECTION L-L

CITY OF WHEATON		
MANCHESTER ROAD/ WESLEY STREET OVER UNION PACIFIC RAILROAD		
MSE RETAINING WALL		
MANCHESTER RD.		
DRAWN	JM	SHEET NO.
CHECKED	VEVS	S-33
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

HDR
HDR Engineering, Inc.

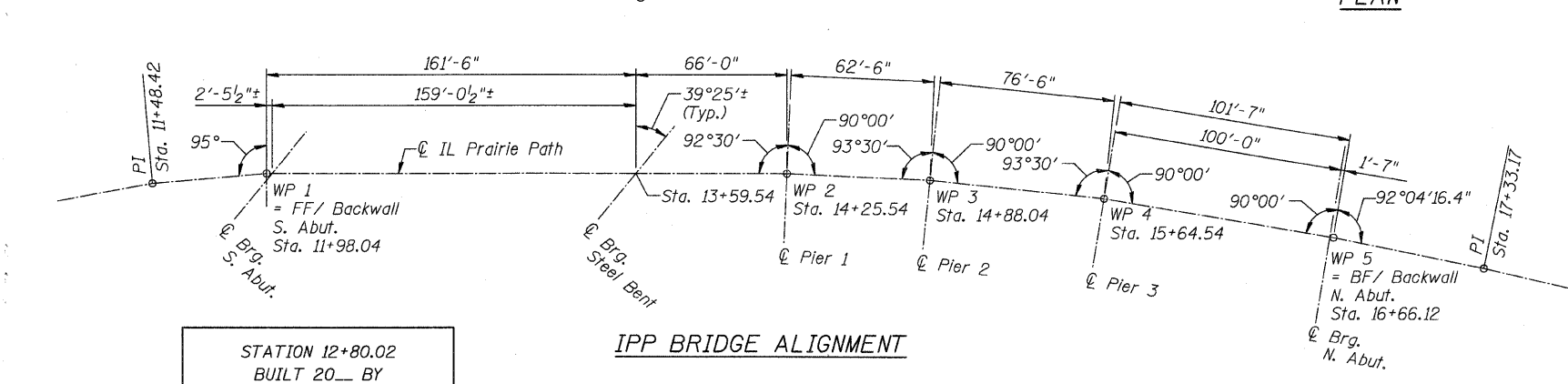
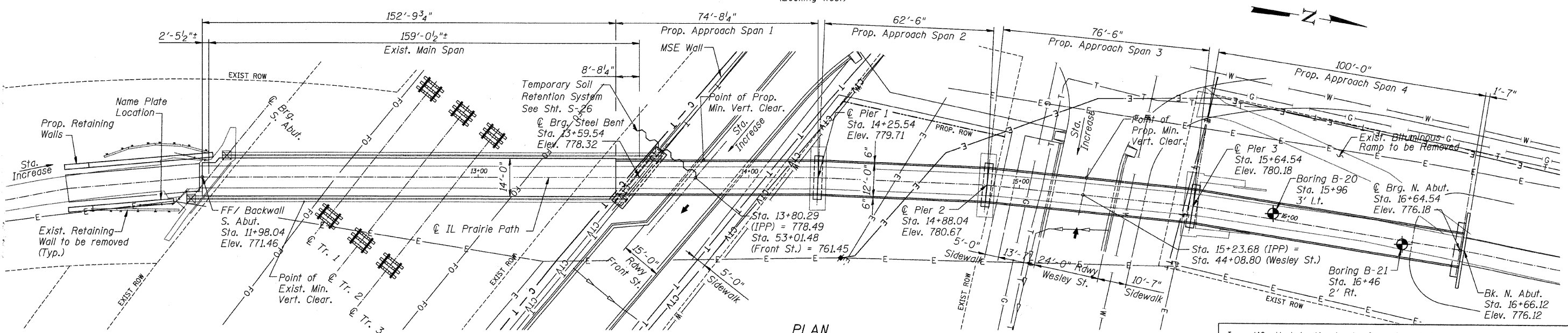
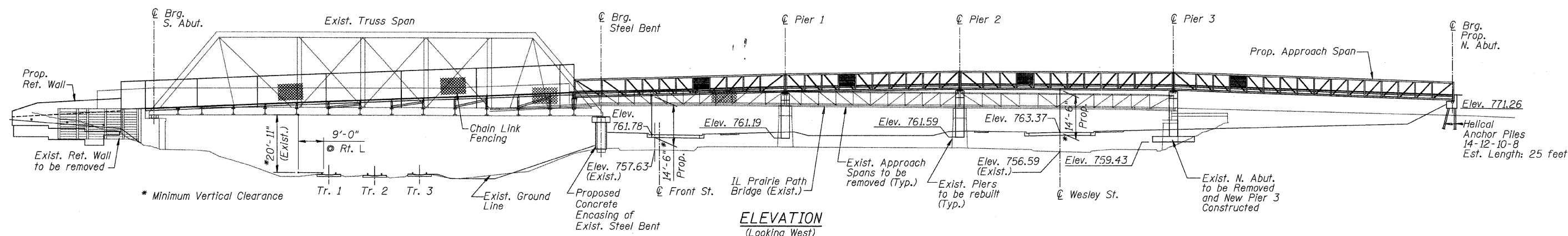
Benchmark: Cut on southwestern corner of concrete bridge abutment of Illinois Prairie Path Bridge over U.P.R.R., Elev. 741.47.

Existing Structure: 4-span bicycle and pedestrian bridge, appr. 369.5 feet, Bk-Bk of Abutments. The bridge consists of a through-truss main span (159'-0 1/2" ± @ Brg.-@ Brg., 13'-11" face-face fencing, 39°25' skew, appr. 100 years old) and three welded steel through-truss approach spans (66'-0", 62'-4", 76'-10", 7'-6" face-face fencing, erected in the early 1980's). Timber deck systems are included on both the approach spans and main span. The substructure includes two closed concrete abutments, two solid stem concrete piers and a steel bent between the main span and the approach spans.

Proposed Structure: SN 022-3005 5-span pedestrian bridge. Contractor shall remove deck of main span, demolish existing approach spans and partially remove select substructure as indicated in the Plans. Existing main span is to remain and will include a new timber deck. Four new approach spans are to be constructed of prefabricated steel truss with concrete deck. The bridge shall remain closed during construction.

Salvage: None.

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	•	241	138
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				



STATION 12+80.02
BUILT 20__ BY
STATE OF ILLINOIS
IL PRAIRIE PATH
SEC. 97-00084-00-BR
LOADING H10
STR. NO. 022-3005

NAME PLATE
(See Std. 515001)

IPP BRIDGE ALIGNMENT

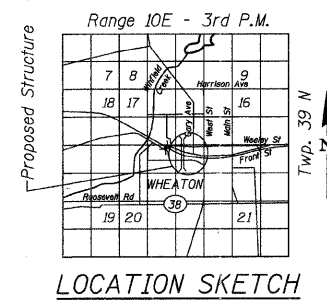
DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi (Substructure)
 $f'_c = 4,000$ psi (Deck)
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 50,000$ psi (structural steel)

DESIGN SPECIFICATIONS

AASHTO Guide Specifications for
Design of Pedestrian Bridges-1997
LOADING H-10
 LL = 85 psf

NOTES:
1. For Index of Sheets, see Sht. IPP-2.



I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specifications for Highway Bridges".



Barry S. Kravitz
Licensed Structural Engineer
(Illinois Structural Engineer's Seal)

MY LICENSE EXPIRES NOV 30 2010

CITY OF WHEATON
ILLINOIS PRAIRIE PATH BRIDGE
OVER UNION PACIFIC RAILROAD,
FRONT STREET AND WESLEY STREET
GENERAL PLAN & ELEVATION

DRAWN	JM/PES/TV	SHEET NO.
CHECKED	VEVS	IPP-1
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	



FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	•	241	139
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment	Cu. Yd.	-	2	2
* Removal of Existing Structures No. 2	Each	1	-	1
* Removal of Existing Superstructures	L. Sum	1	-	1
Concrete Removal	Cu. Yd.	-	149.8	149.8
Protective Shield	Sq. Yd.	307	-	307
Earth Excavation	Cu. Yd.	-	36	36
Concrete Structures	Cu. Yd.	-	126.4	126.4
* Furnishing and Erecting Structural Steel Bridge No. 2	L. Sum	1	-	1
Treated Timber	F.B.M.	8,558	-	8,558
Stud Shear Connectors	Each	-	1,372	1,372
Reinforcement Bars, Epoxy Coated	Pound	-	15,310	15,310
* Bicycle Railing, Special	Foot	318	-	318
* Steel Sheet Piling	Sq. Ft.	-	1,441	1,441
Name Plates	Each	1	-	1
Concrete Sealer	Sq. Ft.	-	199.0	199.0
Epoxy Crack Sealing	Foot	-	117	117
* Chain Link Fence, 10' (Special)	Foot	318	-	318
Bicycle Railing	Foot	14.5	-	14.5
* Helical Ground Anchor	Each	-	5	5
* Pedestrian Truss Superstructure	Sq. Ft.	4,080	-	4,080
* Form Liner Mockup	Each	-	1	1
* Form Liner Limestone Surface	Sq. Ft.	-	856	856

* Indicates pay item governed by a special provision.

GENERAL NOTES

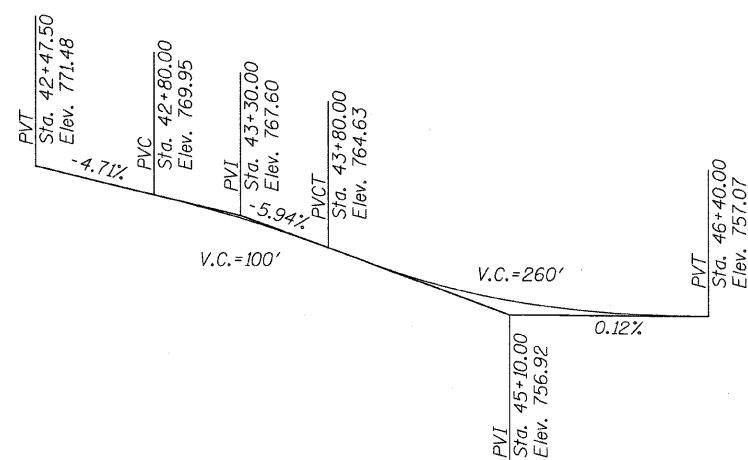
- Fasteners shall be high strength bolts (AASHTO M 164, Type 3 in unpainted areas and mechanically galvanized AASHTO M 164, Type 1 or 2 in painted areas). Bolts $\frac{7}{8}$ inch ϕ , open holes $\frac{5}{16}$ inch ϕ , unless otherwise noted.
- Calculated weight of Structural Steel = 28,859 lbs. AASHTO M270 GR50W. Weight does not include weight of prefabricated approach spans.
- All structural steel shall be AASHTO M 270 Grade 50W.
- Field welding of construction accessories will not be permitted to beams or girders.
- 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.
- The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the North Abutment.
- Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two $\frac{1}{8}$ " adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.
- Concrete Sealer shall be applied to the seat area of the three reconstructed piers and the new North Abutment.
- All Construction joints shall be bonded.

DECK AND CONCRETE NOTES

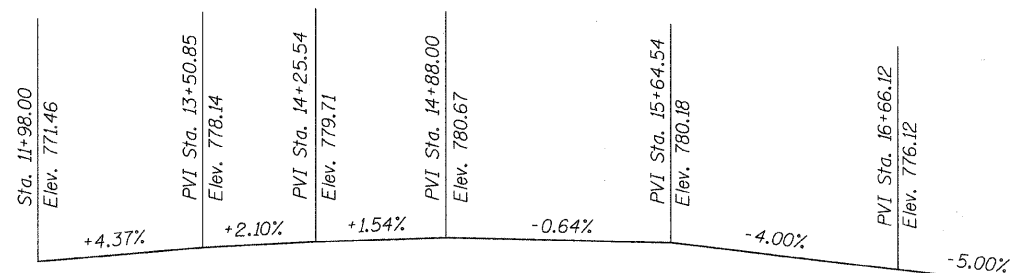
- Galvanized form deck shall be United Steel deck UF2X-22 GA. Form deck will be shop attached to floor beams by welding.
- Bar reinforcement shall be Grade 60 minimum and conform to the requirements of ASTM A 615.
- Concrete deck and reinforcing to be as shown on drawings. $f'c = 4,000$ psi minimum 28-day strength. Approach span bridge is designed for light weight (120 pcf) concrete loading with maximum aggregate size of $\frac{3}{4}$ ". Install bridge before pouring concrete. Concrete should conform to the requirement of ASTM C94.
- Air-entraining agent meeting the requirements of ASTM C 260, shall be used. Sufficient air-entraining agent shall be used to provide a total air content of 3 to 5 percent.
- Reinforcement steel shall be accurately formed to the dimensions and shapes shown, and the fabricating details shall be in accordance with ACI 315 and ACI 318.
- Concrete cover of $2\frac{1}{4}$ " above top lateral reinforcement and $2\frac{3}{4}$ " below bottom longitudinal reinforcement shall be maintained.
- All reinforcement, inserts, and similar items shall be set and secured in the forms.
- Placing of concrete shall conform to the applicable requirements of chapter 8 of ACI 301. No aluminum shall be used in conveying any concrete.
- Concrete shall not be placed in freezing or inclement conditions unless special provisions are made to protect the concrete. The finished concrete shall be protected from freezing weather for a minimum of 14 days.
- Concrete shall be wood float finished. Given a wood float finish using wood or metal floats or with a finishing machine. Using dry cement or sand on the concrete surface to absorb excess moisture will not be permitted. The final surface shall be given a light hairbroom finish with brooming perpendicular to drainage unless otherwise shown. The resulting surface shall be rough enough to provide a nonskid finish.
- Compression test specimens shall be taken during construction to insure compliance with concrete strength requirements. Each set of test specimens will be a minimum of 4 cylinders. Compression test specimens for concrete shall be made in accordance with section 9.2 of ASTM C 31. Specimens shall be 6-inch diameter by 12-inch high cylinders. Compression tests shall be performed in accordance with ASTM C 39. One test cylinder will be tested at 7 days and 2 at 28 days. The remaining cylinders will be held to verify test results.
- Contractor to exercise care to control traffic and storage of materials on formdeck before pouring slab. Spans must be planked or otherwise protected against damage from workers walking on material, construction traffic and concrete placing equipment.

INDEX OF SHEETS

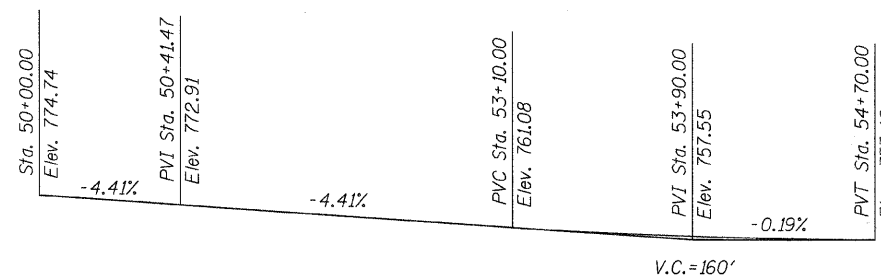
- General Plan & Elevation
- General Notes and Bill of Material
- Demolition Plan
- Demolition Details - Existing Main Span
- Demolition Details - Existing Approach Spans
- Main Span Proposed Modifications
- Main Span Proposed Deck Modifications Details I
- Main Span Proposed Deck Modifications Details II
- Approach Spans 1 & 2 Plan & Elevation
- Approach Spans 3 & 4 Plan & Elevation
- Approach Spans Typ. Section
- Approach Spans Details
- South Abutment Removal Details
- South Abutment Repair Details I
- South Abutment Repair Details II
- South Approach Retaining Walls Details I
- South Approach Retaining Walls Details II
- Existing Steel Bent Details
- Steel Bent Encasement Details
- Pier 1 Removal Details
- Pier 1 Modification Details
- Concrete Pier Form Liner
- Pier 2 Removal Details
- Pier 2 Modification Details
- Existing North Abutment Removal Details
- Pier 3 Details
- Proposed North Abutment Details



PROFILE GRADE (WESLEY ST.)
Along ϕ Roadway



PROFILE GRADE - IPP

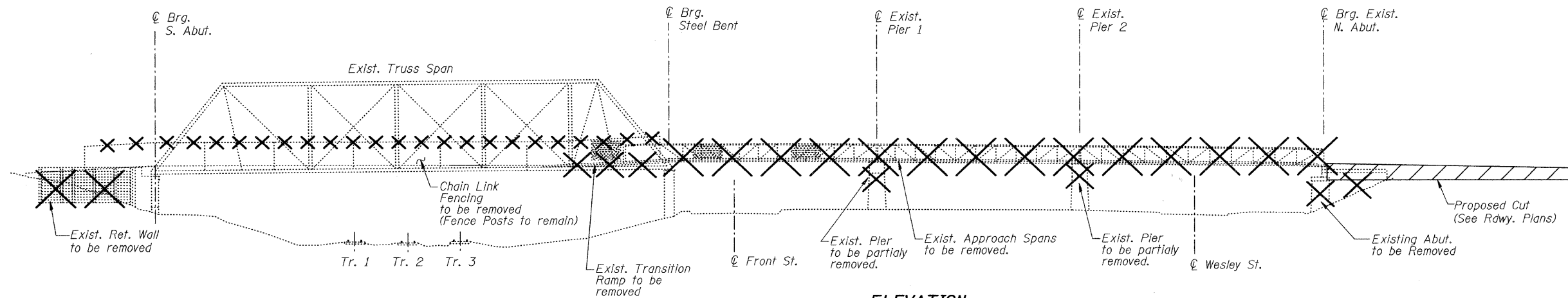


PROFILE GRADE - FRONT ST.

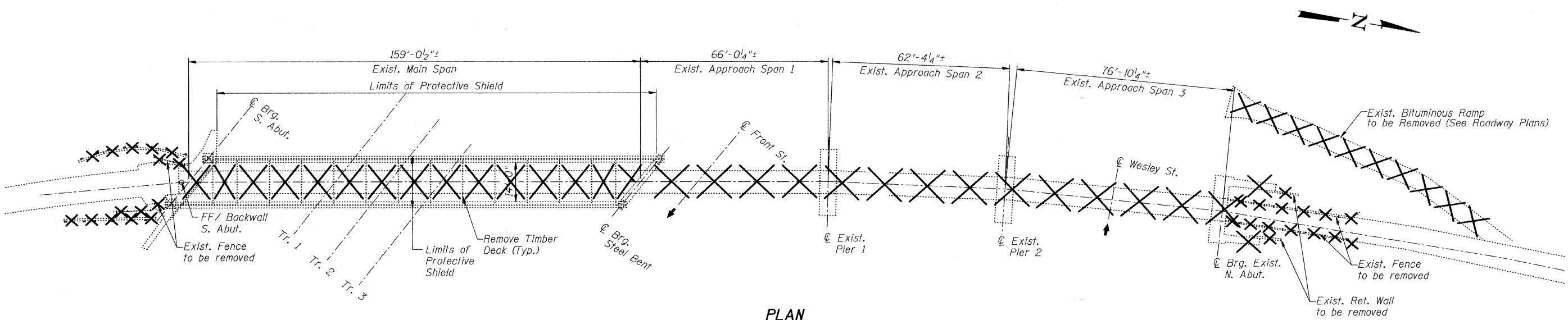
CITY OF WHEATON		
ILLINOIS PRAIRIE PATH BRIDGE OVER UNION PACIFIC RAILROAD, FRONT STREET AND WESLEY STREET		
GENERAL NOTES AND BILL OF MATERIAL		
DRAWN	JM/PES/TV	SHEET NO.
CHECKED	VEVS	IPP-2
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

HDR
HDR Engineering, Inc.

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	•	241	140
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				



ELEVATION
(Looking West)



PLAN

Notes:

1. Demolition of existing approach spans to be paid for as Removal of Existing Superstructures.
2. Demolition of existing main span timber deck, transition ramp, fencing, and retaining walls shall be paid for as Removal of Existing Structures No. 2.
3. Partial demolition of the piers and north abutment shall be paid for as Concrete Removal.
4. For portion of existing main span framing to remain, see Detail 4 on Sht. IPP-7.

LEGEND



CITY OF WHEATON	
ILLINOIS PRAIRIE PATH BRIDGE OVER UNION PACIFIC RAILROAD, FRONT STREET AND WESLEY STREET	
DEMOLITION PLAN	
DRAWN	JM/PES/TV
CHECKED	VEVS
APPROVED	BSK
DATE	06/04/2008
SCALE	NONE
SHEET NO. IPP-3	

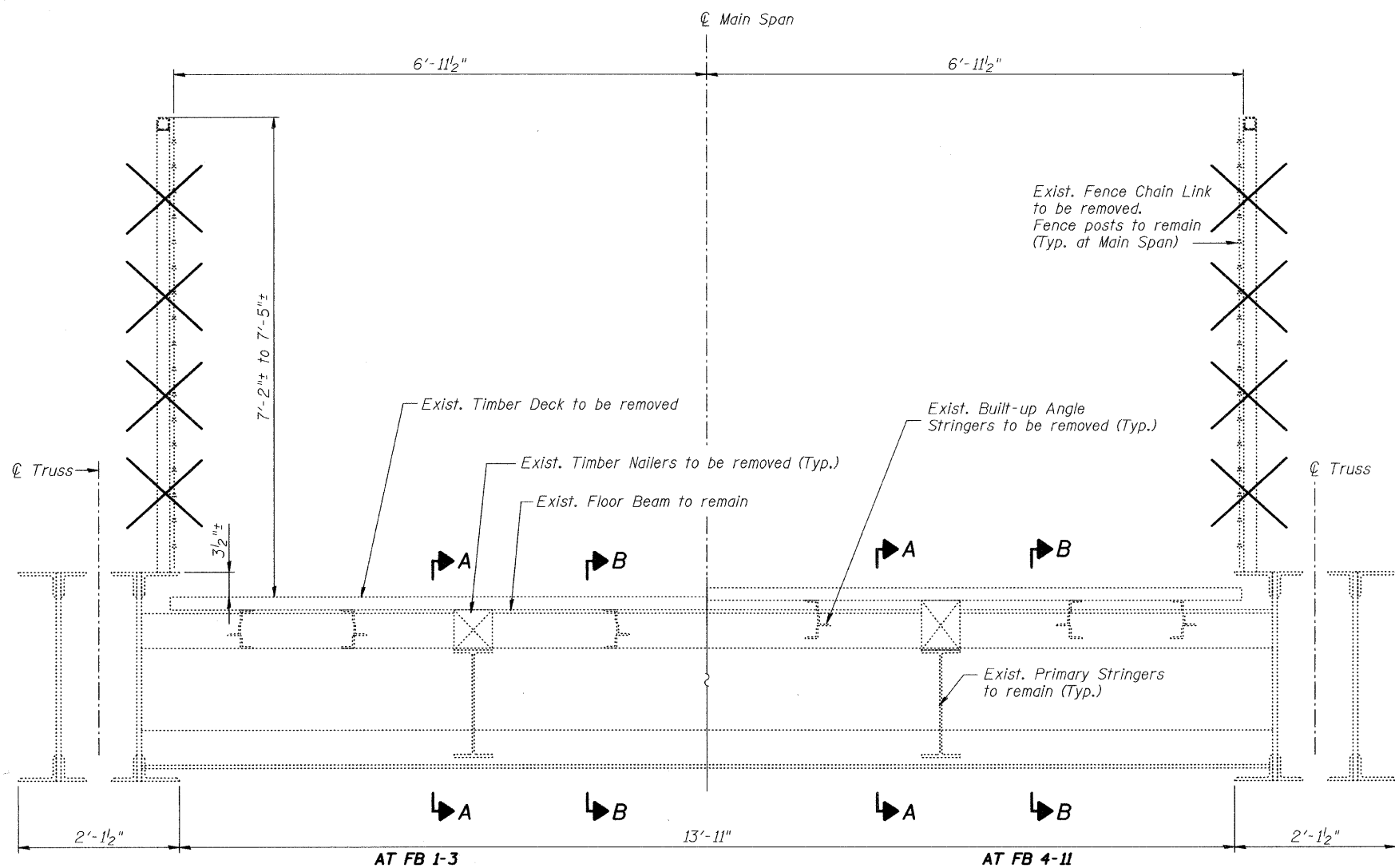


FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	141

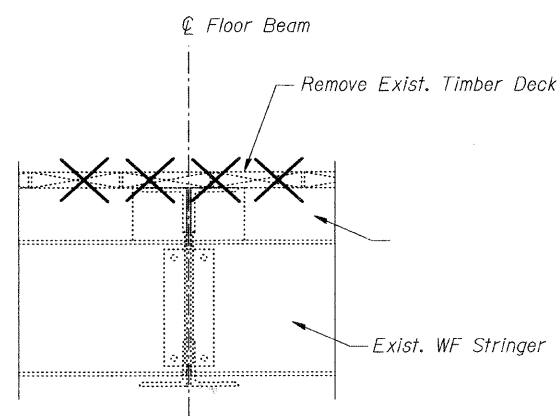
CONTRACT NUMBER 83908

SECTION 97-00084-00-BR

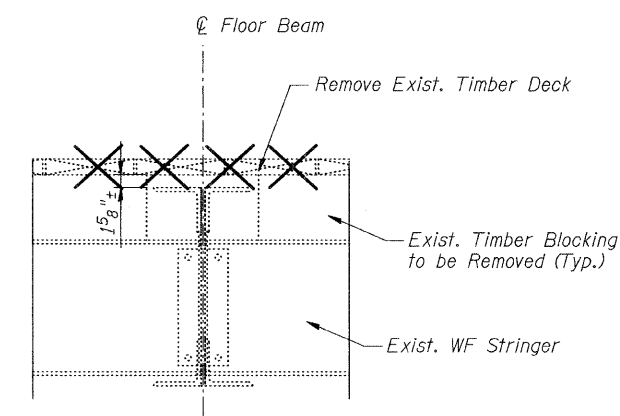
• FAU 3549/ FAU 1432



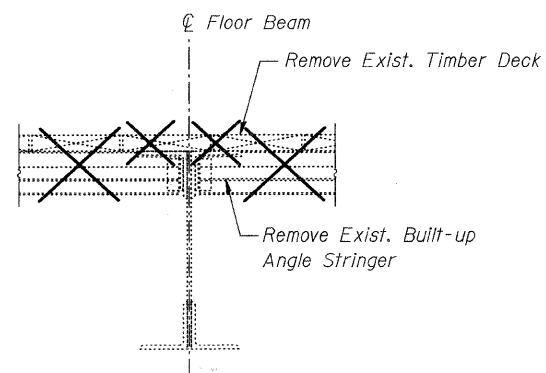
TYP. MAIN SPAN CROSS SECTION (Exist.)
(Looking South)



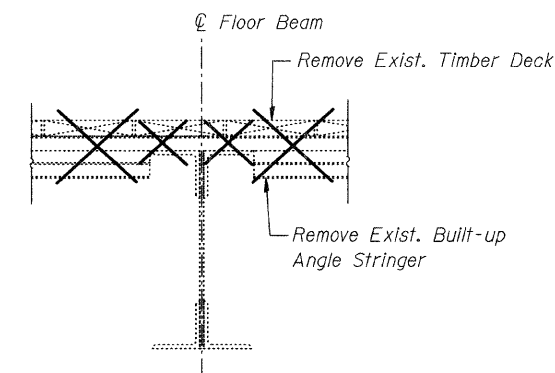
SECTION A-A
FB 1-3



SECTION A-A
FB 4-11



SECTION B-B
FB 1-3



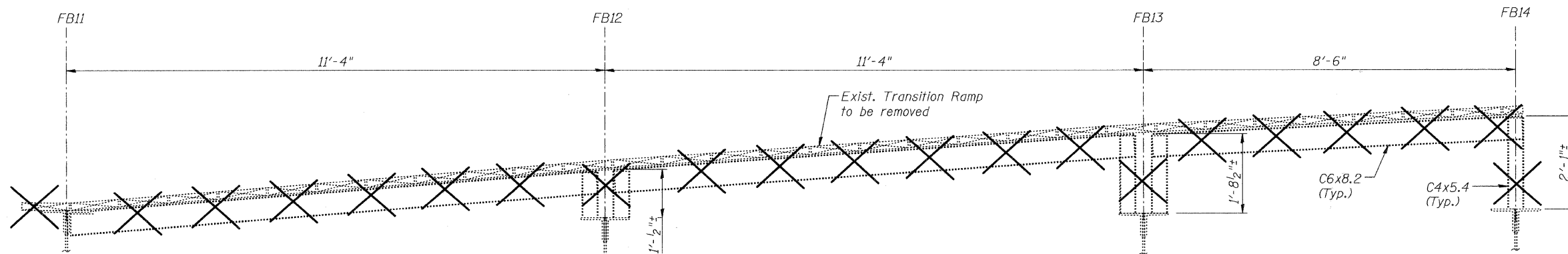
SECTION B-B
FB 4-11

LEGEND

✕ Demolition

NOTES:

1. Demolition of existing main span timber deck, nailers, secondary built-up stringers, transition ramp and supports, and fencing shall be paid for as Removal of Existing Structures No. 2.

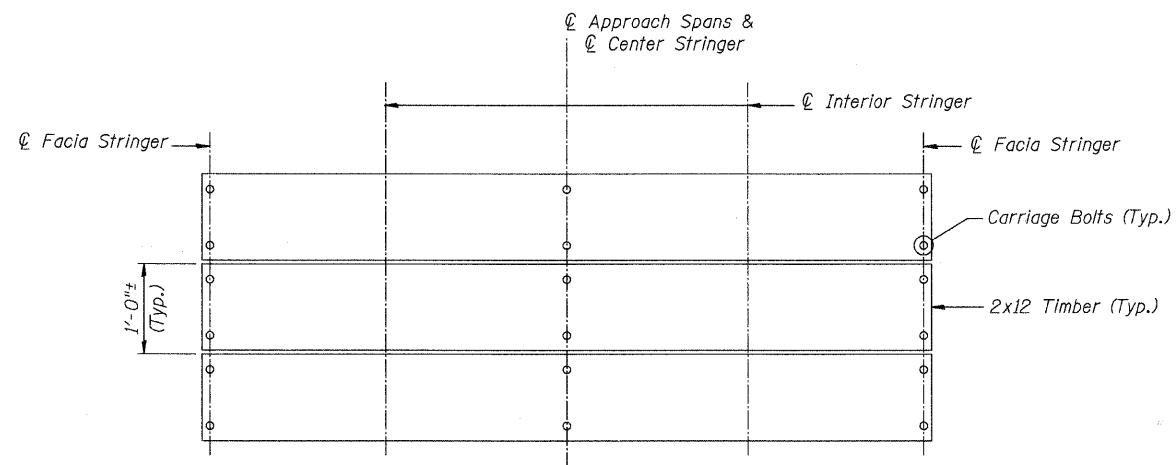


MAIN SPAN - EXIST. TRANSITION RAMP
(Looking East)

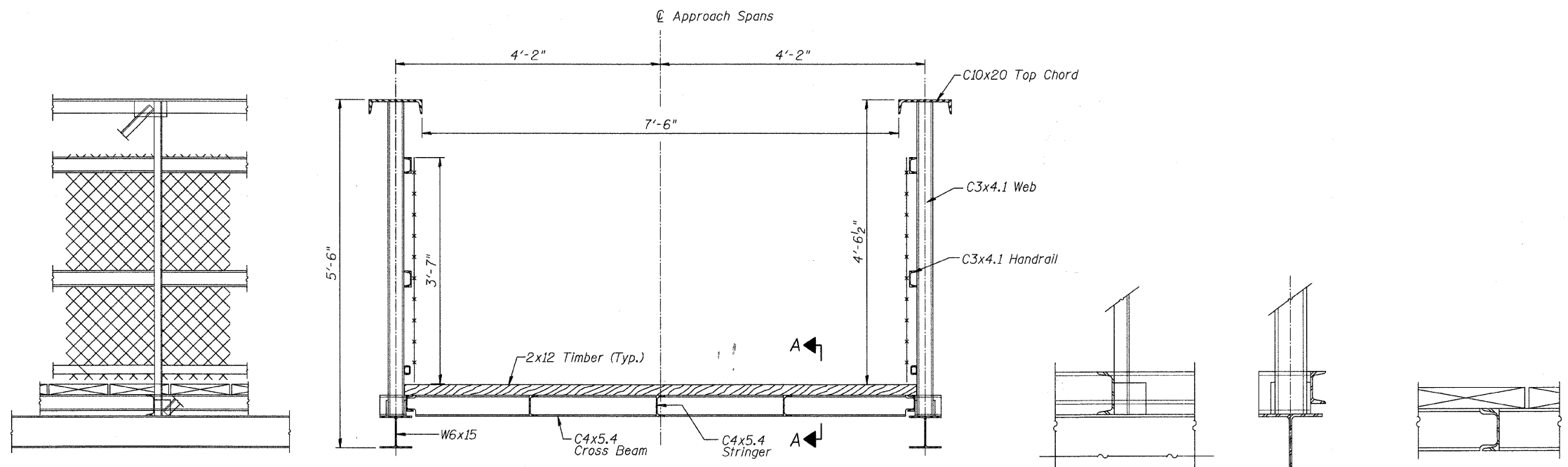
CITY OF WHEATON	
ILLINOIS PRAIRIE PATH BRIDGE OVER UNION PACIFIC RAILROAD, FRONT STREET AND WESLEY STREET	
DEMOLITION DETAILS EXISTING MAIN SPAN	
DRAWN	JM/PES/TV
CHECKED	VEYS
APPROVED	BSK
DATE	06/04/2008
SCALE	NONE
SHEET NO. IPP-4	

HDR
HDR Engineering, Inc.

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	•	241	142
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				



PLAN - TYPICAL TIMBER ATTACHMENT



HANDRAIL DETAIL

TYP. FLOOR SYSTEM SECTION

HANDRAIL ATTACHMENT DETAILS

SECTION A-A

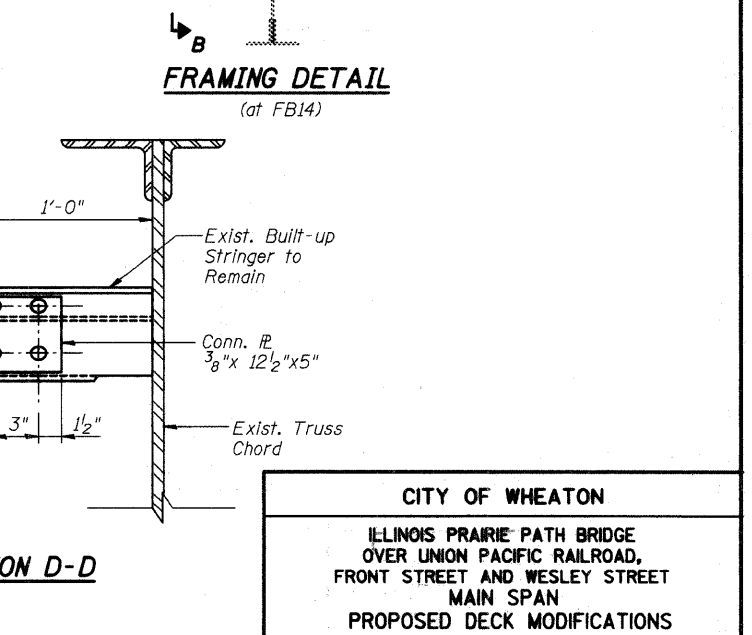
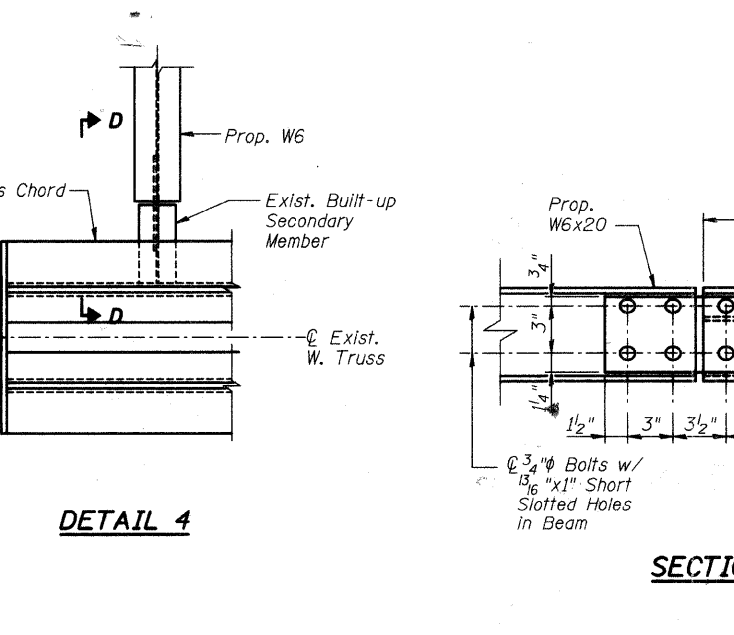
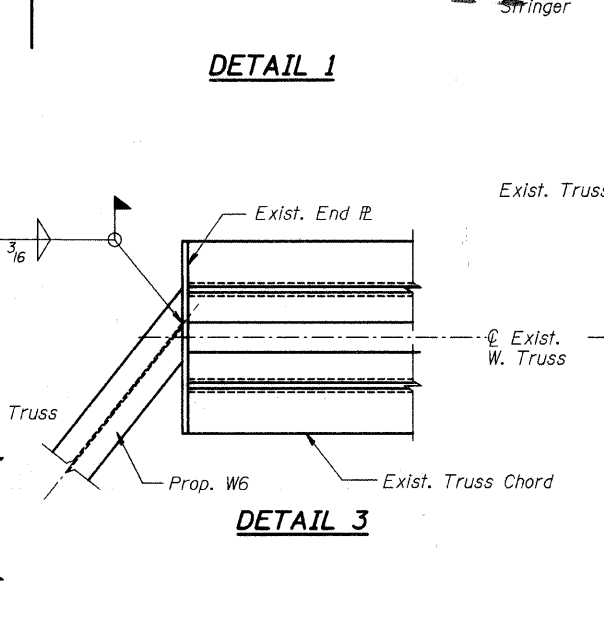
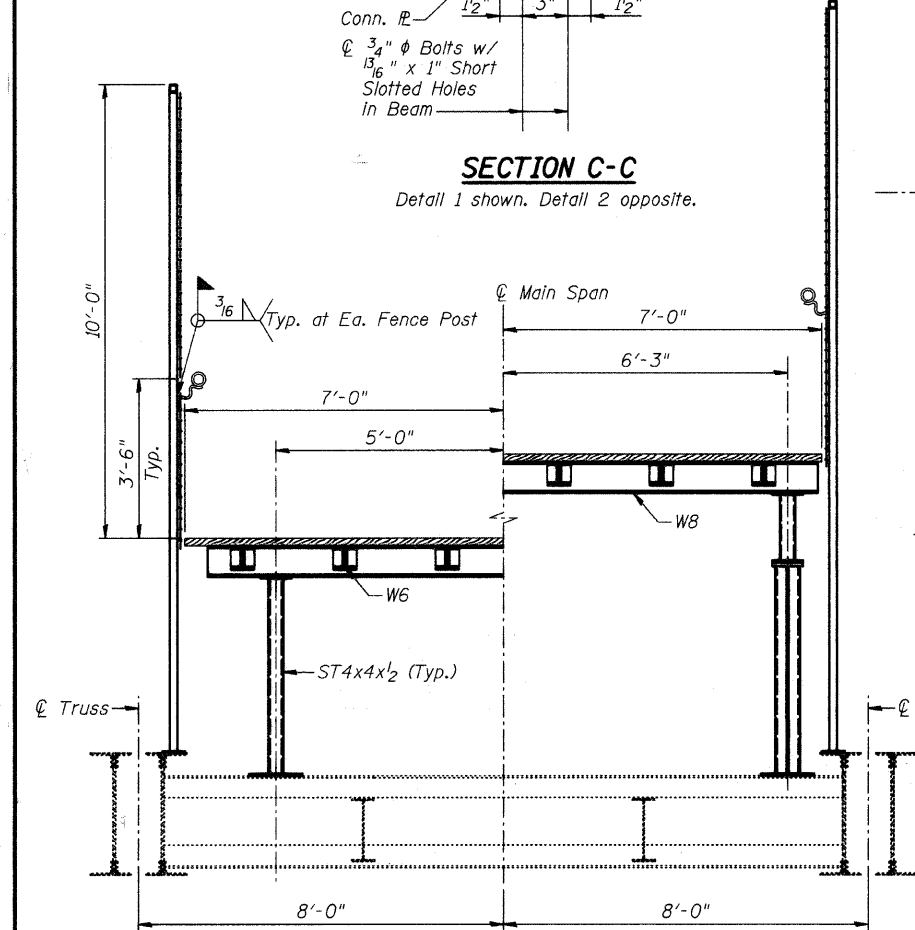
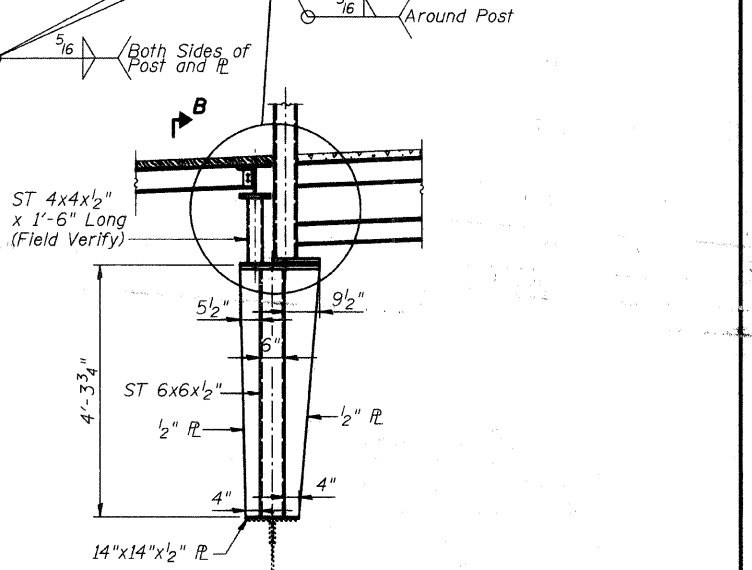
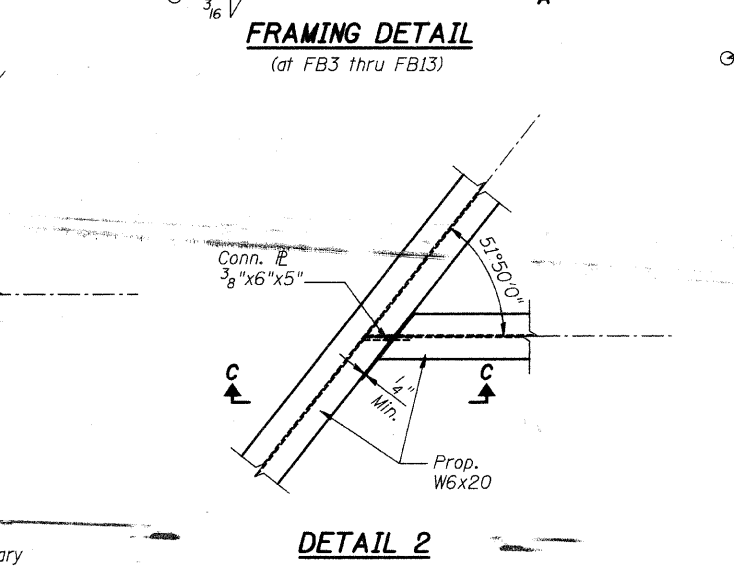
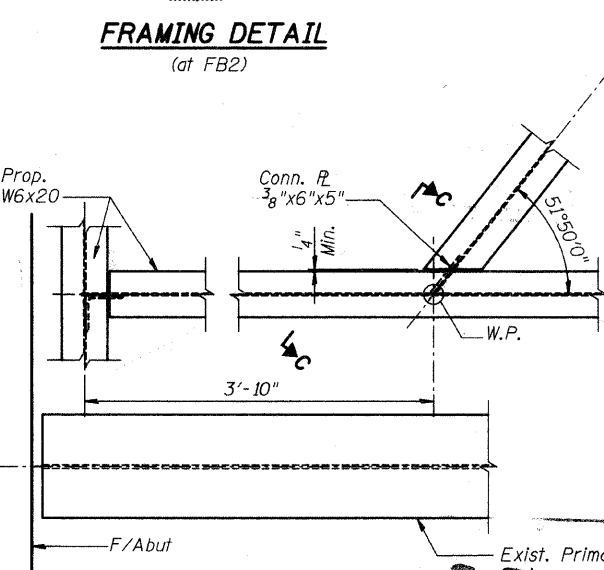
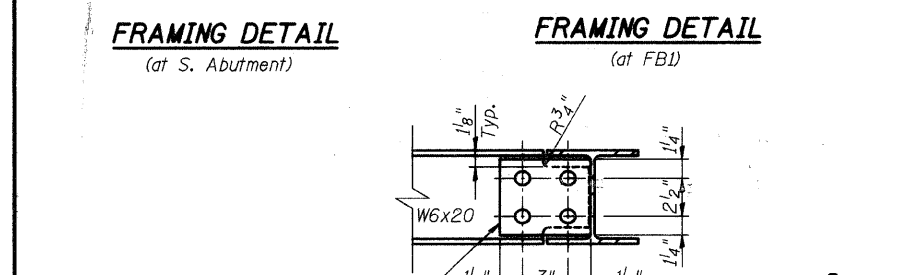
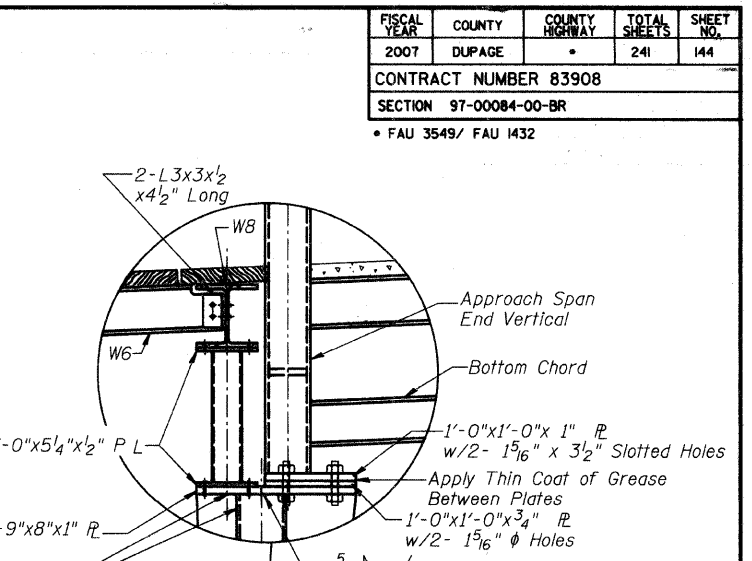
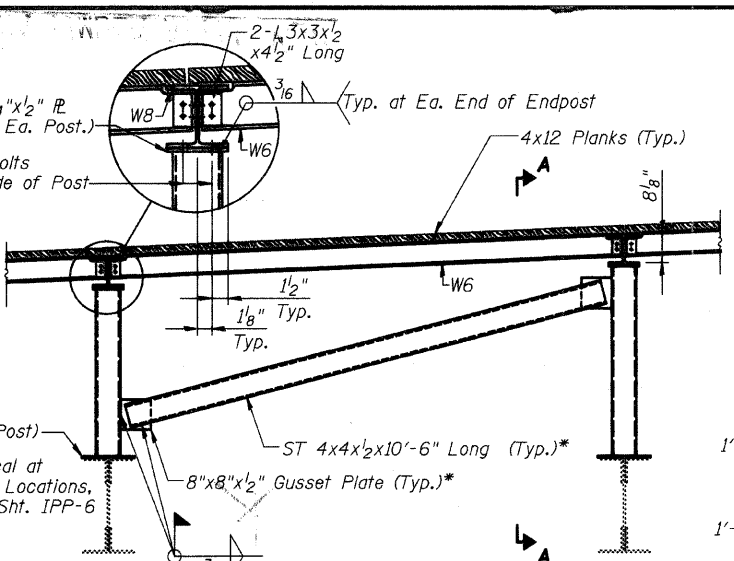
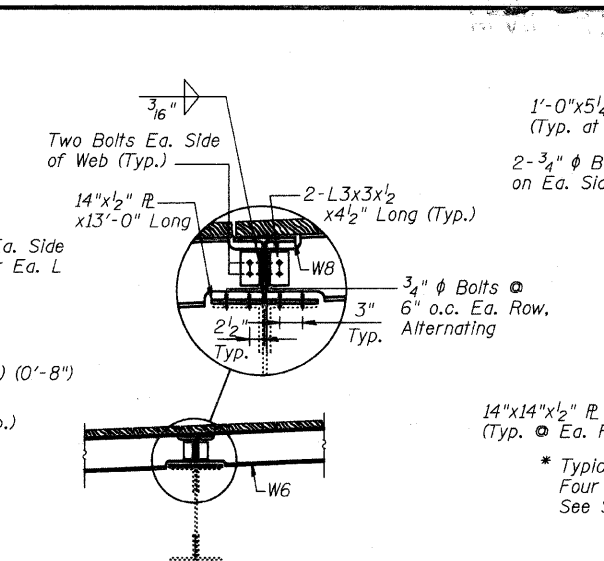
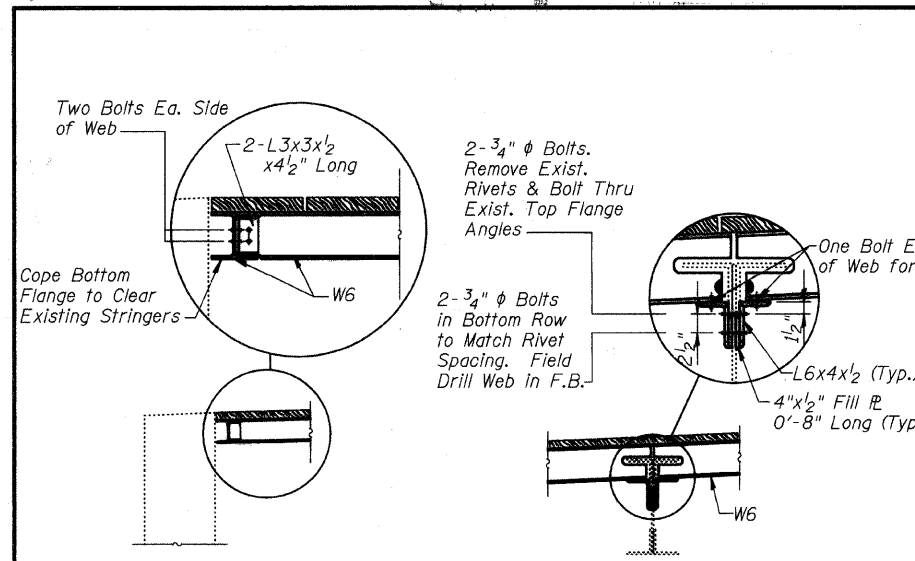
TYP. APPROACH SPANS CROSS SECTION (Exist.)

- FOR INFORMATION ONLY -



CITY OF WHEATON		
ILLINOIS PRAIRIE PATH BRIDGE OVER UNION PACIFIC RAILROAD, FRONT STREET AND WESLEY STREET		
DEMOLITION DETAILS EXISTING APPROACH SPANS		
DRAWN	JM/PES/TV	SHEET NO.
CHECKED	VEYS	IPP-5
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE		241	144
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				

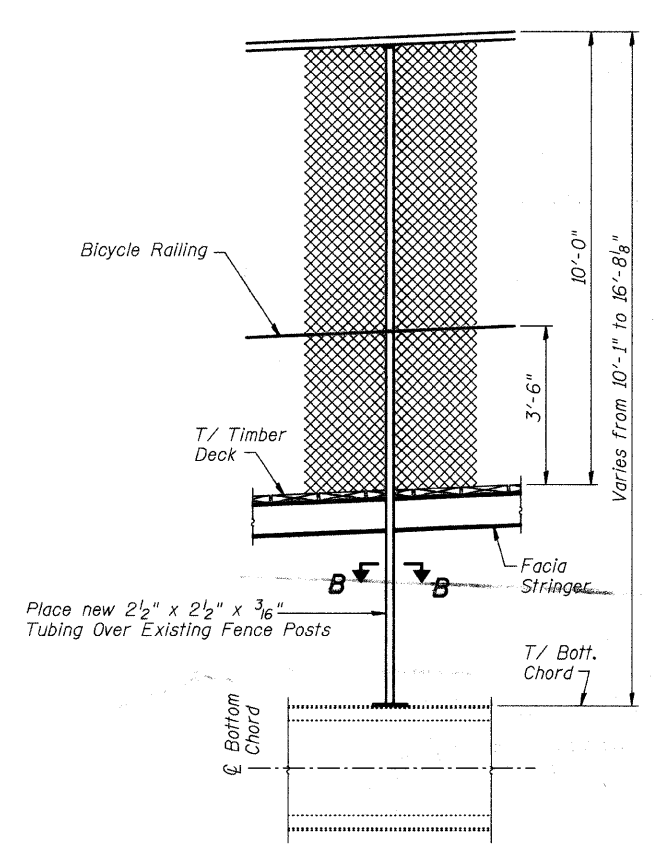


CITY OF WHEATON		
ILLINOIS PRAIRIE PATH BRIDGE OVER UNION PACIFIC RAILROAD, FRONT STREET AND WESLEY STREET MAIN SPAN PROPOSED DECK MODIFICATIONS DETAILS I		
DRAWN	JM/PES/TV	SHEET NO.
CHECKED	VEVS	IPP-7
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

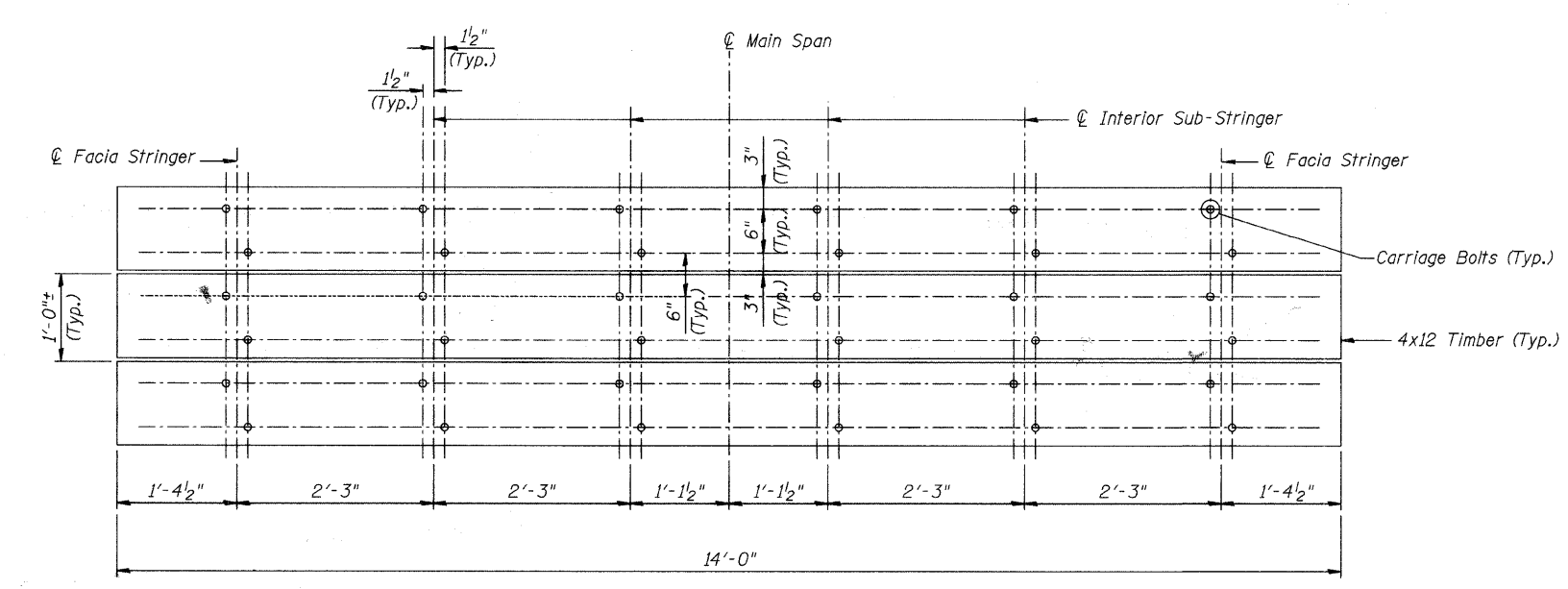
HDR
 HDR Engineering, Inc.

6/27/2008 3:27:28 PM

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	145
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				



TYP. FENCE DETAILS

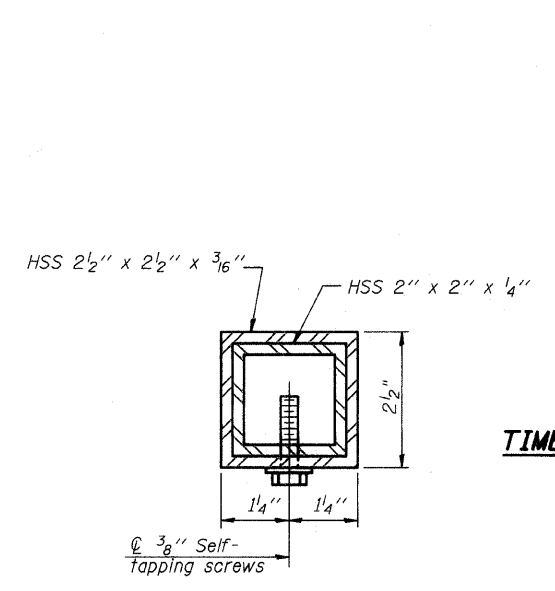


PLAN - TYP. TIMBER ATTACHMENT

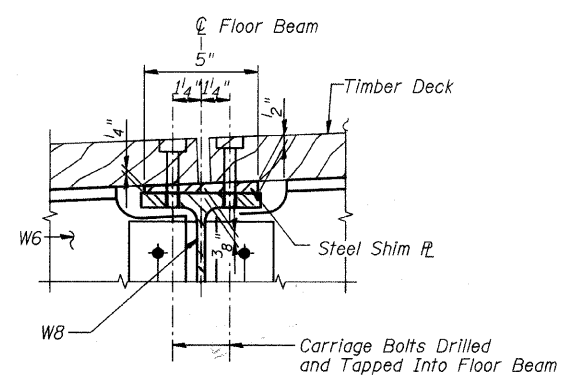
- NOTES:**
1. Cost for Carriage Bolts included in cost for Timber Deck.
 2. The contractor shall field verify the existing fence post size and provide new posts that will fit snug over the existing posts.

BILL OF MATERIAL

Item	Unit	Quantity
Treated Timber	F.B.M.	8,558
Bicycle Railing, Special	Ft.	318
Chain Link Fence 10' (Special)	Ft.	318

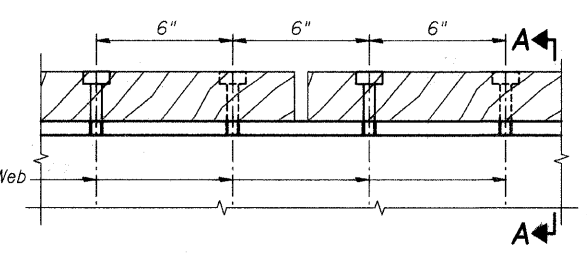


SECTION B-B

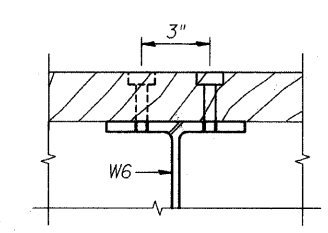


TIMBER ATTACHMENT DETAIL AT FLOOR BEAM

Carriage Bolts Drilled and Tapped Into Stringer, Staggered Across Stringer Web



TIMBER ATTACHMENT DETAIL AT STRINGER



SECTION A-A

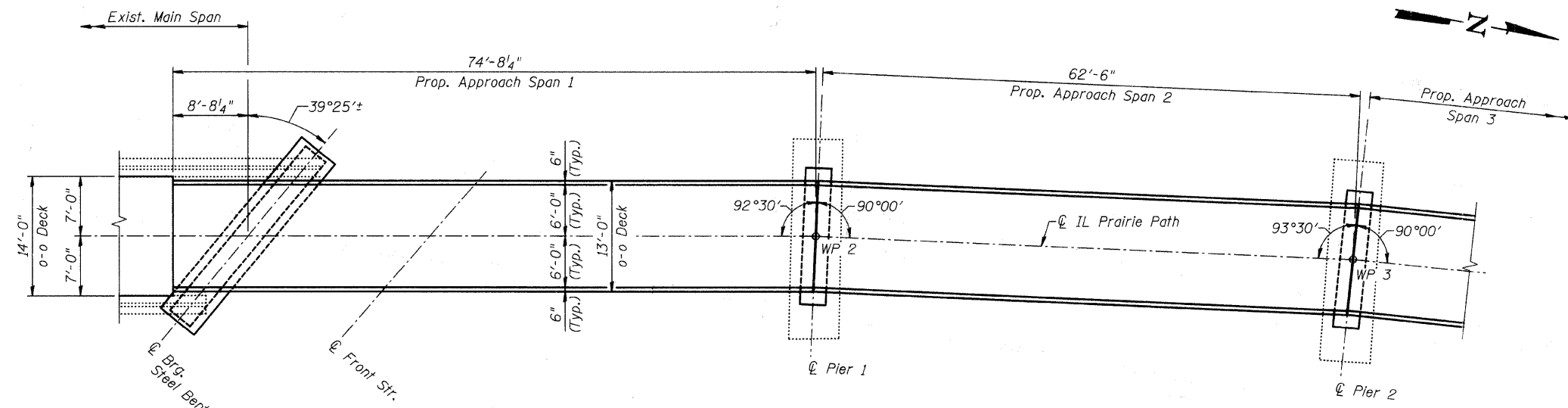


CITY OF WHEATON

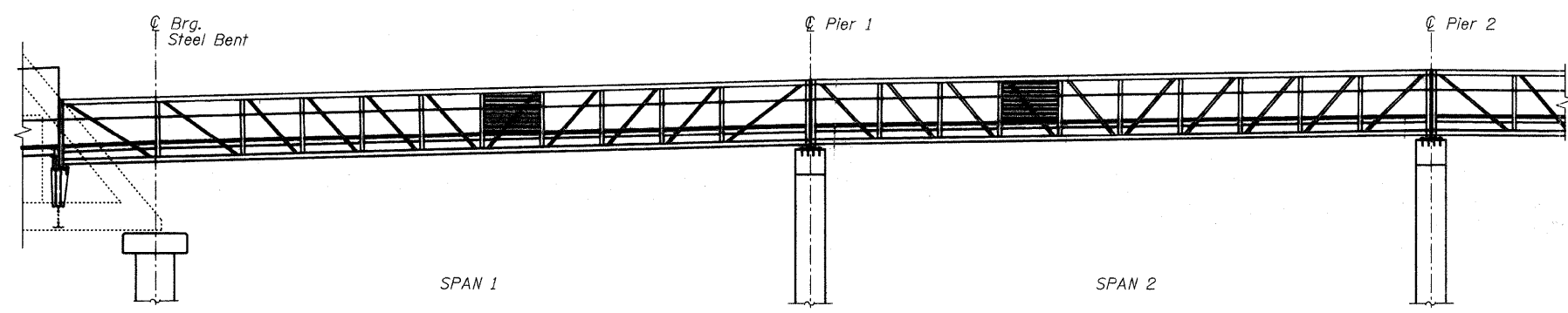
ILLINOIS PRAIRIE PATH BRIDGE
OVER UNION PACIFIC RAILROAD,
FRONT STREET AND WESLEY STREET
MAIN SPAN
PROPOSED DECK MODIFICATIONS
DETAILS II

DRAWN	JM/PES/TV	SHEET NO.
CHECKED	VEVS	IPP-8
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

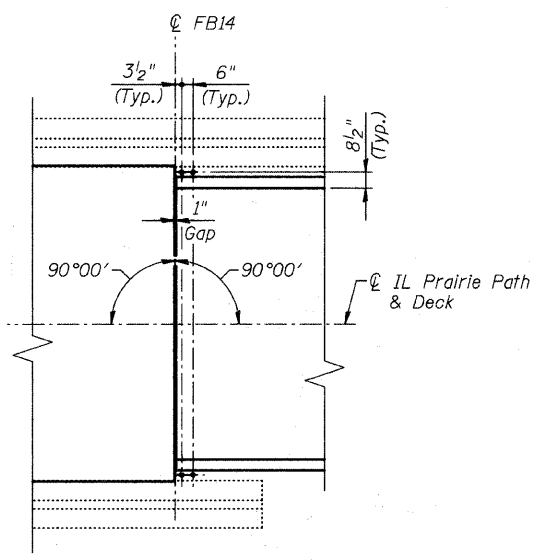
FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	.	241	146
CONTRACT NUMBER 83908				
SECTION 97-0084-00-BR				
• FAU 3549/ FAU 1432				



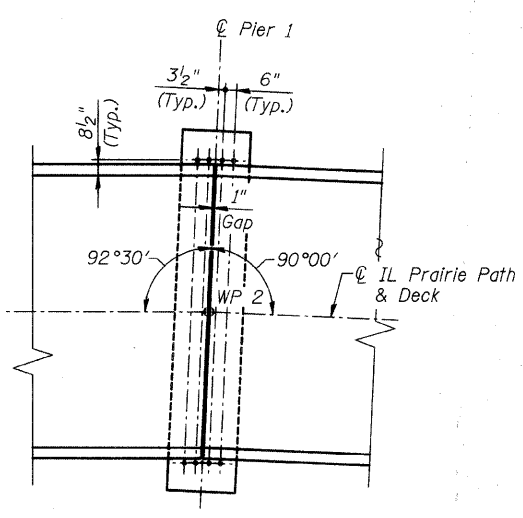
PLAN - SPANS 1 & 2



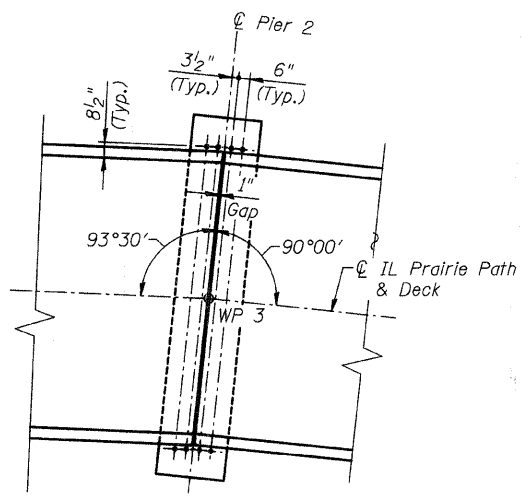
ELEVATION



DETAIL AT FB14



DETAIL AT PIER 1



DETAIL AT PIER 2

NOTES:

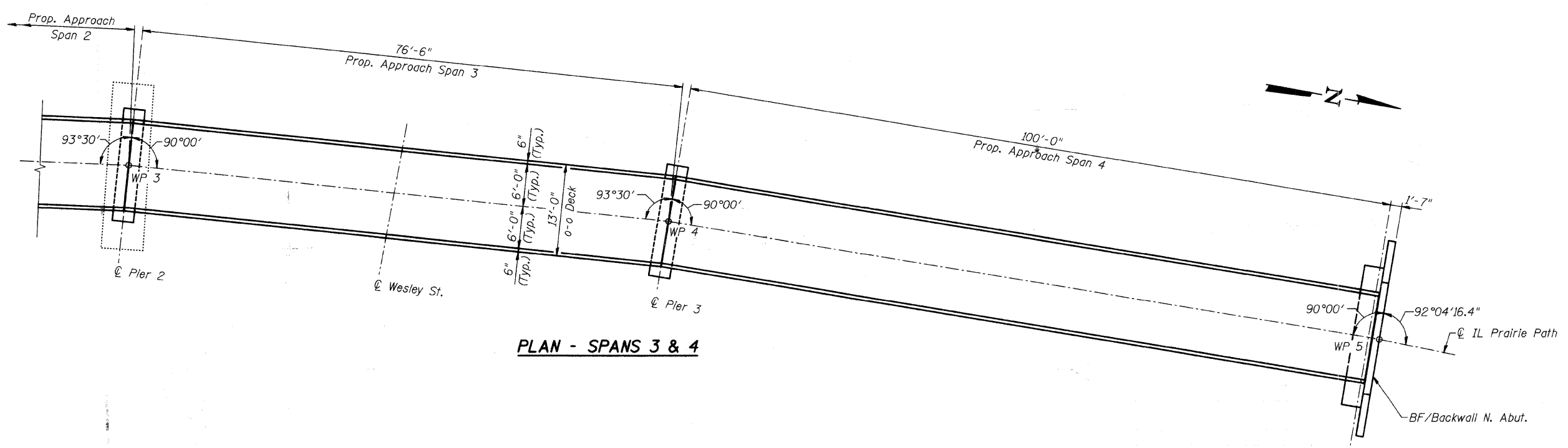
1. Final location of Bearing Anchor Bolts to be specified by the Superstructure Manufacture.
2. All new steel shall be painted within 15'-0" of each support pier or abutment in accordance with the Special Provisions.

CITY OF WHEATON	
ILLINOIS PRAIRIE PATH BRIDGE OVER UNION PACIFIC RAILROAD, FRONT STREET AND WESLEY STREET APPROACH SPANS 1 & 2 PLAN & ELEVATION	
DRAWN	JM/PES/TV
CHECKED	VEVS
APPROVED	BSK
DATE	06/04/2008
SCALE	NONE
IPP-9	

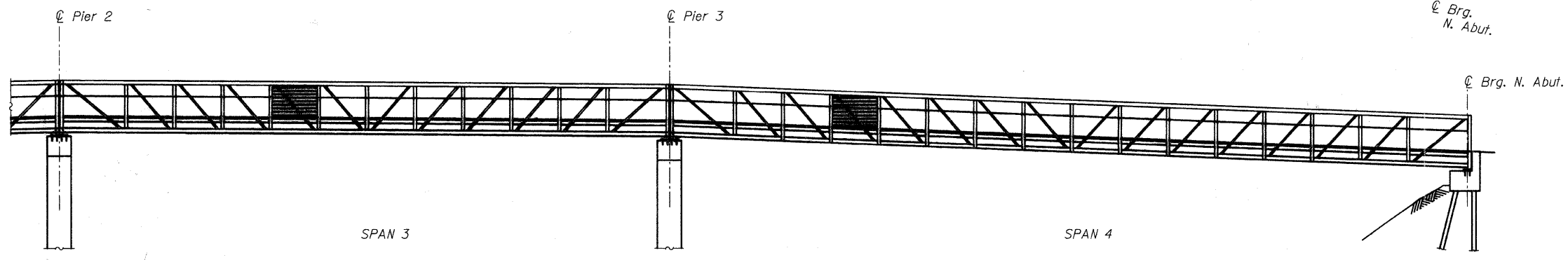
HDR
HDR Engineering, Inc.

IPP-9-SPANS-1&2-PLAN-ELEVATION-6/27/2008 3:28:03 PM

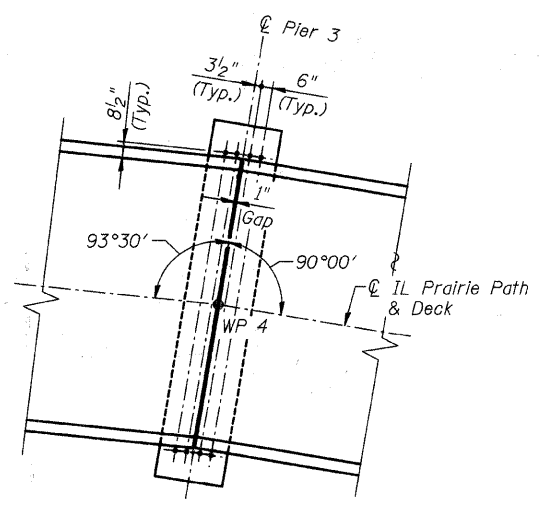
FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	147
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				



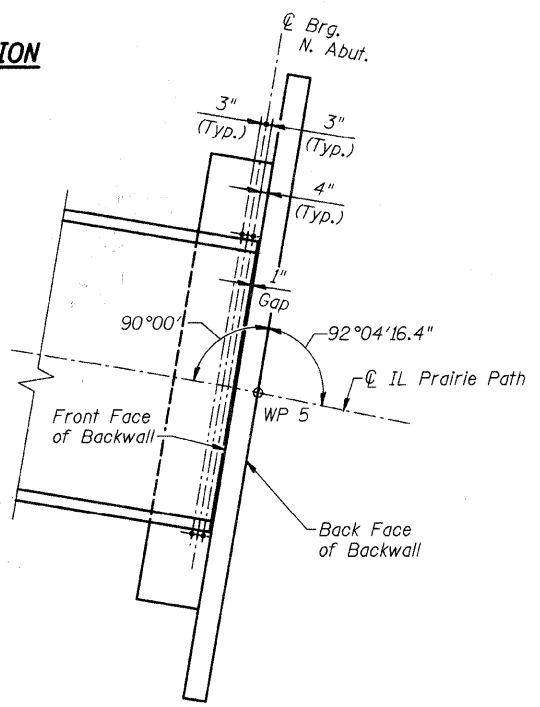
PLAN - SPANS 3 & 4



ELEVATION



DETAIL AT PIER 3



DETAIL AT N. ABUTMENT

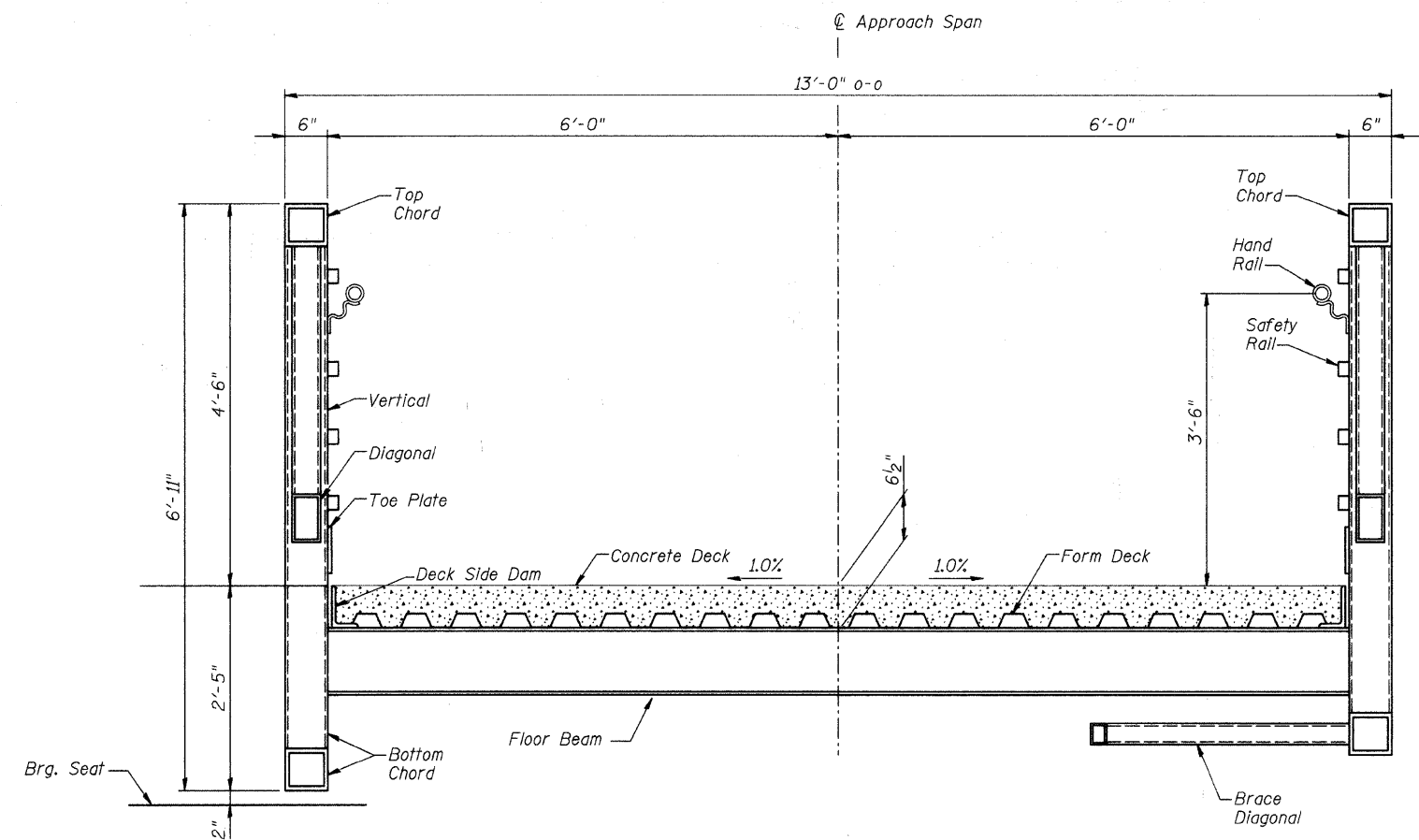
NOTES:

1. Final location of Bearing Anchor Bolts to be specified by the Superstructure Manufacture.
2. All new steel shall be painted within 15'-0" of each support pier or abutment in accordance with the Special Provisions.

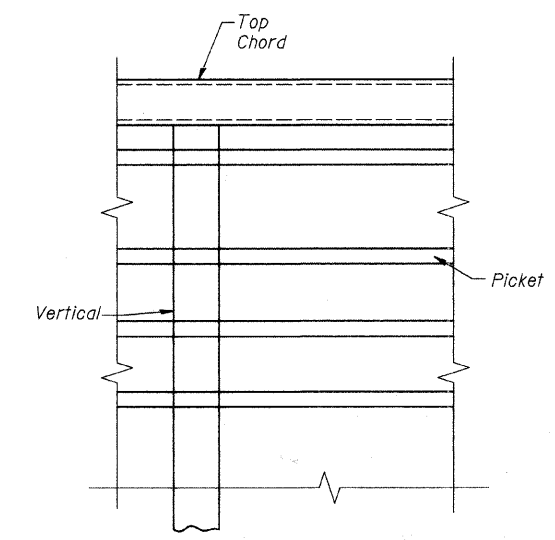


CITY OF WHEATON		
ILLINOIS PRAIRIE PATH BRIDGE OVER UNION PACIFIC RAILROAD, FRONT STREET AND WESLEY STREET		
APPROACH SPANS 3 & 4 PLAN & ELEVATION		
DRAWN	JM/PES/TV	SHEET NO.
CHECKED	VEVS	IPP-10
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	148
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				



CROSS SECTION - PROPOSED APPROACH SPANS (TYP.)
(Looking North)

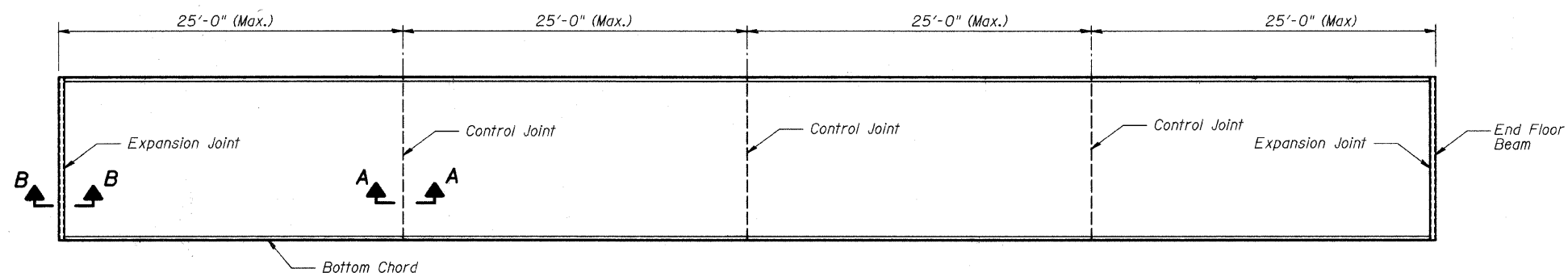
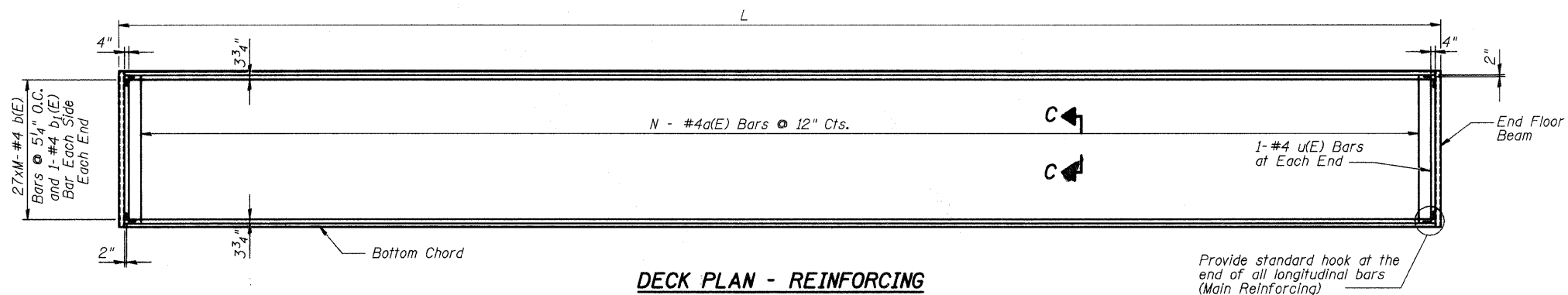


TYPICAL PICKET LAYOUT



CITY OF WHEATON		
ILLINOIS PRAIRIE PATH BRIDGE OVER UNION PACIFIC RAILROAD, FRONT STREET AND WESLEY STREET		
APPROACH SPANS TYP. SECTION		
DRAWN	JM/PES/TV	SHEET NO.
CHECKED	VEVS	IPP-11
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

IPP-11-00084-00-BR-01.dwg 6/2/2008 3:28:56 PM



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	311	#4	11'-8"	—
b(E)		#4	26'-0"	—
b ₁ (E)		#4	26'-8"	—
u(E)		#4	13'-0"	—
Pedestrian Truss Superstructure			Sq. Ft.	4,080

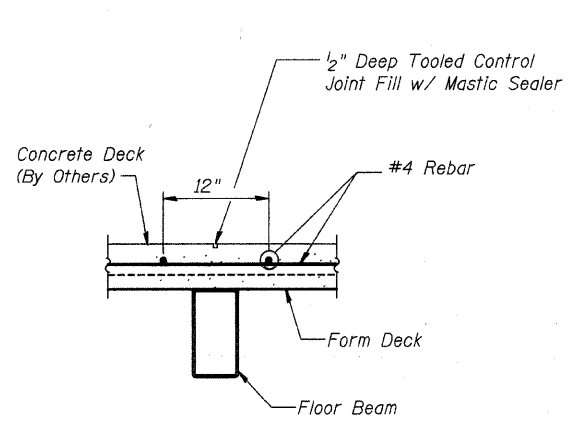
The concrete deck and reinforcement bars are included in the cost of Pedestrian Truss Superstructure.

DECK PLAN

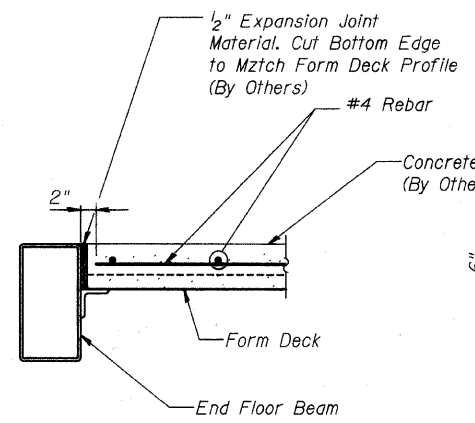
NOTE:

If splice is required in Longitudinal Rebars, 1'-8" min. lap required. locate bottom rebar splice over floor beam.

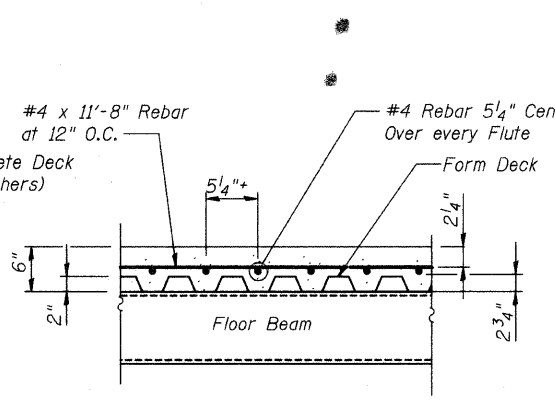
Span	L	N	M
1	73'-4 1/4"	74	1
2	61'-2"	62	1
3	75'-2"	76	1
4	98'-8"	99	2



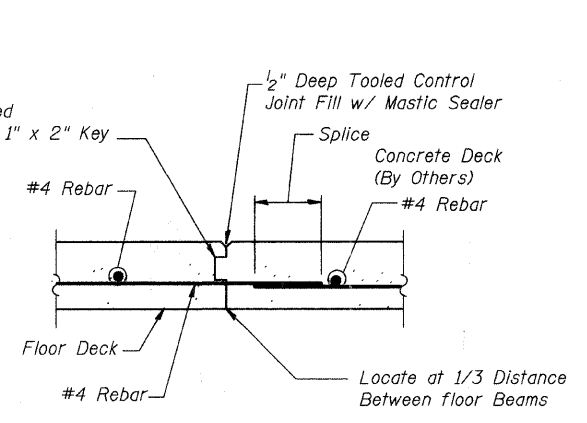
SECTION A-A - CONTROL JOINT



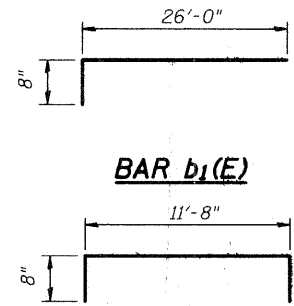
SECTION B-B - EXPANSION JOINT
Locate at Each End Floor Beam



SECTION C-C TYP. SLAB REINFORCEMENT DETAILS
Place rebar over depressions in form deck.



CONSTRUCTION JOINT DETAIL
(As Required)

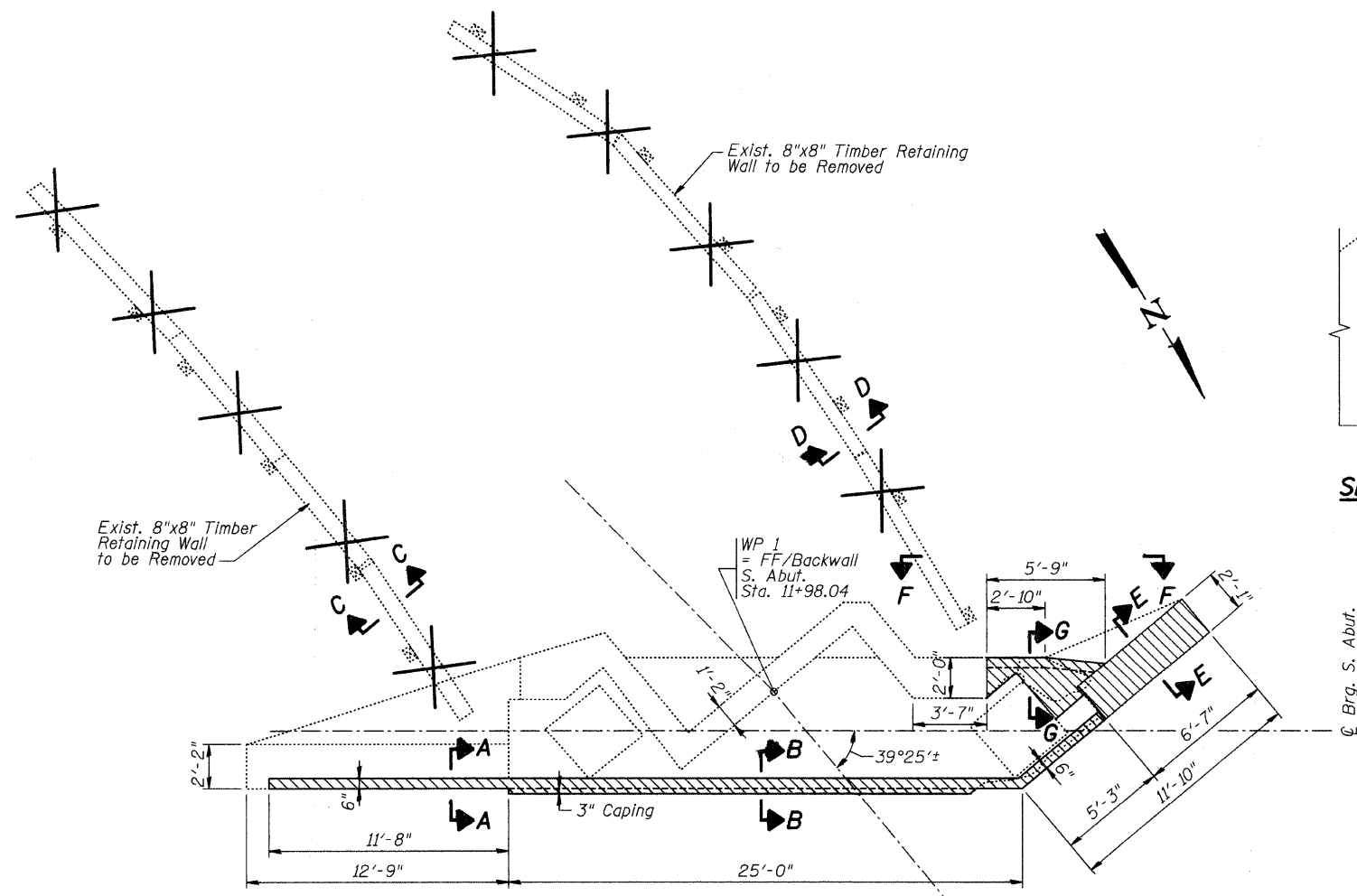


CITY OF WHEATON		
ILLINOIS PRAIRIE PATH BRIDGE OVER UNION PACIFIC RAILROAD, FRONT STREET AND WESLEY STREET		
APPROACH SPANS DETAILS		
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CHECKED	VEVS	IPP-12
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	



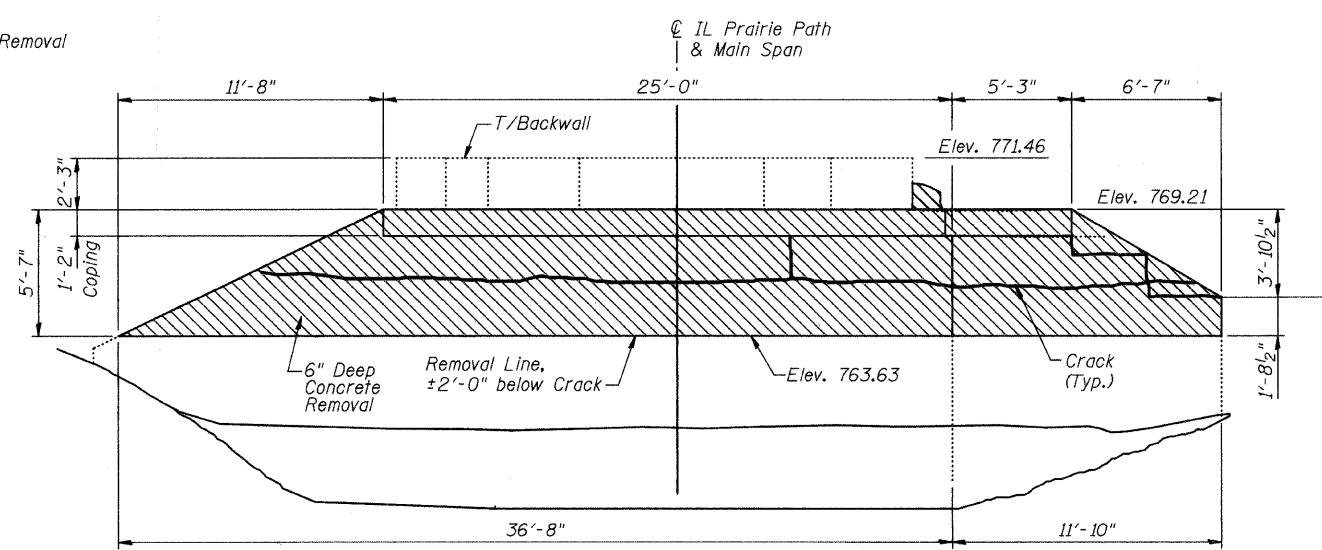
FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	150
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				

• FAU 3549/ FAU 1432

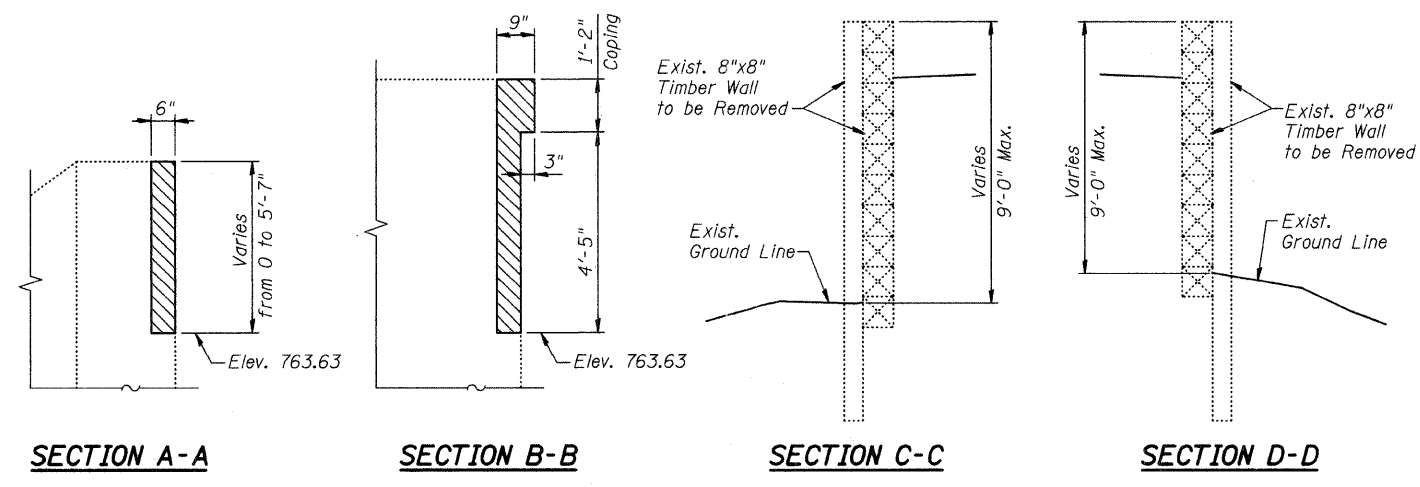


TOP VIEW

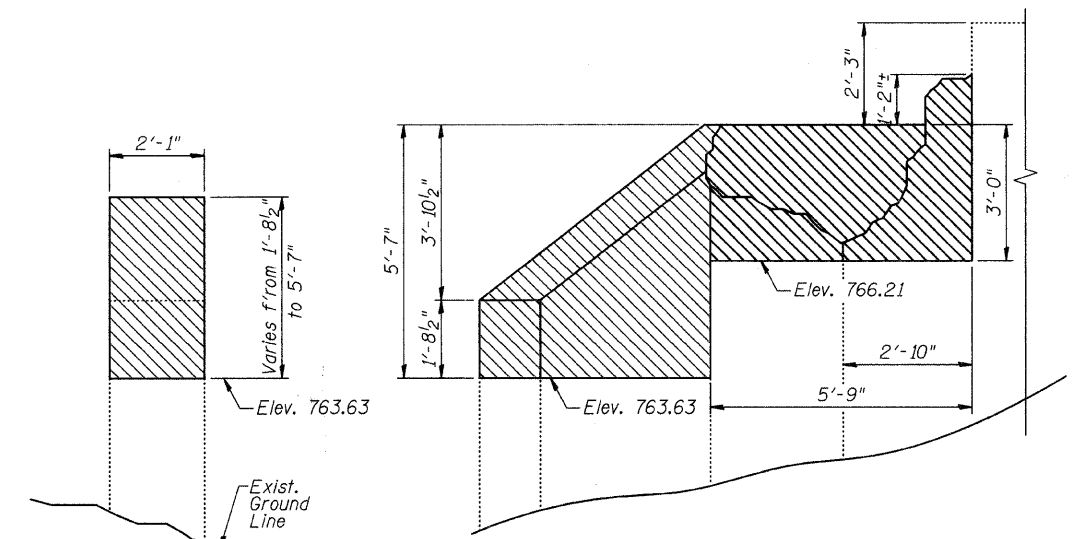
- LEGEND:**
- Concrete Removal
 - Timber Removal



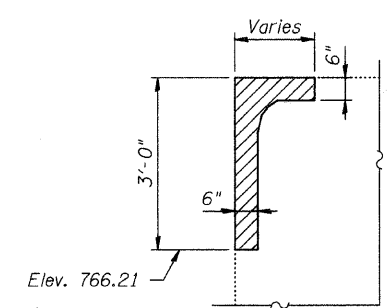
SOUTH ABUTMENT
North Elevation (Unfolded)



SECTION A-A SECTION B-B SECTION C-C SECTION D-D



SECTION E-E SECTION F-F



SECTION G-G

NOTE:

Cost for existing Timber Retaining Wall Removal included in Concrete Removal.

BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	Cu. Yd.	6.4
Epoxy Crack Sealing	Ft.	117

CITY OF WHEATON

ILLINOIS PRAIRIE PATH BRIDGE
OVER UNION PACIFIC RAILROAD,
FRONT STREET AND WESLEY STREET

**SOUTH ABUTMENT
REMOVAL DETAILS**

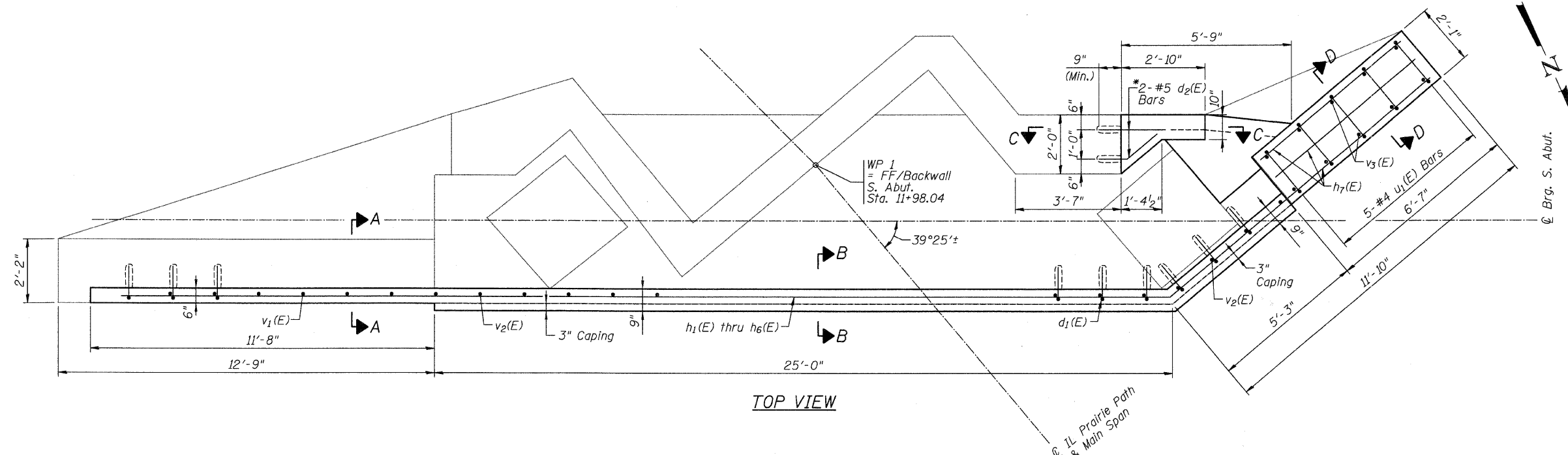
DRAWN	JM/PES/TV	SHEET NO.
CHECKED	VEVS	IPP-13
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	



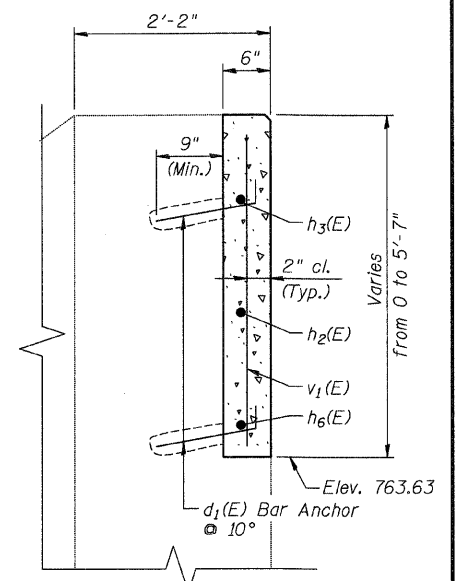
DRAWN: JM/PES/TV; CHECKED: VEV; APPROVED: BSK; DATE: 06/04/2008; SCALE: NONE

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	151
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				

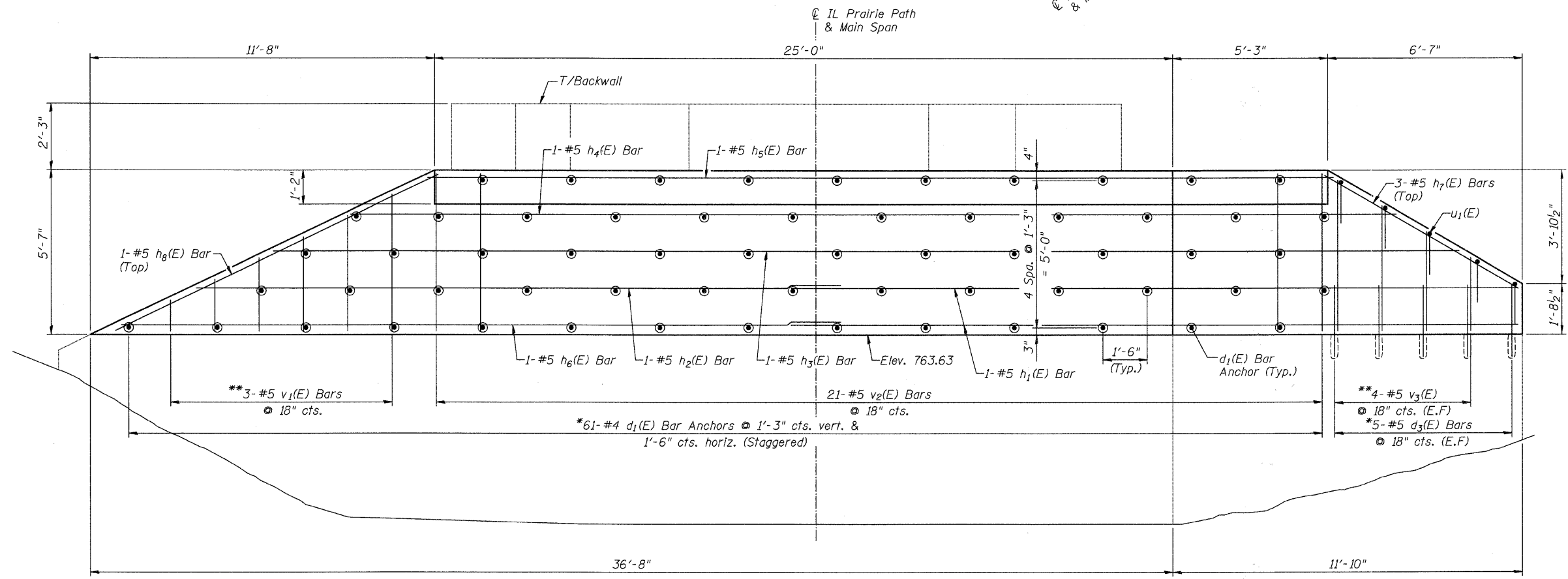
• FAU 3549/ FAU 1432



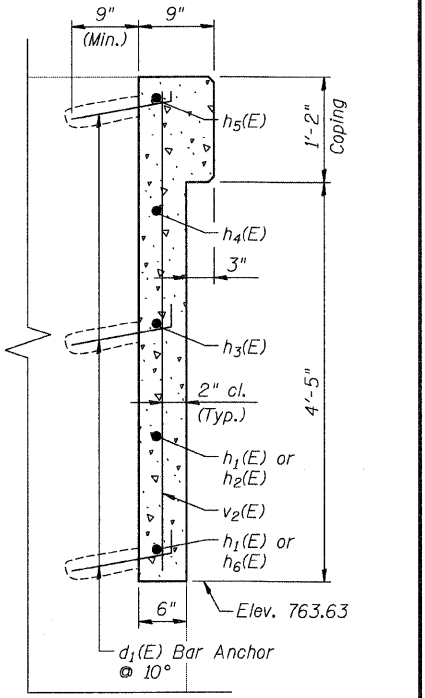
TOP VIEW



SECTION A-A



SOUTH ABUTMENT
North Elevation (Unfolded)



SECTION B-B

* Epoxy grout in 9" min. drilled 1" φ holes according to Article 584 of the Standard Specifications. Cost included with Concrete Structure.

** See Field Cutting Diagrams on Sht. IPP-15.

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

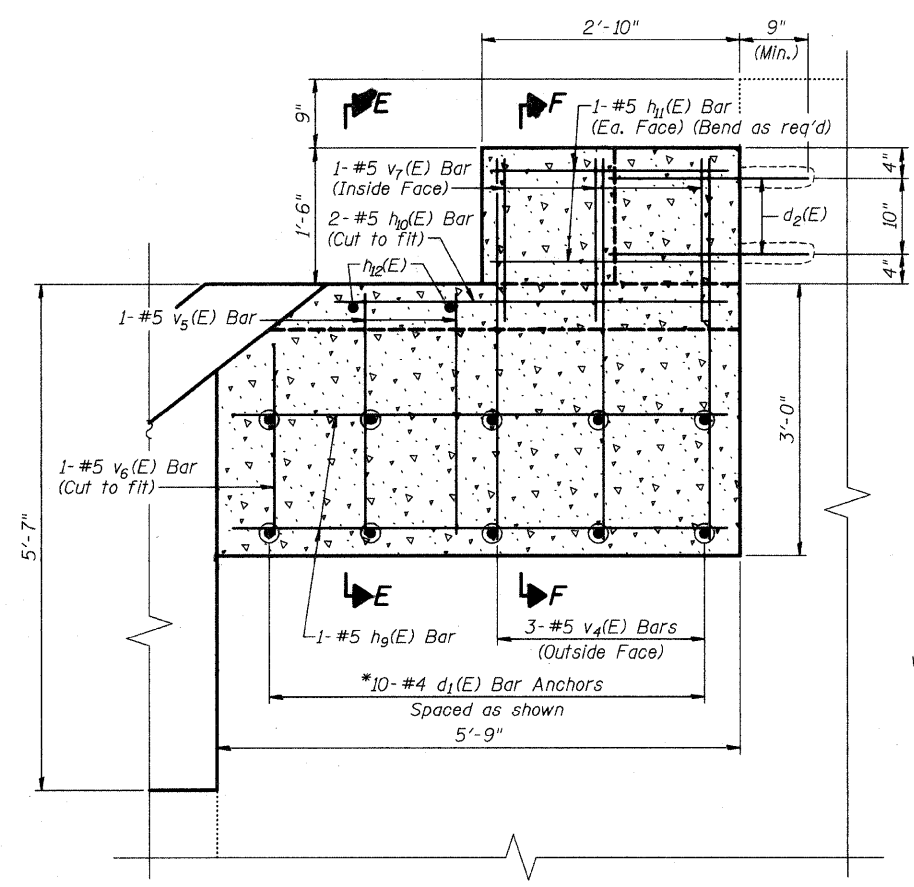
NOTES:

1. For Sections C-C & D-D, See Sheet IPP-15.
2. For Bill of Material, See Sheet IPP-15.

CITY OF WHEATON
ILLINOIS PRAIRIE PATH BRIDGE
OVER UNION PACIFIC RAILROAD,
FRONT STREET AND WESLEY STREET
SOUTH ABUTMENT
REPAIR DETAILS I

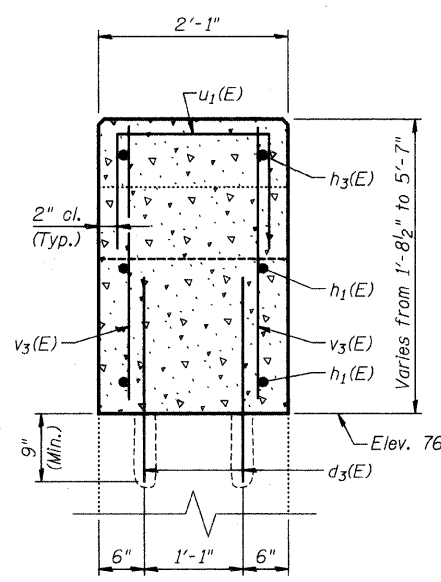
DRAWN	JM/PES/TV	SHEET NO.
CHECKED	VEVS	IPP-14
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

HDR
HDR Engineering, Inc.

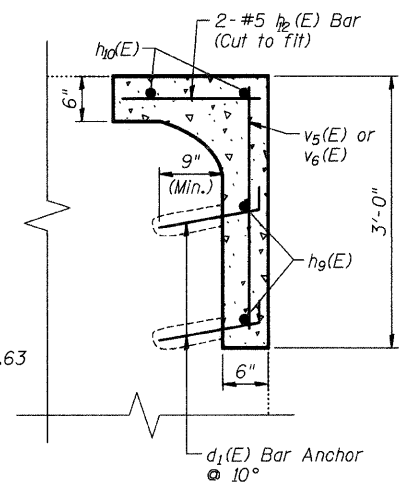


SECTION C-C

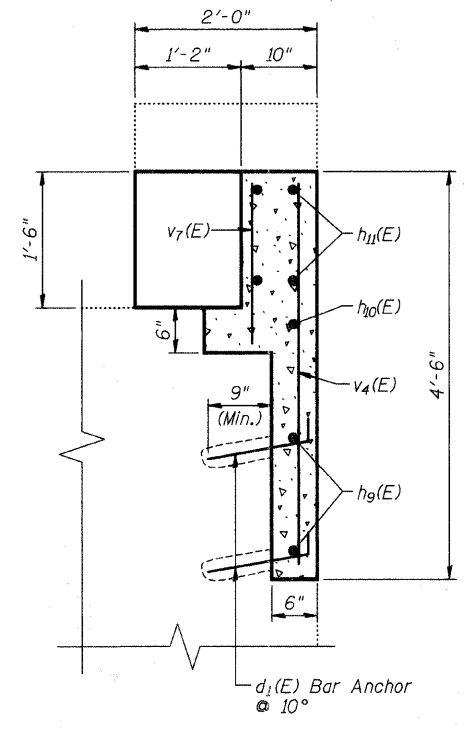
* Epoxy grout in 9" min. drilled 1" ϕ holes according to Article 584 of the Standard Specifications. Cost included with Concrete Structure.



SECTION D-D



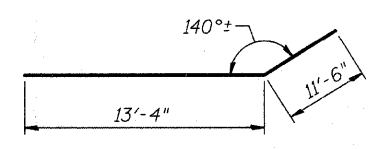
SECTION E-E



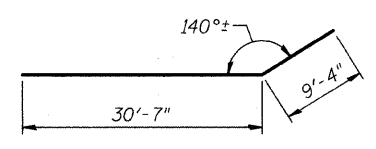
SECTION F-F

BILL OF MATERIAL

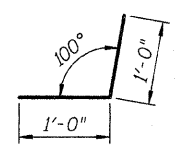
Bar	No.	Size	Length	Shape
d1(E)	71	#4	2'-0"	—
d2(E)	4	#5	2'-3"	—
d3(E)	10	#5	2'-10"	—
h1(E)	2	#5	24'-10"	—
h2(E)	1	#5	21'-10"	—
h3(E)	1	#5	39'-11"	—
h4(E)	1	#5	35'-3"	—
h5(E)	1	#5	30'-6"	—
h6(E)	1	#5	24'-6"	—
h7(E)	3	#5	7'-7"	—
h8(E)	1	#5	12'-1"	—
h9(E)	2	#5	5'-5"	—
h10(E)	2	#5	5'-3"	—
h11(E)	4	#5	2'-6"	—
h12(E)	2	#5	2'-0"	—
u1(E)	5	#4	5'-1"	□
v1(E)	3	#5	5'-7"	—
v2(E)	21	#5	5'-3"	—
v3(E)	4	#5	7'-6"	—
v4(E)	3	#5	3'-2"	—
v5(E)	2	#5	2'-8"	—
v6(E)	1	#5	2'-6"	—
v7(E)	3	#5	1'-8"	—
Earth Excavation			Cu. Yd.	2
Porous Granular Embankment			Cu. Yd.	2
Concrete Structures			Cu. Yd.	6.5
Reinforcement Bars, Epoxy Coated			Pound	620



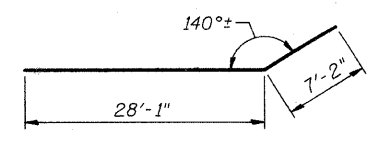
BAR h1(E)



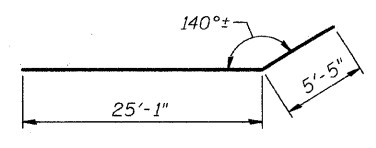
BAR h3(E)



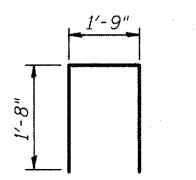
BAR d1(E)



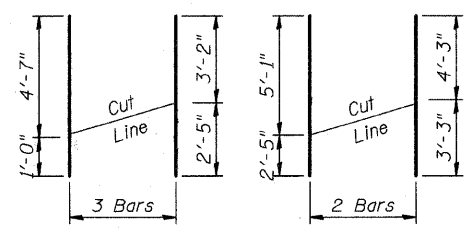
BAR h4(E)



BAR h5(E)



BAR u1(E)



BARS v1(E) BARS v3(E)

FIELD CUTTING DIAGRAMS

Order bars full length. Cut to fit as shown and use remainder in opposite face or end.

CITY OF WHEATON

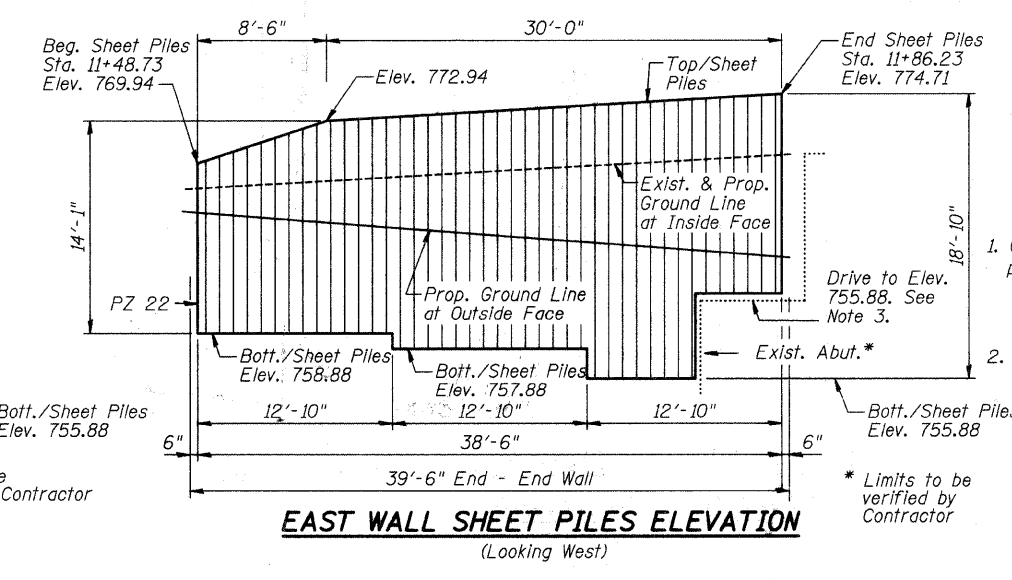
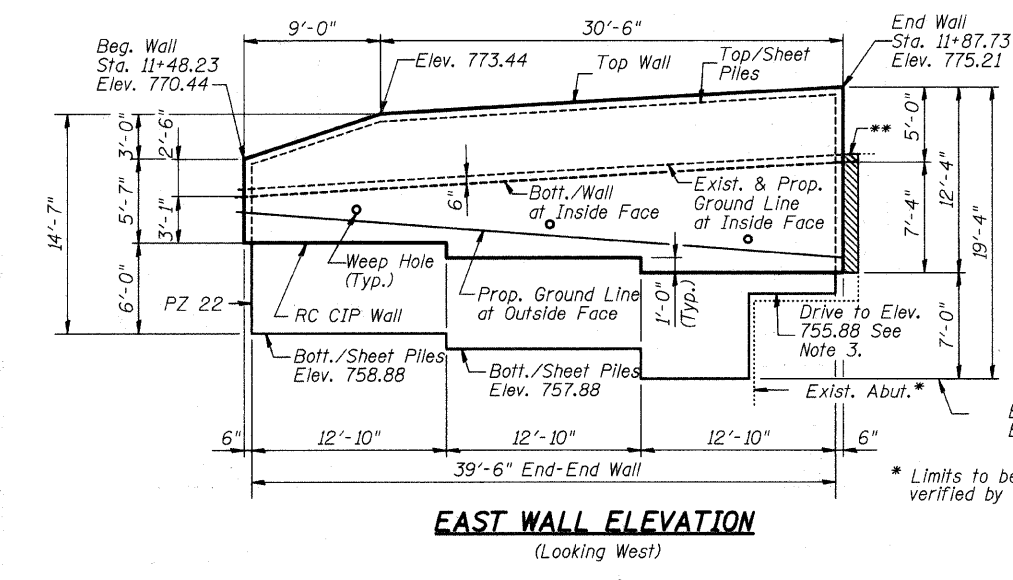
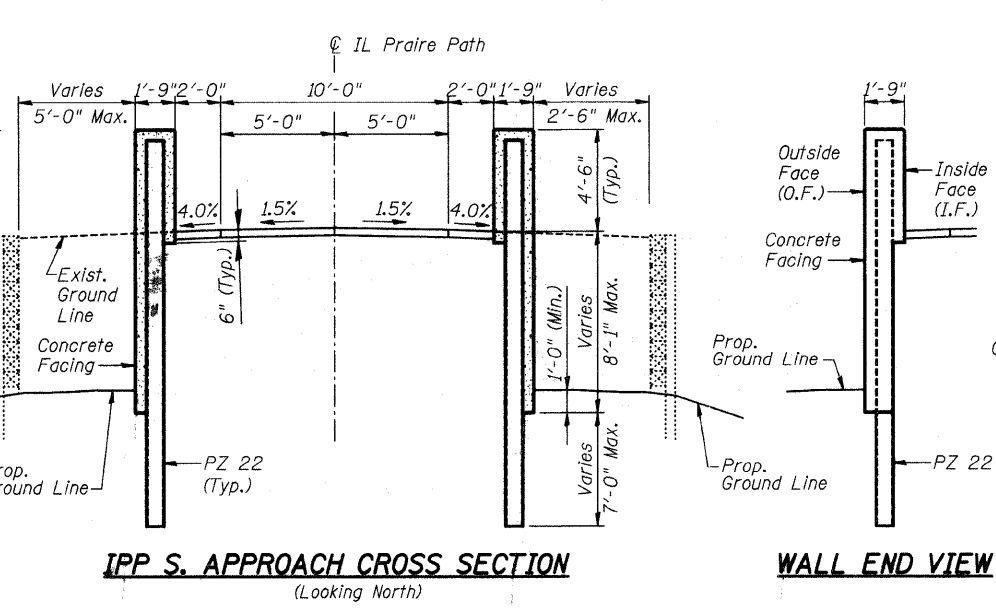
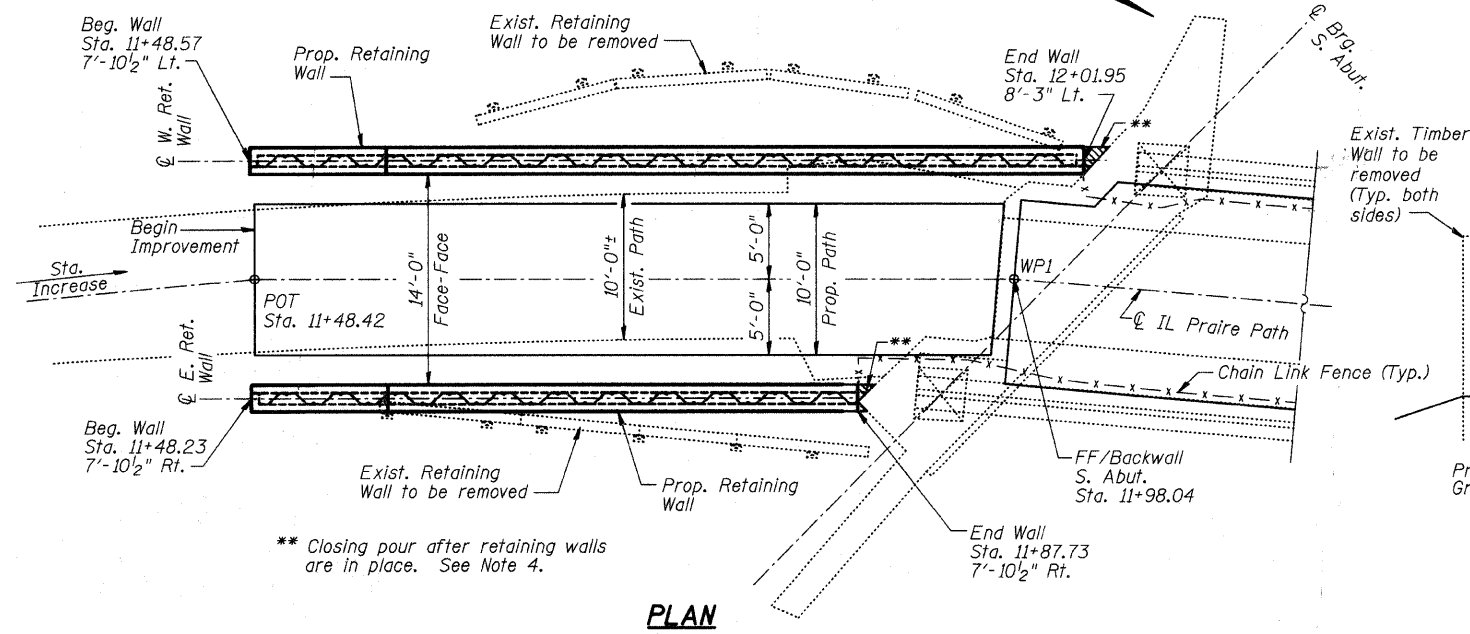
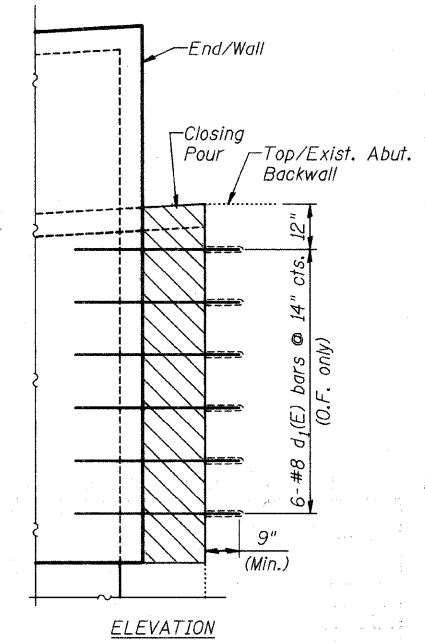
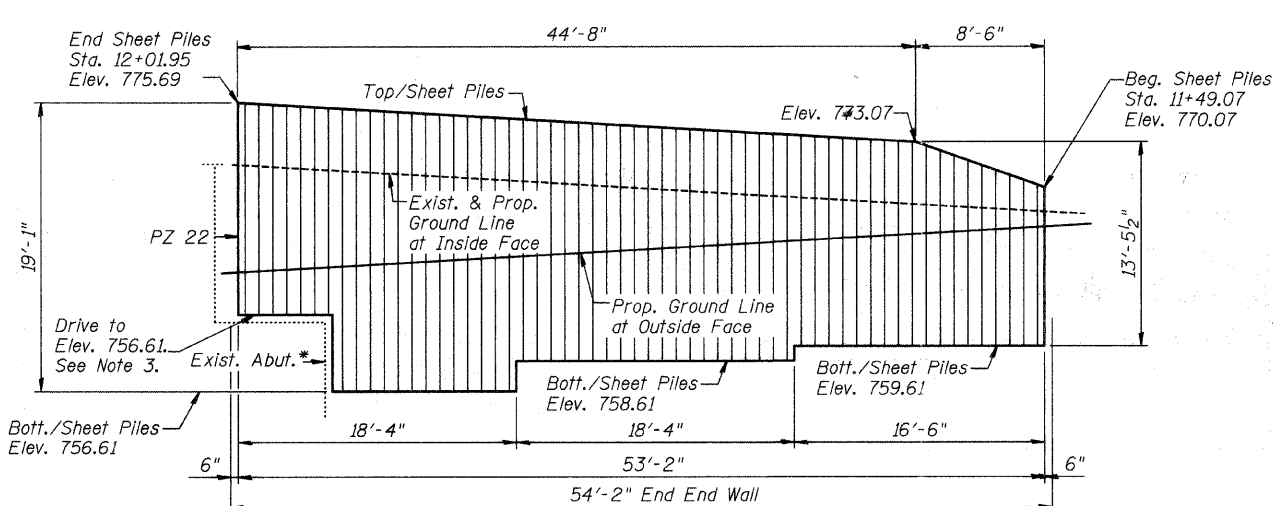
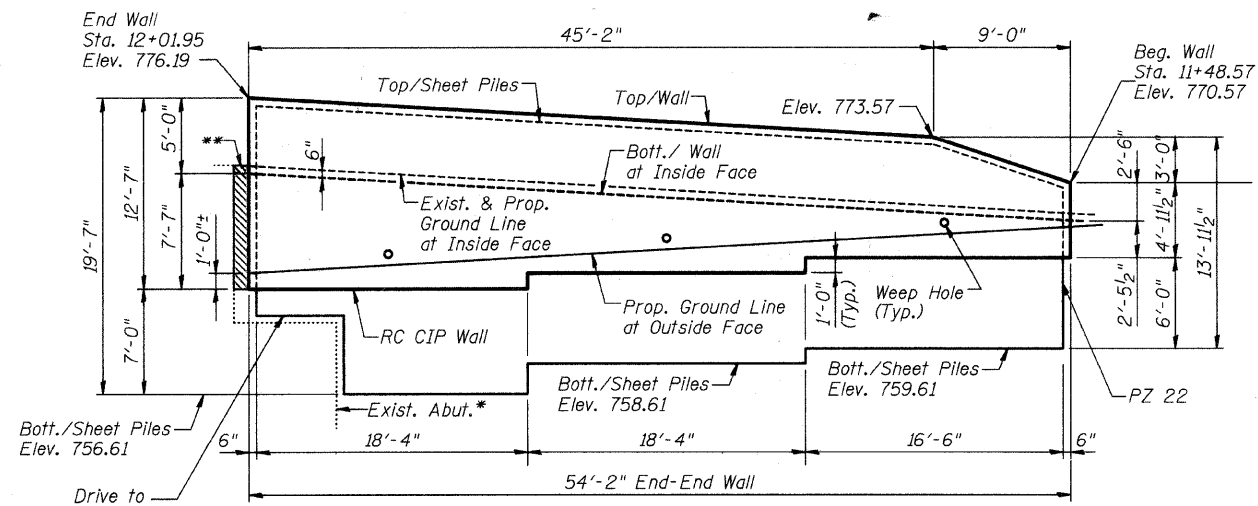
ILLINOIS PRAIRIE PATH BRIDGE
OVER UNION PACIFIC RAILROAD,
FRONT STREET AND WESLEY STREET
**SOUTH ABUTMENT
REPAIR DETAILS II**

DRAWN	JM/PES/TV	SHEET NO.
CHECKED	VEVS	IPP-15
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	



FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE		241	153

CONTRACT NUMBER 83908
SECTION 97-00084-00-BR
• FAU 3549/ FAU 1432



CONCRETE FACING ALTERNATES:

1. Cast with voids between sheet pile cells as shown.
- OR
2. Cast solid as 1'-9" & 1'-3" sections.

Notes:

1. See Sheet IPP-17 for reinforcement details.
2. See Sheet IPP-17 for Bill of Material.
3. Any sheets not reaching their required embedment due to the abutment footing shall be attached to exist. abutment. The connection shall be approved by the Engineer.
4. Retaining walls shall be connected to Exist. Abutment. Drill & epoxy grout anchors per details on this sheet.

CITY OF WHEATON

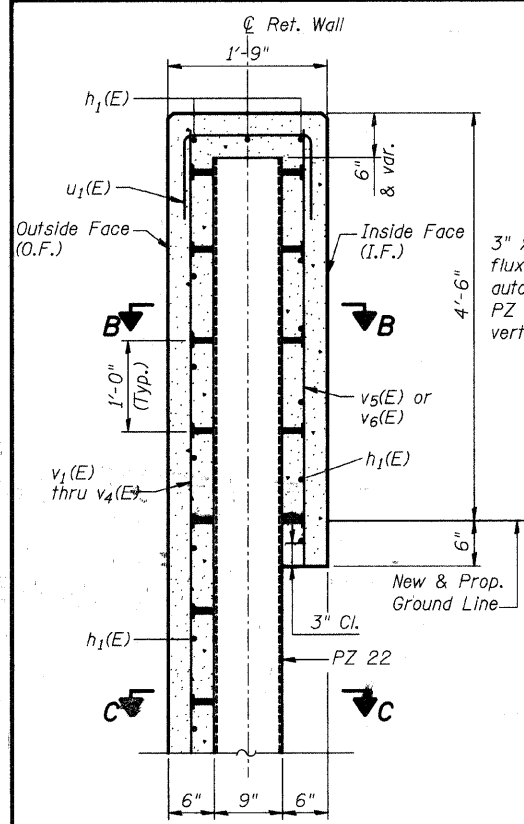
ILLINOIS PRAIRE PATH BRIDGE OVER UNION PACIFIC RAILROAD, FRONT STREET AND WESLEY STREET

SOUTH APPROACH RETAINING WALLS DETAILS I

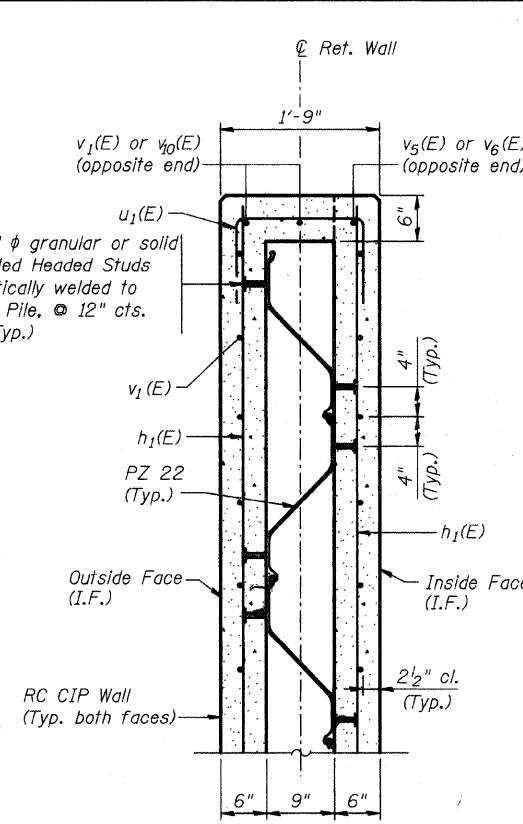
DRAWN	JM/PES/TV	SHEET NO.
CHECKED	VEVS	IPP-16
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

HDR Engineering, Inc.

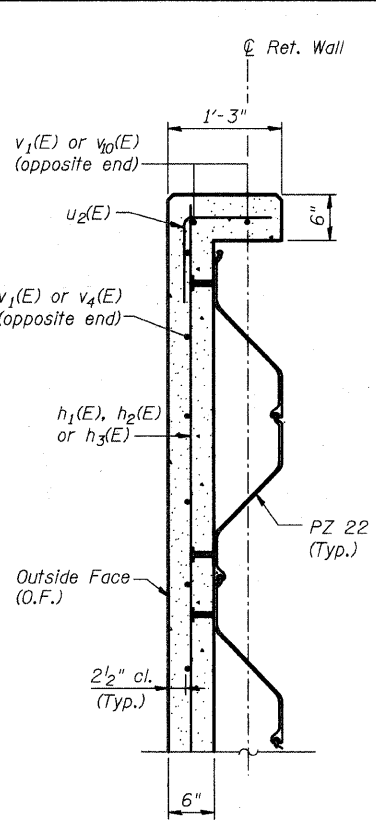
FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE		241	154
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				



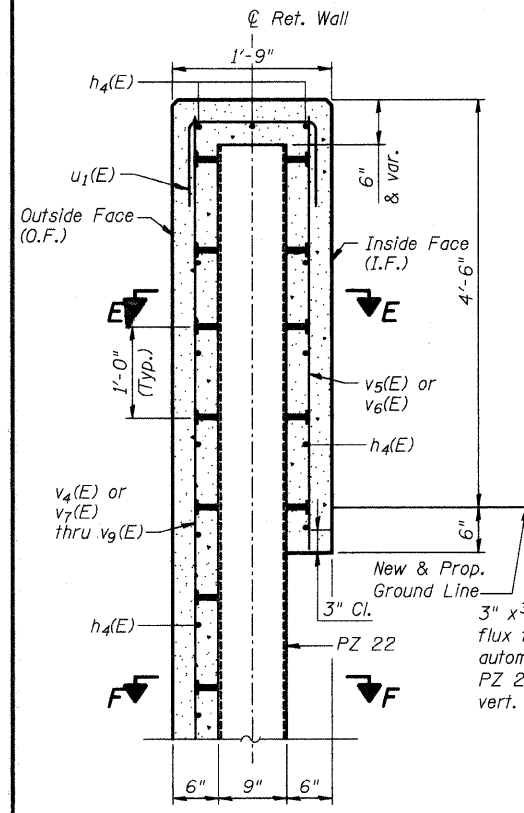
SECTION A-A



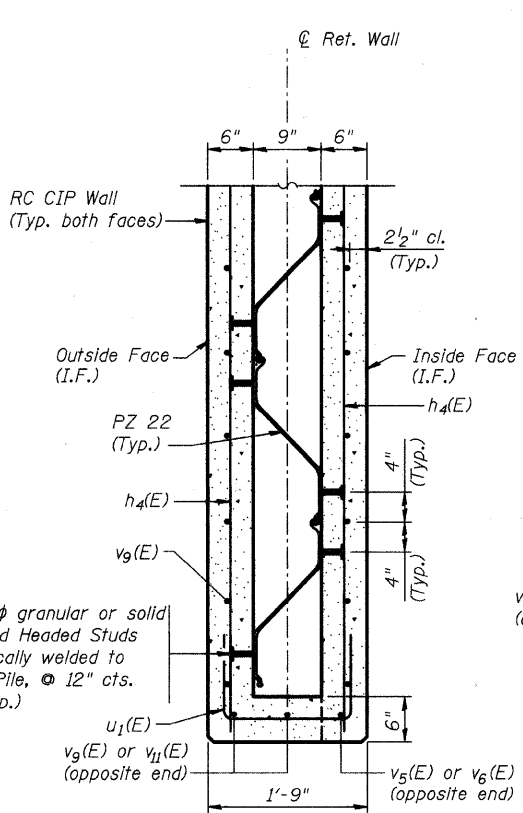
SECTION B-B



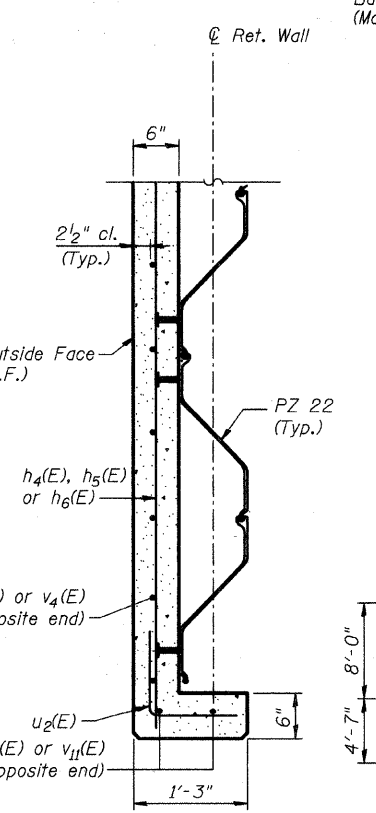
SECTION C-C



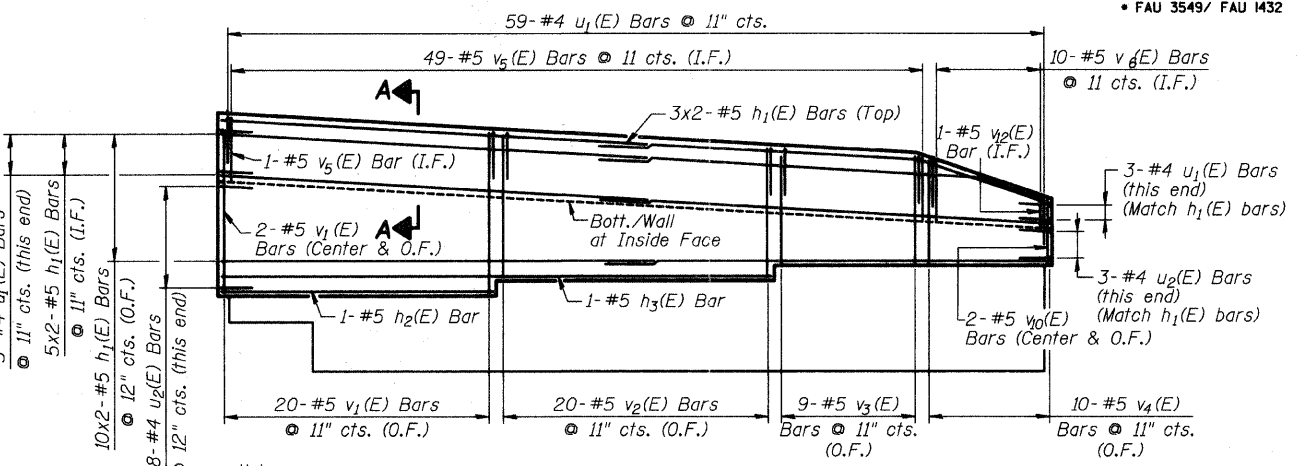
SECTION D-D



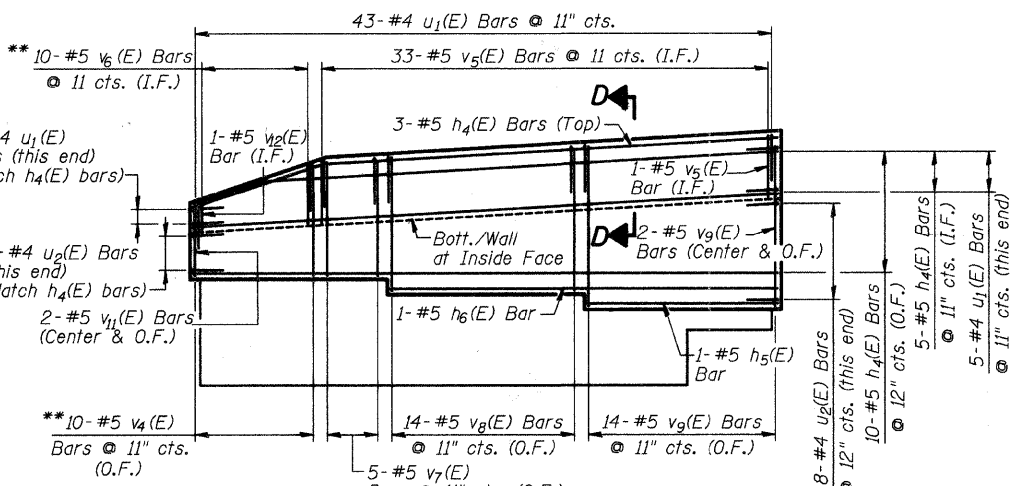
SECTION E-E



SECTION F-F



WEST WALL ELEVATION
(Looking East)



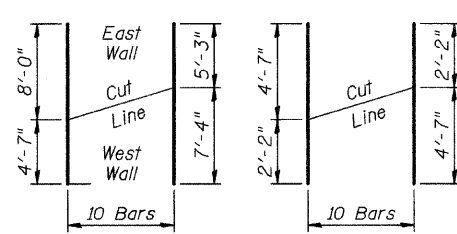
EAST WALL ELEVATION
(Looking West)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d1(E)	12	#8	4'-0"	
h1(E)	36	#5	27'-8"	
h2(E)	1	#5	18'-4"	
h3(E)	1	#5	36'-8"	
h4(E)	18	#5	39'-0"	
h5(E)	1	#5	12'-10"	
h6(E)	1	#5	25'-8"	
u1(E)	118	#4	4'-7"	
u2(E)	22	#4	2'-6"	
v1(E)	22	#5	11'-2"	
v2(E)	20	#5	9'-1"	
v3(E)	9	#5	7'-7"	
v4(E)	10	#5	12'-7"	
v5(E)	84	#5	4'-8"	
v6(E)	10	#5	6'-9"	
v7(E)	5	#5	8'-3"	
v8(E)	14	#5	9'-6"	
v9(E)	16	#5	11'-3"	
v10(E)	2	#5	4'-7"	
v11(E)	2	#5	5'-3"	
v12(E)	2	#5	2'-2"	
Earth Excavation		Cu. Yd.	34	
Steel Sheet Piling		Sq. Ft.	1,441	
Stud Shear Connectors		Each	1,372	
Concrete Structures		Cu. Yd.	27.1	
Reinforcement Bars, Epoxy Coated		Pound	3,920	

MIN. BAR LAP

#5 - 1'-8"

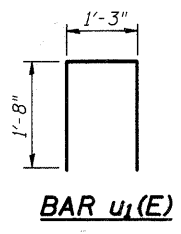


BARS v4(E) BARS v6(E)

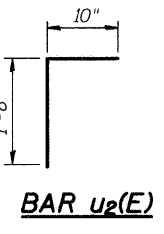
FIELD CUTTING DIAGRAMS

Order bars full length. Cut to fit as shown and use remainder in other wall.

BAR u1(E)



BAR u1(E)



BAR u2(E)

NOTES:

- See Sheet IPP-16 for geometry of the retaining walls.
- Bars Indicated thus 20 x 3 - #5 etc. indicates 20 lines with 3 lengths per line.

CITY OF WHEATON

ILLINOIS PRAIRIE PATH BRIDGE
OVER UNION PACIFIC RAILROAD,
FRONT STREET AND WESLEY STREET

**SOUTH APPROACH
RETAINING WALLS DETAILS II**

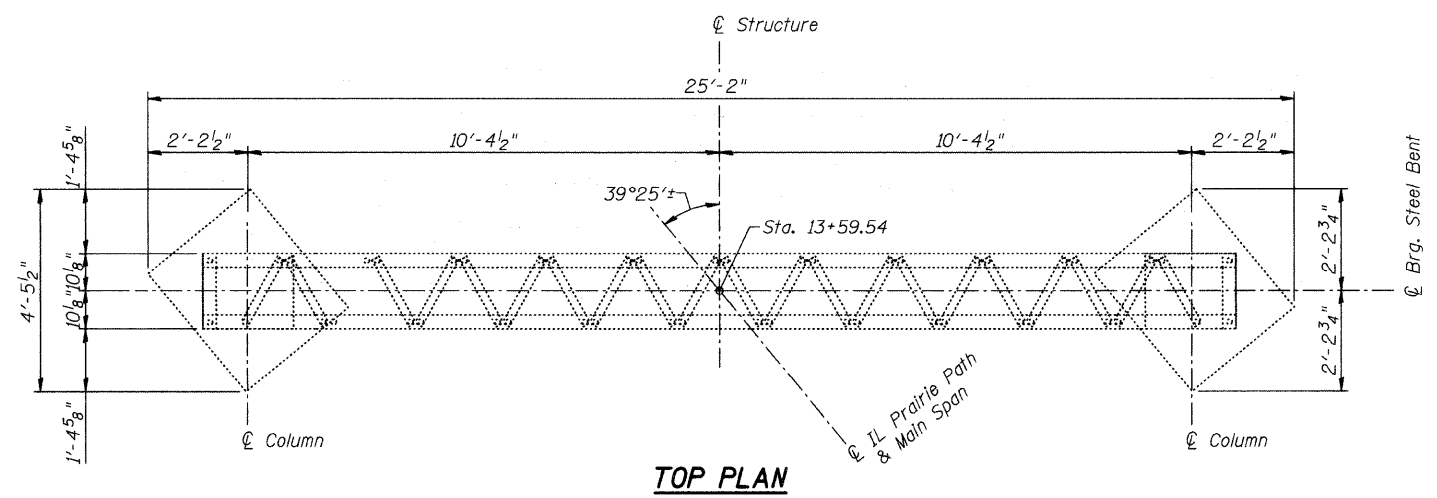
DRAWN	JM/PES/TV	SHEET NO.
CHECKED	VEVS	IPP-17
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

HDR
HDR Engineering, Inc.

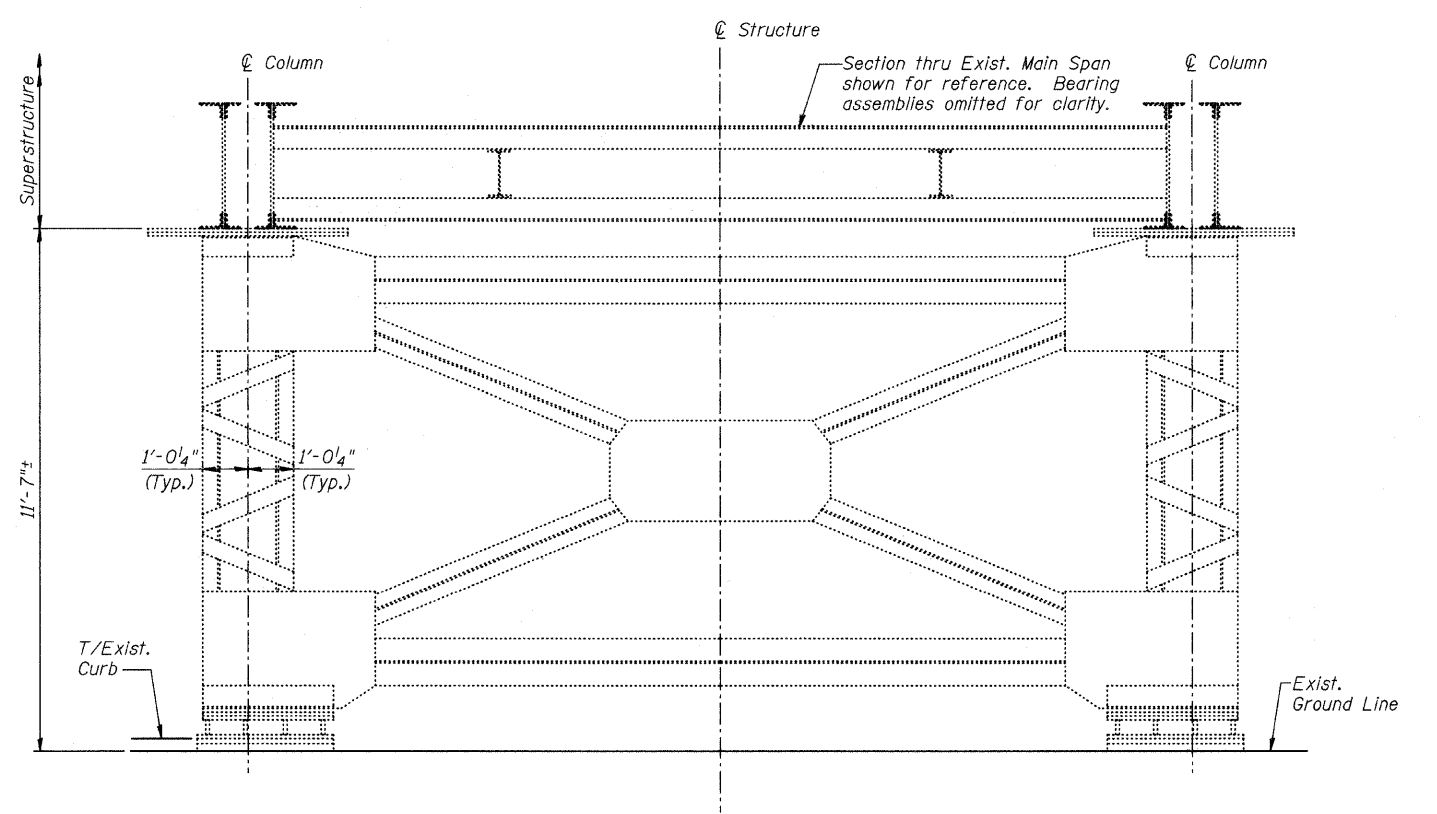
FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	155

CONTRACT NUMBER 83908
SECTION 9T-00084-00-BR

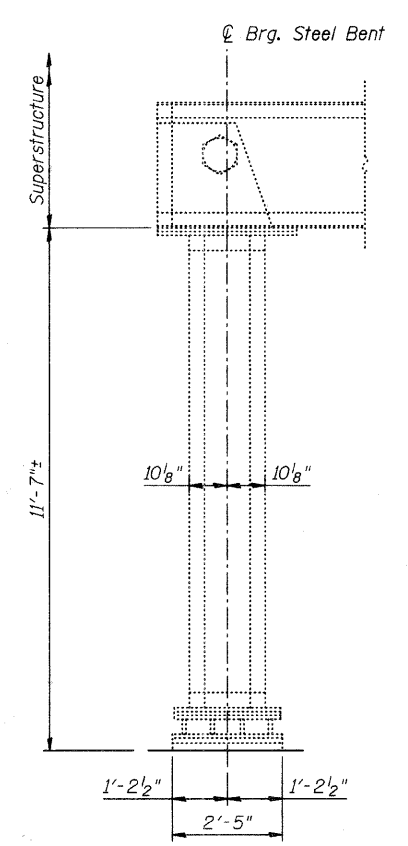
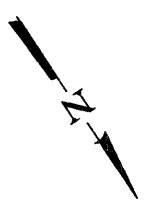
* FAU 3549/ FAU 1432



TOP PLAN



STEEL BENT ELEVATION
(Looking South)



END VIEW

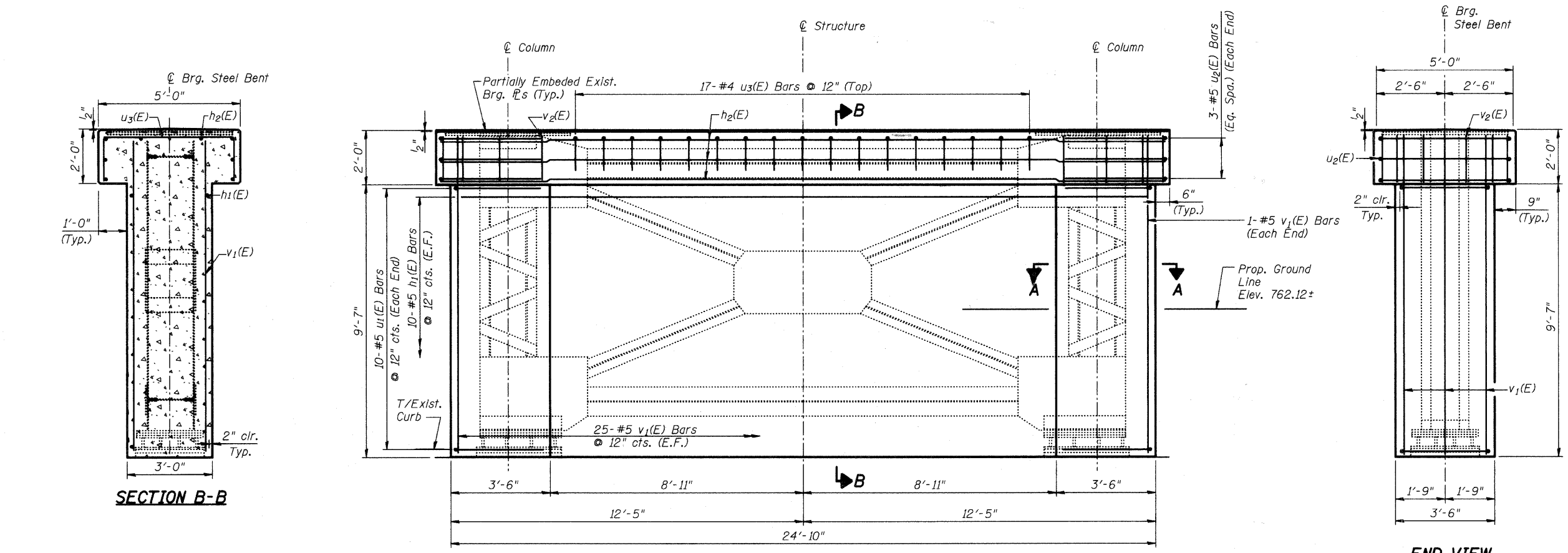
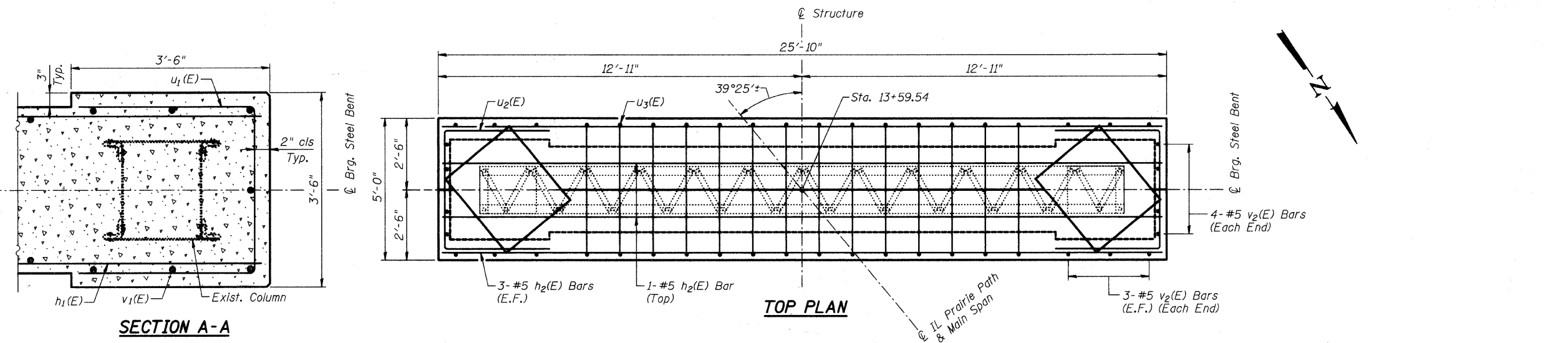
- FOR INFORMATION ONLY -



CITY OF WHEATON	
ILLINOIS PRAIRIE PATH BRIDGE OVER UNION PACIFIC RAILROAD, FRONT STREET AND WESLEY STREET	
EXISTING STEEL BENT DETAILS	
DRAWN	JM/PES/TV
CHECKED	VEYS
APPROVED	BSK
DATE	06/04/2008
SCALE	NONE
SHEET NO. IPP-18	

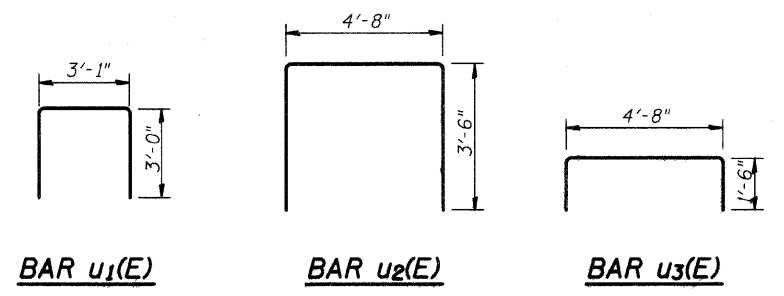
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FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	156
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	20	#5	24'-4"	—
h2(E)	8	#5	25'-6"	—
u1(E)	20	#5	9'-1"	⊥
u2(E)	6	#5	11'-8"	⊥
u3(E)	17	#4	7'-8"	⊥
v1(E)	50	#5	11'-2"	—
v2(E)	20	#5	1'-8"	—
Concrete Structures		Cu. Yd.	37.2	
Reinforcement Bars, Epoxy Coated		Pound	1,690	
Form Liner Limestone Surface		Sq. Ft.	342	



CITY OF WHEATON

ILLINOIS PRAIRIE PATH BRIDGE
OVER UNION PACIFIC RAILROAD,
FRONT STREET AND WESLEY STREET
**STEEL BENT ENCASEMENT
DETAILS**

DRAWN	JM/PES/TV	SHEET NO.	
CHECKED	VEVS	IPP-19	
APPROVED	BSK		
DATE	06/04/2008		
SCALE	NONE		

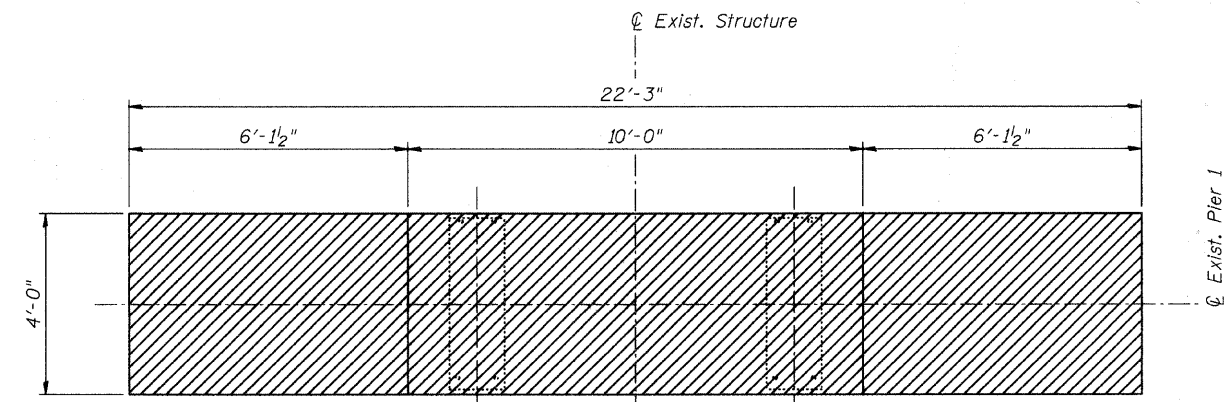
HDR
HDR Engineering, Inc.

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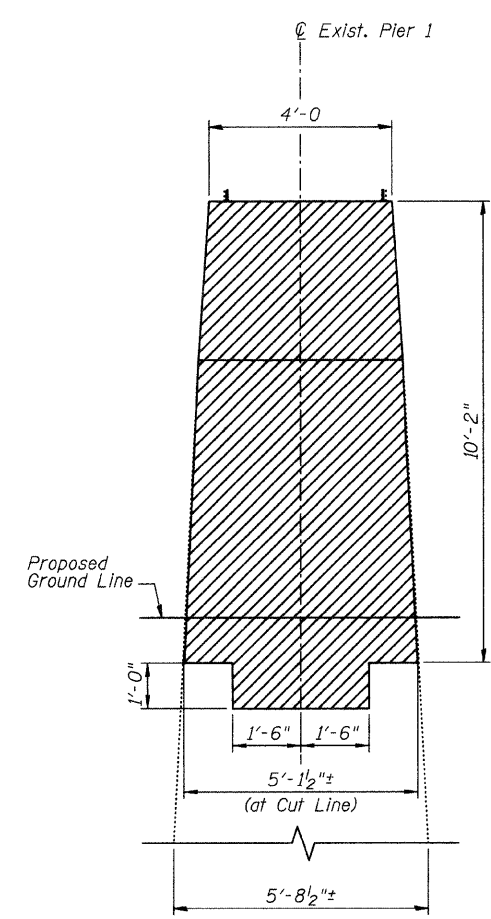
FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	157

CONTRACT NUMBER 83908
SECTION 97-00084-00-BR

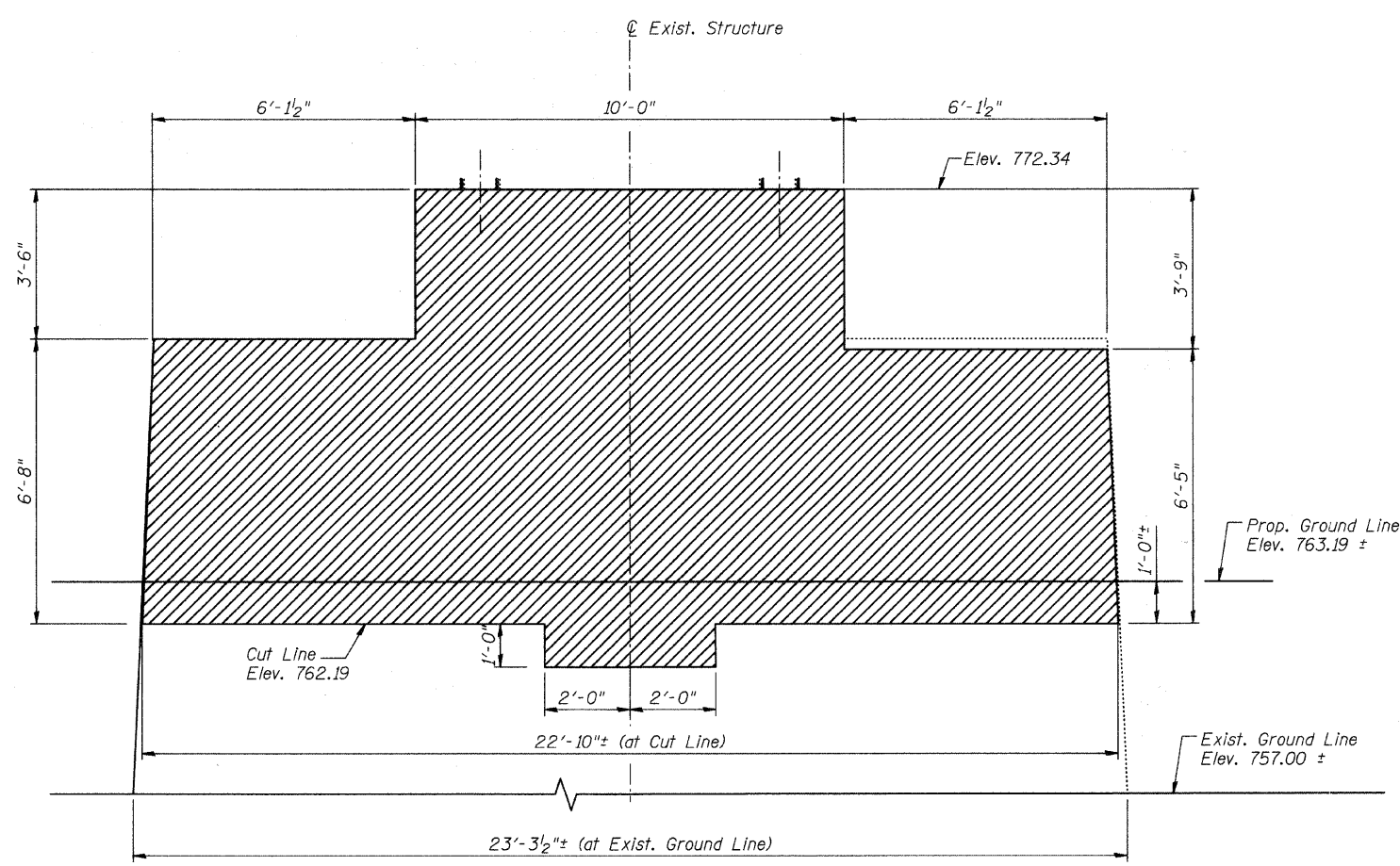
• FAU 3549/ FAU 1432



TOP VIEW

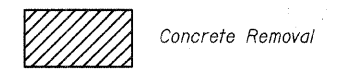


END VIEW



ELEVATION
(Looking North)

LEGEND:



BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	Cu. Yd.	32.3

CITY OF WHEATON

ILLINOIS PRAIRIE PATH BRIDGE
OVER UNION PACIFIC RAILROAD,
FRONT STREET AND WESLEY STREET

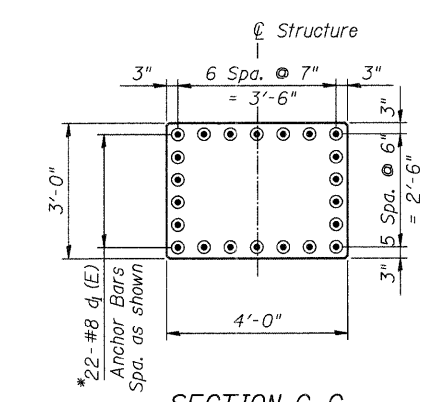
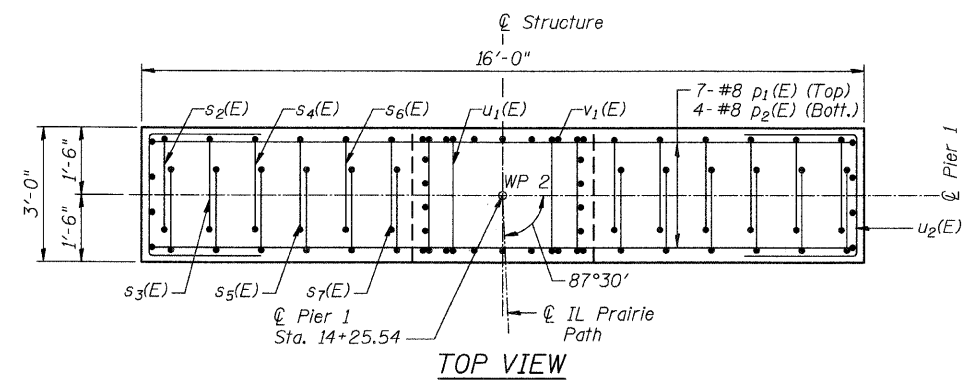
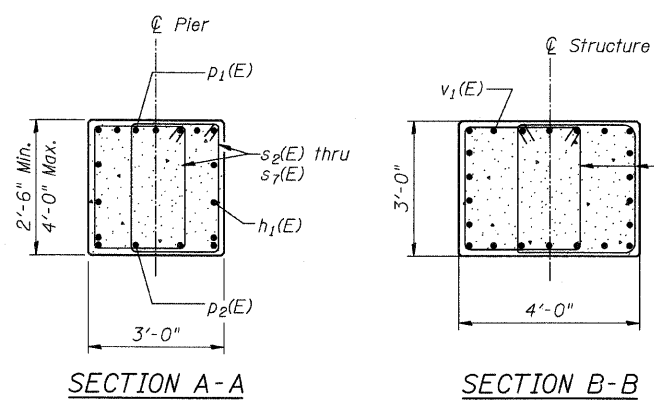
PIER 1 REMOVAL DETAILS

DRAWN	JM/PES/TV	SHEET NO.
CHECKED	VEVS	IPP-20
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	



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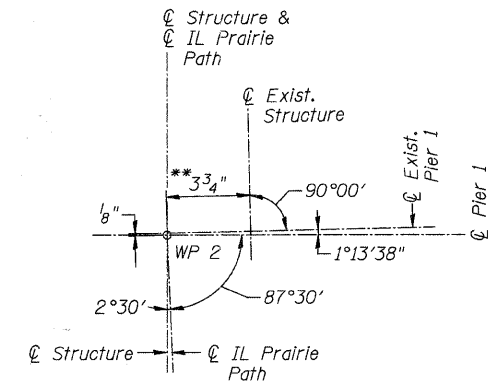
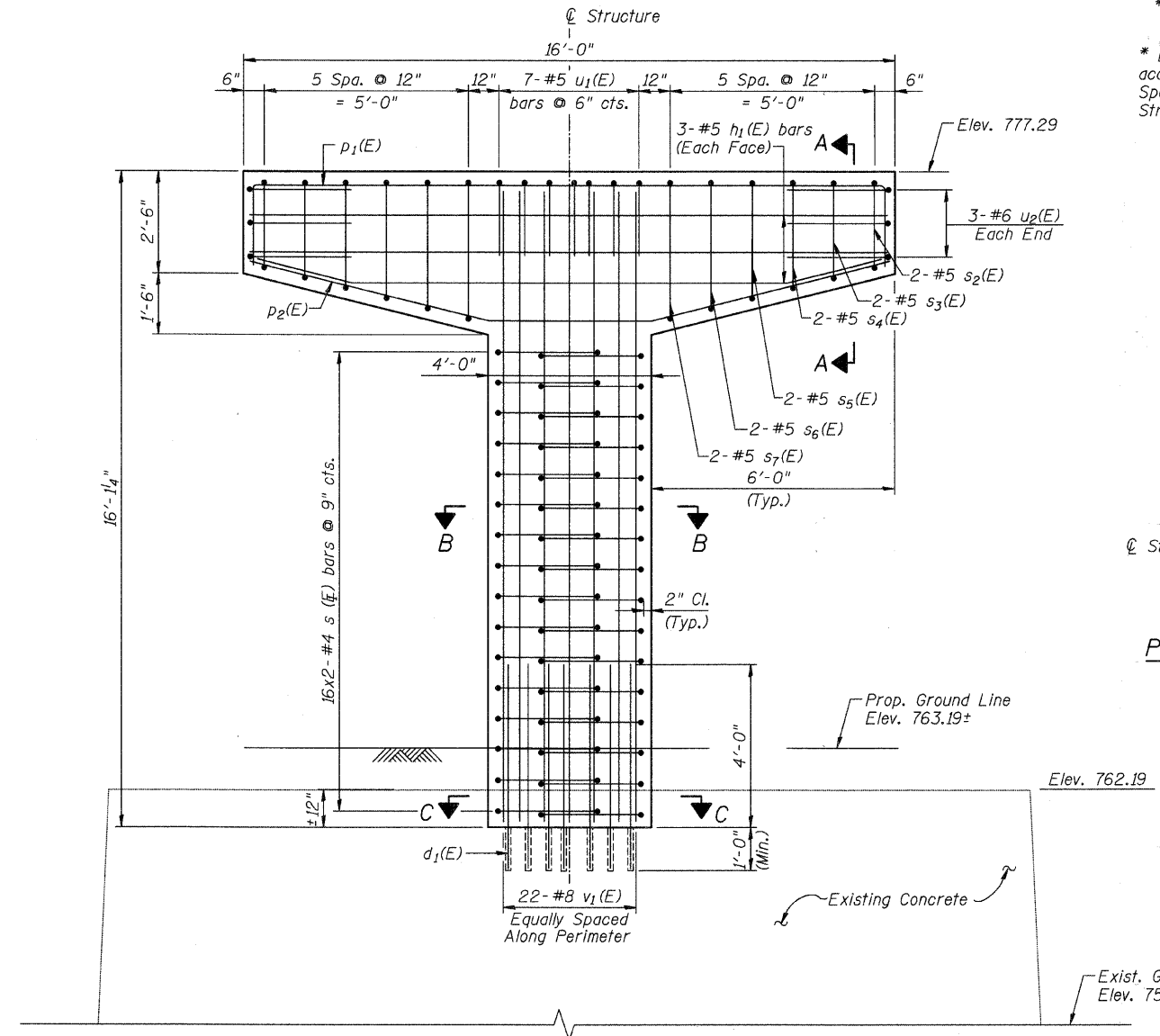
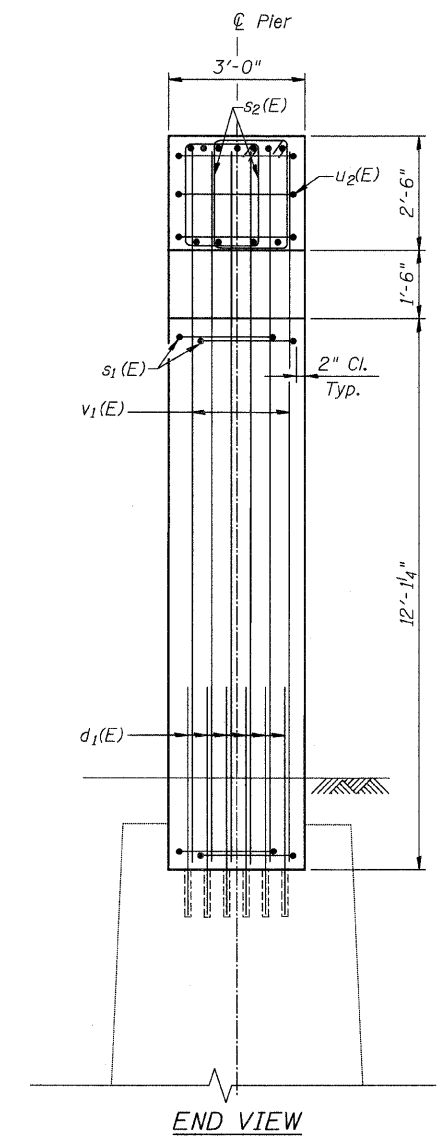
FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	158
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
* FAU 3549/ FAU 1432				



* Epoxy grout in 12" min. drilled 1 1/2" φ holes according to Article 584 of the Standard Specifications. Cost included with Concrete Structures.

BILL OF MATERIAL

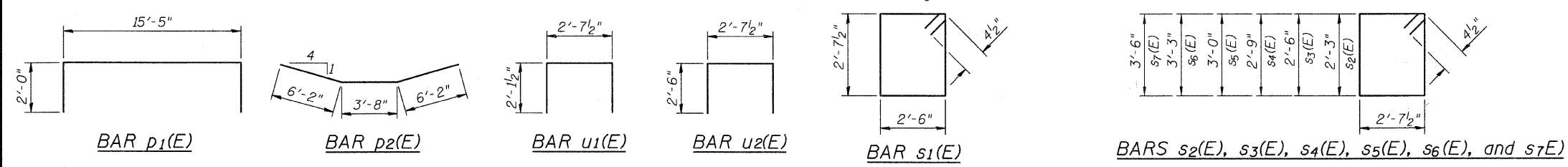
Bar	No.	Size	Length	Shape
d ₁ (E)	22	#8	5'-0"	
h ₁ (E)	6	#5	15'-8"	
p ₁ (E)	7	#8	19'-5"	
p ₂ (E)	4	#8	16'-0"	
s ₁ (E)	32	#4	11'-0"	□
s ₂ (E)	4	#4	10'-6"	□
s ₃ (E)	4	#4	11'-0"	□
s ₄ (E)	4	#4	11'-6"	□
s ₅ (E)	4	#4	12'-0"	□
s ₆ (E)	4	#4	12'-6"	□
s ₇ (E)	4	#4	13'-0"	□
u ₁ (E)	7	#5	6'-10 1/2"	□
u ₂ (E)	6	#6	7'-7 1/2"	□
v ₁ (E)	22	#8	15'-8"	
Concrete Structures		Cu. Yd.	11.5	
Reinforcement Bars, Epoxy Coated		Pound	2,390	
Form Liner		Sq. Ft.	170	
Limestone Surface		Sq. Ft.	170	
Concrete Sealer		Sq. Ft.	48.0	



** Along Existing Pier 1
PIER 1 RELOCATION DIAGRAM

NOTE:

For location of Bearing Anchor Bolts, see detail on Sheet IPP-9.

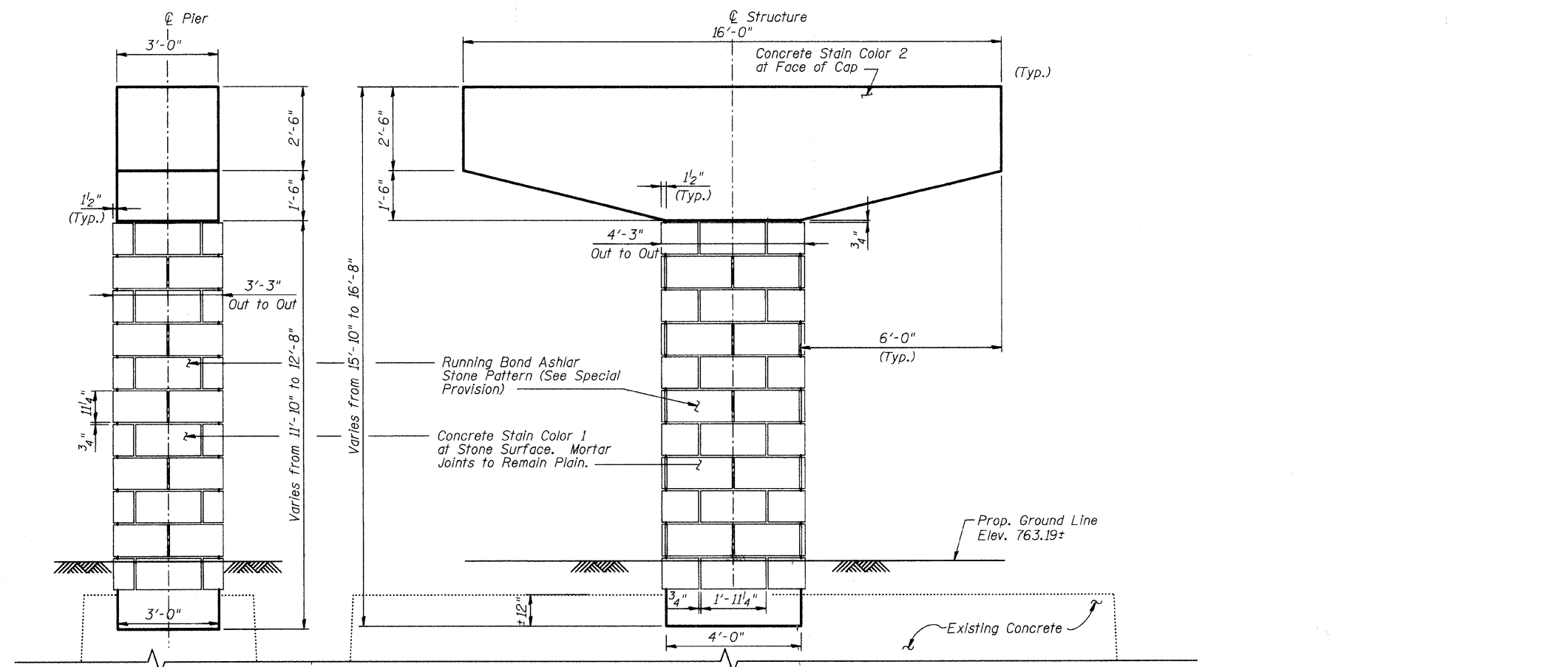


CITY OF WHEATON
ILLINOIS PRAIRIE PATH BRIDGE
OVER UNION PACIFIC RAILROAD,
FRONT STREET AND WESLEY STREET
PIER 1 MODIFICATION DETAILS

DRAWN	JM/PES/TV	SHEET NO.
CHECKED	VEVS	IPP-21
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

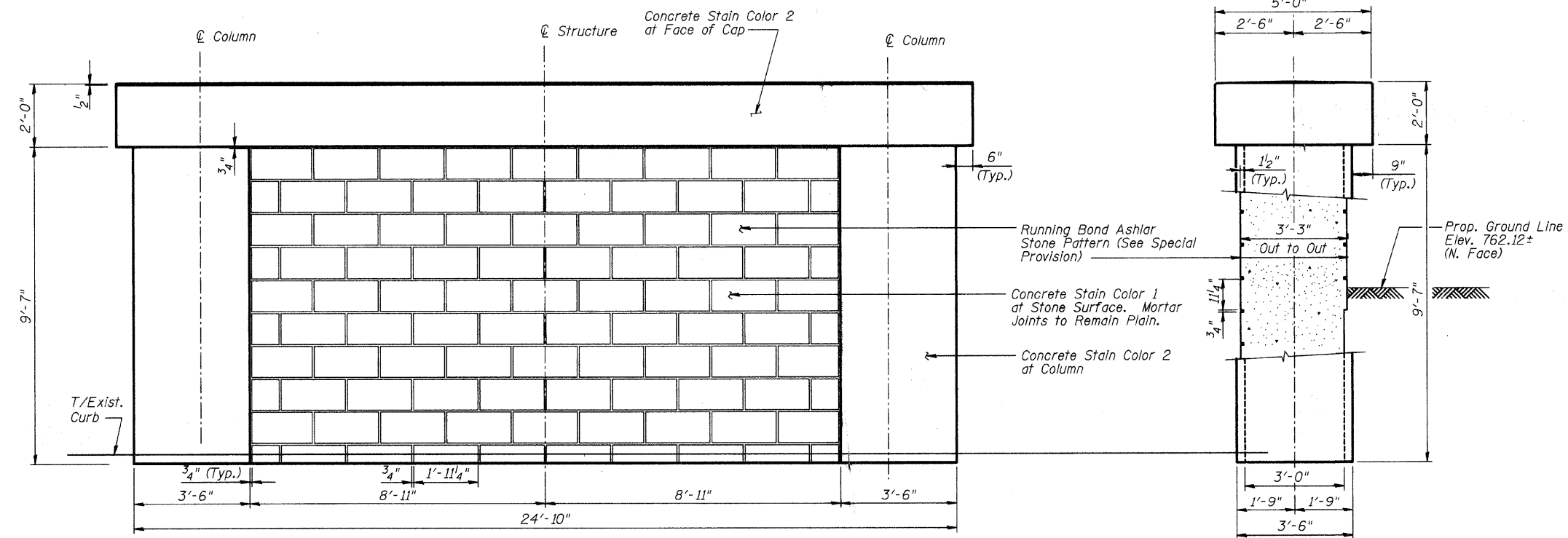
HDR Engineering, Inc.

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	•	241	159
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				



END VIEW

PIER 1 THRU 3 - ELEVATION
(Looking North)



STEEL BENT ELEVATION
(Looking North)

END VIEW

NOTES:

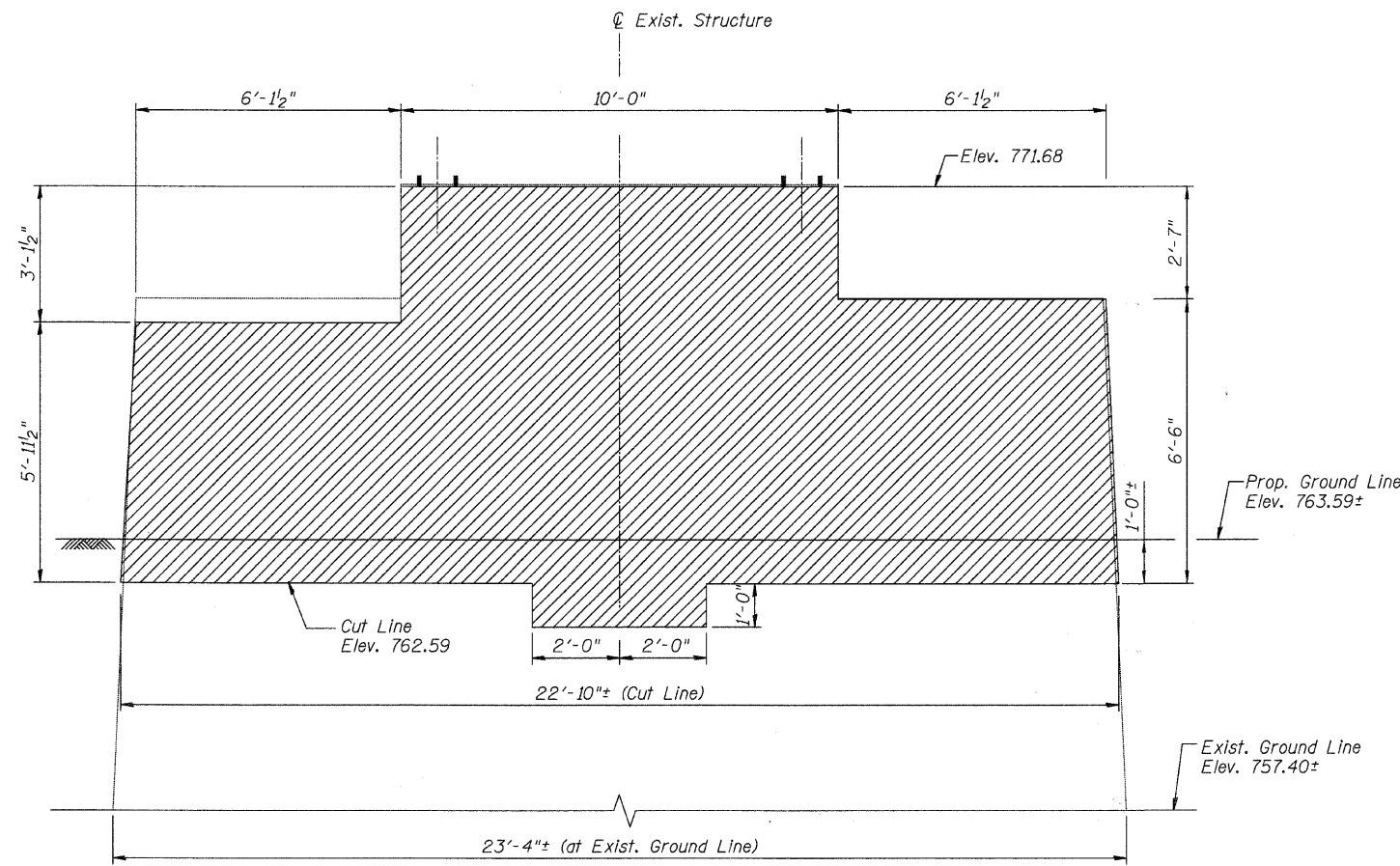
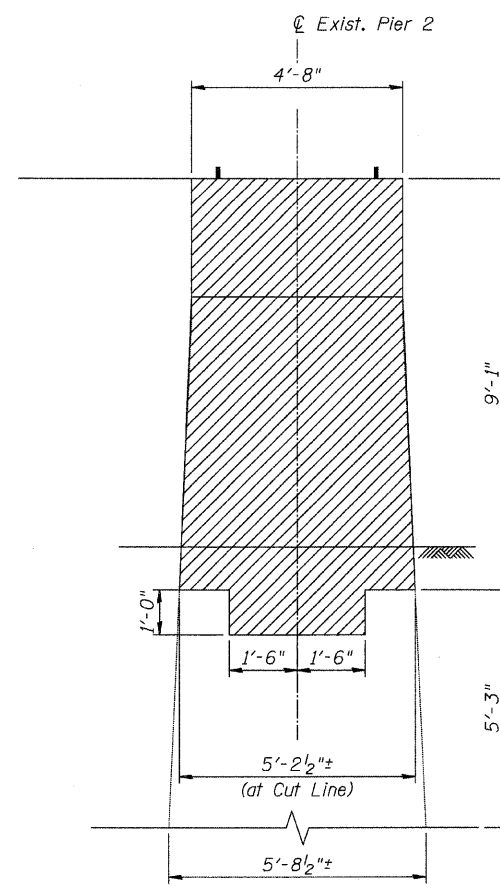
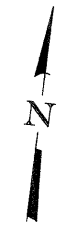
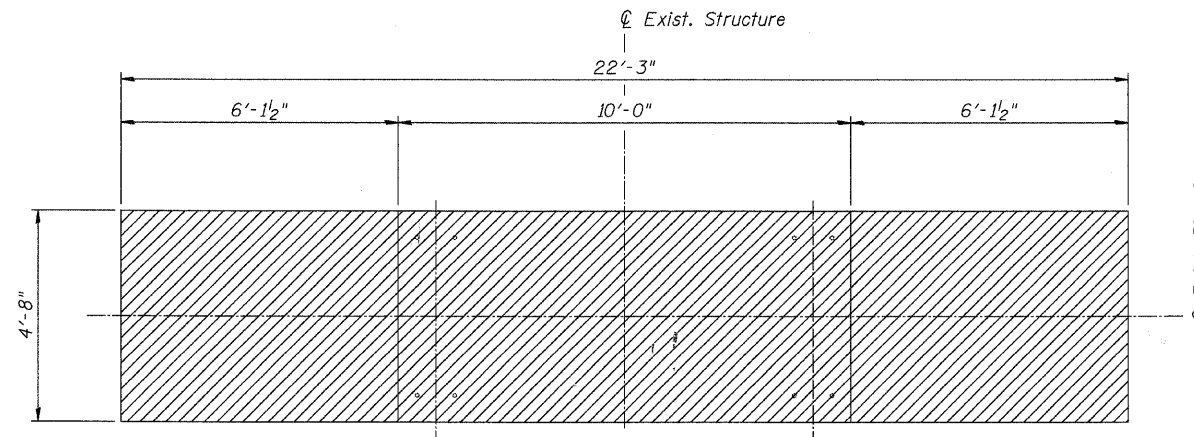
1. Set Masonry Pattern/Mortar joint orientation parallel to true horizontal plane.
2. Concrete stain color shall be as per specifications and subject to the City of Wheaton Engineer acceptance of a Field mock-up. Cost of concrete stain shall be incidental to Concrete Structures.
3. Columns and face of cap shall be rubbed smooth prior to staining.

CITY OF WHEATON	
ILLINOIS PRAIRIE PATH BRIDGE OVER UNION PACIFIC RAILROAD, FRONT STREET AND WESLEY STREET	
CONCRETE PIER FORM LINER	
DRAWN	JM/PES/TV
CHECKED	VEVS
APPROVED	BSK
DATE	06/04/2008
SCALE	NONE
SHEET NO. IPP-22	

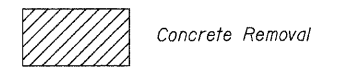


V:\PP\PIER FORM LINER.DWG 6/2/2008 3:26:17 PM

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	160
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				



LEGEND:



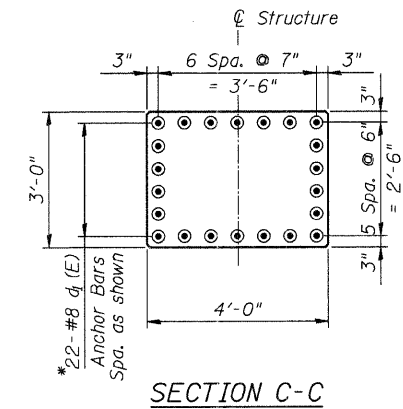
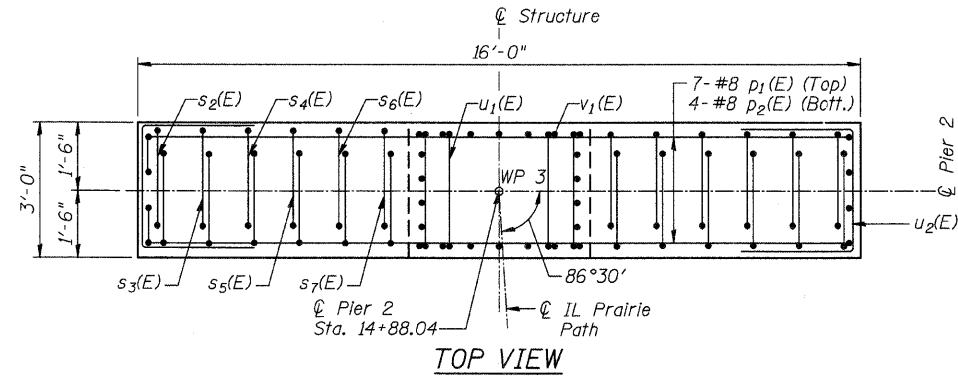
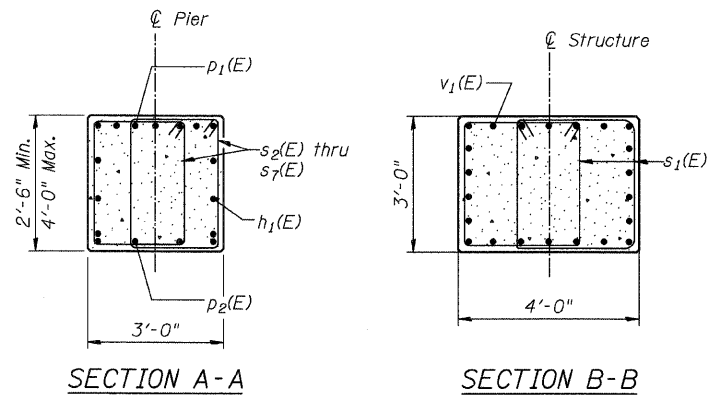
BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	Cu. Yd.	31.1

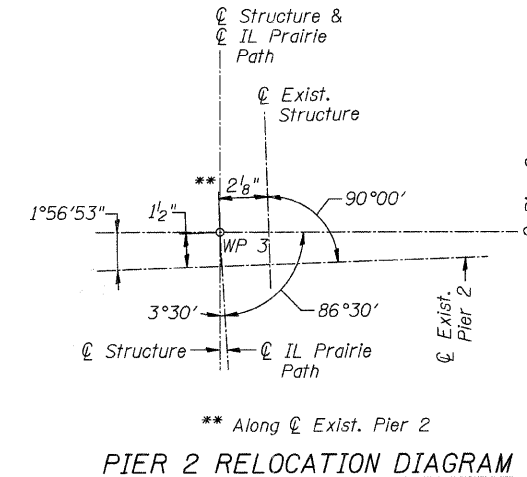
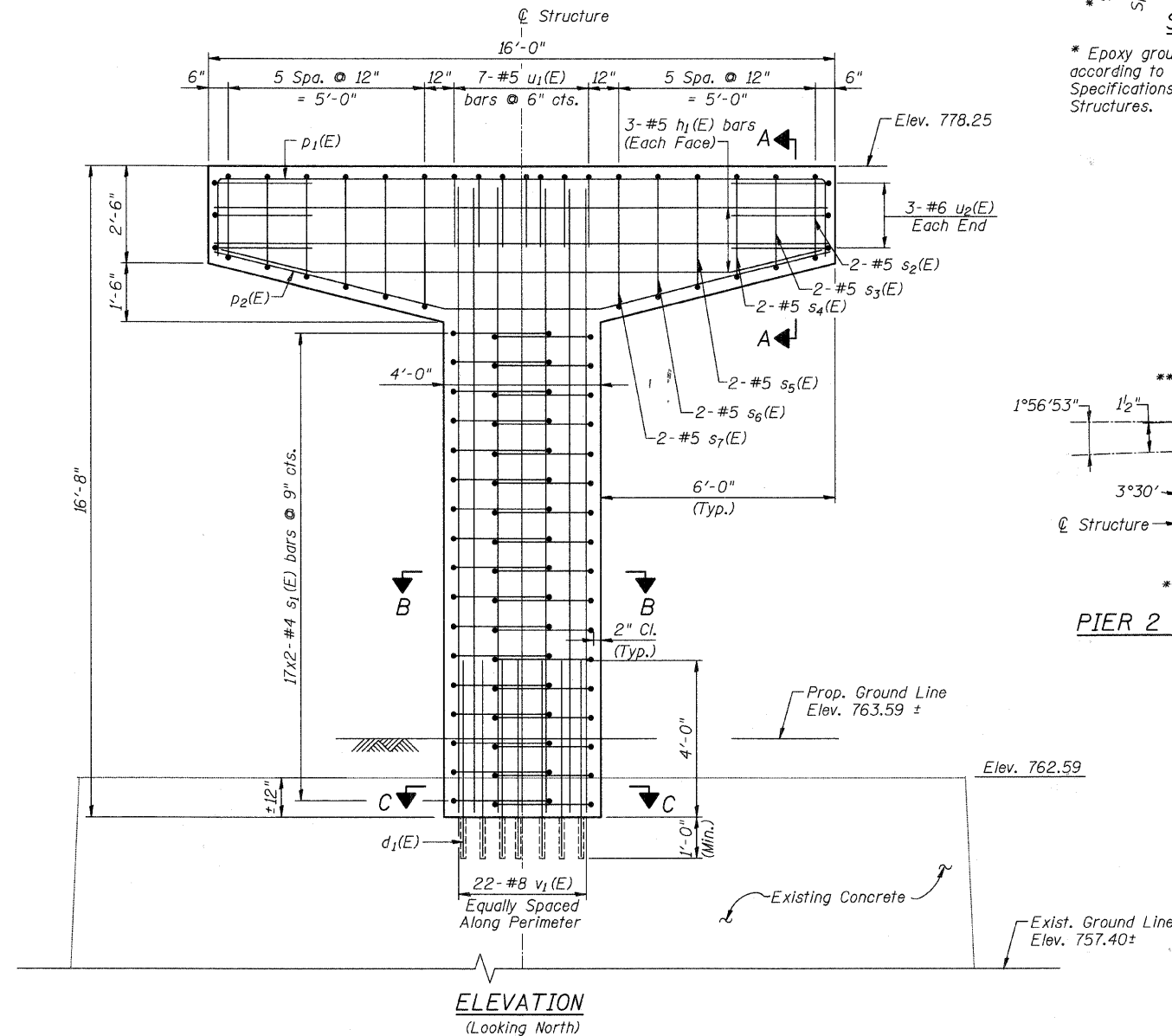
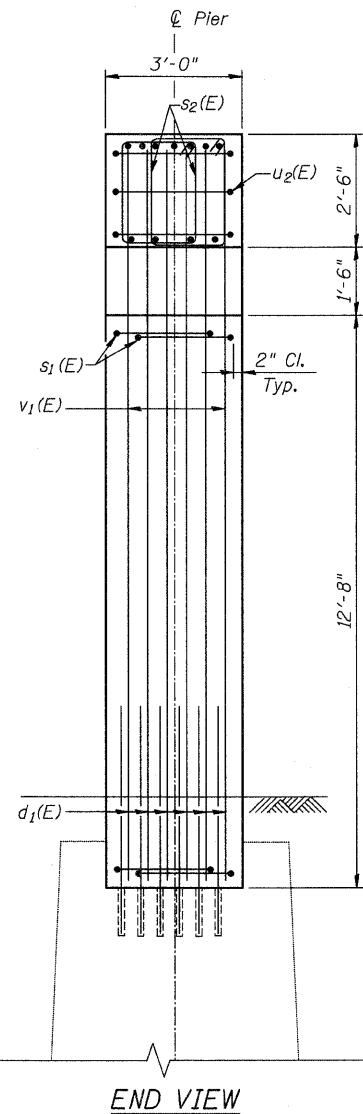
CITY OF WHEATON		
ILLINOIS PRAIRIE PATH BRIDGE OVER UNION PACIFIC RAILROAD, FRONT STREET AND WESLEY STREET		
PIER 2 REMOVAL DETAILS		
DRAWN	JM/PES/TV	SHEET NO.
CHECKED	VEVS	IPP-23
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

HDR
HDR Engineering, Inc.

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	161
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
* FAU 3549/ FAU 1432				



* Epoxy grout in 12" min. drilled $1\frac{1}{2}$ " ϕ holes according to Article 584 of the Standard Specifications. Cost included with Concrete Structures.

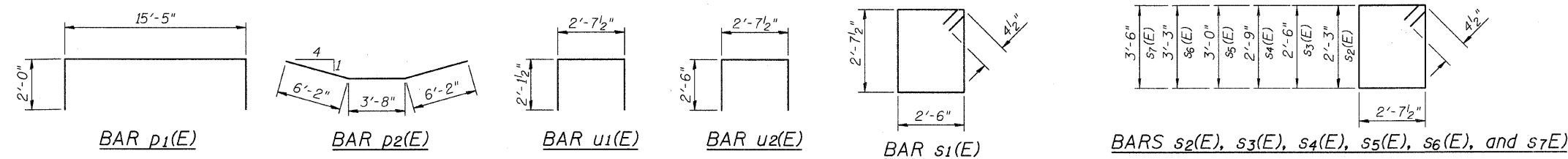


BILL OF MATERIAL

Bar No.	Size	Length	Shape
$d_1(E)$	#8	5'-0"	—
$h_1(E)$	#5	15'-8"	—
$p_1(E)$	#8	19'-5"	□
$p_2(E)$	#8	16'-0"	—
$s_1(E)$	#4	11'-0"	□
$s_2(E)$	#4	10'-6"	□
$s_3(E)$	#4	11'-0"	□
$s_4(E)$	#4	11'-6"	□
$s_5(E)$	#4	12'-0"	□
$s_6(E)$	#4	12'-6"	□
$s_7(E)$	#4	13'-0"	□
$u_1(E)$	#5	6'-10 $\frac{1}{2}$ "	□
$u_2(E)$	#6	7'-7 $\frac{1}{2}$ "	□
$v_1(E)$	#8	16'-3"	—
Concrete Structures	Cu. Yd.	11.8	
Reinforcement Bars, Epoxy Coated	Pound	2,440	
Form Liner	Sq. Ft.	178	
Limestone Surface	Sq. Ft.	48.0	

NOTE:

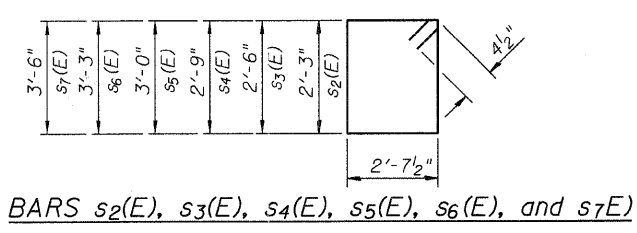
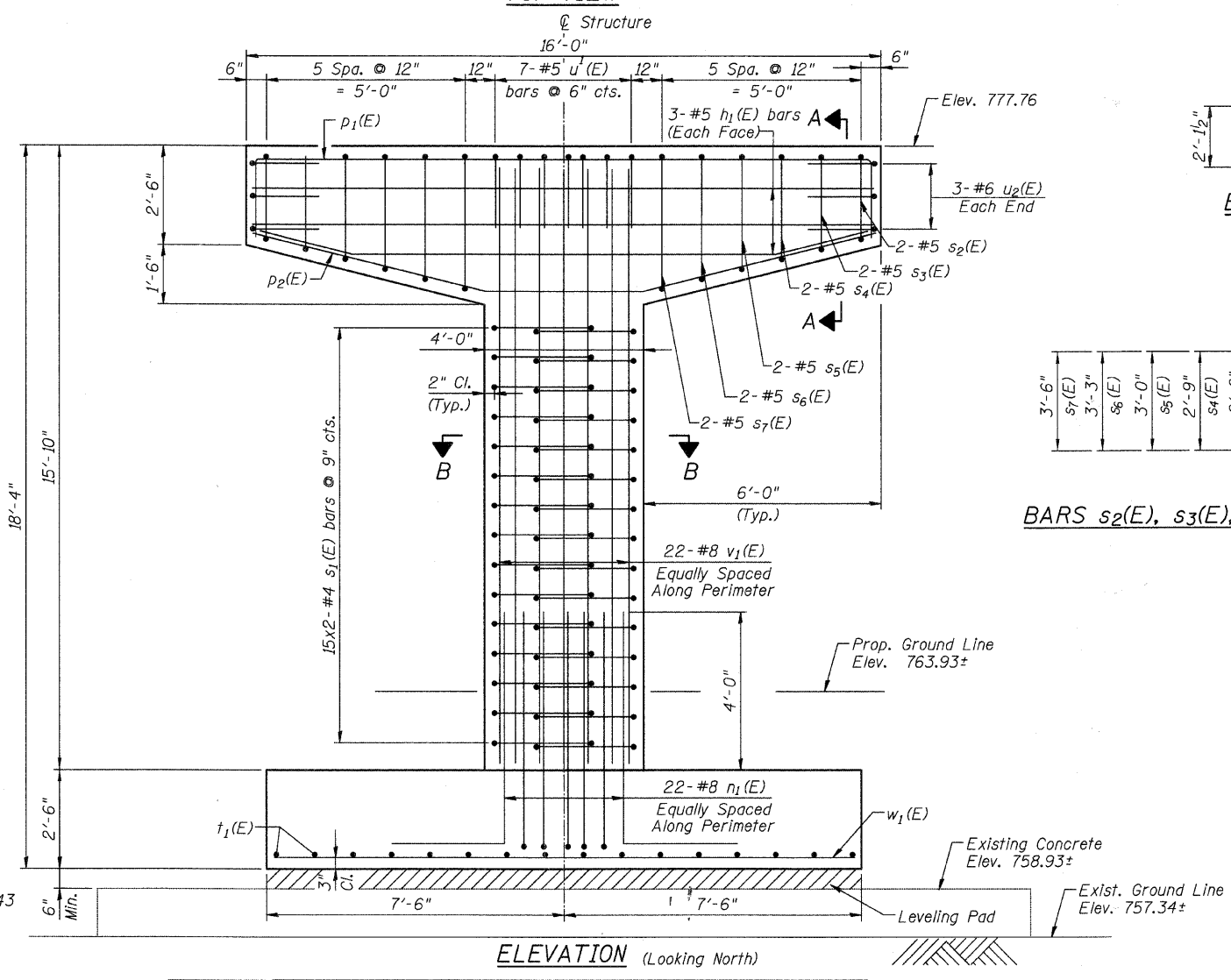
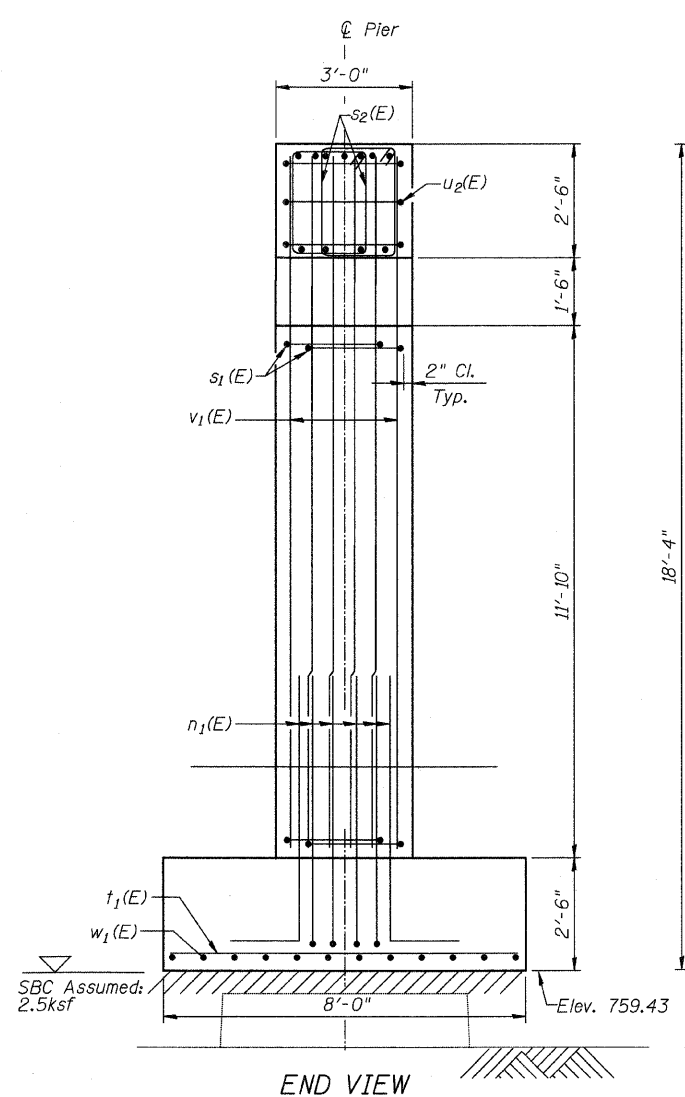
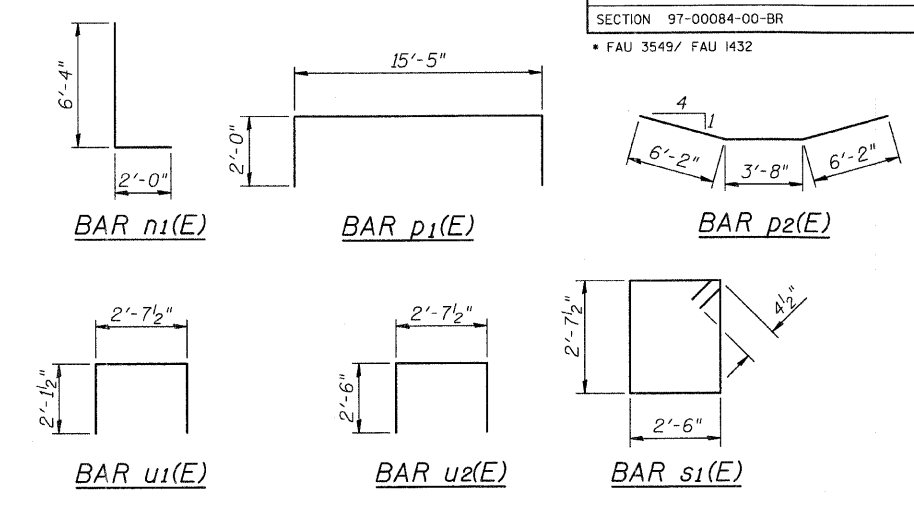
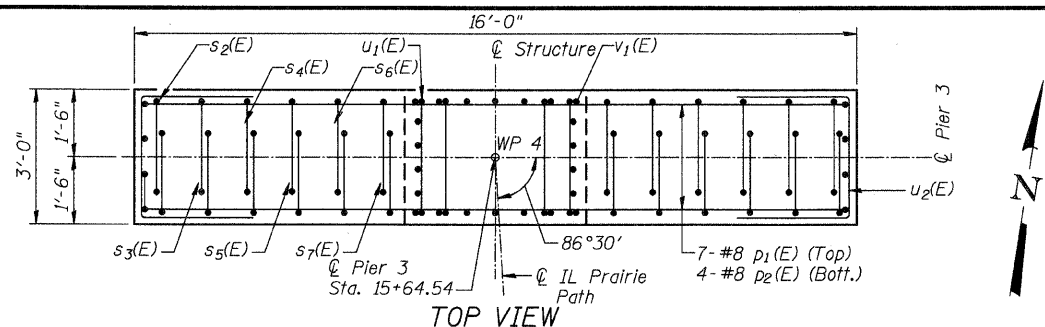
For location of Bearing Anchor Bolts, see detail on Sheet IPP-9.



HDR
 HDR Engineering, Inc.

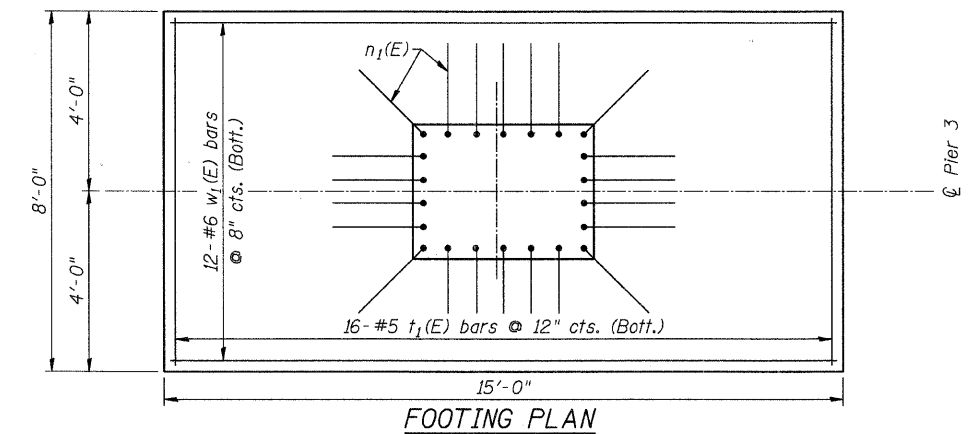
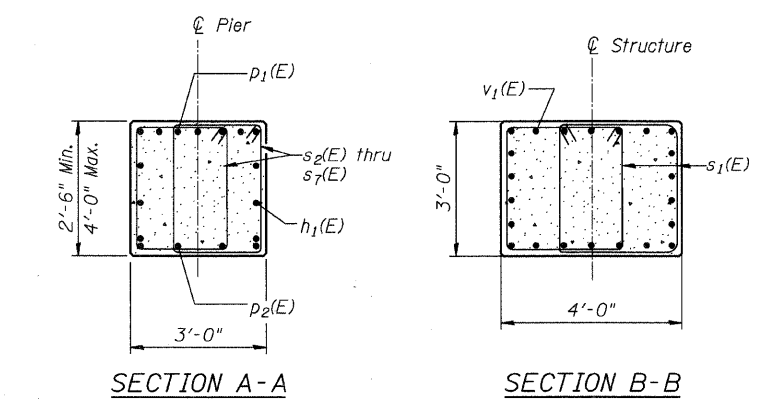
CITY OF WHEATON		
ILLINOIS PRAIRIE PATH BRIDGE OVER UNION PACIFIC RAILROAD, FRONT STREET AND WESLEY STREET		
PIER 2 MODIFICATION DETAILS		
DRAWN	JM/PES/TV	SHEET NO.
CHECKED	VEVS	IPP-24
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	•	241	163
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_1(E)$	6	#5	15'-8"	—
$n_1(E)$	22	#8	8'-4"	L
$p_1(E)$	7	#8	19'-5"	—
$p_2(E)$	4	#8	16'-0"	—
$s_1(E)$	30	#4	11'-0"	□
$s_2(E)$	4	#4	10'-6"	□
$s_3(E)$	4	#4	11'-0"	□
$s_4(E)$	4	#4	11'-6"	□
$s_5(E)$	4	#4	12'-0"	□
$s_6(E)$	4	#4	12'-6"	□
$s_7(E)$	4	#4	13'-0"	□
$t_1(E)$	16	#5	7'-6"	—
$u_1(E)$	7	#5	6'-10 1/2"	□
$u_2(E)$	6	#6	7'-7 1/2"	□
$v_1(E)$	22	#8	15'-4"	—
$w_1(E)$	12	#6	14'-6"	—
Concrete Structures	Cu. Yd.	22.5		
Reinforcement Bars, Epoxy Coated	Pound	2,940		
Form Liner	Sq. Ft.	166		
Limestone Surface	Sq. Ft.	48.0		
Concrete Sealer	Sq. Ft.	48.0		



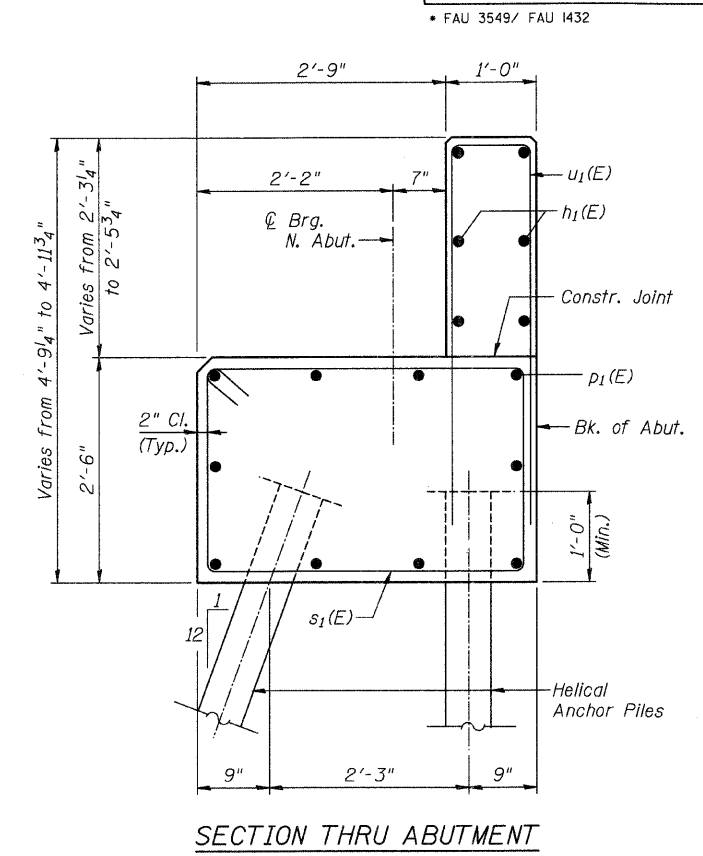
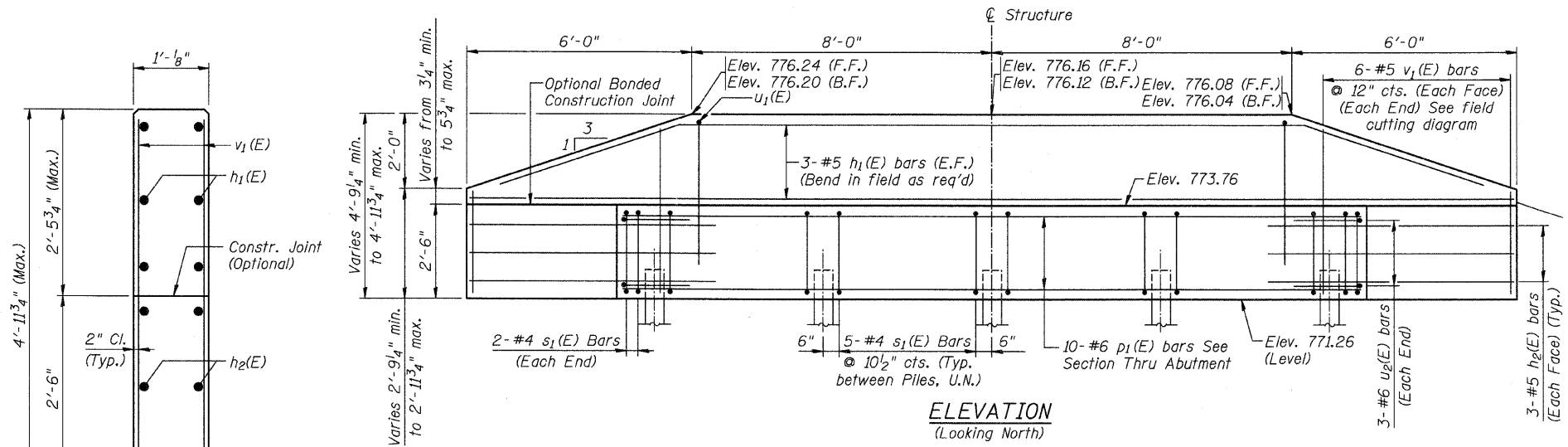
NOTE:
For location of Bearing Anchor Bolts, see detail on Sheet IPP-10.

CITY OF WHEATON
ILLINOIS PRAIRIE PATH BRIDGE
OVER UNION PACIFIC RAILROAD,
FRONT STREET AND WESLEY STREET
PIER 3 DETAILS

DRAWN	JM/PES/TV	SHEET NO.
CHECKED	VEYS	IPP-26
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

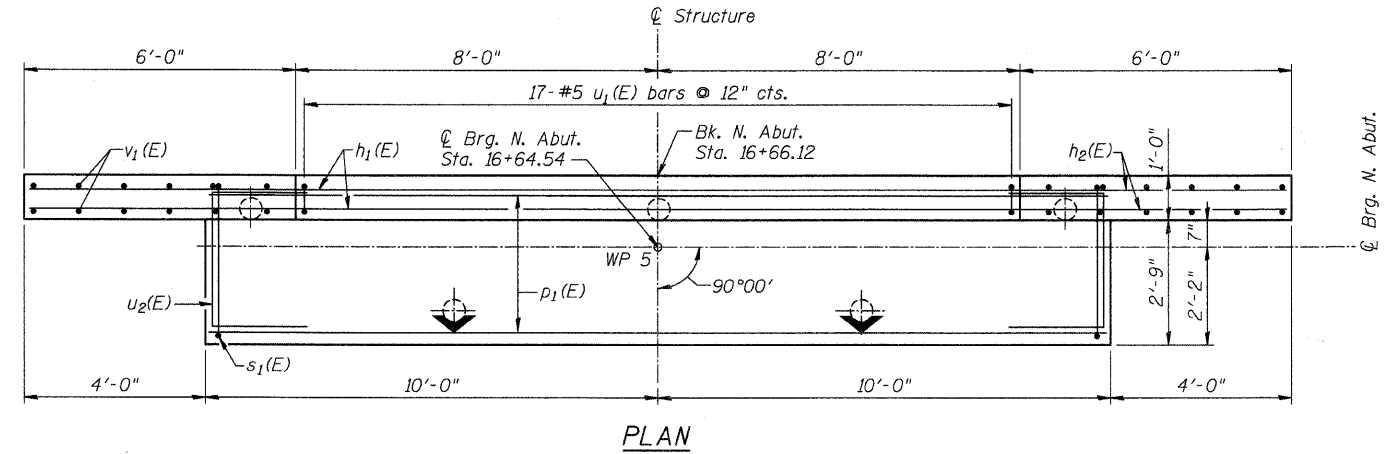
HDR
HDR Engineering, Inc.

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	•	241	164
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
• FAU 3549/ FAU 1432				

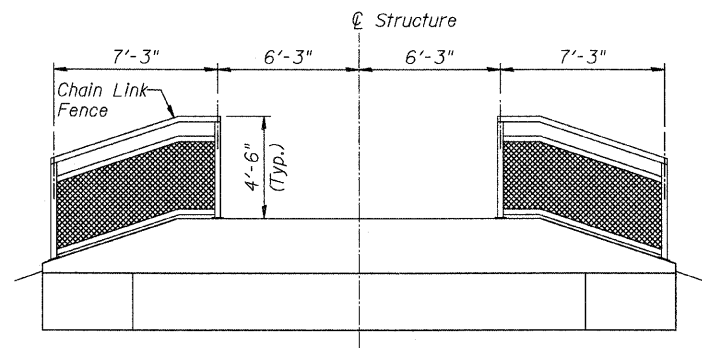


SECTION THRU WINGWALL

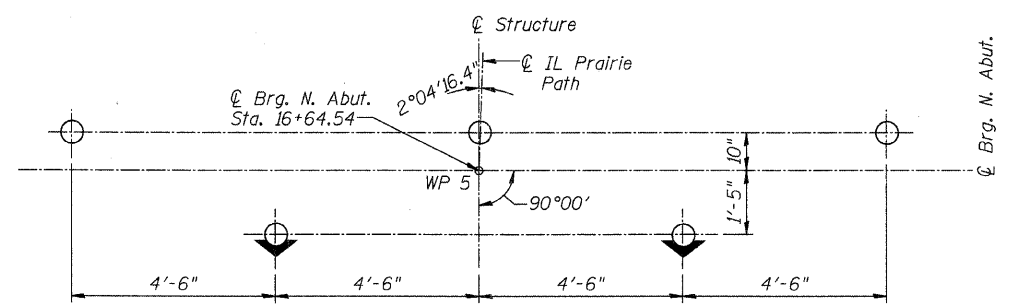
SECTION THRU ABUTMENT



PLAN



ABUTMENT ELEVATION (Looking North)



PILE LAYOUT

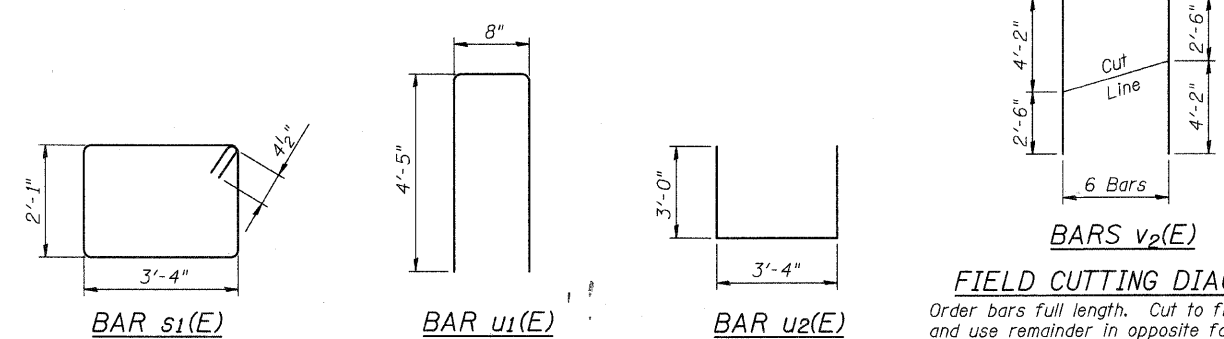
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	6	#5	27'-8"	—
h2(E)	12	#5	6'-6"	—
p1(E)	10	#8	19'-8"	—
s1(E)	24	#4	11'-7"	□
u1(E)	17	#5	9'-6"	□
u2(E)	6	#6	9'-4"	□
v1(E)	12	#5	6'-8"	—
Helical Ground Anchors	Ea.		5	
Concrete Structures	Cu. Yd.		9.8	
Reinforcement Bars, Epoxy Coated	Pound		1,310	
Concrete Sealer	Sq. Ft.		55.0	
Bicycle Railing	Ft.		14.5	

- LEGEND:
- Battered Piles
 - Plumb Piles

PILE DATA

Type:	Helical Anchors 14-12-10-8
Nominal Required Bearing:	90 Kips
Allowable Resistance Available:	30 Kips
Est. Length:	25 Feet
No Req'd.:	5



FIELD CUTTING DIAGRAMS
Order bars full length. Cut to fit as shown and use remainder in opposite face.

CITY OF WHEATON
ILLINOIS PRAIRIE PATH BRIDGE
OVER UNION PACIFIC RAILROAD,
FRONT STREET AND WESLEY STREET
PROPOSED NORTH
ABUTMENT DETAILS

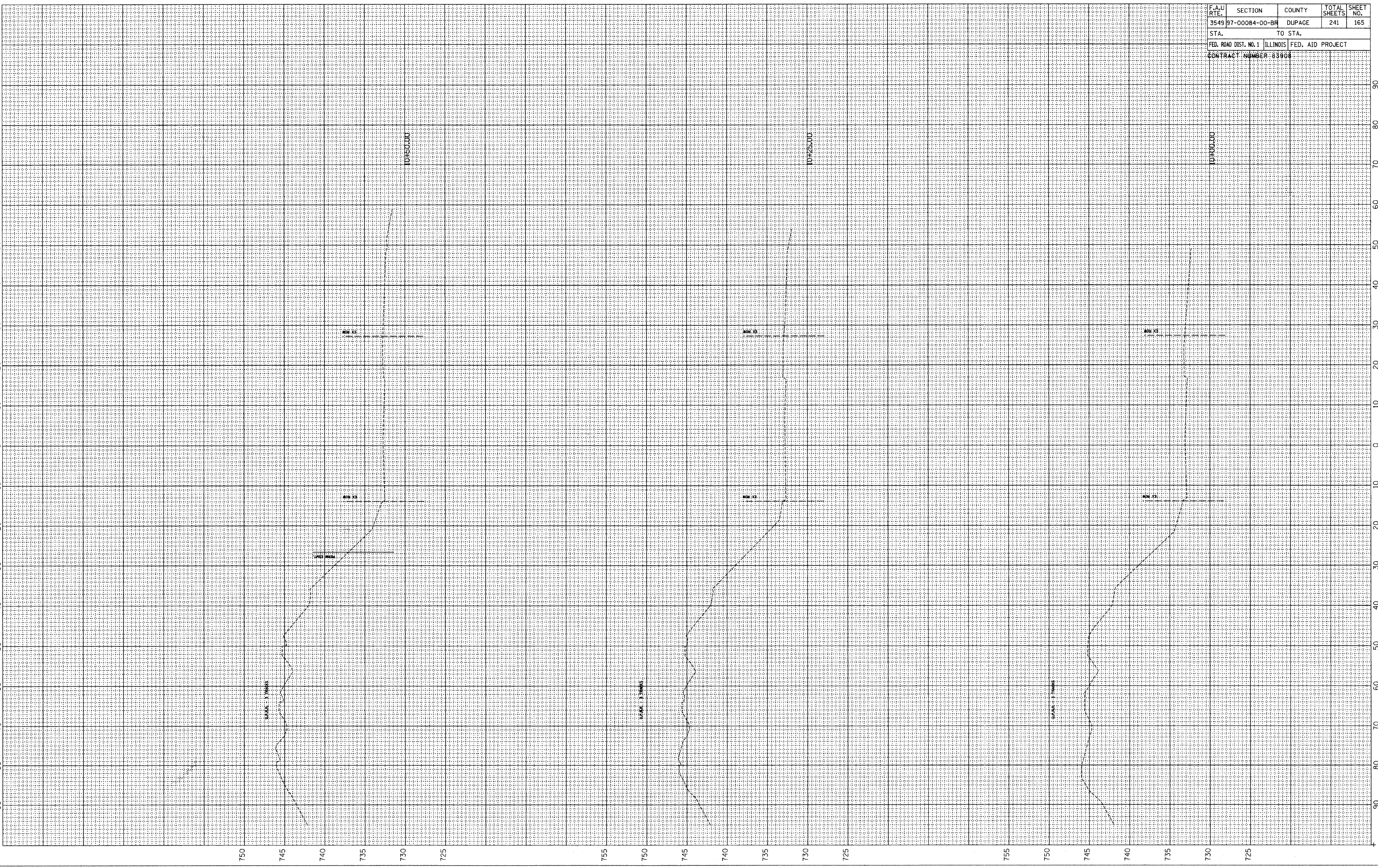
DRAWN	JM/PES/TV	SHEET NO.
CHECKED	VEVS	IPP-27
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

HDR
HDR Engineering, Inc.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3549	97-00084-00-BB	DUPAGE	241	165
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	AREAS CHECKED

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	AREAS CHECKED

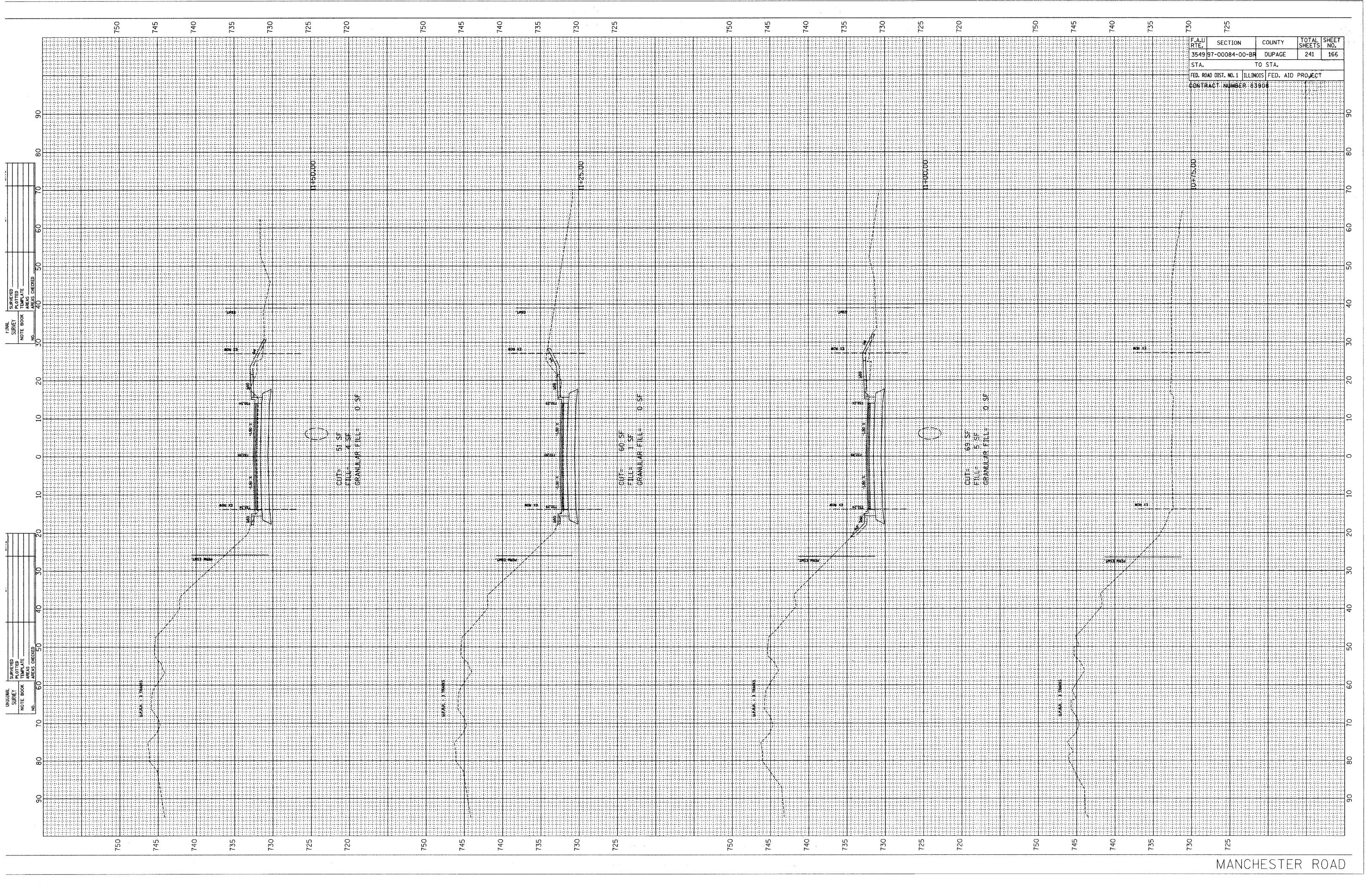


MANCHESTER ROAD

F.A.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3549	97-00084-00-BF	DUPAGE	241	166
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				

NO.	40	50	60	70	80	90
SURVEYED						
PLOTTED						
NOTE BOOK						
AREAS CHECKED						

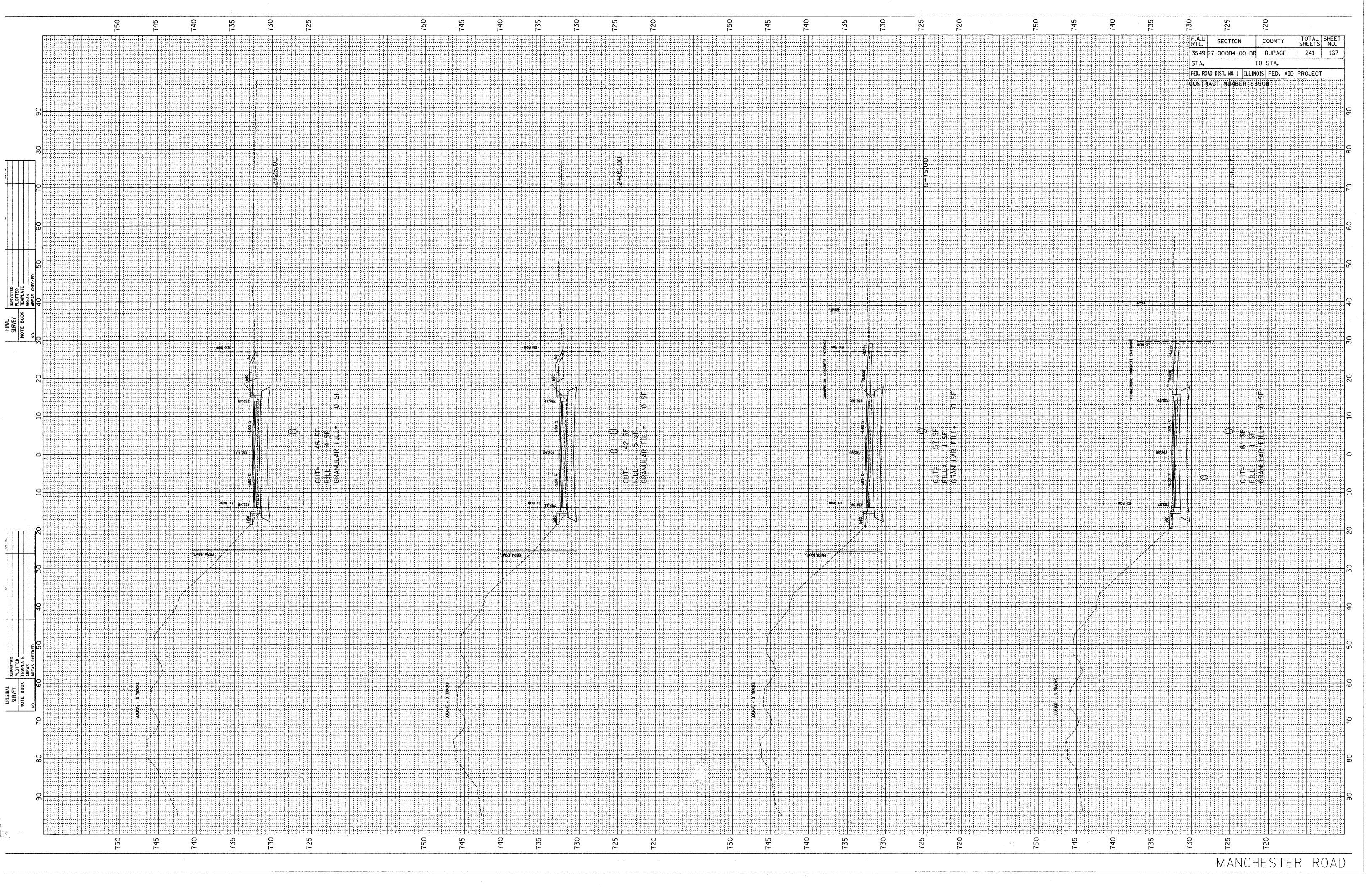
NO.	20	30	40	50	60	70
SURVEYED						
PLOTTED						
NOTE BOOK						
AREAS CHECKED						



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3549	97-00084-00-BR	DUPAGE	241	167
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				

UNL	SURVEYED	NO.
SURVEY	PLOTTED	
NOTE BOOK	AREA	
NO.	CHECKED	

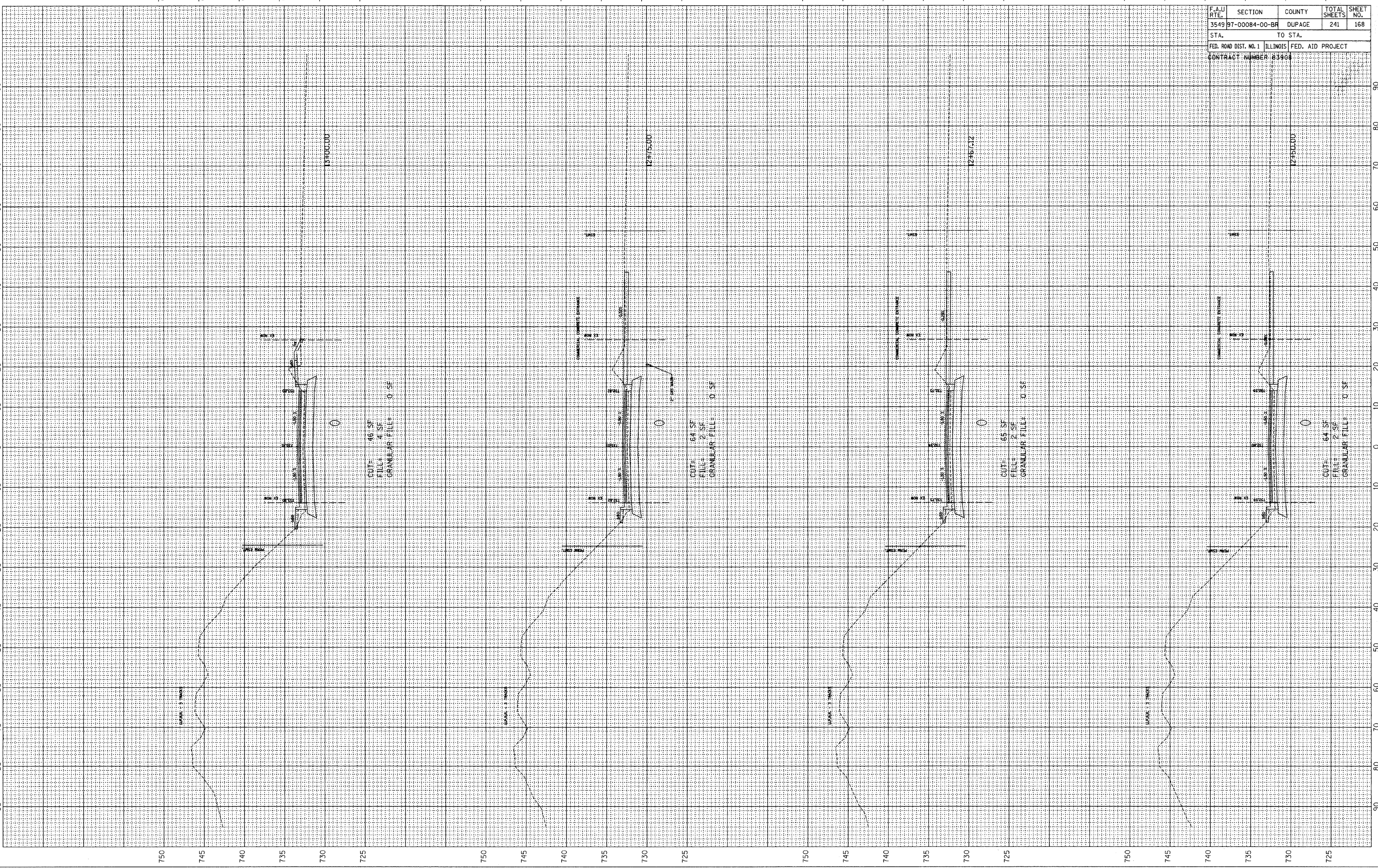
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SURVEY	PLOTTED	
NOTE BOOK	AREA	
NO.	CHECKED	



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3549	97-00084-00-BF	DUPAGE	241	168
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				

NO.	40
SURVEYED	
PLOTTED	
REPLATE	
AREAS CHECKED	

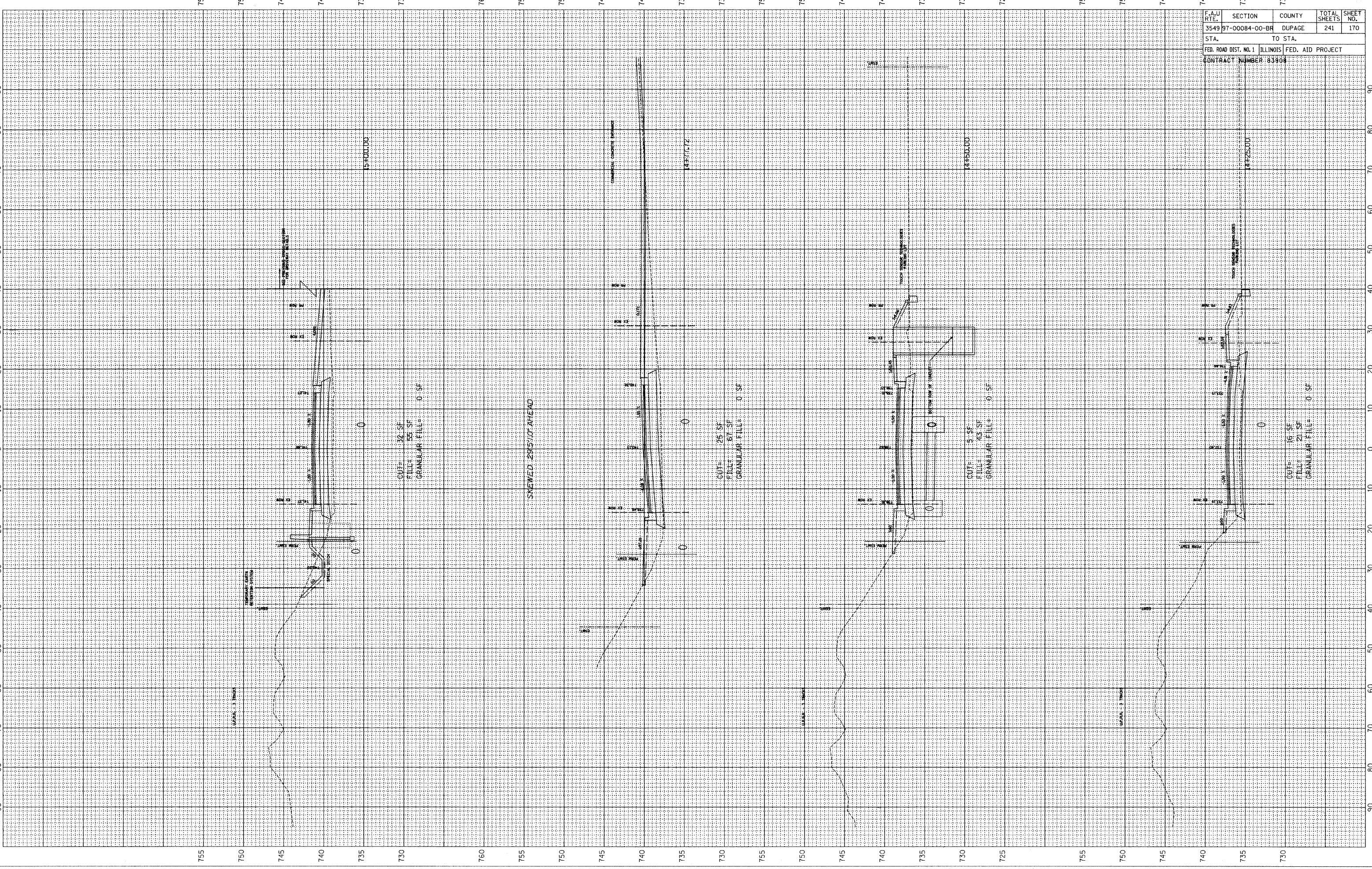
NO.	40
SURVEYED	
PLOTTED	
REPLATE	
AREAS CHECKED	



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3549	97-00084-00-BR	DUPAGE	241	170
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER 83908				

ORIGINAL SURVEY	SURVEYED
NO.	PLOTTED
	TEMPLATE
	AREAS CHECKED

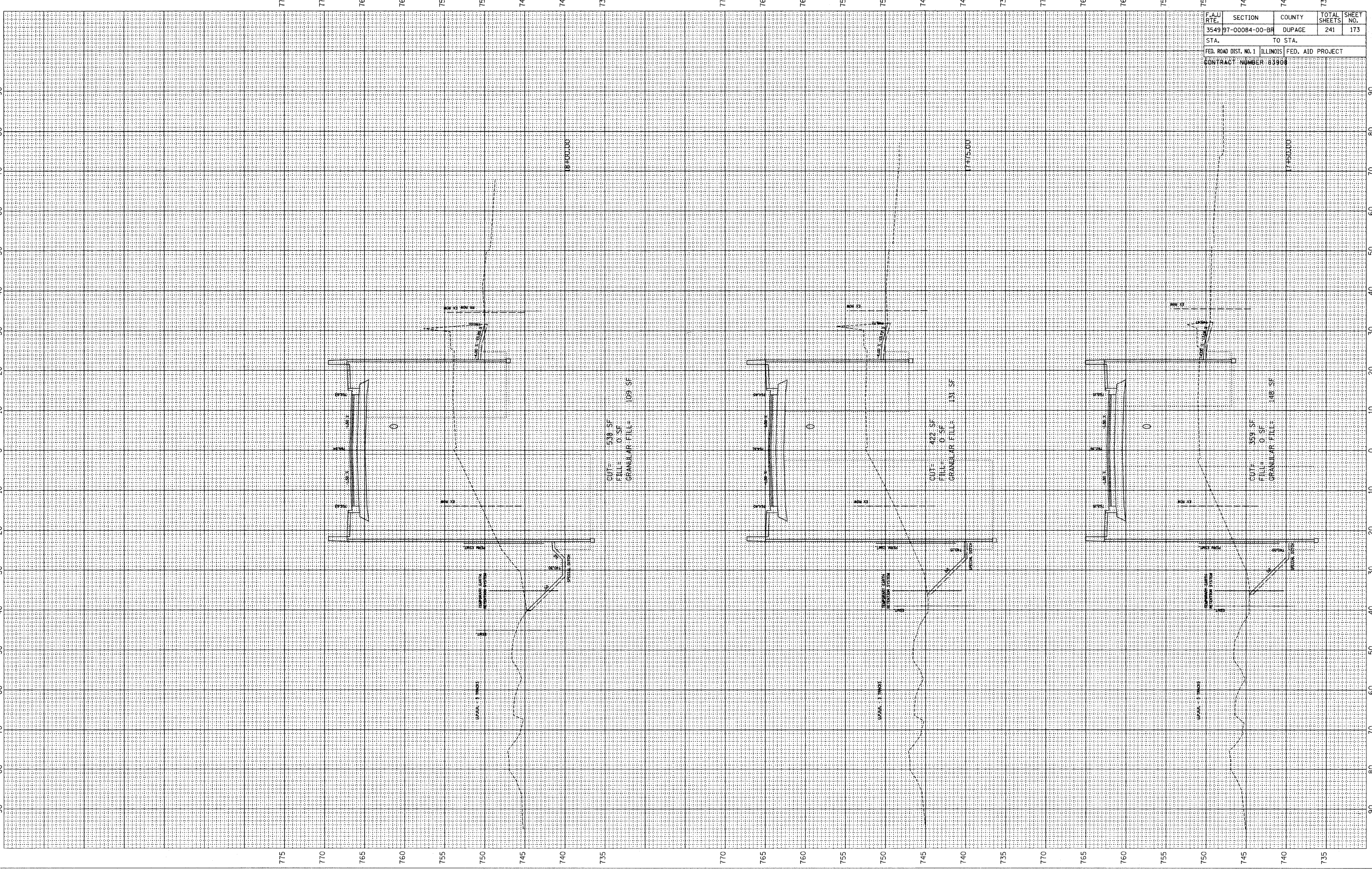
ORIGINAL SURVEY	SURVEYED
NO.	PLOTTED
	TEMPLATE
	AREAS CHECKED



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3549	97-00084-00-BF	DUPAGE	241	173
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				

FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

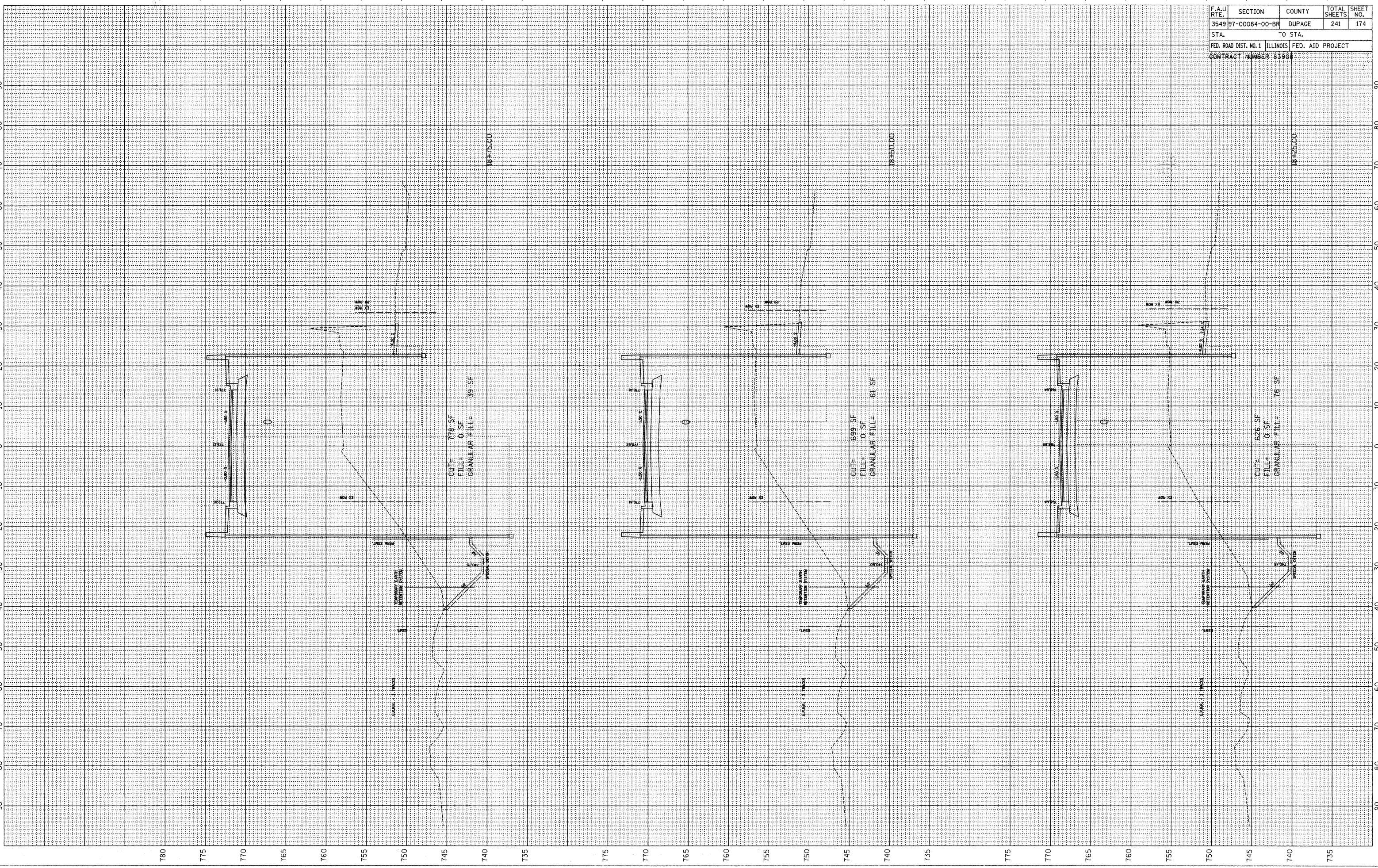
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED



FINAL SURVEY
 SURVEYED PLOTTED
 NOTE BOOK TEMPLATE
 NO. AREAS CHECKED

ORIGINAL SURVEY
 SURVEYED PLOTTED
 NOTE BOOK TEMPLATE
 NO. AREAS CHECKED

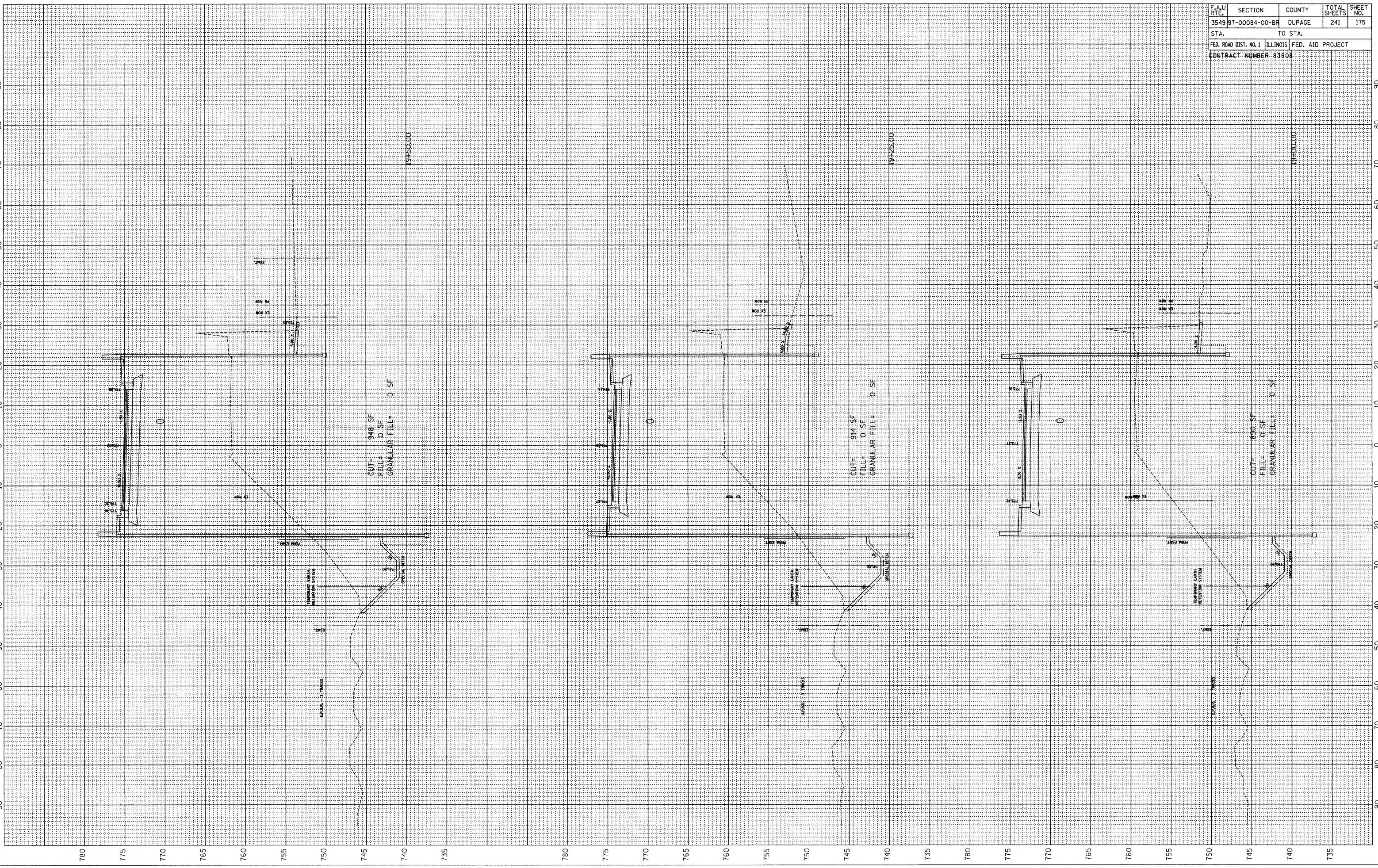
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3549	97-00084-00-8R	DUPAGE	241	174
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				



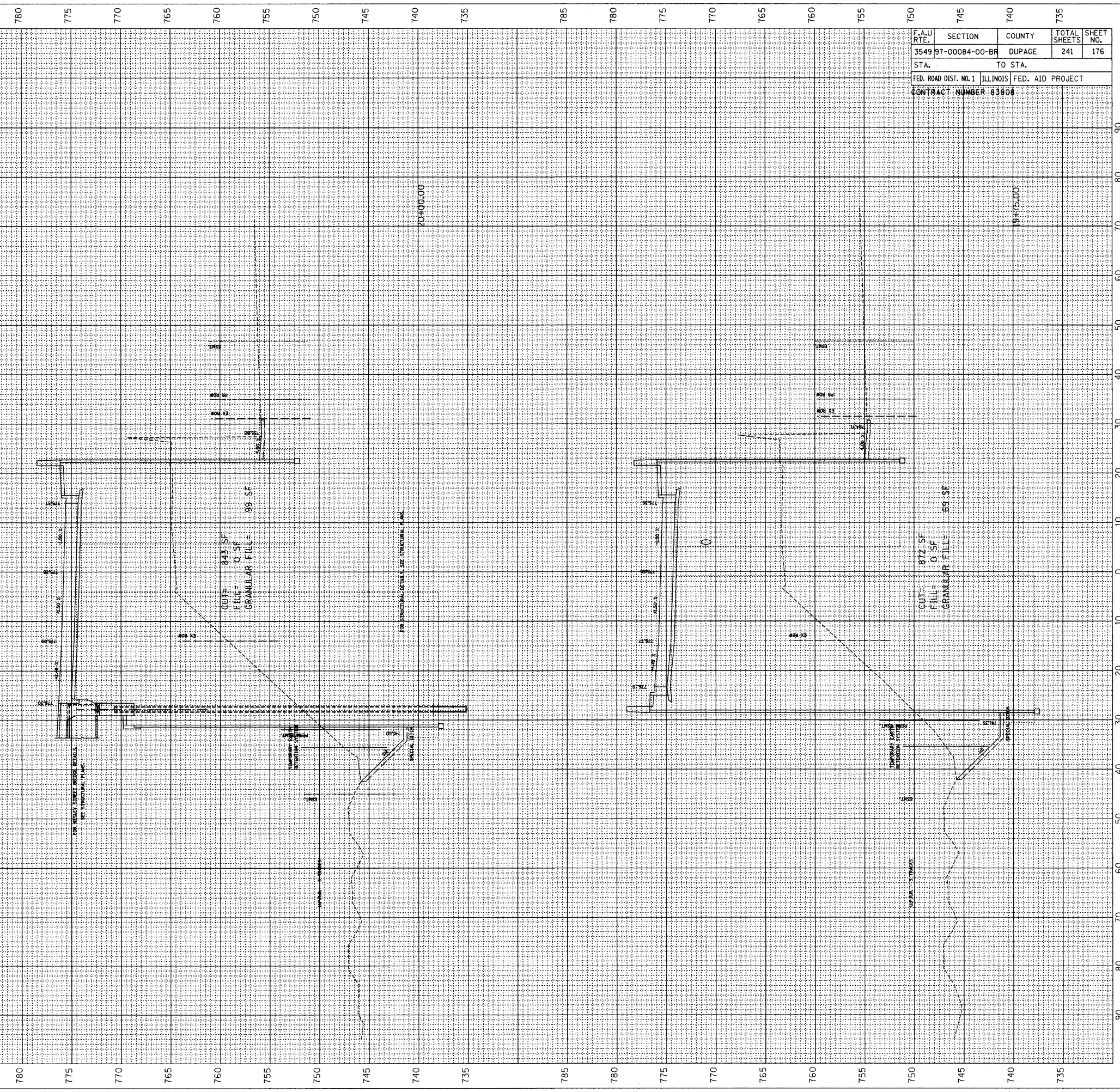
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3549	97-00084-00-BR	DUPAGE	241	175
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER 83908				

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED



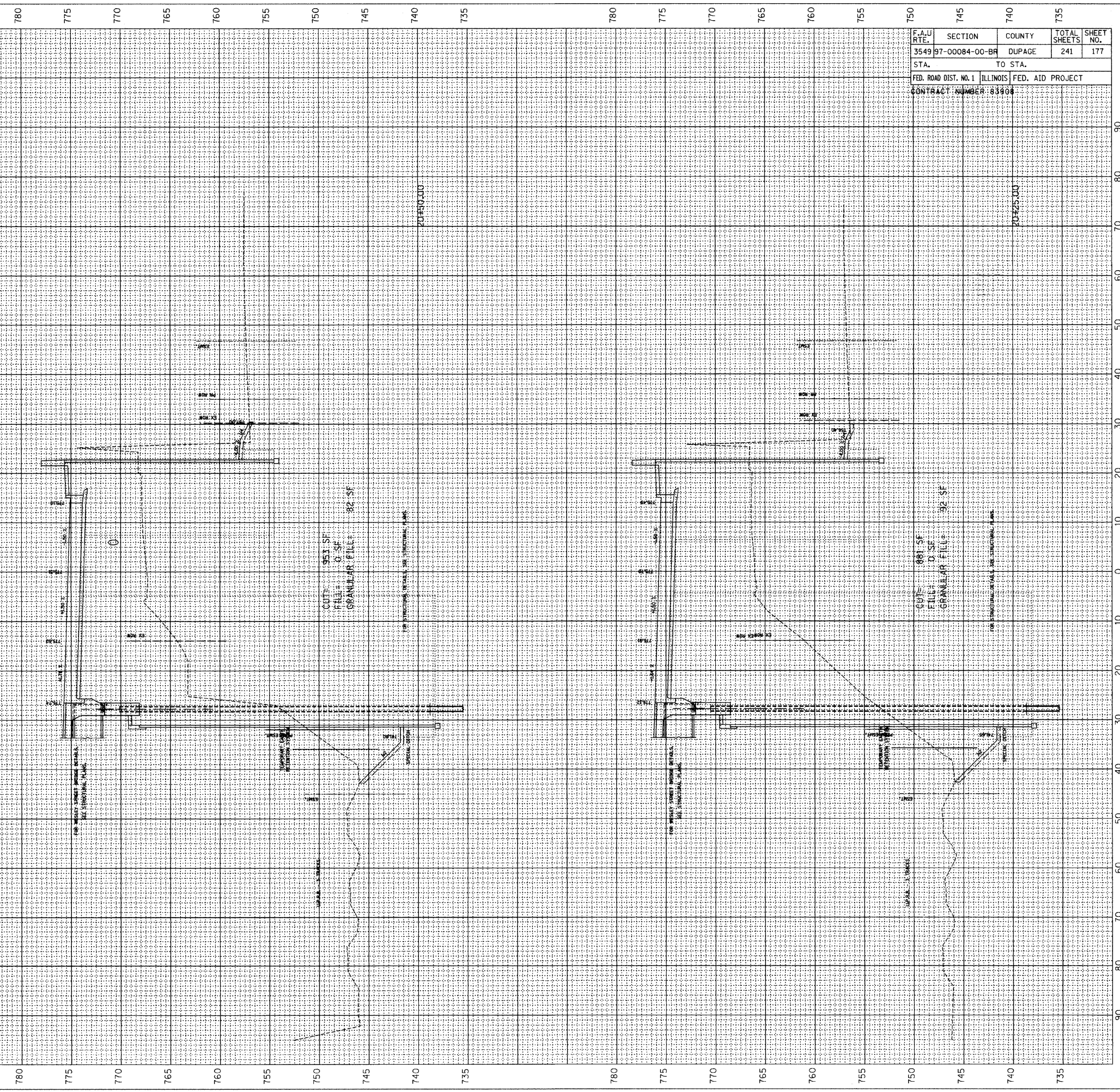
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3549	97-00084-00-BR	DUPAGE	241	176
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER 83908				



ORIGINAL SURVEY	SURVEYED	PLOTTED	TEMPERATURE	AREAS CHECKED
NO.	NO.	NO.	NO.	NO.

ORIGINAL SURVEY	SURVEYED	PLOTTED	TEMPERATURE	AREAS CHECKED
NO.	NO.	NO.	NO.	NO.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3549	97-0084-00-BR	DUPAGE	241	177
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				



MANCHESTER ROAD

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

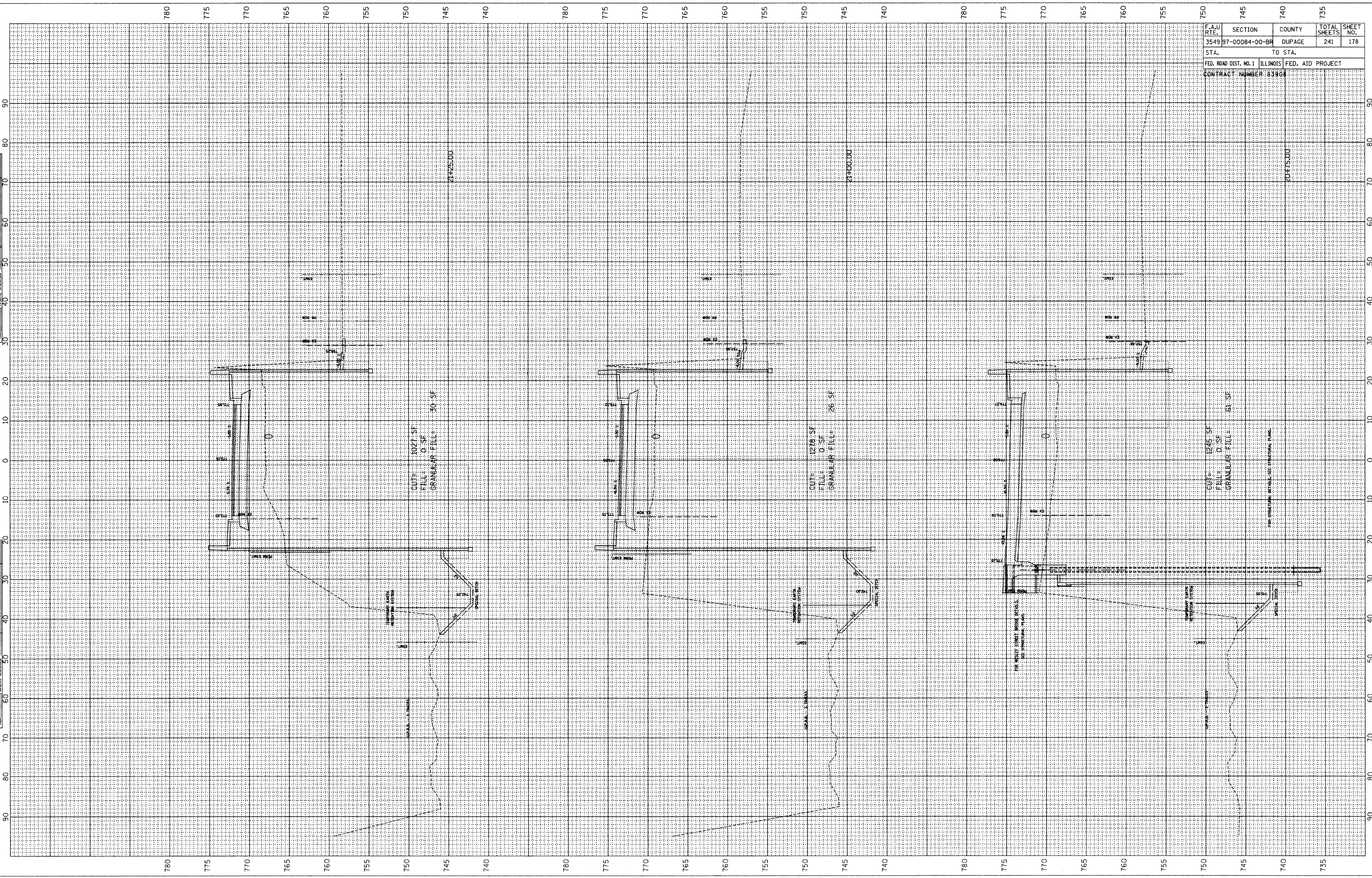
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

ORIGINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED

SURVEYED PLOTTED TEMPLATE AREAS CHECKED

ORIGINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED

SURVEYED PLOTTED TEMPLATE AREAS CHECKED

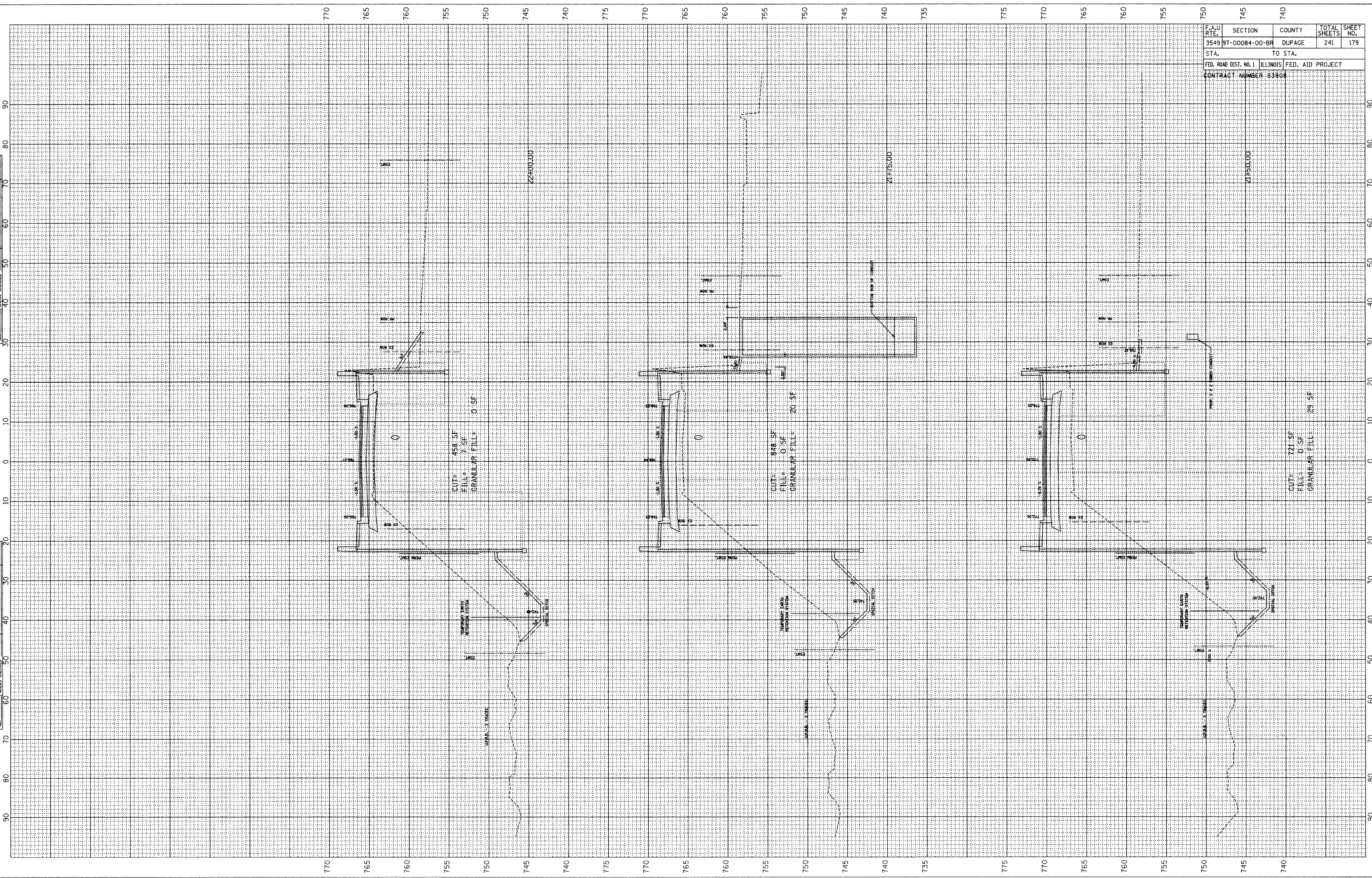


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3549	97-00084-00-BB	DUPAGE	241	178
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 63908				

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3549	97-00084-00-BF	DUPAGE	241	179
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				

NO.	40
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	

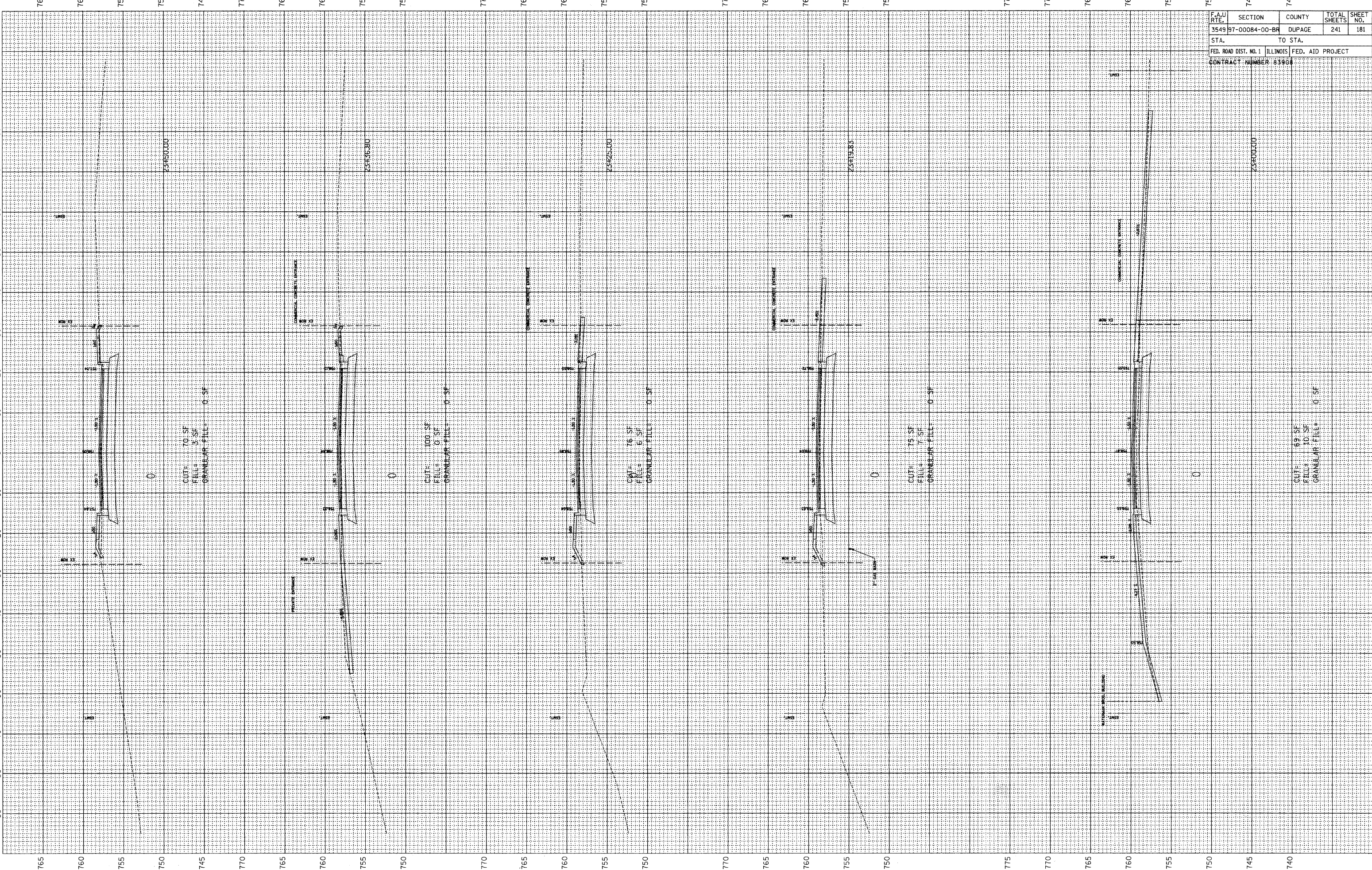
NO.	40
ORIGINAL SURVEY	
PLOTTED	
TEMPLATE	
AREAS CHECKED	



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3549	97-00084-00-BB	DUPAGE	241	181
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				

NO.	40	50	60	70	80	90
SURVEYED						
PLOTTED						
REPLACED						
AREAS CHECKED						

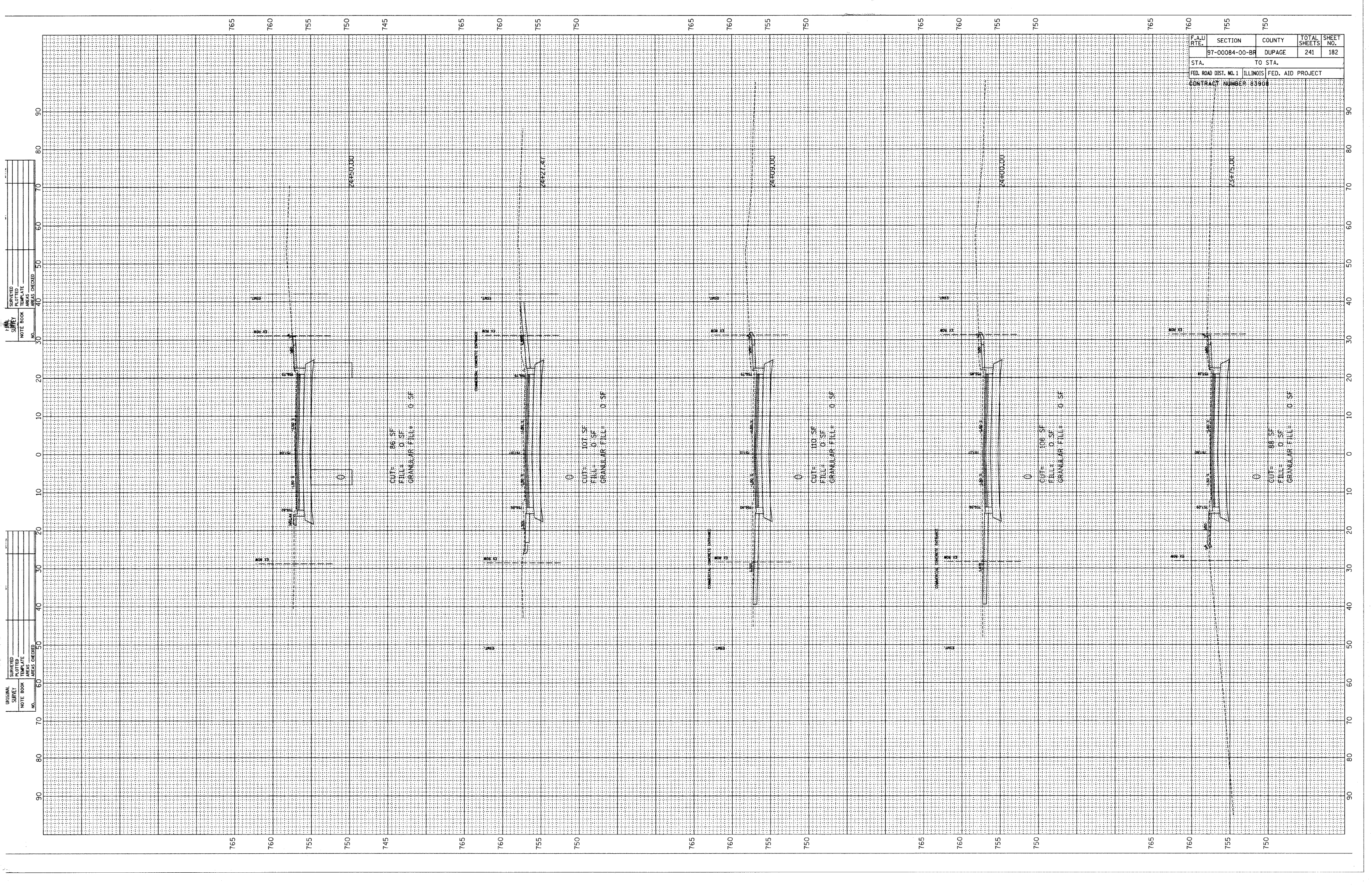
NO.	40	50	60	70	80	90
SURVEYED						
PLOTTED						
REPLACED						
AREAS CHECKED						



SURVEYED
 PLOTTED
 AREA
 NO.

SURVEYED
 PLOTTED
 AREA
 NO.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	97-00084-00-BR	DUPAGE	241	182
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				



CUT= 86 SF
 FILL= 0 SF
 GRANULAR FILL= 0 SF

CUT= 107 SF
 FILL= 0 SF
 GRANULAR FILL= 0 SF

CUT= 110 SF
 FILL= 0 SF
 GRANULAR FILL= 0 SF

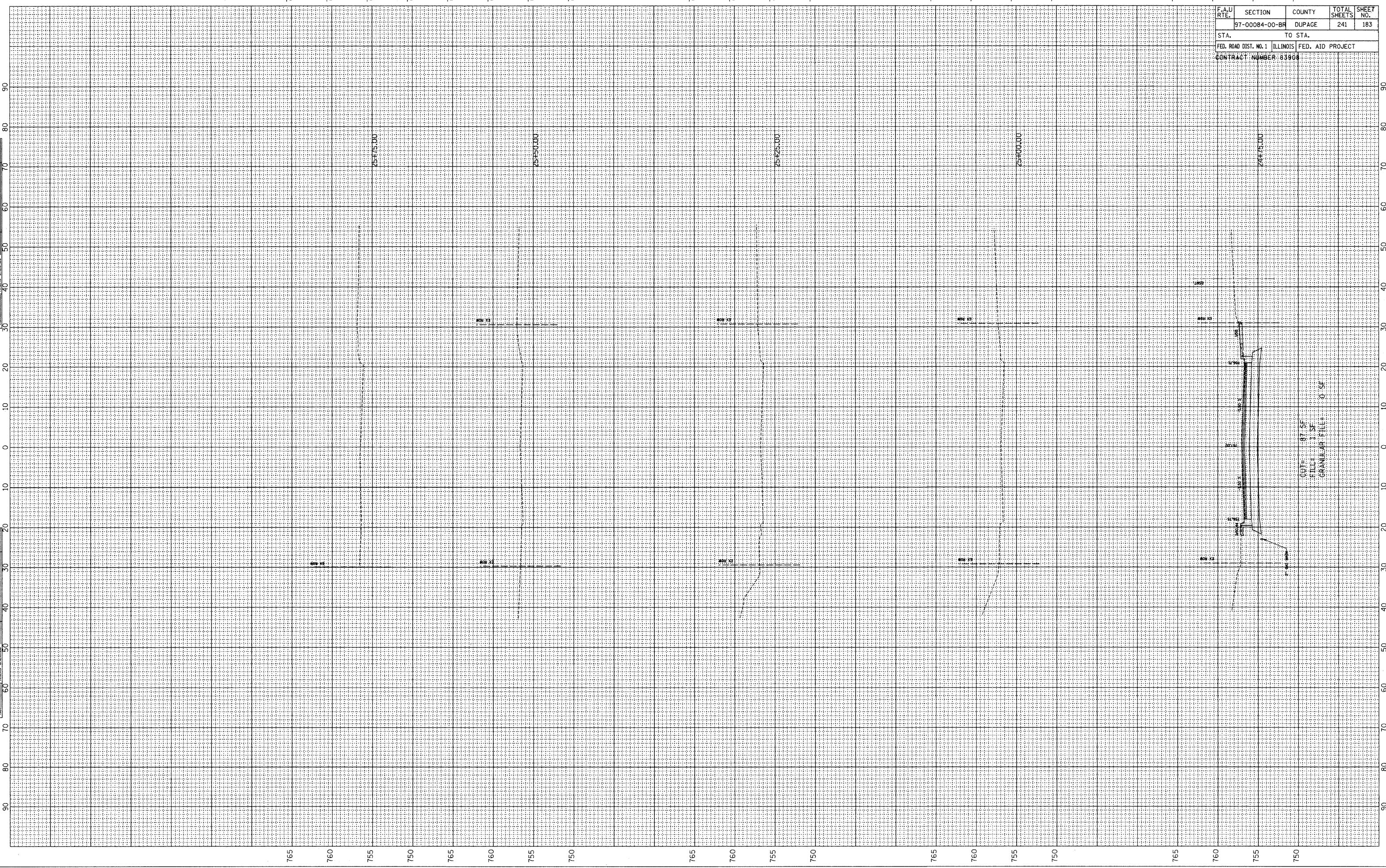
CUT= 108 SF
 FILL= 0 SF
 GRANULAR FILL= 0 SF

CUT= 88 SF
 FILL= 0 SF
 GRANULAR FILL= 0 SF

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
97-00084-00-BF	DUPAGE		241	183
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				

FINAL SURVEY	SURVEYED
NO. _____	PLOTTED
	REMARKS
	AREAS CHECKED

ORIGINAL SURVEY	SURVEYED
NO. _____	PLOTTED
	REMARKS
	AREAS CHECKED



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BF	DUPAGE	241	184
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83808				

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

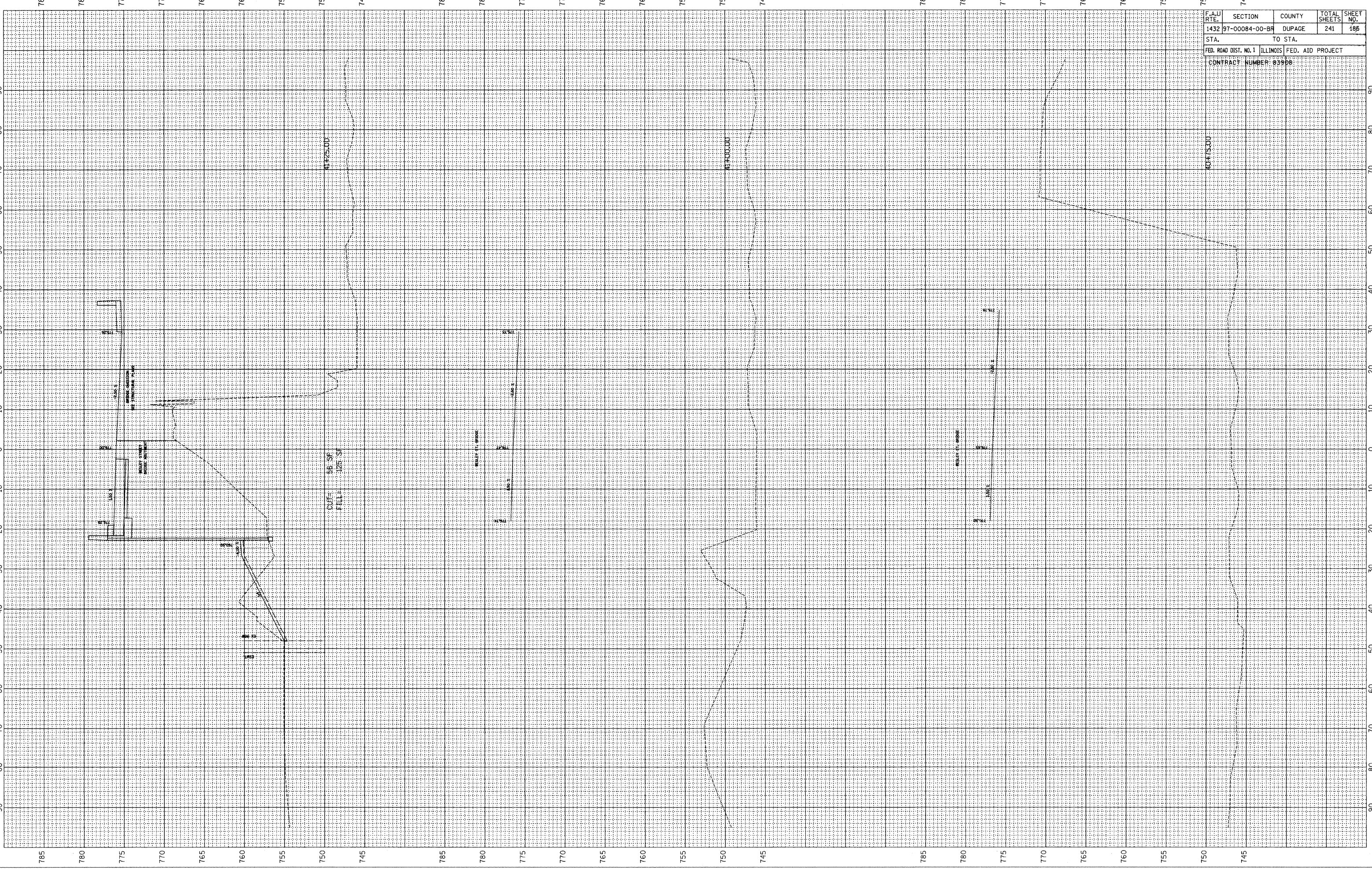


WESLEY STREET

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BF	DUPAGE	241	186
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83808				

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED



WESLEY STREET

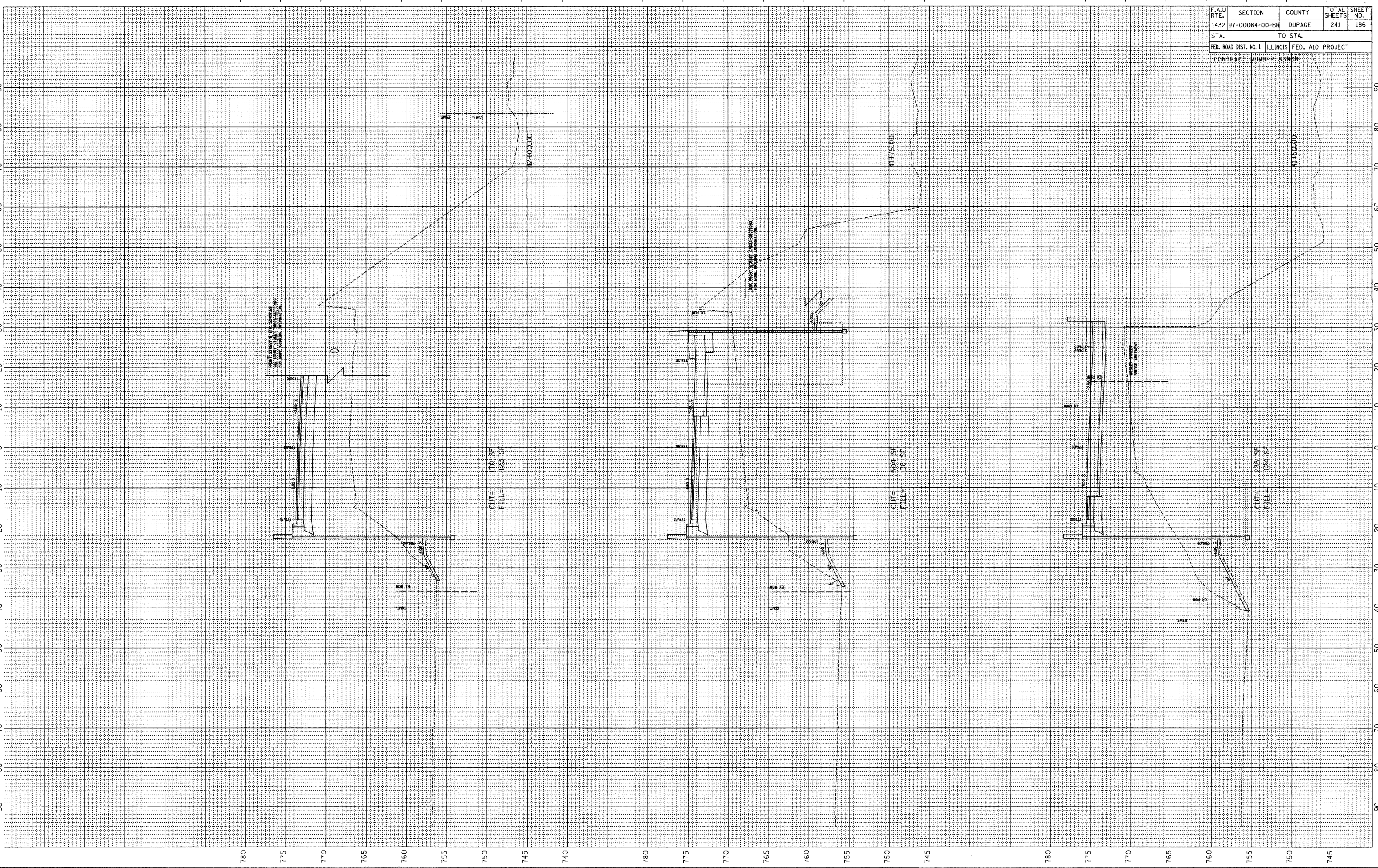
ORIGINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED

NO. _____

FINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED

NO. _____

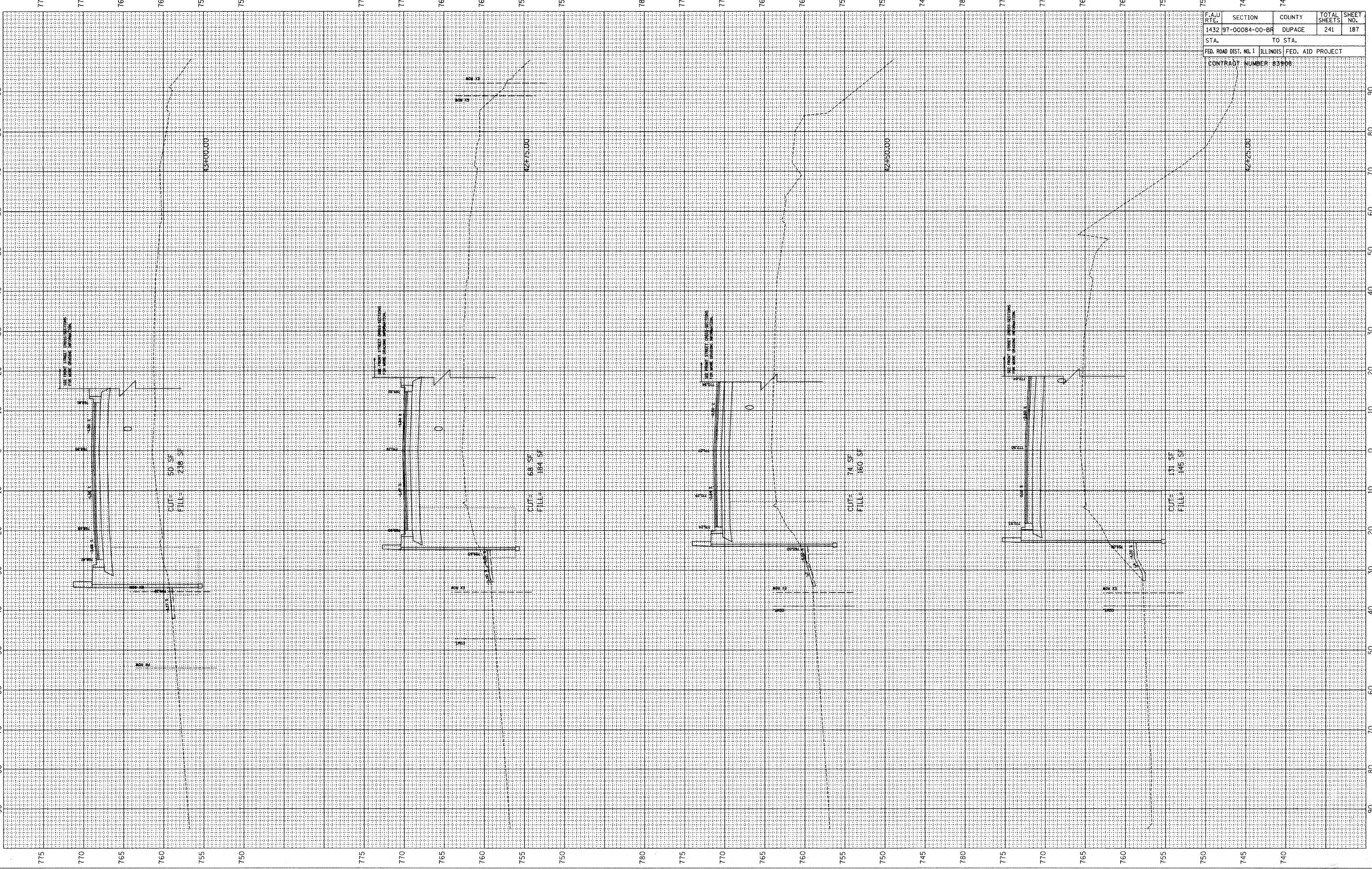
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BF	DUPAGE	241	186
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83808				



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-0084-00-BF	DUPAGE	241	187
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				

FINAL SURVEYED PLOTTED TEMPLATE AREAS CHECKED

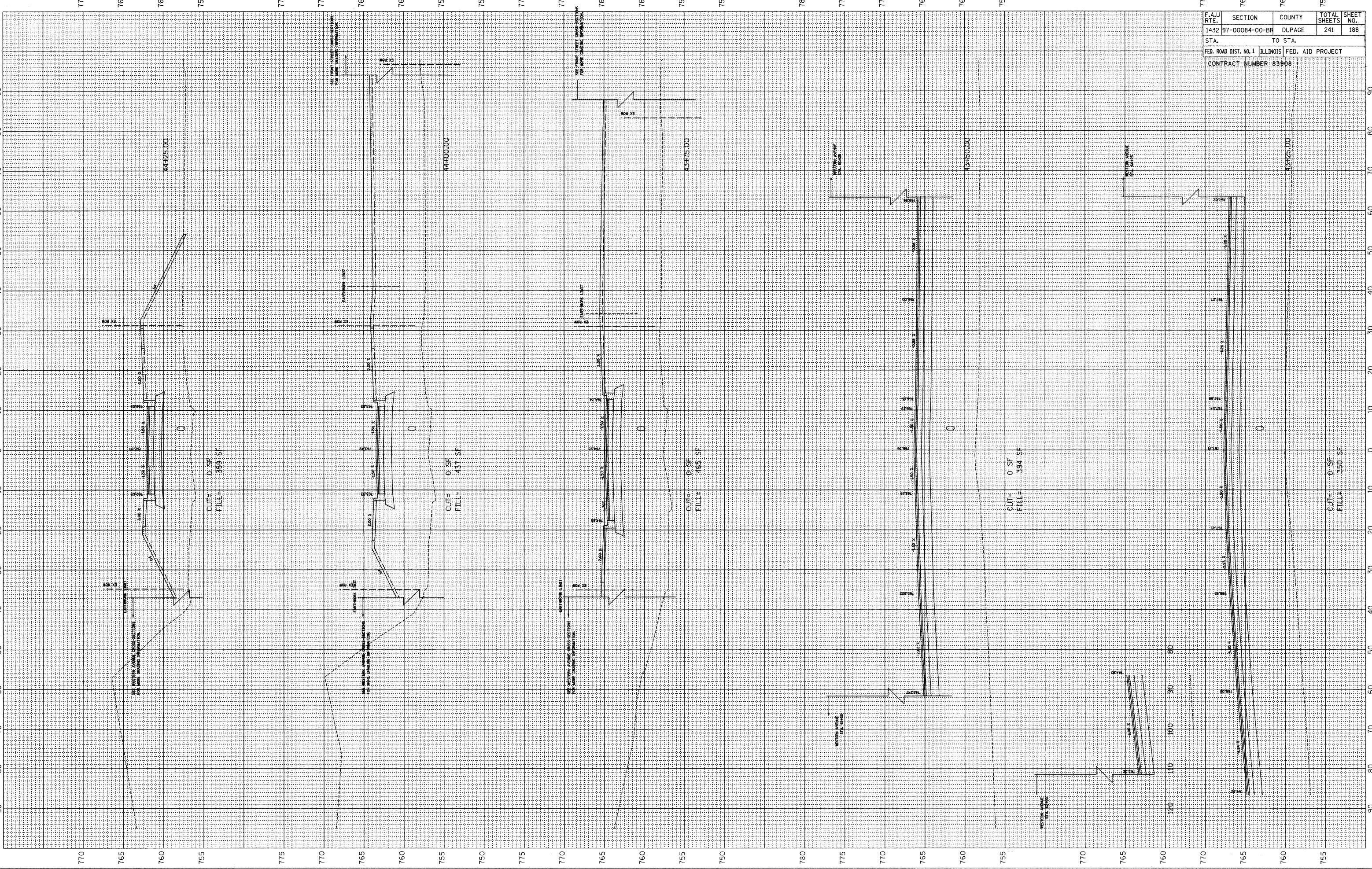
ORIGINAL SURVEYED PLOTTED TEMPLATE AREAS CHECKED



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-0084-00-BF	DUPAGE	241	188
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				

ORIGINAL SURVEY	SURVEYED
PLOTTED	PLOTTED
NOTE BOOK	NOTE BOOK
AREAS CHECKED	AREAS CHECKED

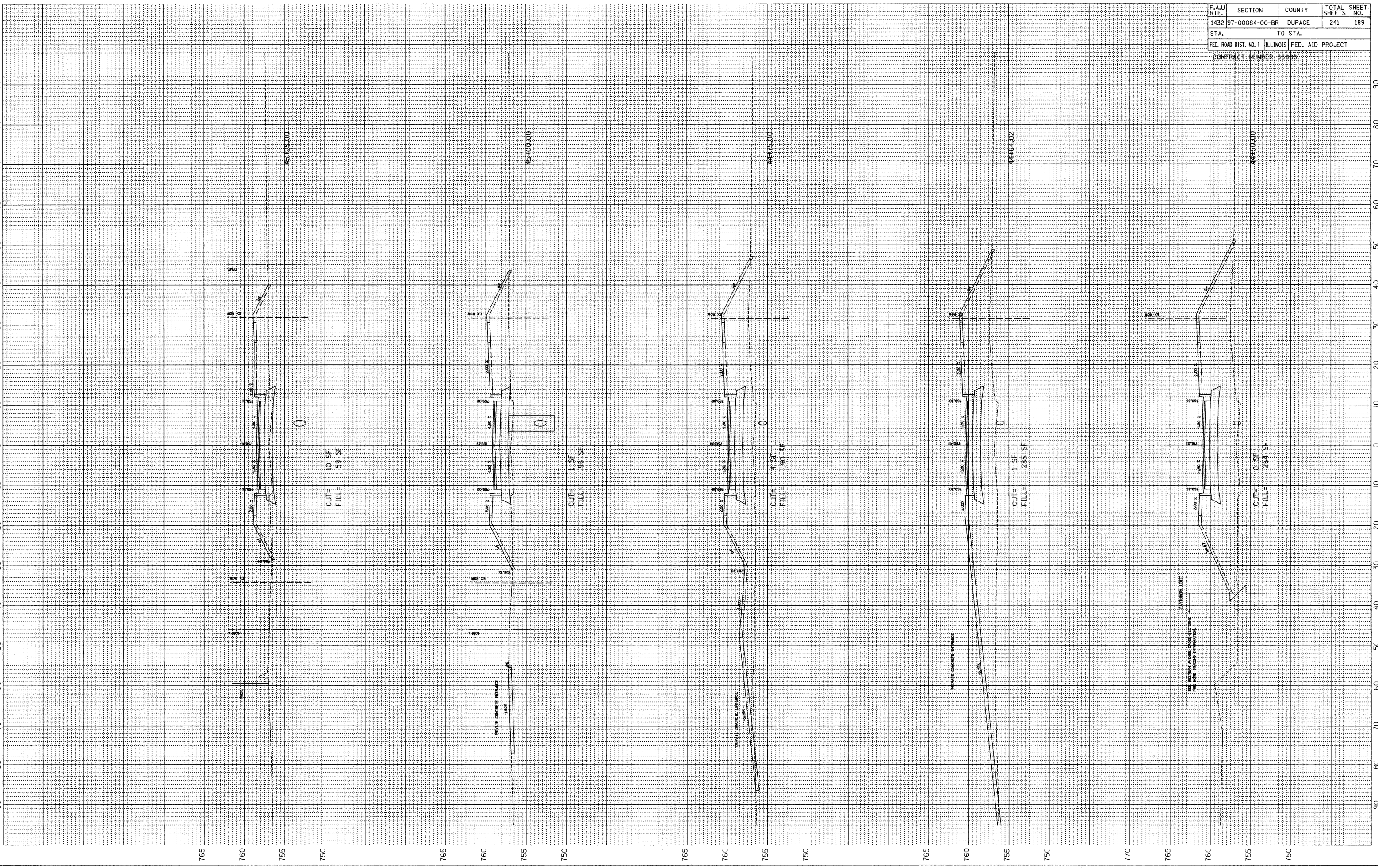
ORIGINAL SURVEY	SURVEYED
PLOTTED	PLOTTED
NOTE BOOK	NOTE BOOK
AREAS CHECKED	AREAS CHECKED



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BB	DUPAGE	241	189
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	FLOTTED
NO.	TEMPLATE
	AREAS CHECKED

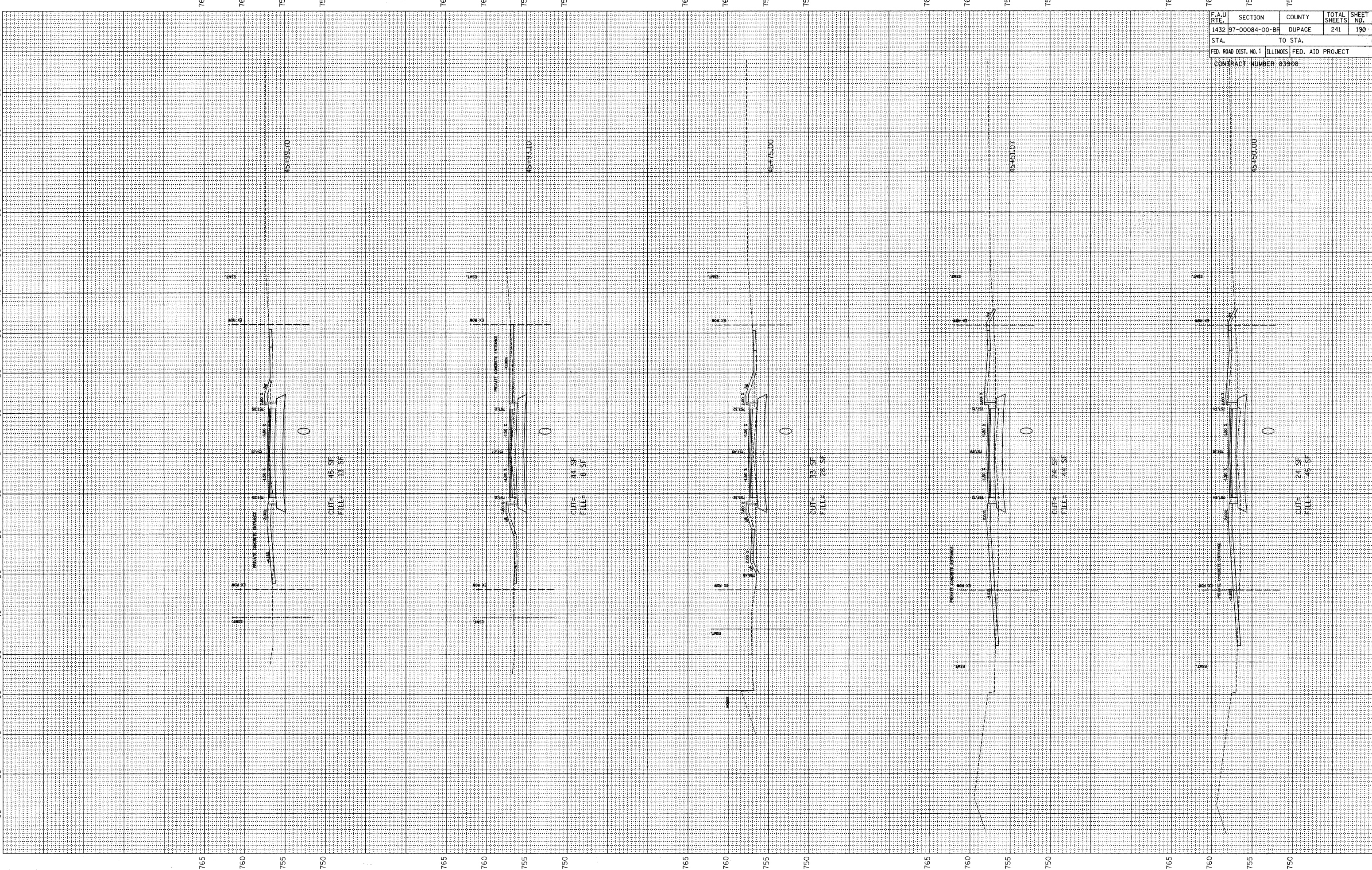
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	FLOTTED
NO.	TEMPLATE
	AREAS CHECKED



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BF	DUPAGE	241	190
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER 83808				

NO.	AREAS CHECKED	REPLATE	PLOTTED	SURVEYED

NO.	AREAS CHECKED	REPLATE	PLOTTED	SURVEYED



WESLEY STREET

ORIGINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED

NO. _____

NO. _____

NO. _____

NO. _____

ORIGINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED

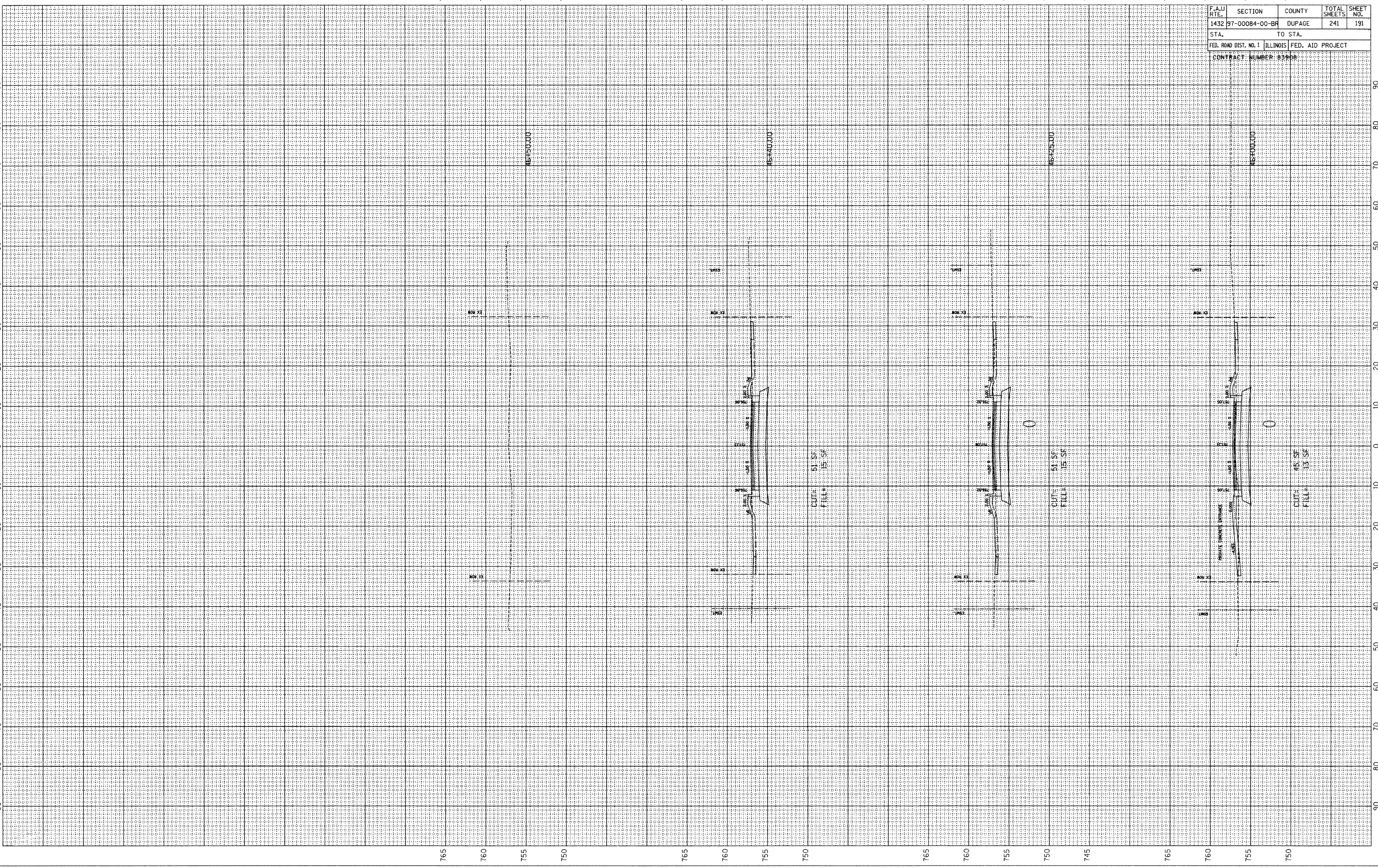
NO. _____

NO. _____

NO. _____

NO. _____

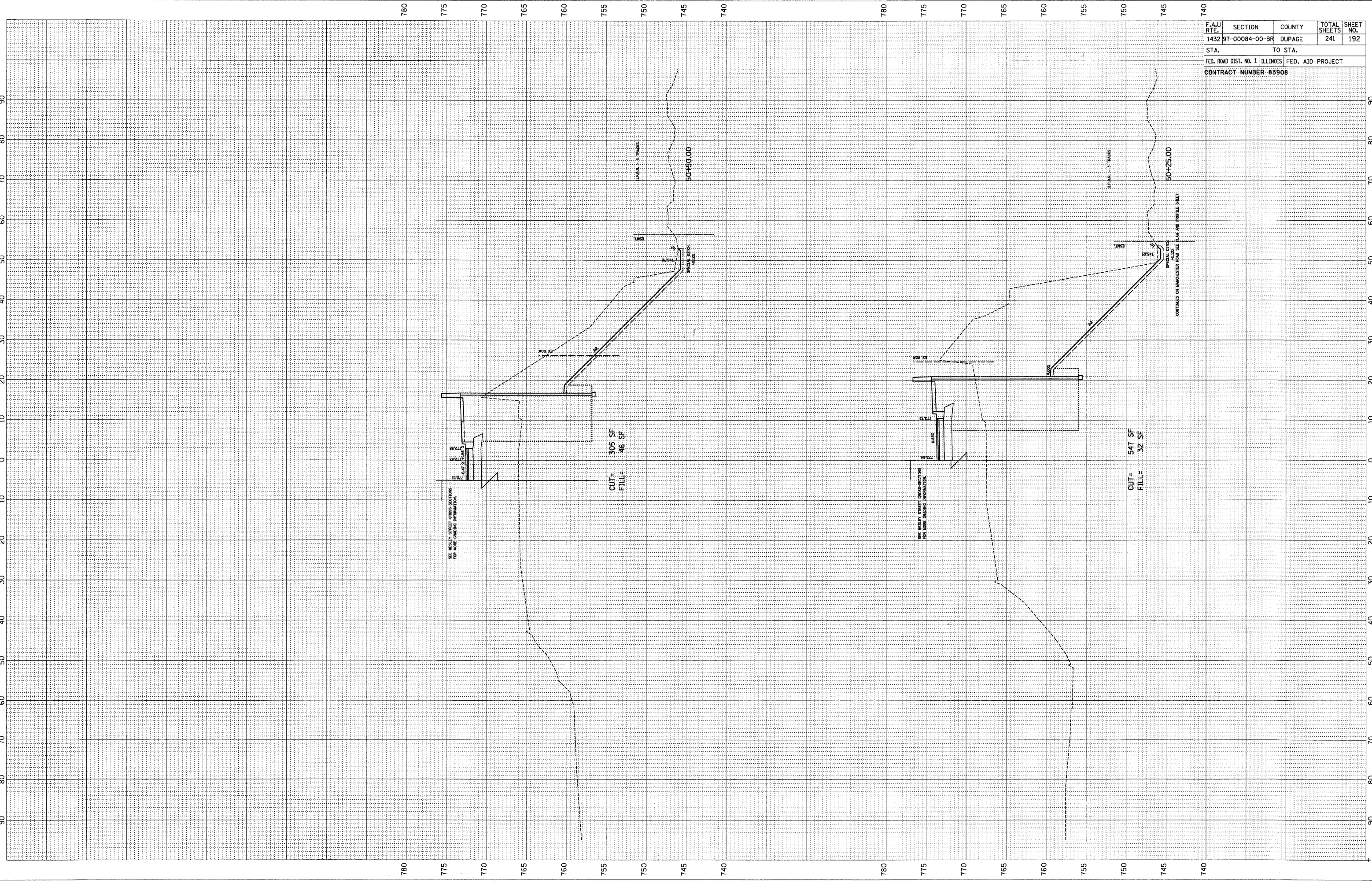
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BF	DUPAGE	241	191
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				



FINAL SURVEY	DATE
SURVEYED	BY
NOTE BOOK	
TEMPLATE	
AREAS	
CHECKED	

ORIGINAL SURVEY	DATE
SURVEYED	BY
NOTE BOOK	
TEMPLATE	
AREAS	
CHECKED	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BR	DUPAGE	241	192
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER 83908				

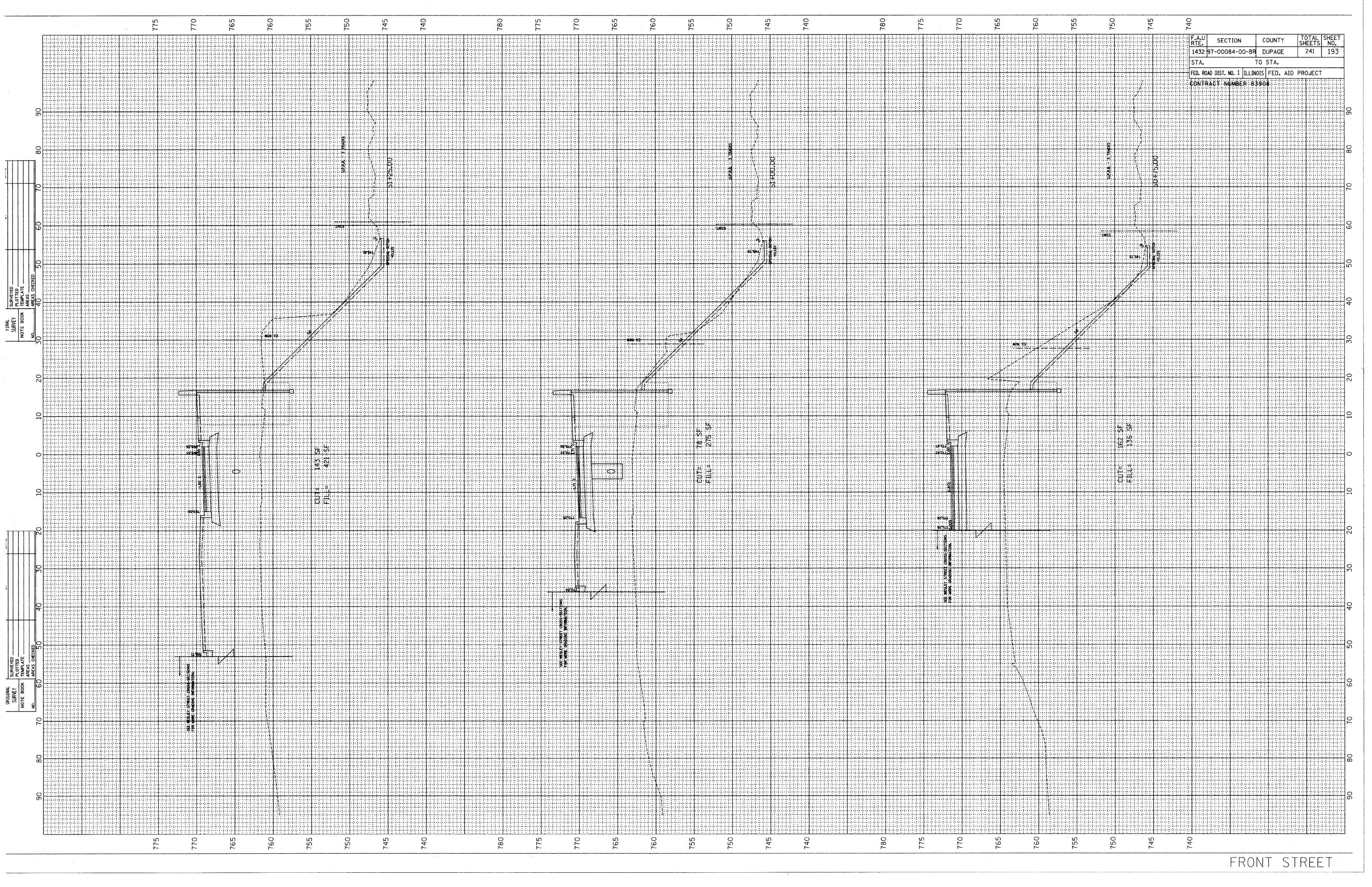


FRONT STREET

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BR	DUPAGE	241	193
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				

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

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

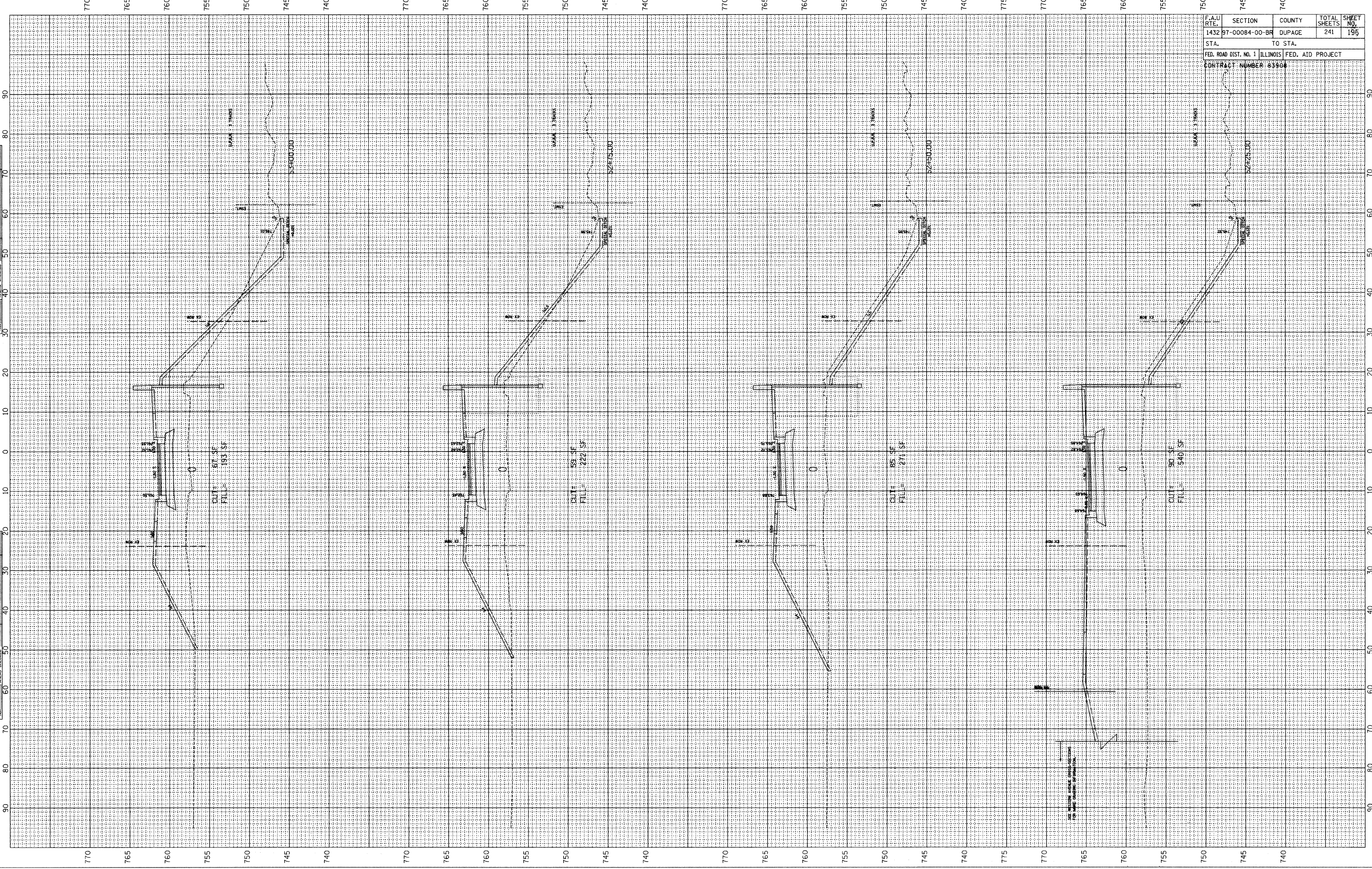


FRONT STREET

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BR	DUPAGE	241	196
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				

FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	AREAS CHECKED

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	AREAS CHECKED



CUT = 87 SF
FILL = 193 SF

CUT = 83 SF
FILL = 222 SF

CUT = 85 SF
FILL = 271 SF

CUT = 80 SF
FILL = 340 SF

SEE SECTION 111.16 FOR
FRONT STREET IMPROVEMENT

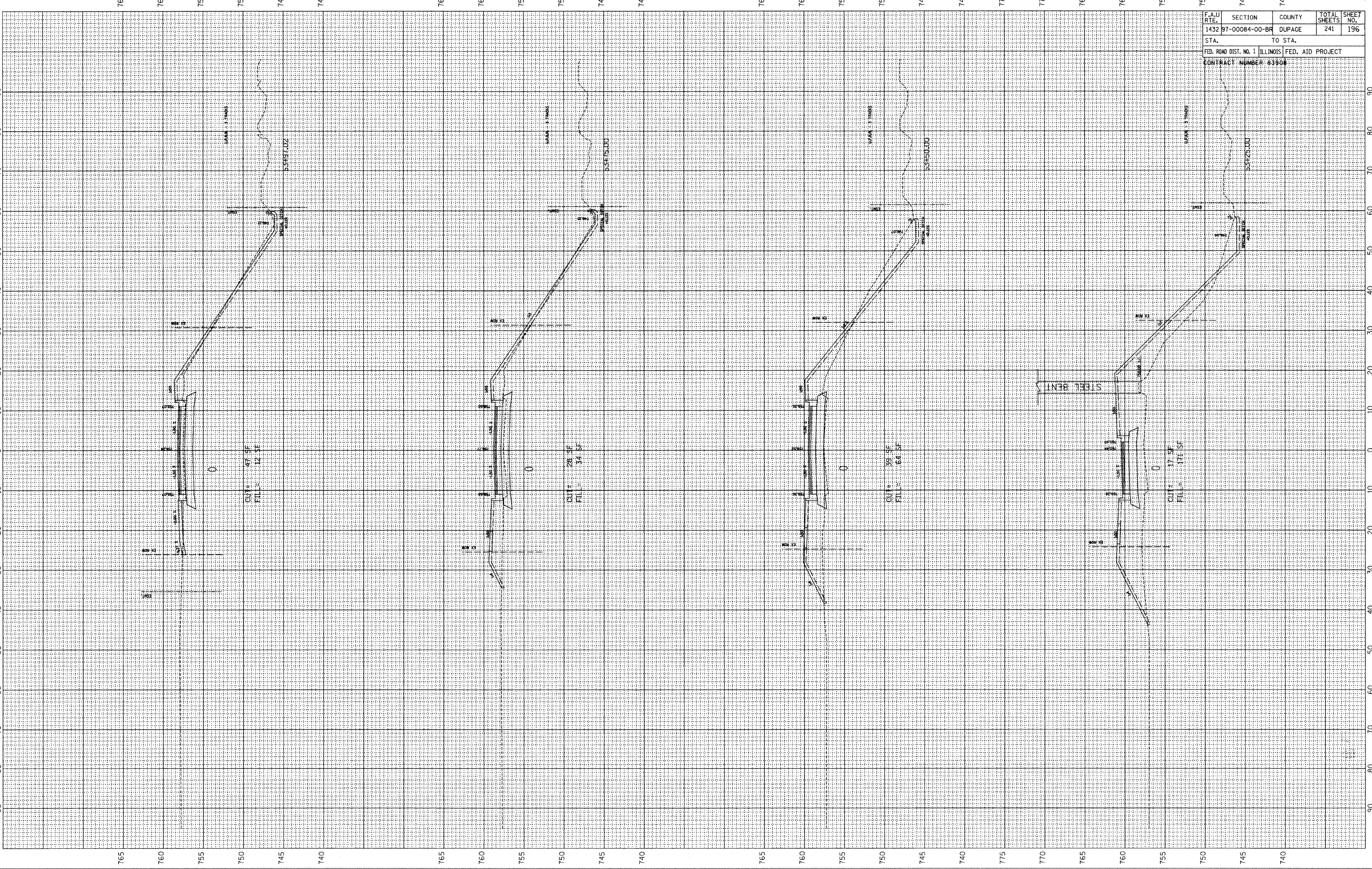
FRONT STREET

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BR	DUPAGE	241	196
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

CONTRACT NUMBER: 83908

NO.	DATE	DESCRIPTION

NO.	DATE	DESCRIPTION

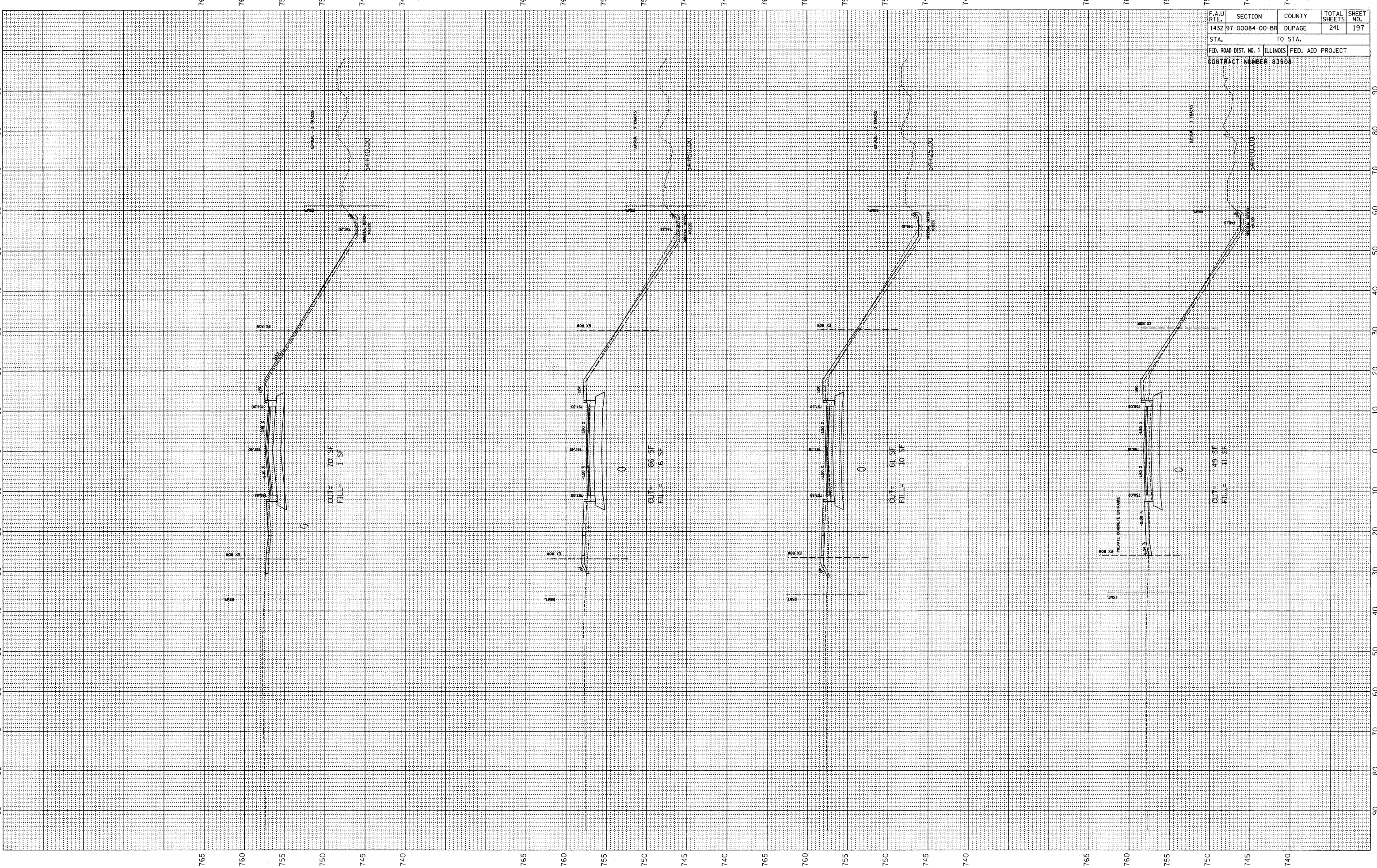


FRONT STREET

F.A.U. RTE. 1432	SECTION 97-00084-00-BR	COUNTY DUPAGE	TOTAL SHEETS 241	SHEET NO. 197
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
CONTRACT NUMBER: 83408				

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

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

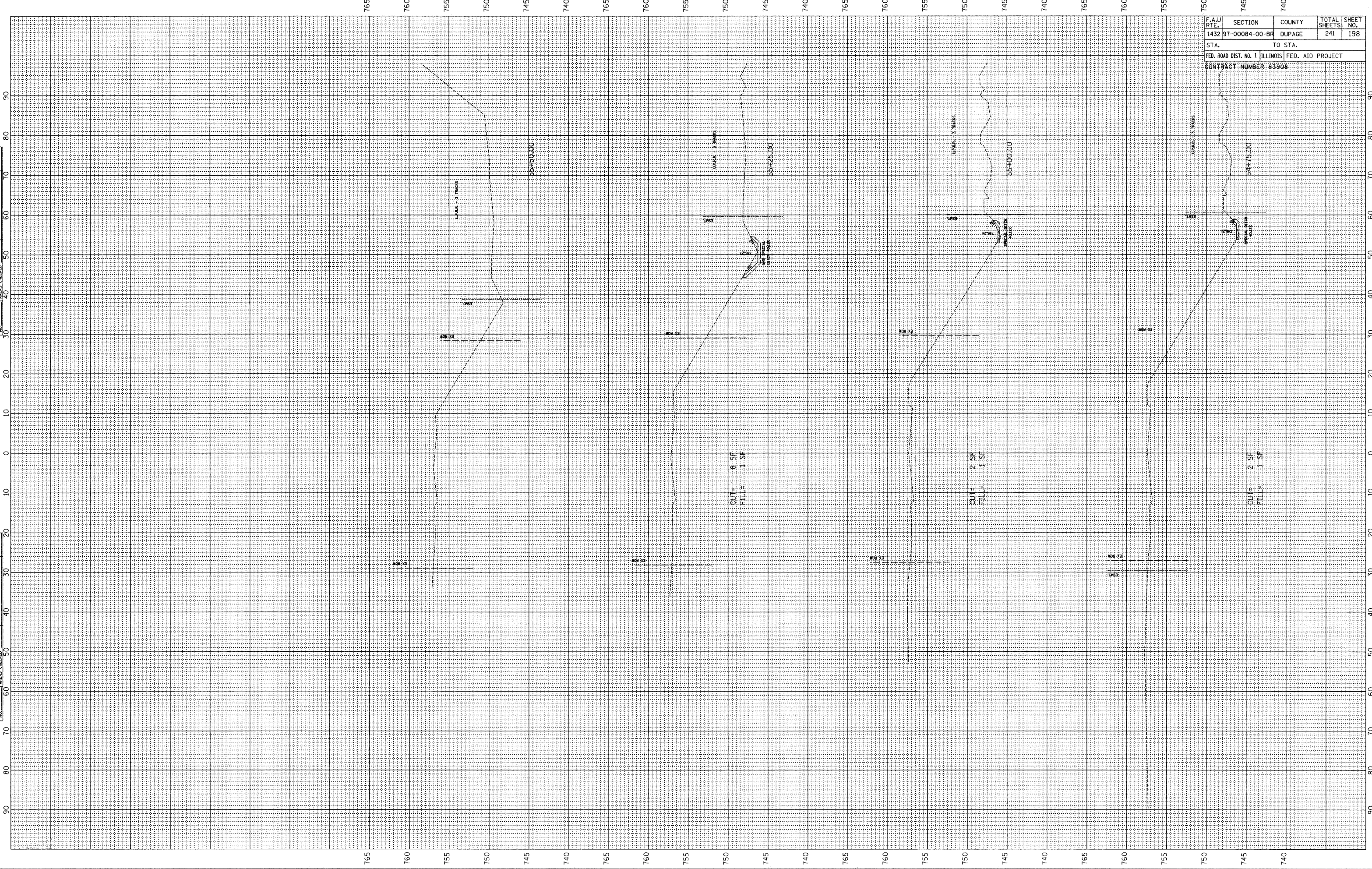


FRONT STREET

FINAL SURVEY SURVEYED PLOTTED NOTE BOOK TEMPLATE AREAS CHECKED

ORIGINAL SURVEY SURVEYED PLOTTED NOTE BOOK TEMPLATE AREAS CHECKED

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BR	DUPAGE	241	198
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				

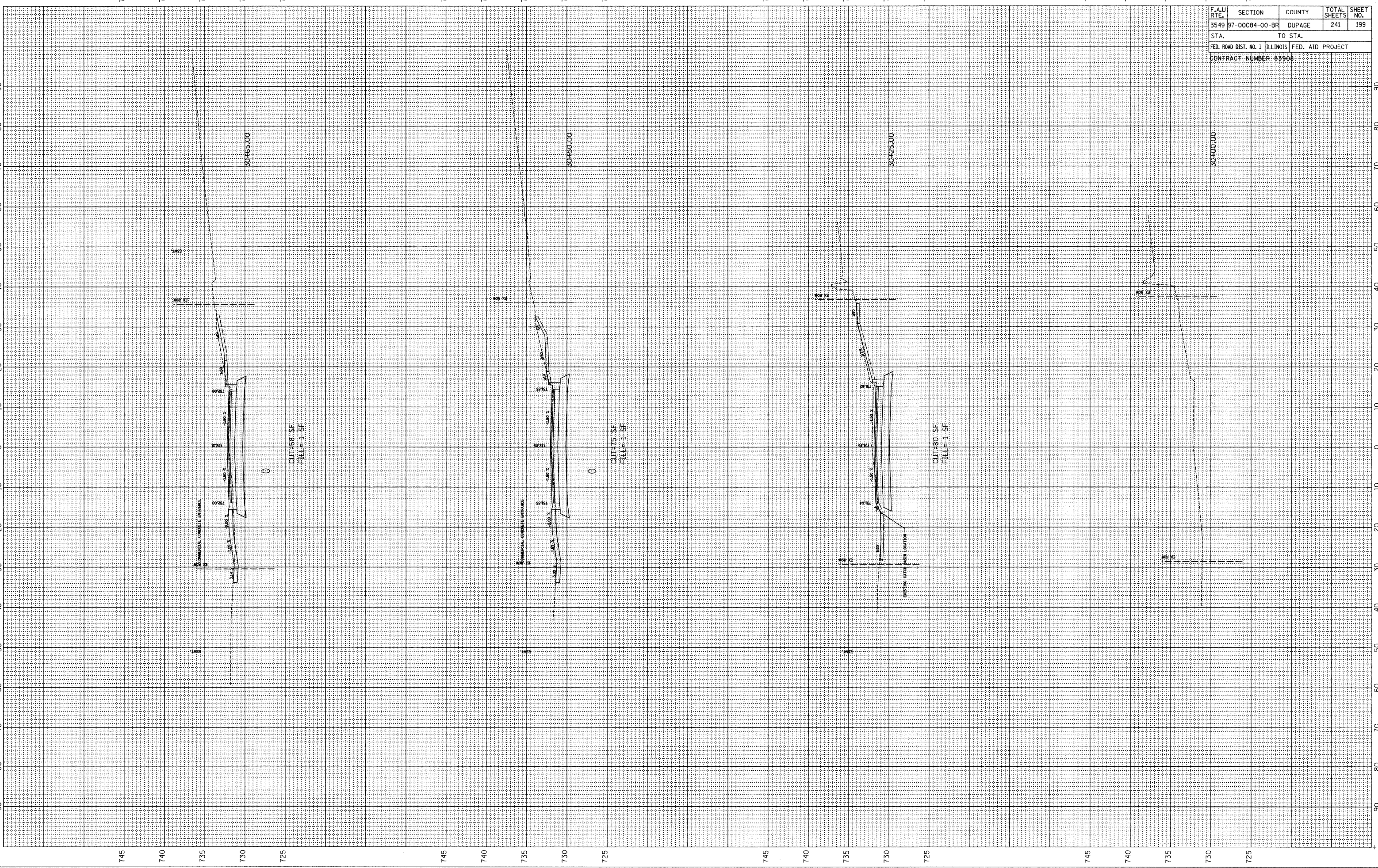


FRONT STREET

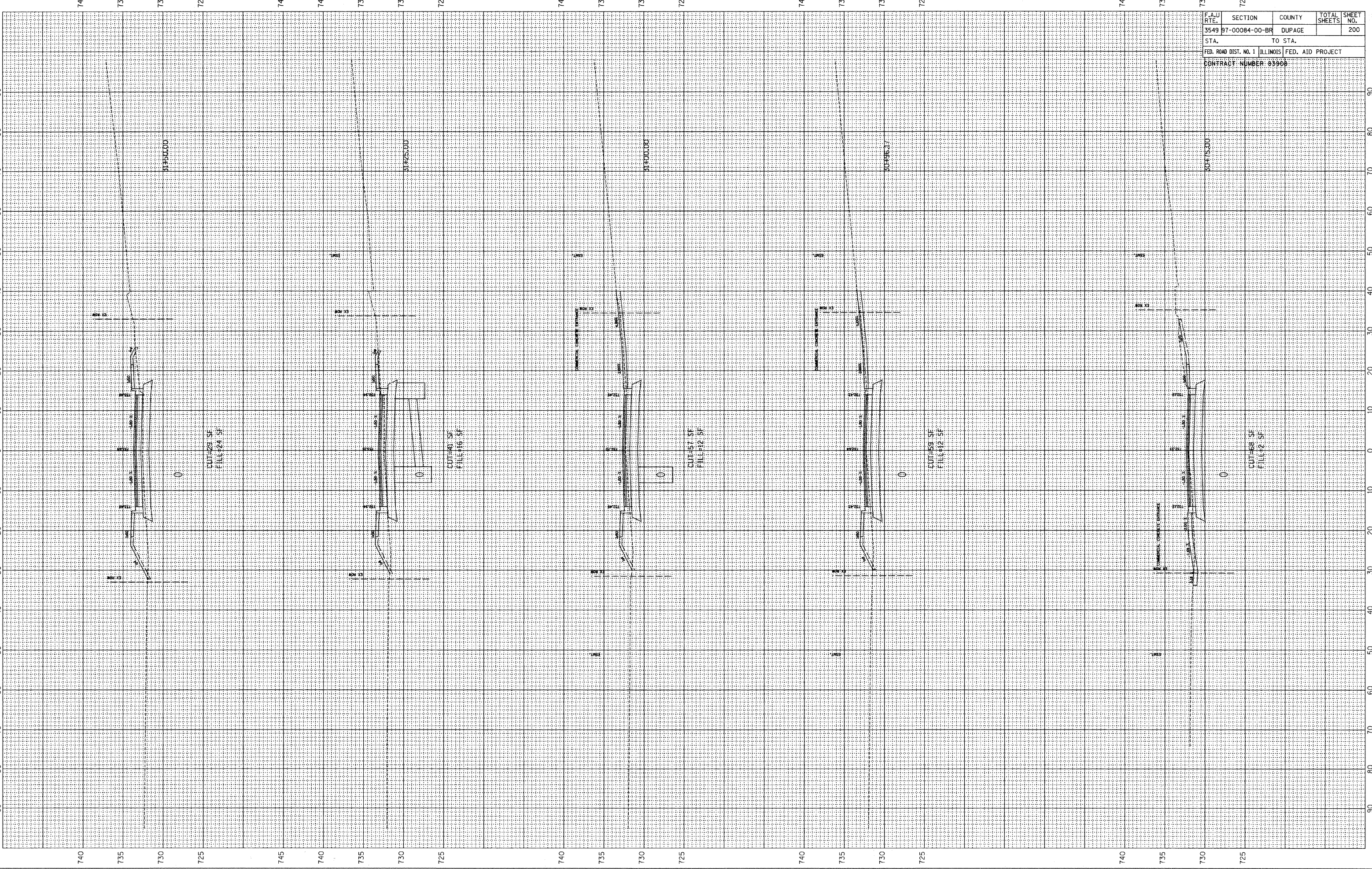
ORIGINAL SURVEY	SURVEYED
PLOTTED	PLOTTED
TEMPLATE	TEMPLATE
NOTE BOOK	NOTE BOOK
AREAS CHECKED	AREAS CHECKED
NO.	NO.

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3549	97-00084-00-BF	DUPAGE	241	199
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 82908				



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3549	87-0084-00-BR	DUPAGE		200
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 85908				



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

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