CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	1

11-7-08 Letting, Item 058

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

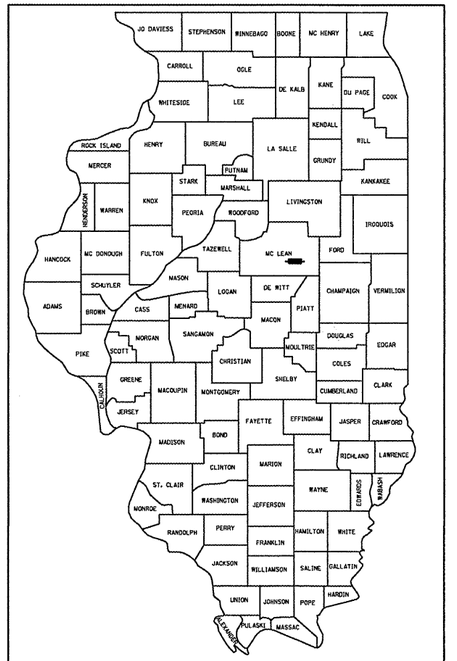
PROPOSED HIGHWAY PLANS

FAU ROUTE 6406 (US ROUTE 150)
SECTION 1(BR-2)
MCLEAN COUNTY
C-95-038-06
BRIDGE REPLACEMENT
KICKAPOO CREEK
NW OF DOWNS

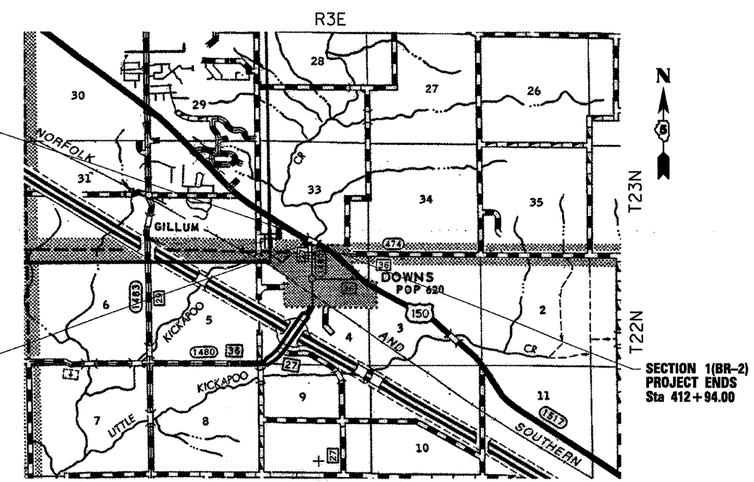
PROJECT ACM-ACBRM-6406(001)

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4

D-95-037-06



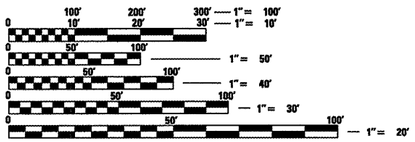
LOCATION OF SECTION INDICATED THUS:- ■



LOCATION MAP

GROSS LENGTH OF PROJECT = 1203 FEET = 0.228 MILES

MINOR ARTERIAL (URBAN)
ADT=6900 (2006)



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

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

CONTRACT NO. 70517

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 12/12 20 07
Joseph E. Crowe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
October 3, 20 08
Eric E. Harm /KD
Interim ENGINEER OF DESIGN AND ENVIRONMENT
October 3, 20 08
Christine M. Reed /KD
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

BLANK, WESSELINK, COOK & ASSOCIATES
ENGINEERS - CONSULTANTS
DECATUR, ILLINOIS

STATE OF ILLINOIS CHARLES W. GUTHRIE, JR. 062-050644 LICENSED PROFESSIONAL ENGINEER

Charles W. Guthrie, Jr.
CHARLES W. GUTHRIE, JR., P.E.
DATE August 29 20 07
EXPIRES NOVEMBER 30, 2007

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PROJECT ENGINEER: NANCY FASIG (217) 465-4181
CONSULTANT LIASON: JASON W. STULTS

CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HIGHWAY STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS & PATTERNS
001001-01	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-04	TEMPORARY EROSION CONTROL SYSTEMS
420001-07	PAVEMENT JOINTS
420401-06	BRIDGE APPROACH PAVEMENT
421001-02	BAR REINFORCEMENT FOR CRC PAVEMENT
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-02	NAME PLATE FOR BRIDGES
542301-01	PRECAST REINFORCED CONCRETE FLARED END SECTION
542311	GRATING FOR CONCRETE FLARED END SECTION
601101	CONCRETE HEADWALL FOR PIPE DRAIN
602301-01	INLET TYPE A
602401-01	MANHOLE TYPE A
602406-02	MANHOLE TYPE A 1.8M (6') DIAMETER
602601-01	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
602701-01	MANHOLE STEPS
604001-02	FRAME AND LIDS TYPE 1
604011-03	FRAME AND GRATE TYPE 3V
604026-01	FRAME AND GRATE TYPE 6
606001-03	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606006-01	OUTLET FOR CONCRETE CURB AND GUTTER, TYPE B-15.60 (B-6.24)
630001-07	STEEL PLATE BEAM GUARDRAIL
630301-04	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-06	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-01	REFLECTOR MARKER AND MOUNTING DETAILS
666001	RIGHT-OF-WAY MARKERS
667101	PERMANENT SURVEY MARKERS
701006-02	OFF-RD OPERATIONS, 2L, 2W, 4.5m (15') TO 600mm (24") FROM PAVEMENT EDGE
701311-02	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701901	TRAFFIC CONTROL DEVICES
780001-01	TYPICAL PAVEMENT MARKINGS

INDEX OF SHEETS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

HIGHWAY STANDARDS AND INDEX OF SHEETS

SCALE: VERT. HORIZ.
DATE
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PLOT DATE = 8/20/2008
FILE NAME = c:\projects\d503706 (v8)\11.01.2007 submittal\indexofsheets.dgn
PLOT SCALE = 42.3629 ' / IN.
USER NAME = stoltejw

GENERAL NOTES

1. G.N. 100
ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

2. G.N. 105.09A
ALL ELEVATIONS SHOWN IN THE PLANS ARE BASED ON NORTH AMERICAN DATUM OF 1988 (NAVD 88).

3. G.N. 107.31
UTILITY LINES WERE PLOTTED FROM INFORMATION FURNISHED BY THE VARIOUS UTILITY COMPANIES INVOLVED (QUALITY LEVEL C &/OR QUALITY LEVEL D) AND THE ACCURACY SHOULD BE CONSIDERED APPROXIMATE ONLY.

   UTILITY COMPANIES MAY BE ADJUSTING THEIR FACILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL COOPERATE WITH THESE ORGANIZATIONS WHILE THESE ADJUSTMENTS ARE BEING PREFORMED. J.U.L.I.E. - JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS SYSTEM (800) 892-0123.

4. G.N. 202
GRADING SHALL BE DONE BY HAND AROUND LIGHT POLES, UTILITY POLES, SIGN POSTS, SHRUBS, TREES OR OTHER NATURAL OR MAN-MADE OBJECTS WHERE SHALLOW FILLS OR CUTS ARE ADJACENT TO THE ITEMS. IT IS THE INTENT THAT THE LIMITS OF CONSTRUCTION BE SUCH AS TO PRESERVE IN THE ORIGINAL STATE AS MUCH AREA OF TEMPORARY EASEMENTS AS POSSIBLE. THE DECISION AS TO ITEMS TO REMAIN IN PLACE SHALL BE AS DIRECTED BY THE ENGINEER.

   THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

5. G.N. 281
THE RIPRAP GRADATION SHALL BE IN ACCORDANCE WITH THE GRADATION SPECIFIED IN THE PLANS OR, WITH APPROVAL OF THE ENGINEER, A RIPRAP GRADATION MEETING A D50 GREATER THAN OR EQUAL TO 0.80 FEET. D50 IS DEFINED AS THE MEAN ROCK SIZE AS DESCRIBED IN THE FHWA HYDRAULIC ENGINEERING CIRCULARS (HEC 11, HEC 14 AND HEC 15).

   IF GRAVEL IS USED FOR THE BEDDING MATERIAL UNDER RIPRAP, THE GRAVEL SHALL BE CRUSHED AS ALLOWED UNDER ARTICLE 1005.01.

6. G.N. 406
THE QUANTITIES INCLUDED IN THE PLANS FOR HOT-MIX ASPHALT RESURFACING ARE INTENDED TO GIVE THE COVERAGE SHOWN ON THE TYPICAL CROSS SECTIONS. IT IS NOT INTENDED TO INCREASE THE THICKNESS OF THE HOT-MIX ASPHALT MIXTURE IN ORDER TO USE ALL OF THE QUANTITIES INCLUDED IN THE CONTRACT.

7. G.N. 406.05B
ALL LEVELING BINDER OR BINDER SHALL BE GIVEN A FOG COAT OF PRIME BEFORE THE SURFACE COURSE IS PLACED WHEN DIRECTED BY THE ENGINEER.

   THE FOG COAT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER GALLON FOR BITUMINOUS MATERIAL (PRIME COAT) AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

8. GN. 406H
THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

LOCATION(S):	MAINLINE PAVEMENT
MIXTURE USE(S):	SURFACE COURSE, TOP 1½" OF SHOULDERS
AC/PG:	PG 64-22
RAP %: (MAX)	15%
DESIGN AIR VOIDS:	4.0% @ NDES = 50
MIX COMP: (GRADATION)	IL 9.5
FRICTION AGGREGATE:	MIX "D"

LOCATION(S):	MAINLINE PAVEMENT
MIXTURE USE(S):	FLEXIBLE CONNECTOR, BOTTOM 6½" OF SHOULDERS, BINDER
AC/PG:	PG 64-22
RAP %: (MAX)	25%
DESIGN AIR VOIDS:	4.0% @ NDES = 50
MIX COMP: (GRADATION)	IL 19.0
FRICTION AGGREGATE:	N/A

9. G.N. 482
ALL MATERIAL PLACED AS HOT-MIX ASPHALT SHOULDERS SHALL BE COMPACTED TO 94.0 - 98.4 PERCENT OF THE MAXIMUM THEORETICAL DENISTY. THIS REQUIREMENT SHALL APPLY TO IL 9.5L GRADATION SHOULDER MIXES AND OTHER MIXES (BOTTOM LIFT OF SHOULDERS). THIS MAXIMUM DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE OF FOUR TESTS AS IN OTHER QC/QA TESTING. A NUCLEAR GAUGE DENSITY/CORE CORRELATION SHALL BE PERFORMED FOR THE IL 9.5L MIXES AND OTHER MIXES USING STANDARD CORRELATION PROCEDURES.

10. G.N. 542.07
AT LOCATIONS WHERE END SECTIONS ARE SPECIFIED, CAST-IN-PLACE CONCRETE HEADWALLS WILL NOT BE ALLOWED.

11. G.N. 550
BEFORE ORDERING STORM SEWERS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR THE EXACT LENGTHS.

12. G.N. 631
IF THE CONTRACTOR ELECTS TO USE THE ALTERNATE MOUNTING METHOD OF THRU DRILLING THE MOUNTING HOLES FOR THE TRAFFIC BARRIER TERMINALS, TYPE 6, THE HOLES SHALL BE DRILLED USING A CORE DRILL. A HAMMER DRILL WILL NOT BE ALLOWED.

13. G.N. 667
THE RESIDENT ENGINEER SHALL CONTACT THE PROGRAM DEVELOPMENT CHIEF OF SURVEYS PRIOR TO THE PRE-CONSTRUCTION CONFERENCE FOR INSTRUCTION AS TO SETTING OF TEMPORARY OR PERMANENT TIES FOR CENTERLINE ALIGNMENT CONTROL SURVEY MARKERS (PC'S, PT'S, AND PI'S). PROJECT IMPLEMENTATION PERSONNEL WILL BE RESPONSIBLE FOR SETTING THESE MARKERS.

14. G.N. 1004.01
COARSE AGGREGATE GRADATION CA-10 MAY BE USED WHENEVER COARSE AGGREGATE CA-6 IS SPECIFIED IN THE STANDARD SPECIFICATIONS.

15. G.N. Z0038
AN ALUMINUM TABLET OF THE TYPE SHOWN ON STANDARD 667101 SHALL BE PLACED ON THE PROPOSED STRUCTURE AS DIRECTED BY THE ENGINEER. THE BENCH MARK ELEVATION WILL BE ESTABLISHED AND MARKED BY THE DEPARTMENT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR PERMANENT BENCH MARKS.

16. THERE ARE NO COMMITMENTS FOR THIS PROJECT.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

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DATE

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PLOT SCALE = 42.353 ' / IN.
USER NAME = stultsjw

CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCCLEAN	74	4
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PAY CODE NUMBER	ITEM DESCRIPTION	UNIT	URBAN TOTAL QUANTITY	ACM ROADWAY STP TWO-LANE URBAN ROADWAY 80% FEDERAL 20% STATE 1000-2A	ACBRM STRUCTURE HBP TWO-LANE URBAN ROADWAY 80% FEDERAL 20% STATE X071-2A
20200100	EARTH EXCAVATION	CU YD	710	710	0
20400800	FURNISHED EXCAVATION	CU YD	7980	7980	0
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	133	133	0
25000200	SEEDING, CLASS 2	ACRE	2.25	2.25	0
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	203	203	0
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	203	203	0
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	203	203	0
25100115	MULCH, METHOD 2	ACRE	2.25	2.25	0
25100630	EROSION CONTROL BLANKET	SQ YD	615	615	0
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	230	230	0
28000300	TEMPORARY DITCH CHECKS	EACH	10	10	0
28000400	PERIMETER EROSION BARRIER	FOOT	1108	1108	0
28100107	STONE RIPRAP, CLASS A4	SQ YD	1678	166	1512
28200200	FILTER FABRIC	SQ YD	1678	166	1512
31100300	SUB-BASE GRANULAR MATERIAL, TYPE A 4"	SQ YD	4901	4901	0
31101900	SUB-BASE GRANULAR MATERIAL, TYPE C	TON	99	99	0
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1198	1198	0
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	184	184	0
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	1749	1749	0
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	297	297	0
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	266	266	0
42001300	PROTECTIVE COAT	SQ YD	282	282	0
44000100	PAVEMENT REMOVAL	SQ YD	1018	1018	0
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	276	276	0
44000700	APPROACH SLAB REMOVAL	SQ YD	174	174	0
44004250	PAVED SHOULDER REMOVAL	SQ YD	489	489	0
44004300	PAVEMENT BREAKING	SQ YD	3094	3094	0
48101200	AGGREGATE SHOULDERS, TYPE B	TON	18	18	0
48203100	HOT-MIX ASPHALT SHOULDERS	TON	456	456	0
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	0	1
50200100	STRUCTURE EXCAVATION	CU YD	277	0	277
50300100	FLOOR DRAINS	EACH	16	0	16
50300225	CONCRETE STRUCTURES	CU YD	152.1	0	152.1
50300255	CONCRETE SUPERSTRUCTURE	CU YD	218.5	0	218.5
50300260	BRIDGE DECK GROOVING	SQ YD	623	0	623

PAY CODE NUMBER	ITEM DESCRIPTION	UNIT	URBAN TOTAL QUANTITY	ACM ROADWAY STP TWO-LANE URBAN ROADWAY 80% FEDERAL 20% STATE 1000-2A	ACBRM STRUCTURE HBP TWO-LANE URBAN ROADWAY 80% FEDERAL 20% STATE X071-2A
50300280	CONCRETE ENCASEMENT	CU YD	9.8	0	9.8
50300300	PROTECTIVE COAT	SQ YD	780	0	780
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	0	1
50500505	STUD SHEAR CONNECTORS	EACH	3276	0	3276
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	63830	0	63830
50800515	BAR SPLICERS	EACH	84	0	84
51201600	FURNISHING STEEL PILES HP12X53	FOOT	1566	0	1566
51202305	DRIVING PILES	FOOT	1566	0	1566
51203600	TEST PILE STEEL HP12X53	EACH	4	0	4
51500100	NAME PLATES	EACH	1	0	1
52100520	ANCHOR BOLTS, 1"	EACH	48	0	48
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	1	1	0
54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	1	1	0
54213687	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 42"	EACH	1	1	0
54247180	GRATING FOR CONCRETE FLARED END SECTION 42"	EACH	1	1	0
54248510	CONCRETE COLLAR	CU YD	2	2	0
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	16	16	0
550A0090	STORM SEWERS, CLASS A, TYPE 1 18"	FOOT	17	17	0
550A0180	STORM SEWERS, CLASS A, TYPE 1 42"	FOOT	38	38	0
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	68	0	68
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	165	0	165
60223700	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1	1	0
60236100	INLETS, TYPE A, TYPE 6 FRAME AND GRATE	EACH	1	1	0
60258000	MANHOLES TO BE RECONSTRUCTED (SPECIAL)	EACH	2	2	0
60258200	MANHOLES TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	2	2	0
60262800	INLETS TO BE RECONSTRUCTED (SPECIAL)	EACH	2	2	0
60263105	INLETS TO BE RECONSTRUCTED WITH NEW TYPE 3V FRAME AND GRATE	EACH	1	1	0
60500065	REMOVING INLETS, SPECIAL	EACH	1	1	0
60600095	CLASS SI CONCRETE (OUTLET)	CU YD	6	6	0

* DENOTES SPECIALTY ITEM

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
SHEET 1 OF 2

SCALE: VERT. HORIZ.
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FILE NAME = c:\projects\d503706 (v8)\11.01.2007 submittal\quantitiessummary.dgn
PLOT SCALE = 42.353 ' / IN.
USER NAME = stultsjk

CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	5
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

	PAY CODE NUMBER	ITEM DESCRIPTION	UNIT	URBAN TOTAL QUANTITY	ACM ROADWAY STP TWO-LANE URBAN ROADWAY 80% FEDERAL 20% STATE 1000-2A	ACBRM STRUCTURE HBP TWO-LANE URBAN ROADWAY 80% FEDERAL 20% STATE X071-2A
	60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	766	766	0
	60610400	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.24	FOOT	161	161	0
	63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	262.5	262.5	0
•	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	3	3	0
•	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4	0
•	63100215	TRAFFIC BARRIER TERMINAL, TYPE 6 (SPECIAL)	EACH	1	1	0
	63200310	GUARDRAIL REMOVAL	FOOT	409	409	0
•	63300725	STEEL PLATE BEAM GUARD RAIL (SHORT RADIUS)	FOOT	112.5	112.5	0
	66600105	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	2	2	0
	66700305	PERMANENT SURVEY MARKERS, TYPE II	EACH	1	1	0
	67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	5	2	3
	67100100	MOBILIZATION	L SUM	1	0.5	0.5
	70102550	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	EACH	1	0.5	0.5
•	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	5076	5076	0
•	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	30	30	0
•	78200405	GUARDRAIL MARKERS	EACH	8	8	0
•	78200500	BARRIER WALL MARKERS	EACH	4	0	4
•	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	0
	X0322936	REMOVE EXISTING FLARED END SECTION	EACH	2	2	0
	X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1	0	1
	X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH	1	0	1
	X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	28	28	0
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	0
•	Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	52	0	52
	Z0037300	PAVEMENT GROOVING	SQ YD	250	250	0
	Z0038700	PERMANENT BENCH MARKS	EACH	1	1	0

PAY CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	ROADWAY STP TWO-LANE URBAN ROADWAY 80% FEDERAL 20% STATE 1000-2A	STRUCTURE HBP TWO-LANE URBAN ROADWAY 80% FEDERAL 20% STATE X071-2A

• DENOTES SPECIALTY ITEM

REVISIONS	
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ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
SHEET 2 OF 2

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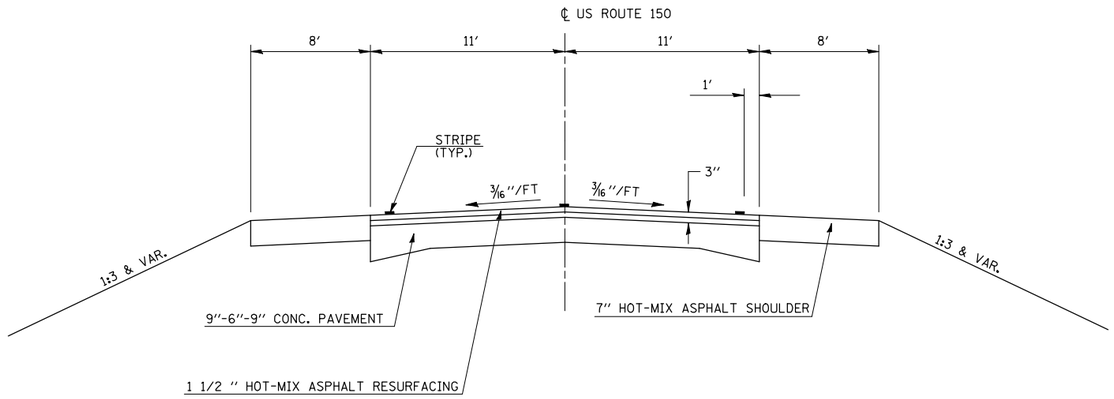
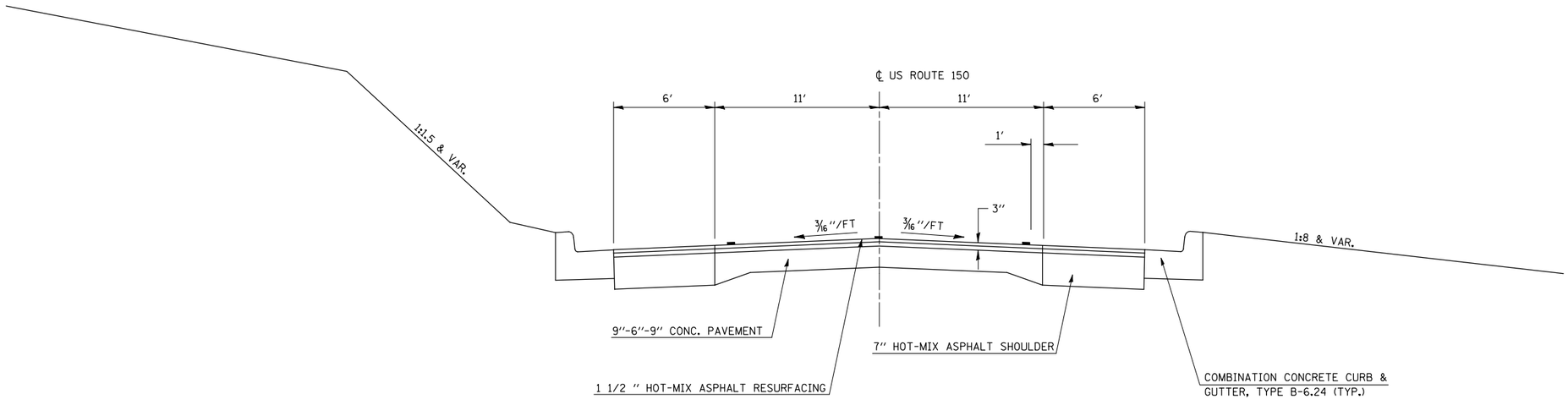
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING TYPICAL CROSS SECTION

F.A.U. 6406 (US RTE. 150)
STATION 400+91.00 TO STATION 406+72.25



EXISTING TYPICAL CROSS SECTION

F.A.U. 6406 (US RTE. 150)
STATION 408+03.75 TO STATION 412+94.00

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING TYPICAL SECTIONS

SCALE: VERT.
HORIZ.
DATE 4/07

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USER NAME = mullaly

CONTRACT NO. 70517

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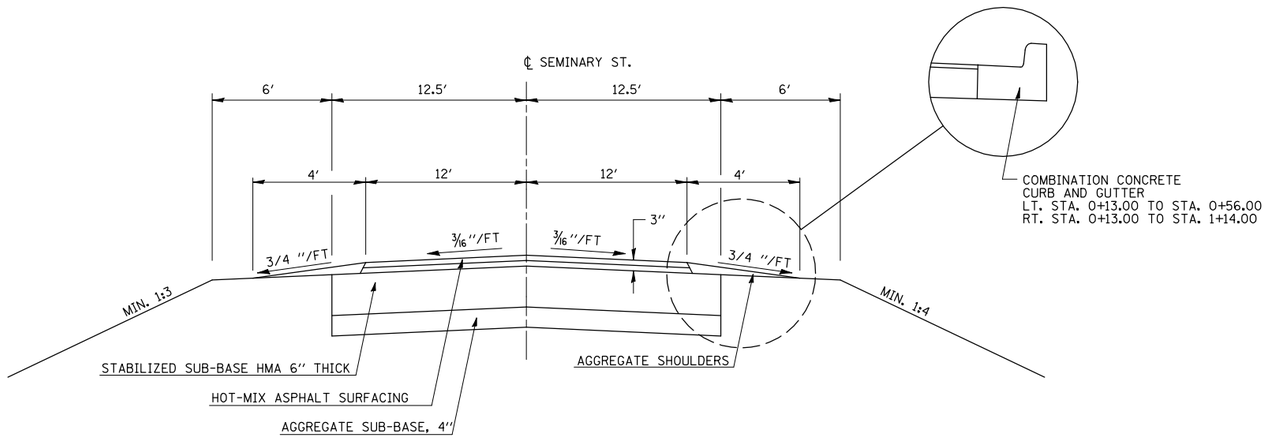
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING TYPICAL CROSS SECTION

SEMINARY STREET
STATION 0+13.00 TO STATION 1+70.00

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING TYPICAL SECTIONS

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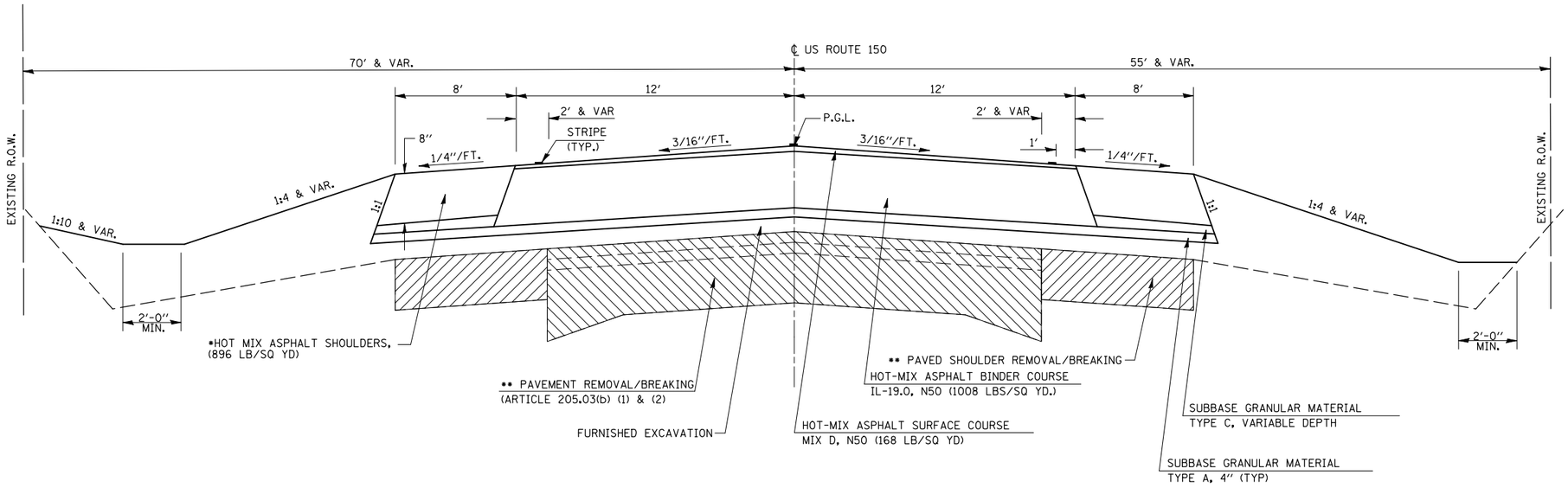
USER NAME = mwilson

CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	8
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PROPOSED TYPICAL SECTION

STA. 400+91.00 TO STA. 406+19.75

* SEE MIXTURE REQUIREMENTS TABLE FOR SHOULDER MIXES TO BE USED

** PAVEMENT REMOVAL STA. 401+05 TO STA. 403+25

NOTE: ALL HOT-MIX ASPHALT SHALL BE PLACED UTILIZING A STRINGLINE

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTIONS

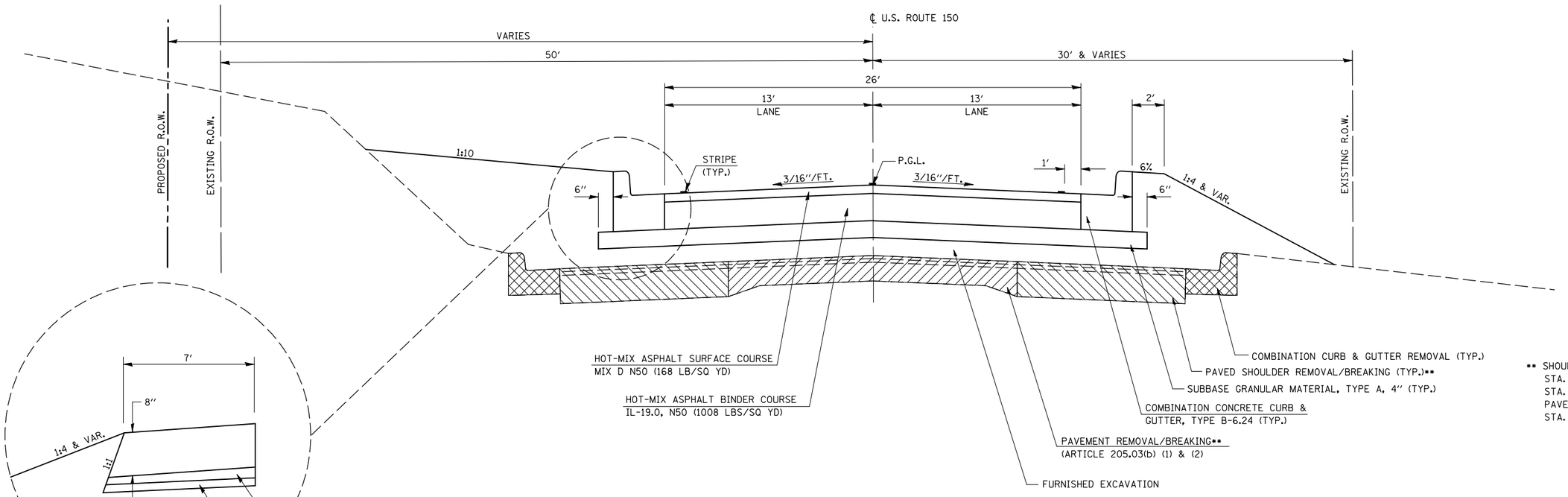
SCALE: VERT. HORIZ.
DATE 4/07

DRAWN BY MLO
CHECKED BY RMD

PLOT DATE = 8/20/2008
FILE NAME = s:\projects\d503706 (v8\11.01.2007 submittal\typicals.dgn
PLOT SCALE = 42.3529 / IN.
USER NAME = mulloy

CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	9
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



•• SHOULDER REMOVAL
STA. 412+00 TO STA. 412+59 RT
STA. 412+00 TO STA. 412+84 LT
PAVEMENT REMOVAL
STA. 411+62 TO STA. 412+69

•HOT MIX ASPHALT SHOULDERS (896 LB/SQ YD)
LT. STA 408+27.25 TO LT. STA 409+25.00

• SEE MIXTURE REQUIREMENTS TABLE FOR SHOULDER MIXES TO BE USED

PROPOSED TYPICAL SECTION

STA. 408+27.25 TO STA. 412+94.00

NOTE: ALL HOT-MIX ASPHALT SHALL BE PLACED UTILIZING A STRINGLINE

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTIONS

SCALE: VERT.
HORIZ.
DATE 4/07

DRAWN BY MLO
CHECKED BY RMD

PLOT DATE = 8/20/2008
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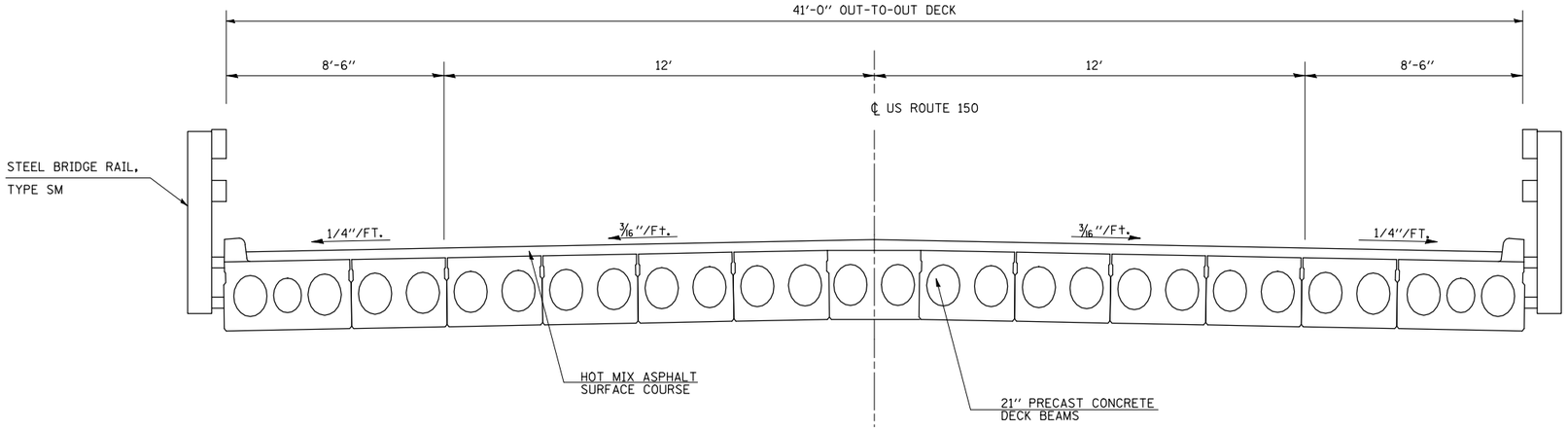
PLOT SCALE = 42.3529 ' / IN.
USER NAME = mills_w

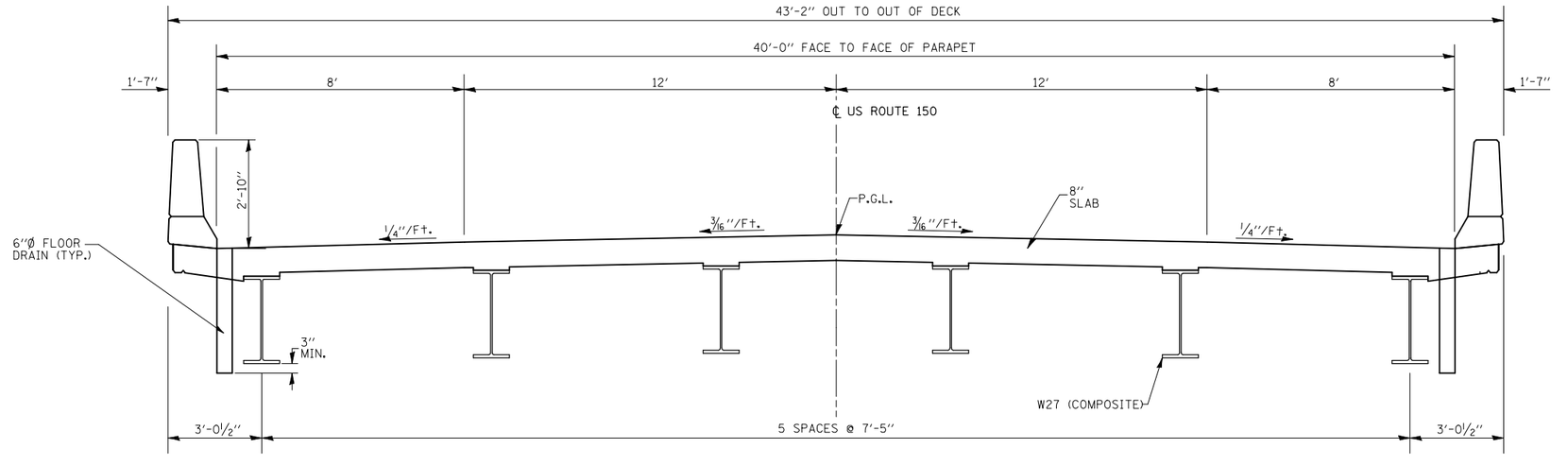
CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	10
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING STRUCTURE CROSS SECTION
S.N. 057–0181

STATION 406+72.25 TO STATION 408+03.75



PROPOSED STRUCTURE CROSS SECTION
S.N. 057–0246

STATION 406+49.75 TO STATION 407+97.25

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING TYPICAL SECTIONS

SCALE: VERT. HORIZ.
DATE 4/07

DRAWN BY MLO
CHECKED BY RMD

PLOT DATE = 8/20/2008
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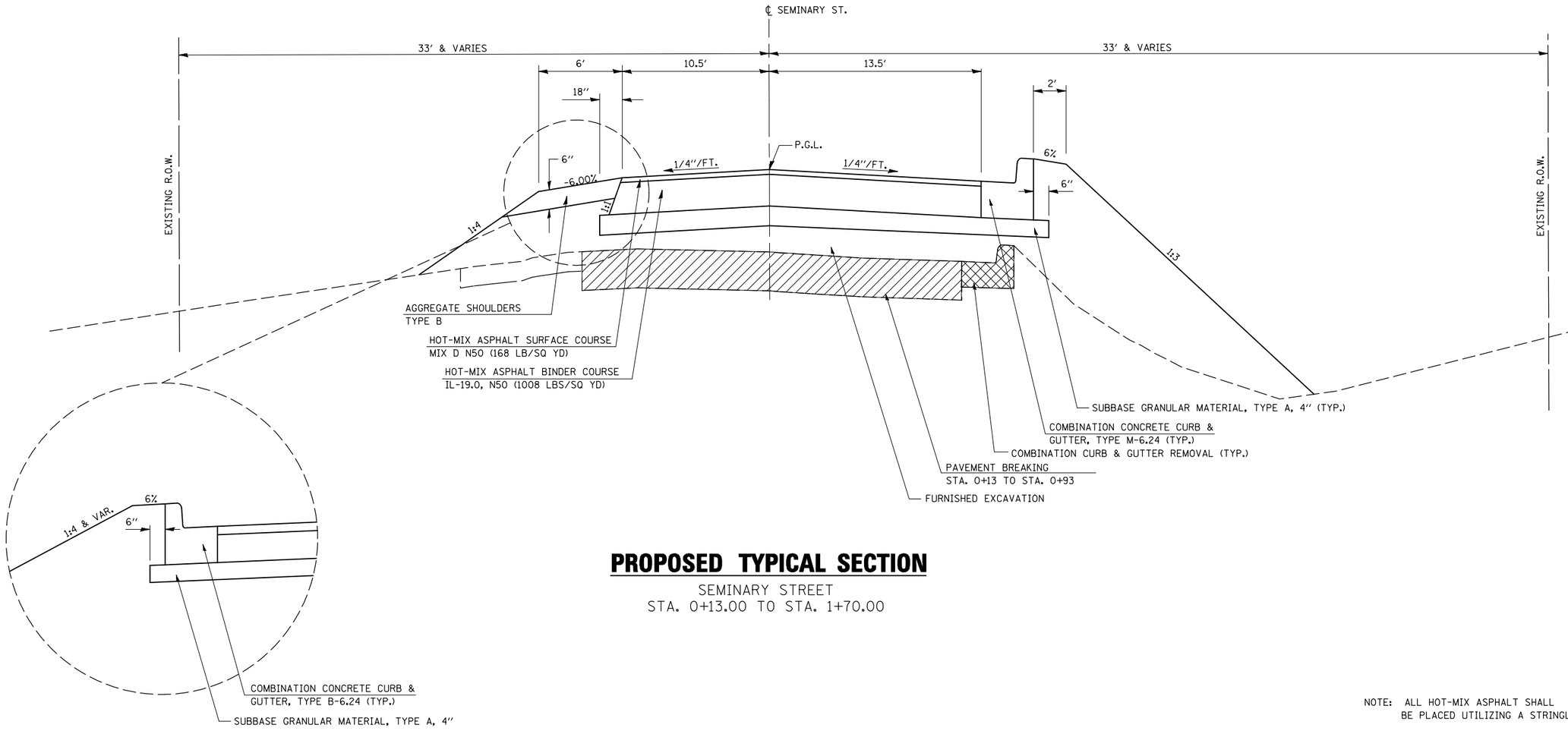
USER NAME = mullikjw

CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	11
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LT. STA 0+13.00 TO LT. STA 0+89.67

PROPOSED TYPICAL SECTION

SEMINARY STREET
STA. 0+13.00 TO STA. 1+70.00

NOTE: ALL HOT-MIX ASPHALT SHALL BE PLACED UTILIZING A STRINGLINE

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTIONS

SCALE: VERT.
HORIZ.
DATE 4/07

DRAWN BY MLO
CHECKED BY RMD

PLOT DATE = 8/20/2008
FILE NAME = c:\projects\d503706 (v8)\11.01.2007 submittal\typicals.dgn
PLOT SCALE = 42.2529 ' / IN.
USER NAME = mluig_w

CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	12
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

EARTH EXCAVATION AND FURNISHED EXCAVATION

LOCATION	EARTH EXCAVATION (CUT) (CU YD)	EARTH EXCAV. ADJUSTED FOR SHRINKAGE • (CU YD)	EMBANKMENT (FILL) (CU YD)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CU YD)
US 150	710	533	7,870	-7,337
SEMINARY ST.			640	-640
	710	533	8,510	-7,980

• An earth-shrinkage factor of 0.25 is applied

SEEDING, FERTILIZERS AND MULCH

STATION TO	STATION	OFFSET	SEEDING CLASS 2 (ACRE)	NITROGEN FERTILIZER NUTRIENT (POUND)	PHOSPHORUS FERTILIZER NUTRIENT (POUND)	POTASSIUM FERTILIZER NUTRIENT (POUND)	MULCH, METHOD 2 (ACRE)	TEMPORARY EROSION CONTROL SEEDING (POUND)
400+91.00	412+94.00	LT	1.00	90	90	90	1.25	100.0
400+91.00	412+94.00	RT	0.75	67.5	67.5	67.5	0.75	75.0
0+17.00	1+70.00	RT	0.50	45.0	45.0	45.0	0.50	50.0
		TOTAL	2.25	203	203	203	2.25	230.0

EROSION CONTROL BLANKET

STATION TO	STATION	OFFSET	SQ YD
409+25.00	412+94.00	LT	615

TEMPORARY DITCH CHECKS

STATION	OFFSET	EACH
402+00.00	RT	1
402+50.00	LT	1
403+00.00	RT	1
404+00.00	LT	1
405+50.00	LT	1
407+00.00	LT	1
408+00.00	LT	1
408+10.00	RT	1
408+50.00	LT	1
409+50.00	LT	1
	TOTAL	10

PERIMETER EROSION BARRIER

STATION TO	STATION	OFFSET	FOOT
403+00.00	407+08.00	RT	410
407+08.00	407+08.00	LT&RT	116
409+65.00	410+05.00	RT	54
410+05.00	412+94.00	RT	298
0+75.00	1+00.00	LT	50
1+00.00	1+70.00	LT	70
0+55.00	1+55.00	RT	110
		TOTAL	1108

STONE RIPRAP, CLASS A4

STATION TO	STATION	OFFSET	SQ YD
407+86.00	409+04.50	LT	134
408+07.00	408+36.00	RT	32
		TOTAL	166

FILTER FABRIC

STATION TO	STATION	OFFSET	SQ YD
407+86.00	409+04.50	LT	133
408+07.00	408+36.00	RT	32
		TOTAL	166

SUB-BASE GRANULAR MATERIAL, TYPE A, 4"

STATION TO	STATION	OFFSET	SQ YD
401+05.00	406+16.75	LT&RT	2388
408+30.25	409+25.00	LT&RT	473
409+25.00	410+45.00	LT&RT	387
410+45.00	412+69.00	LT&RT	796
0+13.00	0+93.00	LT	350
0+13.00	0+93.00	RT	317
0+93.00	1+50.00	LT&RT	190
		TOTAL	4901

SUB-BASE GRANULAR MATERIAL, TYPE C

STATION TO	STATION	OFFSET	TON
401+05.00	406+19.75	LT	45
401+05.00	406+19.75	RT	45
408+27.25	409+25.00	LT	9
		TOTAL	99

BITUMINOUS MATERIALS (PRIME COAT)

STATION TO	STATION	OFFSET	GALLONS
400+91.00	406+19.75	LT&RT	141
408+27.25	412+94.00	LT&RT	135
0+13.00	1+70.00	LT&RT	78
401+05.00	406+19.75	LT&RT	343
408+27.25	412+69.00	LT&RT	319
0+13.00	0+93.00	LT&RT	143
0+93.00	1+50.00	LT&RT	39
		TOTAL	1198

HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT

STATION TO	STATION	OFFSET	SQ YD
400+91.00	401+05.00	LT&RT	59
412+69.00	412+94.00	LT&RT	72
1+50.00	1+70.00	LT&RT	53
		TOTAL	184

HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50

STATION TO	STATION	OFFSET	TON
401+05.00	406+19.75	LT&RT	714
408+27.25	412+69.00	LT&RT	662
0+13.00	0+93.00	LT&RT	292
0+93.00	1+50.00	LT&RT	81
		TOTAL	1749

HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50

STATION TO	STATION	OFFSET	TON
400+91.00	406+19.75	LT&RT	118
408+27.25	412+94.00	LT&RT	113
0+13.00	1+70.00	LT&RT	66
		TOTAL	297

BRIDGE APPROACH PAVEMENT

STATION TO	STATION	SQ YD
406+19.75	406+49.75	133
407+97.25	408+27.25	133
	TOTAL	266

PROTECTIVE COAT

STATION TO	STATION	OFFSET	SQ YD
406+19.75	406+49.75	LT&RT	141
407+97.25	408+27.25	LT&RT	141
		TOTAL	282

(INCLUDES ROADWAY ITEMS ONLY)

PAVEMENT REMOVAL

STATION TO	STATION	OFFSET	SQ YD
401+05.00	403+25.00	LT&RT	538
411+62.00	412+69.00	LT&RT	309
0+93.00	1+50.00	LT&RT	171
		TOTAL	1018

COMBINATION CURB & GUTTER REMOVAL

STATION TO	STATION	OFFSET	FOOT
412+58.00	412+94.00	LT	36
0+17.00	1+14.00	RT	119
0+23.00	0+59.00	LT	84
412+57.00	412+94.00	RT	37
		TOTAL	276

APPROACH SLAB REMOVAL

STATION TO	STATION	OFFSET	SQ YD
406+52.25	406+72.25	LT&RT	87
408+03.75	408+23.75	LT&RT	87
		TOTAL	174

PAVED SHOULDER REMOVAL

STATION TO	STATION	OFFSET	SQ YD
401+05.00	403+25.00	LT	196
401+05.00	403+25.00	RT	196
411+62.00	412+59.00	RT	43
411+62.00	412+84.00	LT	54
		TOTAL	489

PAVEMENT BREAKING

STATION TO	STATION	SQ YD
403+25.00	406+52.25	1382
408+23.75	411+62.00	1278
0+13.00	0+93.00	434
	TOTAL	3094

AGGREGATE SHOULDERS, TYPE B

STATION TO	STATION	OFFSET	TON
0+94.67	1+70.00	LT	15
1+55.00	1+70.00	RT	3
		TOTAL	18

HOT-MIX ASPHALT SHOULDERS

STATION TO	STATION	OFFSET	TON
400+91.00	406+19.75	LT	211
400+91.00	406+19.75	RT	211
408+27.25	409+25.00	LT	34
		TOTAL	456

CONCRETE COLLAR

STATION	OFFSET	EACH
408+60.18	RT	1
409+41.00	RT	1
	TOTAL	2

STORM SEWERS, CLASS A, TYPE 1, 12"

STATION TO	STATION	OFFSET	FOOT
1+00.00	1+00.00	RT	16

STORM SEWERS, CLASS A, TYPE 1, 18"

STATION TO	STATION	OFFSET	FOOT
409+53.60	409+64.36	RT	4
409+53.60	409+63.45	RT	13
		TOTAL	17

STORM SEWERS, CLASS A, TYPE 1, 42"

STATION TO	STATION	OFFSET	FOOT
408+37.40	408+60.18	RT	25
409+41.00	409+53.60	RT	13
		TOTAL	38

CLASS SI CONCRETE (OUTLET)

STATION TO	STATION	OFFSET	CU YD
0+89.76	0+94.76	LT	0.51
0+50.00	0+55.00	RT	0.51
409+00.00	409+49.11	LT	4.36
		TOTAL	6

COMBINATION CONCRETE CURB & GUTTER TYPE B-6.24

STATION TO	STATION	OFFSET	FOOT
409+47.00	412+94.00	LT	347
0+17.00	0+89.67	LT	170
410+45.00	412+94.00	RT	249
		TOTAL	766

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
SHEET 1 OF 2

SCALE: VERT.
HORIZ.
DATE

DRAWN BY
CHECKED BY

PLOT DATE = 8/20/2008
FILE NAME = c:\projects\d503706 (v8)\11.01.2007 submittal\quantitysheschedule.dgn
PLOT SCALE = 40.3529 ' / IN.
USER NAME = stulty4

CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	13
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

COMBINATION CONCRETE CURB & GUTTER TYPE M-6.24

STATION TO	STATION	OFFSET	FOOT
408+33.25	1+50.00	RT	161

STEEL PLATE BEAM GUARD RAIL, TYPE A

STATION TO	STATION	OFFSET	FOOT
403+81.50	406+06.50	RT	225.0
405+69.00	406+06.50	LT	37.5
		TOTAL	262.5

STEEL PLATE BEAM GUARD RAIL (SHORT RADIUS)

STATION TO	STATION	OFFSET	FOOT
408+40.50	1+00.97	RT	112.5

TRAFFIC BARRIER TERMINAL, TYPE 6

STATION TO	STATION	OFFSET	EACH
406+06.50	406+49.75	LT	1
406+06.50	406+49.75	RT	1
407+97.28	408+40.50	LT	1
		TOTAL	3

TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT)

STATION TO	STATION	OFFSET	EACH
403+31.50	403+81.50	RT	1
405+19.00	405+69.00	LT	1
408+40.50	408+90.50	LT	1
1+00.97	1+50.00	RT	1
		TOTAL	4

TRAFFIC BARRIER TERMINAL, TYPE 6 (SPECIAL)

STATION TO	STATION	OFFSET	EACH
407+97.28	408+40.50	RT	1
		TOTAL	1

GUARDRAIL REMOVAL

STATION TO	STATION	OFFSET	FOOT
405+72.00	406+73.00	LT	101
405+72.00	406+74.00	RT	102
408+03.00	408+94.00	LT	91
408+56.00	408+94.00	LT	38
408+03.00	408+67.00	RT	77
		TOTAL	409

FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS

STATION	OFFSET	EACH
408+50.00	70'LT	1
409+00.00	50'LT	1
	TOTAL	2

PERMANENT SURVEY MARKERS, TYPE II

STATION	OFFSET	EACH
404+40.54	-	1

THERMOPLASTIC PAVEMENT MARKING - LINE 4"

STATION TO	STATION	FOOT
400+91.00	412+94.00	3609
400+91.00	408+16.10	725
0+08.77	1+70.00	200
0+13.00	1+70.00	293
410+44.64	412+94.00	249
	TOTAL	5076

THERMOPLASTIC PAVEMENT MARKING - LINE 24"

STATION	FOOT
0+36.00	30

GUARDRAIL MARKERS & BARRIER WALL MARKERS

	STATION TO	OFFSET	GUARDRAIL MARKERS	BARRIER WALL MARKERS
BEGIN STA.	405+19.00	LT		
	405+70.50	LT	1	
	406+50.50	LT		1
	407+30.50	LT		1
	408+10.50	LT	1	
END STA.	408+90.50	LT		
BEGIN STA.	403+31.50	RT		
	404+11.50	RT	1	
	404+91.50	RT	1	
	405+71.50	RT	1	
	406+51.50	RT		1
	407+31.50	RT		1
	408+11.50	RT	1	
	0+56.51	RT	1	
	1+35.03	RT	1	
END STA.	1+50.00	RT		
		TOTAL	8	4

TERMINAL MARKER - DIRECT APPLIED

STATION	OFFSET	EACH
405+19.00	LT	1
403+31.50	RT	1
408+90.50	LT	1
1+50.00	RT	1
	TOTAL	4

PAVEMENT GROOVING

STATION TO	STATION	FOOT
406+19.75	406+49.75	125
407+97.25	408+27.25	125
	TOTAL	250

PERMANENT BENCH MARKS

STATION	OFFSET	EACH
407+23.50	*	1

*AS DIRECTED BY THE ENGINEER

REMOVE EXISTING FLARED END SECTION

STATION	OFFSET	EACH
408+60.00	RT	1
409+41.00	RT	1
	TOTAL	2

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
SHEET 2 OF 2

SCALE: VERT. HORIZ.

DATE

DRAWN BY

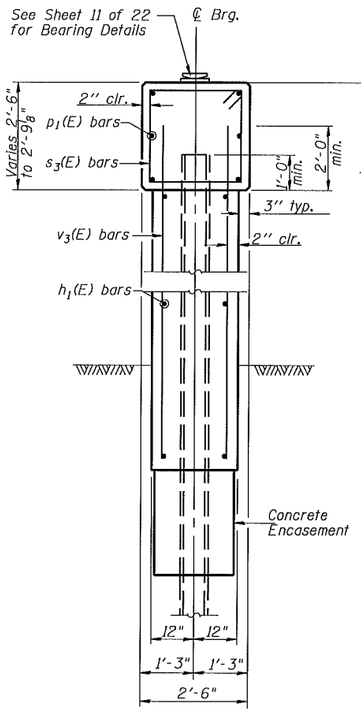
CHECKED BY

PLOT DATE = 8/20/2008
FILE NAME = c:\projects\d083706 (v8)\11.01.2007 submittal\quantitysheet.dgn
PLOT SCALE = 42.3529 / IN.
USER NAME = mstuhy

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	I(BR-2)	MCLEAN	74	38
FED. ROAD DIST. NO. 8	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 14
22 SHEETS

Contract #70517



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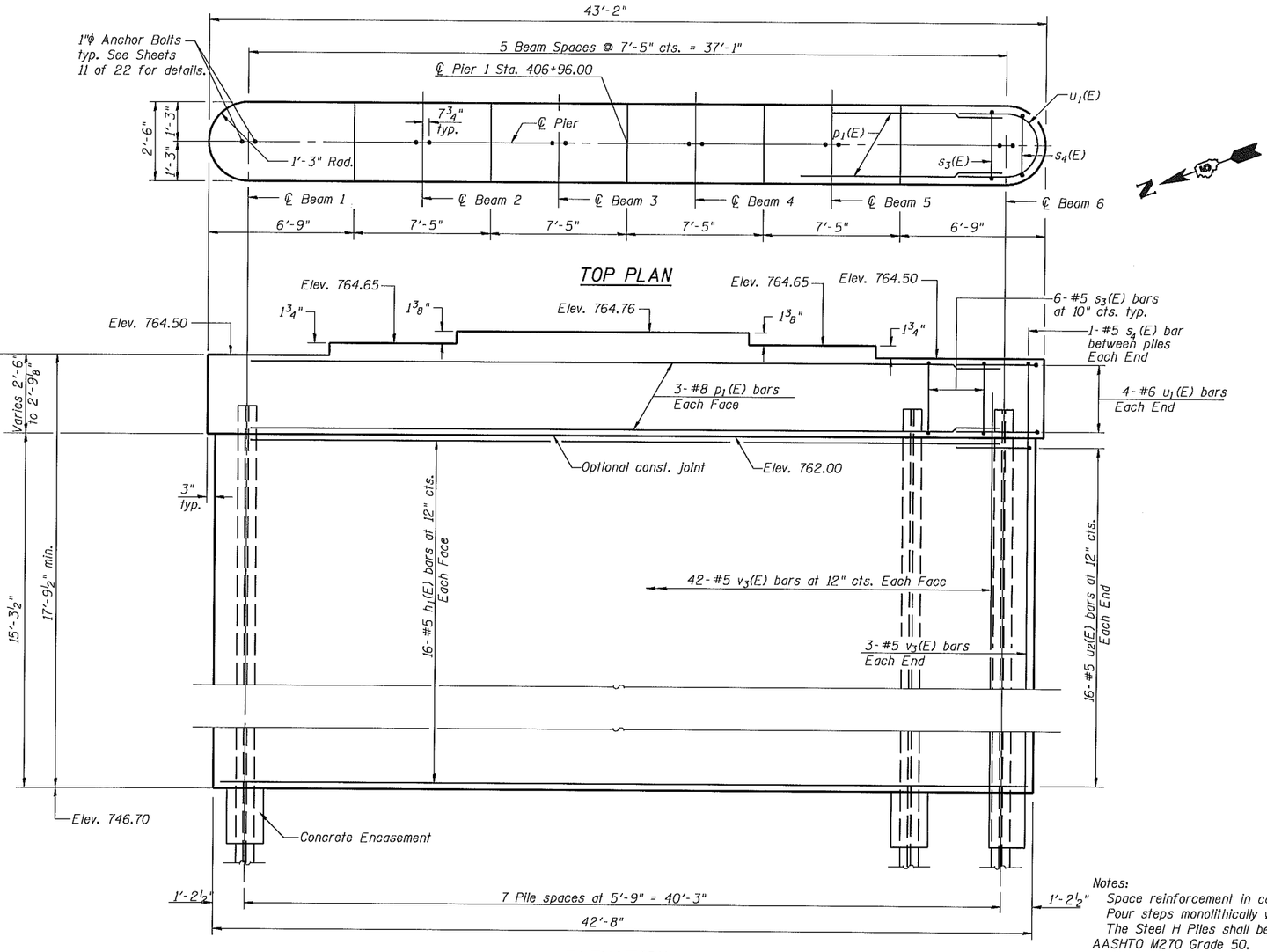
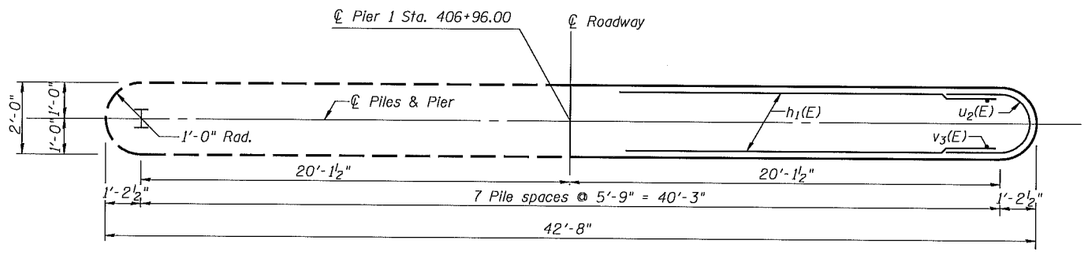
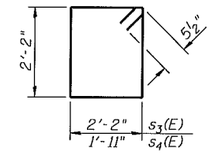


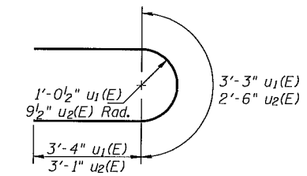
ELEVATION
(Looking East)



PILE LAYOUT & PIER PLAN



BAR s_3(E) & s_4(E)



BARS u_1(E) & u_2(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_1(E)	32	#5	40'-8"	——
p_1(E)	6	#8	40'-8"	——
s_3(E)	42	#5	9'-7"	□
s_4(E)	2	#5	9'-1"	□
u_1(E)	8	#6	9'-11"	⊃
u_2(E)	32	#5	8'-8"	⊃
v_3(E)	90	#5	17'-2"	——
Structure Excavation			Cu. Yd.	81.9
Concrete Structures			Cu. Yd.	58.3
Reinforcement Bars, Epoxy Coated			Pound	4470
Furnishing Steel Piles, 12x53			Foot	483
Driving Piles			Foot	483
Test Pile, HP 12x53			Each	1
Concrete Encasement			Cu. Yd.	2.8
Underwater Structure Excavation Protection, Location 2			Each	1

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
The Steel H Piles shall be according to AASHTO M270 Grade 50.
The Test Pile shall be driven to 110 percent of the nominal required bearing indicated in the Pile Data information.
For details of piles and concrete encasement see sheet 17 of 22.
If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.

PILE DATA

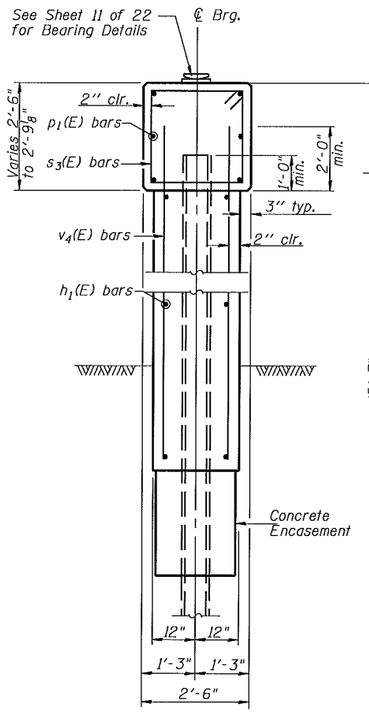
Type: Steel HP 12x53
Nominal Required Bearing: 419 kips
Allowable Resistance Available: 140 kips
Est. Length: 69 ft.
No. Production Piles: 7
No. Test Piles: 1

PIER 1
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

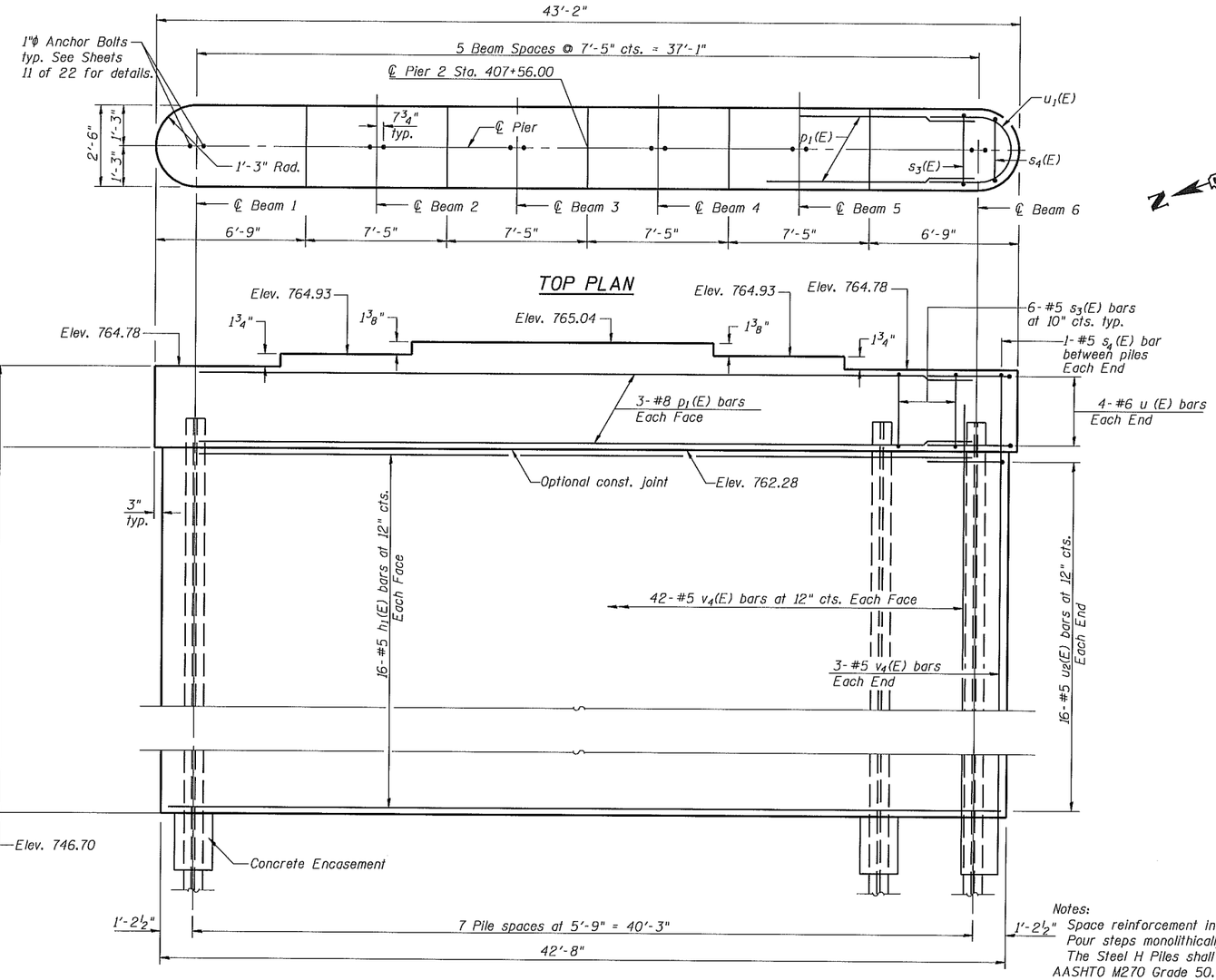
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	1(BR-2)	MCLEAN	74	39
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 15
22 SHEETS

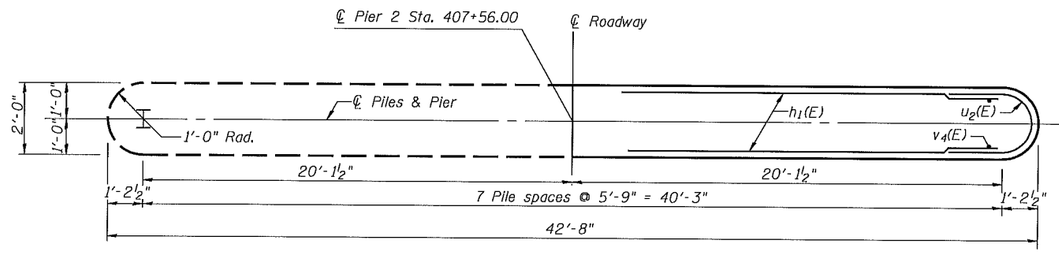
Contract #70517



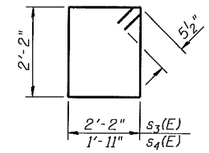
END VIEW



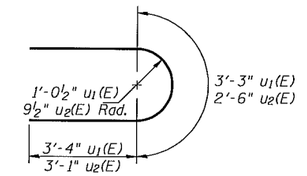
ELEVATION
(Looking East)



PILE LAYOUT & PIER PLAN



BAR s_3(E) & s_4(E)



BARS u_1(E) & u_2(E)

Notes:
Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap.
The Steel H Piles shall be according to AASHTO M270 Grade 50.
The Test Pile shall be driven to 110 percent of the nominal required bearing indicated in the Pile Data information.
For details of piles and concrete encasement see sheet 17 of 22.
If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_1(E)	32	#5	40'-8"	——
p_1(E)	6	#8	40'-8"	——
s_3(E)	42	#5	9'-7"	□
s_4(E)	2	#5	9'-1"	□
u_1(E)	8	#6	9'-11"	⊃
u_2(E)	32	#5	8'-8"	⊃
v_4(E)	90	#5	17'-5"	——
Structure Excavation		Cu. Yd.	56.0	
Concrete Structures		Cu. Yd.	59.2	
Reinforcement Bars, Epoxy Coated		Pound	4500	
Furnishing Steel Piles, 12x53		Foot	483	
Driving Piles		Foot	483	
Test Pile, HP 12x53		Each	1	
Concrete Encasement		Cu. Yd.	2.8	
Underwater Structure Excavation Protection, Location 1		Each	1	

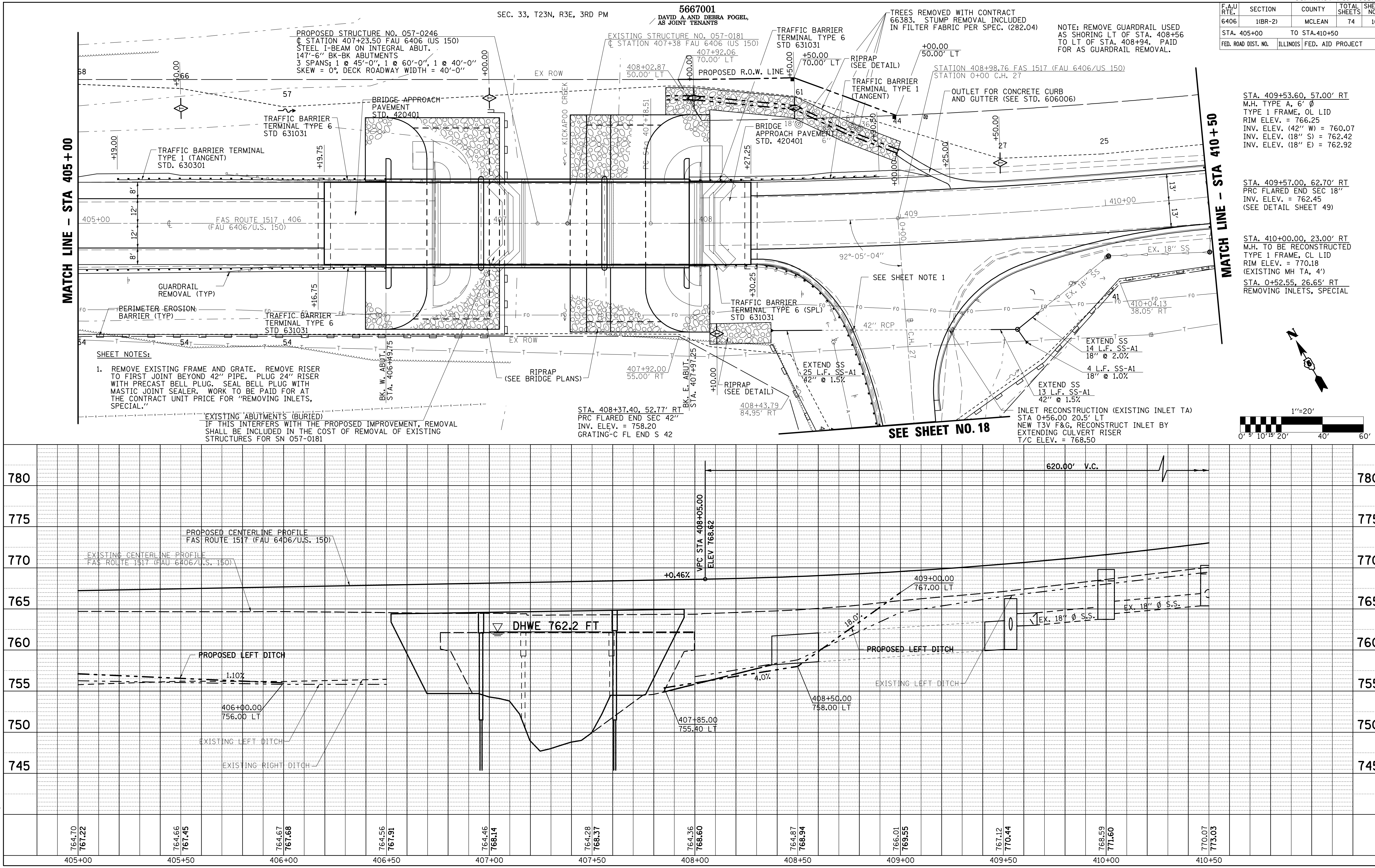
PILE DATA

Type: Steel HP 12x53
Nominal Required Bearing: 420 kips
Allowable Resistance Available: 140 kips
Est. Length: 69 ft.
No. Production Piles: 7
No. Test Piles: 1

PIER 2
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	16
STA. 405+00	TO STA.410+50			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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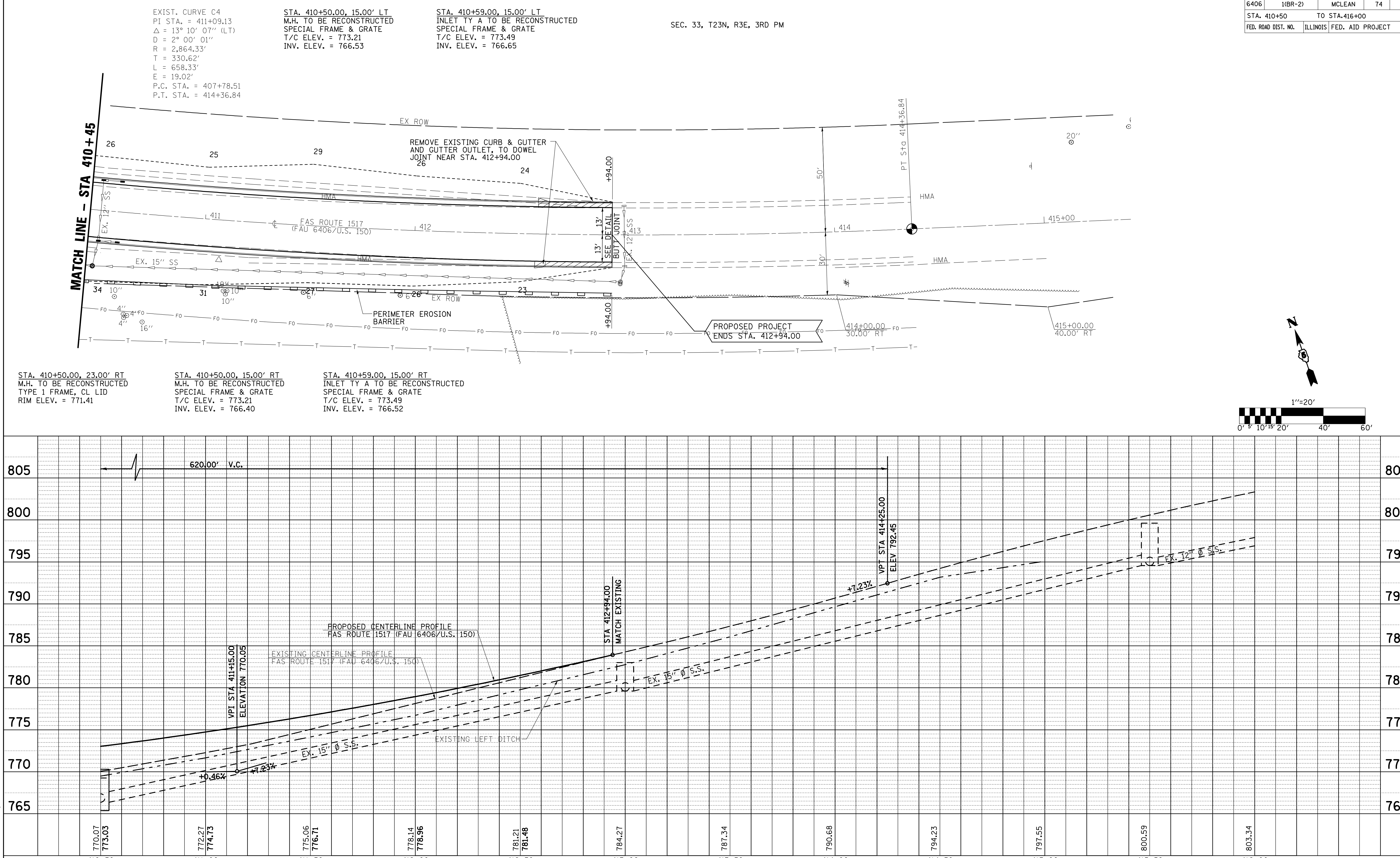
CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	17
STA. 410+50		TO STA.416+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, STRUCTURE NOTATNS CHKD — NOTE BOOK NO.

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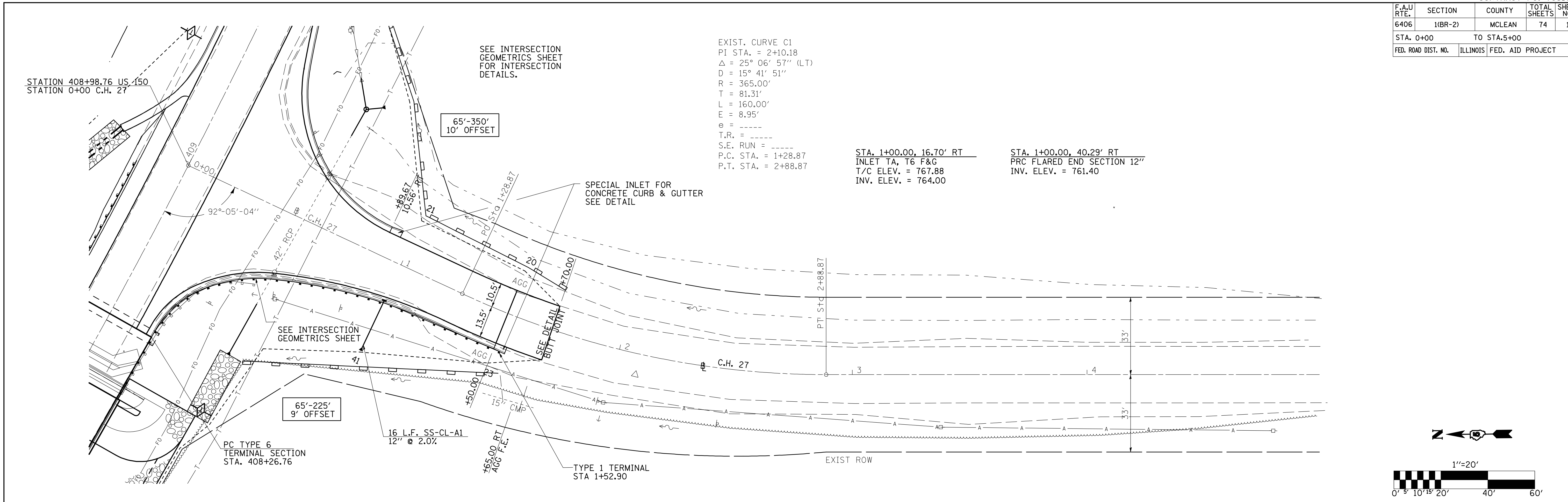
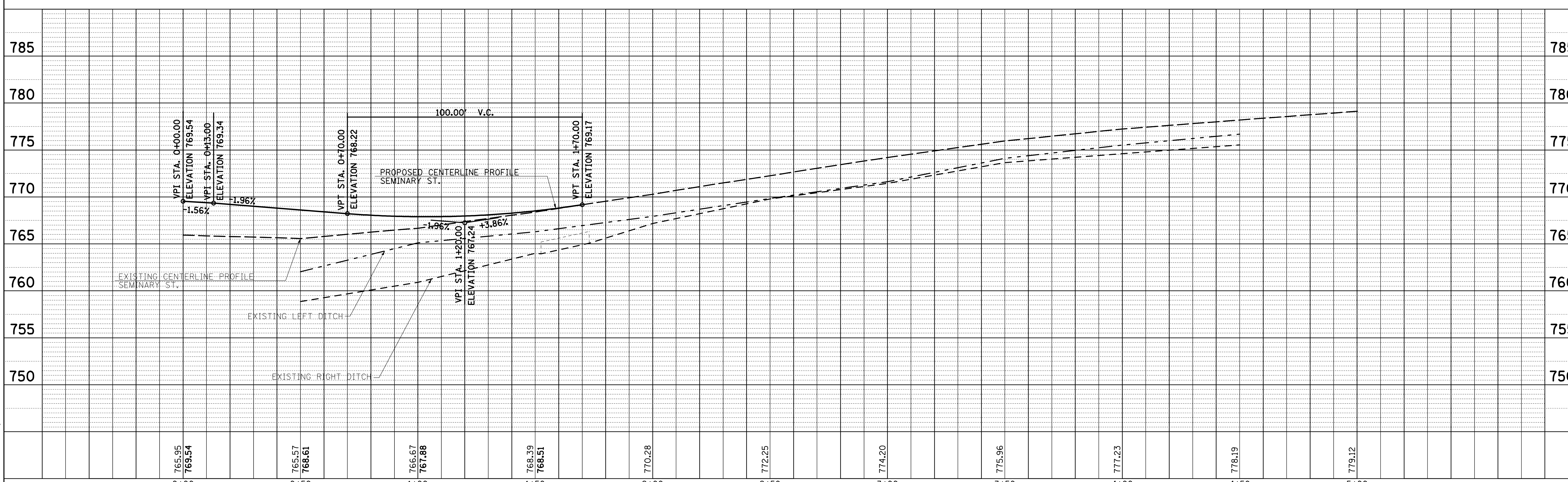
CONTRACT NO. 70517

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	18
STA. 0+00	TO STA.5+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





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PROFILE: SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / STRUCTURE NOTATNS CHKD / NOTE BOOK / NO. — BY — DATE

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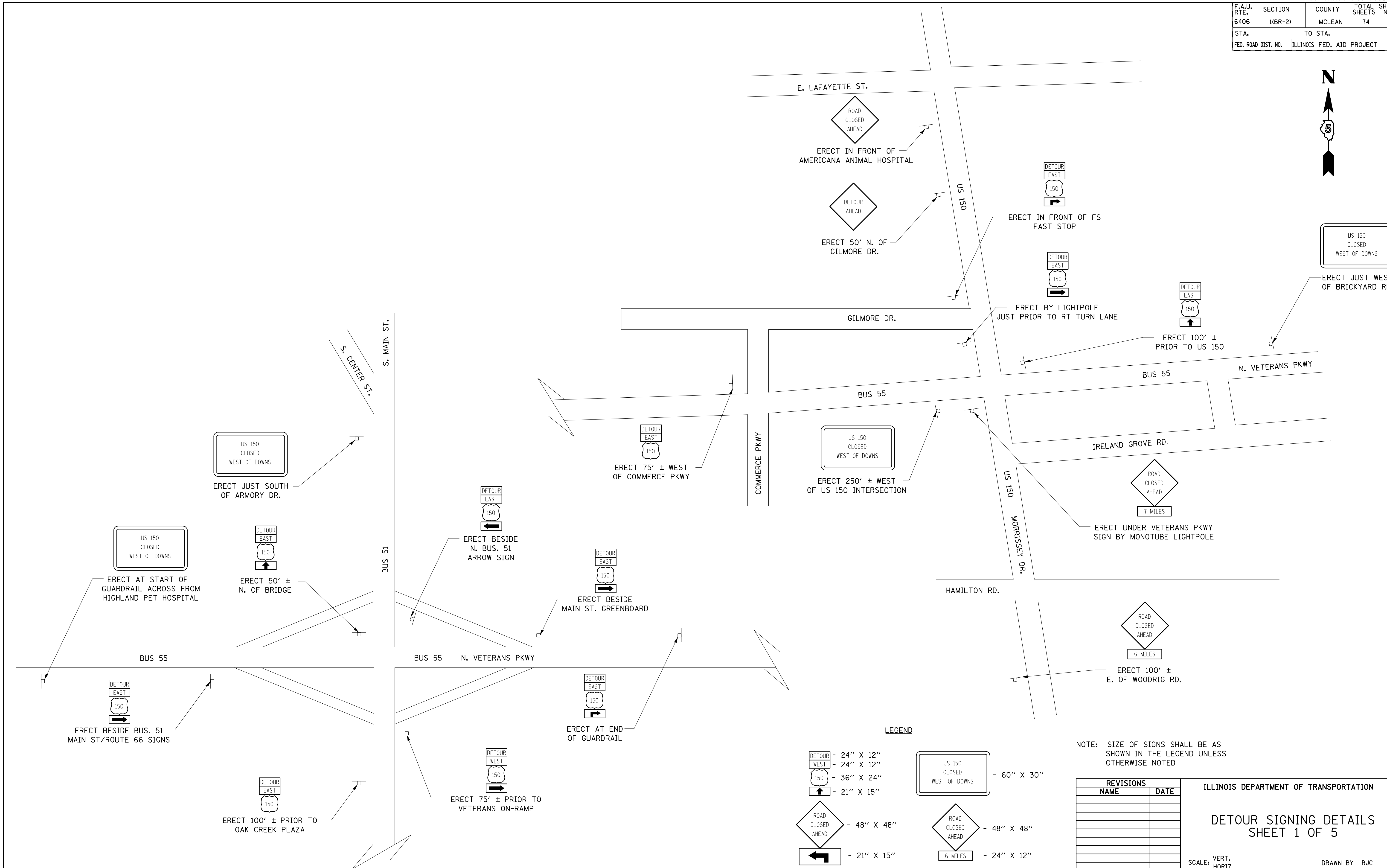
BLANK, WESSELINK, COOK & ASSOCIATES — ENGINEERS - CONSULTANTS — DECATUR, ILLINOIS — F.A.U. 6406 (US RTE. 150) SECTION 1(BR-2) — MCLEAN COUNTY

CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	19
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTE: SIZE OF SIGNS SHALL BE AS SHOWN IN THE LEGEND UNLESS OTHERWISE NOTED

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETOUR SIGNING DETAILS
SHEET 1 OF 5

SCALE: VERT. HORIZ.
DATE
DRAWN BY RJC
CHECKED BY

PLOT DATE = 8/21/2008
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CONTRACT NO. 70517

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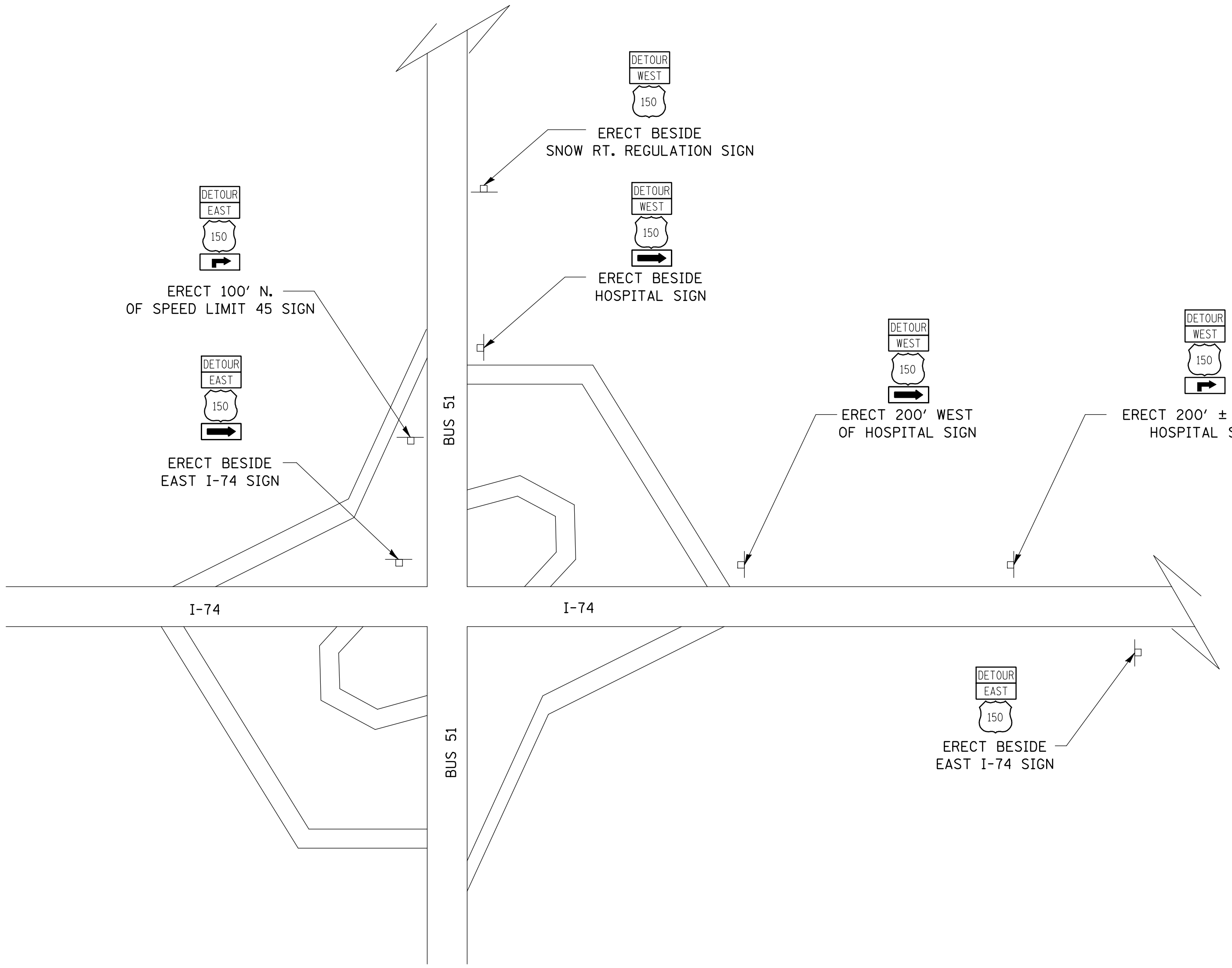
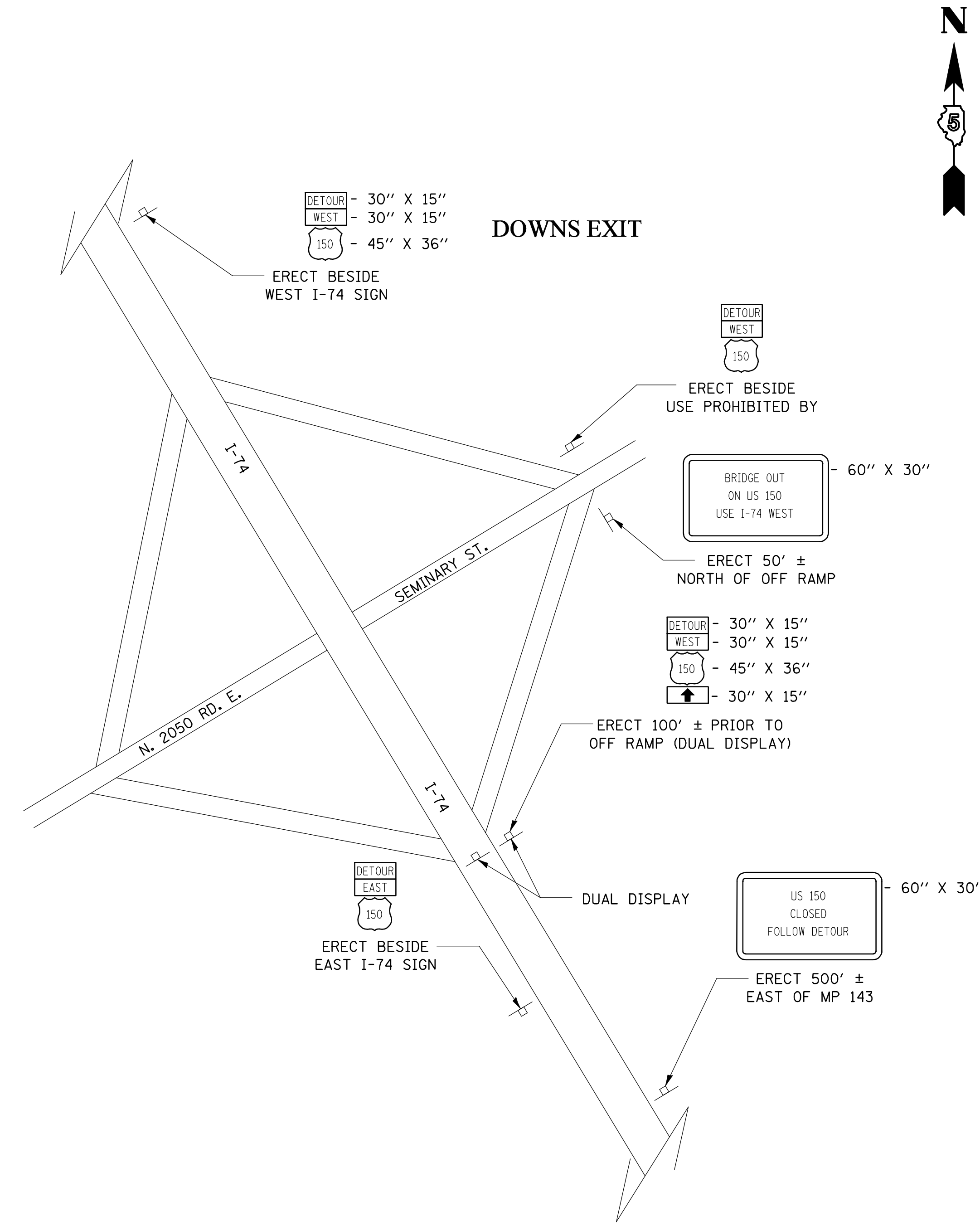
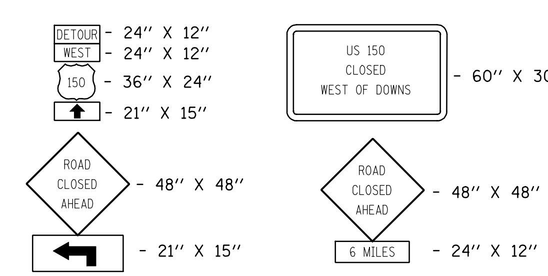
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





LEGEND



NOTE: SIZE OF SIGNS SHALL BE AS SHOWN IN THE LEGEND UNLESS OTHERWISE NOTED

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETOUR SIGNING DETAILS
SHEET 2 OF 5

SCALE: VERT.
HORIZ.
DATE

DRAWN BY RJC
CHECKED BY

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CONTRACT NO. 70517

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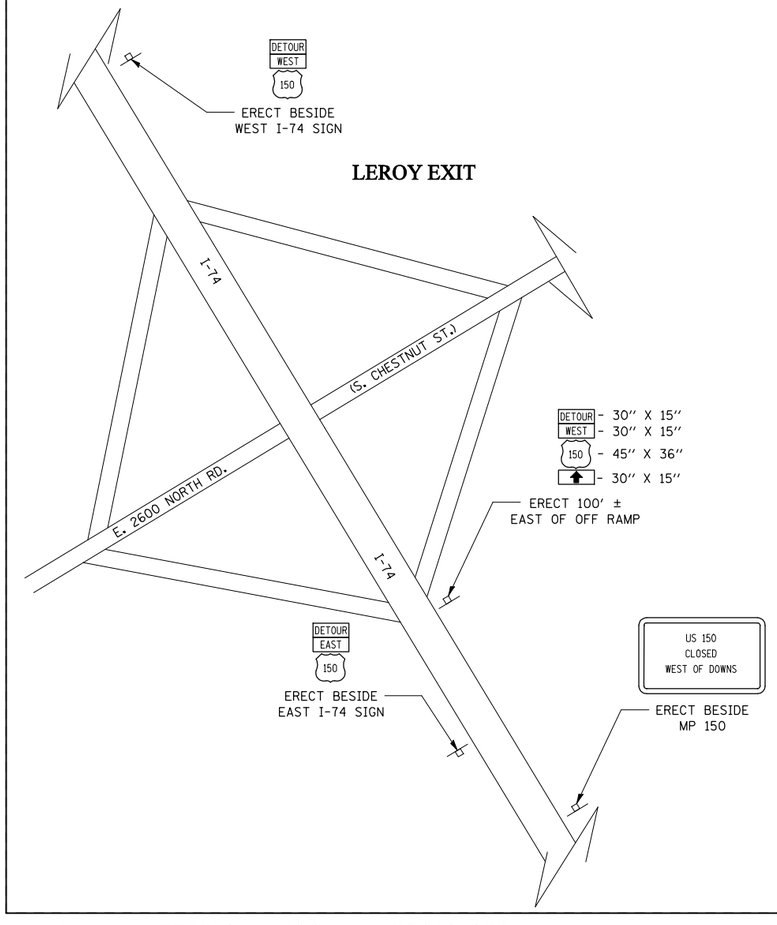
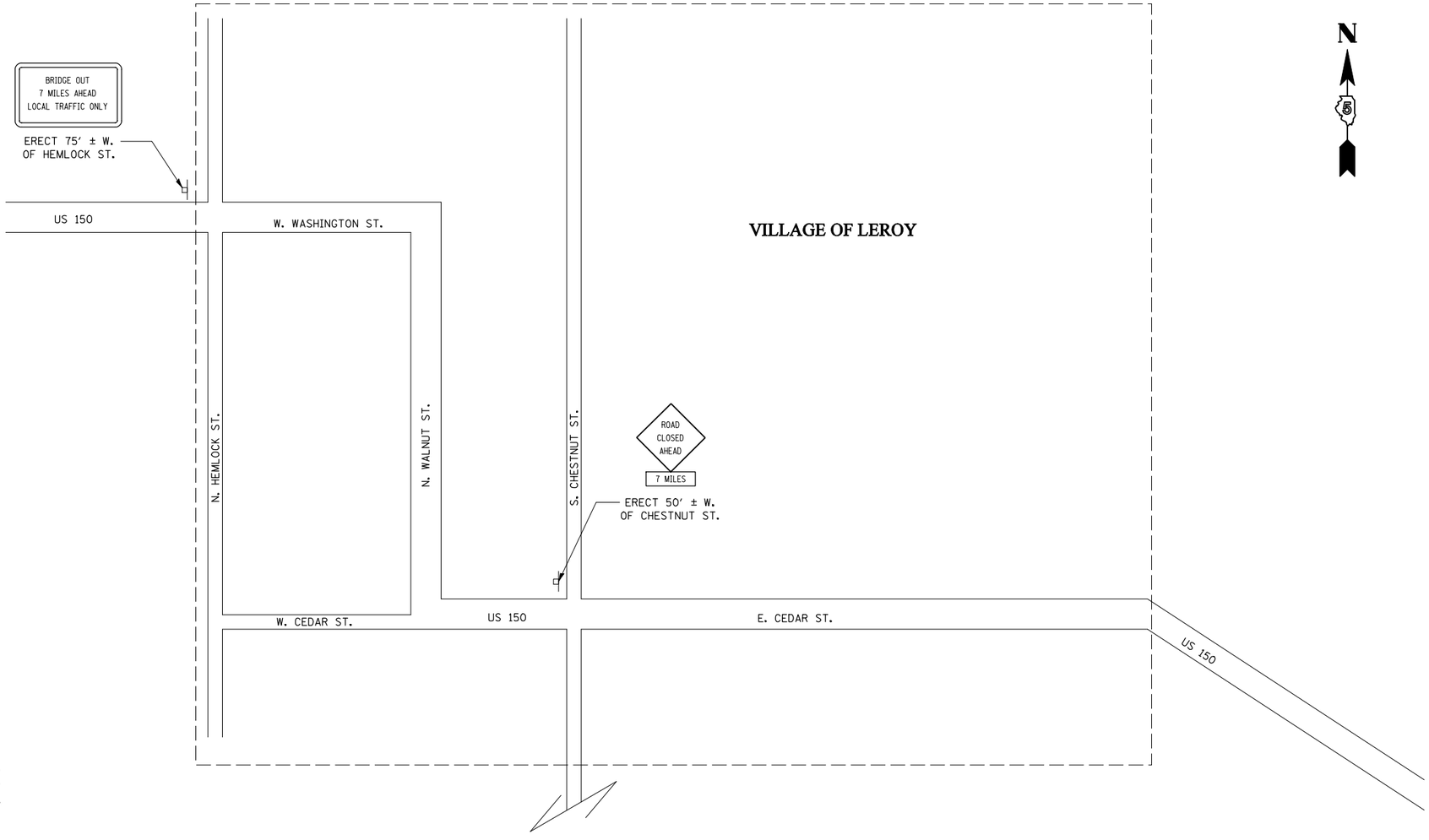
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





LEGEND

DETOUR - 24" X 12"
WEST - 24" X 12"
150 - 36" X 24"
- 21" X 15"

ROAD CLOSED AHEAD - 48" X 48"
- 21" X 15"

US 150 CLOSED WEST OF DOWNS - 60" X 30"

ROAD CLOSED AHEAD - 48" X 48"
6 MILES - 24" X 12"

NOTE: SIZE OF SIGNS SHALL BE AS SHOWN IN THE LEGEND UNLESS OTHERWISE NOTED

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETOUR SIGNING DETAILS SHEET 3 OF 5

SCALE: VERT.
HORIZ.
DATE

DRAWN BY RJC
CHECKED BY

PLOT DATE = 8/21/2008
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CONTRACT NO. 70517

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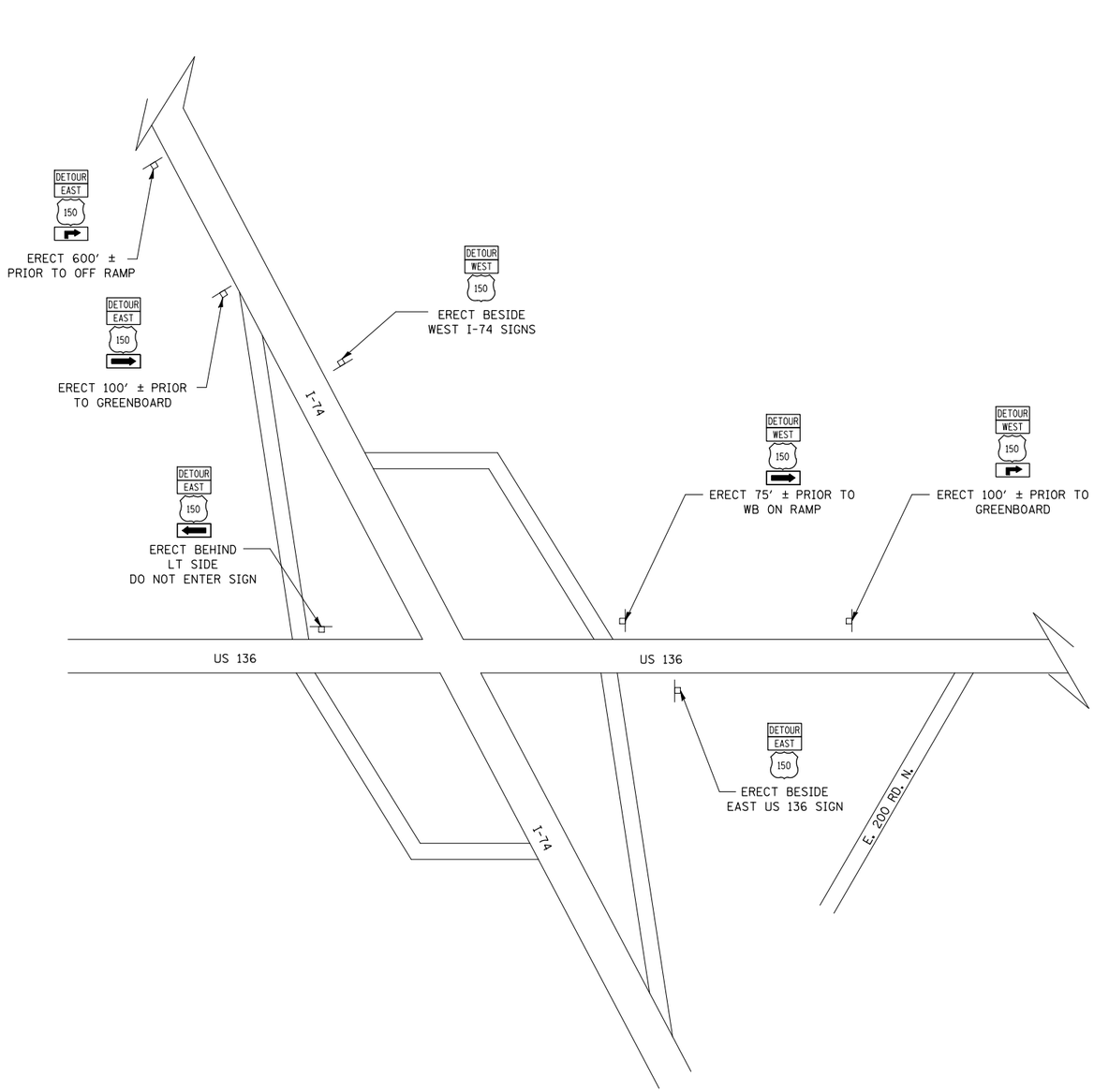
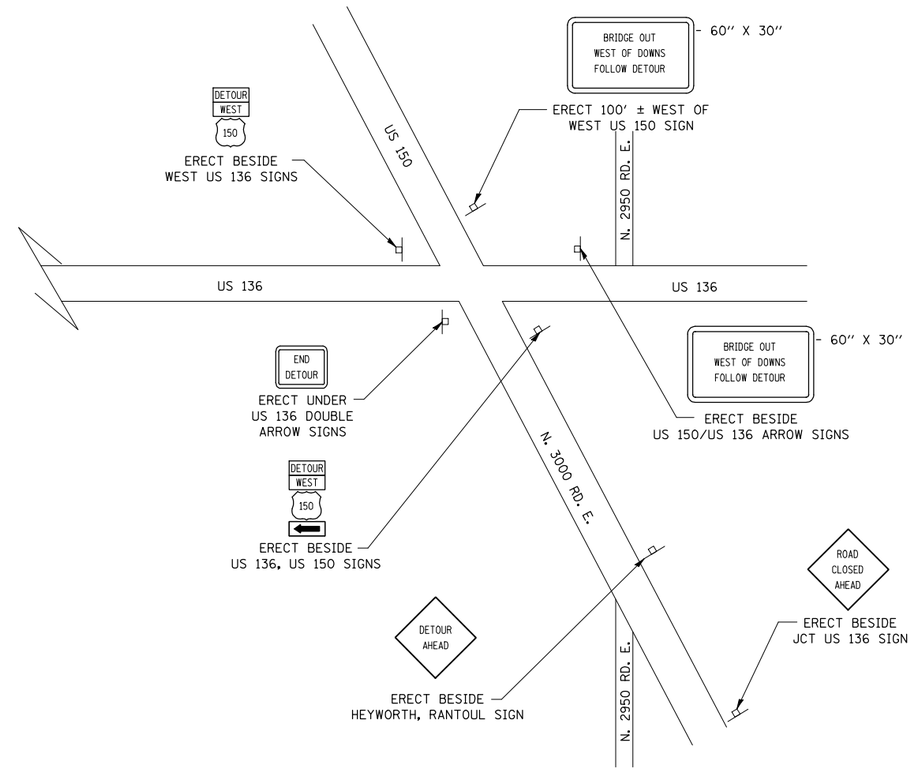
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





LEGEND

DETOUR - 24" X 12"
WEST - 24" X 12"
150 - 36" X 24"
- 21" X 15"

ROAD CLOSED AHEAD - 48" X 48"
- 21" X 15"

US 150 CLOSED WEST OF DOWNS - 60" X 30"

ROAD CLOSED AHEAD - 48" X 48"
6 MILES - 24" X 12"

NOTE: SIZE OF SIGNS SHALL BE AS SHOWN IN THE LEGEND UNLESS OTHERWISE NOTED

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETOUR SIGNING DETAILS SHEET 4 OF 5

SCALE: VERT. HORIZ.
DATE
DRAWN BY RJC
CHECKED BY

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CONTRACT NO. 70517

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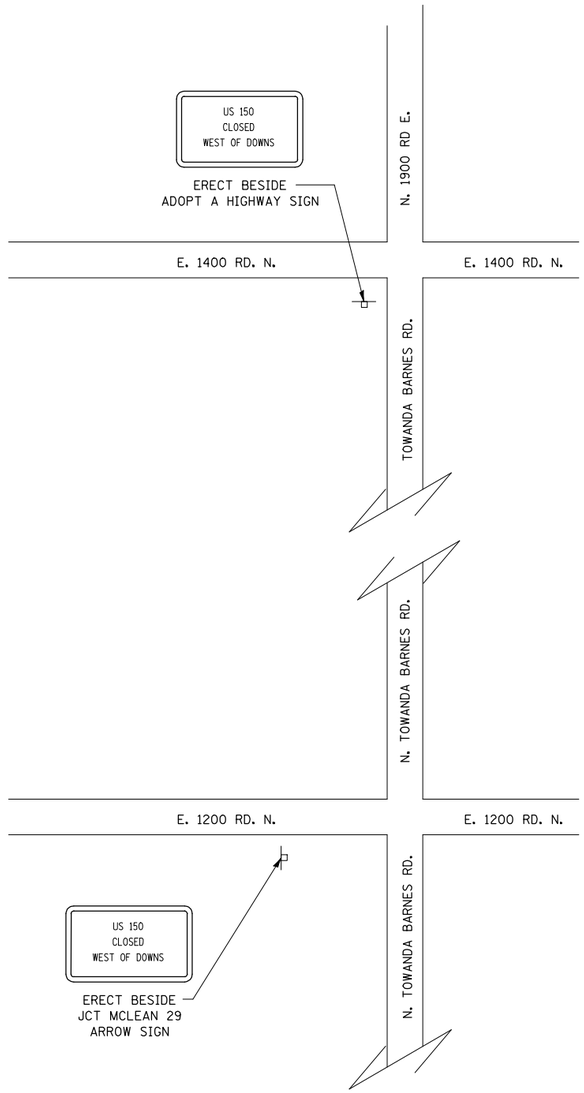
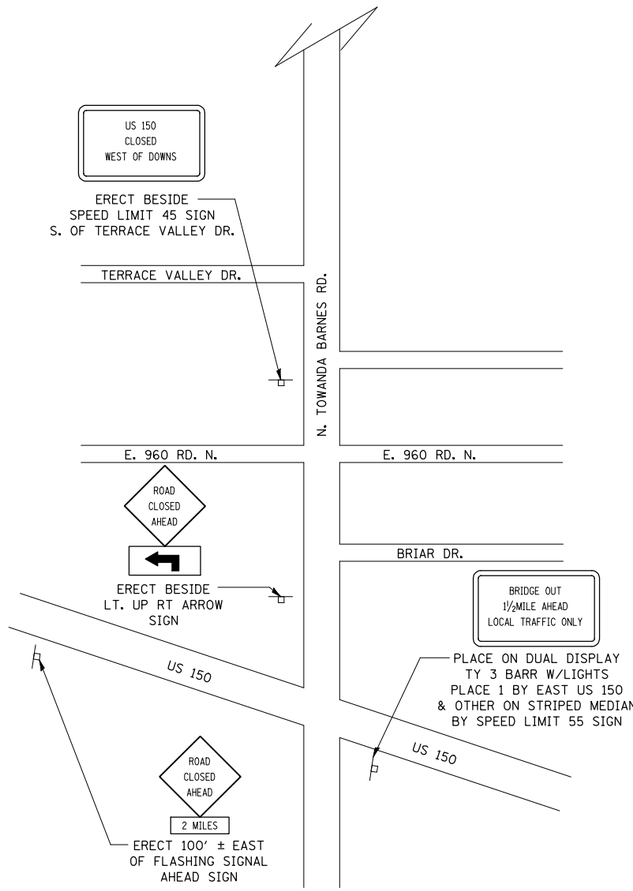
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





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LEGEND

DETOUR - 24" X 12"
WEST - 24" X 12"
150 - 36" X 24"
- 21" X 15"

ROAD CLOSED AHEAD - 48" X 48"
- 21" X 15"

US 150 CLOSED WEST OF DOWNS - 60" X 30"

ROAD CLOSED AHEAD - 48" X 48"
6 MILES - 24" X 12"

NOTE: SIZE OF SIGNS SHALL BE AS SHOWN IN THE LEGEND UNLESS OTHERWISE NOTED

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETOUR SIGNING DETAILS SHEET 5 OF 5

SCALE: VERT.
HORIZ.
DATE

DRAWN BY RJC
CHECKED BY

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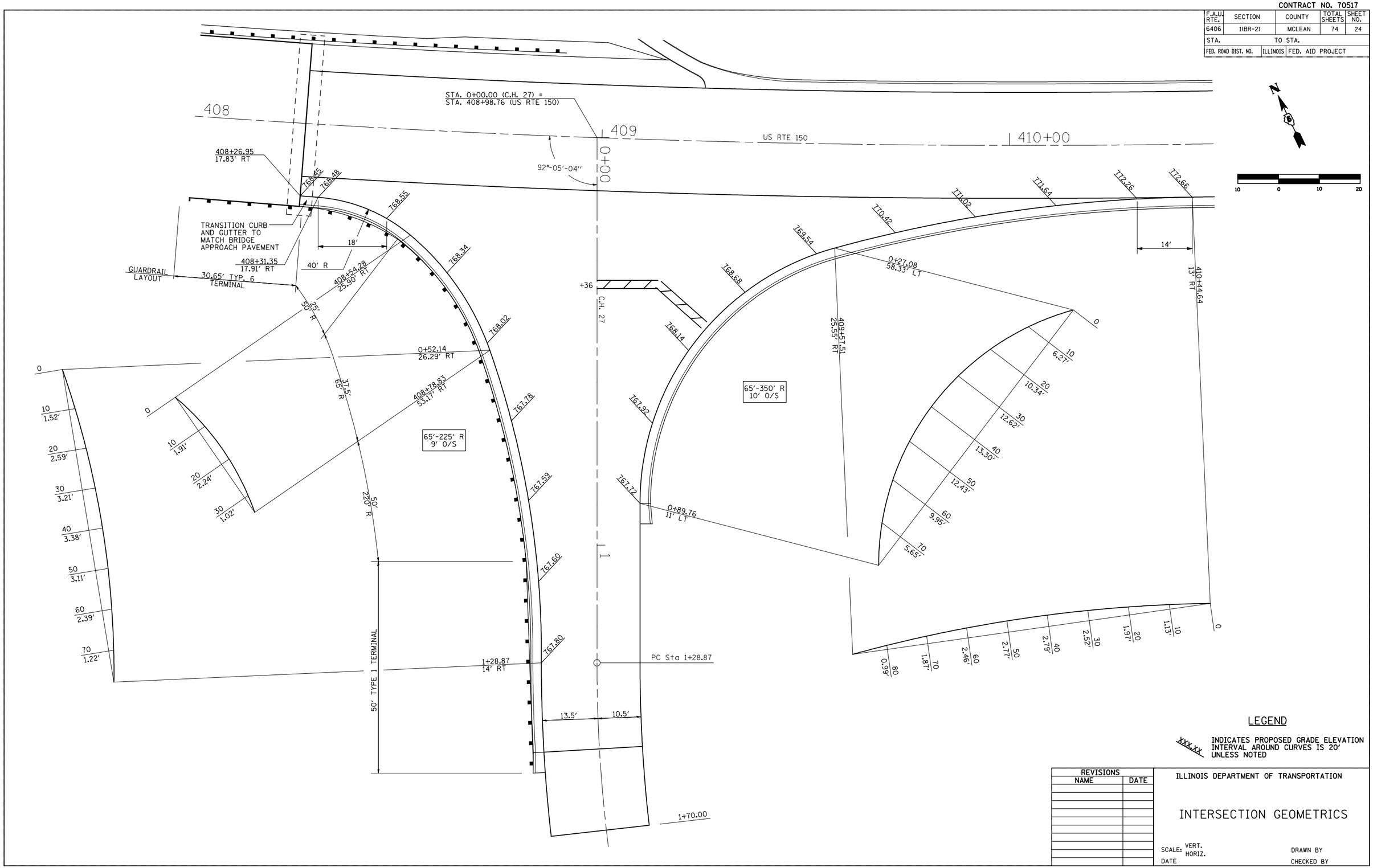
BLANK, WESSELINK, COOK & ASSOCIATES ENGINEERS - CONSULTANTS DECATUR, ILLINOIS

F.A.U. 6406 (US RTE. 150) SECTION 1(BR-2)

MCLEAN COUNTY

CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	24
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LEGEND

XXX.XX INDICATES PROPOSED GRADE ELEVATION INTERVAL AROUND CURVES IS 20' UNLESS NOTED

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

INTERSECTION GEOMETRICS

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

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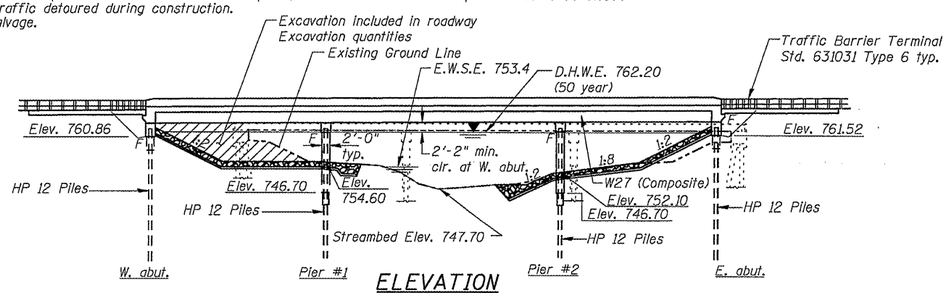
BLANK, WESSELINK, COOK & ASSOCIATES ENGINEERS - CONSULTANTS DECATUR, ILLINOIS

F.A.U. 6406 (US RTE. 150) SECTION 1(BR-2)

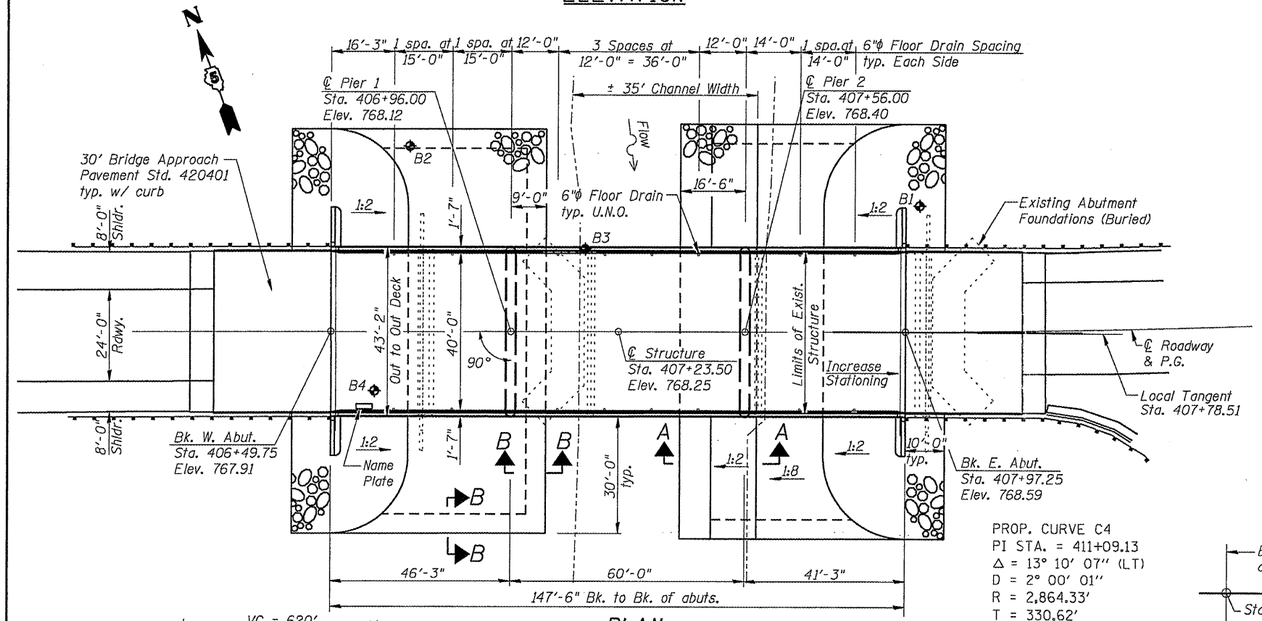
MCLEAN COUNTY

Benchmark: Chisled "□" on S.W. Wingwall on S.N. 057-0181 Elev. 764.42

Existing structure: S.N. #057-0181 was built in 1974 as FA-39 Section 1-BR. The structure is a no skew three span deck beam bridge which measures 41'-0" Out to Out and 131'-6" Bk. to Bk. Abutments. The substructure consists of open abutments and solid shaft piers, all founded on concrete piles. Road to be closed and traffic detoured during construction.
No Salvage.

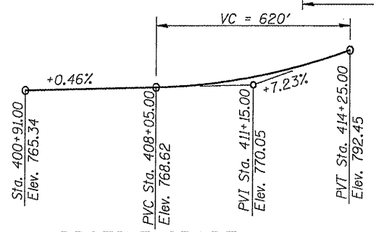


ELEVATION



PLAN

PROP. CURVE C4
PI STA. = 411+09.13
Δ = 13° 10' 07" (LT)
D = 2° 00' 01"
R = 2,864.33'
T = 330.62'
L = 658.33'
E = 19.02'
P.C. STA = 407+78.51
P.T. STA = 414+36.84



PROFILE GRADE
F.A.U. Rte. 6406 (US 150)
(Along ℄ Roadway)

Design Scour Elevation Table

	*W. Abut.	Pier 1	Pier 2	*E. Abut.
Design Scour Elevation	760.86	746.70	746.70	761.52

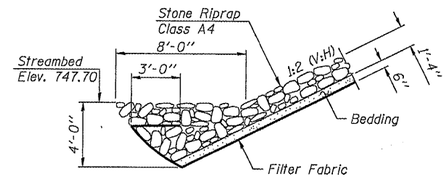
*Bottom of Abutment Elevations

WATERWAY INFORMATION

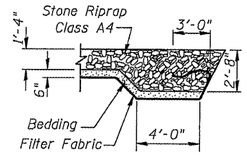
Drainage Area = 45.2 sq.mi.
Exist. Low Grade Elev. = 764.5 @ Sta. 407+00.00
Prop. Low Grade Elev. = 765.4 @ Sta. 400+91.00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E. Ft.	Head-Ft. Exist.	Head-Ft. Prop.	Headwater Elev. - Ft. Exist.	Headwater Elev. - Ft. Prop.
	10	3651	835	923	760.6	0.1	0.0	760.7	760.6
Design	50	5858	1009	1130	762.2	0.6	0.1	762.8	762.3
Base	100	6837	1009	1197	762.7	0.7	0.3	763.4	763.0
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	9229	1009	1305	763.5	1.5	0.6	765.0	764.1

10yr Velocity thru existing bridge = 4.5fps. 10yr velocity thru proposed bridge = 4.0fps



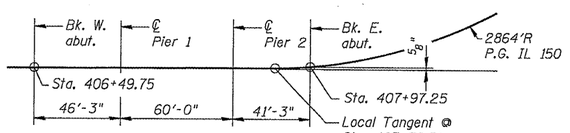
SECTION A-A



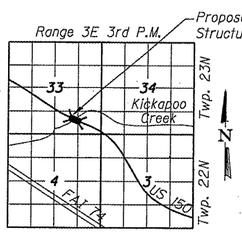
SECTION B-B

STATION 407+23.50
BUILT 20__ BY
STATE OF ILLINOIS
F.A.U. RT. 6406 SEC. 1(BR-2)
LOADING HS20
STR. NO. 057-0246

NAME PLATE
See Std. 515001



OFFSET SKETCH
(No Superelevation)



LOCATION SKETCH

APPROVED
For Structural Adequacy Only
Ralph E. Anderson
Engineer of Bridges & Structures

PETER B. BAYLES
081-006042
LICENSED STRUCTURAL ENGINEER
ILLINOIS

Peter B. Bayles, P.E., S.E.
Structural Engineer License No. 081-006042
Expiration Date: 11/30/2008

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	1(BR-2)	MCLEAN	74	25
FED. ROAD DIST. NO. 9	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1
22 SHEETS

Contract #70517

DESIGN SPECIFICATIONS
2002 AASHTO

LOADING HS20-44
Allow 50#/sq. ft. for Future Wearing Surface.

DESIGN STRESSES
FIELD UNITS
f'_c = 3,500 psi
f_y = 60,000 psi (Reinf.)
f_y = 50,000 (M-270, Grade 50W Structural Steel)

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.044g
Site Coefficient (S) = 1.0

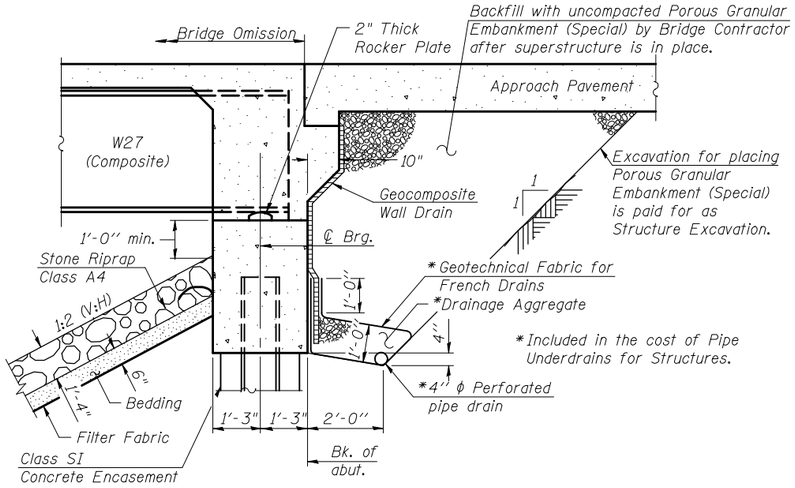
INDEX OF SHEETS

GENERAL PLAN
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	1(BR-2)	MCLEAN	74	26
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 2
22 SHEETS

Contract #70517



SECTION THRU INTEGRAL ABUTMENT

All drainage system components shall extend to 2'-0' from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts in painted areas and M164 Type 3 in unpainted areas. Bolts $\frac{7}{8}$ in.ϕ, holes $\frac{15}{16}$ in.ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 114,450 lbs.

All structural steel shall be AASHTO M270 Grade 50W.

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

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.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$" (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3". Those areas shall be primed in the shop with a Department approved zinc rich primer. No field painting shall be required. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

If the Contractor's procedures for existing beam removal or placement of new beams involves placement of heavy equipment on the existing deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Cost included with Removal of Existing Structures.

Slipforming of parapets is not allowed.

TOTAL BILL OF MATERIAL

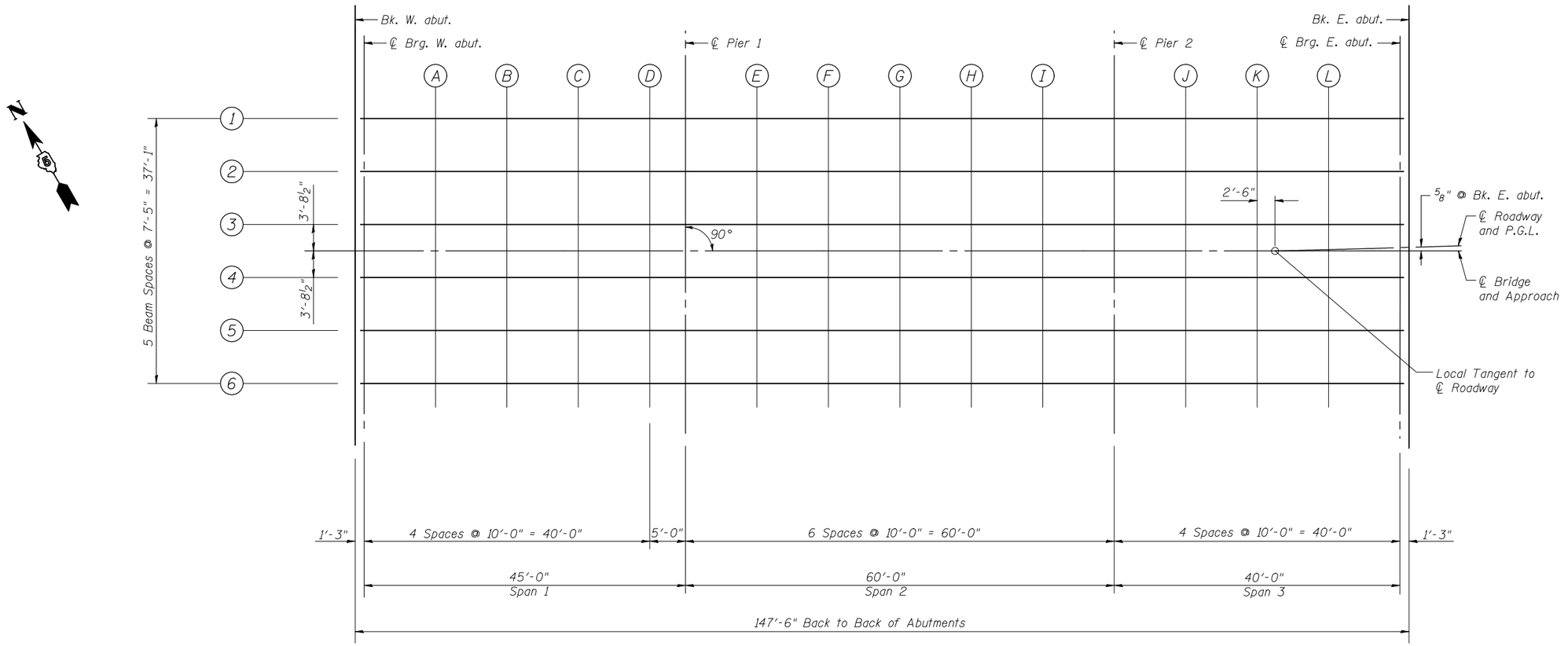
ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. Yd.		133	133
Stone Riprap, Class A4	Sq. Yd.		1512	1512
Filter Fabric	Sq. Yd.		1512	1512
Removal of Existing Structures	Each	1		1
Structure Excavation	Cu. Yd.		277	277
Floor Drains	Each	16		16
Concrete Structures	Cu. Yd.		152.1	152.1
Concrete Superstructure	Cu. Yd.	218.5		218.5
Bridge Deck Grooving	Sq. Yd.	623		623
Concrete Encasement	Cu. Yd.		9.8	9.8
Protective Coat	Sq. Yd.	780		780
Furnishing and Erecting Structural Steel	L. Sum	1		1
Reinforcement Bars, Epoxy Coated	Pound	50780	13050	63830
Furnishing Steel Piles HP 12 x 53	Foot		1566	1566
Driving Piles	Foot		1566	1566
Test Pile Steel HP 12x53	Each		4	4
Name Plates	Each	1		1
Anchor Bolts, 1"	Each	48		48
Geocomposite Wall Drain	Sq. Yd.		68	68
Pipe Underdrains for Structures 4"	Foot		165	165
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1
Stud Shear Connectors	Each	3276		3276
Bar Splicers	Each	84		84
~~Slope Wall Removal~~	~~Sq. Yd.~~		~~313~~	~~313~~
Asbestos Bearing Pad Removal	Each			52

GENERAL NOTES AND BILL OF MATERIAL
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

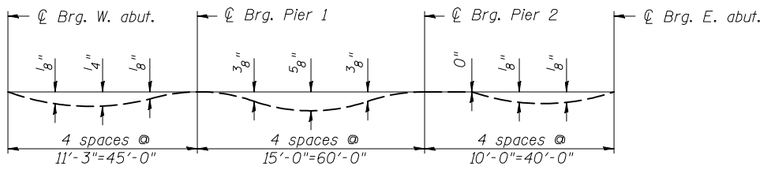
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	I(BR-2)	MCLEAN	74	27
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 3
22 SHEETS

Contract #70517



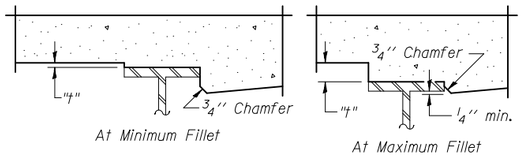
PLAN



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 4 of 22.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 4 of 22, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

TOP OF SLAB ELEVATIONS (1 OF 2)

US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION I(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	I(BR-2)	MCLEAN	74	28
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 4
22 SHEETS

Contract #70517

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	406+49.75	-18'-6 1/2"	767.59	767.59
℄ Brg. W. Abut	406+51.00	-18'-6 1/2"	767.60	767.60
A	406+61.00	-18'-6 1/2"	767.64	767.65
B	406+71.00	-18'-6 1/2"	767.69	767.71
C	406+81.00	-18'-6 1/2"	767.73	767.74
D	406+91.00	-18'-6 1/2"	767.78	767.78
℄ Pier 1	406+96.00	-18'-6 1/2"	767.80	767.80
E	407+06.00	-18'-6 1/2"	767.85	767.87
F	407+16.00	-18'-6 1/2"	767.90	767.94
G	407+26.00	-18'-6 1/2"	767.94	767.99
H	407+36.00	-18'-6 1/2"	767.99	768.03
I	407+46.00	-18'-6 1/2"	768.03	768.05
℄ Pier 2	407+56.00	-18'-6 1/2"	768.08	768.08
J	407+66.00	-18'-6 1/2"	768.13	768.13
K	407+76.00	-18'-6 1/2"	768.17	768.18
L	407+86.00	-18'-6 3/8"	768.22	768.23
℄ Brg. E. Abut.	407+96.00	-18'-6"	768.26	768.26
Bk. E. Abut.	407+97.25	-18'-5 7/8"	768.27	768.27

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	406+49.75	11'-1 1/2"	767.74	767.74
℄ Brg. W. Abut	406+51.00	11'-1 1/2"	767.75	767.75
A	406+61.00	11'-1 1/2"	767.79	767.80
B	406+71.00	11'-1 1/2"	767.84	767.86
C	406+81.00	11'-1 1/2"	767.88	767.89
D	406+91.00	11'-1 1/2"	767.93	767.93
℄ Pier 1	406+96.00	11'-1 1/2"	767.95	767.95
E	407+06.00	11'-1 1/2"	768.00	768.02
F	407+16.00	11'-1 1/2"	768.05	768.09
G	407+26.00	11'-1 1/2"	768.09	768.14
H	407+36.00	11'-1 1/2"	768.14	768.18
I	407+46.00	11'-1 1/2"	768.18	768.20
℄ Pier 2	407+56.00	11'-1 1/2"	768.23	768.23
J	407+66.00	11'-1 1/2"	768.28	768.28
K	407+76.00	11'-1 1/2"	768.32	768.33
L	407+86.00	11'-1 3/8"	768.37	768.38
℄ Brg. E. Abut.	407+96.00	11'-1"	768.41	768.41
Bk. E. Abut.	407+97.25	11'-0 7/8"	768.42	768.42

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	406+49.75	3'-8 1/2"	767.85	767.85
℄ Brg. W. Abut	406+51.00	3'-8 1/2"	767.86	767.86
A	406+61.00	3'-8 1/2"	767.90	767.91
B	406+71.00	3'-8 1/2"	767.95	767.97
C	406+81.00	3'-8 1/2"	767.99	768.00
D	406+91.00	3'-8 1/2"	768.04	768.04
℄ Pier 1	406+96.00	3'-8 1/2"	768.06	768.06
E	407+06.00	3'-8 1/2"	768.11	768.13
F	407+16.00	3'-8 1/2"	768.16	768.20
G	407+26.00	3'-8 1/2"	768.20	768.25
H	407+36.00	3'-8 1/2"	768.25	768.29
I	407+46.00	3'-8 1/2"	768.29	768.31
℄ Pier 2	407+56.00	3'-8 1/2"	768.34	768.34
J	407+66.00	3'-8 1/2"	768.39	768.39
K	407+76.00	3'-8 1/2"	768.43	768.44
L	407+86.00	3'-8 3/8"	768.48	768.49
℄ Brg. E. Abut.	407+96.00	3'-8"	768.52	768.52
Bk. E. Abut.	407+97.25	3'-7 7/8"	768.53	768.53

℄ ROADWAY & PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	406+49.75	0''-0 "	767.91	767.91
℄ Brg. W. Abut	406+51.00	0''-0 "	767.92	767.92
A	406+61.00	0''-0 "	767.96	767.97
B	406+71.00	0''-0 "	768.01	768.03
C	406+81.00	0''-0 "	768.05	768.06
D	406+91.00	0''-0 "	768.10	768.10
℄ Pier 1	406+96.00	0''-0 "	768.12	768.12
E	407+06.00	0''-0 "	768.17	768.19
F	407+16.00	0''-0 "	768.22	768.26
G	407+26.00	0''-0 "	768.26	768.31
H	407+36.00	0''-0 "	768.31	768.35
I	407+46.00	0''-0 "	768.35	768.37
℄ Pier 2	407+56.00	0''-0 "	768.40	768.40
J	407+66.00	0''-0 "	768.45	768.45
K	407+76.00	0''-0 "	768.49	768.50
L	407+86.00	0''-0 "	768.54	768.55
℄ Brg. E. Abut.	407+96.00	0''-0 "	768.58	768.58
Bk. E. Abut.	407+97.25	0''-0 "	768.59	768.59

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	406+49.75	18'-6 1/2"	767.59	767.59
℄ Brg. W. Abut	406+51.00	18'-6 1/2"	767.60	767.60
A	406+61.00	18'-6 1/2"	767.64	767.65
B	406+71.00	18'-6 1/2"	767.69	767.71
C	406+81.00	18'-6 1/2"	767.73	767.74
D	406+91.00	18'-6 1/2"	767.78	767.78
℄ Pier 1	406+96.00	18'-6 1/2"	767.80	767.80
E	407+06.00	18'-6 1/2"	767.85	767.87
F	407+16.00	18'-6 1/2"	767.90	767.94
G	407+26.00	18'-6 1/2"	767.94	767.99
H	407+36.00	18'-6 1/2"	767.99	768.03
I	407+46.00	18'-6 1/2"	768.03	768.05
℄ Pier 2	407+56.00	18'-6 1/2"	768.08	768.08
J	407+66.00	18'-6 1/2"	768.13	768.13
K	407+76.00	18'-6 1/2"	768.17	768.18
L	407+86.00	18'-6 5/8"	768.22	768.23
℄ Brg. E. Abut.	407+96.00	18'-7"	768.26	768.26
Bk. E. Abut.	407+97.25	18'-7 1/8"	768.27	768.27

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	406+49.75	11'-1 1/2"	767.74	767.74
℄ Brg. W. Abut	406+51.00	11'-1 1/2"	767.75	767.75
A	406+61.00	11'-1 1/2"	767.79	767.80
B	406+71.00	11'-1 1/2"	767.84	767.86
C	406+81.00	11'-1 1/2"	767.88	767.89
D	406+91.00	11'-1 1/2"	767.93	767.93
℄ Pier 1	406+96.00	11'-1 1/2"	767.95	767.95
E	407+06.00	11'-1 1/2"	768.00	768.02
F	407+16.00	11'-1 1/2"	768.05	768.09
G	407+26.00	11'-1 1/2"	768.09	768.14
H	407+36.00	11'-1 1/2"	768.14	768.18
I	407+46.00	11'-1 1/2"	768.18	768.20
℄ Pier 2	407+56.00	11'-1 1/2"	768.23	768.23
J	407+66.00	11'-1 1/2"	768.28	768.28
K	407+76.00	11'-1 1/2"	768.32	768.33
L	407+86.00	11'-1 5/8"	768.37	768.38
℄ Brg. E. Abut.	407+96.00	11'-2"	768.41	768.41
Bk. E. Abut.	407+97.25	11'-2 1/8"	768.42	768.42

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	406+49.75	3'-8 1/2"	767.85	767.85
℄ Brg. W. Abut	406+51.00	3'-8 1/2"	767.86	767.86
A	406+61.00	3'-8 1/2"	767.90	767.91
B	406+71.00	3'-8 1/2"	767.95	767.97
C	406+81.00	3'-8 1/2"	767.99	768.00
D	406+91.00	3'-8 1/2"	768.04	768.04
℄ Pier 1	406+96.00	3'-8 1/2"	768.06	768.06
E	407+06.00	3'-8 1/2"	768.11	768.13
F	407+16.00	3'-8 1/2"	768.16	768.20
G	407+26.00	3'-8 1/2"	768.20	768.25
H	407+36.00	3'-8 1/2"	768.25	768.29
I	407+46.00	3'-8 1/2"	768.29	768.31
℄ Pier 2	407+56.00	3'-8 1/2"	768.34	768.34
J	407+66.00	3'-8 1/2"	768.39	768.39
K	407+76.00	3'-8 1/2"	768.43	768.44
L	407+86.00	3'-8 5/8"	768.48	768.49
℄ Brg. E. Abut.	407+96.00	3'-9"	768.52	768.52
Bk. E. Abut.	407+97.25	3'-9 1/8"	768.53	768.53

TOP OF SLAB ELEVATIONS (2 OF 2)

US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	1(BR-2)	MCLEAN	74	29
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 5
22 SHEETS

Contract #70517

NORTH CURB LINE

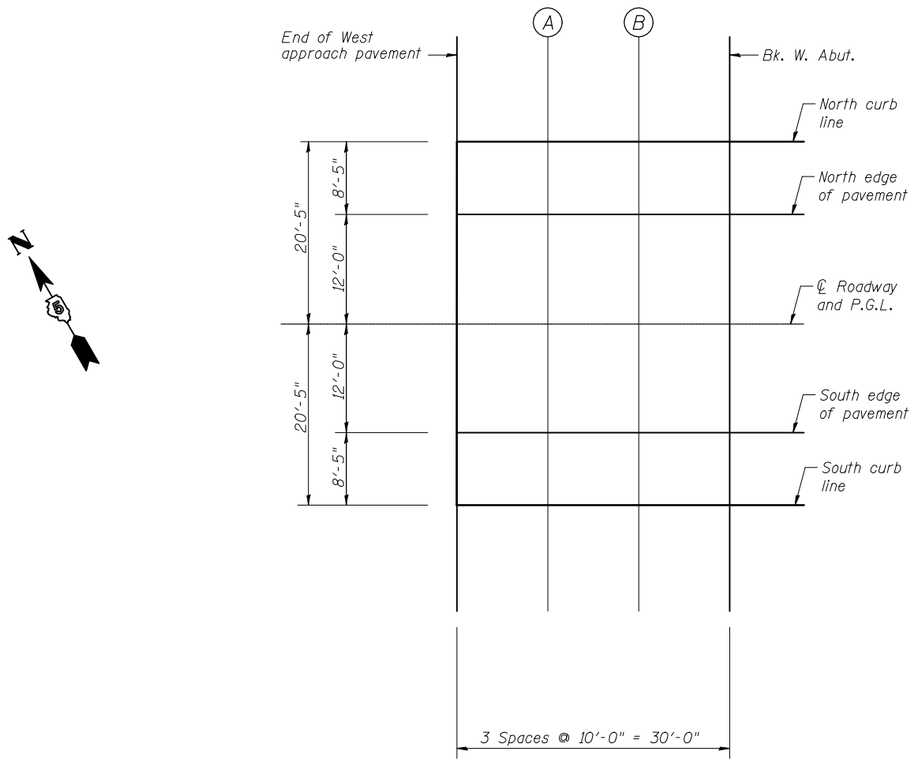
Location	Station	Offset	Theoretical Grade Elevations
End W. Appr. Pav't	406+19.75	-20.00	767.40
A	406+29.75	-20.00	767.45
B	406+39.75	-20.00	767.49
Bk. W. Abut.	406+49.75	-20.00	767.54

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End W. Appr. Pav't	406+19.75	-12.00	767.58
A	406+29.75	-12.00	767.63
B	406+39.75	-12.00	767.67
Bk. W. Abut.	406+49.75	-12.00	767.72

℄ ROADWAY & PG

Location	Station	Offset	Theoretical Grade Elevations
End W. Appr. Pav't	406+19.75	0.00	767.77
A	406+29.75	0.00	767.82
B	406+39.75	0.00	767.86
Bk. W. Abut.	406+49.75	0.00	767.91



PLAN

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End W. Appr. Pav't	406+19.75	12.00	767.58
A	406+29.75	12.00	767.63
B	406+39.75	12.00	767.67
Bk. W. Abut.	406+49.75	12.00	767.72

SOUTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End W. Appr. Pav't	406+19.75	20.00	767.40
A	406+29.75	20.00	767.45
B	406+39.75	20.00	767.49
Bk. W. Abut.	406+49.75	20.00	767.54

TOP OF WEST APPROACH SLAB ELEVATIONS
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	I(BR-2)	MCLEAN	74	30
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 6
22 SHEETS

Contract #70517

NORTH CURB LINE

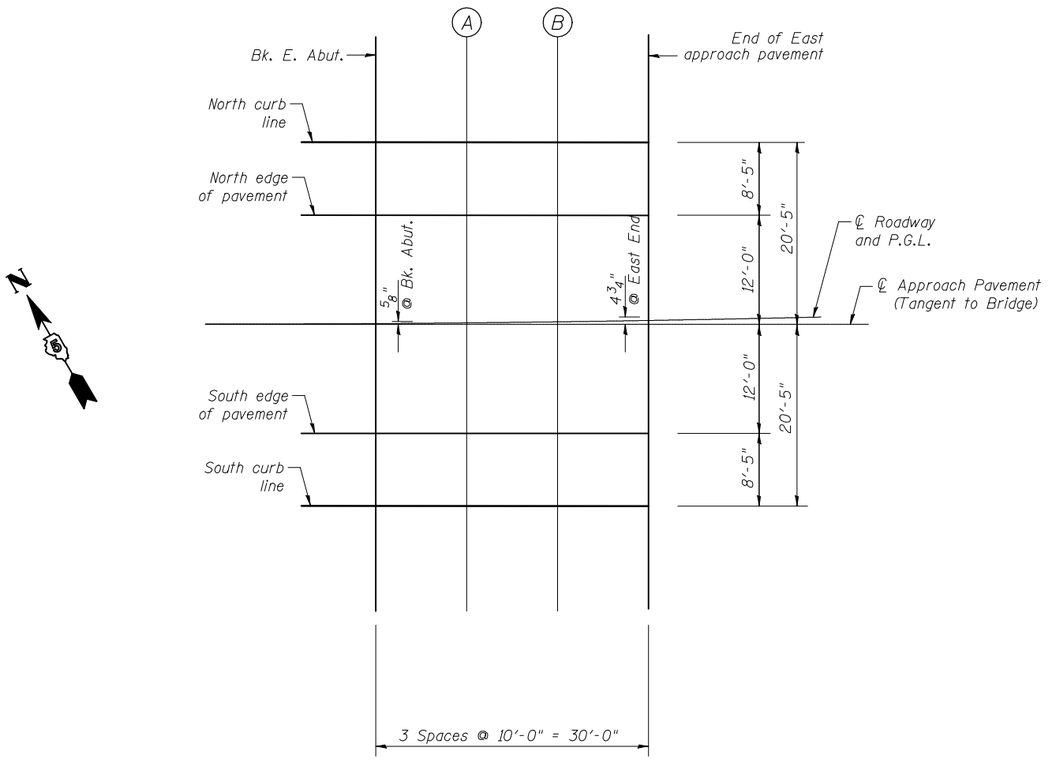
Location	Station	Offset	Theoretical Grade Elevations
Bk. E. Abut.	407+97.25	-20.37	768.22
A	408+07.25	-20.29	768.26
B	408+17.25	-20.17	768.32
End E. Appr. Pav't	408+27.25	-20.03	768.38

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk. E. Abut.	407+97.25	-11.95	768.40
A	408+07.25	-11.87	768.44
B	408+17.25	-11.75	768.50
End E. Appr. Pav't	408+27.25	-11.61	768.56

℄ ROADWAY & PG

Location	Station	Offset	Theoretical Grade Elevations
Bk. E. Abut.	407+97.25	-0.00	768.59
A	408+07.25	-0.00	768.63
B	408+17.25	-0.00	768.69
End E. Appr. Pav't	408+27.25	-0.00	768.75



PLAN

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk. E. Abut.	407+97.25	12.05	768.40
A	408+07.25	12.13	768.44
B	408+17.25	12.25	768.50
End E. Appr. Pav't	408+27.25	12.39	768.56

SOUTH CURB LINE

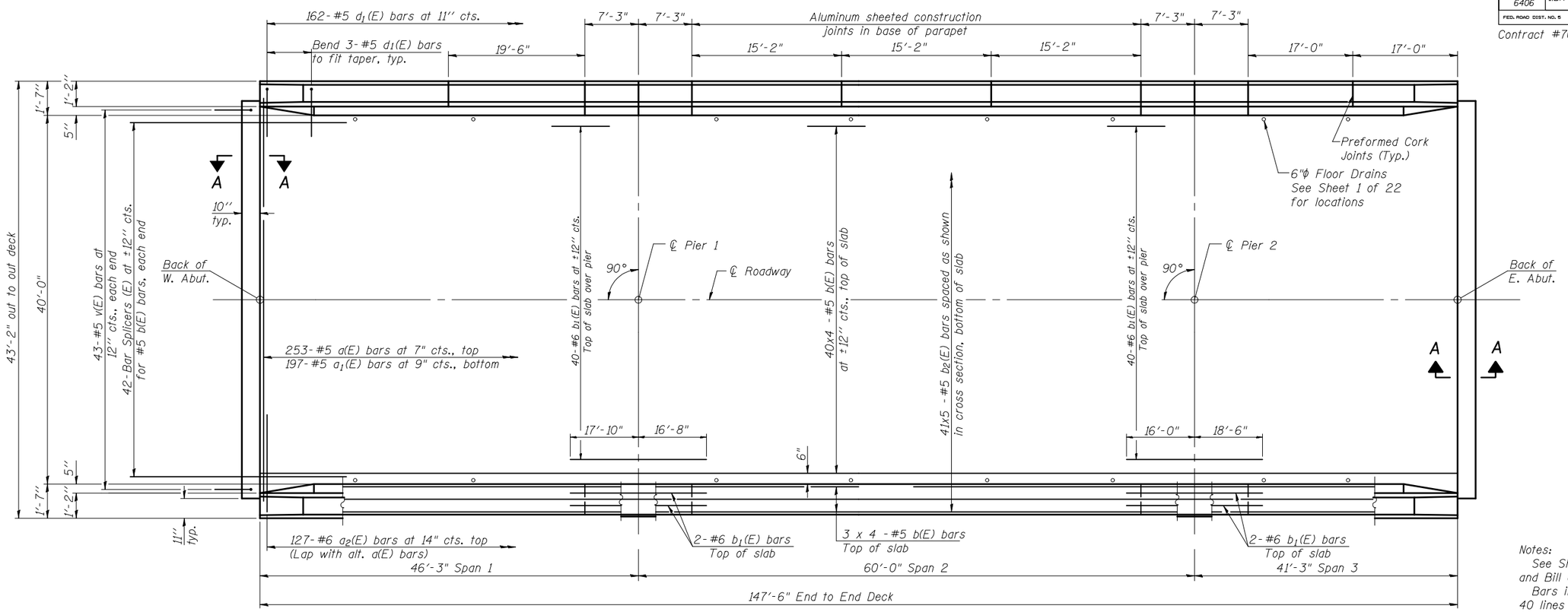
Location	Station	Offset	Theoretical Grade Elevations
Bk. E. Abut.	407+97.25	20.47	768.22
A	408+07.25	20.55	768.26
B	408+17.25	20.67	768.32
End E. Appr. Pav't	408+27.25	20.81	768.38

TOP OF EAST APPROACH SLAB ELEVATIONS
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION I(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	1(BR-2)	MCLEAN	74	31
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 7
22 SHEETS

Contract #70517

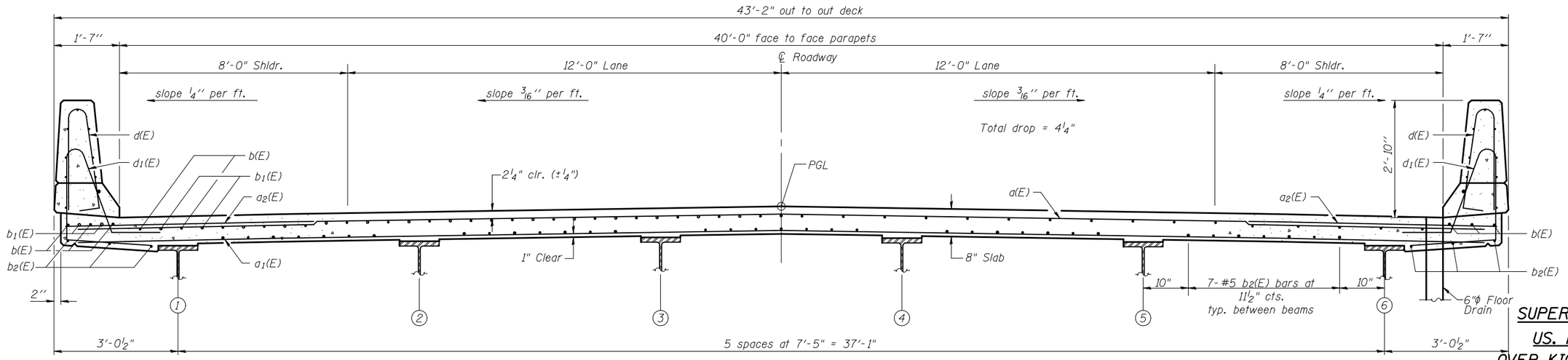


PLAN

MINIMUM BAR LAP

#5 bar = 1'-8''

Notes:
See Sheet 8 of 22 for superstructure details and Bill of Material.
Bars indicated thus 40 x 4-#5 etc. indicates 40 lines of bars with 4 lengths per line.
See Sheet 8 of 22 for parapet reinforcement.
For details of bar splicers see Sheet 16 of 22.



NEAR PIER NEAR MIDSPAN

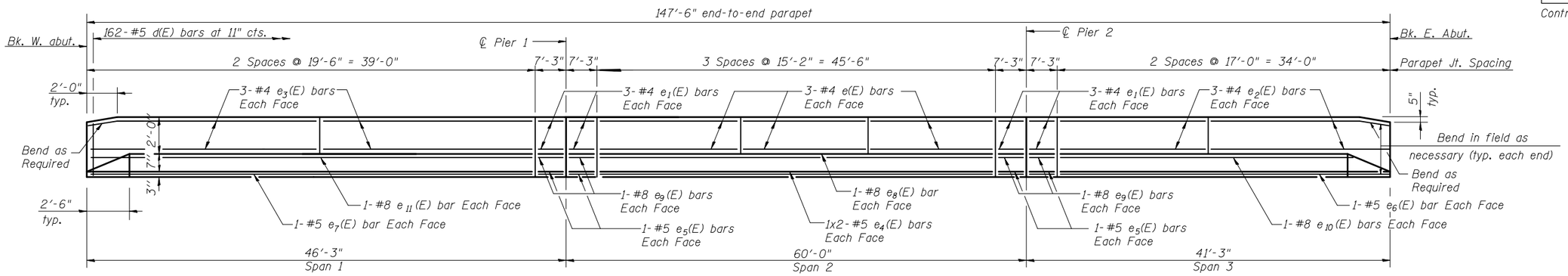
CROSS SECTION
(Looking East)

SUPERSTRUCTURE
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

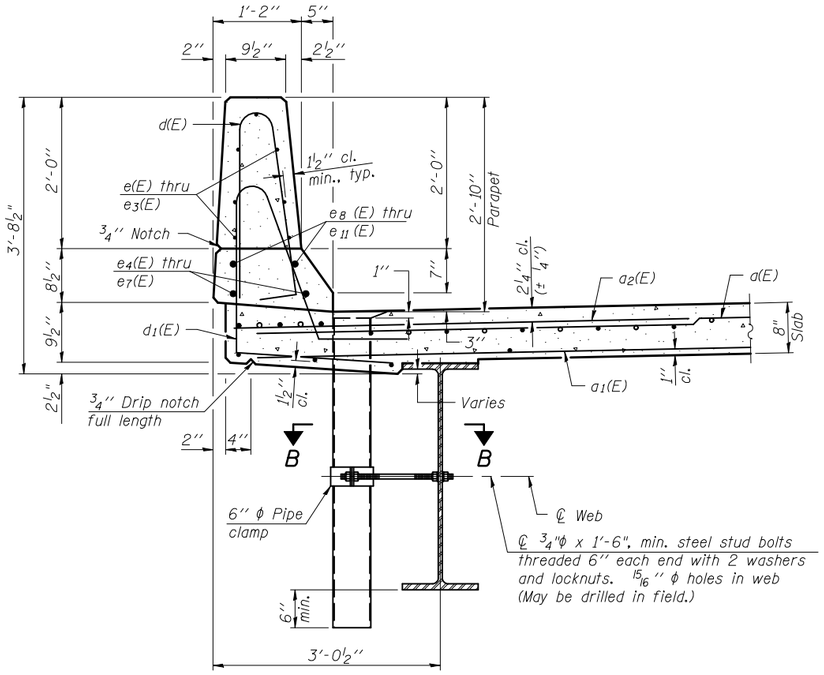
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	1(BR-2)	MCLEAN	74	32
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 8
22 SHEETS

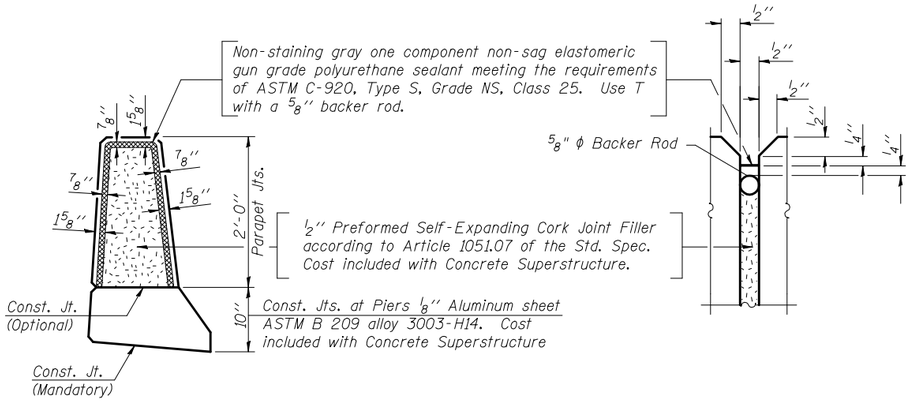
Contract #70517



INSIDE ELEVATION OF PARAPET



SECTION THRU PARAPET



PARAPET JOINT DETAILS

Notes:
The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to Steel Structures Painting Council's Spec. SSPC-SP1 prior to painting.
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

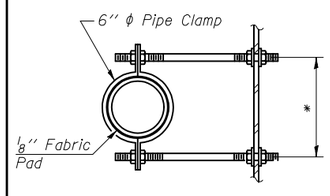
MINIMUM BAR LAP

#5 bar = 2'-2"

SUPERSTRUCTURE BILL OF MATERIAL

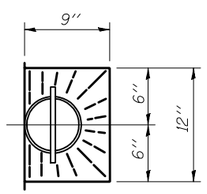
Bar	No.	Size	Length	Shape
a(E)	253	#5	42'-2"	
a1(E)	197	#5	42'-1"	
a2(E)	254	#6	6'-0"	
b(E)	184	#5	38'-1"	
b1(E)	88	#6	34'-6"	
b2(E)	205	#5	30'-9"	
d(E)	324	#5	5'-7"	
d1(E)	324	#5	7'-10"	
e(E)	36	#4	14'-10"	
e1(E)	48	#4	6'-11"	
e2(E)	24	#4	16'-8"	
e3(E)	24	#4	19'-2"	
e4(E)	8	#5	23'-8"	
e5(E)	16	#5	6'-11"	
e6(E)	4	#5	33'-8"	
e7(E)	4	#5	38'-8"	
e8 (E)	4	#8	45'-2"	
e9 (E)	16	#8	6'-11"	
e10 (E)	4	#8	33'-8"	
e11 (E)	4	#8	38'-8"	
m(E)	4	#6	41'-0"	
m1(E)	6	#6	42'-10"	
m2(E)	24	#6	9'-5"	
m3(E)	10	#6	7'-0"	
m4(E)	4	#6	2'-8"	
s(E)	92	#5	5'-7"	
s1(E)	82	#4	9'-0"	
v(E)	86	#5	3'-4"	
Reinforcement Bars, Epoxy Coated		Pound	50780	
Concrete Superstructure		Cu. Yds.	218.5	
Floor Drains		Each	16	
Bridge Deck Grooving		Sq. Yd.	623	
Protective Coat		Sq. Yd.	780	
Bar Splicers		Each	84	

Bars indicated thus 1 x 2 -#5 etc. indicates 1 line of bars with 2 lengths per line.
See Sheet 9 of 22 for details of bars s(E), s1(E) and v(E).

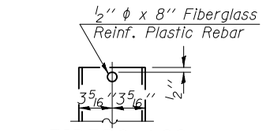


SECTION B-B

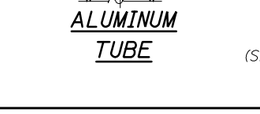
* Dimension as required by Pipe Clamp



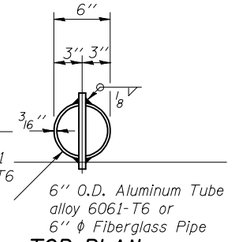
TOP PLAN



FIBERGLASS PIPE

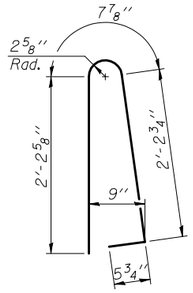


ALUMINUM TUBE

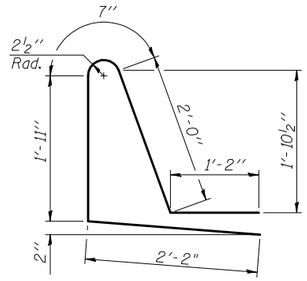


TOP PLAN

(Showing Aluminum Tube)



BAR d(E)



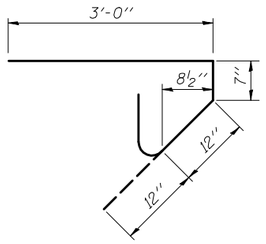
BAR d1(E)

SUPERSTRUCTURE DETAILS
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

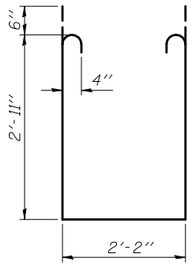
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	1(BR-2)	MCLEAN	74	33
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 9
22 SHEETS

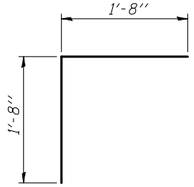
Contract #70517



BAR s(E)



BAR s1(E)

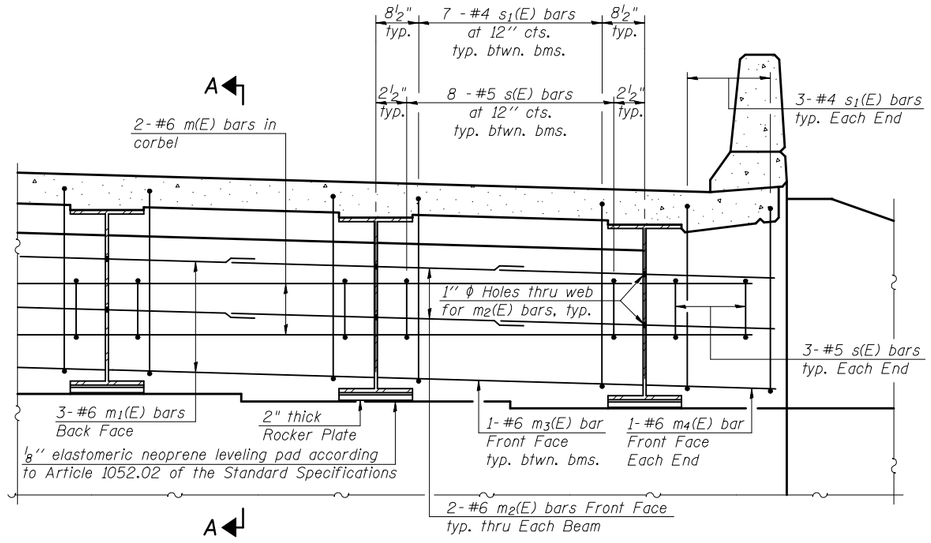


BAR v(E)

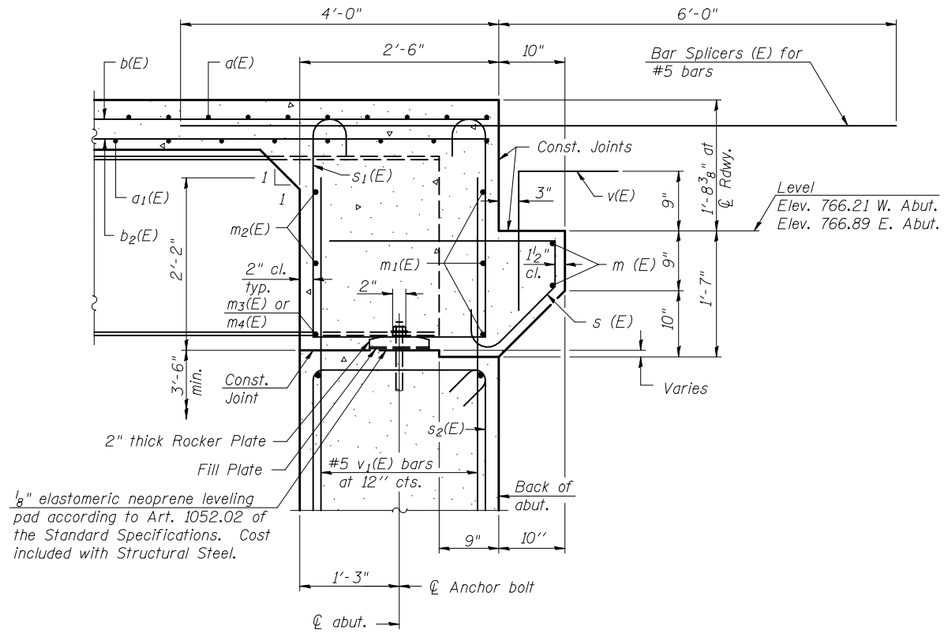
Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet 8 of 22.
Concrete in diaphragm is included with Concrete Superstructure on sheet 8 of 22.
For details of bar splicers see sheet 16 of 22.

MINIMUM BAR LAP

#6 bar = 2'-9"



DIAPHRAGM ELEVATION AT ABUTMENT



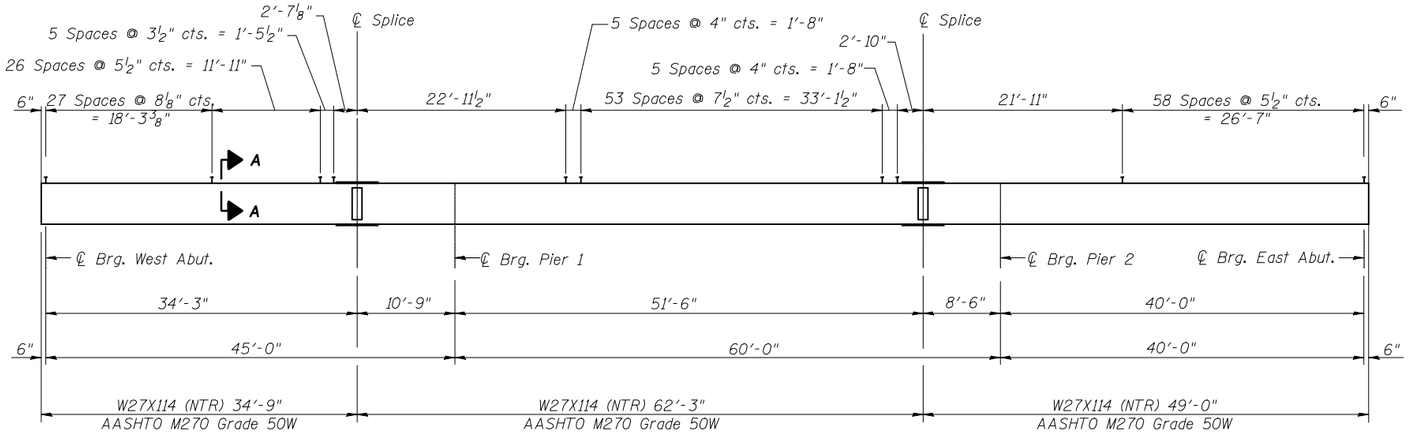
SECTION A-A

ABUTMENT DIAPHRAGM DETAILS
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

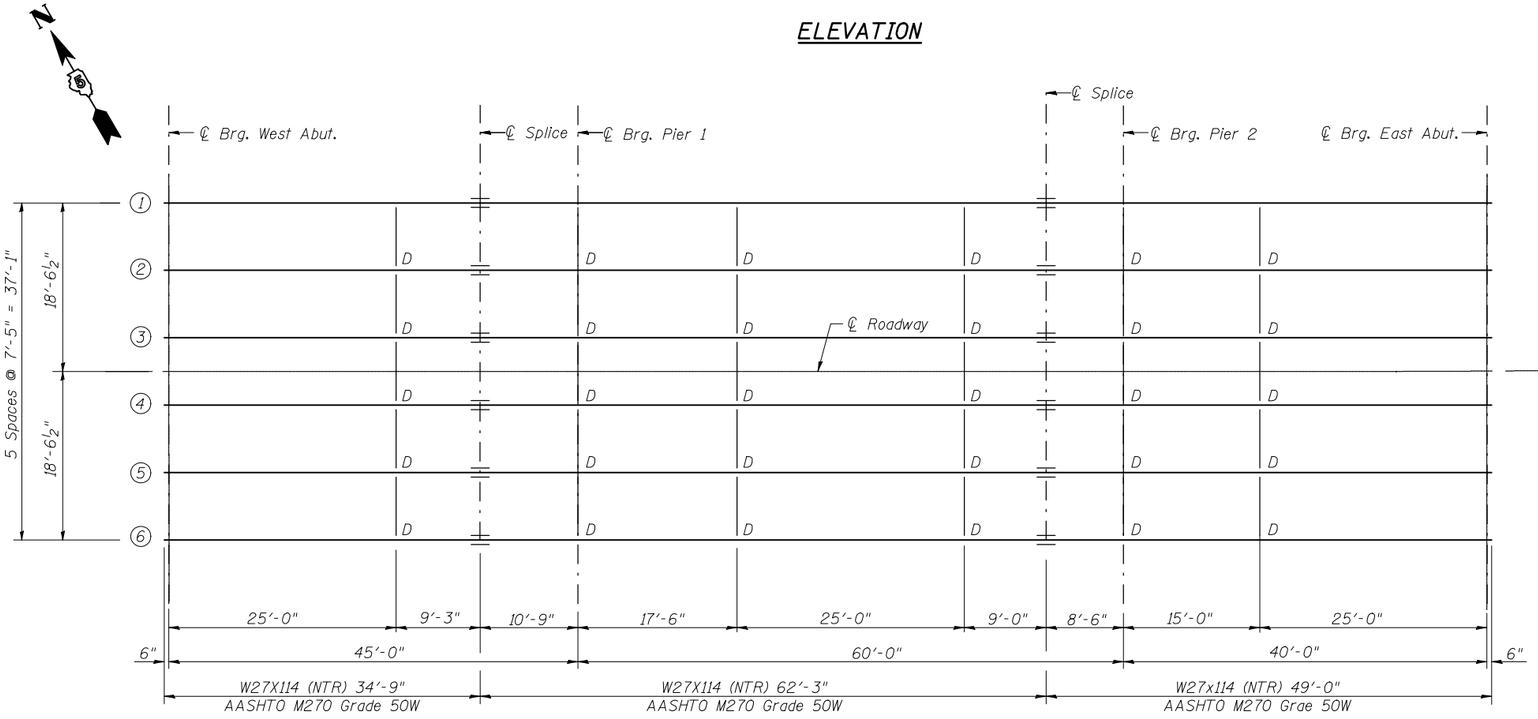
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	1(BR-2)	MCLEAN	74	34
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 10
22 SHEETS

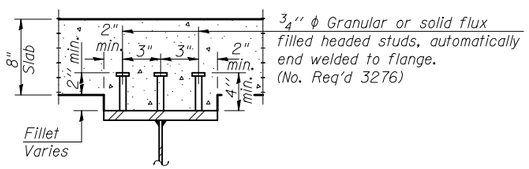
Contract #70517



ELEVATION



FRAMING PLAN



SECTION A-A

INTERIOR GIRDER MOMENT TABLE						
		0.4 spa. #1	Pier 1	0.5 spa. #2	Pier 2	0.6 spa. #3
I_s	(in^4)	4080	4080	4080	4080	4080
$I_c(n)$	(in^4)	11833		11833		11833
$I_c(3n)$	(in^4)	8817		8817		8817
S_s	(in^3)	299	299	299	299	299
$S_c(n)$	(in^3)	454		454		454
$S_c(3n)$	(in^3)	412		412		412
w_{DL}	(k/')	0.888	1.308	0.888	1.308	0.888
M_{DL}	('k)	114	359	157	327	80
s_{DL}	(k/')	0.420		0.420		0.420
M_{sDL}	('k)	76		118		55
M_{LL}	('k)	311	180	395	174	253
M_{Imp}	('k)	91	51	106	50	76
$\frac{5}{3}[M_{LL}+M_{Imp}]$	('k)	670	385	835	374	549
M_a	('k)	1118	967	1443	911	889
* M_u	('k)	1806		1771		1833
f_s DL non-comp	(ksi)	4.6	14.5	6.4	13.2	3.3
f_s DL (comp)	(ksi)	2.3		3.5		1.7
$f_s \frac{5}{3}[M_{LL}+M_{Imp}]$	(ksi)	17.7	15.5	22.1	15.1	14.6
f_s (Overload)	(ksi)	24.6	30.0	32.0	28.3	19.6
** f_s (Total)	(ksi)		39.0		36.8	
VR	(k)	52.5		47.5		51.1

INTERIOR GIRDER REACTION TABLE					
		W. abut.	Pier 1	E. abut.	Pier 2
R_{DL}	(k)	22.9	80.5	76.2	19.3
R_{LL}	(k)	37.1	44.6	44.5	35.6
Imp.	(k)	10.9	9.7	9.9	10.7
R_{Total}	(k)	70.9	134.8	130.6	65.6

*
** Compact section Braced non-compact and partially braced section

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total and Overload) due to non-composite dead loads (in.4 and in.3).

$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total and Overload) due to short-term composite live loads (in.4 and in.3).

$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total and Overload) due to long-term composite (superimposed) dead loads (in.4 and in.3).

w_{DL}: Un-factored non-composite dead load (kips/ft.).

M_{DL}: Un-factored moment due to non-composite dead load (kip-ft.).

s_{DL}: Un-factored long-term composite (superimposed) dead load (kips/ft.)

M_{sDL}: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

M_{LL}: Un-factored live load moment (kip-ft.).

M_{Imp}: Un-factored moment due to impact (kip-ft.).

M_a: Factored design moment (kip-ft.).
$1.3\ [\ M_{DL} + M_{sDL} + \frac{5}{3}\ (M_{LL} + M_{Imp})]$

M_u: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).

f_s (Overload): Sum of stresses as computed from the moments below (ksi).
$M_{DL} + M_{sDL} + \frac{5}{3}\ (M_{LL} + M_{Imp})$

f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
$1.3\ [M_{DL} + M_{sDL} + \frac{5}{3}\ (M_{LL} + M_{Imp})]$

VR: Maximum M_{LL} + impact horizontal shear range within the composite portion of the span for stud shear connector design (kips).

Note:
All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor bolts.

	W. Abut.	℄ Splice 1	℄ Pier 1	℄ Splice 2	℄ Pier 2	E. Abut.
Beam 1 and 6	766.81	766.96	767.01	767.25	767.29	767.47
Beam 2 and 5	766.96	767.11	767.16	767.40	767.44	767.62
Beam 3 and 4	767.07	767.22	767.27	767.51	767.55	767.73

TOP OF BEAM ELEVATIONS

(For Fabrication use Only)

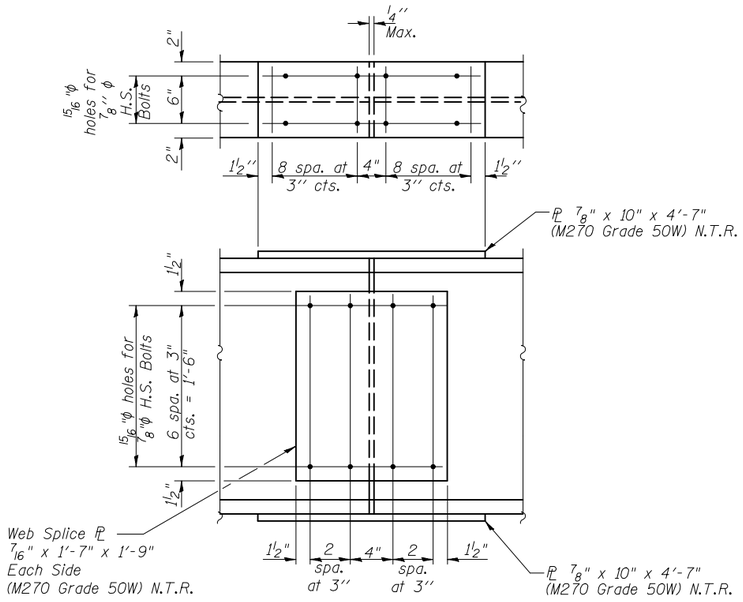
FRAMING PLAN AND BEAM DETAILS

US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	1(BR-2)	MCLEAN	74	35
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

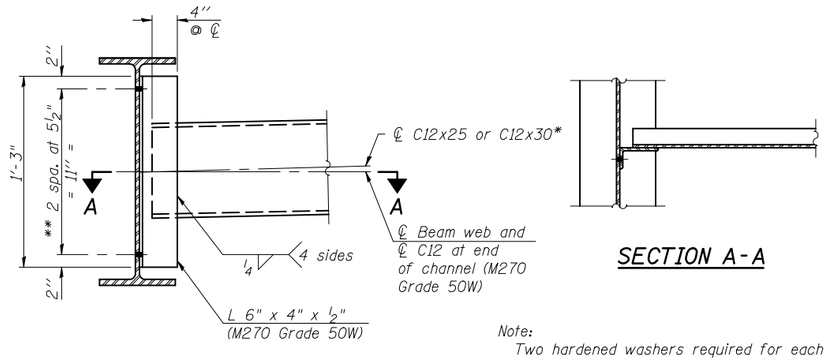
SHEET NO. 11
22 SHEETS

Contract #70517



SPLICE

Note:
Steel designated with N.T.R. shall conform to the requirements for Notch Toughness (Zone 2).

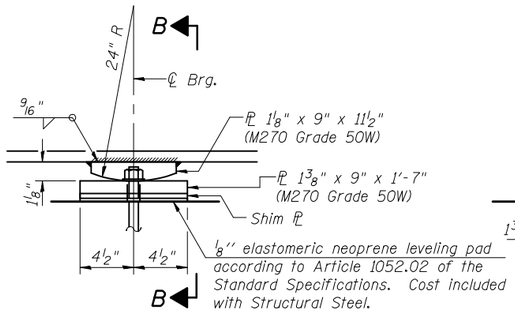


INTERIOR DIAPHRAGM
(30 Required)

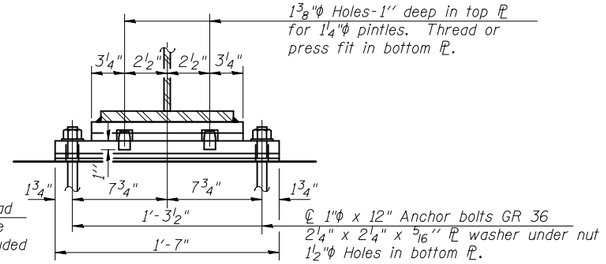
SECTION A-A

Note:
Two hardened washers required for each set of oversized holes.

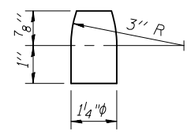
* Alternate channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.
** 3/4" ϕ HS bolts. 15/16" ϕ holes



ELEVATION AT PIER

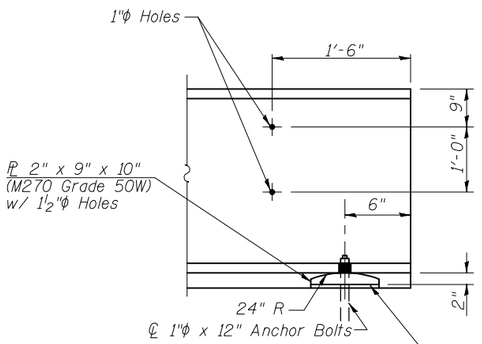


SECTION B-B

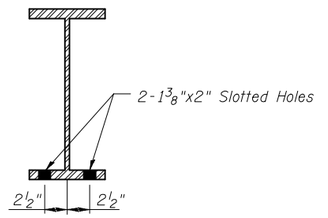


PINTLE

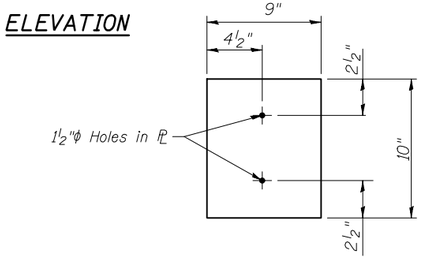
FIXED BEARING AT PIERS
(12 Required)



ELEVATION



SECTION



NEOPRENE MAT AND ROCKER PLAN AT ABUTMENTS
(12 Required)

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

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

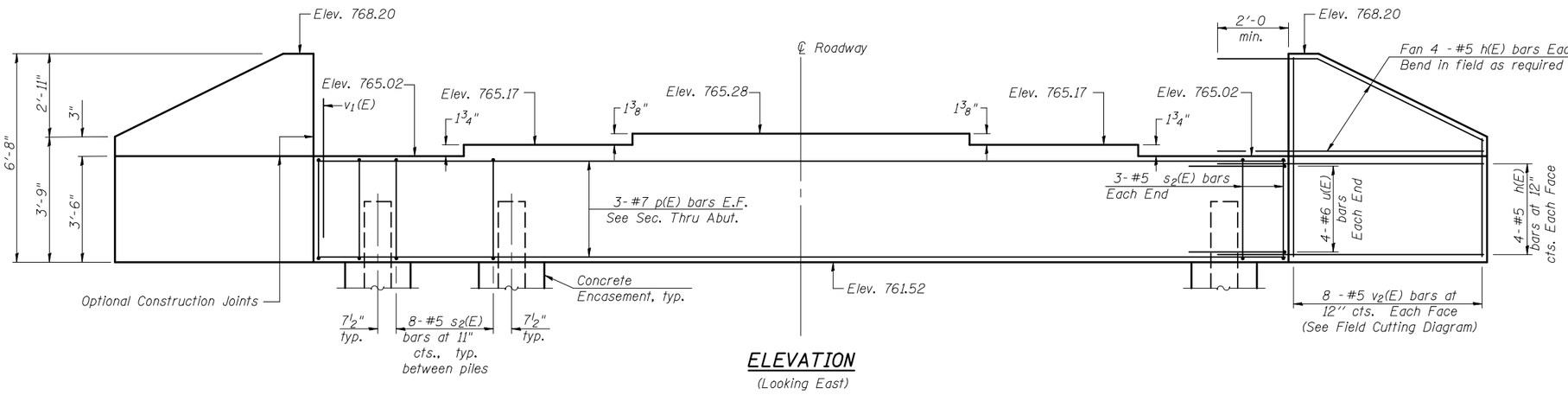
Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

STRUCTURAL STEEL DETAILS
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	1(BR-2)	MCLEAN	74	36
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

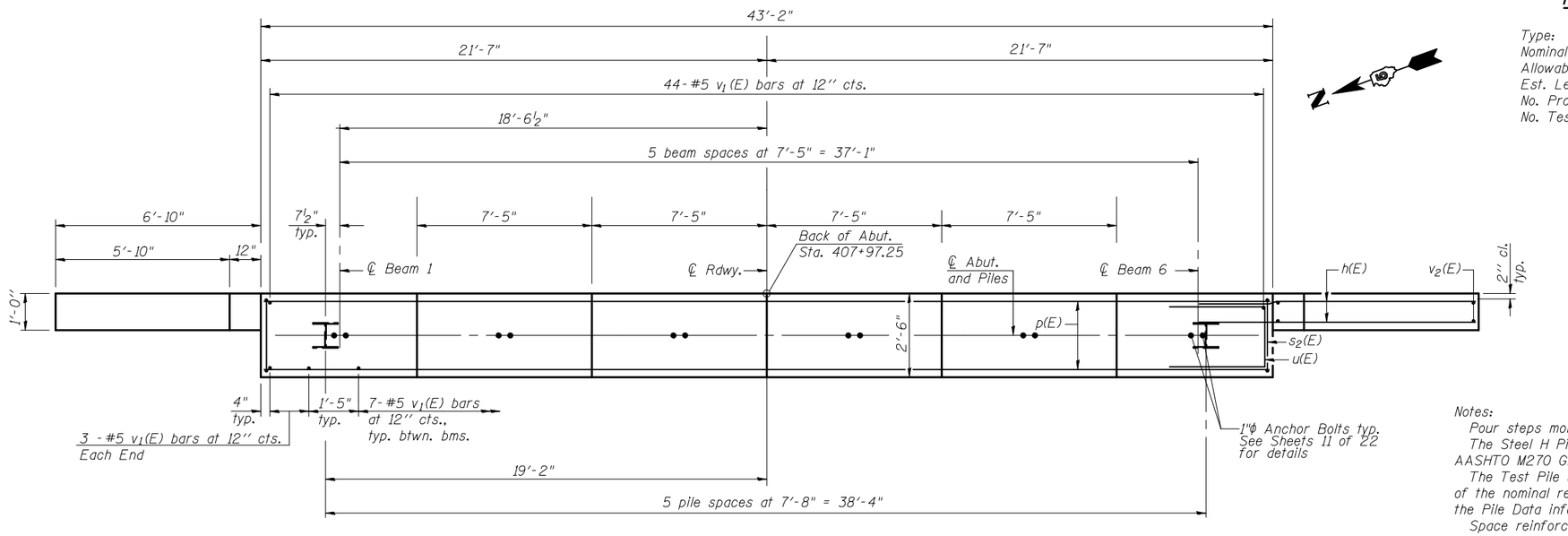
SHEET NO. 12
22 SHEETS

Contract #70517

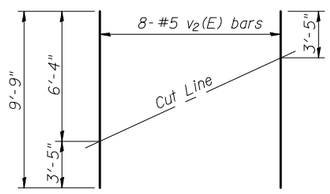


ELEVATION

(Looking East)

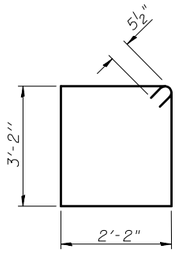


PLAN

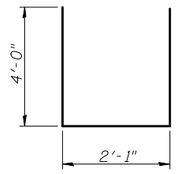


FIELD CUTTING DIAGRAM

Order $v_2(E)$ full length. Cut as shown and use remainder of bars in opposite face.



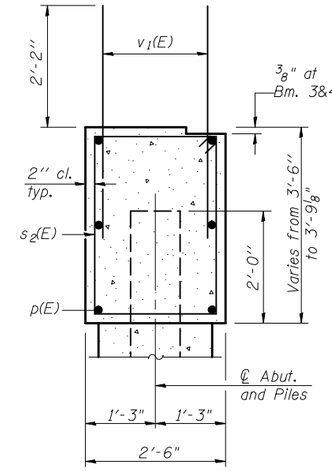
BAR $s_2(E)$



BAR $u(E)$

PILE DATA

Type: Steel HP 12X53
Nominal Required Bearing: 419 kips
Allowable Resistance Available: 140 kips
Est. Length: 49 ft.
No. Production Piles: 5
No. Test Piles: 1



SEC. THRU ABUT.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	32	#5	8'-8"	
p(E)	6	#7	42'-10"	
$s_2(E)$	46	#5	11'-7"	
u(E)	8	#6	10'-1"	
$v_1(E)$	85	#5	4'-4"	
$v_2(E)$	16	#5	9'-9"	
Structure Excavation		Cu. Yd.	55.3	
Concrete Structures		Cu. Yd.	17.3	
Reinforcement Bars, Epoxy Coated		Pound	2040	
Furnishing Steel Piles, 12x53		Foot	245	
Driving Piles		Foot	245	
Test Pile, HP 12x53		Each	1	
Concrete Encasement		Cu. Yd.	2.1	

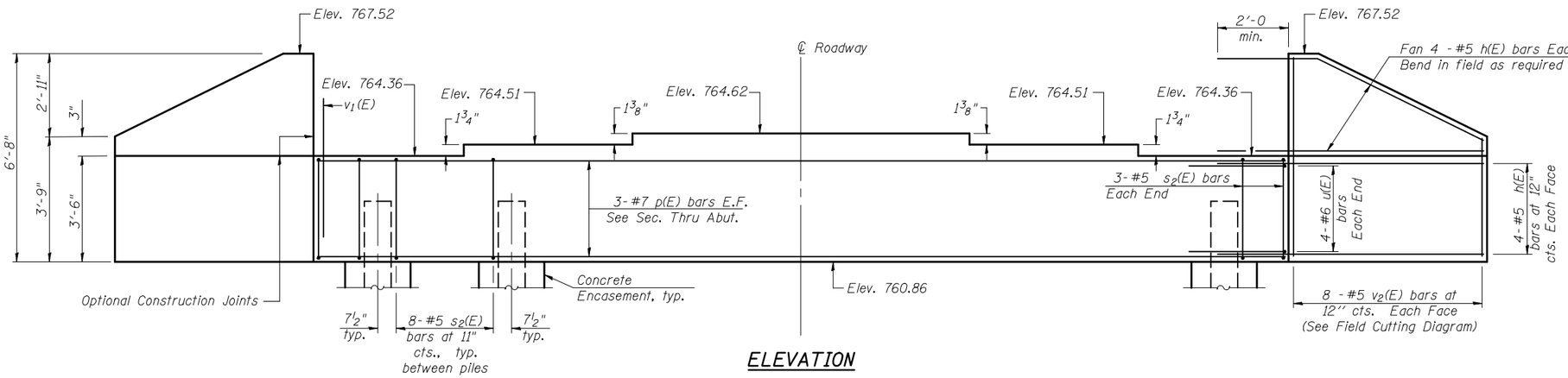
Notes:
Pour steps monolithically with cap.
The Steel H Piles shall be according to AASHTO M270 Grade 50.
The Test Pile shall be driven to 110 percent of the nominal required bearing indicated in the Pile Data information.
Space reinforcement to miss anchor bolts.
All edges to have 3/4" chamfer except as noted.
For details of Bar Splicers, see sheet 16 of 22.
For details of piles and Concrete Encasement, see sheet 17 of 22.

EAST ABUTMENT
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	1(BR-2)	MCLEAN	74	37
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

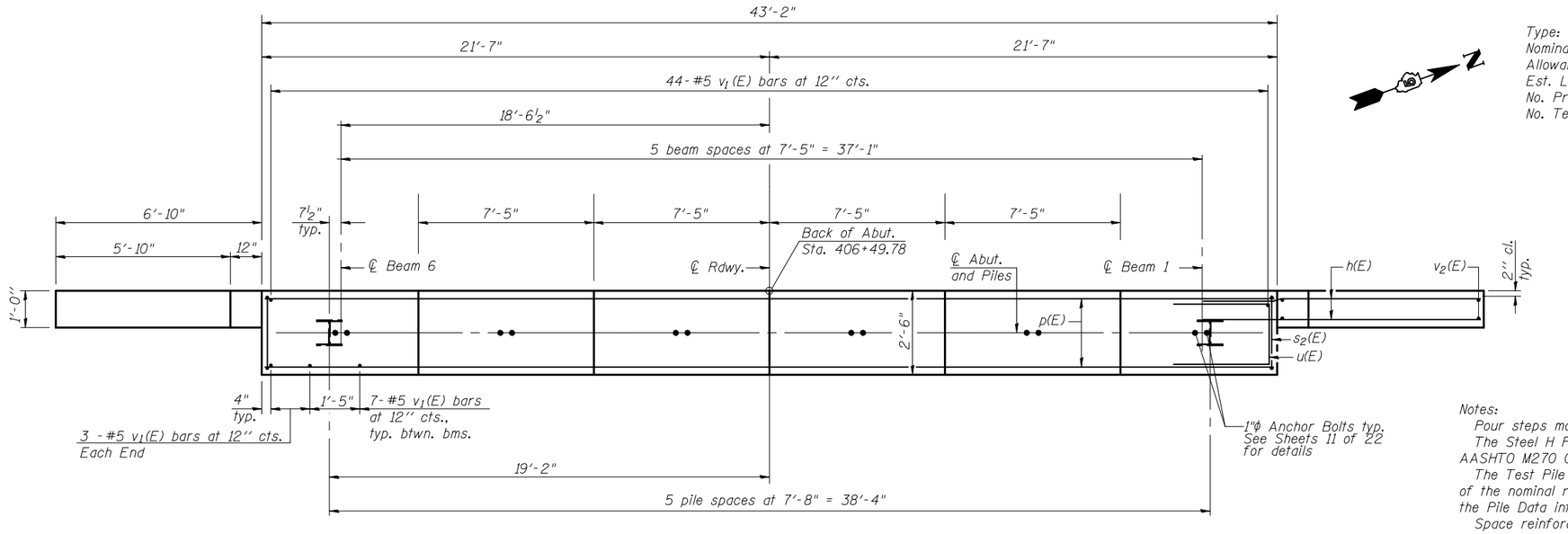
SHEET NO. 13
22 SHEETS

Contract #70517

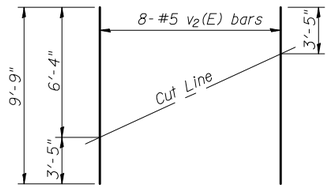


ELEVATION

(Looking West)

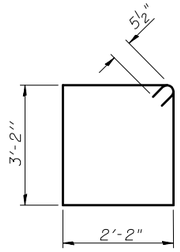


PLAN

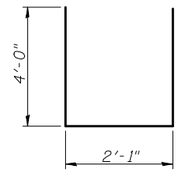


FIELD CUTTING DIAGRAM

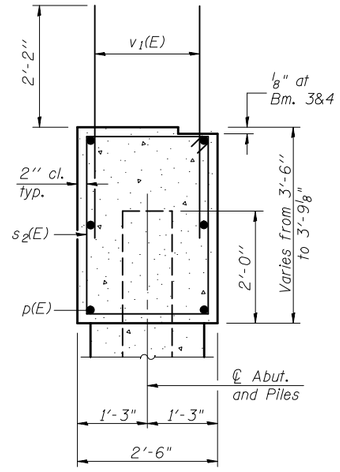
Order $v_2(E)$ full length. Cut as shown and use remainder of bars in opposite face.



BAR $s_2(E)$



BAR $u(E)$



SEC. THRU ABUT..

PILE DATA

Type: HP 12x53
Nominal Required Bearing: 419 kips
Allowable Resistance Available: 140 kips
Est. Length: 71 ft.
No. Production Piles: 5
No. Test Piles: 1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	32	#5	8'-8"	
p(E)	6	#7	42'-10"	
s2(E)	46	#5	11'-7"	
u(E)	8	#6	10'-1"	
v1(E)	85	#5	4'-4"	
v2(E)	16	#5	9'-9"	
Structure Excavation		Cu. Yd.	83.9	
Concrete Structures		Cu. Yd.	17.3	
Reinforcement Bars, Epoxy Coated		Pound	2040	
Furnishing Steel Piles, 12x53		Foot	355	
Driving Piles		Foot	355	
Test Pile, HP 12x53		Each	1	
Concrete Encasement		Cu. Yd.	2.1	

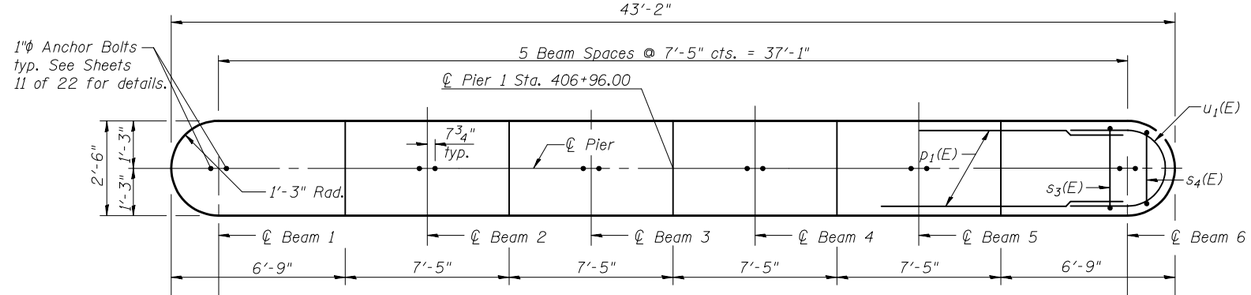
Notes:
Pour steps monolithically with cap.
The Steel H Piles shall be according to AASHTO M270 Grade 50.
The Test Pile shall be driven to 110 percent of the nominal required bearing indicated in the Pile Data information.
Space reinforcement to miss anchor bolts.
All edges to have 3/4" chamfer except as noted.
For details of Bar Splicers, see sheet 16 of 22.
For details of piles and Concrete Encasement, see sheet 17 of 22.

WEST ABUTMENT
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

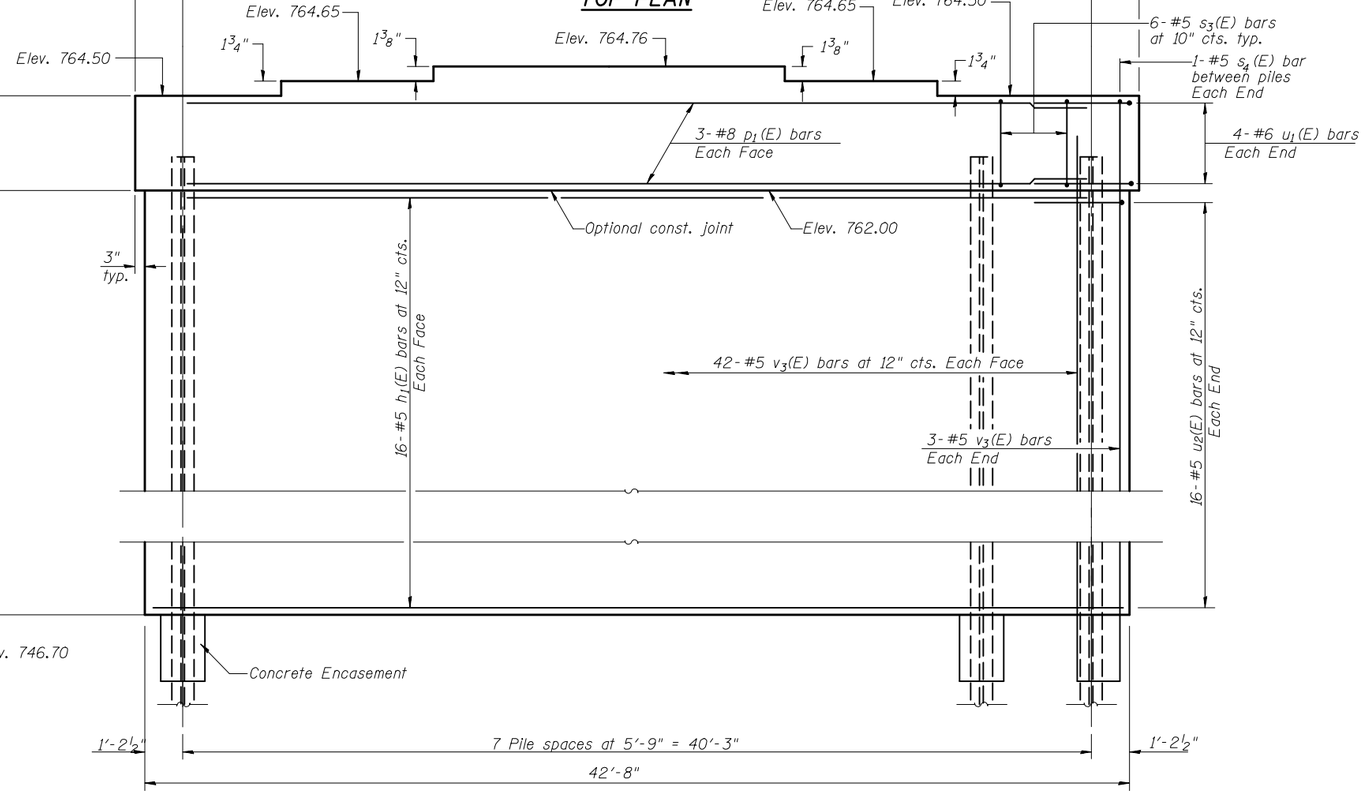
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	I(BR-2)	MCLEAN	74	38
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 14
22 SHEETS

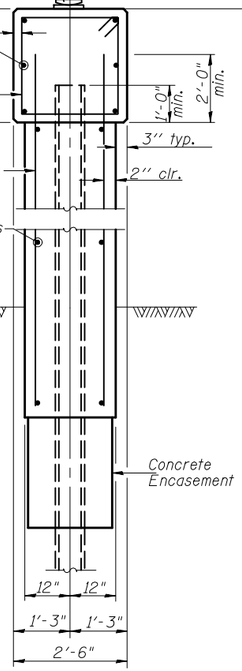
Contract #70517



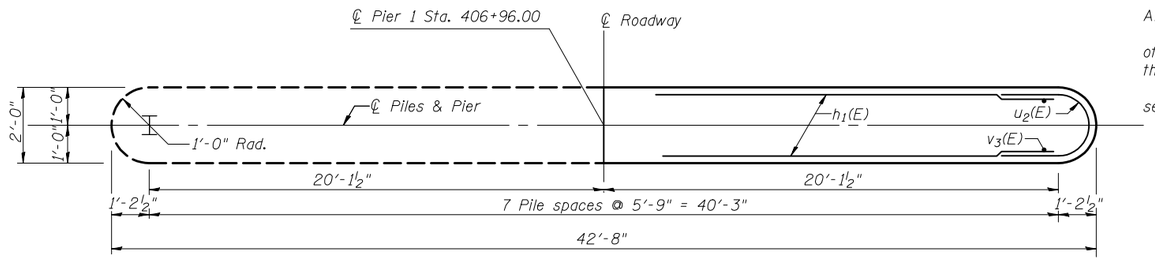
TOP PLAN



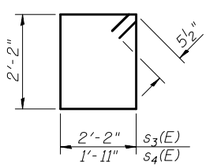
ELEVATION
(Looking East)



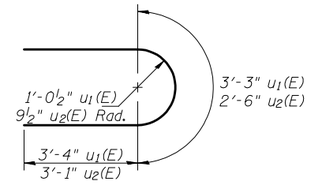
END VIEW



PILE LAYOUT & PIER PLAN



BAR $s_3(E)$ & $s_4(E)$



BARS $u_1(E)$ & $u_2(E)$

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_1(E)$	32	#5	40'-8"	——
$p_1(E)$	6	#8	40'-8"	——
$s_3(E)$	42	#5	9'-7"	▯
$s_4(E)$	2	#5	9'-1"	▯
$u_1(E)$	8	#6	9'-11"	⊃
$u_2(E)$	32	#5	8'-8"	⊃
$v_3(E)$	90	#5	17'-2"	——
Structure Excavation		Cu. Yd.	81.9	
Concrete Structures		Cu. Yd.	58.3	
Reinforcement Bars, Epoxy Coated		Pound	4470	
Furnishing Steel Piles, 12x53		Foot	483	
Driving Piles		Foot	483	
Test Pile, HP 12x53		Each	1	
Concrete Encasement		Cu. Yd.	2.8	
Underwater Structure Excavation Protection, Location 2		Each	1	

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
The Steel H Piles shall be according to AASHTO M270 Grade 50.
The Test Pile shall be driven to 110 percent of the nominal required bearing indicated in the Pile Data information.
For details of piles and concrete encasement see sheet 17 of 22.

PILE DATA

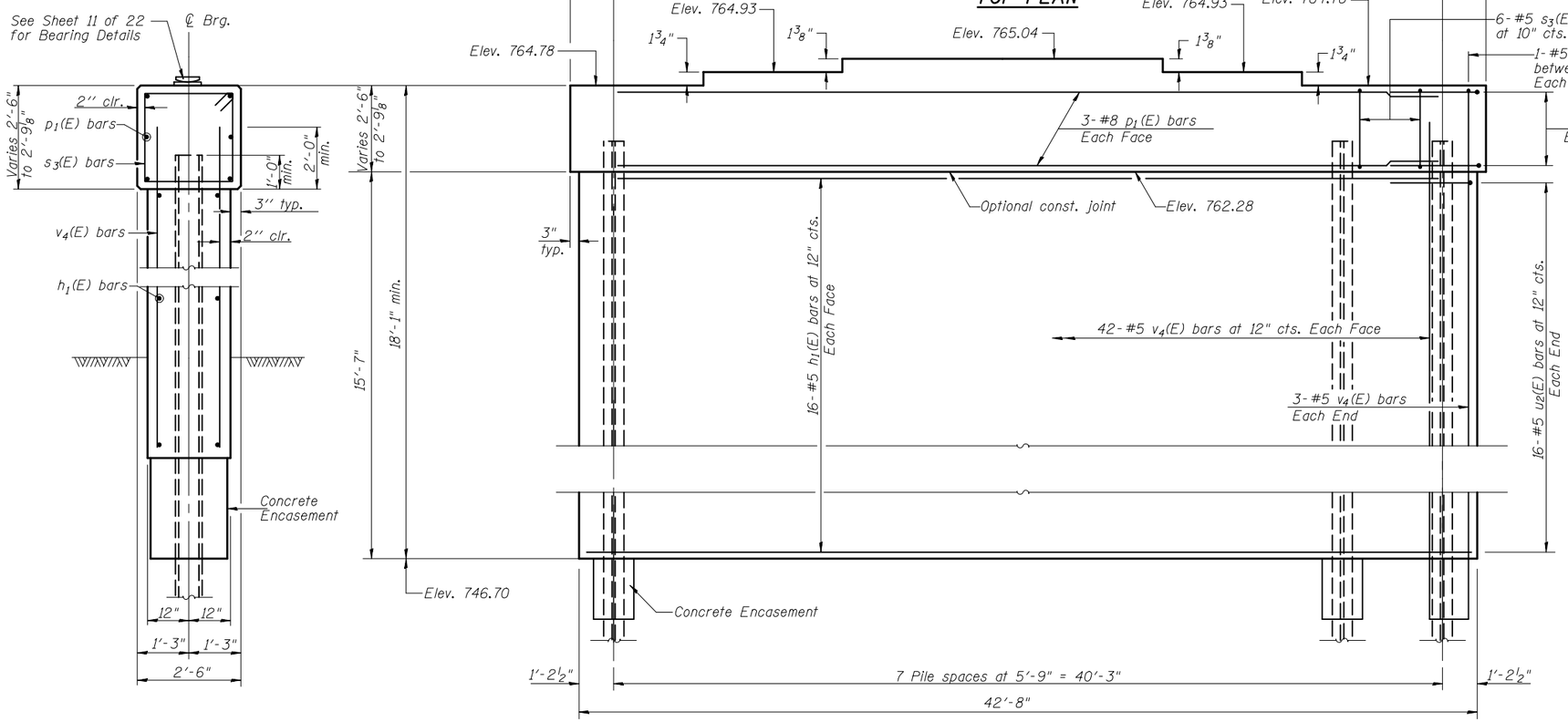
Type: Steel HP 12x53
Nominal Required Bearing: 419 kips
Allowable Resistance Available: 140 kips
Est. Length: 69 ft.
No. Production Piles: 7
No. Test Piles: 1

PIER 1
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	I(BR-2)	MCLEAN	74	39
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

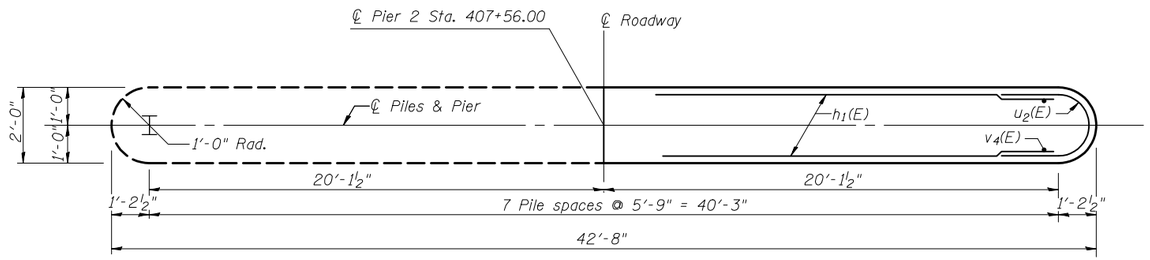
SHEET NO. 15
22 SHEETS

Contract #70517

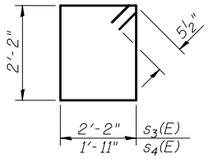


END VIEW

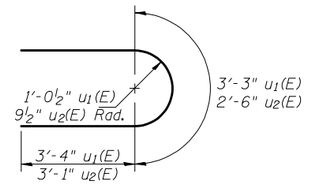
ELEVATION
(Looking East)



PILE LAYOUT & PIER PLAN



BAR $s_3(E)$ & $s_4(E)$



BARS $u_1(E)$ & $u_2(E)$

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_1(E)$	32	#5	40'-8"	
$p_1(E)$	6	#8	40'-8"	
$s_3(E)$	42	#5	9'-7"	
$s_4(E)$	2	#5	9'-1"	
$u_1(E)$	8	#6	9'-11"	
$u_2(E)$	32	#5	8'-8"	
$v_4(E)$	90	#5	17'-5"	
Structure Excavation		Cu. Yd.	56.0	
Concrete Structures		Cu. Yd.	59.2	
Reinforcement Bars, Epoxy Coated		Pound	4500	
Furnishing Steel Piles, 12x53		Foot	483	
Driving Piles		Foot	483	
Test Pile, HP 12x53		Each	1	
Concrete Encasement		Cu. Yd.	2.8	
Underwater Structure Excavation Protection, Location 1		Each	1	

Notes:
Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap.
The Steel H Piles shall be according to AASHTO M270 Grade 50.
The Test Pile shall be driven to 110 percent of the nominal required bearing indicated in the Pile Data information.
For details of piles and concrete encasement see sheet 17 of 22.

PILE DATA

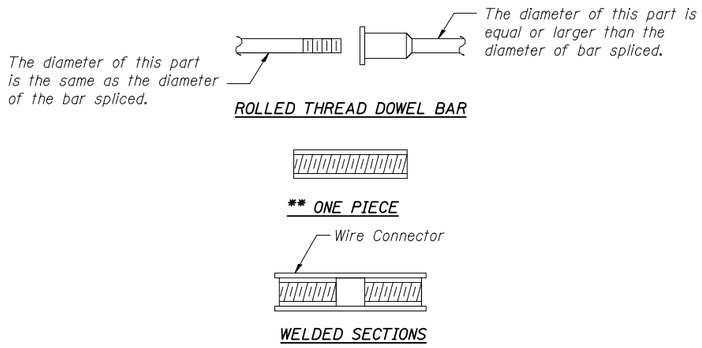
Type: Steel HP 12x53
Nominal Required Bearing: 420 kips
Allowable Resistance Available: 140 kips
Est. Length: 69 ft.
No. Production Piles: 7
No. Test Piles: 1

PIER 2
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION I(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	1(BR-2)	MCLEAN	74	40
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

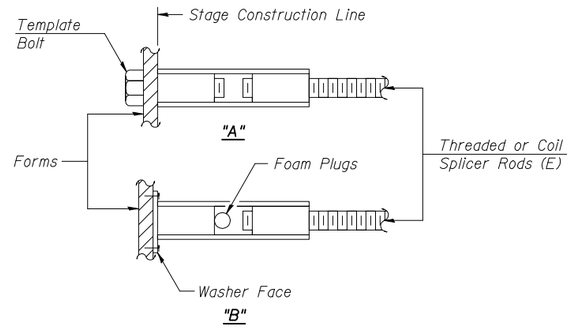
SHEET NO. 16
22 SHEETS

Contract #70517



BAR SPLICER ASSEMBLY ALTERNATIVES

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



INSTALLATION AND SETTING METHODS

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

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.

All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

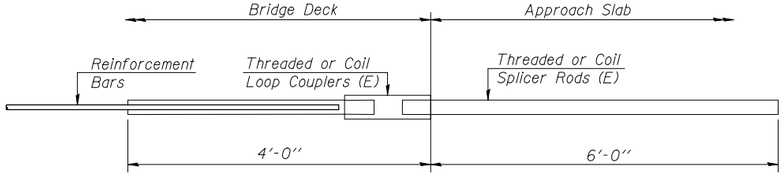
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$

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

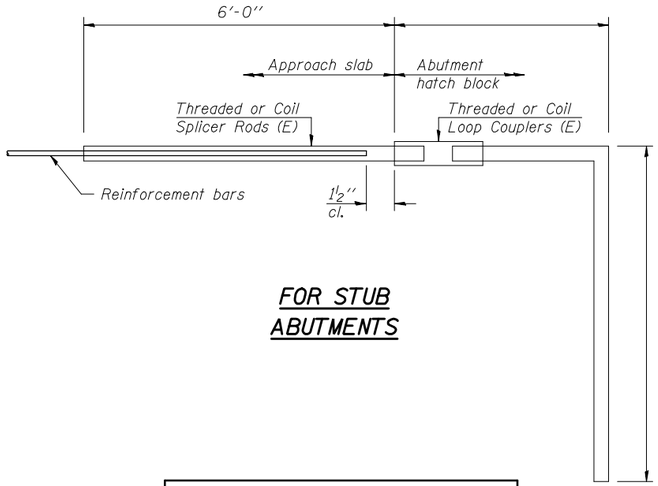
Where f_y = Yield strength of lapped reinforcement bars in ksi.
A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

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



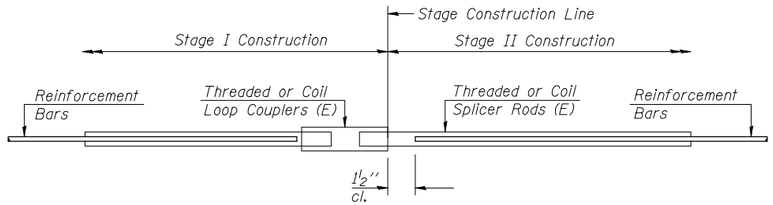
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 84



FOR STUB ABUTMENTS

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



STANDARD

Bar Size	No. Assemblies Required	Location

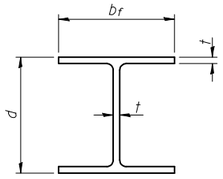
BAR SPLICER ASSEMBLY DETAILS
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

BSD-1 11-1-06

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	I(BR-2)	MCLEAN	74	41
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

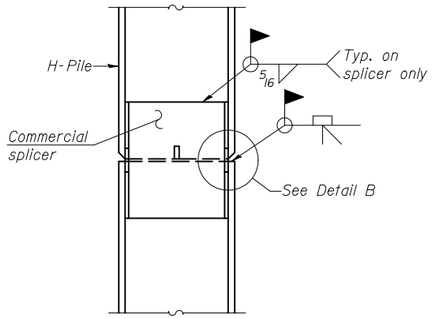
SHEET NO. 17
22 SHEETS

Contract #70517

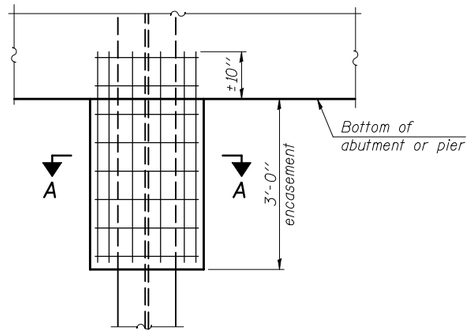


STEEL PILE TABLE

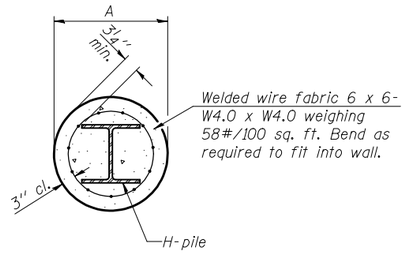
Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	11/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	11/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



ELEVATION



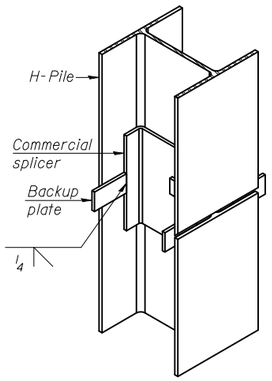
ELEVATION



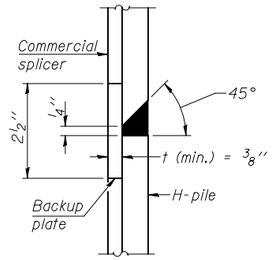
Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

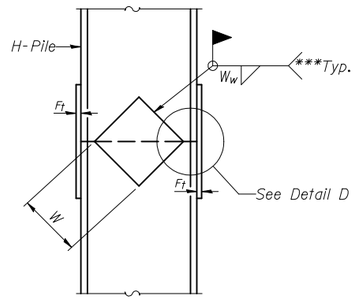
PILE ENCASEMENT



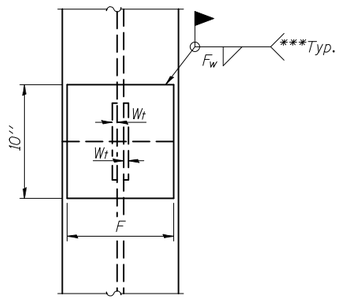
ISOMETRIC VIEW



DETAIL "B"

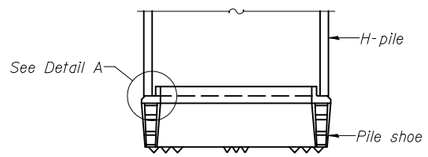


ELEVATION

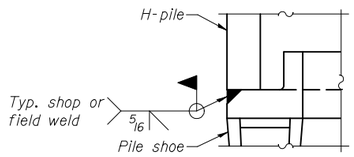


END VIEW

WELDED COMMERCIAL SPLICE

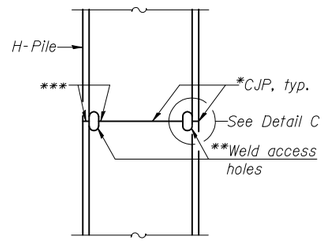


ELEVATION

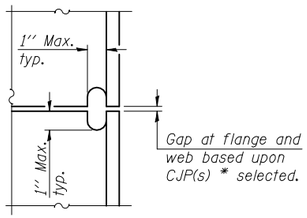


DETAIL A

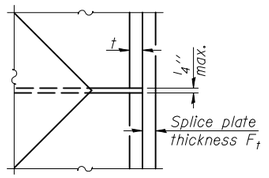
H-PILE SHOE ATTACHMENT



ELEVATION



DETAIL C



DETAIL D

COMPLETE PENETRATION WELD SPLICE

WELDED PLATE FIELD SPLICE

Designation	F	F_t	F_w	W	W_t	W_w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

*Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code - Steel.

**Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code - Steel.

***Interrupt welds 1/4" from end of each pile.

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

H-PILE & ENCASEMENT DETALS
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

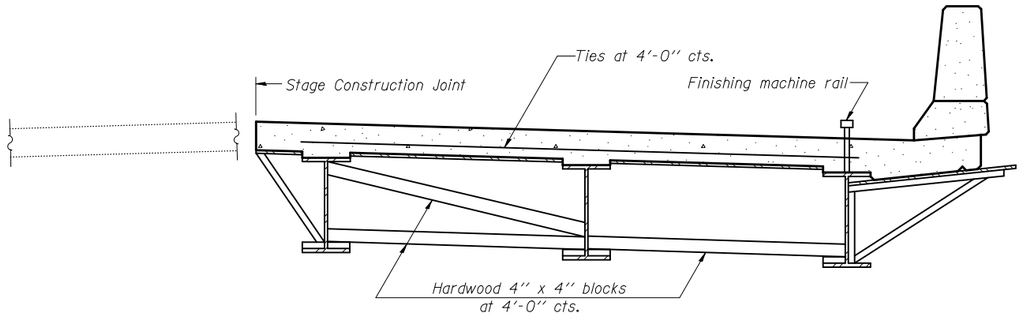
F-HP 9-3-07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	1(BR-2)	MCLEAN	74	42
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

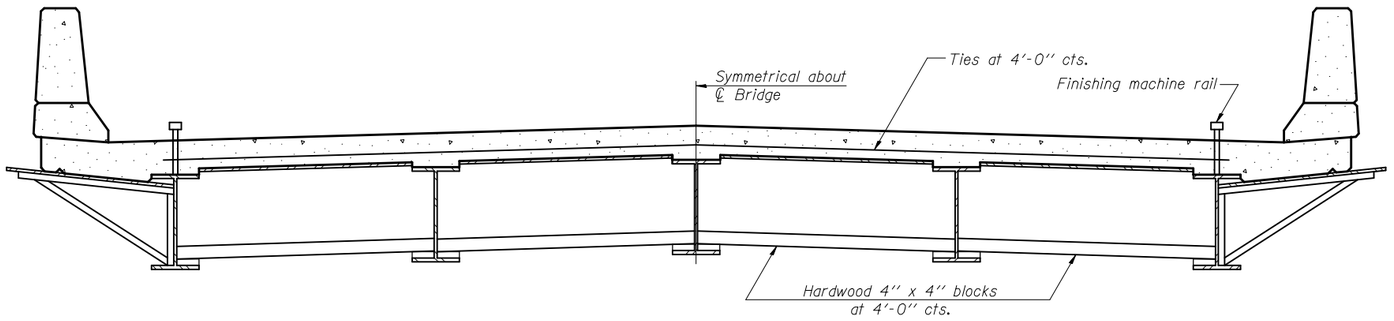
SHEET NO. 18

22 SHEETS

Contract #70517



FORM BRACES FOR
STAGE CONSTRUCTION



FORM BRACES FOR
STANDARD CONSTRUCTION

When cantilever forming brackets are used, the work shall be done according to Article 503.06(b) of the Standard Specifications, except as modified below and in the details shown on this sheet.

The finishing machine rails shall be placed on the top flange of the exterior beams.

The beams or girders, supporting cantilever forming brackets, shall be tied together at 4 foot intervals.

For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.

CANTILEVER FORMING BRACKETS
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

SB-1 11-1-06

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	1(BR-2)	MCLEAN	74	43
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 19
22 SHEETS
Contract #70517

Illinois Department of Transportation
Division of Highways
IDOT - Region 3/Dist 5

SOIL BORING LOG

Date 10/17/73

ROUTE FAU 6406 (US 150) DESCRIPTION ROUTE 150 OVER KICKAPOO CREEK LOGGED BY W. PEARCE

SECTION 1(BR-2) LOCATION , SEC., TWP., RNG.

COUNTY McLean DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 057-0181
Station 407+38

BORING NO. 1
Station 408+01
Offset 32.0 ft Lt.
Ground Surface Elev. 756.2 ft

Surface Water Elev. 750.2 ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (taf)	MOIST (%)
MEDIUM DARK BROWN CLAY LOAM			
	4	0.5 S	24
751.7 VERY SOFT BROWN SILTY CLAY LOAM -5			
	4	0.2 B	34
749.2 LOOSE GRAY SAND & GRAVEL (CLAY CONTAMINATED)			
	7		
-10			
	7		17
	8		
741.7 MEDIUM LIGHT GRAY SAND & GRAVEL -15			
	17		
	21		12
-20			
MEDIUM LIGHT GRAY SAND & GRAVEL (continued)			
-25	15		
	20		
-30	18		9
	20		
734.2 VERY HARD GRAYISH BROWN CLAY LOAM TILL	22		
	43		22
-35			
	86	7.0 B	13
716.7 DENSE GRAY SAND & GRAVEL -40	49	6.8 S	10

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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Illinois Department of Transportation
Division of Highways
IDOT - Region 3/Dist 5

SOIL BORING LOG

Date 10/17/73

ROUTE FAU 6406 (US 150) DESCRIPTION ROUTE 150 OVER KICKAPOO CREEK LOGGED BY W. PEARCE

SECTION 1(BR-2) LOCATION , SEC., TWP., RNG.

COUNTY McLean DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 057-0181
Station 407+38

BORING NO. 1
Station 408+01
Offset 32.0 ft Lt.
Ground Surface Elev. 756.2 ft

Surface Water Elev. 750.2 ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (taf)	MOIST (%)
DENSE GRAY SAND & GRAVEL (continued)			
715.2 HARD GRAY CLAY TILL	90	4.5 S	9
714.2 VERY DENSE GRAY MEDIUM SAND	87		14
711.7 VERY STIFF GRAY CLAY TILL -45			
	42	2.2 S	9
709.2 DENSE GRAY SAND & GRAVEL (CLAY CONTAMINATED)			
	49		8
-50			
	61		
	85		16
-55			
699.7 End of Boring	66		
-60			

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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SOIL BORINGS
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	1(BR-2)	MCLEAN	74	44
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 20
22 SHEETS

Contract #70517

Illinois Department of Transportation
Division of Highways
IDOT – Region 3/Dist 5

SOIL BORING LOG

Date 10/18/73

ROUTE FAU 6406 (US 150) DESCRIPTION ROUTE 150 OVER KICKAPOO CREEK LOGGED BY W. PEARCE

SECTION 1(BR-2) LOCATION , SEC. , TWP. , RNG.

COUNTY McLean DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 057-0161
Station 407+38

BORING NO. 2
Station 406+70
Offset 47.0 ft Lt.
Ground Surface Elev. 756.3 ft

Surface Water Elev. 750.2 ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
MEDIUM DARK BROWN SILTY CLAY			
	7	0.7	28
752.8			
MEDIUM TO SOFT BROWN SANDY CLAY			
-5	3	0.3	19
749.8			
LOOSE TO MEDIUM BROWNISH GRAY SAND & GRAVEL (CLAY CONTAMINATED)	6		24
-10	16		
	101		
743.8			
STIFF GRAYISH BROWN CLAY LOAM		1.2 B	13
742.8			
MEDIUM LIGHT GRAY SAND & GRAVEL			
-15	26		14
	24		
-20			
MEDIUM LIGHT GRAY SAND & GRAVEL (continued)	24		15
	29		
-25			
	25		
728.8			
VERY STIFF BLACK SEDIMENTARY PEAT	52	2.1 S	24
-30	40		
724.8			
HARD GRAYISH BROWN CLAY LOAM TILL			
	35		
-35			
	92		17
-40	35		

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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Illinois Department of Transportation
Division of Highways
IDOT – Region 3/Dist 5

SOIL BORING LOG

Date 10/18/73

ROUTE FAU 6406 (US 150) DESCRIPTION ROUTE 150 OVER KICKAPOO CREEK LOGGED BY W. PEARCE

SECTION 1(BR-2) LOCATION , SEC. , TWP. , RNG.

COUNTY McLean DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 057-0161
Station 407+38

BORING NO. 2
Station 406+70
Offset 47.0 ft Lt.
Ground Surface Elev. 756.3 ft

Surface Water Elev. 750.2 ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
HARD GRAYISH BROWN CLAY LOAM TILL (continued)			
	32	4.5 B	12
	38	4.1 B	12
-45			
	32	4.5 S	12
	22		
-50			
	44	4.7 B	12
704.8			
DENSE GRAY SAND & GRAVEL			
	38		12
702.3			
HARD GRAY CLAY LOAM TILL			
-55	39	4.7 B	11
700.8			
End of Boring			
-60			

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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SOIL BORINGS
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	1(BR-2)	MCLEAN	74	45
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 21
22 SHEETS

Contract #70517

Illinois Department of Transportation
Division of Highways
IDOT - Region 3/Dist 5

SOIL BORING LOG

Page 1 of 2

Date 1/21/73

ROUTE FAU 6406 (US 150) DESCRIPTION ROUTE 150 OVER KICKAPOO CREEK LOGGED BY W. PEARCE

SECTION 1(BR-2) LOCATION , SEC. , TWP. , RNG.

COUNTY McLean DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 057-0181
Station 407+38

BORING NO. 3
Station 407+15
Offset 21.0 ft Lt.
Ground Surface Elev. 754.7 ft

Surface Water Elev. 750.2 ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (taf)	MOIST (%)
SOFT DARK BROWN SILTY CLAY			
	2	0.3 B	29
750.7			
VERY SOFT GRAYISH BROWN CLAY LOAM			
-5	3	0.1 B	23
748.2			
VERY SOFT DARK BROWN CLAY LOAM (MUCK)			
	10	0.0 B	34
745.7			
DENSE GRAYISH BROWN SANDY GRAVEL			
-10	36		
743.2			
MEDIUM GRAY SAND & GRAVEL			
	17		
-15			
	21		
	29		
735.7			
DENSE GRAY SAND & GRAVEL			
-20			
DENSE GRAY SAND & GRAVEL (continued)			
	44		
	31		
-25			
727.2			
VERY STIFF DARK BROWN SEDIMENTARY PEAT	58	3.1 S	40
725.7			
HARD GRAY CLAY LOAM TILL			
-30			
	56	5.2 B	14
	53	4.2 S	13
-35			
	37	6.8 B	12
	45	6.4 B	11
-40			

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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Illinois Department of Transportation
Division of Highways
IDOT - Region 3/Dist 5

SOIL BORING LOG

Page 2 of 2

Date 1/21/73

ROUTE FAU 6406 (US 150) DESCRIPTION ROUTE 150 OVER KICKAPOO CREEK LOGGED BY W. PEARCE

SECTION 1(BR-2) LOCATION , SEC. , TWP. , RNG.

COUNTY McLean DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 057-0181
Station 407+38

BORING NO. 3
Station 407+15
Offset 21.0 ft Lt.
Ground Surface Elev. 754.7 ft

Surface Water Elev. 750.2 ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (taf)	MOIST (%)
HARD GRAY CLAY LOAM TILL (continued)			
	42	5.8 S	11
	44	5.8 S	12
-45			
	34	4.9 B	12
	73	8.5 S	10
-50			
	61	4.1 S	11
703.7			
End of Boring			
-60			
-55			

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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SOIL BORINGS
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6406	1(BR-2)	MCLEAN	74	46
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 22
22 SHEETS

Contract #70517

Illinois Department of Transportation
Division of Highways
IDOT – Region 5/Dist 5

SOIL BORING LOG

Date 2/26/07

ROUTE FAU 6406 (US 150) DESCRIPTION Route 150 Over Kickapoo Creek LOGGED BY CNA

SECTION 1(BR-2) LOCATION SW, SEC. 33, TWP. 23N, RNG. 2E

COUNTY McLean DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 057-0181
Station 407+38

BORING NO. 4 SW Abut
Station 406+61
Offset 15.0 ft Rt.
Ground Surface Elev. 764.2 ft

Surface Water Elev. 751.0 ft
Stream Bed Elev. 748.1 ft

Groundwater Elev.:
First Encounter 747.2 ft ▼
Upon Completion Wash Bored ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (6")	UCS Qu (taf)	MOIST (%)
763.2			
Shoulder Pavement			
Brown Clay Loam (Embankment)			
	3		
	3	1.3	15
-5	3	B	
758.2			
Black Organic Silty Clay (Muck)			
	1		
	2		33
-10	2		
	0		
	2		32
	2		
	0		
	2		36
749.2 -15	1		
Gray Dirty Very Coarse Sand with Gravel			
	6		
	6		
	6		
	3		
	7		
(Gravel Stuck in Sampler) -20	17		
Gray Dirty Very Coarse Sand with Gravel (continued) 743.2			
Gray Poorly Sorted Coarse Sand with Large Gravel	4		
	6		
	7		
	10		
	8		
-25	13		
	8		
	12		
-30	12		
	10		
	7		
-35	10		
727.2			
Dark Gray to Gray Clay Loam Till	5		
	9	4.8	17
-40	14	S	

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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Illinois Department of Transportation
Division of Highways
IDOT – Region 5/Dist 5

SOIL BORING LOG

Date 2/26/07

ROUTE FAU 6406 (US 150) DESCRIPTION Route 150 Over Kickapoo Creek LOGGED BY CNA

SECTION 1(BR-2) LOCATION SW, SEC. 33, TWP. 23N, RNG. 2E

COUNTY McLean DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 057-0181
Station 407+38

BORING NO. 4 SW Abut
Station 406+61
Offset 15.0 ft Rt.
Ground Surface Elev. 764.2 ft

Surface Water Elev. 751.0 ft
Stream Bed Elev. 748.1 ft

Groundwater Elev.:
First Encounter 747.2 ft ▼
Upon Completion Wash Bored ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (6")	UCS Qu (taf)	MOIST (%)
Dark Gray to Gray Clay Loam Till (continued)			
722.2			
Gray Moderately Sorted Coarse Sand	10		
	17		
-45	18		
718.2			
Gray Clay Loam Till	7		
	11	5.4	11
-50	17	B	
	5		
	6	4.7	11
-55	8	B	
	11		
	24	6.5	10
704.7 -60	29	S	
Gray Moderately Sorted Coarse Sand (continued) 703.2			
Gray Clay Loam Till with Interminant Sand Seams			
-65	15		
	15	7.1	10
	15	S	
	11		
	12	7.0	11
694.2 -70	21	S	
End of Boring			
-75			
-80			

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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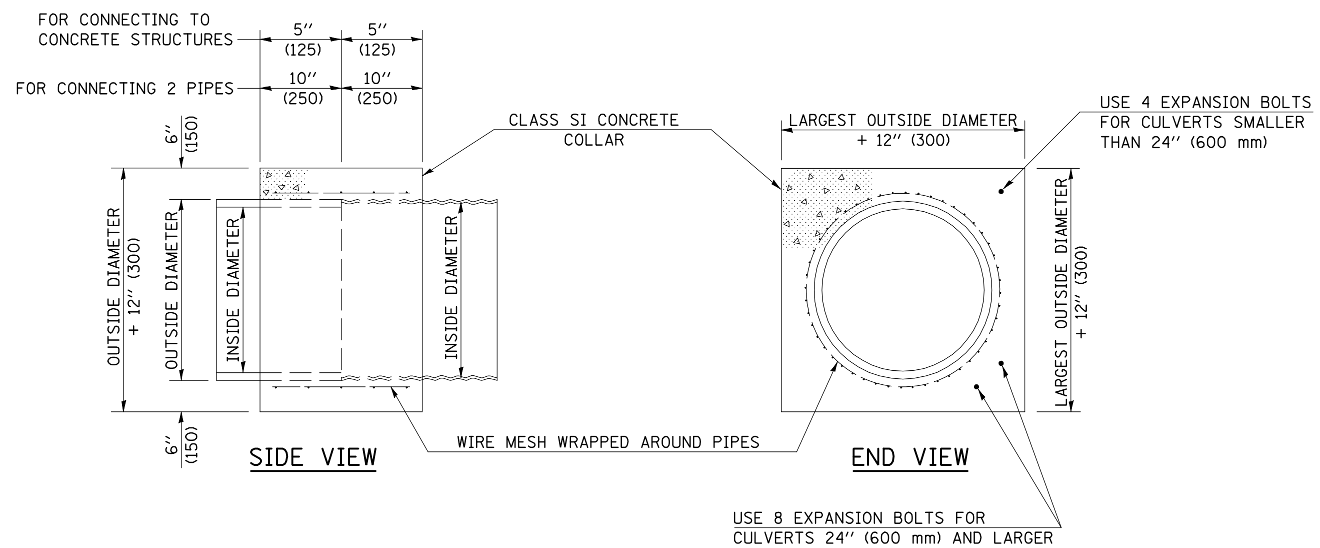
SOIL BORINGS
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION 1(BR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246



CONCRETE COLLAR

STA. 406+60.18 RT 42″ DIA.
STA. 409+41.00 RT 42″ DIA.

QUANTITIES FOR CONCRETE PIPES	
INSIDE DIAMETER OF PIPE INCH (mm)	ESTIMATED CLASS SI CONCRETE REQUIRED 20″ (500 mm) WIDTH CU. YD. (m^3)
4″ (100)	0.14 (0.11)
6″ (150)	0.16 (0.12)
8″ (200)	0.19 (0.14)
10″ (250)	0.22 (0.17)
12″ (300)	0.25 (0.19)
15″ (375)	0.30 (0.23)
18″ (450)	0.35 (0.27)
24″ (600)	0.45 (0.35)
30″ (750)	0.57 (0.43)
36″ (900)	0.69 (0.53)
42″ (1050)	0.83 (0.63)
48″ (1200)	0.97 (0.74)
54″ (1350)	1.12 (0.86)
60″ (1500)	1.28 (0.98)

QUANTITIES FOR METAL PIPES	
INSIDE DIAMETER OF PIPE INCH (mm)	ESTIMATED CLASS SI CONCRETE REQUIRED 20″ (500 mm) WIDTH CU. YD. (m^3)
4″ (100)	0.12 (0.09)
6″ (150)	0.14 (0.11)
8″ (200)	0.16 (0.12)
10″ (250)	0.19 (0.14)
12″ (300)	0.21 (0.16)
15″ (375)	0.25 (0.19)
18″ (450)	0.29 (0.22)
24″ (600)	0.38 (0.29)
30″ (750)	0.47 (0.36)
36″ (900)	0.59 (0.45)
42″ (1050)	0.69 (0.53)
48″ (1200)	0.81 (0.62)
54″ (1350)	0.93 (0.71)
60″ (1500)	1.05 (0.81)

GENERAL NOTES

1. CLASS SI CONCRETE SHALL BE USED THROUGHOUT.
2. WHEN CONCRETE COLLARS ARE USED TO CONNECT PIPES OF DIFFERENT OUTSIDE DIAMETERS, THE CONCRETE COLLAR SHALL BE FORMED USING THE LARGEST OUTSIDE DIAMETER (SEE END VIEW).
3. THE WIRE MESH SHALL WEIGH NOT LESS THAN 54#/100 SQ. FT. (2.63 kg/m^2).
4. WHEN CONCRETE COLLARS ARE CONSTRUCTED ADJACENT TO AN EXISTING CONCRETE STRUCTURE (HEADWALLS, ETC.) EXPANSION BOLTS, SHALL BE USED AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE, EACH, FOR EXPANSION BOLTS OF THE SIZE SPECIFIED IN THE PLANS.
5. CONCRETE COLLARS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE, PER CUBIC YARD (CUBIC METER), FOR CONCRETE COLLARS INCLUDING ALL MATERIAL AND LABOR SPECIFIED TO COMPLETE THE WORK IN PLACE.

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

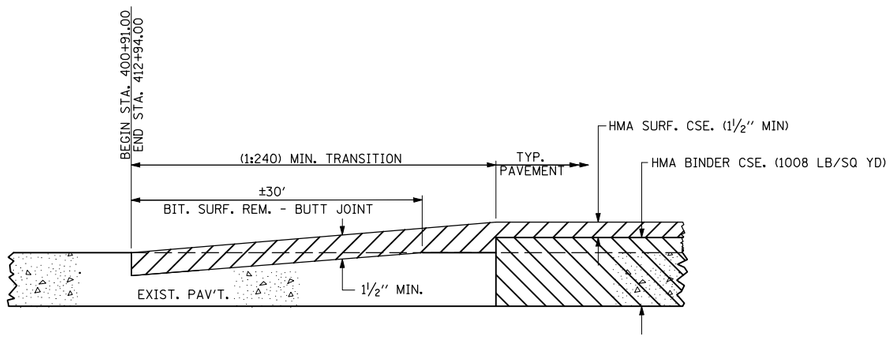
CONCRETE COLLAR DETAIL

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

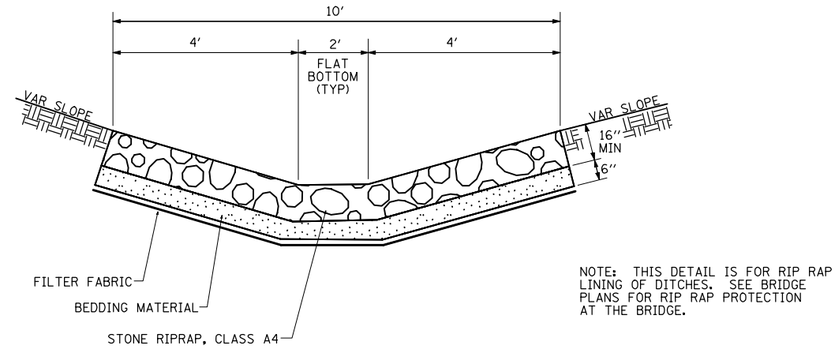
PLOT DATE = 8/21/2008
FILE NAME = c:\projects\d503706 (v8)\11_01_2007 submittal\details.dgn
PLOT SCALE = 105.8824 ' / IN.
USER NAME = stultsjw

CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	48
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



BUTT JOINT DETAIL



NOTE: THIS DETAIL IS FOR RIP RAP LINING OF DITCHES. SEE BRIDGE PLANS FOR RIP RAP PROTECTION AT THE BRIDGE.

DETAIL OF STONE RIPRAP, CLASS A4

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

ROADWAY DETAILS

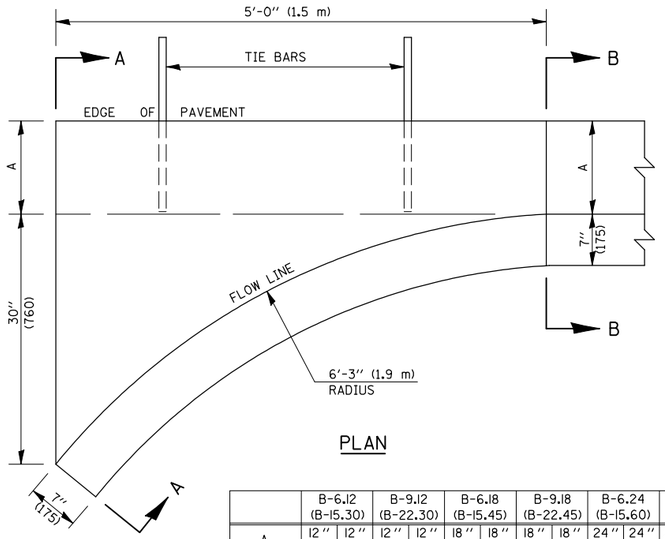
SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

PLOT DATE = 8/21/2008
FILE NAME = c:\projects\c503706 (d8)\11.01.2007 submittal\details.dgn
PLOT SCALE = 185.0824 / IN.
USER NAME = mullajm

CONTRACT NO. 70517

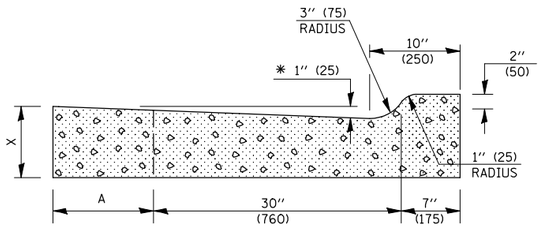
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	49
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DETAIL OF SPECIAL INLET FOR COMBINATION CONCRETE CURB AND GUTTER (BARRIER CURB)



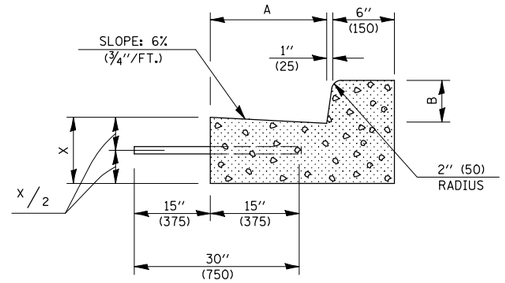
PLAN

	B-6.12 (B-15.30)		B-9.12 (B-22.30)		B-6.18 (B-15.45)		B-9.18 (B-22.45)		B-6.24 (B-15.60)		B-9.24 (B-22.60)	
A	12" (300)	12" (300)	12" (300)	12" (300)	18" (450)	18" (450)	18" (450)	18" (450)	24" (600)	24" (600)	24" (600)	24" (600)
B	6" (150)	6" (150)	9" (225)	9" (225)	6" (150)	6" (150)	9" (225)	9" (225)	6" (150)	6" (150)	9" (225)	9" (225)
X	9" (225)	10" (250)	9" (225)	10" (250)	9" (225)	10" (250)	9" (225)	10" (250)	9" (225)	10" (250)	9" (225)	10" (250)
CU. YD. (m3) CLASS SI CONCRETE (OUTLET)	0.37 (0.28)	0.42 (0.32)	0.38 (0.29)	0.42 (0.32)	0.44 (0.34)	0.49 (0.37)	0.45 (0.34)	0.50 (0.38)	0.51 (0.39)	0.56 (0.43)	0.52 (0.40)	0.57 (0.44)



SECTION A-A

* INCREASE TO 2" (50 mm) WHERE IN THE PLANS IT IS SPECIFIED THAT THESE SPECIAL INLETS ARE TO BE CONSTRUCTED AS OUTLETS. ALL OUTLET LOCATIONS WILL BE CONFIRMED BY THE ENGINEER.



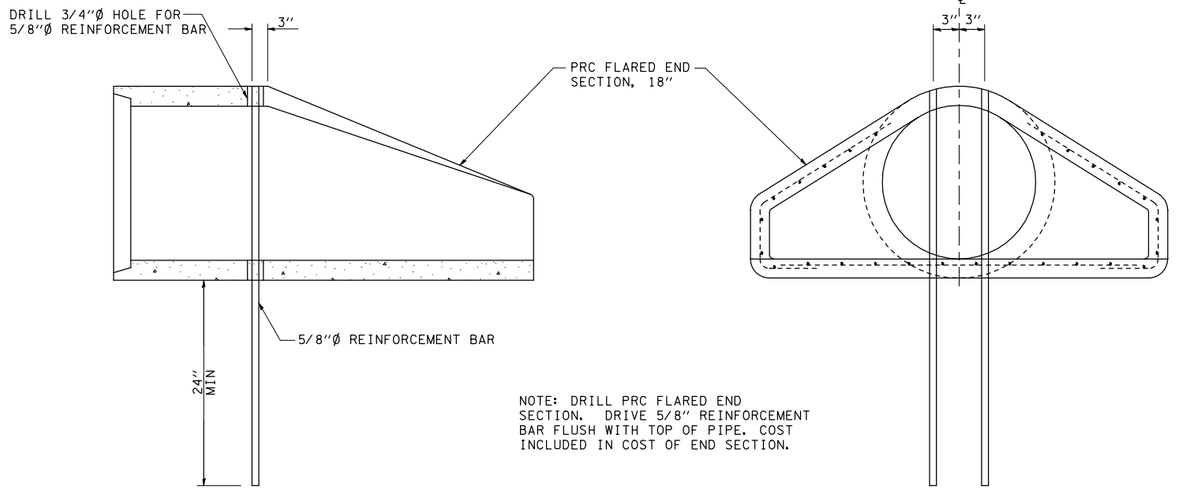
SECTION B-B

GENERAL NOTES

1. CLASS SI CONCRETE SHALL BE USED THROUGHOUT.
2. TIE BARS SHALL BE NO. 6 (NO. 20) AT 24" (600 mm) CENTERS UNLESS OTHERWISE SHOWN. SPECIAL INLETS AND OUTLETS SHALL BE TIED TO THE PAVEMENT IN ACCORDANCE WITH DETAILS FOR LONGITUDINAL CONSTRUCTION JOINT SHOWN ON STANDARD 420001.
3. TIE BARS SHOWN ABOVE WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCIDENTAL TO CLASS SI CONCRETE (OUTLET).
4. WHEN SPECIAL INLET IS CONSTRUCTED ADJACENT TO FLEXIBLE PAVEMENT, THE TIE BARS SHALL BE OMITTED AND ALL CONSTRUCTION JOINTS SHALL BE PROVIDED WITH A DOWEL BAR CONFORMING TO ARTICLE 1006.11(b).
5. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CU. YD. (m3) FOR CLASS SI CONCRETE (OUTLET) WHICH PRICE SHALL INCLUDE ALL LABOR AND MATERIAL AS SPECIFIED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

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

DETAIL OF PRECAST REINFORCED CONCRETE FLARED END SECTION, 18"



NOTE: DRILL PRC FLARED END SECTION. DRIVE 5/8" REINFORCEMENT BAR FLUSH WITH TOP OF PIPE. COST INCLUDED IN COST OF END SECTION.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

ROADWAY DETAILS

SCALE: VERT. HORIZ.
DATE
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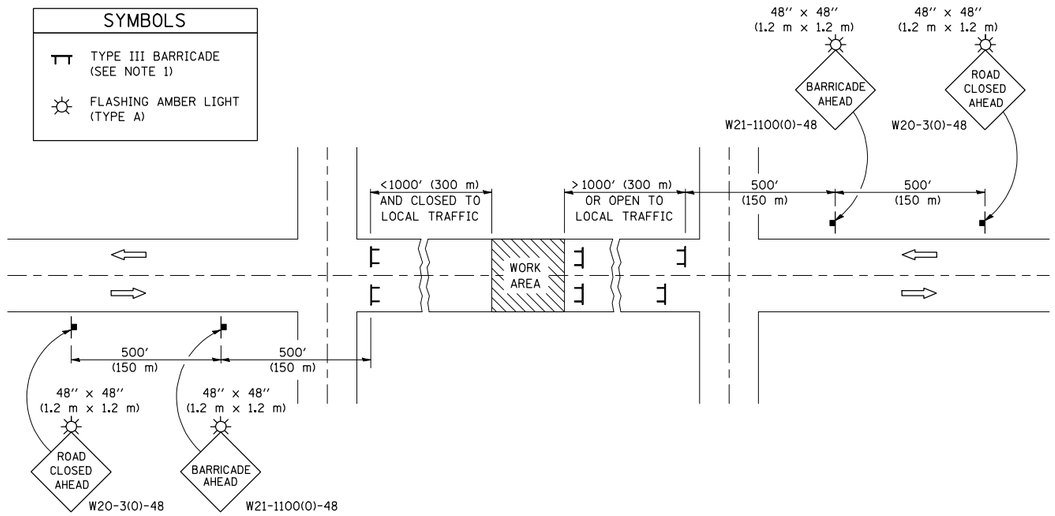
CHECKED BY

PLOT DATE = 8/21/2008
FILE NAME = c:\projects\d803706 (d8\11.01.2007 submittal\details.dgn
PLOT SCALE = 185.8824 ' / IN.
USER NAME = mullaj

CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	50
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

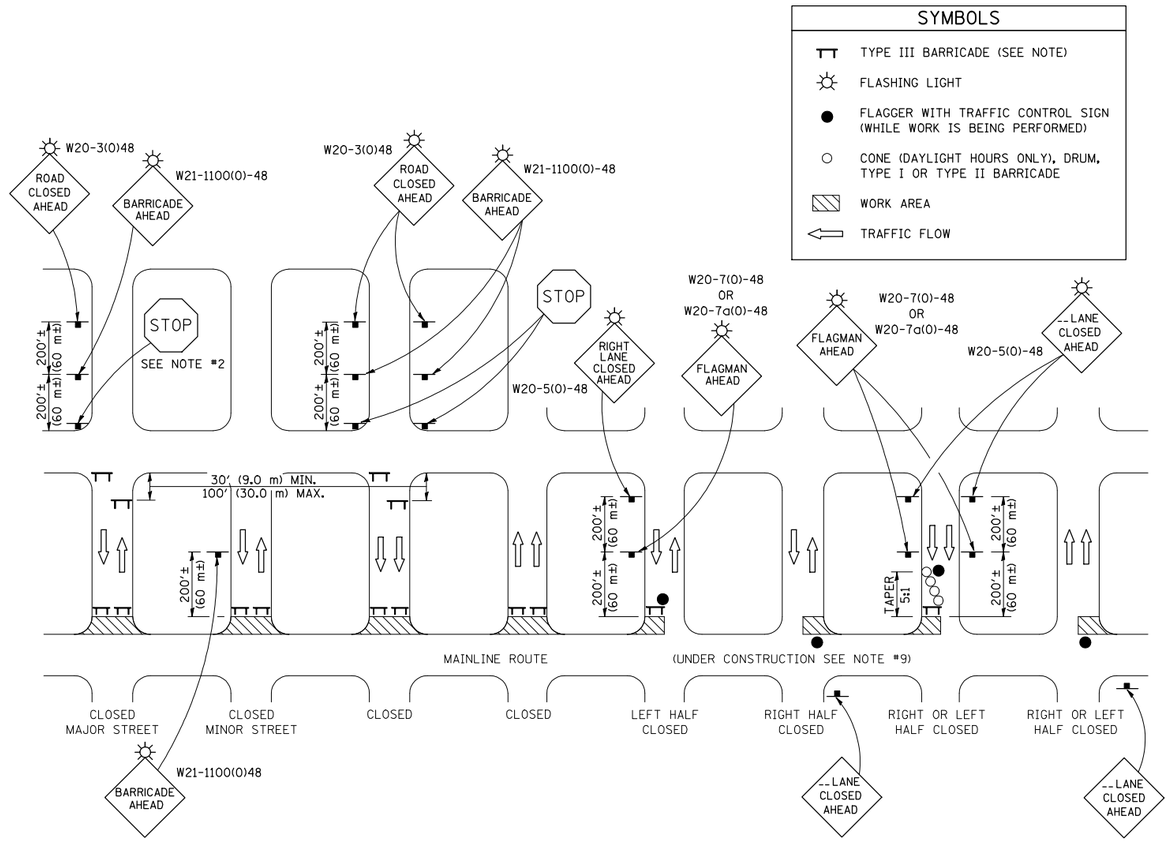
ROAD CLOSURE



GENERAL NOTES

1. TYPE III BARRICADES SHALL BE AS SHOWN ON STANDARD 701901 "TYPICAL APPLICATIONS OF TYPE III BARRICADES CLOSING A ROAD". EACH TYPE III BARRICADE SHALL HAVE TWO FLASHING AMBER LIGHTS MOUNTED ABOVE IT.
2. IF THE ROAD IS OPEN TO LOCAL TRAFFIC OR EXCEEDS 1000' (300 m), ANOTHER SET OF TYPE III BARRICADES, EQUIPPED AS IN NOTE 1 ABOVE, SHALL BE PLACED AT EACH END OF THE WORK AREA.
3. WHEN A STOP CONDITION EXISTS, NO SIGNS ARE REQUIRED IN ADVANCE OF THE "STOP" SIGN WHEN THE ROAD IS CLOSED WITHIN 100' (30 m) OF THE INTERSECTION.
4. STANDARD 701901 SHALL APPLY FOR THE PLACEMENT & DESIGN OF TYPE III BARRICADES.
5. IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON AN NCHRP 350 TEMPORARY SIGN SUPPORT DIRECTLY IN FRONT OF THE BARRICADE.
6. REFLECTORIZED STRIPING SHALL APPEAR ON BOTH SIDES OF THE TY III BARRICADES IF ROAD IS OPEN TO LOCAL TRAFFIC.
7. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
8. A MINIMUM OF TWO FLASHING LIGHTS SHALL BE USED AT NIGHT ON EACH APPROACH IN ADVANCE OF THE WORK AREA. FLASHING LIGHTS SHALL BE INSTALLED ABOVE THE FIRST TWO SIGNS IN THE SERIES.
9. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.
10. FORMS BT. 725 AND BT. 726 ARE REQUIRED.
11. WHEN A SIDEROAD INTERSECTS THE HIGHWAY ON WHICH WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC DEVICES SHALL BE ERECTED AND PROVIDED AS DIRECTED BY THE ENGINEER.
12. AN ADDITIONAL SIGN MAY BE REQUIRED AT A MAJOR INTERSECTING ROAD IN ADVANCE OF THE CLOSURE. THE ADDITIONAL SIGN SHALL GIVE THE DISTANCE TO THE BARRICADE IN MILES OR FRACTIONS OF A MILE.

SIDEROAD / STREET CLOSURE



GENERAL NOTES

1. TYPE III BARRICADES SHALL BE AS SHOWN ON "TYPICAL APPLICATIONS OF TYPE III BARRICADES CLOSING A ROAD". EACH TYPE III BARRICADE SHALL HAVE TWO FLASHING AMBER LIGHTS MOUNTED ABOVE IT.
2. WHERE A STOP CONDITION EXISTS, AS SHOWN ABOVE, WARNING SIGNS MAY BE OMITTED IN ADVANCE OF THE "STOP" SIGN.
3. STANDARD 701901 SHALL APPLY FOR THE PLACEMENT & MANUFACTURE OF TYPE III BARRICADES.
4. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
5. ONE FLASHING LIGHT IS REQUIRED ABOVE EACH ADVANCE WARNING SIGN DURING HOURS OF DARKNESS.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.
7. FORMS BT 725 AND BT 726 ARE REQUIRED.
8. THE MAINLINE ROUTE TEMPORARY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE PLANS, SPECIAL PROVISIONS AND STANDARD SPECIFICATIONS.
9. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE VARIOUS PAY ITEMS INVOLVING THE RECONSTRUCTION OF ALL APPLICABLE SIDE STREETS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

REVISIONS	
NAME	DATE

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTOROL & PROTECTION DEVICES (ROAD & SIDEROAD/ STREET CLOSURES)

SCALE: VERT. HORIZ.
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PLOT DATE = 8/21/2008
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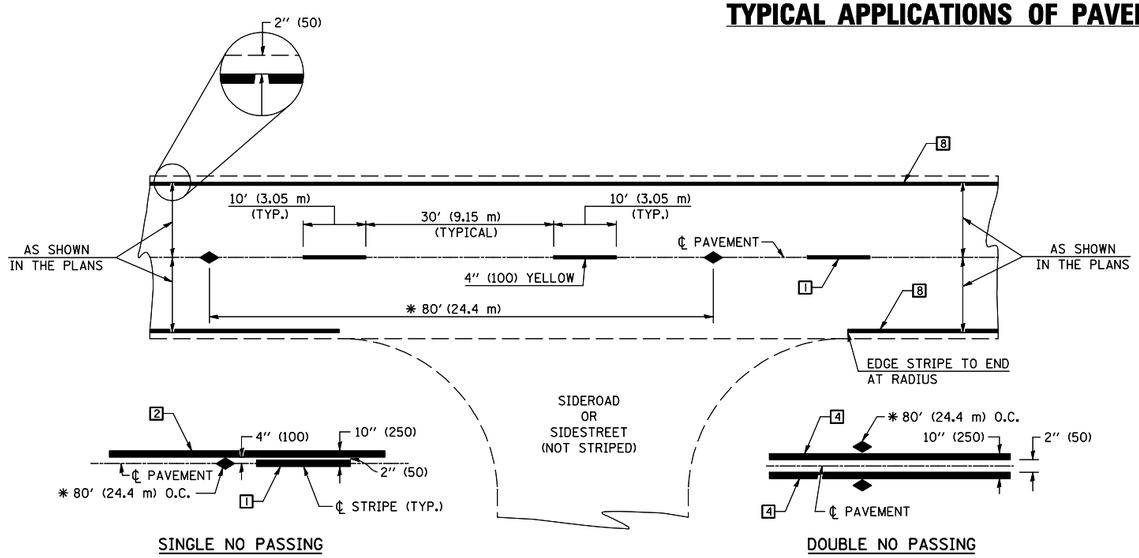
USER NAME = smithjm

CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	51
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL APPLICATIONS OF PAVEMENT MARKINGS AND MARKERS



SINGLE NO PASSING

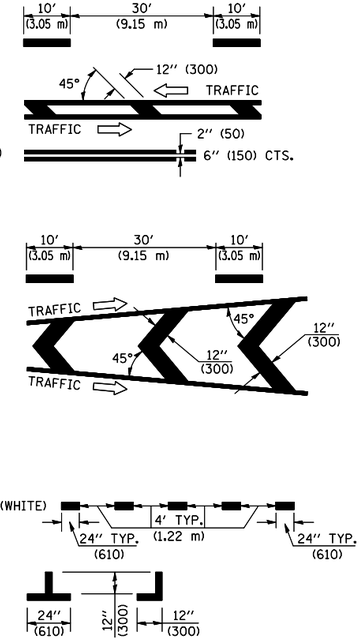
DOUBLE NO PASSING

* REDUCE TO 40' (12.2 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEEDS OF 45 mph (70 km/h) OR LESS.

TWO LANE/TWO WAY

TYPICAL PAVEMENT MARKING LEGEND

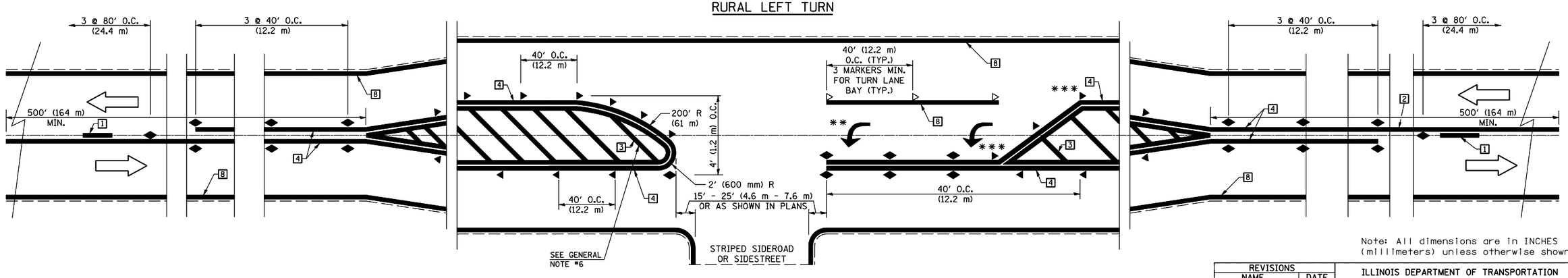
1. 4" (100) SKIP-DASH (YELLOW)
2. 4" (100) SOLID (YELLOW)
3. 12" (300) DIAGONAL (YELLOW)
4. 4" (100) DOUBLE YELLOW (NARROW)
5. RESERVED
6. RESERVED
7. 4" (100) SKIP-DASH (WHITE)
8. 4" (100) SOLID (WHITE)
9. 12" (300) DIAGONAL (WHITE)
10. 6" (150) SOLID (WHITE)
11. 24" (600) STOP BAR (WHITE)
12. 8" (200) SOLID (WHITE)
13. 4" (100) LANE LINE EXTENSIONS (WHITE)
14. 4" (100) PARKING WHITE



TYPICAL PAVEMENT MARKERS LEGEND

- TWO-WAY AMBER MARKER
- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER

RURAL LEFT TURN



*** REDUCE SPACING IF NECESSARY TO ASSURE MARKERS AT CORNER POINTS.

** TURN ARROWS SHALL BE PLACED AS SHOWN ON SHEET *2.

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

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING DETAILS
SHEET 1 OF 4

SCALE: VERT. HORIZ.
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PLOT DATE = 8/21/2008
FILE NAME = c:\projects\d503706 (d8)\11.01.2007 submittal\details.dgn
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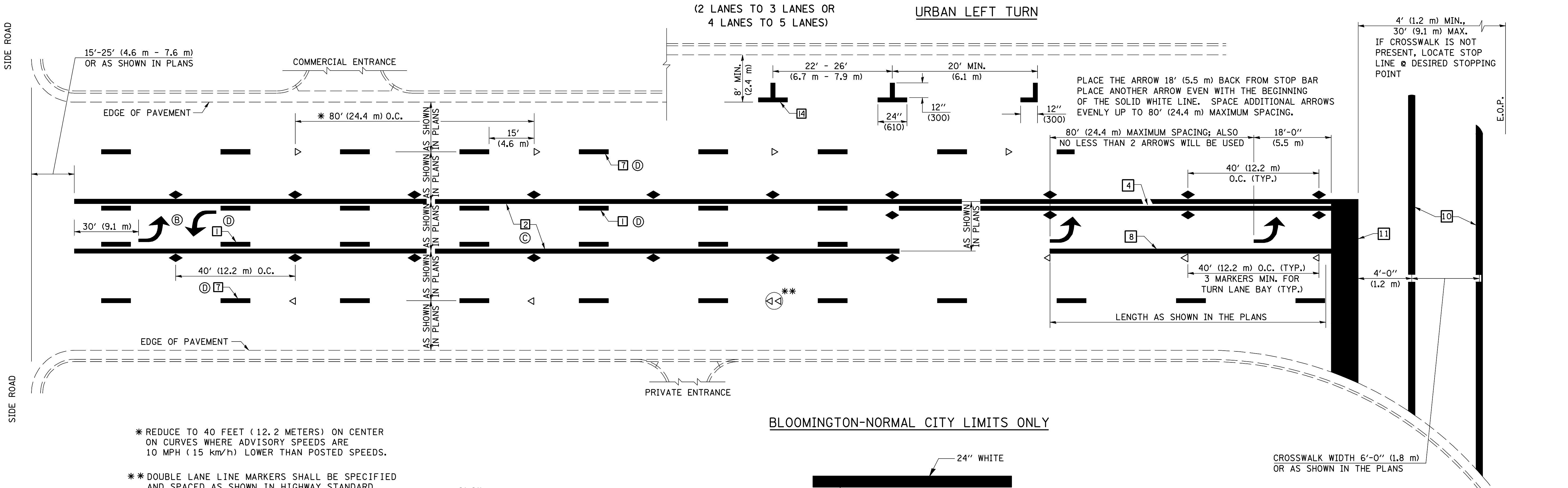
USER NAME = mattb_w

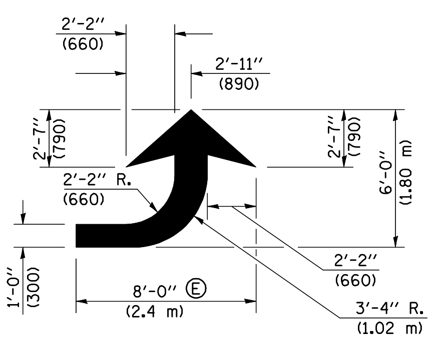
TYPICAL APPLICATIONS OF PAVEMENT MARKINGS AND MARKERS



BLOOMINGTON-NORMAL CITY LIMITS ONLY

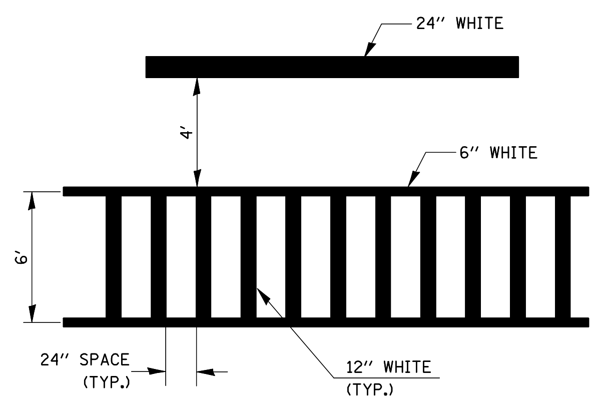
* REDUCE TO 40 FEET (12.2 METERS) ON CENTER ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH (15 km/h) LOWER THAN POSTED SPEEDS.

** DOUBLE LANE LINE MARKERS SHALL BE SPECIFIED AND SPACED AS SHOWN IN HIGHWAY STANDARD 781001 FOR MULTI-LANE DIVIDED AND UNDIVIDED HIGHWAYS.

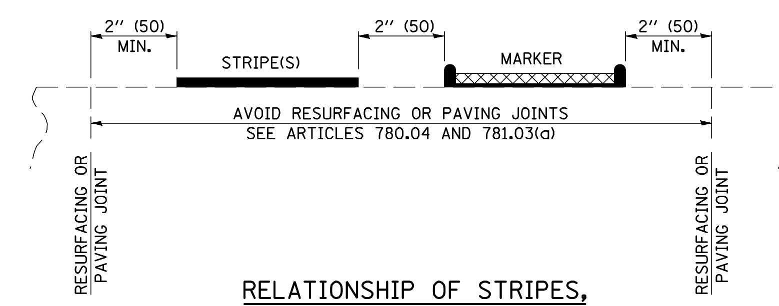


LEFT ARROW

REVERSE FOR RIGHT ARROW
AREA = 15.6 SQ. FT. (1.47 m^2)
(WHITE)



TYPICAL SPACING FOR CROSSWALKS & STOP BARS



RELATIONSHIP OF STRIPES, MARKERS AND JOINTS

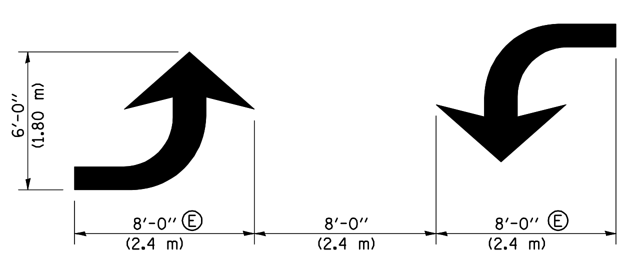
NOTES:

Ⓑ TURN ARROW PAIRS SHALL BE PLACED AT 250' (75 m) INTERVALS AND SHALL BE EVENLY SPACED BETWEEN BOTH ENDS OF THE BIDIRECTIONAL LEFT TURN LANE.

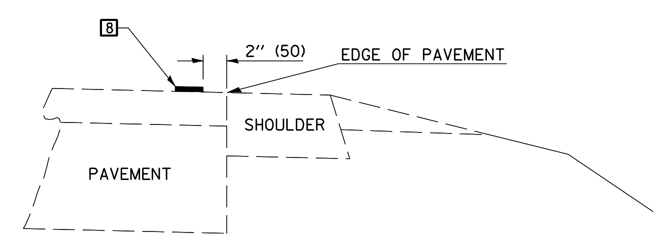
Ⓒ THE SOLID YELLOW PAVEMENT MARKINGS [2] SHOULD GENERALLY START OR END NEAR THE RADIUS POINT OF EACH STREET RETURN EXCEPT WHERE ONE OR BOTH ENDS WOULD INCLUDE STOP BARS.

Ⓓ THE SKIP-DASH PAVEMENT MARKINGS [1] OR [7] SHOULD BE CENTERED BETWEEN BOTH ENDS OF EACH CITY BLOCK AND SHALL BE PLACED SO THEY LINE UP ACROSS FROM EACH OTHER. SEE EXAMPLE ON SHEET 2 OF 3.

Ⓔ USE LARGE ARROW SIZE FOR BOTH RURAL AND URBAN LOCATIONS. (SEE LAST PAGE OF SECTION 780x FOR SYMBOLS TABLE)



TYPICAL DOUBLE TURN ARROWS (WHITE)



RELATIONSHIP OF EDGE LINE TO EDGE OF PAVEMENT

(SAFETY SHOULDER OR PAVED SURFACE)
SEE ARTICLE 780.04

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

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING DETAILS
SHEET 2 OF 4

SCALE: VERT. HORIZ.
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FILE NAME = c:\projects\d503706 (v8)\11.01.2007 submittal\details.dgn
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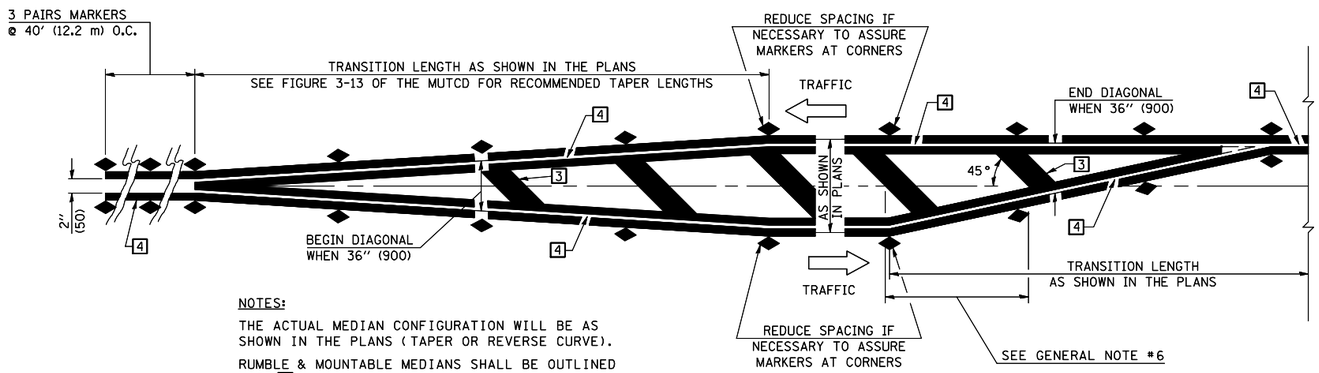
USER NAME = stultsjw

CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	53
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL APPLICATIONS OF PAVEMENT MARKINGS AND MARKERS



NOTES:

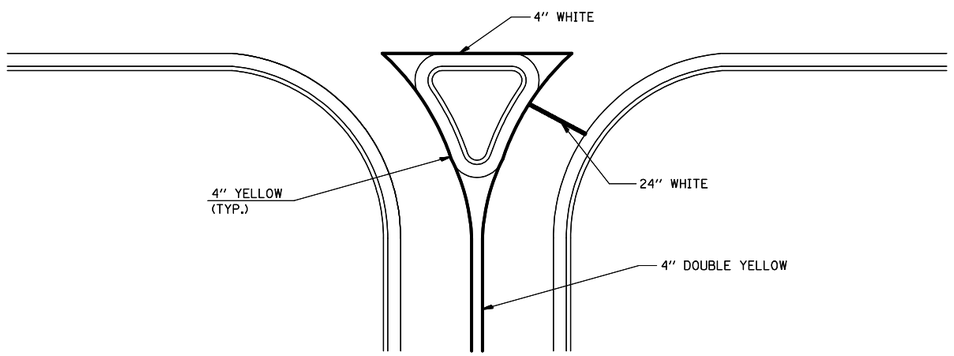
THE ACTUAL MEDIAN CONFIGURATION WILL BE AS SHOWN IN THE PLANS (TAPER OR REVERSE CURVE).

RUMBLE & MOUNTABLE MEDIANS SHALL BE OUTLINED WITH [2].

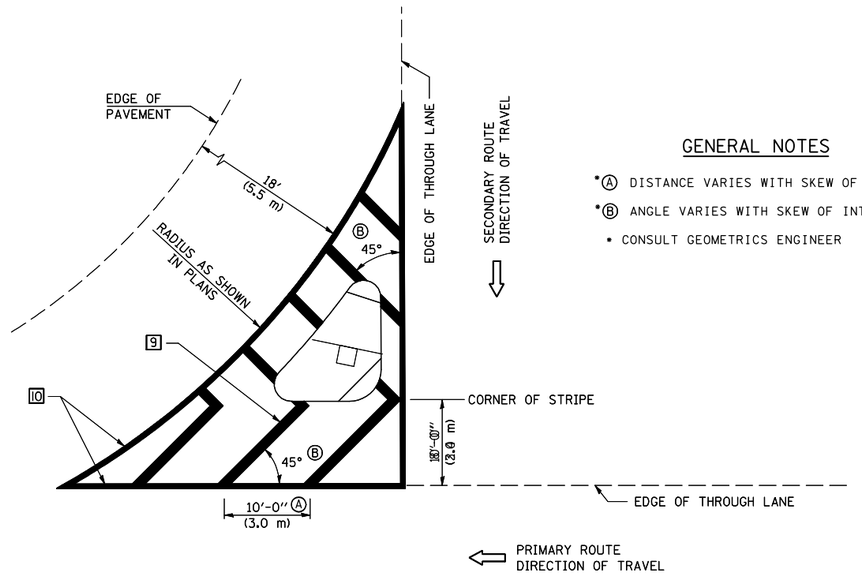
TYPICAL MEDIAN TRANSITIONS

GENERAL NOTES

1. WHEN MEDIANS ARE PRESENT, PAVEMENT MARKINGS ARE TO BE PLACED ADJACENT TO MEDIANS.
2. SOME OF THE INFORMATION INCLUDED WITH THIS DETAIL MAY NOT BE APPLICABLE TO THIS IMPROVEMENT.
3. PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.
4. A STRIPING KEY IS AVAILABLE ELSEWHERE AND SHALL BE SHOWN WHERE THE QUANTITIES ARE LISTED.
5. FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING ANY RAISED REFLECTIVE PAVEMENT MARKERS.
6. THE FOLLOWING CRITERIA SHALL BE USED FOR SELECTING THE DIAGONAL PAVEMENT MARKING SPACING,
   <30 MPH USE 15' (<50 km/h USE 4.5 m)
   30-45 MPH USE 20' (50-75 km/h USE 6.0 m)
   >45 MPH USE 30' (>75 km/h USE 9.0 m)



RIGHT IN - RIGHT OUT ACCESS



GENERAL NOTES

*Ⓐ DISTANCE VARIES WITH SKEW OF INTERSECTION.

*Ⓑ ANGLE VARIES WITH SKEW OF INTERSECTION.

• CONSULT GEOMETRICS ENGINEER

ISLAND

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

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING DETAILS
SHEET 3 OF 4

SCALE: VERT. HORIZ.
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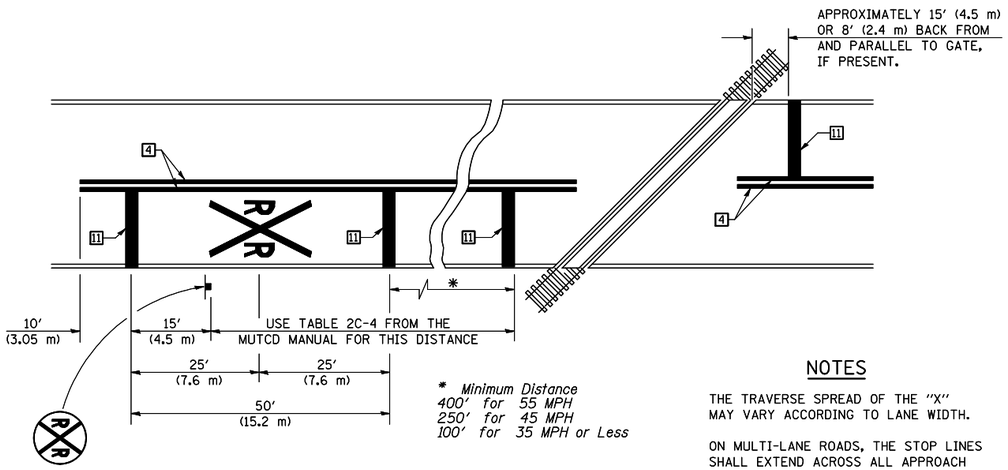
CONTRACT NO. 70517

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	54
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL APPLICATIONS OF PAVEMENT MARKINGS AND MARKERS



PAVEMENT MARKINGS AT RAILROAD-HIGHWAY GRADE CROSSING

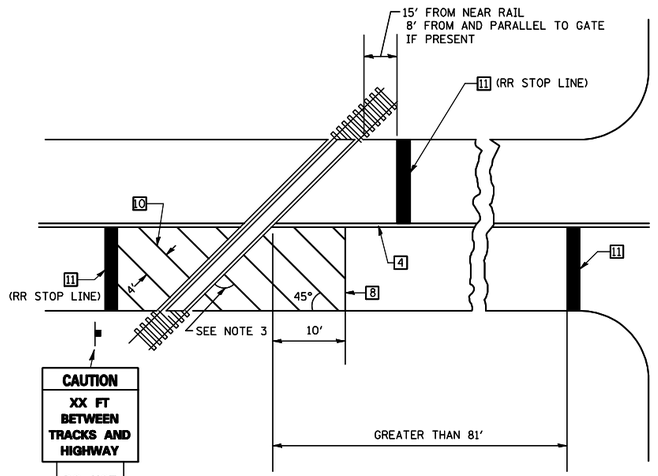
NOTES

THE TRAVERSE SPREAD OF THE "X" MAY VARY ACCORDING TO LANE WIDTH.

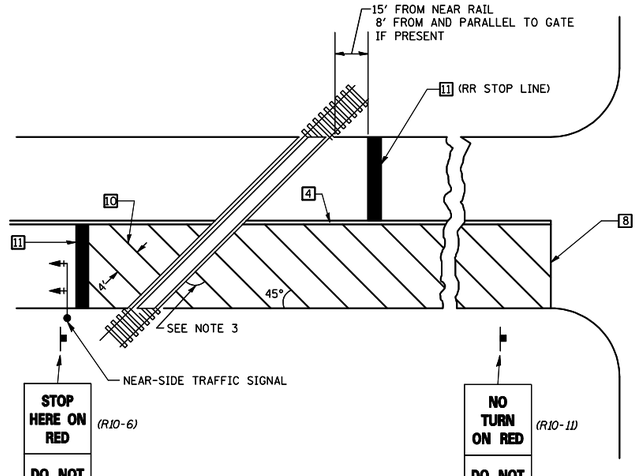
ON MULTI-LANE ROADS, THE STOP LINES SHALL EXTEND ACROSS ALL APPROACH LANES AND SEPARATE RXR SYMBOLS SHALL BE PLACED ADJACENT TO EACH OTHER IN EACH LANE.

WHEN THE PAVEMENT MARKING SYMBOL IS USED, A PORTION OF THE SYMBOL SHOULD BE LOCATED DIRECTLY ADJACENT TO THE ADVANCE WARNING SIGN (W10-1) AS PLACED BY TABLE II-1, CONDITION B OF THE MUTCD.

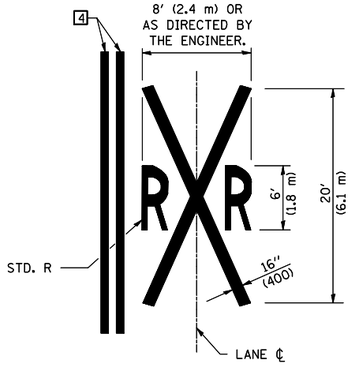
RAILROAD CROSSING WITH INTERCONNECT ONLY



RAILROAD CROSSING WITH INTERCONNECT AND PRE-SIGNALS



SUPPLEMENTAL PAVEMENT MARKING TREATMENT FOR RAILROAD-HIGHWAY GRADE CROSSING



NOTES

SUPPLEMENTAL PAVEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.

EXTEND PAVEMENT MARKINGS TO THE INTERSECTION ONLY WHERE NEAR-SIDE TRAFFIC SIGNALS ARE USED.

WHERE THE ANGLE BETWEEN THE DIAGONAL PAVEMENT MARKINGS AND THE TRACK WOULD BE LESS THAN 20°, THE PAVEMENT MARKINGS SHOULD BE PLACED IN THE OPPOSITE DIRECTION FROM THAT SHOWN.

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

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING DETAILS
SHEET 4 OF 4

SCALE: VERT. HORIZ.
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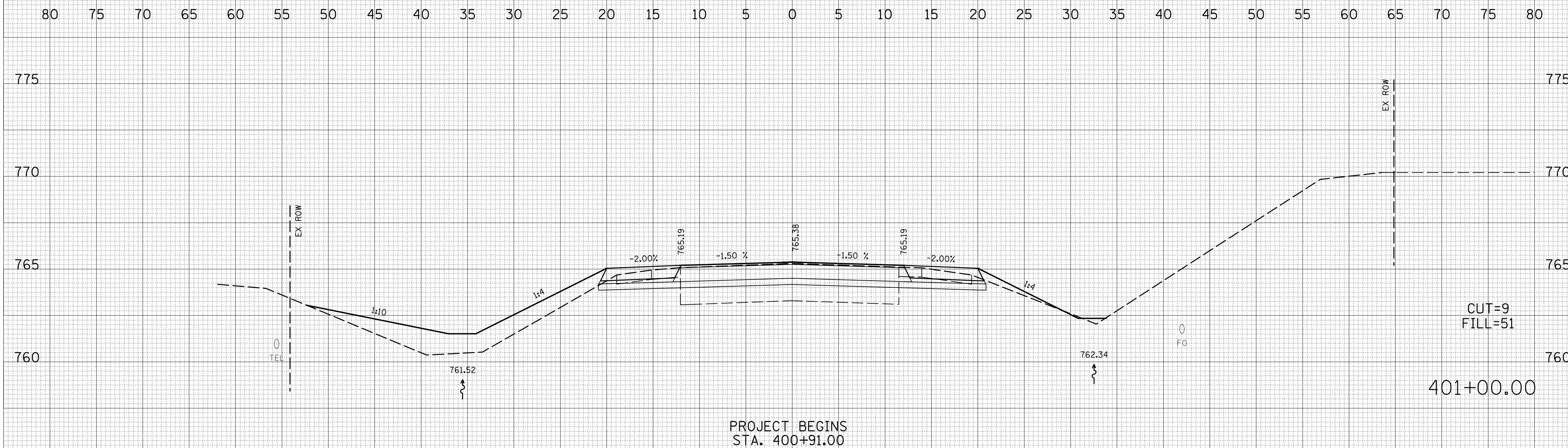
CHECKED BY

PLOT DATE = 8/21/2008
FILE NAME = c:\projects\d563706 (v8)\11.01.2007 submittal\details.dgn
PLOT SCALE = 100.0824 ' / IN.
USER NAME = stublg*

CONTRACT NO. 70517

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	55
STA. 400+50.00 TO STA. 401+00.00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

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CONTRACT NO. 70517

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	56
STA. 401+50.00		TO STA. 401+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

ORIGINAL SURVEY
SURVEYED
PLOTTED
TYPED AND CHECKED
AREAS
AREAS CHECKED
BY
DATE

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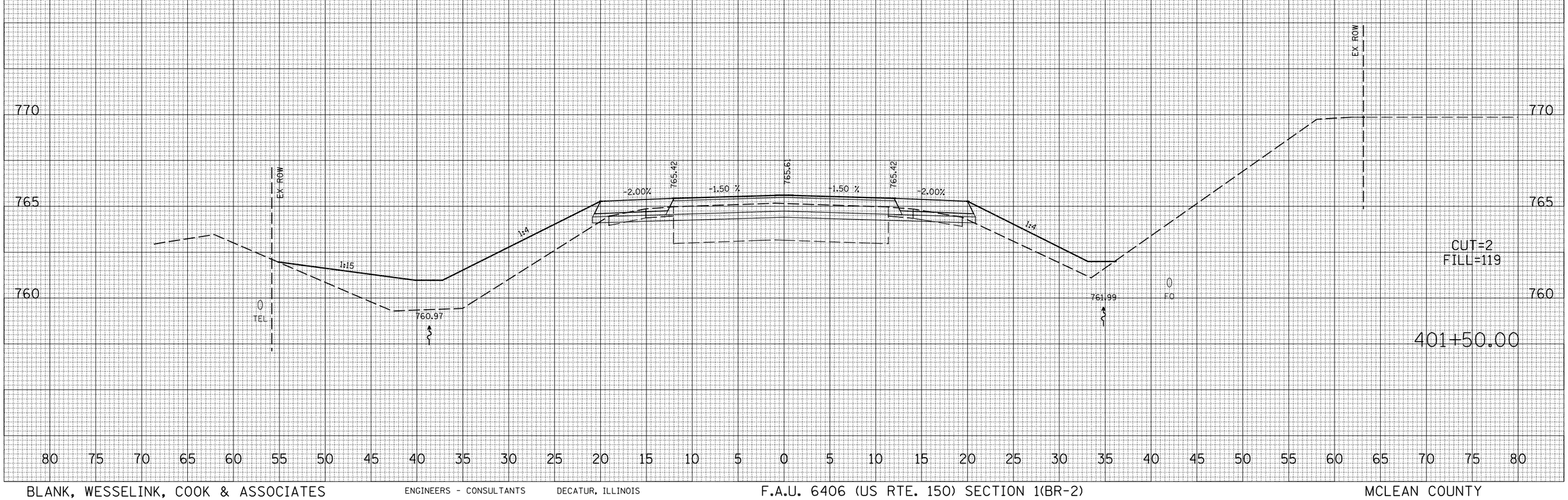
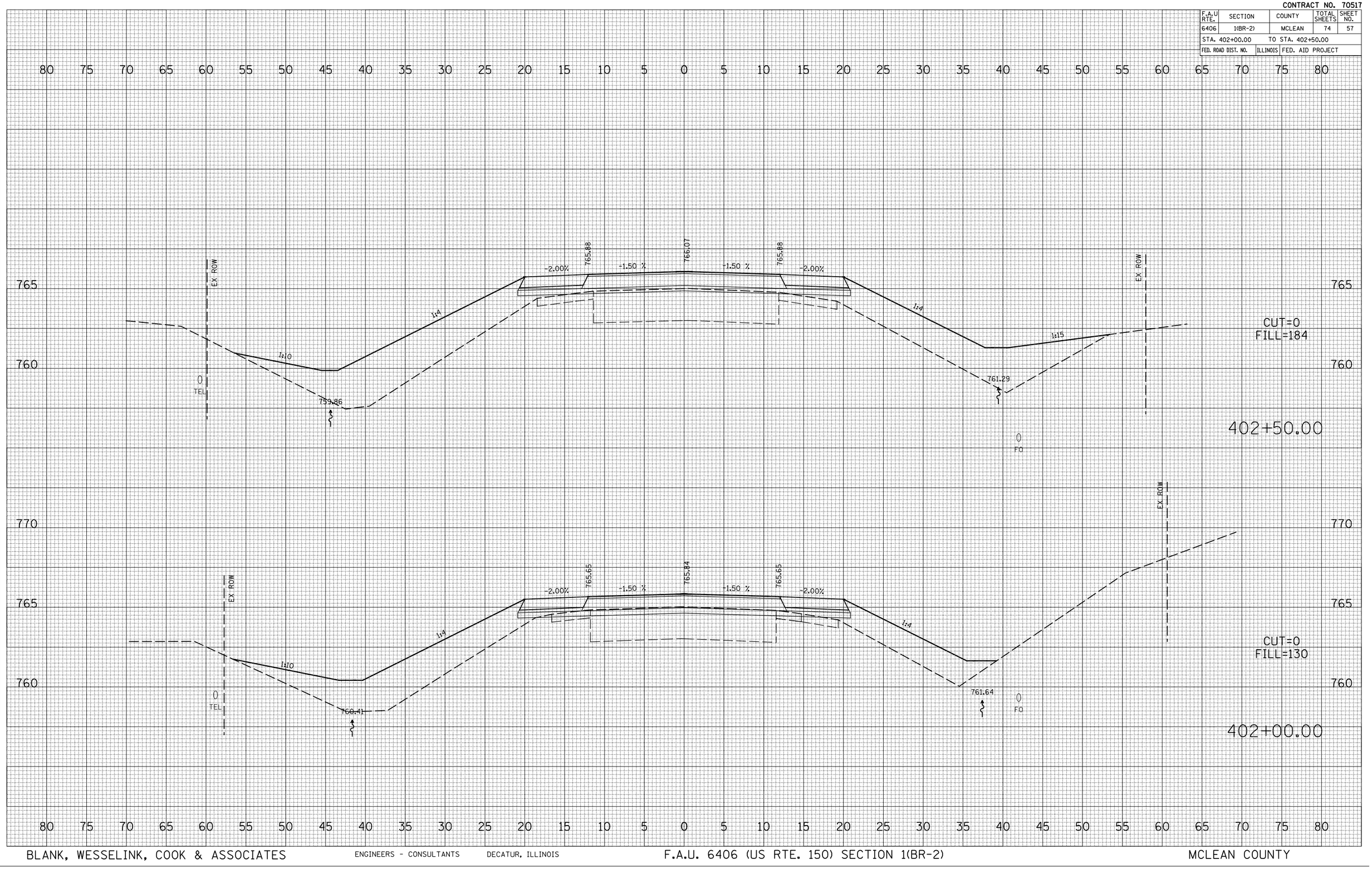


BLANK, WESSELINK, COOK & ASSOCIATES ENGINEERS - CONSULTANTS DECATUR, ILLINOIS

F.A.U. 6406 (US RTE. 150) SECTION 1(BR-2) MCLEAN COUNTY

CONTRACT NO. 70517

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	57
STA. 402+00.00		TO STA. 402+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

PLOT DATE = 8/21/2008
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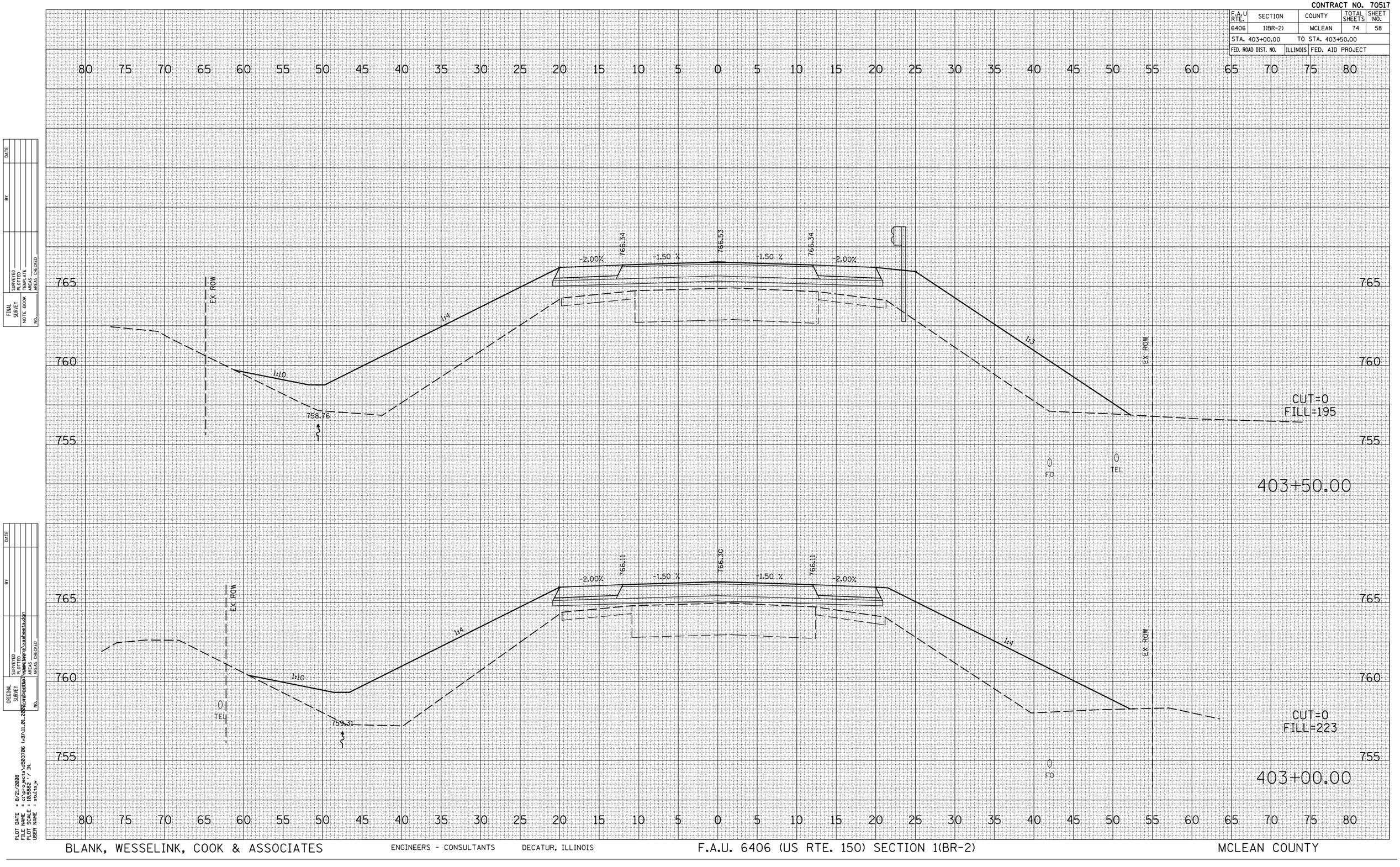
USER NAME = stulajw

BLANK, WESSELINK, COOK & ASSOCIATES ENGINEERS - CONSULTANTS DECATUR, ILLINOIS

F.A.U. 6406 (US RTE. 150) SECTION 1(BR-2) MCLEAN COUNTY

CONTRACT NO. 70517

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	58
STA. 403+00.00		TO STA. 403+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

ORIGINAL SURVEY
SURVEYED
PLOTTED
TRANSFERRED TO FILE
AREAS
AREAS CHECKED
BY
DATE

PLOT DATE = 8/21/2008
FILE NAME = c:\projects\d503706 (v8)\il_01_2007\cross-sections\xsheets.dgn
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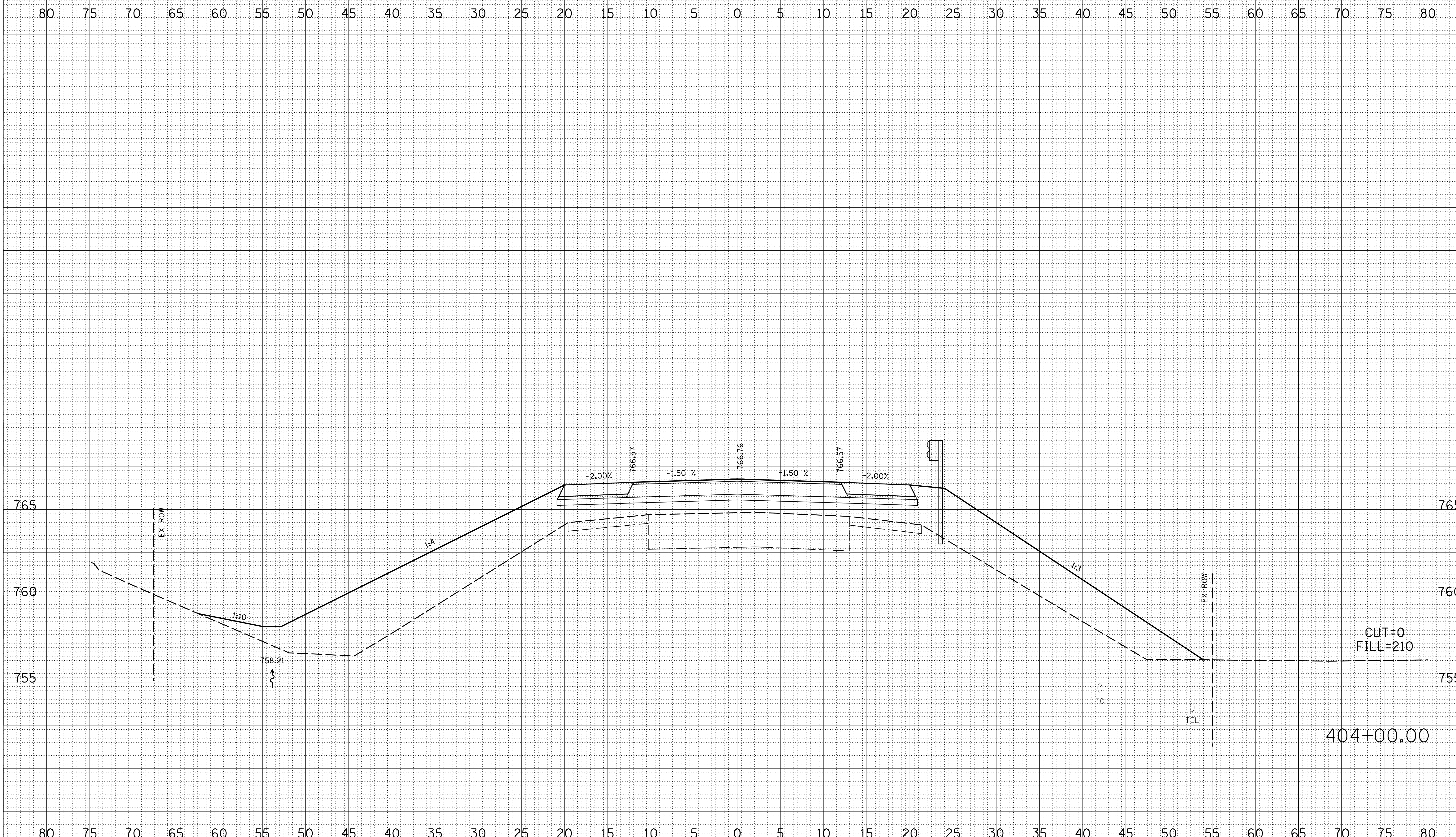
BLANK, WESSELINK, COOK & ASSOCIATES ENGINEERS - CONSULTANTS DECATUR, ILLINOIS

F.A.U. 6406 (US RTE. 150) SECTION 1(BR-2) MCLEAN COUNTY

CONTRACT NO. 70517

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	59
STA. 404+00.00 TO STA. 404+00.00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CONTRACT NO. 70517

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	60
STA. 404+50.00		TO STA. 404+50.00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

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

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

PLOT DATE = 8/21/2008
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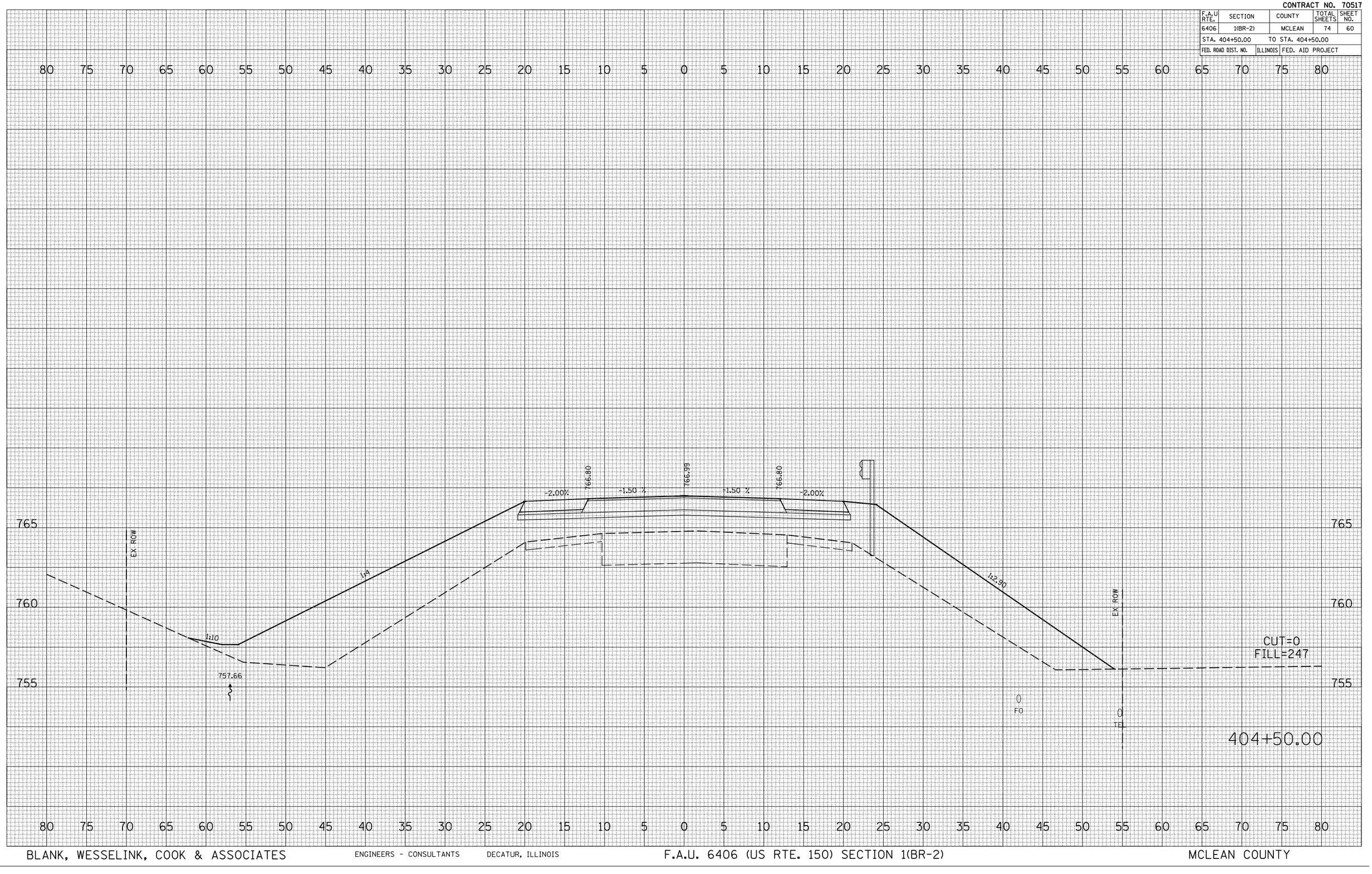


BLANK, WESSELINK, COOK & ASSOCIATES ENGINEERS - CONSULTANTS DECATUR, ILLINOIS

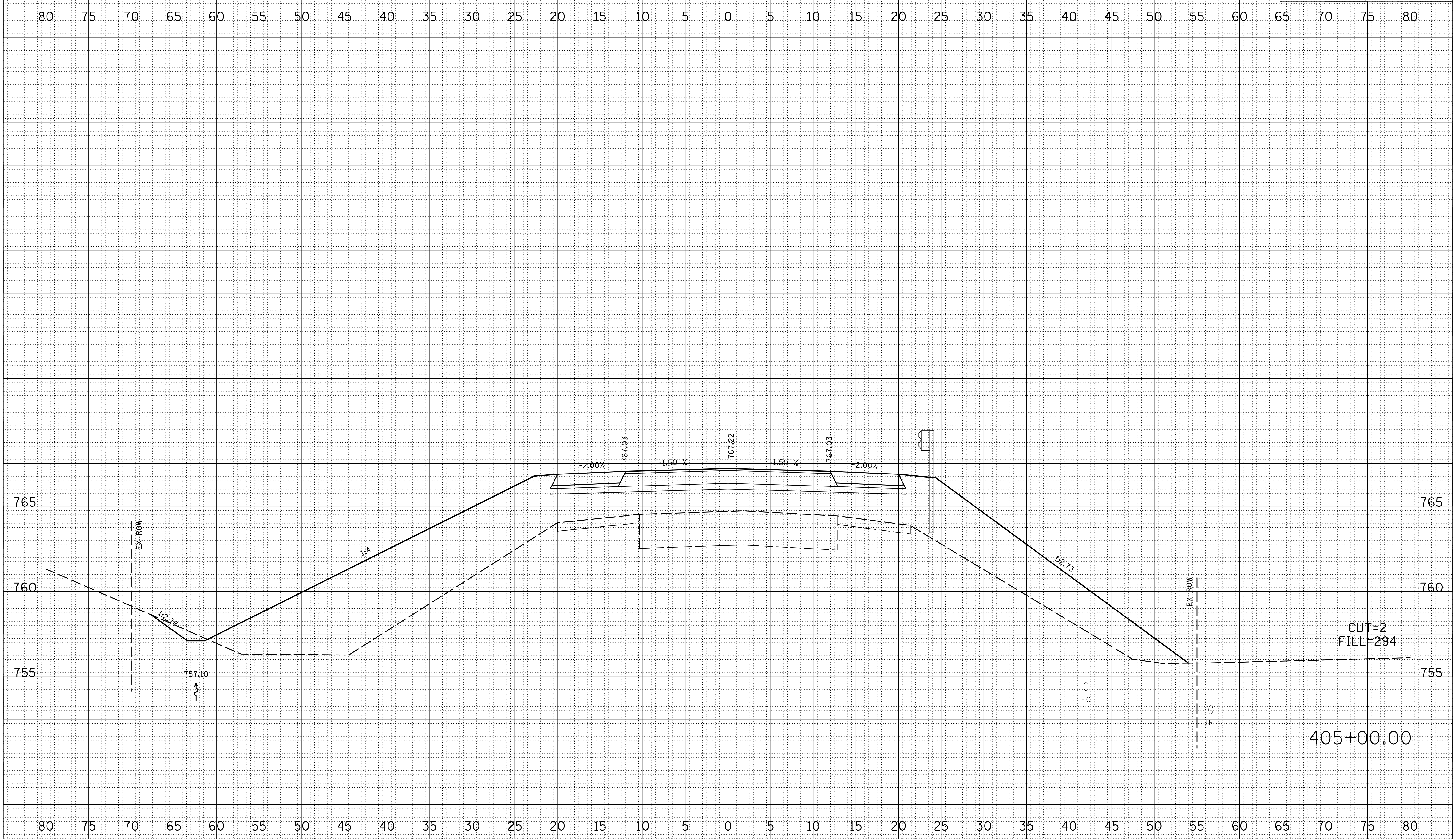
F.A.U. 6406 (US RTE. 150) SECTION 1(BR-2) MCLEAN COUNTY

CONTRACT NO. 70517

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	61

STA. 405+00.00 TO STA. 405+00.00

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



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

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

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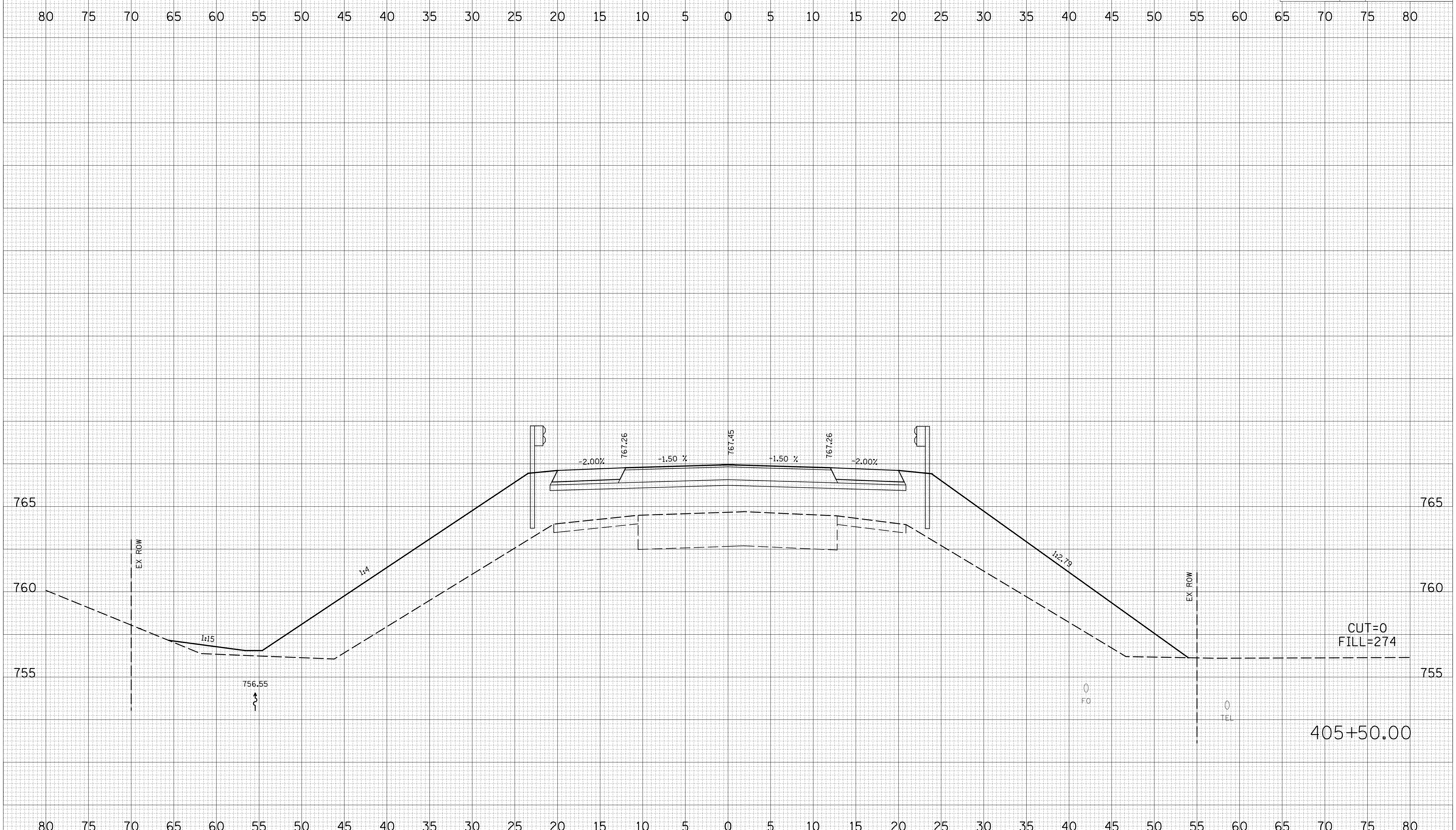
BLANK, WESSELINK, COOK & ASSOCIATES ENGINEERS - CONSULTANTS DECATUR, ILLINOIS F.A.U. 6406 (US RTE. 150) SECTION 1(BR-2) MCLEAN COUNTY

CONTRACT NO. 70517

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	62
STA. 405+50.00	TO STA. 405+50.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



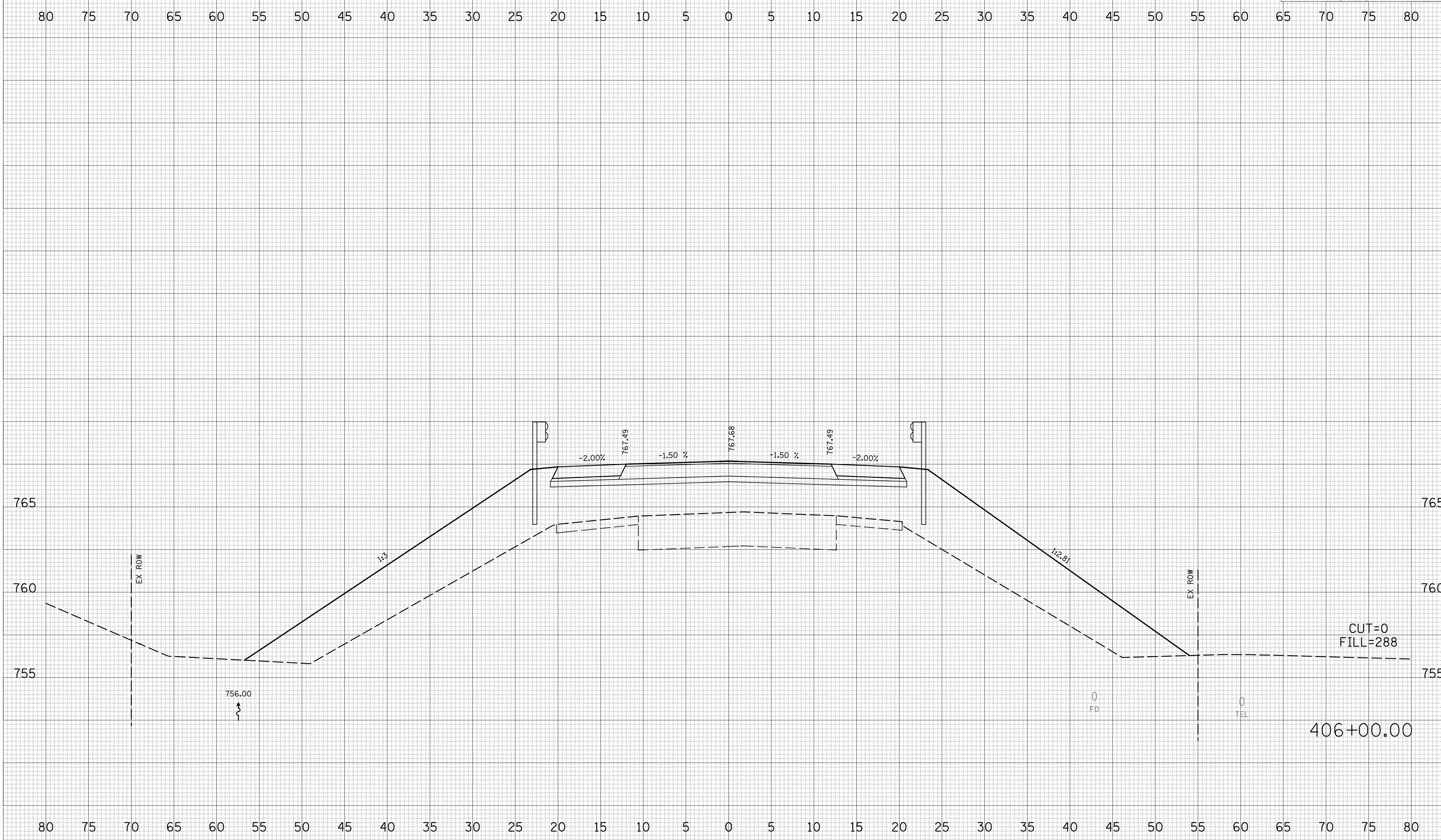
FINAL SURVEY: NOTE BOOK NO. / SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED / BY / DATE

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

PLOT DATE = 8/21/2008

CONTRACT NO. 70517

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	63
STA. 406+00.00 TO STA. 406+00.00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

PLOT DATE = 8/21/2008
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USER NAME = stultsjw

BLANK, WESSELINK, COOK & ASSOCIATES ENGINEERS - CONSULTANTS DECATUR, ILLINOIS

F.A.U. 6406 (US RTE. 150) SECTION 1(BR-2) MCLEAN COUNTY

CONTRACT NO. 70517

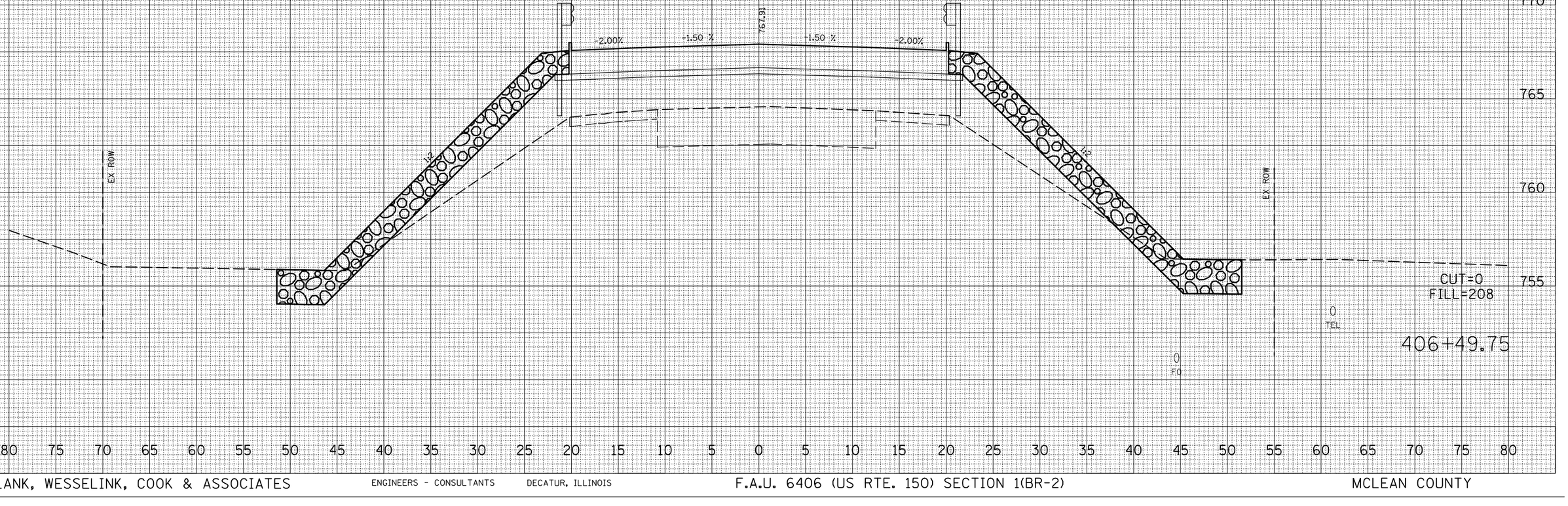
F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	64
STA. 406+49.75		TO STA. 406+49.75		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

ORIGINAL SURVEY	NOTE BOOK	NO.	BY	DATE
SURVEYED				
PLOTTED				
TYPICAL SHEET	c:\projects\d503706\typ\xsheets.dgn			
AREAS				
AREAS CHECKED				

PLOT DATE = 8/21/2008
FILE NAME = c:\projects\d503706 (v8i)\il.01.2007\typ\xsheets.dgn
PLOT SCALE = 10.5882 ' / IN.
USER NAME = stuiajw

BRIDGE OMISSION
STA. 406+49.75 - STA. 407+97.25



BLANK, WESSELINK, COOK & ASSOCIATES ENGINEERS - CONSULTANTS DECATUR, ILLINOIS

F.A.U. 6406 (US RTE. 150) SECTION 1(BR-2) MCLEAN COUNTY

CONTRACT NO. 70517

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	65
STA. 407+97.25		TO STA. 407+97.25		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

ORIGINAL SURVEY	BY	DATE
	SURVEYED	
	PLOTTED	
	TYPED AND CHECKED	
	AREAS	
	AREAS CHECKED	

PLOT DATE = 8/21/2008
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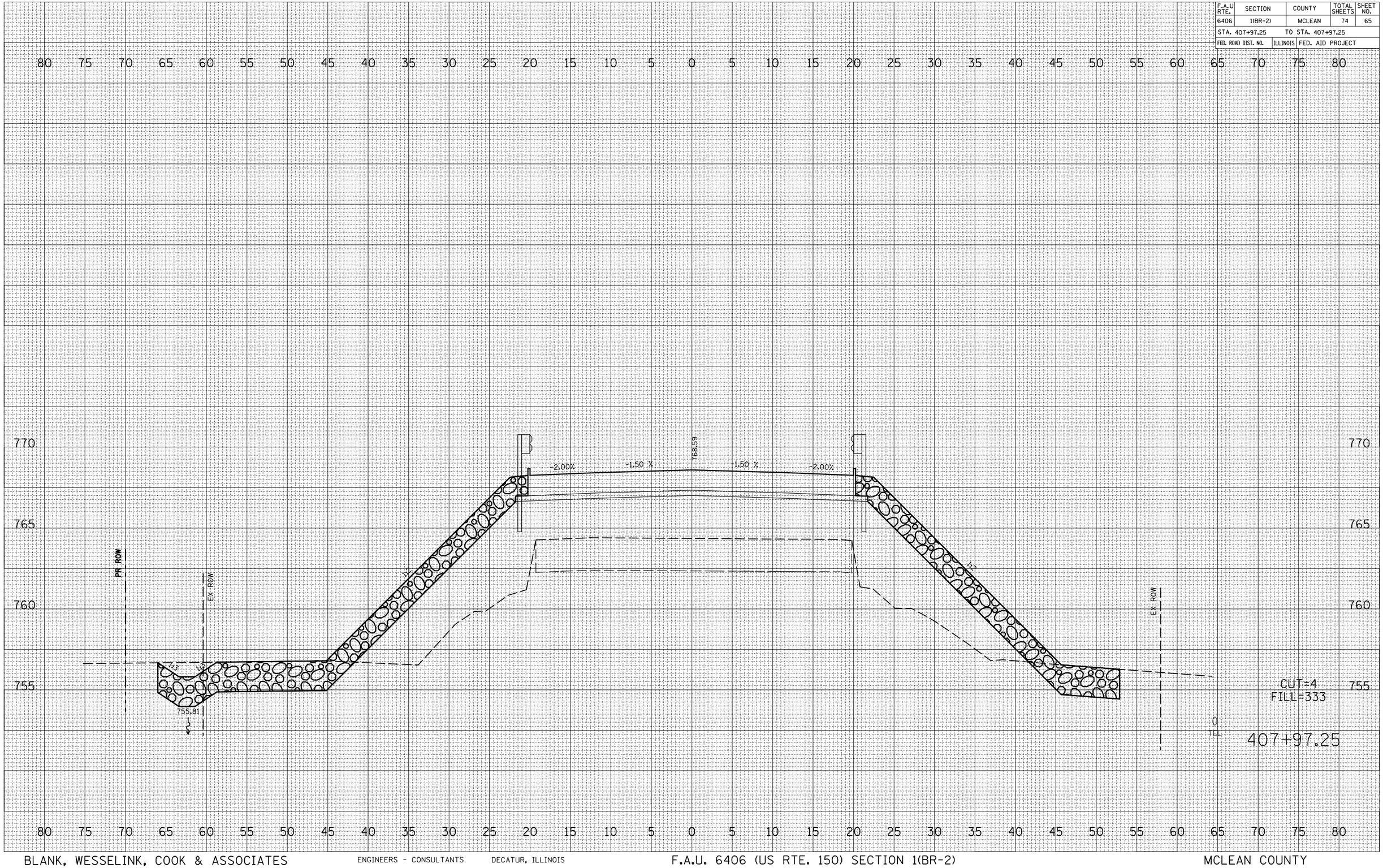
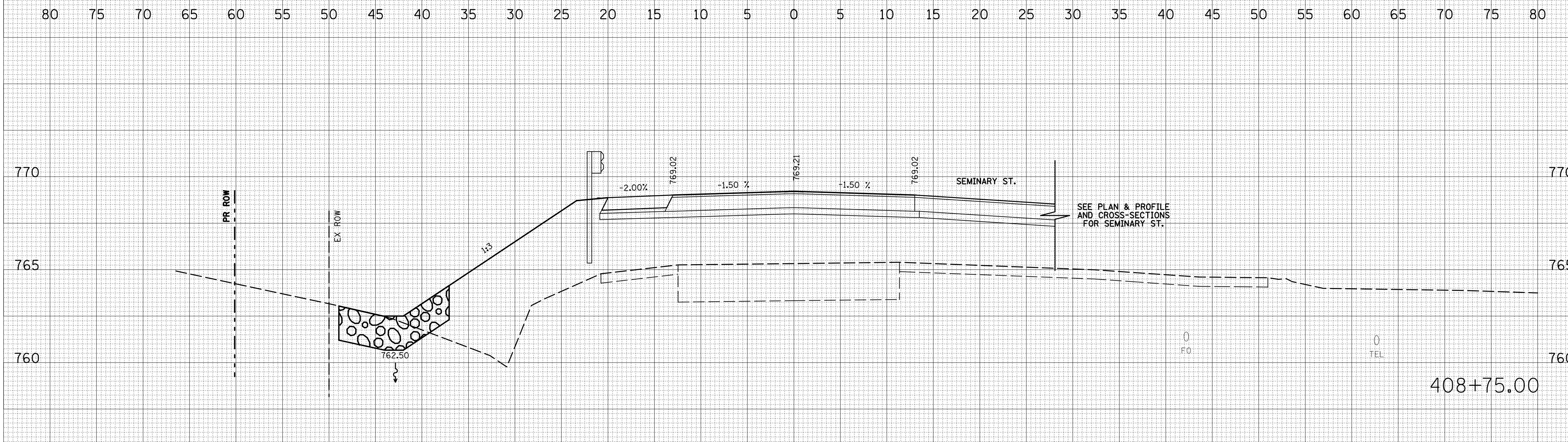


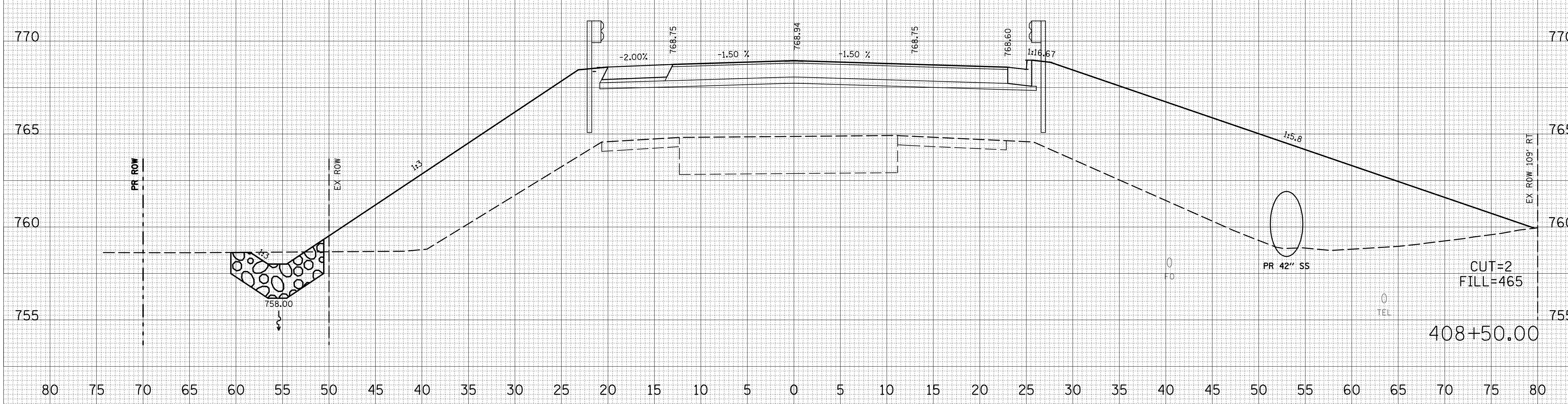
BLANK, WESSELINK, COOK & ASSOCIATES ENGINEERS - CONSULTANTS DECATUR, ILLINOIS

F.A.U. 6406 (US RTE. 150) SECTION 1(BR-2) MCLEAN COUNTY

CONTRACT NO. 70517

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	66
STA. 408+50.00 TO STA. 408+75.00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





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

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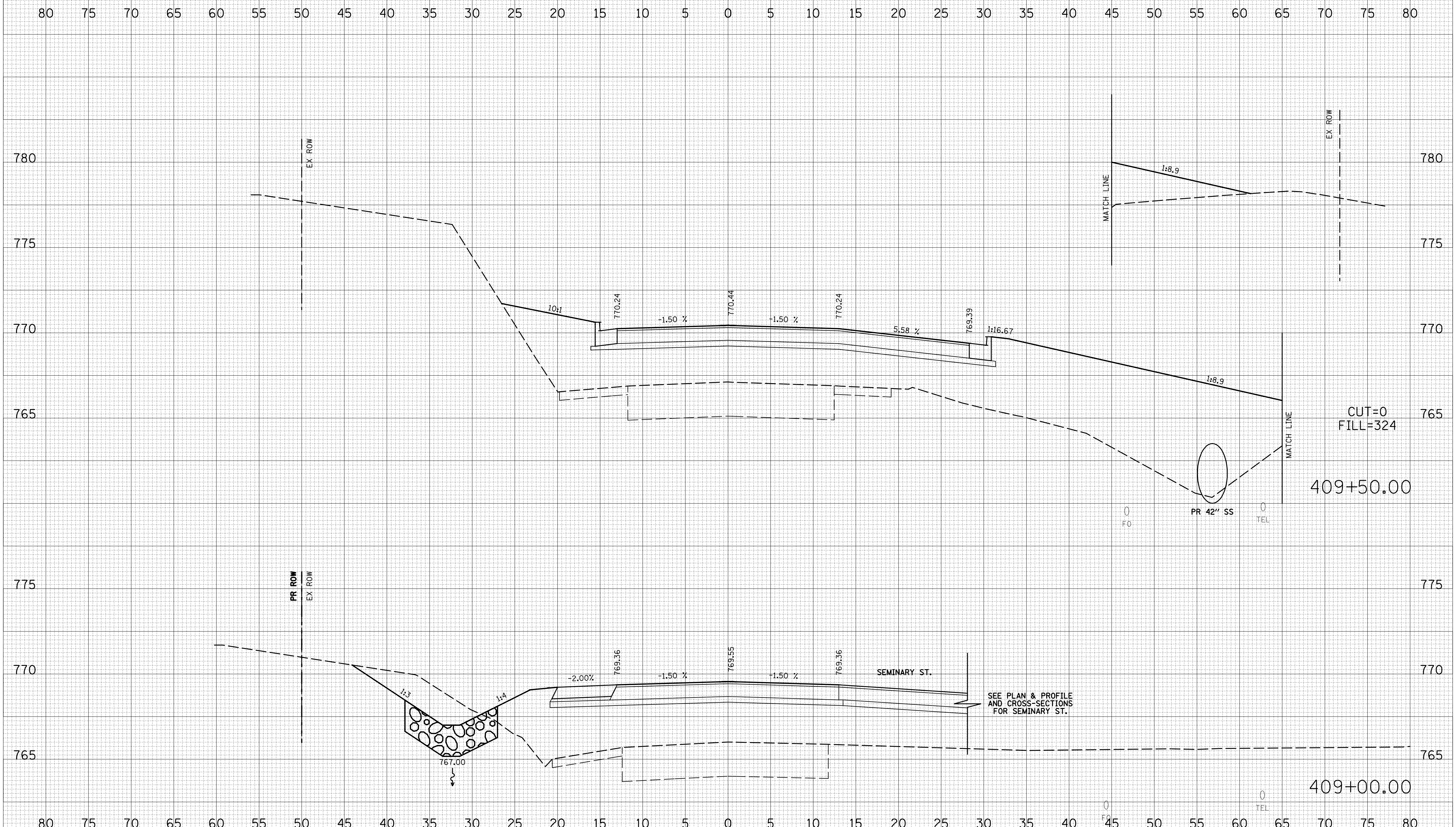
EX ROW
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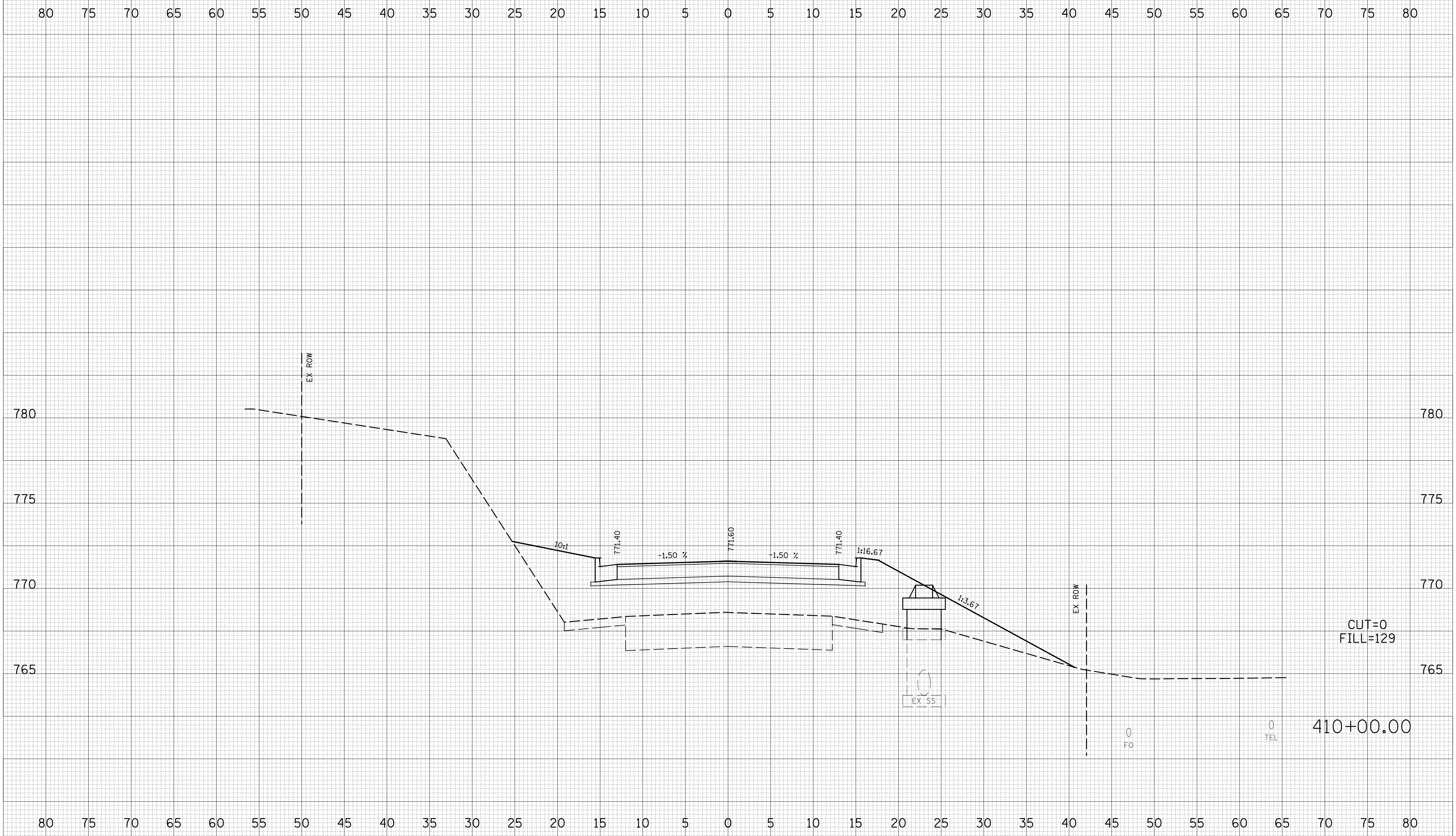
770.24
770.44
770.24
-1.50 %
-1.50 %
5.58 %
769.39
1:16.67
1:8.9
1:8.9
MATCH LINE
MATCH LINE
CUT=0
FILL=324
409+50.00
PR 42" SS
FO
TEL
PR ROW
EX ROW
1:3
1:4
-2.00%
769.36
769.55
769.36
-1.50 %
-1.50 %
SEMINARY ST.
SEE PLAN & PROFILE AND CROSS-SECTIONS FOR SEMINARY ST.
767.00
409+00.00

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	68

CONTRACT NO. 70517

STA. 410+00.00 TO STA. 410+00.00

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



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

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

PLOT DATE = 8/21/2008
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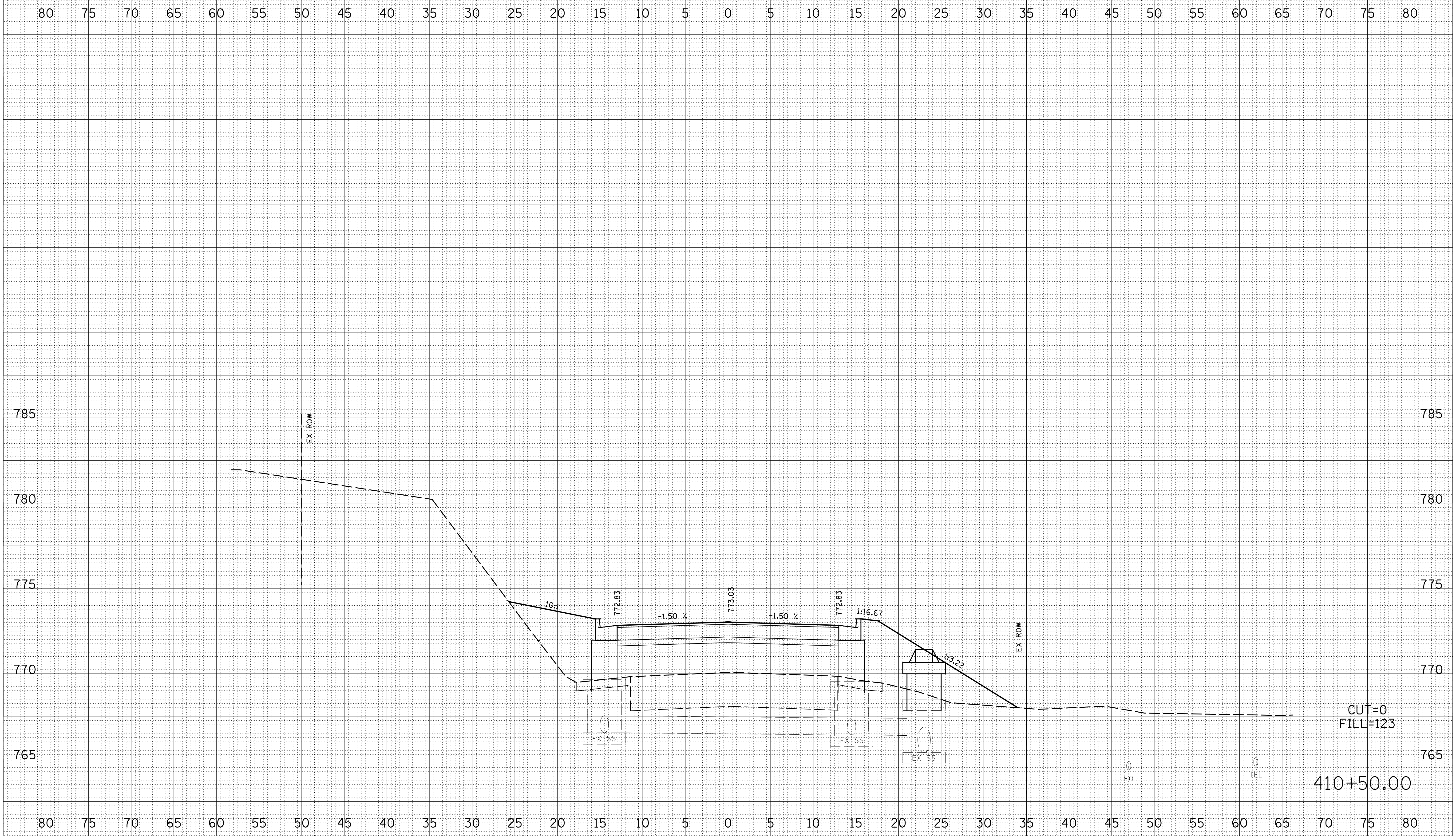
BLANK, WESSELINK, COOK & ASSOCIATES ENGINEERS - CONSULTANTS DECATUR, ILLINOIS

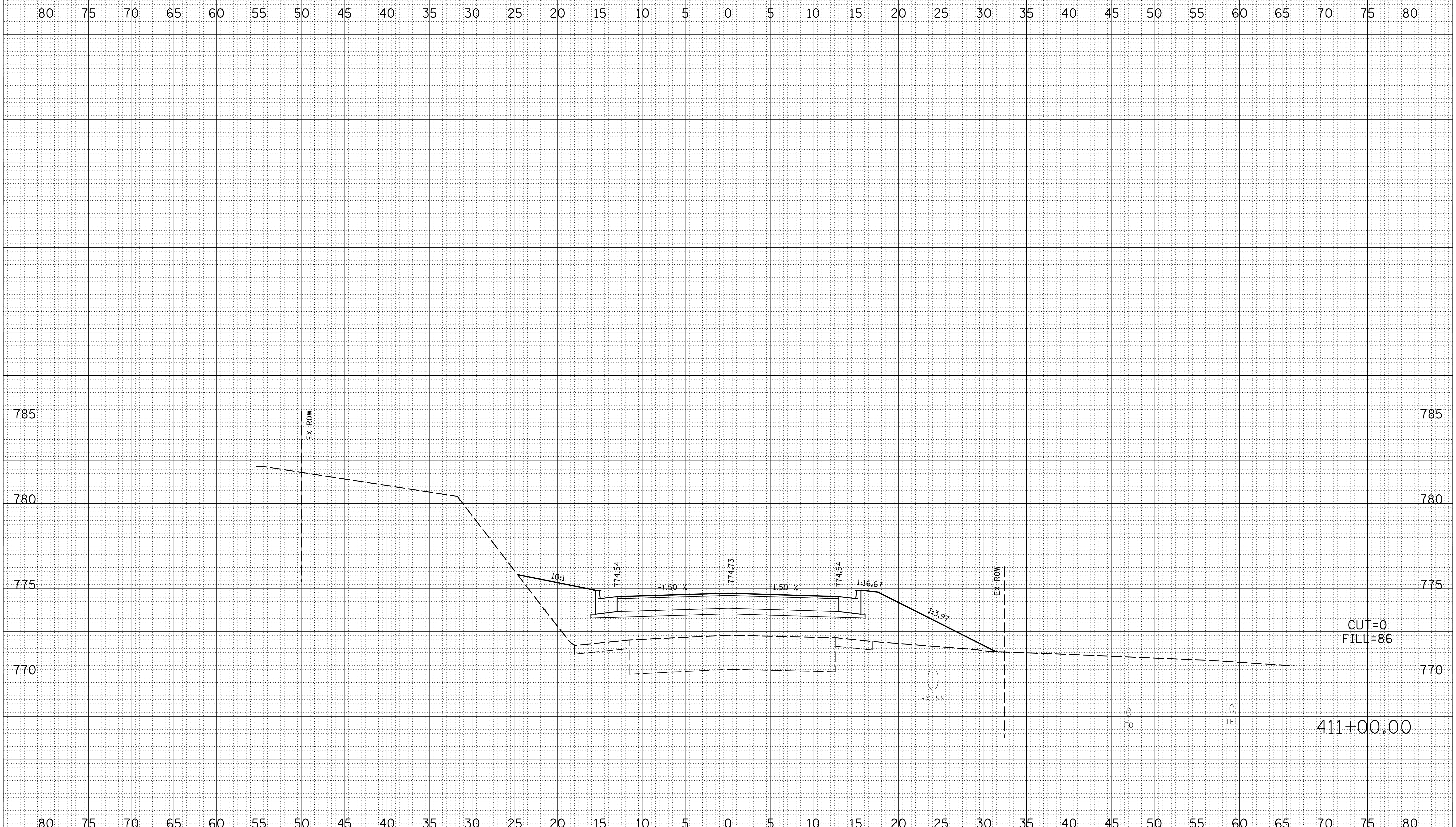
F.A.U. 6406 (US RTE. 150) SECTION 1(BR-2) MCLEAN COUNTY

CONTRACT NO. 70517

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	69
STA. 410+50.00	TO STA. 410+50.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

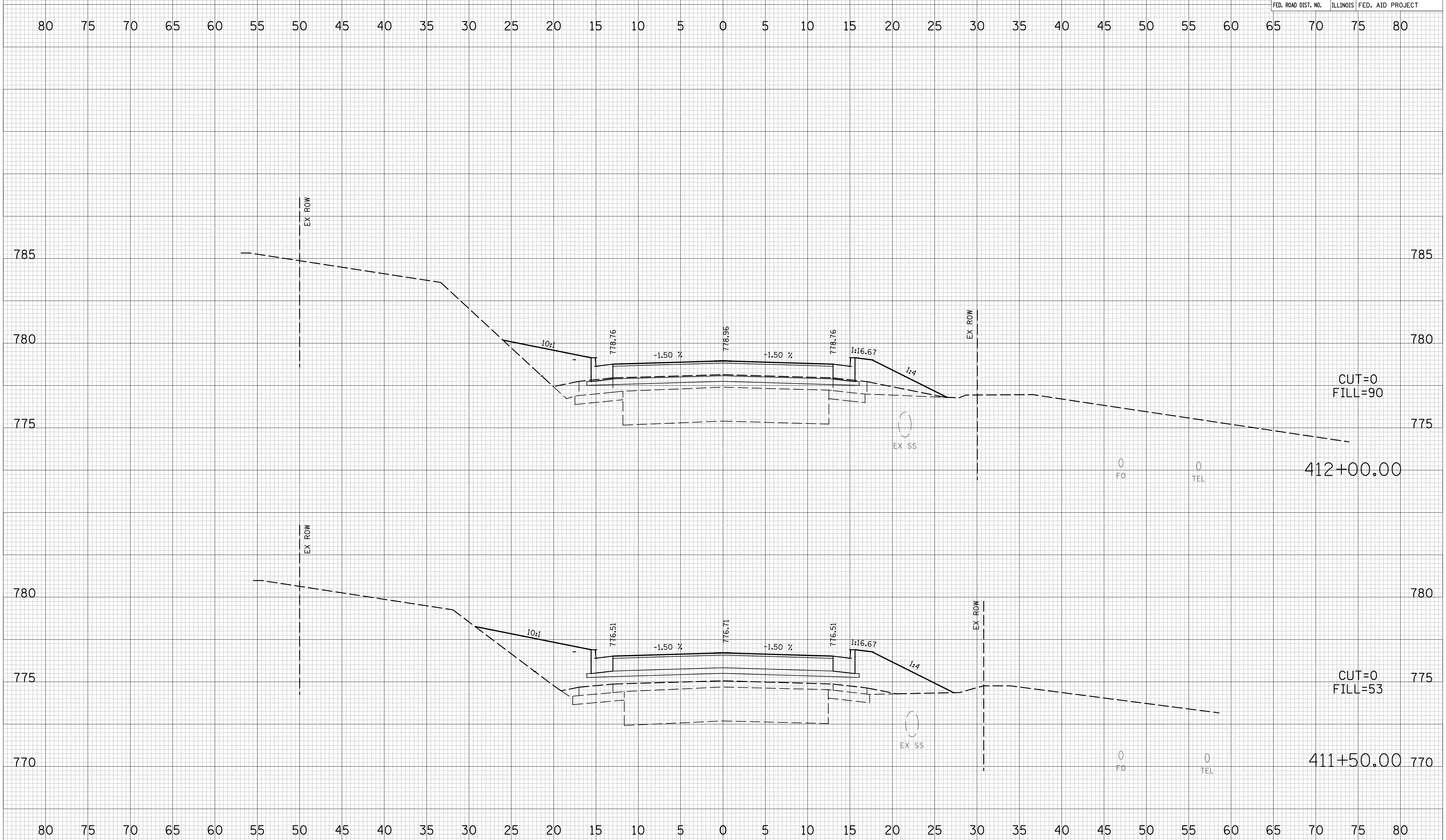


BLANK, WESSELINK, COOK & ASSOCIATES ENGINEERS - CONSULTANTS DECATUR, ILLINOIS F.A.U. 6406 (US RTE. 150) SECTION 1(BR-2) MCLEAN COUNTY


80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80
785
780
775
770
EX ROW
10:1
774.54
-1.50 %
774.73
-1.50 %
774.54
1:16.67
1:3.97
EX ROW
EX SS
FO
TEL
CUT=0
FILL=86
411+00.00

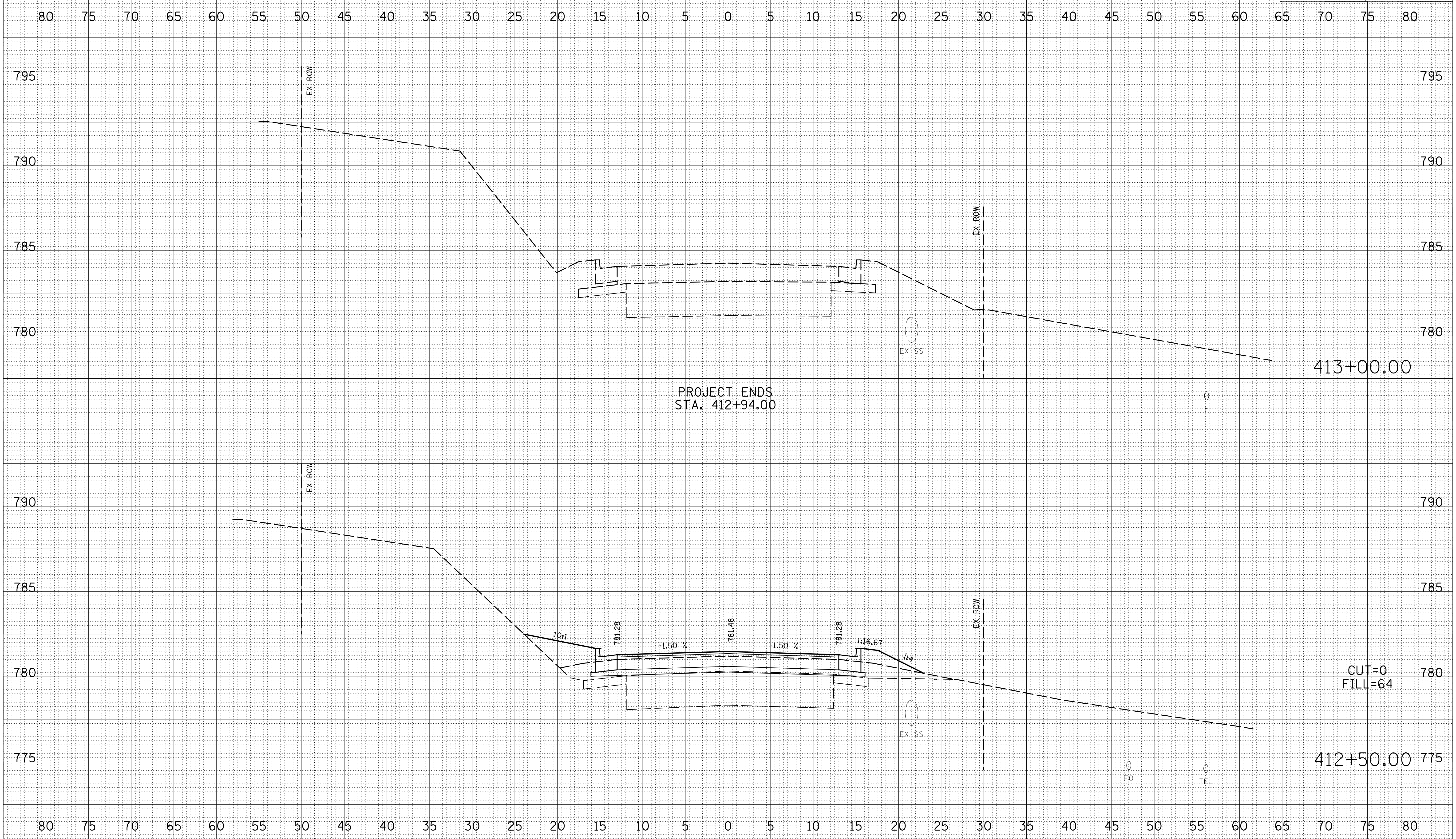
CONTRACT NO. 70517

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	71
STA. 411+50.00	TO STA. 412+00.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CONTRACT NO. 70517

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	72
STA. 412+50.00 TO STA. 413+00.00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

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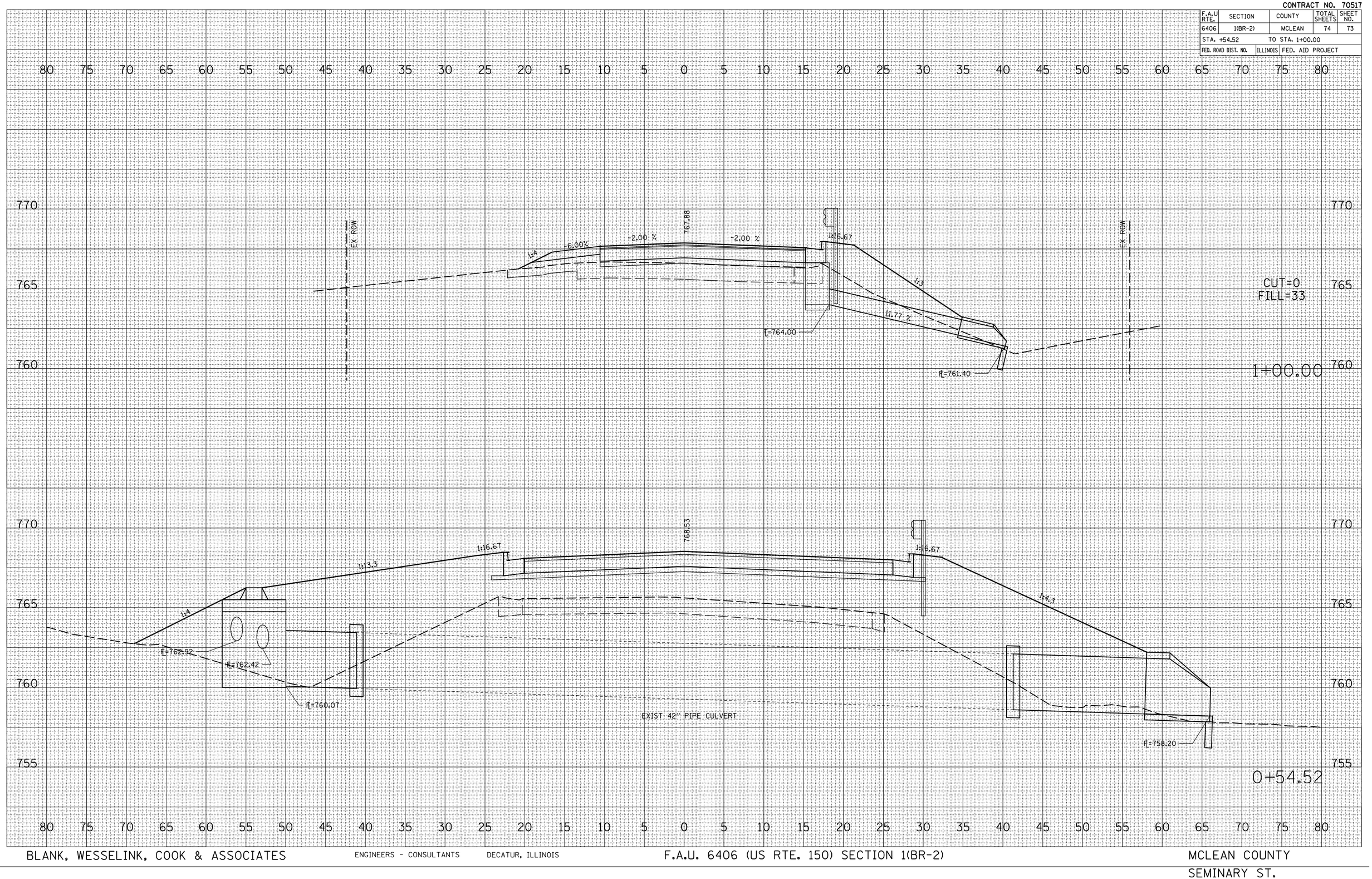
CONTRACT NO. 70517

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	73
STA. +54.52		TO STA. 1+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

PLOT DATE = 8/21/2008
FILE NAME = c:\projects\d503706 (v8)\il_201_sheets_seminary.dgn
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USER NAME = stulajw

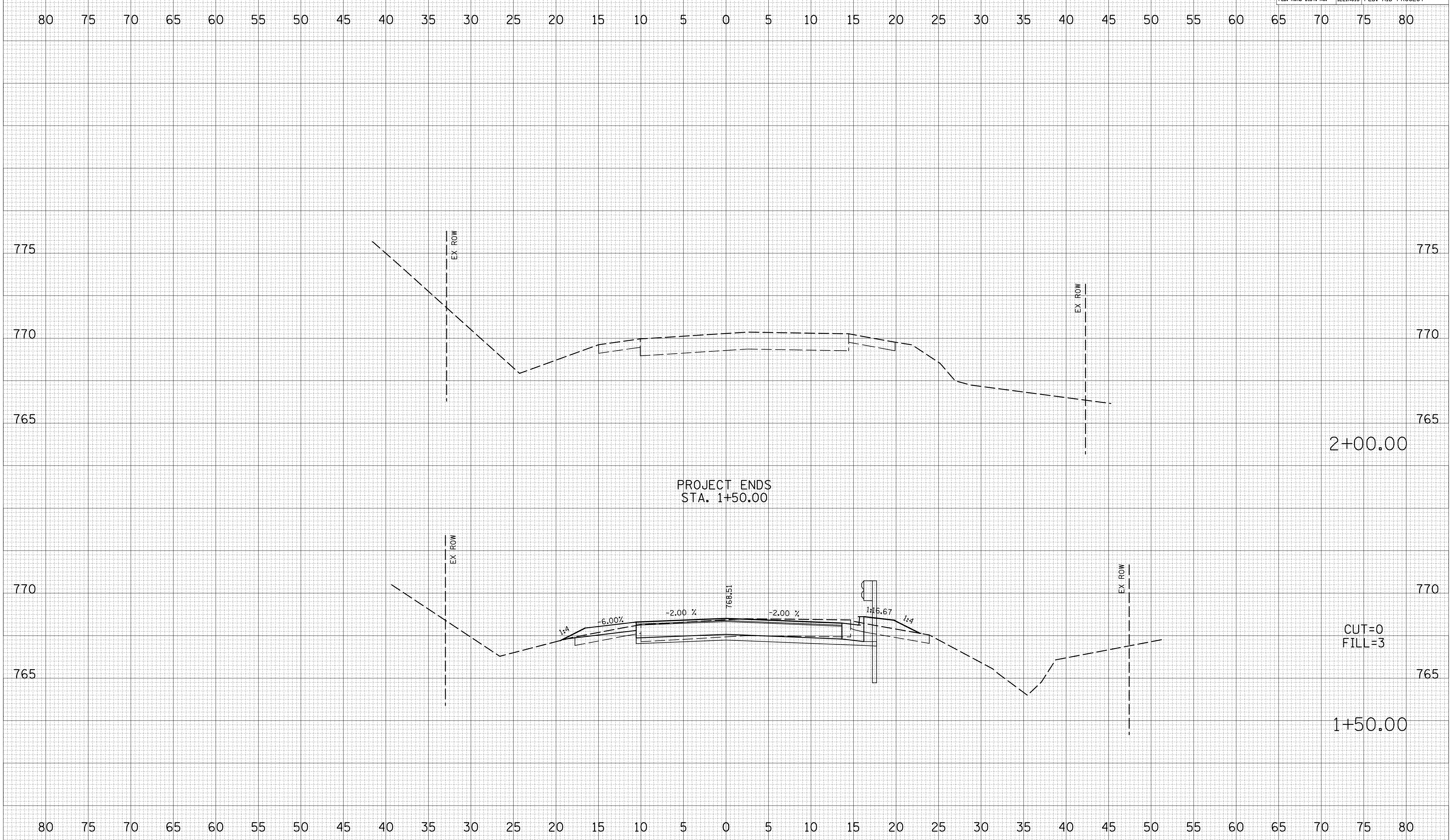
BLANK, WESSELINK, COOK & ASSOCIATES ENGINEERS - CONSULTANTS DECATUR, ILLINOIS

F.A.U. 6406 (US RTE. 150) SECTION 1(BR-2) MCLEAN COUNTY

SEMINARY ST.

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6406	1(BR-2)	MCLEAN	74	74
STA. 1+50.00	TO STA. 2+00.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 70517



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

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BLANK, WESSELINK, COOK & ASSOCIATES ENGINEERS - CONSULTANTS DECATUR, ILLINOIS

F.A.U. 6406 (US RTE. 150) SECTION 1(BR-2)

MCLEAN COUNTY
SEMINARY ST.