

03-08-13 LETTING ITEM 082

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 301 (US 20)
SECTION 29T-2
PROJECT: NHPP-0301(075)
REMOVAL & REPLACEMENT OF
CONCRETE BOX CULVERT ALONG US 20
JO DAVIESS COUNTY

C-92-077-12

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	29T-2	JO DAVIESS	52	1
ILLINOIS CONTRACT NO. 64H17				

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR STATE STANDARDS SEE SHEET NO. 2

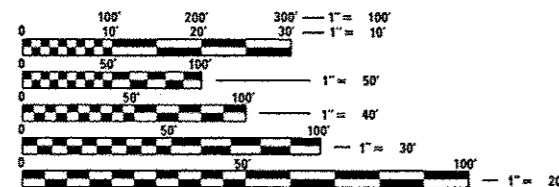


SECTION IMPROVEMENT
BEGINS STA 882+25

R 1 W - 1 E

SECTION IMPROVEMENT
ENDS STA 869+75

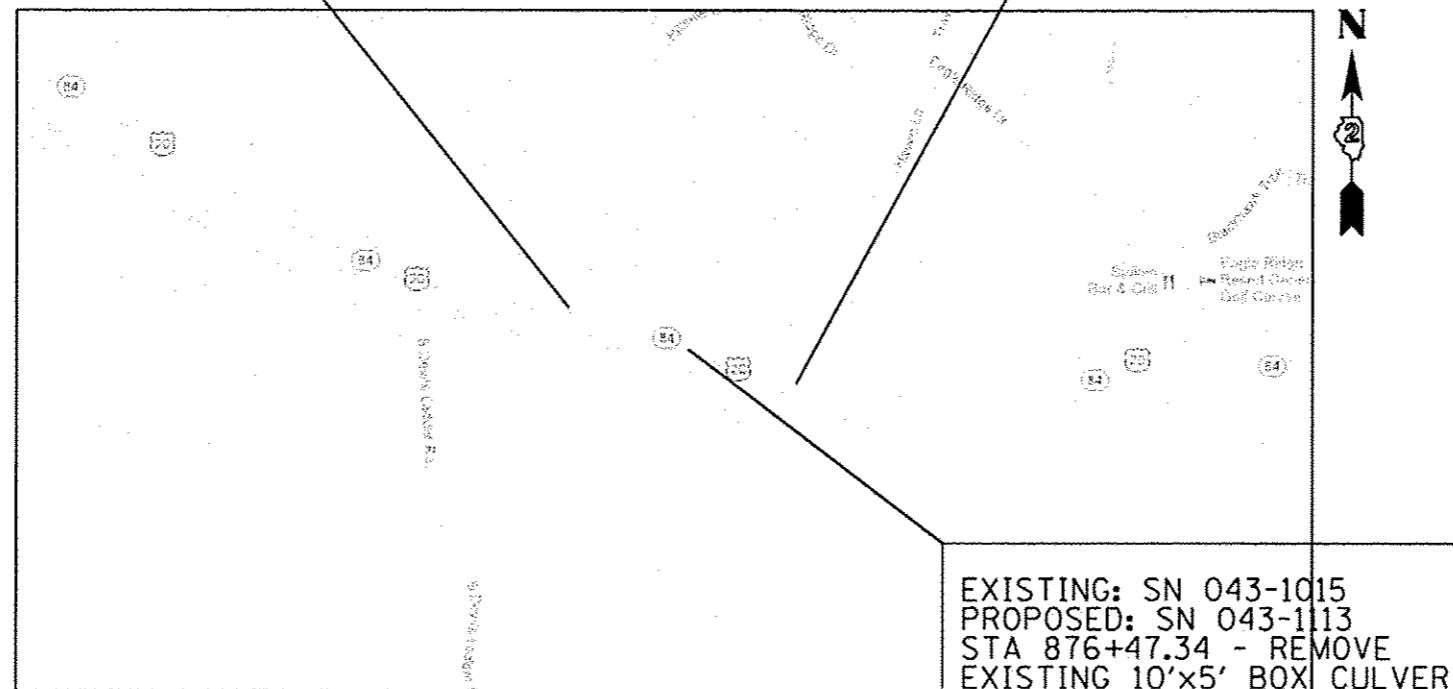
EAST GALENA TOWNSHIP
SECTION 36



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
OR 811

T 28 N



EXISTING: SN 043-1015
PROPOSED: SN 043-1113
STA 876+47.34 - REMOVE
EXISTING 10'x5' BOX CULVERT
(88'-0") AND CONSTRUCT A
PRECAST 10'x5' BOX
CULVERT (114'-0")

PROJECT ENGINEER VAL LYKHOLAP PHONE# (815) 284-5933
PROJECT MANAGER MASOOD AHMAD

GROSS LENGTH = 1250 FT. = 0.24 MILE
NET LENGTH = 1250 FT. = 0.24 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED DEC 10 20 21
Paul A. Roetz
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Feb 1 20 13
Jim D. Baranzelli PE/PA
ENGINEER OF DESIGN AND ENVIRONMENT

Feb 1 20 13
Omer Osman PE/PA
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

DISTRICT 2, DIXON

CONTRACT NO. 64H17

JO DAVIESS COUNTY SECTION 29T-2 F.A.P. 301 (US 20)

INDEX OF SHEETS AND STATE STANDARDS

INDEX OF SHEETS

1	COVER SHEET
2	INDEX OF SHEETS / STATE STANDARDS
3-4	GENERAL NOTES
5-7	SUMMARY OF QUANTITIES
8-9	TYPICAL SECTIONS
10-13	SCHEDULE OF QUANTITIES
14-15	HORIZONTAL AND VERTICAL CONTROL
16	PLAN AND PROFILE
17-19	STAGING DETAILS
20	EROSION CONTROL AND SEEDING DETAILS
21-27	BOX CULVERT PLAN STA. 876+47 STRUCTURE NO. 043-1113
28	SOIL BORING LOGS
29	TEMPORARY SOIL RETENTION SYSTEM DETAIL
30	HOT-MIX ASPHALT SHOULDER DETAIL
31	GRADING AROUND WINGWALLS (20.4)
31	CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS (28.4)
31	DELINEATOR AND POST ORIENTATION (37.4)
31	ROAD CLOSED TO OVERSIZED LOADS (40.4)
32	TYPICAL BENCHING ON EXISTING EMBANKMENT (50.4)
32	STOP LINE SIGN FOR TEMPORARY SIGNALS (99.4)
32	FIELD TILE JUNCTION VAULTS 24 AND 36 DIA (30.2)
33	UNDERDRAIN FOR ACROSS ROAD (37.2)
33	INFORMATIONAL WARNING SIGNS (FOR NARROW TRAVEL LANES) (39.2)
34	WITNESS MARKER & PERMANENT SURVEY MARKERS, TYPE II (66.2)
34	ENTRANCE SIGN FOR USE WITH THE TEMPORARY SIGNALS (75.2)
35	TYPICAL FURROWED ROADWAY SLOPES (1.1)
36	HOT-MIX ASPHALT APPROACHES AND MAILBOX RETURNS (20.1)
37-39	TYPICAL PAVEMENT MARKINGS (41.1)
40-52	CROSS SECTIONS

STATE STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
442201-03	CLASS C AND D PATCHES
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-03	NAME PLATES FOR BRIDGES
601101-01	CONCRETE HEADWALL FOR PIPE DRAIN
635001-01	DELINEATORS
701001-02	OFF-RD OPERATIONS 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-04	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701011-03	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-03	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS > 45MPH
701311-03	LANE CLOSURE, 2L, 2W MOVING OPERATIONS - DAY ONLY
701321-13	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS > 45MPH
701331-04	LANE CLOSURE, 2L, 2W, WITH RUN-AROUND, FOR SPEEDS > 45MPH
701901-02	TRAFFIC CONTROL DEVICES
704001-07	TEMPORARY CONCRETE BARRIER
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
780001-03	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

FILE NAME *	USER NAME * hardnetbr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS / STATE STANDARDS	F.A.P. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwwork\pwwork\hardnetbr\08277919\0	080711-shl-cover.dgn	DRAWN -	REVISED -			301	29T-2	JO DAVIESS	52	2	
	PLOT SCALE * 40.0000 / in.	CHECKED -	REVISED -			CONTRACT NO. 64H17					
	PLOT DATE * Mon Dec 10 13:33:17 2012	DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO STA.

GENERAL NOTES

See cross sections for special ditches and backslopes.

The final top 4 inches of soil in any right-of-way area disturbed by the Contractor must be capable of supporting vegetation. The soil must be from the A horizon (zero to 2' deep) of soil profiles of local soils.

It is estimated that 1,892 cubic yards of earth will be hauled to the job from outside the project limits. A shrinkage factor of 25% has been used.

All Borrow/Waste/Use sites must be approved by the Department prior to removing any material from the project or initiating any earthmoving activities, including temporary stockpiling outside the limits of construction.

The Contractor shall seed all disturbed areas within the project limits. Seeding Class 4 or 2A shall be used, except in front of properties where the grass will be mowed, then use Seeding, Class 1. Class 2A shall be used on front slopes and ditch bottoms. Class 4 shall be used on all backslopes and areas behind the backslope, and beyond the toe of front slope on fill sections without ditches.

Previously pugmilled stockpiles of "Type A" older than 1 month will not be approved for use until a moisture check is run to verify moisture content. Material shipped to projects without being tested will not be accepted.

Placement and compaction of the backfill for proposed across road culverts and existing across road culverts that are removed shall conform to Section 502.10 of the Standard Specifications, except that the material shall conform to Article 208.02 of the Standard Specifications, and shall be compacted to a minimum of 95% of the standard laboratory density. Any material conforming to the requirements of Article 1003.04 or 1004.05 which has been excavated from the trenches shall be used for backfilling the trenches. The entire excavation, within 2 feet outside of each shoulder, shall be backfilled with trench backfill material to the bottom of the proposed subgrade. Impervious material shall be used on the outer 3 feet of each end of the culvert. This trench backfill material will not be measured for payment, but shall be included in the contract unit price for the class of concrete involved or other unit price item of the work for which it is required.

The following Mixture Requirements are applicable for this project:

Mixture Uses(s):	Surface	Level Binder	Shoulders	
			Top	Bottom
PG:	PG 64-22	PG 64-22	PG 64-22	PG 64-22
Design Air Voids	4.0 @ N70	4.0 @ N70	3 @ N50	2 @ N50
Mixture Composition (Gradation Mixture)	IL 9.5	IL 9.5 FG*	IL 9.5 or 9.5 FG*	BAM or IL 19.0
Friction Aggregate	D	N/A	C	N/A
20 Year ESAL	3.7	3.7	N/A	N/A
Mix Unit Weight	112 lbs/sy/in		112 lbs/sy/in	

* On projects with less than 2000 tons level binder, growth curve will be used for density and IL 9.5 may be used

The area to be primed shall be limited to that which can be covered with HMA on the next days productivity, but no more than five days in advance of the placement of the HMA, unless approved by the Engineer.

Bituminous and Aggregate prime coat shall be placed in accordance with Section 406 of the Standard Specifications. The cost of the prime coats shall be included in the contract unit price per Ton for LEVELING BINDER (MACHINE METHOD) of the type specified.

A Nationwide 404 Permit has been issued for this project and the conditions of that permit must be adhered to.

The new number for this structure will be 043-1113.

The boring logs for this structure indicate that groundwater levels may encroach on the construction limits of this culvert. It shall be the responsibility of the contractor to control the ground water and divert the stream flow during construction in order to keep the construction area free of water. The method of controlling the water shall be subject to approval of the Engineer and the cost shall be included in the contract unit price for Precast Concrete Box Culverts.

Culvert & bridge flows must be maintained throughout the project. Normal flow shall be allowed to pass at the rate it enters the jobsite. High flows shall be allowed to pass without causing damage to upstream properties.

Box culverts that are stage constructed and undercut by more than 2 feet shall have lean concrete placed on the rock fill at the stage line. The concrete shall retain the rock fill until the second stage rock fill is placed. This work will be included in the pay item for the type of rock fill used.

Where field tile is encountered, storm sewer or pipe drain will be used in accordance with Section 611. The minimum size for replacement will be 6" for Pipe Drains and 8" for Storm Sewer, but the size must be at least 2" larger than the adjoining tile. A Field Tile Junction Vault will be constructed at the right of way to connect the tile and storm sewer. See the Summary of Quantities for the estimated quantities.

Pavement Marking shall be done according to Standard 780001, except as follows:

- The distance between yellow no-passing lines shall be 8", not 7" as shown in the detail of Typical Lane and Edge Lines.

PERMANENT SURVEY MARKERS, TYPE II, shall be set at intervals of 1 mile or as directed by the Engineer. Bridge or culvert projects shall have one survey marker placed near the structure. Estimated: 1 Each.

Permanent Survey Markers, Type II shall be cast-in-place as shown on District Standard 66.2. Option 2 would be to install a vaulted style, monumented as described by NGS as a 3D monument (Top Security Sleeve Rod Monument), with installation instructions provided by the District Chief of Surveys. If poured in place, the bottom of the marker shall be 5'-0" below the ground surface.

The Contractor shall submit to the Engineer a description of location, elevation, and coordinates for each permanent survey marker. The horizontal coordinates must be derived by GPS and the elevation derived using an electronic level. The meta data, such as the Geoid used, (NGS adjustment ie: 97 HARN, 03, 07), and the base point(s) name or number shall be submitted along with a complete collection log. If collected using RTK method, it will require either 3 collections (averaged) from 2 different bases, or a minimum of 3 collections (averaged), at least 2 hours apart, from the same base. If using a CORS type network, the collection procedure shall include localizing with check shots on at least 2 different HARN monuments both before and after collection. The level circuit shall be run from furnished mark to furnished mark and then adjusted. The error of closure shall be submitted with the electronic level notes in a recognized format approved by the Engineer and/or the Chief of Surveys. The Engineer shall submit this information to the District Chief of Surveys.

The temporary concrete barrier shall be anchored to the pavement with 6 anchors per section at the following locations:

Sta. 876+03 to Sta. 876+93, Staging I and II, and
Sta. 873+43 to Sta. 879+52, Stage I Rt.

FILE NAME = 64H17.GN.DOCX	USER NAME =	DESIGNED - Engineering Systems	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES	ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			FAP 301	23T-2	JoDawess	52	3
	PLOT SCALE =	CHECKED -	REVISED -			(US 20)				
	PLOT DATE = 12/7/2012 2:47 PM	DATE - 2/23/2012 3:44 PM	REVISED -					ILLINOIS	FED. AID PROJECT	

GENERAL NOTES

The Contractor shall be responsible for protecting utility property during construction operations as outlined in Article 107.31 of the Standard Specifications. A minimum of 48 hours advance notice is required for non-emergency work. The JULIE number is 800-892-0123. The following listed utilities located within the project limits or immediately adjacent to the project construction limits are members of JULIE:

AT&T (630/573-5465) Jo-Carroll Energy – Gas (815/273-2222)
 Jo-Carroll Energy – Elec. (815/858-2207) Dairyland Power CoOp (608/723-7539)

IDOT is not a member of JULIE. If you are near any overhead lighting, intersection lighting or traffic signals, contact the IDOT Traffic Office at 815/284-5469 at least 48 hours prior to work.

CADD data will be available to Contractors and Consultants working on this project. This information will be provided upon request as MicroStation CADD files and Geopak coordinate geometry files ONLY. If data is required in other formats it will be your responsibility to make these conversions. If any discrepancy or inconsistency arises between the electronic data and the information on the hard copy, the information on the hard copy should be used. Contact the District's Project Engineer to request these files.

Temporary Impact Attenuators will be measured as each for each attenuator supplied on the job as specified in the plans, and shall include the cost of renting/owning the attenuator for the time required on the job plus hauling to and from the project site, as well as one placement and removal from the roadway. This shall be paid for at the contract unit price per Each for IMPACT ATTENUATORS, TEMPORARY of the type specified.

Relocate Temporary Impact Attenuators will be paid for as Each and will be paid for each time the attenuator is required by staging to be picked up and moved to a different location on the project, whether it is to another location on the roadway or to a storage/staging location for the project. This shall be paid for at the contract unit price per Each for IMPACT ATTENUATORS, RELOCATE of the type specified.

This work shall be done in accordance with Section 704 of the Standard Specifications. Temporary Concrete Barrier will be measured in feet along the centerline of the barrier and shall include the cost of renting/owning the barrier for the time required on the job plus hauling to and from the project site, as well as one placement and removal from the roadway in accordance with Section 704 of the Standard Specification. This shall be paid for at the contract unit price per Foot for TEMPORARY CONCRETE BARRIER.

Relocate Temporary Concrete Barrier will be paid for in Feet along the centerline of the barrier, and will be paid for each time the barrier is required by staging to be picked up and moved to a different location on the project, whether it is to another location on the roadway or to a storage/staging location for the project. This shall be paid for at the contract unit price per Foot for RELOCATE TEMPORARY CONCRETE BARRIER.

All "Aggregate Subgrade Improvement" (Section 303), shall be completed in accordance with Articles 311.04, 311.05, 311.05(a), 311.06 and 311.07. All aggregate subgrade thicknesses less than 12 inches shall be constructed of aggregate of CA02 gradation.

Fertilizer Nutrients shall be applied at the rate specified in Sections 250 and 252 of the Standard Specifications. This shall be included in the cost of the SEEDING or SODDING.

Class C Patches shall be tied to the adjacent lane when the patches are more than 20 feet. The cost of the tie bars shall be included in the cost of the patch.

The Contractor will be required to furnish 5 1/2" high brass stencils as approved by the Engineer and install stationing at 250' intervals. Stationing shall be placed on both lanes of 2-lane highways and on the outside lanes in both directions on 4-lane highways. The stations shall be placed 6" inside the pavement marking edge so they can be read from the shoulder. This work will be included in the cost of the final pavement surface.

The proposed pipes for entrances and side roads shall be placed in line with the existing or proposed ditch line.

Connecting bands for corrugated metal pipes shall be metal and shall be coated with the same material as the pipe sections. The connecting bands shall be a minimum of 18" wide.

Delineators shall be installed as shown in Standard 635001, except that the post shall be rotated 180° and only metal-backed delineators shall be permitted. Delineators shall be placed at the ends of approach guardrail terminal sections, and at each headwall or end section of AR Culverts. This work will be paid for at the contract unit price each for DELINEATORS.

The Contractor shall be responsible for collecting and maintaining an electronic log of all stakeout survey that is performed on the job, either by him/her or any sub-contractor performing the stakeout. Upon request, all logs shall be submitted to the Department. No additional compensation will be allowed for this work, but shall be considered included in the cost for CONSTRUCTION LAYOUT.

Aggregate Base Course, Type B, is provided in the plan quantities and shall be used only as needed when directed by the Engineer.

FILE NAME = 64H17.GH.DOCX	USER NAME =	DESIGNED - Engineering Systems	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES				ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
	PLOT SCALE =	DRAWN -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	FAP 381	251-2	JoDareness	52	4
	PLOT DATE = 12/7/2012 2:47 PM	CHECKED -	REVISED -		ILLINOIS	FED. AID PROJECT									
	DATE = 2/23/2012 3:44 PM	REVISED -													

SUMMARY OF QUANTITIES

80% FEDERAL
20% STATE
0040

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY
20200100	EARTH EXCAVATION	CU YD	2,000
* 20200200	ROCK EXCAVATION	CU YD	379
20400800	FURNISHED EXCAVATION	CU YD	1,895
21101600	TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH	SQ YD	1,112
* 25000210	SEEDING, CLASS 2A	ACRE	2.25
*** 25000750	MOWING	ACRE	2.25
* 25100125	MULCH, METHOD 3	ACRE	2.25
25100630	EROSION CONTROL BLANKET	SQ YD	115
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	892
28000305	TEMPORARY DITCH CHECKS	FOOT	100
28000400	PERIMETER EROSION BARRIER	FOOT	1,250
28000500	INLET AND PIPE PROTECTION	EACH	1
28100107	STONE RIPRAP, CLASS A4	SQ YD	132
28200200	FILTER FABRIC	SQ YD	132
30300118	AGGREGATE SUBGRADE IMPROVEMENT 18"	SQ YD	1,268
35101400	AGGREGATE BASE COURSE, TYPE B	TON	261
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	184
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	512
40600990	TEMPORARY RAMP	SQ YD	512
40603310	HOT- MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	370
40603340	HOT- MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	307
44004250	PAVED SHOULDER REMOVAL	SQ YD	1,053
44201359	CLASS C PATCHES, TYPES IV, 10 INCH	SQ YD	250

* SPECIALTY ITME
*** NON- PARTICIPATING 100% STATE

FILE NAME *	USER NAME * hardnetbr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US 20 /IL 84 SUMMARY OF QUANTITIES			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwwork\pwwork\hardnetbr\00277919\000711-eh-500.dgn		DRAWN -	REVISED -		301	291-2	JO DAVIESS	52	5			
PLOT SCALE * 80.0000' / in.		CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.			CONTRACT NO. 64H17				
PLOT DATE * Mon Dec 10 14:05:53 2012		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

SUMMARY OF QUANTITIES

80% FEDERAL
20% STATE
0040

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY
48203019	HOT- MIX ASPHALT SHOULDERS, 5 1/2"	SQ YD	1,197
50100300	REMOVAL OF EXISTING STRUCTURE NO. 1	EACH	1
50800205	REINFORCEMENT BAR, EPOXY COATED	POUND	8,600
51500100	NAME PLATES	EACH	1
54003000	CONCRETE BOX CULVERTS	CU YD	46.9
54011005	PRECAST CONCRETE BOX CULVERTS 10' X 5'	FOOT	114
5421D015	PIPE CULVERTS, CLASS D, TYPE 1 15" (TEMPORARY)	FOOT	67
54215408	CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 8"	EACH	1
60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	2
60100915	PIPE DRAINS 6"	FOOT	20
60107600	PIPE UNDERDRAINS 4"	FOOT	110
61100500	EXPLORATION TRENCH 52" DEPTH	FOOT	75
61101009	STORM SEWERS PROTECTED, CLASS A, 8"	FOOT	100
61133100	FIELD TILE JUNCTION VAULTS, 2' DIA.	EACH	2
63500105	DELINEATORS	EACH	6
66700305	PERMANENT SURVEY MARKERS, TYPE II	EACH	1
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2
67100100	MOBILIZATION	L SUM	1
70100200	TRAFFIC CONTROL AND PROTECTION, STANDARD 701331	EACH	2
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1

* SPECIALTY ITME
*** NON- PARTICIPATING 100%

FILE NAME :	USER NAME : hardnestbr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US 20 / IL 84 SUMMARY OF QUANTITIES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwwork\pwwork\hardnestbr\0277919\020711-shl-500.dgn	DRAWN -	REVISED -	301			29T-2	JO DAVIESS	52	6	
PLOT SCALE * 08.0000 / 1"	CHECKED -	REVISED -	CONTRACT NO. 64H17							
PLOT DATE * Mon Dec 10 14:55:53 2012	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							
					SCALE:	SHEET	OF	SHEETS	STA.	TO STA.

SUMMARY OF QUANTITIES

80% FEDERAL
20% STATE
0040

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	14
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	2
70106700	TEMPORARY RUMBLE STRIPS	EACH	12
70300100	SHORT TERM PAVEMENT MARKING	FOOT	220
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	4,857
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	48
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1786
70400100	TEMPORARY CONCRETE BARRIER	FOOT	962.5
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	425
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2
70600280	IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, NARROW), TEST LEVEL 3	EACH	2
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	8,130
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	16
78300100	PAVEMENT MARKING REMOVAL	SQ FT	1,051
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	16
X5429311	TRAVERSABLE PIPE GRATE, SPECIAL	FOOT	25
X4400110	TEMPORARY PAVEMENT REMOVAL	SQ YD	889
Z0013798	CONSTRUCTION LAYOUT	L SUM	1
* Z0054500	ROCK FILL	TON	81
Z0062456	TEMPORARY PAVEMENT	SQ YD	889
Z0073002	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	228
Z0073100	TEMPORARY SHORING	EACH	1

??

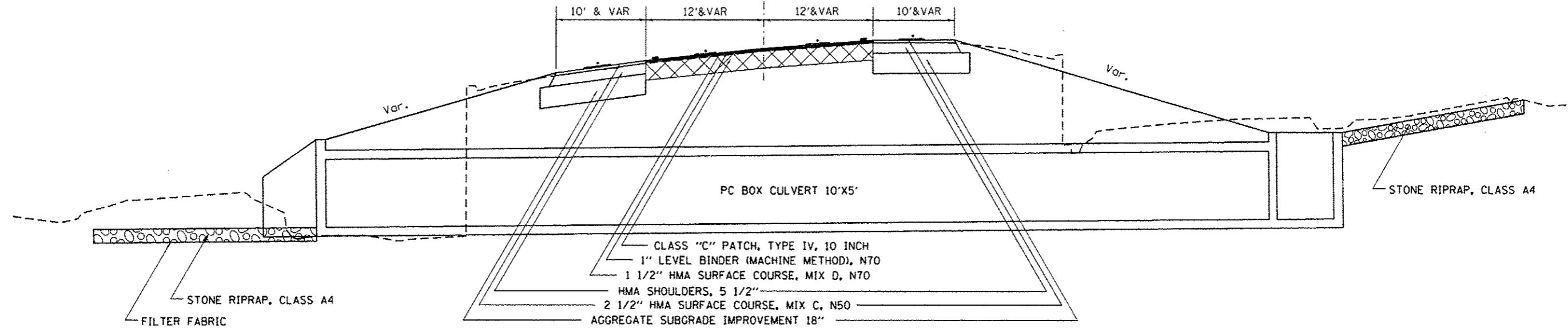
* SPECIALTY ITME
*** NON- PARTICIPATING 100%

FILE NAME *	USER NAME * hardnetbr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US 20 /IL 84 SUMMARY OF QUANTITIES			F.A.P. RTE. 301	SECTION 29T-2	COUNTY JO DAVIESS	TOTAL SHEETS 52	SHEET NO. 7
c:\pwork\pwork\hardnetbr\d0277919\000711-sh1-500.dgn		DRAWN -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT CONTRACT NO. 64H17	
		CHECKED -	REVISED -									
		DATE -	REVISED -									

TYPICAL SECTIONS

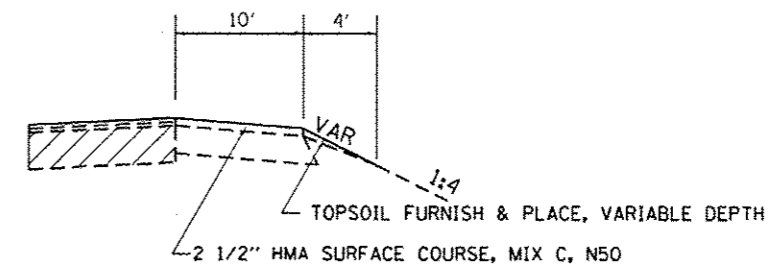
STA 876+47.34

US 20

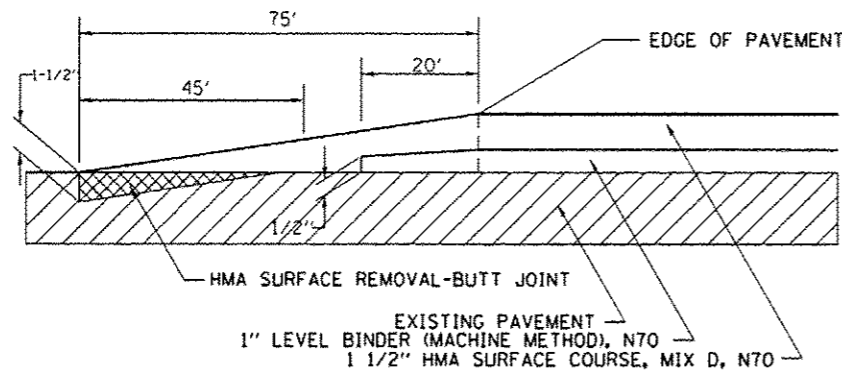


• MATCH EXISTING CROSS-SLOPE, MINIMUM 1/8 /FT

SHOULDER EARTHWORK DETAIL



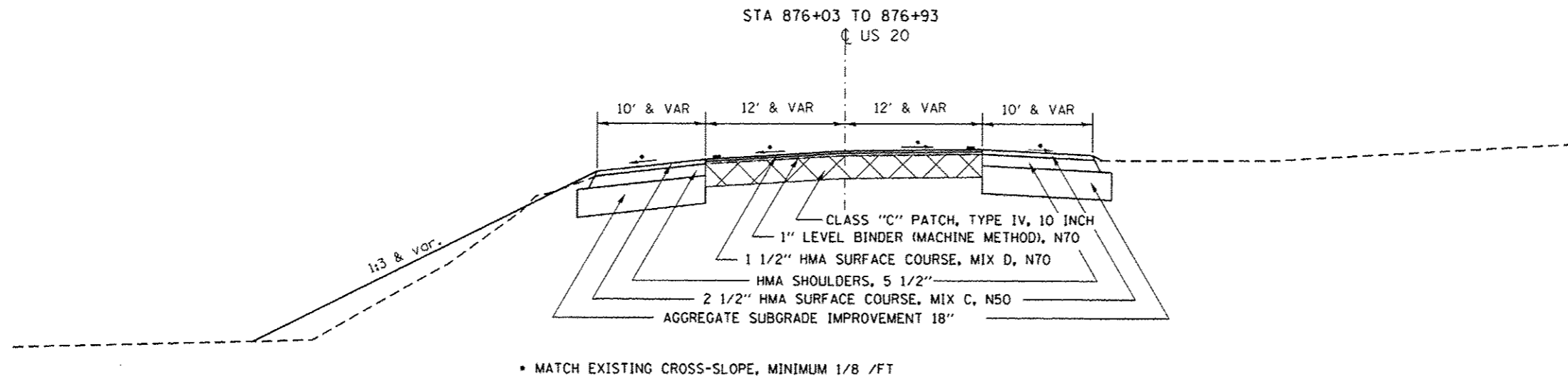
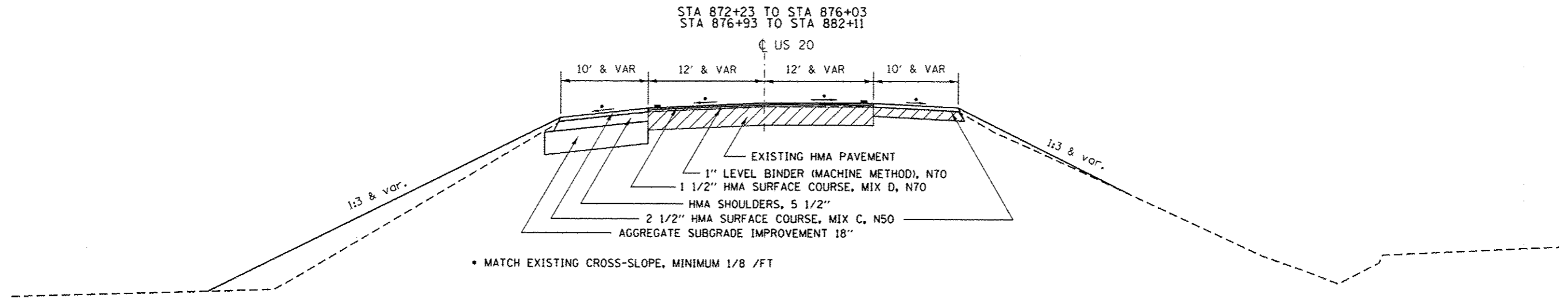
BUTT-JOINT
STA 869+75 TO 870+50
STA 881+50 TO 882+25



BITUMINOUS MIXTURES:
112 LBS/SQ YD/INCH

FILE NAME :	USER NAME : hardnetbr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr:\pwork\pedit\hardnetbr\027791910	08711-shr-typical.dgn	DRAWN -	REVISED -					301	29T-2	JO DAVIESS	52	8
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.			CONTRACT NO. 64H17				
	PLOT DATE = Mon Dec 18 14:22:17 2012	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

TYPICAL SECTIONS



BITUMINOUS MIXTURES:
112 LBS/SQ YD/INCH

FILE NAME :	USER NAME : hardnestbr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pwwork\p1dot\hardnestbr\08277919\08277919-08711-ent-typical.dgn	DRAWN -	REVISED -	301					29T-2	JO DAVIESS	52	9	
Default	PLOT SCALE : 100.0000' / in.	CHECKED -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 64H17	
	PLOT DATE : Mon Dec 18 14:22:17 2012	DATE -	REVISED -								ILLINOIS FED. AID PROJECT	

SCHEDULE OF QUANTITIES

1 LOCATION	2 EARTH EXCAVATION 20200100	3 EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	4 EMBANKMENT	5 EARTHWORK BALANCE (-) FURNISHED EXCAVATION 20400800
	CU YD	CU YD	CU YD	CU YD
Sta. 869+75 to 882+25	2000	1500	3395	1895
TOTAL	2000	1500	3395	1895

20200200 ROCK EXCAVATION

CU YD	LOCATION
	US 20
379.0	Sta 875+83 - 877+14
379.0	TOTAL

21101600 TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH

SQ YD	LOCATION
	US 20
556.0	Sta 869+75 - 882+25 LT
556.0	Sta 869+75 - 882+25 RT
1112.0	TOTAL

25000210 SEEDING, CLASS 2A

ACRE	LOCATION
	US 20
1.00	Sta 869+75 - 882+25 RT
1.25	Sta 869+75 - 882+25 LT
2.25	TOTAL

25000750 MOWING

ACRE	LOCATION
	US 20
1.00	Sta 869+75 - 882+25 RT
1.25	Sta 869+75 - 882+25 LT
2.25	TOTAL

25100125 MULCH, METHOD 3

ACRE	LOCATION
	US 20
1.00	Sta 869+75 - 882+25 RT
1.25	Sta 869+75 - 882+25 LT
2.25	TOTAL

25100630 EROSION CONTROL BLANKET

SQ YD	LOCATION
	US 20
40.0	Sta 875+99 - 876+50 75.0' RT
75.0	Sta 879+86 - 880+66 40.0' RT
115.0	TOTAL

28000250 TEMPORARY EROSION CONTROL SEEDING

POUND	LOCATION
	US 20
400.0	Sta 869+75 - 882+25 RT (4 applications)
492.0	Sta 869+75 - 882+25 LT (4 applications)
892.0	TOTAL

28000305 TEMPORARY DITCH CHECKS

FOOT	LOCATION
	US 20
10.0	Sta 876+06 55.4' RT
10.0	Sta 877+00 35.1' RT
10.0	Sta 877+20 34.9' RT
10.0	Sta 877+60 35.7' RT
10.0	Sta 877+80 35.8' RT
10.0	Sta 878+00 35.9' RT
10.0	Sta 878+20 36.4' RT
10.0	Sta 879+49 35.1' RT
10.0	Sta 880+48 35.2' RT
10.0	Sta 881+45 34.2' RT
100.0	TOTAL

28000400 PERIMETER EROSION BARRIER

FOOT	LOCATION
	US 20
1250.0	Sta 869+75 - 882+25 LT
1250.0	TOTAL

28000500 INLET AND PIPE PROTECTION

EACH	LOCATION
	US 20
1.0	Sta 875+92 58.1' RT
1.0	TOTAL

28100107 STONE RIPRAP, CLASS A4

SQ YD	LOCATION
	US 20
63.0	Sta 875+54 - 875+98 75.0' RT
69.0	Sta 876+83 - 877+22 68.0' LT
132.0	TOTAL

28200200 FILTER FABRIC

SQ YD	LOCATION
	US 20
63.0	Sta 875+54 - 875+98 75.0' RT
69.0	Sta 876+83 - 877+22 68.0' LT
132.0	TOTAL

FILE NAME :	USER NAME : hordnetbr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US 20 /IL 84 SCHEDULE OF QUANTITIES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pvc\work\pvidot\hordnetbr-148277919\	09711-sh-tr-schedule.dgn	DRAWN -	REVISED -			301	29T-2	JO DAVIESS	52	10	
	PLOT SCALE : 80.0000 ' / in.	CHECKED -	REVISED -			CONTRACT NO. 64H17					
	PLOT DATE : Mon Dec 10 14:06:30 2012	DATE -	REVISED -			[ILLINOIS] FED. AID PROJECT					

SCHEDULE OF QUANTITIES

30300118 AGGREGATE SUBGRADE IMPROVEMENT 18"

SQ YD	LOCATION
	US 20
1165.0	Sta 872+23 - 882+11 LT SHOULDERS
103.0	Sta 876+03 - 876+93 RT SHOULDERS
1268.0	TOTAL

35101400 AGGREGATE BASE COURSE TYPE B

TON	LOCATION
	US 20
131.0	Sta 876+71 RT Field Entrance
130.0	Sta 880+25 RT Temporary Field Entrance
261.0	TOTAL

40600635 LEVELING BINDER (MACHINE METHOD) N70

TON	LOCATION
	US 20
184.0	Sta 870+30 - 881+70
184.0	TOTAL

40600982 HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

SQ YD	LOCATION
	US 20
297.8	Sta 869+75 - 870+50
214.2	Sta 881+50 - 882+25
512.0	TOTAL

40600990 TEMPORARY RAMPS

SQ YD	LOCATION
	US 20
297.8	Sta 869+75 - 870+50
214.2	Sta 881+50 - 882+25
512.0	TOTAL

40603310 HOT-MIX ASPHALT SURFACE COURSE MIX "C" N50

TON	LOCATION
	US 20
179.0	Sta 869+75 - 882+25 RT SHOULDER
191.0	Sta 869+75 - 882+25 LT SHOULDER
370.0	TOTAL

40603340 HOT-MIX ASPHALT SURFACE COURSE MIX "D" N70

TON	LOCATION
	US 20
307.0	Sta 869+75 - 882+25 ROADWAY
307.0	TOTAL

44004250 PAVED SHOULDER REMOVAL

SQ YD	LOCATION
	US 20
1053.0	Sta 872+23 - 882+11 LT SHOULDER
1053.0	TOTAL

44201359 CLASS C PATCHES TYPE IV 10 INCH

SQ YD	LOCATION
	US 20
250.0	Sta 876+03 - 876+93
250.0	TOTAL

48203019 HOT-MIX ASPHALT SHOULDERS 5 1/2"

SQ YD	LOCATION
	US 20
1100.0	Sta 872+23 - 882+11 MATCH EXISTING LT
97.0	Sta 876+03 - 876+93 MATCH EXISTING RT
1197.0	TOTAL

50100300 REMOVAL OF EXISTING STRUCTURES NO. 1

EACH	LOCATION
	US 20
1.0	Sta 876+47
1.0	TOTAL

51500100 NAME PLATES

EACH	LOCATION
	US 20
1.0	Sta 876+47
1.0	TOTAL

54011005 PRECAST CONCRETE BOX CULVERTS 10' X 5'

FOOT	LOCATION
	US 20
114.0	Sta 876+47
114.0	TOTAL

5421D015 PIPE CULVERTS CLASS D TYPE 1 1/2" (TEMPORARY)

FOOT	LOCATION
	US 20
67.0	Sta 879+91 - 880+58 38.9' RT
67.0	TOTAL

54215408 CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 8"

EACH	LOCATION
	US 20
1.0	As Needed & Directed by the Resident Engineer
1.0	TOTAL

60100060 CONCRETE HEADWALLS FOR PIPE DRAINS

EACH	LOCATION
	US 20
2.0	Sta 876+03 RT & LT
2.0	TOTAL

SCHEDULE OF QUANTITIES

60100915 PIPE DRAINS 6"

FOOT	LOCATION
	US 20
<u>20.0</u>	As Needed & Directed by the Resident Engineer
20.0	TOTAL

60107600 PIPE UNDERDRAINS 4"

FOOT	LOCATION
	US 20
<u>110.0</u>	Sta 876+03
110.0	TOTAL

61100500 EXPLORATION TRENCH 52" DEPTH

FOOT	LOCATION
	US 20
<u>75.0</u>	Sta 876+10 - 876+85
75.0	TOTAL

61101009 STORM SEWERS PROTECTED, CLASS A, 8"

FOOT	LOCATION
	US 20
<u>100.0</u>	As Needed & Directed by the Resident Engineer
100.0	TOTAL

61133100 FIELD TILE JUNCTION VAULTS, 2' DIA.

EACH	LOCATION
	US 20
<u>2.0</u>	As Needed & Directed by the Resident Engineer
2.0	TOTAL

63500105 DELINEATORS

EACH	LOCATION
	US 20
1.0	Sta 876+27 RT
1.0	Sta 876+89 LT
1.0	Sta 878+51 RT
1.0	Sta 878+51 LT
1.0	Sta 881+02 RT
1.0	Sta 881+02 LT
<u>6.0</u>	TOTAL

66700305 PERMANENT SURVEY MARKERS, TYPE II

EACH	LOCATION
	US 20
<u>1.0</u>	As Directed by the Resident and Coordination with Surveys
1.0	TOTAL

70106500 TEMPORARY BRIDGE TRAFFIC SIGNALS

EACH	LOCATION
------	----------

	US 20
1.0	As Needed & Directed by the Resident Engineer Stage I
<u>1.0</u>	As Needed & Directed by the Resident Engineer Stage II
2.0	TOTAL

70106700 TEMPORARY RUMBLE STRIPS

EACH	LOCATION
	US 20
<u>12.0</u>	As required per Standard 701321
12.0	TOTAL

70300100 SHORT TERM PAVEMENT MARKING

FOOT	LOCATION
	US 20
50.0	Sta 869+75 - 882+25 White Shoulder LT
50.0	Sta 869+75 - 882+25 White Shoulder RT
<u>120.0</u>	Sta 869+75 - 882+25 Yellow Centerline
220.0	TOTAL

70300220 TEMPORARY PAVEMENT MARKING - LINE 4"

FOOT	LOCATION
	US 20
645.0	Sta 869+58 - 882+90 Stage I RT
511.0	Sta 869+58 - 874+69 Stage I C
365.0	Sta 879+25 - 882+90 Stage I C
1047.0	Sta 872+42 - 882+90 Stage I LT
899.0	Sta 870+95 - 879+94 Stage II RT
274.0	Sta 870+95 - 873+69 Stage II C
274.0	Sta 879+37 - 882+11 Stage II C
<u>1116.0</u>	Sta 870+95 - 882+11 Stage II LT
4857.0	TOTAL

70300280 TEMPORARY PAVEMENT MARKING - LINE 24"

FOOT	LOCATION
	US 20
12.0	Sta 873+70 Stage I
12.0	Sta 879+25 Stage I
12.0	Sta 873+68 Stage II
<u>12.0</u>	Sta 879+37 Stage II
48.0	TOTAL

70301000 WORK ZONE PAVEMENT MARKING REMOVAL

SQ FT	LOCATION
	US 20
17.0	Sta 869+75 - 882+25 White Shoulder LT
17.0	Sta 869+75 - 882+25 White Shoulder RT
40.0	Sta 869+75 - 882+25 Yellow Centerline
213.0	Sta 869+58 - 882+90 Stage I RT
169.0	Sta 869+58 - 874+69 Stage I C
121.0	Sta 879+25 - 882+90 Stage I C
346.0	Sta 872+42 - 882+90 Stage I LT
297.0	Sta 870+95 - 879+94 Stage II RT
91.0	Sta 870+95 - 873+69 Stage II C
91.0	Sta 879+37 - 882+11 Stage II C
368.0	Sta 870+95 - 882+11 Stage II LT
4.0	Sta 873+70 Stage I
4.0	Sta 879+25 Stage I
4.0	Sta 873+68 Stage II
<u>4.0</u>	Sta 879+37 Stage II
1786.0	TOTAL

SCHEDULE OF QUANTITIES

70400100 TEMPORARY CONCRETE BARRIER

FOOT	LOCATION
	US 20
612.5	Sta 873 + 39 - 879 + 50 Stage I RT
<u>350.0</u>	Sta 874 + 74 - 878 + 13 Stage I LT
962.5	TOTAL

70400200 RELOCATE TEMPORARY CONCRETE BARRIER

FOOT	LOCATION
	US 20
<u>425.0</u>	Sta 874 + 33 - 878 + 52 Stage II
425.0	TOTAL

70600250 IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3

EACH	LOCATION
	US 20
1.0	Sta 874 + 66 Stage I RT
<u>1.0</u>	Sta 878 + 23 Stage I RT
2.0	TOTAL

70600280 IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, NARROW), TEST LEVEL 3

EACH	LOCATION
	US 20
1.0	Sta 873 + 30 Stage I RT
<u>1.0</u>	Sta 879 + 64 Stage I RT
2.0	TOTAL

70600350 IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3

EACH	LOCATION
	US 20
1.0	Sta 874 + 20 Stage II
<u>1.0</u>	Sta 878 + 66 Stage II
2.0	TOTAL

78001110 PAINT PAVEMENT MARKING - LINE 4"

FOOT	LOCATION
	US 20
2,500.0	Sta 869 + 75 - 882 + 25 White Shoulder LT
2,500.0	Sta 869 + 75 - 882 + 25 White Shoulder RT
2,500.0	Sta 869 + 75 - 882 + 25 Yellow Centerline EastBound Solid
<u>630.0</u>	Sta 869 + 75 - 882 + 25 Yellow Centerline WestBound Skip
8,130.0	TOTAL

78100100 RAISED REFLECTIVE PAVEMENT MARKER

EACH	LOCATION
	US 20
<u>16.0</u>	Sta 869 + 75 - 882 + 25 80 o.c. Two-way Amber
16.0	TOTAL

78300100 PAVEMENT MARKING REMOVAL

SQ.FT	LOCATION
	US 20
173.6	Sta 869 + 60 - 874 + 86 Stage I - White Shoulder RT
160.4	Sta 878 + 04 - 882 + 90 Stage I - White Shoulder RT
36.6	Sta 869 + 60 - 874 + 02 Stages I & II - Yellow Centerline Dash
32.7	Sta 878 + 95 - 882 + 90 Stages I & II - Yellow Centerline Dash
145.9	Sta 872 + 95 - 874 + 42 Stages I & II - Yellow Centerline Solid
130.4	Sta 878 + 40 - 879 + 61 Stages I & II - Yellow Centerline Solid
<u>371.6</u>	Sta 870 + 95 - 882 + 11 Stage II - White Shoulder LT
1051.2	TOTAL

78300200 RAISED REFLECTIVE PAVEMENT MARKER REMOVAL

EACH	LOCATION
	US 20
<u>16.0</u>	Sta 869 + 75 - 882 + 25
16.0	TOTAL

X4400110 TEMPORARY PAVEMENT REMOVAL

SQ.YD	LOCATION
	US 20
<u>889.0</u>	Sta 872 + 00 - 880 + 79 RT
889.0	TOTAL

Z0054500 ROCK FILL

TON	LOCATION
	US 20
<u>81.0</u>	Sta 876 + 47 (Depth = 6")
81.0	TOTAL

Z0062456 TEMPORARY PAVEMENT

SQ.YD	LOCATION
	US 20
<u>889.0</u>	Sta 872 + 00 - 880 + 79 RT
889.0	TOTAL

Z0073002 TEMPORARY SOIL RETENTION SYSTEM

SQ.FT	LOCATION
	US 20
114.0	Sta 876 + 03 - 876 + 93 Stage I
<u>114.0</u>	Sta 876 + 03 - 876 + 93 Stage II
228.0	TOTAL

Chain IL84 contains:
 1 CUR 330 CUR 340 CUR 350 CUR 360 CUR 200 CUR 210 CUR 220 CUR 230 CUR 240 CUR -
 250 CUR 260 CUR 1200

HORIZONTAL & VERTICAL CONTROL

Beginning chain IL84 description
 =====

Point 1 X 2,251,141.9175 Y 2,077,620.6169 Sta 853+01.9341

Course from 1 to PC 330 264° 49' 44.4364" Dist 401.1434'

Curve Data

Curve 330
 P.I. Station 859+85.4317 X 2,250,461.2016 Y 2,077,559.0144
 Delta = 27° 40' 02.8535" (RT)
 Degree = 4° 59' 48.8447"
 Tangent = 282.3542'
 Length = 553.6923'
 Radius = 1,146.6262'
 External = 34.2529'
 Long Chord = 548.3284'
 Mid. Ord. = 33.2594'
 P.C. Station 857+03.0775 X 2,250,742.4067 Y 2,077,584.4625
 P.T. Station 862+56.7698 X 2,250,200.3336 Y 2,077,667.0506
 C.C. X 2,250,639.0632 Y 2,078,726.4221

Course from PT 330 to PC 340 292° 29' 47.2898" Dist 1,235.4708'

Curve Data

Curve 340
 P.I. Station 880+36.4753 X 2,248,556.0582 Y 2,078,348.0131
 Delta = 10° 48' 57.6676" (LT)
 Degree = 0° 59' 47.9480"
 Tangent = 544.2347'
 Length = 1,085.2350'
 Radius = 5,748.8238'
 External = 25.7036'
 Long Chord = 1,083.6243'
 Mid. Ord. = 25.5892'
 P.C. Station 874+92.2406 X 2,249,058.8783 Y 2,078,139.7745
 P.T. Station 885+77.4756 X 2,248,023.0936 Y 2,078,458.1951
 C.C. X 2,246,859.2260 Y 2,072,828.4183

Course from PT 340 to PC 350 281° 40' 49.6223" Dist 992.6036'

Curve Data

Curve 350
 P.I. Station 899+46.6049 X 2,246,682.3163 Y 2,078,735.3797
 Delta = 18° 18' 42.1041" (RT)
 Degree = 2° 27' 09.2817"
 Tangent = 376.5257'
 Length = 746.6304'
 Radius = 2,336.1448'
 External = 30.1485'
 Long Chord = 743.4568'
 Mid. Ord. = 29.7644'
 P.C. Station 895+70.0793 X 2,247,051.0448 Y 2,078,659.1509
 P.T. Station 903+16.7097 X 2,246,356.2097 Y 2,078,923.5978
 C.C. X 2,247,524.0048 Y 2,080,946.9187

Course from PT 350 to PC 360 299° 59' 31.7264" Dist 409.1154'

Curve Data

Curve 360
 P.I. Station 912+03.1320 X 2,245,588.4847 Y 2,079,366.7038
 Delta = 1° 56' 48.0056" (RT)
 Degree = 0° 12' 14.1900"
 Tangent = 477.3069'
 Length = 954.5220'
 Radius = 28,094.1986'
 External = 4.0543'
 Long Chord = 954.4761'
 Mid. Ord. = 4.0537'
 P.C. Station 907+25.8251 X 2,246,001.8773 Y 2,079,128.1070
 P.T. Station 916+80.3471 X 2,245,183.4356 Y 2,079,619.2055
 C.C. X 2,260,045.6415 Y 2,103,460.3219

Course from PT 360 to PC 200 301° 56' 19.7319" Dist 702.9698'

Curve Data

Curve 200
 P.I. Station 925+18.4839 X 2,244,472.1814 Y 2,080,062.5910
 Delta = 3° 06' 49.8722" (LT)
 Degree = 1° 09' 07.6975"
 Tangent = 135.1669'
 Length = 270.2674'
 Radius = 4,972.9955'
 External = 1.8366'
 Long Chord = 270.2341'
 Mid. Ord. = 1.8359'
 P.C. Station 923+83.3169 X 2,244,586.8859 Y 2,079,991.0859
 P.T. Station 926+53.5843 X 2,244,353.7621 Y 2,080,127.7598
 C.C. X 2,241,956.1050 Y 2,075,770.9348

Course from PT 200 to PC 210 298° 49' 29.8597" Dist 331.3072'

Curve Data

Curve 210
 P.I. Station 932+63.7130 X 2,243,819.2304 Y 2,080,421.9244
 Delta = 10° 09' 35.2263" (RT)
 Degree = 1° 49' 36.1359"
 Tangent = 278.8215'
 Length = 556.1811'
 Radius = 3,136.5654'
 External = 12.3684'
 Long Chord = 555.4527'
 Mid. Ord. = 12.3198'
 P.C. Station 929+84.8914 X 2,244,063.5050 Y 2,080,287.4947
 P.T. Station 935+41.0726 X 2,243,602.4986 Y 2,080,597.3348
 C.C. X 2,245,575.7542 Y 2,083,035.4294

Course from PT 210 to PC 220 308° 59' 05.0860" Dist 421.2489'

Curve Data

Curve 220
 P.I. Station 946+27.2858 X 2,242,758.1704 Y 2,081,280.6862
 Delta = 15° 28' 27.6605" (LT)
 Degree = 1° 10' 14.4189"
 Tangent = 664.9644'
 Length = 1,321.8349'
 Radius = 4,894.2644'
 External = 44.9665'
 Long Chord = 1,317.8212'
 Mid. Ord. = 44.5571'
 P.C. Station 939+62.3214 X 2,243,275.0562 Y 2,080,862.3482
 P.T. Station 952+84.1563 X 2,242,148.4063 Y 2,081,545.9508
 C.C. X 2,240,196.0085 Y 2,077,057.9705

Course from PT 220 to PC 230 293° 30' 37.4255" Dist 630.8947'

Curve Data

Curve 230
 P.I. Station 962+84.6556 X 2,241,230.9608 Y 2,081,945.0654
 Delta = 35° 55' 06.4996" (RT)
 Degree = 5° 01' 28.8708"
 Tangent = 369.6046'
 Length = 714.8401'
 Radius = 1,140.2857'
 External = 58.4048'
 Long Chord = 703.1920'
 Mid. Ord. = 55.5591'
 P.C. Station 959+15.0510 X 2,241,569.8836 Y 2,081,797.6244
 P.T. Station 966+29.8911 X 2,241,042.9770 Y 2,082,263.2943
 C.C. X 2,242,024.7612 Y 2,082,843.2524

Course from PT 230 to PC 240 329° 25' 43.9251" Dist 625.5539'

Curve Data

Curve 240
 P.I. Station 974+87.3094 X 2,240,606.8875 Y 2,083,001.5301
 Delta = 12° 29' 59.7511" (LT)
 Degree = 2° 42' 22.5673"
 Tangent = 231.8644'
 Length = 461.8880'
 Radius = 2,117.1504'
 External = 12.6587'
 Long Chord = 460.9726'
 Mid. Ord. = 12.5835'
 P.C. Station 972+55.4450 X 2,240,724.8155 Y 2,082,801.8952
 P.T. Station 977+17.3330 X 2,240,448.5462 Y 2,083,170.9087
 C.C. X 2,238,901.9524 Y 2,081,725.0963

Course from PT 240 to PC 250 316° 55' 44.1740" Dist 166.6479'

Curve Data

Curve 250
 P.I. Station 981+12.7898 X 2,240,178.4868 Y 2,083,459.7928
 Delta = 16° 20' 37.1297" (RT)
 Degree = 3° 35' 45.1574"
 Tangent = 228.8089'
 Length = 454.5107'
 Radius = 1,593.3743'
 External = 16.3447'
 Long Chord = 452.9714'
 Mid. Ord. = 16.1787'
 P.C. Station 978+83.9809 X 2,240,334.7415 Y 2,083,292.6462
 P.T. Station 983+38.4916 X 2,240,075.5808 Y 2,083,664.1549
 C.C. X 2,241,498.7130 Y 2,084,380.7693

Course from PT 250 to PC 260 333° 16' 21.3036" Dist 1,002.1328'

Curve Data

Curve 260
 P.I. Station 997+51.4175 X 2,239,440.1224 Y 2,084,926.1186
 Delta = 23° 57' 24.9855" (RT)
 Degree = 2° 57' 33.0376"
 Tangent = 410.7930'
 Length = 809.5812'
 Radius = 1,936.2065'
 External = 43.0981'
 Long Chord = 803.6966'
 Mid. Ord. = 42.1596'
 P.C. Station 993+40.6245 X 2,239,624.8751 Y 2,084,559.2162
 P.T. Station 1001+50.2056 X 2,239,420.2667 Y 2,085,336.4314
 C.C. X 2,241,354.2101 Y 2,085,430.0181

Course from PT 260 to PC 1200 357° 13' 46.2892" Dist 2,010.2991'

Curve Data

Curve 1200
 P.I. Station 1025+22.2867 X 2,239,305.6120 Y 2,087,705.7400
 Delta = 22° 01' 53.9411" (LT)
 Degree = 3° 04' 58.6570"
 Tangent = 361.7820'
 Length = 714.6265'
 Radius = 1,858.4664'
 External = 34.8861'
 Long Chord = 710.2319'
 Mid. Ord. = 34.2433'
 P.C. Station 1021+60.5047 X 2,239,323.0988 Y 2,087,344.3809
 P.T. Station 1028+75.1312 X 2,239,153.8496 Y 2,088,034.1519
 C.C. X 2,237,466.8046 Y 2,087,254.5517

Ending chain IL84 description

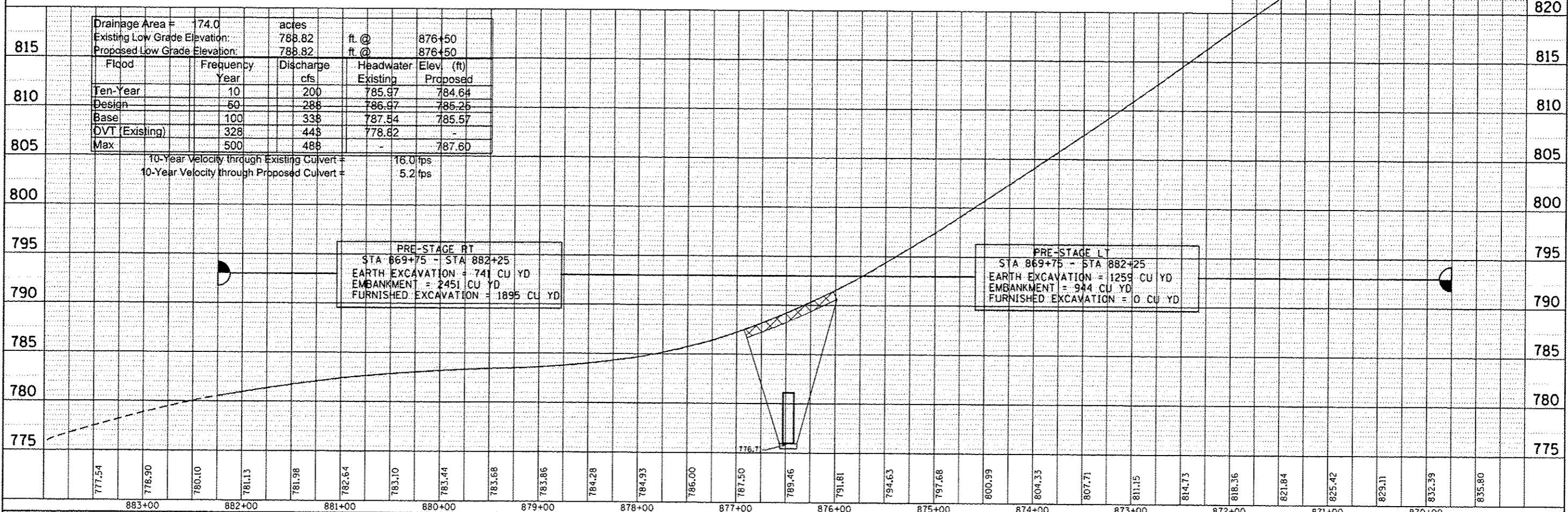
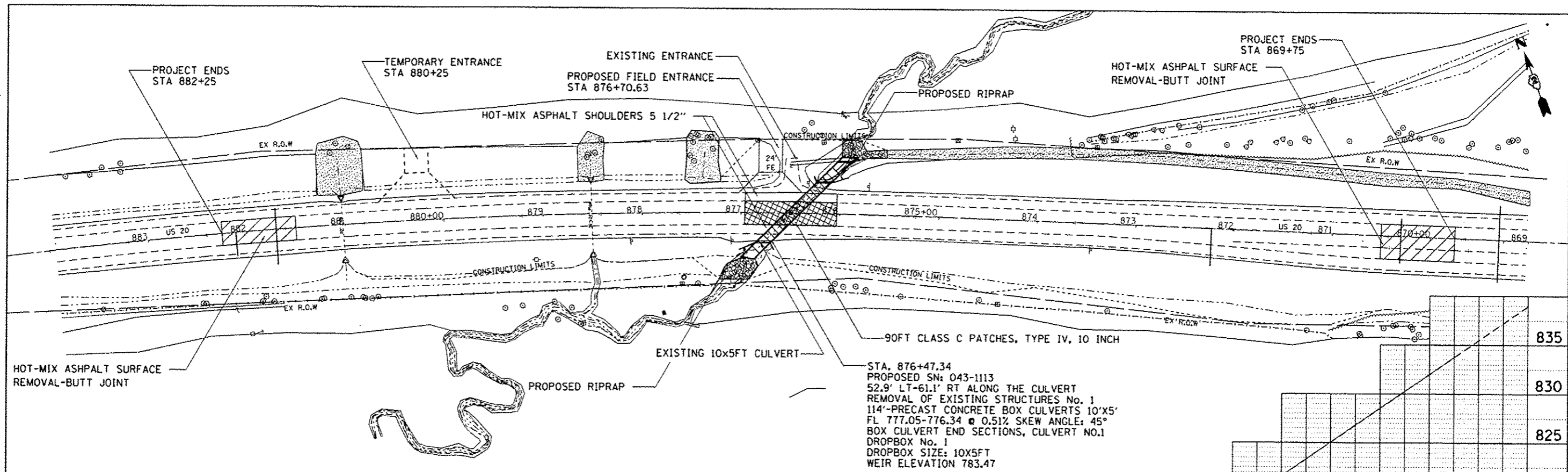
FILE NAME =	USER NAME = hardnettr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US 20 / IL 84 HORIZONTAL & VERTICAL CONTROL			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pvidot\hardnettr\d827791\10	00711-ah-hvc.dgn	DRAWN -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT	52	15
		CHECKED -	REVISED -										
		DATE -	REVISED -										

PLOT SCALE = 68.0000" / in.
 PLOT DATE = Mon Dec 18 13:58:09 2012

CONTRACT NO. 64H17

PLAN
 DATE: _____
 BY: _____
 CHECKED: _____
 DESIGNED: _____
 DRAWN: _____
 PLOT SCALE: 1/8" = 1'-0"
 PLOT DATE: _____

PROFILE
 DATE: _____
 BY: _____
 CHECKED: _____
 DESIGNED: _____
 DRAWN: _____
 PLOT SCALE: 1/8" = 1'-0"
 PLOT DATE: _____



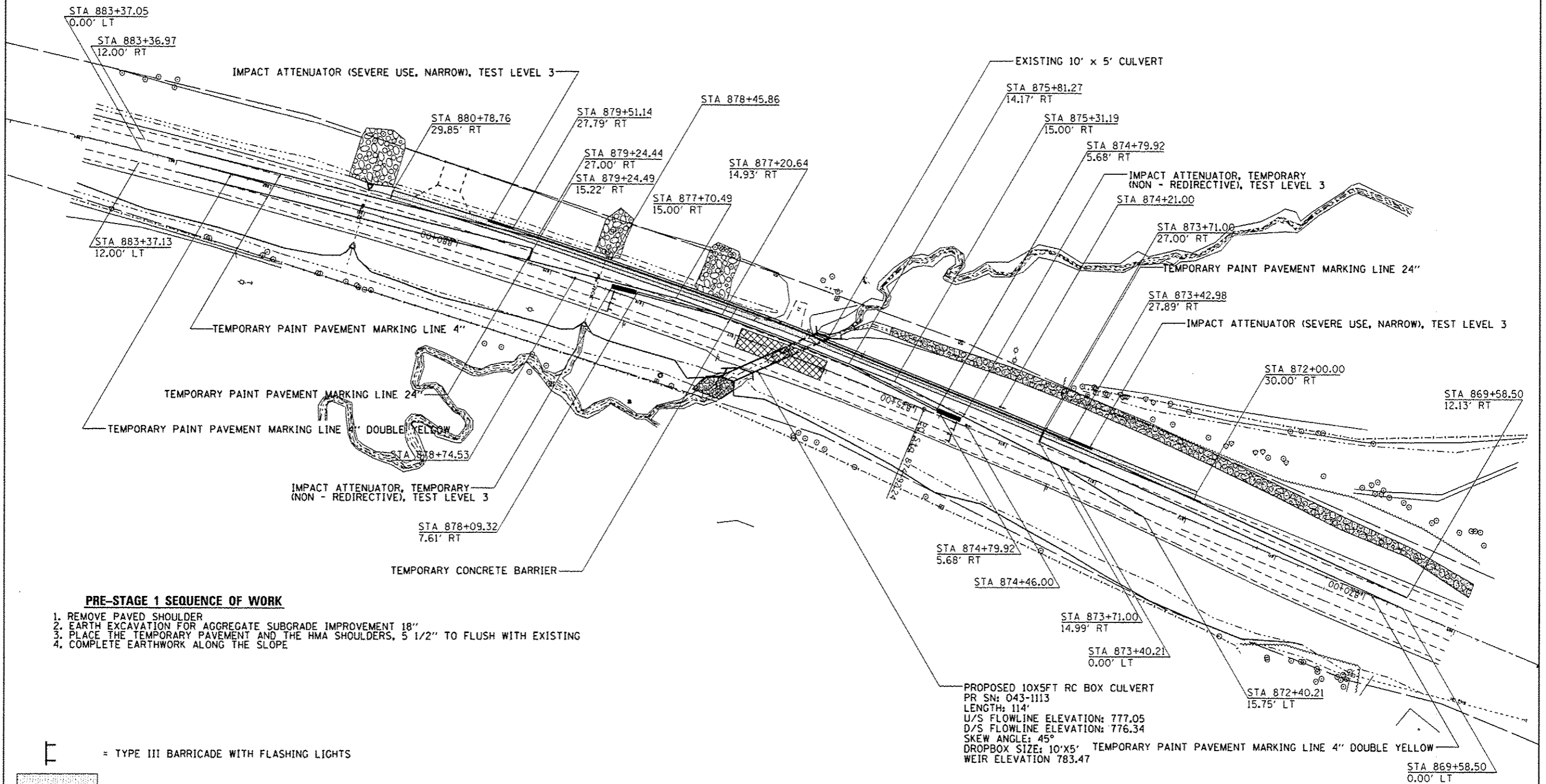
Drainage Area =	74.0	acres
Existing Low Grade Elevation:	788.82	ft. @ 876+50
Proposed Low Grade Elevation:	788.82	ft. @ 876+50
Flood Year	Frequency	Discharge
Ten-Year	10	200
Design	50	288
Base	100	338
DVT (Existing)	328	448
Max	500	488
10-Year Velocity through Existing Culvert =	16.0 fps	
10-Year Velocity through Proposed Culvert =	5.2 fps	

PRE-STAGE RT
 STA 869+75 - STA 882+25
 EARTH EXCAVATION = 741 CU YD
 EMBANKMENT = 2451 CU YD
 FURNISHED EXCAVATION = 1895 CU YD

PRE-STAGE LT
 STA 869+75 - STA 882+25
 EARTH EXCAVATION = 1259 CU YD
 EMBANKMENT = 944 CU YD
 FURNISHED EXCAVATION = 0 CU YD

STA. 876+47.34
 PROPOSED SN: 043-1113
 52.9' LT-61.1' RT ALONG THE CULVERT
 REMOVAL OF EXISTING STRUCTURES No. 1
 114'-PRECAST CONCRETE BOX CULVERTS 10'X5'
 FL 777.05-776.34 @ 0.51% SKEW ANGLE: 45°
 BOX CULVERT END SECTIONS, CULVERT NO.1
 DROPBOX No. 1
 DROPBOX SIZE: 10X5FT
 WEIR ELEVATION 783.47

STAGE 1



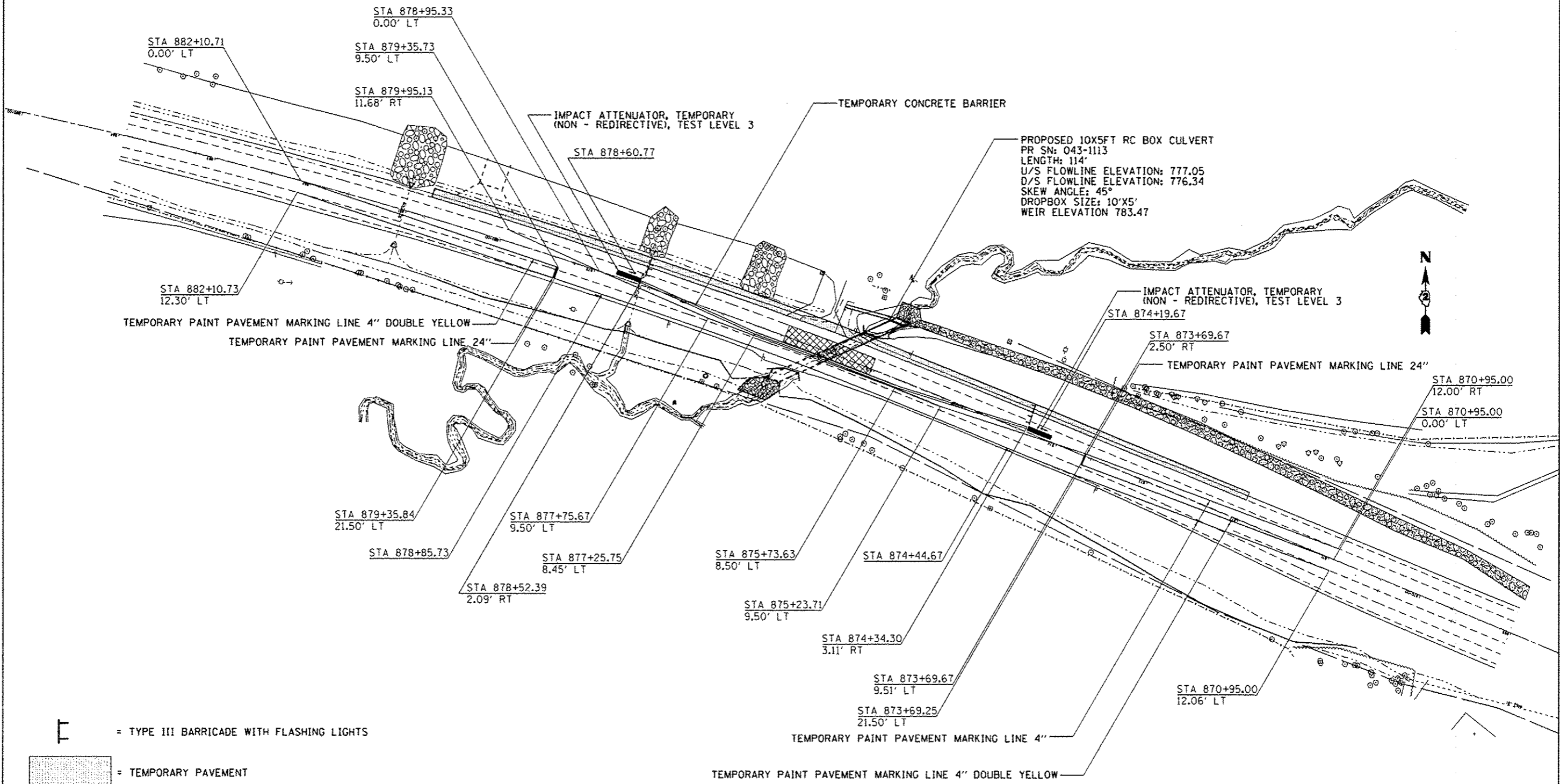
- PRE-STAGE 1 SEQUENCE OF WORK**
1. REMOVE PAVED SHOULDER
 2. EARTH EXCAVATION FOR AGGREGATE SUBGRADE IMPROVEMENT 18"
 3. PLACE THE TEMPORARY PAVEMENT AND THE HMA SHOULDERS, 5 1/2" TO FLUSH WITH EXISTING
 4. COMPLETE EARTHWORK ALONG THE SLOPE


- [Symbol] = TYPE III BARRICADE WITH FLASHING LIGHTS
- [Symbol] = TEMPORARY PAVEMENT
- [Symbol] = TRAFFIC SIGNAL


BARRIER WALL OFFSETS ARE TO THE TRAFFIC SIDE OF THE WALL DEVICES, VERTICAL PANELS, & SIGNING TO BE SET UP ACCORDING TO HIGHWAY TRAFFIC STANDARD 701321


FILE NAME :	USER NAME :	DESIGNED :	REVISED :	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGING DETAILS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default	hardnetlb-	-	-				301	29T-2	JO DAVIESS	52	17	
	88711-sht-staging.dgn	DRAWN :	REVISED :		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 64H17	ILLINOIS FED. AID PROJECT
		CHECKED :	REVISED :									
		DATE :	REVISED :									

STAGE 2



 = TYPE III BARRICADE WITH FLASHING LIGHTS

 = TEMPORARY PAVEMENT

 = TRAFFIC SIGNAL

BARRIER WALL OFFSETS ARE TO THE TRAFFIC SIDE OF THE WALL
 DEVICES, VERTICAL PANELS, & SIGNING TO BE SET UP ACCORDING
 TO HIGHWAY TRAFFIC STANDARD 701321

FILE NAME	USER NAME	DESIGNED	REVISED
c:\pwork\pwork\hardnet\br\08277919\0827711-sht-staging.dgn	hardnet	-	-
		DRAWN	REVISED
		-	-
		CHECKED	REVISED
		-	-
		DATE	REVISED
		-	-

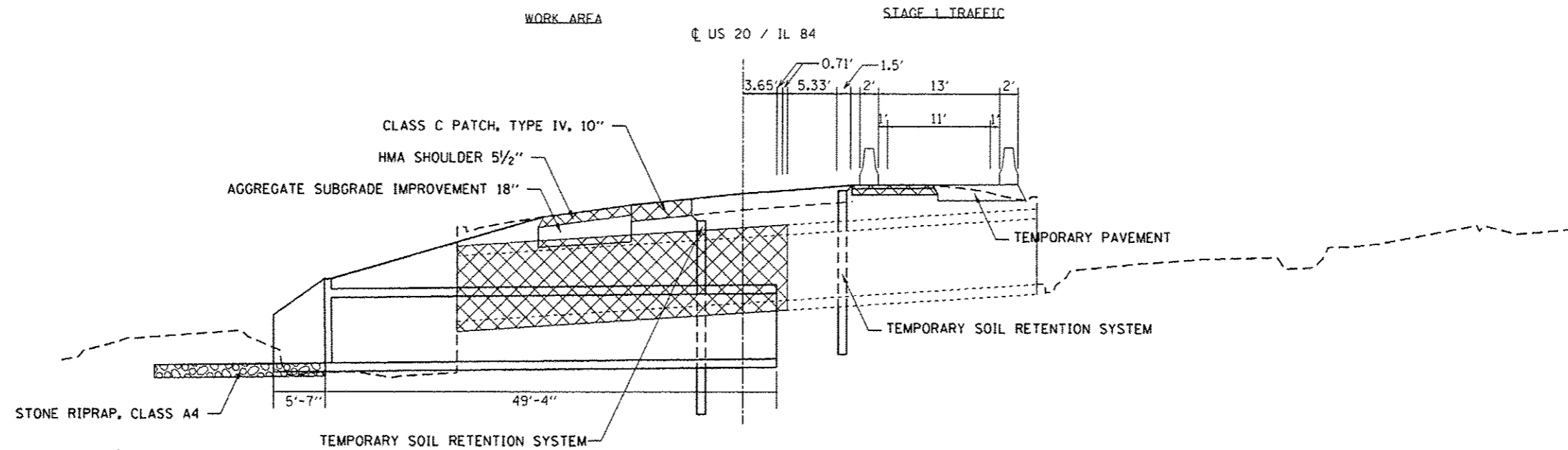
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING DETAILS			
SCALE:	SHEET	OF	SHEETS
	STA.		TO STA.

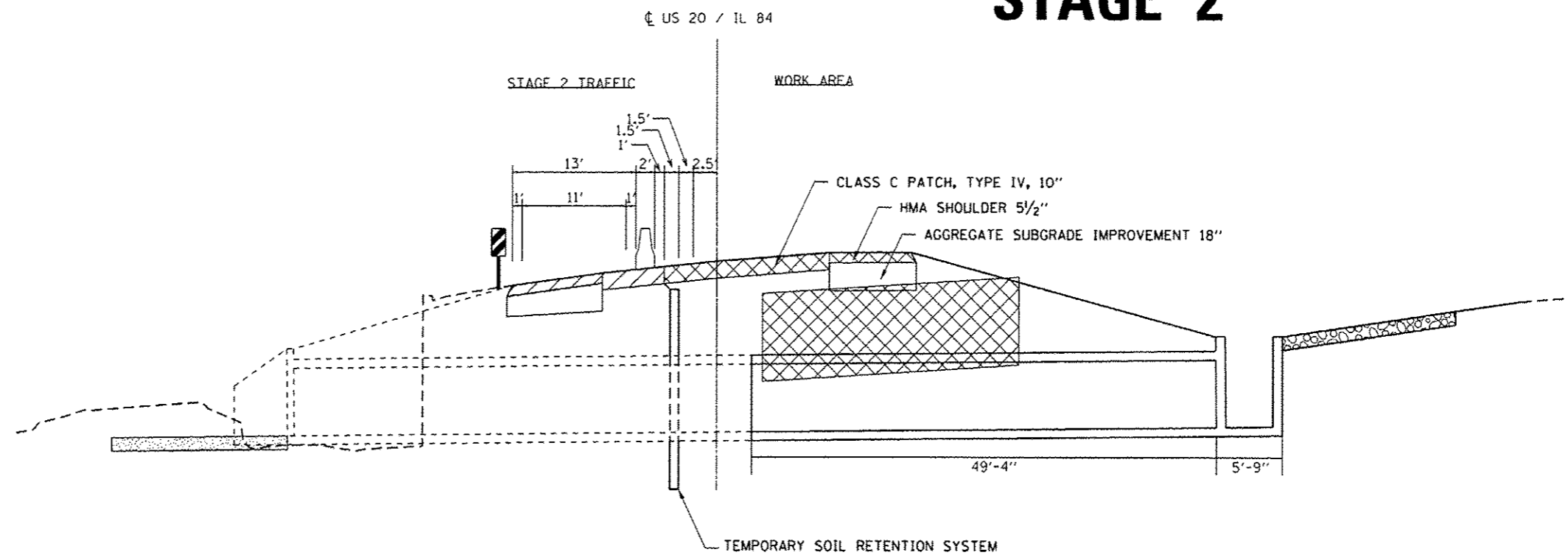
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	291-2	JO DAVIESS	52	18
CONTRACT NO.			64H17	
ILLINOIS FED. AID PROJECT				

STAGING TYPICALS

STAGE 1

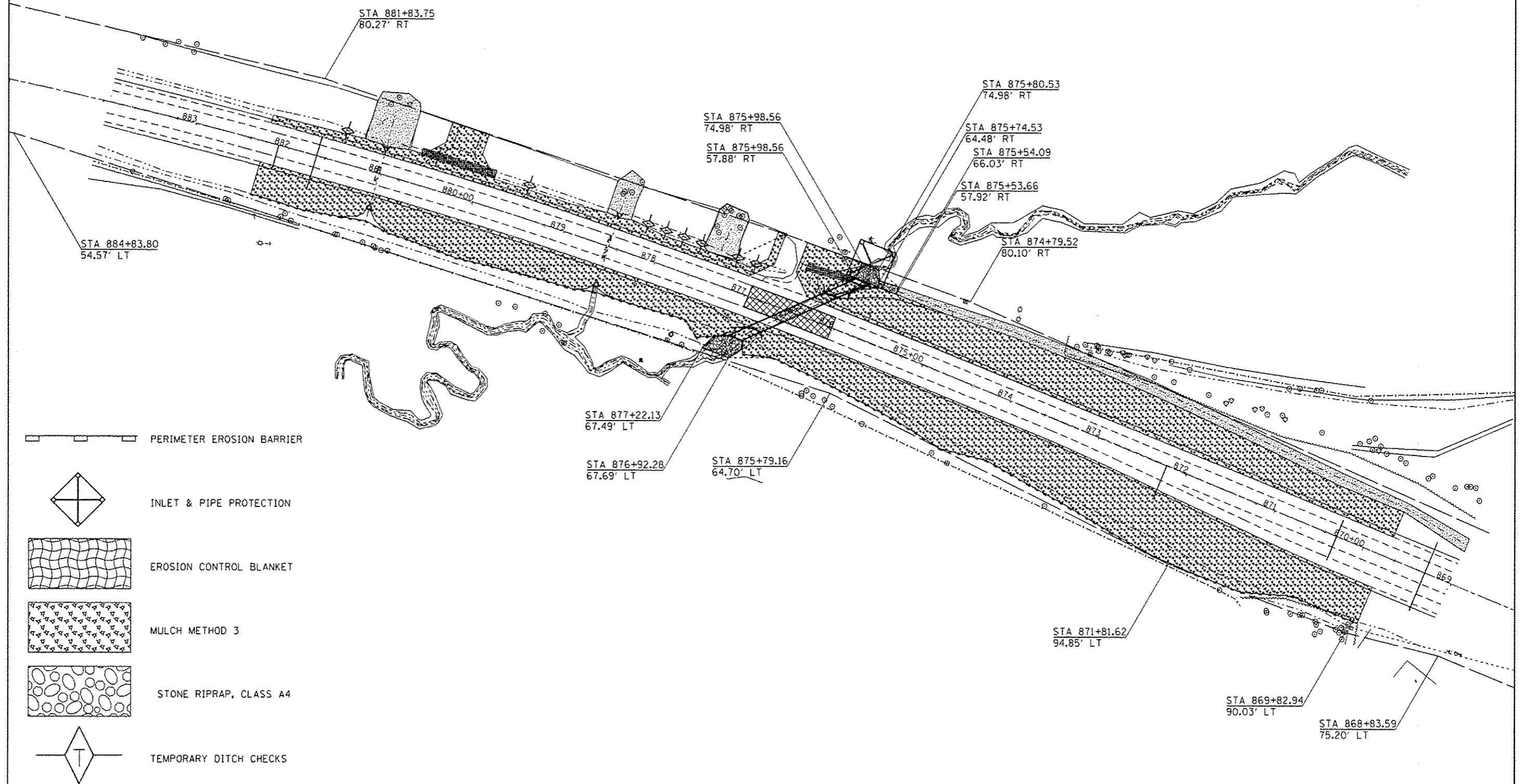


STAGE 2



FILE NAME :	USER NAME :	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGING DETAILS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr:\pwwork\psidot\hardnettb\0277919\0277919.dgn	hardnettb	DRAWN -	REVISED -					301	291-2	JO DAVIESS	52	19
Default	PLOT SCALE * 100.0000' / in.	CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.			CONTRACT NO. 64H17				
	PLOT DATE * Mon Dec 10 14:19:56 2012	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

EROSION CONTROL, R.O.W., & SEEDING DETAILS



FILE NAME =	USER NAME = hardnetbr	DESIGNED -	REVISED -
c:\pwwork\pwwid\hardnetbr\d827791910	8871\ah\erod.dgn	DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / 1" =	CHECKED -	REVISED -
	PLOT DATE = Mon Dec 18 15:46:58 2012	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EROSION CONTROL & SEEDING DETAILS

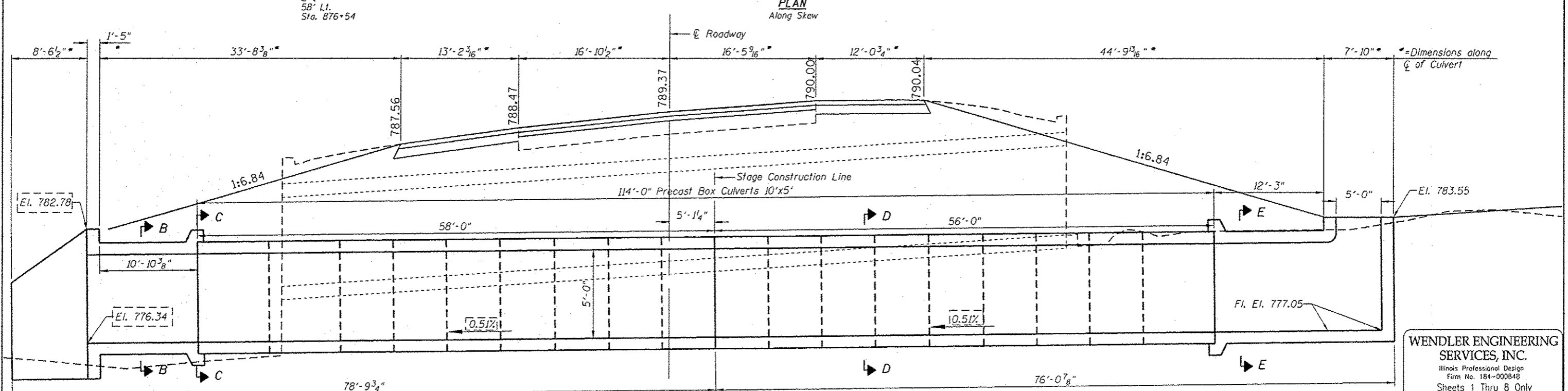
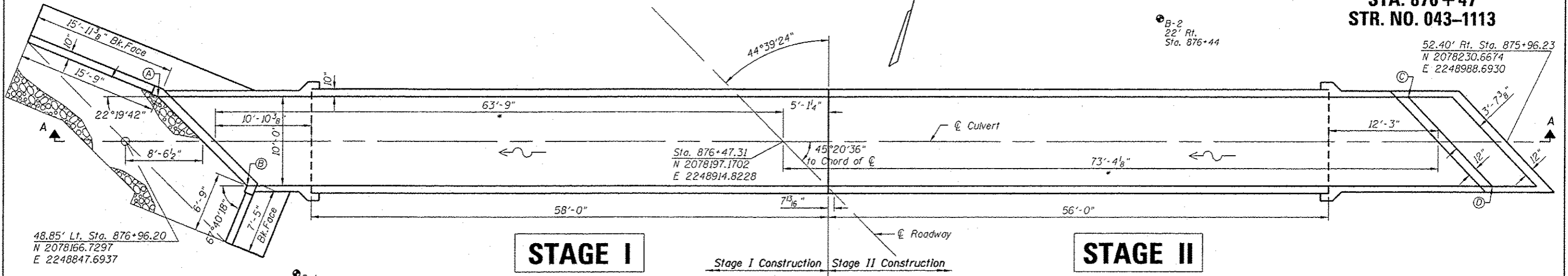
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	29T-2	JO DAVIESS	52	20
CONTRACT NO. 64H17				
[ILLINOIS] FED. AID PROJECT				

BOX CULVERT PLAN
US 20 /IL RTE 84
F.A.P. RTE 301 SECTION 29T-2
JO DAVIESS COUNTY
STA. 876+47
STR. NO. 043-1113

LAYOUT COORDINATES

Point	Northing	Easting
(A)	2078172.7434	2248848.8482
(B)	2078167.7711	2248862.0970
(C)	2078230.6147	2248976.4698
(D)	2078225.4487	2248989.2913



WATERWAY INFORMATION TABLE

Drainage Area = 174.0 acres
 Existing Low Grade Elevation: 788.82 ft. @ 876+50
 Proposed Low Grade Elevation: 788.82 ft. @ 876+50

Flood Year	Frequency	Discharge cfs	Headwater Elev. (ft.) Existing	Headwater Elev. (ft.) Proposed
Ten-Year	10	200	785.97	784.64
Design	50	288	786.97	785.25
Base	100	338	787.54	785.57
OVT (Existing)	328	443	778.82	-
Max	500	488	-	787.60

10-Year Velocity through Existing Culvert = 16.0 fps
 10-Year Velocity through Proposed Culvert = 5.2 fps

SEC A-A
 * Along Skew @ C of Culvert

LOADING HL-93
 Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

Field Units

$f_y = 60,000$ psi (Reinforcement)
 $f'_c = 4,000$ psi

Precast Units

$f_y = 65,000$ psi (Welded Wire Fabric)
 $f'_c = 5,000$ psi (Precast)

Traversable

DESIGN SPECIFICATIONS
 AASHTO LRFD 6TH Edition

TOTAL BILL OF MATERIAL - STA. 876+47

Item	Unit	Quantity
Precast Concrete Box Culverts 10'x5'	Foot	114
Concrete Box Culverts	Cu.Yd.	46.9
Reinforcement Bars, Epoxy Coated	Pound	8,600
Traversable Pipe Grate (SPECIAL)	Foot	25
Name Plates	Each	1
Temporary Shoring	Each	1

WENDLER ENGINEERING SERVICES, INC.
 Illinois Professional Design Firm No. 184-000848
 Sheets 1 Thru 8 Only
 For Structural Adequacy Only



SCOTT A. BROWN
 DIXON, ILLINOIS
 ILLINOIS LICENSED STRUCTURAL ENGINEER NO. 081-005981
 EXPIRES 11-30-2014



USER NAME - Jamie Shaw
 WES JOB # - 2120114
 PLOT SCALE - 1/8" = 1'-0"
 PLOT DATE - 12/7/2012

DESIGNED - SB
 DRAWN - BEH
 CHECKED - DB
 DATE - 12/07/2012

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BOX CULVERT PLAN STA. 876+47
 STRUCTURE NO. 043-1113

SHEET 1 OF 7 SHEETS STA. 876+47

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	29T-2	JO DAVIESS	52	21

CONTRACT NO. 64H17
 ILLINOIS FED. AID PROJECT

PRECAST BARREL DETAILS
US 20 /IL RTE 84
F.A.P. RTE 301 SECTION 29T-2
JO DAVIESS COUNTY
STA. 876 + 47

GENERAL NOTES

Precast Concrete Box Culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO C 1577.

The minimum concrete strength shall be 5,000 psi.

Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.

FILL = 6.2 ft. Min to 7.6' Max.

REQUIRED AASHTO STEEL AREAS (in²/ft.)

A_{S1} 0.32
A_{S2} 0.33
A_{S3} 0.34
A_{S4} 0.24

DESIGN LOADING
HL - 93

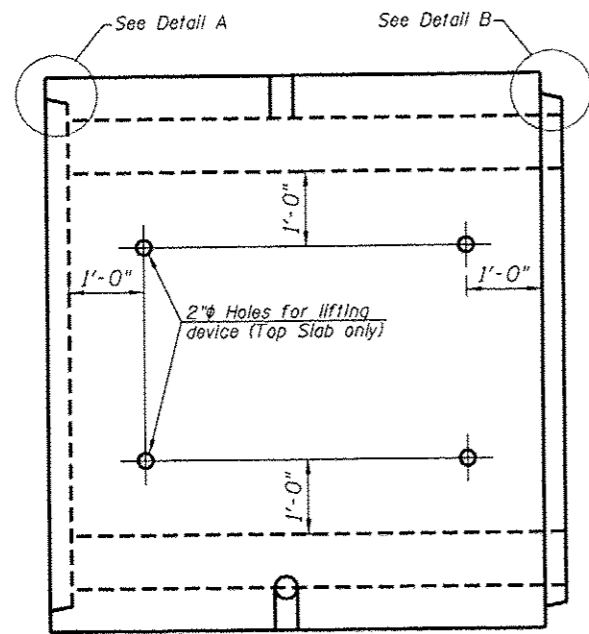
REINFORCEMENT PROVIDED AREA

(To be filled out during construction)

A_{S1} --- x --- W --- x W --- = ---
A_{S2} --- x --- W --- x W --- = ---
A_{S3} --- x --- W --- x W --- = ---
A_{S4} provided b A_{S3} and A_{S3}

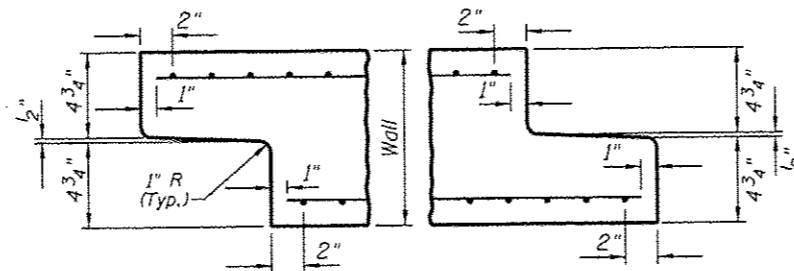
BILL OF MATERIAL

ITEM	UNIT	TOTAL
Precast Concrete Box Culvert 10' x 5'	Ft.	114



PLAN

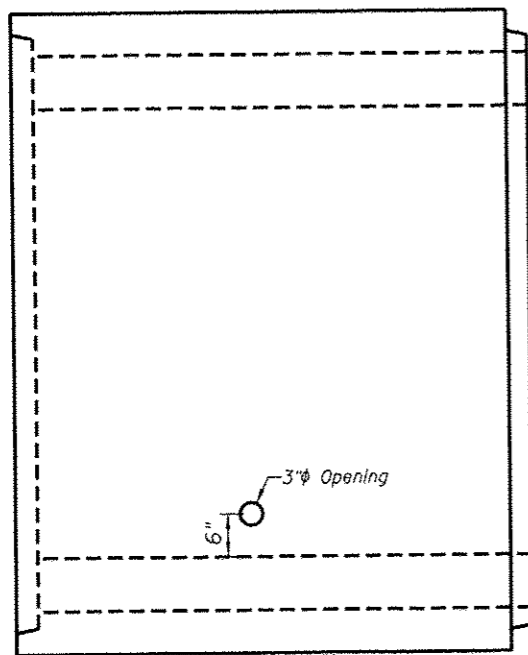
Location of lifting holes may be varied as needed to clear reinforcement.



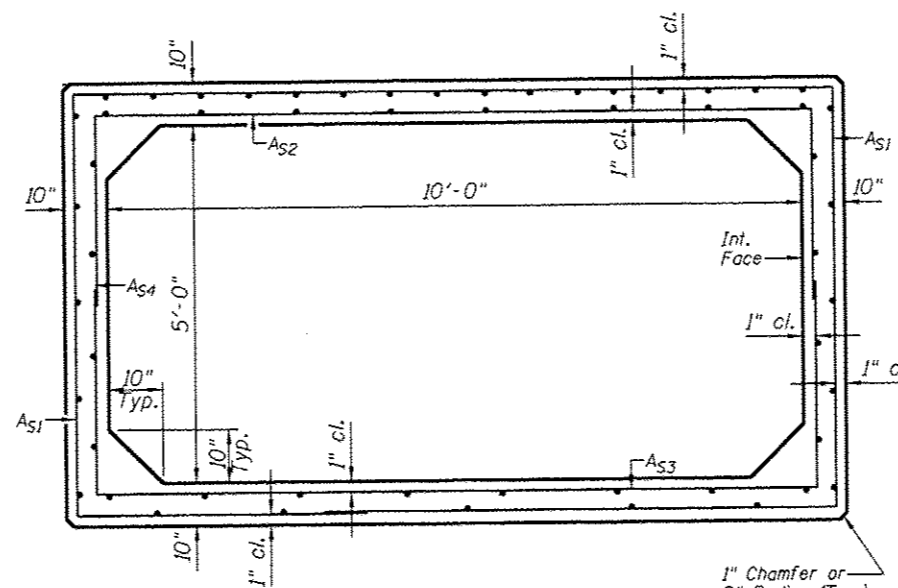
DETAIL A
(Typ. Inlet End)

DETAIL B
(Typ. Outlet End)

Note: Inlet and outlet ends shall be compatible. End details are subject to variation by fabricator.



ELEVATION



CROSS SECTION



USER NAME - Jomie Show	DESIGNED - SAB	REVISIONS -
WES JOB # - 2120114	DRAWN - BDS BEH	REVISIONS -
PLOT SCALE - 1/8" = 1'-0"	CHECKED - DB	REVISIONS -
PLOT DATE - 12/7/2012	DATE - 12/07/2012	REVISIONS -

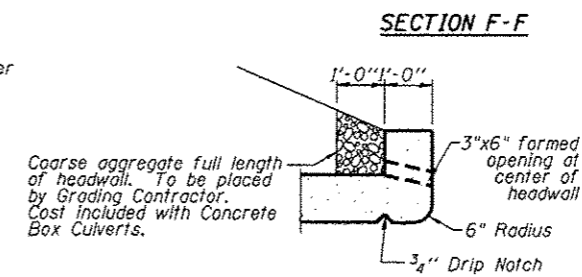
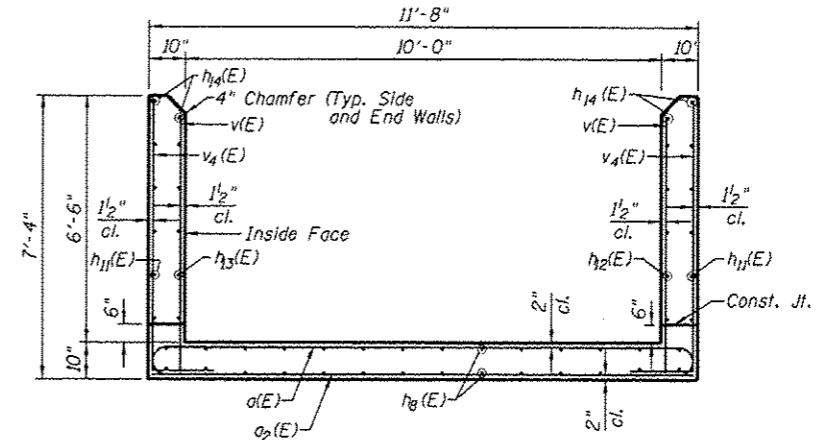
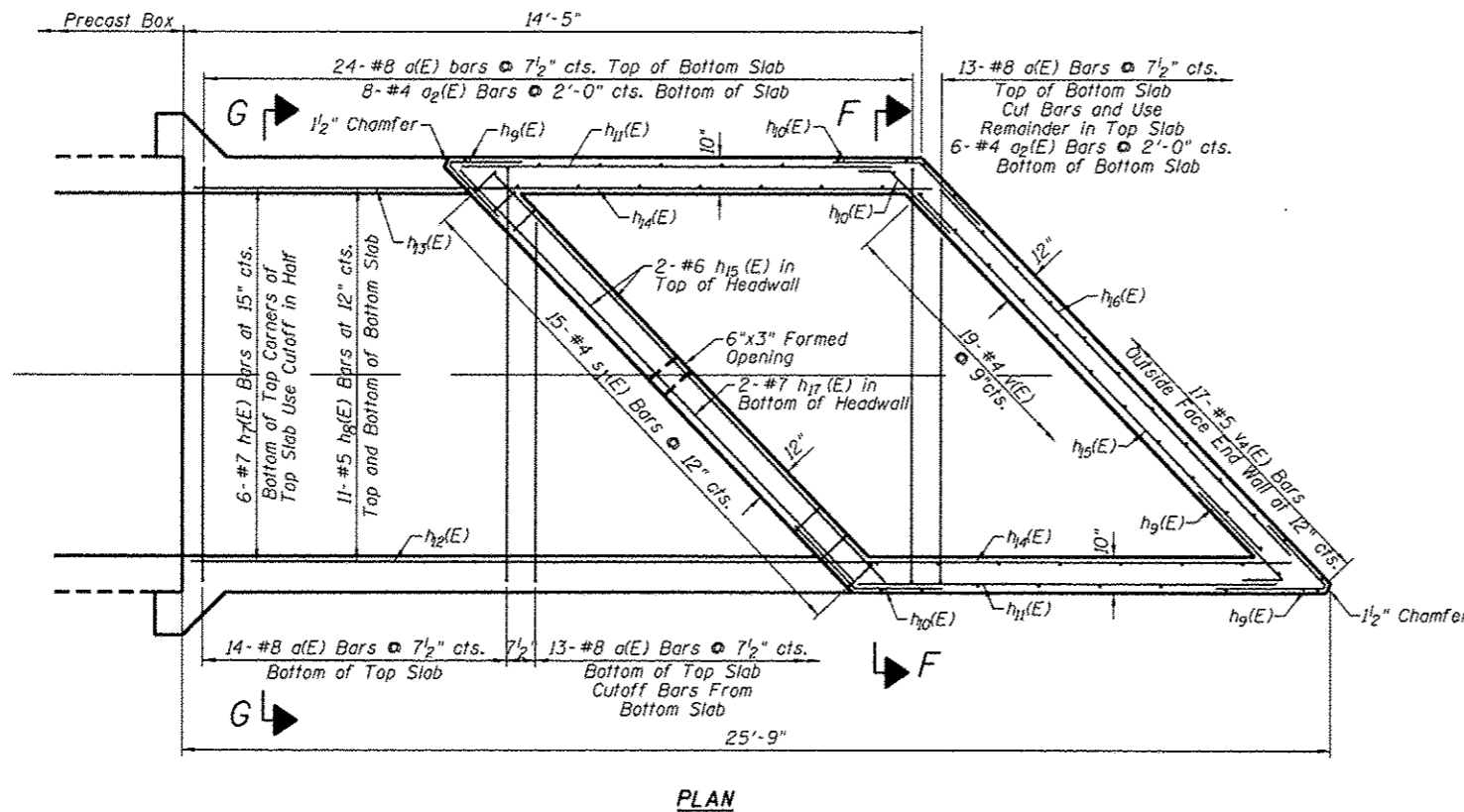
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOX CULVERT DETAILS STA. 879 + 47
PRECAST BARREL DETAILS

SHEET 2 OF 7 SHEETS STA. 876+47

F.A.P. RTE. 301	SECTION 29T-2	COUNTY JO DAVIESS	TOTAL SHEETS 52	SHEET NO. 22
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64H17	

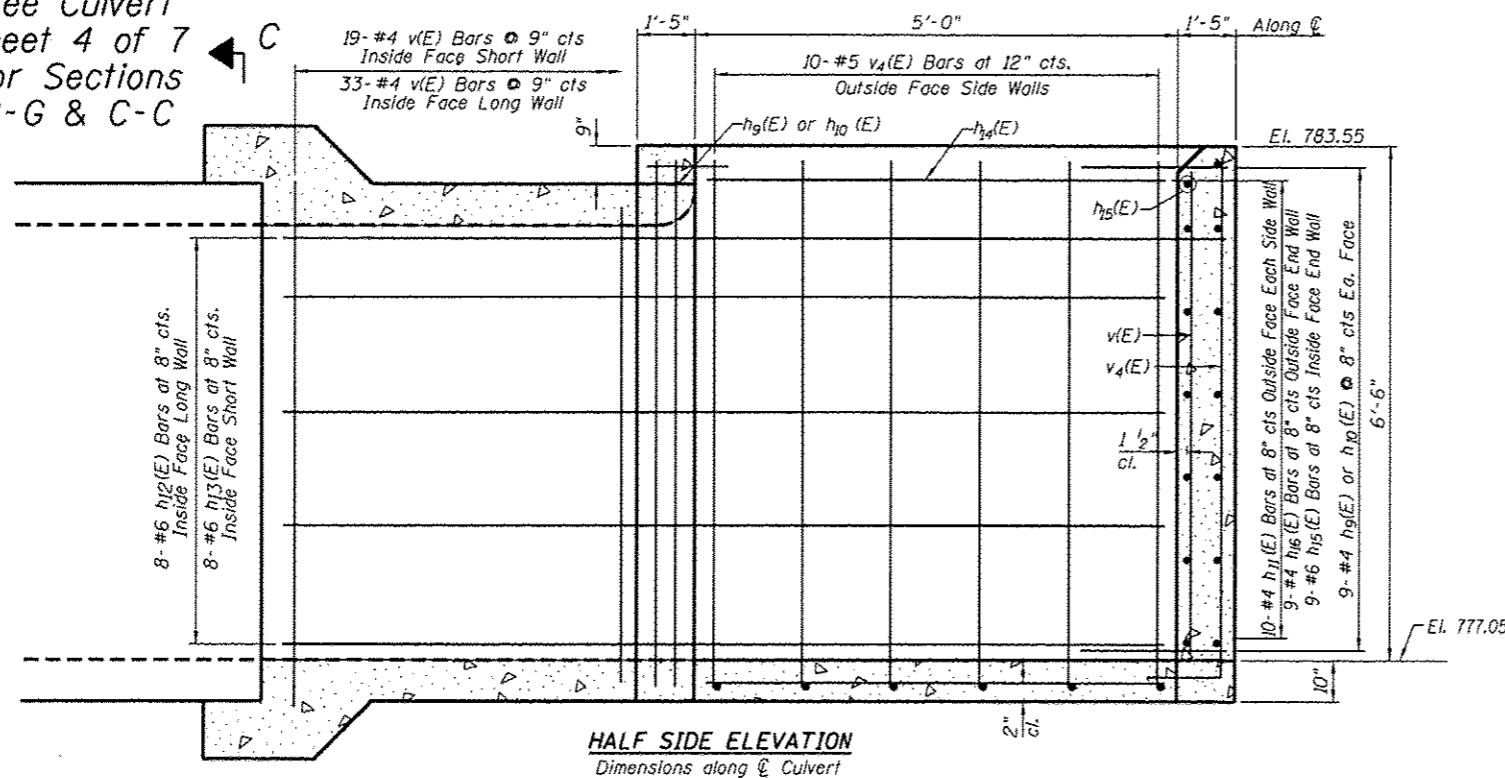
BOX CULVERT DETAILS
US 20 /IL RTE 84
F.A.P. RTE 301 SECTION 29T-2
JO DAVIESS COUNTY
STA. 876 + 47



BILL OF MATERIAL
NORTH END SECTION

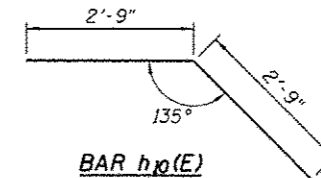
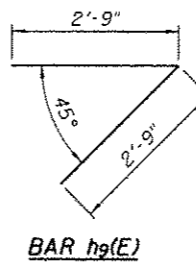
Bar	No.	Size	Length	Shape	
a(E)	51	#8	13'-2"	□	
a2(E)	14	#4	11'-0"	□	
h7(E)	6	#7	25'-0"	—	
h8(E)	11	#5	39'-2"	—	
h9(E)	19	#4	5'-6"	—	
h10(E)	19	#4	5'-6"	—	
h11(E)	20	#4	6'-3"	—	
h12(E)	8	#6	24'-6"	—	
h13(E)	8	#6	13'-3"	—	
h14(E)	4	#5	7'-0"	—	
h15(E)	11	#6	15'-6"	—	
h16(E)	9	#4	15'-6"	—	
h17(E)	2	#7	15'-6"	—	
s1(E)	15	#4	4'-10"	□	
v	71	#4	6'-4"	—	
v4	37	#5	9'-0"	—	
x(E)	46	#4	6'-3"	—	
x1(E)	6	#4	22'-4"	—	
Concrete Box Culverts				Cu. Yd.	23.7
Reinforcement Bars, Epoxy Coated				Pound	4,750

See Culvert Sheet 4 of 7 for Sections G-G & C-C



BAR v4(E)

BAR h7(E) & h8(E)
 Cut Diagram



USER NAME * Jamie Show	DESIGNED - SB	REVISED -
WES JOB # * 2120114	DRAWN - BEH	REVISED -
PLOT SCALE * 1/8" = 1'-0"	CHECKED - DB	REVISED -
PLOT DATE * 12/7/2012	DATE - 12/01/2012	REVISED -

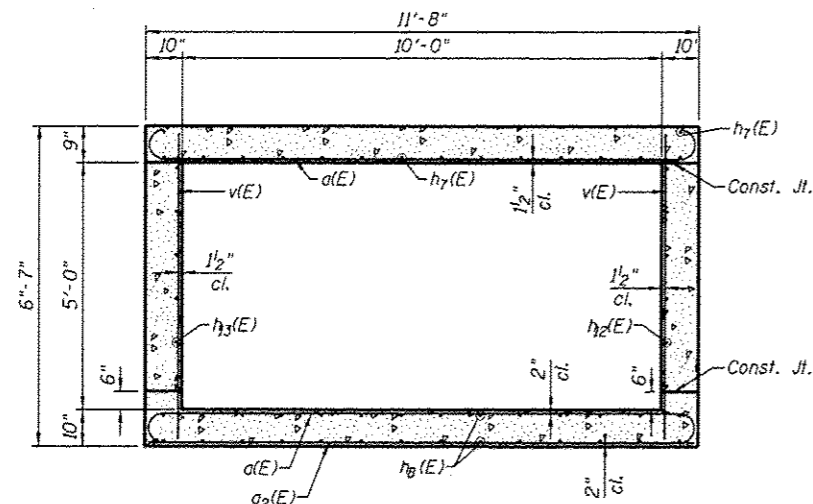
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOX CULVERT DETAILS STA. 876 + 47
UPSTREAM END STR. NO. 043-1113

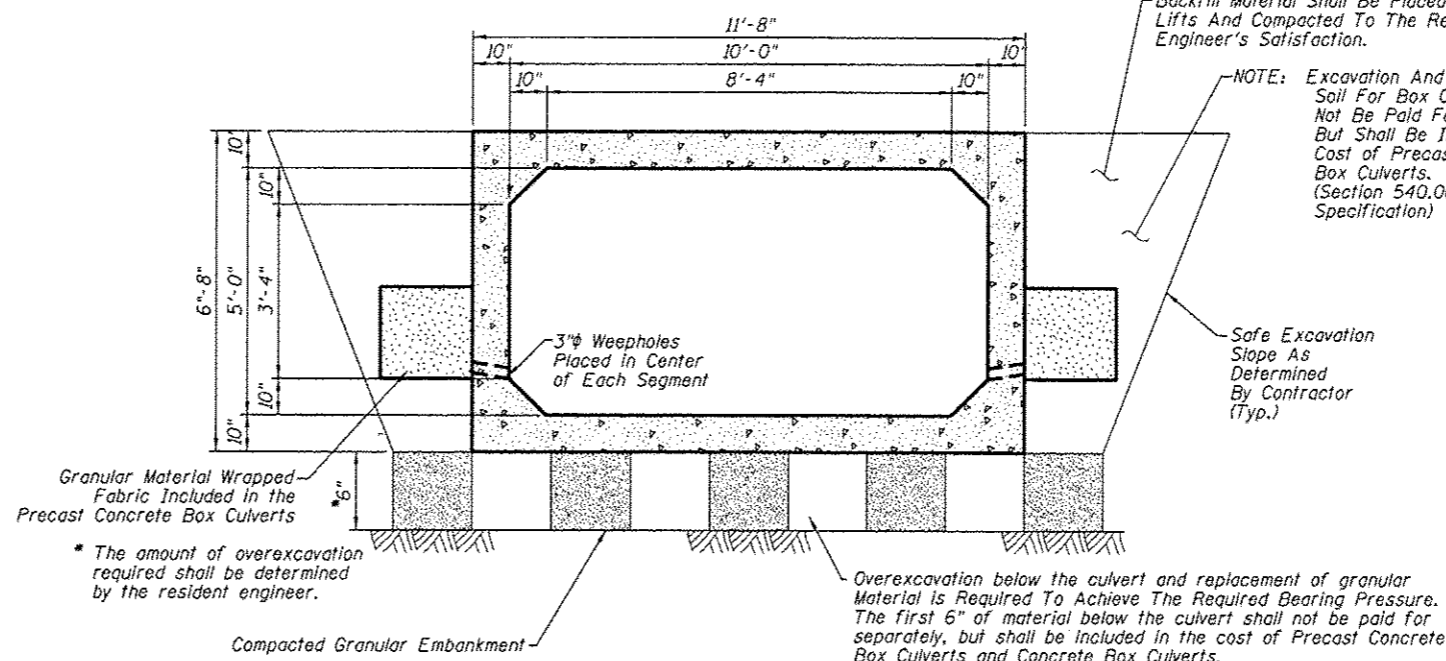
SHEET 3 OF 7 SHEETS STA. 876+47

F.A.P. RTE. 301	SECTION 29T-2	COUNTY JO DAVIESS	TOTAL SHEETS 52	SHEET NO. 23
CONTRACT NO. 64H17				ILLINOIS FED. AID PROJECT

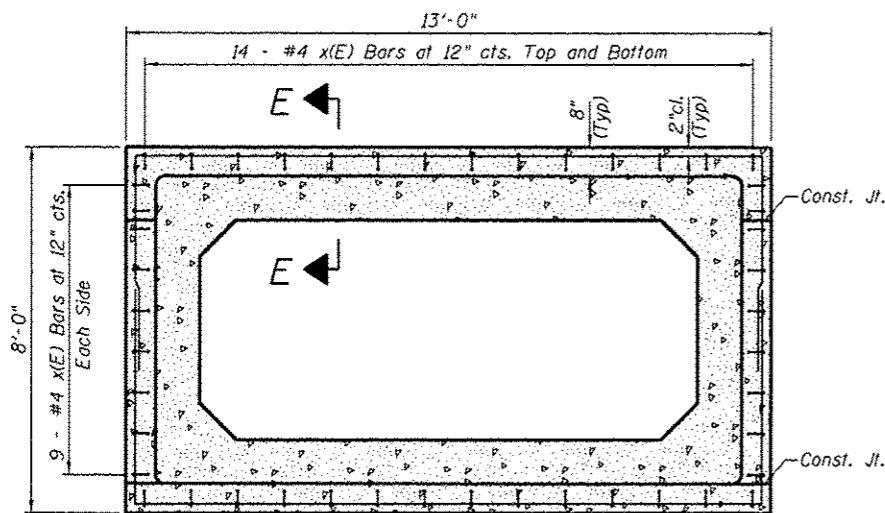
BOX CULVERT DETAILS
US 20 /IL RTE 84
F.A.P. RTE 301 SECTION 29T-2
JO DAVIESS COUNTY
STA. 876 + 47



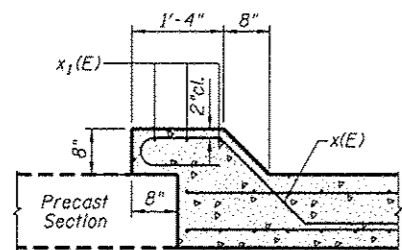
SECTION G-G
TYPICAL SECTION THRU
NORTH CAST-IN-PLACE END SECTION



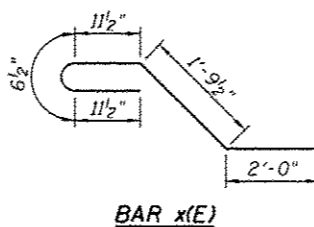
SECTION D-D
TYPICAL SECTION THRU PRECAST CULVERT



SECTION C-C
TYPICAL SECTION THRU PRECAST TO
CAST-IN-PLACE CONNECTION COLLAR
(Typical For Both End Sections)

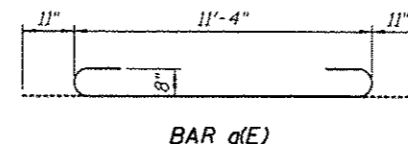


SECTION E-E
TYPICAL SECTION THRU PRECAST TO
CAST-IN-PLACE CONNECTION COLLAR
(Typical For Both End Sections)



BAR s(E)

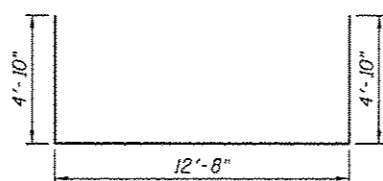
BAR s1(E)



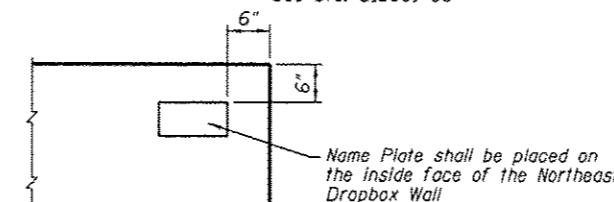
BAR a(E)

Station 876+47
 Built by
 State of Illinois
 F.A.P. Rte 301 Sec. 29T-2
 Loading HL-93
 Structure No. 043-1113

NAME PLATE
 See Std. 515001-03



BAR x1(E)



NAME PLATE LOCATION
 Northeast Wall

GENERAL NOTES

- All work and materials shall be in accordance with the Illinois Department of Transportation (IDOT) Standard Specifications for Road and Bridge Construction adopted January 1, 2012 and latest supplemental specifications and recurring special provisions, unless noted otherwise on these plans or special provisions.
- The Contractor shall verify all dimensions in the field prior to commencing work. The engineer shall be notified of any discrepancies which may exist, prior to proceeding with the work.
- Any information concerning type or location of underground and other utilities is not guaranteed to be accurate or all inclusive. The Contractor is responsible for making his own determinations as to the type and location of the utilities as may be necessary to avoid damage thereto. Contractor shall call J.U.L.I.E. prior to excavation.
- The Contractor is responsible for design, installation and removal of all excavation support systems.
- The excavation and work area shall be properly drained at all times during construction. All wet, loose, frozen or other unsuitable material shall be removed prior to placement of concrete or compacted backfill. The cost of any pumping required shall be included in the cost of "Concrete Box Culverts".
- It shall be the responsibility of the Contractor to divert the stream flow during construction in order to keep the construction areas free of water. The method of water diversion shall be subject to the approval of the Engineer and cost shall be included with "Concrete Box Culverts".

CAST-IN-PLACE CONCRETE NOTES

- All cast-in-place concrete work shall be in accordance with Section 540 of the Illinois Department of Transportation (IDOT) Standard Specifications for Road and Bridge Construction adopted January 1, 2012, supplemental specifications and recurring special provisions and as noted below.
- Reinforcement bars shall conform to the requirements of ASTM A 706 GR60.
- Exposed edges of cast-in-place concrete shall be beveled 3/4".
- All construction joints shall be bonded.
- Concrete mix designs shall be submitted to the Engineer for review and approval a minimum of 7 days prior to ordering or placing concrete.
- Backfill material on all sides of the box and wings shall be compacted in accordance with Section 502 using walk behind tampers.



USER NAME = Jamie Shaw
 WEG JOB # = 212R114
 PLOT SCALE = 1/8" = 1'-0"
 PLOT DATE = 12/7/2012

DESIGNED - SB
 DRAWN - BEH
 CHECKED - DB
 DATE - 12/07/2012

REVISED -
 REVISED -
 REVISED -
 REVISED -

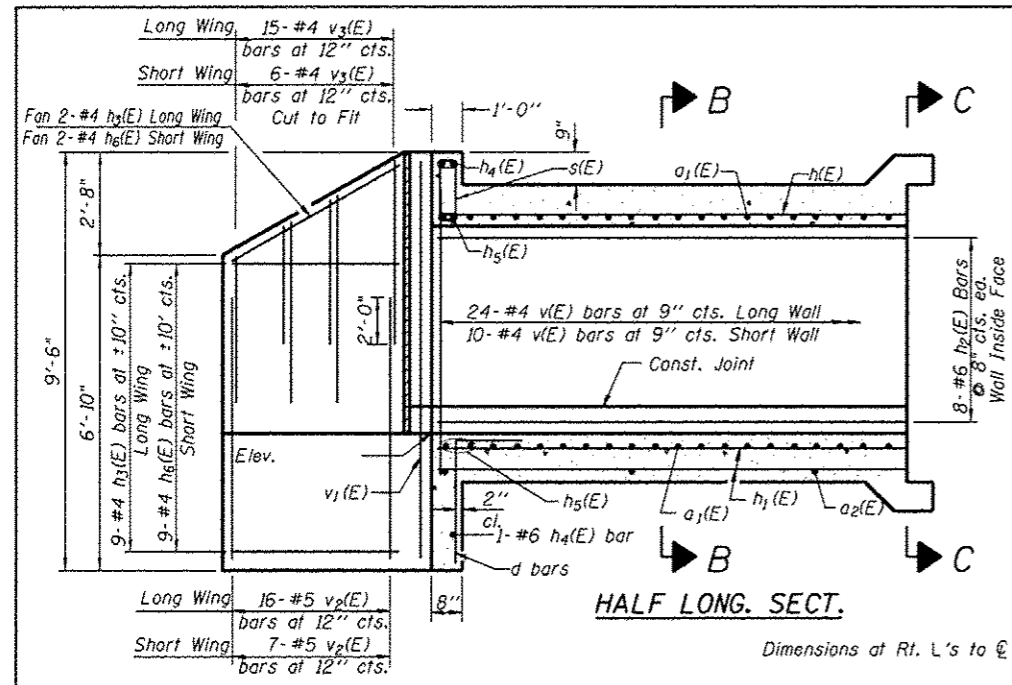
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOX CULVERT DETAILS STA. 876 + 47

SHEET 4 OF 7 SHEETS STA. 876+47

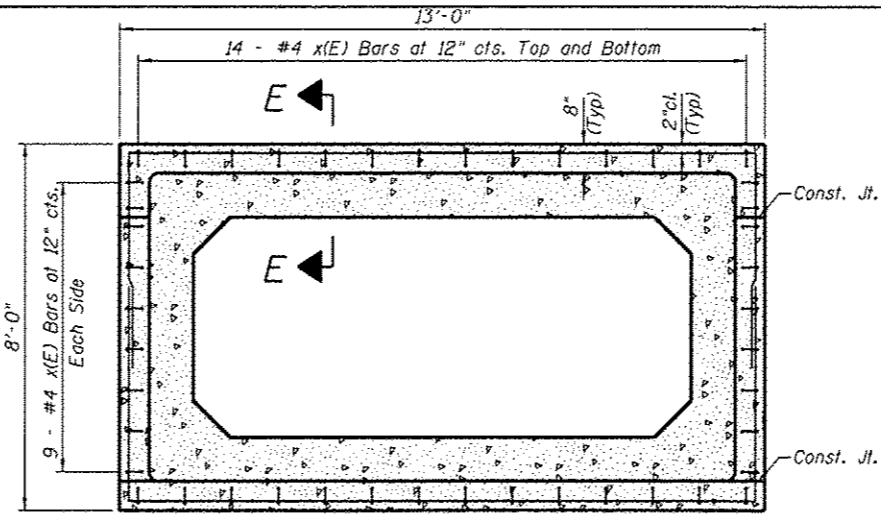
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	29T-2	JO DAVIESS	52	24
CONTRACT NO. 64H17				ILLINOIS FED. AID PROJECT

BOX CULVERT DETAILS
US 20 /IL RTE 84
F.A.P. RTE 301 SECTION 29T-2
JO DAVIESS COUNTY
STA. 876 + 47

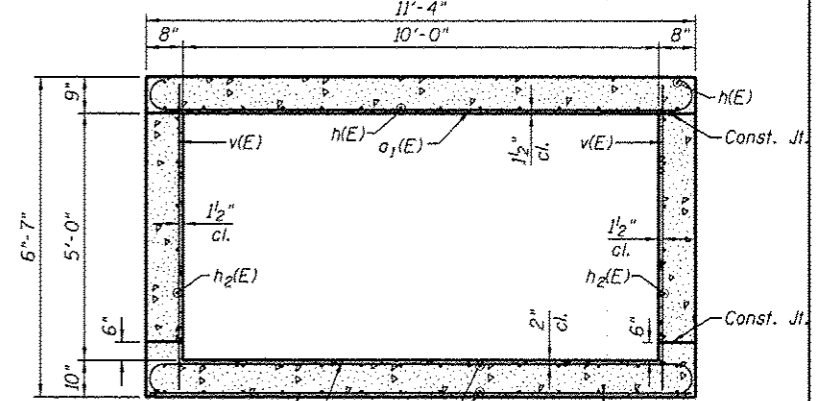


HALF LONG. SECT.

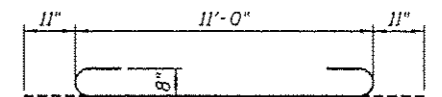
Dimensions at Rt. L's to \emptyset Roadway



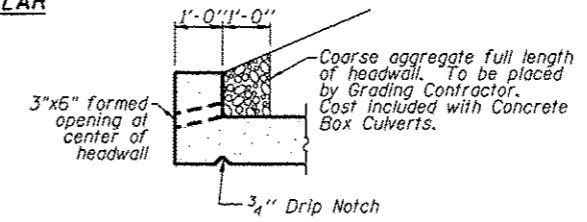
SECTION C-C
TYPICAL SECTION THRU PRECAST TO
CAST-IN-PLACE CONNECTION COLLAR
 (Typical For Both End Sections)



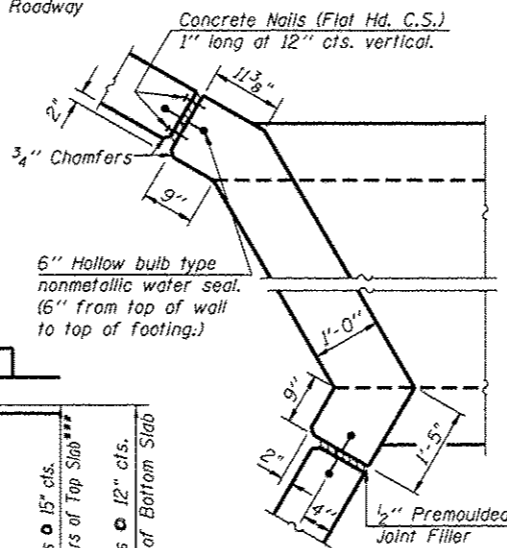
SECTION B-B
TYPICAL SECTION THRU
SOUTH CAST-IN-PLACE END SECTION



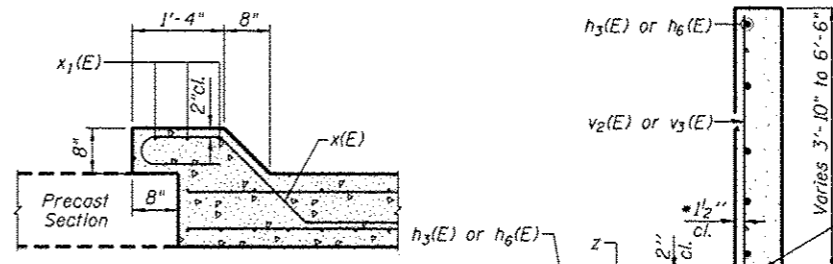
BAR a₁(E)



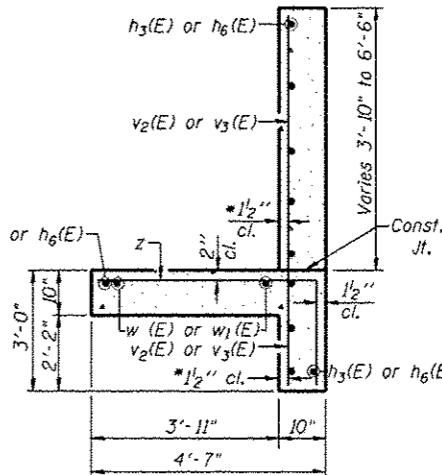
SECTION THRU HEADWALL
 (Down Stream End Only)



CORNER DETAIL

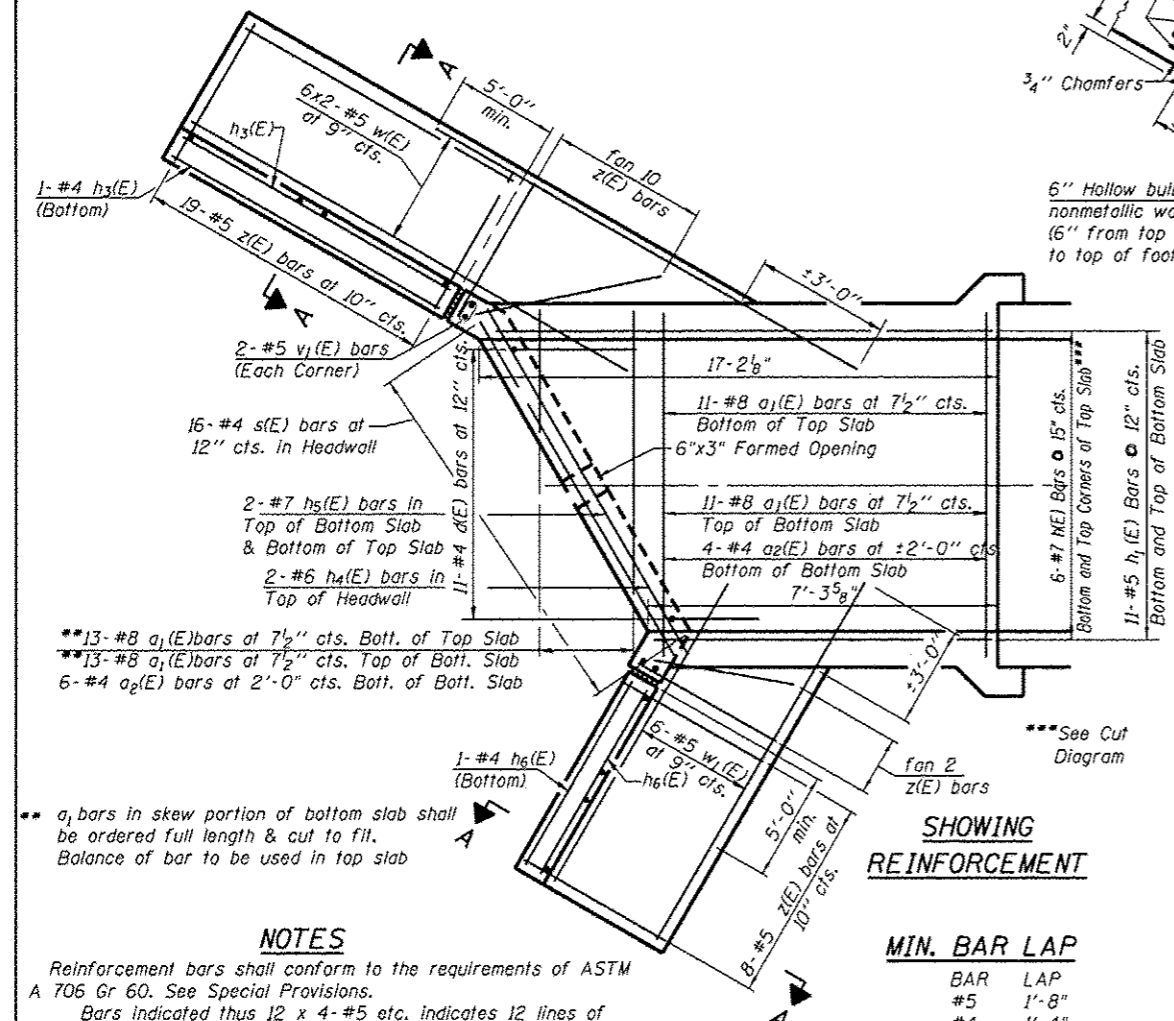


SECTION E-E
TYPICAL SECTION THRU PRECAST TO
CAST-IN-PLACE CONNECTION COLLAR
 (Typical For Both End Sections)



SECTION A-A

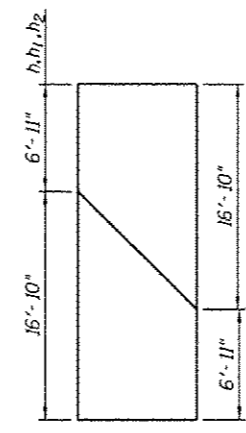
* v bars shall not be placed more than 1/2" cl. from back face of wingwall.



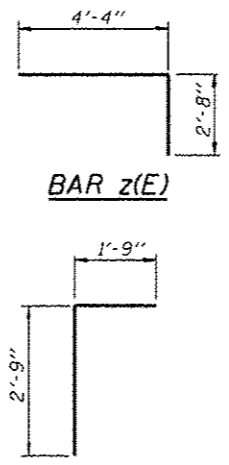
SHOWING REINFORCEMENT

MIN. BAR LAP

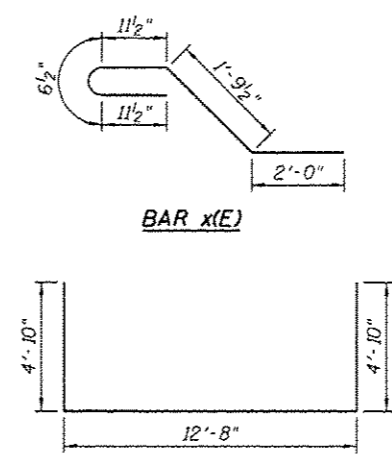
BAR	LAP
#5	1'-8"
#4	1'-4"



BAR h(E)
 Cut Diagram



BAR d(E)



BAR x₁(E)

DESIGN STRESSES

$f_y = 60,000 \text{ psi}$
 $f'_c = 3,500 \text{ psi}$
 Max. Soil Pressure under footing = 2400 psf

BILL OF MATERIAL
DOWNSTREAM END

Bar	No.	Size	Length	Shape
a ₁ (E)	35	#8	12'-10"	U
a ₂ (E)	10	#4	11'-0"	U
d(E)	11	#4	4'-6"	U
h(E)	6	#7	23'-9"	U
h ₁ (E)	11	#5	23'-9"	U
h ₂ (E)	8	#6	23'-9"	U
h ₃ (E)	12	#4	14'-9"	U
h ₄ (E)	3	#6	15'-0"	U
h ₅ (E)	4	#7	15'-8"	U
h ₆ (E)	12	#4	5'-9"	U
s(E)	16	#4	4'-9"	U
v(E)	34	#4	6'-3"	U
v ₁ (E)	4	#5	9'-2"	U
v ₂ (E)	23	#5	6'-8"	U
v ₃ (E)	21	#4	4'-7"	U
x(E)	46	#4	6'-3"	U
x ₁ (E)	6	#4	22'-4"	U
w(E)	12	#5	19'-0"	U
w ₁ (E)	6	#5	11'-0"	U
z(E)	39	#5	7'-0"	U
Concrete Box Culverts		Cu. Yd.	23.2	
Reinforcement Bars, Epoxy Coated		Pound	3850	

NOTES
 Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
 Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
 Reinforcement bars designated (E) shall be epoxy coated.

SSB-L-L 7-1-10

**END SECTION
GRATING DETAILS
US 20 /IL RTE 84
F.A.P. RTE 301 SECTION 29T-2
JO DAVIESS COUNTY
STA. 876 + 47**

GENERAL NOTES

Length and number of steel pipes shall be determined by the Contractor except as shown. All steel pipe shall be standard weight (Sch. 40) unless otherwise noted.

All components of the Steel Pipe Grate System shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable.

Fabrication of the Steel Pipe Grate System shall conform to the requirements in Section 505 of the Standard Specifications unless noted otherwise.

Structural steel shapes and plates shall conform to the requirements of Article 1006.04 of the Standard Specifications. Steel pipes shall conform to the requirements of ASTM A 53 (Type E or S), Grade B.

Anchor rods shall conform to the requirements of ASTM F1554, Grade 105. Anchor rods shall be drilled and epoxy grouted according to the requirements of Section 584 of the Standard Specifications. The chemical adhesive system shall be capable of achieving a minimum proof load of 5000 pounds and an ultimate shear capacity of 8000 pounds per anchor.

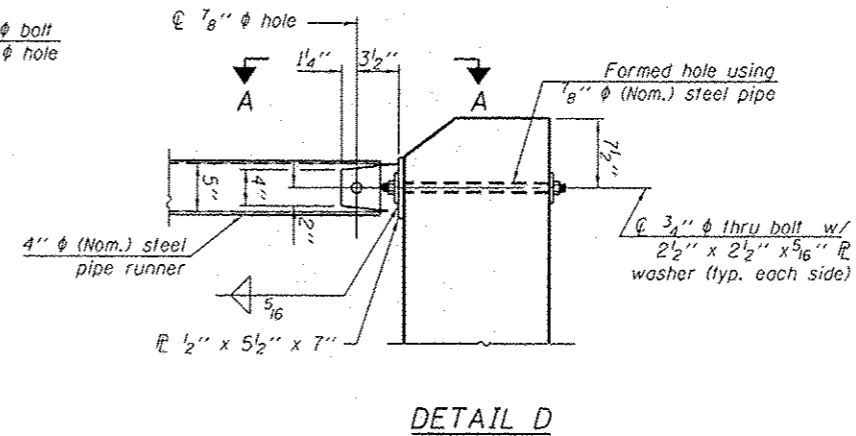
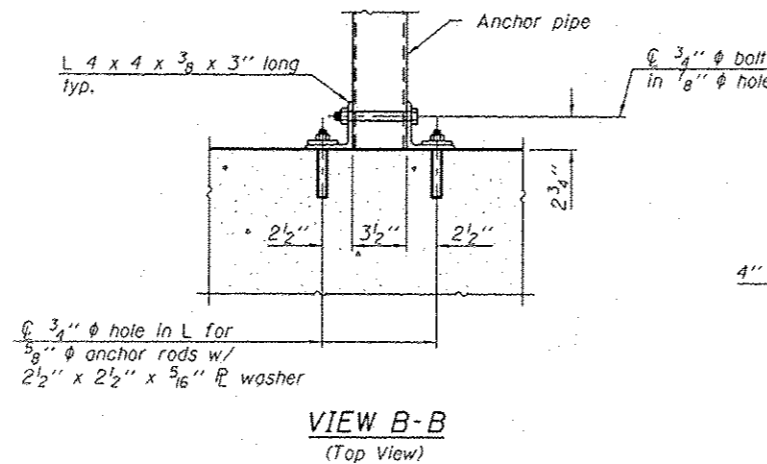
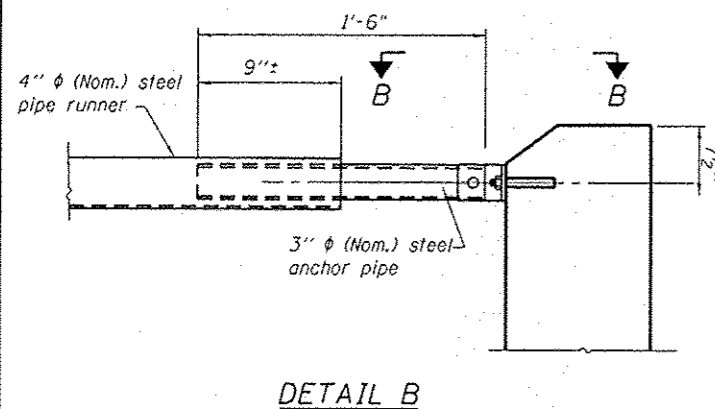
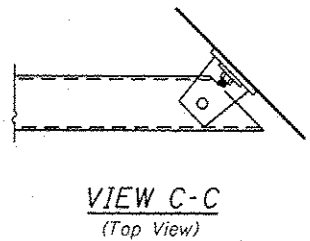
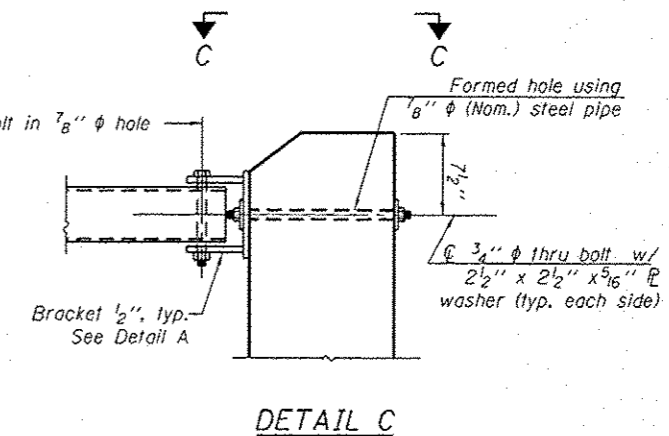
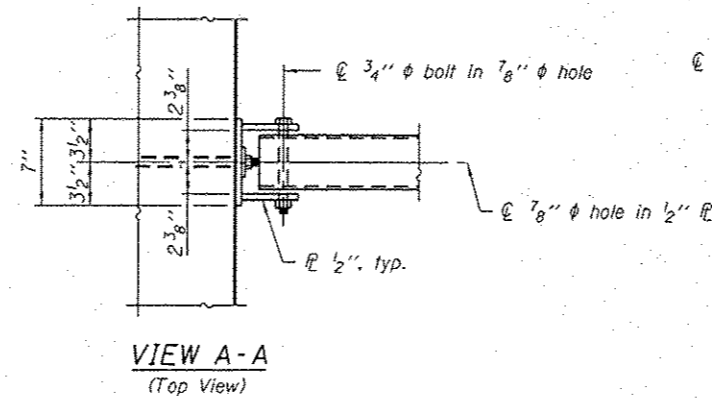
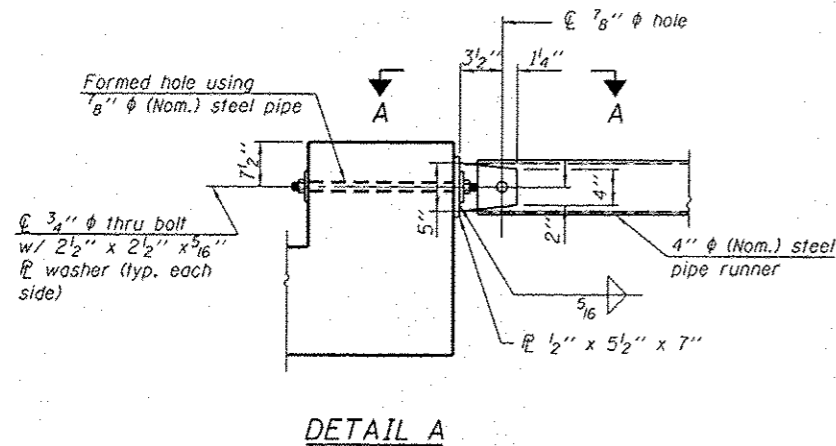
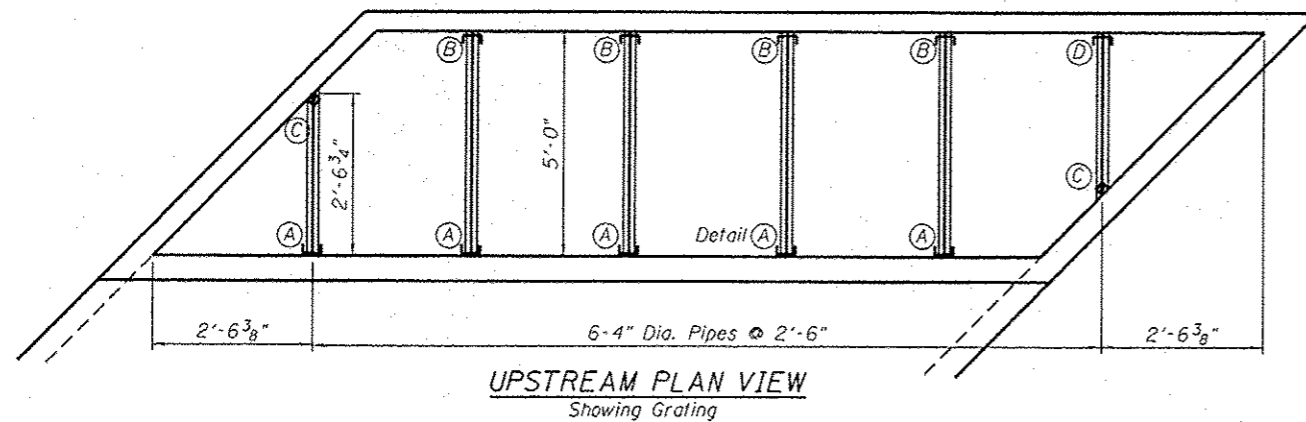
Bolts and thru bolts shall conform to the requirements of Article 1006.08 of the Standard Specifications except threaded rods conforming to the requirements of ASTM F1554, Grade 105 may be used for the thru bolts.

The minimum edge distance from the center of a hole to the free edge of a structural shape or plate shall be 1 1/2" unless noted otherwise.

Bolts and anchor rods shall be snug tightened by a few impacts of an impact wrench or the full force of a worker using an ordinary spud wrench.

All cost associated with fabricating, furnishing, and installing the Steel Pipe Grate System shall be included in the contract unit price per foot for **Transversible Pipe Grate (SPECIAL)**.

TRAVERSABLE



BILL OF MATERIAL

Item	Unit	Quantity
Transversible Pipe Grate	Foot	25

Transversible (SPECIAL)

2-16-11



USER NAME = Jamie Shaw	DESIGNED SB	REVISED -
WES JOB # = 2120114	DRAWN BEH	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED DB	REVISED -
PLOT DATE = 12/7/2012	DATE 12/07/2012	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**END SECTION GRATING DETAILS
STRUCTURE NO. 043-113, STA. 876 + 47**

SHEET 6 OF 7 SHEETS STA. 876+47

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	29T-2	JO DAVIESS	52	26
			CONTRACT NO. 64H17	
ILLINOIS FED. AID PROJECT				

TEMPORARY SHORING DETAILS
US 20 /IL RTE 84
F.A.P. RTE 301 SECTION 29T-2
JO DAVIESS COUNTY
STA. 876 + 47

SHORING NOTES

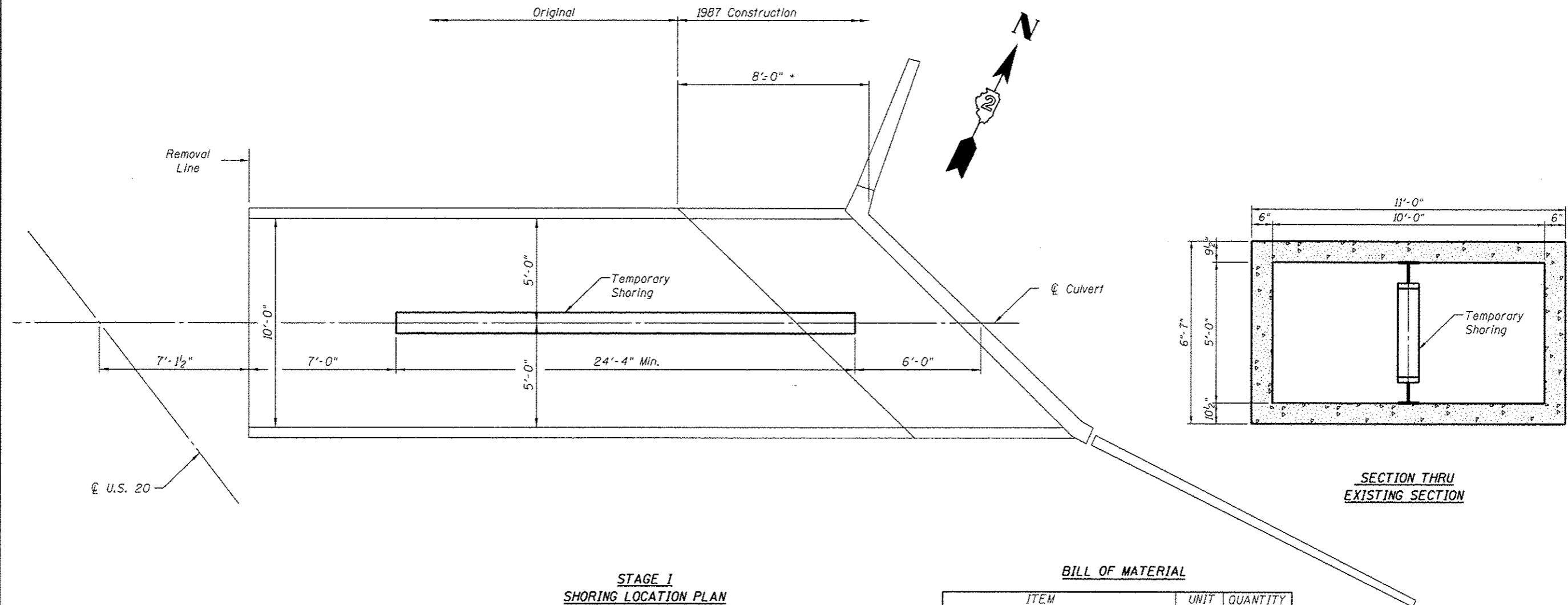
This work shall consist of furnishing, installing and subsequent removal of the temporary shoring according to the dimensions and details shown on the plans and according to the applicable portions of Section 512 of the Standard Specifications.

This work shall also include furnishing, installing and subsequent removal of all miscellaneous steel shapes, plates and connecting hardware when required to attach the shoring to the existing structure.

Temporary shoring minimum limits are shown in the plans. The contractor shall submit plans and details to the engineer for approval. The methods shown on the plans are for information only. The contractor may propose other means of supporting the sides of the excavation provided they are done so at no extra cost to the department. The calculations shall be prepared and sealed by an Illinois Licensed Structural Engineer. This approval will not relieve the contractor of responsibility for the safety of the shoring.

Any disturbance or damage to existing structures, utilities or other property, caused by the contractors operation, shall be repaired by the contractor in a manner satisfactory to the Engineer at no additional cost to the Department. The contractor shall be responsible for determining the appropriate equipment necessary to install the contractors approved design. The shoring shall remain in place until removal of the existing structure.

This work shall be paid for at the contract unit price per Each for TEMPORARY SHORING.



STAGE I
SHORING LOCATION PLAN

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
TEMPORARY SHORING	EACH	1

SECTION THRU
EXISTING SECTION



USER NAME - Jamie Shaw	DESIGNED - SB	REVISED -
WES JOB # - 2120114	DRAWN - BEH	REVISED -
PLOT SCALE - 5.0000' / 1"	CHECKED - DB	REVISED -
PLOT DATE - 12/7/2012	DATE - 12/07/2012	REVISED -

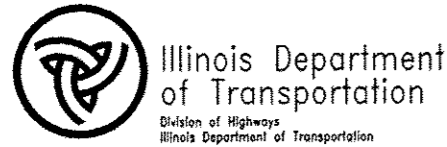
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY SHORING DETAILS STA. 876 + 47
STRUCTURE NO. 043-1113

SHEET 7 OF 7 SHEETS STA. 876+47

F.A.P. RTE. 301	SECTION 29T-2	COUNTY JO DAVIESS	TOTAL SHEETS 52	SHEET NO. 27
CONTRACT NO. 64H17			ILLINOIS FED. AID PROJECT	

SOIL BORING LOGS



SOIL BORING LOG

Page 1 of 1

Date 5/24/11

ROUTE FAP 301 DESCRIPTION P92-087-11 Box Culvert on US 20, .4 m. E. of S. Devils Ladder Road LOGGED BY W. Garza

SECTION 29T-2 LOCATION E. Galena Twp. - 36SE, SEC. , TWP. 28N, RNG. 1E

COUNTY Jo Daviess DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO.	D	B	U	M	Surface Water Elev.	ft	D	B	U	M
Station <u>876+50</u>	E	L	C	O	Stream Bed Elev.	<u>91.5</u>	E	L	C	O
BORING NO. <u>B-1</u>	P	O	S	I	Groundwater Elev.:		P	O	S	I
Station <u>876+54</u>	T	W	Qu	T	First Encounter	<u>93.5</u>	H	S	Qu	T
Offset <u>58.00ft Lt CL</u>	H	S			Upon Completion	<u>89.5</u>	(ft)	(/6")	(tsf)	(%)
Ground Surface Elev. <u>100.5</u> ft					After <u> </u> Hrs.	<u> </u> ft				

MEDIUM brown SILTY CLAY LOAM			0.5	20						
	98.50									
LOOSE tan weathered LIMESTONE		17								
	97.00	4								
		5								
VERY SOFT light brown SILTY LOAM		4				75.50	-25			
	94.50	3	0.2	33	Additional Rock Probe:					
		2	P		Sta. 877+00, 22' Rt CL					
					First Encounter: 87.0					
					Auger Refusal: 84.0					
					End of Boring					
MEDIUM tan weathered LIMESTONE		2								
	92.00	5								
		8								
HARD gray/tan CLAY LOAM		6								
	89.00	8	5.4	20						
		15	S							
VERY DENSE tan weathered LIMESTONE			00/2							
	87.00									
End of Boring										

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)



SOIL BORING LOG

Page 1 of 1

Date 5/24/11

ROUTE FAP 301 DESCRIPTION P92-987-11 Box Culvert on US 20, .4 m. E. of S. Devils Ladder Road LOGGED BY W. Garza

SECTION 29T-2 LOCATION E. Galena Twp. - 36SE, SEC. , TWP. 28N, RNG. 1E

COUNTY Jo Daviess DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

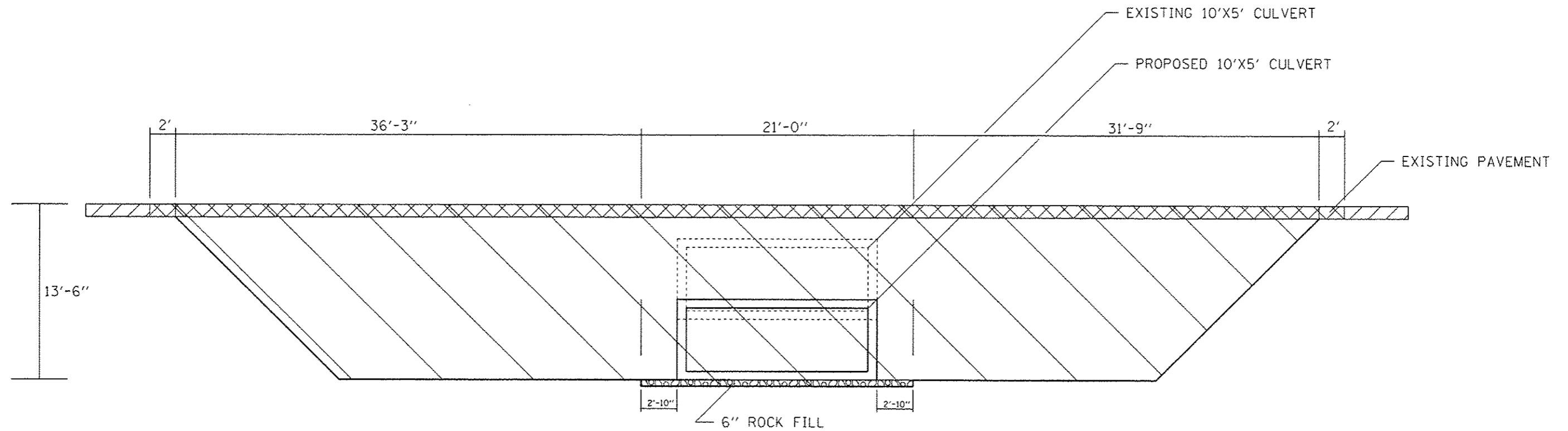
STRUCT. NO.	D	B	U	M	Surface Water Elev.	ft	D	B	U	M
Station <u>876+45</u>	E	L	C	O	Stream Bed Elev.	<u>91.5</u>	E	L	C	O
BORING NO. <u>B-2</u>	P	O	S	I	Groundwater Elev.:		P	O	S	I
Station <u>876+44</u>	T	W	Qu	T	First Encounter	<u>87.5</u>	H	S	Qu	T
Offset <u>22.00ft Rt CL</u>	H	S			Upon Completion	<u>Dry</u>	(ft)	(/6")	(tsf)	(%)
Ground Surface Elev. <u>99.5</u> ft					After <u> </u> Hrs.	<u> </u> ft				

MEDIUM brown SILTY CLAY LOAM			0.8	18						
	97.50									
No Recovery		3								
	96.00	3								
		2								
VERY LOOSE tan very moist weathered LIMESTONE		1				74.50	-25			
	93.50	2			Additional Rock Probe:					
		2			Sta. 877+85, 21' Lt CL					
					First Encounter: 84.8					
					Auger Refusal: 82.8					
					End of Boring					
STIFF tan SILTY LOAM		1								
	91.00	2	1.1	24						
		3	P							
MEDIUM dark gray SILTY CLAY LOAM with LIMESTONE fragments		1								
	88.00	2	0.5	30						
		4	B							
DENSE tan weathered LIMESTONE		3								
	86.00	7								
		27								
VERY DENSE tan weathered LIMESTONE			00/2							
	83.50									
End of Boring										

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)

FILE NAME:	USER NAME: hardnetbr	DESIGNED:	REVISED:	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr:\p\work\p\dot\hardnetbr\08277919\ND	082711-ant-biog.dgn	DRAWN:	REVISED:				301	29T-2	JO DAVIESS	52	28
Default	PLOT SCALE: 100.0000' / 1"	CHECKED:	REVISED:				CONTRACT NO. 64H17				
	PLOT DATE: Mon Dec 10 13:41:37 2012	DATE:	REVISED:				ILLINOIS FED. AID PROJECT				
SCALE:		SHEET OF SHEETS					STA. TO STA.				

TEMPORARY SOIL RETENTION SYSTEM

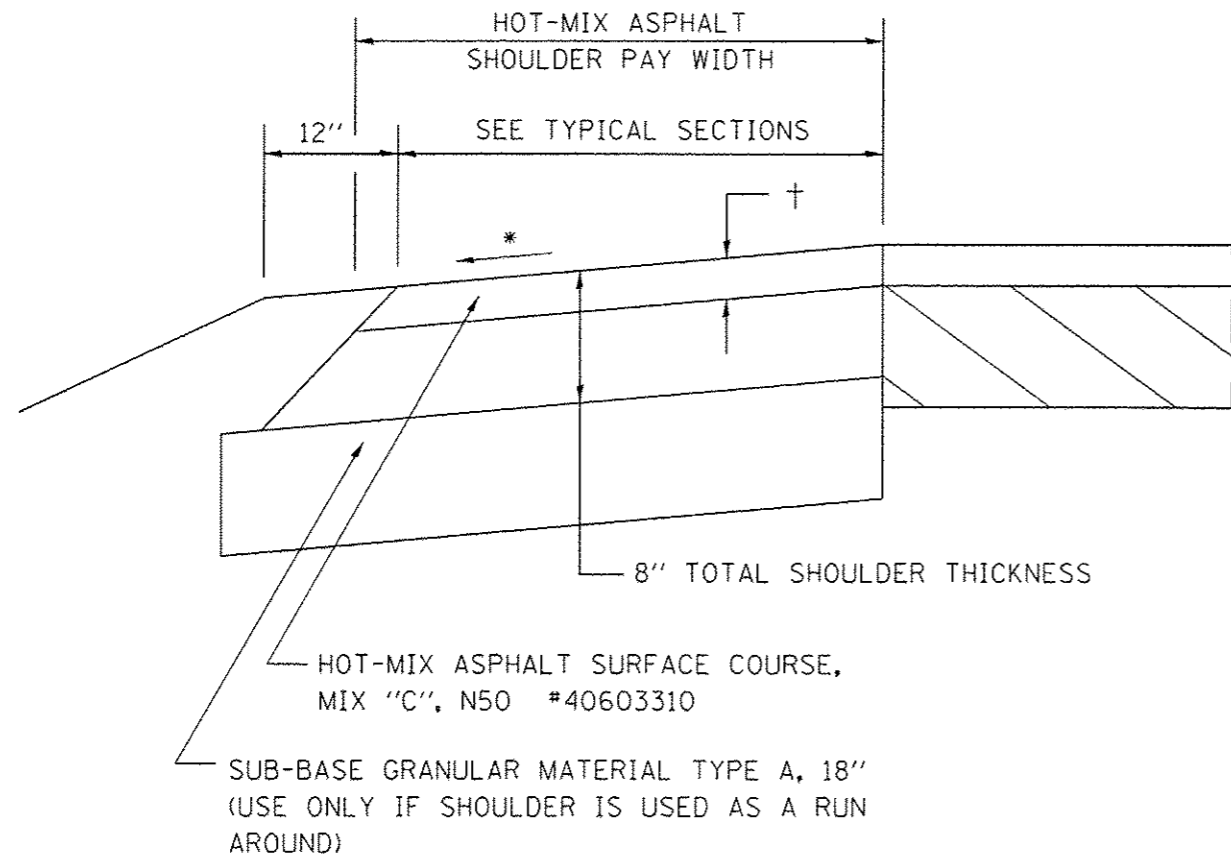


 CLASS C PATCH, TYPE IV, 10 INCH

 TEMPORARY SOIL RETENTION SYSTEM AREA

FILE NAME *	USER NAME * hardnetbr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US 20 /IL 84 TEMPORARY SOIL RETENTION SYSTEM DETAIL	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwwork\psidat\hardnetbr\602779\10	00711-sht-details.dgn	DRAWN -	REVISED -			301	29T-2	JO DAVIESS	52	29
	PLOT SCALE * 00.0000 ' / in.	CHECKED -	REVISED -					CONTRACT NO. 64H17		
	PLOT DATE * Mon Dec 18 13:47:59 2012	DATE -	REVISED -			SCALE: SHEET OF SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT		

HOT-MIX ASPHALT SHOULDER DETAIL



† = SEE TYPICAL SECTIONS
FOR THICKNESS

GENERAL NOTES

THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310 AND SQUARE YARD FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED.

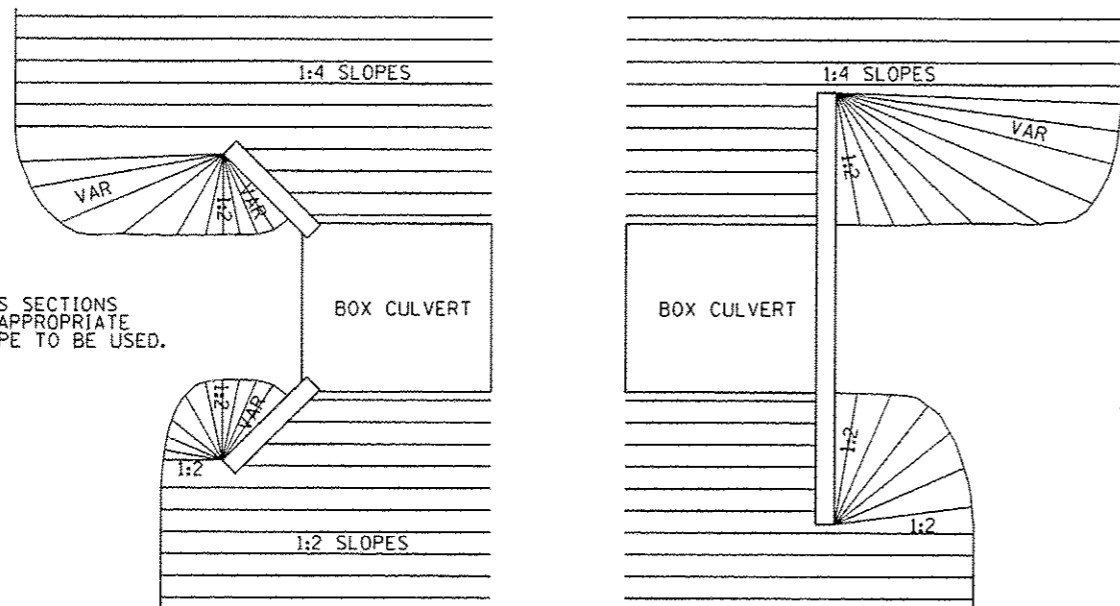
USE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310. WHEN RESURFACING EXISTING HOT-MIX ASPHALT SHOULDERS. THE THICKNESS IS SHOWN ON THE TYPICAL SECTIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310.

REMOVAL OF MATERIAL FOR PLACEMENT OF THE HOT-MIX ASPHALT SHOULDER TO BE PAID FOR IN UNITS FOR EXCAVATING AND GRADING EXISTING SHOULDERS OR IN CUBIC YARDS FOR EARTH EXCAVATION OR EARTH EXCAVATION WIDENING.

- 4% WHEN MAINLINE IS ON TANGENT. FOR CROSS SLOPE ON SUPERELEVATION SECTION, SEE HIGHWAY STANDARD 482001 OR 482006.

FILE NAME =	USER NAME = hardmettr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HOT-MIX ASPHALT SHOULDER DETAIL	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\p\dot\hardmettr\082779\9.0	08711-shr-cover.dgn	DRAWN -	REVISED -			301	29T-2	JO DAVIESS	52	30	
Default	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -			SCALE:		SHEET OF SHEETS		STA. TO STA.	CONTRACT NO. 64H17
	PLOT DATE = Mon Dec 18 13:33:18 2012	DATE -	REVISED -								ILLINOIS FED. AID PROJECT

GRADING AROUND WINGWALLS

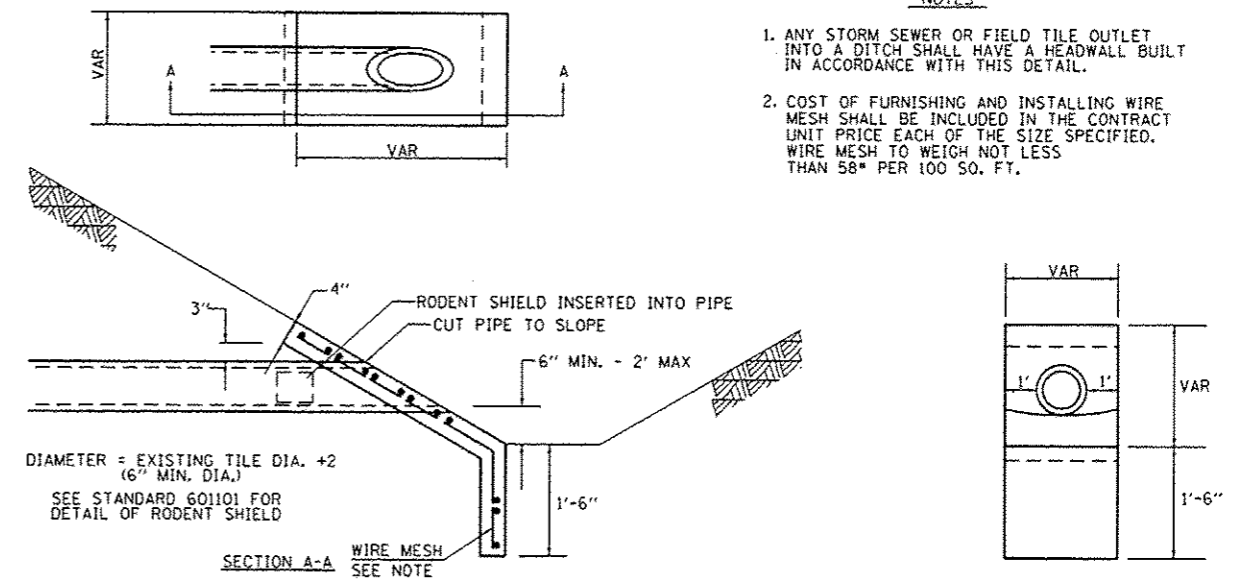


NOTES
SEE CROSS SECTIONS FOR THE APPROPRIATE FRONTSLOPE TO BE USED.

5-27-09

GRADING AROUND WINGWALLS 20.4

CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS



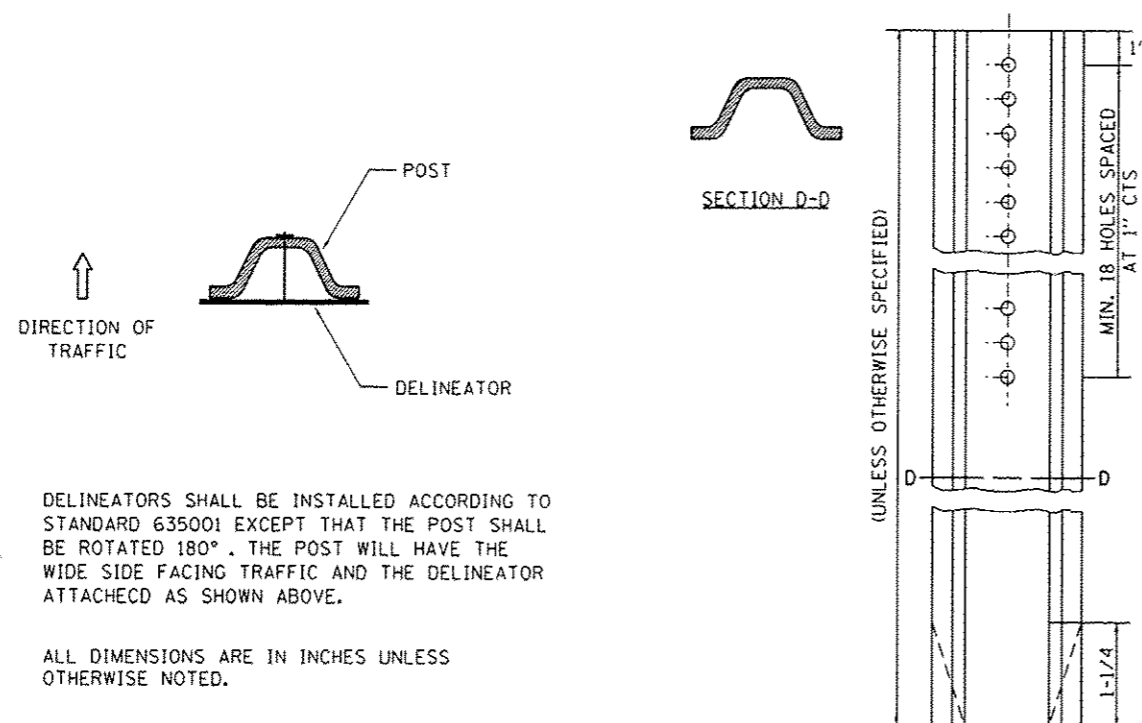
NOTES

1. ANY STORM SEWER OR FIELD TILE OUTLET INTO A DITCH SHALL HAVE A HEADWALL BUILT IN ACCORDANCE WITH THIS DETAIL.
2. COST OF FURNISHING AND INSTALLING WIRE MESH SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE EACH OF THE SIZE SPECIFIED. WIRE MESH TO WEIGH NOT LESS THAN 58# PER 100 SQ. FT.

REVISED - 10-09-12

CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 28.4

DELINEATOR AND POST ORIENTATION



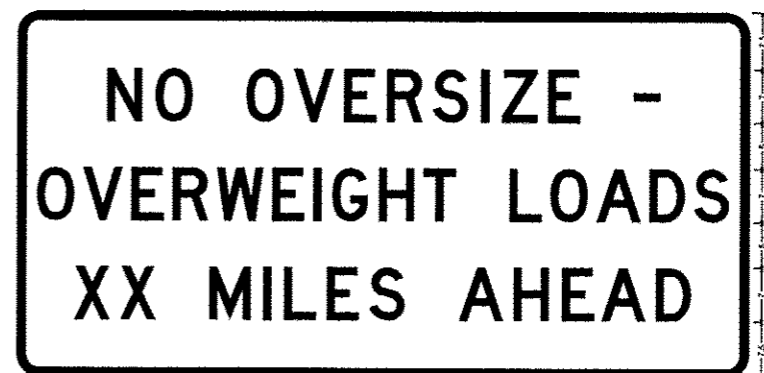
DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180°. THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE DELINEATOR ATTACHED AS SHOWN ABOVE.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 10-03-11

DELINEATOR AND POST ORIENTATION 37.4

ROAD CLOSED TO OVERSIZED LOADS



Permit Loads - Loads Over 12 Feet 3.0' Radius, 1.3' Border, Black on Orange.
(NO OVERSIZE - O; OVERWEIGHT LOADS) O 85% spacing; (XX MILES AHEAD) D.
Table of letter and object sets.

W	0	V	1	A	5	1	4	1	2	1	1	0	1	1
11.7	10.7	10.7	20.4	28.2	42.8	42.8	42.4	24.4	10.7	10.7	10.8	10.8	10.8	10.8
0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7.0	8.8	10.0	20.4	28.2	23.4	38.8	41.3	47.4	33.2	24.5	18.9	75.6	87.5	88.7
7.6	13.9	25.3	25.3	25.1	68.4	82.0	57.8	85.1	71.4	78.9	82.7			

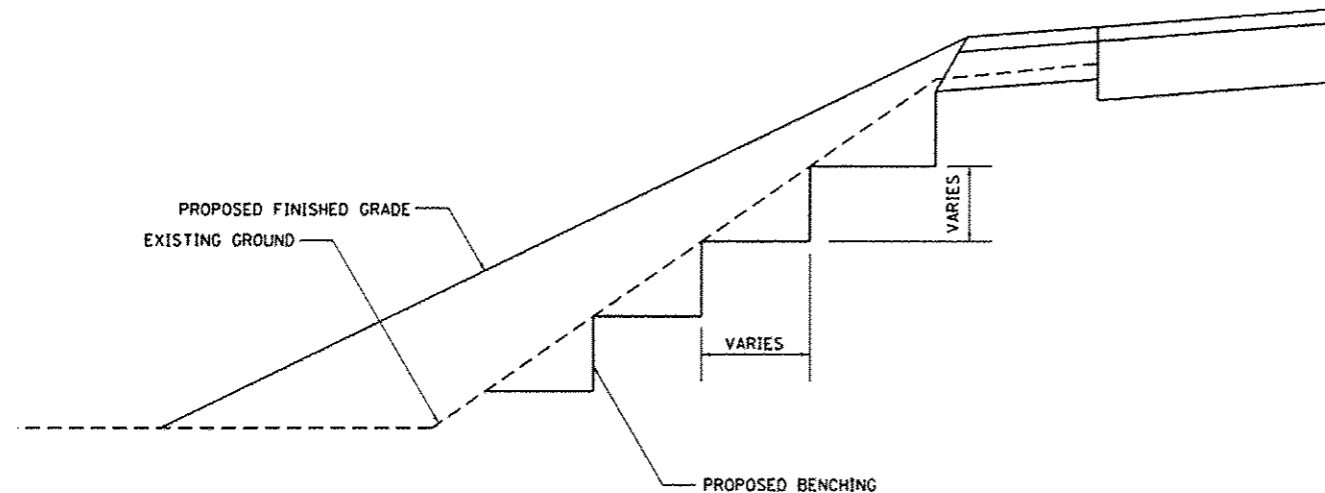
All work to furnish and install these signs shall be included in the cost of the Traffic Control Standards and shall not be paid for separately.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 3-11-09	REGION 2 / DISTRICT 2 STANDARD	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -		301	29T-2	JO DAVIESS	52	31
REVISED -		SCALE: 100,0000 / 1	SHEET NO. OF SHEETS		CONTRACT NO. 64HI7	
REVISED -		STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		

ROAD CLOSED TO OVERSIZED LOADS 40.4

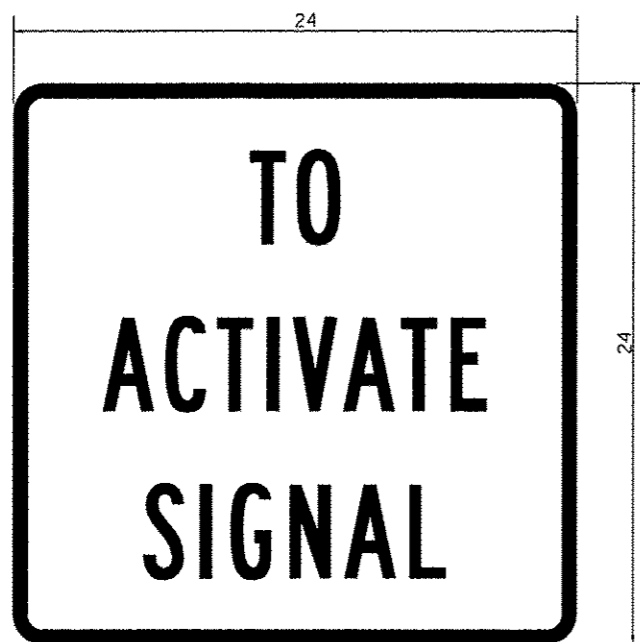
TYPICAL BENCHING ON EXISTING EMBANKMENT



REVISED - 2-22-06

TYPICAL BENCHING ON EXISTING EMBANKMENT 50.4

STOP LINE SIGN FOR TEMPORARY SIGNALS



SIZE: 24 x 24
 4 CAPITAL LETTERS - BLACK
 1/2 BORDER - BLACK
 WHITE REFLECTIVE - TYPE AP
 HIGH INTENSITY PRISMATIC SHEETING

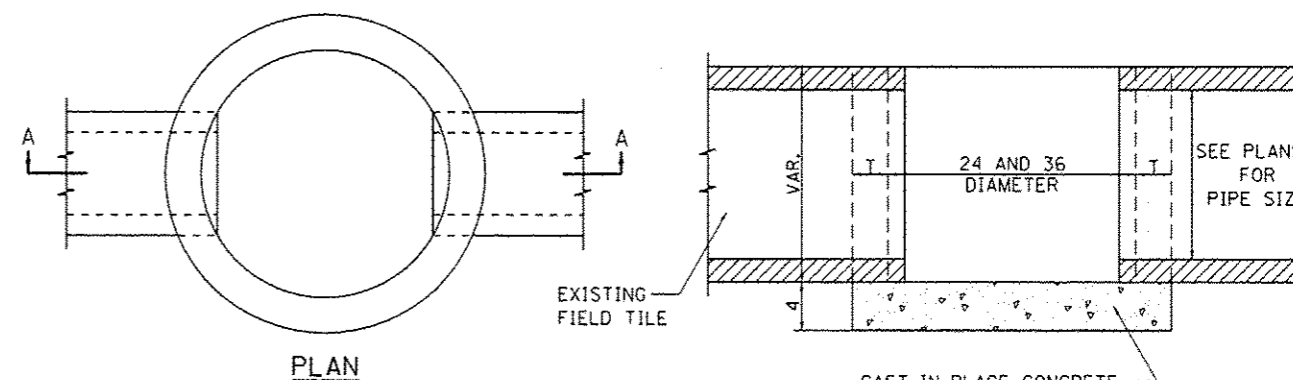
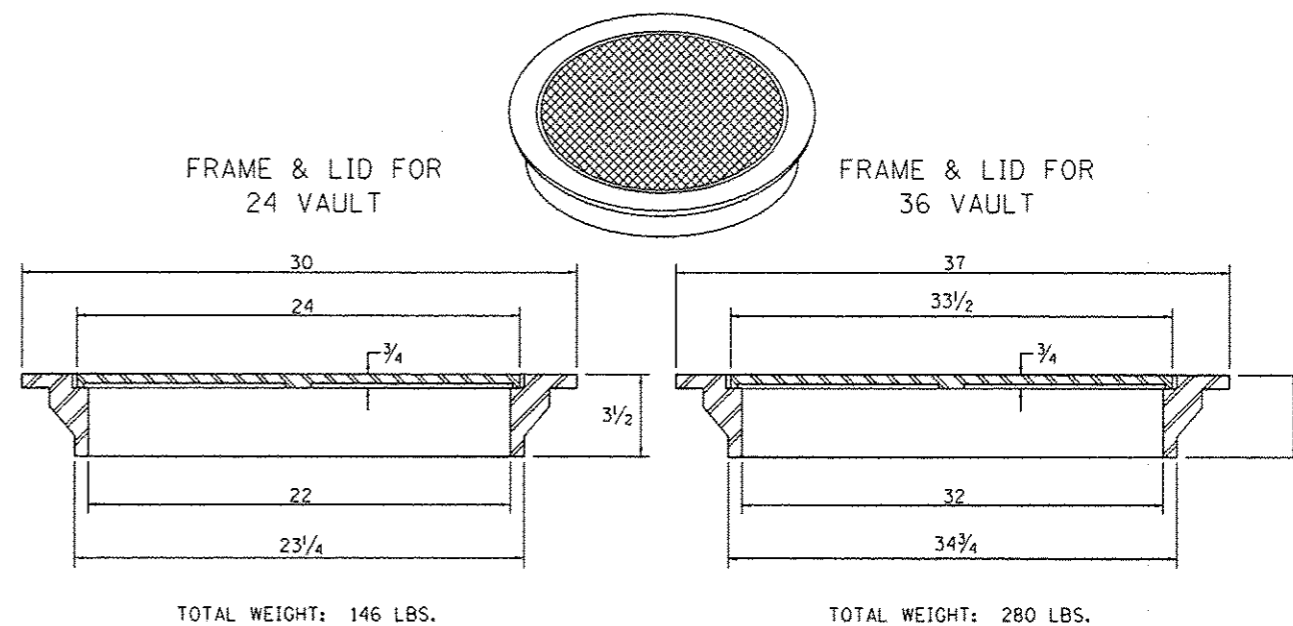
GENERAL NOTE:

THIS SIGN SHALL BE INSTALLED AT THE STOP LINE AS DIRECTED BY ENGINEER.
 ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 10-11-11

STOP LINE SIGN FOR TEMPORARY SIGNALS 99.4

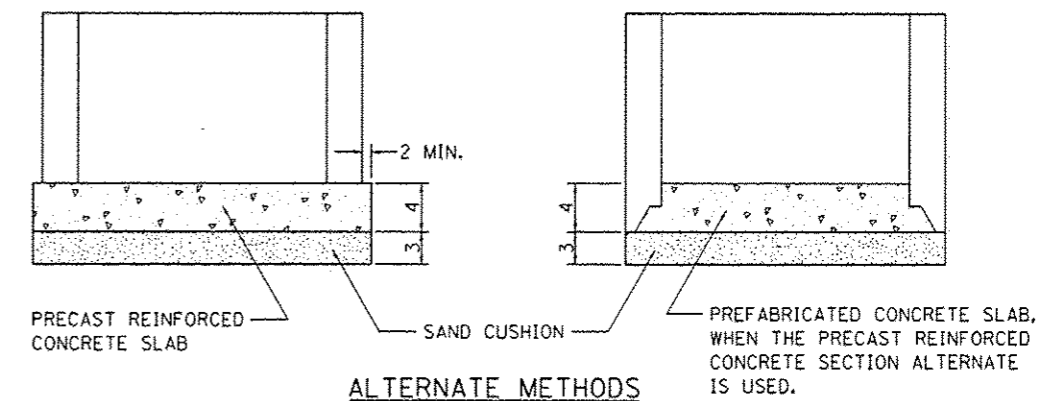
FIELD TILE JUNCTION VAULTS 24 AND 36 DIA.



ALTERNATE MATERIALS FOR WALLS	T
BRICK MASONRY	8
CAST-IN-PLACE CONCRETE	6
CONCRETE MASONRY UNIT	5
PRECAST REINFORCED CONCRETE SECTION	3

NOTE: THE FRAME AND LID IS REQUIRED ON ALL JUNCTION VAULTS.

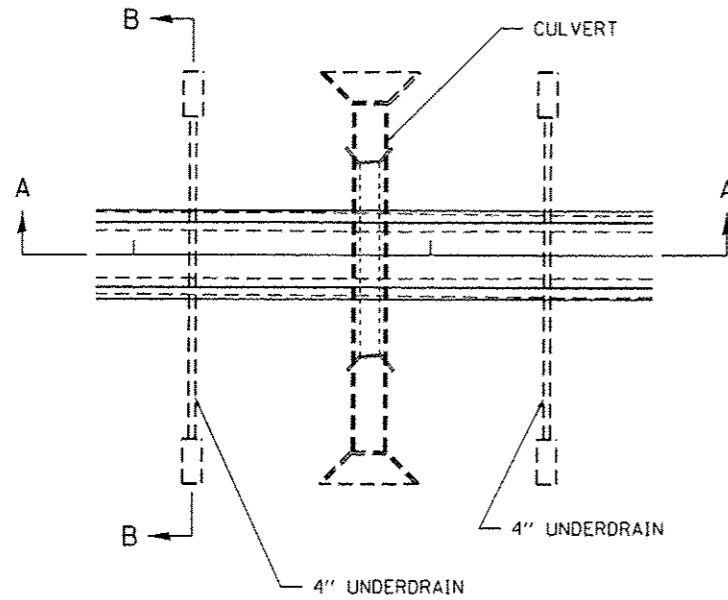
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.



REVISED - 10-14-11	REGION 2 / DISTRICT 2 STANDARD	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -		301	29T-2	JO DAVIESS	52	32
REVISED -		CONTRACT NO. 64H17				
REVISED -		SCALE: 100.0000	SHEET NO. OF SHEETS		STA. TO STA.	FED. ROAD DIST. NO.

FIELD TILE JUNCTION VAULTS 24 AND 36 DIA. 30.2

UNDERDRAIN FOR ACROSS ROAD (AR) CULVERTS



NOTES:

IN SAG CONDITIONS INSTAL PIPE UNDERDRAINS ON BOTH SIDES OF CULVERT.

ON HIGHWAY GRADES GREATER THAN 2% INSTAL PIPE UNDERDRAINS ON THE HIGH SIDE OF THE CULVERT.

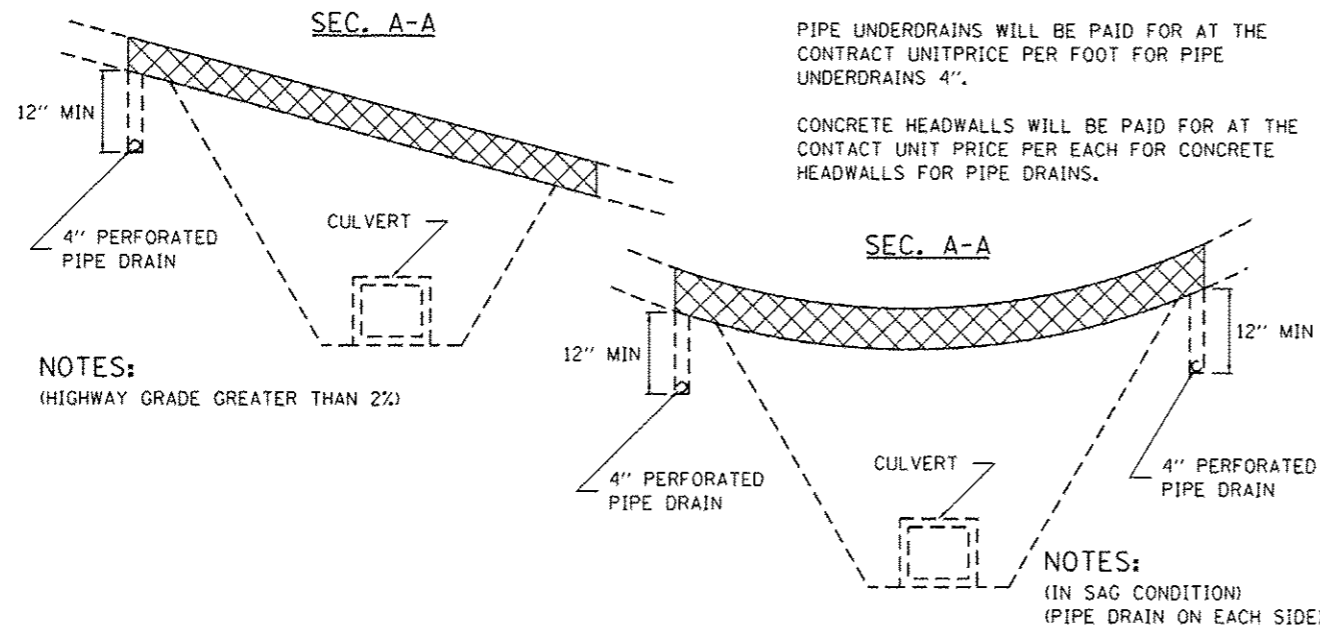
THIS WORK SHALL BE COMPLETED ACCORDING TO SECTION 601 OF THE STANDARD SPECIFICATION.

THE UNDERDRAIN 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 STANDARDS 601101).

THE UNDERDRAIN SHALL BE A MINIMUM OF 12" BELOW THE EXISTING PAVEMENT.

THE TRENCH FOR THE UNDERDRAIN SHALL BE BACKFILLED WITH CA7 OR CA16.

THE TRENCH SHALL BE WRAPPED USING A FABRIC ENVELOPE MEETING THE REQUIREMENTS OF ARTICLE 1080.05 OF THE STANDARD SPECIFICATIONS. FABRIC ENCASING THE PIPE SHALL BE ELIMINATED.

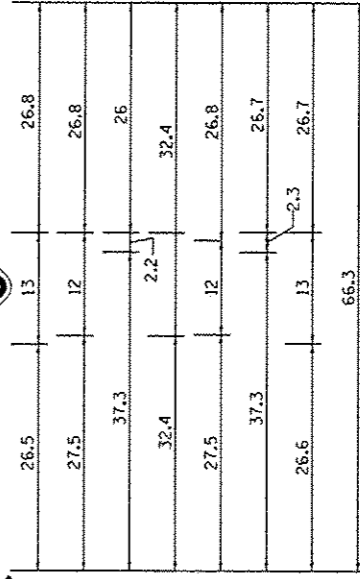
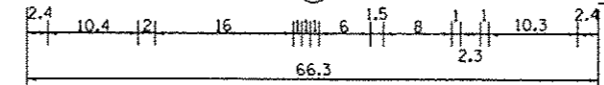
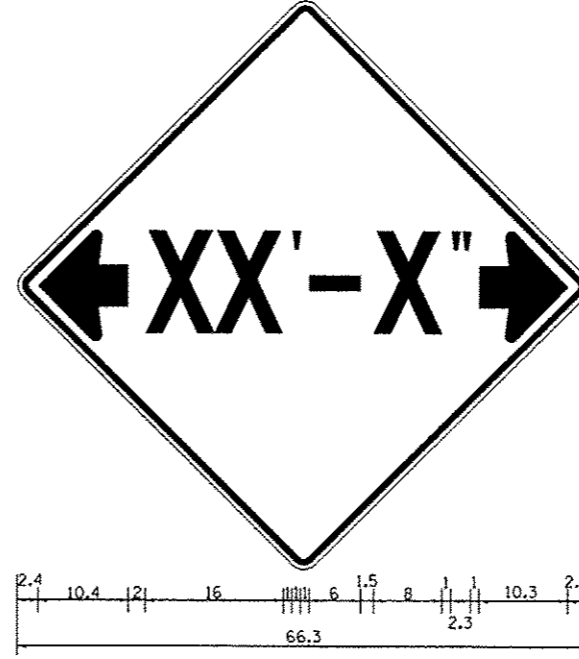


NOTES:
(HIGHWAY GRADE GREATER THAN 2%)

NOTES:
(IN SAG CONDITION)
(PIPE DRAIN ON EACH SIDE)

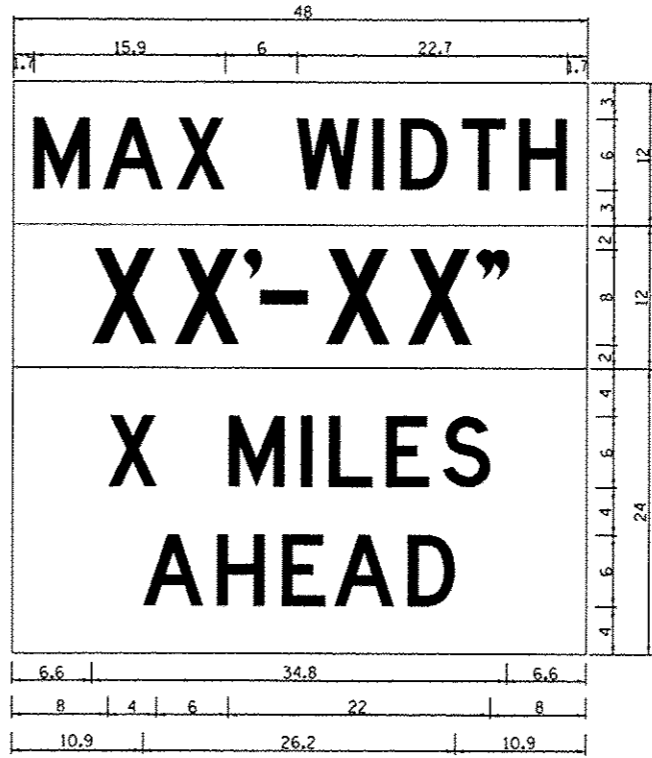
REVISED - 7-05-12

INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES)



NOTES

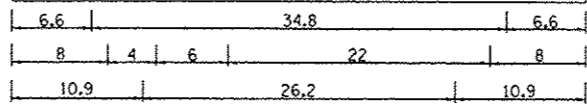
W12-2 - Horizontal Clearance Sign
48.0" across sides, 1.9" Radius,
0.8" Border, 0.5" Indent, Black on
Orange; Standard Arrow Custom
10.4" X 8.1" 180° Black II Inch
D Series Lettering; Standard Arrow
Custom 10.4" X 8.1" 0°



W12-1103 (Width is 80);
No border, Black on White;
[MAX WIDTH] D;

No border, Black on Orange;
[XX'-XX''] D;

No border, Black on White;
[X MILES] D; [AHEAD] D;

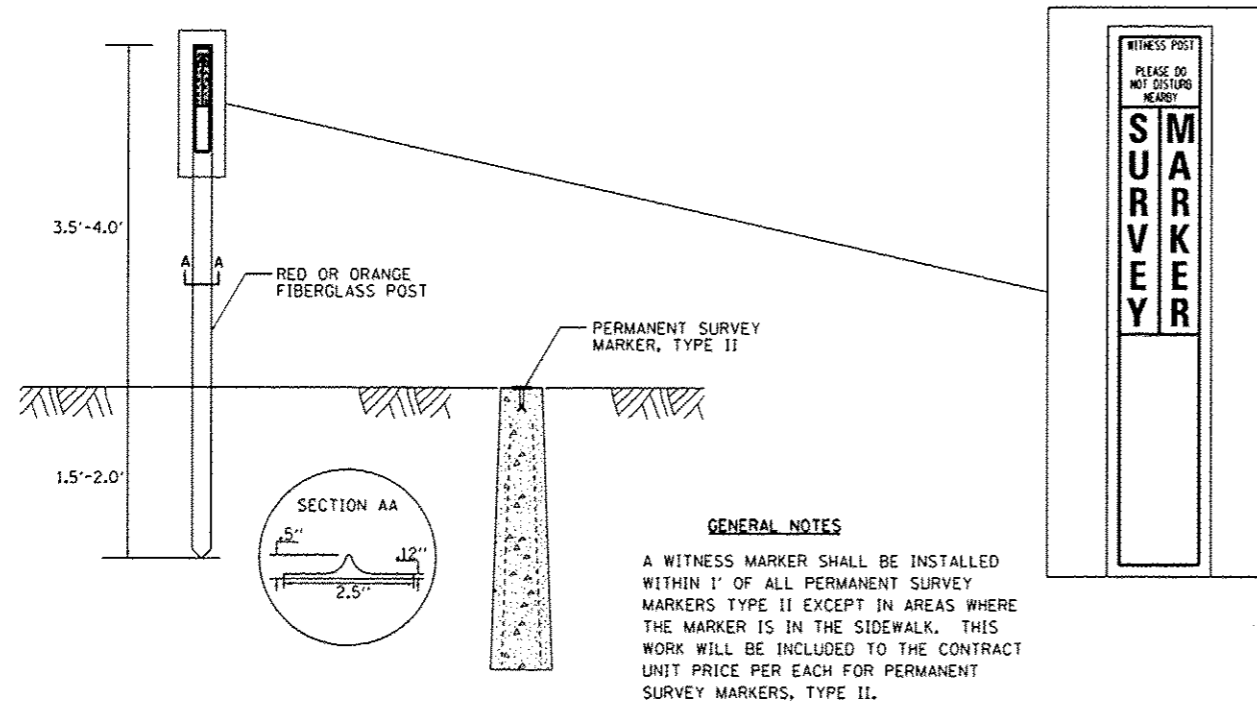


All work to furnish and install these signs shall be included in the cost of the Traffic Control Standards and shall not be paid for separately.

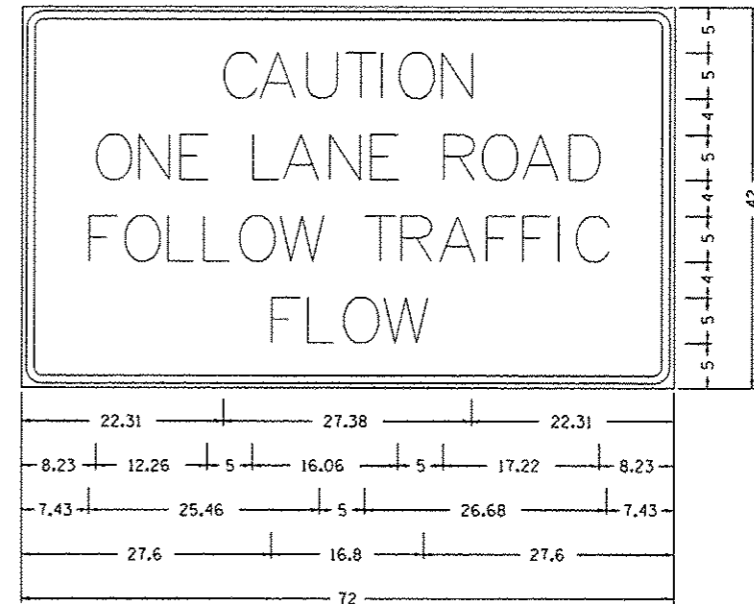
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 5-15-09	REGION 2 / DISTRICT 2 STANDARD	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
REVISED -		301	29T-2	JO DAVIESS	52	33	
REVISED -		SCALE: 1/8" = 1'-0"	SHEET NO. OF SHEETS		STA. TO STA.	CONTRACT NO. 64H17	
REVISED -		FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

WITNESS MARKER FOR PERMANENT SURVEY MARKERS, TYPE II



ENTRANCE SIGN FOR USE WITH TEMPORARY SIGNALS



Type AA Fluorescent Orange Sheeting :
 2.25" Radius, 0.88" Border, 0.50" Indent, Black on Orange;
 [CAUTION] D; [ONE LANE ROAD] D;
 [FOLLOW TRAFFIC] D; [FLOW] D

PERMANENT SURVEY MARKERS, TYPE II

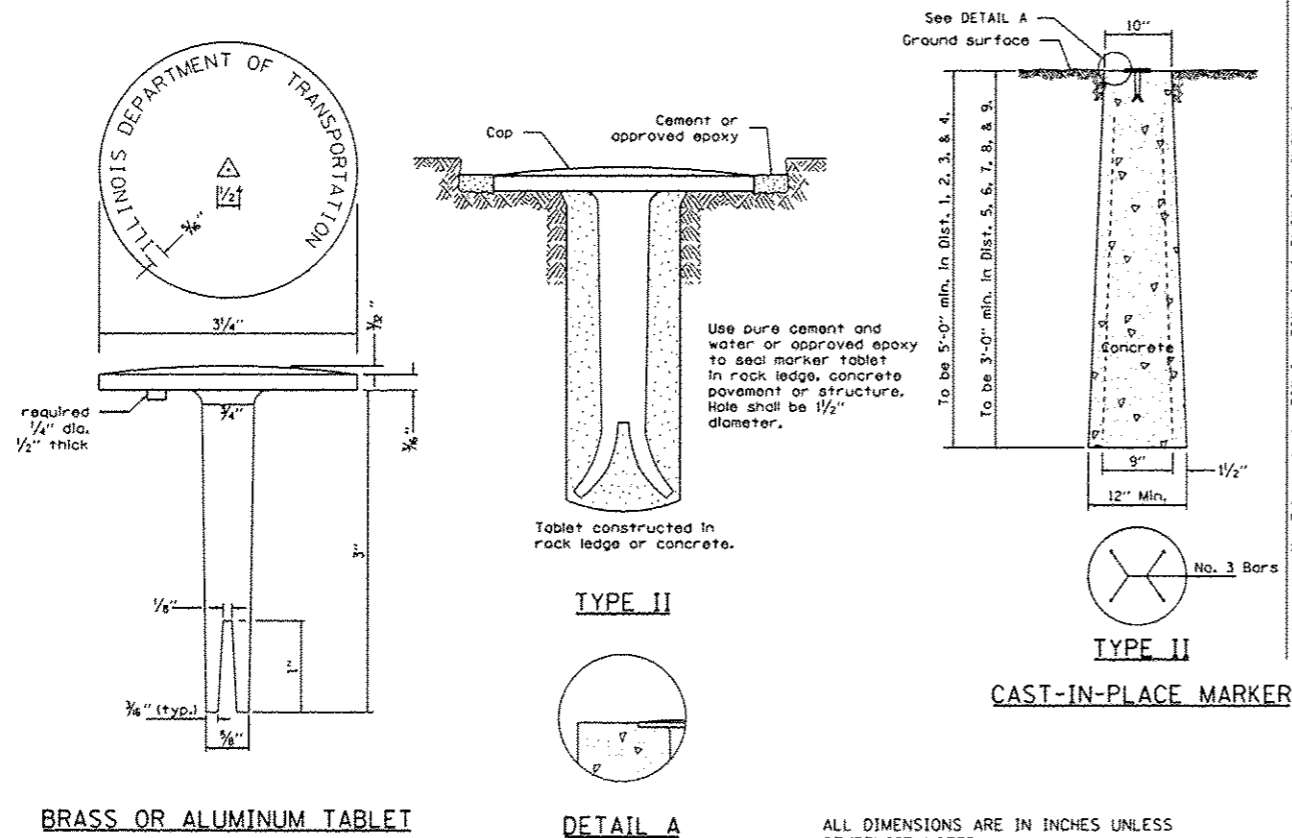


Table Of Widths And Spaces

22.31	C	3.36	A	0.62	4.18	0.94	U	3.36	0.94	T	3.04	0.94	I	0.78	1.17	O	3.52	1.17	N	3.36	22.31
8.23	O	3.51	N	1.17	3.36	1.18	E	3.04													
	L	3.05	0.31	A	4.18	0.94	N	3.36	1.17	E	3.05										
	R	3.36	0.93	O	3.52	0.94	A	4.18	0.93	D	3.36	8.23									
7.43	F	3.04	0.94	O	3.52	1.17	L	3.04	0.94	L	3.05	0.94	O	3.51	0.94	W	4.37				
	T	3.05	0.94	R	3.36	0.94	A	4.18	0.93	F	3.05	0.94	F	3.04	0.94	I	0.78	1.18	C	3.35	7.43
27.60	F	3.05	0.94	L	3.04	0.94	O	3.52	0.93	W	4.38	27.60									

GENERAL NOTES

THIS SIGN SHALL BE INSTALLED AT ENTRANCES LOCATED BETWEEN THE TEMPORARY SIGNALS AS DIRECTED BY THE ENGINEER.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

THE COST TO FURNISH, INSTALL AND REMOVE THIS SIGN AT THE REQUIRED LOCATIONS SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 10-14-11

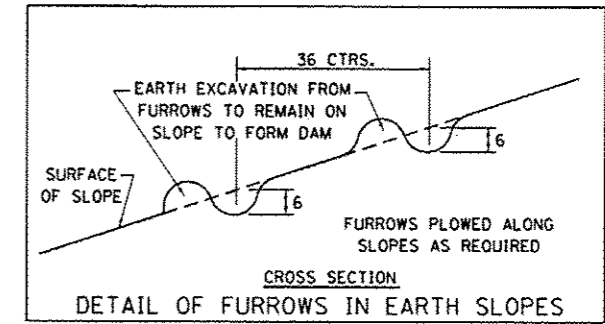
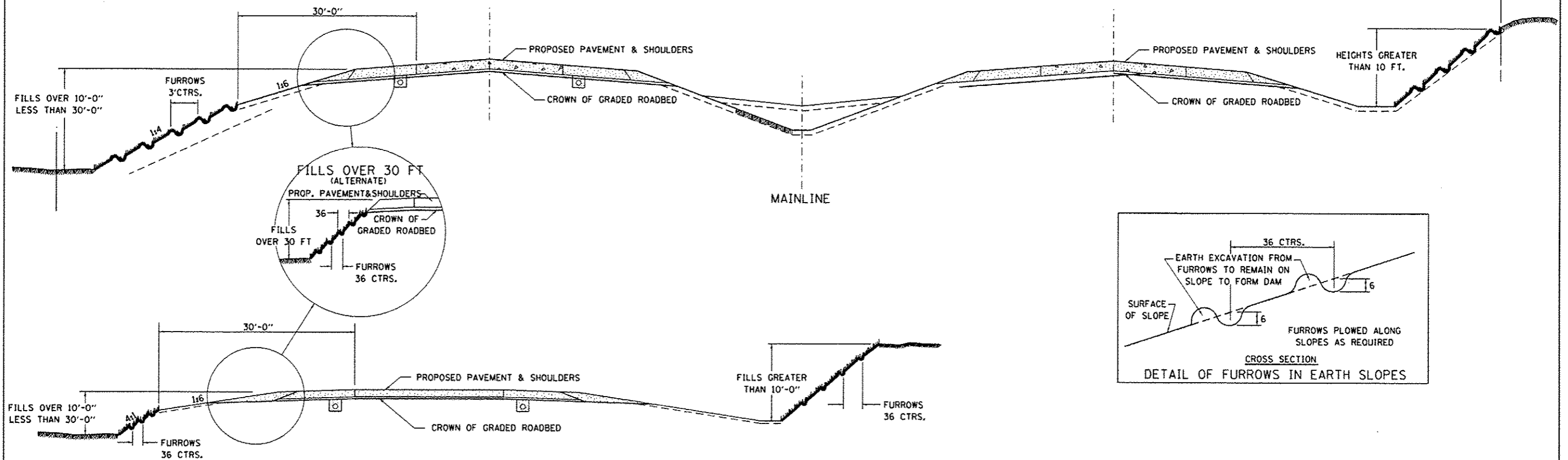
BRASS OR ALUMINUM TABLET

DETAIL A

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 10-14-11	REGION 2 / DISTRICT 2 STANDARD		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -			301	29T-2	JO DAVIESS	52	34
REVISED -			CONTRACT NO. 64H17				
REVISED -	SCALE: 100.0000	SHEET NO. OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	

TYPICAL FURROWED ROADWAY SLOPES



GENERAL NOTES

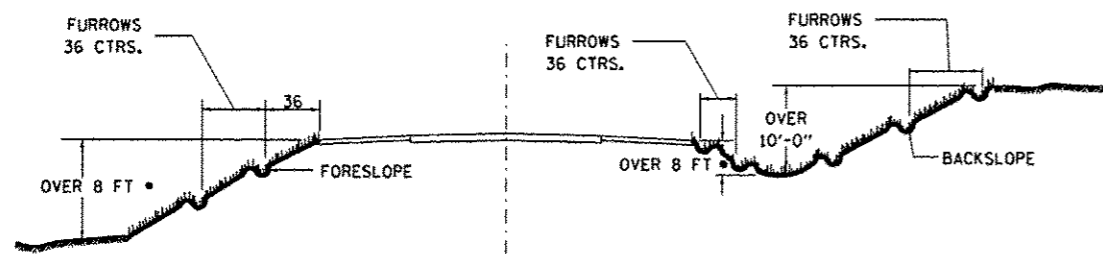
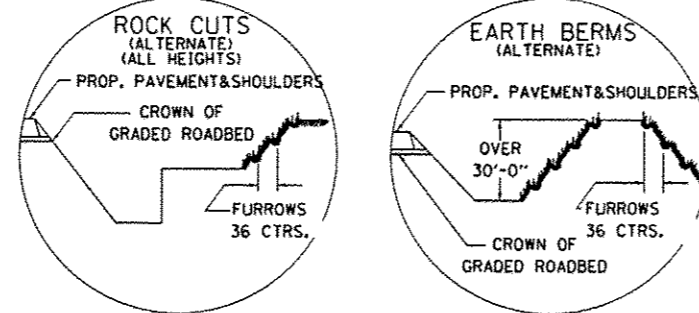
IN GENERAL, THE ENTIRE EARTH SURFACE WITHIN THE RIGHT-OF-WAY SHALL BE SEEDED AND MULCHED. NO AGRICULTURAL GROUND LIMESTONE SHALL BE APPLIED TO THE GRADED ROADBED.

FORESLOPES AND/OR BACKSLOPES 10 FT. OR LESS IN HEIGHT WILL NOT REQUIRE FURROWING UNLESS OTHERWISE NOTED IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

FORESLOPES AND/OR BACKSLOPES OVER 10 FT. IN HEIGHT SHALL BE FURROWED. THE OPERATION SHALL INCLUDE FINISHING THE SLOPES TO FINAL LINE AND GRADE, AS SHOWN ON THE CROSS SECTIONS BEFORE FURROWING IS DONE. FURROWS SHALL BE PLOWED ALONG A LEVEL LINE CONFORMING TO THE CONTOURS OF THE SLOPE. THE COST OF FURROWING SHALL BE CONSIDERED INCLUDED IN THE PROJECT COST AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

SEQUENCE AND OPERATION FOR SEEDING, MULCHING AND FURROWING OF ROADWAY SLOPES:

1. SPREAD FERTILIZER.
2. PERFORM THE OPERATION OF GROUND PREPARATION.
3. PLOW FURROWS.
4. PERFORM THE OPERATION OF SEEDING. THE SEED SHALL BE SOWN ON THE SURFACE OF THE PREPARED GROUND AFTER FURROWING.
5. THE OPERATION OF COVERING THE SEED, BY HARROWING OR OTHER MEANS, SHALL BE PERFORMED ONLY IF SO DIRECTED BY THE ENGINEER AND SHALL BE INCLUDED TO THE ITEM OF SEEDING.
6. SECTION 250 AND 251 OF THE STANDARD SPECIFICATIONS SHALL GOVERN THIS WORK EXCEPT AS NOTED HEREIN.



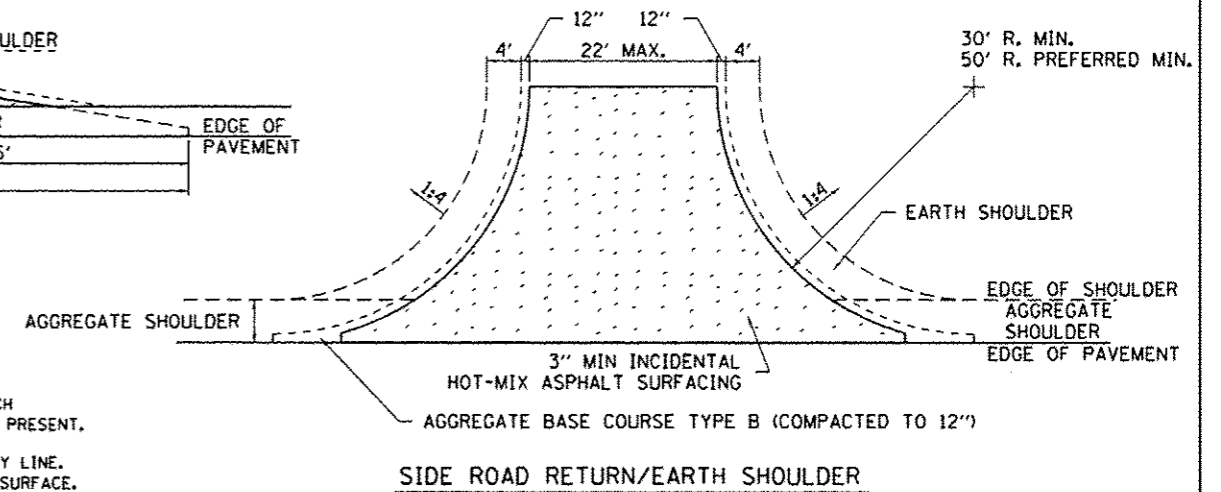
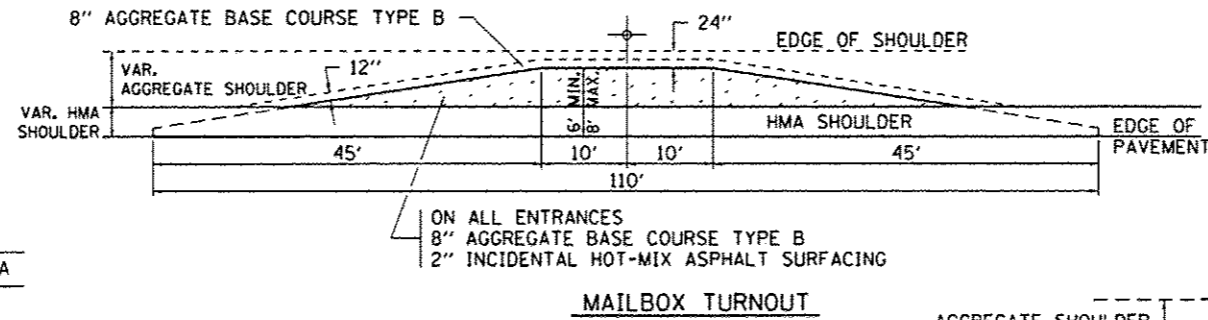
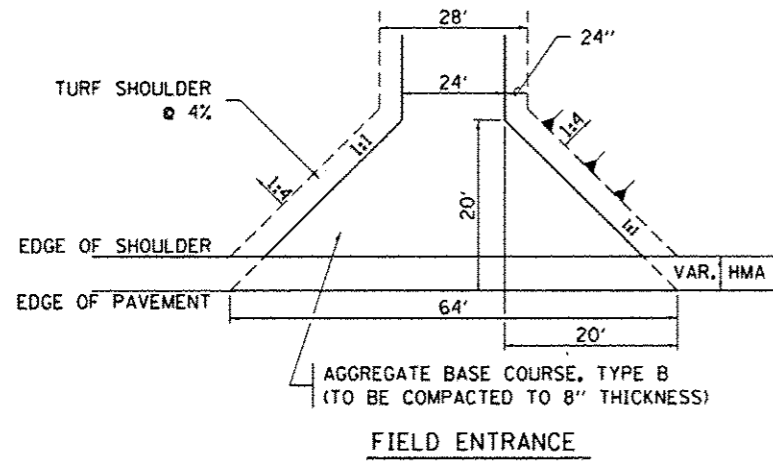
• IF FORESLOPES ARE SIMILAR TO MAINLINE OR RAMP CONFIGURATION, FURROW AS INDICATED FOR THOSE SLOPES.

CROSSROAD GRADE SEPERATIONS

ALL DIMENSIONS ARE IN INCHES
UNLESS OTHERWISE NOTED.

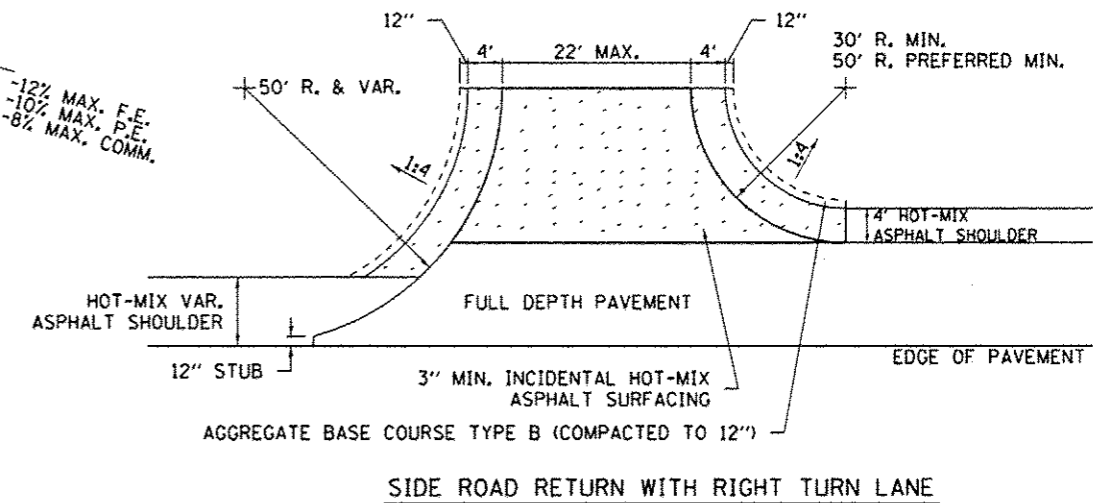
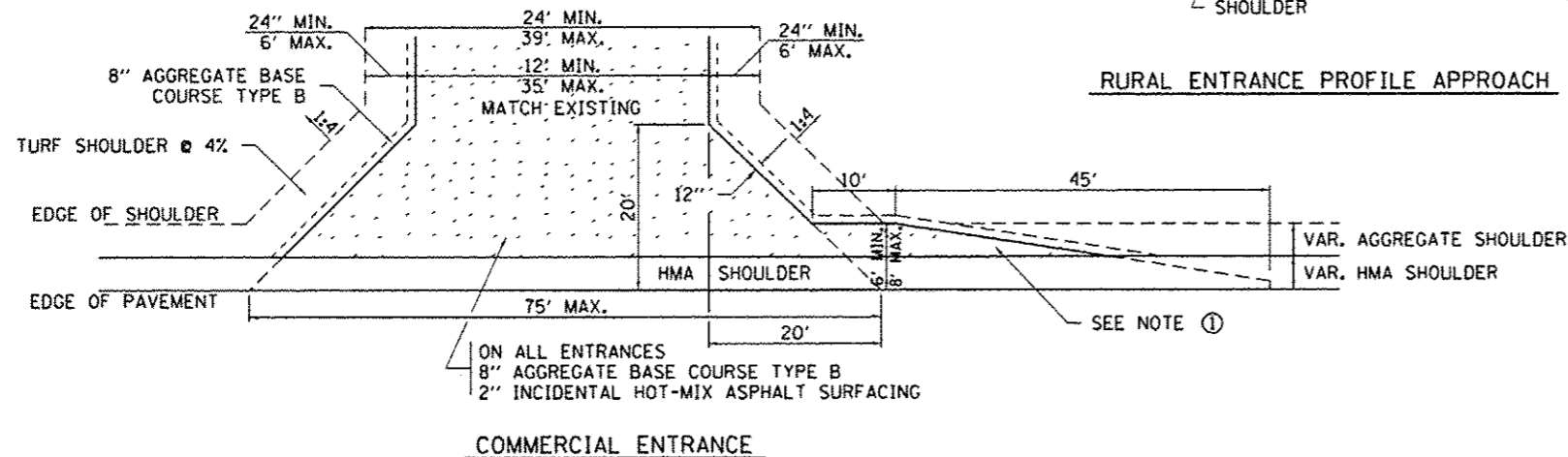
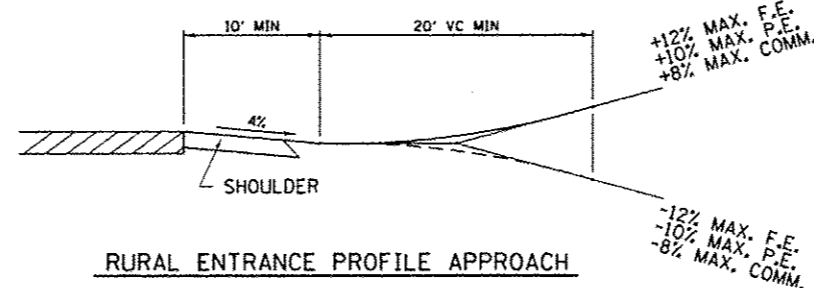
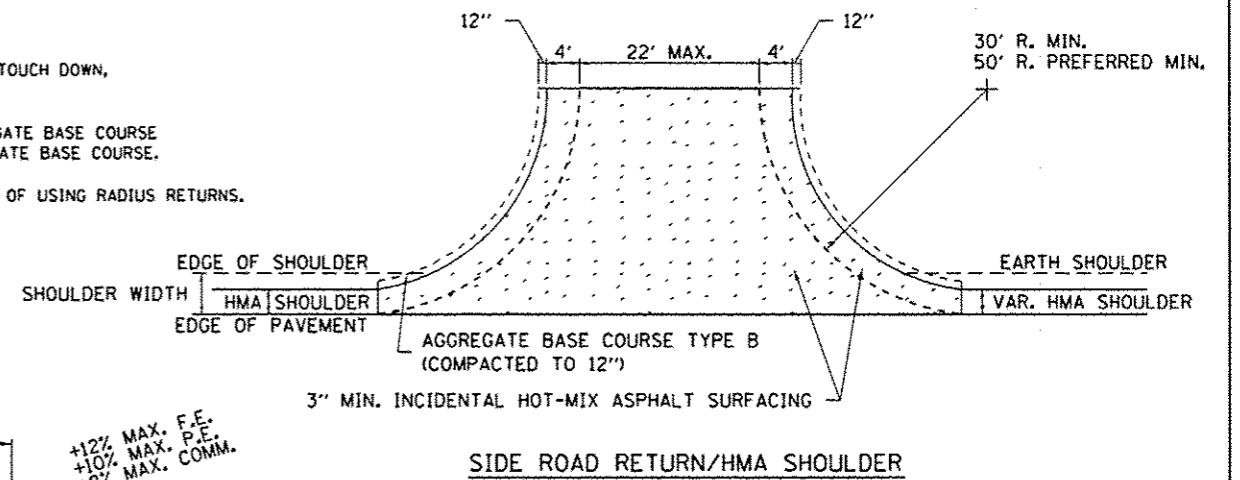
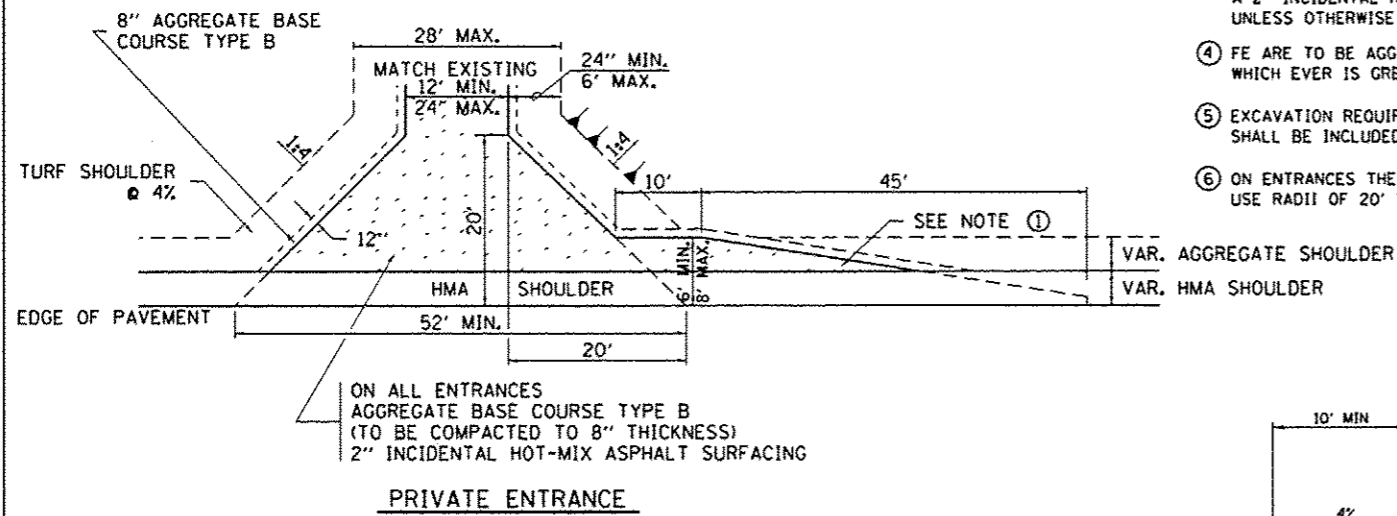
FILE NAME :	USER NAME : hardnetlb	DESIGNED -	REVISED - 10-17-11	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pwork\hardnetlb\08277919\080711-shr-cover.dgn		DRAWN -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	301	29T-2	JO DAVIESS	52 35
		CHECKED -	REVISED -										CONTRACT NO.	64H17
		DATE -	REVISED -										FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

HOT-MIX ASPHALT APPROACHES AND MAILBOX RETURNS



NOTE

- ① TURNOUTS ARE TO BE CONSTRUCTED ON THE APPROACH SIDE OF ALL PE & CE REGARDLESS IF A MAILBOX IS PRESENT.
- ② ALL PE & CE ARE TO BE SURFACED TO RIGHT OF WAY LINE. AREA BEHIND RIGHT OF WAY SHALL MATCH EXISTING SURFACE.
- ③ ALL PE & CE TO BE CONSTRUCTED WITH AN 8" AGGREGATE BASE COURSE, TYPE B AND WITH A 2" INCIDENTAL HOT-MIX ASPHALT SURFACING, UNLESS OTHERWISE NOTED.
- ④ FE ARE TO BE AGGREGATE TO RIGHT OF WAY OR TOUCH DOWN, WHICH EVER IS GREATEST.
- ⑤ EXCAVATION REQUIRED FOR PLACEMENT OF AGGREGATE BASE COURSE SHALL BE INCLUDED IN THE COST OF THE AGGREGATE BASE COURSE.
- ⑥ ON ENTRANCES THE CONTRACTOR HAS THE OPTION OF USING RADIUS RETURNS. USE RADII OF 20' TO 60'.



FILE NAME :	USER NAME : hardnetbr	DESIGNED -	REVISED - 12-07-10
c:\pwwork\pudat\hardnetbr\082779191	08711-sht-cover.dgn	DRAWN -	REVISED -
	PLOT SCALE * 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE * Mon Dec 10 13:33:20 2012	DATE -	REVISED -

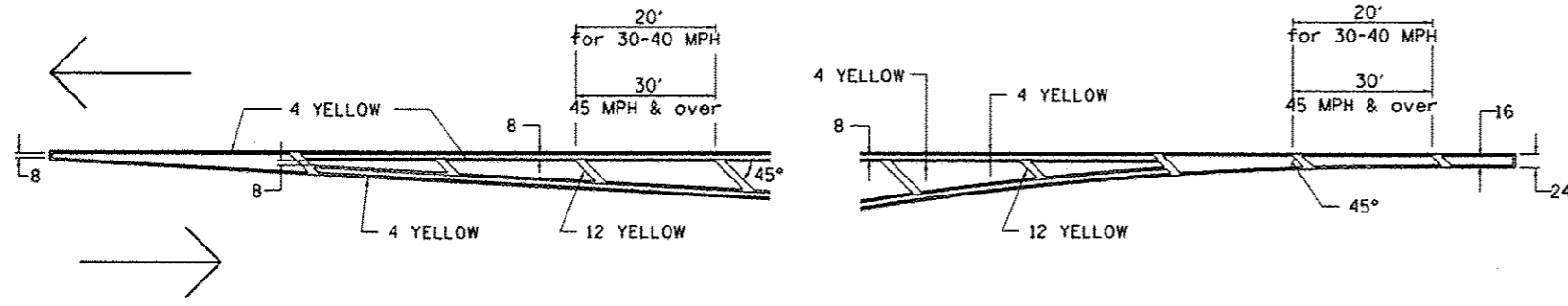
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

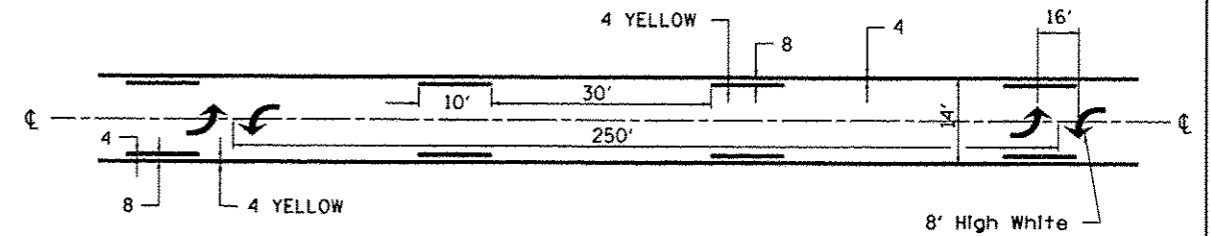
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	29T-2	JO DAVIESS	52	36
SCALE:		FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 64H17

TYPICAL PAVEMENT MARKINGS

TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

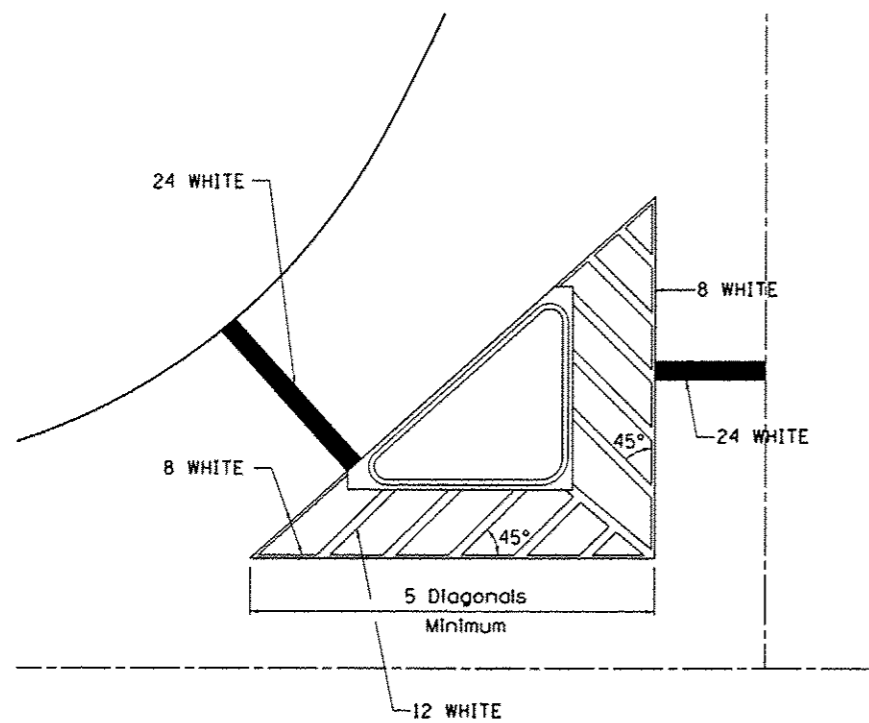


MEDIAN PAVEMENT MARKING

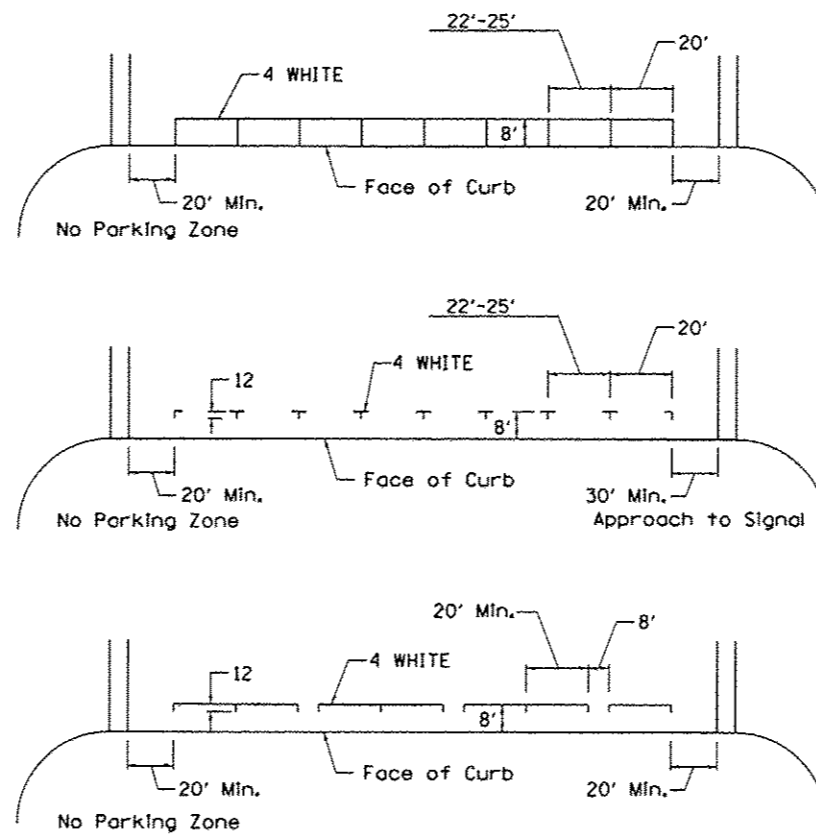


•• ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

TYPICAL ISLAND OFFSET SHOULDER WIDTH

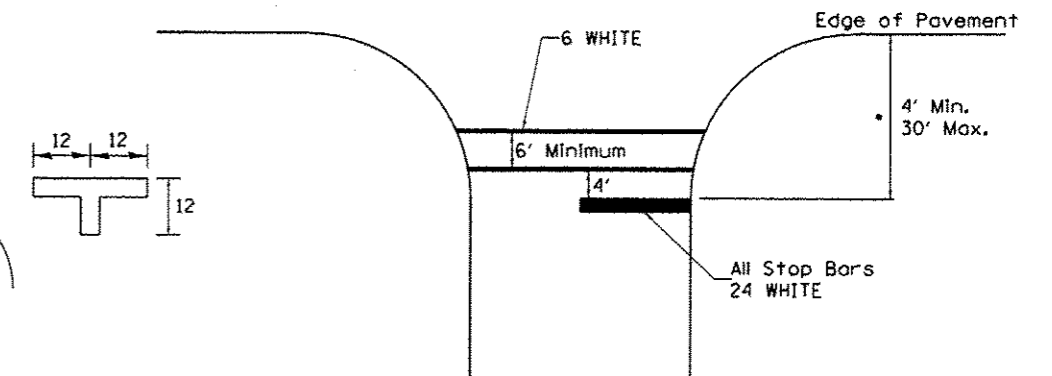


TYPICAL PARKING SPACING



STANDARD CROSSWALK MARKING

See Schedules for Locations

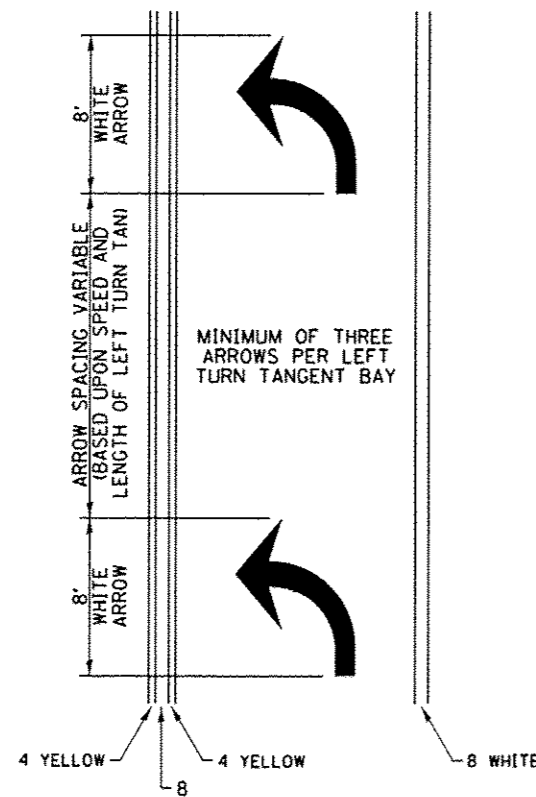


• Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

FILE NAME :	USER NAME : hardnetbr	DESIGNED -	REVISED - 3-05-12	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pvidot\hardnetbr\08277919\08277911-gh-cover.dgn	DRAWN -	REVISED -	301			29T-2	JO DAVIESS	52	37	
PLOT SCALE : 100.0000 / in.	CHECKED -	REVISED -	CONTRACT NO. 64H17							
PLOT DATE : Mon Dec 18 13:33:20 2012	DATE -	REVISED -	FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT							

TYPICAL PAVEMENT MARKINGS

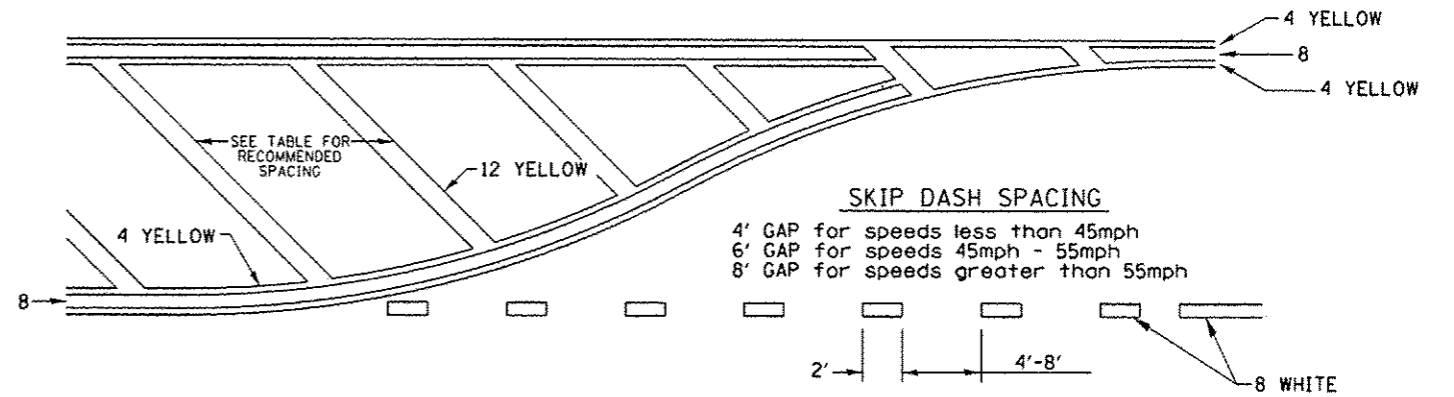
ARROW LAYOUT



- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER
- ◆ TWO-WAY AMBER MARKER

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

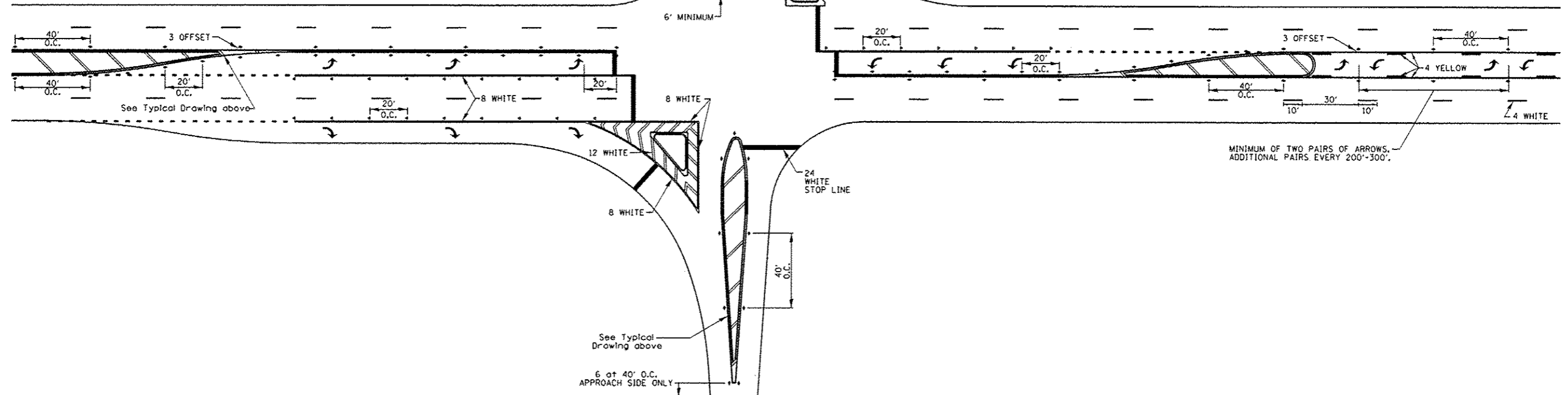
TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 30MPH	50'	15'	10'
30-40MPH	75'	20'	15'
45MPH & over	75'	30'	20'

NOTE: if the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.



FILE NAME : c:\pwwork\pwwork\hardnettr\ad2779\1\000711-ext-cover.dgn	USER NAME : hardnettr	DESIGNED -	REVISED - 3-05-12
		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

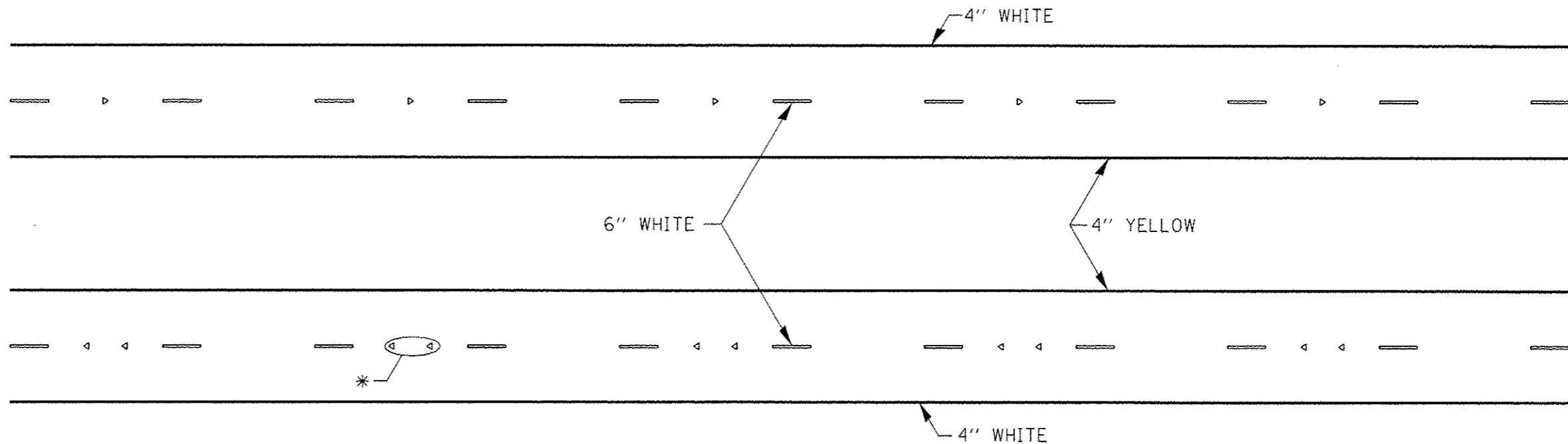
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

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

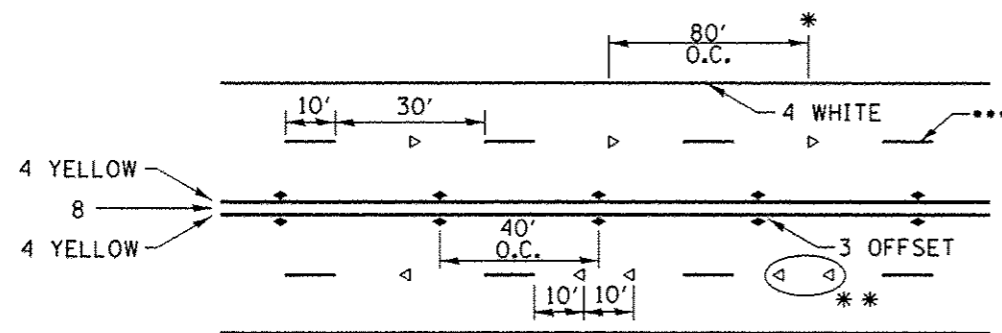
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	29T-2	JO DAVIESS	52	38
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 64H17	

TYPICAL PAVEMENT MARKINGS



* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS.
USE DOUBLE MARKERS WHEN ADT \geq 20,000.

MULTI-LANE / DIVIDED

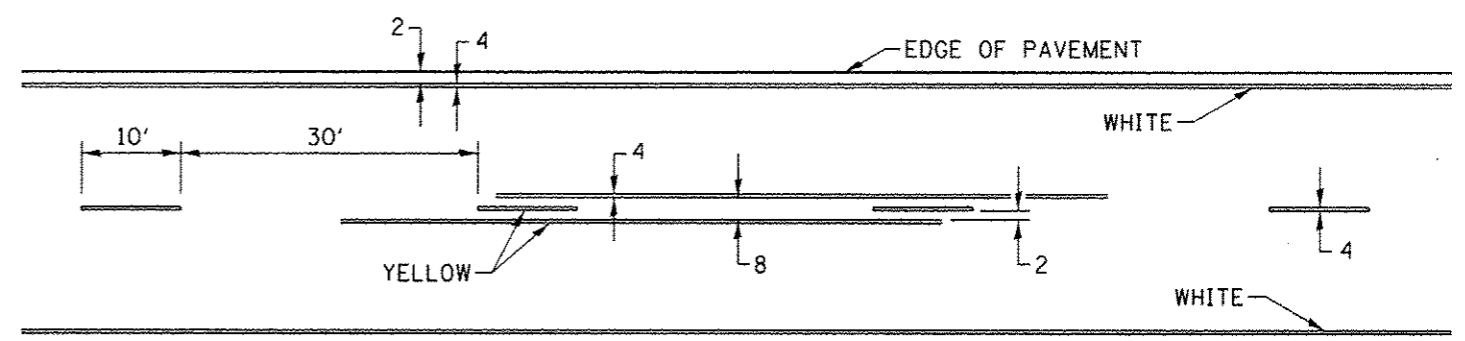


- REDUCE TO 40' O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH LOWER THAN POSTED SPEEDS.
- USE DOUBLE MARKERS WHEN ADT \geq 20,000
- CENTERLINE SKIP DASH PAVEMENT MARKING SPEED LIMIT LESS THAN 40 MPH USE 4" LINE SPEED LIMIT 40 MPH AND OVER USE 6" LINE

MULTI-LANE / UNDIVIDED & ONE WAY

(FOR MULTI-LANE UNDIVIDED HIGHWAYS USE THIS
DETAIL NOT HIGHWAY STANDARD 781001)

TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION - NO PASSING ZONES

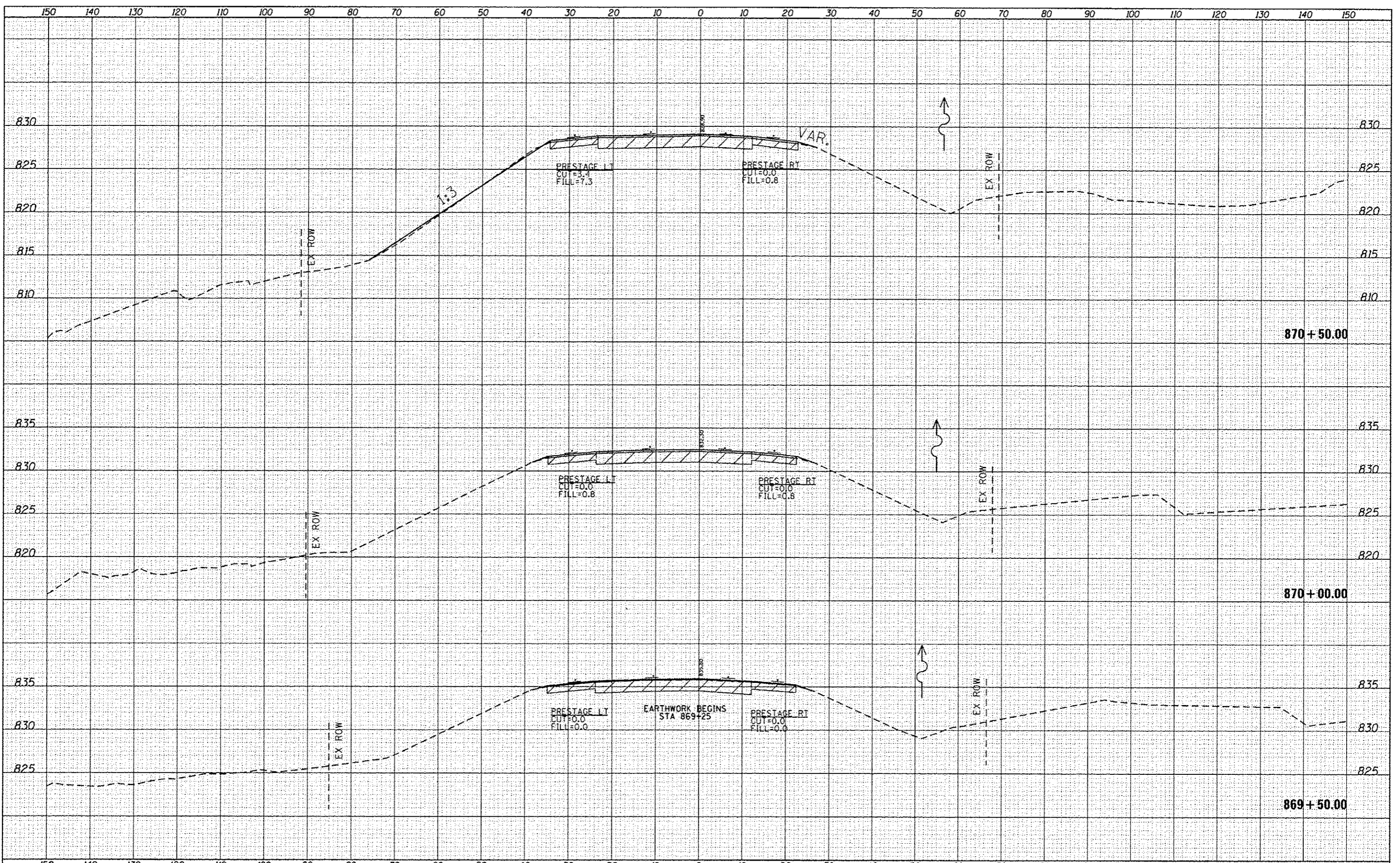


SYMBOLS

FILE NAME *	USER NAME * hardnetbr	DESIGNED -	REVISED - 11-28-12	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pavdot\hardnetbr\d8277919.d	00711-shs-cover.dgn	DRAWN -	REVISED -			301	29T-2	JO DAVIESS	52	39	
PLOT SCALE * 1/8" = 1' / in.	CHECKED -	REVISED -				CONTRACT NO. 64H17					
PLOT DATE * Mon Dec 18 13:33:21 2012	DATE -	REVISED -				SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	

DATE	
BY	
FINISHED	
SURVEY	
PLOTTED	
IN SCALE	
AREAS CHECKED	
NO.	

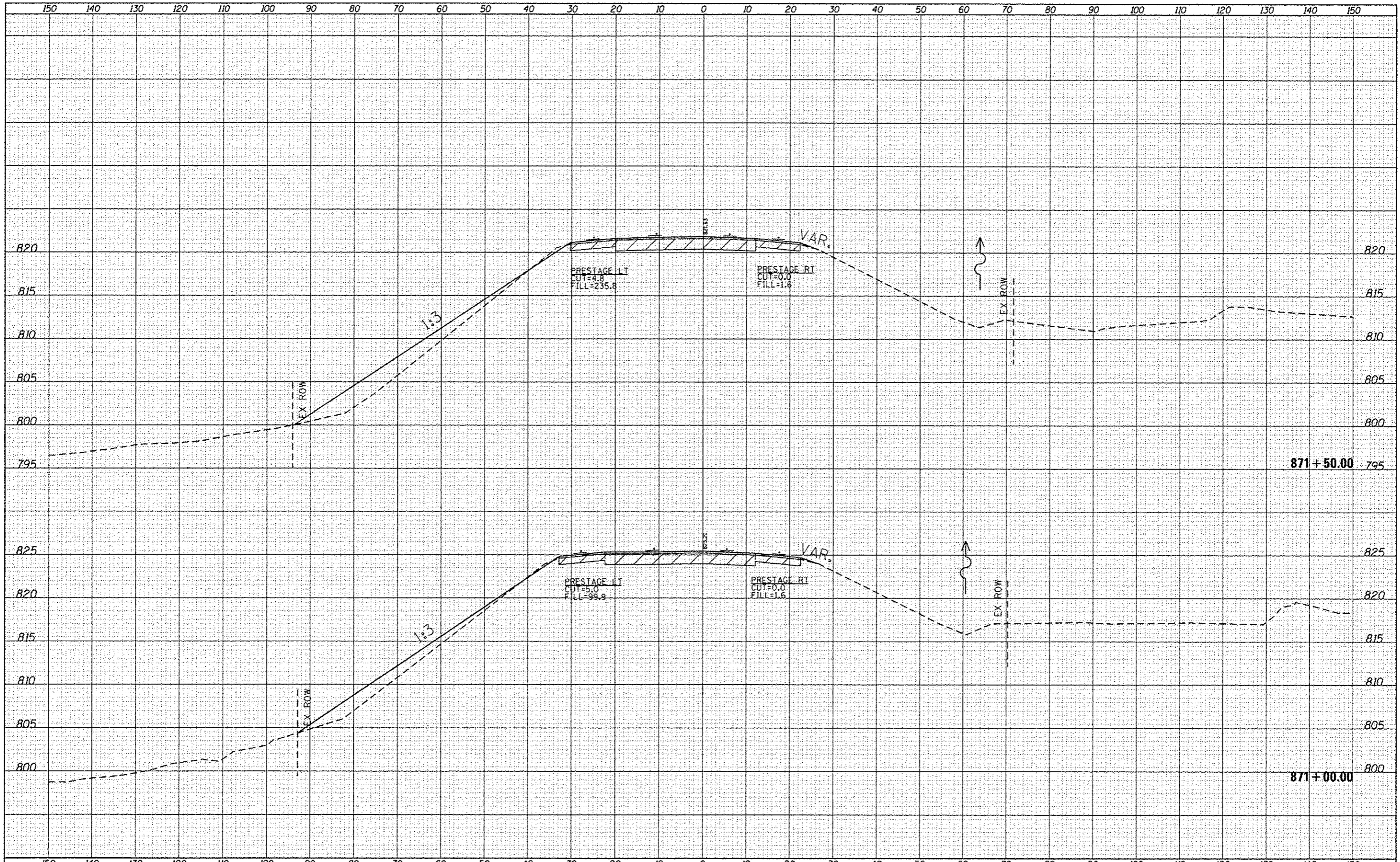
DATE	
BY	
ORIGINAL	
SURVEY	
PLOTTED	
IN SCALE	
AREAS CHECKED	
NO.	



FILE NAME =	USER NAME = hardnettr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS SCALE: SHEET OF SHEETS STA. 869+50.00 TO STA. 870+50.00	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default	PLT SCALE = 20.0000' / in.	DRAWN -	REVISED -			301	291-2	JO DAVIESS	52	40	
	PLT DATE = Mon Dec 10 14:38:46 2012	CHECKED -	REVISED -			CONTRACT NO. 64H17					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

DATE	
BY	
FINAL SURVEY	
NOTED SURVEY	
NOTE BOOK	
TEMPLATE	
AREAS	
AREAS CHECKED	

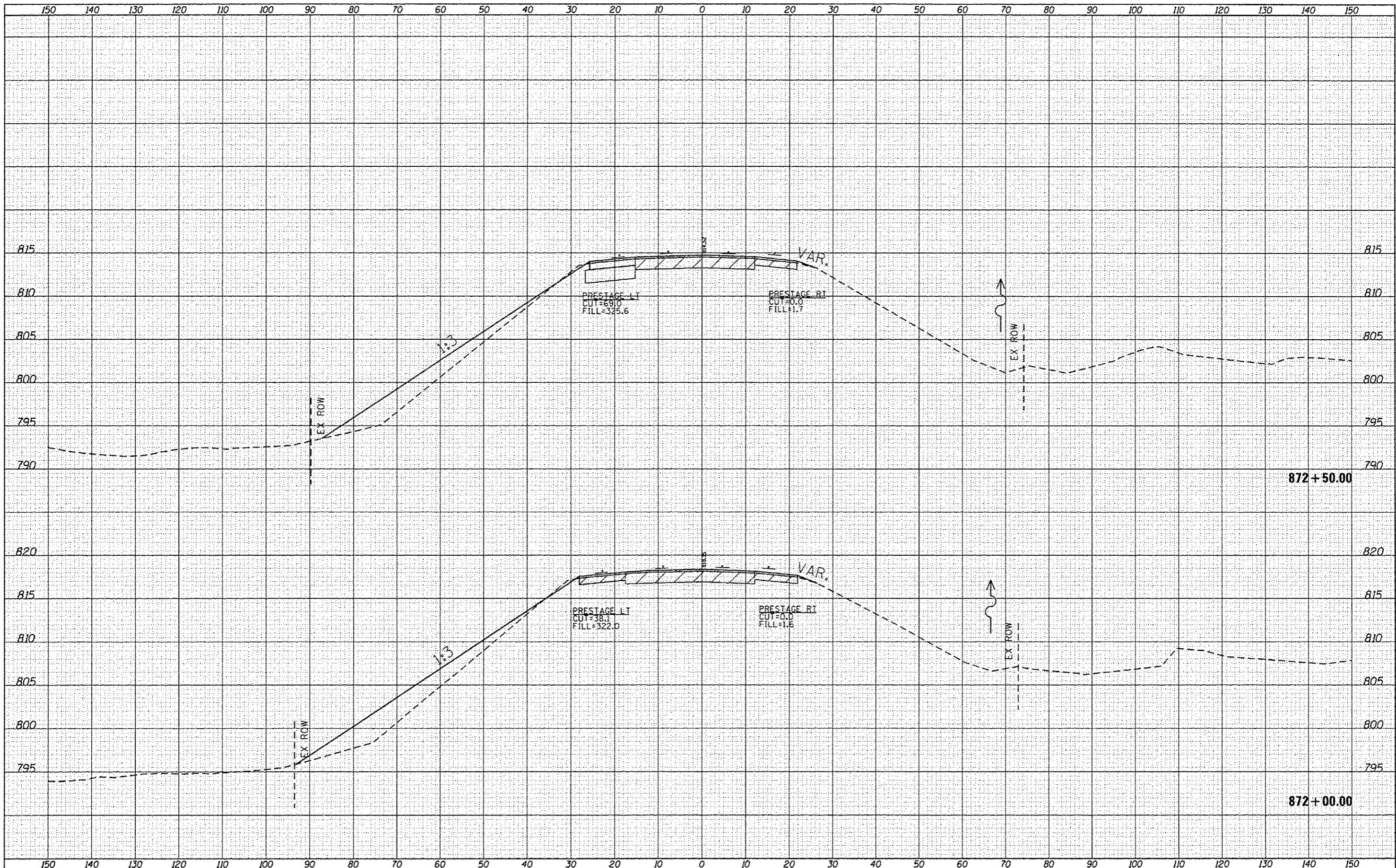
DATE	
BY	
ORIGINAL SURVEY	
NOTED SURVEY	
NOTE BOOK	
TEMPLATE	
AREAS	
AREAS CHECKED	



FILE NAME =	USER NAME = hardnetbr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwork\hardnetbr\10277891\10280711-10280711.dgn		DRAWN -	REVISED -		301	29T-2	JO DAVIESS	52	41			
Default	PLOT SCALE = 28.0000 / in.	CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA. 871+00.00 TO STA. 871+50.00			CONTRACT NO. 64H17				
	PLOT DATE = Mon Dec 10 14:38:48 2012	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

FINI	STARTED	DATE
SURVEY	PLOTTED	
NOTE BOOK	UPDATE	
NO.	AREAS CHECKED	

ORIGINAL	STARTED	DATE
SURVEY	PLOTTED	
NOTE BOOK	UPDATE	
NO.	AREAS CHECKED	



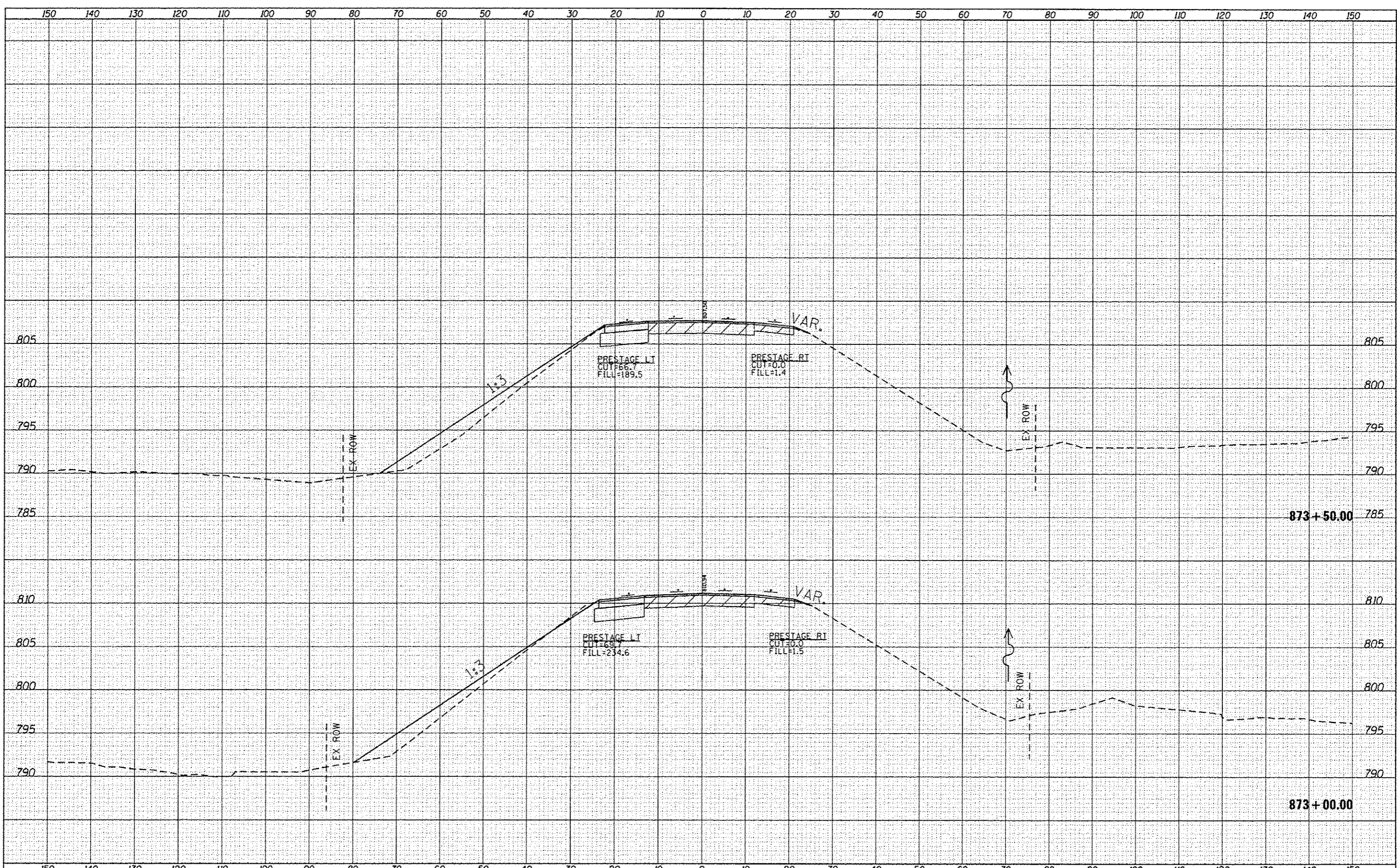
FILE NAME :	USER NAME :	DESIGNED :	REVISED :	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pedit\hardnettr\02277891\0208711-	ec.m.dgn	DRAWN :	REVISED :			301	29T-2	JO DAVIESS	52	42	
Default	PLOT SCALE :	CHECKED :	REVISED :			SCALE:		SHEET OF SHEETS		STA. 872+00.00 TO STA. 872+50.00	
	PLOT DATE :	DATE :	REVISED :			ILLINOIS FED. AID PROJECT					
	Mon Dec 10 14:38:50 2012										

872+50.00

872+00.00

DATE	
BY	
FINISHED	
SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	

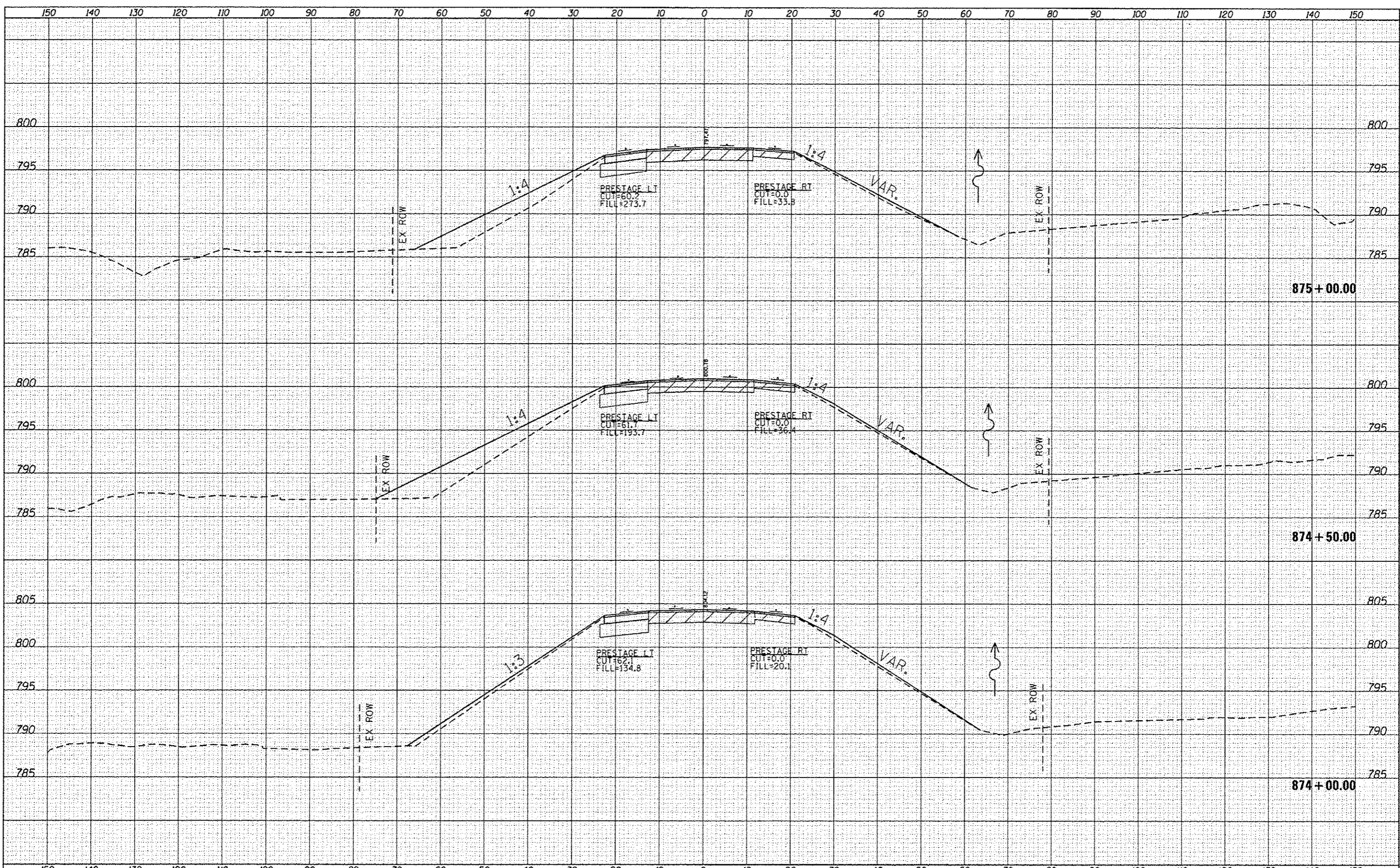
DATE	
BY	
ORIGINAL	
SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	



FILE NAME :	USER NAME :	DESIGNED :	REVISED :	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
cr:\pr-work\pidsat\hardnet\br\08277891\0208711-	pc.m.dgn	DRAWN :	REVISED :			301	29T-2	JO DAVIESS	52	43	
Default	PLOT SCALE :	CHECKED :	REVISED :			SCALE:		SHEET OF SHEETS		STA. 873+00.00 TO STA. 873+50.00	ILLINOIS FED. AID PROJECT
	PLOT DATE :	DATE :	REVISED :			CONTRACT NO. 64H17					

DATE	
BY	
ORIGINAL SURVEY	
SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	

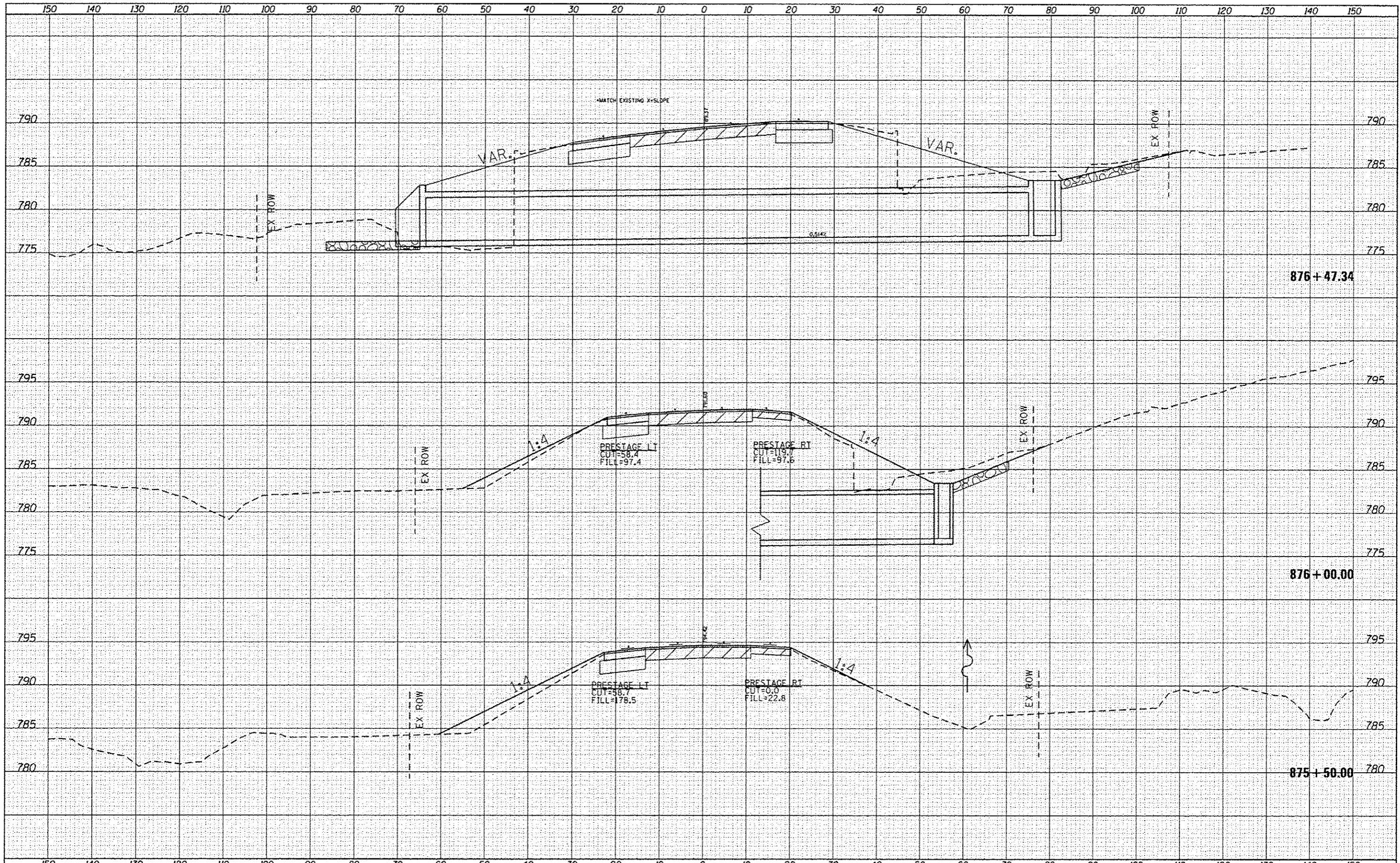
DATE	
BY	
ORIGINAL SURVEY	
SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	



FILE NAME =	USER NAME = hardnet1b-	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS SCALE: SHEET OF SHEETS STA. 874+00.00 TO STA. 875+00.00		F.A. RTE.	SECTION	COUNTY	TOTAL SHEET NO.	
c:\pwork\psidat\hardnet1b\8277891\0288711-	ac_m1.dgn	DRAWN -	REVISED -				301	29T-2	JO DAVIESS	52	44
Default	PLOT SCALE = 20.0000' / in.	CHECKED -	REVISED -				CONTRACT NO. 64H17				
	PLOT DATE = Mon Dec 10 14:38:54 2012	DATE -	REVISED -				ILLINOIS FED. AID PROJECT				

DATE	
BY	
SUPP'D	
SURVEY	
TEMP.	
NOTE BOOK	
AREAS	
AREAS CHECKED	

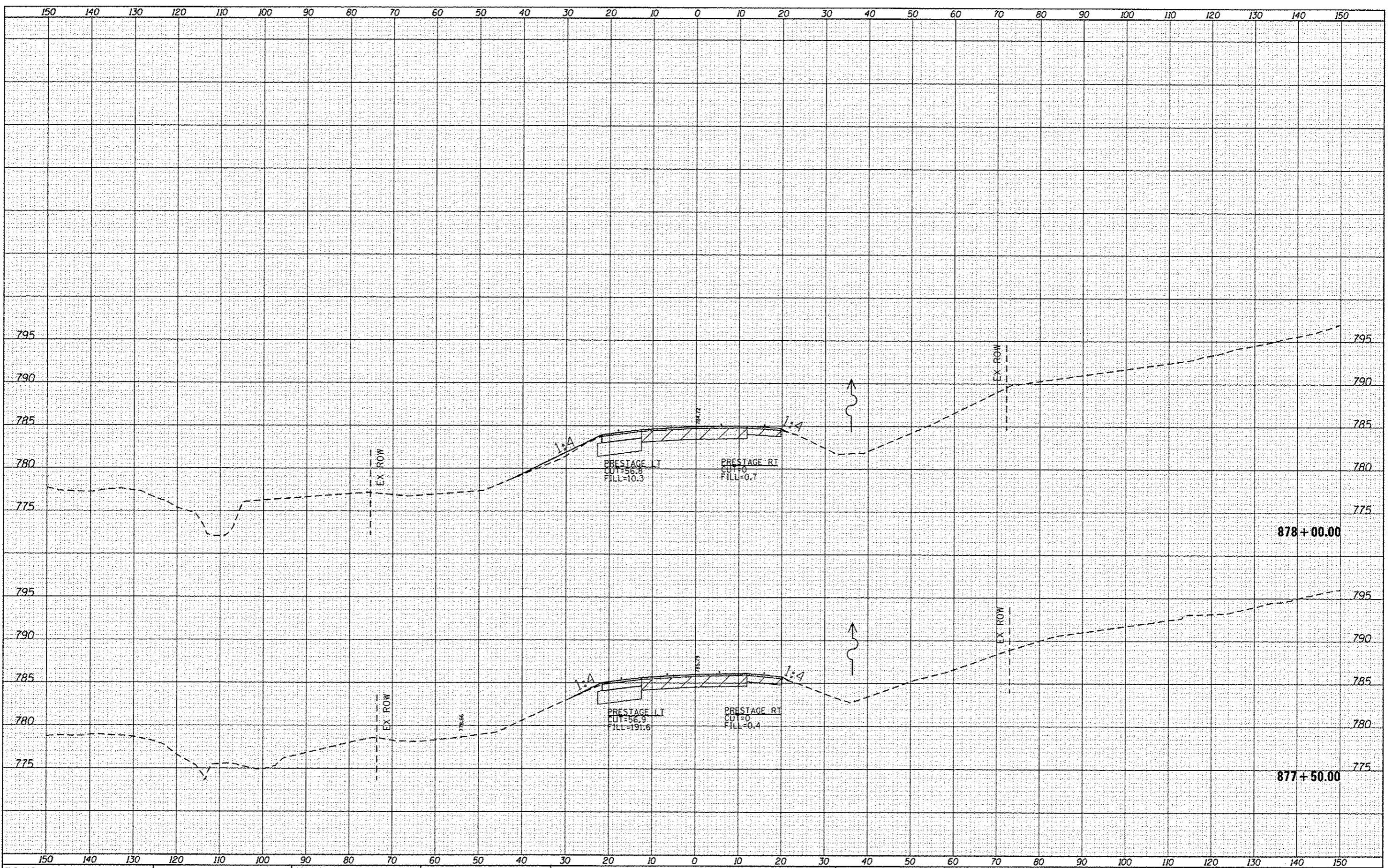
DATE	
BY	
SUPP'D	
SURVEY	
TEMP.	
NOTE BOOK	
AREAS	
AREAS CHECKED	



FILE NAME =	USER NAME = hardnetbr	DESIGNED -	REVISED -	<p align="center">STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p> <p align="center">CROSS SECTIONS</p>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\p\work\p\idat\hardnetbr\02277091\0280711-	pc.mldgr	DRAWN -	REVISED -		301	29T-2	JO DAVIESS	52	45	
Default	PLOT SCALE = 28.0000' / in.	CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA. 875+50.00 TO STA. 876+47.34		CONTRACT NO. 64H17			
	PLOT DATE = Mon Dec 18 14:38:56 2012	DATE -	REVISED -		[ILLINOIS] FED. AID PROJECT					

DATE	
BY	
FINISHED	
SURVEYED	
PLOTTED	
NOTE BOOK	
APPROVED	
NO.	

DATE	
BY	
ORIGINAL	
SURVEYED	
PLOTTED	
NOTE BOOK	
APPROVED	
NO.	



FILE NAME = c:\pwork\pwork\hardnet\877891\208711-
 USER NAME = hardnet
 PLLOT SCALE = 20.0000 / in.
 PLOT DATE = Mon Dec 10 14:59:00 2012

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

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

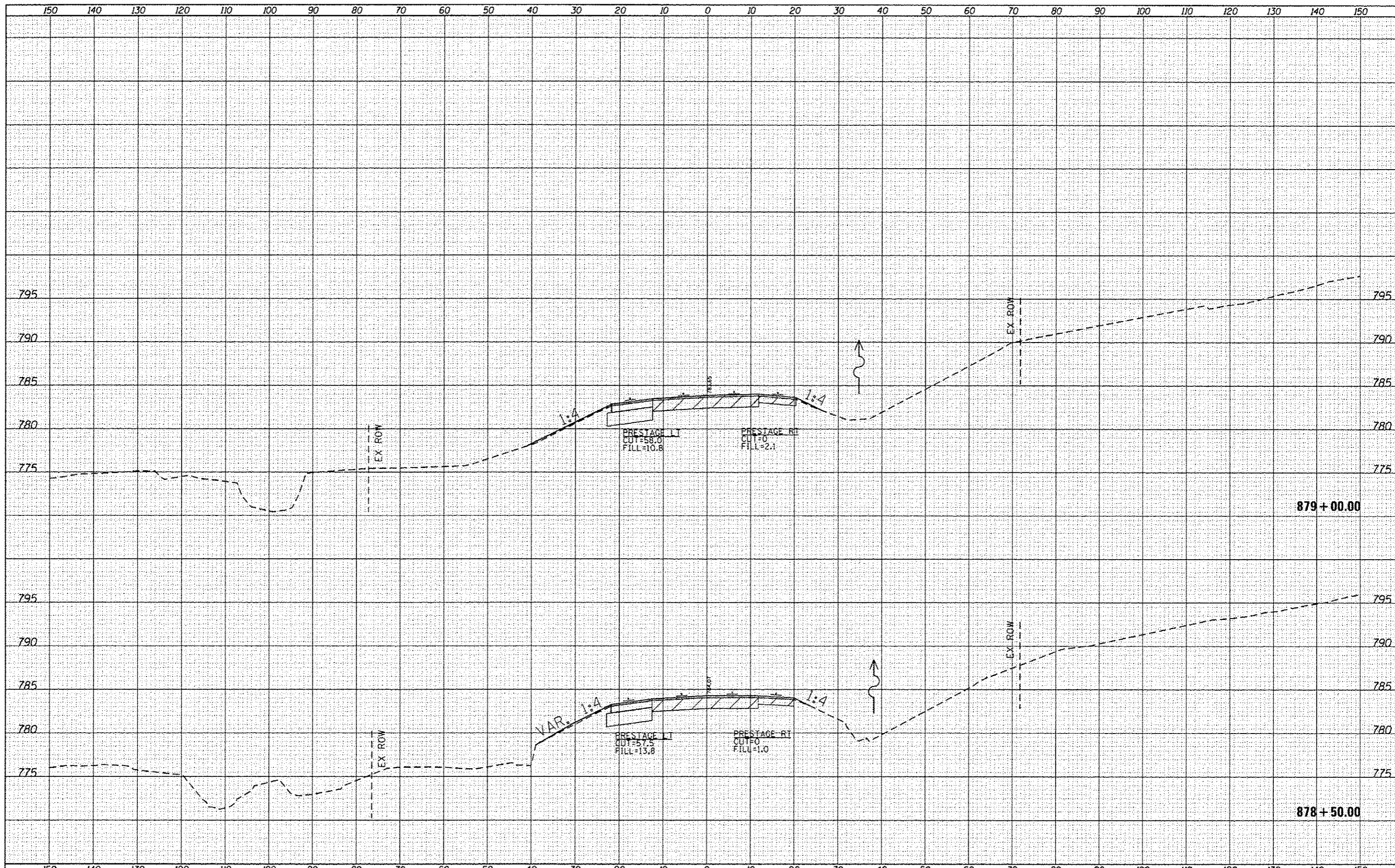
CROSS SECTIONS

SCALE: SHEET OF SHEETS STA. 877+50.00 TO STA. 878+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	29T-2	JO DAVIESS	52	47
				CONTRACT NO. 64H17
ILLINOIS FED. AID PROJECT				

DATE	
BY	
NO.	
FINAL SURVEY	
NOTED	
NOTE BOOK	
TEMPLATE	
AREAS CHECKED	

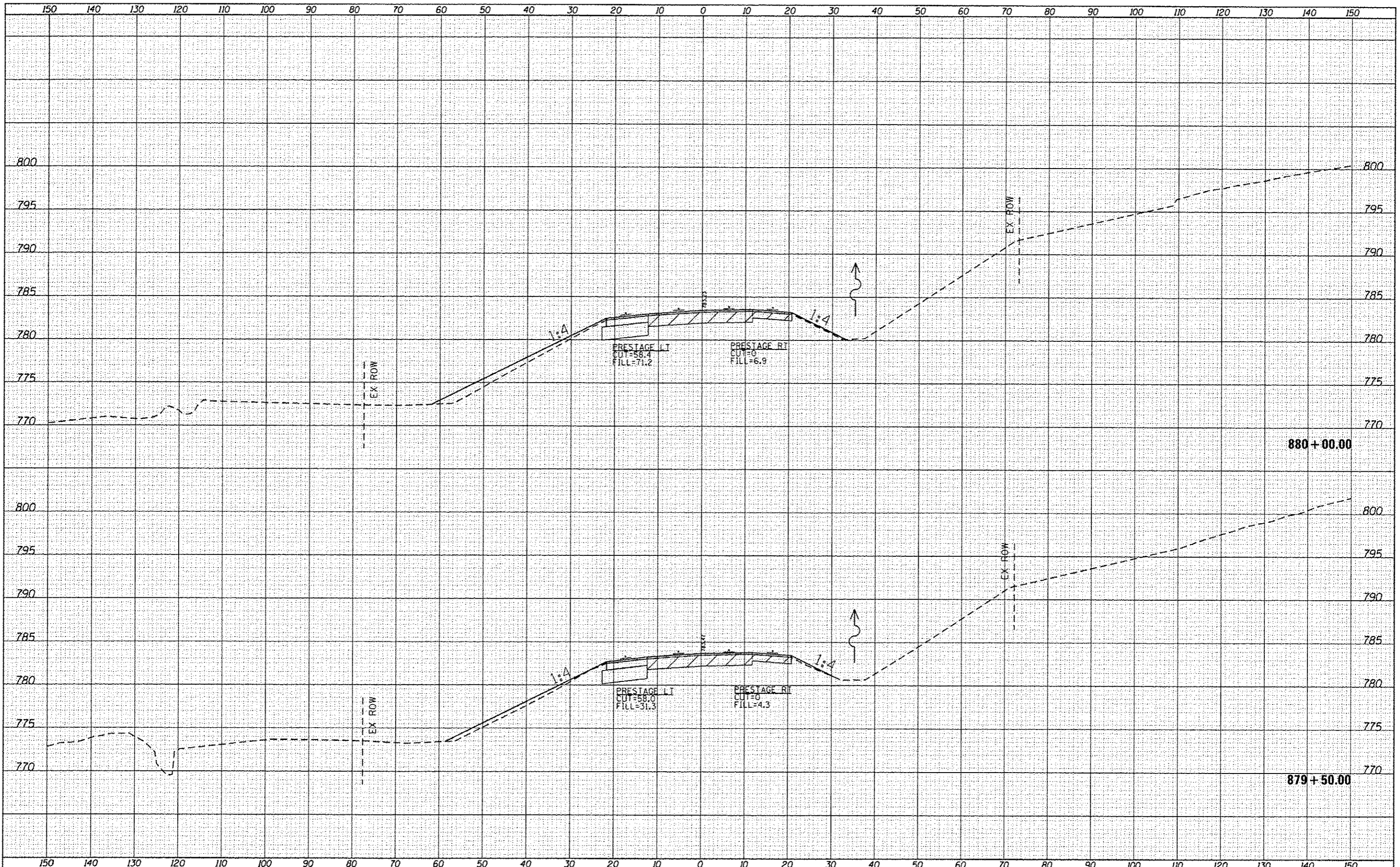
DATE	
BY	
NO.	
ORIGINAL SURVEY	
NOTED	
NOTE BOOK	
TEMPLATE	
AREAS CHECKED	



FILE NAME :	USER NAME :	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS SCALE: SHEET OF SHEETS STA. 878+50.00 TO STA. 879+00.00	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\p\idat\hardnet\br\id277891\0288711-	ec.m.dgn	DRAWN -	REVISED -			301	29T-2	JO DAVIESS	52	48	
PLOT SCALE * 20.0000' / in.	CHECKED -	REVISED -				CONTRACT NO. 64H17					
PLOT DATE * Mon Dec 18 14:39:02 2012	DATE -	REVISED -				ILLINOIS FED. AID PROJECT					

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	

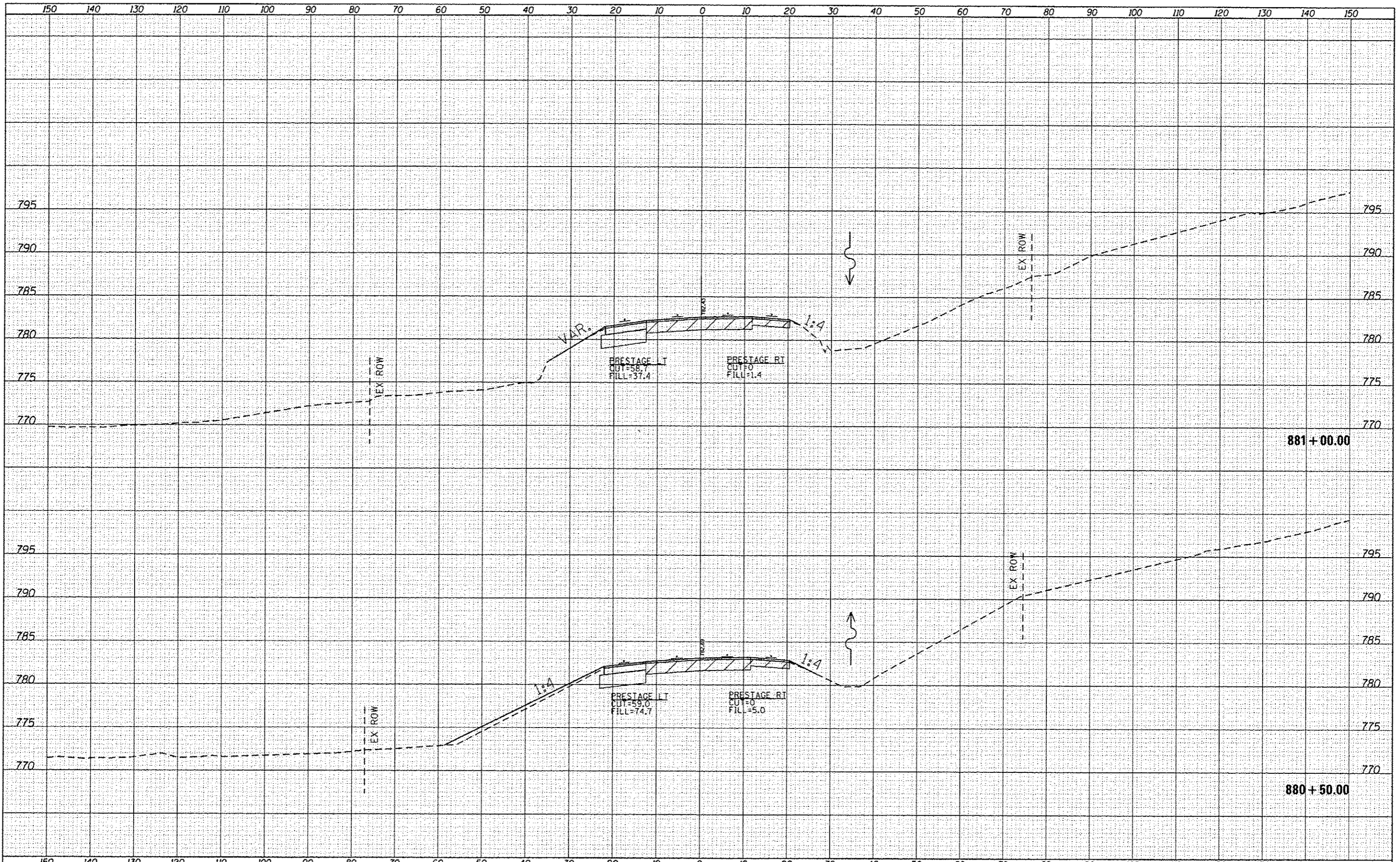
DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	



FILE NAME : c:\pwork\pwork\hardnet\rd\277891\0200711- Default	USER NAME : hardnet rd.m.dgn	DESIGNED - DRAWN - CHECKED - DATE -	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS SCALE: SHEET OF SHEETS STA. 879+50.00 TO STA. 880+00.00	F.A. RTE. 301	SECTION 29T-2	COUNTY JO DAVIESS	TOTAL SHEETS 52	SHEET NO. 49
						CONTRACT NO. 64H17		ILLINOIS FED. AID PROJECT		

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	



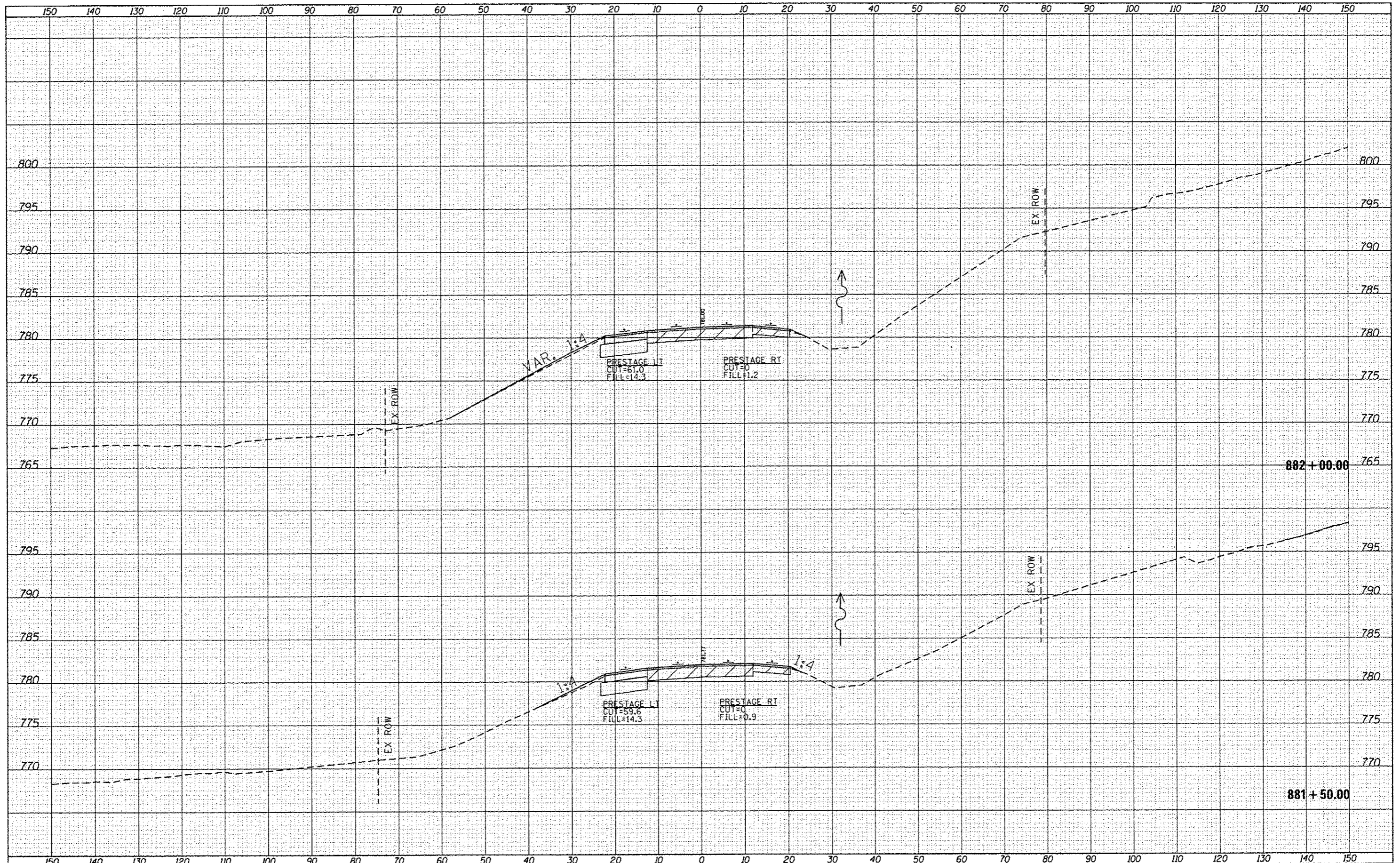
FILE NAME =	USER NAME = hardnetlb-	DESIGNED -	REVISED -	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pvidot\hardnetlb\2277891\0288711-	ds_m1.dgn	DRAWN -	REVISED -	301	29T-2	JO DAVIESS	52	50
Default	PLOT SCALE = 20.0000' / 1"	CHECKED -	REVISED -	SCALE:		SHEET OF SHEETS		STA. 880+50.00 TO STA. 881+00.00
	PLOT DATE = Mon Dec 10 14:39:06 2012	DATE -	REVISED -			ILLINOIS FED. AID PROJECT		CONTRACT NO. 64H17

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS

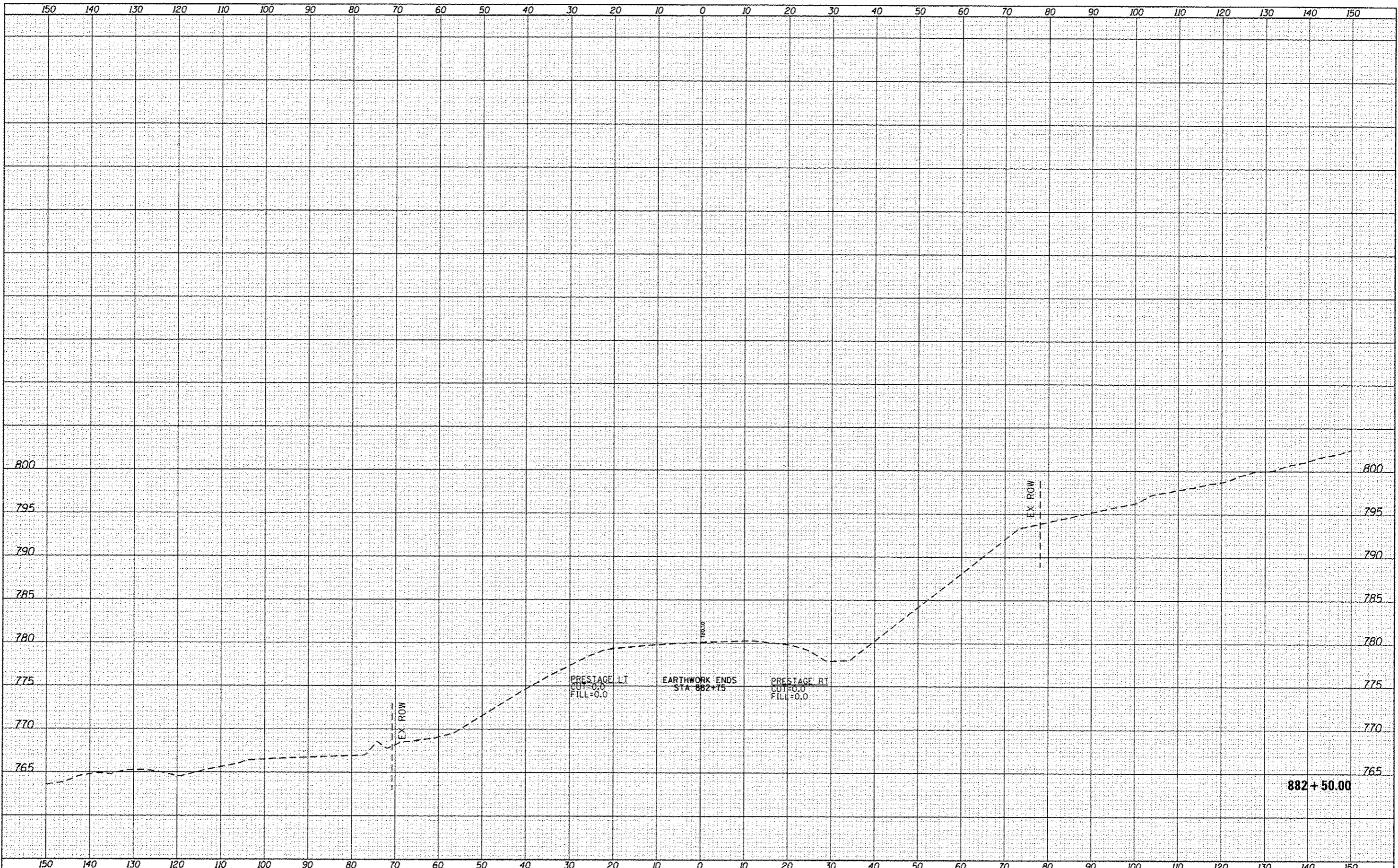
DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
PROJECT	
NO.	

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
PROJECT	
NO.	



FILE NAME =	USER NAME = hardnetlbr	DESIGNED -	REVISIED -
cr:\p\work\spisdc\hardnetlbr\02277891\0200711-dc.mxd		DRAWN -	REVISIED -
Default	PLOT SCALE = 20.0000' / in.	CHECKED -	REVISIED -
	PLOT DATE = Mon Dec 18 14:39:00 2012	DATE -	REVISIED -

STATE OF ILLINOIS		CROSS SECTIONS	
DEPARTMENT OF TRANSPORTATION		SCALE:	SHEET OF SHEETS
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
301	29T-2	JO DAVIESS	52 51
		CONTRACT NO.	64H17
[ILLINOIS] FED. AID PROJECT			



DATE	
BY	
FIGURE	
SHEET	
NOTED BOOK	
NO.	
DESIGNED	
DRAWN	
CHECKED	
DATE	

DATE	
BY	
FIGURE	
SHEET	
NOTED BOOK	
NO.	
DESIGNED	
DRAWN	
CHECKED	
DATE	

FILE NAME : c:\pwwork\pwwork\hardnetb\142277091\10200711-ec.mxd	USER NAME : hardnetb	DESIGNED -	REVISIED -	F.A. RTE. 301	SECTION 29T-2	COUNTY JO DAVIESS	TOTAL SHEETS 52	SHEET NO. 52
Default	PLOT SCALE * 20.0000' / in.	CHECKED -	REVISIED -	SCALE: SHEET OF SHEETS STA. 882+50.00 TO STA. 882+50.00		CONTRACT NO. 64H17		ILLINOIS FED. AID PROJECT
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				CROSS SECTIONS				