

Standard Road Plans
See Sheet C.XX



Iowa Department of Transportation
HIGHWAY DIVISION



1-800-292-8989
www.iowaonecall.com



IOWA COUNTY
U.S. HIGHWAY 6 - LADORA CREEK
RCB - REPLACEMENT

INDEX OF SHEETS

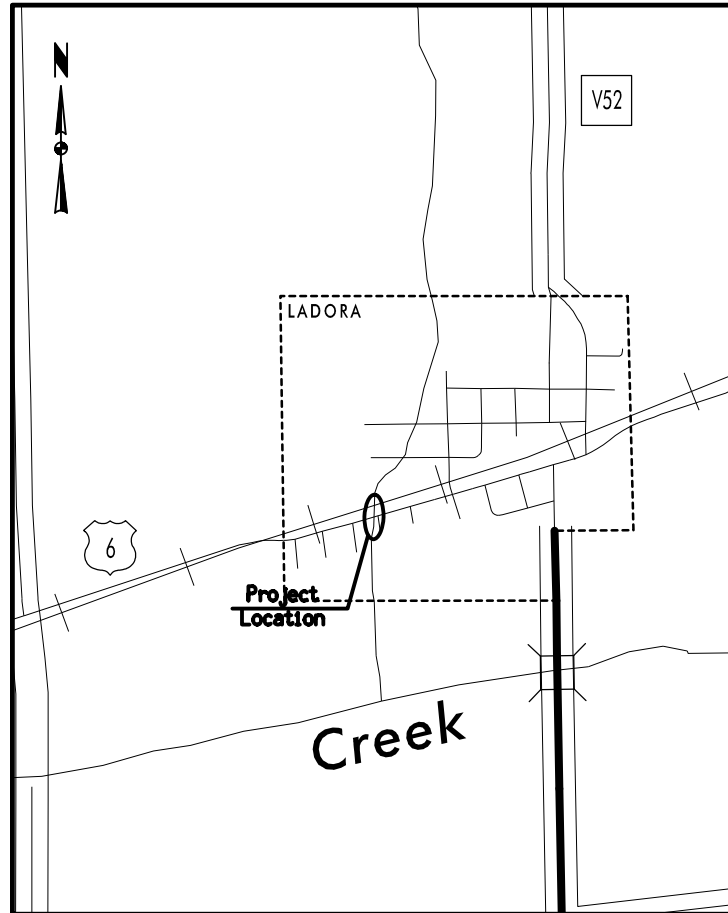
105-3
10-18-05

No.	Description
A.01	Title Sheet
B.01-B.02	Typical Cross Section and Details
C.01-C.0X	Estimate Quantities and General Information
D.01	Plan and Profile Sheets - U.S. HWY. 6
D.02	Plan and Profile Sheets - RCB Culvert
V.01	Culvert Situation Plan
W.01-W.02	U.S. HWY. 6 Cross Sections
X.01-X.02	RCB Culvert Cross Sections

SCALES: As Noted

The Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, series 2012, plus General Supplemental Specifications; and applicable Supplemental Specifications, Developmental Specifications, and Special Provisions, shall apply to construction on this project.

Value Engineering Saves. Refer to Article 1105.15 of the Specifications.



*NOT TO SCALE

MILEAGE SUMMARY

105-1
09-27-94

Div.	Location	Lin. Ft.	Miles
	Sta. 347+28.05 to Sta. 349+27.16	199.11	0.04
Total:		119.11	0.04

PRELIMINARY

IOWA CO. STPN-006-6(50)-2J-48 RCB - REPLACEMENT LETTING DATE XX-XX-2014
 Cedar County #60316923 \$SDCINS \$SDATF\$ \$SDRIF\$



STANDARD SYMBOLS

	Interstate Highway Symbol		Septic Tank		Guardrail (Beam or Cable)
	U.S. Highway Symbol		Cistern		GP Guard Post (one or two)
	Iowa Highway Symbol		L.P. Gas Tank (No Footing)		Guard Post (over two)
	County Road Highway Symbol		Underground Storage Tank		FP Filler Pipe
	Evergreen Tree		Latrine		GV Gas Valve
	Deciduous Tree		Luminaire		WV Water Valve
	Fruit Tree		Traffic Signal		SL Speed Limit Sign
	Shrub (Bushes)		Traffic Signal with Luminaire		MM Mile Marker Post
	Timber		Telephone Pedestal		SIGN Sign
	Hedge		Television Pedestal		WHU Water Hook Up
	Stump		Telephone Pole		RT Radio Tower
	Swamp		Telephone Pole (Second Company)		TA Tower Anchor
	Rock Outcrop		Telephone Pole (Third Company)		EB Electric Box
	Broken Concrete		Telephone Pole (Fourth Company)		TCB Traffic Signal Control Box
	Revetment (Rip Rap)		Telephone Pole (Fifth Company)		RRB Rail Road Signal Control Box
	Cemetery		Power Pole		TSB Telephone Switch Box
	Grave		Power Pole (Second Company)		
	Cave		Power Pole (Third Company)		
	Sink Hole		Power Pole (Fourth Company)		
	Board Fence		Power Pole (Fifth Company)		
	Chain Link or Security Fence		Electrical Highline Tower (Metal or Concrete)		
	Wire Fence		Telephone Riser Pole		
	Terrace		Power Riser Pole		
	Earth Dam or Dike (Existing)		Telegraph Pole		
	Earth Dam or Dike (Proposed)		Satellite TV Dish		
	Tile Outlet		Existing Water Line		
	Edge of Water		Existing Water Line (Second Company)		
	Existing Drainage		Existing Sanitary Sewer Line		
	Proposed Drainage		Existing Telephone Line		
	Right of Way Rail or Lot Corner		Existing Telephone Line (Second Company)		
	Concrete Monument		Existing Fiber Optics Telephone Line		
	Well		Existing Storm Sewer Line		
	Windmill		Existing Gas Line		
	Beehive Intake		Existing High Pressure Gas Line		
	Existing Intake		Existing Gas Line (Second Company)		
	Proposed Intake		Existing High Pressure Gas Line (Second Company)		
	Existing Utility Access (Manhole)		Existing Power Line		
	Proposed Utility Access (Manhole)		Existing Power Line (Second Company)		
	Fire Hydrant		Cable Television Line		
	Water Hydrant (Rural)				

	Shading - Proposed Paved Surface
	Shading - Proposed Granular Surface
	Shading - Other, with Identification
	Shading - Clearing & Grubbing Area
	Removals

RIGHT OF WAY LEGEND

	Proposed Right of Way
	Existing Right of Way
	Existing and Proposed Right of Way
	Easement and Existing Right of Way
	Borrow
	Easement (Temporary)
	Easement
	Excess
	Property Line
	Access Control

CONVENTIONAL LINEWORK

	Survey Line
	Section Corner
	Proposed Profile Grade
	Railroad
	Field Tile
	Culverts
	Stream



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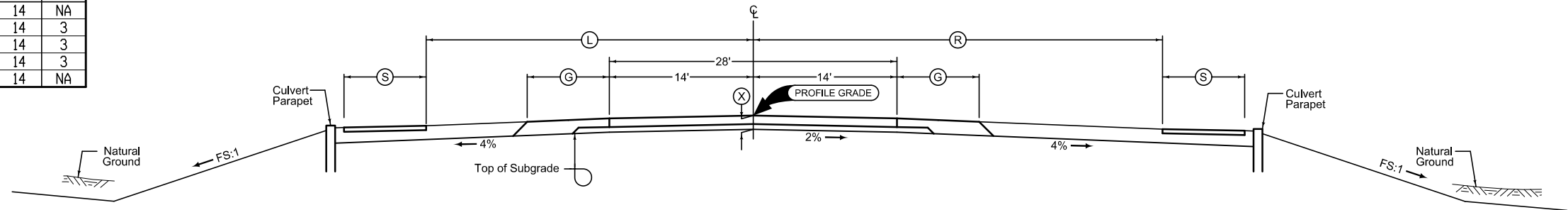


Legend And Symbol Information Sheet

(Symbols are Typical Only, actual size may vary)

LOCATION			DIMENSIONS					
ROAD IDENTIFICATION	STATION TO STATION		Ⓛ Feet	Ⓡ Feet	ⓐ Feet	Ⓢ Feet	ⓧ Inches	FS
U.S. HWY. 6	347+27.92	348+03.57	26	28	4	5	14	NA
U.S. HWY. 6	348+03.57	348+32.14	Varies	28	4	5	14	3
U.S. HWY. 6	348+32.14	348+72.14	22	28	4	5	14	3
U.S. HWY. 6	348+72.14	349+00.70	Varies	28	4	5	14	3
U.S. HWY. 6	349+00.70	350+49.71	26	28	4	5	14	NA

TYPICAL
X-SECTION



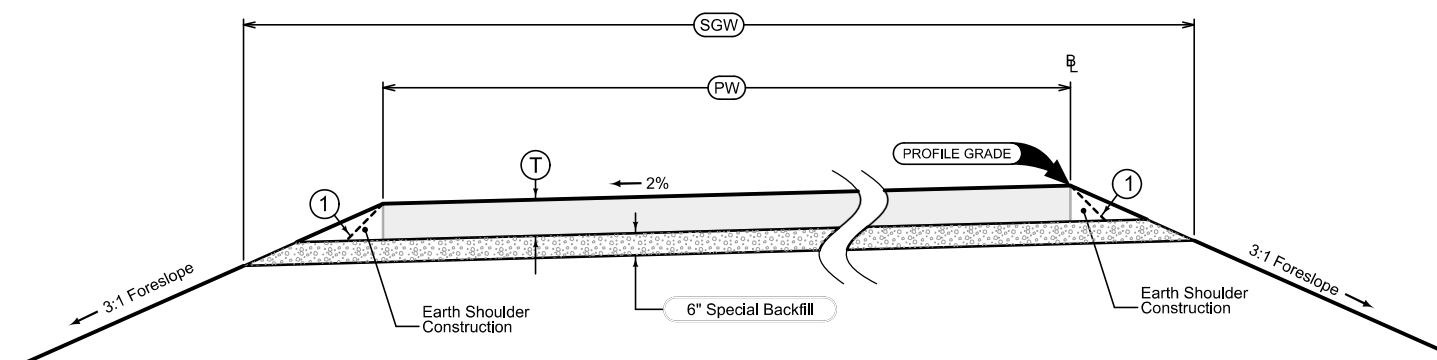
TYPICAL CROSS SECTION

Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

See plan & profile sheets and cross sections for additional details of ditches and backslopes.

LOCATION		DIMENSIONS						6" Special Backfill Tons/Station	Earth Shoulder Construction Station
ROAD IDENTIFICATION	STATION TO STATION	HMA			PCC				
		PW Feet	T Inches	SGW Feet	PW Feet	T Inches	SGW Feet		
STAGE 1									
U.S. HWY. 6									
STAGE 2									
U.S. HWY. 6									

TEMP PVMT
MODIFIED

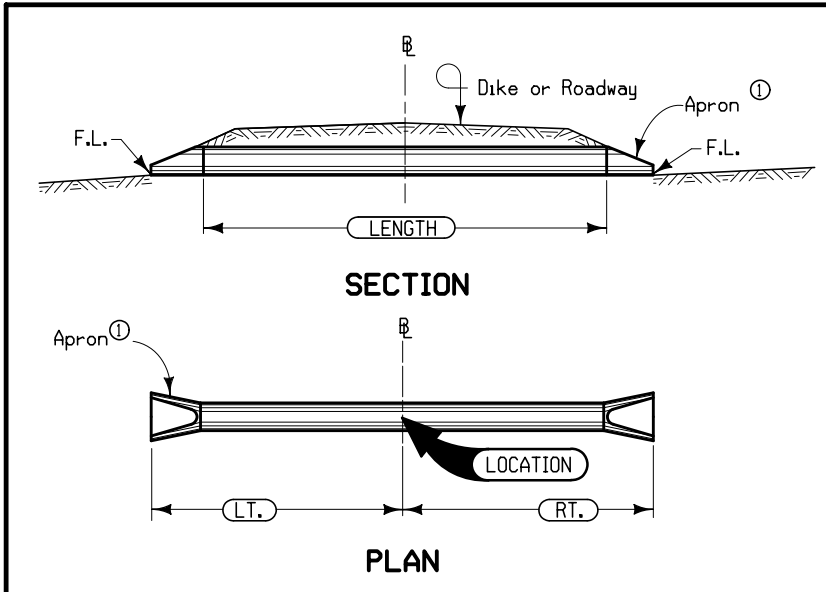


DETOUR PAVING

Quantity calculations based on vertical pavement edges.

Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

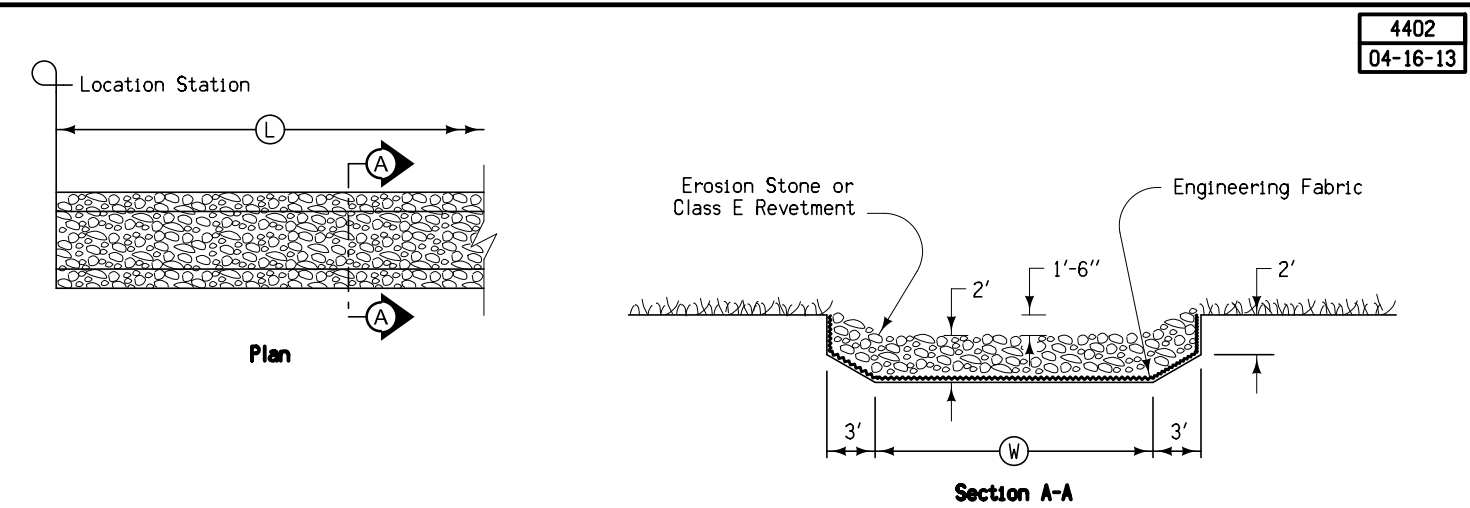
① Possible HMA 1:1 slope



1101
04-30-02

Notes:
 Ⓛ shall be Ⓛ of roadway, dike, survey, or other; as detailed on plans.
 Skew angle is the angle which one end of the pipe is ahead (by stationing) of line perpendicular to the Ⓛ (example skew Rt. ahead 30°).
 Refer to tabular listing and other plans for additional information.
 ① See Standard Road Plan RF-3 For Conc. or RF-5 for Metal.

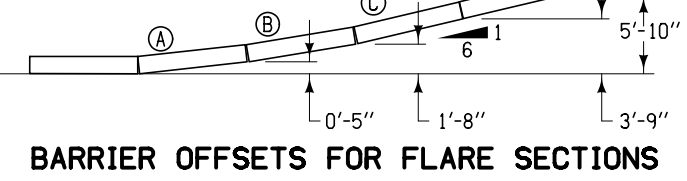
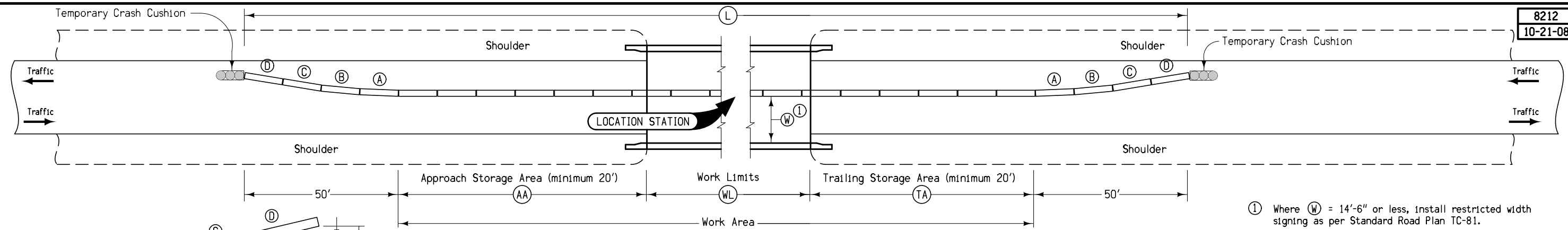
PIPE CULVERT



4402
04-16-13

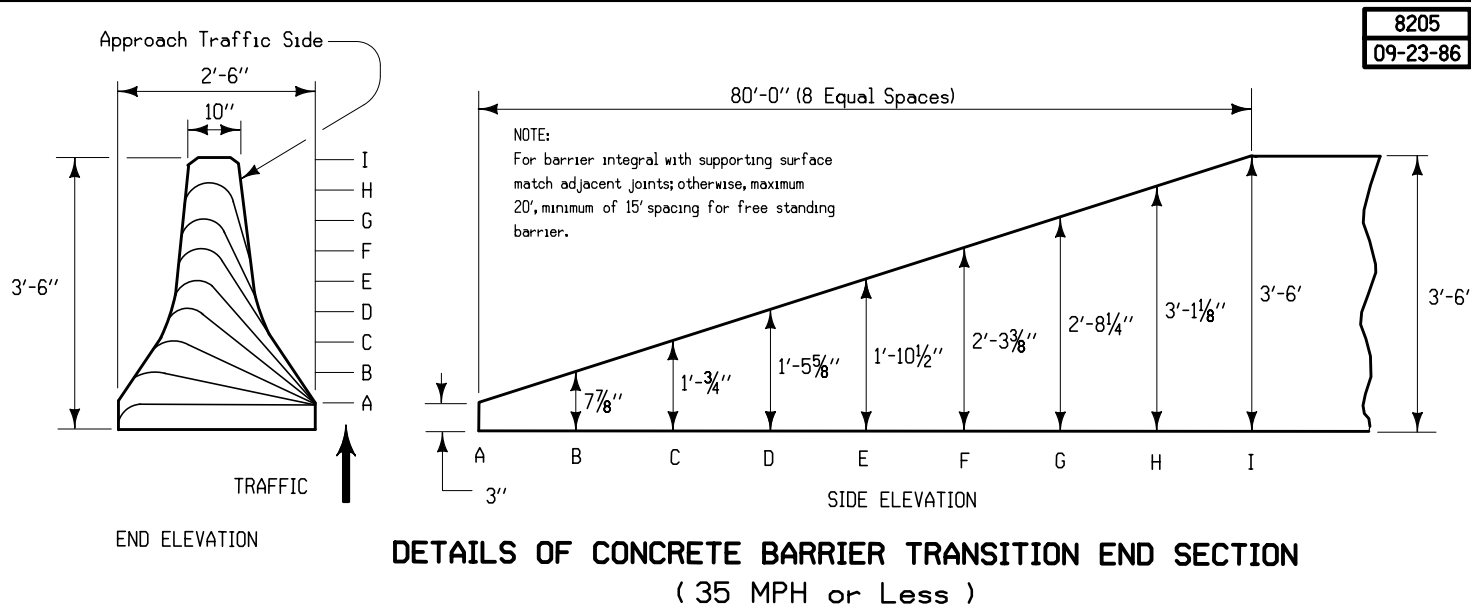
Refer to Tabulation 100-23 for additional information.

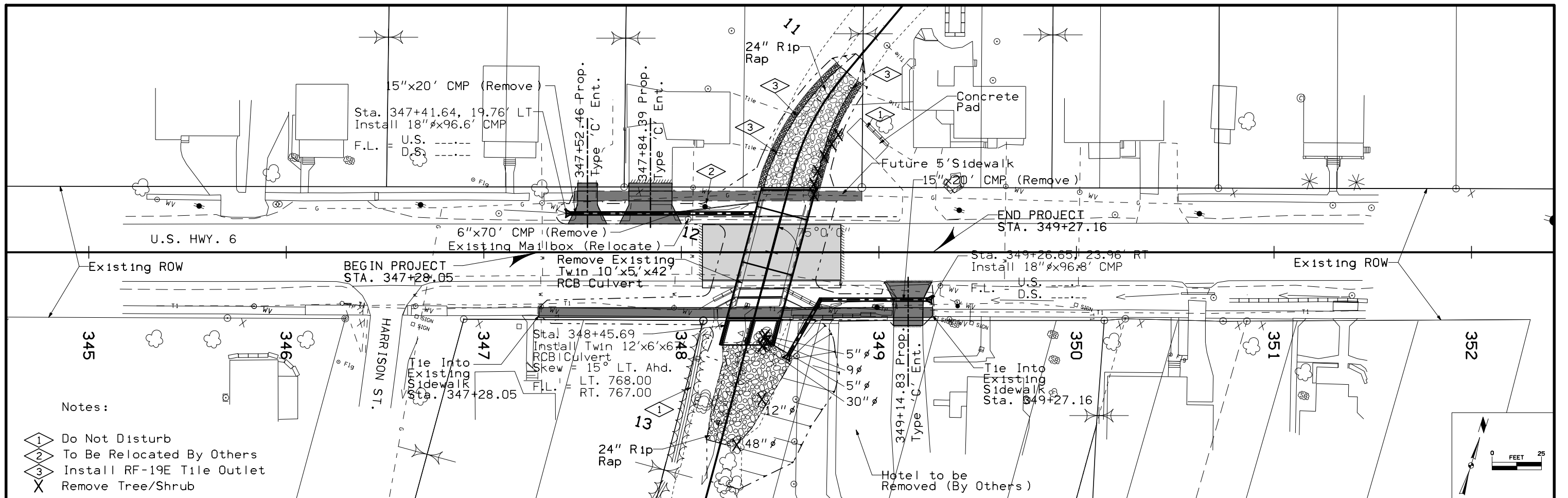
ROCK DITCH



Station	Side	AA	WL	TA	L	Anchored	W	Remarks
		Feet	Feet	Feet	Feet	X	Feet-Inches	
See J-Sheets For Staging Layouts								

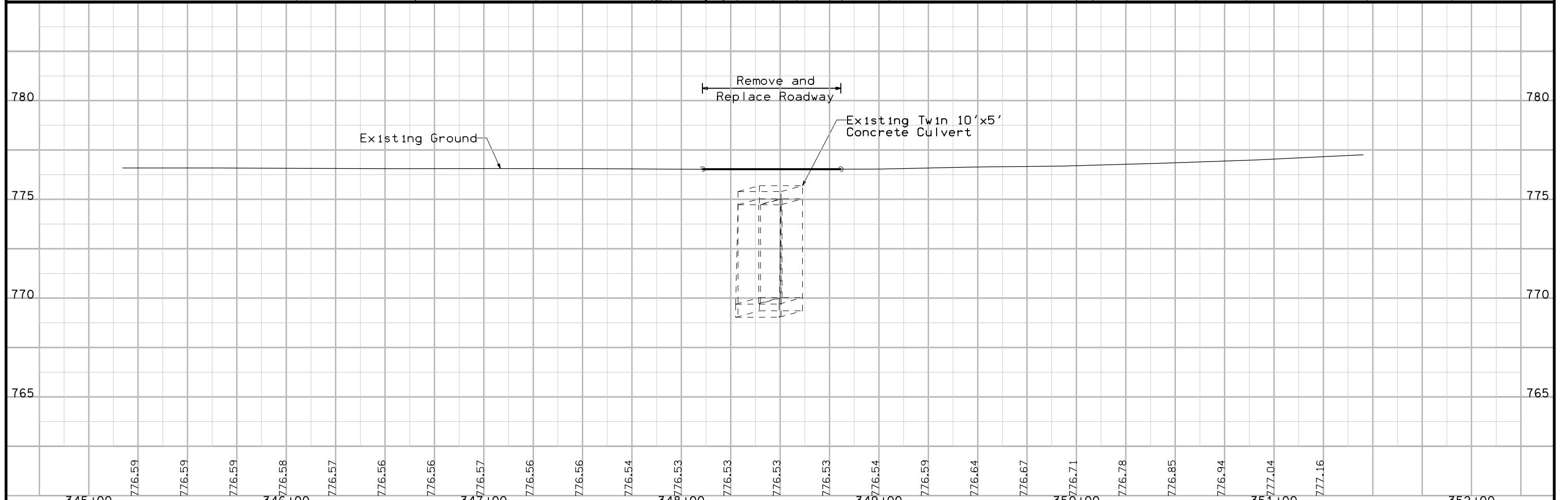
**TEMPORARY CONCRETE BARRIER LAYOUT
for Two-Way Traffic**



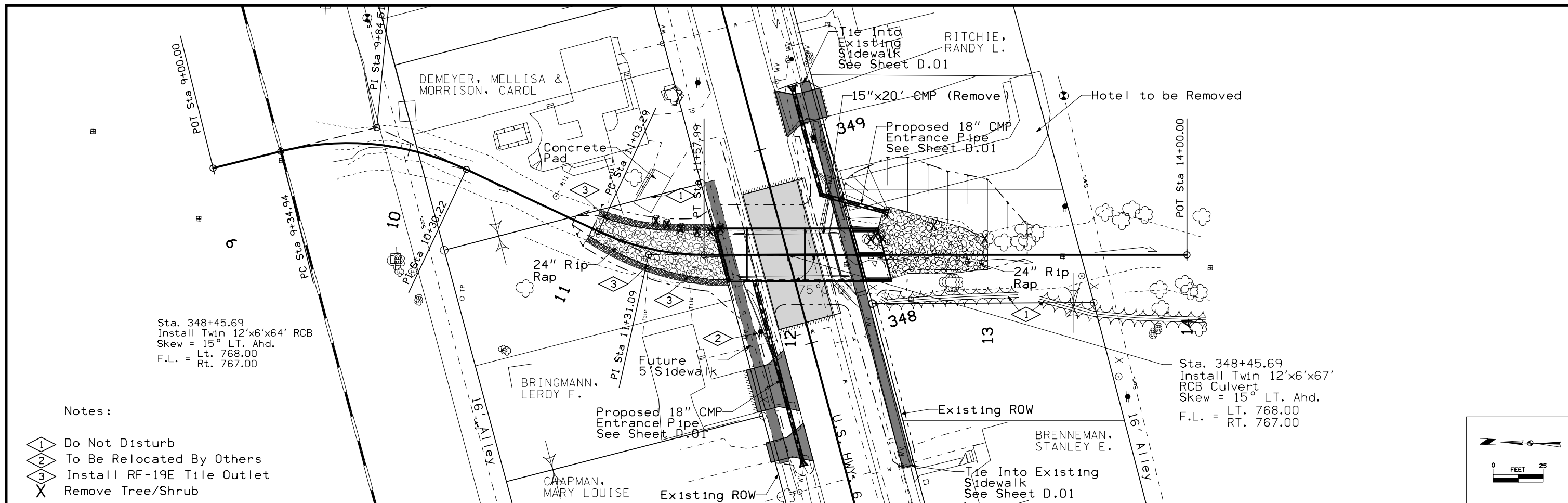


Notes:

- 1 Do Not Disturb
- 2 To Be Relocated By Others
- 3 Install RF-19E Tile Outlet
- X Remove Tree/Shrub



345+00	776.59	776.59	776.59	776.58	776.57	776.56	776.56	776.57	776.56	776.56	776.54	776.53	776.53	776.53	776.54	776.59	776.64	776.67	776.71	776.78	776.85	776.94	777.04	777.16	352+00
ENGLISH	IOWA DOT	DESIGN TEAM	AECOM										IOWA COUNTY	PROJECT NUMBER	STPN-006-6(50)-2J-48					SHEET NUMBER	D.01	REVISED			

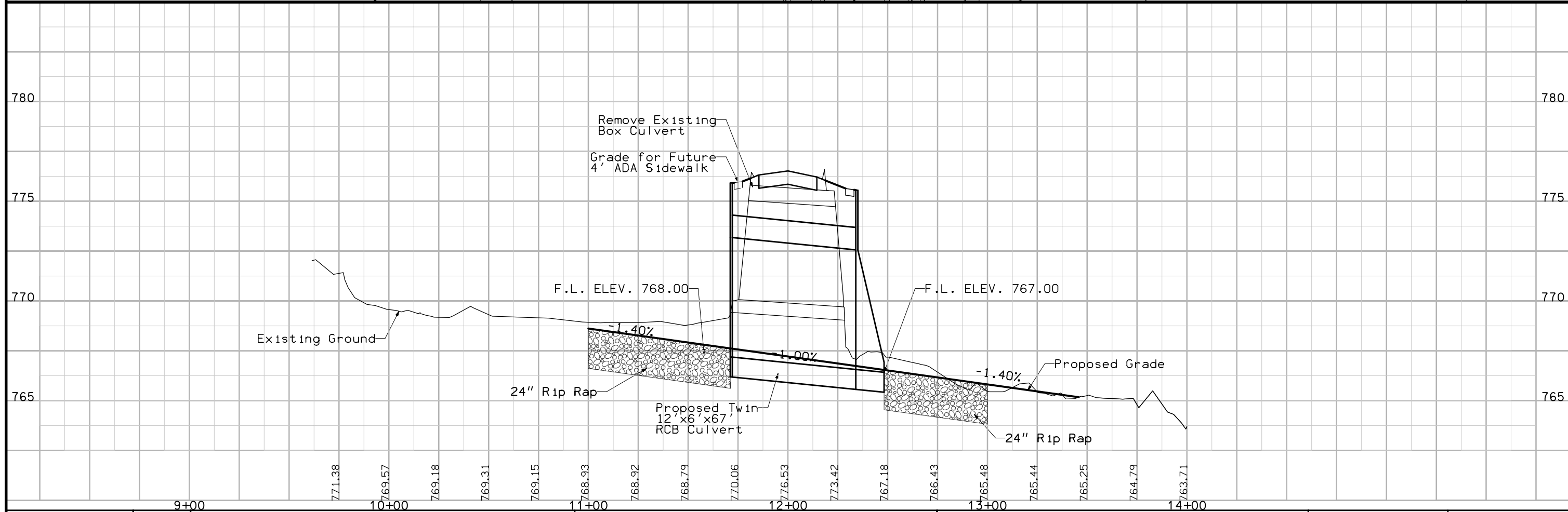
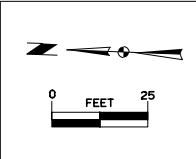


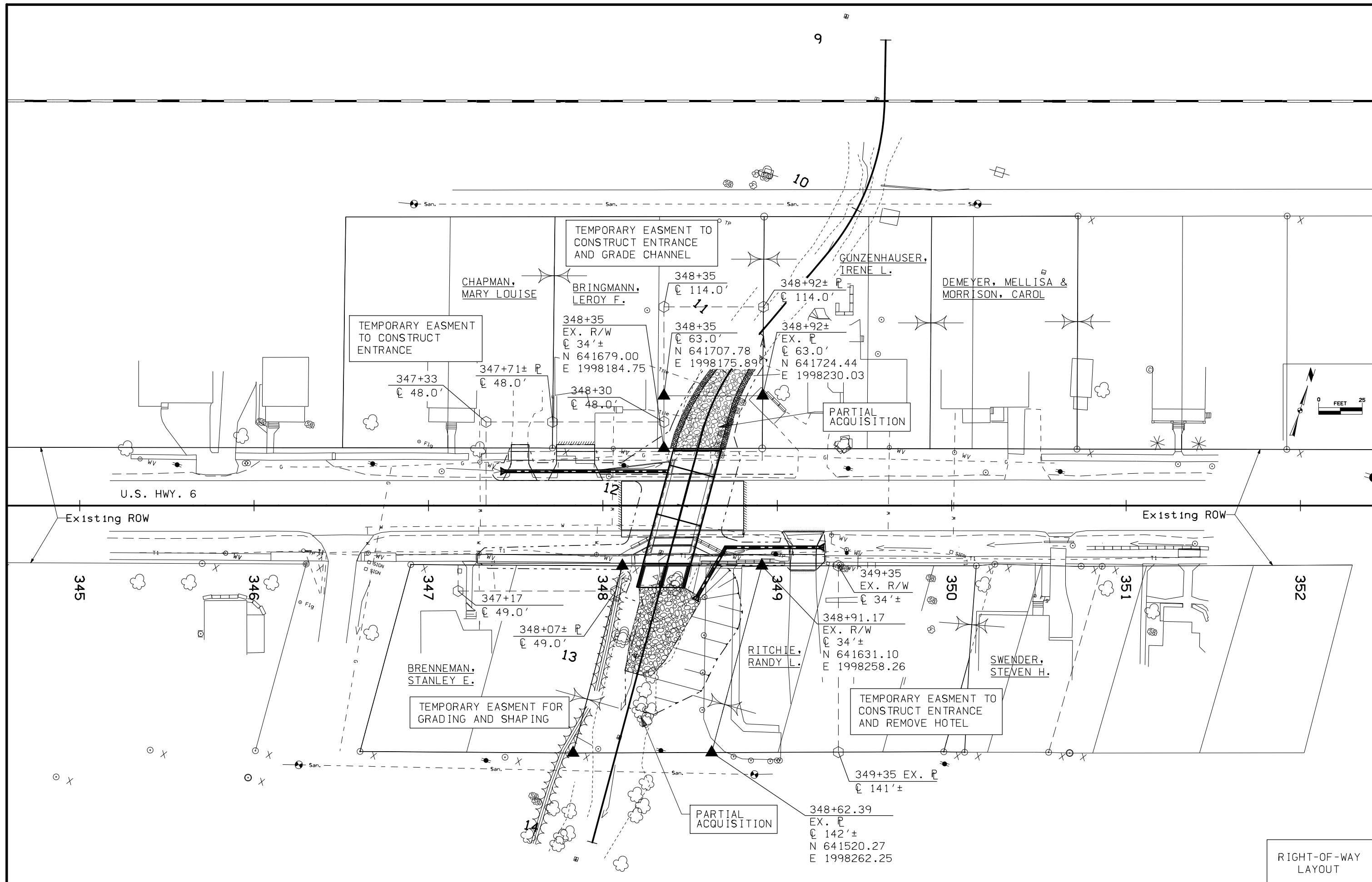
Sta. 348+45.69
 Install Twin 12'x6'x64' RCB
 Skew = 15° LT. Ahd.
 F.L. = Lt. 768.00
 Rt. 767.00

Sta. 348+45.69
 Install Twin 12'x6'x67'
 RCB Culvert
 Skew = 15° LT. Ahd.
 F.L. = LT. 768.00
 RT. 767.00

Notes:

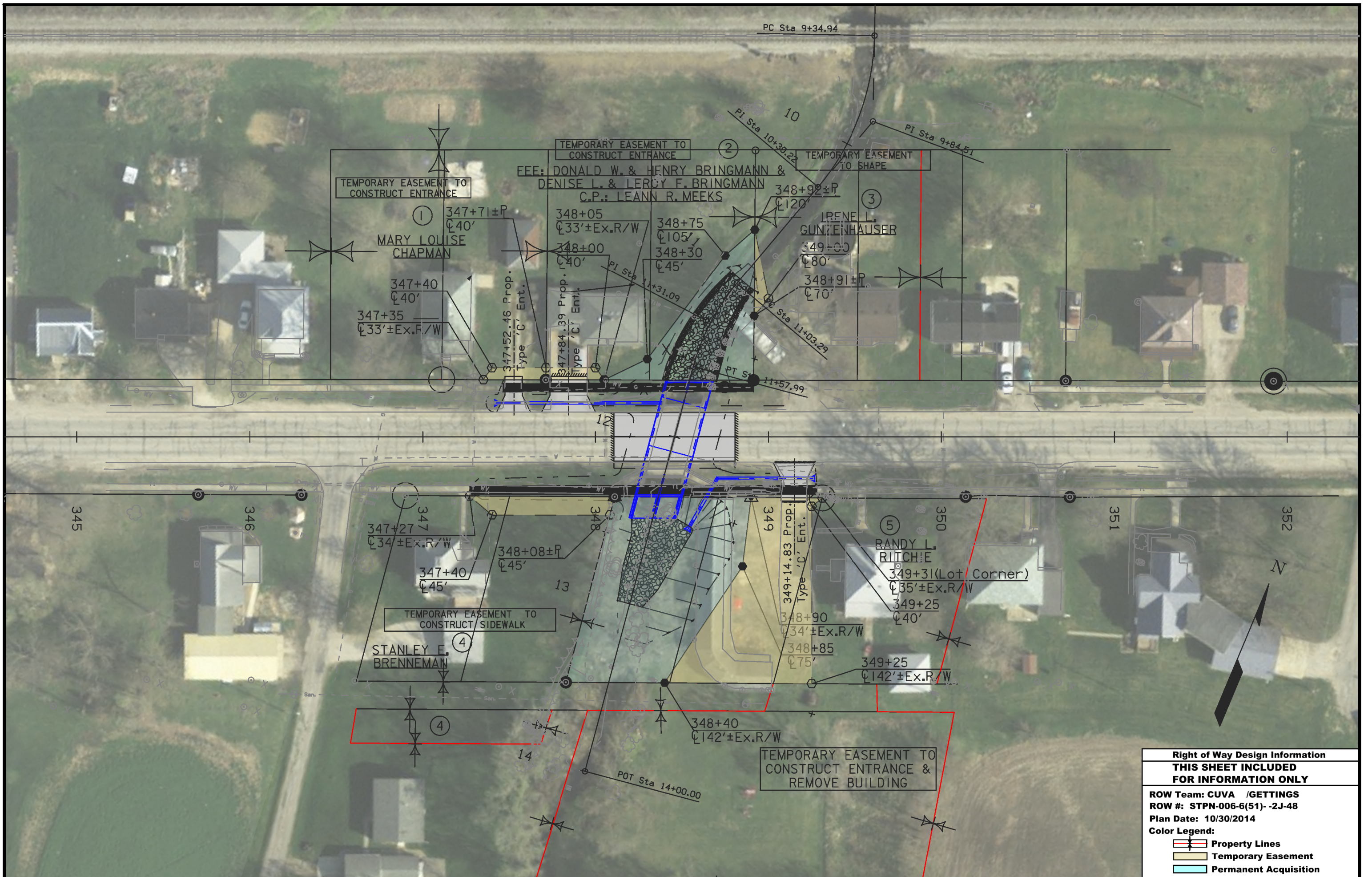
- 1 Do Not Disturb
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- X Remove Tree/Shrub



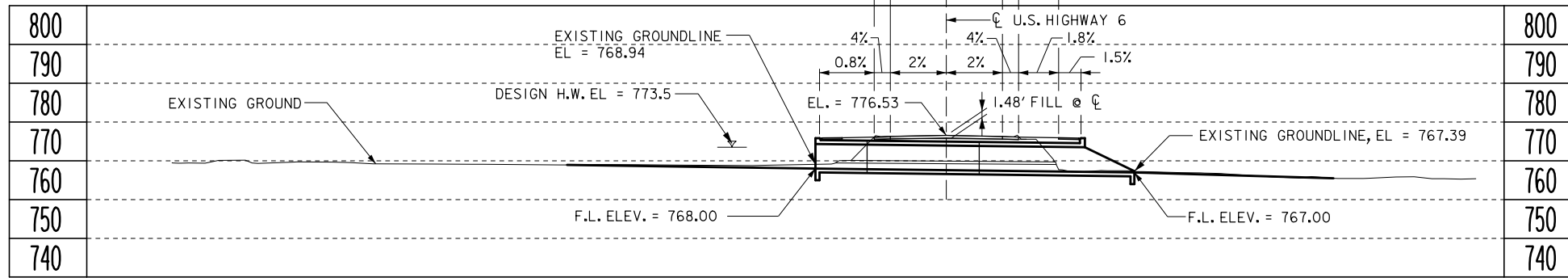


RIGHT-OF-WAY
LAYOUT

Iowa	ROW: STPN-006-6(51)--2J-48				PIN	13-48-006-010											
	In Ladora over Stream																
		STATE		COUNTY		CITY			BORROW								
PARCEL NO.	OWNER NAME	FEE	EASE	FEE	EASE	FEE	EASE	EXCESS	FEE	T.E.	MITIGATION	OTHER	HOUSE	BUILDING(S)	A/C ONLY	TOTAL ACQ.	
1	Mary Louise Chapman - Fee																
2	Donald W Bringmann - Fee Denise L Bringmann - Fee Leann R Meeks - CP1		3380 SF														
3	Irene L Gunzenhauser - Fee																
4	Stanley E Brenneman - Fee																
5	Randy L Ritchie - Fee		8042 SF														
5 Parcels	"TOTALS	0 AC	0 AC	0 AC	0 AC		0 AC	0 AC		0 AC	0 AC	0 AC		0 AC			
		0 SF	11422 SF	0 SF		0 SF	0 SF		0 SF	0 SF							



Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: CUVA /GETTINGS	
ROW #: STPN-006-6(51)-2J-48	
Plan Date: 10/30/2014	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition



LONGITUDINAL SECTION ALONG CL BOX CULVERT

TRAFFIC ESTIMATE

2016 AADT	1500	V.P.D.
TRUCKS	3	%
2036 AADT	1900	V.P.D.
TRUCKS	4	%

PAVEMENT TIE-IN
STA. 348+10.69
EL. = 776.53

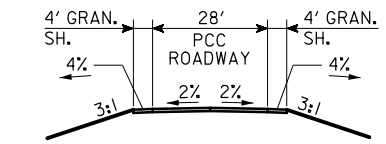
PAVEMENT TIE-IN
STA. 348+80.69
EL. = 776.53

0.00%

PROPOSED GRADE

BENCHMARK:

'X' CUT ON WEST END OF NORTH HEADWALL
STA. 348+39.2, LT 18.3'
EL. = 776.90



TYPICAL APPROACH SECTION

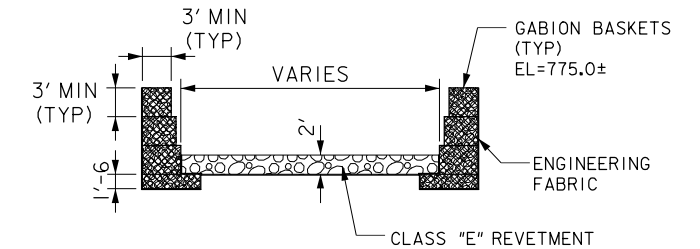
NOTE: 24' TRAVELED WAY
6' EFFECTIVE SHOULDERS

HYDRAULIC DATA

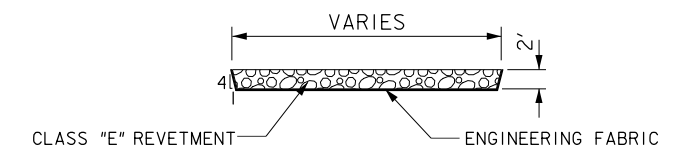
DRAINAGE AREA = 669 ACRES
STREAM SLOPE 0.0140'/FT.
DESIGN DISCHARGE, Q50 = 675 CFS
DESIGN HIGH WATER ELEVATION, Q50 = 773.5
DISCHARGE Q100 = 840 CFS
HIGHWATER ELEVATION, Q100 = 774.2

LOCATION

UNNAMED STREAM UNDER U.S. HIGHWAY 6
345' EAST OF HIGHWAY 58 INTERSECTION
T-80N R-12W
SECTION 12
HARTFORD TOWNSHIP
IOWA COUNTY
41°45'13.5"N, 92°11'19.3"E

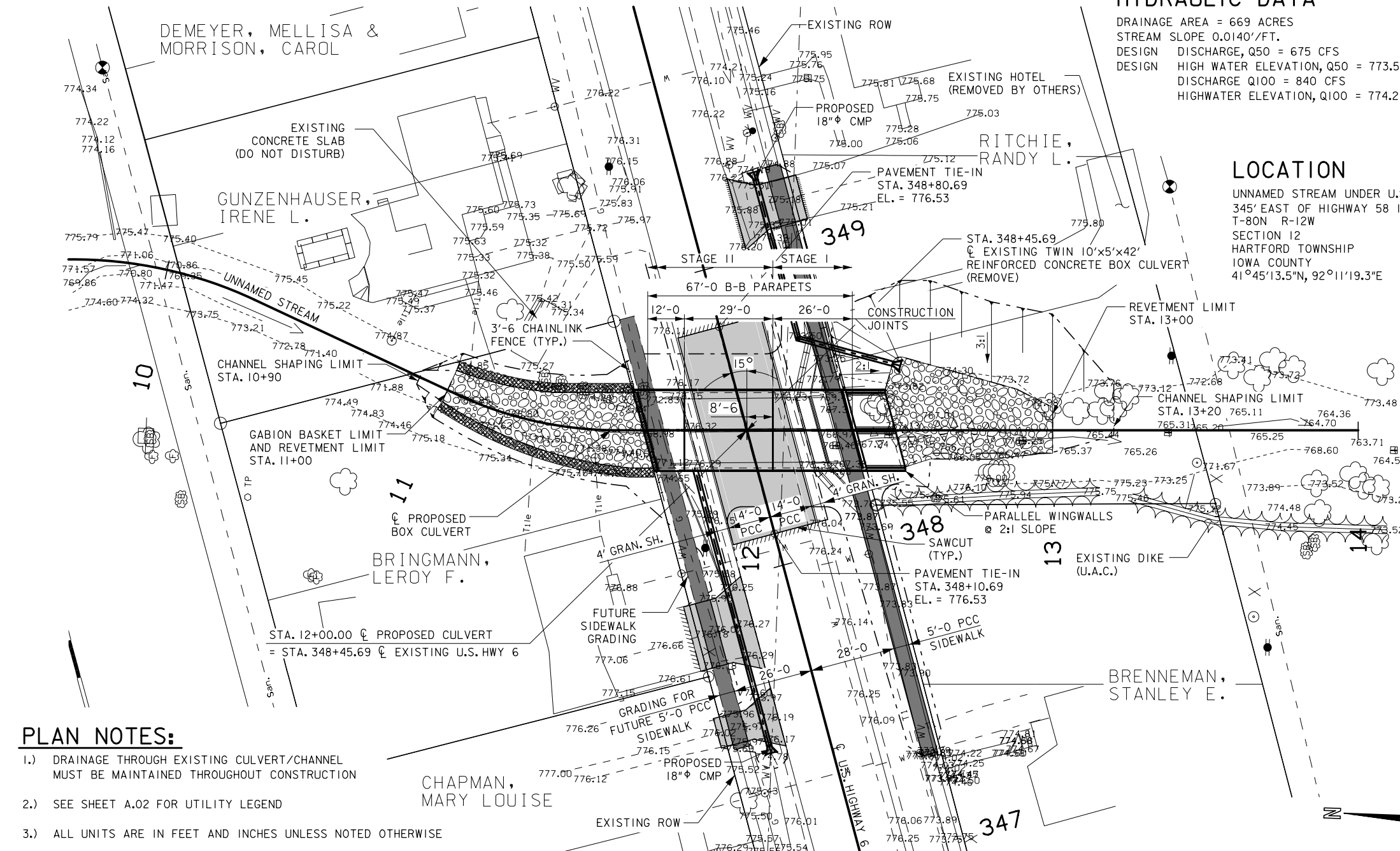


REVETMENT SECTION NORTH



REVETMENT SECTION SOUTH

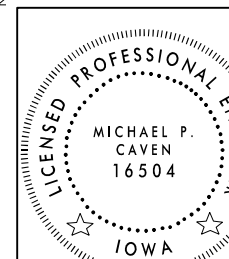
ESTIMATED REVETMENT QUANTITIES			
	REVETMENT CL. "E" (TON)	ENGINEERING FABRIC (SY)	EXCAVATION (CY)
INLET	XX	XX	XX
OUTLET	XX	XX	XX
TOTAL	XX	XX	XX



SITUATION PLAN

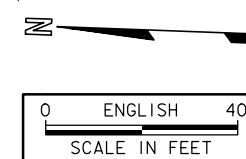
PLAN NOTES:

- 1.) DRAINAGE THROUGH EXISTING CULVERT/CHANNEL MUST BE MAINTAINED THROUGHOUT CONSTRUCTION
- 2.) SEE SHEET A.02 FOR UTILITY LEGEND
- 3.) ALL UNITS ARE IN FEET AND INCHES UNLESS NOTED OTHERWISE
- 4.) SEE 'J' SHEETS FOR STAGING DETAILS
- 5.) SEE 'D' SHEETS FOR ADDITIONAL DRIVE, SIDEWALK AND PIPE INFORMATION

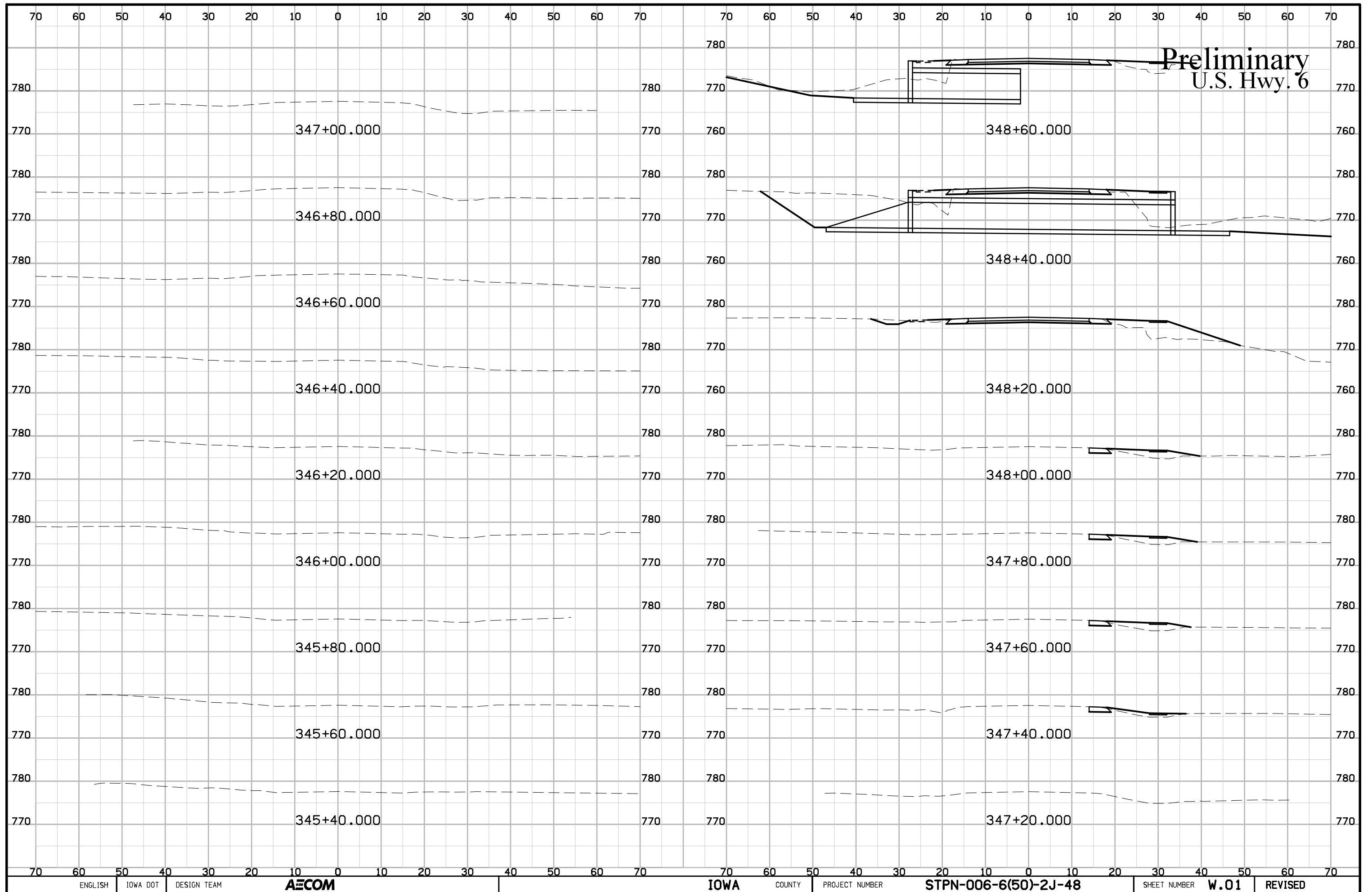


I hereby certify that this Engineering document was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa.

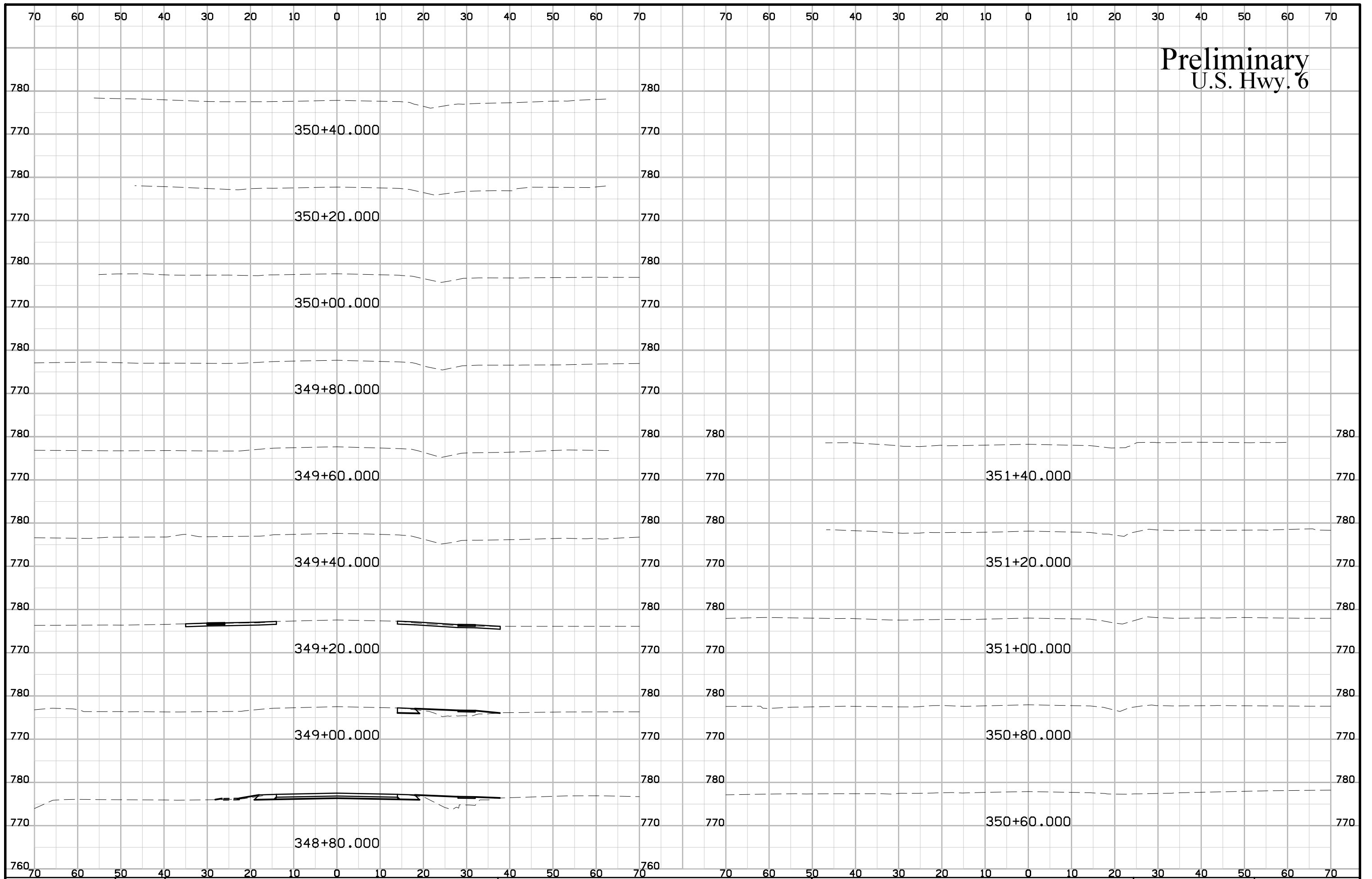
Date _____
License number 16504
My license renewal date is December 31, 2014
Pages or sheets covered by this seal:
ALL SHEETS

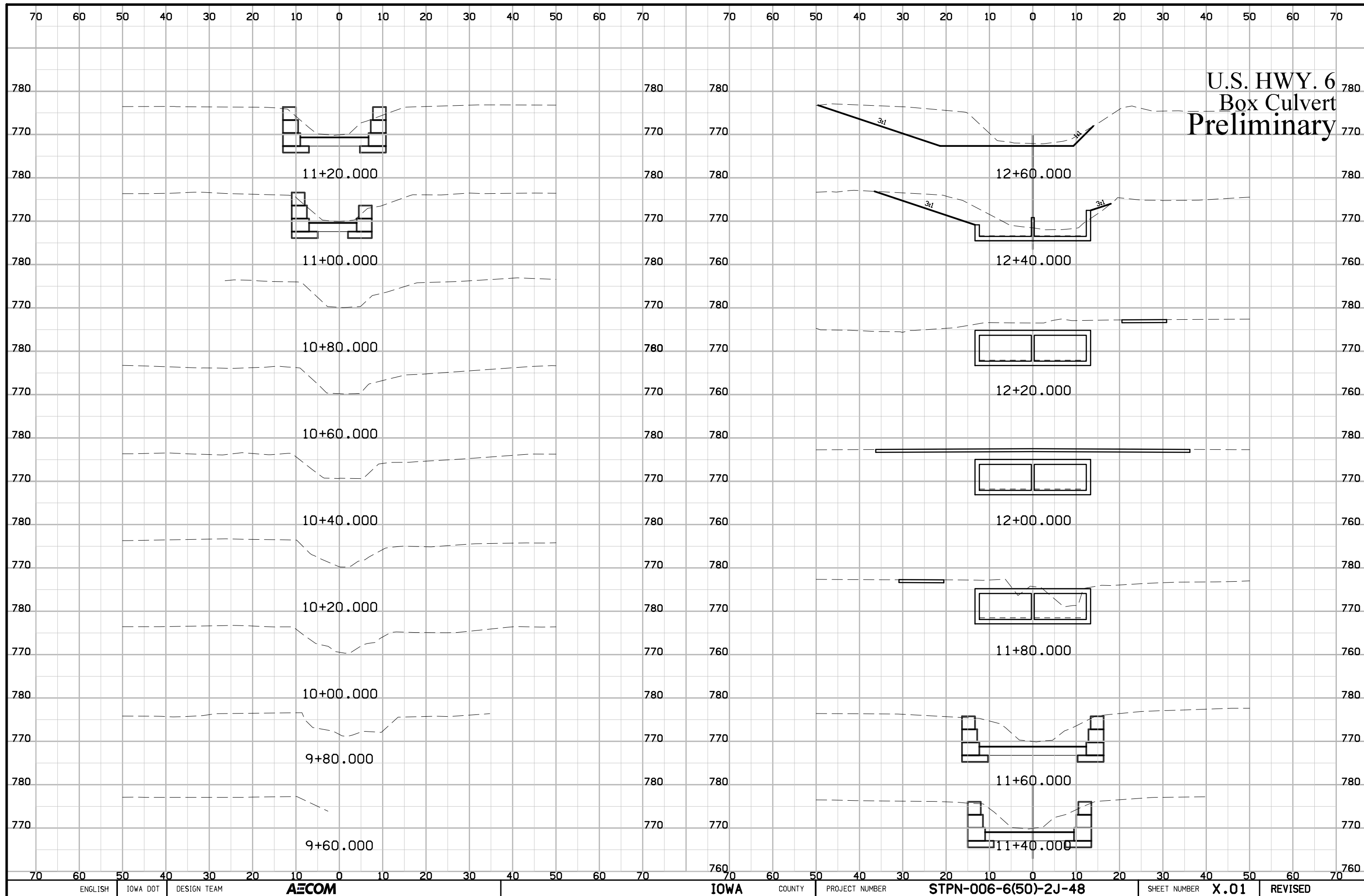


DESIGN FOR 15° SKEW (LA)
TWIN 12'x6'x67' REINFORCED CONCRETE BOX CULVERT
SITUATION PLAN
STA. 348+45.69, EXISTING CL U.S. HIGHWAY 6
IOWA COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. OF FILE NO. DESIGN NO.



Preliminary
U.S. Hwy. 6





U.S. HWY. 6
Box Culvert
Preliminary

U.S. HWY. 6 Box Culvert Preliminary

