

WINNESHIEK CO.
 NHSX-150-5(9)--3H-96
 HSIPX-150-5(8)--3L-96

HMA RESURFACING/
 PAVED SHOULDERS
 LETTING DATE
 1-20-2021



Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM WINNESHIEK COUNTY

NHSX-150-5(9)--3H-96/HSIPX-150-5(8)--3L-96

HMA RESURFACING WITH
HMA PAVED SHOULDER - NEW

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.14 of the Specifications.



REVISIONS

TOTAL
52

PROJECT IDENTIFICATION NUMBER

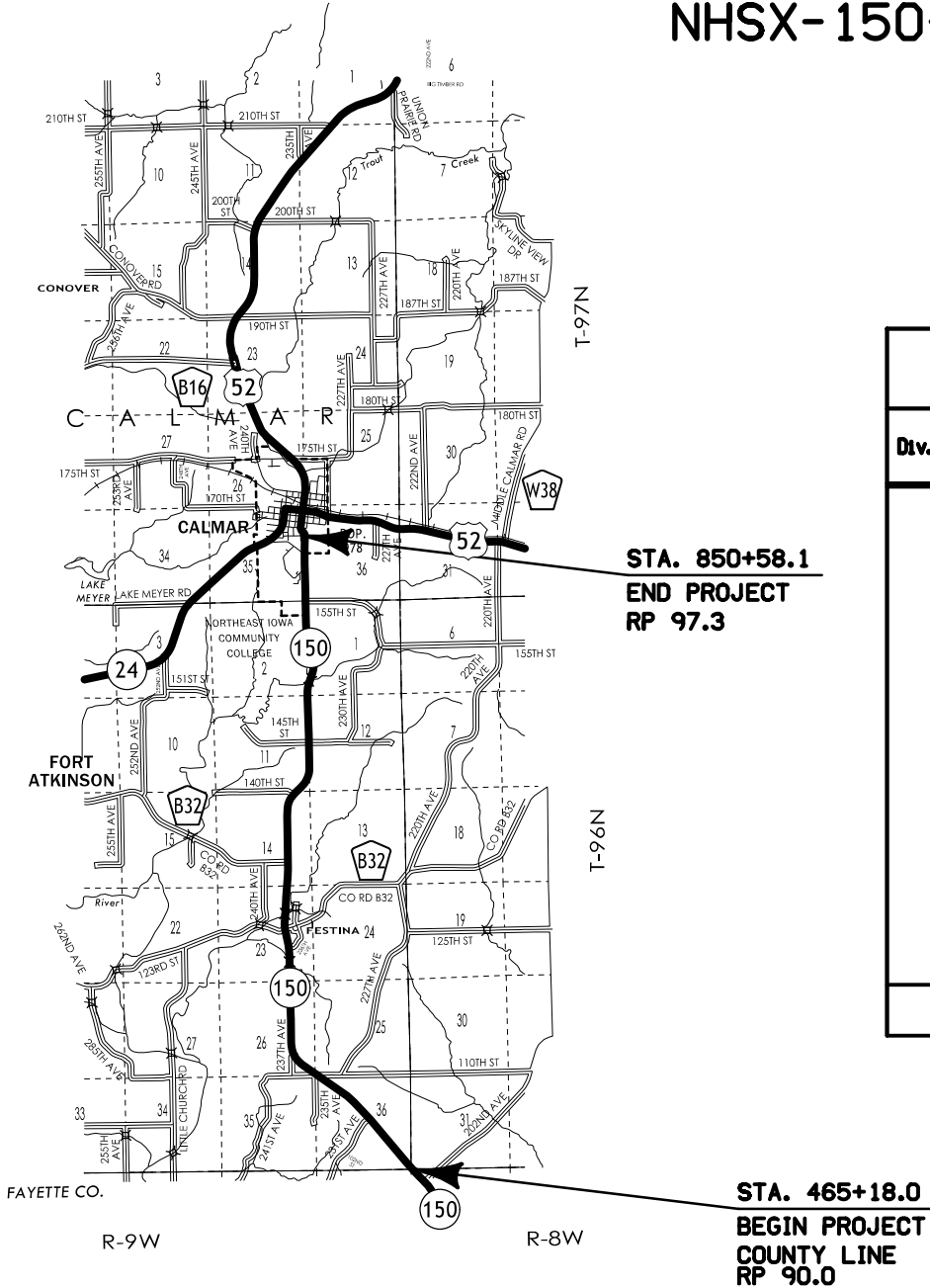
18-96-150-010

PROJECT NUMBER

NHSX-150-5(9)--3H-96

HSIPX-150-5(8)--3L-96

R.O.W. PROJECT NUMBER



MILEAGE SUMMARY			
Div.	Location	Lin. Ft.	Miles
	STA 465+18.0 to STA 850+58.1	38,540.1	
Total Length of Project		38,540.1	7.30

INDEX OF SHEETS	
No.	DESCRIPTION
A Sheets	Title Sheets
A.1	Title Sheet
B Sheets	Typical Cross Sections and Details
B.1 - 6	Typical Cross Sections and Details
C Sheets	Quantities and General Information
C.1	Estimated Project Quantities
C.2	Project Description
C.2 - 3	Estimate Reference Information
C.3	Standard Road Plans
C.3	Index of Tabulations
C.4 - 14	Tabulations (beg. with tab. of incidentals if needed)
J Sheets	Traffic Control and Staging Sheets
J.1	Traffic Control Plan and Staging notes
R Sheets	Mainline Plan & Profile/Erosion Control
* R.1 - 22	Traffic Control Plan and Staging notes
U Sheets	500 Series, Mod.Stds. and Detail Sheets
* U.1 - 4	Temporary Sediment Control
V Sheets	Bridge and Culvert Situation Plans
V.1 - 4	Bridge and Culvert Situation Plans
	* Color Plan Sheets

DESIGN DATA RURAL

2020 AADT	2400	V.P.D.
2040 AADT	2800	V.P.D.
20-- DHV	--	V.P.H.
TRUCKS	13	%
Total Design ESALs	911,040	

INDEX OF SEALS

SHEET NO.	NAME	TYPE
A.1	Mary K. Kelly	Primary Signature Block



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.

Signature _____ Date _____

MARY K. KELLY

Printed or Typed Name

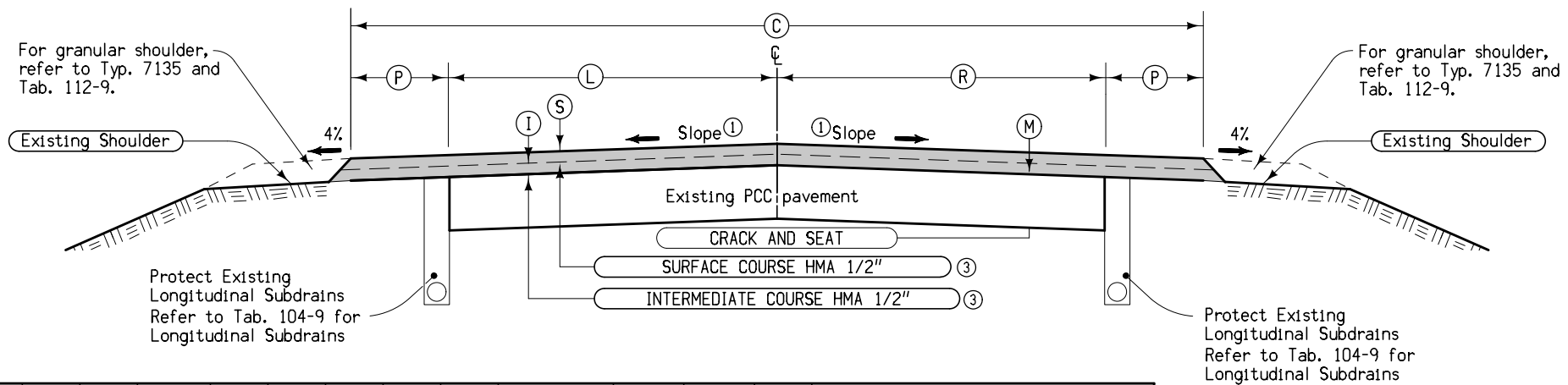
My license renewal date is December 31, 2020

Pages or sheets covered by this seal:

A.1, B.1-B.6 C.1-C.14, J.1, R.1-R.22, U.1-U.4, V.1-V.4

Design Rates	
Item	Rate
Surface Course	147 lbs./cu. ft.
Intermediate Course	147 lbs./cu. ft.
Tack Coat	0.05 gal./sq. yd.
Binder Content	6.0%

For granular shoulder, refer to Typ. 7135 and Tab. 112-9.

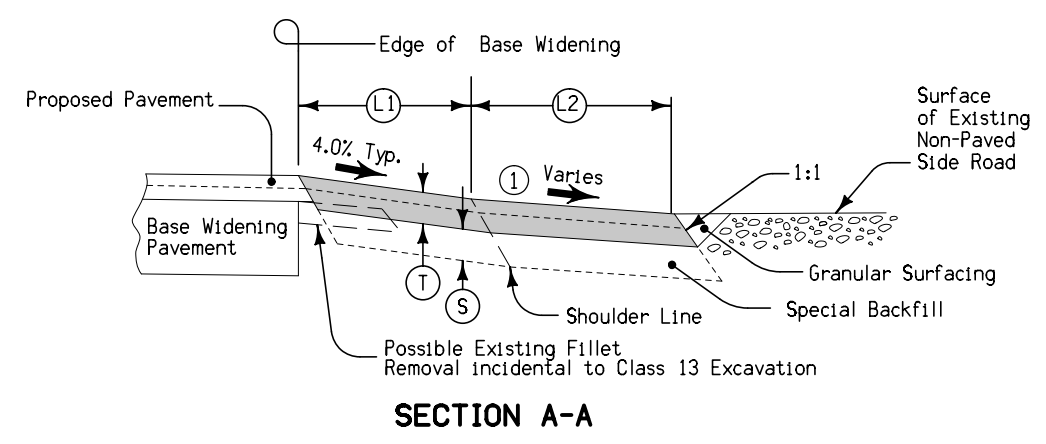
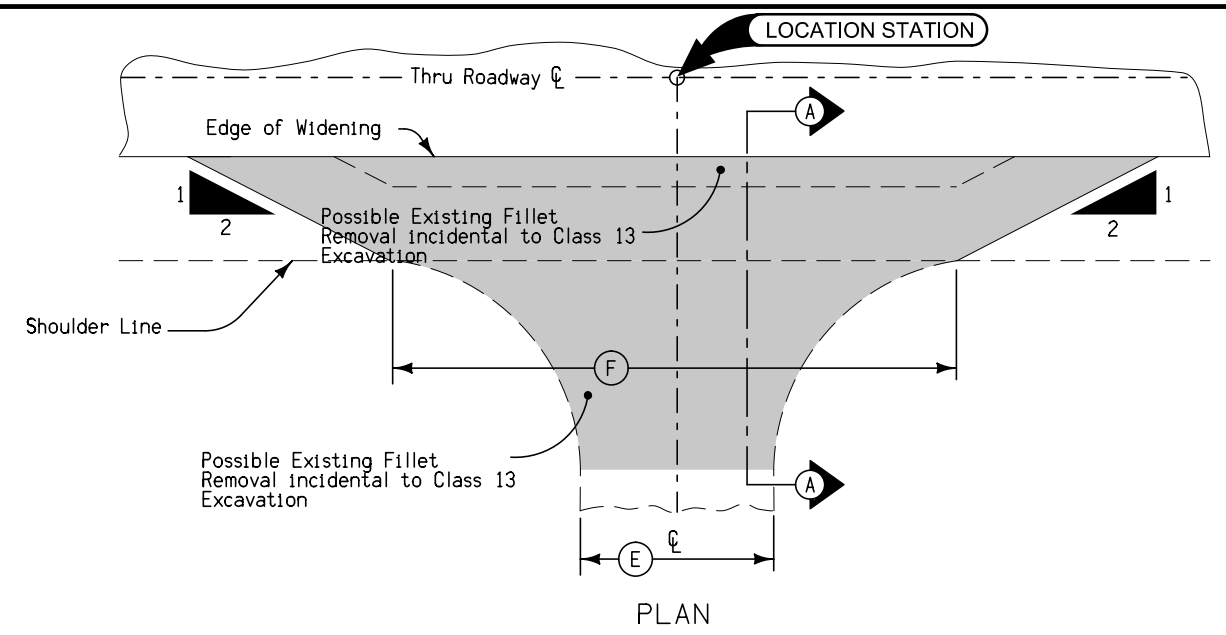


For granular shoulder, refer to Typ. 7135 and Tab. 112-9.

- Notes:
- ① Finished slope shall match existing pavement except that the maximum allowable slope is 3.0 %, minimum allowable slope is 2.0 %. Section may be modified as directed by the Engineer through areas of special shaping.
 - ③ Asphalt binder shall be PG 58-28S Standard Traffic.

Location		(S)	(i)	(C)	(L)	(R)	(P)	(B)	(M)	Scarification	HMA surface	HMA Int.	BINDER	Remarks
Station To Station		Inches	Inches	Feet	Feet	Feet	Feet	Inches	Inches	Sq.YD.	Ton	Ton	Ton	
465+18.0	850+58.1	3	3	34	11	11	6	6	8	-	-	-	-	Mainline HMA Type N3 Notch runouts
831+09.0	832+59.0	3	3	46	11	11	18	6	8	-	-	-	-	12' SB Right Turn Lane
832+59.0	833+01.0	3	3	46-40	11	11	18-12	6	8	-	-	-	-	Turn lane taper
										-	-	-	-	Total

TYPICAL CROSS SECTION
CRACK AND SEAT, RESURFACING, AND BASE WIDENING



Special shaping of existing surface prior to placement of fillet or fillet extension may be required by the Engineer and is incidental to other work on the project.
Pavement quantities included with mainline shoulder quantities.
① Match existing slope.

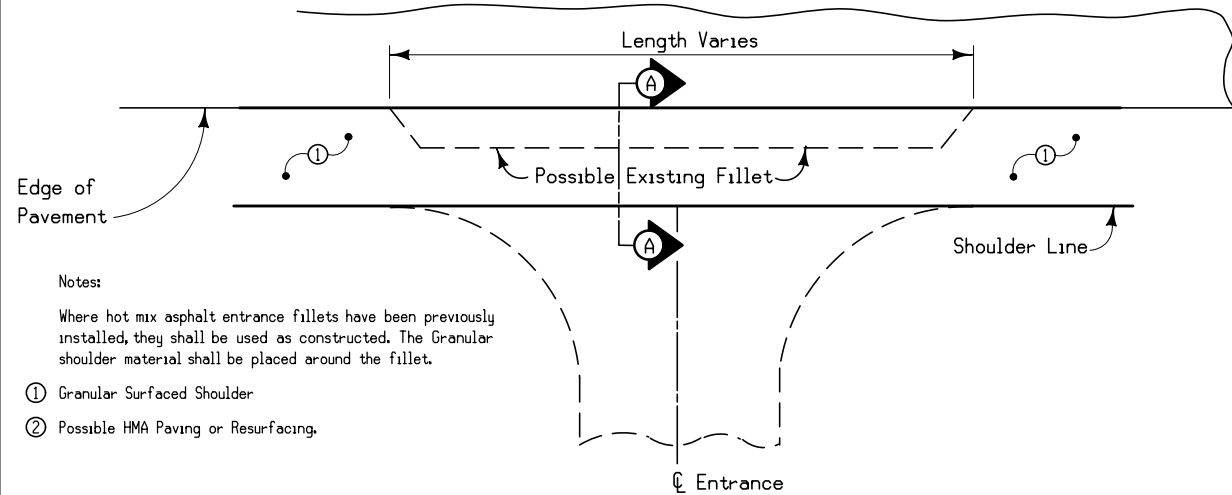
100% STATE

Station Location	ⓕ Feet	ⓓ Inches	Ⓛ ₁ Feet	3" Surface HMA Ton	Binder Ton	Remarks
627+10.5 Lt.	78	3	10.0	15	1	123rd. St.
627+10.5 Rt.	78	3	10.0	15	1	B32
664+71.0 Lt.	132	3	10.0	23	1.5	B32
793+00.0 Lt.	300	3	10.0	64	4	NICC S. Dairy Ent.
800+00.0 Lt.	450.0	3	10.0	101	6	NICC N. Dairy Ent.
830+44.0 Lt.	121.0	3	10.0	97	6	NICC School Ent.
				315	19.5	Totals

100% COUNTY

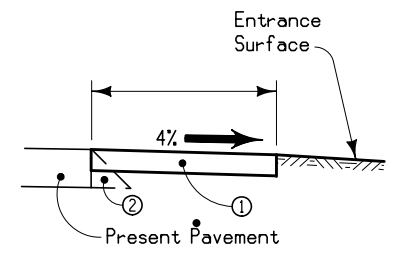
Station Location	ⓔ Feet	ⓓ Inches	Ⓛ ₂ Feet	6" BASE HMA SY	BINDER Ton	Remarks

FILLET EXTENSION FOR
NON-PAVED SIDE ROADS

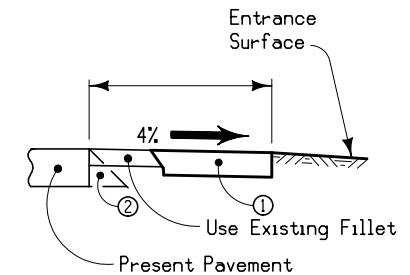


Notes:
Where hot mix asphalt entrance fillets have been previously installed, they shall be used as constructed. The Granular shoulder material shall be placed around the fillet.
① Granular Surfaced Shoulder
② Possible HMA Paving or Resurfacing.

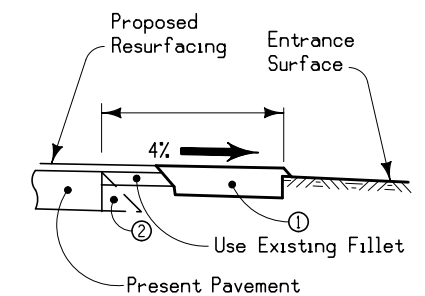
Plan



Section A-A
Without Fillet

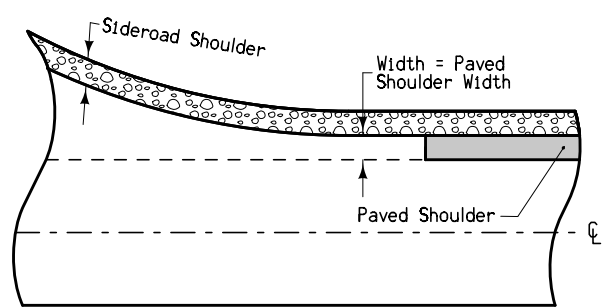


Section A-A
With Previous Fillet

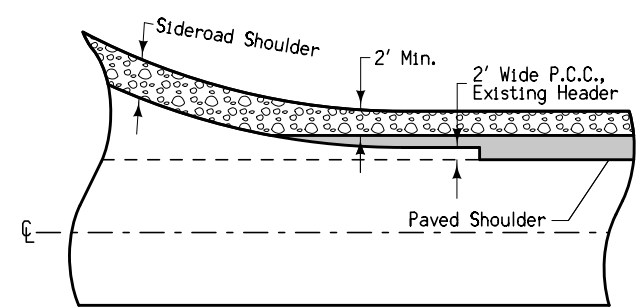


Section A-A
With Previous Fillet
And Resurfacing Less than 1 1/2"

GRANULAR SHOULDER CONSTRUCTION THRU ENTRANCES

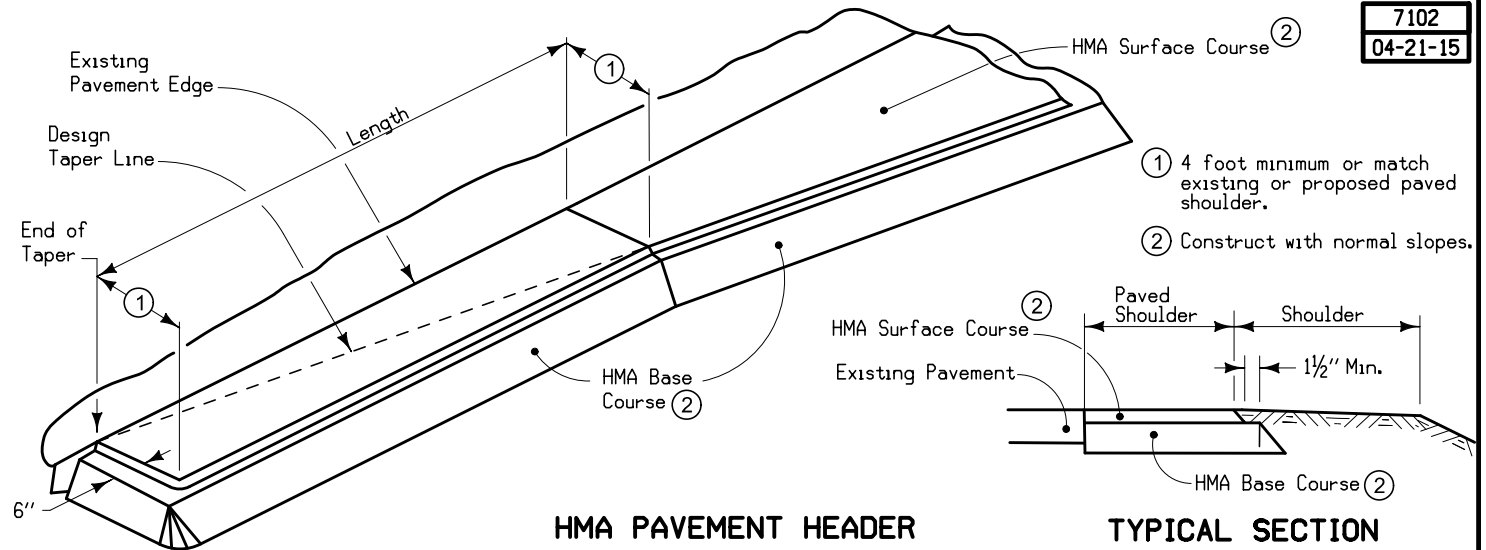


With Newly Constructed Returns



At UAC Returns

PAVED SHOULDER
DETAIL AT RETURNS

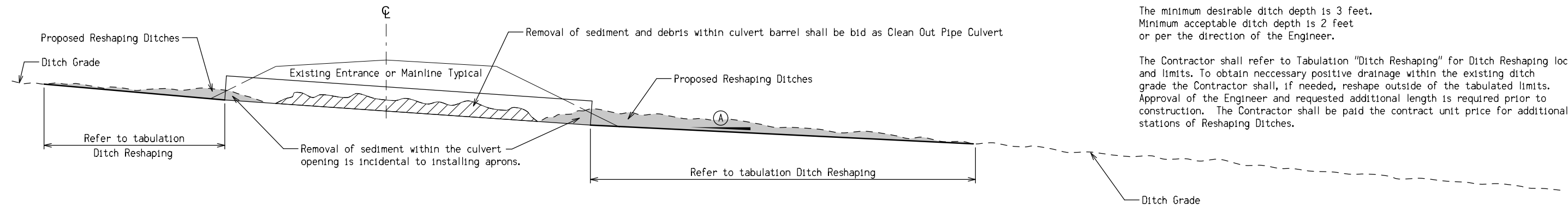


HMA PAVEMENT HEADER

TYPICAL SECTION

Refer to project plans for exact details of pavement requirements.

- ① 4 foot minimum or match existing or proposed paved shoulder.
- ② Construct with normal slopes.



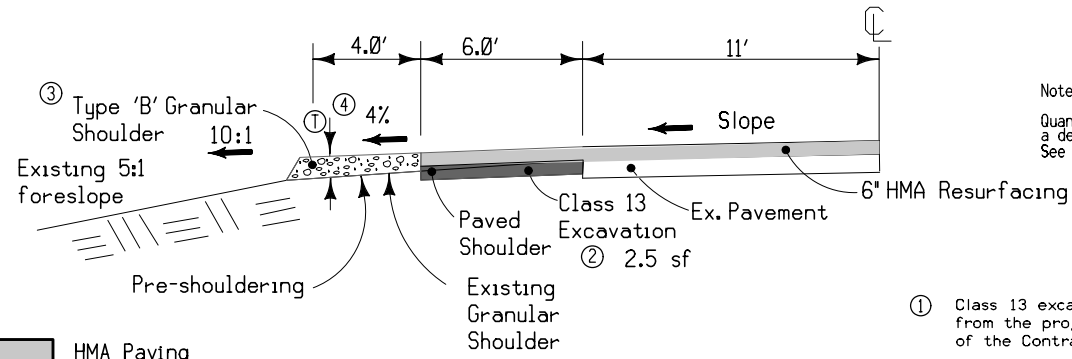
Ⓐ Contractor to reshape ditch from culvert outlet as follows:

Minimum acceptable ditch grades range from 0.2% to 1.0%.
Desirable ditch grades range from 1.0% to 3.0%.

The minimum desirable ditch depth is 3 feet.
Minimum acceptable ditch depth is 2 feet
or per the direction of the Engineer.

The Contractor shall refer to Tabulation "Ditch Reshaping" for Ditch Reshaping locations and limits. To obtain necessary positive drainage within the existing ditch grade the Contractor shall, if needed, reshape outside of the tabulated limits. Approval of the Engineer and requested additional length is required prior to construction. The Contractor shall be paid the contract unit price for additional stations of Reshaping Ditches.

RESHAPING DITCHES TYPICAL



- HMA Paving
- Base Widening
- Granular

Notes:
Quantities have been determined on the basis of a design weight of 140 lbs. per cubic foot. See Tabulation 112-9.

- ① Class 13 excavation material shall be removed from the project site and shall become property of the Contractor.
- ② Tons per station. Assume an existing cross slope of 6%, a proposed slope of 2%, and a nominal midpoint thickness of one inch.
- ③ CY per station

**TYPICAL SECTION
FOR TYPE 'B'
GRANULAR SHOULDER
ADJACENT TO HOT MIX ASPHALT
RESURFACING**

LOCATION			TONS ②	CY ③	Ⓣ Inches
ROAD	STATION TO STATION	SIDE			

100-1D
10-18-05

UTILITIES

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☐

232-10
04-18-17

EMERALD ASH BORER

Any living, dead, cut or fallen material of the ash (Fraxinus spp.) including trees, nursery stock, logs, firewood, stumps, roots, branches, and composted or uncomposted ash chips can be freely moved within the yellow areas of the most recent Federal EAB Quarantine & Authorized Transit.

https://www.aphis.usda.gov/plant_health/plant_pest_info/emerald_ash_b/downloads/eab_quarantine_map.pdf.

Obtain appropriate Compliance Agreements from USDA APHIS PPQ prior to moving any of the above listed ash articles to areas outside the yellow zone on the map.

For questions, concerns, and general assistance, contact:

USDA APHIS PPQ, Iowa office, 515-414-3295

Or

Iowa Department of Agriculture & Land Stewardship
515-725-1470
Entomology@IowaAgriculture.gov

262-6
10-18-05

UTILITIES

(NOT A POINT 25 PROJECT)

This is NOT a POINT 25 project and is not subject to the provisions of IAC 761-115.25.

EXISTING PAVEMENT

No.	Location					Year	Type	Project Number	Surface		Base		Subbase		Removal		Coarse Aggregate			Reinforcement	Remarks
	County	Route	Dir. of Travel	Begin Ref. Loc. Sign	End Ref. Loc. Sign				Type	Depth	Type	Depth	Type	Depth	Type	Depth	Source	Type	Durability Class	Type	
	96	150	NB	90.03	96.64	1958	74	DF-1011(2)	PCC	8							ELDORADO-JACOBSON	C.LIST.	1		

INDEX OF TABULATIONS

Tabulation	Tabulation Title	Sheet No.

NOTCHES AND RUNOUTS FOR RESURFACING

Refer to PR-201 and PR-202.

① Bid item. Applies only to Types 'N1' and 'N3' on PR-202. Refer to 100-25 for remaining values.

Location Station	Type of Notch or Runout	(S)	(I)	(DI)	(L)	(M)	Pavement ① Scarification	Remarks
		IN	IN	IN	FT	IN	SY	
465+18.0	Type 'N3'	3.0	3.0		300.0		366.7	Fayette County line - Begin Project
627+10.5 Lt.	Type 'N2'	3.0			50.0		240.0	123rd /St. Mill 3"/61' CL to joint.
627+10.5 Rt.	Type 'N2'	3.0			60.0		283.0	B32 EB Mill 3"/71' CL to joint.
664+89.4 Lt.	Type 'N2'	3.0			50.0		4231.0	B-32 WB Mill 3"/ 61' CL os
793+00.0 Lt.	Type 'N2'	3.0			10.0		389.0	NICC Dairy S. ent. Mill 3"
800+00.0 Lt.	Type 'N2'	3.0			10.0		611.1	NICC Dairy N. ent. Mill 3"
830+44.0 Lt.	Type 'N2'	3.0			12.0		549.0	NICC ent. w/ turn lane. Mill 3".
850+58.1	Type 'N3'	3.0	3.0		300.0		366.7	End of Project
+49.00								

FORESLOPE FLATTENING AND DRAINAGE STRUCTURES BY ROAD CONTRACTOR (MAINLINE PIPES)

Refer to Standard Road Plans DR-121, DR-122, and DR-213.

* Not a bid item

Existing Information		New Information		Length of New Const.	Flow Line Elevations		Dimensions				Removal and Reinstallation of Culvert Aprons and Pipes				New Apron No.		Apron Guard* (DR-213)	Type 'C' Connections* (DR-122)		Connected Pipe Joint* (DR-121)	Embank.- In-Place	Class 20		Remarks	
																									Total (LF)
							Location	Size and Type of Culvert	Size IN	Type of Culvert	LF	LEFT	RIGHT	LEFT											RIGHT
Mainline																									
477+81	2x2 RCB w/ 30" RCP extension													1	6						Type 1			4.0	clean outlet & reshape ditch to ROW
536+23	2x2 RCB w/ 30" RCP extension													1	6						Type 1			4.0	Clean pipe. Reshape ditch
544+73	2x2 RCB w/ 30" RCP extension																								Clean inlet. Reshape ditch 30'
576+12	2x2 RCB w/ 30" RCP extension																								Resahpe ditch Rt. Side 100'
618+51	2x2 RCB w/ 30" RCP extension													2	12			1	1		Type 1		60.0	8.0	
638+82	2x2 RCB w/ 30" RCP extension																	1	1		Type 1				Clean pipe. Reshape ditch Lt 30'.
655+00	48" 78' RCP	48	RCP	6												3	18	1	1		Type 1		30.0	24.0	Replace one outlet section with new.
685+35	2x2 RCB w/ RCP extension																								Clean out. Reshape ditch Rt. to ROW
770+10	RCB																								Clean. N. Barrel full. Reshape to ROW ea
788+07	30" RCP													1	6			1							Lt. Side
835+90	5x4 RCB w/ extension																								Reshape ditch Rt.
Entrance Pipes																									
491+82	Rt. 36"x32' CMP																	1	1						Pipe 1/2 full. Clean out.
491+82	Lt. 18"x30' CMP																	1	1				15.0		
511+10	Rt. 18"x34' CMP																	1	1						Buried. Clean pipe. Reshape ditch 100'.
511+10	Lt. 18"x 30' CMP																	1	1				15.0		Buried. Clean pipe. * Remove RR ties. Protect flowers.
516+82	Rt. 24"x30' CMP																	1	1						Clean pipe. Reshape ditch 50'.
527+56	Lt. 18"x32' CMP																	1	1				15.0		911 Address #1087
527+56	Rt. 18"x28' CMP																	1	1				15.0		
541+60	Rt. 18"x24' CMP																	1	1						Reshape ditch. Approx. 50' each end.
555+05	Lt. 18"x36' CMP																		1						Clean pipe. Inlet buried
555+05	Rt. 18"x34' CMP																	1	1						Clean inlet and reshape ditch on inlet si
567+70	Lt. 18"x28' CMP																	1	1						Outlet buried. Clean pipe. Reshape ditch 1
585+30	Lt. 24"x34' CMP																	1	1				15.0		Reshape ditch outlet end. 30'
601+50	Rt. 18"x60' CMP																	1					15.0		Reshape to RCB. Erosion Stone
602+09	Lt. Dry Entrance																						15.0		Add for safety slope
616+75	Rt. 15"x32' CMP																	1	1				15.0		Outlet buried. Clean pipe
620+50	Lt. 18"x78' CMP																	1	1				30.0		Reshape outlet ditch
620+50	Rt. 18:x66' CMP																						45.0		Safety slope
624+60	Lt. 18"x46 CMP	15"	CMP	6														1	1				15.0		Replace ex. 18" with 15" at ex. Grade
656+65	Lt. 18"x36" CMP																	1	1				15.0		Clean outlet
664+81	Lt. 18"x46" CMP	18"	CMP	6														1	1						Sideroad B32. Extend inlet. Reshape ditc
674+62	Rt. 24"x30' CMP																	1	1				15.0		
677+02	Lt. 18"x30' CMP																	1	1						Clean Pipe. Reshape ditch 100'.
690+70	Lt. 18"x28' CMP																	1	1						Reshae ditch
715+75	Rt.																						60.0		Safety slopes
800+88	Lt. 18"x34' CMP																	1	1				30.0		Buried. NICC Const. ent. Reshape 30' N. &

FORESLOPE FLATTENING AND DRAINAGE STRUCTURES BY ROAD CONTRACTOR (MAINLINE PIPES)

Refer to Standard Road Plans DR-121, DR-122, and DR-213.

* Not a bid item

Existing Information		New Information		Length of New Const.	Flow Line Elevations		Dimensions				Removal and Reinstallation of Culvert Aprons and Pipes				New Apron No.	Apron Guard* (DR-213)	Type 'C' Connections* (DR-122)	Connected Pipe Joint* (DR-121)	Embank.- In-Place	Class 20	Remarks
Location	Size and Type of Culvert	Size	Type of Culvert		LEFT	RIGHT	Total (LF)		Extensions (LF)		Aprons		Culvert Sections								
							LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	NO.*	FT							
808+03 Rt.																			75.0	Safety slope North side	
* Existing railroad ties shall become th of the contractor at the landowners discre																					

ROCK EROSION CONTROL

Refer to EC-301 and Detail 570-8

Location				L	W	Rock Erosion Control (REC)					Material Bid Quantities			Remarks
Road Identification	Begin Station	End Station	Side			Type 1	Type 2	Type 3	Type 4	Type 5	Eng. Fabric	Class E Revetment	Erosion Stone	
						Rock Ditch Check	Rock Ditch	Rock Flume	Rock Splash Basin	Rock Slope Protection	SY	TON	TON	
IA 150	602+10	602+40	Rt.	30	15							2.0	See tab. 104-13	
	601+57.5		Lt.	30	10							2.0	RCB Outlet Scour	
	614+45		Lt.	15	15							2.0	RCB Outlet Scour	
	655+65		Rt.	6	20							2.0	RCB Outlet Scour	
	736+12		Rt.	25	2							2.0	RCB Outlet Scour	

CLEARING AND GRUBBING

Location		Work and Material Type	Trees, Stumps, and Logs and Down Timber Material Diameters													All Other Materials		Estimated Quantities			Remarks
Station to Station or Ref. Loc. Sign to Ref. Loc. Sign or Description	Direction of Travel		3"-6"	>6"-9"	>9"-12"	>12"-15"	>15"-18"	>18"-24"	>24"-30"	>30"-36"	>36"-42"	>42"-48"	>48"-60"	>60"-72"	>72"	Length	Width	Units	Area	Herbicide Application	
			FT	FT	Units	Acres	Each														
567+00 Rt. Side at RCB				6				4							50.0	50.0	10.0				
608+94 at RCB			2	1														3.0			
646+01 at RCB				30	1			1							60.0	20.0	32.0				
674+62 Rt.						1															
680+52 at RCB								1											Reshape ditch		
815+67 at RCB					10			1											Rt. side		

SHOULDERS

- ① Lane(s) to which the shoulder is adjacent.
- ② See Typ. 7156, 7157, or 7158.
- ③ Bid Item.
- ④ Applies only for Paved Shoulders constructed on project with existing granular shoulders.
- ⑤ Bid Item. Typ. 7156, 7157, or 7158.
- ⑥ Does not include shrink.

Calculations assume a HMA unit weight (lbs/cf) of 147, a Special Backfill unit weight (lbs/cf) of 140, and a Granular Shoulder unit weight (lbs/cf) of 140.

Road Identification	Direction Of Traffic	Location		Side	P Width FT	P _{SG} Width FT ②	G Width FT	L Length FT	Class 13 ^④ Excavation CY ③	Hot Mix Asphalt		Binder TONS	Paved Shoulder SY ③	" Paved Shoulder at Guardrail SY ⑤	Reinforced Paved Shoulder SY ③	Special Backfill				Subbase CY ③	Granular Shoulder		Earth Shoulder Construction Alternates			Remarks														
		Station to Station	Station to Station							HMA Alternate						PCC Alternate		TON ③	TON/STA		TON ③	TON/STA	TON ③	TON/STA	CY ③		TON ③	TON/STA	STA ③	HMA CY ⑥	PCC CY ⑥									
										TON ③	TON/STA					TON ③	TON/STA																							
										TON ③	TON/STA					TON ③	TON/STA																							
IA 150		465+18.00	626+70.50	Lt.	6.0		6.0	16152.5	1794.7	3561.626	22.050	213.698	10768.3																											
		627+43.50	664+10.00	Lt.	6.0		6.0	3666.5	407.4	808.463	22.050	48.508	2444.3																											

SHOULDERS

- ① Lane(s) to which the shoulder is adjacent.
- ② See Typ. 7156, 7157, or 7158.
- ③ Bid Item.
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- ⑤ Bid Item. Typ. 7156, 7157, or 7158.
- ⑥ Does not include shrink.

Calculations assume a HMA unit weight (lbs/cf) of 147, a Special Backfill unit weight (lbs/cf) of 140, and a Granular Shoulder unit weight (lbs/cf) of 140.

Road Identification	Direction Of Traffic	Location		Side	P Width FT	P _{SG} Width FT ②	G Width FT	L Length FT	Class 13 ^④ Excavation CY ③	Hot Mix Asphalt		Binder TONS	Paved Shoulder SY ③	" Paved Shoulder at Guardrail SY ⑤	Reinforced Paved Shoulder SY ③	Special Backfill				Subbase CY ③	Granular Shoulder		Earth Shoulder Construction Alternates			Remarks																
		Station to Station	Station to Station							HMA Alternate						PCC Alternate		TON ③	TON/STA		TON ③	TON/STA	TON ③	TON/STA	CY ③		TON ③	TON/STA	STA ③	HMA CY ⑥	PCC CY ⑥											
										TON ③	TON/STA					TON ③	TON/STA																									
										TON ③	TON/STA					TON ③	TON/STA																									
		665+10.00	791+50.00	Lt.	6.0		6.0	12640.0	1404.4	2787.120	22.050	167.227	8426.7																													
		794+50.00	798+25.00	Lt.	6.0		6.0	375.0	41.7	82.688	22.050	4.961	250.0																													
		803+75.00	828+90.00	Lt.	6.0		6.0	2515.0	279.4	554.558	22.050	33.273	1676.7																													
		833+01.00	850+58.10	Lt.	6.0		6.0	1757.1	195.2	387.441	22.050	23.246	1171.4																													
		465+18.00	626+70.50	Rt.	6.0		6.0	16152.5	1794.7	3561.626	22.050	213.698	10768.3																													
		627+43.50	850+58.10	Rt.	6.0		6.0	22314.6	2479.4	4920.369	22.050	295.222	14876.4																													

LONGITUDINAL SUBDRAIN SHOULDER AND BACKSLOPE

Refer to Soils Sheets

* Not a bid item. Bridge berm quantities assume a trench depth of 24 inches.

Line No.	Road or Lane Identification	Location		Side	Longitudinal Subdrain (DR-303)								Subdrain Outlet		Porous* Backfill CY	Class "A"* Crushed Stone CY	Remarks																									
		Station to Station	Station to Station		Depth IN	Shoulder		Backslope		Bridge Berm (EW-203 or EW-204)		DR-303, DR-305 or DR-306																														
						Size IN	Length FT	Size IN	Length FT	Standard Road Plan and Type	Size IN	Length FT	Station	Standard Road Plan and Type																												
																		IN	FT	IN	FT	IN	FT																			
	IA 150	521+00.00	526+00.00	Lt.	48.0	4.0	525.0																																			
		526+05.00	531+00.00	Lt.	48.0	4.0	525.0																																			
		531+05.00	536+00.00	Lt.	48.0	4.0	525.0																																			
		610+00.00	615+00.00	Lt.	48.0	4.0	525.0																																			
		646+15.00	641+00.00	Lt.	48.0	4.0	512.0																																			
		641+05.00	655+90.00	Lt.	48.0	5.0	512.0																																			

PAVEMENT MARKING LINE TYPES

See PM-110

***MNY4 - Factor of 1.00 as value includes number of 4-inch passes to cover median nose area.

*BCY4 - Place on the same side of the roadway to match existing markings near the project.

**NPY4 - For estimating purposes only. No Passing Zone Lines will be located in the field.

BCY4: Broken Centerline (Yellow) @ 0.25

DCY4: Double Centerline (Yellow) @ 2.00

NPY4: No Passing Zone Line (Yellow) @ 1.25

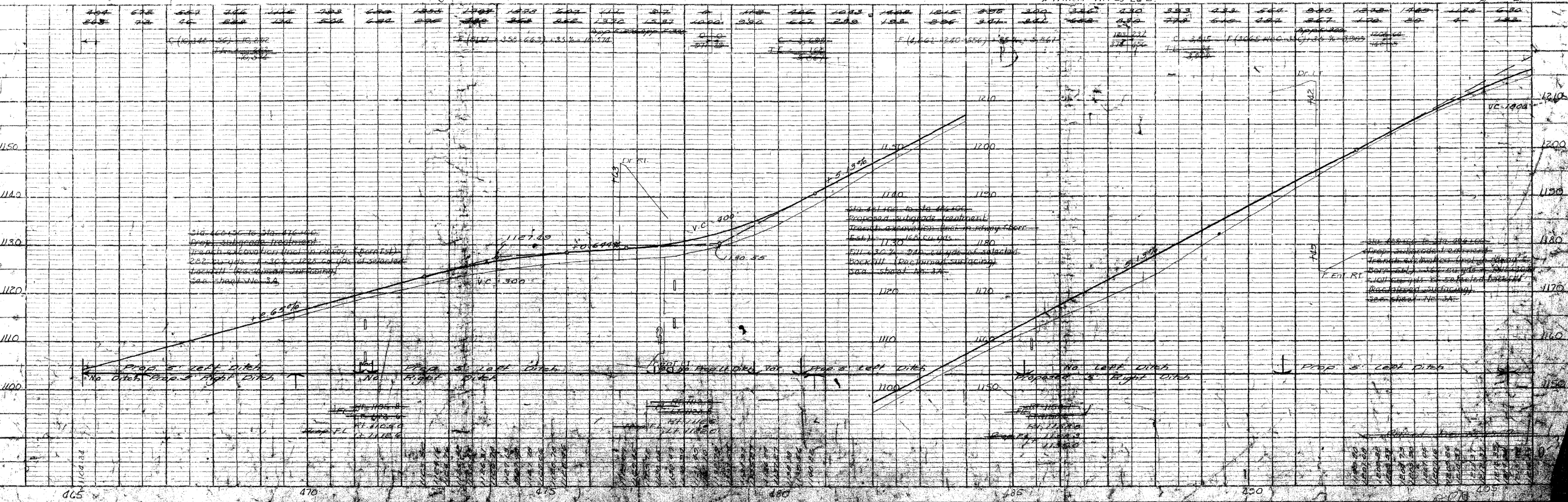
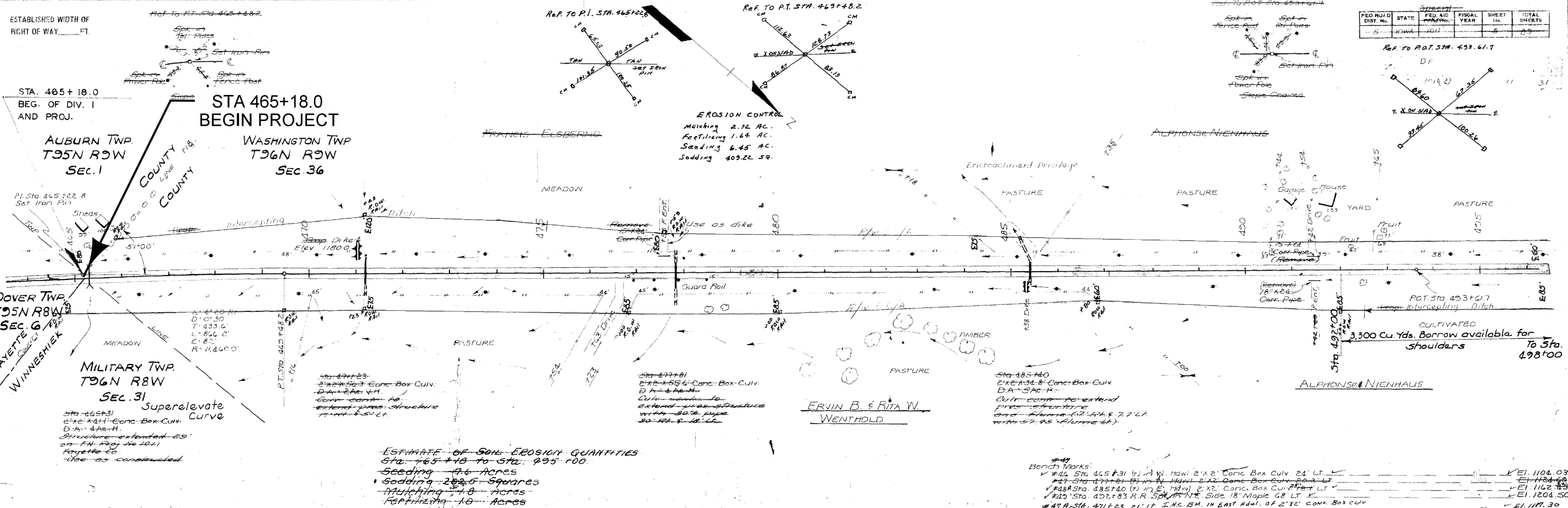
BLW4: Broken Lane Line (White) @ 0.25

ELW4: Edge Line Right (White) @ 1.00

ELY4: Edge Line Left (Yellow) @ 1.00

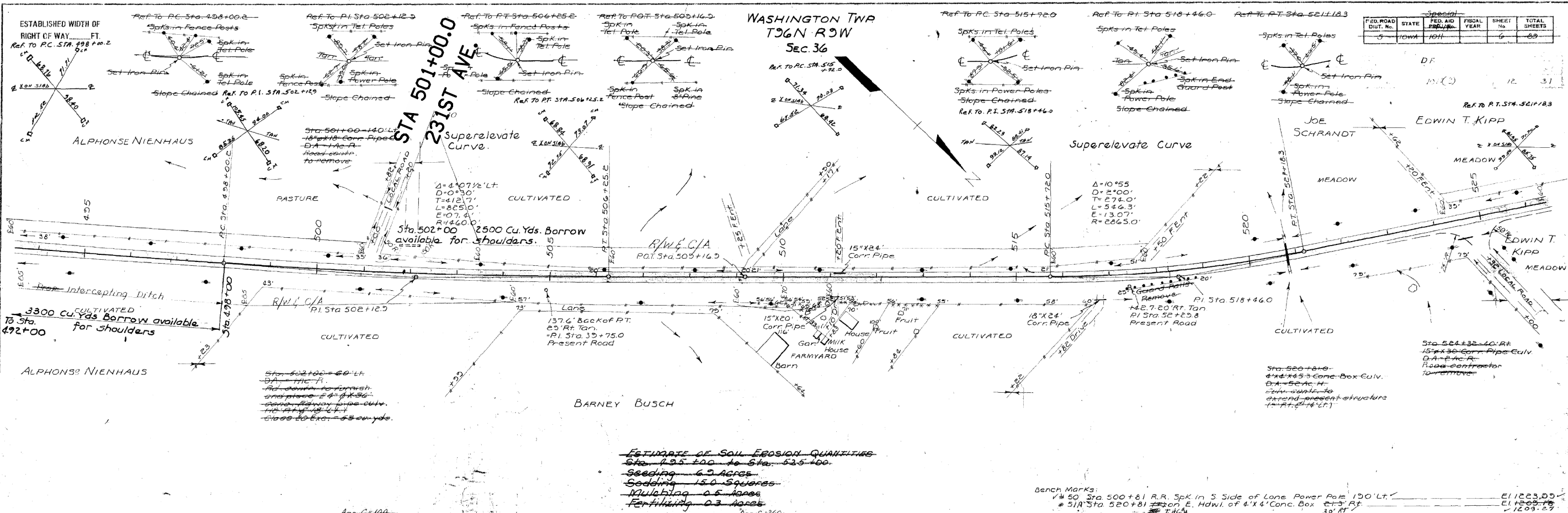
Road ID	Station to Station		Dir. of Travel	Location	Marking Type	Side	Length by Line Type (Unfactored)														Remarks						
							L	C	R	BCY4*	DCY4	NPY4**	BLW4	ELW4	ELY4												
										STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA		STA	STA	STA	STA	STA	
	465+18.00	487+50.00			Waterborne/Solvent Paint				22.32					44.64												2nd application	
	487+50.00	494+25.00			Waterborne/Solvent Paint						6.75			13.50													
	494+25.00	507+00.00			Waterborne/Solvent Paint							12.75		25.50													
	507+00.00	515+64.00			Waterborne/Solvent Paint						8.64			17.28													
	515+64.00	549+10.00			Waterborne/Solvent Paint				33.46					66.92													
	549+10.00	552+35.00			Waterborne/Solvent Paint						3.25			6.50													
	552+35.00	572+00.00			Waterborne/Solvent Paint							19.65		39.30													
	572+00.00	581+90.00			Waterborne/Solvent Paint						9.90			19.80													
	581+90.00	593+75.00			Waterborne/Solvent Paint				11.85					23.70													
	593+75.00	602+90.00			Waterborne/Solvent Paint						9.15			18.30													
	602+90.00	603+75.00			Waterborne/Solvent Paint				0.85					1.70													
	603+75.00	619+42.00			Waterborne/Solvent Paint							15.67		31.34													
	619+42.00	627+48.00			Waterborne/Solvent Paint						8.06			16.12													
	627+48.00	635+20.00			Waterborne/Solvent Paint							7.72		15.44													
	635+20.00	637+70.00			Waterborne/Solvent Paint						2.50			5.00													
	637+70.00	644+15.00			Waterborne/Solvent Paint							6.45		12.90													
	644+15.00	644+45.00			Waterborne/Solvent Paint						0.30			0.60													
	644+45.00	654+20.00			Waterborne/Solvent Paint							9.75		19.50													
	654+20.00	667+28.00			Waterborne/Solvent Paint				13.08					26.16													
	667+28.00	697+46.00			Waterborne/Solvent Paint							30.18		60.36													
	697+46.00	698+62.00			Waterborne/Solvent Paint						1.16			2.32													
	698+62.00	704+00.00			Waterborne/Solvent Paint							5.38		10.76													
	704+00.00	711+64.00			Waterborne/Solvent Paint						7.64			15.28													
	711+64.00	718+87.00			Waterborne/Solvent Paint							7.23		14.46													
	718+87.00	735+70.00			Waterborne/Solvent Paint							16.83		33.66													
	735+70.00	743+63.00			Waterborne/Solvent Paint							7.93		15.86													
	743+60.00	755+63.00			Waterborne/Solvent Paint							12.03		24.06													
	755+63.00	763+20.00			Waterborne/Solvent Paint							7.57		15.14													
	763+20.00	766+24.00			Waterborne/Solvent Paint				3.04					6.08													
	766+24.00	778+70.00			Waterborne/Solvent Paint							12.46		24.92													
	778+70.00	809+30.00			Waterborne/Solvent Paint							30.60		61.20													
	809+30.00	818+30.00			Waterborne/Solvent Paint							9.00		18.00													
	818+30.00	835+67.00			Waterborne/Solvent Paint				17.37					34.74													
	835+67.00	841+15.00			Waterborne/Solvent Paint							5.48		10.96													
	Factored Total: Waterborne/Solvent Paint									50.99	446.08	406.28	-	1504.00	-	-	-	-	-	-	-	-	-	-	-	-	
	Bid Quantity: Painted Pavement Markings, Waterborne or Solvent-Based														2407.34												

PED PROJ ID	STATE	FED AID	FISCAL YEAR	SHEET No.	TOTAL SHEETS
6	IOWA		2011	5	09



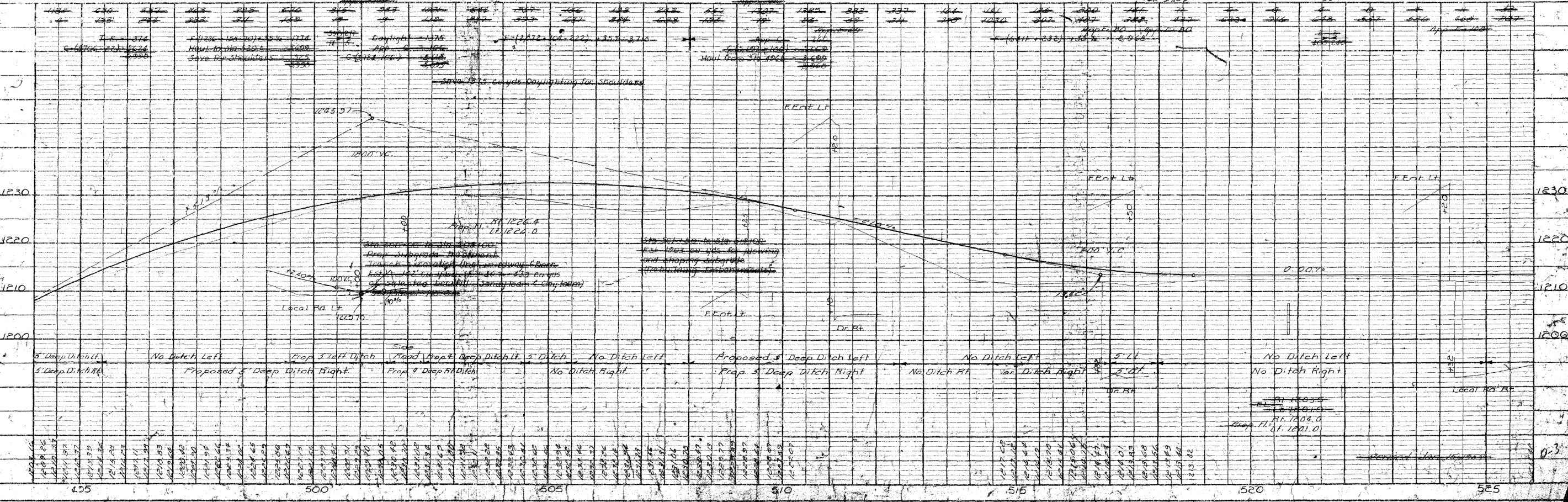
AS-BUILT PLANS, FOR INFORMATION ONLY

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	1011		6	63



ESTIMATE OF SOIL EROSION QUANTITIES
 Sta. 495+00 to Sta. 525+00.
 Seeding 6.2 ACRES
 Sodding 15.0 SQUARES
 Mulchlag 0.5 ACRES
 Fertilizing 0.3 ACRES

Bench Marks:
 #50 Sta 500+81 R.R. Spk in S Side of Lane Power Pole 130' Lt.
 #51A Sta 520+81 on E. Hdwl. of 4'x4' Conc. Box 30' Rt.
 E11223.00
 E11223.59

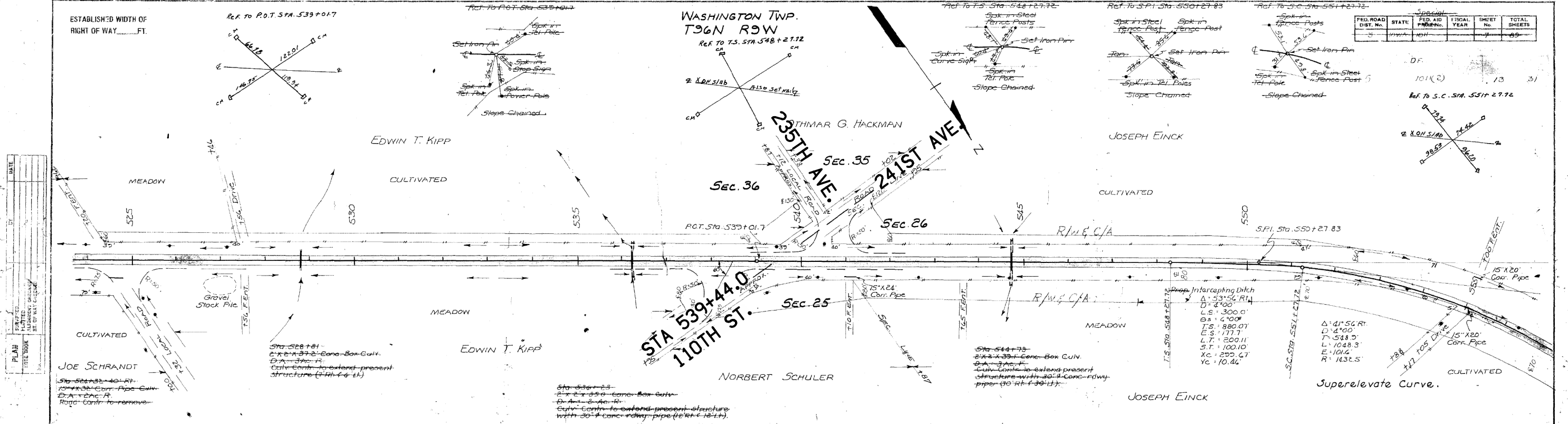


AS-BUILT PLANS, FOR INFORMATION ONLY

DATE: _____
 DRAWN BY: _____
 CHECKED BY: _____
 IN CHARGE: _____

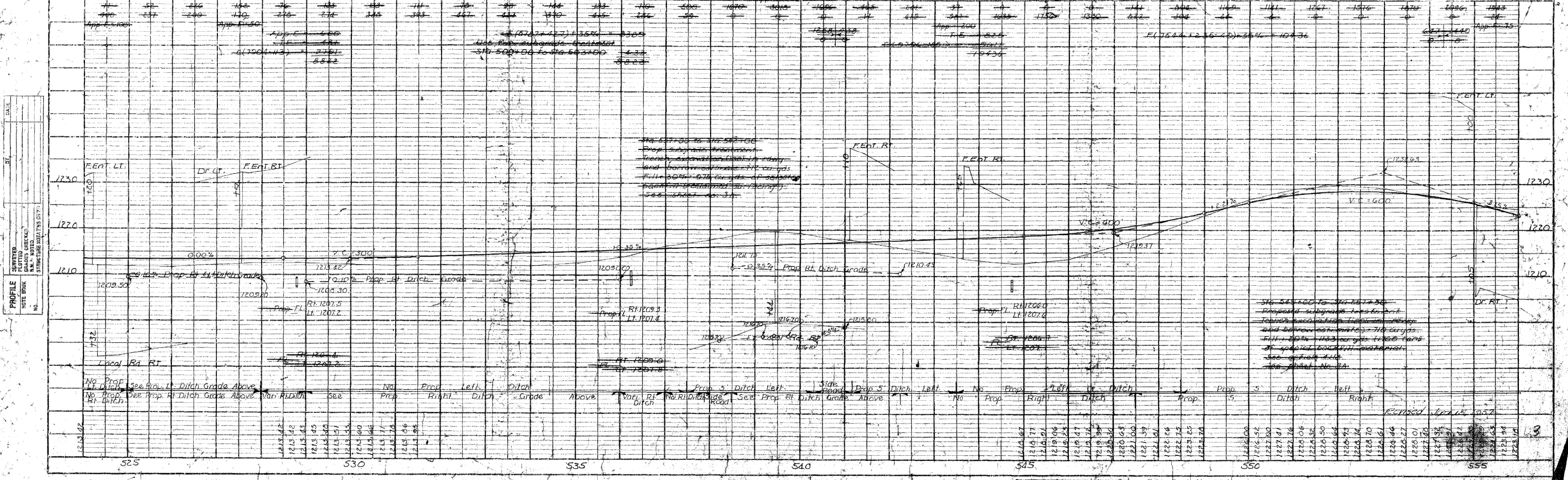
PROFILE
 NOTE: ELEVATION SHOWN IS IN FEET
 1" = 10' VERTICALLY
 1" = 100' HORIZONTALLY

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IND.	1011		13	89



ESTIMATE OF SOIL EROSION QUANTITIES
 Sta. 525+00 to Sta. 555+00
 Seeding 1.8 Acres
 Sodding 112.5 Squares
 Mulching 0.9 Acres
 Fertilizing 0.9 Acres

Bench Marks:
 116.87
 116.52 S.D. 528+81 on E. Hdwy. 2' x 2' Conc. Box Culi. 7.5' RT.
 116.53 S.D. 544+73 on W. Hdwy. 2' x 2' Conc. Box Culi. 10' LT.
 116.53 S.D. 539+44.0 R.R. Spike in west side of Power Pole 80' RT.



DATE	BY	REVISION

DATE	BY	REVISION

PLATE 1 - PLAN - PROFILE OF R.R. & E. HDWY. WINNESHIEK COUNTY, IOWA

AS-BUILT PLANS, FOR INFORMATION ONLY

FED. ROAD DIST. No.	STATE	FED. AID PROJECT No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	1041		8	89

WASHINGTON TWP
T96N R9W
SEC. 26

PHILIP J. ETTELDORF

HENRY & ALOYSIUS BUCHHEIT

ESTIMATE OF SOIL EROSION QUANTITIES
 Sta. 555+00 to Sta. 585+00
 Seeding 9.3 Acres
 Seeding 285.0 Squares
 Mulching 2.6 Acres
 Fertilizing 2.9 Acres

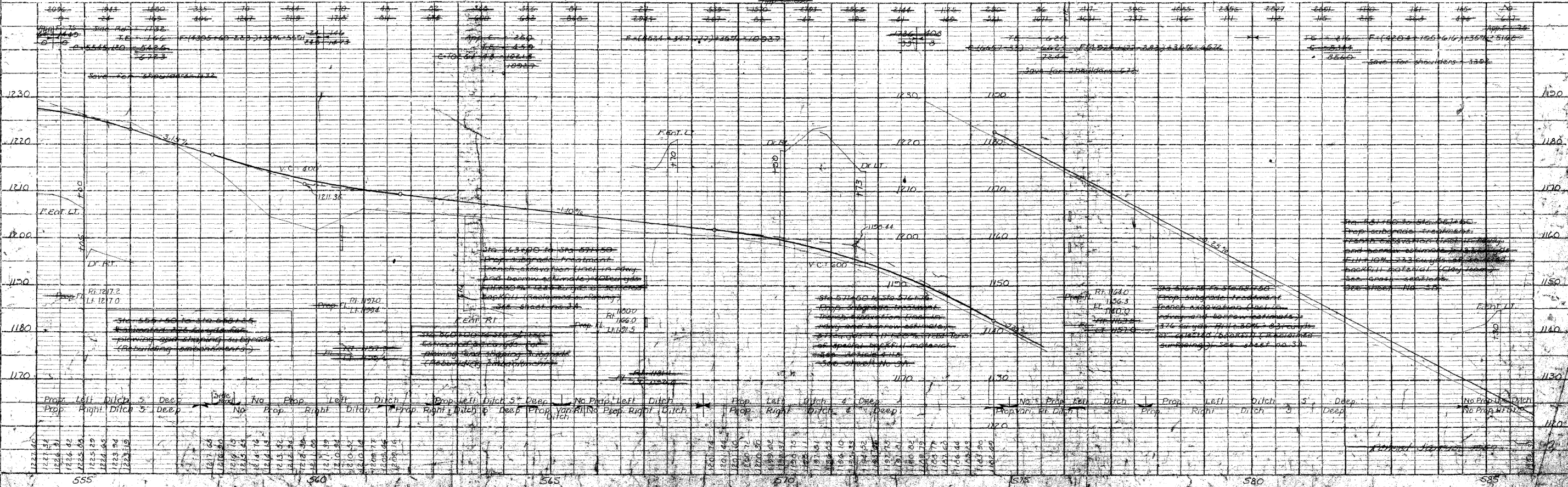
ESTABLISHED WIDTH OF RIGHT OF WAY _____ FT.

Sta. 557+00-6946
 Road cut to furnish and placed 2.33 (10' x 16' ft) concrete pipe culv. class 60 Ex. to bridge.

For Side Road Details See sheet No. 19

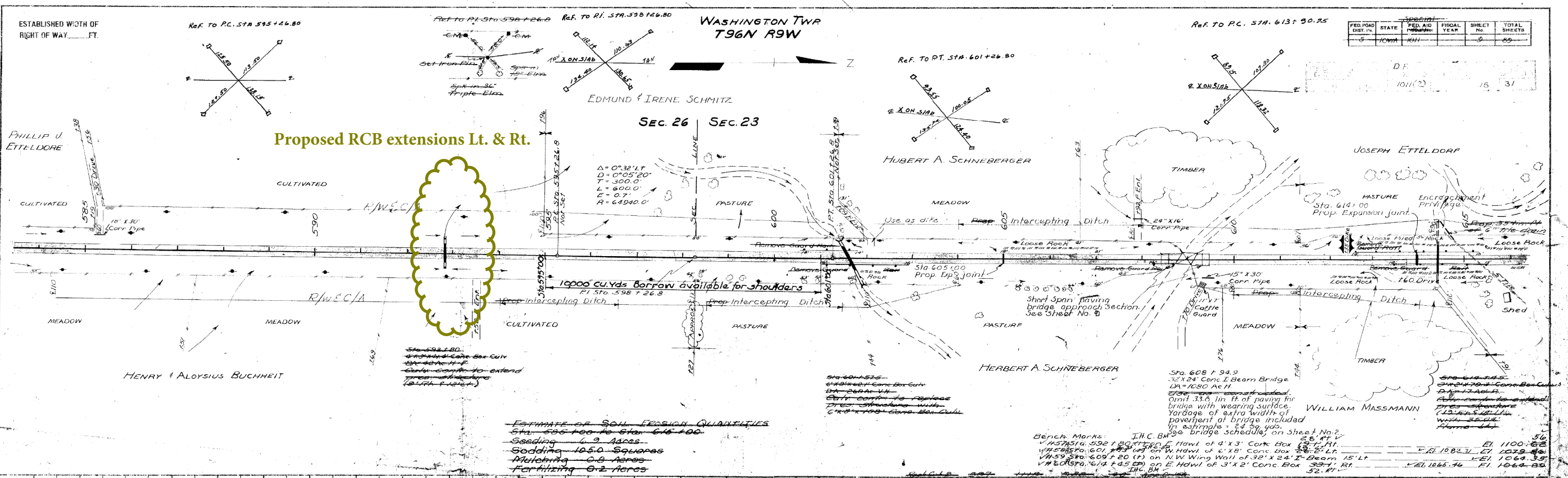
STA 557+00.0
 237TH AVE.

Superlevate Curve.



AS-BUILT PLANS, FOR INFORMATION ONLY

FED. ROAD DIST. NO.	STATE	FED. AID DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IOWA	1011(2)	15	31	35

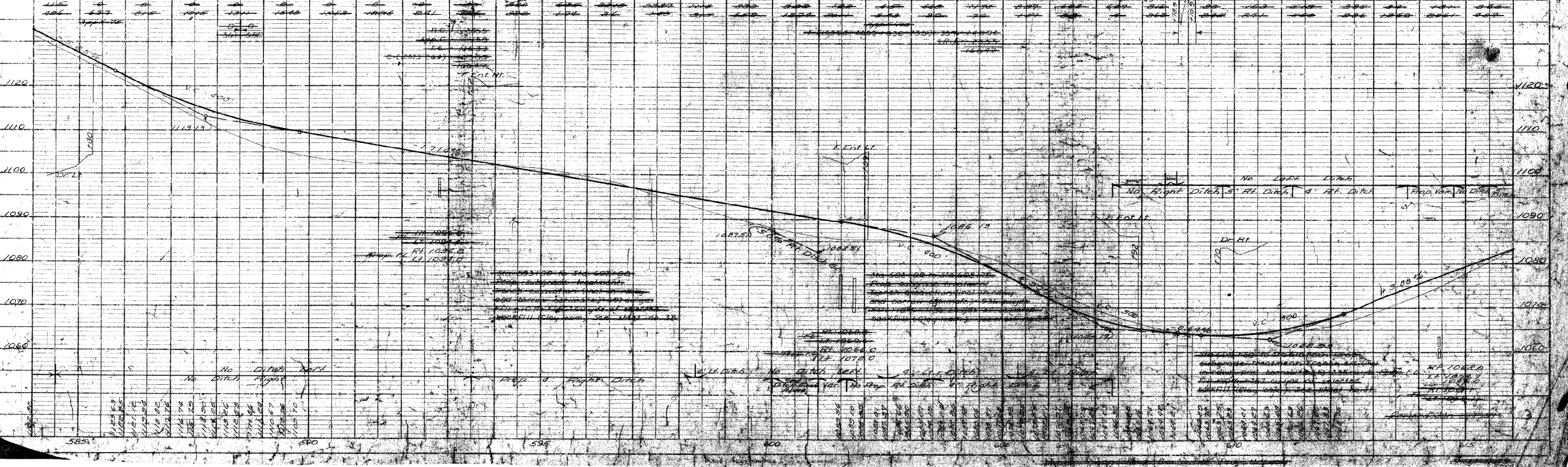


ESTIMATE OF SOIL EROSION QUANTITIES
 Sta. 595+00 to Sta. 615+00

Seeding	3 Acres
Sodding	10.5 Acres
Mulching	0.5 Acres
Fertilizing	0.2 Acres

Bench Marks:

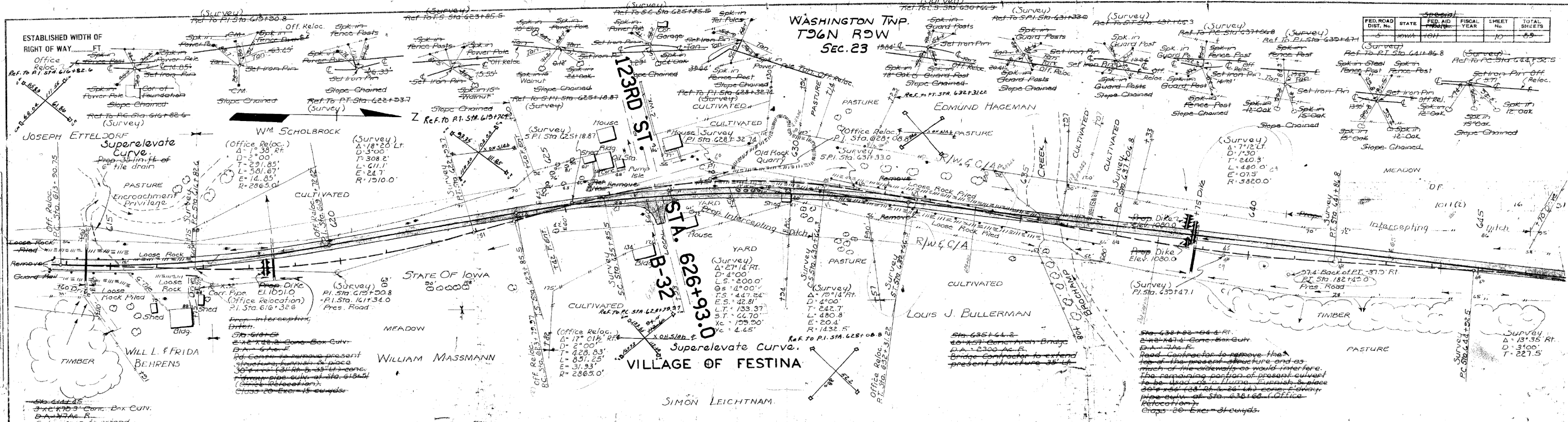
I.H.C. BM 1	Sta. 592+20.0	El. 1100.62
V.M.S. Sta. 592+20.0	on W. H.W.I. of 4'x3' Conc. Box	El. 1029.85
V.M.S. Sta. 609+20.0	on N.W. Wing Wall of 32'x24' I-Beam	El. 1064.35
V.M.S. Sta. 614+25.0	on E. H.W.I. of 3'x2' Conc. Box	El. 1064.45



AS-BUILT PLANS, FOR INFORMATION ONLY

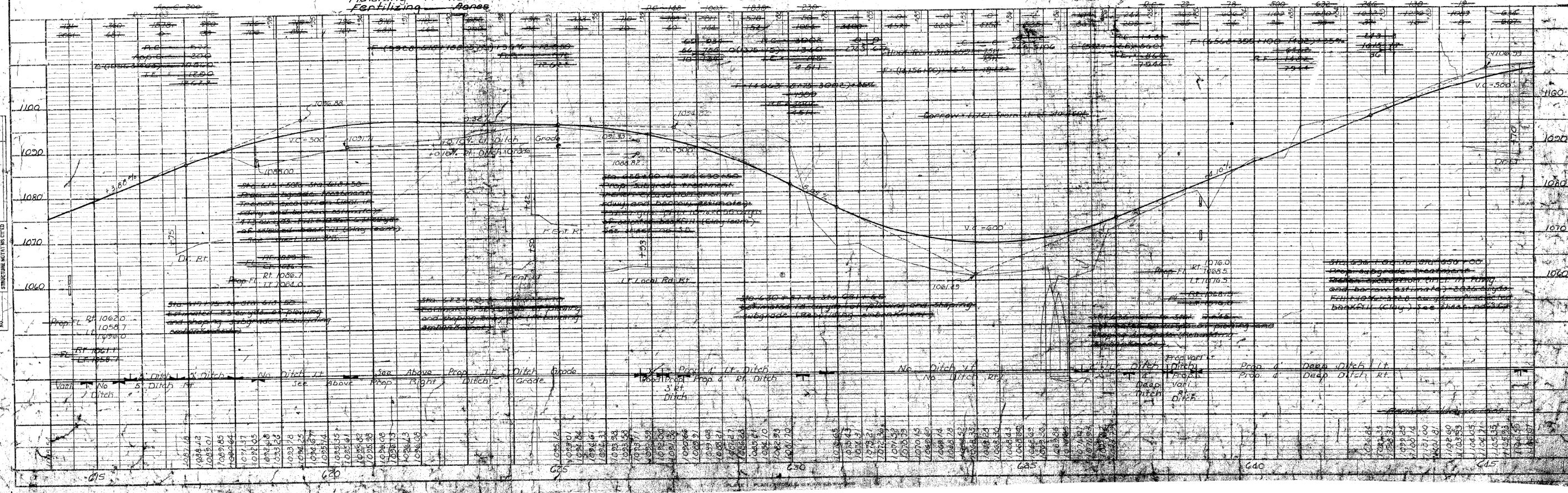
FED. ROAD DIST. NO.	STATE	FED. AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
10	IOWA	1011		10	89

WASHINGTON TWP.
T96N R9W
SEC. 23



ESTIMATE OF SOIL TRENCH QUANTITIES
Sta. 615+00 to Sta. 645+00
Seeding 24 Acres
Grading Squares
Mulching 11 Acres
Fertilizing Acres

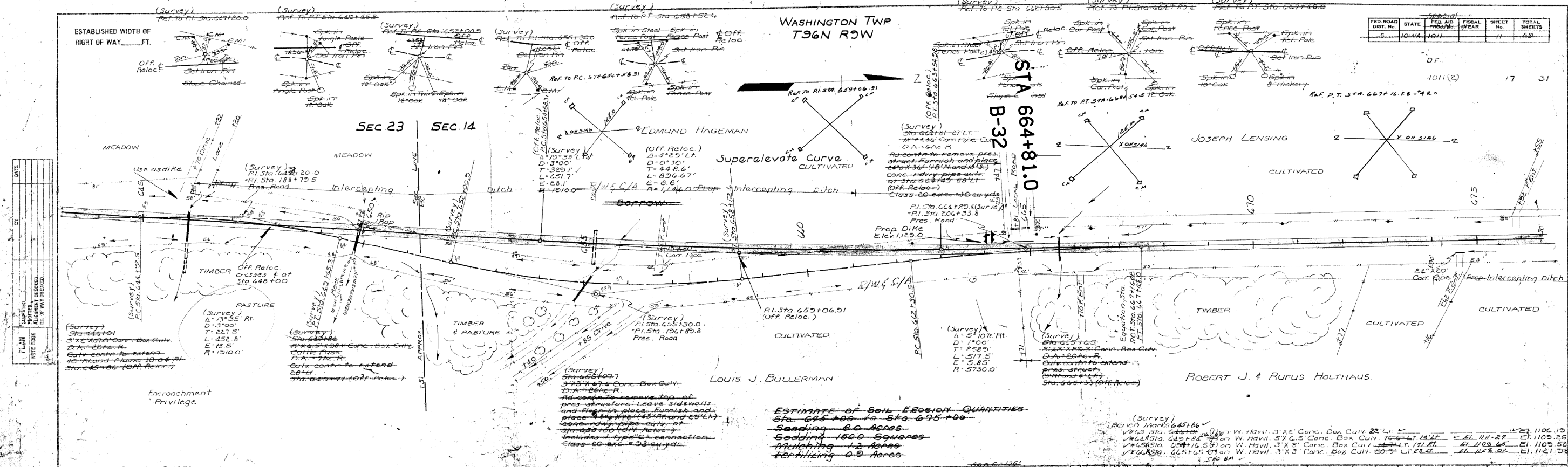
For Detail of Intersection
See Sheet No. 4A



AS-BUILT PLANS, FOR INFORMATION ONLY

FED. ROAD DIST. NO.	STATE	FED. AID FUNDING YEAR	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IOWA	401		11	69

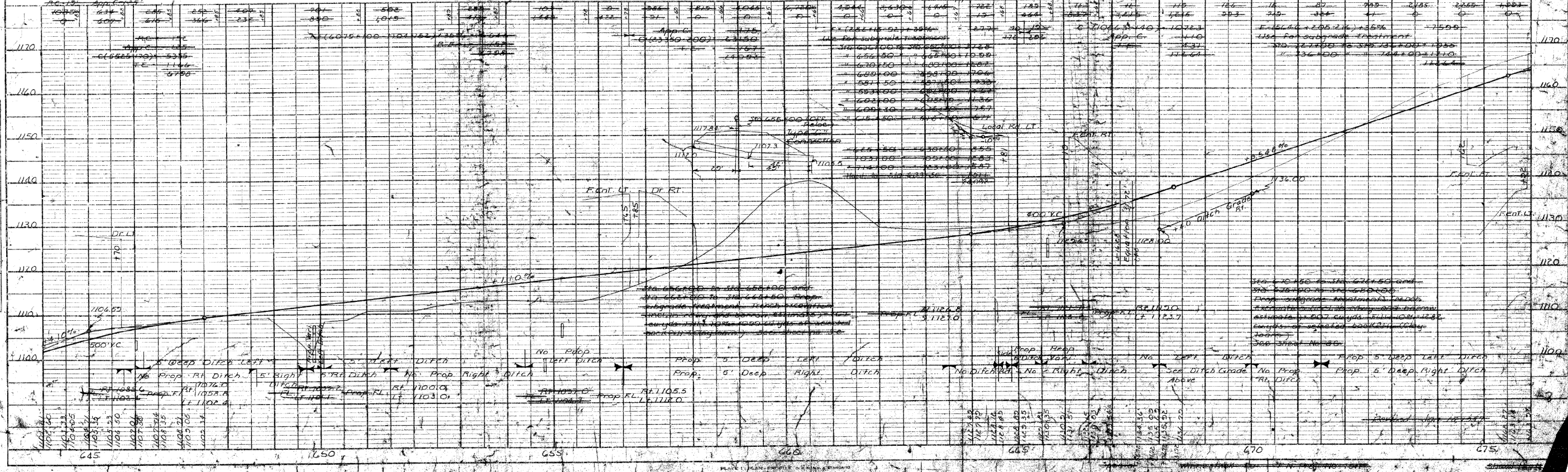
WASHINGTON TWP
T96N R9W



ESTIMATE OF SOIL EROSION QUANTITIES
 STA. 645+00 TO STA. 675+00
 Seeding 80 Acres
 Sodding 1500 Squares
 Mulching 1.2 Acres
 Fertilizing 0.2 Acres

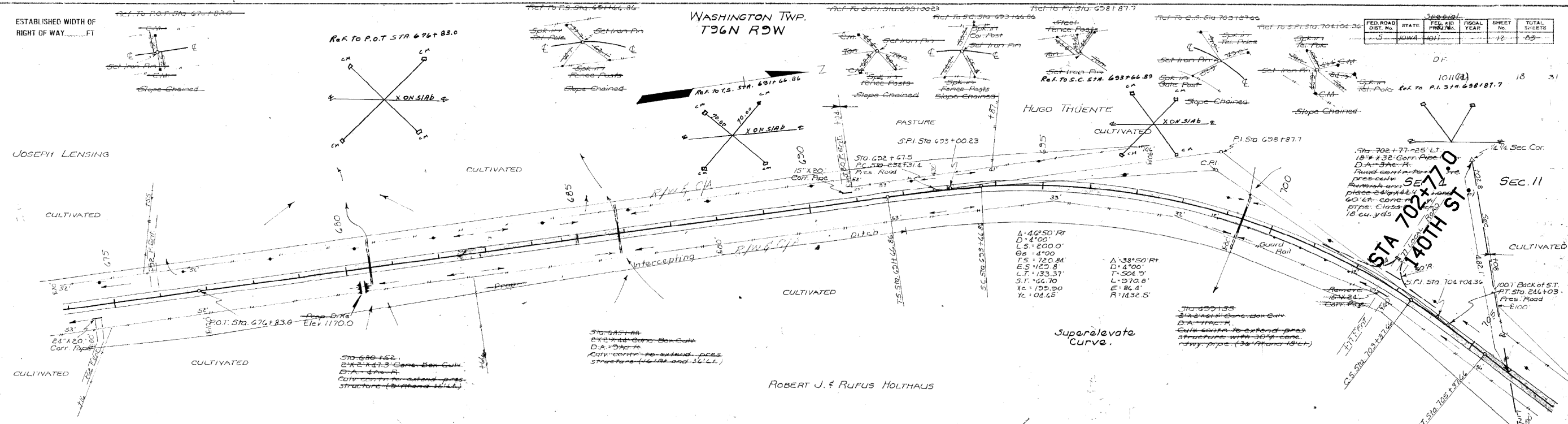
DATE	BY	DESCRIPTION

DATE	BY	DESCRIPTION



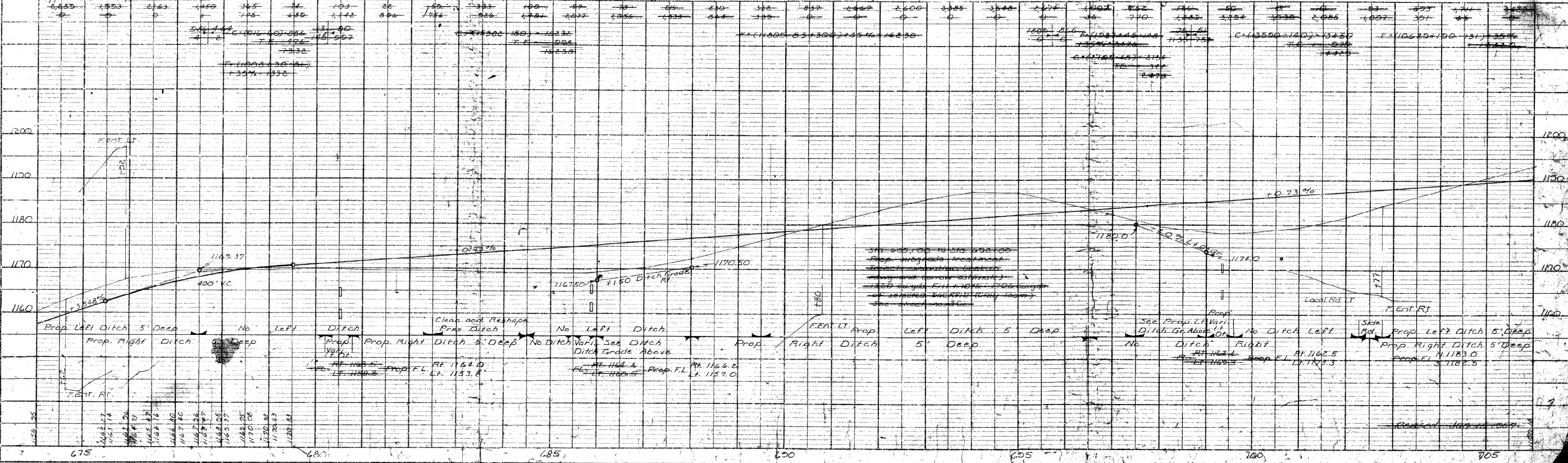
AS-BUILT PLANS, FOR INFORMATION ONLY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IOWA	1011		12	63



ESTIMATE OF SOIL EROSION QUANTITIES
 STA. 675+00 TO STA. 705+00
 Seeding 7.8 ACRES
 Seeding 122.5 SQUARES
 MULCHING 1.2 ACRES
 FERTILIZING 1.3 ACRES

Bench Marks: T.H.C. BM
 V. 4218 STA 680+52.00
 V. 4218 STA 685+88.00
 V. 4218 STA 690+35.00
 25 RT
 2' X 2' CONC. BOX CULV. 25' LT.
 16' X 16' CONC. BOX CULV. 34' LT.
 20' X 20' CONC. BOX CULV. 20' LT.
 E1. 1167.53
 E1. 1167.25
 E1. 1173.25
 E1. 1173.02



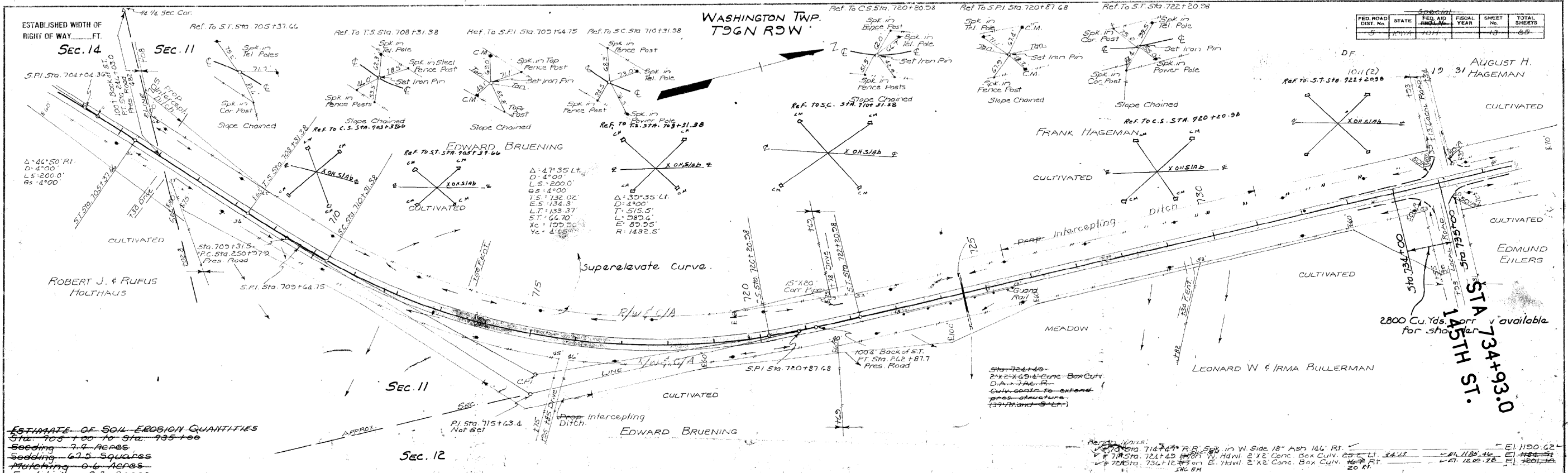
DATE	BY	REVISION

DATE	BY	REVISION

AS-BUILT PLANS, FOR INFORMATION ONLY

FED. ROAD DIST. NO.	STATE	FED. AID DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MINN	101	1984	15	20

WASHINGTON TWP.
T99N R9W



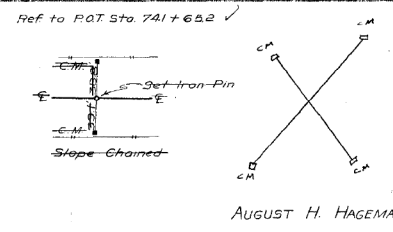
ESTIMATE OF SOIL EROSION QUANTITIES
Sta 705+00 to Sta 735+00
Seeding 7.4 Acres
Seeding 6.5 Squares
Mulching 0.6 Acres
Fertilizing 0.2 Acres

1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	
1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190
1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223	1224	1225	1226	1227	1228	1229	1230

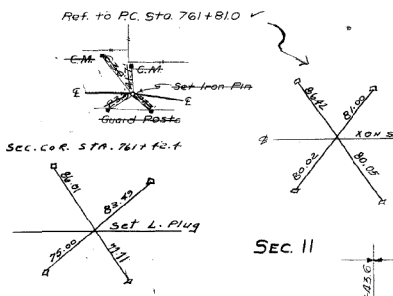
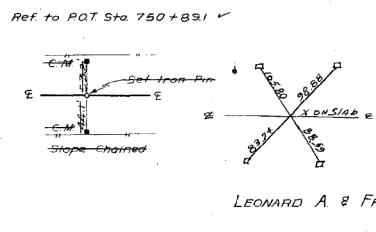


AS-BUILT PLANS, FOR INFORMATION ONLY

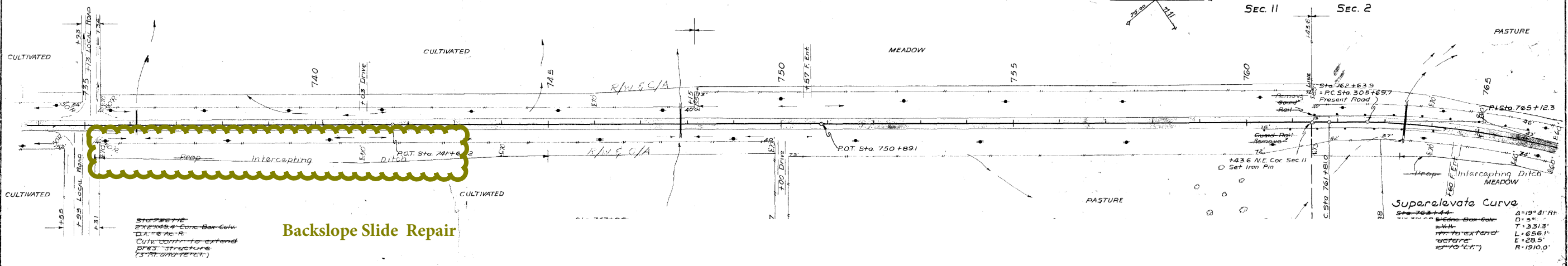
ESTABLISHED WIDTH OF RIGHT OF WAY _____ FT.



WASHINGTON TWP.
T96N R9W

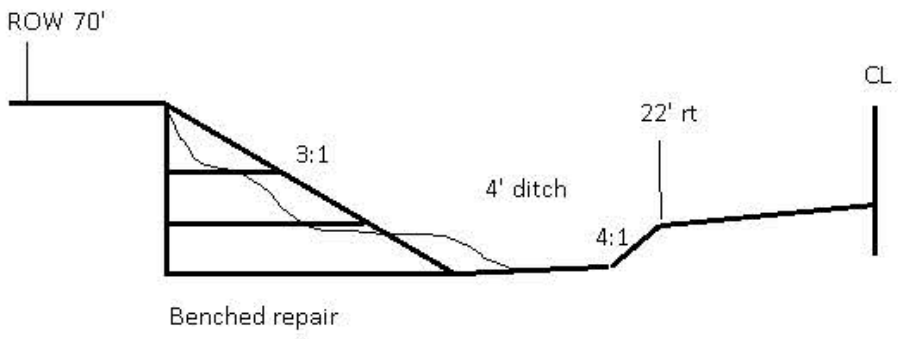


FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	10N	14	50	50



Backslope Slide Repair

STRUCTURE
2x2x24 Conc. Box Culm
DIA=24" R
Culm corr. to extend
Ditch structure
(3' from center)

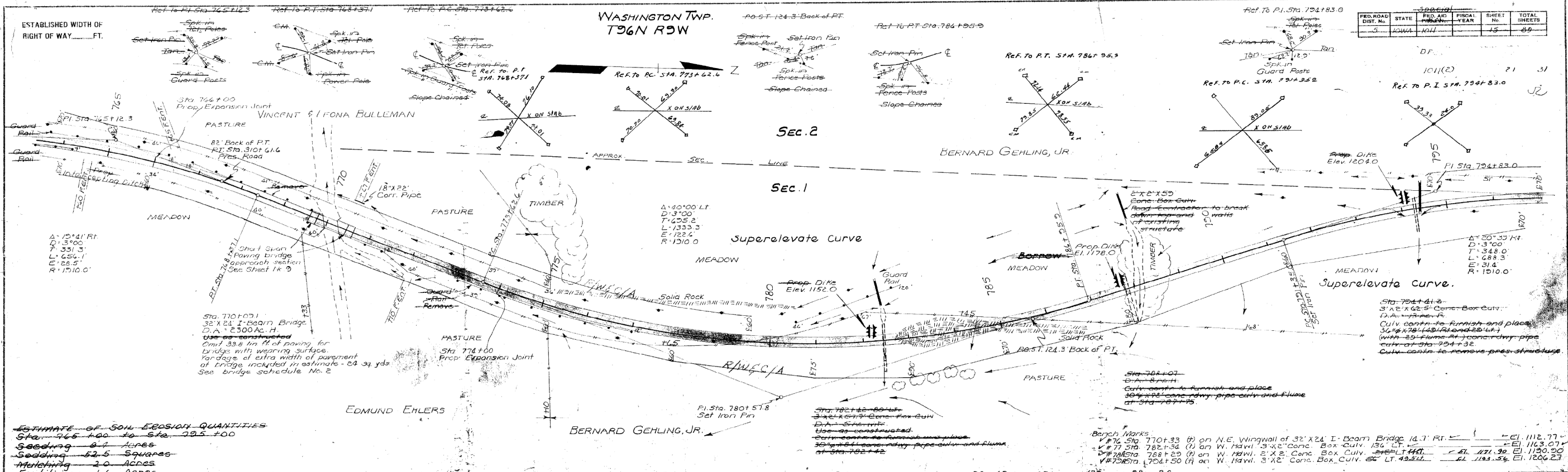


Station	Left Ditch	Right Ditch	Prop. Right Ditch	Prop. Left Ditch	Prop. Right Ditch	Prop. Left Ditch	Prop. Right Ditch	Prop. Left Ditch	Prop. Right Ditch	Prop. Left Ditch	Prop. Right Ditch	Prop. Left Ditch	Prop. Right Ditch	Prop. Left Ditch	Prop. Right Ditch
735	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep
740	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep
745	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep
750	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep
755	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep
760	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep
765	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep	Prop Left Ditch 4' Deep	No Left Ditch	No Right Ditch	Prop Right Ditch 4' Deep

AS-BUILT PLANS, FOR INFORMATION ONLY

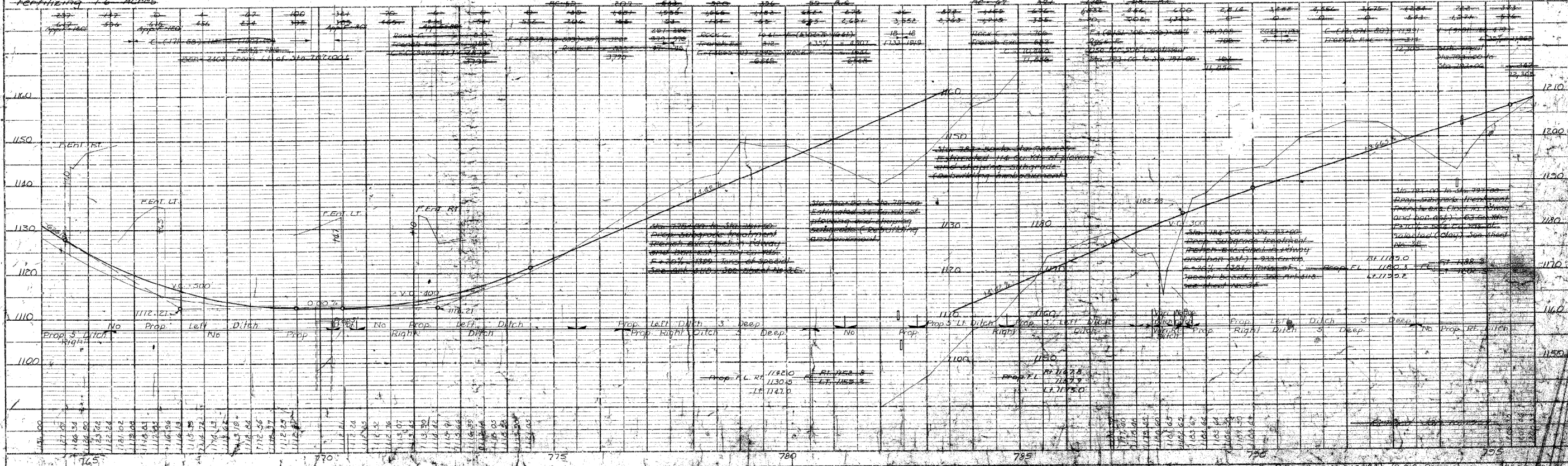
FED. ROAD DIST. No.	STATE	FED. AID YEAR	FISCAL YEAR	SHEET No.	TOTAL SHEETS
3	IOWA	1911		15	89

WASHINGTON TWP.
T96N R9W



ESTIMATE OF SOIL EROSION QUANTITIES
Sta. 765+00 to Sta. 795+00

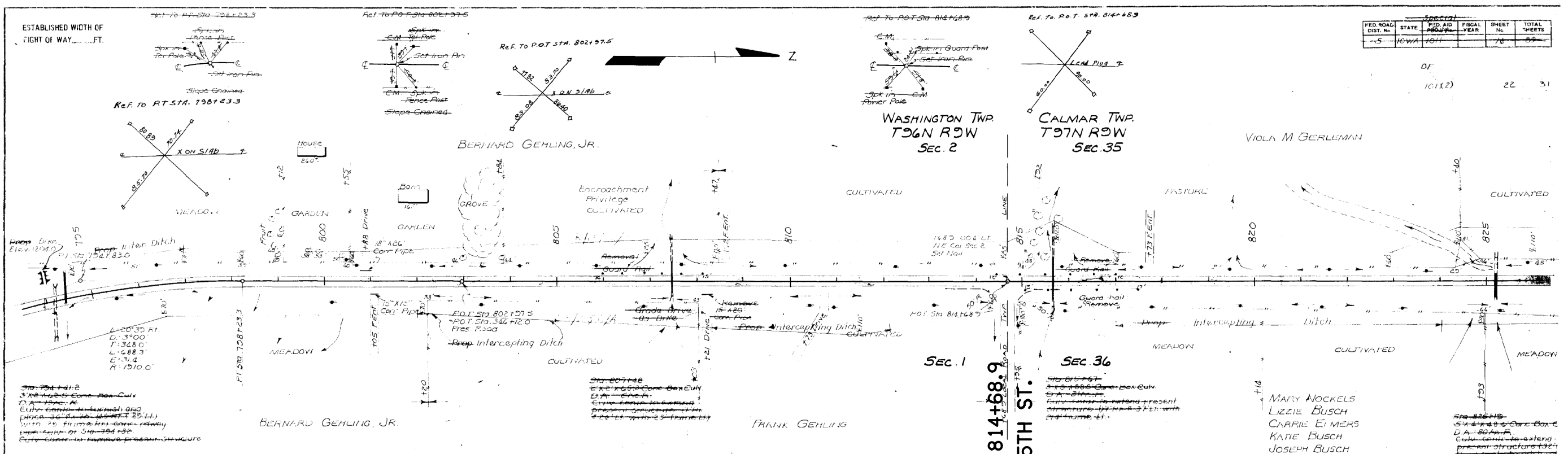
Seeding	2.1 Acres
Mulching	52.5 Squares
Fertilizing	2.0 Acres
Fertilizing	1.6 Acres



DATE	5/29/2020
SCALE	AS SHOWN
PROJECT	WINNESHIEK COUNTY PROJECT NO. 1011(2) (P.C. PAVING)
DESIGNER	KELLY/NIE/MEISE
CHECKER	ALAN HART
DATE	5/29/2020

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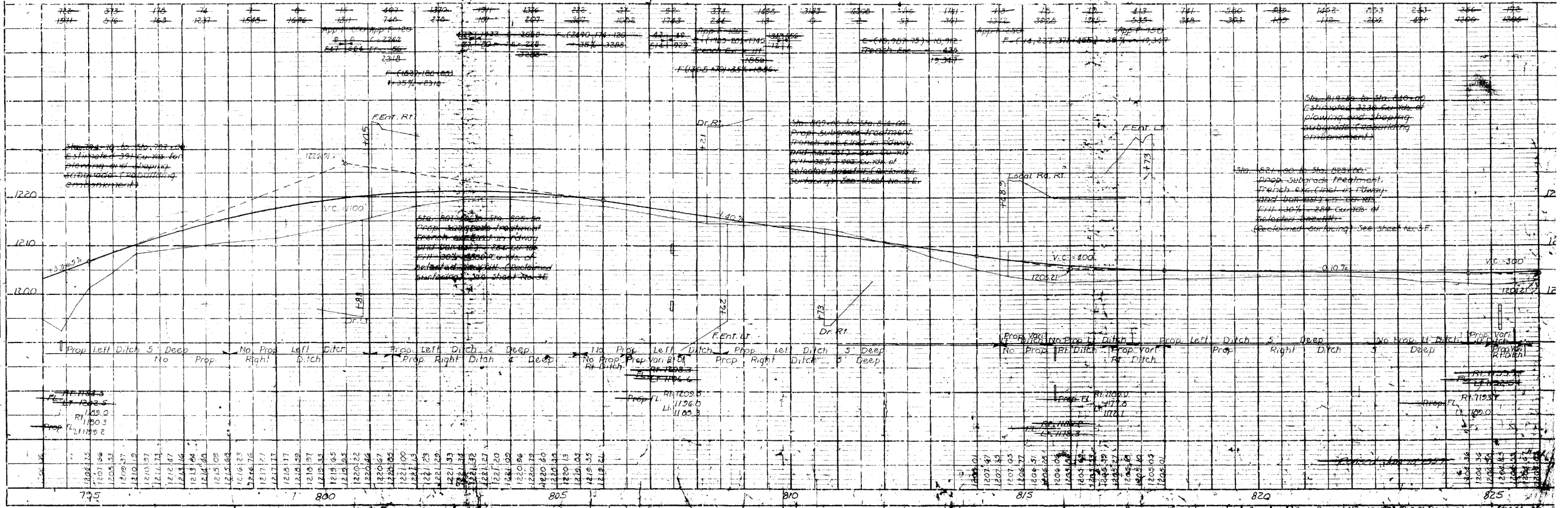
AS-BUILT PLANS, FOR INFORMATION ONLY



FED. ROAD DIST. No.	STATE	FISCAL YEAR	SHEET No.	TOTAL SHEETS
15	IOWA	1971	78	83

ESTIMATE OF SOIL EROSION QUANTITIES
 Sta. 795+00 to Sta. 825+00
 Seeding 9.2 Acres
 Sodding 210.0 Squares
 Mating 2.7 Acres
 Fertilizing 2.1 Acres

Bench Marks
 V#704 Sta. 724+50 (1) on W. Hwy 3'x2' Conc Box Culv 5'x1' RT. E.L. 1193.56 E.I. 1204
 V#804 Sta. 807+48 (1) on E. Hwy 3'x2' Conc Box Culv 5'x1' RT. E.L. 1174.61 E.I. 1213
 V#814 Sta. 815+17 (1) on E. Hwy 3'x3' Conc Box Culv 5'x1' RT. E.L. 1183.36 E.I. 1190
 V#824 Sta. 825+15 (1) on E. Hwy 5'x4' Conc Box Culv 3'x1' RT. E.L. 1193.39 E.I. 1190



DATE	BY	DESCRIPTION

DATE	BY	DESCRIPTION

Winneshiek Co. Proj. No. 10110 (A.C. Paving) Sheet No. 2
AS-BUILT PLANS, FOR INFORMATION ONLY

ESTABLISHED WIDTH OF RIGHT OF WAY _____ FT.

Ref To P.O.T. STA. 834+58.8

Ref To P.O.T. Sta. 834+58.8

Ref To P.C. STA. 828+13.9

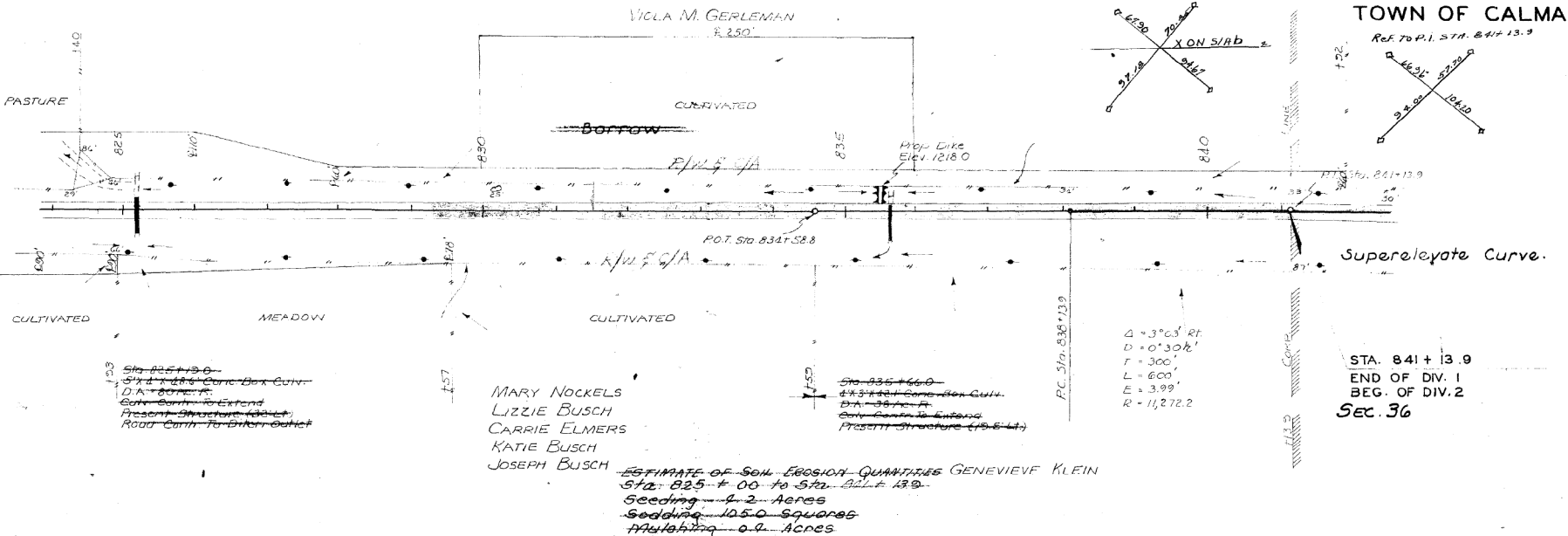
CALMAR TWP.
T97N R3W
Sec. 35

FED. ROAD DIST. No.	STATE	FED. AID PROGRAM	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	1011		17	30

D.F. 1011(2) 23 31

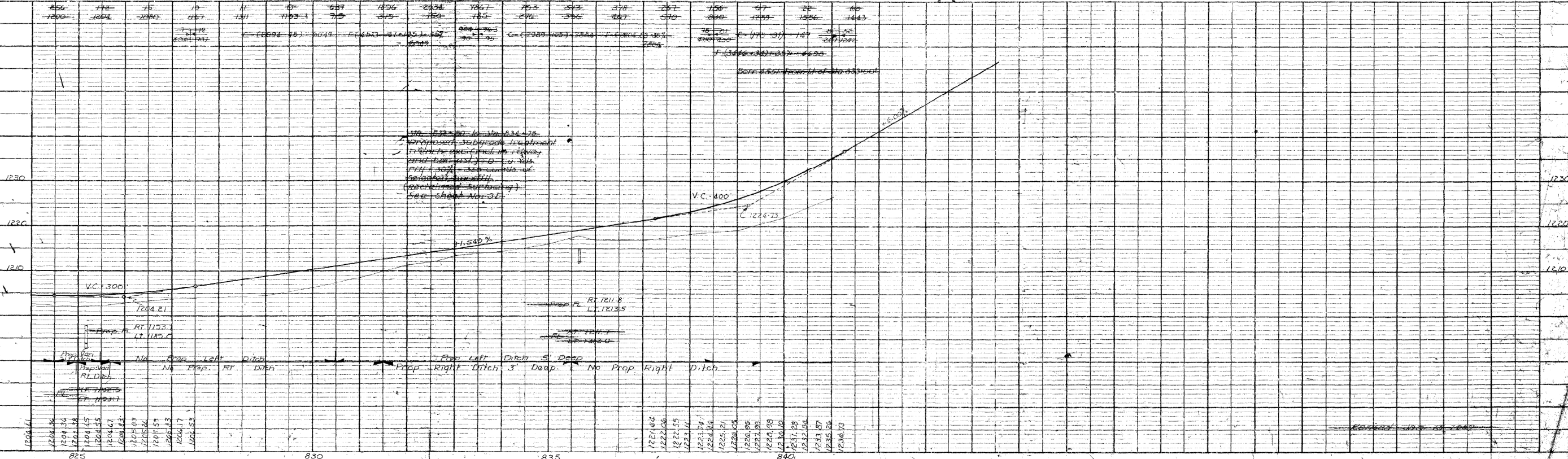
DATE	BY	REVISIONS

DATE	BY	REVISIONS



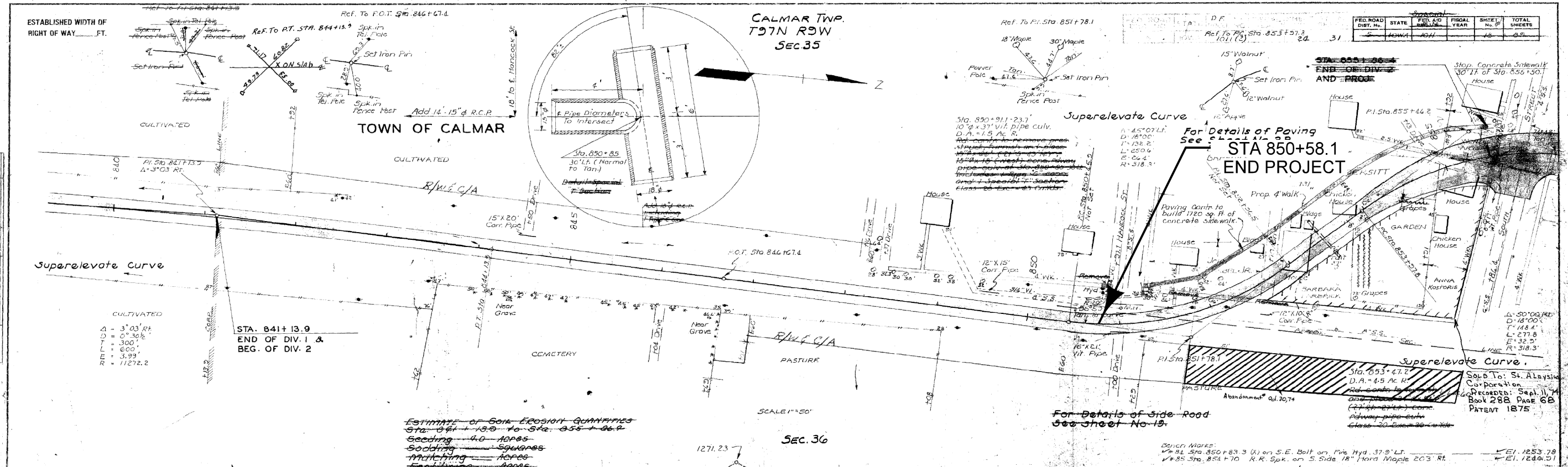
ESTIMATE OF SOIL LOSS QUANTITIES GENEVIEVE KLEIN
 STA. 825+00 TO STA. 841+13.9
 Seeding - 4.2 Acres
 Sodding - 10.0 Squares
 Mulching - 0.4 Acres
 Fertilizing - 0.2 Acres

Bench Marks:
 #82 Sta. 825+13 (1) on E. Main, 5'x4' Conc. Box Culv. 33' RT. E1. 1199.35
 #83 Sta. 835+66 on E. Main, 4'x3' Conc. Box Culv. #16 RT. 21' RT. E1. 1212.93 E1. 1216.22
 2'x2' BM

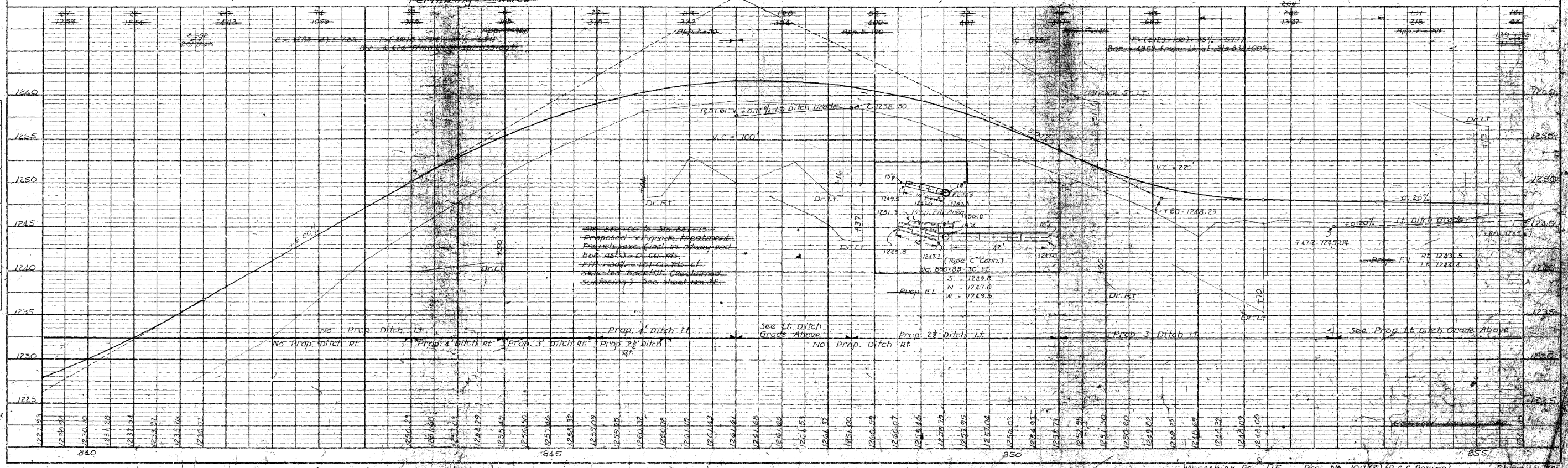


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AS-BUILT PLANS, FOR INFORMATION ONLY



ESTIMATE OF SOIL EROSION QUANTITIES
 STA. 841+13.9 TO STA. 855+86.1
 Seeding — 40 Acres
 Sodding — 5 Squares
 Mulching — 40 Acres
 Fertilizing — 40 Acres



AS-BUILT PLANS, FOR INFORMATION ONLY

511 TRAVEL RESTRICTIONS

Route	Direction	County	Location Description	Feature Crossed	Object Type	Maint. Bridge No., Structure ID, or FHWA No.	Type of Restriction	Existing Measurement	Construction Measurement	Construction Measurement as Signed	Projected As Built Measurement	Remarks
			None									

108-23A 08-01-08	TRAFFIC CONTROL PLAN
<p>1) Thru traffic shall be maintained at all times during construction.</p> <p>2) The contractor shall coordinate traffic control with any other projects in the area.</p>	

111-01 04-17-12	COORDINATED OPERATIONS
<p>Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.</p>	
Project	Type of Work
To be discussed at precon.	