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PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM

WOODBURY COUNTY

Pavement Planing/Grooving

Lincoln Way to N of Cunningham Dr in Sioux City
SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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



DESIGN DATA URBAN				
2024	AADT	12300	V.P.D.	
2044	AADT	14760	V.P.D.	
20	- DHV	-	V.P.H.	
TRUCKS		4	%	
Total				
Design ESALS		-		

INDEX OF SEALS		
A.1	Justin M. Pottorff	Primary Signature Block
V.1	Robert D. Mitchell	Structural Design

ROADWAY DESIGN

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.

Justin M. Pottorff 07/07/2026

Signature JUSTIN M. POTTORFF Date

Printed or Typed Name

My license renewal date is December 31, 2026

Pages or sheets covered by this seal: A.1-A.2, B.1-B.2, C.1-C.26, CS.1, J.1-J.6, L.1-L.3, and U.1-U.23

REVISIONS

TOTAL

67

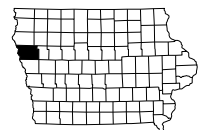
PROJECT IDENTIFICATION NUMBER

21-97-376-020

PROJECT NUMBER

NHSX-376-1(15)--3H-97

R.O.W. PROJECT NUMBER



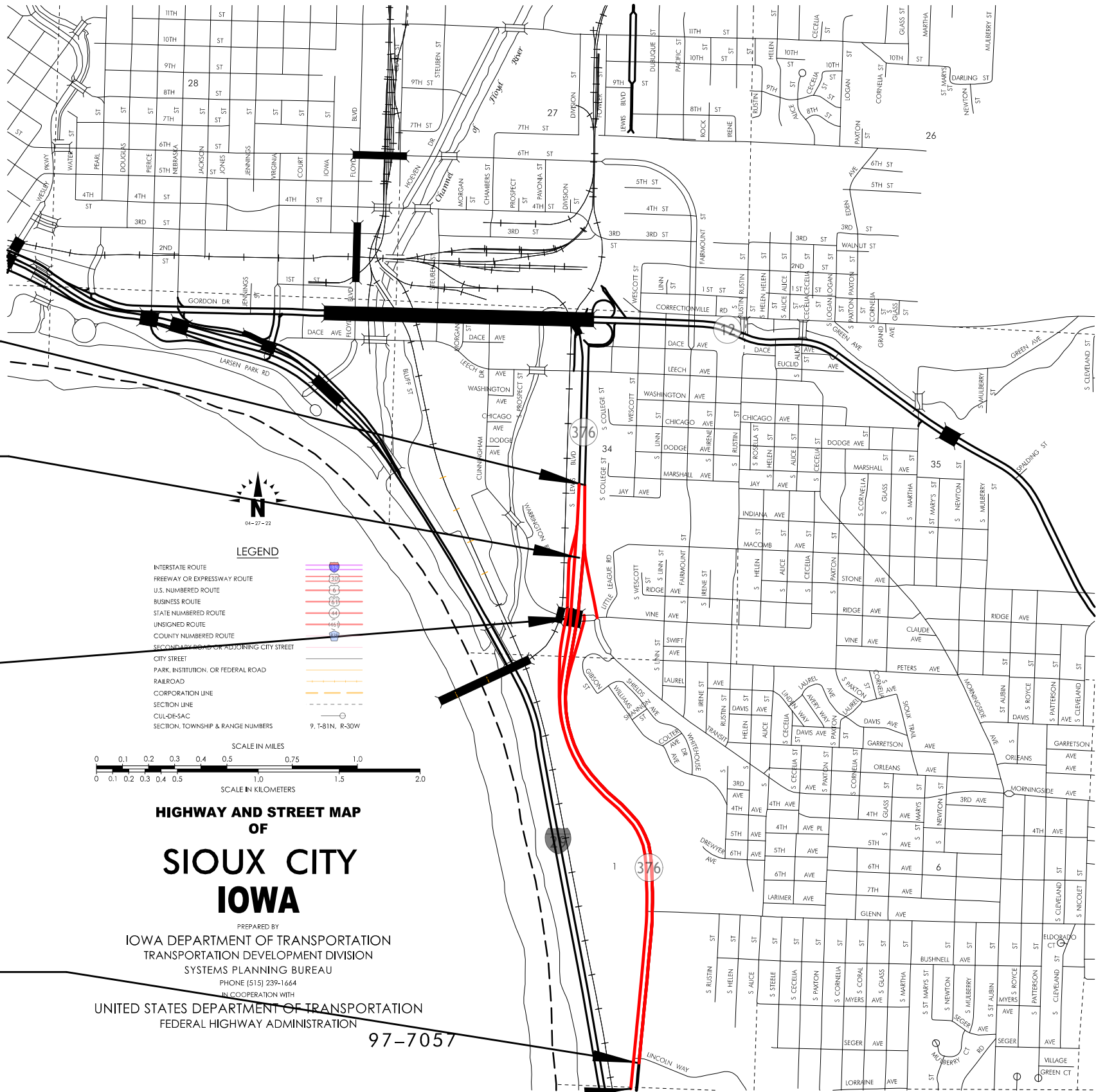
END CONSTRUCTION
STA. 1137+76

STATION EQUATION
STA 384+42.3 BACK
STA 1126+77.09 AHEAD

BRIDGE FHWA #052991

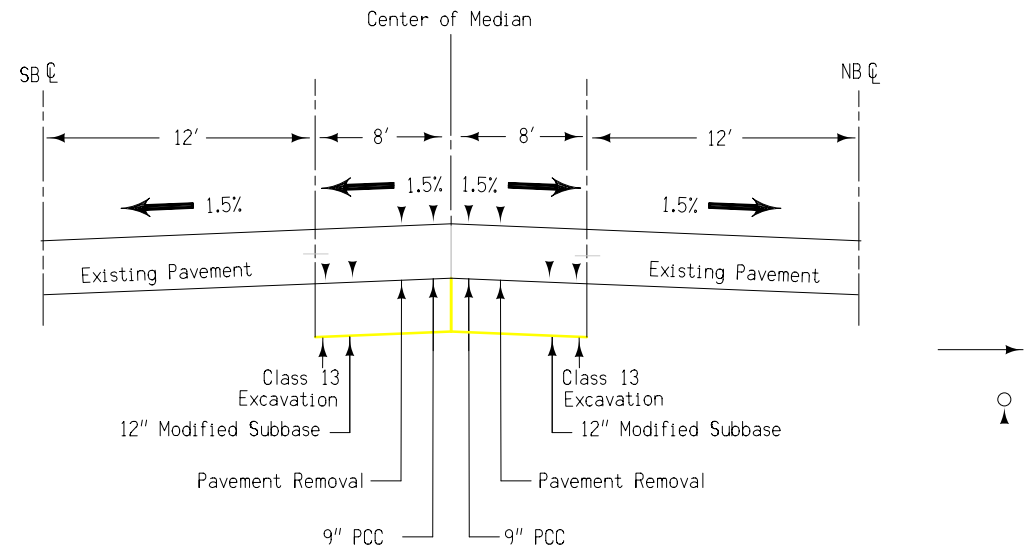
BEGIN CONSTRUCTION
NBL STA. 301+75.21

BEGIN CONSTRUCTION
SBL STA. 299+95.21



Modified

07-27-26



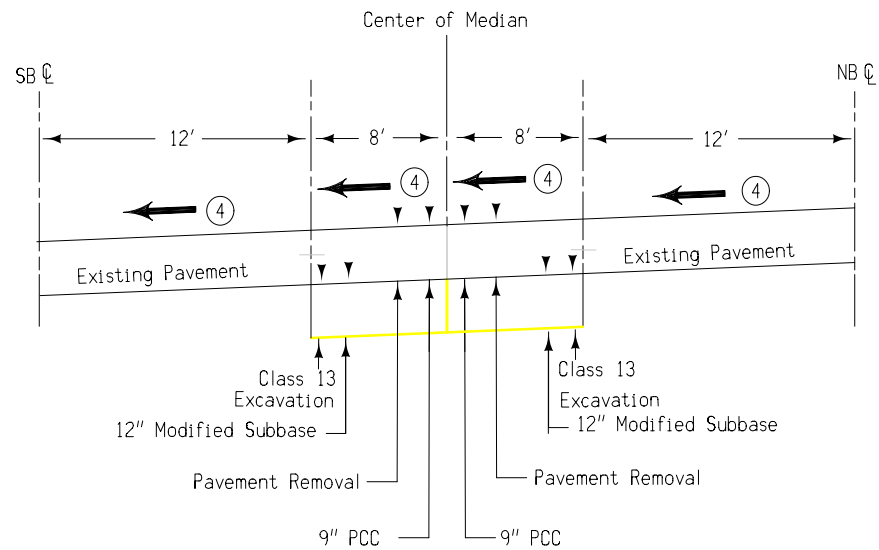
- ① Saw cut to be a maximum of 6" from front of curb.
- ② Looking in direction of increasing Station
- ③ Pavement removal is to include removal of existing 6-inch median pavement

Route	Station to Station	Pavement Removal SY ③	Class 13 Excavation CY	9" PCC SY	12" Modified Subbase CY	Notes
IA 376	370+16.21 to 372+41.21	375	125	375	125	

SOUTH MEDIAN CROSSOVER

Modified

07-27-26



- ① Saw cut to be a maximum of 6" from front of curb.
- ② Looking in direction of increasing Station
- ③ Pavement removal is to include removal of existing 6-inch median pavement
- ④ Varies. Match nearest existing mainline cross slope.

Route	Station to Station	Pavement Removal SY ③	Class 13 Excavation CY	9" PCC SY	12" Modified Subbase CY	Notes
IA 376	377+56.21 to 379+81.21	375	125	375	125	

NORTH MEDIAN CROSSOVER

ESTIMATED PROJECT QUANTITIES AND REFERENCE NOTES

Division 1 : Iowa DOT

Item no.	Item Code	Item	Unit	Quantities	Estimate Reference Notes
				Estimated	
				Division 1	
1	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW	CY	93.6	Includes 93.6 cu. yds. of suitable material to be used in the roadway fill for construction of right turn lane.
2	2102-2710090	EXCAVATION, CLASS 10, WASTE	CY	228.7	Dispose of excess material according to Article 1106.07 of the current specifications.
3	2102-2712015	EXCAVATION, CLASS 12, BOULDERS OR ROCK FRAGMENTS	CY	5	Dispose of excess material according to Article 1106.07 of the current specifications.
4	2102-2713090	EXCAVATION, CLASS 13, WASTE	CY	250	Dispose of excess material according to Article 1106.07 of the current specifications. Refer to median crossover typicals.
5	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD	CY	77.8	Quantity will be computed on the basis of a uniform 6-inch cut, or the depth as specified in the contract documents over the area involved. Sufficient field measurements will be taken to assure reasonable conformity with the required depth of cut.
6	2107-0875100	COMPACTION WITH MOISTURE CONTROL	CY	93.6	Shrinkage will not be included in the moisture control quantity.
7	2115-0100000	MODIFIED SUBBASE	CY	374.8	Turn lane at will use 124.8 CYs of modified subbase. Refer to Typical Half-Section PCC Turn Lane. Median crossovers will use 250 CYs of modified subbase. Refer to Typical Median Crossover.
8	2123-7450000	SHOULDER CONSTRUCTION, EARTH	STA	3.1	Requires a minimum of 4 inches of topsoil. Place according to Article 2105.03,B of the Standard Specifications.
9	2123-7450020	SHOULDER FINISHING, EARTH	STA	3.1	Shape to the Typical Half Section PCC Turn Lane.
10	2212-5070310	PATCHES, FULL-DEPTH REPAIR	SY	860.8	Refer to Tabulation 102-6C.
11	2212-5070330	PATCHES BY COUNT (REPAIR)	EACH	82	
12	2301-0690203	BRIDGE APPROACH, BR-203	SY	1,011	Refer to Tabulation 112-06. Refer to BR-231 for construction of this item.
13	2301-1033090	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 3 DURABILITY, 9 IN.	SY	1,073	323 SY are to be used for the construction of new turn lane at Lincoln Way. Refer to Typical Half Section PCC Turn Lane. 750 SY will be used for the construction of median crossover at STA 370+16.21 to 372+41.21 and STA 377+56.21 to 379+81.21.
14	2435-0254104	INTAKE, SW-541, TOP ONLY	EACH	1	Refer to Tabulation 104-11. Work only to include replacement of back of curb.
15	2502-8212034	SUBDRAIN, LONGITUDINAL, (SHOULDER) 4 IN. DIA.	LF	310	Refer to Tabulation 104-09A
16	2502-8221303	SUBDRAIN OUTLET, DR-303	EACH	1	
17	2505-4008120	REMOVAL OF STEEL BEAM GUARDRAIL	LF	250	Refer to Tabulation 110-07A
18	2505-4008300	STEEL BEAM GUARDRAIL	LF	225	Refer to Tabulation 108-08A
19	2505-4008410	STEEL BEAM GUARDRAIL BARRIER TRANSITION SECTION, BA-201	EACH	2	Refer to Tabulation 108-08A.

Item no.	Item Code	Item	Unit	Quantities	Estimate Reference Notes
				Estimated	
				Division 1	
20	2505-4021720	STEEL BEAM GUARDRAIL TANGENT END TERMINAL, BA-205	EACH	2	Refer to Tabulation 108-08A
21	2510-6745850	REMOVAL OF PAVEMENT	SY	1,761	Refer to Tabulations 110-1 and 102-05. Refer to U sheets for original approach standard RK-12. Removal of the pavement at the bridge approach will be 1011 SY. Removal of the pavement at the median crossovers will be 750 SY.
22	2512-1725156	CURB AND GUTTER, P.C. CONCRETE, 1.5 FT.	LF	695.1	Refer to Tabulation 100-05
23	2514-0000200	REMOVAL OF CURB	STA	695.1	Refer to Tabulation 110-04
24	2526-8285040	CONSTRUCTION SURVEY, LOCATION SURVEY	LS	1	Location survey to include topographic survey of the median cross over, guardrail, and conditions before and after grading new turn lane at Lincoln Way to confirm Class 10 Roadway and Borrow, Class 10 Excavation and Waste, Topsoil Strip Salvage and Spread.
25	2527-9263155	PRE-CUT SYMBOLS AND LEGENDS, PREFORMED THERMOPLASTIC MARKING MATERIAL	EACH	6	Refer to Tabulation 108-29.
26	2527-9263209	PAINTED PAVEMENT MARKINGS, WATERBORNE OR SOLVENT-BASED	STA	452.99	Refer to Tabulation 108-22.
27	2527-9263225	PERMANENT TAPE MARKINGS, PREFORMED THERMOPLASTIC MARKING MATERIAL	STA	14.1	Refer to Tabulation 108-22.
28	2527-9263231	REMOVABLE TAPE MARKINGS, WET RETROREFLECTIVE	STA	136.68	Refer to Tab 108-22.
29	2527-9270112	GROOVES CUT FOR PAVEMENT MARKINGS	STA	453.79	Refer to Tabulation 108-22.
30	2527-9270120	GROOVES CUT FOR SYMBOLS AND LEGENDS	EACH	14	Refer to Tabulation 108-29.
31	2528-2518000	SAFETY CLOSURE	EACH	8	Refer to Tabulation 108-13A and staging notes.
32	2528-2518005	CROSSOVER BARRICADE	EACH	2	Approximately 19 posts or 285 feet of cable barrier will be needed per median crossover. Refer to Detail 540-13.
33	2528-8400157	TEMPORARY FLOODLIGHTING LUMINAIRE	EACH	4	Refer to Tab. 108-27.
34	2528-8445110	TRAFFIC CONTROL	LS	1	Refer to Traffic Control Plan on Sheet J.1.
35	2528-9109020	TEMPORARY LANE SEPARATOR SYSTEM	LF	450	Refer to Tabulation 108_35.
36	2528-9290050	PORTABLE DYNAMIC MESSAGE SIGN (PDMS)	CDAY	0	See Proposal.
37	2529-2242304	CD JOINT ASSEMBLY	EACH	1	Refer to Tabulation 102-06C.
38	2529-5070110	PATCHES, FULL-DEPTH FINISH, BY AREA	SY	860.8	Refer to Tabulation 102-6C.
39	2529-5070120	PATCHES, FULL-DEPTH FINISH, BY COUNT	EACH	82	Refer to Tabulation 102-6C.
40	2532-5200002	PAVEMENT SURFACE REPAIR (GRINDING GRAVEL)	SY	61,163.52	Quantity includes mainline, existing turn lanes, and ramps at Cunningham Drive Interchange.
41	2533-4980005	MOBILIZATION	LS	1	--
42	2542-1006001	CRACK AND JOINT CLEANING AND FILLING (PCC PAVEMENT)	MILE	4.76	Quantity includes mainline, and ramps per ERL 2542.04.3.
43	2542-1007000	SEALER MATERIAL (PCC PAVEMENT)	LB	12,281	

Item no.	Item Code	Item	Unit	Quantities	Estimate Reference Notes
				Estimated	
				Division 1	
44	2602-0000320	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 20 IN. DIA.	LF	400	Refer to Tab. 100-19. The tabulation includes estimated locations for placement of "Perimeter and Slope Sediment Control Device, 20 in. dia." to address erosion to be encountered during construction. Verify the specific locations with the Engineer prior to beginning placement. Bid item includes 25% additional quantity for field adjustments and replacements.
45	2602-0000351	REMOVAL OF PERIMETER AND SLOPE OR DITCH CHECK SEDIMENT CONTROL DEVICE	LF	400	
46	2602-0000500	OPEN-THROAT CURB INTAKE SEDIMENT FILTER, EC-602	LF	492	Refer to Tab 109-36. Add additional 20% to this item to cover widths exceeding 5'.
47	2602-0000510	MAINTENANCE OF OPEN-THROAT CURB INTAKE SEDIMENT FILTER	EACH	82	Refer to Tab 100-36.
48	2602-0000520	REMOVAL OF OPEN-THROAT CURB INTAKE SEDIMENT FILTER	EACH	82	Refer to Tab 100-36.

262_06
9/28/22

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.

100_01D
8/15/22

PROJECT DESCRIPTION

This is a pavement planing and grooving project on IA 376 from Lincoln Way to N of Cunningham Dr in Sioux City. Other work includes constructing a new right turn lane at Lincoln Way, median crossovers, approach and pavement notch replacement at Cunningham Drive Interchange, pavement markings, and PCC full depth patches.

102_05 9/29/23																				
EXISTING PAVEMENT																				
County	Route	Direction of Travel	Begin Ref. Location Sign	End Ref. Location Sign	Year	Type	Project Number	Surface Type	Surface Depth (IN)	Base Type	Base Depth (IN)	Subbase Type	Subbase Depth (IN)	Removal Type	Removal Depth (IN)	Coarse Aggregate Source	Coarse Aggregate Type	Course Aggregate Durability Class	Reinforcement Type	Remarks
Woodbury	IA-376		92.41	93.65	1980		FN-75-4(17)--21-97	PCC	12.0							CRESCENT	C.LST.			
Woodbury	IA-376		93.65	94.15	1980		FN-75-4(17)--21-97	PCC	12.0							CRESCENT	C.LST.			

105_04
10/20/26

STANDARDS

The following Standards apply to construction work on this project.

Number	Date	Title
BR-203	10/20/2026	Double Reinforced 12in Approach
BR-231	4/21/2026	Bridge Approach (Multi-Lane, Curbed Roadway)
BA-200	10/20/2026	Steel Beam Guardrail Components
BA-201	10/18/2022	Steel Beam Guardrail Barrier Transition Section (MASH TL-3)
BA-202	10/20/2026	Steel Beam Guardrail Bolted End Anchor
BA-203	10/15/2019	Steel Beam Guardrail W-Beam End Anchor
BA-205	10/17/2023	Steel Beam Guardrail Tangent End Terminal (MASH TL-3)
BA-250	10/20/2026	Steel Beam Guardrail Installation at Concrete Barrier or Bridge End Post (MASH TL-3)
BA-252	10/21/2025	Steel Beam Guardrail Installation at Side Object (One-Way Protection)
EC-204	10-19-21	Perimeter, Slope and Ditch Check Sediment Control Devices
LI-130	10-17-17	Temporary Floodlighting Luminaires
PM-310	4/15/2025	Entrance and Exit Ramps
PM-560	10/15/2024	Divided Multi-Lane Roadway with no Turn Lanes
PM-561	10/15/2024	Divided Multi-Lane Roadway with Right Turn Lanes
PM-562	10/15/2024	Divided Multi-Lane Roadway with Left Turn Lanes
SI-172	4/19/2016	Delineators
SI-173	4/19/2016	Object Markers
SI-211	10/18/2022	Object Marker and Delineator Placement with Guardrail
PM-110	10/15/2024	Line Types
PM-116	4/16/2024	Grooving for Symbols and Legends
PR-103	10/21/2025	Full Depth PCC Patch with Dowels
PV-101	10/21/2025	Joints
PV-102	10/21/2025	PCC Curb Details
TC-1	10/15/2019	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-61	10-21-25	Two-Lane, Two-way Operation
TC-402	4/18/2023	Work Within 15 ft of Traveled Way
TC-417	4/21/2020	Ramp Closure
TC-418	4/18/2023	Lane Closure on Divided Highway
TC-420	10/16/2018	Lane Closure at Ramps
TC-422	4/18/2023	Closure of Two Adjacent Lanes on Divided Highway
TC-431	4/15/2025	Slow Moving Vehicle Operating in the Traffic Lane
TC-433	10/17/2017	Pavement Marking Operations

PROPOSED POSTED SPEED LIMIT				
Roadway Identification	Station From	Station To	Proposed Posted Speed	Remarks
IA 376	299+95.21	332+83.21	over 45	
IA 376	332+82.21	384+42.30	40-45	
IA 376	384+42.30	1137+76.00	40-45	

100_27
8/15/22

FULL-DEPTH PATCHES														102_06C 4/21/26
Line No.	Count	Station	Direction of Travel	Side	Length (FT)	Width (FT)	Total Patch Area (SY)	Patch Thickness (IN)	Patch Repair or Finish	PCC Patch Type	PCC Patch Quantity (SY)	'CD' Joints (No.)	Remarks	
1.0	1	302+25.21	SB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		SB (LOOKING SOUTH)	
2.0	2	316+75.21	SB	Both	8.0	12.5	22.2	8.0	Repair	PCC With Dowels (PR-103)	22.2		SB (LOOKING SOUTH)	
3.0	1	317+55.21	SB	Right	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		SB (LOOKING SOUTH)	
4.0	1	322+15.21	SB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		SB (LOOKING SOUTH)	
5.0	1	323+45.21	SB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		SB (LOOKING SOUTH)	
6.0	2	324+35.21	SB	Both	6.0	12.5	16.7	8.0	Repair	PCC With Dowels (PR-103)	16.7		SB (LOOKING SOUTH)	
7.0	2	327+05.21	SB	Both	6.0	12.5	16.7	8.0	Repair	PCC With Dowels (PR-103)	16.7		SB (LOOKING SOUTH)	
8.0	1	327+55.21	SB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		SB (LOOKING SOUTH)	
9.0	1	330+15.21	SB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		SB (LOOKING SOUTH) Turn Lane	
10.0	2	331+65.21	SB	Both	6.0	12.5	16.7	8.0	Repair	PCC With Dowels (PR-103)	16.7		SB (LOOKING SOUTH)	
11.0	1	345+15.21	SB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		SB (LOOKING SOUTH)	
12.0	2	352+55.21	SB	Both	6.0	12.5	16.7	8.0	Repair	PCC With Dowels (PR-103)	16.7		SB (LOOKING SOUTH)	
13.0	1	359+25.21	SB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		SB (LOOKING SOUTH)	
14.0	1	359+85.21	SB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		SB (LOOKING SOUTH)	
15.0	1	366+95.21	SB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		SB (LOOKING SOUTH)	
16.0	1	367+45.21	SB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		SB (LOOKING SOUTH)	
17.0	1	377+05.21	SB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		SB (LOOKING SOUTH)	
18.0	2	1127+00.00	SB	Both	12.0	12.5	33.3	8.0	Repair	PCC With Dowels (PR-103)	33.3		SB (LOOKING SOUTH)	
19.0	2	1132+00.00	SB	Both	6.0	12.5	16.7	8.0	Repair	PCC With Dowels (PR-103)	16.7		SB (LOOKING SOUTH)	
20.0	1	1135+60.00	SB	Center	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		SB (LOOKING SOUTH)	
21.0	1	1137+50.00	SB	Center	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		SB (LOOKING SOUTH)	
22.0	1	304+10.21	NB	Right	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)	
23.0	1	306+05.21	NB	Right	20.0	12.5	27.8	8.0	Repair	PCC With Dowels (PR-103)	27.8		NB (LOOKING NORTH)	
24.0	2	306+65.21	NB	Both	6.0	12.5	16.7	8.0	Repair	PCC With Dowels (PR-103)	16.7		NB (LOOKING NORTH)	
25.0	2	307+55.21	NB	Both	6.0	12.5	16.7	8.0	Repair	PCC With Dowels (PR-103)	16.7		NB (LOOKING NORTH)	
26.0	1	309+65.21	NB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)	
27.0	2	310+25.21	NB	Both	6.0	12.5	16.7	8.0	Repair	PCC With Dowels (PR-103)	16.7		NB (LOOKING NORTH)	
28.0	1	315+55.21	NB	Right	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)	
29.0	1	319+45.21	NB	Right	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)	
30.0	1	322+65.21	NB	Right	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)	
31.0	2	325+25.21	NB	Both	6.0	12.5	16.7	8.0	Repair	PCC With Dowels (PR-103)	16.7		NB (LOOKING NORTH)	
32.0	1	327+05.21	NB	Right	8.0	12.5	11.1	8.0	Repair	PCC With Dowels (PR-103)	11.1		NB (LOOKING NORTH) Turn Lane	
33.0	1	335+65.21	NB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)	
34.0	1	336+65.21	NB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)	
35.0	1	341+65.21	NB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)	
36.0	1	344+45.21	NB	Right	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)	
37.0	1	344+85.21	NB	Right	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)	
38.0	1	345+35.21	NB	Right	20.0	12.5	27.8	8.0	Repair	PCC With Dowels (PR-103)	27.8		NB (LOOKING NORTH)	
39.0	1	348+15.21	NB	Right	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)	
40.0	1	349+05.21	NB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)	
41.0	2	349+55.21	NB	Both	6.0	12.5	16.7	8.0	Repair	PCC With Dowels (PR-103)	16.7		NB (LOOKING NORTH)	
42.0	1	351+15.21	NB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)	
43.0	1	357+65.21	NB	Right	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)	
44.0	1	361+55.21	NB	Right	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)	
45.0	1	363+85.21	NB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)	
46.0	1	366+25.21	NB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)	
47.0	1	369+75.21	NB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)	
48.0	2	379+95.21	NB	Both	6.0	12.5	16.7	8.0	Repair	PCC With Dowels (PR-103)	16.7		NB (LOOKING NORTH)	

FULL-DEPTH PATCHES													102_06C 4/21/26
Line No.	Count	Station	Direction of Travel	Side	Length (FT)	Width (FT)	Total Patch Area (SY)	Patch Thickness (IN)	Patch Repair or Finish	PCC Patch Type	PCC Patch Quantity (SY)	'CD' Joints (No.)	Remarks
49.0	1	381+85.21	NB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)
50.0	1	1130+40.00	NB	Left	6.0	12.5	8.3	8.0	Repair	PCC With Dowels (PR-103)	8.3		NB (LOOKING NORTH)
51.0	2	1135+30.00	NB	Both	6.0	12.5	16.7	8.0	Repair	PCC With Dowels (PR-103)	16.7		NB (LOOKING NORTH)
52.0	1	5372+40.00	NB	Center	12.0	13.0	17.3	8.0	Repair	PCC With Dowels (PR-103)	17.3		RAMP B
53.0	1	5373+70.00	NB	Center	6.0	13.0	8.7	8.0	Repair	PCC With Dowels (PR-103)	8.7		RAMP B
54.0	1	627+20.00	NB	Center	6.0	6.0	4.0	8.0	Repair	PCC With Dowels (PR-103)	4.0		RAMP D
55.0	1	628+50.00	NB	Center	12.0	13.0	17.3	8.0	Repair	PCC With Dowels (PR-103)	17.3		RAMP D
56.0	1	629+50.00	NB	Center	6.0	13.0	8.7	8.0	Repair	PCC With Dowels (PR-103)	8.7		RAMP D
57.0	1	629+70.00	NB	Center	6.0	13.0	8.7	8.0	Repair	PCC With Dowels (PR-103)	8.7		RAMP D
58.0	1	630+80.00	NB	Center	6.0	13.0	8.7	8.0	Repair	PCC With Dowels (PR-103)	8.7		RAMP D
59.0	1	631+50.00	NB	Center	6.0	13.0	8.7	8.0	Repair	PCC With Dowels (PR-103)	8.7		RAMP D
60.0	1	633+00.00	NB	Center	8.0	13.0	11.6	8.0	Repair	PCC With Dowels (PR-103)	11.6		RAMP D
61.0	1	524+90.00	NB	Center	20.0	21.0	46.7	8.0	Repair	PCC With Dowels (PR-103)	46.7		RAMP A
62.0	1	529+10.00	NB	Center	40.0	12.5	55.6	8.0	Repair	PCC With Dowels (PR-103)	55.6	1	RAMP A
63.0	1	530+10.00	NB	Center	20.0	12.5	27.8	8.0	Repair	PCC With Dowels (PR-103)	27.8		RAMP A
64.0	1	534+60.00	NB	Center	6.0	15.0	10.0	8.0	Repair	PCC With Dowels (PR-103)	10.0		RAMP A
65.0	1	536+20.00	NB	Center	6.0	15.0	10.0	8.0	Repair	PCC With Dowels (PR-103)	10.0		RAMP A
66.0	1	536+50.00	NB	Center	6.0	15.0	10.0	8.0	Repair	PCC With Dowels (PR-103)	10.0		RAMP A
67.0	1	537+50.00	NB	Center	6.0	15.0	10.0	8.0	Repair	PCC With Dowels (PR-103)	10.0		RAMP A
68.0	1	6371+82.00	NB	Center	20.0	15.0	33.3	8.0	Repair	PCC With Dowels (PR-103)	33.3		RAMP C
Total		82					901.9				901.9	1	

* Patches include curb and gutter

100_36 8/15/22 OPEN-THROAT CURB INTAKE SEDIMENT FILTER Possible Standard: EC-602						
Line No.	Station	Side	Installation (LF)	Maintenance (Each)	Removal (Each)	Remarks
1.0	304+15.21	Right	5.0	1	1.0	SB (LOOKING SOUTH)
2.0	311+45.21	Right	5.0	1	1.0	SB (LOOKING SOUTH)
3.0	319+05.21	Right	5.0	1	1.0	SB (LOOKING SOUTH)
4.0	328+65.21	Right	5.0	1	1.0	SB (LOOKING SOUTH)
5.0	331+75.21	Right	5.0	1	1.0	SB (LOOKING SOUTH)
6.0	334+95.21	Right	5.0	1	1.0	SB (LOOKING SOUTH)
7.0	338+65.21	Right	5.0	1	1.0	SB (LOOKING SOUTH)
8.0	339+45.21	Right	5.0	1	1.0	SB (LOOKING SOUTH)
9.0	340+35.21	Right	5.0	1	1.0	SB (LOOKING SOUTH)
10.0	344+75.21	Median	5.0	1	1.0	SB (LOOKING SOUTH)
11.0	358+65.21	Median	5.0	1	1.0	SB (LOOKING SOUTH)
12.0	361+75.21	Median	5.0	1	1.0	SB (LOOKING SOUTH)
13.0	365+65.21	Median	5.0	1	1.0	SB (LOOKING SOUTH)
14.0	366+95.21	Median	5.0	1	1.0	SB (LOOKING SOUTH)
15.0	373+75.21	Right	5.0	1	1.0	SB (LOOKING SOUTH)
16.0	379+85.21	Right	5.0	1	1.0	SB (LOOKING SOUTH)
17.0	1127+00.00	Right	5.0	1	1.0	SB (LOOKING SOUTH)
18.0	1132+90.00	Right	5.0	1	1.0	SB (LOOKING SOUTH)
18.0	1132+90.00	Median	5.0	1	1.0	SB (LOOKING SOUTH)
19.0	1135+10.00	Right	5.0	1	1.0	SB (LOOKING SOUTH)
20.0	1135+90.00	Right	5.0	1	1.0	SB (LOOKING SOUTH)
21.0	1135+70.00	Right	5.0	1	1.0	SB (LOOKING SOUTH)
22.0	304+35.21	Right	5.0	1	1.0	NB (LOOKING NORTH)
23.0	311+75.21	Right	5.0	1	1.0	NB (LOOKING NORTH)
25.0	319+45.21	Right	5.0	1	1.0	NB (LOOKING NORTH)
26.0	321+95.21	Median	5.0	1	1.0	NB (LOOKING NORTH)
27.0	325+65.21	Median	5.0	1	1.0	NB (LOOKING NORTH)
28.0	325+75.21	Right	5.0	1	1.0	NB (LOOKING NORTH)
30.0	331+95.21	Median	5.0	1	1.0	NB (LOOKING NORTH)
31.0	337+65.21	Right	5.0	1	1.0	NB (LOOKING NORTH)
31.0	337+65.21	Median	5.0	1	1.0	NB (LOOKING NORTH)
32.0	338+45.21	Right	5.0	1	1.0	NB (LOOKING NORTH)
32.0	338+45.21	Median	5.0	1	1.0	NB (LOOKING NORTH)
33.0	339+25.21	Right	5.0	1	1.0	NB (LOOKING NORTH)
33.0	339+25.21	Median	5.0	1	1.0	NB (LOOKING NORTH)
34.0	340+15.21	Median	5.0	1	1.0	NB (LOOKING NORTH)
35.0	340+75.21	Median	5.0	1	1.0	NB (LOOKING NORTH)
36.0	341+65.21	Right	5.0	1	1.0	NB (LOOKING NORTH)
37.0	345+35.21	Right	5.0	1	1.0	NB (LOOKING NORTH)
38.0	358+95.21	Right	5.0	1	1.0	NB (LOOKING NORTH)
39.0	363+35.21	Right	5.0	1	1.0	NB (LOOKING NORTH)
40.0	373+95.21	Right	5.0	1	1.0	NB (LOOKING NORTH)
41.0	376+35.21	Right	5.0	1	1.0	NB (LOOKING NORTH)
42.0	383+85.21	Right	5.0	1	1.0	NB (LOOKING NORTH)
42.0	383+85.21	Median	5.0	1	1.0	NB (LOOKING NORTH)
43.0	1127+10.00	Right	5.0	1	1.0	NB (LOOKING NORTH)
43.0	1127+10.00	Median	5.0	1	1.0	NB (LOOKING NORTH)
44.0	1128+60.00	Right	5.0	1	1.0	NB (LOOKING NORTH)

100_36 8/15/22 OPEN-THROAT CURB INTAKE SEDIMENT FILTER Possible Standard: EC-602						
Line No.	Station	Side	Installation (LF)	Maintenance (Each)	Removal (Each)	Remarks
44.0	1128+60.00	Median	5.0	1	1.0	NB (LOOKING NORTH)
45.0	1129+10.00	Right	5.0	1	1.0	NB (LOOKING NORTH)
46.0	1129+30.00	Right	5.0	1	1.0	NB (LOOKING NORTH)
47.0	1132+70.00	Right	5.0	1	1.0	NB (LOOKING NORTH)
48.0	1136+20.00	Right	5.0	1	1.0	NB (LOOKING NORTH)
49.0	1137+30.00	Right	5.0	1	1.0	NB (LOOKING NORTH)
50.0	5363+50.00	Right	5.0	1	1.0	RAMP B
51.0	5367+50.00	Right	5.0	1	1.0	RAMP B
52.0	5373+50.00	Median	5.0	1	1.0	RAMP B
53.0	5374+60.00	Left	5.0	1	1.0	RAMP B
54.0	5374+60.00	Median	5.0	1	1.0	RAMP B
55.0	6367+44.00	Median	5.0	1	1.0	RAMP B
56.0	6371+65.00	Right	5.0	1	1.0	RAMP C
57.0	6371+25.00	Left	5.0	1	1.0	RAMP C
58.0	6371+75.00	Left	5.0	1	1.0	RAMP C
59.0	6373+25.00	Left	5.0	1	1.0	RAMP C
60.0	6373+50.00	Left	5.0	1	1.0	RAMP C
61.0	6374+95.00	Right	5.0	1	1.0	RAMP C
62.0	6774+95.00	Median	5.0	1	1.0	RAMP C
63.0	523+75.00	Median	5.0	1	1.0	RAMP A
64.0	524+40.00	Median	5.0	1	1.0	RAMP A
65.0	527+15.00	Right	5.0	1	1.0	RAMP A
66.0	527+49.00	Median	5.0	1	1.0	RAMP A
67.0	528+68.00	Median	5.0	1	1.0	RAMP A
68.0	536+05.00	Median	5.0	1	1.0	RAMP A
69.0	536+25.00	Median	5.0	1	1.0	RAMP A
70.0	236+75.00	Median	5.0	1	1.0	RAMP A
71.0	622+00.00	Left	5.0	1	1.0	RAMP D
72.0	622+00.00	Right	5.0	1	1.0	RAMP D
73.0	622+64.00	Right	5.0	1	1.0	RAMP D
74.0	628+65.00	Left	5.0	1	1.0	RAMP D
75.0	633+17.00	Median	5.0	1	1.0	RAMP D
76.0	637+25.00	Median	5.0	1	1.0	RAMP D
77.0	636+20.00	Median	5.0	1	1.0	RAMP D
Total410.08282.0						

Add additional 20% to this item to cover widths exceeding 5'.

108_08A

4/25/25

STEEL BEAM GUARDRAIL AT CONCRETE BARRIER OR BRIDGE RAIL END SECTION

Possible Standards: BA-200, BA-201, BA-202, BA-205, BA-206, BA-209, BA-210, BA-211, BA-221, BA-225, BA-250, BA-260, LS-625, LS-626, LS-630, LS-635, SI-172, SI-173 and SI-211.

(1) Lane(s) to which the obstacle is adjacent.

(2) Not a bid item. Incidental to guardrail installation.

Line No.	Direction of Travel (1)	Side	Station	Offset (FT)	Barrier Transition Section	Barrier Transition Section (EA)	End Terminal	End Terminal Count (EA)	VT1 (LF)	VF (LF)	VT2 (LF)	ET (LF)	BA-211 Station	BA-211 (Type)	SI-211 (Type) (2)	Delineator SI-172 Type 1 (EA) (2)	Object Marker Type 2 (EA) (2)	Object Marker Type 3 Lt (EA)(2)	Object Marker Type 3 Rt (EA)(2)	Bolted End Anchor BA-202 (Type)	Bolted End Anchor BA-202 (EA)	Post Adapter BA-210 (EA)	Steel Beam Guardrail BA-200 (LF)	Remarks
1.0	NB	Right	374+30.19	36.0	BA-201	1	BA-205	1	53.125	25.00	100.00	47.70			3								137.5	Refer to U.21 for guardrail layout
2.0	SB	Right	376+07.85	36.0	BA-201	1	BA-205	1	53.125	25.00	100.00	47.70			3								137.5	Refer to U.21 for guardrail layout

PAVEMENT MARKING LINE TYPES

Line factors based on 6-inch wide continuous line.
*BCY4 - Place on the same side of the roadway to match existing markings near the project.
**NPY4 - Estimating purposes only. No Passing Zone Lines will be located in the field.
***MNY6 - Factor of 1.00 includes number of 6-inch passes to cover median nose area.
BCY4: Broken Centerline (Yellow) @ 0.17 BCY6: Broken Centerline (Yellow) @ 0.25 BLC6: Broken Line Contrast (White/Black) @ 0.50
CBW6: Crosswalk Bar (White) @ 10.00 CHW8: Channelizing Line (White) @ 1.33 CHW10: Channelizing Line (White) @ 1.67
CLW6: Crosswalk Line (White) @ 2.00 DCY4: Double Centerline (Yellow) @ 1.34 DCY6: Double Centerline (Yellow) @ 2.00
DLW4: Dotted Line (White) @ 0.22 DLW6: Dotted Line (White) @ 0.33 DLY4: Dotted Line (Yellow) @ 0.22
ELW6: Edge Line Right (White) @ 1.00 ELY4: Edge Line Left (Yellow) @ 0.67 ELY6: Edge Line Left (Yellow) @ 1.00
MNY6: Median Nose (Yellow) @ 1.00 NPY4: No Passing Zone Line (Yellow) @ 0.84 NPY6: No Passing Zone Line (Yellow) @ 1.25
RLY4: Ramp Edge Line Left (Yellow) @ 0.67 RLY6: Ramp Edge Line Left (Yellow) @ 1.00 SLW2: Stop Line (White) @ 4.00
SPW4: Sloped Curb 4" (White) @ 2.16 SPW6: Sloped Curb 6" (White) @ 2.28 SPY4: Sloped Curb 4" (Yellow) @ 2.16
STY6: Standard Curb 6" (Yellow) @ 2.03 YLW2: Yield Line (White) @ 1.15

BLW4: Broken Lane Line (White) @ 0.17 BLW6: Broken Lane Line (White) @ 0.25
CHY8: Channelizing Line (Yellow) @ 1.33 CHY10: Channelizing Line (Yellow) @ 1.67
DDY4: Double Dotted Line (Yellow) @ 0.44 DDY6: Double Dotted Line (Yellow) @ 0.67
DLY6: Dotted Line (Yellow) @ 0.33 ELW4: Edge Line Right (White) @ 0.67
LDW8: Lane Drop (White) @ 0.33 LDW10: Lane Drop (White) @ 0.42
RLW4: Ramp Edge Line Right (White) @ 0.67 RLW6: Ramp Edge Line Right (White) @ 1.00
SLW4: Solid Lane Line (White) @ 0.67 SLW6: Solid Lane Line (White) @ 1.00
SPY6: Sloped Curb 6" (Yellow) @ 2.28 STW6: Standard Curb 6" (Yellow) @ 2.03

Road ID	Station From	Station To	Lane	Marking Type	Left	Center	Right	Groove Marking Needed?	Groove Qty. (STA)	BLW6 (STA)	BLW6 Factored (STA)	CBW6 (STA)	CBW6 Factored (STA)	CHY8 (STA)	CHY8 Factored (STA)	ELW6 (STA)	ELW6 Factored (STA)	ELY6 (STA)	ELY6 Factored (STA)	SLW2 (STA)	SLW2 Factored (STA)	Remarks
IA 376	301+75.21	1137+76.00	NB	Waterborne/Solvent Paint	X	X	X	Yes	210.73	93.66	23.42					93.66	93.66	93.66	93.66			
IA 376	299+95.21	1137+76.00	SB	Waterborne/Solvent Paint	X	X	X	Yes	214.78	95.46	23.87					95.46	95.46	95.46	95.46			
IA 376	1127+78.00	1129+88.00	NB	Waterborne/Solvent Paint		X		Yes	2.10							2.10	2.10					
IA 376	1132+89.00	1136+37.00	SB	Waterborne/Solvent Paint		X		Yes	3.48							3.48	3.48					
IA 376	362+55.21	364+15.21	NB	Waterborne/Solvent Paint		X		Yes	1.60							1.60	1.60					
IA 376	363+72.21	364+22.21	SB	Waterborne/Solvent Paint		X		Yes	3.90							3.90	3.90					
IA 376	326+77.21	328+35.61	SB	Waterborne/Solvent Paint		X		Yes	1.58							1.58	1.58					
IA 376	324+13.21	325+71.21	SB	Waterborne/Solvent Paint		X		Yes	1.58							1.58	1.58					
RAMP A	517+85.00	517+85.00	Center	Thermoplastic		X		Yes	1.44											0.36	1.44	
RAMP A	517+75.00	517+75.00	Center	Thermoplastic		X		Yes	7.00			0.70	7.00									
RAMP B	5375+30.00	5375+30.00	Center	Thermoplastic		X		Yes	1.20											0.30	1.20	
RAMP D	617+60.00	617+60.00	Center	Thermoplastic		X		Yes	4.40			0.44	4.40									
Stage 1																						South Median Crossover
IA 376	345+98.71	372+43.71	NB	Removal of Paint		X		No		26.45	6.61											
IA 376	353+48.71	372+43.71	NB	Wet Retroreflective Removable Tape		X		No						18.95	25.20							
IA 376	370+16.21	372+41.21	SB	Wet Retroreflective Removable Tape	X			No						2.25	2.99							
IA 376	370+16.21	372+41.21	SB	Wet Retroreflective Removable Tape		X		No						2.25	2.99							
IA 376	353+38.71	379+83.71	NB	Removal of Paint		X		No		26.45	6.61											
IA 376	360+88.71	379+83.71	NB	Wet Retroreflective Removable Tape		X		No						18.95	25.20							
IA 376	377+56.21	379+81.21	SB	Wet Retroreflective Removable Tape	X			No						2.25	2.99							
IA 376	377+56.21	379+81.21	SB	Wet Retroreflective Removable Tape		X		No						2.25	2.99							
Stage 2 -																						Northbound Median Crossover
IA 376	353+48.71	372+43.71	NB	Removal of Removable Tape		X		No		18.95	4.74											
IA 376	370+16.21	372+41.21	SB	Removal of Removable Tape	X			No						2.25	2.99							
IA 376	370+16.21	372+41.21	SB	Removal of Removable Tape		X		No						2.25	2.99							
IA 376	360+88.71	379+83.71	NB	Removal of Removable Tape		X		No		18.95	4.74											
IA 376	377+56.21	379+81.21	SB	Removal of Removable Tape	X			No						2.25	2.99							
IA 376	377+56.21	379+81.21	SB	Removal of Removable Tape		X		No						2.25	2.99							
IA 376	345+98.71	372+43.71	NB	Waterborne/Solvent Paint		X		Yes														
IA 376	353+38.71	379+83.71	NB	Waterborne/Solvent Paint		X		Yes														
IA 376	370+13.71	396+58.71	SB	Removal of Paint		X		No		26.45	6.61											
IA 376	370+13.71	389+08.71	SB	Wet Retroreflective Removable Tape		X		No						18.95	25.20							
IA 376	370+16.21	372+41.21	NB	Wet Retroreflective Removable Tape	X			No						2.25	2.99							
IA 376	370+16.21	372+41.21	NB	Wet Retroreflective Removable Tape		X		No						2.25	2.99							
IA 376	377+53.71	403+98.71	SB	Removal of Paint		X		No		26.45	6.61											
IA 376	377+53.71	396+48.71	SB	Wet Retroreflective Removable Tape		X		No						18.95	25.20							
IA 376	377+56.21	379+81.21	NB	Wet Retroreflective Removable Tape	X			No						2.25	2.99							
IA 376	377+56.21	379+81.21	NB	Wet Retroreflective Removable Tape		X		No						2.25	2.99							
Stage 3 -																						Restore Traffic

PAVEMENT MARKING LINE TYPES

Line factors based on 6-inch wide continuous line.
*BCY4 - Place on the same side of the roadway to match existing markings near the project.
**NPY4 - Estimating purposes only. No Passing Zone Lines will be located in the field.
***MNY6 - Factor of 1.00 includes number of 6-inch passes to cover median nose area.
BCY4: Broken Centerline (Yellow) @ 0.17 BCY6: Broken Centerline (Yellow) @ 0.25 BLC6: Broken Line Contrast (White/Black) @ 0.50
CBW6: Crosswalk Bar (White) @ 10.00 CHW8: Channelizing Line (White) @ 1.33 CHW10: Channelizing Line (White) @ 1.67
CLW6: Crosswalk Line (White) @ 2.00 DCY4: Double Centerline (Yellow) @ 1.34 DCY6: Double Centerline (Yellow) @ 2.00
DLW4: Dotted Line (White) @ 0.22 DLW6: Dotted Line (White) @ 0.33 DLY4: Dotted Line (Yellow) @ 0.22
ELW6: Edge Line Right (White) @ 1.00 ELY4: Edge Line Left (Yellow) @ 0.67 ELY6: Edge Line Left (Yellow) @ 1.00
MNY6: Median Nose (Yellow) @ 1.00 NPY4: No Passing Zone Line (Yellow) @ 0.84 NPY6: No Passing Zone Line (Yellow) @ 1.25
RLY4: Ramp Edge Line Left (Yellow) @ 0.67 RLY6: Ramp Edge Line Left (Yellow) @ 1.00 SLW2: Stop Line (White) @ 4.00
SPW4: Sloped Curb 4" (White) @ 2.16 SPW6: Sloped Curb 6" (White) @ 2.28 SPY4: Sloped Curb 4" (Yellow) @ 2.16
STY6: Standard Curb 6" (Yellow) @ 2.03 YLW2: Yield Line (White) @ 1.15

BLW4: Broken Lane Line (White) @ 0.17 BLW6: Broken Lane Line (White) @ 0.25
CHY8: Channelizing Line (Yellow) @ 1.33 CHY10: Channelizing Line (Yellow) @ 1.67
DDY4: Double Dotted Line (Yellow) @ 0.44 DDY6: Double Dotted Line (Yellow) @ 0.67
DLY6: Dotted Line (Yellow) @ 0.33 ELW4: Edge Line Right (White) @ 0.67
LDW8: Lane Drop (White) @ 0.33 LDW10: Lane Drop (White) @ 0.42
RLW4: Ramp Edge Line Right (White) @ 0.67 RLW6: Ramp Edge Line Right (White) @ 1.00
SLW4: Solid Lane Line (White) @ 0.67 SLW6: Solid Lane Line (White) @ 1.00
SPY6: Sloped Curb 6" (Yellow) @ 2.28 STW6: Standard Curb 6" (Yellow) @ 2.03

Road ID	Station From	Station To	Lane	Marking Type	Left	Center	Right	Groove Marking Needed?	Groove Qty. (STA)	BLW6 (STA)	BLW6 Factored (STA)	CBW6 (STA)	CBW6 Factored (STA)	CHY8 (STA)	CHY8 Factored (STA)	ELW6 (STA)	ELW6 Factored (STA)	ELY6 (STA)	ELY6 Factored (STA)	SLW2 (STA)	SLW2 Factored (STA)	Remarks
IA 376	370+13.71	396+58.71		Waterborne/Solvent Paint		X		Yes	6.61	26.45	6.61											
IA 376	377+53.71	403+98.71		Waterborne/Solvent Paint		X		Yes	6.61	26.45	6.61											
Total									467.01		96.43		11.40			203.36		189.12		2.64		
Number of Records : 41																						

Factored Total: PAINTED PAVEMENT MARKINGS, WATERBORNE OR SOLVENT BASED: 452.99
Factored Total: WET RETROREFLECTIVE REMOVBLE TAPE MARKINGS: 136.68
Factored Total: PAVEMENT MARKINGS REMOVED: 26.44
Factored Total: REMOVAL OF REMOVABLE TAPE: 136.68
NOT A BID ITEM: REMOVAL OF REMOVABLE TAPE

							108_29 4/15/25
PAVEMENT MARKING SYMBOLS AND LEGENDS							
Refer to PM-111							
Line No.	Roadway Identification	Station	Side	Pavement Symbol	Quantity (EA)	Groove Marking Needed?	Remarks
1.0	IA 376	324+25.21	Right	RTAW	1	Yes	Glenn Ave.
2.0	IA 376	325+25.21	Right	RTAW	1	Yes	Glenn Ave.
3.0	IA 376	326+65.21	Median	LTAW	1	Yes	Glenn Ave.
4.0	IA 376	327+65.21	Median	LTAW	1	Yes	Glenn Ave.
5.0	IA 376	301+95.21	Right	RTAW	1	Yes	Lincoln Way
6.0	IA 376	302+95.21	Right	RTAW	1	Yes	Lincoln Way
7.0	IA 376	330+98.71	Left	LLRW	1	No	
8.0	IA 376	331+98.71	Left	LLRW	1	No	
9.0	IA 376	335+98.71	Left	LLRW	1	No	
10.0	IA 376	336+98.71	Left	LLRW	1	No	
11.0	IA 376	374+08.71	Left	LLRW	1	No	
12.0	IA 376	375+08.71	Left	LLRW	1	No	
13.0	IA 376	379+08.71	Left	LLRW	1	No	
14.0	IA 376	380+08.71	Left	LLRW	1	No	
Total					14		

BRIDGE APPROACH SECTION
Refer to the BR Series.

* Not a bid item
** Verify layout of bridge approach does not conflict with guardrail posts.

Line No.	Bridge Station	End	Skew Ahead Left (Degrees)	Skew Ahead Right (Degrees)	(T) Thickness (IN)	Pay Length (FT)	Right Edge Offset (FT) **	Left Edge Offset (FT) **	Non-Reinf. Area (SY)	Single-Reinf. Area (SY)	Double-Reinf. Area (SY)	SRP Approach	SRP Abutment Type	SRP Abutting Pavement	Perforated * 4" Subdrain (LF)	Subdrain * Outlet (STA)	Subdrain * Outlet Side	Porous * Backfill (CY)	Modified * Subbase (TON)	Polymer * Grid (SY)	Special * Backfill (TON)	Remarks
1.0	375+19.02	N	0.0	0.0	12.0	70.0			216.7	144.4	144.4	BR-203	Fixed	BR-231	89.0	376+58.85	Left		497.400	536.7		
2.0	375+19.02	S	0.0	0.0	12.0	70.0			216.7	144.4	144.4	BR-203	Fixed	BR-231	89.0	373+79.19	Left		497.400	536.7		

Line No.	Station From	Station To	Side	Length (LF)	Width (LF)	Width 1.5 (LF)	Width 2.0 (LF)	Width 2.5 (LF)	Width 3.0 (LF)	Width 3.5 (LF)	Width 4.0 (LF)	Width 4.5 (LF)	Width 5.0 (LF)	Width 5.5 (LF)	Modified Subbase (CY)	Special Backfill (TON)	Remarks
1.0	300+45.71	303+55.21	Right	309.50	1.5	309.50											Refer to Typical Half Section PCC Turn Lane for modified subbase

100_19
10/15/24

PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE

Possible Standards: EC-204

Line No.	Station From	Station To	Side	Sediment Control Device Type	Diameter Size	Length (LF)	Remarks
1.0	300+45.71	303+55.21	Right	Perimeter and Slope	20 inch	310.00	

REBUILDING OF INTAKES AND UTILITY ACCESSES					104_11 8/15/22
Line No.	Item No.	Location Station	Type	Adjustment	
1.0	1	6371+25.00	SW-541	Repair back of curb	

108_13A 3/27/25			
SAFETY CLOSURES			
Station	Road Closure Qty.	Hazard Closure Qty.	Remarks
	1		IA 376 and Lincoln Way
	1		Lincoln Way and S. Paxton St.
370+16.21	1		South Median Crossover
379+81.21	1		North Median Crossover
367+56.71	1		Ramp B
1127+83.60	1		Ramp D
1132+87.00	1		Ramp A
364+19.90	1		Ramp C

108_27 8/15/22 TEMPORARY FLOODLIGHTING LUMINAIRES Possible Standard: LI-130					
Line No.	Item No.	Station	Offset (FT)	Number Luminaires	Remarks
1.0	1	370+43.71	42.5	1	Offset from median crossover
2.0	2	373+03.71	42.5	1	Offset from median crossover
3.0	3	377+83.71	42.5	1	Offset from median crossover
4.0	4	380+43.71	42.5	1	Offset from median crossover

108_35 8/15/22 TEMPORARY LANE SEPARATOR SYSTEM See TC-61				
Line No.	Station From	Station To	Length (LF)	Remarks
1.0	370+16.21	372+41.21	225.0	
2.0	377+56.21	379+81.21	225.0	

110_01
4/5/24

REMOVAL OF PAVEMENT

Refer to Tabulation 102-5.

* Not a bid item.

Line No.	Station From	Station To	Side	Pavement Type	Area (SY)	Saw Cut* (LF)	Remarks
1.0	370+16.21	372+41.21	X-Over	PCC	375.0	450.0	South Median Crossover
2.0	377+56.21	379+81.21	X-Over	PCC	375.0	450.0	North Median Crossover
3.0	375+98.85	376+68.85	Both	PCC	194.4	140.0	North Bridge Approach
4.0	373+69.19	374+39.19	Both	PCC	194.4	140.0	South Bridge Approach

CURB REMOVAL					110_04 8/15/22
Line No.	Station From	Station To	Side	Length (STA)	Remarks
1.0	300+45.71	303+55.21	Right	3.10	

110_07A
8/15/22

REMOVAL OF STEEL BEAM GUARDRAIL

(1) Lane(s) to which the installation is adjacent.
(2) Includes length of End Terminals and End Anchors.

Line No.	No.	Direction of Traffic (1)	Station From	Station To	Side	Removal of Guardrail (2) (LF)
1.0	1	NB	373+10.19	374+30.19	Right	120.0
2.0	2	SB	376+07.85	377+37.85	Left	130.0

104_09A
5/6/24

LONGITUDINAL SUBDRAIN SHOULDER

* Not a bid item.

Line No.	Road or Lane Identification	Station From	Station To	Side	Depth (IN) (D)	Subdrain Size (IN)	Length (FT)	Outlet Station	Outlet Type	Porous Backfill* (CY)	Remarks
1.0	IA 376	300+45.71	303+55.21	Right	24.0	4.0	310.0	1045+95.00	DR-303	14.4	

108_23A 8/15/22
TRAFFIC CONTROL PLAN
1. Through traffic will be maintained on the project at all times through the use of median cross overs and lane closures.
2. Ramps shall be closed while diamond grinding, patching, and intake repair operations are completed on the ramps.
3. Traffic control on this project shall be found in accordance with the TC series of Standard Road Plans found in Tab. 105-4 and/or appropriate Detail Sheets included in the plans. For additional complementary information, refer to part VI of the Manual on Uniform Traffic Control Devices and the current Standard Specifications.
4. The contractor shall coordinate traffic control with other projects in the area.

STAGING NOTES		108_26A 8/15/22
Stage 1 Traffic: Reduce speeds to 45 MPH. Shift traffic to outside lanes on NB and SB IA 376. Maintain access to all side roads and Cunningham Drive ramps. Operation: Construct median crossovers, complete patching on inside lanes of IA 376, and complete diamond grind on inside lanes of IA 376. Stage 2A Traffic: Shift traffic to inside lanes on NB and SB IA 376. Maintain access to all side roads with the exception of Lincoln Way. One ramp may be closed at a time for the Cunningham Drive interchange. PDMS boards to be in place 7 days before closure of a ramp. Coordinate message with Engineer or Traffic Technician. Operation: Complete patching on outside lanes of IA 376, diamond grind of outside lanes of IA 376, and complete all work for ramps at Cunningham Drive Interchange. Stage 2B Traffic: Close Lincoln Way at IA 376 and S Paxton Street. Access to parks, homes, and businesses shall be maintained. PDMS boards to be in place 7 days before closure of Lincoln Way. Coordinate message with Engineer or Traffic Technician. Operation: Complete construction of Lincoln Way turn lane. Stage 3 Traffic: Shift NB traffic to two-lane, two-way operations via the use of median crossover. Close SB IA 376 at the Cunningham Drive Interchange bridge. Operation: Complete bridge approaches, paving notch, and guardrail on SB Cunningham Drive Interchange. Stage 4 Traffic: Shift SB traffic to two-lane, two-way operations via the use of median crossover. Close NB IA 376 at the Cunningham Drive Interchange bridge. Operation: Complete bridge approaches, paving notch, and guardrail on NB Cunningham Drive Interchange. Stage 5 Traffic: Resume normal traffic operations. Operation: Install cable barrier at median crossovers.		

108_25 3/28/24												
511 TRAVEL RESTRICTIONS												
Route	Direction	County	Location Description	Feature Crossed	Object Type	Maint. Bridge No. or Structure ID or FHWA No.	Type of Restriction	Existing Measurement	Construction Measurement	Construction Measurement as Signed	Projected As Built Measurement	Remarks
IA 376	NB	Woodbury	Lincoln Way to N of Cunningham Interchange Dr in Sioux City		Traffic Control Device		Horizontal	24	12			
IA 376	SB	Woodbury	Lincoln Way to N of Cunningham Drive Interchange in Sioux City		Traffic Control Device		Horizontal	24	12			

111_01
10/14/22

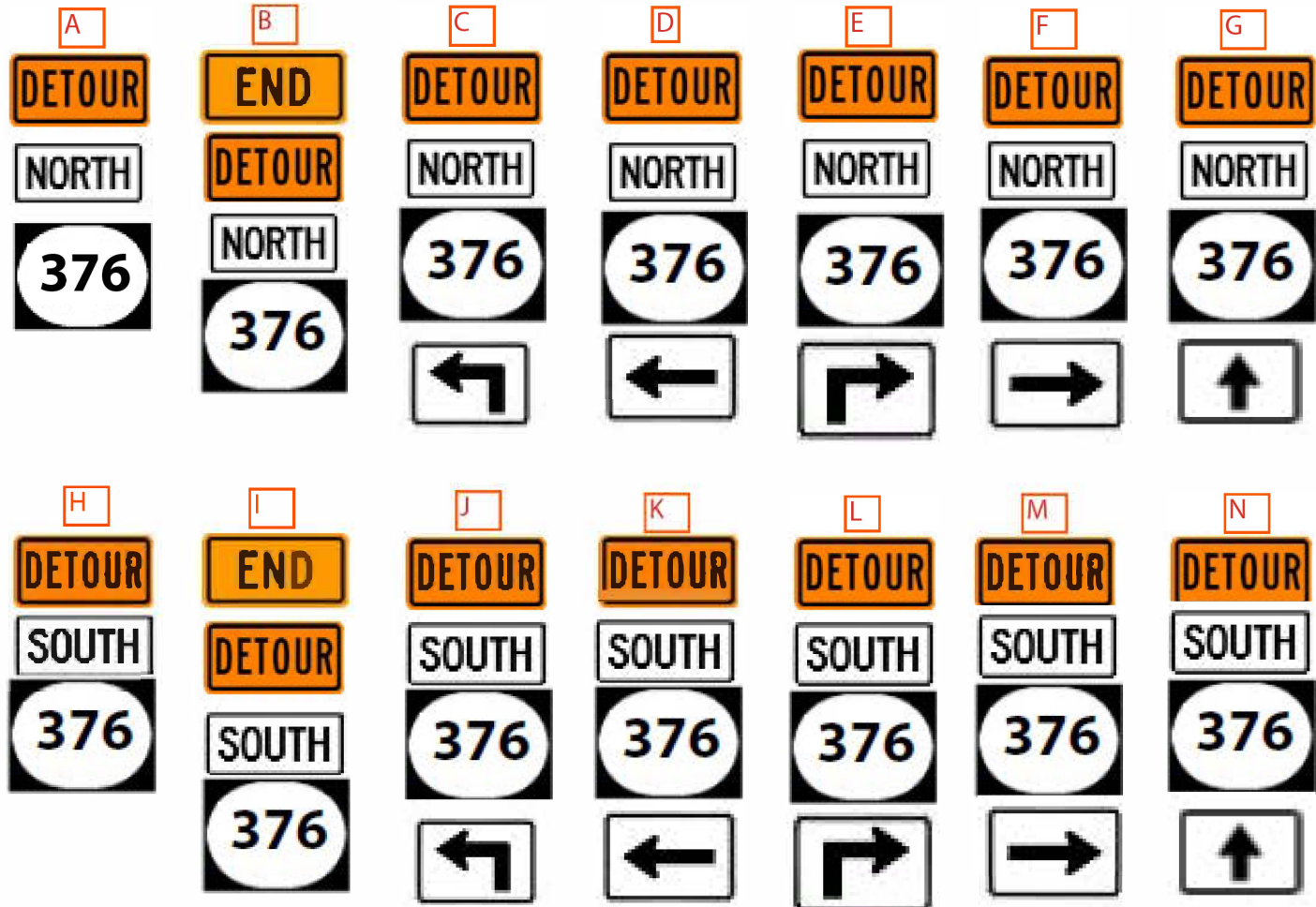
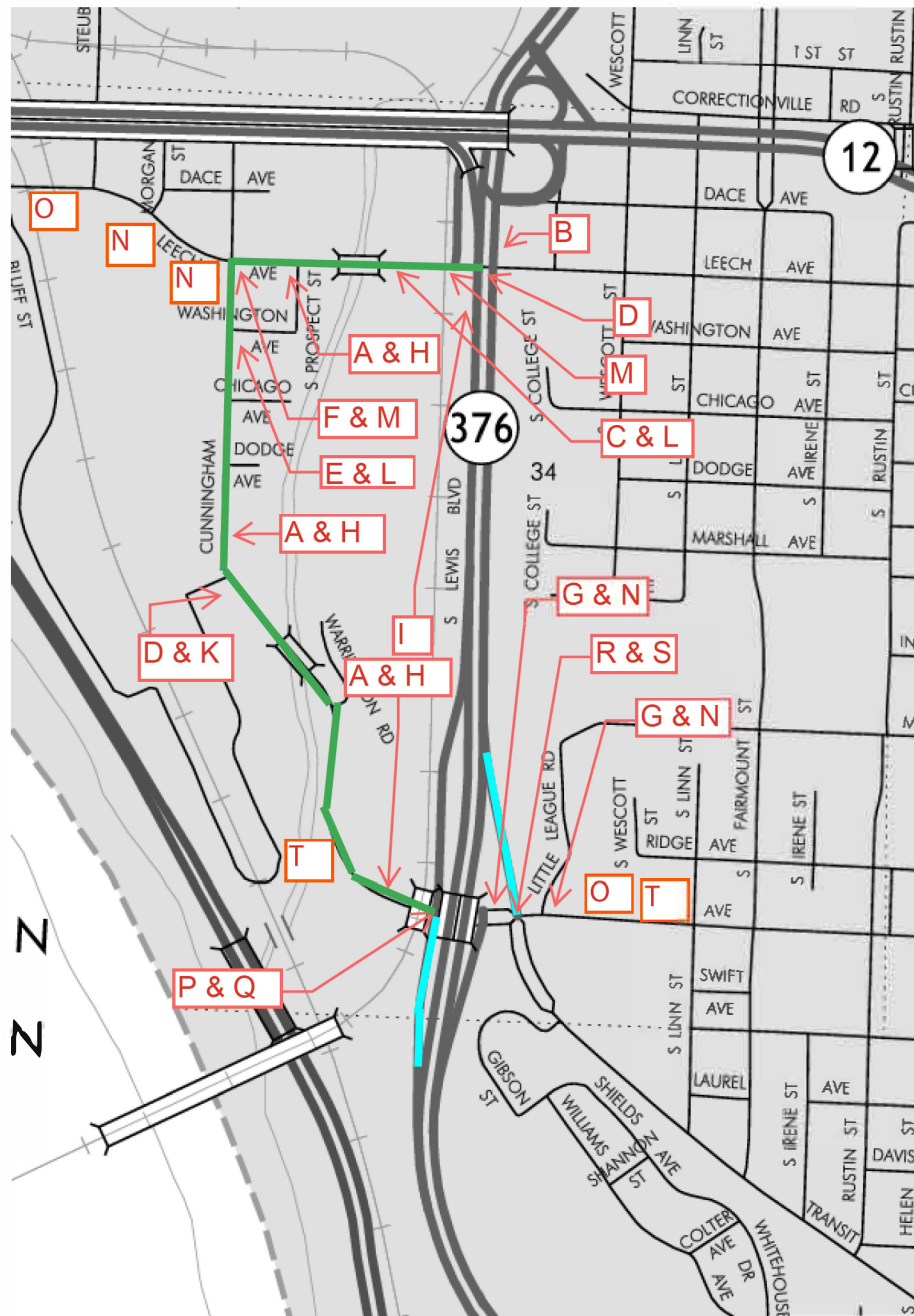
COORDINATED OPERATIONS

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.

Project	Type of Work
None	

8/1/2026 12:01:43 PM

dylan.pryor@iowadot.us

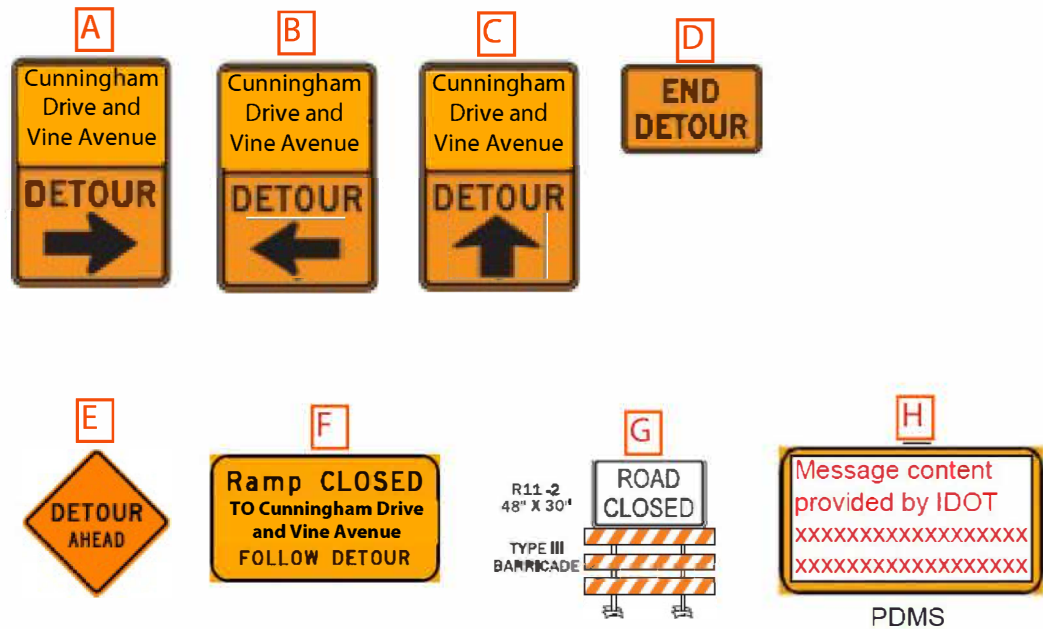
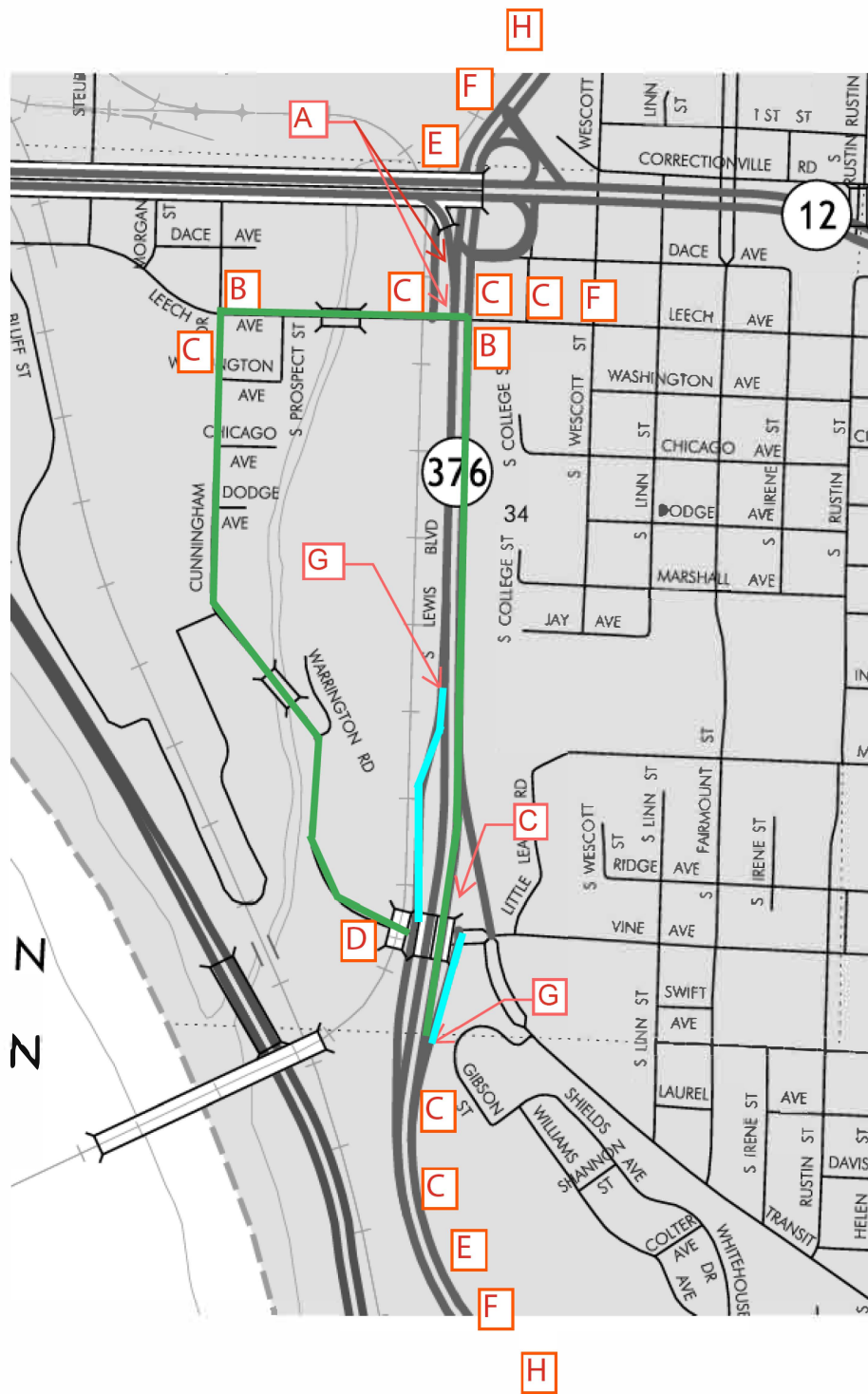


Sign	MUTCD	Size	#
Detour	M4-8	24x12	24
North	M3-1	24x12	11
South	M3-3	24x12	13
End	M4-8B	24x12	2
IA 376 Shield	M1-6C	30x24	24
Advance Turn Arrow Left 90	M5-1B	21x15	1
Single Left Arrow	M6-1	21x15	3
Advance Turn Arrow Right 90	M5-1	21x15	3
Single Right Arrow	M6-1	21x15	3
Straight Up Arrow	M6-3	21x15	6
Detour on Right Arrow	M4-10R	48x18	1
Detour on Left Arrow	M4-10L	48x18	1
Ramp Closed	N/A	48x30	2
Type III Barricades	N/A	N/A	2
Detour Ahead	W20-2	48x48	2
PDMS	N/A	N/A	2

Detour Route

Project Closure

All detour signing to be fabricated, installed, maintained, and removed by Contractor - all conflicting signing should be covered during duration of detour usage. Care should be taken to not block visibility of other signing while installing temporary detour signing. Spacing needs to be maintained based on MUTCD requirements.



Detour Route

Project Closures

All Detour Signing to be fabricated, installed, maintained and removed by Contractor - all conflicting signing should be covered during duration of detour usage. Care should be taken to not block visibility of other signing while installing temporary detour signing. Spacing needs to be maintained based on MUTCD requirements.

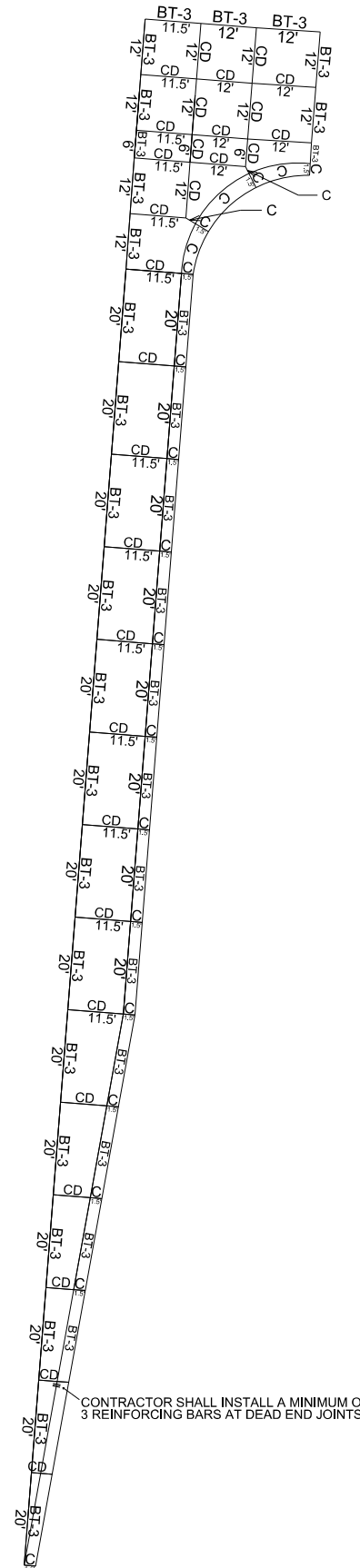
Sign	MUTCD	Size	#
A w/M4-9	N/A	N/A	2
B w/M4-9	N/A	N/A	2
C w/M4-9	N/A	N/A	7
D	M4-8a	24x18	1
Detour Ahead	W20-2	48x48	2
F	N/A	N/A	3
Road Closed	R11-2	48x30	2
Type III Barricades	N/A	N/A	2
PDMS	N/A	N/A	2

1 Match existing joint spacing

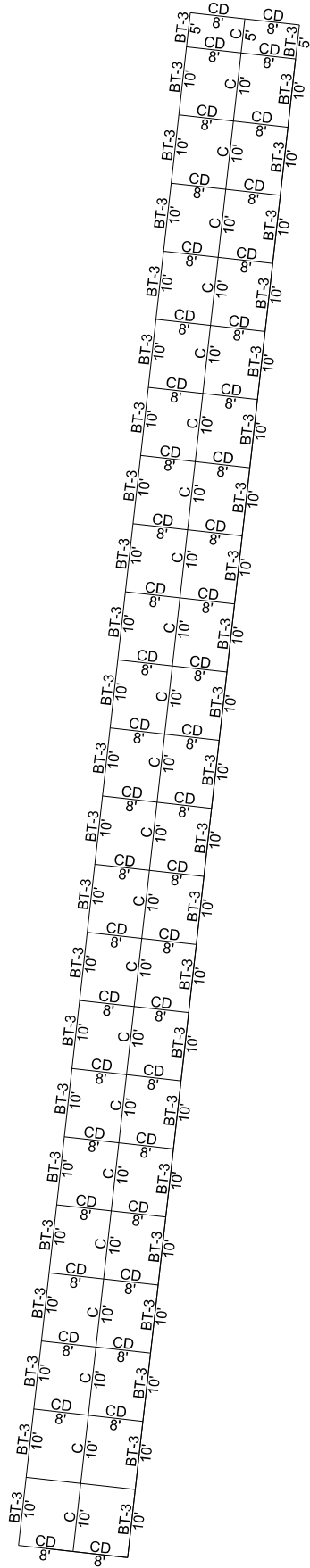
Lincoln Way

IA 376

Not To Scale



CONTRACTOR SHALL INSTALL A MINIMUM OF 3 REINFORCING BARS AT DEAD END JOINTS

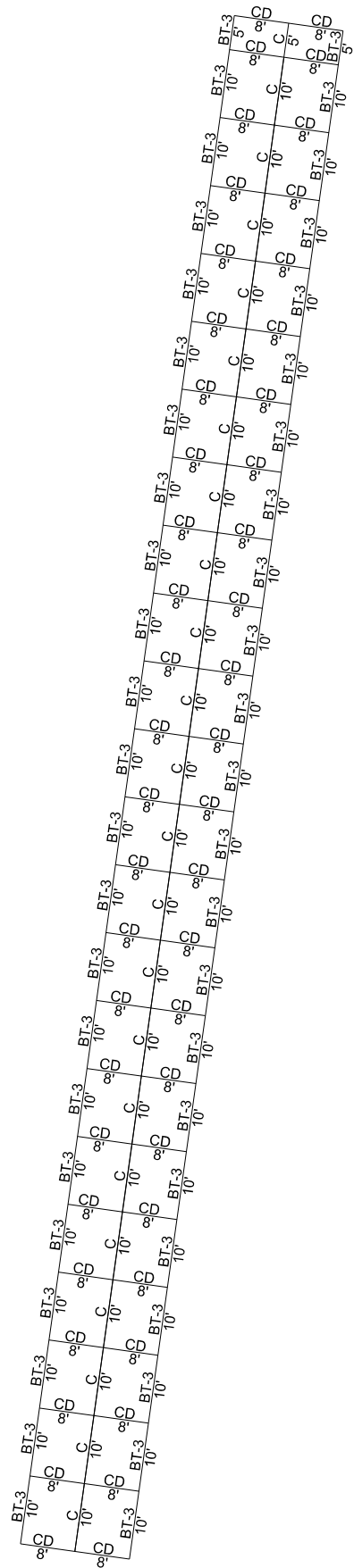
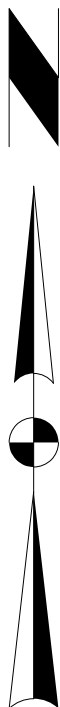


1 Match existing joint spacing of northbound mainline

IA 376

North Median Crossover

Not To Scale



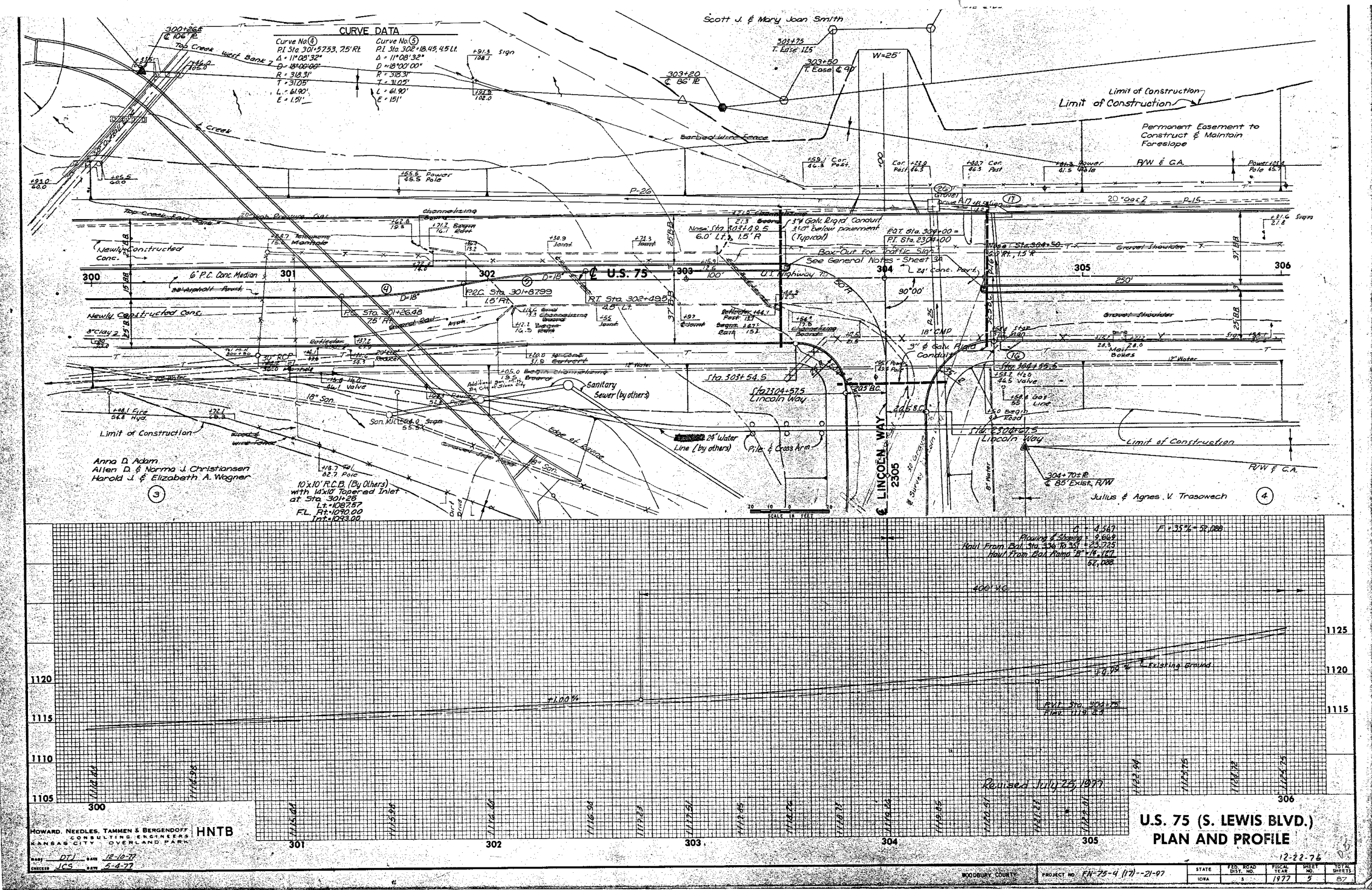
- 1 Match existing joint spacing of northbound mainline

IA 376

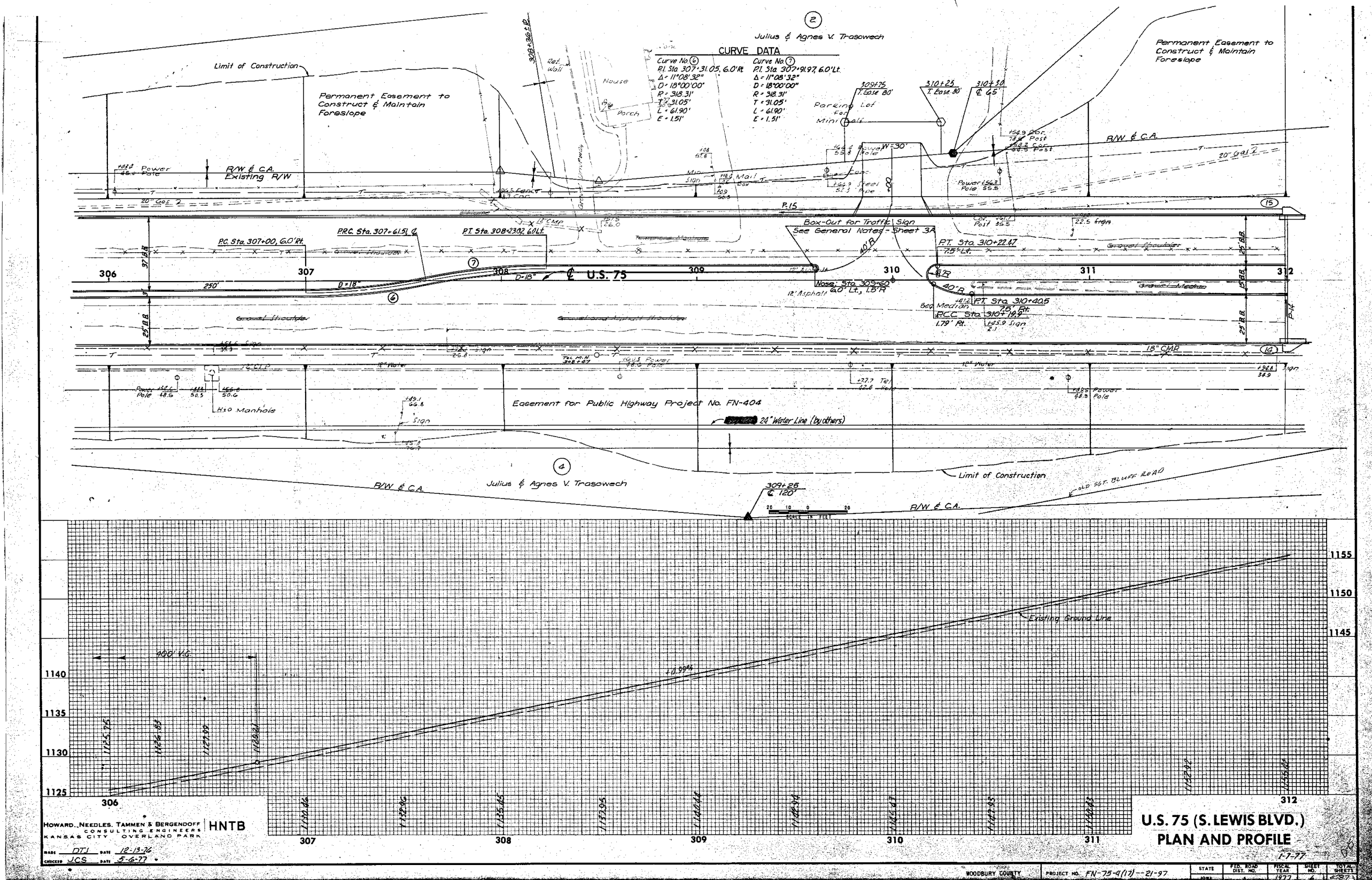
South Median Crossover

Not To Scale

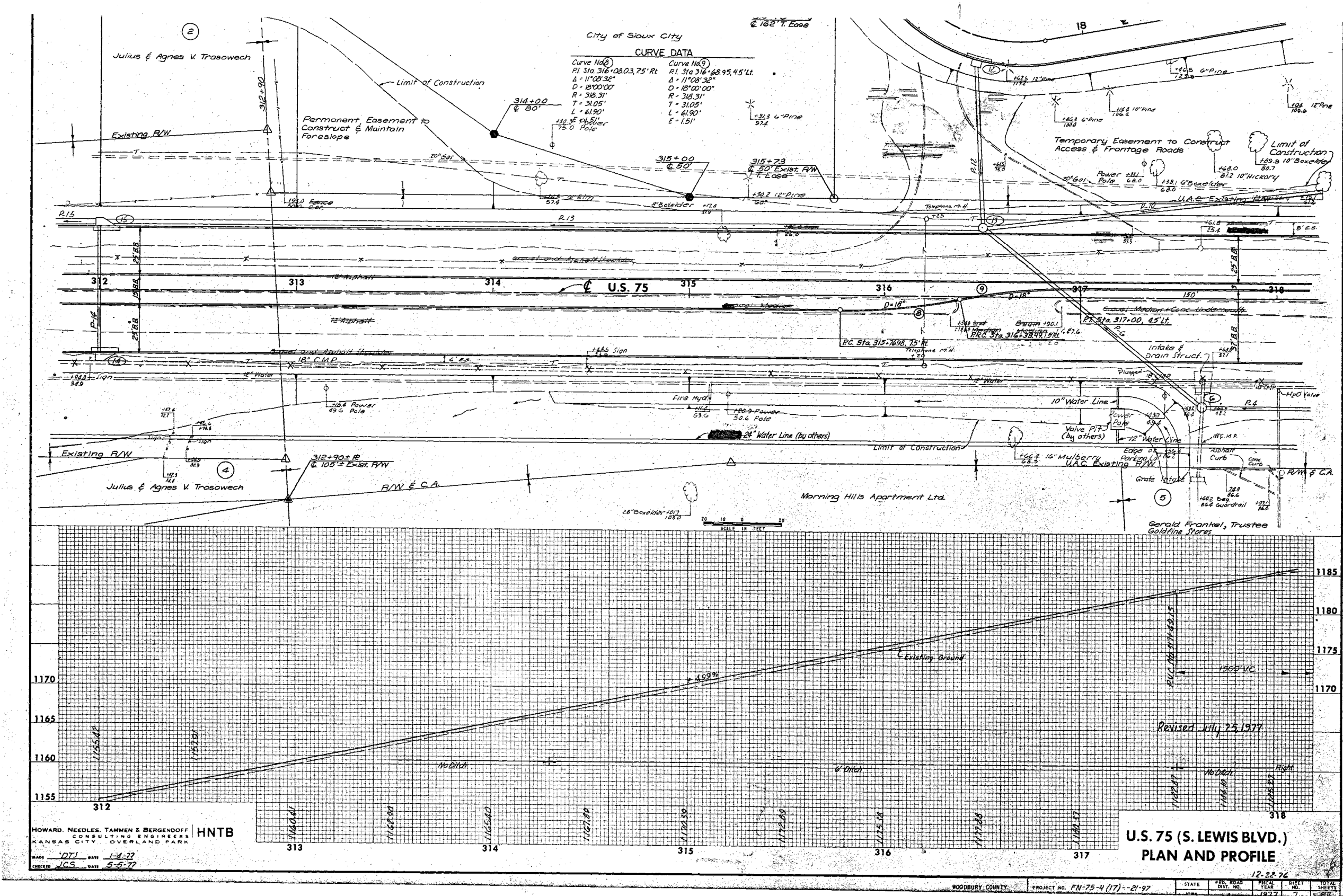
FOR INFORMATION ONLY



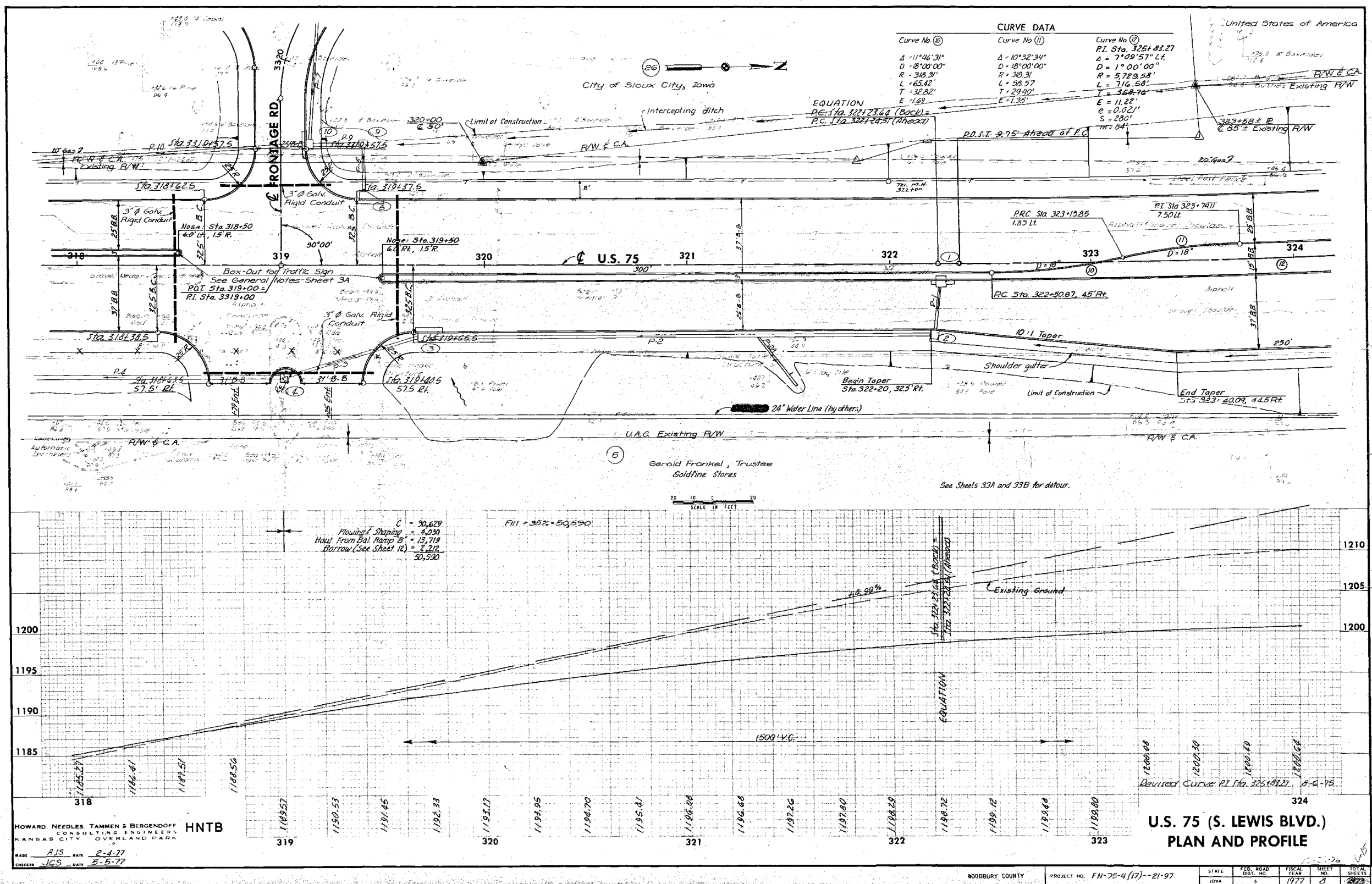
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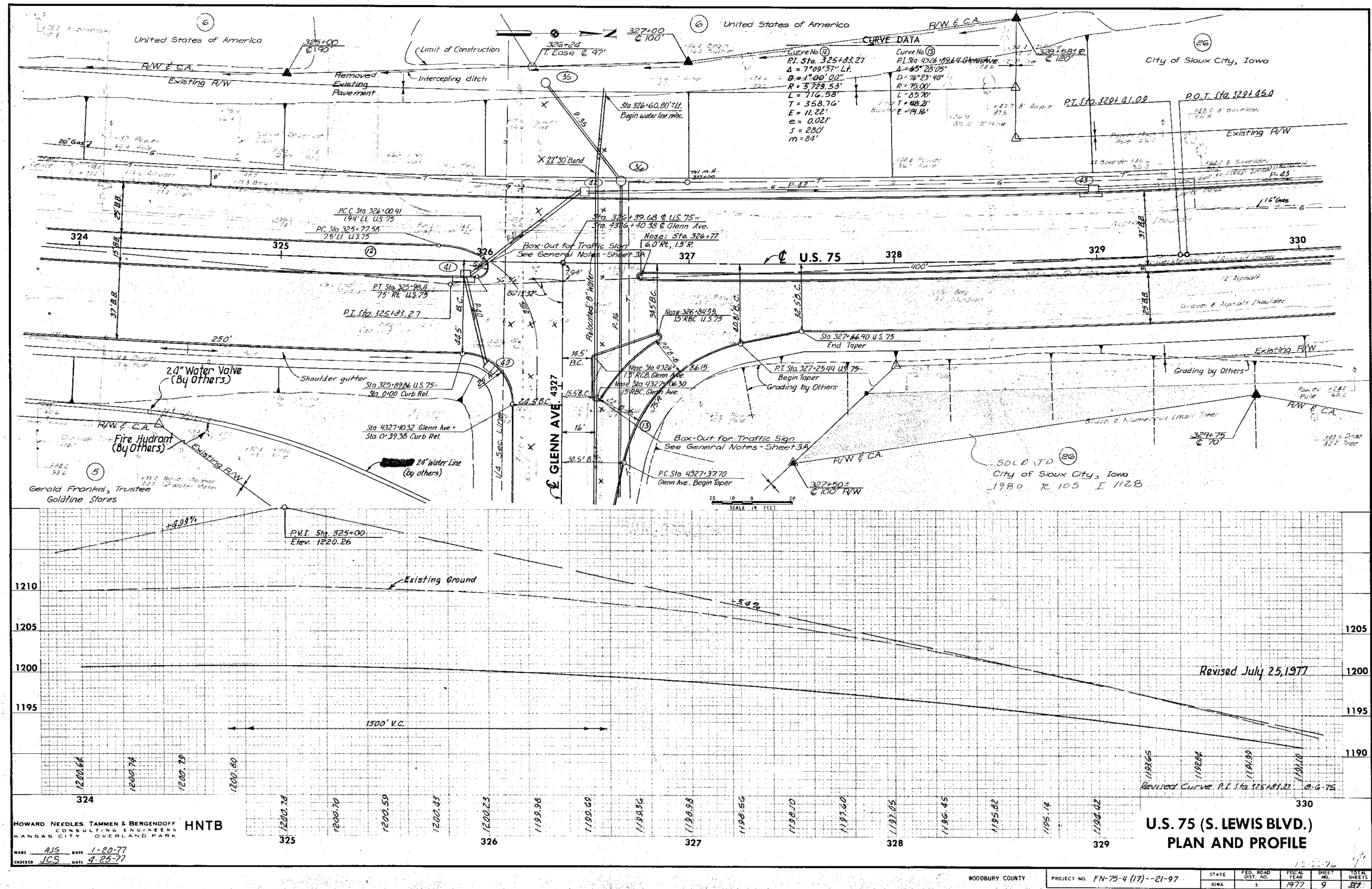
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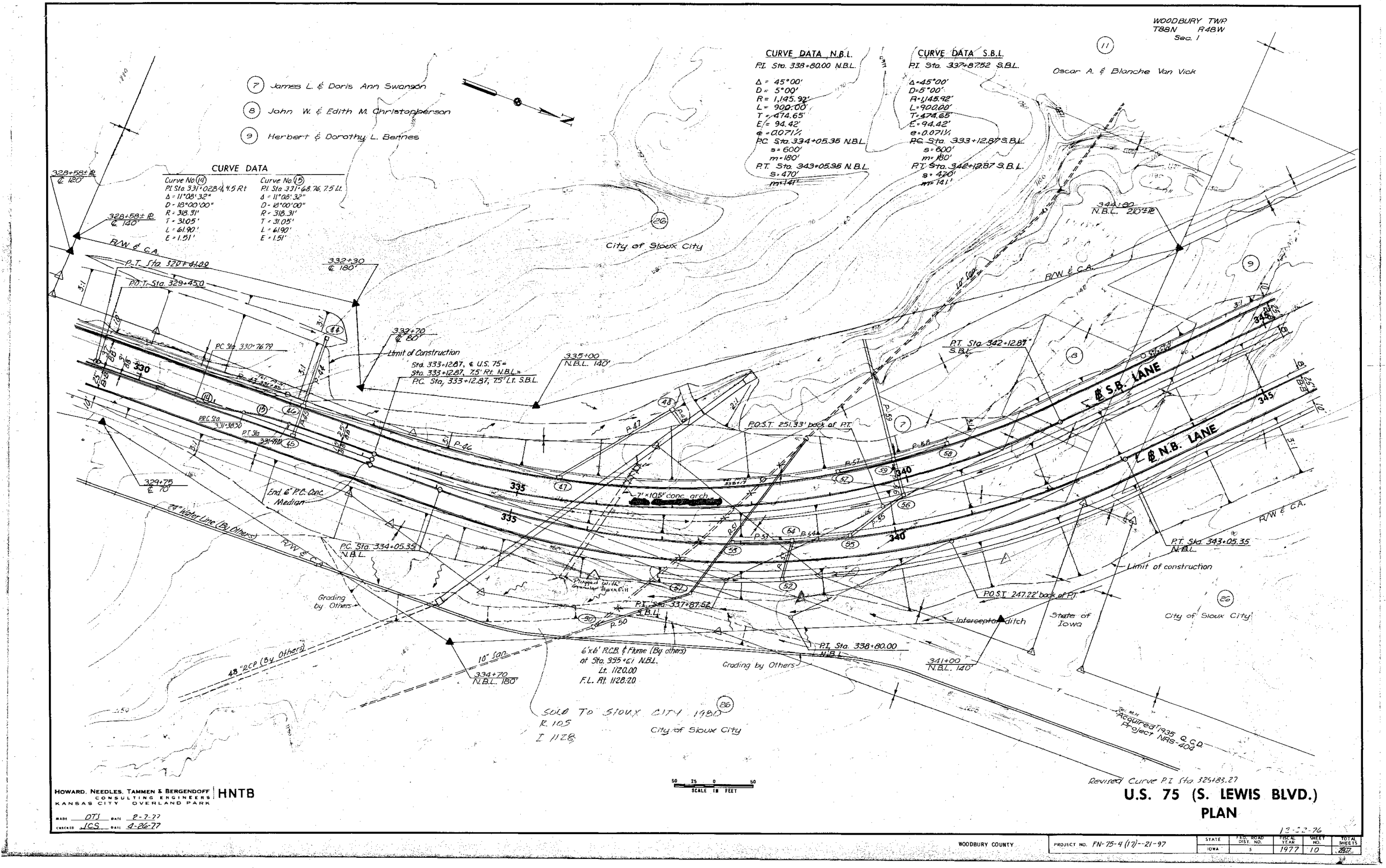
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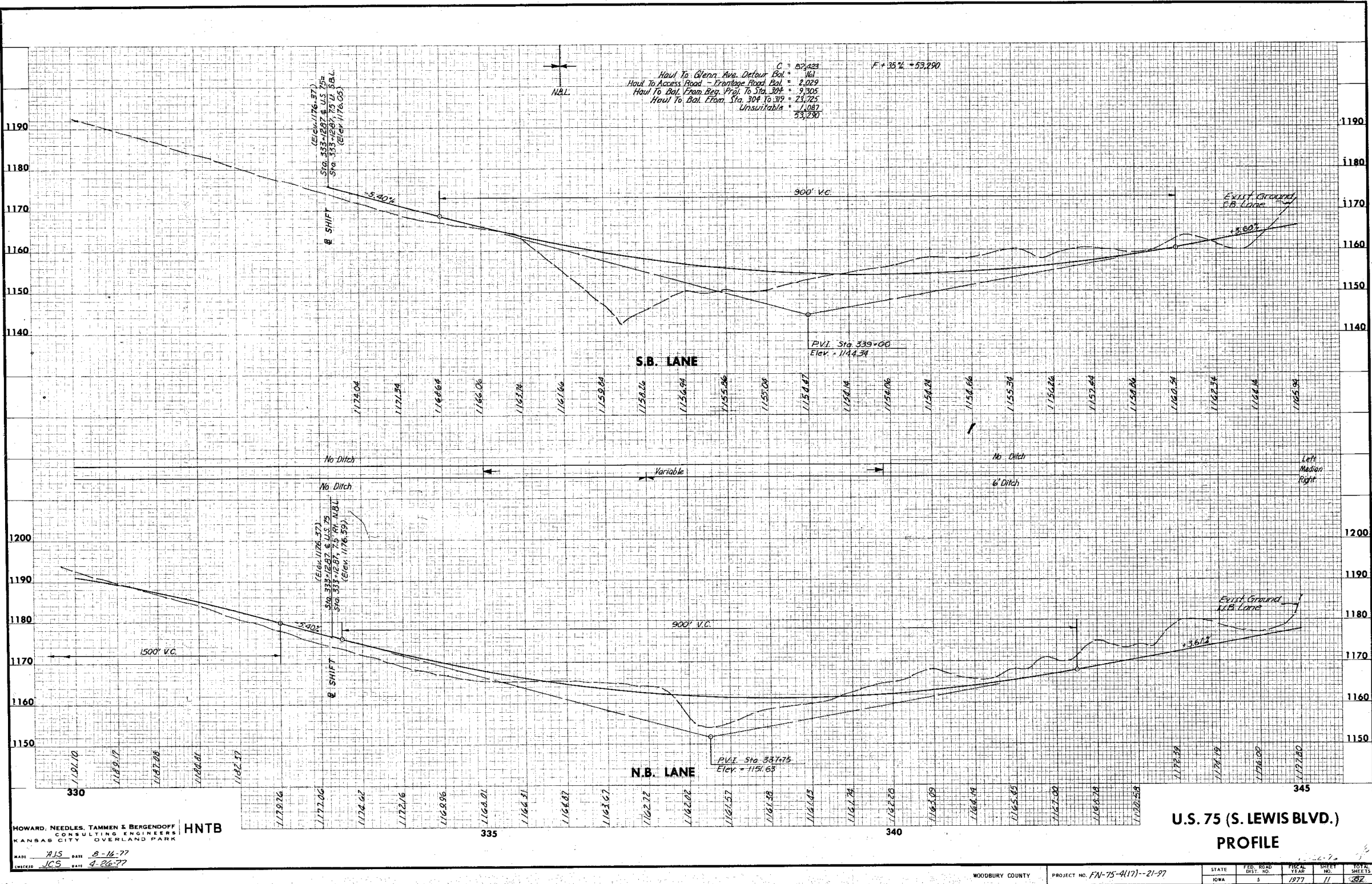
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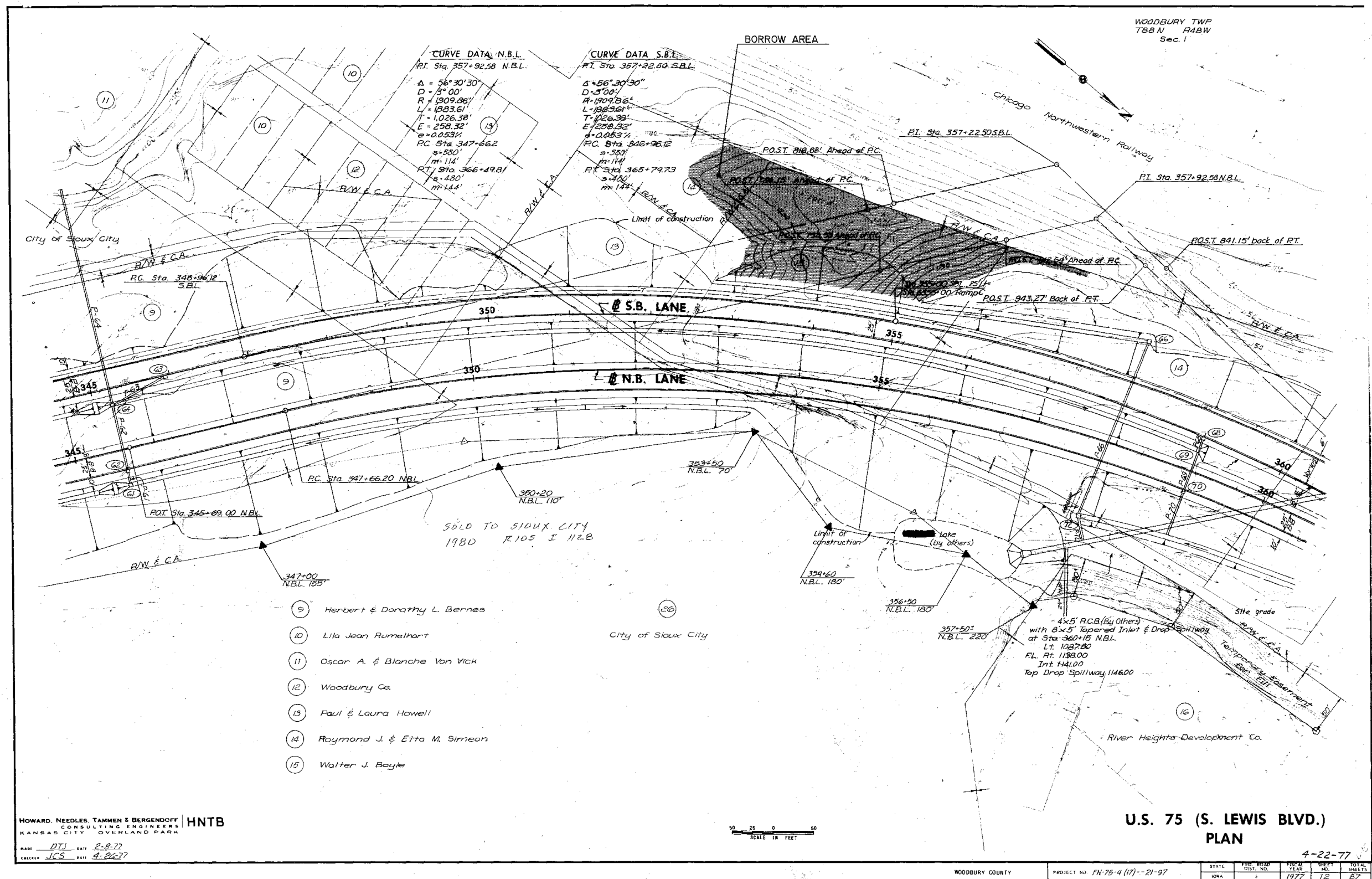
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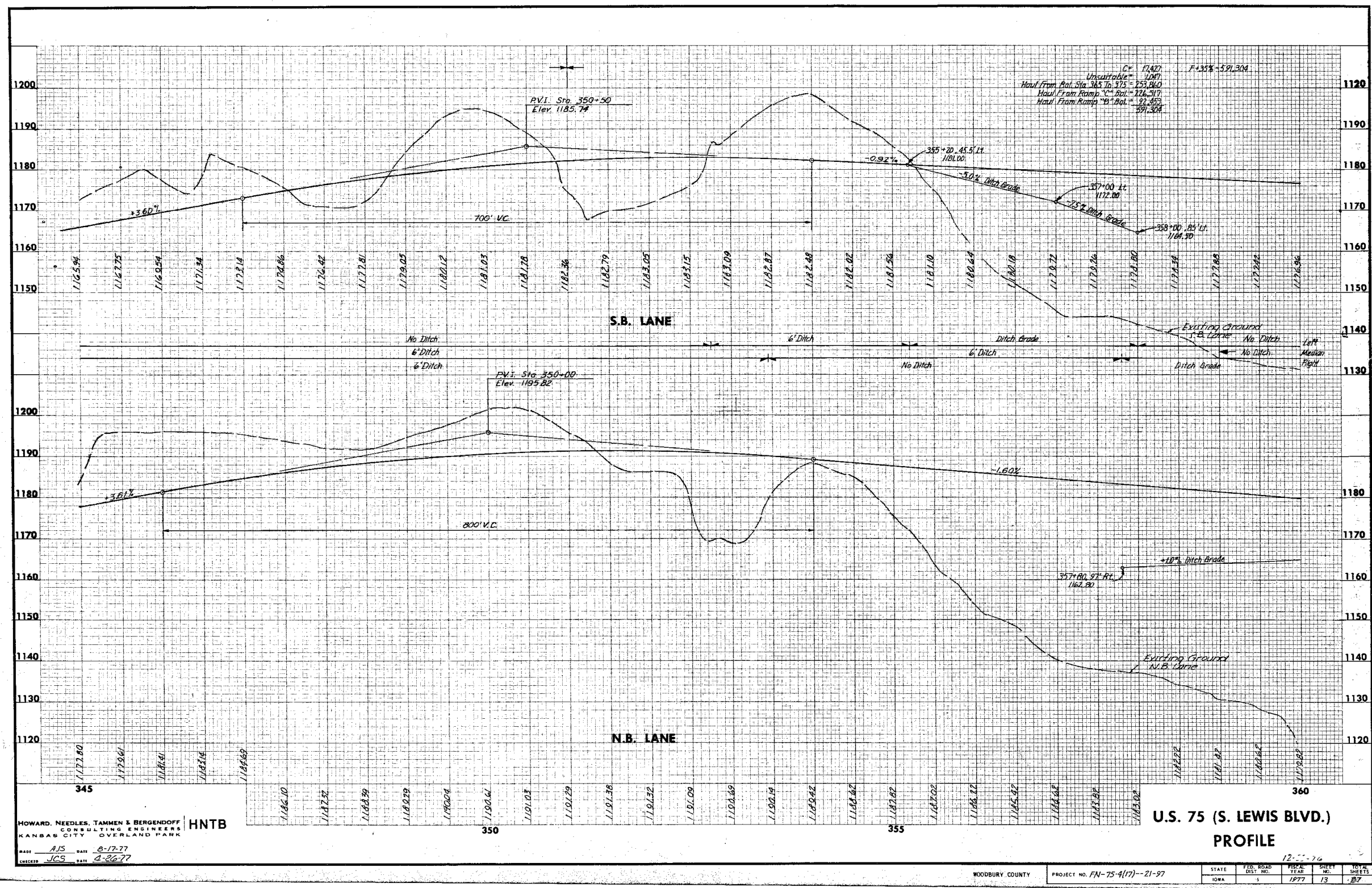
FOR INFORMATION ONLY



FOR INFORMATION ONLY



FOR INFORMATION ONLY



Permanent Easement to Construct & Maintain a 4' x 5' R.C.B.

WOODBURY TWP
T88N R47W
Sec 1

SIOUX CITY TWP
T89N R47W
Sec 34

CURVE DATA N.B.L.
RI Sta 357+92.58 N.B.L.
Δ = 56°30'30"
D = 3°00'
R = 1,909.86'
L = 1,083.61'
T = 1026.38'
E = 258.32'
e = 0.0531
PC Sta 347+66.20
P = 380'
m = 114'
PT Sta 366+49.81

CURVE DATA S.B.L.
RI Sta 357+22.50 S.B.L.
Δ = 56°30'30"
D = 3°00'
R = 1,909.86'
L = 1,083.61'
T = 1,076.38'
E = 258.32'
e = 0.0531
PC Sta 346+46.12
P = 380'
m = 114'
PT Sta 365+74.73

PAVONIA

DIVISION

ST

GIBSON ST.

WARRINGTON RD.

U.S. 75

RAMP C

RAMP B

EXISTING U.S. 75

Site Grading Contours

Scale 1" = 40'

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY, OVERLAND PARK

HNTB

DATE 2-11-77
CHECKED ICS DATE 4-22-77

PROJECT NO. FN-75-4(7)-21-97

STATE IOWA

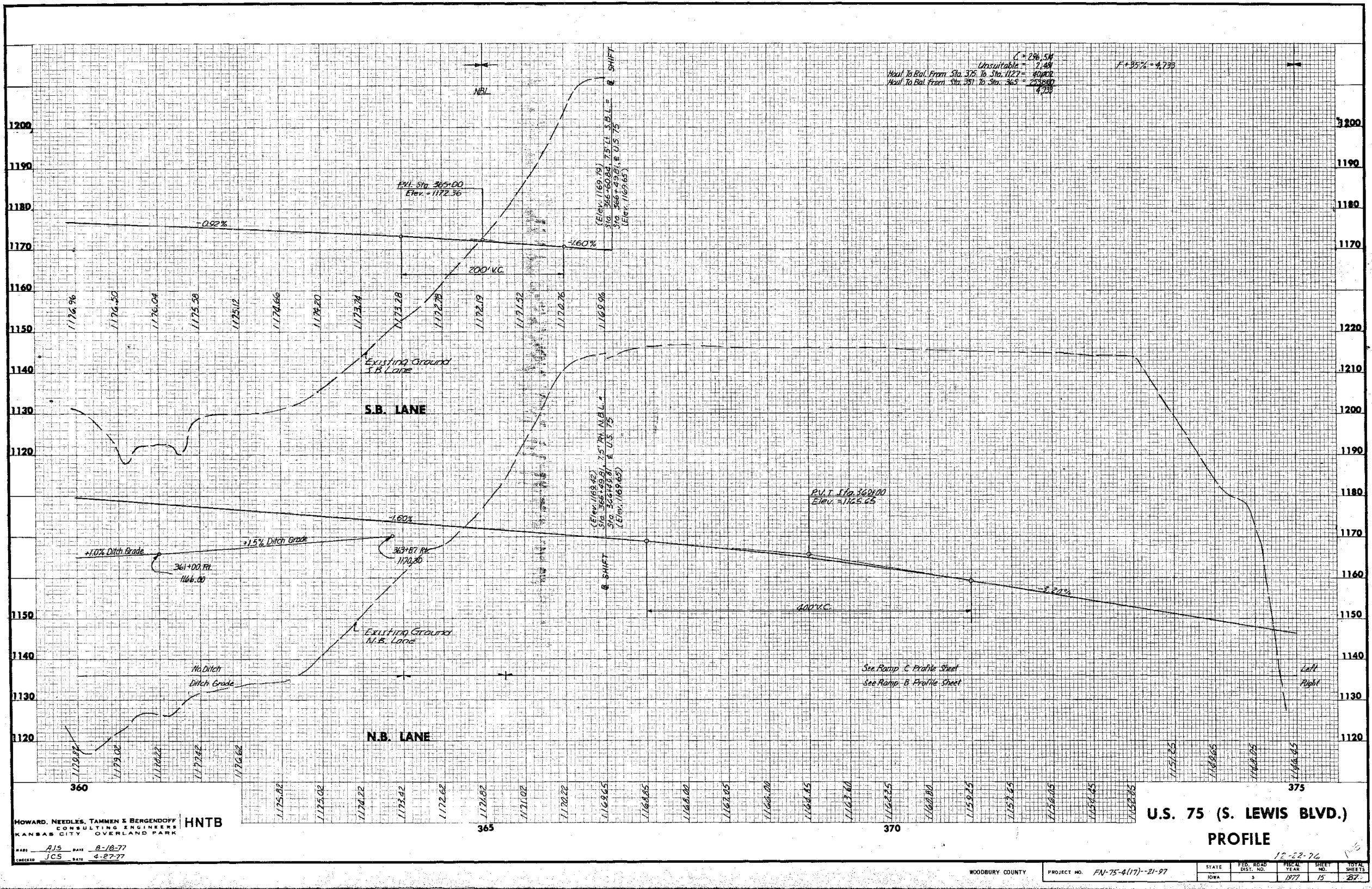
YEAR 1977

SHEET 14

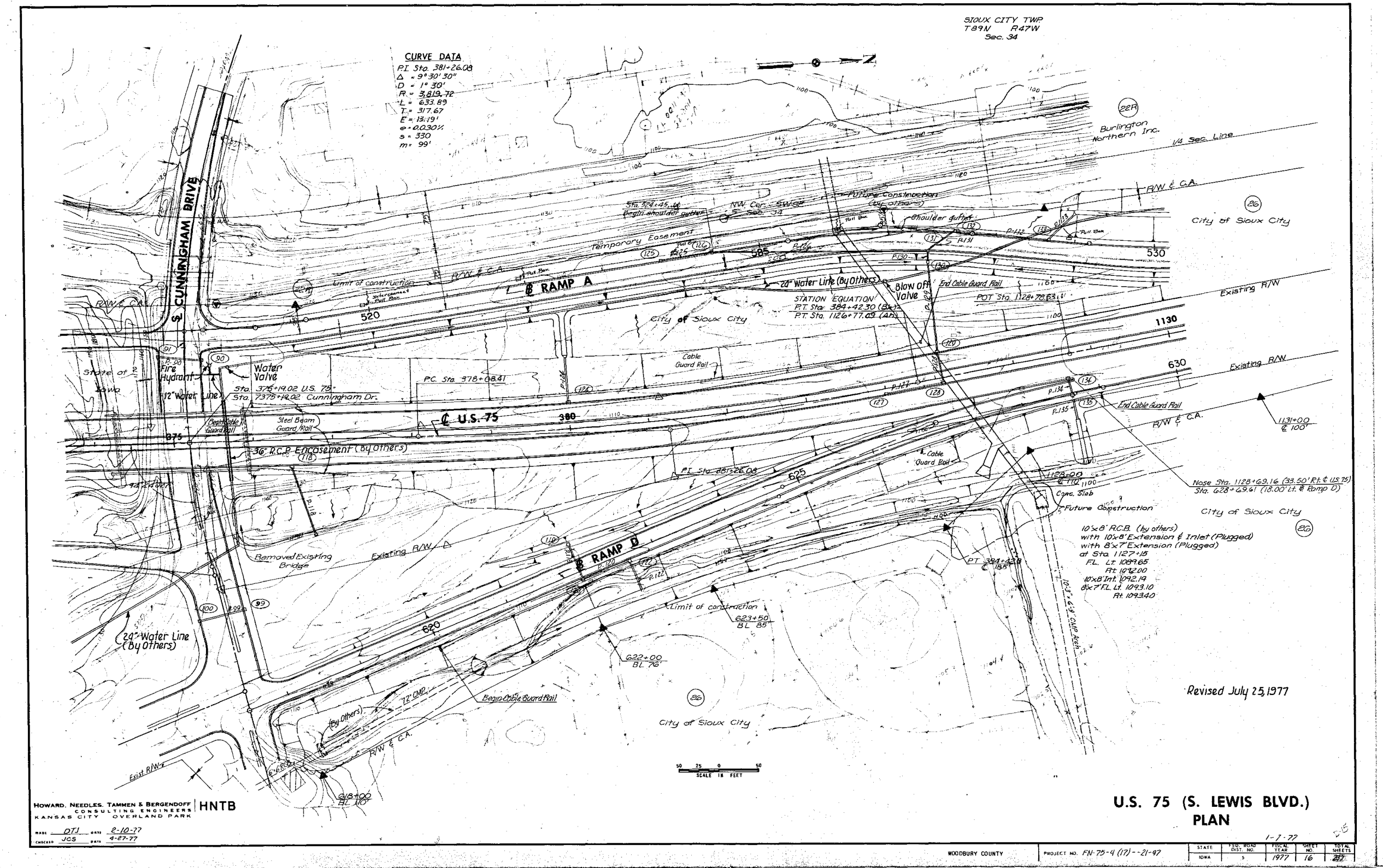
TOTAL SHEETS 182

4-22-77

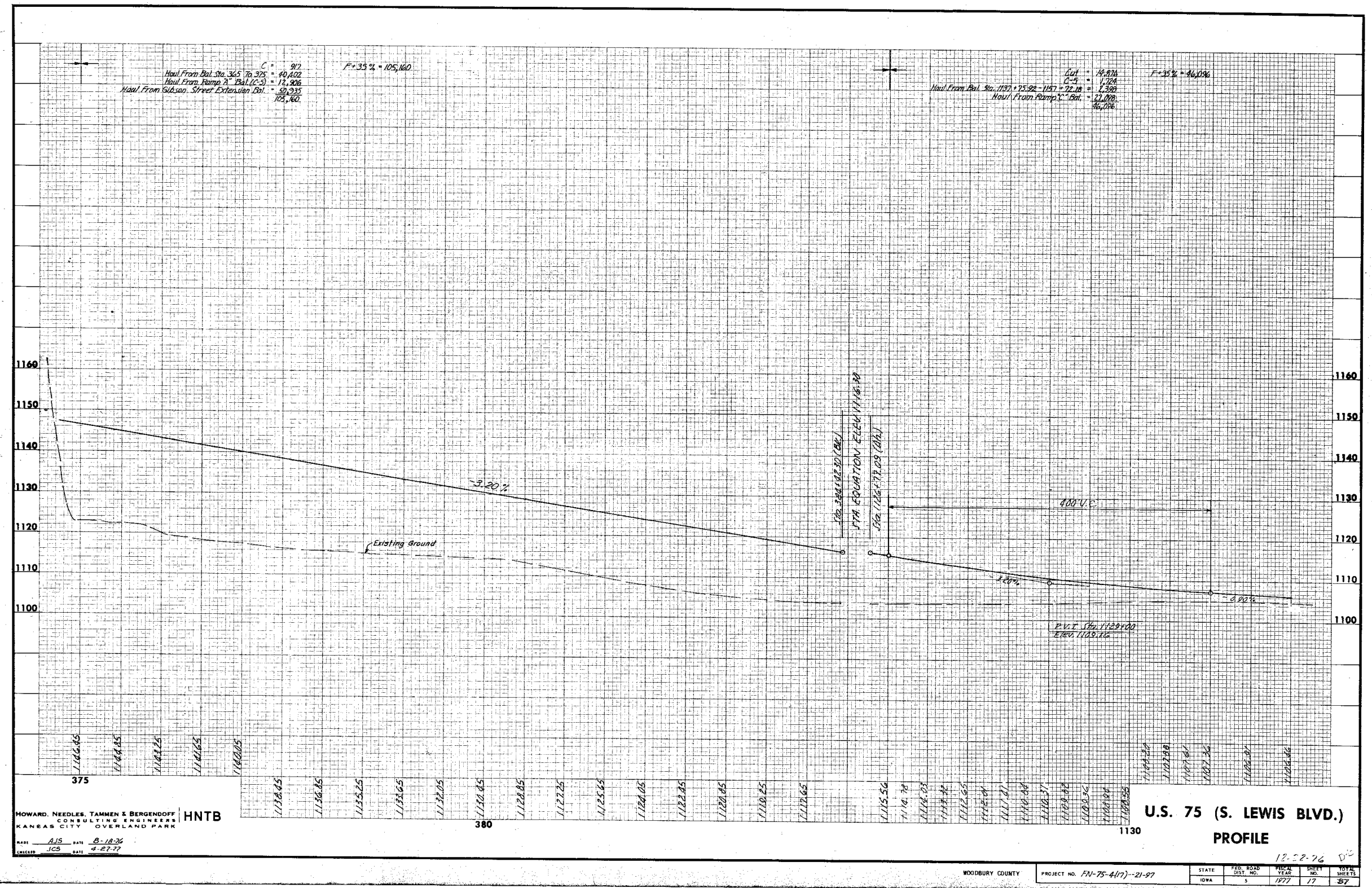
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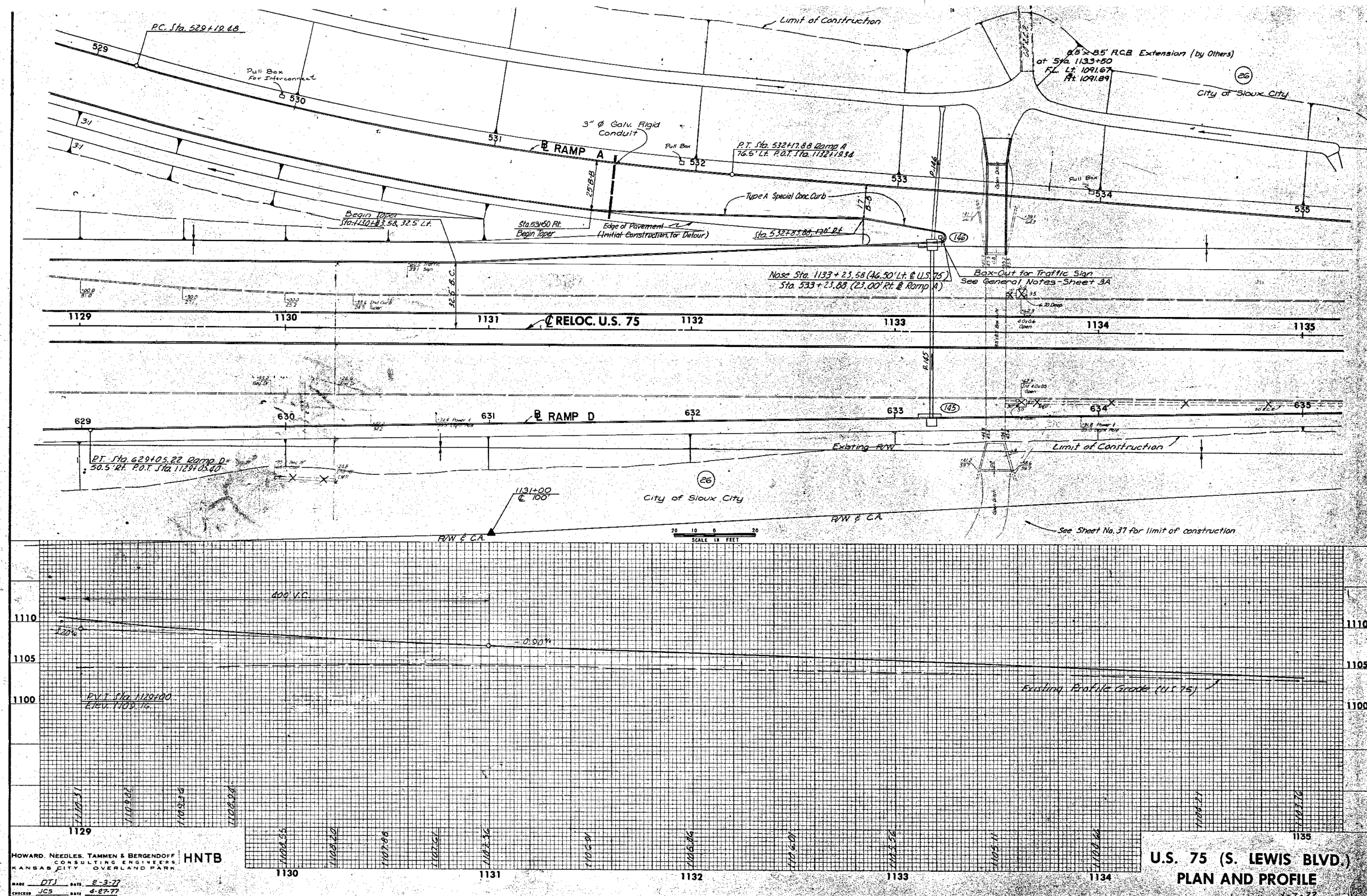
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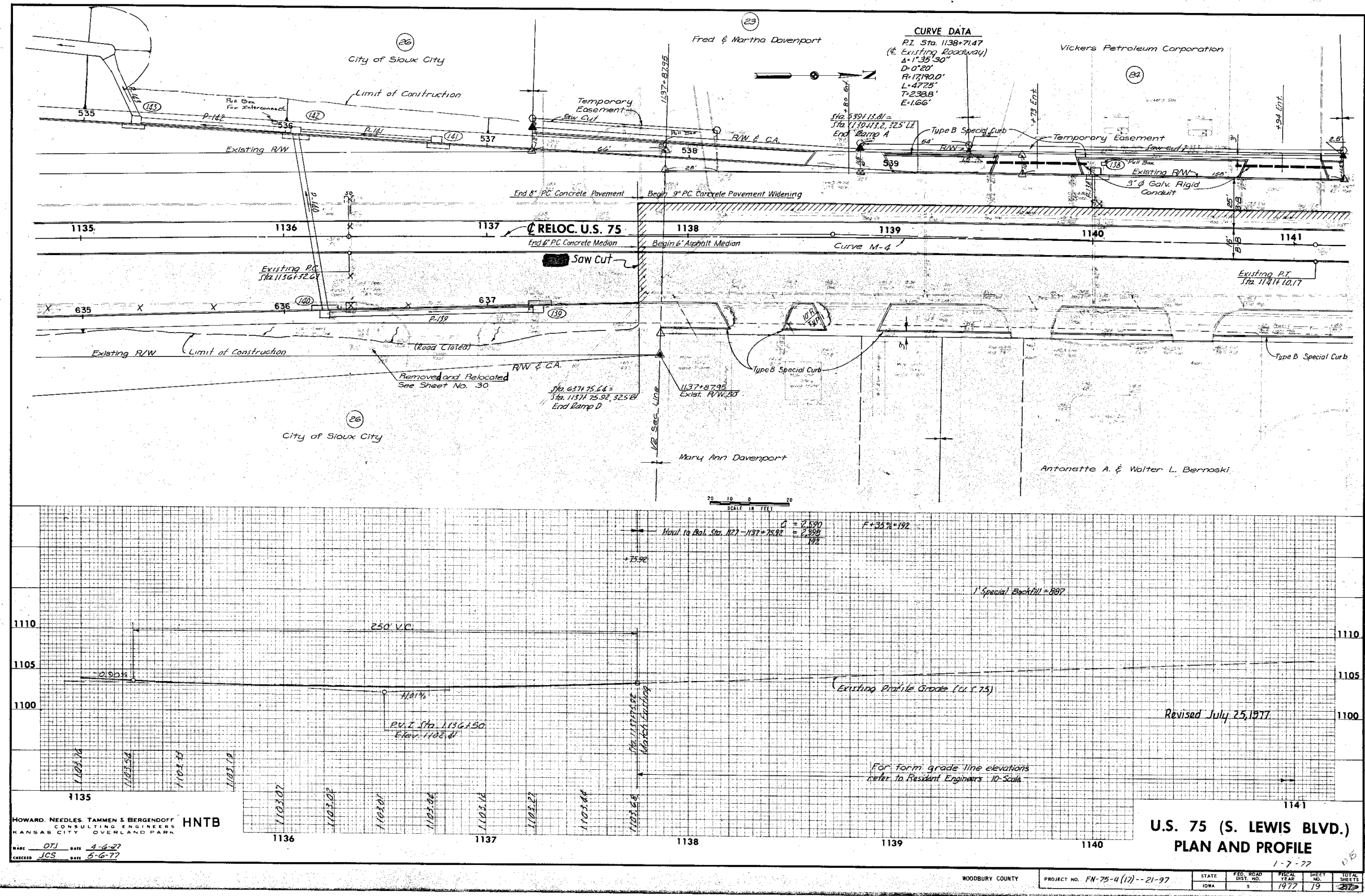
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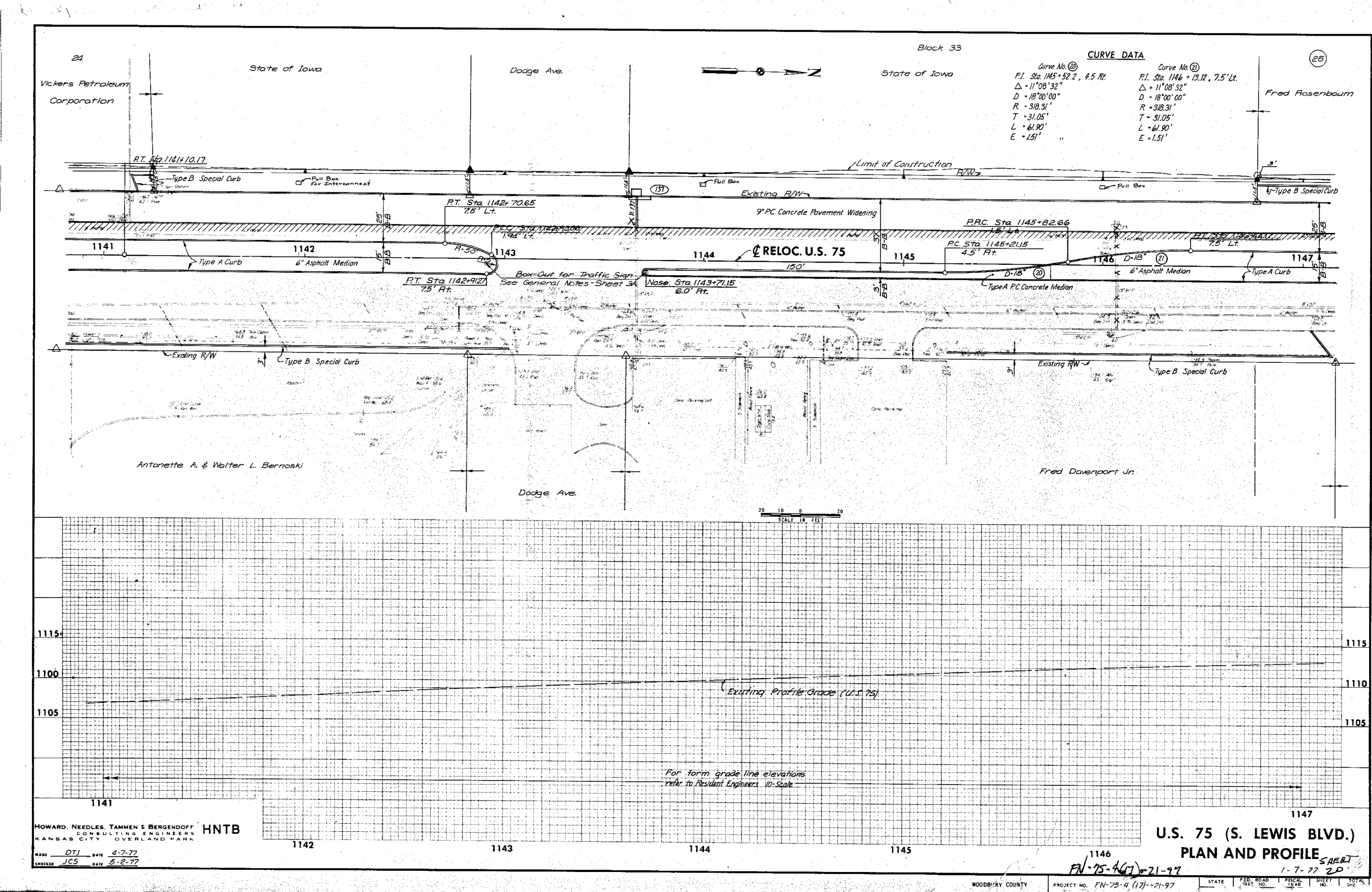
FOR INFORMATION ONLY



FOR INFORMATION ONLY



FOR INFORMATION ONLY



FOR INFORMATION ONLY

LIST OF INTAKES AND MANHOLES					
NO.	LOCATION	TYPE	FORM ELEV.	BOTTOM OF WELL ELEV.	NOTE
1	322+26, 7.5' RL	RA-6	1198.79	1194.59	
2	322+22, 32.7' RL	RA-33	1199.46	1104.38	Condition A
3	319+69, 32.5' RL	RA-8	1191.44	1186.86	6' Extension
4	319+01, 55' RL	RA-1	1191.00	1183.87	
6	317+62, 55' RL	RA-29	1184.00	1178.57	
7	3320+50, 12.5' Lt.	RA-8	1190.04	1185.84	6' Extension
8	319+41, 32.5' Lt.	RA-8	1190.45	1186.08	6' Extension
9	319+41, 60' Lt.	RA-19	1187.50	1183.80	
10	3319+60, 12.5' RL	RA-3	1188.12	1183.28	
11	17+48, 13.4' Lt., Access Rd.	RA-3	1178.39	1174.53	
12	17+48, 12.5' RL, Access Rd.	RA-3	1178.40	1174.37	
13	316+50, 35' Lt.	RA-20	1177.80	1171.51	
14	312+00, 32.5' RL	RA-8	1154.74	1151.00	6' Extension
15	312+00, 32.5' Lt.	RA-8	1154.74	1149.16	6' Extension
16	304+60, 32.5' RL	RA-8	1120.11	1116.35	6' Extension
17	304+55, 32.5' Lt.	RA-8	1119.97	1107.60	6' Extension
19	2306+93, 20.5' RL, Lincoln Way	RA-3	1112.36	1108.50	
20	2307+63, 20.5' Lt., Lincoln Way	RA-8	1112.90	1108.89	6' Extension
21	2306+93, 20.5' Lt., Lincoln Way	RA-3	1112.36	1107.68	
23	4+65, 20' Lt., Dirt Road	RA-29 Mod.	1114.50	1103.14	
25	4+65, 20' Rt., Dirt Road	RA-29 Mod. (6' dia.)	1114.60	1101.90	
26	304+28, 36' Lt.	RA-29 Mod. (7' dia.)	1119.81	1099.19	
28	299+50, 32.5' Lt.	RA-3 Intake, Top Only	1113.50		
29	298+90, 32.5' Rt.	RA-3 Intake, Top Only	1112.48		
30	298+90, 32.5' Lt.	RA-3 Intake, Top Only	1113.06		
31	296+07, 45' Rt.	RA-6	1109.49	*	*To be determined in field
35	326+30, 84' Lt.	M.H., San. Drop	1213.70	1198.07	5.3' Drop
36	326+67, 40' Lt.	M.H., San. Std.	1199.47	1192.19	
37	4327+15, 28' Lt., Glenn Ave.	M.H., San. Std.	1200.70	1190.79	
38	4328+20, 16' RL, Glenn Ave.	M.H., San. Std.	1198.53	1190.27	
40	326+05, 50' RL	RA-33	1201.73	1197.53	Condition A
41	325+92, 7.5' RL	RA-3	1200.91	1196.72	
42	326+50, 35' Lt.	RA-1	1199.49	1195.45	
43	329+00, 32.5' Lt.	RA-3	1193.74	1189.88	
44	3324+10, 128' Lt.	500-5	1205.80	1102.97	
45	332+10, 7.5' RL	RA-3	1181.97	1177.92	
46	332+10, 32.5' Lt.	RA-3	1180.94	1177.08	
47	335+50, 25' Lt., S.B.L.	RA-3	1161.96	1156.80	
48	337+00, 125' Lt., S.B.L.	RA-19	1135.80	1129.74	
50	336+27, 120' RL, N.B.L.	M.H., Rebuild San. Sewer	1159.00		Remove cone of exist. M.H.
51	337+40, 65' RL, N.B.L.	M.H., San. Std.	1163.50	1141.47	
52	338+50, 47' RL, N.B.L.	500-5	1160.50	1157.67	
53	337+90, 8' N.B.L.	RA-3	1161.64	1157.78	
54	338+65, 8' N.B.L.	RA-3	1161.37	1157.51	
55	339+40, 8' N.B.L.	RA-3	1161.65	1156.16	
56	339+90, 19.5' RL, S.B.L.	RA-19	1152.74	1147.44	
57	339+15, 25' Lt., S.B.L.	RA-3	1152.56	1148.70	
58	340+70, 25' Lt., S.B.L.	RA-3	1152.60	1148.74	
59	339+90, 25' Lt., S.B.L.	RA-3	1152.28	1146.50	
61	345+60, 46' RL, N.B.L.	500-5	1178.03	1175.20	
62	345+60, 25' RL, N.B.L.	RA-3	1179.77	1175.30	

LIST OF STORM SEWER PIPE									
LINE NO.	LOCATION FROM	TO	D CLASS OR TYPE	SIZE DIA. (IN.)	LENGTH LINE (FT.)	SLOPE (%)	FLOW LINES		NOTE
							INLET	OUTLET	
P-1	1	2	2000	15	22	1.0	1194.79	1194.57	
P-2	2	3	1500	15	240	3.0	1194.57	1187.07	
P-2A	6' 8"	3	V.C.P.	6	30			1187.40±	
P-3	3	4	2000	15	68	4.0	1187.07	1184.35	
P-4	4	6	2000	18	136	3.5	1184.10	1179.34	
P-6	6	13	2000	24	142	5.0	1178.64	1171.79	
P-7	7	10	2000	15	90	2.5	1186.04	1183.82	
P-8	8	9	1500	15	23	3.0	1186.30	1184.00	
P-9	9	10	1500	15	24	1.0	1184.00	1183.76	
P-10	10	13	2000	18	240	3.6	1183.57	1174.04	
P-11	11	12	2000	15	24	1.0	1174.83	1174.57	
P-12	12	13	1500	15	76	2.0	1174.57	1172.93	
P-13	13	15	1500	24	448	5.0	1171.79	1169.44	
P-14	14	15	2000	15	66	1.0	1151.20	1150.54	
P-15	15	17	1500	24	734	5.6	1149.44	1107.89	
P-16	16	17	2000	15	66	1.0	1116.55	1115.49	
P-17	17	26	2000	24	25	7.0	1107.89	1106.07	
P-18	6' 8"	26	V.C.P.	6	76	1.0±	1106.20	1106.00	Removed exist. M.H.
P-19	19	21	2000	15	47	1.0	1109.10	1108.69	
P-20	20	21	1500	24	69	1.8	1109.15	1107.94	
P-21	21	23	1500	24	108	2.0	1107.94	1105.84	
P-22	Ditch	23	1500	24	24	4.0	1111.00	1110.08	RF-3
P-23	23	25	2000	30	36	1.8	1103.44	1102.79	
P-24	Ditch	25	1500	36	24	4.0	1110.50	1109.58	RF-3
P-25	25	26	3000	42	186	1.2	1102.29	1100.06	
P-26	26	R.C.B.	3000	48	336	2.0	1099.56	1092.78	
P-35	35	36	V.C.P.	8	66	10.0	1198.30	1192.50	
P-36	36	37	V.C.P.	8	176	0.8	1192.38	1191.00	
P-37	37	38	V.C.P.	8	58	0.8	1190.98	1190.50	
P-40	40	41	2000	15	45	1.8	1197.73	1196.92	
P-41	41	42	2000	15	66	1.8	1196.92	1195.66	
P-42	42	43	1500	15	246	2.2	1195.66	1190.23	
P-43	43	46	1500	15	302	4.2	1190.23	1177.34	
P-44	44		C.M.P.	15	9	1.0	1203.58	1203.49	2-18" Elbows
					* 77	33.3	1203.49	1177.85	* 81' Actual Length
					5	1.0	1177.85	1177.80	
P-45	45	46	2000	15	37	2.0	1178.12	1177.36	
P-46	46	47	1500	15	* 334	6.0	1177.34	1157.30	* 335' Actual Length
P-47	47		C.M.P.	18	20	7.0	1157.05	1155.65	2-18" Elbows
					* 86	21.7	1155.65	1135.30	* 88' Actual Length
					64	7.0	1135.30	1131.10	
P-48	48	R.C.B.	C.M.P.	18	44	30.0	1130.10	1124.10	
P-50	50	51	* V.C.P.	10	130	1.0	1142.96	1141.68	* Extra Strength
P-51	51	M.H.	* V.C.P.	10	235	1.8	1141.64	1137.28	12" Camber * Extra Strength
P-52	52	54	2000	15	48	2.0	1158.30	1157.82	
P-53	53	54	1500	15	71	1.0	1158.53	1157.82	
P-54	54	55	1500	15	71	2.0	1157.82	1156.40	
P-55	55	56	1500	15	78	10.0	1156.40	1147.90	
P-56	56	59	2000	18	43	2.1	1147.65	1146.75	
P-57	57	59	1500	15	89	1.0	1149.06	1148.35	
P-58	58	59	1500	15	74	1.0	1149.10	1148.34	
P-59	59		C.M.P.	18	22	12.0	1146.75	1144.11	2-12" Elbows
					* 18	33.0	1144.11	1138.17	* 19' Actual Length
					54	12.0	1138.17	1131.69	2-24" Elbows
					* 50	60.0	1131.69	1101.69	* 58' Actual Length
		Outlet			6	12.0	1101.69	1100.97	RF-5
P-61	61	62	1500	15	17	1.0	1175.82	1175.65	
P-62	62		2000	15	37	3.0	1175.51	1174.52	RF-2
			C.M.P.		7	3.0	1174.62	1174.31	1-17" Elbow
					* 40	33.0	1174.31	1161.11	* 42' Actual Length

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY OVERLAND PARK

HNTB

DATE 2-14-77
CHECKED DTL DATE 2-23-77

DRAINAGE STRUCTURES

WOODBURY COUNTY

PROJECT NO. FN-75-4(17)-21-97

STATE

FEEL ROAD

DIST. NO.

YEAR

FISCAL

SHEET

NO.

TOTAL

SHEETS

1977

3E

627

FILE NO.

ENGLISH

DESIGN TEAM DISTRICT 3

WOODBURY COUNTY

PROJECT NUMBER NHSX-376-1(15)--3H-97

SHEET NUMBER U.17

9:29:45 AM

6/18/2026

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FOR INFORMATION ONLY

LIST OF INTAKES AND MANHOLES					
NO.	LOCATION	TYPE	FORM ELEV.	BOTTOM OF WELL ELEV.	NOTE
63	345+05, E.S.B.L.	RA-3	1160.36	1165.50	
64	345+22, 19' RT, S.B.L.	RA-19	1164.91	1160.66	
66	358+00, 85' LT, S.B.L.	RA-19	1164.50	1161.30	
68	359+00, E.S.B.L.	RA-3	1177.88	1173.98	
69	359+00, 16.5' RT, S.B.L.	RA-19	1176.20	1173.40	
70	359+00, E.N.B.L.	RA-3	1180.10	1172.96	
71	5363+50, B Ramp B	RA-3	1172.06	1168.20	
72	357+80, 97' RT, N.B.L.	RA-35	1162.80	1157.53	
77	5363+50, 40' RT, Ramp B	M.H., San. Str.	1173.20	1160.27	
78	6364+25, 110' LT, Ramp C	M.H., San. Str.	1180.00	1131.27	
80	366+00, E.S.B.L.	RA-3	1170.76	1166.90	
81	367+14, 7.5' LT	RA-3	1168.71	1164.75	
82	6367+44, B Ramp C	RA-3	1161.89	1155.37	
83	6371+65, 17' RT, Ramp C	RA-6	1136.90	1133.28	
84	6371+75, 106' LT, Ramp C	RA-19	1138.90	1155.63	
85	6371+75, 8' LT, Ramp C	RA-1	1137.04	1130.61	
86	6378+25, 86' LT, Ramp C	RA-35	1142.00	1137.00	
87	6373+50, 16.5' LT, Ramp C	RA-35	1124.30	1119.81	
88	6374+95, B Ramp C	RA-3	1121.42	1115.95	
89	6374+95, 17' RT, Ramp C	RA-33	1122.26	1114.79	Condition A
90	7374+16, 20.5' LT, Cunningham Dr.	RA-3	1121.96	1118.10	
91	7374+10, 32.5' RT, Cunningham Dr.	RA-3 Mod.	1121.85	1113.96	3'x3.5'
92	5367+50, 100' RT, Ramp B	500-5	1187.50	1184.67	
94	374+00, 32.5' LT	RA-8	1148.97	1145.30	6' Extension
95	374+00, 32.5' RT	RA-8	1148.97	1140.63	6' Extension
96	5374+60, 25' LT, Ramp B	RA-33	1123.18	1118.93	Condition A
97	5373+50, B Ramp B	RA-8	1126.11	1121.79	6' Extension
98	5374+60, B Ramp B	RA-3	1122.18	1117.20	
99	7377+40, 24.5' LT, Cunningham Dr.	RA-3	1122.18	1118.62	
100	7377+40, 32.5' RT, Cunningham Dr.	RA-3	1122.42	1118.09	
102	8470+10, 12.5' RT, Gibrian Extension	RA-8	1142.72	1138.95	6' Extension
103	8470+10, 12.5' LT, Gibrian Extension	RA-8	1142.72	1138.56	6' Extension
104	8471+35, 12.5' LT, Gibrian Extension	RA-3	1135.97	1131.06	
105	8471+35, 12.5' RT, Gibrian Extension	RA-3	1135.90	1130.09	
106	485+45, 48' RT, Transit Ave.	RA-35	1133.80	1129.14	
107	485+57, 22' RT, Transit Ave.	RA-6	1137.05	1127.70	
108	7377+40, 59' RT, Cunningham Dr.	RA-35, Mod.	1119.00	1111.94	3'x4'
109	483+12, 30.8' LT, Transit Ave.	RA-3	1131.44	* 1124.8 ±	* To be determined in the field
110	470+10, 32.5' RT, Transit Ave.	RA-3	1124.45	1120.55	
111	479+10, 32.5' LT, Transit Ave.	RA-3	1124.45	1119.90	
112	7380+64, 24.5' RT, Cunningham Dr.	RA-3	1124.51	1120.60	
113	7380+64, 20.5' LT, Cunningham Dr.	RA-3	1124.57	1118.80	
114	7379+41, 20.5' LT, Cunningham Dr.	RA-3	1122.72	1118.86	
115	7379+41, 24.5' RT, Cunningham Dr.	RA-3	1122.66	1118.80	
116	7379+60, 35' RT, Cunningham Dr.	RA-28, Mod. (5' dia.)	1123.60	1107.5 ±	Build on top of 6'x6' R.C.B.

LIST OF STORM SEWER PIPE									
LINE NO.	LOCATION FROM TO		D CLASS OR TYPE	SIZE DIA. (IN.)	LENGTH LINE (FT.)	SLOPE (%)	FLOW LINES		NOTE
							INLET	OUTLET	
P-63	63	64	1500	15	72	6.0	1165.86	1161.58	
P-64	64		2000	18	56	1.5	1160.86	1160.05	2F-2
			C.M.P.		39	1.5	1160.05	1159.46	1-9" Elbow
					* 70	18.0	1159.46	1146.86	* 71' Actual Length, 1-18" Elbow
					* 98	50.0	1146.86	1097.86	* 110' Actual Length, 1-24" Elbow
		Outlet			5	5.0	1097.86	1097.46	2F-5
P-66	66	72	3000	15	228	1.0	1161.50	1159.22	9" Camber
P-68	68	69	1500	15	12	5.0	1174.20	1173.60	
P-69	69	70	2000	15	51	0.8	1173.60	1173.19	
P-70	70		C.M.P.	15	24	7.0	1173.19	1171.51	2-15" Elbows
		Outlet			* 18	33.0	1171.51	1165.57	* 19' Actual Length
P-71	71	Outlet	1500	15	6	7.0	1165.57	1165.15	2F-5
P-72	72	R.C.B.	C.M.P.	18	42	65.0	1169.92	1169.87	2F-3
							1158.10	1136.00	* 82' Actual Length, 6' to 12" Camber
P-76	M.H.	77	U.C.P.	8	325	3.0	1169.92	1160.63	
P-77	77	78	C.I.P.	8	260	11.0	1160.50	1131.90	6' to 12" camber
P-78	78	M.H.	U.C.P.	8	340	10.8	1131.50	1094.78	
P-80	80	81	1500	15	121	1.8	1167.17	1164.99	
P-81	81	82	2000	15	94	10.0	1164.99	1155.59	
P-82	82	83	2000	15	416	5.3	1155.59	1133.49	
P-83	83	85	2000	15	20	3.0	1133.49	1132.89	
P-84	84		C.M.P.	15	12	1.0	1155.83	1155.71	2-18" Elbows
					* 75	33.0	1155.71	1130.96	* 79' Actual Length
		85			13	1.0	1130.96	1130.43	
P-85	85	87	1500	15	171	6.0	1130.43	1120.51	
P-86	86		C.M.P.	15	14	1.0	1130.00	1137.86	1-16" Elbow
		87			* 59	29.7	1137.86	1120.34	* 62' Actual Length
P-87	87	88	1500	18	143	2.7	1120.04	1116.18	
P-88	88	89	2000	18	18	3.5	1116.18	1115.55	
P-89	89	91	1500	24	24	1.1	1115.05	1114.76	
P-90	90	91	2000	15	54	1.0	1118.40	1117.87	
P-91	91	108	2000	30	337	0.4	1114.26	1112.91	
P-92	92		C.M.P.	15	9	2.0	1185.30	1185.12	2-19" Elbows
		Outlet			* 59	37.0	1185.12	1163.29	* 63' Actual Length
					4	2.0	1163.29	1163.21	2F-5
P-94	94	95	2000	15	70	1.0	1145.50	1144.84	
P-95	95		C.M.P.	15	14	3.0	1144.84	1144.42	2-16" Elbows
					* 76	32.0	1144.42	1120.10	* 80' Actual Length
		96			26	3.0	1120.10	1119.29	
P-96	96	98	2000	15	26	2.2	1119.15	1118.58	
P-97	97	98	1500	15	107	4.0	1122.00	1117.72	
P-98	98	P-91	1500	18	30	12.0	1117.47	1113.63	2F-21 18" 30" 60" Tee
P-99	99	100	2000	15	57	1.0	1118.90	1118.33	
P-100	100	108	1500	15	24	10.0	1118.33	1116.23	
P-102	102	103	2000	15	26	1.4	1139.15	1138.79	
P-103	103	104	1500	15	88	8.0	1138.79	1131.27	
P-104	104	105	2000	15	26	2.8	1131.27	1130.57	
P-105	105	106	1500	18	17	2.4	1130.57	1129.91	
P-106	106	107	C.M.P.	30	30	3.5	1129.41	1128.50	
P-107	107	Intake	2000	30	98	1.2	1128.00	1126.76	
P-108	108	116	2000	36	217	1.2	1112.41	1109.81	
P-110	110	111	2000	15	64	1.0	1120.75	1120.10	
P-111	111	116	2000	15	75	2.0	1120.10	1118.56	
P-112	112	113	2000	15	45	2.0	1120.80	1119.90	
P-114	114	115	2000	15	45	1.0	1119.50	1119.05	
P-115	115	116	1500	15	18	3.0	1119.05	1118.48	

Revised July 25, 1977

DRAINAGE STRUCTURES

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY OVERLAND PARK
HNTB
DATE 2-15-77
CHECKED D.L. DATE 2-23-77

WOODBURY COUNTY PROJECT NO. F-175-4(17)-21-97

STATE IOWA
SHEET NO. 3F
TOTAL SHEETS 482-2

FOR INFORMATION ONLY

LIST OF INTAKES AND MANHOLES					
NO.	LOCATION	TYPE	FORM ELEV.	BOTTOM OF WELL ELEV.	NOTE
117A	7379+93.45' Lt. Cunningham Dr.	M.H., San. Drop	1123.48	1117.96	2.8'± Drop
117C	7377+97.44' Rt. Cunningham Dr.	M.H., San. Std.	1123.75	1116.66	
117D	7376+40.36' Rt. Cunningham Dr.	M.H., San. Std.	1123.76	1115.08	
118	376+46.32.5' Lt.	RA-3	1141.42	1137.56	
119	622+00.37.5' Lt. Ramp D	RA-3S	1111.50	1117.30	
120	622+00.8' Rt. Ramp D	RA-3	1115.36	1106.59	
122	622+64.8' Rt. Ramp D	RA-4	1115.07	1104.88	
124	380+00.32.5' Lt.	RA-3	1129.47	1125.61	
125	523+75.8 Ramp A	RA-3	1109.62	1105.76	
126	524+40.8 Ramp A	RA-3	1108.19	1104.33	
127	384+00.7.5' Rt.	RA-3	1117.81	1114.95	
128	1127+09.7.5' Rt.	RA-3	1115.34	1111.48	
129	1127+09.32.5' Lt.	RA-3	1114.59	1110.70	
130	527+15.39.5' Rt. Ramp A	RA-3S	1099.85	1096.21	
131	527+15.25' Rt. Ramp A	RA-3	1102.35	1096.16	
132	527+40.8 Ramp A	RA-3S	1104.08	1095.76	Condition A
133	528+68.8 Ramp A	RA-4	1104.34	1094.29	
134	1128+65.32.5' Lt.	RA-6	1110.60	1106.78	
135	628+65.0.5' Lt. Ramp D	RA-3	1104.77	1105.73	
137	1143+66.32.5' Lt.	RA-3	1108.72	1104.86	
138	1140+02.32.5' Lt.	RA-3	1105.00	1100.98	
139	637+25.8 Ramp D	RA-3, Mod.	1102.70	1096.66	4.5' x 4.5'
140	636+20.8 Ramp D	RA-3, Mod.	1102.23	1095.20	4.5' x 4.5'
141	536+75.8 Ramp A	RA-3	1101.96	1098.10	
142	536+05.8 Ramp A	RA-3, Mod.	1101.82	1094.58	4.5' x 4.5'
143	535+25.8 Ramp A	RA-3, Mod.	1102.12	1093.96	4.5' x 4.5'
145	633+17.8 Ramp D	RA-3	1104.44	1100.58	
146	1133+08.44.5' Lt.	RA-6	1104.37	1100.03	
148	1151+70.42' Lt.	RA-3	1110.47	1106.61	
149	1154+46.78' Lt.	RA-3	1106.75	1098.33	

LIST OF STORM SEWER PIPE									
LINE NO.	LOCATION FROM	TO	D CLASS OR TYPE	SIZE DIA. (IN.)	LENGTH LINE (FT.)	SLOPE (%)	FLOW LINES		NOTE
							INLET	OUTLET	
P-117A	117A	117C	V.C.P.	10	195	0.6	1118.14	1116.94	
P-117B	117B	117C	V.C.P.	10	48	1.0	1117.53	1116.94	
P-117C	117C	117D	V.C.P.	10	148	1.0	1116.84	1115.30	
P-118	118		CMP	15	10	4.0	1137.90	1137.50	2-19" Elbows
		Outlet			* 28	38.0	1137.50	1126.86	* 30' Actual Length
P-119	119	120	2000	15	48	4.0	1126.46	1124.94	RF-5
P-120	120	122	1500	15	60	1.6	1107.50	1106.80	
P-122	122		CMP	18	18	4.0	1105.11	1104.39	2-25" Elbows
		Outlet			* 10	50.0	1104.39	1099.39	* 11' Actual Length
					3	4.0	1099.39	1099.27	RF-5
P-124	124		C.M.P.	15	11	2.0	1126.00	1125.78	2-17" Elbows
		Outlet			* 38	33.0	1125.78	1113.24	* 40' Actual Length
P-125	125	126	1500	15	61	2.2	1106.00	1104.66	RF-5
P-126	126	131	2000	15	267	2.4	1104.66	1098.18	
P-127	127	128	1500	15	71	3.2	1114.30	1112.03	
P-128	128	129	2000	15	37	3.0	1112.05	1110.84	
P-129	129		C.M.P.	15	13	5.5	1110.94	1110.22	2-15" Elbows
		130			* 28	33.0	1110.22	1100.98	* 29' Actual Length
					86	5.5	1100.98	1092.24	
P-130	130	131	1500	24	10	0.7	1096.49	1096.42	
P-131	131	132	2000	24	44	1.2	1096.42	1095.92	
P-132	132	133	1500	24	113	1.3	1095.92	1094.41	
P-133	133	Outlet	1500	24	120	1.4	1094.41	1093.86	RF-3
P-134	134	135	2000	15	19	5.0	1107.00	1106.05	
P-135	135		CMP	16	* 27	25.0	1106.05	1099.30	* 28' Actual Length, 1-13" Elbow
		Outlet			4	2.0	1099.30	1099.24	RF-5
P-137	137	15" #	2000	15	18	0.6	1105.89	1105.29	RF-2
P-138	138	15" #	2000	15	18	1.0	1101.18	1101.02	RF-2
P-139	139	140	1500	36	110	0.9	1097.00	1096.08	
P-140	140	142	2000	42	87	0.7	1095.54	1094.96	
P-141	141	142	1500	15	66	1.0	1098.40	1097.73	
P-142	142	143	1500	42	74	0.8	1094.96	1094.34	
P-143	143	Outlet	1500	42	146	1.0	1094.34	1094.10	RF-3
P-145	145	146	2000	15	82	0.8	1100.90	1100.24	
P-146	146		2000	15	35	3.0	1100.24	1099.31	RF-2
			C.M.P.	15		3.0	1099.31	1099.19	2-17" Elbows
		Outlet			* 21	33.0	1099.19	1092.19	* 22' Actual Length
					5	3.0	1092.19	1092.04	RF-5
P-148	148	15" #	2000	15	6	1.0	1107.55	1107.48	RF-2
P-149A	149	24" #	2000	24	6	2.0	1098.86	1098.64	RF-2
P-149B	149	24" #	2000	24	11	2.2	1098.64	1098.30	RF-2 Deleted

Revised July 25, 1977

DRAINAGE STRUCTURES

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY OVERLAND PARK
HNTB
MADE: AIS DATE: 2-15-77
CHECKED: DTI DATE: 2-24-77

WOODBURY COUNTY

PROJECT NO. FN-75-4(17)-21-97

STATE: IOWA FED. ROAD DIST. NO.: 5 FISCAL YEAR: 1977 SHEET NO.: 36 TOTAL SHEETS: 38

FILE NO.

ENGLISH

DESIGN TEAM **DISTRICT 3**

WOODBURY

COUNTY

PROJECT NUMBER

NHSX-376-1(15)--3H-97

SHEET NUMBER **U.19**

9:31:24 AM

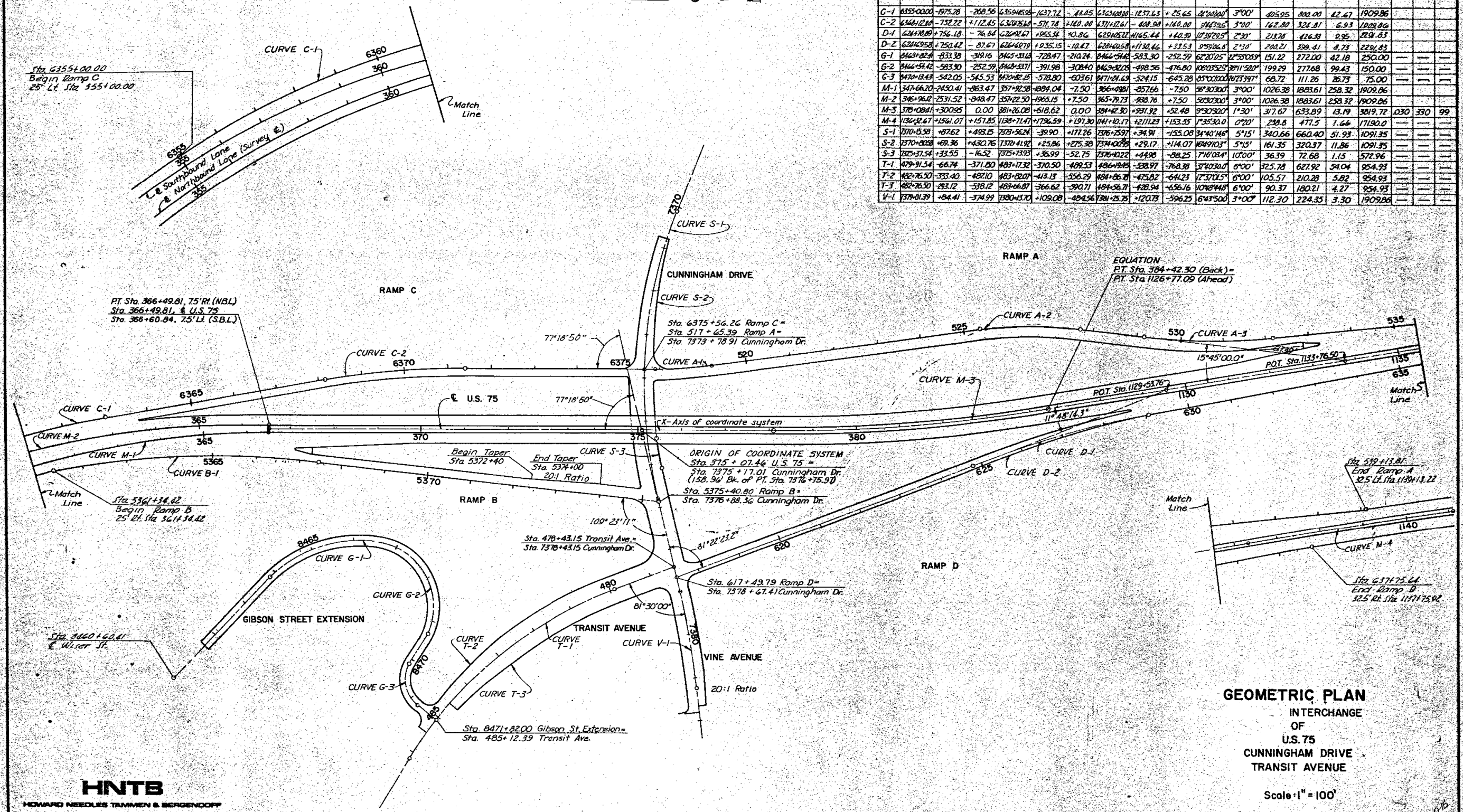
6/18/2026

jprofer

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FOR INFORMATION ONLY

NO.	P.C.		P.I.		P.T.		Δ	D	T	L	E	R	SUPERELEV.		
	STATION	COORDINATES	STATION	COORDINATES	STATION	COORDINATES							e	s	m
A-1	517+92.41	+34.69	+140.00	518+55.16	+99.45	+140.00	519+18.72	+163.61	+148.74	745°32'5"	6°00'	64.76	129.32	2.19	954.93
A-2	525+36.92	+775.16	+232.07	526+54.17	+991.34	+247.90	527+70.28	+1007.89	+235.15	140°00'0.0"	6°00'	117.25	233.33	7.17	954.93
A-3	529+19.48	+1156.23	+218.93	530+69.22	+305.09	+202.65	532+128.14	+154.09	+217.51	117°56'08.3"	4°00'	149.74	298.40	7.81	1432.39
B-1	536+34.42	-1860.15	-100.72	536+142.10	-1058.06	-38.44	536+74.41	-751.73	-76.43	187°25'25"	3°00'	308.44	611.60	24.75	1909.86
C-1	6355+00.00	-975.28	-268.56	6359+45.08	-1637.72	-42.85	6363+40.00	-1237.63	+25.66	18°00'00"	3°00'	405.95	800.00	12.67	1909.86
C-2	6364+12.80	-732.22	+112.45	6368+56.14	-571.78	+160.00	6371+17.61	-408.98	+140.00	54°19'35"	3°00'	162.80	324.81	6.93	1909.86
D-1	624+18.89	+754.18	-74.84	624+42.61	+955.34	+0.86	624+105.27	+1165.44	+40.39	107°38'29.5"	2°30'	213.78	416.38	0.95	2291.83
D-2	624+49.58	+750.42	-87.67	624+49.19	+935.15	-10.47	624+49.58	+1132.46	+33.53	9°59'06.8"	2°10'	204.21	399.41	8.73	2291.83
G-1	6463+02.41	-833.38	-319.16	6465+59.14	-728.47	-210.24	6466+54.42	-583.30	-252.59	62°20'15"	12°35'02.9"	151.22	272.00	42.18	250.00
G-2	6464+54.42	-583.30	-252.59	6468+53.71	-391.98	-308.40	6469+02.05	-498.56	-476.00	108°03'25"	31°11'50.0"	199.29	277.68	99.43	150.00
G-3	6470+18.43	-542.05	-545.53	6470+82.15	-578.80	-603.61	6471+44.63	-524.15	-645.28	85°00'00.0"	16°33'39.7"	66.72	111.26	26.73	75.00
M-1	347+66.20	-2450.41	-863.47	357+92.58	-1084.04	-7.50	366+48.81	-857.68	-7.50	98°30'30.0"	3°00'	1026.38	1883.61	258.32	1909.86
M-2	346+16.02	-2531.52	-848.47	357+22.50	-1965.15	+7.50	365+79.73	-848.78	+7.50	58°30'30.0"	3°00'	1026.38	1883.61	258.32	1909.86
M-3	378+08.41	+300.85	0.00	381+26.08	+618.62	0.00	384+42.30	+931.92	+52.48	9°30'30.0"	1°30'	317.67	633.89	13.19	3019.72
M-4	136+42.47	+1561.07	+157.85	138+71.47	+1736.59	+197.30	141+10.17	+2111.29	+153.85	1°38'30.0"	0°20'	238.8	477.5	1.66	17190.0
S-1	370+15.58	+87.62	+488.15	373+56.24	-39.90	+177.26	376+25.97	-34.91	-153.08	34°40'14.6"	5°15'	340.66	660.40	51.93	1091.35
S-2	370+00.00	+69.36	+430.76	370+41.92	+25.86	-275.38	374+00.00	+29.17	+114.07	148°49'10.3"	5°15'	161.35	320.37	11.86	1091.35
S-3	370+37.54	+33.55	-16.52	375+23.93	+36.99	-52.75	376+10.22	+44.90	-88.25	71°10'34"	10°00'	36.39	72.68	1.15	572.96
T-1	479+91.54	-66.74	-371.80	483+17.32	-370.50	-409.53	486+19.45	-388.97	-768.38	3°40'30.0"	6°00'	325.78	627.92	54.04	954.93
T-2	482+76.50	-333.40	-487.10	483+00.07	-413.13	-556.29	484+26.21	-475.02	-641.23	17°37'03.5"	6°00'	105.57	210.28	5.82	954.93
T-3	482+76.50	-293.12	-538.12	483+66.87	-366.62	-590.71	484+56.71	-428.94	-656.16	10°48'44.8"	6°00'	90.37	180.21	4.27	954.93
V-1	374+11.39	+84.41	-374.99	380+13.70	+109.08	-484.56	384+25.25	+120.73	-596.25	64°35'00"	3°00'	112.30	224.35	3.30	1909.86



GEOMETRIC PLAN
INTERCHANGE
OF
U.S. 75
CUNNINGHAM DRIVE
TRANSIT AVENUE

Scale: 1" = 100'

HNTB

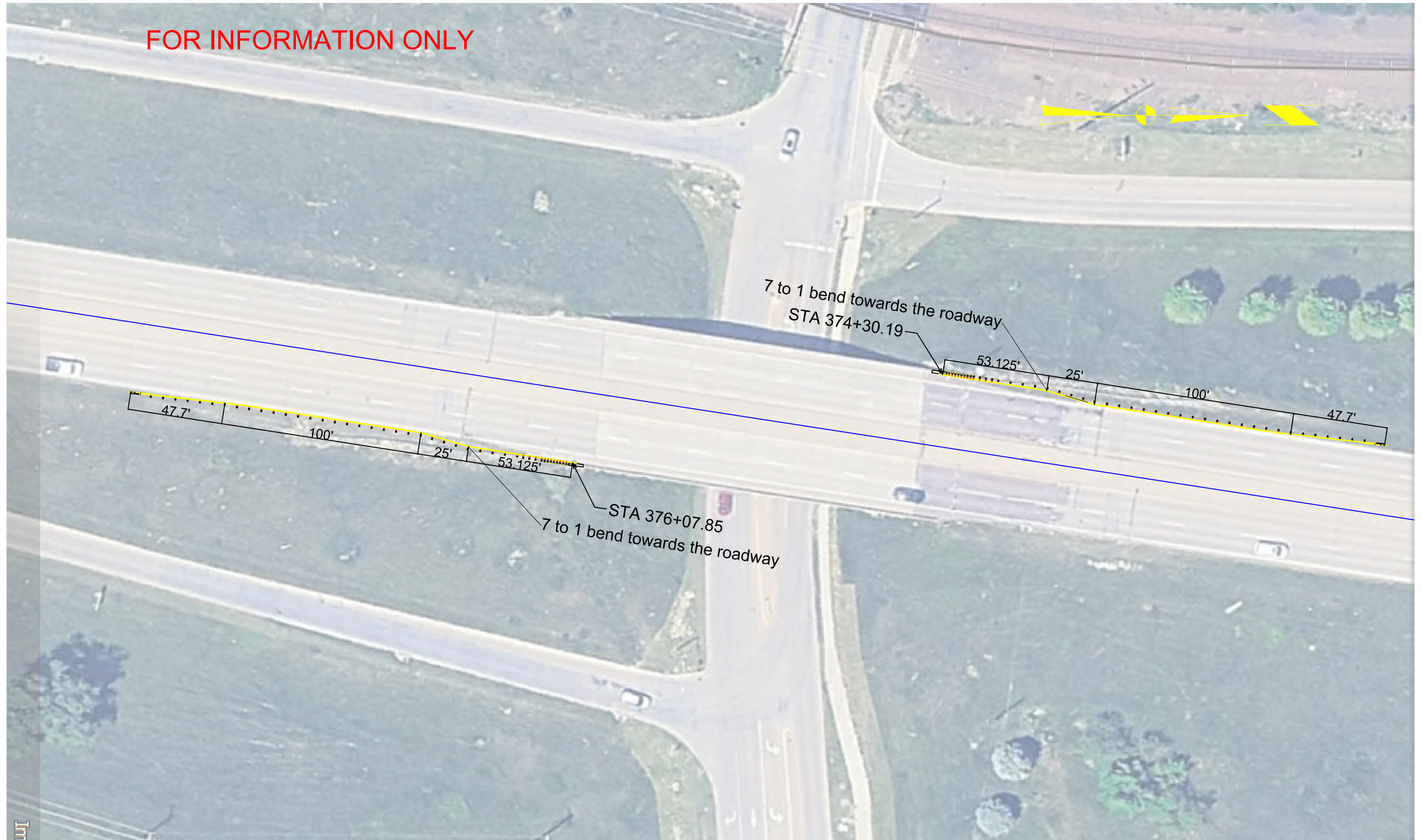
HOWARD NEEDLES TAMMEN & BERGENDOFF

WOODBURY COUNTY

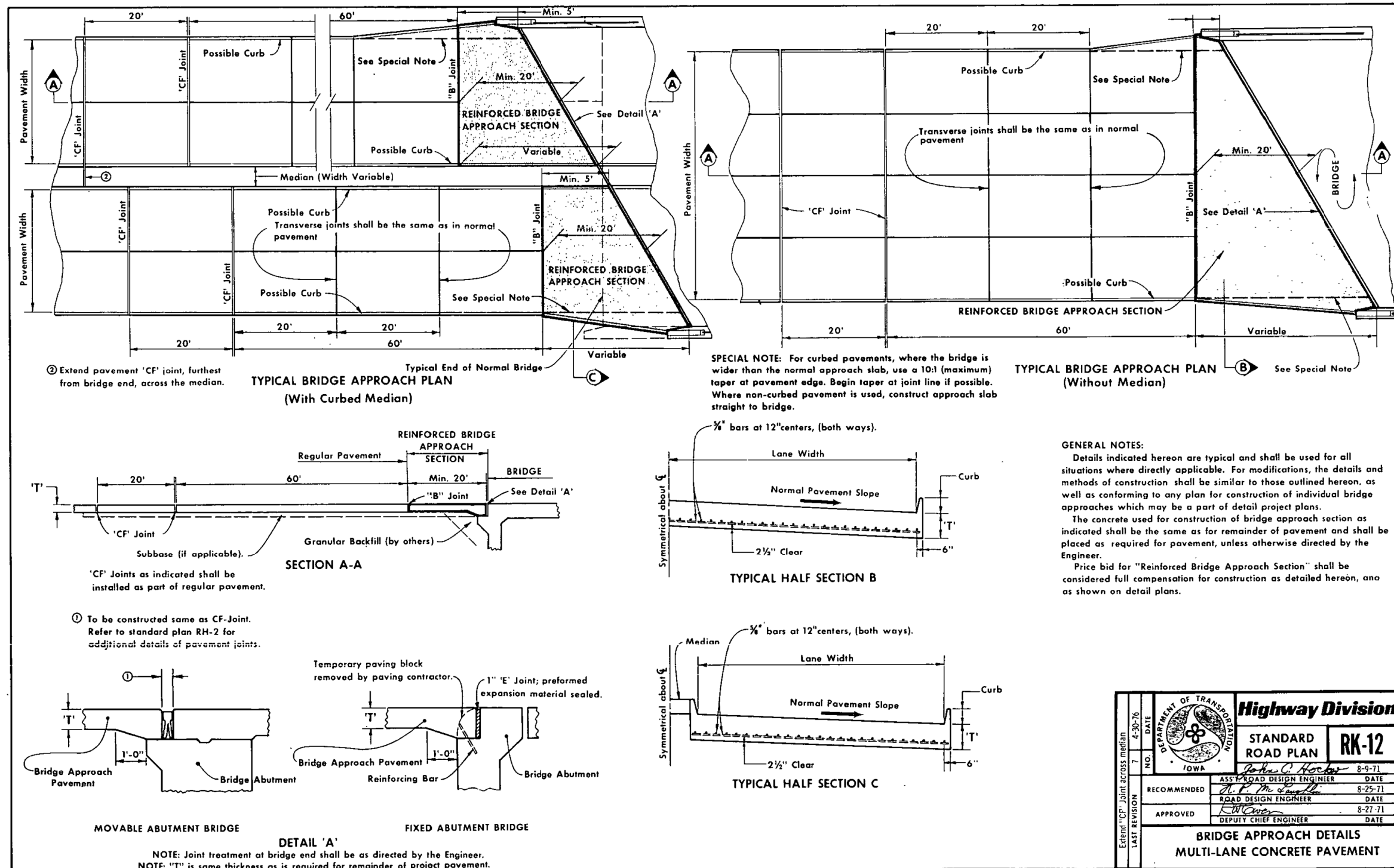
PROJECT NO. FA-15-4(17)-21-97

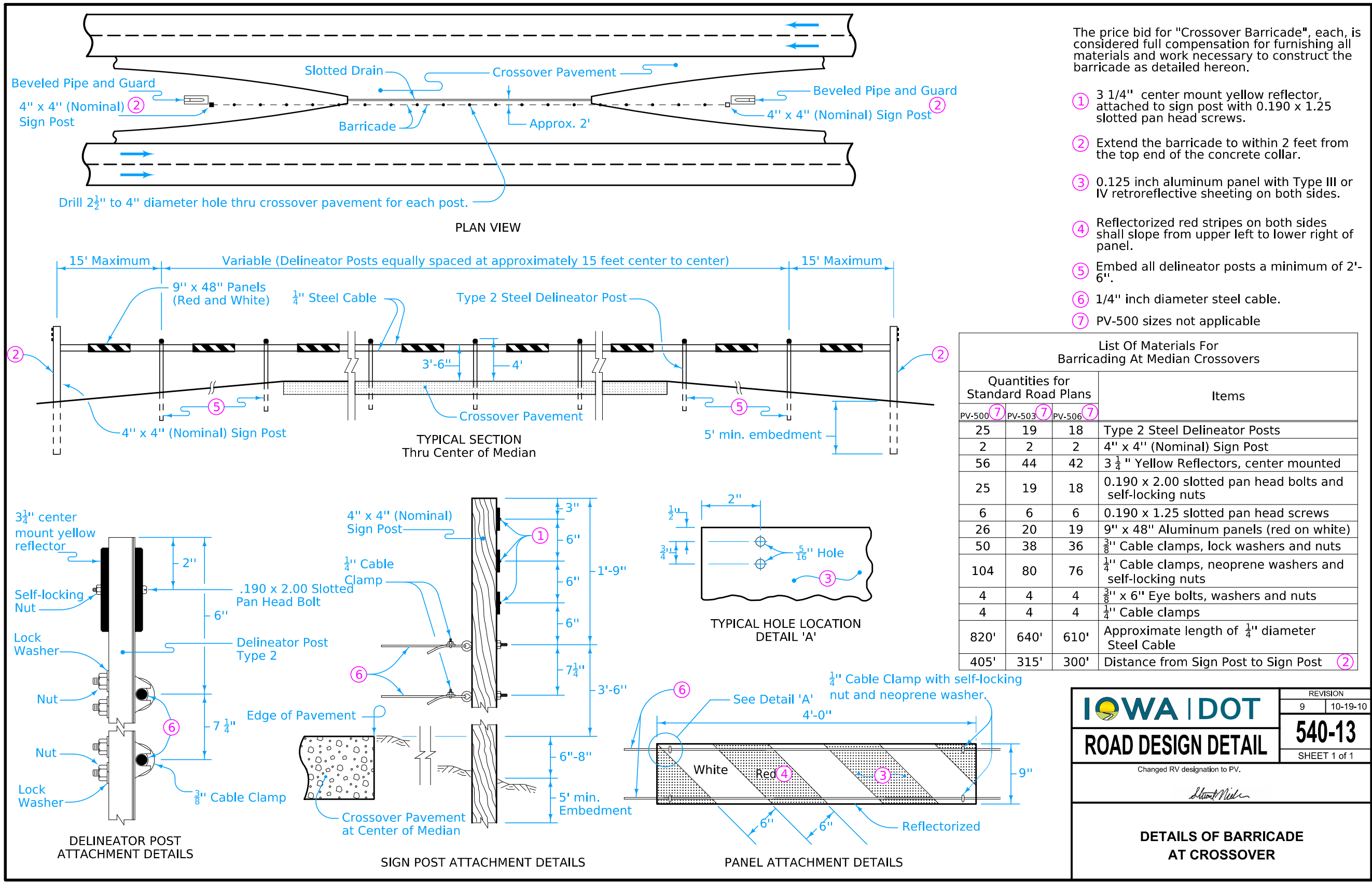
STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
IDAHO	8	1977	35	87

FOR INFORMATION ONLY



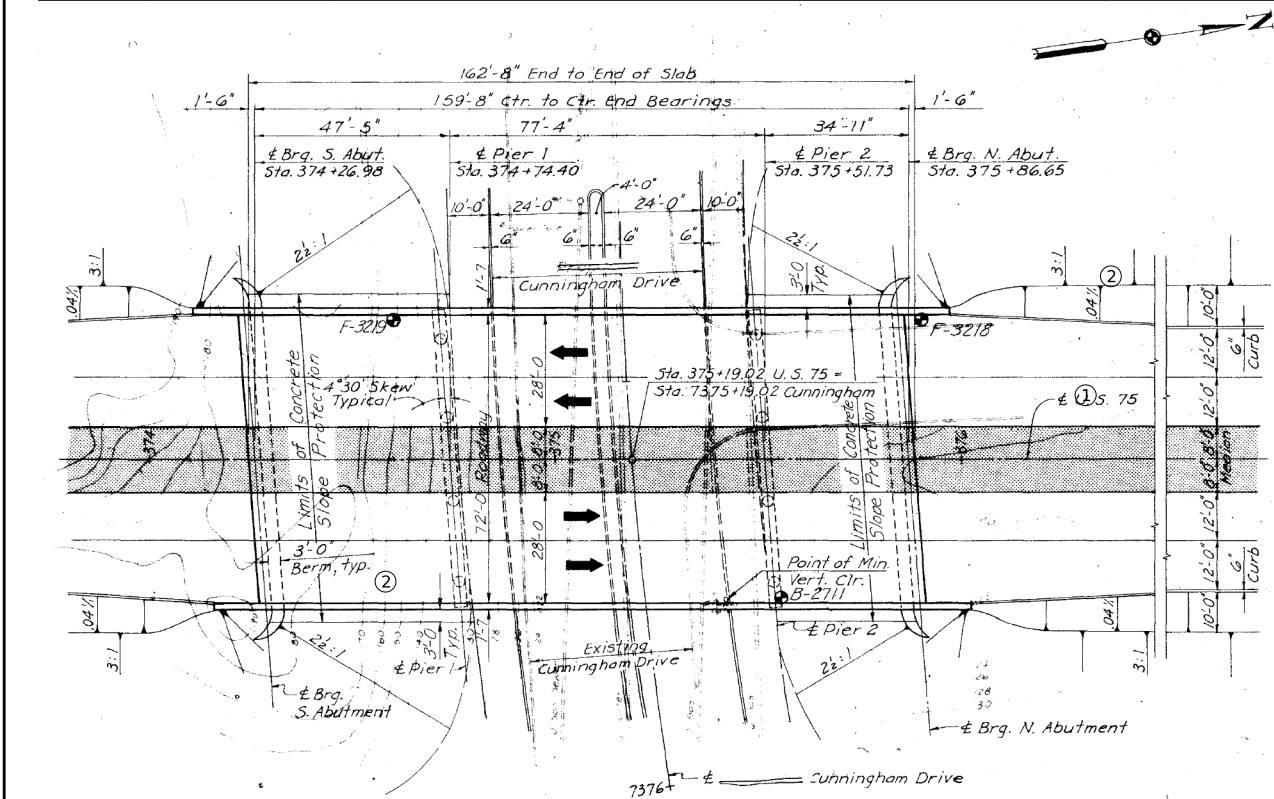
FOR INFORMATION ONLY





ESTIMATED BRIDGE REPAIR QUANTITIES				
ITEM NO.	ITEM CODE	ITEM	UNIT	TOTAL
1	2401-6750001	REMOVALS, AS PER PLAN	LS	1
2	2403-0100000	STRUCTURAL CONCRETE (MISCELLANEOUS)	CY	2.2
3	2404-7775005	REINFORCING STEEL, EPOXY COATED	LB	934
4	2499-0800000	PAVING NOTCH REPLACEMENT	LF	72.2
5	2536-6745045	REMOVAL OF ASBESTOS	LS	1

ESTIMATE REFERENCE INFORMATION		
ITEM NO.	ITEM CODE	ITEM DESCRIPTION
1	2401-6750001	REMOVALS, AS PER PLAN Includes all work for removal and off-site disposal of two concrete barrier rail end sections. Removal of scheduled items shall be in accordance with Section 2401 of the Standard Specifications. Any damage to material not scheduled for removal shall be the responsibility of the Contractor and repaired at no extra cost to the state. Contractor to add the following information when submitting the Iowa DNR "Notification of Bridge Demolition and Renovation" form: Name of Asbestos Inspector: Brad Azelttne Date Inspected: 3/22/2023 IA License Number: Iowa DOT Inspector Phone: 515-239-1938 Procedure used to detect the presence of asbestos materials: Polarized Light Microscopy (PLM)
2	2403-0100000	STRUCTURAL CONCRETE (MISCELLANEOUS) For retrofit barrier rail end sections at the southeast and northwest corners of the bridge. See bridge barrier end retrofit details. Includes furnishing and installing 1 inch diameter plastic conduits in the rail end sections for guardrail attachments. Includes cost of setting bars as dowels in the retrofit barrier rail end sections.
3	2404-7775005	REINFORCING STEEL, EPOXY COATED For bridge barrier rail end section retrofits.
4	2499-0800000	PAVING NOTCH REPLACEMENT Includes 5.1 cu yd of structural concrete Class C, 1,155 lbs of epoxy-coated reinforcing steel, excavation, removing and disposing of the existing paving notch and concrete removed to form the shear keyways, drilling holes for dowel bars, and polymer grout material required to replace the paving notch at the north abutment.
5	2536-6745045	REMOVAL OF ASBESTOS --



Situation Plan

General Notes:

This design is for repairs to the existing 159'-8" x 72'-0" Pretensioned Prestressed Concrete Beam Bridge on IA 376 over Cunningham Drive in Sioux City. Electronic copies of original design plans will be made available to the Contractor as part of the E-Files supplied with the contract documents.

Repair shall consist of:

1. Remove and replace the Paving Notch at the North Abutment
2. Replace portions of the Northwest and Southeast Barrier Rail End Sections to accommodate new guardrail connections.

The Contractor's attention is directed to the existing conduit in the West bridge Rail. In order to ensure the existing conduit is not damaged during placement of the cast-in-place barrier rail end sections, the Contractor shall be required to do the following:

1. Physically locate the conduit prior to drilling any holes for ¾" diameter dowel bars.
2. After completion of drilling for the ¾" dowel bars and prior to placement of the dowels, prove to the Inspector by a reasonable method the usability of the conduit has not been compromised.

Cost of these operations will be considered incidental to the cost of Structural Concrete (Misc). Any damage to the conduit or wiring by the Contractor will be the responsibility of the Contractor and repaired at no extra cost to the State.

Keyway dimensions shown on the plans are based on nominal dimensions unless stated otherwise. In addition, the bevel used on the keyway shall be limited to a maximum of 10 degrees from vertical.

Faint lines on plans indicate the existing structure.

All dimensions and details shown on these plans pertinent to new construction shall be verified in the field by the Contractor before starting construction.

These bridge plans label all reinforcing steel with english notation (5a1 is ⅝ inch diameter bar). English reinforcing steel received in the field may display the following "Bar Designation". The "Bar Designation" is the stamped impression on the reinforcing bars, and is equivalent to the bar diameter in millimeters.

English Size	3	4	5	6	7	8	9	10	11
Bar Designation	10	13	16	19	22	25	29	32	36

Minimum clear distance from face of concrete to near reinforcing bar is to be 2" unless otherwise noted or shown.

The City and Utility Companies whose facilities are shown on the plans or known to be within the construction limits shall be notified by the Bridge Contractor of the construction starting date.

I reinforcing bars and bars noted as dowels supplied for this structure shall be deformed reinforcement unless otherwise noted or shown.

Laboratory analysis has identified asbestos at this site. Asbestos shall be removed prior to bridge demolition operations. Removal, transport, and disposal shall be in accordance with Section 2536, of the Standard Specifications.

Required DNR information includes:
Year Constructed - 1978
Asbestos Location - Black caulk in joints of concrete bridge railings
FHWA Number (Existing) - Information provided elsewhere in plan
Road/Route (City) - Information provided elsewhere in plan
County - Information provided elsewhere in plan
Direction to Bridge - Information provided elsewhere in plan
Bridge Size - Information provided elsewhere in plan
Number of Decks - 1 (Typ.)
Asbestos Inspector/Amounts - Information provided by Engineer

Design No. 1376
File No. 25789
Design Sheet No. 1

The "Situation Plan" Sheet from Original Design Plans is Included For Information Only.

- ① Remove and replace the Paving Notch at the North Abutment.
- ② Replace portions of the Northwest and Southeast Barrier Rail End Sections.

Roadway Quantities shown elsewhere in these plans.

Traffic Control Plan

The roadway will be open to thru traffic. Refer to the Traffic Control Plan shown elsewhere in these plans.

Location

IA 376 over
Cunningham Drive
In City of Sioux City
T-89N R-47W
Section 34
Woodbury County
FHWA No. 052991
Bridge Maint. No. 9793.65376
Latitude 42.477199°
Longitude -96.380448°

Structural Design

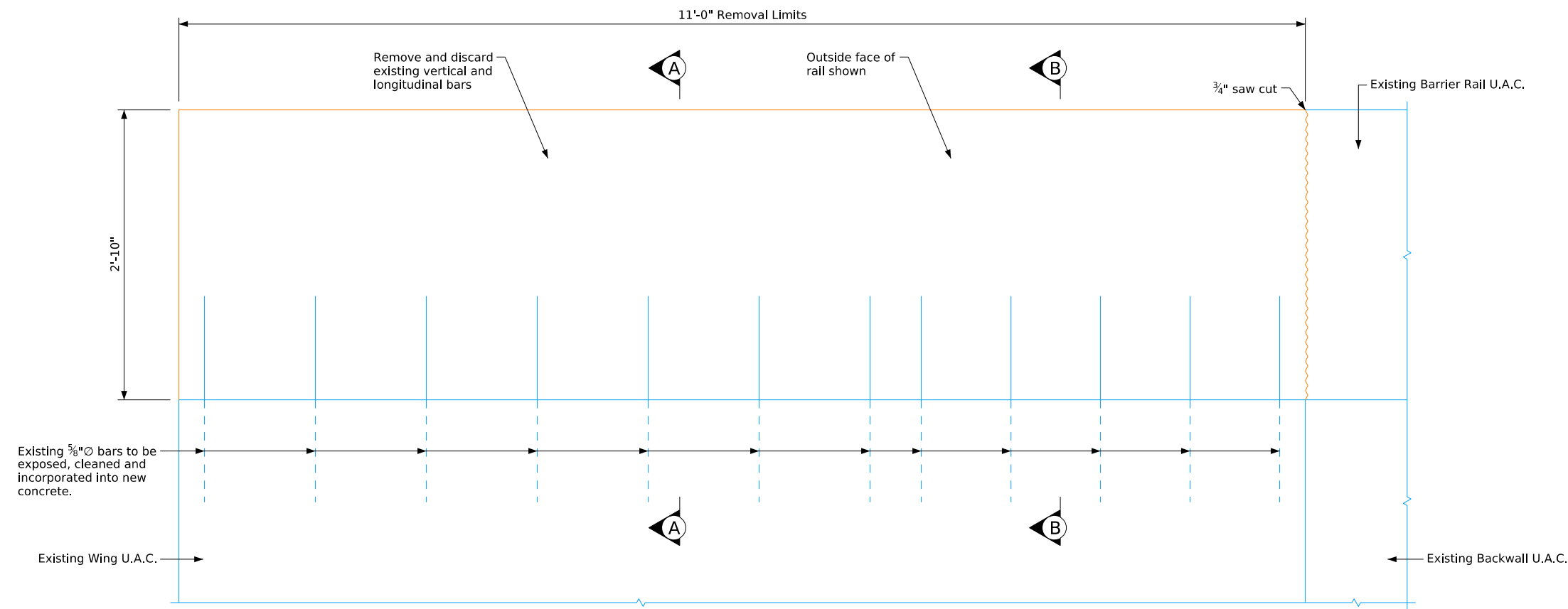


I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

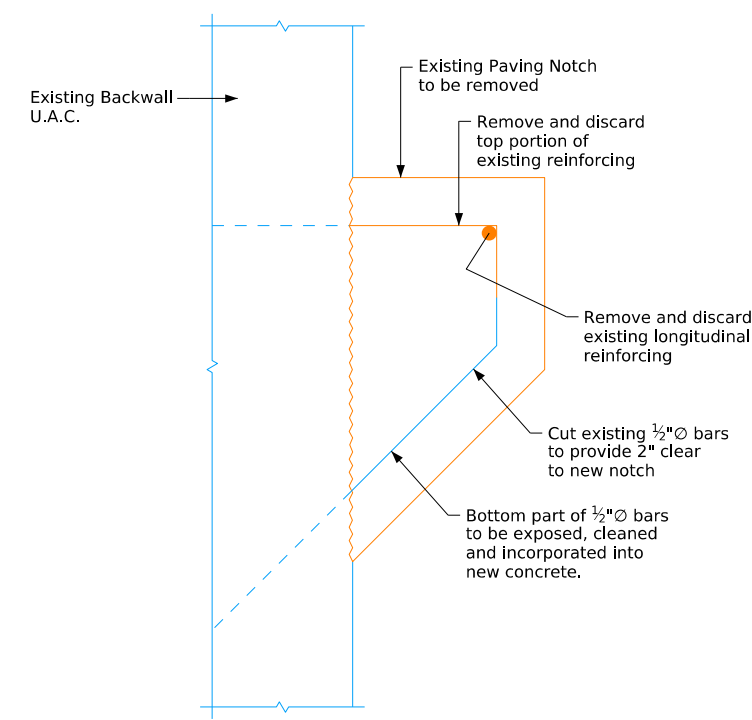
Robert D. Mitchell
Signature Robert D. Mitchell Date 5-4-2026
Printed or Typed Name
My license renewal date is December 31, 2027

Pages or sheets covered by this seal: V.1 thru V.4

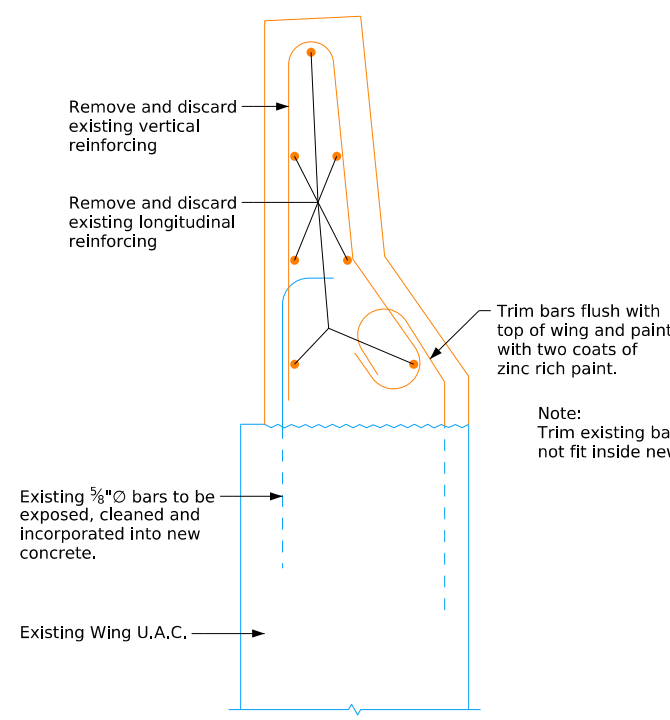
Design For Repairs to 4°30' Skew (RA)
159'-8" x 72'-0" Pretensioned
Prestressed Concrete Beam Bridge
47'-5" & 34'-11" End Spans 77'-4" Interior Span
Estimated Quantities & Notes
STA. 375+19.02 (IA 376) Turn-in Date: May 2026
Woodbury County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. 225 Design Sheet No. 1 of 4 FHWA No. 052991



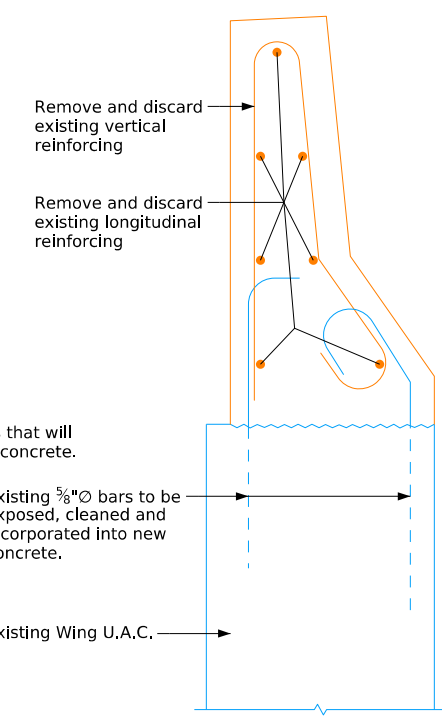
Northwest Rail End Section
(Looking East)
(S.E. corner similar)



Paving Notch Elevation



Section A-A



Section B-B

Design For Repairs to 4°30' Skew

159'-8" x 72'-0" Prestressed Concrete Beam Bridge

47'-5" & 34'-11" End Spans 77'-4" Interior Span

Removals

STA. 375+19.02 (IA 376) Turn-in Date: May 2026

Woodbury County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 225 Design Sheet No. 2 of 4 FHWA No. 052991

Revised 06-2017 - Added Statement in Paving Notch Replacement Note Paragraph "Granular Backfill and Compaction As Needed.". Updated Design History Table.
Revised 07-2019: Changed Bent Ends (Hook Leg) of 5k1 Bar to 6" (Was 4½"). Changed All References of "Slab" to "Deck".
EnglishMiscellaneousBridges.dgn - 1068 - This Sheet Issued 04-09
MiscellaneousBridges.dgn - 1068 - This Sheet Re-Issued 11-2023. Sheet Format Update.

* Construction joint for notch repair to extend a minimum of 3 inches past construction joint for pavement. Provide 2'-5" minimum lap for reinforcement.

Paving Notch Replacement Notes:

The Paving Notch Replacement is to be Class "C" structural concrete. Minimum clear distance from face of concrete to near reinforcing bar is to be 2", unless otherwise noted or shown. The bid item "Paving Notch Replacement" linear feet, shall include all costs of labor and materials associated with excavation, removing, and disposing of the existing paving notch, granular backfill and compaction as needed, and installing the new paving notch. This work shall include, cutting of the existing #4 bars, removing the concrete for the shear keyways, drilling the holes for the deformed dowels, and constructing the new notch to the dimensions shown. The new notch is estimated at 0.07 cubic yards per foot of structural concrete and 16.0 pounds of epoxy coated reinforcing steel per foot. Removals shall be in accordance with Section 2401, of the Standard Specifications.

Dowel Setting Note:

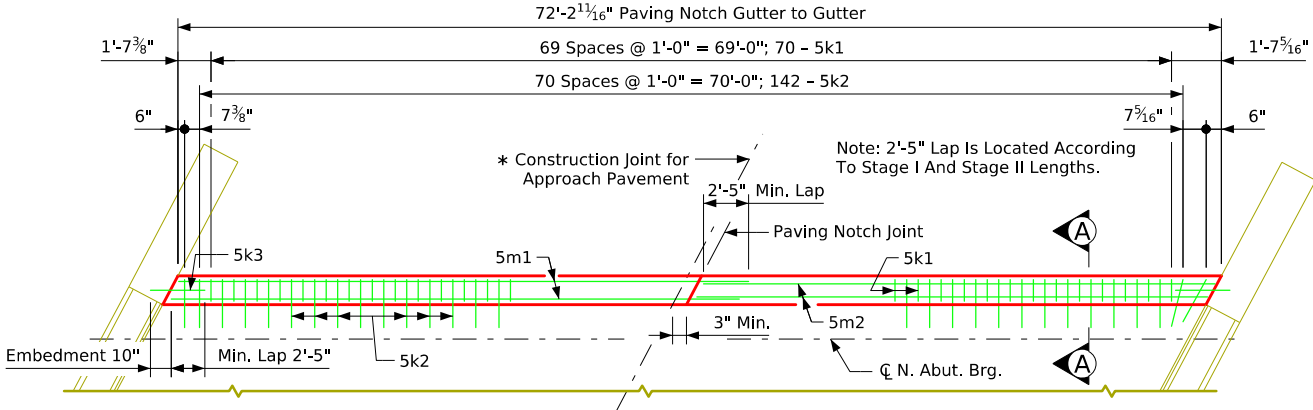
The deformed 5k2 & 5k3 bars shall be set as dowels in drilled holes. Holes are to be 10" deep. Polymer grout system shall be used to install the deformed dowel bars in accordance with Article 2301.03,E, of the Standard Specifications and the Grout Manufacturer's recommendations.

Specifications:

Design: AASHTO Series of 2002
Construction: Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, Series 2023, plus applicable General Supplemental Specifications, Developmental Specifications, Supplemental Specifications and Special Provisions shall apply to construction work on this project.

Design Stresses:

Design stresses for the following materials are in accordance with the AASHTO Standard Specifications for Highway Bridges, Series of 2002.
Reinforcing steel in accordance with Section 8, Grade 60.
Concrete in accordance with Section 8, f'c = 4.0 KSI.

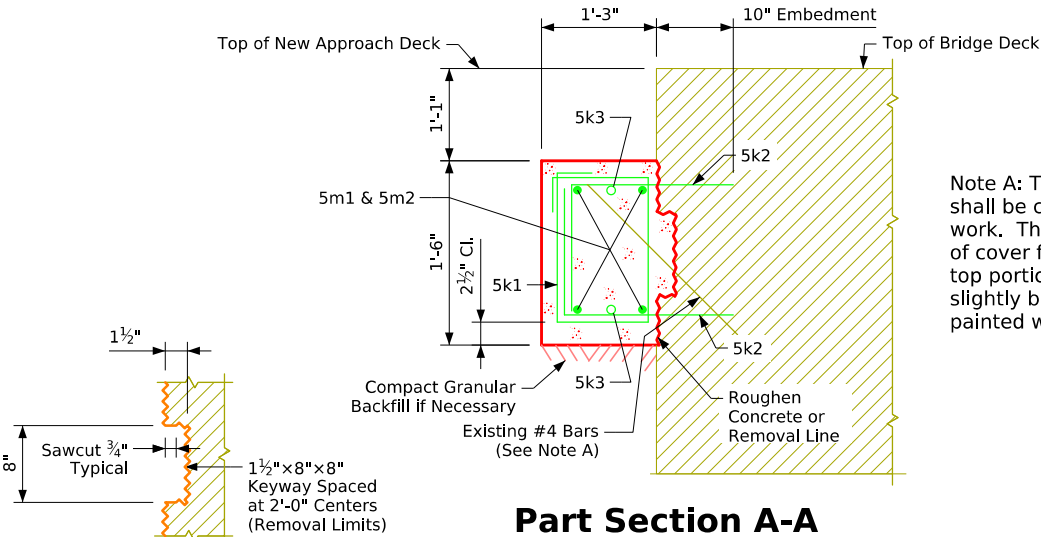
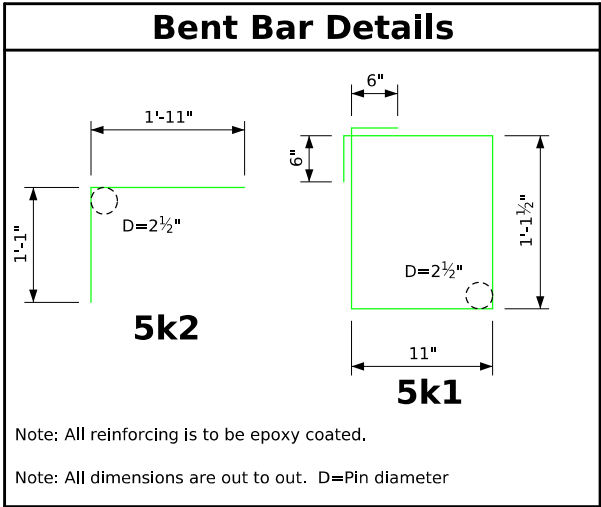


Note: Use "BR-203" approach pavement standard for moveable abutment.

Note: 5k3 bars shall be set as dowels embedding 10 inches minimum into the existing bridge wingwalls and extending a minimum of 2'-5" into the new paving notch replacement.

Part Plan View At North Abutment

Note: New Paving Notch Replacement should extend from bridge wingwall to bridge wingwall.



Note A: The bottom portion of the existing #4 bars shall be carefully exposed and incorporated into new work. The bar shall be cut off to provide 2 inches of cover from the top of the new paving notch. The top portion of the bar shall be cut off flush or slightly below the concrete surface and the ends painted with 2 coats of zinc rich paint.

1 1/2"x8" Keyway Detail

Note: Dowels shall be placed to miss any existing reinforcing steel exposed during removals.

Design For Repairs to 4°30' Skew

159'-8" x 72'-0" Prestensioned
Prestressed Concrete Beam Bridge

47'-5" & 34'-11" End Spans77'-4" Interior Span

Paving Notch Replacement

STA. 375+19.02 (IA 376)Turn-In Date: May 2026

Woodbury County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 225Design Sheet No. 3 of 4FHWA No. 052991

FILE NO. 32512	ENGLISH	DESIGN TEAM RDM/PES/DKT	Paving Notch Replacement	Standard Sheet 1068	Woodbury COUNTY	PROJECT NUMBER NHSX-376-1(015)–3H-97	SHEET NUMBER V.3
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