LETTING DATE 12-21-2021

HENRY / LOUISA COUNTY
HMA RESURFACING / HMA PAVED SHOULDER - NEW
STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58

4/7/2021 FIELD EXAM ATTENDEES:

via Microsoft Teams Videoconference:
Bahr, Jonathan (Road Design)
Jackson, Kari (Road Design)
Phillips, Jim (District 5)
Klein, Jared (District 5, Maintenance)
Fix, Scott (District 5, Maintenance)
Giarmo, Lauren (District 5, Construction)
Blint, Anthony (District 5, Construction)

IOWA DOT

Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM

HENRY / LOUISA COUNTY

HMA RESURFACING / HMA PAVED SHOULDER - NEW

IA 78 FROM WINFIELD E. TO US 61

SCALES: As Noted

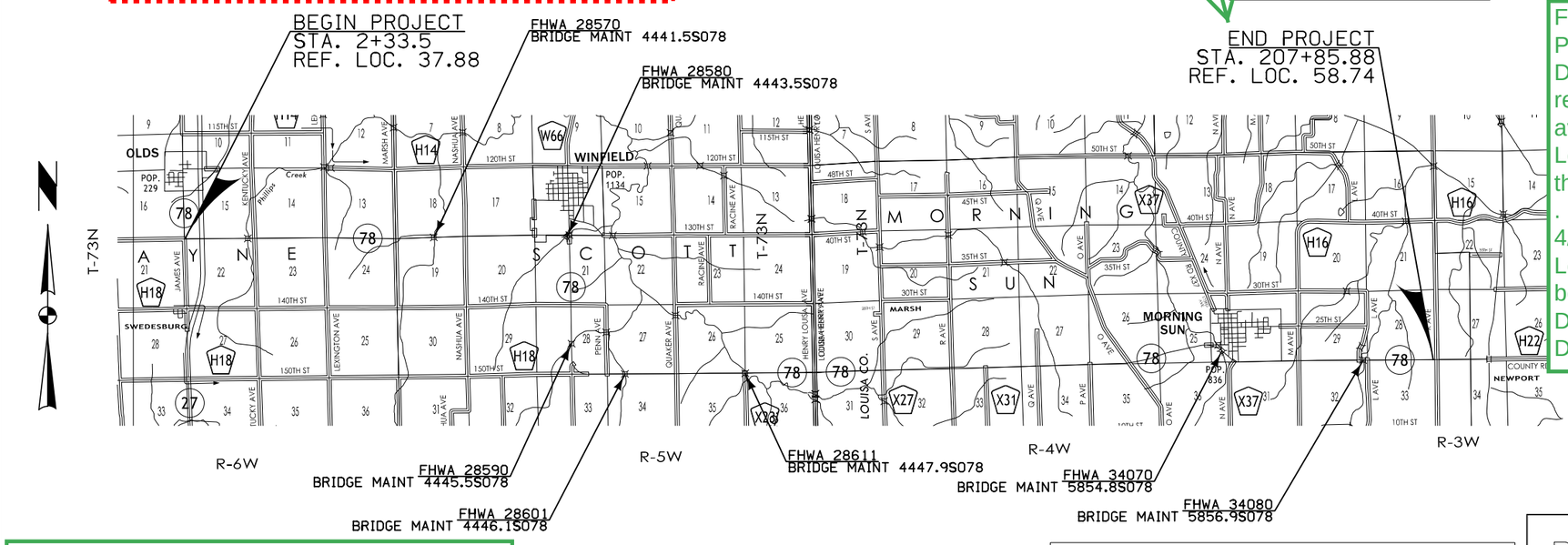
REVISIONS

	TOTAL
	--
PROJECT IDENTIFICATION NUMBER	
09-44-078-010	
PROJECT NUMBER	
STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	
R.O.W. PROJECT NUMBER	

INDEX OF SHEETS

FIELD EXAM NOTES:
See notes at bottom left hand corner of sheet A.2 regarding the plan set distribution of projects.
STP-078-4(29)--2C-44 and STP-078-4(29)--2C-44 / HSIPX-078-5(10)--3L-58.
All three projects were discussed during the same 4/7/2021 Field Exam Meeting.

FIELD EXAM NOTES:
End of Project is at pavement transition just to the west of the IA 78/US 61 intersection. (Station 207+78, MP 54.71).



FIELD EXAM NOTES:
Project Design Events may be revised pending Design Team 3R workload analysis. It has been recommended that the February 2022 Letting be avoided due to project congestion and that the Letting be no earlier than October 2021 or later than March 2022.
.
4/21/2021 UPDATE:
Letting Dates for project (29) and (19)/(10) have been REVISED from 12/21/2021 to 1/19/2022.
DM5 Event Date is now 9/28/2021.
D7 Event Date is now 11/02/2021.

Project Design Events:
DM5 – 08–31–2021
D7 – 10–05–2021

FIELD EXAM NOTES:
Design Team and District 5 shall coordinate with Bridges and Structures Bureau on special items identified by District 5 Maintenance.

LOCATION MAP SCALE
0 1 2 3
Miles

HENRY COUNTY DESIGN DATA RURAL		
2022 AADT	1,065	V.P.D.
2042 AADT	1,280	V.P.D.
2042 DHV	140	V.P.H.
TRUCKS	12	%
Total Design ESALs	409,080	

LOUISA COUNTY DESIGN DATA RURAL		
2022 AADT	1,524	V.P.D.
2042 AADT	1,821	V.P.D.
2042 DHV	190	V.P.H.
TRUCKS	12	%
Total Design ESALs	708,585	

INDEX OF SEALS

SHEET NO.	NAME	TYPE
A.1	Jonathan W. Bahr	Primary Signature Block
X	X	X

PRELIMINARY PLANS

Subject to change by final design.

D2 – Date: 04–01–2021

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY / LOUISA COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER A.1

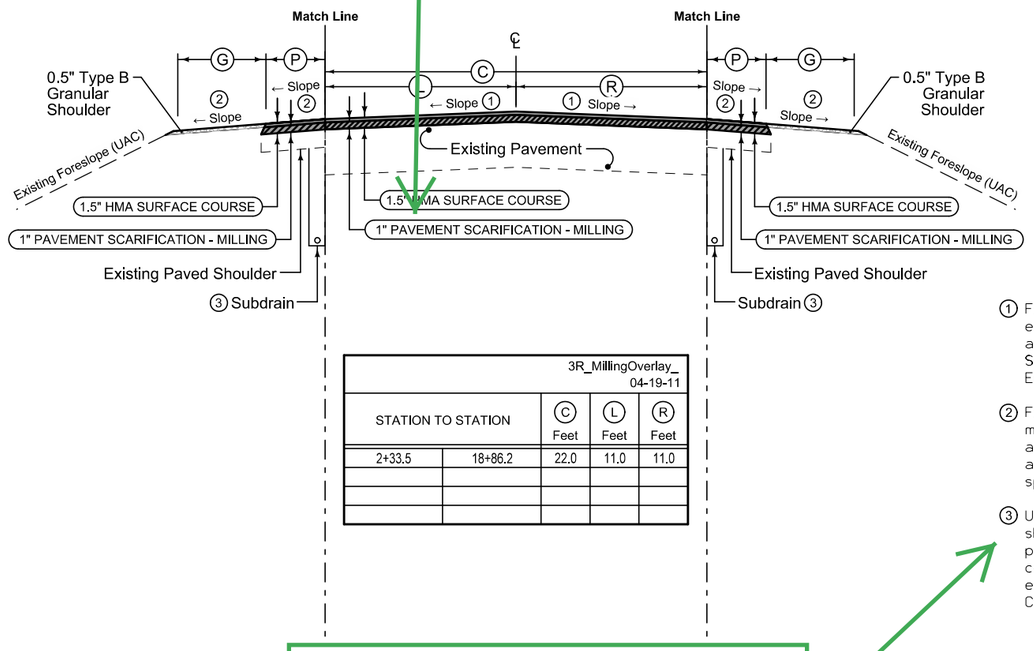
1:09:29 PM 4/1/2021 kjackso pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\4407801009\Design\CADD_Files\Sheet_Files\SHT_44078019_A01.dgn

Combination Shoulder

3R_Shldr_C_Overlay_
04-19-11

STATION TO STATION		(P) Feet	(G) Feet
2+33.5	18+86.2	2.0	3.0

FIELD EXAM NOTES:
District 5 Maintenance Team agreed to stockpile HMA Millings (or Class A Stone).
Primary Location: Reload Station (US 61 Milepost 61.7, a mile south of IA 78)
Secondary Location: Iowa DOT Maintenance Garage, 3001 Grandview Ave., Muscatine
Contact Person: Scott Fix (Maintenance Supervisor), mobile: 563-272-8660
(specification mentions each location can store up to 2500 tons of HMA milling for a 5000 ton combined maximum and Contractor has the option to deliver HMA Millings or Class A Stone).



3R_MillingOverlay_
04-19-11

STATION TO STATION		(C) Feet	(L) Feet	(R) Feet
2+33.5	18+86.2	22.0	11.0	11.0

1. Finished slope shall match existing pavement except the maximum allowable slope is 3.0% and the minimum allowable slope is 2.0%. Section may be modified as directed by the Engineer through areas of special shaping.
2. Finished slope of Shoulder shall have a minimum allowable slope of 4% and a maximum allowable slope of 6%. Section may be modified as directed by the Engineer through areas of special shaping.
3. UAC existing subdrain. All existing subdrain shall remain functional at all times (do not plug or crush). New subdrain shall be in contact with the granular material below the existing mainline pavement (see Tab 104-9 on CS sheets for proposed locations).

FIELD EXAM NOTES:
Design Team shall coordinate with Soils Bureau for design of proposed subdrain.

Combination Shoulder

3R_Shldr_C_Overlay_
04-19-11

STATION TO STATION		(P) Feet	(G) Feet
2+33.5	18+86.2	2.0	3.0

FIELD EXAM NOTES:
US 218 to Winfield (Section 2 in Project Concept) is associated with project STP-078-4(29)--2C-44. For the purposes of this D2 Meeting the Section 2 detail was included in the plan set and the extents were included on the Cover Sheet's Location Map.
.
The Design Team shall contact the Contracts group and discuss the possibility of merging project STP-078-4(29)--2C-44 into the plans for STP-078-4(29)--2C-44 / HSIPX-078-5(10)--3L-58 or whether STP-078-4(29)--2C-44 needs to be extracted from this plan set and be included in its own set of plans.
.
4/21/2021 UPDATE: Project STP-078-4(29)--2C-44 will be broken out into its own set of plans on subsequent submittals. STP-078-4(29)--2C-44 / HSIPX-078-5(10)--3L-58 will remain sharing a set of plans.

FIELD EXAM NOTES:
Contingency Percentages to be utilized for projects (29), (19), (10):
HMA Material: 5%
Granular Shoulder: 20%
Patches: 5%

See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

Notes:

1. Stationing on typical sections does not include gapping for bridges, sideroads, or entrances. Refer to tabulations and details for precise stationing and quantities.

IA 78 HMA RESURFACING WITH MILLING

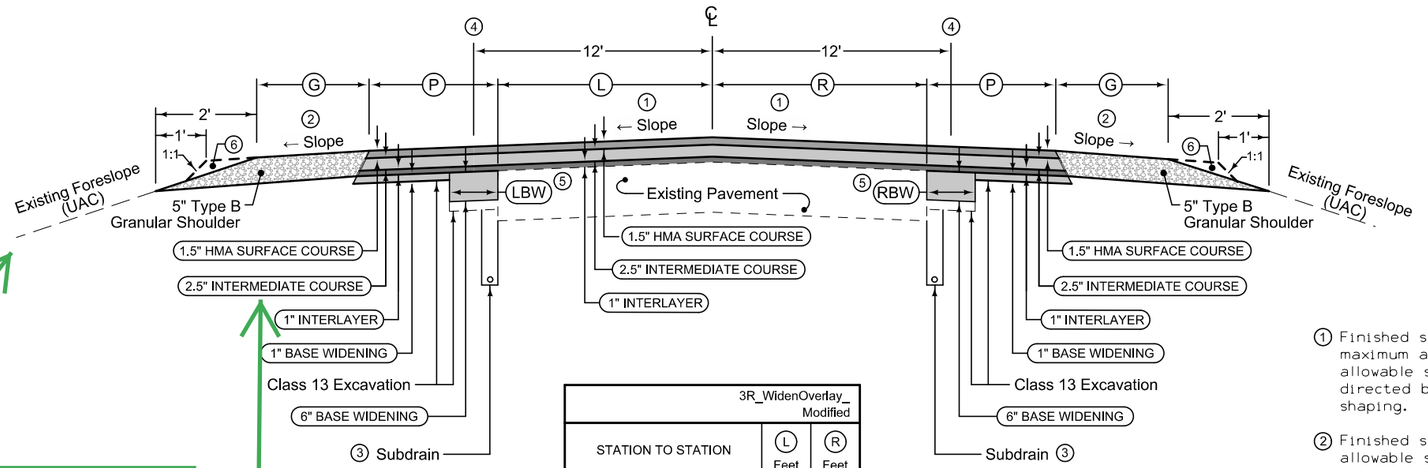
(US 218 to Winfield)

Combination Shoulder with Widening

Shoulder Jointing:
Longitudinal joint: B

STATION TO STATION		3R_Shldr_Paved_Modified		
		(LBW) Feet	(P) Feet	(G) Feet
18+86.2	625+87.3 (E1)	2.0	5.0	4.0
12+00 (E1)	17+36 (E2)	2.0	5.0	4.0

STATION EQUATION (E1) 625+87.3 (BK) = 12+00 (AH)
(E2) 17+36 (BK) = 17+38 (AH)



STATION TO STATION		3R_WidenOverlay_Modified	
		(L) Feet	(R) Feet
18+86.2	625+87.3 (E1)	11.0	11.0
12+00 (E1)	17+36 (E2)	11.0	11.0

STATION EQUATION (E1) 625+87.3 (BK) = 12+00 (AH)
(E2) 17+36 (BK) = 17+38 (AH)

Combination Shoulder with Widening

Shoulder Jointing:
Longitudinal joint: B

STATION TO STATION		3R_Shldr_Paved_Modified		
		(RBW) Feet	(P) Feet	(G) Feet
18+86.2	625+87.3 (E1)	2.0	5.0	4.0
12+00 (E1)	17+36 (E2)	2.0	5.0	4.0

STATION EQUATION (E1) 625+87.3 (BK) = 12+00 (AH)
(E2) 17+36 (BK) = 17+38 (AH)

1. Finished slope shall match existing pavement except the maximum allowable slope is 3.0% and the minimum allowable slope is 2.0%. Section may be modified as directed by the Engineer through areas of special shaping.

2. Finished slope of Shoulder shall have a minimum allowable slope of 4% and a maximum allowable slope of 6%. Section may be modified as directed by the Engineer through areas of special shaping.

3. UAC existing subdrain. All existing subdrain shall remain functional at all times (do not plug or crush). New subdrain shall be in contact with the granular material below the existing mainline pavement (see Tab 104-9 on CS sheets for proposed locations).

4. Edge of Traveled Way and white painted edge line to be located at 12 ft Rt and Lt of Centerline. See current Standard Specifications and Road Standards for placement of Shoulder Rumble strips for information. See Tab 112-10 for Locations.

5. 6 inches of Special Backfill is required beneath the Base Widening unit when Base Widening unit is part of the proposed traffic lane.

6. Place and compact material to the dashed lines; then blade and shape to foreslope that portion above the solid line in the outer 2 ft and roll with loaded truck tire.

FIELD EXAM NOTES:
District 5 Maintenance (Scott Fix) mentioned ditch reshaping may be needed in certain areas. Field Crews will identify and tabulate locations and lengths of Ditch Reshaping for Jim Phillips and the Office of Location and Environment to review and approve before adding to the project scope. (one possible location is NWC of Bridge FHWA 34080, 5856.9S078 at MP 56.9, station 248+51.5, north of Mount Union).

FIELD EXAM NOTES:
This project will utilize Rumble STRIPES to provide additional space for bicyclists on the shoulders. Rumble Stripes shall NOT be utilized within the Corporate Limits of Winfield and Morning Sun.
.
Multiple Pavement Marking applications of edgeline will be added to accommodate sequence of final surface construction and subsequent installation of Rumble Stripes.

FIELD EXAM NOTES:
The Project Concept says "1" HMA Interlayer, 2.5" leveling/strengthening course, plus a 1.5" Standard HMA." for Section 3 (Winfield to Morning Sun) The Design Team asked the District if the 2.5" leveling/strengthening course should be identified as a "Scratch Course" and be placed beneath the interlayer since the existing pavement in this section (IA 78, Winfiled to Morning Sun) is PCC.
.
Jim Phillips (District 5) confirmed in a 4/7/2021 e-mail at 1:28pm the following sequence (from existing pavement surface up):
2.5" Scratch Course, 1" Interlayer, 1.5" Surface Course. This is because the existing pavement is PCC. If the existing pavement was HMA it would be 1" Interlayer, 2.5" Scratch Course, 1.5" Surface Course.
.
A note shall be added to the typical that "Scratch Course consists of a a HMA Mixture Leveling or Strengthening Course" and be bid as 2303-0001000 HOT MIX ASPHALT MIXTURE, WEDGE, LEVELING OR STRENGTHENING COURSE (TON).

FIELD EXAM NOTES:
"Urban" Funding Division shall be used within the Corporate Limits of Winfield AND Morning Sun. "Rural" Funding Division shall be used elsewhere.

Notes:

1. Stationing on typical sections does not include gapping for bridges, sideroads, or entrances. Refer to tabulations and details for precise stationing and quantities.

IA 78 WIDENING/HMA RESURFACING

(Winfield to Morning Sun)

FIELD EXAM NOTES:
A "Suggested Sequence of Construction" shall be added to the J sheet. The Sequence shall indicate that the construction of the CIR course shall come before the installation of the Paved Shoulder. Such an order of operation will allow the CIR to cure better (rationale not needed on J-Sheet).

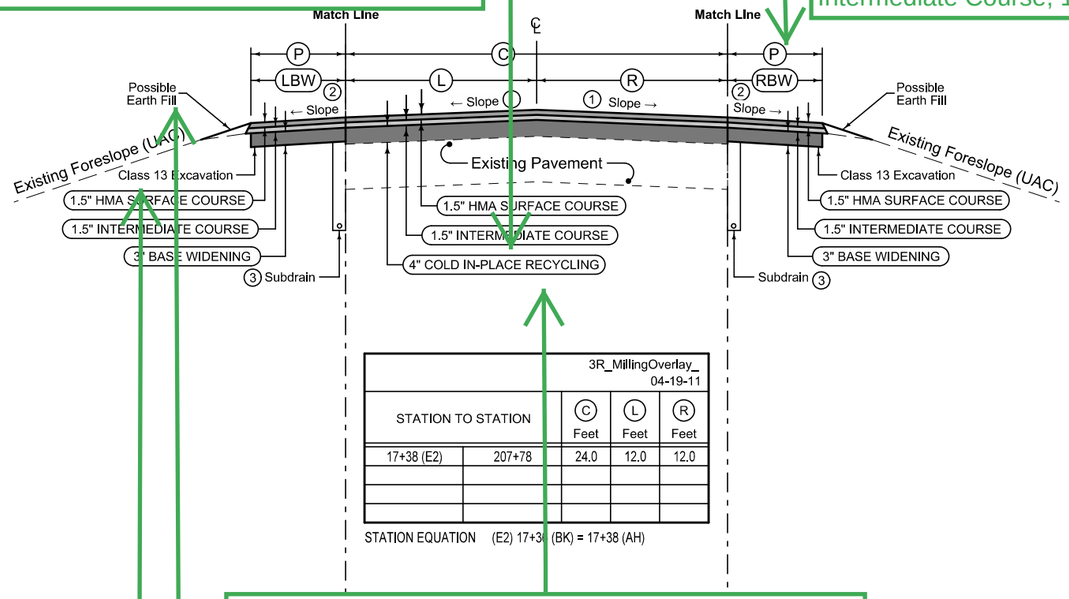
FIELD EXAM NOTES:
Composition of the Morning Sun to US 61 HMA Shoulder was confirmed as 3" Base Widening, 1.5" Intermediate Course, 1.5" Surface Course (6" total).

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

STATION TO STATION		3R_Shldr_Paved_Modified LBW Feet	P Feet
17+38 (E2)	207+78	4.0	4.0

STATION EQUATION (E2) 17+36 (BK) = 17+38 (AH)



STATION TO STATION		3R_MillingOverlay_04-19-11 C Feet	L Feet	R Feet
17+38 (E2)	207+78	24.0	12.0	12.0

STATION EQUATION (E2) 17+3[illegible] (BK) = 17+38 (AH)

FIELD EXAM NOTES:
Composition of the Morning Sun to US 61 HMA Mainline was confirmed as 4" CIR, 1.5" Intermediate Course, 1.5" Surface Course (3" net gain in elevation).

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

STATION TO STATION		3R_Shldr_Paved_Modified LBW Feet	P Feet
17+38 (E2)	207+78	4.0	4.0

STATION EQUATION (E2) 17+36 (BK) = 17+38 (AH)

(1) Finished slope shall match existing pavement except the maximum allowable slope is 3.0% and the minimum allowable slope is 2.0%. Section may be modified as directed by the Engineer through areas of special shaping.

(2) Finished slope of Shoulder shall have a minimum allowable slope of 4% and a maximum allowable slope of 6%. Section may be modified as directed by the Engineer through areas of special shaping.

(3) UAC existing subdrain. All existing subdrain shall remain functional at all times (do not plug or crush). New subdrain shall be in contact with the granular material below the existing mainline pavement (see Tab 104-9 on CS sheets for proposed locations).

FIELD EXAM NOTES:
District 5 Maintenance Team declined to stockpile Class 13 Excavation Material.
.
District 5 Construction Team prefers to flip the material to the foreslope and utilize Class 13 Excavation as Earth Shoulder Construction material. The Design Team shall replace the callout for "Possible Earth Fill" with "Earth Shoulder Construction" and add notes specifying the use of Class 13 Excavation material as Earth Shoulder Construction material. Furthermore, while Earth Shoulder Construction is bid by Station, the Design team will distinguish how much Class 13 Excavation Material will be utilized as Earth Shoulder construction material and how much will need to be hauled offsite.

See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

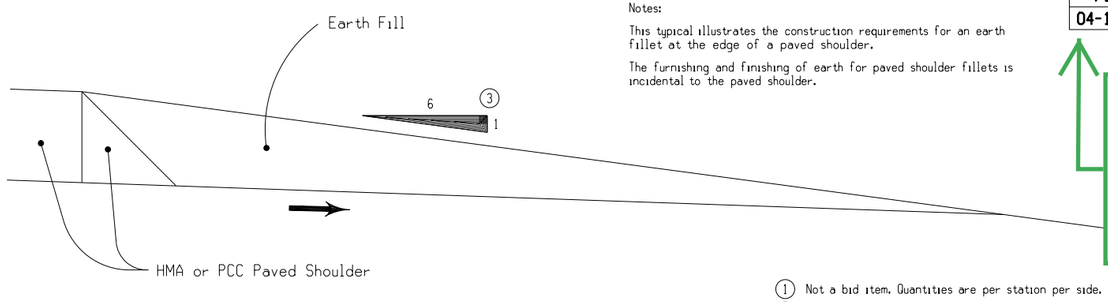
Notes:

1. Stationing on typical sections does not include gapping for bridges, sideroads, or entrances. Refer to tabulations and details for precise stationing and quantities.

IA 78 CIR, HMA Resurfacing, and Widening

(Morning Sun to US 61)

7146
04-15-03



Notes:

This typical illustrates the construction requirements for an earth fillet at the edge of a paved shoulder.

The furnishing and finishing of earth for paved shoulder fillets is incidental to the paved shoulder.

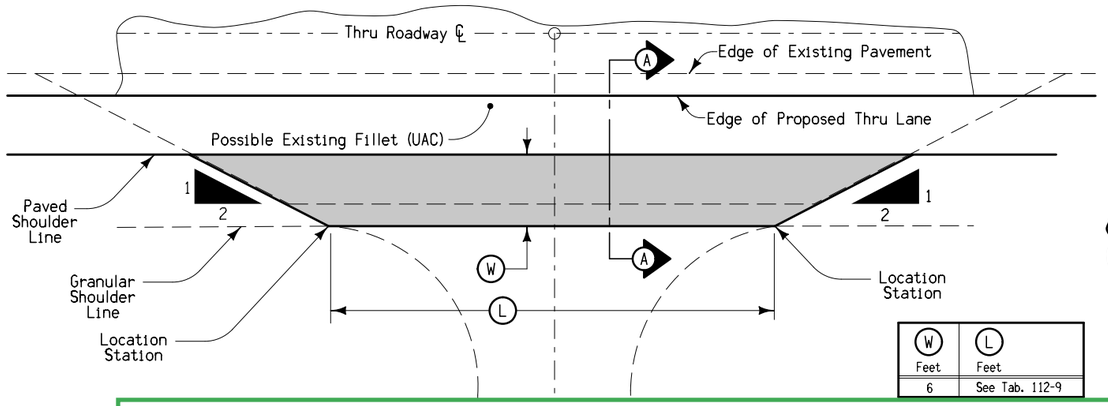
FIELD EXAM NOTES:
See Field Exam Note regarding Earth Fill/Class 13 Excavation/Earth Shoulder Construction on Sheet B3. Detail 7146 may be modified or Tabulation 112-9 (Shoulders) may be modified to accommodate the Field Exam Note.

(1) Not a bid item. Quantities are per station per side.
(2) Match slope of under side of shoulder pavement.
(3) 6:1 Slope minimum.

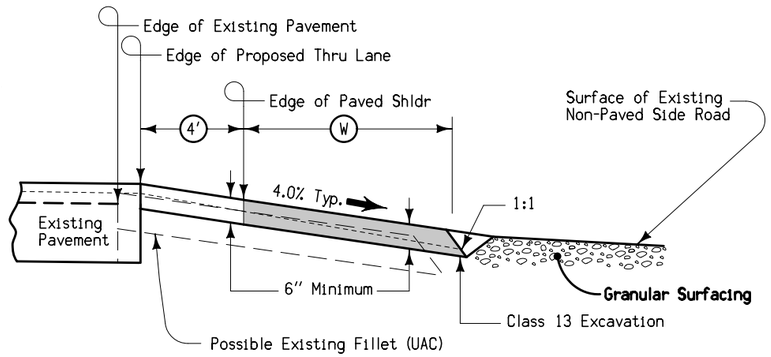
LOCATION				QUANTITIES (1)	
ROAD IDENTIFICATION	STATION TO STATION		SIDE	EARTH FILL	
				PCC Cu. Yds.	HMA Cu. Yds.

EARTH FOR PAVED SHOULDER FILLET

7148-SR
Modified



W Feet	L Feet
6	See Tab. 112-9



SECTION A-A

Notes:

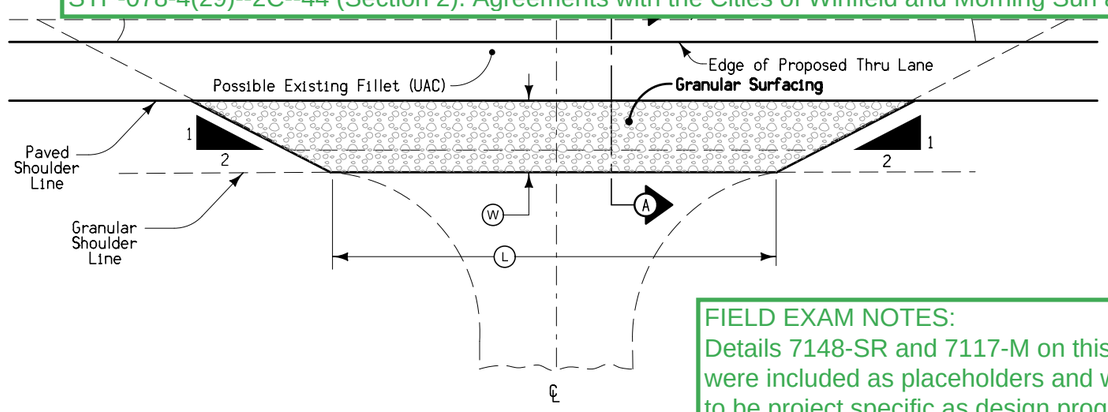
1. Special shaping of existing surface prior to placement of fillet may be required by the Engineer and is incidental to other work on the project.
2. Fillet information is tabulated with Shoulders. See Tab. 112-9 (Shoulders).

FIELD EXAM NOTES:
Henry and Louisa Counties declined participation of 50' runouts for non-paved sideroads within limits of project STP-078-4(19)--2C--44 (Section 3). However, Henry County is considering participation of 50' runouts for non-paved sideroads within limits of project STP-078-4(29)--2C--44 (Section 2).
.
4/19/2021 UPDATE: Henry County declined participating in paving gravel sideroads within the limits of project STP-078-4(29)--2C--44 (Section 2). Agreements with the Cities of Winfield and Morning Sun are still pending.

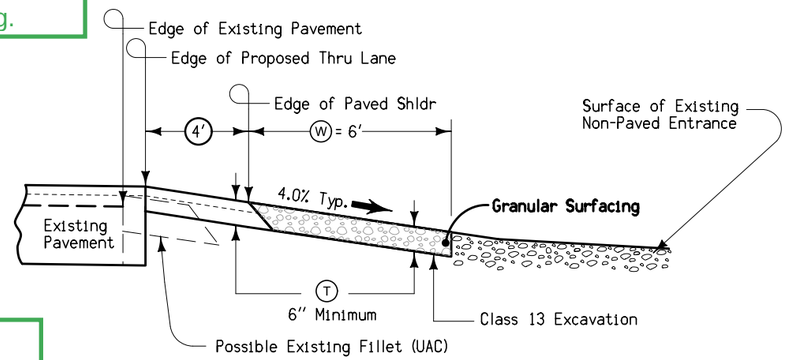
FILLET FOR NON-PAVED SIDE ROADS

CASE 'A' - Existing Paved Fillet Less Than or Equal to 4'

7117-M
Modified



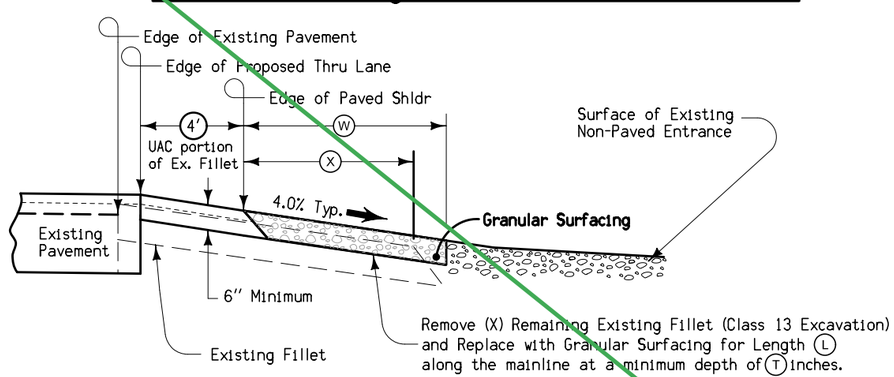
PLAN



SECTION A-A

FIELD EXAM NOTES:
Details 7148-SR and 7117-M on this D2 plan set were included as placeholders and will be developed to be project specific as design progresses.

CASE 'B' - Existing Paved Fillet Greater Than 4'



SECTION A-A

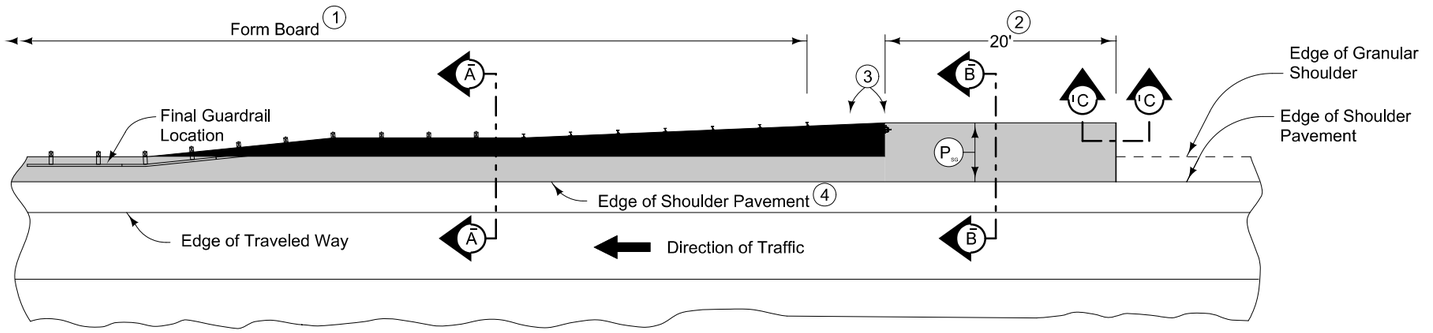
ENTRANCE TABULATION

3R_Shldr_Paved_ Modified

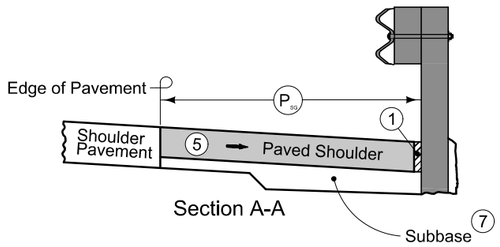
LOCATION STATION	X Feet	L Feet	W Feet	T Inches	Class 13 Excavation CY	Granular Surfacing (140 lbs/cf) TON
CASE 'A' TABULATION						
XX Entrances	-	XX AVG	6	6	XX.X	XX.X
CASE 'B' TABULATION						
XX+X LT/RT	5	47	6	6	6.6	12.5
CASE 'B' TOTALS					XX.X	XX.X
Class 13 Excavation / Granular Surfacing TOTALS					XX.X	XX.X

FIELD EXAM NOTES:
District 5 (Lauren Giarmo) indicated the District 5 field team could catalog existing entrances (locations and surface material) and pass the information on to the Design Team.

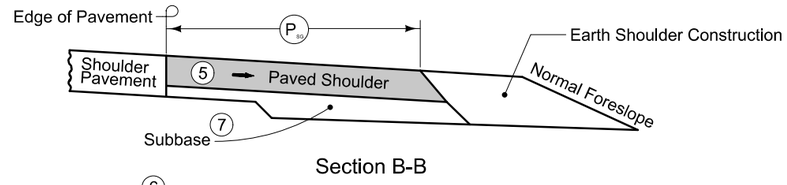
GRANULAR SHOULDER CONSTRUCTION THRU ENTRANCES



PLAN VIEW

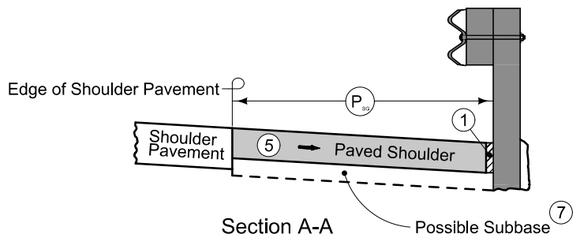


Section A-A

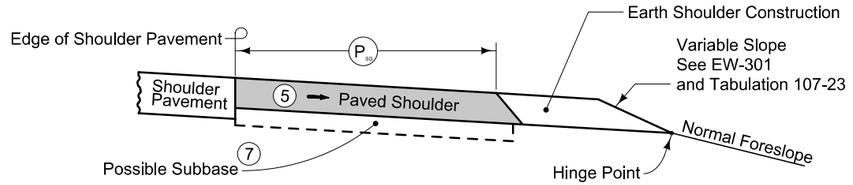


Section B-B

NEW CONSTRUCTION
6



Section A-A



Section B-B

EXISTING SHOULDER

DESIGNER INFO 7157 10-20-20

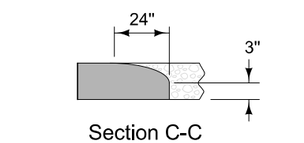
9" HMA Paved Shoulder at guardrail. 8" PCC may be substituted with the following jointing layout:

Match mainline pavement joint spacing. When mainline pavement is 8" or greater in thickness, place additional transverse 'C' joints in shoulder at mid-panel of the mainline pavement. Place longitudinal 'C' joint at P/2 from edge of mainline pavement when P is greater than 10' wide. Terminate longitudinal joint at transverse joint less than 10' in length.

Compaction of HMA is required to face of guardrail post. Hand compaction will be allowed under guardrail. Removal and reinstallation of guardrail will be allowed with no additional payment.

Refer to Tabulation 112-9 for shoulder quantities.

1. PCC option only: When guardrail posts are installed prior to construction of PCC paved shoulder, fasten form board to the face of guardrail posts for the length shown.
2. Continue paved shoulder 20 feet beyond the center of the first post.
3. Shoulder may be notched for first 2 posts or post sleeves may be installed through pavement. Do not drive posts through pavement.
4. 'KT-1 joint for PCC shoulder.
   'B' joint for HMA shoulder.
5. Match shoulder slope.
6. The Contractor has the option to pave the paved shoulder at guardrail and the partial width paved shoulder as one operation.
7. Refer to other details in the plan.

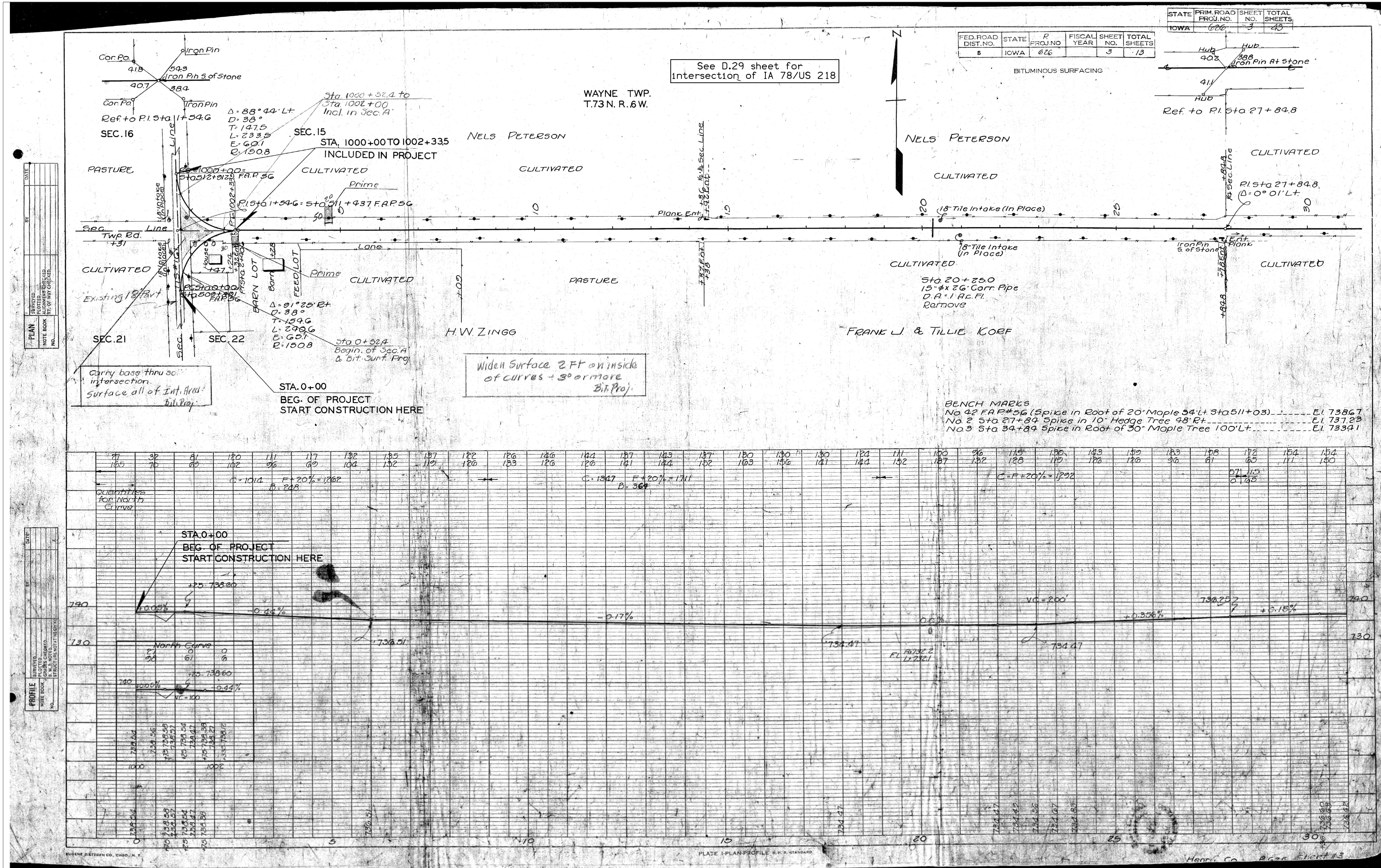


Section C-C
Roll down at granular shoulder or earth.

PAVED SHOULDER AT GUARDRAIL
(ADJACENT TO PARTIAL WIDTH PAVED SHOULDER)

FIELD EXAM NOTES:
District 5 Maintenance Team declined to stockpile existing guardail beam and posts that are being removed.

FIELD EXAM NOTES:
Detail 7157 on this D2 plan set was included as a placeholder. Additional "Paved Shoulder at Guardrail" details may be included in subsequent submittals to accomodate the varying conditions found within the project limits.



This Sheet
For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY / LOUISA COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D1

10:21:14 AM 3/10/2021 kjackso pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\4407801009\Design\CADD_Files\Sheet_Files\SHT_44078019_D01_D10.dgn

STATE	PRIM. ROAD PROJ. NO.	SHEET NO.	TOTAL SHEETS
IOWA	626	4	43

FED. ROAD DIST. NO.	STATE	PROJ. NO	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IOWA	626		4	13

BITUMINOUS SURFACING

WAYNE TWP.
T. 73 N. R. 6 W.

N

Wood Hubs
Ref. to P.O.T. Sta 35+64.9
27.3 35.1 Iron Pin
37.4 38.9

HOMER AND NINA ZINGG

CULTIVATED
ORCHARD
House
Lawn
Barns
Barn Lot
Prime
16"ø Clay Tile
P.O.T. Sta 35+64.9
FEED LOT
PASTURE
CULTIVATED
MEADOW
PASTURE
HOG LOT
ORCHARD
Conc. Curb
Lawn
House
Prime
Grapes
8"ø Clay Tile
Garden
FRANK J. AND TILLIE KORF

Sta 42+90.7
3'x3'x38' Conc. Box
DA - 80 Ac. R.
Extend to fit grade

Sta 49+40.2
16'x20' R.C. Slab Bridge
Conc. Abuts. and Handrails
DA. - 2400 Ac. F. to R.
Use as Constructed

PASTURE

SEC. 15 | SEC. 14

CHARLES A. SANDEEN & BERNT F. BENSON

PASTURE
Prime
P.I. Sta 54+76.0
Δ - 0°11'5" Lt.
Stone & Iron Pin
18"ø x 24' Corr. Pipe
Daylight
Garden
Barn
Yard
Lawn
ORCHARD & GARDEN
Corn Crib
Hog Lot
Barn
Prime
Ho.

SEC. 22 | SEC. 23

AXEL NORMAN

Ref. to P.I. Sta 54+76.0
Hub
42.8
38.7
Iron Pin At Stone
37.6
45.2
Hub

Approx. Sta. 33+75 to Sta. 36+25
250 Lin. Ft. frost boil treatment and 2 drains.
Bit. Proj.

BENCH MARKS
No. 3 Sta 34+84 Spike in Root of 30" Maple 100' Lt. ---------- El. 733.41
No. 4 Sta 49+40 (X) on Center of S. Handrail 16' Conc. Bridge ---------- El. 706.73

xRC = 400

154	154	135	133	167	222	285	280	189	148	210	204	110	91	122	230	311	254	83	0	0	0	0	107	276	343	420	420	232	165	113	78	82
111	130	167	169	134	111	72	137	187	133	193	202	244	259	196	70	36	250	289	191	40	77	182	208	283	202	20	11	76	139	167	194	209
C=F+20%=794		103 / 0	64 / 154	C=F+20%=1013									91 / 138	121	C=F+20%=500		228 / 96	93 / 0	C=F+20%=420	83 / 109	0 / 189	Rdy.=366		C=F+20%=1710			672 / 0	848 / 11	Rdy.=1026		F+20%=1874	
																					X.R.C.=192							X.R.C.=848			
																					C.=1718							C.=1274			

8"ø 600 By daylighting
Road Intersection

+0.15%
C=+18-737.10
VC=764'
-2.30%
VC=200'
Ent. Lt.
Ent. Rt.
-1.10%
FL Rt. 706.6
Lt. 706.9
VC=200'
-2.20%
VC=540'
+1.20%
+1.80%
VC=206'
Twp. Rd.
Lt.
Rt.
E.C. Rt.
+30=726.92
+72
+82
+96
+72
+92.4
+22
70.60
69.60

740	730	720	710	700	30	35	40	45	50	60
736.40	736.60	736.63	736.62	736.62	736.81	736.00	736.61	737.10	737.15	737.27	737.81	738.00	738.20	738.10	738.00	737.80	737.50	737.60	737.26	737.40	737.25	737.13	737.38	737.68	738.05	738.40	738.36	738.07	737.69	737.60	737.69	737.85	738.28	738.38	738.47	738.60	738.55	738.02	738.50

PLATE I-PLAN-PROFILE B. P. R. STANDARD

Henry Co. 626 4

This Sheet
For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D2

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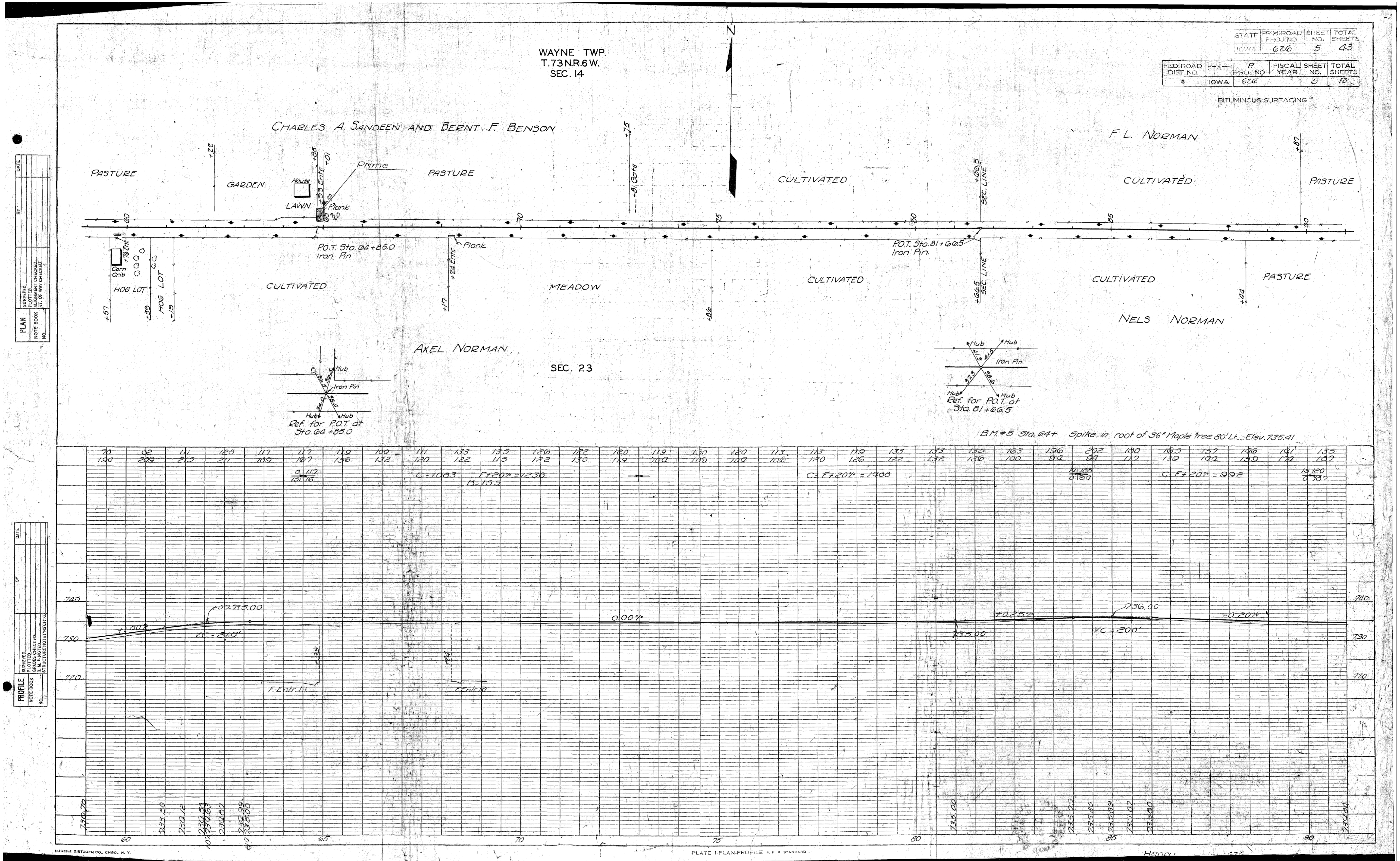

This Sheet
For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D3

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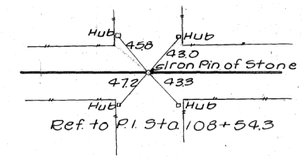
STATE	PRIM. ROAD PROJ. NO.	SHEET NO.	TOTAL SHEETS
IOWA	626	6	43

FED. ROAD DIST. NO.	STATE	P. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IOWA	626		6	13

BITUMINOUS SURFACING

WAYNE TWP.
T. 73 N. R. 6 W.



N

SEC. 14 SEC. 13

SEC. 23 SEC. 24

F. L. NORMAN

PASTURE

Barn

Fed Lot

Fence

House

GARDEN

ORCHARD

℄ Tile Line

MEADOW

Prime

P.I. Sta 108+54.3
Δ = 1° 28' Rt.

Abandoned School House

Well

Conc. Slab

Stone & Iron Pin

Planted

Shed

Feed Yard

Hog Lot

Barn

Corn Crib

Lot

Barn

Garage

Hog Lot

Barn

Barn Lot

House

Sta. 94+91.3
15"ϕ X 24' Corr. P.
D.A. = 2 Ac. Fl.
Build 2'X2'X36' R.C.B.
At Sta. 94+91

NELS NORMAN

B. F. BENSON

THEODORE L. & ADA B. RUSSELL

PASTURE

PASTURE

CULTIVATED

CULTIVATED

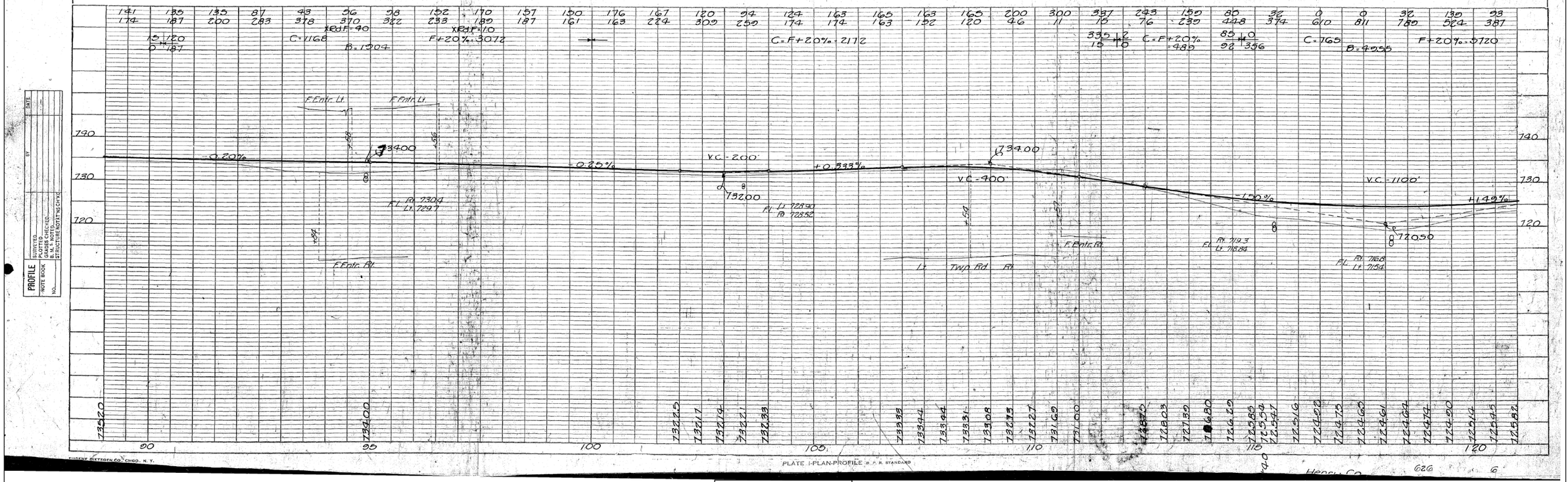
Sta. 115+42.3
20"ϕ X 19" Vitr. Tile
With Conc. Hdwls.
D.A. = 150 Ac. Fl.-R.
Build 8'X4'X41'
R.C.B. 30° Skew.
At Sta. 115+26

Sta. 118+08.2
12"ϕ X 21" Vitr. Tile
With Conc. Hdwls
D.A. = 1.5 Ac. R.
Build 2'X2'X40' R.C.B.
At Sta. 118+08

THEODORE RUSSELL

BENCH MARKS
No. 6 Sta. 92+35 Spike in Root of 30" Maple 55' Lt. ----- El. 732.96
No. 7 Sta. 108+75 Spike in Root of 20" Maple 75' Lt. ----- El. 732.91

PLAN
SURVEYED
PLOTTED
NOTE BOOK
NO.
BY
DATE
ALIGNMENT CHECKED
RT. OF WAY CHECKED



PROFILE
SURVEYED
PLOTTED
NOTE BOOK
NO.
BY
DATE
GRADES CHECKED
B. M. & NOTES
STRUCTURE NOTATIONS CHKD.

EUGENE DIETZGEN CO. CHGO. N. Y.

PLATE I-PLAN-PROFILE - B. P. R. STANDARD

Henry Co. 626 6

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FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D4

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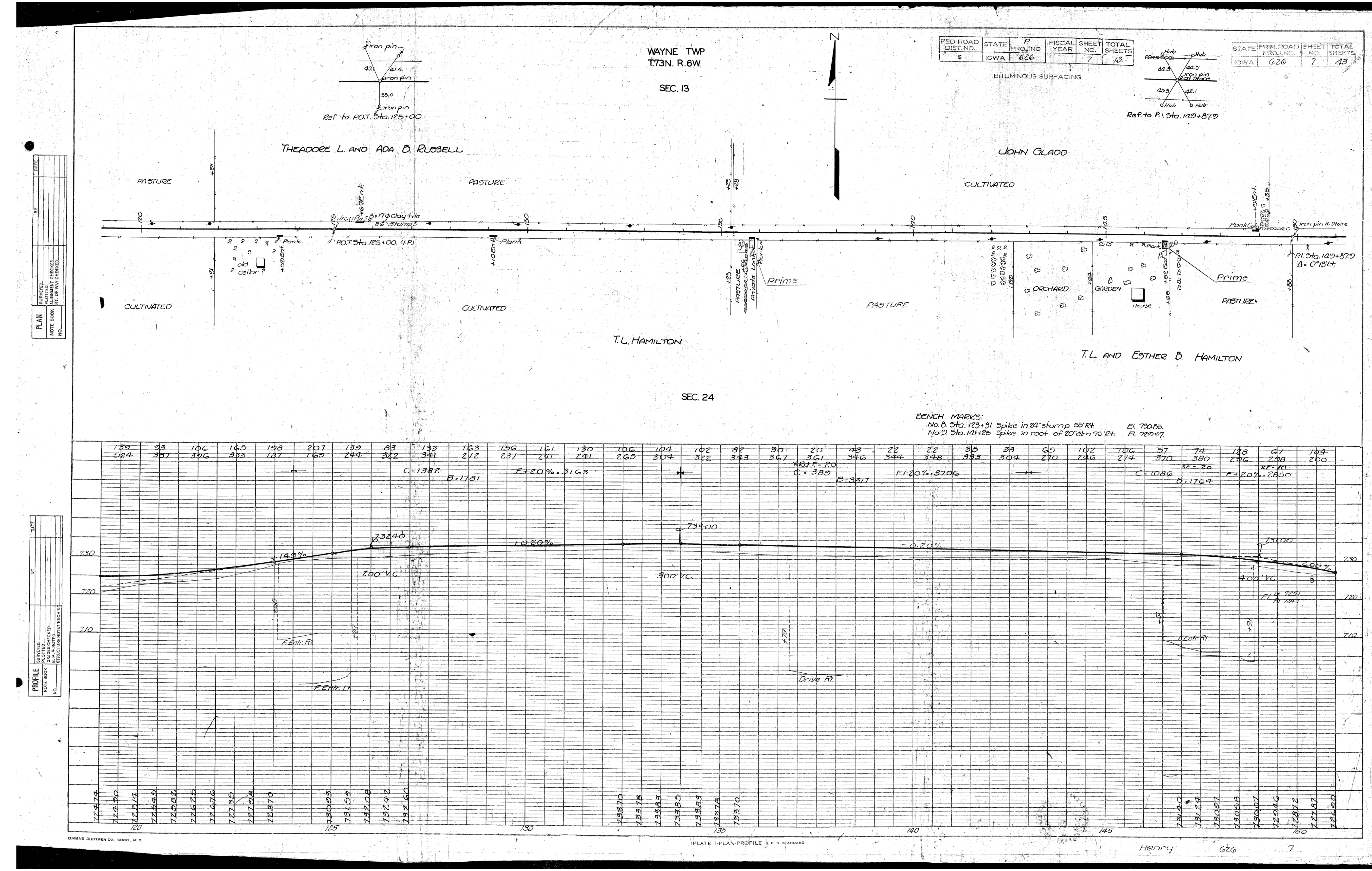

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For Information Only

FILE NO. 30406 | ENGLISH | DESIGN TEAM HOLST / BAHR / JACKSON | HENRY COUNTY | PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58 | SHEET NUMBER D5

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FED. ROAD DIST. NO.	STATE	PROJ. NO	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IOWA	626		8	13

STATE	PRIM. ROAD PROJ. NO.	SHEET NO.	TOTAL SHEETS
IOWA	626	8	43

BITUMINOUS SURFACING

WAYNE TWP.
T. 73 N. R. 6W.

SCOTT TWP.
T. 73N. R 5W.

JOHN GLADD

WM. A. JOHNSON

ANDREW GLADD ET AL

SEC. 13

SEC. 18

SEC. 24

SEC. 19

CARL VICTOR AND MABEL ESTHER SANDERS

E. H. BURGE

Ref. for P.I. at Sta. 149+87.9

Ref. for POT at Sta. 158+32.8

Ref. for P.I. at Sta. 162+75.7

Approx. Sta 157+75 to Sta 160+25 — 250 Lin. Ft. Frost Boil Treatment and 2 drains

Approx. Sta. 131 to Sta. 133 +50 250 Lin. Ft. frost boil treatment and 2 drains.

Approx. Sta. 137+75 to Sta. 160+25. 250 Lin. Ft. frost boil treatment and 2 drains.

Barn, Granary, House, Prime, FEED LOT, BABY LOT, GARDEN, HOG LOT, CULTIVATED, PASTURE, DAY LIGHT Corner, SEC. LINE, Wood Hub, Iron Pin, Hub, Gate, Grate at end of tile, 10" Tile, 4" Tile

P.I. Sta. 149+87.9
Δ : 0° 15' Lt.

Sta. 150+37.4
15"ø x 23' Corr. Pipe
D.A.: 2 Ac. E
Sta. 150+37
Replace With
2'X2'X36' R.C.B.

Sta. 156+66.6
15'x 15'x 28' Conc. Box
D.A.: 18 Ac. R.
Sta. 156+67
Replace With
3'X2'X44' R.C.B.

POT. Sta. 158+32.8

Sta. 162+57.0
15"ø, 30 Corr. Pipe
D.A.: 6 Ac. R.
Sta. 162+30
Replace With
2'X2'X36' R.C.B.

P.I. Sta. 162+75.7
Δ : 2° 30' Lt.

Sta. 166+50.7
5'x 3'x 52' Conc. Box
D.A.: 200 Ac. Fl to R.
Extend 10' Rt.
26' Lt.
60° Skew.

BORROW FOR DRAINAGE

Sta. 177+21.3
18"ø x 30' Corr. Pipe
D.A.: 0 Ac. R.
Sta. 177+2.1
Replace With
2'X2'X38' R.C.B.

Bench Marks:
#10 Sta. 152+25 Spike in root of 36" Maple 30' Lt. ..... Elev. 728.52
#11 Sta. 166+24 (±) on center of S. Hdw. Conc. Culv. 18' Rt. .. Elev. 694.53

PLATE I-PLAN-PROFILE R. P. R. ENGARD

Henry Co.

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FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D6

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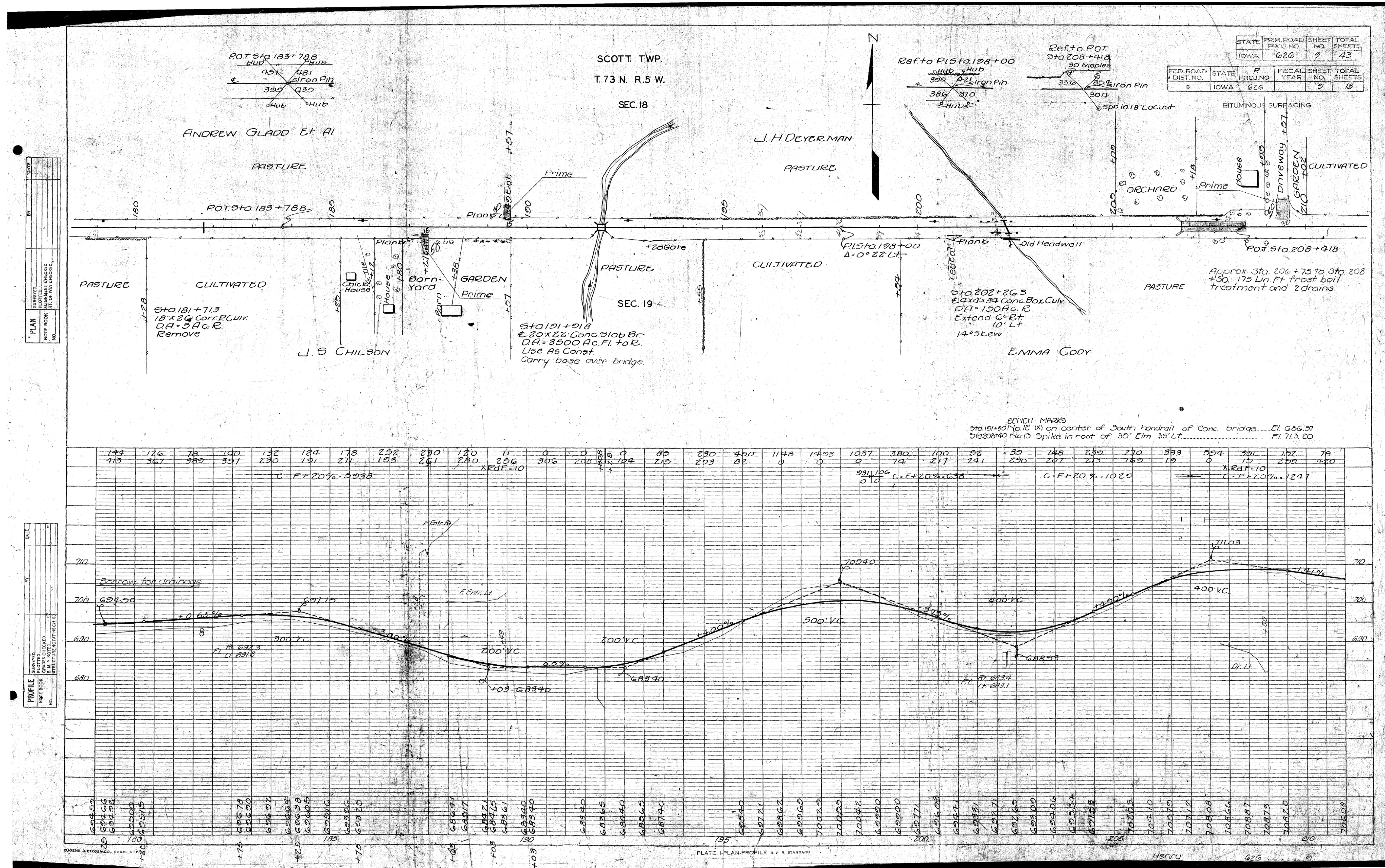

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STATE	PRIM. ROAD PROJ. NO.	SHEET NO.	TOTAL SHEETS
IOWA	626	10	43

FED. ROAD DIST. NO.	STATE	P PROJ. NO	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IOWA	626		10	13

BITUMINOUS SURFACING

N

SCOTT TWP.
T. 73 N. R. 5 W.

SEC. 18 | SEC. 17 | SEC. 19 | SEC. 20

J. H. DEYERMAN — CULTIVATED — Prime — PASTURE — CULTIVATED

EMMA CODY — PASTURE — CULTIVATED — Prime — CULTIVATED

JESSE W. & FLORA CLARK — CULTIVATED

JESSE W. CANBY — CULTIVATED

Driveway — GARDEN — ORCHARD — House — Barn — BARN LOT — FEED LOT — Sheds — Windmill — Privy — Lane

Sta. 211+90.1'
2.5'x2.5'x30.5' Conc. Box
D.A. = 30 Ac. R.
Extend to fit grade

P.I. Sta 216+10.8
Δ: 1°28' Rt.

P.O.T. Sta 227+00

BORROW HERE FOR SPECIAL DITCH

Sta 222+75
10'x35' Vit. Sewer Pipe
Encased in Conc.
D.A. = 2 Ac. Ft.
Remove
Place T.C. Under Dr. Lt.

Ref. to P.I. Sta 216+10.8
℄ Iron Pin ℄
283 380

Ref. to P.O.T. Sta 227+00
Hub Hub
436 418 Iron Pin
951 398
Hub Hub

B.M. #14 (X) on W. Hdw. conc. Culv. 33' Lt. Sta. 216+00 ..... Elev. 707.59
#15 Spike in trunk of 10" cherry tree 40' Lt. Sta. 232+62 .. Elev. 731.29

182	18	12	85	100	117	193	126	100	130	149	184	228	161	115	132	191	176	163	136	98	98	143	132	113	132	124	111	113	104	106	126					
209	420	948	333	202	206	287	311	435	483	367	172	102	133	235	333	302	136	137	202	250	248	198	172	189	209	233	222	196	174	161	176					

X RO. = 60
T = 0
333 113
C = 571 F+20% = 1730
B = 1159

C = 1415 F+20% = 3029
B = 1614

C = 1090 F+20% = 1946
B = 856

Dr. F. = 10

C = 950 F+20% = 1883
B = 933

Lt. — Rt. — TWP. RD.

+2.10% — V.C. = 500' — FL Rt. = 697.16 Lt. = 696.0 — 702.03

729.80 — +2.10% — V.C. = 200' — FL Lt. 720.40 Rt. 719.56 — Dr. Lt.

730.69 — +0.10% — -0.25% — V.C. = 200' — Est. Lt. V

704.23	706.20	706.08	705.47	705.02	705.76	705.67	704.75	705.01	705.44	706.05	706.85	707.80	727.75	728.67	729.35	729.77	729.95	730.55	730.58	730.56	730.48	730.38	730.28	730.17	730.06	729.95	729.84	729.73	729.62	729.51	729.40				

210 | 215 | 220 | 225 | 230 | 235 | 240

720 | 710 | 700 | 730 | 720 | 710

PLATE I-PLAN-PROFILE B. P. R. STANDARD

EUGENE DIETZGEN CO., CHGO., N. Y.

PLAN: SURVEYED | PLOTTED | GRADES CHECKED | B. M.'S NOTED | STRUCTURE NOTATIONS CHECKED | RT. OF WAY CHECKED | NOTE BOOK | NO. | BY | DATE

PROFILE: SURVEYED | PLOTTED | GRADES CHECKED | B. M.'S NOTED | STRUCTURE NOTATIONS CHECKED | NOTE BOOK | NO. | BY | DATE

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FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D8

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626 10

FED. ROAD DIST. NO.	STATE	PROJ. NO	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IOWA	626		11	13

STATE	PRIM. ROAD PROJ. NO.	SHEET NO.	TOTAL SHEETS
IOWA	626	11	43

SCOTT TWP.
T.73 N.R.5W.

N

BITUMINOUS SURFACING

Ref. to P.I. Sta. 242+62.5
Hub Hub
430 354
466 470
Hub Hub

REGINALD L. & ETHEL A. VAN SYOC

CULTIVATED

P.I. Sta. 242+62.5
Δ = 0°10' Lt.

Sta. 253+12.0
6'-10"x10'-0" Conc. Box Culv.
DA = 2.0 Ac. Ft.
Extend to fit grade

CHARLES B. SYOC

PASTURE

Gate

Iron Pin At Stone
34.7
36.9 31.5
Hub

Ref. to P.I. Sta. 269+23.9

SEC. 17

SEC. 16

Prime

Township Road

CULTIVATED

P.I. Sta. 269+23.9
Δ = 1°08' Rt.

Conc. Curb

House

OLD ORCHARD

Private Drive

Sta. 264+74.7
6'-5"x15'-0"x30' Conc. Box Culv.
DA = 1.0 Ac. Ft.
Extend to fit grade

SEC. 20

SEC. 21

B.M. #16 Sta. 253+13 (x) in center So. Hdw. Conc. Culv. ... Elev. 727.32
#17 Sta. 269+03 Spike in root of 10" Maple 33' Lt. ... Elev. 726.52

240 245 250 255 260 265 270

625 627 +87 +38 +42 +85 +80

PROFILE

+60 = 728.10

0.25%

0.00%

728.10

-0.30%

800' V.C.

400' V.C.

+0.60%

723.00

Elev. 728.10 728.07 727.59 727.26 727.67 727.44 727.14 726.80 726.49 726.00 725.64 725.33 725.06 724.85 724.62 724.58 724.45 724.45 724.42 724.41 724.36 724.30 724.89 725.12 725.40 726.60

Rt. 164.3 Lt. 164.0

Rt. 720.5 Lt. 720.6

Exp. Rd. Lt.

Dr. Rt.

PLATE I-PLAN-PROFILE B. P. R. STANDARD

Henry Co. 626 11

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FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D9

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STATE	PROJ. NO.	SHEETS NO.	SHEETS
IOWA	626	12	13

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IOWA	626		12	13

BITUMINOUS SURFACING

SCOTT TWP.
T. 73 N. R. 5 W.
SEC. 16

TOWN OF WINFIELD

ARTHUR B. McCASH

CULTIVATED

CULTIVATED

CULTIVATED

PASTURE

PASTURE

KONRAD H. SCHWARTZ

J. H. PATTERSON

B. B. LINDLEY
SEC. 21

Twp. Rd.

Private Drive

ORCHARD

County Rd.

Iron Pin
All Hubs
Ref. to P.O.T. Sta. 276+64.3

Iron Pin
All Hubs
Ref. to P.O.T. Sta. 286+13.3

Sta. 299+82
36"x25' twin conc. ϕ culv.
D.A.-590 Ac. F-R
Build Twin 8'x5'x45'
Conc. Box Culv.
30° Skew at
Sta. 299+40
Road contractor
to ditch outlet

All hubs
Ref. to P.C.
Sta. 299+02.4

Widen Surface 2 Ft
on inside of curve
B.I. Proj.

Δ = 91°30' Lt
D = 10°
T = 583.6
E = 249.1
L = 916.3
R = 573.0

P.T. Sta. 299+02.4

Superelevate Curve

Add base 60' (on ℄) x 26'
Prime 160' x 30'

Sta. 294+21
℄ Drow
D.A. - 5 Ac. R.
Build 2'x2'x41'
Conc. Box Culv.

15'x15'x46'
Conc. Box Culv.

10'x6' Conc.
Arch Brdg.

P.I. Sta. 295+75.7

All hubs.
Ref. to P.I.
Sta. 295+75.7

P.I. Sta. 269+23.9
Δ = 1°08' Rt.

P.O.T. Sta. 276+64.3

P.O.T. Sta. 286+13.3

P.C. Sta. 289+86.1

Sta. 284+19.9
1.5'x1.5'x30' Conc. Box Culv.
D.A. - 10 Ac. R.
Extend to fit grade

Sta. 289+86.1
End of Sec. A
Begin of Sec. 'B'
Bit. Surface Proj.

Drop base to
meet pres. grade
Build base 60' (on
℄) x 26' Prime
160' x 30.

Ref. to P.C. Sta. 289+86.1

All Hubs. Sec. 16 / Sec. 21
Iron pin. Tan.

Bench Marks:
#17 Sta. 269+03 Spike in root of 10" Maple 33' Rt. Elev. 726.52
#18 Sta. 284+19 (N) on S. Hdw. Conc. Culv. Elev. 706.20
#19 Sta. 295+44 (N) on center S. Hdw. Conc. Culv. Elev. 680.09

PLAN	
SURVEYED	DATE
PLOTTED	BY
ALIGNMENT CHECKED	
P.I.'S AND PVMT CHECKED	
NOTE BOOK	
NO.	

PROFILE	
SURVEYED	DATE
PLOTTED	BY
GRADES CHECKED	
NOTE BOOK	
NO.	STRUCTURE NO. 47 MSH V.C.

161 150 132 130 144 157 152 154 110 130 185 159 183 141 78 82 185 134 137 150 190 230 224 137 57 24 50 200 92 90 74 111
89 113 148 200 246 250 244 189 157 163 180 187 150 157 213 222 87 50 178 134 163 220 230 294 544 633 502 294 660 510 419 518
XF=10 C=1387 D=5°37 F+20%=1914 C=1322 D=5°71 F+20%=1913 XF=10 82.10 =180°42 C=F+20%=668 C=1108 D=23°73 F+20%=3481 XF=30

+0.60% +85 729.50 300' V.C. -3.00% 200' V.C. -0.05% 708.00 707.75 300' V.C. -3.58% 250' V.C. -0.255% +15 680.38 400' V.C.

Sta. 292+86.1
End of Sec. A
Begin of Sec. B
Bit. Surface Proj.

Lt. 677.54
Rt. 675.0

730 720 710 700 690 680

275.40 728.00 728.09 728.23 728.21 727.99 727.60 727.25 727.04 726.29 722.30 724.25 722.28 722.01 711.00 702.82 702.04 701.85 701.68 701.23 700.96 700.40 700.11 702.50 693.25 692.13 690.75 690.17 689.64 688.79 688.12 683.41 683.12 683.27 683.66 684.48

270 275 +83 280 +83 285 290 295 300

PLATE 1-PLAN-PROFILE — H. R. B. STANDARD

Henry Co. 626 12

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FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D10

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FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	352(6)		7	

ESTABLISHED WIDTH OF RIGHT OF WAY 1216 FT.

SCOTT TWP
T 73N R5W

Ref. to PC Sta. 10+00 — Fence Post, Power Pole, Set Pin, P.O.W., Fence Posts

Ref. to RI Sta. 15+59.3 — Nail in Pole, Nail, Tel. Pole, Found Iron Pin

Ref. to PT Sta. 18+86.2 — Spk in Pole, Found Iron Pin, Spk in Pe. Post, Face N.O.W., Spk in Brace Post, Slope Chained

Ref. to POT Sta. 27+65.0 — Nail in Pole, Nail in Power Pole, Nail in Steel Post, Nail in Steel Post

Set Nail in Pkt

Ref. to PI Sta. 15+59.3

For details on this line See Sheet #28

SEC 16 | SEC 21

TOWN OF WINFIELD

HORACE W. & DAISY STEVENS 0.97 Acres
Acquired 11-21-51
Consideration $285.00
Title by [illegible]
Book 229 Page 225
Henry Co. Recorder

NELLIE Mc COSH .08 Acres
Acquired 12-3-51
Consideration $445.00
Title by easement
Book 228 Page 231
Henry Co. Recorder

C. JONES 3.23 / 3.32 Acres
Acquired 12-12-51
Consideration $1532.00
Title by easement
Book 234 Page 21
Henry Co. Recorder

10'x5'x38' R.C. Twin Conc. Box Culv. DA = 1329 Ac.

Borrow Z

Sta. 20+00 to Sta. 25+00 Save 1865 c.y. in R.O.W. for shoulders

Sta. 25+60 to Sta. 41+00 Save 1437 cu. yds. in R.O.W. for shoulders

Do not disturb pillars

Pillars to be removed

Save Trees

Sta. 13+84.0 10'x8'x9.3.3' Twin Conc. Box Culv. D.A. = 13.21 Ac. FR. Raise Lt. Hdwl. 2.6' Raise Rt. Hdwl. 1.5' Rd. Contr. to clean Channel.

Center Line Approach Slope Line

Guard Posts

Superelevate Curve

P.C. Sta. 10+00

STA. 10+00.0
BEG. OF DIV. I & PROJ.

L = 88° 37' Rt.
D = 10° 47'
T = 55.93
L = 88.62
E = 22.77
R = 573.0

PASTURE | CULTIVATED | GARDEN | HOUSE | BARN | SHED | FEED LOT | GAR. HOUSE | CHICK. LOT | ORCHARD | LANE

Estimate of Erosion Control Quantities
Sta. 10+00 to Sta. 33+00
Seeding 3.5 acres
Sodding 234.8 squares
Mulching 1.2 acres

3/4"ø (New) Sta. 13+84.0 E.H.C. Cl. III in Hdwl. twin 10'x8' R.C.B. Elev. Flow Line - - - - - - - El. 683.37
3/4"ø Sta. 10+66.89 E.H.C. Cl. III in inlet Hdwl. 8'x5' R.C.B. 17' Rt. - - - - - - - - El. 682.73
#2 A Sta. 13+40 Harrow Tooth in base of P. Pole S. Side 82' Lt. - - - - - El. 681.62
BENCH MARKS #3 (New) Sta. 13+84 E.H.C. Cl. III in outlet Hdwl. twin 10'x8' R.C.B. 80' Lt. - - - - El. 683.37
#1 Sta. 7+84 P.K. Spk. in S. Side Power Pole 38' Lt. - - - - - - - - - - - - - - - El. 706.58
#2 Sta. 13+84 E.H.C. on Inlet Hdwl. of Twin 10'x8' R.C. Box 20' Rt. - - - - - El. 684.57
#4 Sta. 20+91 P.K. Spk. in W. Root of 36" Maple in Farm Yard 76' Lt. - - - - El. 725.34

Pillars to be removed

Save Trees

Gar. House

Shed

Barn

Do not disturb pillars

Sta. 25+60 to Sta. 41+00 Save 1437 cu. yds. in R.O.W. for shoulders

Sta. 20+00 to Sta. 25+00 Save 1865 c.y. in R.O.W. for shoulders

Borrow Z

Sta. 13+84.0 10'x8'x9.3.3' Twin Conc. Box Culv. D.A. = 13.21 Ac. FR. Raise Lt. Hdwl. 2.6' Raise Rt. Hdwl. 1.5' Rd. Contr. to clean Channel.

Superelevate Curve

P.C. Sta. 10+00

STA. 10+00.0
BEG. OF DIV. I & PROJ.

L = 88° 37' Rt.
D = 10° 47'
T = 55.93
L = 88.62
E = 22.77
R = 573.0

Sta. 19+50 to Sta. 23+00 Proposed Subgrade Treatment Trench excav. in Rdwy. and borrow. Est. = 510 cu. yds. Fill + 30% = 1133 cu. yds. of Selected Subgrade Material (Reclaimed Surfacing) See Sheet No. 28

Prop. Left Ditch 5' deep

3od ditch on Rt. 4' bottom

3od ditch Lt. 4' bottom

3od ditch Rt. 4' bottom

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PLATE 1-PLAN-PROFILE B. P. R. STANDARD
EUGENE DIETZGEN CO., Chicago-New York

Henry Co. F 352(6) Sheet No 7

PLAN — SURVEYED, PLOTTED, DRAWN, CHECKED, ALIGNMENT CHECKED, FIT OF MAP CHECKED, NOTE BOOK, NO., DATE, BY, CY

PROFILE — SURVEYED, PLOTTED, DRAWN, CHECKED, B.M.'s NOTED, STRUCTURE NOTATIONS CHKD, NOTE BOOK, NO., DATE, BY

This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D11

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ESTABLISHED WIDTH OF RIGHT OF WAY 66 FT.

Ref to P.I. Sta. 39+84.9
Face, R.O.W. Post
Spk in Steel Fence Po.
Found Iron Pin & Stone
Spk in Steel Fence Po.
Face R.O.W. Post

set nail in Post

SCOTT TWP.
T. 73 N. R 5 W.
SEC. 21

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	352(6)		8	

NELLIE Mc COSH.
See Sheet No. 7

U. E. KONGABLE 1.56 Acres
Acquired 12-19-51
Consideration $999.00
Title by easement
Book 229 Page 385
Henry Co. Recorder

CULTIVATED | PASTURE | MEADOW | PASTURE | PASTURE | CULTIVATED

Sta. 25+00 to Sta. 41+00
Save 1437 Cu. Yds. in R.O.W. for shoulders

16"x16' Corr. Pipe

ORCHARD
Barn
House
12"x28' R. Corr. Pipe

"LANE"

P.I. Sta 39+84.9
D = 0°12½' Lt.
Sta. 79+85.7 Const.

PASTURE | MEADOW | CULTIVATED

INA
IRA C. JONES
See Sheet No. 7

Misc. F. Ent. 05
Dike

~~Sta 52+84~~
~~8.3' x 16' x 28.2'~~
~~Conc. Box Culv.~~
D.A. = 9.3 Ac. F.
~~Rd Contr to fill ends of present Culv with earth & fill over Culv. Furnish & place 36" ø x 24' Conc. pipe Culv. (27 Lt & 37 Rt.) of Sta. 53+06~~
~~Class 20 Exc. = 2.9 Cu. Yds~~

~~Sta 56+79~~
~~8.2' x 2.6' x 25.8'~~
~~Conc. Box Culv.~~
D.A. = 33/8 Ac. F.
~~Rd Contr to fill ends with earth & fill over present Culv. Furnish & place 36" x 72" Conc. pipe culv. Skew 20° (37 Lt & 35' Rt) at Sta. 57+08. Extd. Inlet & Outlet. Class 20 Exc. = 33 Cu. Yds~~

Δ = 0°31' Rt
D = 0°5'10"
P.C. Sta 63+44.9

Estimate of Erosion Control Quantities
Sta. 35+00 to Sta. 65+00
Seeding 6.5 acres
Sodding 1650 squares
Mulching 0.1 acres

BENCH MARKS
~~ø A. Sta. 37+08 God Spike in N root 8" Maple 83.5' Lt~~ El. 712.52
~~#3 Sta. 42+10~~ El. 729.03
~~#6 Sta. 56+79 "X" on Outlet Hdw. of 2'x2' RC Box~~ El. 713.56
ø A. Sta. 57+08 God Spike in N root 8" Maple 83.5' Lt El. 712.52
#3 Sta. 42+10 El. 729.03
#6 Sta. 56+79 "X" on Outlet Hdw. of 2'x2' RC Box El. 713.56
ø B. Sta. 64+44 Spk in N root 36" Maple 67' Lt El. 729.98

619	520	535	615	574	494	337	313	382	420	509	580	702	796	769	717	519	161	187	561	548	259	296	546	644	700	715	635	339	500
176	167	235	252	282	356	444	483	439	387	278	247	161	109	187	306	539	791	1006	339	243	1067	409	437	344	296	282	233	260	239

Appr. = 25 | Appr. = 25 | Appr. = 10

Avail. From Sta. 38+84 = 233
= 800?

C = 7150

F (6533 + 330 - 304) + 30% = 8007

C = 6451 F (3540 + 609 - 333) + 30% = 6451

117 353
150 105

Sta 46+00 to Sta 51+30
~~Proposed~~ Subgrade treatment
Fill + 30% = 990 cu. yds
Selected trackFill Material
(Reclaimed Surfacing)
See sheet No. 48

Sta 58+00 to Sta 61+00
~~Proposed~~ Subgrade treatment
Fill + 30% = 432 cu. yds of
Selected trackFill Material
(Reclaimed Surfacing)
See sheet No. 48

730 | 720 | 710

Prop. Left Ditch 4' Deep
Prop. Right Ditch 4' Deep
Prop. Left Ditch 4' Deep
Prop. Right Ditch 4' Deep
Soil ditch Lt & Rt 4' bottom

35 | 40 | 45 | 50 | 55 | 60 | 65

PLATE I-PLAN-PROFILE U. P. R. STANDARD
EUGENE DIETZGEN CO., Chicago-New York

Henry Co. F 352 (6) Sheet No 8

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PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, PROFILE CHECKED, RT. OF WAY CHECKED, B.M.'s NOTED, STRUCTURE NOTATIONS CHKD, NOTE BOOK, NO., DATE, BY, CY

PROFILE: SURVEYED, PLOTTED, PROFILE CHECKED, B.M.'s NOTED, STRUCTURE NOTATIONS CHKD, NOTE BOOK, NO., DATE

This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D12

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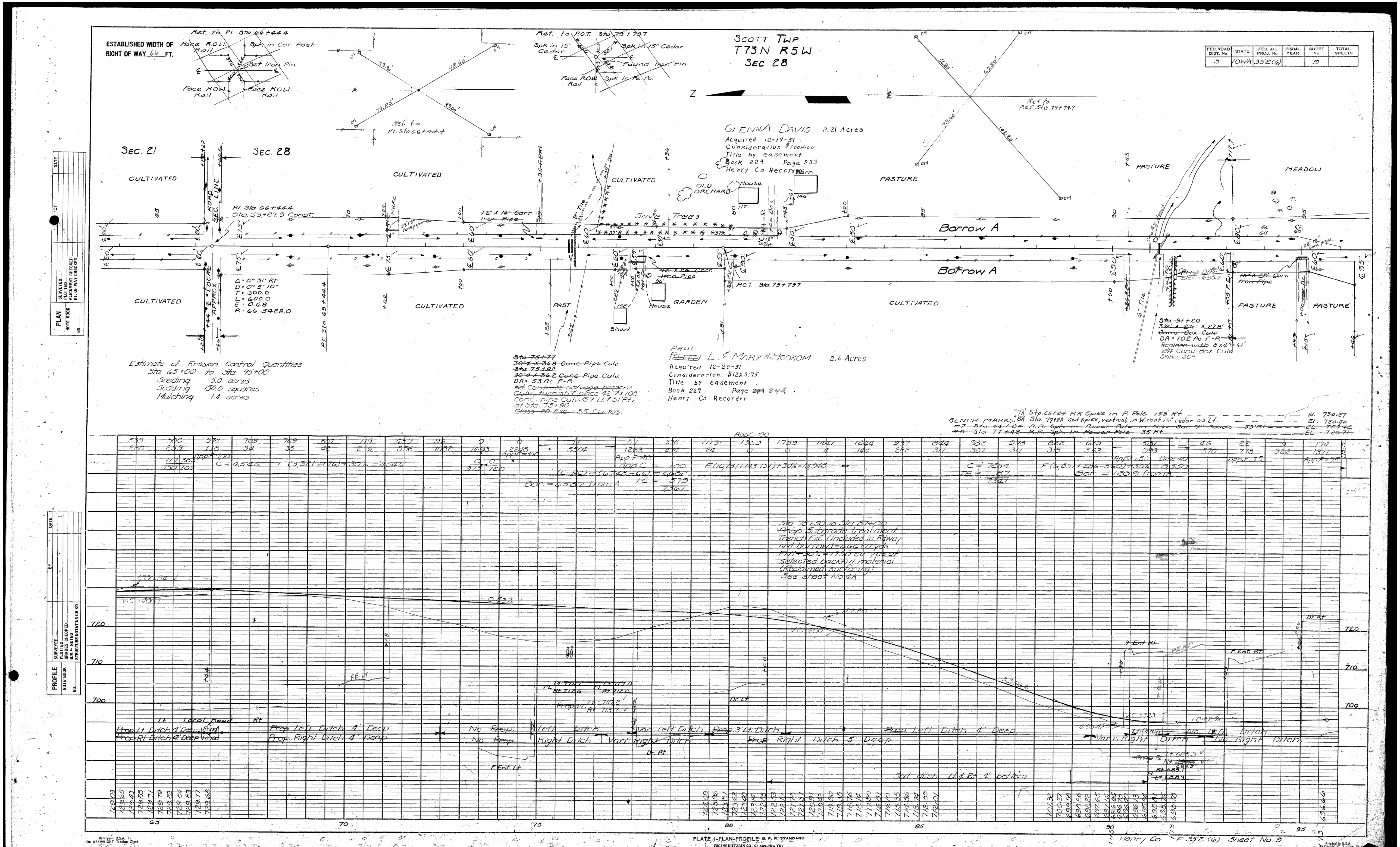

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For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D13

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FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	352(6)		10	

ESTABLISHED WIDTH OF RIGHT OF WAY 66 FT.

Ref To T.S. Sta. 104+36.59 — Nail in Steel Post, Nail in Car Post, Set Iron Pin

Ref To S.P.I. Sta 109+03.68 — Steel Fence Post, Spiral Tan., Fence Ties, Nail in Tel Pole, Nail in Power Pole, Set Iron Pin

Ref To S.C. Sta 104+36.59 — Nail in Steel Post, Nail in Power Pole, Nail in Car Post, Set Iron Pin

Ref To C.S. Sta 124+23.93 — Spk. in Fence Post, Spk. in Fence Post, Spk. in Steel Fence Post, Spk. in Power Pole, Set Iron Pin

Ref To S.P.I. Sta 125+37.6 — Spk. in Tel Pole, Spk. in Fence Post, Set Iron Pin, Spk. in Steel Fence Post, Spk. in Power Pole

Scott Twp
T73N-R5W

MEADOW

PASTURE

Borrow B

18" RCP Corrugon Pipe

Prop. Dike Elev. 700.6

Ref to S.P.I. Sta 109+03.68

Δ = 89°22'Lt
Δc = 69°22'
Dc = 5°17'
Ls = 400'
Rc = 1146.0'
θs = 10°
Ts = 1338.31
Es = 475.38
Xc = 398.78
Yc = 83.22
Lt = 267.03
St = 133.72
Lc = 399.46
P = .301
K = 1998.0'

CARL W. CARDEN 8.85 Acres
Acquired 1-4-52
Consideration $5,200.00
Title by easement
Book 229 Page 381
Henry Co. Recorder

Δ = 69°22'
D = 5°
T = 770.32
L = 1387.53
E = 239.34
R = 1146.0

Sec. 28

Sec. 33

CULTIVATED

Superelevate Curve.

T.S. Sta. 106+36.6

S.C. Sta. 110+36.6

C.S. Sta. 124+23.9

S.P.I. Sta. 125+37.6

M.G. & HELEN L. McALLISTER 0.14 Acres
Acquired 11-29-51
Consideration $100.00
Title by easement
Book 229 Page 295
Henry Co. Recorder

Ref to P.I. Sta. 119+75.5 = N¼ Cor Sec. 33-73-5 Set iron pin over stone

Shed, Shed, House, C.P.I. Sta 118+14.3

Windmill

Garage

House

15" x 20' Corr. 114' Iron Pipe

12" x 24' Corr Iron Pipe

G-Tile

Iowa No. 78

HAZEL G. SIBERTS GRIFFITH

Sta. 96+23.0
36" x 20' I-Beam Bridge ✓
D.A. = 82.63 sq. mi. EF
Raise to proposed grade & widen to 30' roadway.

~~Sta. 101+16~~
~~2'6" x 2'6" x 28.6' Conc. Box Culv.~~
D.A. = 1.45 Sq. Mi. EF
~~Replace with~~ 3'x3'x~~28'~~ 44' Conc. Box Culv. at Sta. 101+02. Skew 15°
Flume outlet.

Estimate of Erosion Control Quantities
Sta 115+00 to Sta 125+00
Seeding 6.1 acres
Sodding 90.0 squares
Mulching 12 acres

HAZEL G. SIBERTS GRIFFITH 0.94 Acres
Acquired 12-17-51
Consideration $ 358.50
Title by easement
Book 229 Page 249
Henry Co. Recorder

M.G. & HELEN L. McALLISTER

S.P.I. Sta. 109+03.68

P.I. Sta. 119+75.5

24" x 32' Conc. Tile Culv. Use as constr.

BM "A" Sta 94+86 'cod spike in P. Pole 23' Rt. ——— El. 697.48
BM "1" Sta 111+16 'X' in S. side conc. well top 85' Rt. ——— El. 731.93
Bench Marks: 'X' Sta 91+12 INCISED in ADJ SHARP CB 35' Lt. ——— El. 694.71
#18 Sta 96+34.3 'X' on Top West Horn of 36"x 20' I-Beam U.I. Rt. El. 697.46
#11 Sta 110+52 R.R. Spk. in Tel. Pole 58' Rt. El. 731.85
#12 Sta. 119+38 R.R. Spk. in Power Pole So. Side Fremont Road 300' Rt. El. 737.59
BM "A" Sta 91+12 INCISED in ADJ SHARP CB 35' Lt. ——— El. 700.38

PROFILE

Sta 96+23.0 to Sta 100+00
Proposed Subgrade treatment Trench Exc. (Unclass. Rdwy and Borrow) = 80 cu. yds. F.F. + 10% = 2013 cu. yds. of selected backfill material (glacial clay)
See Sheet No. 2A

Dr. Rt.

V.C. = 650

V.C. = 230

Ext. H.W. 699.08 V

Prop. Fl. Lt. 694.1 6961 / Rt. 694.2 695.9 / 697.0 696.5

Fl. Lt. 694.5 Rt. 693.9
Drop Inlet Top 696.7 Fl. 693.7

Prairie Road Ahead
No Right Ditch
Side Road open
Deep Left Ditch 5' Deep
Right Ditch 4' Deep
Sod ditch Lt. & Rt. 4' bottom V.
Veg. Right Ditch
Veg. Left Ditch
No Rt. Ditch
Veg. Right Ditch

Henry Co. F 352(6) Sheet No. 10

PLATE I-PLAN-PROFILE B. P. R. STANDARD
EUGENE DIETZGEN CO., Chicago-New York

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This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D14

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FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	352(6)		11	

ESTABLISHED WIDTH OF RIGHT OF WAY 66 FT.

SCOTT TWP
T 73N R5W

Ref to C.S. Sta 124+23.92
Spk in Post, Spk in Tel P, Spk in Fence Post, Set Iron Pin, Spk in Steel Fence Post, Spk in Tower Pole, Spk in Steel Fence Post

Ref to ST. Sta. 128+23.92
Spk in Post, Face R.O.W. Fence, Set Iron Pin, Spk in Steel Post, Face R.O.W.

Ref to S.P.I. Sta. 125+57.6

Ref to P.O.T. Sta 141+93.8
Face R.O.W. Fence, Set Iron Pin, Nail in Gate Post, Nail in Fence Post

Ref to P.O.T. Sta 141+93.8

Ref to S.T. Sta 128+23.92

See sheet No. 28 for side road details and side road R.O.W.

See sheet No. 28 for details of Local Road connection.

CARL W. CARDEN
See Sheet No. 10

CULTIVATED

WILLIAM F. & MARJORIE CARDEN 0.86 Acres
Acquired 12-28-51
Consideration # 374.00
Title by easement
Book 229 Page 243
Henry Co. Recorder

SEC 28

SEC 27

JAMES W. & IVA M. HELPHREY 1.61 Acres
Acqured 12-7-51
Consideration $815.25
Title by easement
Book 229 Page 237
Henry Co. Recorder

PASTURE

Borrow C
Save 3000 cy for shoulders

Borrow C

S.P.I. Sta 125+54.8

Prop. Dike Elev.=732.7

P.O.T. Sta 141+93.8

Use drive for dike

Save 1000 cy of Mat for shoulders

Prop. Dike Elev.=722.5

FRANK MASON

CULTIVATED

CARL W. CARDEN
See Sheet No. 10

CULTIVATED

CULTIVATED

FLOYD E. & DOROTHY I. DEAL

PASTURE

Estimate of Erosion Control Quantities
Sta 125+00 to Sta 155+00
Seeding 6.5 acres
Sodding 15.0 squares
Mulching 1.0 acres

Sta 136+82
30" @ 155.2' Conc. Pipe
D.A. = 30 Ac. P.
Ref. Contr. to furnish 16 Lin. Ft. of 30" Conc. pipe and extend present Culv. 6 Rt. & 12 Lt. No Class 2 Exc.

SEC 33

Sta 142+37
24" @ 140' Vit. Pipe
D.A. = 8 Ac. P.
Ref. Contr. to remove pres. Culv. furnish & place 29'@ 1.56 Conc. pipe Culv. 13.0 Lt. & 26' Rt.
Class 2 Exc. + 40 Cu. Yds.

SEC 34

FLOYD E. & DOROTHY I. DEAL
Acquited 12-7-51
Consideration #574.00 (ROW) #324.95 (Borrow)
Title by easement (ROW) by Contract (Borrow)
Book 229 Page 253
Henry Co. Recorder

0.49 Acres (ROW)
B.03 Ac (Borrow)

Sta 148+02.0
24" x 56.0 Conc. Pipe
D.A. = 4 Ac. P.
Culv. Capacity to furnish 12 Lin. ft. of 24" @ Conc. pipe & extend present Culv. 6 Rt. & 6 Lt.
Flume outlet.

FLOYD E. & DOROTHY I. DEAL

Sta 155+42.6
24' x 24' I Beam Br.
D.A. = 2536 Ac. P.
Raise to proposed grade & widen to 30 roadway.

Bench Marks: "A" Sta 141+46 Spike, vert. in top hedge Cor. post 75' Lt. — El. 730.16
#13 Sta 130+66 R.R. Spk. in Power Pole 48' Rt. — El. 737.48
#14 Sta 136+66 R.R. Spk. in Power Pole 43' Rt. — El. 732.80
#15 Sta 141+78 R.R. Spk. in Power Pole 47' Rt. — El. 729.92
#16 Sta 155+55.3 I.H.C. B.M. Top S.E. Wing Wall of 24' x 24' I Beam 13.5' Rt. — El. 698.58
"16A" Sta 154+79 God Spike in S root 36" maple 99' Lt. — El. 696.68

Prop. left Ditch 5' Deep — Clean & use present left Ditch — Prop. left Ditch 5' Deep — Vary left — No Prop. Ditch — Prop. left Ditch 4' Deep — Vary left — No Prop. Ditch — Prop. left Ditch 4' Deep — No left Ditch — Prop. left Ditch 4' Deep — Vary left — No left Ditch

Cross Road Vary Ditches — Clean & use present ditches Right — Prop. Right Ditch 5' Deep — Vary Right — No Prop. Ditch — Prop. Right Ditch 4' Deep — Vary Right Ditch — No Prop. Right Ditch — Prop. Right Ditch 4' Deep — Vary Right Ditch — No Right Ditch

Profile Road Back Rt.

Profile Road Lt.

Sod ditch Lt. & Rt. & bottom.

Extreme high water 690.0 Aug. 1936

PLATE 1-PLAN-PROFILE B. P. R. STANDARD
EUGENE DIETZGEN CO. Chicago-New York

Henry Co. F 352(6) Sheet No. 11

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PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, NOTE BOOK, NO., DATE, BY, CY

PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, B.M.'s NOTED, STRUCTURE NO'S & CHKD

This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D15	

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ESTABLISHED WIDTH OF RIGHT OF WAY 66 FT.

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	352(6)		12	

SCOTT TWP
T 73 N R 5 W

JAMES W. & IVA M. HELPHREY
See Sheet No. 11

SEC. 27

IOWA STATE CROSSING NO. 2670

F. & S. NORTH 4.0 Acres
Acquired 3-31-52
Consideration $893.75 CULTIVATED
Title by easement
Book 229 Page 227
Henry Co. Recorder

PASTURE
Barn
House
Raspberries
Prop. Intercepting Ditch 7
CULTIVATED
Grove
Drive
Haulage Way
Sta. 135+42.6
24'X24' I-Beam Br.
DA: 2396 Ac. R
Raise to proposed grade and widen to 30ft. roadway.
Sta. 161+40
24"X48" Conc. Pipe
DA = 11 Ac. R
Reset Contr. to furnish 28 Lin. ft. of 24" Conc. pipe & extend pres. Culv. 15' Rt.
10' Lt. Required 2 type C Connections and 1/4 Section See sketch below. No Class 20 Exc.
Sta. 163+05
30" X 55.2'
Conc. Pipe
DA = 17 Ac. R
Reset Contr. to furnish 24 Lin. ft. of 30" Conc. pipe Extend pres. Culv. 18' Rt. 12' Lt.
Required 2 type C Connections No Class 20 Exc.
See sketch below.
Borrow D
Borrow D
FLOYD E. & DOROTHY I. DEAL
See Sheet No. 11
Estimate of Erosion Control Quantities
Sta. 135+00 to Sta. 185+00
Seeding 3.6 acres
Sodding 80.8 squares
Mulching 0.7 acres
SEC. 34
GUY U. DEAL 0.41 Acres
Acquired 11-27-51
Consideration $298.75
Title by easement
Book 229 Page 651
Henry Co. Recorder
Barn
House
GARDEN
PASTURE LOT
Sta. 177+71.94
C.B. & Q. R.R. Crossing
State maintenance forces to furnish and place 50" reflector crossing sign assembly. Relocate to widen roadbed to provide proper elevation and support.
CHICAGO BURLINGTON & QUINCY
18"X81' Vit. Tile
32'18" Corr. Pipe
15"X81' Vit. Tile
RR Sign

BENCH MARKS: 1) Sta. 111 the Top of bolt in N end old conc. Wall 12' Rt. — EL. 724.76
2) Sta. 155+553 LHC B.M. Top S.E. wing Wall of 24'X24' I Beam 13.6 Rt. EL. 698.69
3) Sta. 170+20 RR Spk. in Power Pole 48' Rt. EL. 723.44
4) Sta. 178+43 RR Spk. in Power Pole East Side RR 63' Rt. EL. 735.02

PLAN: SURVEYED, PLOTTED, GRADES CHECKED, ALIGNMENT CHECKED, R/W STAKED, STRUCTURE NOTATNS CHKD, R/W MONUMENTED, NOTE BOOK, NO., DATE, BY

PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, R/W STAKED, STRUCTURE NOTATNS CHKD, NOTE BOOK, NO., DATE, BY

0	25	50	0	63	320	285	200	215	171	18	63	204	248	215	372	0	171	0	11	169	319	304	383	300	70	171	202	200	167	130	100	171	156
3296	25	50	2413	759	2501	163	220	395	366	329	292	241	200	193	360	373		330	263	183	142	119	181	107	12	57	137	93	62	111	178	163	192
						Appr=10	Appr=20												Appr=30							Appr=25								
								C = 2458		F(6959+403)+30% = 95.71										C = 1051				F(13+260)+30% = 2051				C = 1962		F(12+229)+30% = 1969		
										Bar = 7083 from "0"																							

Dr. Lt.
Type "C" Conn.
Prop. Lt. 718.6' Rt. 712.8
Lt. 711.1 Rt. 715.3
Prop. Lt. 704.3 Rt. 703.2
Prop. Lt. 704.6 Rt. 702.2
Ext. High Water El. 700
Prop. Left Ditch 5' Deep
Prop. Right Ditch 4' Deep
Clean and use existing Lt. Ditch
Sod ditch Lt. 6' bottom
Profile 1st Rail Rt. & Lt.
F. Ent. Lt.
F. Ext. Rt.

740	730	720	710	700	690	680

155	160	165	170	175	180	185

PLATE I-PLAN-PROFILE B. P. R. STANDARD
EUGENE DIETZGEN CO. Chicago-New York

Henry Co. F 352(6) Sheet No. 12

This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D16

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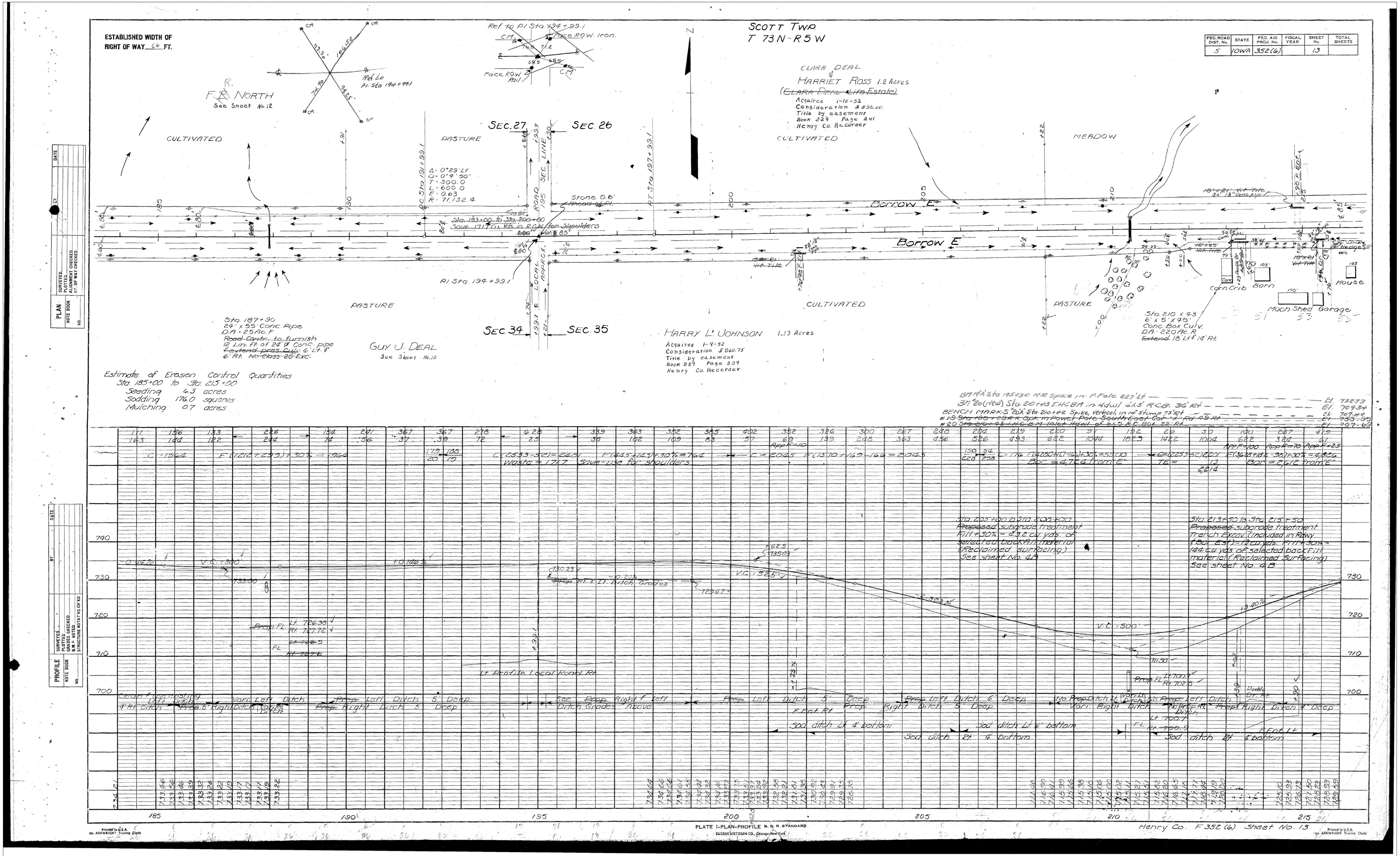
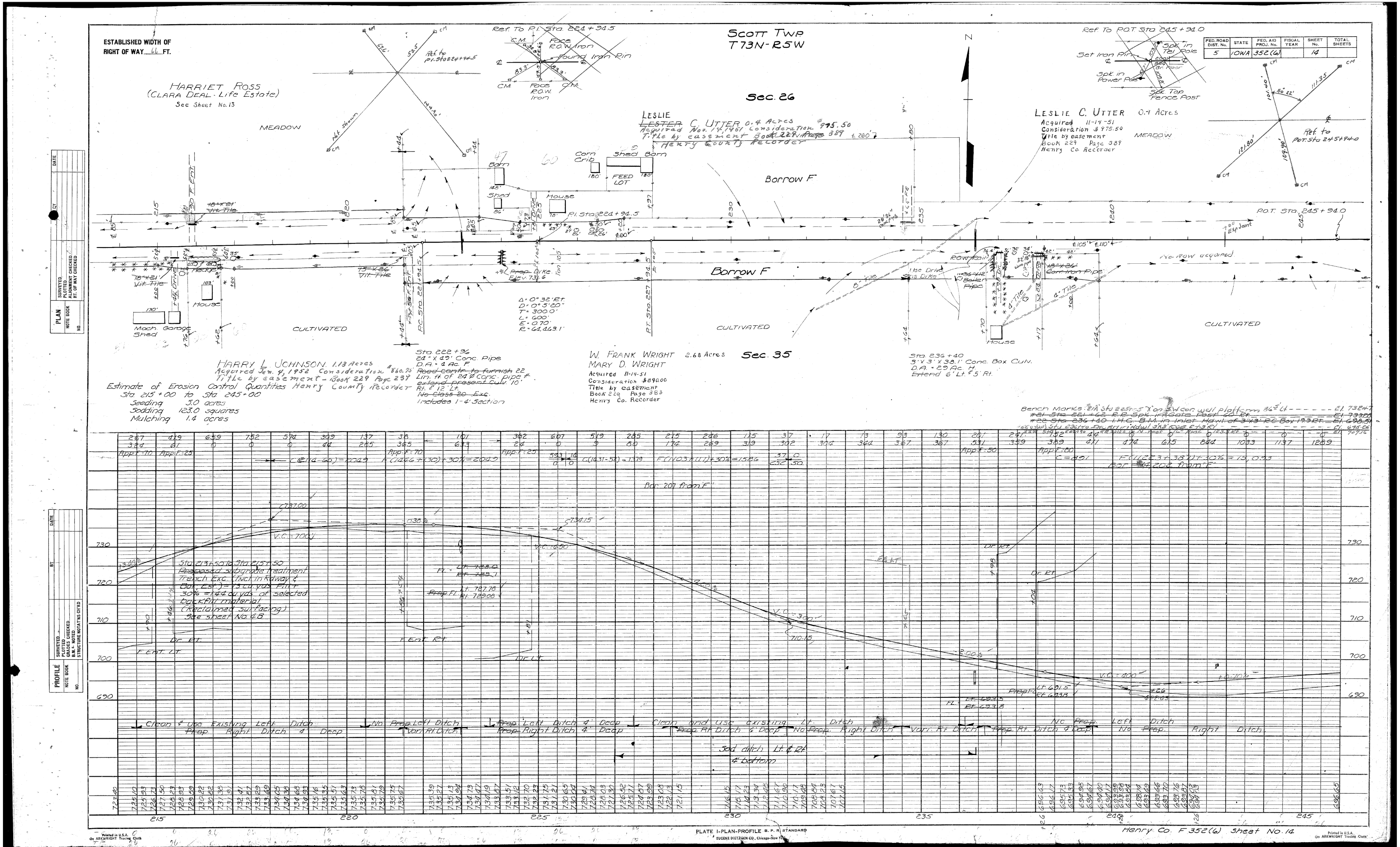


This Sheet
For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D17



This Sheet
For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D18

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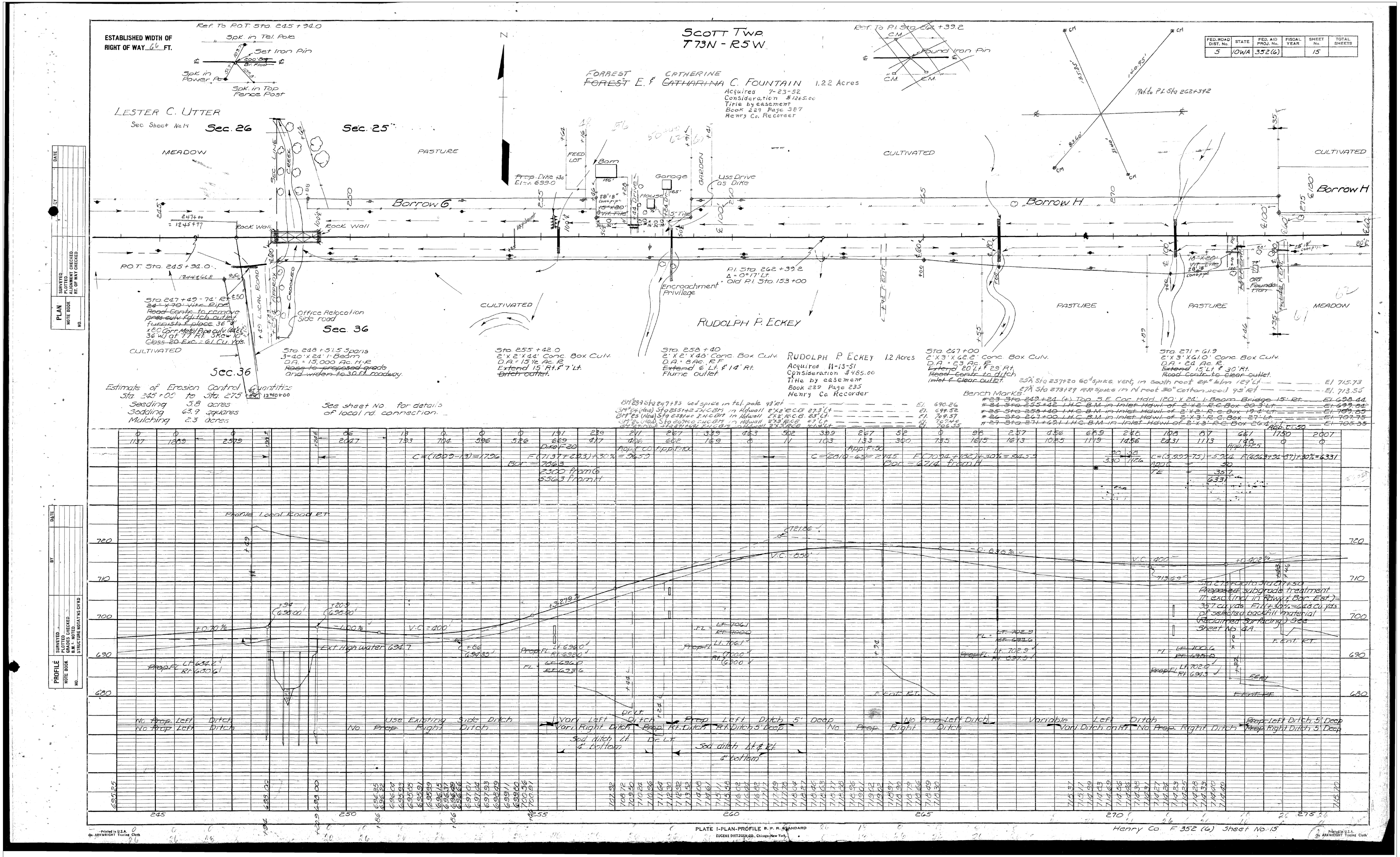

This Sheet
For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D19

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FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	352(6)		16	

ESTABLISHED WIDTH OF RIGHT OF WAY 66 FT.

PLAN — SURVEYED / PLOTTED / ALIGNMENT CHECKED / ALL R/W STAKED — DATE / BY / NOTE BOOK / NO.

PROFILE — SURVEYED / PLOTTED / GRADES CHECKED / B.M.'S NOTED / STRUCTURE NOTATIONS CHECKED — DATE / BY / NOTE BOOK / NO.

Scott Twp.
T73N-R5W

Morning Sun Twp.
T73N - R4W

Ref to P.I. Sta 300+89.2

Face R.O.W. Rail

Section Pin

Spk. in Power Pole

Ref to P.I. Sta 300+89.2

Notes: Excavated for corner stone but none recovered

Spk. in Cor. Post

STA. 300 + 89.2
END OF DIV. I
BEG. OF DIV. II

Sec. 25 | Sec. 30 | Sec. 36 | Sec. 31

Henry County | Louisa County

ETHEL M. GIBBS HILEMAN 0.35 Acres R.O.W.
4.8 " Borrow
Acquired 12-21-51
Consideration $1117.00
Title by easement
Book 229 Page 391
Henry Co. Recorder

JESSIE P. BELL, Est.
See Sheet No. 17

Δ = 1°53' ~~Lt.~~
D = 0° 16'
T = 313.9
L = 627.7
E = 08.3
R = 17,100

Sta. 300 + 89.2 ~~- 46' Lt.~~
~~18" Conc. Pipe~~
D.A. = 8 Ac. F.
~~Rd. Contr. to remove grass, Cully, form ditches 24' W.~~
54' Conc. culv. (Est. 28'W)
~~1-45° Lt. Class 20 Extr. 20 Conc.~~

Sta. 304+09.0

PASTURE

MEADOW

CULTIVATED

Borrow "H"

Borrow "I"

Borrow "J"

Sta. 288 to Sta. 289 on Rt.
Saves 2700 C.Y. for shoulders

18"x20'-0" Conc. Pipe

15"x16' Conc. Pipe

N.E. Cor. Sec. 36

Encroachment Privilege

Sta 300+44 Rt. on P.I. Sta 300+89.2
Old P.O.T. Sta 151+50

See Sheet No. 30 for details of Local Road connection.

HARRIET ROSS & CLARIBEL DEAL

Estimate of Erosion Control Quantities
Sta 275+00 to Sta 305+00
Seeding 6.3 acres
Mulching 2.0 acres

Sta. 279+32.5
2'x2.5'x44.5
Conc. Box Culv.
D.A. = 22 Ac. F.
~~Extend~~ 23' Rt. & 14' Lt.

Sta. 289+12.1
2'x3'x57.0'
Conc. Box Culv.
D.A. = 21 Ac. F.
~~Extend 26' Rt. & 16' Lt.~~
~~Rd. Contr. to Ditch outlet.~~

~~JESSIE P. BELL~~
ELLIS W. BELL
MILES T. BELL
L. CECILE KONGABLE 1.35 Acres
Acquired 12-4-51
Consideration $577.50
Title by easement
Book 221 Page 393
Henry Co. Recorder

Sta. 298+71.0
2'x3'x43.0'
Conc. Box Culv.
D.A. = 22 Ac. F.
~~Extend~~ 22' Rt. & 15' Lt.

For "X" Road details see sheet No. 28

#28 (View) Sta 279+32.5 +HC B.M. in Hdwl 2'x2.5' RCB 33' Lt. ——— El. 711.74
#29 (View) Sta 289+12.1 +HC B.M. in Hdwl 2'x3' RCB 38.4' Lt. ——— El. 715.16
Bench Marks: 30 (View) Sta 298+71.0 +HC B.M. in Hdwl 2'x3' RCB 34.2' Lt. ——— El. 724.65
~~#28 Sta 278+32.5 +HC B.M. in Inlet Hdwl of 2'x2.5' RC Box 19.2' Lt.~~ ——— ~~El. 710.06~~
~~#29 Sta 289+12.1 +HC B.M. in Inlet Hdwl of 2'x3' RC Box 38.4' Lt.~~ ——— ~~El. 715.41~~
~~#30 Sta 298+71.0 +HC B.M. in Inlet Hdwl of 2'x3' RC Box 19.2' Lt.~~ ——— ~~El. 723.80~~

Appr. = 50 | Appr. = 50 | Appr. = 50 | Appr. = 50

C (3950-52) = 3898
TE = 32.9
422.1
F (5500+143+127)+30% = 7451
Bar. = 2960 from "J"

C (6520-72) = 6448
TE = 47.1
6495
F (5228+1N-13)+30% = 6795

C (1206-26) = 1180
F (6529+208)+30% = 8790
Bar. = 7720 from "J"

Appr. = 50
C (2505-60) = 2445
F (889+128)+30% = 3810
Bar. = 1627 from "J"

Lt. Profile Local Road Rt.

Prop. Fl. W. 723.7 ±
E. 722.0 ±

V.C. = 7501

Fl. Lt. 715.1
Rt. 716.9

Prop. Fl. Lt. 720.0 ±
Rt. 719.4 ±

Fl. Lt. 711.2
Rt. 713.6

Fl. Lt. 706.3
Rt. 702.9

Prop. Fl. Lt. 700.0 ±
Rt. 702.9 ±

~~Sta 273+00 to Sta 277+32~~
~~Proposed Subgrade Treatment~~
~~Tr. Exc. (Incl. in Rdwy. & Bor. Est.) =~~
~~3.7 cu. yds. (Tr. 33% = 2.49 cu. yds. of selected backfill material (Reclaimed Surfacing) See sheet No. 4A~~

Sta 283+00 to Sta 288+00
Prop. Subgrade Treatment
Trench Exc. (Incl. in Rdwy. & Bor. est.) = 0 Hard rock Tr. 30% = 243 cu. yds. of selected backfill material (Reclaimed Surfacing)
See sheet No. 4A

Prop. Left Ditch 5' Deep
Prop. Right Ditch 5' Deep
No Prop. Left Ditch
No Prop. Right Ditch
Prop. Left Ditch 6' Deep
Prop. Right Ditch 6' Deep
Prop. Left Ditch 5' Deep
Prop. Right Ditch 5' Deep
Prop. Rt. Ditch 5' Deep
No Prop. Left Ditch
No Prop. Right Ditch
Prop. Left Ditch 6' Deep
Prop. Right Ditch 6' Deep
Prop. Rt. Ditch 5' Deep
Prop. Left Ditch 6' Deep
Prop. Right Ditch 6' Deep

Vert. Curve Data: 300 | 719.32 | 10.40% | 10.75%

Elevations: 719.32 | 718.72 | 718.63 | 718.30 | 718.15 | 718.00 | 717.85 | 717.70 | 717.55 | 717.40 | 717.25 | 717.10 | 716.95 | 716.80 | 716.65 | 716.50 | 716.35 | 716.20 | 716.05 | 715.90 | 715.75 | 715.60 | 715.45 | 715.30 | 715.15 | 715.00 | 714.85 | 714.70 | 714.55 | 714.40 | 714.25 | 714.10 | 713.95 | 713.80 | 713.65 | 713.50 | 713.35 | 713.20 | 713.05 | 712.90 | 712.75 | 712.60 | 712.45 | 712.30 | 712.15 | 712.00 | 711.85 | 711.70 | 711.55 | 711.40 | 711.25 | 711.10 | 710.95 | 710.80 | 710.65 | 710.50 | 710.35 | 710.20 | 710.05 | 709.90 | 709.75 | 709.60 | 709.45 | 709.30 | 709.15 | 709.00 | 708.85 | 708.70 | 708.55 | 708.40 | 708.25 | 708.10 | 707.95 | 707.80 | 707.65 | 707.50 | 707.35 | 707.20 | 707.05 | 706.90 | 706.75 | 706.60 | 706.45 | 706.30 | 706.15 | 706.00 | 705.85 | 705.70 | 705.55 | 705.40 | 705.25 | 705.10 | 704.95 | 704.80 | 704.65 | 704.50 | 704.35 | 704.20 | 704.05 | 703.90 | 703.75 | 703.60 | 703.45 | 703.30 | 703.15 | 703.00 | 702.85 | 702.70 | 702.55 | 702.40 | 702.25 | 702.10 | 701.95 | 701.80 | 701.65 | 701.50 | 701.35 | 701.20 | 701.05 | 700.90 | 700.75 | 700.60 | 700.45 | 700.30 | 700.15 | 700.00

Stations: 275 | 280 | 285 | 290 | 295 | 300 | 305

PLATE I-PLAN-PROFILE B. P. R. STANDARD
EUGENE DIETZGEN CO., Chicago-New York

Printed in U.S.A. On ARKWEIGHT Tracing Cloth

Henry-Louisa Co. F-352(6) Sheet No 16

This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D20

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ESTABLISHED WIDTH OF RIGHT OF WAY 66 FT.

MORNING SUN TWP.
T73N - R4W

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	352(6)		17	

Ref. to P.I. Sta. 333+93.8

Face R.O.W. Rail

Set Iron Pin

Face R.O.W. Rail

Ref. to P.I. Sta. 333+93.8

Ref. to 1/4 Stone Sec. 30 T73N. R4W. Stone is 19.94' South of Sta. 326+64

ELLIS W. BELL,
LEMMA CECILE KONGABLE &
MILES T. BELL

Sec. 30

~~JESSIE P. BELL Estate~~ 1.17 Acres
Acquired 12-9-51
Consideration $145.00 CULTIVATED
Title by easement
Book 221 Page 189
Louisa Co. Recorder

~~HENRY TOTEMEIER,~~
V. B. TOTEMEIER &
ALTA TOTEMEIER.
See Sheet No. 18

CULTIVATED

CULTIVATED

Sta. 305+00 to Sta. 335+00
Seeding 7.0 acres
Sodding 184.8 squares
Mulching 0.6 acres

Sta. 317 tie
4'x5'x57' Conc. Box Culv.
D.A. = 156 Ac. E.
~~Extend~~ 21 Lt.

Sec. 31

HARRIET ROSS & CLARIBEL DEAL 0.76 Acres
Acquired 10-31-51
Consideration $433.75
Title by easement
Book 221 Page 99
Louisa Co. Recorder

ALTA TOTEMEIER & V.B. TOTEMEIER 0.9 Acres
Acquired 11-1-31
Consideration 4682.00 (Total)
Title by easement
Book 221 Page 111
Louisa Co. Recorder

Δ = 1°24' Rt.
D = 0°25'07"
T = 300'
L = 600'
E = 10'
R = 13745.0'

T.60' 193.8 - 20' Rt. Old P.I. Sta. 223+04.3 Foundation Pin

Bench Marks: #31 (New) Sta 317+12 1.H.C.B.M. in Hdwl 4'x5' R.C.B. 28' Lt. — El. 708.87
~~#31 Sta. 317+12 I.H.C. B.M. in Inlet Hdwl. of 4'x5' R.C. Box Culv. Lt.~~ — El. 711.95
#32 Sta. 332+12 R.R. Spk. in Power Pole in Fence Line 69' Rt. — El. 732.23

Estimate of Erosion Control Quantities
Sta. 305+00 to Sta. 335+00
Seeding 7.0 acres
Sodding 184.8 squares
Mulching 0.6 acres

PLAN — SURVEYED: PLOTTED: GRADES CHECKED: ALIGNMENT CHECKED: NOTE BOOK: NO.: STANDARD ROTATIONS OK'ND — BY: DATE:

PROFILE — SURVEYED: PLOTTED: GRADES CHECKED: ALIGNMENT CHECKED: NOTE BOOK: NO.: STANDARD ROTATIONS OK'ND — BY: DATE:

PLATE I-PLAN-PROFILE B. P. R. STANDARD
EUGENE DIETZGEN CO.

Louisa Co. F 352(6) Sheet No. 17

This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D21

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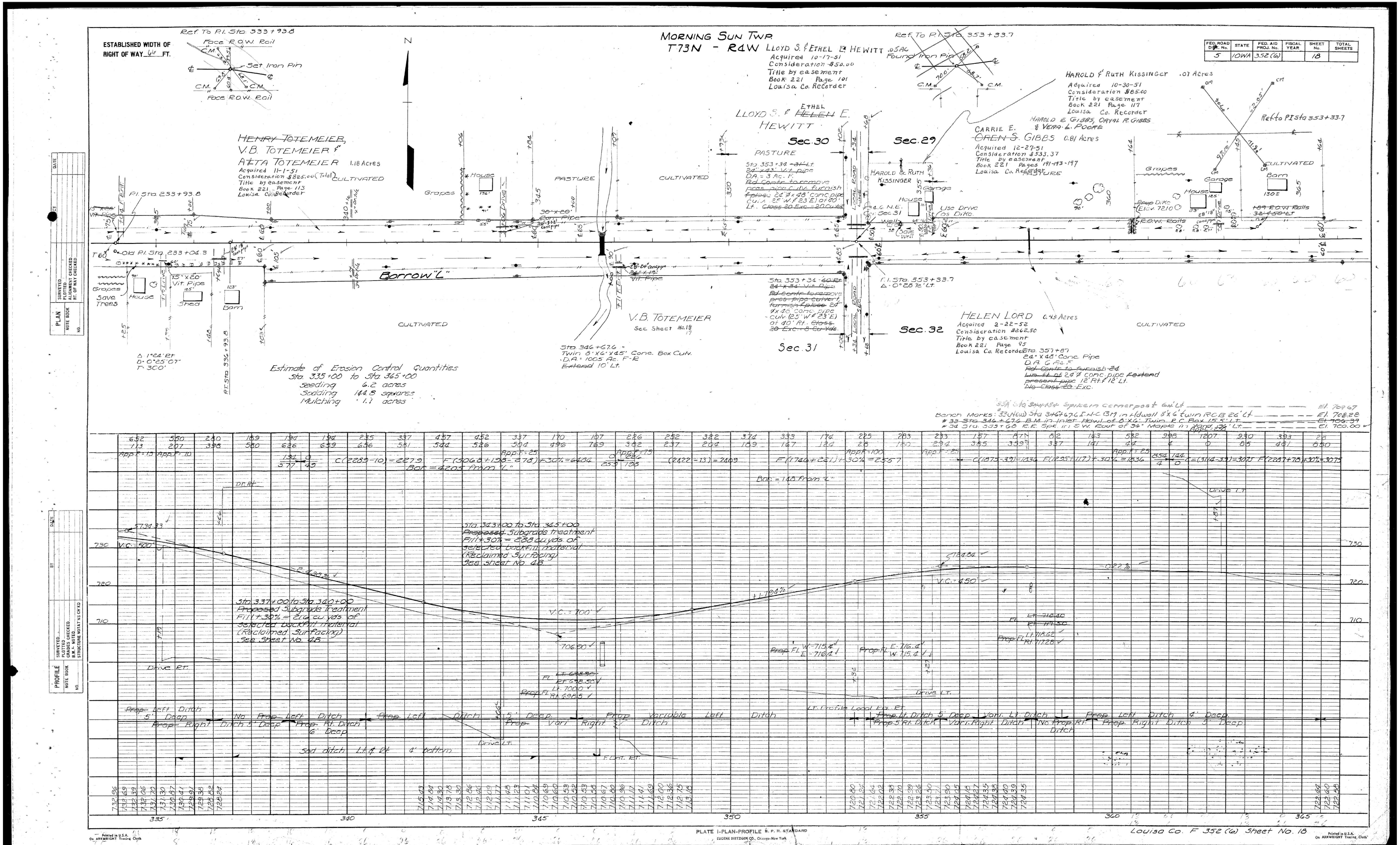

This Sheet
For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D22

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ESTABLISHED WIDTH OF RIGHT OF WAY 1½ FT.

MORNING SUN TWP.
T 73N - R 4W

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	352(6)		19	

Ref. To Pl. Sta. 390+94.6

Found Iron Pin

LUCIAN S. GIBBS
MERLE GIBBS
EVELYN WHITTAN
LYLE GIBBS
HAZEL ROSS
DAYLE S. GIBBS

CARRIE E. ~~OREN S.~~ GIBBS et al
See Sheet No. 18

Sec. 29

CARRIE E. GIBBS

CARRIE E. ~~OWEN~~ GIBBS ~~et al~~ 0.45 Acres
Acquired Jan. 8, 1952
Consideration $215.00
Title by easement
Book 221 Page 195
Louisa Co. Recorder

CECIL L & FERN GRIM .52 Acres
Acquired 10-11-51
Consideration $520.00 (Total)
Title by easement
Book 221 Page 187
Louisa Co. Recorder

CULTIVATED
Barn
PASTURE
MEADOW
YARD
House
Dike
Borrow M
Borrow W
Sta. 361 to Sta. 364 Save 5000 C.Y. in ROW for shouldering
15"x20' Vit. Pipe
18"x22' Vit. Pipe
2-24' Cont. Pipe
15"x26' Vit. Pipe
15"x20' Vit. Pipe
Flood Tile
Cont. Pipe Outlet
16'x16' Wood Plank Set on 8 Wood Piles
Pl Sta. 390+94.6
P.I. Sta. 393+94.6
F.E. Sta. 357+94.6
F.E. Ent. Pt.
F.E. Ent. Lt.
Drive Lt.
Prop. Lt. Ditch Grade
Prop. Fl. Lt. 729.90 Rt. 738.60
Prop. Fl. Lt. 729.19 Rt. 733.07
Prop. Fl. Lt. 709.40 Rt. 708.20
Prop. Fl. Lt. 709.5 Rt. 708.4
V.C. = 300'
V.C. = 400'
-0.22%
+0.60%
-0.20%
+0.20%
+0.31%
Δ = 0°21' Rt.
D = 0°03'30"
T = 300'
L = 600'
R = 1637.1'
Sta. 364+48.0
10'x6'x43.2' Conc. Box Culv.
D.A. = 572 Ac. F-R
~~Extend~~ 13' Lt. & 15' Rt.
~~Ref. Contr. to clear outlet.~~
Sta. 336+68
36" RCB Conc. Pipe
0.9 + 41 Ac. F
~~Ref. Contr. to furnish~~ 30 Lin. Ft. of 36" B Conc. Pipe ~~Extend pres.~~ Culv.
12 Rt. & 18 Lt. ~~Clean outlet~~
~~Grass Ex. Ent. Int. Cu. Yds.~~
10 Lin. Ft. of 8¼ corr. metal outlet pipe.
Estimate of Erosion Control Quantities
Sta. 365+00 to Sta. 395+00
Seeding 6.3 acres
Mulching 0.8 acres
Sta. 364+48.0
10'x6'x43.2' Conc. Box Culv.
D.A. - 572 Ac. F-R
~~Extend~~ 13' Lt. & 15' Rt.
~~Ref. Contr. to clear outlet.~~
HELEN LORD
See Sheet No. 18
HOWARD C. HILL 0.45 Acres
Acquired 6-12-52
Consideration $243.50
Title by easement
Book 221 Page 97
Louisa Co. Recorder
SERILDA SAMUEL BAIRD et al 0.67 Acres
Aquired 7-23-52
Consideration $320.00 (Total)
Title by easement
Louisa Co. Recorder
Book 221 Page 187
Sta. 369+70 is 15' E. Soft. up W. Edge of 30" Cottonwood on E. Bank DW. 222' Lt. - El. 729.71
Sta. 336+68 Ent. Pt. is 15' E. Soft. up W. Edge of 30" Cottonwood on E. Bank DW. 222' Lt. - El. 729.76
Bench Marks: '32 (NW) Sta. 366+48 1.4 Lt. CBM in Hdwall 16'x6' cattle pass 24' Lt. ——— El. 717.69
~~Sta. 336+48 Cut W. on inlet about 8' of 10'x6' cattle pass 26.4' Lt. ——— El. 716.30~~
~~Sta. 364+70 15' E. Soft. up W. Edge of 30" Cottonwood on E. Bank DW. 222' Lt. - El. 729.71~~
~~Sta. 336+68 Ent. Pt. is 15' E. Soft. up W. Edge of 30" Cottonwood on E. Bank DW. 222' Lt. - El. 729.76~~

	393	28	162	139	339	485	398	176	141	196	144	128	182	230	232	209	183	167	252	241	200	233	216	196	122	104	144	139	167	174	195	170
	261	850	1400	644	322	115	33	59	122	185	230	241	261	287	245	189	111	113	122	133	113	100	282	163	150	143	144	96	28	76	187	126
			162	0			Appr. 25					Appr. 45										Appr. 30	0	216					Appr. 50			
			871	5169		C (2306 - 26) = 2300		F (2351 + 2347 - 111) 30% = 3383							C = 1937		F (150 + 234) + 30% = 2256						49	233	C = 1772			F (1872 + 206 = 2078) + 30% = 1940			
						Bor = 1583 from "M"										Bor = 319 from "M"								72	168							
																									1940							

Prop. Rt. Ditch 5' Deep
Vari. Lt. Ditch
Prop. Left Ditch 5' Deep
Prop. Left Ditch 6' Deep
Vari. Left Ditch
Prop. Rt. Ditch 6' Deep
Prop. Left Ditch 7.5' Deep
Prop. Right Ditch 5' Deep
See Prop. Left Ditch Grade Above
Vari. Right Ditch
Prop. Rt. Ditch 6' Deep
Clean out and use existing ditch (Leave Berm)
Prop. Right Ditch 5' Deep

Sta. 374+00 to Sta. 376+00
Prop. Subgrade Treatment
Fill + 30% = 164 cu. yds. of selected backfill material (Reclaimed Surfacing)
See sheet No. 43

Sta. 359+00 to Sta. 363+00
~~Proposed~~ Subgrade Treatment
Ex. Exc. (Incl. in Roway & Bor.) 651 cu. yds. Fill + 30% = 1228 cu. yds. of selected backfill material (Reclaimed Surfacing) See sheet No. 43

365 370 375 380 385 390 395

PLATE I-PLAN-PROFILE U. P. R. STANDARD
EUGENE DIETZGEN CO. Chicago-New York

Louisa Co. F 352 (6) Sheet No. 19

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FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D23	

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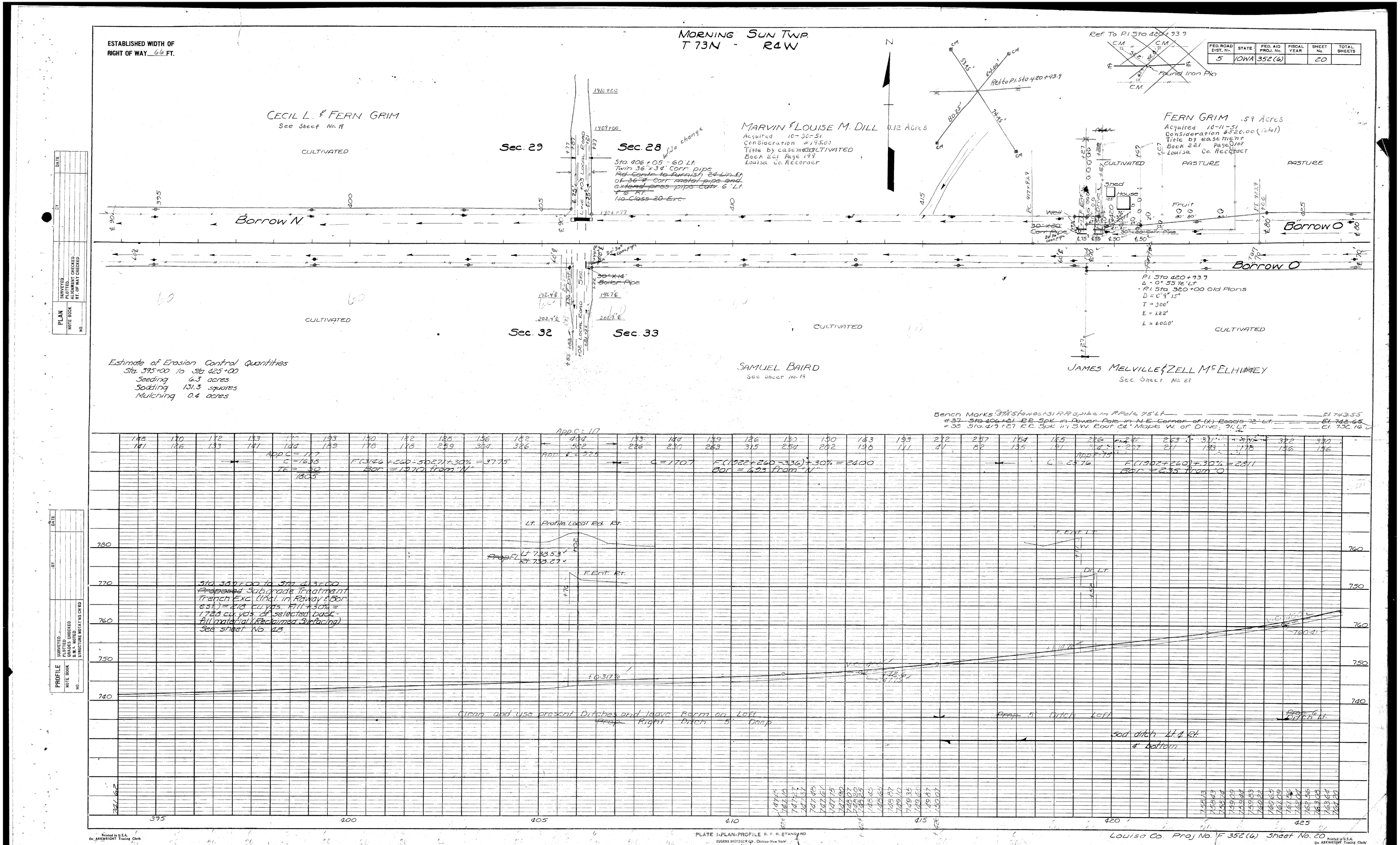

This Sheet
For Information Only

FILE NO. 30406 | ENGLISH | DESIGN TEAM HOLST / BAHR / JACKSON | HENRY COUNTY | PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58 | SHEET NUMBER D24

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ESTABLISHED WIDTH OF RIGHT OF WAY 66 FT.

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	352(6)		21	

MORNING SUN TWP.
T73N - R4W

Ref. To P.O.T. Sta. 434+97.4
Face ROW Post — Spk. in Power Pole — Set Iron Pin — Spk. in Fence Post — Spk. in Tel. Pole

Ref. To P.I. Sta. 449+32.4 (Survey)
Found Iron Pin

Ref. to P.I. Sta. 438+86.3

Sta. 451+78.48 (Survey)
M. & St. L. RR Crossing
Use signals as constructed.

FERN GRIM
See Sheet No. 20

SERILDA MARTHA BAIRD, CRISTAL LOUVERN BIGGERSTAFF, MARTHA SERILDA BAIRD, MARY EMMA BAIRD and DOROTHY ALIENE BAIRD

Sec. 28

~~SAMUEL BAIRD~~ 109 Acres
Acquired 7-23-52
Consideration ~~$450.00~~ PASTURE
Title by easement
Book 221 Page 18
Louisa Co. Recorder

ELSIE RIGGERSTAFF 0.41 AC
0.03 Acres
Acquired 10-16-51
Consideration $333.75 (Total)
Title by easement
Book 221 Page 185
Louisa Co. Recorder

SIDNEY SWANSON
See Sheet No. 22
IOWA STATE CROSSING NO. 13 78

PASTURE
PASTURE
CULTIVATED
CULTIVATED
CULTIVATED

Sta. 423+00 to Sta. 432 Save 800 c.y. on 4 to 1 slopes
Borrow O
Borrow O

24" x 22' Vit. Pipe
24" x 21' Vit. Pipe
Drive
House
Grapes
Prop. Dike Elev. 792.6
Survey Void
Old Reloc. "Been constr. R.R. Signal
Control Box
Battery Box
Corn Crib
Well & Windmill
Shed
Barn
Sta. 423+43
84" x 55' Conc. Pipe
D.A. = 2 Ac. F.H.
~~Rel. Contr. to furnish 12 Lin. ft. of 24" C.M. pipe flared prop. Sty. & Rt. & Lt. No class 20 Exc.~~
Sta. 452+23.5
24" x 62' Conc. pipe.
D.A. = 16 Ac. F.H.
~~Rel. Contr. to furnish~~ 12 lin. ft. of 24" Conc. pipe ~~flared~~ ~~prop. Sty. & Lt. & Rt. Requires~~ Type C connection. ~~See sketch below.~~ ~~No class 20 Exc.~~
Sta. 455+96
24" x 48' Conc. pipe
D.A. = 17 Ac. F.H.
Rel. Contr. to furnish 18 Lin. ft. of 24" Conc. pipe and extend wires. pipe & Lt. & Rt. Requires 2 Type C Connections. See Sketch on next sheet. No Class 20 Exc.
18" x 34' Conc. Pipe
Sta. 452+13.4 Survey
P.C. Sta. 445+51.16 (Survey)
P.T. Sta. 452+13.4 (Survey)
Δ = 0°22½' Rt.
D = 0°04'
T = 281.3'
L = 562.5'
E = 0.46'
R = 8595.0'
P.O.T. Sta. 434+97.4
P.I. Sta. 438+66.3 Survey
Δ = 0°15' Rt.
P.I. Sta. 449+32.4
Sec. 33

CLIFTON S. HADLEY 0.28 AC
0.28 Acres
Acquired 8-28-51
Consideration ~~$333.75~~ (Total)
Title by easement
Book 215 Page 240
Louisa Co. Recorder

JAMES MELVILLE & ZELL ~~MCELHINEY~~ MCELWINEY 0.61 Acres
Acquired 9-27-51
Consideration $653.75
Title by easement
Book 221 Page 103
Louisa Co. Recorder

MURL & ESTHER M. BOWERS 2.26 Acres
Acquired 10-31-51
Consideration $335.00
Title by easement
Book Page
Louisa Co. Recorder

Estimate of Erosion Control Quantities
Sta. 423+00 to Sta. 455+00
Seeding 6.0 acres
Sodding 150.0 squares
Mulching 0.2 acres

Bench Marks: #39A Sta 433+55 R.R. Spike in S.W. root 36" Maple 195' Lt. — El. 782.54
#39 Sta 433+45 R.R. Spk. in S. Side of 18" Maple 45' Lt. — El. 792.49
#40 Sta 443+60 R.R. Spk. in S.W. Side of 36" Twin Maple in Barn Lot 70' Rt. — El. 789.46
#41 Sta 449+76 R.R. Spk. in S. Root of 40" Cottonwood N. of R.R. 106' Lt. W. of Xing. — El. 803.85

PLATE I-PLAN-PROFILE R. P. R. STANDARD
EUGENE DIETZGEN CO., Chicago-New York

Printed in U.S.A. On ARKWRIGHT Tracing Cloth

LOUISA Co. F 352(6) — Sheet No. 21

This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D25

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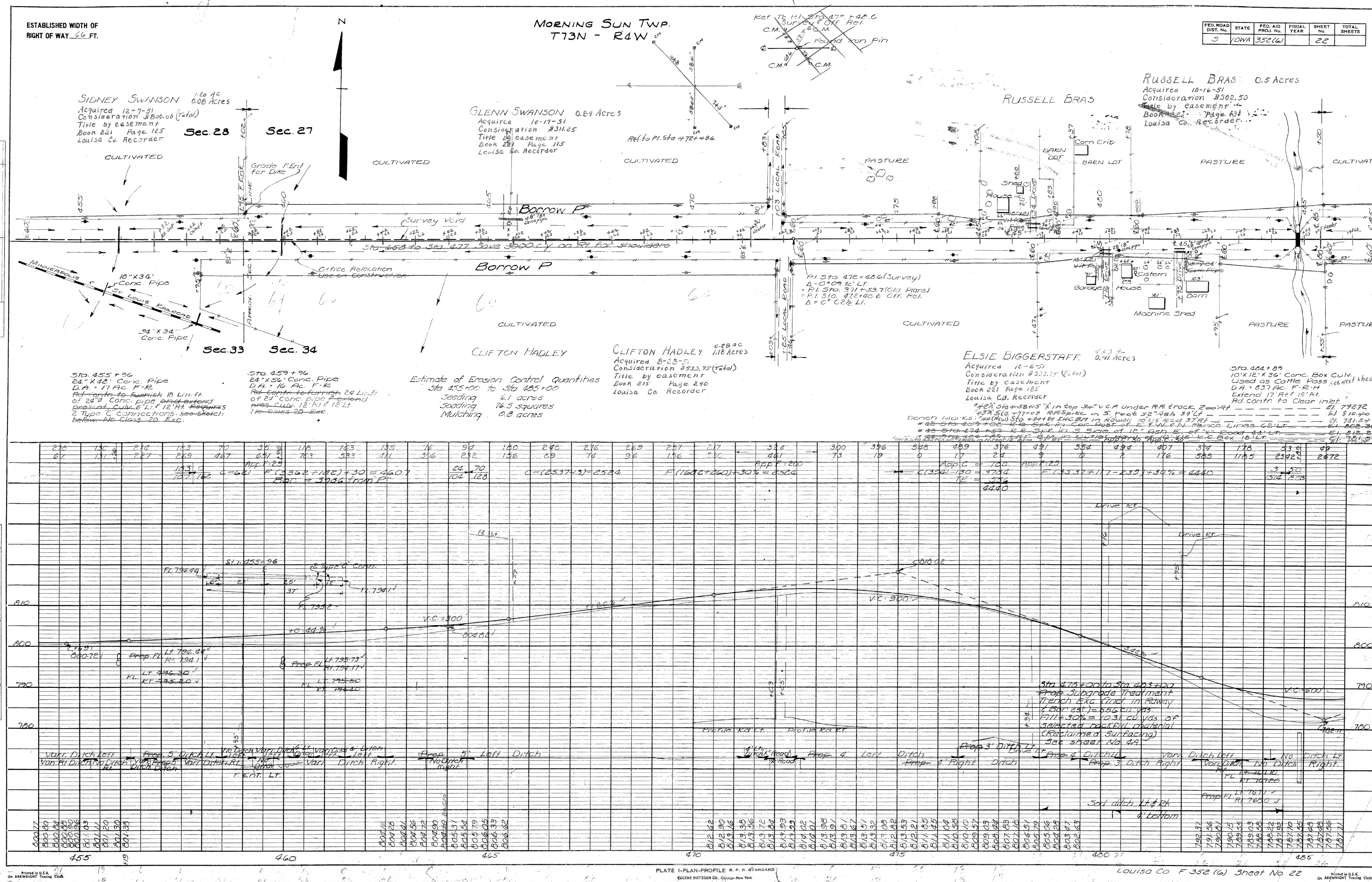

This Sheet
For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D26

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	35C(6)		23	

ESTABLISHED WIDTH OF RIGHT OF WAY 66 FT.

MORNING SUN TWP.
T73N - R4W

N

SIDNEY SWANSON 0.02 AC 1.2 Acres
Acquired 12-7-51
Consideration $80.00 (Total)
Title by easement
Book 221 Page 125
Louisa Co. Recorder

SADIE FRANCES CORNIC & WALTER CORNIC
See Sheet No. 24

Sec. 27 Sec. 26 Sec. 34 Sec. 35

PASTURE CULTIVATED BARN LOT

Borrow "Q" Borrow "R"

Sta. 484+89
10'x16'x36' Conc. Box Culv.
Used as Cattle Pass
D.A.= 837 Ac. F.R.=1.71
~~Extend~~ 17' Rt. & 19' Lt.
~~Rd Contr. to Clear Inlet.~~

SIDNEY SWANSON 0.03 AC 1.20 Acres
Acquired 12-7-51
Consideration $80.00 (Total)
Title by easement
Book 221 Page 125
Louisa Co. Recorder

Estimate of Erosion Control Quantities
Sta. 485+00 to Sta. 515+00
Seeding 6.0 acres
Sodding 102.8 squares
Mulching 1.2 acres

DAVE CUMMINGS 0.29 Acres
Acquired 9-26-51
Consideration $172.50
Title by easement
Book 221 Page 119

Sta. 502+80
24"x49" Conc. Pipe
D.A.= 5 Ac. F.R.
Rd Contr. to furnish 22 Lin. ft. Louisa Co. Recorder
of 20" Conc. Pipe ~~Required~~ Required
~~present Culv.~~ 12' Rt & 10 Lt.
~~Requires~~ 2 Type 'C' connections 1/-0 section
~~See Sketch~~ below. No Class 20 Exc.

Sta. 507+33.6
9'x3.5'x49' Conc. Box Culv.
D.A.= 4.8 Ac. F.R.
Extend 31' Rt. & 13' Lt. Skew 30°
~~Culv. Contr. to~~ outlet 4" tile
to barrel of Culv.

OLLIE OAKLEY 0.29 Acres
Acquired 9-26-51
Consideration $220.00
Title by easement
Book 221 Page 121
Louisa Co. Recorder

Bench Marks:
~~#44 Sta. 484+89 LHC B.M. in Outlet Hdwl. of 10'x16' RC Box 18' Lt.~~ El. 781.58
~~#45 Sta. 493+33 C.F. Spk. in N. Edge of 30" Maple N. of House 32' Rt.~~ El. 869.00
~~#46 Sta. 507+46 LHC B.M. in Inlet Hdwl. of 9'x3.5' R.C. Box 20' Lt.~~ El. 810.17

3/4"ø Sta 485+60 Cod Spike in N root 18" elm 75' Rt. El. 776.54
3/4"ø Sta 493+60 'X' in middle conc. sidewalk 66' Rt. El. 868.39
1/2"ø Sta. 493+47 Spike in 36" maple 13.5' Lt. El. 811.56
3/4"ø Reb (New) Sta 507+50 Chisel in Hdwall 3'x3' RCB 33' Lt. El. 810.96

Prop. Ditch Lt. Vari. Lt. Ditch Prop. 5' Ditch Left. Vari. Ditch Right. Prop. 5' Ditch Rt. Prop. 3' Ditch Rt. No Ditch Rt. No Ditch Rt. No Ditch Rt. Prop. 5' Ditch Right. No Ditch Rt. Vari. Ditch Left. No Ditch Right. Vari. Ditch Rt. Prop. 5' Ditch Left. Prop. 5' Ditch Right. Prop. 4' Ditch Right. No Ditch Rt.

500 ditch Lt. & Rt. 4' bottom

Prop. Subgrade treatment in Ex. Dirt in Roadway & Prop. Ex. 3:1 Cut Slopes Fill 1.30% = 283 cu. yds. of selected backfill material (Reclaimed Surfacing) See sheet No. 49

Profile Located Ft.

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PLATE 1-PLAN-PROFILE B. P. R. STANDARD
EUGENE DIETZGEN CO., Chicago-New York

Louisa Co. F-35C(2) Sheet No. 23

Printed in U.S.A. On ARKWRIGHT Tracing Cloth

This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D27	

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ESTABLISHED WIDTH OF RIGHT OF WAY 66 FT.

MORNING SUN TWP. T73N - R4W

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	352(6)		24	

SADIE FRANCES CORNIC & WALTER T. CORNIC 1.37 Acres
Acquired 10-11-51
Consideration $715.00
Title by easement
Book 221 Page 165
Louisa Co. Recorder
CULTIVATED

REUBEN RUEBEN A. & SUSAN TURK 1.05 Acres
Acquired 10-12-51
Consideration $362.50
Title by easement
Book 221 Page 166
Louisa Co. Recorder
Sec. 26

Ref. To P.C. Sta. 536+01.4
Found Wood Hub with ¾" Iron Pin in C. of Hub
C.M.

Ref. To P.T. Sta. 545+86.4
Found Iron Pin
GLEN ESTHER GLENN B. & ESTER JARVIS

Ref to PC Sta. 536+01.4
Ref to PT Sta 545+86.4

Prop. Dike Elev. 822.5
Save 2500 C.Y. in R.O.W. for shoulders
Borrow "S"
Sta. 530+00 to Sta. 535+00
Save 668 Cu. Yds. in R.O.W. for Shoulders
Save 1600 C.Y. in R.O.W. for shoulders
Borrow "S"
P.C. Sta. 536+01.4
Old P.C. Sta. 452+73.8
Δ = 9°51' Lt.
D = 1°
T = 493.7'
L = 985.0'
E = 21.6'
R = 5730.0'
Superelevate Curve
P.T. Sta. 545+86.4
Old P.T. Sta. 461+71.1
28'18" Conc. Pipe
15"x 25' Conc. Pipe
10' Beehive Intake
6" Tile
Chicken House
PASTURE
CULTIVATED
Sta. 542+05 - 40 Lt. 15"x 32' Conc. pipe
Lt. Tile F.
Rd. Cor. to be removed
Carry water N. in W. edge of road ditch.
Windmill & Well
Sta. 520+88 30"x 54' Conc. Pipe O.A. = 2.4 Ac. F.
Rel. conc. to furnish 18 Lin. Ft. of 30" Conc. pipe and furnish precast pipe culv. 12' Rt. F. 6' Lt. Required 2 Type C connections. See sketch below. No Class 2a Exc.
OLLIE OAKLEY See Sheet No. 23
GLEN ESTHER GLENN B. & ESTER JARVIS Sec. 35
Acquired 10-11-51
Consideration $1,156.75
Title by easement
Book 221 Page 169
Louisa Co. Recorder
1.92 Acres

Estimate of Erosion Control Quantities
Sta. 515+00 to Sta. 545+00
Seeding 6.5 acres
Mulching 0.5 acres

BM #47A Sta. 525+89 God spike in cor post 35' Lt. El. 827.06
BM #48A Sta. 534+90 "x" on E. conc parapet of born ramp 96' Rt. El. 822.26
BM #48 (NW) Sta 547+29 1.4 N. of BM in NE wall of N.G. Cattle pass 26' Lt. El. 824.60

Bench Marks:
~~#47 Sta. 525+37 P.P. Spk in Cor. Post in N.W. Fence 50' Lt. El. 826.85~~
~~#48 Sta. 547+29 Iron Pin in Inlet Wall of N.G. Cattle Pass E. of x-rd. 18' Lt. El. 824.60~~

246	194	270	274	256	307	217	313	333	352	282	282	285	311	411	382	311	304	309	341	409	515	589	507	324	187	141	181	189	300	272	259
215	243	217	250	306	287	314	613	209	122	70	91	135	109	65	52	59	104	167	132	56	0	C	6	32	196	411	494	541	687	682	600

Appt = 20
C = 4837
F (3318 + 403) + 30% = 4837
C (1532-6) = 1546
F (538+137) + 30% = 878
Waste = 668 Use for shoulders
Appt = 25
C (2633-80) = 2553
F (1836 + 720) + 30% = 2553
Appt = 300
C = 7207
F (3715 + 1771) + 30% = 6890
15 = 3791 F 720.5

PROFILE
SURVEYED
PLOTTED
ALIGNMENT CHECKED
B.M.'s NOTED
STRUCTURE NO'S & TYPES CK'D
NOTE BOOK
NO.
BY
DATE

Sta. 520+88
Type C connections
FL 819.27
FL 817.00
FL 818.10
Prop. FL Ft 819.27 Rt 817.07
FL Lt 819.20 Rt 818.60
Lt 1.6%
+2.6%
+3.0%
-1.08%
VC = 300'
VC = 450'
VC 823.02
VC 826.84
VC 839.02
F.C.M.P.
Belt
Prop. 5' Ditch Left
Prop. 5' Ditch Rt.
Variable Ditch Right
Prop. 5' Ditch Right
Prop. 4' Ditch Left
Prop. 4' Ditch Right
Prop. Rt. Ditch 5' Deep
Prop. Rt. Ditch ½ Deep
Prop. Lt. Ditch ½ Deep
Prop. Rt. Ditch 1' Deep
Prop. Lt. Ditch 1' Deep
Prop. Lt. Ditch 5' Deep
Prop. Rt. Ditch 1' Deep
Prop. Lt. Ditch 1' Deep
Prop. Rt. Ditch ½ Deep
Prop. Rt. Ditch 1' Deep

823.09	823.77	823.42	823.58	823.77	823.82	823.61	826.35	826.45	826.55	826.68	826.82	826.97	827.15	827.34	827.56	827.79	828.03	828.30	828.55	836.41	836.60	836.83	837.12	837.32	837.47	837.59	837.66	837.72	837.76	837.73	837.65	837.55	837.42	837.26	837.07	836.82	836.59

515 520 525 530 535 540 545

PLATE I-PLAN-PROFILE B. P. R. STANDARD
EUGENE DIETZGEN CO., Chicago/New York

Louisa Co. F 352(6) Sheet No 24

This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D28

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ESTABLISHED WIDTH OF RIGHT OF WAY_____FT.

MORNING SUN TWP.
T73N - R4W

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	352(6)		25	

GLEN ESTHER
GLENN B. & ESTER JARVIS
See Sheet No. 24

W.C. POGEMILLER ESTATE

Superelevate Curve.

Sec. 26 Sec. 25

Borrow "T"

Superelevate Curve

Ref. To P.T. Sta. 545+26.2 — C.M. — Found Iron Pin

Ref. To P.C. Sta. 553+68.8

Ref. To P.T. Sta. 562+22.1 — C.M. — Found Iron Pin

Ref. To P.C. Sta. 566+69.8 — Spk. in Fence Post — Set Iron Pin — Spk. in Tel. Pole — Spk. in Fence Post

Ref. To P.I. Sta. 570+93.0 — 20 W. Rail — Tan. — Set Iron Pin

Ref. To P.T. Sta. 574+96.5 — Set Iron Pin

Ref. to P.T. Sta. 574+96.5

P.I. Sta. 570+93.0

P.O.S.T. Old P.I. Sta. 476+35.1 — 35.6' Ahead of P.I. Back Tan. — Produced Ahead

Use as dike El. 772.8

Conc. & Rock Foundation

TIMBER PASTURE

OLD ORCHARD

TIMBER

CULTIVATED

PASTURE

Barn

House

Garage

Mach. Shed

Corn Crib

Water Tank

Conc. Tank

Gas Tank

Vit. Pipe

Conc. pipe silo

Feed Bunk

Feed Bunks

Hog House

Cattle Shed

Δ - 9°51' Lt.
D - 1°

Δ - 8°32' Lt.
D - 1°
T - 427.5
L - 853.3
E - 15.9
R - 5730.0'

Δ - 6°04' Rt.
D - 1°
T - 304.0'
L - 606.7'
E - 8.2'
R - 5730.0

P.I. Sta. 537+96.3
Old P.I. Sta. 457+01.3

Old P.C. Sta. 433+60.0
Found Iron Pin
Old P.T. Sta. 439+79.8
Deceased

Old P.T. Sta. 562+22.1
Old P.I. Sta. 441+87.

P.T. Sta. 574+96.5

Sta. 547+29.0
4'X6'6"X36' Conc. Box Culv.
Used as Cattle Pass
D.A. - 7Ac. ±
~~Extend~~ 6' Lt. & 6' Rt.

Sta. 568+44.2
4'X4'X87' Conc. Box Culv.
D.A. - 20 Ac. ±
~~Extend~~ 7' Rt. & Skew 54°
Rd. Contr. to ditch outlet.

Sta. 574+60
24"X55' Conc. Pipe
D.A. - 6Ac. ±
~~Rd. Contr. to remove 6 Section from inlet, furnish~~ 24 Lin. Ft. of 24" Conc. Pipe ~~Extend~~ insert pipe 30' Rt.
~~Skew 60 Exc. 7 Cy Yds.~~
~~Rd. Contr. to ditch outlet.~~

Estimate of Erosion Control Quantities
Sta. 545+00 to Sta. 575+00
Seeding 6.5 acres
Sodding 112.5 squares
Mulching 1.8 acres

CULTIVATED
RAYMOND F. POGEMILLER,
MATILDA E. POGEMILLER
& ALBERT W. POGEMILLER
W.C. POGEMILLER ESTATE 1.64 Acres
Acquired 10-17-51
Consideration $ 750.00
Title by easement
Book 221 Page 123
Louisa Co. Recorder

Bench Marks
#48 Sta. 547+23 Iron Pin in Inlet Head of 4'X6' Cattle Pass 19' Lt. ——— El. 324.61
#49 Sta. 563+12 P.K. Nail in Head Wall of 24"Ø RCP Culv. ——— El. 772.37
BM #48 Sta. 568+17 R.R. Spike in N. Face of 18" dead Walnut 200 Rt. ——— El. 779.70
BM #49 (New) Sta. 567+65 I.H.C. Brass Cap in N. Wall of 4'X4' RCB Culv. ——— El. 772.11

App'c. 50

272	259	196	275	174	211	224	186	190	280	359	357	298	304	276	272	536	800	576	980	931	561	245	208	210		519	256	159	1007	534	247		
682	600	526	765	282	204	182	158	95	50	74	143	246	276	250	189	137	126	119	214	489	871	1589	2145	2424		1826	32	0	26	312	293		
	App'c. 300			App'c. 50									App'c. 50		App'c. 25																		
			174 101										C = 1013	F(NOT 78)E = 101	365	C = 4946	F = (511 + 208 - 726) + 30% = 597						208 1546	C (6639-190) = 6449		F(6643+782-1155) + 30% = 7325							
			761 34		F(7368+247) + 30% = 2360						App'c. 50			1063	30% = 1063	0 137	TE = 5043	.80n = 922 from ~P~							TE = 383 7325								

Prop. Subgrade treatment
Tr. Exc. (Incl. Rdway. & Bor. est.) = 83 cu yds. Fill = 80% = 432 cu yds of selected backfill material (Reclaimed Surfacing) See sheet No. 4A

Prop. Subgrade treatment
Trench Exc. (Incl. in Rdway. & Bor. est.) = 305 cu yds fill +10% = 1625 cu yds of selected backfill material (Glacial Clay) See sheet No. 4A

Prop. Lt. Ditch 7' Deep
Prop. Rt. Ditch 7 Deep
Vari. Left Ditch
No Prop. Rt. Ditch
Prop. Left Ditch 4' Deep
Prop. Rt. Ditch 5½' Deep
Prop. Left Ditch 5' Deep @ Drive Ft.
No Ditch
Prop. Right Ditch 4 Deep
Vari. Right Ditch
No Prop. Lt. Ditch
Prop. Lt. Ditch 5' Deep
Prop. Right Ditch 5 Deep
Vari. Lt. Ditch & Deep
Vari. Right Ditch
No Ditch Right
Prop. Left Ditch 4' Deep
Prop. Right Ditch 5' Deep
Vari. Left Ditch
No Rt. Ditch
Lt. 770.90
Ft. 766.76
Lt. 770.4
Prop. Ft. Rt. 769.0

Lt. 815.76
Ft. Rt. 813.00
Prop. Ft. Lt. 815.71
Rt. 815.01

Lt. 766.66
Ft. 756.26
Prop. Ft. Lt. 766.0
Rt. 753.0

Sod ditch Lt. 4' bottom

Sod ditch Rt. 4' bottom

Drive Ft.

V.C. = 400'

PLATE 1-PLAN-PROFILE B. P. R. STANDARD

Louisa Co. F 352(6) Sheet No. 25

This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D29

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ESTABLISHED WIDTH OF RIGHT OF WAY 66 FT.

MORNING SUN TWP. T73N - R4W Sec. 25

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	352(6)		26	

Ref. To P.T. Sta. 574+96.5 — Spk. in Tel. Pole; Set Iron Pin; Spk. in Tel. Pole

Ref. To P.O.T. Sta. 577+62.4 — Spk. in 36" Maple; Spk. in 30" Ash; Set Iron Pin; Spk. in Tel. Pole

Ref. To P.O.T. Sta. 585+89.0 — Set Iron Pin; Spk. in Tel. Pole; Spk. in Fence P8; Face R.O.W. Rail

Ref. To P.O.T. Sta. 589+52.5 — Set Iron Pin; Spk. in Tel. Pole; Spk. in Angle Fence Post; Spk. in Steel Fence Post

Ref. To P.C. Sta. 597+40 — Spk. in 36" Elm; Spk. in 30" Elm; Set Iron Pin; Spk. in Tel. Pole; Spk. in Fence Post

Ref. to P.C. Sta. 597+40.2

WILLIAM & NILLIE BAXTER

C.S.K. CAMPBELL

OLD ORCHARD

Use F.E.H.T. for Dike ERV. 772.8

House

Shed

Well

Vit. Pipe 23' 18" Conc. Pipe

3/4" Water Pipe

P.O.T. Sta. 577+62.4

P.O.T. Sta. 585+89.0

P.O.T. Sta. 589+52.5

Conc. Foundation

Barn

PASTURE

Borrow "U"

Iowa No. 78

Rock

+CO U.S.G.S. B.M. 64' Lt. No 31-58

Old Channel

New Channel

WILLIAM & NELLIE BAXTER 3.17 Acres

Acquired 12-19-51
Consideration $ 191.25
Title by easement
Book 215 Page 239
Louisa Co. Recorder

CULTIVATED

Superelevate Curve

Δ = 33°43 1/2" Rt.
D = 2°45'
T = 1055.4'
L = 1936.1'
E = 252.1'
R = 2083.6'

MEADOW

Chicken House

P.C. Sta. 597+40.2

P.T. Sta. 574+96.5

Sta. 574+80
24" x 55' Conc. Pipe
D.A. = 2.8 Ac. E.
~~Rel Contr. to remove C.S.P. section from inlet end, furnish 24 Lin. Ft. of 24" Conc. pipe and extend present pipe CulV. 30 Ft. Class 2B Exc. 70 Lin. Yds. Ditch outlet~~

Estimate of Erosion Control Quantities
Sta. 575+00 to Sta. 605+00
Seeding 7.3 acres
Sodding 1658 squares
Mulching 2.7 acres

Sta. 589+84.3 - 17' Lt.
8' x 10' x 54' Conc. Box Culv.
Used as Cattle Pass
D.A. = 411 Ac. F-R-H
~~Extend 11 Ft~~ Rt.

Sta. 600+81
~~24" x 49' Conc. Pipe~~
~~Rel. Lt. F.~~
~~Rel Contr to remove present pipe CulV.~~

Bench Marks
* 36 Sta. 576+43 P.K. Spk. in W. Root of 48" Elm in Farm Yard 82' Lt. — El. 776.24
* 51 Sta. 590+20 P.K. Spk. in S. Root of 18" Walnut N.W. of AXIS P.C. Bnd 122' Lt. — El. 733.72
* 50 Sta. 591+93 P.K. Spk. in S. Root of 24" Elm S. of House 41' Lt. — El. 728.84
BM 50A Sta. 589+84.3 1" HCBM in Hdwall 8' x 16' P.C.B. 56' Rt. — El. 731.49
BM 52A Sta. 604+15 Conc. RR Spike in 24" Elm 96' Lt. — El. 762.36

534	287	280	226	230	411	659	1026	1485	2228	2926	2728	2363	1195	136	456	389	523	472	603	1791	3207	3511	2452	1615	933	680	689	644	659	385	237
312	293	286	315	274	233	153	30	6	19	35	05	793	431	1971	4062	4794	2258	1026	463	4	0	0	0	0	0	12	41	122	1326	2846	4096
		Appr.=40	Appr.=60	Appr.=30		Appr.=25												Appr.=100										Appr.=300			

C=(14,354-298)= 14,716 — F(11,399+122-619)+30% = 14,702
76 = 15.9 — Use for Subgrade treatment
15,895 — Sta. 565+00 to Sta. 583+00 = 1283
Total = 16,585

389 / 4794 — C(4128-117)= 4011 — F(5183-450)+30% = 4322
52 — 76 = 21.7
4322

Appr. = 100
C(16,656-576) = 14,580 — F(12,617-117-685)+30% = 15,664
76 = 206
15,664

Profile Iowa No. 78 East

Sta. 574+50 to Sta. 589+00
Prep. Subgrade treatment
Trench Exc. (Incl. in Rdwy. & Bor. est.) = 318 cu. yds.
Fill +10% = 2625 cu. yds. of selected backfill material (Glacial Clay)
See Sheet No. 4A

Sta. 580+00 to Sta. 584+50
~~Prep.~~ Subgrade treatment
Tr. Exc. (Incl. in Rdwy. & Bor. est.) = 450 cu. yds. Fill +30% = 735 cu. yds. of selected back fill material (Reclaimed Surfacing)
See sheet No. 4A

Sta. 584+50 to Sta. 593+80
~~Prep.~~ Subgrade treatment
Tr. Exc. (Incl. in Rdwy. & Bor. est.) = 804 cu. yds. Fill +30% = 1574 cu. yds. of selected backfill material (Glacial Clay)
See Sheet No. 4A

Sta. 593+50 to Sta. 601+00
Prep. Subgrade treatment
Tr. Exc. (Incl. in Rdwy. & Bor. est.) = 91 cu. yds.
Fill +30% = 135 cu. yds. of selected backfill material (Reclaimed Surfacing)
See Sheet No. 4B

Sta. 601+00 to Sta. 604+00
Prep. Subgrade treatment
Tr. Exc. (Incl. in Rdwy. & Bor. est.) = 139 cu. yds. Fill +30% = 1926 cu. yds. of selected backfill material (Glacial Clay)
See Sheet No. 4B

Prop. Lt. 770.8 Rt. 768.0

Lt. 770.80 Rt. 766.90

V.C. = 700'

V.C. = 500'

V.C. = 1050'

-0.90%

+3.92%

+3.70%

-1.91%

Drive Lt.

Drive Rt.

Vari. Ditch No. Ditch on Right

Prep. Left Ditch 4' Deep

Prep. Right Ditch 4' Deep

No Ditch Left

See Sta. for Culv. Clean Road Ditch on Right

Prep. Left Ditch 5' Deep

Prep. Right Ditch 5' Deep

Prep. Left Ditch

Prep. Vari. Left Ditch Right Ditch

Sod ditch Lt. & Rt. 4' bottom

Sod ditch Lt. & Rt. 4' bottom

F. End Lt.

F. End Rt.

Lt. 718.2 Rt. 718.6

Prop. Fl. Lt. 716.6 Rt. 719.0

780 / 770 / 760 / 750 / 740 / 730 / 720

575 580 585 590 595 600 605

PLATE I-PLAN-PROFILE B. P. R. STANDARD
EUGENE DIETZGEN CO., Chicago-New York

Printed in U.S.A. On ARKWRIGHT Tracing Cloth

Louisa Co. F 352(6) Sheet No. 26

PLAN: SURVEYED, PLOTTED, GRADES CHECKED, R/W CHECKED, RT. OF WAY CHECKED, NOTE BOOK, NO.

PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, B.M.'s NOTED, STRUCTURES DATA NG. GIVEN, NOTE BOOK, NO.

DATE / BY

This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D30

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FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	352(4)		27	

ESTABLISHED WIDTH OF RIGHT OF WAY 66 FT.

MORNING SUN TWP.
T73N - R4W

Ref To PC1 Sta 625 + 87.3

West Cor Conc Base R.R. Signal

4° Curve

Sat Bridge Spike

Spk. in Power Pole

N.W. Cor Base R.R. Signal

IOWA STATE CROSSING NO. 3739

PASTURE

STA. 606+42.0
END OF DIV. 2
BEG. OF DIV. 3

P.I. Sta. 607+95.6

24' x 29' I-Beam Bridge
D.A. = 1302 Sq. Mi. FR-H

Iowa No. 78

Merrill W. & Ruby G. Baird

Sec. 25

Ellen N. Griffith

Prop. Ch-Ch. Sec. Cross Sections and Sheet No. 30

Sta. 613+93.8
Set Iron Pin

Ellen N. Griffith
Ruben E. Griffith

Sec. 30

VACANT LOTS

Church St.

Sta. 621+99
24" x 176' Conc. Pipe
Culv. Skew 33°
Grade 138' Lt.

Lt. Portia Local Road

Sta. 622+86

Approx. Sta. 623+00

Prop. Ch-Ch. Sec. Cross Sections and Sheet No. 30

Sta. 623+68
Prop. Ch-Ch. Sec. Cross Sections and Sheet No. 30

Sta. 624+34
Prop. Ch-Ch. Sec. Cross Sections and Sheet No. 30

Sta. 624+71
Prop. Ch-Ch. Sec. Cross Sections and Sheet No. 30

Sta. 625+00
Prop. Ch-Ch. Sec. Cross Sections and Sheet No. 30

Sta. 625+37
Prop. Ch-Ch. Sec. Cross Sections and Sheet No. 30

M & St. L. R.R.

Pt. Sta. 627+ 350.0 =

7° 57' Curve

Ref to PT Sta 624+93.8

Pt. Sta. 628+94
Post Sta. 9+28.6

24' x 84' Conc. Pipe Culv. VAC

Borrow Pit

24' x 84' Conc. Pipe Culv. VAC
Conc. pipe culv. VAC
Prop. Sta. 625+87.3
P.O.C. Sta. 12+50.0 of Curve
To Lt. of Morning Sun East Survey / F 352 Louisa Co.

STA. 626 + 37.3
END OF DIV. 3 & PROJ.

Pl. Sta. 13+24.7
F. 352 (4)

60' x 10' Wood R.R. Trestle over rd
M & St. L. No. 879

Estimate of Erosion Control Quantities
Sta. 605+00 to Sta. 625+87.3
Seeding 3.2 acres
Mulching 2.3 acres

Ellen N. Griffith 3.0 Acres
Acquired 1-14-52
Consideration $3,000.00
Title by easement
Book 221 Page 193
Louisa Co. Recorder

Borrow "V"

Superelevate Curve

TOWN OF MORNING SUN

Sta. 606+23
D.A. = 5 Ac. M.
Rd. Contr. to furnish & place
24" ϕ x 162' Conc. pipe Culv. Cl. C
Lt. 4°76 Rt. Skew 15°. Butch Inlet & Outlet
Class 2C Exc. - 38 cu. Yds.

Sta. 610+78
D.A. = 8 Ac. M.
Rd. Contr. to furnish & place
24" ϕ x 96' Conc. pipe culv. Cl. C
Lt. 4° 36' Rt.
No Class 2C Exc.

Sta. 613+65
Sta. 614+32
D.A. = 1300 Ac. M. H.R.F.
Build Two 12'x12'x60' Conc. Box Culv. Skew 45°

Sta. 621+81
L.A. = 2 Ac. F-E
Rd. Contr. to furnish & place
90 Lin. ft. of 24" ϕ Conc. Pipe
Extend pres. culv. 26' Lt. & 64'
Rt. Skew 33° Class E Exc. - 0
Sandy Gas. Type C. Connection.

Bench Marks:
#33 Sta. 611+40 R.R. Spk. in N. Root 40' Soft Maple N.W. of I-Beam Bridge 280' Lt. — El. 724.21
#34 Sta. Cut X in W. Howl of Masonry Arch Culv. — El. 730.64
#35 Sta. U.S.G.S. & State B.M. 32 - B.M. 3 of Survey on Iowa #78 — El. 746.64
#56 Sta. 621+40 R.R. Spk. in S.W. Root of 24" Hard Maple in Yard 225' Lt. — El. 747.98

Ch. Ch. = 384 | 776 | 104

App. = 20°

Lt. Portia Local Road ℄

Type C connection

Sta. 621+81

Fl. 736.6

Fl. 733.71

Fl. 730.12

Fl. 731.66

Sta. 601+00 to Sta. 612+50
Prop. Subgrade treatment
Trench Exc. (Incl. in Rdwy. Exc.)
Bor. 4981 cu yds Fill +10% =
1925 cu yds of selected backfill material (Glacial Clay)
See Sheet No. 48

Sta. 612+50 to Sta. 625+00
Proposed Subgrade treatment
Trench Exc. (Incl. in Rdwy. Exc.) = 240 cu yds Fill +10% =
1838 cu yds of selected backfill material (Glacial Clay)
See Sheet No. 48

Prop. Fl. Lt. 726.0 Rt. 729.6
Prop. Fl. Lt. 726.0 Rt. 725.0
Prop. Fl. Rt. 715.1 Lt. 719.0
Prop. Fl. Lt. 730.0 Rt. 722.72

Vari. Left Ditch Road open on left
No Rt. Ditch
Prop. Vari. Ditch on Right
No Left Ditch
Prop. 6' Left Ditch
Prop. Right Ditch 6' Deep
Prop. Ch. Ch. on Left
Vari. Right Ditch
No Ditch on Left
No Right Ditch
Vari. Left Ditch Road
No Right Ditch
Variable Left Ditch
No Right Ditch

PLATE I-PLAN-PROFILE B. P. R. STANDARD
EUGENE DIETZGEN CO. Chicago-New York

Louisa Co. F 352(6) Sheet No. 27

Printed in U.S.A. On ARKWRIGHT Tracing Cloth

This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY / LOUISA COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D31	

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	Iowa	352(4)		9	46

ESTABLISHED WIDTH OF RIGHT OF WAY ____ FT

MORNING SUN TWP.
T. 73 N. R. 3 W.

Ref. to POT Sta 0+00.0

Ref. to POT Sta 3+00.0

Ref. to PC Sta 6+09.5 (Survey)

Ref. to PT Sta. 13+24.7 (Survey & Off Reloc.)

Ref. to PT Sta. 17+33.5 (Survey)

Light Pole

Set Iron Pin

Found Iron Pin

Set Bolt

Tel. Pole

Trans. Pole

Brace Pole

Fence Post

Prop. Type E Intake, 114 lin. ft. of 15" storm sewer and 10 lin. ft. of 15" Conc. Metal Pipe for outlet

Sta. 998 + 58.7 - 00.5' Lt.
6'6" x 3'8" x 20.3' Masonry Arch
D.A. = 76 Ac. F. to R.

2 - Stone Box Inlet
120 - 31" Steel Masonry Catch Basin
Prop. 18" Tile

SEC. 30

TOWN OF MORNING SUN

IOWA STATE CROSSING NO. 3739

Sta. 4 + 85.4 - 18.5' Lt.
10" x 32' Corr. I. Pipe

Off Reloc.
Δ = 89°55'
D = 7°57'
T = 71.87
L = 113.10
E = 20.78
R = 720.0

Survey
Δ = 89°55' Lt.
D = 8°00'
T = 71.90
L = 114.0
E = 20.95
R = 716.3

Prop. Type E Intake, 40 lin. ft. of 15" storm sewer and 10 lin. ft. of 15" corr. pipe for outlet PASTURE

STA. 0 + 00.0
BEG. OF DIV. 1
AND PROJ.

GEORGE E. GRIFFITH & MARY ELLEN GRIFFITH

Prop. Type E Intake, 100 lin. ft. of 15" storm sewer and 10 lin. ft. of 15" corr. metal pipe for outlet

ELLEN GRIFFITH

SEC. 25

Sta. 8 + 40.6
24" x 91' Conc. Pipe
D.A. = 9 Ac. R.
Rd contr. to furnish 22 lin. ft. of 24" conc. pipe and extend prec. culv. 18 Ft. and 4 Lf. Ditch outlet
- No Class 23 Exc.

Sta. 12 + 51.3 N
23" x 84" Conc. Pipe
D.A. = 2 Ac. F. to R.
Use as constructed

Borrow "A"

Prop. conc. crossing slab
For details, see Sheet No. 3

Off Relocation
Sta 17+38.0 = 360.0
Ft. Sta. 17 + 33.5
1.59
1.33.5 Bl or Rt

STA. 17 + 36.0
END OF DIV. 1 =
STA. 17 + 38.0
BEG. OF DIV. 2

M. M. McELHINNEY

Sta. 13 + 15.0
24" x 85' Conc. Pipe
D.A. = 3 Ac. R.
Use as constructed.

SEC. 31

ESTIMATE OF EROSION CONTROL QUANTITIES
Sta. 0+00 to Sta. 17+36
Seeding 1.8 Acres
Mulching 0.1 Acres
Sodding 0.0 Squares
Sta. 17+36 to Sta. 25+00
Seeding 1.5 Acres
Mulching 0.0 Acres
Sodding 0.0 Squares

BENCH MARKS:
#3 Sta 000+06.3 - U.S.G.S. & State B.M. #32 - 41.5' Lt. — Elev. 752.45
#4 Sta 11+76 - X on N.W. Cor. of Conc. Base of R.R. Semaphore 188' Rt. — Elev. 753.55
#5 Sta. 17+07 - U.S.G.S. & State B.M. #K128 - 19.35 - 225' Lt. — Elev. 761.59

PLAN — SURVEYED, PLOTTED, GRADES CHECKED, R.R. MILE NOTED, RT. OF WAY CHECKED, NOTE BOOK NO., BY, DATE

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, R.R. MILE NOTED, SUPERELEVATION NOTES IN CHK'D., NOTE BOOK NO., BY, DATE

Trench excavation for subgrade treatment is included in template quantities. — Iowa # 76. Rt.

Sta. 0+00 to Sta. 5+00
Prop. subgrade treatment
Fill - 1132 cu. yds of selected material. See Sheet No. 6A

500 Cu. Yds available for shoulders in Bor: A

Prop. Curb & Gutter on Lt. - 15% to back of curb
Prop. Curb & Gutter, Prop. Rt. Ditch Var. Dep. & Slope, 15% to back of curb

No Prop. Ditch
No Prop. Ditch
Prop. Rt. Ditch Var. Depth

Prop. Lt. Ditch 1% below bottom slope

No Prop. Ditch

Prop. Lt. Ditch 6" below shoulder
Prop. Rt. Ditch Var. Depth

Prop. Lt. Ditch, Variable Depth

Prop. Ditch Lt. - 3' Deep
Prop. Ditch Rt. - 3' Deep

Revised Nov. 16, 1950

PLATE 1 — PLAN-PROFILE O. P. R. & R. E. STANDARD
KRUPPEL & ESSER CO., NEW YORK.

Louisa Co. F. Proj. No. 352(4) Sh. No. 10

This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D32	

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FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	352(4)		10	46

ESTABLISHED WIDTH OF RIGHT OF WAY ..... FT

PLAN — SURVEYED, PLOTTED, CHECKED, NOTE BOOK, ALIGNMENT CHECKED, R.T. OF WAY CHECKED, NO., DATE, BY

MORNING SUN TWP.
T. 73 N. R. 3 W.
SEC. 30

TOWN OF MORNING SUN

IOWA STATE CROSSING
NO. 1382

Ref. to P.O.T. Sta. 36+89.6
C.M. Set Spk. C.M.
1/4 Sec. Stone
1.0' Rt. of Iron Pin

Ref. to P.O.T. Sta. 50+31.8
Fe. Pin C.M. Set Br. Spk. C.P. C.M.

Stone 4.9 Rt. C.M. C.M. G. C. WARFIELD

LILLIAN BECKT [INTEGRA] 0.85 Acres
Acquired March 6th, 1950
Consideration CULTIVATED $241.15
Title by Easement
Book 218 Page 253
Louisa County Recorder

JOHN C. [WEB] STERRETT 0.89 Acres
Acquired March 20, 1950
Consideration $258.75
Book CULTIVATED Page
Title by Easement
Louisa County Recorder

CULTIVATED

P.O.T. Sta. 36+89.6 Found Stone 1' Rt.

P.O.T. Sta. 50+31.8 Found Stone 4.9 Rt.

Prop. Conc. crossing slab
For details, see Sheet No. 3

CULTIVATED

PASTURE

PASTURE

PASTURE

M. M. MC ELHINNEY 1.31 Acres
Acquired March 23, 1950
Consideration $450.00
Title by Easement
Book 218 Page 256
Louisa County Recorder

SEC. 31

Sta. 44+11.1
℄ of C.R.I.&P. Ry crossing
Flashing light signals to be placed as part of PG program

Sta. 43+72.0
2'x2'x27.0' Conc. Box Culv.
D.A. = 4.0 Ac. F.
Extend 4' Rt. and 9' Lt.
Road contr. to ditch inlet.

GEORGE & C. WARFIELD 2.55 Acres
Acquired July 10, 1950
(Consideration $814.75 (Total))
Title by Easement
Book 218 Page 256
Louisa County Recorder

ESTIMATE OF EROSION CONTROL QUANTITIES
Sta. 25+00 to Sta. 55+00
Seeding 6.2 Acres
Mulching 6.2 Acres
Sodding 30.0 Squares

BENCH MARKS
6 Sta. 28+27 R.R. Spike in Trans. Pole 3' Rt. ..... Elev. 758.65
7 Sta. 44+17 X in W. Hdw. of 24" Vit Pipe 115.8 Rt. ..... Elev. 755.89

403	418	426	370	341	341	367	407	452	407	433	507	482	511	511	430	404	411	441	399	280	322	282	233	372	144	500	530	644	811	1033	1345
326	333	341	342	303	378	370	333	318	311	370	370	383	370	333	311	282	232	141	54	71	159	200	246	294	244	283	300	200	79	39	74

App. f = 25 — C(3978) = f(3117 + 190) + 20% = 3978 — App. f = 10 — 233 / 0 / 466 — C(2542) = f(1980 + 132) + 20% = 2542 — 26 / 0 / 141 — App. f = 20 — C(3727 - 260) = 3703 — F(2117 + 182) + 20% = 2759 — App. f = 100

Waste = 944 Use for Shoulders

V.C. = 300' — -0.32% — V.C. = 200' — -0.16% — -2.10% — -6.00% — -0.10% — V.C. = 150' — -0.25% — V.C. = 300' — -3.00%

Grade proposed ditches Rt. & Lt.

Sta. 53+00 to Sta. 57+00
Prop. subgrade treatment
2111 - 752 cu. yds. of selected material. See Sheet No. 4A

Prop. Lt. Ditch 5' Deep
Prop. Rt. Ditch 5' Deep

See Prop. Ditch Grade above

Prop. Lt. Ditch 5' Deep
Prop. Rt. Ditch 5' Deep

Revised May 31, 1950

PLATE 1 — PLAN-PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO. NEW YORK

PROFILE — SURVEYED, PLOTTED, CHECKED, NOTE BOOK, NO., DATE, BY, STRUCTURE NOTATIONS CHKD.

This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D33

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FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	Iowa	352(4)		11	46

ESTABLISHED WIDTH OF RIGHT OF WAY ..... FT

Ref. to P.O.T. Sta. 63+74.2 Conc. Mon'm.

Ref. to P.O.T. Sta 67+00.0

Ref. to P.C. Sta 71+28.1

Ref. to P.I. Sta. 75+36.5

Ref. to P.T. Sta 79+44.8

MORNING SUN TWP. T. 73 N. R. 3 W.

Wood Hub — Conc. Mon'm. 8.55 Rt. — Wood Hub

G. C. WARFIELD
See Sheet No 10

CULTIVATED

Proposed Channel Change

SEC. 30 — PASTURE

SEC. 29 — MEADOW

BOR. "B"

Outlet 6" Tile

Encroachment Privilege

PASTURE

G. C. WARFIELD
See Sheet No 16

SEC. 31

SEC. 32

Sta. 60 + 97.1
6' X 4' X 32.8' Conc. Box Culv.
D.A. = 24.5 Ac. to R.
Extend 11' Rt & 40' Lt.
Rd. contr. to repair pres. tile and extend approx. 16 ft

+74.2 Found Conc. Mon. 8.55 Rt.

Sta. 63+74.2 - 32' Rt.
18" x 39' Corr. I. Pipe
Rd. contr. to remove pres. culvert, furnish & place 24"ϕ x 80' conc. pipe culv. 40'S of centerline (32' W. & 28' E). Ditch inlet and outlet Class 23 Exc. - 5 cu. yds.

ANNA A. BAIRD 2.84 Acres
Required March 14, 1950
Consideration $69.00 (Plus payments for Sheds Etc.)
Title CULTIVATED by Easement
Book 218 Page 245
Louisa County Recorder

MARTHA PEAR McELHINNEY 0.11 Acres
Required March 15, 1950
Consideration $100.00
Title by Easement
Book 218 Page 281
Louisa County Recorder

Sta. 70+25
DA -
Rd. contr. to furnish & place 60"ϕ & 66" Conc. Pipe Culv. (315' Lt & 305 Rt) for Stock pass. Dike inlet to keep ditch water out of culv.
Class 23 Exc. = 107 cu. yds.

Prop. Dike

P.I. Sta. 76 + 38.5
Δ = 0°40' Rt.

PASTURE

Δ = 0°49'
D = 0°06'
T = 408.4
L = 816.7
E = 1.5
R = 57300.0

P.C. Sta. 71 + 28.1

P.T. Sta. 79 + 44.8

MEADOW

KIRK R. & DAVID T. ARMSTRONG

Sta. 75+00 to Sta. 83+00
3,100 Cu. Yds. available for Shoulders in Rt. ditch

CULTIVATED

MEADOW

Iron Pin

Set Iron Pin

Set Br. Sph.

Trans. Pole

Tel. Pole

Fe. Post

RR Sph.

Conc. Mon'm.

Shed

House

Windmill

Barn

Conc. Ramp

Hedge

Water Hyd.

Creek

Sta. 55+00 to Sta. 85+00
Seeding 6.0 Acres
Mulching 1.0 Acres
Sodding 180.0 Squares

ESTIMATE OF EROSION CONTROL QUANTITIES

PBA I.H.C. B.M. in So. Hdwl 6' x 4' C.u.l. v. 31.5' Rt. of Sta. 64+38.8 — Elev. 736.50
P/O B. Top Iron Pin in Conc. Mon'm. 59.7 Rt. of Sta. 79+44.8 — Elev. 746.96

BENCH MARKS
#8 Sta. 80+45.8 ± on So. Hdwl of 6'x4' Conc. Box Culv. 220 Rt. — Elev. 736.82
#9 Sta. 80+70 RR Spike in root of 24" Maple 70' Rt. — Elev. 756.87
#10 Sta. 79+34 RR Spike in Trans. Pole 57' Rt. — Elev. 746.32

10133	1348	1092	1770	412	0	0	1541	1001	32	57	603	1055	1246	802	430	487	653	556	306	338	374	169	256	412	409	365	350	330	358	385	419	424	400
30	24	126	424	750	1050			1001	1280	1858	508	191	9	2	155	246	315	336	378			315	244	200	200	134	140	103	170	170	136	154	200
								757	670																200								

C(9000-51) = 0.818 — F(507+191)+20% = 0.918 — W = 33.1 Use for shoulders

C(6310-181) = 0.620 — Bar = 1213 from O — F(804+121)+20% = 1.142

C = 1581
F(1057+150)+20% = 1211
Sq. Yds for Shoulders = 1457
2,668
Bar = 1081 from O

Appr. F 40 — 240 100 200 10 — C(3944-127) = 3817 — Appr. F 32 — F(3010+109)+20% = 3817

Sta. 65+00 to Sta. 68+00
Prop. subgrade treatment
Fill = 470 cu. yds. of selected material. See Sheet No. 4-A

Estimated 100 cu. yds. of proposed channel change excavation to be wasted in old channel

Prop. Fl. E 764.3 W 763.5

Lt. Rd. Rt.

Dr. Rt.

FF Lt.

FF Rt.

Prop. Fl. Rt 750.3 Lt 750.0

Sta 73+50 to Sta 83+50
Prop. subgrade treatment. Fill = 2280 cu. yds of selected material. See Sheet No. 4-A and cross sections.

Local Road

No. Prop. Lt. Ditch Var. Depth
Rt. Ditch Var.

7+74 outlet 6" Tile
B.L. F.L. Elev. 738.8

7+77 outlet 12" Tile
46' Lt. F.L. Elev. 728.4

Prop. Lt. Ditch 5' Deep
Prop. Rt. Ditch 5' Deep

Prop. Lt. Ditch Var. Depth
Prop. Rt. Ditch Var. Depth

8+00 to 18" Dia. F.S. opening in 12" Tile
18" Lt. F.L. Elev. 726.6

F.L. Ditch = 726.6
F.L. Creek = 725.6

Prop. Rt. 730.5
Lt. 729.0

Prop. Lt. Ditch 5' Deep
Prop. Rt. Ditch 4' Deep

Prop. Rt. Ditch 5' Deep

Prop. Rt. Ditch Var.

Prop. Lt. Ditch 5' Deep
Prop. Rt. Ditch 5' Deep

753.29	752.40	751.38	750.22	746.82	747.50	744.50	743.47	742.27	741.32	741.20	741.22	741.58	742.27	743.34	746.68	750.07	750.82	752.22	753.47	754.37	755.03	756.34	757.02	757.34	757.02	756.16	754.90	753.40	752.10	751.88	751.10	750.20	750.03	749.84	749.73	748.70	748.30	747.63	746.14

760 / 750 / 740 / 730

VC = 900' — -3.00% — VC = 400' — VC = 800' — VC = 400' — -0.20% — -0.50%

Elev. 760.30 — Elev. 757.75 — Elev. 750.0 — Elev. 749.2 — Elev. 740.50

Revised NOV. 10, 1950

PLATE 1 - PLAN-PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

Louisa Co. — F. Proj. No. 352(4) — Sh. No. 11

This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D34

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ESTABLISHED WIDTH OF RIGHT OF WAY ____ FT

MORNING SUN TWP.
T. 73 N. R. 3 W.
SEC. 29

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	Iowa	352(4)		12	46

LOUISA COUNTY LIME PRODUCTS CO. 1.92 Acres
Acquired March 10, 1950
Consideration #76.80
Title by Easement
Book 215 Page 50
Louisa County Recorder

ANNA A. BAIRD
See Sheet No 11

CAL B. STEWART

KIRK R. & DAVID T. ARMSTRONG

L.M. SAMSON MARY IRENE SAMSON 1.74 Acres

Acquired March 27, 1950 - Consideration #406.00
Title by Easement - Book 218 Page 254
Louisa County Recorder

Sec. 32

Waste Area

Sta. 3+35.4
D.A. = 130 Ac. R.H.
60"ø x 148' corr pipe culv.
Rd contr to furnish 40' of 60"ø corr metal pipe culv. and extend on east
Ditch outlet
Class 2.3 Exc. = 5 cu yds

Sta. 101 + 27.7 ±
24" x ± Clay Pipe
D.A. = 10 Ac. R.H.
Rd contr to remove present structure, furnish and place 24"ø x 138' conc pipe culv. 30° Skew ahead
Sta. 101+82 (90.5' Lt. & 47.5' Rt.)
Requires 1'C' connection 45° from outlet
Class 2.3 Exc. = 6.5 cu yds

Sta. 107 + 87.4
2'-6" x 6'-5.4" Conc. Box Culv.
D.A. = 16 Ac. R.H.
Rd contr to furnish & place 36"ø x 148' conc. pipe culv. at Sta. 108+06 30° Skew (104' Lt. & 48' Rt.) Requires one 'C' connection 38° from outlet.
Class 2.3 Exc. = 227 cu yds.
Rd. contr to remove 18" dt inlet and plug both ends of area. culv. with tamped earth.
Ditch inlet.

Sta. 112 + 83.1
12'-0" x 12'-2" x 8'-3.8" Conc. Box Culv.
D.A. = 9.225 Ac. R.H.
Replace with 150' x 26' Cont. I. Beam Br. at Sta. 112+80.5
See as built bridge Plans

Prop. Lt. for local road
Sta. 110+00 to Sta. 112+00 on left 1000 Cu. Yds available for shoulders

P.I. Sta. 0+00
Off Reloc.

Off Reloc.
Use on const.

P.O.T. +82 = 0+00
Local Rd. Conn.

Conc. Baffle

Pond

Windmill

Barn

Barn

Meadow

Cultivated

Pasture

Cultivated

Pasture

Pasture

Cultivated

Ref. to P.O.T. Sta. 90 + 15.2

Ref. to P.O.T. Sta. 95 + 18.2

P.O.T. Sta. 90 + 15.2

P.O.T. Sta. 95 + 18.2

Sta. 88 + 44.0 - 4.7 ± Rt.
2'-6" x 3'-3.2" Conc. Box Culv.
D.A. = 40 Ac. R.H.
Extend 6.7' Rt. & 8.8' Lt.

Sta. 101 + 84

Sta. 108+06

1 Type 'C' Connection

1 Type 'C' Connection

Sta. 107 + 87.4

Sta. 112 + 83.1

Bench Marks:
#11 Sta. 88 + 44 (47' Lt.) on S. face of 2'-6" Conc. Box Culv. 20.3' Rt. ---------- Elev. 718.84
#12 Sta. 101 + 27.7 (±) on S. side of 24" Vit. Pipe 45.0' Rt. ---------- Elev. 720.45
#13 Sta. 107 + 32 (±) on bottom of 2'-6" Conc. Box Culv. 21.8' Rt. ---------- Elev. 705.64
#14 Sta. 112 + 14 R.R. spike in N.W. root of 30" Elm 83' Rt. ---------- Elev. 685.78

#11A Top of Iron Pin in Conc. Monu. 59' Rt. of Sta. 96+52
#12A R.R. Spk. in base of 15" Hedge Tree 69' Rt. of Sta. 99+90
#14A R.R. Spk. in side of Osage Orange 120' Rt. of Sta. 112+36

Estimate of Erosion Control Quantities
Sta. 85+00 to Sta. 116+00
Seeding 6.9 Acres
Mulching 3.8 Acres
Sodding 285.0 Squares

Elev. 749.33
Elev. 731.04
Elev. 685.04

Plate I - Plan-Profile C.P.P. & B.S. Standard

Revised Nov. 12, 1950

Louisa Co. F Proj. No. 352(4) Sh. No. 12

This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D35

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FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	Iowa	352(4)		13	46

ESTABLISHED WIDTH OF RIGHT OF WAY ____ FT

Sta 116+41.2

Set Br Spx

Stone Sec Cor 21.5 RT

Trans. Pole

Tel Pole

Ref to P.O.T. Sta. 120 + 54.6

Ref to P.O.T. Sta. 125+10.96

Near Con Conc. Base Battery Box

Prop. Conc. crossing sign For details, See Sheet No. 3

IOWA STATE CROSSING NO. 1379

MORNING SUN TWP.
T. 73 N. R. 3 W.

Sec. 29 Sec. 28 Sec. 32 Sec. 33

RALPH HUTCHCROFT

RODNEY W. MASON 2.10 Acres
Acquired March 9, 1950 - Consideration $550.00 (Total)
Title by Easement Book 218 Page 249
Louisa County Recorder

Encroachment Privilege
Sta. 129+67 to Sta. 132+90 on Lt
300 Cu. Yds. available for Shoulders.

GARDEN

Sta. 121+50 to Sta. 124+00 on Lt - 1500 Cu Yds available for shoulders.

Sta. 124+00 to Sta. 126+00 on Rt - 500 Cu. Yds available for shoulders.

PASTURE

LOT

BARN LOT

Hedge

Fence

Signal

Battery Box

Sta. 125+94.9 MUNICIPALS AND ST. LOUIS

30" x 38' Cast I.P.

TRAILROAD

Sta. 124+00
DA = Ditch
Rd. contr to furnish & place 22"ϕ x 54' Conc Pipe Culv. (26.5' Lt & 27.5 Rt)
Class 2 S Exc. = 16 cu yds.
Ditch inlet and outlet.

Sta. 125+ 22" Rt 18"ϕ x 126' Corr Pipe
DA = 3 Ac.
Railroad to furnish & place 24"ϕ x 50' Pipe under railroad at 37° Rt

Sta. 127+77.0
3'x3'x2'-11"
Conc. Box Culv.
D.A. = 88 Ac. C. R. to R.
Extend 10' Rt and 22' Lt
Rd. contr to ditch stones inlet and outlet.
See as Built Culverts Plans for detail of plume on north end

Sta. 125+
4 of M) 4.5 Ft. L. RR. Crossing
Present signals to be moved to fit proposed center line of road.

Sta. 133+78.0
15" x 50.7' Conc and V.T. Pipe
D.A. = 4 Ac. R.
Rd. contr to remove, press culv, furnish & place 24"ϕ x 100' Conc. Pipe Culv. (61.5 Lt & 38.5' Rt)
Class 2S Exc. = 75 cu. yds.

Sta. 138+45.5
6'x3'x 69.0
Conc. Box Culv
D.A. = 16 Ac. M.
Extend 24' Rt and 56' Lt
Rd. contr. to ditch inlet and outlet.

RALPH HUTCHCROFT 3.15 Acres
Acquired March 15, 1950
Consideration $525.00
Title by Easement
Book 218, Page 257
Louisa County Recorder

RODNEY W. MASON 1.65 Acres
Acquired March 9, 1950
Consideration $550.00 (Total)
Title by Easement
Book 218 Page 249
Louisa County Recorder

House

ESTIMATE OF EROSION CONTROL QUANTITIES
Sta. 116+00 to Sta. 148+00
Seeding 7.8 Acres
Mulching 6.1 Acres
Sodding 2330 Squares

BENCH MARKS
* 15 Sta. 124+93 (X) on conc. base of R.R. Signal light 17.4' Rt. — El. 728.89
* 16 Sta. 138+91 R.R. Spike in Side of 15" Oak 67' Lt. — El. 718.32

PLAN: SURVEYED, PLOTTED, DRAWN, CHECKED, NOTE BOOK, S. M. & NOTES, STRUCTURE SCATTING OF NO., RT. OF WAY CHECKED, NO., BY, DATE

PROFILE: SURVEYED, PLOTTED, DRAWN, CHECKED, NOTE BOOK, S. M. & NOTES, STRUCTURE SCATTING OF NO., BY, DATE

Revised Nov. 18, 1950

This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D36

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	Iowa	3528( )		1A	46

ESTABLISHED WIDTH OF RIGHT OF WAY ____ FT

MORNING SUN TWP.
T. 73 N. R. 3 W.

TRYPHENA S. & HARRY M. HUTCHISON

ETHEL G. JOHNSON

SEC. 28 | SEC. 27 | SEC. 33 | SEC. 34

PASTURE | LOT | GARDEN | MEADOW | CULTIVATED

Sta. 152+00 to Sta. 154+00 on Lt. - 300 Cu. Yds. available for shoulders

Sta. 152+00 to Sta. 154+00 on Rt. - 300 Cu. Yds. available for shoulders

Sta. 149+38.2 8'x8'x39.2' Conc. Box D.A. = 425 Ac. F.P.N. Extend 30' Rt. & 42' Lt.

Sta. 158+37.0 2'x2'x37' Conc. Box Cu.M. D.A. = 0 Ac. F.P. Extend 20' Rt. & 10' Lt. Rd. contr. to ditch inlet

Sta. 164+72.8 2'x2'x34.0 Conc. Box D.A. = 18 Ac. F. Extend 20' Rt. & 10' Lt. Rd. contr. to ditch inlet & outlet.

Sta. 160+53.1 Rd. contr. to furnish & place 24" R.C.P. conc. pipe culvert 34' Rt. (25° W & 23° E.) Class 2 3 Exc. = 24 cu. yds. Ditch inlet & outlet

Prop. Ditch Elev. 738.0

Ref. to P.I. Sta. 178+43.9

Ref. to P.O.T. Sta. 169+53.1

P.I. Sta. 178+43.9 Δ = 0°06½' Lt.

P.O.T. Sta. 169+53.1

+53.1 = 16'± Round Stone

Car Stone 18' Lt.

Set Iron Pin

Set Br. Spk.

Iron Pin

Trans. Pole

Barn

Conc. Trans. Pole

Conc. Tele. Pole

15"x 20' Conc. I.P.

15"x 16' Conc. I.P.

24"x 40' R.C.P.

18"x 34' R.C.P.

18"x 30' Conc. I.P.

SERILDA M. BAIRD EXECUTRIX AND HOLDER OF LIFE ESTATE OF THE ESTATE OF SAMUEL BAIRD
Acquired March 20, 1950 - Consideration $257.00 (Total) - 2.58 Acres
Title by Easement - Book 215 Page 49
Louisa County Recorder
SAMUEL BAIRD

TRYPHENA S. & HUTCHESON
HARRY M. HUTCHESON 2.36 Acres
Acquired March 9, 1950
Consideration $20.50
Title by Easement
Book 216 Page 248
Louisa County Recorder

ETHEL G. JOHNSON 0.80 Acres
Acquired March 10, 1950
Consideration $41.00 (Total)
Title by Easement
Book 221 Page 221
Louisa County Recorder

ESTIMATE OF EROSION CONTROL QUANTITIES
Sta. 148+00 to Sta. 180+00
Seeding 6.8 Acres
Mulching 1.7 Acres
Sodding 2100 Squares

BENCH MARKS
#17 - Sta. 149+15 R.R. Spike in W. Root of 20" Black Oak. 78' Lt. — El. 704.66
#18 - Sta. 155+56 'X' on S.E. Cor. of Top Conc. Step to House. 79' Lt. — El. 741.05
#19 - Sta. 163+93 R.R. Spike in So. Root of 36" Maple. 83' Lt. — El. 738.37
#20 - Sta. 179+43 R.R. Spike in Trans. Pole. 11' Rt. — El. 740.78

*17A S.R.K. in Tel. Pole 98' Lt. Sta. 148+90
*20A Top Iron Pin in Conc. Monu. 58' Rt. Sta. 179+63

PLAN: SURVEYED | PLOTTED | GRADES CHECKED | R.O.W. CHECKED | NOTE BOOK | NO.

PROFILE: SURVEYED | PLOTTED | GRADES CHECKED | R.O.W. CHECKED | NOTE BOOK | NO. | STRUCTURE NOTATIONS CHKD.

DATE | BY

PLATE 1—PLAN-PROFILE C.P.R. & R.E. STANDARD

Revised Nov. 10 1950

Louisa Co. F. Proj. No. 352(4)

This Sheet For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D37

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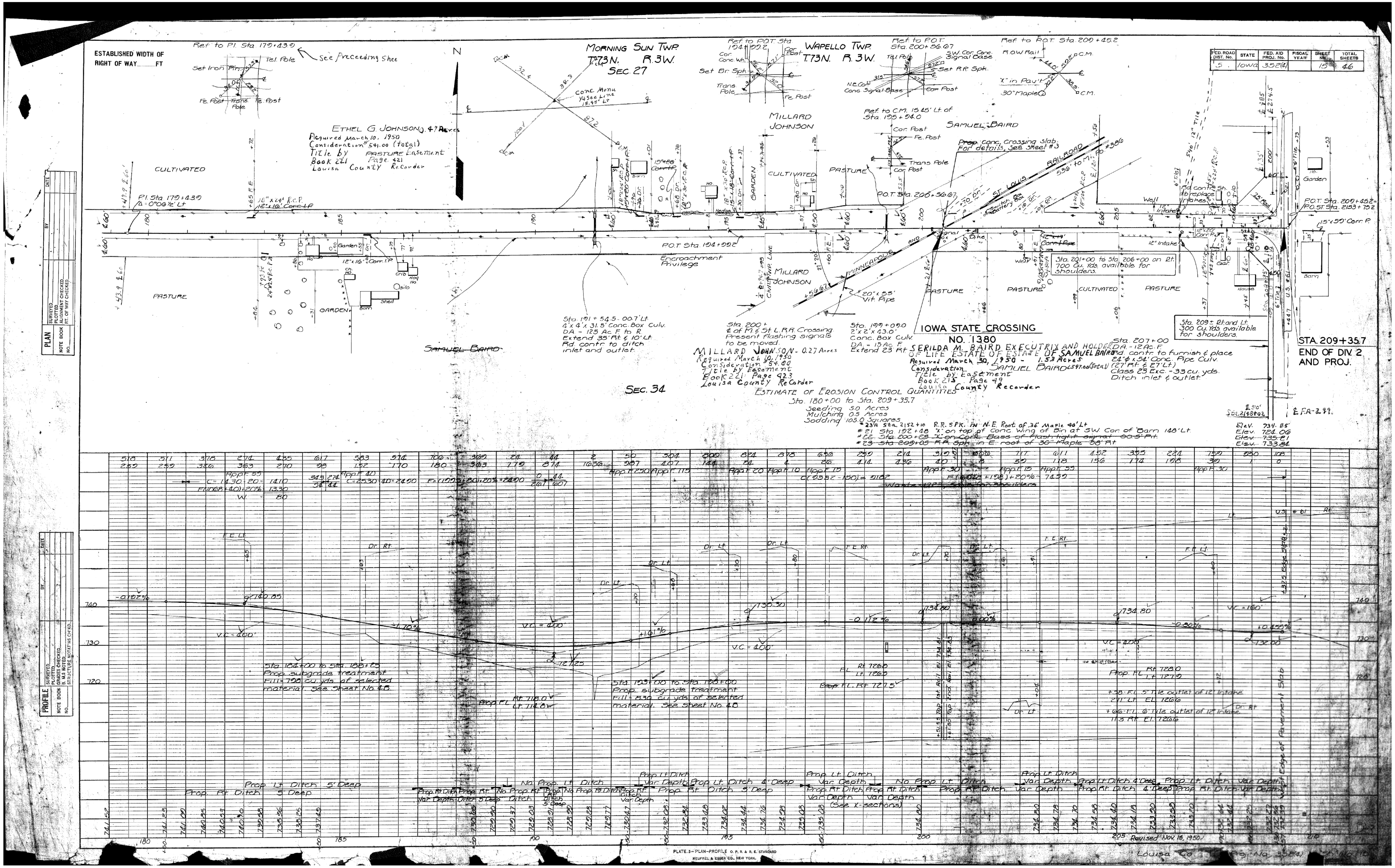

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For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY / LOUISA COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D38

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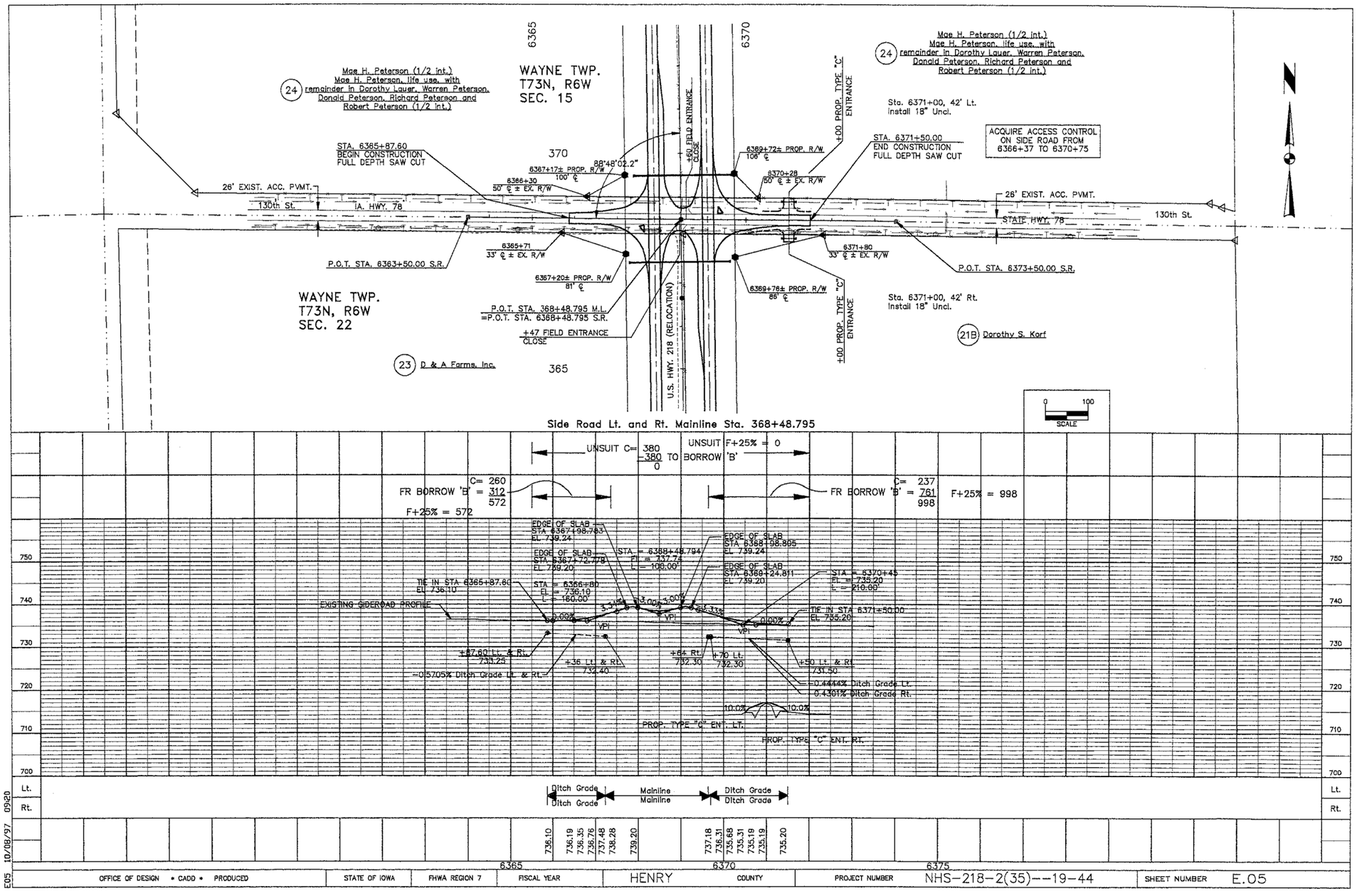

OFFICE OF DESIGN * CADD * PRODUCED	STATE OF IOWA	FHWA REGION 7	FISCAL YEAR	HENRY	COUNTY	PROJECT NUMBER NHS-218-2(35)--19-44	SHEET NUMBER E.05

09/20 10/08/97 E05

This Sheet
For Information Only

FILE NO. 30406	ENGLISH	DESIGN TEAM HOLST / BAHR / JACKSON	HENRY / LOUISA COUNTY	PROJECT NUMBER STP-078-4(19)--2C-44 / HSIPX-078-5(10)--3L-58	SHEET NUMBER D39

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108-23A
08-01-08

TRAFFIC CONTROL PLAN

1. Through traffic shall be maintained at all times.

2. Access to all properties shall be maintained at all times.

FIELD EXAM NOTES:
Projects requiring Coordination and a list of Tied Projects to be verified as project develops (Tied Projects do not need to be mentioned in the Coordinated Operations tab).

111-01
04-17-12

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 anticipated	

108-25
10-21-14

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
			No restrictions anticipated.									

FIELD EXAM NOTES:
Special Events to be added: Morning Sun July 4th Event (additional Events to be researched). RAGBRAI and TRACTORCADE Events shall be omitted from Special Events unless dates and locations are verified by Contracts Turn-In.

FIELD EXAM NOTES:
A "Suggested Sequence of Construction" shall be added to the J sheet. The Sequence shall indicate that the construction of the CIR course shall come before the installation of the Paved Shoulder (see Morning Sun to US 61 typical on Sheet B3). Such an order of operation will allow the CIR to cure better (rationale not needed on J-Sheet).