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Plat of Guy's Port

433

Plat of Guy's Port consolidated with a number of lots laid out on the South & East lines for record as an addition to the lots heretofore laid out and recorded they are all in conformity to the first laying out Except the Squares South of Henderson Street which are laid out on different points of the Compass from the North Squares but all at right angles with Water Street the lots are of the same size and contain 1/4 part of an acre Each All except the first Row of lots South of Henderson Street and the East Row of fractional lots some containing more and some less all of which is fully represented and described on the above Plat and the lot donated and assigned by the Proprietor for Public use Beginning on the East side of the State Road ten perches East from the North ...

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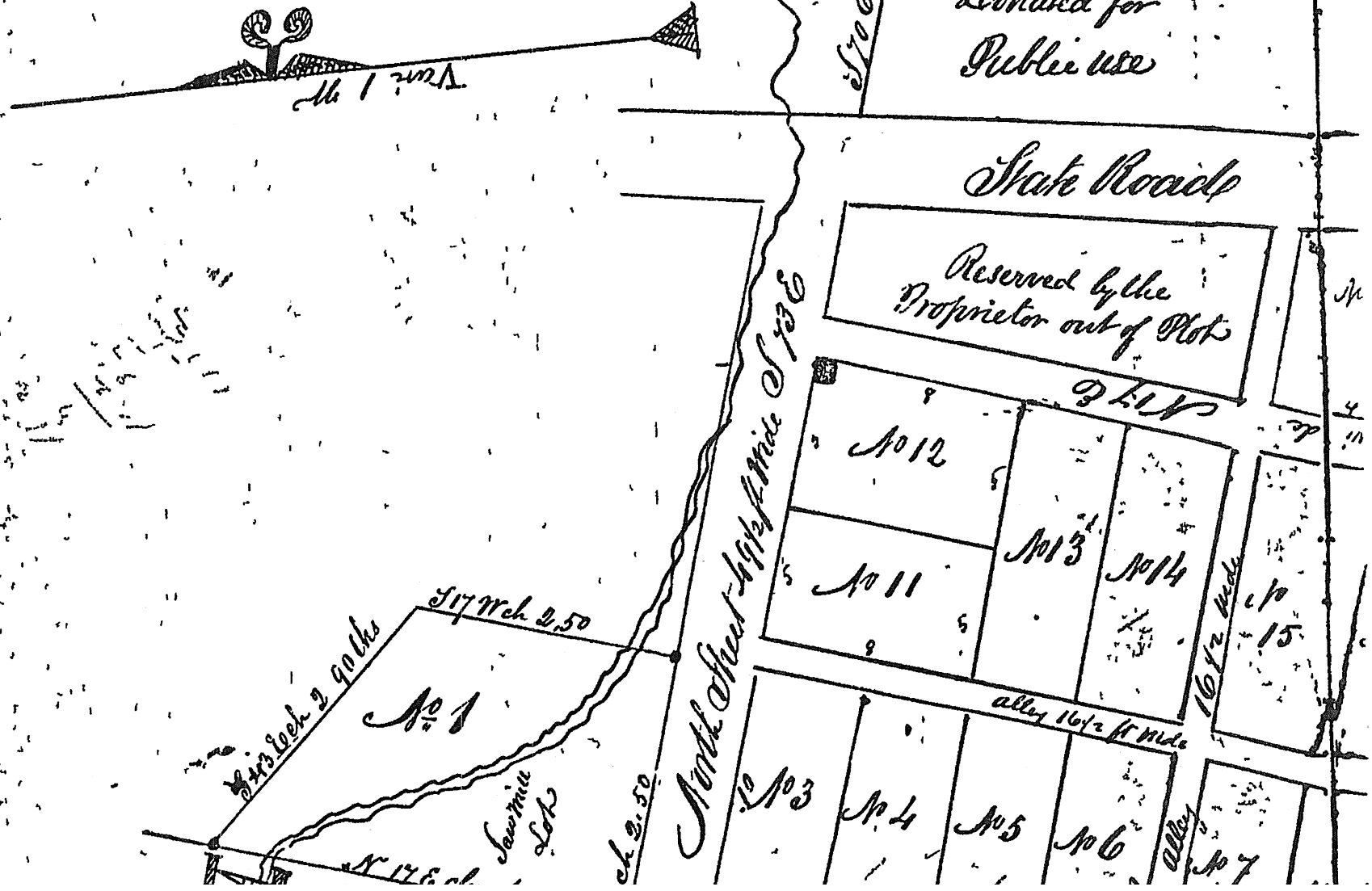
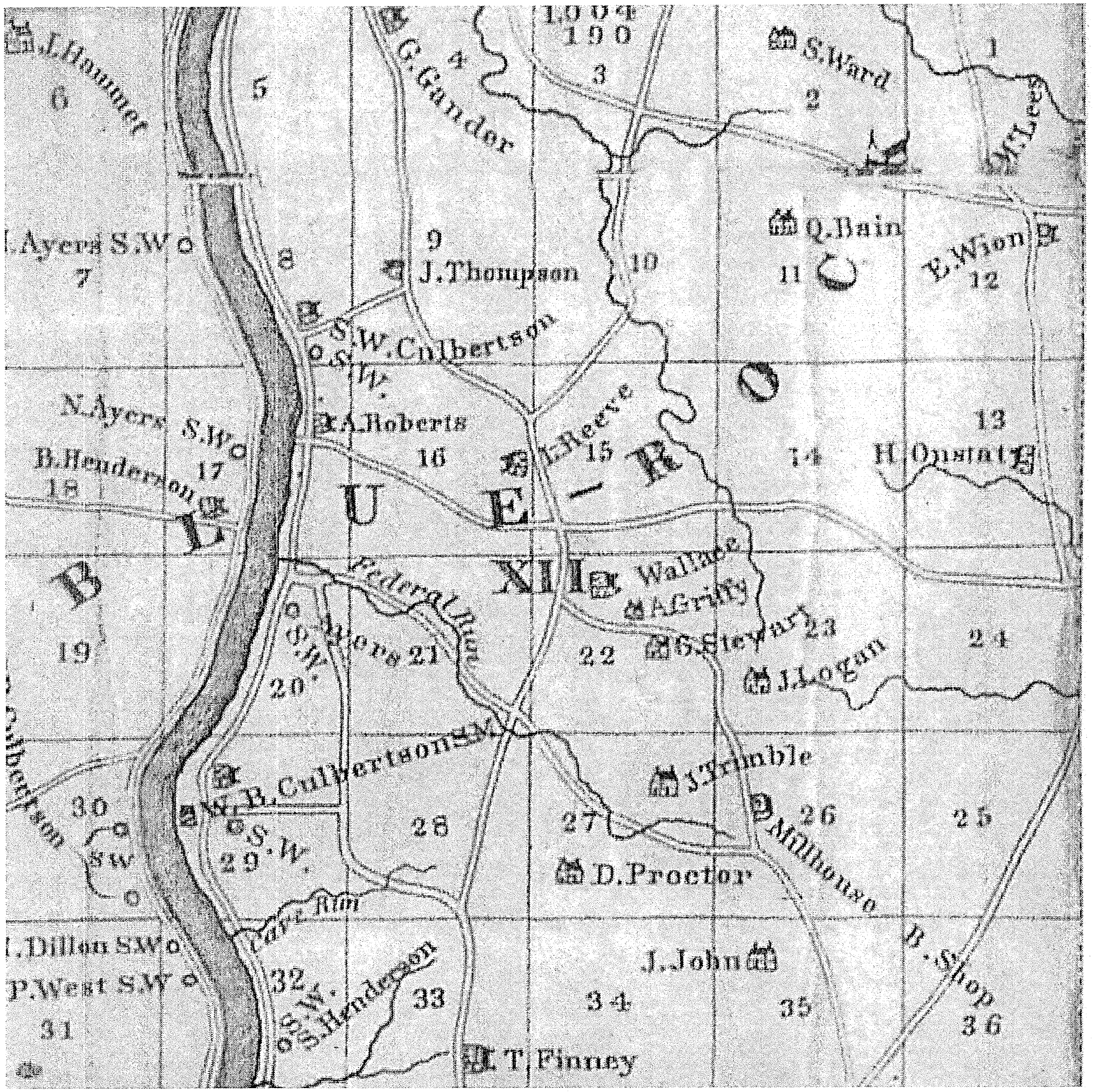
432

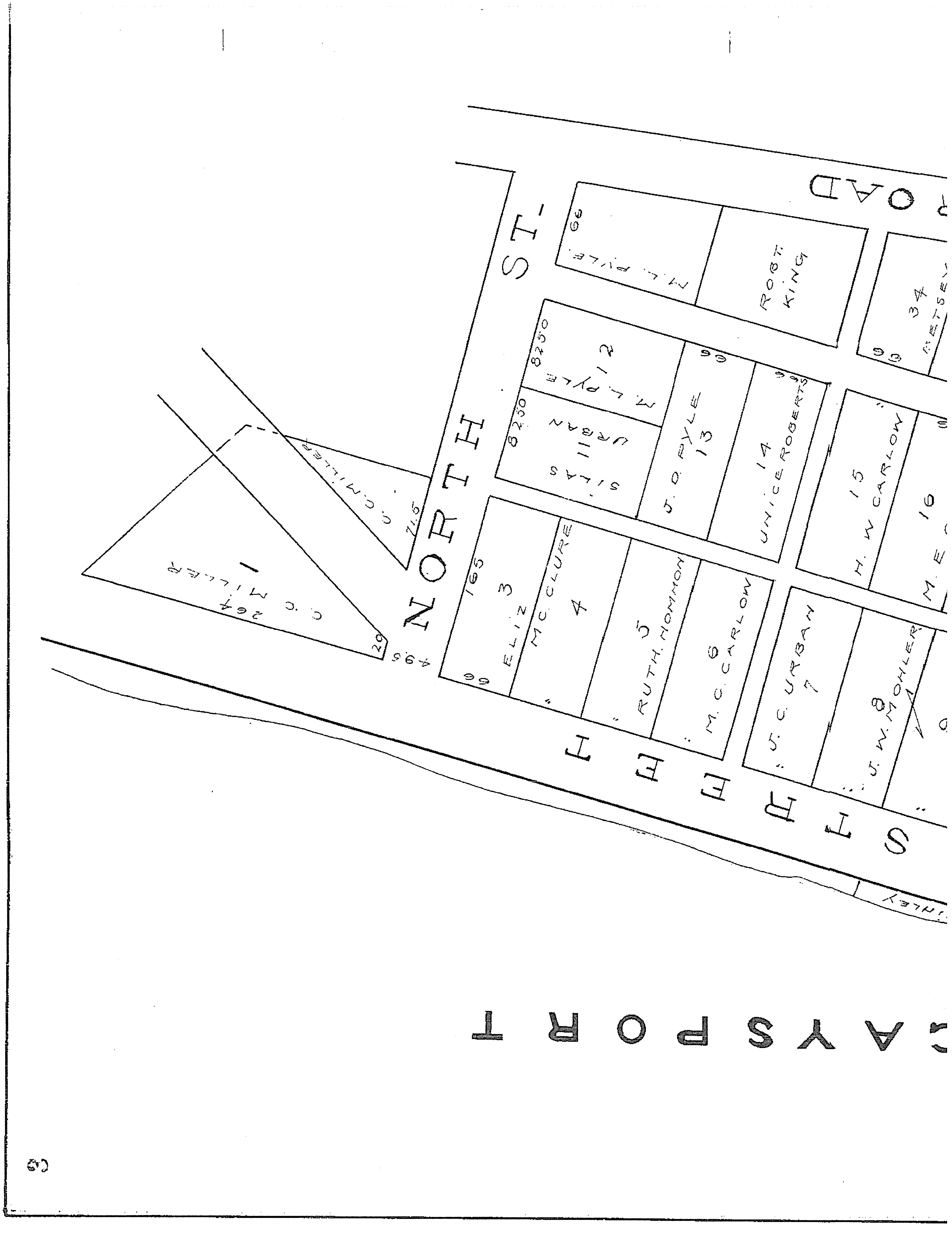
Entered May 6th 1850
Recorded May 8th 1850



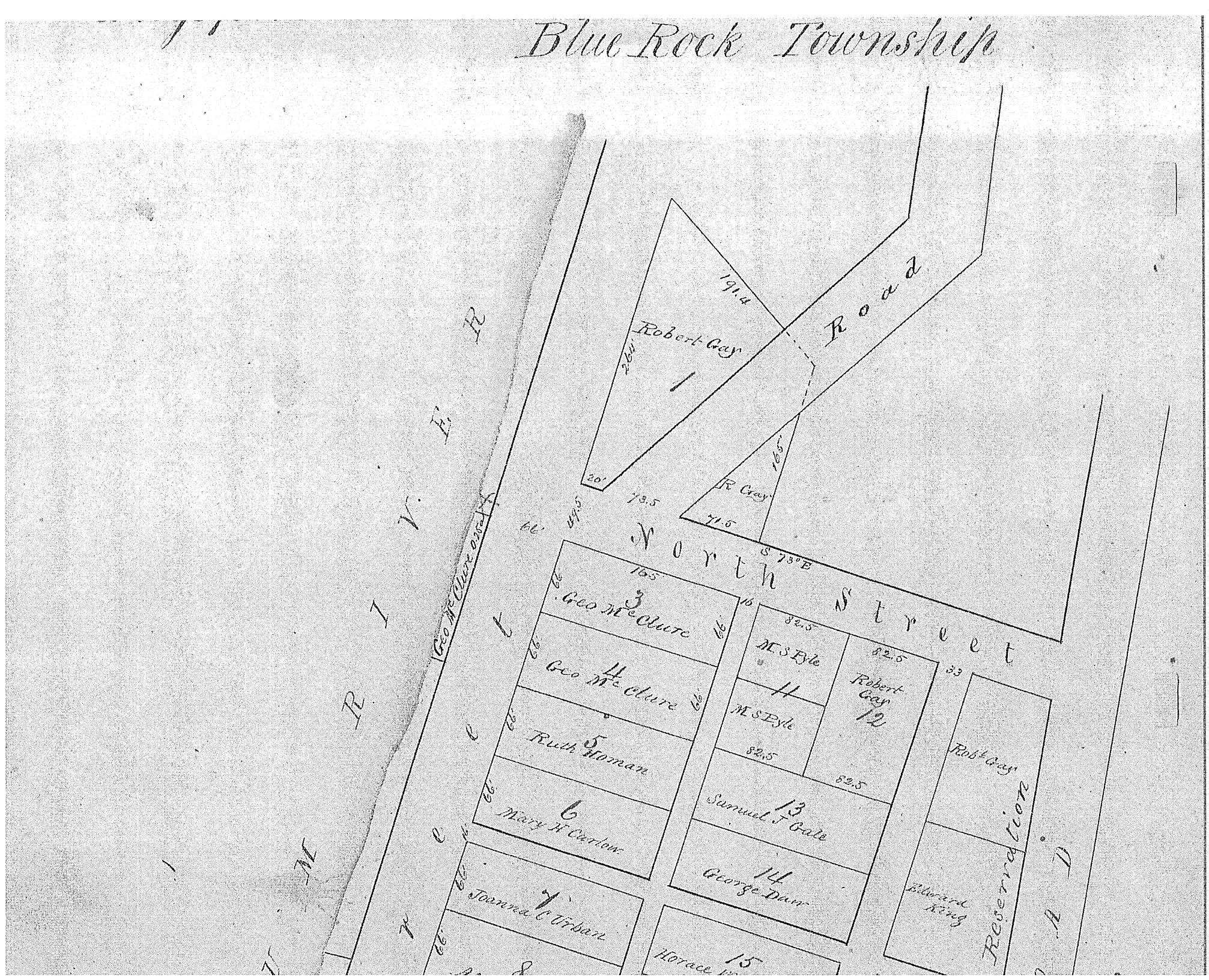
Martin Smith
Thomas Smith
Peter Wion
John Davis
Arthur Crawford
Levi Shaver
Joseph Starrett
Hugh Dugan
Phil. Howell
Joseph Simmons
Henry Perry
Rockville
Jon. th Smith
Cha.s Brothers
Jonas Shaver
Alexander Harah
Joseph McDonald
Wallace
Griffith
John Ward
John Frazier
P. Clapper
S. Farrill
Peter Clapper
Nicholas Border
Jno. Logan
Geo. Bird Jr.
Thomas Mawhorter
John Shaver
Joseph Ecklebarry
Jos. J. Wallace
Dan.l Harriman
Fred. Osborn
Osborn
Jonathan Bird
Wm. T. Tolly
Mans Fork
Henry Crawford
Dan.l Murphy
Ellis Reed
Albon Green
Geo. Forsyth
S.M. Harlan
S. Harlan
A. McNulty
Anthony McNulty
Andrew Dickson
Michael E. White
Robert Findley's hrs.
James Finley
Joseph Harper
Gaysport
Reuben Pyles hrs.
Thomas
Robert Silvey
Robert Finley's
Samuel Dutro
200
Wm. Newkirk
237
Geo. Dutro
John Barr Jr.
Wm. B. Harlan
Robert Mawhorter
220



J.Hoummet
6
5
G.Gander
4
1004
190
3
S.Ward
2
1
McLees
Ayers S.W
7
8
9
J.Thompson
10
Q.Bain
11
E.Wion
12
S.W.Culbertson
S.W.
N.Ayers S.W
A.Roberts
Reeve
15
O
13
B.Henderson
17
16
14
H.Onstatt
18
U
E
R
B
L
XII
Wallace
A.Griffy
Federal Run
G.Stewart
23
19
S.W.
21
22
J.Logan
24
20
Culbertson S.M.
J.Trimble
W.B.Culbertson
30
S.W.
26
25
28
27
Millhouse
29
D.Proctor
Dillon S.W
J.John
B.Shop
P.West S.W
32
S.W.
S.Henderson
33
34
35
36
31
T.Finney

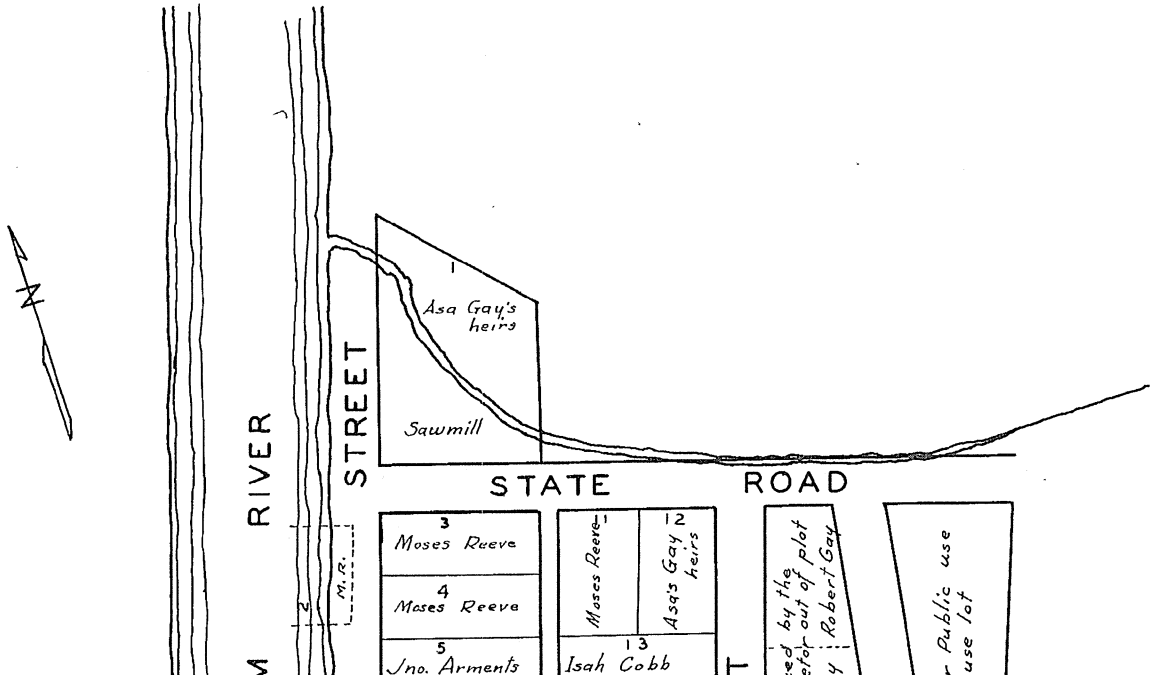

NORTH ST.
STREET
OAD
AYSPORT
M. L. PYLE
66
ROBT. KING
34
12
M. L. PYLE
82.50
11
SILAS URBAN
13
J. D. PYLE
14
UNICE ROBERTS
15
H. W. CARLOW
16
C. C. MILLER
71.5
1
C. C. MILLER
264
29
49.5
165
3
ELIZ MC CLURE
4
5
RUTH HOMMON
6
M. C. CARLOW
7
J. C. URBAN
8
J. W. MOHLER

Blue Rock Township



PLOT OF GAY'S PORT
BLUE ROCK TOWNSHIP

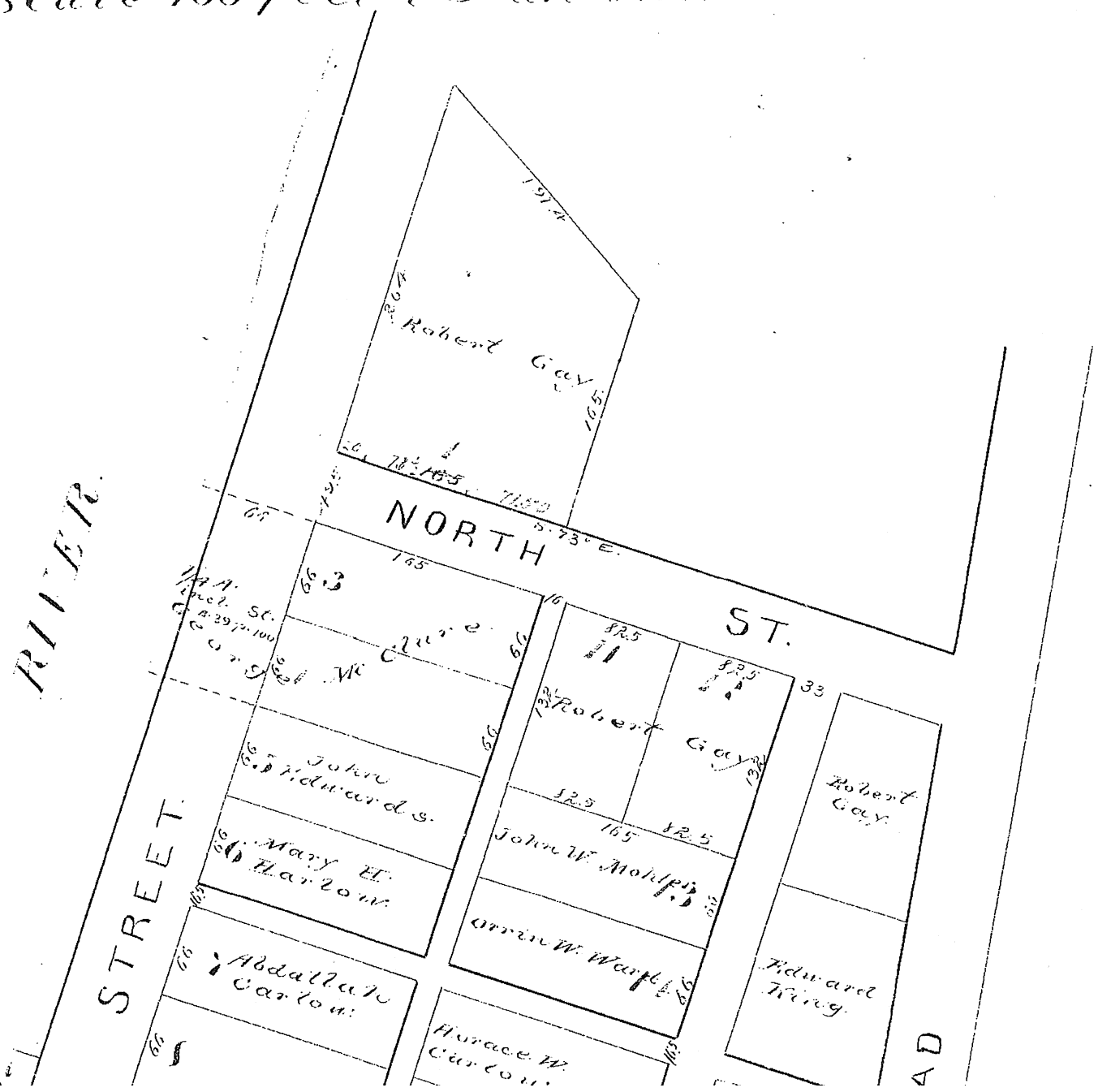
TRACED BY W.F.- J.K. SCALE 1/8 OF AN INCH TO 16 1/2 FEET CHECKED BY E.G.



10

GAYSPORT

Scale 100 feet to an inch.



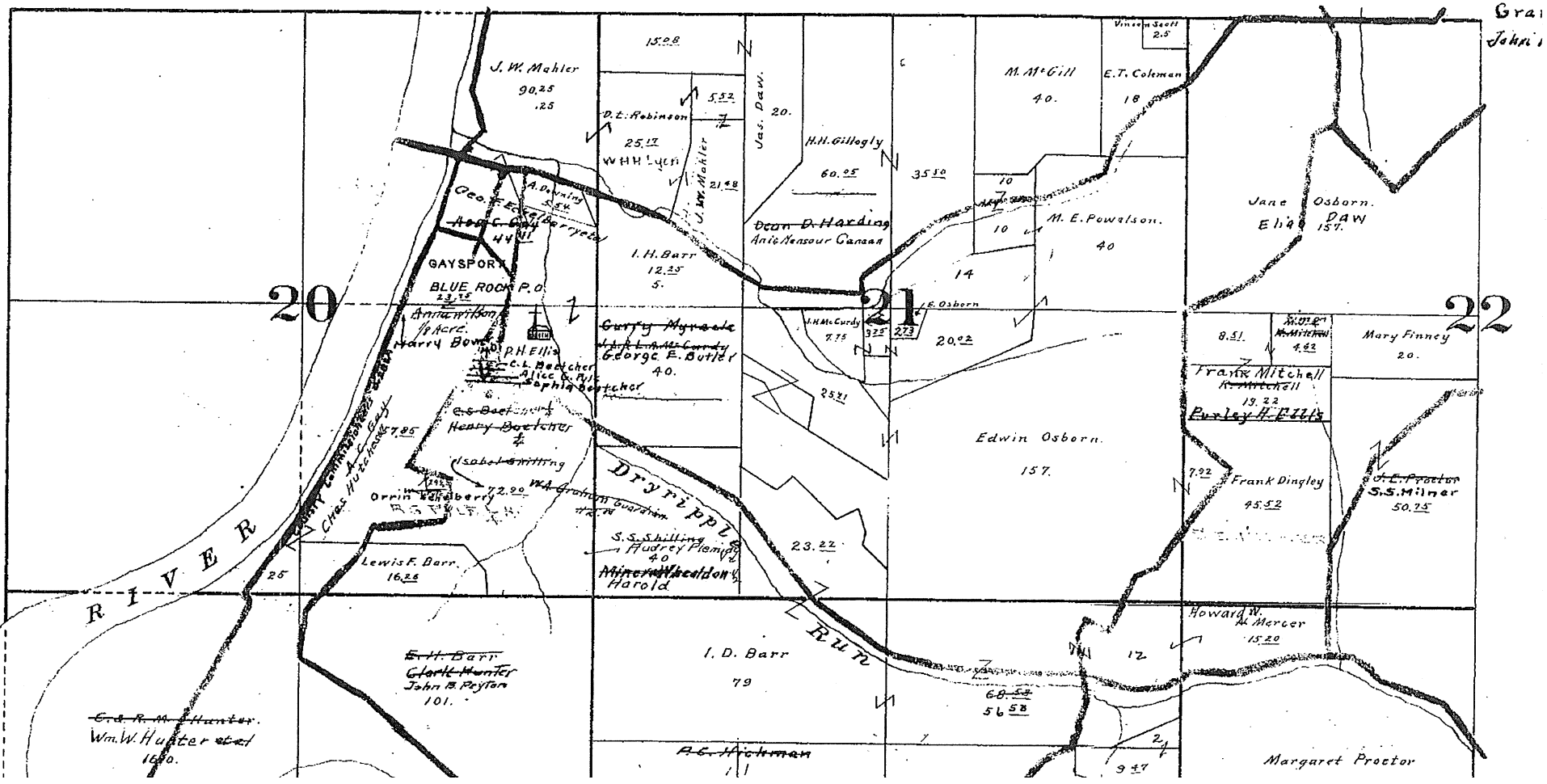
10

1885

GAYSPORT

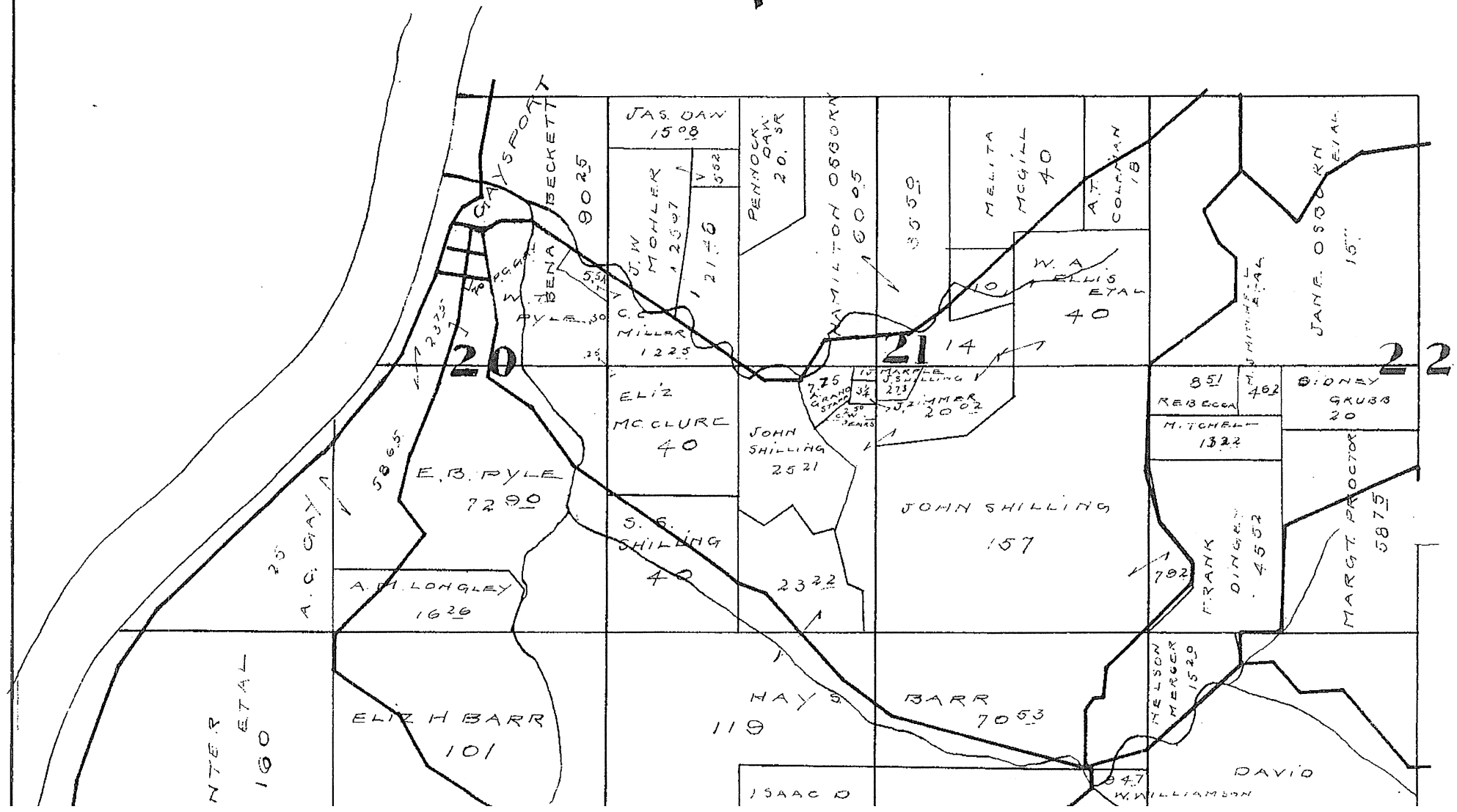
Blue Rock Tp.

QR. TP. 3, R. 12, TP. 12.



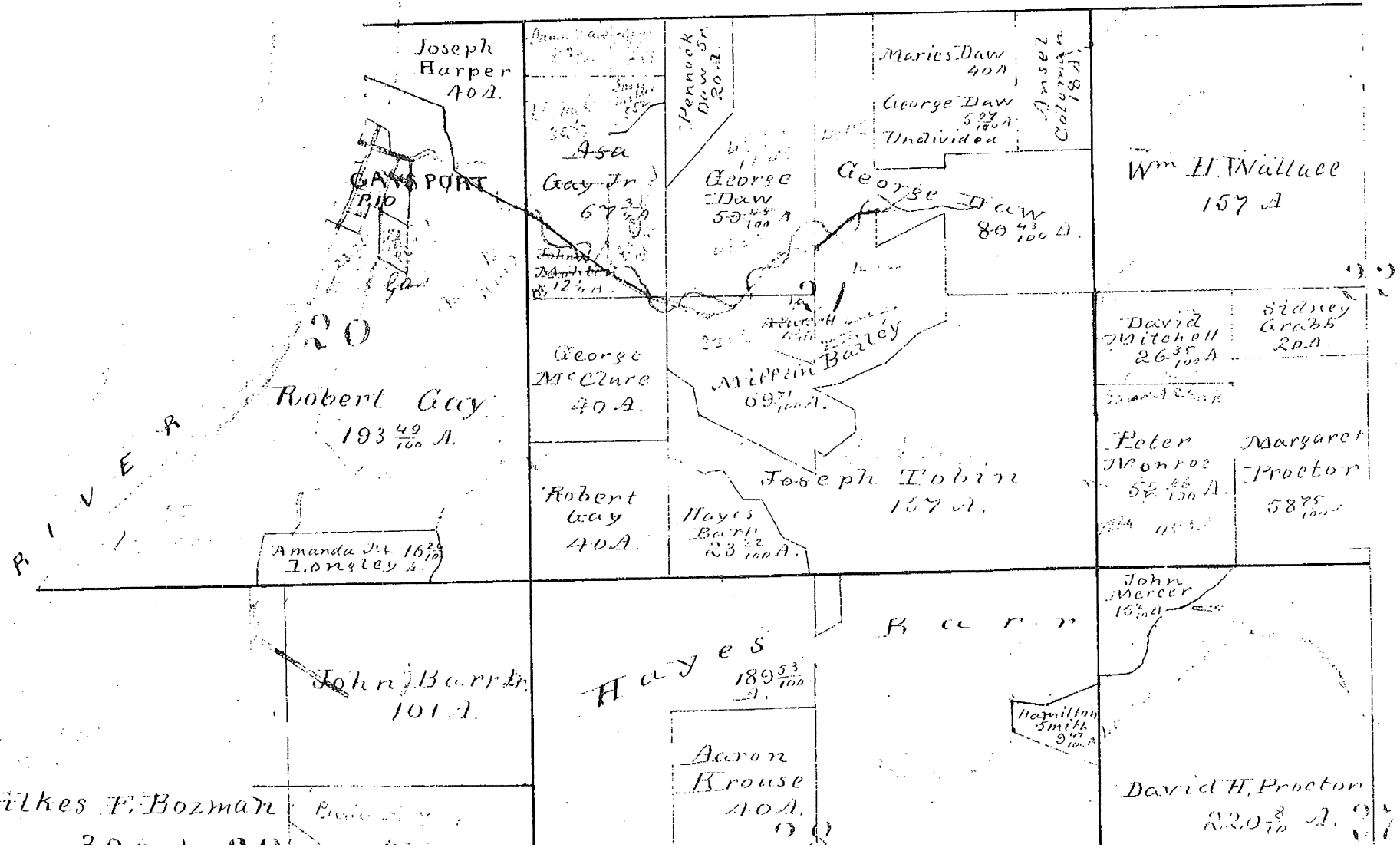
2

S_W_ Q R_ T_ 12 R_ 12



6

Southwest Quarter, T. 12, R. 12 Blue Ro



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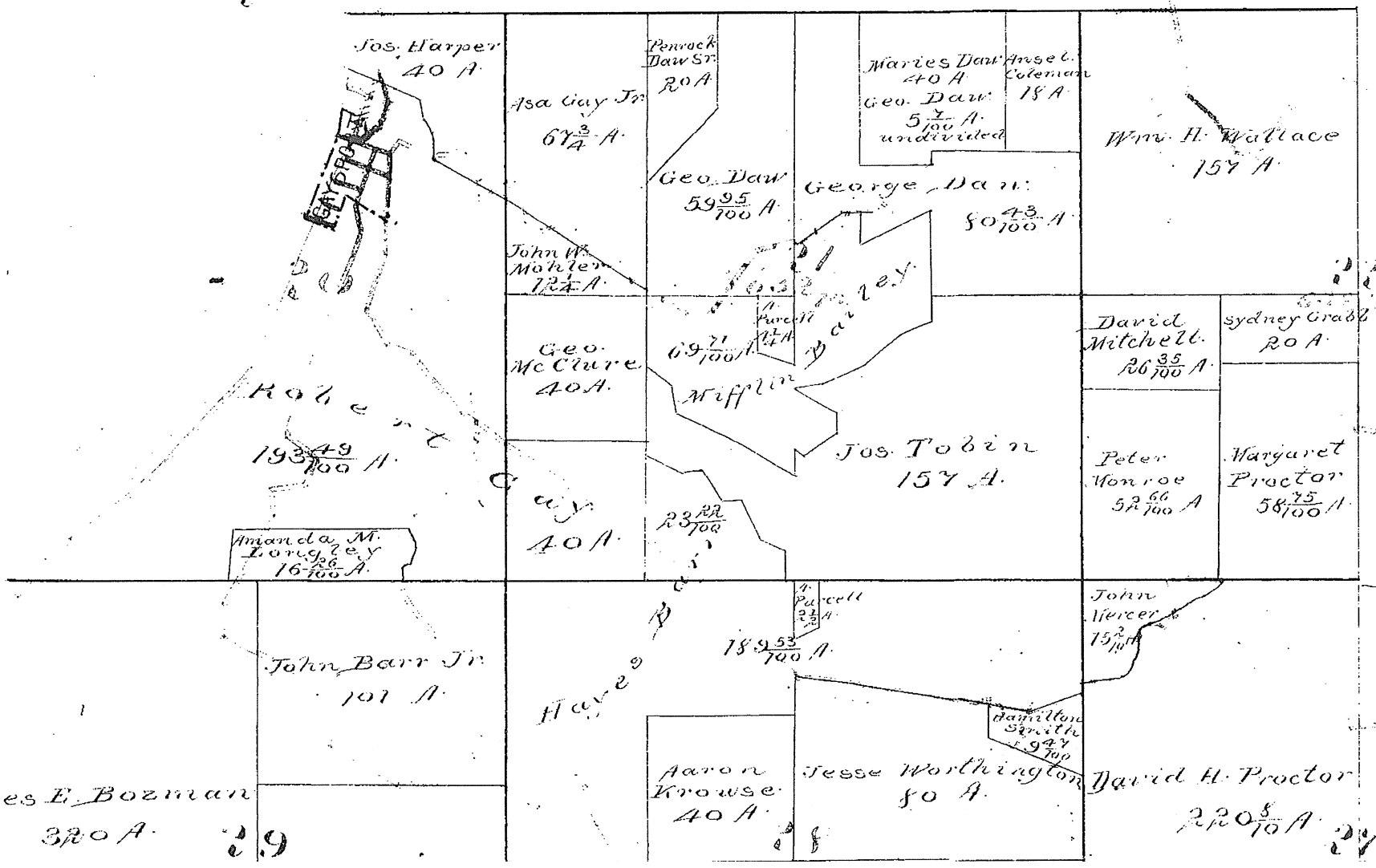
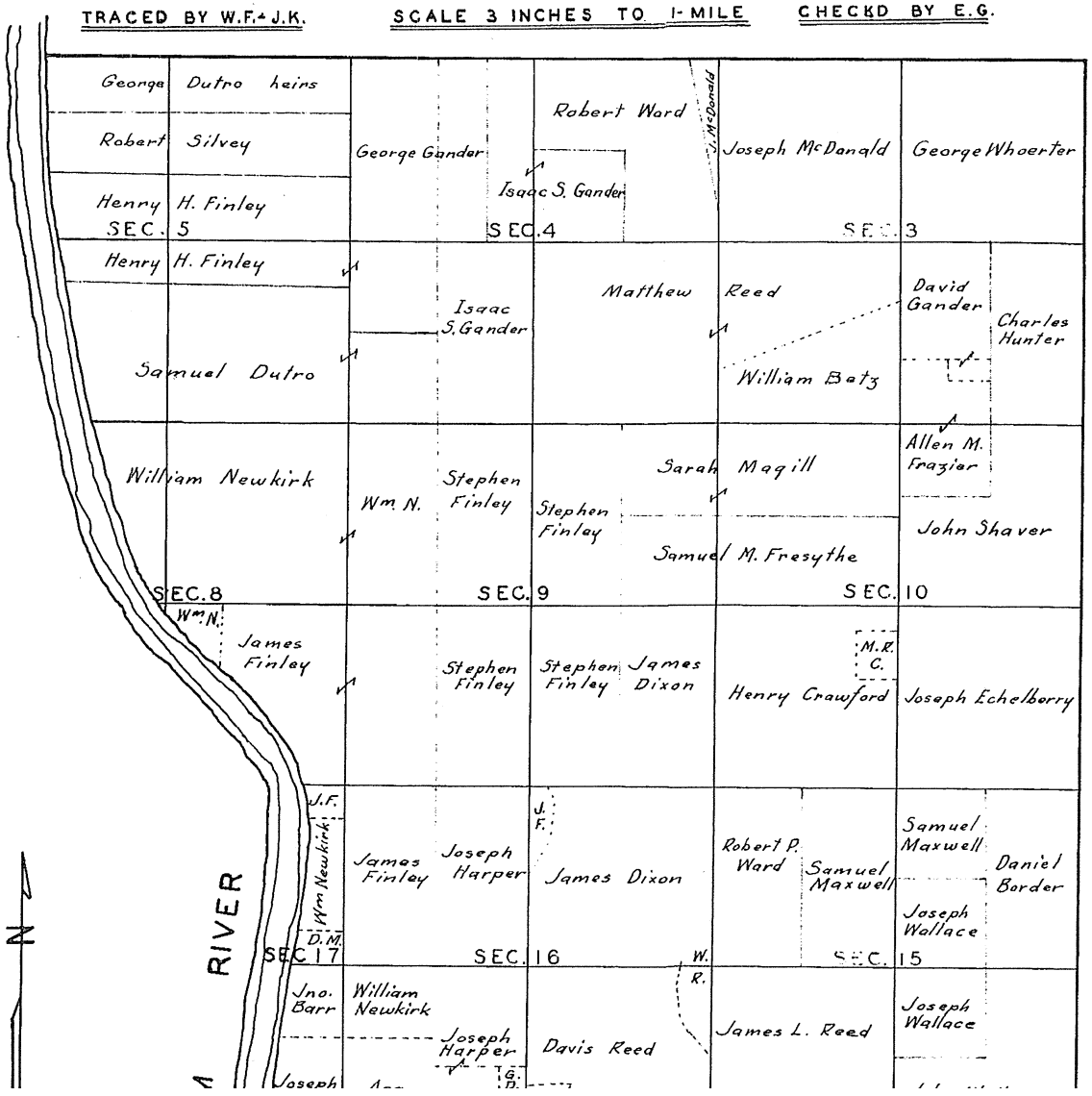
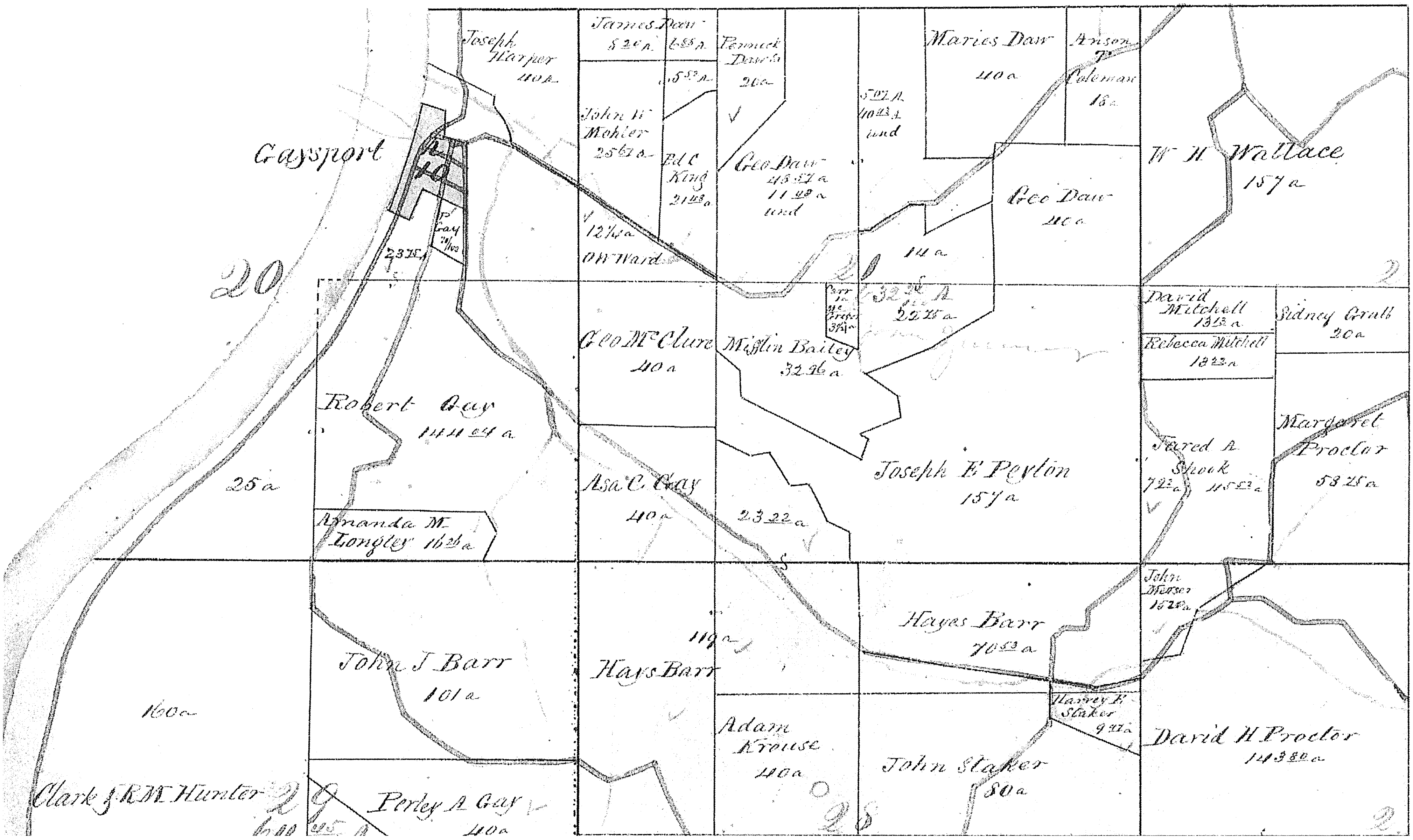
S. W. Quarter T. 12, R. 12, Blue Rock.



BLUE ROCK TOWNSHIP RANGE-X

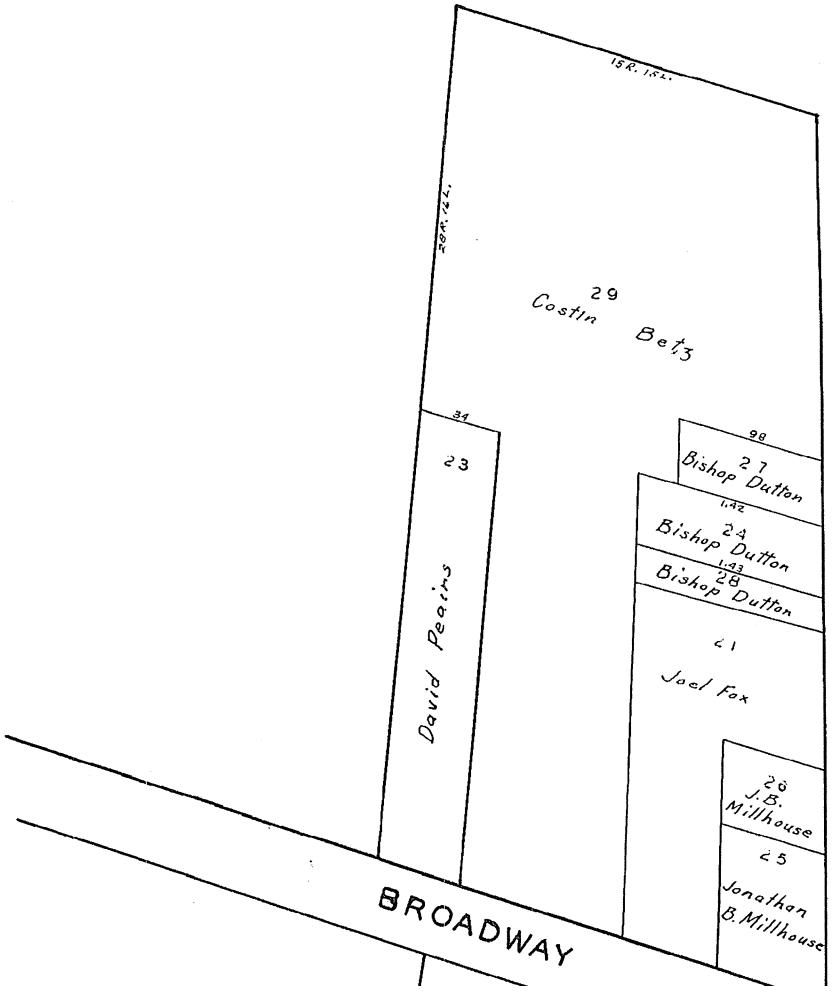
TRACED BY W.F. & J.K. SCALE 3 INCHES TO 1-MILE CHECKD BY E.G.




Gaysport
20
Joseph Harper 40 a
James Daw 8 20 a
6 85 a
5 53 a
John W Mohler 25 62 a
Ed C King 21 43 a
12 75 a
O W Ward
Pennick Daw's 20 a
Geo Daw 45 57 a 11 49 a und
Maries Daw 40 a
Anson T Coleman 18 a
Geo Daw 40 a
14 a
W H Wallace 157 a
David Mitchell 13 13 a
Rebecca Mitchell 18 23 a
Sidney Grall 20 a
Jared A Shook 72 a 45 52 a
Margaret Proctor 58 25 a
Robert Gay 141 1 64 a
25 a
Amanda M Longley 16 2 a
Geo McClure 40 a
Mifflin Bailey 32 96 a
Asa C Gay 40 a
23 22 a
Joseph E Peyton 157 a
John Mercer 15 20 a
Hayes Barr 70 53 a
Harvey E Staker 9 22 a
David H Proctor 143 80 a
John J Barr 101 a
160 a
Hays Barr
119 a
Adam Krouse 40 a
John Staker 80 a
Clark & R M Hunter
Perley A Gay 40 a
29
28

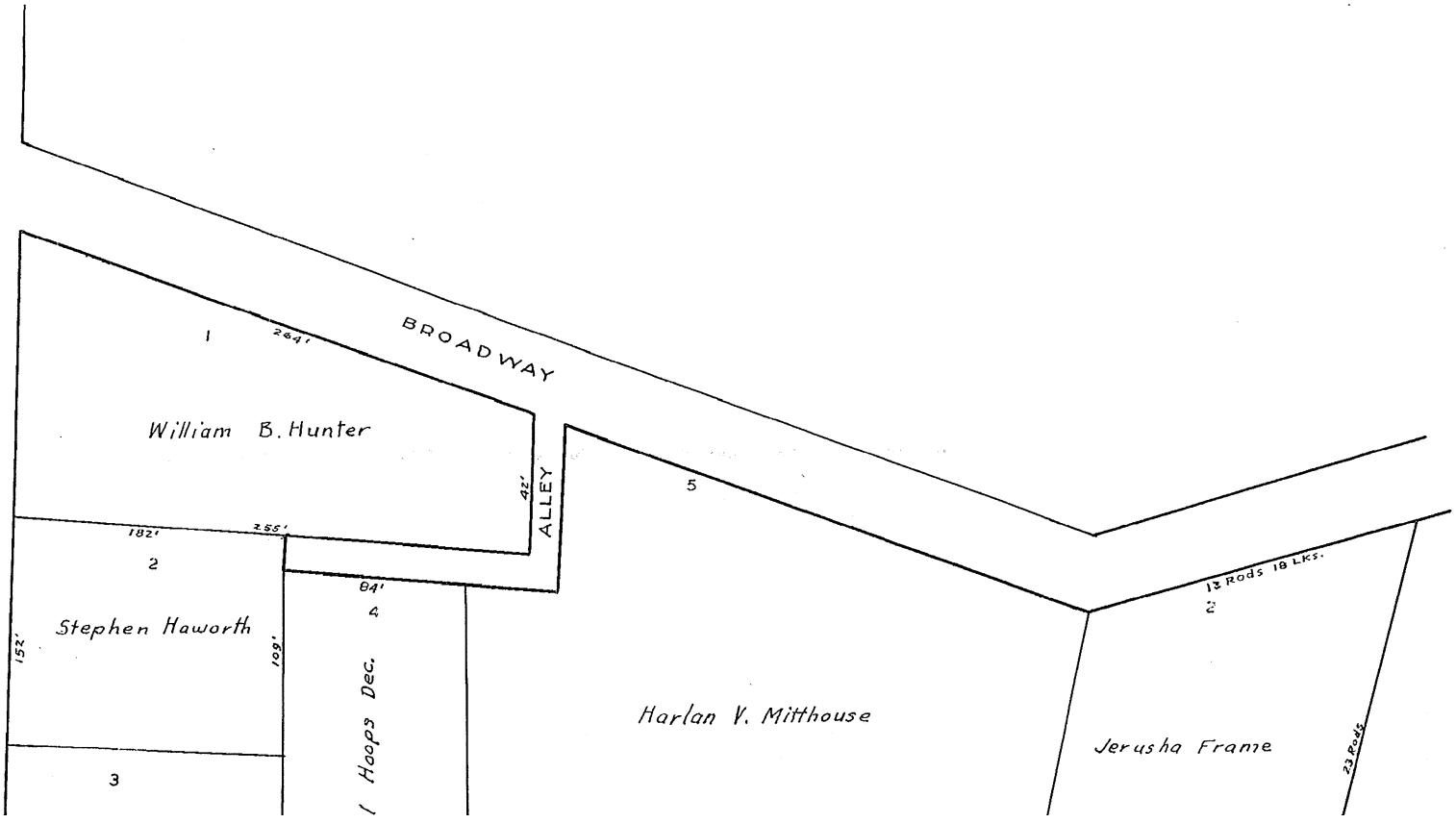
RURAL-DALE

TRACED BY W.F.-J.K. CHCKED BY E.G.



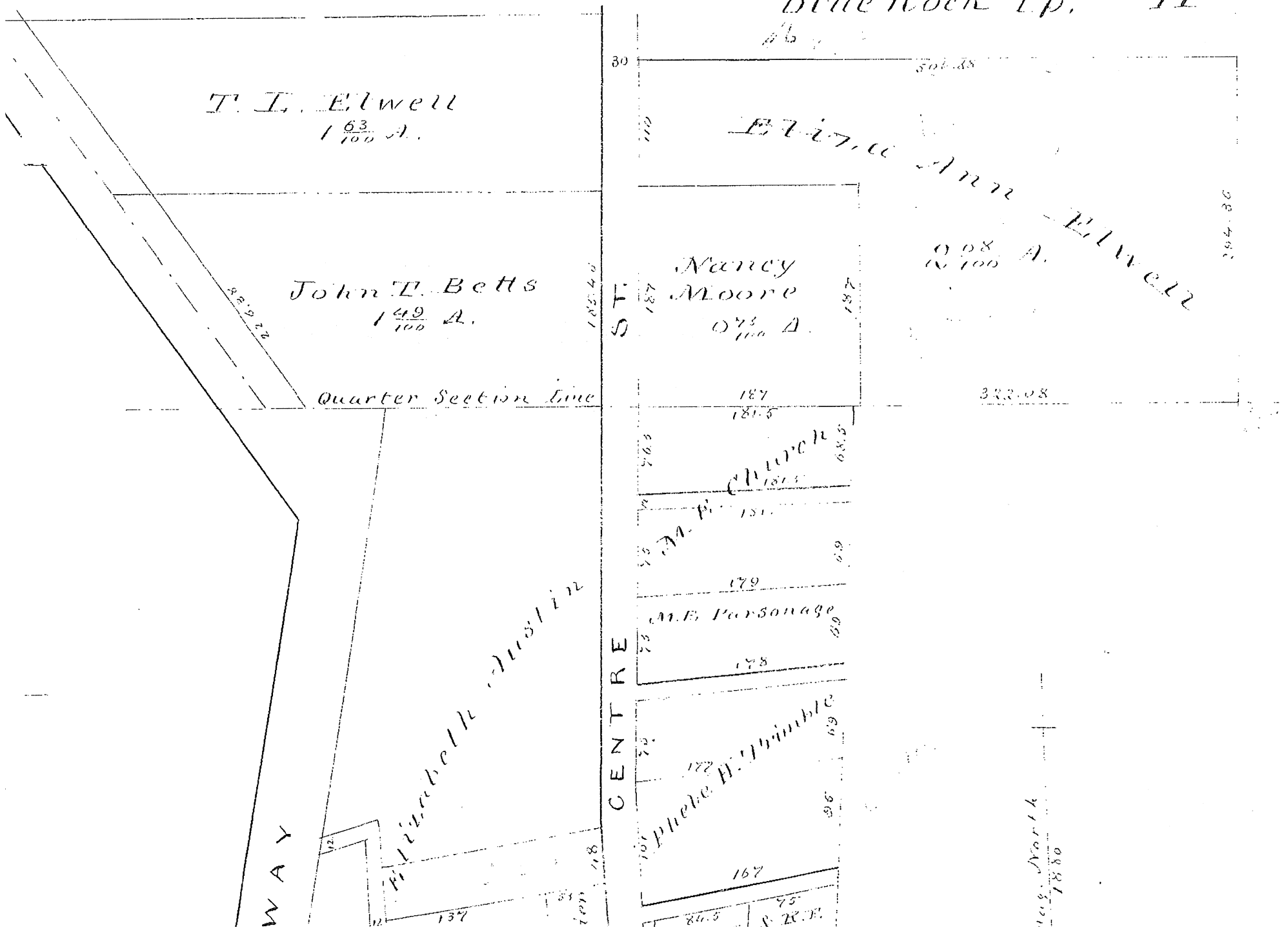
PART OF RURAL-DALE

Traced by W.F & J.K. Checked by E.G.



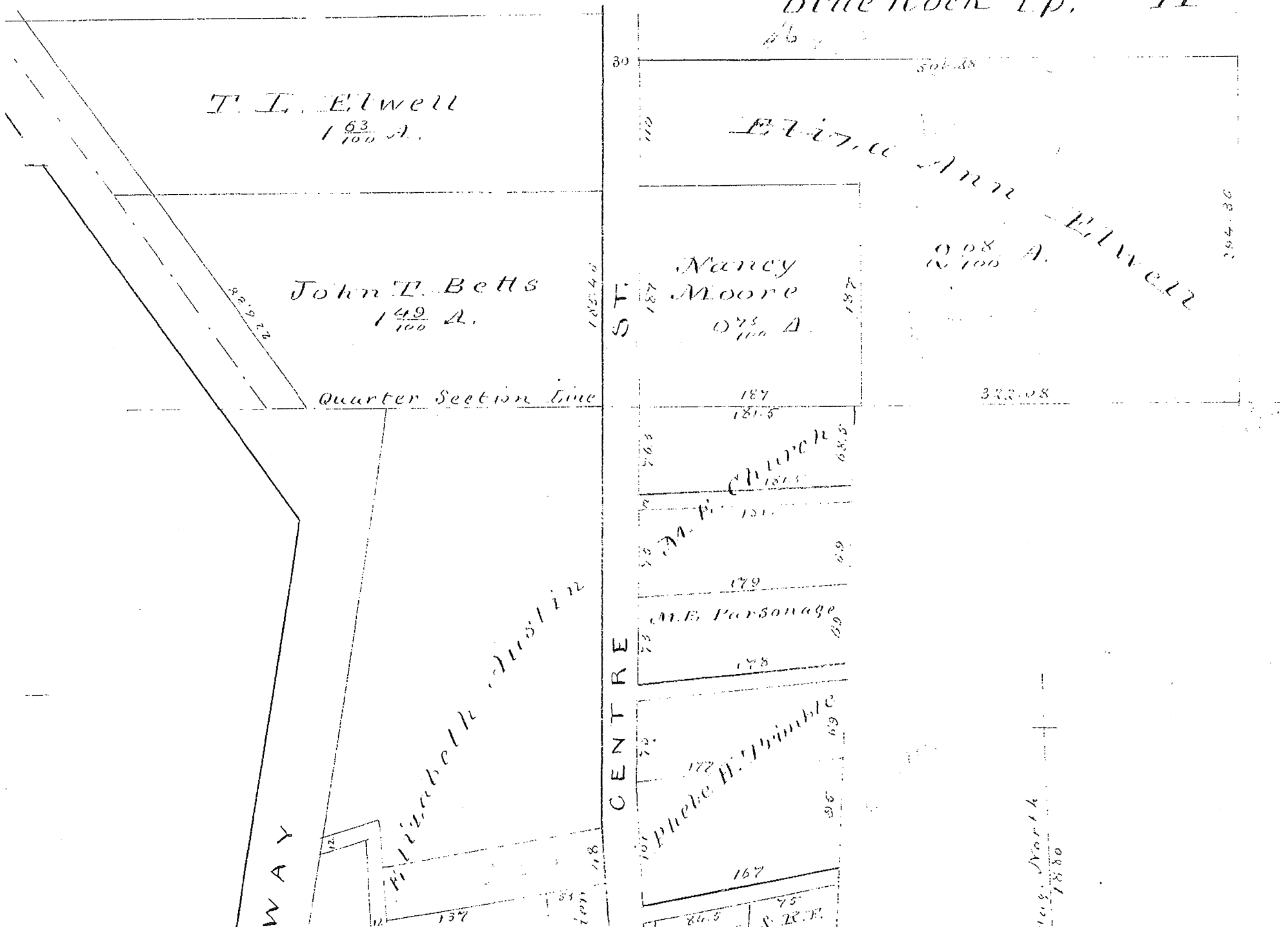
RURAL DALE

Blue Rock Tp. 11



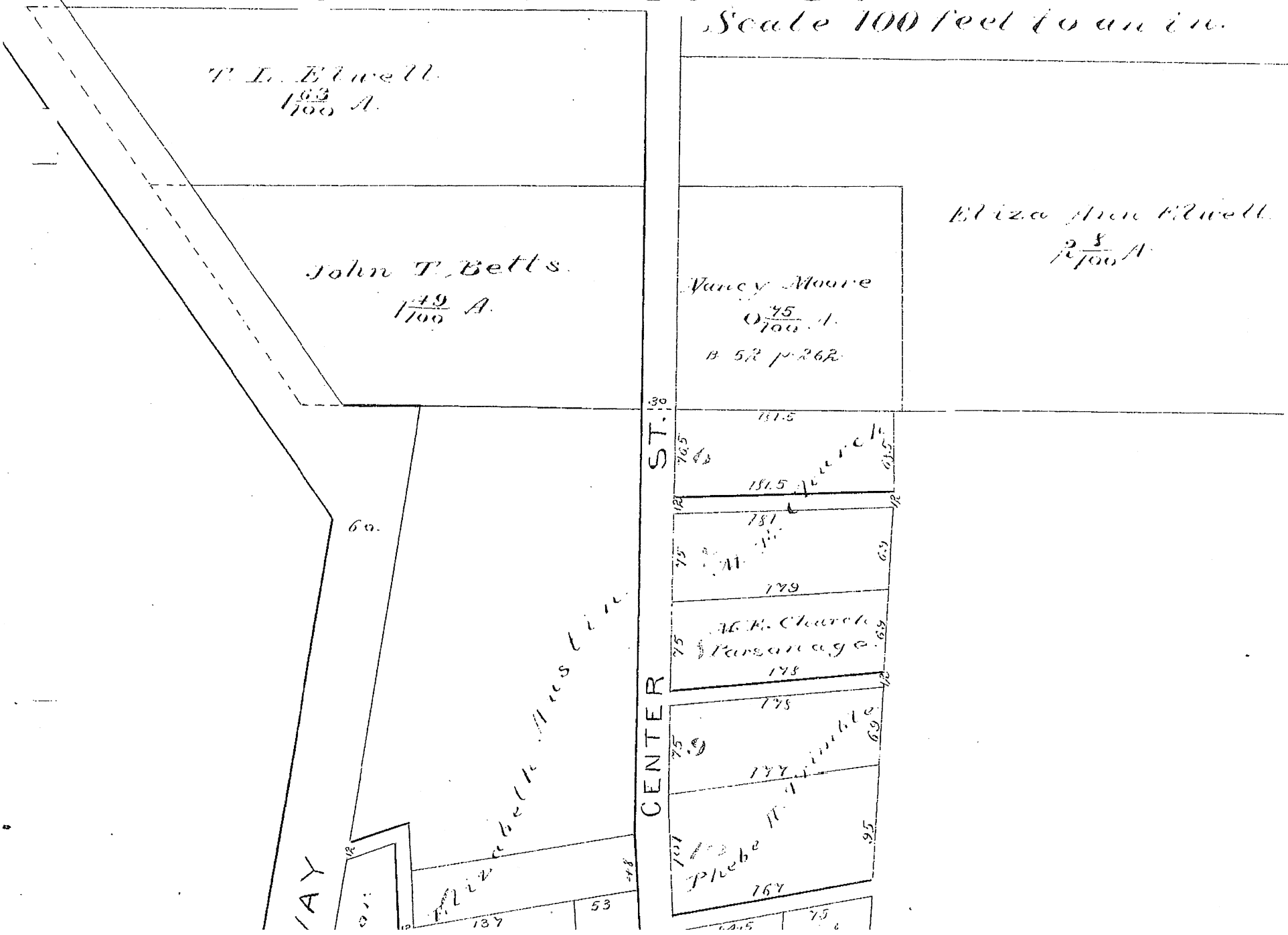
RURAL DALE

Blue Rock Tp. 11

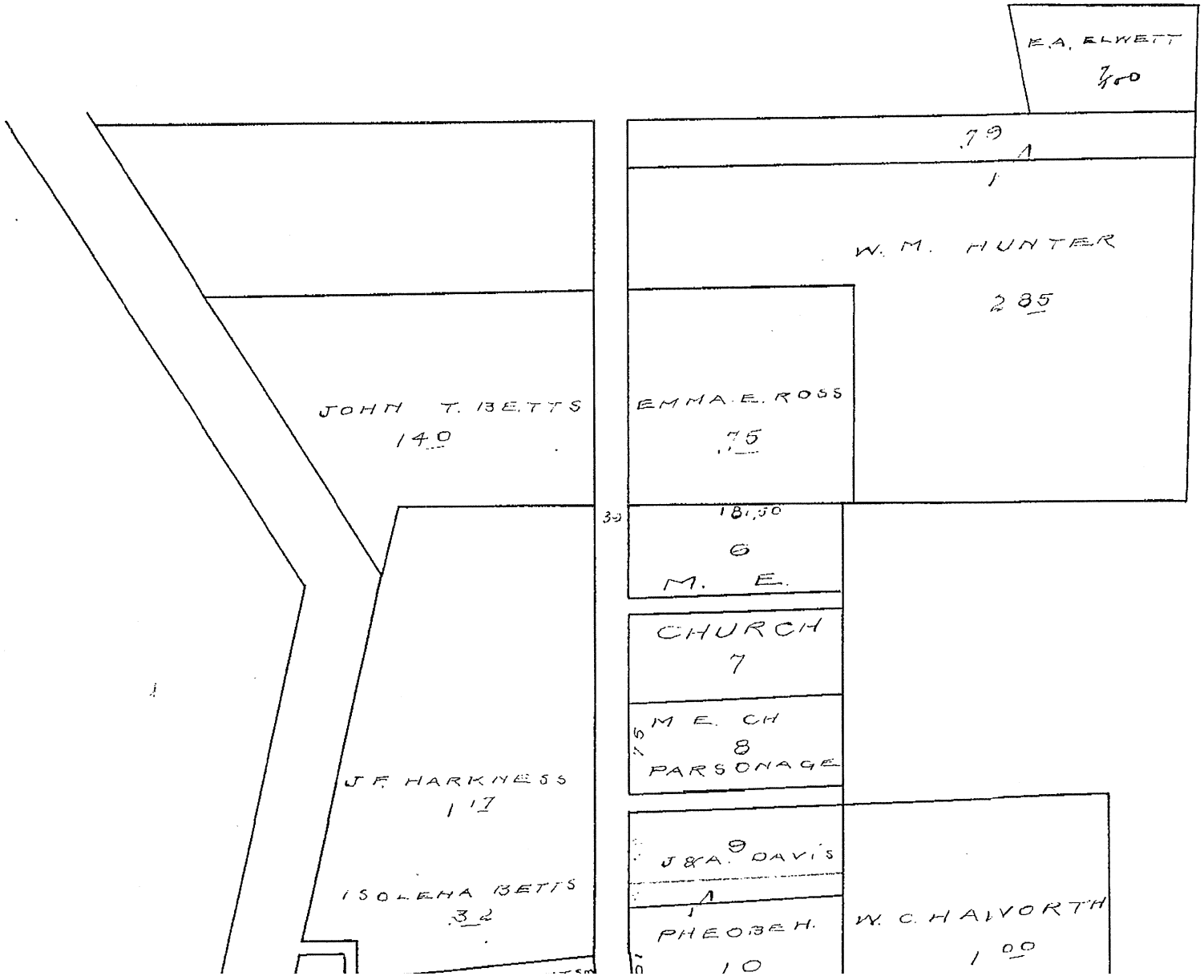


RURAL DALE.

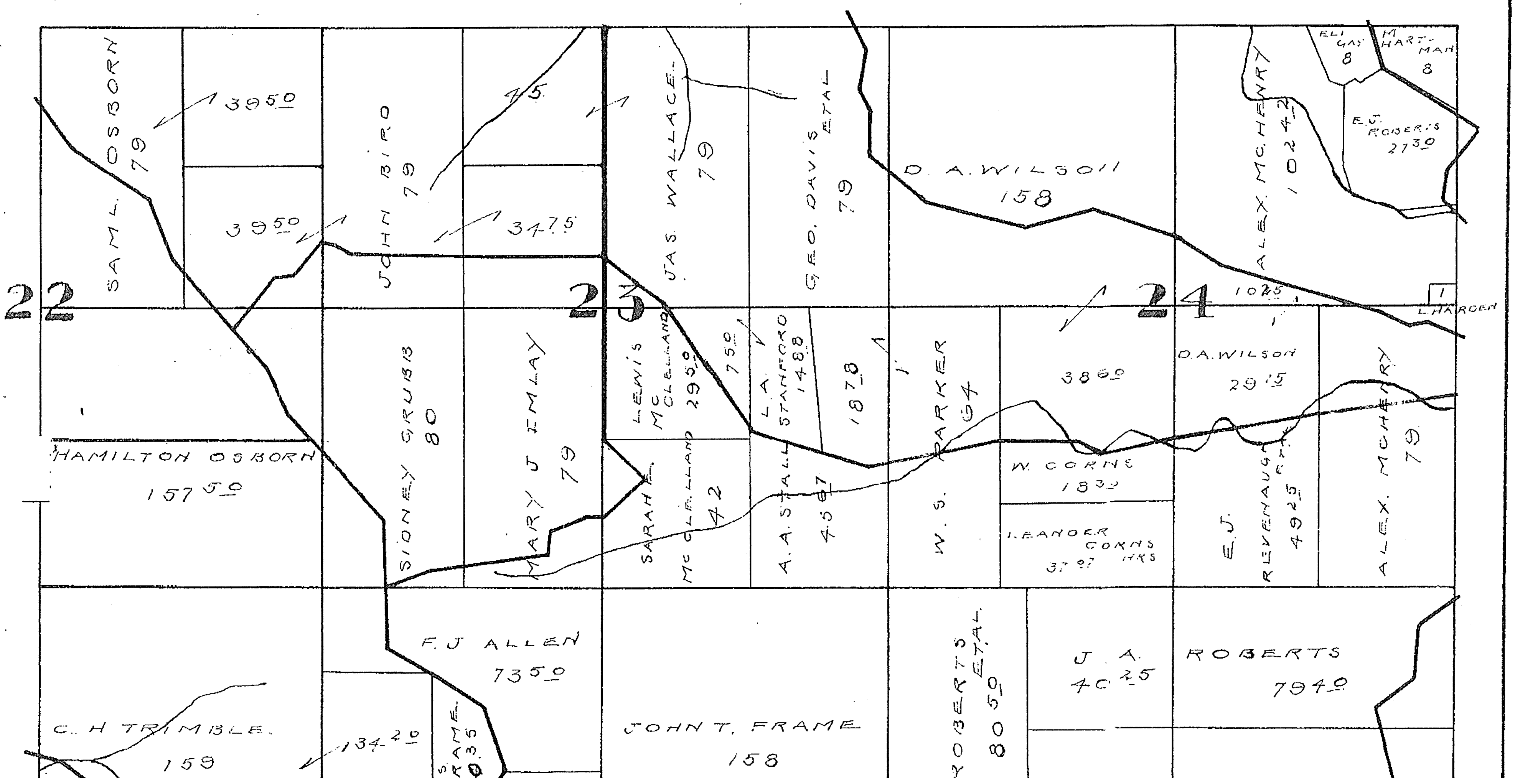
Scale 100 feet to an in.



RURAL DALE

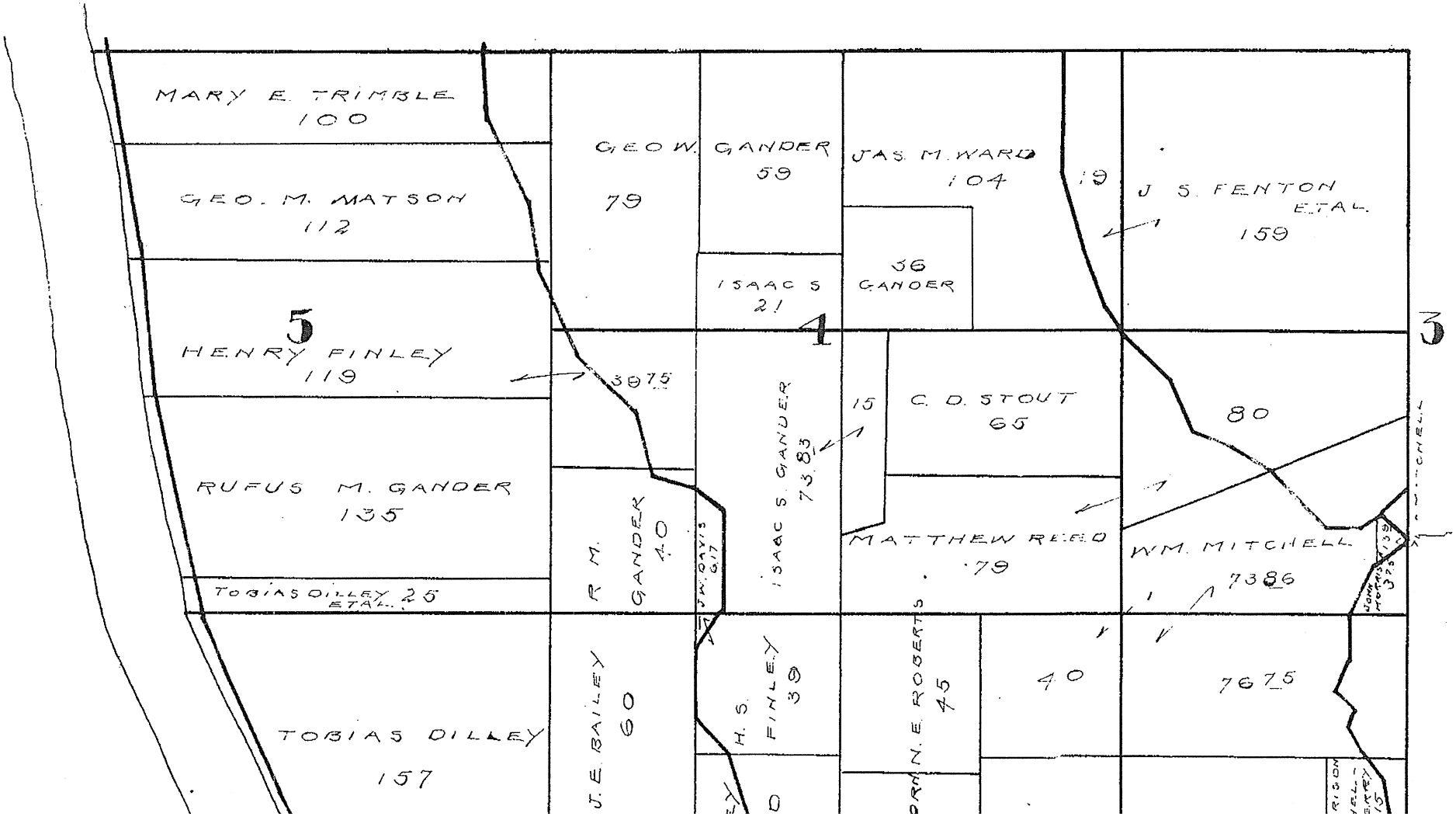

E.A. ELWETT
1/100
79
1
1
W. M. HUNTER
285
JOHN T. BETTS
140
EMMA E. ROSS
75
181,50
6
M. E.
CHURCH
7
M E. CH
8
PARSONAGE
75
J F HARKNESS
117
ISOLENA BETTS
32
J&A. DAVIS
9
1
1
PHEOBE H.
10
W. C. HALVORTH
100

S. E. QR. T. 12 R. 12

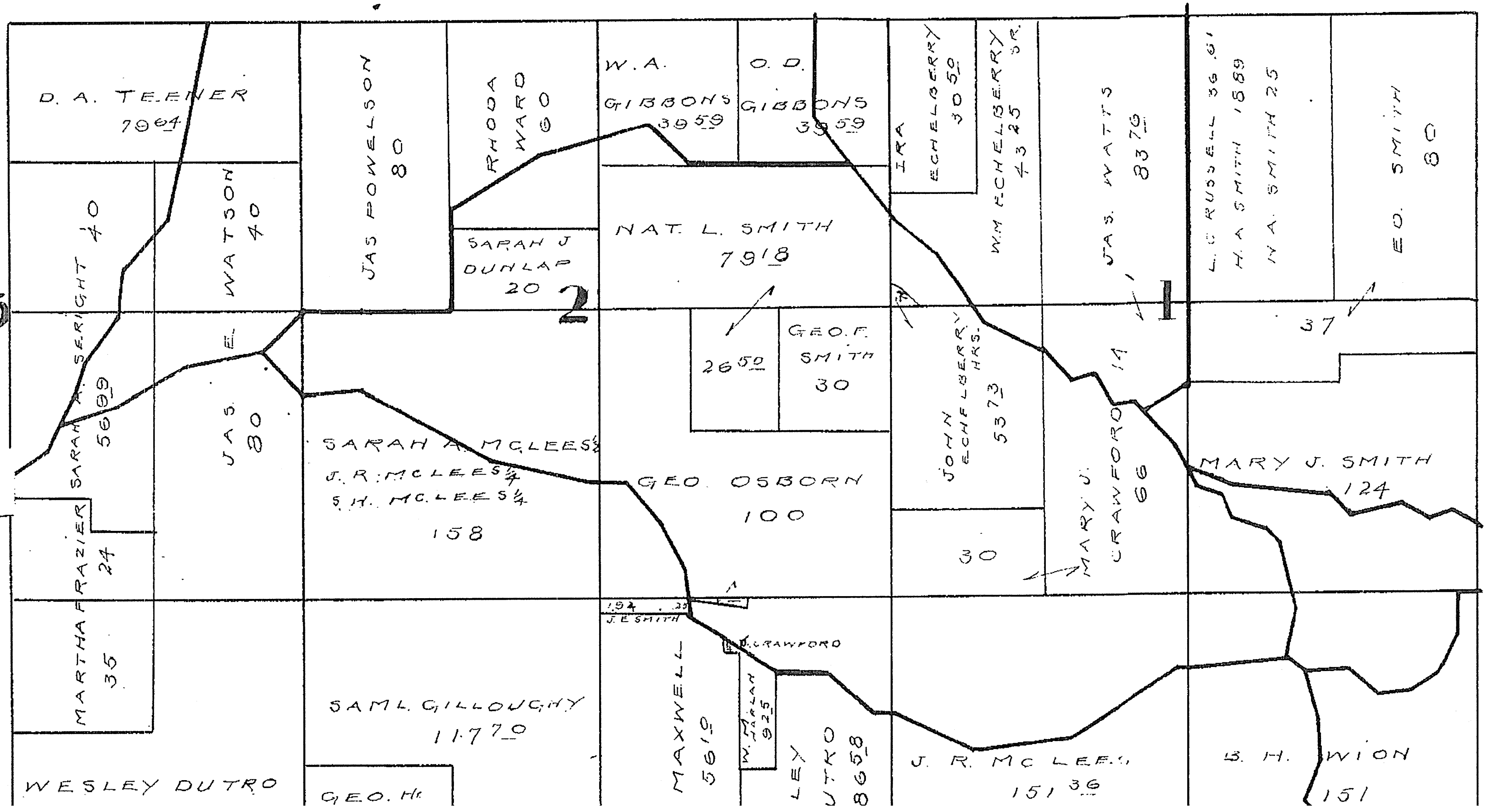


22
23
24
SAM'L OSBORN 79
39.50
39.50
JOHN BIRD 79
45
34.75
JAS WALLACE 79
GEO. DAVIS ETAL 79
D. A. WILSON 158
ALEX. MC. HENRY 102.42
ELI GAY 8
M. HARTMAN 8
E.J. ROBERTS 27.30
1
L. HARDEN
10.25
HAMILTON OSBORN 157.50
SIDNEY GRUBB 80
MARY J IMLAY 79
LEWIS MC CLELLAND 29.50
7.50
L.A. STANFORD 14.88
18.78
SARAH E. MC CLELLAND 42
A. A. STALL 45.67
W. S. PARKER 64
38.60
D.A. WILSON 29.15
W. CORNS 18.33
LEANDER CORNS 37.97 HRS
E.J. REVENAUGH ETAL 49.25
ALEX. MC HENRY 79
F.J ALLEN 73.50
C. H TRIMBLE 159
134.20
JOHN T. FRAME 158
ROBERTS ETAL 80.50
J. A. 40.25
ROBERTS 79.40

N W QR T 12 R 12

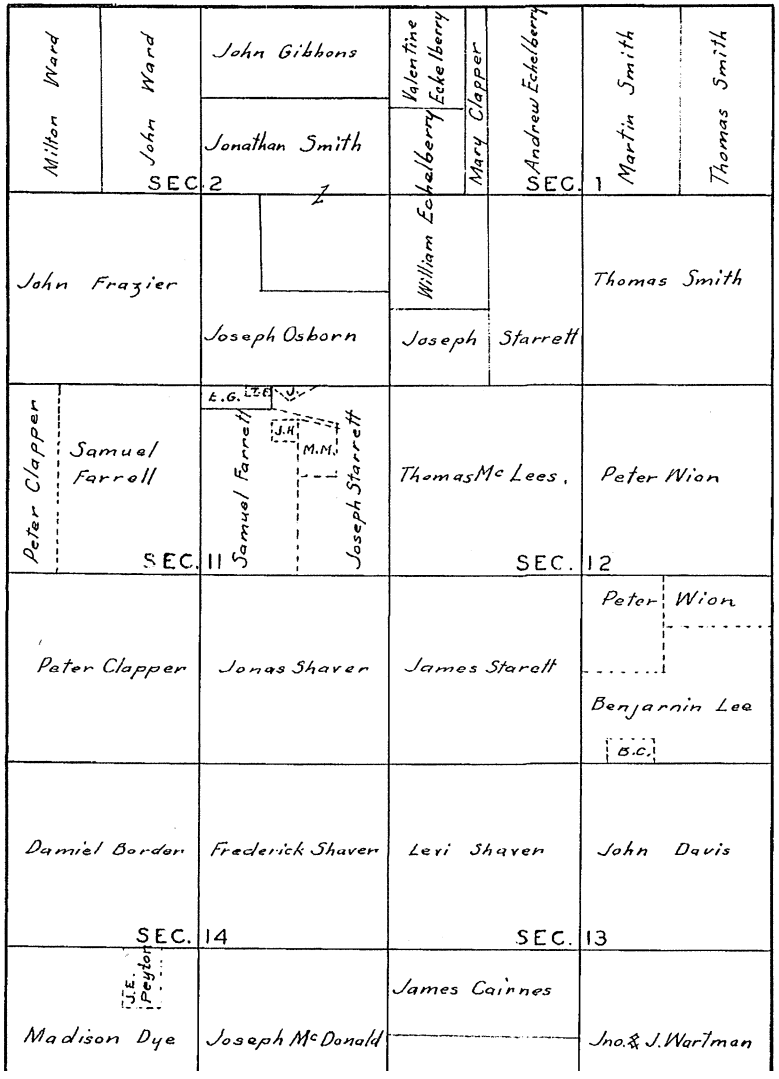

MARY E. TRIMBLE
100
GEO. M. MATSON
112
5
HENRY FINLEY
119
RUFUS M. GANDER
135
TOBIAS DILLEY ETAL 25
TOBIAS DILLEY
157
GEO W. GANDER
79
GEO W. GANDER
59
ISAAC S
21
4
3975
R M. GANDER
40
J.W. DAVIS
6.17
ISAAC S. GANDER
73.83
J.E. BAILEY
60
H.S. FINLEY
39
JAS. M. WARD
104
36
GANDER
15
C. D. STOUT
65
MATTHEW REED
79
N.E. ROBERTS
45
40
19
J S. FENTON
ETAL
159
3
80
WM. MITCHELL
7386
7675

N E QR T 12 R 12

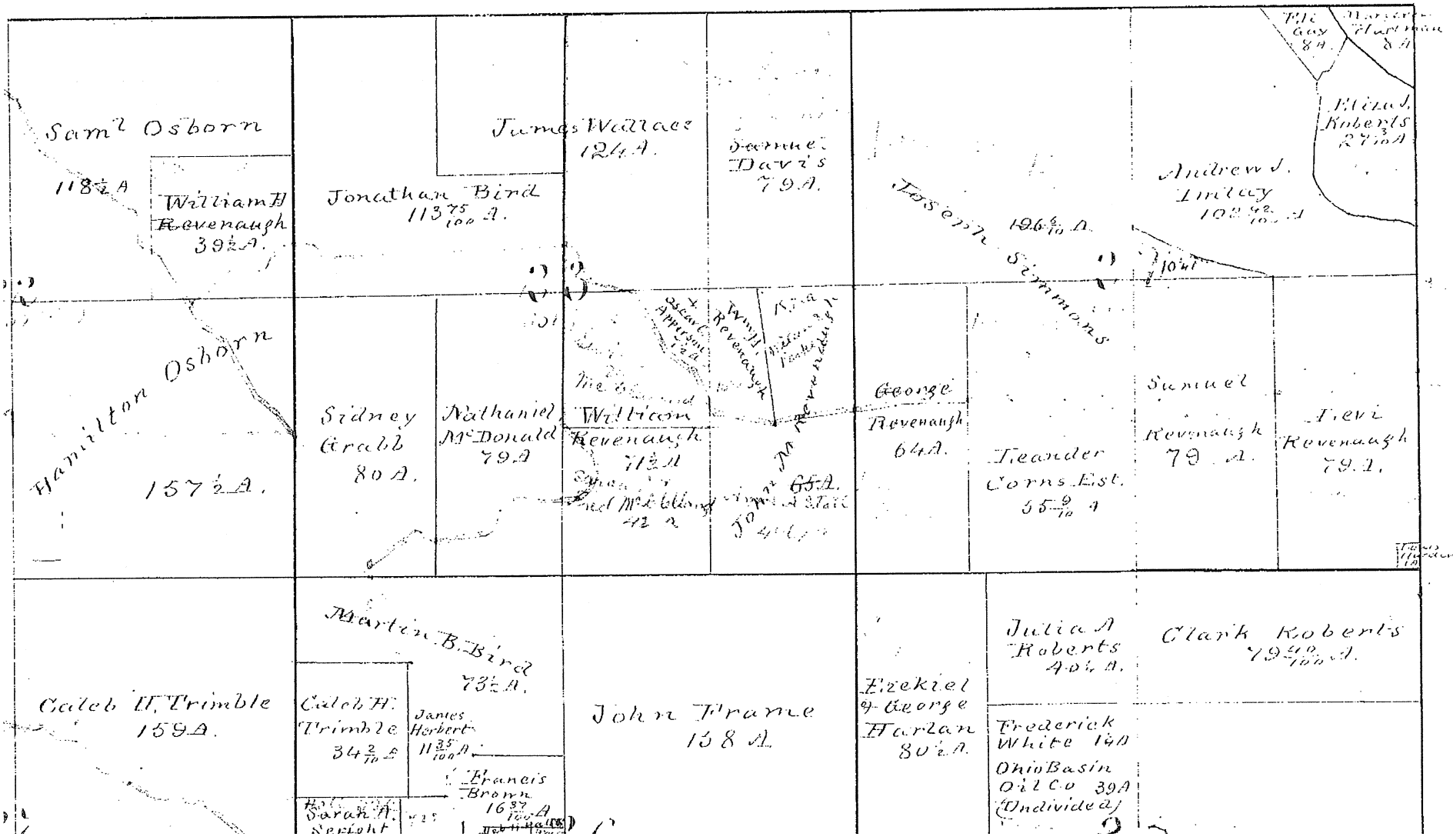

D. A. TEENER 7964
JAS POWELSON 80
RHODA WARD 60
W. A. GIBBONS 3959
O. D. GIBBONS 3959
IRA ECHELBERRY 3050
WM ECHELBERRY SR. 4325
JAS. WATTS 8379
L. C. RUSSELL 36.61
H. A. SMITH 1889
N. A. SMITH 25
ED. SMITH 80
SERIGHT 40
WATSON 40
SARAH J DUNLAP 20
NAT. L. SMITH 7918
2
1
3
37
E
2650
GEO. F. SMITH 30
JOHN ECHELBERRY HRS. 5373
14
SARAH A. 5699
JAS. 80
SARAH A. MCLEES¼
J. R. MCLEES¼
S. H. MCLEES¼
158
GEO. OSBORN 100
MARY J. CRAWFORD 66
MARY J. SMITH 124
30
MARTHA FRAZIER 24
MARTHA 35
194
J. E. SMITH
D. CRAWFORD
SAML. GILLOUGHY 11770
MAXWELL 5619
W. M. HARLAN 925
8658
J. R. MCLEES 15136
B. H. WION 151
WESLEY DUTRO
GEO. H

BLUE ROCK TOWNSHIP

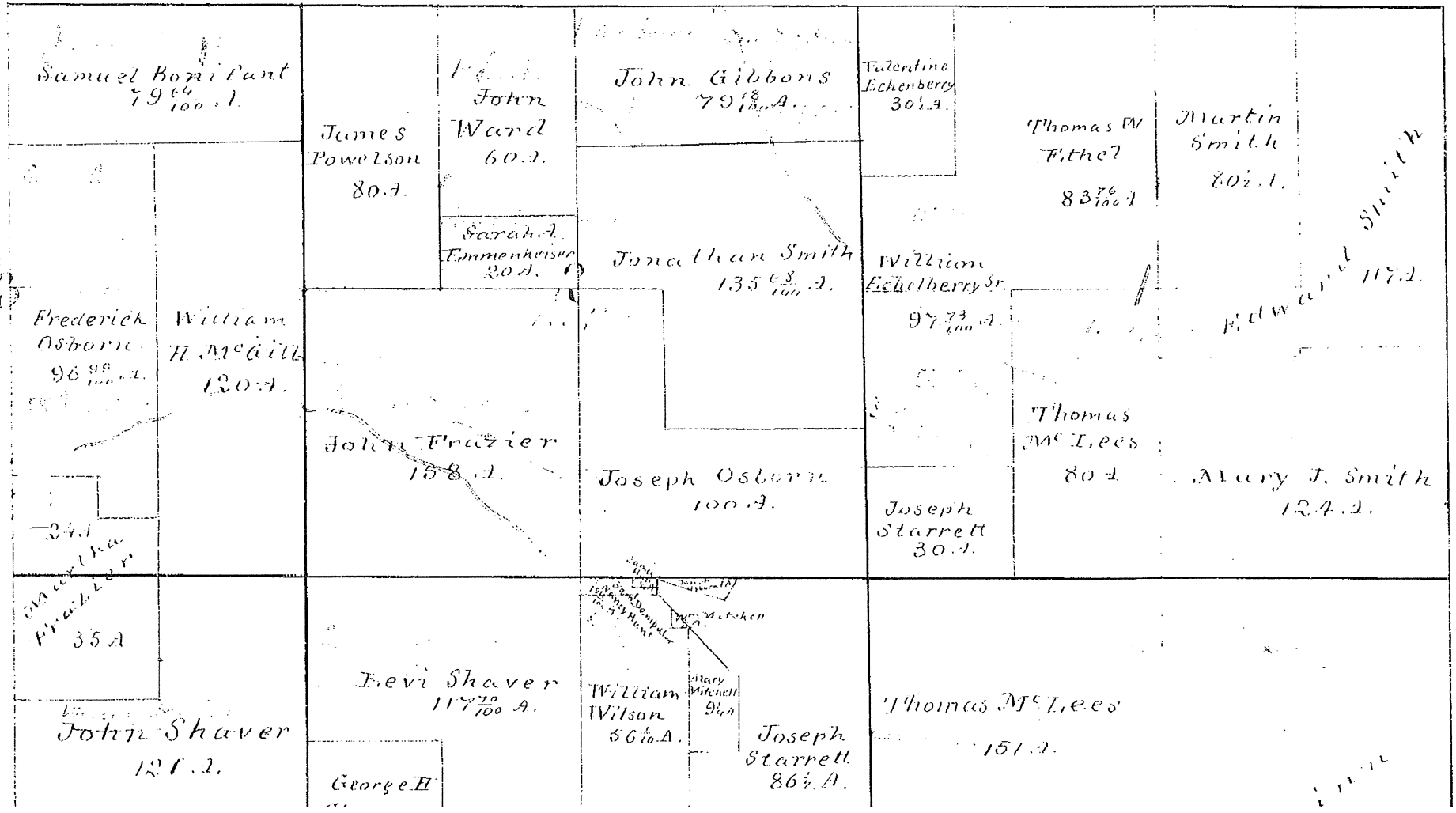
TRACED BY W.F.-J.K. CHECKED BY E. G.



Southeast Quarter, T. 12, R. 12, Blue Rock.



Northeast Quarter, T. 13, R. 13, Blue Rock.



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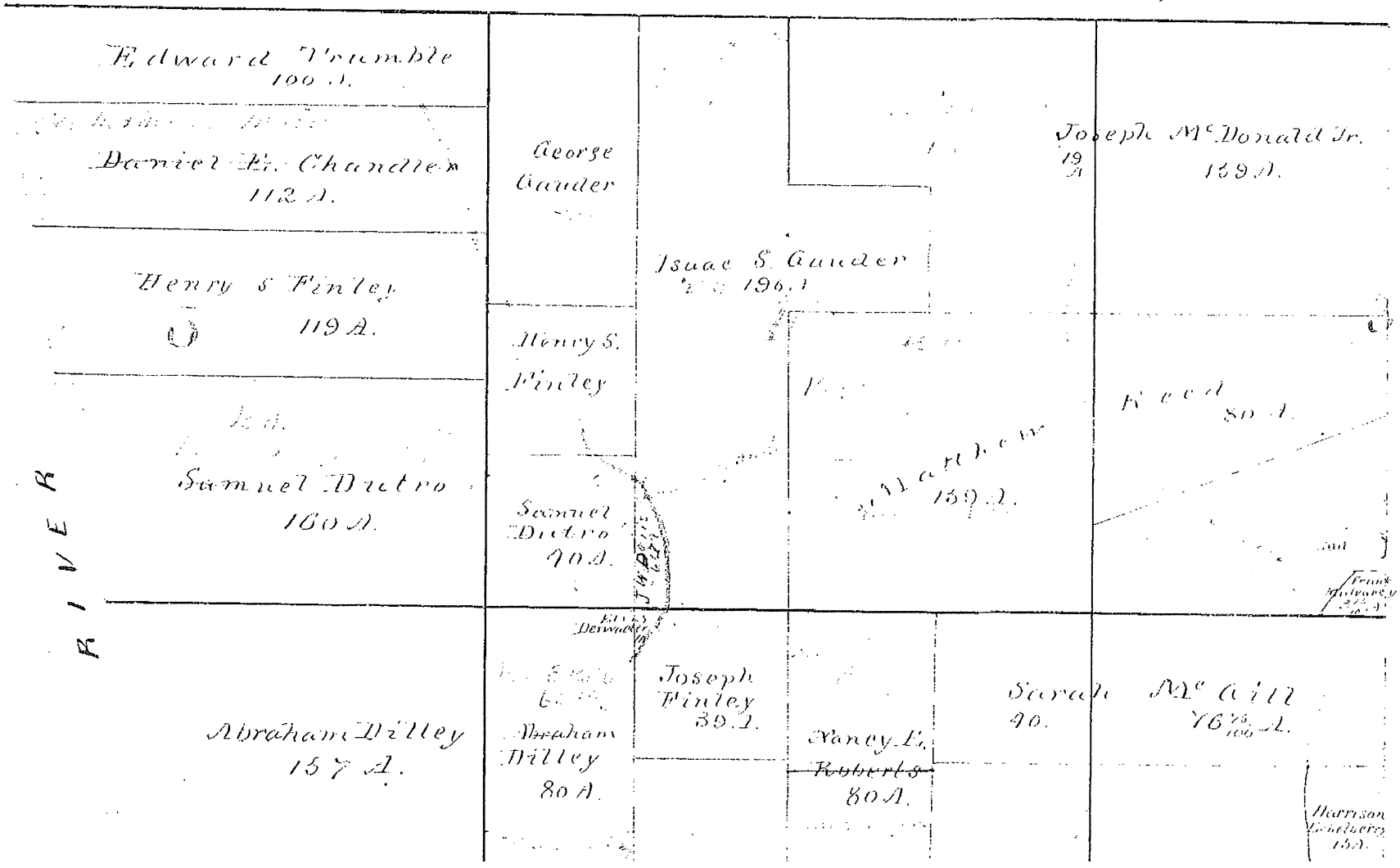
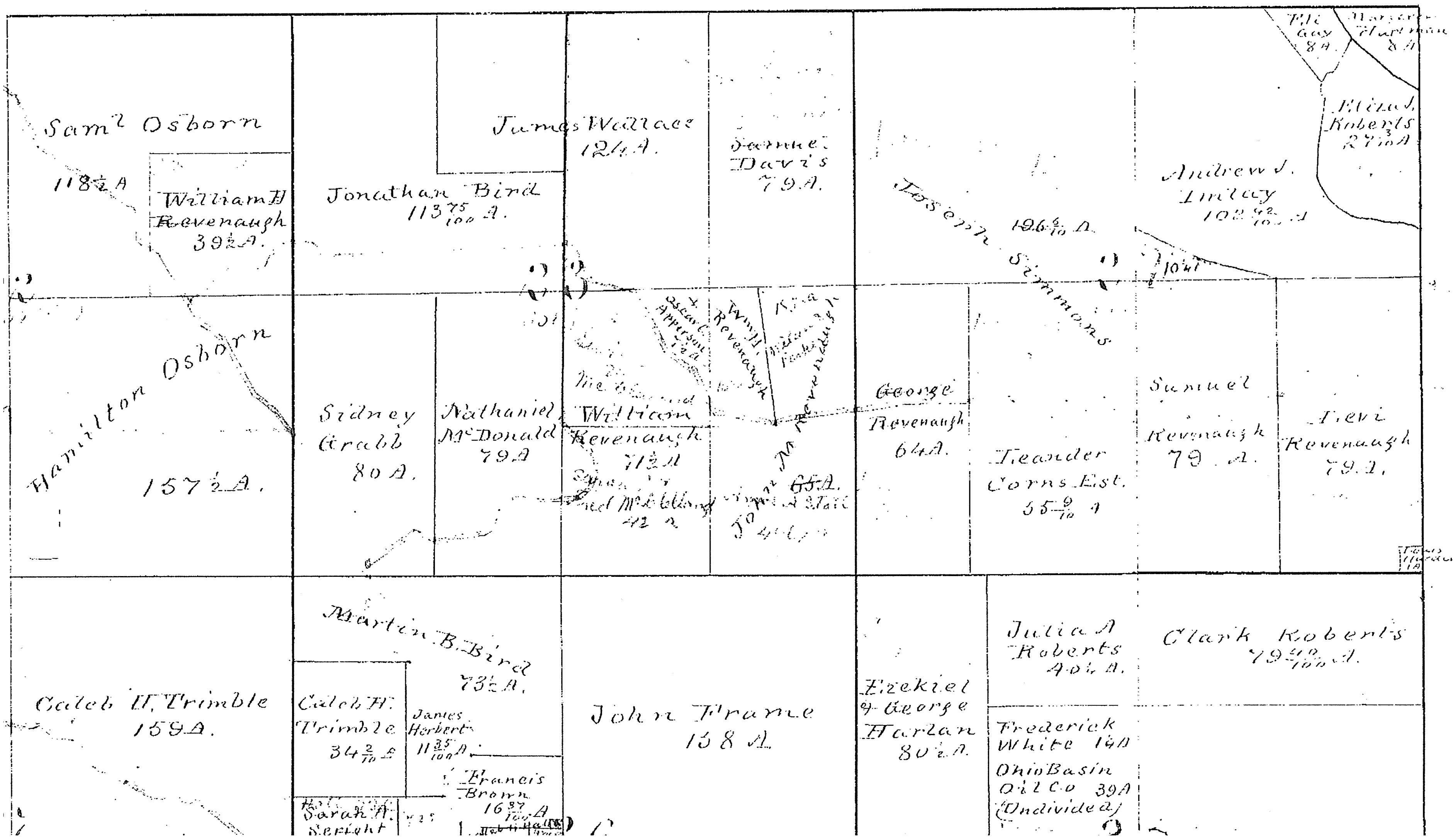
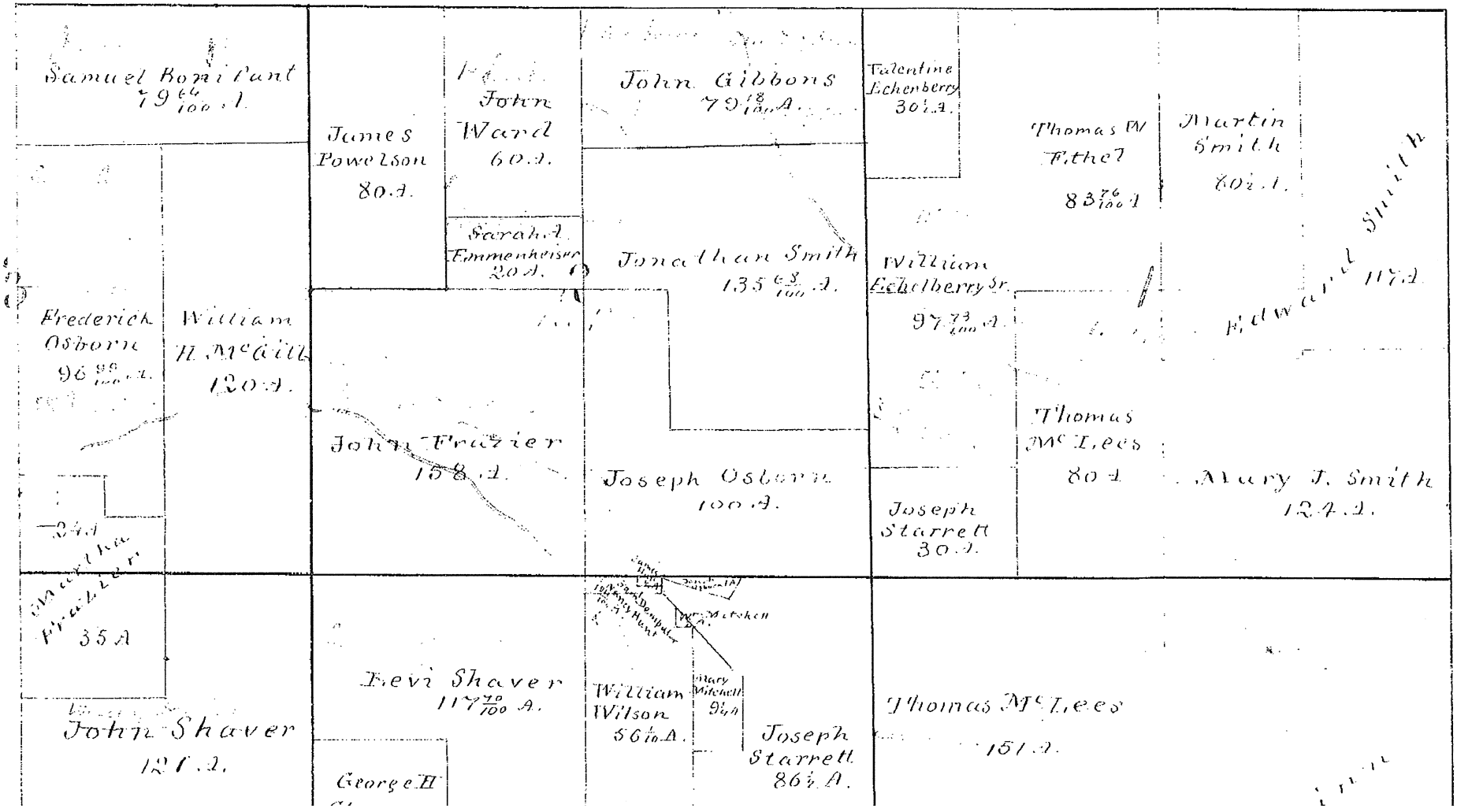
Northwest Quarter, T. 12, R. 12, Blue Rock



Southeast Quarter, T.12, R.12, Blue Rock.

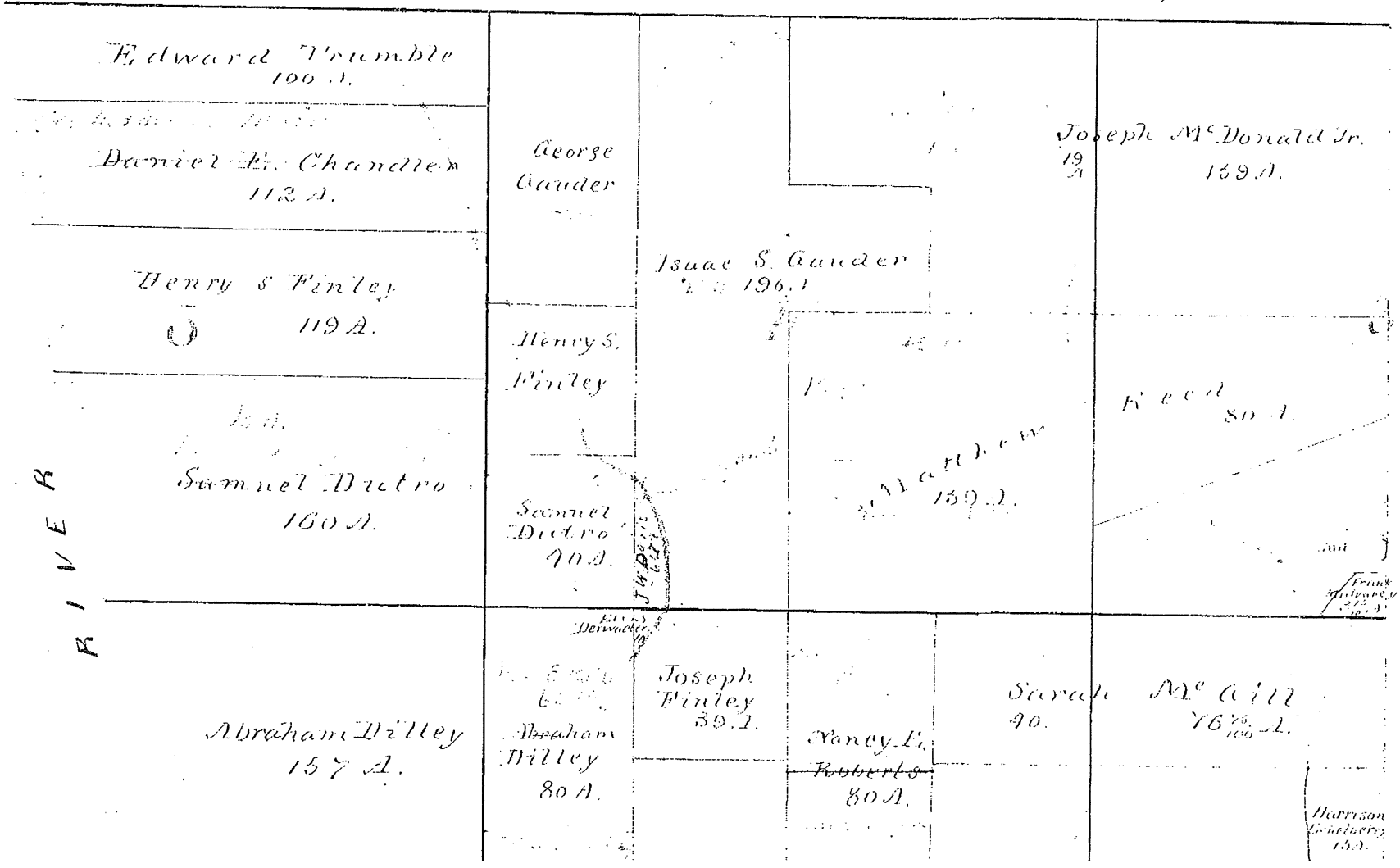


Northeast Quarter; T. 13, R. 13, Blue Rock.

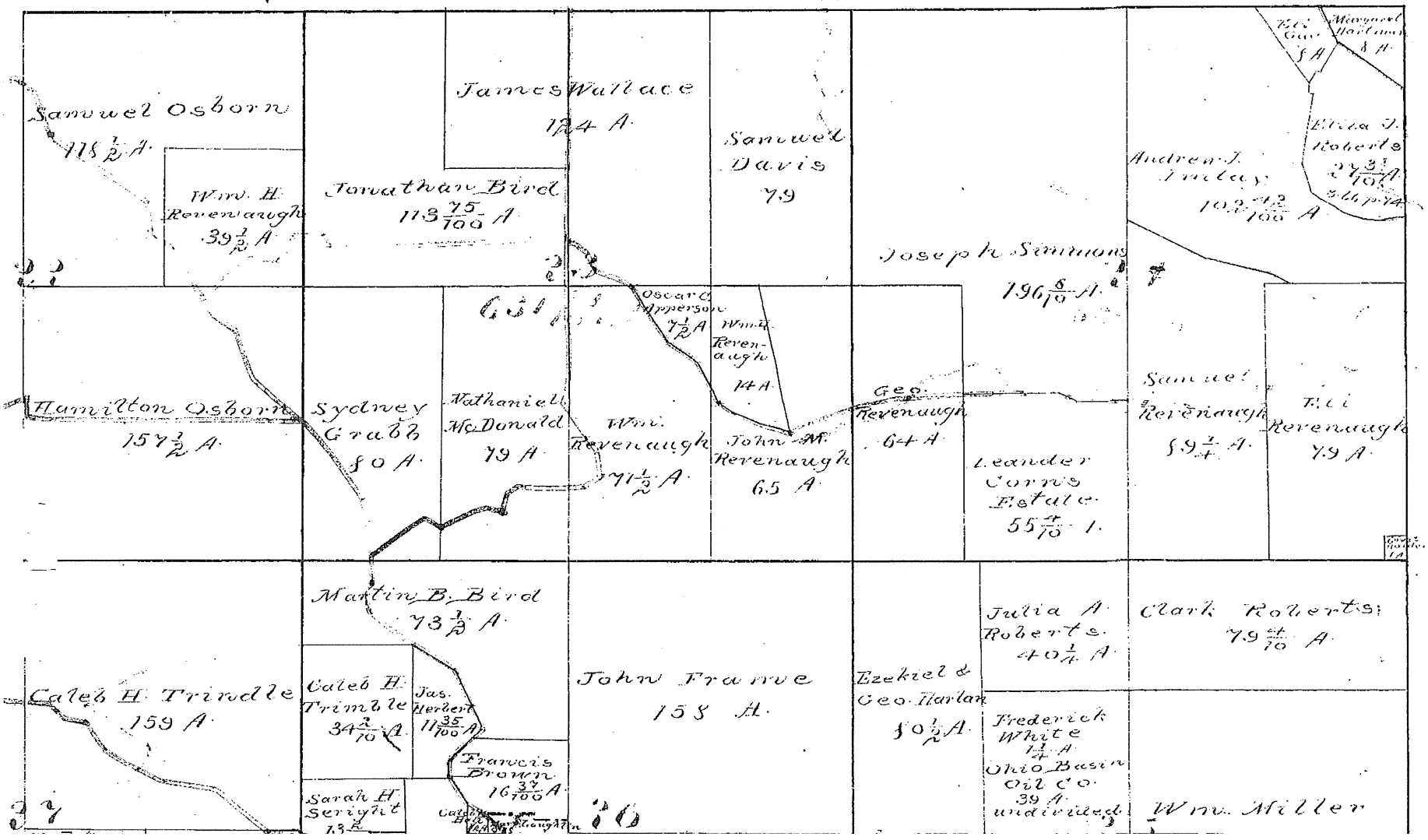


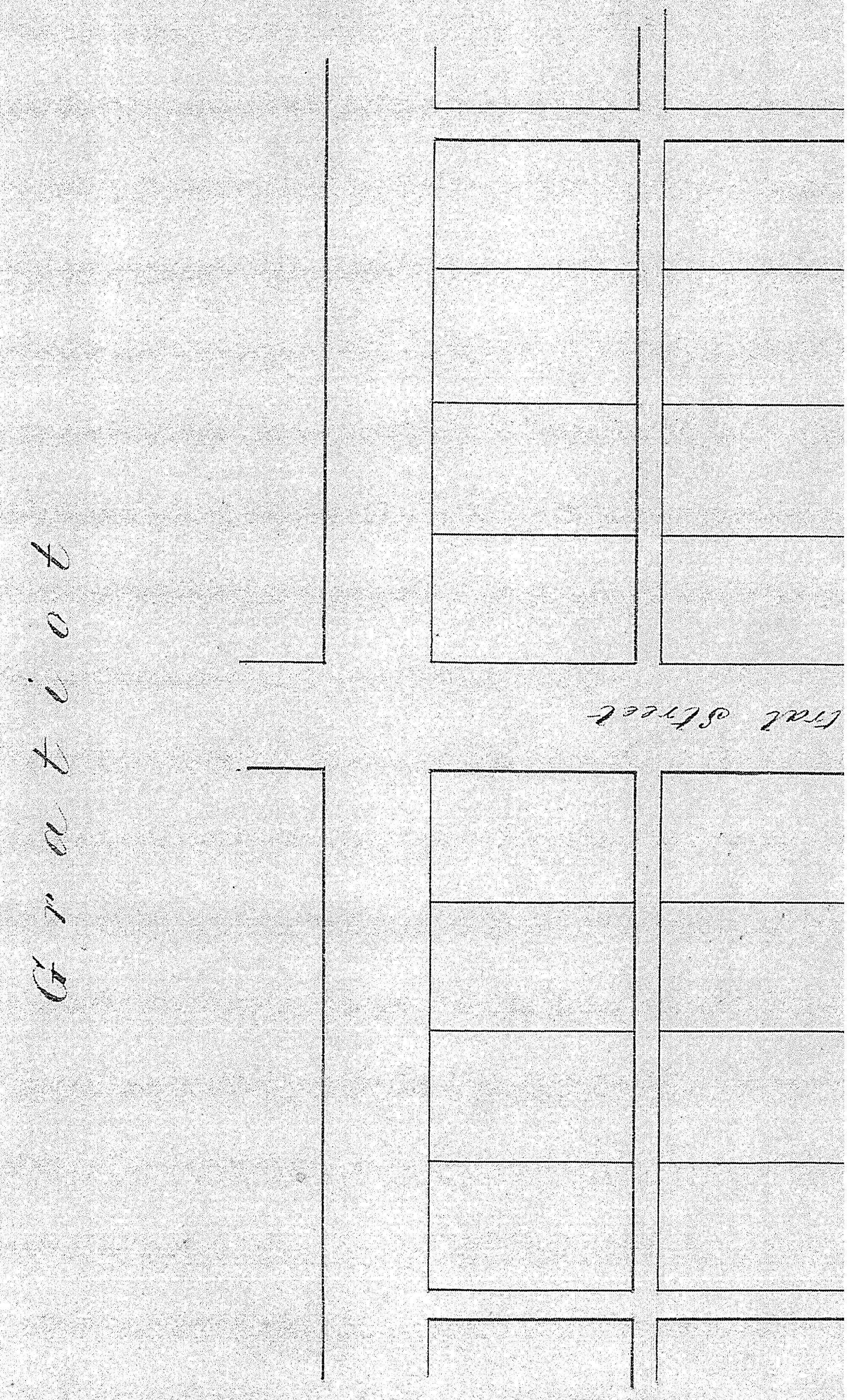
2

Northwest Quarter, T. 12, R. 12, Blue Rock

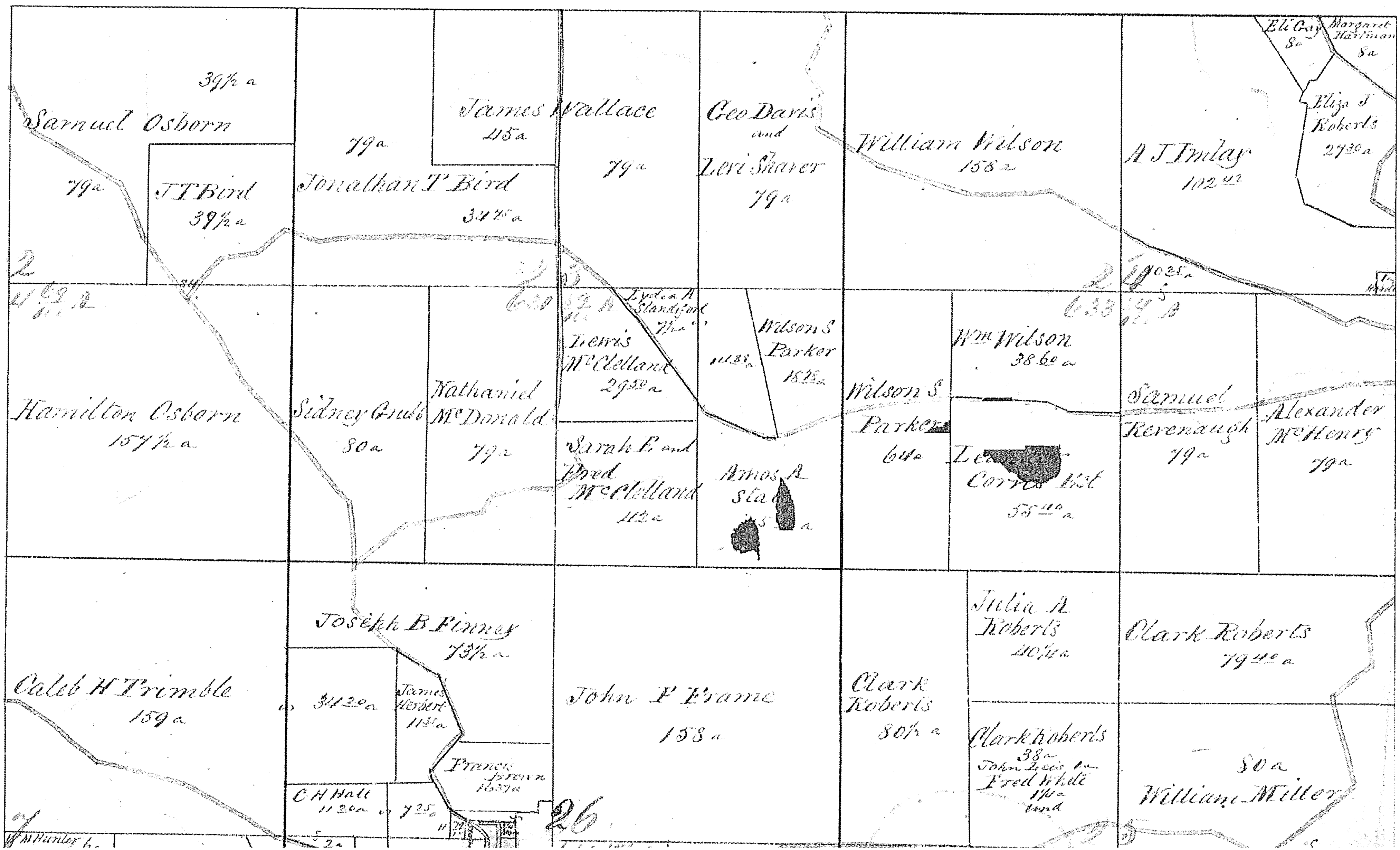


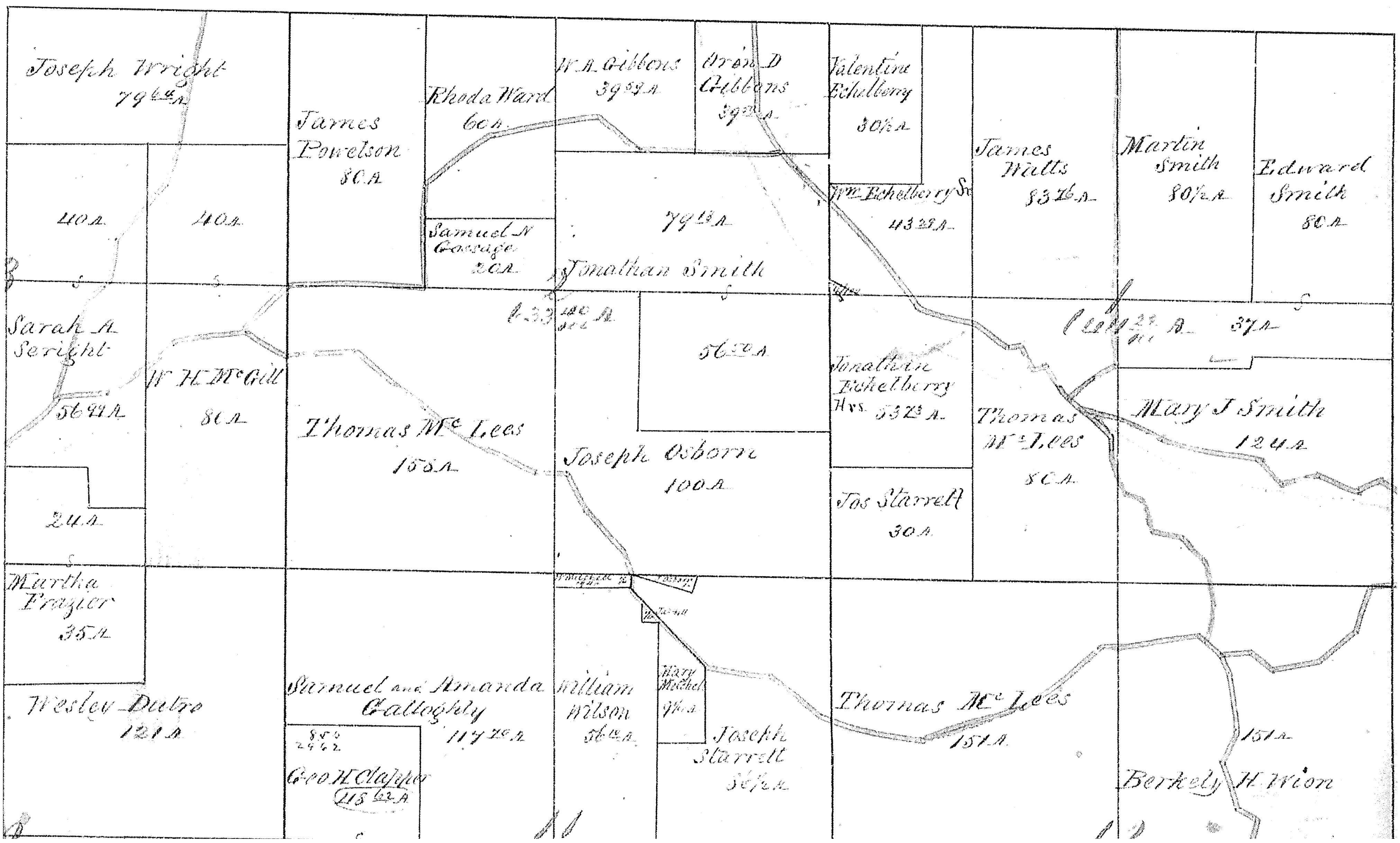
S. E. Quarter, T. 1 R., R. 12, Blue Rock.

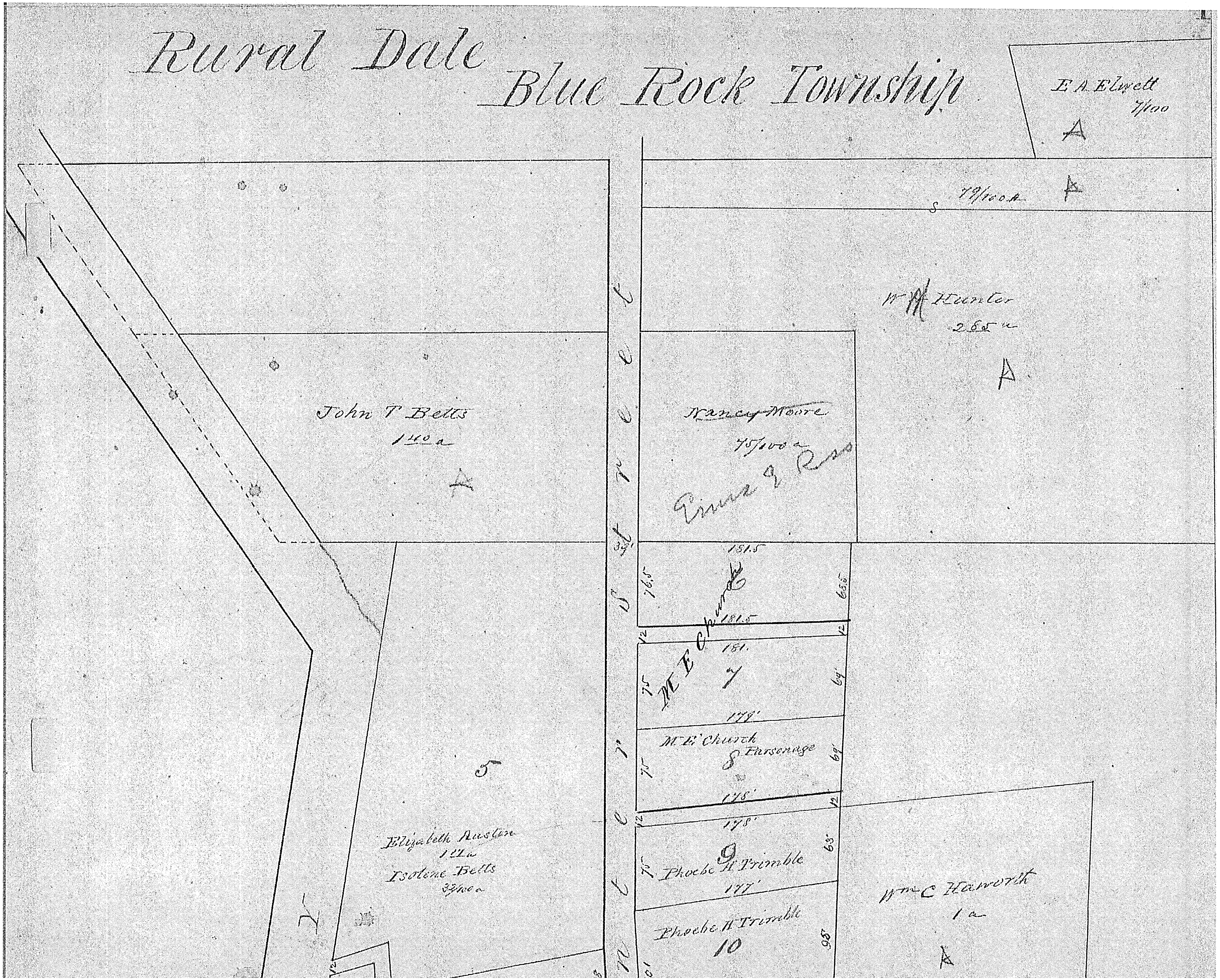



Gratiot
Street


Edward Trimble
100 A
Geo M & Mary C Matson
112 A
Henry S Finlay
119 A
J B Maxwell
and
Rufus M Gander
160 A
Tobias A Diller
150 A
7 A
G W Gander
79 A
39 A
40 A
Jonas E Bailey
60 A
20 A
59 A
Isaac S Gander
21 A
36 A
73 A
15 A
Jos Finley
39 A
A Knapp
40 A
James M Ward
104 A
19 A
Basil L Roberts
65 A
Matthew Reed
79 A
N E Roberts
45 A
James L Good
35 A
Joseph McDonald Jr.
159 A
Matthew Reed
80 A
Wm Mitchell
73 A
John Morrison
Sarah McGill
110 A
76 A
Joseph McDonald Jr.
40 A
60 A
Harrison Eckelberry
18 A

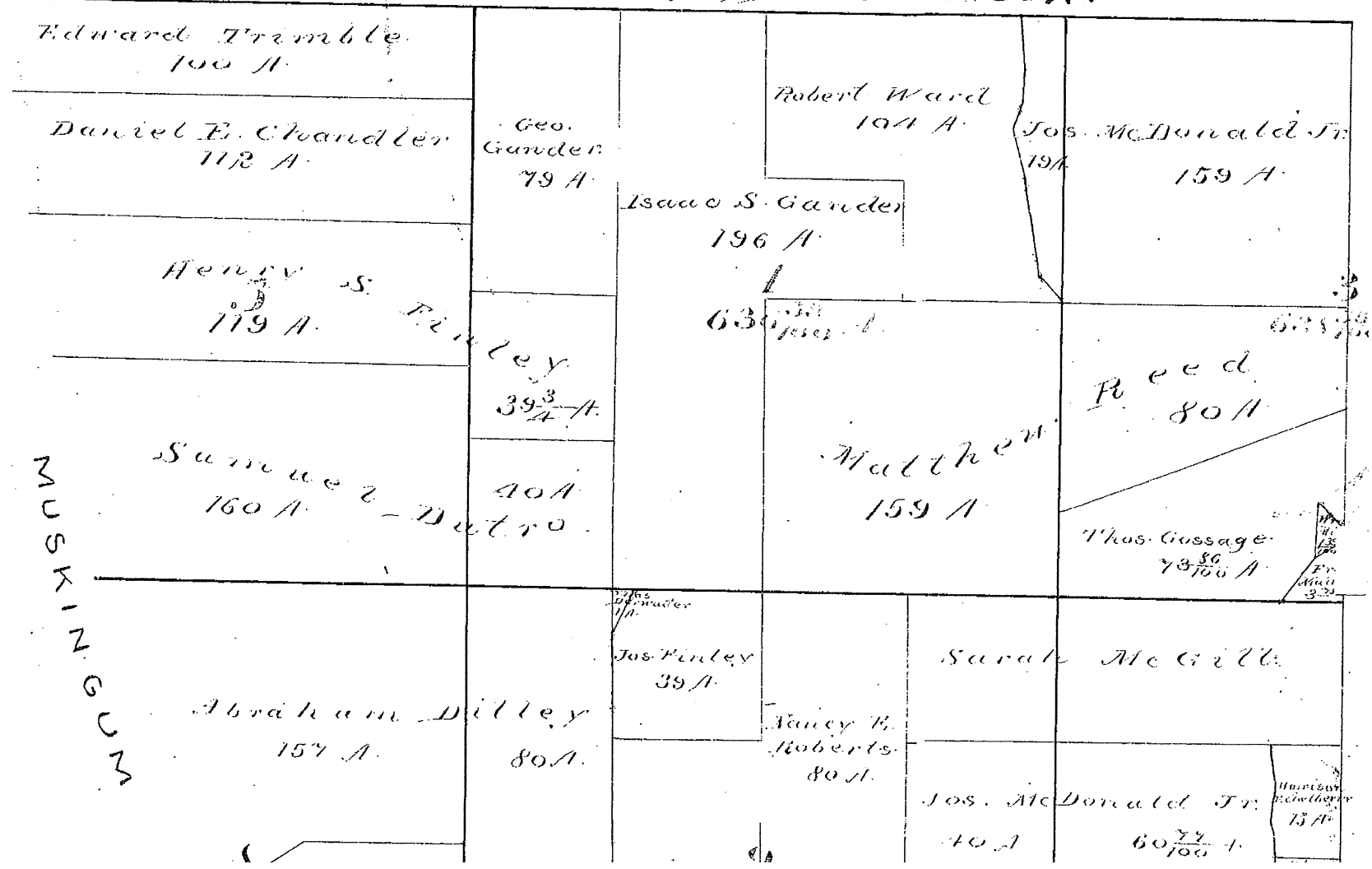

Samuel Osborn
39½ a
79 a
J T Bird
39½ a
Jonathan T Bird
79 a
34 75 a
James Wallace
45 a
79 a
Geo Davis and Levi Shaver
79 a
William Wilson
158 a
A J Imlay
102 42
Eli Gray
8 a
Margaret Hartman
8 a
Eliza J Roberts
27 30 a
Hamilton Osborn
157½ a
Sidney Grubb
80 a
Nathaniel McDonald
79 a
Lydia A Standiford
Lewis McClelland
29 50 a
Sarah E and Fred McClelland
Wilson S Parker
Amos A
Wm Wilson
38 60 a
Wilson S Parker
64 a
Samuel Revenaugh
79 a
Alexander McHenry
79 a
Caleb H Trimble
159 a
Joseph B Finney
73½ a
James Herbert
C H Hall
Francis Brown
John F Frame
158 a
Clark Roberts
80½ a
Julia A Roberts
Clark Roberts
79 40 a
Clark Roberts
38 a
Fred White
80 a
William Miller
2
23
24
26


Joseph Wright 79 64/100 A
40 A
40 A
James Powelson 80 A
Rhoda Ward 60 A
Samuel N Gossage 20 A
W. A. Gibbons 39 53/100 A
Orin D Gibbons 39 A
79 13/100 A
Jonathan Smith
Valentine Echelberry 30½ A
Wm Echelberry Sr 43 28/100 A
James Watts 83 76/100 A
Martin Smith 80½ A
Edward Smith 80 A
Sarah A Seright 56 44/100 A
W H McGill 80 A
Thomas McLees 155 A
Joseph Osborn 100 A
56 50/100 A
Jonathan Echelberry Hrs. 53 73/100 A
Jos Starrett 30 A
Thomas McLees 80 A
37 A
Mary J Smith 124 A
24 A
Martha Frazier 35 A
Wesley Dutro 121 A
Samuel and Amanda Galloghly 117 78/100 A
Geo H Clapper 215 62/100 A
William Wilson 56 13/100 A
Mary Mitchel 9¾ A
Joseph Starrett 36½ A
Thomas McLees 151 A
Berkely H Wion
151 A

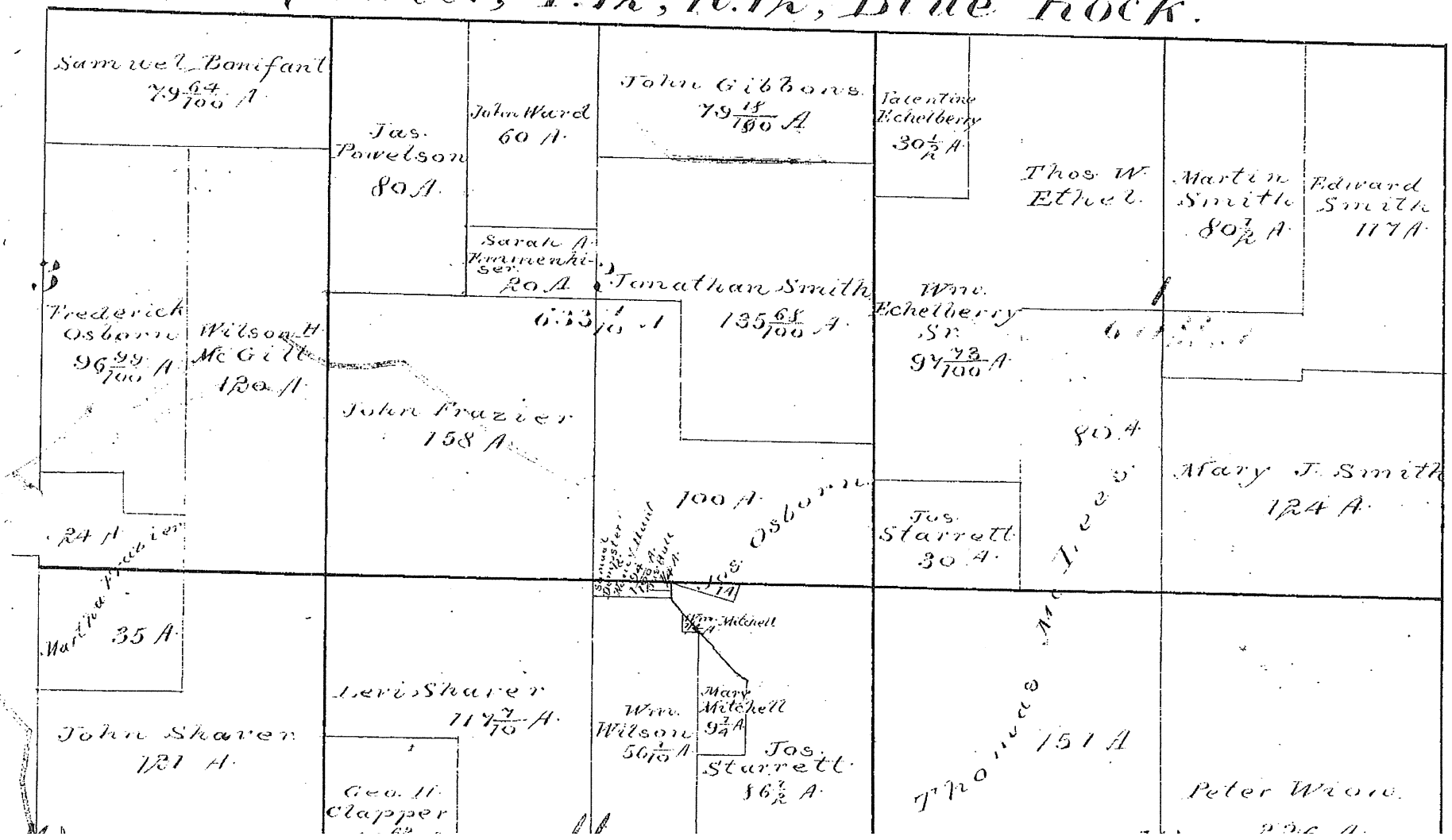

Rural Dale
Blue Rock Township
E A Elwett
7/100
79/100 A
W M Hunter
265 a
John T Betts
140 a
Nancy Moore
75/100 a
Street
M E Church
7
M E Church
8 Parsonage
Elizabeth Austin
12 a
Isolene Betts
33/100 a
5
9
Phoebe H Trimble
Phoebe H Trimble
10
Wm C Haworth
1 a

2

N.W. Quarter T.12, R.12, Blue Rock.



N. E. Quarter, T. 12, R. 12, Blue Rock.



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MUS - 3

BLUE ROCK

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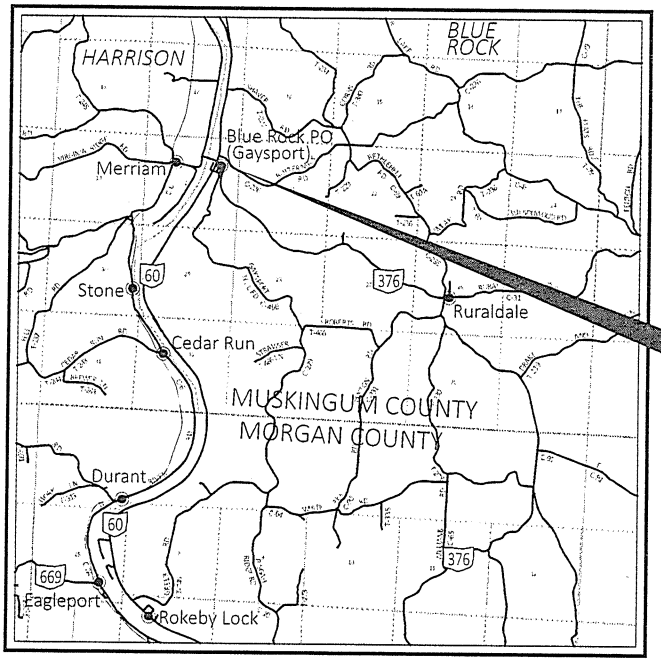

LOCATION MAP

LATITUDE: 39°48'11" LONGITUDE: -81°53'24"

N

PORTION TO BE IMPROVED
INTERSTATE HIGHWAY
FEDERAL ROUTES
STATE ROUTES
COUNTY & TOWNSHIP ROADS
OTHER ROADS

DESIGN DESIGNATION

CURRENT ADT (2023)	410
DESIGN YEAR ADT (2043)	610
DESIGN HOURLY VOLUME (2043)	72
DIRECTIONAL DISTRIBUTION	55%
TRUCKS (24 HOUR B&C)	3%
DESIGN SPEED	55
LEGAL SPEED	55

DESIGN FUNCTIONAL CLASSIFICATION:
RURAL - MAJOR COLLECTOR

NHS PROJECT ---------- NO

DESIGN EXCEPTIONS

NONE

ADA DESIGN WAIVERS

NONE REQUIRED

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

PLAN PREPARED BY:
OHIO DEPARTMENT
OF TRANSPORTATION
DISTRICT 5

INDEX OF SHEETS:

STANDARD CONSTRUCTION DRAWIN

BP-3.1	1/21/22			
BP-5.1	7/15/22			
CB-3A	7/16/21			
DM-1.1	7/17/20			
DM-4.4	1/15/16			
MT-97.10	4/19/19			
MT-101.60	1/17/20			
MT-105.10	1/17/20			
TC-41.20	10/18/13			
TC-65.10	1/17/14			
TC-65.11	7/15/22			

MUS-376-5.09

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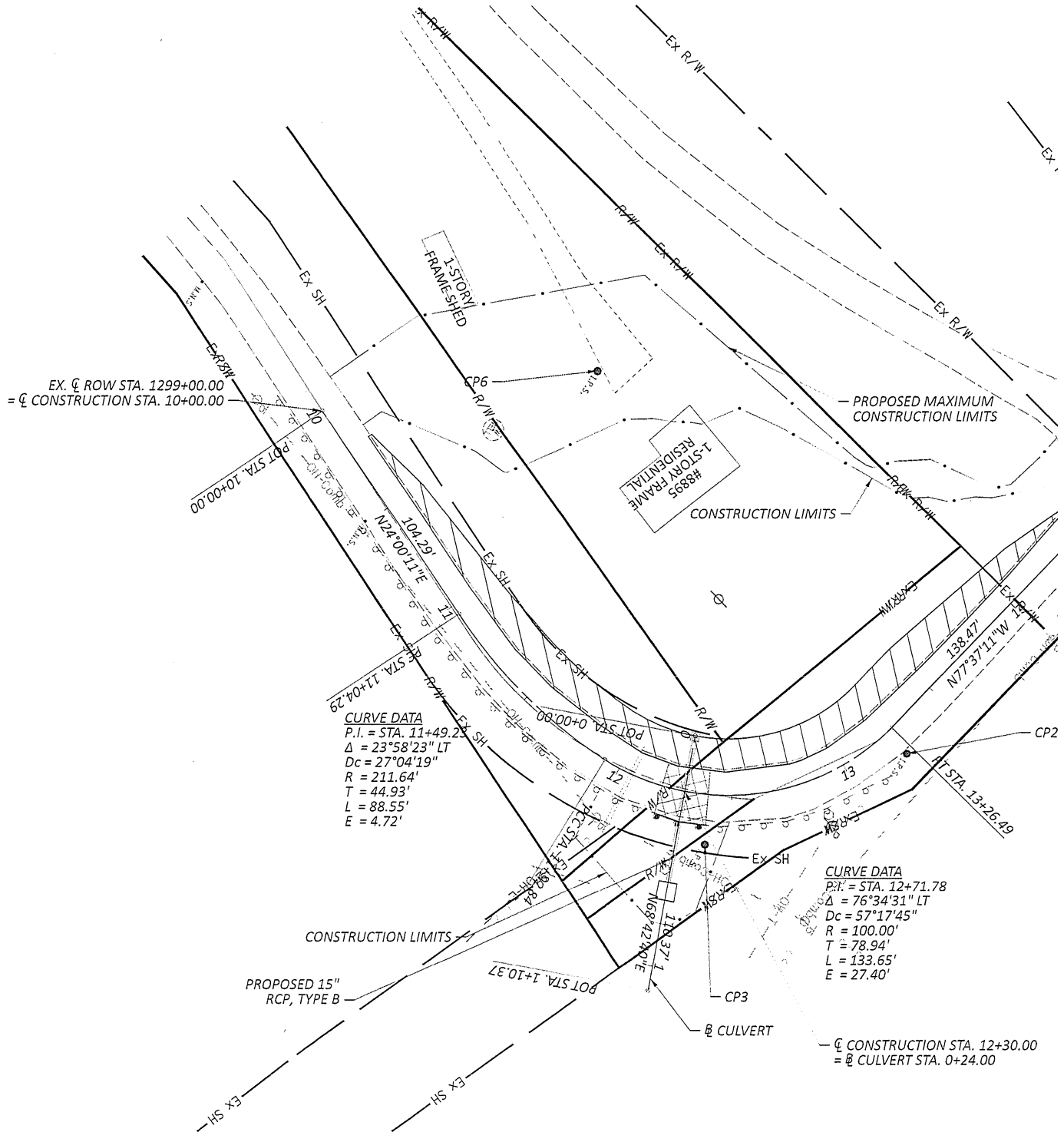
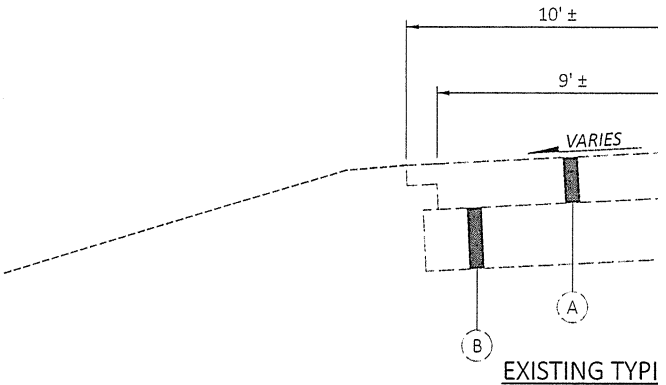


LEGEND

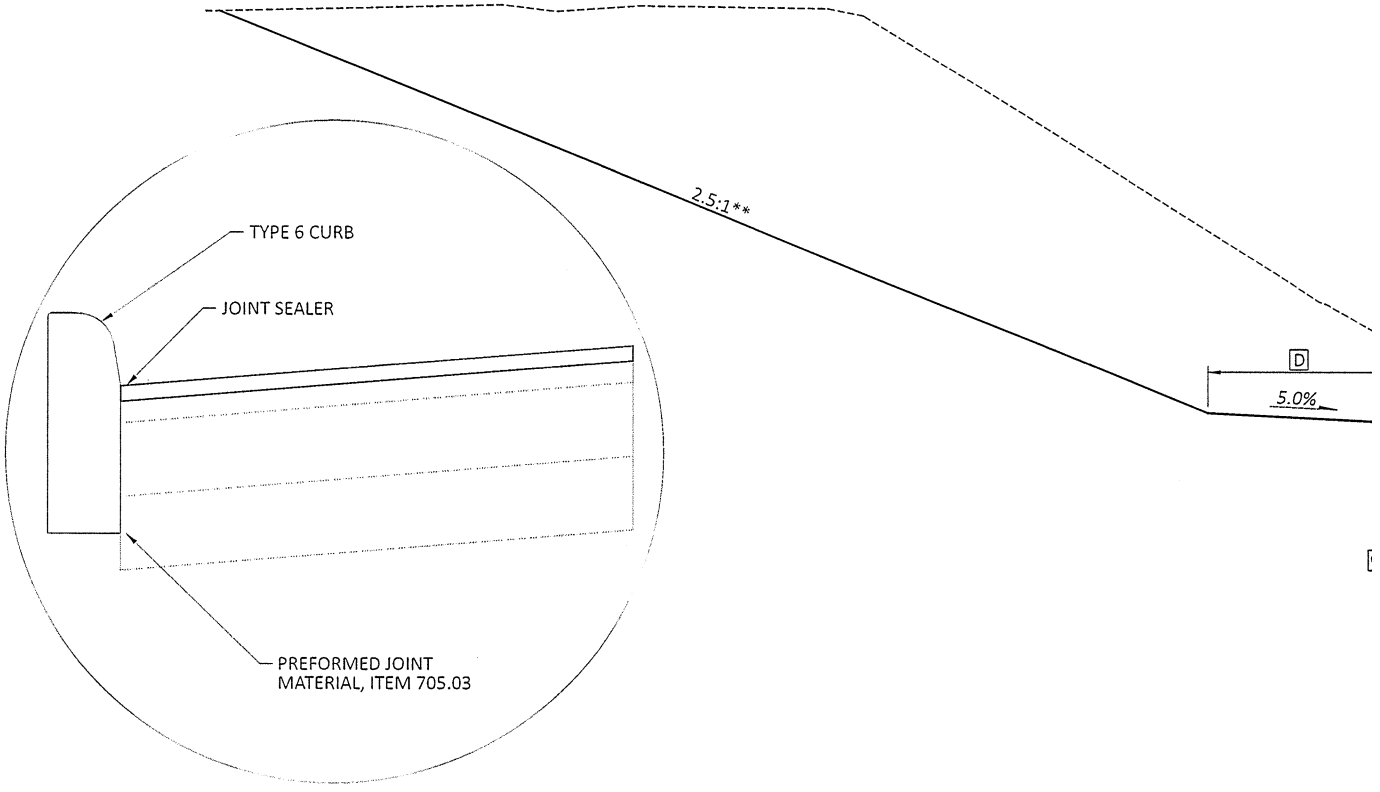
(A) EX. ASPHALT CONCRETE (UNKNOWN DEPTH)

(B) EX. AGGREGATE BASE (UNKNOWN DEPTH)



EXISTING TYPI

STA. 1(



EDGE OF PAVEMENT DETAIL (TYP)

PROPOSED SHOULDER WIDENING

STA. 10+20.00 - 14+4

STA. 10+55.0(

LEGEND

(1) *ITEM 202 PAVEMENT REMOVED*

(2) *ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG70-22M (1.25")*

(3) *ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449) (1.75")*

(4) *ITEM 301 ASPHALT CONCRETE BASE, PG64-22, (449) (6")*

(5) *ITEM 304 AGGREGATE BASE (6")*

(6) *ITEM 407 NON-TRACKING TACK COAT*

(7) *ITEM 204 SUBGRADE COMPACTION*

(8) *ITEM 609 CURB, TYPE 6*

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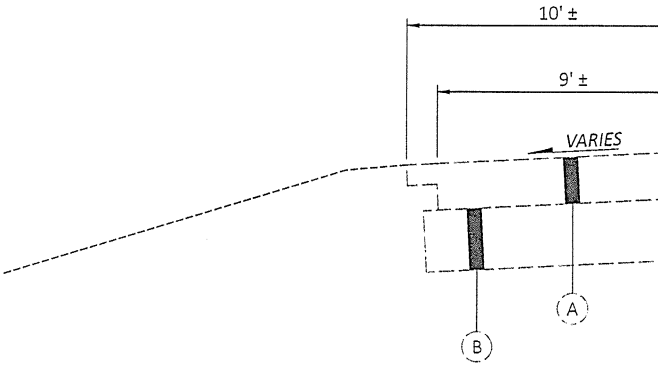
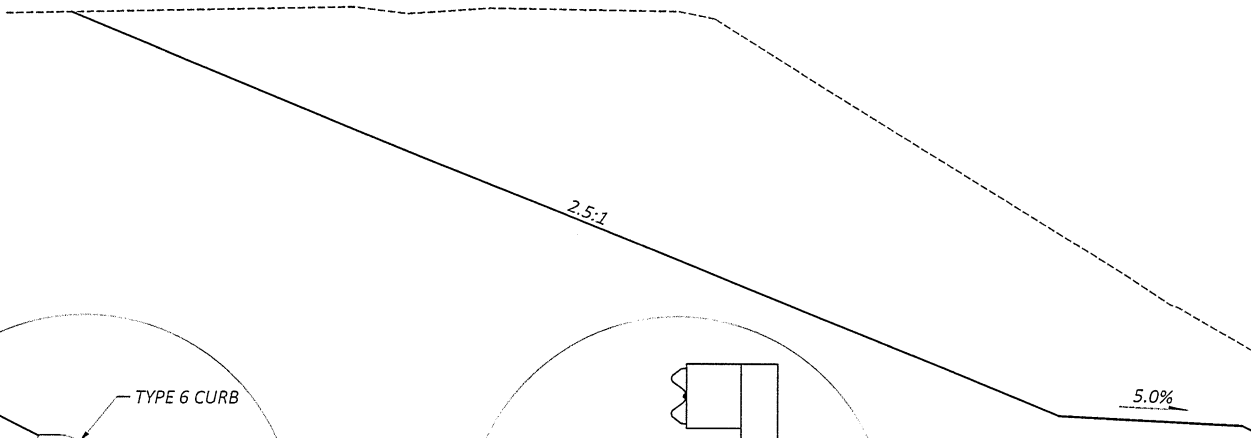
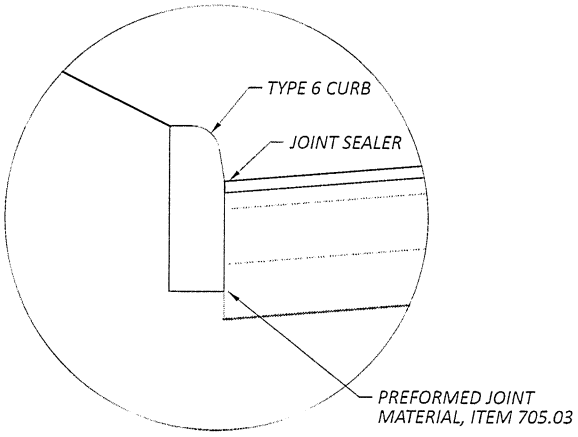


LEGEND

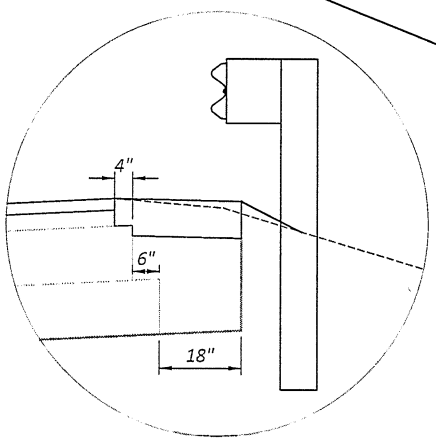
(A) EX. ASPHALT CONCRETE (UNKNOWN DEPTH)
(B) EX. AGGREGATE BASE (UNKNOWN DEPTH)

EXISTING TYPICAL SECTION F
STA. 1





EDGE OF PAVEMENT DETAIL LT. (TYP)



EDGE OF PAVEMENT DETAIL RT. (TYP)

LEGEND

(1) ITEM 202 PAVEMENT REMOVED
(2) ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG70-22M (1.25")
(3) ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449) (1.75")
(4) ITEM 301 ASPHALT CONCRETE BASE, PG64-22, (449) (6")
(5) ITEM 304 AGGREGATE BASE (6")
(6) ITEM 407 NON-TRACKING TACK COAT
(7) ITEM 204 SUBGRADE COMPACTION
(8) ITEM 617 COMPACTED AGGREGATE, 8"
(9) ITEM 606 GUARDRAIL, TYPE 5, USING 9 FOOT POSTS

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS, EVEN THOUGH OTHERWISE SHOWN.

UNDERGROUND UTILITIES

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

AT&T Ohio
160 North Sixth Street
Zanesville, Ohio 43701
Attn: Barret Tamasovich
740-454-3552
BT2178@att.com

Natural Gas and Oil Cooperative
120 O'Neil Drive
Hebron, Ohio 43025
Attn: Will Poling
740-641-8751
wpoling@theenergycoop.com

Guernsey-Muskingum Electric Cooperative, Inc.
17 South Liberty Street
New Concord, Ohio 43762
Attn: Blake West
740-826-7970
bwest@gmenergy.com

Spectrum Cable TV
737 Howard St.
Zanesville, Ohio 43701
Attn: Zack Allen
614-255-2819
Zackary.Allen1@charter.com

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

CLEARING AND GRUBBING

THE DEPARTMENT HAS NOT MARKED INDIVIDUAL TREES AND STUMPS FOR REMOVAL. UNLESS SPECIFICALLY DESIGNATED AS "DO NOT DISTURB" IN THE PLANS, REMOVE ALL TREES AND STUMPS WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201 CLEARING AND GRUBBING.

EXISTING STRUCTURE VERFICATION

DETAILS AND DIMENSIONS SHOWN ON THE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM THE DESIGN PLANS OF THE EXISITNG PIPE'S ORIGINAL INSTALLATION. CONSEQUENTLY, THEY AREA INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS 102.05 AND 105.02.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

BORROW AND WASTE AREAS

THE CONTRACTOR SHALL COMPLY WITH CMS SECTION 107.10 FOR ALL BORROW AND WASTE AREAS ASSOCIATED WITH THE PROJECT.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

EARTHWORK

ITEM 203, EXCAVATION (10203 CY)
10201 CY (SHEET 25) + 2 CY (SHEET 28) = 10203 CY

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

ITEM 659, SEEDING AND MULCHING, CLASS 2 (3210 SY)
3122 SY (SHEET 25) + 88 SY (SHEET 28) = 3210 SY

ITEM 659, COMMERCIAL FERTILIZER (0.4 TON)
1 TON PER 7,410 SY OF PERMANENT SEEDED AREA

ITEM 659, LIME ACRES (0.7 ACRE)
3210 / 4840 = 0.7 ACRE

ITEM 659, WATER (17 M. GAL)
3210 X 0.0054 M. GAL / SY = 17 M. GAL

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND

ITEM 617, COMPACTED AGGREGATE, AS PER PLAN

ALL AGGREGATE SHALL BE 100% CRUSHED LIMESTONE. ALL QUALITY REQUIREMENTS EXCEPT SHALE SHALL BE WAIVED. OTHER GRADATION REQUIREMENTS SHALL BE AS SPECIFIED EXCEPT THE INDEX SHALL BE WAIVED. IF SO PERMITTED, THE CONTRACTOR MAY USE RECYCLED ASPHALT CONCRETE PAVEMENT (RACP MEETING REQUIREMENTS OF 716.02) IN LIEU OF LIMESTONE.

REVIEW OF DRAINAGE FACILITIES

PRIOR TO THE START OF WORK AND AGAIN BEFORE FINAL ACCEPTANCE, PERFORM AN INSPECTION WITH REPRESENTATIVES OF THE DEPARTMENT, CONTRACTOR AND LOCALS OF ALL EXISTING DRAINAGE FACILITIES THAT ARE TO REMAIN IN SERVICE WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES IS DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION ARE MAINTAINED BY THE DEPARTMENT.

CONFIRM ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES ARE MAINTAINED AND LEFT IN A CONDITION COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THEIR OPERATIONS AS DIRECTED AND APPROVED BY THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

ENDANGERED BAT HABITAT REMOVAL

THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT, AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT (ESA). FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK 3 INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

ITEM 407, NON-TRACKING TACK COAT

THE RATE OF APPLICATION OF THE ITEM 407, NON-TRACKING TACK COAT SHALL BE PER CMS TABLE 407.06-1 AND SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.06 GAL/SY FOR TACK COAT UNDER THE SURFACE COURSE AND 0.06 GAL/SY UNDER THE INTERMEDIATE COURSE. (FOR ESTIMATING PURPOSES ONLY).

NOTES

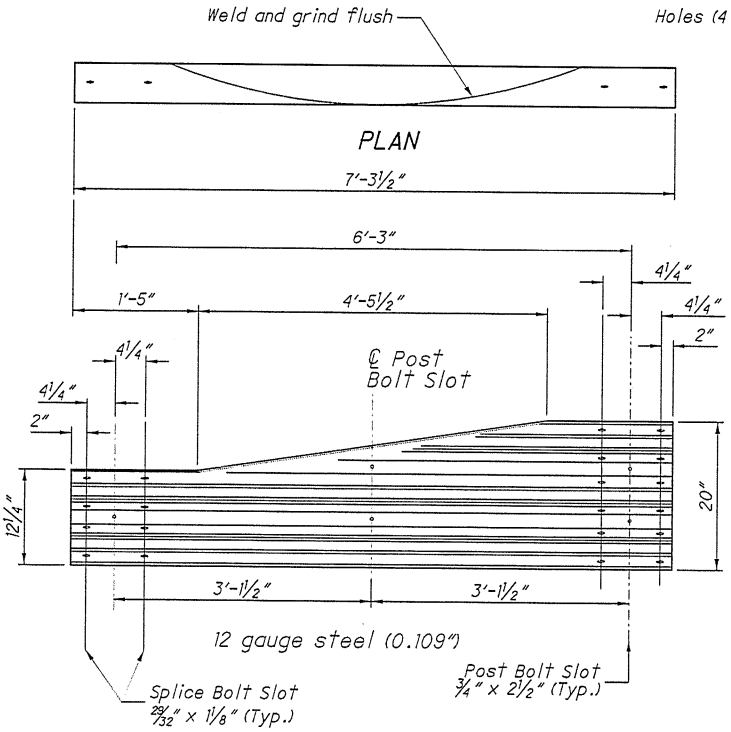
GENERAL: *Components shown on this drawing are used in a variety of guardrail systems. See individual guardrail drawing for specific applications.*

See CMS 606 for guardrail specifications not covered on these drawings.

Refer to AASHTO M 180 for dimensional details of W-Beam and Thrie-Beam rail elements, related buffer and end sections, beam splices, post and splice bolts, nuts, and Type 1 W-Beam to Thrie-Beam Transition sections.

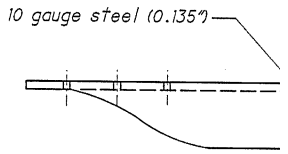
RAIL ELEMENTS: *W-Beam Rail has an effective length of 12'-6" unless otherwise specified, with ¾" x 2½" post bolt slots on 6'-3" centers regardless of post spacing. Field punch or drill bolt holes or slots for irregularly spaced posts as specified in CMS 606.04.*

RAIL SPLICES: *Lap splices between two rail elements or between a rail and terminal connector in the direction of traffic. Lap the buffer or flared end sections in the direction of traffic.*

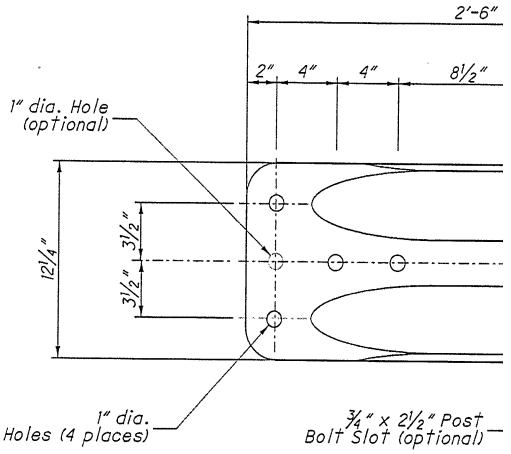


ELEVATION
TYPE 2 TRANSITION SECTION
(Asymmetric W to Thrie-Beam)

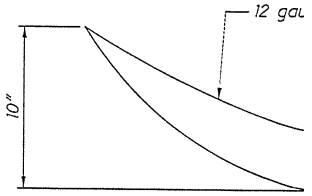
For details of Type 1 Transition Section (Symmetric), refer to AASHTO M 180, Figure 4.

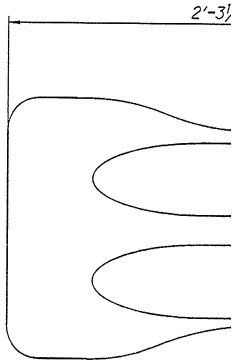


PLA



ELEVA
W-BEAM TERMINA





EL
W-BEAM FL

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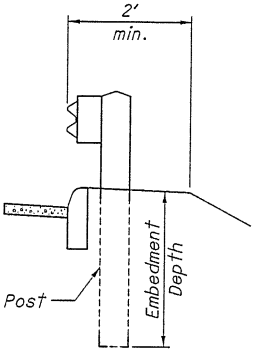
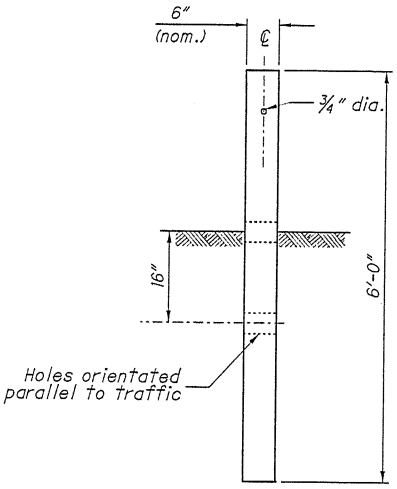
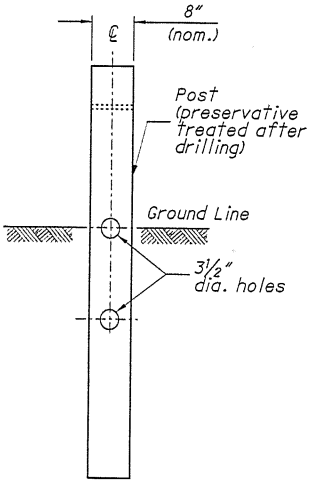


DETAIL A

See POST EMBEDMENT DEPTH Note

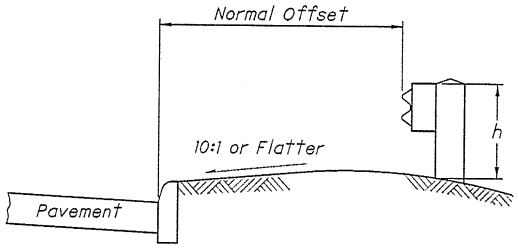


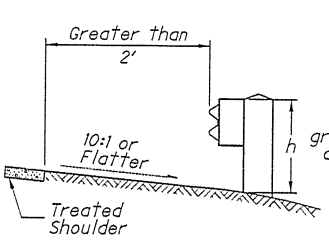
FRONT

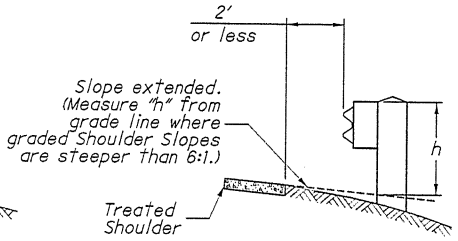


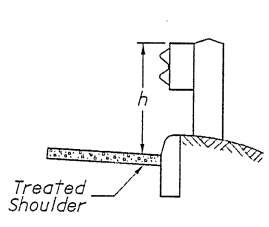
SIDE

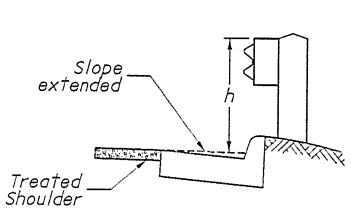
TYPE 1 BREAKAWAY CRT POST











h = Standard Height (See GUARDRAIL HEIGHT Note)

MEASURING GUARDRAIL HEIGHT

NOTE

GUARDRAIL HEIGHT: For initial installa within ± 1″ of the standard height, h, of W-Beam rail. (See MEASURING GUARD When subsequent projects, such as height of existing guardrail, the finis ±2.5″ of the standard height.

POST EMBEDMENT DEPTH: Standard emb than 2′ of graded shoulder width (10:1 from the face of the guardrail (see that a minimum of 5′-5″ embedment dep the longer posts will be made at the **GUARDRAIL POST, 9′, Each.**

SPECIAL POST MOUNTINGS: Install post or structure as shown in the FOOTING the details shown on **SCD GR-2.2.**

Install posts located over a footing w with a footing anchor as detailed here SECTION B-B of **SCD GR-2.2**, may be use method.) Where the cover is between 2 may be omitted and the post encased

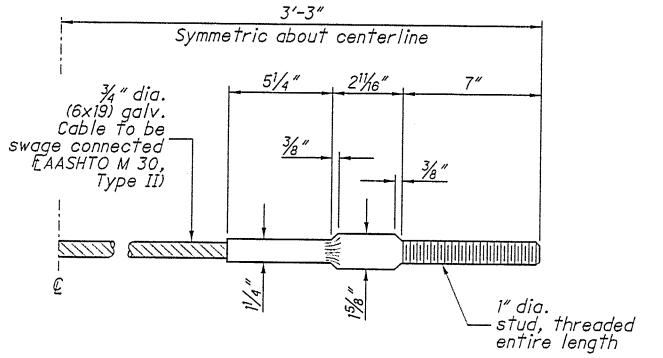
Do not drive posts located over a cul of cover; instead set in drilled or dug embedment depth is less than 3′-5″, er 4″ concrete.

All costs associated with special post unit price bid of Item 606 Guardrail ot

ANCHORS: Holes and grouting shall com cement or non-shrink, nonmetallic grou

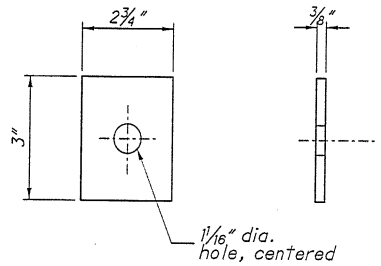
Expansion shield anchors as specified except where concrete deterioration h the Engineer. Where self-drilling anch with the expansion shield (not by a dri flush with the concrete surface.

PROTECTIVE COATING: In lieu of the co expansion shields, anchors and concret embedded in concrete in accordance wi steel. Any bolts screwed into these (See sheet 3 for Concrete Insert Anch

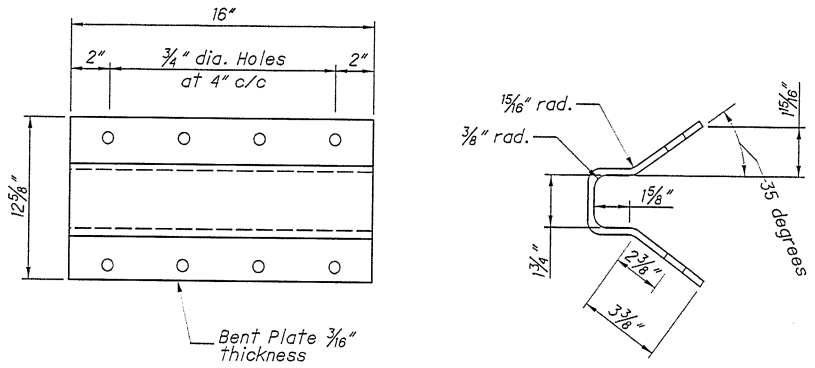


STANDARD SWAGED FITTING AND STUD

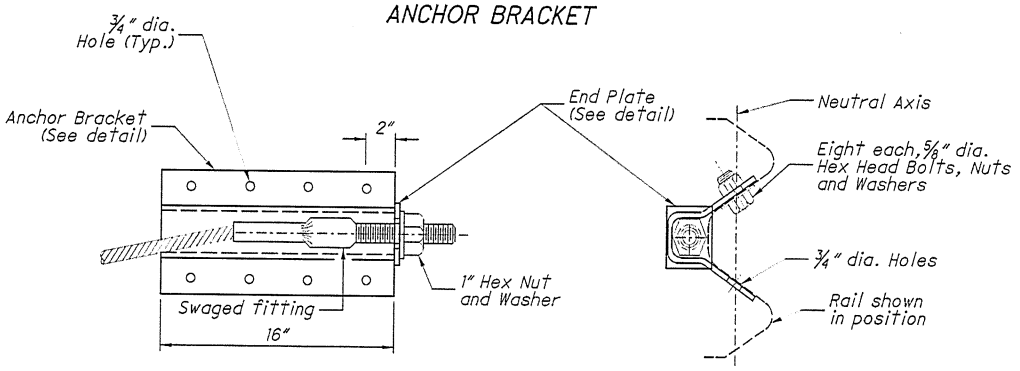
CABLE ANCHOR



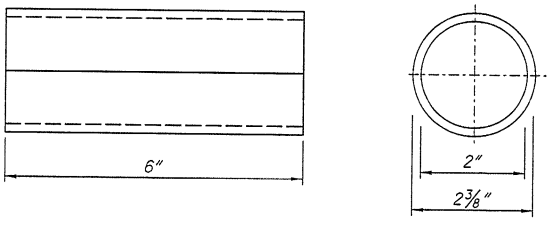
END PLATE



ANCHOR BRACKET

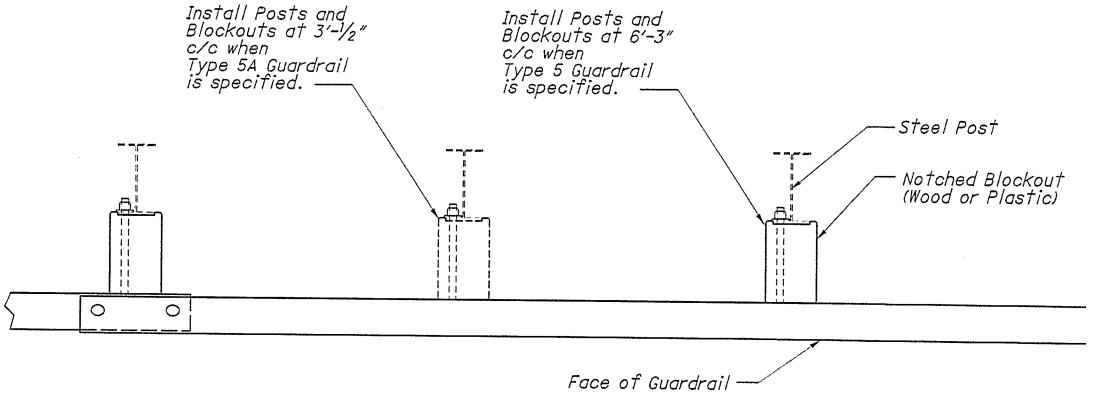


ANCHOR BRACKET ASSEMBLY DETAILS

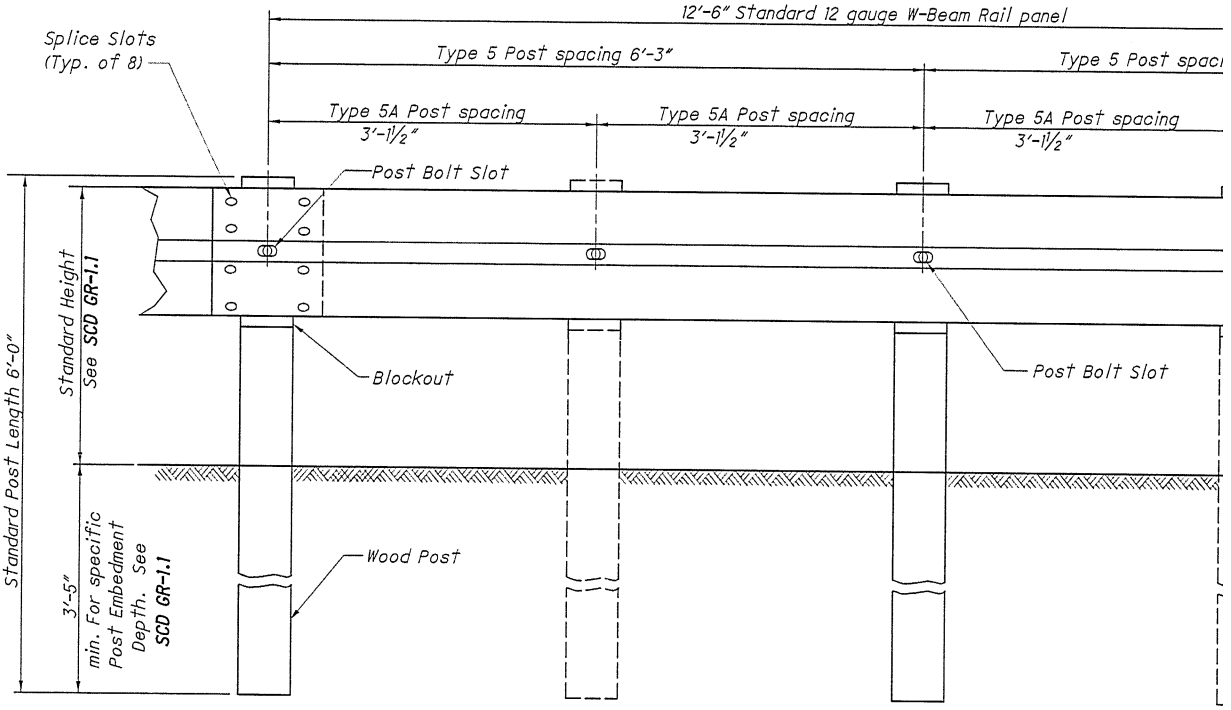


POST SLEEVE

MUS-376-5.09

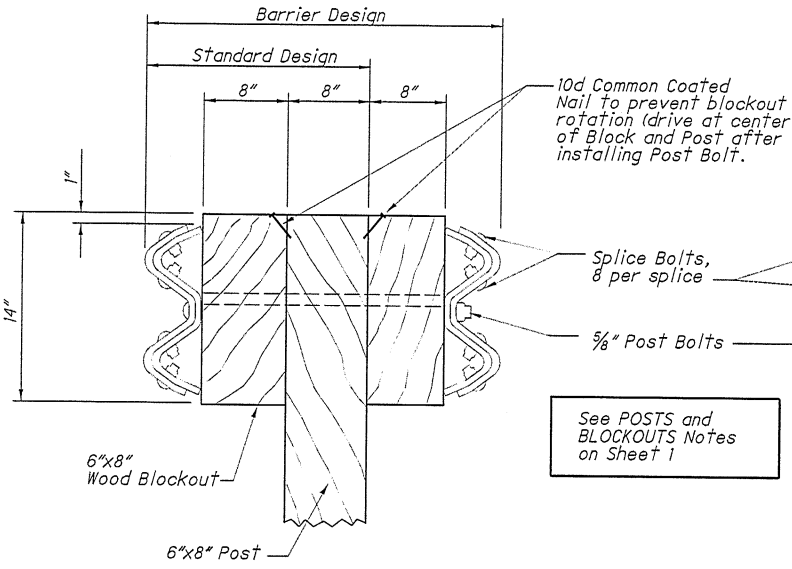


PLAN VIEW
(Steel Posts shown)

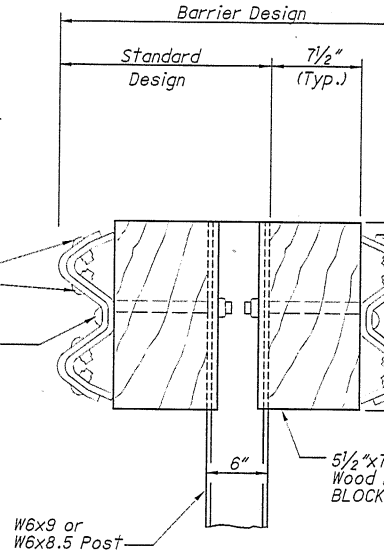


ELEVATION
(Wood Posts shown)

MUS-376-5.09

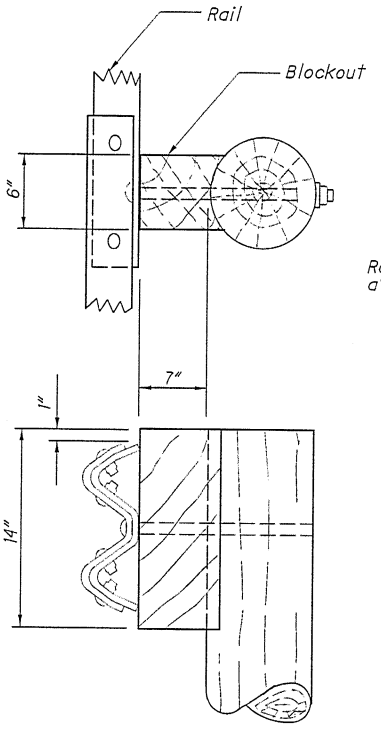


SQUARE WOOD POST

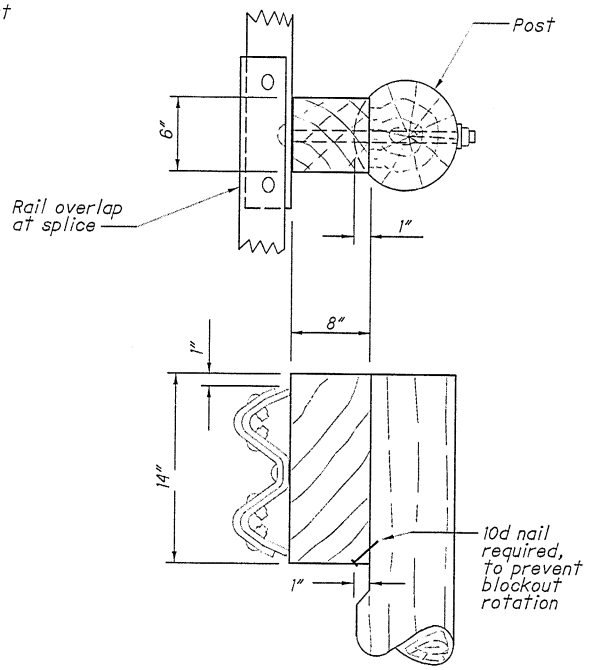


STEEL POST

See POSTS Note, Sheet 1



Method 1
Routed Blockout



Method 2
Notched Post

Alternate methods of placing the Blockouts on round Posts may be submitted for consideration and approved by the Engineer.

ROUND WOOD POSTS

Single Sided runs only (Standard Design)

MUS-376-5.09

CONSTRUCTION NOTIFICATION

THE CONTRACTOR WILL ADVISE THE PROJECT ENGINEER A MINIMUM OF TWENTY-ONE (21) DAYS PRIOR TO THE FOLLOWING: THE START OF CONSTRUCTION ACTIVITIES, LANE RESTRICTIONS, LANE CLOSURES, AND/OR ROAD CLOSURES. THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

DISTRICT PUBLIC INFORMATION OFFICER (PIO)
BY FAX: (614) 887-4510 OR
BY EMAIL: D05.PIO@DOT.OHIO.GOV

DISTRICT PERMIT SECTION
BY FAX: (614) 887-4525 OR
BY EMAIL: BRIAN.BOSCH@DOT.OHIO.GOV

CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION
BY FAX: (614) 728-4099 OR
BY EMAIL: HAULING.PERMIT@DOT.OHIO.GOV

THE PIO WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND BUSINESSES, AND ANY OTHER IMPACTED LOCAL PUBLIC AGENCY OF ANY OF THE ABOVE MENTIONED ITEMS VIA MEDIA SOURCES.

ITEM 614, MAINTAINING TRAFFIC

TRAFFIC SHALL BE MAINTAINED AS PER THE DETAIL SHEETS AND SPECIFICATIONS AND AS OUTLINED IN THE CONSTRUCTION AND MAINTENANCE OPERATIONS SECTIONS OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS LATEST REVISION. IN ADDITION, THE FOLLOWING REQUIREMENTS SHALL APPLY.

BEFORE WORK BEGINS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF A PERSON OR PERSONS WHO CAN BE CONTACTED 24 HOURS A DAY BY THE OHIO DEPARTMENT OF TRANSPORTATION AND ALL INTERESTED POLICE AGENCIES. THIS PERSON OR PERSONS SHALL BE RESPONSIBLE FOR REPLACING NECESSARY TRAFFIC CONTROL DEVICES IMMEDIATELY, AS PER 614.03.

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL DEVICES REQURED BY THESE PLANS SHALL BE PROVIDED WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

THIS PROJECT WILL BE CONSIDERED OPEN TO TRAFFIC ONCE ALL EXCAVATION, AGGREGATE SHOULDER, GRADED DITCH, INSTALLATION OF PROPOSED CULVERT, AND PAVEMENT TO INTERMEDIATE COURSE HAS BEEN COMPLETED.

THE PLANS INDICATE THE MINIMUM SIGNAGE WHICH MUST BE INSTALLED AND/OR MAINTAINED DURING CONSTRUCTION.

EXISTING SIGNS OR CONTRACTOR SUPPLIED SIGNS SHALL BE USED TO MAINTAIN TRAFFIC DURING CONSTRUCTION.

THE ENGINEER SHALL RECORD INSTALLATION AND REMOVAL OF PROPOSED SIGNS, COVERED OR REMOVED, AND UNCOVERED OR REERECTED SIGNS IN THE PROJECT DIARY.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH ITEM 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS DESCRIBED ABOVE SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLANS.

THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY:

ITEM 614, MAINTAINING TRAFFIC (LS)

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION OF TRAFFIC RESTRICTIONS TIME TABLE

Item	*Duration of Closure*	*Sign Displayed to Public*
Ramp & Road Closures	*>= 2 weeks*	*14 calendar days prior to closure*
	> 12 hours & < 2 weeks	*7 calendar days prior to closure*
	< 12 hours	*2 business days prior to closure*
Lane Closures & Restrictions	*>= 2 weeks*	*14 calendar days prior to closure*
	< 2 weeks	*5 business days prior to closure*
Start of Construction & Traffic Pattern Changes	*N/A*	*14 calendar days prior to implementation*

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

NOTICE OF CLOSURE SIGNS (W20- H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. [AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.]

THE SIGNS SHALL BE ERECTED ON THE RIGHT- HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE

Item	*Duration of Closure*	*Sign Displayed to Public*
Ramp & Road Closures	*>= 2 weeks*	*14 calendar days prior to closure*
	> 12 hours & < 2 weeks	*7 calendar days prior to closure*
	< 12 hours	*2 business days prior to closure*

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM- DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

MUS-376-5.09

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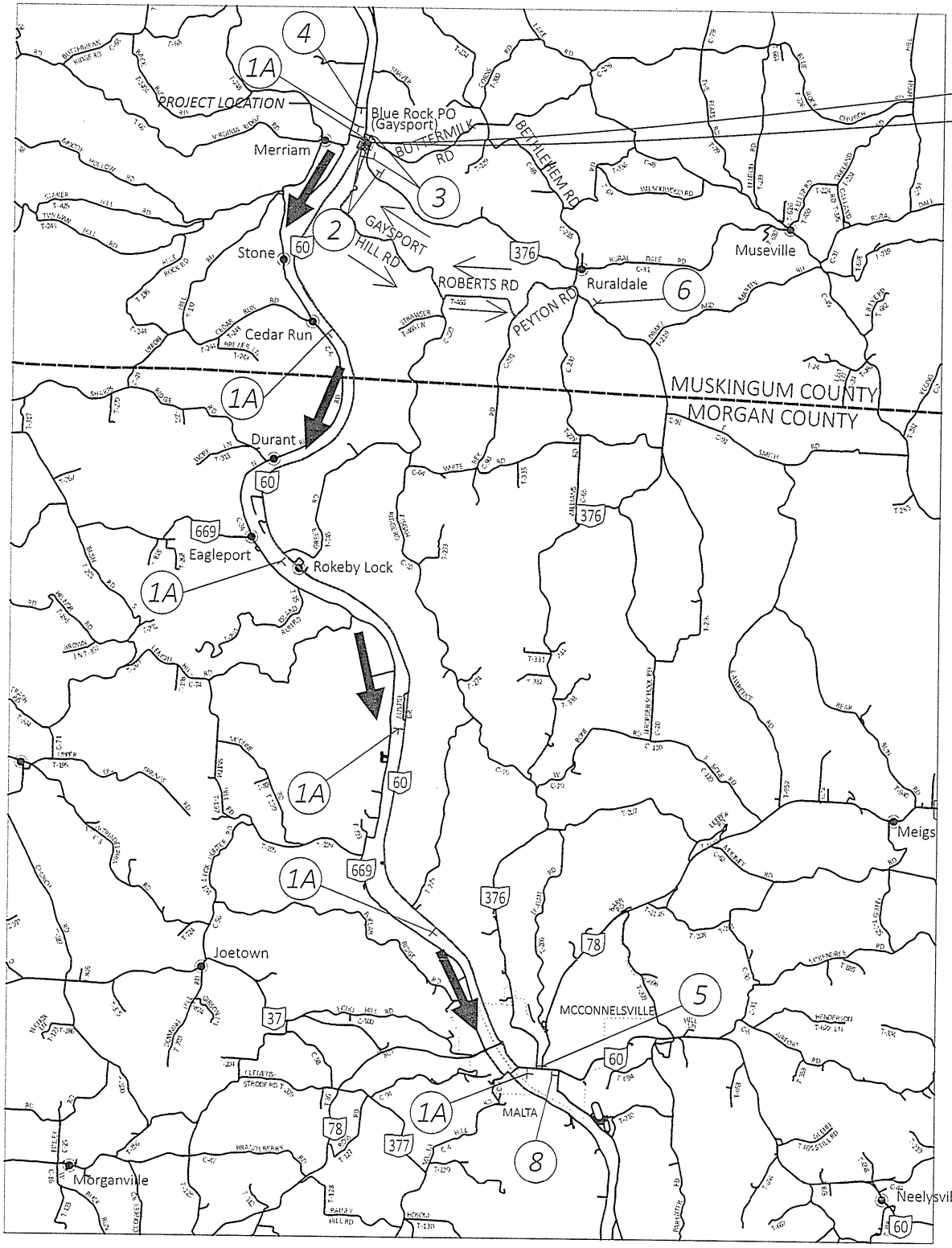

STATE DETOUR ROUTE

NB S.R. 376: NO DETOUR (LOCAL TRAFFIC ONLY)
SB S.R. 376: S.R. 60

LOCAL DETOUR ROUTE

EB: GAYSPORT HILL RD TO ROBERTS RD TO PEYTON RD
WB: PEYTON RD TO GAYSPORT HILL RD TO ROBERTS RD

1/4 1 2
1/2
SCALES IN MILES

LEGE
LOCAL
STATE
PROJE

FOR MAINTENANCE OF TRAFFIC NOTES, SEE SHEET 11

SHEET NUM.				PART.	ITEM	ITEM	GRAND	UNIT	
5	11	14	26	01/NFA/21		EXT	TOTAL		
LS				LS	201	11000	LS		CLEARING AND GRUBBING
		92		92	202	23000	92	SY	PAVEMENT REMOVED
		25		25	202	38000	25	FT	GUARDRAIL REMOVED
		LS		LS	202	56000	LS		BUILDING DEMOLISHED - ONE STORY HOUSE & SHED
		1		1	SPECIAL	20266000	1	EACH	DRILLED WATER WELL ABANDONED
			38	38	SPECIAL	20270000	38	FT	FILL AND PLUG EXISTING CONDUIT - 12"
10,203				10,203	203	10000	10,203	CY	EXCAVATION
		558		558	204	10000	558	SY	SUBGRADE COMPACTION
		25		25	606	13030	25	FT	GUARDRAIL, TYPE 5, USING 9 FOOT POSTS
		1		1	617	10101	1	CY	COMPACTED AGGREGATE, AS PER PLAN
			7	7	601	21050	7	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT
		383		383	609	26000	383	FT	CURB, TYPE 6
3,210				3,210	659	00510	3,210	SY	SEEDING AND MULCHING, CLASS 2
0.4				0.4	659	20000	0.4	TON	COMMERCIAL FERTILIZER
0.7				0.7	659	31000	0.7	ACRE	LIME
17				17	659	35000	17	MGAL	WATER
				1,000	832	30000	1,000	EACH	EROSION CONTROL
			62	62	611	05900	62	FT	15" CONDUIT, TYPE B-706.02
			1	1	611	98180	1	EACH	CATCH BASIN, NO. 3A
		92		92	301	56000	92	CY	ASPHALT CONCRETE BASE, PG64-22, (449)
		92		92	304	20000	92	CY	AGGREGATE BASE
	24	66		90	407	20000	90	GAL	NON-TRACKING TACK COAT
		22		22	408	10001	22	GAL	PRIME COAT, AS PER PLAN
		19		19	441	50000	19	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-2
		27		27	441	50300	27	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)
		2		2	621	00100	2	EACH	RPM
		2		2	621	54000	2	EACH	RAISED PAVEMENT MARKER REMOVED
		0.08		0.08	642	00104	0.08	MILE	EDGE LINE, 6", TYPE 1
		0.01		0.01	642	00300	0.01	MILE	CENTER LINE, TYPE 1
	20			20	441	90000	20	CY	ASPHALT CONCRETE, MISC.: SPOT TREATMENT
				LS	614	12420	LS		DETOUR SIGNING
	8			8	614	18601	8	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
	1			1	616	10000	1	MGAL	WATER
				LS	614	11000	LS		MAINTAINING TRAFFIC
LS				LS	623	10001	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLA
				LS	624	10000	LS		MOBILIZATION

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FULL DEPTH PAVEMENT CALCULATIONS

LIMITS:
STA. 12+20.00 TO STA. 12+40.00 (= 20.00 FT)
STA. 10+20.00 TO STA. 14+45.00 (= 425.00 FT)

ITEM 202, PAVEMENT REMOVED
406.4 SF* (STA. 10+20.00 TO STA. 14+45.00) + 421.6 SF* (STA. 12+20.00 TO STA. 12+40.00) = 92 SY

ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 64-22
[4541.8 SF* (STA. 10+20.00 TO STA. 14+45.00) + 422.8 SF* (STA. 12+20.00 TO STA. 12+40.00)] X 1.25" = 19 CY

ITEM 407, NON-TRACKING TACK COAT (APPLIED TO NEW INTERMEDIATE COURSE)
[4541.8 SF* (STA. 10+20.00 TO STA. 14+45.00) + 422.8 SF* (STA. 12+20.00 TO STA. 12+40.00)] X 0.06 GAL PER SY = 33 GAL

ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)
[4541.8 SF* (STA. 10+20.00 TO STA. 14+45.00) + 422.8 SF* (STA. 12+20.00 TO STA. 12+40.00)] X 1.75" = 27 CY

ITEM 407, NON-TRACKING TACK COAT (APPLIED TO NEW ASPHALT BASE COURSE)
[4541.8 SF* (STA. 10+20.00 TO STA. 14+45.00) + 430.2 SF* (STA. 12+20.00 TO STA. 12+40.00)] X 0.06 GAL PER SY = 33 GAL

ITEM 301, ASPHALT CONCRETE BASE, PG64-22 (449)
[4541.8 SF* (STA. 10+20.00 TO STA. 14+45.00) + 430.2 SF* (STA. 12+20.00 TO STA. 12+40.00)]* X 6" = 92 CY

ITEM 304, AGGREGATE BASE
[4541.8 SF* (STA. 10+20.00 TO STA. 14+45.00) + 441.3 SF* (STA. 12+20.00 TO STA. 12+40.00)] X 6" = 92 CY

ITEM 204, SUBGRADE COMPACTION
4541.8 SF* (STA. 10+20.00 TO STA. 14+45.00) + 477.9 SF* (STA. 12+20.00 TO STA. 12+40.00)= 558 SY

ITEM 408, PRIME COAT, AS PER PLAN
55.1 SF* X 0.40 GAL PER SY = 22 GAL

ITEM 617, COMPACTED AGGREGATE, AS PER PLAN
55.1 SF* (LT.) X 4" = 1 CY

ITEM 609, CURB, TYPE 6
383 FT

*CADD-GENERATED AREA

GUARDRAIL CALCULATIONS

LIMITS:
STA. 12+20.00 TO STA. 12+40.00

ITEM 202, GUARDRAIL REMOVED
=25 FT

ITEM 606, GUARDRAIL, TYPE 5, USING 9 FOOT POSTS
= 25 FT

BUILDINGS DEMOLISHED & WELL ABANDONED

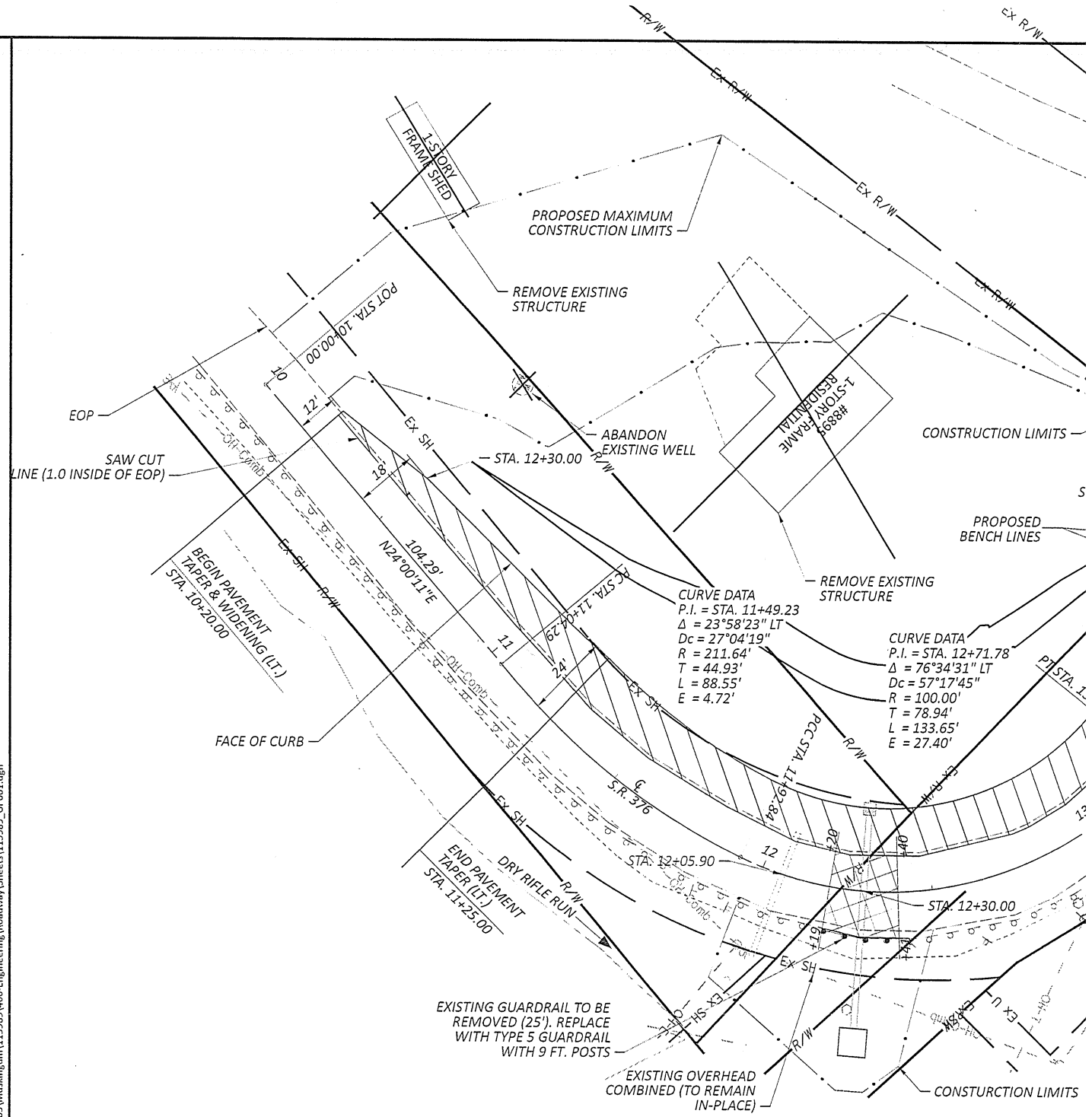
LOCATION:
STA. 11+10.00
115.5' LT (HOUSE)

STA. 9+82.00
78.3' LT (SHED)

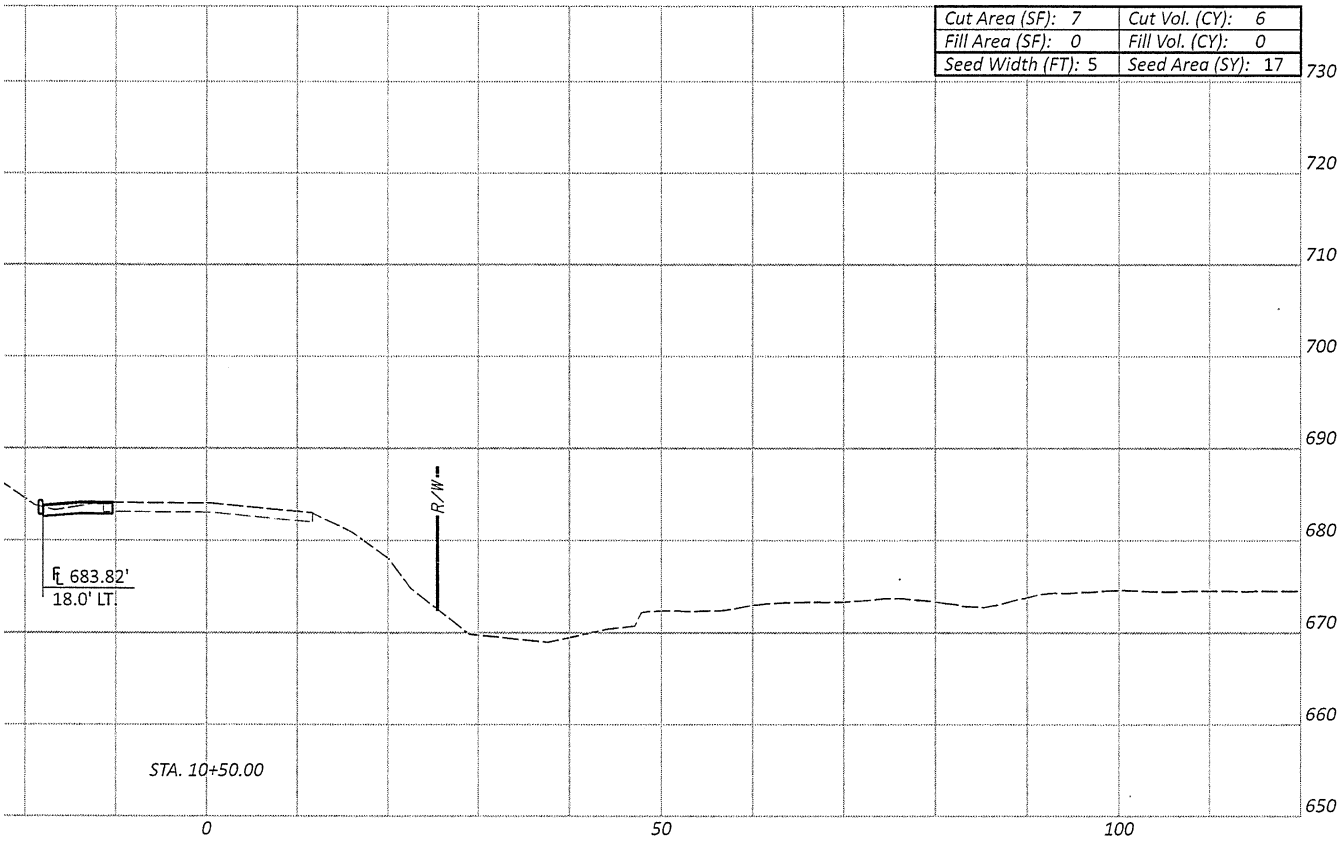
ITEM 202, BUILDING DEMOLISHED, ONE STORY HOUSE & SHED
=LUMP SUM

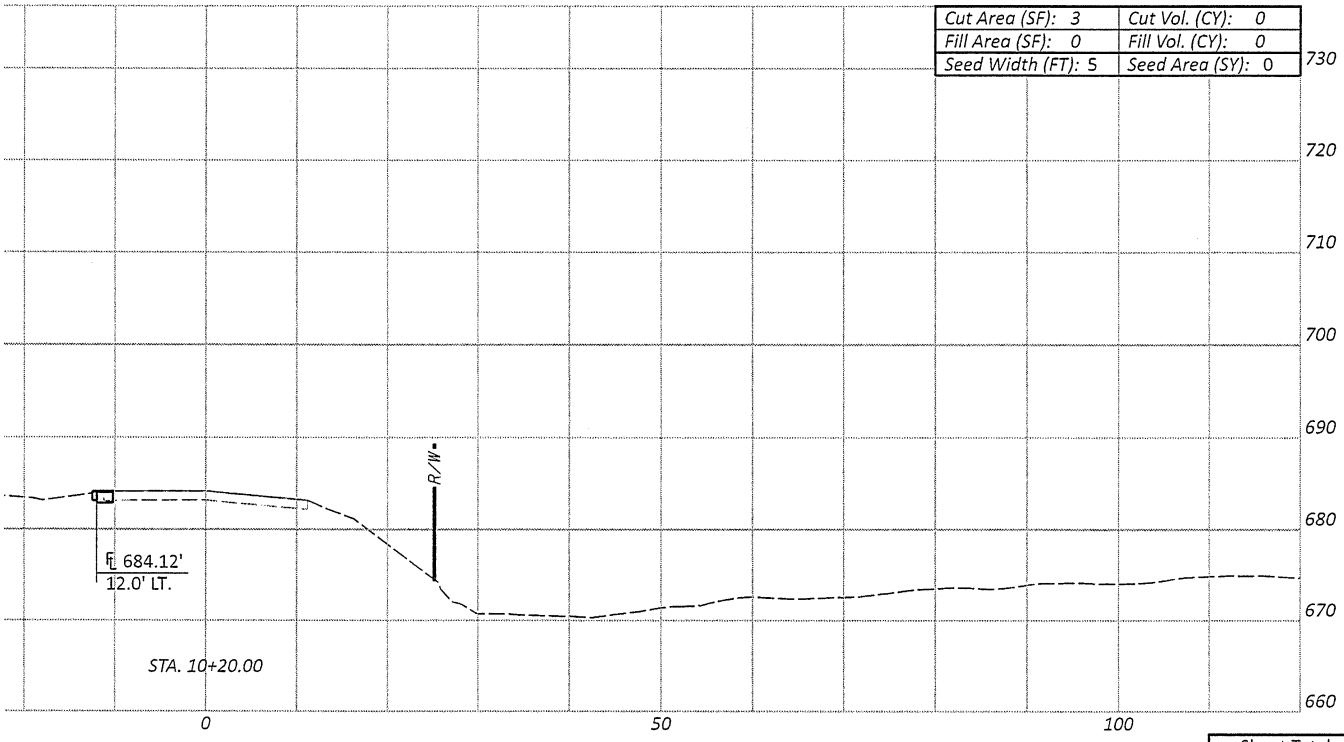
LOCATION:
STA. 10+48.00
56.0' LT (WATER WELL)

ITEM 202, SPECIAL - DRILLED WATER WELL ABANDONED
= 1 EACH



MUS-376-5.09





CROSS SECTIONS - S.R. 376
STA. 10+20 - STA. 10+50

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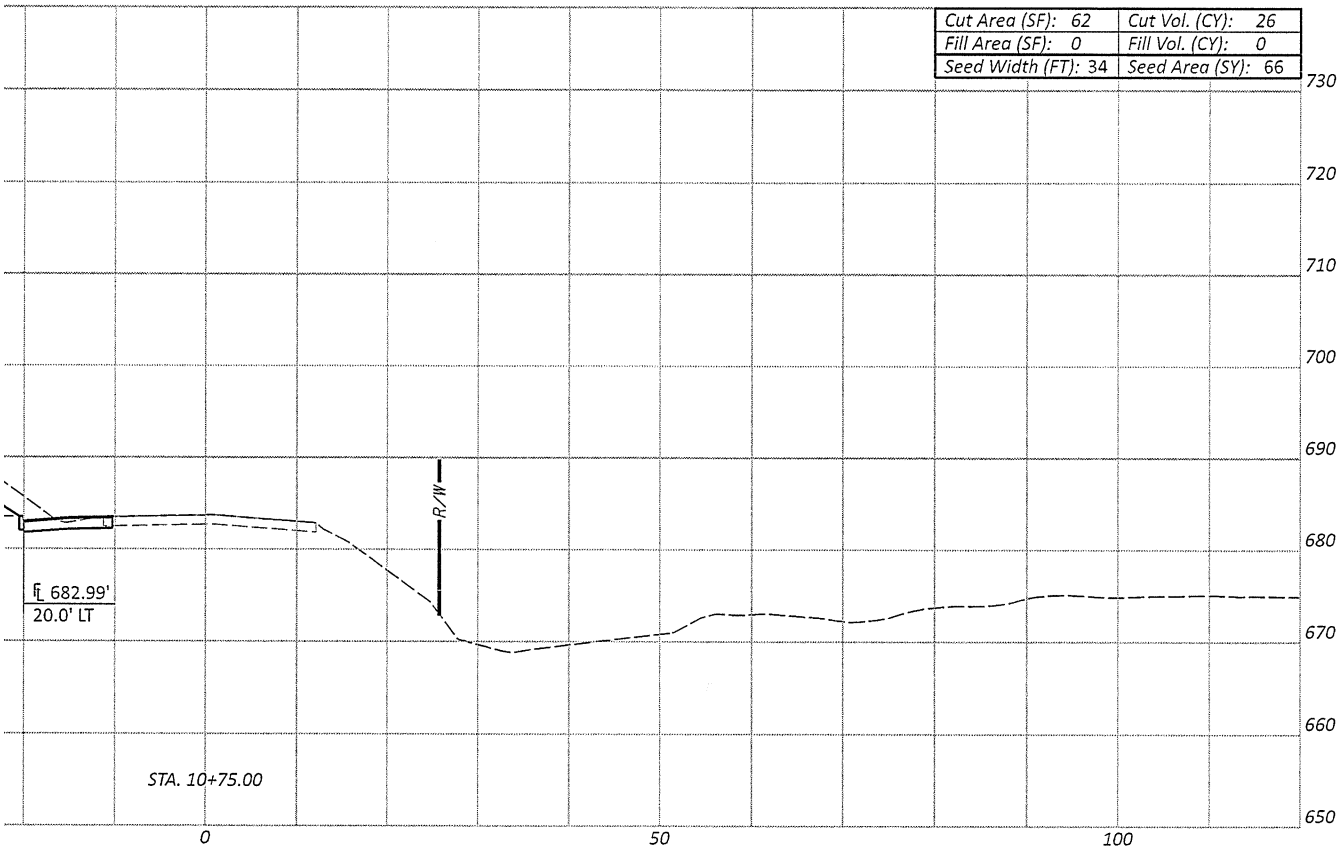
DESIGN AGENCY

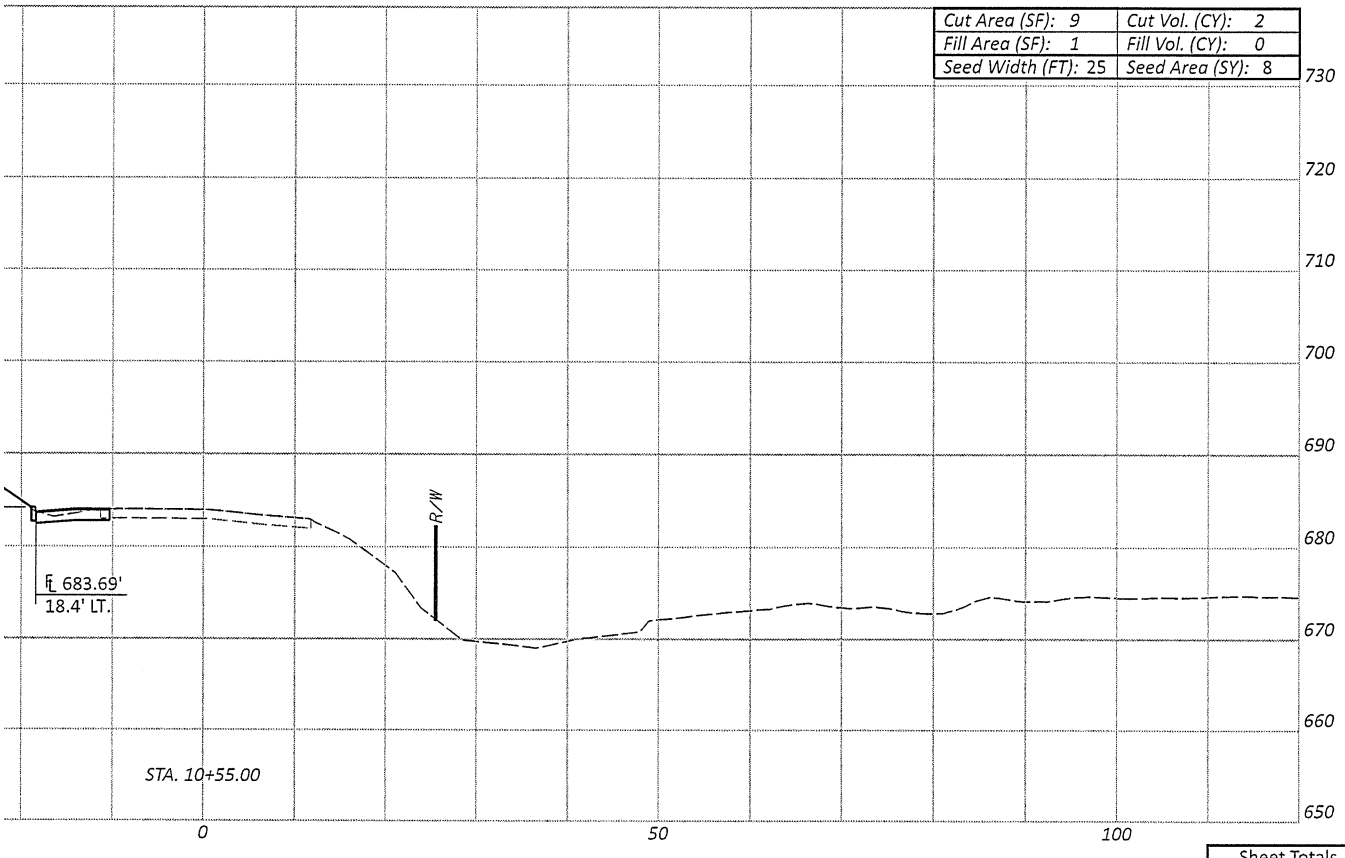
DESIGNER
GPM

REVIEWER

PROJECT ID
115989

SHEET P.16 TOTAL 28





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DESIGN AGENCY

DESIGNER
GPM

REVIEWER

PROJECT ID
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SHEET	TOTAL
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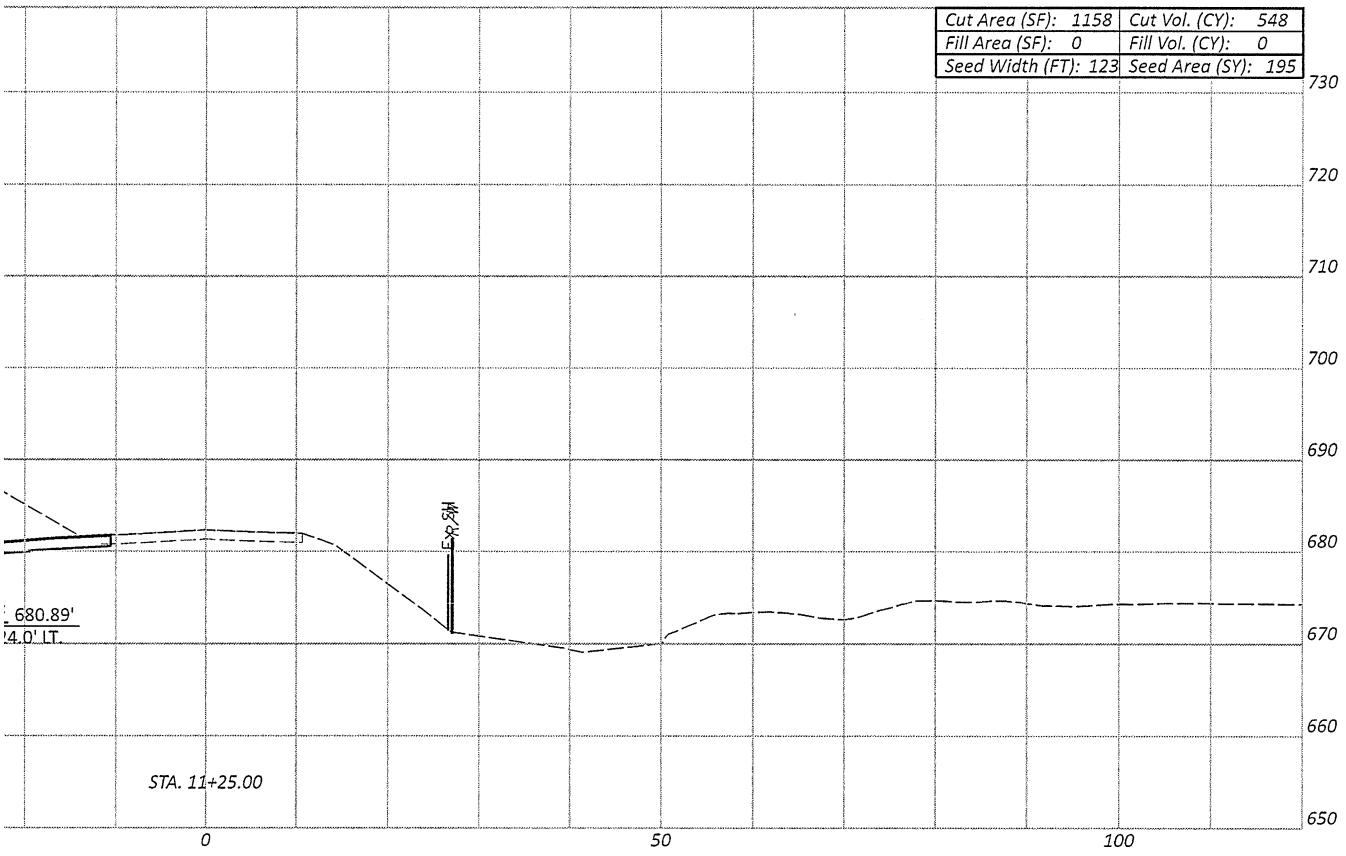

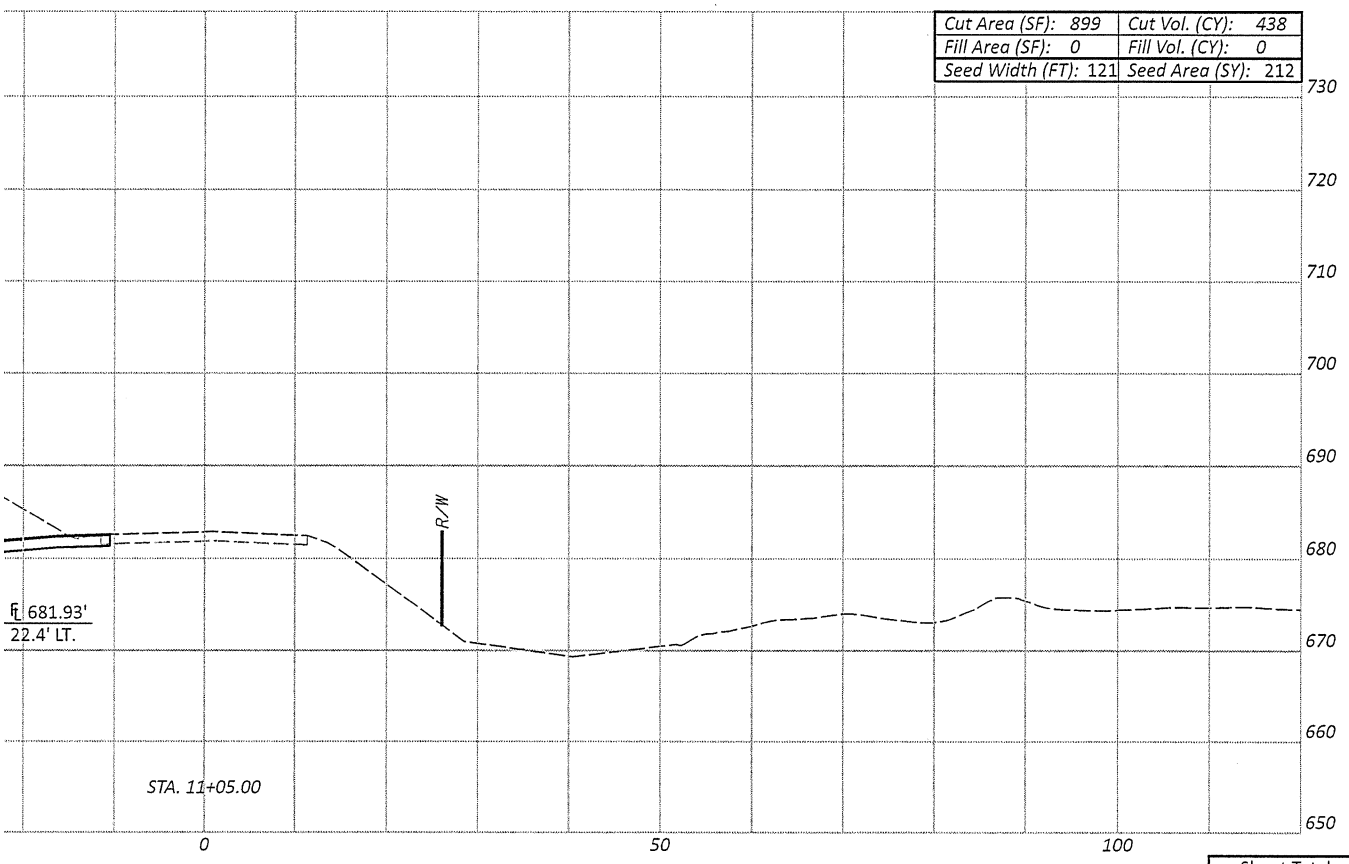

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STA. 11+05 - STA. 11+25

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DESIGN AGENCY

DESIGNER
GPM

REVIEWER

PROJECT ID
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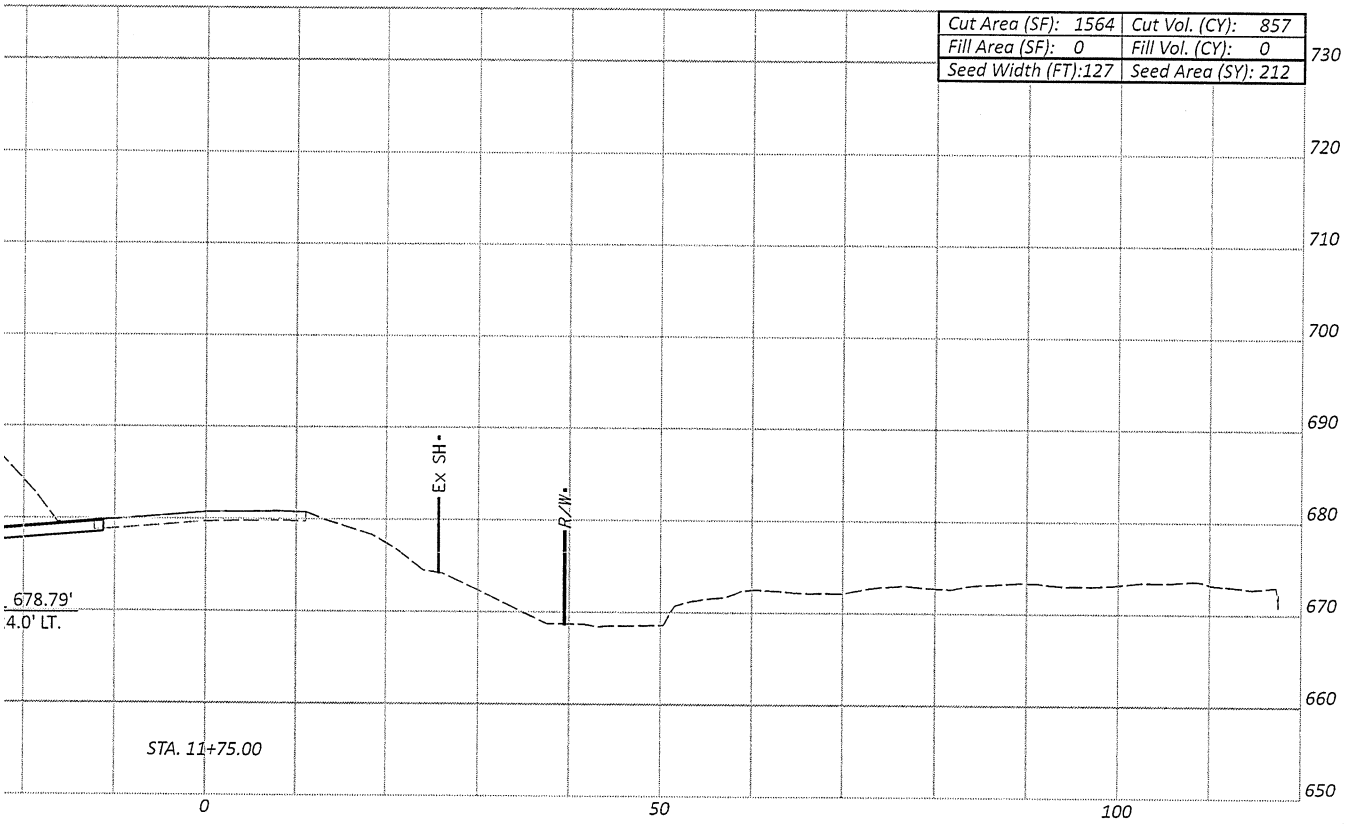
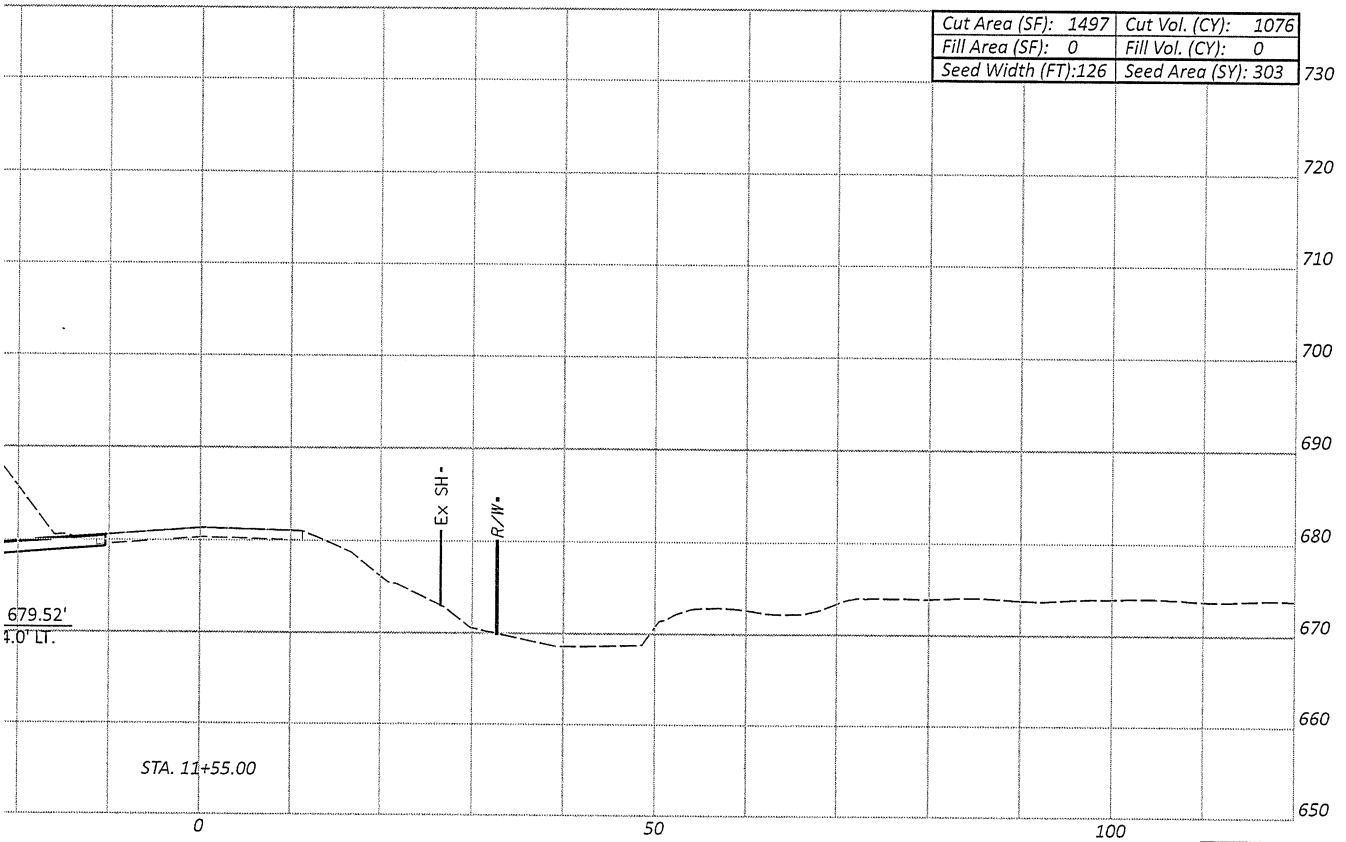
SHEET P.18 TOTAL 28





CROSS SECTIONS - S.R. 376
STA. 11+55 - STA. 11+75

DESIGN AGENCY

DESIGNER
GPM

REVIEWER

PROJECT ID
115989

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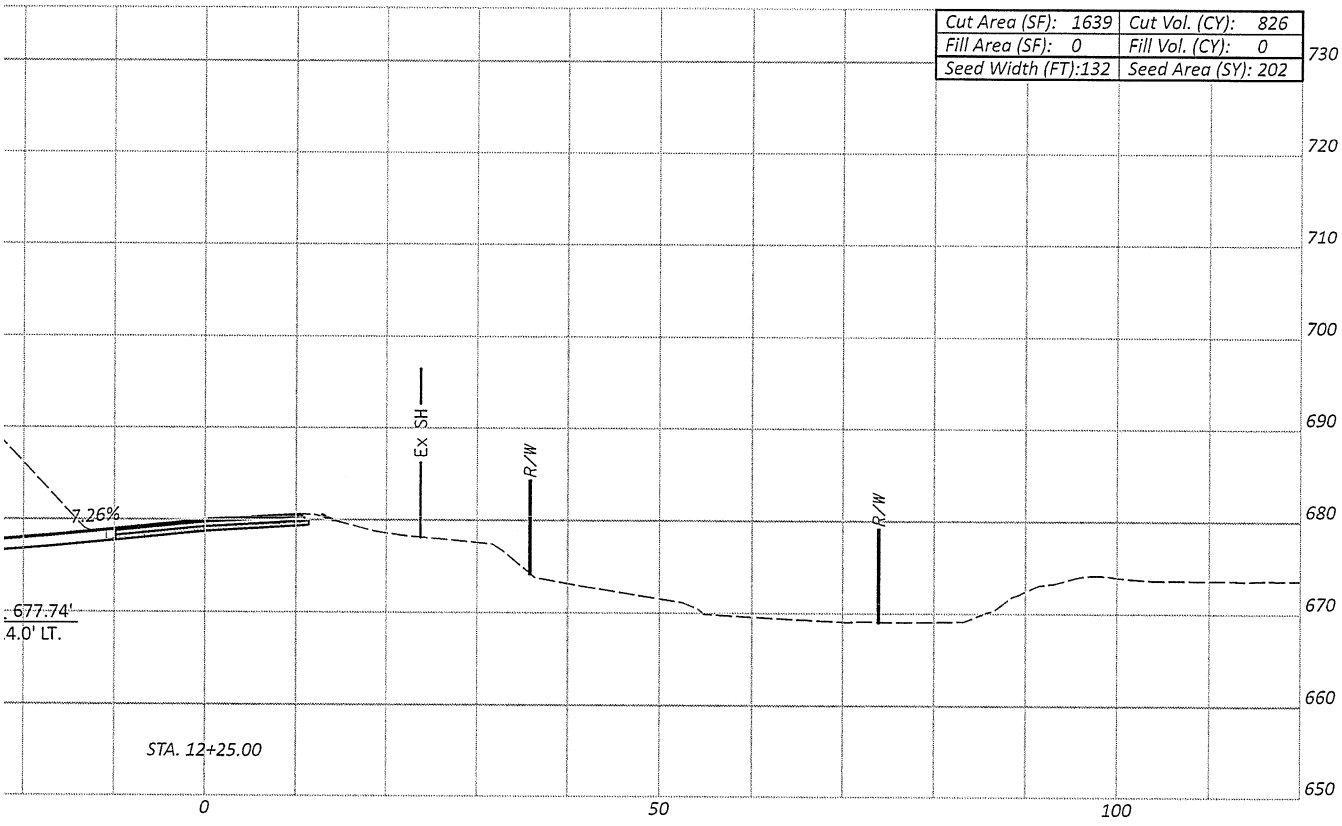
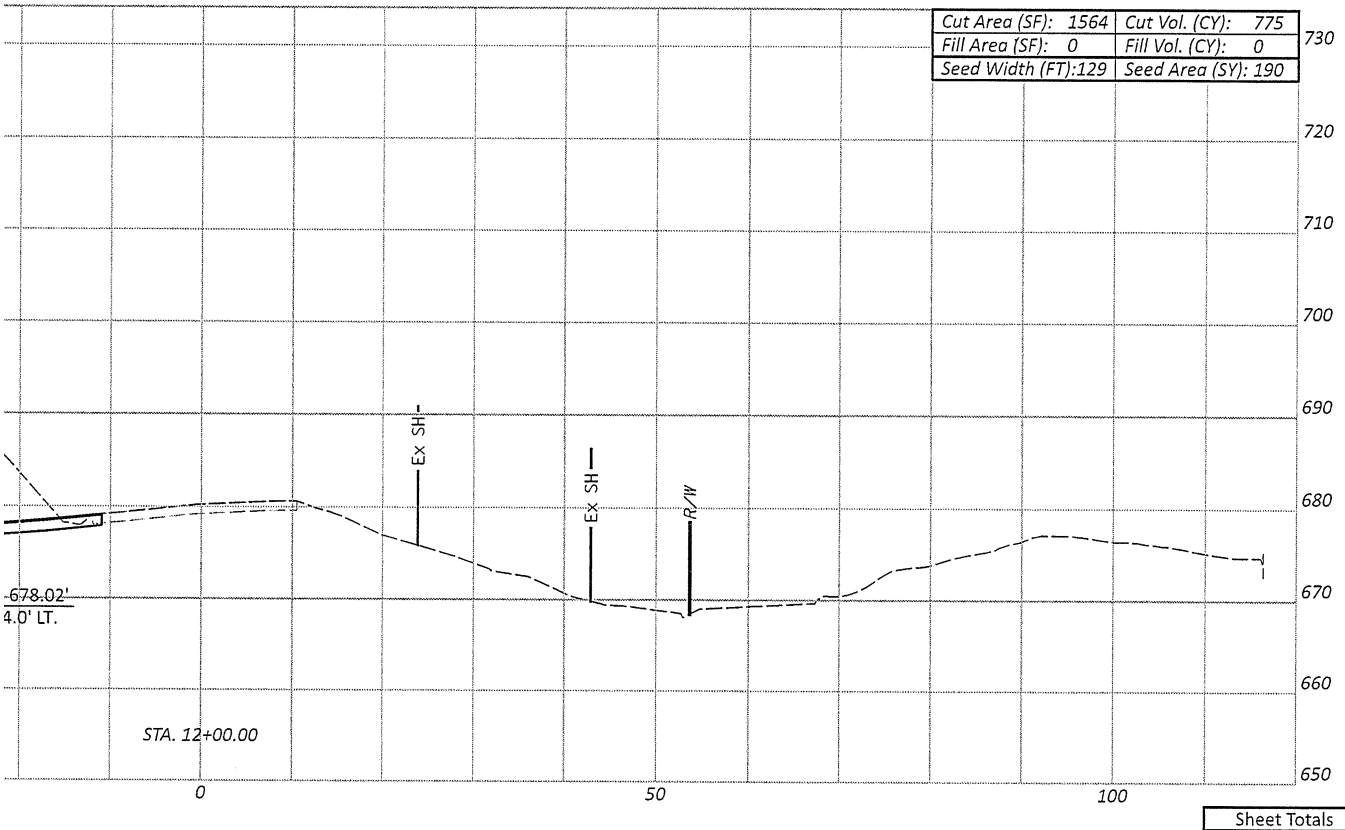
SHEET	TOTAL
P.19	28





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STA. 12+00 - STA. 12+25

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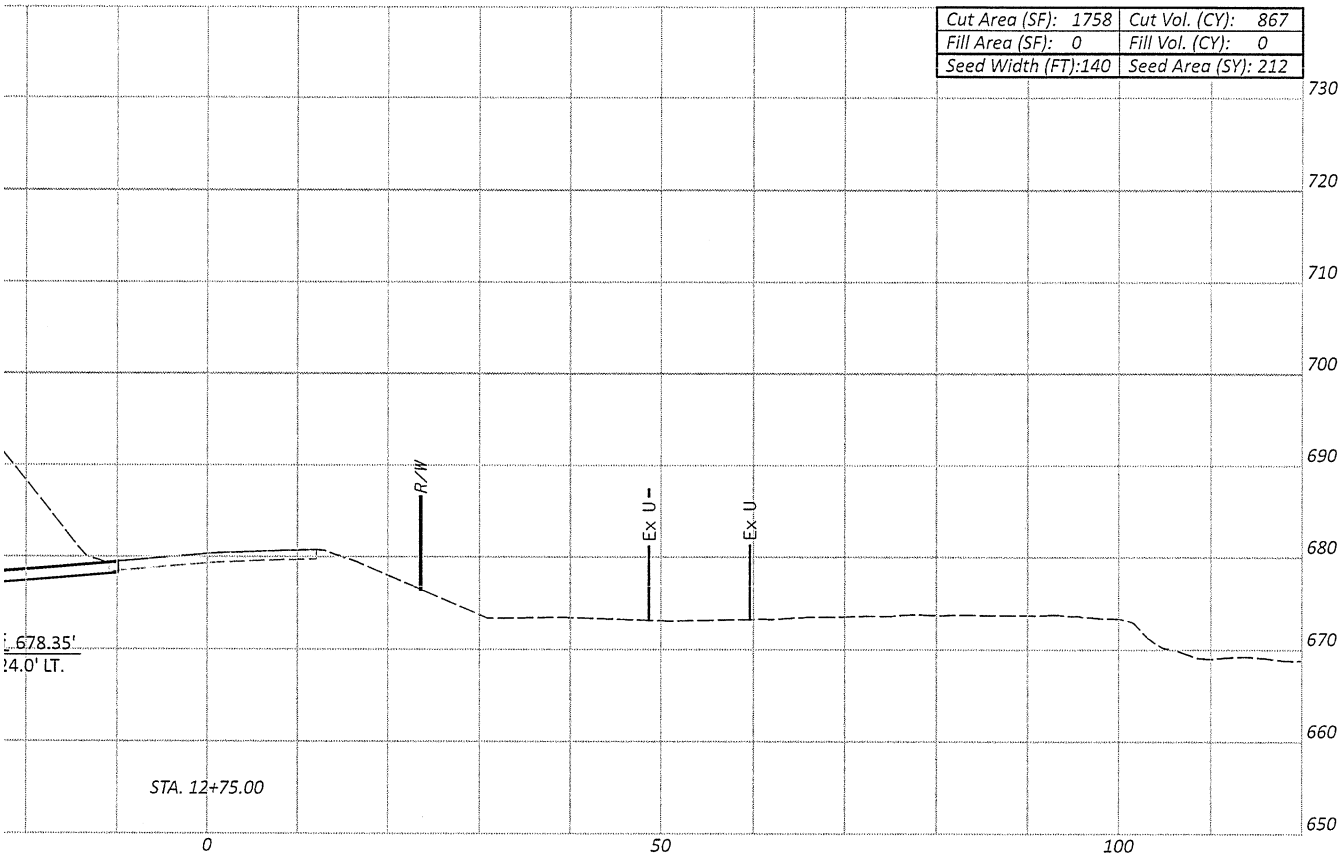
DESIGN AGENCY

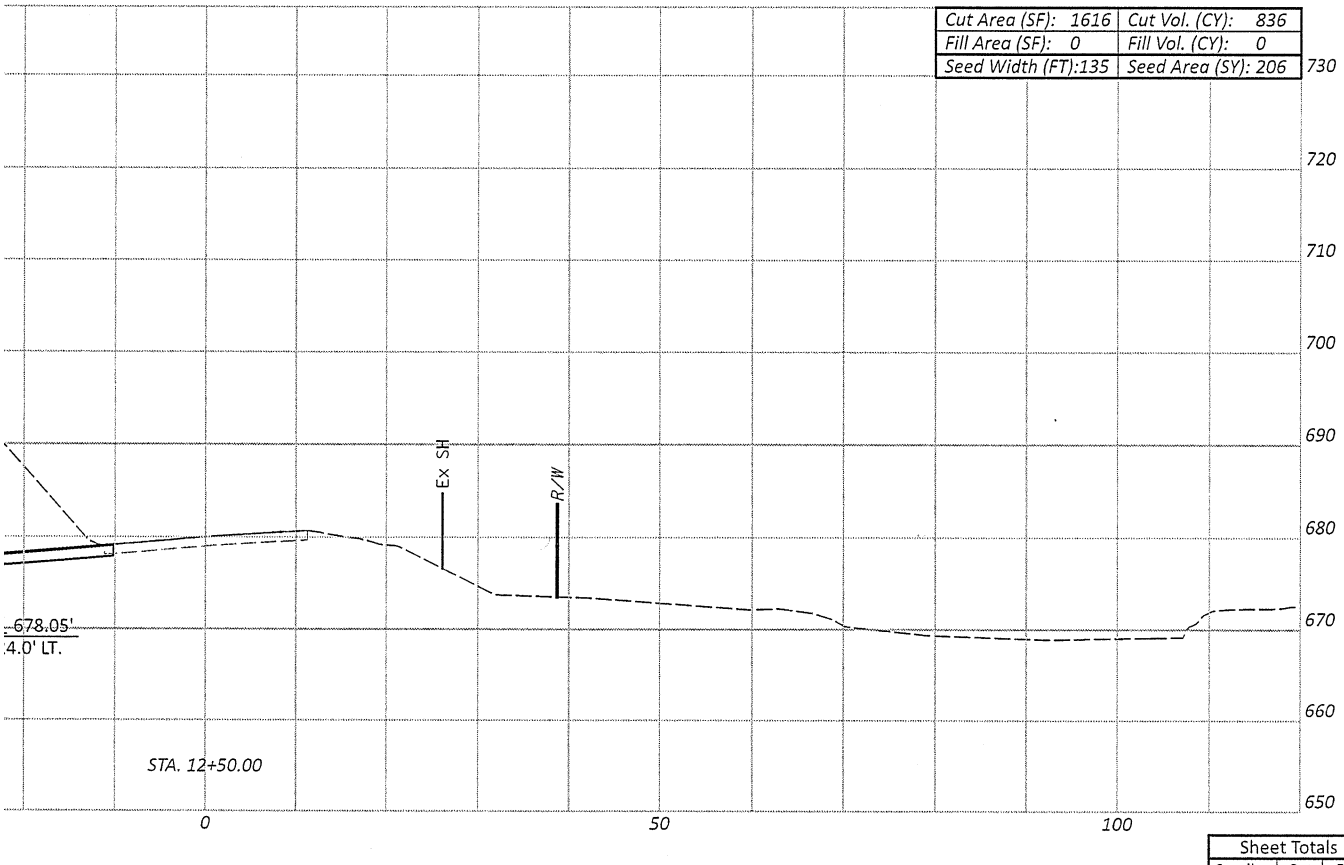
DESIGNER
GPM

REVIEWER

PROJECT ID
115989

SHEET	TOTAL
P.20	28





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STA. 12+50 - STA. 12+75

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DESIGN AGENCY

DESIGNER
GPM

REVIEWER

PROJECT ID
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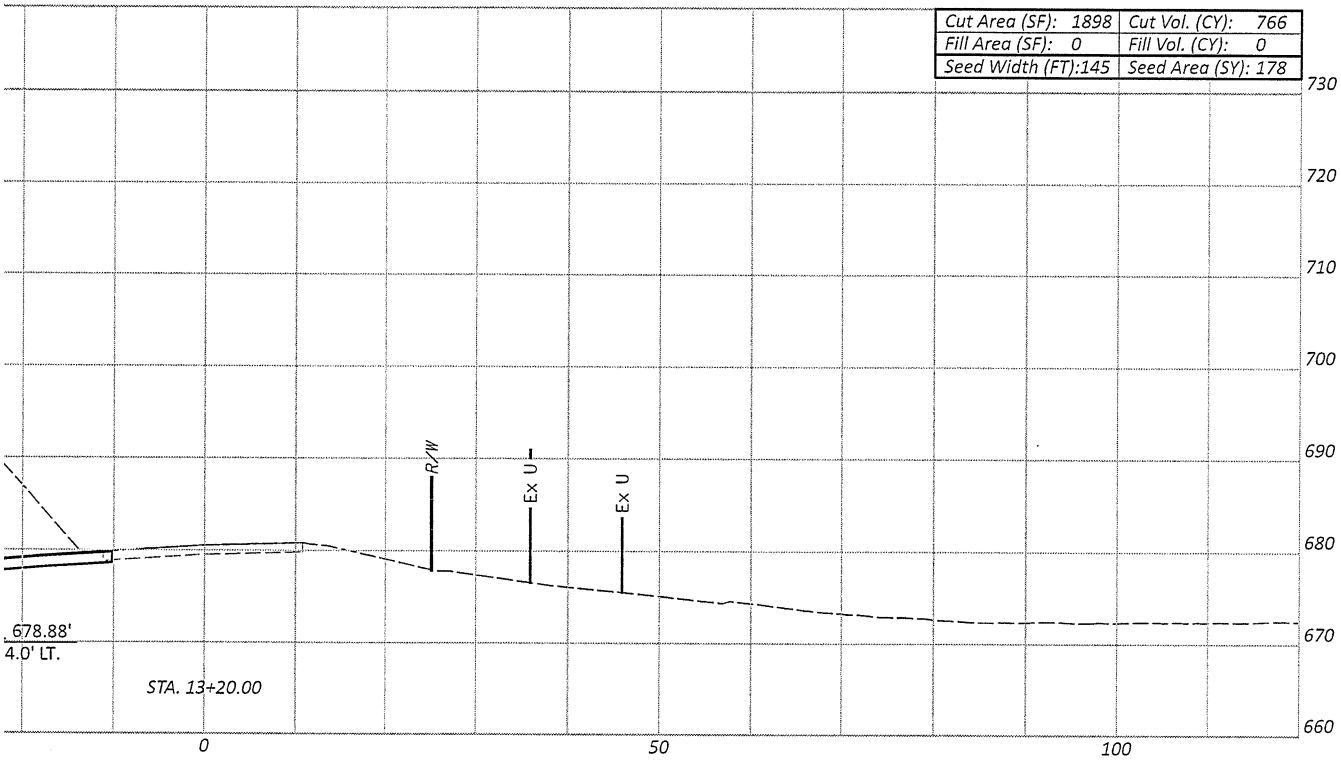
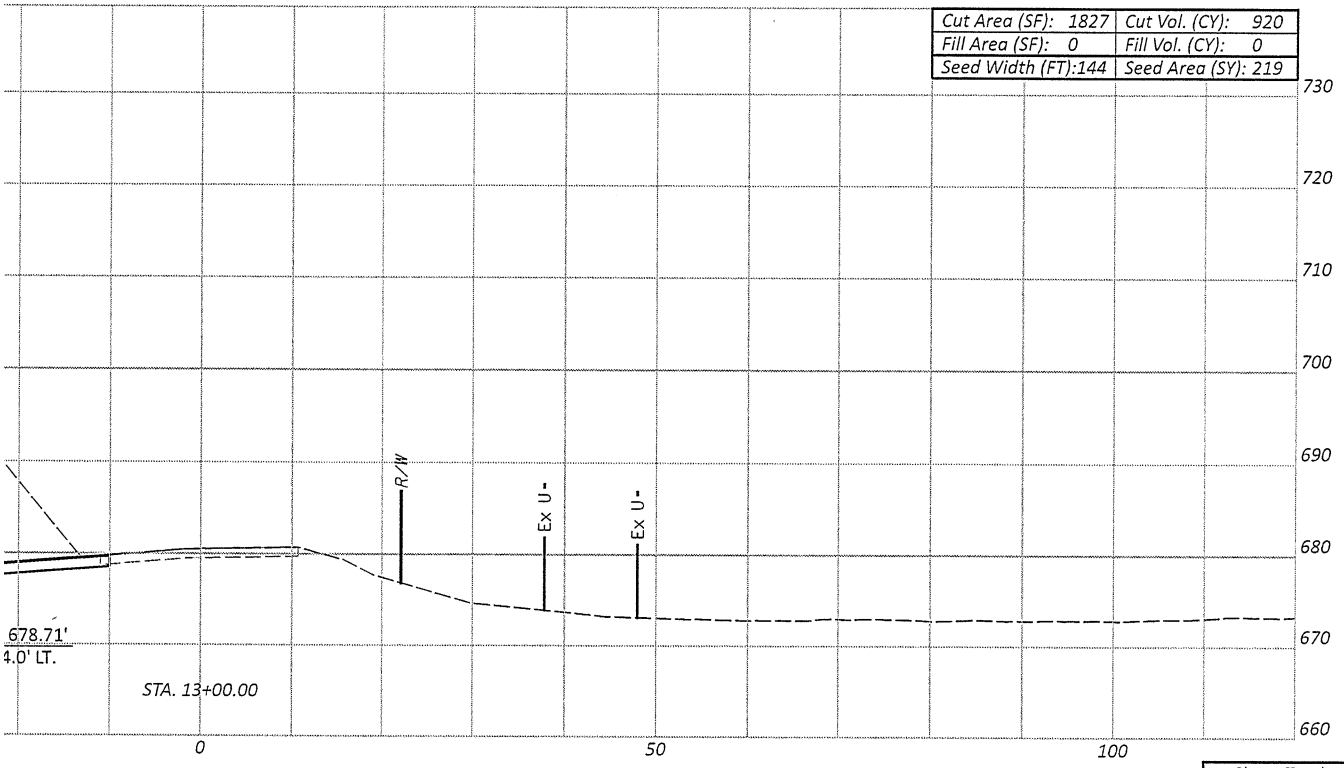
SHEET	TOTAL
P.21	28





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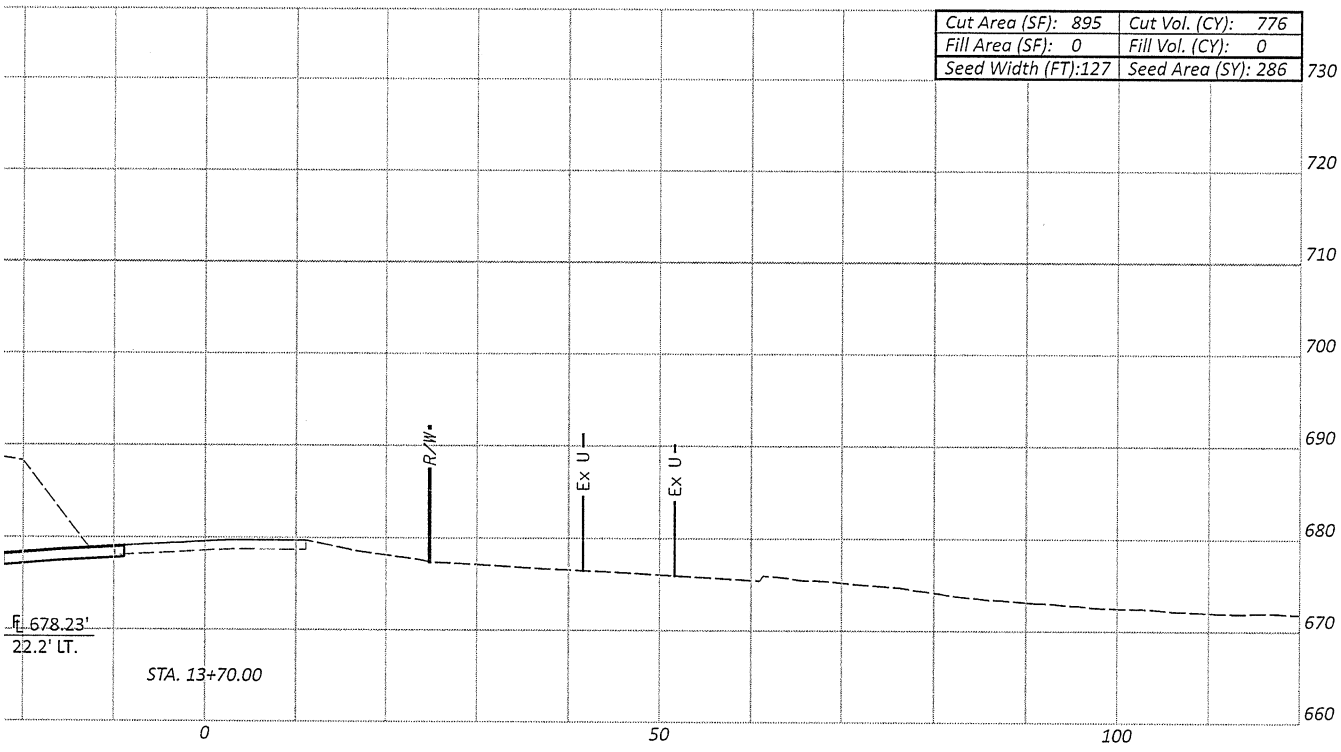
DESIGN AGENCY

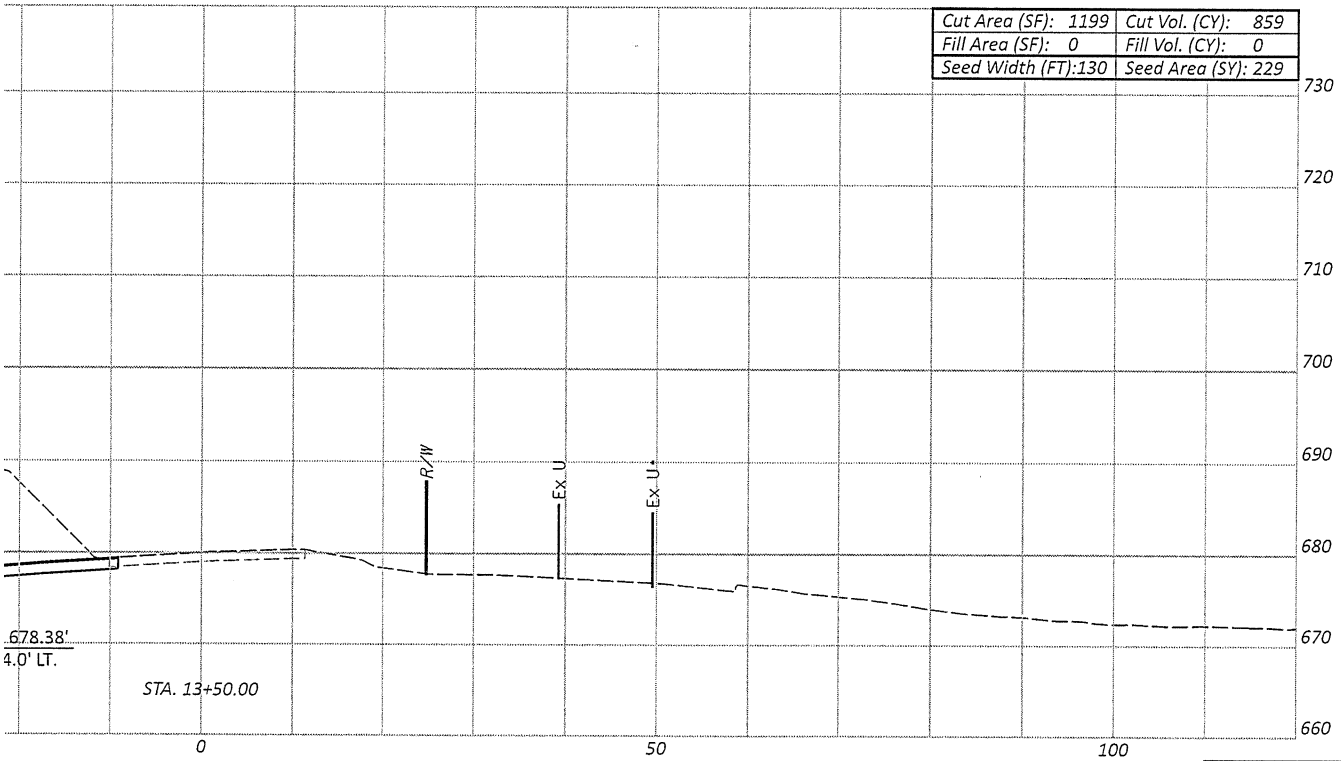
DESIGNER
GPM

REVIEWER

PROJECT ID
115989

SHEET	TOTAL
P.22	28





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STA. 13+50 - STA. 13+70

Sheet Totals		
Seeding	Cut	Fill
515	1635	0

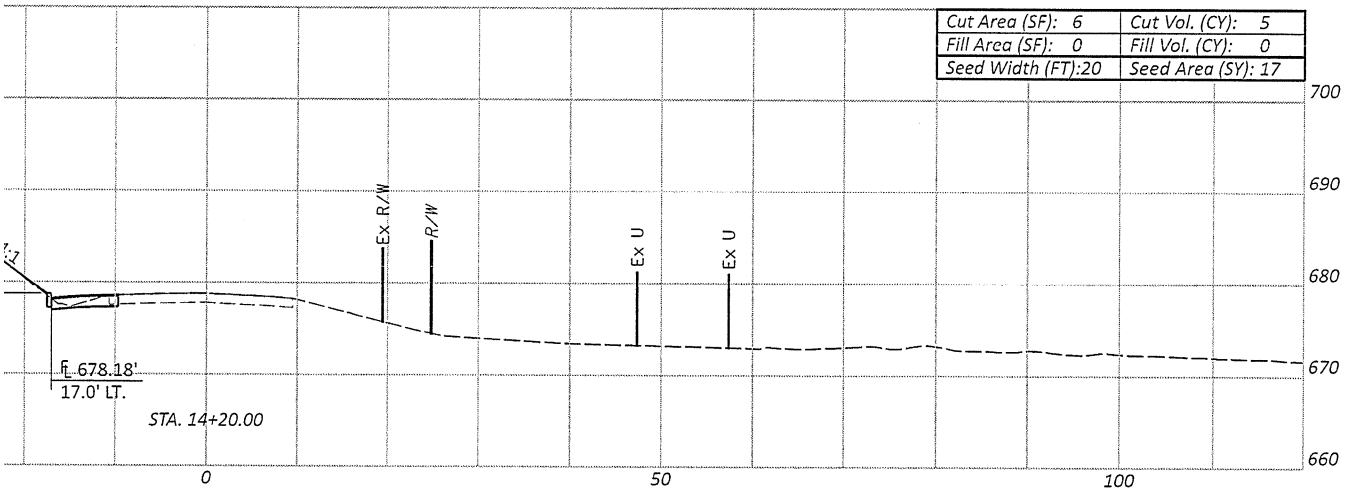
DESIGN AGENCY

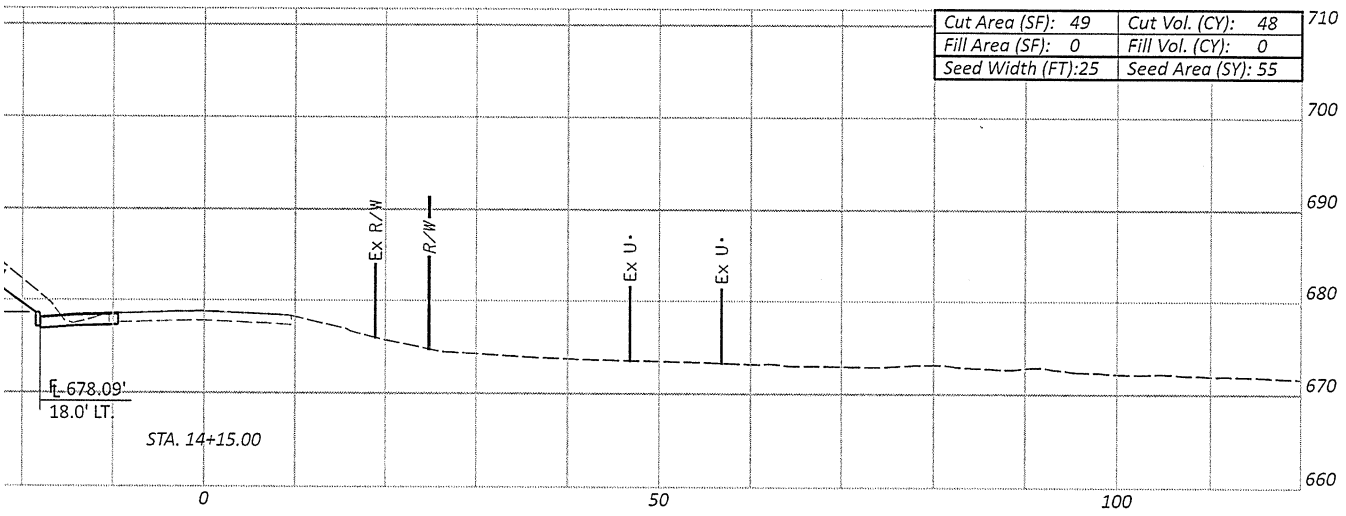
DESIGNER
GPM

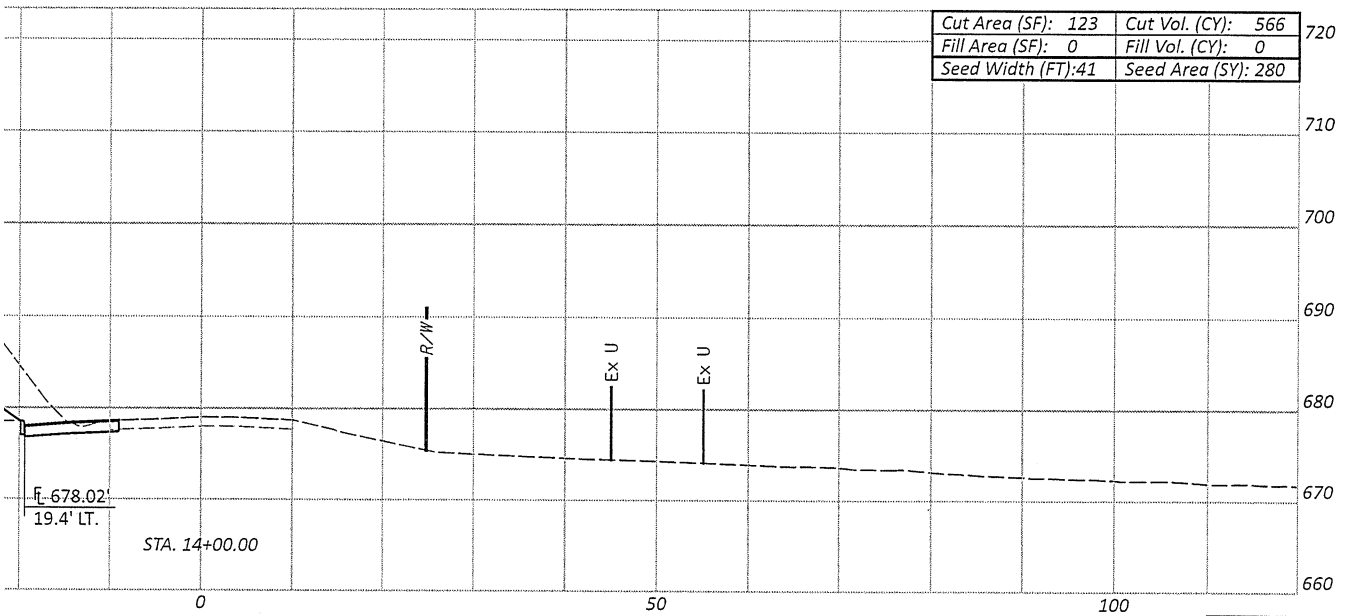
REVIEWER

PROJECT ID
115989

SHEET	TOTAL
P.23	28







CROSS SECTIONS - S.R. 376
STA. 14+00 - STA. 14+20

Sheet Totals		
Seeding	Cut	Fill
352	619	0

DESIGN AGENCY

DESIGNER
GPM

REVIEWER

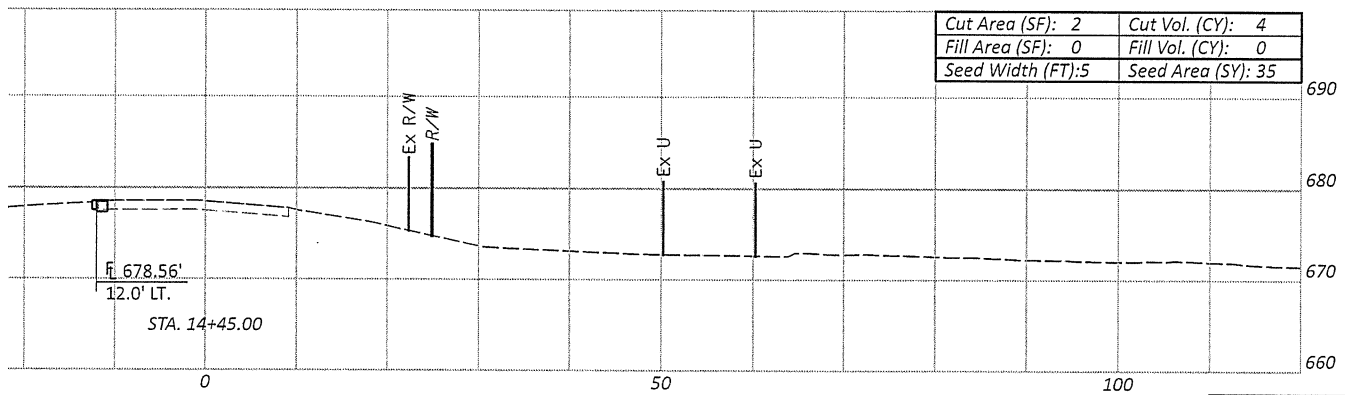
PROJECT ID
115989

SHEET	TOTAL
P.24	28

ONS DUE TO ROADWAY CURVATURE				
RECTED ARC LENGTH (FT)	CUT AREA (SF)	SEEDING WIDTH (FT)	CORRECTED CUT VOLUME (CY)	CORRECTED SEED AREA (SY)
-	62	34	-	-
24.62	899	121	438	212
14.39	1158	123	548	195
21.89	1497	126	1076	303
15.11	1564	127	857	212
13.39	1564	129	775	190
13.93	1639	132	826	202
13.88	1616	135	836	206
13.88	1758	140	867	212
13.86	1827	144	920	219
11.11	1898	145	766	178
14.97	1199	130	859	229

HWORK TOTALS		
Y)	FILL (CY)	SEEDING (SY)
	0	17
	0	74
	0	407
	0	515
	0	392
	0	418
	0	397
	0	515
	0	352
	0	35
t	0	3122

ES CARRIED TO SHEET 5



Cut Area (SF): 2	Cut Vol. (CY): 4
Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT):5	Seed Area (SY): 35

Sheet Totals		
Seeding	Cut	Fill
35	4	0

CROSS SECTIONS - S.R. 376
STA. 14+45

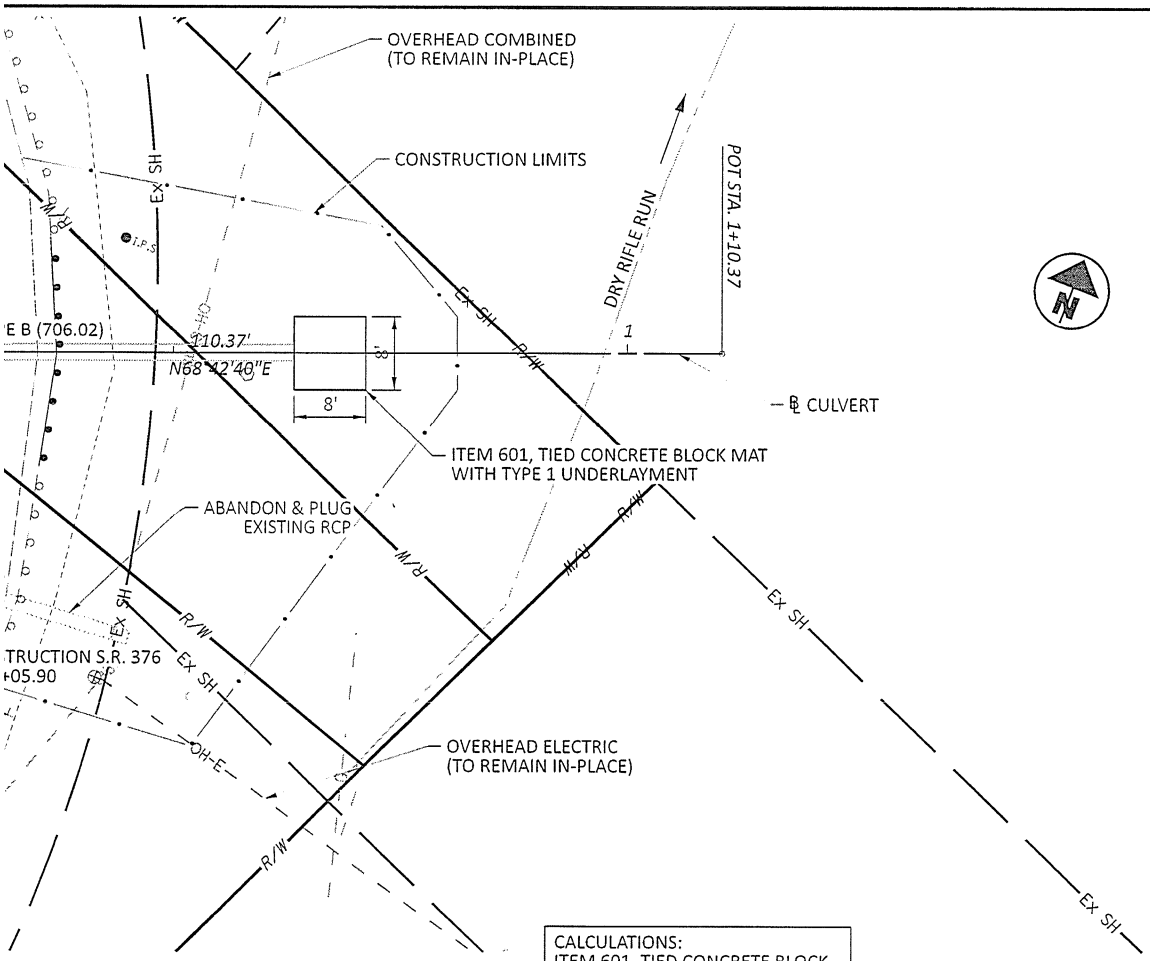
DESIGN AGENCY

DESIGNER
GPM

REVIEWER

PROJECT ID
115989

SHEET	TOTAL
P.25	28



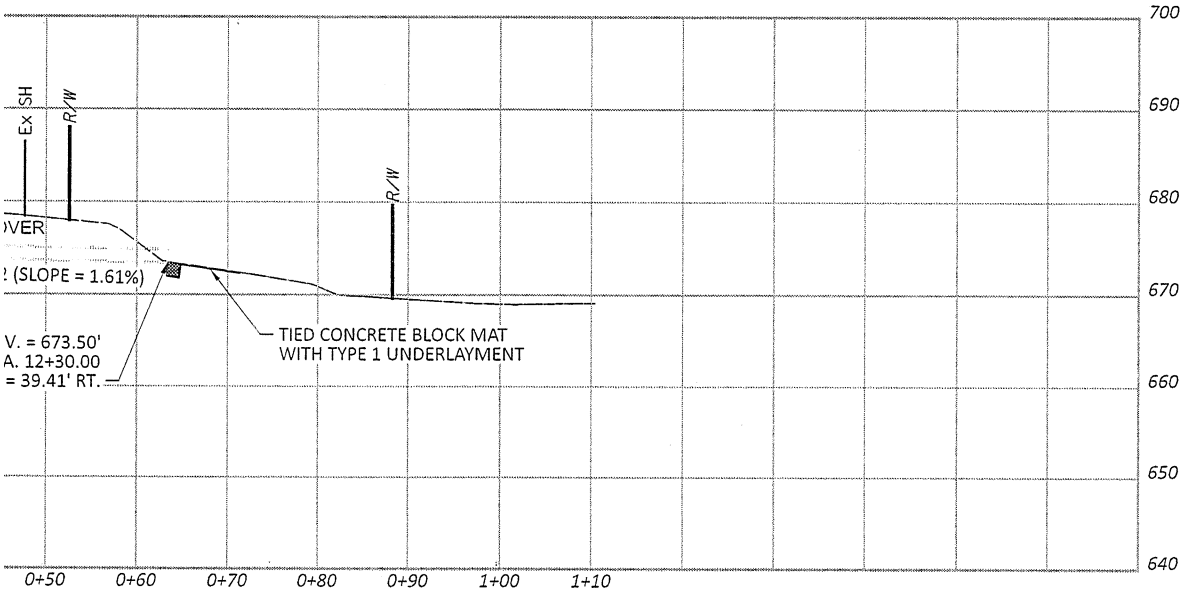
CALCULATIONS:
ITEM 601, TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT
(8' X 8') = 7 SY

HORIZONTAL SCALE IN FEET
0 5 10 20

CULVERT DETAIL SHEET - STA. 12+30.00
S.R. - 376

PROPOSED STRUCTURE
CFN:
TYPE: B
DIAMETER: 15"
LENGTH: 62'
SKEW: 90.0°
STREAM:
LAT: 39.803000
LONG: -81.890036

HYDRAULIC DATA	
DRAINAGE AREA =	
DESIGN SERVICE LIFE = 75 YEARS	
ABRASION LEVEL =	
pH =	
Q10 =	V10 =
Q100 =	V100 =



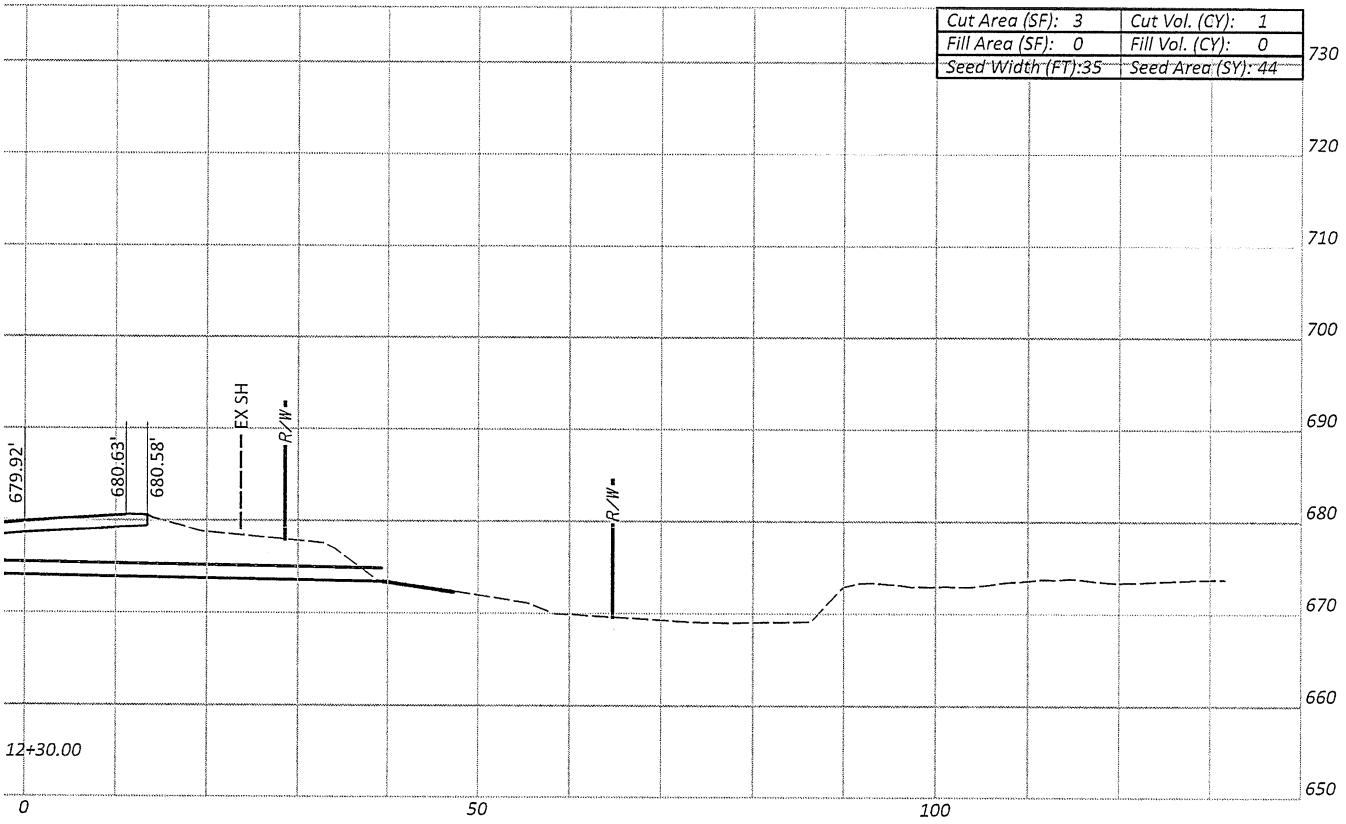
DESIGN AGENCY

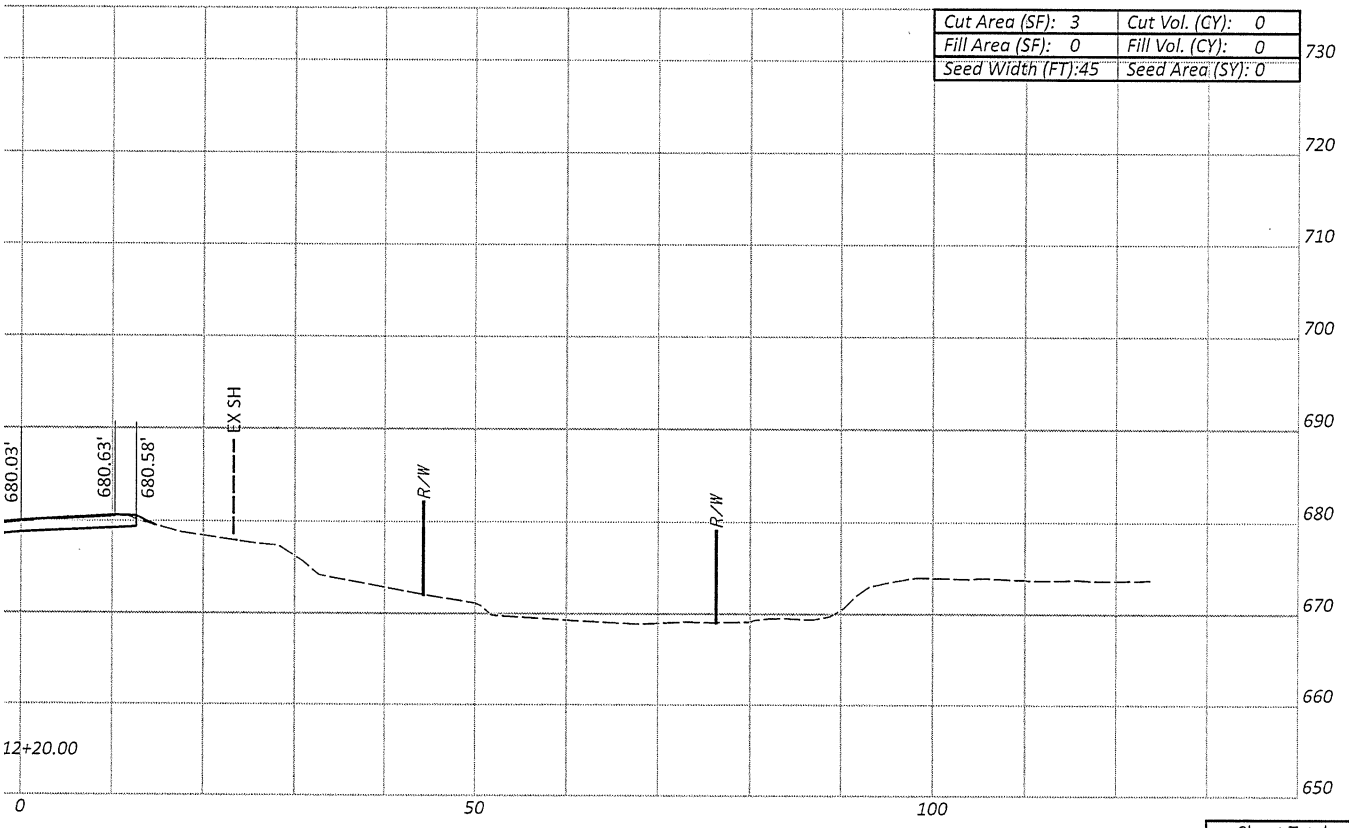
DESIGNER
GPM

REVIEWER

PROJECT ID
115989

SHEET P.26 | TOTAL 28





CROSS SECTIONS FOR CULVERT INSTALLATION - S.R. 376
STA. 12+20 - STA. 12+30

Sheet Totals		
Seeding	Cut	Fill
44	1	0

DESIGN AGENCY

DESIGNER: GPM

REVIEWER:

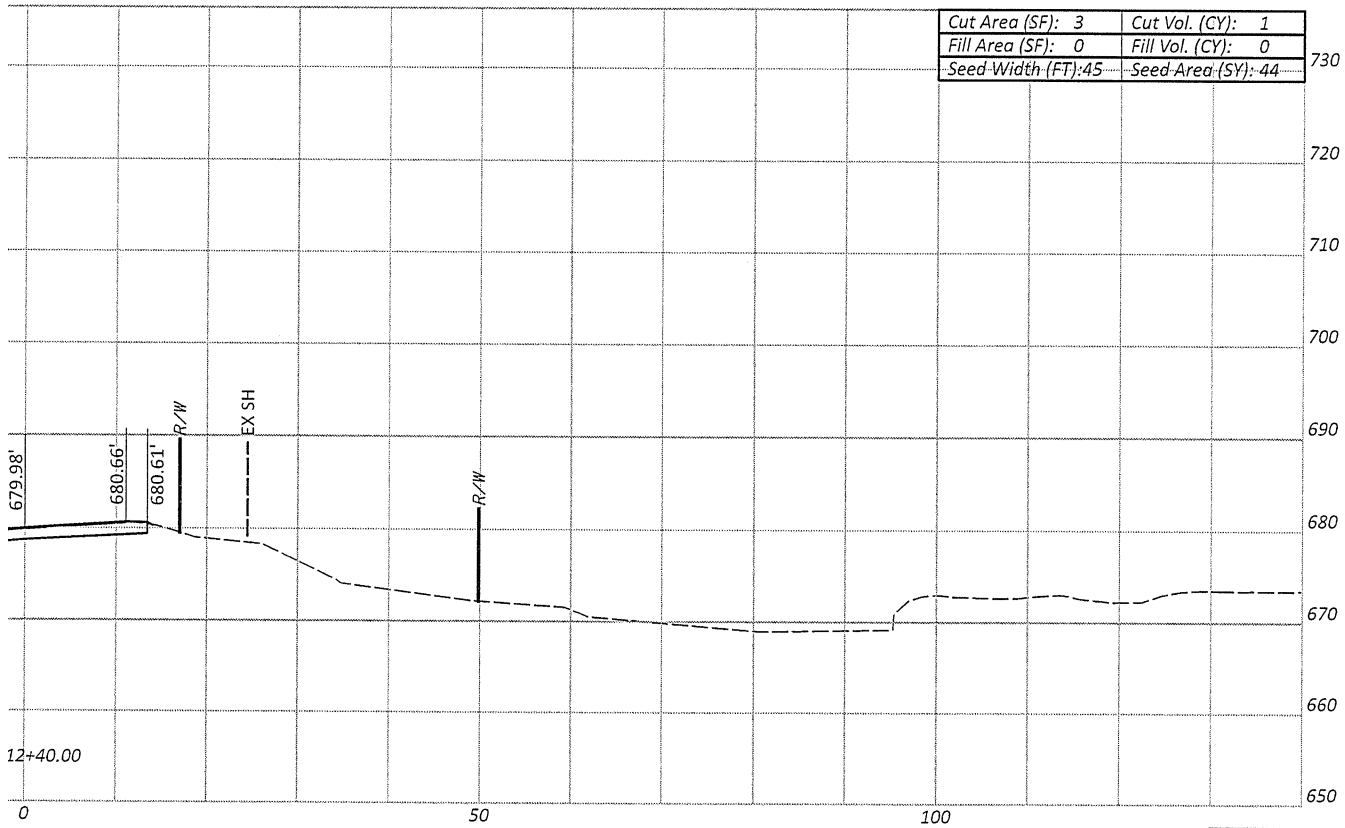
PROJECT ID: 115989

SHEET: P.27 | TOTAL: 28

CROSS SECTIONS FOR CULVERT INSTALLATION - S.R. 376
STA. 12+40

HWORK TOTALS		
Y)	FILL (CY)	SEEDING (SY)
	0	44
	0	44
	0	88

ES CARRIED TO SHEET 5



Sheet Totals		
Seeding	Cut	Fill
44	1	0

DESIGN AGENCY

DESIGNER
GPM

REVIEWER

PROJECT ID
115989

SHEET P.28 TOTAL 28

)F OHIO
'RANSPORTATION

76 - 5.09

TOWNSHIP

'M COUNTY

	1
	2
	3-4
	5-10
	11-12
	13
'ARKING CALCULATIONS	14
	15
	16-25
	26
:TIONS	27-28

GS		SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS
		800-2019	SEE PROPOSAL	
		832	7/15/22	
		902	7/19/19	

FEDERAL PROJECT NUMBER

N.A.

RAILROAD INVOLVEMENT

N.A.

PROJECT DESCRIPTION

REMEDIATION OF ROCK CUT SLOPE THAT IMPROVES SLOPE STABILITY

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.58 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.10 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	0.68 ACRES

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS, CHANGES LISTED IN THE PROPOSAL, AND THE SUPPLEMENTAL SPECIFICATION 800 VERSION INDICATED ON THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEET 12.

Jason L. Sturgeon, P.E.
District 05 Deputy Director

Jack Marchbanks, PhD
Director, Department of Transportation

TITLE SHEET

DESIGN AGENCY

DESIGNER
GPM

REVIEWER

PROJECT ID
115989

SHEET P.1 TOTAL 28

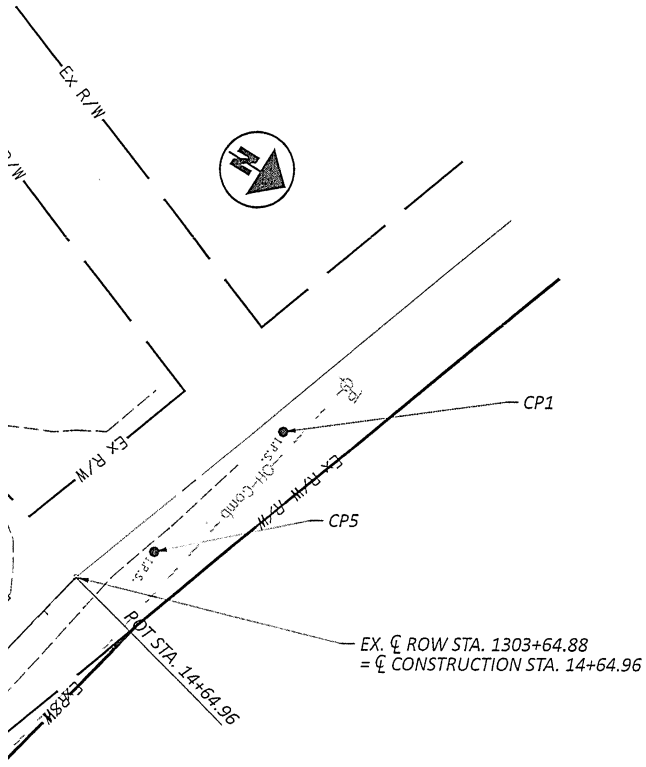


TABLE OF CONTROL POINTS				
POINT ID	NORTHING	EASTING	ELEVATION	CODE
CP1	657384.8401	2139594.5736	679.06	IPINS
CP2	657333.9435	2139812.8115	680.77	IPINS
CP3	657280.8029	2139891.4978	679.09	IPINS
CP5	657369.5708	2139650.7590	678.01	IPINS
CP6	657135.3337	2139745.0906	-	IPINS

HORIZONTAL SCALE IN FEET
0 15 30 60

SCHEMATIC PLAN
MUS-376-5.09

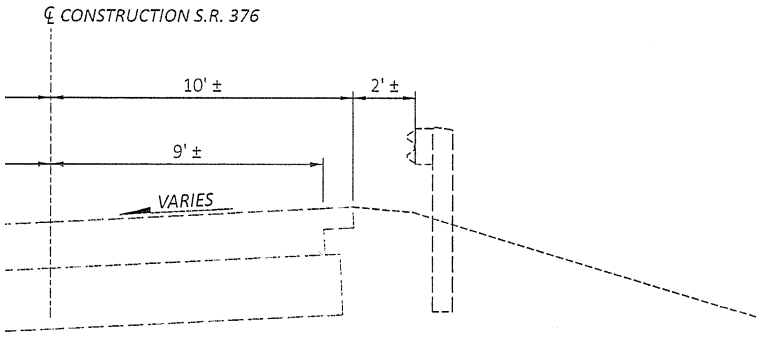
DESIGN AGENCY

DESIGNER
GPM

REVIEWER

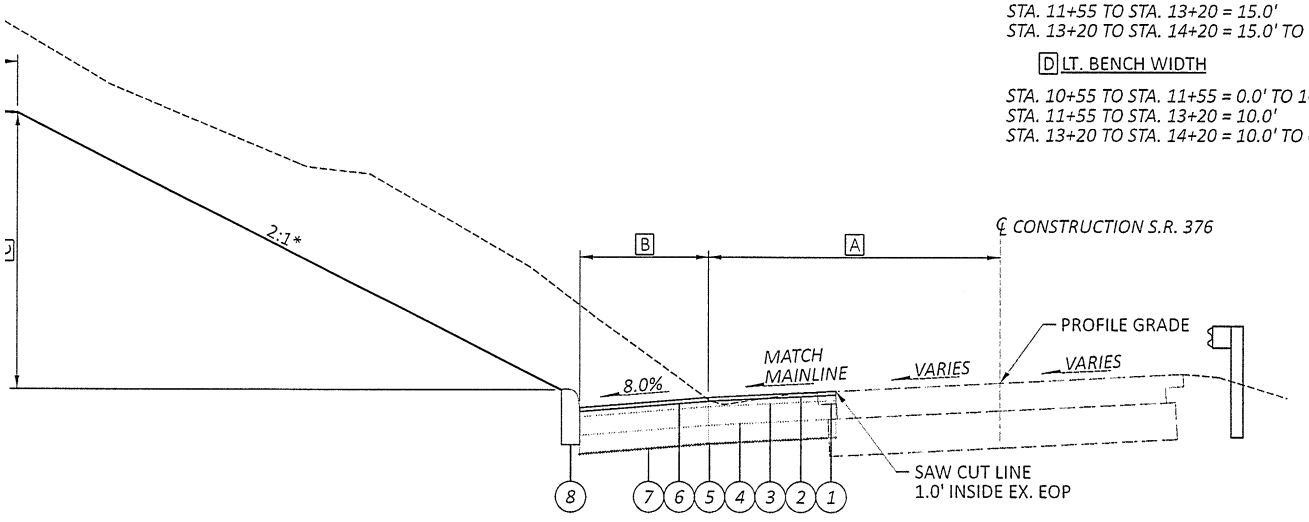
PROJECT ID
115989

SHEET P.2 | TOTAL 28



CAL SECTION - S.R. 376

+00.00 - 14+64.96



& GRADING TYPICAL SECTION - S.R. 376

5.00 (SHOULDER WIDENING)
- 14+15.00 (GRADING)

WIDTHS & HEIGHTS

A LT. PAVEMENT BREAKPOINT

STA. 10+20 TO STA. 10+50 = 12.0' TO 14.0'
STA. 10+50 TO STA. 11+25 = 14.0' TO 17.0'
STA. 11+25 TO STA. 13+50 = 17.0'
STA. 13+50 TO STA. 14+15 = 17.0' TO 14.0'
STA. 14+15 TO STA. 14+45 = 14.0' TO 12.0'

B LT. 8% SLOPE PAVEMENT WIDTH

STA. 10+20 TO STA. 10+50 = 0.0' TO 4.0'
STA. 10+50 TO STA. 11+25 = 4.0' TO 7.0'
STA. 11+25 TO STA. 13+50 = 7.0'
STA. 13+50 TO STA. 14+15 = 7.0' TO 4.0'
STA. 14+15 TO STA. 14+45 = 4.0' TO 0.0'

C LT. B.S. HEIGHT

STA. 10+55 TO STA. 11+55 = 8.0' TO 15.0'
STA. 11+55 TO STA. 13+20 = 15.0'
STA. 13+20 TO STA. 14+20 = 15.0' TO 8.0'

D LT. BENCH WIDTH

STA. 10+55 TO STA. 11+55 = 0.0' TO 10.0'
STA. 11+55 TO STA. 13+20 = 10.0'
STA. 13+20 TO STA. 14+20 = 10.0' TO 0.0'

SLOPES

* LT. BACK SLOPE

STA. 10+55 TO STA. 11+55 = 1.5:1 TO 2:1
STA. 11+55 TO STA. 13+20 = 2:1
STA. 13+20 TO STA. 14+20 = 2:1 TO 1.4:1

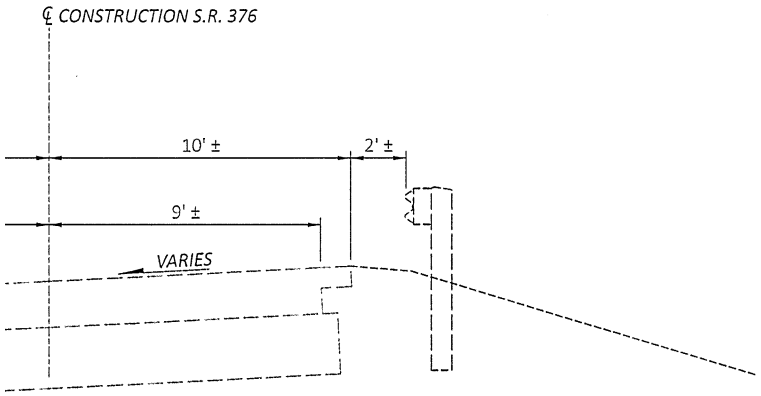
* LT. TIE SLOPE

STA. 10+55 TO STA. 10+75 = 1.5:1
STA. 10+75 TO STA. 11+05 = 1.5:1 TO 2:1
STA. 11+05 TO STA. 13+70 = 2:1
STA. 13+70 TO STA. 14+20 = 2:1 TO 1.4:1

EXISTING/PROPOSED TYPICAL GRADING SECTION - S.R. 376

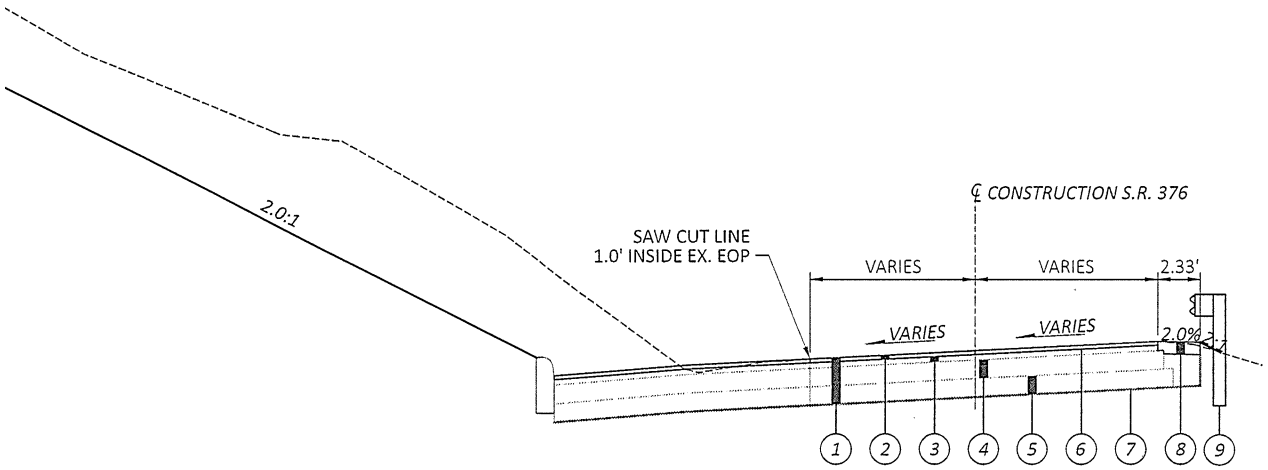
DESIGN AGENCY

DESIGNER	GPM
REVIEWER	XXX
PROJECT ID	115989
SHEET	P.3
TOTAL	28



OR CULVERT INSTALLATION - S.R. 376
+20.00 - 12+40.00

PAVEMENT ELEVATION TABLE				
STA.	SAW CUT (LT.)	℄	EOP (RT.)	EOS (RT.)
12+20	679.03	680.03	680.63	680.58
12+30	679.04	679.92	680.63	680.58
12+40	679.10	679.98	680.66	680.61



PROPOSED TYPICAL SECTION FOR CULVERT INSTALLATION - S.R. 376
STA. 12+20.00 - 12+40.00

EXISITNG/PROPOSED CULVERT INSTALLATION TYPICAL SECTION - S.R. 376

DESIGN AGENCY

DESIGNER
GPM

REVIEWER

PROJECT ID
115989

SHEET P.4 | TOTAL 28

ITEM 690, SPECIAL - MISC.: ROADWAY PRESERVATION

PRESERVE THE EXISTING PAVEMENT AND GUARDRAIL. VIDEO DOCUMENT THE ROADWAY AND GUARDRAIL CONDITIONS PRIOR TO STARTING THE EXCAVATION OF SLOPE AND REMOVAL OF WASTE MATERIALS. SUBMIT PROTECTION PLAN FOR THE PROJECT ENGINEER'S FILES.

REPAIR ANY DAMAGE TO THE ROADWAY AND GUARDRAIL DURING CONSTRUCTION AT NO ADDITIONAL COSTS TO THE STATE. UNLESS ITEMIZED SEPARATELY, INCLUDE ALL LABOR, MATERIALS, AND TOOLS NECESSARY FOR PROTECTION OF EXISTING ROADWAY PAVEMENT.

ITEM 690 SPECIAL, ROADWAY PRESERVATION, LUMP

ITEM SPECIAL - FILL AND PLUG EXISTING CONDUIT

THIS ITEM CONSISTS OF THE CONSTRUCTION OF BULKHEADS IN AN EXISTING 12 INCH DIAMETER CONDUIT AND FILLING THE AREA SEALED OFF WITH ITEM 613, SAND OR OTHER MATERIAL APPROVED ITEM 613, SAND OR OTHER MATERIAL APPROVED BY THE ENGINEER.

LOCATE THE BULKHEADS AT THE LIMITS OF THE AREA TO BE FILLED, AS INDICATED ON THE PLANS. THE BULKHEADS CONSIST OF BRICK OR CONCRETE MASONRY WITH A MINIMUM THICKNESS OF 12 INCHES.

PUMP THE FILL MATERIAL INTO PLACE OR BY OTHER MEANS APPROVED BY THE ENGINEER, SO THAT AFTER SETTLEMENT, AT LEAST 90 PERCENT OF THE CROSS-SECTIONAL AREA OF THE CONDUIT, FOR ITS ENTIRE LENGTH IS FILLED. THE LENGTH OF FILLED AND PLUGGED CONDUIT TO BE PAID FOR IS THE ACTUAL NUMBER OF FEET (MEASURED ALONG THE CENTERLINE OF EACH CONDUIT FROM OUTER FACE TO OUTER FACE OF BULKHEADS) FILLED AND PLUGGED AS DESCRIBED ABOVE.

IN LIEU OF FILLING AND PLUGGING THE EXISTING CONDUIT, THE PIPE MAY BE CRUSHED AND BACKFILLED PER 203, OR IT MAY BE REMOVED. THE LENGTH, MEASURED AS PROVIDED ABOVE, WILL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR, ITEM SPECIAL, FILL AND PLUG EXISTING

CONDUIT.

ITEM 623, CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 623, CONSTRUCTION LAYOUT STAKES AND SURVEYING, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING INFORMATION TO THE DEPARTMENT:

THE CONTRACTOR SHALL PROVIDE AS- BUILT DATA FOR THE SPECIFIED COMPLETED CONSTRUCTION ITEMS IN OHIO STATE PLANE COORDINATES (GRID). THE CONSTRUCTION ITEMS SHALL BE LOCATED AS PER THE SURVEY FEATURE CODE LIST FOUND ON THE OHIO DEPARTMENT OF TRANSPORTATION OFFICE OF CADD & MAPPING SERVICES WEBSITE. AFTER ALL INFORMATION HAS BEEN COLLECTED, AN EMAIL CONTAINING A COMMA DELIMITED ASCII FILE AND A SURVEYOR'S CERTIFICATION SHALL BE DELIVERED TO:

Cody.Gierhart@dot.ohio.gov (D5 GIS COORDINATOR) AND Steven.Miller@dot.ohio.gov (D5 CONSTRUCTION AREA ENGINEER)

ITEM 408, PRIME COAT, AS PER PLAN

THE CONTRACTOR SHALL APPLY ONE COAT OF MC-70 (AS PER CMS 702) AT A RATE OF 0.40 GAL/SY TO THE COMPLETED AGGREGATE SHOULDER. TO REDUCE AGGREGATE LOSS, THE PRIME COAT SHALL BE APPLIED WITHIN SEVEN (7) DAYS AFTER PLACEMENT OF THE AGGREGATE SHOULER OR LIQUIDATED DAMAGES PER CMS 108.07 WILL BE ASSESSED. THE CONTRACTOR SHALL PROVIDE A SHIELD TO PREVENT THE SPRAYING OR DRIFTING OF LIQUID BITUMINOUS MATERIAL ONTO THE EDGE OF PAVEMENT OR EDGE LINE. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO 107.10 OF THE SPECIFICATIONS.

ITEM 623, CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN (CONTINUED)

THE ASCII FILE SHALL INCLUDE A HEADER CONTAINING:

NAME OF SURVEYOR
DATE(S) OF COLLECTION
HORIZONTAL DATUM (I.E. NAD83 (2011), OHIO SPCS NORTH OR SOUTH)
VERTICAL DATUM (I.E. NAVD 88, GEOID12A)
METHOD OF COLLECTION (I.E. OHIO VRS, GPS RTK, TOTAL STATION, ETC.)

THE ASCII FILE SHALL BE IN TABLE FORM AS FOLLOWS:

PT. NO./NORTHING/EASTING/ELEVATION/FEATURE CODE/DESCRIPTION

BELOW IS A LIST OF THE ITEMS THE CONTRACTOR SHALL PROVIDE FOR THIS PROJECT:
-CULVERT INVERT AT INLET AND OUTLET

THE ABOVE ITEMS SHALL BE COLLECTED USING SURVEY GRADE EQUIPMENT MEETING THE REQUIREMENTS OF SECTION 400 IN THE ODOT SURVEY & MAPPING SPECIFICATIONS MANUAL.

ALL COSTS ASSOCIATED WITH OBTAINING THE INFORMATION LISTED ABOVE SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 623, CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN.

THE FOLLOWING QUANTITY HAS BEEN INLCUDED IN THE GENERAL SUMMARY TO PERFORM THE WORK DESCRIBED ABOVE:

ITEM 623, CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN (LS)

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET ___ OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD: LOCAL RT NETWORK AND STATIC GPS OBSERVATIONS
MONUMENT TYPE: TYPE B ODOT D5

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: 12B

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (2011)
ELLIPSOID: GRS 1980
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO NORTH
COMBINED SCALE FACTOR: 0.99995376
ORIGIN OF COORDINATE SYSTEM: 600,000M, Y=0M

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH

UNITS ARE IN U.S. SURVEY FEET.
CMS 623.

GENERAL NOTES

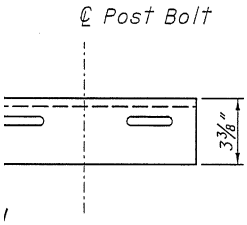
DESIGN AGENCY

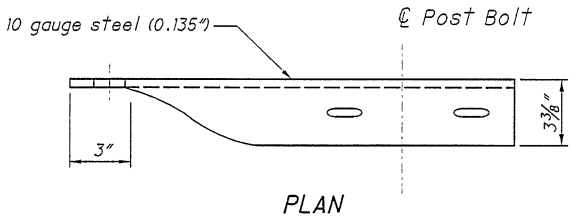
DESIGNER GPM

REVIEWER

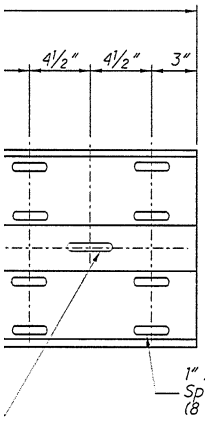
PROJECT ID 115989

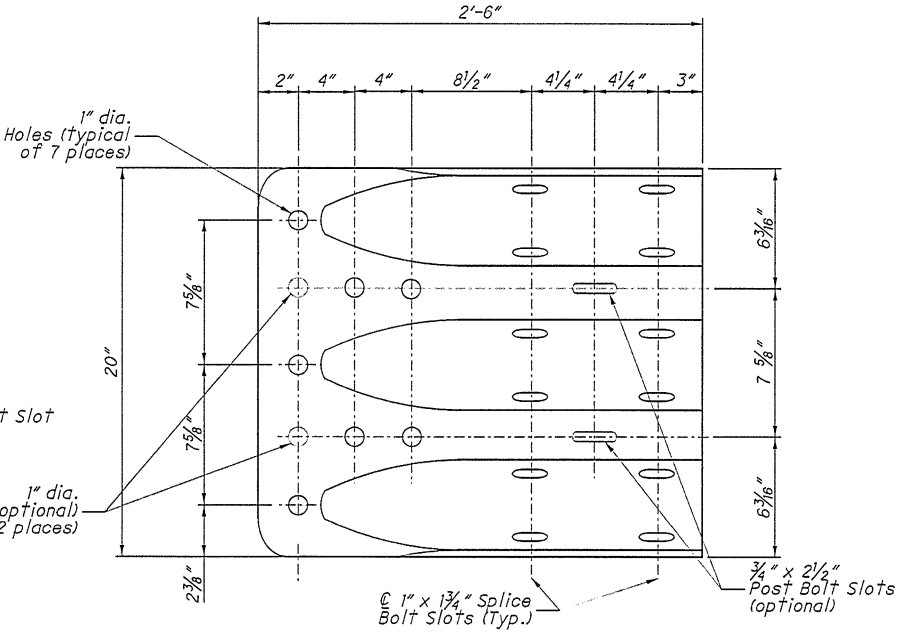
SHEET P.5 | TOTAL 28





PLAN





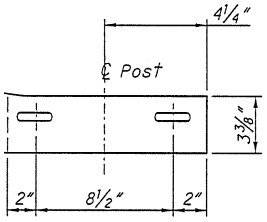
ELEVATION

THRIE-BEAM TERMINAL CONNECTOR

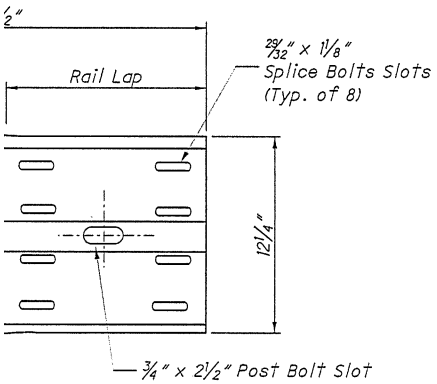
ION

CONNECTOR

ge steel (0.109″)

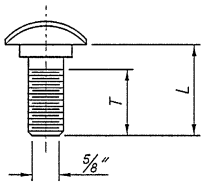


PLAN



EVATION

RED END SECTION



GUARDRAIL BOLT (For Post and Splice Bolts)		
L	T min.	Bolt Use
18″ (Standard Rail)	4″	Type 5: WP/WB, PB
26″ (Barrier Rail)		
10″	4″	Type 5: SP/WB, PB
1¼	1⅛″	Splice Bolt

WP = Wood Post WB = Wood Blockout
SP = Steel Post PB = Plastic Blockout

Longer Bolt may be needed for round Wood Post larger than 8″ dia.

OFFICE OF ROADWAY ENGINEERING

DESIGNED XXX
REVIEWED XXX
REVISION DATE 1/18/2013
CHECKED CHECKED

PLAN INSERT SHEET
GUARDRAIL DETAILS
(Rail Components)

PIS GR-1.1

1 / 3

0
0

TYPE 5 GUARDRAIL DETAILS (1 OF 3) - PLAN INSERT SHEET

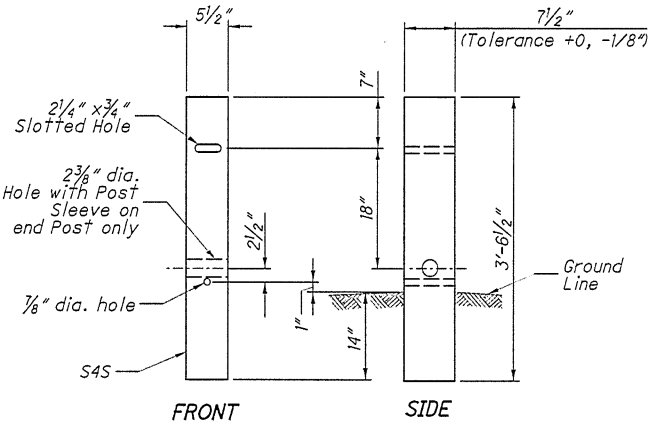
DESIGN AGENCY

DESIGNER GPM

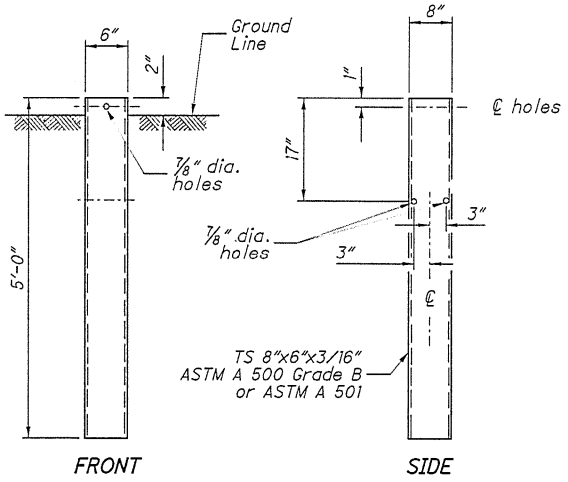
REVIEWER

PROJECT ID 115989

SHEET P.6 TOTAL 28



TYPE 2 BREAKAWAY CRT POST



STEEL GROUND TUBE

on, construct the guardrail
r **29"** to the top
AIL HEIGHT Detail.)
esurfacings, affect the
ed height is to be within

dment is 3'-5" min. Where less
r flatter) exists, measured
ETAIL "A"), use longer posts so
th is provided. Payment for
nit price bid for **ITEM 606 -**

located over a drainage inlet
NCHOR Detail, or anchor per

ith a cover of less than 2'-6"
. (A plate, as detailed on
d as an alternative attachment
'-6" and 3'-5", the footing anchor
nstead with 4" (min.) of concrete.

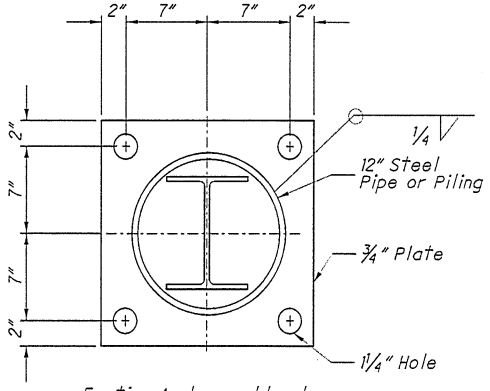
ert with less than 4'-3"
holes. Where the available post
ase the post with a minimum of

mountings are included in the
the type specified in the plans.

ly with CMS 510. Use either
.

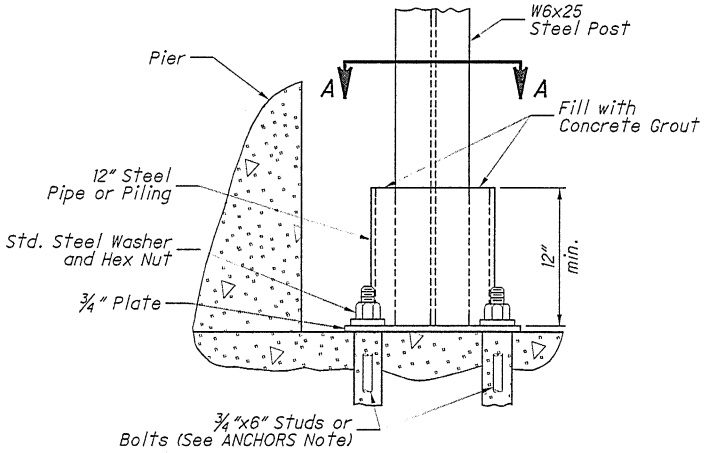
n CMS 712.01 may be substituted
as occurred, as determined by
rs are used, drill the holes
'l bit) and install the shield

mplying with CMS 710.06, coat
e insert anchor assemblies
h ASTM A 153 or be of stainless
evices shall meet CMS 710.06.
r Assembly Detail.)



Footing Anchor and hardware
need not be galvanized

SECTION A-A



ELEVATION
FOOTING ANCHOR

See SPECIAL POST MOUNTINGS Note.

OFFICE OF ROADWAY ENGINEERING

DESIGNED XXX
REVIEWED XXX
REVISION DATE 1/18/2013
CHECKED CHECKED

PLAN INSERT SHEET
GUARDRAIL DETAILS
(Rail Components)

PIS GR-1.1

2 / 3

0
0

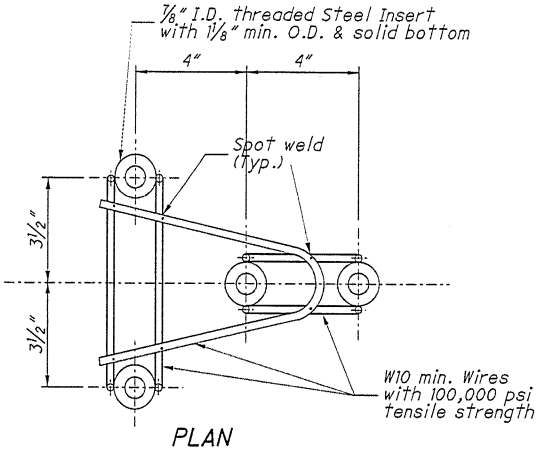
TYPE 5 GUARDRAIL DETAILS (2 OF 3) - PLAN INSERT SHEETS

DESIGN AGENCY

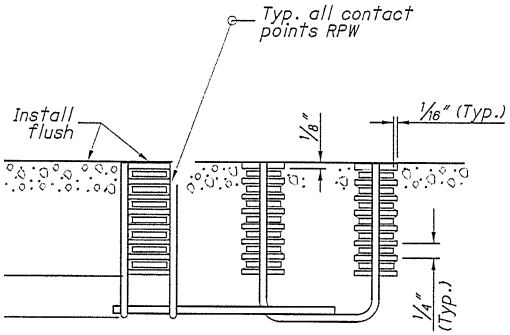
DESIGNER
GPM
REVIEWER

PROJECT ID
115989

SHEET P.7 TOTAL 28



PLAN

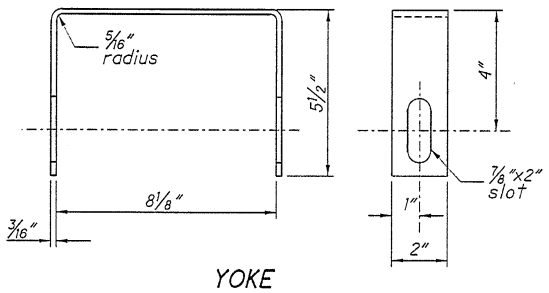


Four 7/8" Bolts required

ELEVATION

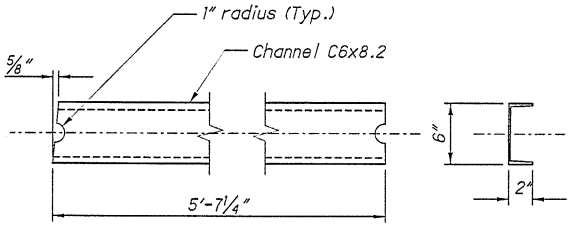
)NCRETE INSERT ANCHOR ASSEMBLY (W-BEAM ONLY)

See ANCHORS and PROTECTIVE COATINGS Notes on Sheet 2

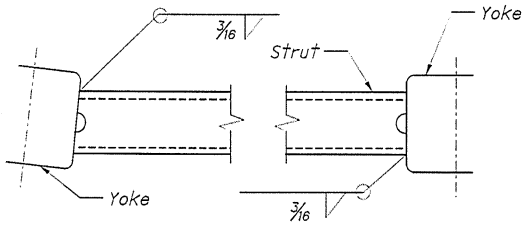


YOKE

Two required in Assembly

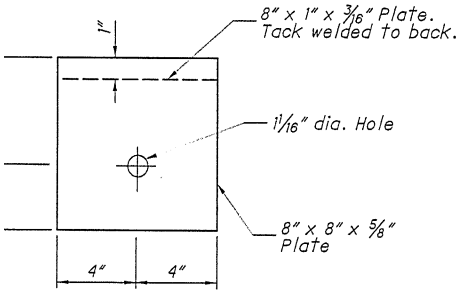


STRUT

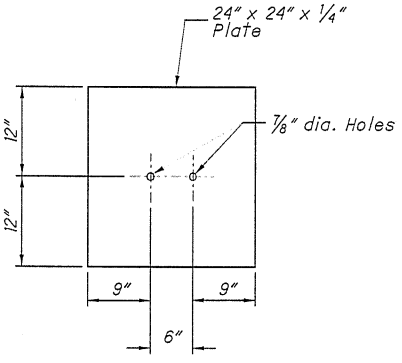


Channel legs shown down. For opposite hand, install Channel legs up.

STRUT AND YOKE ASSEMBLY



BEARING PLATE



SOIL PLATE

OFFICE OF ROADWAY ENGINEERING

DESIGNED XXX
REVIEWED XXX
REVISION DATE 1/18/2013
CHECKED CHECKED

PLAN INSERT SHEET
GUARDRAIL DETAILS (Rail Components)

PIS GR-1.1

3 / 3

0 / 0

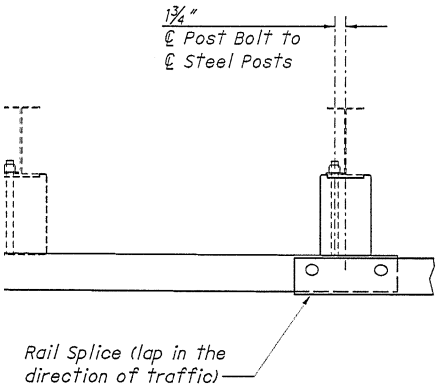
TYPE 5 GUARDRAIL DETAILS (3 OF 3) - PLAN INSERT SHEET

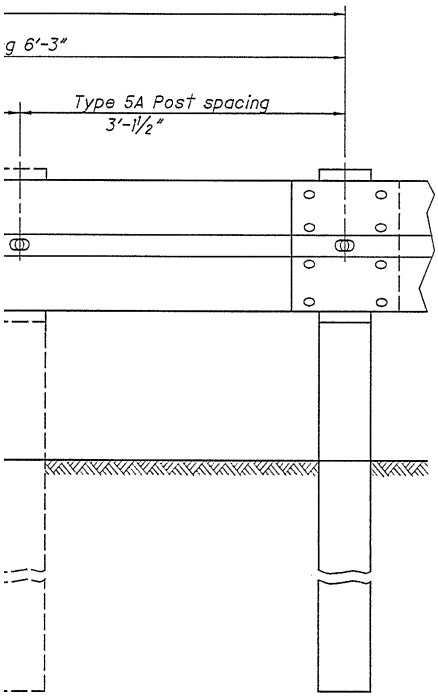
DESIGN AGENCY

DESIGNER GPM
REVIEWER

PROJECT ID 115988

SHEET P.8 TOTAL 28





NOTES

RAIL: *Use W-Beam rail meeting AASHTO M 180 Type II Class A, as specified in CMS 606.*

POSTS: *Posts may be constructed of wood or steel. Wood posts may be round or 6"x8" square-sawed.*

Use round wood posts on runs of single-sided rail. The round posts shall be 8"±1 in diameter at the top and not more than 3" larger at the butt with a uniform taper.

Fabricated wood posts with square ends. Posts shall be pressure-treated as per CMS 710.14. Bore bolt holes and, if required, trim the tops of posts after the posts are set.

Steel posts are to be W6x9 or W6x8.5 galvanized steel. Use the same type of post throughout the length of the project unless otherwise specified in the plans or permitted by the Engineer.

All posts are 6'-0" long unless specified otherwise in the Contract Document. Posts may be set in drilled holes or may be driven to grade.

WELDED BEAM POSTS: *Welded beam guardrail posts may be used for Item 606, Guardrail, provided the web and flange sizes are as shown here. Welding of the web to the flanges must comply with ASTM A 769, Class 1, using Grade 36 steel [250 MPa yield point] with the following exceptions:*

Sec. 7.2 Test reports of tensile properties for each lot shall accompany each shipment.

Sec. 12 Beams that have imperfections repaired by welding shall not be accepted for use in Item 606.

Sec. 13 Random samples shall be tested by the Department from materials delivered to the project site, or other locations designated by the Laboratory.

ALTERNATE POSTS: Engineered guardrail posts having met NCHRP 350 criteria, and listed on the ***Office of Materials Management's*** *Approved List are permitted as an equal alternate when installed according to the Manufacturer's instructions and within the limitations shown on the Approved List.*

BLOCKOUTS: *Blockout dimensions are dependent on post used. Wood Blockouts are to be pressure treated as specified in CMS 710.14. Bore bolt holes. Approved alternate blockouts may be used in lieu of the wood blockouts shown. The approved list is maintained by the* ***Office of Roadway Engineering.***

WASHERS: *Install appropriate sized standard galvanized steel washers on the nut side of bolts installed on wood posts.*

DELINEATION: *For barrier reflectors, see CMS 626.*

MISCELLANEOUS: *For other guardrail details, see* ***SCD GR-1.1.***

STEEL BEAM POSTS (English)				
Size	Beam depth	Flange width	Flange thickness	Web thickness
Rolled W6x8.5	5.8"	3.94"	0.193"	0.170"
Rolled W6x9	5.9"	3.94"	0.215"	0.170"
Welded 6x8.5	6.0"	3.94"	0.193"	0.170"
Welded 6x9	6.0"	3.94"	0.215"	0.170"

OFFICE OF ROADWAY ENGINEERING

DESIGNED XXX | REVIEWED XXX

REVISION DATE 1/18/2013 | CHECKED

PLAN INSERT SHEET

GUARDRAIL TYPE 5 & 5A

PIS GR-2.1

1 / 2

0 / 0

TYPE 5 GUARDRAIL - (1 OF 2)

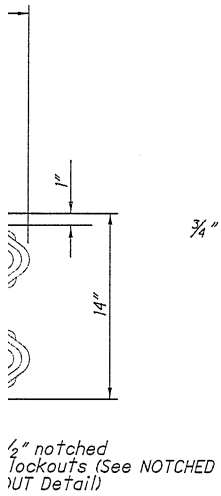
DESIGN AGENCY

DESIGNER GPM

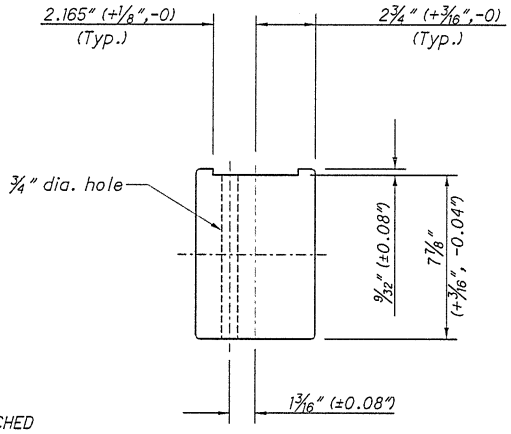
REVIEWER

PROJECT ID 115989

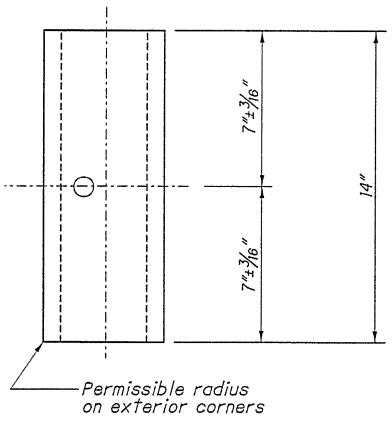
SHEET P.9 | TOTAL 28



½" notched
lockouts (See NOTCHED
UT Detail)



PLAN

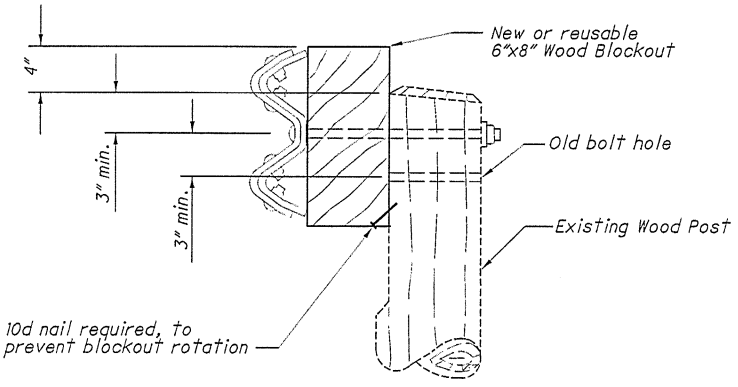


ELEVATION

NOTCHED BLOCKOUTS FOR STEEL POSTS

See BLOCKOUTS Note on Sheet 1

il not required if
is cut as shown



WOOD POSTS WITH WOOD BLOCK RAISING EXISTING GUARDRAIL HEIGHT

OFFICE OF ROADWAY ENGINEERING

DESIGNED XXX | REVIEWED XXX

REVISION DATE 1/18/2013 | CHECKED CHECKED

PLAN INSERT SHEET

GUARDRAIL TYPE 5 & 5A

PIS GR-2.1

2 / 2

0 / 0

TYPE 5 GUARDRAIL - (2 OF 2)

DESIGN AGENCY

DESIGNER GPM

REVIEWER

PROJECT ID 115989

SHEET P.10 | TOTAL 28

ITEM 614, MAINTAINING TRAFFIC (SIGNS AND BARRICADES)

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND TYPE III BARRICADES.

ITEM 614, MAINTAINING TRAFFIC (ROAD CLOSED SIGN)

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 DURING PERIODS IN WHICH THE AFFECTED ROAD IS CLOSED TO TRAFFIC.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER (1 MGAL)

CRITICAL WORK

IF THE CRITICAL WORK IS NOT COMPLETED WITHIN THE CALENDAR DAYS DESIGNATED THE CONTRACTOR WILL BE SUBJECT TO A DISINCENTIVE OF $1000.00 PER DAY. ALL OTHER WORK IS TO BE COMPLETED BY THE PROPOSAL COMPLETION DATE.

CRITICAL WORK TABLE: MUS-146-29.42

DESCRIPTION OF CRITICAL WORK	CALENDAR DAYS TO COMPLETE	DIS-INCENTIVE ($ PER DAY)
EXCAVATION, INSTALLATION OF CULVERT, & PAVEMENT TO INTERMEDIATE COURSE	SIXTY (60) CALENDAR DAYS	$1000 PER DAY

THE FINAL COMPLETION DATE FOR THE PROJECT WILL BE AS LISTED IN THE PROPOSAL.

THE FINAL SURFACE COURSE AND THE STRIPING CAN BE PERFORMED AS A FLAGGING OPERATION.

DESIGNATED LOCAL DETOUR ROUTE

IN ADDITION TO THE OFFICIAL, SIGNED DETOUR ROUTE, A LOCAL DETOUR ROUTE HAS BEEN DETERMINED TO BE THE SECONDARY, UNSIGNED DETOUR ROUTE OR "DESIGNATED LOCAL DETOUR ROUTE". THIS DETOUR ROUTE IS SHOWN ON SHEET 6. DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THIS ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RIDGES, BUMPS, DUST, AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED LOCAL DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DETERMINED BY THE ENGINEER.

THE FOLLOWING QUANTITIES ARE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER TO MAINTAIN AND SUBSEQUENTLY RESTORE THE DESIGNATED LOCAL DETOUR ROUTE.

ITEM 441, ASPHALT CONCRETE, MISC.: SPOT TREAMENT (20 CY)

ITEM 407, NON-TRACKING TACK COAT (24 GAL)

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER- MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON- SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS, PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE- PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE- PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON- BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE- LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24- HOUR- PER- DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN (8 SNMT)

(ASSUMING 4 SIGNS FOR 2 MONTHS.)

MAINTENANCE OF TRAFFIC NOTES

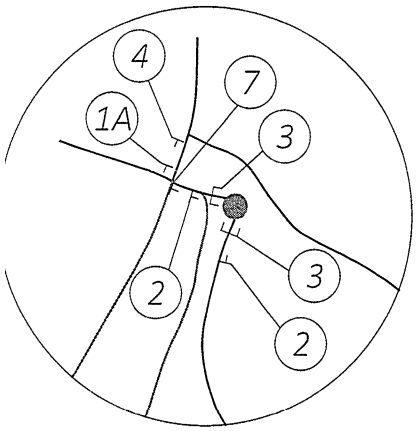
DESIGN AGENCY

DESIGNER GPM

REVIEWER

PROJECT ID 115989

SHEET P.11 TOTAL 28



1

DETOUR

M4-8-24

376

M1-5-24-3

M6-3-21

2

ROAD WILL BE
CLOSED MMM/DD
FOR XX DAYS
INFO: XXX-XXX-XXXX

W20-H13-60

3

ROAD
CLOSED

R11-2-48
(ON TYPE III BARRICADES)

4

DETOUR
AHEAD

W20-2-36

5

376

M1-5-24-3

ROAD CLOSED
14.6 MILES AHEAD
LOCAL TRAFFIC ONLY

R11-3a-60
(ON TYPE III BARRICADE)

6

376

M1-5-24-3

ROAD CLOSED
3.6 MILES AHEAD
LOCAL TRAFFIC ONLY

R11-3a-60
(ON TYPE III BARRICADE)

7

376

M1-5-24-3

ROAD CLOSED
0.1 MILES AHEAD
LOCAL TRAFFIC ONLY

R11-3a-60
(ON TYPE III BARRICADE)

DETOUR

M4-10R-48

8

END
DETOUR

M4-8A-24

A

SOUTH

M3-2-24

ND
DETOUR ROUTE
DETOUR ROUTE
CT LOCATION

N

MOT DETOUR MAP

DESIGN AGENCY

DESIGNER
GPM

REVIEWER

PROJECT ID
115989

SHEET P.12 | TOTAL 28

GENERAL SUMMARY

DESCRIPTION	SEE SHEET NO.
ROADWAY	
	14
	14
	14
	14
	26
	5
	14
	14
	14
EROSION CONTROL	
	26
	14
	5
	5
	5
	5
DRAINAGE	
	26
	26
PAVEMENT	
	14
	14
	14
	14
2	14
	14
TRAFFIC CONTROL	
	14
	14
	14
	14
MAINTENANCE OF TRAFFIC	
	11
	11
	11
INCIDENTALS	
.N	5

DESIGN AGENCY

DESIGNER
GPM

REVIEWER

PROJECT ID
115989

SHEET P.13 | TOTAL 28

ESTIMATED ROADWAY QUANTITIES

ITEM	ITEM EXT	UNIT	TOTAL	ITEM DESCRIPTION
202	23000	SY	92	PAVEMENT REMOVED
202	38000	FT	25	GUARDRAIL REMOVED
202	56000	LS	LS	BUILDING DEMOLISHED, 1 STORY HOUSE & SHED
202	66000	EACH	1	SPECIAL - DRILLED WATER WELL ABANDONED
204	10000	SY	558	SUBGRADE COMPACTION
301	56000	CY	92	ASPHALT CONCRETE BASE, PG64-22 (449)
304	20000	CY	92	AGGREGATE BASE
407	20000	GAL	66	NON-TRACKING TACK COAT
408	10001	GAL	22	PRIME COAT, AS PER PLAN
441	50000	CY	19	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 64-22
441	50300	CY	27	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)
606	13030	FT	25	GUARDRAIL, TYPE 5, USING 9 FOOT POSTS
609	26000	FT	383	CURB, TYPE 6
617	10101	CY	1	COMPACTED AGGREGATE, AS PER PLAN

QUANTITIES CARRIED TO GENERAL SUMMARY

ESTIMATED PAVEMENT MARKING QUANTITIES

ITEM	ITEM EXT	UNIT	TOTAL	ITEM DESCRIPTION
621	00100	EACH	2	RPM
621	54000	EACH	2	RAISED PAVEMENT MARKER REMOVED
642	00104	MILE	0.09	EDGE LINE, 6", TYPE 1
642	00300	MILE	0.01	CENTER LINE, TYPE 1

QUANTITIES CARRIED TO GENERAL SUMMARY

CALCULATIONS

DESIGN AGENCY

DESIGNER
GPM

REVIEWER

PROJECT ID
115989

SHEET P.14 | TOTAL 28

PLAN AND PROFILE - S.R. 376
STA. 10+00 - STA. 14+64.96

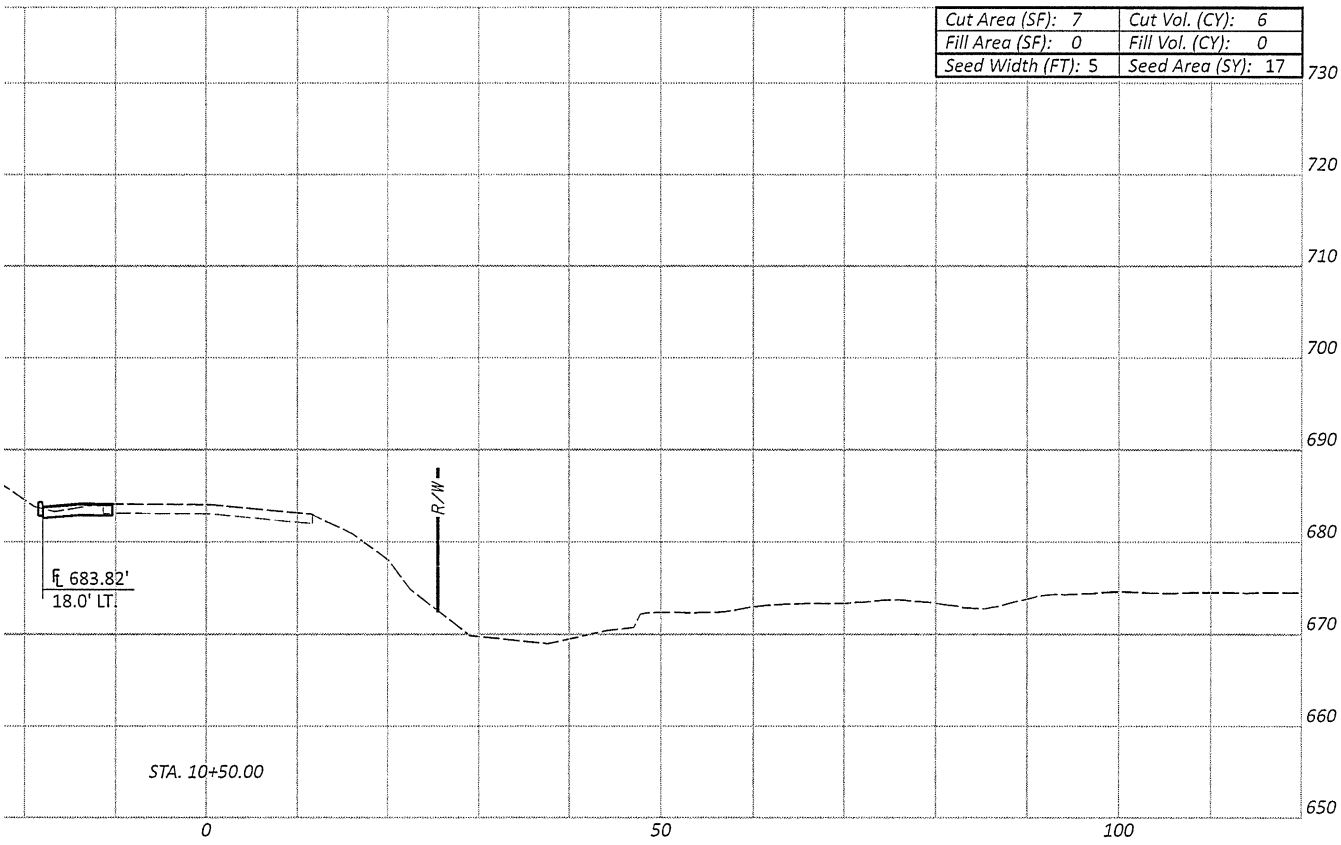
HORIZONTAL SCALE IN FEET
0 10 20 40

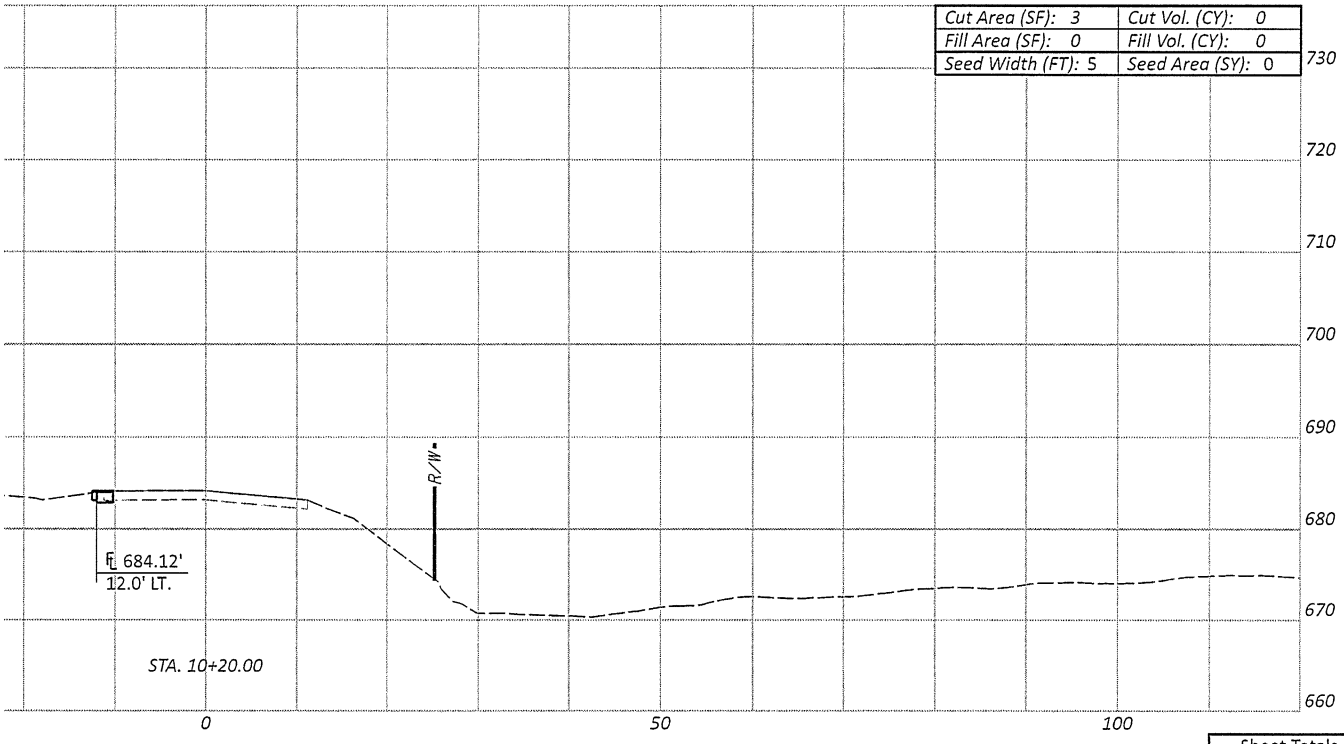
DESIGN AGENCY

DESIGNER GPM
REVIEWER
PROJECT ID 115989
SHEET P.15 TOTAL 28

FULL DEPTH MAINLINE PAVEMENT

FULL DEPTH SHOULDER PAVEMENT





CROSS SECTIONS - S.R. 376
STA. 10+20 - STA. 10+50

Sheet Totals		
Seeding	Cut	Fill
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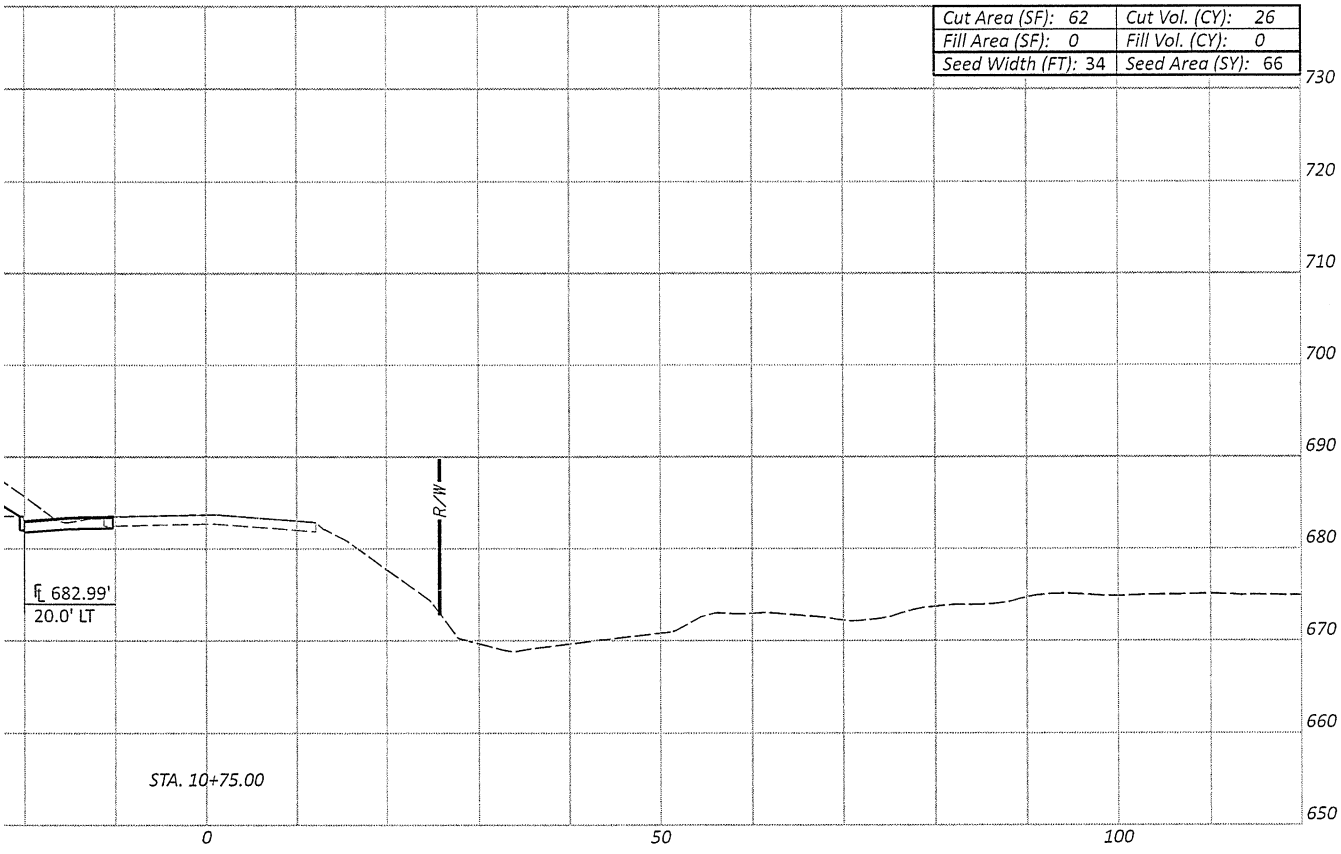
DESIGN AGENCY

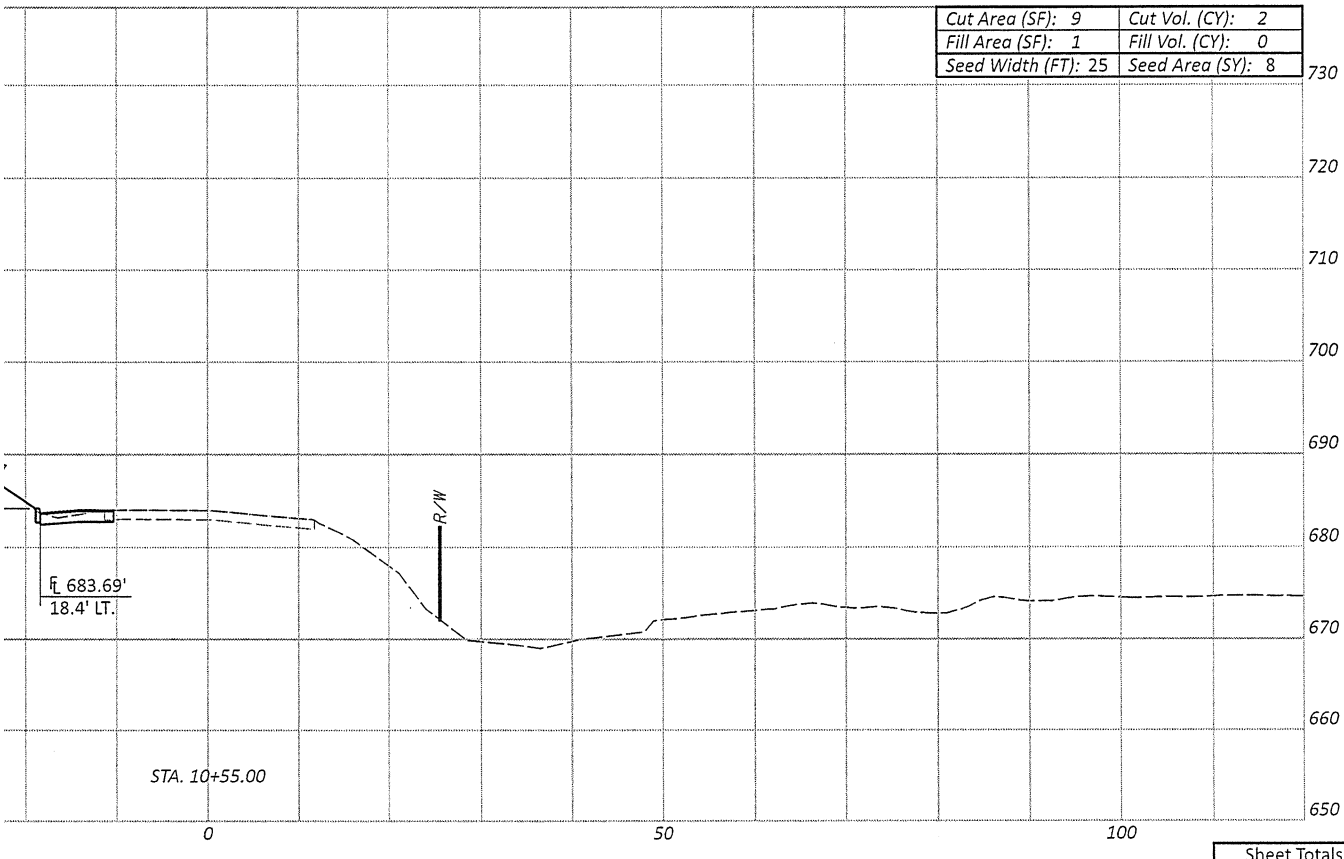
DESIGNER
GPM

REVIEWER

PROJECT ID
115989

SHEET	TOTAL
P.16	28





CROSS SECTIONS - S.R. 376
STA. 10+55 - STA. 10+75

Sheet Totals		
Seeding	Cut	Fill
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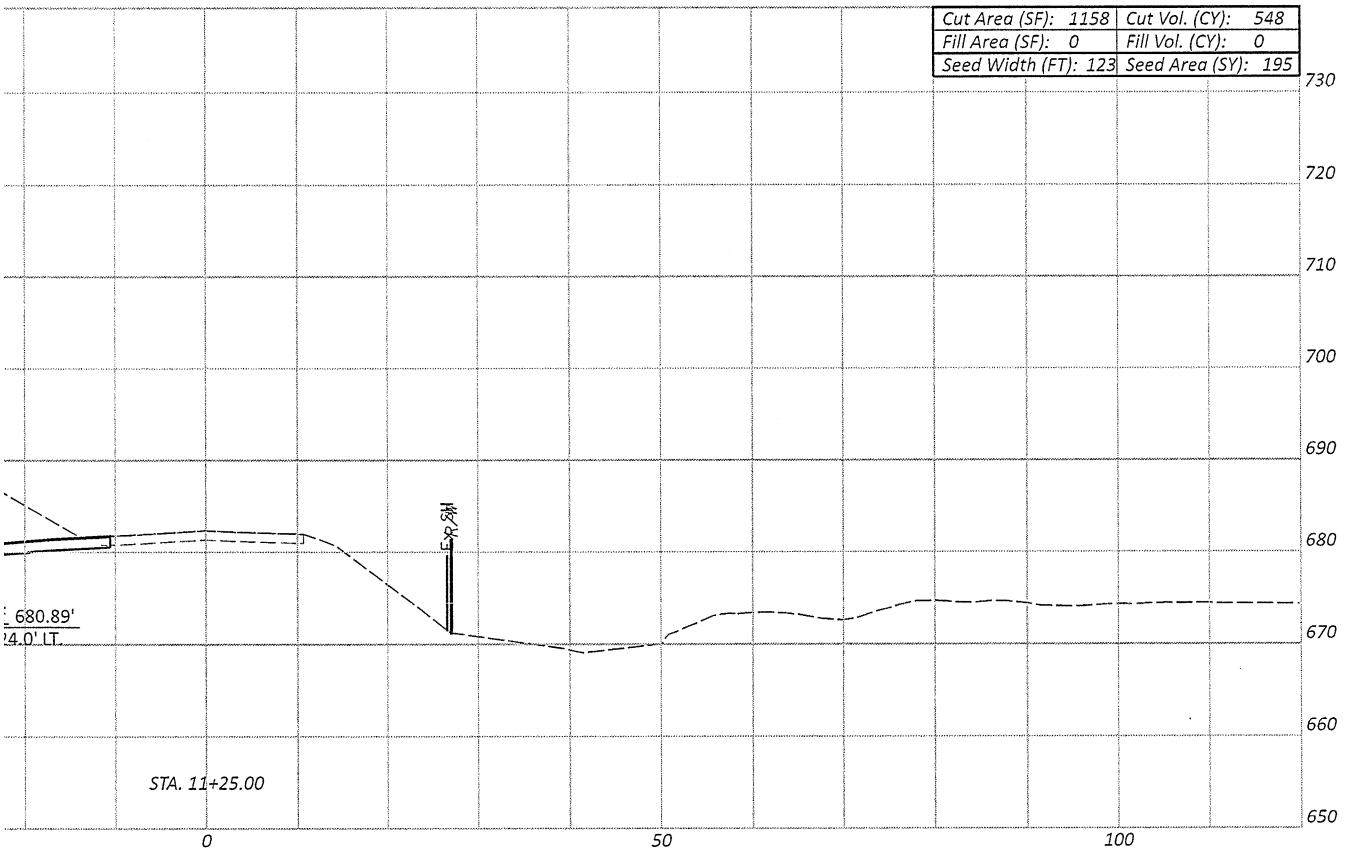
DESIGN AGENCY

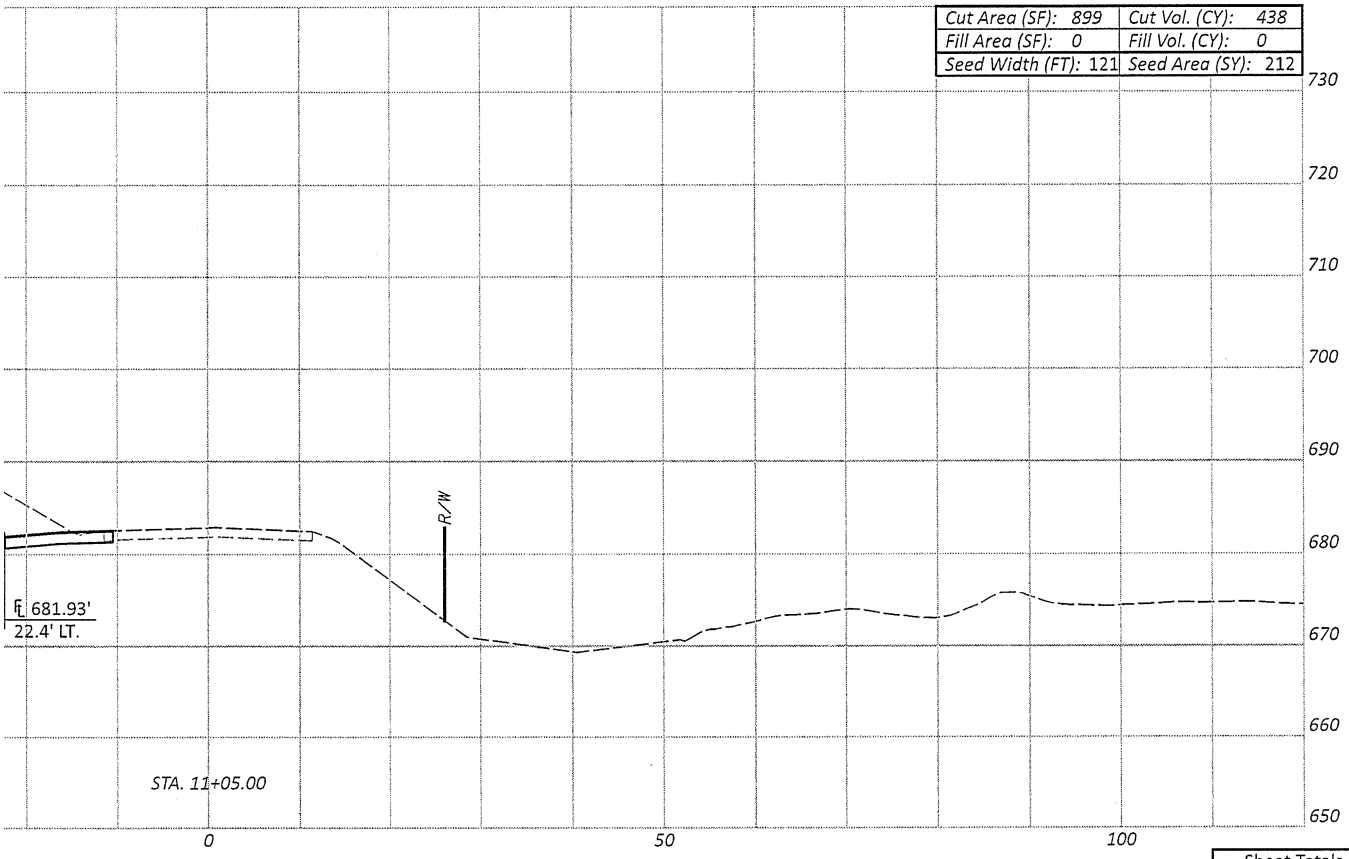
DESIGNER
GPM

REVIEWER

PROJECT ID
115989

SHEET P.17 TOTAL 28





CROSS SECTIONS - S.R. 376
STA. 11+05 - STA. 11+25

DESIGN AGENCY

DESIGNER
GPM

REVIEWER

PROJECT ID
115989

Sheet Totals		
Seeding	Cut	Fill
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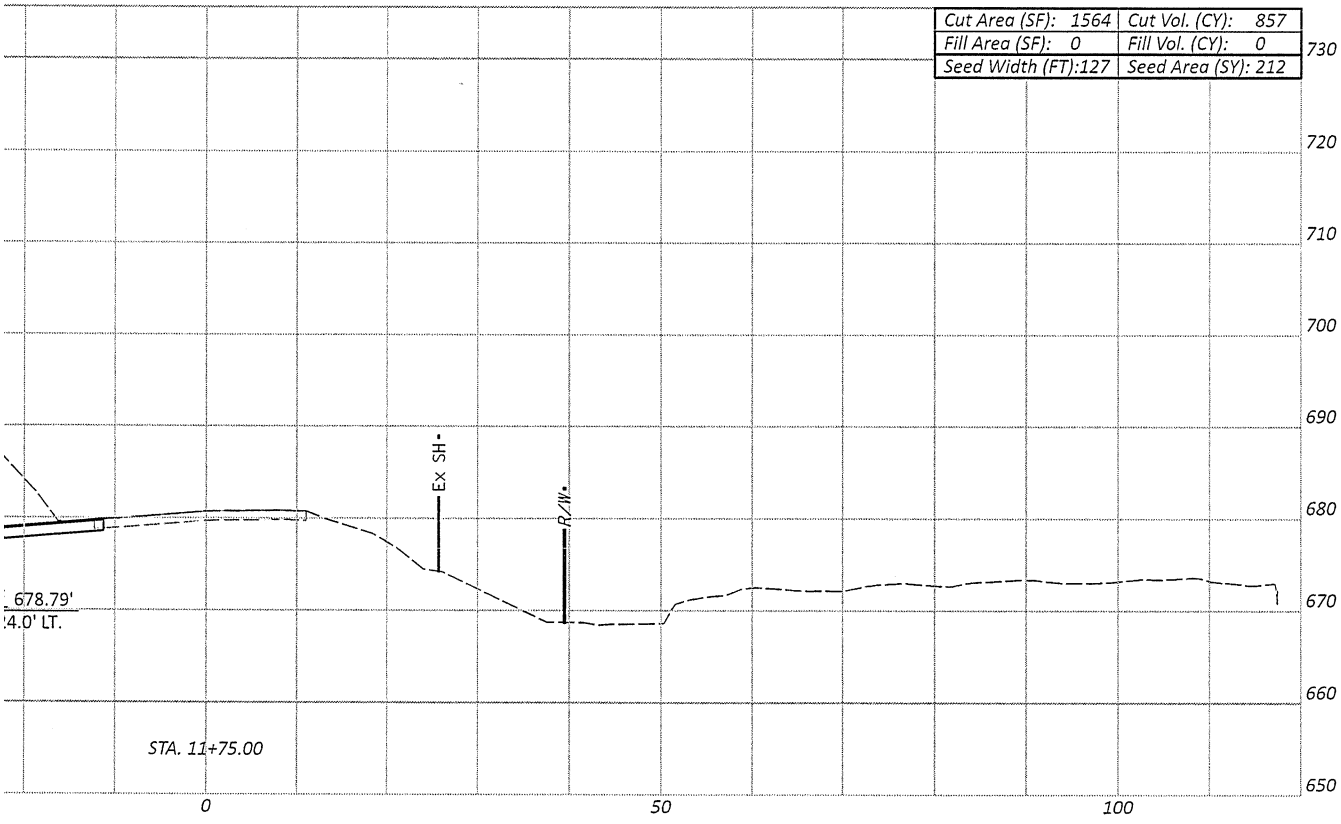
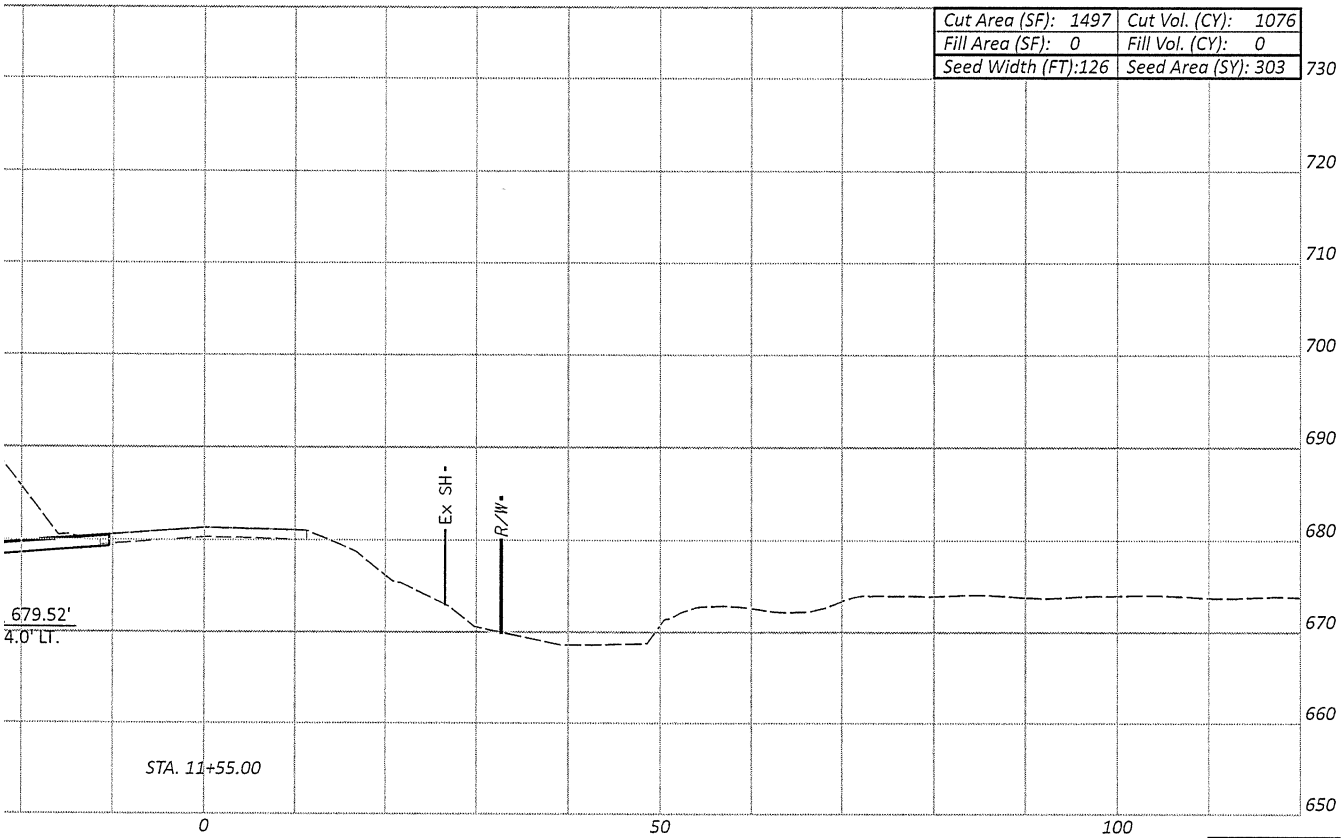
SHEET	TOTAL
P.18	28

CROSS SECTIONS - S.R. 376
STA. 11+55 - STA. 11+75





Sheet Totals		
Seeding	Cut	Fill
515	1933	0

DESIGN AGENCY

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REVIEWER

PROJECT ID
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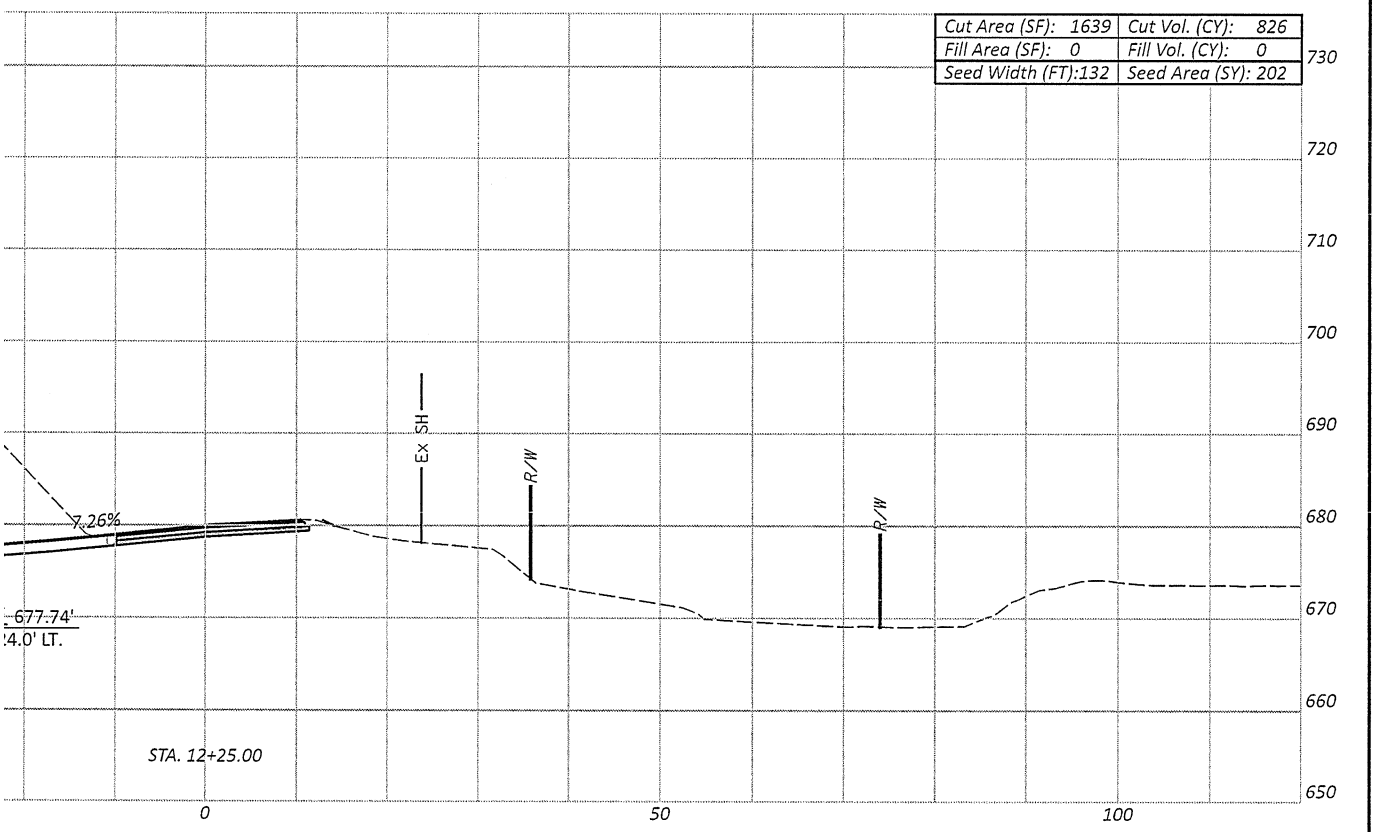
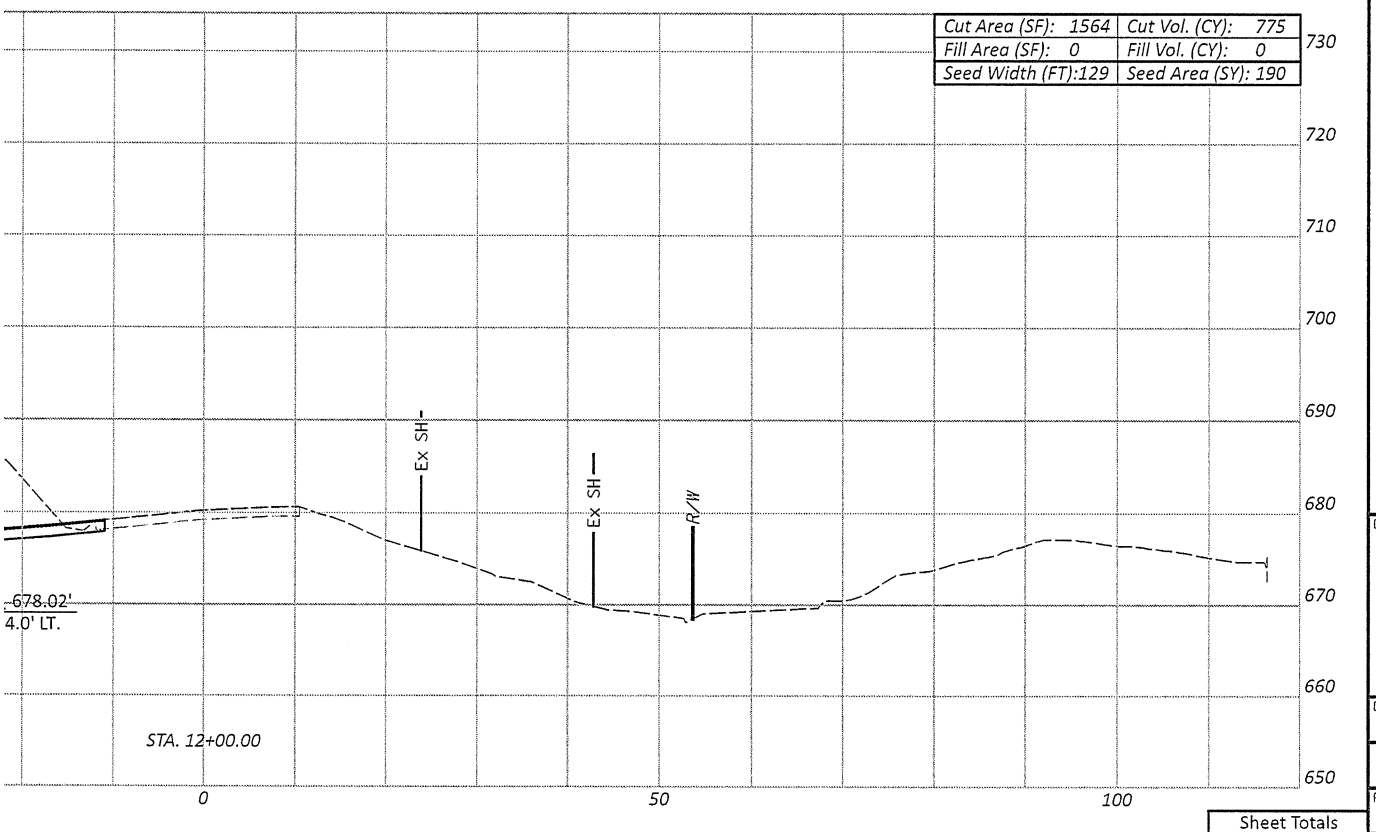
SHEET	TOTAL
P.19	28





CROSS SECTIONS - S.R. 376
STA. 12+00 - STA. 12+25

Sheet Totals		
Seeding	Cut	Fill
392	1601	0

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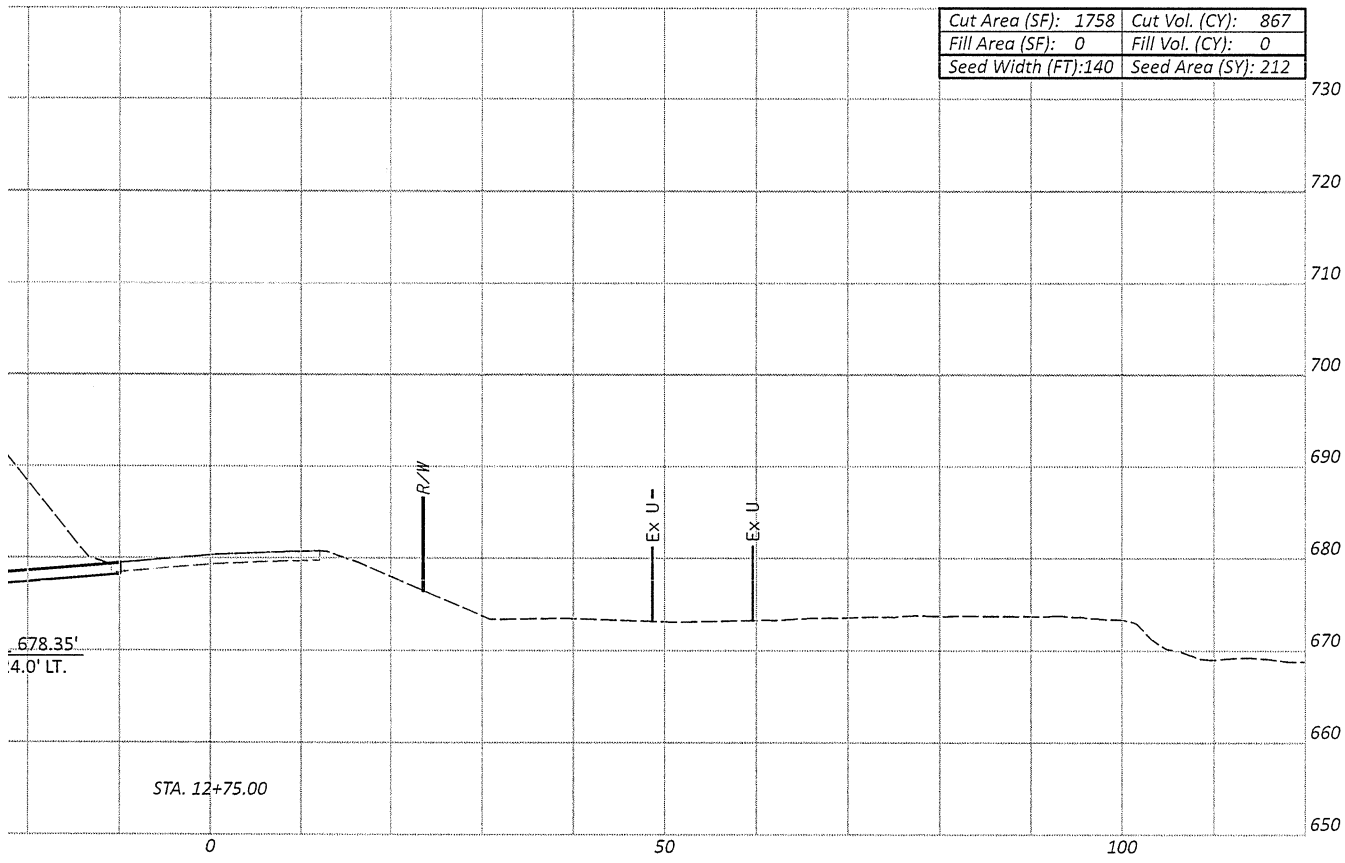
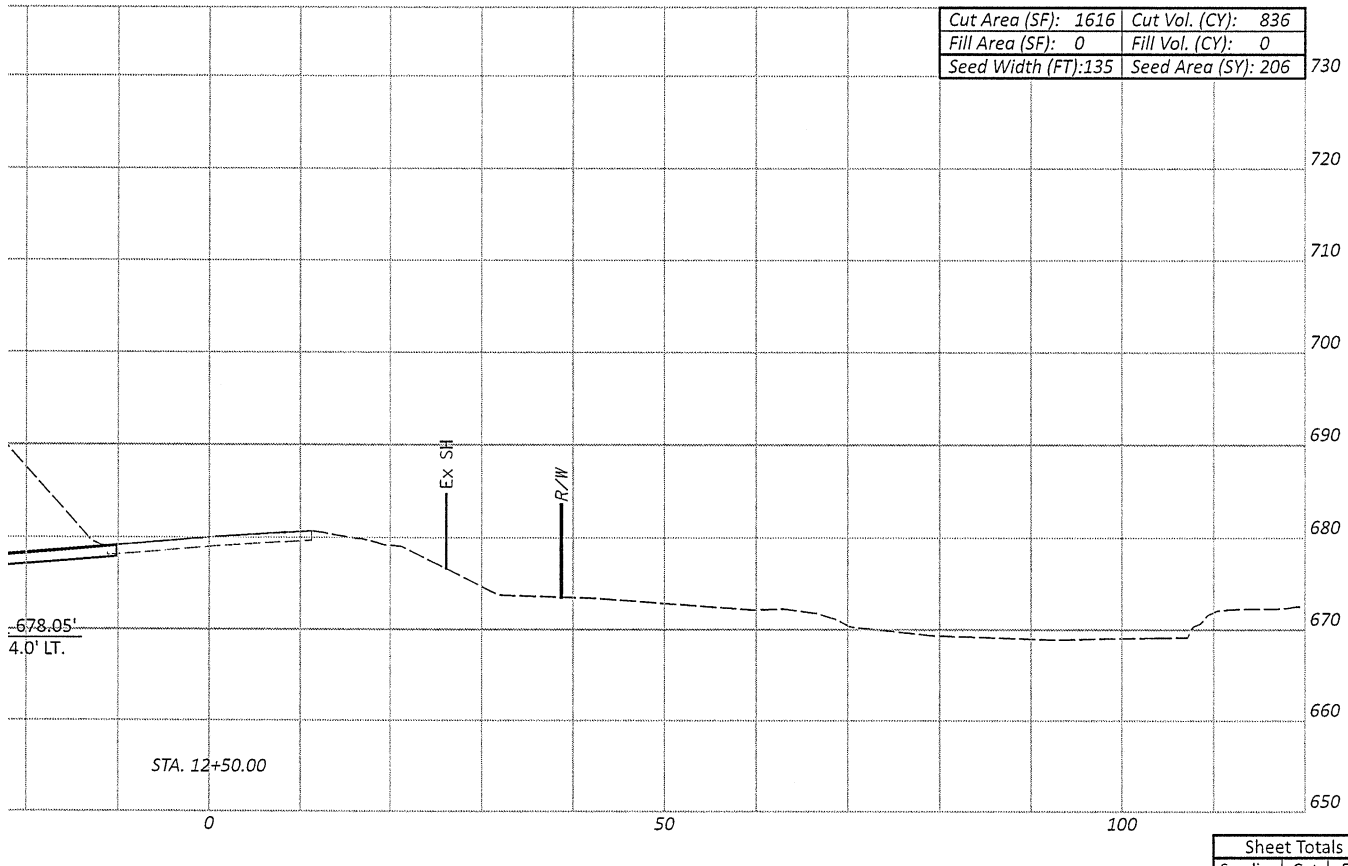
SHEET P.20 TOTAL 28

Cut Area (SF): 1758	Cut Vol. (CY): 867
Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT):140	Seed Area (SY): 212



Cut Area (SF): 1616	Cut Vol. (CY): 836
Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT):135	Seed Area (SY): 206



CROSS SECTIONS - S.R. 376
STA. 12+50 - STA. 12+75

DESIGN AGENCY

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PROJECT ID
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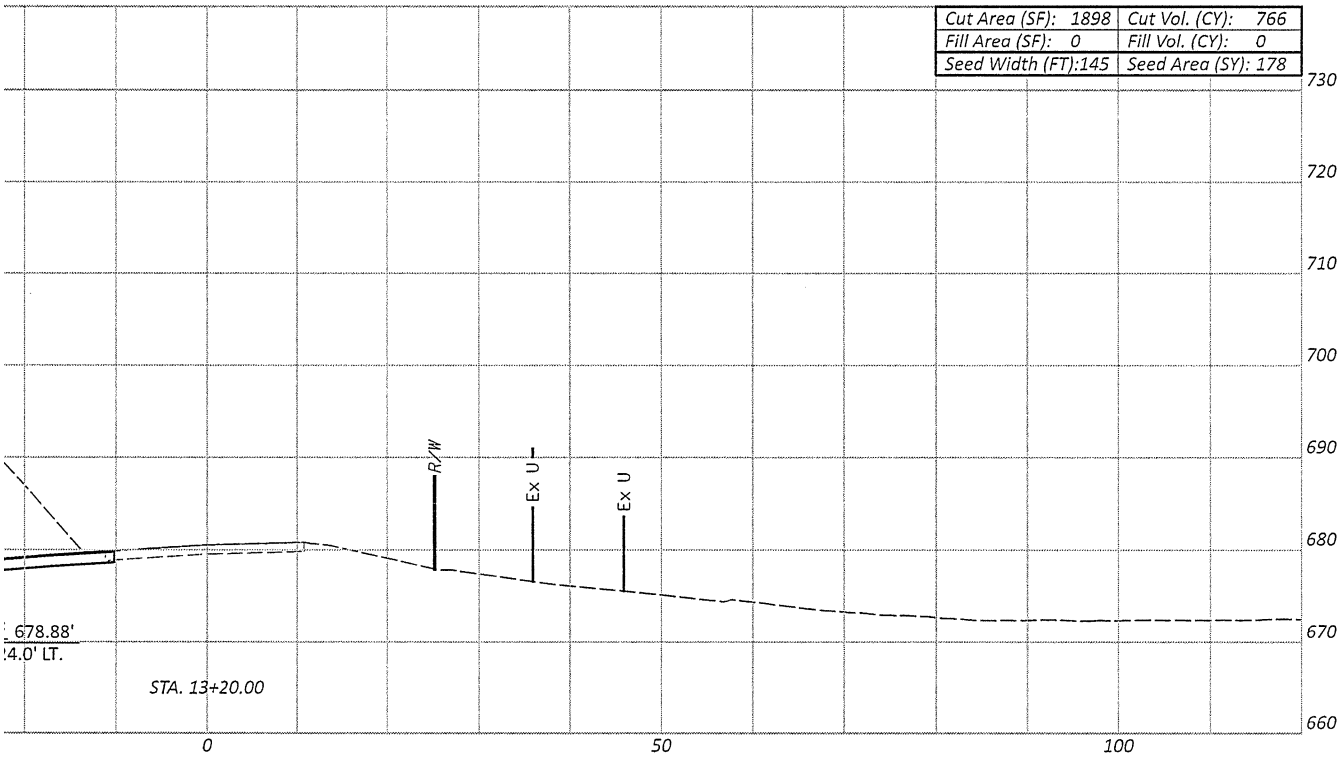
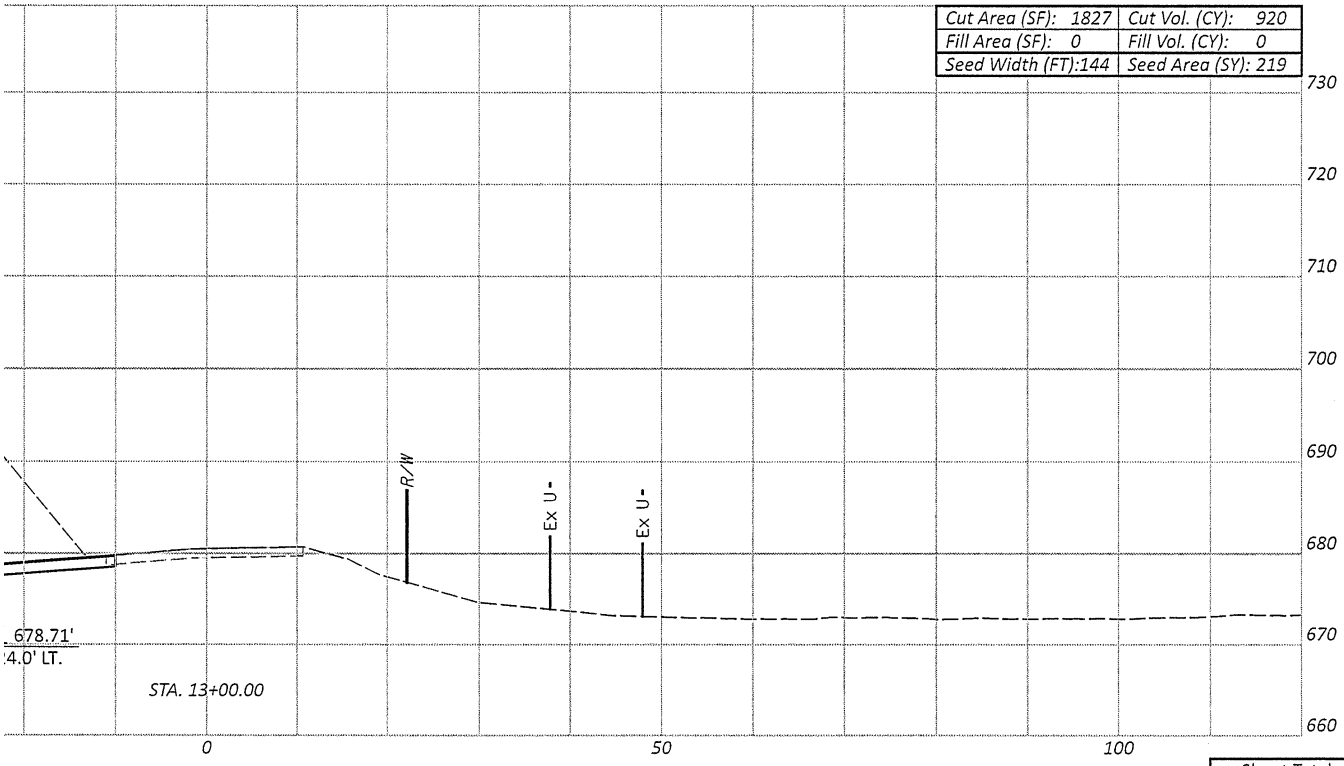
Sheet Totals		
Seeding	Cut	Fill
418	1703	0

SHEET	TOTAL
P.21	28





CROSS SECTIONS - S.R. 376
STA. 13+00 - STA. 13+20

Sheet Totals		
Seeding	Cut	Fill
397	1686	0

DESIGN AGENCY

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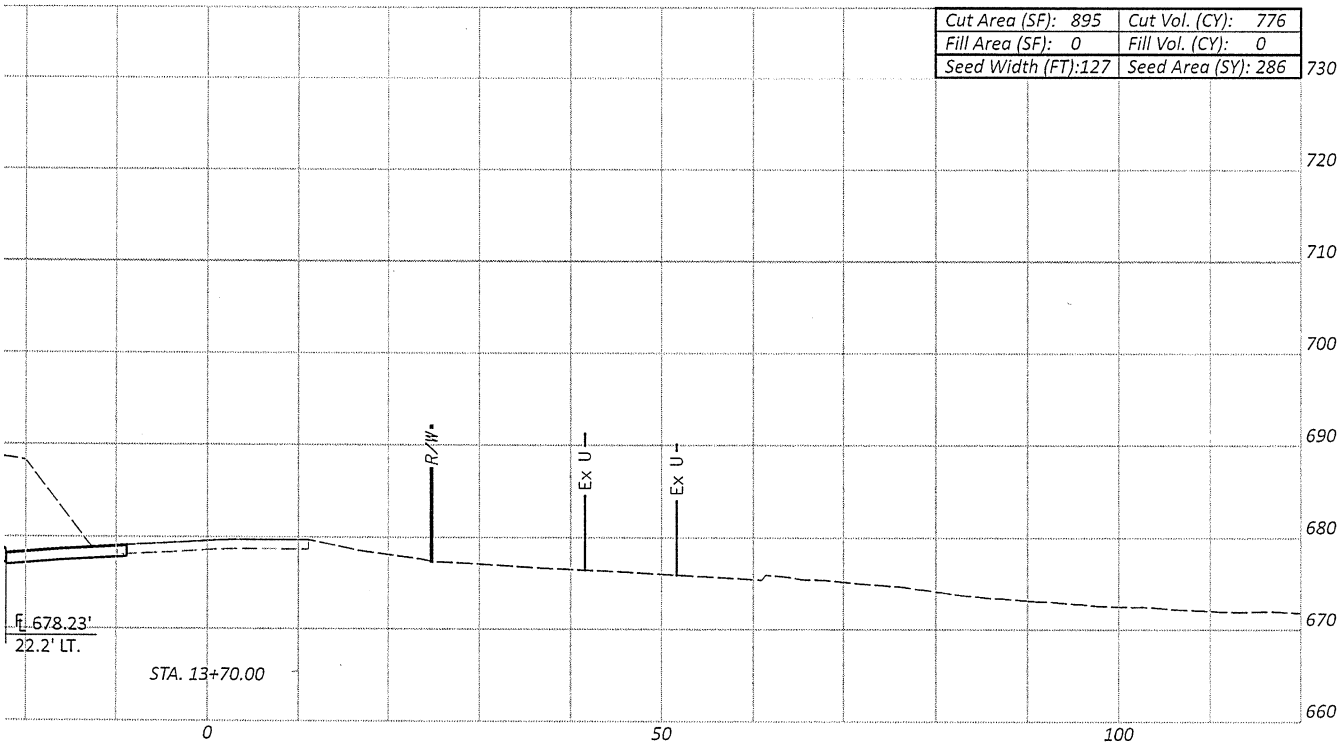
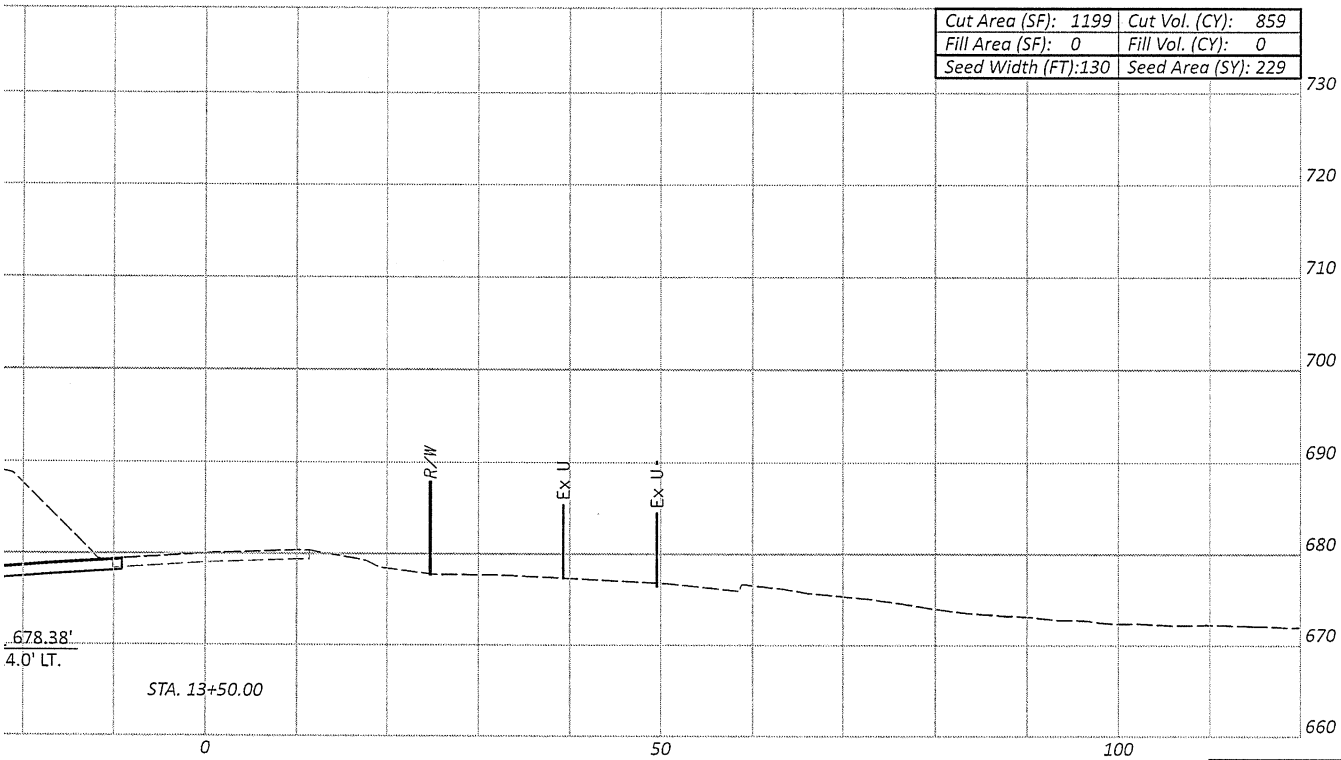
SHEET P.22 | TOTAL 28





CROSS SECTIONS - S.R. 376
STA. 13+50 - STA. 13+70

Sheet Totals		
Seeding	Cut	Fill
515	1635	0

DESIGN AGENCY

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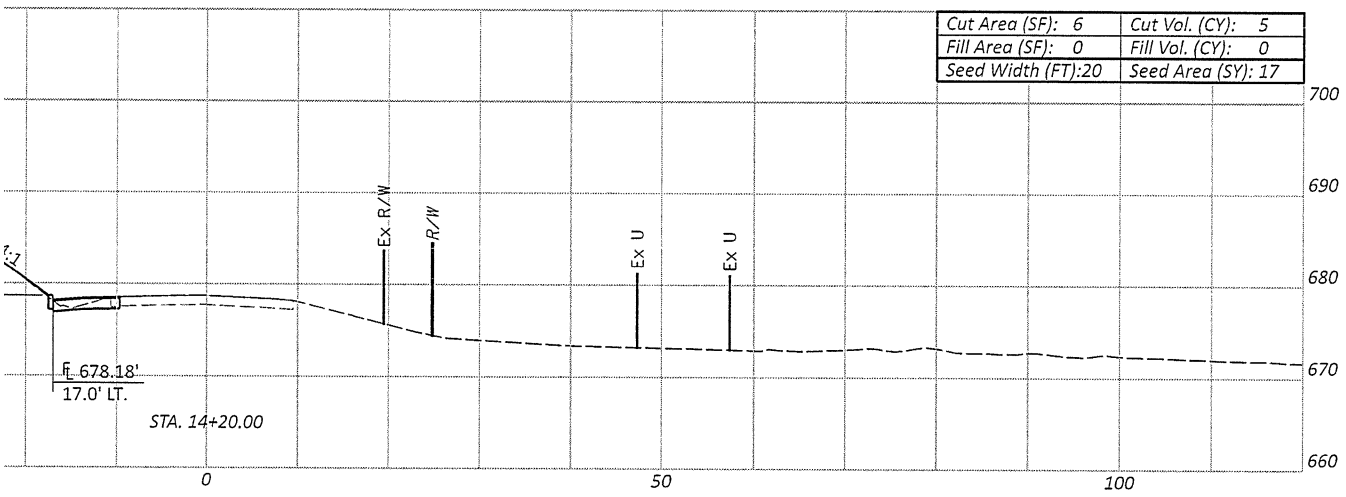
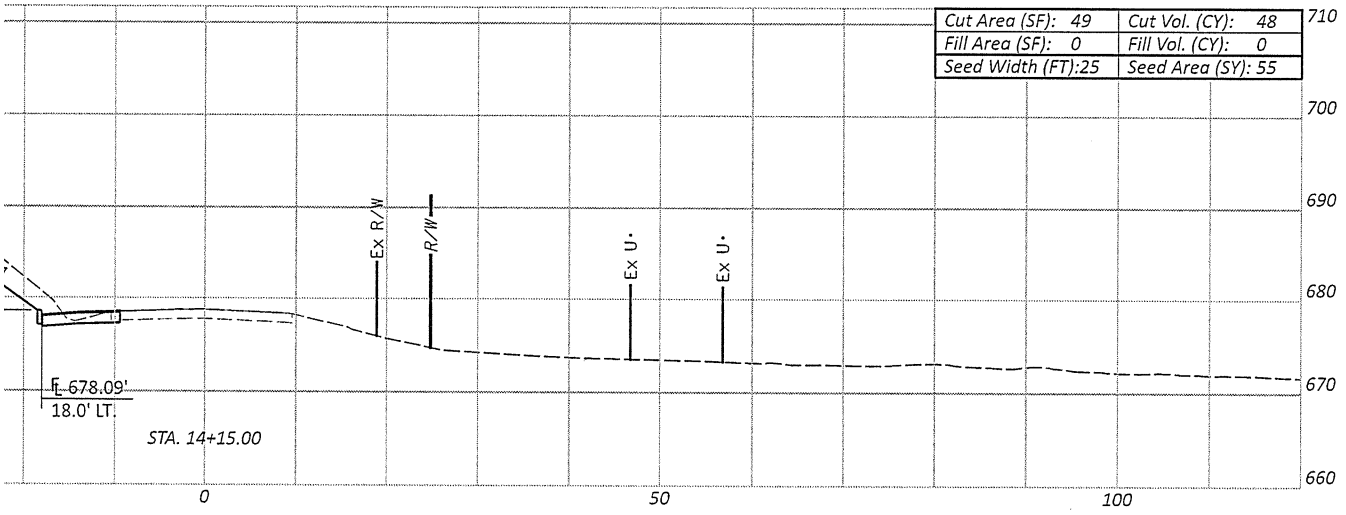
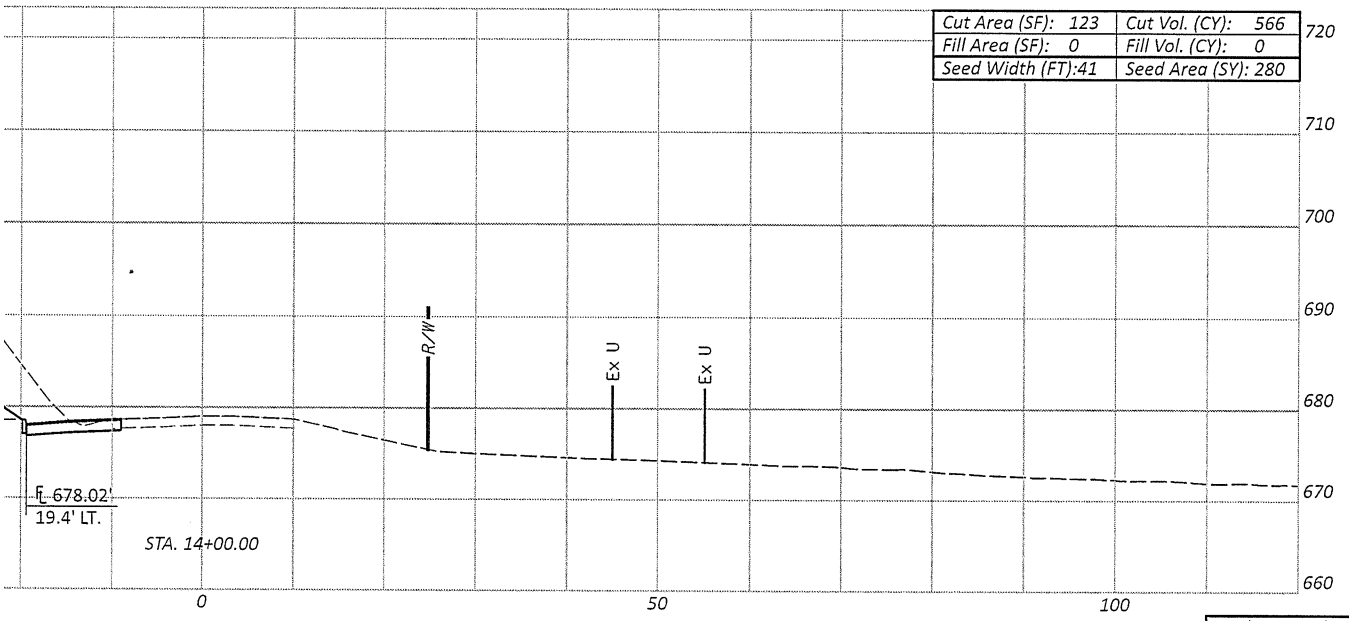
SHEET P.23 TOTAL 28

CROSS SECTIONS - S.R. 376
STA. 14+00 - STA. 14+20







Sheet Totals		
Seeding	Cut	Fill
352	619	0

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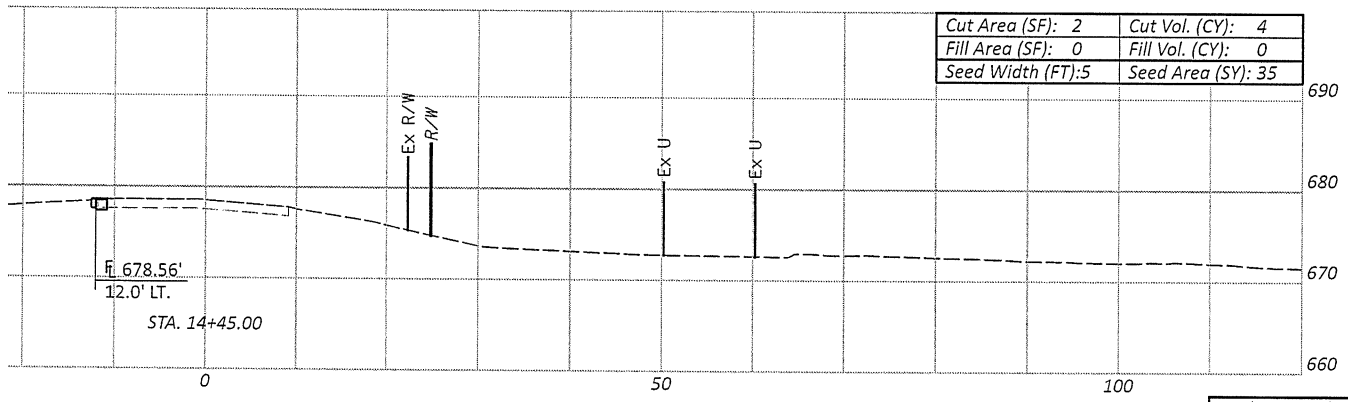
SHEET	TOTAL
P.24	28

ONS DUE TO ROADWAY CURVATURE				
RECTED ARC LENGTH (FT)	CUT AREA (SF)	SEEDING WIDTH (FT)	CORRECTED CUT VOLUME (CY)	CORRECTED SEED AREA (SY)
-	62	34	-	-
24.62	899	121	438	212
14.39	1158	123	548	195
21.89	1497	126	1076	303
15.11	1564	127	857	212
13.39	1564	129	775	190
13.93	1639	132	826	202
13.88	1616	135	836	206
13.88	1758	140	867	212
13.86	1827	144	920	219
11.11	1898	145	766	178
14.97	1199	130	859	229

HWORK TOTALS		
Y)	FILL (CY)	SEEDING (SY)
	0	17
	0	74
	0	407
	0	515
	0	392
	0	418
	0	397
	0	515
	0	352
	0	35
l	0	3122

ES CARRIED TO SHEET 5



Cut Area (SF): 2	Cut Vol. (CY): 4
Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT):5	Seed Area (SY): 35

Sheet Totals		
Seeding	Cut	Fill
35	4	0

CROSS SECTIONS - S.R. 376
STA. 14+45

DESIGN AGENCY

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REVIEWER

PROJECT ID
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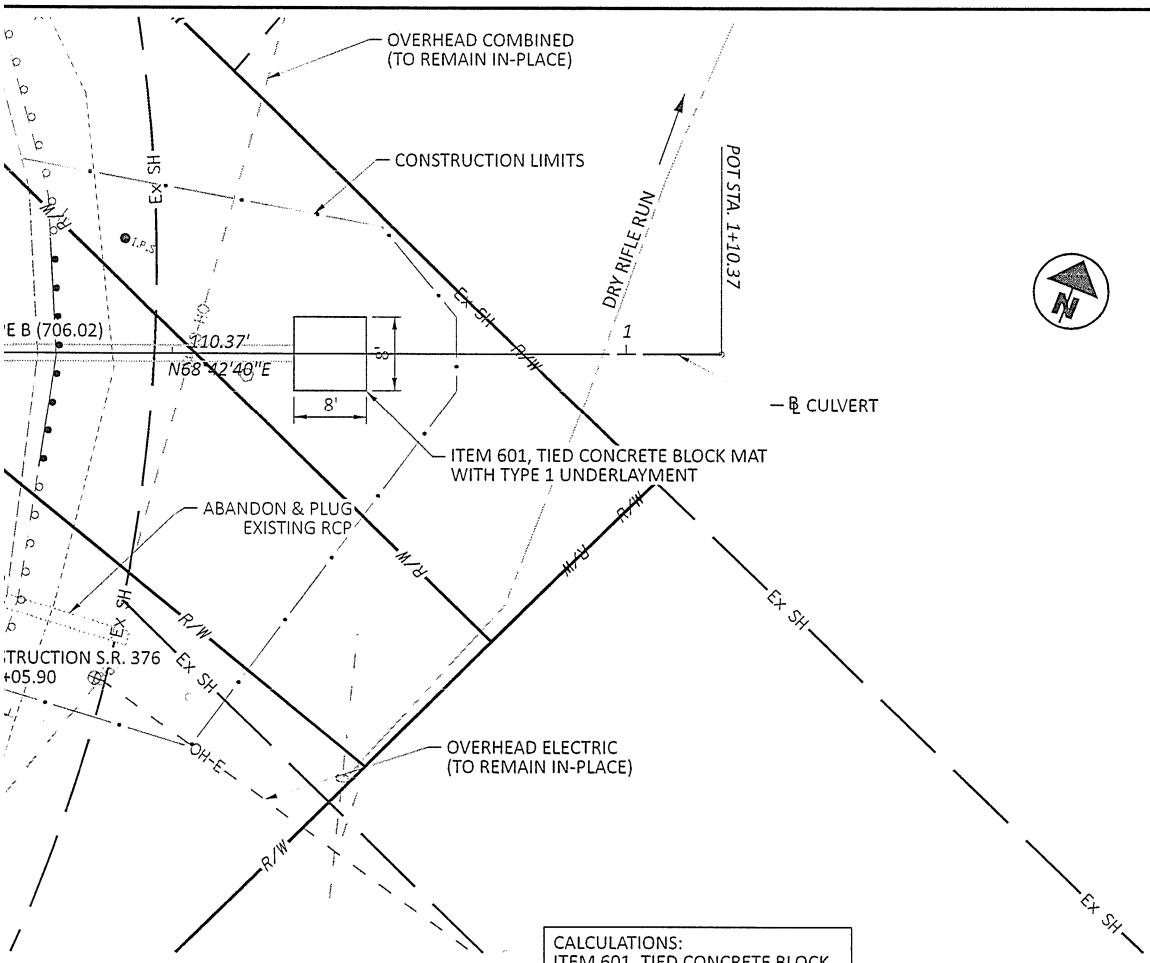
SHEET	TOTAL
P.25	28



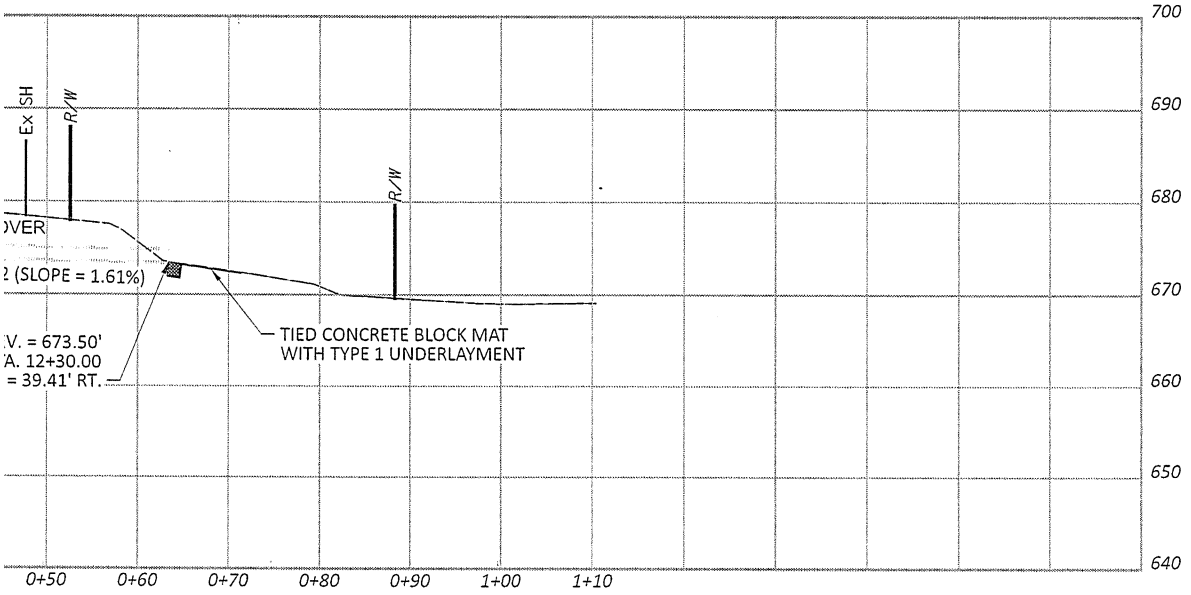
CALCULATIONS:
ITEM 601, TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT (8' X 8') = 7 SY

HORIZONTAL SCALE IN FEET
0 5 10 20

CULVERT DETAIL SHEET - STA. 12+30.00
S.R. - 376

PROPOSED STRUCTURE
CFN:
TYPE: B
DIAMETER: 15"
LENGTH: 62'
SKEW: 90.0°
STREAM:
LAT: 39.803000
LONG: -81.890036

HYDRAULIC DATA	
DRAINAGE AREA =	
DESIGN SERVICE LIFE = 75 YEARS	
ABRASION LEVEL =	
pH =	
Q10 =	V10 =
Q100 =	V100 =



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PROJECT ID
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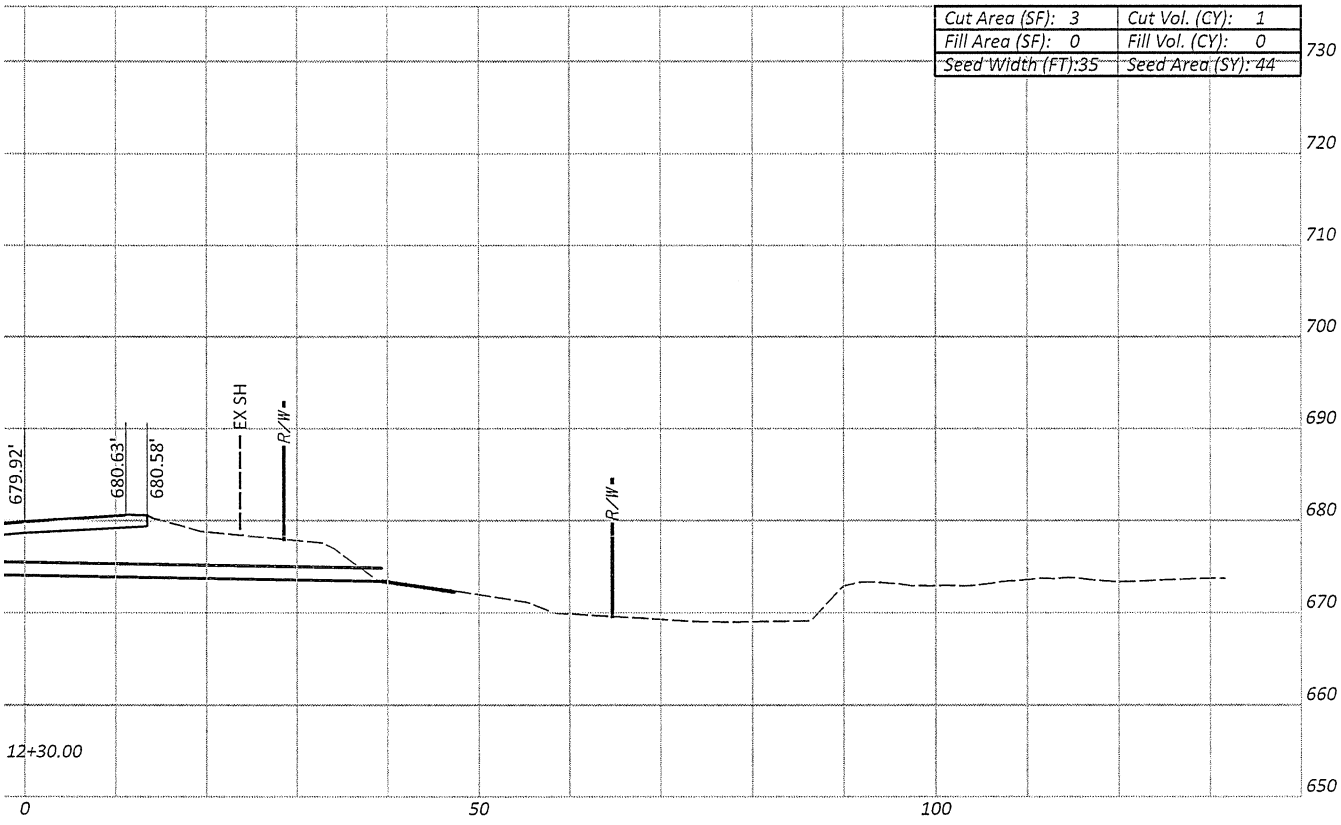
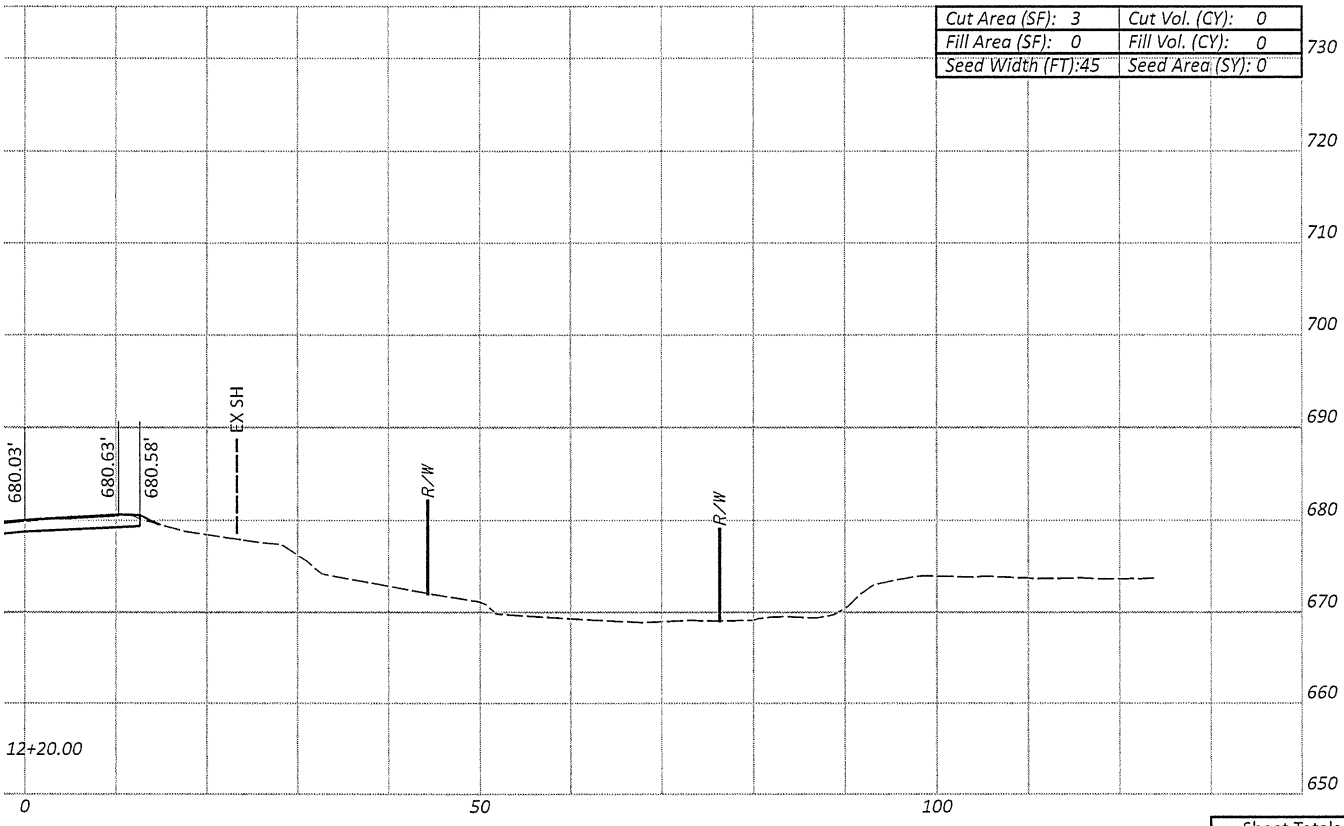
SHEET P.26 | TOTAL 28

CROSS SECTIONS FOR CULVERT INSTALLATION - S.R. 376
STA. 12+20 - STA. 12+30





Sheet Totals		
Seeding	Cut	Fill
44	1	0

DESIGN AGENCY

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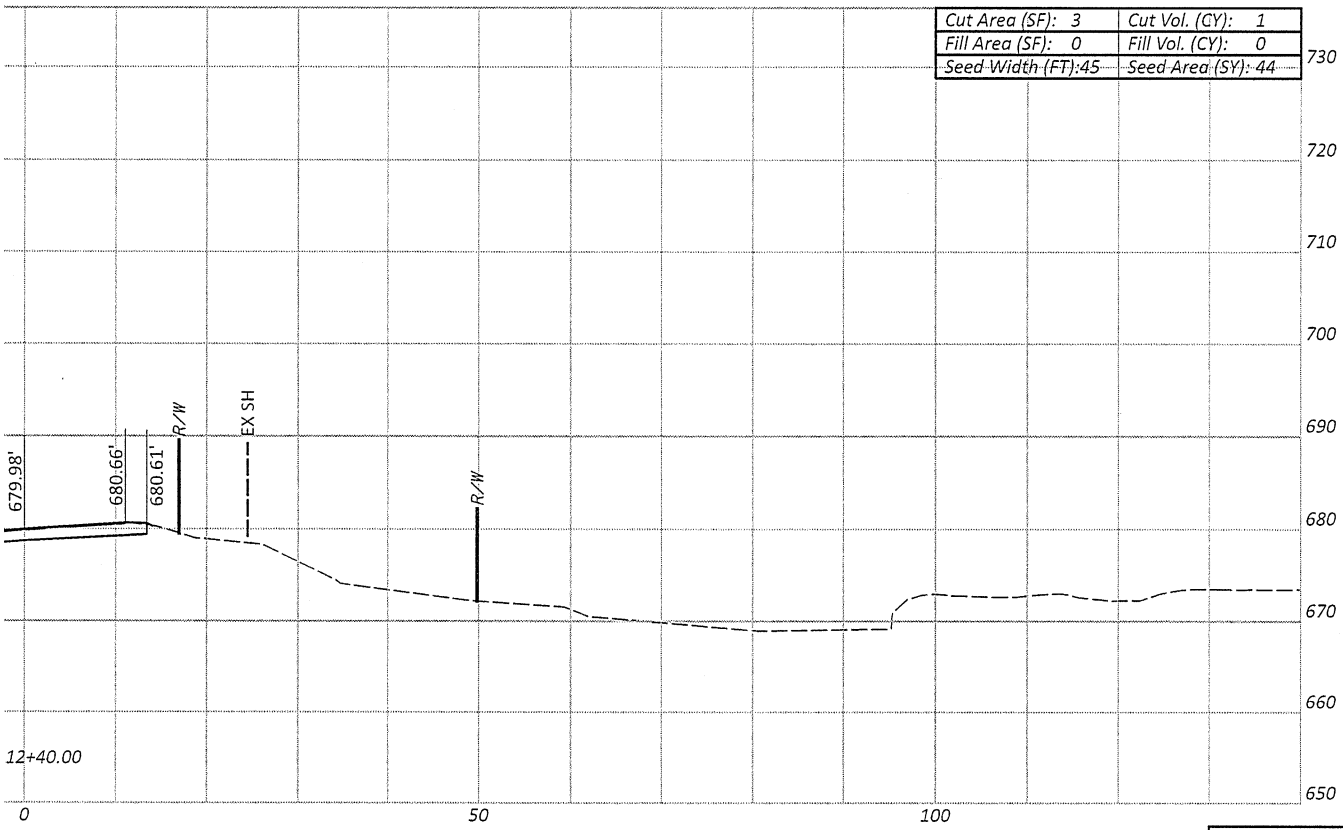
115989

SHEET P.27 TOTAL 28

CROSS SECTIONS FOR CULVERT INSTALLATION - S.R. 376
STA. 12+40

HWORK TOTALS		
Y)	FILL (CY)	SEEDING (SY)
	0	44
	0	44
	0	88

ES CARRIED TO SHEET 5



Sheet Totals		
Seeding	Cut	Fill
44	1	0

DESIGN AGENCY

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PROJECT ID
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SHEET P.28 TOTAL 28