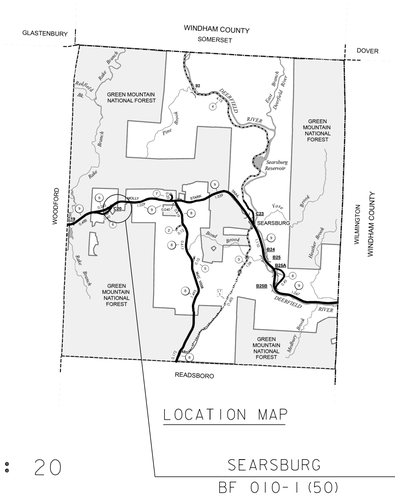
REVIEWER NOTES

1. THE BRIDGE WILL BE CLOSED FOR 12 DAYS. TRUCK TRAFFIC WILL BE MAINTAINED VIA A SIGNED STATE DETOUR. LOCAL TRAFFIC WILL USE OLD ROUTE 9.
2. IT IS ANTICIPATED THAT CHANNEL RIGHTS WILL BE NECESSARY FOR THIS PROJECT. THE EXTENT OF RIGHTS REQUIRED WILL NOT BE KNOWN UNTIL FINAL DESIGN.
3. THERE ARE NO EXISTING OVERHEAD UTILITIES WITHIN THE PROJECT AREA.
4. A SIMPLIFIED PAVEMENT DESIGN WILL BE DONE FOR THIS PROJECT.

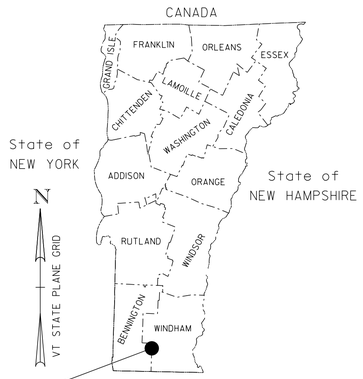
STATE OF VERMONT
AGENCY OF TRANSPORTATION

PROPOSED IMPROVEMENT
BRIDGE PROJECT

TOWN OF SEARSBURG
COUNTY OF BENNINGTON



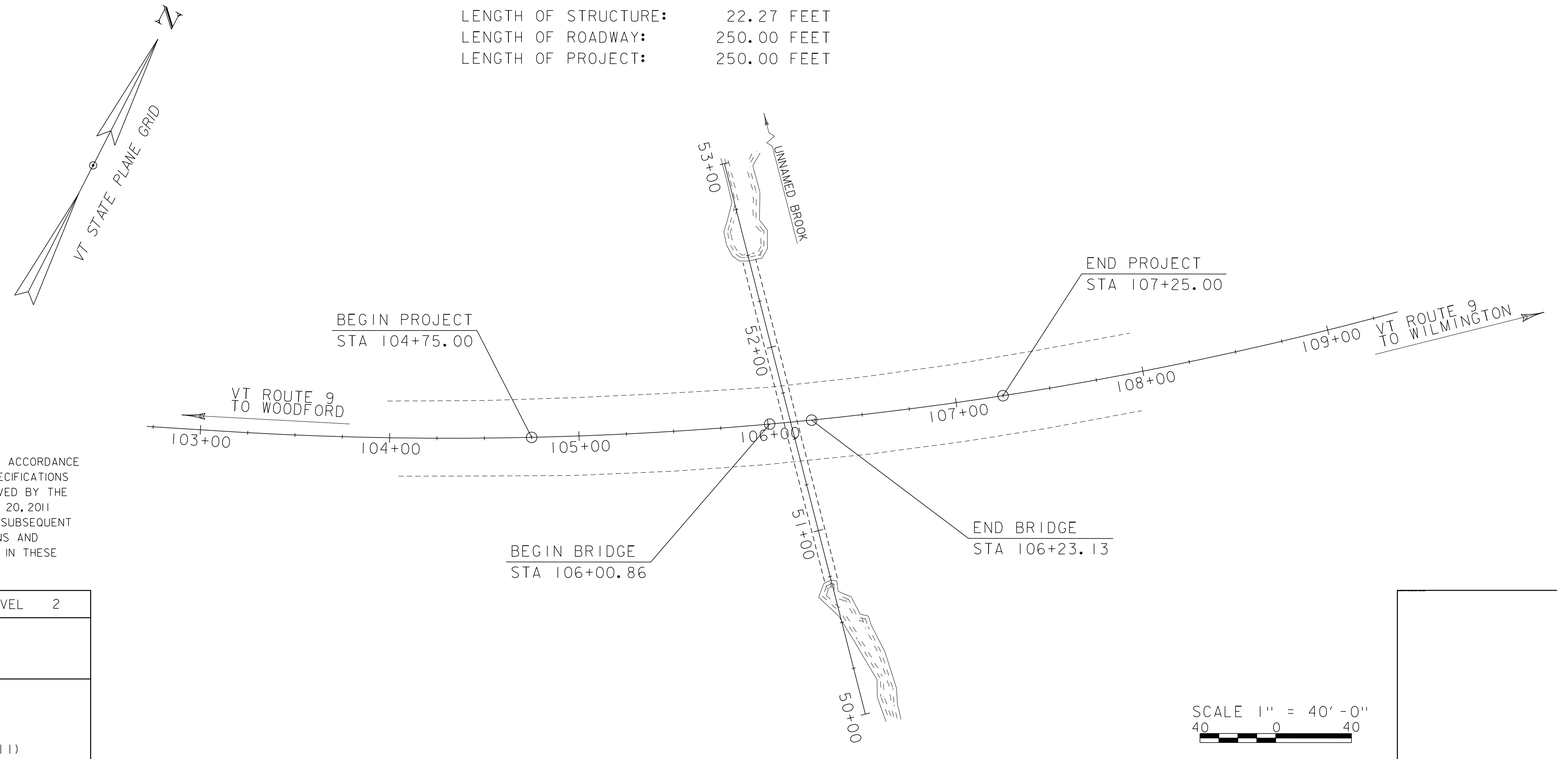
LOCATION MAP



SEARSBURG
BF 010-1(50)

ROUTE NO : VT ROUTE 9, RURAL PRINCIPAL ARTERIAL, BRIDGE NO : 20

PROJECT LOCATION:	APPROXIMATELY 1.1 MILES WEST OF THE INTERSECTION WITH VT ROUTE 8.
PROJECT DESCRIPTION:	REPLACEMENT OF EXISTING CULVERT WITH A NEW PRECAST CONCRETE BOX CULVERT WITH RELATED APPROACH ROADWAY AND CHANNEL WORK.
LENGTH OF STRUCTURE:	22.27 FEET
LENGTH OF ROADWAY:	250.00 FEET
LENGTH OF PROJECT:	250.00 FEET



SCALE 1" = 40'-0"
40 0 40

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

REVISED
CONCEPTUAL PLANS
21-APR-2017

QUALITY ASSURANCE PROGRAM : LEVEL	2
SURVEYED BY :	VTRANS
SURVEYED DATE :	07/08/2014
DATUM	
VERTICAL	NAVD88
HORIZONTAL	NAVD83 (2011)

GM2 ASSOCIATES

GM2 Associates, Inc.
197 Loudon Road, Suite 310
Concord, NH 03301

Tel: 603-856-7854
Fax: 603-856-7855

DIRECTOR OF PROJECT DELIVERY
APPROVED _____ DATE _____

PROJECT MANAGER : N. WARK

PROJECT NAME : SEARSBURG
PROJECT NUMBER : BF 010-1(50)

SHEET 1 OF 15 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET (CULVERT)

Version
LRFD

INDEX OF SHEETS

PLAN SHEETS

STANDARDS LIST

STRUCTURES DETAIL SHEETS

FINAL HYDRAULIC REPORT

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2017	3200	490	54	15.2	540
2037	3400	520	54	19.9	750

20 year ESAL for flexible pavement from 2017 to 2037 : N/A

40 year ESAL for flexible pavement from 2017 to 2057 : N/A

Design Speed : 50 mph

AS BUILT "REBAR" DETAIL

LEVEL I	LEVEL II	LEVEL III
TYPE:	TYPE:	TYPE:
GRADE:	GRADE:	GRADE:

LRFR LOAD RATING FACTORS

LOADING LEVELS	TRUCK						
	H-20	HL-93	3S2	6 AXLE	3A STR.	4A STR.	5A SEMI
TONNAGE	**20**	**36**	**36**	**66**	**30**	**34.5**	**38**
INVENTORY							
POSTING							
OPERATING							
COMMENTS:	TABLE TO BE COMPLETED BY CONTRACTOR'S DESIGNER						

CULVERT DESIGN CRITERIA

1. PROPOSED CULVERT IS A STEEL CORRUGATED (0'-0" X 0'-0" X 0'-0" PIPE).
2. CULVERT ENDS ARE NOT SKEWED.
3. CULVERT WILL BE SET AT A SLOPE OF 0.00 IN. ON 0 FT.
4. CULVERT WILL NOT REQUIRE FISH PASSAGE ACCOMODATIONS
5. CULVERT CONSTRUCTION WILL NOT REQUIRE A TEMPORARY PIPE

TRAFFIC MAINTENANCE NOTES

1. MAINTAIN TWO-WAY TRAFFIC ON THE EXISTING STRUCTURE.
2. TRAFFIC SIGNALS ARE NOT NECESSARY.
3. SIDEWALKS ARE NOT NECESSARY

DESIGN VALUES

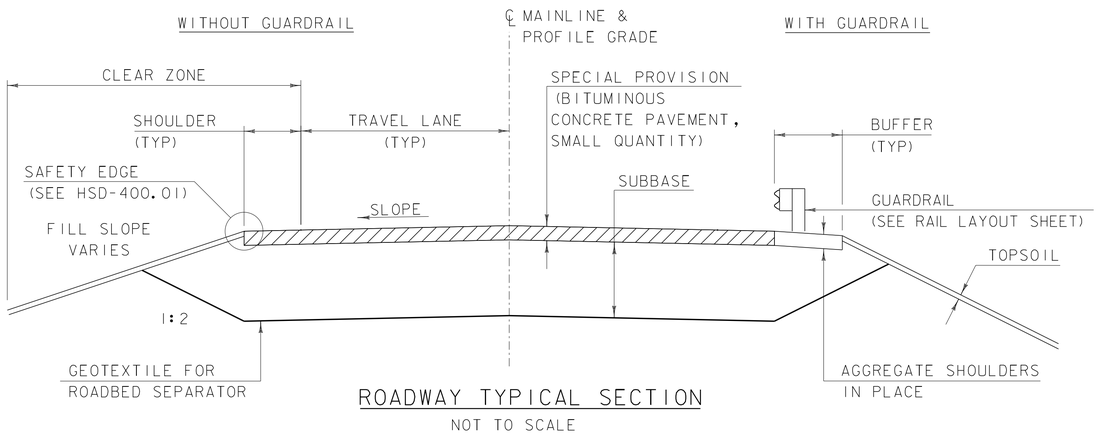
1. DESIGN LIVE LOAD		HL-93
2. FUTURE PAVEMENT	d_p:	---
3. CULVERT OPENING	D:	7.00 FT
4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)	Δ:	---
5. PRESTRESSING STRAND	f_y:	---
6. PRESTRESSED CONCRETE STRENGTH	f'_c:	---
7. PRESTRESSED CONCRETE RELEASE STRENGTH	f'_{ci}:	---
8. CONCRETE, HIGH PERFORMANCE CLASS AA	f'_c:	--- KSI
9. CONCRETE, HIGH PERFORMANCE CLASS A	f'_c:	--- KSI
10. CONCRETE, HIGH PERFORMANCE CLASS B	f'_c:	3.5 KSI
11. CONCRETE, CLASS C	f'_c:	--- KSI
12. REINFORCING STEEL	f_y:	60 KSI
13. STRUCTURAL STEEL AASHTO M270	f_y:	---
14. NOMINAL BEARING RESISTANCE OF SOIL	q_n:	--- KSF
15. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	---
16. NOMINAL BEARING RESISTANCE OF ROCK	q_n:	--- KSF
17. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	---
18. PILE RESISTANCE FACTOR	ϕ:	---
19. LATERAL PILE DEFLECTION	Δ:	--- INCH
20. BASIC WIND SPEED	V_{3s}:	---
21. MINIMUM GROUND SNOW LOAD	p_g:	---
22. SEISMIC DATA PGA: ---	S_s:	---
	S_1:	---
23.		
24.		---
25.		---
26.		---

PROJECT NAME: **SEARSBURG**

PROJECT NUMBER: **BF 010-1(50)**

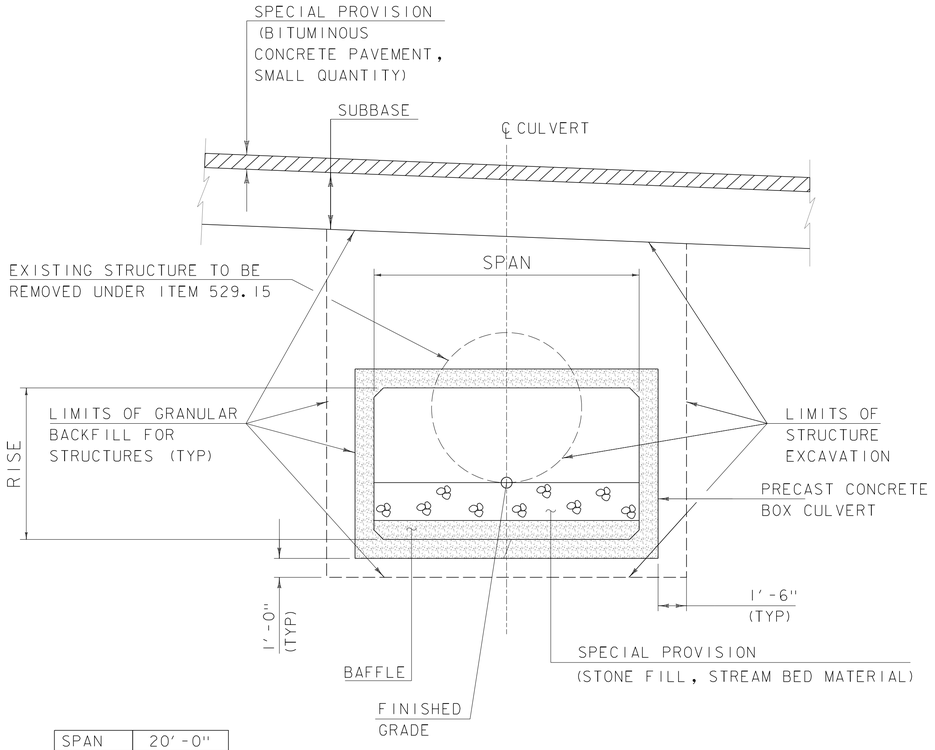
FILE NAME: **z13b332pi.dgn**
PROJECT LEADER: **T. LEVINS**
DESIGNED BY: **B. WILLIAMS**
PRELIMINARY INFORMATION SHEET

PLOT DATE: 4/21/2017
DRAWN BY: **B. WILLIAMS**
CHECKED BY: **T. LEVINS**
SHEET 2 OF 15



ROADWAY TYPICAL SECTION

NOT TO SCALE



SPAN	20'-0"
RISE	13'-0"
LENGTH	150'-0"

CULVERT TYPICAL SECTION

NOT TO SCALE

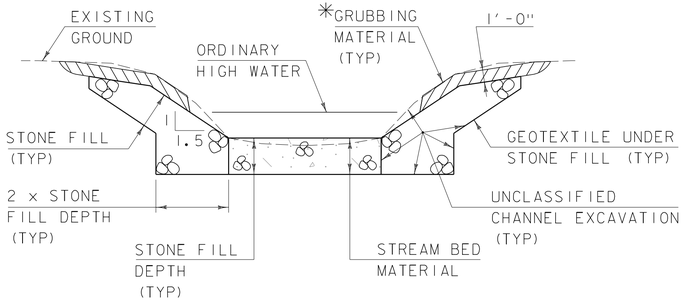
ROAD TYPICAL INFORMATION

	LEFT		RIGHT	
	WIDTH	SLOPE	WIDTH	SLOPE
TRAVEL LANE	12'-0"	VARIES	12'-0"	VARIES
SHOULDER	10'-0"	VARIES	10'-0"	VARIES
BUFFER	3'-7"	-0.060	3'-7"	-0.060
FILL SLOPE		1:1.75		1:1.75
CLEAR ZONE (CUT)	12'-0"		12'-0"	
CLEAR ZONE (FILL)	20'-0"		20'-0"	
CLEAR ZONE (GUARDRAIL)	4'-0"		4'-0"	

MATERIAL INFORMATION

	THICKNESS	TYPE
WEARING COURSE	1½"	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY) (TYPE IVS)
BINDER COURSE	1½"	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY) (TYPE IVS)
BASE COURSE #2	N/A	N/A
BASE COURSE #1	3½"	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY) (TYPE IIS)
SUBBASE	36"	SUBBASE OF DENSE GRADED CRUSHED STONE
STONE FILL	4'-0"	STONE FILL, TYPE IV
TOPSOIL	4"	TOPSOIL
STREAM BED MATERIAL	3'-0"	SPECIAL PROVISION (STONE FILL, STREAM BED MATERIAL) (TYPE III)

✳ WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.



CHANNEL TYPICAL SECTION

NOT TO SCALE

PROJECT NAME: SEARSBURG
PROJECT NUMBER: BF 010-1(50)

FILE NAME: zl3b332typ.dgn
PROJECT LEADER: T. LEVINS
DESIGNED BY: B. WILLIAMS
TYPICAL SECTION

PLOT DATE: 7/6/2016
DRAWN BY: B. WILLIAMS
CHECKED BY: T. LEVINS
SHEET 3 OF 15

GM2 ASSOCIATES

GENERAL INFORMATION

SYMBOLOGY LEGEND NOTE

THE SYMBOLOGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLOGY. THE SYMBOLOGY IS USED FOR EXISTING & PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROJECT ANNOTATION, AS NOTED ON PROJECT PLAN SHEETS. THIS LEGEND SHEET COVERS THE BASICS. SYMBOLOGY ON PLANS MAY VARY, PLAN ANNOTATIONS AND NOTES SHOULD BE USED TO CLARIFY AS NEEDED.

R.O.W. ABBREVIATIONS (CODES) & SYMBOLS

POINT	CODE	DESCRIPTION
	CH	CHANNEL EASEMENT
	CONST	CONSTRUCTION EASEMENT
	CUL	CULVERT EASEMENT
	D&C	DISCONNECT & CONNECT
	DIT	DITCH EASEMENT
	DR	DRAINAGE EASEMENT
	DRIVE	DRIVEWAY EASEMENT
	EC	EROSION CONTROL
	HWY	HIGHWAY EASEMENT
	I&M	INSTALL & MAINTAIN EASEMENT
	LAND	LANDSCAPE EASEMENT
	R&RES	REMOVE & RESET
	R&REP	REMOVE & REPLACE
	SR	SLOPE RIGHT
	UE	UTILITY EASEMENT
	(P)	PERMANENT EASEMENT
	(T)	TEMPORARY EASEMENT
■	BNDNS	BOUND SET
⧈	BNDNS	BOUND TO BE SET
●	IPNS	IRON PIN SET
◎	IPNS	IRON PIN TO BE SET
☒	CALC	EXISTING ROW POINT
○	PROW	PROPOSED ROW POINT
[LENGTH]		LENGTH CARRIED ON NEXT SHEET

COMMON TOPOGRAPHIC POINT SYMBOLS

POINT	CODE	DESCRIPTION
	APL	BOUND APPARENT LOCATION
	BM	BENCHMARK
	BND	BOUND
	CB	CATCH BASIN
	COMB	COMBINATION POLE
	DITHR	DROP INLET THROATED DNC
	EL	ELECTRIC POWER POLE
	FPOLE	FLAGPOLE
	GASFIL	GAS FILLER
	GP	GUIDE POST
	GSO	GAS SHUT OFF
	GUY	GUY POLE
	GUYW	GUY WIRE
	GV	GATE VALUE
	H	TREE HARDWOOD
	HCTRL	CONTROL HORIZONTAL
	HVCTRL	CONTROL HORIZ. & VERTICAL
	HYD	HYDRANT
	IP	IRON PIN
	IPIPE	IRON PIPE
	LI	LIGHT - STREET OR YARD
	MB	MAILBOX
	MH	MANHOLE (MH)
	MM	MILE MARKER
	PM	PARKING METER
	PMK	PROJECT MARKER
	POST	POST STONE/WOOD
	RRSIG	RAILROAD SIGNAL
	RRSL	RAILROAD SWITCH LEVER
	S	TREE SOFTWOOD
	SAT	SATELLITE DISH
	SHRUB	SHRUB
	SIGN	SIGN
	STUMP	STUMP
	TEL	TELEPHONE POLE
	TIE	TIE
	TSIGN	SIGN W/DOUBLE POST
	VCTRL	CONTROL VERTICAL
	WELL	WELL
	WSO	WATER SHUT OFF

THESE ARE COMMON VAOT SURVEY POINT SYMBOLS FOR EXISTING FEATURES, ALSO USED FOR PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROPOSED ANNOTATION.

PROPOSED GEOMETRY CODES

CODE	DESCRIPTION
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
CC	CENTER OF CURVE
PT	POINT OF TANGENCY
PCC	POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
POB	POINT OF BEGINNING
POE	POINT OF ENDING
STA	STATION PREFIX
AH	AHEAD STATION SUFFIX
BK	BACK STATION SUFFIX
D	CURVE DEGREE OF (100FT)
R	CURVE RADUIS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE

UTILITY SYMBOLOGY

UNDERGROUND UTILITIES

- UGU — UTILITY (GENERIC-UNKNOWN)
- UT — TELEPHONE
- UE — ELECTRIC
- UC — CABLE (TV)
- UEC — ELECTRIC+CABLE
- UET — ELECTRIC+TELEPHONE
- UCT — CABLE+TELEPHONE
- UECT — ELECTRIC+CABLE+TELEP.
- G — GAS LINE
- W — WATER LINE
- S — SANITARY SEWER (SEPTIC)

ABOVE GROUND UTILITIES (AERIAL)

- AGU — UTILITY (GENERIC-UNKNOWN)
- T — TELEPHONE
- E — ELECTRIC
- C — CABLE (TV)
- EC — ELECTRIC+CABLE
- ET — ELECTRIC+TELEPHONE
- AER E&T — ELECTRIC+TELEPHONE
- CT — CABLE+TELEPHONE
- ECT — ELECTRIC+CABLE+TELEP.
- UTILITY POLE GUY WIRE

PROJECT CONSTRUCTION SYMBOLOGY

PROJECT DESIGN & LAYOUT SYMBOLOGY

- CZ — CLEAR ZONE
- PLAN LAYOUT MATCHLINE

PROJECT CONSTRUCTION FEATURES

- TOP OF CUT SLOPE
- TOE OF FILL SLOPE
- STONE FILL
- BOTTOM OF DITCH ℄
- CULVERT PROPOSED
- STRUCTURE SUBSURFACE
- PDF — PDF — PROJECT DEMARCATION FENCE
- BF — BF — BARRIER FENCE
- TREE PROTECTION ZONE (TPZ)
- STRIPING LINE REMOVAL
- SHEET PILES

CONVENTIONAL BOUNDARY SYMBOLOGY

BOUNDARY LINES

- TOWN LINE — TOWN BOUNDARY LINE
- COUNTY LINE — COUNTY BOUNDARY LINE
- STATE LINE — STATE BOUNDARY LINE
- PROPOSED STATE R.O.W. (LIMITED ACCESS)
- PROPOSED STATE R.O.W.
- STATE ROW (LIMITED ACCESS)
- STATE ROW
- TOWN ROW
- PERMANENT EASEMENT LINE (P)
- TEMPORARY EASEMENT LINE (T)
- SURVEY LINE
- P/L — PROPERTY LINE (P/L)
- SR SR SR — SLOPE RIGHTS
- 6F — 6F — 6F PROPERTY BOUNDARY
- 4F — 4F — 4F PROPERTY BOUNDARY
- HAZ — HAZ — HAZARDOUS WASTE

EPSC LAYOUT PLAN SYMBOLOGY

EPSC MEASURES

- FILTER CURTAIN
- SILT FENCE
- SILT FENCE WOVEN WIRE
- CHECK DAM
- DISTURBED AREAS REQUIRING RE-VEGETATION
- EROSION MATTING

SEE EPSC DETAIL SHEETS FOR ADDITIONAL SYMBOLOGY

ENVIRONMENTAL RESOURCES

- WETLAND BOUNDARY
- RIPARIAN BUFFER ZONE
- WETLAND BUFFER ZONE
- SOIL TYPE BOUNDARY
- T&E — THREATENED & ENDANGERED SPECIES
- HAZ — HAZ — HAZARDOUS WASTE AREA
- AG — AGRICULTURAL LAND
- HABITAT — FISH & WILDLIFE HABITAT
- FLOOD PLAIN — FLOOD PLAIN
- OHW — ORDINARY HIGH WATER (OHW)
- STORM WATER
- USDA FOREST SERVICE LANDS
- WILDLIFE HABITAT SUIT/CONN

ARCHEOLOGICAL & HISTORIC

- ARCH — ARCHEOLOGICAL BOUNDARY
- HISTORIC DIST — HISTORIC DISTRICT BOUNDARY
- HISTORIC — HISTORIC AREA
- (H) — HISTORIC STRUCTURE

CONVENTIONAL TOPOGRAPHIC SYMBOLOGY

EXISTING FEATURES

- ROAD EDGE PAVEMENT
- ROAD EDGE GRAVEL
- DRIVEWAY EDGE
- DITCH
- FOUNDATION
- FENCE (EXISTING)
- FENCE WOOD POST
- FENCE STEEL POST
- GARDEN
- ROAD GUARDRAIL
- RAILROAD TRACKS
- CULVERT (EXISTING)
- STONE WALL
- WALL
- WOOD LINE
- BRUSH LINE
- HEDGE
- BODY OF WATER EDGE
- LEDGE EXPOSED

PROJECT NAME: SEARSBURG
PROJECT NUMBER: BF 010-1(50)

FILE NAME: zl3b332leg.dgn
PROJECT LEADER: T. LEVINS
DESIGNED BY: VTRANS
LEGEND SHEET

PLOT DATE: 7/6/2016
DRAWN BY: VTRANS
CHECKED BY: T. LEVINS
SHEET 4 OF 15

N

VT STATE PLANE GRID

STATE RIGHT OF WAY

PC
STA 103+14.11

103+00

VT ROUTE 9
TO WOODFORD

104+00

BEGIN APPROACH
STA 104+25.00

BEGIN PROJECT
STA 104+75.00

105+00

106+00

107+00

108+00

VT ROUTE 9
TO WILMINGTON

109+00

UNNAMED BROOK

MARRA, JAMES A & LYNN R.

53+00

CHANNEL POE
STA. 53+00.00

HVCTRL 34

BEGIN BRIDGE
STA 106+00.86

MAINLINE STA 106+12.00=
CHANNEL STA 51+59.08
Δ = 98°

END BRIDGE
STA 106+23.13

CONCEPTUAL
CONSTRUCTION LIMITS

END PROJECT
STA. 107+25.00

END APPROACH
STA. 107+75.00

15" CCMP PLUGGED
FLOW

HVCTRL 32

HVCTRL 33

HVCTRL 30

SIGN
VD-701
(VT 9
BR 20)

52+00

51+00

50+00

FLOW

84" CGMPP

TIE
DIST=18.64

TIE
DIST=28.27

GRAVEL DRIVE

HVCTRL 5

MED
RED PINE
TIE
DIST=70.26

EXISTING
84" CGMPP

PI
STA. 107+40.48 BK =
STA. 107+26.72 AHD

STATE RIGHT
OF WAY

MACK, DAVID L. & WILLIAM R. & YANKE, DONALD L.

SNYDER, DANIEL & DEBORAH A.

BENCHMARK 5
VT STATE SURVEY
DISK IN ROCK
"B95034"
ELEV. = 2256.62

CHANNEL POB
STA. 50+00.00

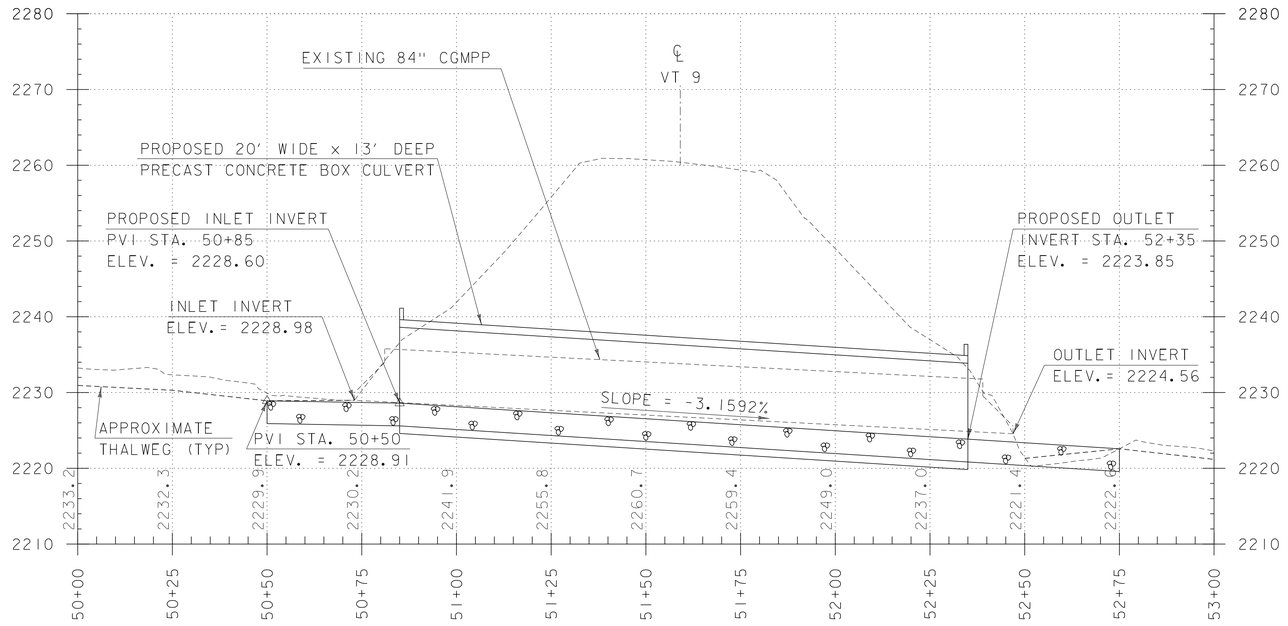
MAINLINE CURVE 1
PT STA. 111+53.09
DELTA = 25° 10' 10"
D = 3° 00' 00"
R = 1909.86'
T = 426.37'
L = 838.98'
E = 47.01'

EXISTING CULVERT DATA
84" CGMPP, 174' LONG
39 SQ FT WATERWAY
BUILT 1965
26' AVERAGE COVER

SCALE 1" = 20'-0"
20 0 20

GM2 ASSOCIATES

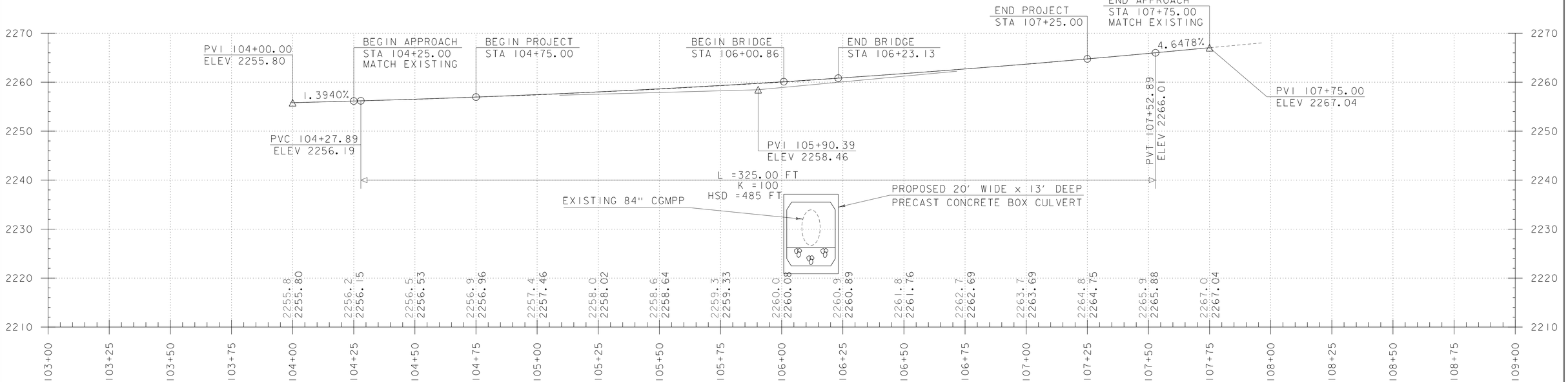
PROJECT NAME: SEARSBURG	
PROJECT NUMBER: BF 010-1(50)	
FILE NAME: z13b332bdr.dgn	PLOT DATE: 4/11/2017
PROJECT LEADER: T. LEVINS	DRAWN BY: J. MERCER
DESIGNED BY: J. MERCER	CHECKED BY: T. LEVINS
LAYOUT SHEET	SHEET 5 OF 15



CULVERT PROFILE

HORIZONTAL SCALE 1" = 20'
VERTICAL SCALE 1" = 10'

NOTE:
ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG ℄
ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADE ALONG ℄



VT ROUTE 9 PROFILE

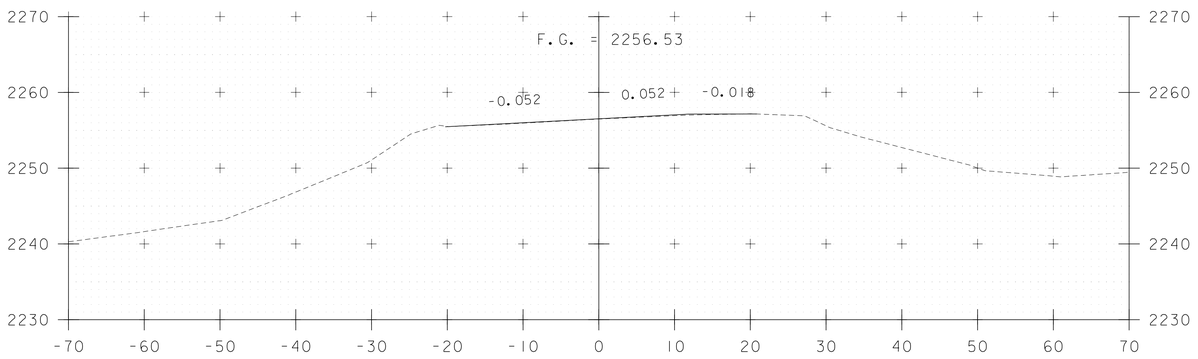
HORIZONTAL SCALE 1" = 20'
VERTICAL SCALE 1" = 10'

GM2 ASSOCIATES

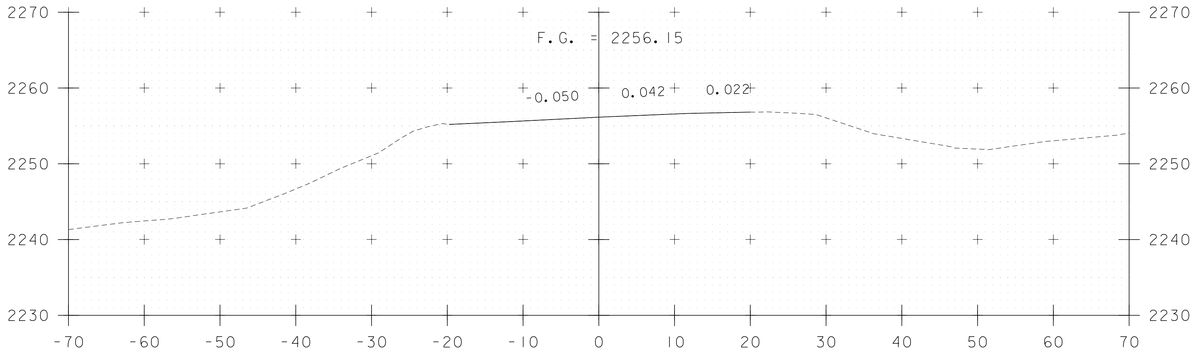
PROJECT NAME: SEARSBURG
PROJECT NUMBER: BF 010-1(50)

FILE NAME: zl3b332pro.dgn
PROJECT LEADER: T. LEVINS
DESIGNED BY: J. MERCER
PROFILE

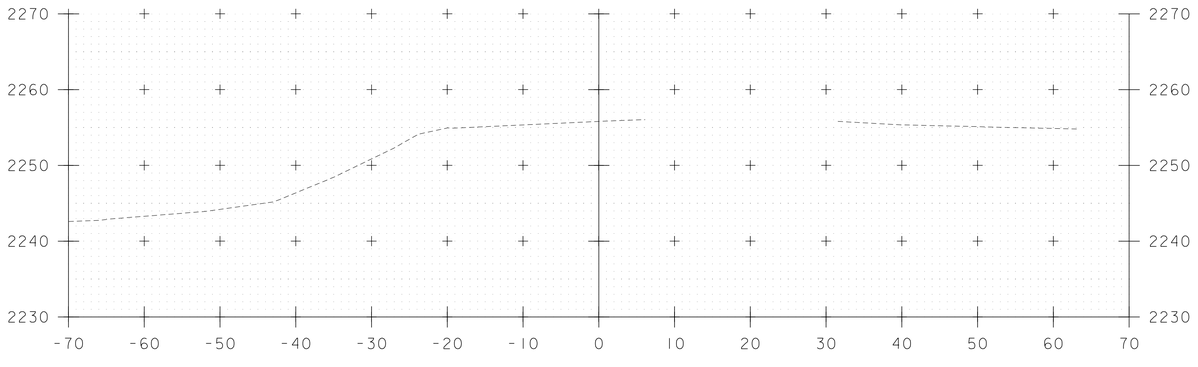
PLOT DATE: 4/11/2017
DRAWN BY: B. WILLIAMS
CHECKED BY: T. LEVINS
SHEET 6 OF 15



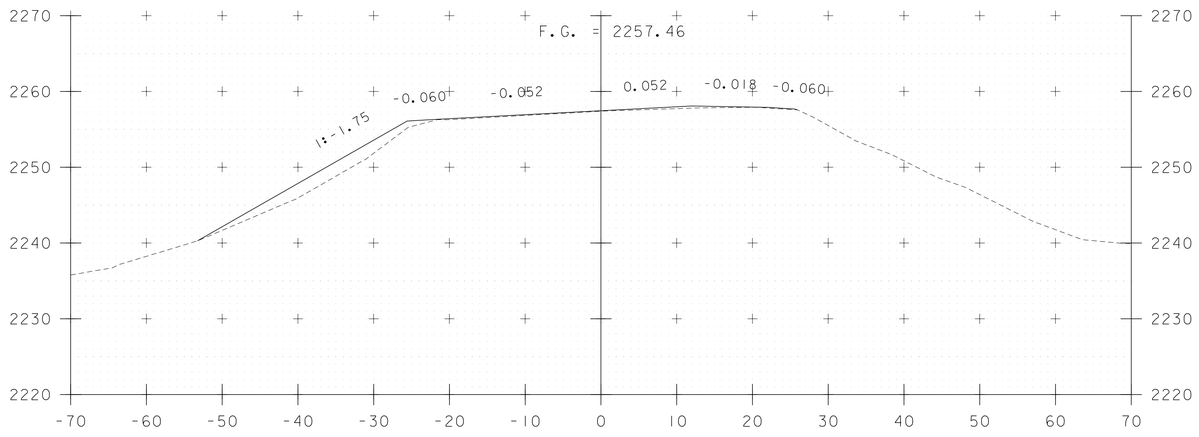
104+50



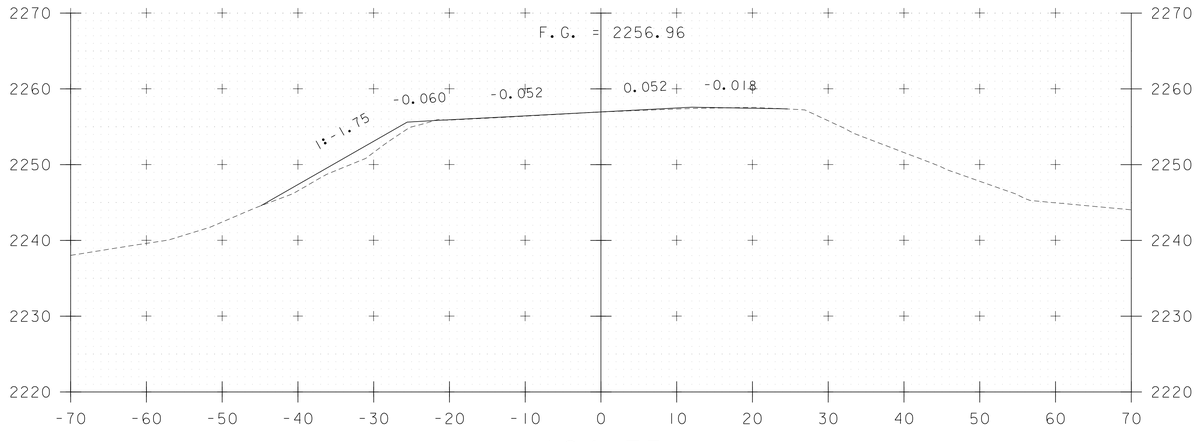
104+25
BEGIN APPROACH



104+00



105+00



104+75
BEGIN PROJECT

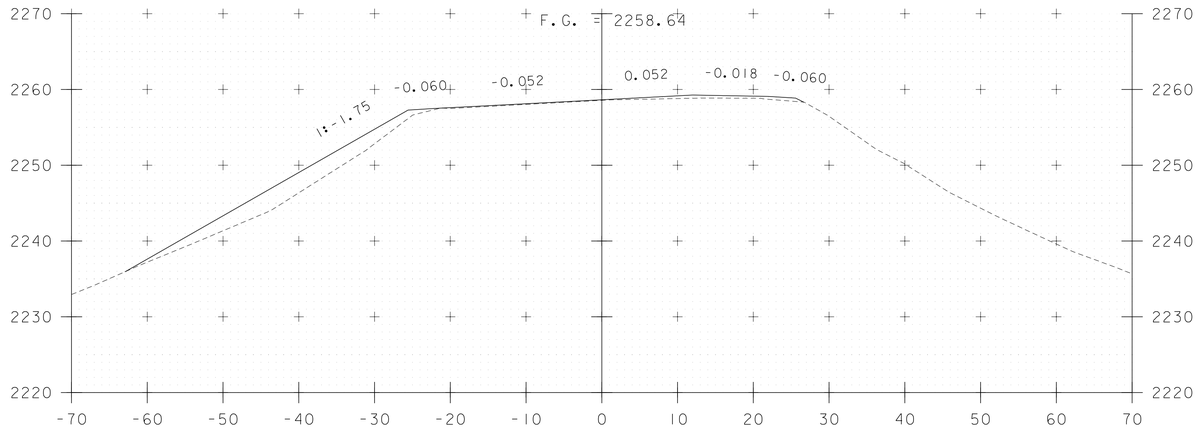
SCALE 1" = 10'-0"
10 0 10

GM2 ASSOCIATES

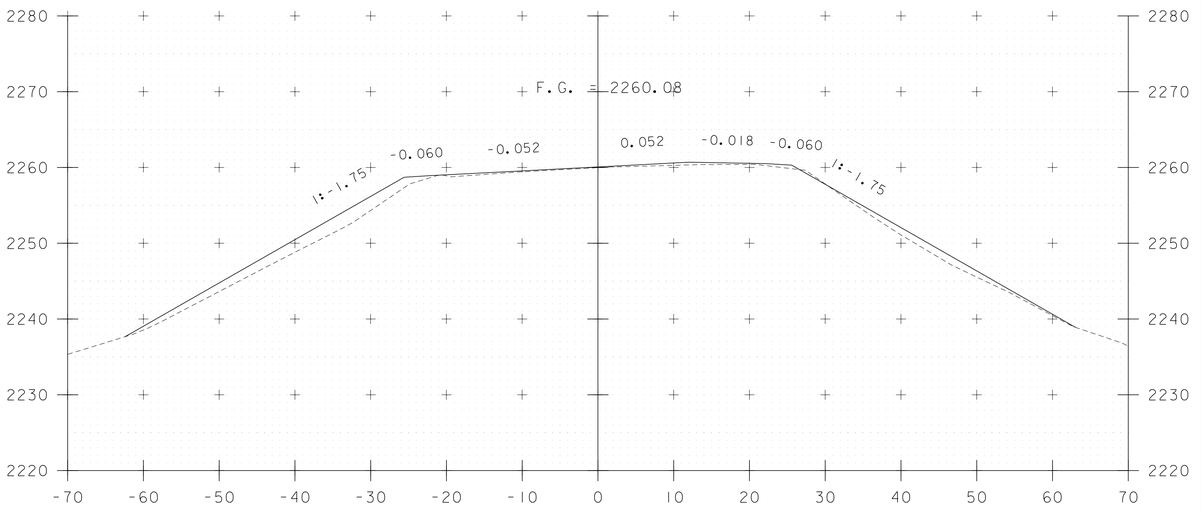
PROJECT NAME: SEARSBURG
PROJECT NUMBER: BF 010-1(50)

FILE NAME: z13b332xs.dgn
PROJECT LEADER: T. LEVINS
DESIGNED BY: J. MERCER
VT9 CROSS SECTIONS 1

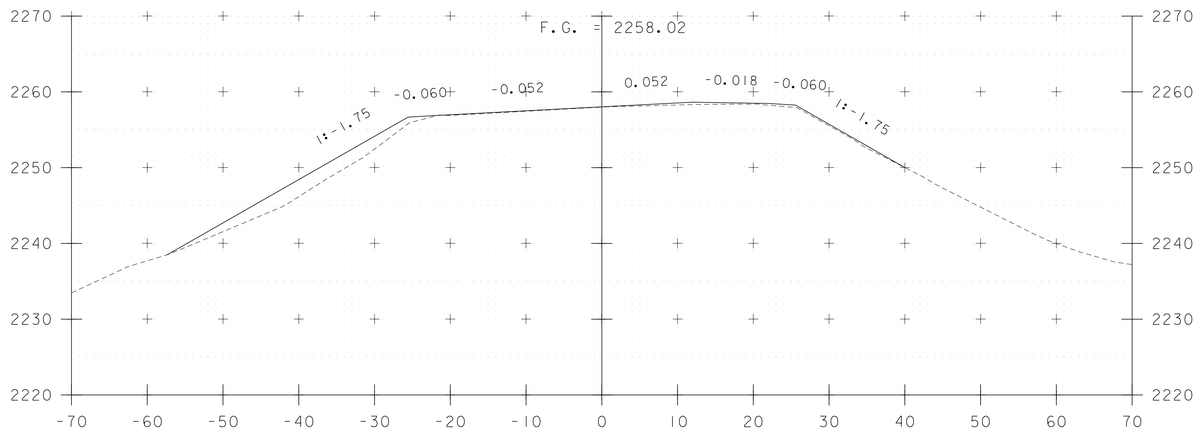
PLOT DATE: 4/11/2017
DRAWN BY: J. MERCER
CHECKED BY: T. LEVINS
SHEET 7 OF 15



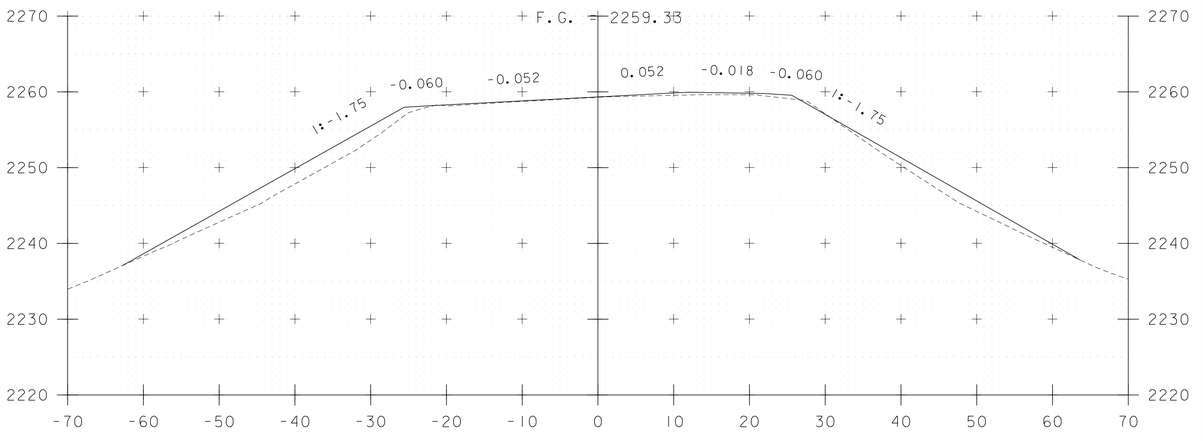
105+50



106+00



105+25



105+75

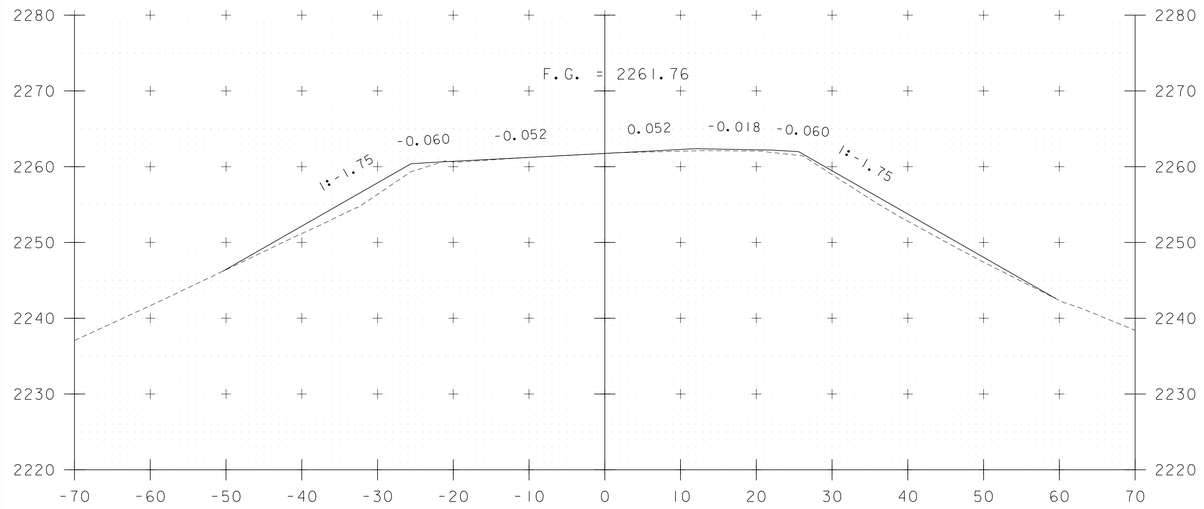
SCALE 1" = 10'-0"
10 0 10

GM2 ASSOCIATES

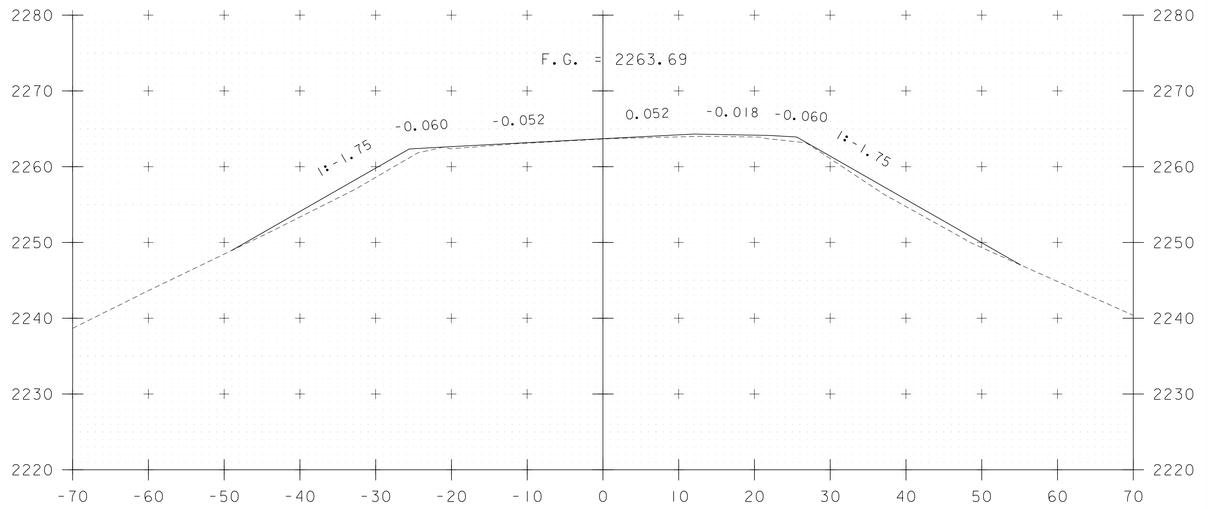
PROJECT NAME: SEARSBURG
PROJECT NUMBER: BF 010-1(50)

FILE NAME: z13b332xs.dgn
PROJECT LEADER: T. LEVINS
DESIGNED BY: J. MERCER
VT9 CROSS SECTIONS 2

PLOT DATE: 4/11/2017
DRAWN BY: J. MERCER
CHECKED BY: T. LEVINS
SHEET 8 OF 15



106+50



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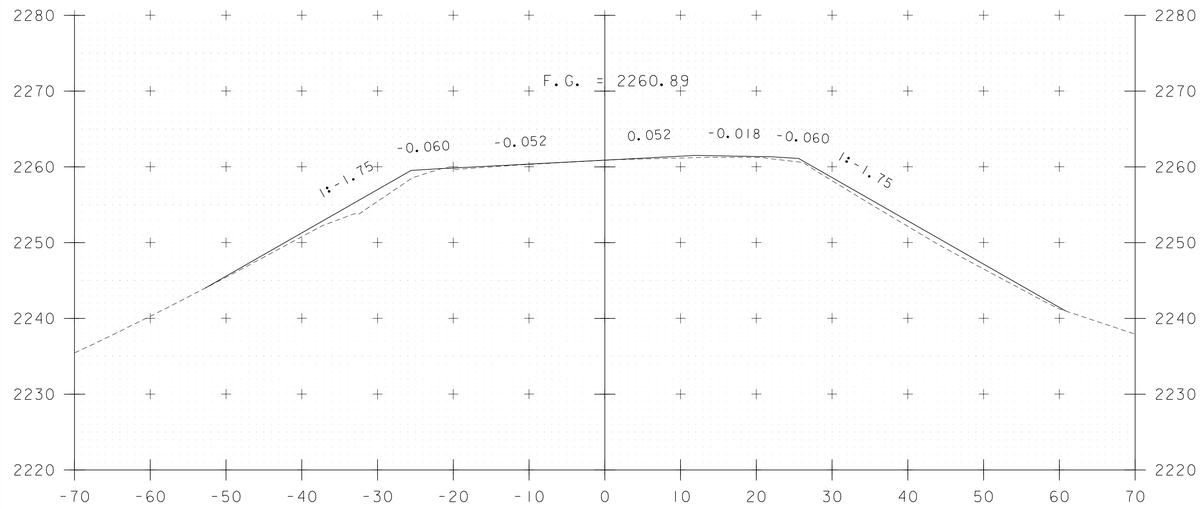

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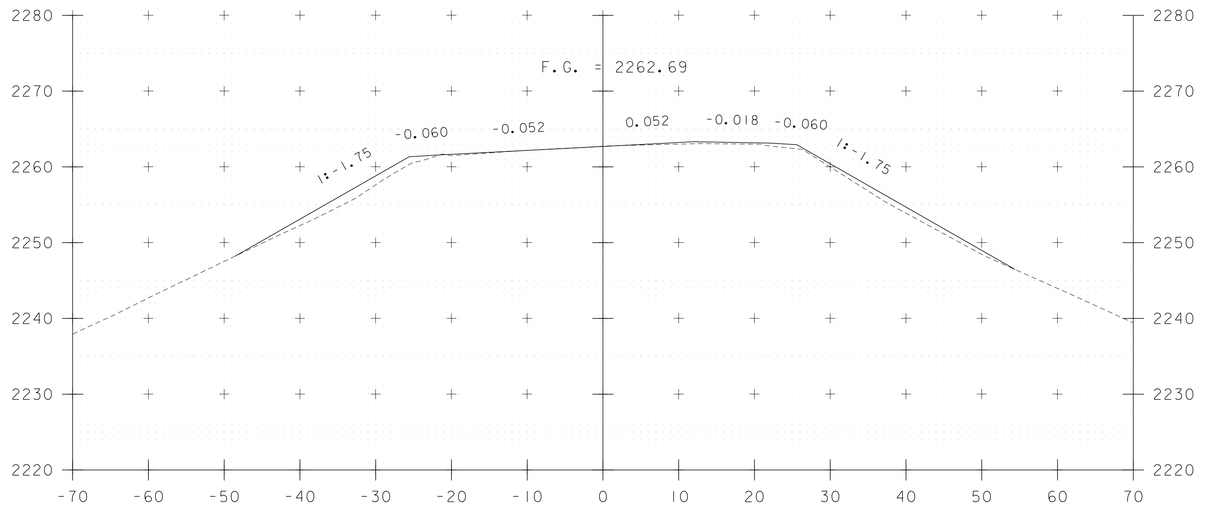
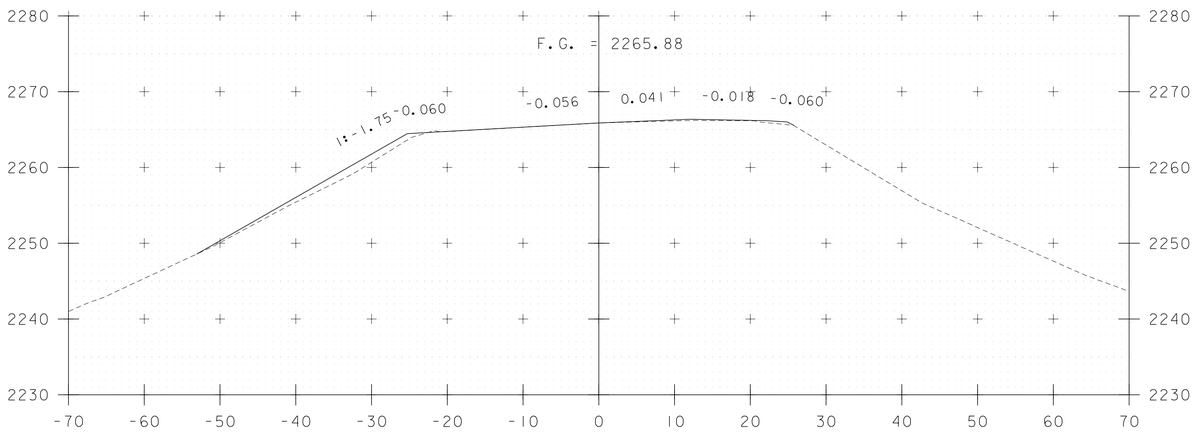


106+75

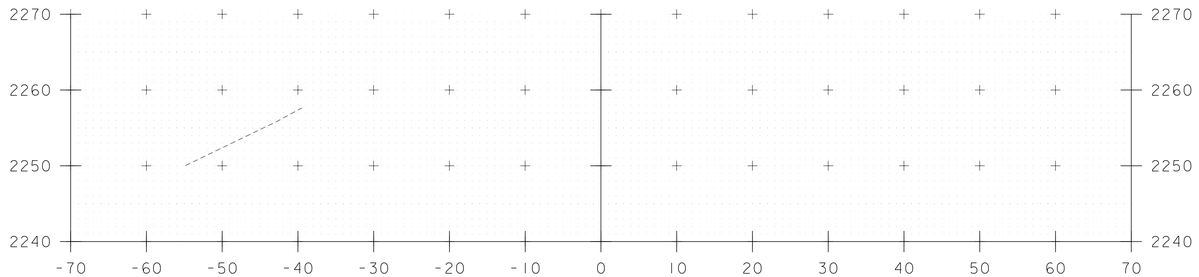
SCALE 1" = 10'-0"
10 0 10

GM2 ASSOCIATES

PROJECT NAME: SEARSBURG	
PROJECT NUMBER: BF 010-1(50)	
FILE NAME: z13b332xs.dgn	PLOT DATE: 4/11/2017
PROJECT LEADER: T. LEVINS	DRAWN BY: J. MERCER
DESIGNED BY: J. MERCER	CHECKED BY: T. LEVINS
VT9 CROSS SECTIONS 3	SHEET 9 OF 15



107+50



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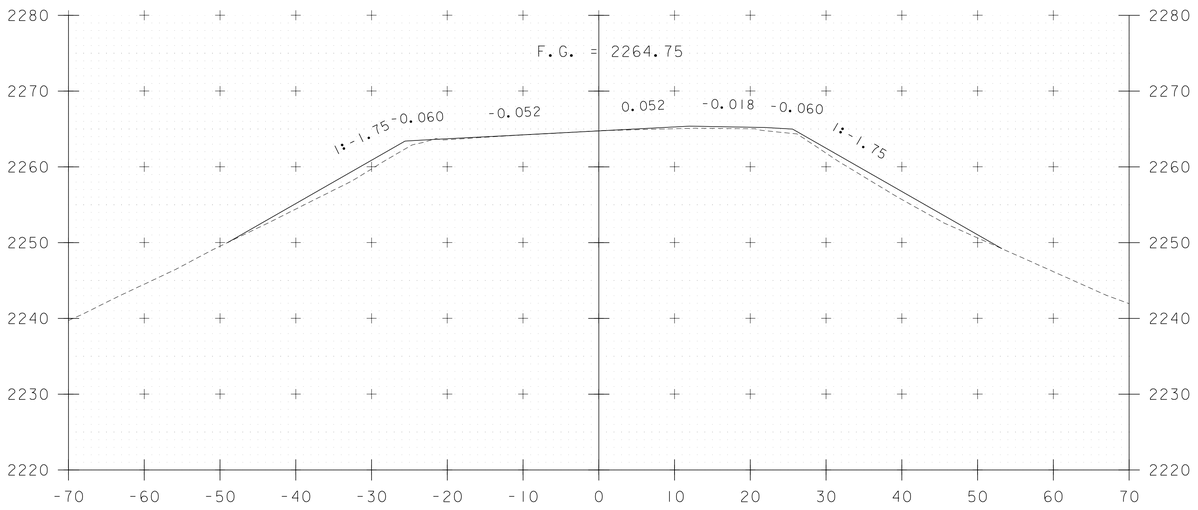
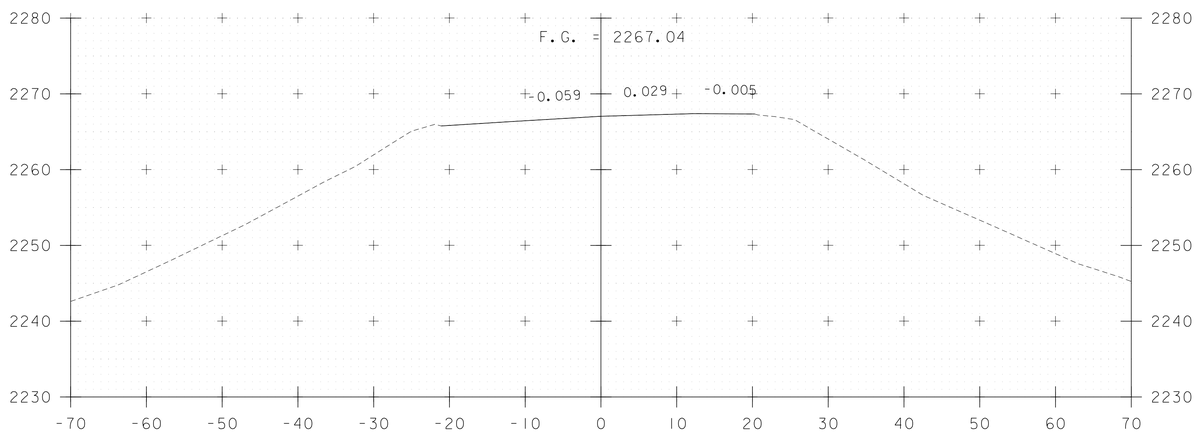


107+25
END PROJECT



107+75
END APPROACH

SCALE 1" = 10'-0"
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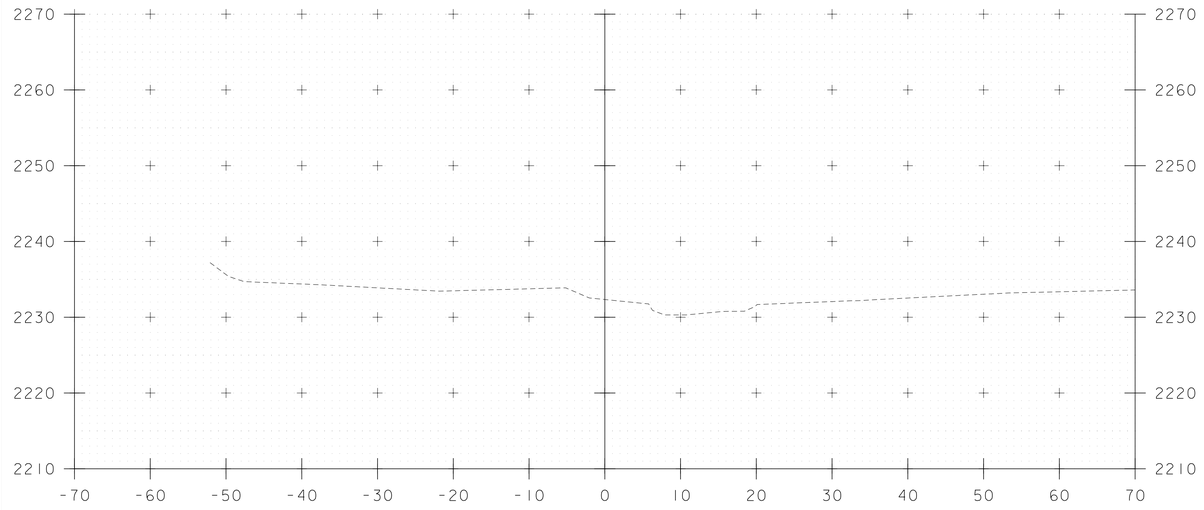
GM2 ASSOCIATES

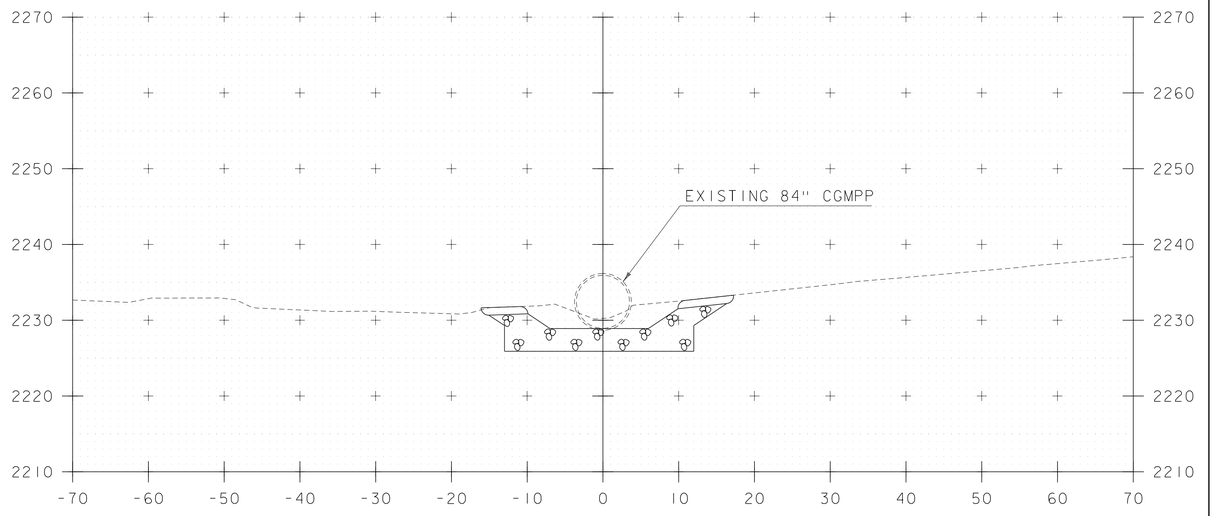
PROJECT NAME: SEARSBURG
PROJECT NUMBER: BF 010-1(50)

FILE NAME: z13b332xs.dgn
PROJECT LEADER: T. LEVINS
DESIGNED BY: J. MERCER
VT9 CROSS SECTIONS 4

PLOT DATE: 4/11/2017
DRAWN BY: J. MERCER
CHECKED BY: T. LEVINS
SHEET 10 OF 15



50+25



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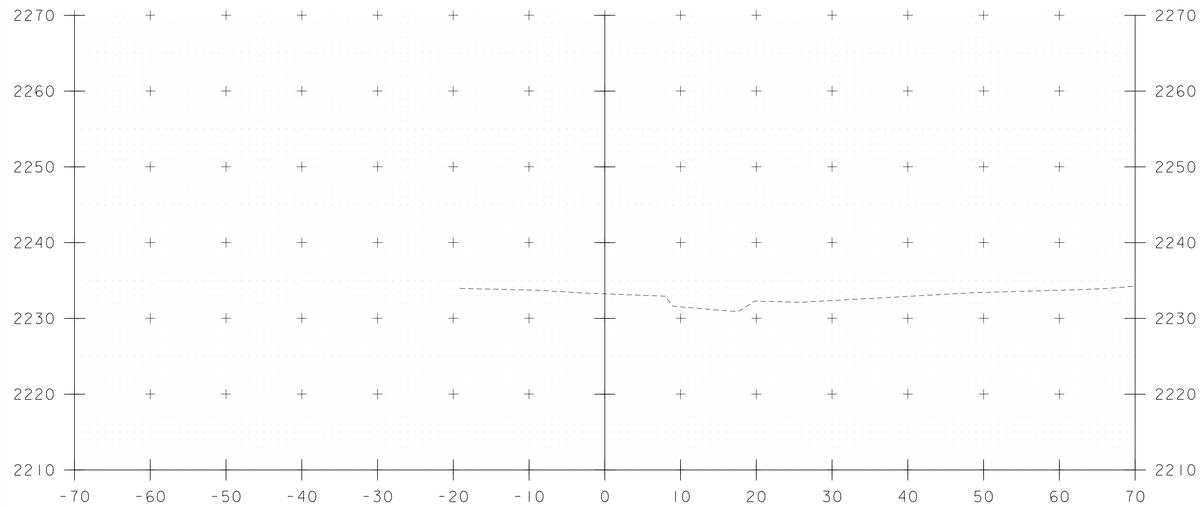

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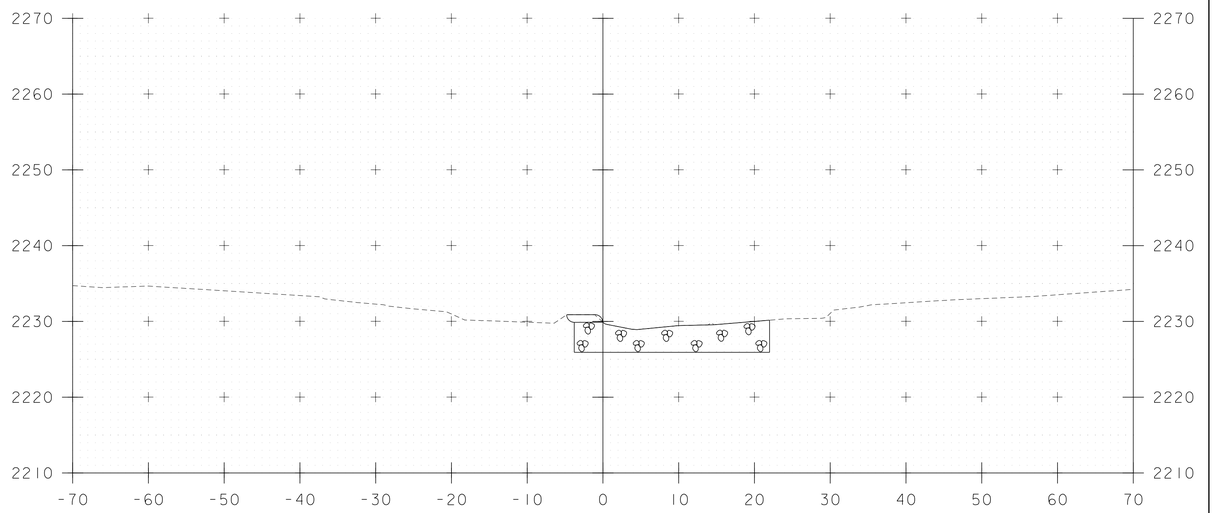
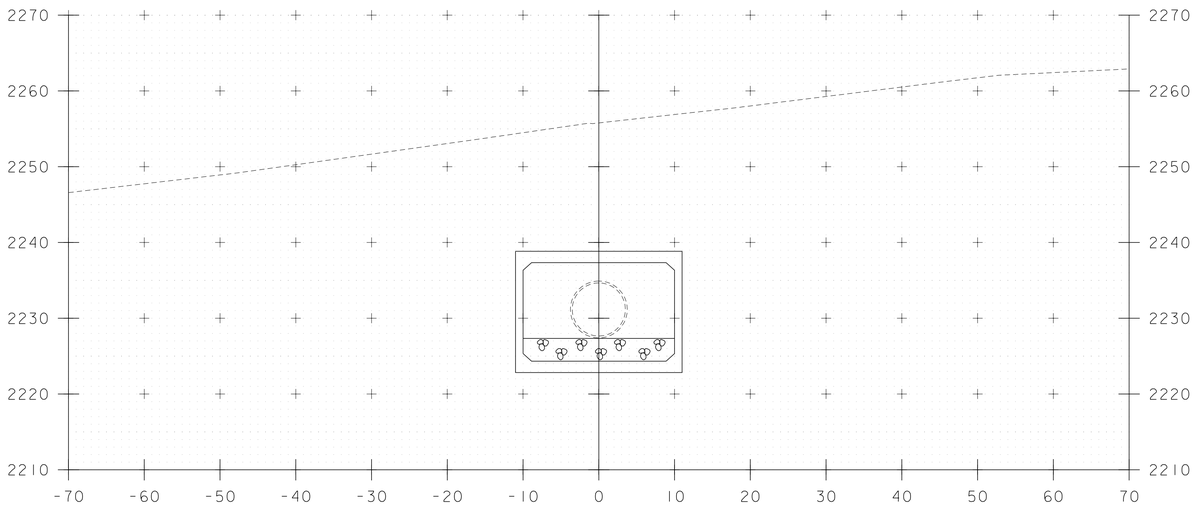


50+50

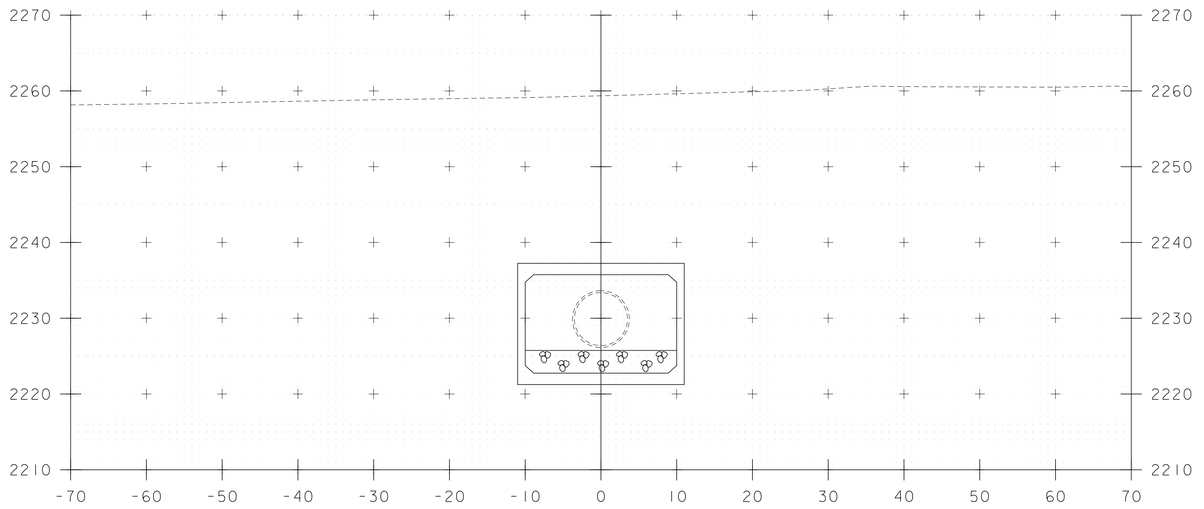
SCALE 1" = 10'-0"
10 0 10

GM2 ASSOCIATES

PROJECT NAME: SEARSBURG	
PROJECT NUMBER: BF 010-1(50)	
FILE NAME: z13b332xs.dgn	PLOT DATE: 4/11/2017
PROJECT LEADER: T. LEVINS	DRAWN BY: B. WILLIAMS
DESIGNED BY: B. WILLIAMS	CHECKED BY: T. LEVINS
CHANNEL CROSS SECTIONS 1	SHEET 11 OF 15



51+25



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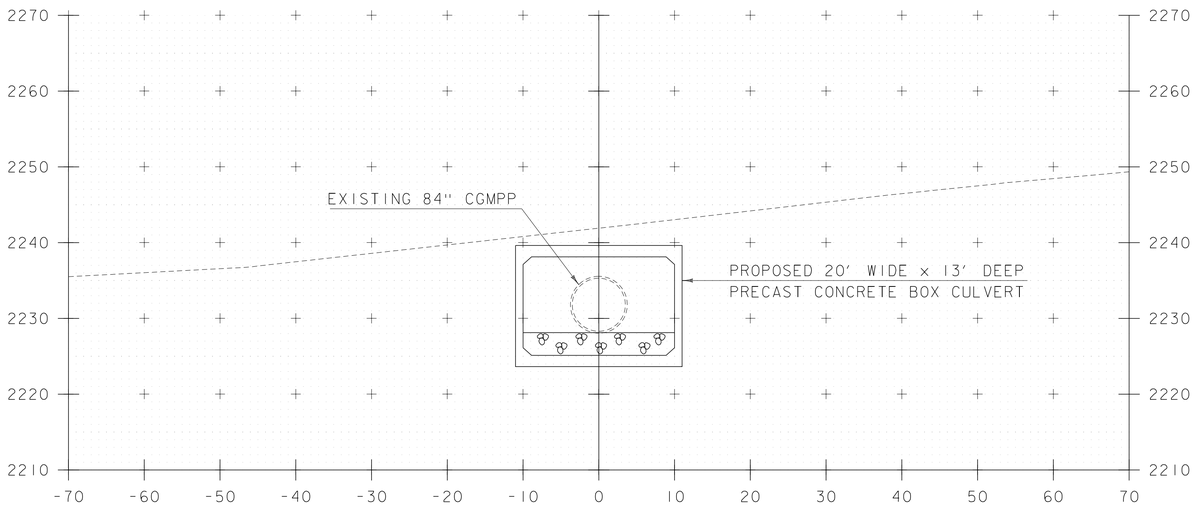

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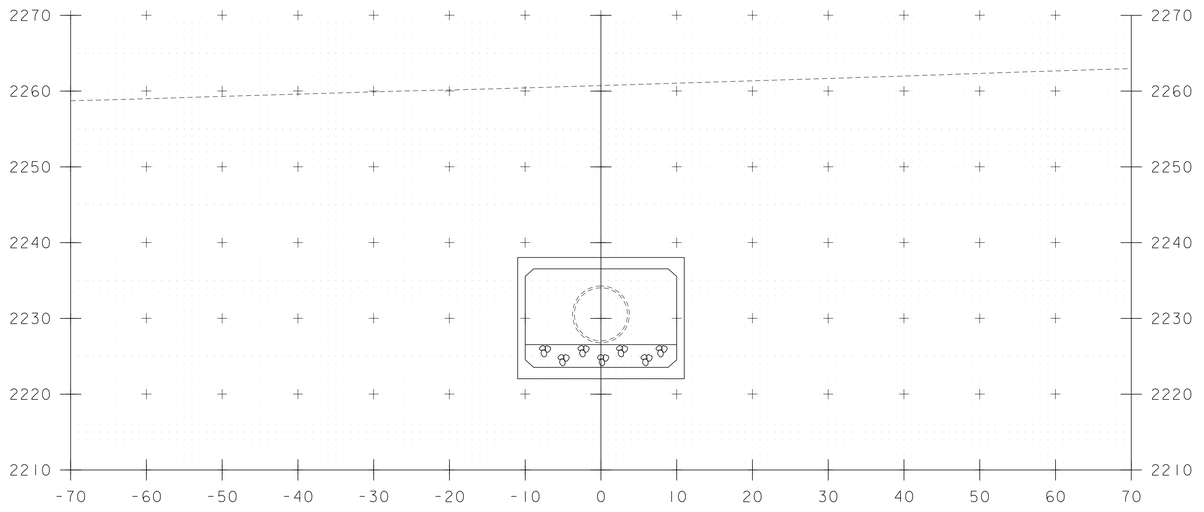
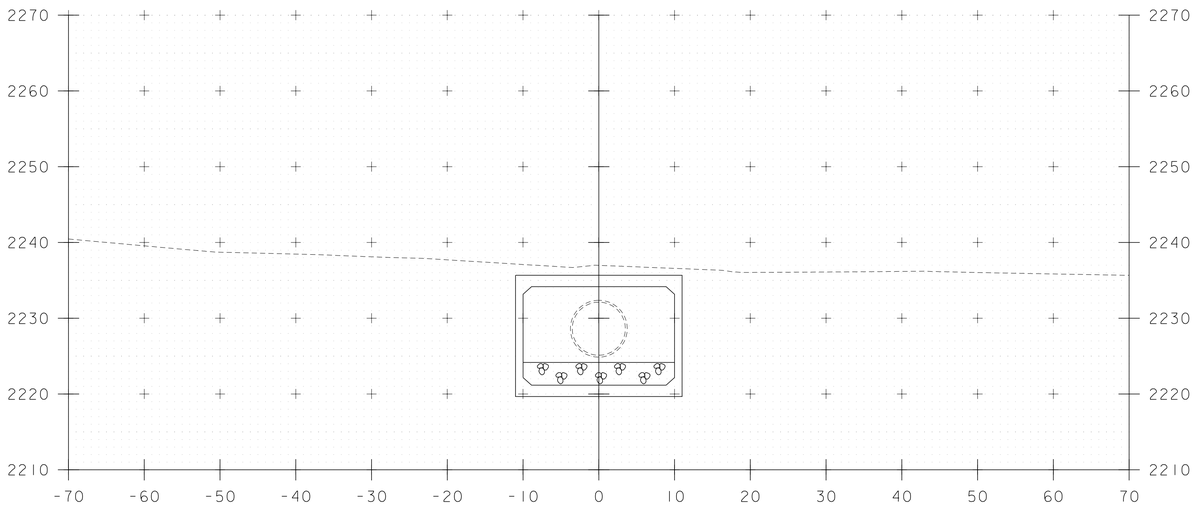


51+50

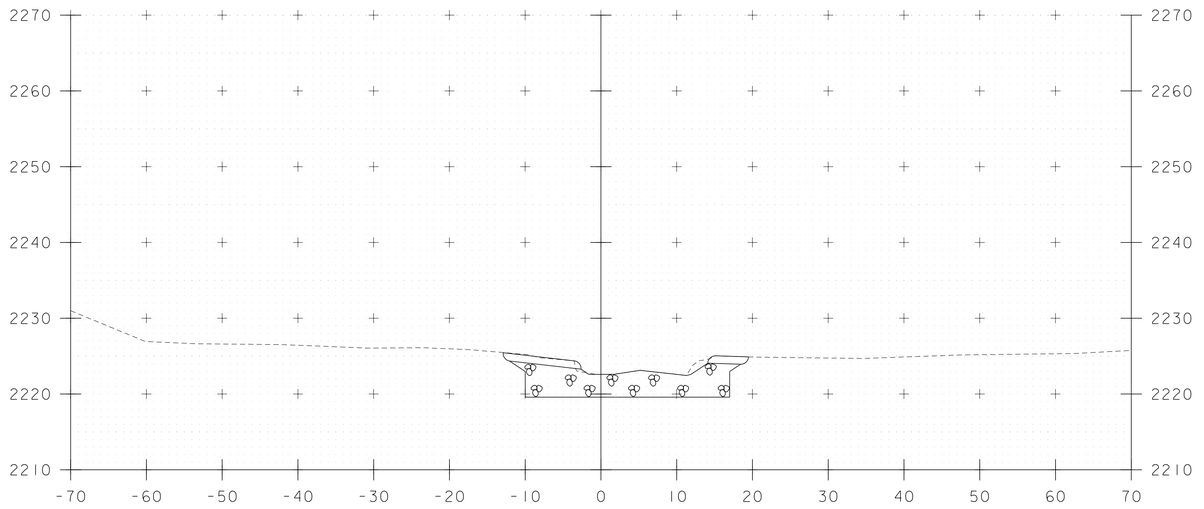
SCALE 1" = 10'-0"
10 0 10

GM2 ASSOCIATES

PROJECT NAME: SEARSBURG	
PROJECT NUMBER: BF 010-1(50)	
FILE NAME: z13b332xs.dgn	PLOT DATE: 4/11/2017
PROJECT LEADER: T. LEVINS	DRAWN BY: B. WILLIAMS
DESIGNED BY: B. WILLIAMS	CHECKED BY: T. LEVINS
CHANNEL CROSS SECTIONS 2	SHEET 12 OF 15



52+25



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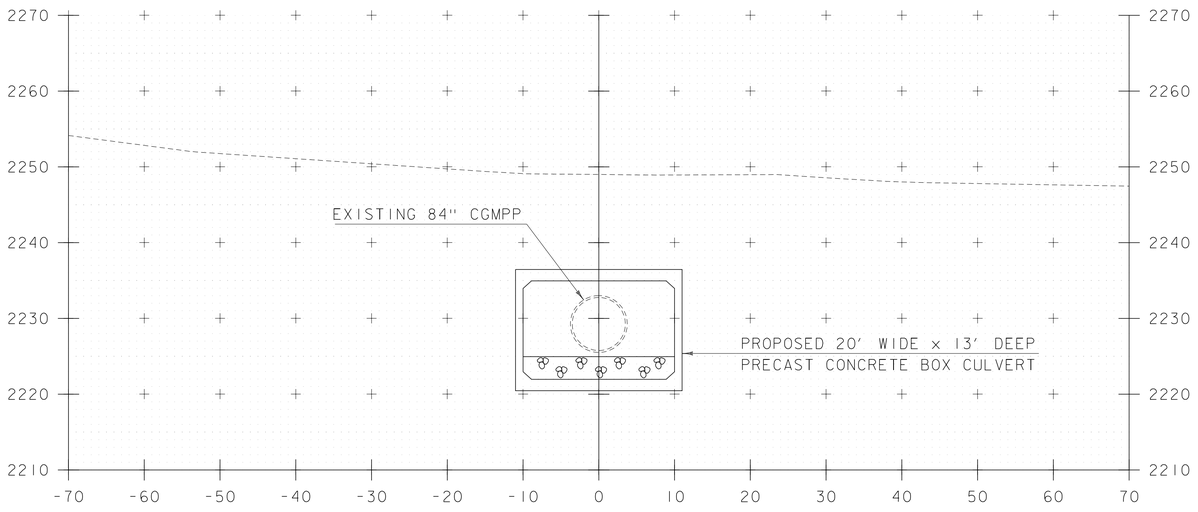

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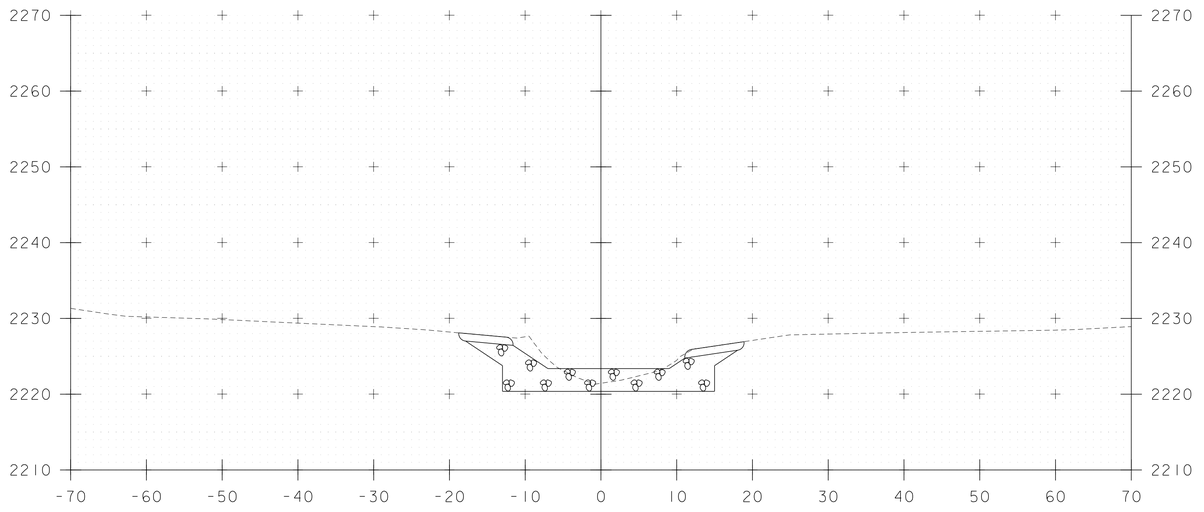
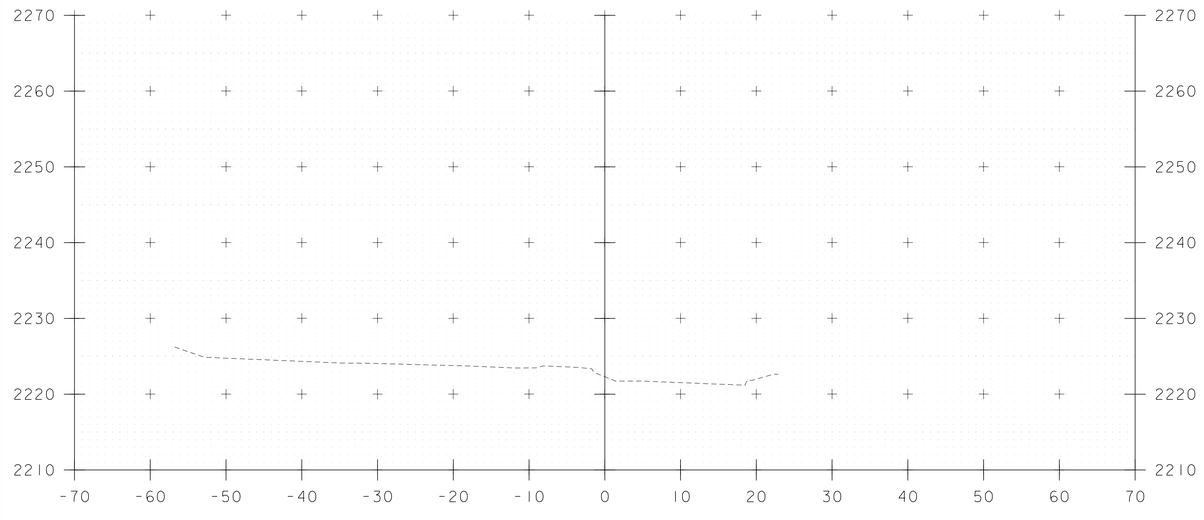


52+50

SCALE 1" = 10'-0"
10 0 10

GM2 ASSOCIATES

PROJECT NAME: SEARSBURG	
PROJECT NUMBER: BF 010-1(50)	
FILE NAME: z13b332xs.dgn	PLOT DATE: 4/11/2017
PROJECT LEADER: T. LEVINS	DRAWN BY: B. WILLIAMS
DESIGNED BY: B. WILLIAMS	CHECKED BY: T. LEVINS
CHANNEL CROSS SECTIONS 3	SHEET 13 OF 15



53+00

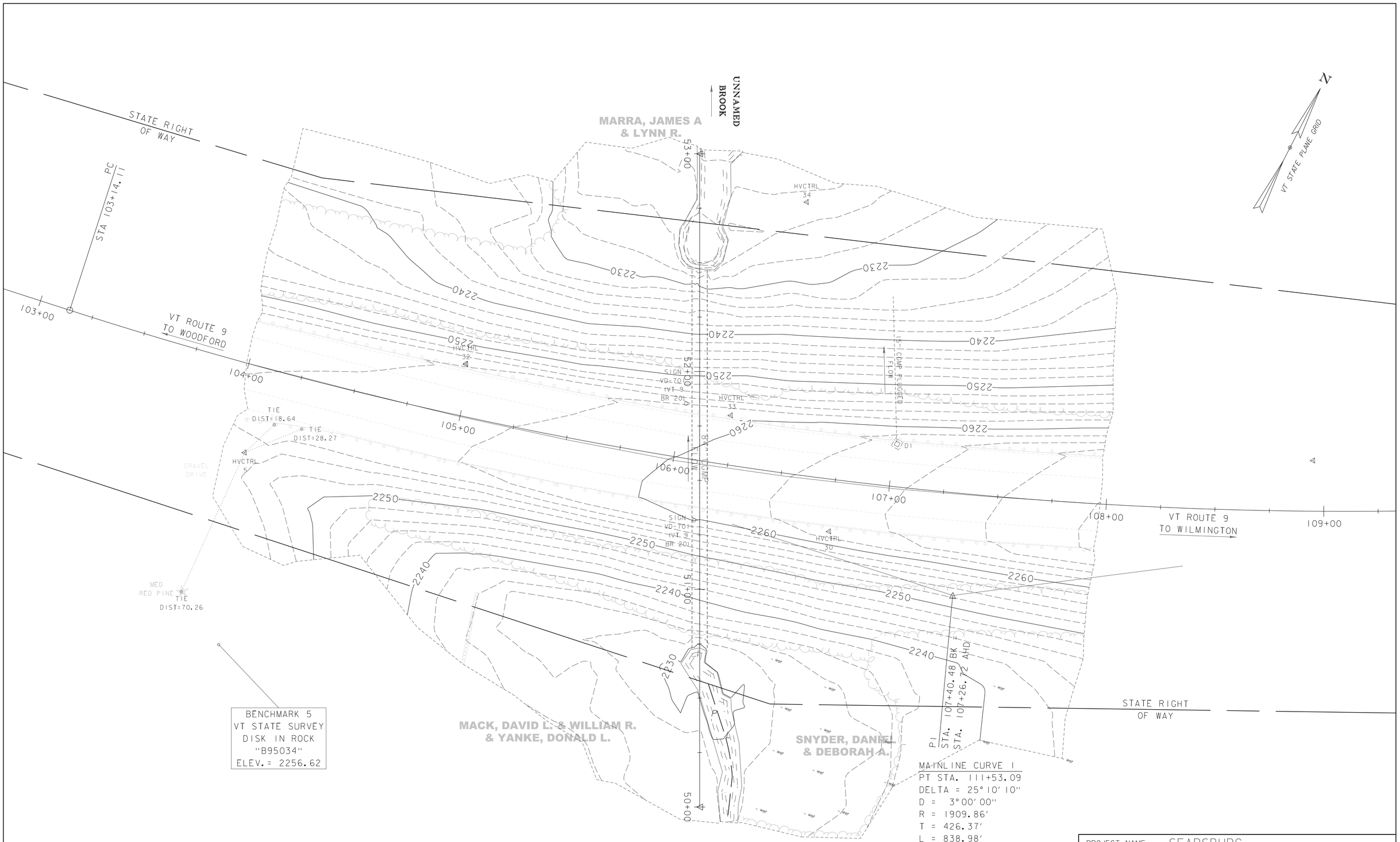
SCALE 1" = 10'-0"
10 0 10

GM2 ASSOCIATES

PROJECT NAME: SEARSBURG
PROJECT NUMBER: BF 010-1(50)

FILE NAME: z13b332xs.dgn
PROJECT LEADER: T. LEVINS
DESIGNED BY: B. WILLIAMS
CHANNEL CROSS SECTIONS 4

PLOT DATE: 4/11/2017
DRAWN BY: B. WILLIAMS
CHECKED BY: T. LEVINS
SHEET 14 OF 15



BENCHMARK 5
VT STATE SURVEY
DISK IN ROCK
"B95034"
ELEV. = 2256.62

MAINLINE CURVE 1
PT STA. 111+53.09
DELTA = 25° 10' 10"
D = 3° 00' 00"
R = 1909.86'
T = 426.37'
L = 838.98'
E = 47.01'

EXISTING CULVERT DATA
84" CGMPP, 174' LONG
39 SQ FT WATERWAY
BUILT 1965
2% AVERAGE COVER

SCALE 1" = 20'-0"
20 0 20

GM2 ASSOCIATES

PROJECT NAME: SEARSBURG
PROJECT NUMBER: BF 010-1(50)

FILE NAME: z13b332resorce.dgn
PROJECT LEADER: T. LEVINS
DESIGNED BY: B. WILLIAMS
RESOURCE SITE PLAN

PLOT DATE: 4/11/2014
DRAWN BY: B. WILLIAMS
CHECKED BY: T. LEVINS
SHEET 15 OF 15