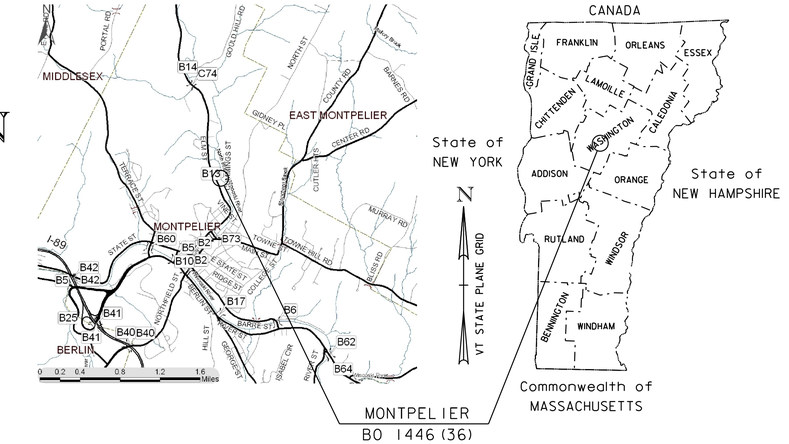
REVIEWER NOTES

1. THIS WILL HAVE A ONE LANE TEMPORARY BRIDGE WITHOUT SIGNALS.
2. RIGHT OF WAY WILL NEED TO BE ACQUIRED.
3. IT IS ANTICIPATED THAT OVERHEAD UTILITIES AND AN UNDERGROUND WATER LINE WILL NEED TO BE RELOCATED.
4. A SIMPLIFIED PAVEMENT DESIGN HAS BEEN DONE FOR THIS PROJECT.
5. THE SAG VERTICAL CURVE ON THE WESTERN APPROACH IS SUBSTANDARD.
6. THE HORIZONTAL CURVE ON THE EASTERN APPROACH IS SUBSTANDARD AND SHOULD INCLUDE WARNING SIGNS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT
BRIDGE PROJECT

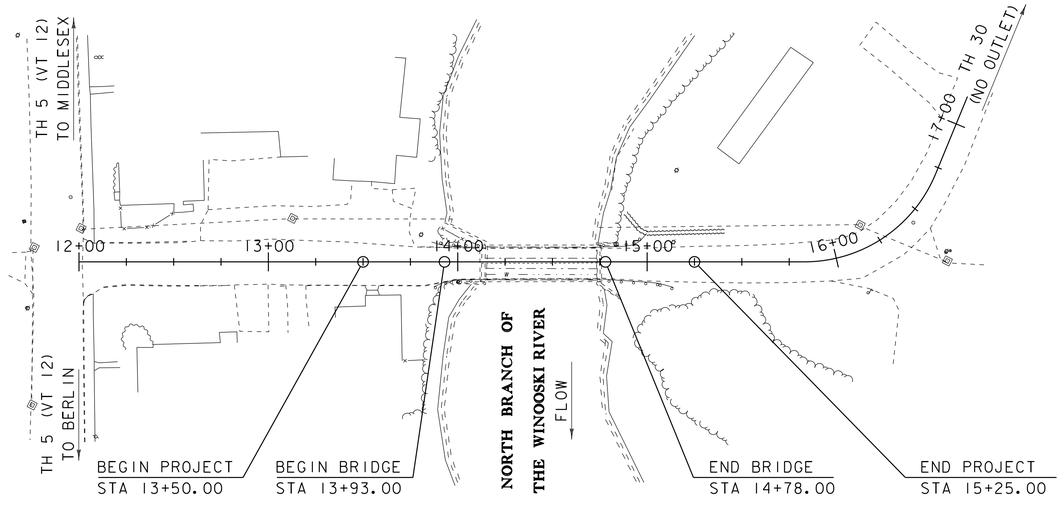
TOWN OF MONTPELIER
COUNTY OF WASHINGTON

ROUTE NO : TOWN HIGHWAY 130 (CUMMINGS STREET), CLASS 3 TOWN HIGHWAY. BRIDGE NO : 13

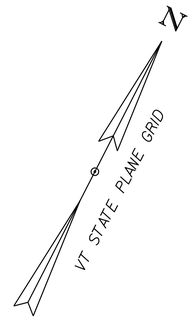
PROJECT LOCATION: APPX 0.1 MILES EAST OF THE JUNCCTION WITH CLASS 1 TH 5 (VT ROUTE 12)

PROJECT DESCRIPTION: REMOVAL OF EXISTING BRIDGE, AND REPLACEMENT WITH A NEW STRUCTURE.

LENGTH OF STRUCTURE:	85.00 FEET
LENGTH OF ROADWAY:	90.00 FEET
LENGTH OF PROJECT:	175.00 FEET



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



THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

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.

QUALITY ASSURANCE PROGRAM : LEVEL 2	
SURVEYED BY :	R. GILMAN
SURVEYED DATE :	04-22-2013
DATUM	
VERTICAL	NAVD88
HORIZONTAL	NAD83 (2011)

CONCEPTUAL PLANS
05-MAR-2014

DIRECTOR OF PROGRAM DEVELOPMENT	
APPROVED _____ DATE _____	
PROJECT MANAGER :	C. P. WILLIAMS
PROJECT NAME :	MONTPELIER
PROJECT NUMBER :	BO 1446(36)
SHEET 1 OF 18 SHEETS	

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET (BRIDGE)

Version
LRFD

INDEX OF SHEETS

PLAN SHEETS

STANDARDS LIST

STRUCTURES DETAIL SHEETS

SD-366.00	LONGSPAN STEEL BEAM GUARDRAIL, GALVANIZED	11/25/2013
SD-501.00	CONCRETE DETAILS AND NOTES	5/7/2010
SD-502.00	CONCRETE DETAILS AND NOTES	5/7/2010
SD-516.00	BRIDGE JOINT ASHPALTIC PLUG	5/7/2010
SD-516.11a	BRIDGE EXPANSION JOINT, VERMONT	2/24/2011
SD-516.11b	BRIDGE EXPANSION JOINT, VERMONT	2/25/2011
SD-601.00	STRUCTURAL STEEL DETAILS AND NOTES	5/7/2010
SD-602.00	STRUCTURAL STEEL PLATE GIRDER DETAILS AND NOTES	5/7/2010

FINAL HYDRAULIC REPORT

TRAFFIC MAINTENANCE NOTES

1. MAINTAIN ONE-WAY TRAFFIC ON A TEMPORARY BRIDGE.
2. TRAFFIC SIGNALS ARE NOT NECESSARY.
3. SIDEWALKS ARE NOT NECESSARY
4. THE APPROACHES FOR THE TEMPORARY BRIDGE SHALL BE PAVED.

DESIGN VALUES

1. DESIGN LIVE LOAD		HL-93
2. FUTURE PAVEMENT	d_p:	3.0 INCH
3. DESIGN SPAN	L:	81.00 FT
4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)	Δ:	- - -
5. PRESTRESSING STRAND (0.60 INCH DIAMETER - LOW RELAX)	f_y:	270 KSI
6. PRESTRESSED CONCRETE STRENGTH	f'_c:	6.0 KSI
7. PRESTRESSED CONCRETE RELEASE STRENGTH	f'_{ci}:	5.0 KSI
8. CONCRETE, HIGH PERFORMANCE CLASS AA	f'_c:	4.0 KSI
9. CONCRETE, HIGH PERFORMANCE CLASS A	f'_c:	4.0 KSI
10. CONCRETE, HIGH PERFORMANCE CLASS B	f'_c:	3.5 KSI
11. CONCRETE, CLASS C	f'_c:	3.0 KSI
12. REINFORCING STEEL	f_y:	60 KSI
13. STRUCTURAL STEEL AASHTO M270	f_y:	- - -
14. NOMINAL BEARING RESISTANCE OF SOIL	q_n:	4.0 KSF
15. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	- - -
16. NOMINAL BEARING RESISTANCE OF ROCK	q_n:	10.0 KSF
17. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	- - -
18. PILE RESISTANCE FACTOR	ϕ:	- - -
19. LATERAL PILE DEFLECTION	Δ:	- - -
20. BASIC WIND SPEED	V_{3s}:	- - -
21. MINIMUM GROUND SNOW LOAD	p_g:	- - -
22. SEISMIC DATA — PGA: 0	S_s:	- - -
	S_1:	- - -
23.		
24.		- - -
25.		- - -
26.		- - -

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:							

AS BUILT "REBAR" DETAIL

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

TRAFFIC DATA

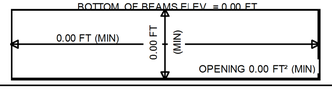
YEAR	ADT	DHV	% D	% T	ADTT
2016	220	50	57	1.6	10
2036	240	55	57	2	15

20 year ESAL for flexible pavement from 2016 to 2036 : 24000

40 year ESAL for flexible pavement from 2016 to 2056 : 50000

Design Speed : 25 mph

TEMPORARY BRIDGE PROFILE ALONG TEMP CL

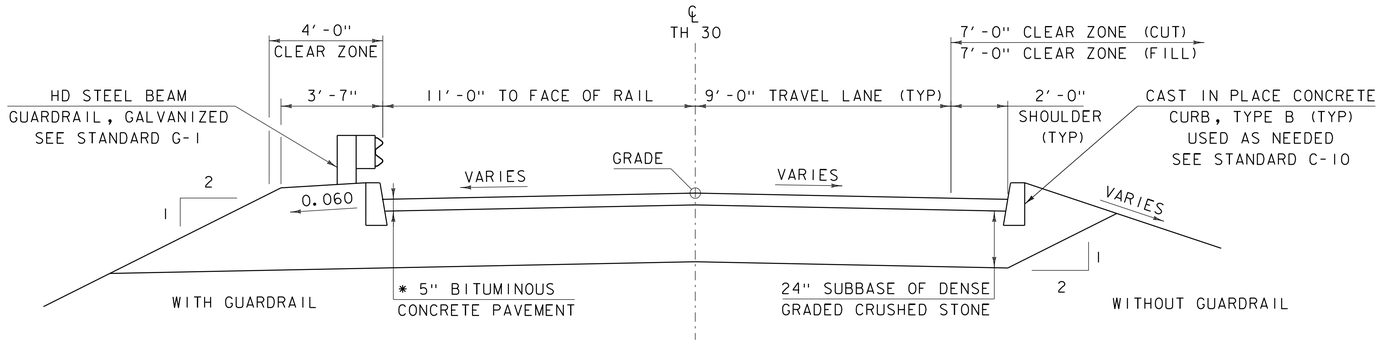


PROJECT NAME: **MONTPELIER**

PROJECT NUMBER: **BO 1446(36)**

FILE NAME: **13j082/s13j082excel.dgn**
PROJECT LEADER: **C.P.WILLIAMS**
DESIGNED BY:
PRELIMINARY INFORMATION SHEET 1

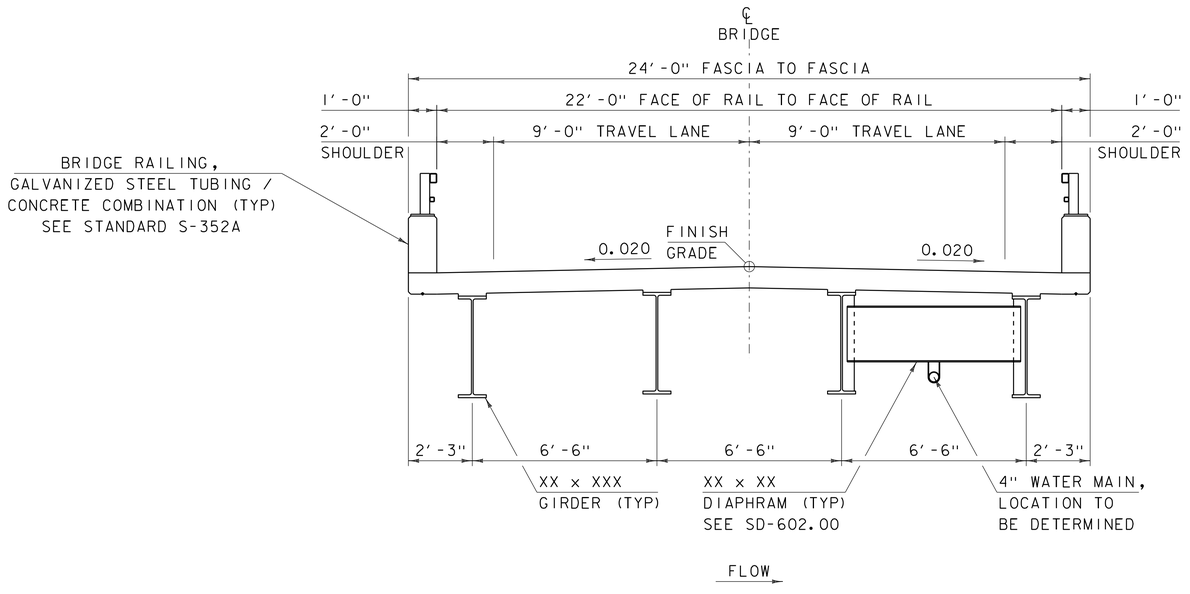
PLOT DATE: 2/19/2014
DRAWN BY: **D.D.BEARD**
CHECKED BY:
SHEET 2 OF 18



PROPOSED TH 30 TYPICAL SECTION

SCALE 3/8" = 1′-0"

* 1½" TYPE IVS OVER
1½" TYPE IVS OVER
2" TYPE IIIS



PROPOSED BRIDGE TYPICAL SECTION

SCALE 3/8" = 1′-0"

NOTE: GIRDERS SHOWN AS EXAMPLE
SUPERSTRUCTURE NOT YET DESIGNED

MATERIAL TOLERANCES

(IF USED ON PROJECT)

SURFACE	
- PAVEMENT (TOTAL THICKNESS)	+/- ¼"
- AGGREGATE SURFACE COURSE	+/- ½"
SUBBASE	+/- 1"
SAND BORROW	+/- 1"

PROJECT NAME: MONTPELIER
PROJECT NUMBER: BO 1446(36)

FILE NAME: 13J082/sl3J082Typical.dgn
PROJECT LEADER: C.P.WILLIAMS
DESIGNED BY: ----------
TYPICAL SECTIONS

PLOT DATE: 05-MAR-2014
DRAWN BY: D.D.BEARD
CHECKED BY: ------

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	BENCH MARK
	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

- 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)

- 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 PROPERTY BOUNDARY
- 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

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

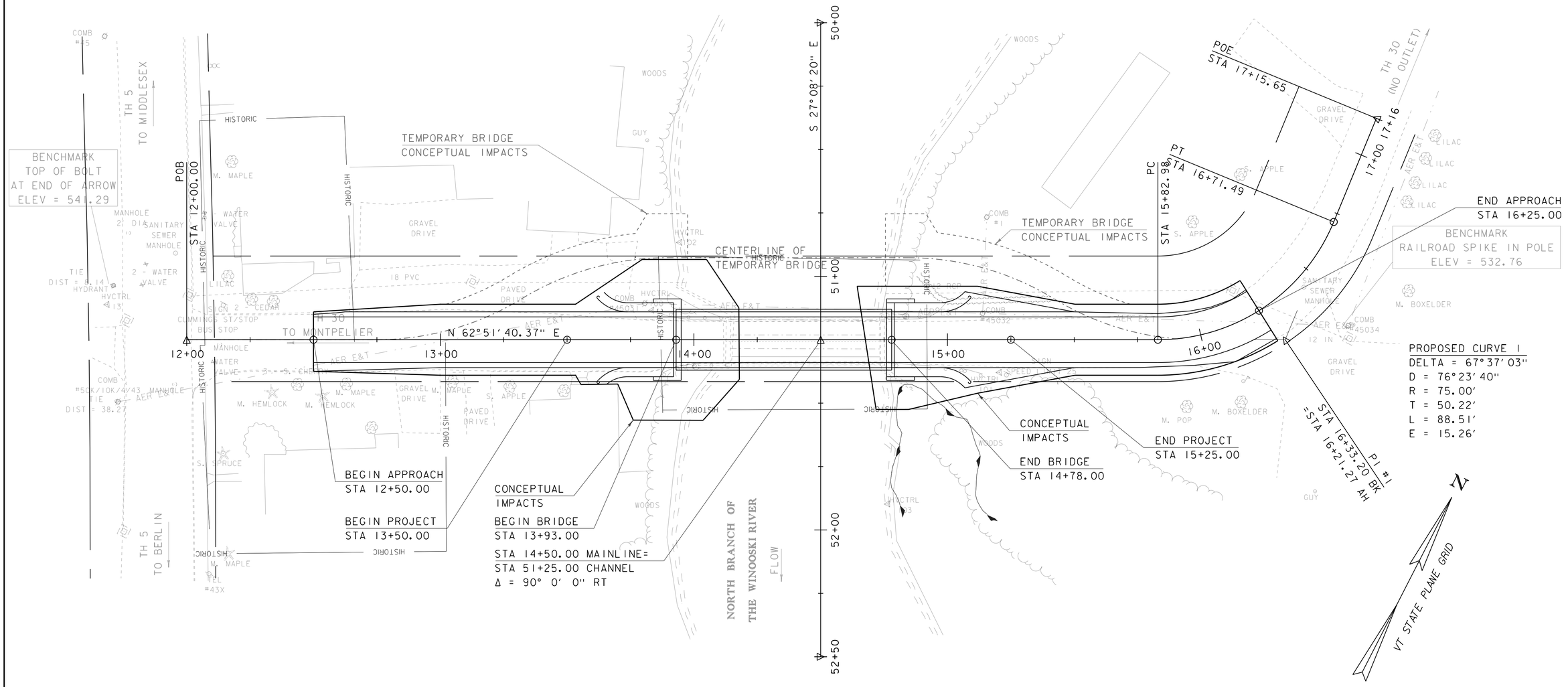
- ARCH — ARCHEOLOGICAL BOUNDARY
- HISTORIC DIST — HISTORIC DISTRICT BOUNDARY
- HISTORIC — HISTORIC AREA
- Ⓗ HISTORIC STRUCTURE

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:	MONTPELIER
PROJECT NUMBER:	BO 1446(36)
FILE NAME: 13J082/sl3J082excel.dgn	PLOT DATE: 05-MAR-2014
PROJECT LEADER: C.P.WILLIAMS	DRAWN BY: M.LONGSTREET
DESIGNED BY: ------	CHECKED BY: ------
SYMBOLOGY LEGEND	SHEET 4 OF 18

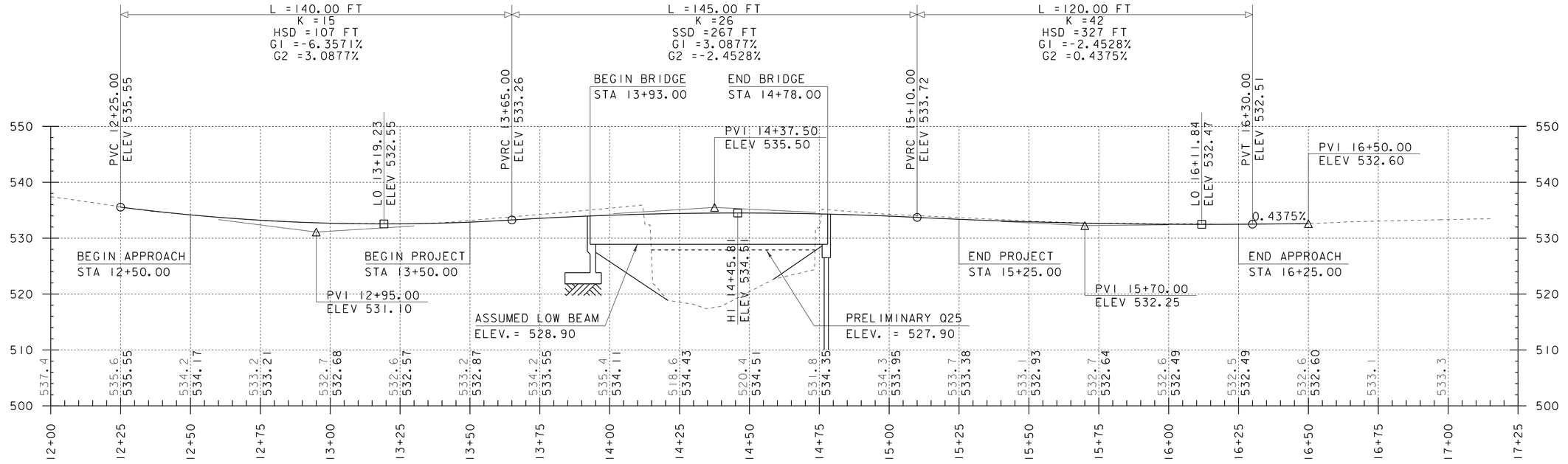


LAYOUT SHEET

SCALE 1" = 20'-0"

20 0 20

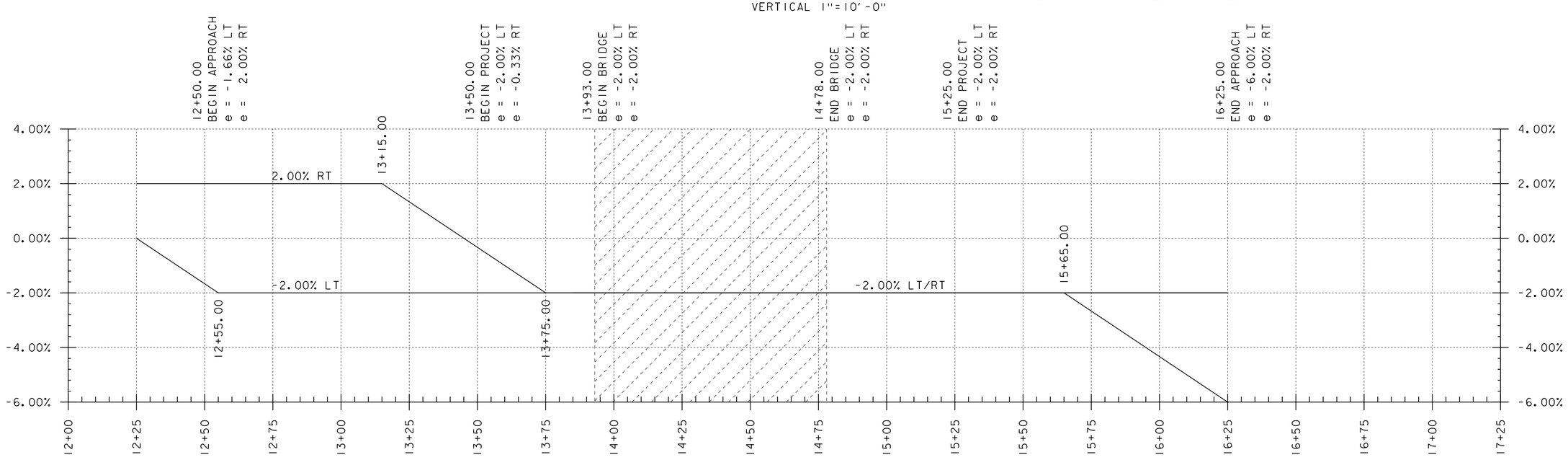
PROJECT NAME:	MONTPELIER
PROJECT NUMBER:	BO 1446(36)
FILE NAME:	13J082/sl3J082bdr.dgn
PROJECT LEADER:	C.P.WILLIAMS
DESIGNED BY:	L.J.STONE
LAYOUT SHEET	
PLOT DATE:	05-MAR-2014
DRAWN BY:	L.J.STONE
CHECKED BY:	------
SHEET	5 OF 18



TH 30 PROPOSED PROFILE

SCALE: HORIZONTAL 1"=20'-0"
VERTICAL 1"=10'-0"

CONCEPTUAL ABUTMENTS SHOWN.
BORINGS HAVE NOT BEEN TAKEN AND
ABUTMENTS HAVE NOT BEEN DESIGNED.



TH 30 PROPOSED BANKING

SCALE: HORIZONTAL 1"=20'-0"
VERTICAL 1"=1.00%

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG ℄

GRADES SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADE ALONG ℄

PROJECT NAME: MONTPELIER
PROJECT NUMBER: BO 1446(36)

FILE NAME: Structures/13j082pro.dgn
PROJECT LEADER: C.P.WILLIAMS
DESIGNED BY: L.J.STONE
PROFILE SHEET

PLOT DATE: 05-MAR-2014
DRAWN BY: L.J.STONE
CHECKED BY: ------

SOIL CLASSIFICATION

AASHTO	
A1	Gravel and Sand
A3	Fine Sand
A2	Silty or Clayey Gravel and Sand
A4	Silty Soil - Low Compressibility
A5	Silty Soil - Highly Compressible
A6	Clayey Soil - Low Compressibility
A7	Clayey Soil - Highly Compressible

ROCK QUALITY DESIGNATION

R.Q.D. (%)	ROCK DESCRIPTION
<25	Very Poor
25 to 50	Poor
51 to 75	Fair
76 to 90	Good
>90	Excellent

SHEAR STRENGTH

UNDRAINED SHEAR STRENGTH IN P.S.F.	CONSISTENCY
<250	Very Soft
250-500	Soft
500-1000	Med. Stiff
1000-2000	Stiff
2000-4000	Very Stiff
>4000	Hard

CORRELATION GUIDE OF "N" TO DENSITY/CONSISTENCY

DENSITY (GRANULAR SOILS)		CONSISTENCY (COHESIVE SOILS)	
N	DESCRIPTIVE TERM	N	DESCRIPTIVE TERM
<5	Very Loose	<2	Very Soft
5-10	Loose	2-4	Soft
11-24	Med. Dense	5-8	Med. Stiff
25-50	Dense	9-15	Stiff
>50	Very Dense	16-30	Very Stiff
		31-60	Hard
		>60	Very Hard

COMMONLY USED SYMBOLS

▼	Water Elevation
⊛	Standard Penetration Boring
⊕	Auger Boring
⊙	Rod Sounding
S	Sample
N	Standard Penetration Test Blow Count Per Foot For: 2" O.D. Sampler 1 3/8" I.D. Sampler Hammer Weight Of 140 Lbs. Hammer Fall Of 30"
VS	Field Vane Shear Test
US	Undisturbed Soil Sample
B	Blast
DC	Diamond Core
MD	Mud Drill
WA	Wash Ahead
HSA	Hollow Stem Auger
AX	Core Size 1 1/8"
BX	Core Size 1 5/8"
NX	Core Size 2 1/8"
M	Double Tube Core Barrel Used
LL	Liquid Limit
PL	Plastic Limit
PI	Plasticity Index
NP	Non Plastic
w	Moisture Content (Dry Wgt. Basis)
D	Dry
M	Moist
MTW	Moist To Wet
W	Wet
Sat	Saturated
Bo	Boulder
Gr	Gravel
Sa	Sand
Si	Silt
Cl	Clay
HP	Hardpan
Le	Ledge
NLTD	No Ledge To Depth
CNPF	Can Not Penetrate Further
TLOB	Top of Ledge Or Boulder
NR	No Recovery
Rec.	Recovery
%Rec.	Percent Recovery
ROD	Rock Quality Designation
CBR	California Bearing Ratio
<	Less Than
>	Greater Than
R	Refusal (N > 100)
VTSPG	NAD83 - See Note 7

COLOR

blk	Black	pnk	Pink
bl	Blue	pu	Purple
brn	Brown	rd	Red
dk	Dark	tn	Tan
gry	Gray	wh	White
gn	Green	yel	Yellow
lt	Light	mltc	Multicolored
or	Orange		

DEFINITIONS (AASHTO)

BEDROCK (LEDGE) - Rock in its native location of indefinite thickness.

BOULDER - A rock fragment with an average dimension > 12 inches.

COBBLE - Rock fragments with an average dimension between 3 and 12 inches.

GRAVEL - Rounded particles of rock < 3" and > 0.0787" (#10 sieve).

SAND - Particles of rock < 0.0787" (#10 sieve) and > 0.0029" (#200 sieve).

SILT - Soil < 0.0029" (#200 sieve), non or slightly plastic and exhibits no strength when air-dried.

CLAY - Fine grained soil, exhibits plasticity when moist and considerable strength when air-dried.

VARVED - Alternate layers of silt and clay.

HARDPAN - Extremely dense soil, cemented layer, not softened when wet.

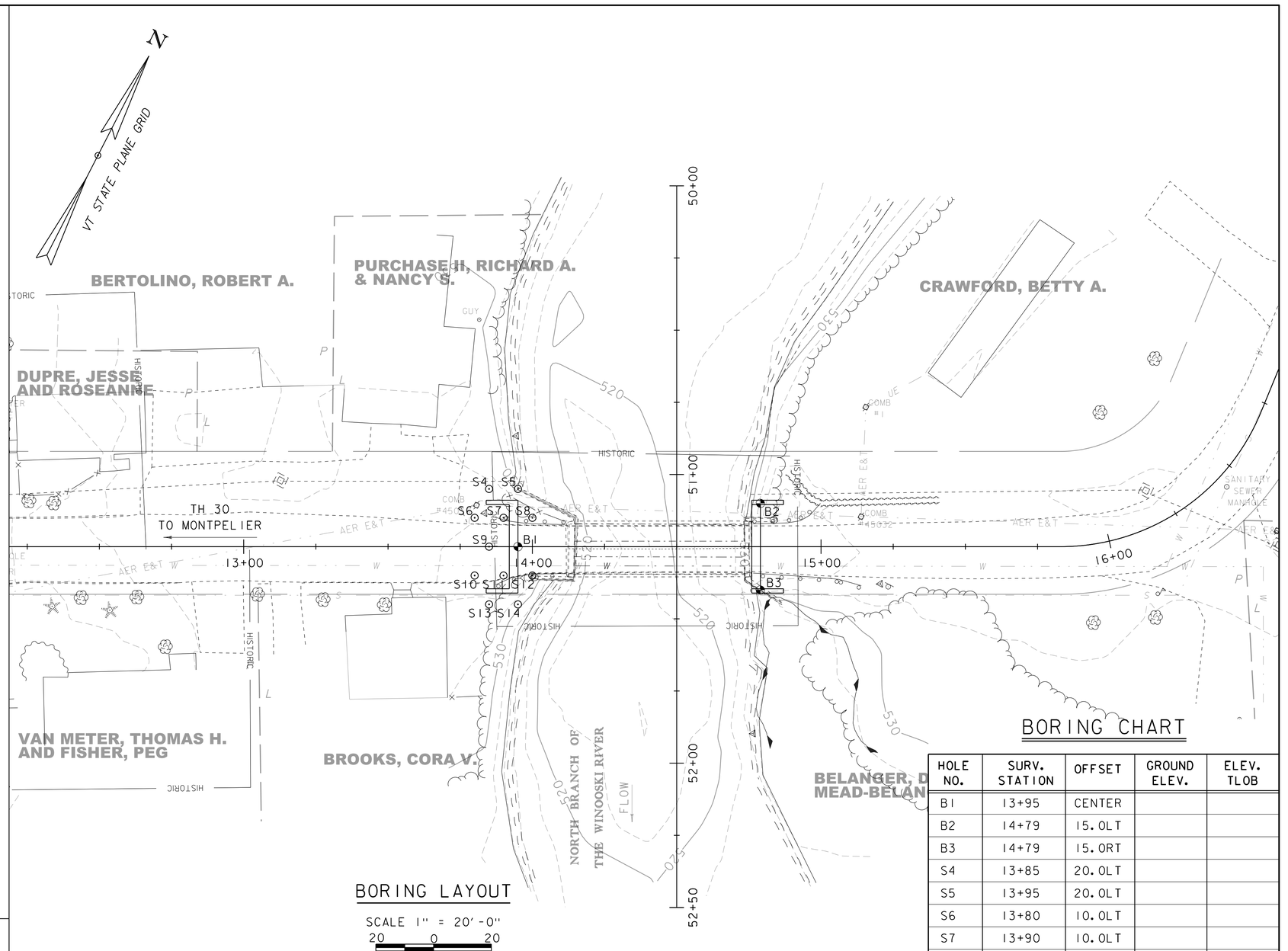
MUCK - Soft organic soil (containing > 10% organic material.

MOISTURE CONTENT - Weight of water divided by dry weight of soil.

FLOWING SAND - Granular soil so saturated (loose) that it flows into drill casing during extraction of wash rod.

STRIKE - Angle from magnetic north to line of intersection of bed with a horizontal plane.

DIP - Inclination of bed with a horizontal plane.



BORING LAYOUT

SCALE 1" = 20'-0"

20 0 20

BORING CHART

HOLE NO.	SURV. STATION	OFFSET	GROUND ELEV.	ELEV. TLOB
B1	13+95	CENTER		
B2	14+79	15.0 LT		
B3	14+79	15.0 RT		
S4	13+85	20.0 LT		
S5	13+95	20.0 LT		
S6	13+80	10.0 LT		
S7	13+90	10.0 LT		
S8	14+00	10.0 LT		
S9	13+85	CENTER		
S10	13+80	10.0 RT		
S11	13+90	10.0 RT		
S12	14+00	10.0 RT		
S13	13+85	20.0 RT		
S14	13+95	20.0 RT		

GENERAL NOTES

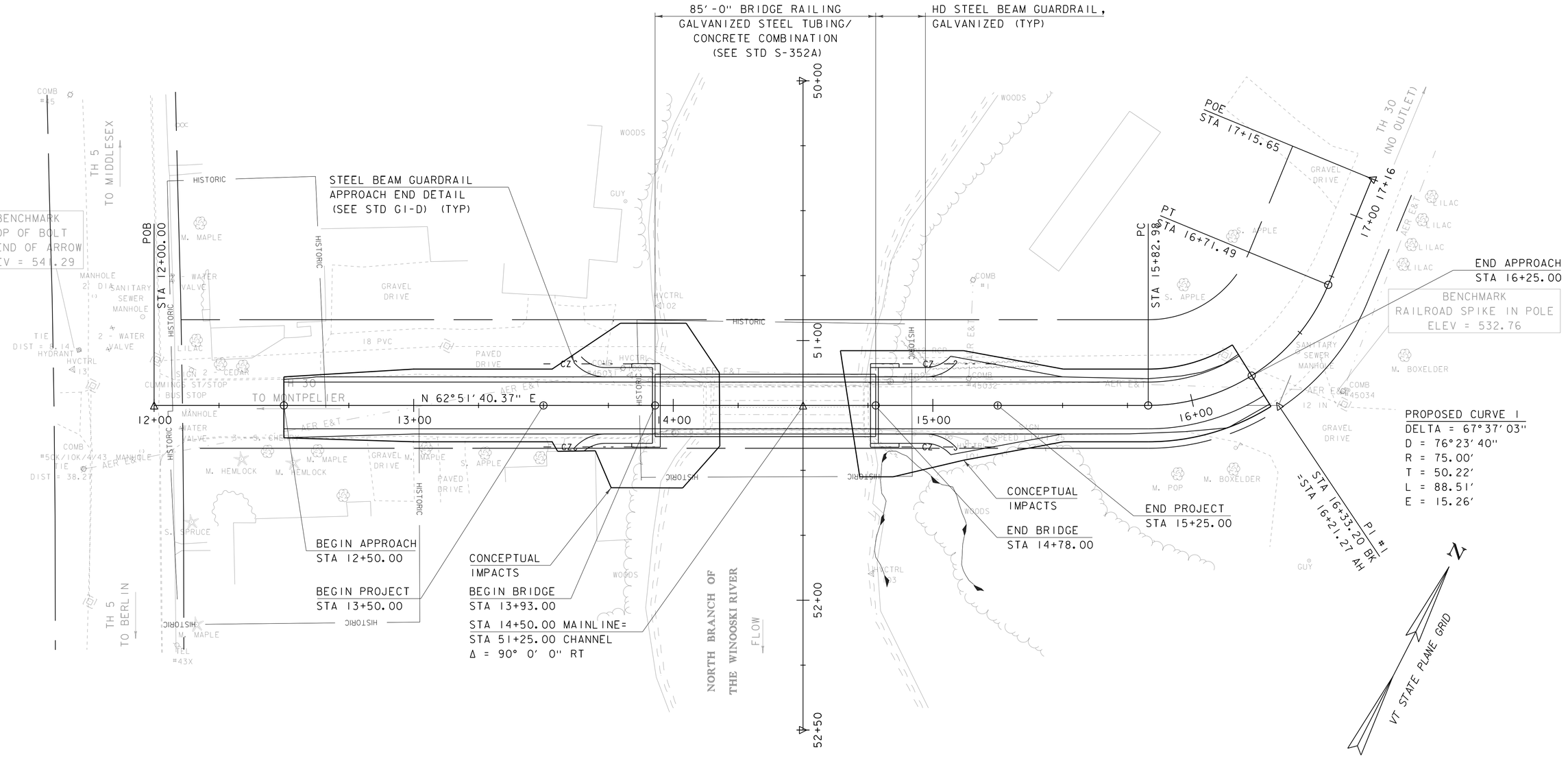
1. The subsurface explorations shown herein were made between _____ and _____ by the Agency.
2. Soil and rock classifications, properties and descriptions are based on engineering interpretation from available subsurface information by the Agency and may not necessarily reflect actual variations in subsurface conditions that may be encountered between individual boring or sample locations.
3. Observed water levels and/or conditions indicated are as recorded at the time of exploration and may vary according to the prevailing rainfall, methods of exploration and other factors.
4. Engineering judgment was exercised in preparing the subsurface information presented herein. Analysis and interpretation of subsurface data was performed and interpreted for Agency design and estimating purposes. Presentation of the information in the Contract is intended to provide the Contractor access to the same data available to the Agency. The subsurface information is presented in good faith and is not intended as a substitute for personal investigation, independent interpretation, independent analysis or judgment by the Contractor.
5. Pictorial structure details shown on the boring plan layout or soils profile are for illustrative purposes only and may not accurately portray final contract details.
6. Terminology used on boring logs to describe the hardness, degree of weathering, and spacing of fractures, joints and other discontinuities in the bedrock is defined in the AASHTO Manual on Subsurface Investigations, 1988.
7. Northing and Easting coordinates are shown in Vermont State Plane Grid North American Datum 1983 in meters and survey feet.

PROJECT NAME: MONTPELIER

PROJECT NUMBER: BO 1446(36)

FILE NAME: 13J082/sl3J082boring.dgn
PROJECT LEADER: C.P.WILLIAMS
DESIGNED BY: ------
BORING INFORMATION SHEET

PLOT DATE: 05-MAR-2014
DRAWN BY: D.D.BEARD
CHECKED BY: ------
SHEET 7 OF 18

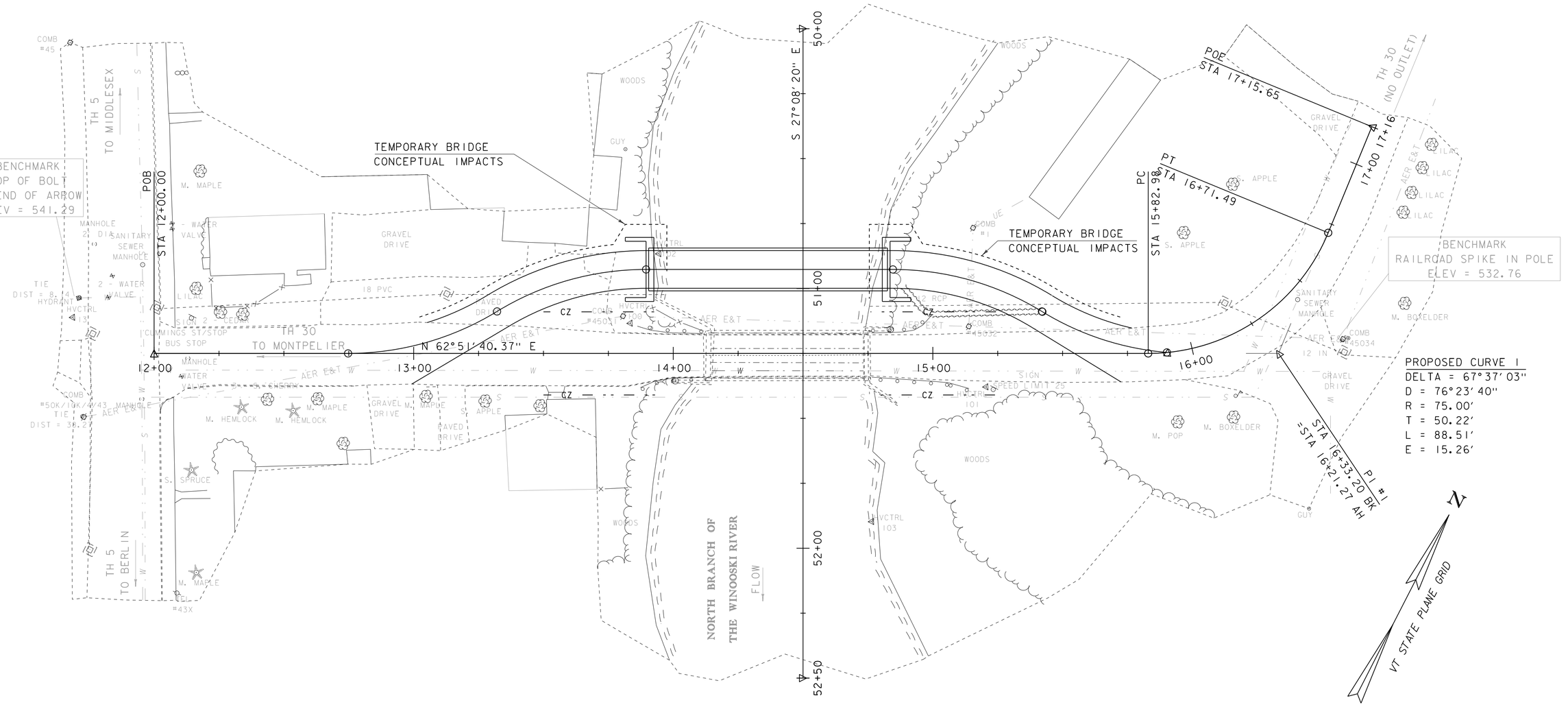


RAILING LAYOUT SHEET

SCALE 1" = 20'-0"

20 0 20

PROJECT NAME:	MONTPELIER
PROJECT NUMBER:	BO 1446(36)
FILE NAME: 13J082/sl3J082bdr.dgn	PLOT DATE: 05-MAR-2014
PROJECT LEADER: C.P.WILLIAMS	DRAWN BY: L.J.STONE
DESIGNED BY: L.J.STONE	CHECKED BY: ------
RAILING LAYOUT SHEET	SHEET 8 OF 18

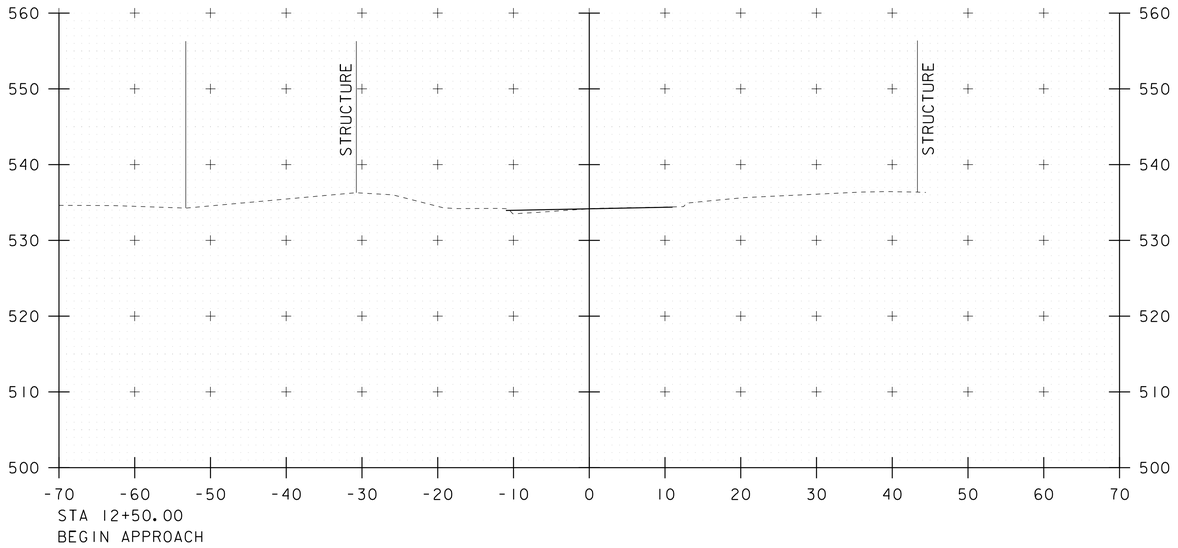


TEMPORARY BRIDGE LAYOUT

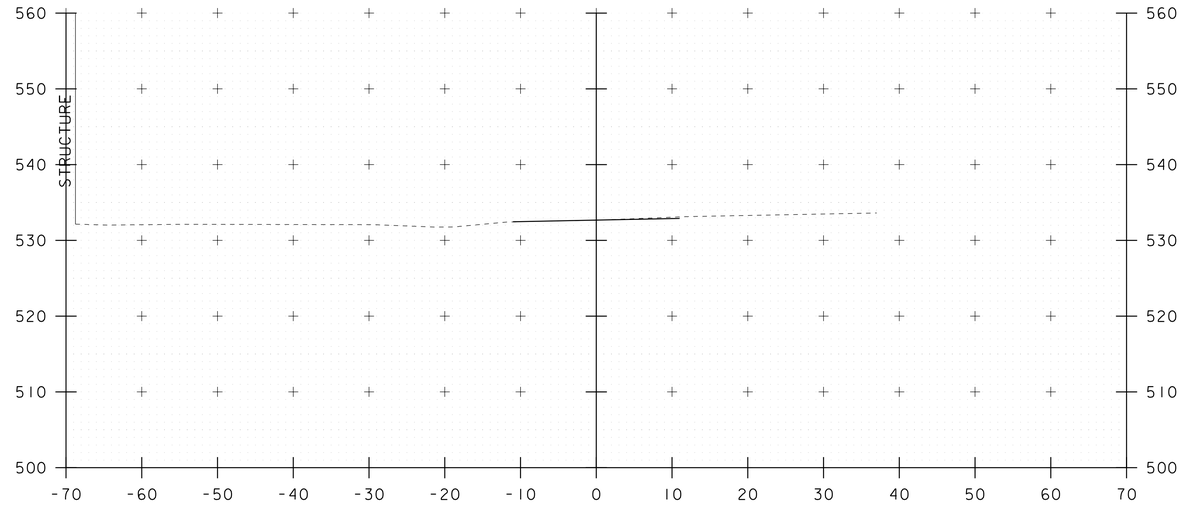
SCALE 1" = 20'-0"
20 0 20

NOTE: TEMPORARY BRIDGE APPROACHES ARE DESIGNED TO MEET A 15 MPH DESIGN SPEED (DOWN FROM A POSTED 25 MPH) WITH SUPERELEVATION OF 5.9%.

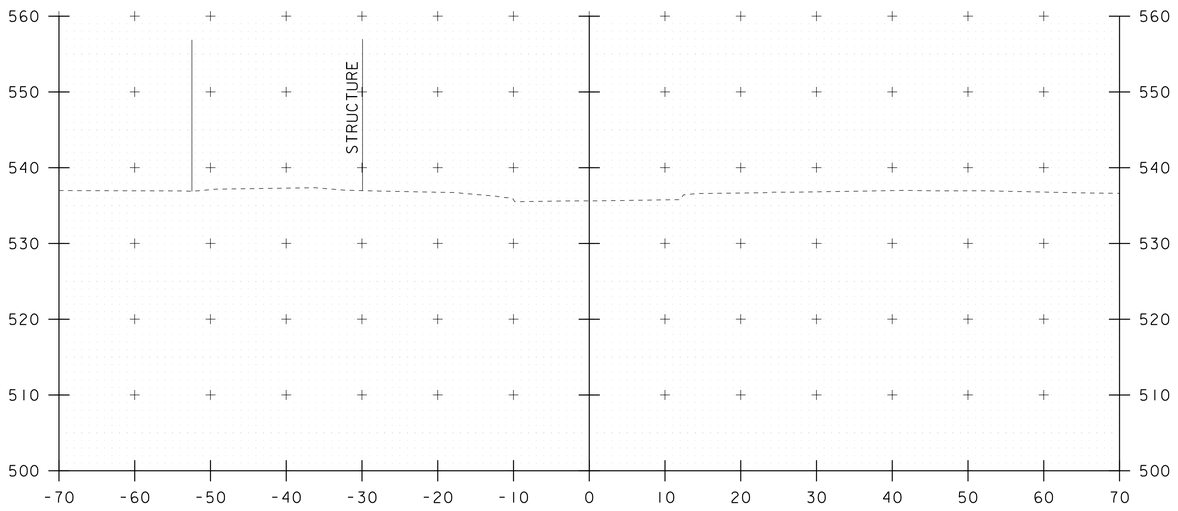
PROJECT NAME:	MONTPELIER
PROJECT NUMBER:	BO 1446(36)
FILE NAME: 13J082/sl3J082tempbridge.dgn	PLOT DATE: 05-MAR-2014
PROJECT LEADER: C.P.WILLIAMS	DRAWN BY: D.D.BEARD
DESIGNED BY: T.FILLBACH	CHECKED BY: ------
TEMPORARY BRIDGE LAYOUT SHEET	SHEET 9 OF 18



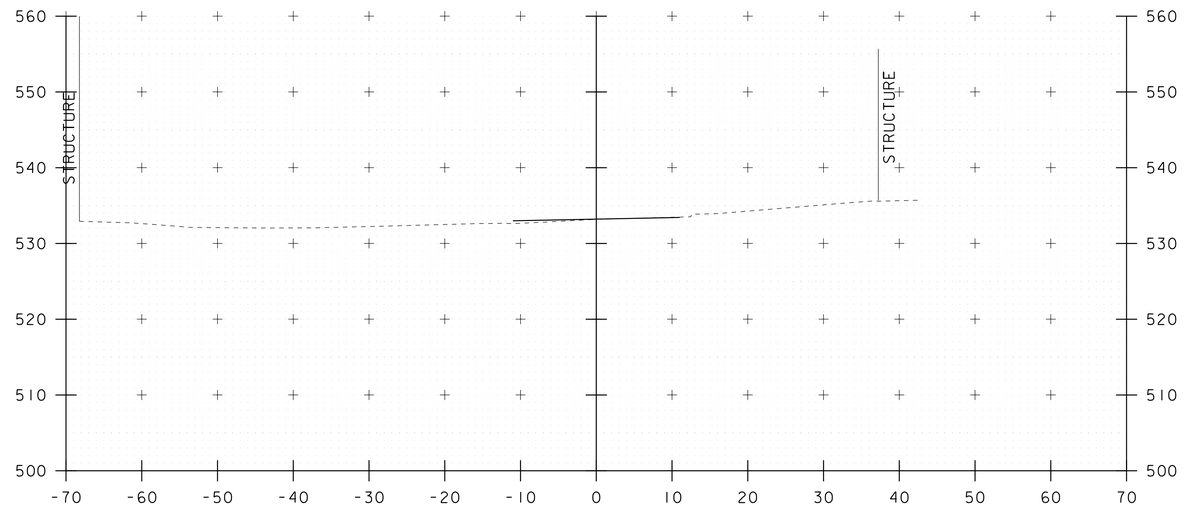
12+50



13+00



12+25



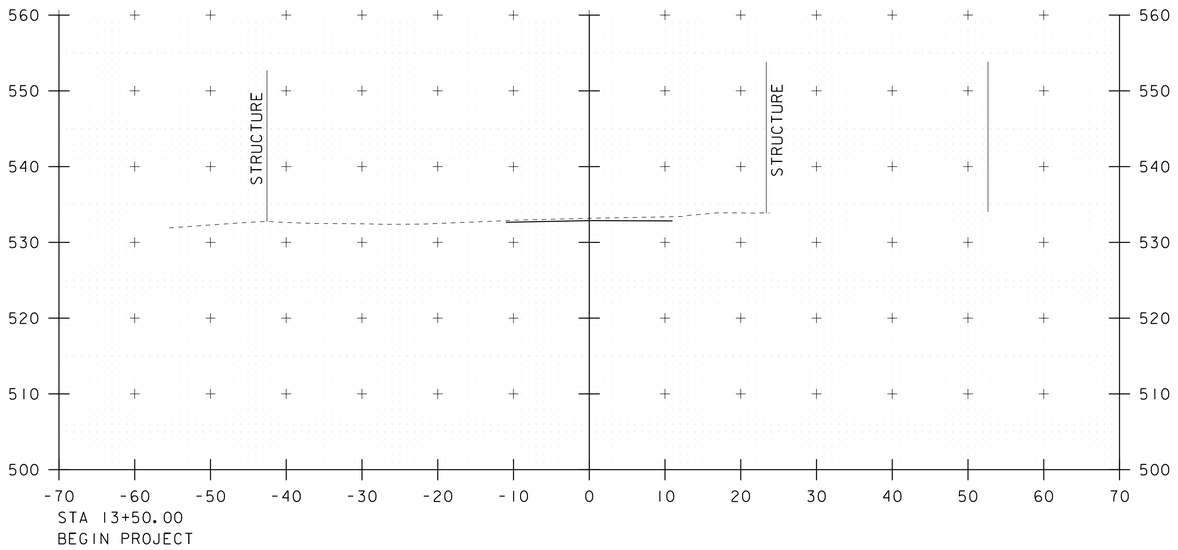
12+75

STA. 12+25 TO STA. 13+00

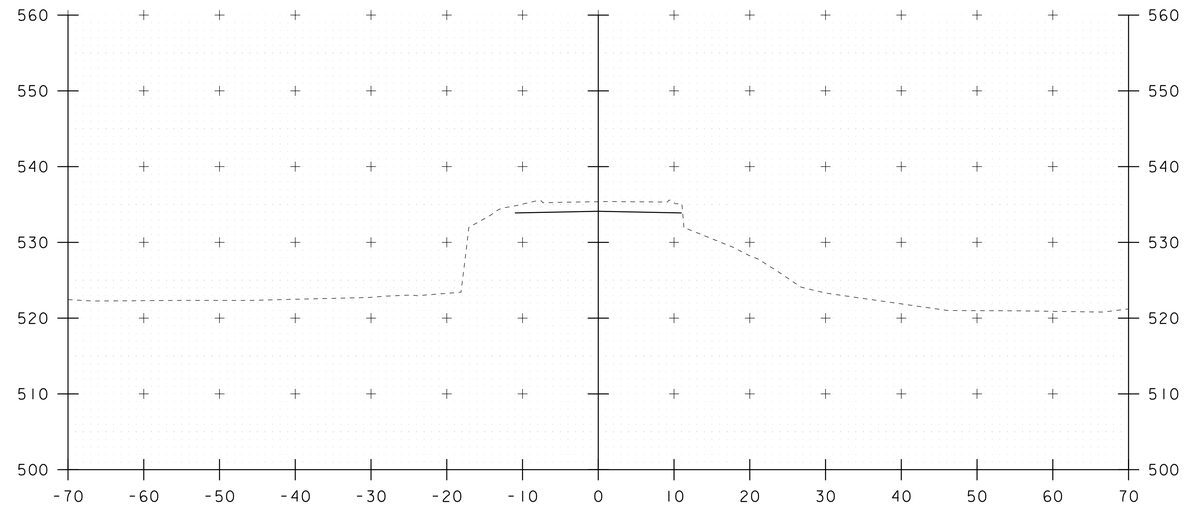
PROJECT NAME: MONTPELIER
PROJECT NUMBER: BO 1446(36)

FILE NAME: Structures/13j082xsl.dgn
PROJECT LEADER: C.P.WILLIAMS
DESIGNED BY: L.J.STONE
MAINLINE CROSS SECTIONS

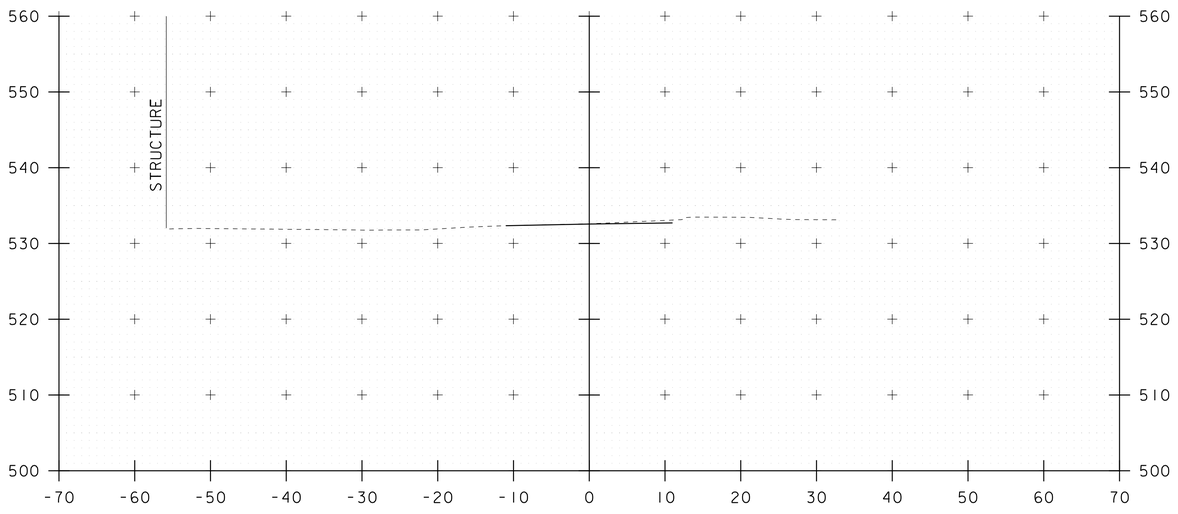
PLOT DATE: 05-MAR-2014
DRAWN BY: L.J.STONE
CHECKED BY: ------
SHEET 10 OF 18



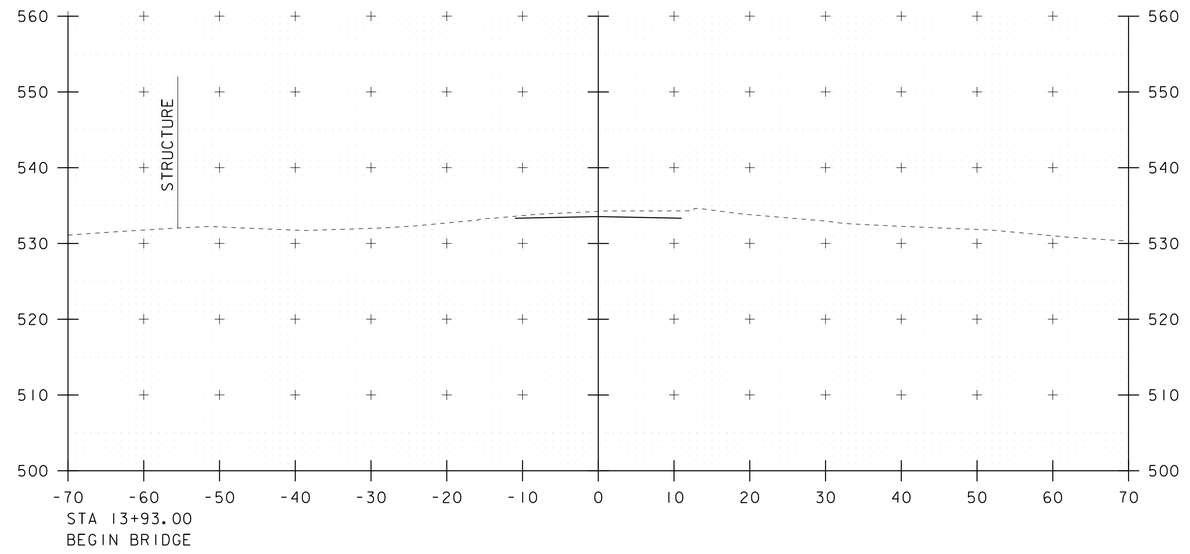
13+50



14+00



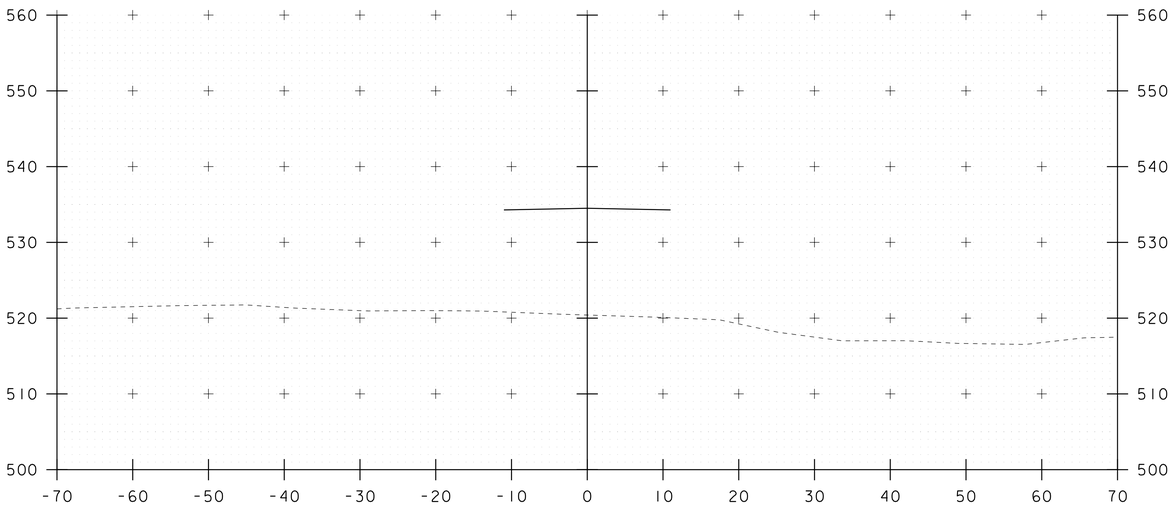
13+25



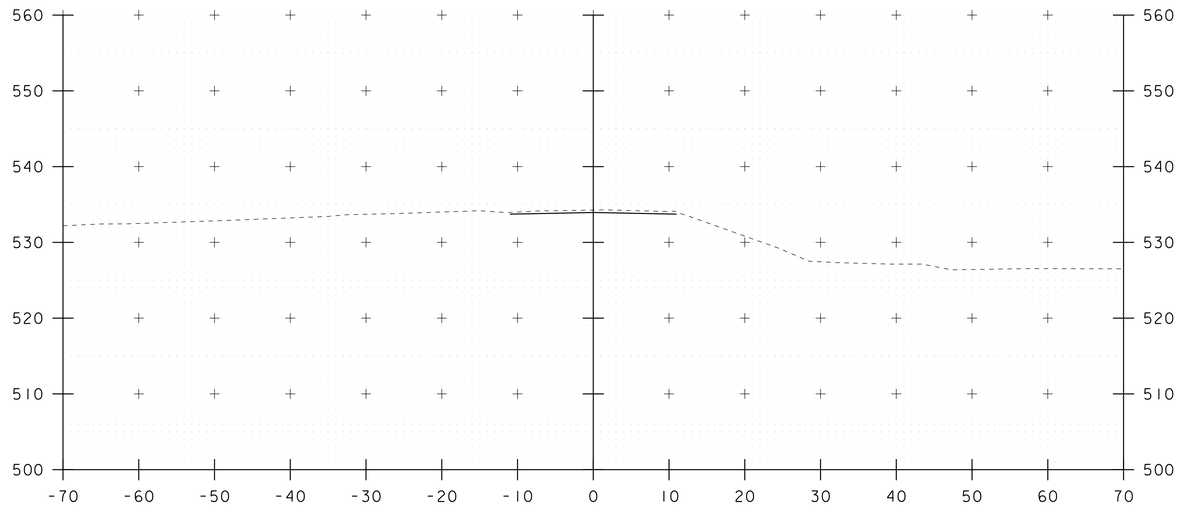
13+75

STA. 13+25 TO STA. 14+00

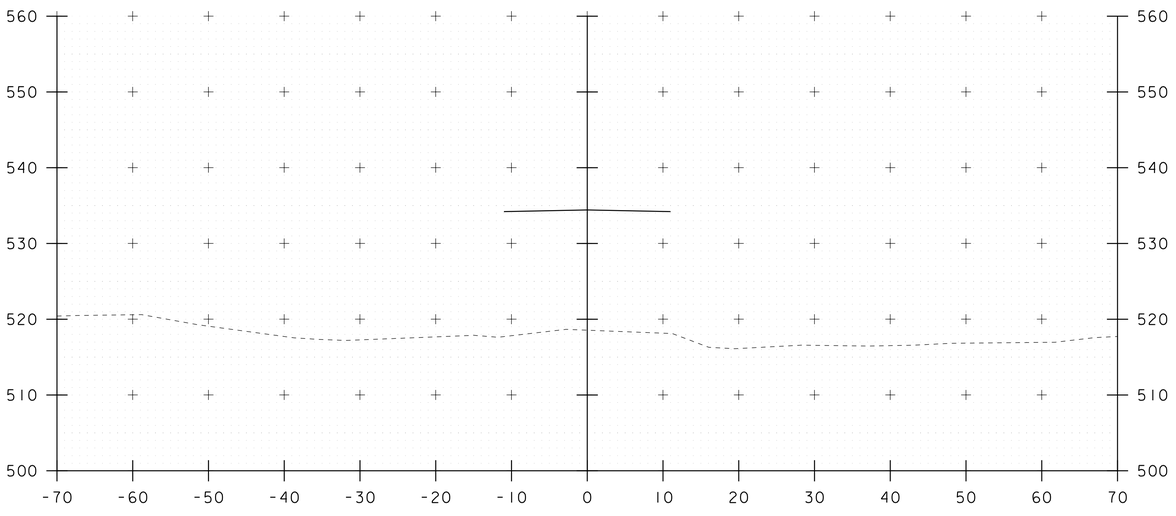
PROJECT NAME: MONTPELIER	
PROJECT NUMBER: BO 1446(36)	
FILE NAME: Structures/13j082xsl.dgn	PLOT DATE: 05-MAR-2014
PROJECT LEADER: C.P.WILLIAMS	DRAWN BY: L.J.STONE
DESIGNED BY: L.J.STONE	CHECKED BY: ------
MAINLINE CROSS SECTIONS	SHEET 11 OF 18



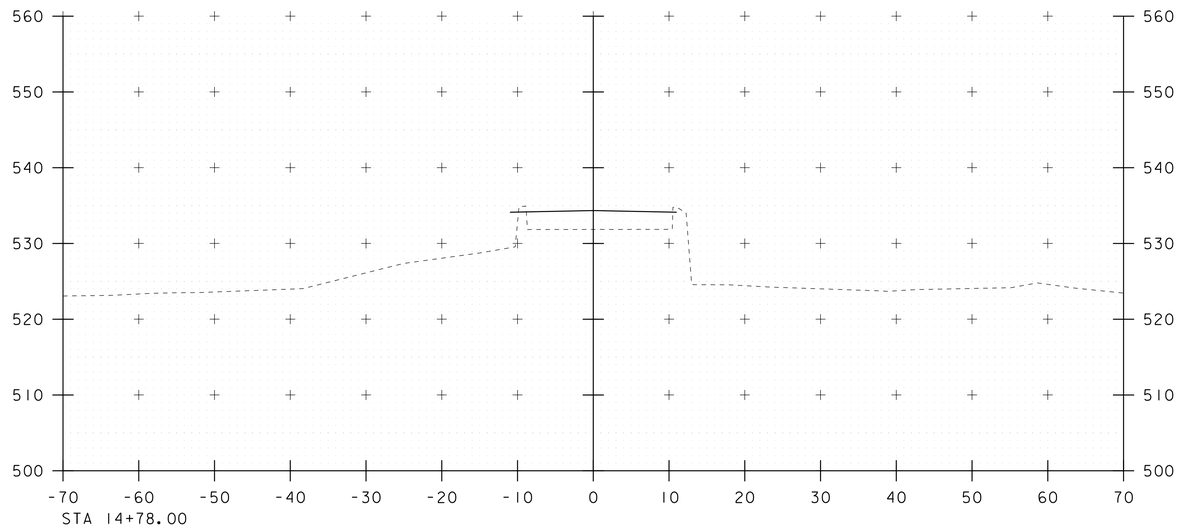
14+50



15+00



14+25

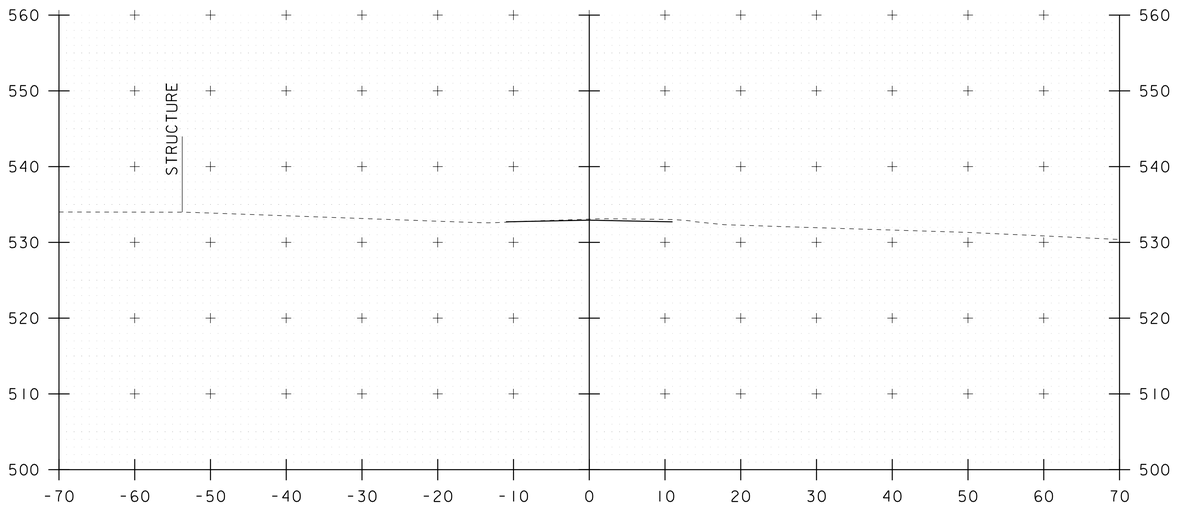


14+75

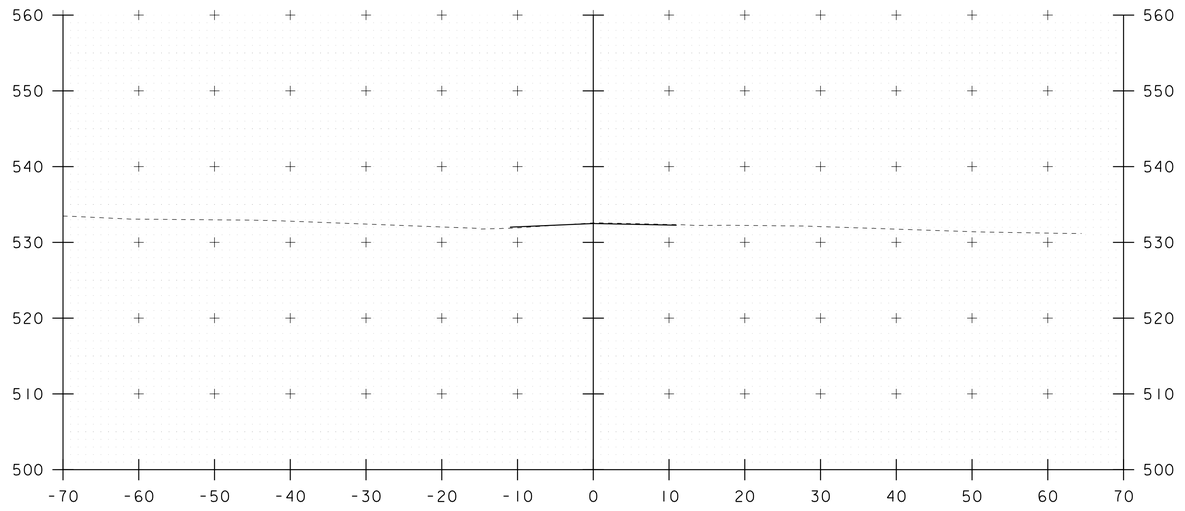
STA. 14+25 TO STA. 15+00

PROJECT NAME:	MONTPELIER
PROJECT NUMBER:	BO 1446(36)

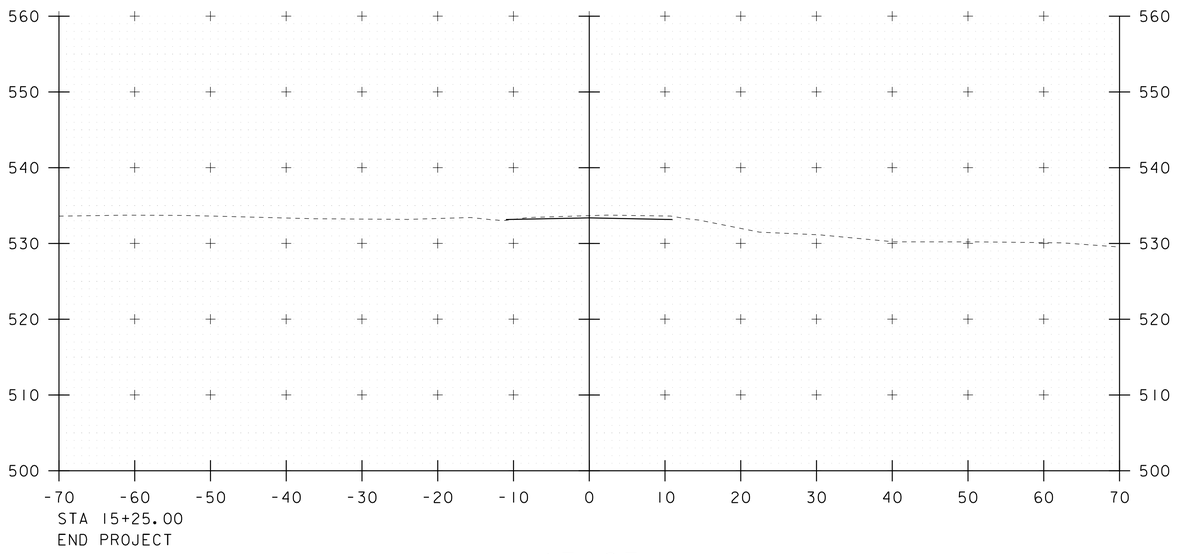
FILE NAME: Structures/13j082xsl.dgn	PLOT DATE: 05-MAR-2014
PROJECT LEADER: C.P.WILLIAMS	DRAWN BY: L.J.STONE
DESIGNED BY: L.J.STONE	CHECKED BY: ------
MAINLINE CROSS SECTIONS	SHEET 12 OF 18



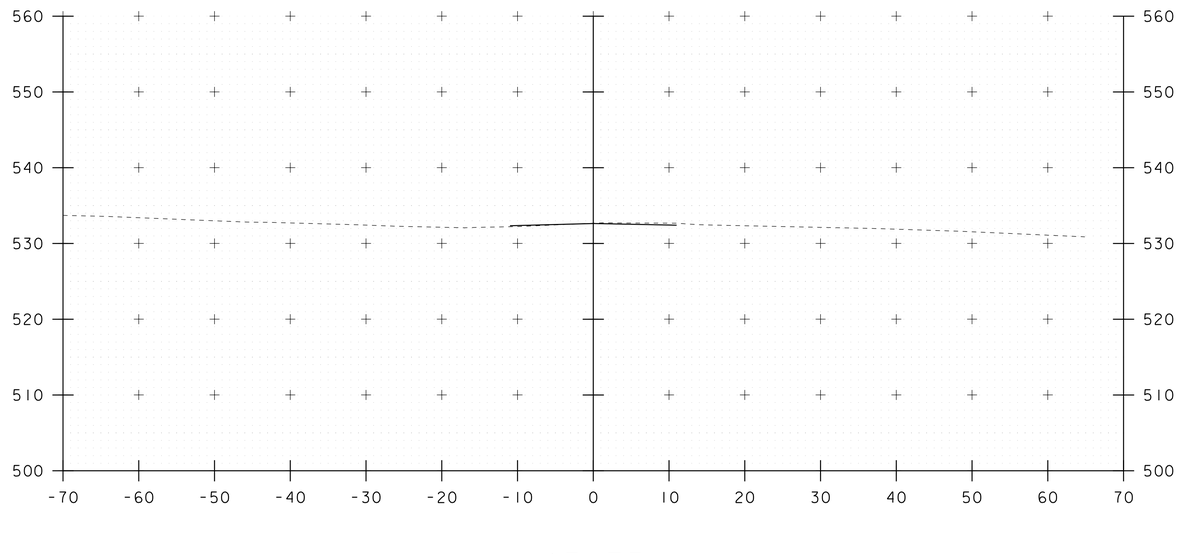
15+50



16+00



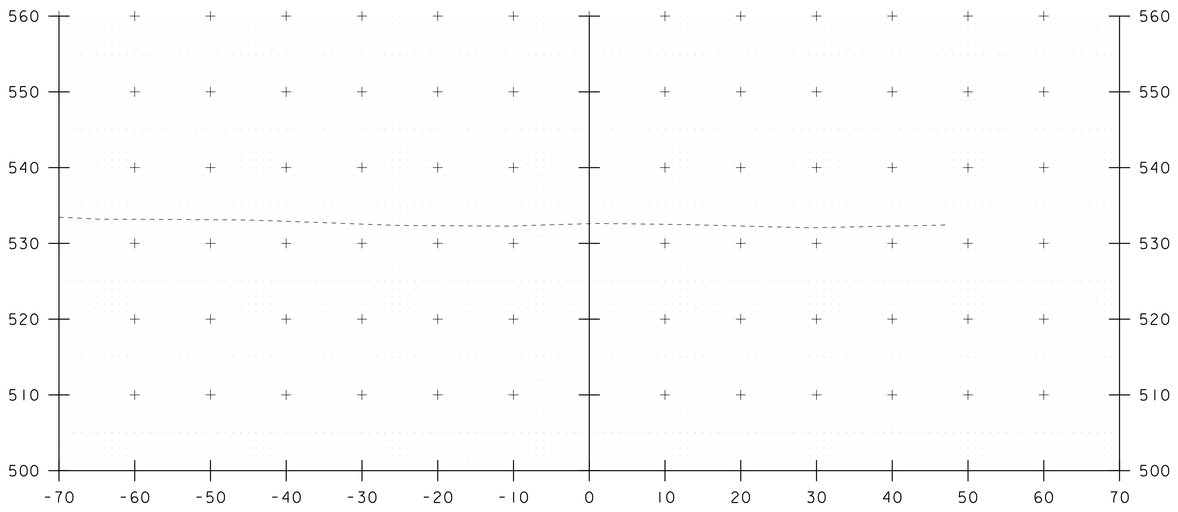
15+25



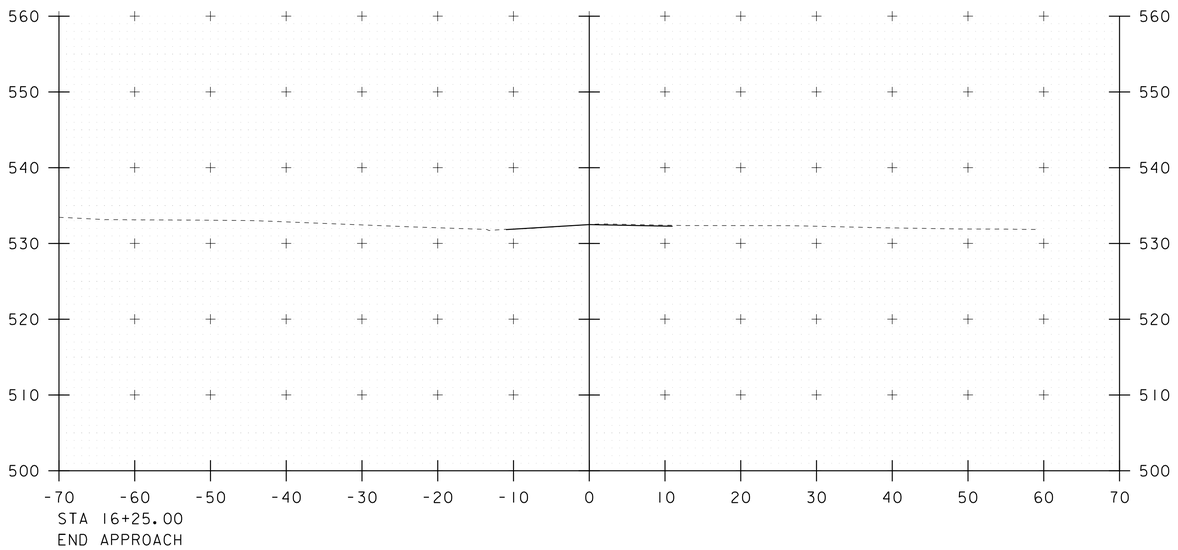
15+75

STA. 15+25 TO STA. 16+00

PROJECT NAME: MONTPELIER	
PROJECT NUMBER: BO 1446(36)	
FILE NAME: Structures/13j082xsl.dgn	PLOT DATE: 05-MAR-2014
PROJECT LEADER: C.P.WILLIAMS	DRAWN BY: L.J.STONE
DESIGNED BY: L.J.STONE	CHECKED BY: ------
MAINLINE CROSS SECTIONS	SHEET 13 OF 18



16+50



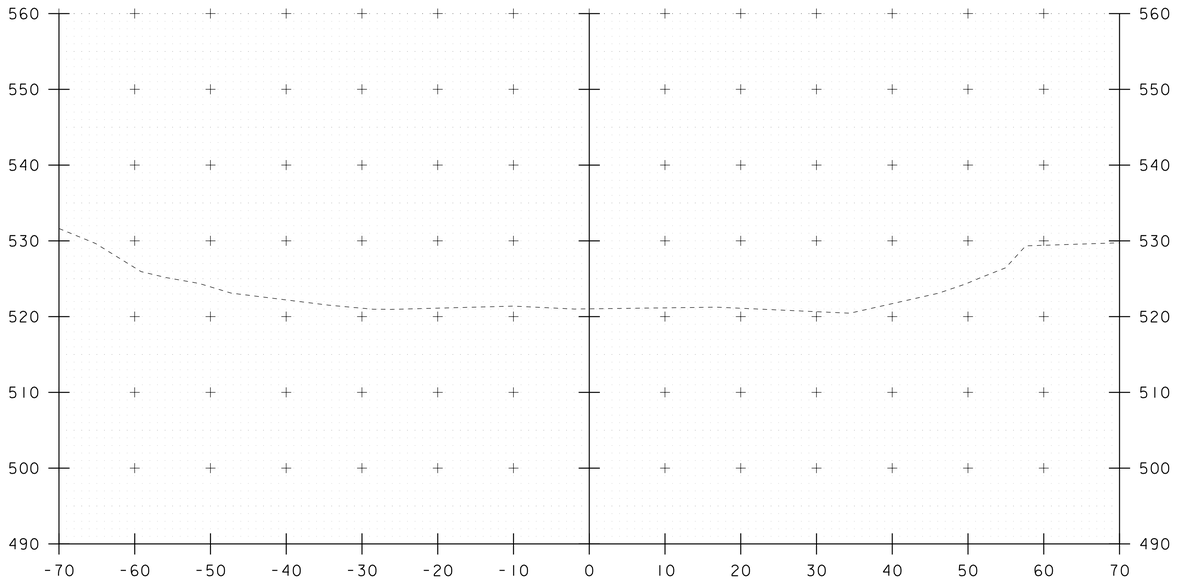
16+25

STA. 16+25 TO STA. 16+50

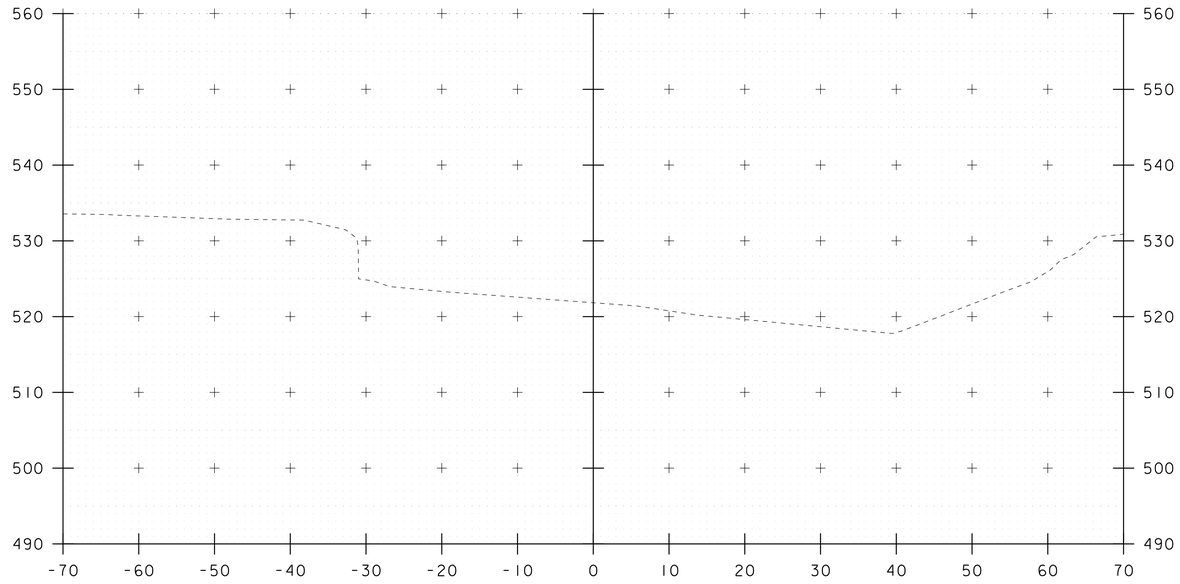
PROJECT NAME: MONTPELIER
PROJECT NUMBER: BO 1446(36)

FILE NAME: Structures/13j082xsl.dgn
PROJECT LEADER: C.P.WILLIAMS
DESIGNED BY: L.J.STONE
MAINLINE CROSS SECTIONS

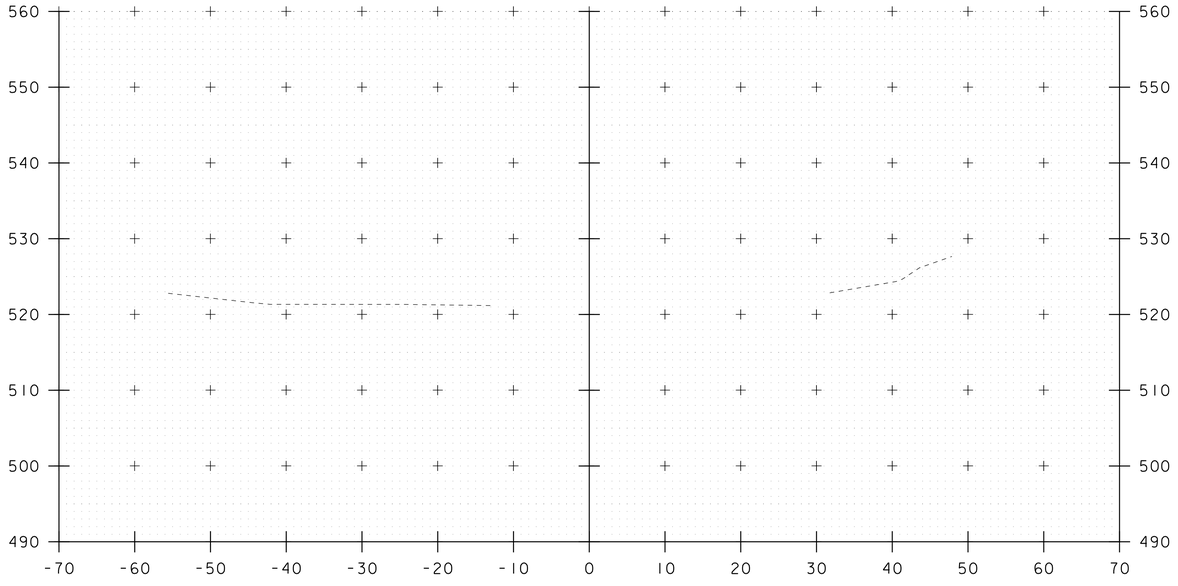
PLOT DATE: 05-MAR-2014
DRAWN BY: L.J.STONE
CHECKED BY: ------
SHEET 14 OF 18



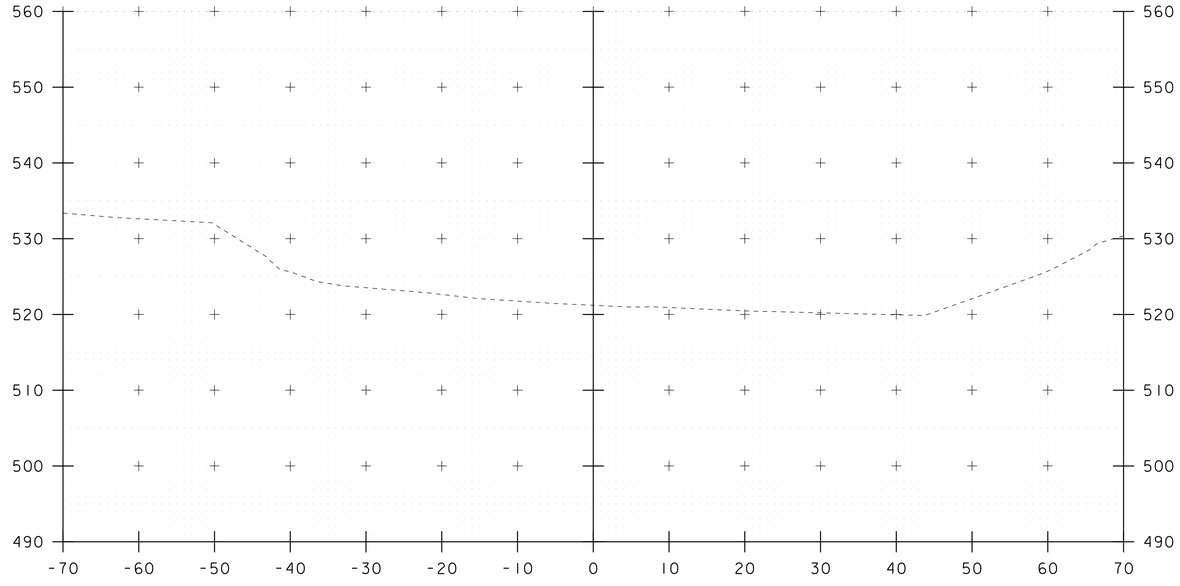
50+25



50+75



50+00



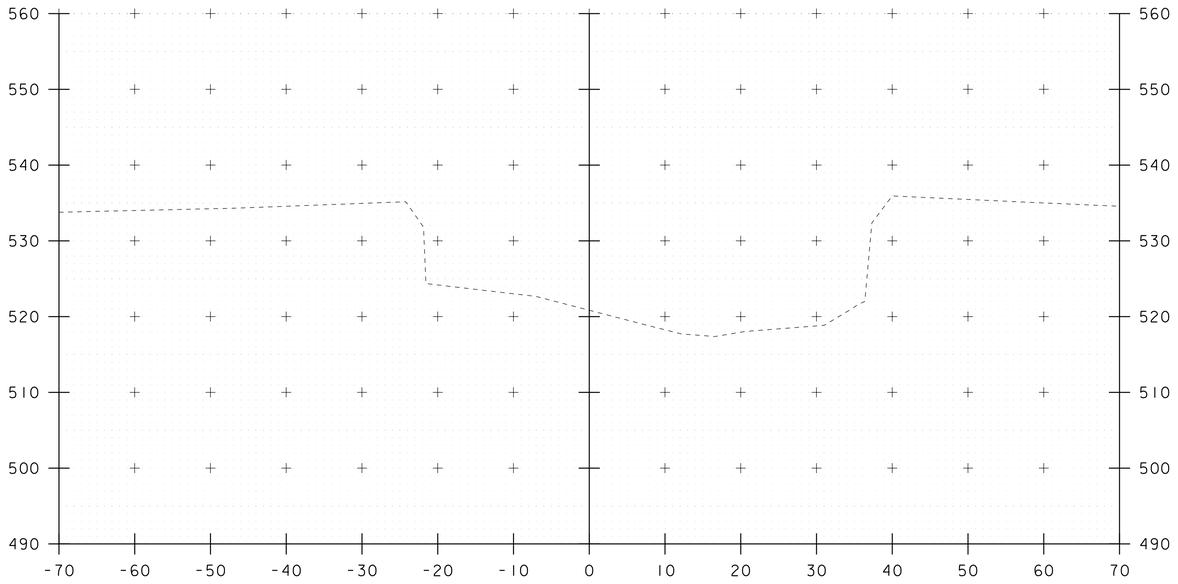
50+50

PROJECT NAME: MONTPELIER
PROJECT NUMBER: BO 1446(36)

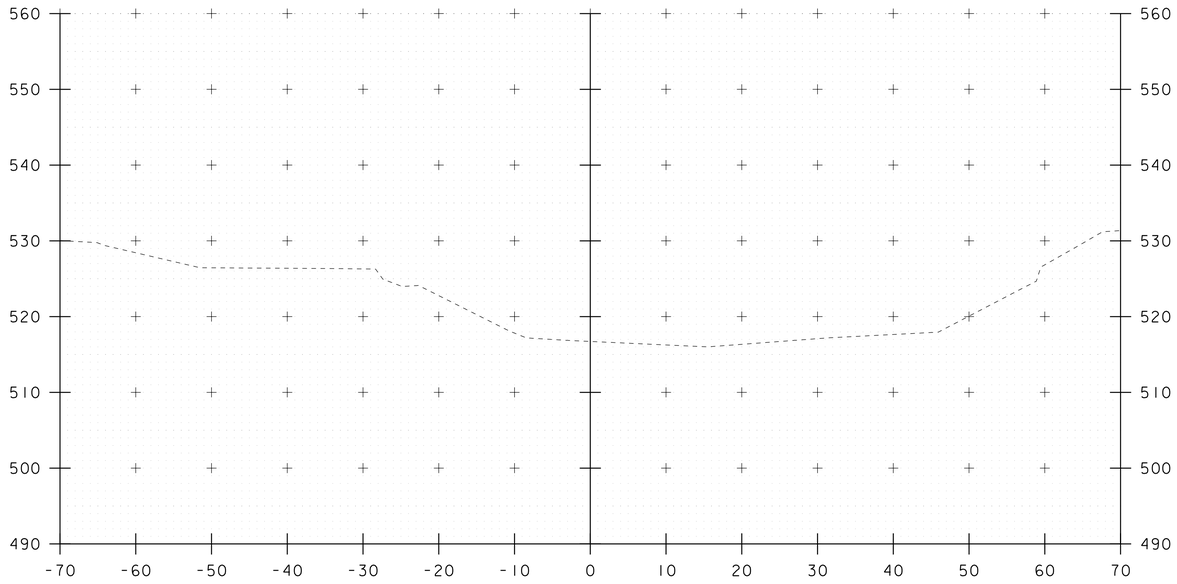
FILE NAME: Structures/13j082xsl.dgn
PROJECT LEADER: C.P.WILLIAMS
DESIGNED BY: L.J.STONE
CHANNEL CROSS SECTIONS

PLOT DATE: 05-MAR-2014
DRAWN BY: L.J.STONE
CHECKED BY: ------
SHEET 15 OF 18

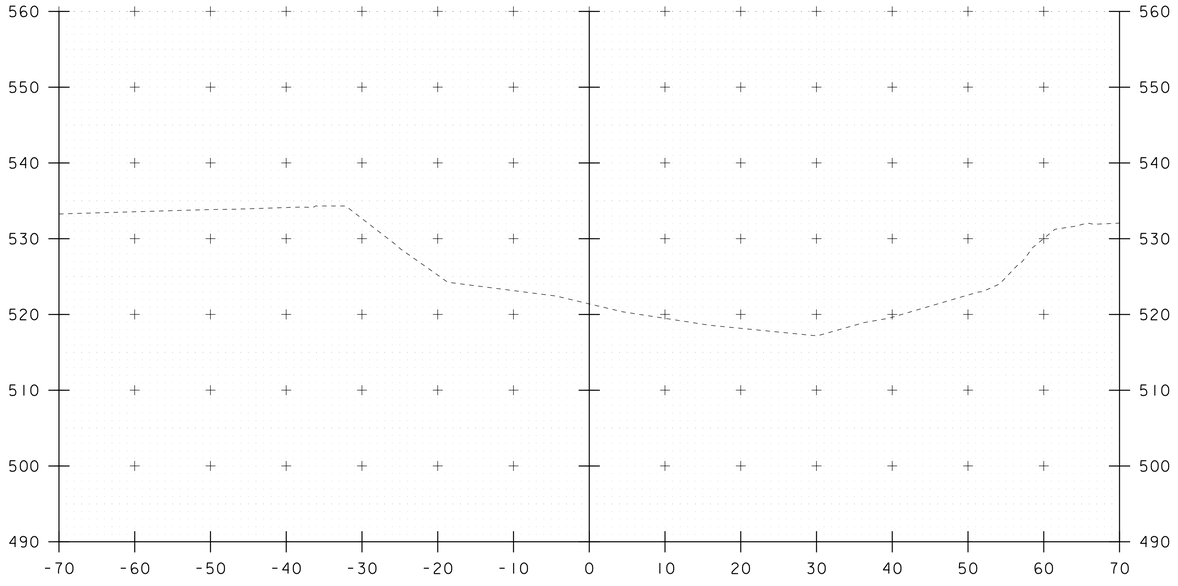
STA. 50+00 TO STA. 50+75



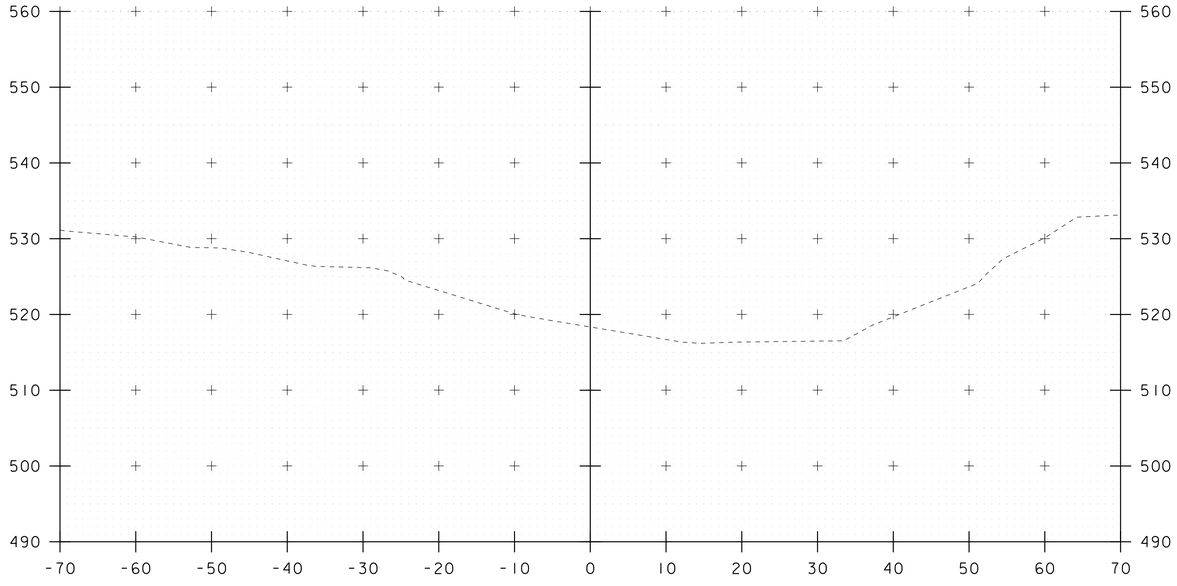
51+25



51+75



51+00



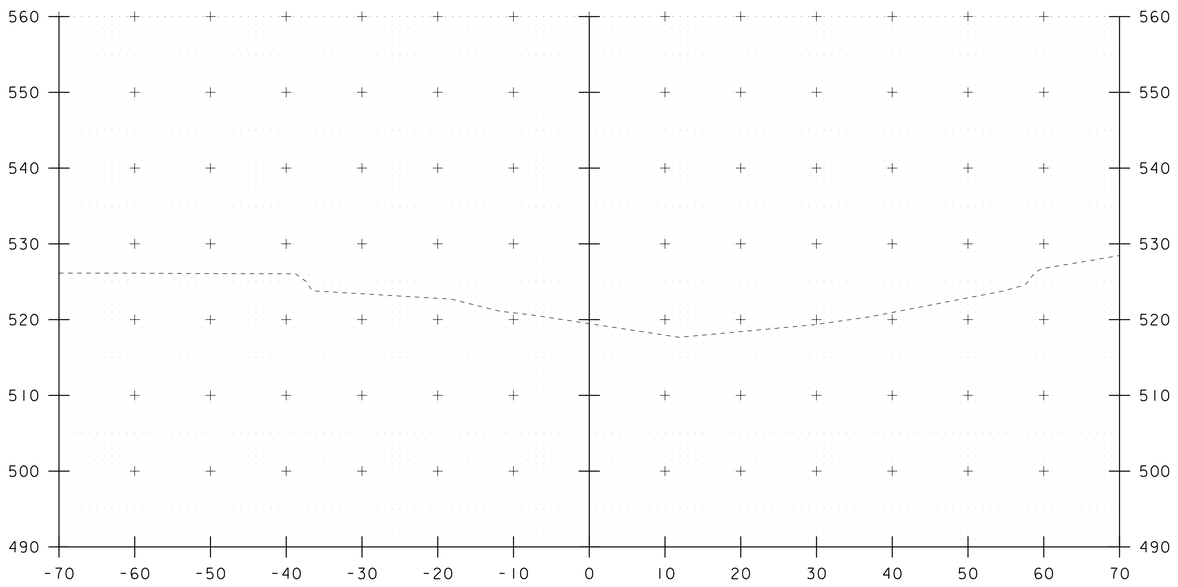
51+50

STA. 51+00 TO STA. 51+75

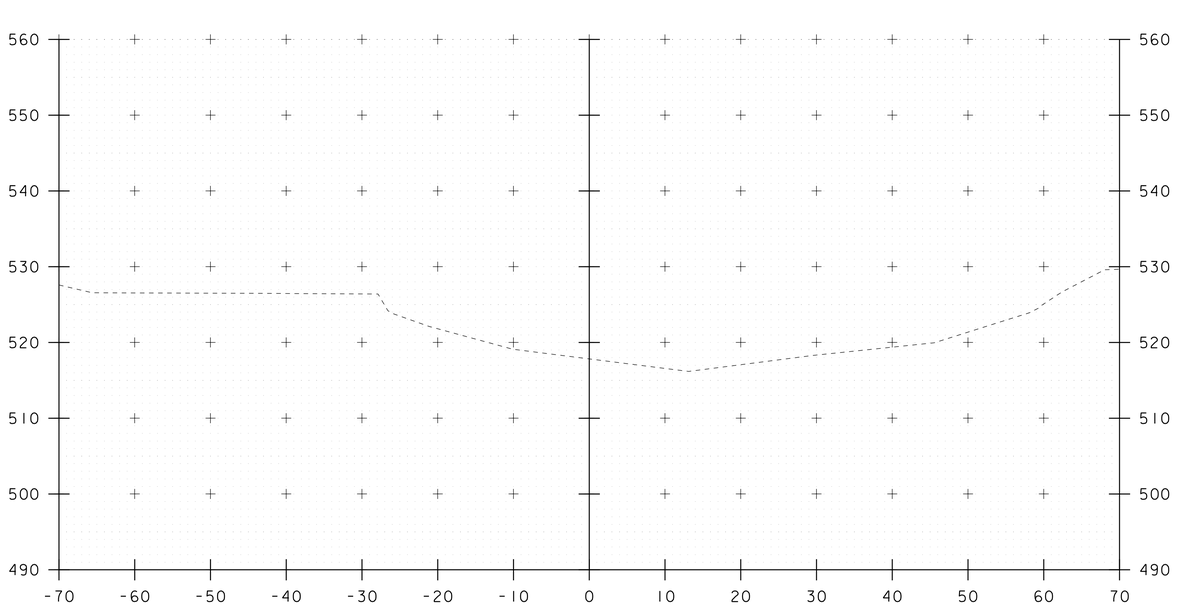
PROJECT NAME: MONTPELIER
PROJECT NUMBER: BO 1446(36)

FILE NAME: Structures/13j082xsl.dgn
PROJECT LEADER: C.P.WILLIAMS
DESIGNED BY: L.J.STONE
CHANNEL CROSS SECTIONS

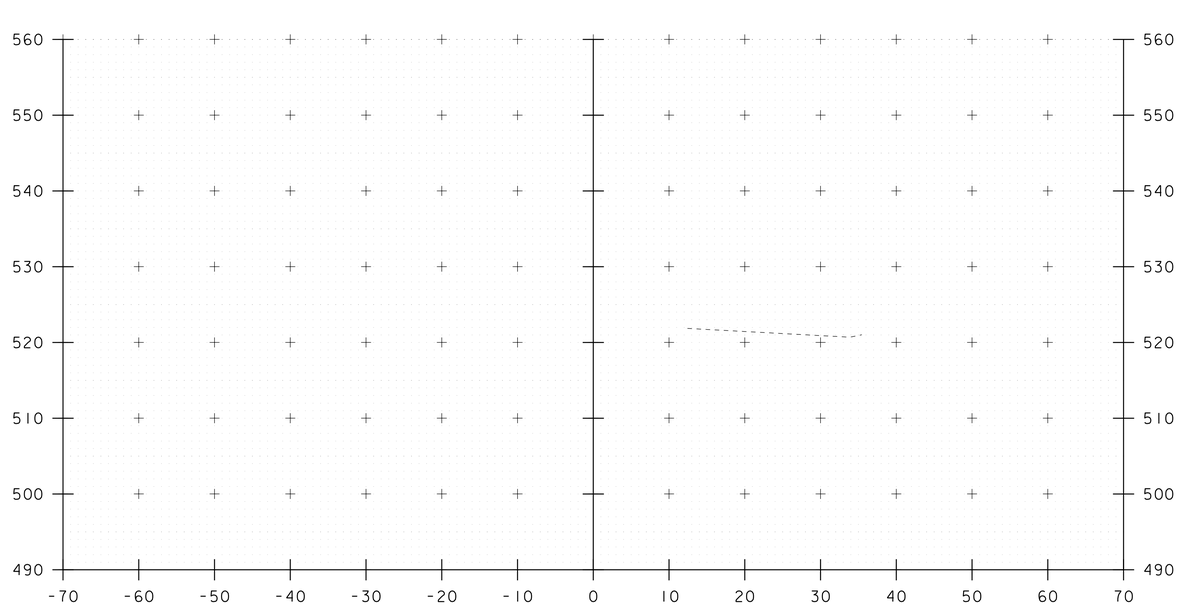
PLOT DATE: 05-MAR-2014
DRAWN BY: L.J.STONE
CHECKED BY: ------
SHEET 16 OF 18



52+25



52+00



52+50

STA. 52+00 TO STA. 52+50

PROJECT NAME: MONTPELIER
PROJECT NUMBER: BO 1446(36)

FILE NAME: Structures/13J082xsl.dgn
PROJECT LEADER: C.P.WILLIAMS
DESIGNED BY: L.J.STONE
CHANNEL CROSS SECTIONS

PLOT DATE: 05-MAR-2014
DRAWN BY: L.J.STONE
CHECKED BY: ------
SHEET 17 OF 18

LAMOINE SILT LOAM
3%-8% SLOPES
POTENTIALLY HIGHLY ERODIBLE
K = 0.32

RUMNEY FINE SANDY LOAM
0%-2% SLOPES
NOT HIGHLY ERODIBLE
K = 0.24

SUNDAY FINE SAND
0%-3% SLOPES
NOT HIGHLY ERODIBLE
K = 0.15

BENCHMARK
TOP OF BOLT
AT END OF ARROW
ELEV = 541.29

POB
STA 2+00.00

TH 5
TO MIDDLESEX

TH 5
TO BERLIN

TH 30
TO MONTPELIER

N 62°51'40" E

S 27°08'20" E

POE
STA 7+15.65

PT
STA 6+71.49

PC
STA 5+82.98

N 4°45'23" W

PI
STA 6+33.20

BENCHMARK
RAILROAD SPIKE IN POLE
ELEV = 532.76

EXISTING CURVE 1
DELTA = 67°37'03"
D = 76°23'40"
R = 75.00'
T = 50.22'
L = 88.51'
E = 15.26'

NORTH BRANCH OF
THE WINOOSKI RIVER
FLOW

HISTORIC

WOODS

GRAVEL DRIVE

PAVED DRIVE

SANITARY SEWER MANHOLE

WATER VALVE

HYDRANT

GUY

SIGN

SPEED LIMIT 25

18 PVC

12 IN

2 - RCP

M. MAPLE
M. HEMLOCK
M. BOXELDER
M. POP
S. APPLE
S. SPRUCE
S. CHERRY
LILAC
CEDAR

VT STATE PLANE GRID

URBAN LAND,
OCCASIONALLY FLOODED
UNKNOWN SLOPES
NOT HIGHLY ERODIBLE
K = 0.15

EXISTING CONDITIONS

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

PROJECT NAME:	MONTPELIER
PROJECT NUMBER:	BO 1446(36)
FILE NAME: 13J082/sl3J082bdrero.dgn	PLOT DATE: 05-MAR-2014
PROJECT LEADER: C.P.WILLIAMS	DRAWN BY: L.J.STONE
DESIGNED BY: L.J.STONE	CHECKED BY: ------
EXISTING CONDITIONS SHEET	SHEET 18 OF 18