REVIEWER NOTES:

1. TRAFFIC WILL BE MAINTAINED ON AN TWO-WAY TEMPORARY ON-SITE DETOUR LOCATED DOWNSTREAM OF THE EXISTING BRIDGE.

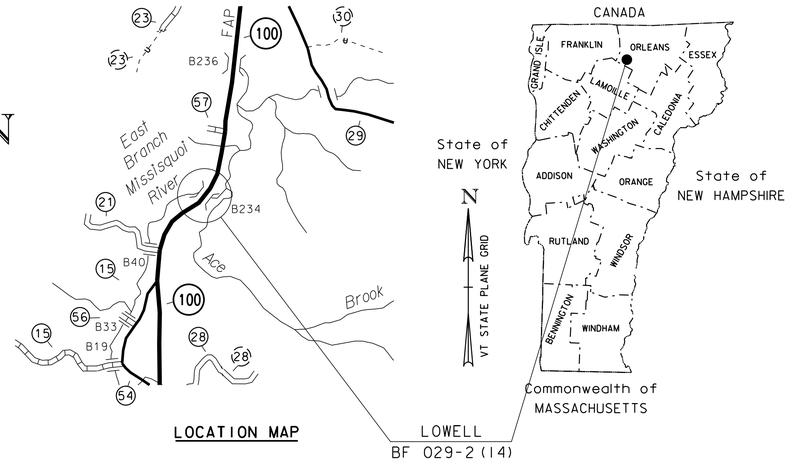
2. ANY STRUCTURAL ELEMENTS SHOWN IN THE PLANS ARE CONCEPTUAL IN NATURE AND HAVE NOT BEEN FULLY DESIGNED.

3. IT IS ANTICIPATED THAT ADDITIONAL R.O.W. WILL BE REQUIRED.

4. IT IS ANTICIPATED THAT OVERHEAD UTIITIES WILL BE RELOCATED.

5. THIS PROJECT WILL UTILIZE THE VT DEC LOW RISK SITE HANDBOOK FOR EPSC. NO SITE-SPECIFIC EPSC PLAN IS INCLUDED. THE CONTRACTOR SHALL SUBMIT A SITE-SPECIFIC EPSC PLAN TO VTRANS UPON CONTRACT AWARD IN ACCORDANCE WITH THIER MEANS AND METHODS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT
BRIDGE PROJECT

TOWN OF LOWELL

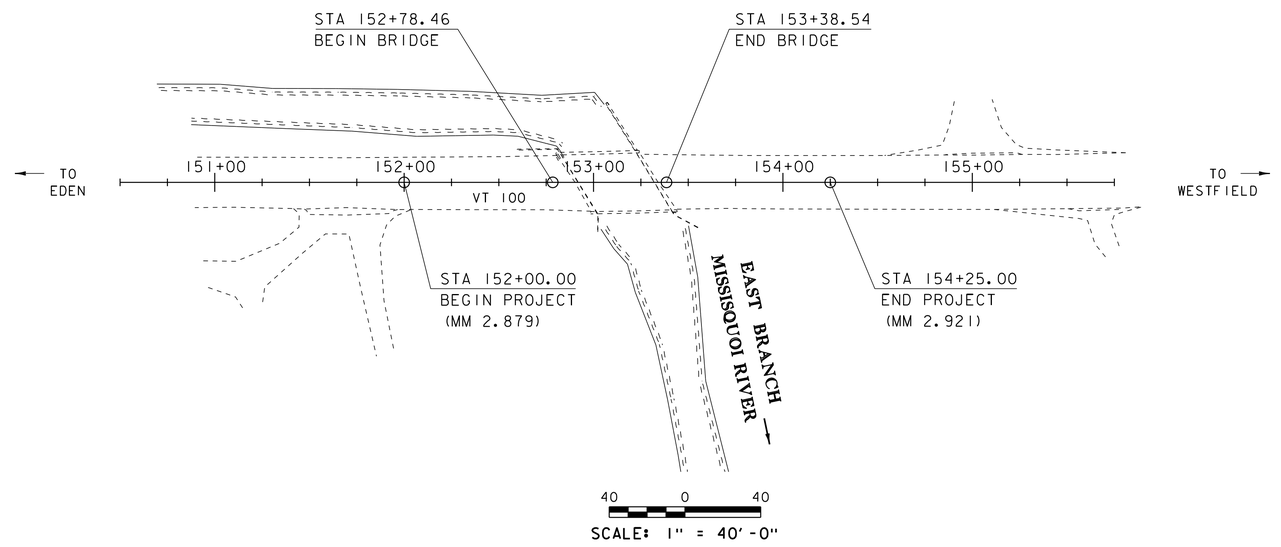
COUNTY OF ORLEANS

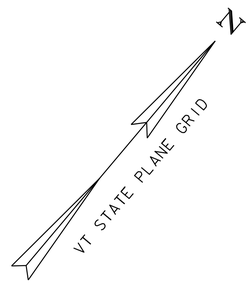
ROUTE NO : VT 100; RURAL MINOR ARTERIAL BRIDGE NO : 234

PROJECT LOCATION : ON VT 100 BEGINNING APPROXIMATELY 2.879 MILES NORTH FROM EDEN/LOWELL TOWNLINE AND EXTENDING NORTHERLY APPROXIMATELY 0.043 MILE.

PROJECT DESCRIPTION : REPLACEMENT OF EXISTING BRIDGE ALONG WITH RELATED APPROACH ROADWAY AND CHANNEL WORK.

LENGTH OF STRUCTURE :	60.08 FEET
LENGTH OF ROADWAY :	164.92 FEET
LENGTH OF PROJECT :	225.00 FEET





CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2018, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON APRIL 13, 2018 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

CONCEPTUAL PLANS
02-MAR-2020

QUALITY ASSURANCE PROGRAM : LEVEL 2
SURVEYED BY : R. GILMAN SURVEYED DATE : 02/19/2011
DATUM VERTICAL NAVD88 HORIZONTAL NAD 83 (96)

HIGHWAY DIVISION, CHIEF ENGINEER APPROVED _____ DATE _____
PROJECT MANAGER : CAROLYN COTA, PE
PROJECT NAME : LOWELL PROJECT NUMBER : BF 029-2(14) SHEET 1 OF 20 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET (BRIDGE)

Version
LRFD

INDEX OF SHEETS

PLAN SHEETS

DETAIL SHEETS

STANDARDS LIST

FINAL HYDRAULIC REPORT

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2023	2700	310	62	8.5	260
2043	2900	340	62	12.7	420

20 year ESAL for flexible pavement from 2023 to 2043 : 1604000

40 year ESAL for flexible pavement from 2023 to 2063 : 3571000

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:							

TRAFFIC MAINTENANCE NOTES

1. MAINTAIN TWO-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

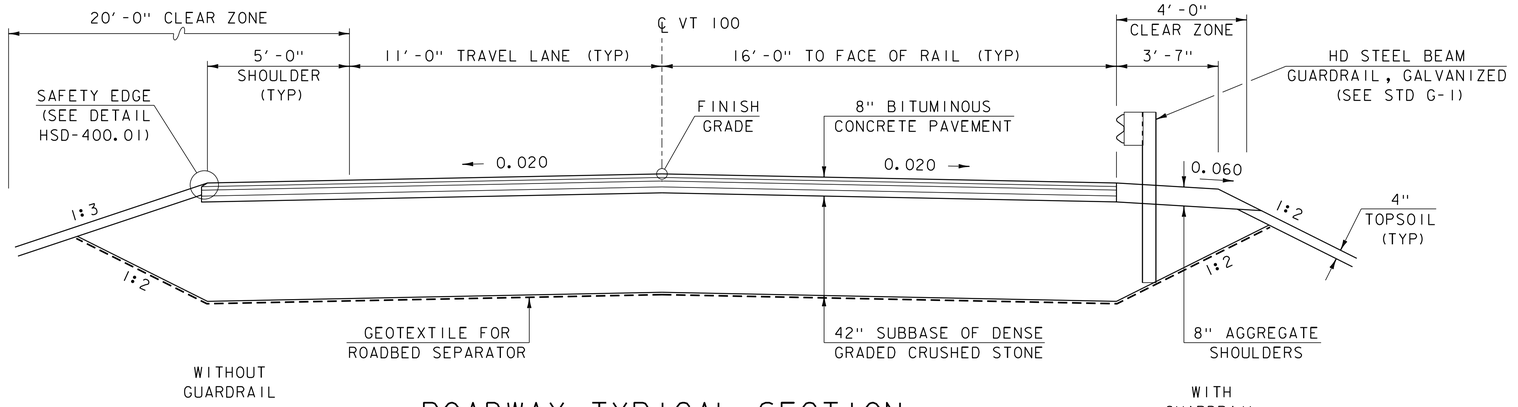
1. DESIGN LIVE LOAD		HL-93
2. FUTURE PAVEMENT	d_p:	---
3. DESIGN SPAN	L:	57.00 FT
4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)	Δ:	---
5. PRESTRESSING STRAND	f_y:	---
6. PRESTRESSED CONCRETE STRENGTH	f'_c:	---
7. PRESTRESSED CONCRETE RELEASE STRENGTH	f'_{ci}:	---
8. HIGH PERFORMANCE CONCRETE, CLASS PCD	f'_c:	4.0 KSI
9. HIGH PERFORMANCE CONCRETE, CLASS PCS	f'_c:	3.5 KSI
10. CONCRETE HIGH PERFORMANCE, CLASS PSS	f'_c:	---
11. CONCRETE, CLASS C	f'_c:	---
12. REINFORCING STEEL	f_y:	60 KSI
13. STRUCTURAL STEEL AASHTO M270 (WEATHERING)	f_y:	50 KSI
14. NOMINAL BEARING RESISTANCE OF SOIL	q_n:	---
15. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	---
16. NOMINAL BEARING RESISTANCE OF ROCK	q_n:	---
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 : ---	S_s:	---
	S_1:	---
23.		
24.		---
25.		---
26.		---

PROJECT NAME: **LOWELL**

PROJECT NUMBER: **BF 029-2(14)**

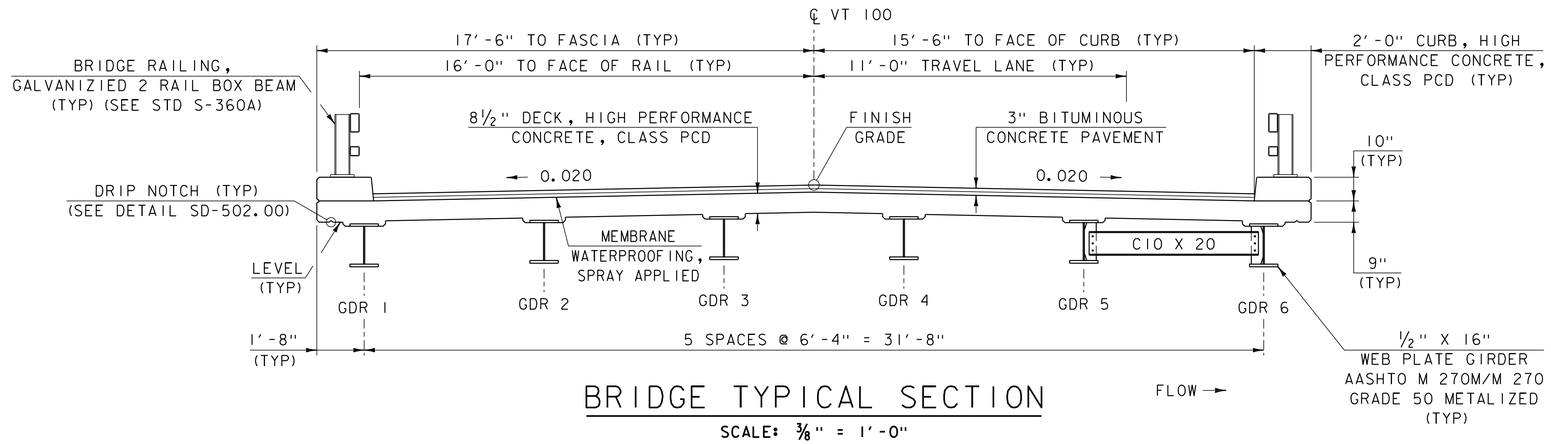
FILE NAME: **s12b592pi.dgn**
PROJECT LEADER: **C. COTA**
DESIGNED BY: **S. COLEY**
PRELIMINARY INFORMATION SHEET

PLOT DATE: 3/2/2020
DRAWN BY: **G. ROY**
CHECKED BY: **C. BURRALL**
SHEET 2 OF 20



ROADWAY TYPICAL SECTION

SCALE: 3/8" = 1'-0"



BRIDGE TYPICAL SECTION

SCALE: 3/8" = 1'-0"

ROADWAY MATERIAL REQUIREMENTS

	THICKNESS	DESCRIPTION
BINDER	70-28	PERFORMANCE GRADE ASPHALT BINDER
GYRATION	65	DESIGN NUMBER OF GYRATIONS
WEARING COURSE	1½"	406.36 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT, TYPE IVB
INTERMEDIATE COURSE	1½"	406.36 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT, TYPE IVB
BASE COURSE #1	2½"	406.35 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT, TYPE IIS
BASE COURSE #2	2½"	406.35 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT, TYPE IIS
EMULSIFIED ASPHALT	---	STANDARD SPECIFICATIONS TABLE 406.12A
BUFFER	VARIES	AGGREGATE SURFACE COURSE (MATCH PAVE THICK)
SUBBASE	42"	SUBBASE OF DENSE GRADED CRUSHED STONE
TOPSOIL	4"	TOPSOIL

MATERIAL TOLERANCES

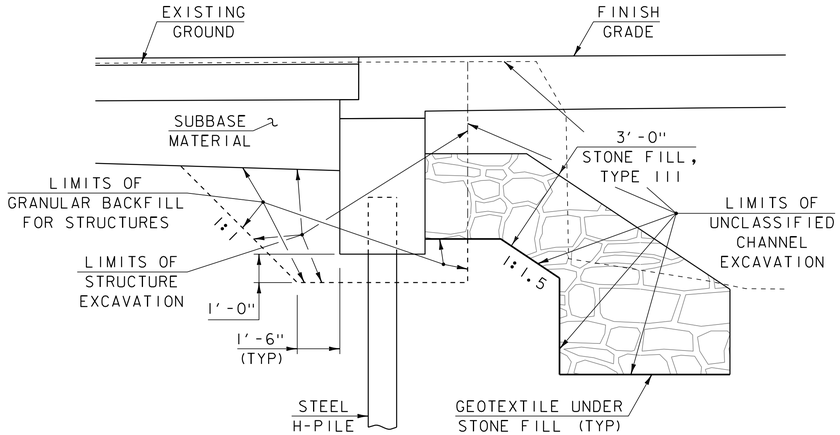
(IF USED ON PROJECT)

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

PROJECT NAME: LOWELL
PROJECT NUMBER: BF 029-2(14)

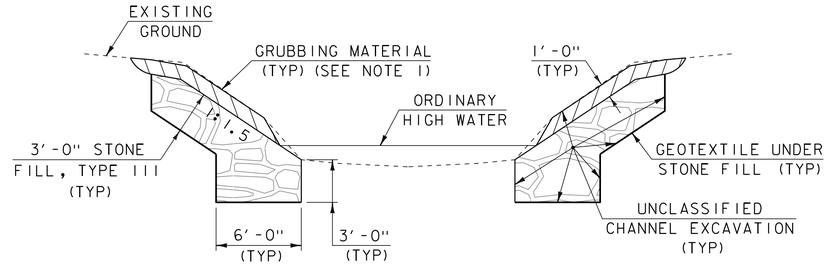
FILE NAME: sl2b592typ.dgn
PROJECT LEADER: C. COTA
DESIGNED BY: S. COLEY
TYPICAL SECTIONS (1)

PLOT DATE: 02-MAR-2020
DRAWN BY: G. ROY
CHECKED BY: C. BURRALL



ABUTMENT TYPICAL SECTION

(NOT TO SCALE)



CHANNEL TYPICAL SECTION

(NOT TO SCALE)

1. GRUBBING MATERIAL SHALL BE PLACED UNDERNEATH STRUCTURES WHERE THERE IS MORE THAN 6 FEET VERTICALLY FROM ORDINARY HIGH WATER (OHW) TO THE BOTTOM OF SUPERSTRUCTURE AND MORE THAN 6 FEET HORIZONTALLY FROM OHW LINE TO FRONT FACE OF ABUTMENT. THIS MATERIAL SHALL START JUST ABOVE THE OHW ELEVATION AND TERMINATE 3 FEET HORIZONTALLY FROM THE FRONT FACE OF THE ABUTMENT. THIS MATERIAL SHALL NOT BE PLACED UNDERNEATH DOWNSPOUTS. SEE THE CHANNEL SECTIONS FOR ADDITIONAL DETAILING.

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

PROJECT NAME:	LOWELL
PROJECT NUMBER:	BF 029-2(14)
FILE NAME: sl2b592typ.dgn	PLOT DATE: 02-MAR-2020
PROJECT LEADER: C. COTA	DRAWN BY: G. ROY
DESIGNED BY: S. COLEY	CHECKED BY: C. BURRALL
TYPICAL SECTIONS (2)	SHEET 4 OF 20

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
	BF	BARRIER FENCE
	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
	PDF	PROJECT DEMARCATION FENCE
	R&RES	REMOVE & RESET
	R&REP	REMOVE & REPLACE
	R.T.& I.	RIGHT, TITLE, AND INTEREST
	SR	SLOPE RIGHT
	UE	UTILITY EASEMENT
	(P)	PERMANENT EASEMENT
	(T)	TEMPORARY EASEMENT
■	BNDNS	BOUND SET
⧈	BNDNS	BOUND TO BE SET
◎	IPNF	IRON PIN FOUND
●	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 VALVE
	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 RADIUS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE
CB	CHORD BEARING

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+TELEPHONE
- 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+TELEPHONE
- 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: LOWELL
PROJECT NUMBER: BF 029-2(14)

FILE NAME: sl2b592legend.dgn
PROJECT LEADER: C. COTA
DESIGNED BY: S. COLEY
CONVENTIONAL SYMBOLOGY LEGEND

PLOT DATE: 02-MAR-2020
DRAWN BY: G. ROY
CHECKED BY: C. BURRALL
SHEET 5 OF 20

PRIMARY CONTROL

HVCTRL #1
RICKABY AZ MK
NORTH = 827975.4300
EAST = 1651451.9500
ELEV = 1051.7710

LOWELL, VT.
THE MARK IS SET FLUSH WITH THE GROUND SURFACE IN THE TOP OF A 30 CM (12 INCH) DIAMETER CONCRETE MONUMENT POURED 1.3 M (4.3 FT) DEEP. IT IS 11.9 M (39.0 FT) WEST OF AND ABOUT 2 M (6.6 FT) HIGHER THAN THE CENTERLINE OF VT ROUTE 100, 36.0 M (118.1 FT) NORTH OF THE CENTERLINE OF A FIELD DRIVE, 10.9 M (35.8 FT) SOUTH OF A 12 CM (5 INCH) POPLAR AND 0.3 M (1.0 FT) EAST OF A FIBERGLASS WITNESS POST.

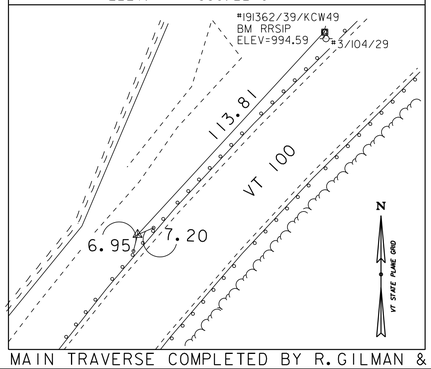
HVCTRL #2
RICKABY
NORTH =829374.4700
EAST = 1651600.3100
ELEV = 1004.0800

LOWELL, VT.
THE MARK IS SET FLUSH WITH GROUND SURFACE IN THE TOP OF A 30 CM DIAMETER CONCRETE MONUMENT IN A LAWN AND ABOUT 70 M NORTH OF THE INTERSECTION OF RICKABY ROAD. IT IS 7.8 M WEST OF AND ABOUT 0.4 M LOWER THAN THE CENTERLINE OF VT ROUTE 100, 20.5 M EAST OF THE NORTHEAST PORCH CORNER OF A 1 1/2 STORY HOUSE, 22.6 M NORTHEAST OF THE SOUTHEAST CORNER OF THE PORCH AND 16.8 M SOUTH OF AN UNNUMBERED TELEPHONE POLE AND A FIBERGLASS WITNESS POST.

SECONDARY CONTROL

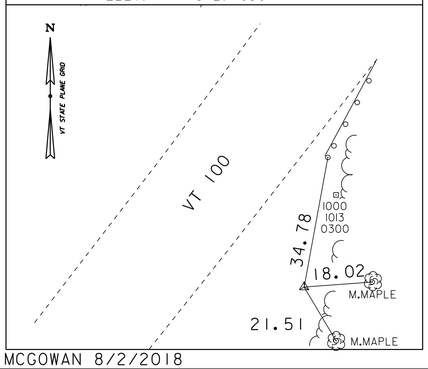
HVCTRL #3

NORTH = 829899.7375
EAST = 1651862.5501
ELEV. = 996.2240



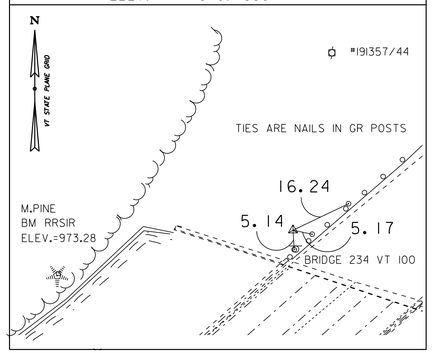
HVCTRL #4

NORTH = 830904.3945
EAST = 1653077.8783
ELEV. = 972.7030



HVCTRL #10

NORTH = 830573.7843
EAST = 1652653.4557
ELEV. = 976.4886



HVCTRL

NORTH =
EAST =
ELEV. =

HVCTRL

NORTH =
EAST =
ELEV. =

MAIN TRAVERSE COMPLETED BY R.GILMAN & H.MCGOWAN 8/2/2018

SECONDARY CONTROL

HVCTRL

NORTH =
EAST =
ELEV. =

HVCTRL

NORTH =
EAST =
ELEV. =

HVCTRL

NORTH =
EAST =
ELEV. =

HVCTRL

NORTH =
EAST =
ELEV. =

HVCTRL

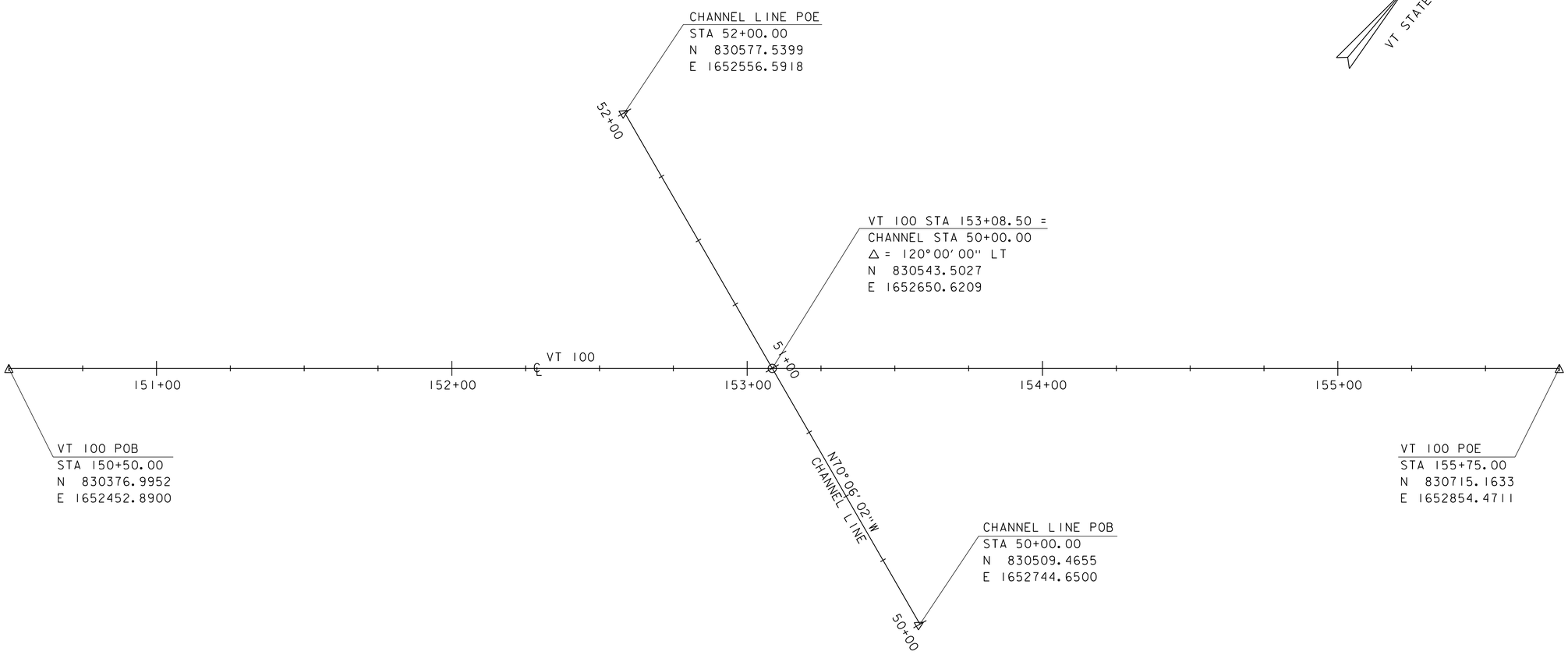
NORTH =
EAST =
ELEV. =

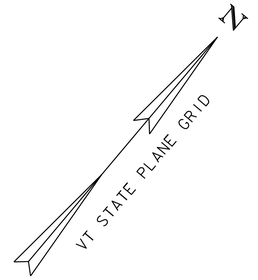
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (2011)
ADJUSTMENT COMPASS

PROJECT NAME: LOWELL
PROJECT NUMBER: BF 029-2(14)

FILE NAME: sl2b592tie.dgn
PROJECT LEADER: C. COTA
DESIGNED BY: S. COLEY
TIES

PLOT DATE: 02-MAR-2020
DRAWN BY: H. MCGOWAN
CHECKED BY: G. HITCHCOCK
SHEET 6 OF 20





DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (96)

ADJUSTMENT Compass

20 0 20

SCALE: 1" = 20'-0"

PROJECT NAME: LOWELL

PROJECT NUMBER: BF 029-2(14)

FILE NAME: sl2b592alg.dgn
PROJECT LEADER: C. COTA
DESIGNED BY: S. COLEY
ALIGNMENT

PLOT DATE: 02-MAR-2020
DRAWN BY: G. ROY
CHECKED BY: C. BURRALL
SHEET 7 OF 20

COLTON-DUXBURY COMPLEX
25%-60% SLOPES
MODERATE EROSION POTENTIAL
K= 0.20/0.32

N

VT STATE PLANE GRID

PION, BRUCE W. & LAURINE K.

SHEEPSCOT GRAVELLY FINE SANDY LOAN
3%-8% SLOPES
LOW EROSION POTENTIAL
K= 0.17

3
105X
27.5

EXISTING R.O.W.

979

BND

WOODS

M. PINE

OHW

EAST BRANCH
MISSISQUOI RIVER

M. ELM

191357
990 44

EXISTING R.O.W.

18" CPEP

GRAVEL
DRIVE

TO
EDEN

VT 100
(PAVED)

TO
WESTFIELD

898

HVCTRL
10

191335
43

31

MB

EXISTING R.O.W.

GRAVEL
DRIVE

M. ROP

WELL

GRAVEL
DRIVE

GUYW

GUYW

GUYW

S. MAPLE

BRUSH

14-S. APPLE

3-S. ELM

HVCTRL
02

HYDRANGEA

GARDEN

MB

GRAVEL
DRIVE

SHRUB

EXISTING R.O.W.

WOODS

968

**MCALLISTER, WILLIAM H. &
BARBARA M., TRUSTEES for
THE MCALLISTER FAMILY TRUST**

LOWELL FARMS LLC

ADAMS LOAMY SAND
3%-8% SLOPES
LOW EROSION POTENTIAL
K= 0.17

LOWELL FARMS LLC

FLEISCHER, EDWARD B.

CHARLES SILT LOAM
0%-2% SLOPES
MODERATE EROSION POTENTIAL
K= 0.32

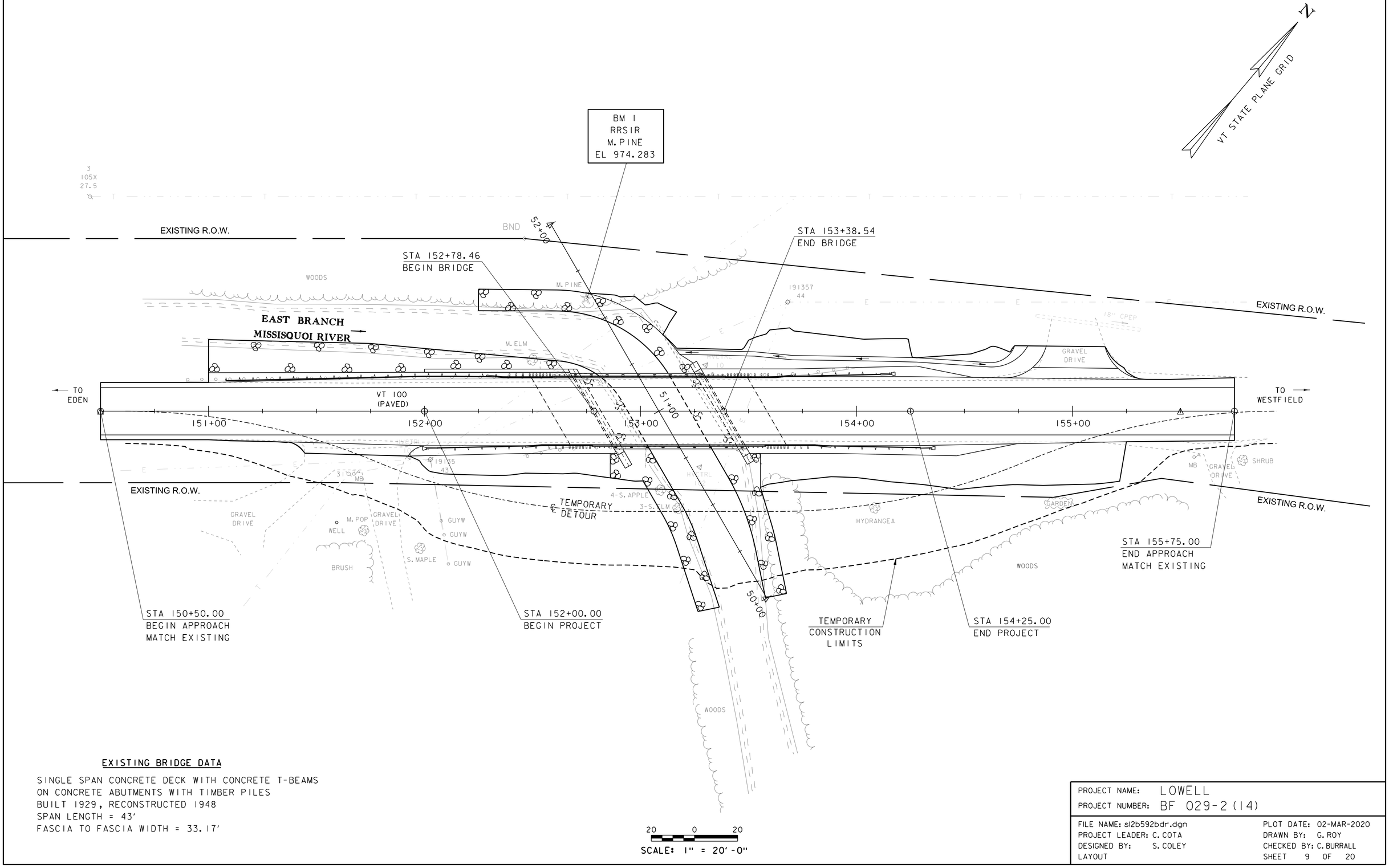
WOODS

968

20 0 20

SCALE: 1" = 20'-0"

PROJECT NAME:	LOWELL
PROJECT NUMBER:	BF 029-2(14)
FILE NAME: sl2b592bdr_ero.dgn	PLOT DATE: 02-MAR-2020
PROJECT LEADER: C. COTA	DRAWN BY: G. ROY
DESIGNED BY: S. COLEY	CHECKED BY: C. BURRALL
EXISTING SITE CONDITIONS	SHEET 8 OF 20



EXISTING BRIDGE DATA

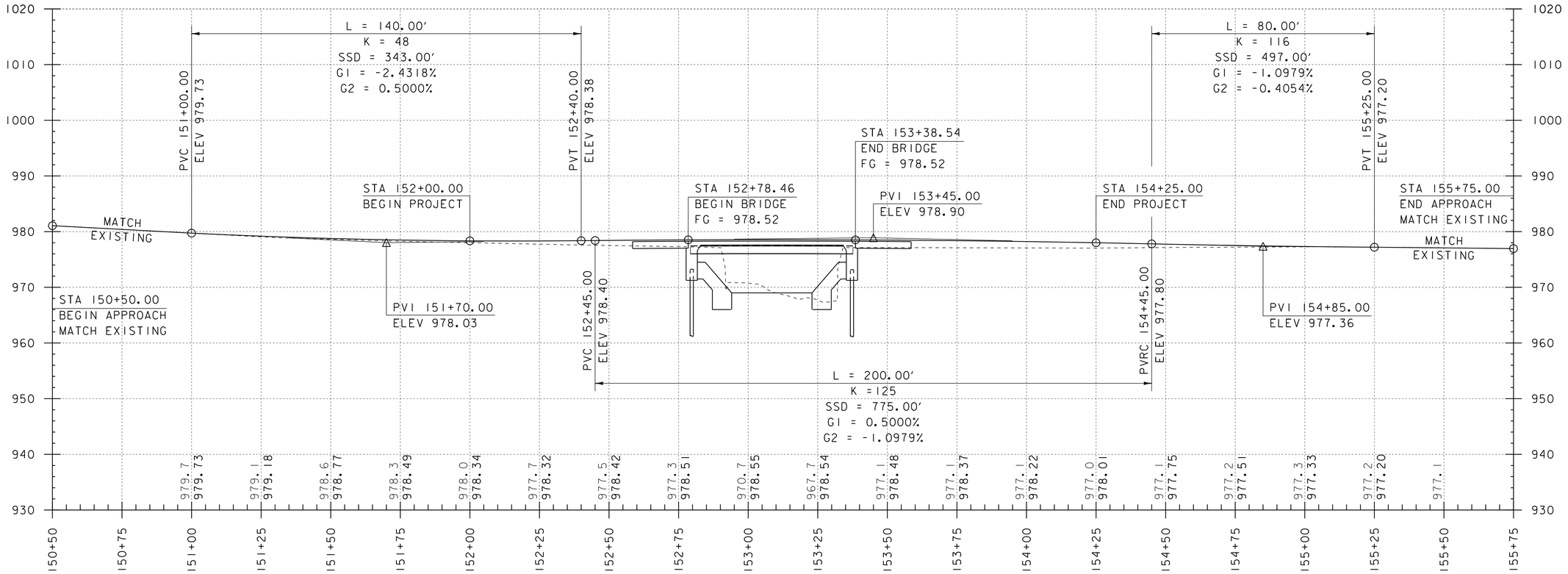
SINGLE SPAN CONCRETE DECK WITH CONCRETE T-BEAMS
ON CONCRETE ABUTMENTS WITH TIMBER PILES
BUILT 1929, RECONSTRUCTED 1948
SPAN LENGTH = 43'
FASCIA TO FASCIA WIDTH = 33.17'

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

PROJECT NAME: LOWELL
PROJECT NUMBER: BF 029-2(14)

FILE NAME: sl2b592bdr.dgn
PROJECT LEADER: C. COTA
DESIGNED BY: S. COLEY
LAYOUT

PLOT DATE: 02-MAR-2020
DRAWN BY: G. ROY
CHECKED BY: C. BURRALL
SHEET 9 OF 20



PROFILE ALONG VT 100

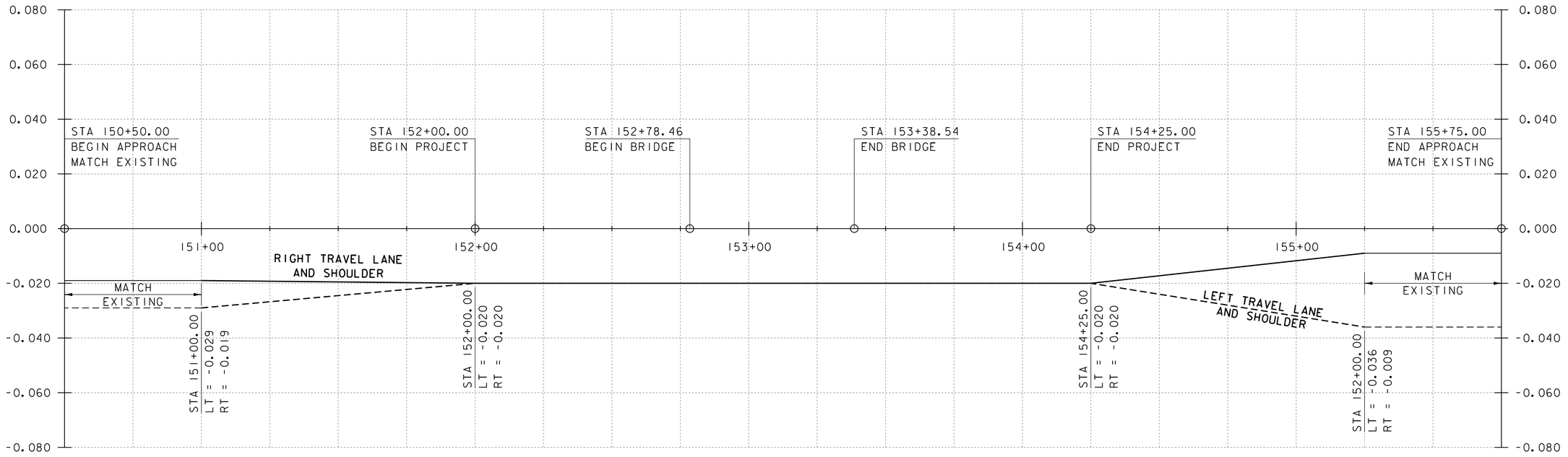
HORIZONTAL SCALE: 1" = 20'-0"
VERTICAL SCALE: 1" = 10'-0"

NOTE:

ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG PROPOSED CENTERLINE.

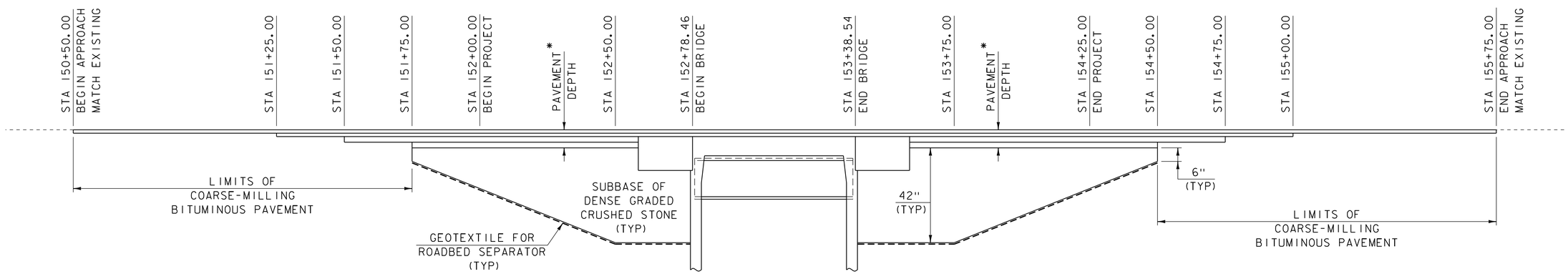
ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADES ALONG PROPOSED CENTERLINE.

PROJECT NAME:	LOWELL
PROJECT NUMBER:	BF 029-2(14)
FILE NAME: sl2b592pro.dgn	PLOT DATE: 02-MAR-2020
PROJECT LEADER: C. COTA	DRAWN BY: G. ROY
DESIGNED BY: S. COLEY	CHECKED BY: C. BURRALL
VT 100 PROFILE	SHEET 10 OF 20



VT 100 BANKING DIAGRAM

HORIZONTAL SCALE: 1" = 20'-0"
VERTICAL SCALE: 1" = 0.020'/'

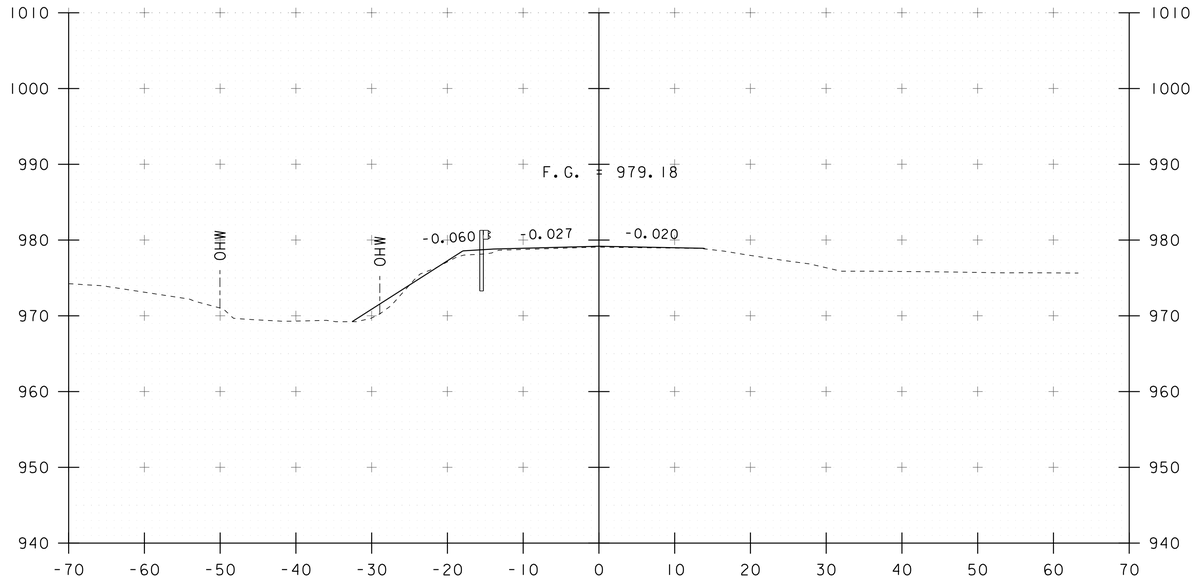


VT 100 MATERIAL TRANSITION

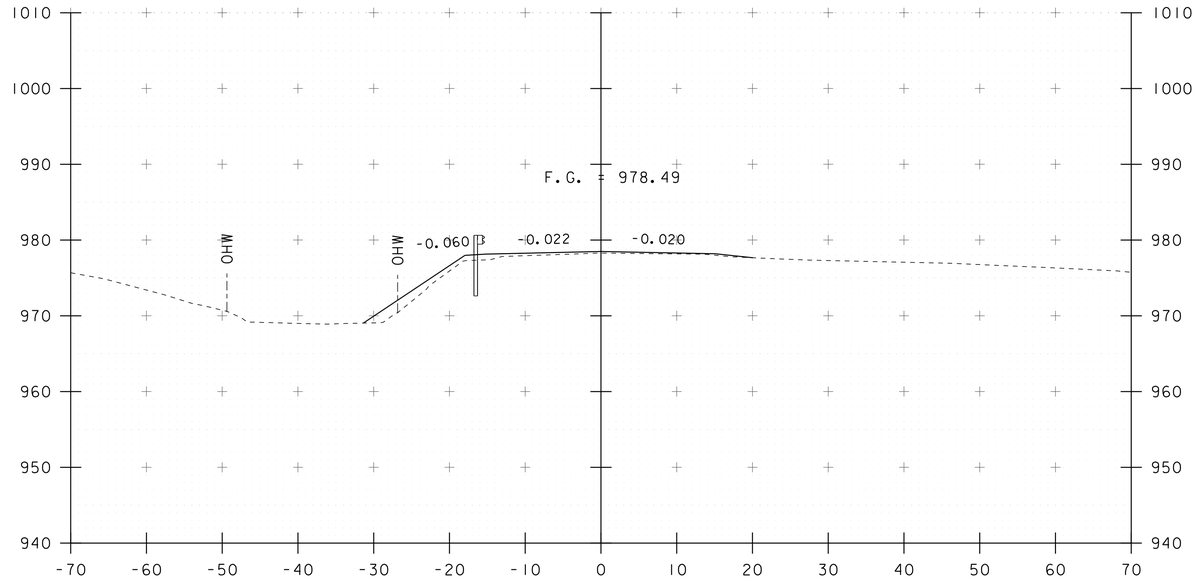
HORIZONTAL SCALE: 1" = 20'-0"
VERTICAL SCALE: 1" = 2'-0"

*SEE ROADWAY TYPICAL SECTION FOR PAVEMENT AND SUBBASE MATERIAL DESIGN INFORMATION.

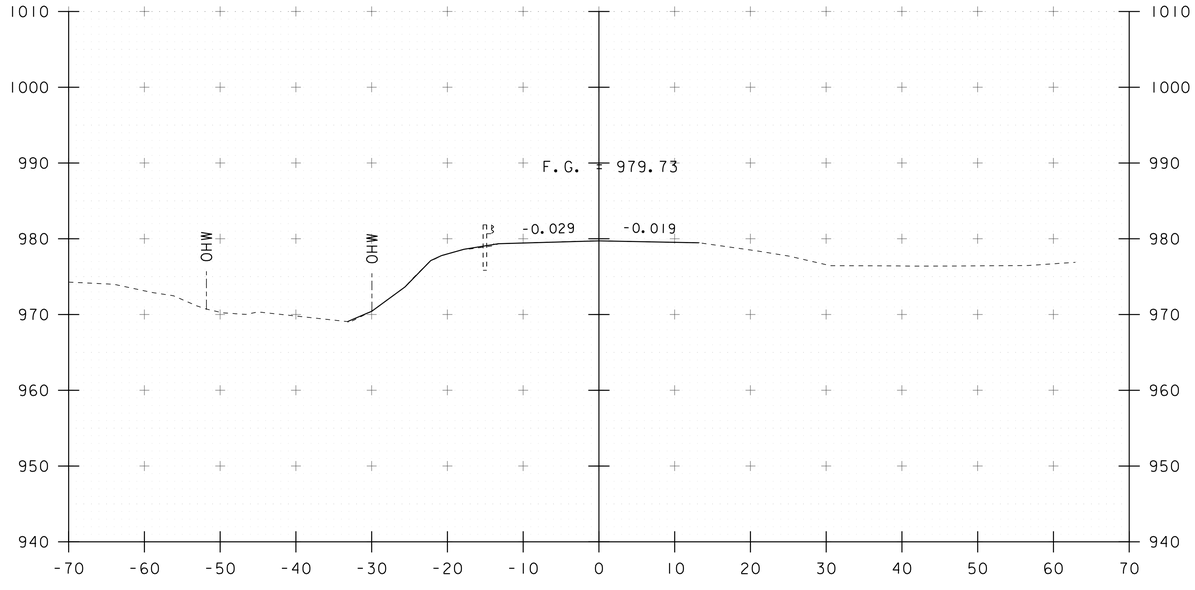
PROJECT NAME:	LOWELL
PROJECT NUMBER:	BF 029-2(14)
FILE NAME: sl2b592pro.dgn	PLOT DATE: 02-MAR-2020
PROJECT LEADER: C. COTA	DRAWN BY: G. ROY
DESIGNED BY: S. COLEY	CHECKED BY: C. BURRALL
VT 100 BANKING AND MATERIAL TRANSITION	SHEET 11 OF 20



151+25

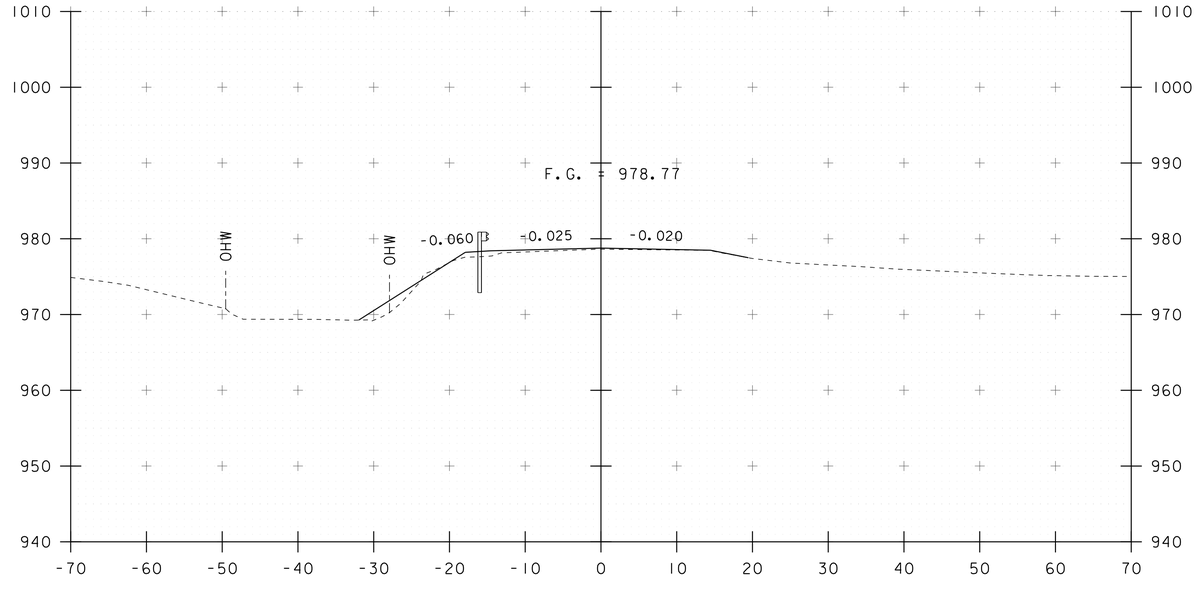


151+75



151+00

STA 150+50.00
BEGIN APPROACH
MATCH EXISTING



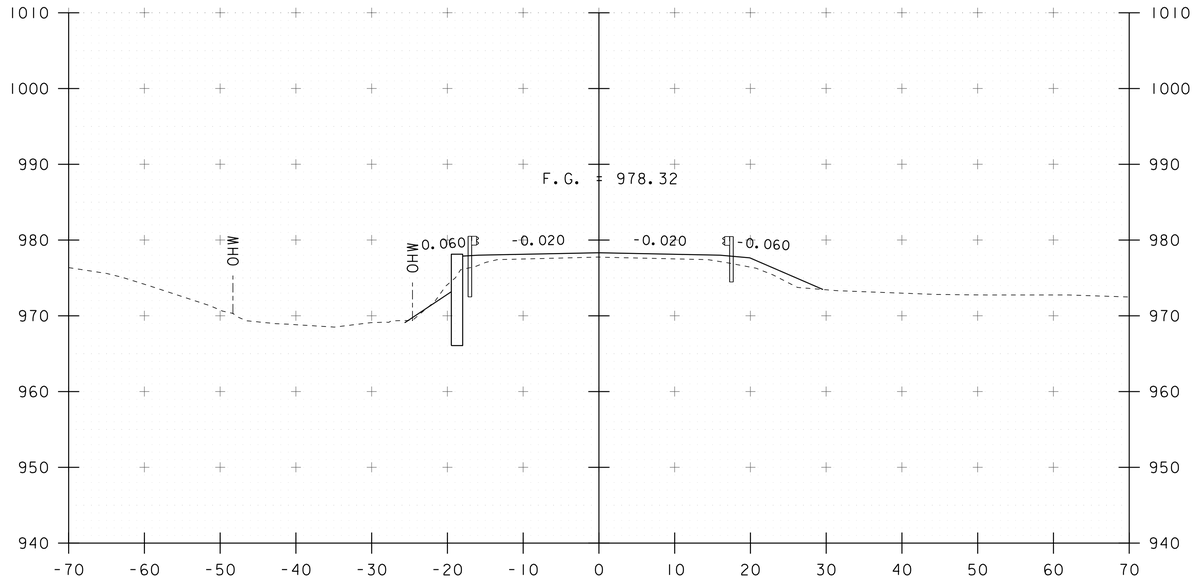
151+50

STA. 151+00 TO STA. 151+75

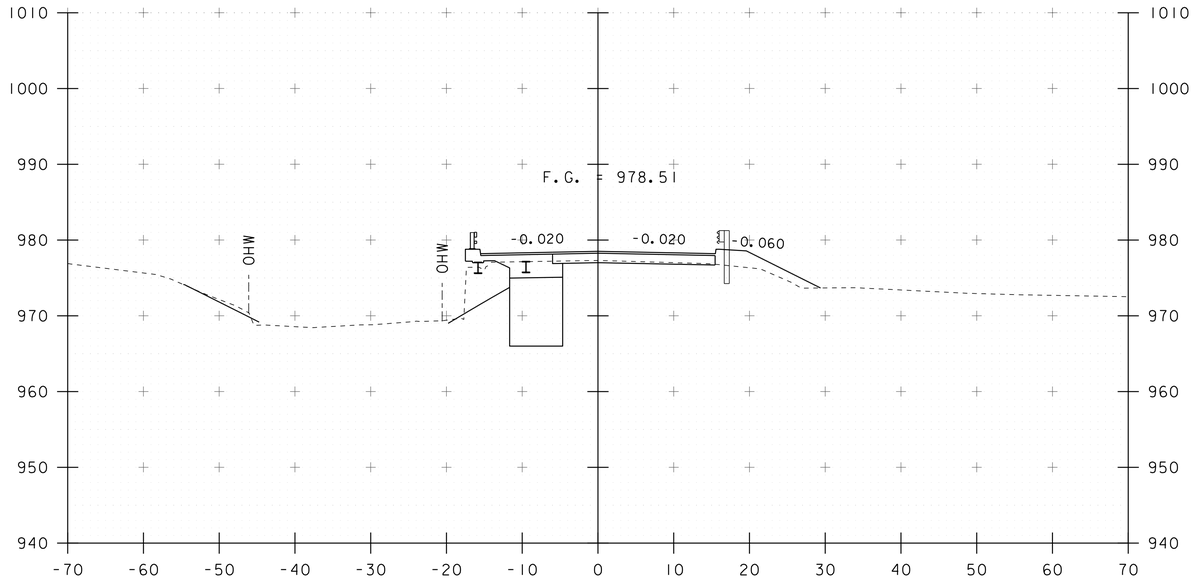
PROJECT NAME: LOWELL
PROJECT NUMBER: BF 029-2(14)

FILE NAME: sl2b592xs.dgn
PROJECT LEADER: C. COTA
DESIGNED BY: S. COLEY
VT 100 CROSS SECTIONS (1)

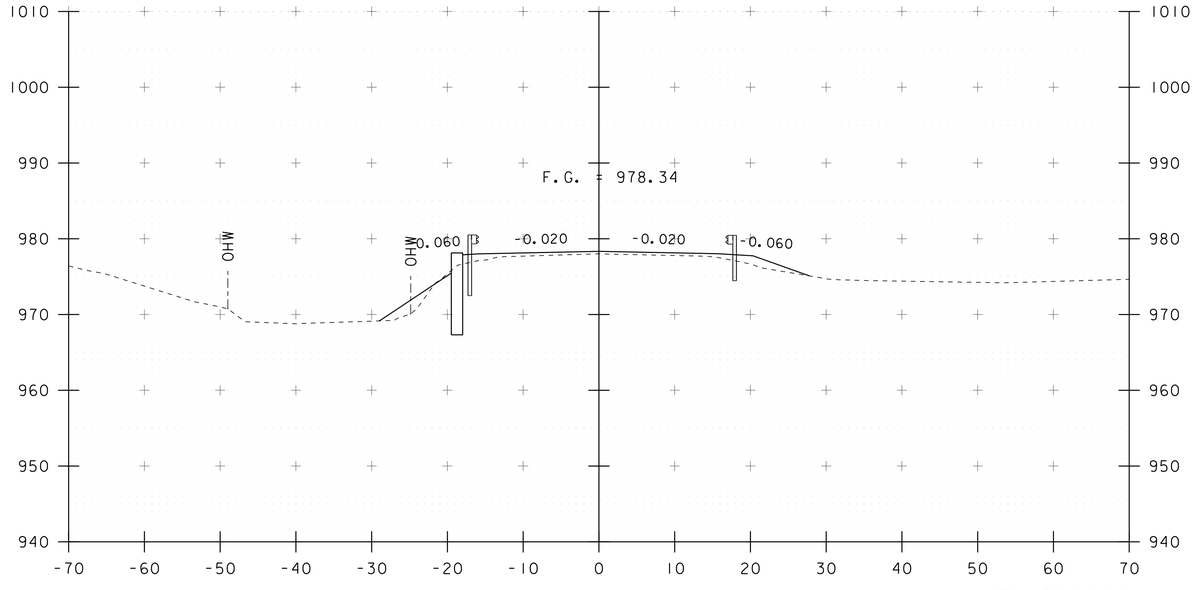
PLOT DATE: 02-MAR-2020
DRAWN BY: G. ROY
CHECKED BY: C. BURRALL
SHEET 12 OF 20



152+25

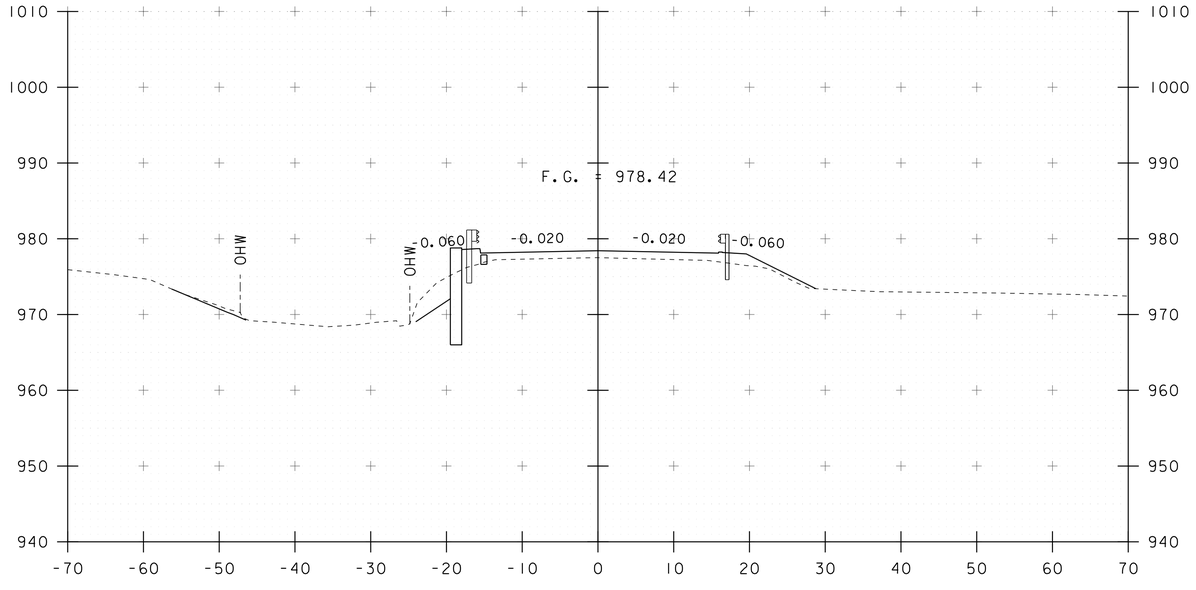


152+75



STA 152+00.00
BEGIN PROJECT

152+00



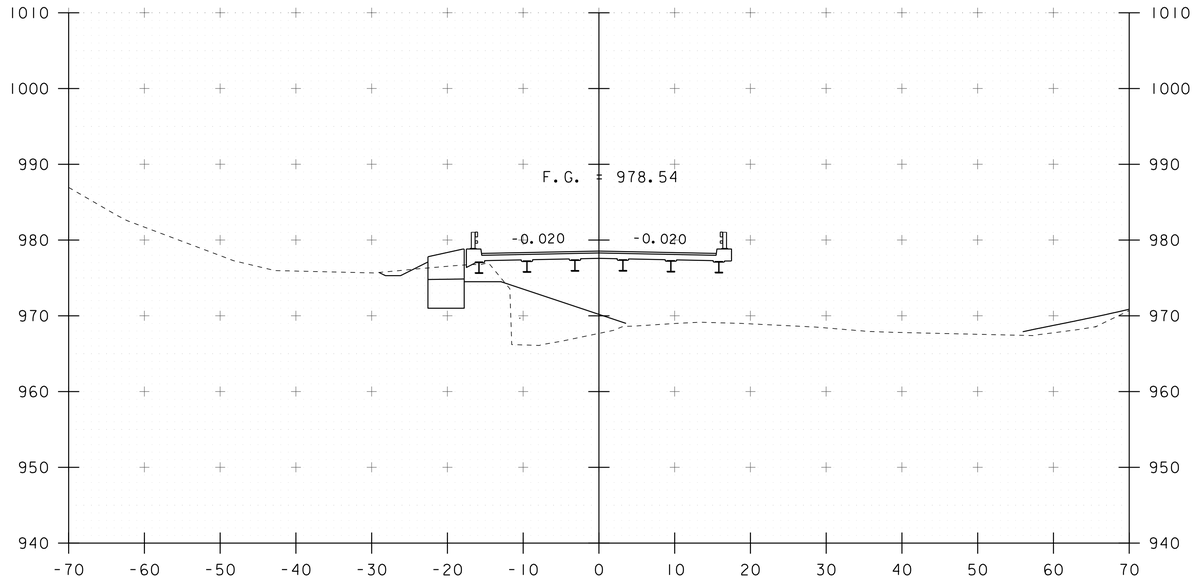
152+50

STA. 152+00 TO STA. 152+75

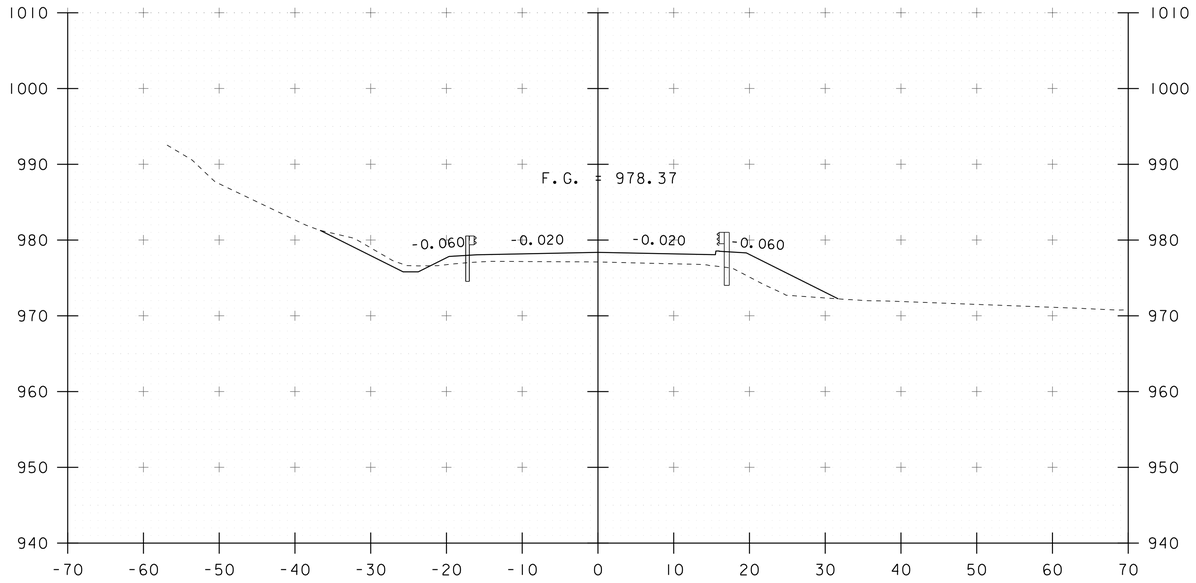
PROJECT NAME: LOWELL
PROJECT NUMBER: BF 029-2(14)

FILE NAME: sl2b592xs.dgn
PROJECT LEADER: C. COTA
DESIGNED BY: S. COLEY
VT 100 CROSS SECTIONS (2)

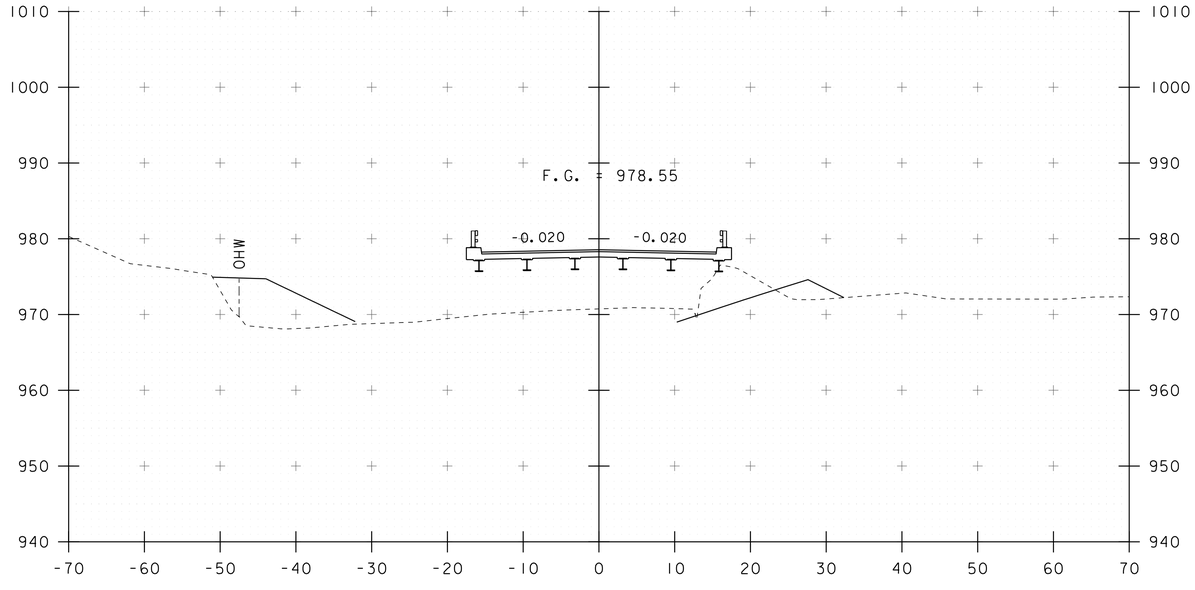
PLOT DATE: 02-MAR-2020
DRAWN BY: G. ROY
CHECKED BY: C. BURRALL
SHEET 13 OF 20



153+25

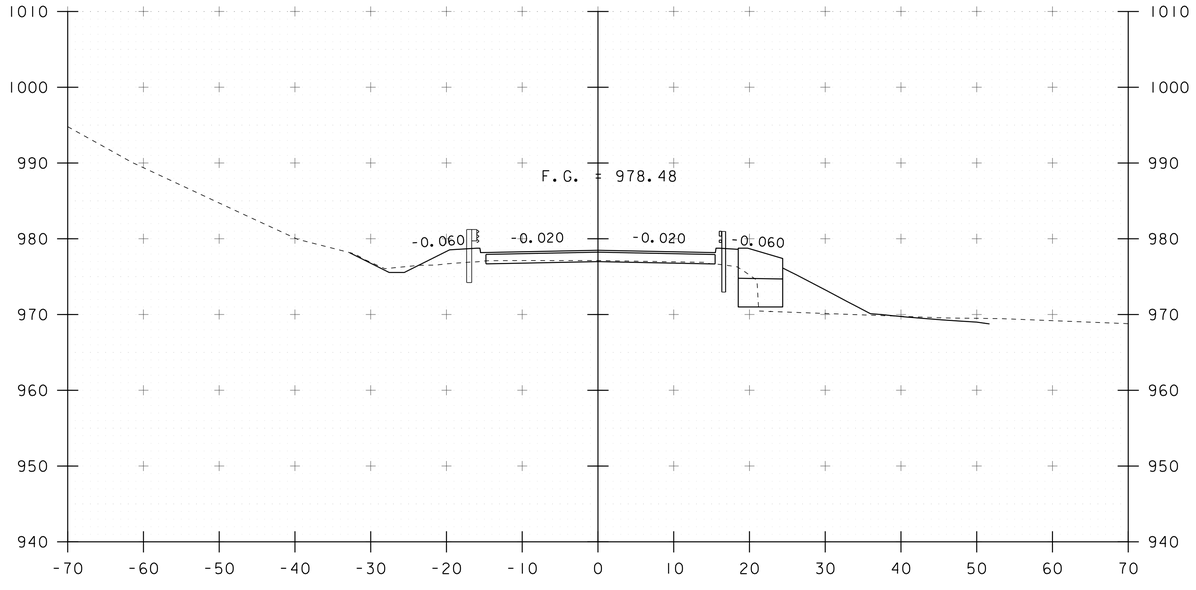


153+75



153+00

STA 152+78.46
BEGIN BRIDGE



153+50

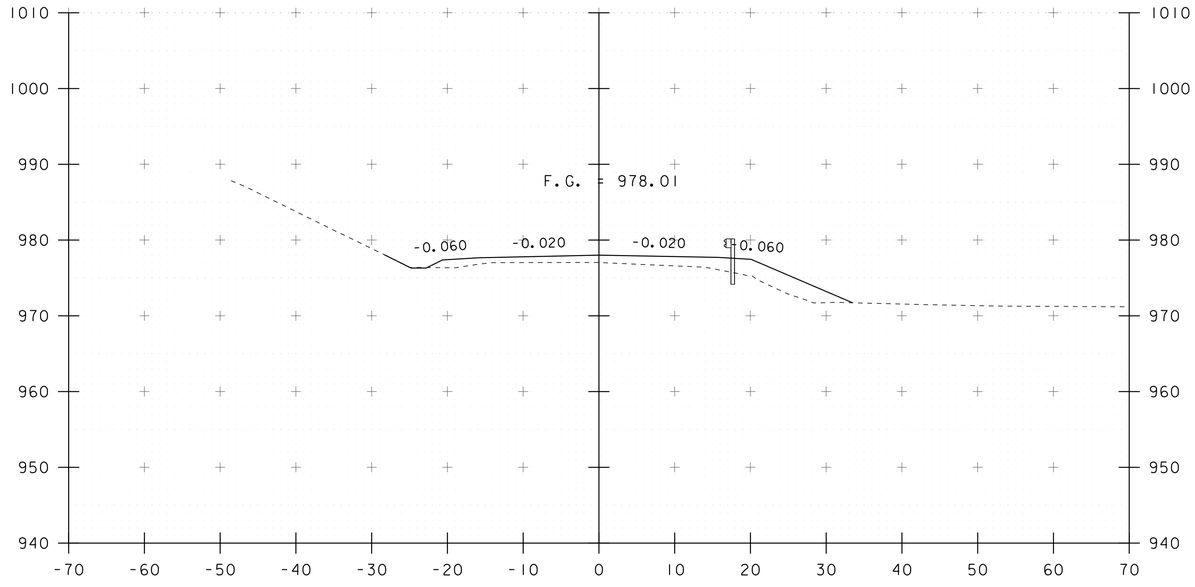
STA 153+38.54
END BRIDGE

STA. 153+00 TO STA. 153+75

PROJECT NAME: LOWELL
PROJECT NUMBER: BF 029-2(14)

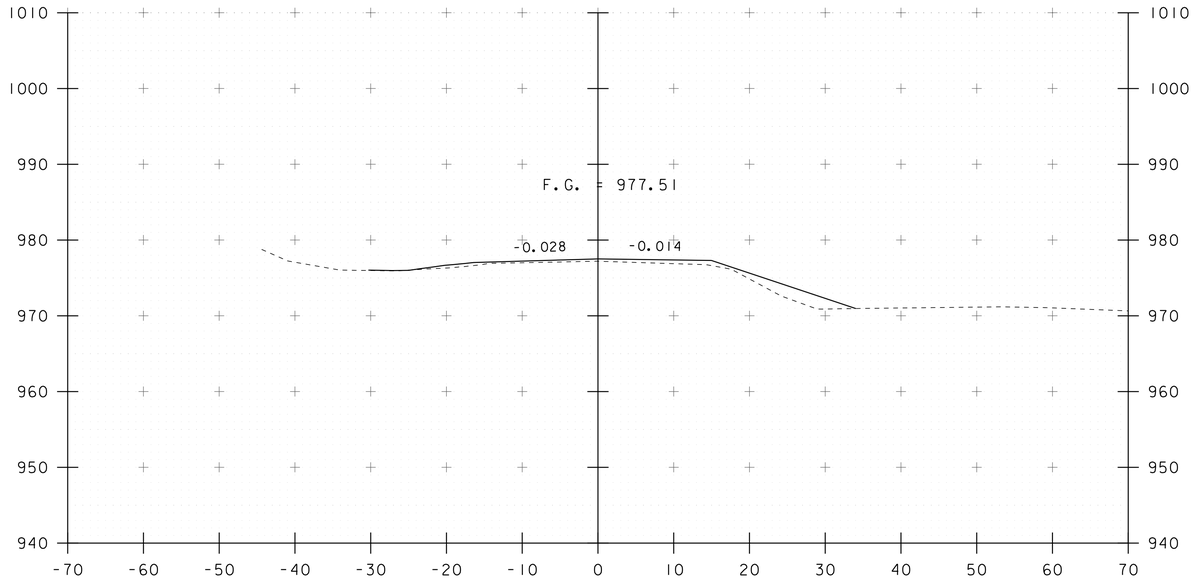
FILE NAME: sl2b592xs.dgn
PROJECT LEADER: C. COTA
DESIGNED BY: S. COLEY
VT 100 CROSS SECTIONS (3)

PLOT DATE: 02-MAR-2020
DRAWN BY: G. ROY
CHECKED BY: C. BURRALL
SHEET 14 OF 20

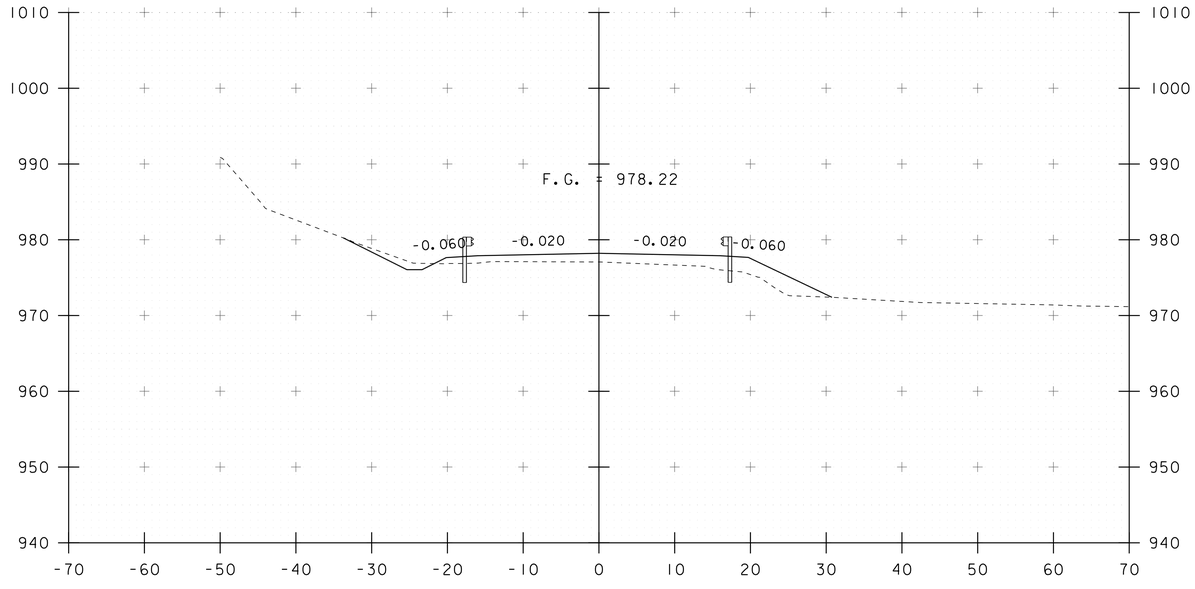


154+25

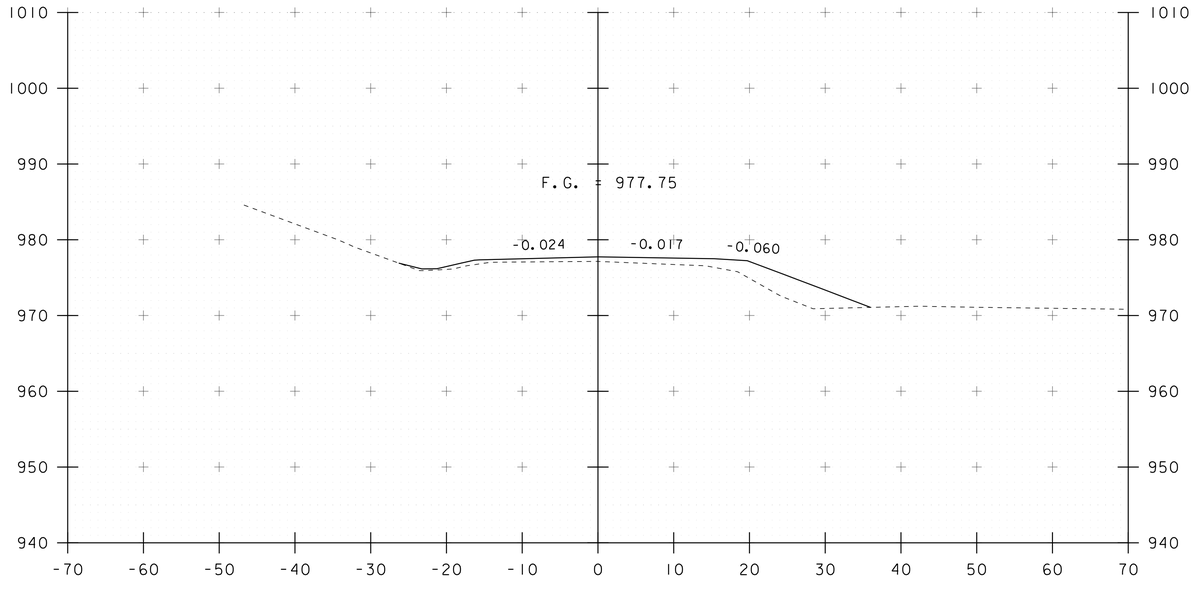
STA 154+25.00
END PROJECT



154+75



154+00



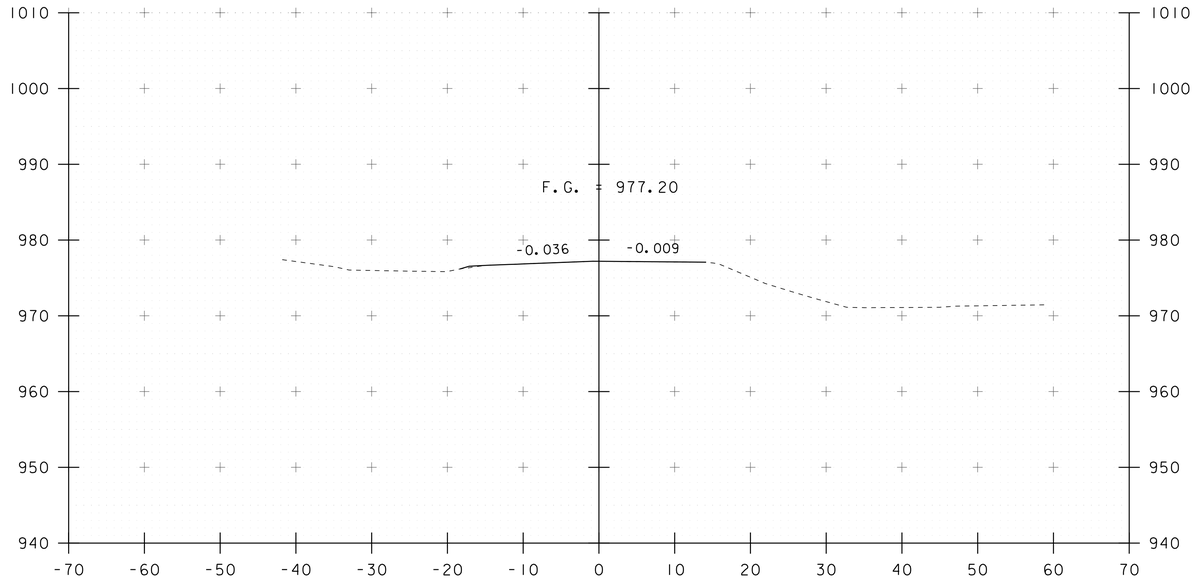
154+50

STA. 154+00 TO STA. 154+75

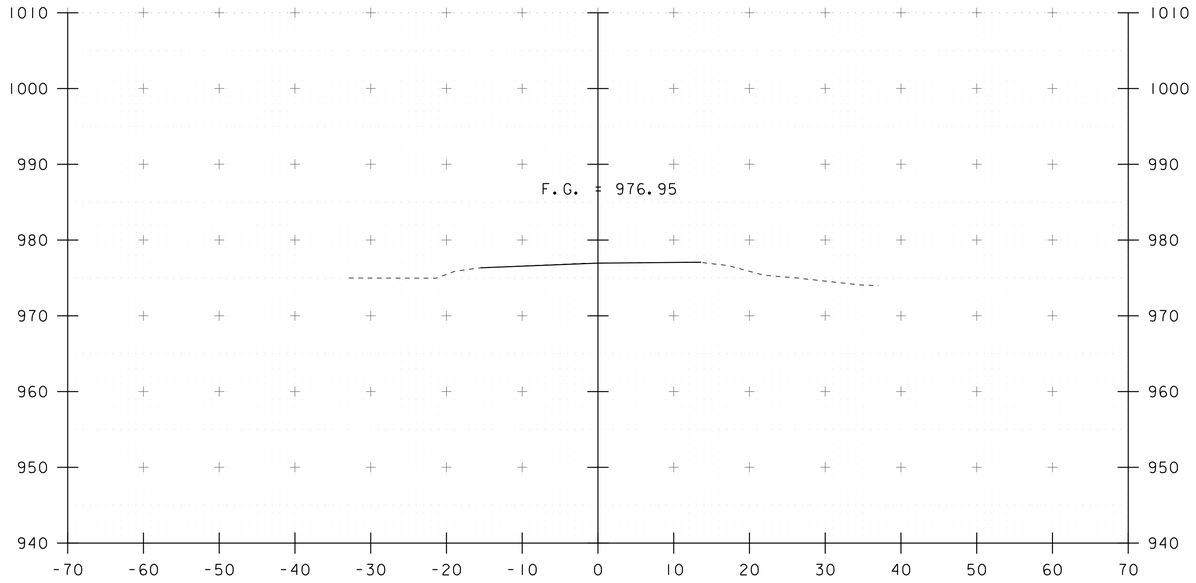
PROJECT NAME: LOWELL
PROJECT NUMBER: BF 029-2(14)

FILE NAME: sl2b592xs.dgn
PROJECT LEADER: C. COTA
DESIGNED BY: S. COLEY
VT 100 CROSS SECTIONS (4)

PLOT DATE: 02-MAR-2020
DRAWN BY: G. ROY
CHECKED BY: C. BURRALL
SHEET 15 OF 20

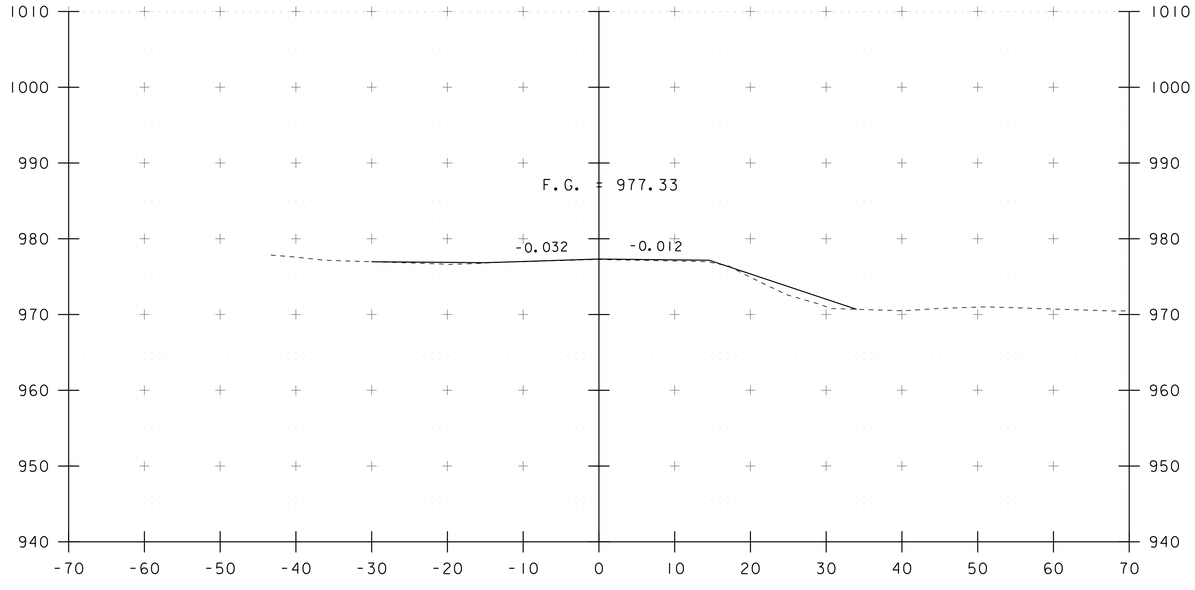


155+25

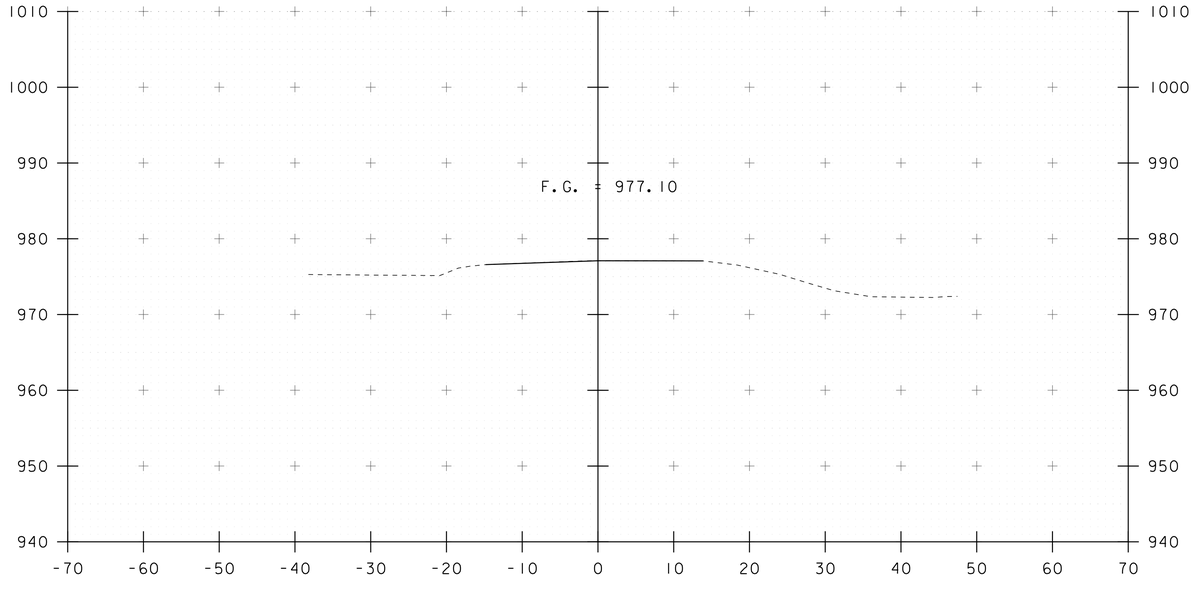


155+75

STA 155+75.00
END APPROACH
MATCH EXISTING



155+00



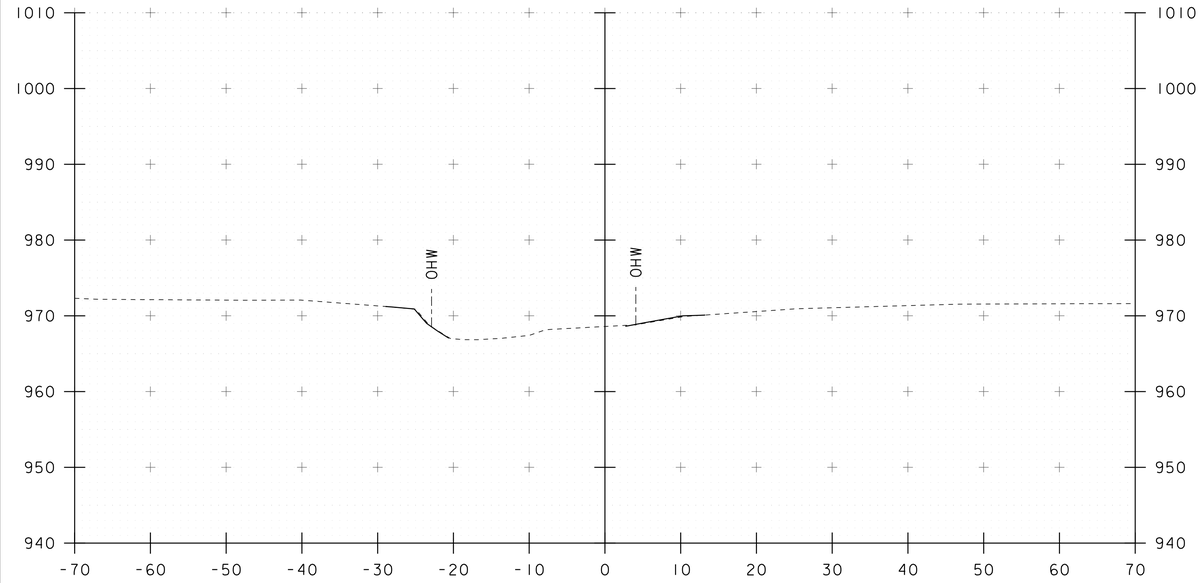
155+50

STA. 155+00 TO STA. 155+75

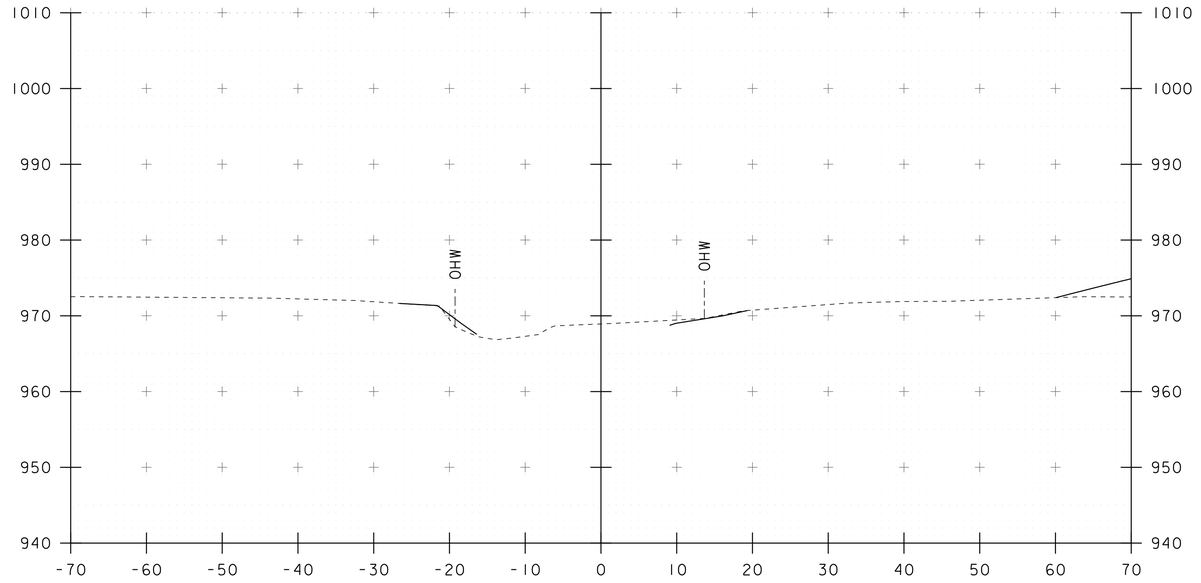
PROJECT NAME: LOWELL
PROJECT NUMBER: BF 029-2(14)

FILE NAME: sl2b592xs.dgn
PROJECT LEADER: C. COTA
DESIGNED BY: S. COLEY
VT 100 CROSS SECTIONS (5)

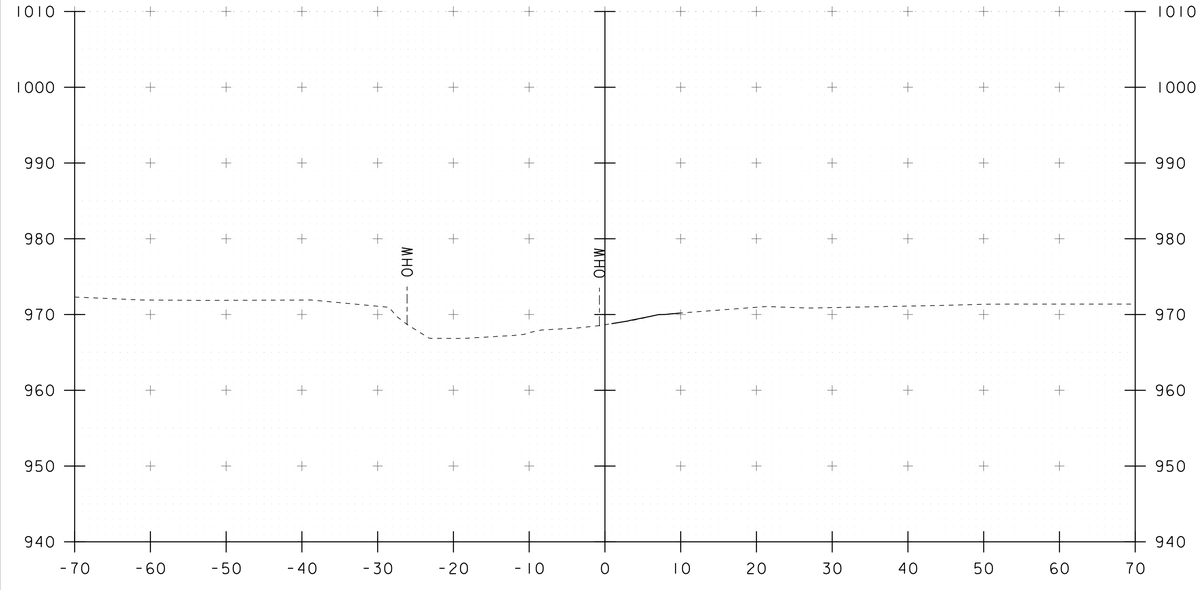
PLOT DATE: 02-MAR-2020
DRAWN BY: G. ROY
CHECKED BY: C. BURRALL
SHEET 16 OF 20



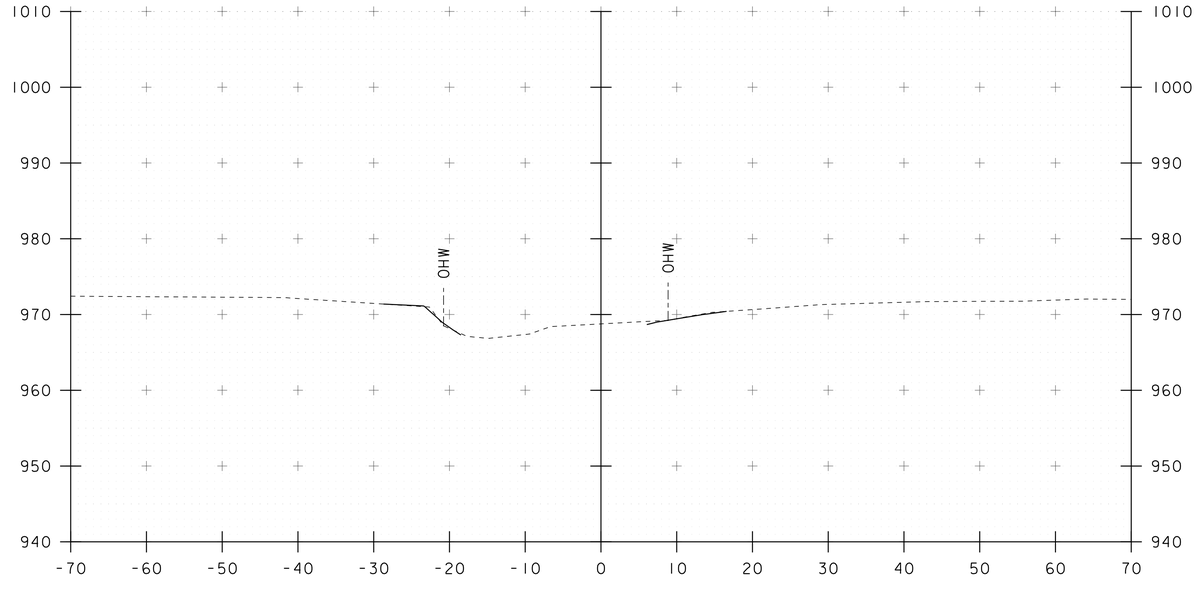
50+10



50+30



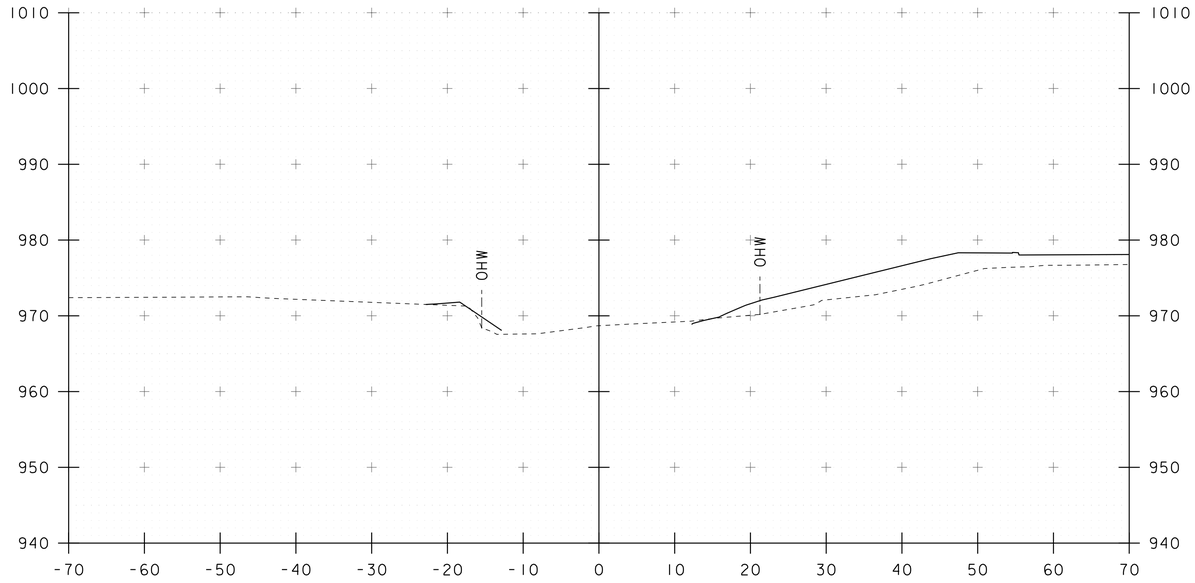
50+00



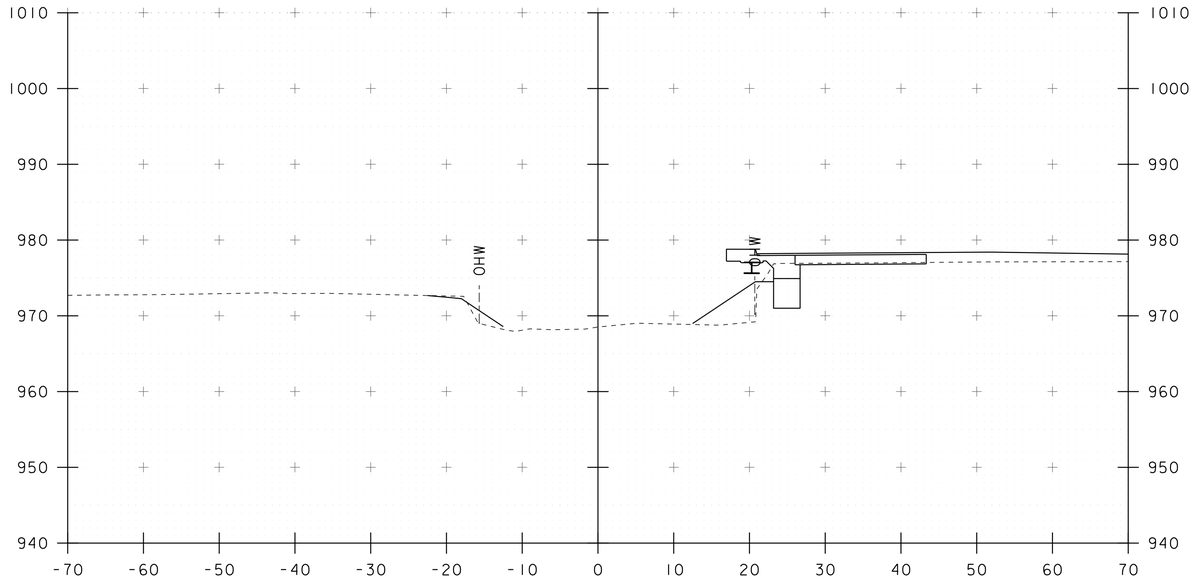
50+20

STA. 50+00 TO STA. 50+30

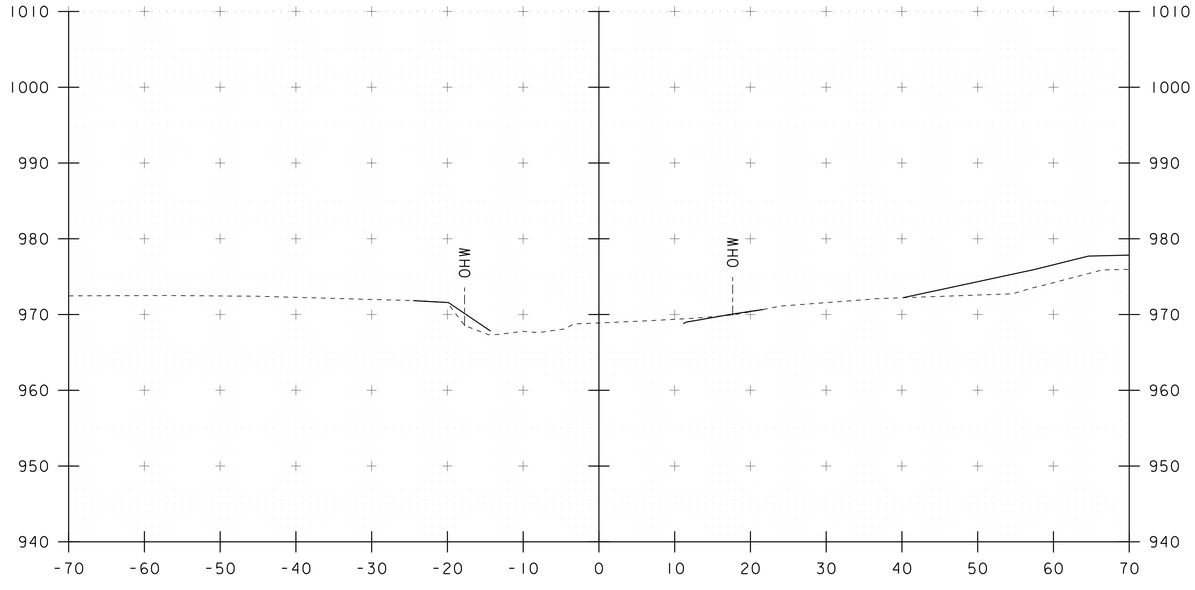
PROJECT NAME: LOWELL	
PROJECT NUMBER: BF 029-2(14)	
FILE NAME: sl2b592xs.dgn	PLOT DATE: 02-MAR-2020
PROJECT LEADER: C. COTA	DRAWN BY: G. ROY
DESIGNED BY: S. COLEY	CHECKED BY: C. BURRALL
CHANNEL CROSS SECTIONS (1)	SHEET 17 OF 20



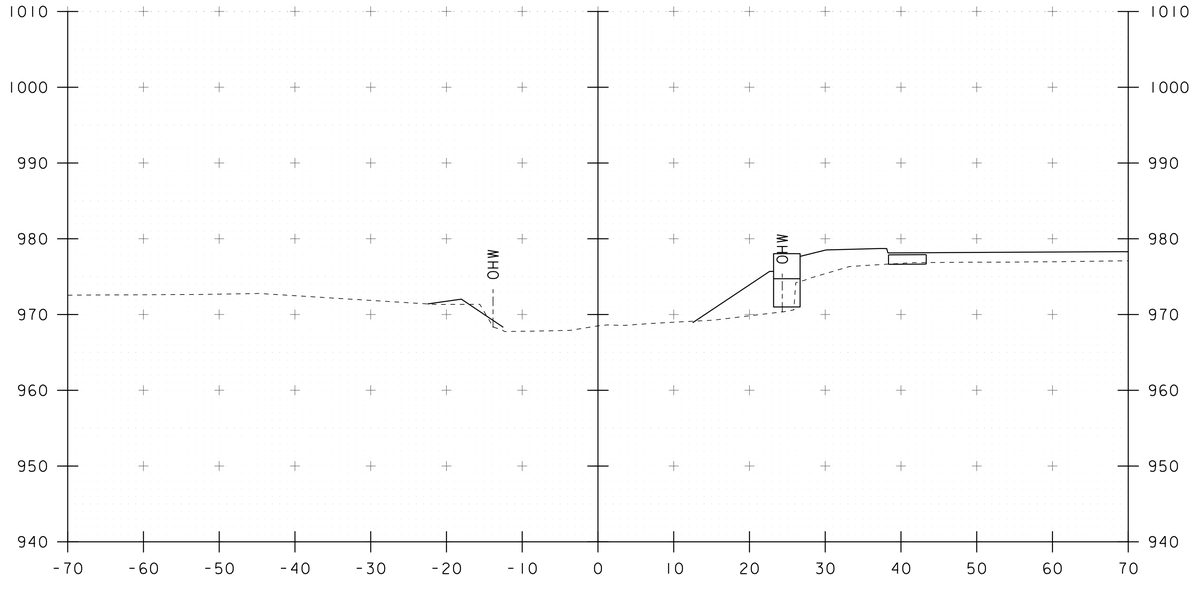
50+50



50+70



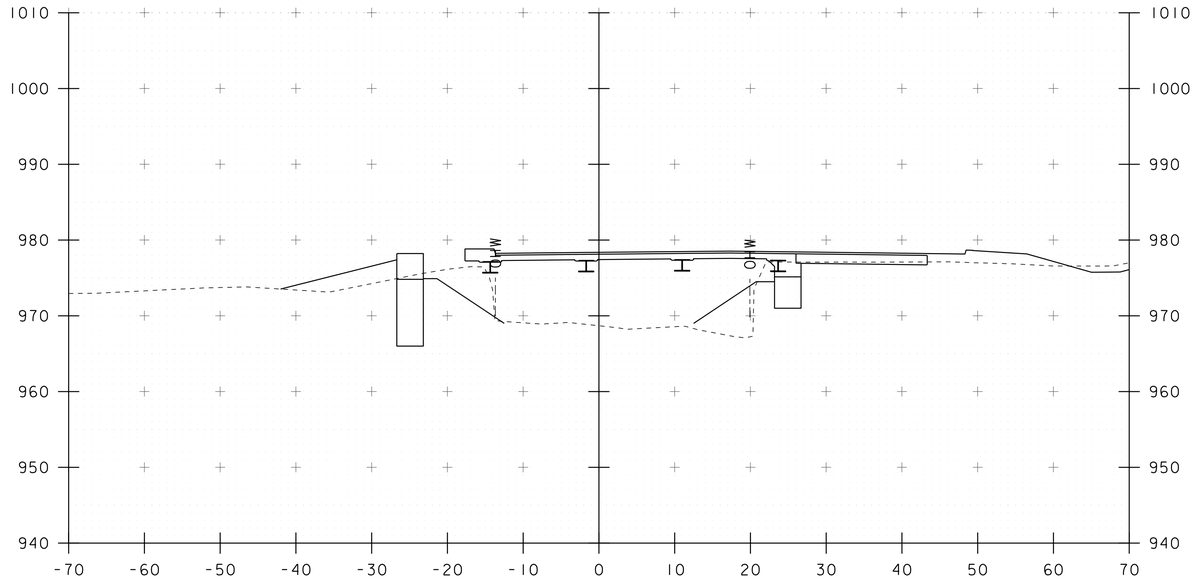
50+40



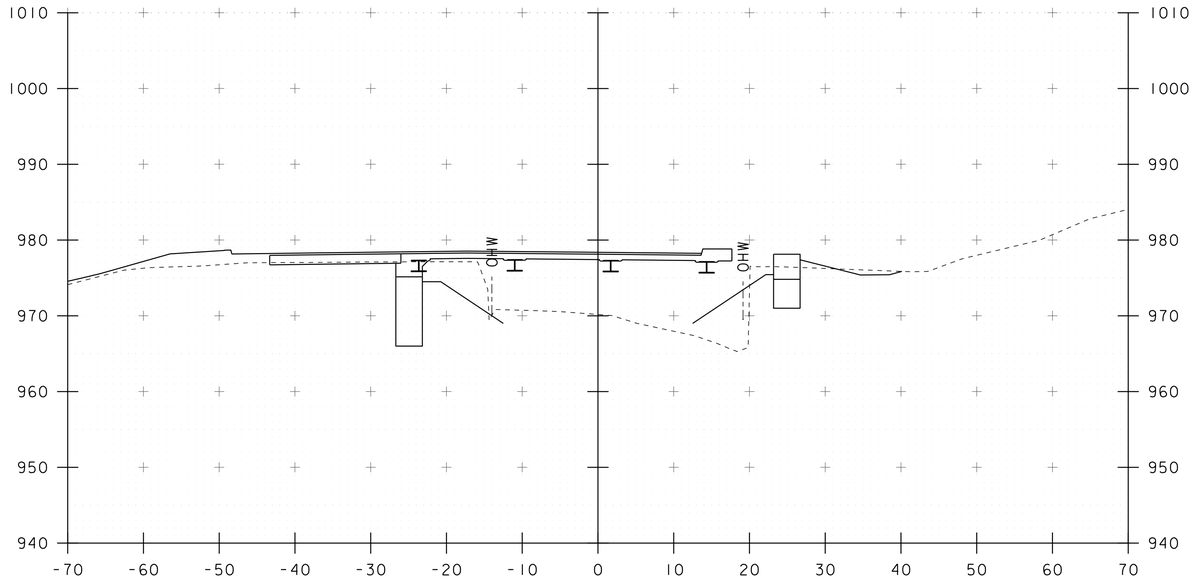
50+60

PROJECT NAME:	LOWELL
PROJECT NUMBER:	BF 029-2(14)
FILE NAME: sl2b592xs.dgn	PLOT DATE: 02-MAR-2020
PROJECT LEADER: C. COTA	DRAWN BY: G. ROY
DESIGNED BY: S. COLEY	CHECKED BY: C. BURRALL
CHANNEL CROSS SECTIONS (2)	SHEET 18 OF 20

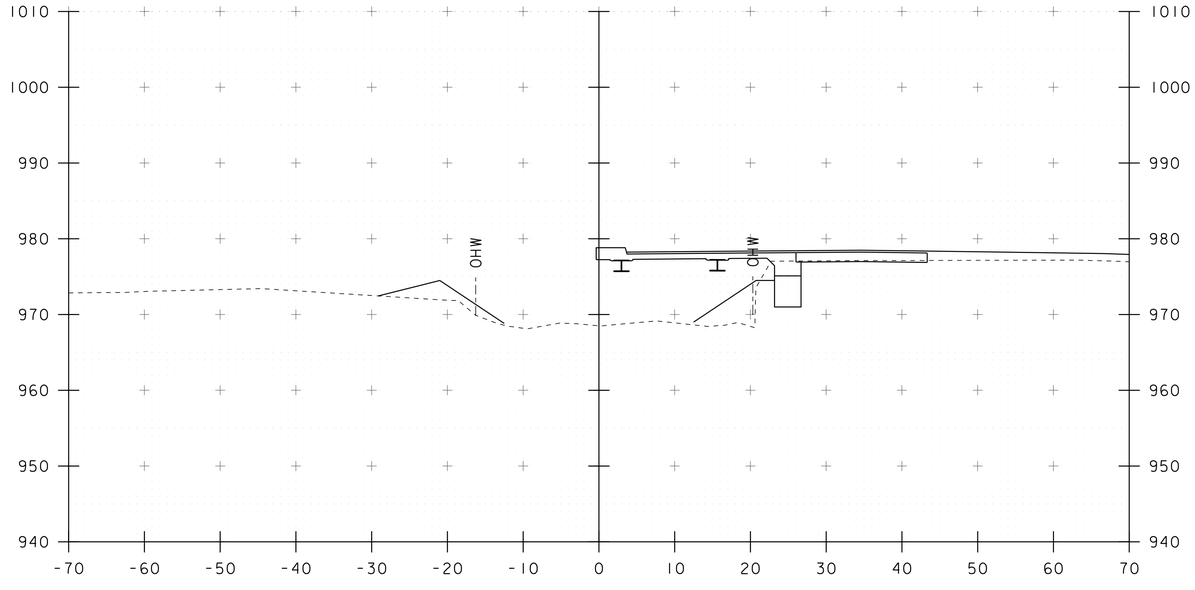
STA. 50+40 TO STA. 50+70



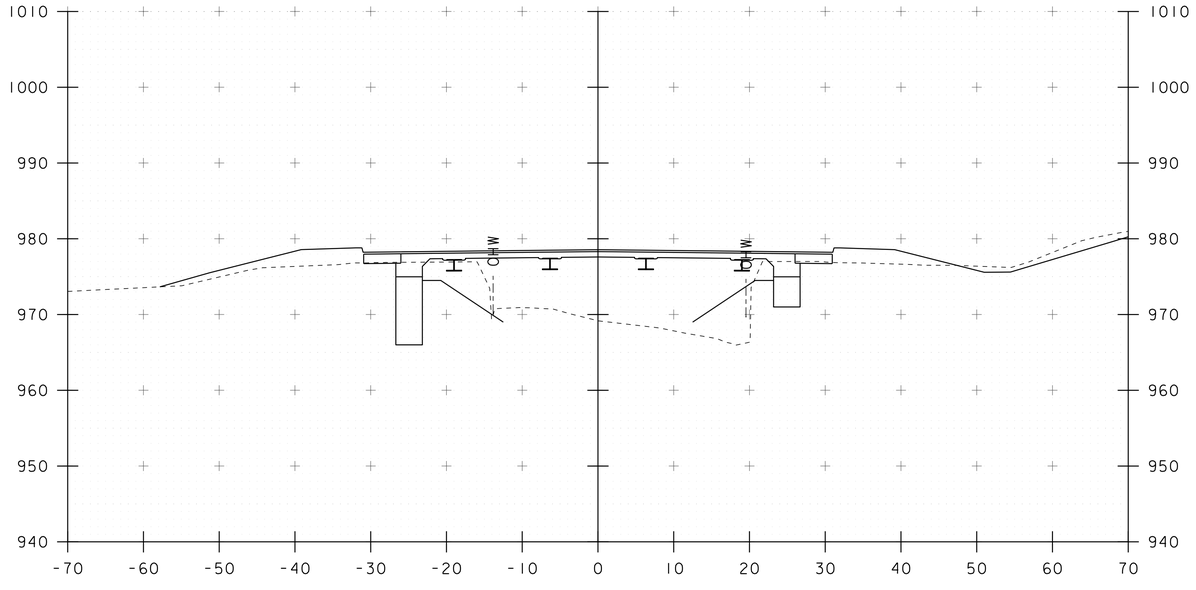
50+90



51+10



50+80



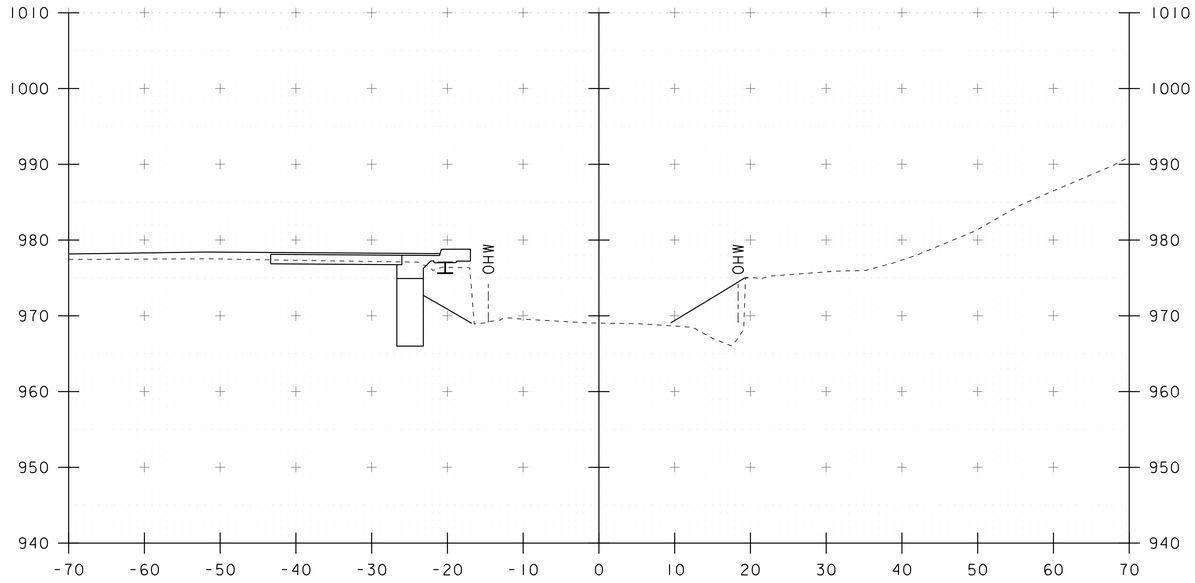
51+00

PROJECT NAME: LOWELL
PROJECT NUMBER: BF 029-2(14)

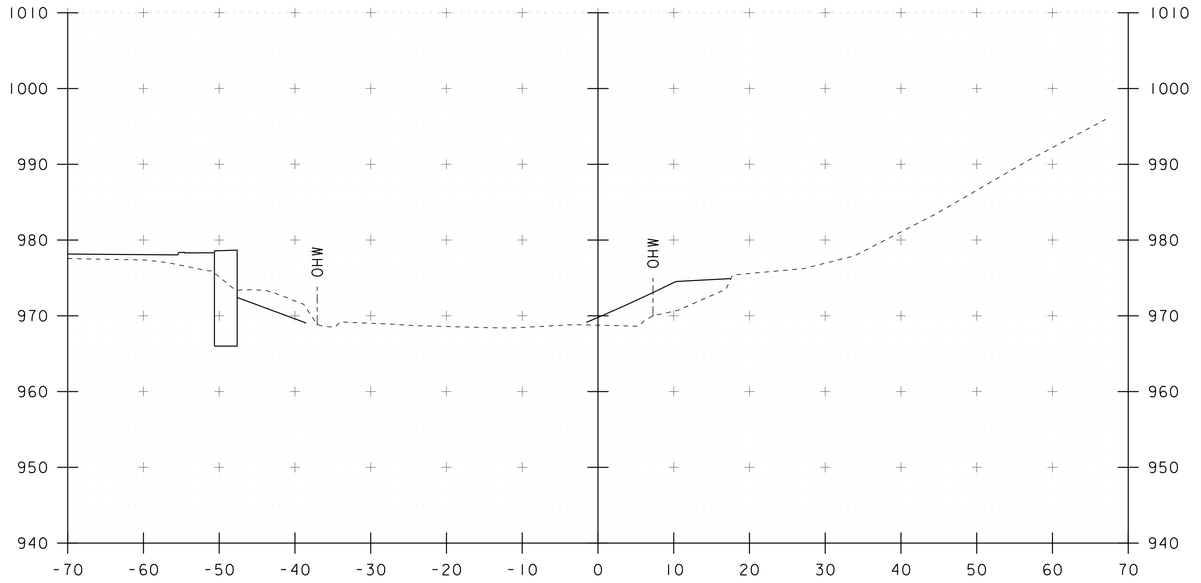
FILE NAME: sl2b592xs.dgn
PROJECT LEADER: C. COTA
DESIGNED BY: S. COLEY
CHANNEL CROSS SECTIONS (3)

PLOT DATE: 02-MAR-2020
DRAWN BY: G. ROY
CHECKED BY: C. BURRALL
SHEET 19 OF 20

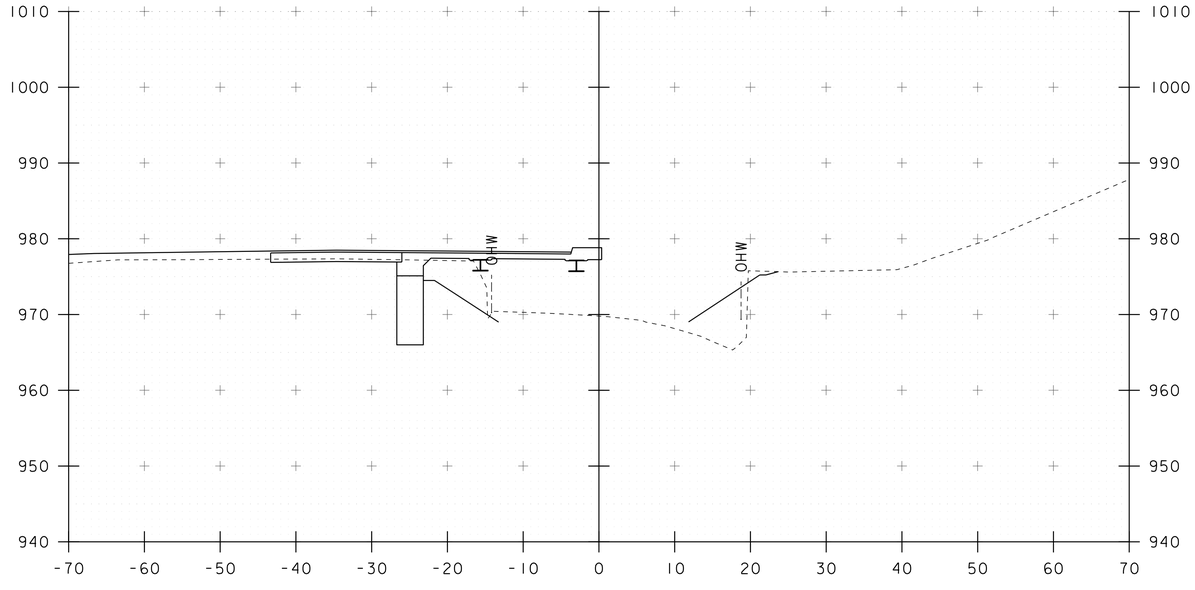
STA. 50+80 TO STA. 51+10



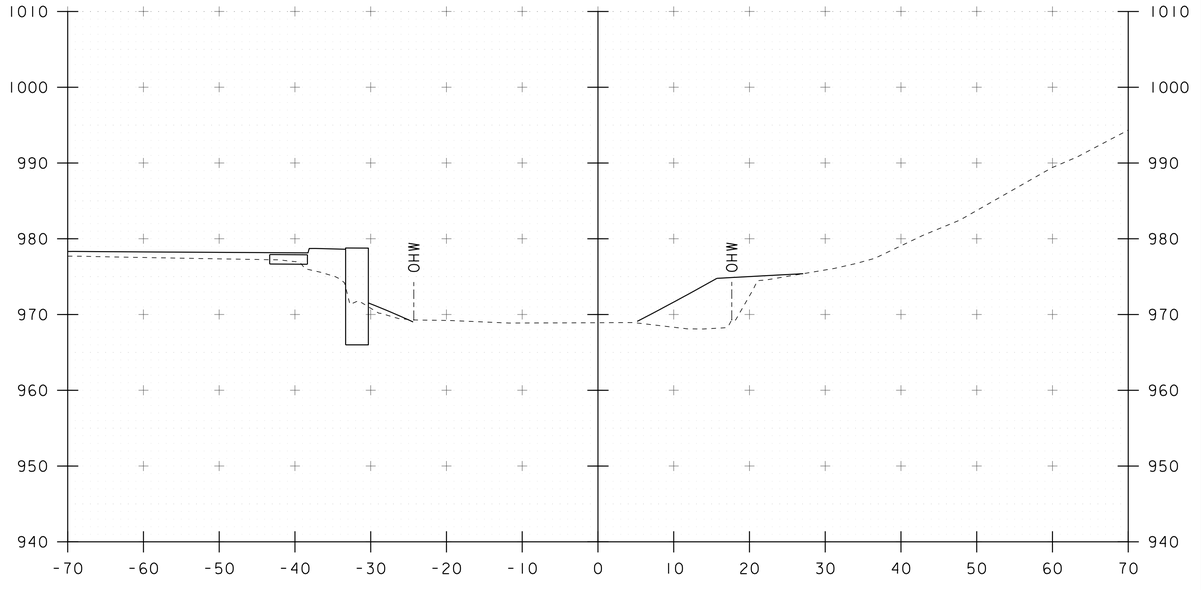
51+30



51+50



51+20



51+40

STA. 51+20 TO STA. 51+50

PROJECT NAME: LOWELL	
PROJECT NUMBER: BF 029-2(14)	
FILE NAME: sl2b592xs.dgn	PLOT DATE: 02-MAR-2020
PROJECT LEADER: C. COTA	DRAWN BY: G. ROY
DESIGNED BY: S. COLEY	CHECKED BY: C. BURRALL
CHANNEL CROSS SECTIONS (4)	SHEET 20 OF 20