

REVIEWER NOTES

- 1:
- TRAFFIC CONTROL WILL BE A TEMPORARY BRIDGE, DOWNSTREAM OF THE EXISTING STRUCTURE.
- 2:
- ROW ACQUISITION IS ANTICIPATED TO BE LIMITED TO SLOPE AND ACCESS RIGHTS.
- 3:
- UTILITY RELOCATION IS NOT ANTICIPATED TO BE NECESSARY.
- 4:
- A PHASE I ARCHAEOLOGICAL STUDY IS PLANNED FOR SUMMER 2019.
- 5:

STATE OF VERMONT

AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT

BRIDGE PROJECT

TOWN OF CHESTER

COUNTY OF WINDSOR

ROUTE NO: VT ROUTE 103

BRIDGE NO : 16

PROJECT LOCATION:

APPROXIMATELY 1.7 MILES NORTH OF THE INTERSECTION OF VT ROUTE 103 AND VT ROUTE 10

PROJECT DESCRIPTION:

REMOVAL AND REPLACEMENT OF EXISTING BRIDGE DECK AND ASSOCIATED MINOR REPAIRS.

LENGTH OF BR 16 STRUCTURE:

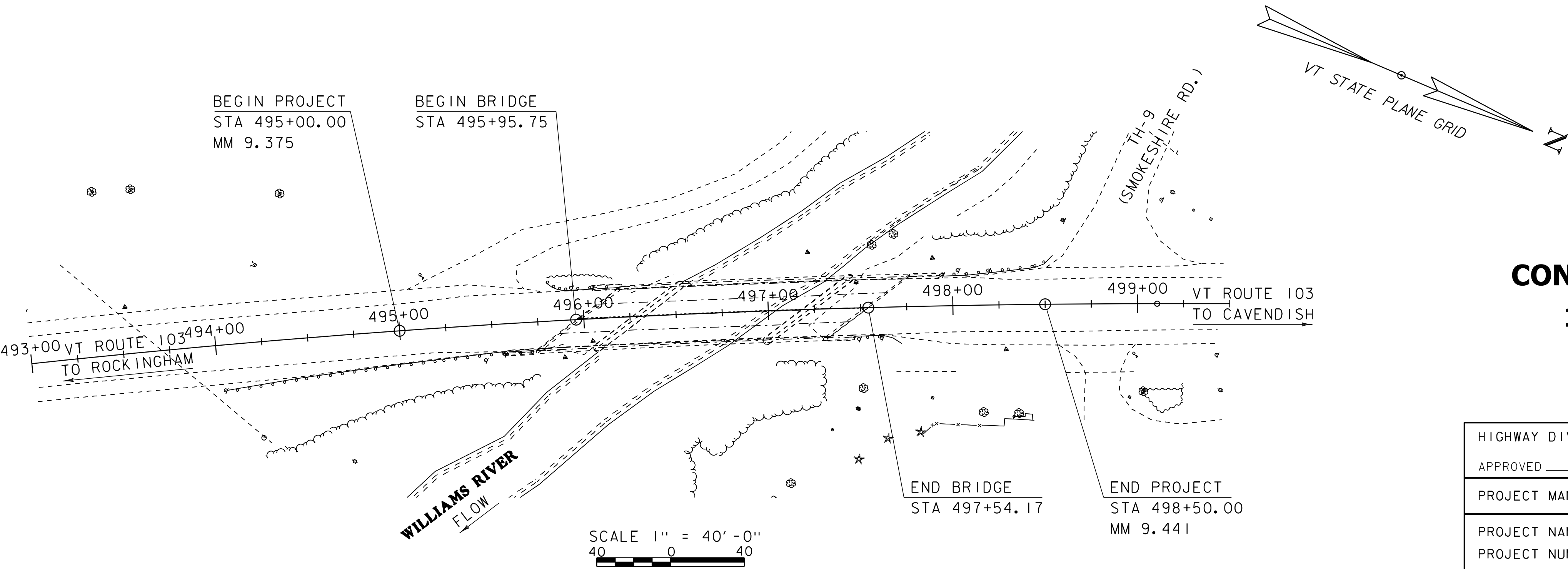
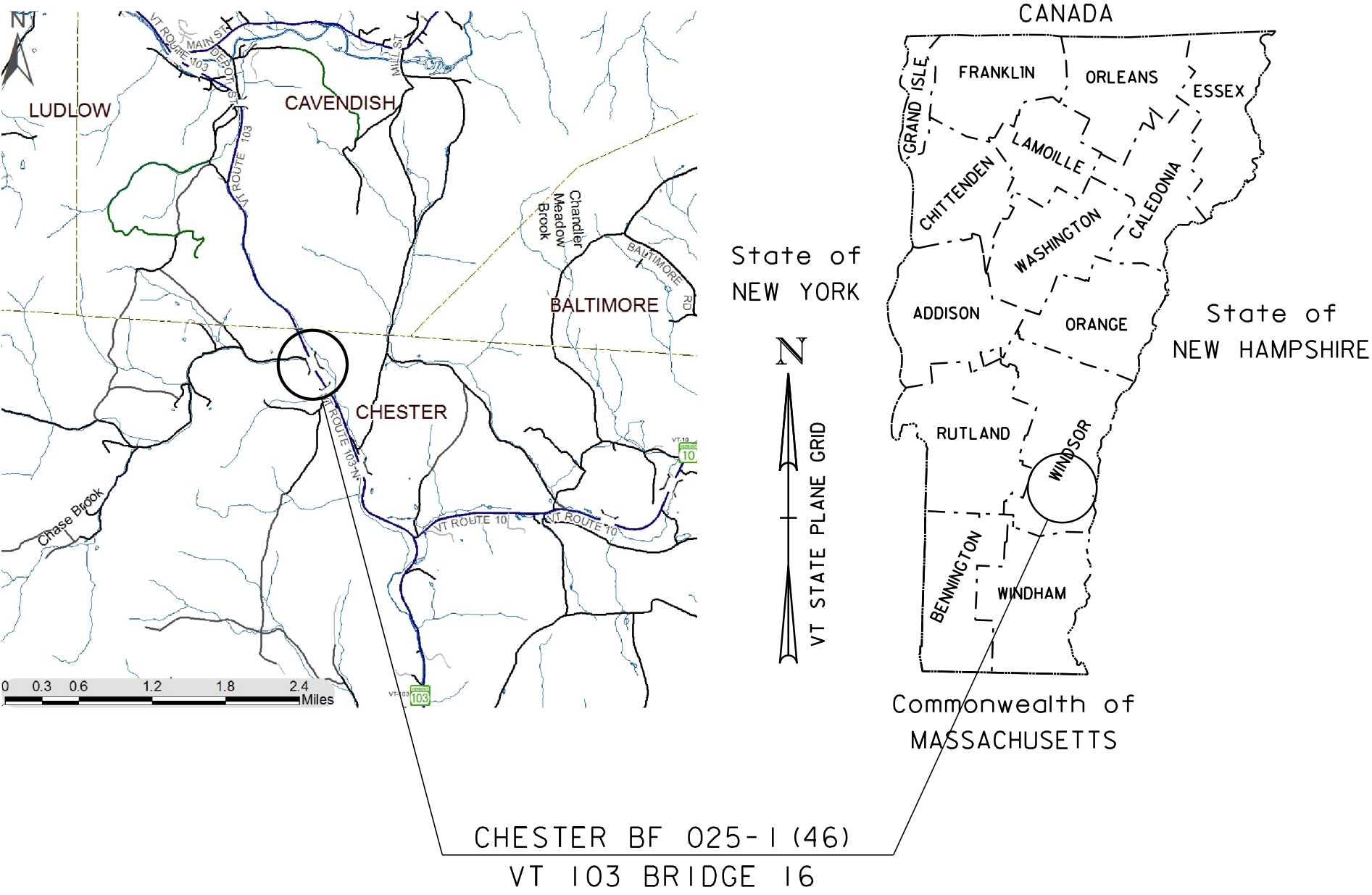
158.42 FEET

LENGTH OF BR 16 ROADWAY:

191.58 FEET

LENGTH OF BR 16 PROJECT:

350.00 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.

QUALITY ASSURANCE PROGRAM : LEVEL 2	
SURVEYED BY :	R. GILMAN
SURVEYED DATE :	9/28/2018
DATUM	
VERTICAL	NAVD88
HORIZONTAL	NAD83 (2011)

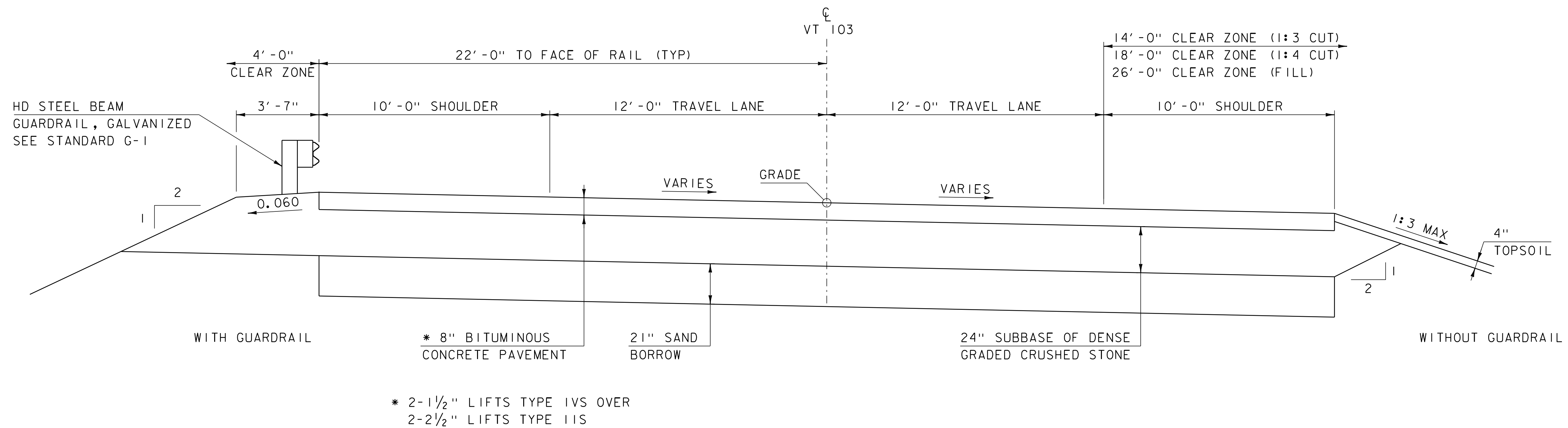
CONCEPTUAL PLANS

18-APR-2019

HIGHWAY DIVISION, CHIEF ENGINEER	
APPROVED _____	DATE _____
PROJECT MANAGER : W. PELLETIER	
PROJECT NAME : CHESTER	
PROJECT NUMBER : BF 025-1 (46)	
SHEET 1 OF 19 SHEETS	

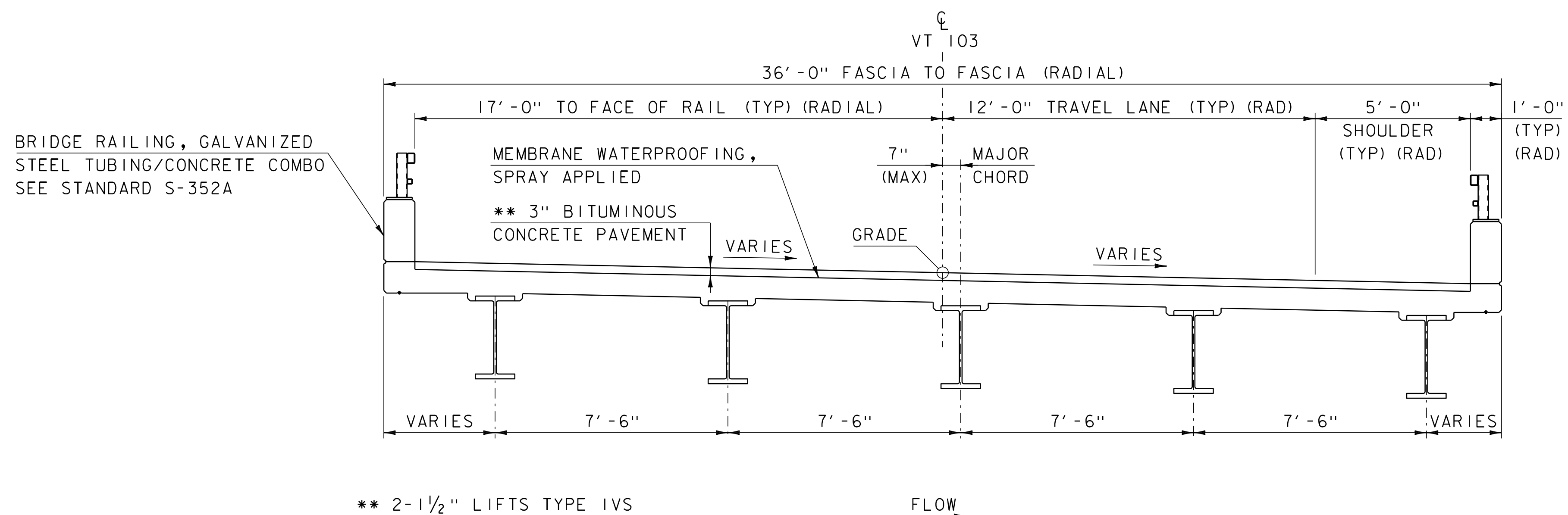
# PRELIMINARY INFORMATION SHEET (BRIDGE)

[illegible]



### VT ROUTE 103 TYPICAL SECTION

SCALE 3/8" = 1'-0"



### TYPICAL BRIDGE SECTION

SCALE 3/8" = 1'-0"

### MATERIAL TOLERANCES (IF USED ON PROJECT)

SURFACE	
- PAVEMENT (TOTAL THICKNESS)	+/- 1/4"
- AGGREGATE SURFACE COURSE	+/- 1/2"
SUBBASE	+/- 1"
SAND BORROWS	+/- 1"

PROJECT NAME: CHESTER  
PROJECT NUMBER: BF 025-1(46)

FILE NAME: I6b002/sl6b002+typical.dgn  
PROJECT LEADER: W.PELLETIER  
DESIGNED BY: D.D.BEARD  
TYPICAL SECTIONS

PLOT DATE: 18-APR-2019  
DRAWN BY: D.D.BEARD  
CHECKED BY: L.J.STONE  
SHEET 3 OF 19



GENERAL INFORMATION

SYMBOLOLOGY LEGEND NOTE

THE SYMBOLOLOGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLOLOGY. THE SYMBOLOLOGY 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. SYMBOLOLOGY 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
	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 SYMBOLOLOGY

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 SYMBOLOLOGY

PROJECT DESIGN & LAYOUT SYMBOLOLOGY	
	— — — — — 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
	PROJECT DEMARCATION FENCE
	BARRIER FENCE
	TREE PROTECTION ZONE (TPZ)
	STRIPING LINE REMOVAL
	SHEET PILES

CONVENTIONAL BOUNDARY SYMBOLOLOGY

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
	PROPERTY LINE (P/L)
	SLOPE RIGHTS
	6f 6f 6F PROPERTY BOUNDARY
	4f 4f 4F PROPERTY BOUNDARY
	HAZ HAZ HAZARDOUS WASTE

EPSC LAYOUT PLAN SYMBOLOLOGY

EPSC MEASURES	
	ONNNOONNNOONNO FILTER CURTAIN
	SILT FENCE
	SILT FENCE WOVEN WIRE
	CHECK DAM
	DISTURBED AREAS REQUIRING RE-VEGETATION
	EROSION MATTING
SEE EPSC DETAIL SHEETS FOR ADDITIONAL SYMBOLOLOGY	

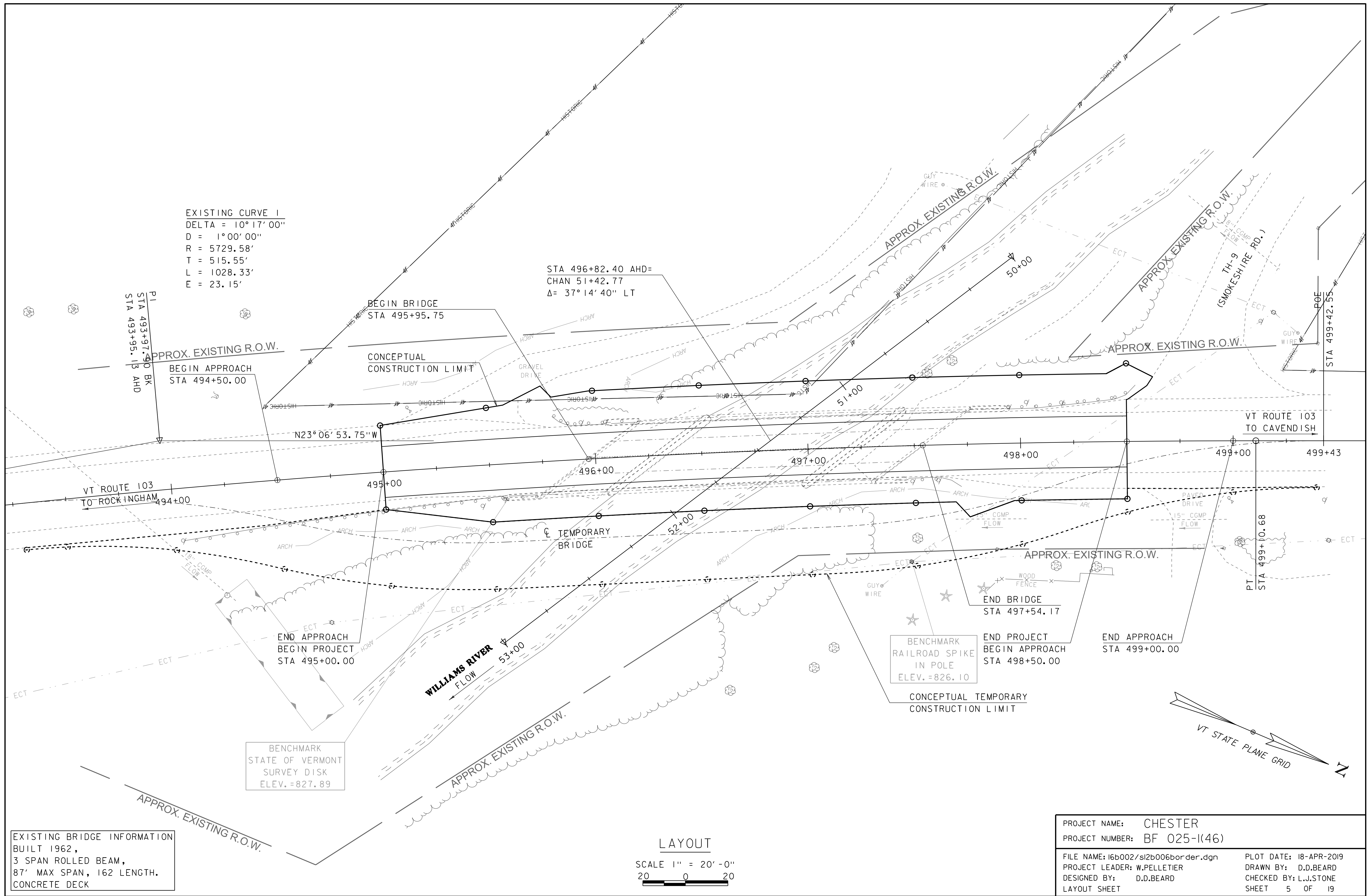
ENVIRONMENTAL RESOURCES	
	WETLAND BOUNDARY
	RIPARIAN BUFFER ZONE
	WETLAND BUFFER ZONE
	SOIL TYPE BOUNDARY
	THREATENED & ENDANGERED SPECIES
	HAZ HAZ HAZARDOUS WASTE AREA
	AG AG AGRICULTURAL LAND
	HABITAT HABITAT FISH & WILDLIFE HABITAT
	FLOOD PLAIN FLOOD PLAIN
	OHW OHW ORDINARY HIGH WATER (OHW)
	STORM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

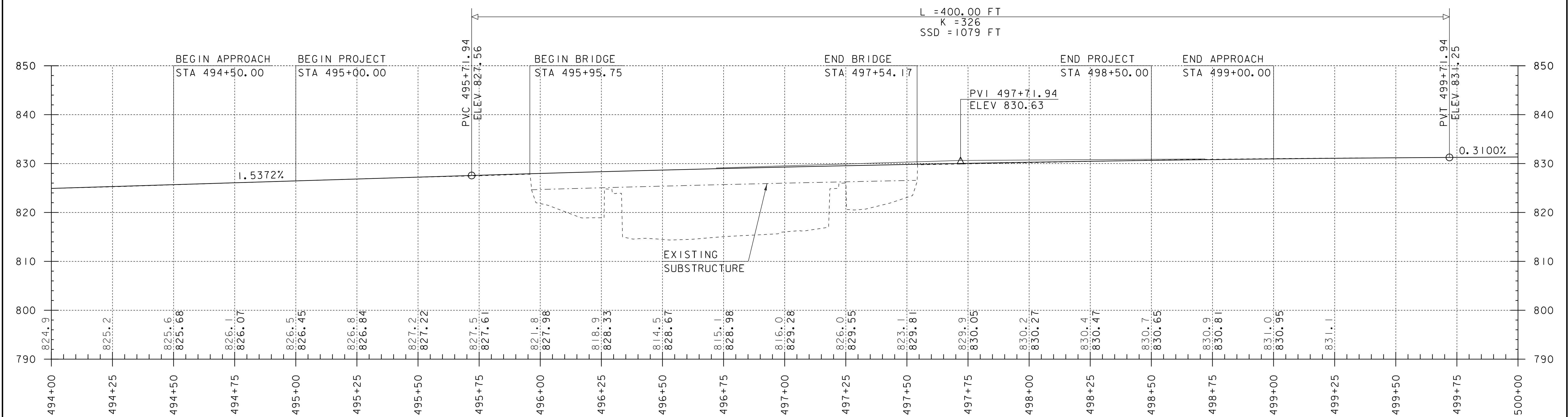
ARCHEOLOGICAL & HISTORIC	
	ARCH ARCH ARCHEOLOGICAL BOUNDARY
	HISTORIC DIST HISTORIC DISTRICT BOUNDARY
	HISTORIC HISTORIC AREA
	H HISTORIC STRUCTURE

CONVENTIONAL TOPOGRAPHIC SYMBOLOLOGY

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

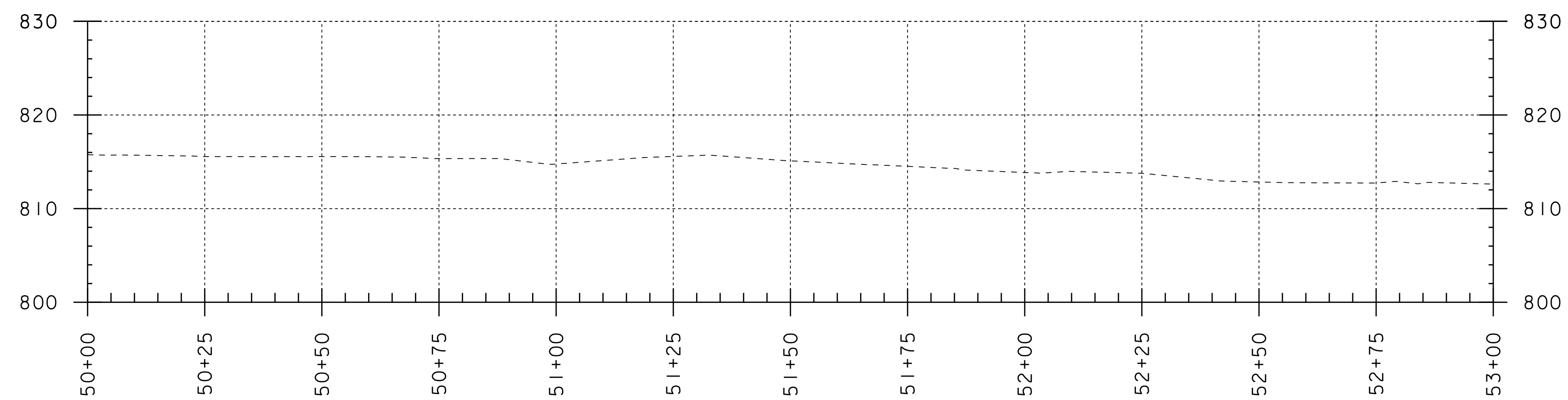
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PROJECT LEADER: W.PELLETIER	DRAWN BY: M.LONGSTREET
DESIGNED BY: -----	CHECKED BY: -----
SYMBOLOLOGY LEGEND	SHEET 4 OF 19





### VT ROUTE 103 PROFILE

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



### WILLIAMS RIVER PROFILE

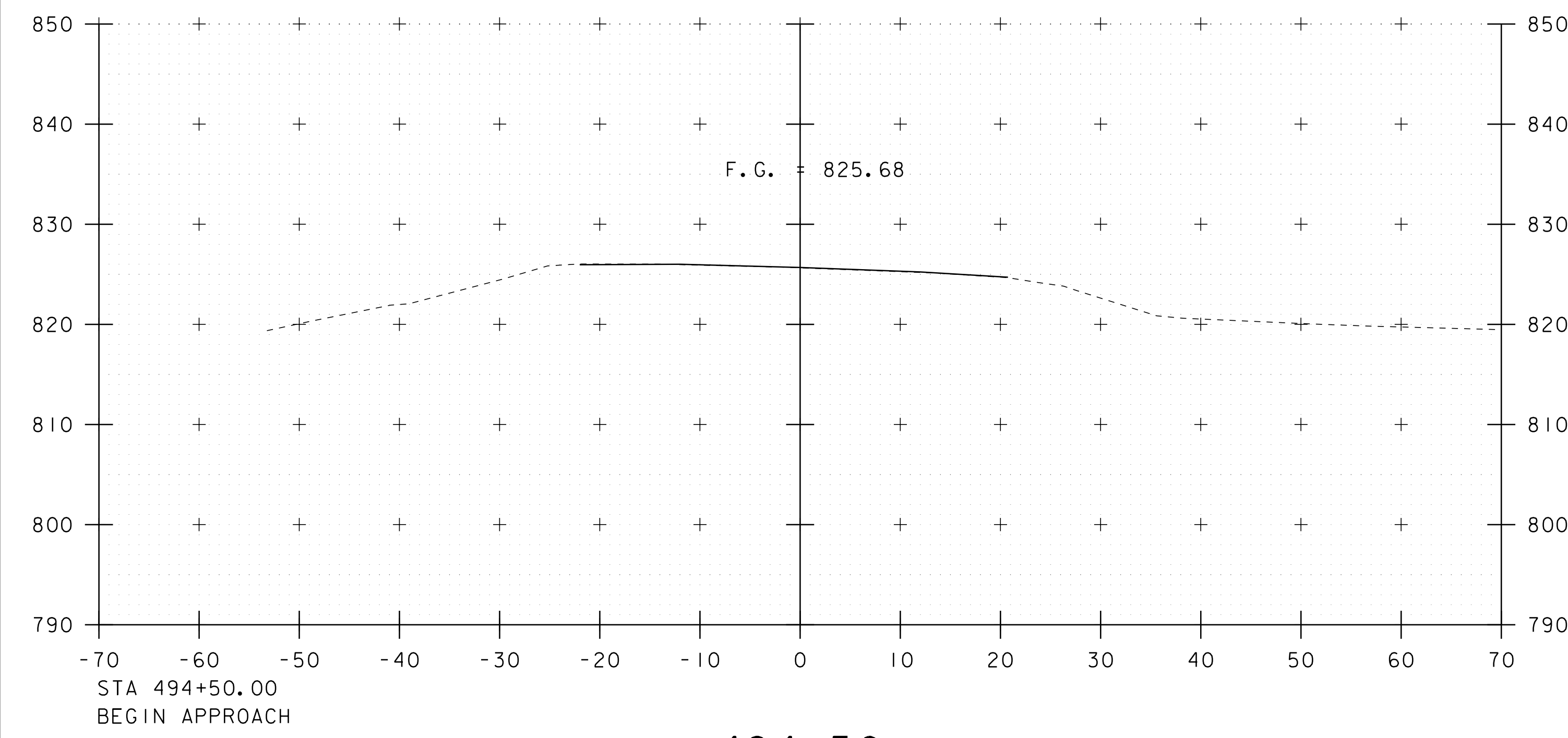
SCALE: HORIZONTAL 1"=20'-0"  
VERTICAL 1"=10'-0"

NOTE:  
GRADES SHOWN TO THE NEAREST  
TENTH ARE EXISTING GROUND ALONG CL  
GRADES SHOWN TO THE NEAREST  
HUNDREDTH ARE FINISH GRADE ALONG CL

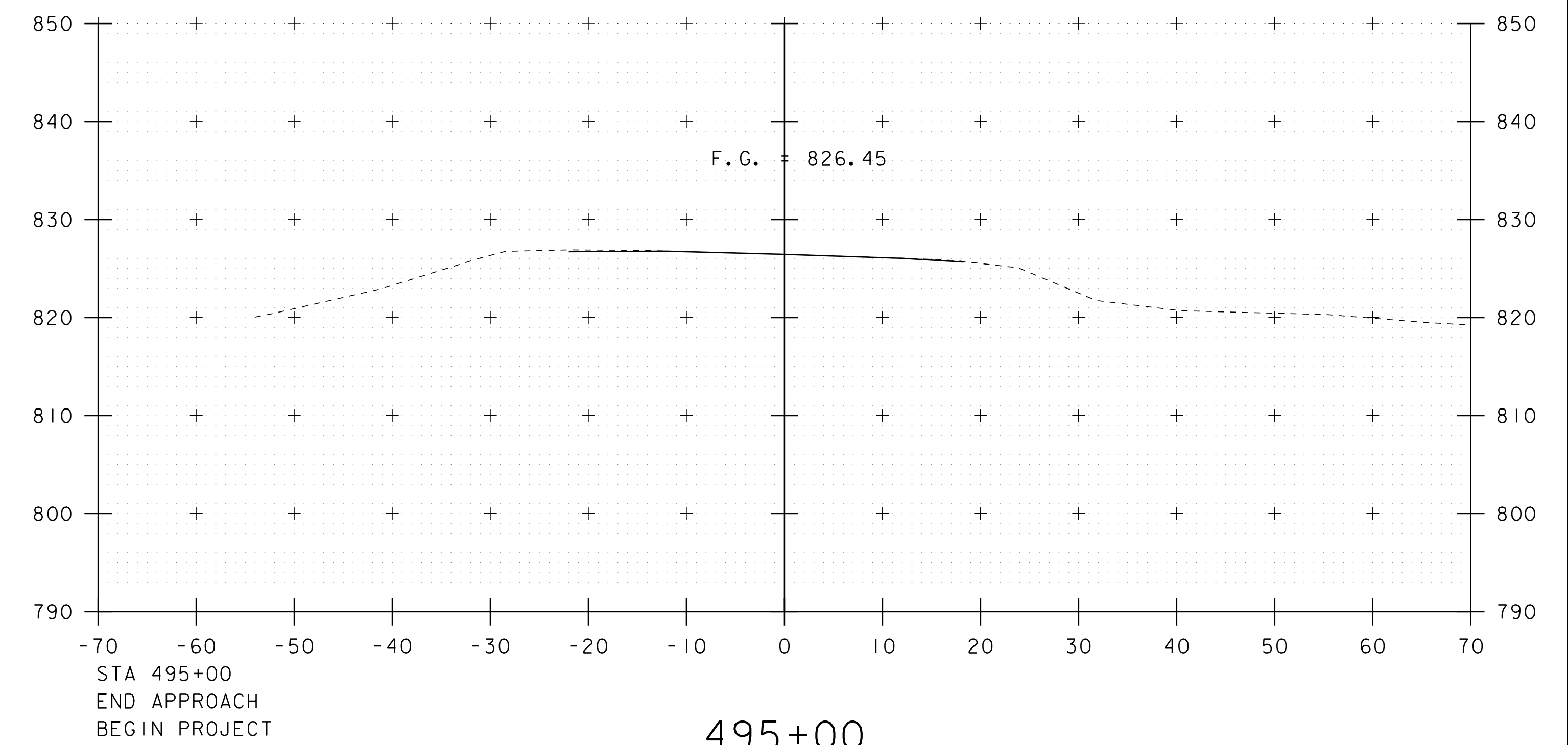
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PROJECT NUMBER: BF 025-I(46)

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PROJECT LEADER: W.PELLETIER  
DESIGNED BY: D.D.BEARD  
PROFILE SHEET

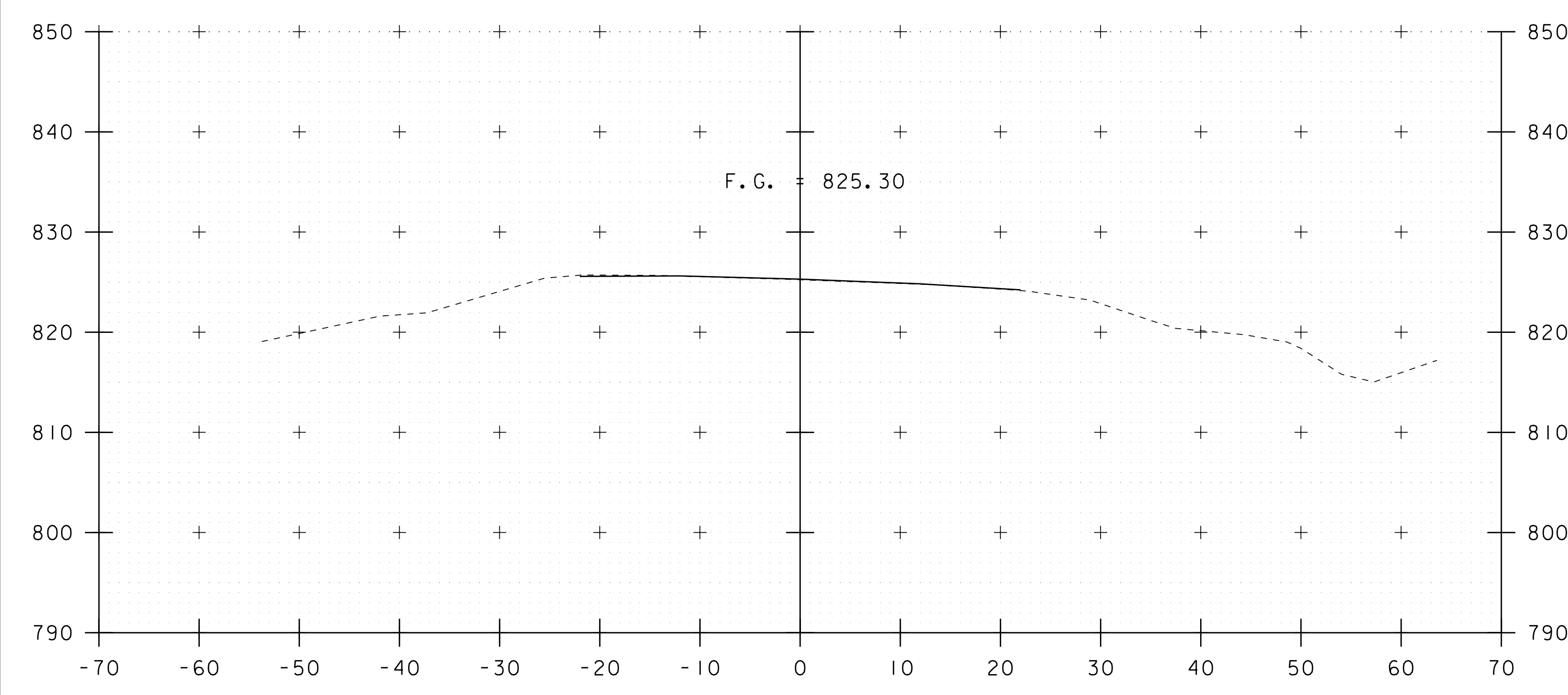
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DRAWN BY: D.D.BEARD  
CHECKED BY: L.J.STONE  
SHEET 6 OF 19



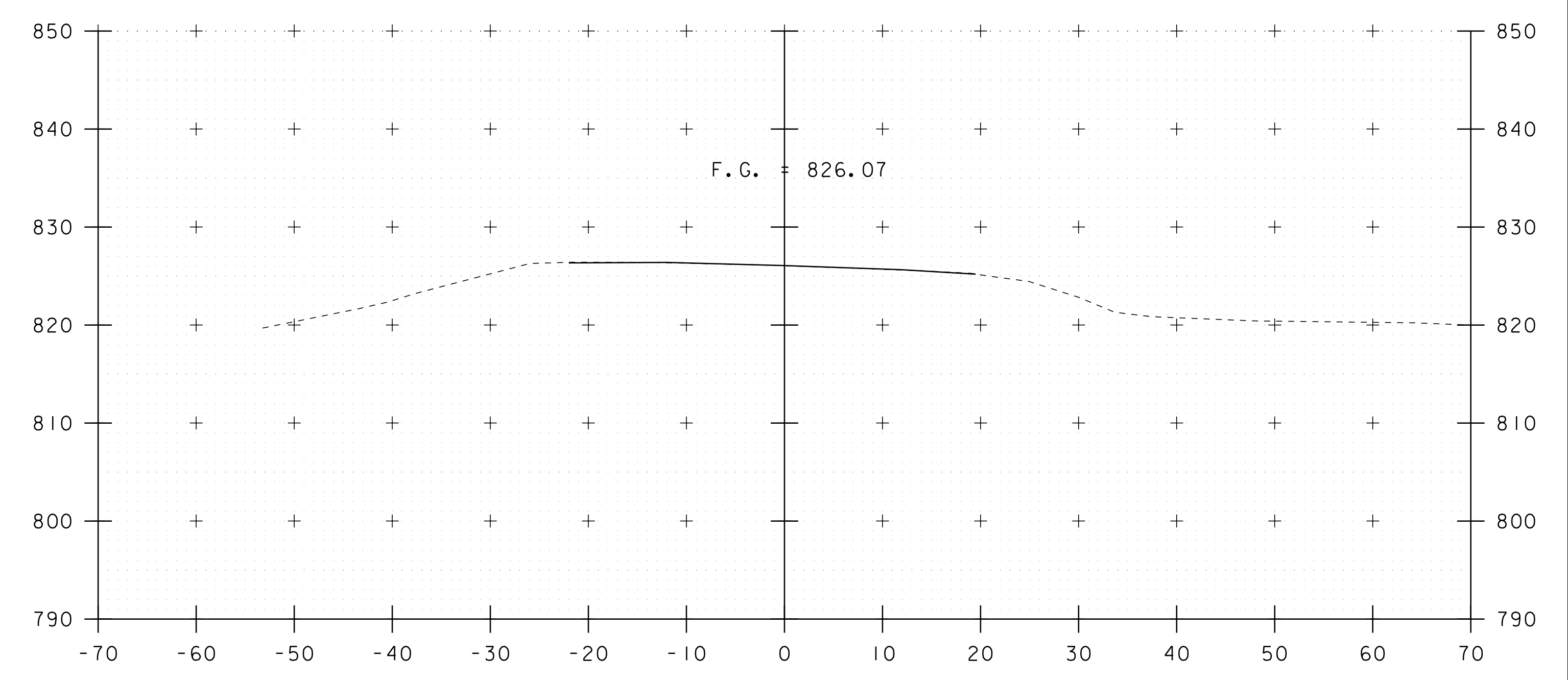
494+50



495+00



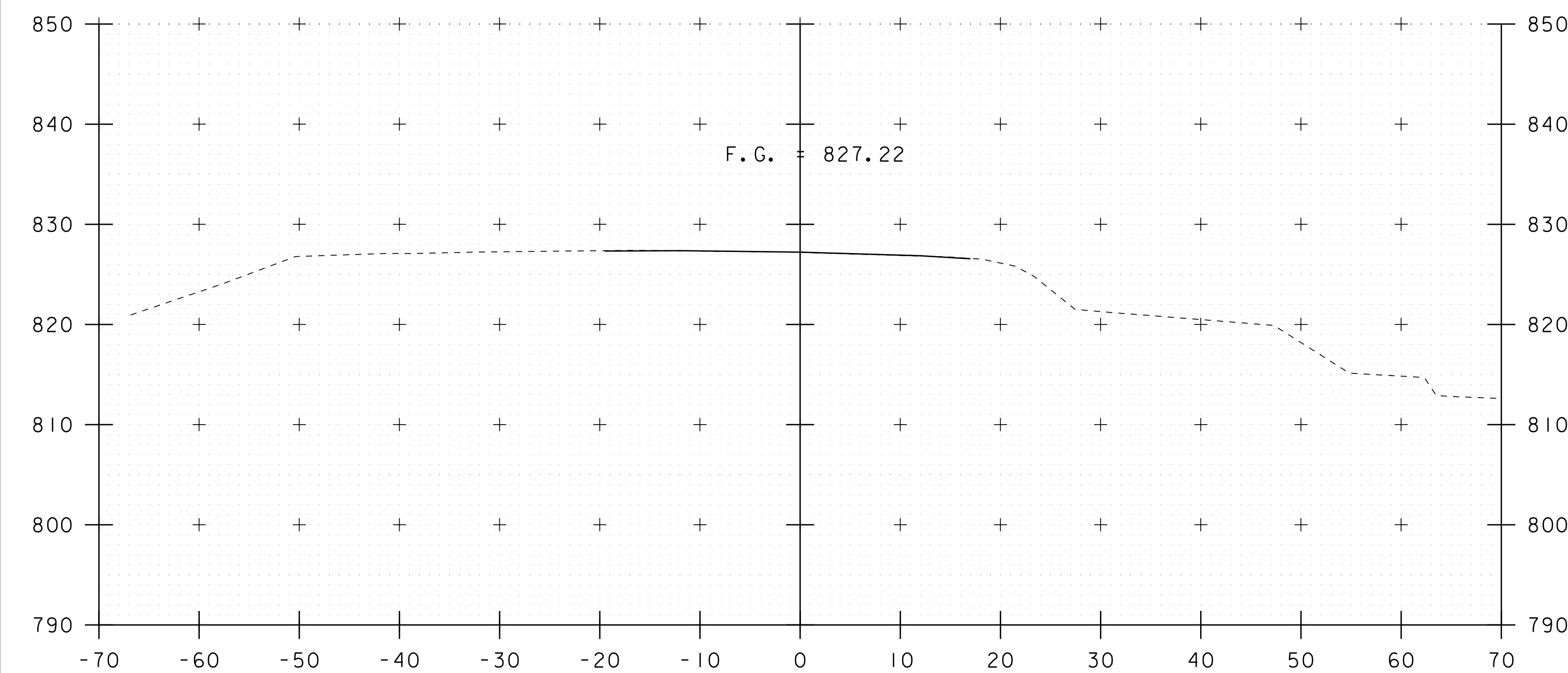
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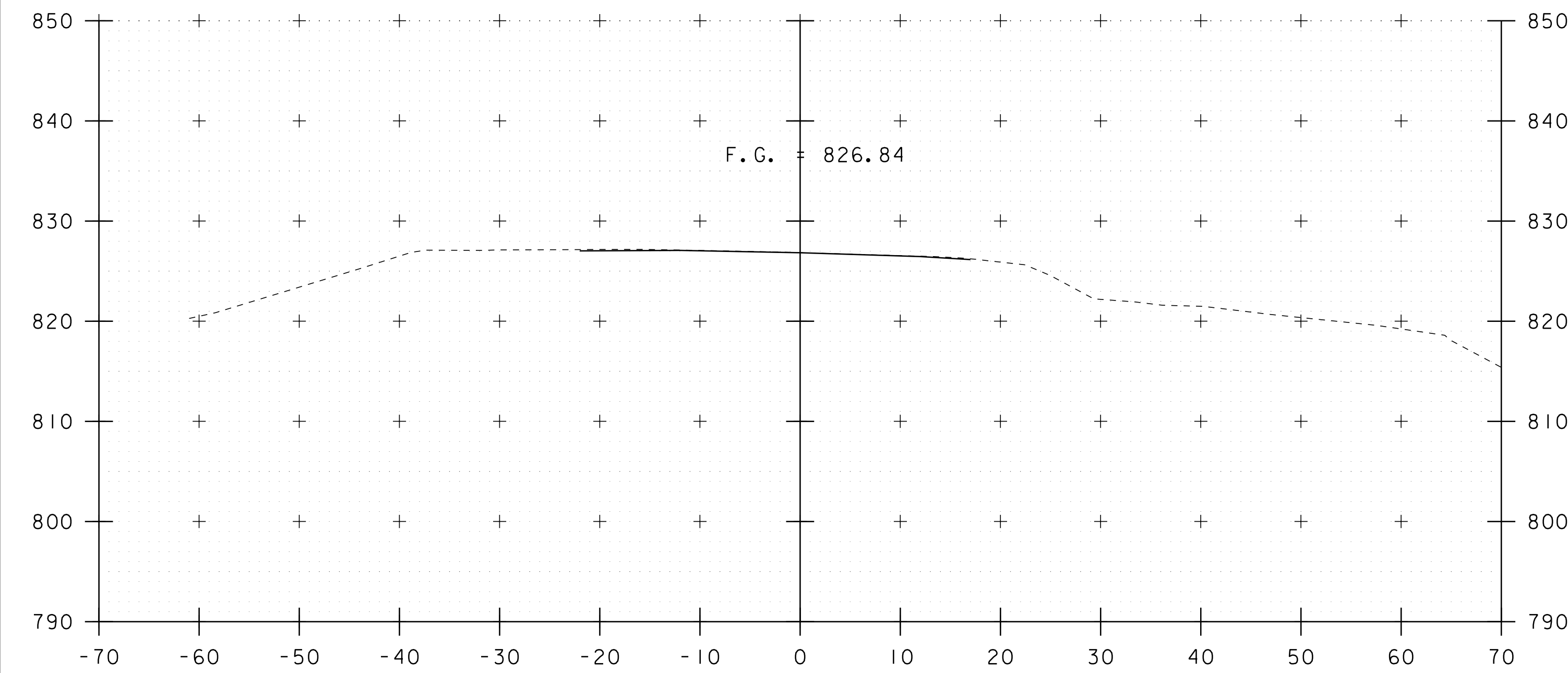
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STA. 494+25 TO STA. 495+00

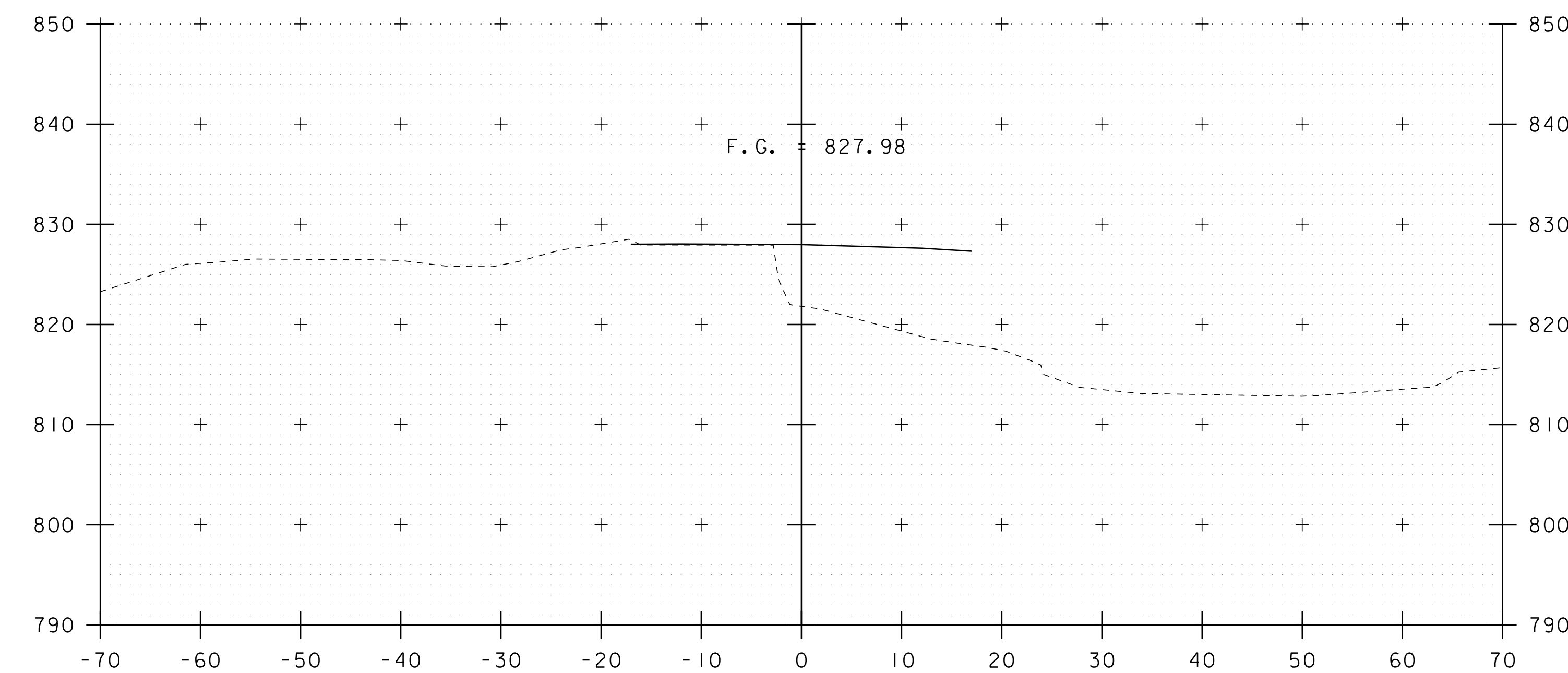
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PROJECT LEADER: W.PELLETIER	DRAWN BY: D.D.BEARD
DESIGNED BY: D.D.BEARD	CHECKED BY: L.J.STONE
ROADWAY CROSS SECTIONS I	SHEET 7 OF 19



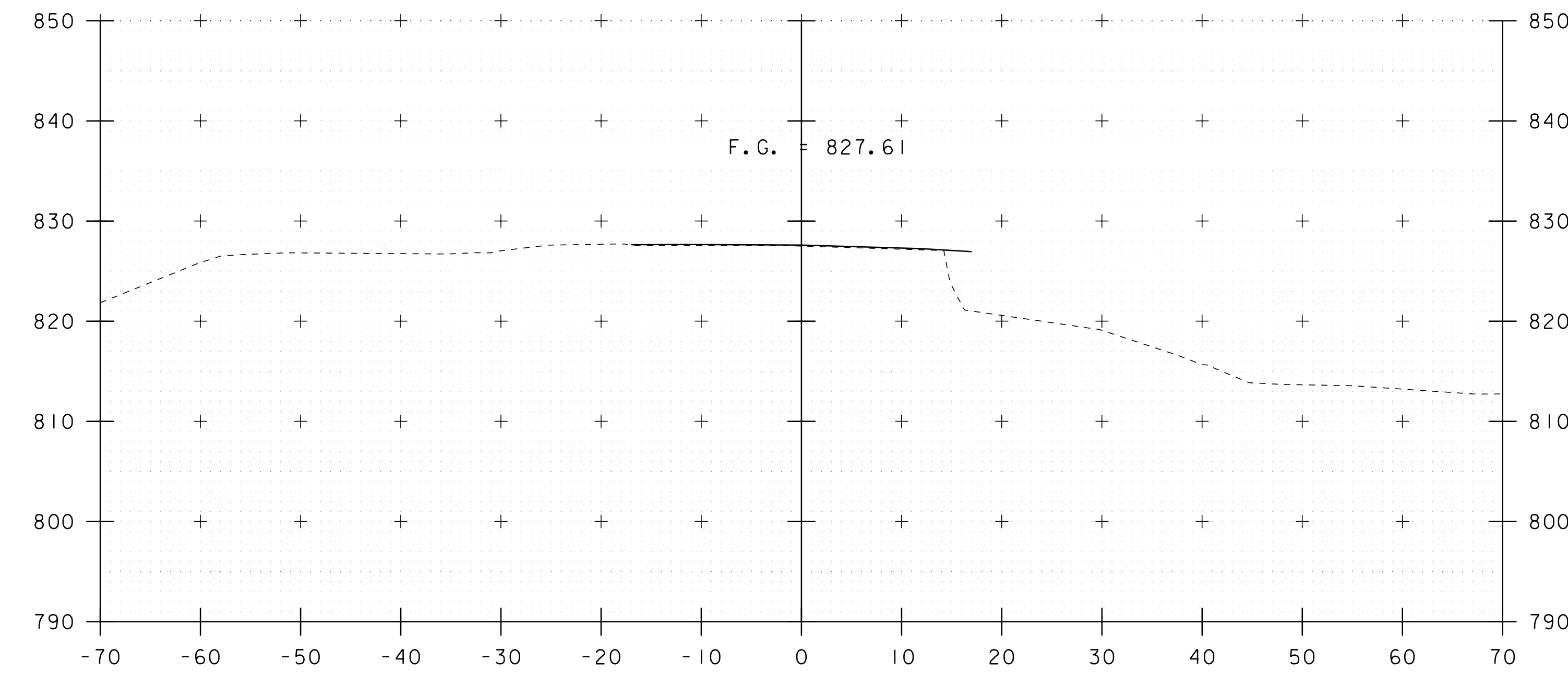
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495+25



496+00



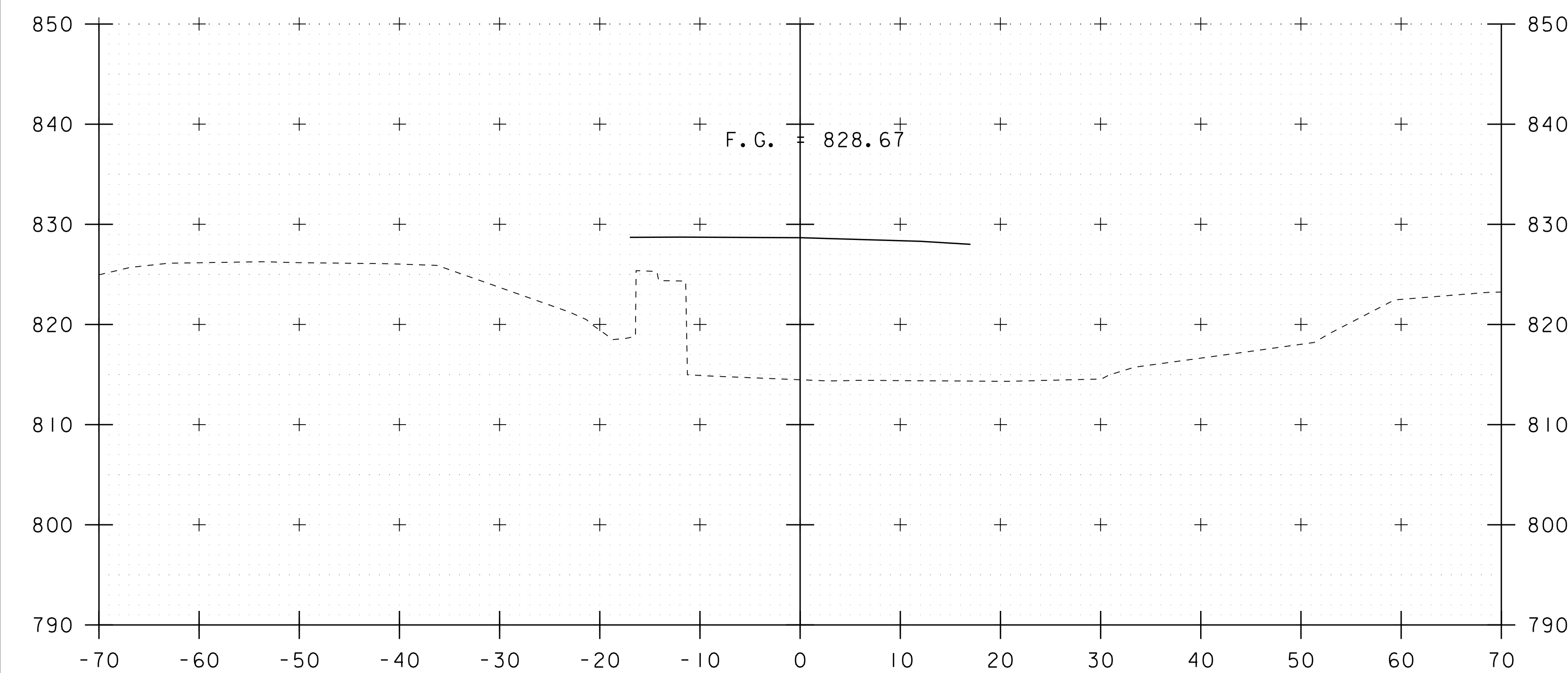
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STA 495+95.75  
BEGIN BRIDGE

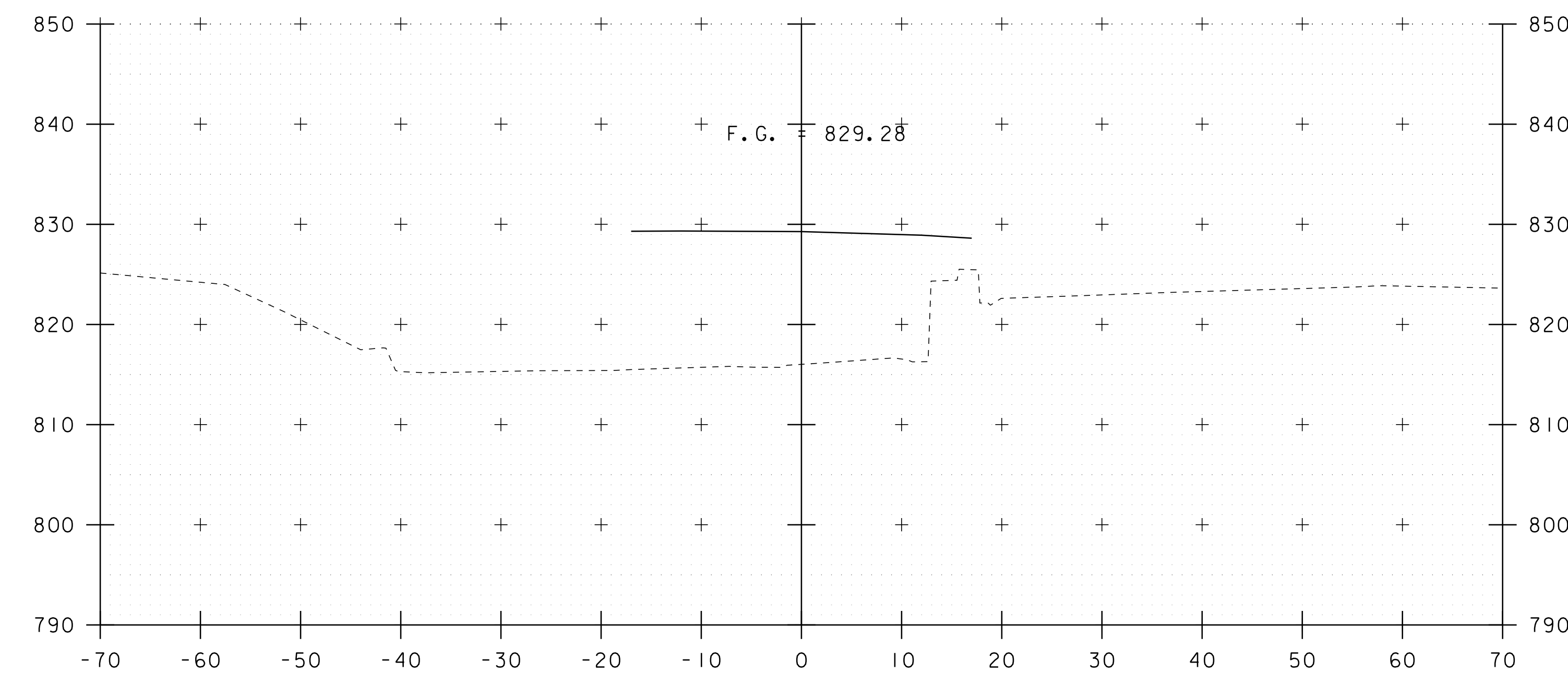
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PROJECT LEADER: W.PELLETIER	DRAWN BY: D.D.BEARD
DESIGNED BY: D.D.BEARD	CHECKED BY: L.J.STONE
ROADWAY CROSS SECTIONS 2	SHEET 8 OF 19

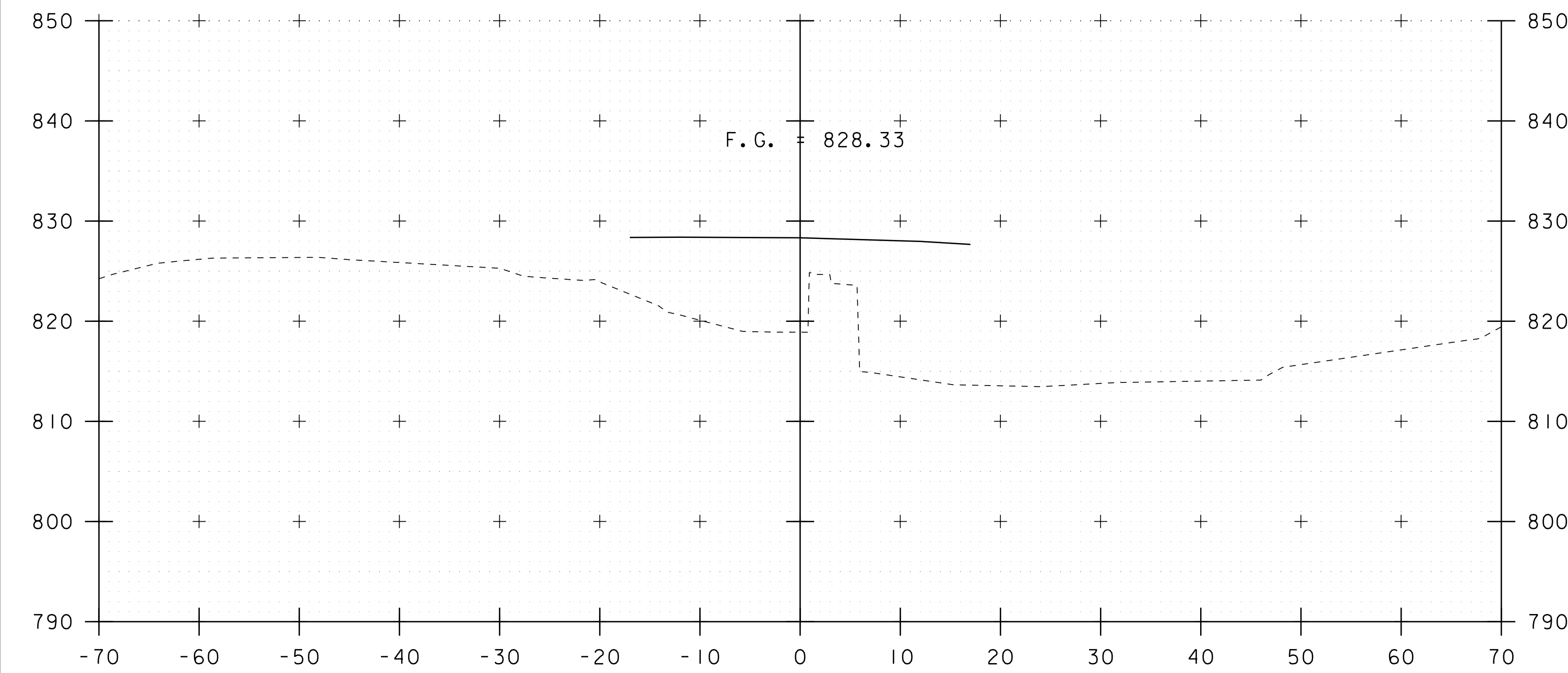




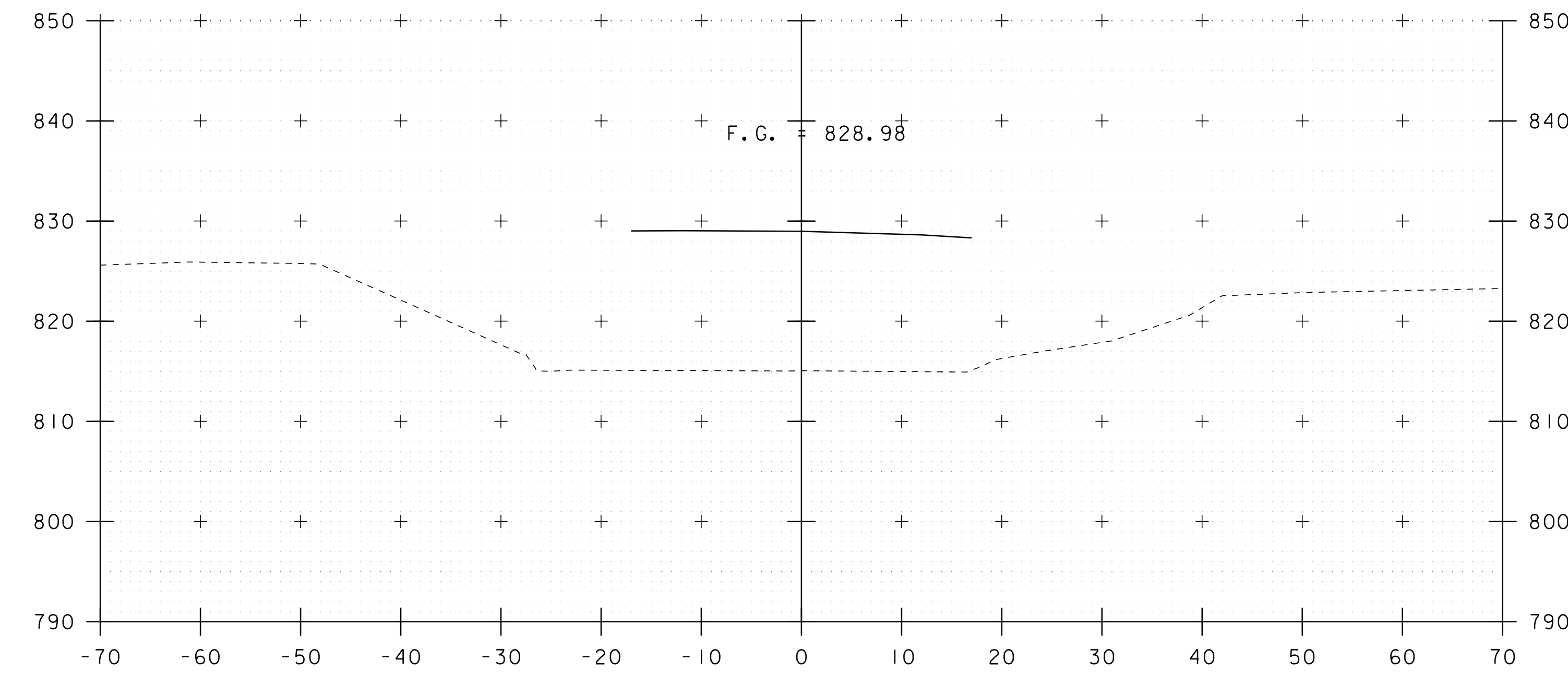
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497+00



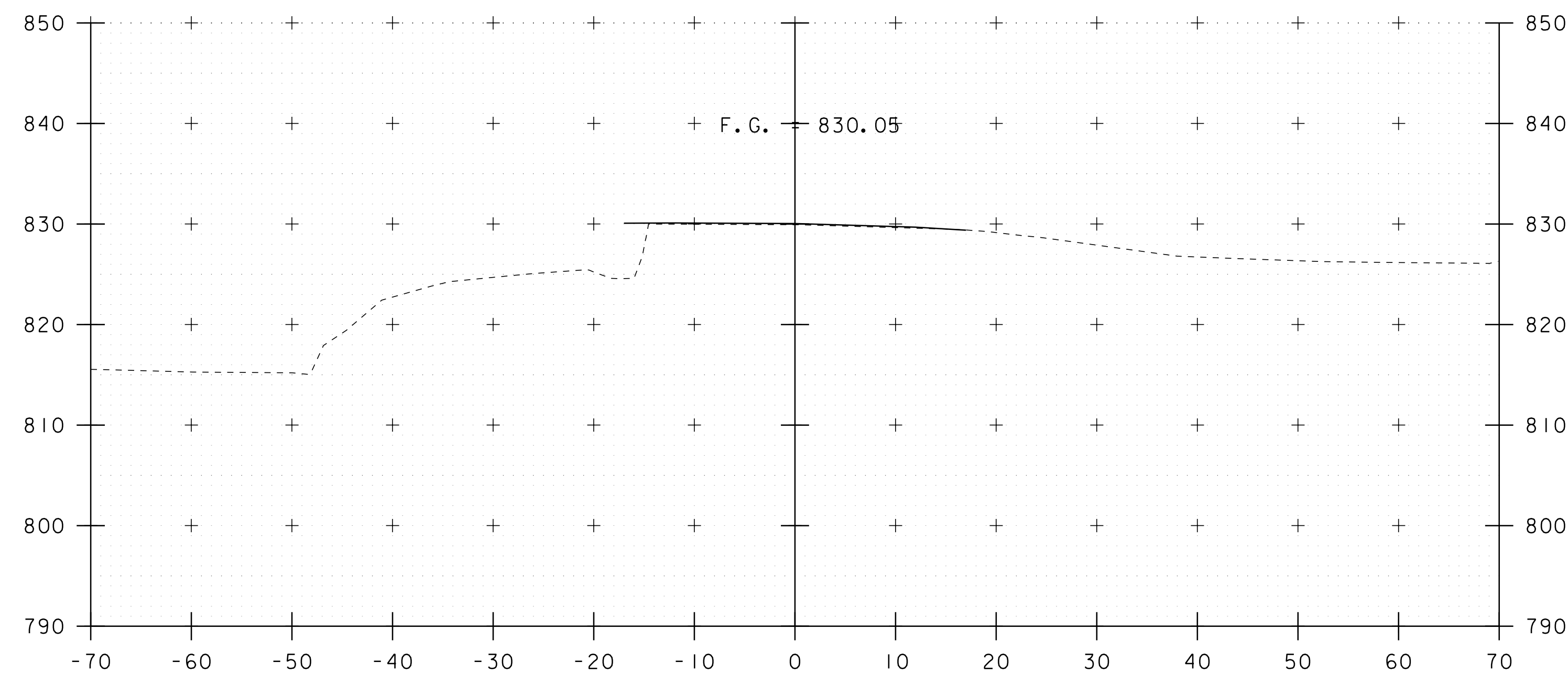
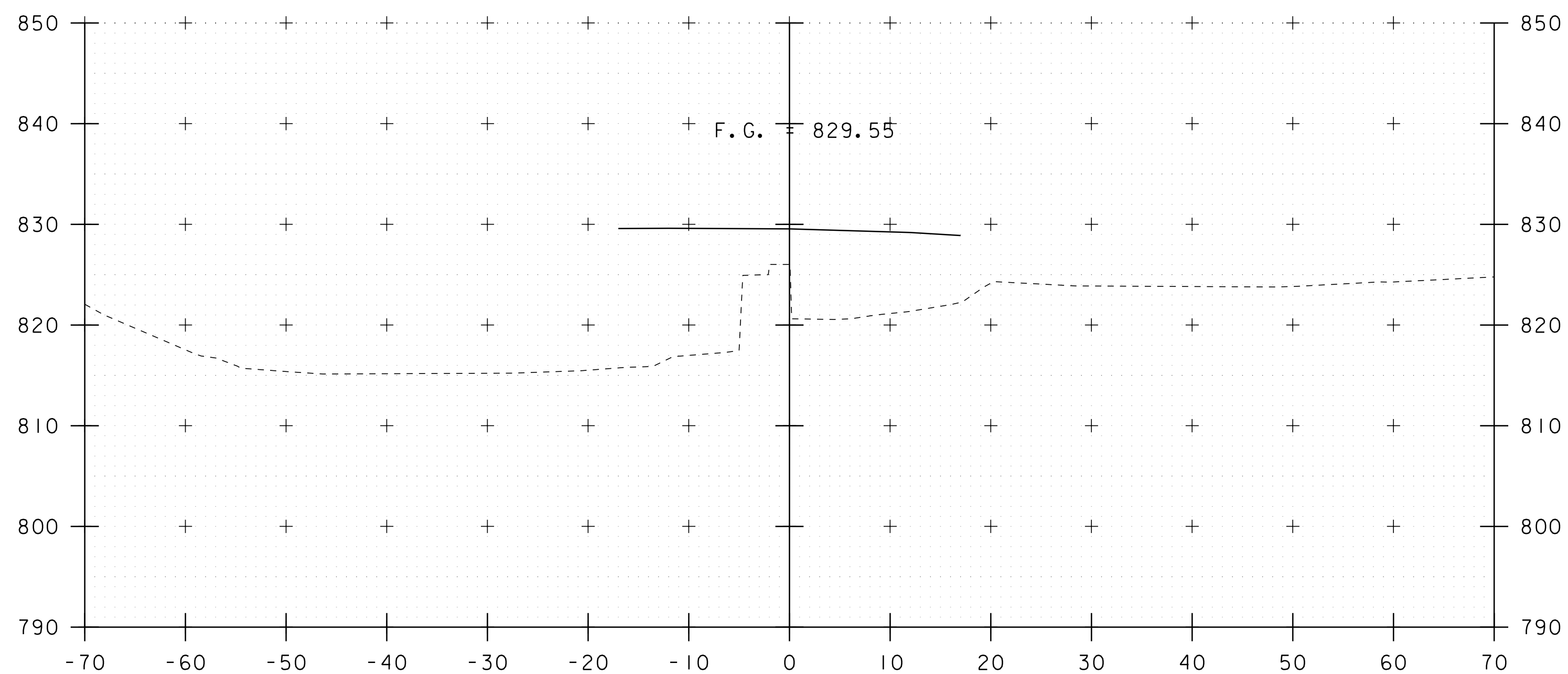
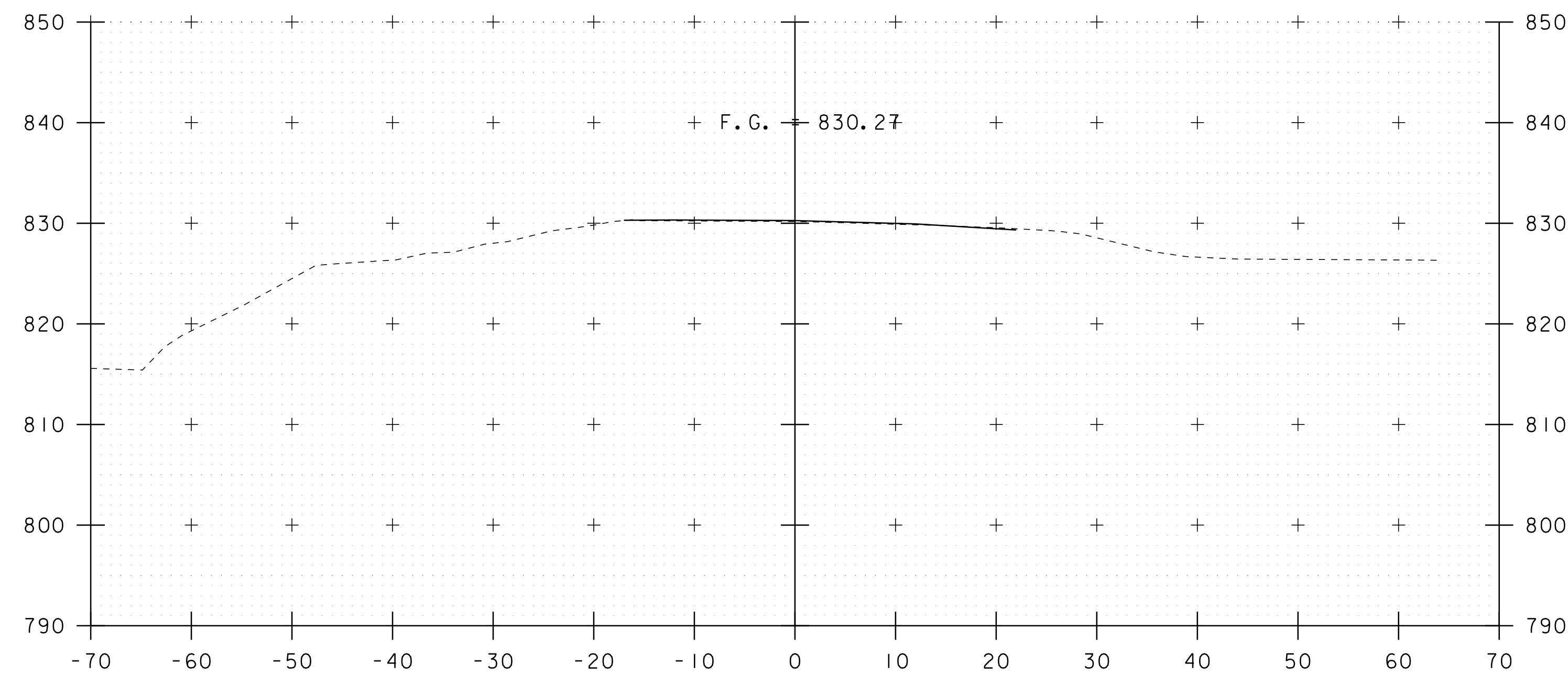
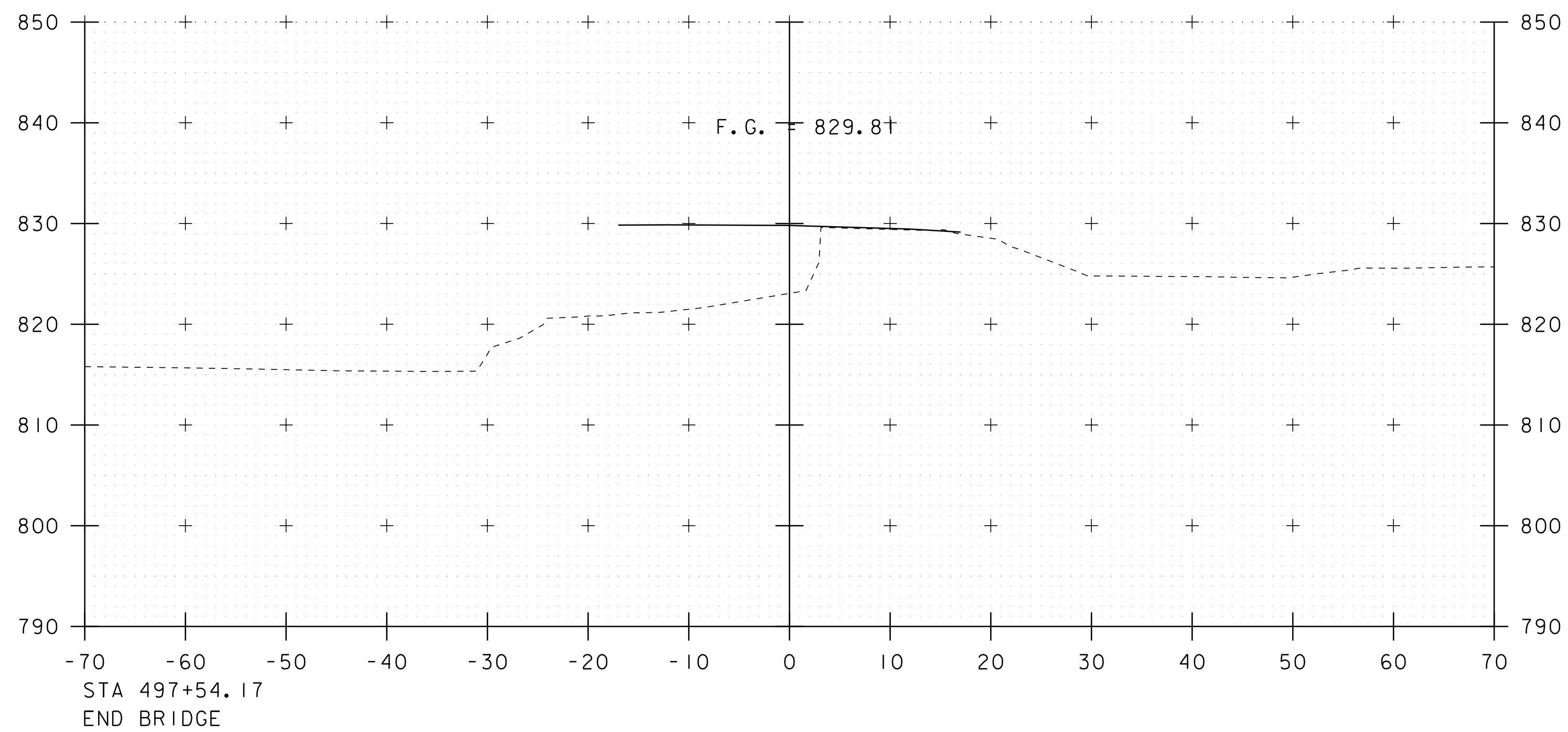
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STA. 496+25 TO STA. 497+00

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PROJECT NUMBER: BF 025-I(46)	
FILE NAME: I6b002/sl2b006xs.dgn	PLOT DATE: 18-APR-2019
PROJECT LEADER: W.PELLETIER	DRAWN BY: D.D.BEARD
DESIGNED BY: D.D.BEARD	CHECKED BY: L.J.STONE
ROADWAY CROSS SECTIONS 3	SHEET 9 OF 19

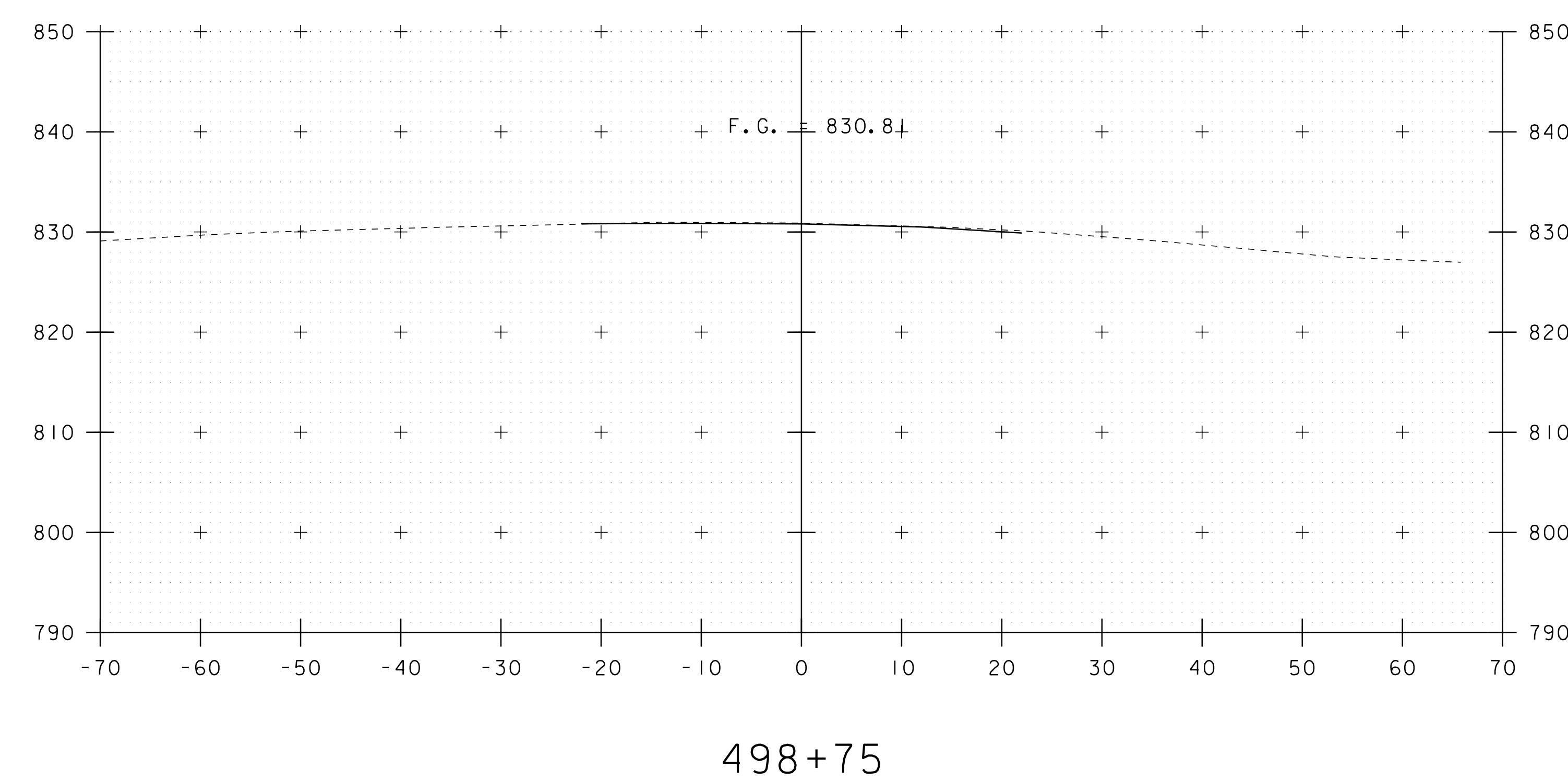
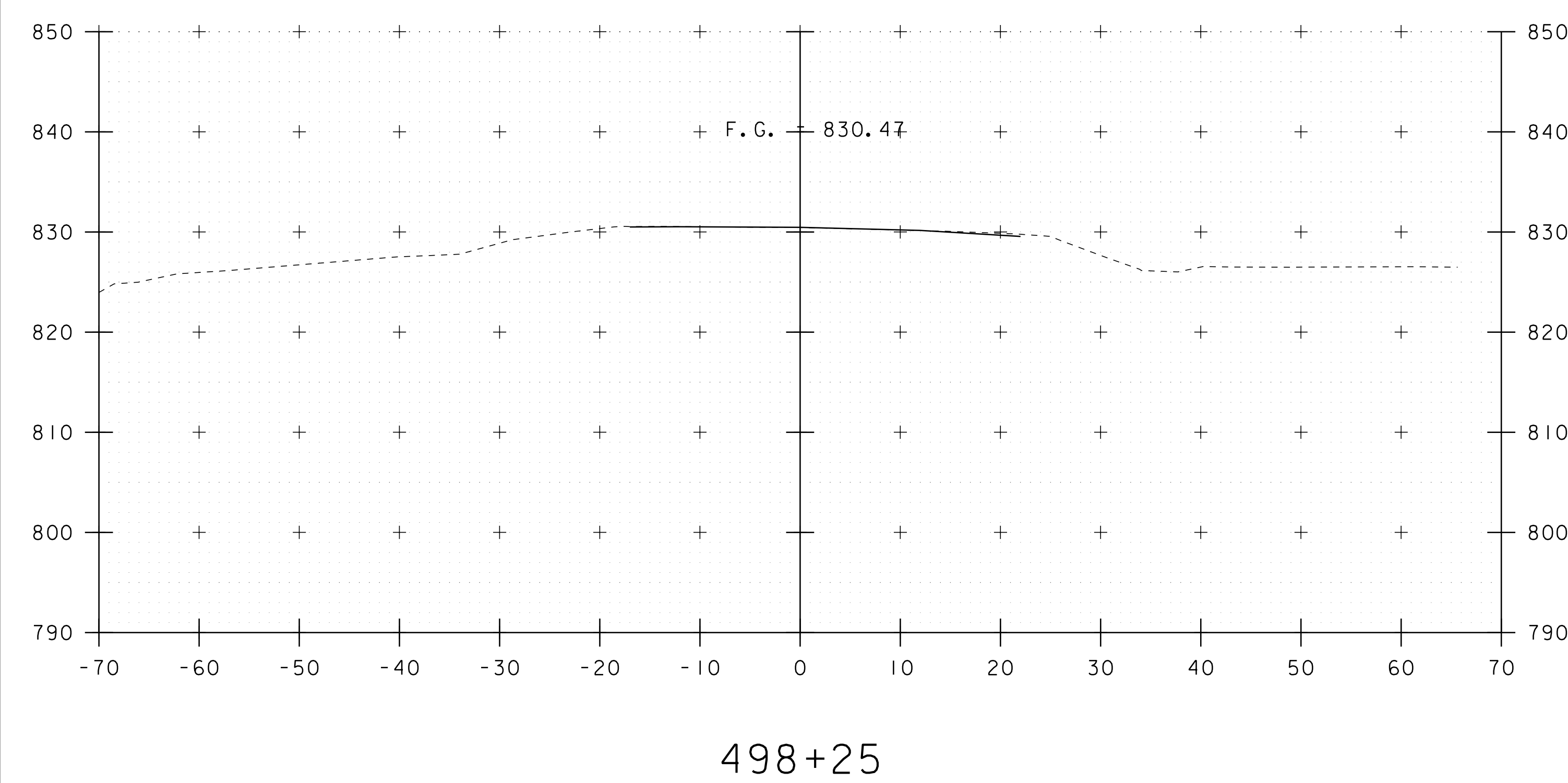
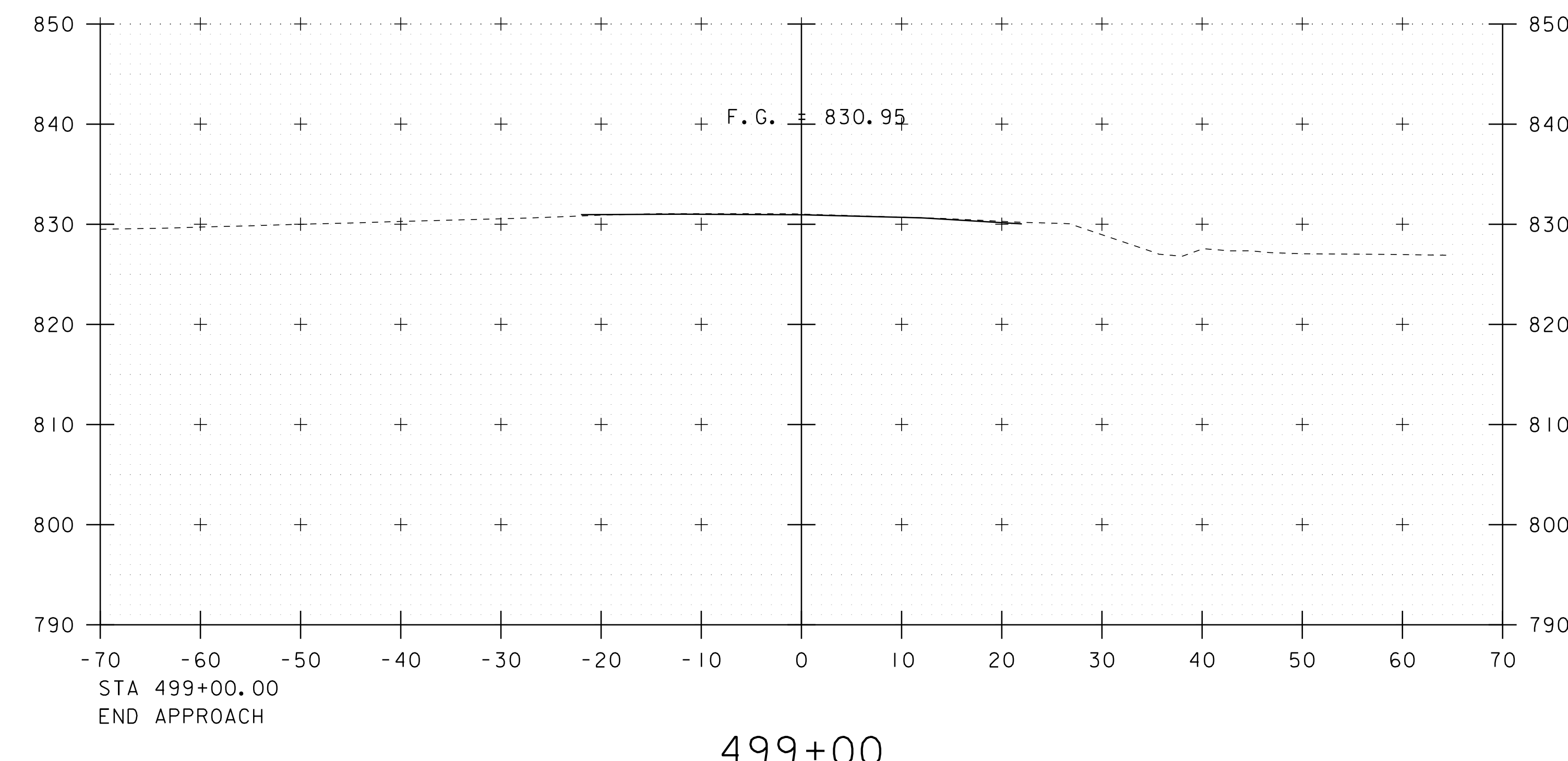
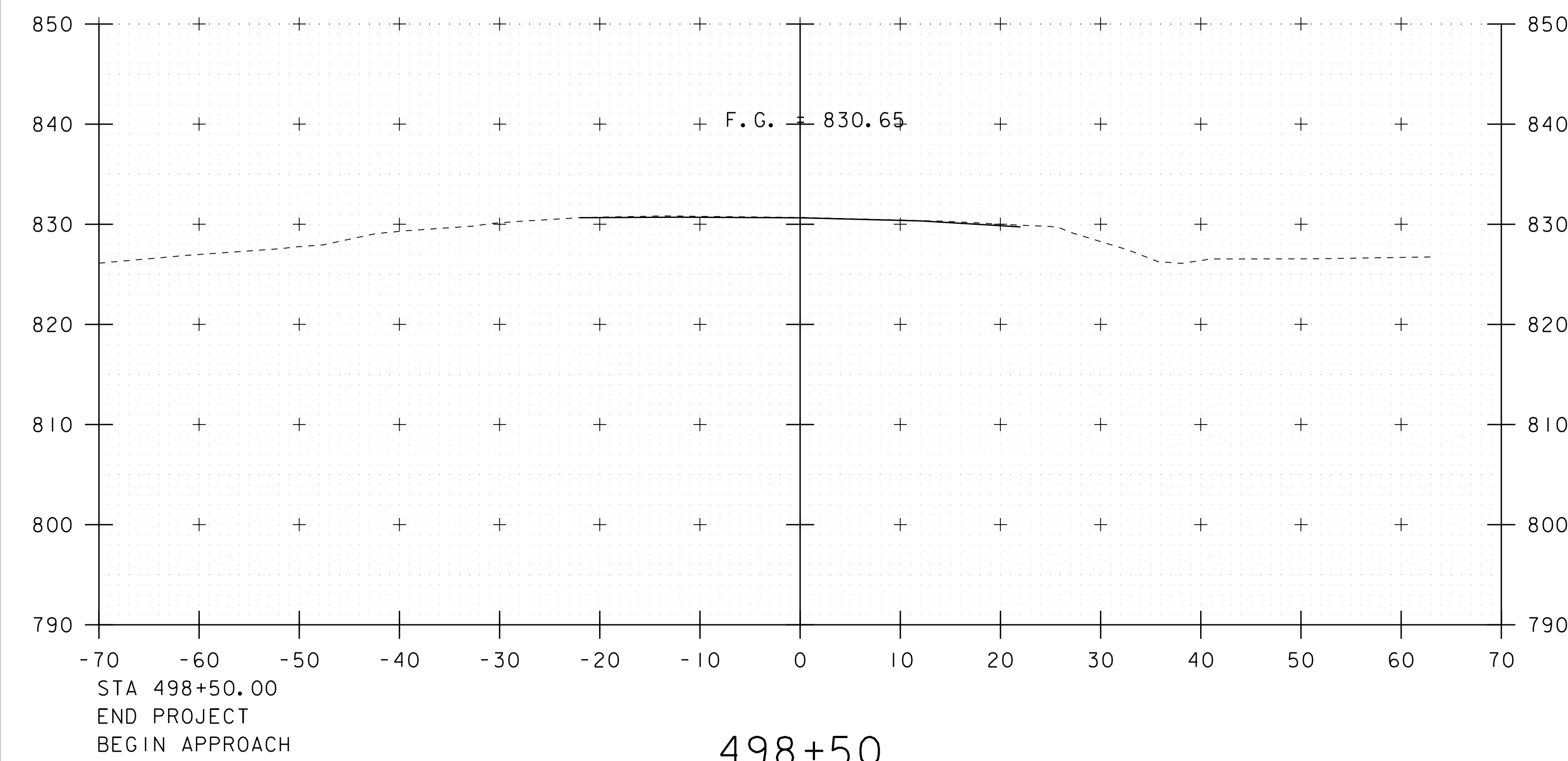


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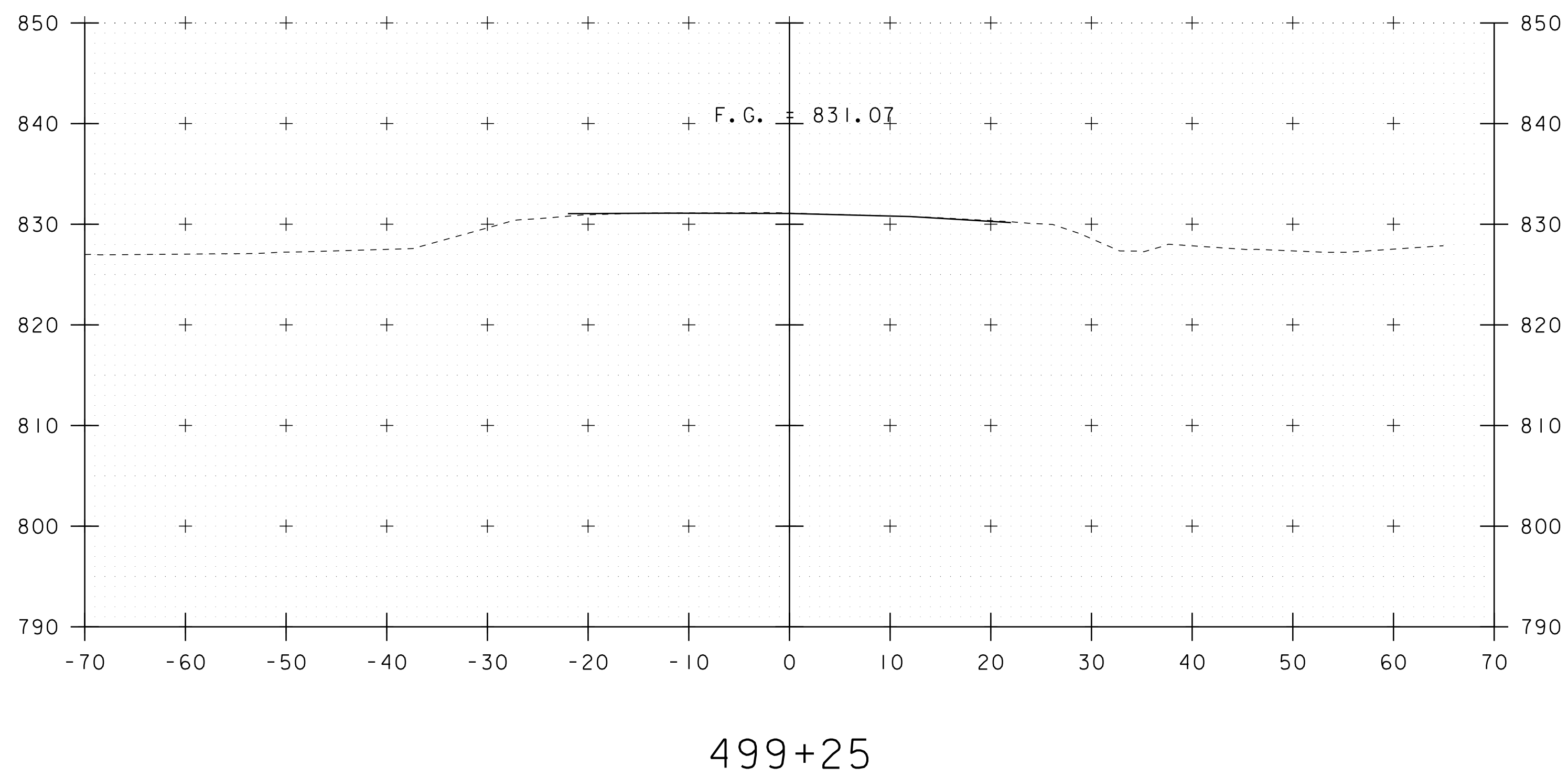
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PROJECT LEADER: W.PELLETIER	DRAWN BY: D.D.BEARD
DESIGNED BY: D.D.BEARD	CHECKED BY: L.J.STONE
ROADWAY CROSS SECTIONS 4	SHEET 10 OF 19

STA. 497+25 TO STA. 498+00



STA. 498+25 TO STA. 499+00

PROJECT NAME: CHESTER	
PROJECT NUMBER: BF 025-I(46)	
FILE NAME: I6b002/sl2b006xs.dgn	PLOT DATE: 18-APR-2019
PROJECT LEADER: W.PELLETIER	DRAWN BY: D.D.BEARD
DESIGNED BY: D.D.BEARD	CHECKED BY: L.J.STONE
ROADWAY CROSS SECTIONS 5	SHEET 11 OF 19



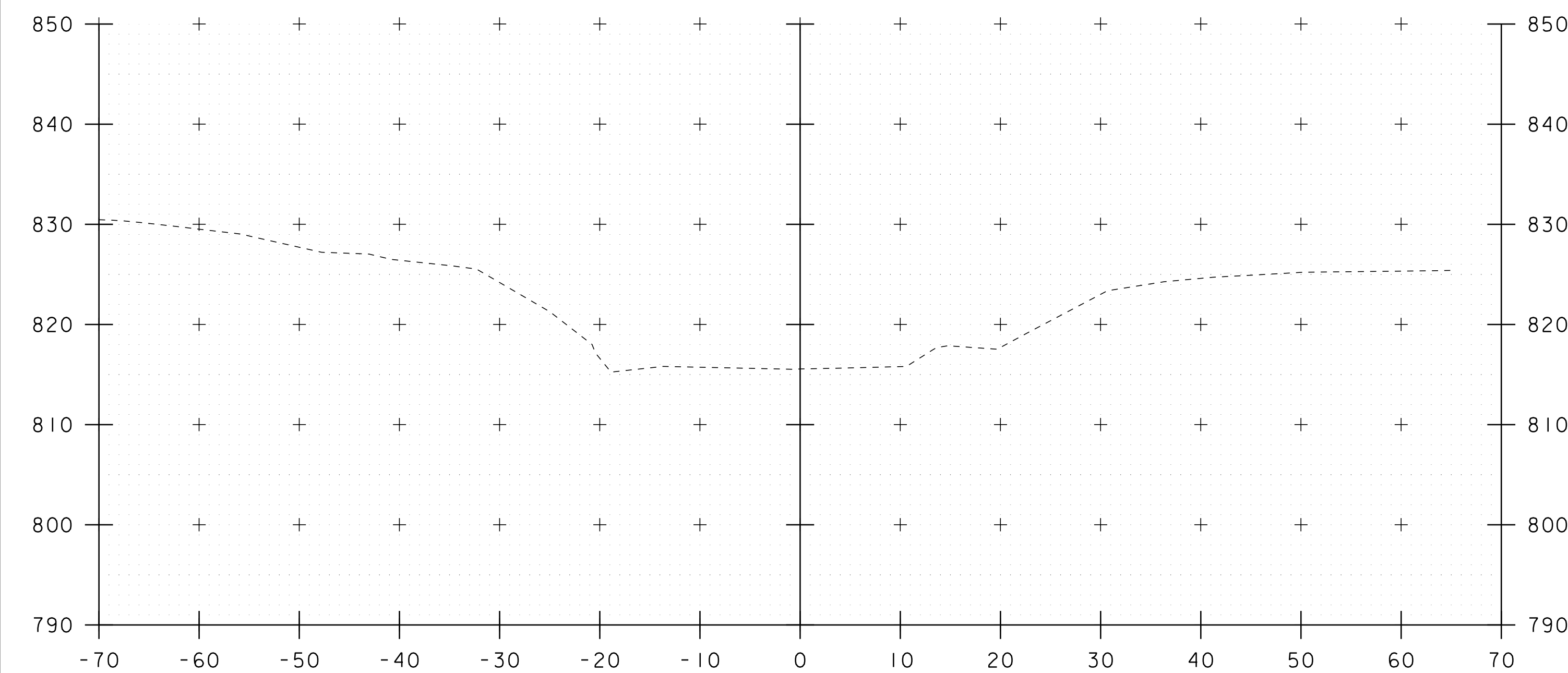
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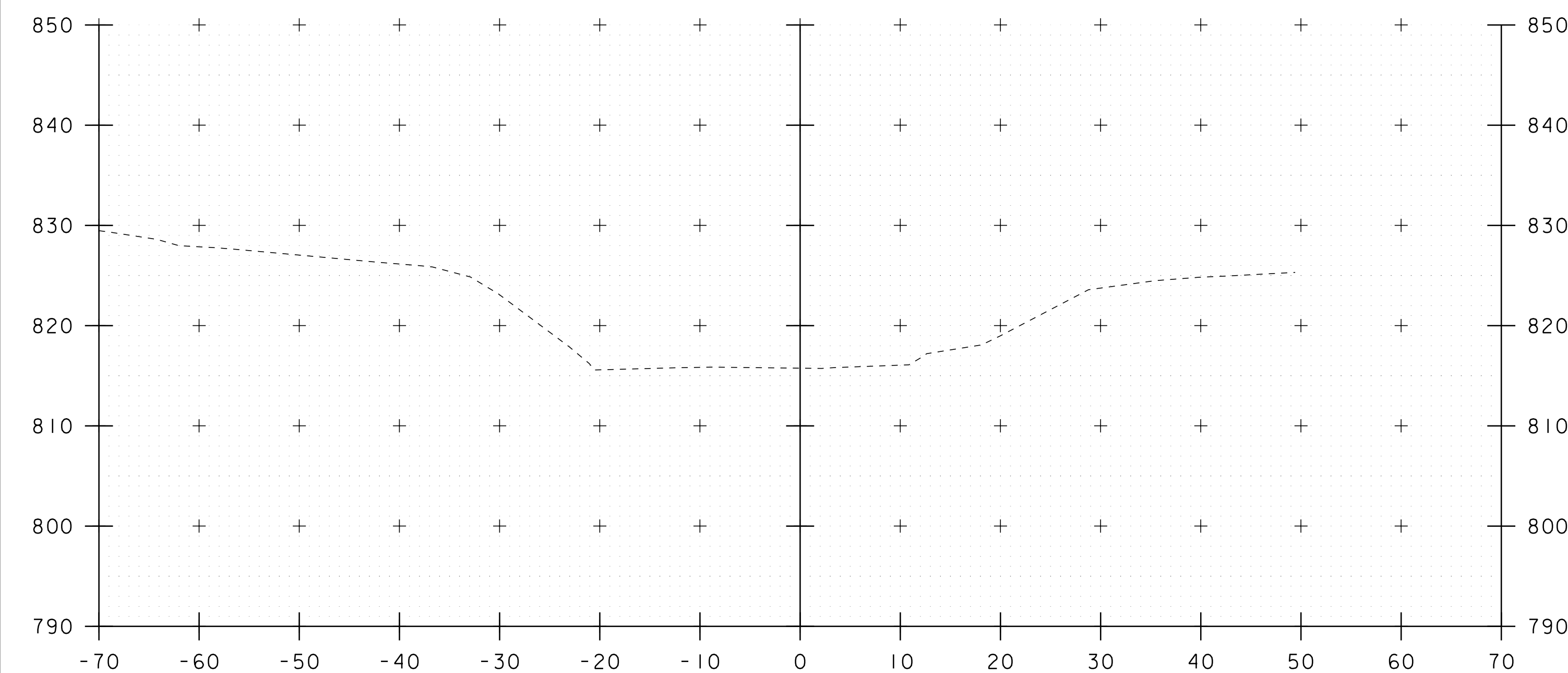
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PROJECT LEADER: W.PELLETIER  
DESIGNED BY: D.D.BEARD  
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PLOT DATE: 18-APR-2019  
DRAWN BY: D.D.BEARD  
CHECKED BY: L.J.STONE  
SHEET 12 OF 19

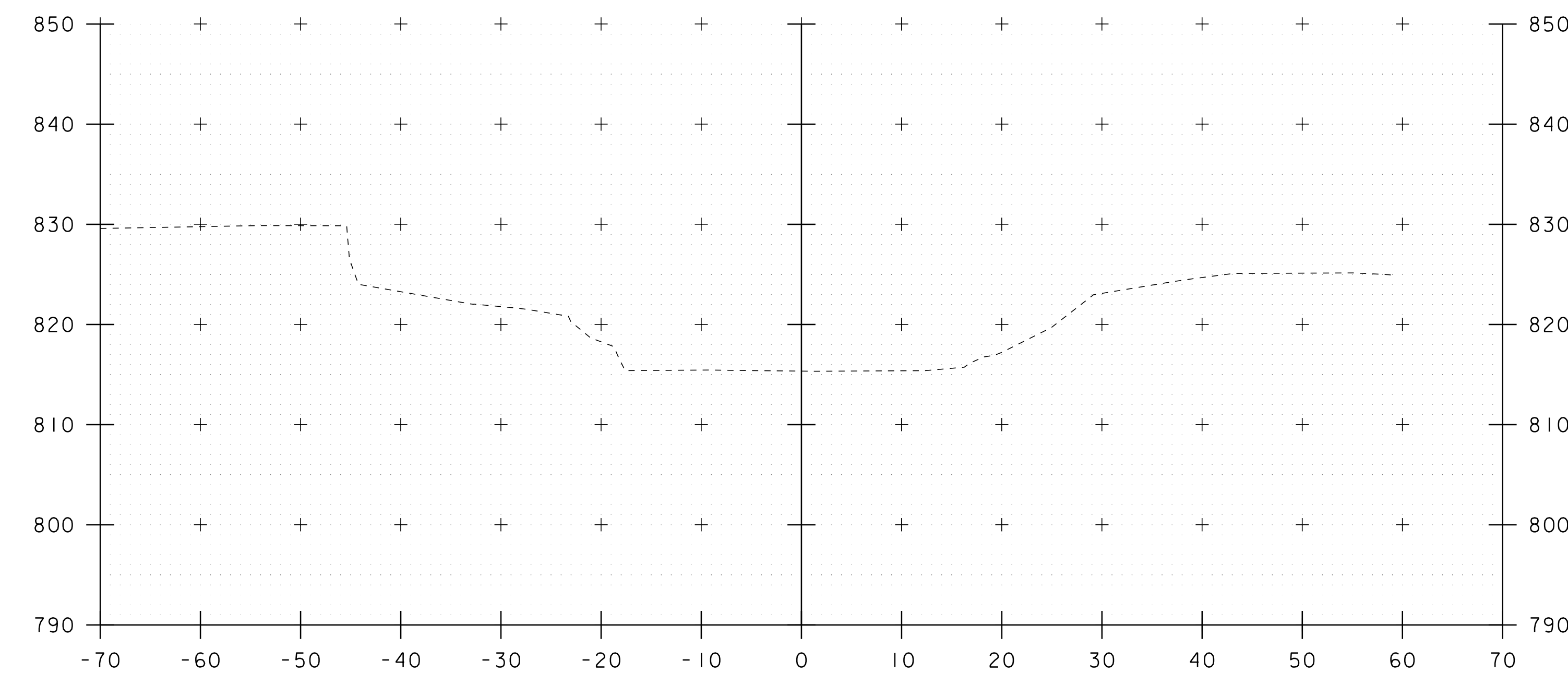




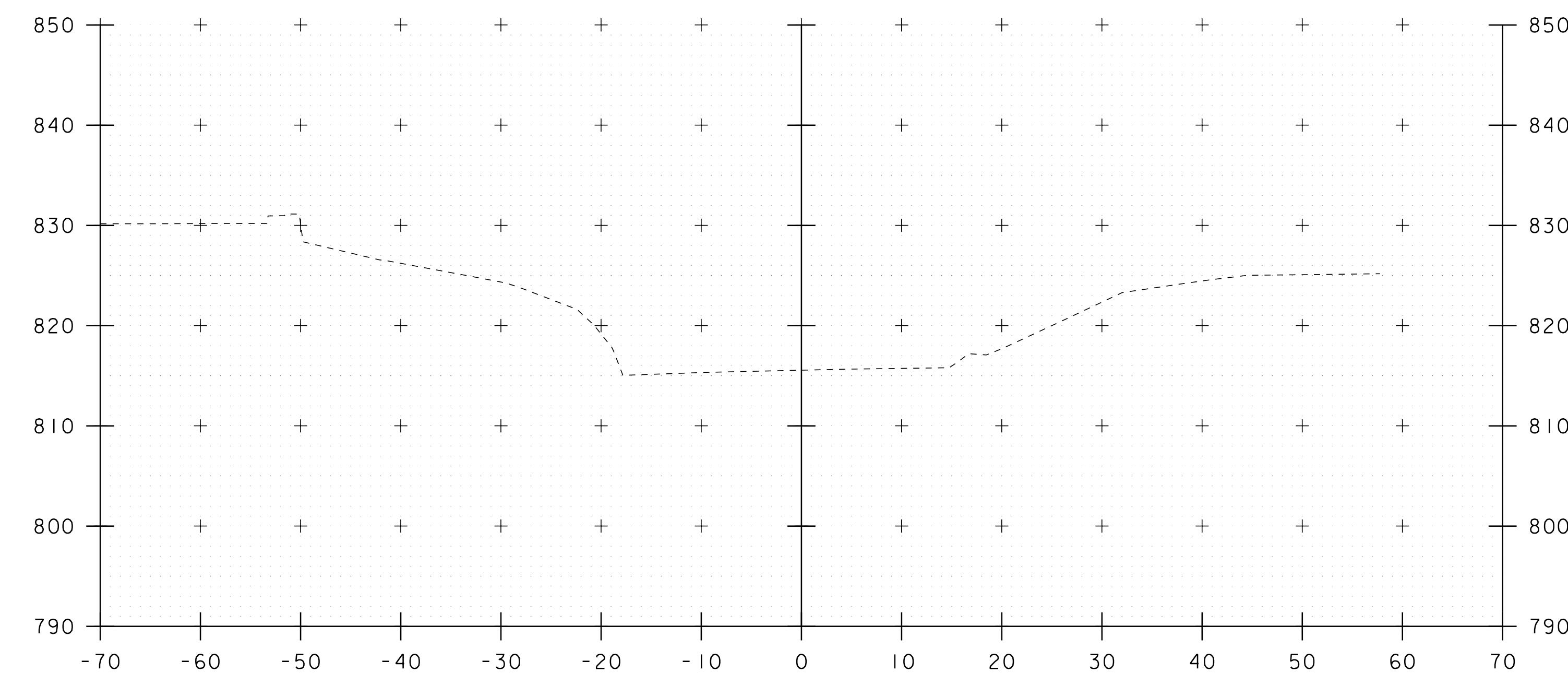
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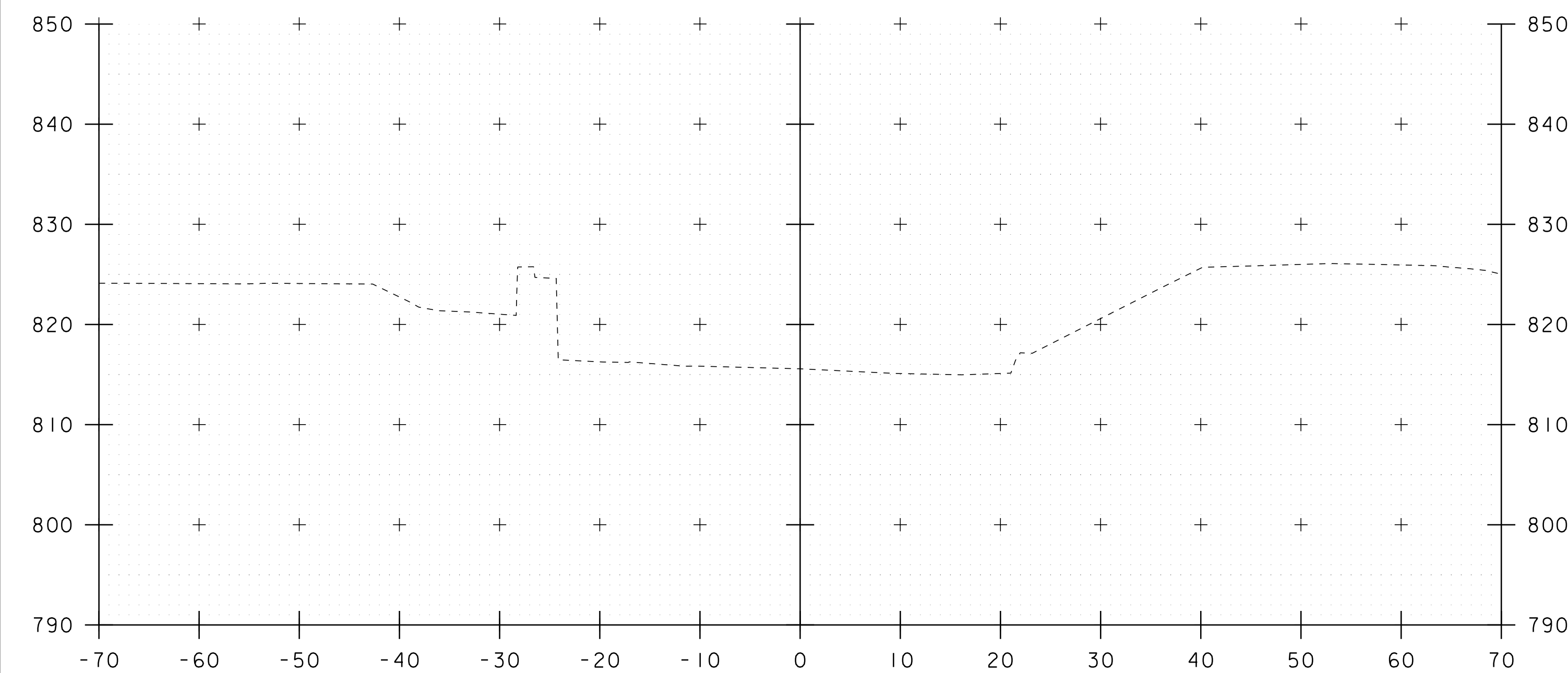
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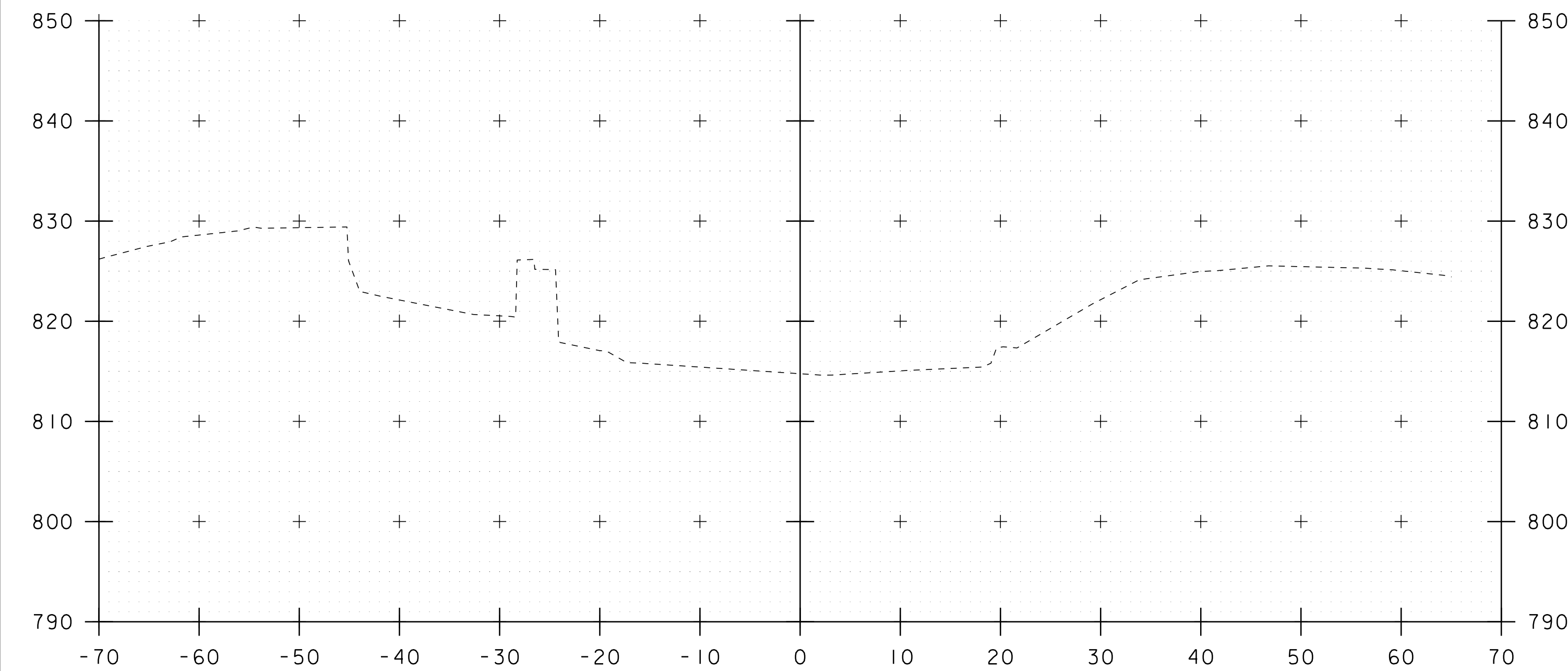
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STA. 50+00 TO STA. 50+75

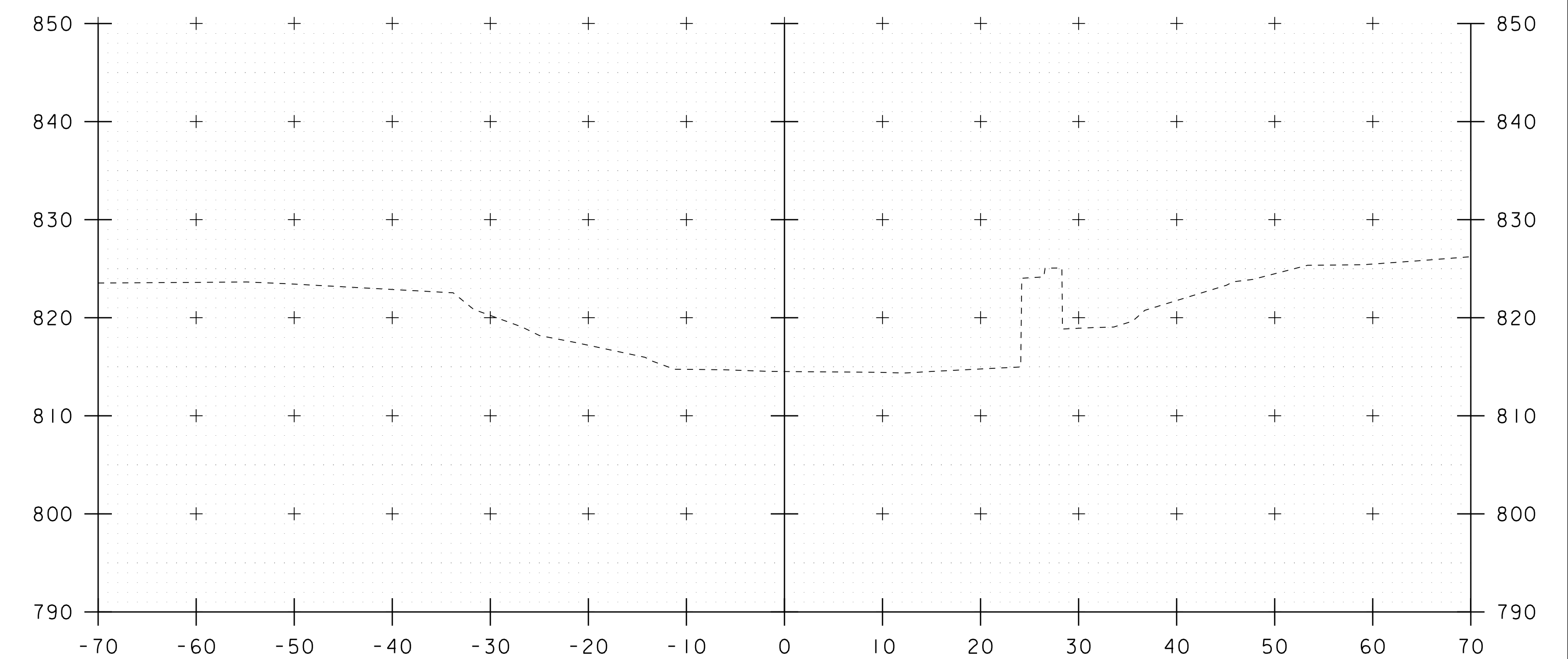
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PROJECT LEADER: W.PELLETIER	DRAWN BY: D.D.BEARD
DESIGNED BY: D.D.BEARD	CHECKED BY: L.J.STONE
CHANNEL CROSS SECTIONS 1	SHEET 13 OF 19



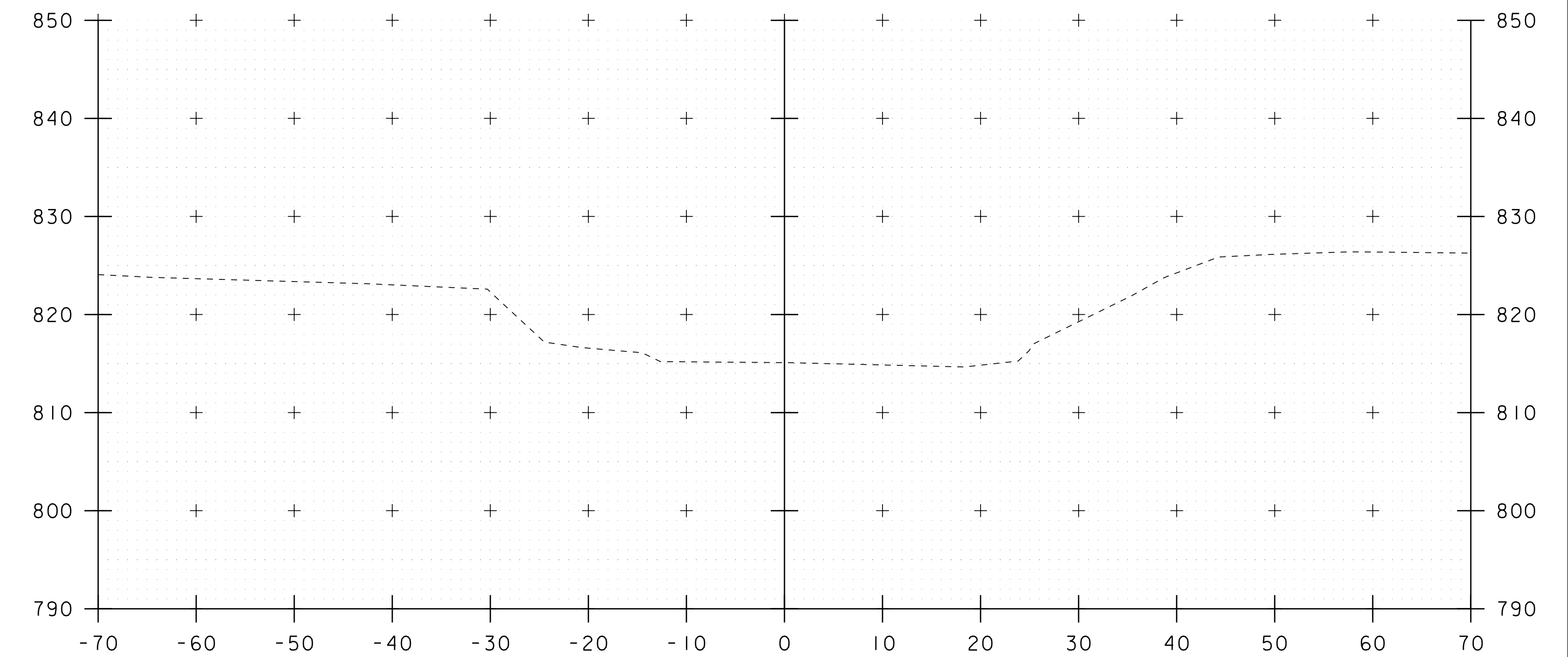
51+25



51+00



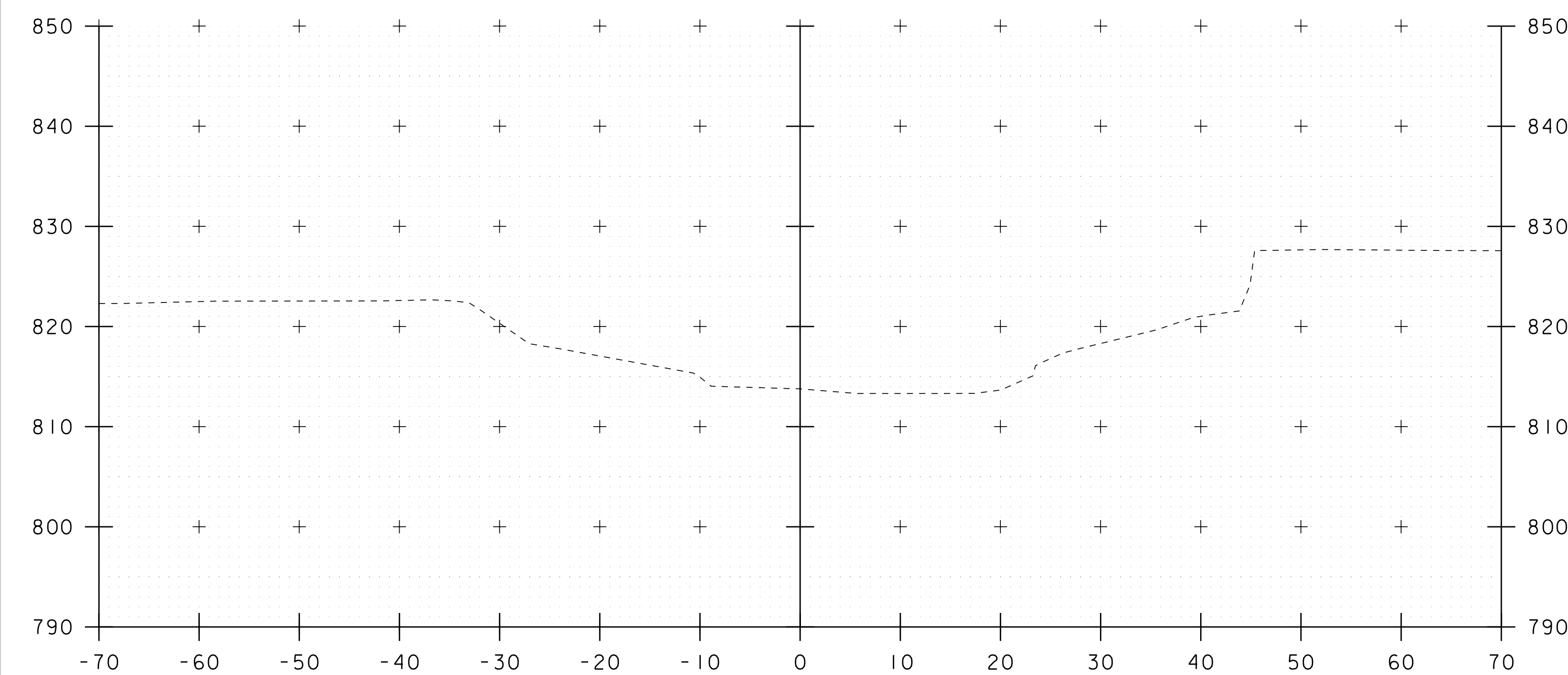
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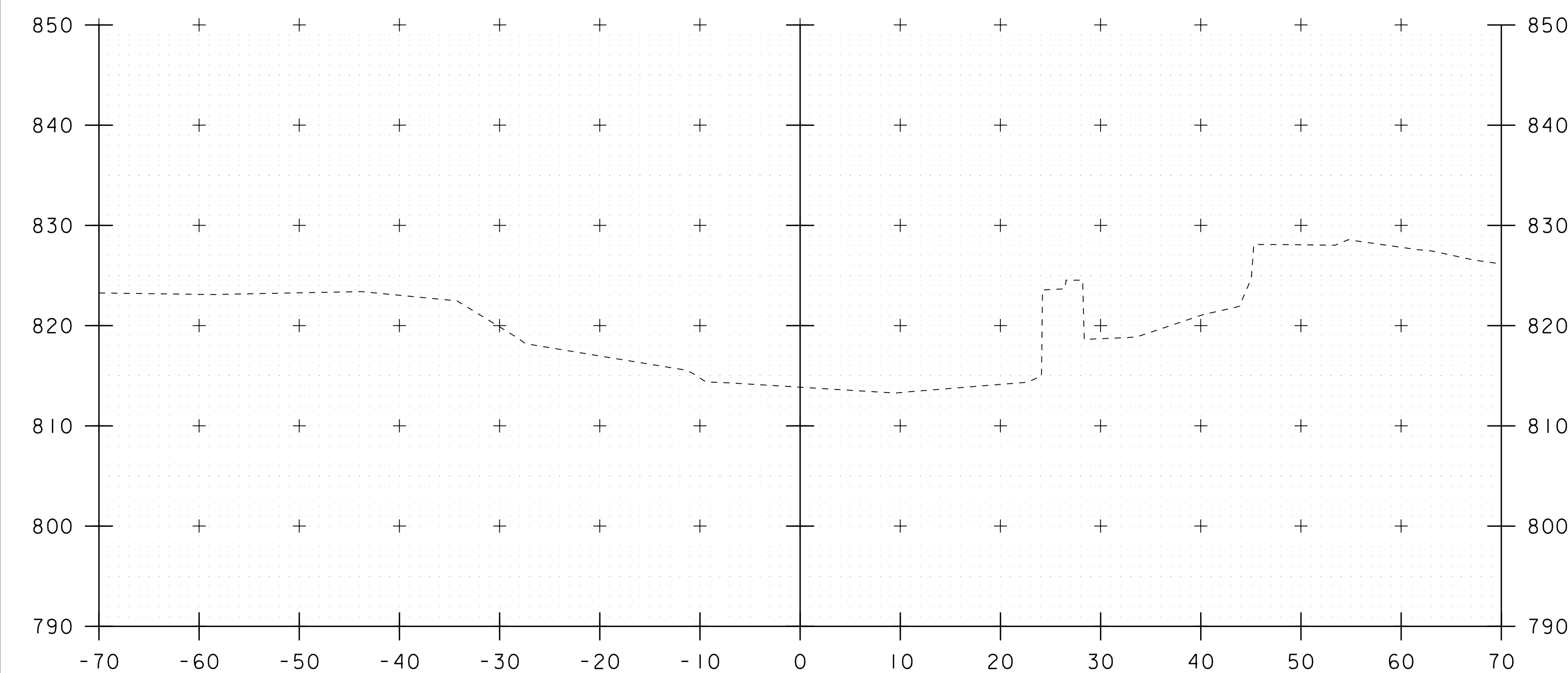
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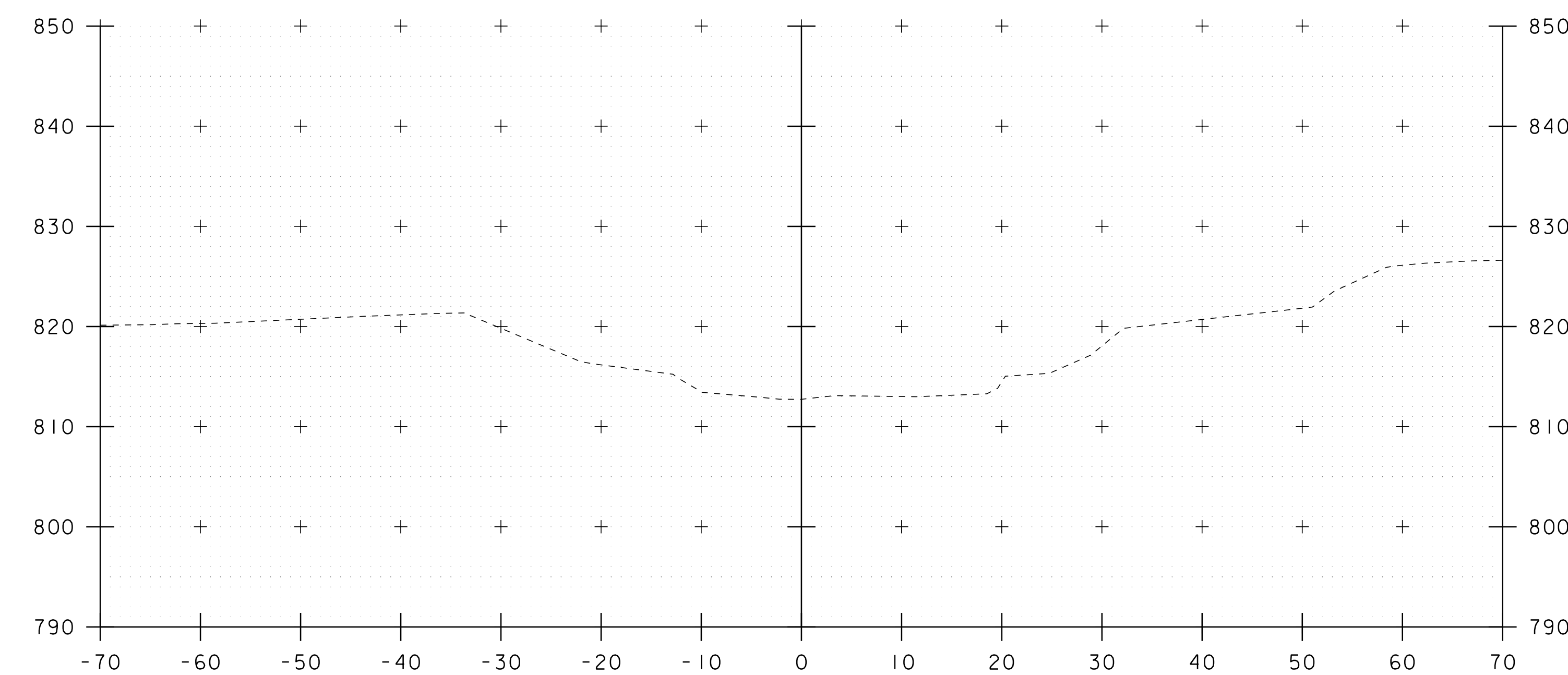
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FILE NAME: I6b002/sl2b006xs.dgn	PLOT DATE: 18-APR-2019
PROJECT LEADER: W.PELLETIER	DRAWN BY: D.D.BEARD
DESIGNED BY: D.D.BEARD	CHECKED BY: L.J.STONE
CHANNEL CROSS SECTIONS 2	SHEET 14 OF 19



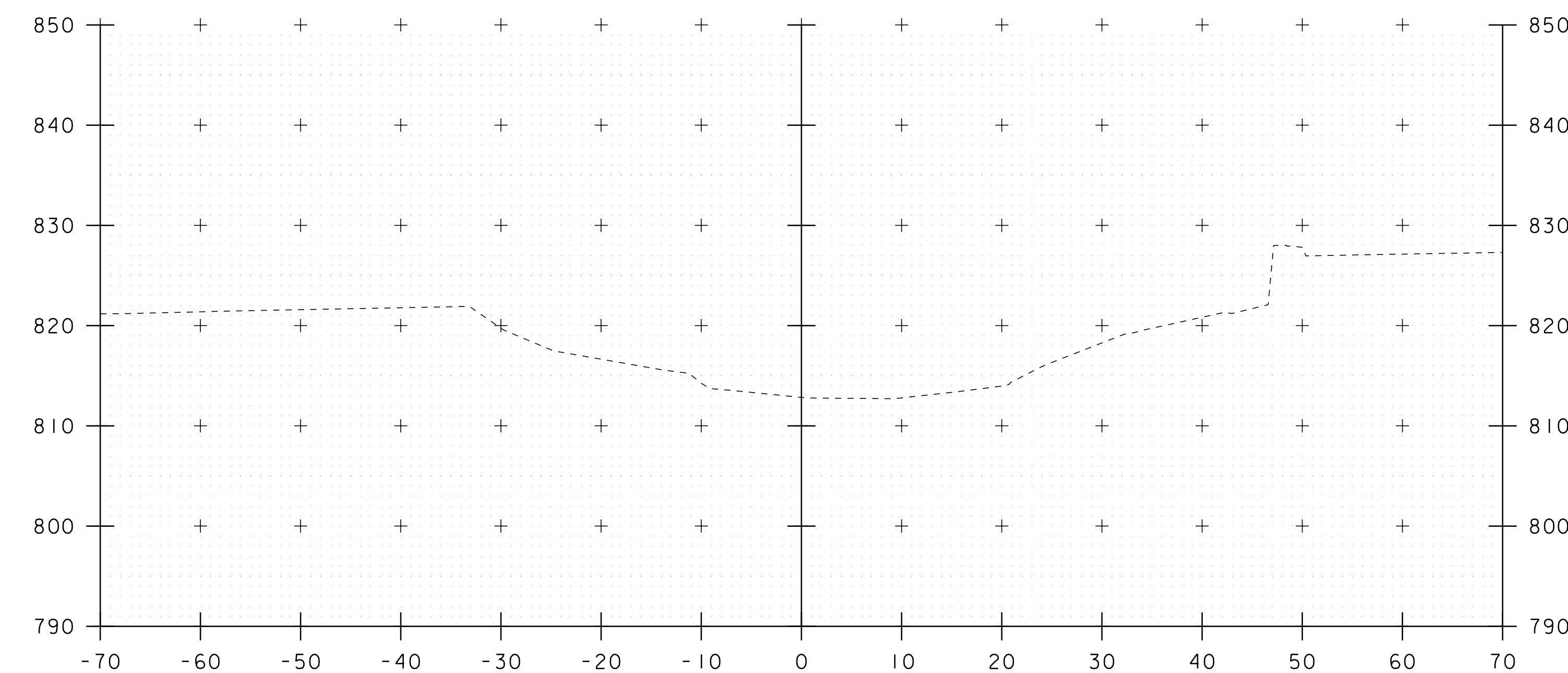
52+25



52+00



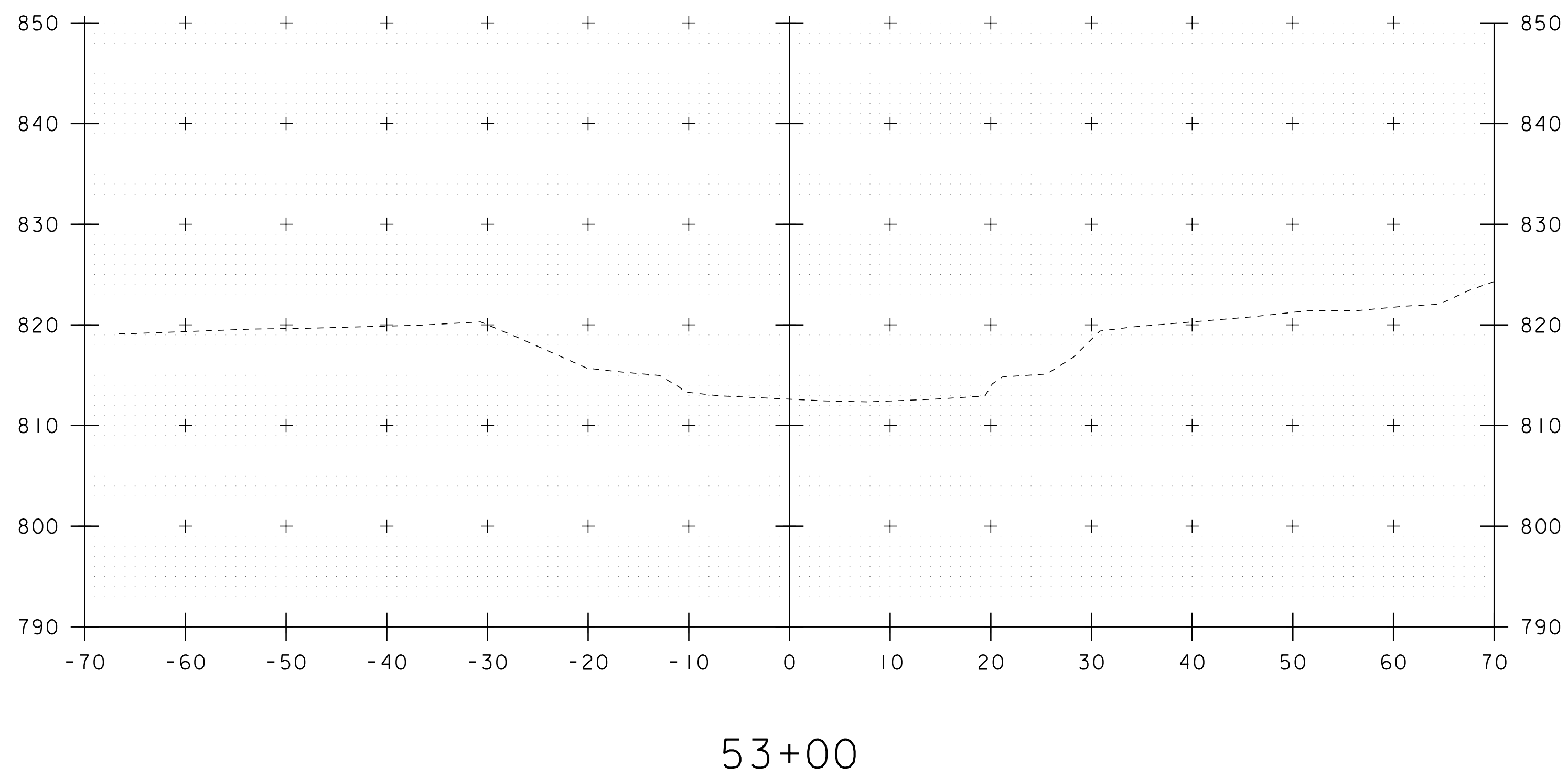
52+75



52+50

STA. 52+00 TO STA. 52+75

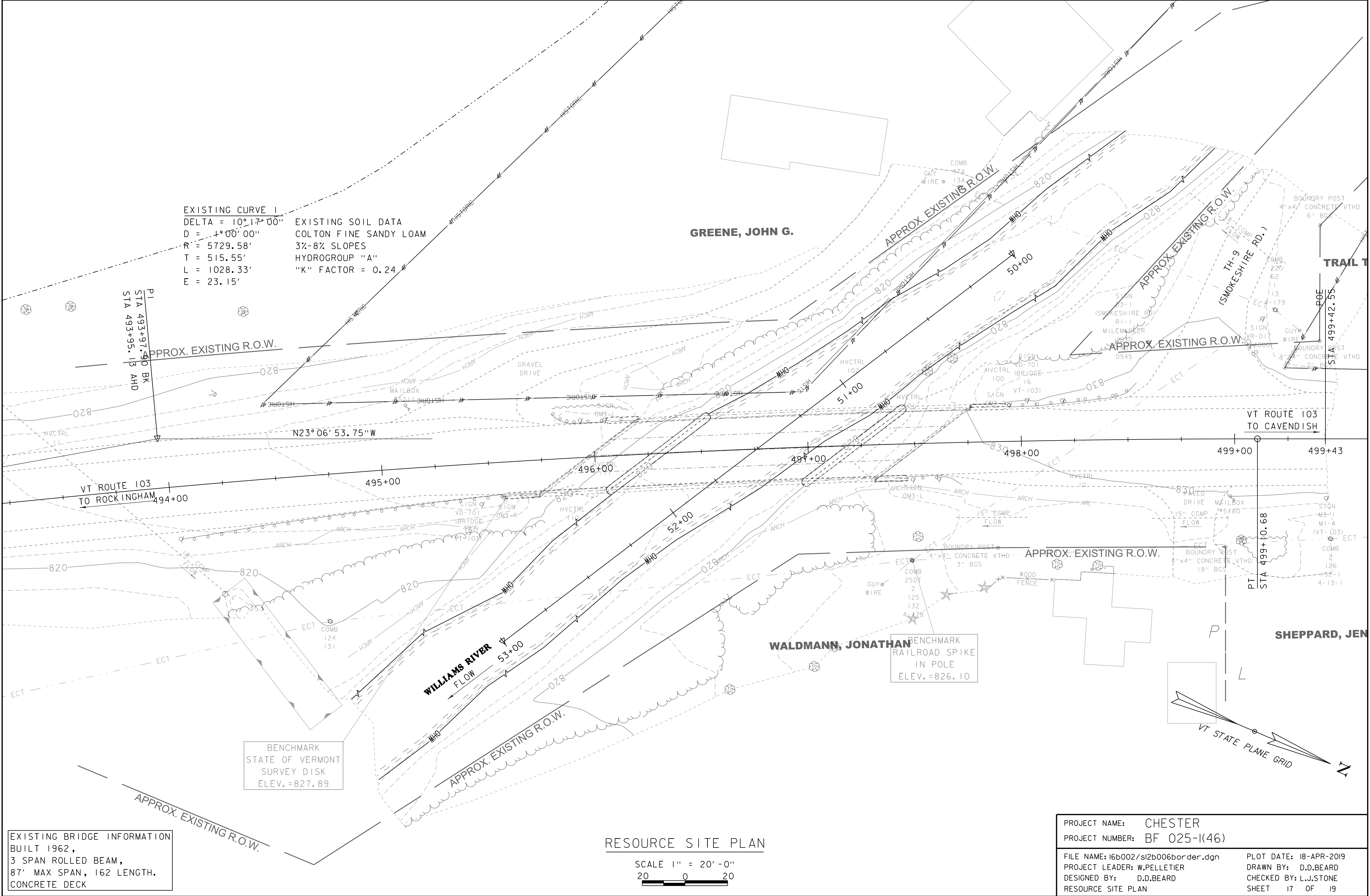
PROJECT NAME: CHESTER	
PROJECT NUMBER: BF 025-I(46)	
FILE NAME: I6b002/sl2b006xs.dgn	PLOT DATE: 18-APR-2019
PROJECT LEADER: W.PELLETIER	DRAWN BY: D.D.BEARD
DESIGNED BY: D.D.BEARD	CHECKED BY: L.J.STONE
CHANNEL CROSS SECTIONS 3	SHEET 15 OF 19



STA. 53+00 TO STA. 53+00

PROJECT NAME: CHESTER	
PROJECT NUMBER: BF 025-I(46)	
FILE NAME: I6b002/sl2b006xs.dgn	PLOT DATE: 18-APR-2019
PROJECT LEADER: W.PELLETIER	DRAWN BY: D.D.BEARD
DESIGNED BY: D.D.BEARD	CHECKED BY: L.J.STONE
CHANNEL CROSS SECTIONS 4	SHEET 16 OF 19





- PERMANENT WETLAND IMPACT AREA = 0.0 SF  
TEMPORARY WETLAND IMPACT AREA = 0.0 SF  
PERMANENT WETLAND BUFFER IMPACT AREA = 0.0 SF  
TEMPORARY WETLAND BUFFER IMPACT AREA = 1810 SF  
PERMANENT ARCHEOLOGY IMPACT AREA = 480 SF  
TEMPORARY ARCHEOLOGY IMPACT AREA = 6430 SF  
PERMANENT HISTORIC IMPACT AREA = 500 SF  
TEMPORARY HISTORIC IMPACT AREA = 0.0 SF

EXISTING CURVE 1  
DELTA = 10°17'00"  
D = 1°00'00"  
R = 5729.58'  
T = 515.55'  
L = 1028.33'  
E = 23.15'

STA 496+82.40 AHD=  
CHAN 51+42.77  
Δ= 37°14'40" LT

BEGIN BRIDGE  
STA 495+95.75

CONCEPTUAL  
CONSTRUCTION LIMIT

BEGIN APPROACH  
STA 494+50.00

VT ROUTE 103  
TO ROCKINGHAM

N23°06'53.75"W

TEMPORARY  
BRIDGE

END APPROACH  
BEGIN PROJECT  
STA 495+00.00

BENCHMARK  
STATE OF VERMONT  
SURVEY DISK  
ELEV.=827.89

WILLIAMS RIVER  
FLOW

END BRIDGE  
STA 497+54.17

END PROJECT  
BEGIN APPROACH  
STA 498+50.00

END APPROACH  
STA 499+00.00

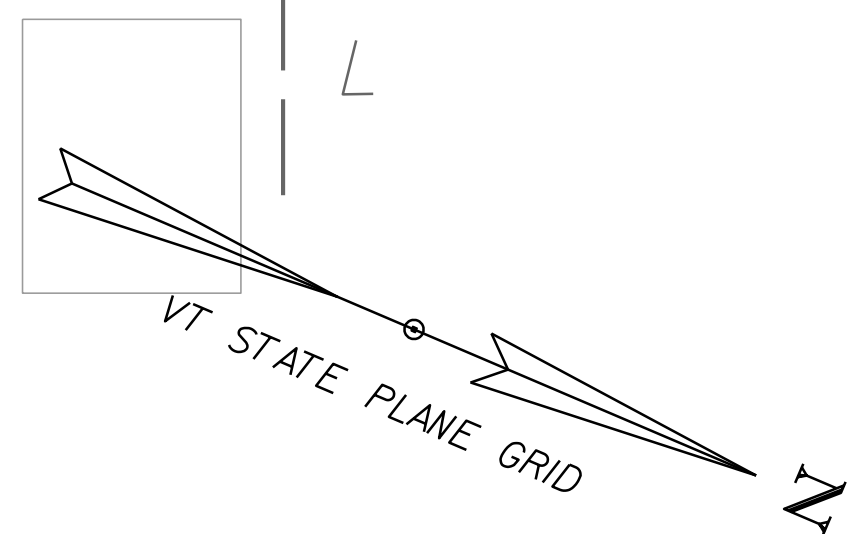
BENCHMARK  
RAILROAD SPIKE  
IN POLE  
ELEV.=826.10

CONCEPTUAL TEMPORARY  
CONSTRUCTION LIMIT

VT ROUTE 103  
TO CAVENDISH

STA 499+10.68

STA 499+42.55



EXISTING BRIDGE INFORMATION  
BUILT 1962,  
3 SPAN ROLLED BEAM,  
87' MAX SPAN, 162 LENGTH.  
CONCRETE DECK

# RESOURCE IMPACTS LAYOUT

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

PROJECT NAME: CHESTER	
PROJECT NUMBER: BF 025-I(46)	
FILE NAME: I6b002/sl2b006border.dgn	PLOT DATE: 18-APR-2019
PROJECT LEADER: W.PELLETIER	DRAWN BY: D.D.BEARD
DESIGNED BY: D.D.BEARD	CHECKED BY: L.J.STONE
RESOURCE IMPACTS LAYOUT SHEET	SHEET 18 OF 19

EXISTING CURVE 1  
DELTA = 10° 17' 00"  
D = 1° 00' 00"  
R = 5729.58'  
T = 515.55'  
L = 1028.33'  
E = 23.15'

BEGIN BRIDGE  
STA 495+95.75

CONCEPTUAL  
CONSTRUCTION LIMIT

BEGIN APPROACH  
STA 494+50.00

P1	493+97.90	BK
STA	493+95.13	AHD

- N23° 06' 53.75" W

VT ROUTE 103  
TO ROCK INGHAM

END APPROACH  
BEGIN PROJECT  
STA 495+00.00

BENCHMARK  
STATE OF VERMONT  
SURVEY DISK  
ELEV.=827.89

END BRIDGE
STA 497+54.17

END PROJECT  
BEGIN APPROACH  
STA 498+50.00

END	APPROACH
STA	499+00.00

BENCHMARK  
RAILROAD SPIKE  
IN POLE  
ELEV. = 826.10

CONCEPTUAL TEMPORARY  
CONSTRUCTION LIMIT



VT STATE PLANE GRID

SCALE 1" = 20' - 0"

EXISTING BRIDGE INFORMATION  
BUILT 1962,  
3 SPAN ROLLED BEAM,  
87' MAX SPAN, 162 LENGTH.  
CONCRETE DECK

PROJECT NAME:	CHESTER
PROJECT NUMBER:	BF 025-1(46)

FILE NAME: I6b002/s12b006border.dgn	PLOT DATE: 18-APR-2019
PROJECT LEADER: SUPERSTRUCTURE REPLACEMENT	DRAWN BY: D.D.BEARD
DESIGNED BY: D.D.BEARD	CHECKED BY: L.J.STONE
IMPERVIOUS SURFACE LAYOUT SHEET	SHEET 19 OF 19