

FOUR RIVERS SANITATION AUTHORITY

SOUTH MAIN LIFT STATION ACCESS IMPROVEMENTS

CAPITAL PROJECT NO. 2525

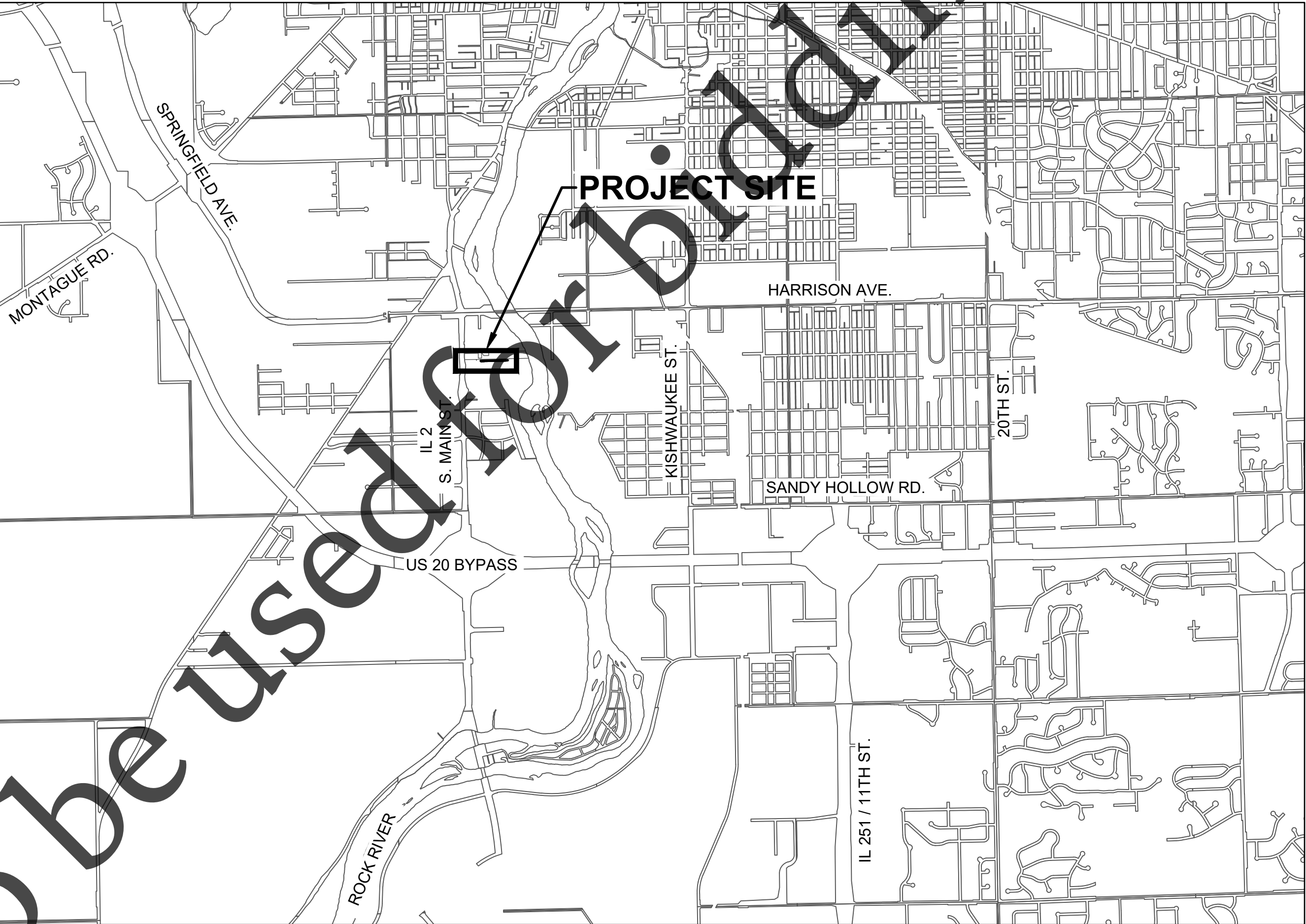
2024

BOARD OF TRUSTEES

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BENJAMIN W. BERNSTEN	VICE-PRESIDENT
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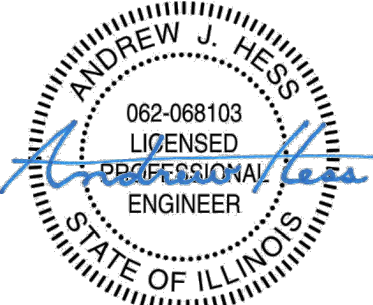
TIMOTHY S. HANSON	EXECUTIVE DIRECTOR
CHRISTOPHER T. BAER, PE	DIRECTOR OF ENGINEERING



WINNEBAGO COUNTY, ILLINOIS

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SIGN: AUGUST 15, 2024
EXP: NOVEMBER 30, 2025

FOR BID

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LEGEND

EXISTING	PROPOSED	
		RIGHT OF WAY LINE
		PROPERTY LINE
		BUILDING
		WATER EDGE
		EASEMENT - PERMANENT SANITARY
		EASEMENT - TEMPORARY CONSTRUCTION
		VEGETATION / TREE LINE
		TREE DRIPLINE
		CONTOUR - MAJOR
		CONTOUR - MINOR
		FENCE
		FENCE - TEMPORARY CONSTRUCTION
		FENCE - SILT (PERIMETER EROSION BARRIER)
		ROADWAY CENTERLINE
		EDGE OF PAVEMENT
		CURB & GUTTER
		GUARD RAIL
		RAILROAD TRACKS
		CABLE - OVERHEAD
		CABLE - UNDERGROUND
		ELECTRIC - OVERHEAD
		ELECTRIC - UNDERGROUND
		FIBER OPTIC
		GAS LINE
		TELEPHONE - OVERHEAD
		TELEPHONE - UNDERGROUND
		PEDESTALS (CATV, ELEC, TELE), GAS METER, ELEC METER
		ELECTRIC MANHOLE, HANDHOLE
		SOIL BORING
		BENCHMARK & CONTROL POINT
		MAILBOX
		UTILITY POLE W/ GUY WIRE & MAST ARM LIGHT POLE
		TREE (DECIDUOUS & CONIFEROUS)
		BUSH & SHRUB
		GROUND / LANDSCAPE LIGHT
		SPOT ELEVATION

LEGEND

EXISTING	PROPOSED	
		SANITARY MANHOLE & SANITARY SEWER
		SANITARY SEWER SERVICE & CLEANOUT
		SANITARY FORCEMAIN
		TREATMENT PLANT PROCESS PIPING
		STORM SEWER
		STORM MANHOLE, CATCH BASIN, CURB & GUTTER INLET, CURB INLET SPECIAL
		DRAINAGE CULVERT, WITH END SECTION
		WATER MAIN
		WATER SERVICE & WATER SERVICE VALVE
		WATER MAIN VALVE
		WATER MAIN VALVE WITH BOX
		WATER MAIN VALVE WITH VAULT
		WATER MAIN REDUCER
		FIRE HYDRANT
		YARD HYDRANT
		WATER WELL
		SPRINKLER HEAD & SPRINKLER VALVE
		EXISTING SURFACE TYPE (HOT-MIX ASPHALT, AGGREGATE, CONCRETE, TURF)
		DITCH CHECK
		INLET OR PIPE PROTECTION

PROPOSED

	EROSION CONTROL BLANKET
	HEAVY DUTY EROSION CONTROL BLANKET
	TEMPORARY EROSION CONTROL SEEDING
	SEEDING AREA, CLASS 1
	SEEDING AREA, CLASS 2, 3, OR 4
	LANDSCAPE

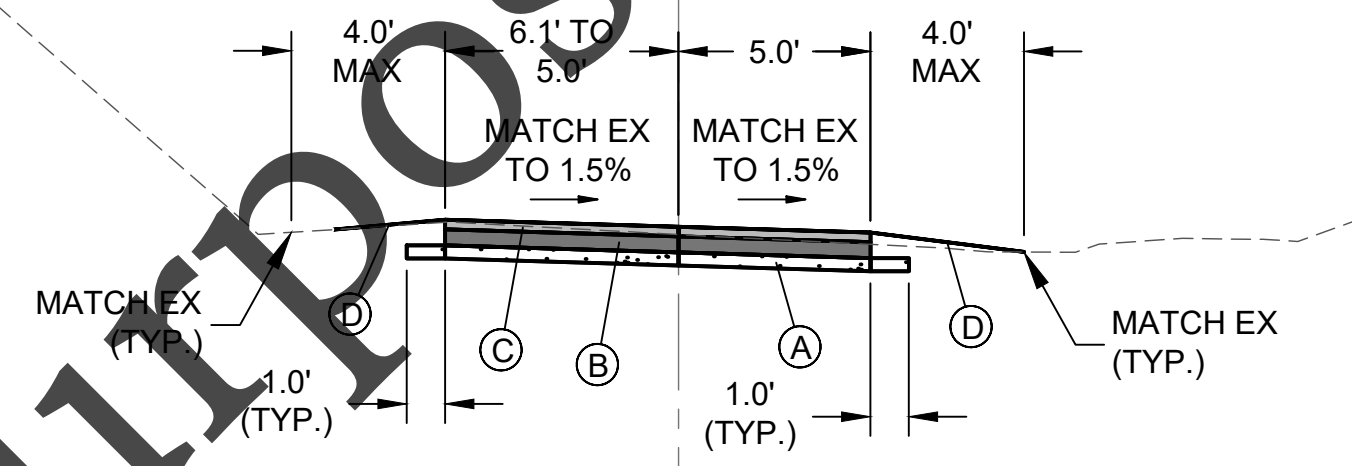
PROPOSED

	STABILIZED CONSTRUCTION ENTRANCE
	RIP RAP
	PAVEMENT REPLACEMENT, PCC
	PAVEMENT REPLACEMENT, HMA
	DRIVEWAY REPLACEMENT
	AGGREGATE REPLACEMENT

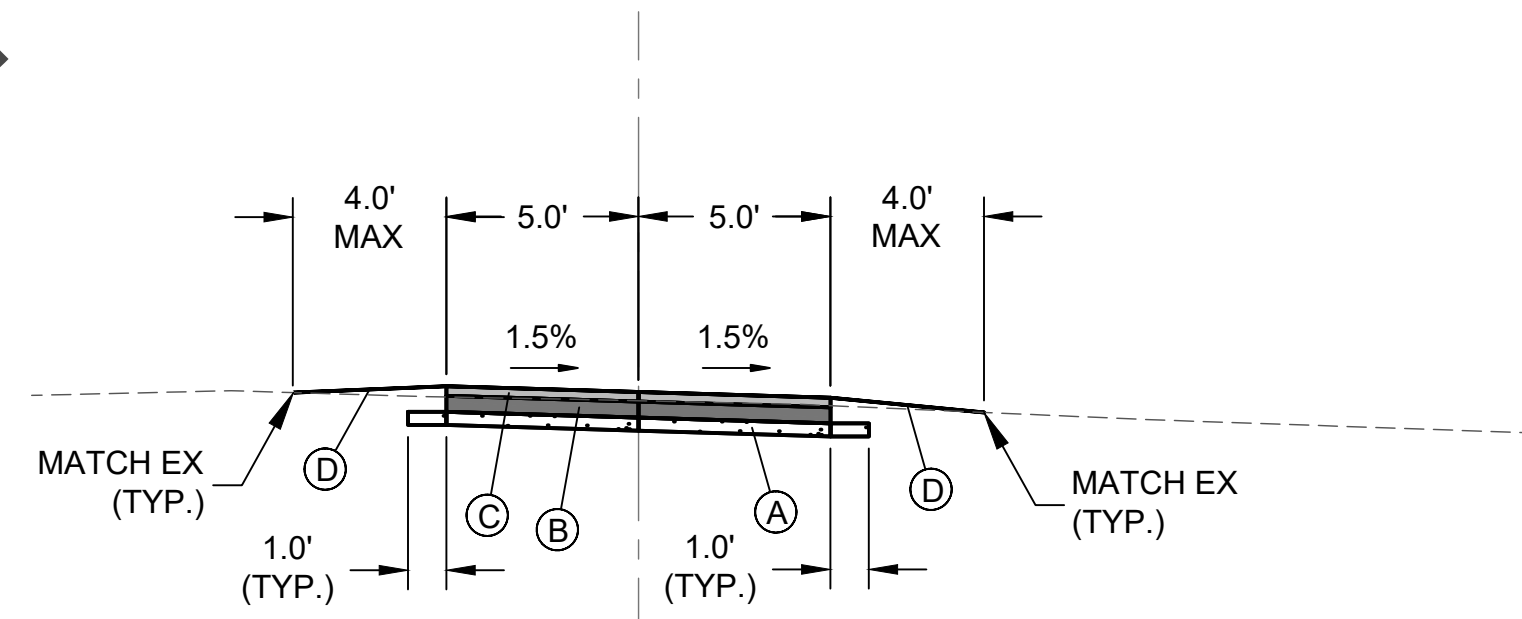
ABBREVIATIONS

ABD = ABANDON(ED)	LS = LUMP SUM
CMP = CORRUGATED METAL PIPE	MH = MANHOLE
CO = CLEAN OUT	PVMNT = PAVEMENT
CTRL= CONTROL	PRC = PRECAST REINFORCED CONCRETE
CU = CUBIC YARD(S)	PR = PROPOSED
DI = DUCTILE IRON	RCP = REINFORCED CONCRETE PIPE
EA = EACH	REM = REMOVE(D)
EL = ELEVATION	REPL = REPLACE(D)
EROS = EROSION	R/R = REMOVE & REPLACE
EX = EXISTING	SAN = SANITARY
FES = FLARED END SECTION	SVC = SERVICE
FM = FORCE MAIN	SY = SQUARE YARD(S)
FRSA = FOUR RIVERS SANITATION AUTHORITY	TY = TYPE
FT = FEET	UNK = UNKNOWN
INV = INVERT	VCP = VITRIFIED CLAY PIPE
LF = LINEAR FEET	WM = WATER MAIN
LINCIPP = LINED WITH CURED IN PLACE PIPE	

TYPICAL SECTIONS



STA 14+92.68 TO STA 15+42.68



STA 15+42.68 TO STA 22+00.00

LEGEND

- (A) AGGREGATE BASE COURSE, TYPE B, CA-6. (QUANTITY TO BE USED IF NEEDED FOR SHAPING. IT IS ANTICIPATED THAT APPROXIMATELY 89 CY OF AGGREGATE WILL BE GENERATED BY CORE-OUT FOR PAVEMENT.)
- (B) HMA BINDER COURSE, IL-19.0, N50, 2 1/2"
- (C) HMA SURFACE COURSE, MIX 'C', N50, 1 1/2"
- (D) TOPSOIL FURNISH & PLACE, 4" SEEDING CLASS 1 & FERTILIZING EROSION CONTROL BLANKET

GENERAL NOTES

- FRSA WILL PROVIDE HORIZONTAL AND VERTICAL LAYOUT OF THE PROPOSED AGGREGATE BASE COURSE AND PAVEMENT LIMITS. COORDINATE DESIRED OFFSETS, ETC., WITH FRSA SURVEY AND FIELD OPERATIONS MANAGER BEN CHRISTIANSEN AT (815) 209-7952.
- THE CONTRACTOR SHALL PREPARE THE AGGREGATE BASE, ENSURING POSITIVE DRAINAGE. THE PREPARED AGGREGATE BASE COURSE SHALL BE APPROVED BY THE FRSA INSPECTOR PRIOR TO PLACEMENT OF PAVEMENT.
- THE CONTRACTOR SHALL IDENTIFY ALL UTILITY LOCATIONS IN THE FIELD BY CONTACTING J.U.L.I.E. AT 811 OR 1-800-892-0123 AND ALL UTILITIES NOT ON THE J.U.L.I.E. NETWORK 48 HOURS, MINIMUM, PRIOR TO THE START OF CONSTRUCTION
- THE CONTRACTOR SHALL NOTIFY THE FRSA SURVEY AND FIELD OPERATIONS MANAGER BEN CHRISTIANSEN 48 HRS, MINIMUM, PRIOR TO THE START OF CONSTRUCTION.

SUMMARY OF QUANTITIES

No.	ITEM	QUANTITY	UNIT
1	EARTH EXCAVATION	125	CY
2	AGGREGATE BASE COURSE, TYPE B, CA6	10	TON
3	HMA BINDER COURSE, IL-19.0, N50, 2.5"	66	TON
4	HMA SURFACE COURSE, IL-9.5 MIX "C", N50, 1.5"	110	TON
5	RESTORATION AND SEEDING	638	SY
6	PERIMETER EROSION BARRIER	718	LF
7	TEMPORARY DITCH CHECK (STRAW WATTLE)	20	LF

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE USE(S)	SURFACE COURSE	BINDER COURSE
PG:	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4.0 @ N50	4.0 @ N50
MIXTURE COMPOSITION (GRADATION MIXTURE)	IL 9.5	IL 19.0
FRICTION AGGREGATE	MIX "C"	N/A
MIX UNIT WEIGHT	112 lbs/sy/in	112 lbs/sy/in

THESE MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT



SOUTH MAIN LIFT STATION ACCESS IMPROVEMENTS CAPITAL PROJECT NO. 2525

LEGEND & TYPICAL SECTIONS

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SOUTH MAIN LIFT STATION ACCESS IMPROVEMENTS
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PLAN & PROFILE (STA. 10+00.00 TO STA. 14+00.00)

FOR BID

Sheet No.
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Date:
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BENCHMARK TABLE

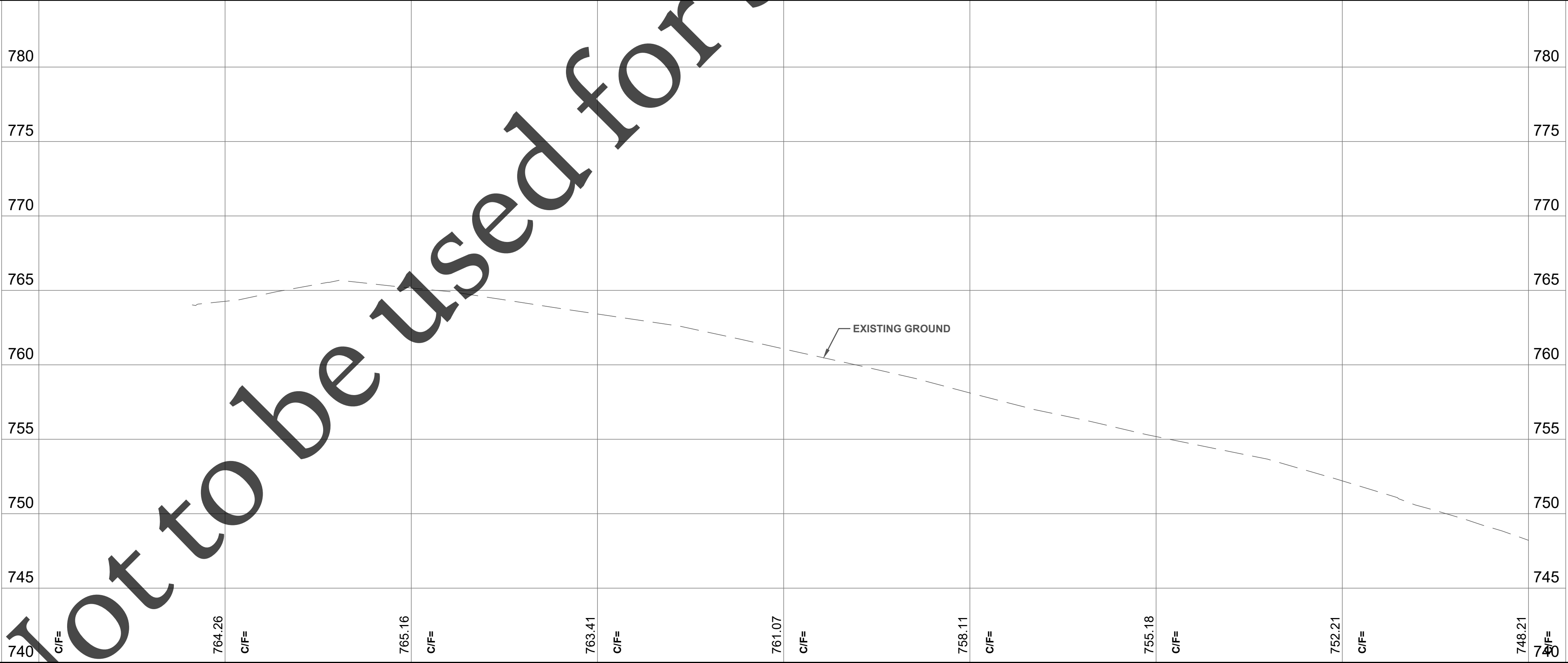
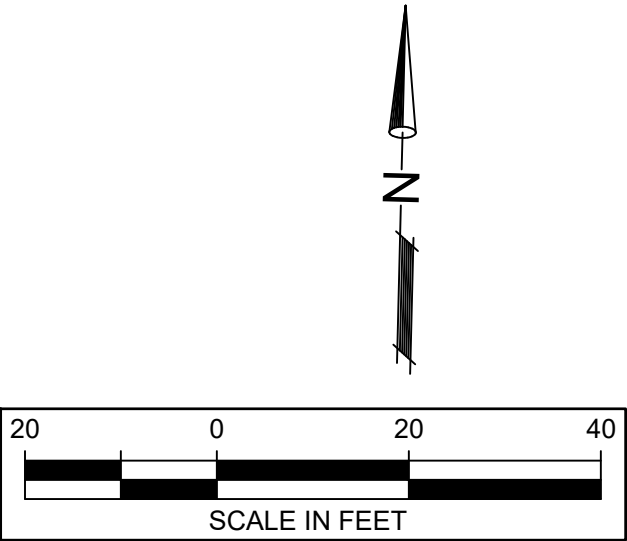
BM #	STA.	O/S	DESCRIPTION	ELEV.
1	22+85.63	1.6' RT	CUT "X"	701.56
2	20+01.06	11.8' RT	RAILROAD SPIKE ON NORTH SIDE OF POWER POLE	711.86
3	16+20.56	11.5' LT	CUT "X" IN SOUTHEAST BOLT	741.54

HORIZONTAL DATUM IS BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD 1983, WEST ZONE. VERTICAL DATUM IS BASED ON NAVD 1988. FIELD PROCEDURES UTILIZE THE WinGIS CONTROL NETWORK AND CORS STATION RRW1 AS BLUE BOOKED WITH NGS.



MATCH LINE - STA. - 14+00.00

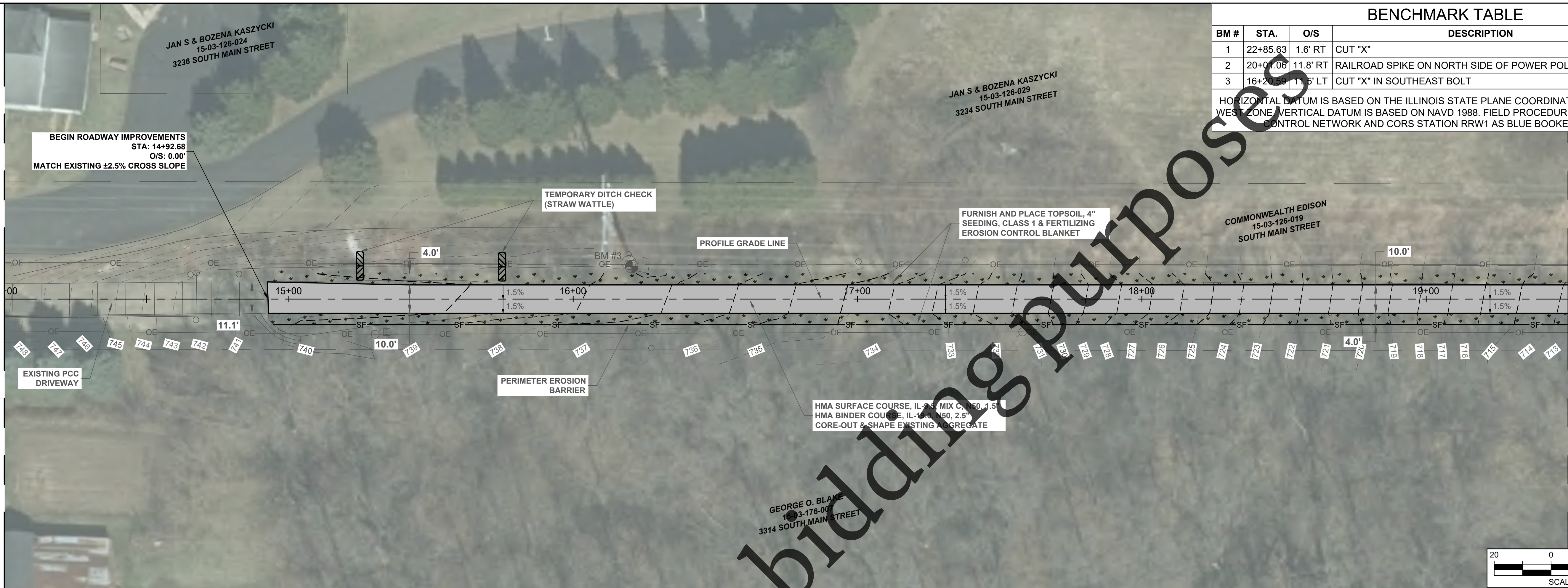
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SEE SHEET 3

MATCH LINE - STA. - 14+00.00



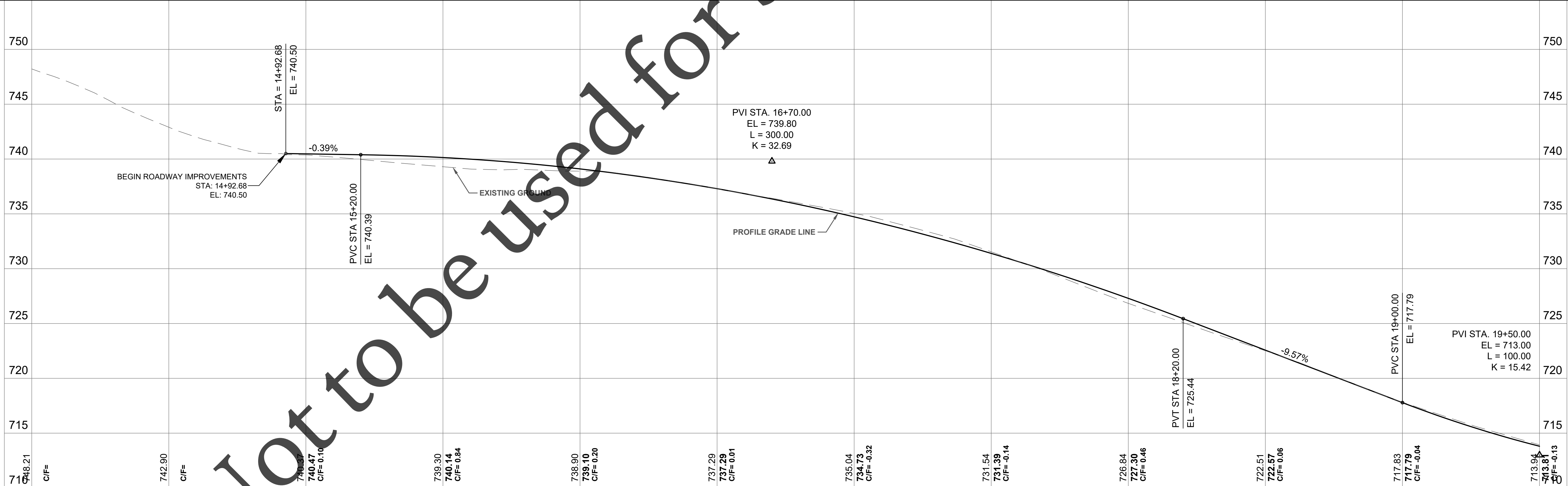
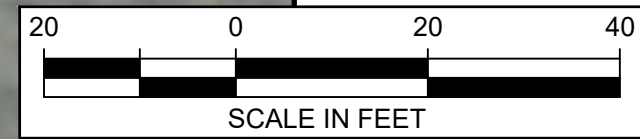
MATCH LINE - STA. - 19+50.00

SEE SHEET 5

BENCHMARK TABLE

BM #	STA.	O/S	DESCRIPTION	ELEV.
1	22+85.63	1.6' RT	CUT "X"	701.56
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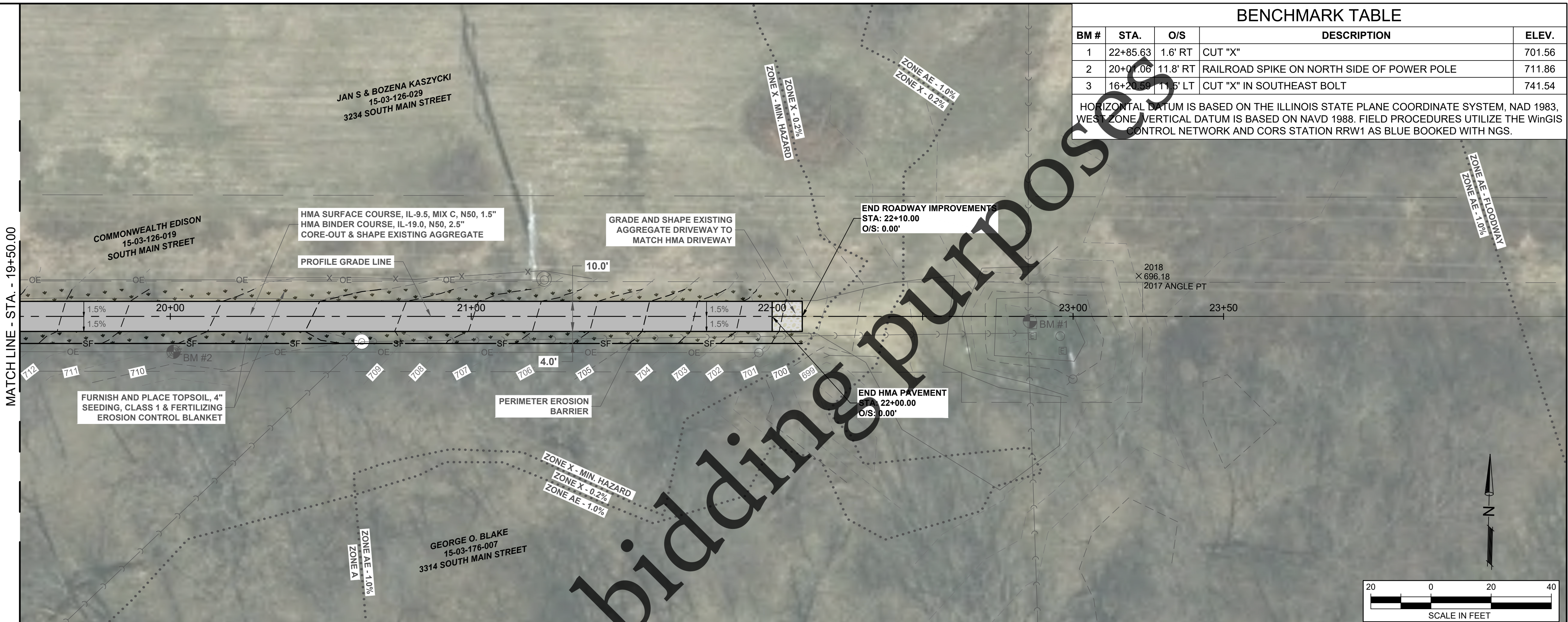
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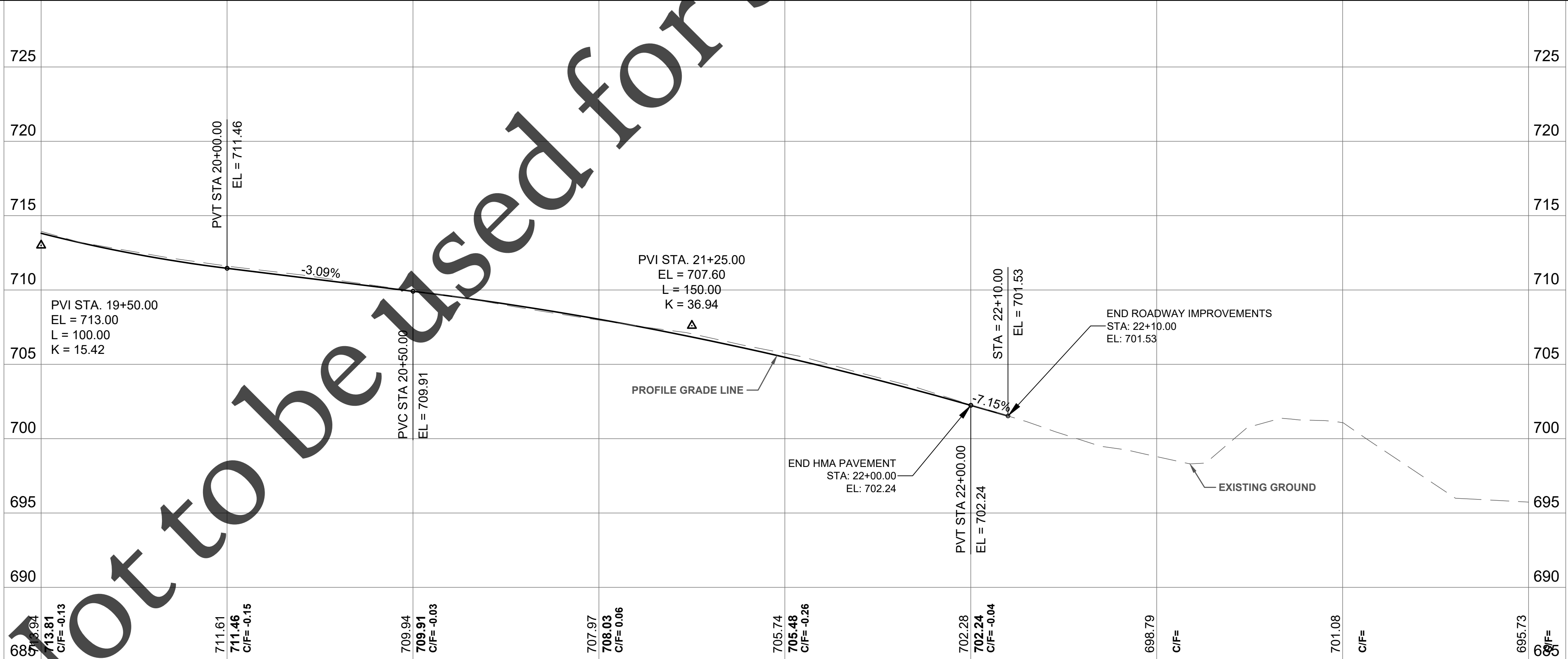
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SEE SHEET 4



BENCHMARK TABLE				
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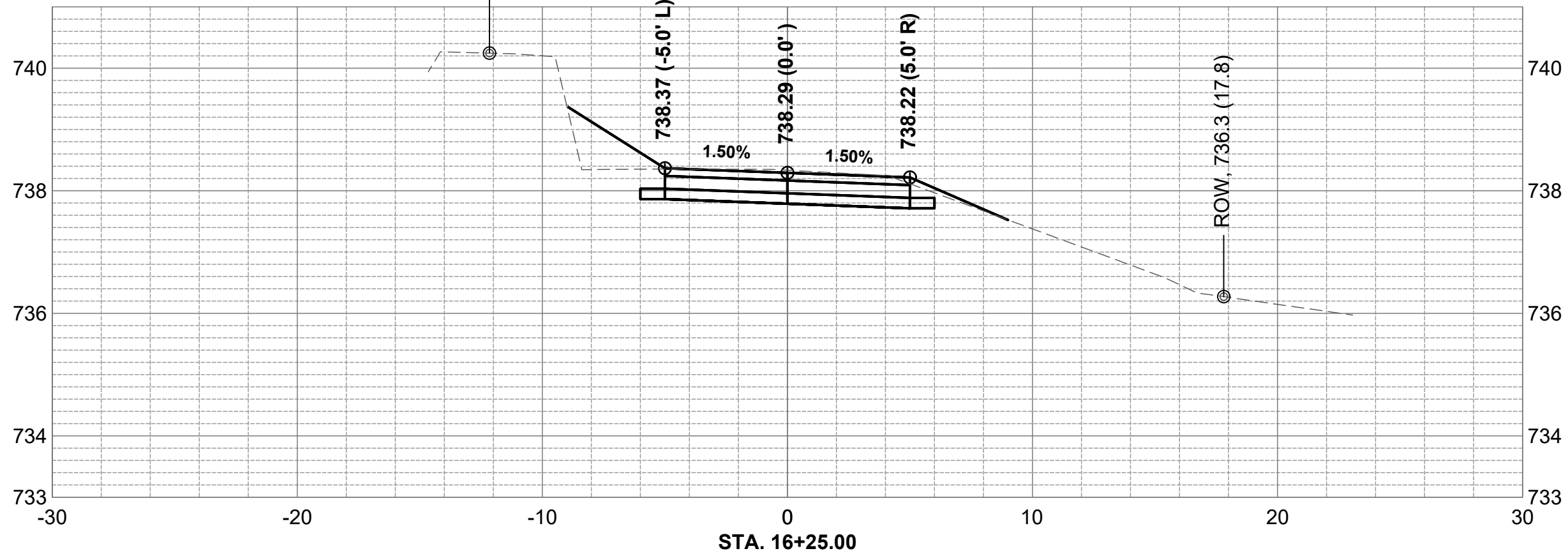
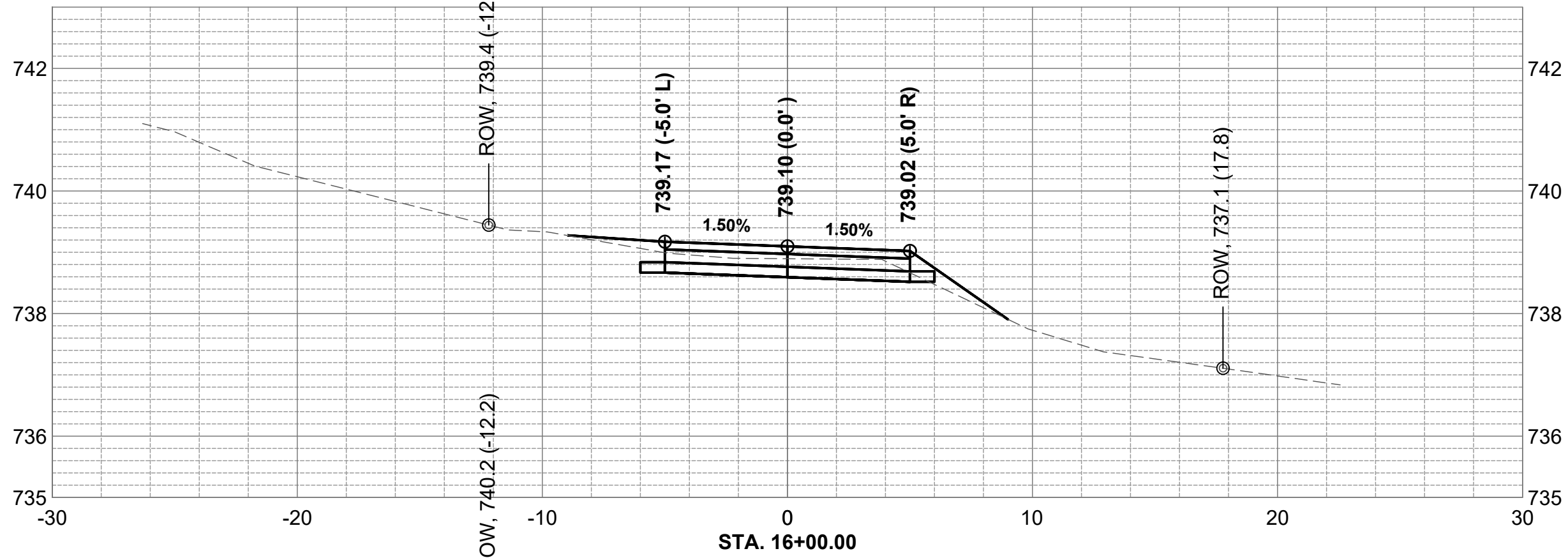
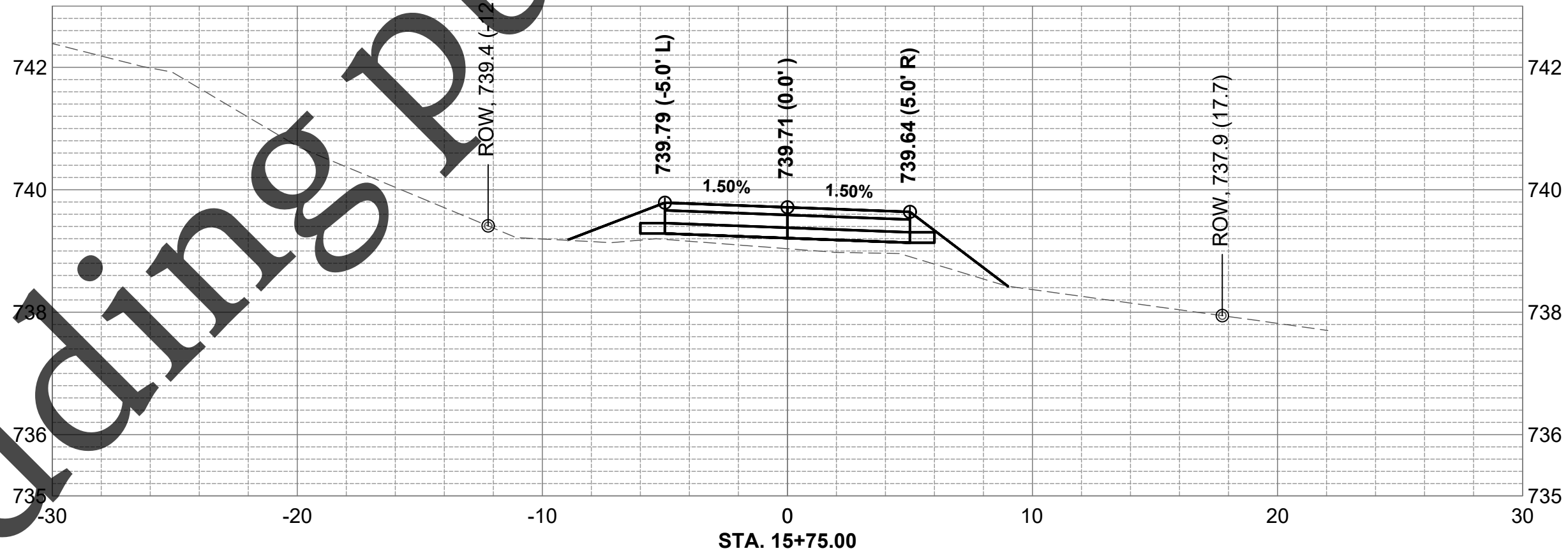
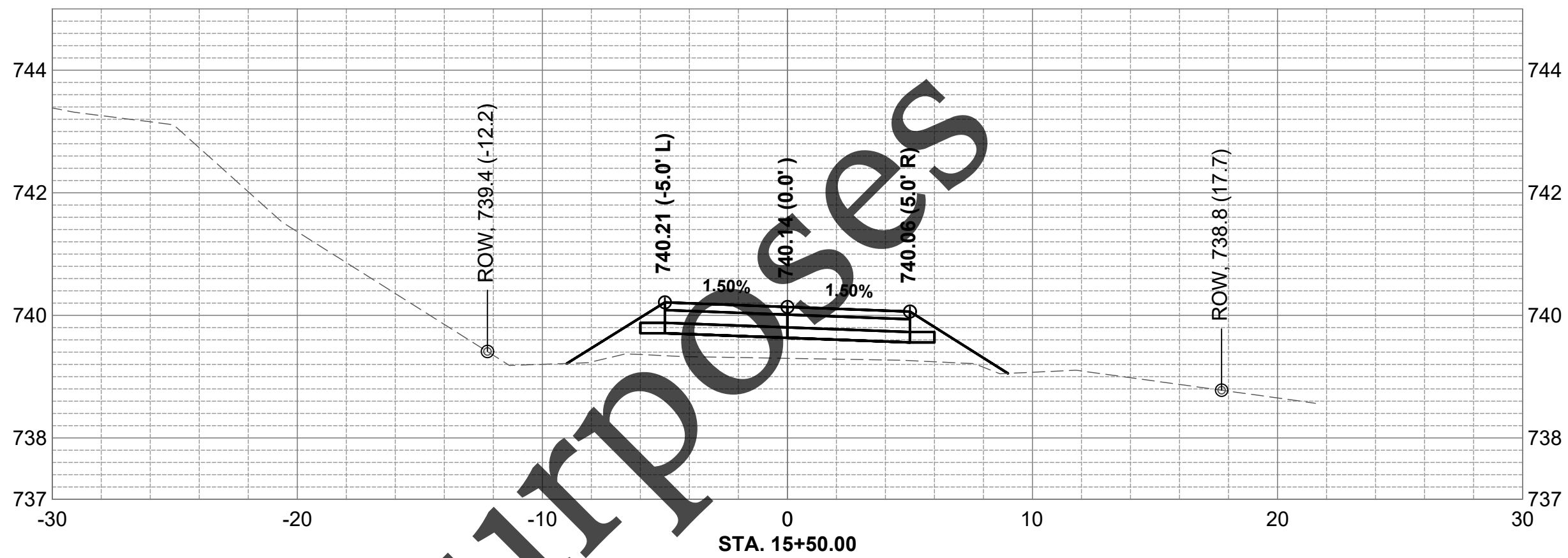
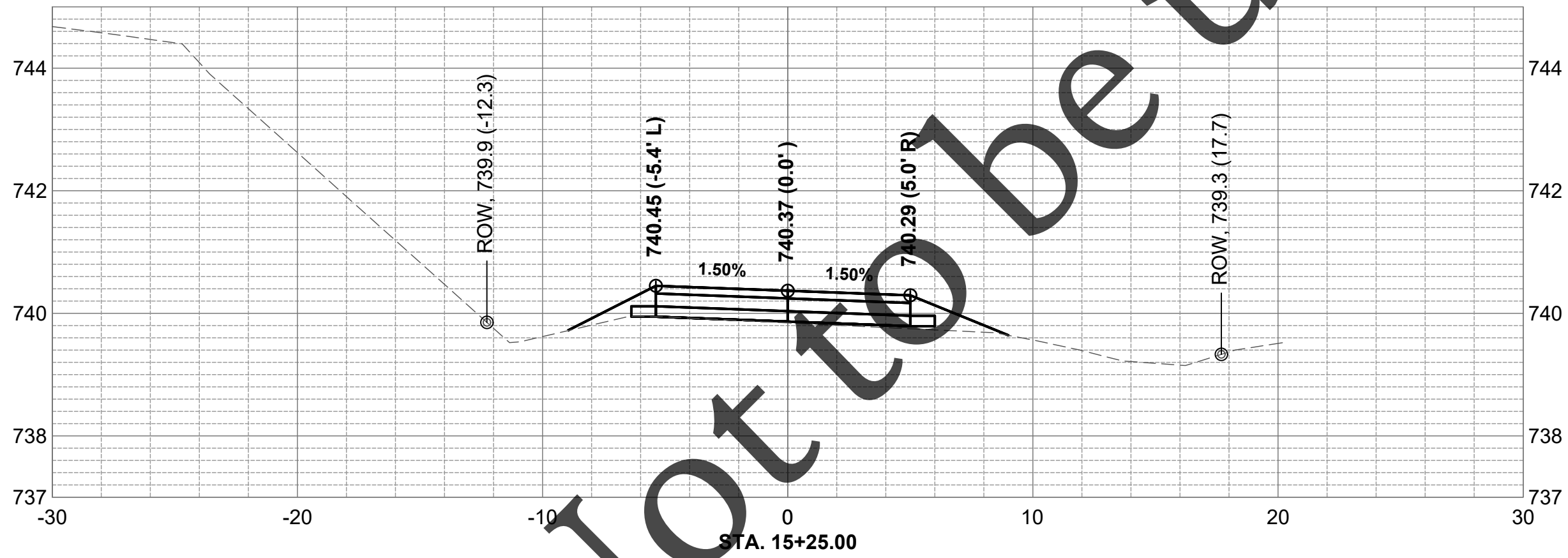
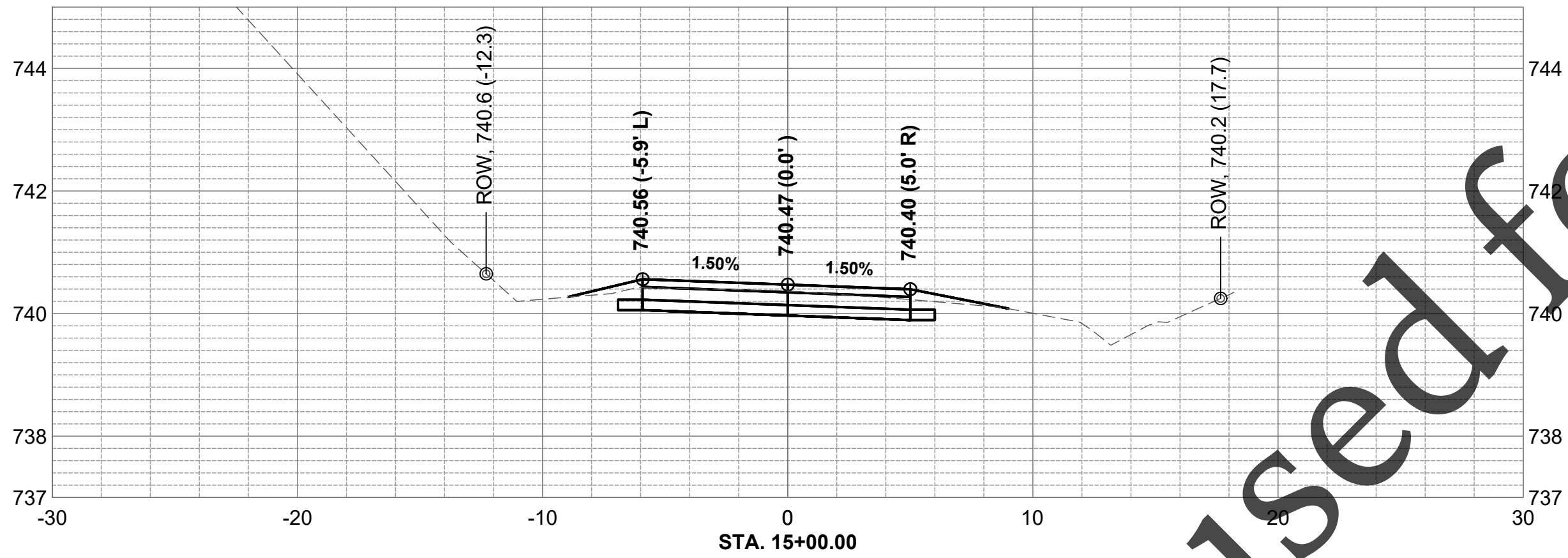
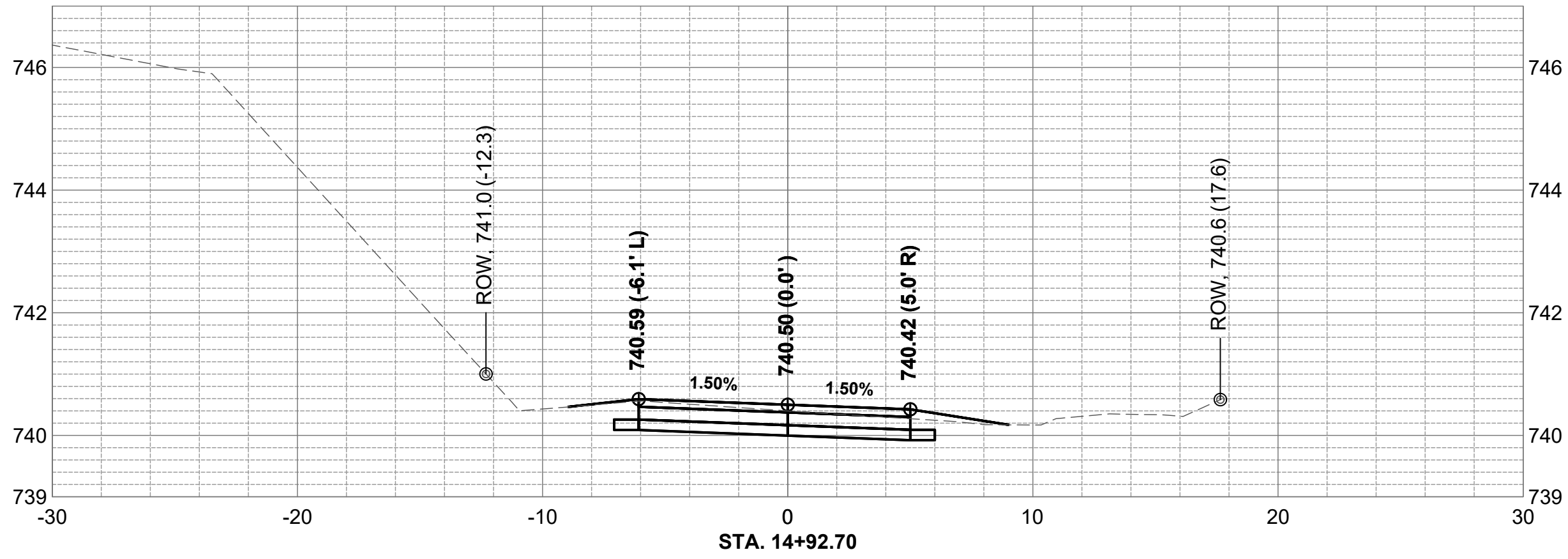
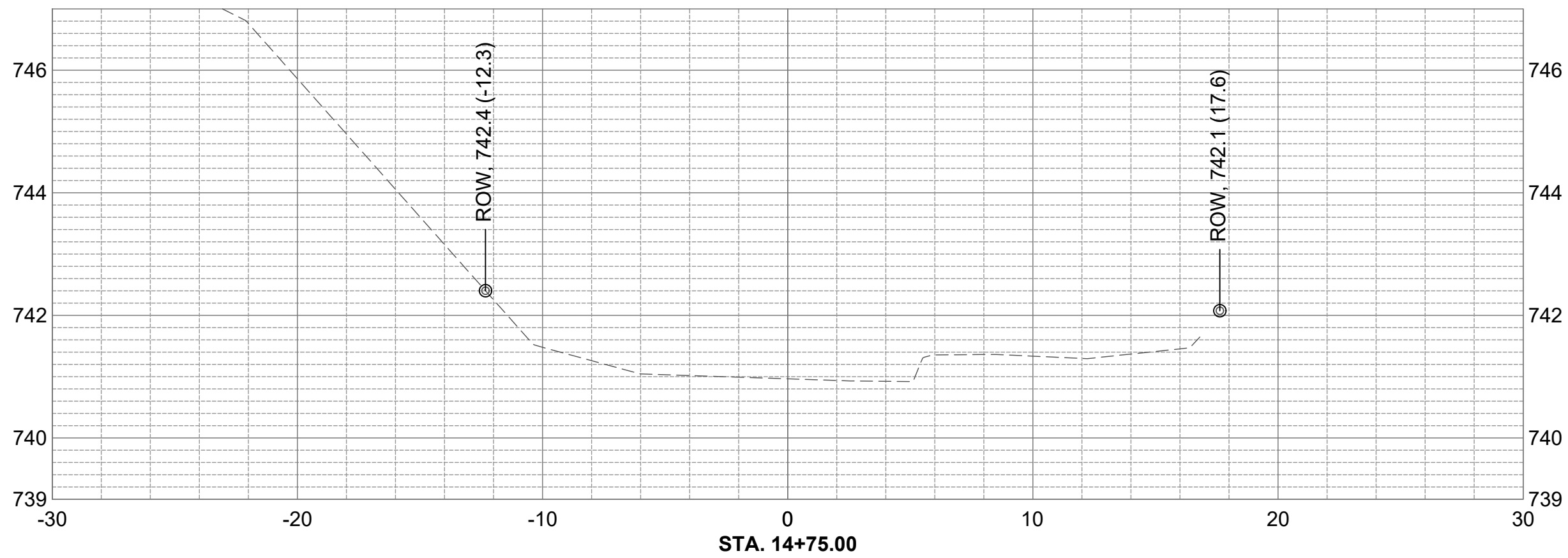
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NOTES

1. AGGREGATE BASE COURSE SHOWN ON CROSS SECTIONS REPRESENTS GRADING AND SHAPING OF EXISTING AGGREGATE DRIVEWAY FOLLOWING 4" CORE-OUT FOR PROPOSED PAVEMENT.
2. AGGREGATE BASE COURSE, TYPE B, CA6 QUANTITY TO BE USED IF NEEDED FOR SHAPING. IT IS ANTICIPATED THAT APPROXIMATELY 89 CY OF AGGREGATE WILL BE GENERATED BY CORE-OUT FOR PROPOSED PAVEMENT.



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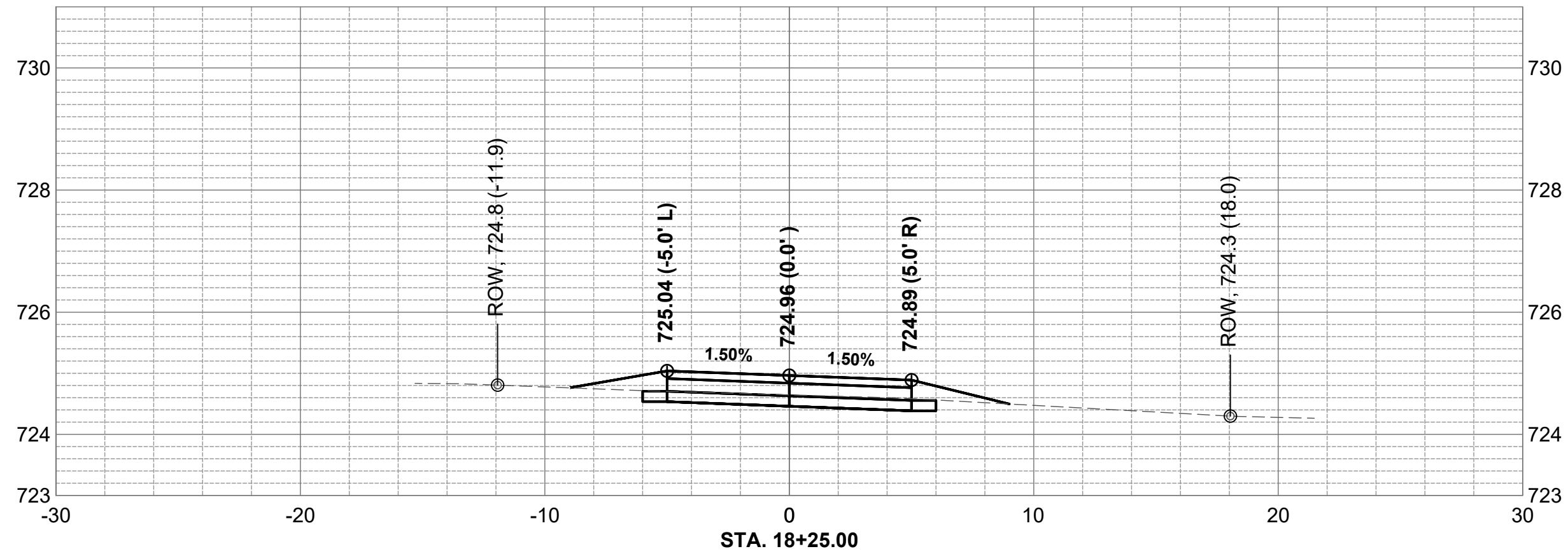
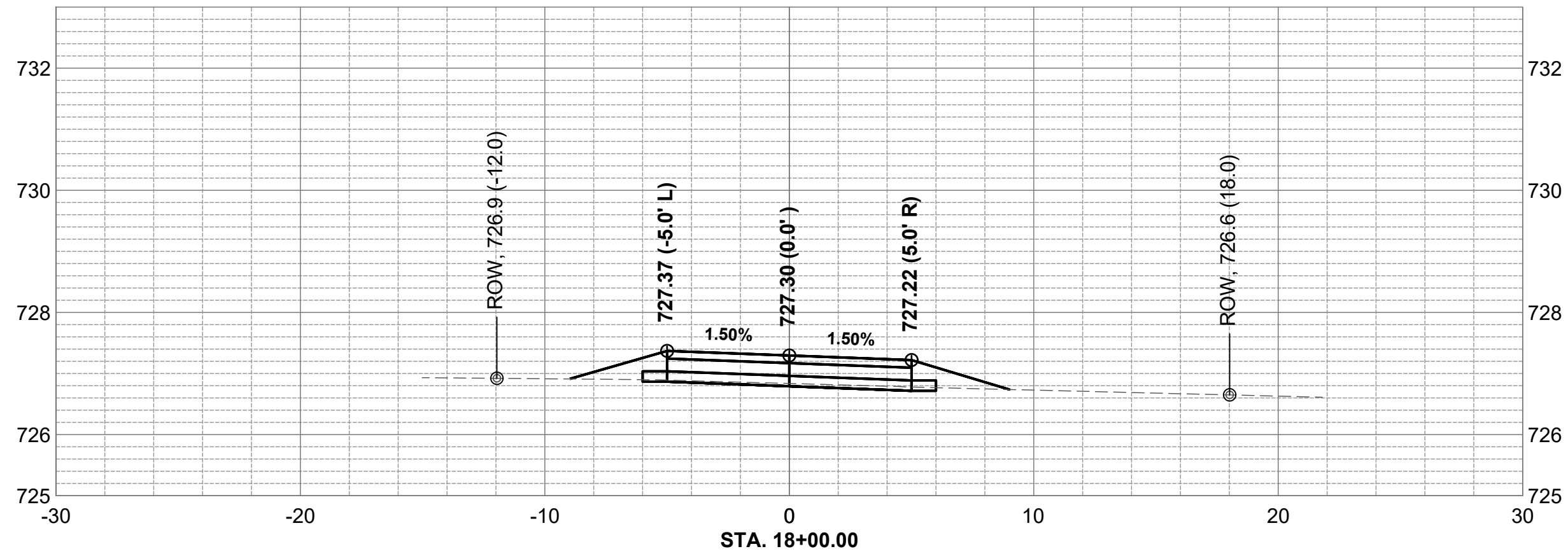
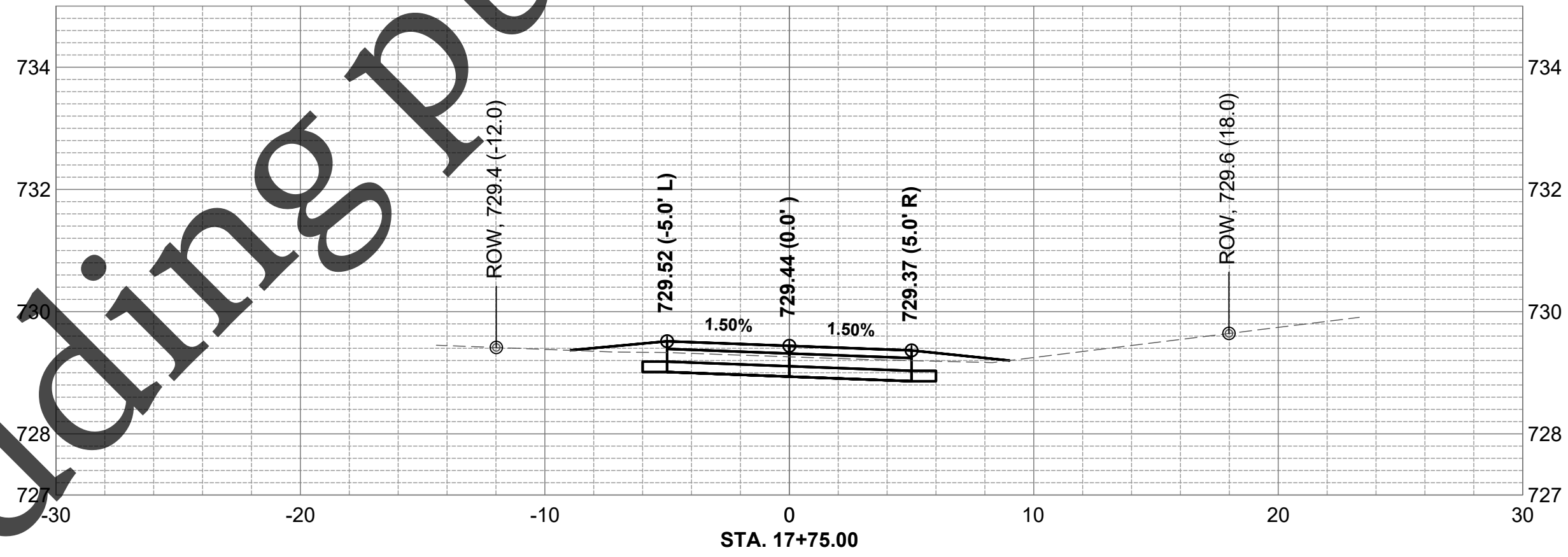
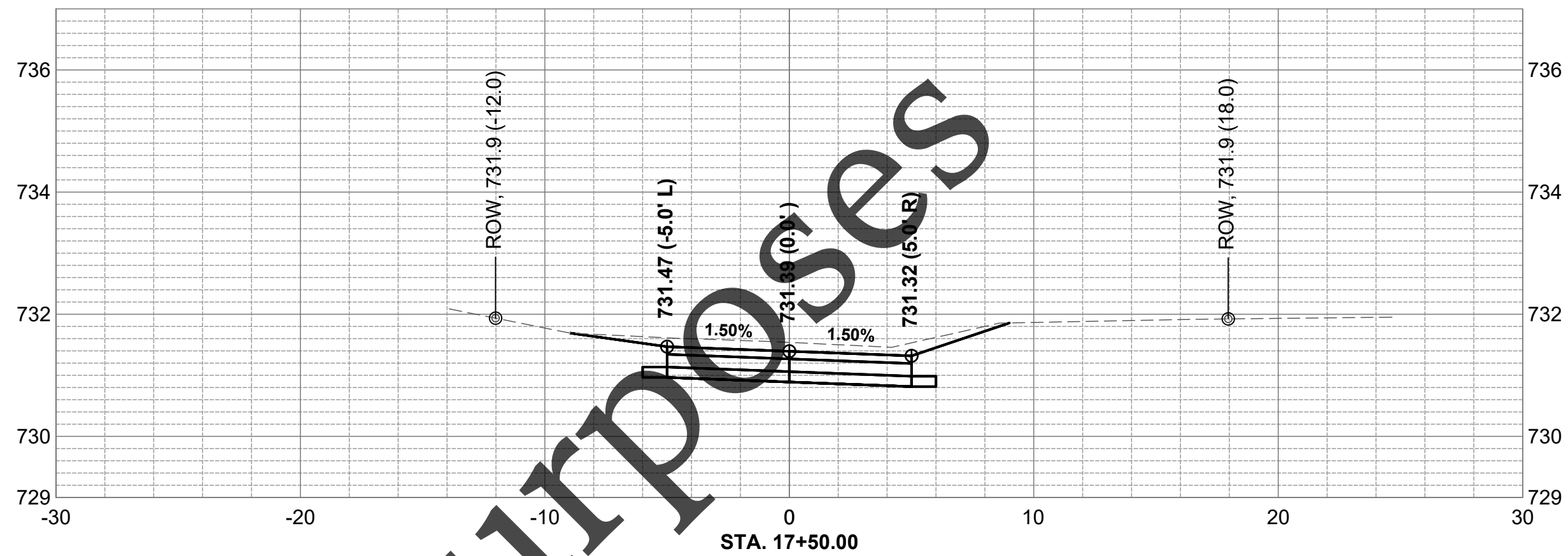
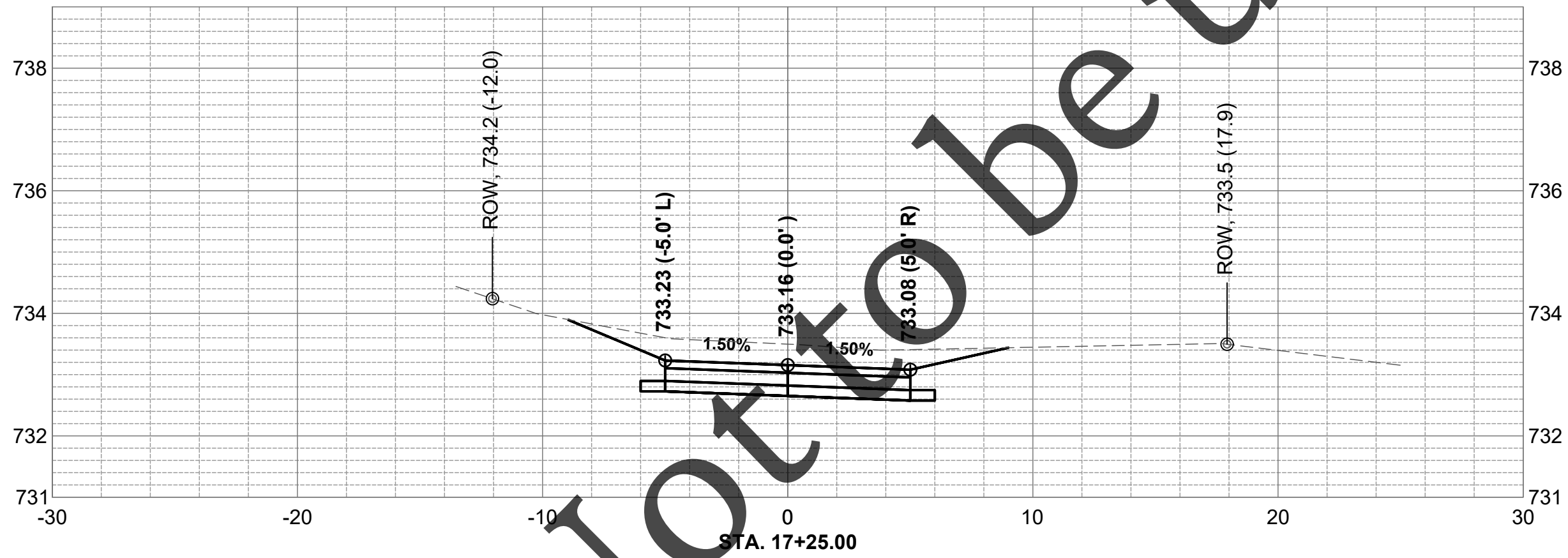
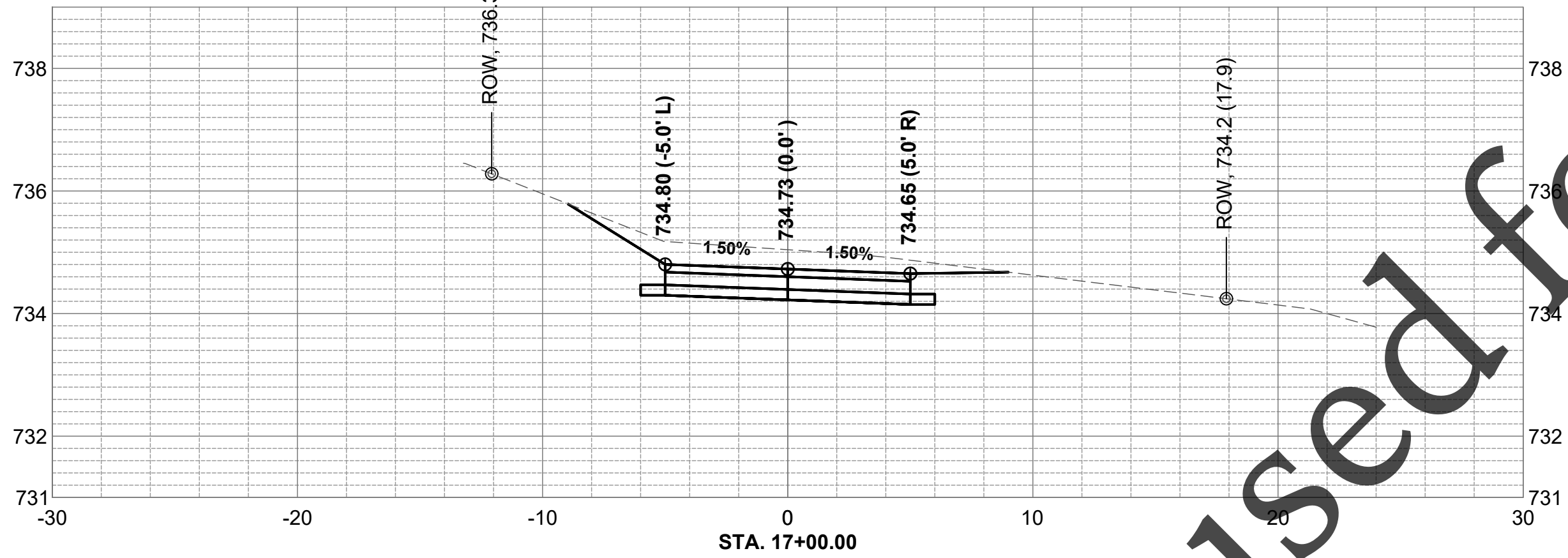
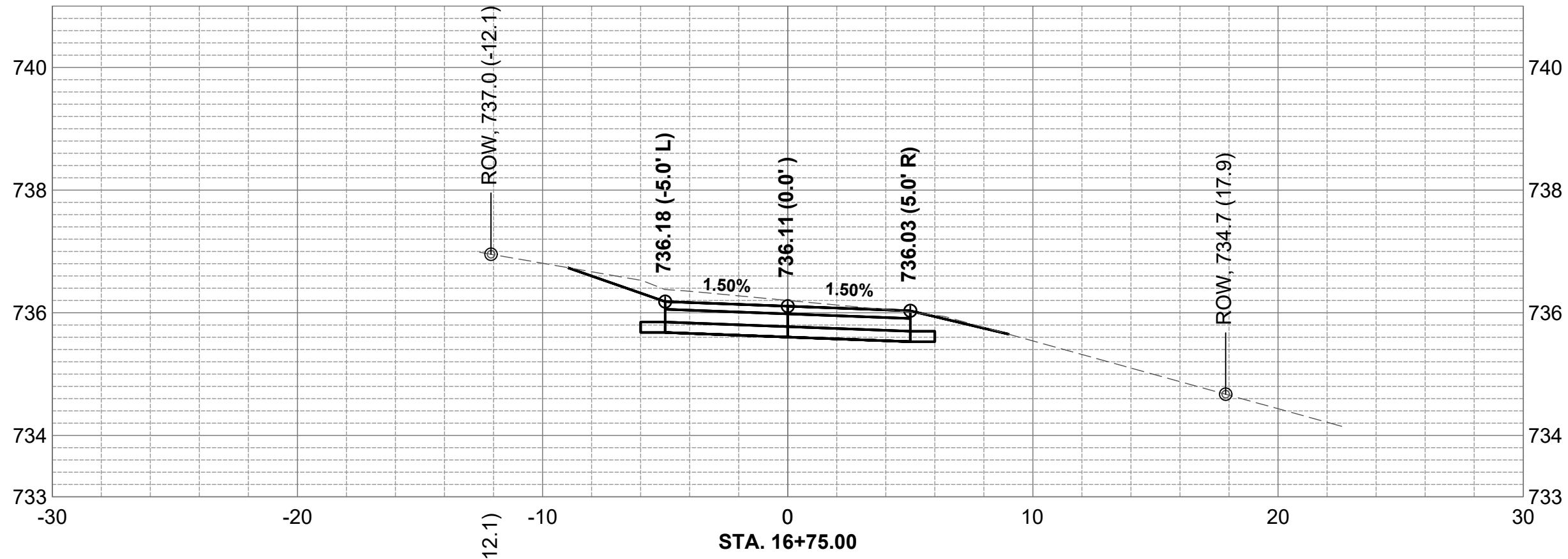
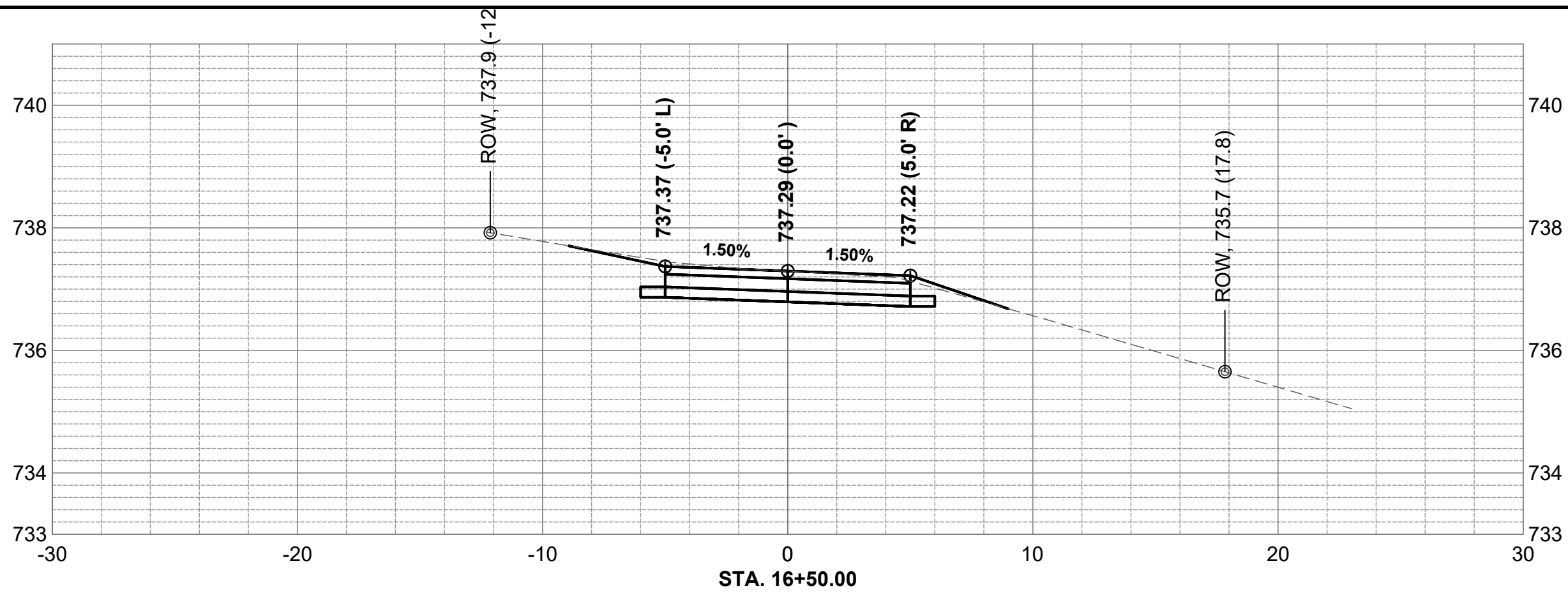
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NOTES

1. AGGREGATE BASE COURSE SHOWN ON CROSS SECTIONS REPRESENTS GRADING AND SHAPING OF EXISTING AGGREGATE DRIVEWAY FOLLOWING 4" CORE-OUT FOR PROPOSED PAVEMENT.
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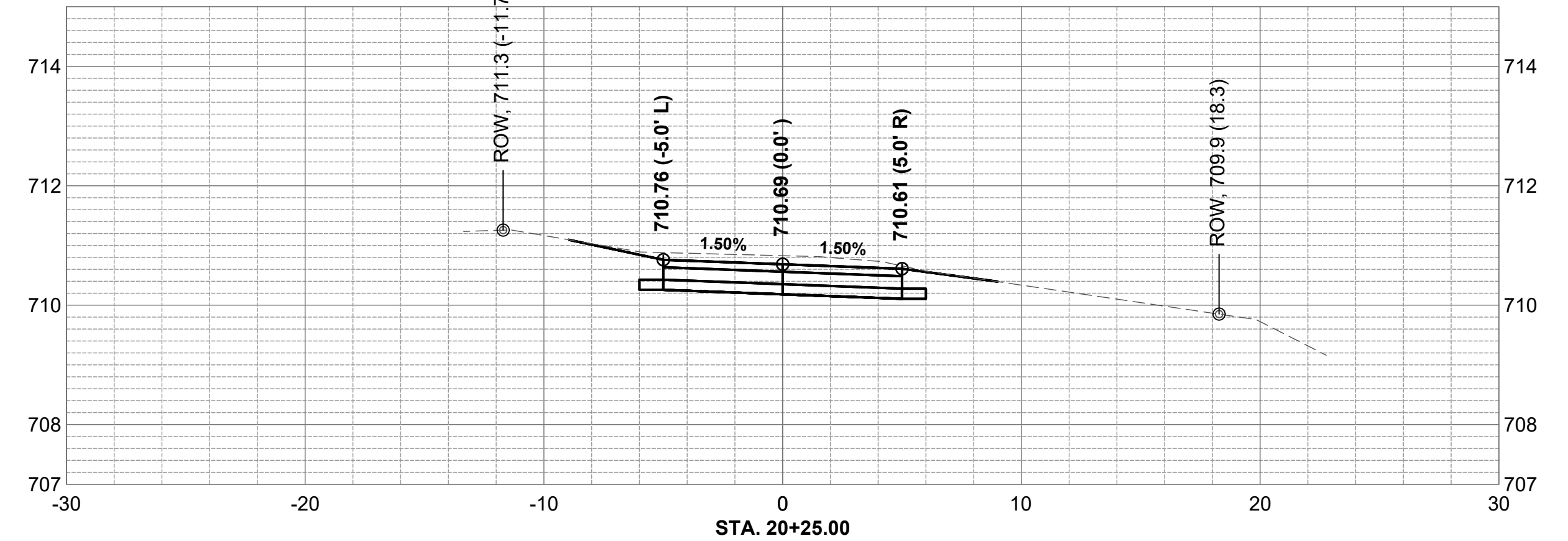
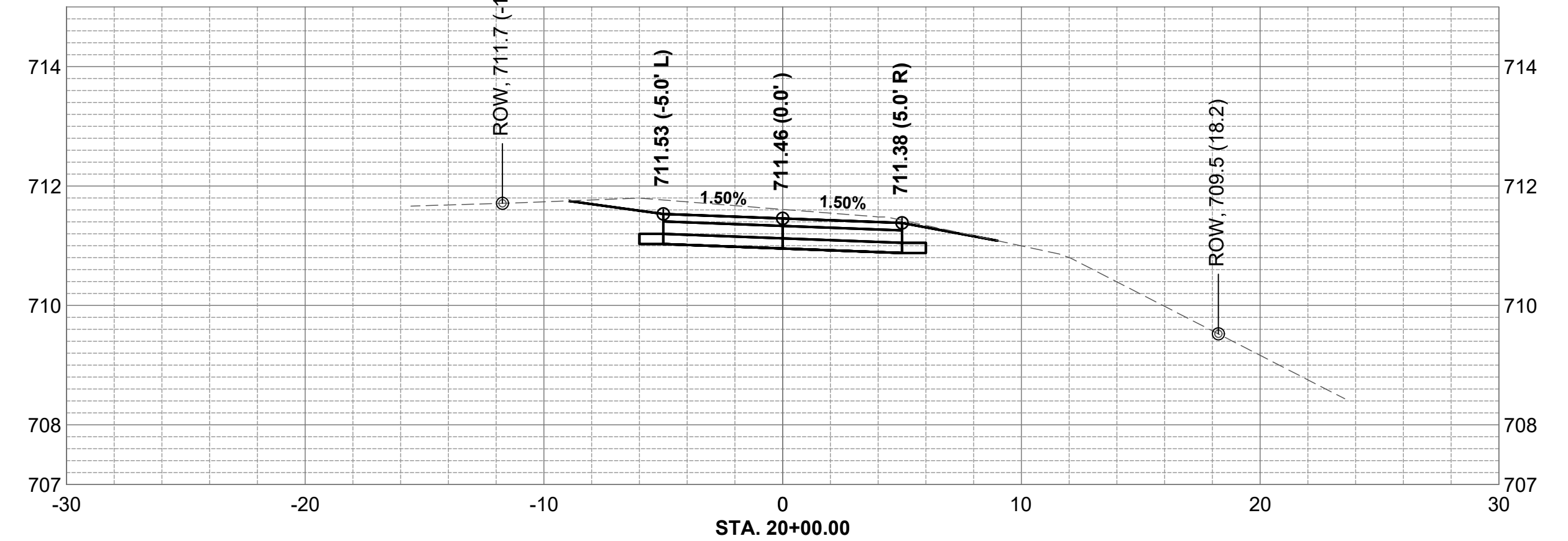
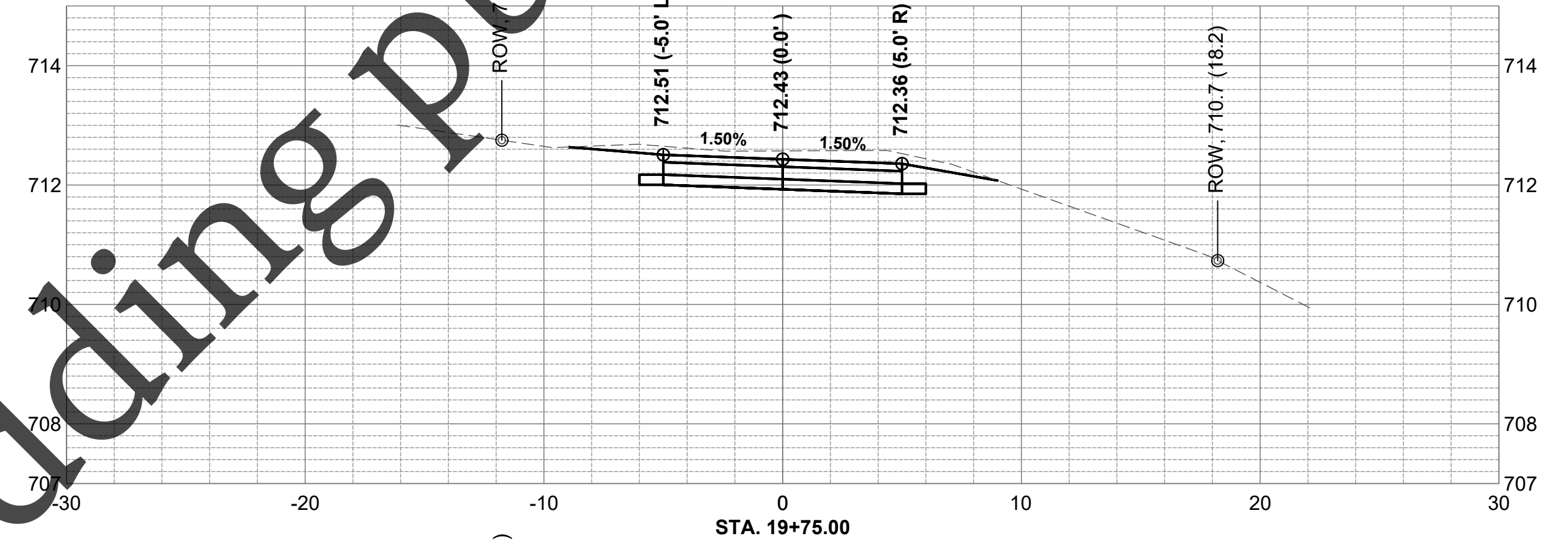
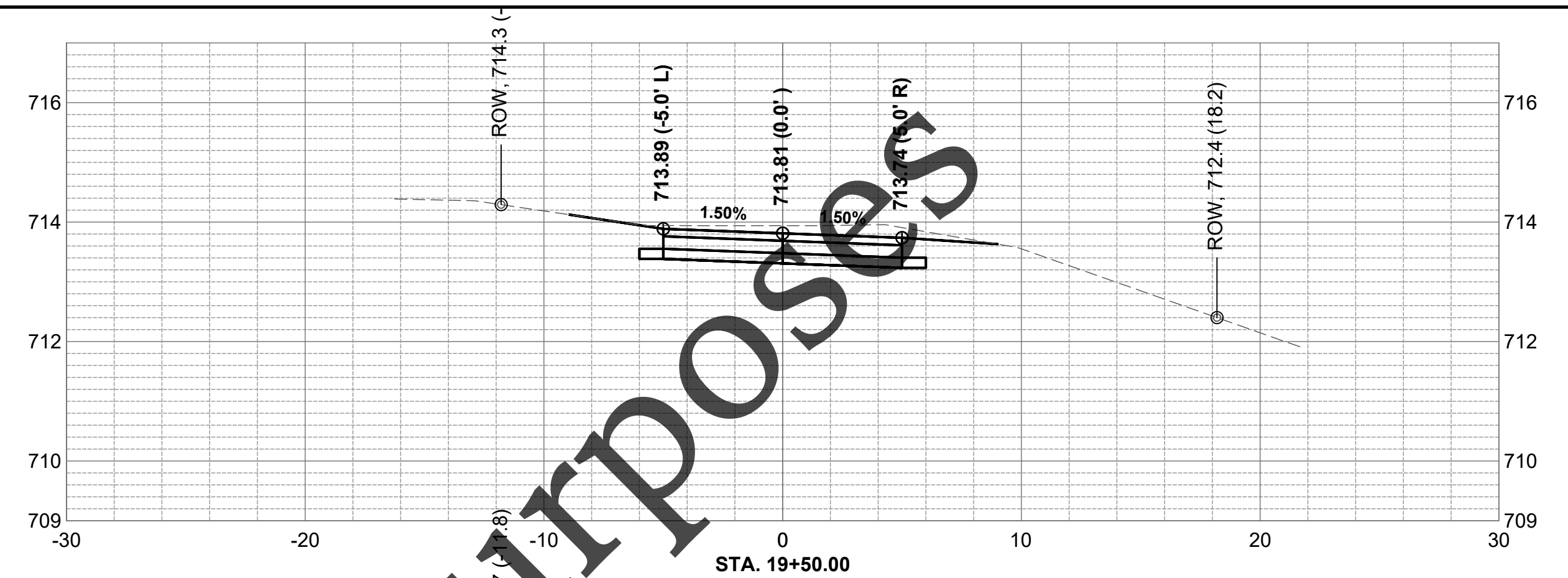
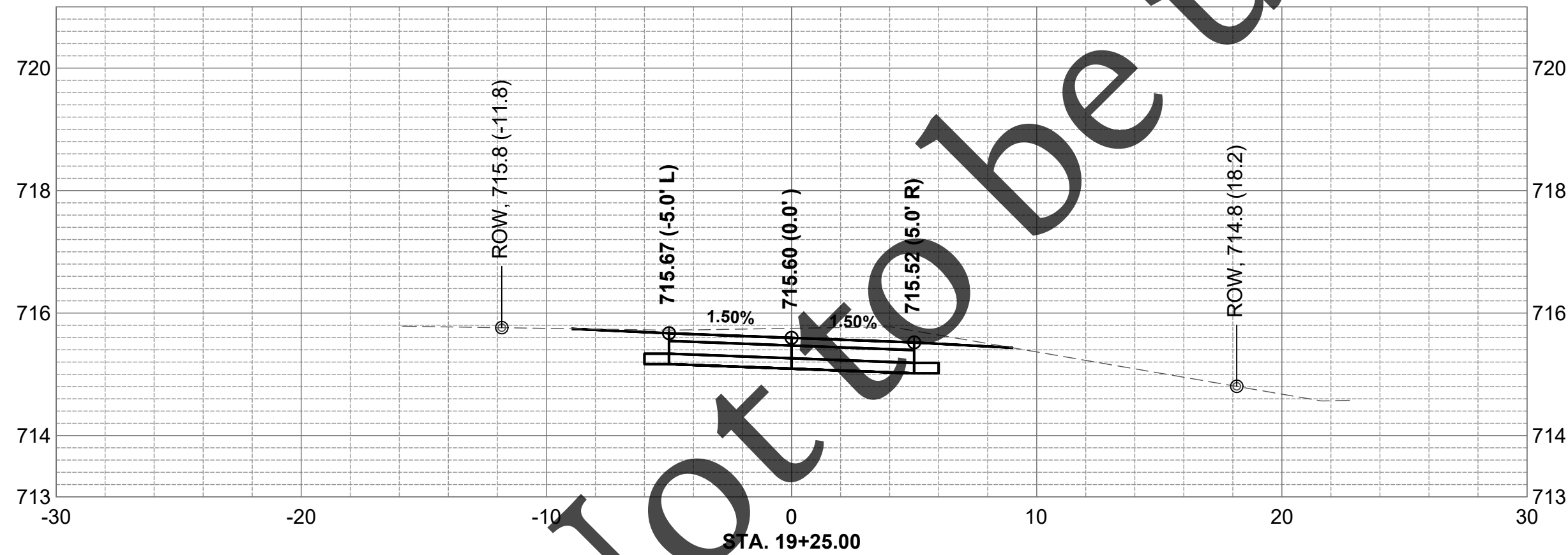
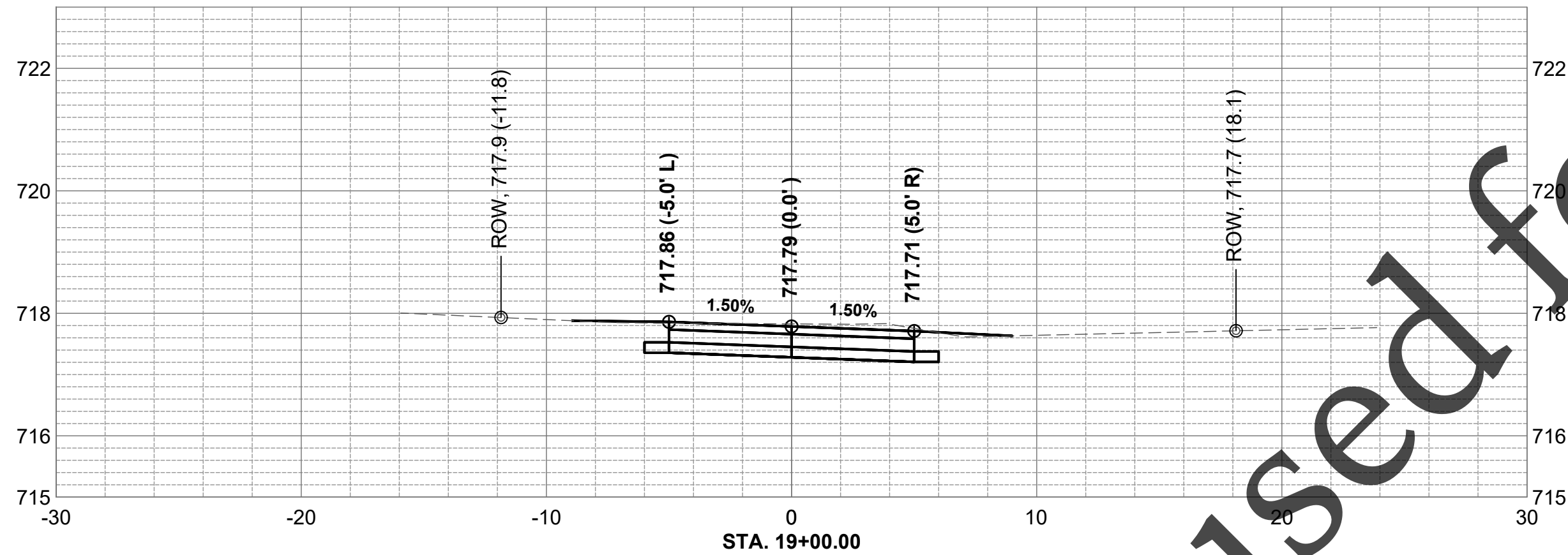
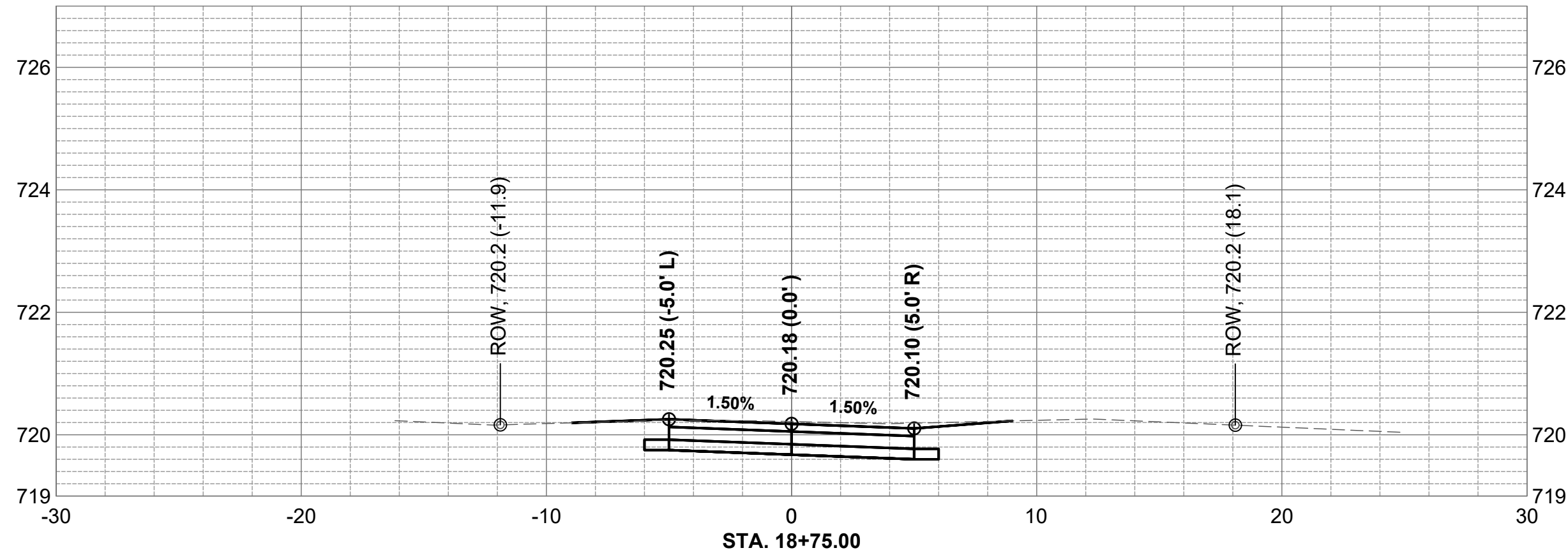
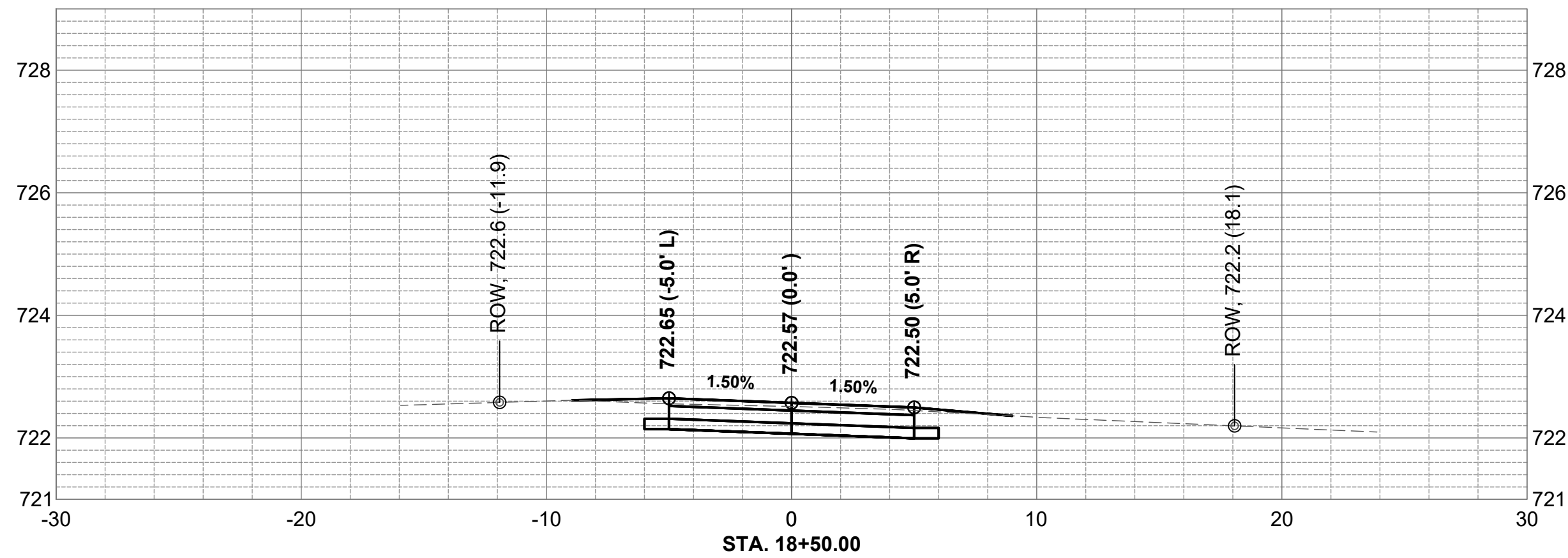
CROSS SECTIONS (STA. 16+50.00 TO STA. 18+25.00)

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NOTES

1. AGGREGATE BASE COURSE SHOWN ON CROSS SECTIONS REPRESENTS GRADING AND SHAPING OF EXISTING AGGREGATE DRIVEWAY FOLLOWING 4" CORE-OUT FOR PROPOSED PAVEMENT.
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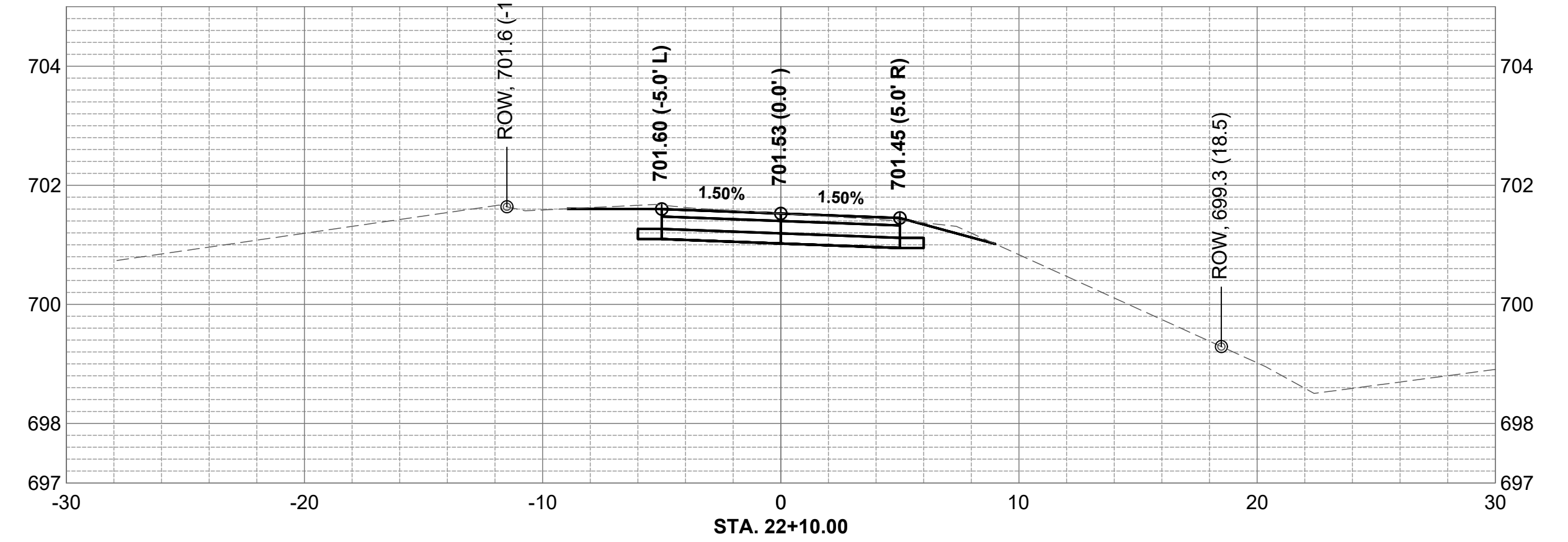
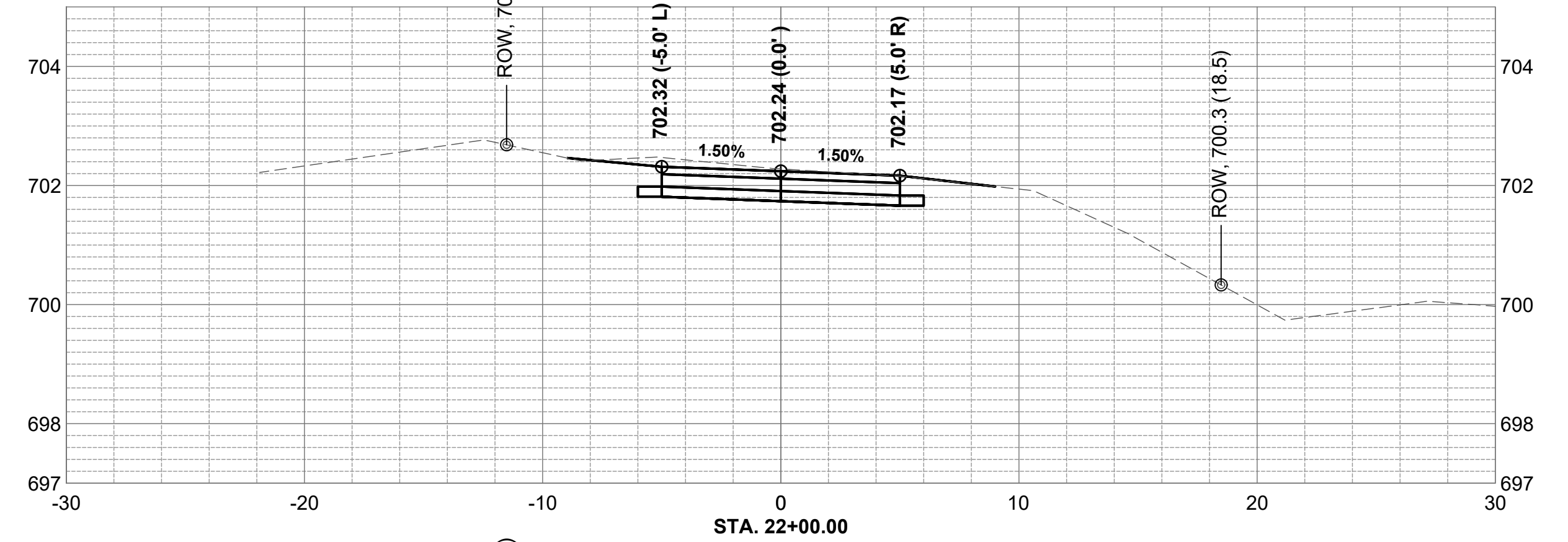
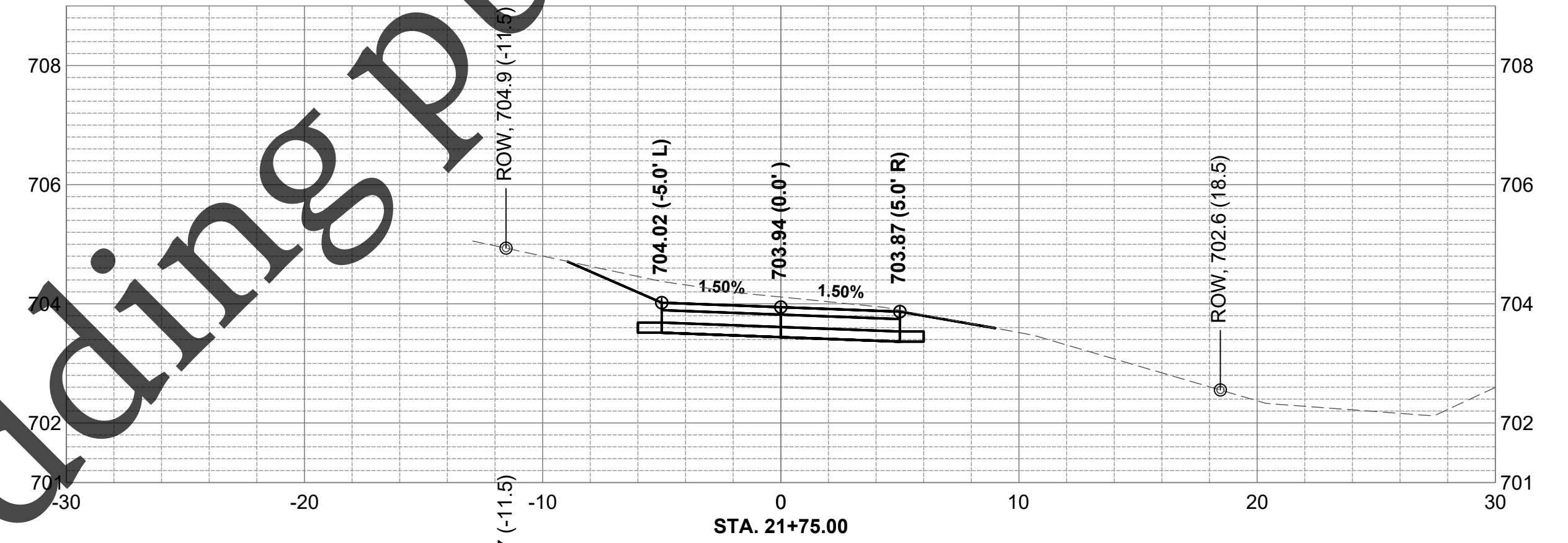
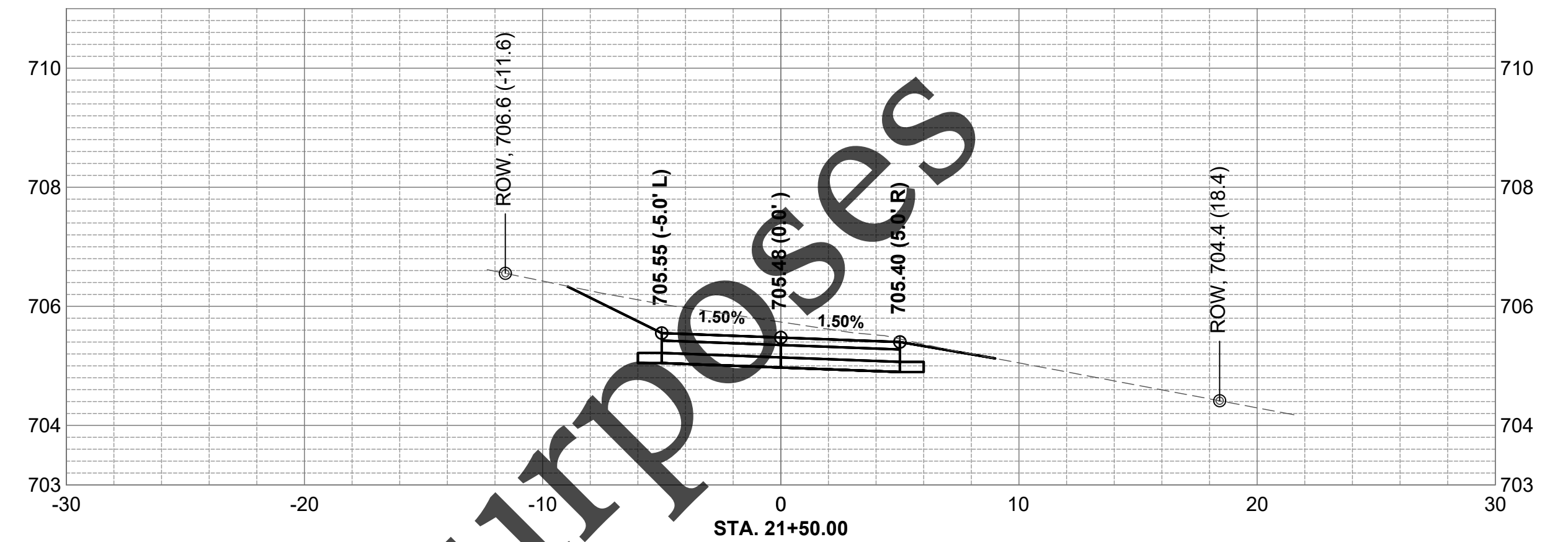
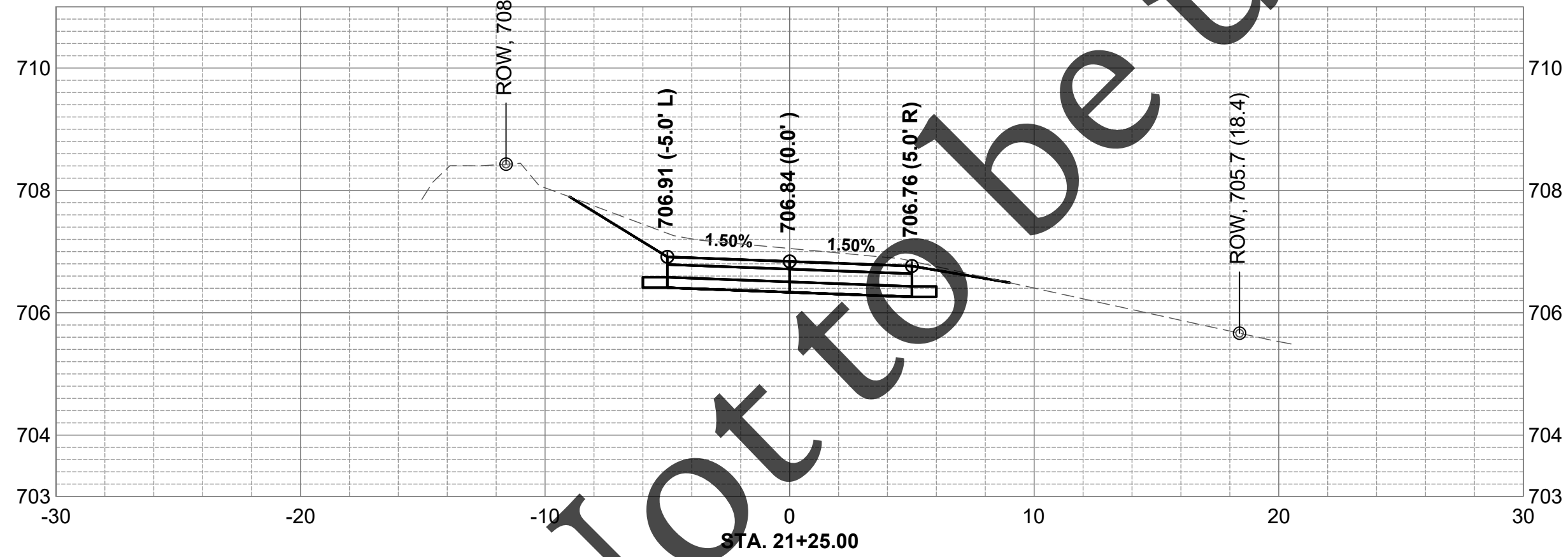
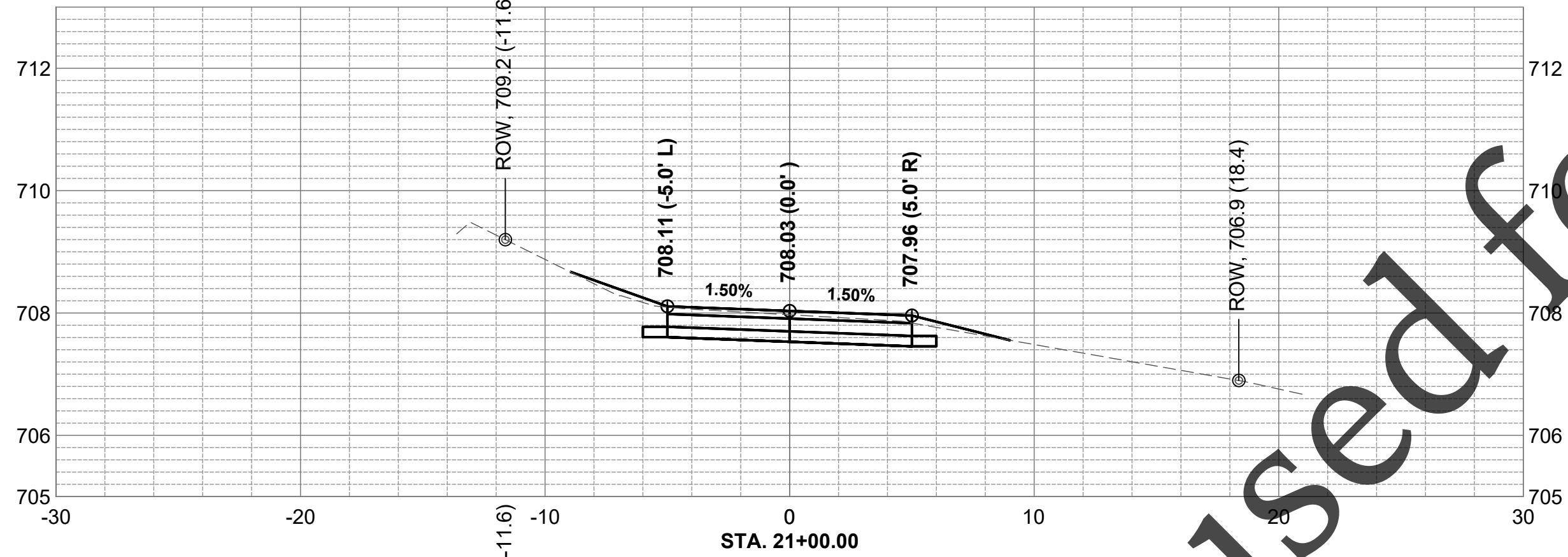
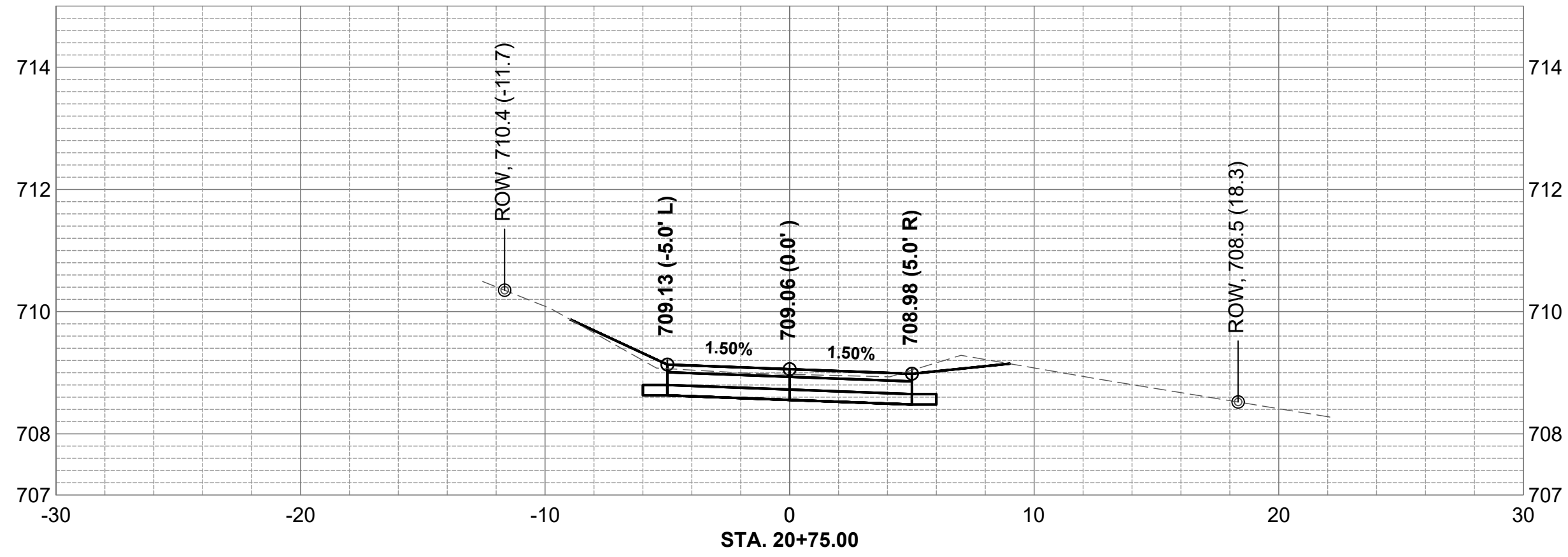
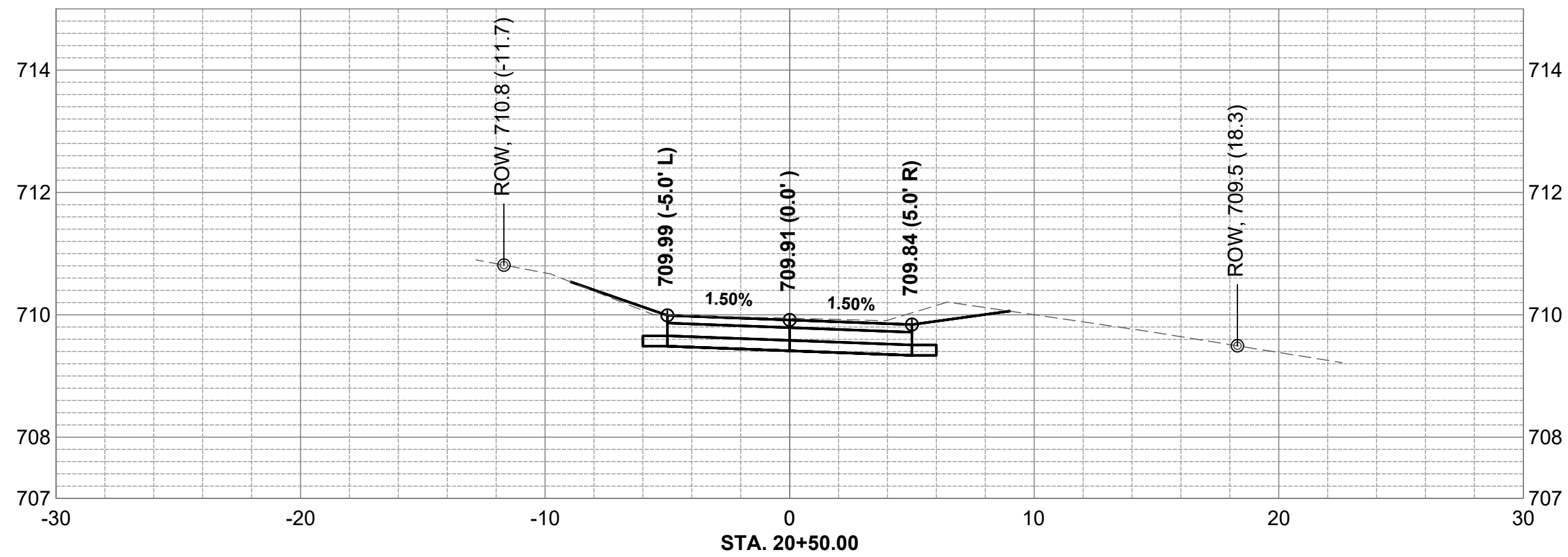
CROSS SECTIONS (STA. 18+50.00 TO STA. 20+25.00)

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NOTES

1. AGGREGATE BASE COURSE SHOWN ON CROSS SECTIONS REPRESENTS GRADING AND SHAPING OF EXISTING AGGREGATE DRIVEWAY FOLLOWING 4" CORE-OUT FOR PROPOSED PAVEMENT.
2. AGGREGATE BASE COURSE, TYPE B, CA6 QUANTITY TO BE USED IF NEEDED FOR SHAPING. IT IS ANTICIPATED THAT APPROXIMATELY 89 CY OF AGGREGATE WILL BE GENERATED BY CORE-OUT FOR PROPOSED PAVEMENT.



No.	DATE	REVISION	INT.

SOUTH MAIN LIFT STATION ACCESS IMPROVEMENTS CAPITAL PROJECT NO. 2525

CROSS SECTIONS (STA. 20+50.00 TO STA. 22+10.00)

FOR BID

Sheet No.
9 of 10

Date:
8/15/2024

file: \\admrwd.internal\mwd\data\ENGDOC\1\District Projects\Lift Station Paving 252501 Design\Drawings (Working Folder)\2024 Paving Plan Set - Sections.dwg

ROLLED EROSION CONTROL PRODUCTS

Staking Pattern Guide

Stake within 2" of the end of Wattle

Straw Wattle or Rolled Excelsior in 3" Deep Trench

2" or less

6" Min.

Wood Stake

Notes:

1. Overlap minimum is the diameter of the roll.

2. 4" spacing for wattles.

3. 2" spacing for rolled excelsior.

4. Or space according to manufacturer's specifications.

Stake Detail

Roll Erosion Control Product

Wood Stake (to only penetrate netting)

Flow

Channel Bottom

3" Deep Trench

Notes:

1. Drawings are not to scale.

2. Ends of wattles or rolled excelsior shall be turned at least 6" upslope.

3. Recommended stakes are 1 1/8" wide x 1 1/8" thick x 30" long.

4. Stakes shall not extend above the straw wattle more than 2".

5. Spacing: The toe of the upstream ditch check shall create a horizontal line with the top of the downstream ditch check.

6. When compost filter sock ditch check is used, place a compost berm upstream of the filter sock (see IUM 805). A trench is not required.

Compost Filter Sock Detail

Compost Filter Material

1 1/2" Wood Stake (or equal)

Place additional Compost Filter Material to fill the seam between the tube and the ground.

Flow

Notes:

1. Drawings are not to scale.

2. Ends of wattles or rolled excelsior shall be turned at least 6" upslope.

3. Recommended stakes are 1 1/8" wide x 1 1/8" thick x 30" long.

4. Stakes shall not extend above the straw wattle more than 2".

5. Spacing: The toe of the upstream ditch check shall create a horizontal line with the top of the downstream ditch check.

6. When compost filter sock ditch check is used, place a compost berm upstream of the filter sock (see IUM 805). A trench is not required.

REFERENCE

Project _____

Designed _____ Date _____

Checked _____ Date _____

Approved _____ Date _____

STANDARD DWG. NO.
IUM-514

SHEET 1 OF 1

DATE 8-19-11

BURY UPSLOPE END OF BLANKET IN TRENCH 6" WIDE BY 6" DEEP

OVERLAP BLANKETS SIDE BY SIDE USING A 4" OVERLAP WITH UPSLOPE BLANKET LAID OVER DOWNSLOPE BLANKET

OVERLAP END OF UPSLOPE BLANKET 4" OVER DOWNSLOPE BLANKET AND SECURE WITH STAPLES

BURY TOE OF BLANKET IN TRENCH 6" WIDE BY 6" DEEP

DETAIL 1

DETAIL 2

DETAIL 3

STAPLE DETAIL

PUSH PIN DETAIL

NOTES:

1. Staples shall be placed in a diamond pattern at 2 per s.y. for stiched blankets. Non-stiched shall use 4 staples per s.y. of material. This equates to 200 staples with stiched blanket and 400 staples with non-stiched blanket per 100 s.y. of material.

2. Staple or push pin lengths shall be selected based on soil type and conditions. (minimum staple length is 6")

3. Erosion control material shall be placed in contact with the soil over a prepared seedbed.

4. All anchor slots shall be stapled at approximately 12" intervals.

REFERENCE

Project _____

Designed _____ Date _____

Checked _____ Date _____

Approved _____ Date _____

STANDARD DWG. NO.
IUM-620A

SHEET 1 OF 2

DATE 04-15-2021

SILT FENCE PLAN

Filter Fabric

FASTENED TO THE POST

5' Max (Typ)

2' Min

18" Min (Typ)

ELEVATION

Filter Fabric

Direction of Flow

Well Compacted

6" Min

FABRIC ANCHOR DETAIL

NOTES:

1. Temporary sediment fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.

2. Filter fabric shall meet the requirements of material specification 59200 Textile Table 1, Class 2.

3. Fence posts shall be either standard steel post or wood post 2" X 2" nominal.

REFERENCE

Project _____

Designed _____ Date _____

Checked _____ Date _____

Approved _____ Date _____

STANDARD DWG. NO.
IUM-620A

SHEET 1 OF 2

DATE 04-15-2021

SILT FENCE - SPLICING TWO FENCES

Filter Fabric

Step 1

Step 2

Step 3

Posts

Filter Fabric

ATTACHING TWO SILT FENCES

NOTES:

1. Place the end post of the second fence inside the end post of the first fence.

2. Rotate both posts at least 180 degrees in a clockwise direction to create a tight seal with the fabric material.

3. Cut the fabric near the bottom of the stakes to accommodate the 6" flap.

4. Drive both posts a minimum of 18 inches into the ground and bury the flap.

5. Compact backfill (particularly at splices) completely to prevent stormwater piping.

REFERENCE

Project _____

Designed _____ Date _____

Checked _____ Date _____

Approved _____ Date _____

STANDARD DWG. NO.
IUM-620B(W)

SHEET 1 OF 1

DATE 3-16-2012

Four Rivers
Sanitation Authority

No.	DATE	REVISION	INT.

SOUTH MAIN LIFT STATION ACCESS IMPROVEMENTS
CAPITAL PROJECT NO. 2525

DETAILS

Sheet No.
10 of 10

FOR BID

Date:
8/15/2024