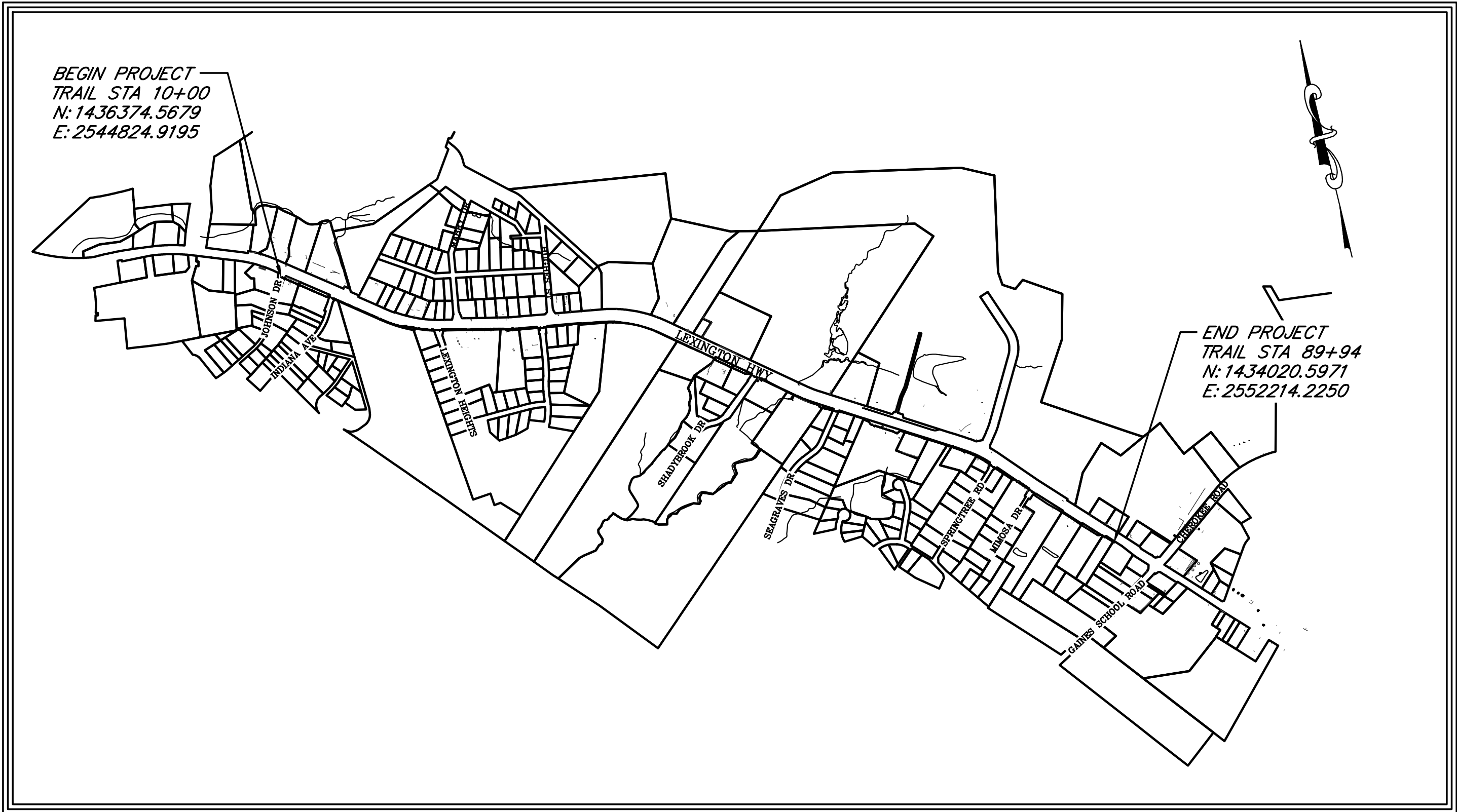


PROJECT DATA

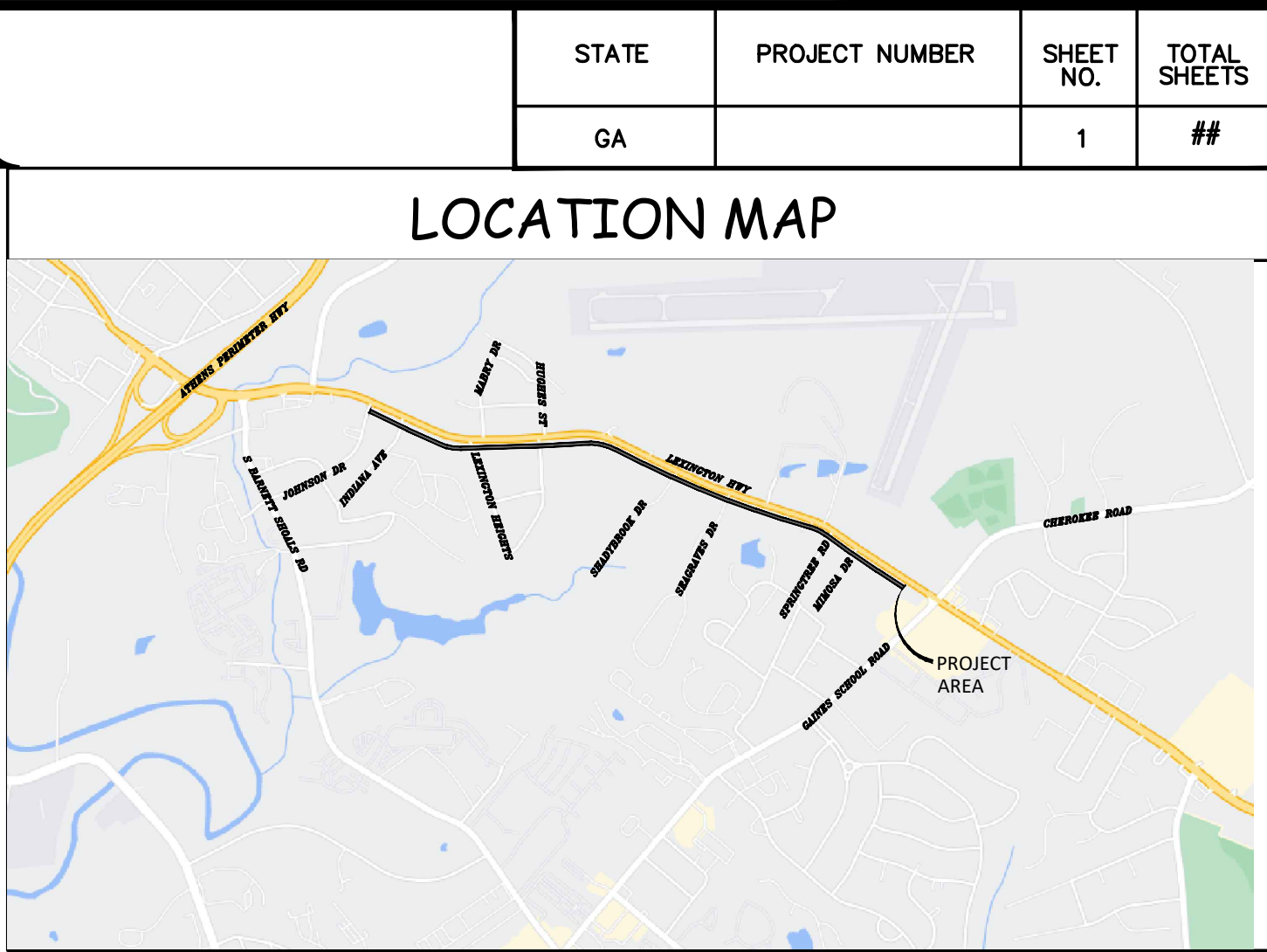
LENGTH OF PROJECT	1.51 MILES	
	GREENWAY	TOTAL
NET LENGTH OF MULTI-USE TRAIL	1.51	1.51
NET LENGTH OF BRIDGES	0.00	0.00
NET LENGTH OF PROJECT	1.51	1.51
NET LENGTH OF EXCEPTION	0.00	0.00
GROSS LENGTH OF PROJECT	1.51	1.51
PERCENT LENGTH OF PROJECT COUNTY		100%
THIS PROJECT IS LOCATED WITHIN CONGRESSIONAL DISTRICT 10		
THIS PROJECT IS LOCATED WITHIN ATHENS-CLARKE COUNTY		

LEXINGTON ROAD CORRIDOR
SIDEWALK PROJECTS

FOR
ATHENS-CLARKE COUNTY
DEPARTMENT OF LEISURE SERVICES



N.T.S.



N.T.S.

DISTURBED AREA = #### AC
A NOI IS REQUIRED

NOTE:
PROJECT TO BE CONSTRUCTED AS PER GEORGIA
DOT STANDARD SPECIFICATIONS, 2013 EDITION
AND 2016 STANDARD SUPPLEMENTAL
SPECIFICATIONS, AS APPROVED BY THE FEDERAL
HIGHWAY ADMINISTRATION AND AS MODIFIED BY
CONTRACT DOCUMENTS.

THE DATA, TOGETHER WITH ALL OTHER INFORMATION
SHOWN ON THESE PLANS OR IN ANYWAY INDICATED
THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY
OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS
AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL
CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS
INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT
BIND THE DEPARTMENT OF TRANSPORTATION IN ANY WAY.
THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO
SUBSECTIONS 102.04, 102.05, AND 104.03 OF THE
SPECIFICATIONS.

NOTE:
ALL REFERENCES IN THIS DOCUMENT, WHICH INCLUDES ALL PAPERS,
WRITINGS, DOCUMENTS, DRAWINGS, OR PHOTOGRAPHS USED, OR TO
BE USED IN CONNECTION WITH THIS DOCUMENT, TO "STATE HIGHWAY
DEPARTMENT OF GEORGIA", "STATE HIGHWAY DEPARTMENT", "GEORGIA
STATE HIGHWAY DEPARTMENT", "HIGHWAY DEPARTMENT", OR
"DEPARTMENT" WHEN THE CONTEXT THEREOF MEANS THE STATE
HIGHWAY DEPARTMENT OF GEORGIA MEAN, AND SHALL BE DEEMED
TO MEAN THE DEPARTMENT OF TRANSPORTATION AND/OR THE
UNIFIED GOVERNMENT OF ATHENS-CLARKE COUNTY.

Begin	33.945895	N
Latitude		
Longitude	83.348100	W
End	33.939291	N
Latitude		
Longitude	83.323879	W



Alfred Benesch & Company
1005 Broad Street, Suite 200 Augusta, GA 30901
P 706.722.4114 - www.benesch.com

OWNER
24 HR. CONTACT
ATHENS-CLARKE COUNTY
DEREK DOSTER
301 COLLEGE AVE., SUITE 101
ATHENS, GA. 30603
706-613-3025



SUBMITTED BY VICTOR A. CONOVER

PLANS COMPLETED	APRIL 27, 2022
REVISIONS	

Sheet:
05-001



TYPICAL SECTION 8

TYPICAL SECTION 6

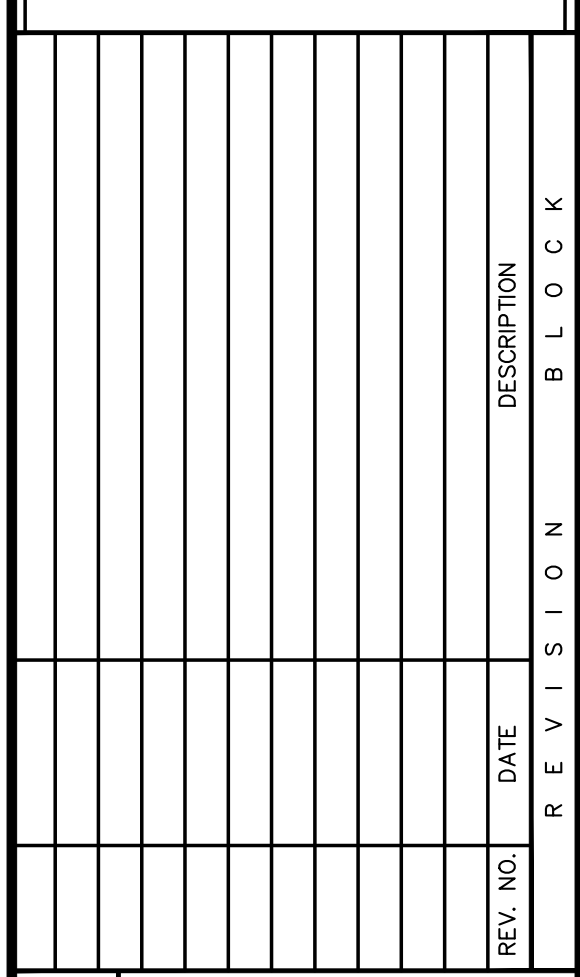
TYPICAL SECTION 9

TYPICAL SECTION 7

Sheet:
05-002



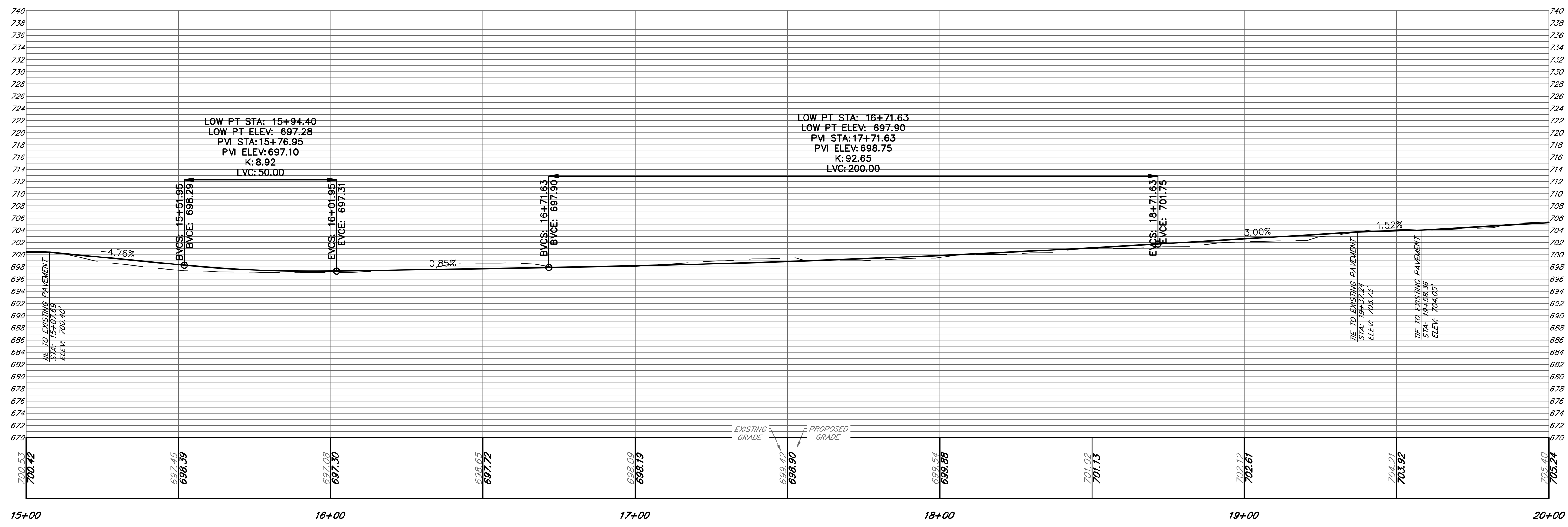
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COUNTY, GA

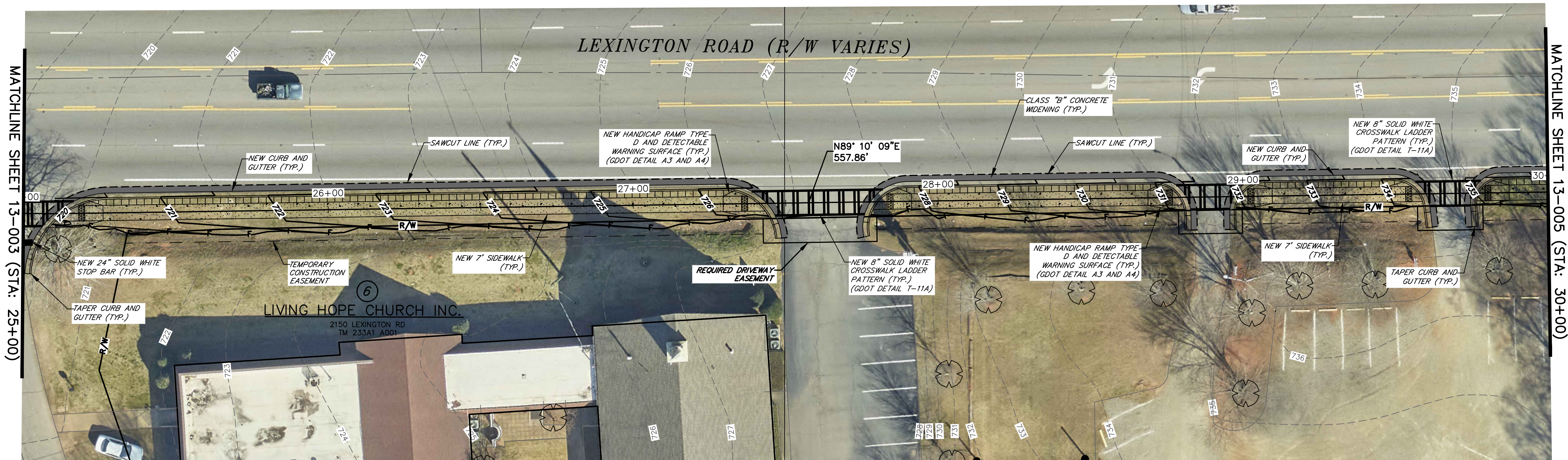
HEET TITLE:
CONSTRUCTION PLAN AND
PROFILE

PROJECT NAME
**LEXINGTON ROAD
CORRIDOR SIDEWALK
PROJECTS**

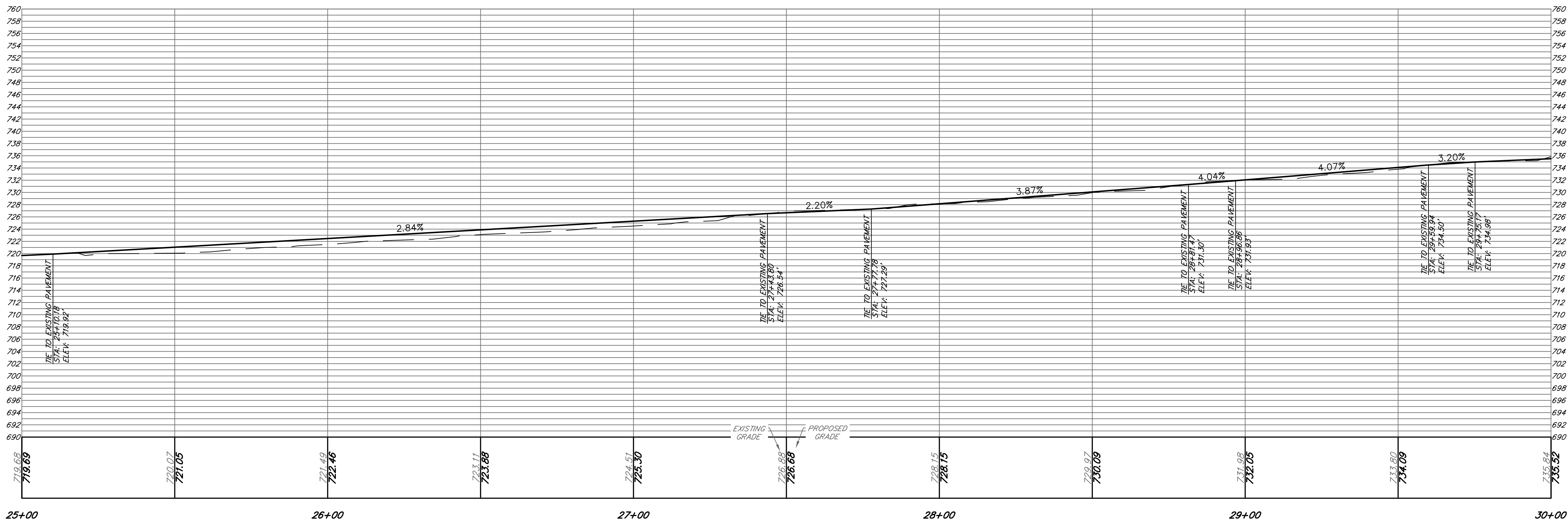



PROJECT INFORMATION
JOB NO: 19022041
DRAWN BY: KC
CHECKED BY: EH
DRAWING FILE: 19022041E.DWG
DRAWING SCALE: 1" = 20'
ORIGINAL RELEASE DATE: APRIL 27, 2022
Sheet: 13-002

PROPERTY INFORMATION					
PARCEL NO.	TAX PARCEL I.D.	OWNER	STREET ADDRESS	REQUIRED RIGHT OF WAY	REQUIRED TEMPORARY CONSTRUCTION EASEMENT AREA
6	233A1 A001	LIVING HOPE CHURCH INC.	2150 LEXINGTON ROAD	-	1975 SF
				REQUIRED TEMPORARY DRIVEWAY EASEMENT	
				650 SF	



1" = 20'
H: 1" = 20'
V: 1" = 10'



REVISION		BLOCK	
REV. NO.	DATE	DESCRIPTION	

ATHENS-CLARKE
COUNTY, GA

SHEET TITLE:
**CONSTRUCTION PLAN AND
PROFILE**
PROJECT NAME:
**LEXINGTON ROAD
CORRIDOR SIDEWALK
PROJECTS**

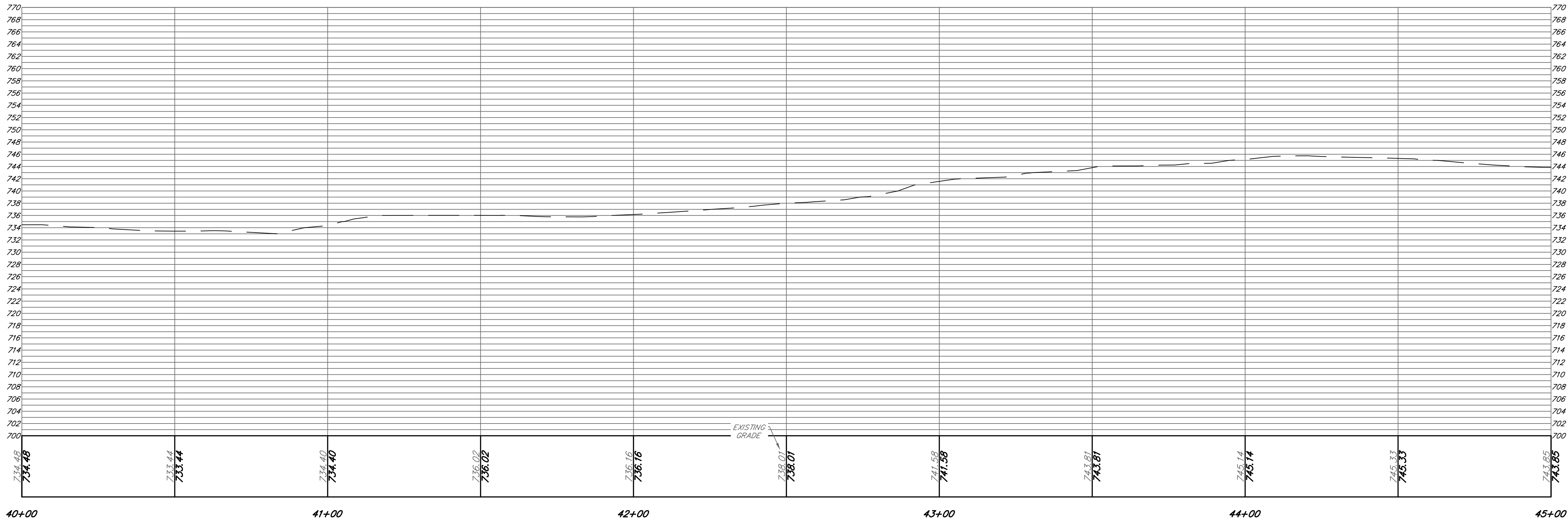


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DRAWN BY:	KC
CHECKED BY:	EH
DRAWING FILE:	19022041E.DWG
DRAWING SCALE:	1" = 20'
ORIGINAL RELEASE DATE:	APRIL 27, 2022

Sheet:
13-004



1" = 20'
H: 1" = 20'
V: 1" = 10'



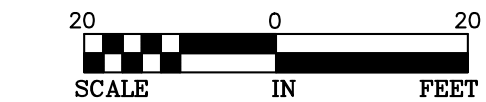
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REVISION		BLOCK	
REV. NO.	DATE	DESCRIPTION	

ATHENS-CLARKE
COUNTY, GA

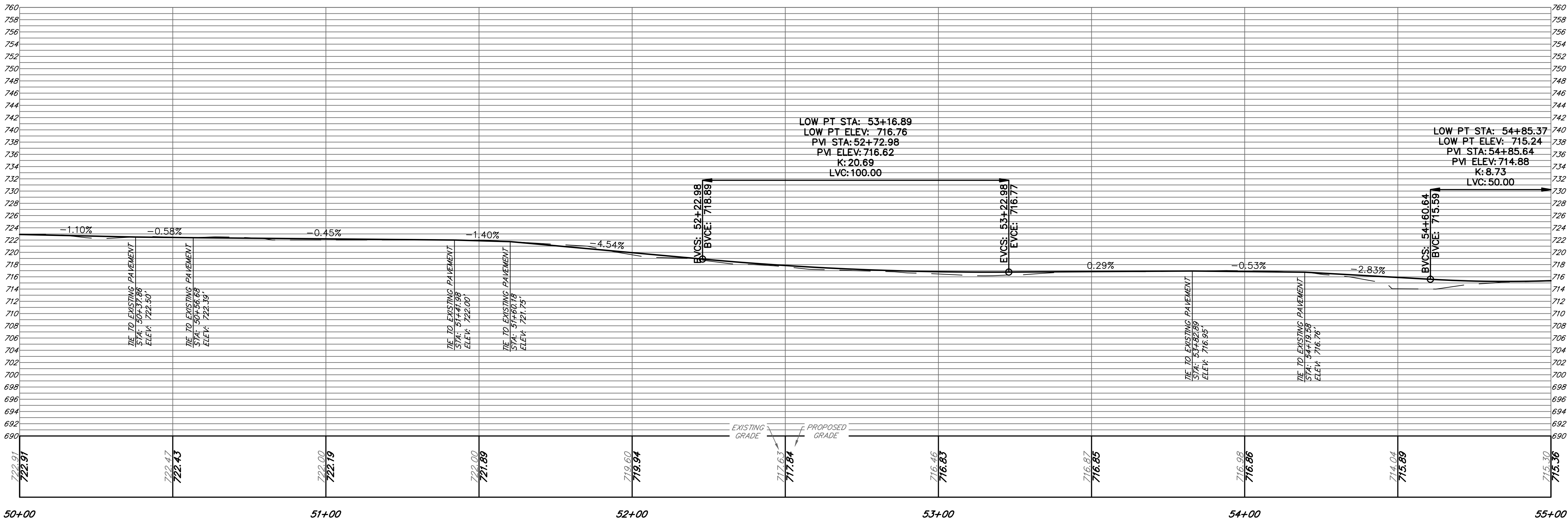
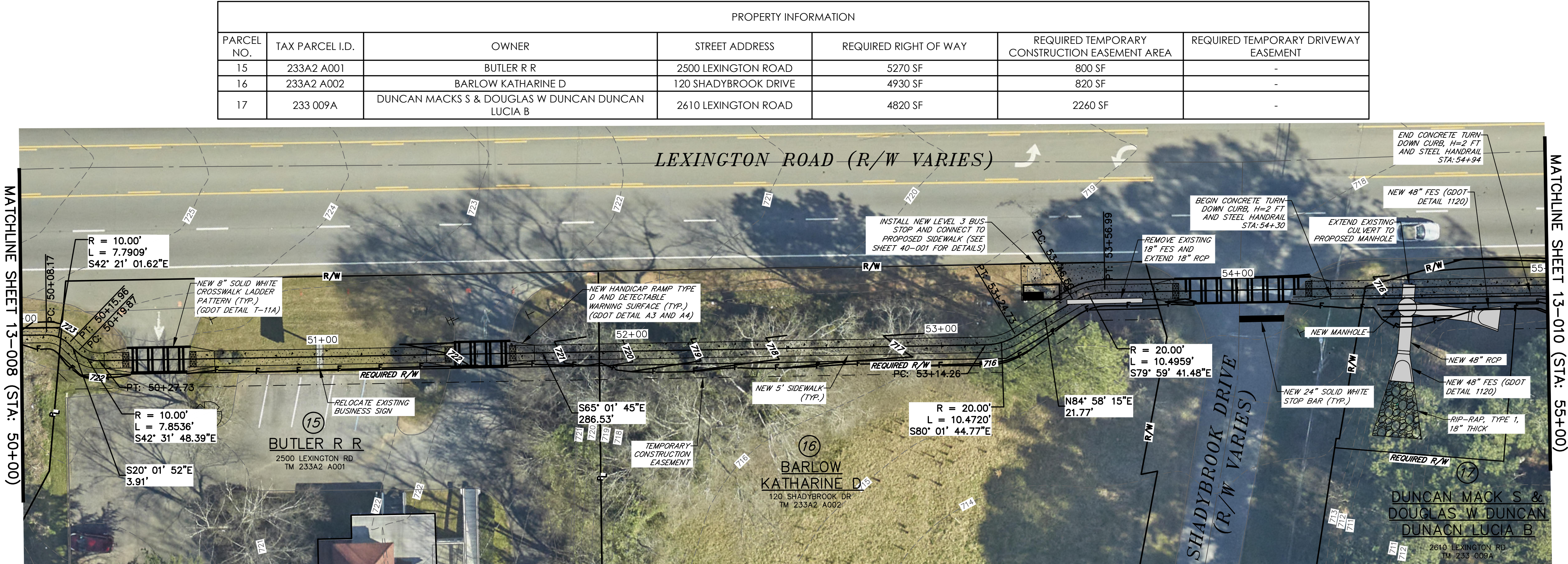
SHEET TITLE:
CONSTRUCTION PLAN AND
PROFILE

PROJECT NAME:
LEXINGTON ROAD
CORRIDOR SIDEWALK
PROJECTS



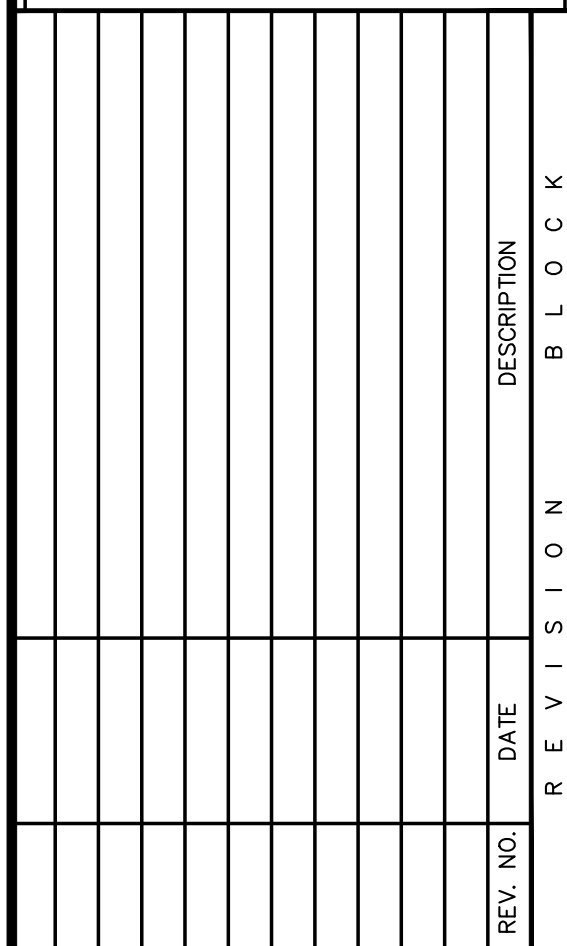
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DRAWN BY:	KC
CHECKED BY:	EH
DRAWING FILE:	19022041E.DWG
DRAWING SCALE:	1" = 20'
ORIGINAL RELEASE DATE:	APRIL 27, 2022

Sheet:
13-007





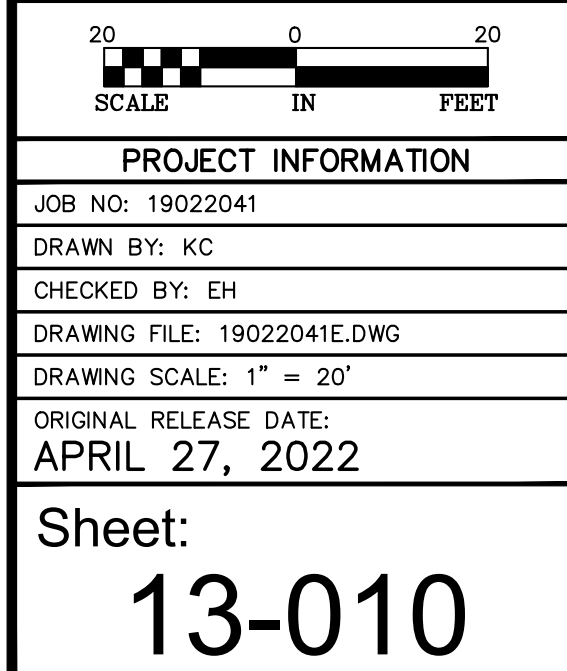
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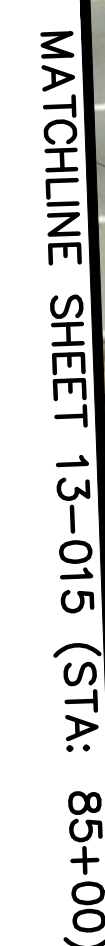


ATHENS-CLARKE
COUNTY, GA

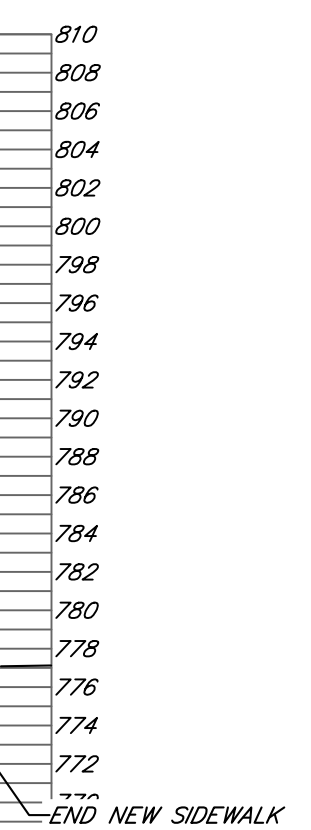
HEET TITLE:
CONSTRUCTION PLAN AND
PROFILE

PROJECT NAME
**LEXINGTON ROAD
CORRIDOR SIDEWALK
PROJECTS**



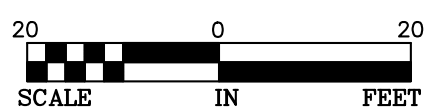


H: $1'' = 20'$
V: $1'' = 10'$



SHEET TITLE: CONSTRUCTION PLAN AND PROFILE

LEXINGTON ROAD CORRIDOR SIDEWALK PROJECTS

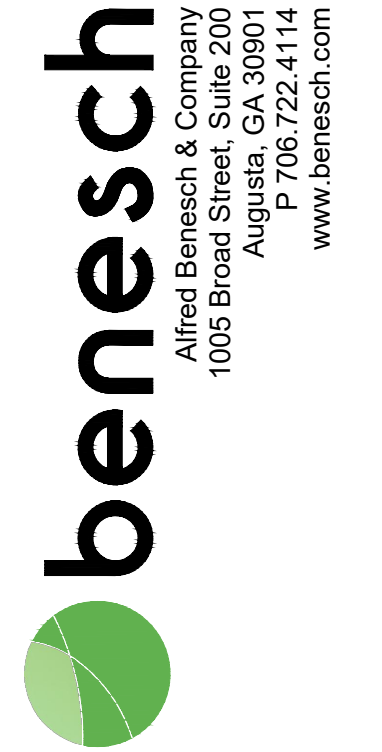
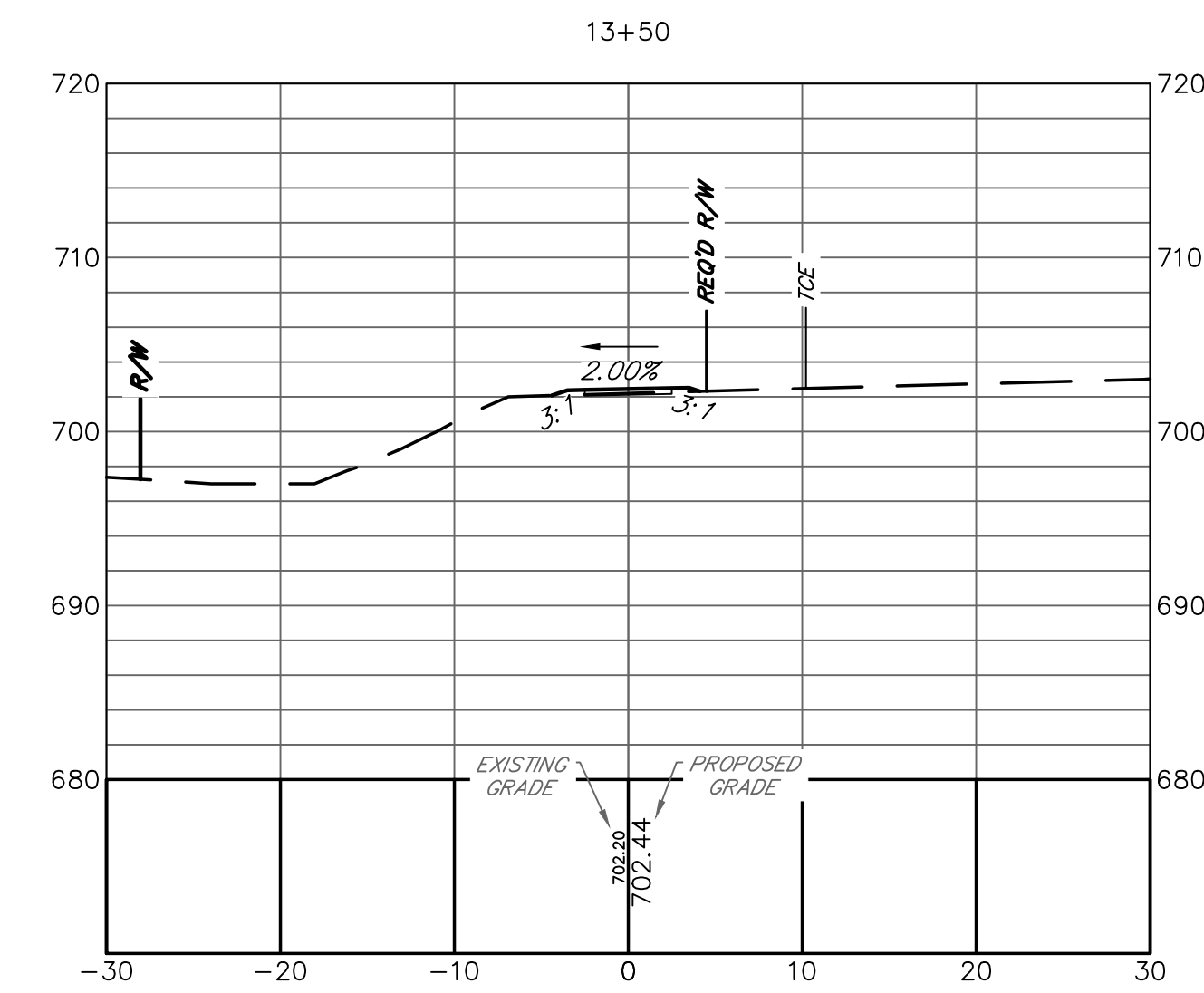
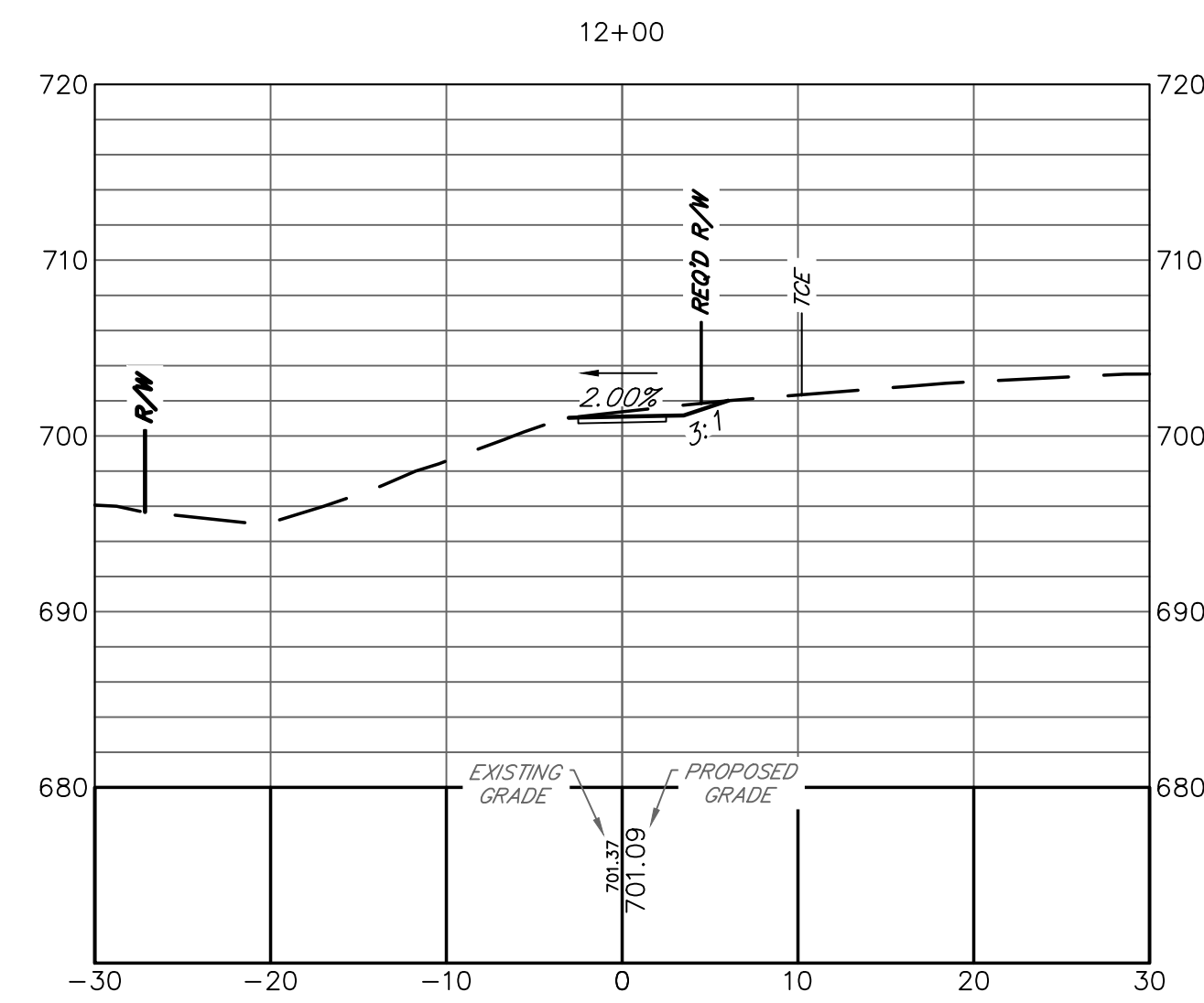
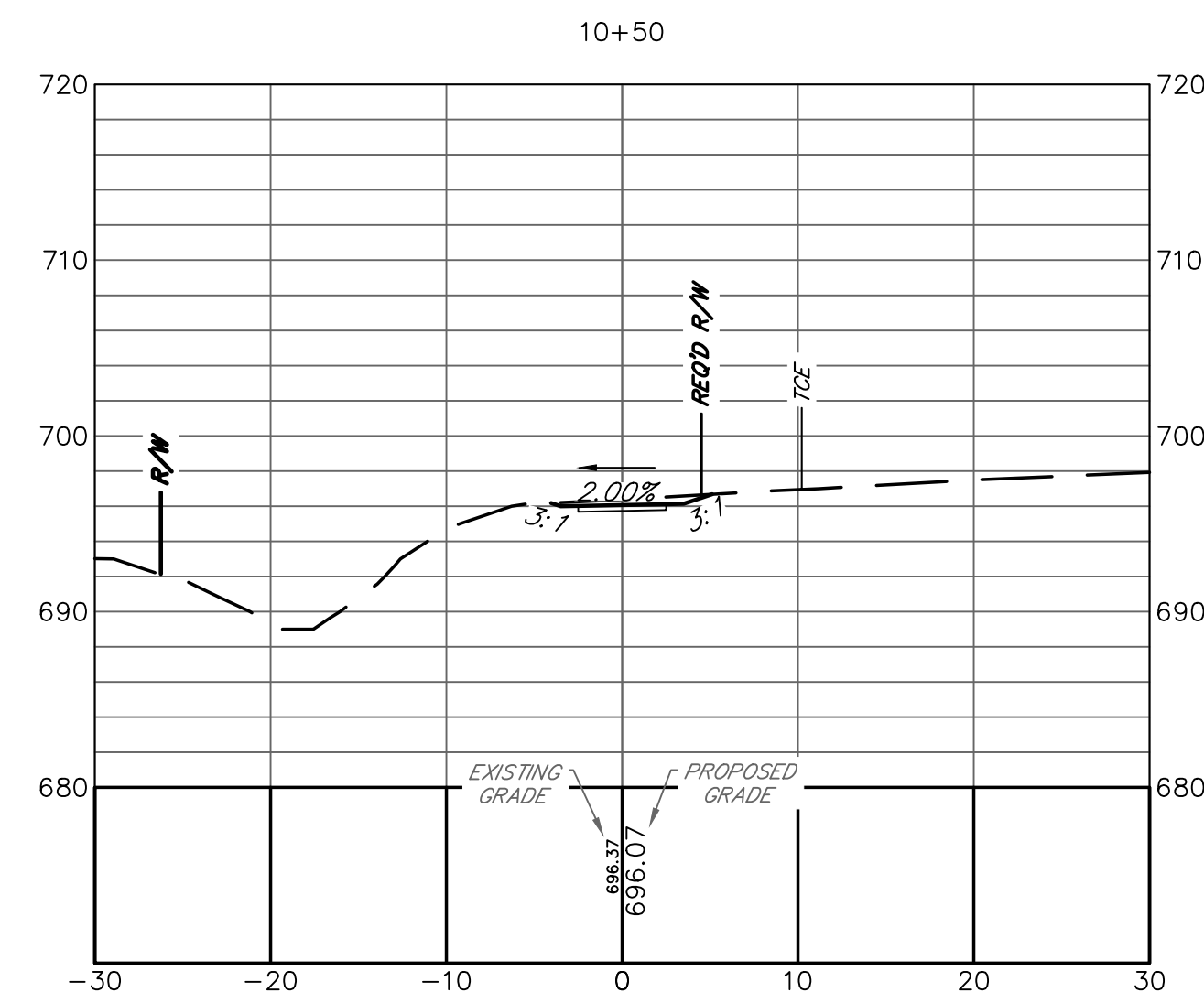
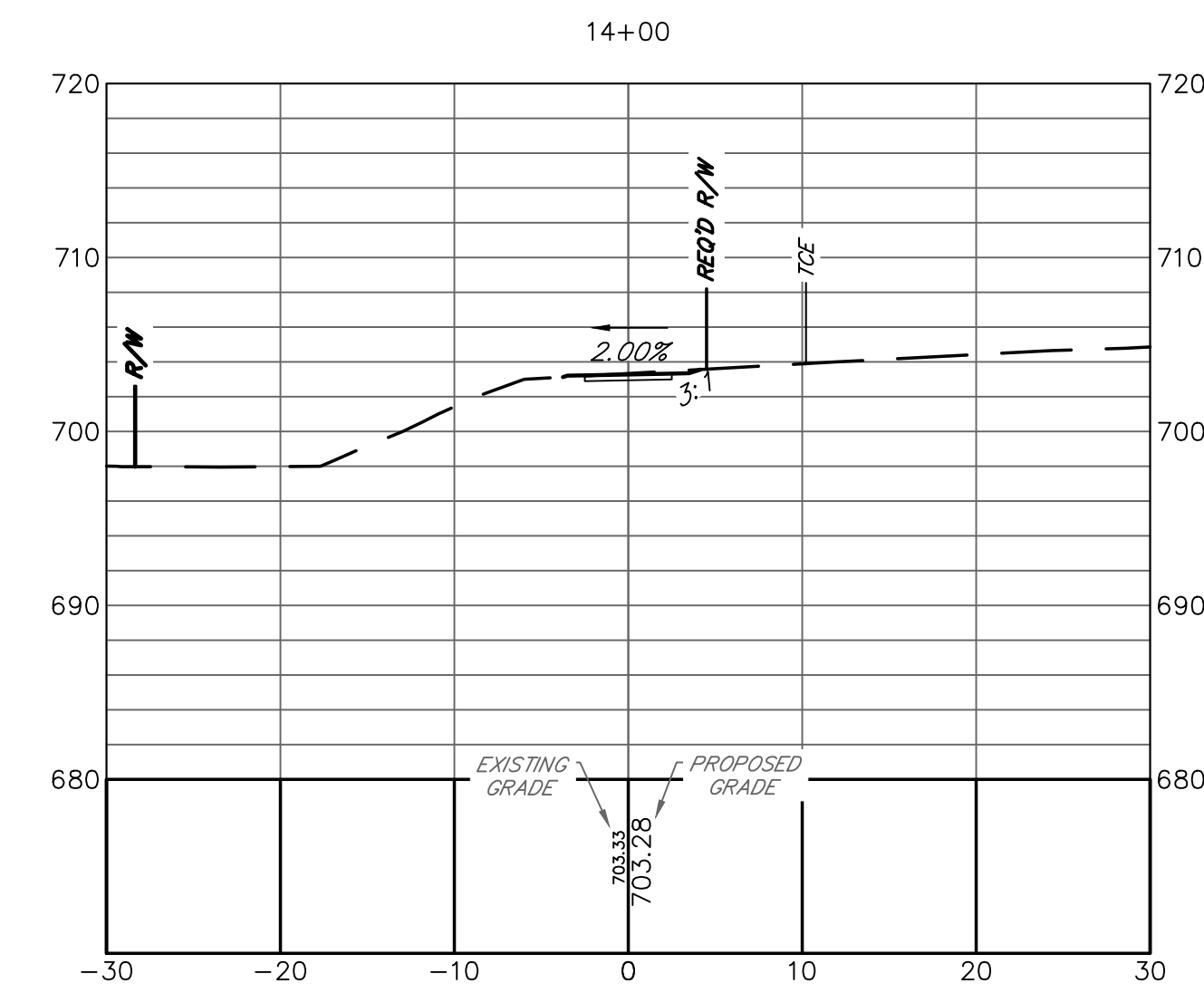
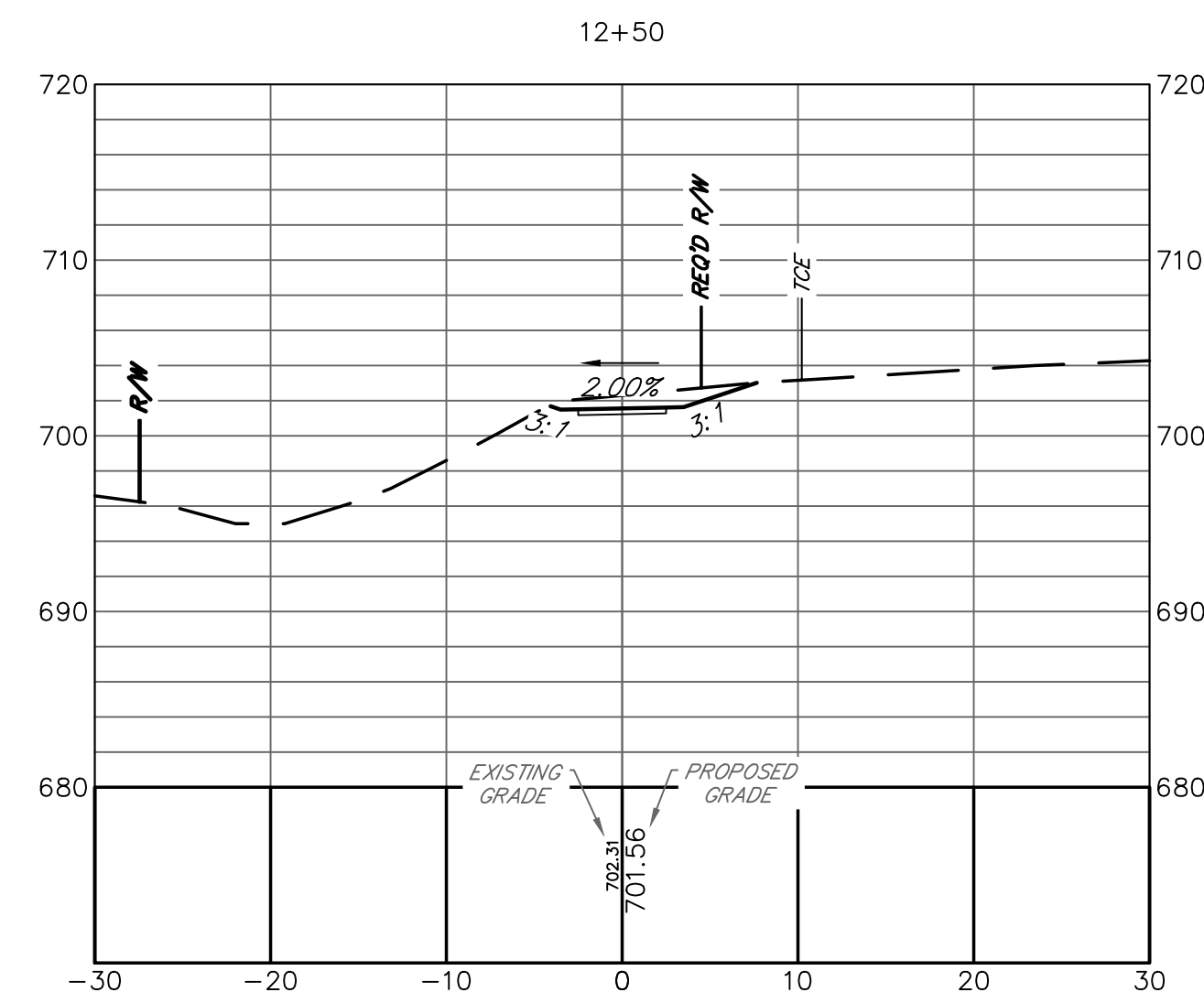
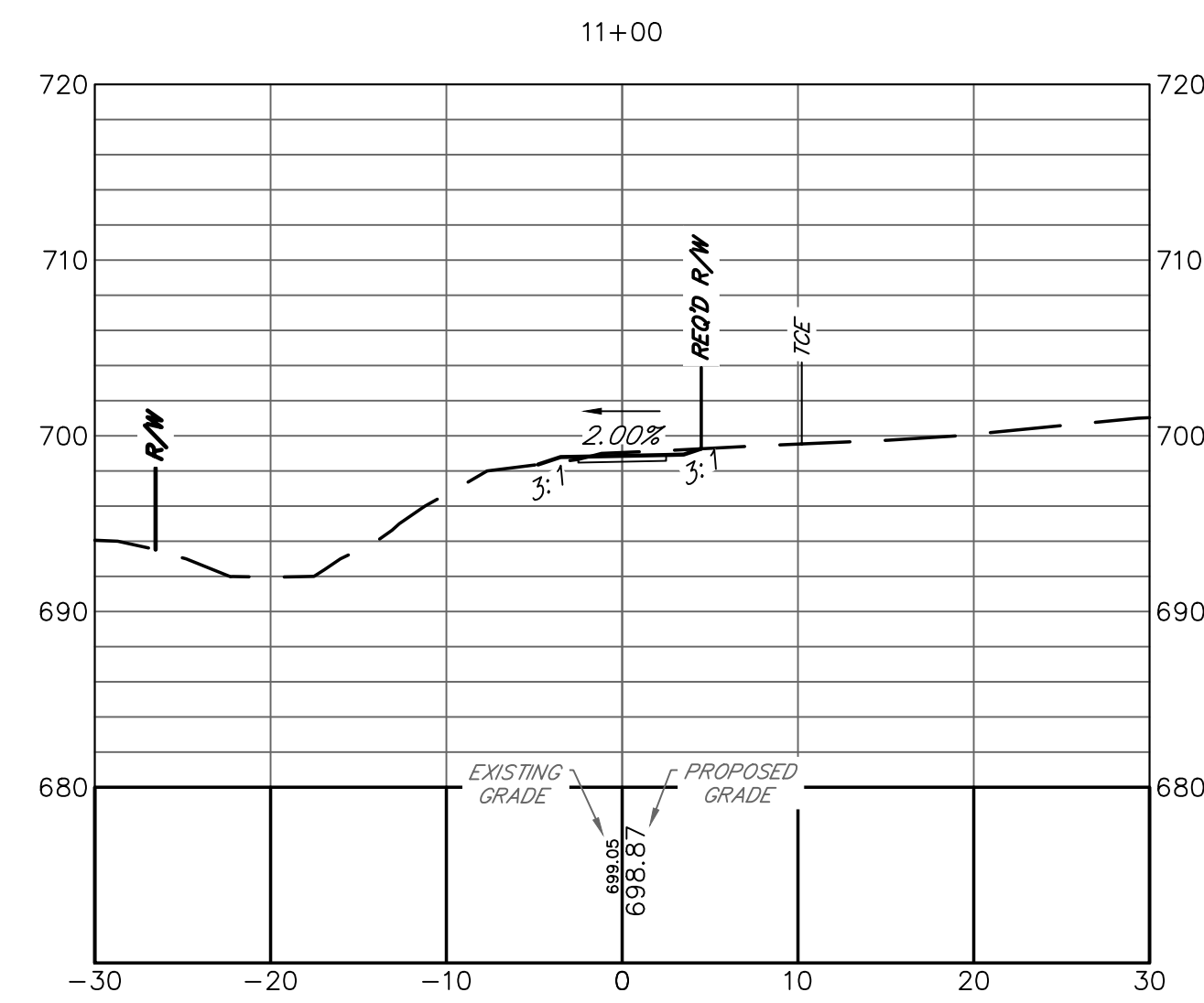
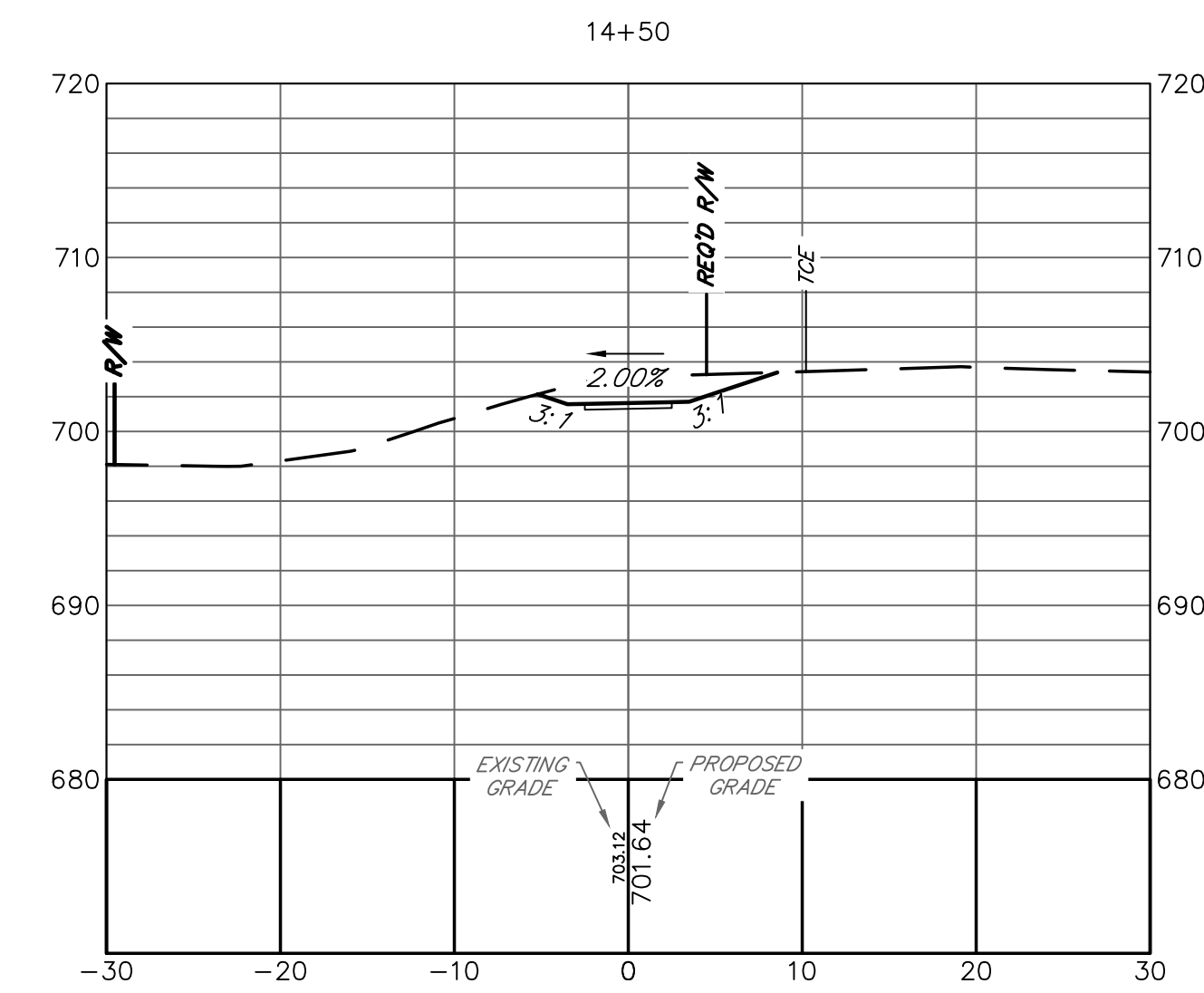
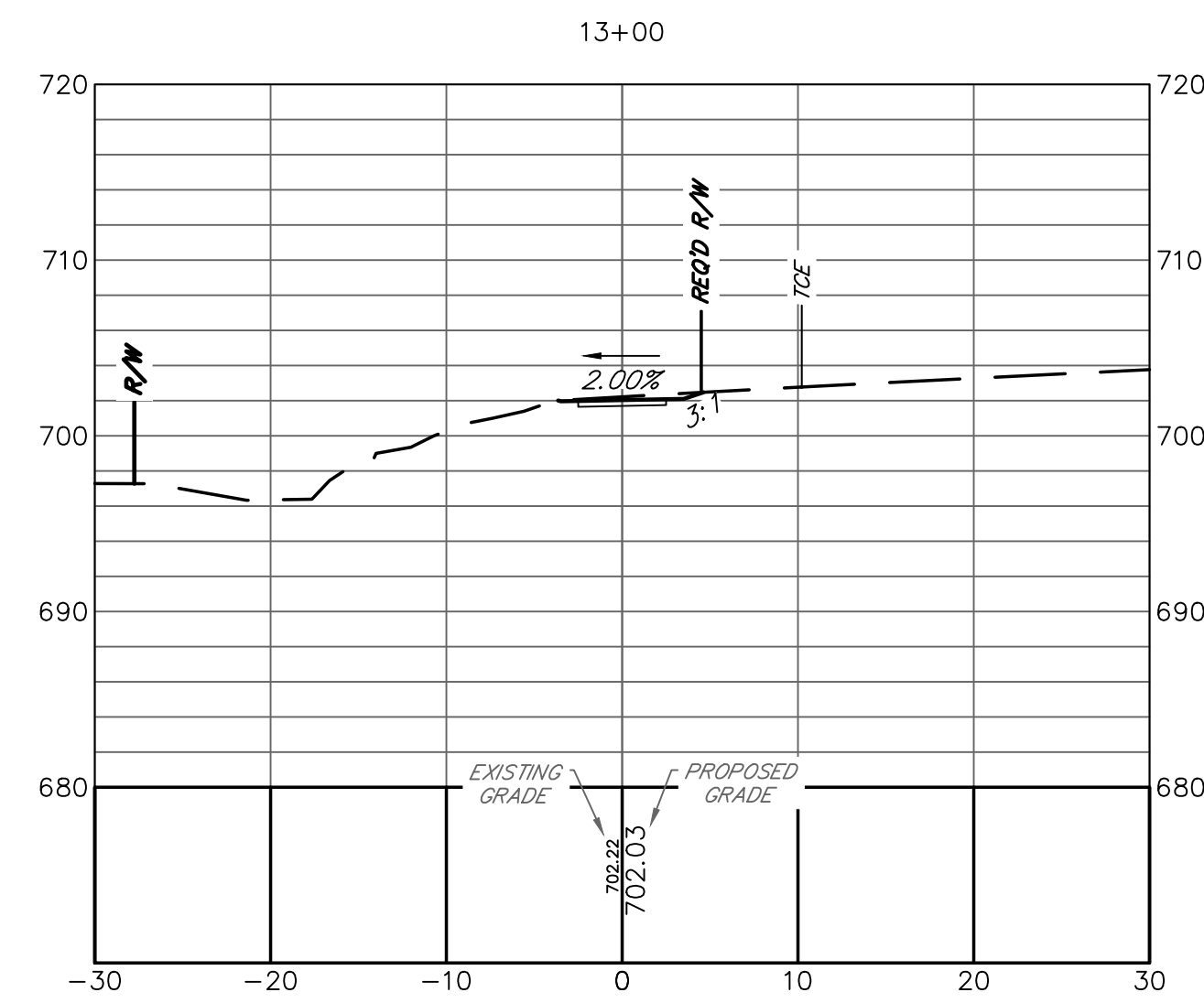
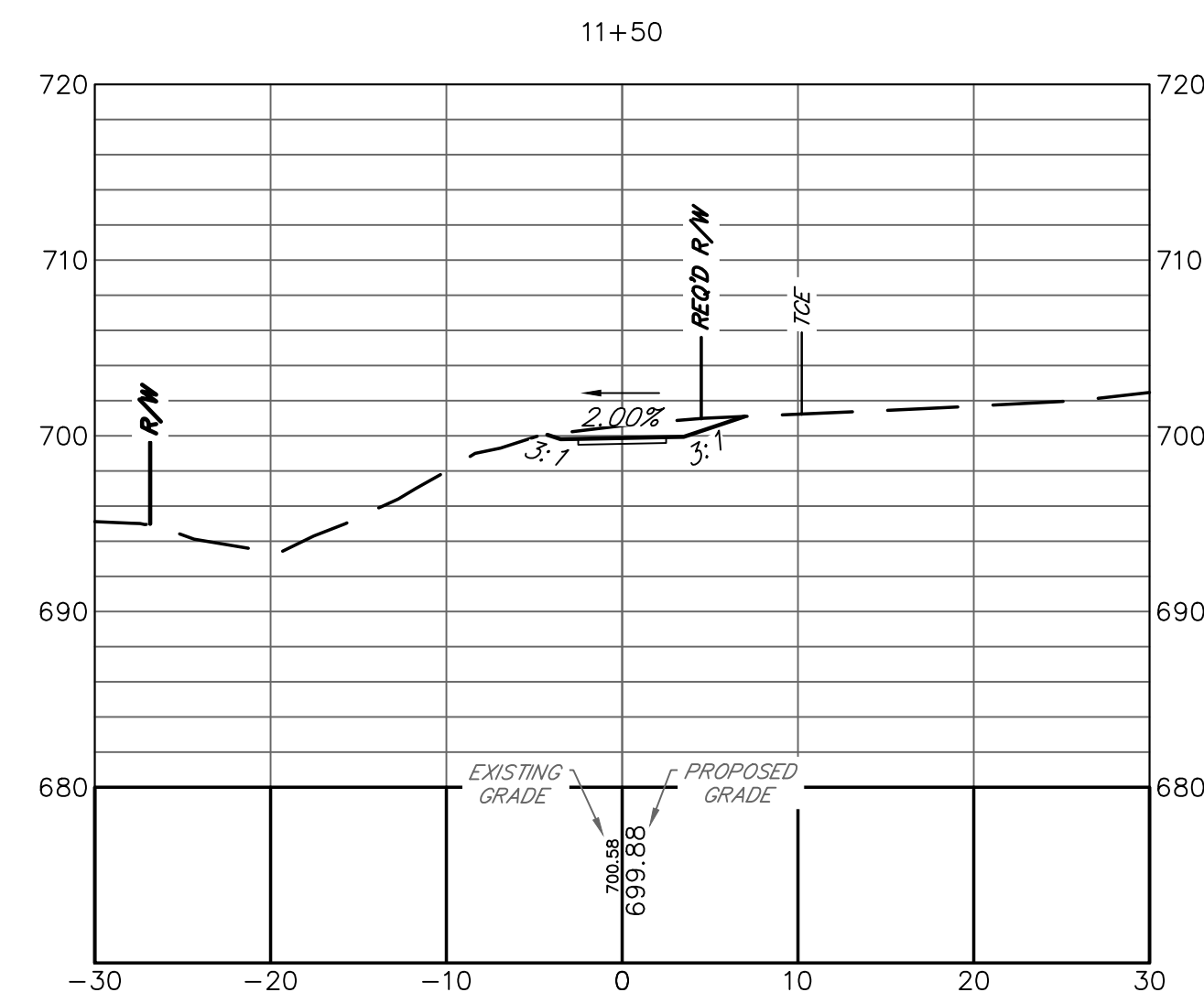


PROJECT INFORMATION	
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DRAWN BY: KC
CHECKED BY: EH
DRAWING FILE: 19022041E.DWG
DRAWING SCALE: 1" = 20'
ORIGINAL RELEASE DATE: APRIL 27, 2022

Sheet:
13-016

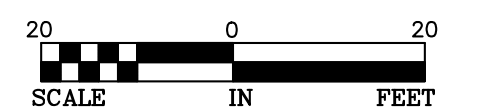
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ATHENS-CLARKE
COUNTY, GA

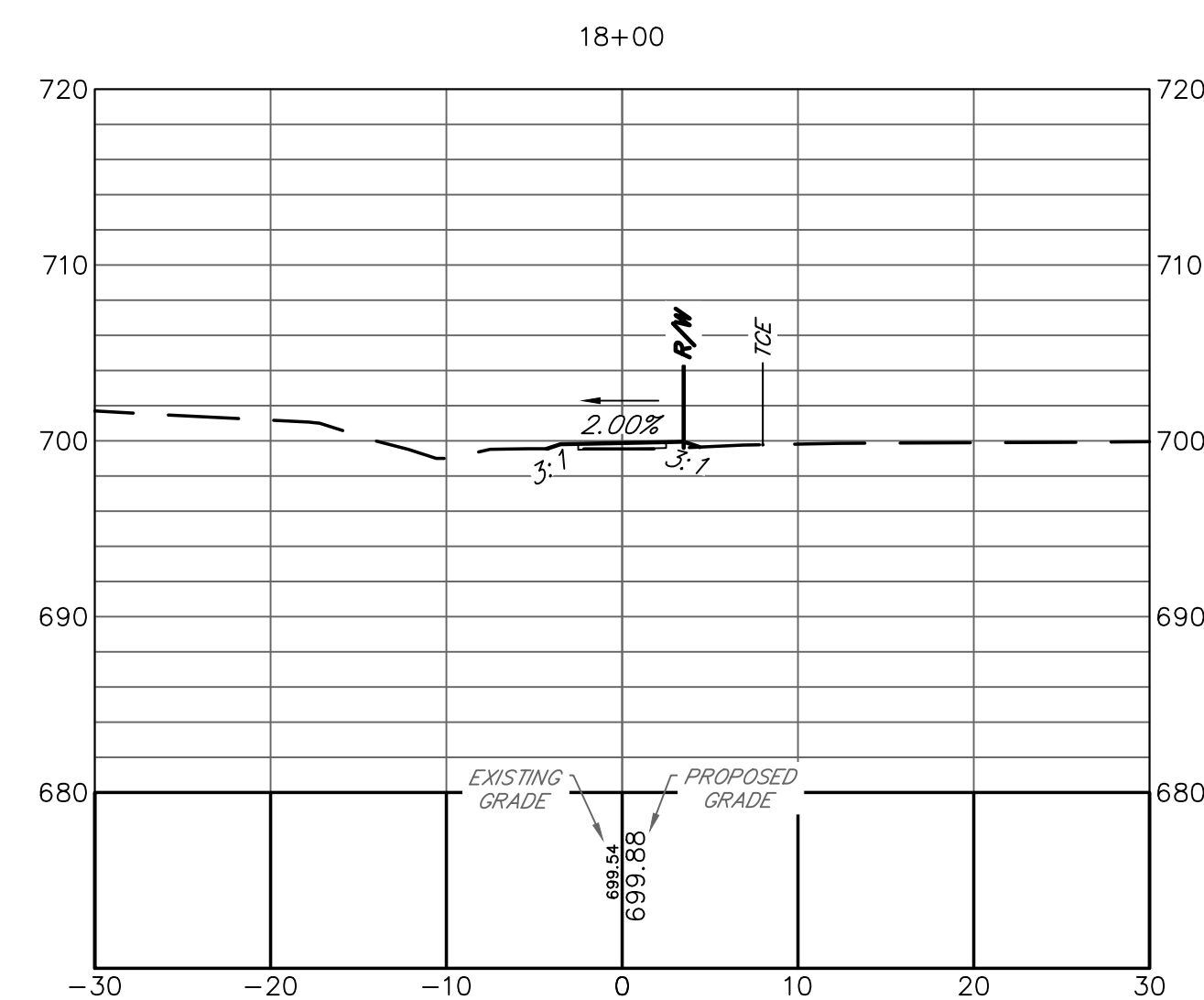
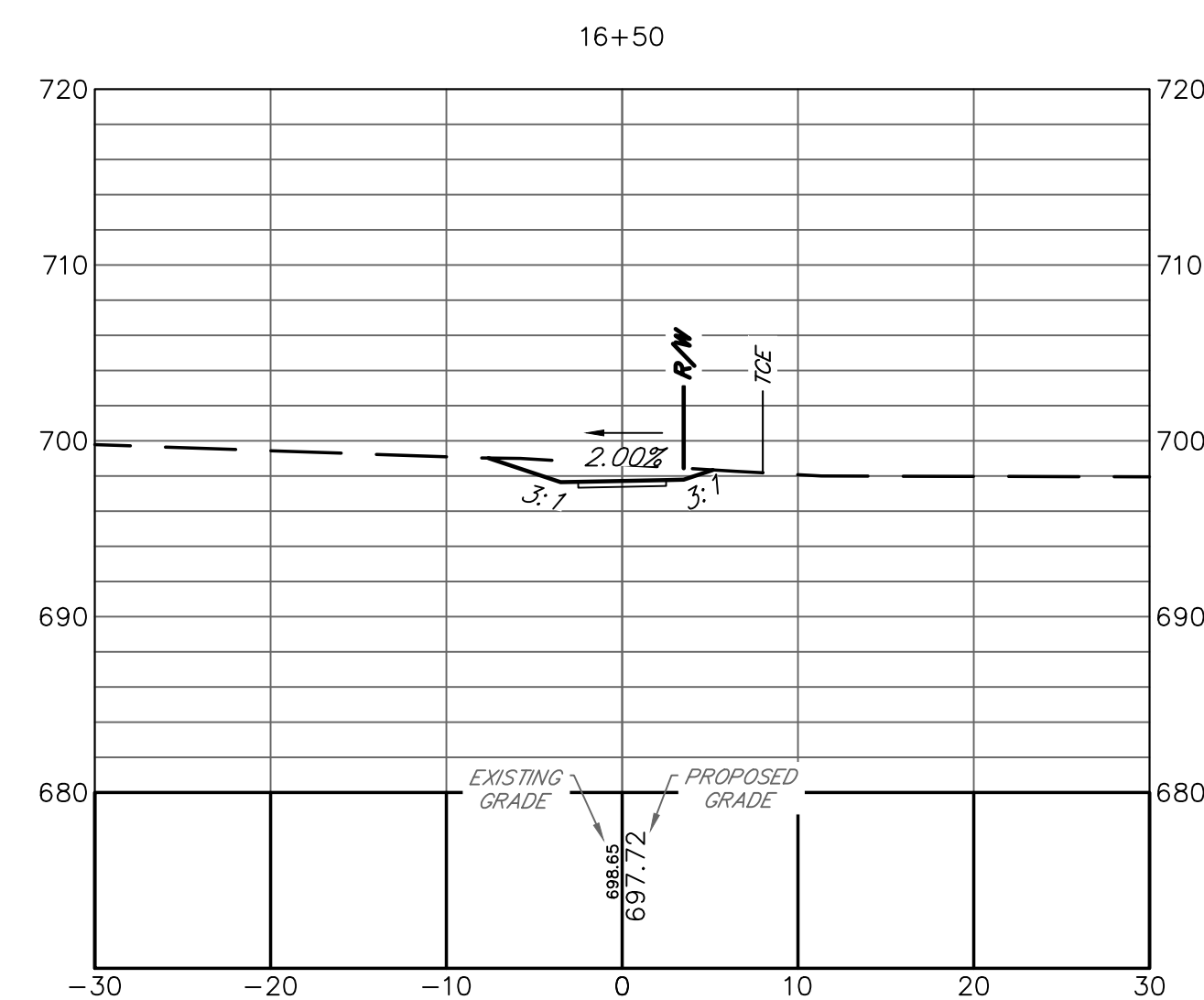
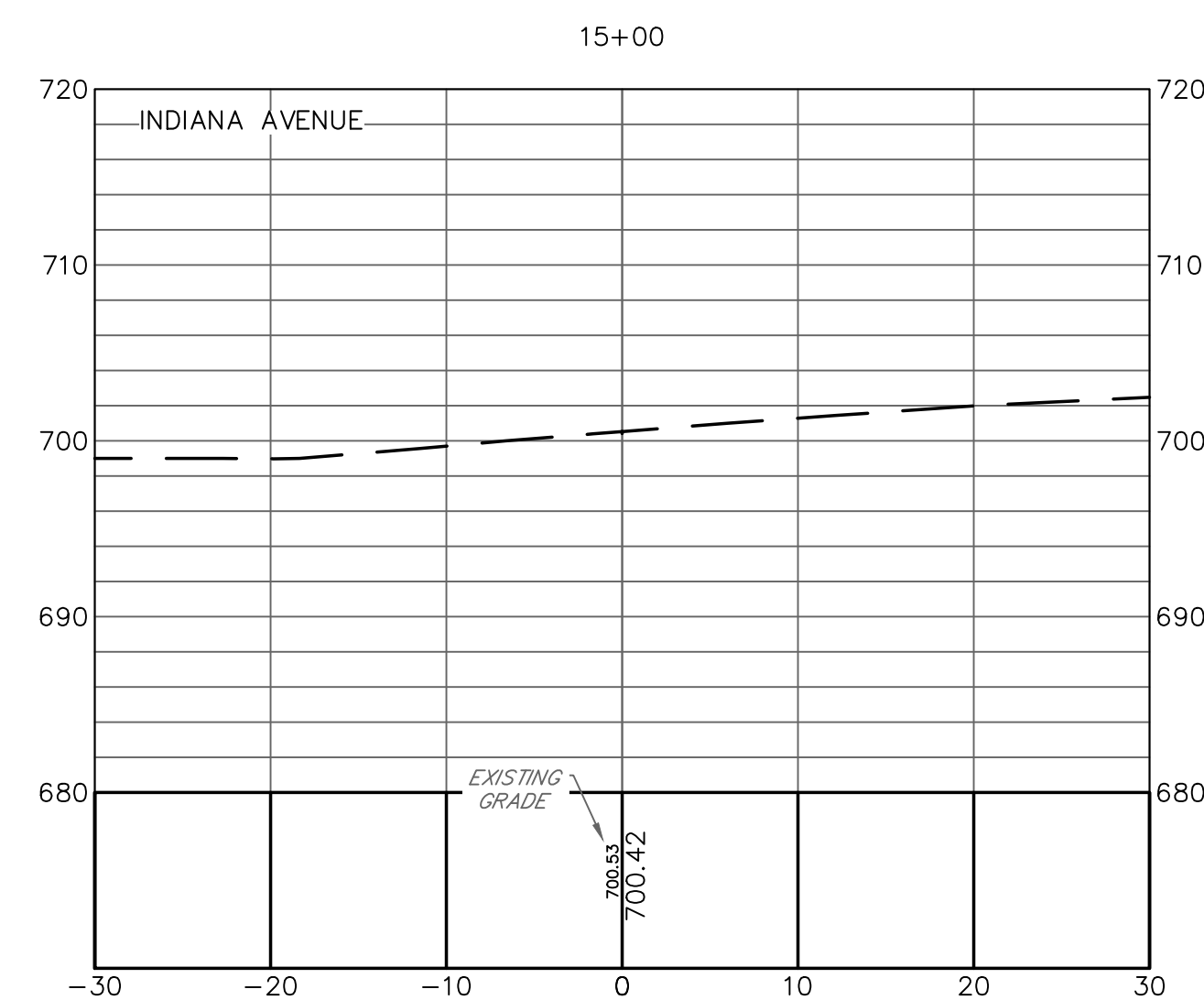
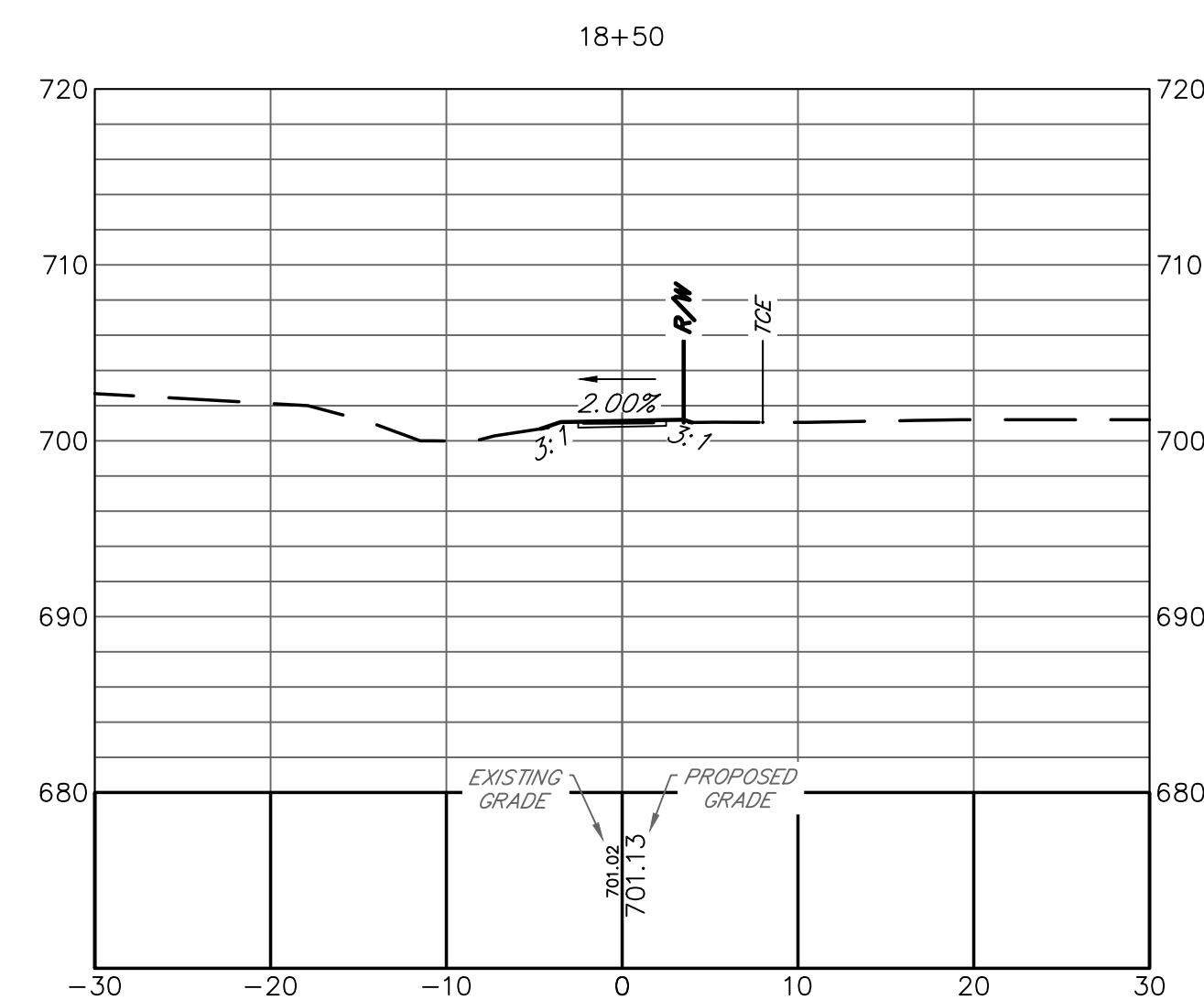
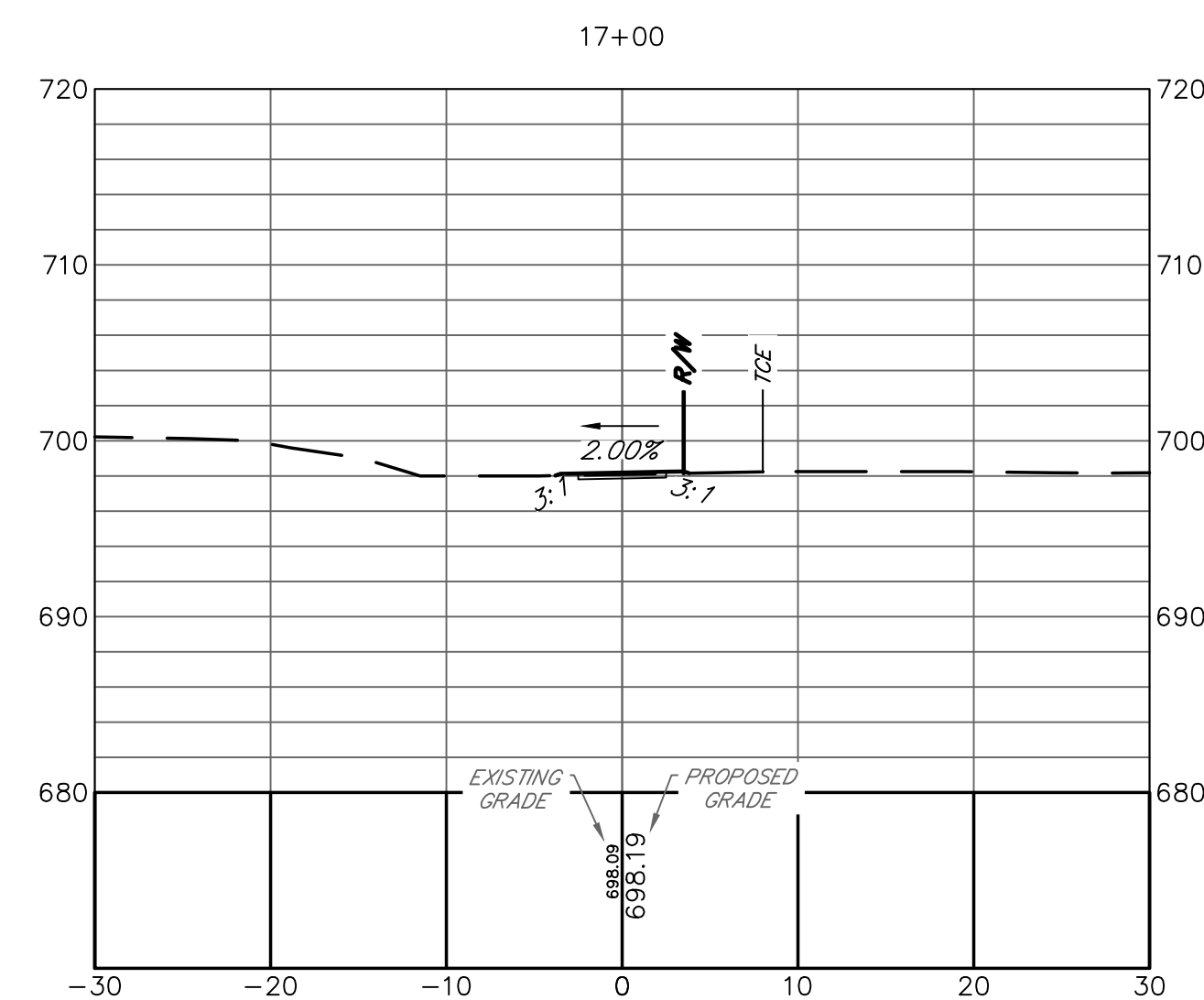
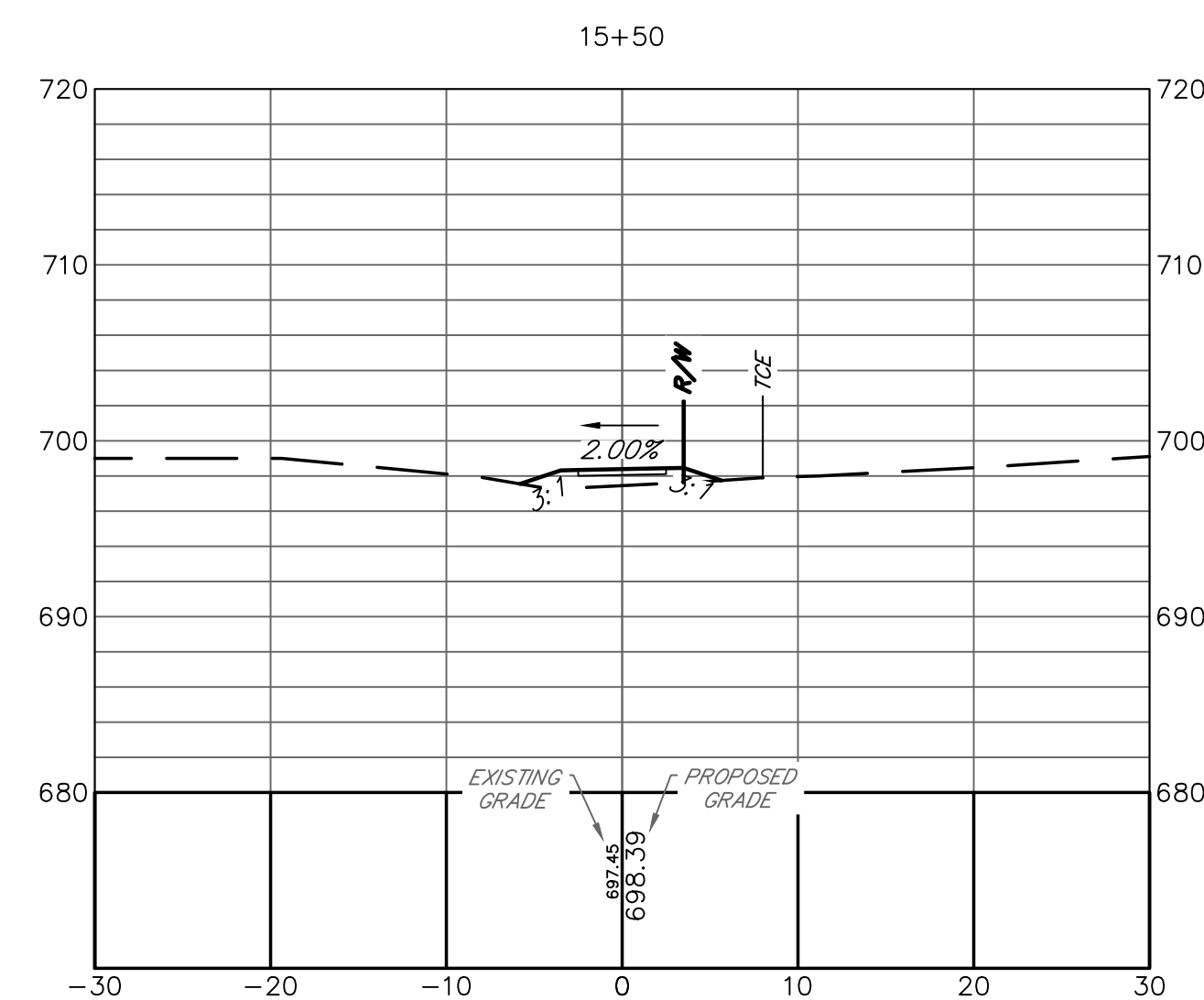
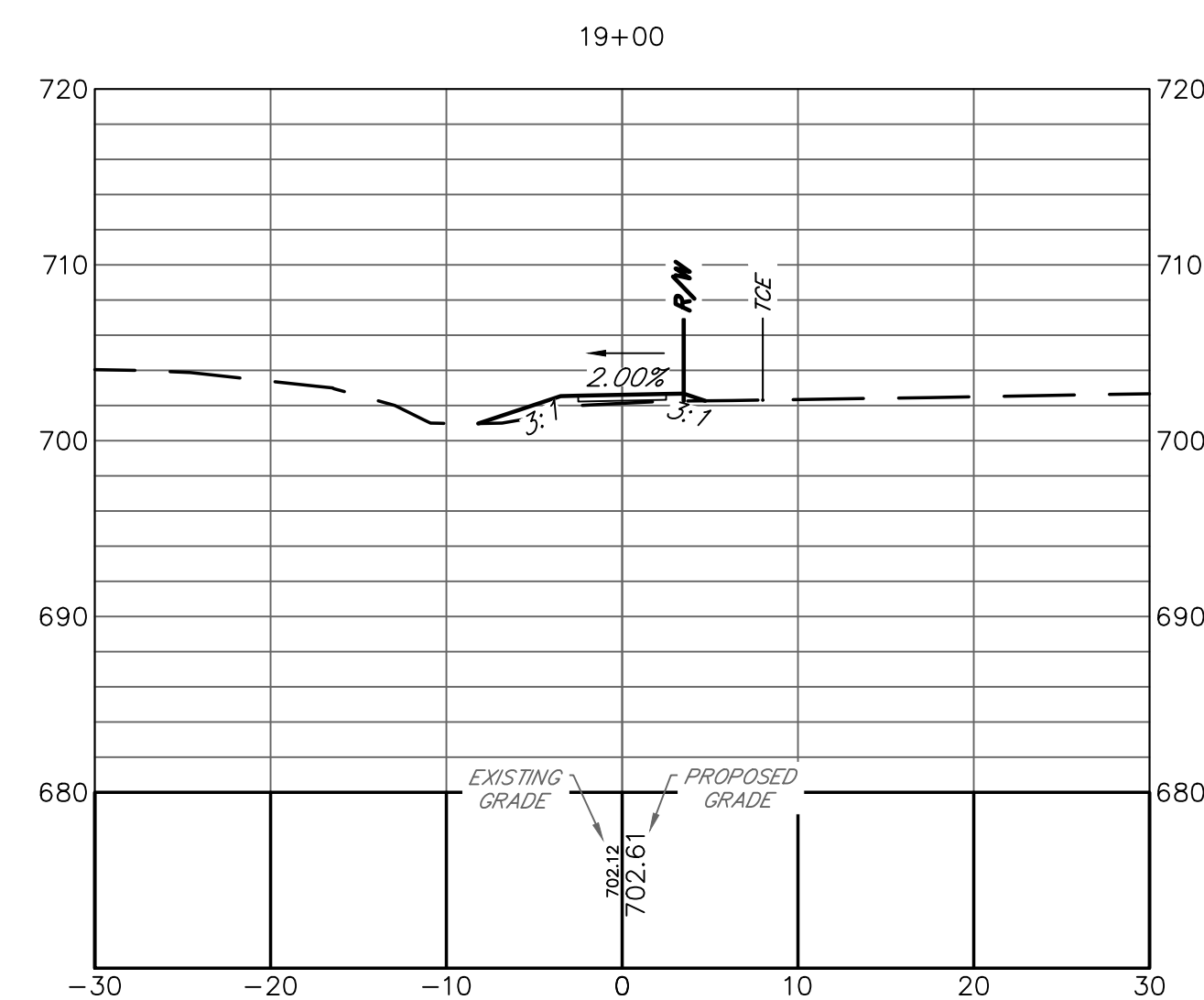
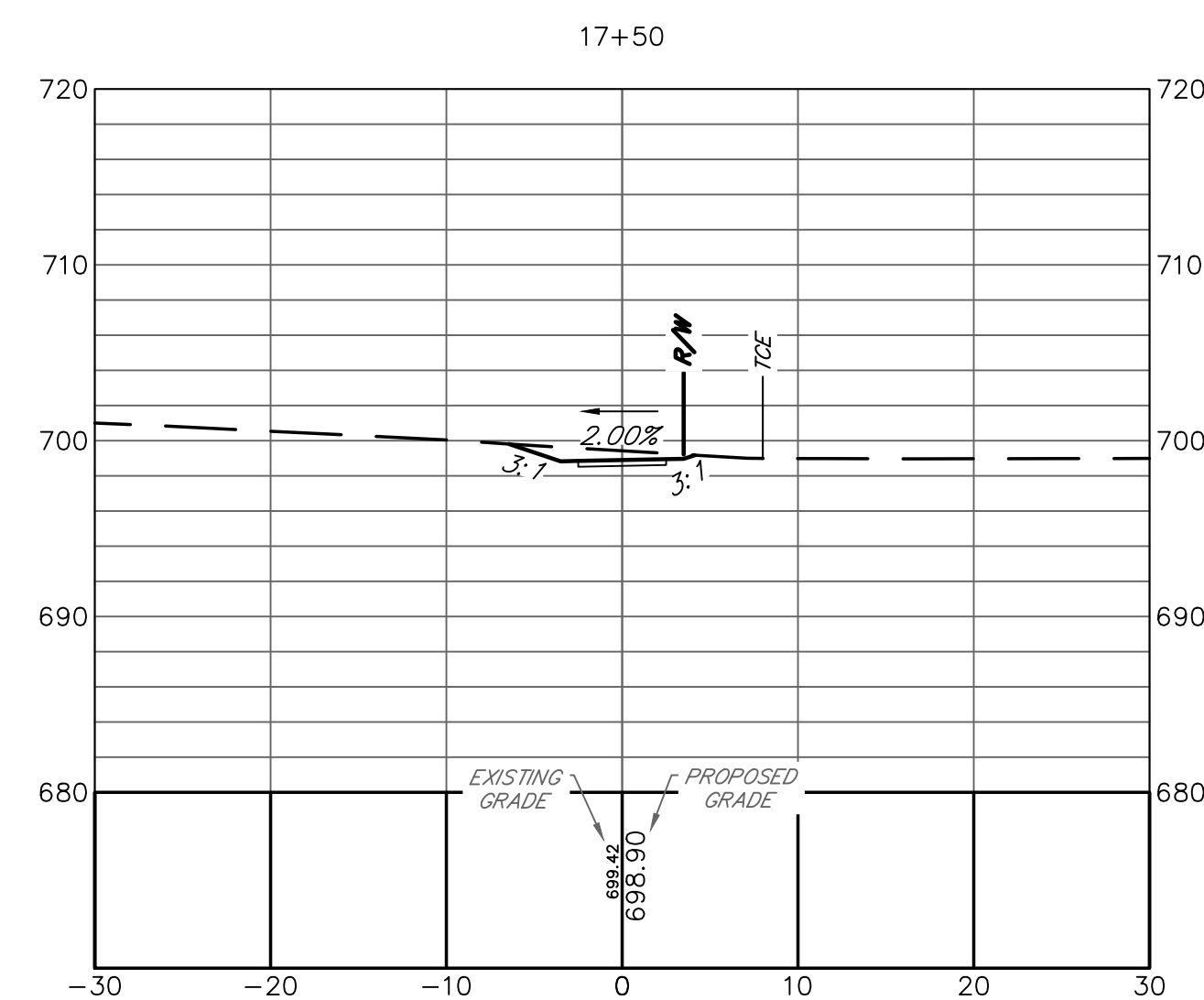
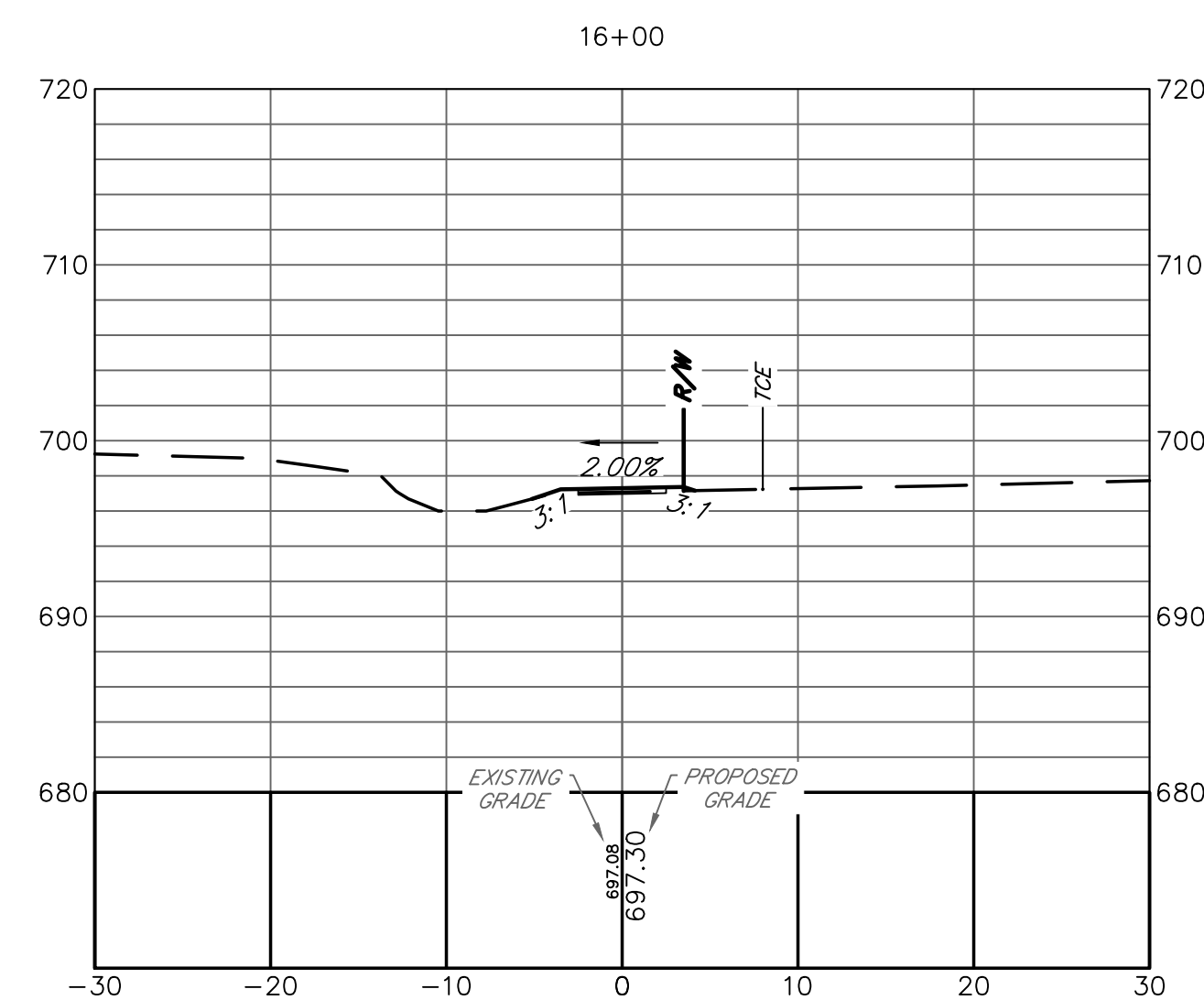
SHEET TITLE:
CROSS SECTIONS

PROJECT NAME
**LEXINGTON ROAD
CORRIDOR SIDEWALK
PROJECTS**



PROJECT INFORMATION	
JOB NO:	19022041
DRAWN BY:	KC
CHECKED BY:	EH
DRAWING FILE:	19022041E.DWG
DRAWING SCALE:	1" = 20'
ORIGINAL RELEASE DATE:	APRIL 27, 2022

Sheet:
23-001



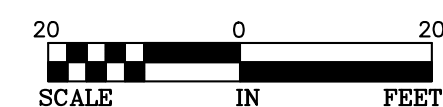
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[illegible]

**ATHENS-CLARKE
COUNTY, GA**

SHEET TITLE:
CROSS SECTIONS

PROJECT NAME
LEXINGTON ROAD
CORRIDOR SIDEWALK
PROJECTS



PROJECT INFORMATION

JOB NO: 19022041

DRAWN BY: KC

CHECKED BY: EH

DRAWING FILE: 19022041E.DWG

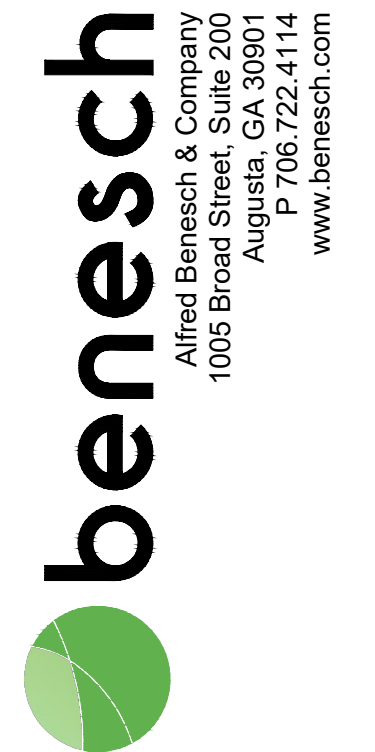
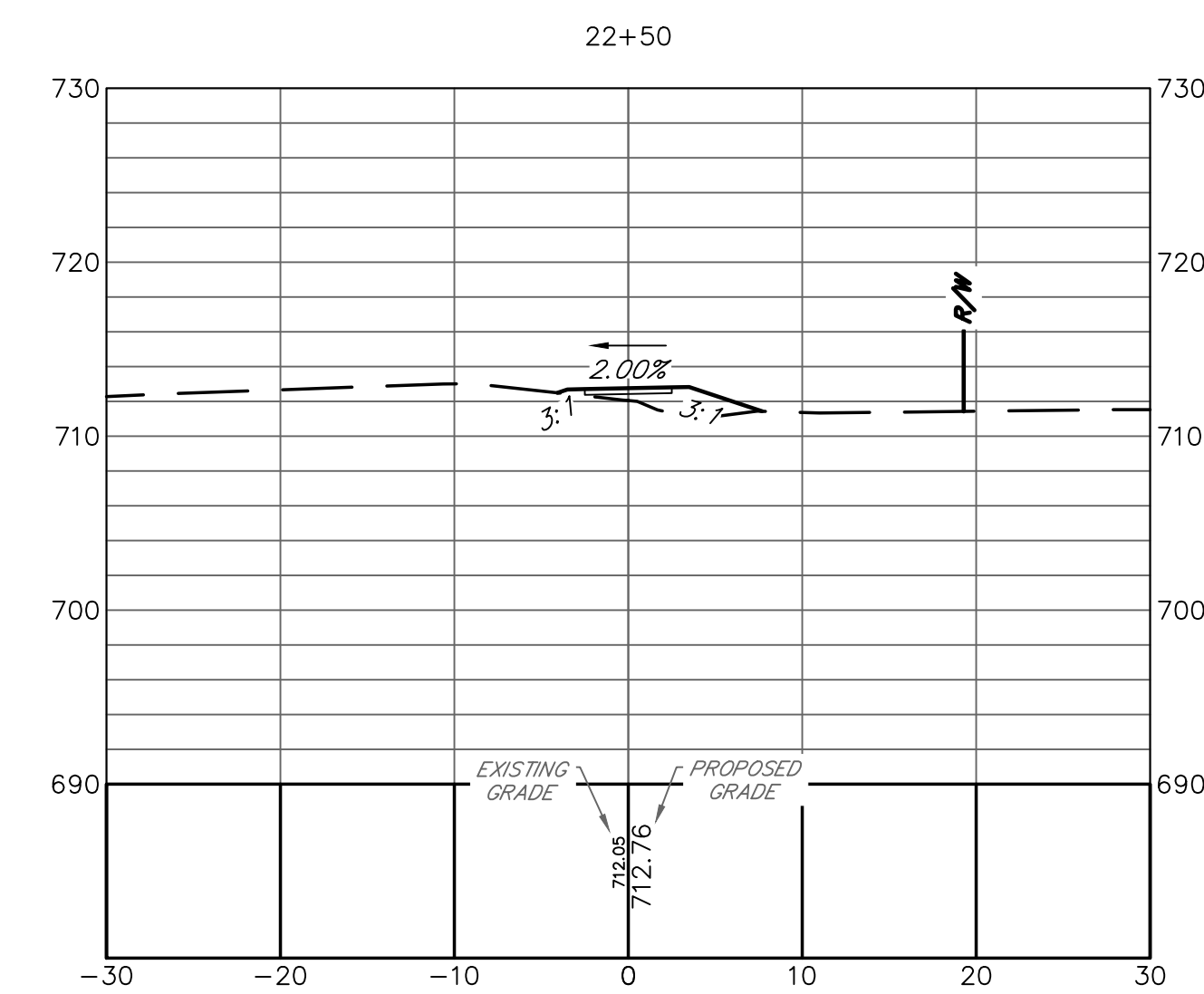
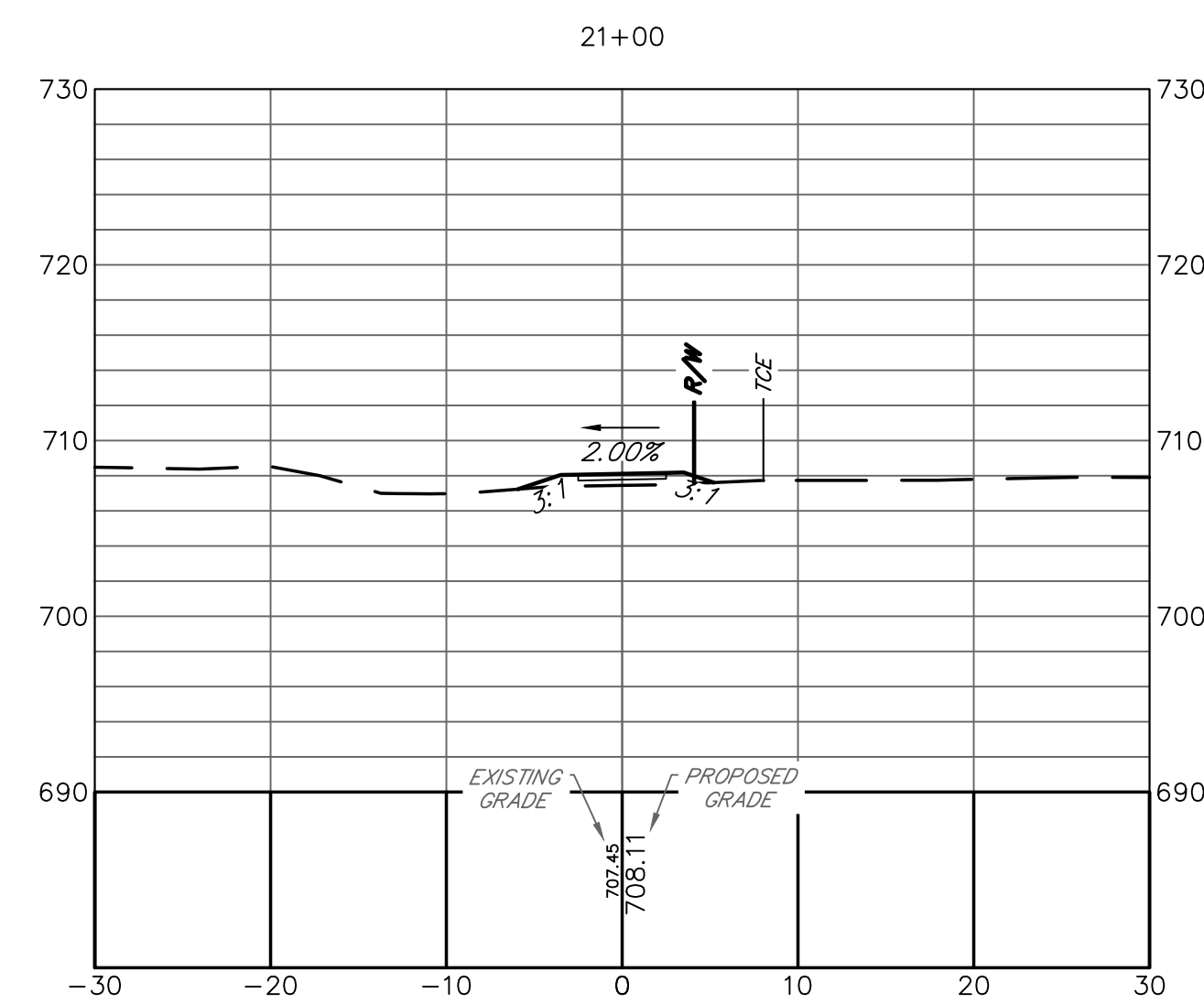
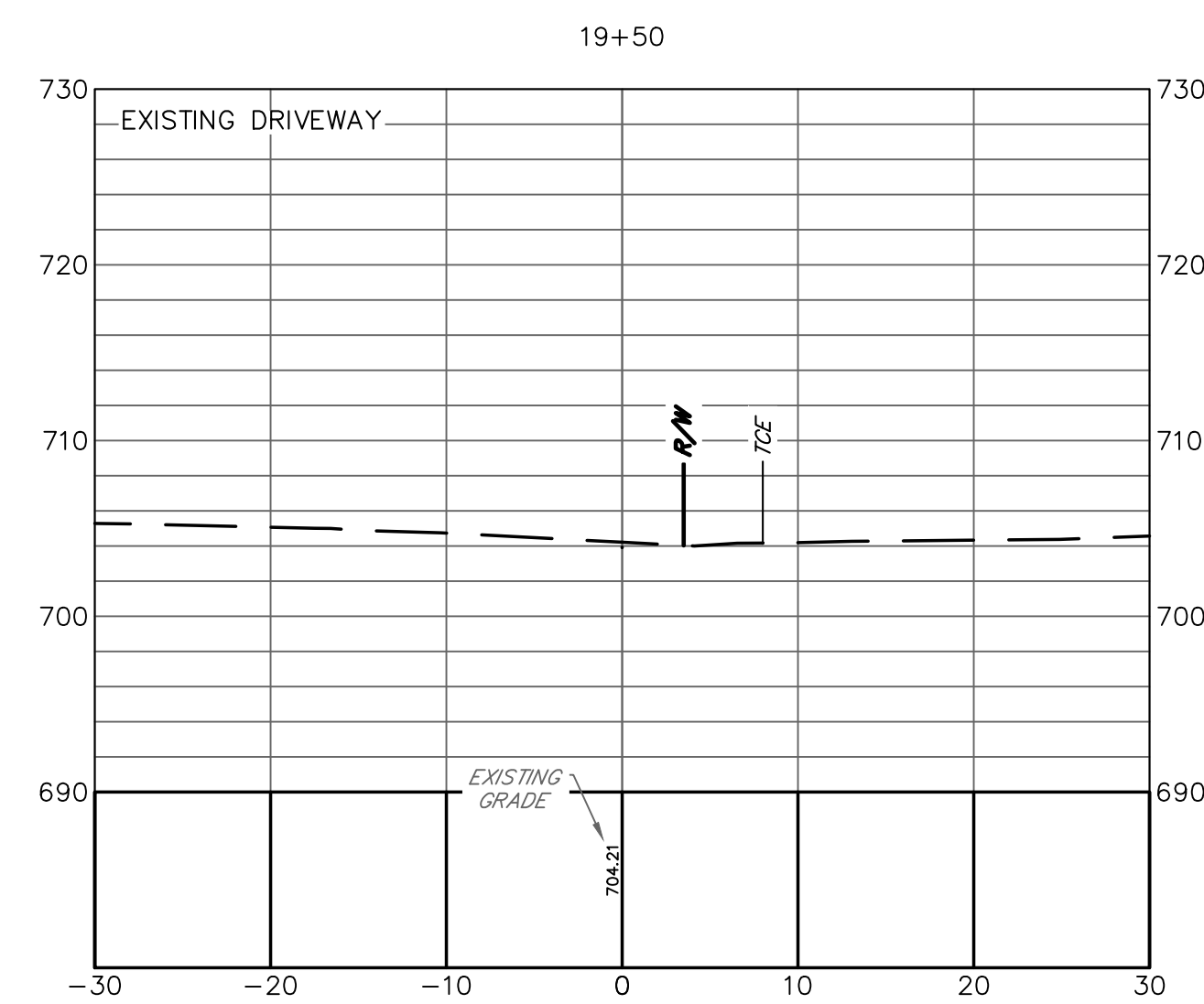
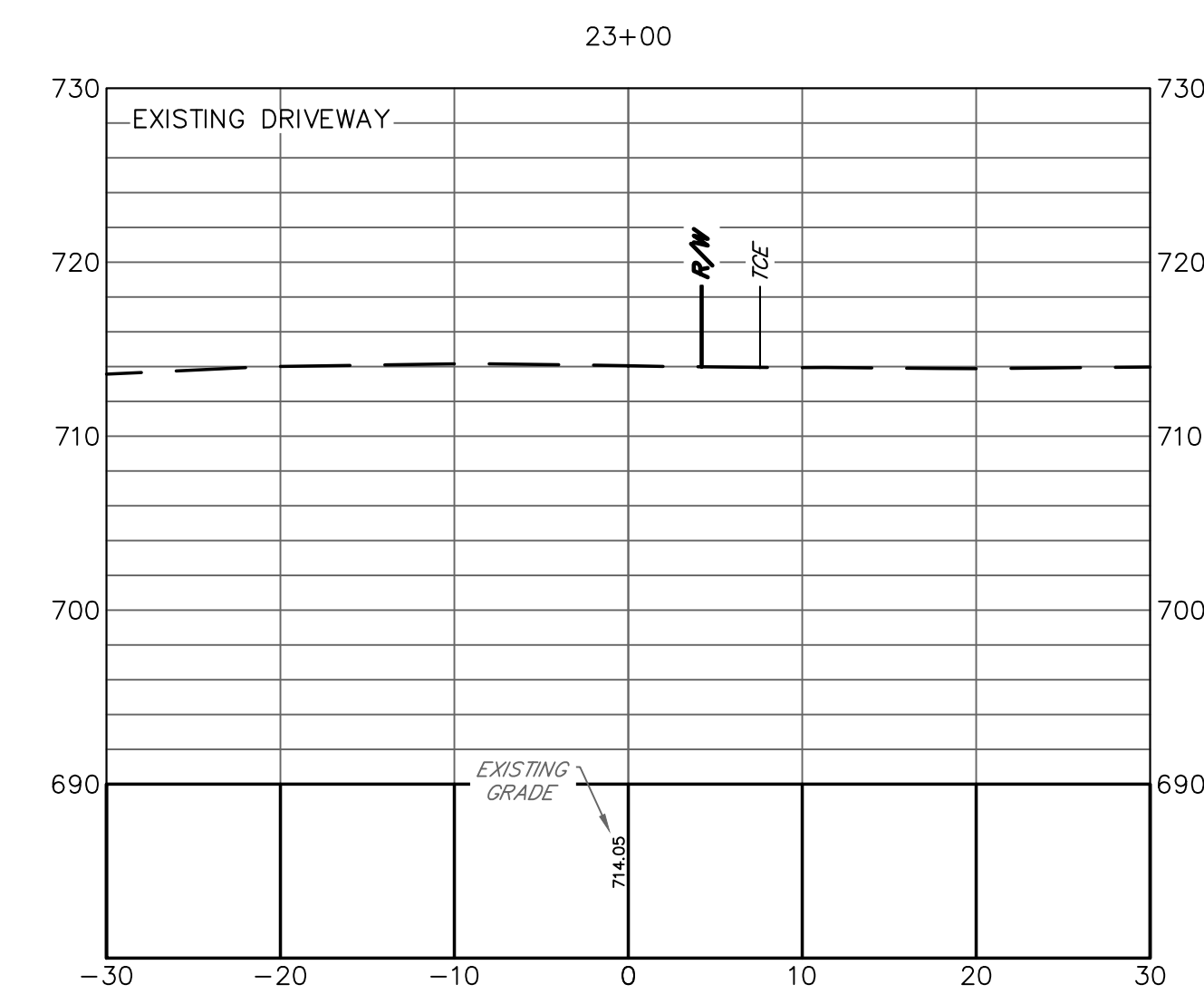
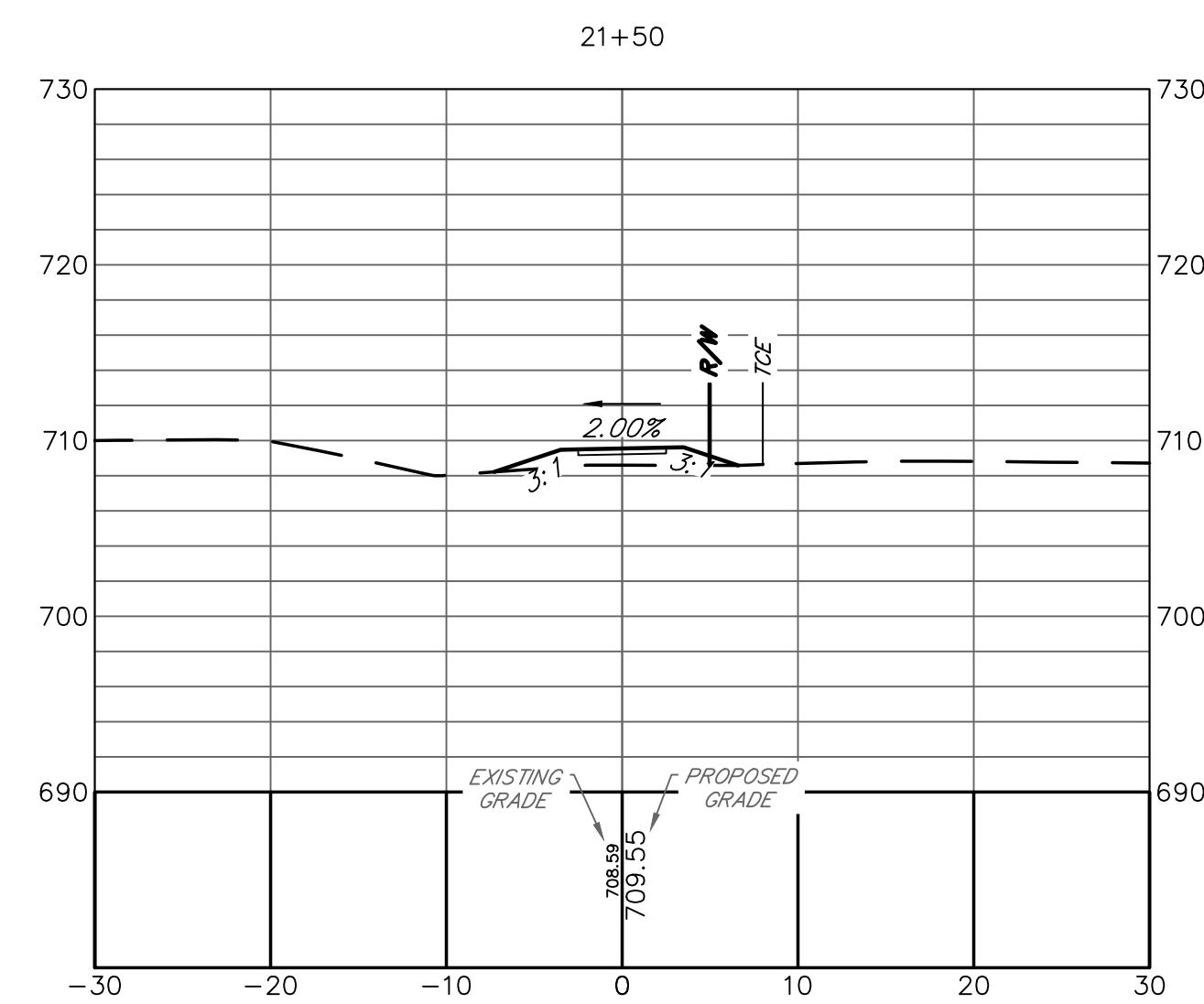
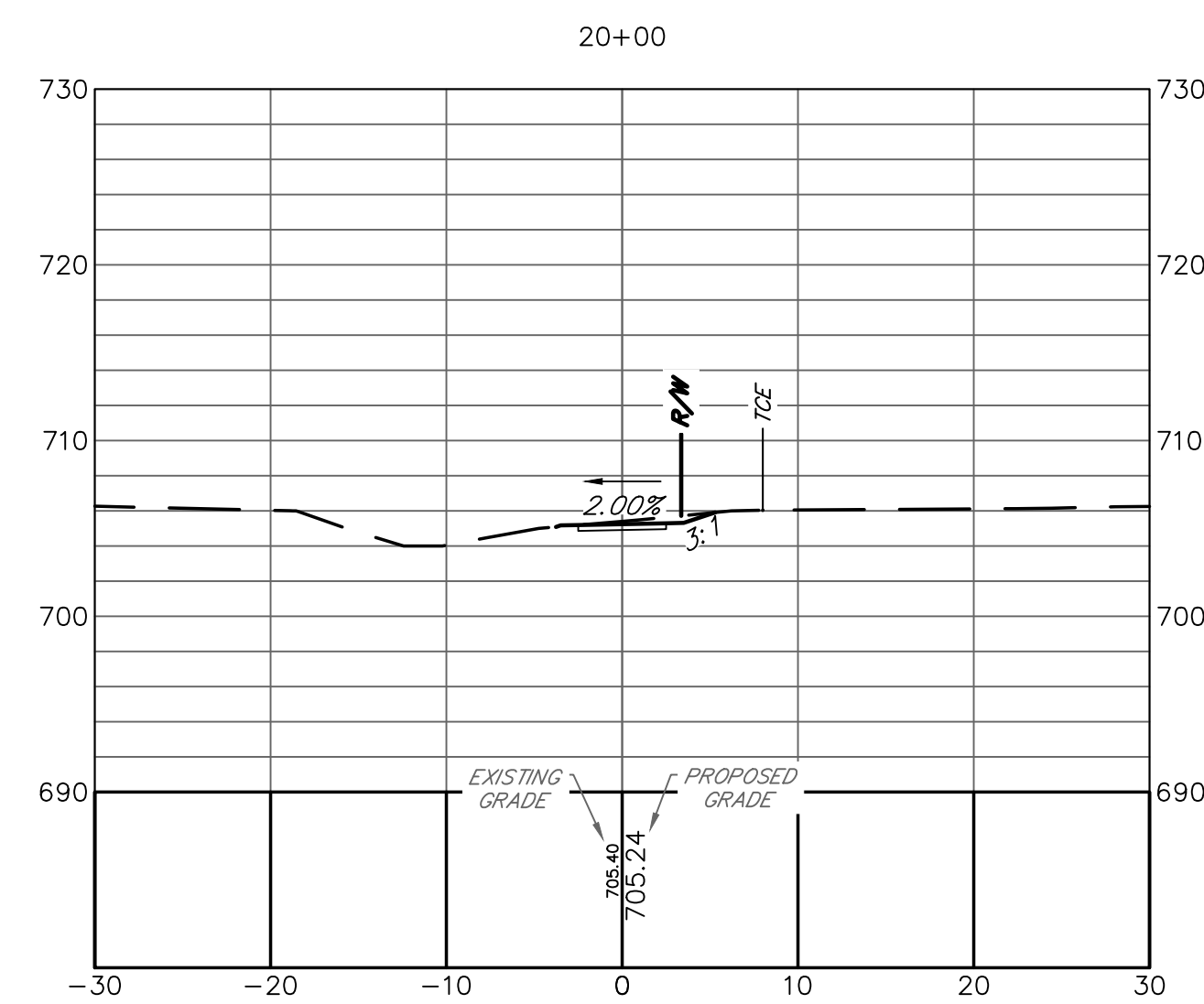
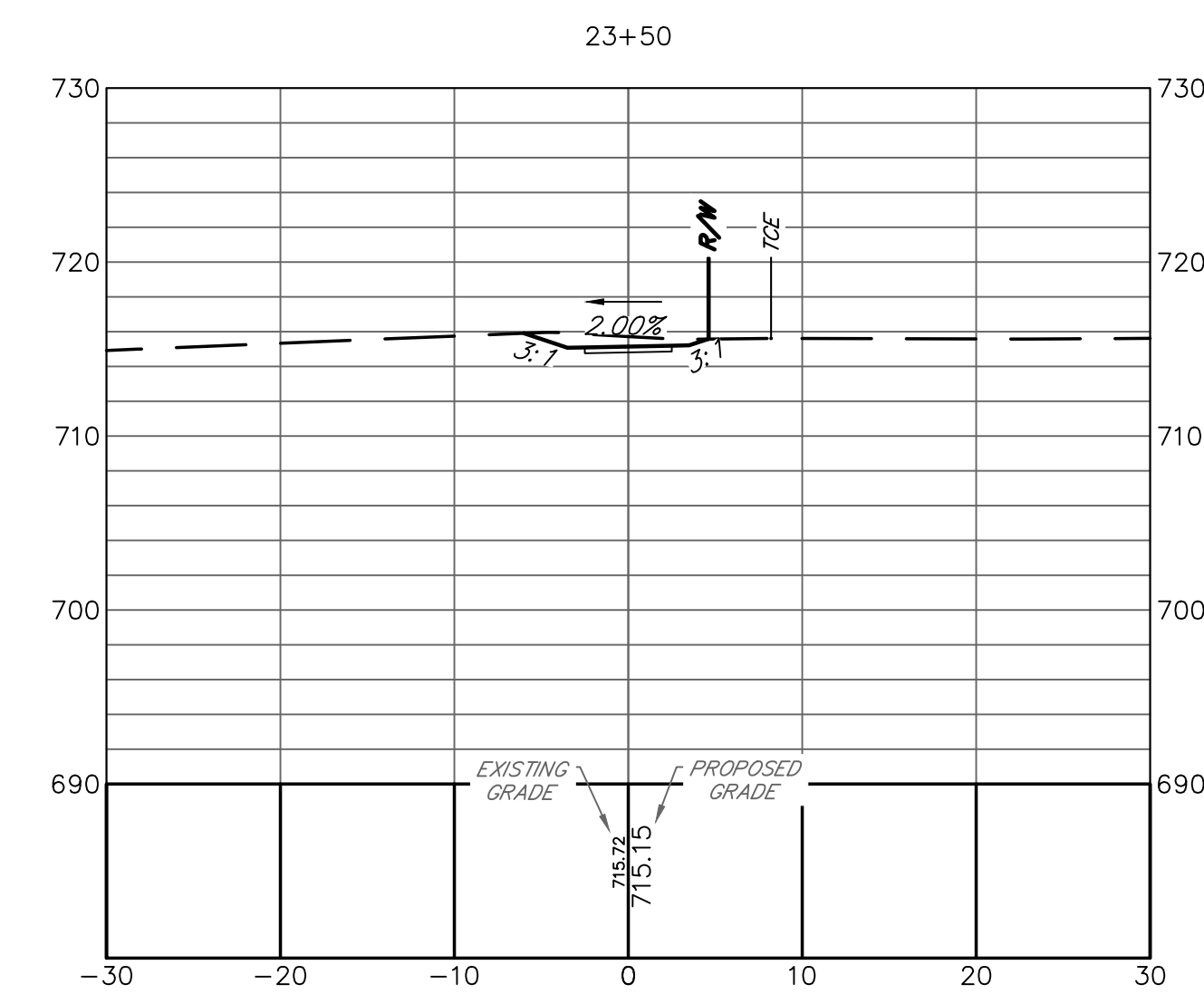
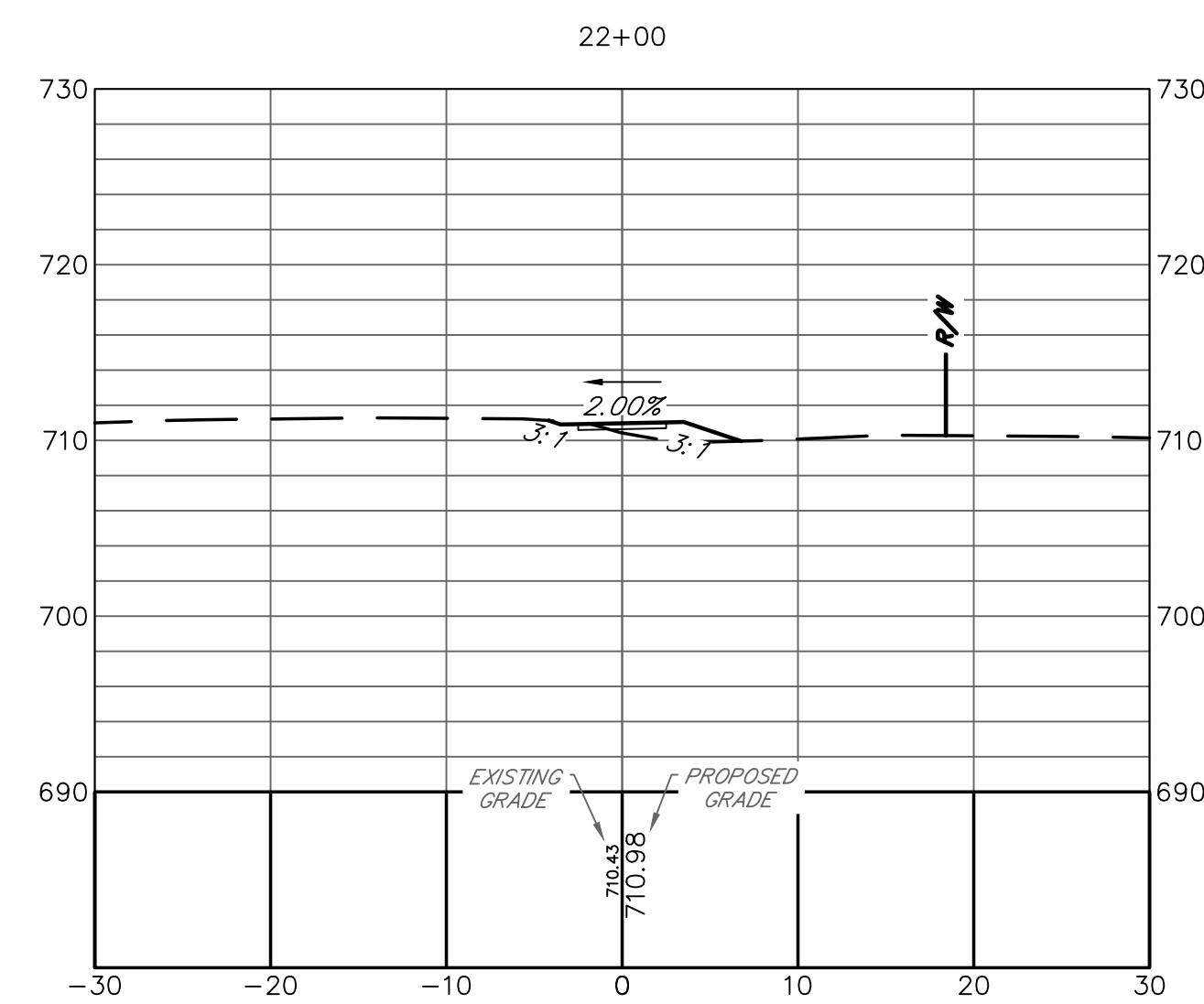
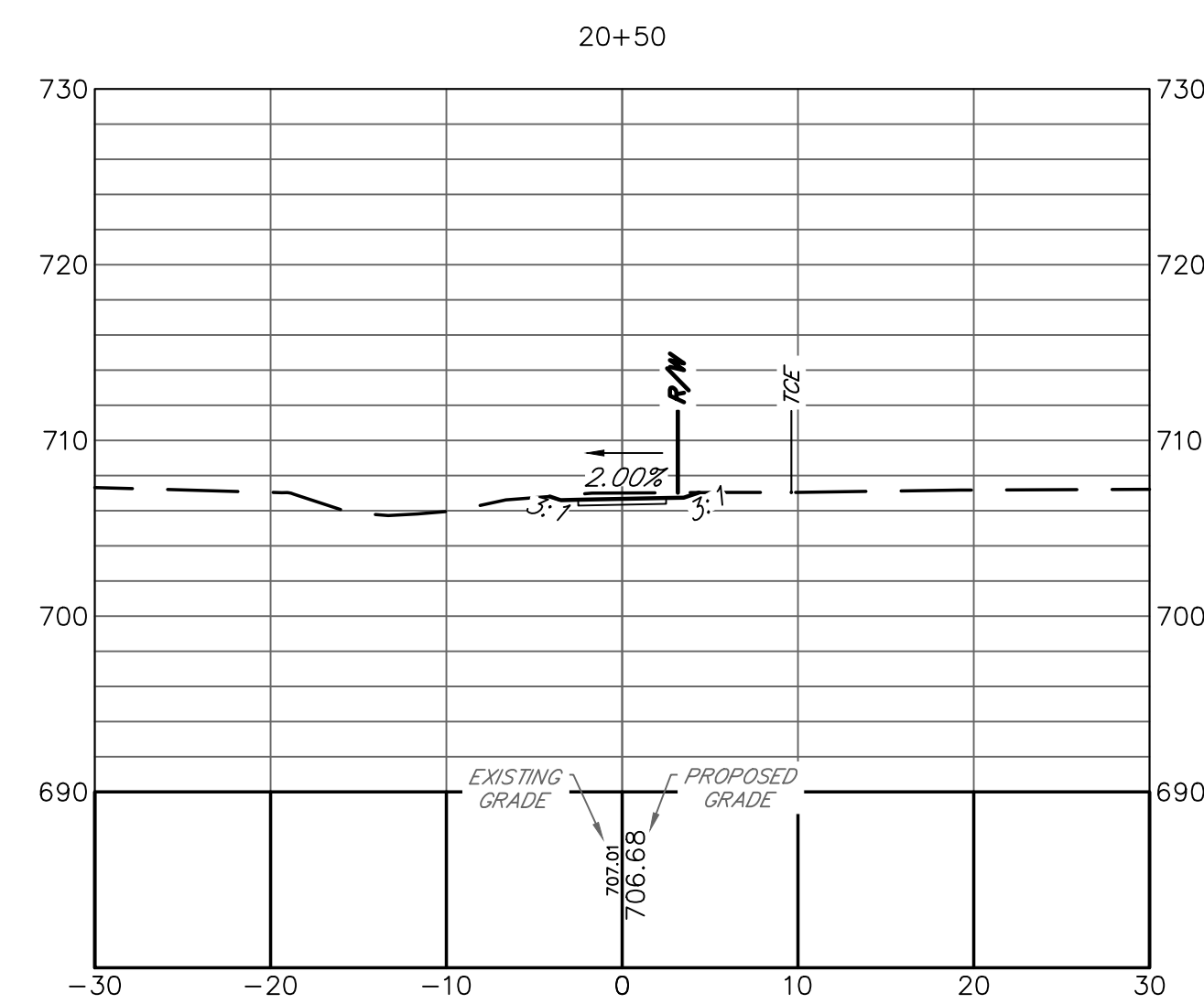
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ORIGINAL RELEASE DATE:
APR 27 2000

APRIL 27, 2022

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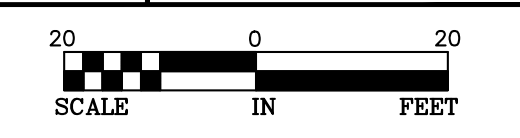
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ATHENS-CLARKE
COUNTY, GA

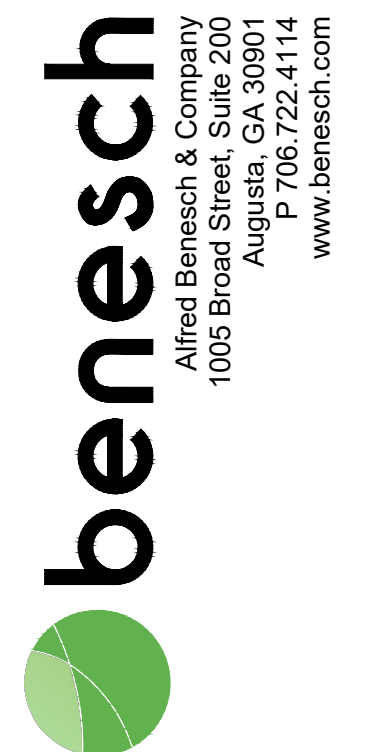
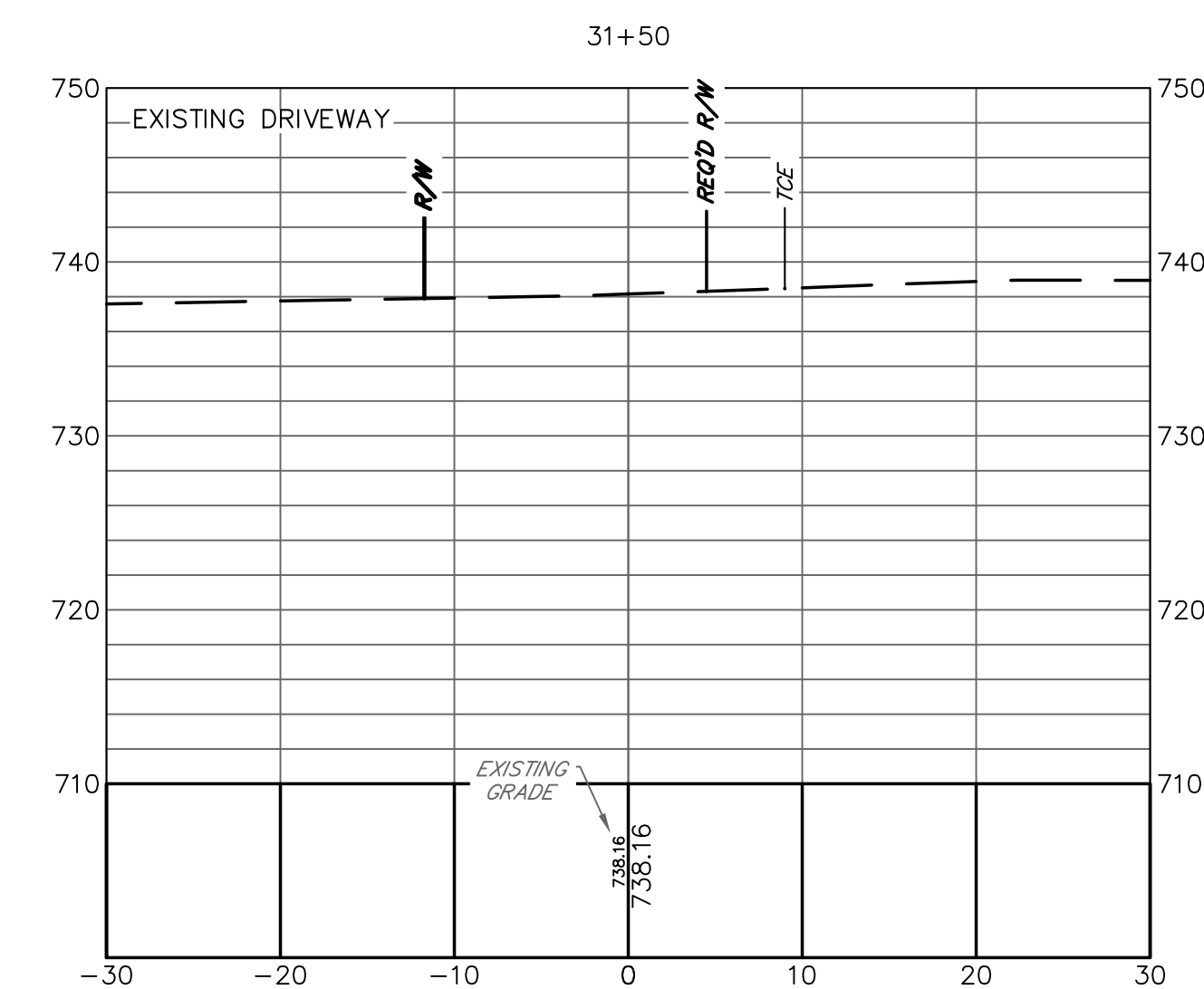
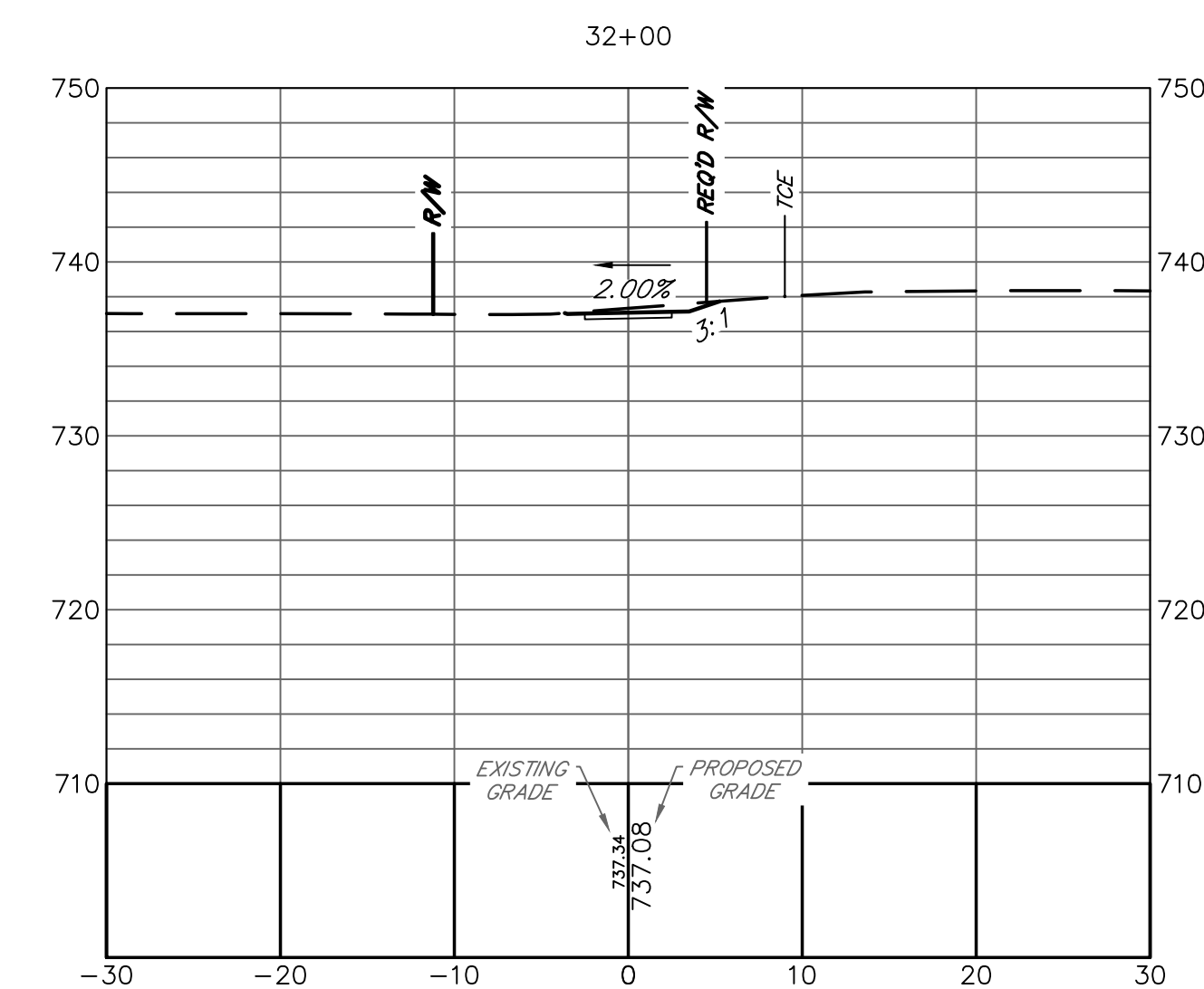
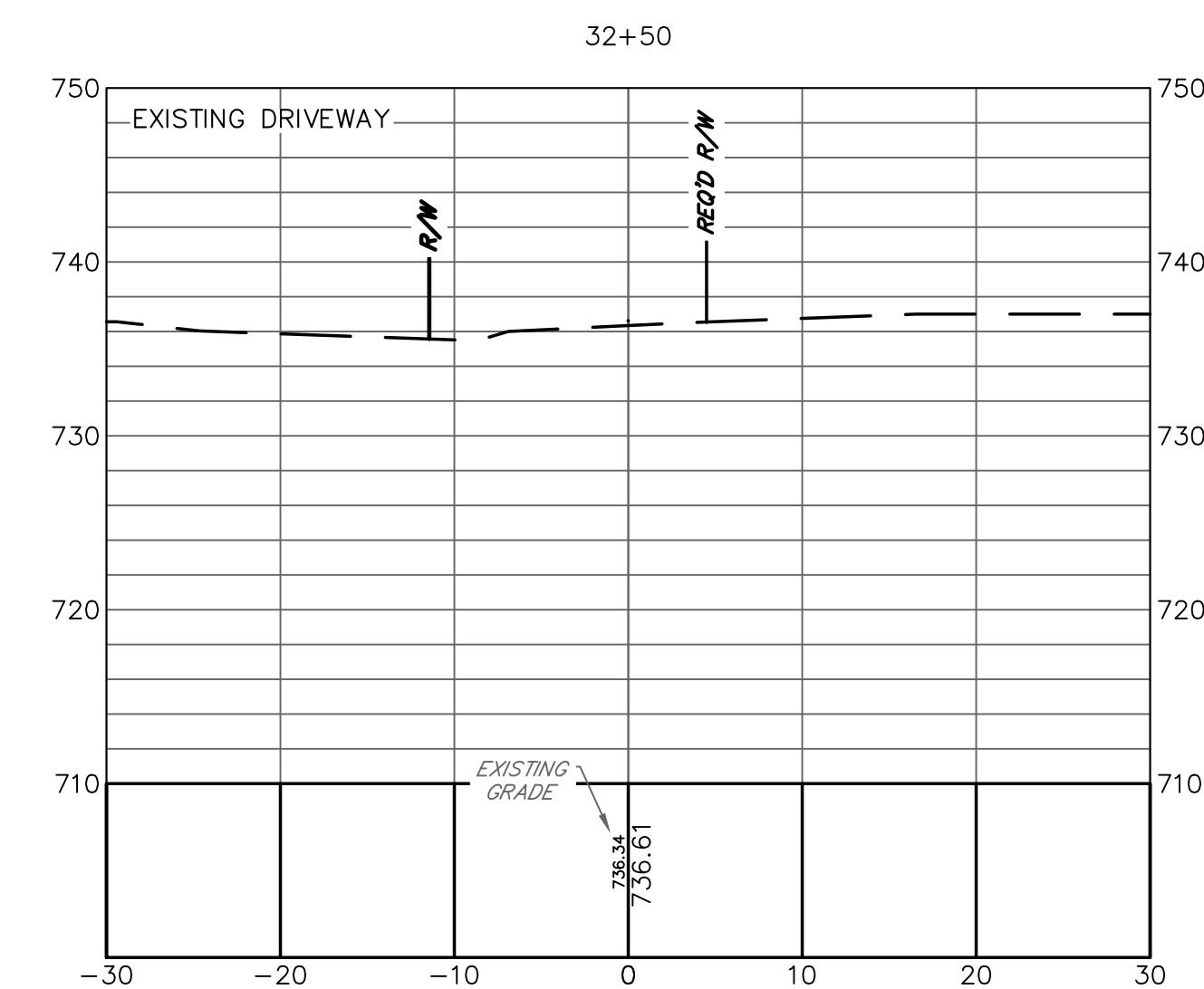
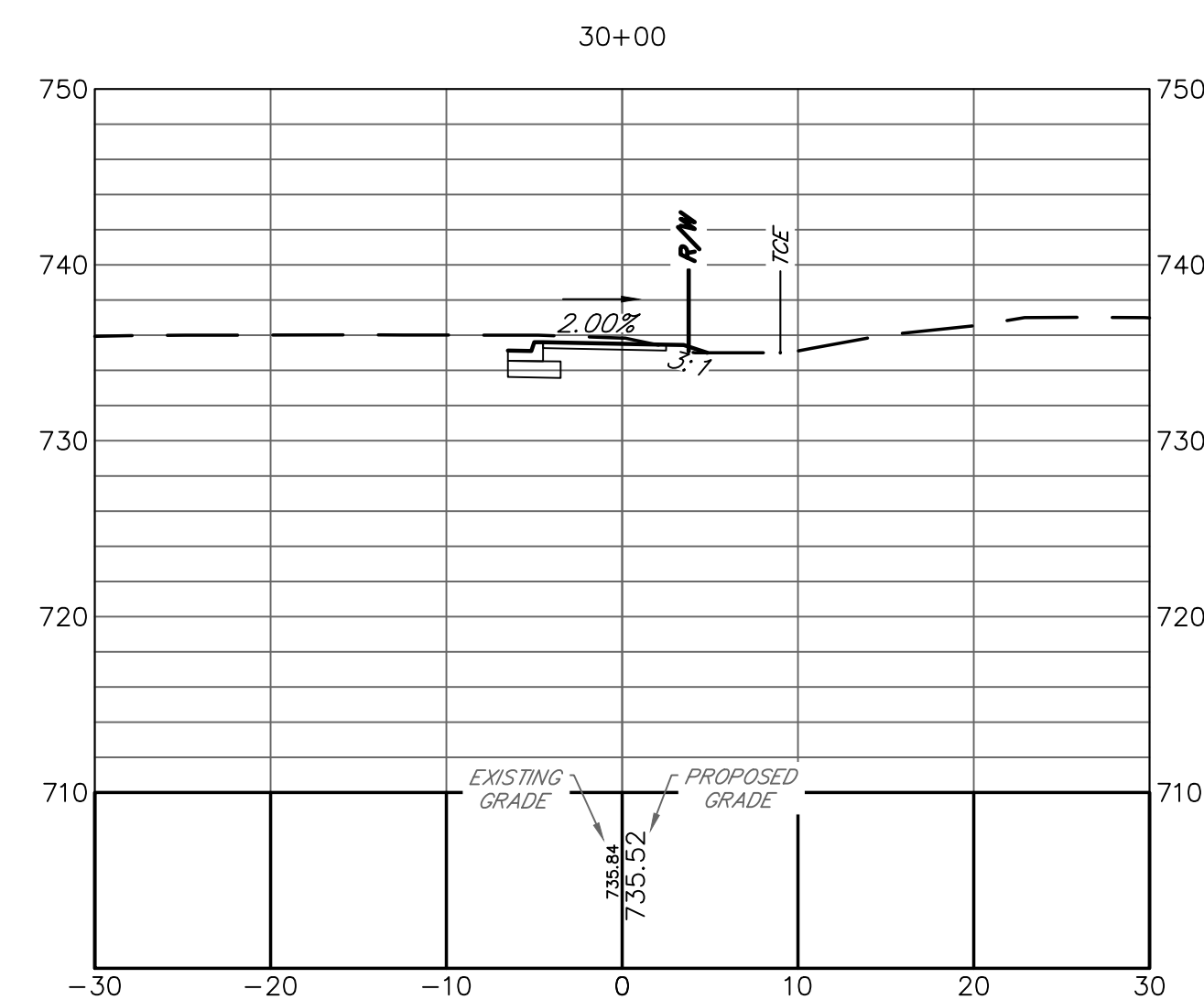
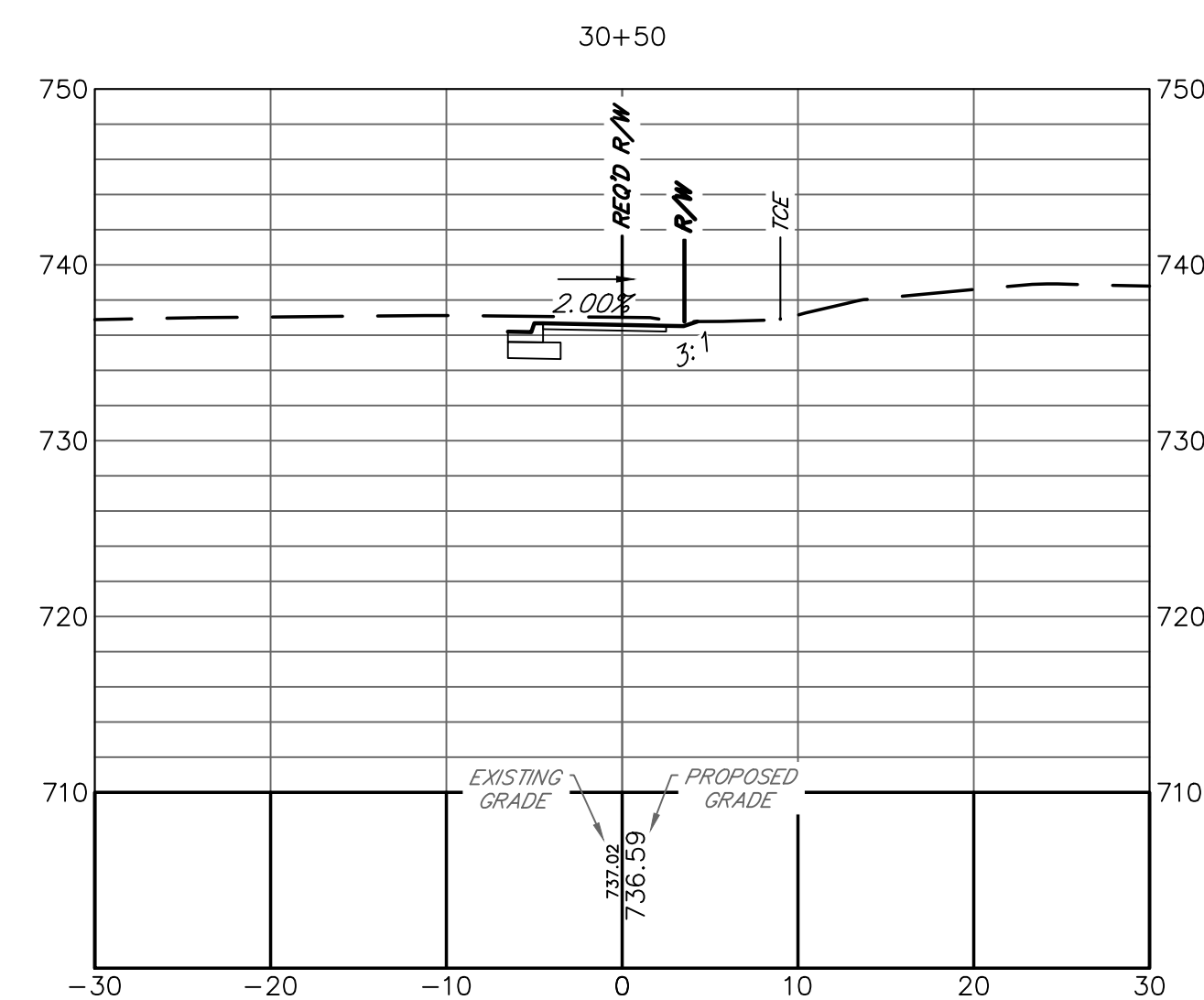
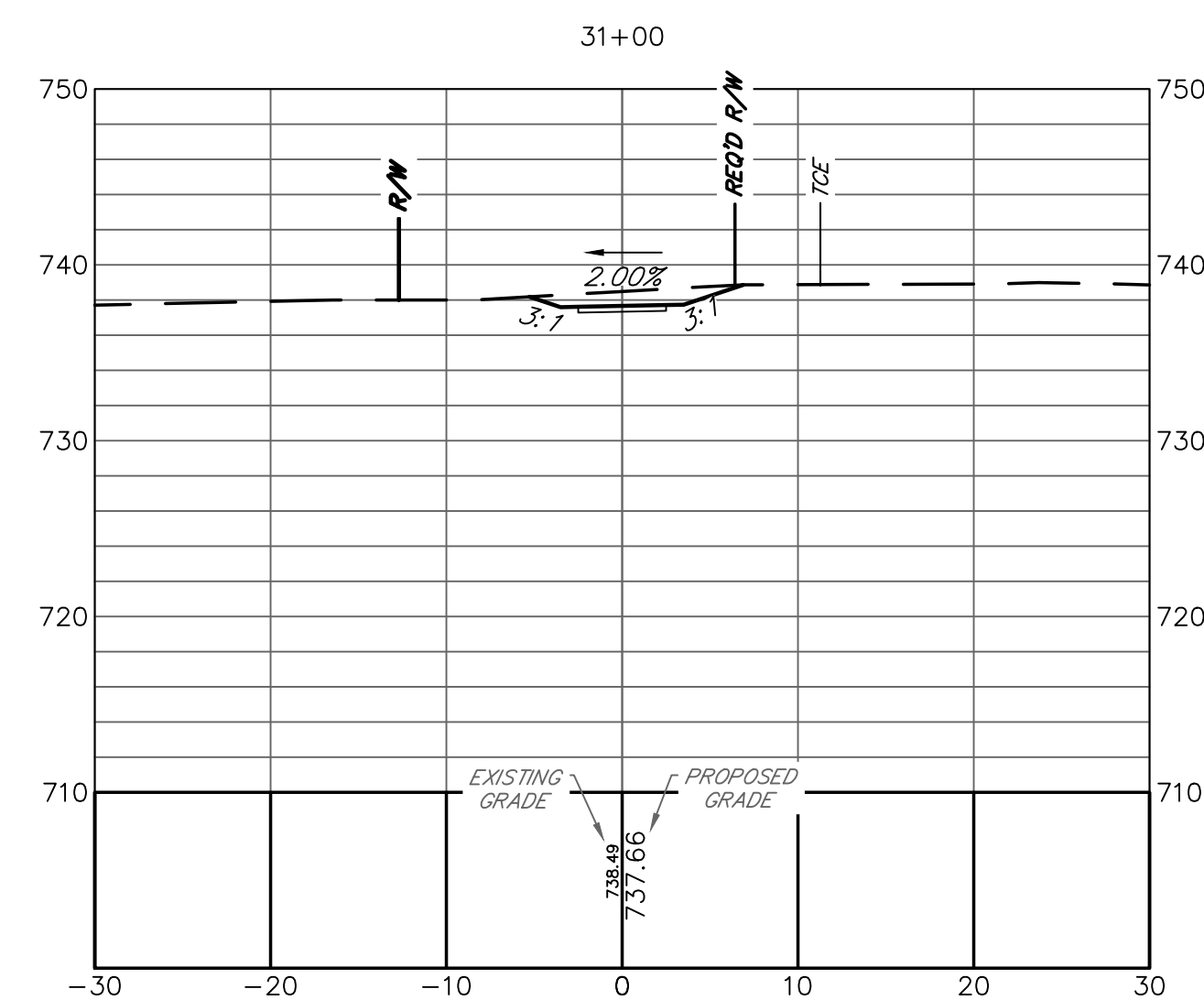
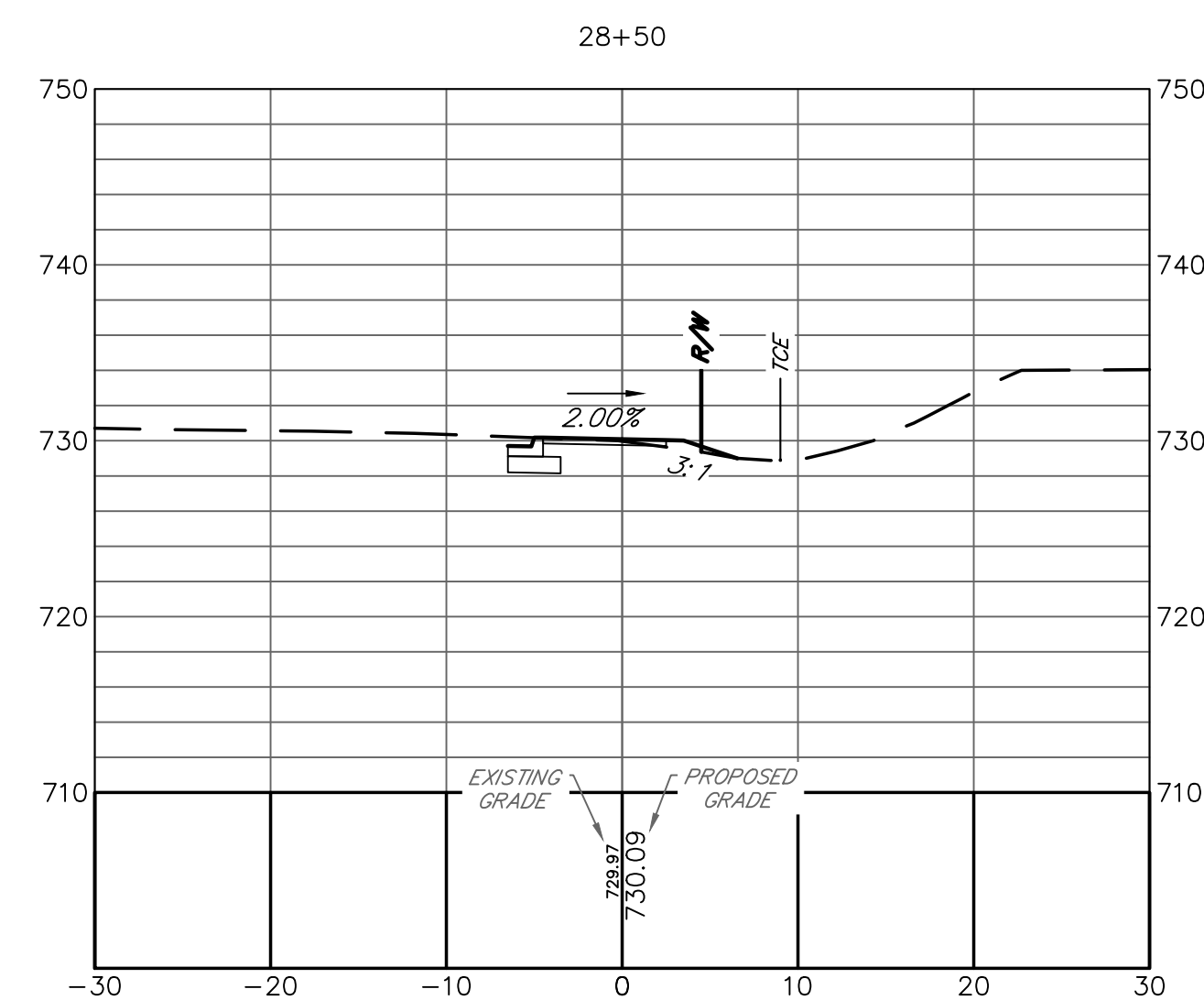
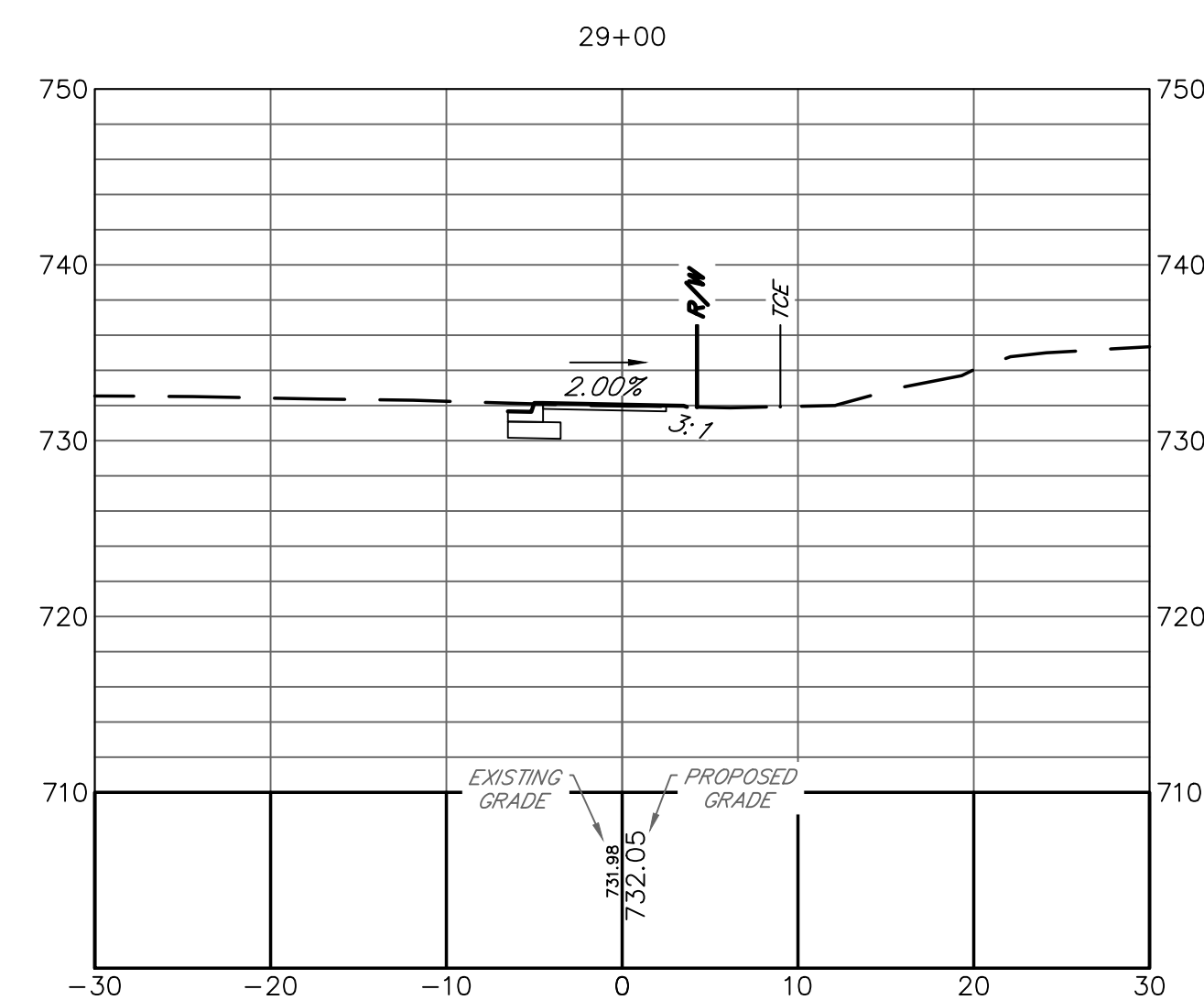
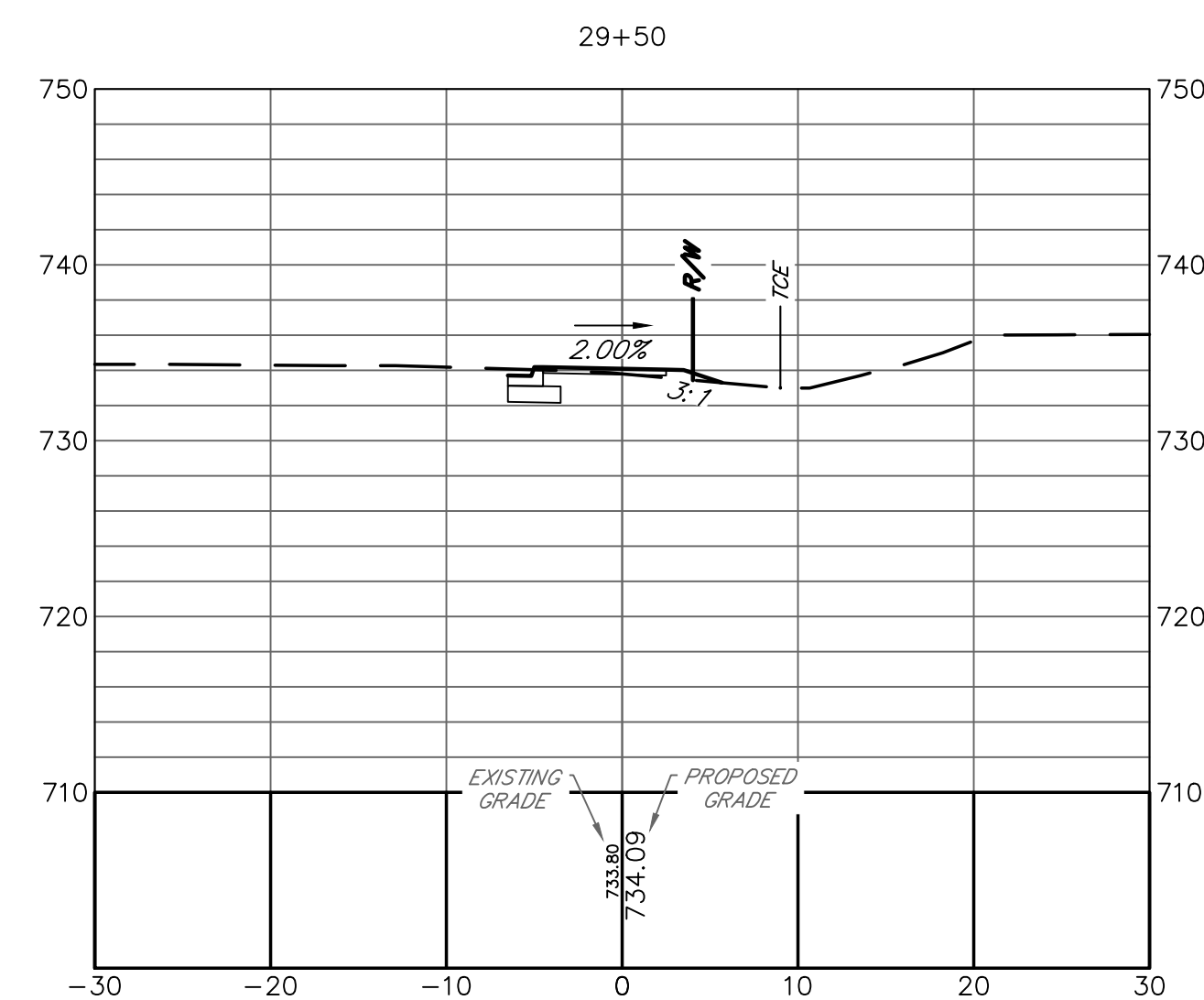
SHEET TITLE:
CROSS SECTIONS

PROJECT NAME
LEXINGTON ROAD
CORRIDOR SIDEWALK
PROJECTS



PROJECT INFORMATION	
JOB NO:	19022041
DRAWN BY:	KC
CHECKED BY:	EH
DRAWING FILE:	19022041E.DWG
DRAWING SCALE:	1" = 20'
ORIGINAL RELEASE DATE:	APRIL 27, 2022

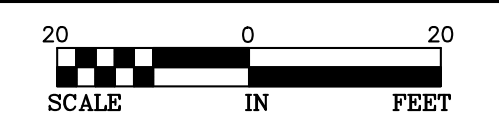
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23-003



ATHENS-CLARKE
COUNTY, GA

SHEET TITLE:
CROSS SECTIONS

PROJECT NAME
LEXINGTON ROAD
CORRIDOR SIDEWALK
PROJECTS



PROJECT INFORMATION

JOB NO: 19022041

DRAWN BY: KC

CHECKED BY: EH

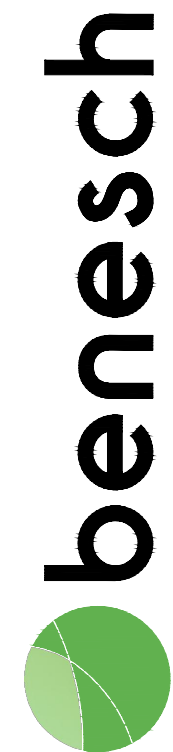
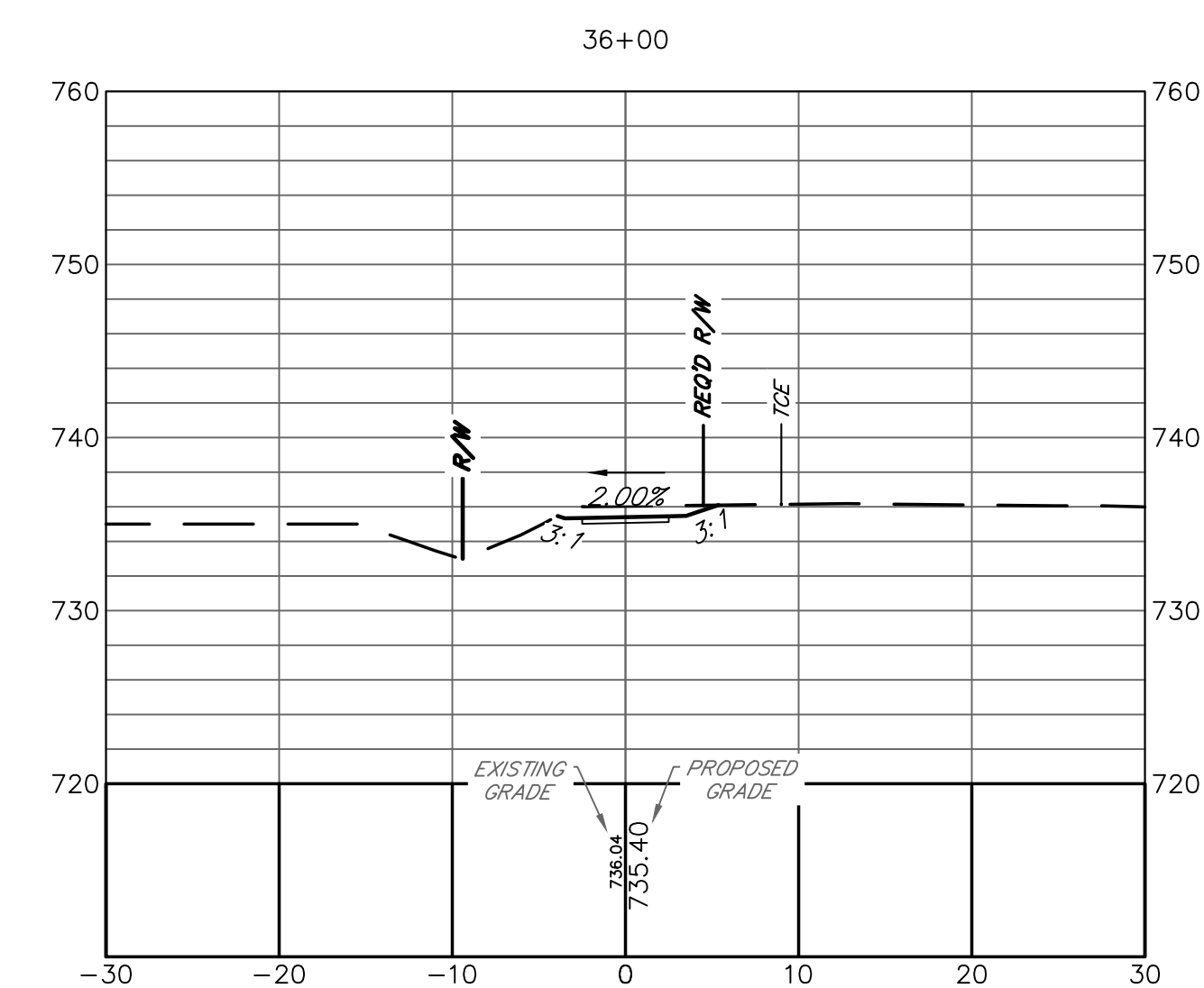
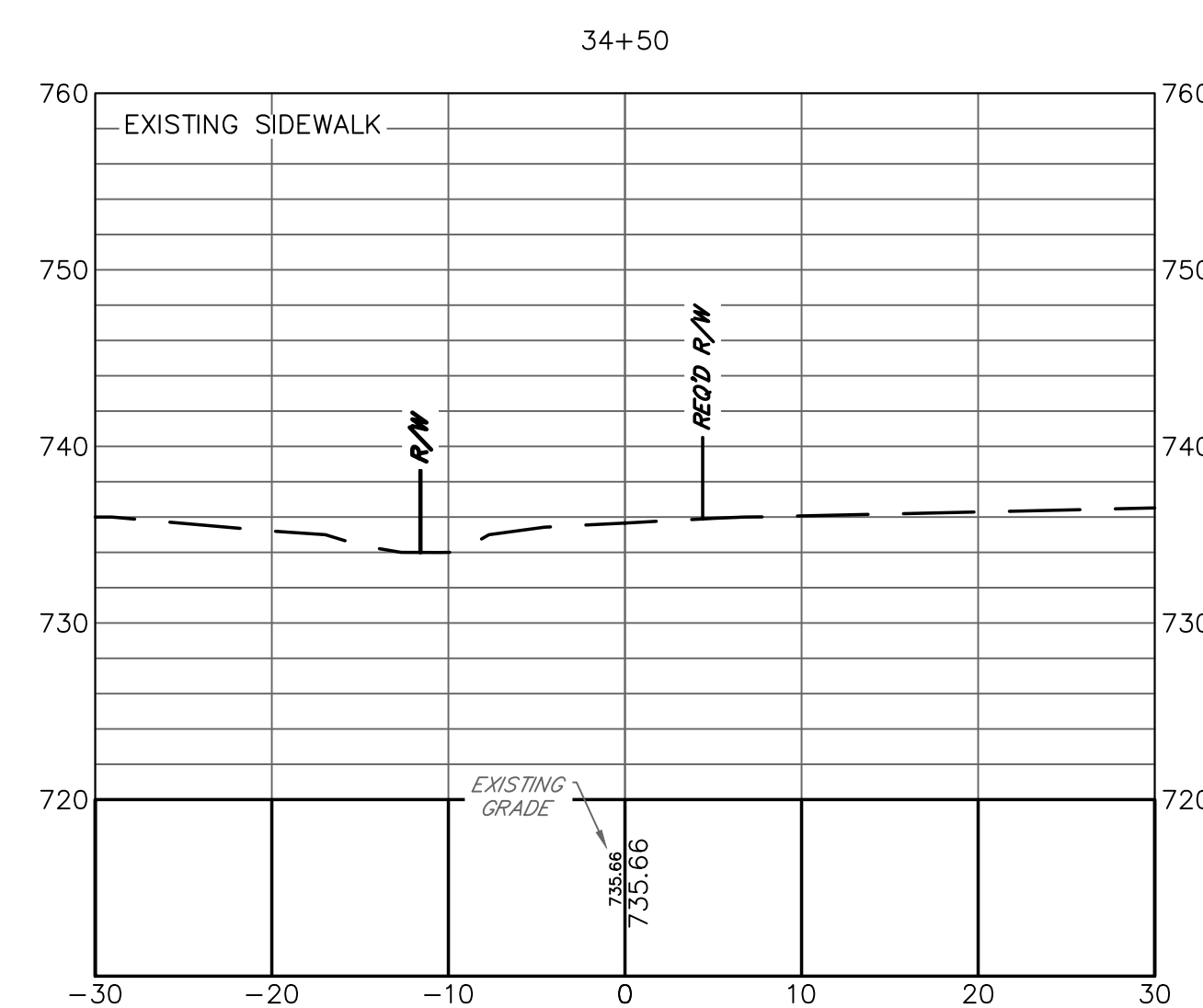
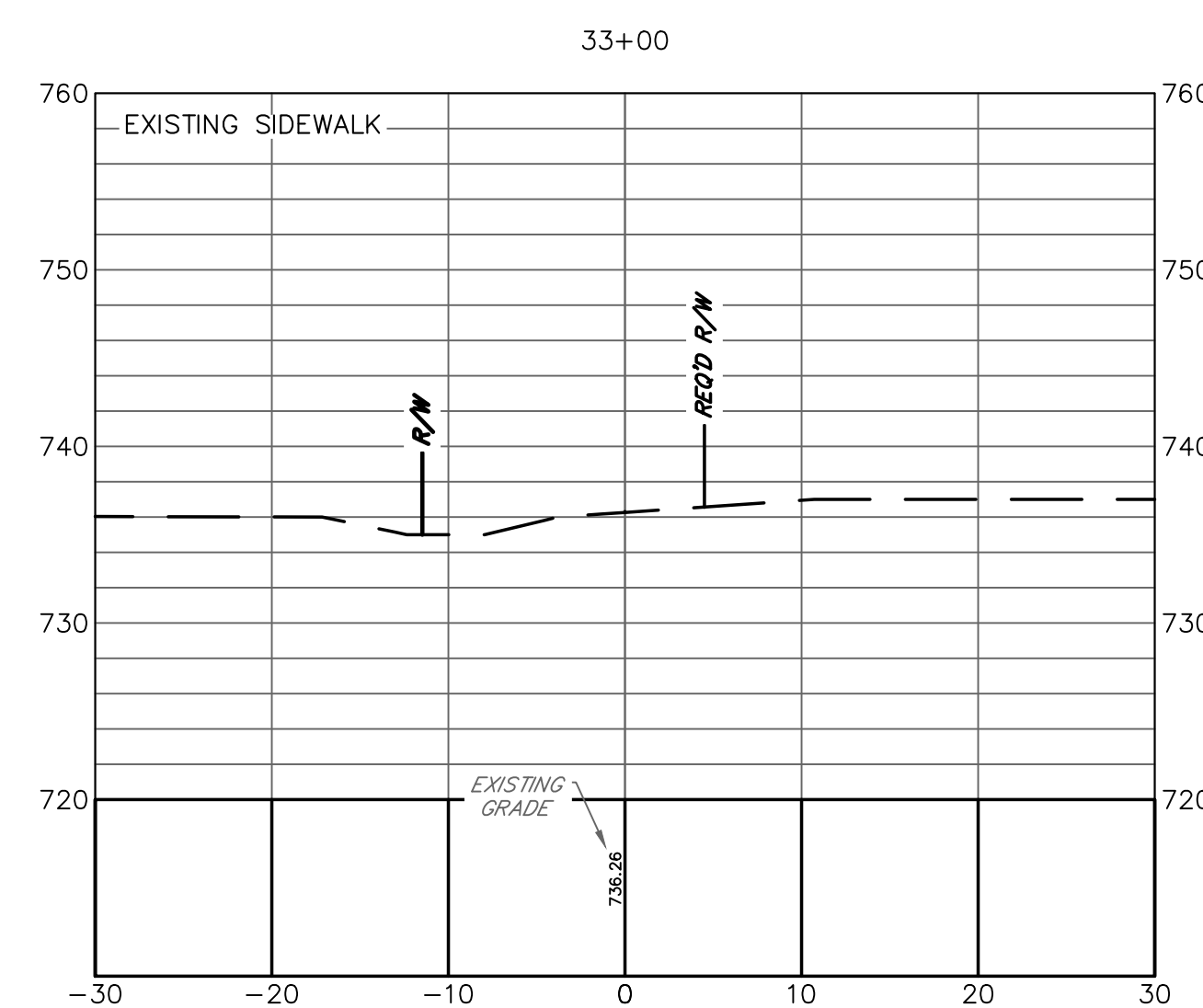
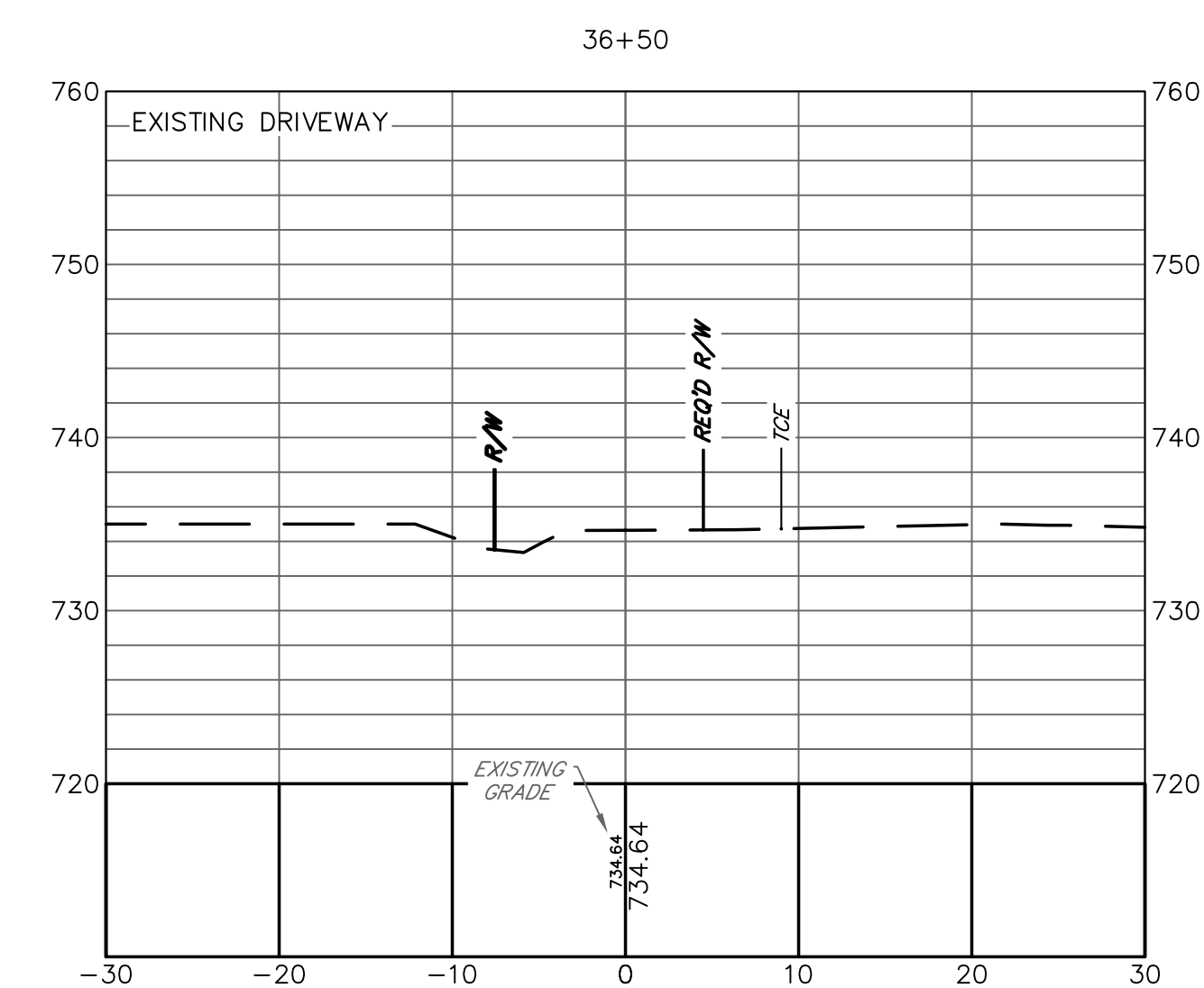
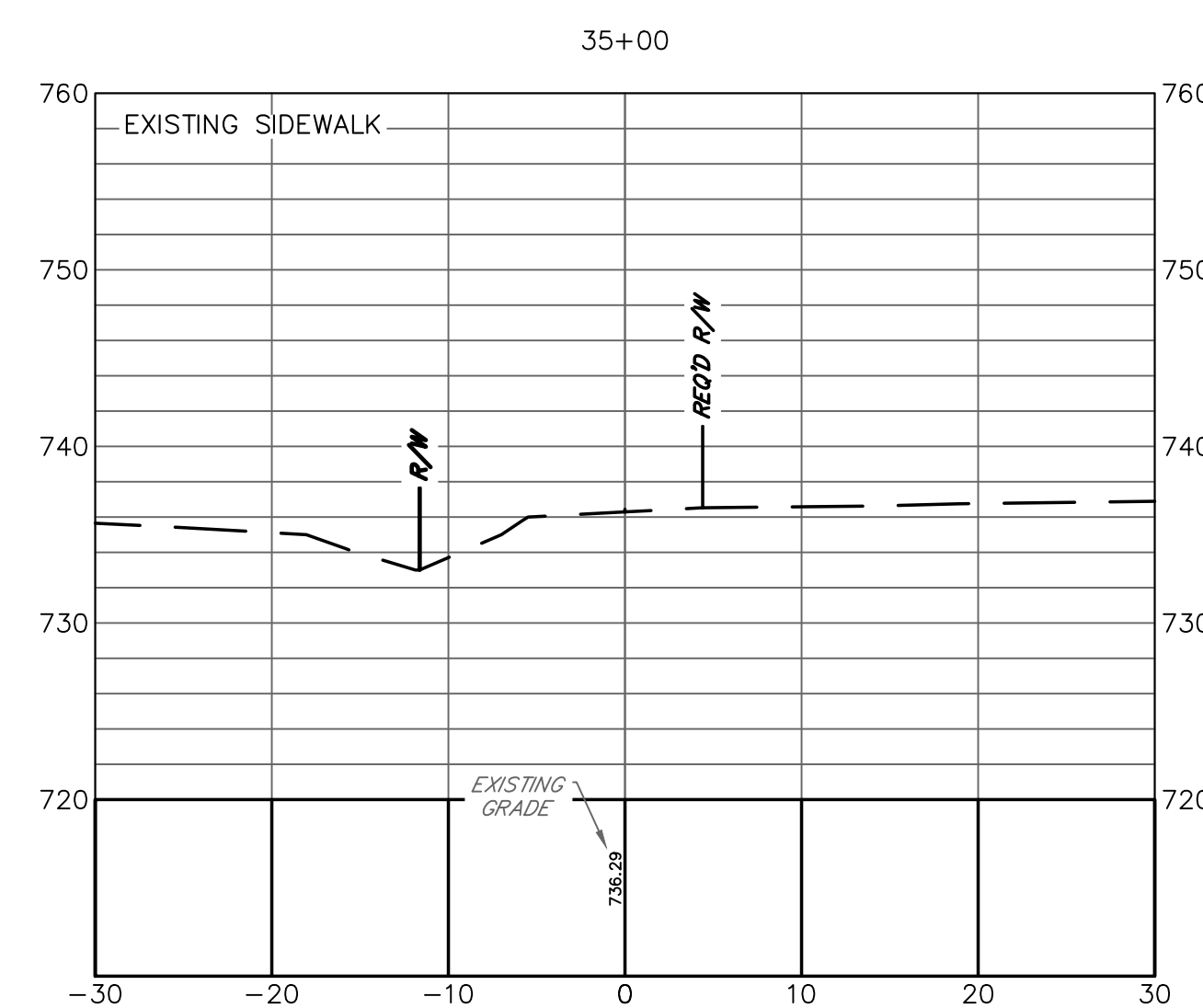
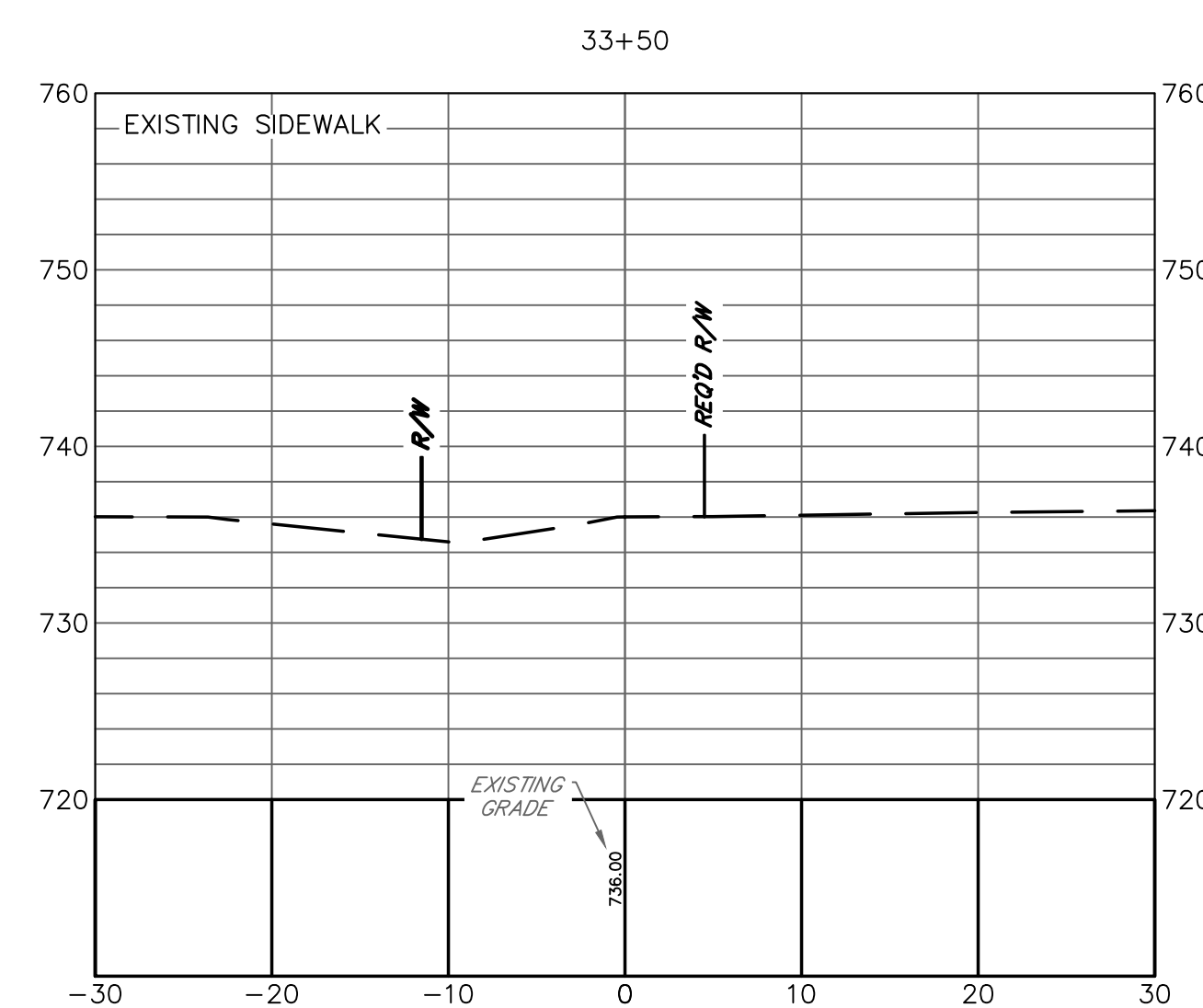
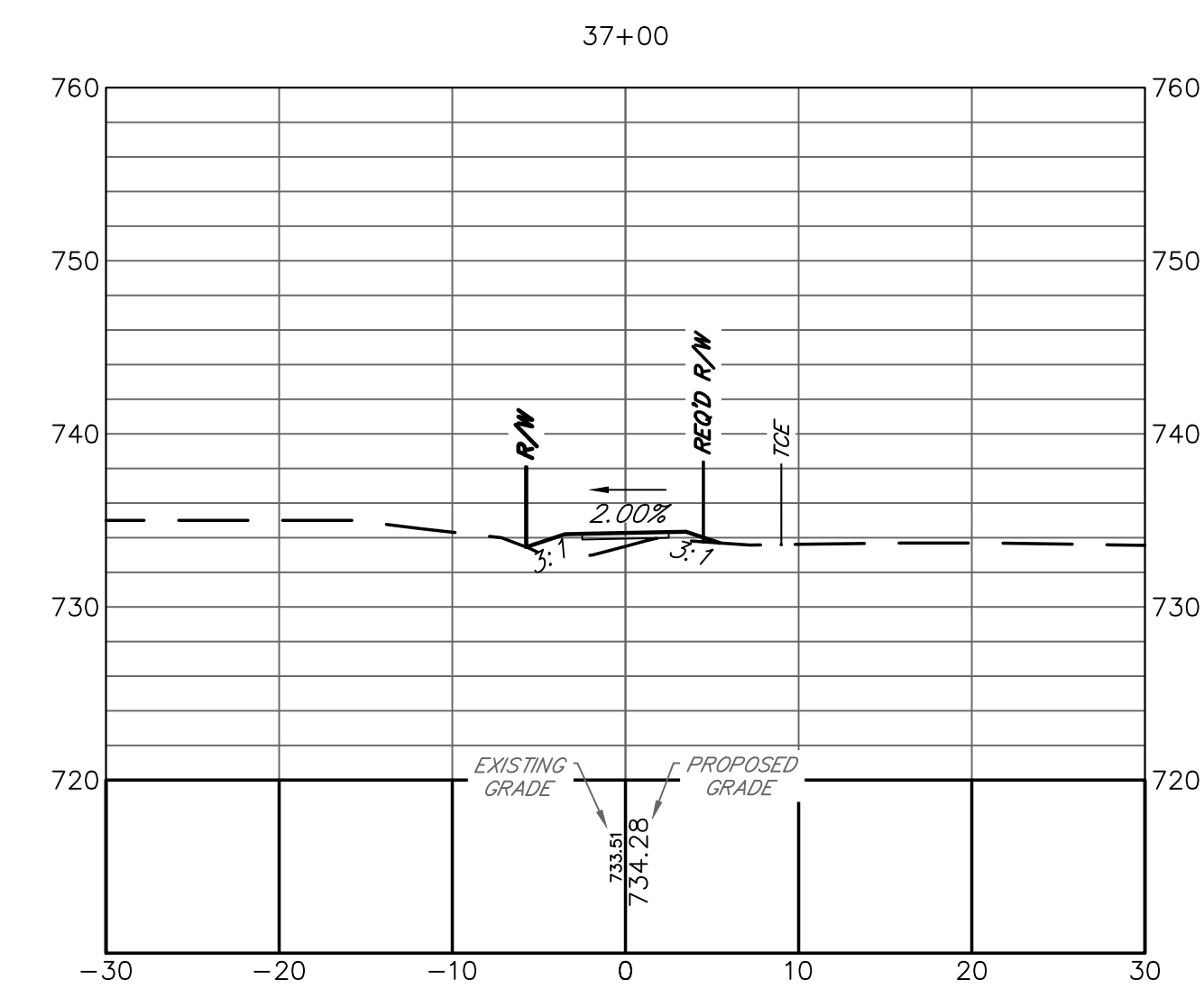
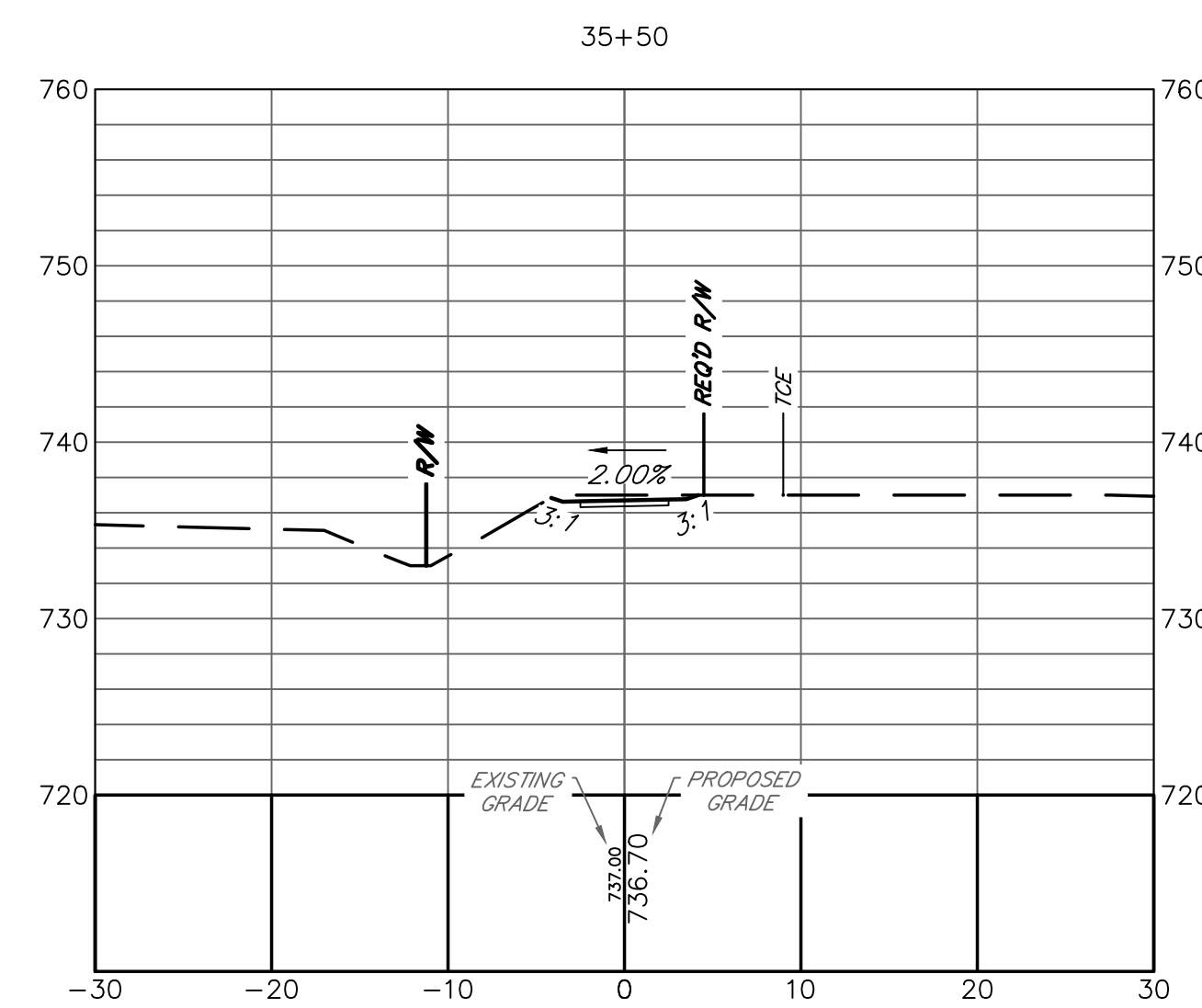
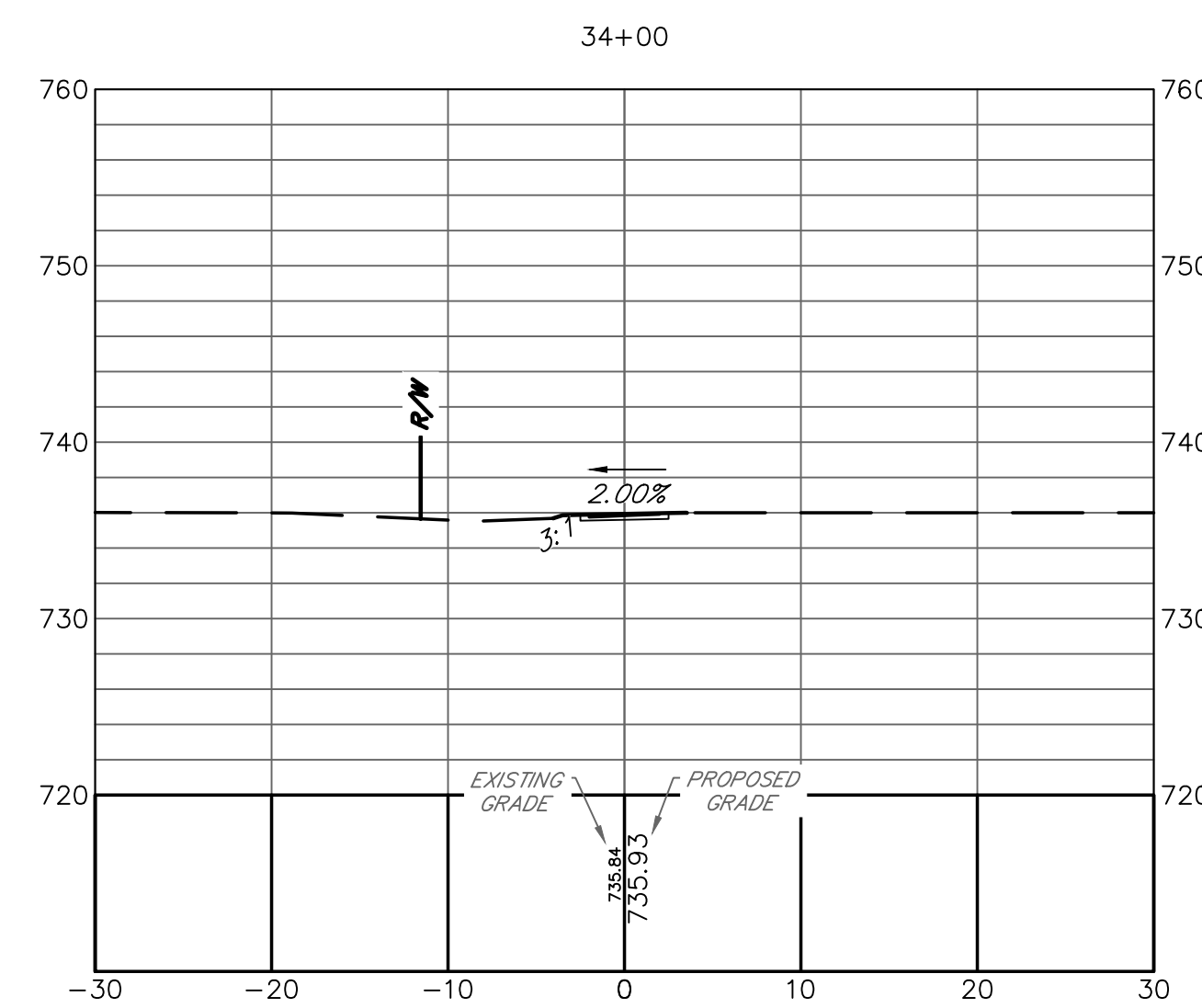
DRAWING FILE: 19022041E.DWG

DRAWING SCALE: 1" = 20'

ORIGINAL RELEASE DATE:
APRIL 27, 2022

Sheet:

23-005



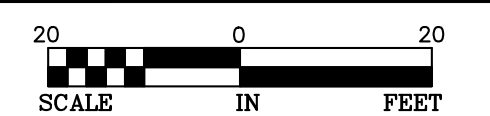
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ATHENS-CLARKE
COUNTY, GA

SHEET TITLE: CROSS SECTIONS

LEXINGTON ROAD CORRIDOR SIDEWALK PROJECTS



PROJECT INFORMATION

JOB NO: 19022041

DRAWN BY: KC

CHECKED BY: EH

DRAWING FILE: 19022041E.DWG

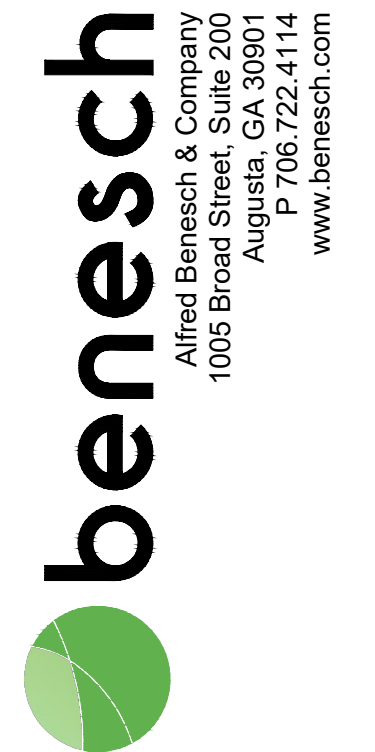
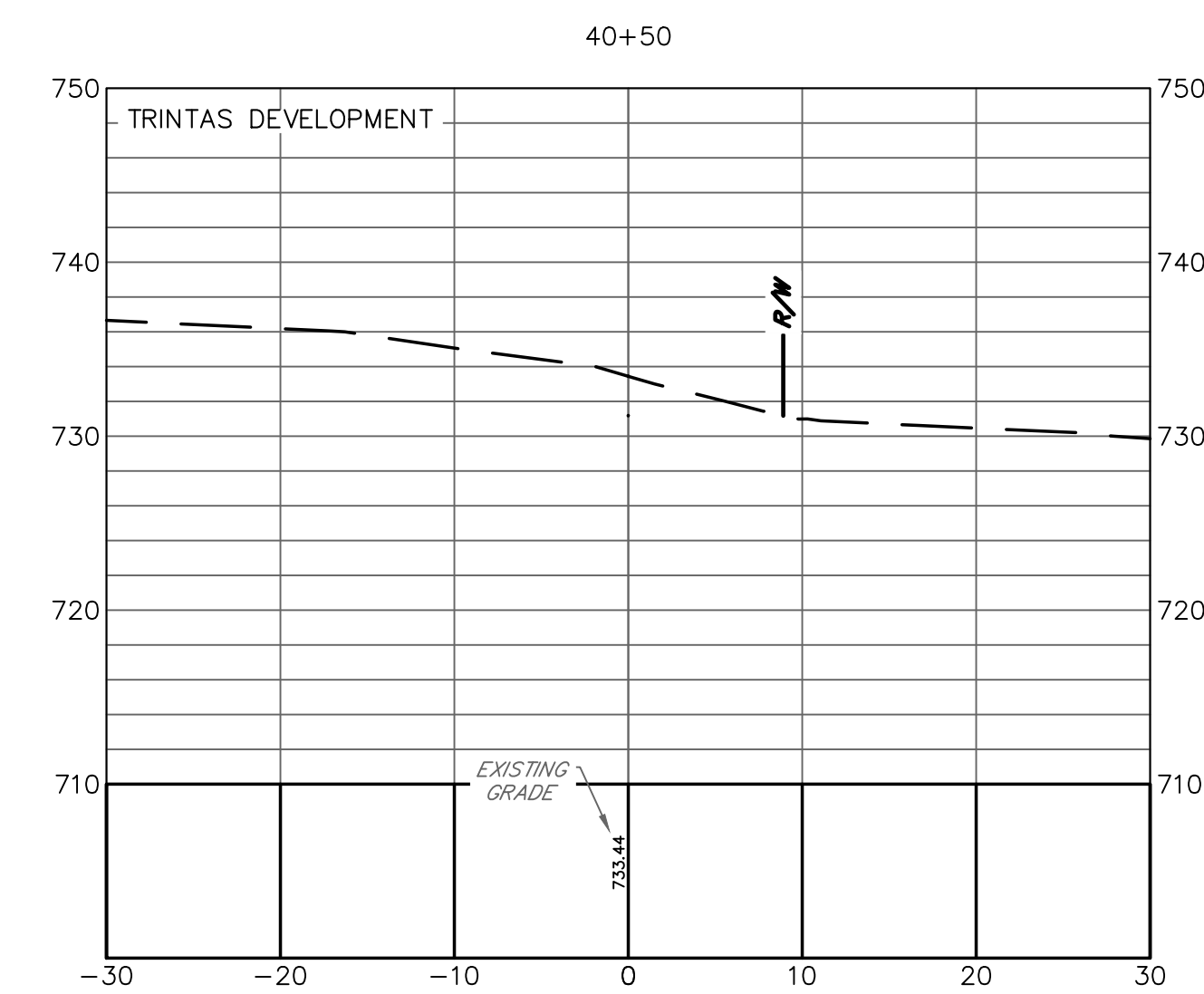
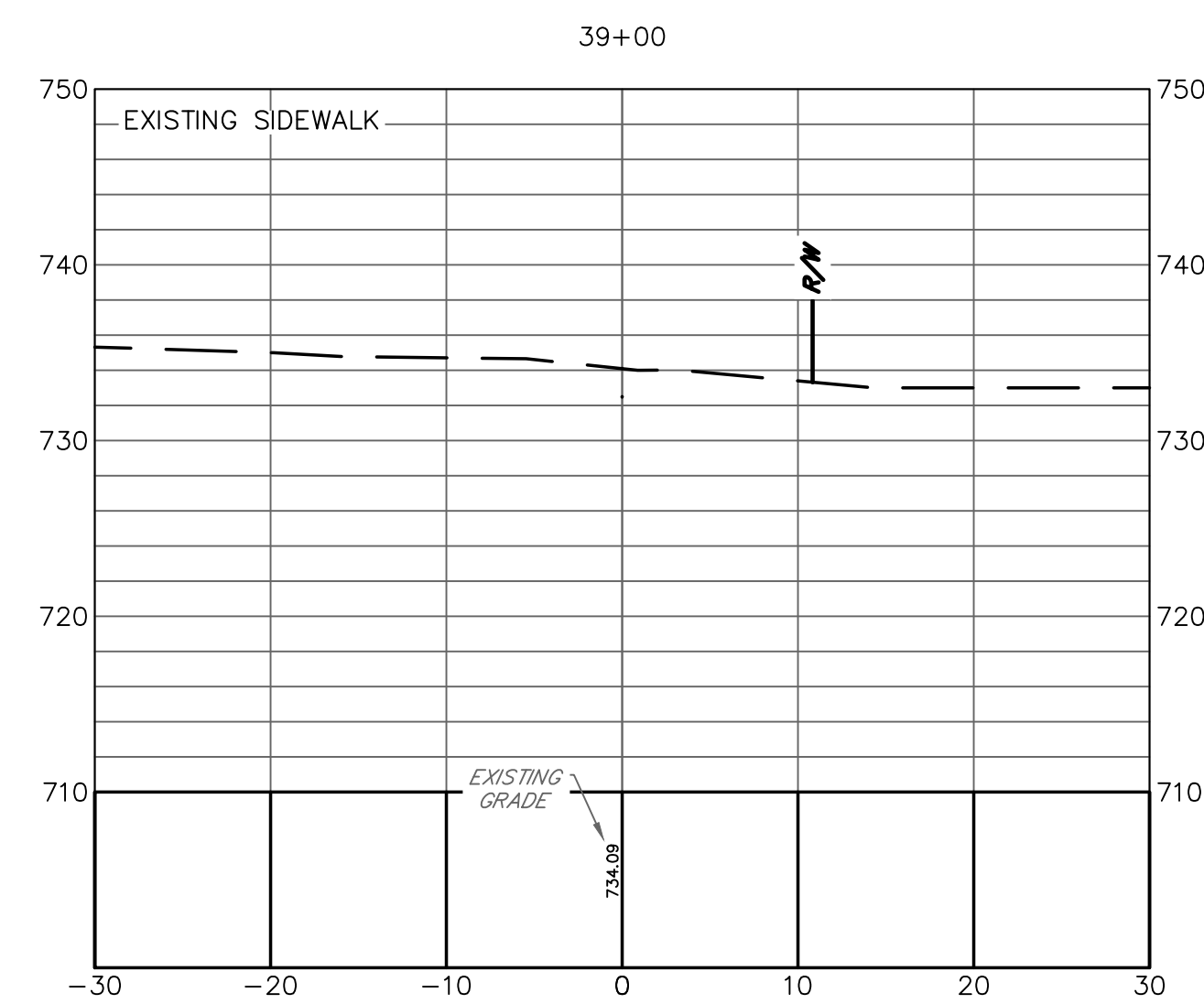
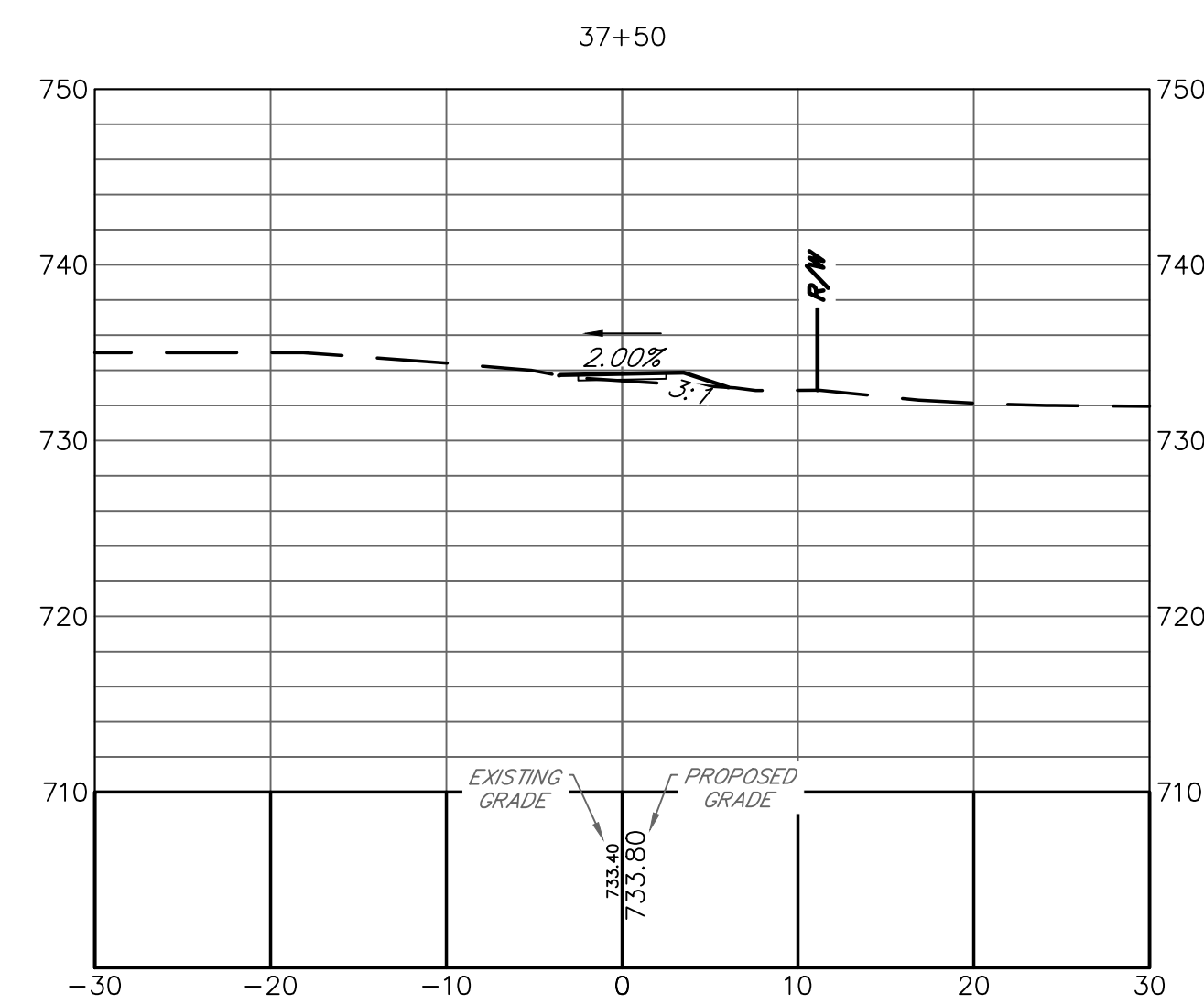
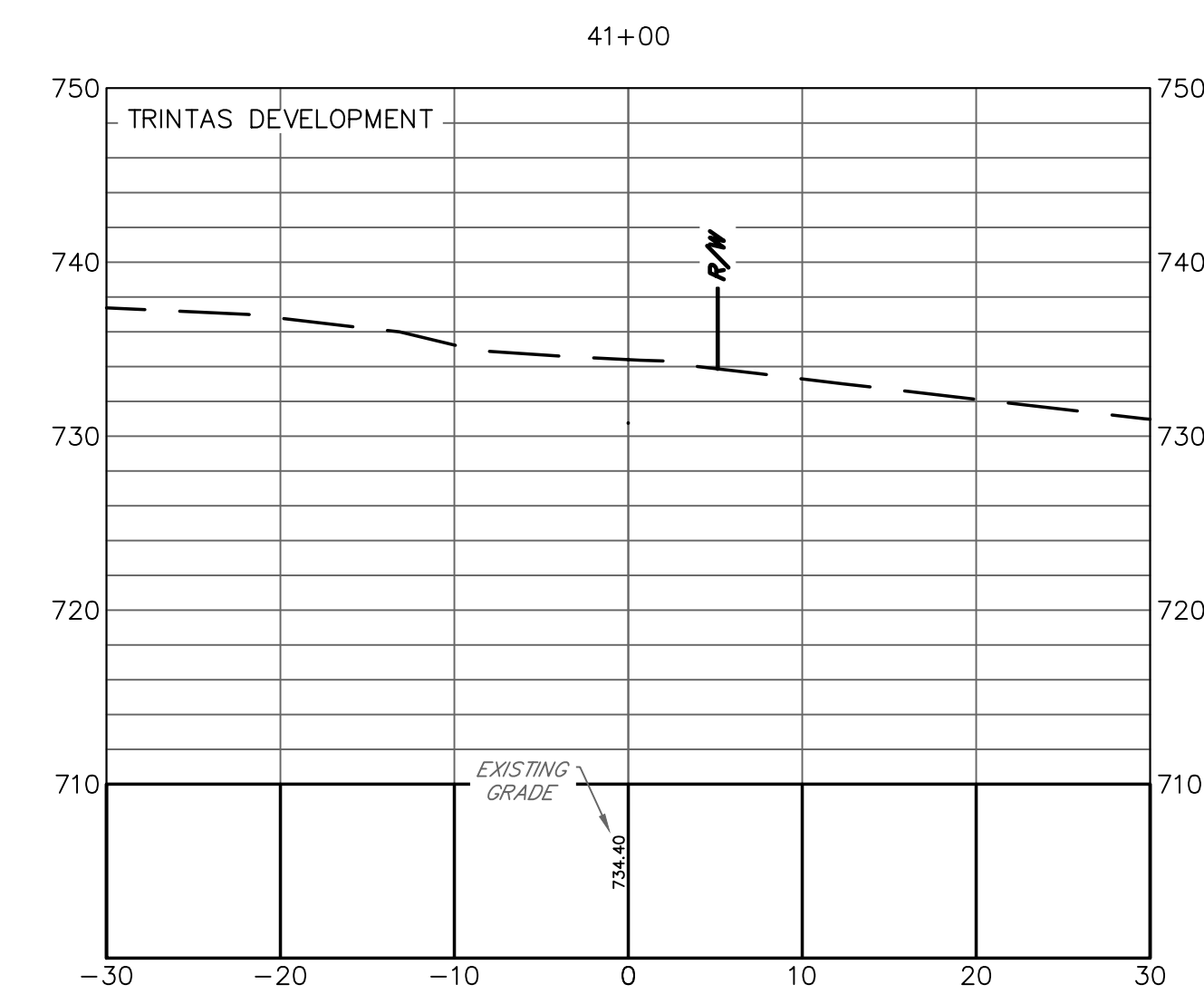
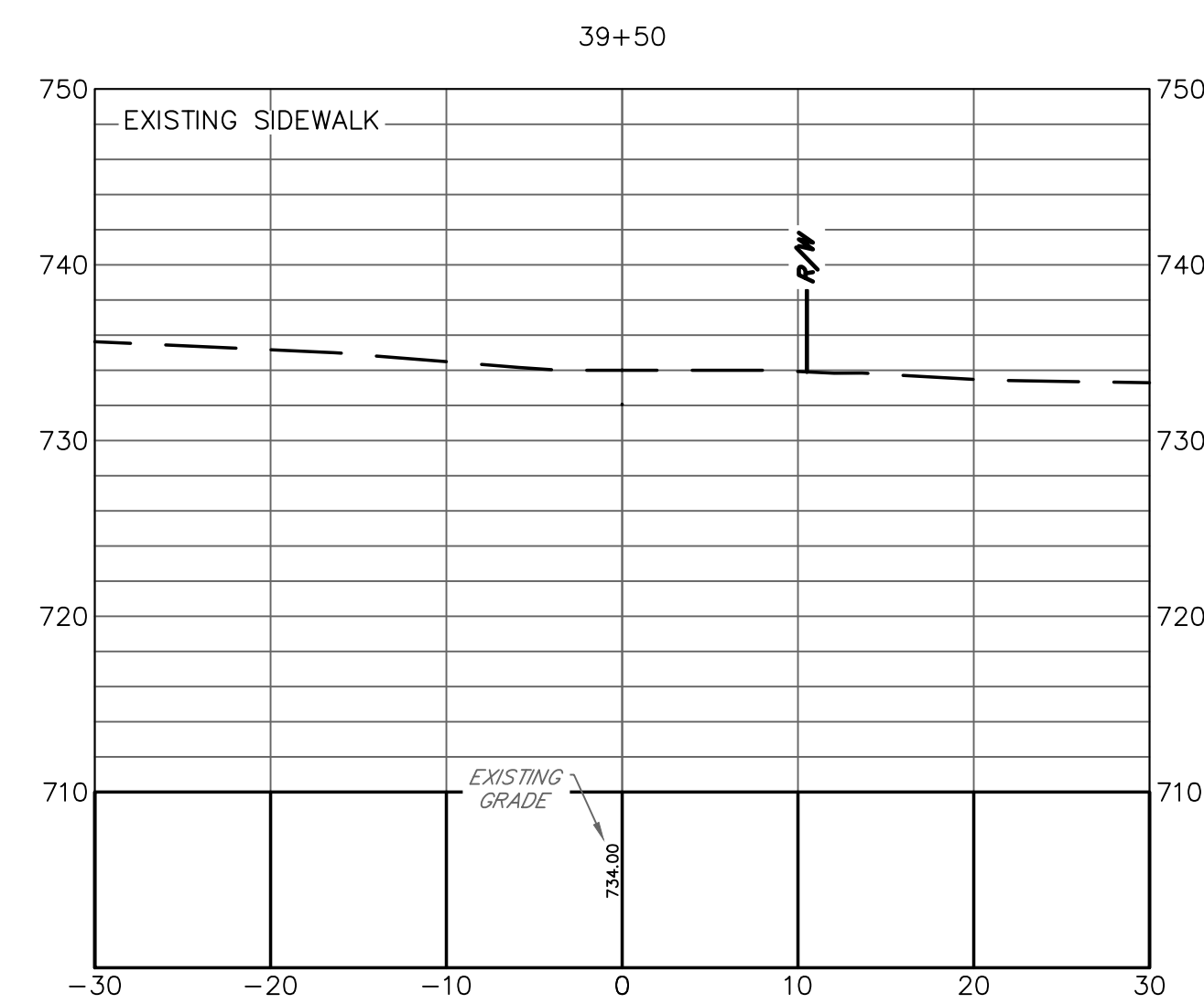
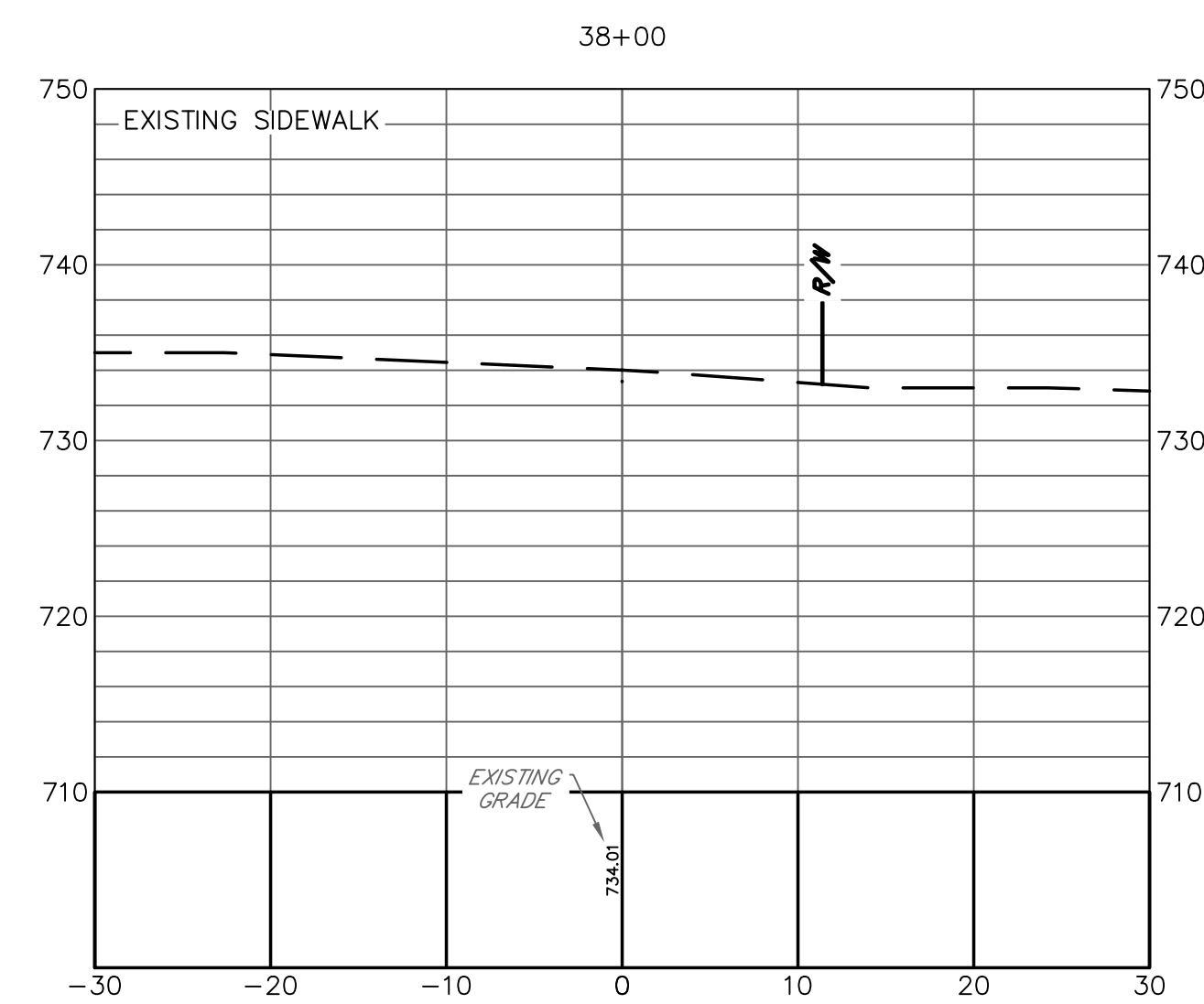
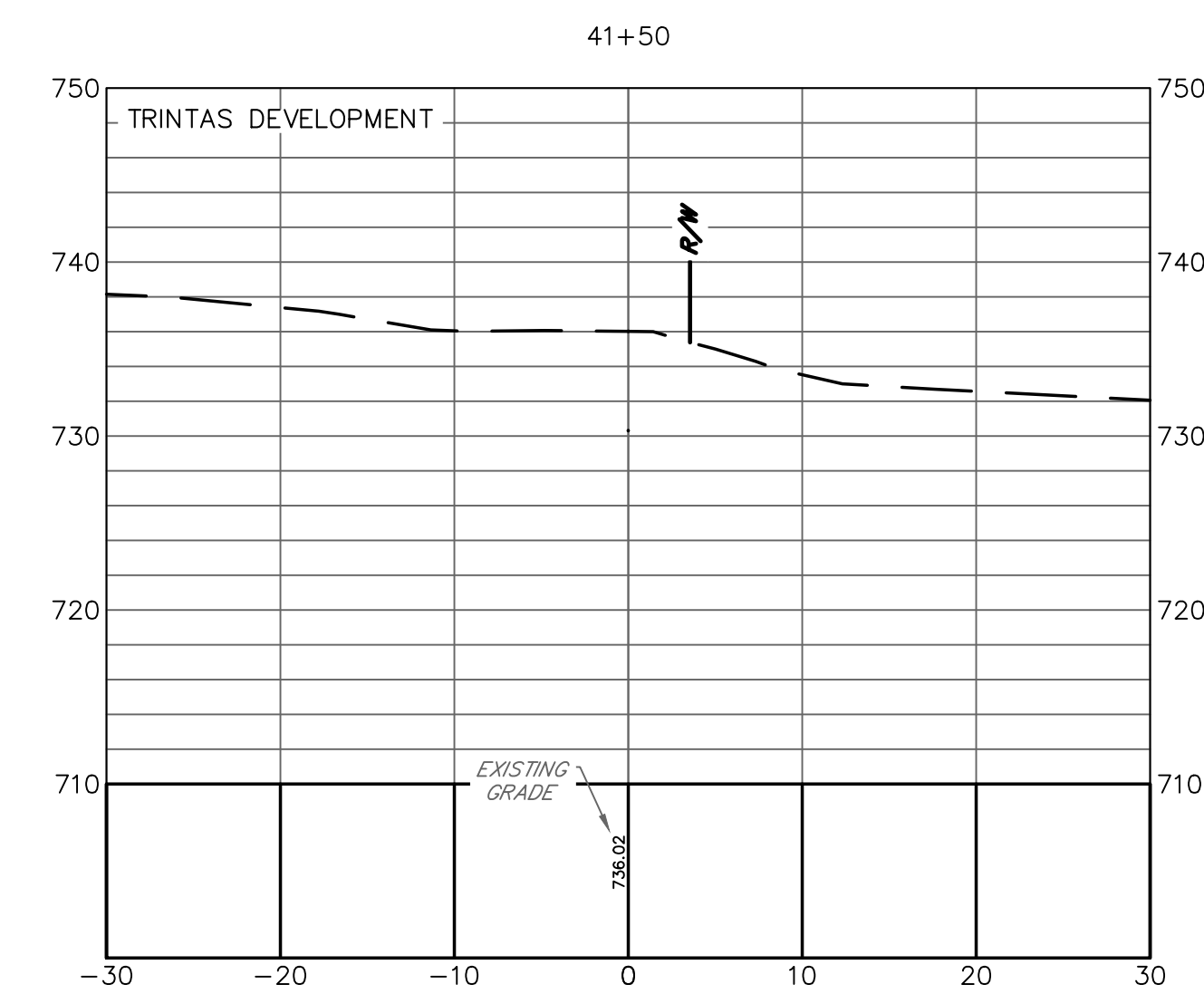
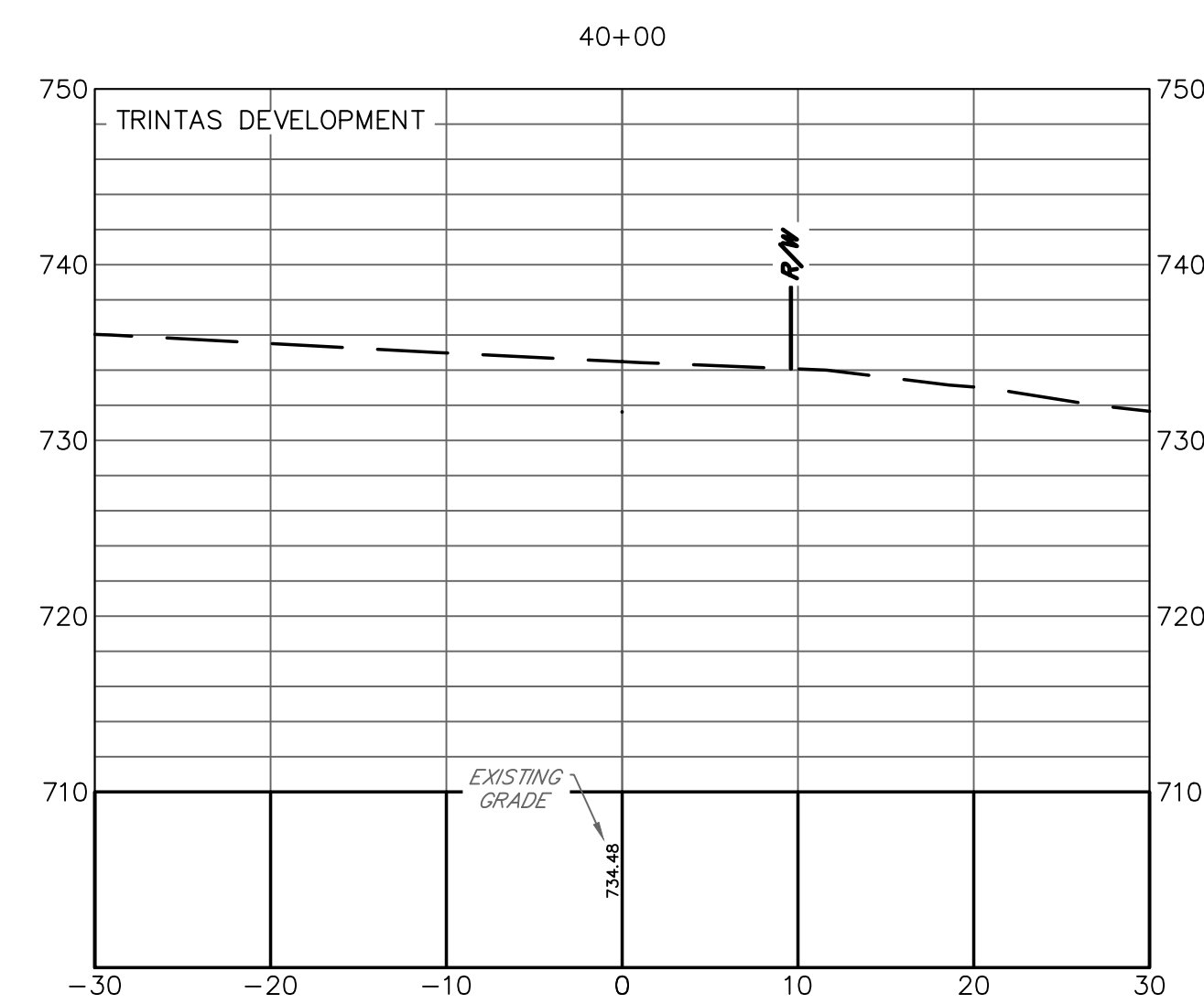
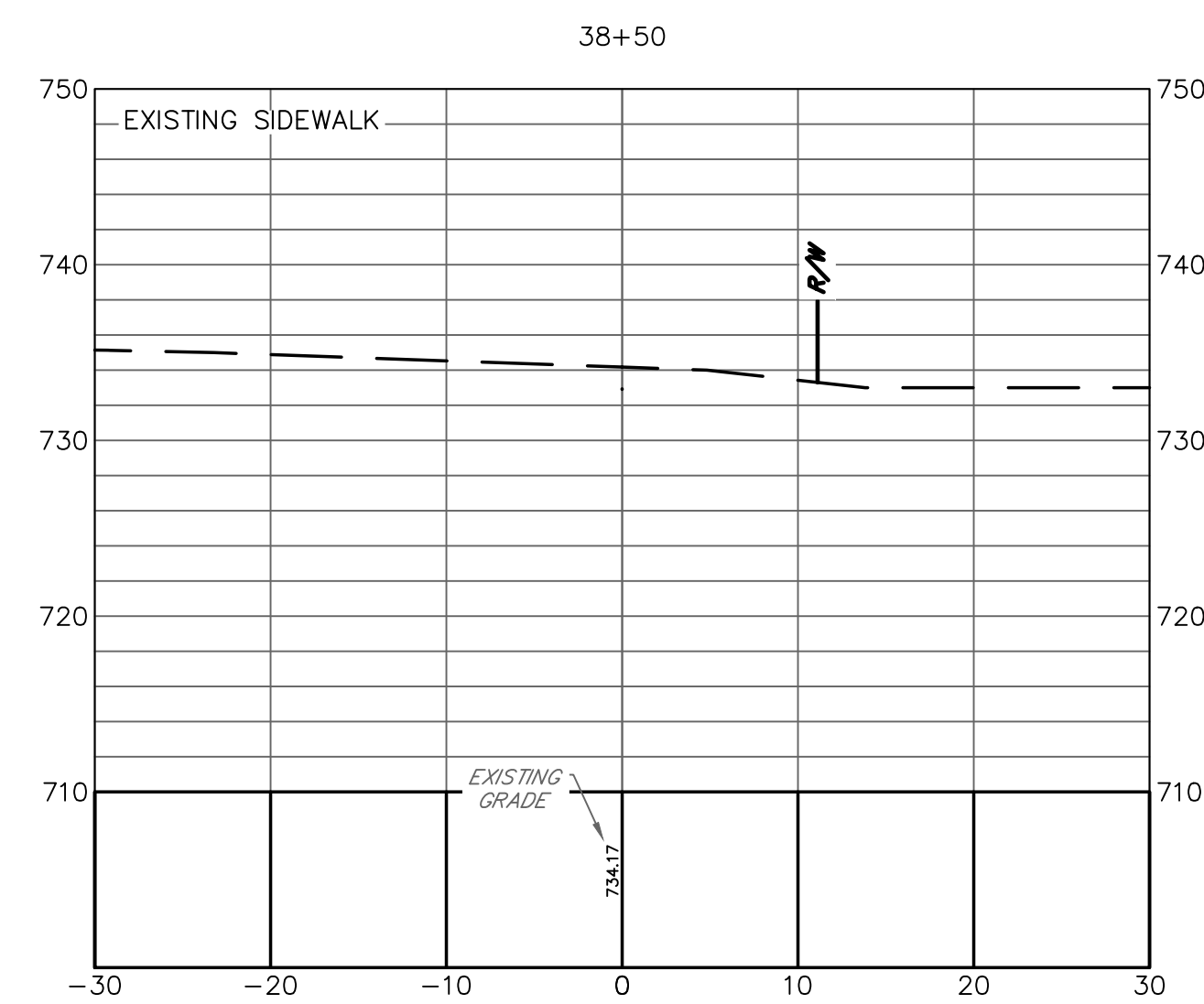
DRAWING SCALE: 1" = 20'

ORIGINAL RELEASE DATE:

APRIL 27, 2022

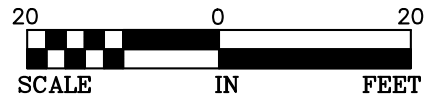
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ATHENS-CLARKE
COUNTY, GA

SHEET TITLE:
CROSS SECTIONS

LEXINGTON ROAD CORRIDOR SIDEWALK PROJECTS



PROJECT INFORMATION

JOB NO: 19022041

DRAWN BY: KC

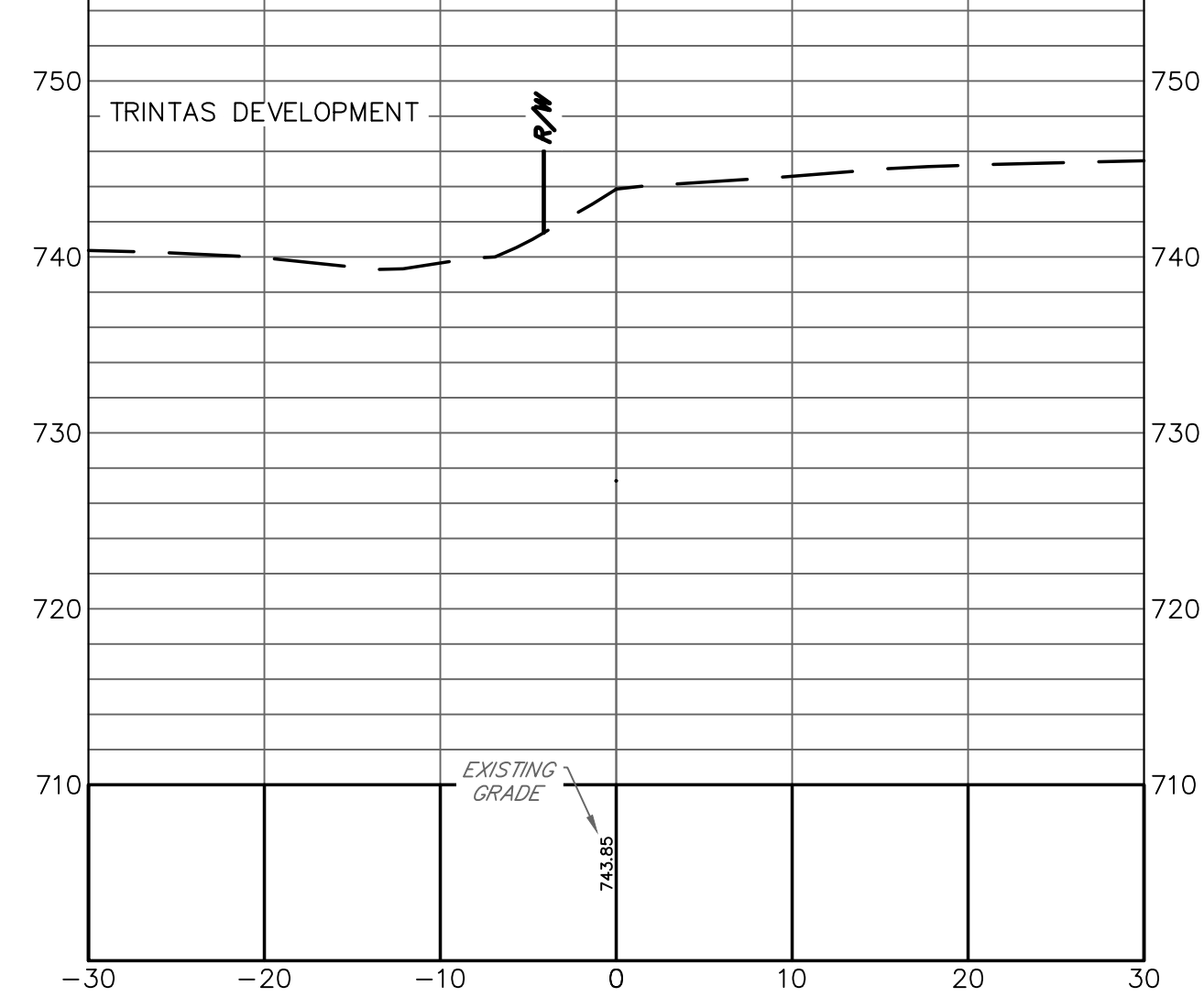
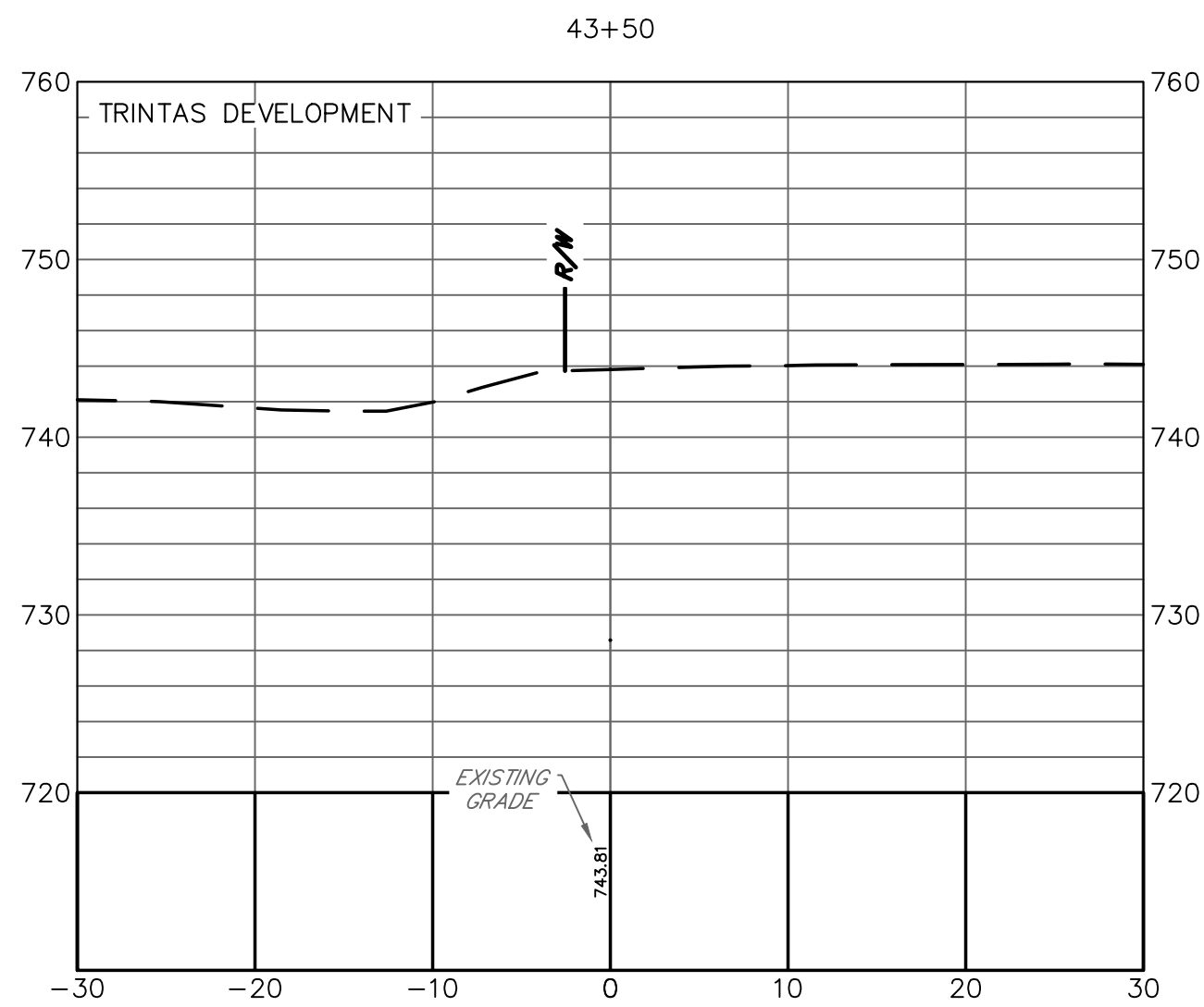
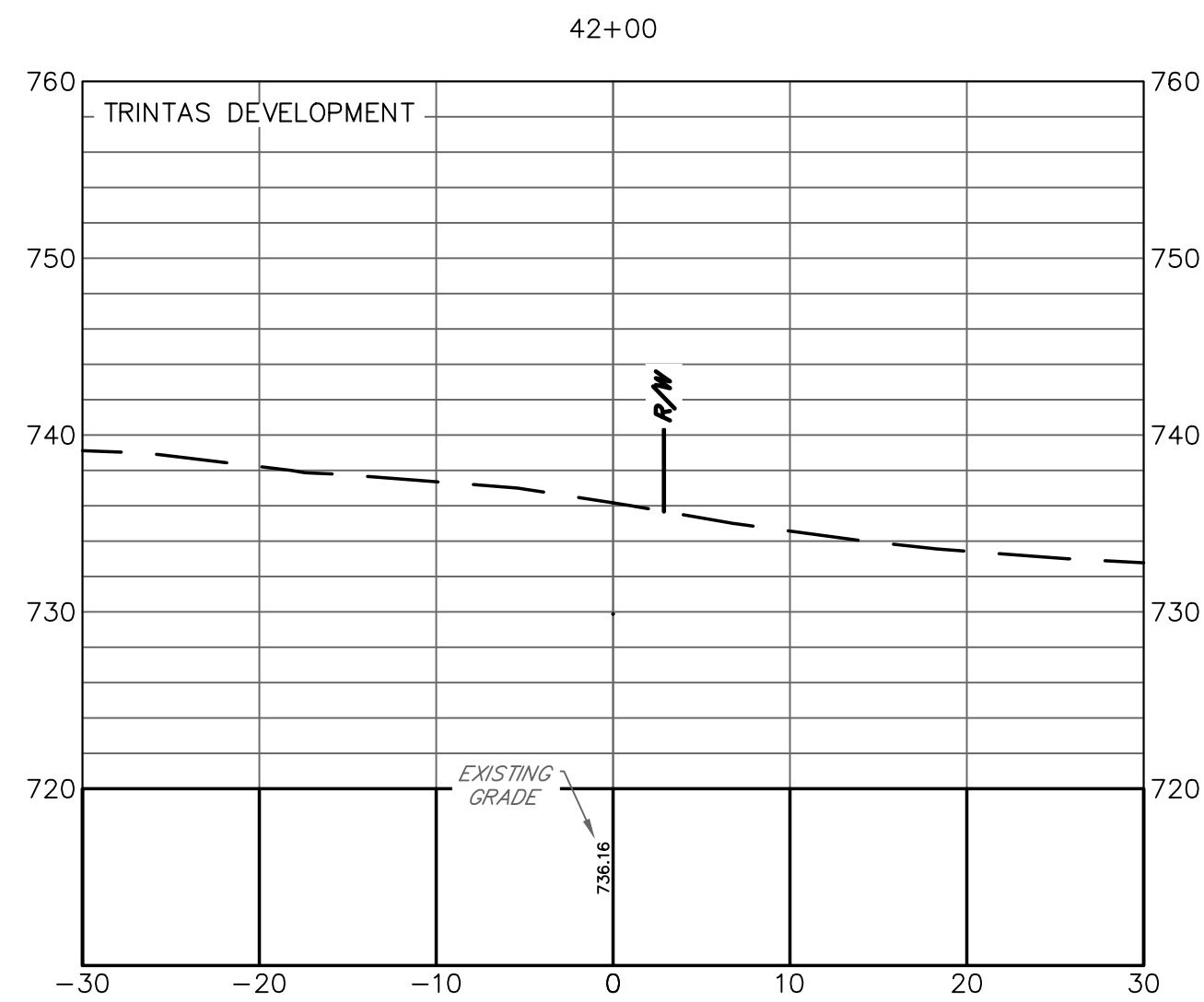
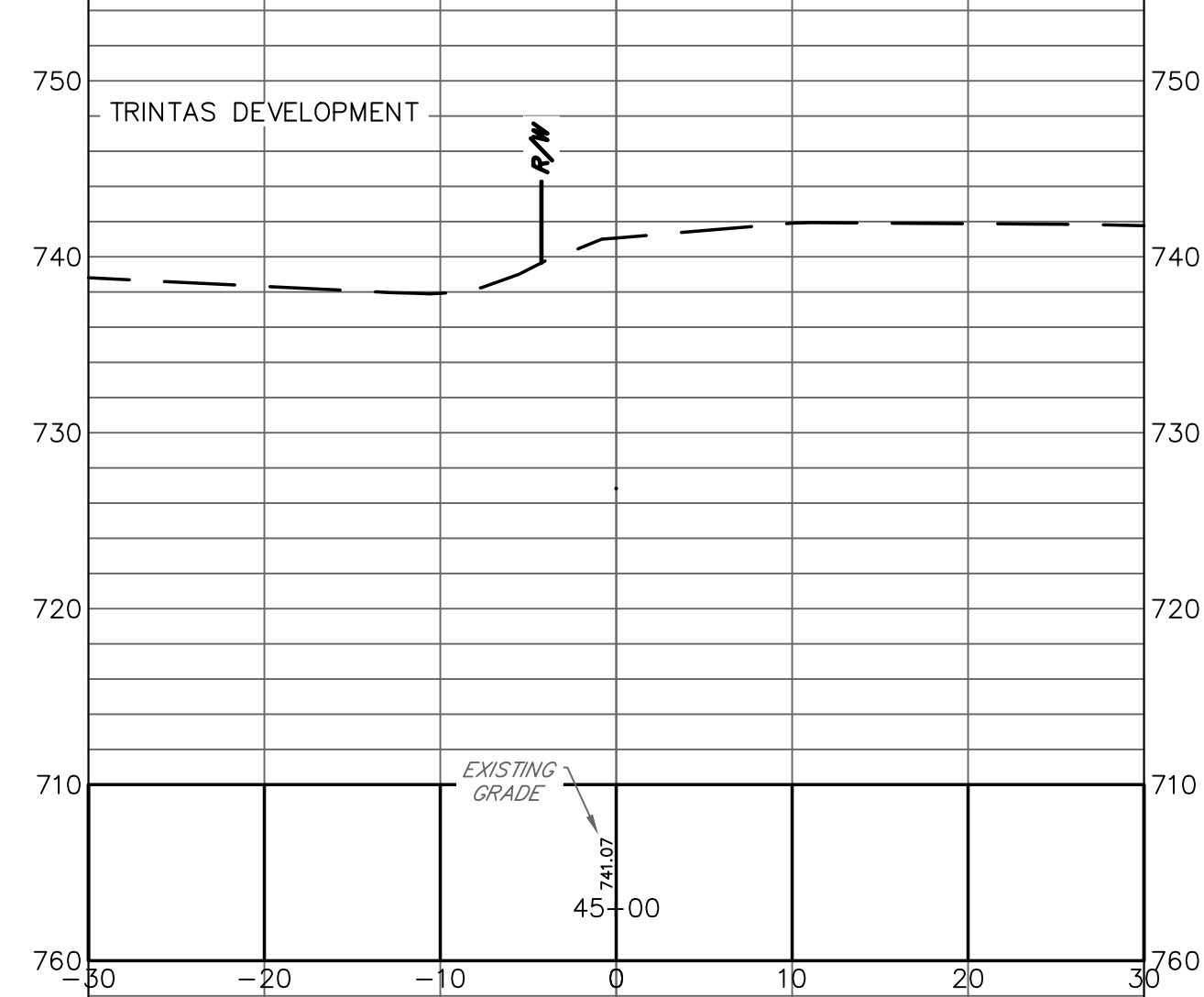
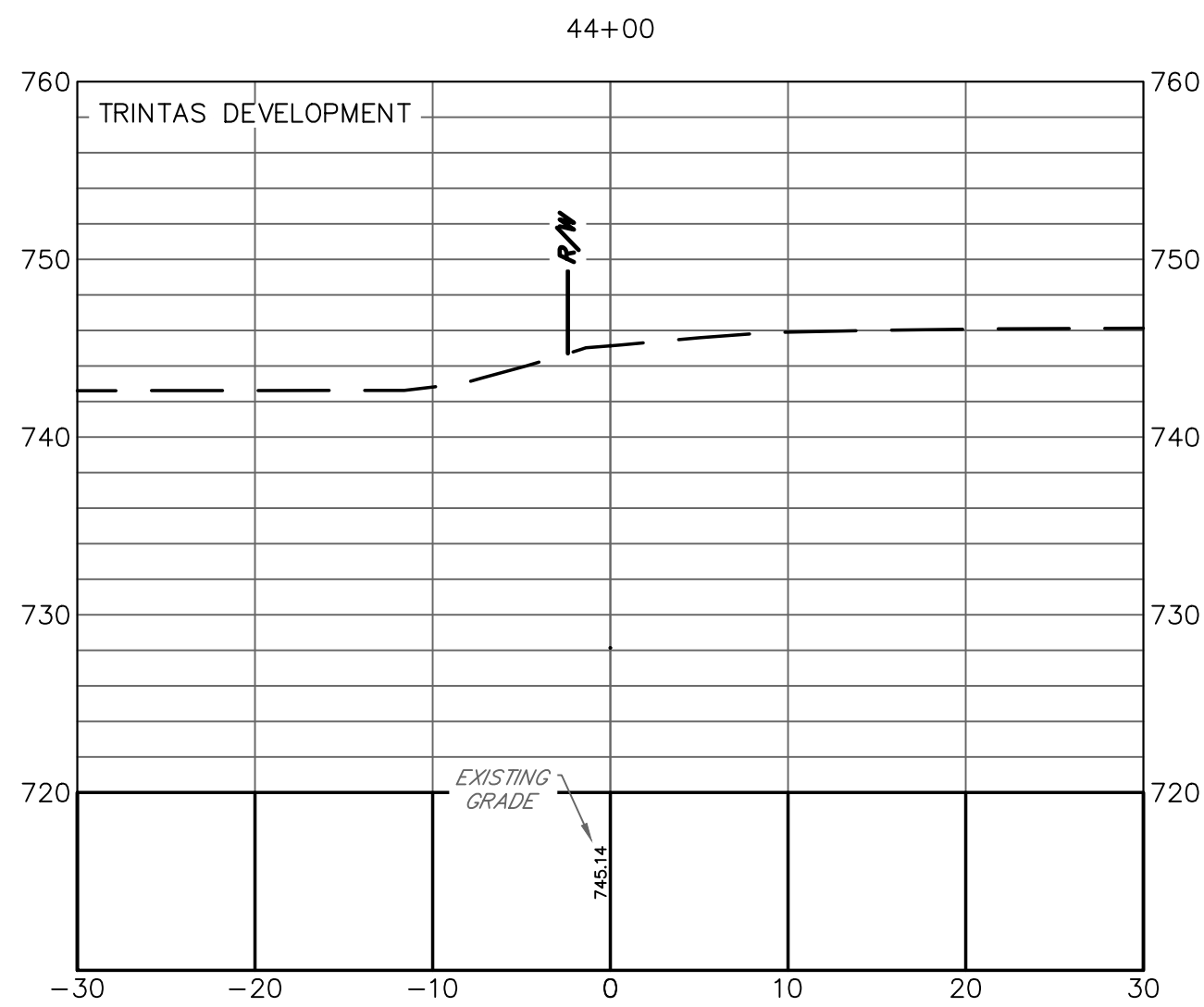
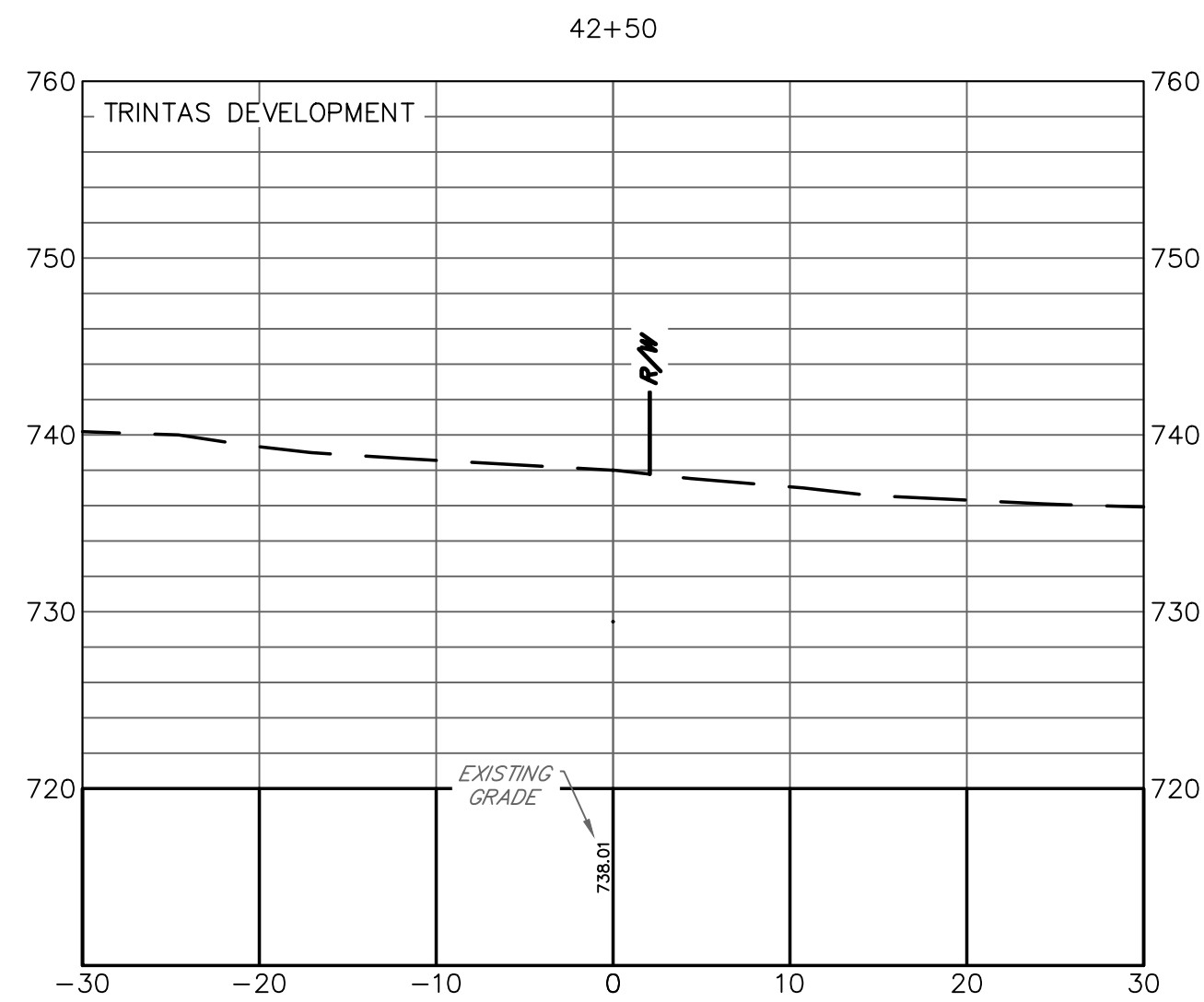
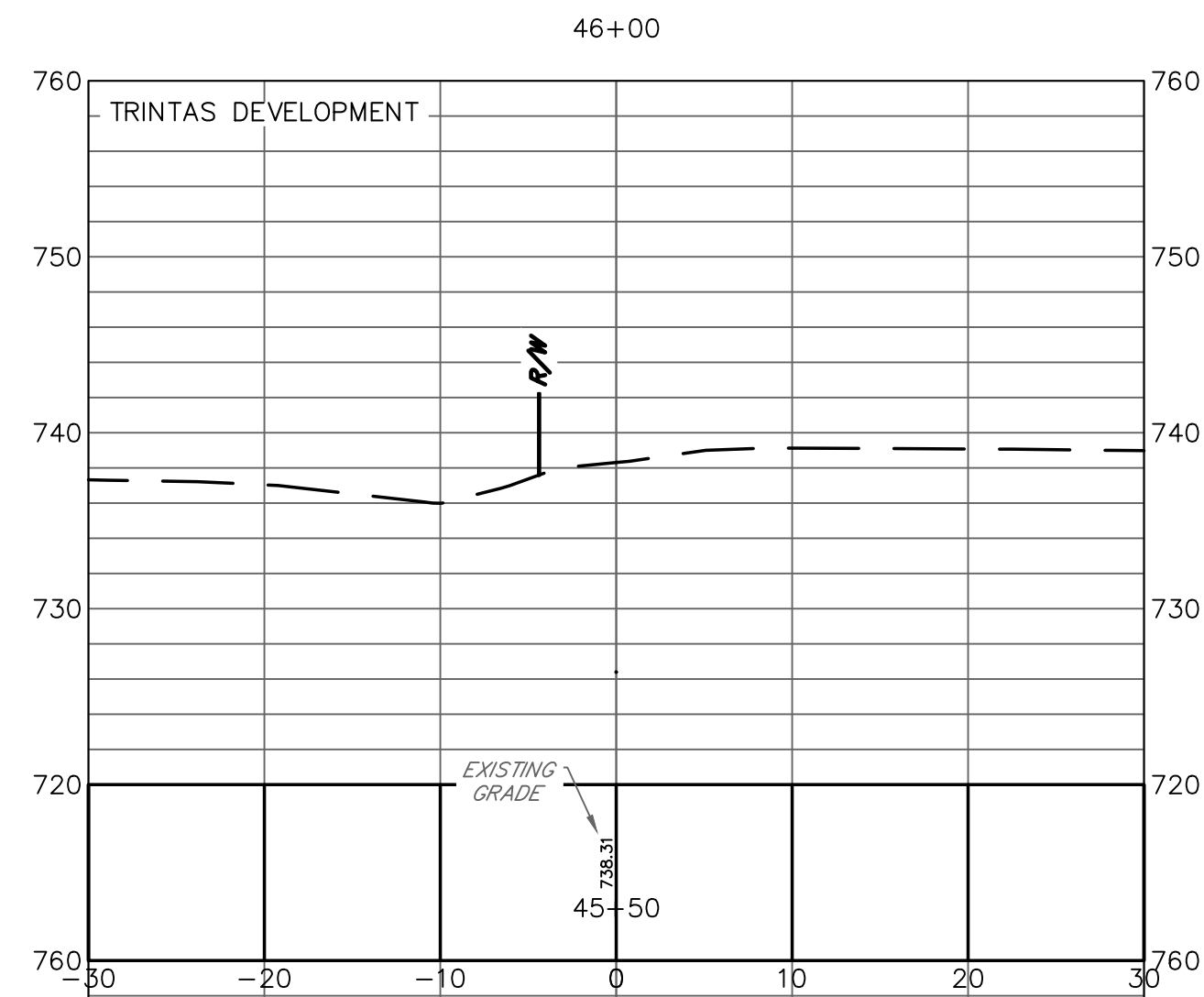
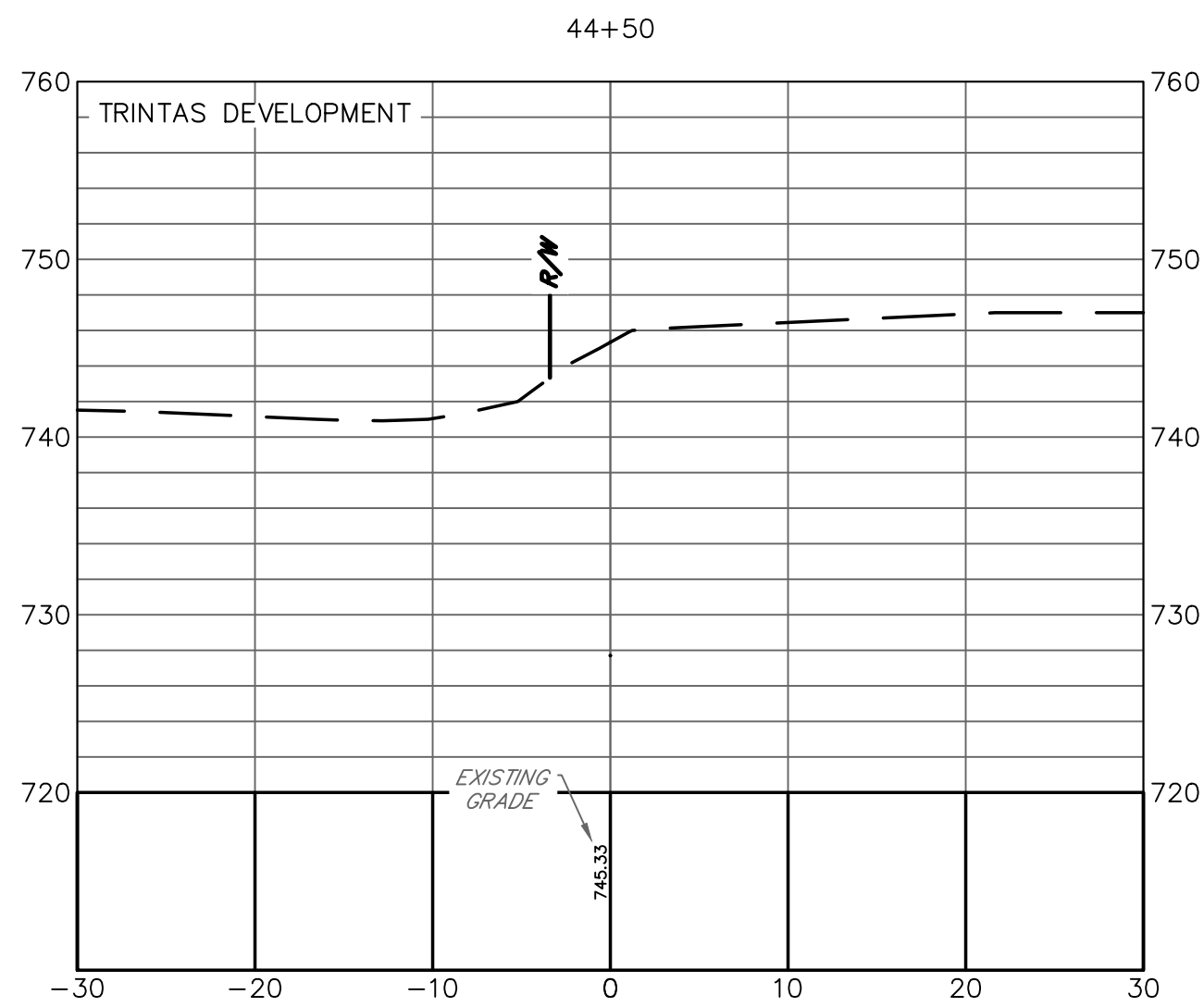
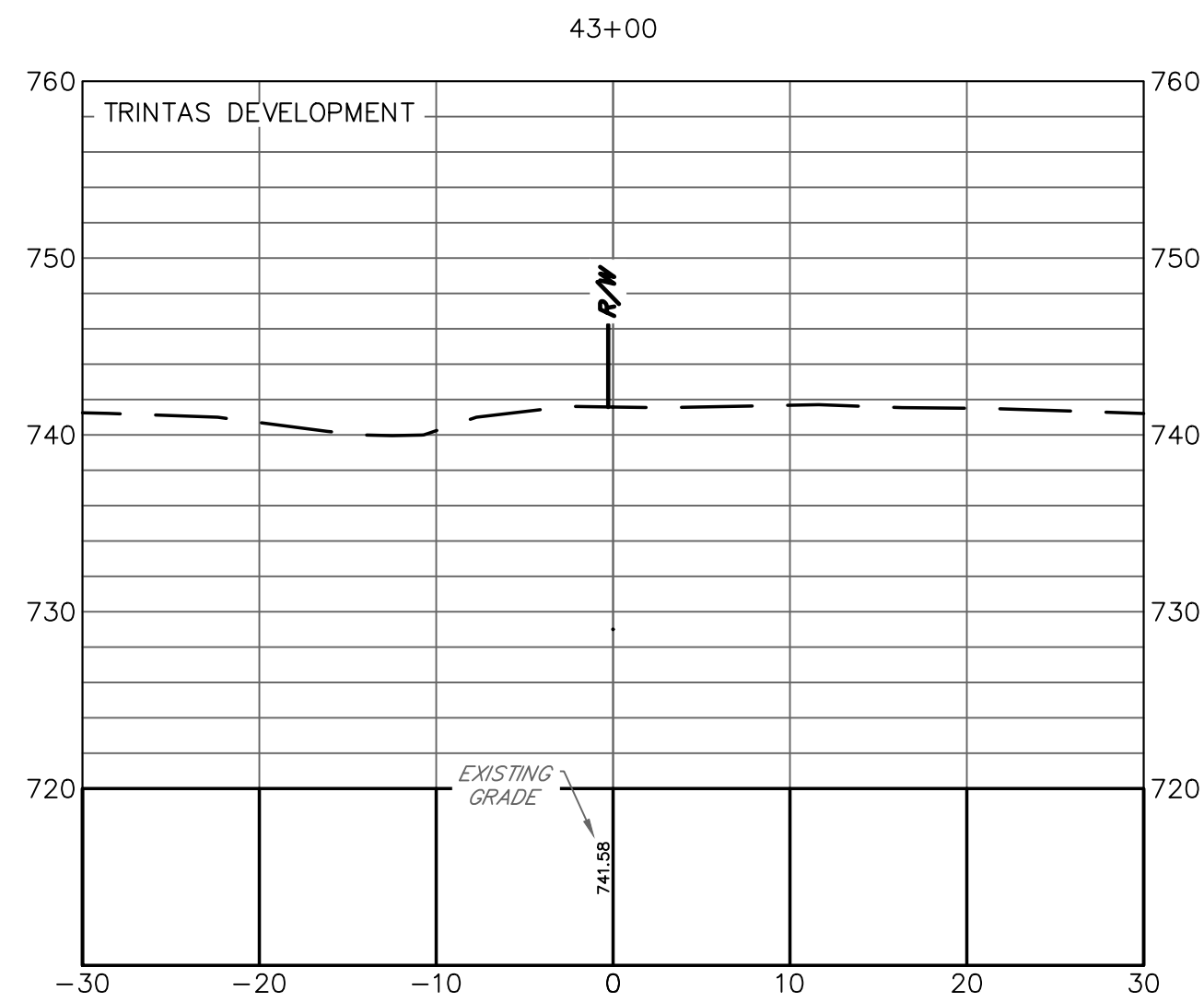
CHECKED BY: EH

DRAWING FILE: 19022041E.DWG

DRAWING SCALE: 1" = 20'

ORIGINAL RELEASE DATE:
APRIL 27 2022

Sheet:
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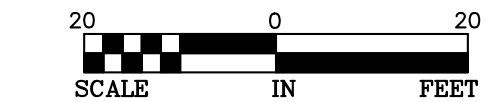


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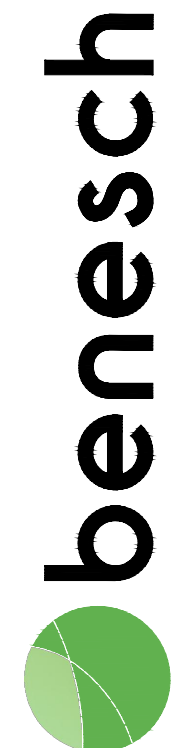
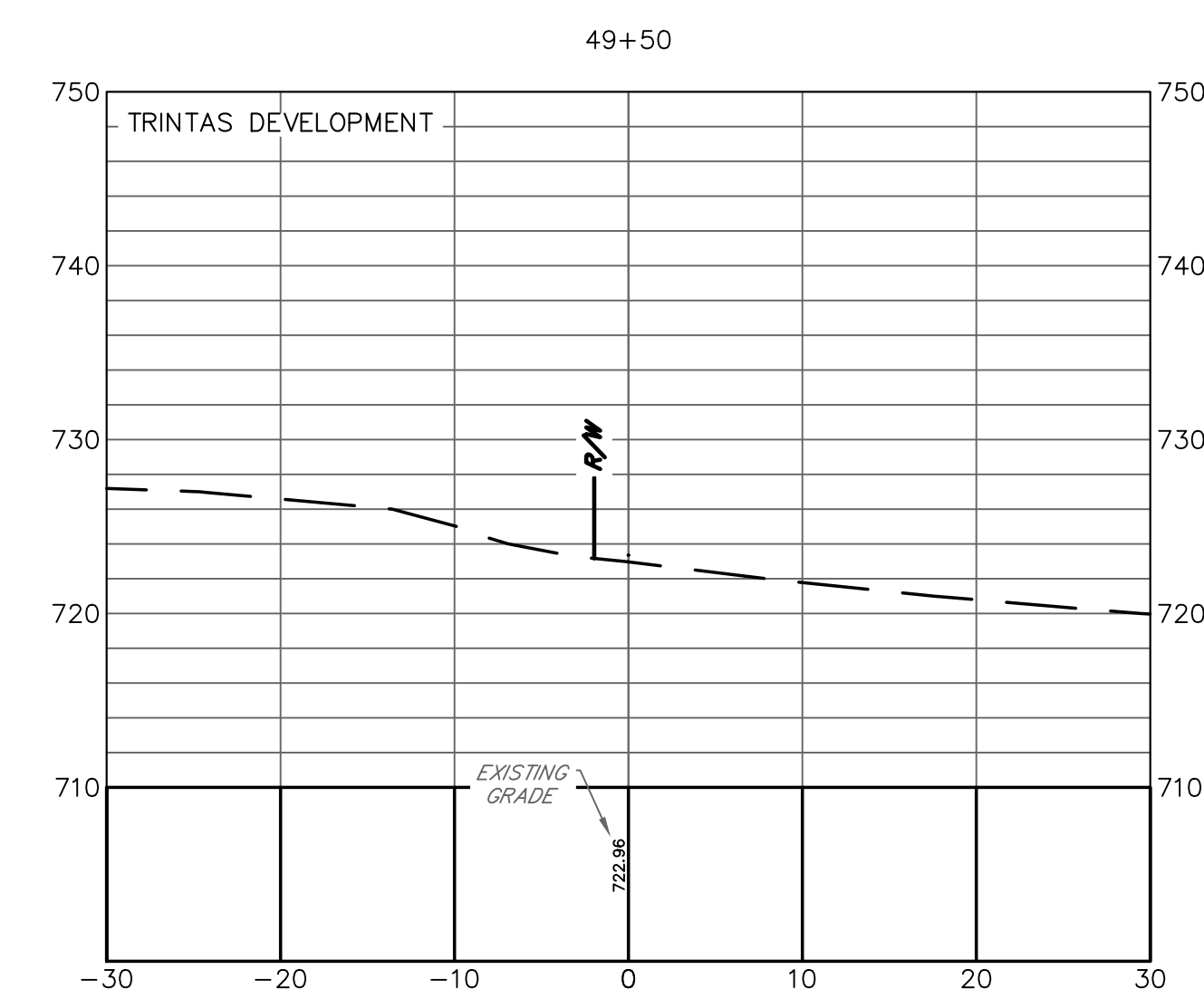
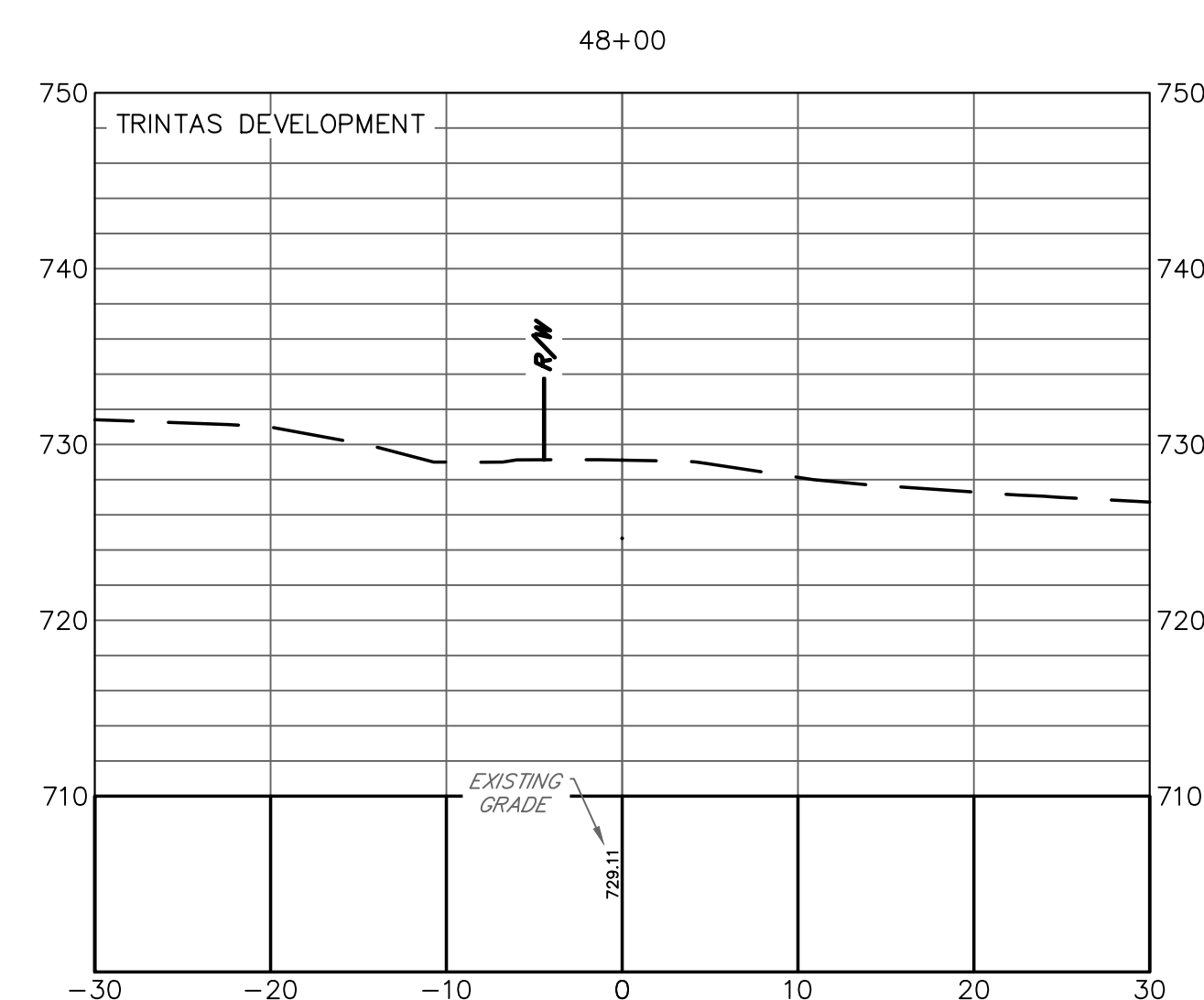
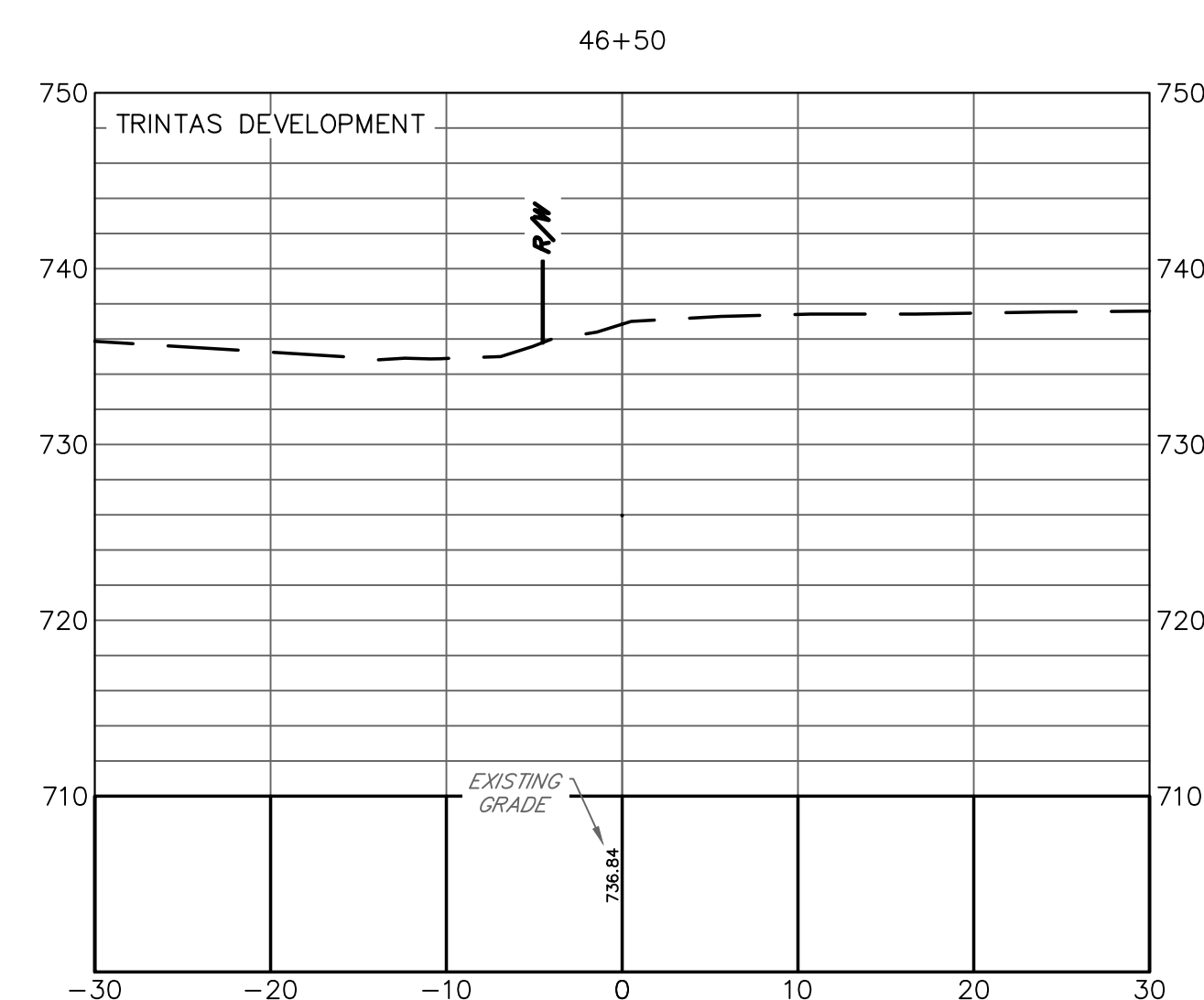
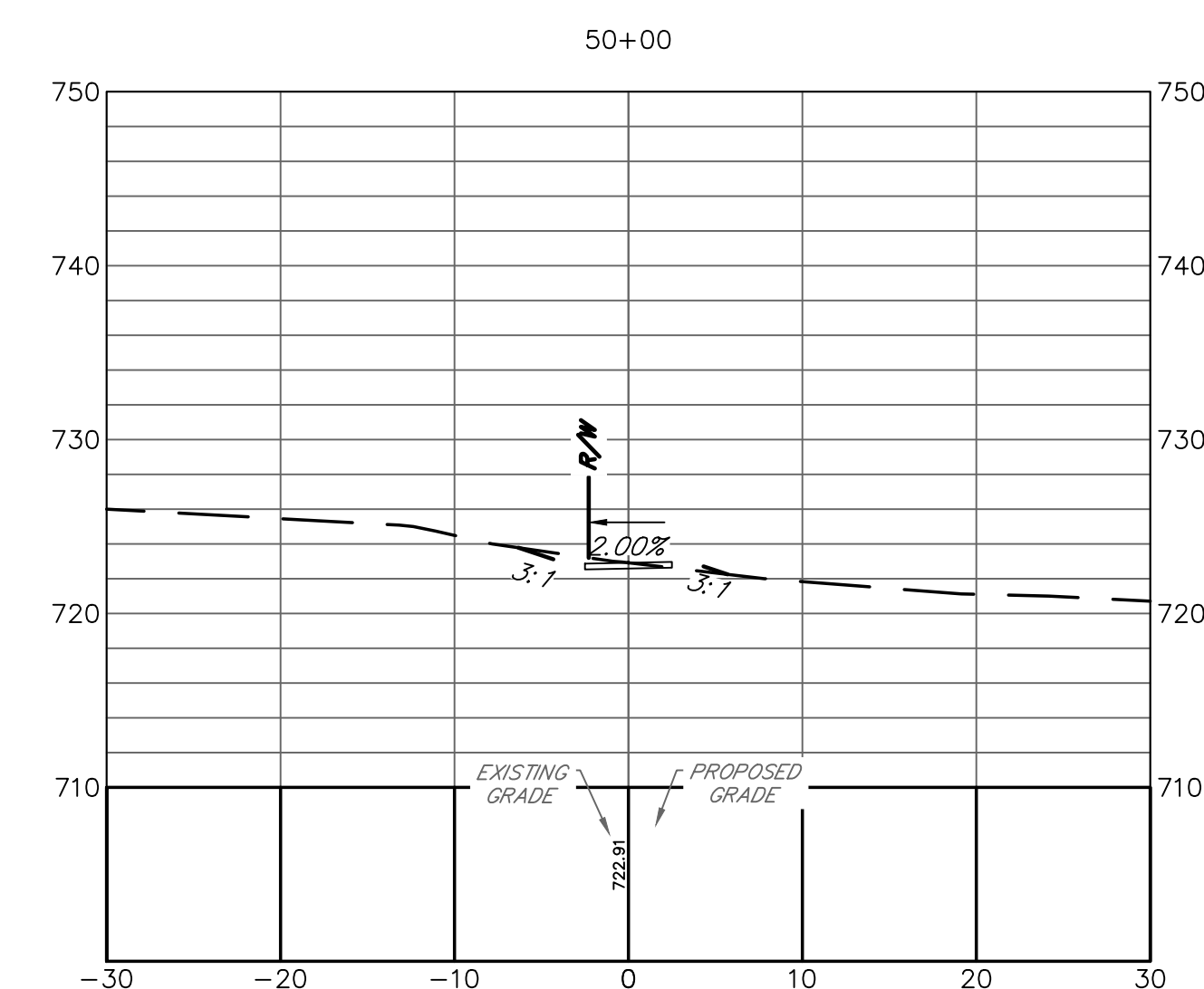
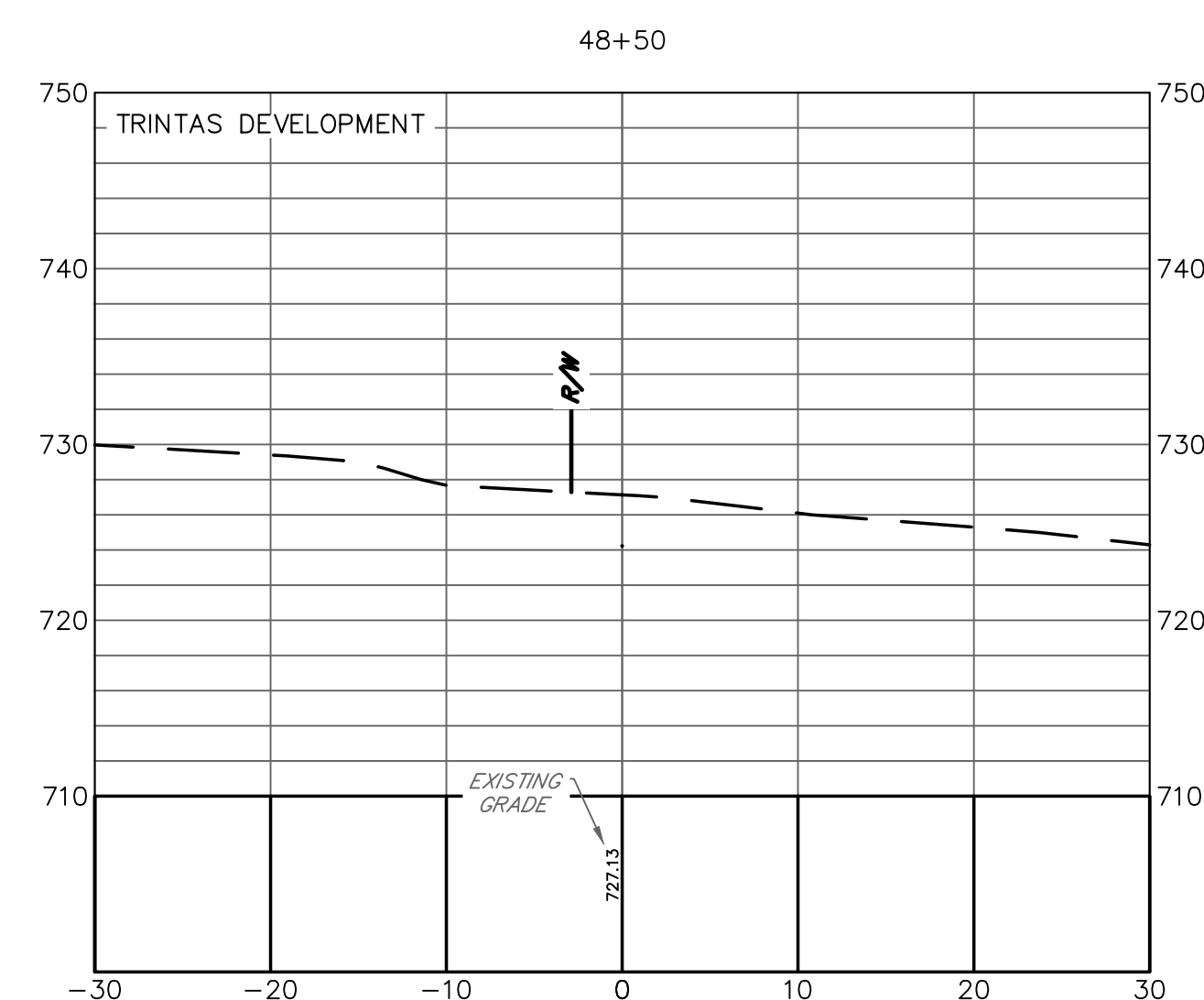
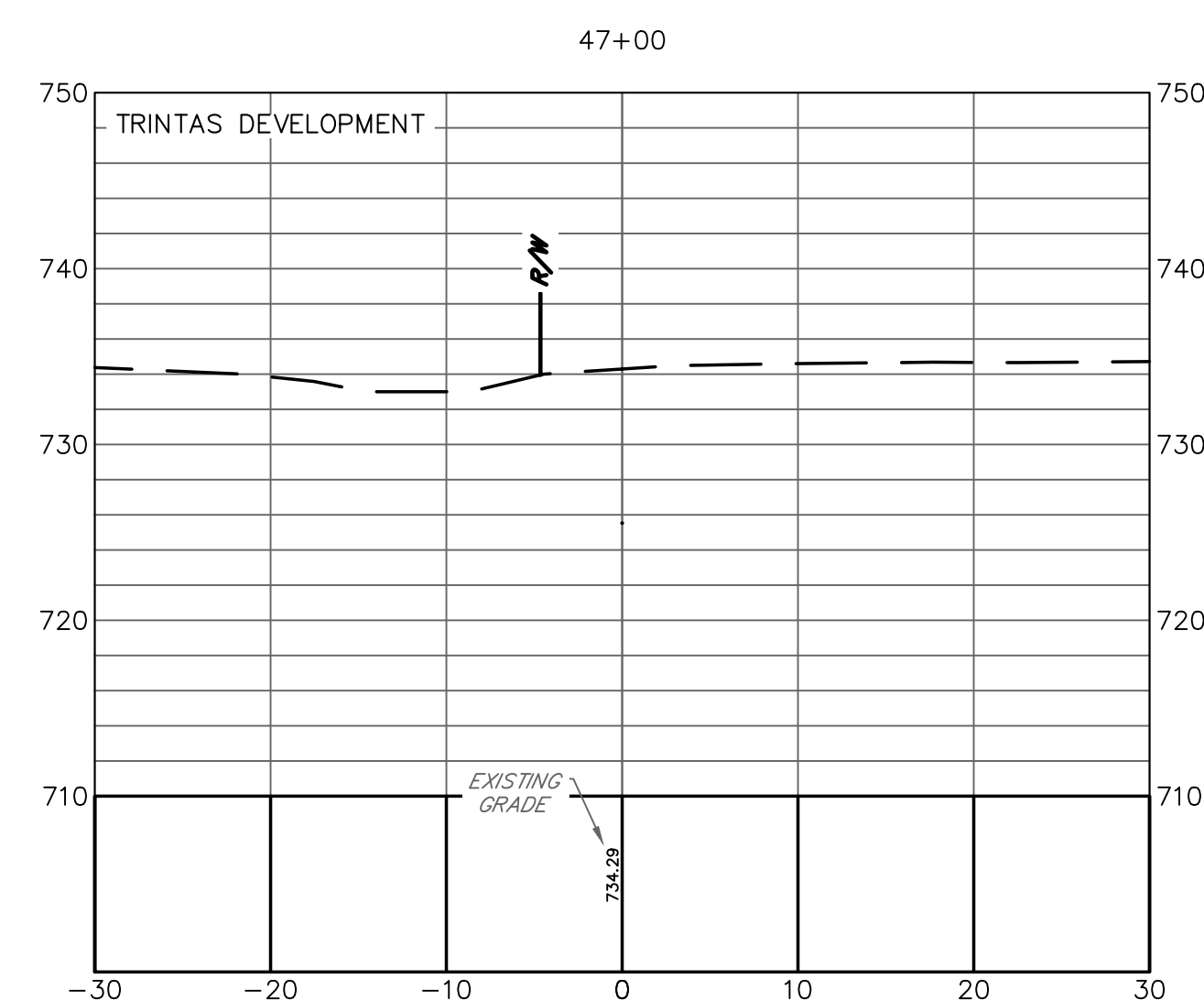
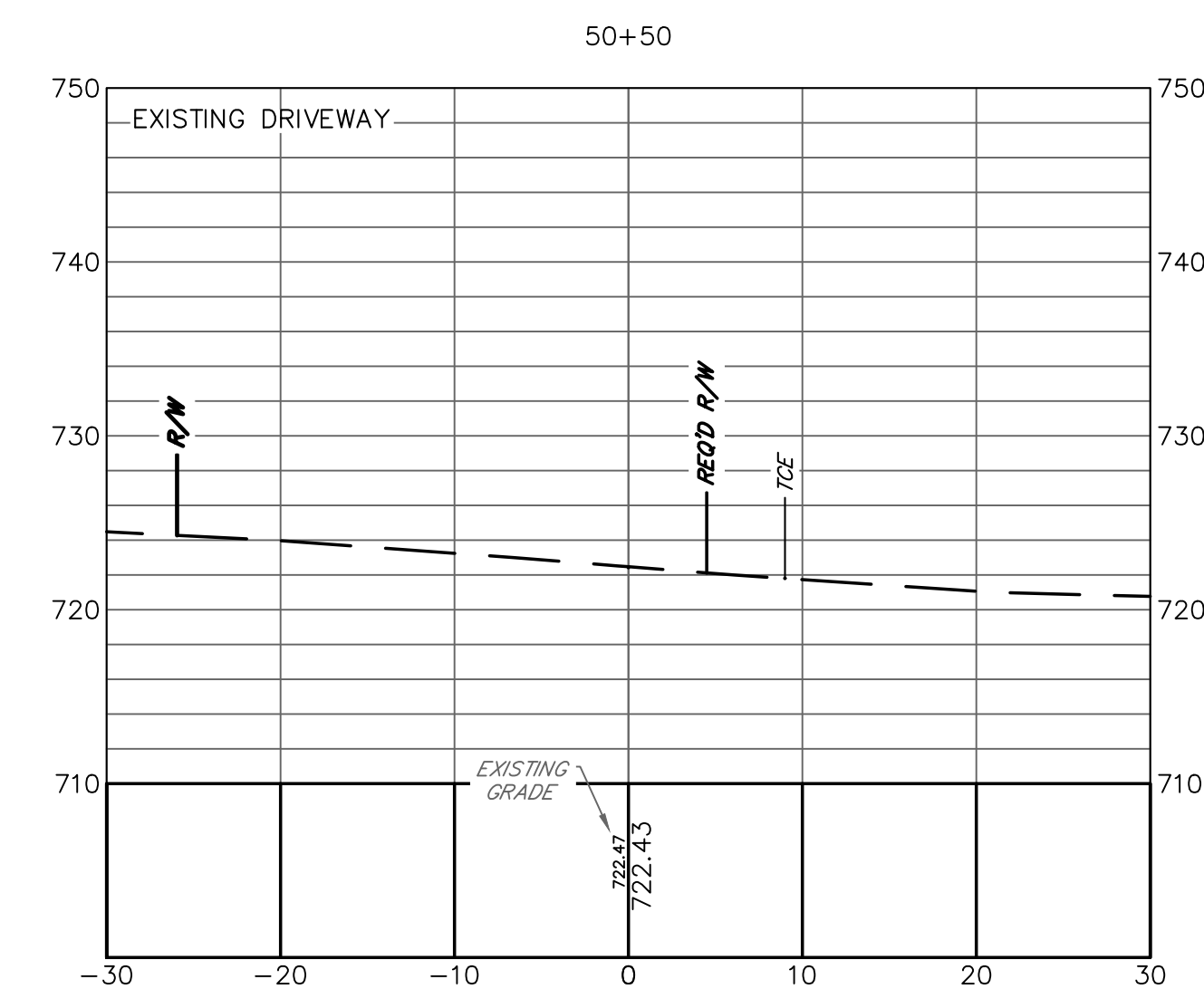
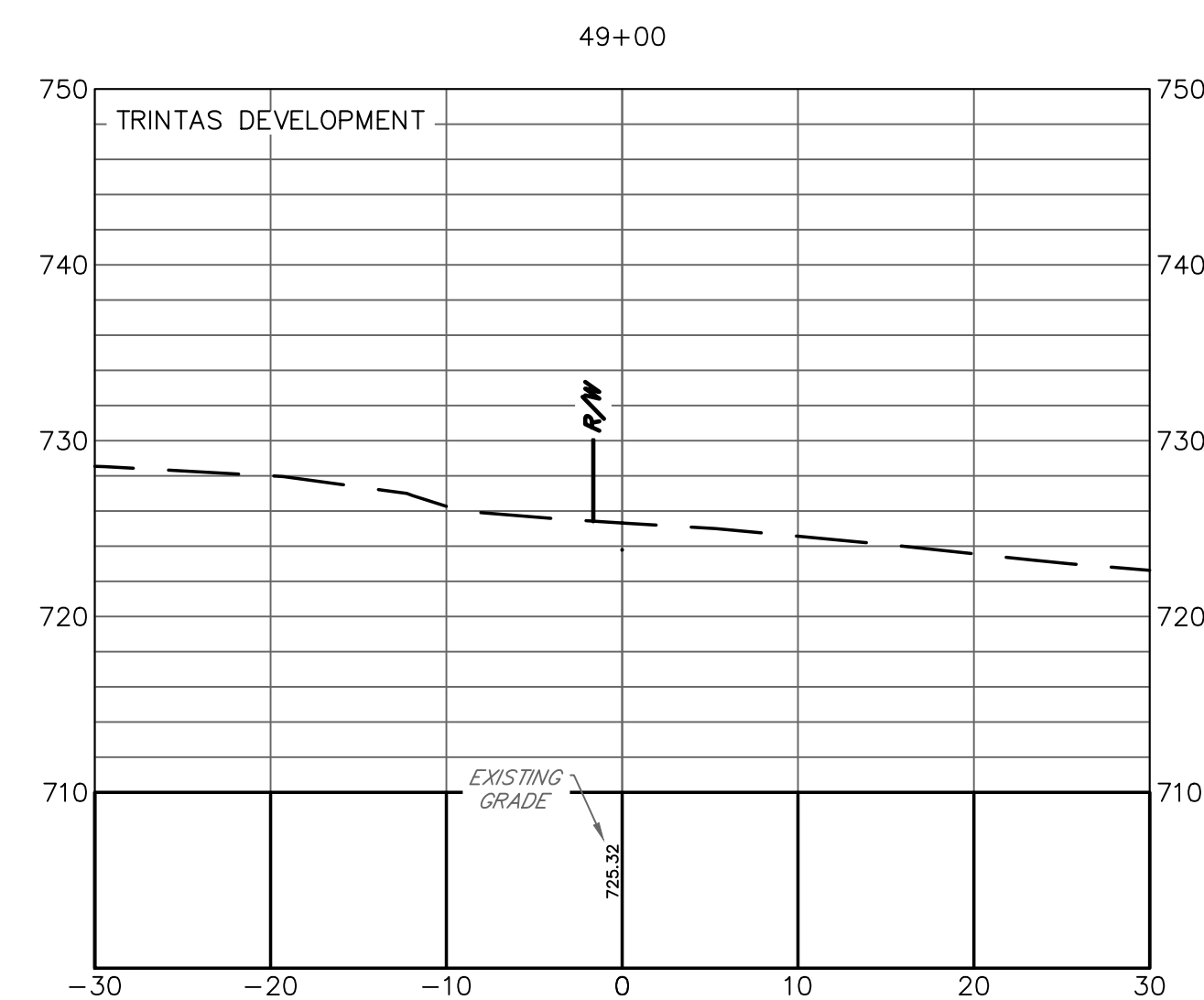
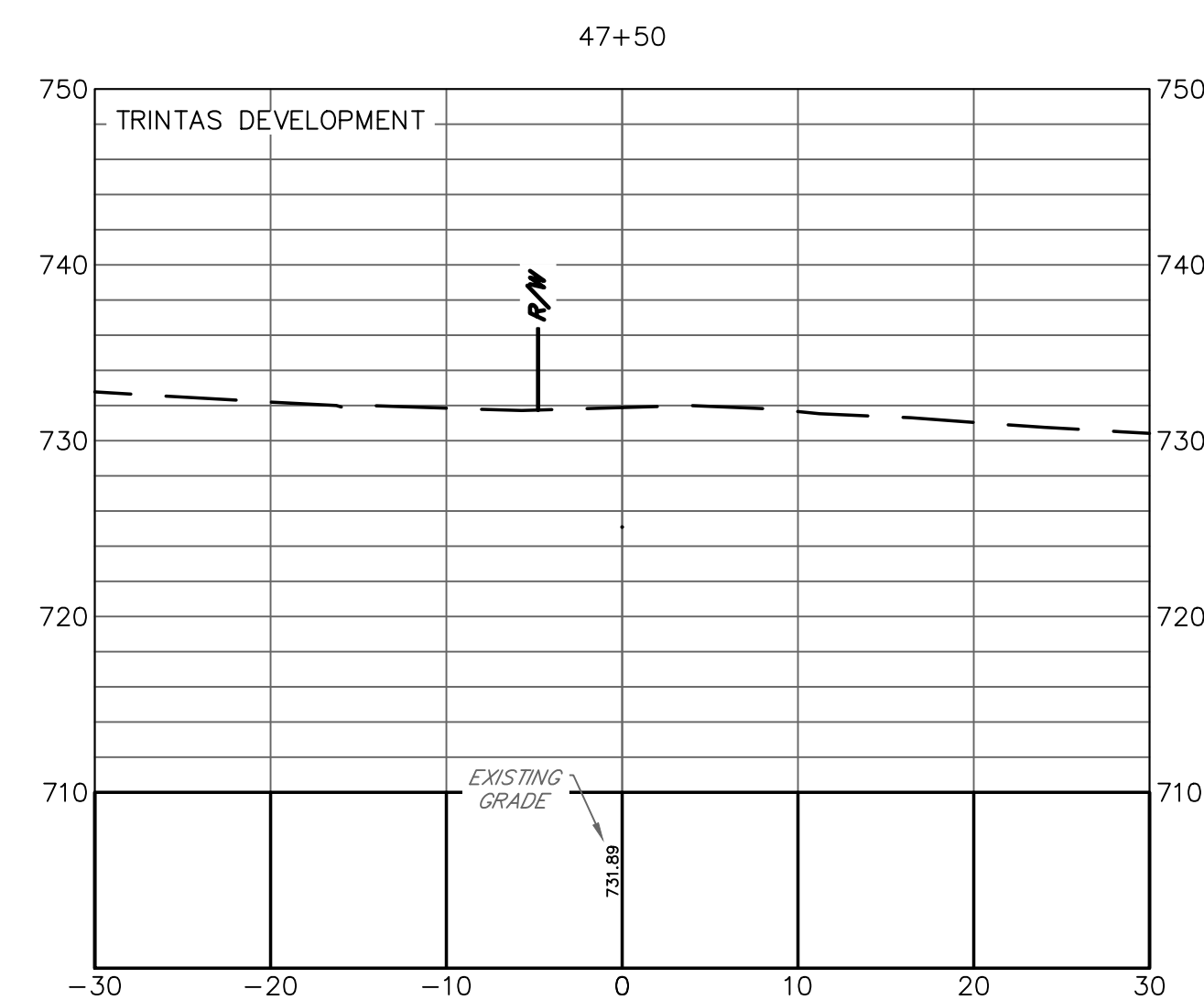
SHEET TITLE: CROSS SECTIONS

PROJECT NAME
LEXINGTON ROAD
CORRIDOR SIDEWALK
PROJECTS



PROJECT INFORMATION	
JOB NO:	19022041
DRAWN BY:	KC
CHECKED BY:	EH
DRAWING FILE:	19022041E.DWG
DRAWING SCALE:	1" = 20'
ORIGINAL RELEASE DATE:	APRIL 27, 2022

Sheet:
23-008



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HEET TITLE:
CROSS SECTIONS

PROJECT NAME
LEXINGTON ROAD
CORRIDOR SIDEWALK
PROJECTS



PROJECT INFORMATION

JOB NO: 19022041

DRAWN BY: KC

CHECKED BY: EH

DRAWING FILE: 19022041E.DWG

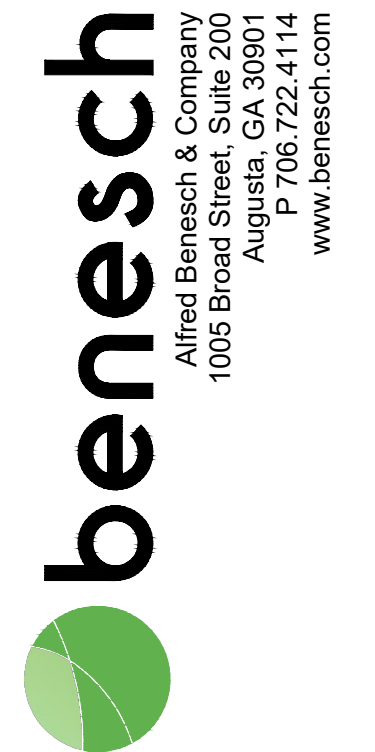
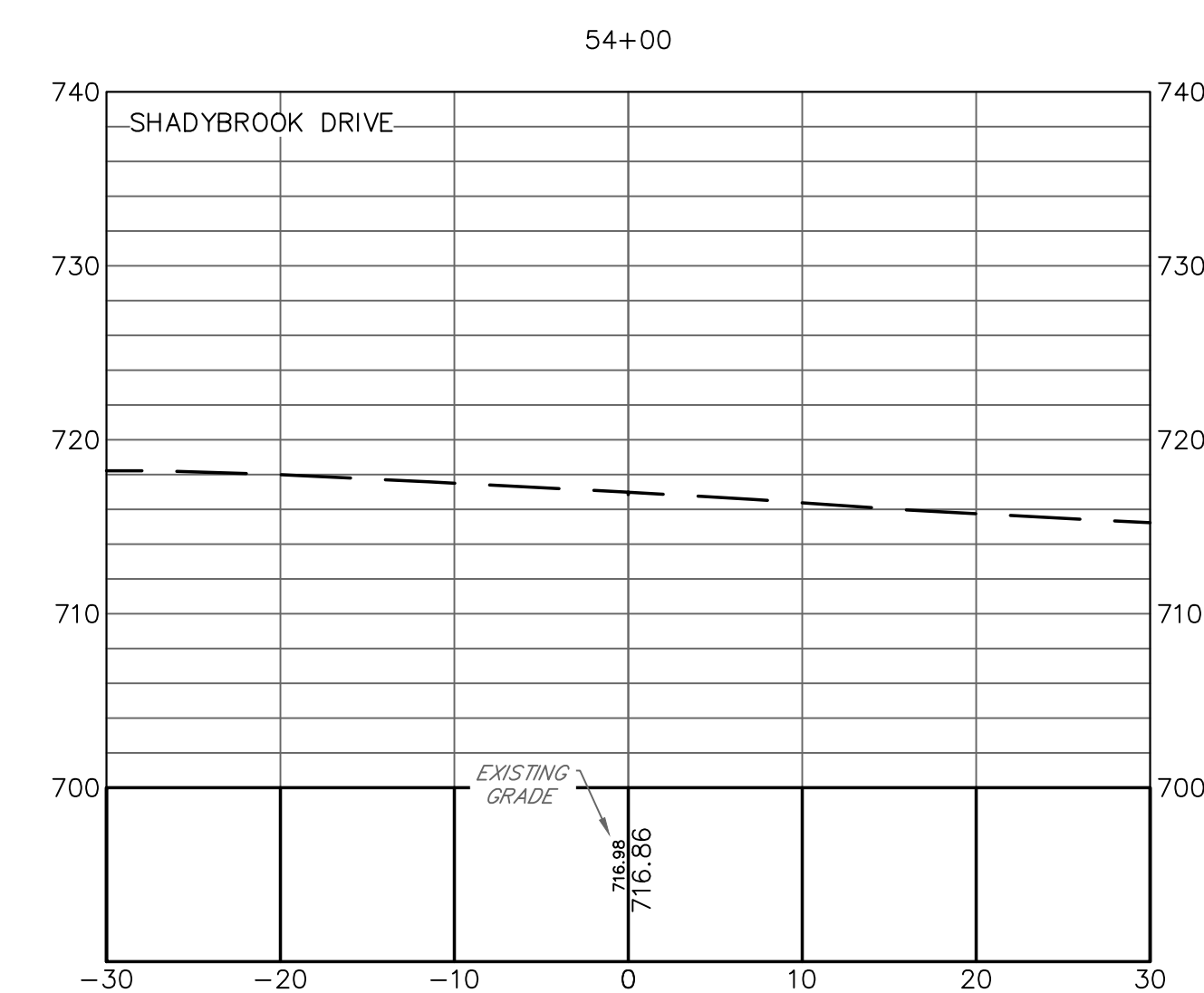
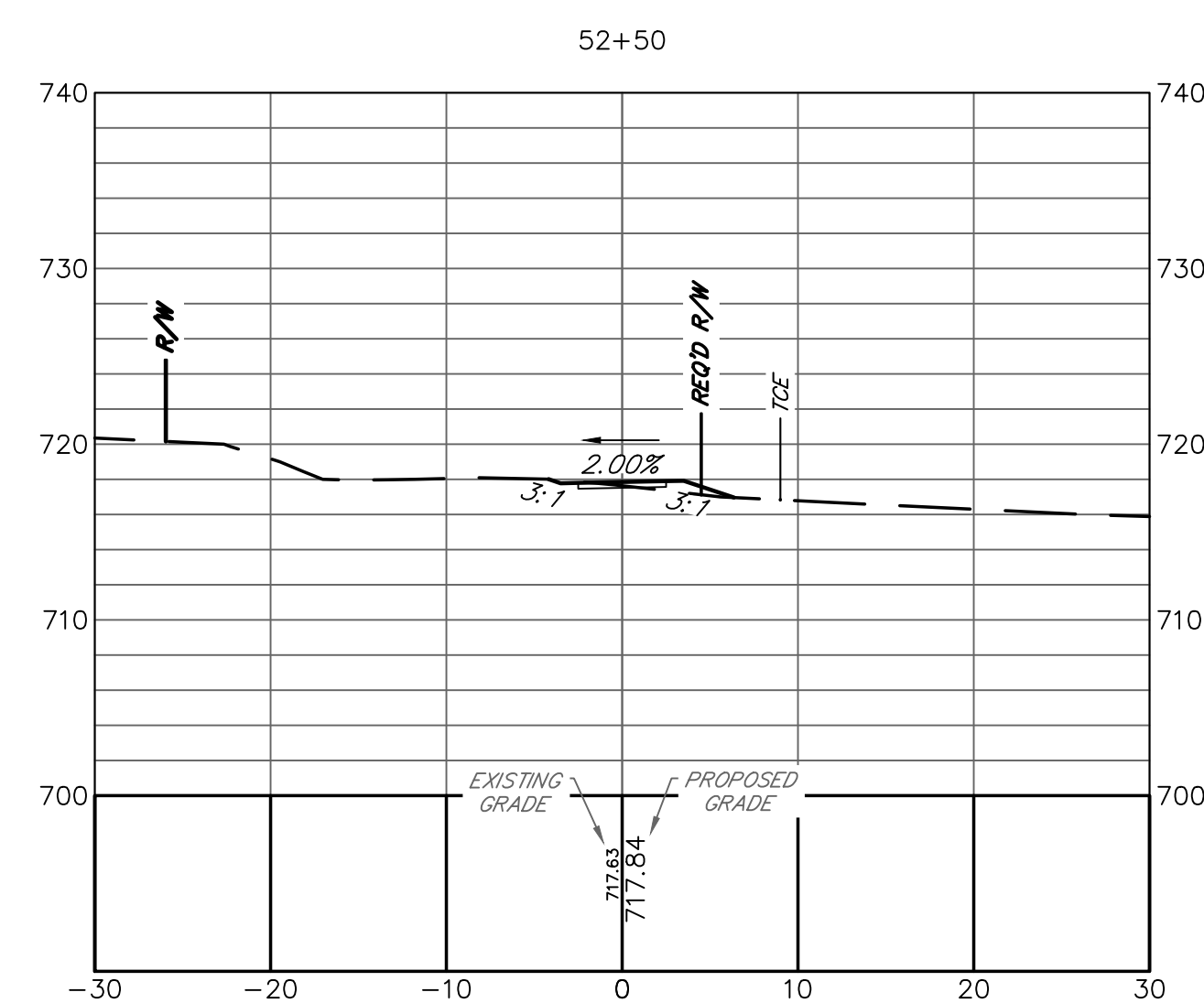
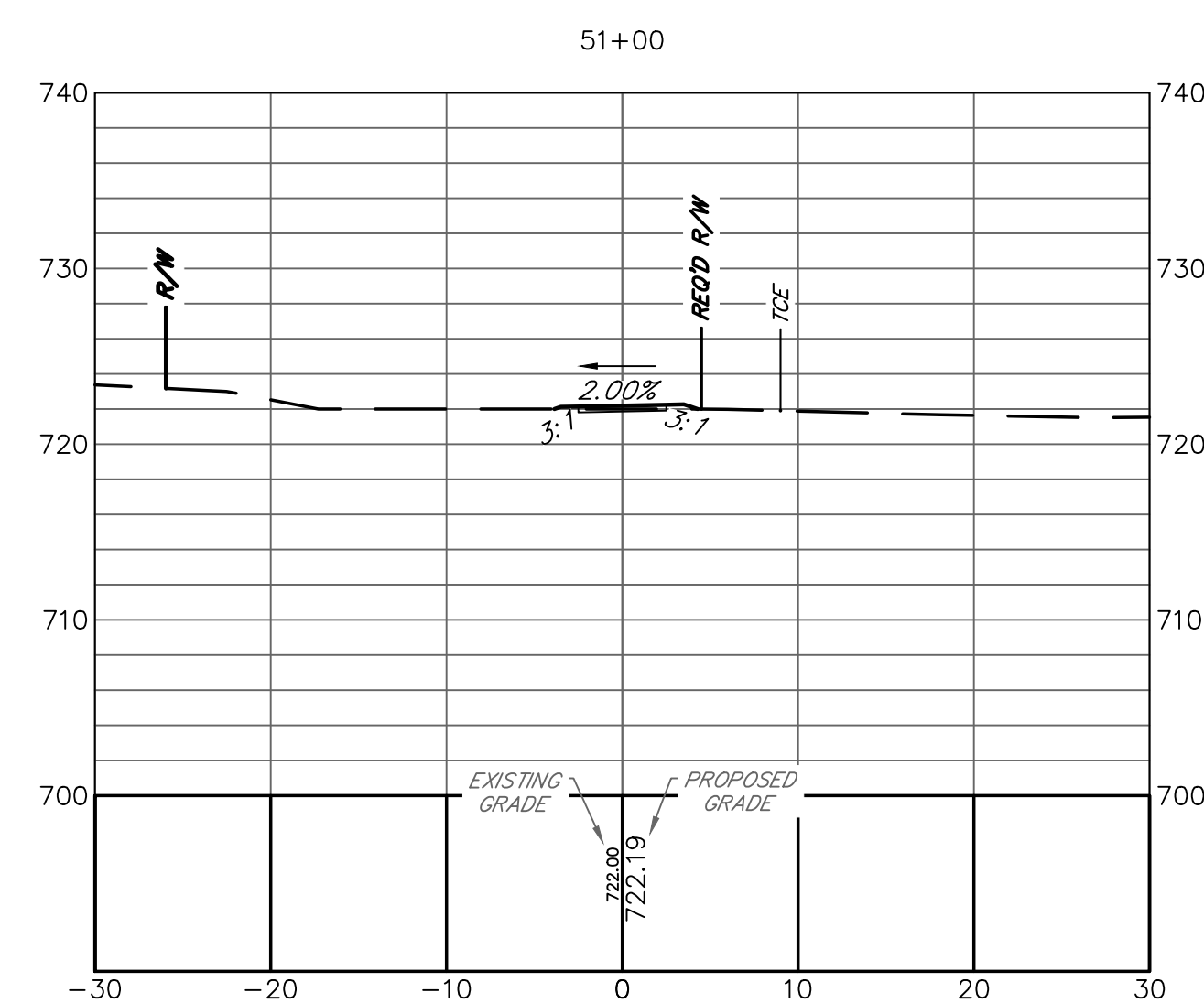
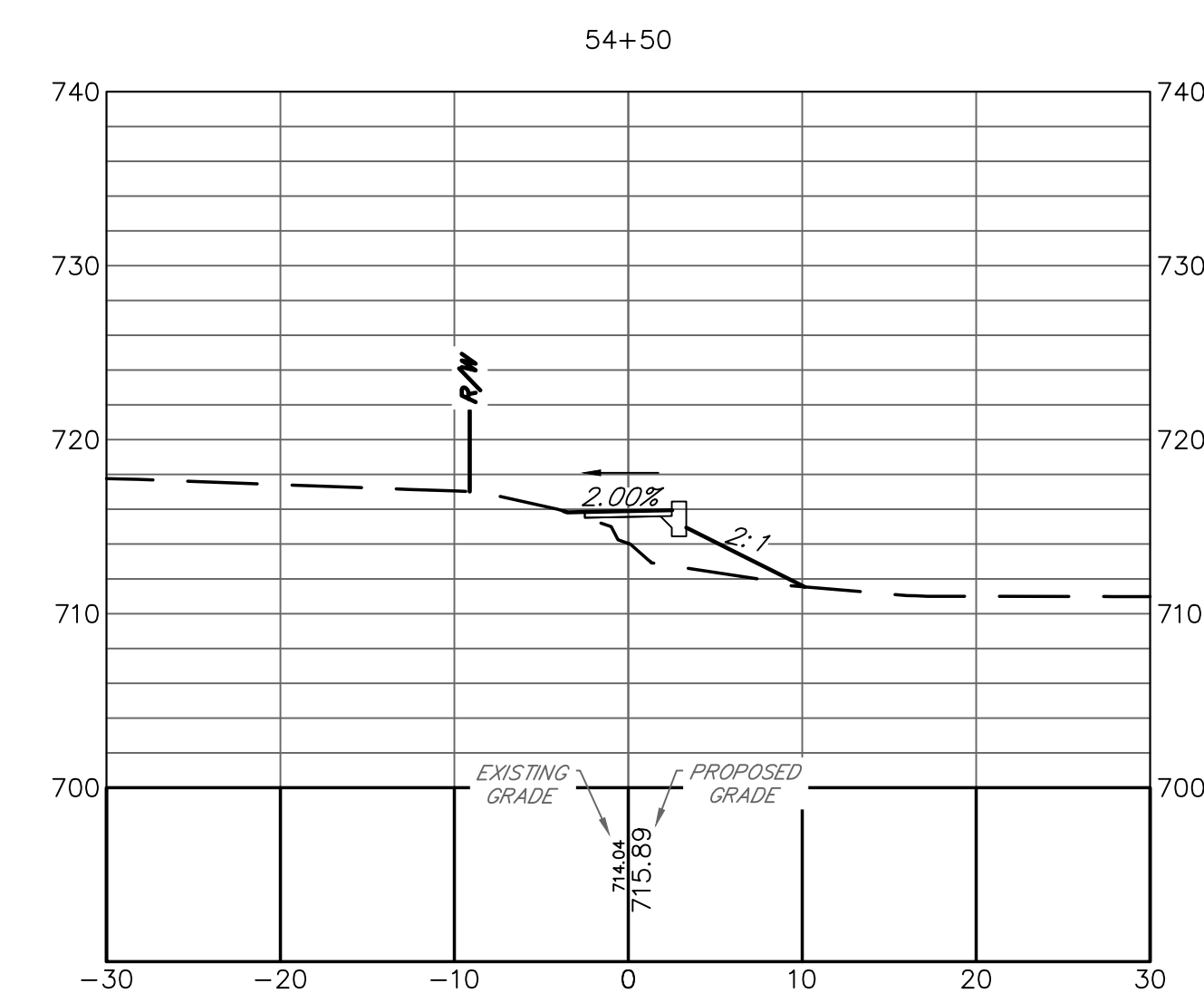
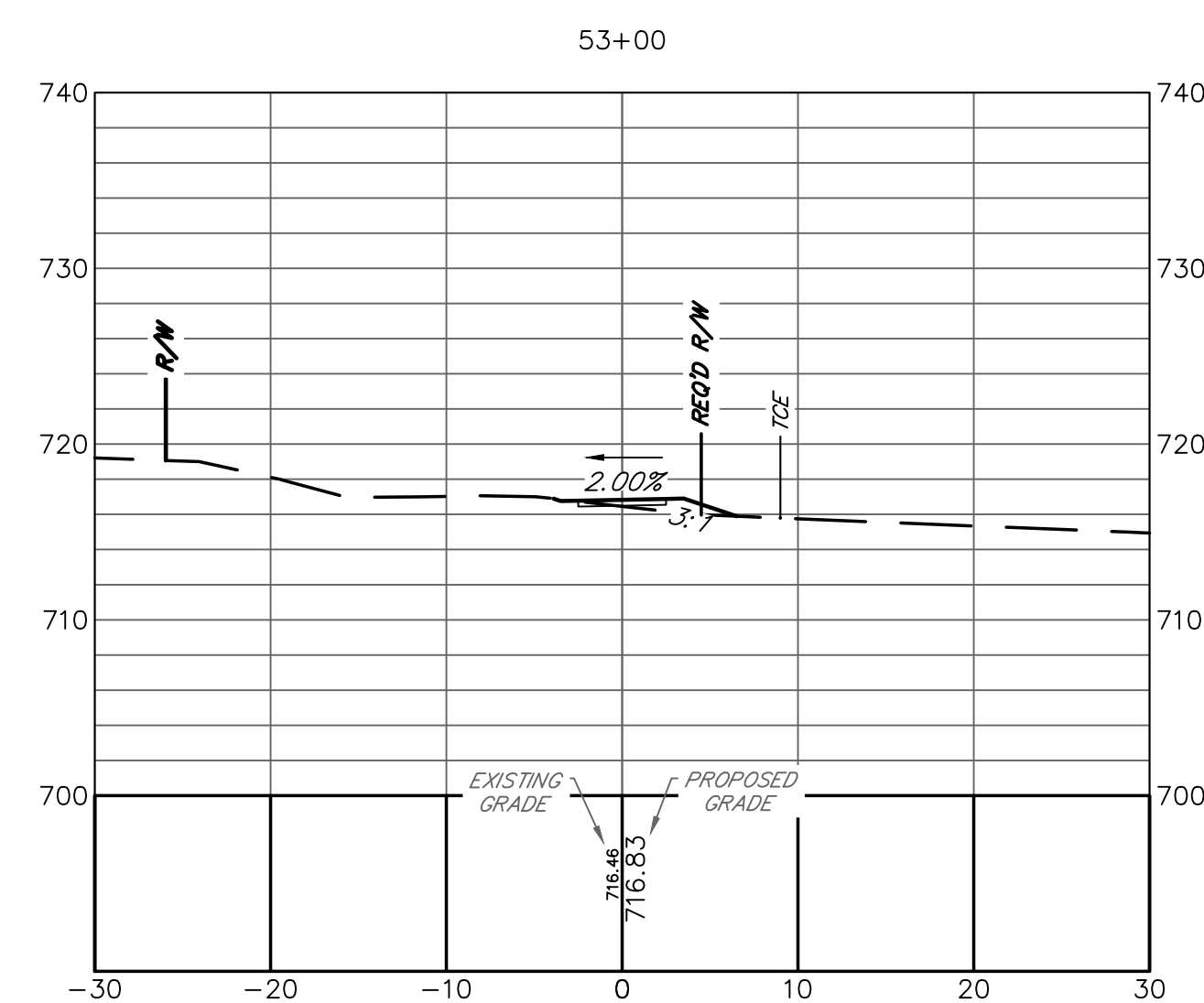
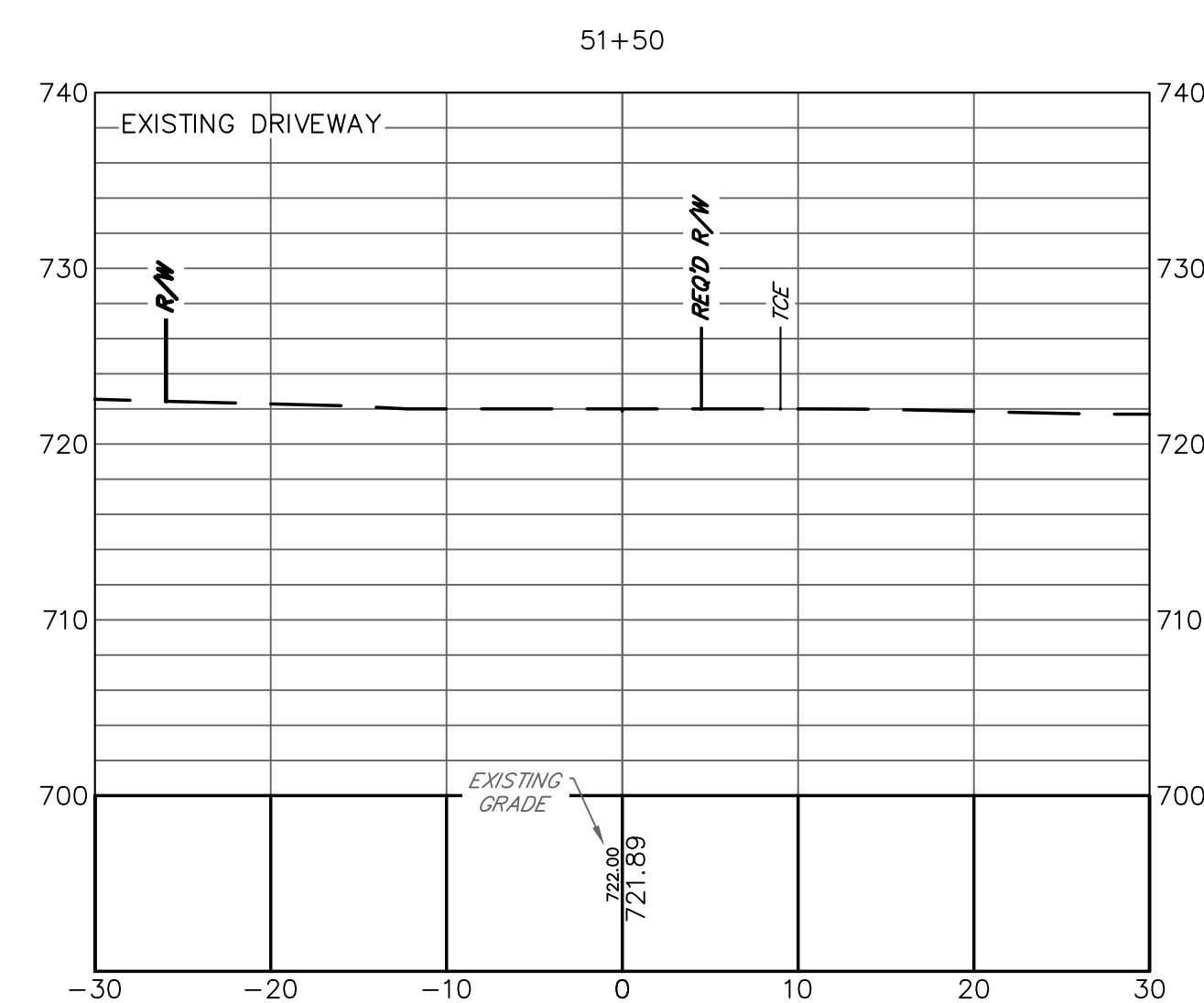
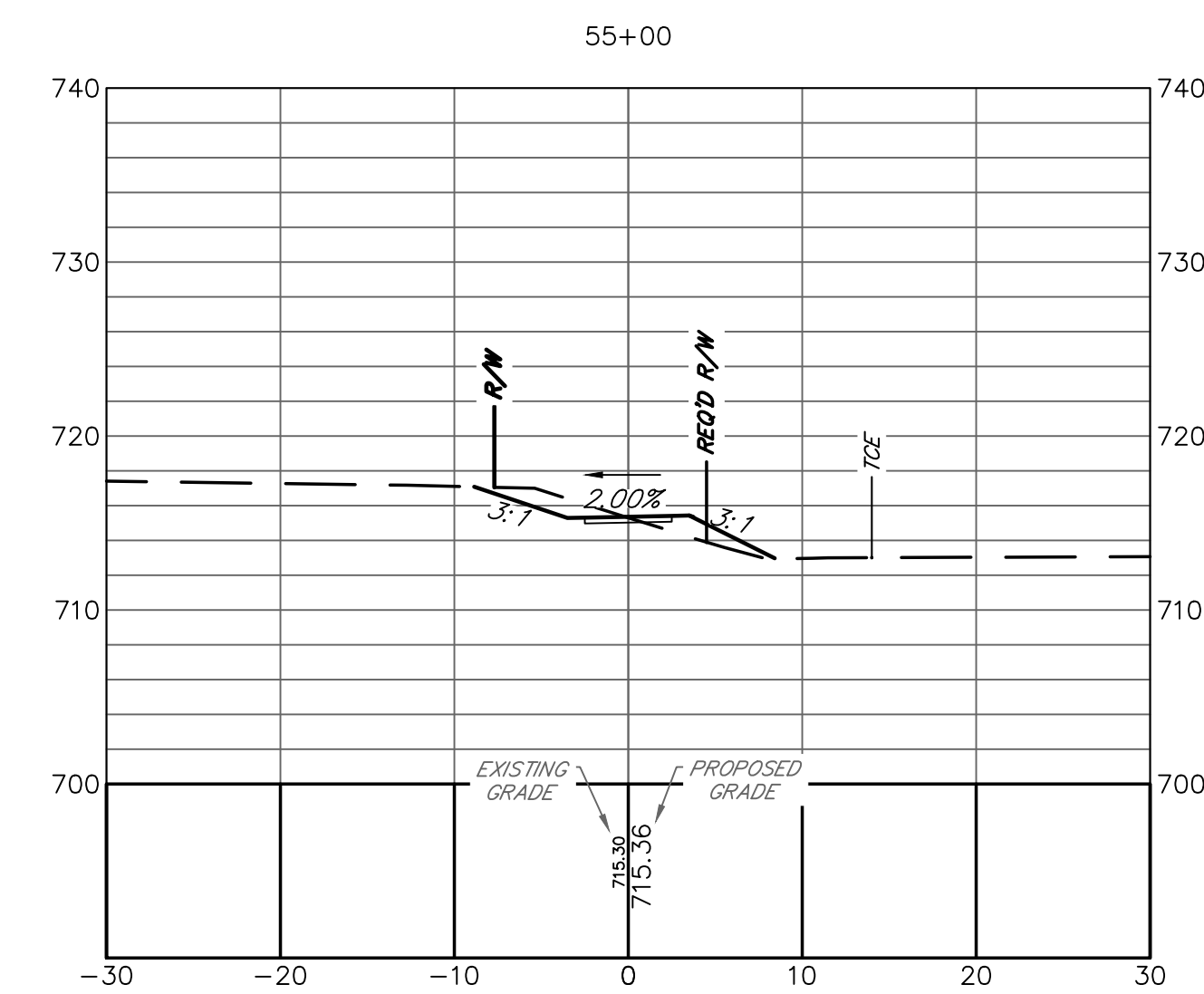
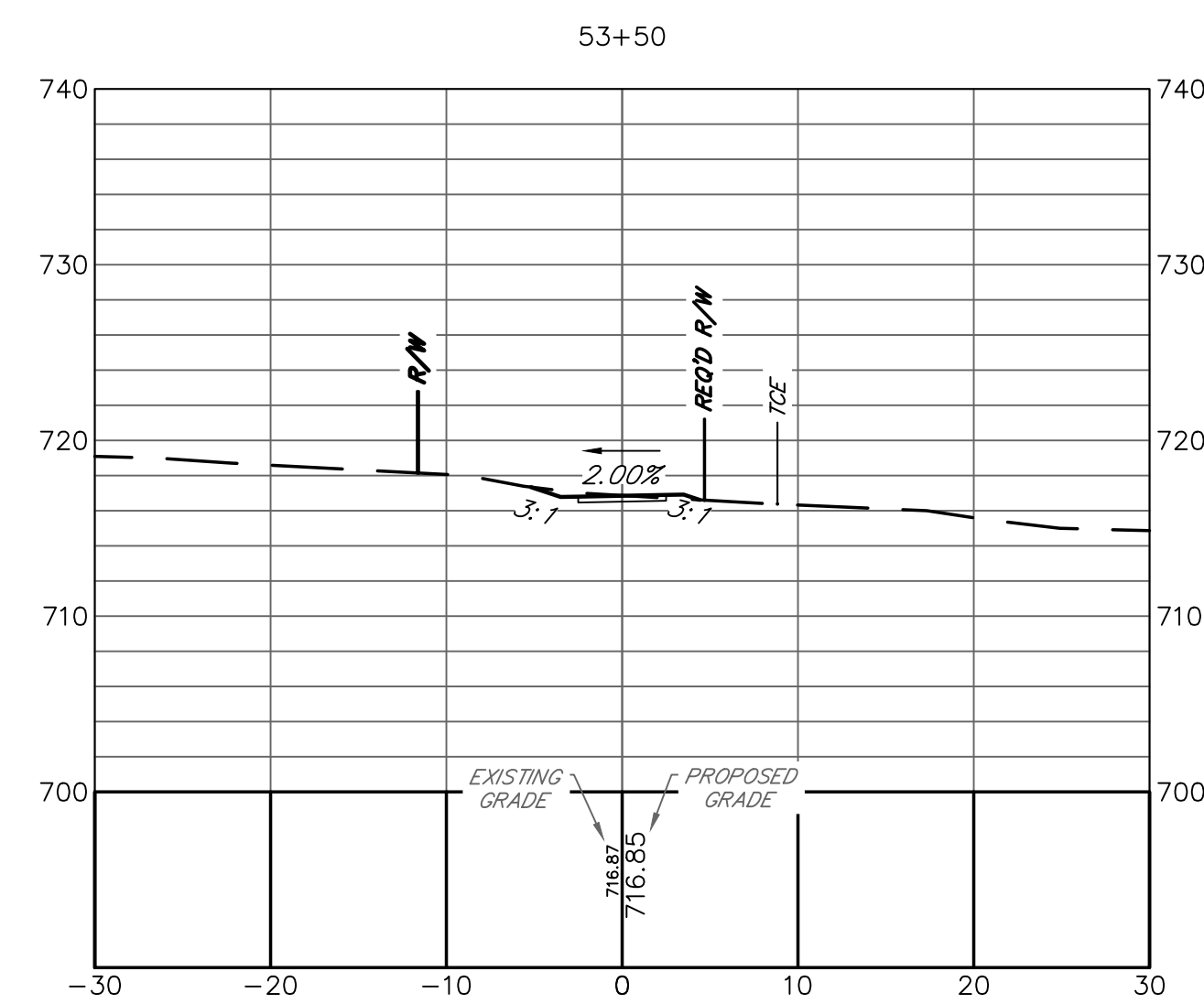
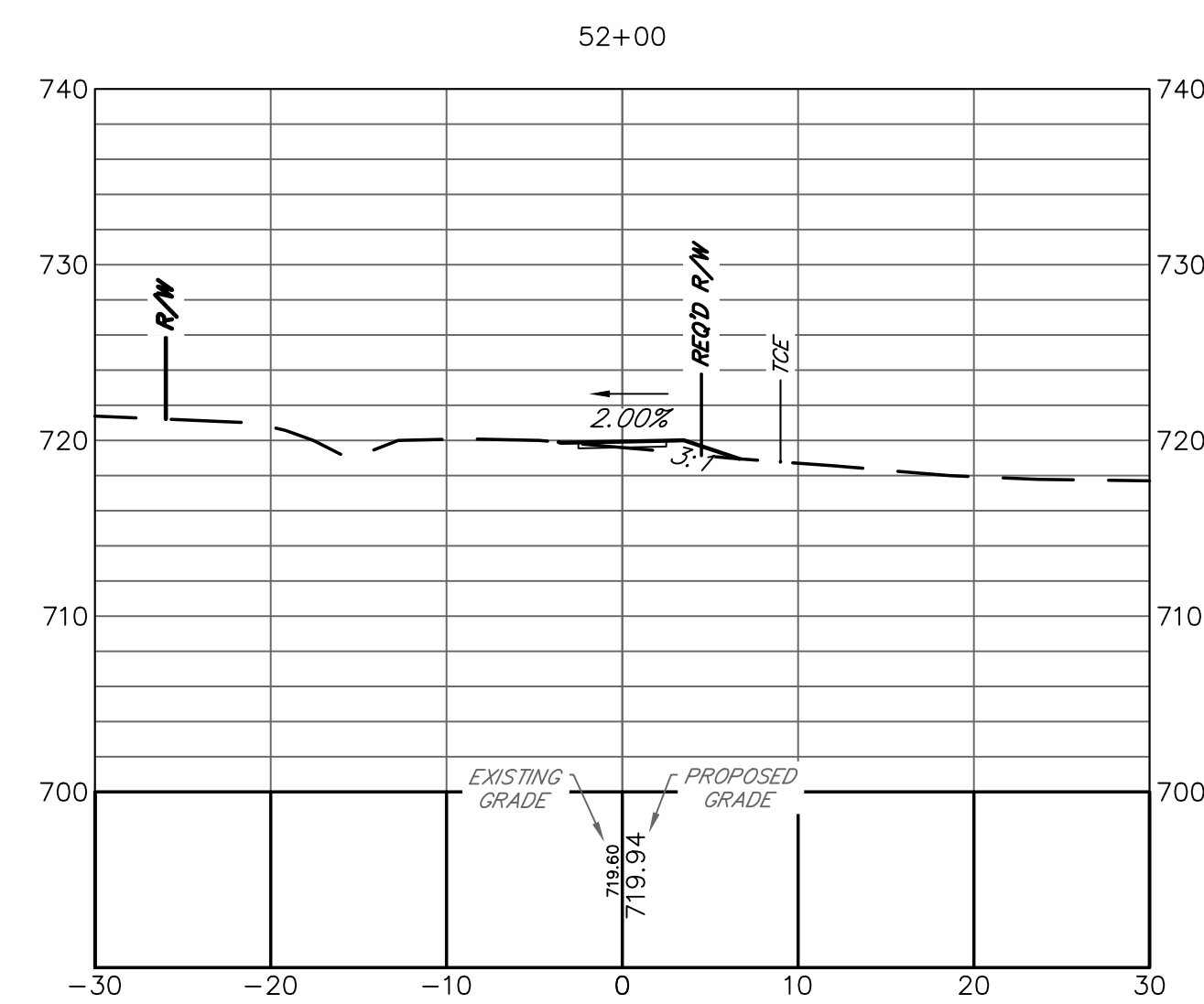
DRAWING SCALE: 1" = 20'

ORIGINAL RELEASE DATE:

APRIL 27, 2022

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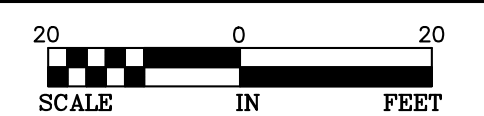
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COUNTY, GA**

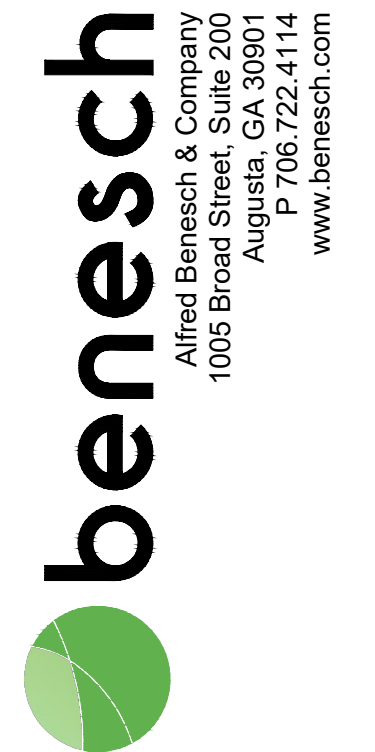
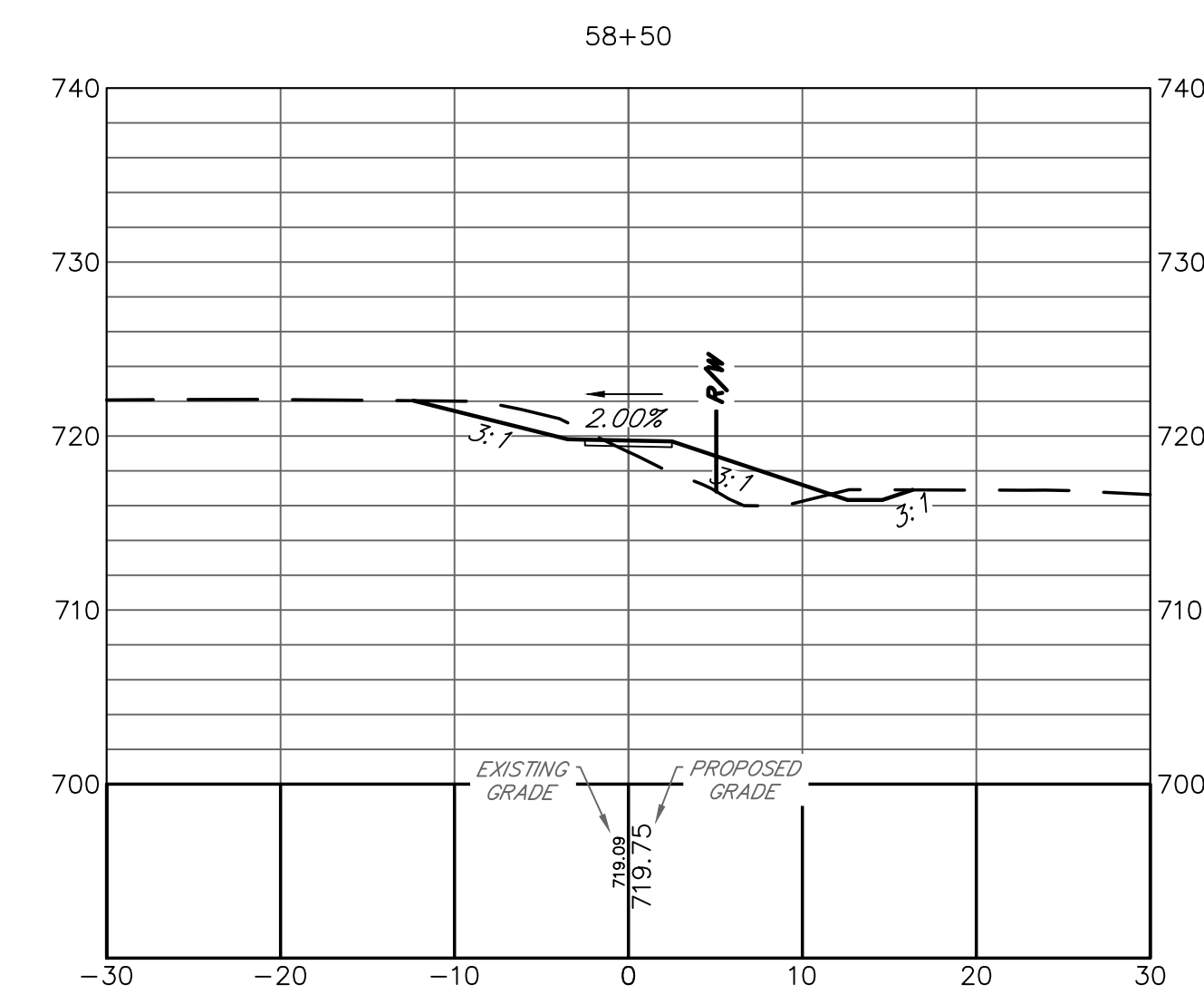
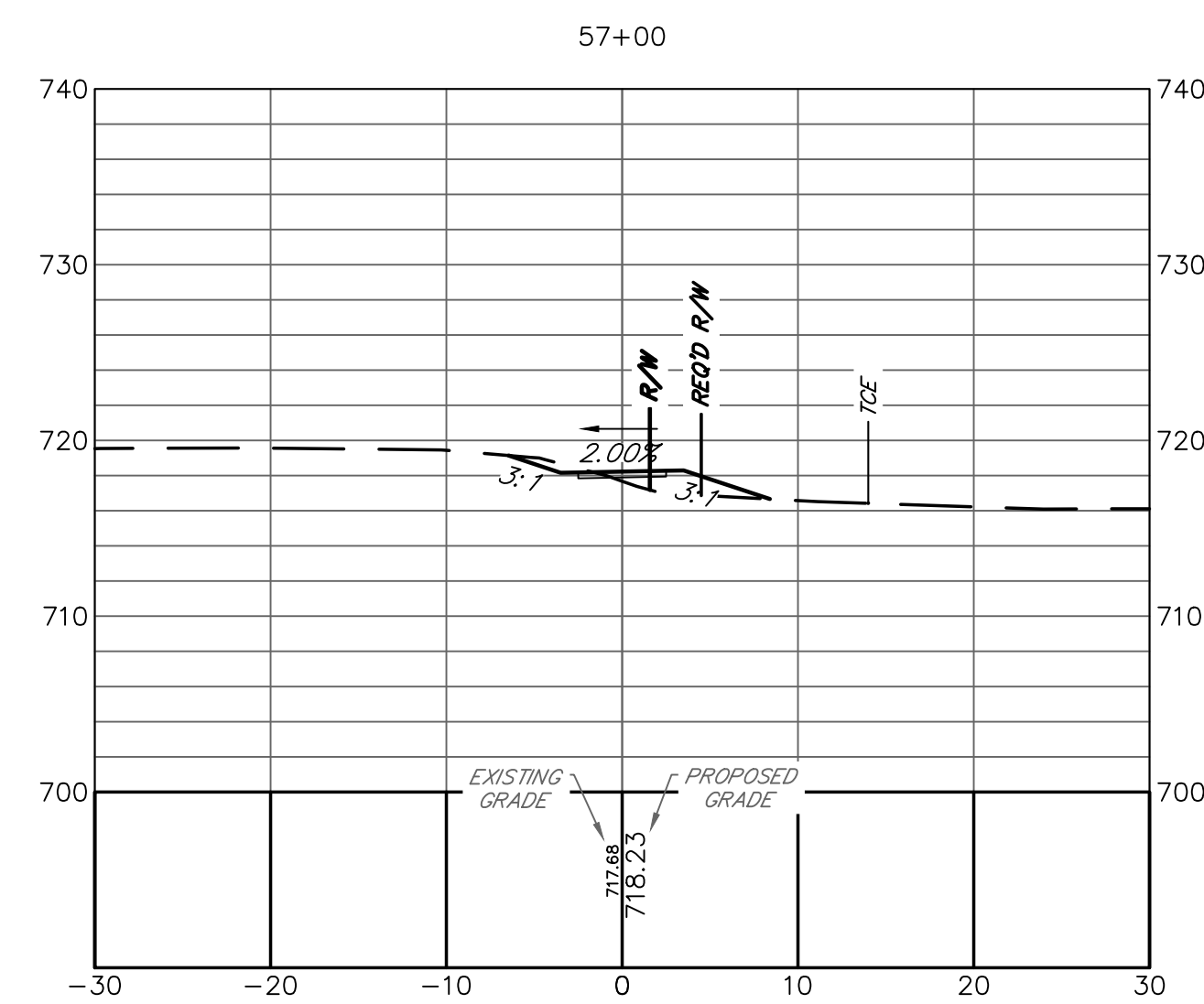
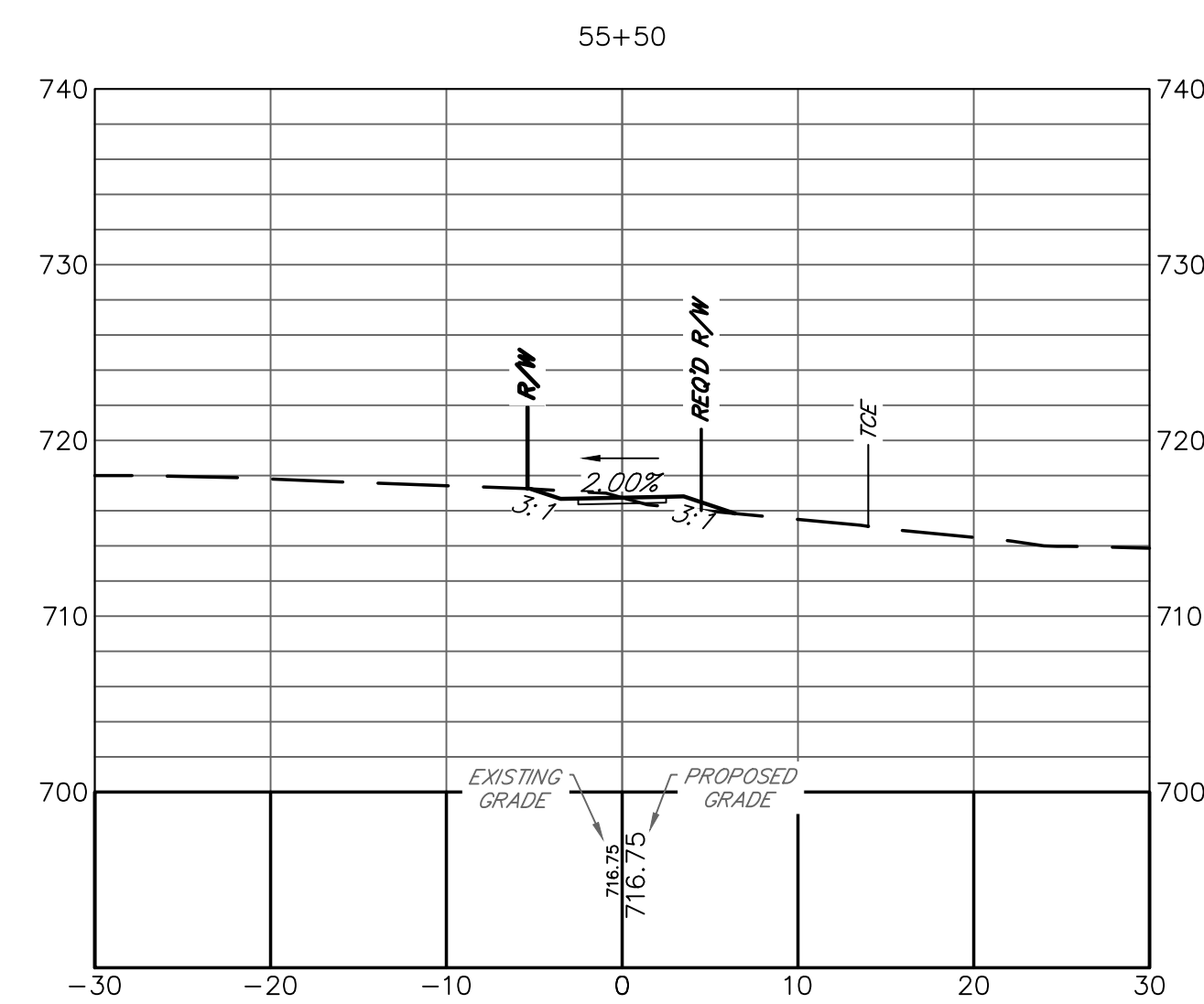
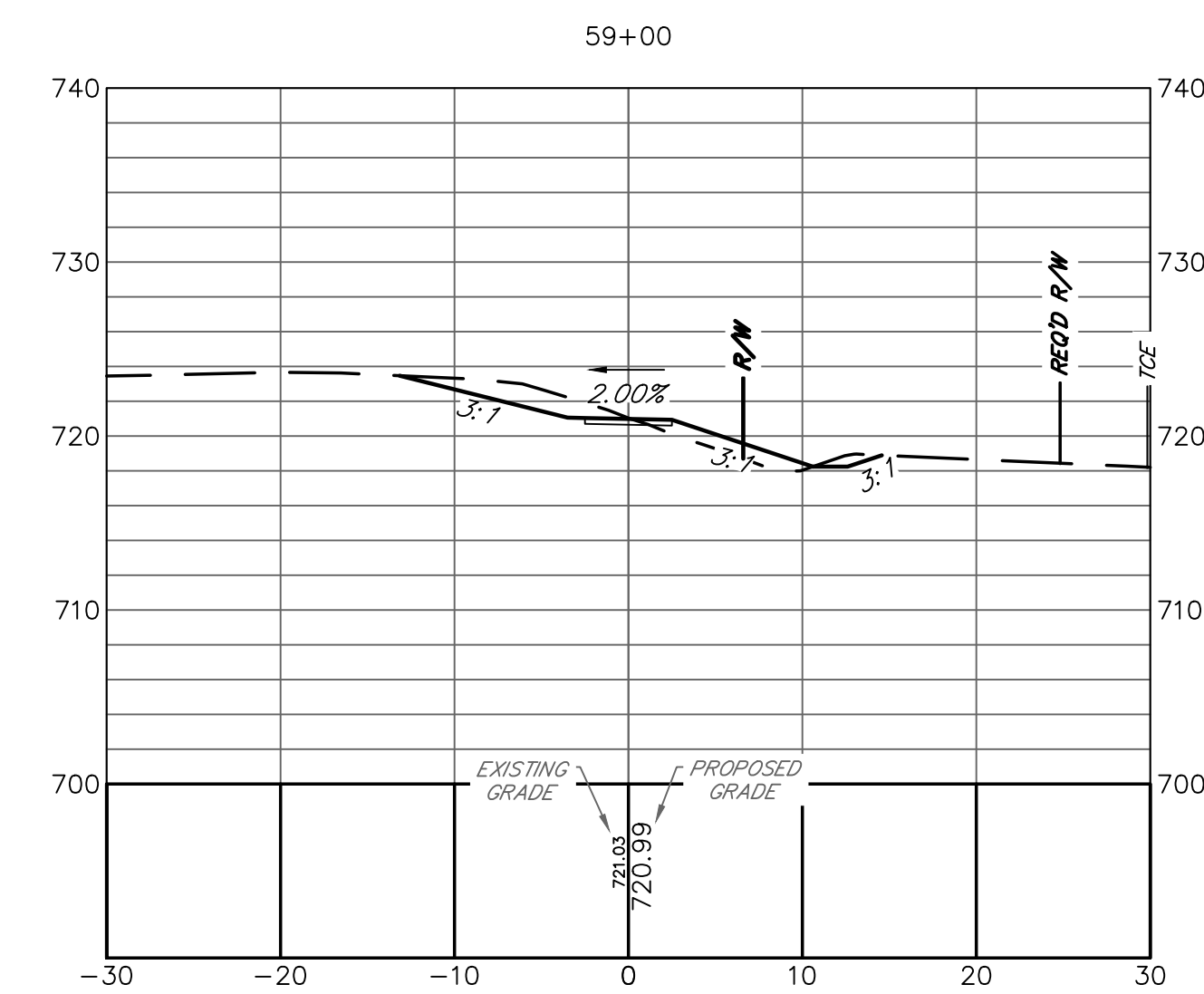
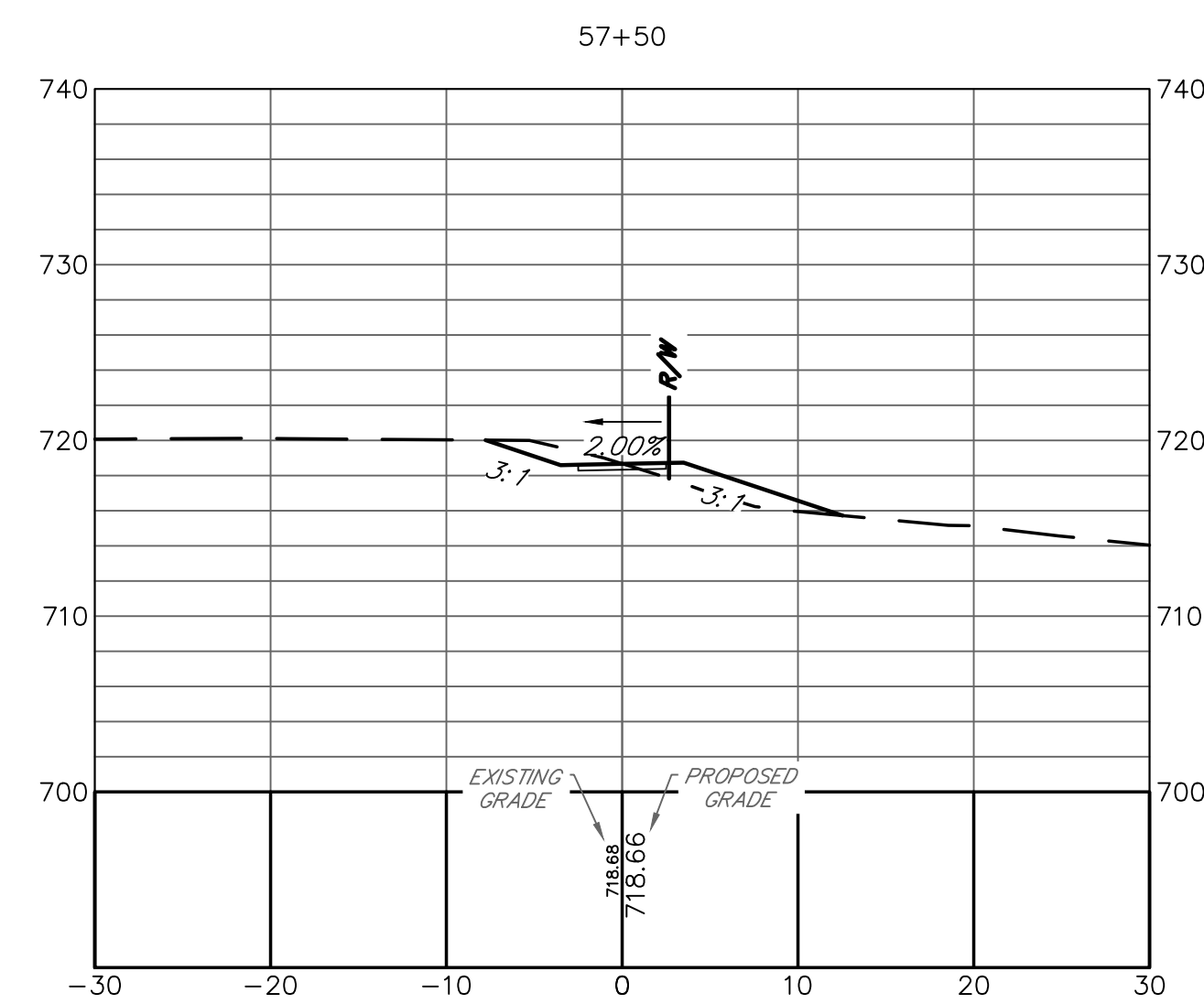
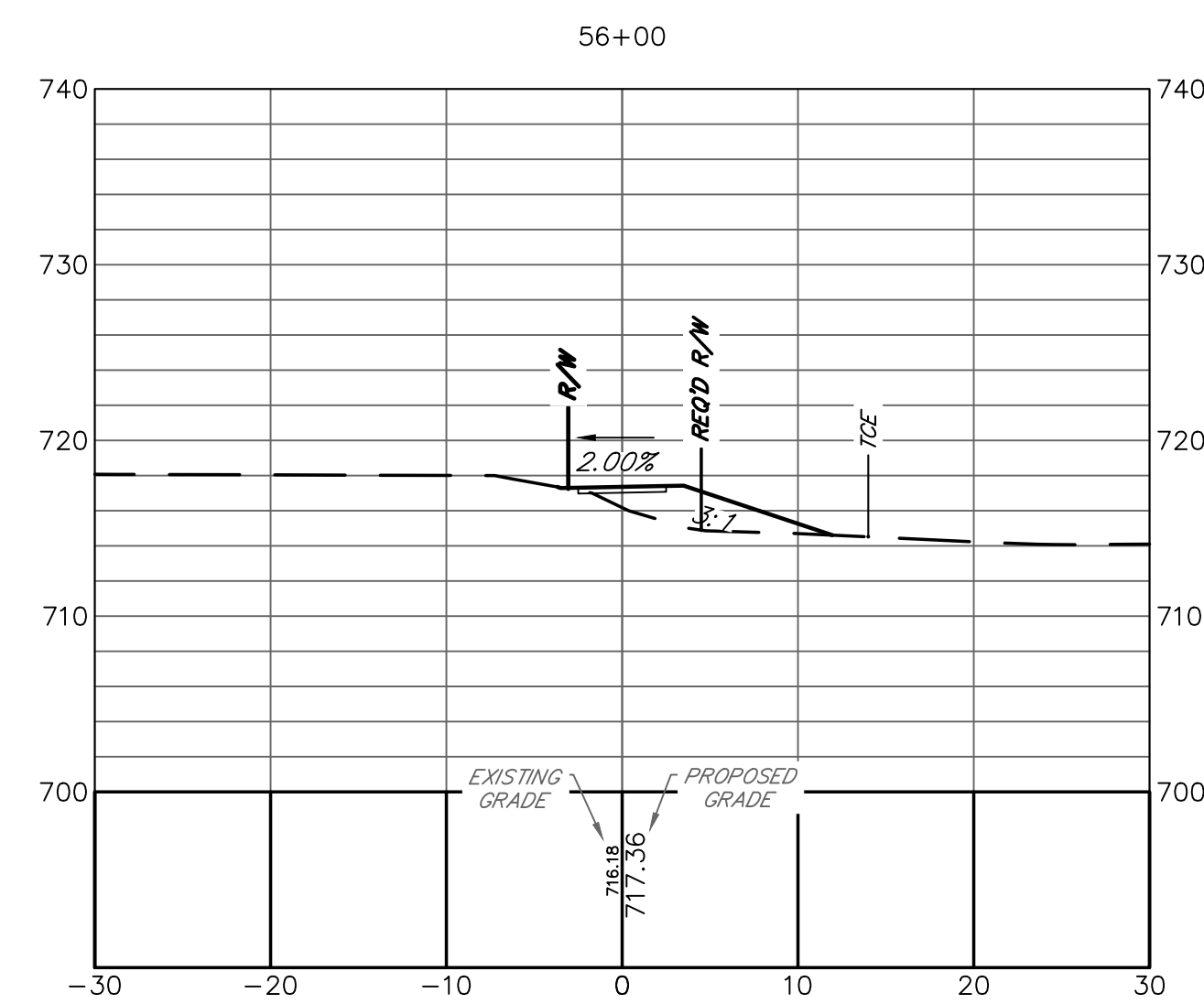
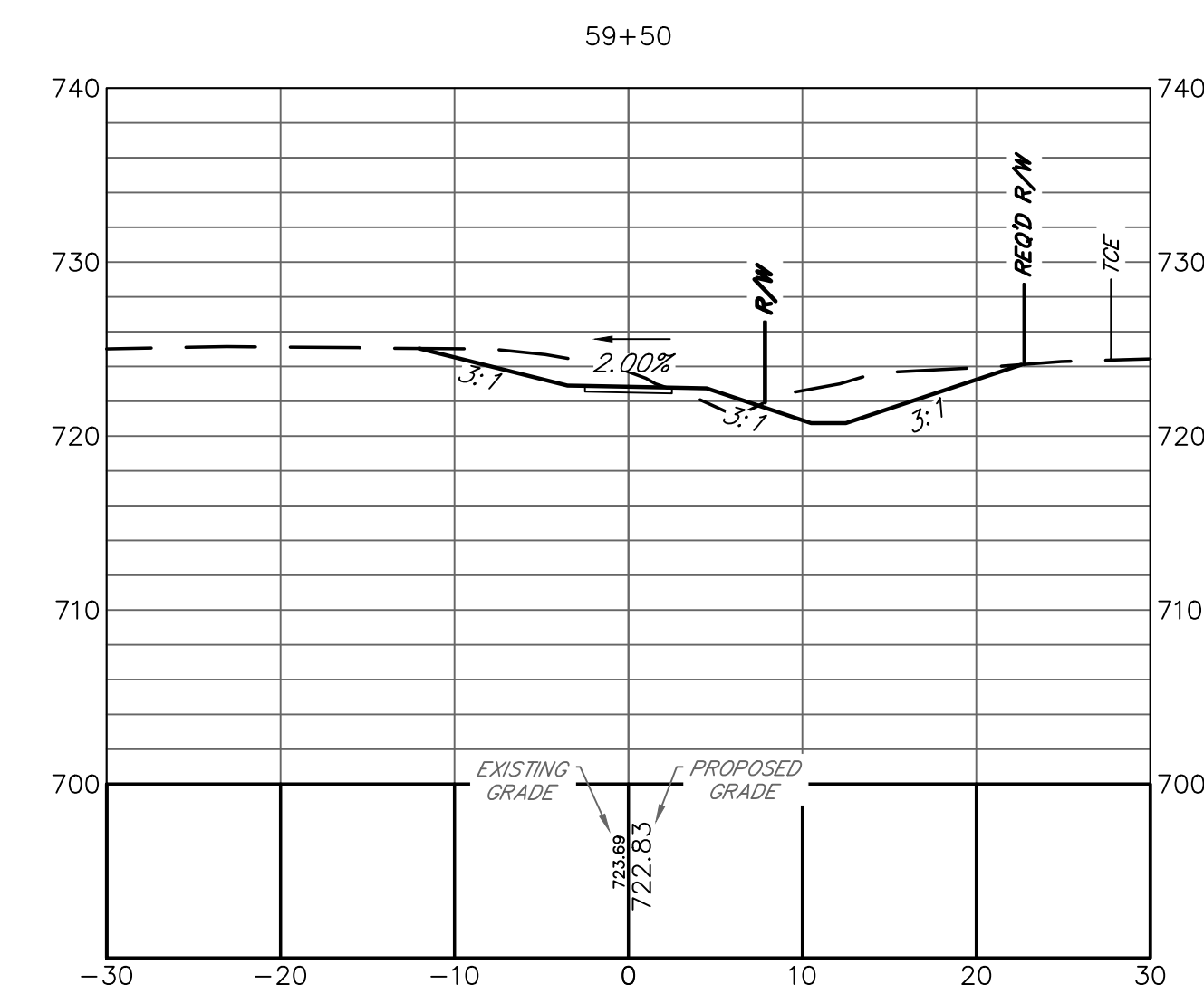
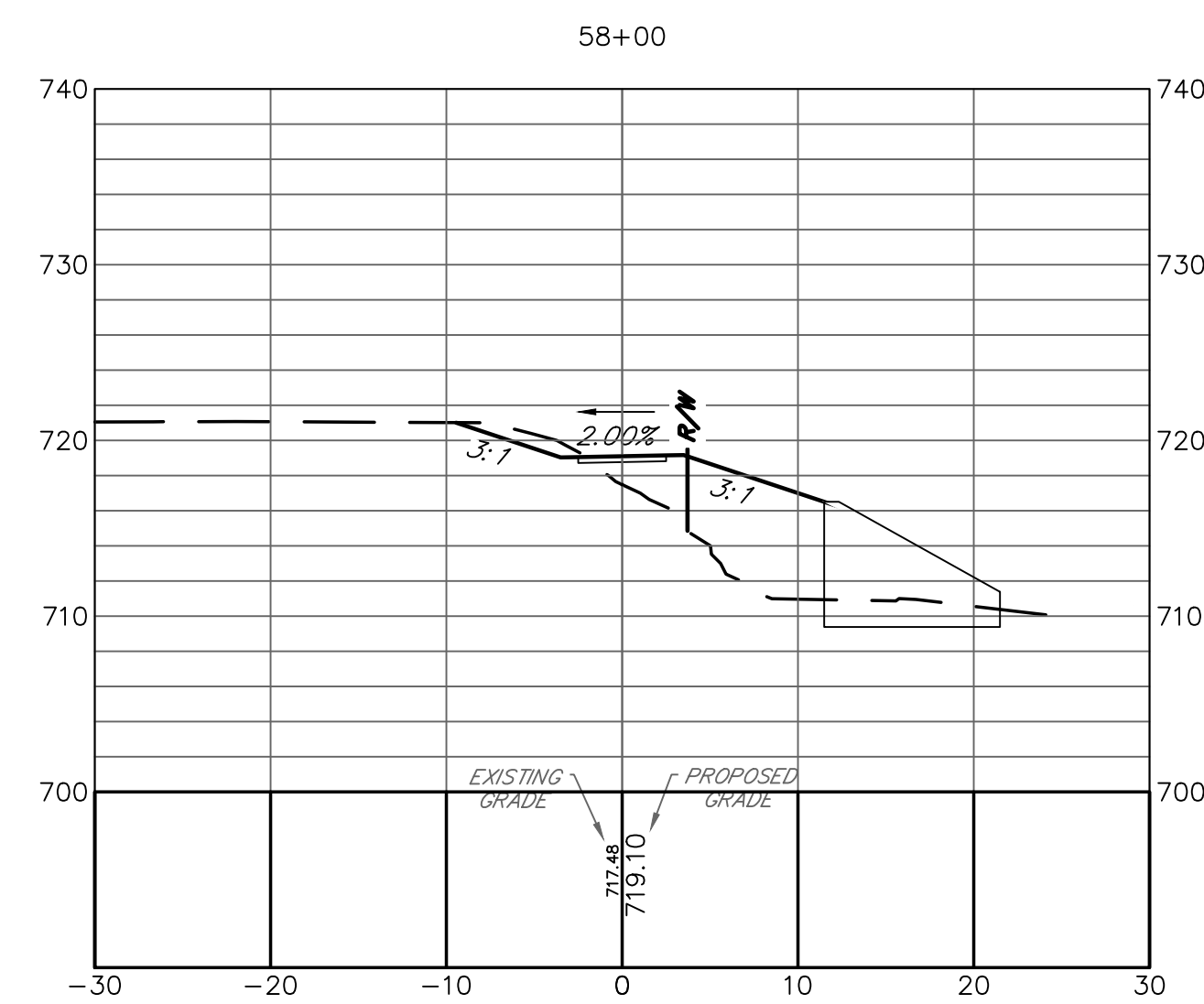
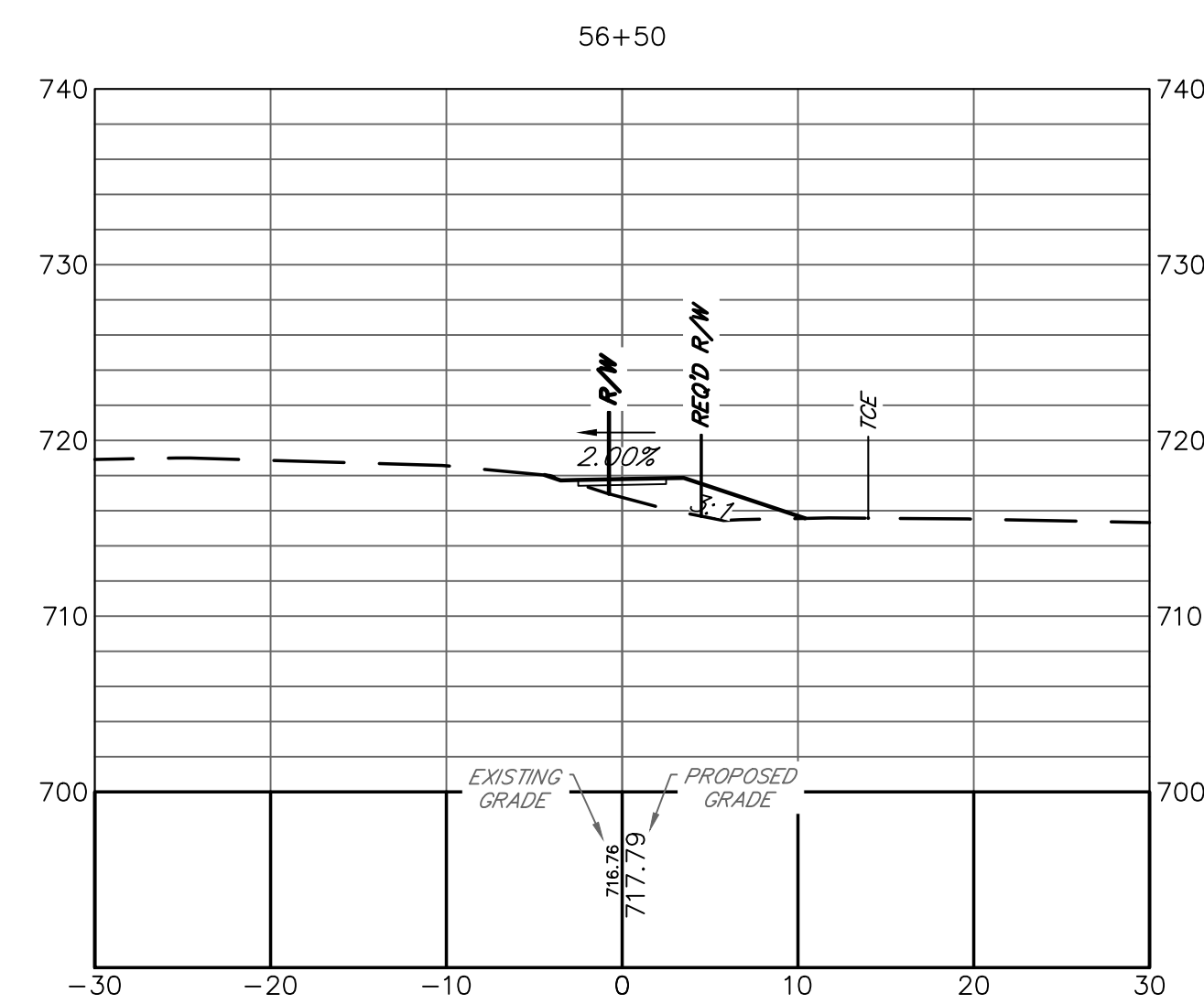
HEET TITLE: CROSS SECTIONS

PROJECT NAME
LEXINGTON ROAD
CORRIDOR SIDEWALK
PROJECTS



PROJECT INFORMATION	
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DRAWN BY:	KC
CHECKED BY:	EH
DRAWING FILE:	19022041E.DWG
DRAWING SCALE:	1" = 20'
ORIGINAL RELEASE DATE:	
APRIL 27, 2022	

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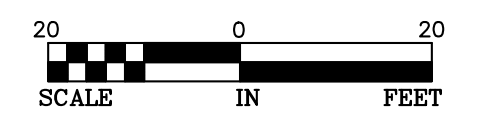
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COUNTY, GA

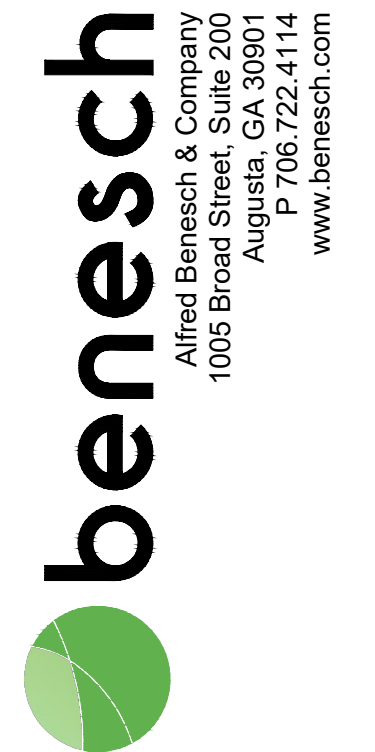
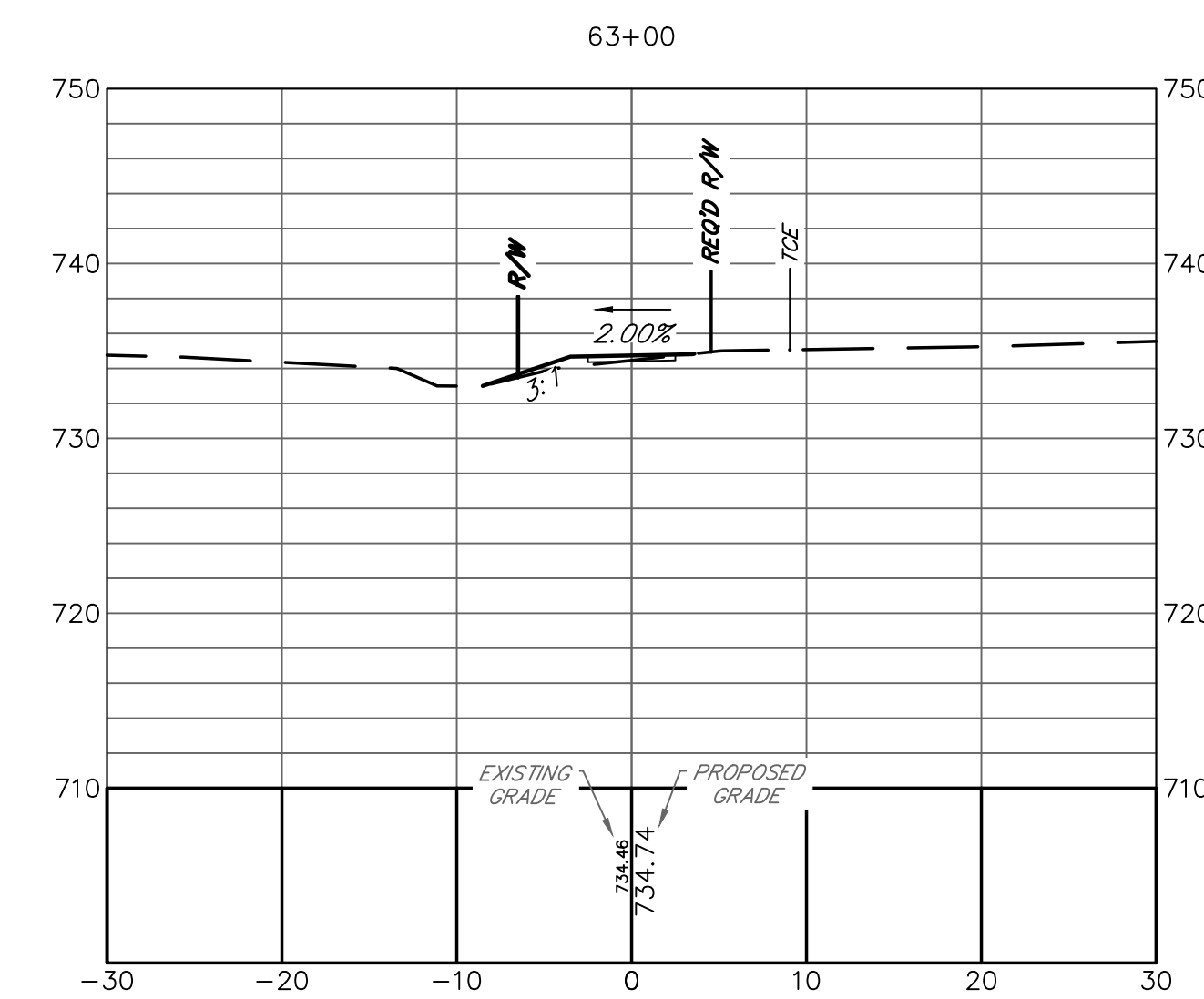
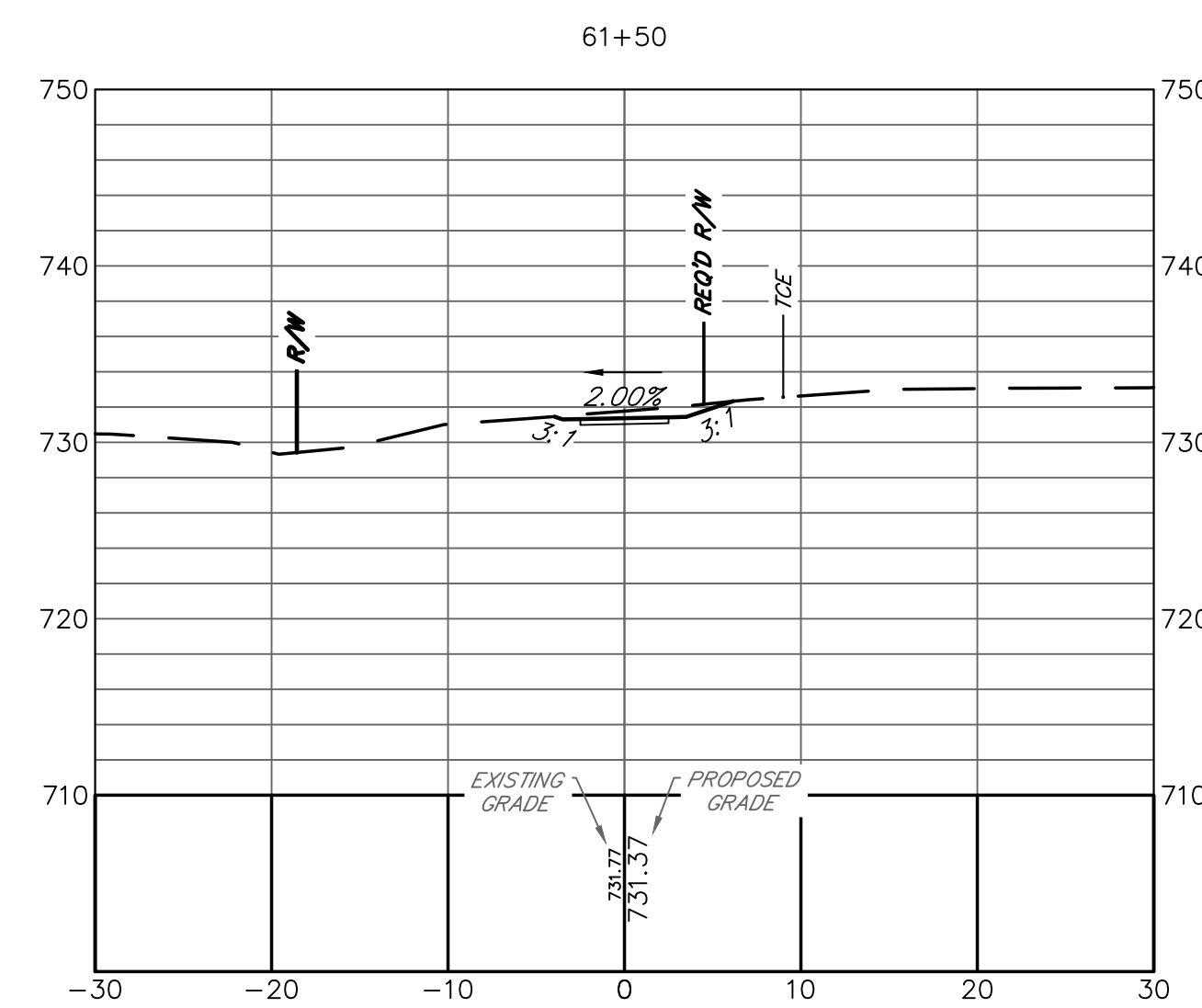
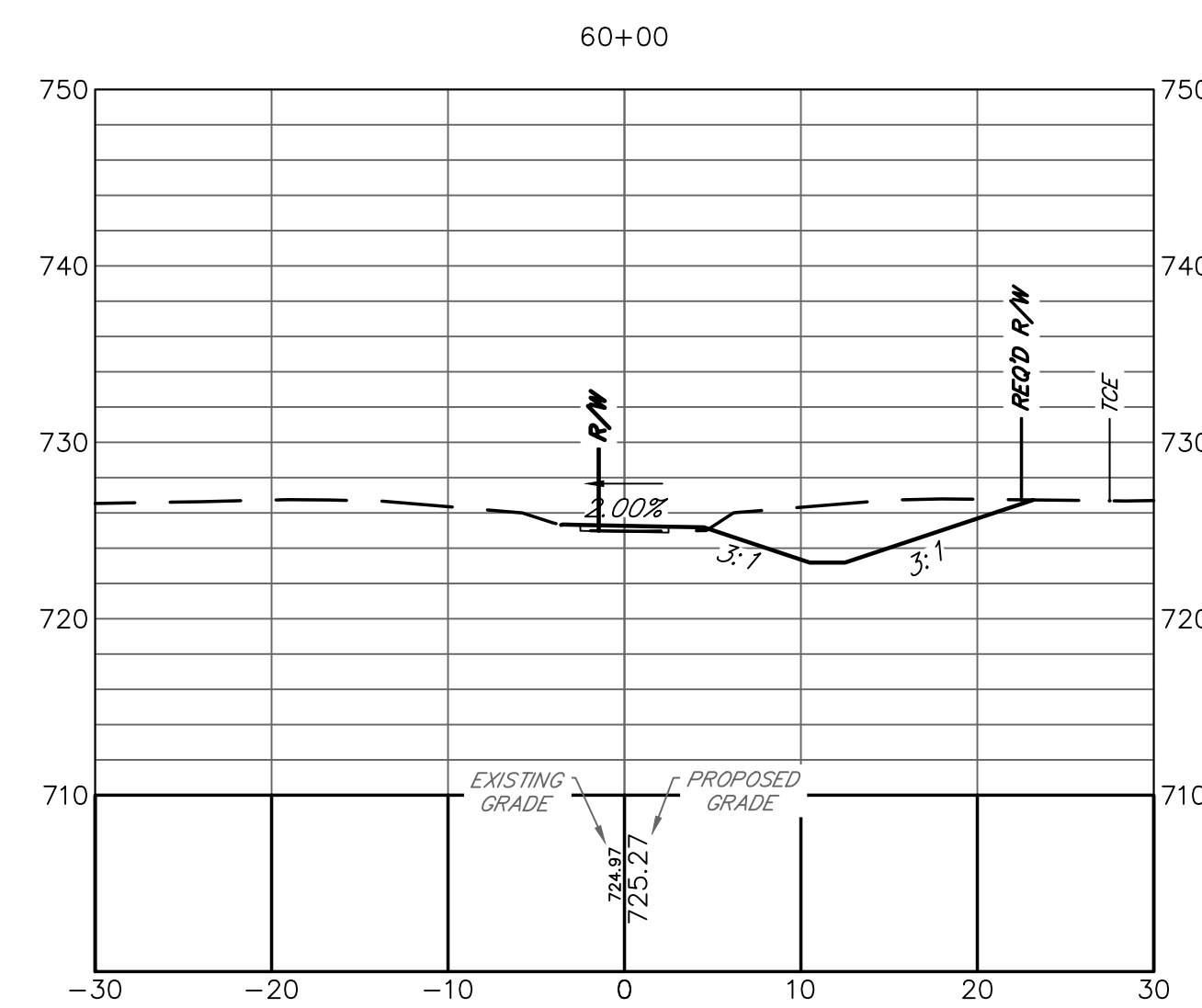
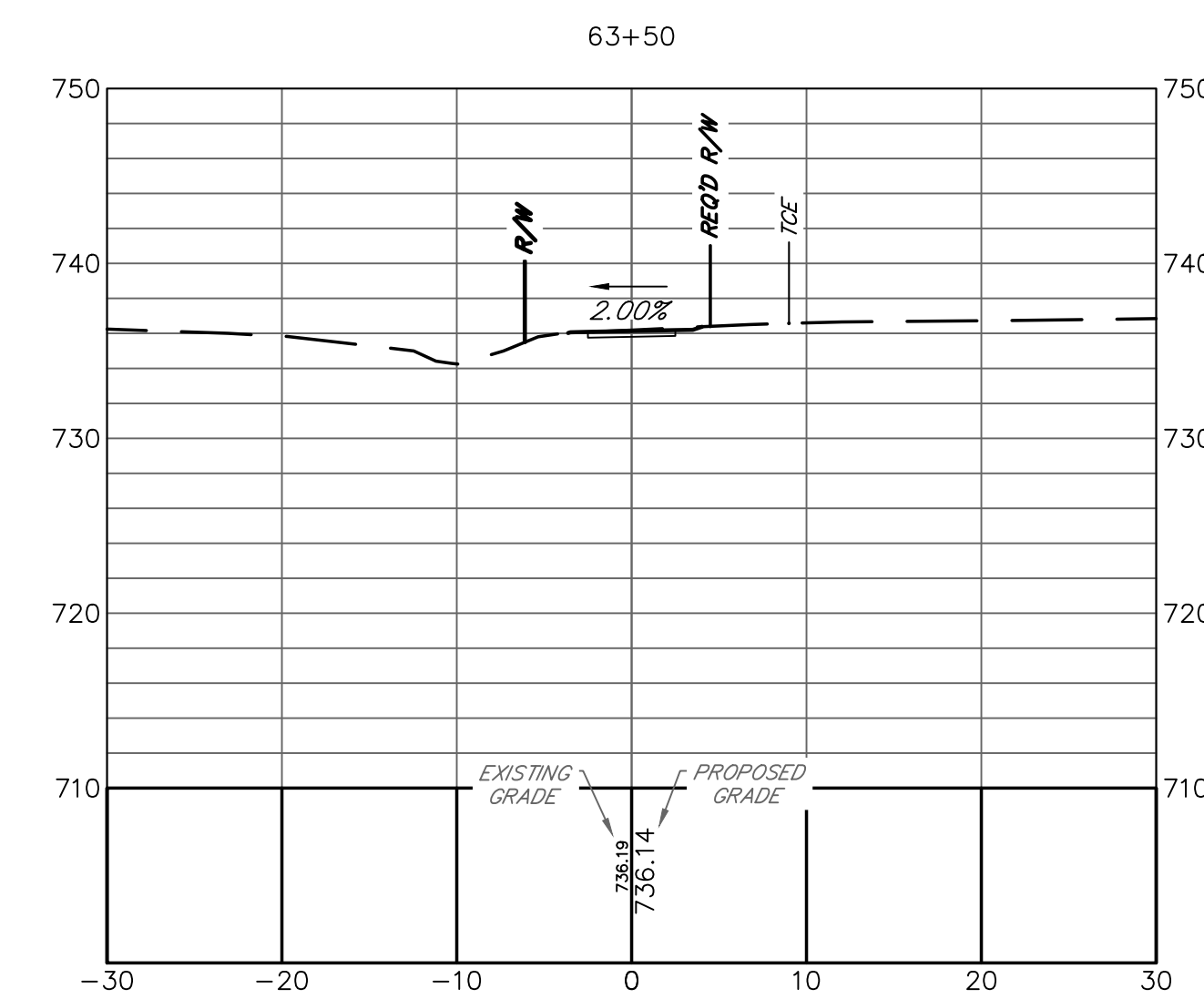
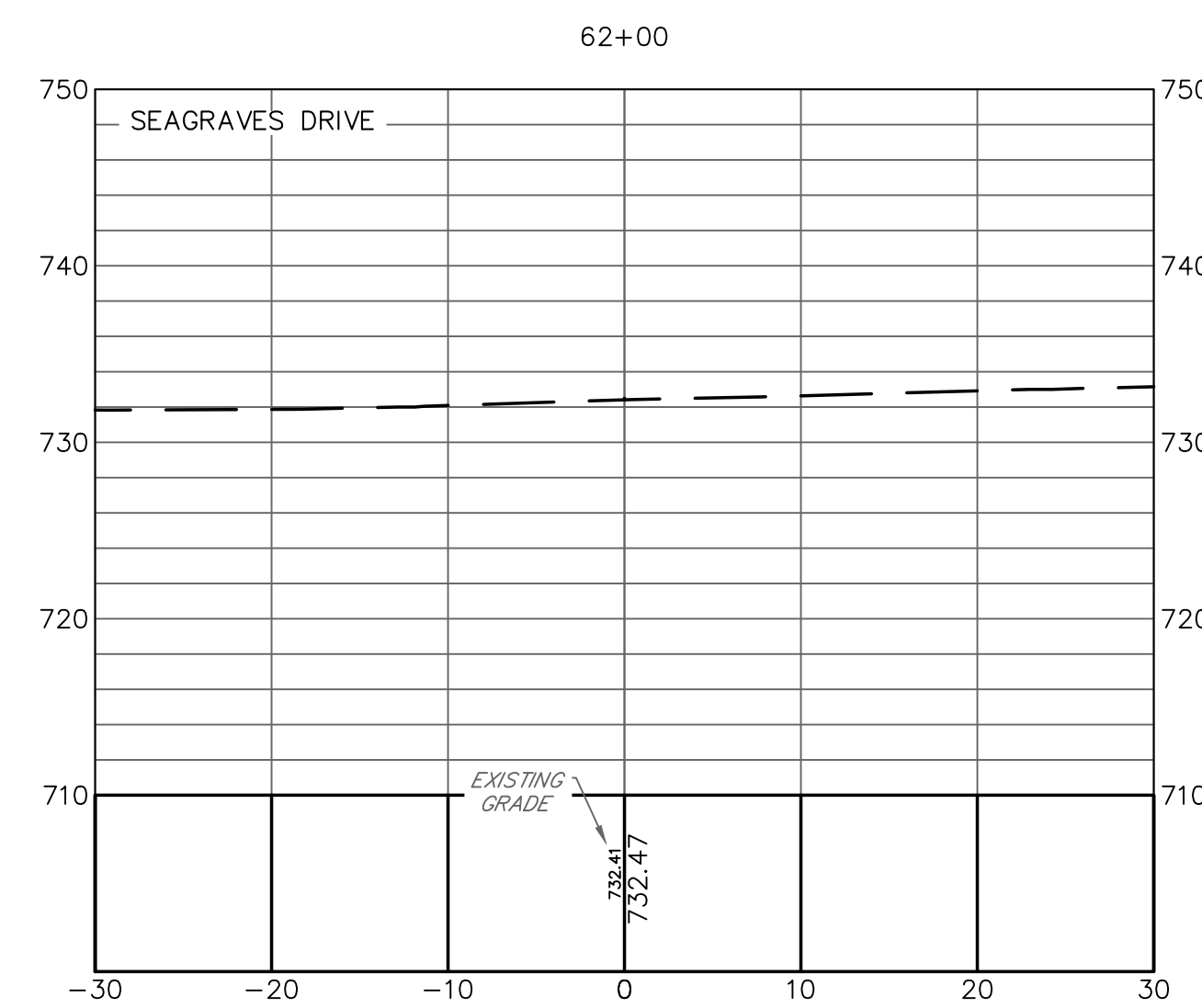
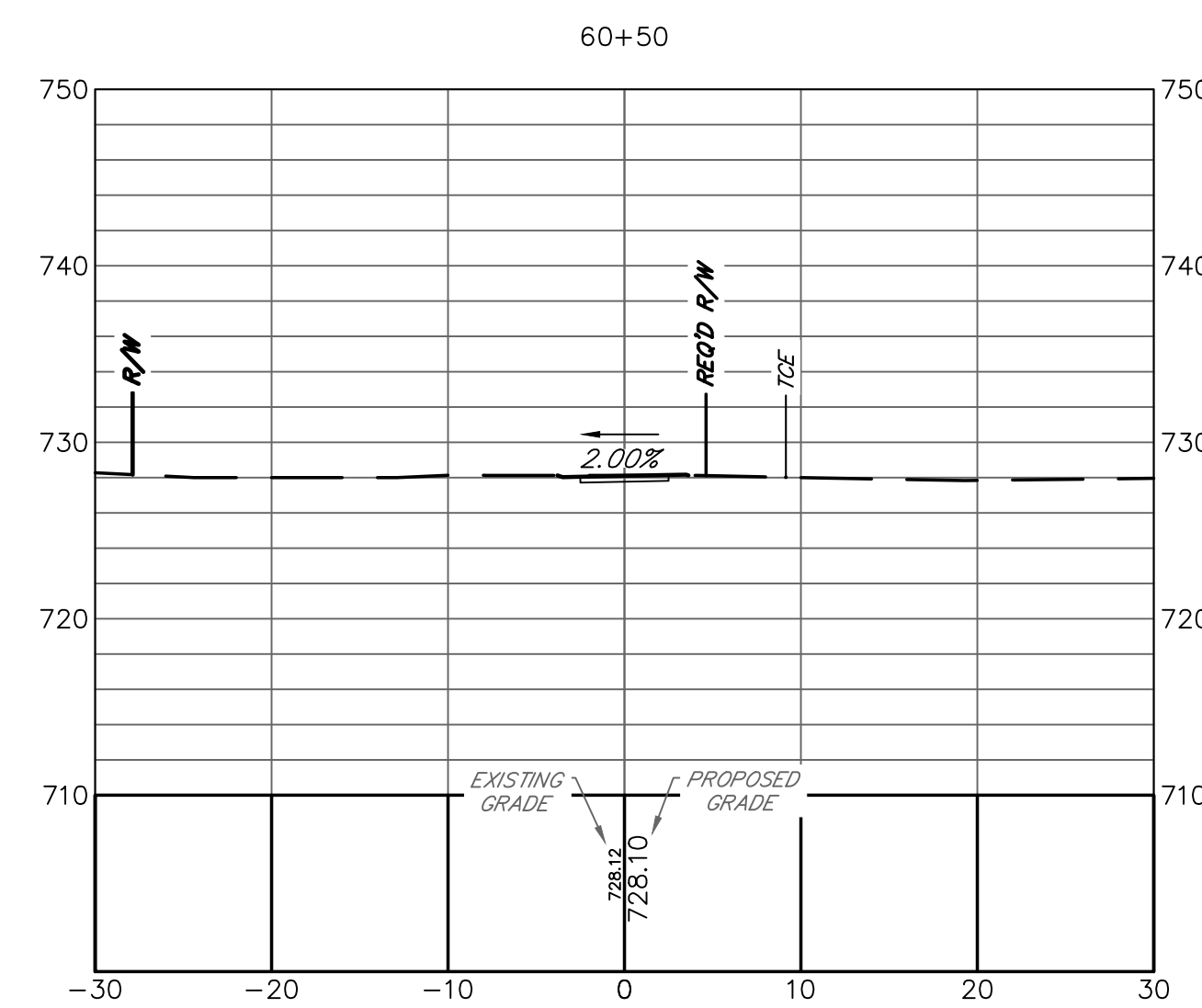
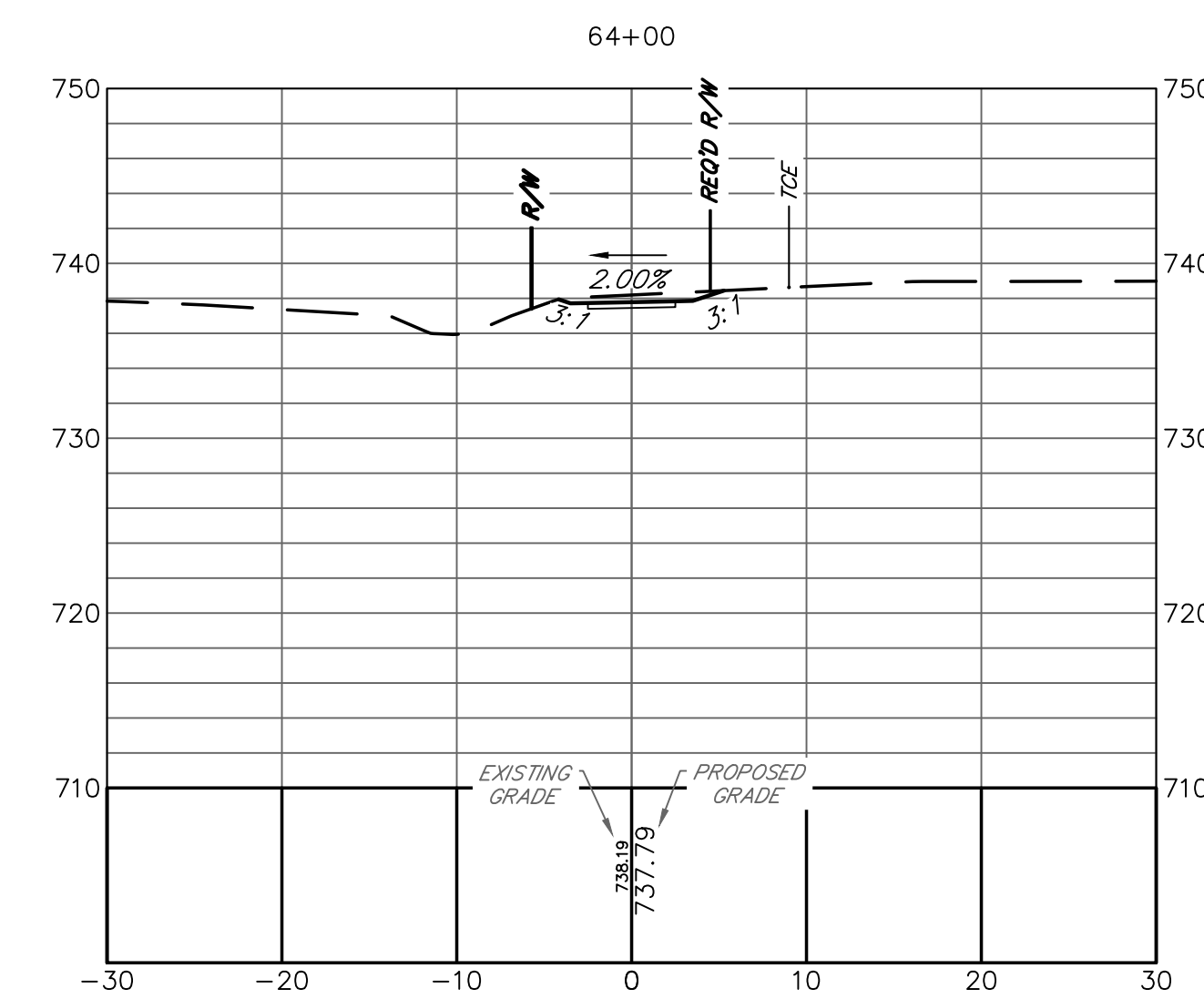
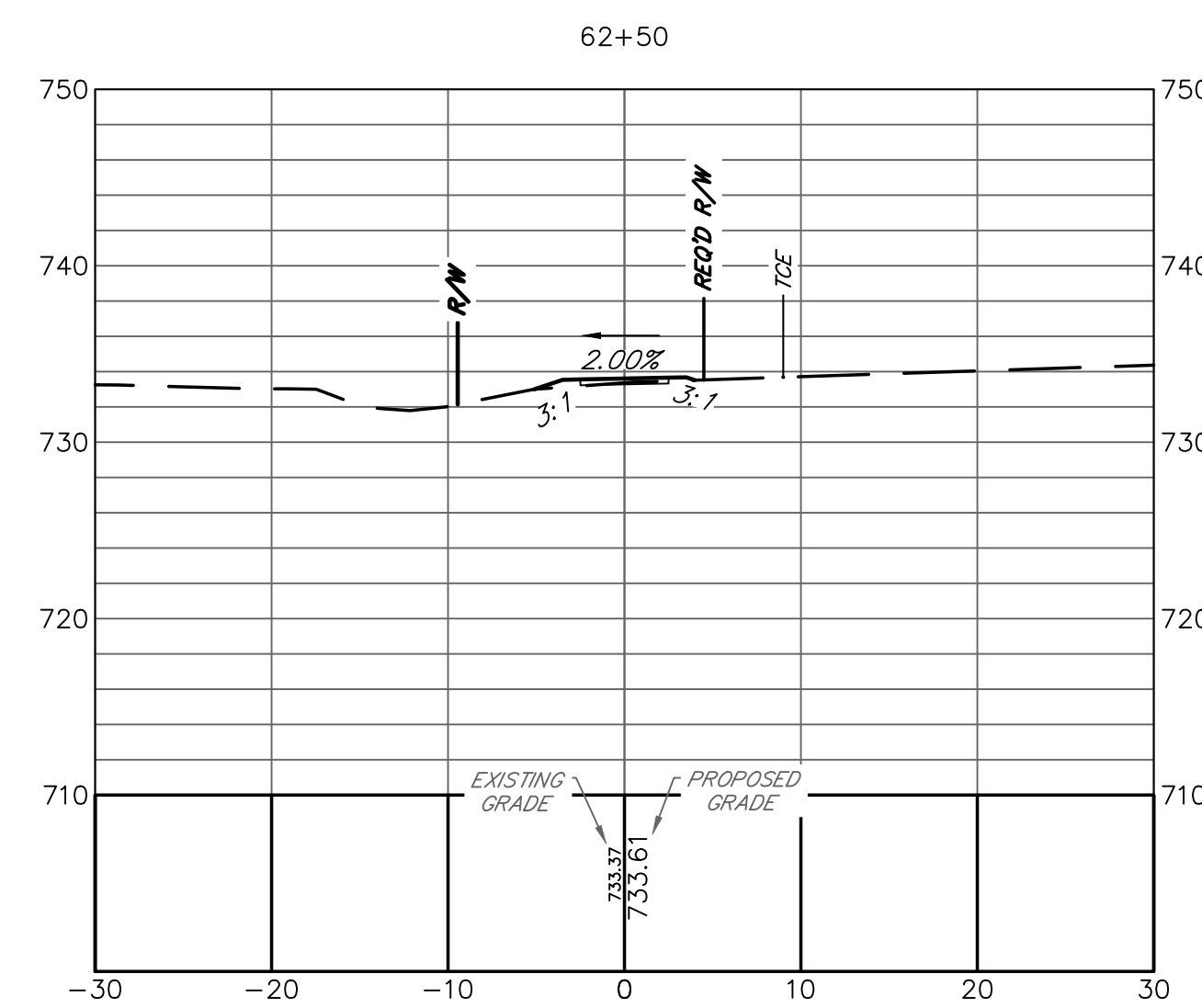
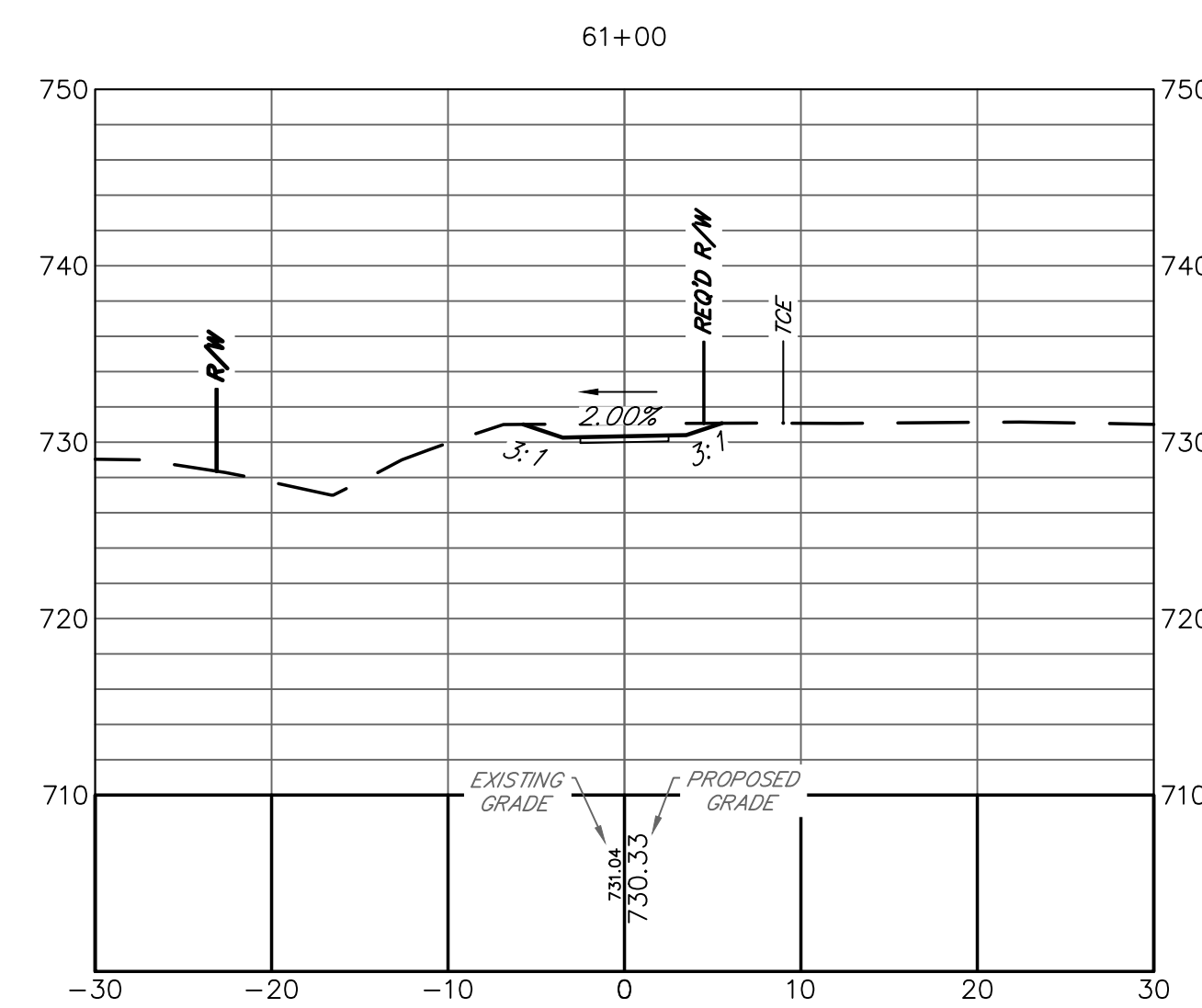
SHEET TITLE: CROSS SECTIONS

PROJECT NAME
LEXINGTON ROAD
CORRIDOR SIDEWALK
PROJECTS



PROJECT INFORMATION
JOB NO: 19022041
DRAWN BY: KC
CHECKED BY: EH
DRAWING FILE: 19022041E.DWG
DRAWING SCALE: 1" = 20'
ORIGINAL RELEASE DATE: APRIL 27, 2022

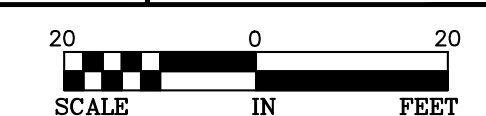
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COUNTY, GA

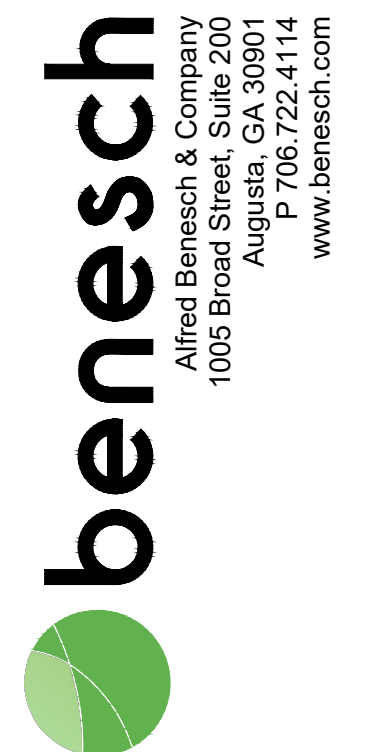
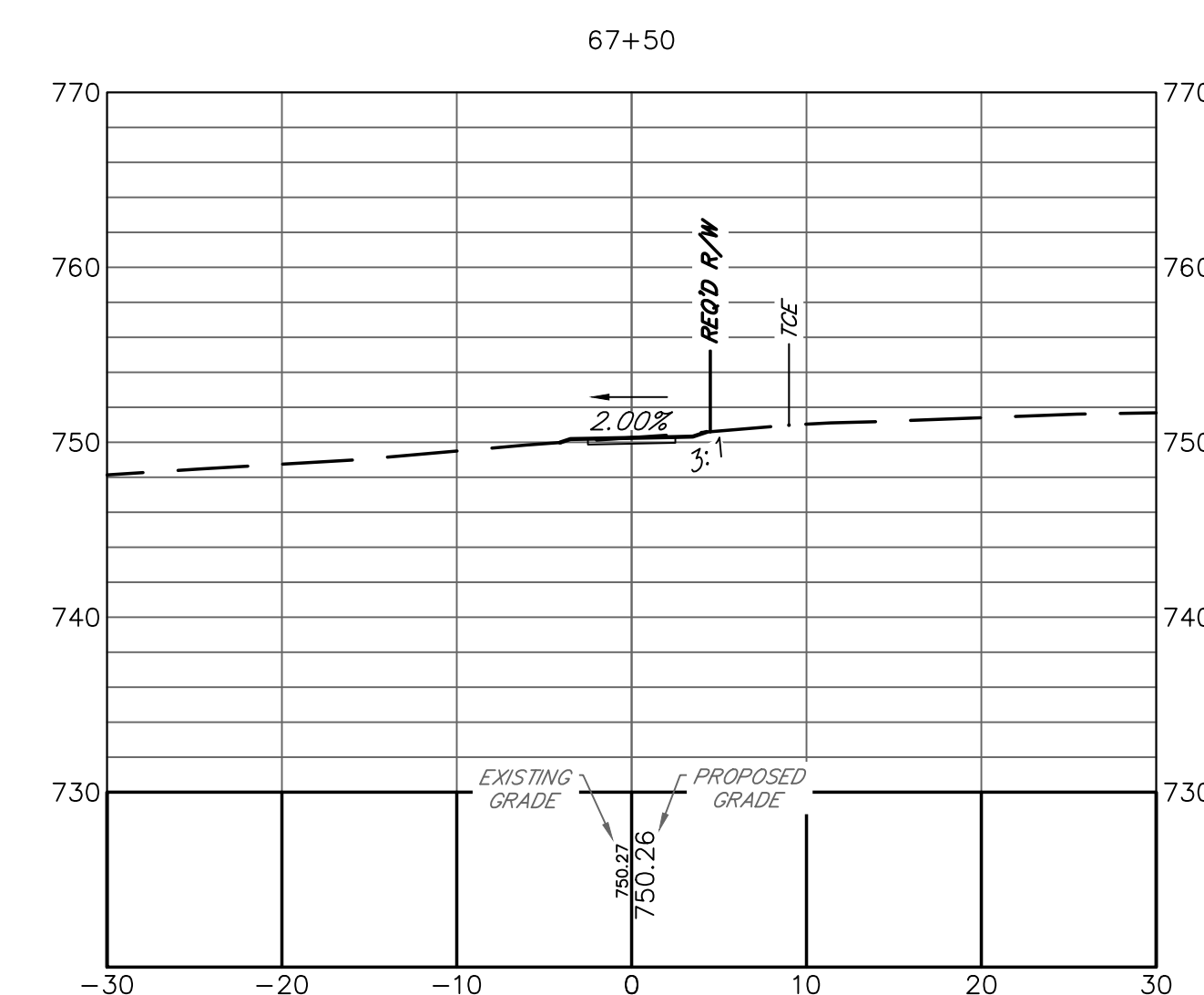
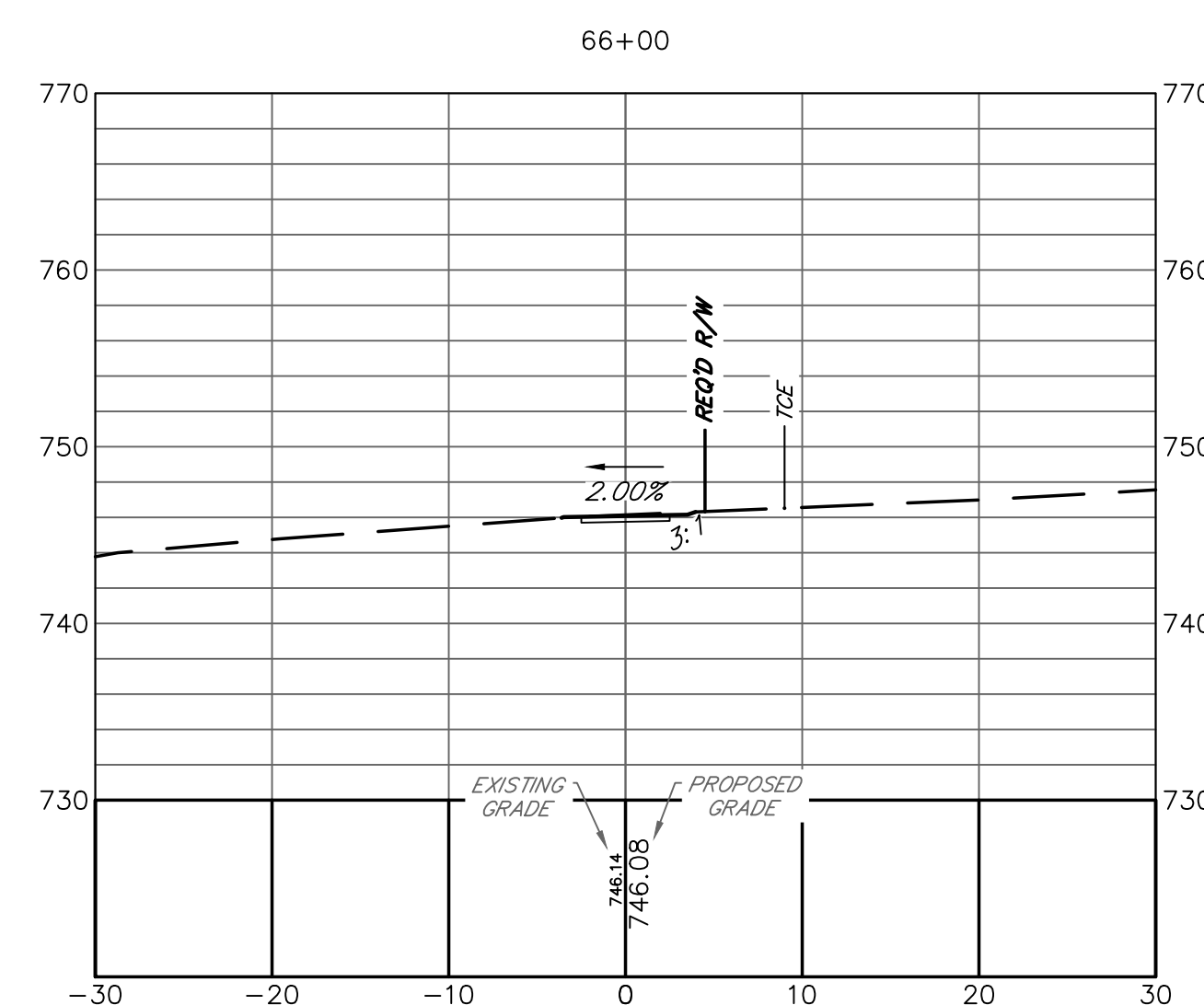
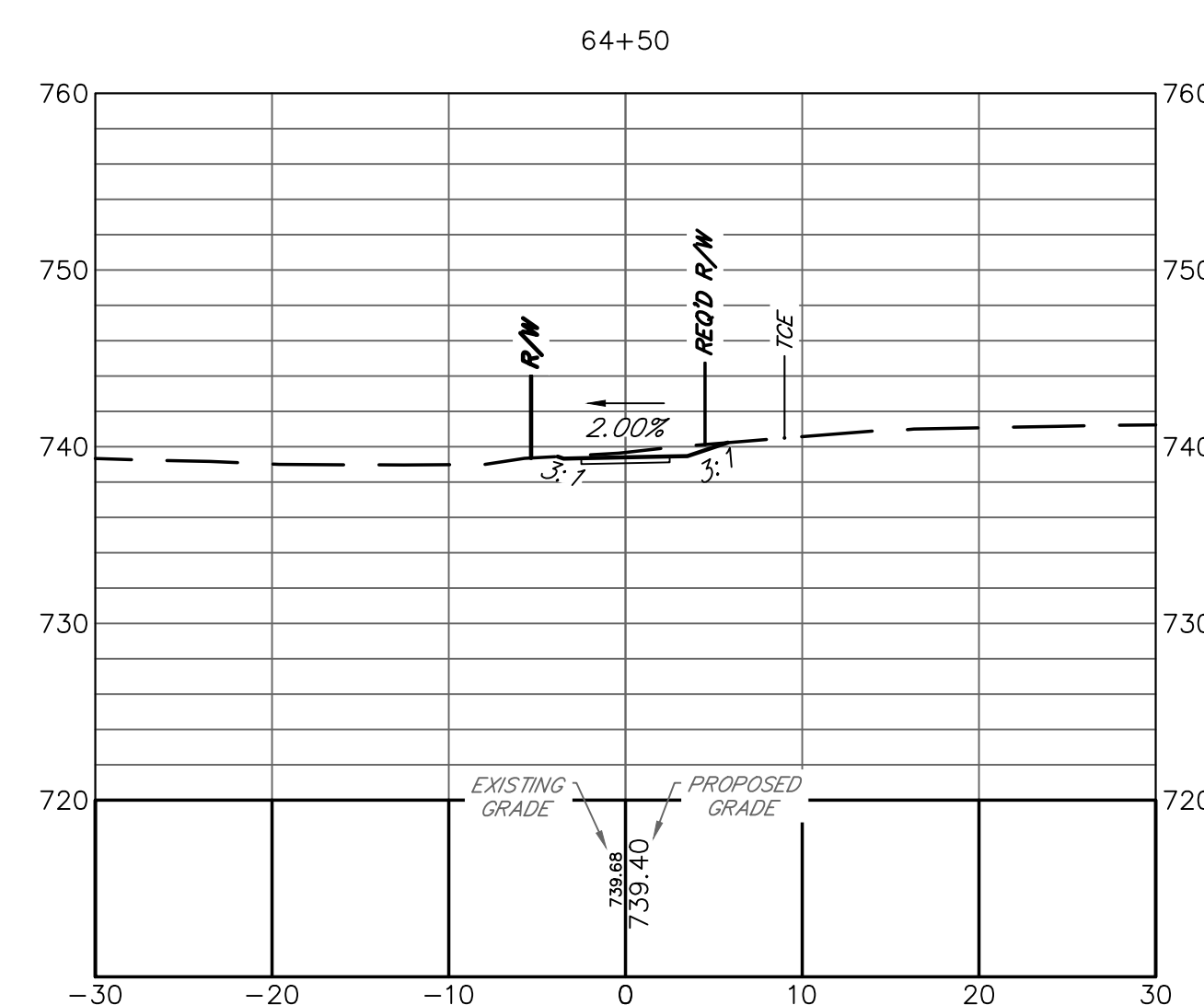
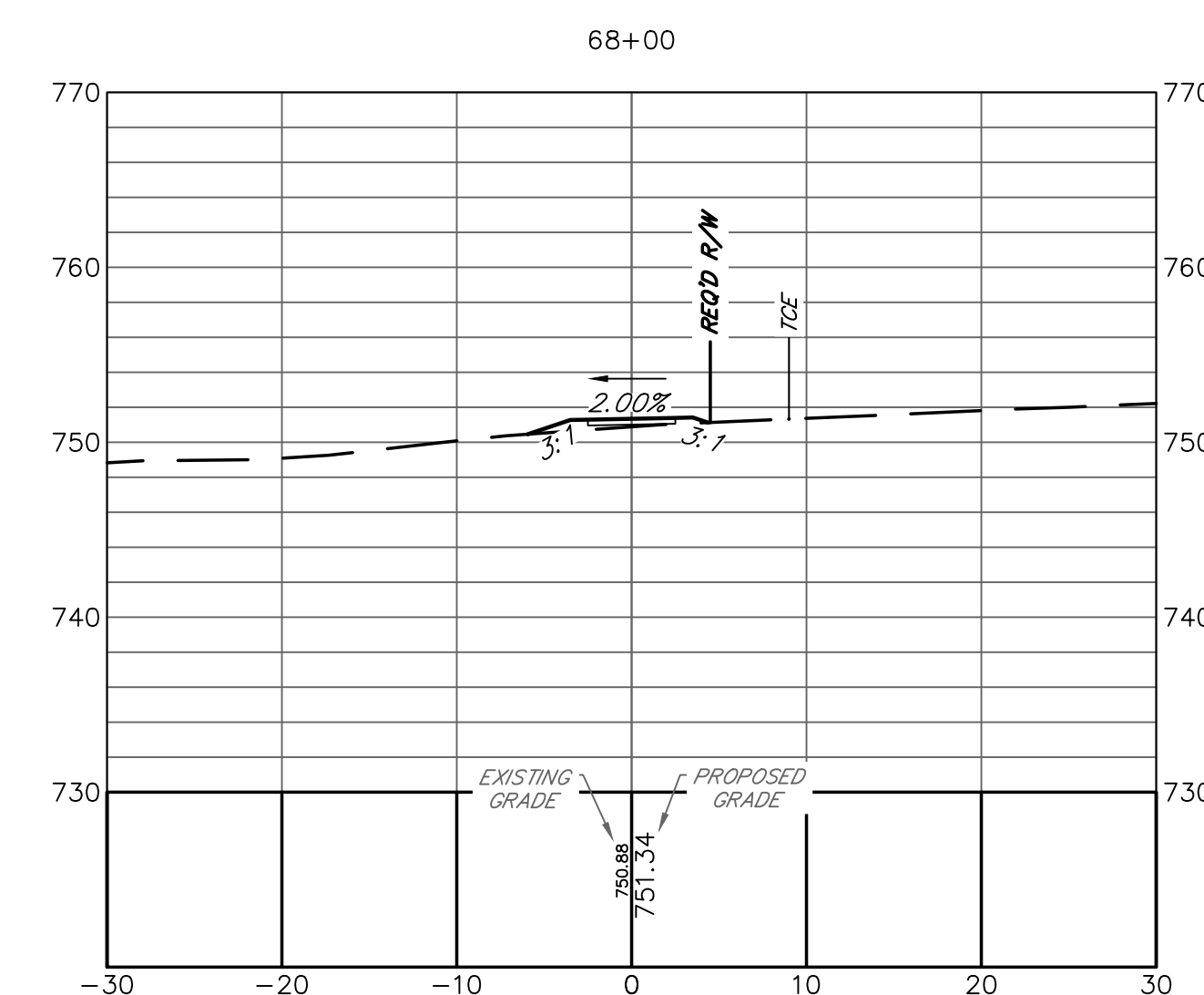
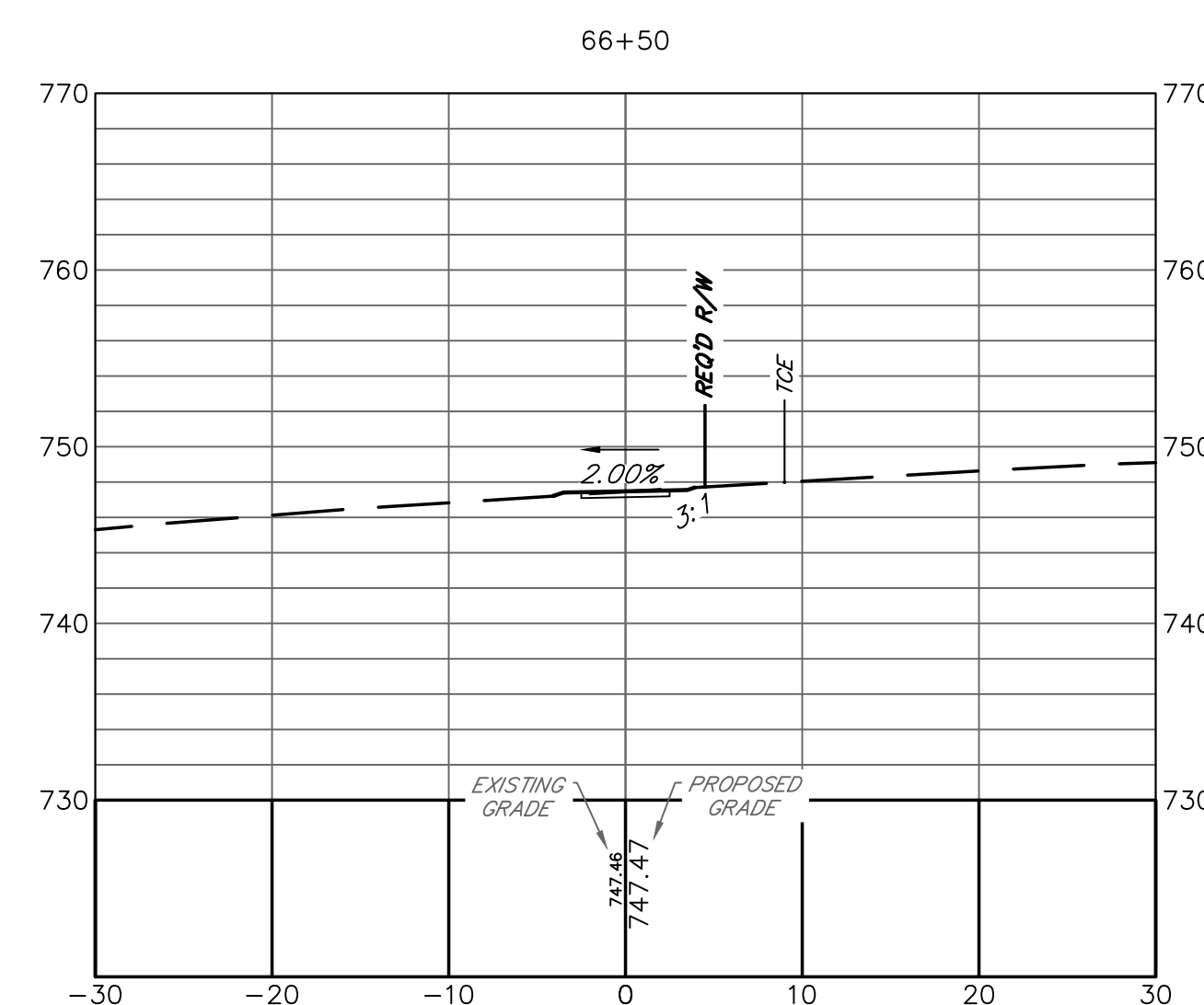
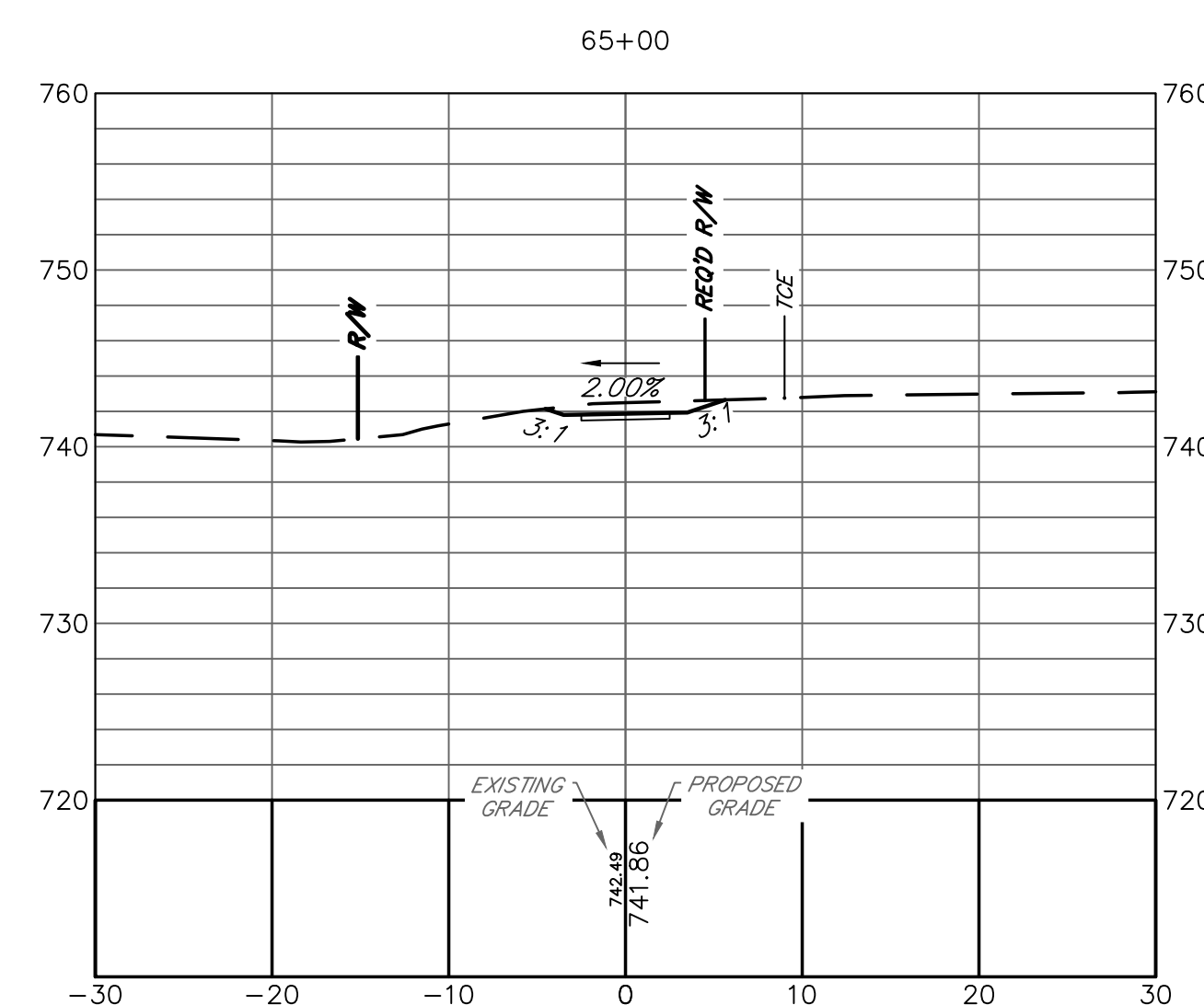
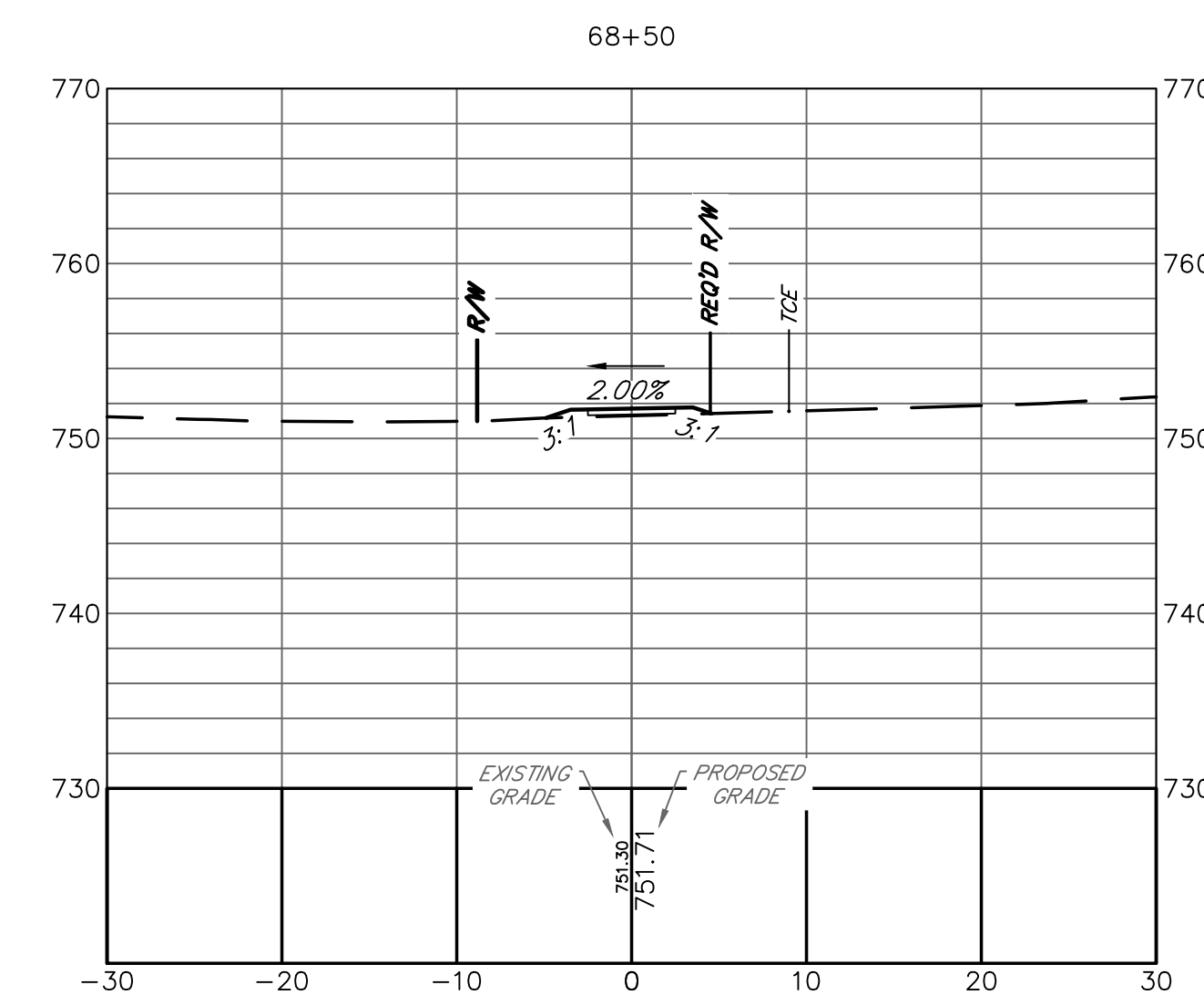
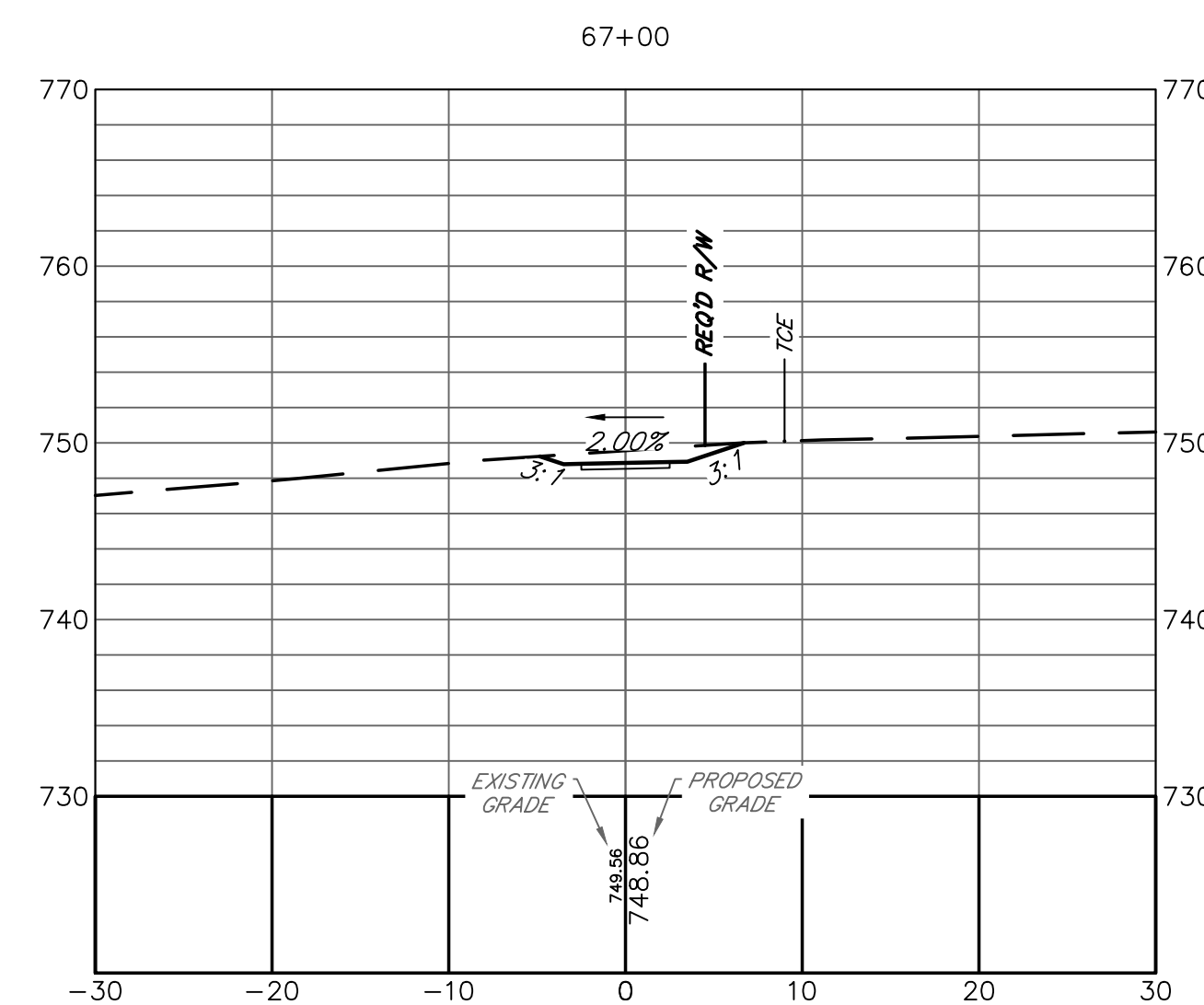
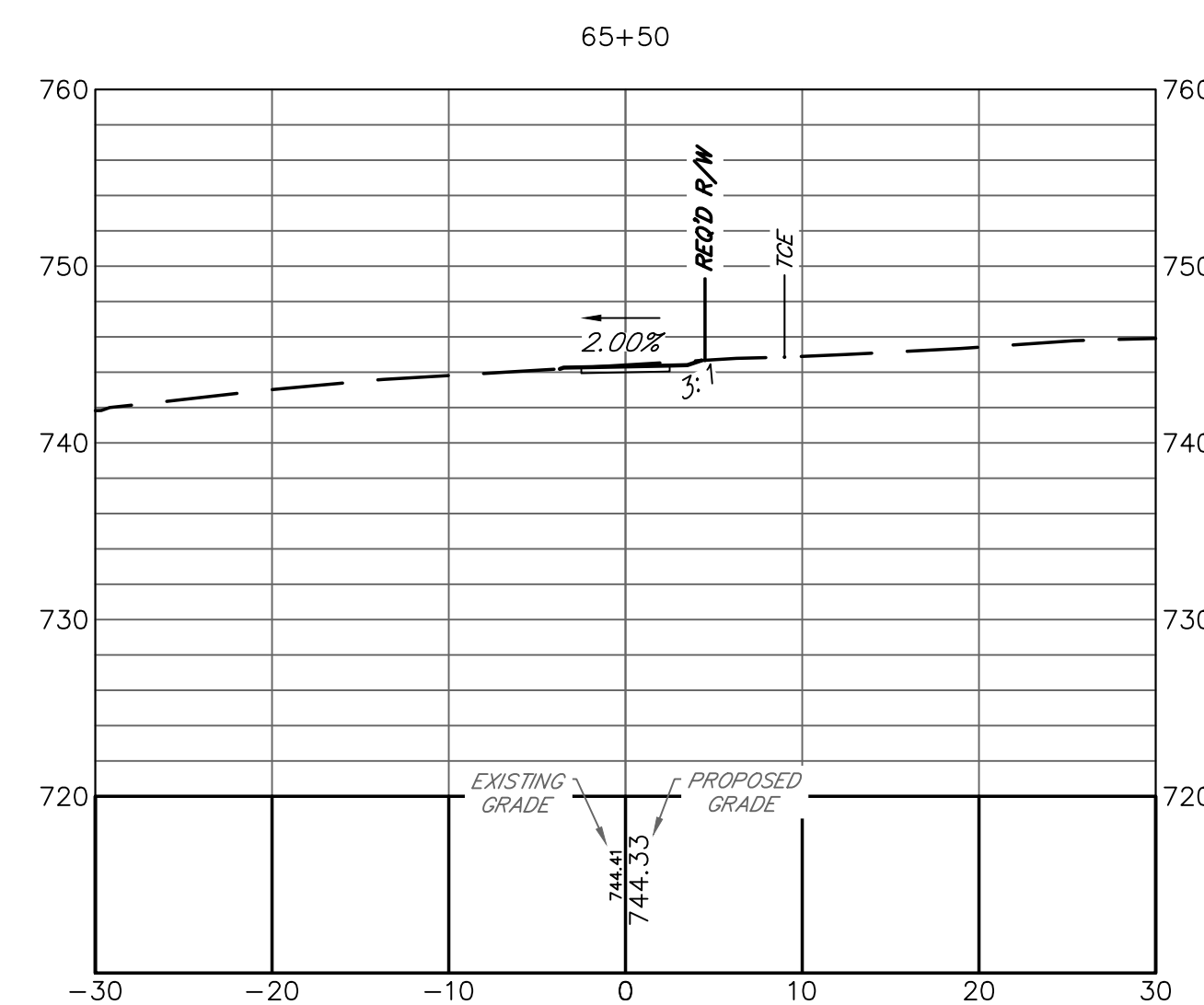
SHEET TITLE:
CROSS SECTIONS

LEXINGTON ROAD CORRIDOR SIDEWALK PROJECTS



PROJECT INFORMATION
JOB NO: 19022041
DRAWN BY: KC
CHECKED BY: EH
DRAWING FILE: 19022041E.DWG
DRAWING SCALE: 1" = 20'
ORIGINAL RELEASE DATE: APRIL 27, 2022

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23-012

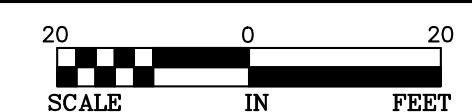
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ATHENS-CLARKE
COUNTY, GA

SHEET TITLE:
CROSS SECTIONS

PROJECT NAME

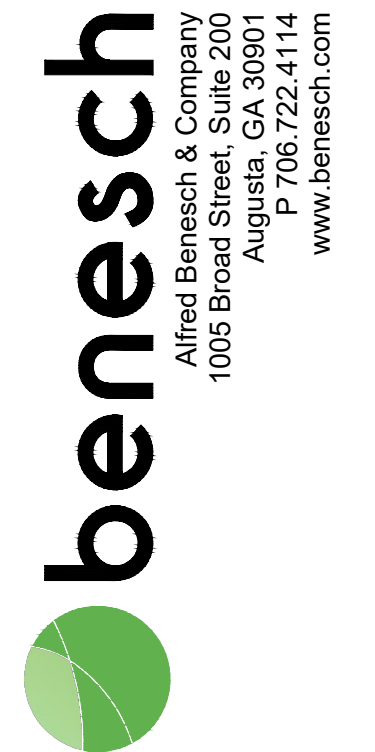
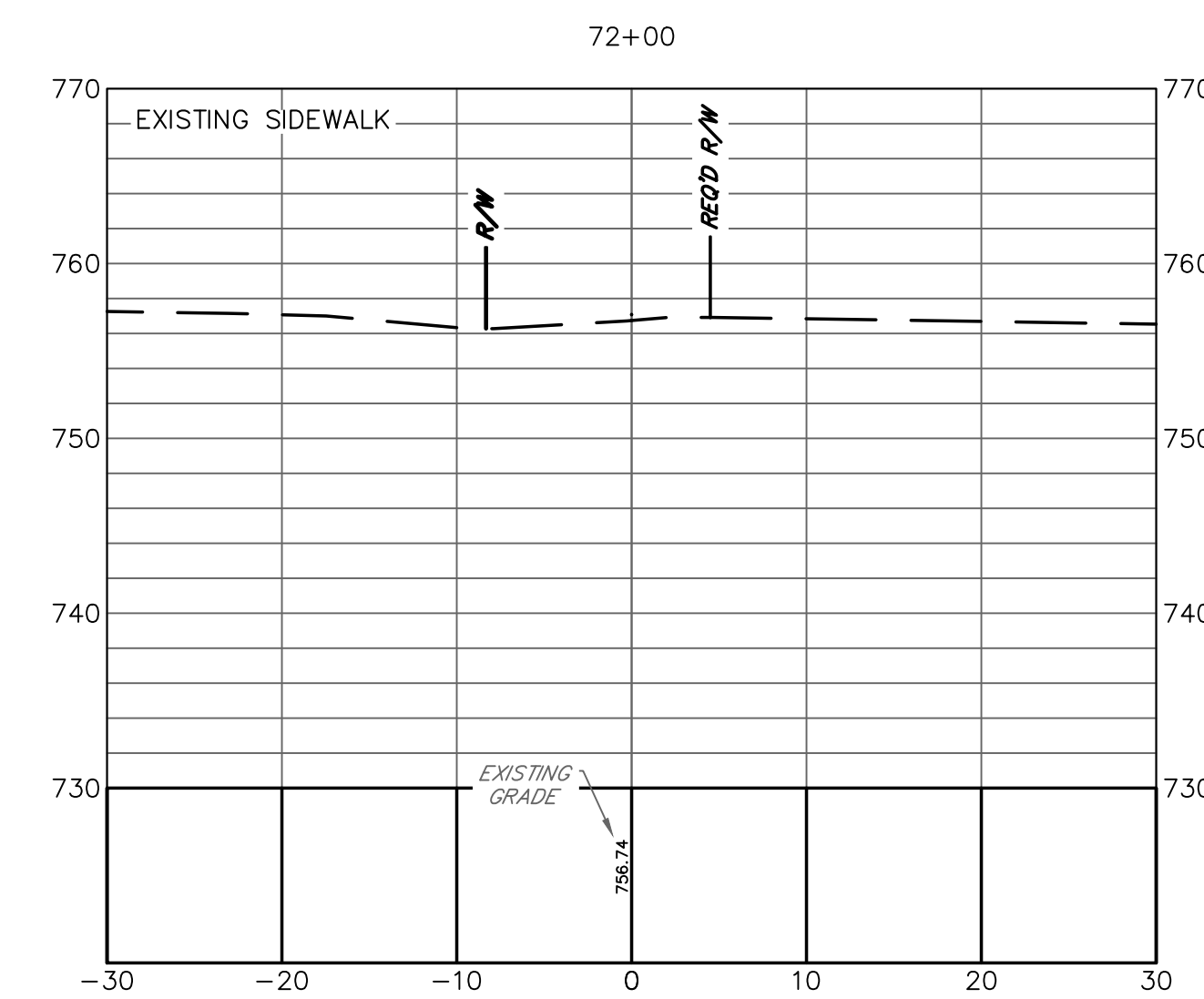
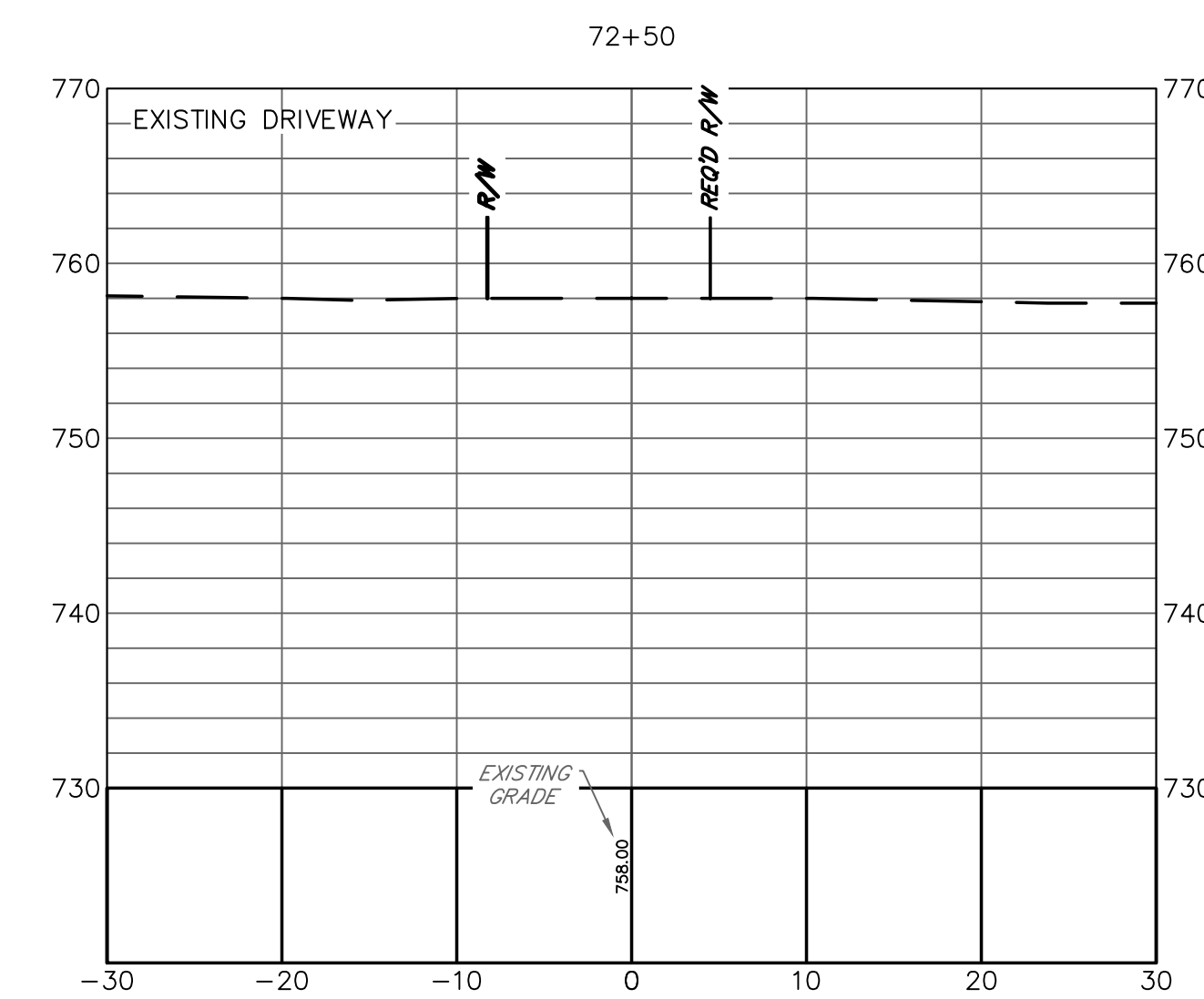
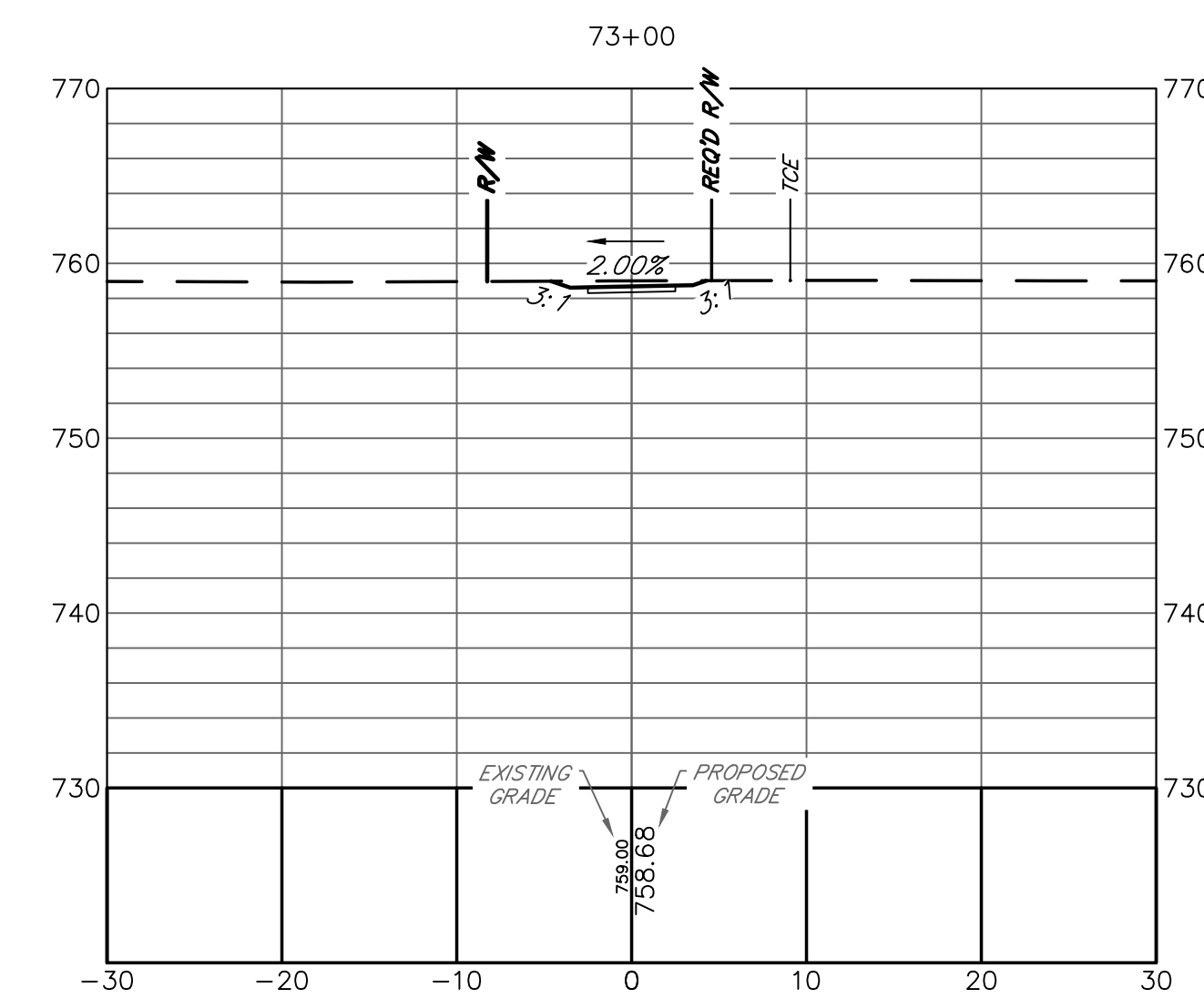
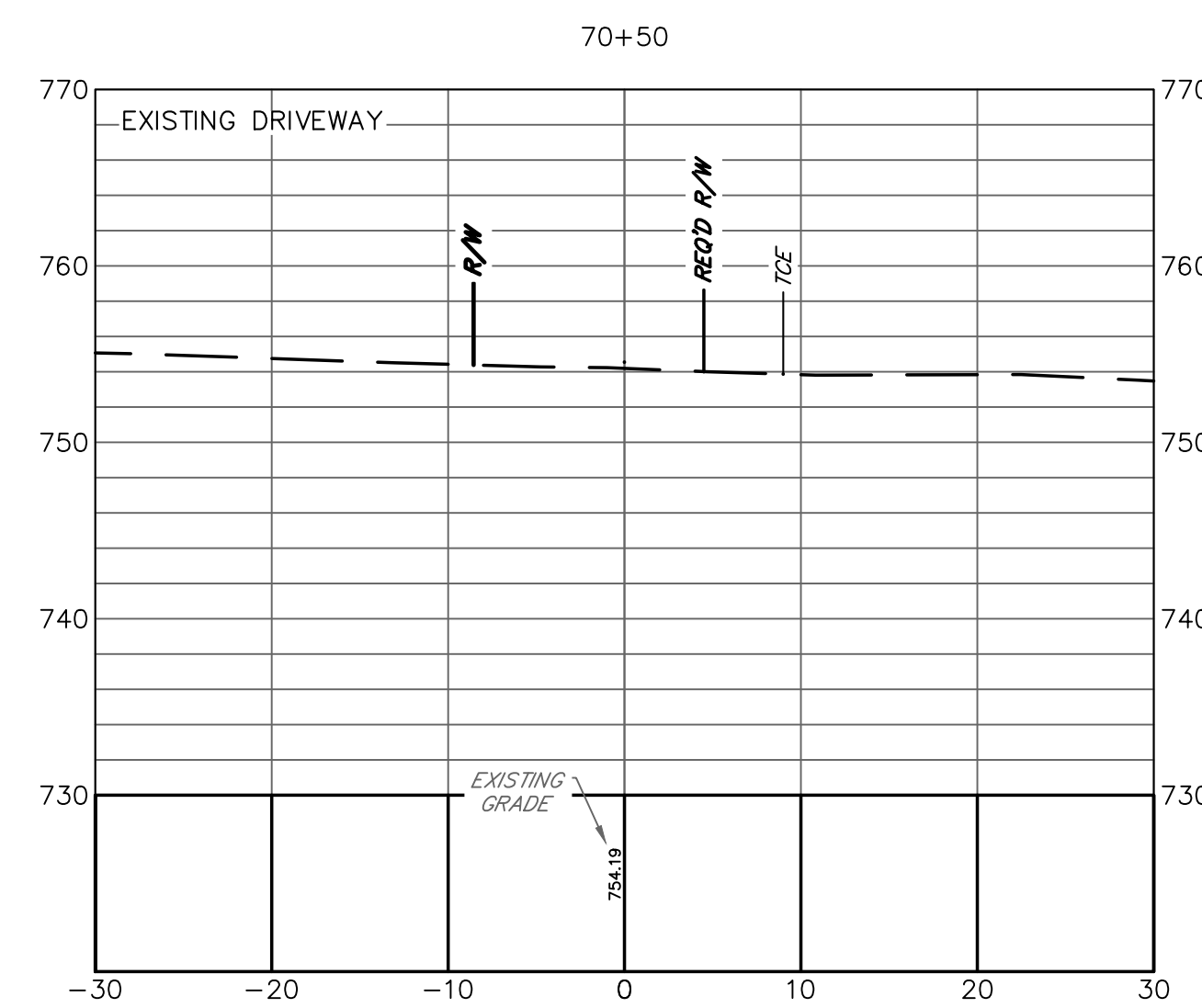
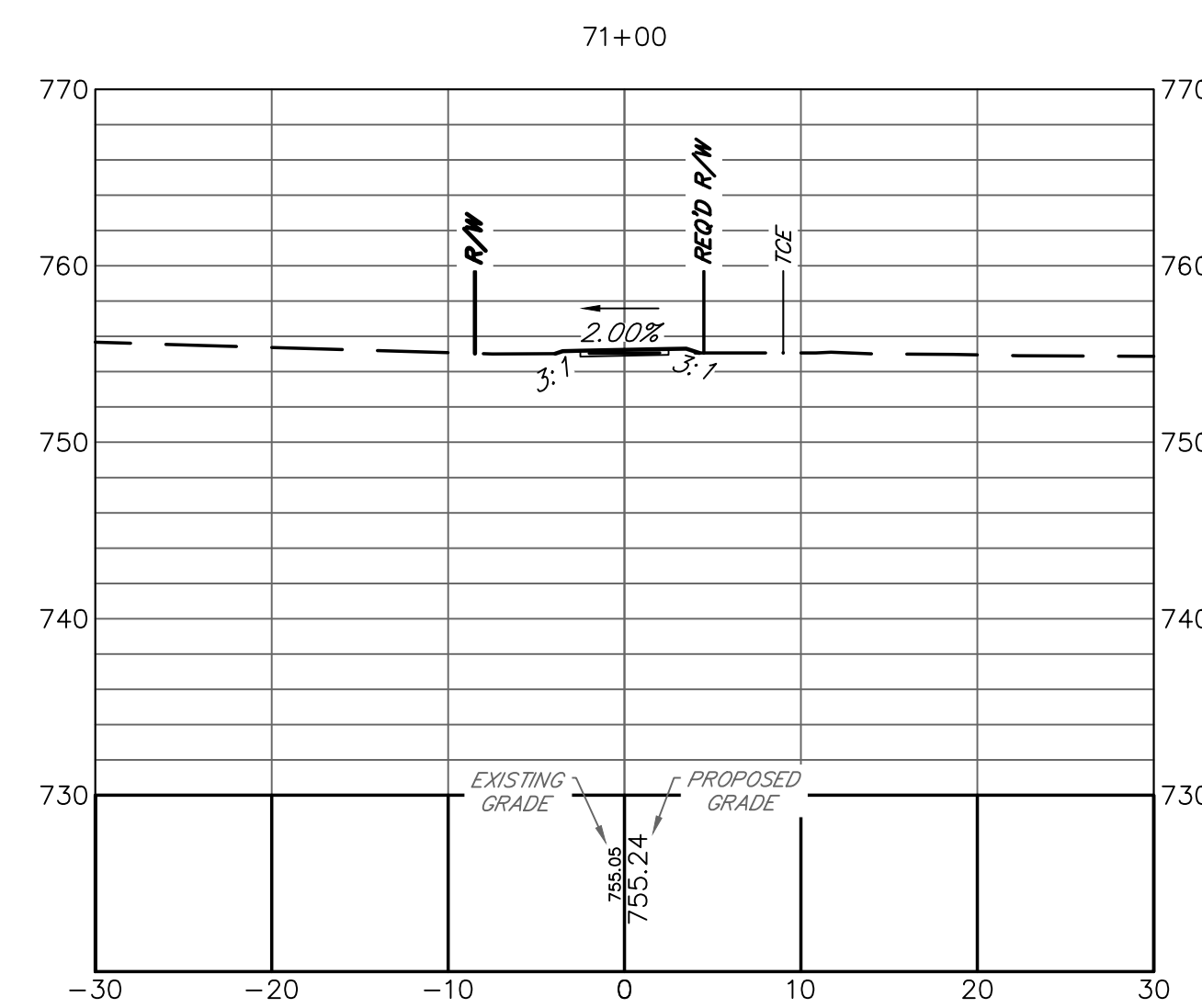
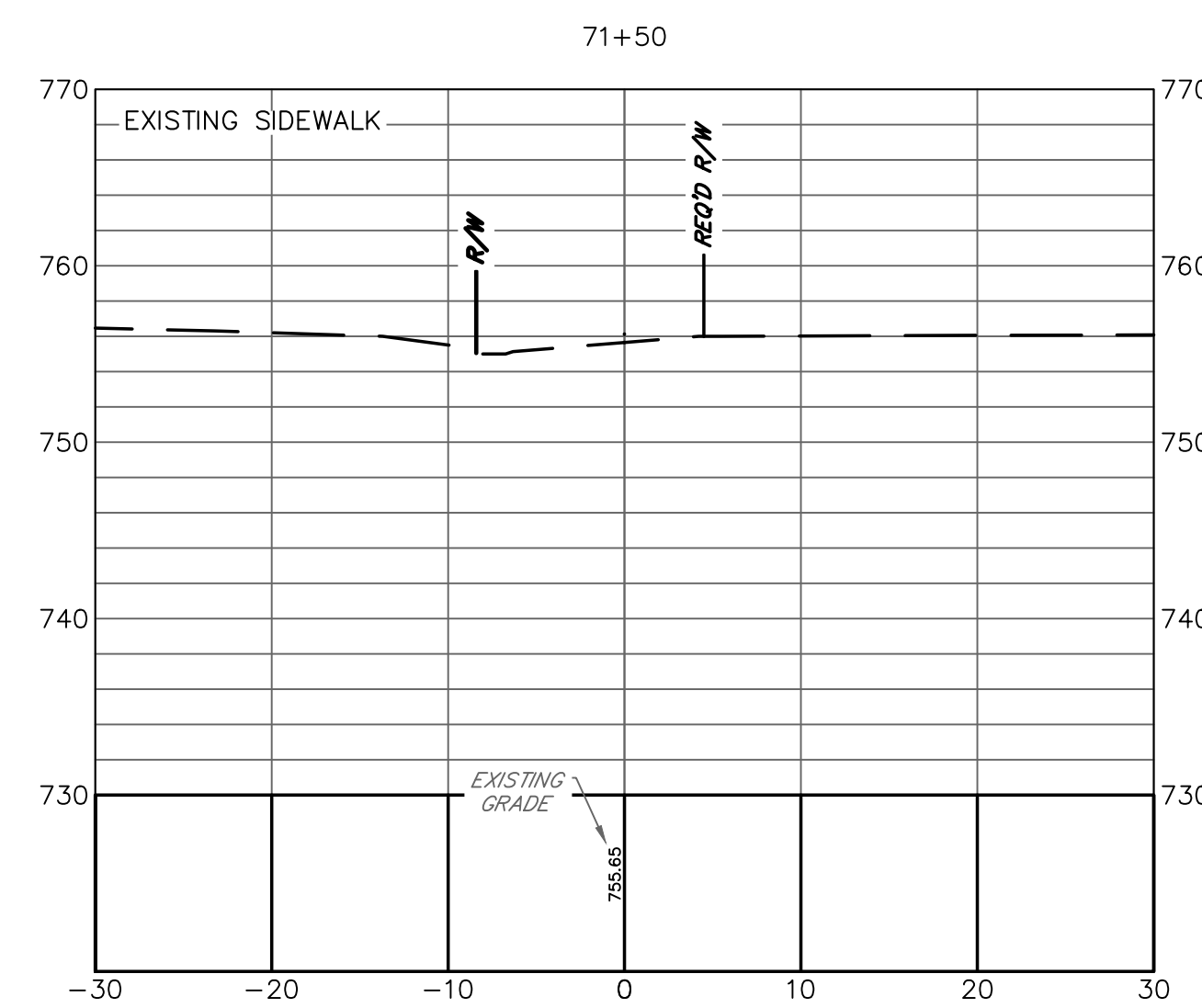
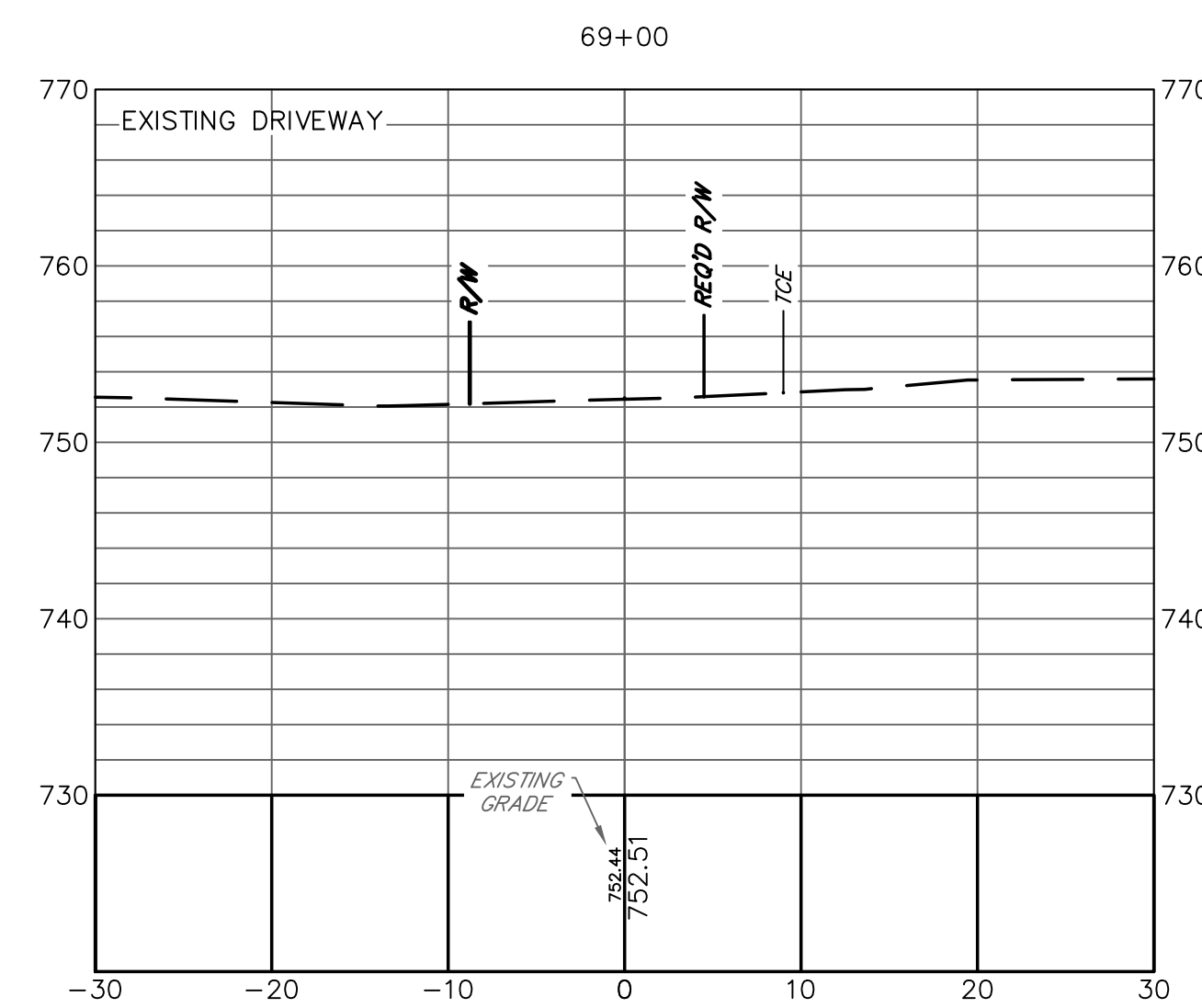
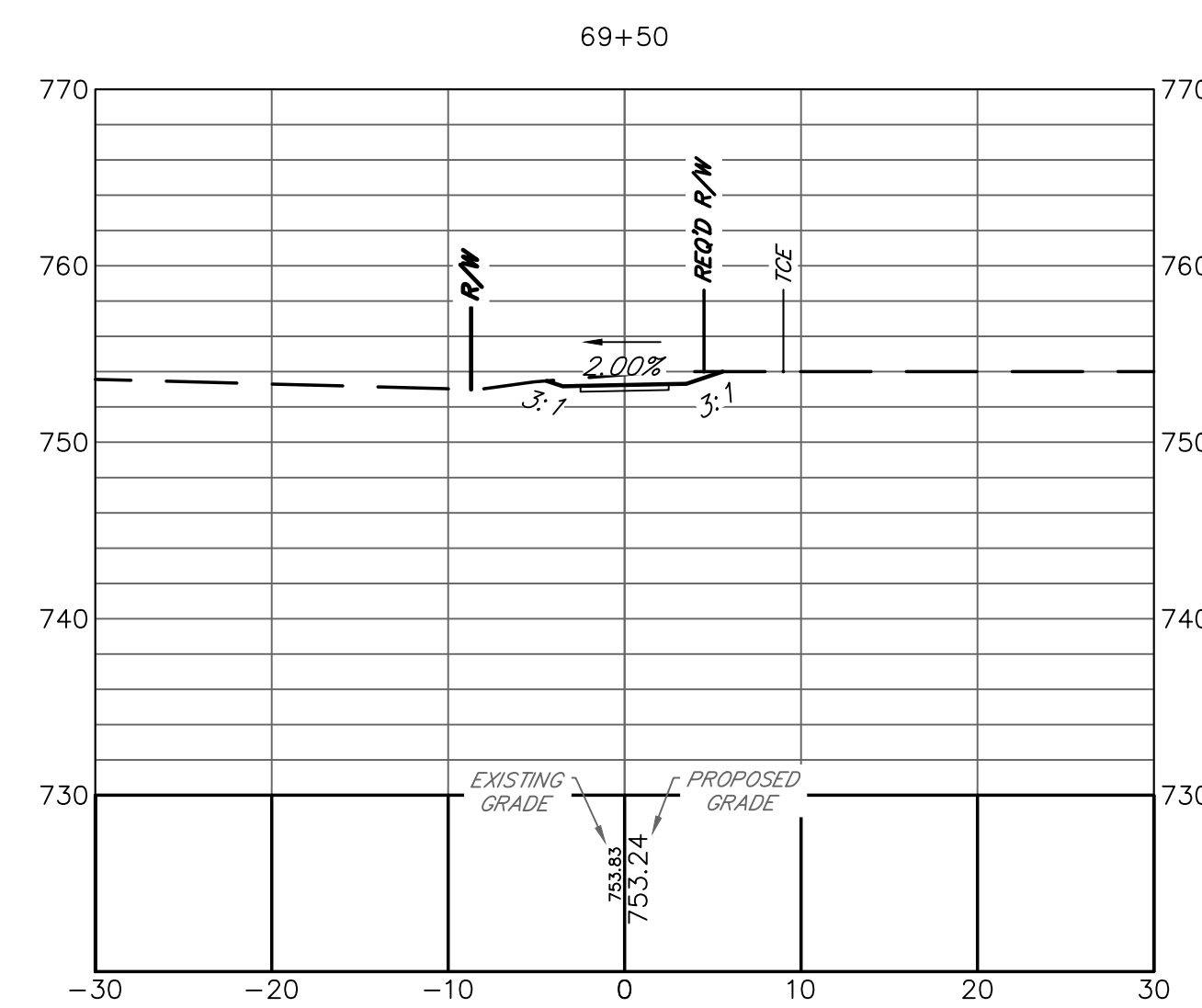
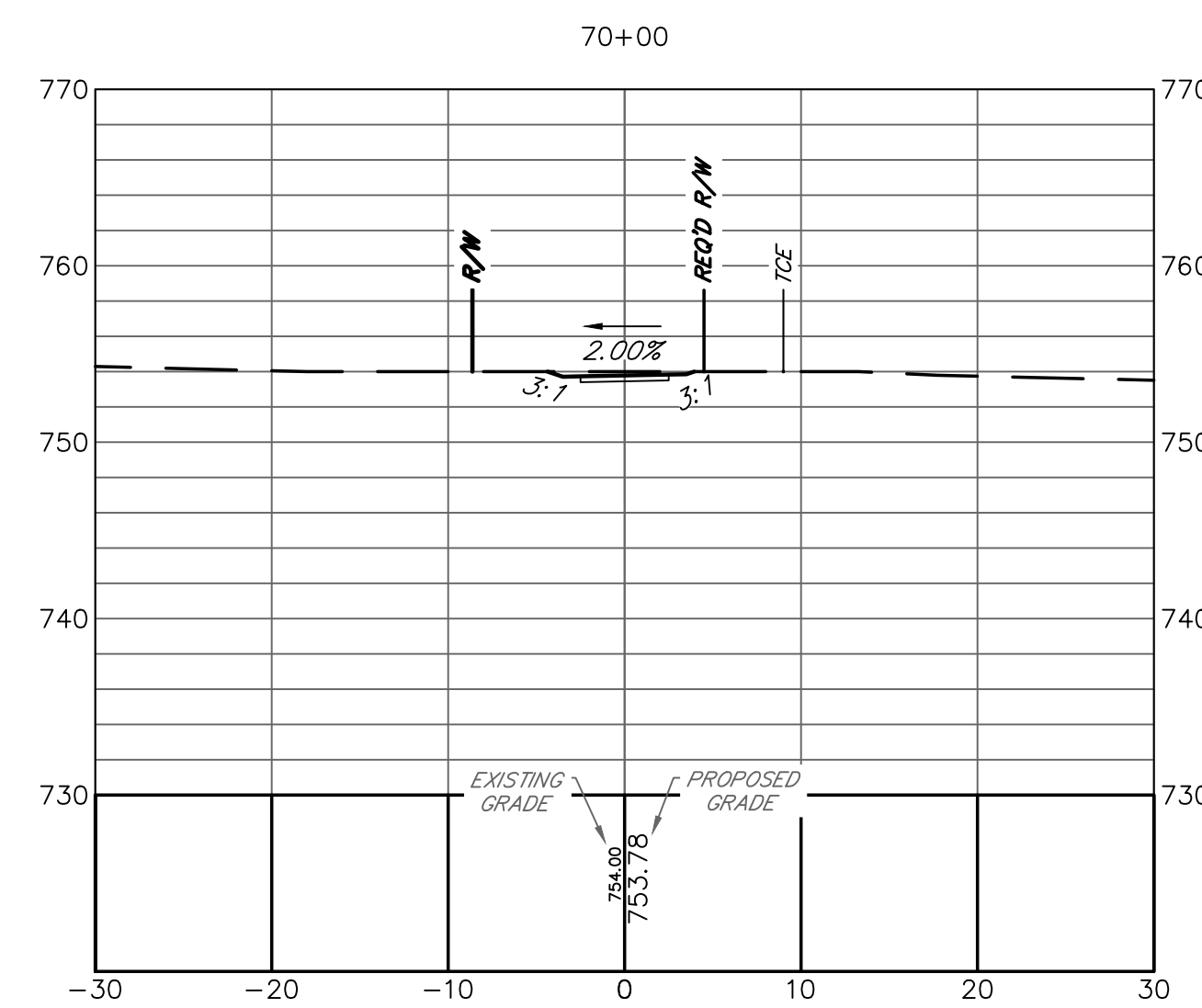
LEXINGTON ROAD
CORRIDOR SIDEWALK
PROJECTS



PROJECT INFORMATION	
JOB NO:	19022041
DRAWN BY:	KC
CHECKED BY:	EH
DRAWING FILE:	19022041E.DWG
DRAWING SCALE:	1" = 20'
ORIGINAL RELEASE DATE: APRIL 27, 2022	

Sheet:

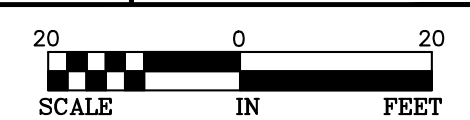
23-013

[illegible]

ATHENS-CLARKE
COUNTY, GA

HEET TITLE:
CROSS SECTIONS

PROJECT NAME LEXINGTON ROAD CORRIDOR SIDEWALK PROJECTS



PROJECT INFORMATION
JOB NO: 19022041
DRAWN BY: KC
CHECKED BY: EH
DRAWING FILE: 19022041E.DWG
DRAWING SCALE: 1" = 20'
ORIGINAL RELEASE DATE: APRIL 27, 2022

Sheet:

TYPICAL BUS SHELTER INSTALLATION SITE

INSTALL 3' X 3' 4-INCH THICK CONCRETE PAD WITH 12'-0" INSTALL NEW SHELTER, SIMME-SEAT, AND VANDAL BAR. LOCATION TO BE DETERMINED BY OWNER.



WAITING PAD TO HAVE MAXIMUM CROSS SLOPE OF 2%.

WHERE TYING INTO EDGE OF PAVEMENT, PARTICULARLY ASPHALT, THE ASPHALT BE CUT STRAIGHT WITH A CONCRETE SAW AND THAT THE TIE-IN BE TWO STRAIGHT EDGES.

GRADE SITE DRAIN, MINIMUM SLOPE 0.5%

TYPICAL BUS SHELTER INSTALLATION SITE
(WITH SIDEWALK BEHIND INSTALLATION SITE)



WAITING PAD TO HAVE MAXIMUM CROSS SLOPE OF 2%.

SHELTER INSTALLATION TO INCLUDE FARE & TIME SCHEDULE
HOLDERS AND SYSTEM MAP.

WHERE TYING INTO EDGE OF PAVEMENT, PARTICULARLY ASPHALT,
THAT THE ASPHALT BE CUT STRAIGHT WITH A CONCRETE SAW AND
THAT THE TIE-IN BE TWO STRAIGHT EDGES

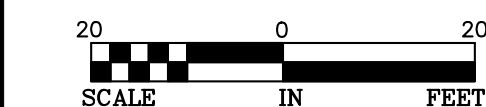
GRADE SITE TO DRAIN, MINIMUM SLOPE 0.5%

[illegible]

**ATHENS-CLARKE
COUNTY, GA**

SHEET TITLE:
CONSTRUCTION DETAILS

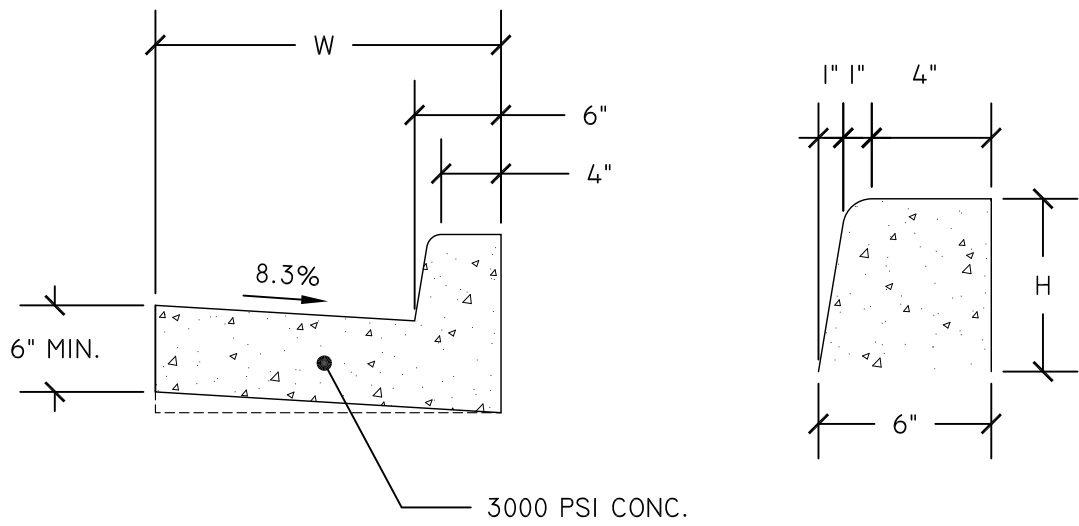
PROJECT NAME
LEXINGTON ROAD
CORRIDOR SIDEWALK
PROJECTS



PROJECT INFORMATION

JOB NO: 19022041
DRAWN BY: KC
CHECKED BY: EH
DRAWING FILE: 19022041E.DWG
DRAWING SCALE: 1" = 20'
ORIGINAL RELEASE DATE: APRIL 27, 2022

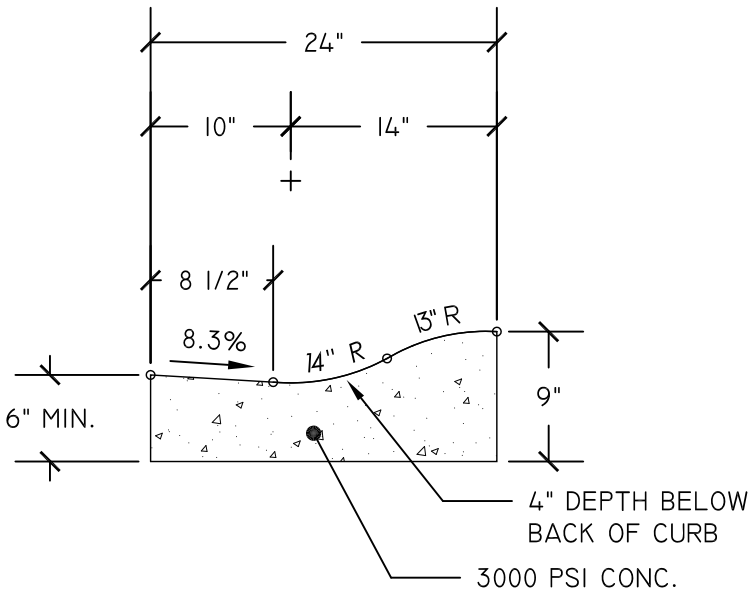
Sheet:
40-001



TYPE	H	W	DESIGNATION
2-A	6"	24"	6"x24"x12"
2-B	6"	30"	6"x30"x12"
3	8"	30"	8"x30"x14"

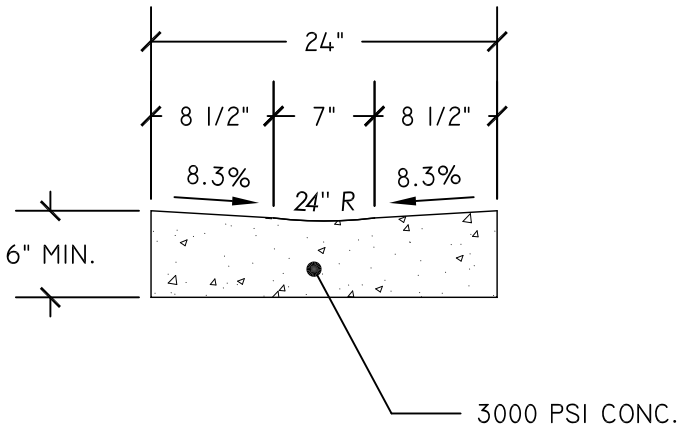
- Notes:
- 1/2" Asphalt Impregnated Expansion Joints to be placed every 100 L.F., at all structures, and at radius points.
 - Construction Joints to placed every 10 L.F.
 - Graded Aggregate Base to be placed under curb at a minimum thickness of 6" and extend beyond the back of curb a minimum of 6".
 - All exposed surfaces to be broom finished.
 - Gutter thickness may be increased to match paving course.

HIGH BACK CURB & GUTTER
NTS



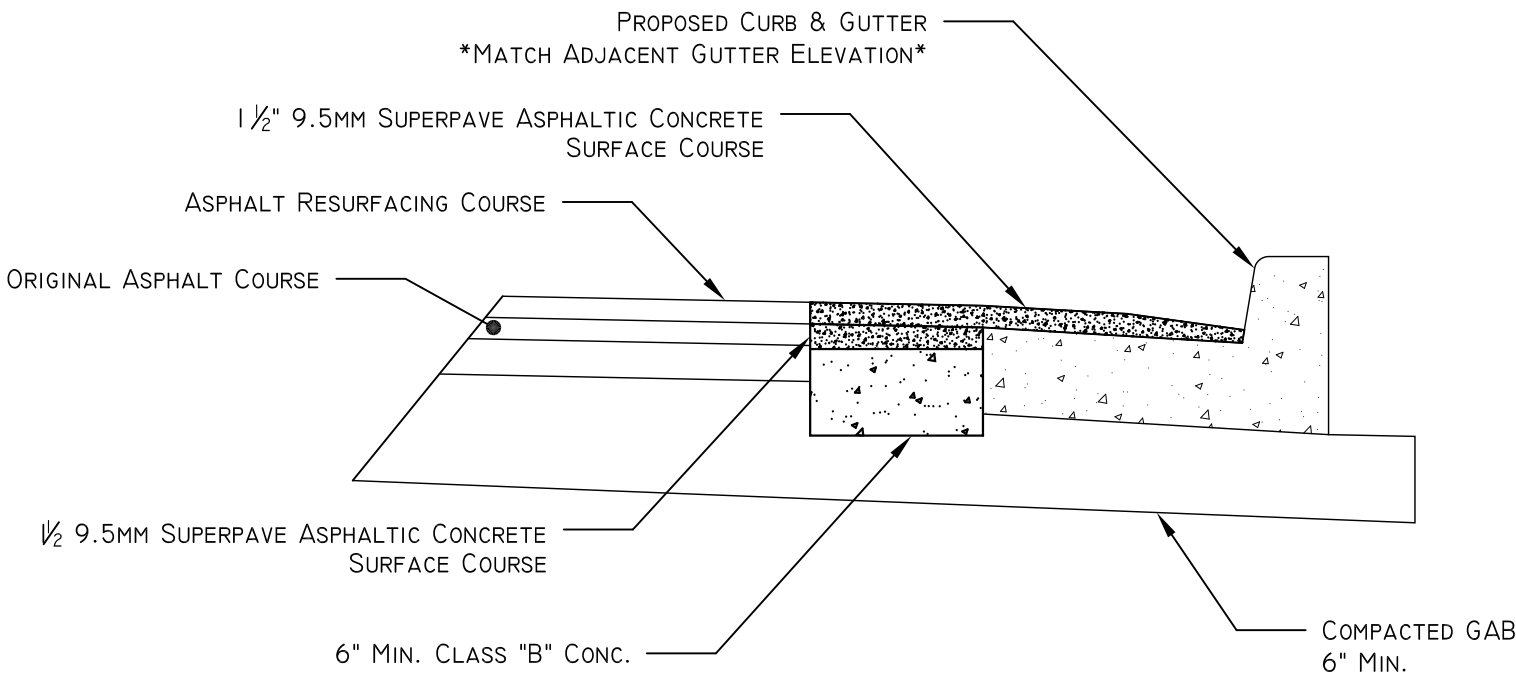
- Notes:
- Use of Rollover Curb requires the approval of the Director of Transportation and Public Works.
 - 1/2" Asphalt Impregnated Expansion Joints to be placed every 100 L.F., at all structures, and at radius points.
 - Construction Joints to placed every 10 L.F.
 - Graded Aggregate Base to be placed under curb at a minimum thickness of 6" and extend beyond the back of curb a minimum of 6".
 - All exposed surfaces to be broom finished.
 - Gutter thickness may be increased to match paving course.

ROLLOVER CURB
NTS



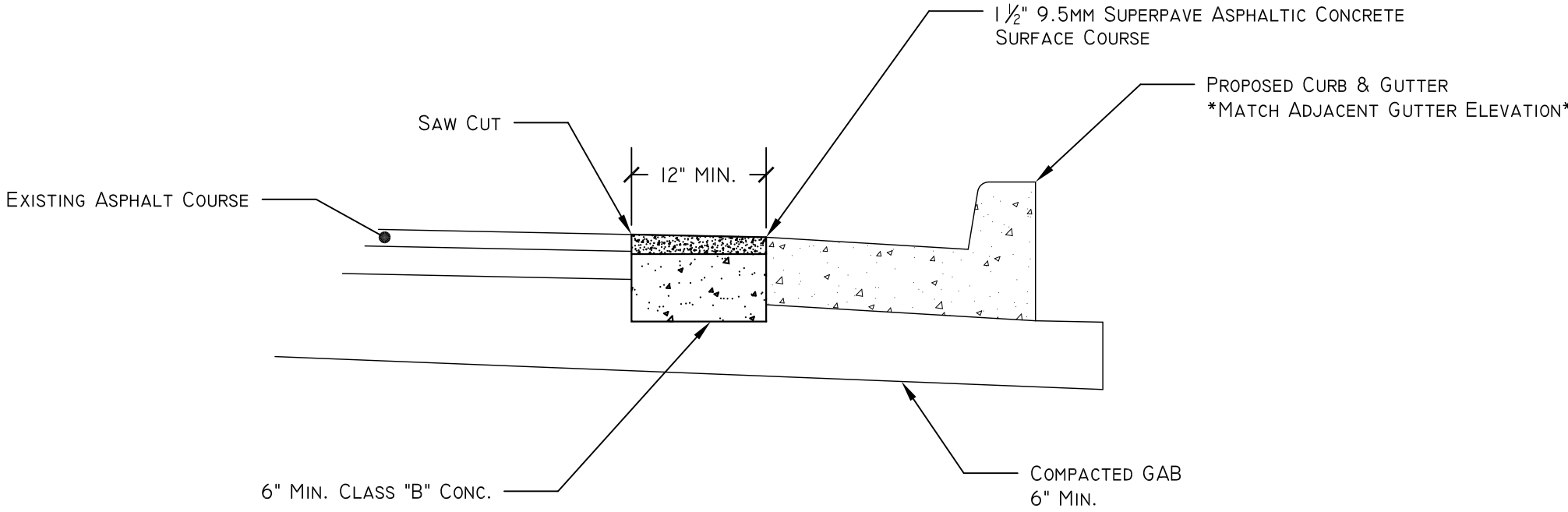
- Notes:
- For use along on-street parking when approved by the Department Director.
 - 1/2" Asphalt Impregnated Expansion Joints to be placed every 100 L.F., at all structures, and at radius points.
 - Construction Joints to placed every 10 L.F.
 - Graded Aggregate Base to be placed under curb at a minimum thickness of 6" and extend beyond the back of curb a minimum of 6".
 - All exposed surfaces to be broom finished.
 - Gutter thickness may be increased to match paving course.

VALLEY GUTTER
NTS



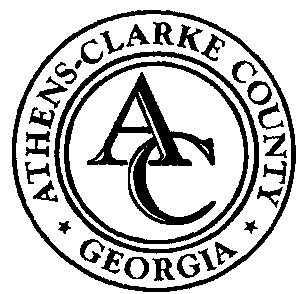
- Notes:
- For installation of curb and gutter along existing streets with excavated area width is less than 5'.
 - Use typical section detail for excavated areas wider than 5'.
 - Graded Aggregate Base to be placed under curb at a minimum thickness of 6" and extend beyond the back of curb a minimum of 6".

CLASS "B" CONCRETE BASE
NTS



REVISIONS:			
NO.	BY	DATE	DESCRIPTION
1			
2			
3			
4			
5			
6			
7			
8			

SURVEYED BY: NA
DESIGNED BY: BCB
DRAWN BY: BCB
CHECKED BY: BCB
APPROVED BY: JMP



THE UNIFIED GOVERNMENT OF ATHENS-CLARKE COUNTY
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
ENGINEERING DIVISION

120 WEST DOUGHERTY STREET
ATHENS, GEORGIA 30603

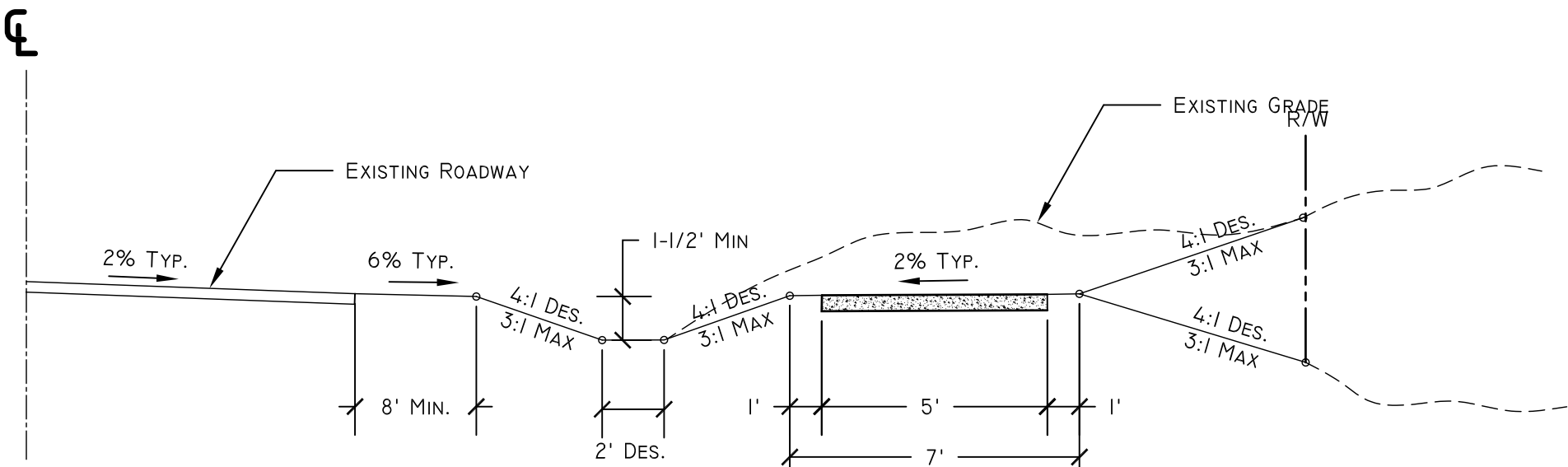
PHONE 706.613.3440
FAX 706.613.3444

PROJECT:

CONSTRUCTION STANDARDS AND DETAILS

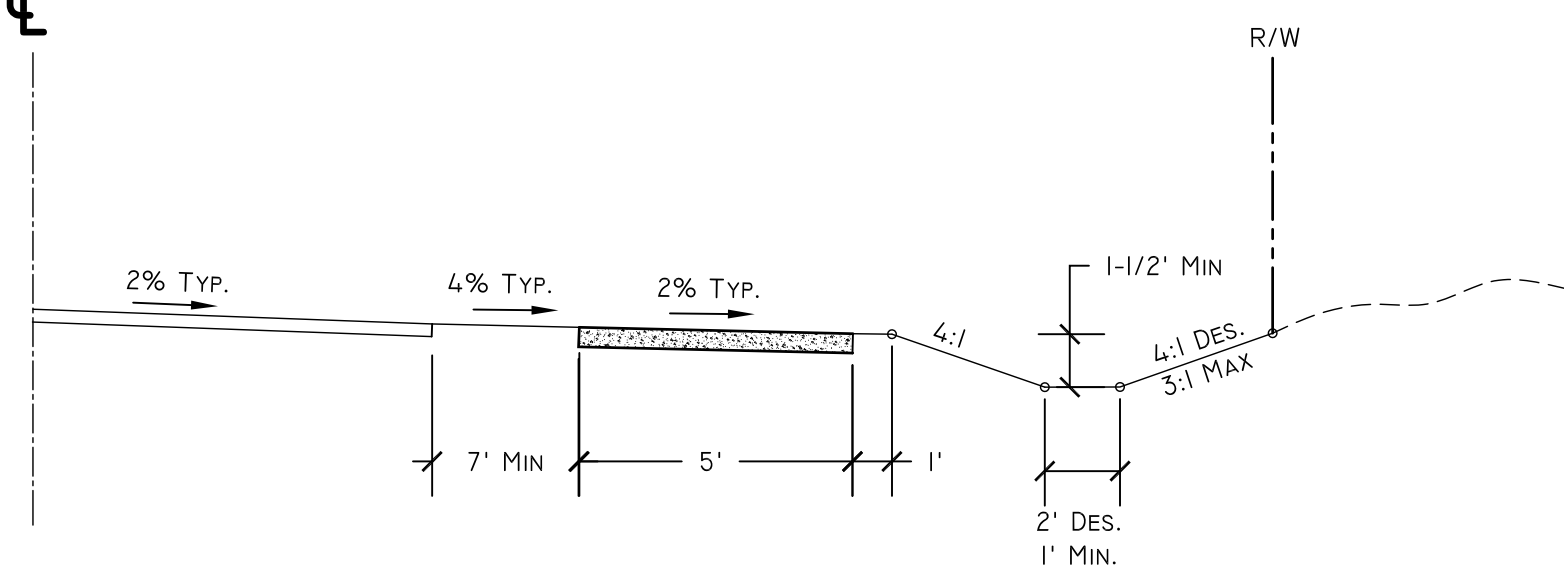
DATE: FEBRUARY 2009

SHEET:
CURB & GUTTER
DETAIL
SHEET: I-030



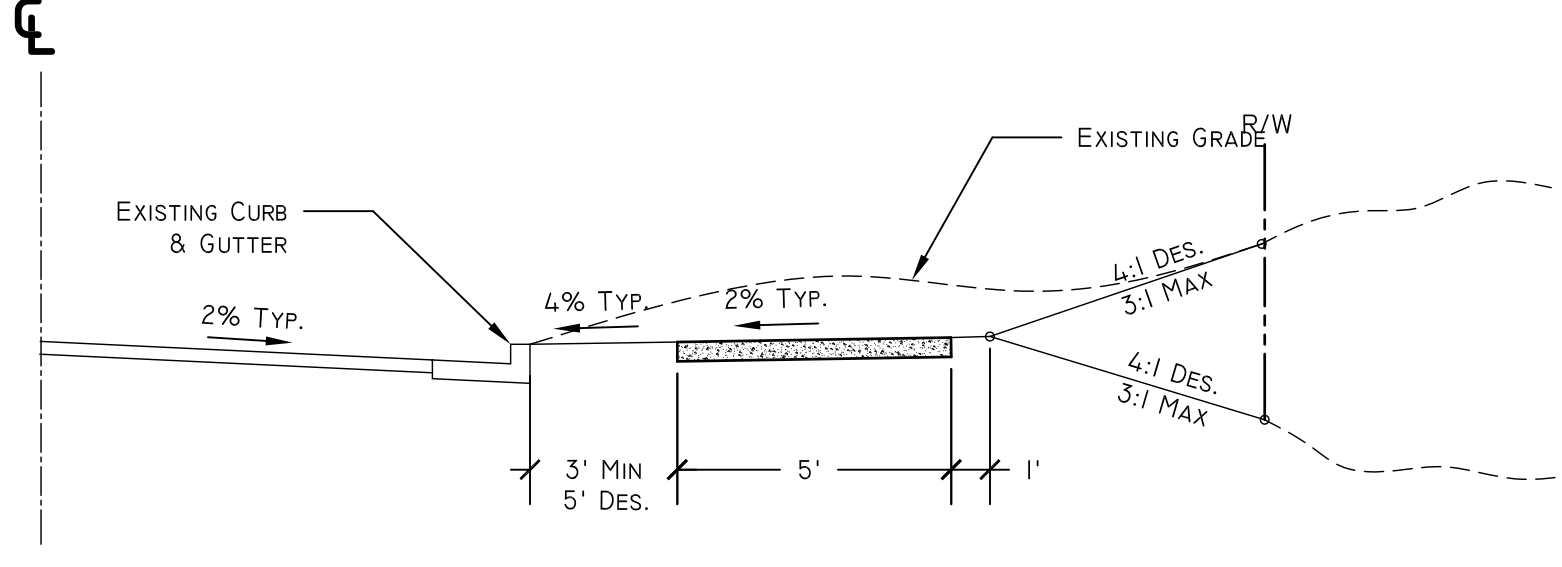
- Notes:
- This typical section to be used when right of way and terrain will allow the sidewalk to be constructed between the ditch and right of way.
 - The centerline profile of the sidewalk should conform to the centerline profile of the roadway whenever possible.
 - Longitudinal slope should not exceed 1:12 or 8.33% except where centerline profile of roadway exceeds 8.33%.
 - All fill areas should be compacted to 95% standard proctor.

TYPICAL SIDEWALK CROSS-SECTION
TYPE #1
NTS



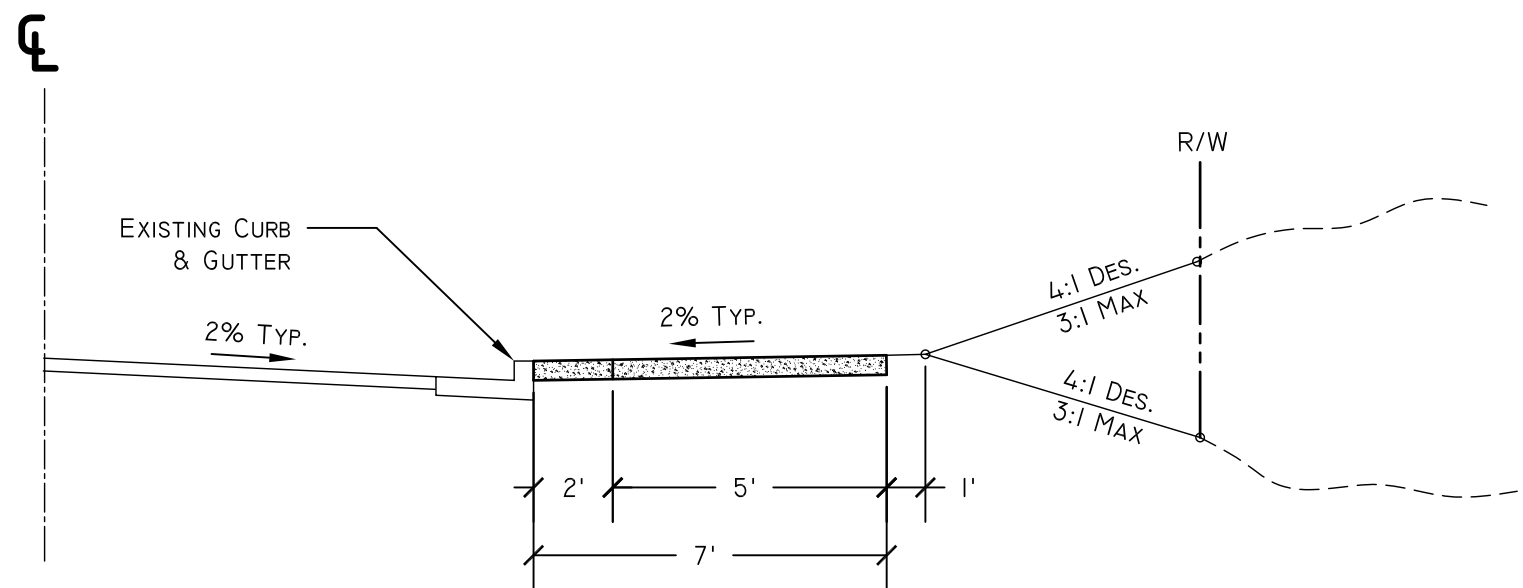
- Notes:
- This detail to be used on ditch sections where the construction of sidewalks behind the ditch is not practical or feasible.
 - The centerline profile of the sidewalk should conform to the centerline profile of the roadway whenever possible.
 - Longitudinal slope should not exceed 1:12 or 8.33% except where centerline profile of roadway exceeds 8.33%.
 - All fill areas should be compacted to 95% standard proctor.

TYPICAL SIDEWALK CROSS-SECTION
TYPE #2
NTS



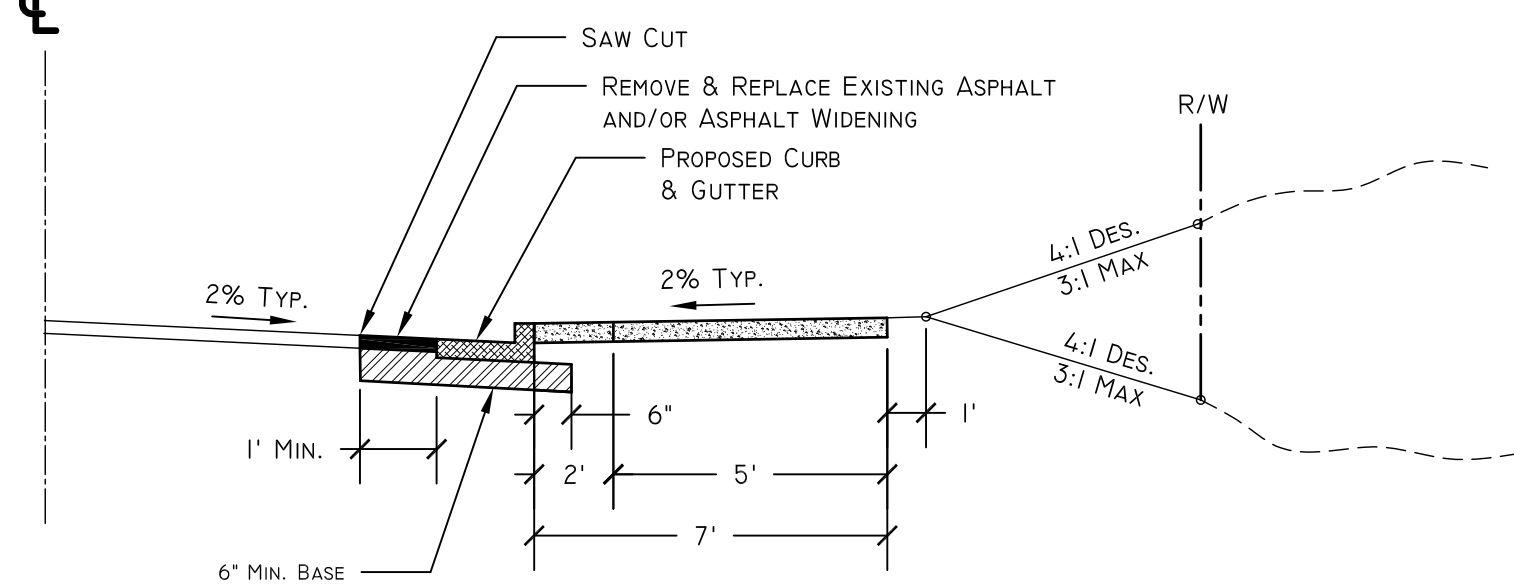
- Notes:
- This detail to be used on streets with existing or proposed curb and gutter.
 - The centerline profile of the sidewalk should conform to the centerline profile of the roadway whenever possible.
 - Longitudinal slope should not exceed 1:12 or 8.33% except where centerline profile of roadway exceeds 8.33%.
 - All fill areas should be compacted to 95% standard proctor.

TYPICAL SIDEWALK CROSS-SECTION
TYPE #3
NTS



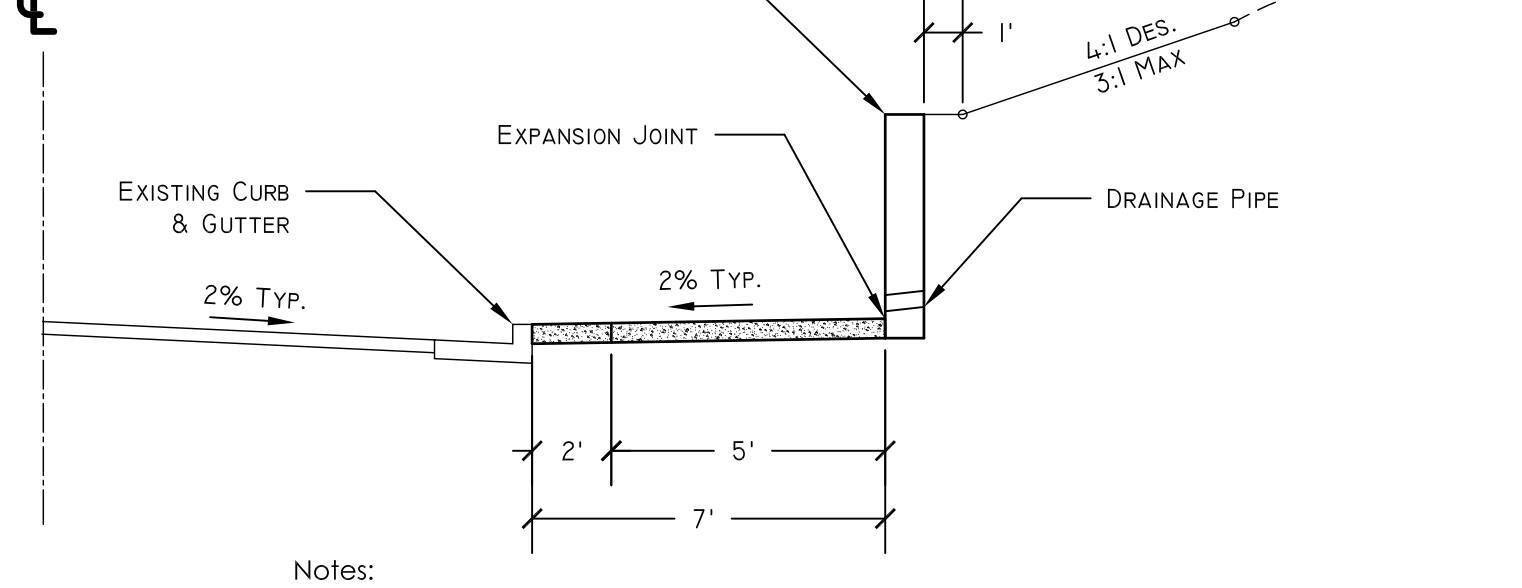
- Notes:
- This detail to be used on streets with existing curb and gutter.
 - See "7' Sidewalk Joint Pattern and Finish Detail".
 - All fill areas should be compacted to 95% standard proctor.

TYPICAL SIDEWALK CROSS-SECTION
TYPE #4
NTS



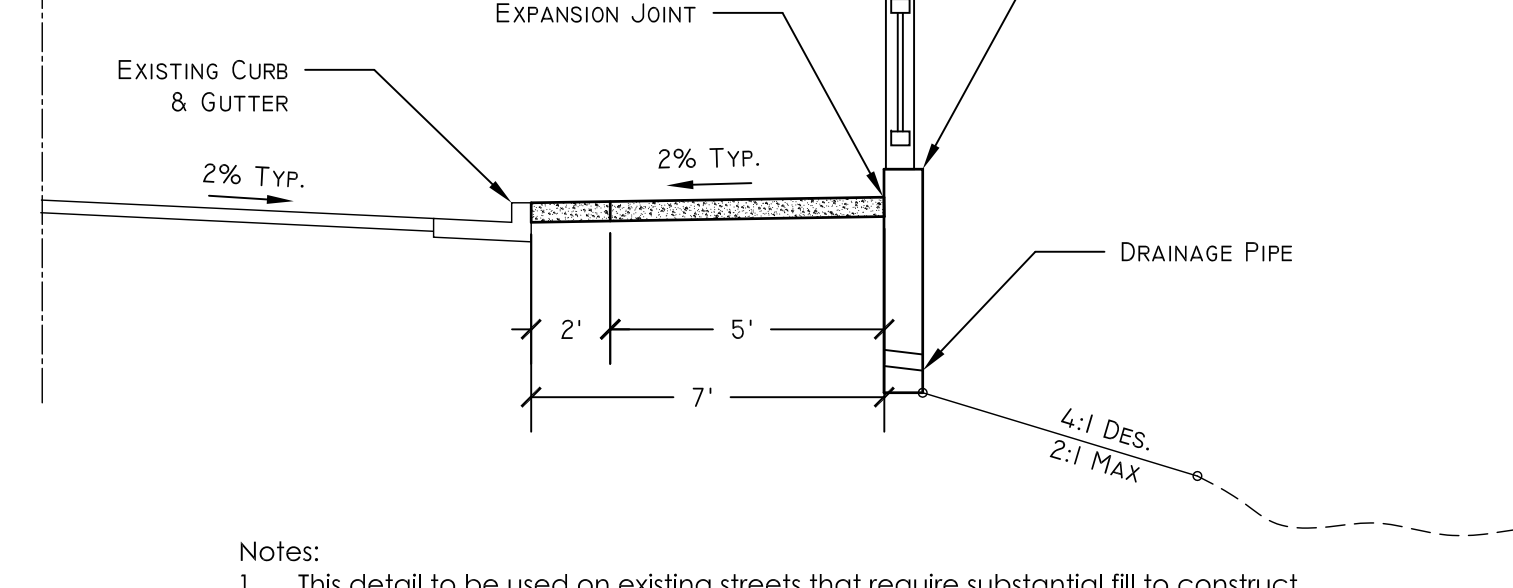
- Notes:
- This detail to be used on streets with proposed curb & gutter or limited right of way, (e.g. - deceleration lane, bike lanes, etc)
 - See "7' Sidewalk Joint Pattern and Finish Detail".
 - All fill areas should be compacted to 95% standard proctor.

TYPICAL SIDEWALK CROSS-SECTION
TYPE #5
NTS



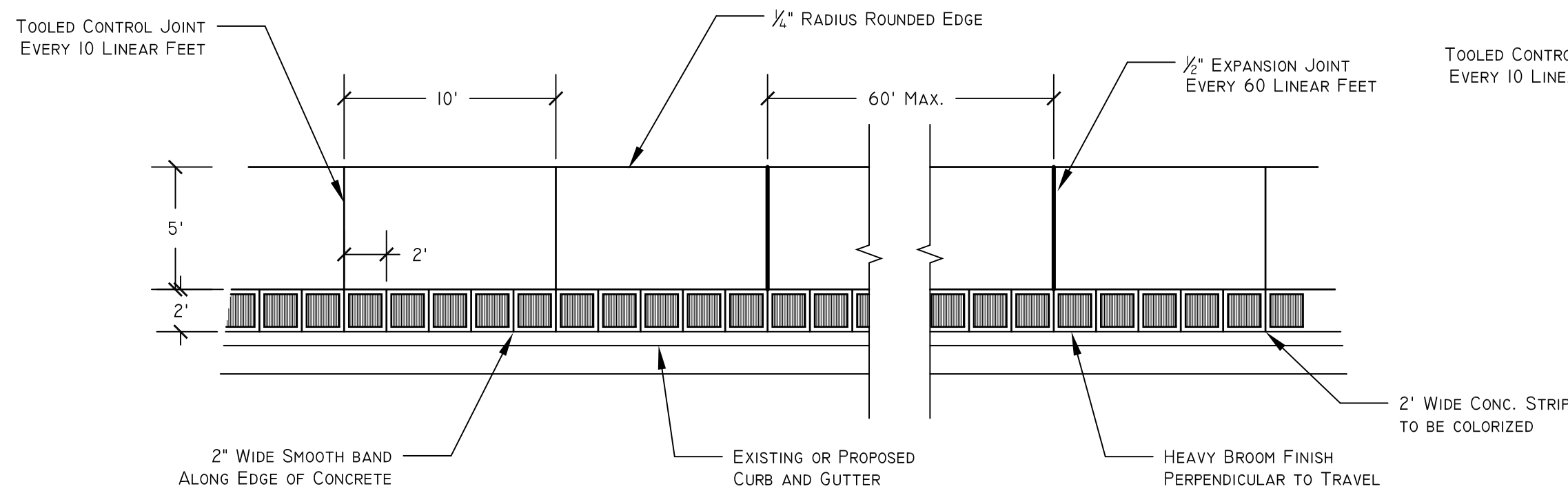
- Notes:
- This detail to be used on existing streets that require substantial cut to construct the proposed sidewalk.
 - Handrails may be required along the top of the proposed wall.
 - See GDOT Standard 9031L.
 - All fill areas should be compacted to 95% standard proctor.

TYPICAL SIDEWALK CROSS-SECTION
TYPE #6
NTS



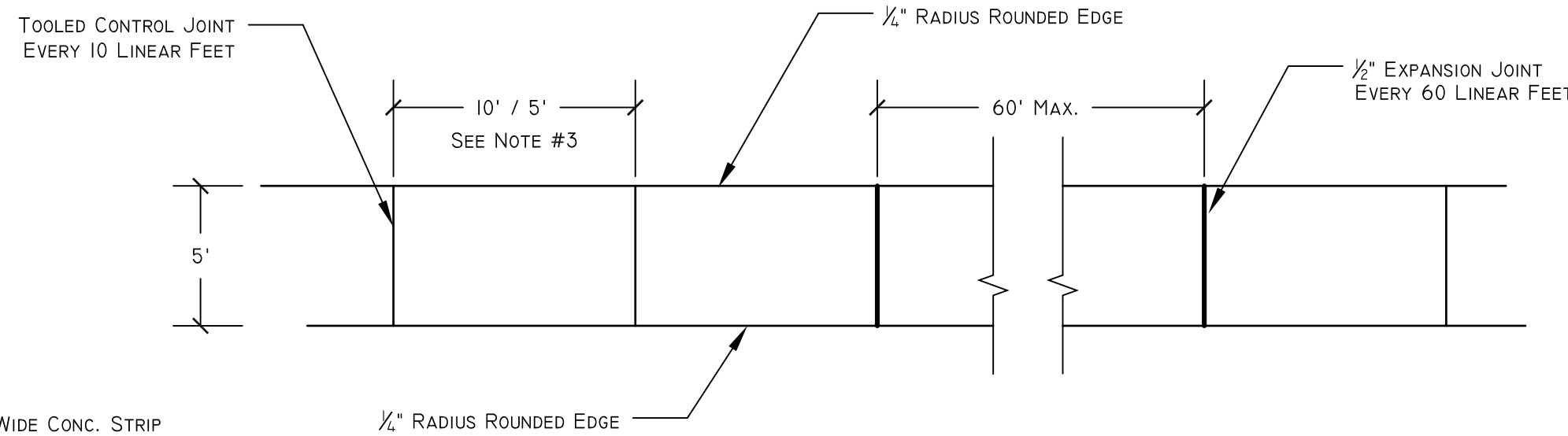
- Notes:
- This detail to be used on existing streets that require substantial fill to construct the proposed sidewalk.
 - Handrails may be required along the top of the proposed wall.
 - See GDOT Standard 9031L.
 - All fill areas should be compacted to 95% standard proctor.

TYPICAL SIDEWALK CROSS-SECTION
TYPE #7
NTS



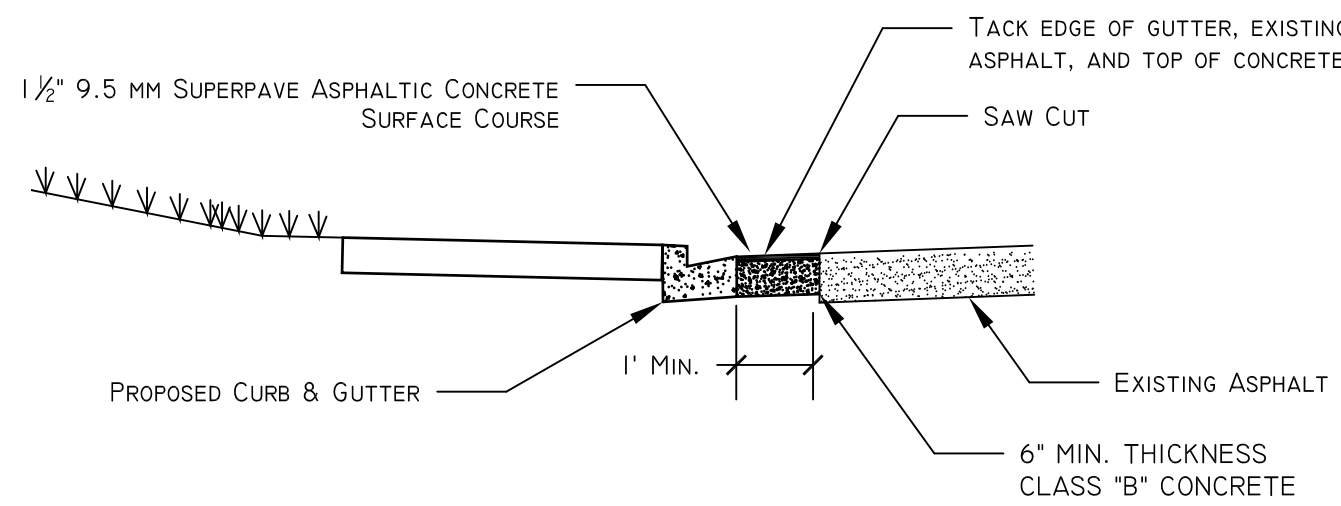
- Notes:
- 1/2" Expansion Joints to be placed every 60' L.F., where sidewalks abut structures, at driveways, driveway aprons and curb cut ramps.
 - This detail substitutes "Concrete Sidewalk Detail" from GDOT Detail Sheet A3.
 - Proposed Curb & Gutter and Concrete Sidewalk must be formed and poured separate.
 - Concrete to be placed 4" (except where otherwise specified) thick with tamps, wood floats and stiff bristle brooms to achieve a type 5 sidewalk finish acceptable to Athens-Clarke County Department of Transportation and Public Works.
 - Sidewalk Joints shall be tooled to match curb joints whenever possible.
 - Maximum cross-slope not to exceed 2.00%.
 - 2' wide concrete strip to be colorized concrete per Department direction.

7' SIDEWALK JOINT PATTERN
AND FINISH DETAIL
NTS



- Notes:
- 1/2" Expansion Joints to be placed every 60' L.F., where sidewalks abut structures, at driveways, driveway aprons and curb cut ramps.
 - This detail substitutes "Concrete Sidewalk Detail" from GDOT Detail Sheet A3.
 - Contraction joints shall be placed every 5' in an Urban Section (Curb and Gutter Section) and every 10' in a Rural Section (Shoulder and Ditch Section).
 - Concrete to be placed 4" (except where otherwise specified) thick with tamps, wood floats and stiff bristle brooms to achieve a type 5 sidewalk finish acceptable to Athens-Clarke County Department of Transportation and Public Works.
 - Maximum running slope not to exceed 8.33%.
 - Maximum cross-slope not to exceed 2.00%.

5' SIDEWALK JOINT PATTERN
AND FINISH DETAIL
NTS



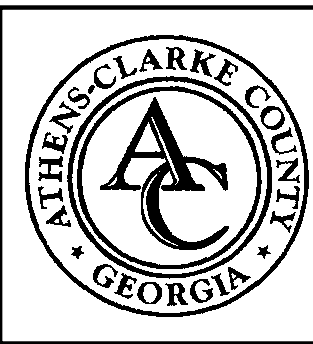
- Notes:
- Class "B" concrete base or pavement widening item code 500-9999 - cu yds
 - In excavated areas between the existing paving and new curb and gutter that are 5'-0" or less in width, class "B" concrete shall be placed in lieu of the base and paving specified by the typical section. Payment will be made under "class B concrete base and pavement widening."
 - In excavated areas greater than 5'-0" in width, the contractor shall place base and paving as specified on the typical section.
 - See plans for details of curb and gutter construction.

CLASS "B" CONCRETE BASE
OR WIDENING DETAIL
NTS

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REVISIONS:				
NO.	BY	DATE	DESCRIPTION	
1				
2				
3				
4				
5				
6				
7				
8				

SURVEYED BY:	NA
DESIGNED BY:	BCB
DRAWN BY:	BCB
CHECKED BY:	BCB
APPROVED BY:	JMP



THE UNIFIED GOVERNMENT OF ATHENS-CLARKE COUNTY
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
ENGINEERING DIVISION

120 WEST DOUGHERTY STREET
ATHENS, GEORGIA 30603

PHONE 706.613.3440
FAX 706.613.3444

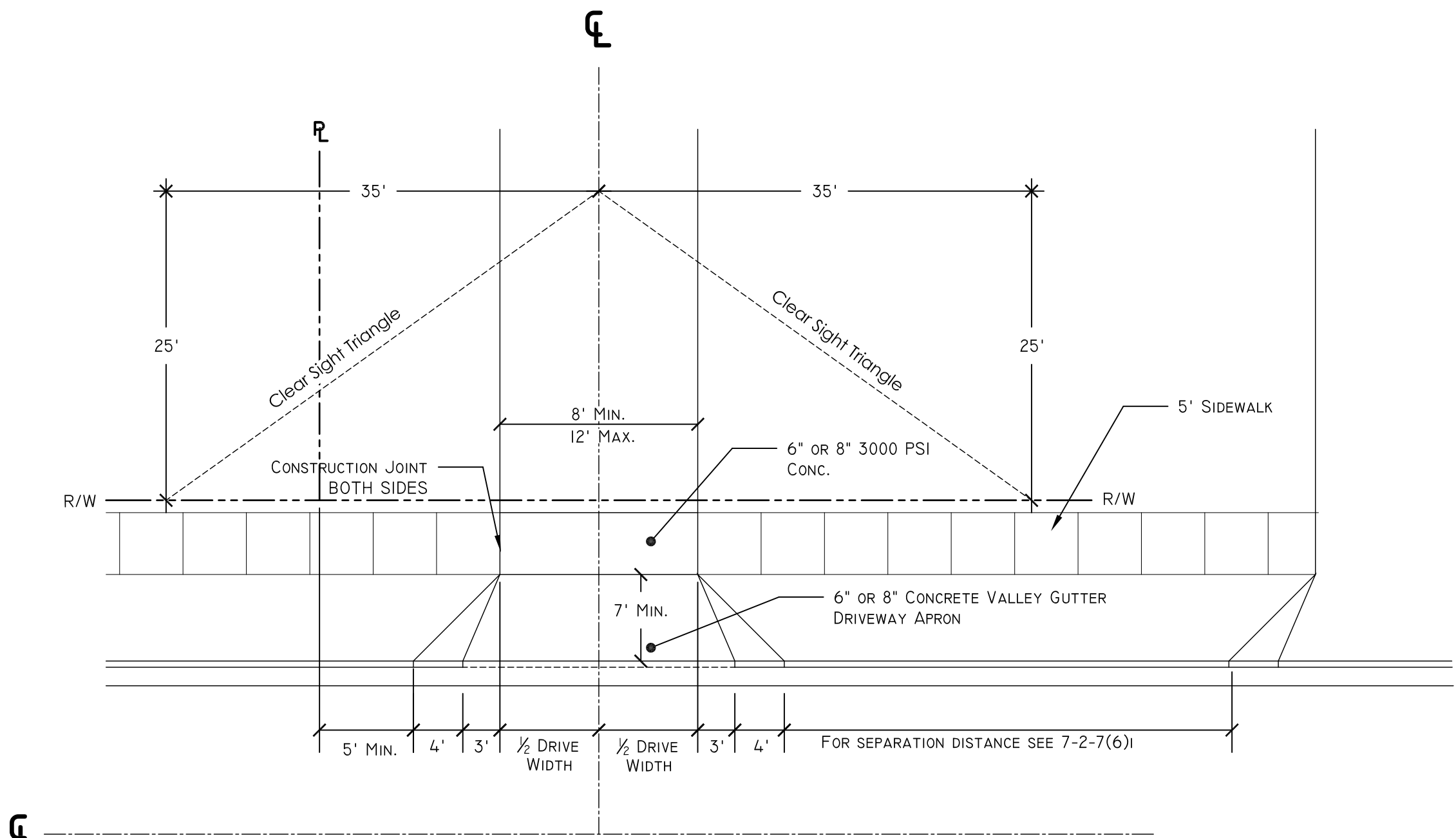
PROJECT:

CONSTRUCTION STANDARDS AND DETAILS

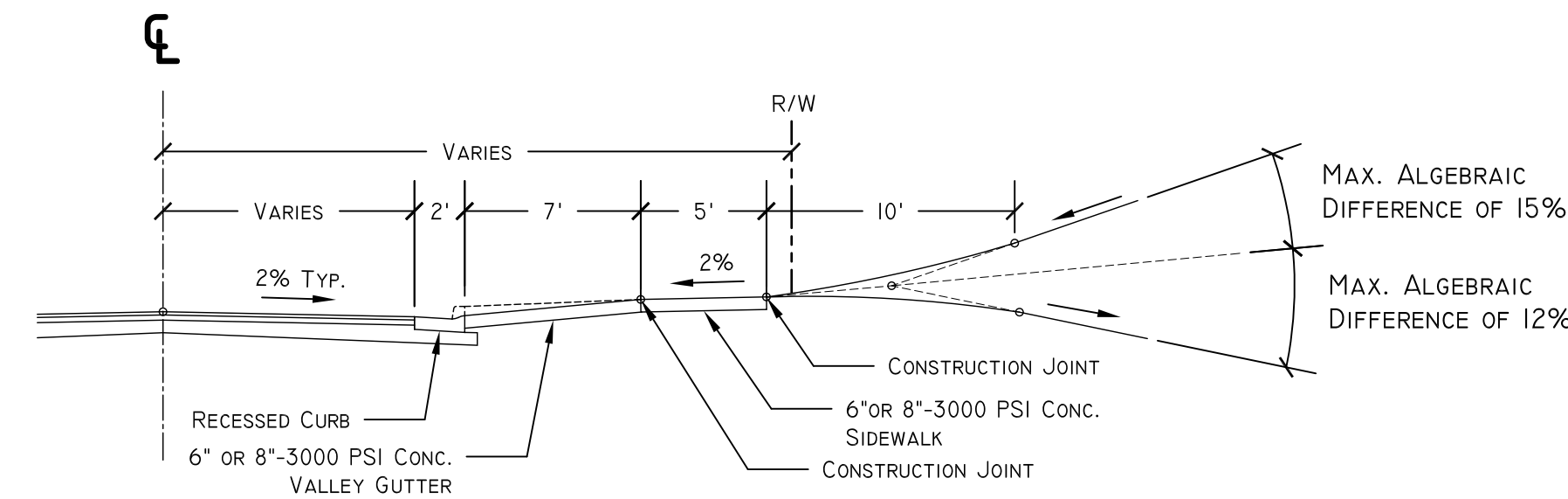
DATE: FEBRUARY 2009

SHEET: TYPICAL SIDEWALK
CROSS-SECTIONS
(EXISTING STREETS)

SHEET: 1-060

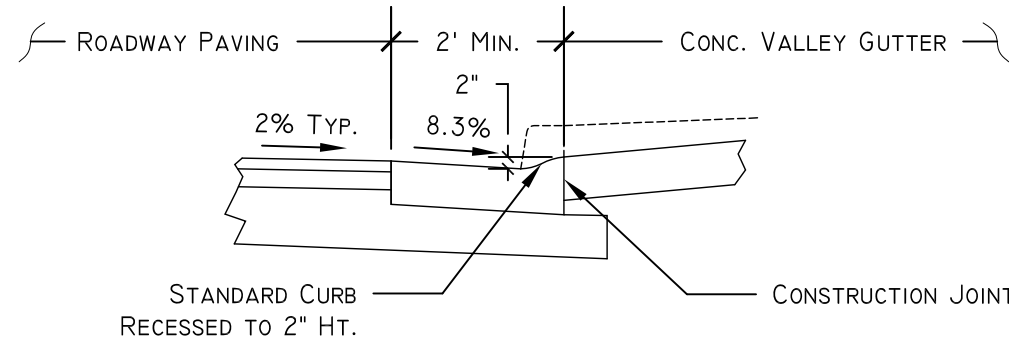


PLAN VIEW

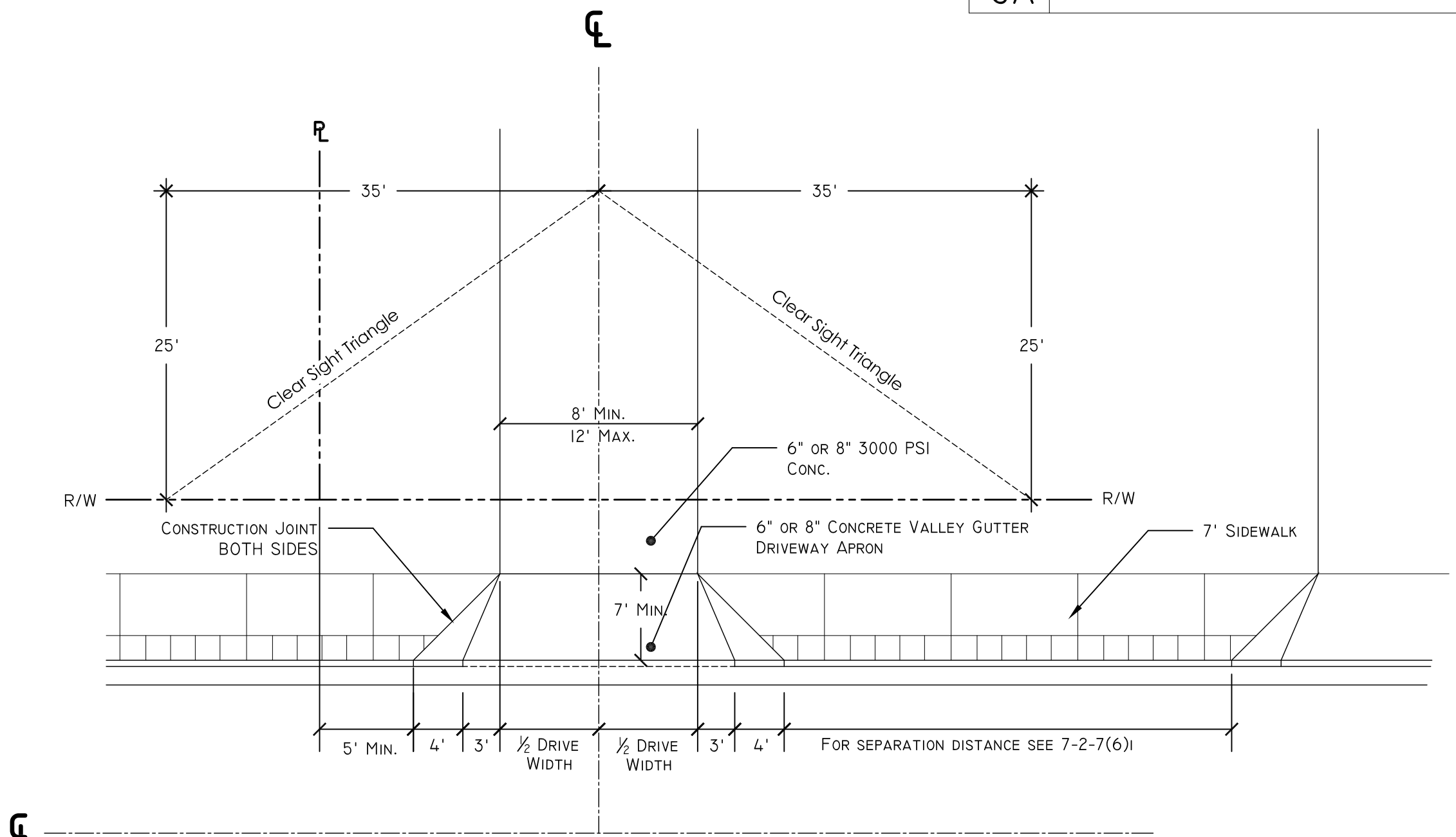


PROFILE VIEW

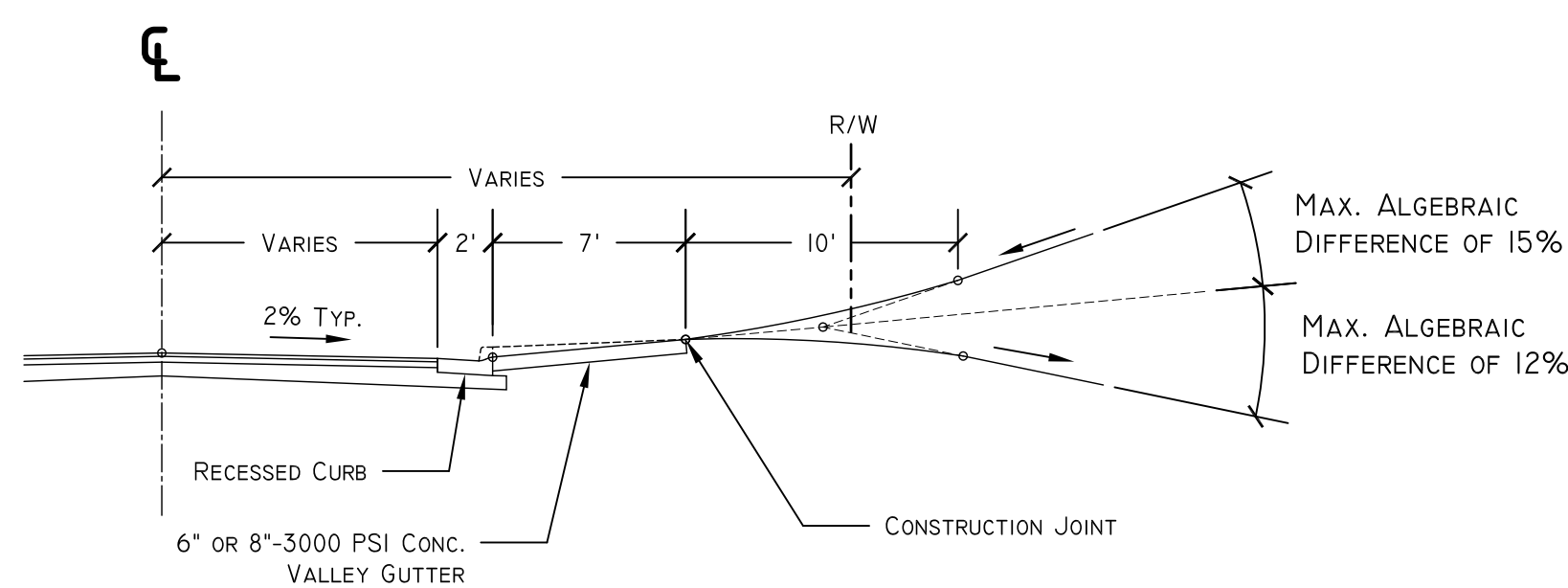
- Notes:
1. Sidewalk must be the same thickness of the driveway (6" or 8") through the first full segment of sidewalk.
 2. See Typical Intersection Detail 1-040 and 7-2-7(6)ii of Athens-Clarke County Code of Ordinances for driveway separation from intersections.
 3. See 7-2-7(6) of the Athens-Clarke County Code of Ordinance for separation between driveways.



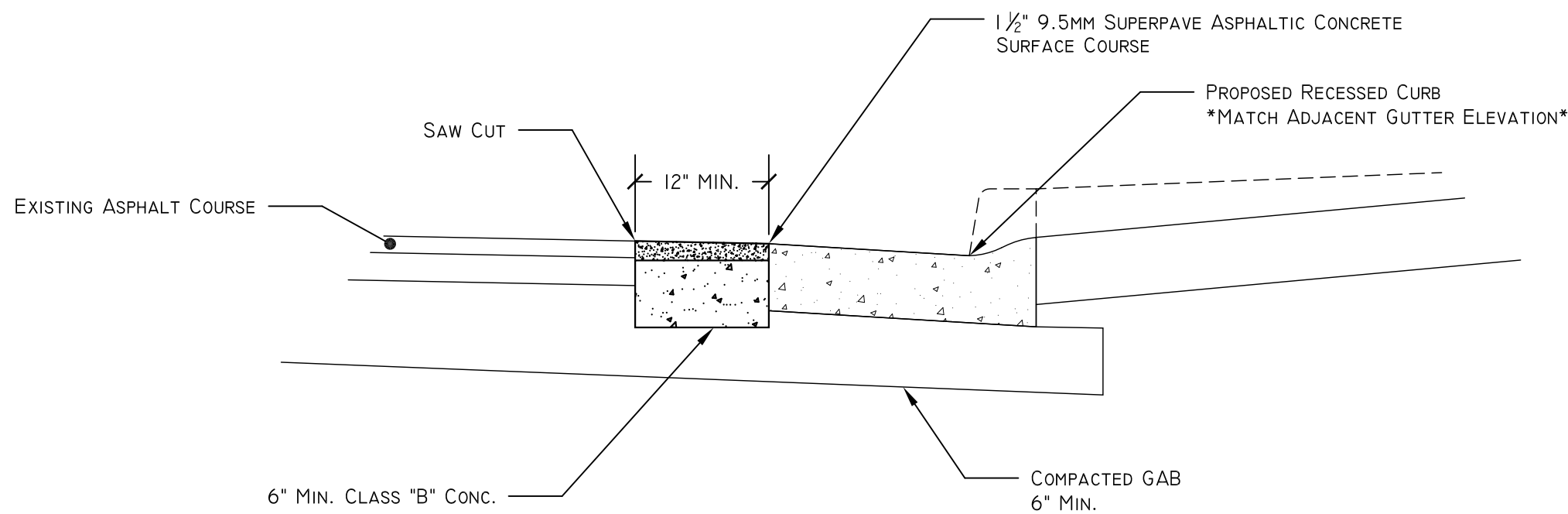
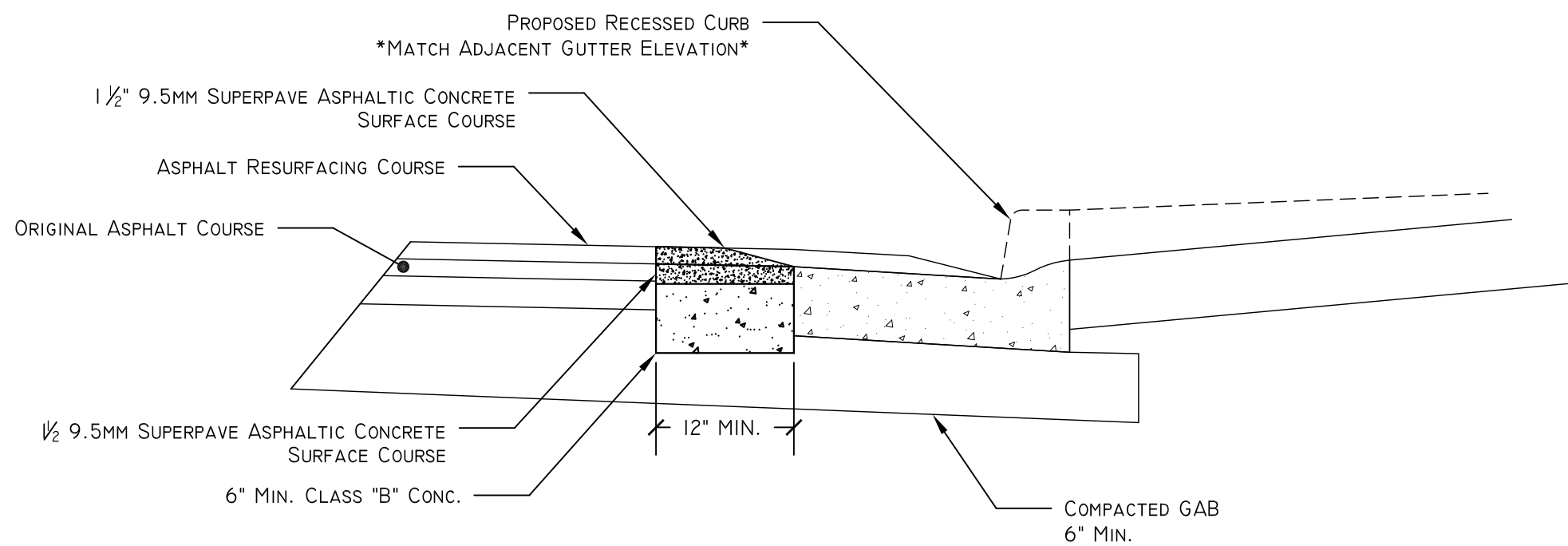
RECESSED CURB



PLAN VIEW



PROFILE VIEW



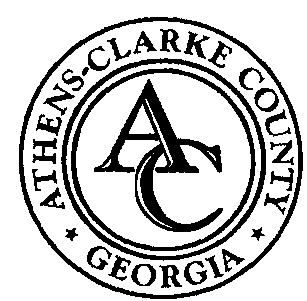
- Notes:
1. For installation of curb and gutter along existing streets where excavated area with a width less than 5'.
 2. Use typical section detail for excavated areas wider than 5'.
 3. Graded Aggregate Base to be placed under curb at a minimum thickness of 6" and extend beyond the back of curb a minimum of 6'.

CLASS "B" CONCRETE BASE
NTS

REVISIONS:

NO.	BY	DATE	DESCRIPTION
1			
2			
3			
4			
5			
6			
7			
8			

SURVEYED BY: NA
DESIGNED BY: BCB
DRAWN BY: BCB
CHECKED BY: BCB
APPROVED BY: JMP



THE UNIFIED GOVERNMENT OF ATHENS-CLARKE COUNTY
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
ENGINEERING DIVISION

120 WEST DOUGHERTY STREET
ATHENS, GEORGIA 30603

PHONE 706.613.3440
FAX 706.613.3444

PROJECT:

CONSTRUCTION STANDARDS AND DETAILS

DATE: JUNE 2009

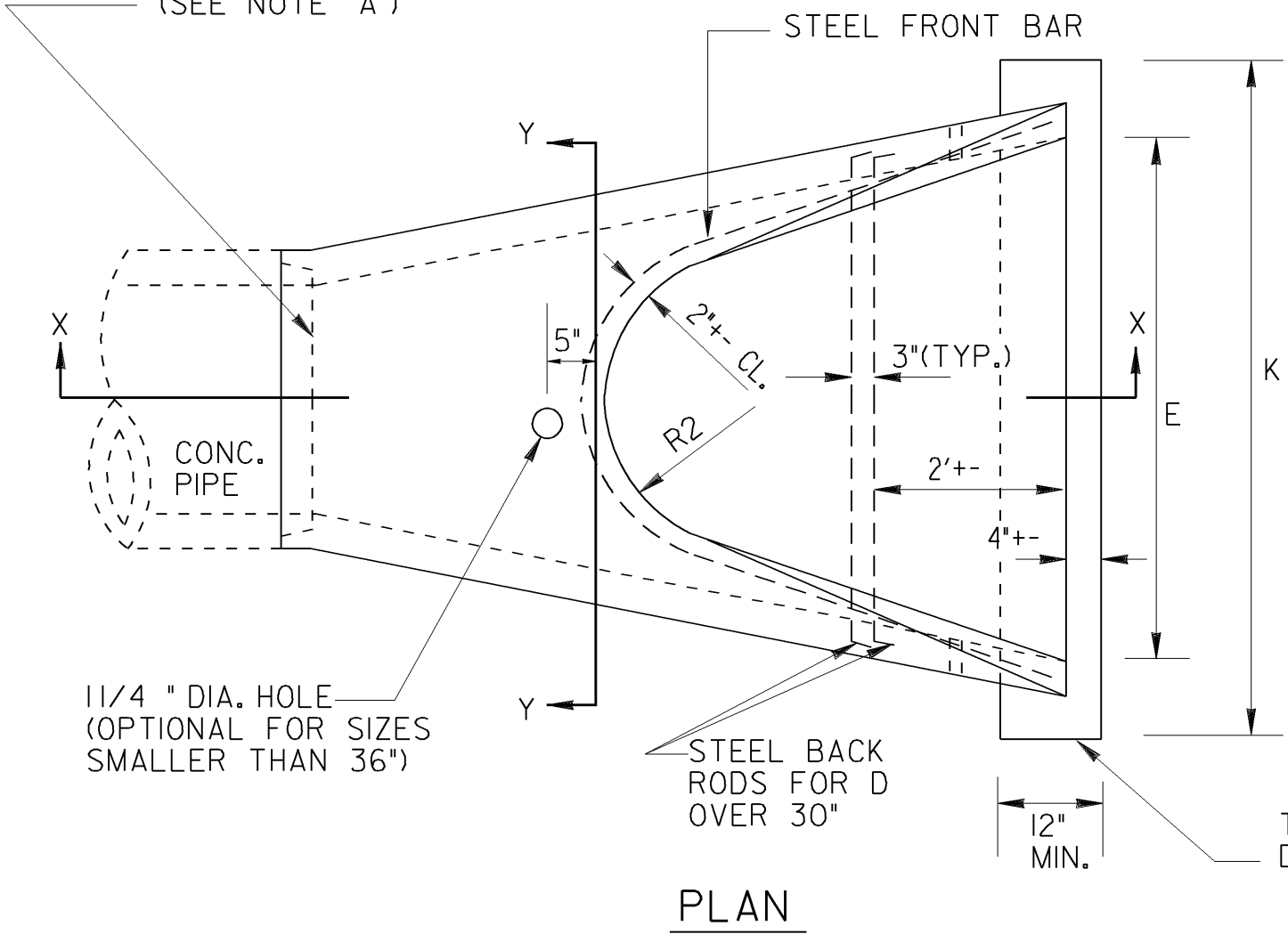
SHEET:

URBAN RESIDENTIAL
DRIVEWAY APRON DETAIL

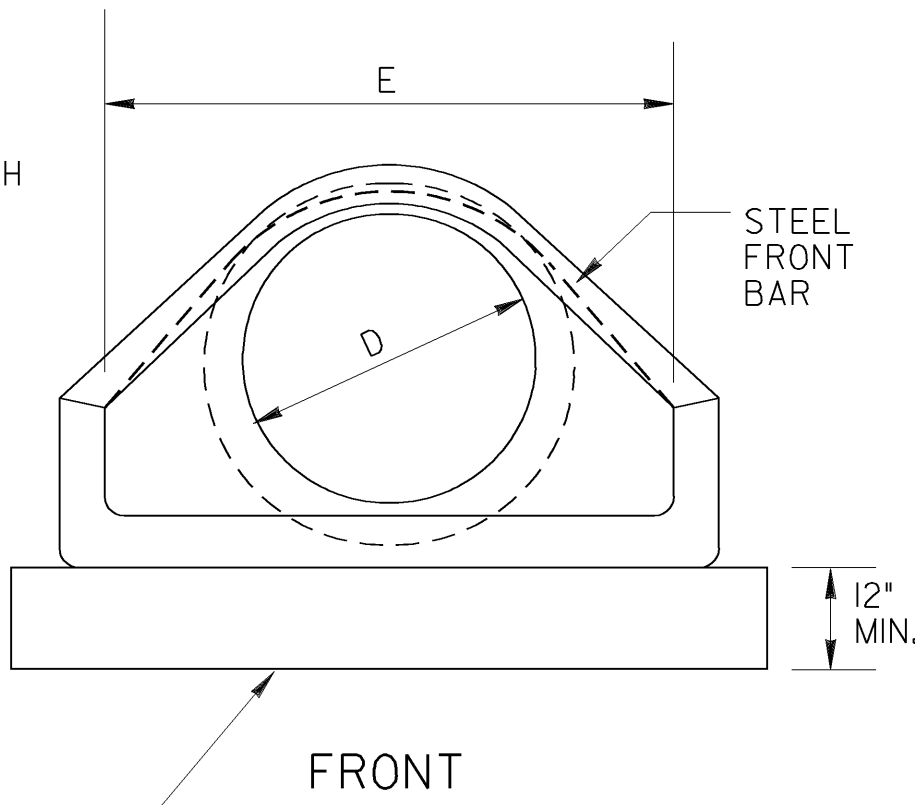
SHEET: 2-010

END SECTION TO PIPE JOINT SHOWN AS TYPICAL:
HUB END ON OUTLET END SECTIONS;
SOCKET END ON INLET END SECTIONS
(SEE NOTE "A")

CONCRETE FLARED END SECTION

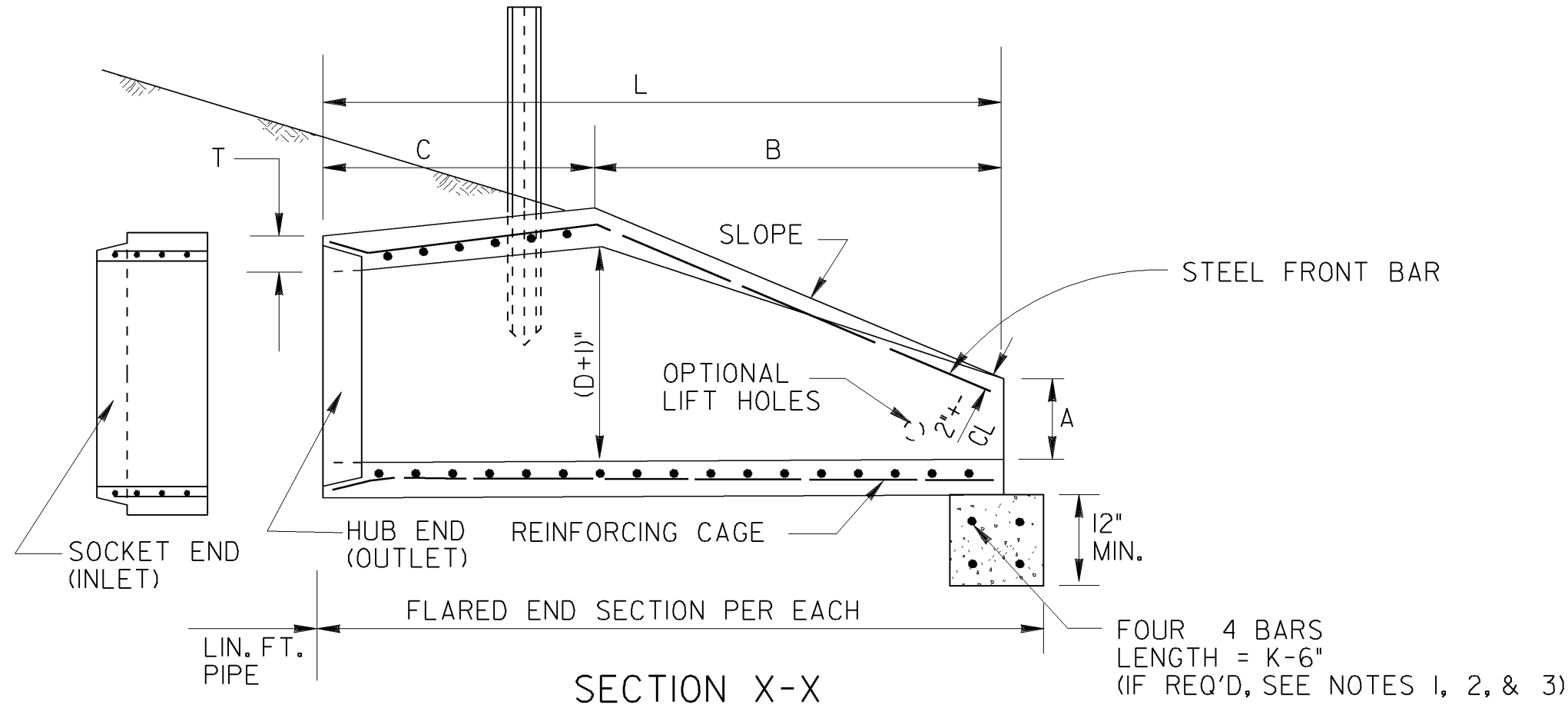


INSTALLATION: (D OVER 30\")
CABLE, CHAIN, OR LIFTING PIN
WILL EXTEND THRU 1 1/4\"/>



TOEWALL IF REQ'D. (TYPICAL FOR STORM
DRAIN OUTLETS, SEE GEN. NOTES #1, 2, 3)

NOTE: DO NOT CUT CONCRETE PIPE, USE FULL LENGTH SECTIONS ONLY.
WARP SLOPE TO CONFORM WITH PIPE LENGTH AND END SECTION.



REINFORCING CAGE:

- (1.) WIRE FABRIC HAVING EQUAL STEEL AREA AS INNER CAGE FOR CLASS II PIPE, AASHTO M-170.
(2.) ALTERNATE: # 3 BARS SPACED 12\"/>

NOTE "A":

CONTRACTOR WILL INFORM PRODUCER IF CONCRETE FLARED END SECTION IS FOR
INLET OR FOR OUTLET END. SOCKET (TONGUE OR SPIGOT) END IS REQUIRED FOR INLETS.
HUB (GROOVE OR BELL) END IS REQUIRED FOR OUTLETS. SOCKET TO SOCKET OR HUB TO
HUB JOINT WILL NOT BE ACCEPTED UNLESS A REINFORCED CONCRETE COLLAR IS
BUILT AROUND THE JOINT WITH NO PAYMENT BEING MADE FOR THE COLLAR.
FLARED END SECTIONS SHALL BE JOINTED TO PIPE WITH ALL SPACE IN THE JOINT FILLED WITH EITHER BITUMINOUS
PLASTIC CEMENT OR PREFORMED PLASTIC GASKET (SEC. 848).

WALL THICKNESS (T) IS SHOWN AS NOMINAL AND MAY BE INCREASED AT PRODUCER'S OPTION FOR DESIRED JOINT
DESIGN OR TO ALLOW A FLAT OUTSIDE BOTTOM ON THE FLARE, WITH INSIDE DIMENSIONS OF FLARE RETAINED AS SHOWN.

T = PIPE WALL THICKNESS (0.0833D + 1\"/>

DIMENSIONS AND REINFORCING FOR CONCRETE FLARED END SECTIONS (+- 1" TOLERANCE)												OUTLET TOEWALL (IF REQ'D)	
PIPE DIA	FRONT BAR	BACK RODS	SLOPE +-	A	B	C •	L •	E	P	R1	R2	K= E + 2'	CU.YDS. CONC.
12"	1-#3 x 5' 4"	NOT REQ'D.	2.2%	4"	2'0"	4' 1"	6'1"	2'0"	1'8"	10"	9"	4'-0"	.148
15"	1-#3 x 6' 0"	NOT REQ'D.	2.2%	6"	2'3"	3'10"	6'1"	2'6"	2'0"	1'0"	11"	4'-6"	.167
18"	1-#3 x 7' 2"	NOT REQ'D.	2.2%	9"	2'3"	3'10"	6'1"	3'0"	2'5"	1'4"	1'0"	5'-0"	.185
24"	1-#3 x 9' 10"	NOT REQ'D.	2.4%	10"	3'8"	2' 6"	6'2"	4'0"	2'9"	1'5"	1'2"	6'-0"	.222
30"	1-#4 x 11' 8"	NOT REQ'D.	2.4%	12"	4'6"	1' 8"	6'2"	5'0"	3'1"	1'6"	1'3"	7'-0"	.259
36"	1-#4 x 13' 10"	2-#4 x 6'3"	2.4%	15"	5'3"	2'11"	8'2"	6'0"	4'0"	2'0"	1'8"	8'-0"	.296
42"	1-#4 x 13' 10"	2-#4 x 7'4"	2.4%	21"	5'3"	2'11"	8'2"	6'6"	4'6"	2'4"	1'10"	8'-6"	.315

NOTE: SPECIFIED REINFORCING IS MINIMAL AND MAY BE INCREASED AT PRODUCER'S OPTION TO
AID CASTING & HANDLING. ALTERNATE REINFORCEMENT PERMITTED IF APPROVED.

* NOTE: "C" AND "L" DIMENSION MAY BE MEASURED TO EITHER END OF JOINT
CONNECTION AT PIPE.

SPECIAL NOTE:

FLARED END SECTIONS ARE NORMALLY LIMITED TO
USE OUTSIDE THE CLEAR ZONE OR BEHIND BARRIER AND
WHERE HYDRAULICS PERMIT. SEE OTHER STANDARDS OR
DETAILS FOR TAPERED HEADWALLS, SAFETY SLOPE END
SECTIONS OR OTHER PIPE END STRUCTURES.

GENERAL NOTES :

- TOEWALLS ARE REQ'D. FOR OUTLETS OF CONC. STORM DRAINS, EXCEPT WHERE DITCH PAVING OR OTHER EROSION PROTECTION
IS PROVIDED OR WHERE THE OUTLET VELOCITY IS LESS THAN 8 FT/SEC. TOEWALLS ARE NOT REQUIRED FOR SIDE DRAINS,
SLOPE DRAINS OR INLETS OF STORM DRAINS THIS CRITERIA MAY BE VARIED WHERE SPECIFIED BY THE DESIGNER OR THE ENGINEER.
- TOEWALLS WILL BE PAID FOR AS CU. YDS. OF CLASS "A" OR "B" CONCRETE. CONTRACTOR MAY ELECT TO CONSTRUCT TOE WALL WITH
SAND CEMENT BAG RIPRAP OR STONE RIPRAP TO SAME MINIMUM DIMENSIONS WITH NO ADDITIONAL PAYMENT.
- PRECAST TOEWALLS SHALL BE CL. "A" CONCRETE; CAST-IN-PLACE TOEWALLS MAY BE CL. "A" OR "B" CONCRETE AND MAY BE TRENCH FORMED. WHERE PLANS ITEMIZE ONE
CLASS OF CONCRETE AND CONTRACTOR ELECTS TO USE OTHER CLASS, NO ADDITIONAL PAYMENT IS MADE. NO PAYMENT IS MADE FOR STEEL IN TOEWALL.
- CENTERLINE OF FLARED END SECTION WILL ALIGN WITH CENTERLINE OF PIPE, IF PIPE IS SKEWED, THE EMBANKMENT SLOPE WILL BE
WARPED TO CONFORM WITH END SECTION.
- FLEXIBLE DELINEATORS SHALL BE REQUIRED AT CROSS DRAIN FLARED END SECTIONS, BOTH INLET AND OUTLET. PAY-
MENT FOR FLARED END SECTION WILL INCLUDE DELINEATORS, SEE DETAIL AND NOTES BELOW. DELINEATORS NOT REQ'D.
FOR SIDE DRAIN, SLOPE DRAIN, OR LONG PIPE.

1" X 12" LONG YELLOW REFLECTIVE
SHEETING TYPE IX, ON EACH SIDE
OF RIDGE.

DELINEATOR POST SECTION (TYP.)

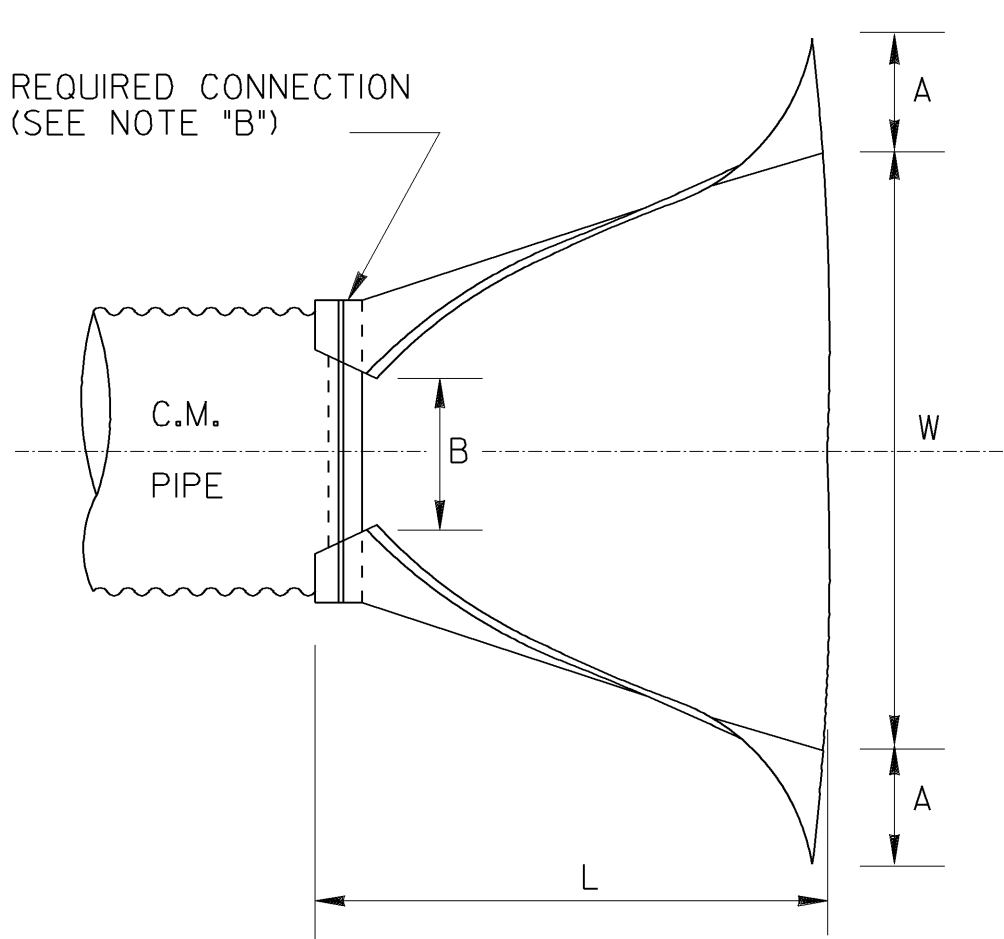
NOTE:
DELINEATOR POST SHALL CONFORM TO SEC. 911 FOR FLEXIBLE DELINEATOR POST EXCEPT REFLECTIVE SHEETING IS NOT REQUIRED
AND LENGTH IS 4'-6" FROM TOP TO BOTTOM POINT. ALTERNATES PERMITTED IF APPROVED BY D.O.T. LABORATORY.

SPECIAL NOTE :

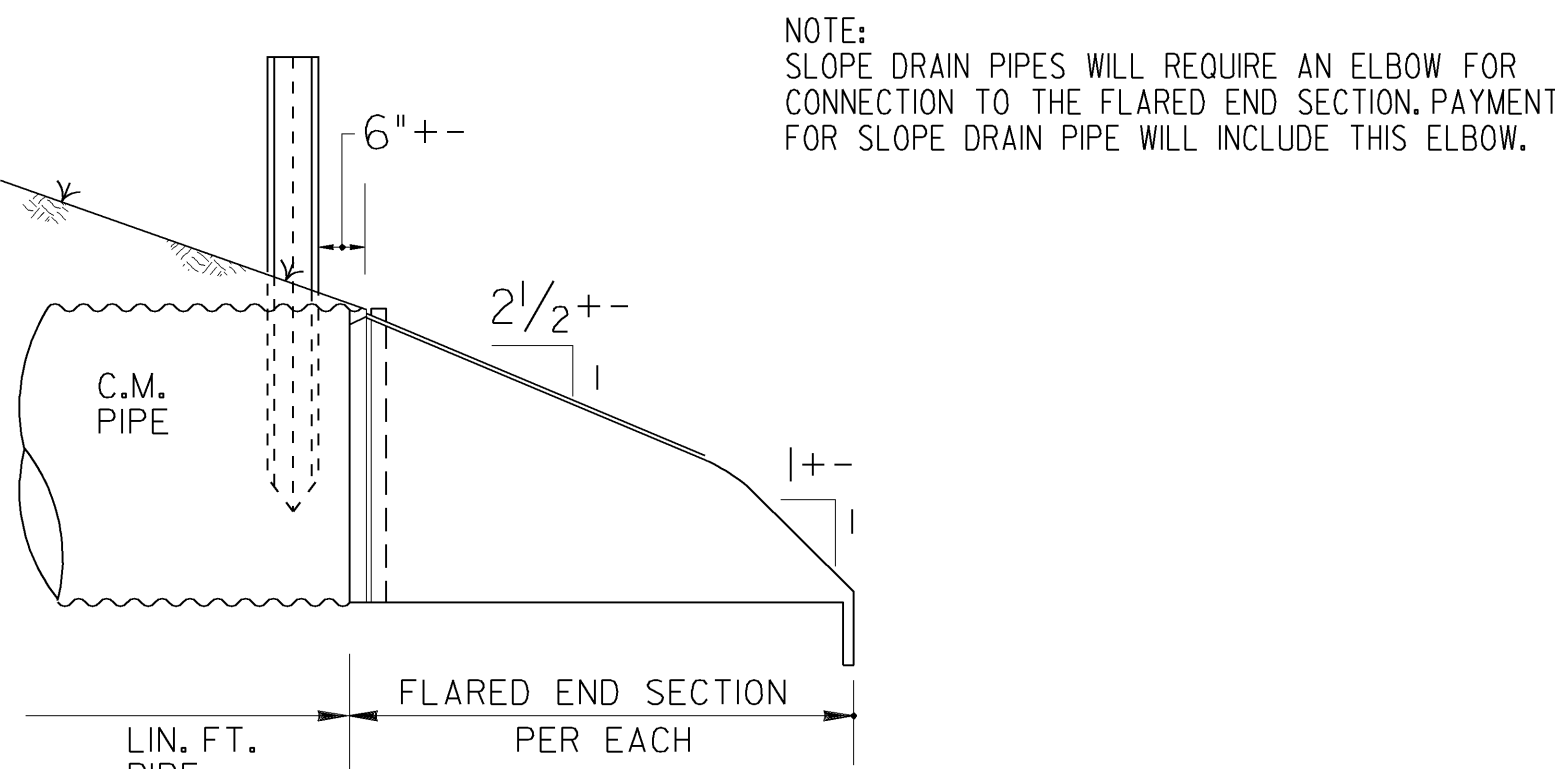
PIPE SIZES (D) ARE "NOMINAL-MINIMUM" INSIDE DIAMETERS IN ACCORDANCE WITH GEORGIA
STANDARD FOR PIPE CULVERTS. "D" DIMENSION FOR FLARED END SECTION SHALL EQUAL THE
"D" DIMENSION FOR CONNECTING PIPE CULVERT.

METAL FLARED END SECTION

(USE ONLY WITH COR. METAL PIPE)



PLAN



SIDE

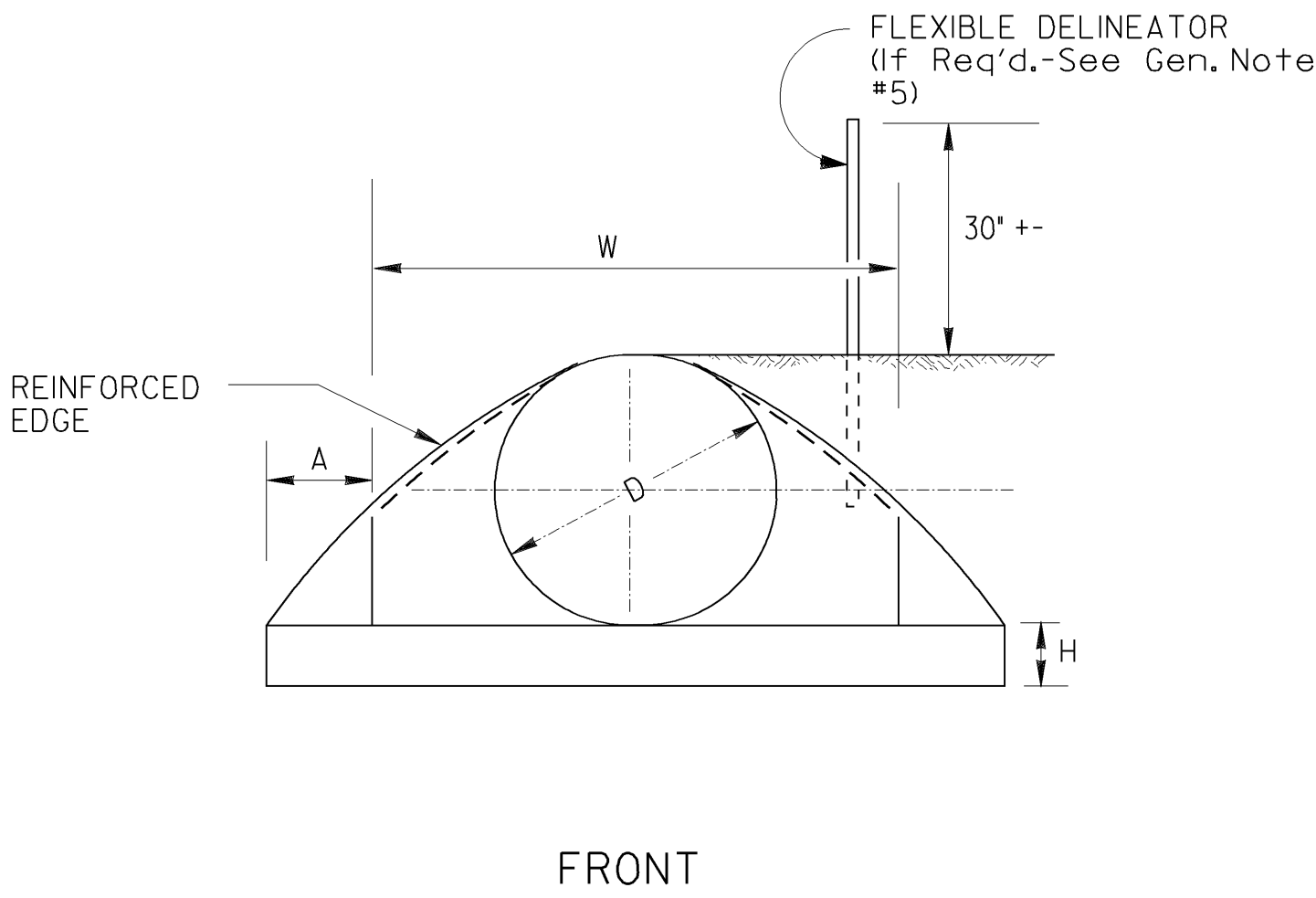
NOTE:
SLOPE DRAIN PIPES WILL REQUIRE AN ELBOW FOR
CONNECTION TO THE FLARED END SECTION. PAYMENT
FOR SLOPE DRAIN PIPE WILL INCLUDE THIS ELBOW.

NOTE: GALVANIZED STEEL FLARED END SECTIONS ARE TO BE USED
ONLY WITH CORRUGATED STEEL PIPE AND ALUMINUM FLARED
END SECTIONS ARE TO BE USED ONLY WITH CORRUGATED
ALUMINUM PIPE UNLESS OTHERWISE APPROVED BY D.O.T.
OFFICE OF MATERIALS AND TESTS.

FLARED END SECTION DIMENSIONS

PIPE SIZE "D"	THICKNESS		A	B	H	L	W
	GALV. STEEL	ALUM.	A= 0.4D +- 1"	B= 0.5 D +- 1"	H= 0.25D +- 1" (MIN. 6")	L= 1.67D +- 1 1/2"	W= 2.0D +- 2"
12"	.064"	.060"	5"	6"	6"	1' 8"	2' 0"
15"	.064"	.060"	6"	7"	6"	2' 3"	2' 6"
18"	.064"	.060"	7"	9"	6"	2' 6"	3' 0"
24"	.064"	.060"	9"	1' 0"	6"	3' 4"	4' 0"
30"	.079"	.105"	1' 0"	1' 3"	7"	4' 2"	5' 0"
36"	.079"	.105"	1' 2"	1' 6"	9"	5' 0"	6' 0"
42"	.109"	.164"	1' 5"	1' 9"	10"	5' 10"	7' 0"

NOTE: WHERE METAL FLARED END SECTIONS ARE USED WITH MULTIPLE PIPE LINES, THE STANDARD SPACING
BETWEEN PIPES (S=D OR 3 FT.) MAY HAVE TO BE INCREASED (S=1.75 D TYPICAL), TO PREVENT OVER-
LAP OF END SECTION WINGTIPS. SEE ALSO STD. 1030D.



NOTE "B":

THE CONNECTION BETWEEN METAL FLARED END SECTION AND C.M. PIPE WILL BE ONE OF THE
FOLLOWING:

- A STRAP BAND OR THREADED ROD PROVIDED BY THE MANUFACTURER WILL LOCK END SECTION
ONTO PIPE, A CORRUGATION AT THE PIPE AND WILL BE NON-SPIRALED (PERPENDICULAR
TO CL OF PIPE)
- A DIMPLE BAND COLLAR WILL BE SHOP BOLTED TO END SECTION. PIPE WILL BE INSERTED
INTO BAND COLLAR TO MEET THE END SECTION.
- A STUB PIPE WILL BE RIVITED TO THE END SECTION AND THE MAIN PIPE CONNECTED TO
THE STUB WITH A NORMAL CONNECTING BAND.
- OTHER TYPE CONNECTION IF RECOMMENDED BY MANUFACTURER AND APPROVED BY THE
D.O.T.

			6-9-06	DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
				REVISION	STANDARD FLARED END SECTIONS FOR PIPES	
					NO SCALE	
					REV. & REDR. SEPT., 1999	
				GLO	DES. _____ REV. _____ CHK. _____	(SUBMITTED) <i>[Signature]</i> STATE ROAD & AIRPORT DESIGN ENGINEER (APPROVED) <i>[Signature]</i> CHIEF ENGINEER
					NUMBER 1120	



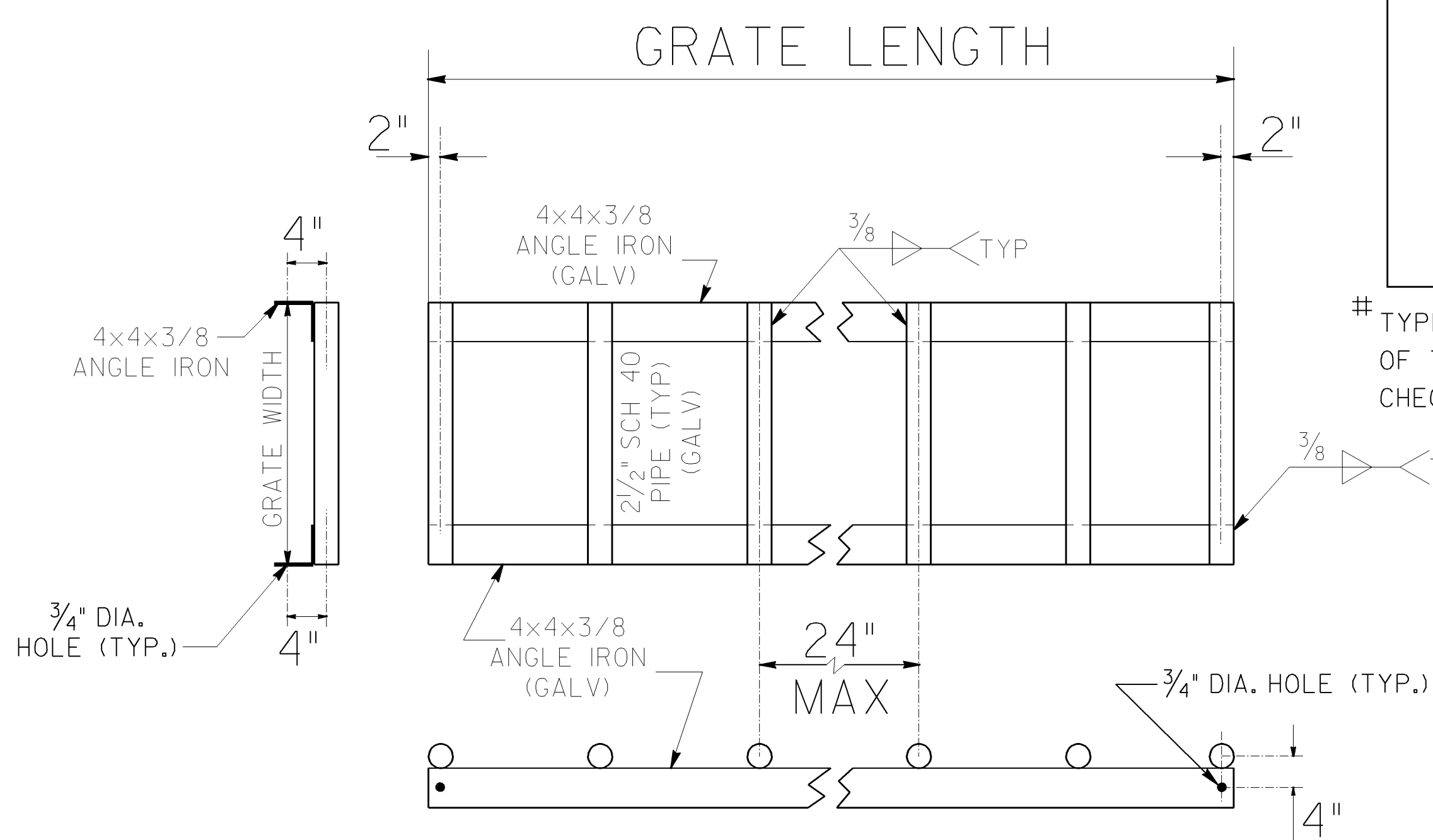
Diagram illustrating the dimensions of the square panel and the circular hole:

- The total width and height of the square panel are labeled **VAR**.
- The diameter of the circular hole is labeled **3" R (TYP)**.
- The distance from the center of the hole to the nearest edge is labeled **1" R (OPT)**.

SECTION A-A

D	(MIN) GRATE LENGTH	GRATE WIDTH (TYP) #
15"	2'-4"	1'-9 ⁵ / ₈ "
18"	2'-4"	2'-0 ⁵ / ₈ "
24"	6'-4"	2'-6 ⁵ / ₈ "
30"	8'-6"	3'-2 ⁵ / ₈ "
36"	12'-4"	3'-8 ⁵ / ₈ "
42"	14'-6"	4'-2 ⁵ / ₈ "
48"	18'-4"	4'-10 ⁵ / ₈ "

TYPICAL GRATE WIDTHS SHOWN ARE MEASURED FROM INSIDE TO INSIDE OF THE 3/8" THICK ANGLE IRON. GRATE FIT WITH END SECTION SHALL BE CHECKED BEFORE DELIVERY.



GALVANIZED SAFETY GRATE DETAIL

GENERAL NOTES:

1. CONCRETE STRENGTH SHALL BE 4000 PSI MINIMUM
2. REINFORCING SHALL BE PER AASHTO M170, CLASS II REINFORCED CONCRETE PIPE, PLUS ONE #4 BAR TOP AND BOTTOM, EACH SIDE.
3. WALLS MAY HAVE 1/4" TAPER. WALL THICKNESSES SHOWN ARE THE MINIMUM.
4. LIFT HOLES MAY BE PROVIDED IN THE SIDE WALLS FOR HANDLING.
5. END SECTION JOINT WILL BE A MATCHED FIT TO THE ADJOINING PIPE JOINT AT ALL INLET AND OUTLET ENDS. NON-FITTING JOINTS WILL REQUIRE A BUILT-IN-PLACE REINFORCED COLLAR CONNECTION WITH NO ADDITIONAL PAYMENT.
6. ALL END SECTIONS FOR PIPES WITH "D" OVER 24" ON SINGLE LINES WILL HAVE GALV. SAFETY BARS, SPACED NOT MORE THAN 24" ON CENTERS, AND INSTALLED PERPENDICULAR TO THE MAINLINE TRAFFIC FLOW. ALL END SECTIONS FOR MULTIPLE LINE PIPES WILL HAVE GRATES.
7. TYPICAL USE OF SAFETY END SECTIONS IS AT THE ENDS OF PIPES UNDER DRIVEWAYS OR SIDEROADS WHERE THE PIPE CULVERT IS PARALLEL TO THE MAINLINE AND FALLS INSIDE THE MAINLINE CLEAR ZONE WIDTH.

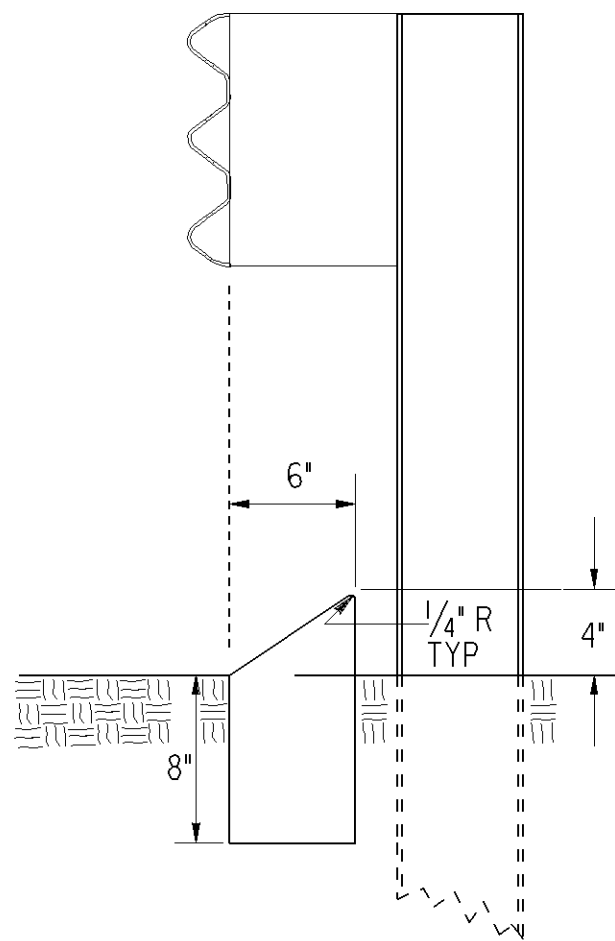
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

		1-28-05	DEPARTMENT OF TRANSPORTATION		
		DATE	STATE OF GEORGIA		
		REVISED TO I122 PAGE 3	STANDARD SAFETY END SECTION (CONCRETE) (FOR SIDE DRAIN PIPE-OR FOR STORM DRAIN PIPE PARALLEL TO MAINLINE) ALTERNATE 3		
		REVISION	NO SCALE OCT., 2000		
		CL.O. BY	DESIGNED _____ DRAWN _____ TRACED _____ CHECKED _____	(SUBMITTED) <i>B. A. H.</i> STATE ROAD & AIRPORT DESIGN ENGINEER (APPROVED) <i>D. L. H. H.</i> CHIEF ENGINEER	NUMBER 1122 SHEET 3 OF 3

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.		41	48

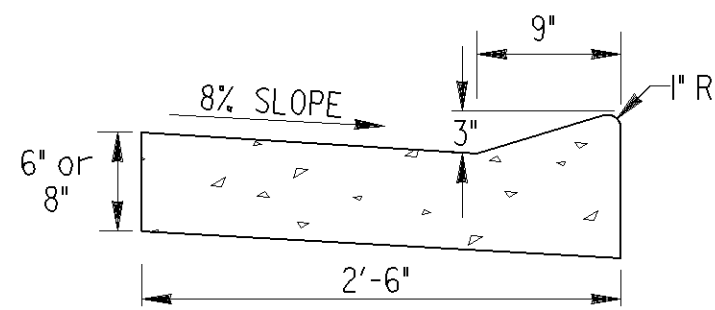
RAISED EDGE WITH CONCRETE GUTTER

FACE OF CURB MUST ALIGN WITH BACK EDGE OF GUARDRAIL AND THE FACE OF THE OFFSET BLOCK.



TYPE 8

TYPE 8 CURB IS USED IN CONJUNCTION WITH GUARDRAIL CONNECTIONS TO CONCRETE BARRIER AS NOTED ON GA. STD. 4012C.

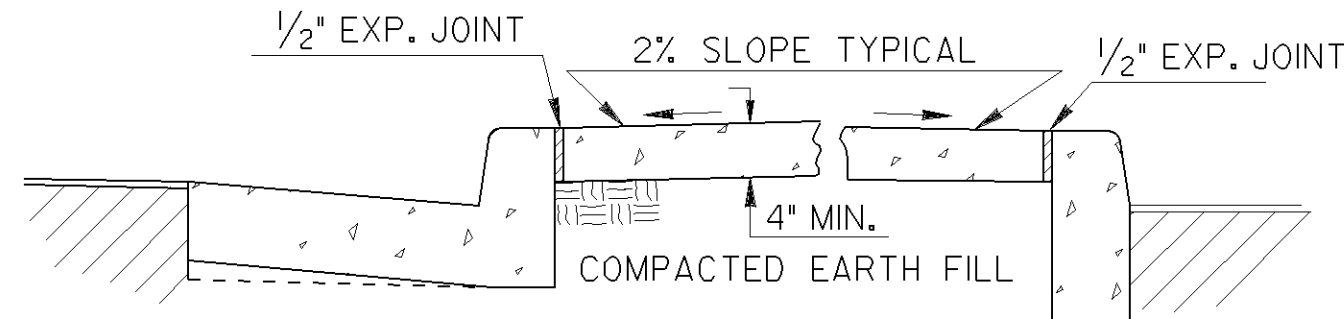


SCALE: 1" = 1 FT.

RAISED EDGE TO BE CONSTRUCTED WITH SAME CONCRETE MIX AS THE GUTTER AND SHALL BE FORMED MONOLITHIC WITH GUTTER. JOINTS IN RAISED EDGE SHALL MATCH THOSE IN THE GUTTER.

CONCRETE MEDIAN (Between Curbs)

NOTE: CURB TYPES SHOWN ARE TYPICAL. OTHER TYPES MAY BE SPECIFIED.



SCALE: 3/4" = 1 FT.

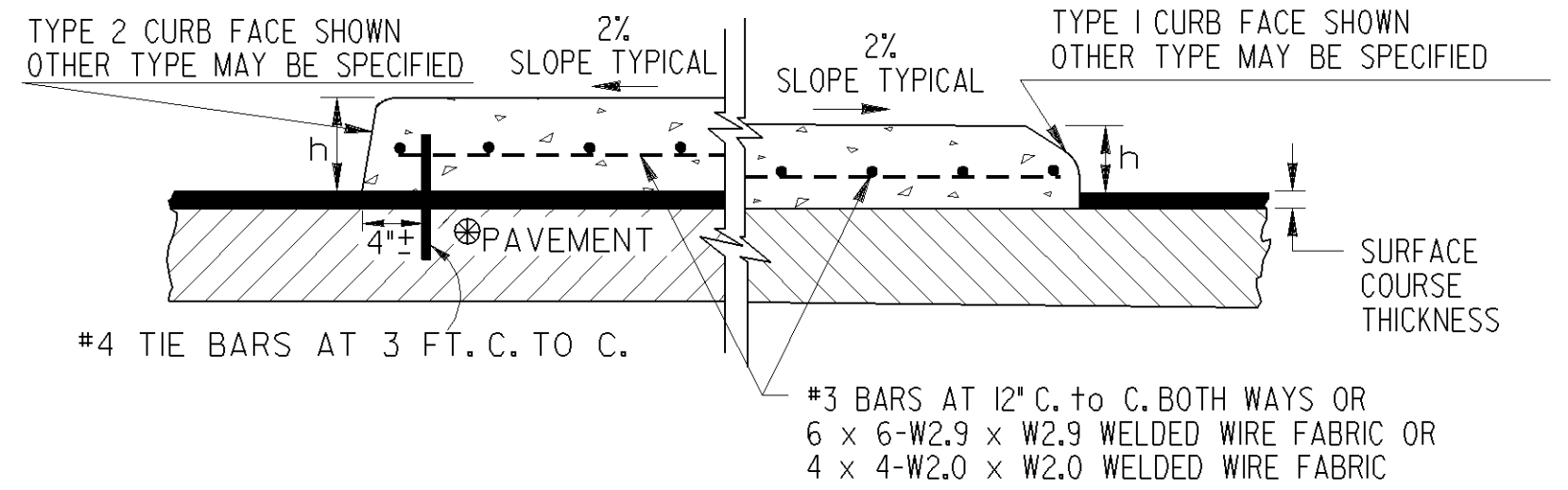
NOTE: WIDTH OF CONCRETE MEDIAN WILL BE AS SHOWN IN PLANS

CONCRETE MEDIANS (Integral)

SCALE: 1" = 1 FT.

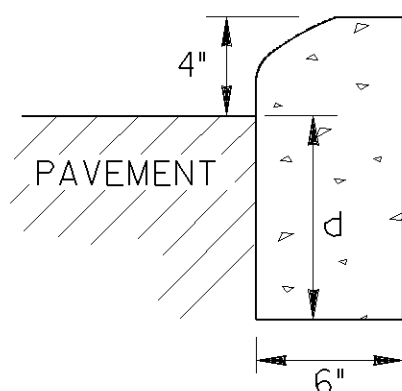
-WITH TIE BARS-

-WITHOUT TIE BARS-



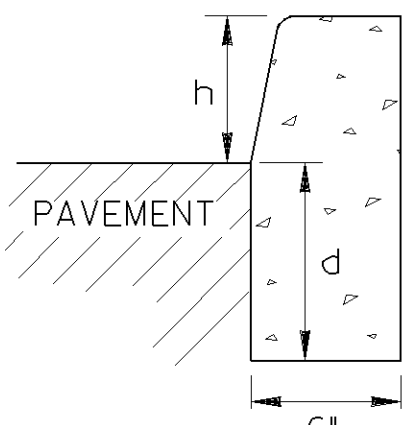
NOTE: IF FINAL SURFACE COURSE IS PRESENT OR MUST BE INSTALLED BEFORE THE CONCRETE MEDIAN CAN BE INSTALLED, THEN DOWELED IN CONCRETE MEDIAN IS REQUIRED.

CONCRETE HEADER CURBS

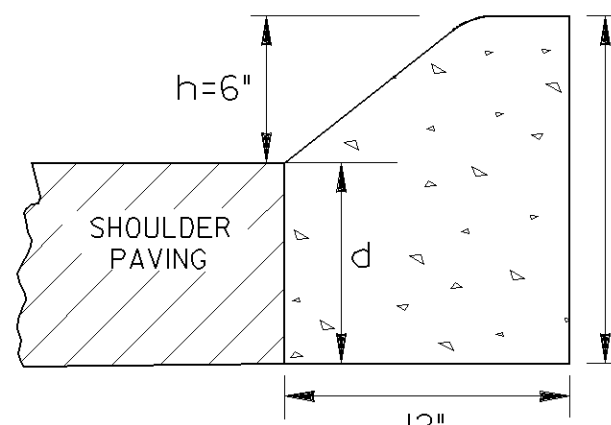


TYPE 1

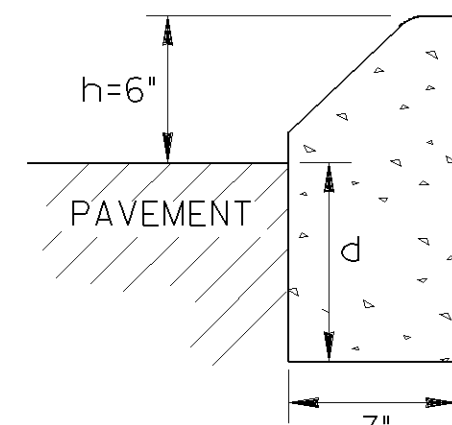
CURB TYPE	h	d
1	4"	6' min.
2	6"	8' min.
3	8"	10' min.
4	10"	12' min.
6	6"	7' min.
7	6"	8' min.
9	4"	8' min.



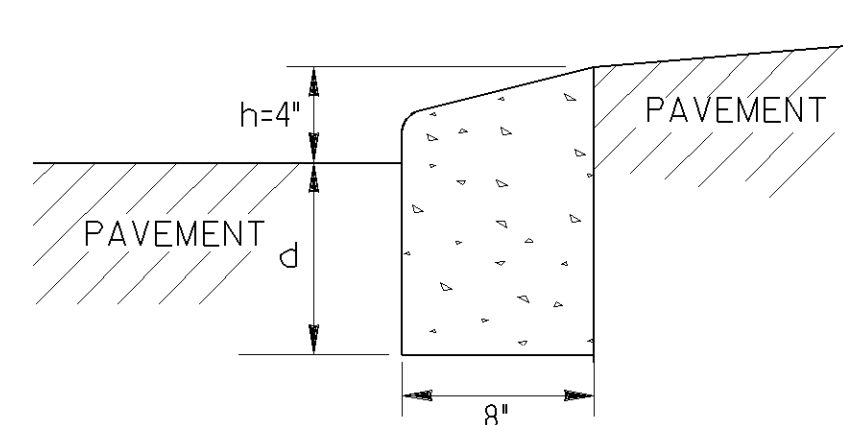
TYPE 2, 3 OR 4



TYPE 6



TYPE 7



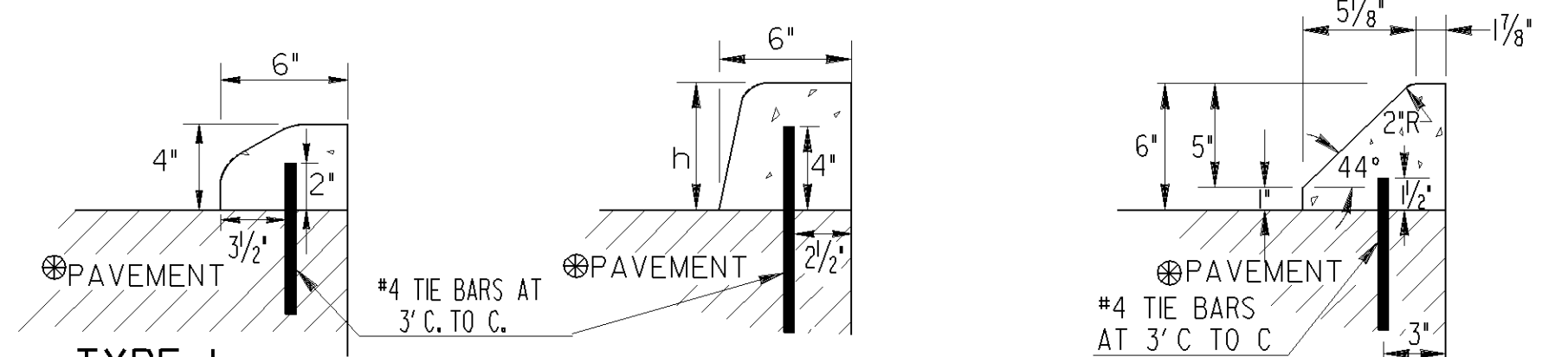
TYPE 9
TRUCK APRON
IN ROUNDABOUTS

THE DIMENSION d MAY BE INCREASED AT CONTRACTOR'S OPTION SO BOTTOM OF HEADER CURB WILL ALIGN WITH BOTTOM OF PAVEMENT TYPICAL SECTION.

SCALE: 1 1/2" = 1 FT.

CONCRETE DOWELED INTEGRAL CURBS

SCALE: 1" = 1 FT.



- NOTES:
1. CONCRETE CURB CAN BE INSTALLED AFTER INITIAL SET AS LONG AS TIE BARS ARE DRILLED INTO UNDERLYING CONCRETE PAVEMENT.
 2. CONCRETE CURB CAN BE INSTALLED BEFORE INITIAL SET WITH DOWELS THAT ARE DRIVEN INTO UNDERLYING CONCRETE PAVEMENT.
 3. JOINTS IN CURB AND CONCRETE MEDIAN WILL MATCH THOSE IN THE CONCRETE PAVEMENT.
 4. ALL TYPES OF CONCRETE CURB CAN BE PLACED ON ASPHALT PAVEMENTS WHERE TIE BARS MAY BE EITHER DRIVEN OR DRILLED INTO THE UNDERLYING PAVEMENT. CONTRACTION JOINTS SHALL BE CONSTRUCTED IN CURB OR CONCRETE MEDIAN AT 20 FT. SPACING.

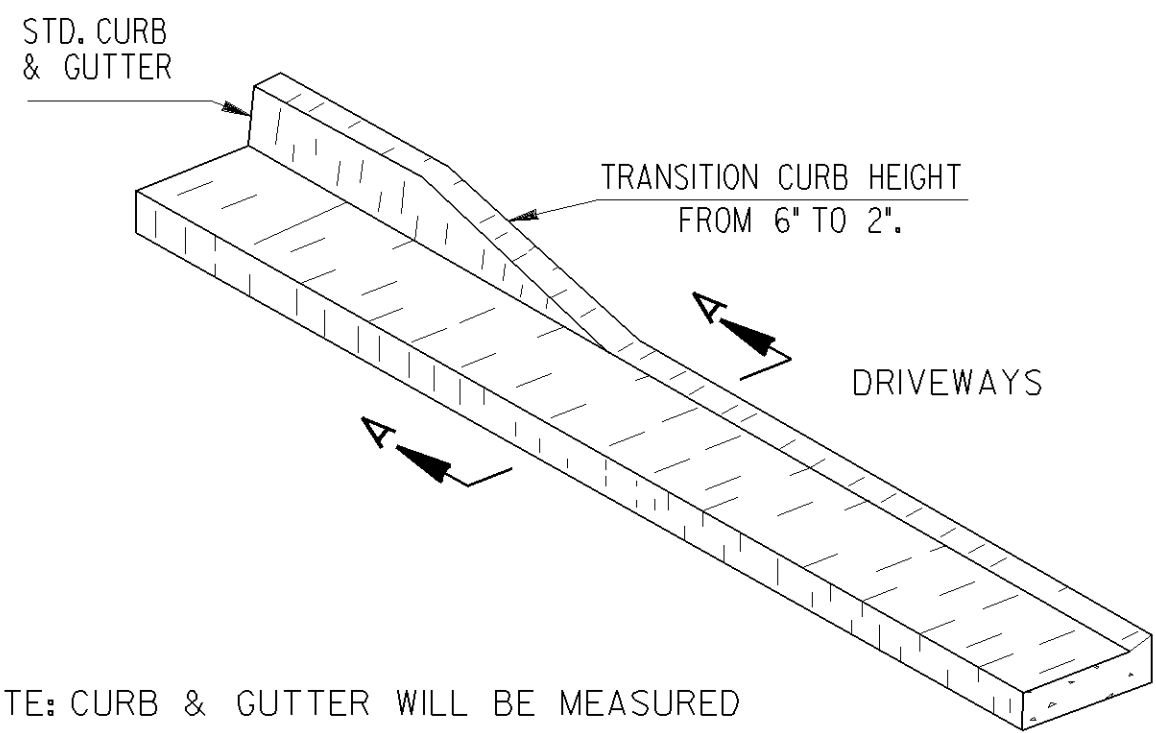
MINIMUM TIE BAR LENGTHS (FOR CONC. DOWELED CURBS OR CONC. MEDIAN)		
CURB TYPE	P.C. CONC. PAV.	ASPHALT PAV.
1	6"	8"
2, 3 or 4	8"	12"
7	6"	8"

NOTE: TIE BARS FOR DOWELED CURBS MAY BE UNCOATED PLAIN OR DEFORMED BILLET-STEEL BARS (GRADE 40) AS USED FOR CONCRETE REINFORCEMENT, (AASHTO M-31)

DETAILS OF RECESSED CURB FOR DRIVEWAYS

NO SCALE

PICTORIAL VIEW



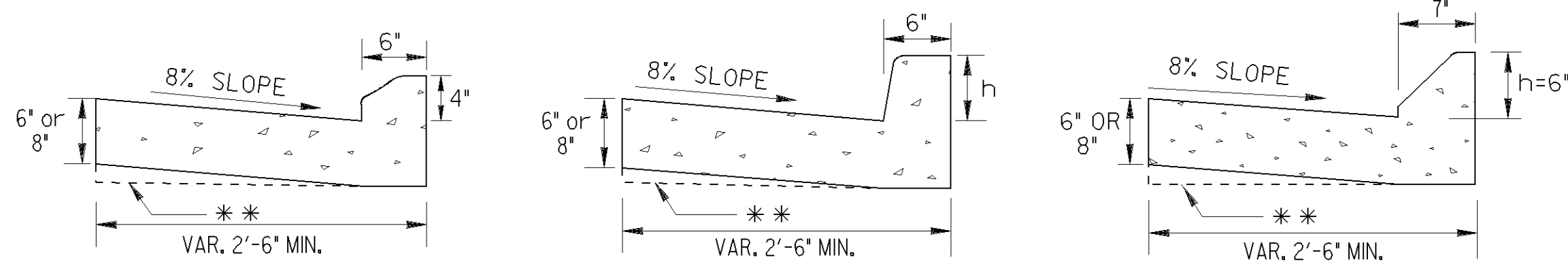
NOTE: CURB & GUTTER WILL BE MEASURED FOR PAYMENT THRU THE DRIVE



SECTIONAL VIEW
SECTION A-A

(SEE SEPARATE CONSTRUCTION DETAILS FOR DRIVEWAYS)

CONCRETE CURB & GUTTER



SCALE: 1" = 1 FT.

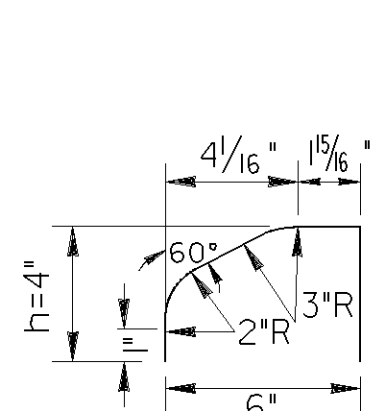
TYPE 1

TYPE 2, 3 OR 4

TYPE 7

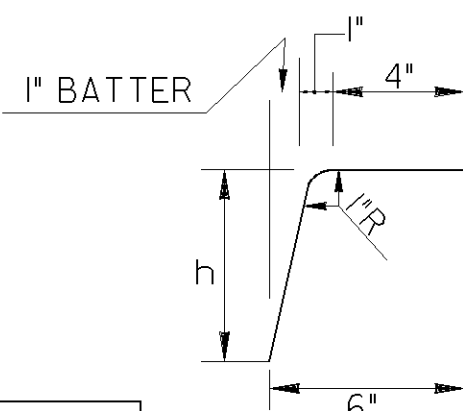
** AT CONTRACTOR'S OPTION THE GUTTER THICKNESS MAY BE INCREASED AT EDGE OF PAVEMENT TO MAKE BOTTOM OF GUTTER PARALLEL WITH PAVING OF BASE COURSE, BUT THE GUTTER THICKNESS MUST NOT BE LESS THAN THE SPECIFIED 6" OR 8" AT ANY POINT.

CURB FACE DESIGN

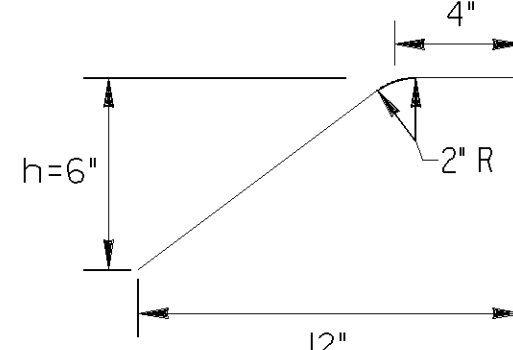


TYPE 1

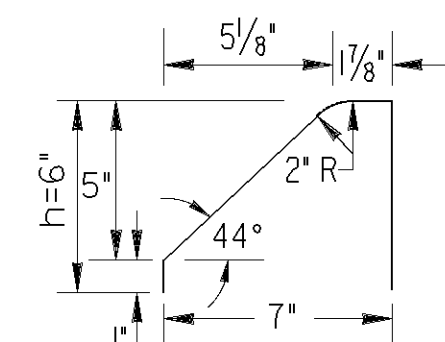
TYPE	h
1	4"
2	6"
3	8"
4	10"
6	6"
7	6"
9	4"



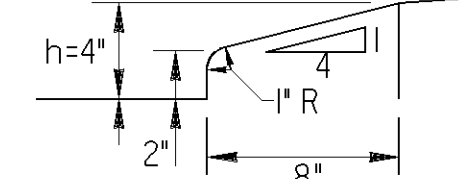
TYPE 2, 3 OR 4



TYPE 6



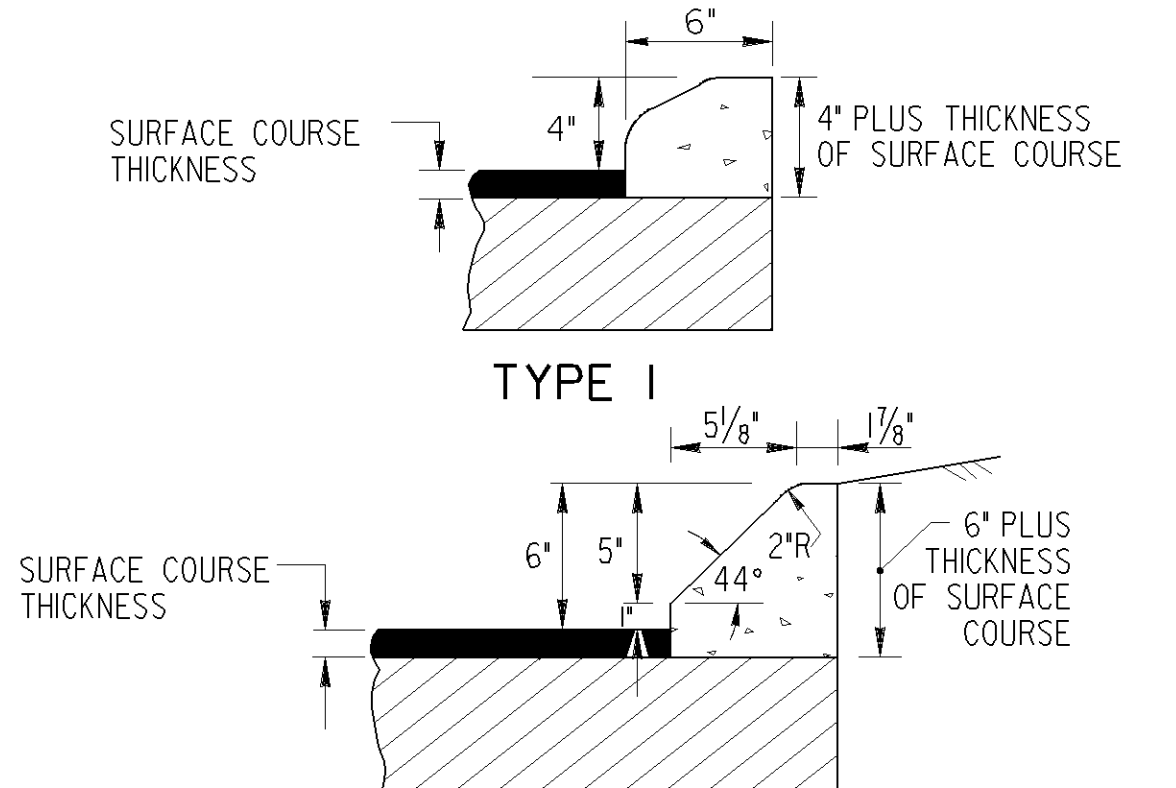
TYPE 7



TYPE 9

SCALE: 2" = 1 FT.

CONCRETE INTEGRAL CURB



TYPE 7

SCALE: 1 1/2" = 1 FT.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
CONCRETE CURB & GUTTER
CONCRETE CURBS, CONCRETE MEDIANS

SCALE: AS SHOWN REVISED AND REDRAWN OCT. 2011

REV.	TYPE 9 CURB DETAIL & REV. OVERALL LAYOUT	II-15-II	I-27-II	3-03	DATE	DES.	(SUBMITTED)	NUMBER
TC	GLO	BY	REVISION	DES.	(SUBMITTED)	TRA.	(APPROVED)	9032B
				CHK.				

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.		42	48

GENERAL NOTES :

1. ALL TRAFFIC CONTROL DEVICES SHALL BE MADE AND ERECTED IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS; THE MUTCD; THE GEORGIA STANDARD SPECIFICATIONS, AND/OR SPECIAL PROVISIONS. (SEE SECTION 150)
2. ALL TRAFFIC CONTROL DEVICES SHALL BE AS SHOWN, OR AS DIRECTED BY THE ENGINEER. ADDITIONAL DEVICES MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.
3. ALL PORTABLE SIGNS SHALL BE MOUNTED A MINIMUM OF 10 FEET ABOVE THE LEVEL OF PAVEMENT EDGE FOR DIRECTIONAL TRAFFIC OF TWO (2) LANES OR LESS AND A MINIMUM OF 7 FEET FOR DIRECTIONAL OF THREE (3) OR MORE LANES. ALL PORTABLE SIGNS AND SIGN MOUNTING DEVICES UTILIZED IN THE WORK SHALL BE NCHRP 350 COMPLIANT. PORTABLE SIGNS MAY BE USED WHEN THE DURATION OF THE WORK IS LESS THAN 3 DAYS.
4. WHEN THE CONSTRUCTION AREA HAS ENTRANCE/EXIT RAMP OR INTERSECTIONS, WORK WILL BE PERFORMED IN SUCH A MANNER TO PERMIT TRAFFIC TO OPERATE WITH THE LEAST AMOUNT OF INCONVENIENCE AS POSSIBLE. ADDITIONAL CHANNELIZATION AND SIGNING SHALL BE INSTALLED, AS REQUIRED, TO ALLOW TRAFFIC TO REMAIN AS OPERATIONAL AS POSSIBLE. WHEN ENTRANCE RAMP/INTERSECTIONS ARE INOPERABLE, FLAGGERS WILL BE UTILIZED TO CONTROL AND PROHIBIT MOVEMENT INTO THE PROJECT AT THAT POINT UNTIL CONSTRUCTION HAS CLEARED THE RESTRICTION SUFFICIENT TO RETURN TO OPERATIONAL STATUS.
5. FOR NIGHT TIME OPERATIONS, DRUMS SHALL HAVE, FOR THE LENGTH OF THE TAPER ONLY, A SIX (6") INCH ORANGE REFLECTIZED TOP STRIPE ON EACH DRUM IN THE TAPER AS REQUIRED IN SECTION 150. SPACING OF DEVICES SHALL BE AS SHOWN. DURING DAYLIGHT HOURS, CONES (28" MIN.) MAY BE USED IN ADVANCE OF AND THROUGHOUT WORK AREA.
6. SIGN LOCATIONS ARE APPROXIMATE AND MAY BE ADJUSTED TO MEET FIELD CONDITIONS BUT MUST BE WITHIN THE LIMITATIONS SET FORTH IN THE MUTCD.
7. A PORTABLE SELF-SUSTAINED SEQUENTIAL OR FLASHING ARROW SIGN SHALL BE USED AT THE BEGINNING OF EACH LANE CLOSURE ON MULTI-LANE HIGHWAYS. ARROW PANELS SHALL NOT BE USED ON TWO-LANE TWO-WAY HIGHWAYS EXCEPT IN CAUTION MODE.
8. WHEN NOT IN USE, PORTABLE SIGNS SHALL BE REMOVED FROM THE TRAVELWAY SO THAT THE MESSAGE IS NOT VISIBLE TO THE MOTORIST. INTERIM SIGNS THAT ARE PERMANENTLY MOUNTED SHALL BE COVERED WHEN NOT APPLICABLE. SEE SECTION 150.
9. PROJECT SIGNS W20-1, G20-1 & G20-2 FOR THIS PROJECT SHALL BE COORDINATED WITH ADJACENT CONSTRUCTION PROJECTS. ONLY ONE SET OF SIGNS IS REQUIRED IN EACH DIRECTION FOR THE TOTAL LENGTH OF ALL PROJECTS- AT THE BEGINNING OF THE FIRST PROJECT AND AT THE ENDING OF THE LAST PROJECT. ADVANCE CONSTRUCTION SIGNS ARE NOT REQUIRED ON INTERMEDIATE PROJECTS, UNLESS CONSTRUCTION ON THE ADJACENT PROJECTS IS COMPLETED BEFOREHAND, THEN PROJECT CONSTRUCTION SIGNS WILL BE ADDED AS NECESSARY.
10. ALL THE COST OF THE MATERIALS, LABOR AND EQUIPMENT NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE PRICE BID FOR TRAFFIC CONTROL SECTION 150. LUMP SUM WHEN SHOWN AS A PAYMENT ITEM IN THE PROPOSAL. OTHERWISE, ALL THE COST WILL BE INCLUDED IN THE OVER-ALL BID SUBMITTED, EXCEPT ON CERTAIN PROJECTS SOME ITEMS MAY BE PAID FOR SEPARATELY BY THE UNIT WHEN SPECIFIED ON THE PLANS AND IN THE PROPOSAL.
11. FOR FREEWAY CONSTRUCTION THE CONTRACTOR SHALL ARRANGE HIS WORK SO THAT THERE IS AN EXIT GORE SIGN AND AN EXIT DIRECTION SIGN IN PLACE FOR ALL EXIT RAMP AT ALL TIMES.
12. ALL CROSSROADS, SIDEROADS, RAMPS OR OTHER ENTRANCES TO MAINLINE CONSTRUCTION SHALL REQUIRE W20-1 SIGNS LOCATED AS SHOWN IN THE PLANS, OR AS DIRECTED BY THE ENGINEER.
13. MARKINGS AND/OR SIGNS IN CONFLICT WITH INTERIM TRAFFIC CONTROL SHALL BE REMOVED, RELOCATED OR COVERED; APPLICABLE EXISTING AND INTERIM MARKINGS AND/OR SIGNING SHALL BE MAINTAINED PER SECTION 150.
14. ANY CHANNELIZING DEVICES (DRUMS OR BARRICADES) IN CONFLICT WITH CONCRETE BARRIERS SHALL BE OMITTED.
15. CONTRACTOR SHALL PROVIDE THE NECESSARY TRAFFIC CONTROL DURING THE TIE-IN OPERATION.
16. THE TRAFFIC CONTROL DEVICES SHOWN FOR ANY STAGE CONSTRUCTION SHALL REMAIN IN PLACE AND BE UTILIZED SO LONG AS NECESSARY FOR THE FOLLOWING STAGES AND SHALL BE REMOVED IMMEDIATELY WHEN NO LONGER REQUIRED. THE DEVICES MAY OR MAY NOT BE SHOWN ON THE PLANS FOR THESE FOLLOWING STAGES. REFER TO THE PLAN SHEET FOR THE INITIAL STAGE FOR THESE TRAFFIC CONTROLS.
17. EXISTING GUIDE SIGNS SHALL REMAIN IN PLACE SO LONG AS THEY DO NOT CONFLICT WITH THE CONSTRUCTION OF THIS PROJECT. WHEN IN CONFLICT, THEY SHALL BE RELOCATED ON TEMPORARY POSTS AT THE LOCATION AS DIRECTED BY THE ENGINEER. ANY DISTANCE SHOWN ON THE SIGN SHALL BE ADJUSTED ACCORDINGLY. IF THE SIGNS CANNOT BE RELOCATED, THEN THE SIGN SHALL BE REMOVED AND STORED AT A PLACE DESIGNATED BY THE ENGINEER. IF NEITHER OF THE ABOVE CAN BE DONE, THEN THE CONTRACTOR SHALL PROVIDE INTERIM GUIDE SIGNS AS COVERED IN SECTION 150.
18. (a) ON PROJECTS WITH LOW OR SOFT SHOULDERS, THE CONTRACTOR SHALL ERECT IMMEDIATELY AHEAD OF CONSTRUCTION OPERATIONS "LOW/SOFT SHOULDER" WARNING SIGNS AT THE PROJECT TERMINII, AT INTERVALS NOT TO EXCEED 1 MILE AND IMMEDIATELY PAST EACH CROSSROAD.

(b) WHERE THE CONTRACTOR IS NOT RESPONSIBLE FOR SHOULDER CONSTRUCTION, THE DEPARTMENT WILL FURNISH THESE SIGNS FOR THE CONTRACTOR TO PICK UP, TRANSPORT, AND ERECT. THE DEPARTMENT WILL LATER REMOVE AND RETAIN THE SIGNS.

STANDARD LEGEND

- STRIPED DRUM
- ▨

TYPE III BARRICADES
- ×

SPECIAL BARRICADE WITH BI-DIRECTIONAL, TYPE "C" STEADY BURNING LIGHT OR HIGHWAY SIGN AS SPECIFIED (SEE DETAIL)
- ⋯

SEQUENTIAL OR FLASHING ARROW
- |—

PORTABLE CHANGEABLE MESSAGE SIGN
- |

PERMANENT TYPE POST MOUNTED SIGN
- ⊕

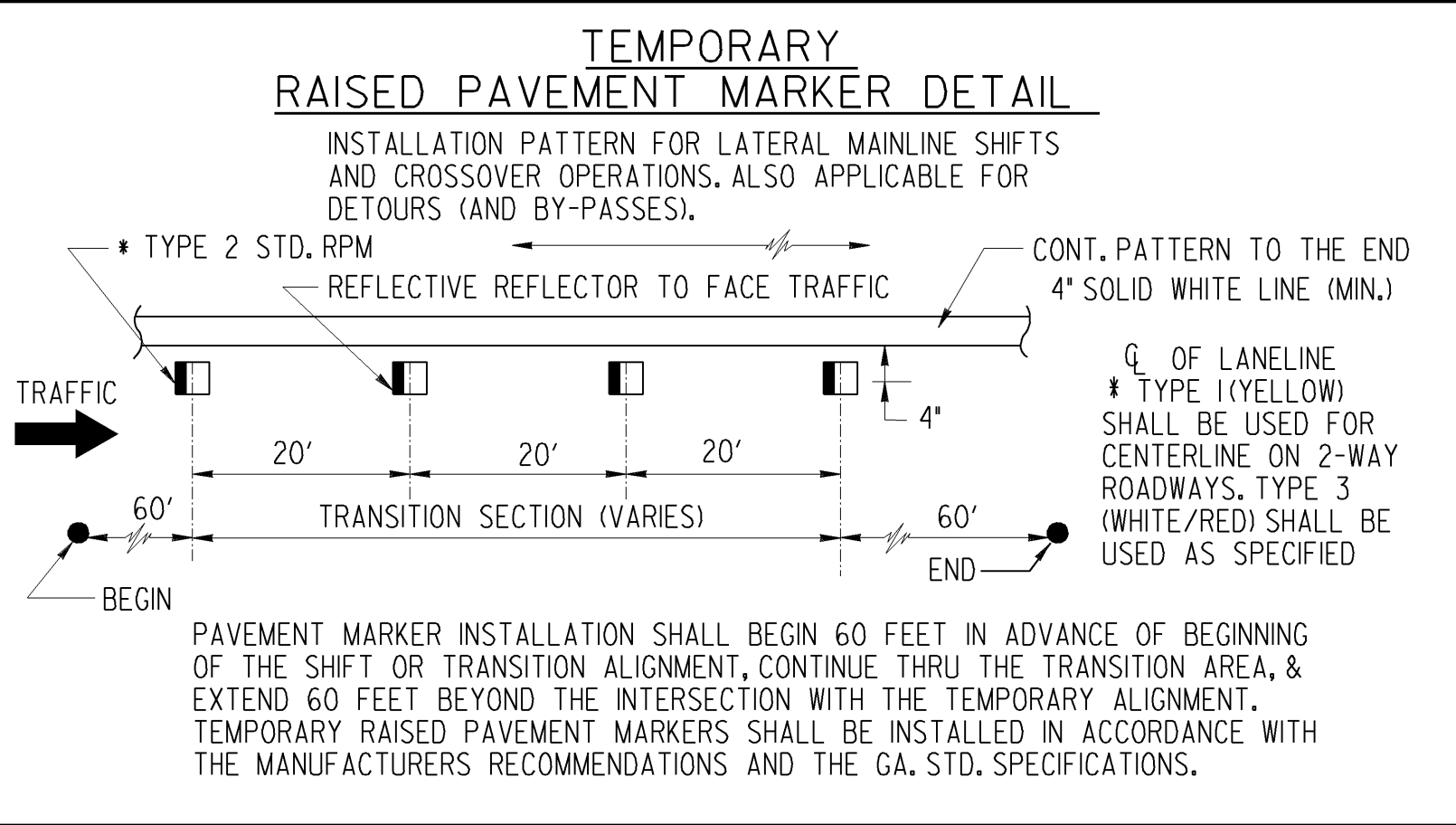
TEMPORARY POST MOUNTED SIGN
- Ⓚ

PORTABLE MOUNTED SIGN - FLAGS NOT REQUIRED
- ▨

WORK AREA
- ▲

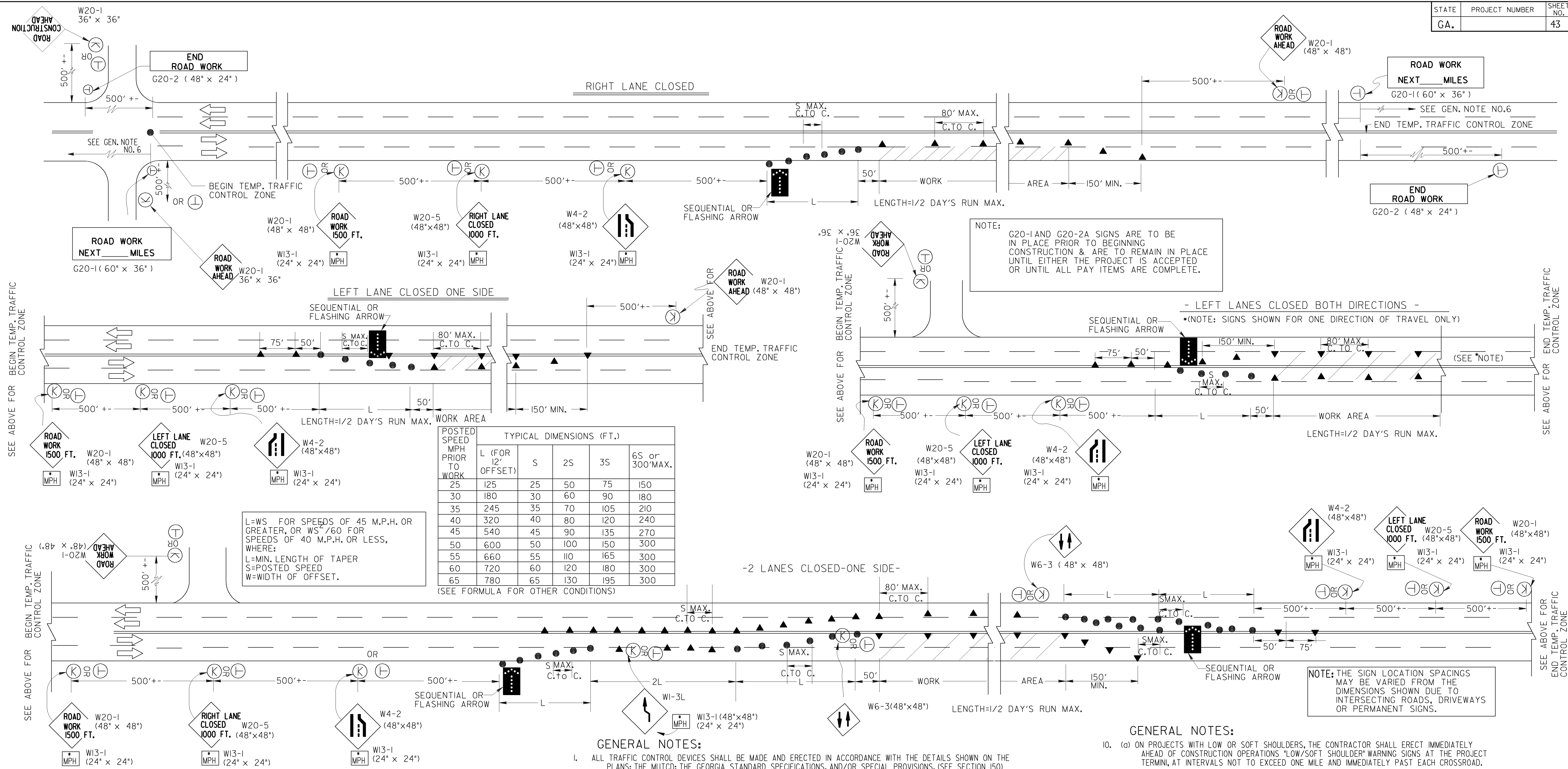
TRAFFIC CONE - 28" MIN. - (DAYTIME USE ONLY)
- FLAGGER WITH STOP-SLOW PADDLE
- ⊞

TRAFFIC IMPACT ATTENUATOR (CRASH CUSHION)
- TYPE I CLEAR (WHITE) DELINEATOR - SINGLE FACE
- TYPE I YELLOW DELINEATOR - SINGLE FACE
- TYPE I CLEAR (WHITE) DELINEATOR DOUBLE FACE
- TYPE I YELLOW DELINEATOR DOUBLE FACE



3-30-06		4-24-01		DATE	
REVISED GENERAL NOTES AND LEGEND, DELETED TWO DETAILS.		SPEC. BAR. SH. SPEC. REVISION		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
GLO		BY		STANDARD TRAFFIC CONTROL GENERAL NOTES, STANDARD LEGEND, MISCELLANEOUS DETAILS	
				NO SCALE	
				AUG., 1999	
				DES. (SUBMITTED) <i>[Signature]</i> STATE ROAD & AIRPORT DESIGN ENGINEER	
				TRA. (APPROVED) <i>[Signature]</i> CHIEF ENGINEER	
				NUMBER 9100	

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.		43	48

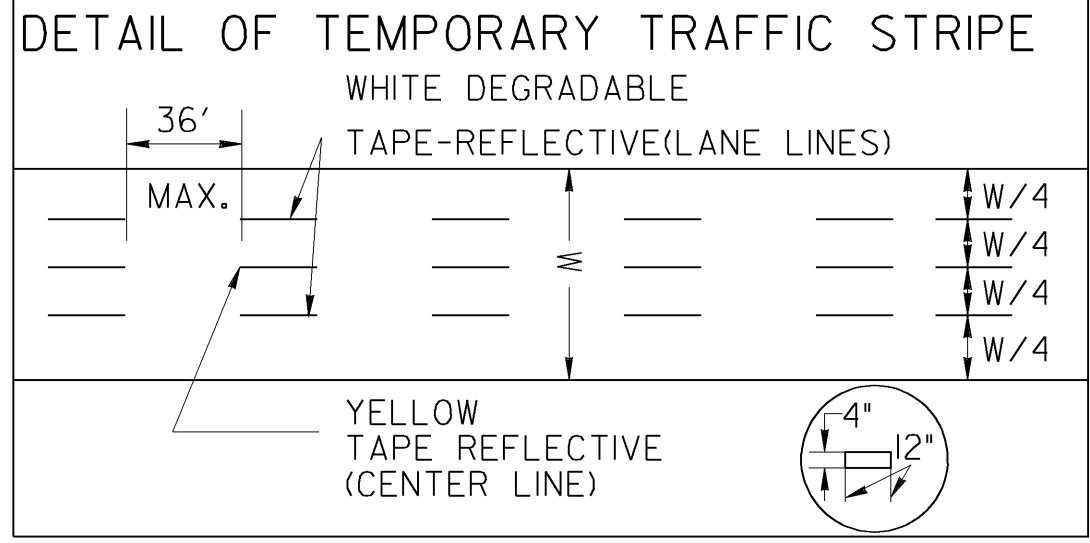


FOR LOCATIONS ON THIS PROJECT INVOLVING ADDED TURN LANES, THE DISTRICT TRAFFIC OPERATIONS OFFICE WILL FURNISH A SCHEMATIC DRAWING OF THE TEMPORARY PAVEMENT MARKINGS AT THE PRE-CONSTRUCTION CONFERENCE.

• WHEN TEMPORARY OPERATING SPEEDS ARE LESS THAN THE POSTED SPEED LIMIT, THE ADVISORY SPEED PLATES (W3-I) SHALL BE USED IN 10 M.P.H. INCREMENTS, UNTIL THE SPEED IS REDUCED TO THE TEMPORARY OPERATING SPEED.

STANDARD LEGEND

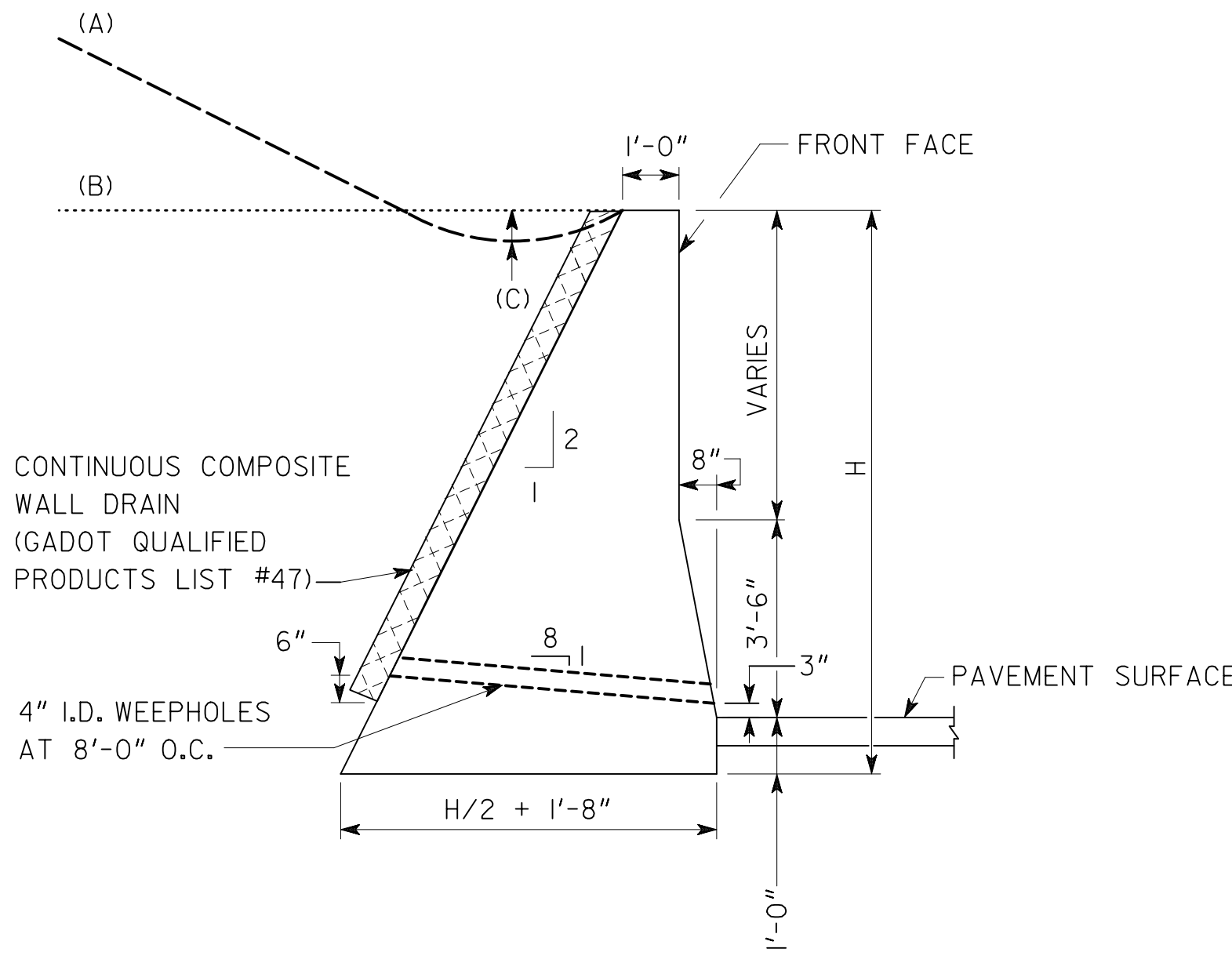
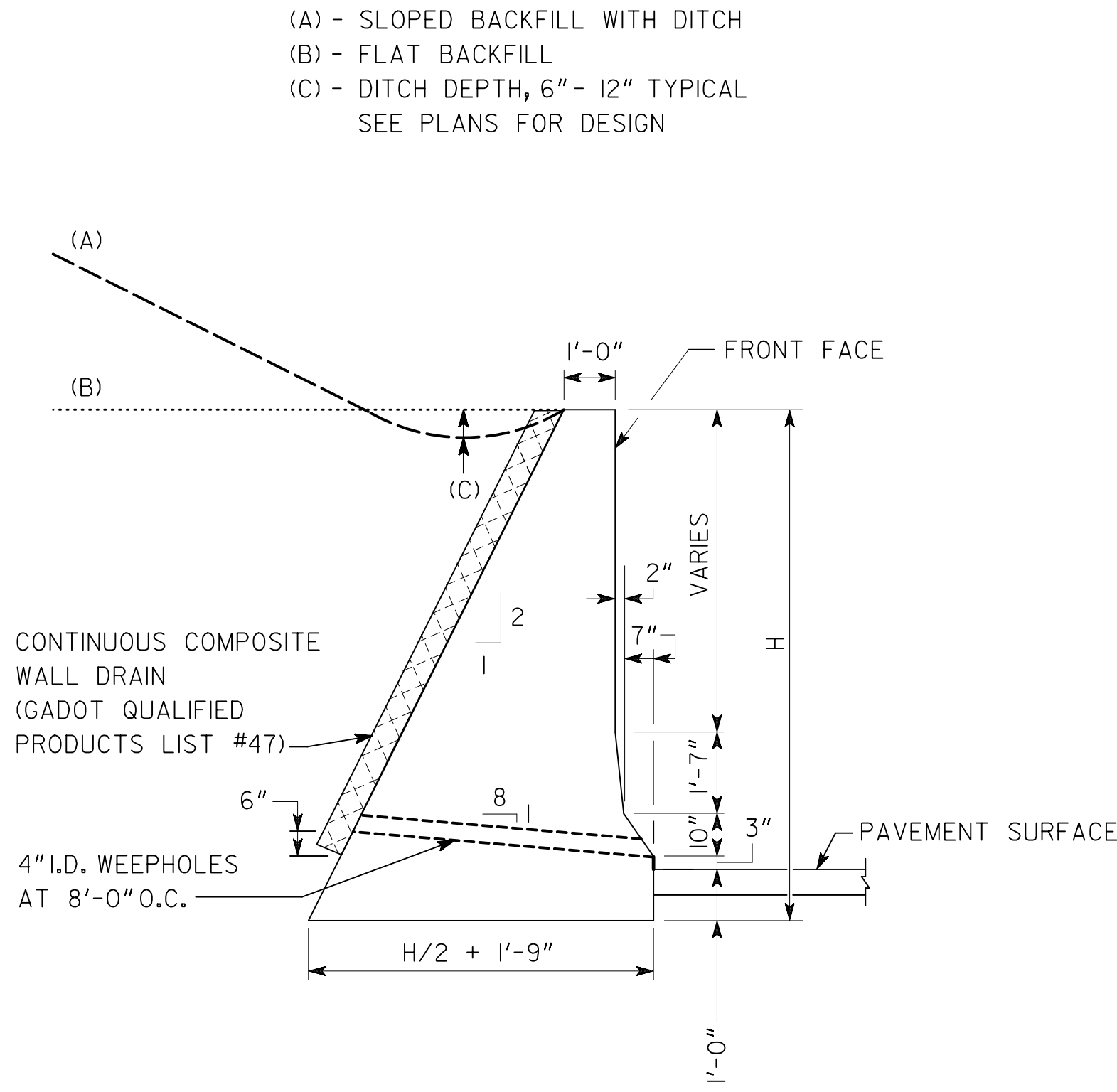
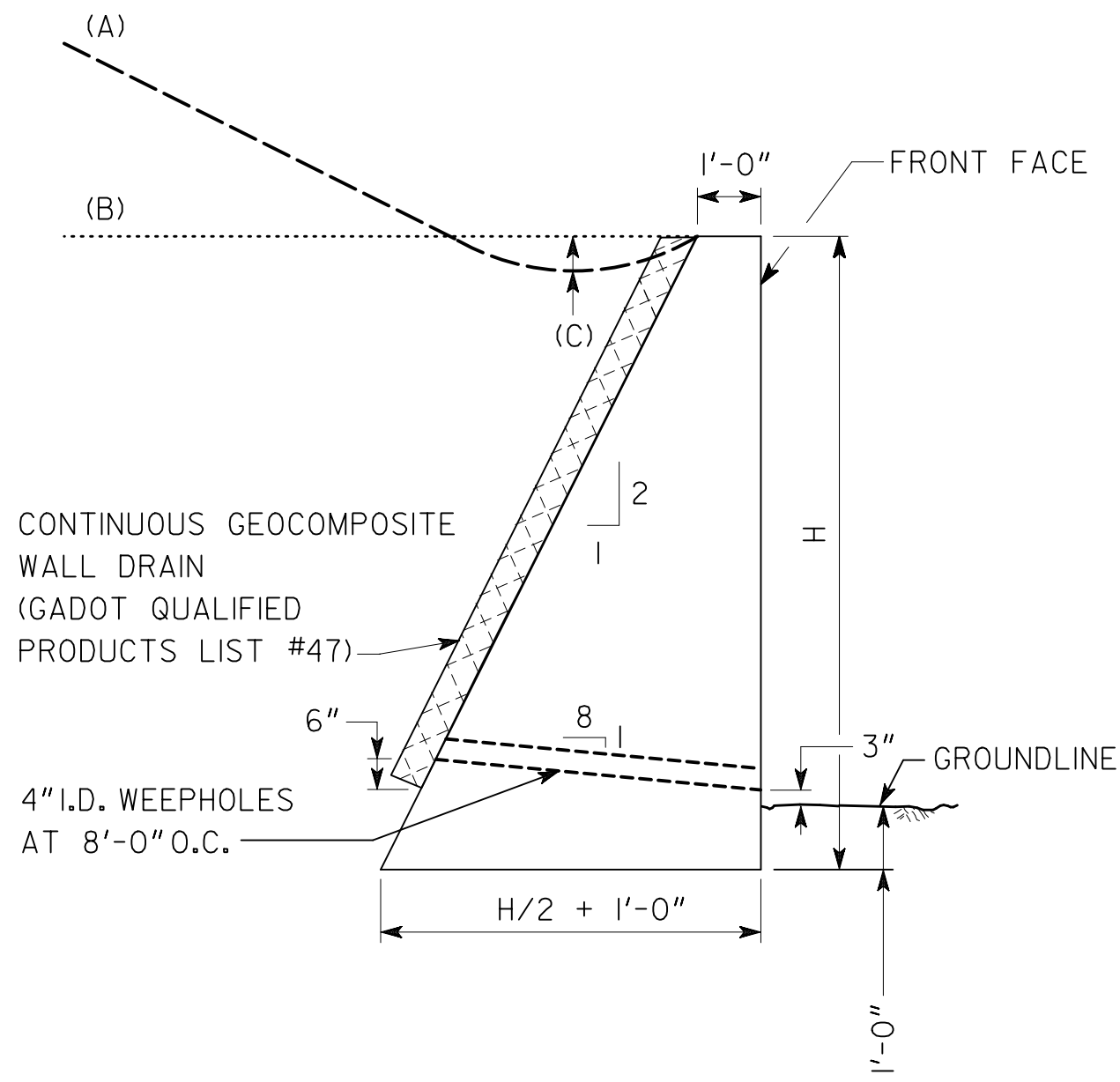
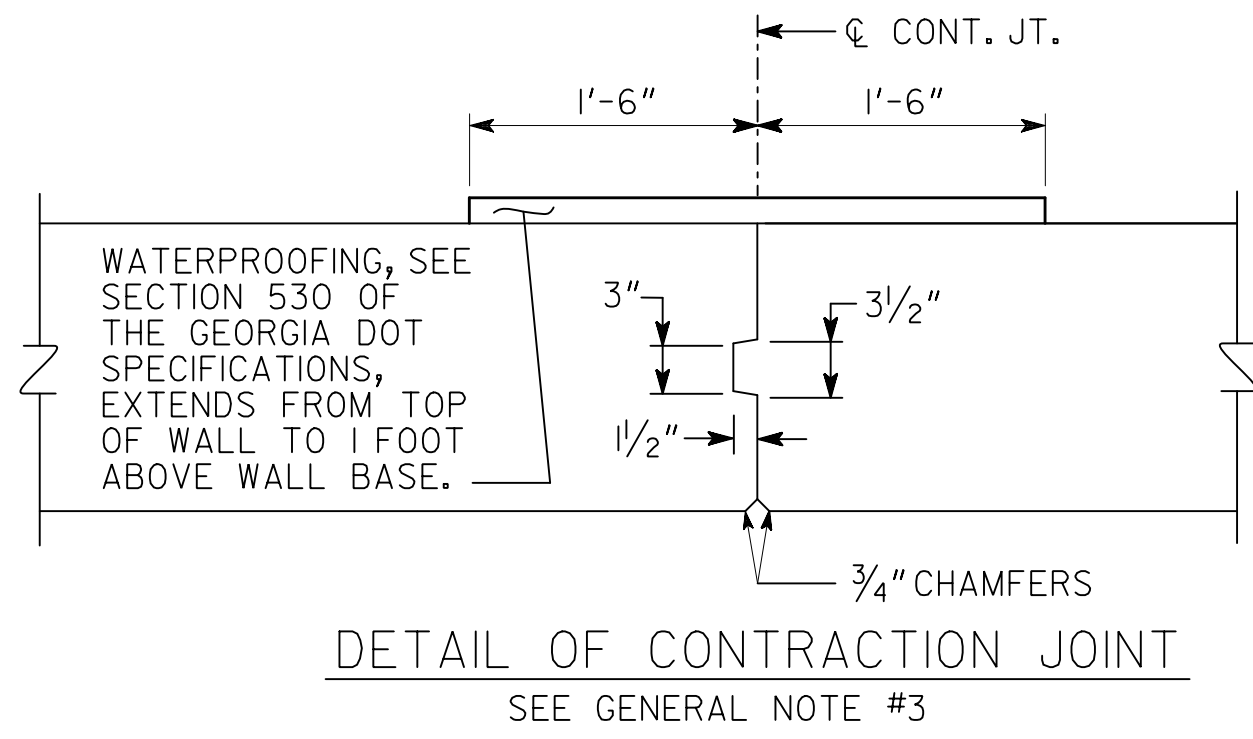
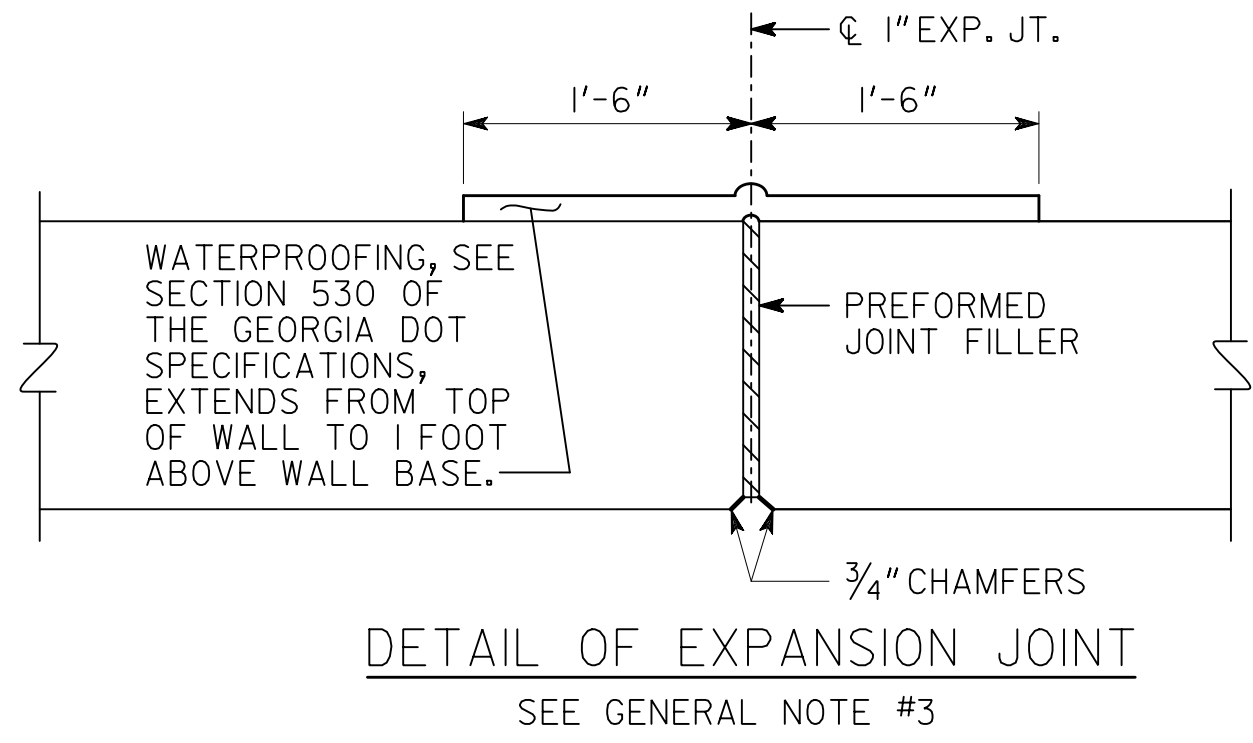
- STRIPED DRUM
- TEMPORARY POST MOUNTED SIGN (OFF SHOULDER) --FOR LONG TERM LANE CLOSURE SUCH AS STATIONARY OPERATIONS, BRIDGE WIDENING PROJECTS ETC. - (7' MOUNT HEIGHT)
- PORTABLE MOUNTED SIGN (ON SHOULDER) --FOR SHORT TERM LANE CLOSURE SUCH AS MOVING OPERATIONS, RESURFACING PROJECTS, ETC. (SEE GENERAL NOTE, NO. 3)
- TRAFFIC CONE - 28" MIN. (DAYTIME USE ONLY)
- SEQUENTIAL OR FLASHING ARROW
- WORK AREA



GENERAL NOTES:

- (a) ON PROJECTS WITH LOW OR SOFT SHOULDERS, THE CONTRACTOR SHALL ERECT IMMEDIATELY AHEAD OF CONSTRUCTION OPERATIONS "LOW/SOFT SHOULDER" WARNING SIGNS AT THE PROJECT TERMINI, AT INTERVALS NOT TO EXCEED ONE MILE AND IMMEDIATELY PAST EACH CROSSROAD.
- (b) WHERE THE CONTRACTOR IS NOT RESPONSIBLE FOR SHOULDER CONSTRUCTION, THE DEPARTMENT WILL FURNISH THESE SIGNS FOR THE CONTRACTOR TO PICK-UP, TRANSPORT AND ERECT, THE DEPARTMENT WILL LATER REMOVE AND RETAIN THE SIGNS.
- HIGHWAY WORK ZONE SIGNS (HWZ-2 AND HWZ-3) SHALL BE INSTALLED ON THE TRAVEL WAY AND THE INTERSECTING ROADWAY AS REQUIRED IN SECTION 150.
- THE G20-I SIGNS SHOULD BE PLACED AT EACH TERMINUS OF THE PROJECT, PREFERABLY BETWEEN THE LAST ADVANCE WARNING SIGN (ROAD WORK- 500 FT.) AND BEFORE THE ADVANCE WARNING SIGNS FOR LANE SHIFTS, LANE CLOSURES, ETC.

REMOVED FLAGS AND REV.		DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
GENERAL NOTES: REV. SIGN		REVISION	STANDARD TRAFFIC CONTROL DETAIL FOR LANE CLOSURE ON MULTI-LANE UNDIVIDED HIGHWAY	
G20-2A TO G20-2.			NO SCALE REV. & REDR. JULY, 1999	
GLO	BY	DES. _____ DRW. _____ TRA. _____ CHK. _____	(SUBMITTED) _____ STATE ROAD & AIRPORT DESIGN ENGINEER (APPROVED) _____ CHIEF ENGINEER	NUMBER 9107



MAXIMUM "H"*			
BACKSLOPE	TYP. SECTION A	TYP. SECTION B **	TYP. SECTION C **
FLAT	8'-6"	10'-0"	10'-0"
SLOPE TO 4:1	6'-3"	7'-0"	7'-0"
SLOPE TO 2:1	4'-6"	4'-9"	4'-9"

* GREATER "H" PERMITTED IF APPROVED BY BRIDGE DESIGN.
** TYPICAL SECTION B SHALL HAVE A MINIMUM H OF 3'-8"
TYPICAL SECTION C SHALL HAVE A MINIMUM H OF 4'-6"

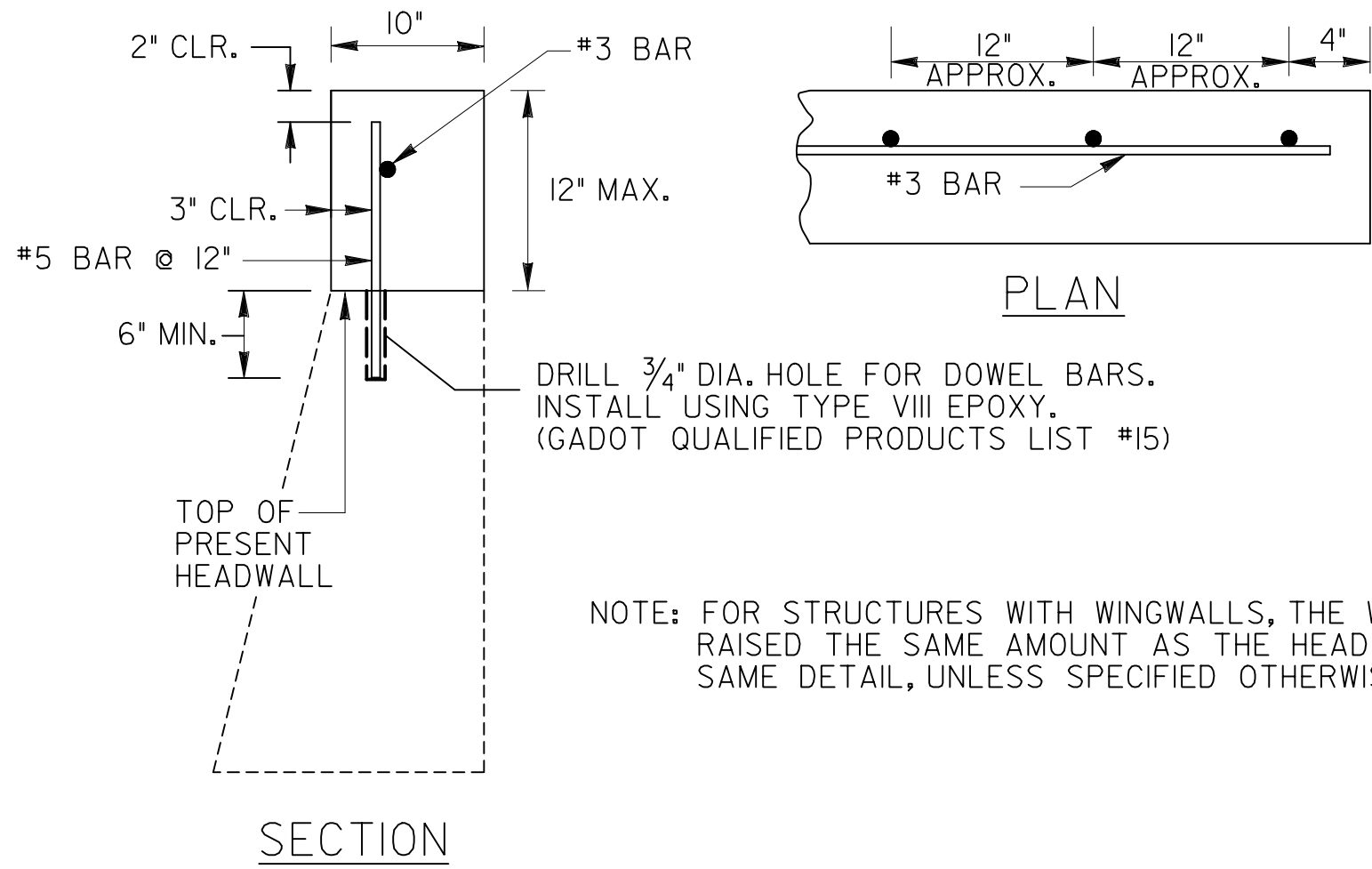
GENERAL NOTES:

- GRAVITY WALLS SHALL NOT BE USED WHEN HORIZONTAL DISTANCE FROM EDGE OF TRAVEL WAY TO FRONT FACE OF WALL IS LESS THAN $(H + 1'-0")$.
- GRAVITY WALLS DESIGNED FOR THE FOLLOWING SOIL PROPERTIES:

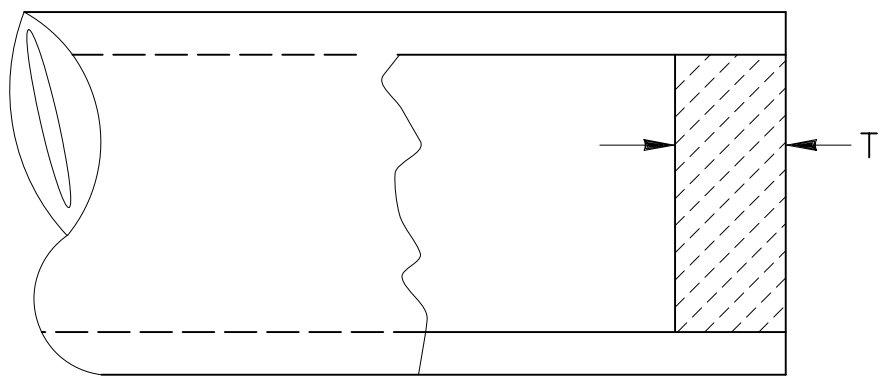
	FOUNDATION	BACKFILL
COHESION =	0 PSF	0 PSF
ϕ =	28°	28°
UNIT WEIGHT =	120 PCF	120 PCF
- EXPANSION JOINTS SHALL BE LOCATED AT A MAXIMUM SPACING OF 90'-0" AND EXTEND THROUGH THE WALL. CONTRACTION JOINTS SHALL BE LOCATED AT A MAXIMUM SPACING OF 30'-0".
- GRAVITY WALLS WITH A VERTICAL FRONT FACE SHALL BE PAID FOR AS "CLASS B CONCRETE OR MORTAR RUBBLE MASONRY, RETAINING WALL". GRAVITY WALLS WITH A BARRIER FRONT FACE SHALL BE PAID FOR AS "CLASS A CONCRETE, RETAINING WALL". WATERPROOFING, JOINT FILLER, WALL DRAIN, AND OTHER INCIDENTAL ITEMS SHALL BE INCLUDED IN OVERALL BID SUBMITTED.

- A CONCRETE DITCH DETAIL FOR THE TOP OF THE WALL SHOULD BE INCLUDED IN THE ROADWAY PLANS WHEN WATER IS FLOWING TOWARDS THE BACK OF THE WALL. SEE CONSTRUCTION DETAIL D-49.
- FINISH EXPOSED SURFACES OF THE WALL WITH A TYPE III FINISH.
- APPLY GRAFFITI PROOF COATING AS PER SECTIONS 500 AND 838 OF THE GEORGIA DOT SPECIFICATIONS.
- ALL NECESSARY FENCE AND HANDRAIL SHOULD BE INCLUDED IN THE ROADWAY PLANS WHEN APPROPRIATE.
- GRAVITY WALL TYPICAL SECTIONS A, B, AND C HAVE BEEN DESIGNED PER THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION, 2014.

DETAIL FOR RAISING HEADWALL



TYPICAL PIPE PLUG

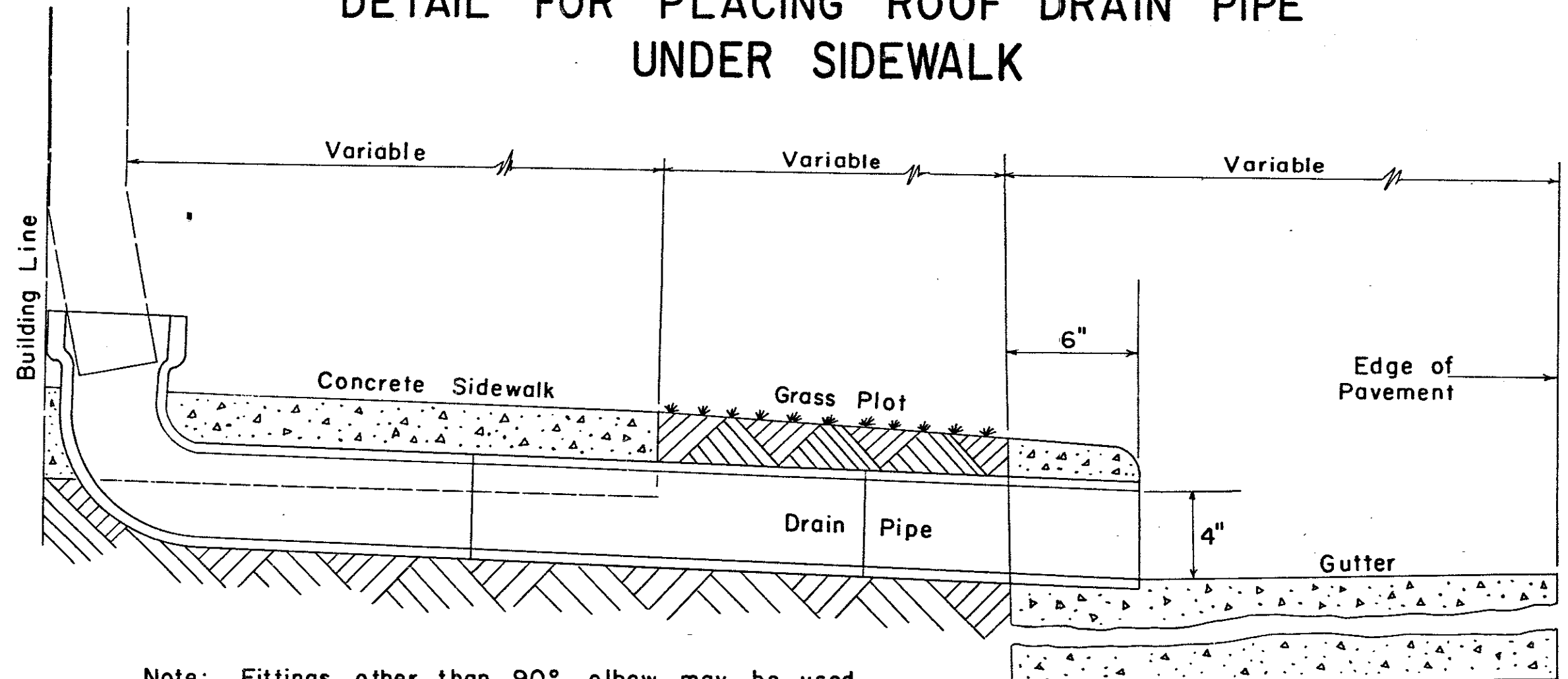


NOTE: PLAN PAY QUANTITIES ARE TO REFLECT PIPE PLUGS AS CU. YDS. OF CL. B CONCRETE. ON CONSTRUCTION PLUGS MAY BE BUILT WITH BRICK MASONRY, MORTAR RUBBLE MASONRY, CL. A CONC., OR CL. B CONC. WITH NO ADJUSTMENT IN PAYMENT MADE FOR ALTERNATES.

D	T (MIN)	PIPE PLUG (CU. YDS.)
12"	8"	0.0194
15"	8"	0.0303
18"	8"	0.0436
24"	8"	0.0776
30"	8"	0.1212
36"	8"	0.1745
42"	8"	0.2376
48"	8"	0.3103
54"	12"	0.5890
60"	12"	0.7272
66"	12"	0.8799
72"	12"	1.0472

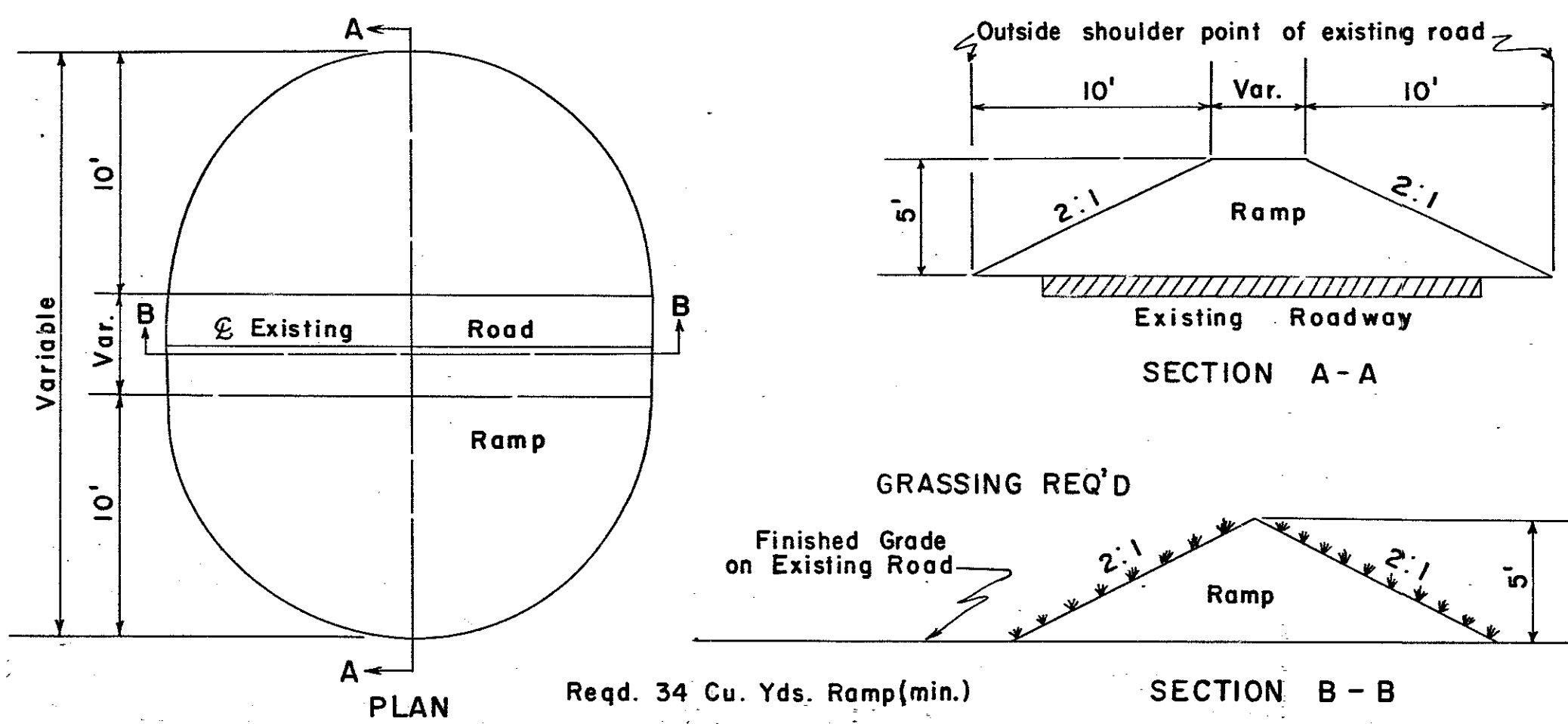
	DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
	REVISION	STANDARD GRAVITY WALL TYPICAL SECTIONS, RAISING HEADWALL, AND TYPICAL PIPE PLUG	
		NO SCALE:	REV. & REDR. SEPT, 2016
	BY	REV. & C.E.W. (SUBMITTED) REDR. STATE ROAD & AIRPORT DESIGN ENGR.	NUMBER 9031L
	CHK.	D.D.E. (APPROVED) STATE HIGHWAY ENGINEER	SHEET 1 OF 2

DETAIL FOR PLACING ROOF DRAIN PIPE UNDER SIDEWALK



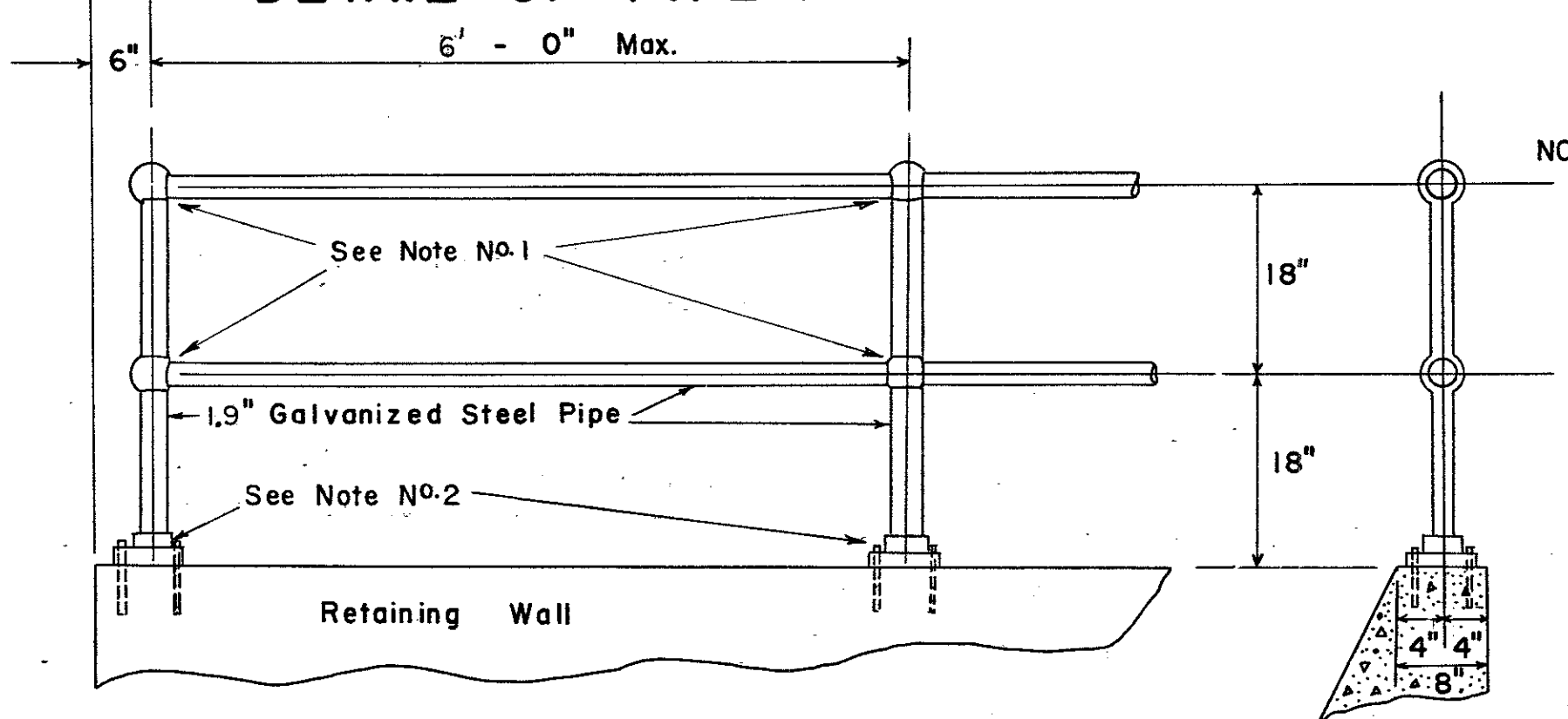
Note: Fittings other than 90° elbow may be used to satisfy other conditions.

DETAIL OF RAMP TYPE BARRICADE



NOTE: Materials and construction to be in accordance with Standard Specifications

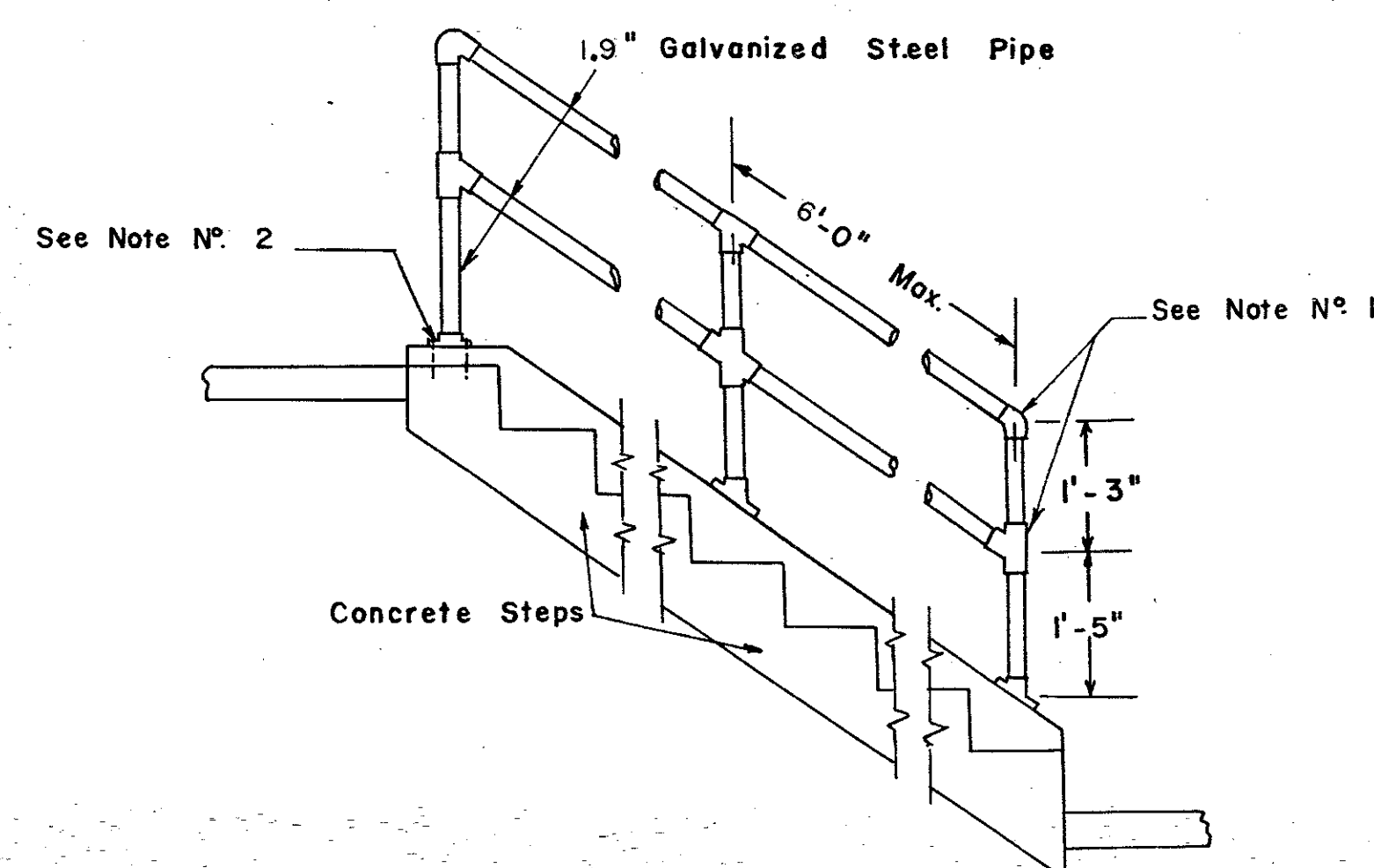
DETAIL OF PIPE HANDRAIL FOR RETAINING WALL



NOTE: If wall is long, and expansion and contraction joints are used in the wall, slip joints are to be provided for in that section of handrailing over the expansion or contraction joint. Stripping the threads in the part of the ball fittings where required to form a slip joint will be permitted.

NOTE: Pipe, pipe fittings, floor flanges and bolts shall be of an approved standard type.

DETAIL OF PIPE HANDRAIL FOR CONCRETE STEPS

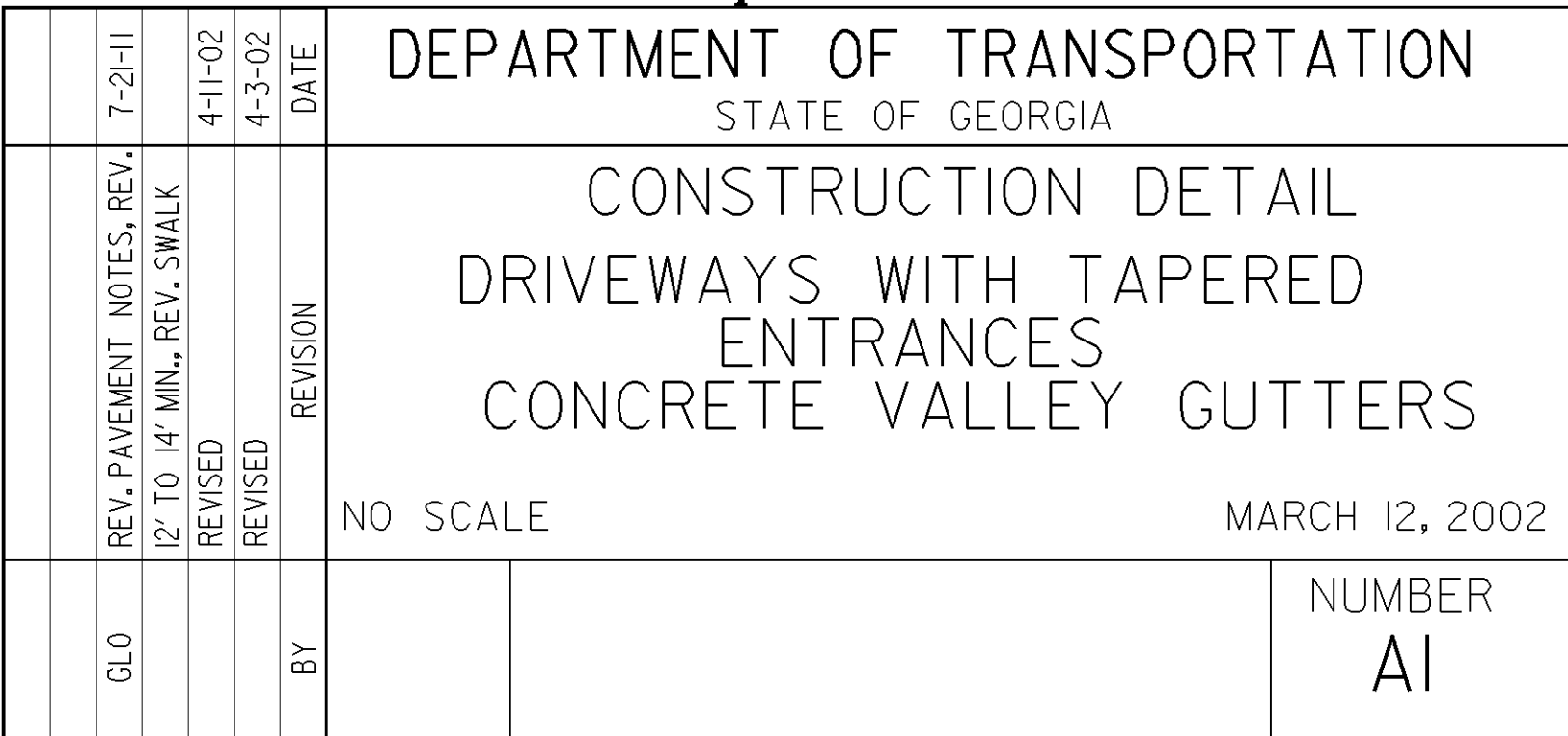


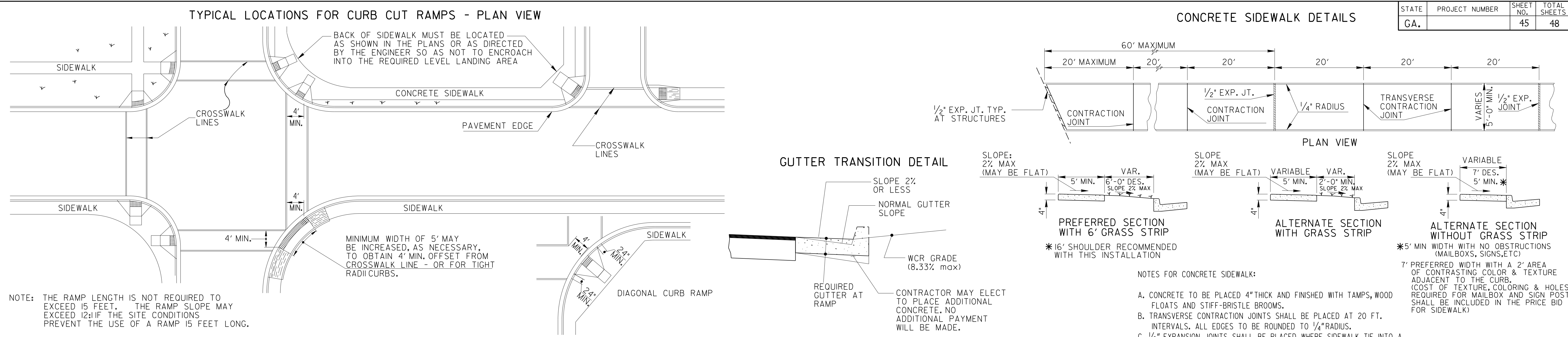
NOTE: PIPE, FITTINGS, FLANGES AND BOLTS SHALL BE OF AN APPROVED STANDARD TYPE.

NOTES FOR PIPE HANDRAILING

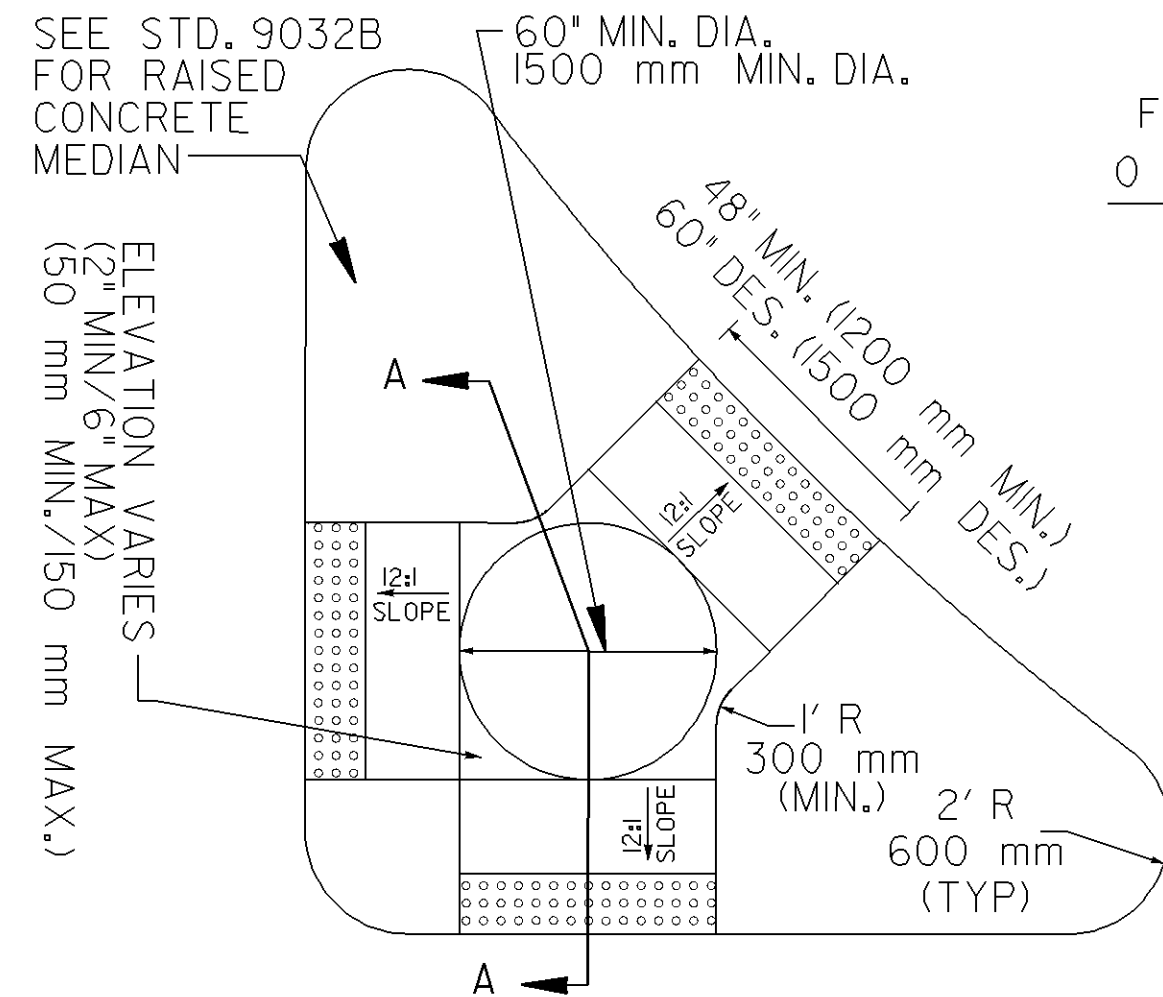
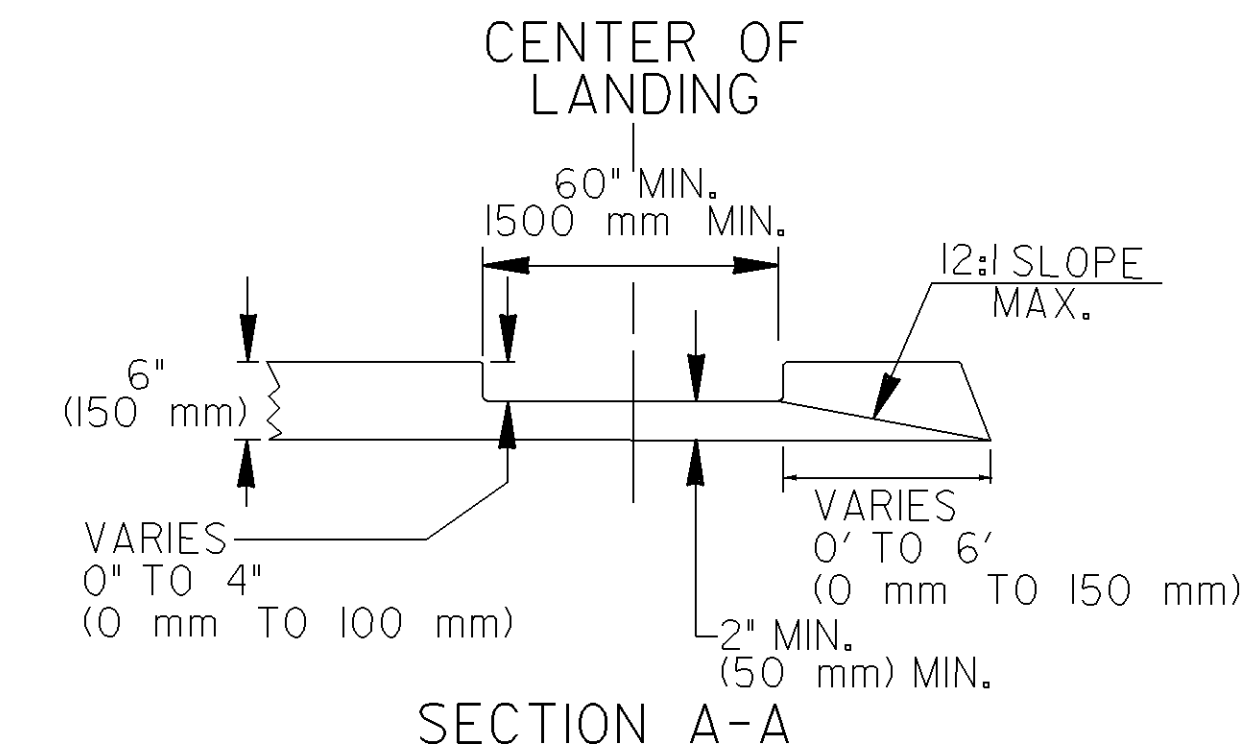
1. JOINTS —
 - a.) Standard or Special galvanized steel or galvanized iron fittings may be used at joints (as shown).
 - OR —
 - b.) Joints may be welded. If welded, all exposed joints shall be finished by grinding or filling to give a neat appearance. All damage to galvanizing shall be repaired in accordance with the Ga. Standard Specifications.
2. FOOTINGS —
 - a.) Post may be anchored with 2 1/2" x 6 1/2" galvanized Floor Flanges with 4 - 1/2 x 9" galvanized bolts (as shown).
 - OR —
 - b.) Post may be grouted in 6" deep, 3" diam. hole. Total length of post will be 6" greater than that in details to give some useable height as if Floor Flanges were used.
3. 1.9" (galv. steel pipe) denotes O.D. for rail sections. 1.D. = 1 1/2".

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA STANDARD CONSTRUCTION DETAILS PLACING ROOF DRAIN PIPE UNDER SIDEWALK RAMP TYPE BARRICADE PIPE HANDRAIL FOR RETAINING WALL PIPE HANDRAIL FOR CONCRETE STEPS NO SCALE REVISED: FEB., 1966		NUMBER 9031R
DESIGNED: _____ DRAWN: A.V.S. TRACED: A.V.S. CHECKED: R.B.S.	SUBMITTED: _____ STATE ROAD DESIGN ENGINEER APPROVED: _____ STATE HIGHWAY ENGINEER	

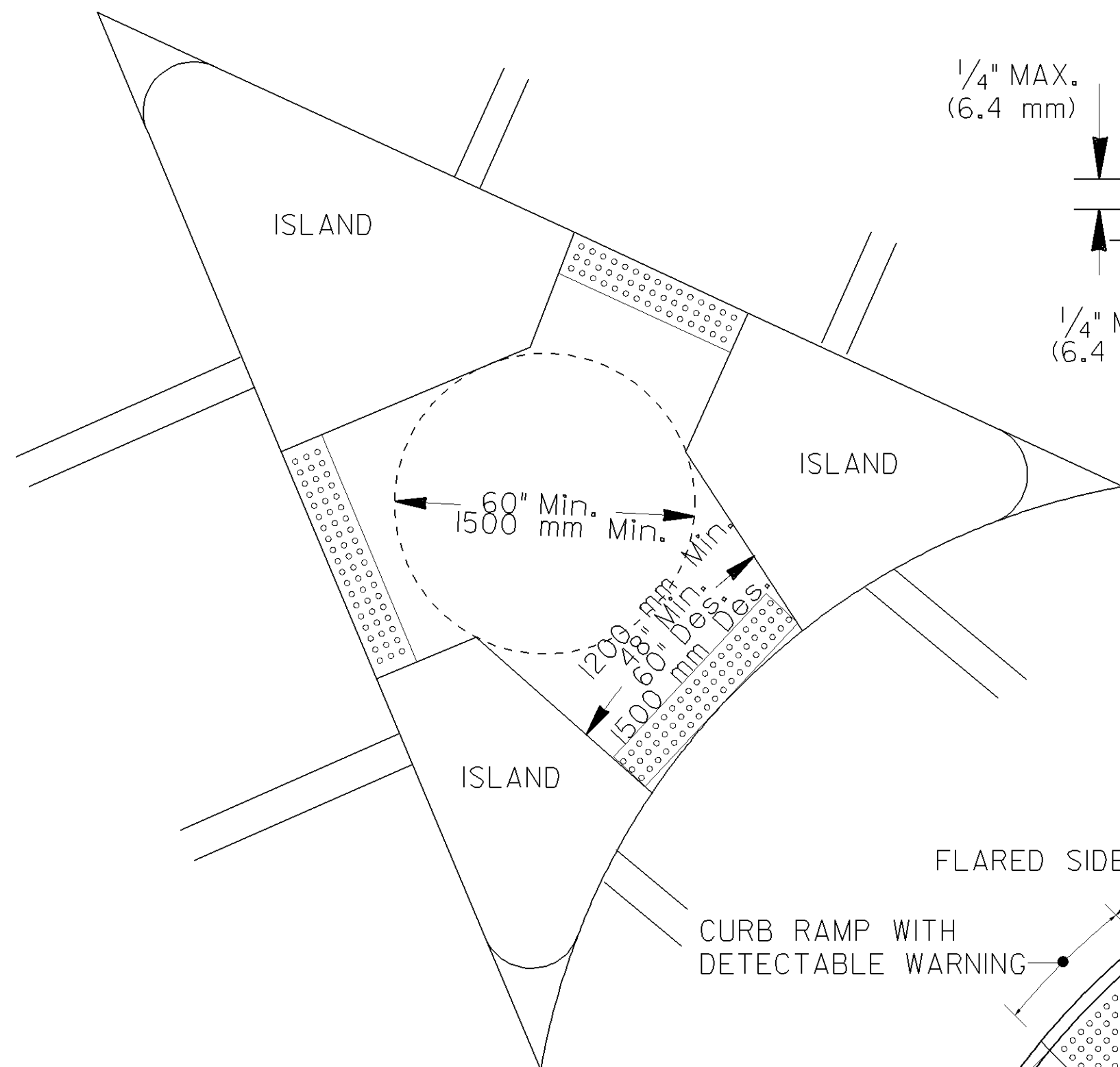




STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.		46	48

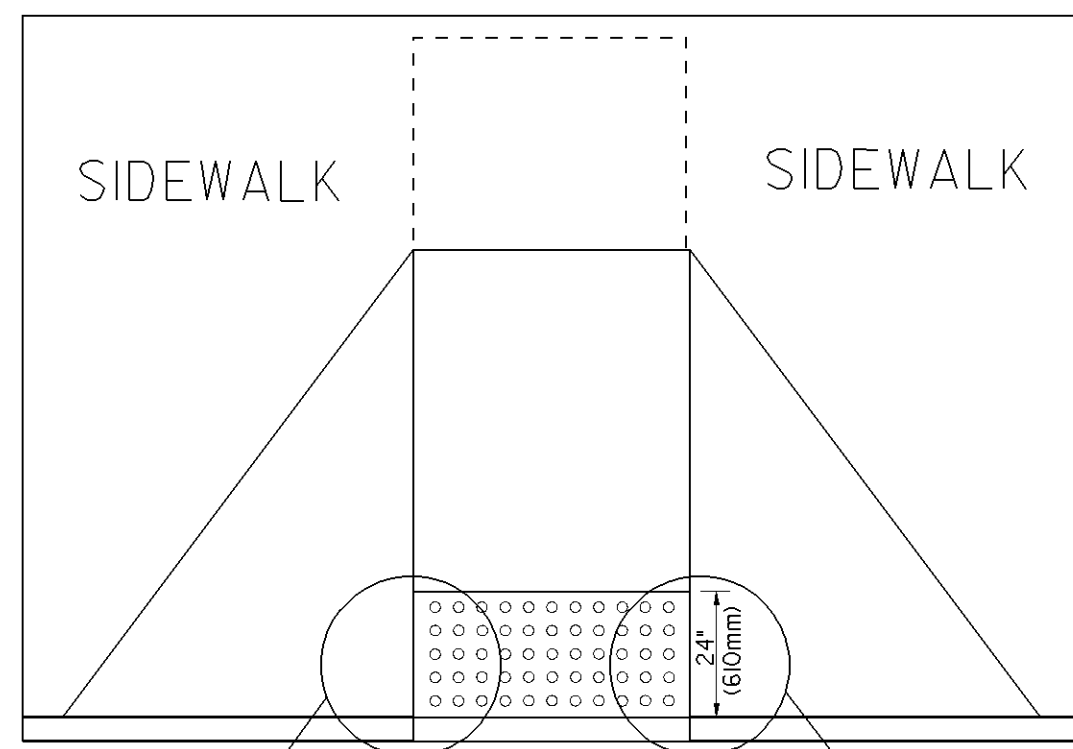


CONCRETE ISLAND WITH ELEVATED CUT THROUGH



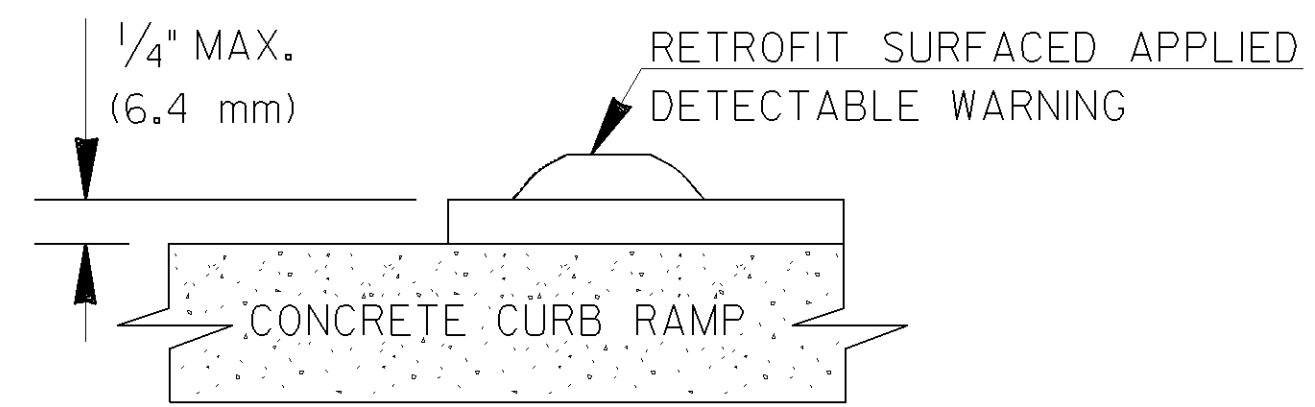
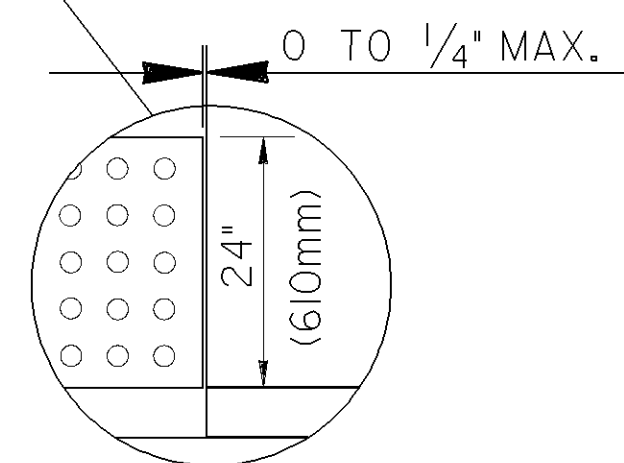
NO SEPARATE PAYMENT WILL BE MADE FOR THE DETECTABLE WARNINGS. THE COST SHALL BE INCLUDED IN THE PRICE BID FOR SIDEWALK (OR CURB CUT RAMP IF THE ITEM IS INCLUDED IN THE PROPOSAL).

FOR CUT-THRU ISLANDS AND EXISTING RAMPS, WHERE NO SIDEWALK OR CURB CUT RAMPS ARE IN THE PROPOSAL, THE COST OF THE DETECTABLE WARNINGS SHALL BE INCLUDED IN THE OVERALL BID PRICE SUBMITTED.



FLARED SIDE
0 TO 1/4" MAX.

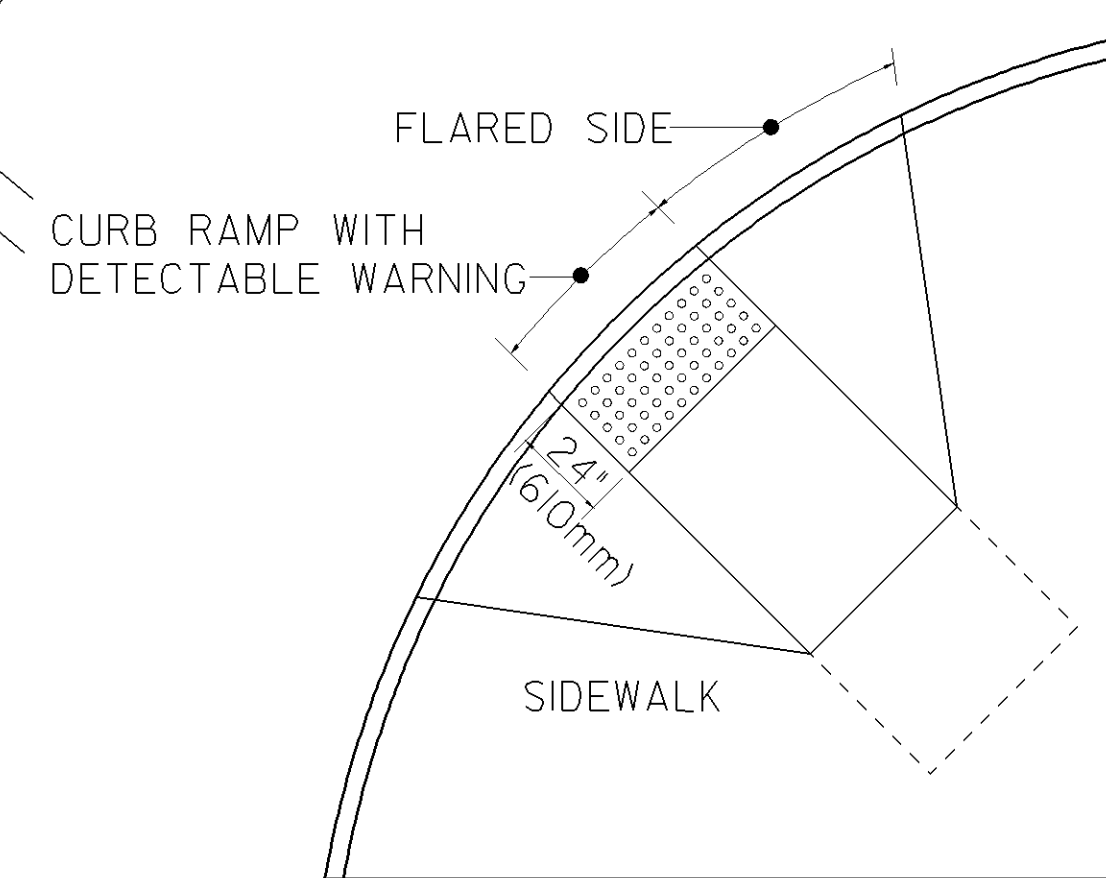
CURB RAMP
WITH DETECTABLE
WARNING



1/4" MAX.
(6.4 mm)

1/4" MAX.
(6.4 mm)

1/2" MAX.
(13 mm)



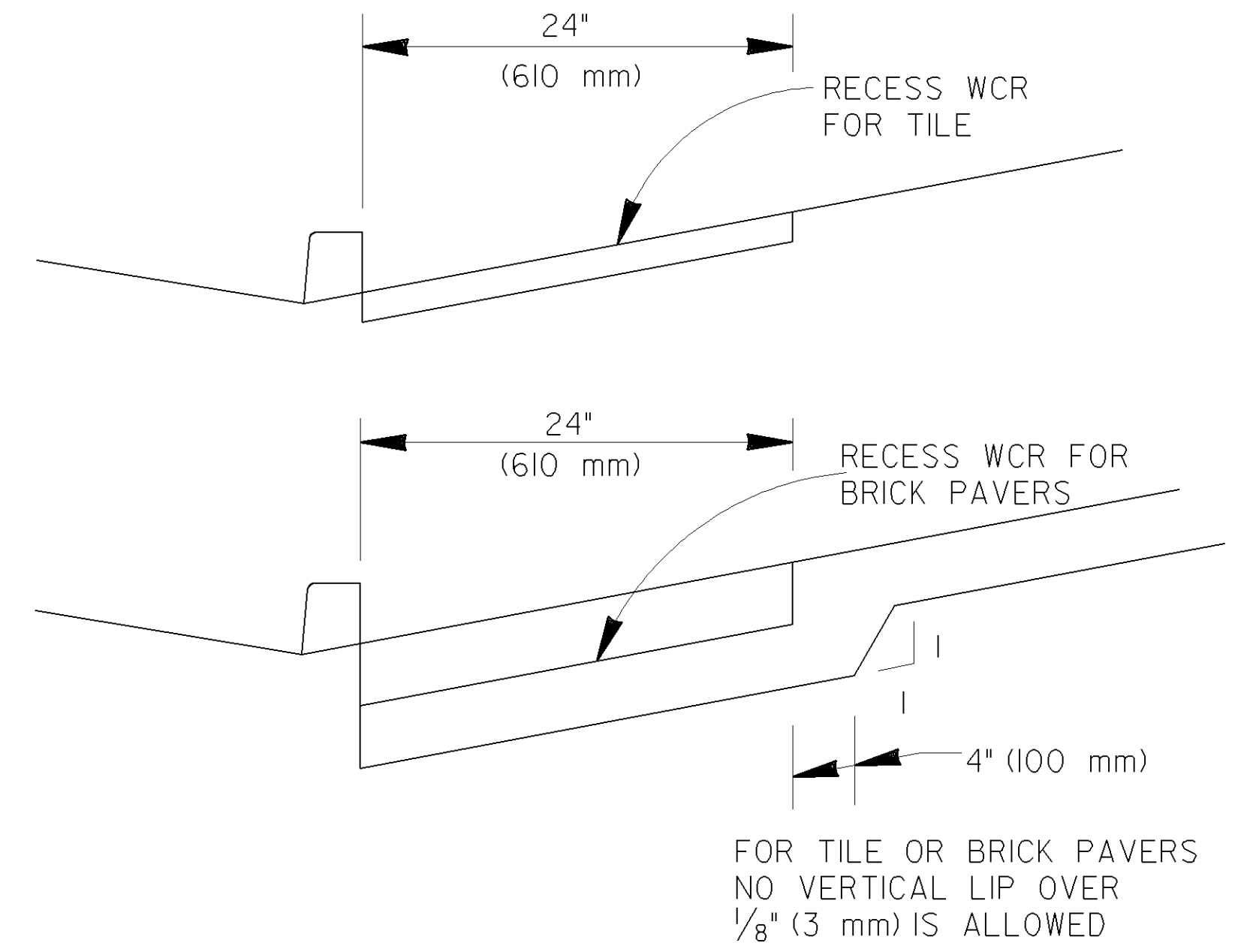
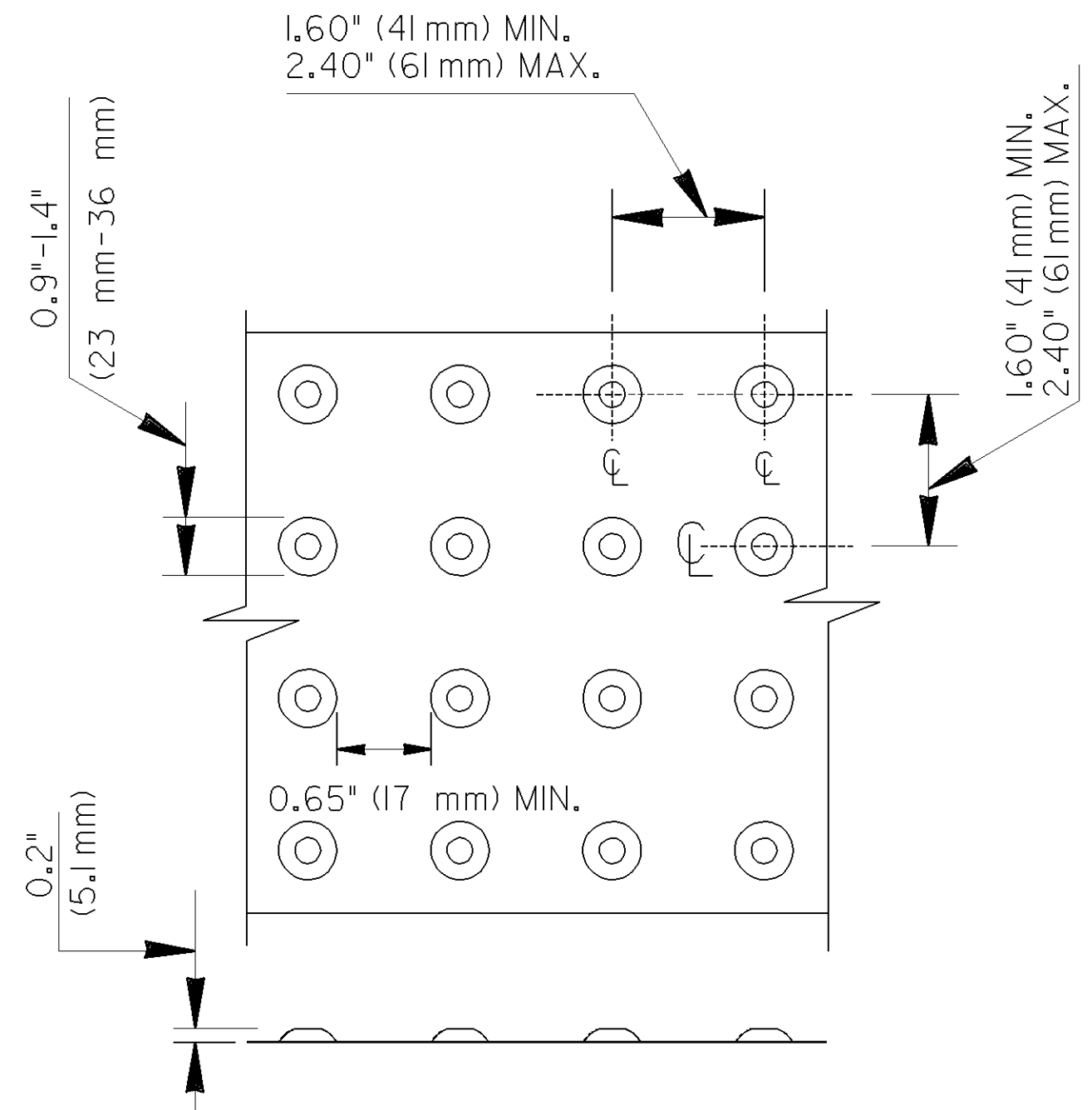
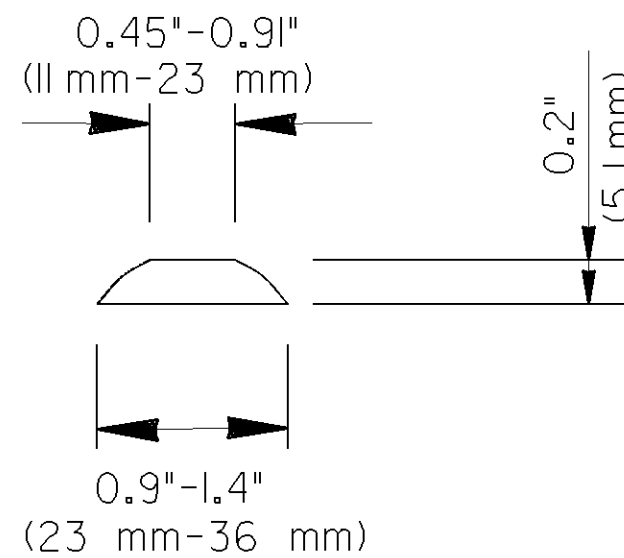
DETAIL FOR DETECTABLE WARNING AT CUT-THRU CONCRETE ISLAND

SIZE: DETECTABLE WARNINGS SHALL BE 24 INCHES (610 mm) IN THE DIRECTION OF PEDESTRAIN TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE.

LOCATION: THE DETECTABLE WARNING SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE OR OTHER POTENTIAL HAZARD IS 6 TO 8 INCHES (150 mm to 180 mm) FROM THE CURB LINE OR OTHER POTENTIAL HAZARD, SUCH AS A REFLECTIVE POOL EDGE OR THE DYNAMIC ENVELOPE OF RAIL OPERATIONS.

DOMES SIZE AND SPACING: TRUNCATED DOMES SHALL HAVE A BASE DIAMETER OF 0.9 INCH TO 1.4 INCH (23 mm-36 mm) AT THE BOTTOM, A DIAMETER OF 0.45 INCH TO 0.9 INCH (11 mm-23 mm) AT THE TOP, THE TOP DIAMETER SHALL BE A MINIMUM OF 50% AND A MAXIMUM OF 65% OF THE BASE DIAMETER, A HEIGHT OF 0.2 INCH (5.1 mm) AND A CENTER-TO-CENTER SPACING OF 2.40 INCHES (61 mm) DESIRABLE 1.60 INCHES (41 mm) MINIMUM MEASURED ALONG ONE SIDE OF A SQUARE ARRANGEMENT. DOMES SHALL HAVE A SQUARE ARRANGEMENT. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.

VISUAL CONTRAST: DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH THE ADJACENT WALKING SURFACE EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT. THE MATERIAL USED TO PROVIDE VISUAL CONTRAST SHALL BE AN INTEGRAL PART OF THE DETECTABLE WARNING SURFACE.



MATERIALS:

NEW CONSTRUCTION

THE DETECTABLE WARNINGS SHALL BE MADE OF MATERIALS SPECIFIED ON QPL 87.

RETROFIT OF EXISTING RAMPS

SURFACED APPLIED MATERIALS WILL ONLY BE APPROVED TO BE USED ON EXISTING WHEELCHAIR RAMPS.

INSTALLATION:

BRICK PAVERS SHALL BE SET IN A WET MORTAR BED. THE BED SHALL BE PLACED ON CONCRETE. THE CONCRETE SHALL BE A MINIMUM OF 4" THICK.

CERAMIC TILE SHALL BE EPOXIED IN PLACE OR SET IN A WET MORTAR BED. MANUFACTURER RECOMMEND ADHESIVE OR FASTENER SHALL BE USED IN THE INSTALLATION.

ALL OTHER MATERIALS SHALL BE INSTALLED ACCORDING TO MANUFACTURES DETAILS OR INSTRUCTION.

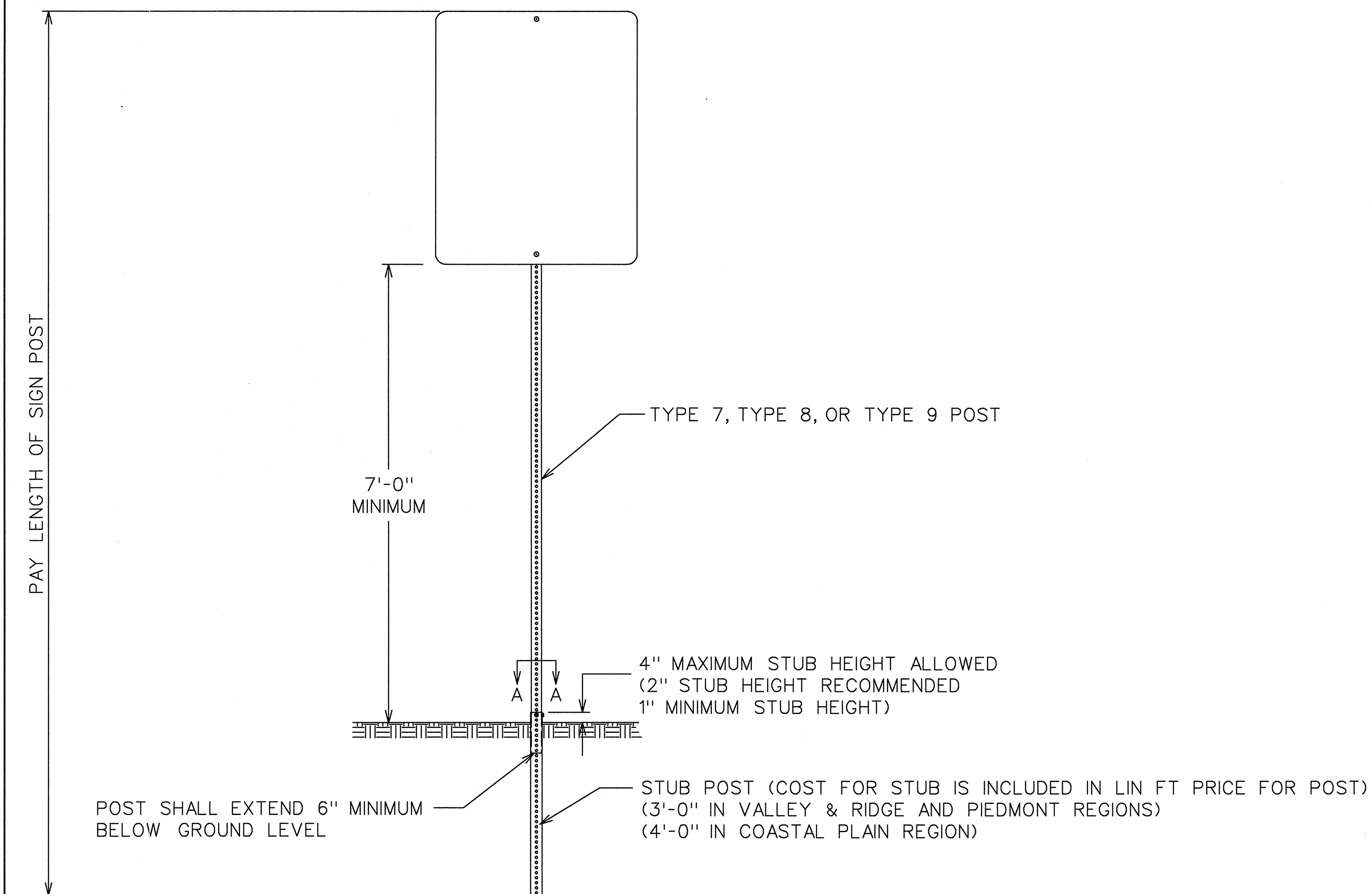
GENERAL NOTES:

RETROFIT SURFACED APPLIED MATERIALS ONLY:

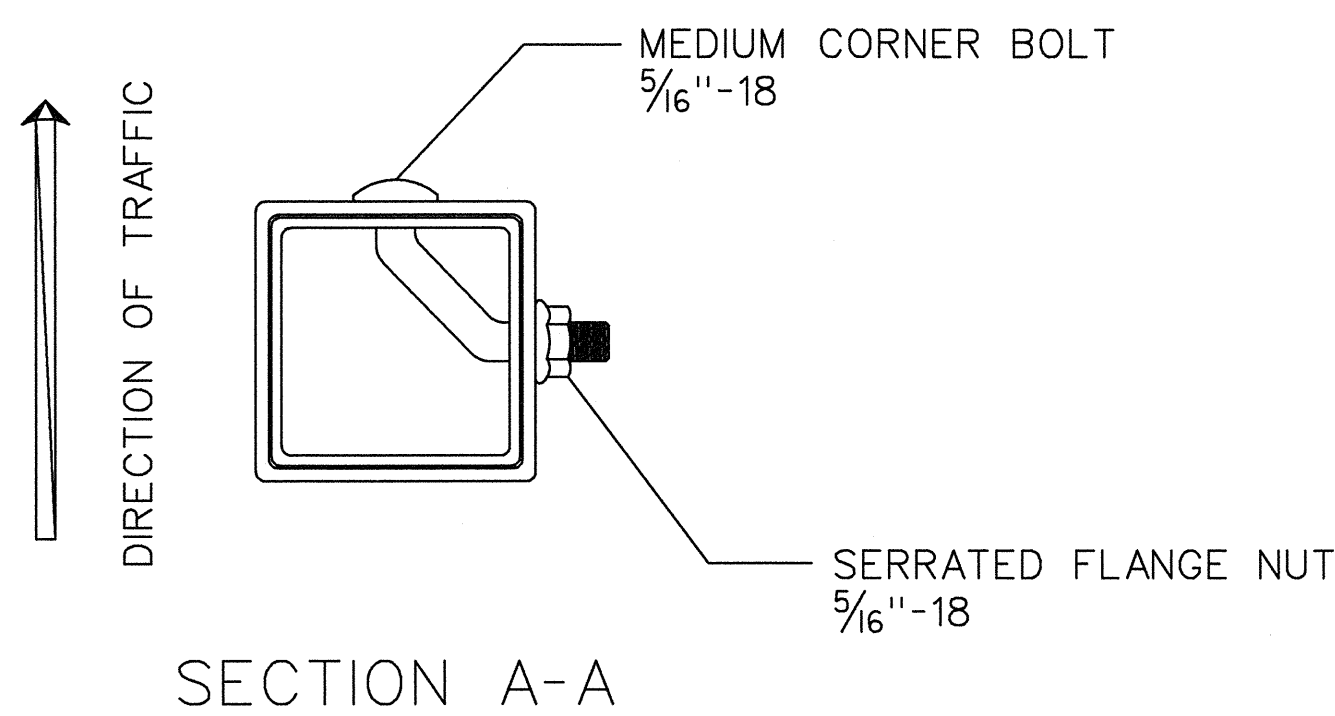
- CHANGES IN LEVEL OF 1/4" (6.4 mm) HIGH MAXIMUM SHALL BE PERMITTED VERTICALLY ON SURFACED APPLIED MATERIALS.
- CHANGES IN LEVEL BETWEEN 1/4" (6.4 mm) HIGH MINIMUM AND 1/2" (13 mm) HIGH MAXIMUM SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 2:1.

6-18-09	10-2-06	5-10-06	11-14-02	7-29-02	DATE	DEPARTMENT OF TRANSPORTATION	
						STATE OF GEORGIA	
						SPECIAL DETAIL	
						DETECTABLE WARNING SURFACE TRUNCATED DOME SIZE, SPACING AND ALIGNMENT REQUIREMENTS	
						NO SCALE	
						MARCH 12, 2002	
GLO	ADDED RETROFIT DETAIL AND ADDED ALT. RAMP DETAIL AND GEN. NOTES	GLO	ADDED TOLERANCE TO DTL.	GLO	REVISED TRUNCATED DOMES AND NOTES.	BY	NUMBER
							A4

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.		47	48



POST	STUB SIZE
TYPE 7	2 1/4" x 2 1/4"
TYPE 8	2 3/4" x 2 3/4"
TYPE 9	2 1/2" x 2 1/2"



SIGN POST SELECTION CHART

70 MPH Wind Load Chart + 15% Gust Factor

Sign Centroid	SLIP BASE NOT REQUIRED				GROUND MOUNTED BREAKAWAY SIGN SUPPORT REQUIRED				
	TYPE 7 2" 1/4 ga.		TYPE 9 2-1/4" 1/4 ga.	TYPE 8 2-1/2" 1/2 ga.	TYPE 8 2-1/2" 1/2 ga.		TYPE 8 w / TYPE 9 Insert* 2-1/2" 1/2 ga. W / 2-1/4" 1/4 ga.		
	1 Post	2 Post	1 Post	1 Post	2 Post	3 Post	1 Post	2 Post	3 Post
	SQUARE FOOTAGE				SQUARE FOOTAGE				
6'	13.50	27.00	19.25	30.00	60.00	90.00	49.25	98.50	147.75
7'	11.60	23.20	16.50	25.75	51.50	77.25	42.25	84.50	126.75
8'	10.15	20.30	14.45	22.55	45.10	67.65	37.00	74.00	111.00
9'	9.00	18.00	12.85	20.00	40.00	60.00	32.85	65.70	98.55
10'	8.10	16.20	11.55	18.00	36.00	54.00	29.55	59.10	88.65
11'	7.40	14.80	10.50	16.40	32.80	49.20	26.90	53.80	80.70
12'	6.80	13.60	9.65	15.00	30.00	45.00	24.65	49.30	73.95
13'	6.25	12.50	8.90	13.85	27.70	41.55	22.75	45.50	68.25
14'	5.80	11.60	8.25	12.90	25.80	38.70	21.15	42.30	63.45
15'	5.00	10.00	6.45	10.10	20.20	30.30	16.55	33.10	49.65
16'	4.70	9.40	6.05	9.45	18.90	28.35	15.50	31.00	46.50
17'	4.40	8.80	5.70	8.90	17.80	26.70	14.60	29.20	43.80
18'	4.15	8.30	5.40	8.40	16.80	25.20	13.80	27.60	41.40
19'	3.95	7.90	5.10	7.95	15.90	23.85	13.05	26.10	39.15
20'	3.75	7.50	4.85	7.55	15.10	22.65	12.40	24.80	37.20

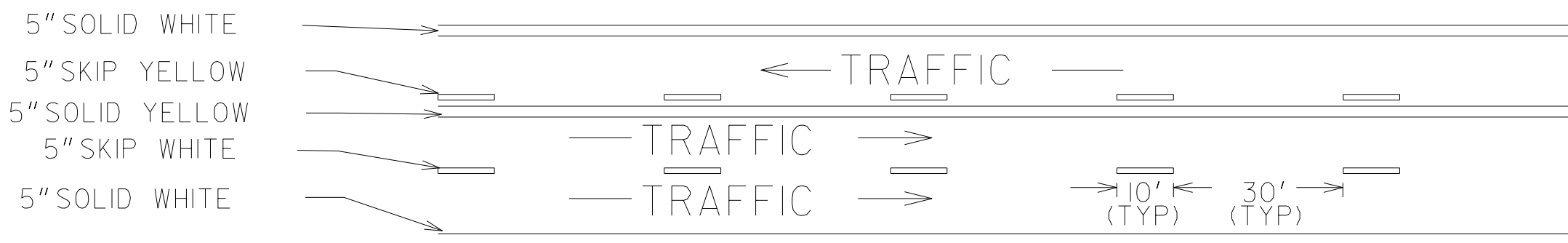
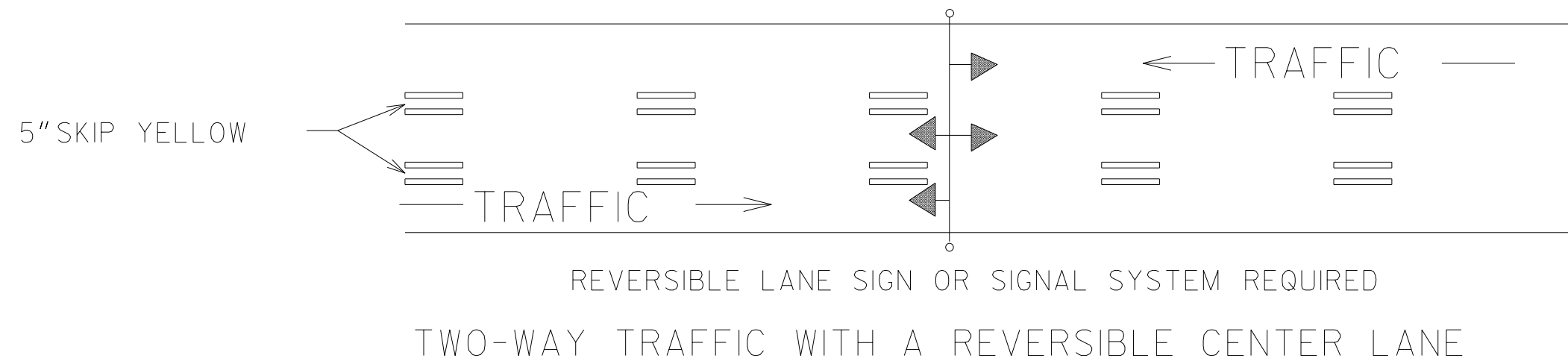
SIGN CENTROID IS DISTANCE FROM GROUND LEVEL TO BOTTOM OF SIGN PLUS HALF THE HEIGHT OF SIGN.
EXAMPLE: 24" X 48" SIGN THAT IS 7 FEET FROM GROUND TO BOTTOM OF SIGN. ADD HALF OF 48" (24" OR 2 FT) PLUS 7 FT. = 9' CENTROID.

SIGN PLATE SHALL NOT EXCEED 48" IN WIDTH ON A SINGLE POST.

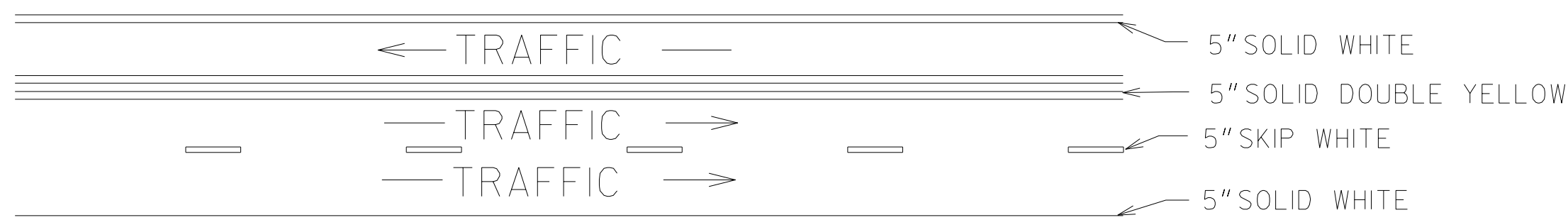
* TYPE 9 INSERT SHALL BE A CONTINUOUS POST INSERTED INTO THE TYPE 8 POST WHERE REQUIRED. THE INSERT POST SHALL EXTEND FROM THE BOTTOM OF THE SLIP BASE UPPER ASSEMBLY TO 4" BELOW THE BOTTOM OF THE SIGN. THE INSERT POST SHALL NOT EXTEND ABOVE THE BOTTOM OF THE SIGN. PAYMENT FOR THE INSERT POST SHALL BE PER LINEAR FOOT OF TYPE 9 POST.

GROUND MOUNTED BREAKAWAY SIGN SUPPORT WILL BE MEASURED AND PAID FOR SEPARATELY. THE COST FOR THIS WORK SHALL INCLUDE THE UPPER AND LOWER ASSEMBLY, STUB POST, CLASS "A" CONCRETE, ALL HARDWARE NECESSARY TO COMPLETE THE INSTALLATION, AND BE INCLUDED IN THE BID PRICE SUBMITTED FOR ITEM 636-3010.

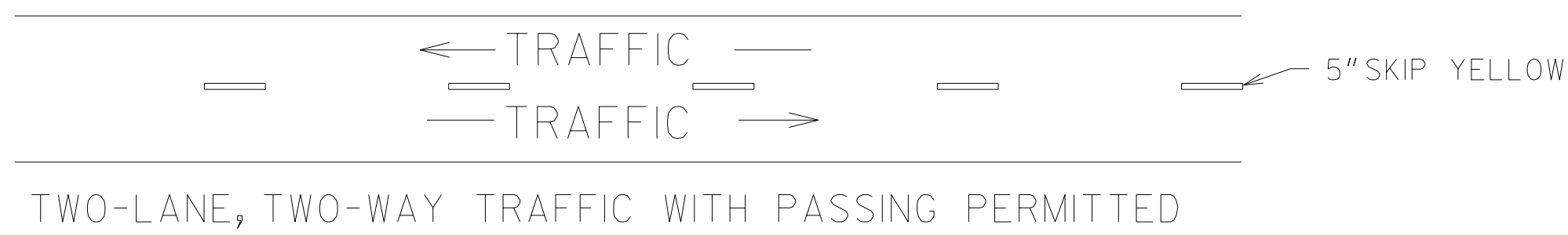
DATE	REVISIONS	GEORGIA DEPARTMENT OF TRANSPORTATION	
		OFFICE OF TRAFFIC SAFETY & DESIGN	
		TYPE 7, 8, AND 9	
		SQUARE TUBE POST	
		INSTALLATION DETAIL	
		NO SCALE	JULY 2002



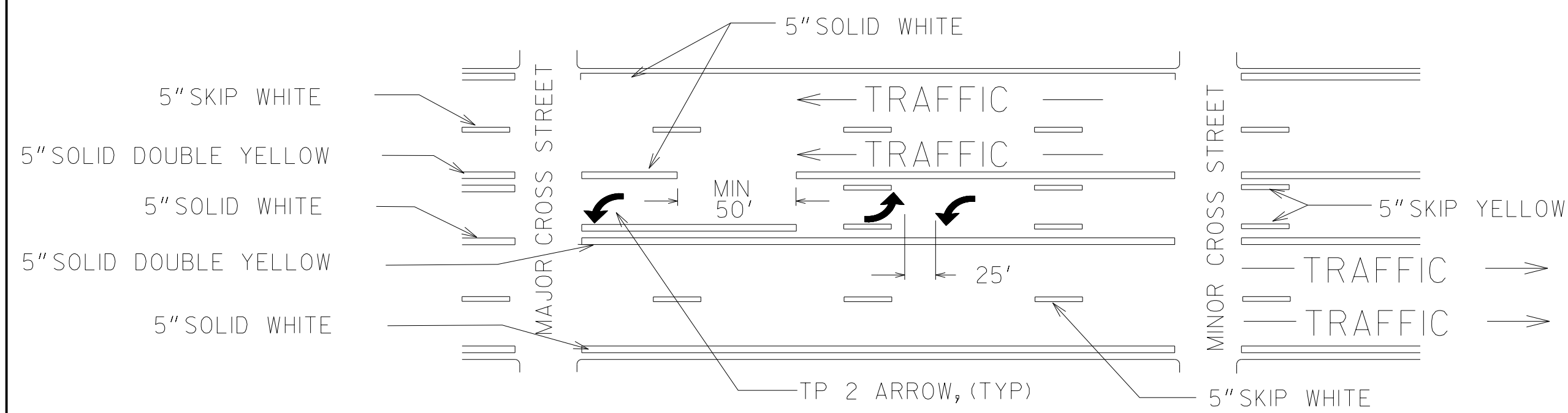
TWO-WAY TRAFFIC WHERE MOTORISTS IN A SINGLE LANE ARE PERMITTED TO PASS



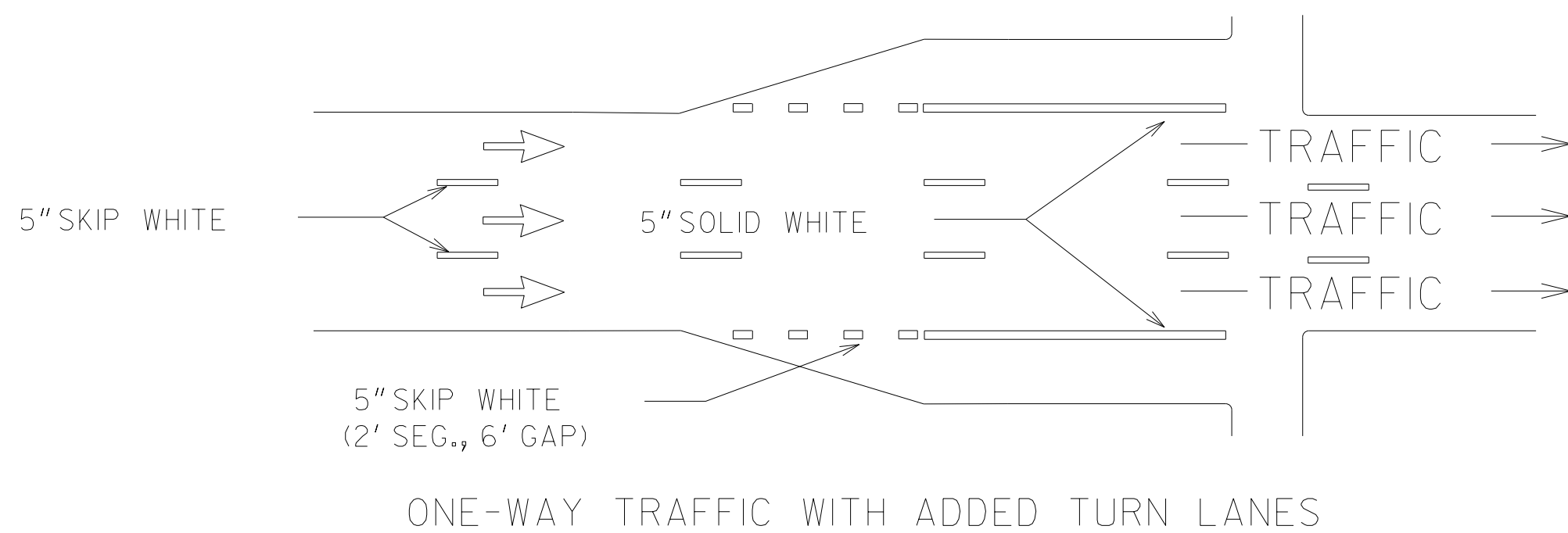
TWO-WAY TRAFFIC WHERE MOTORISTS IN A SINGLE LANE ARE NOT PERMITTED TO PASS



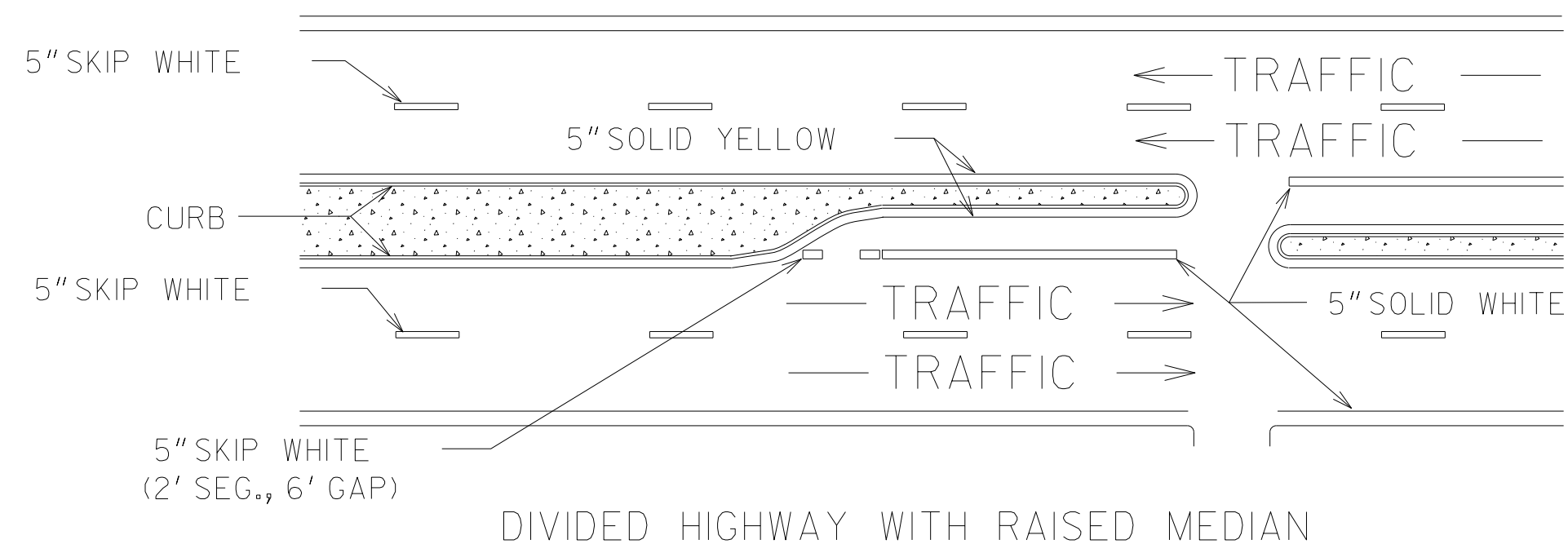
TWO-LANE, TWO-WAY TRAFFIC WITH PASSING PERMITTED



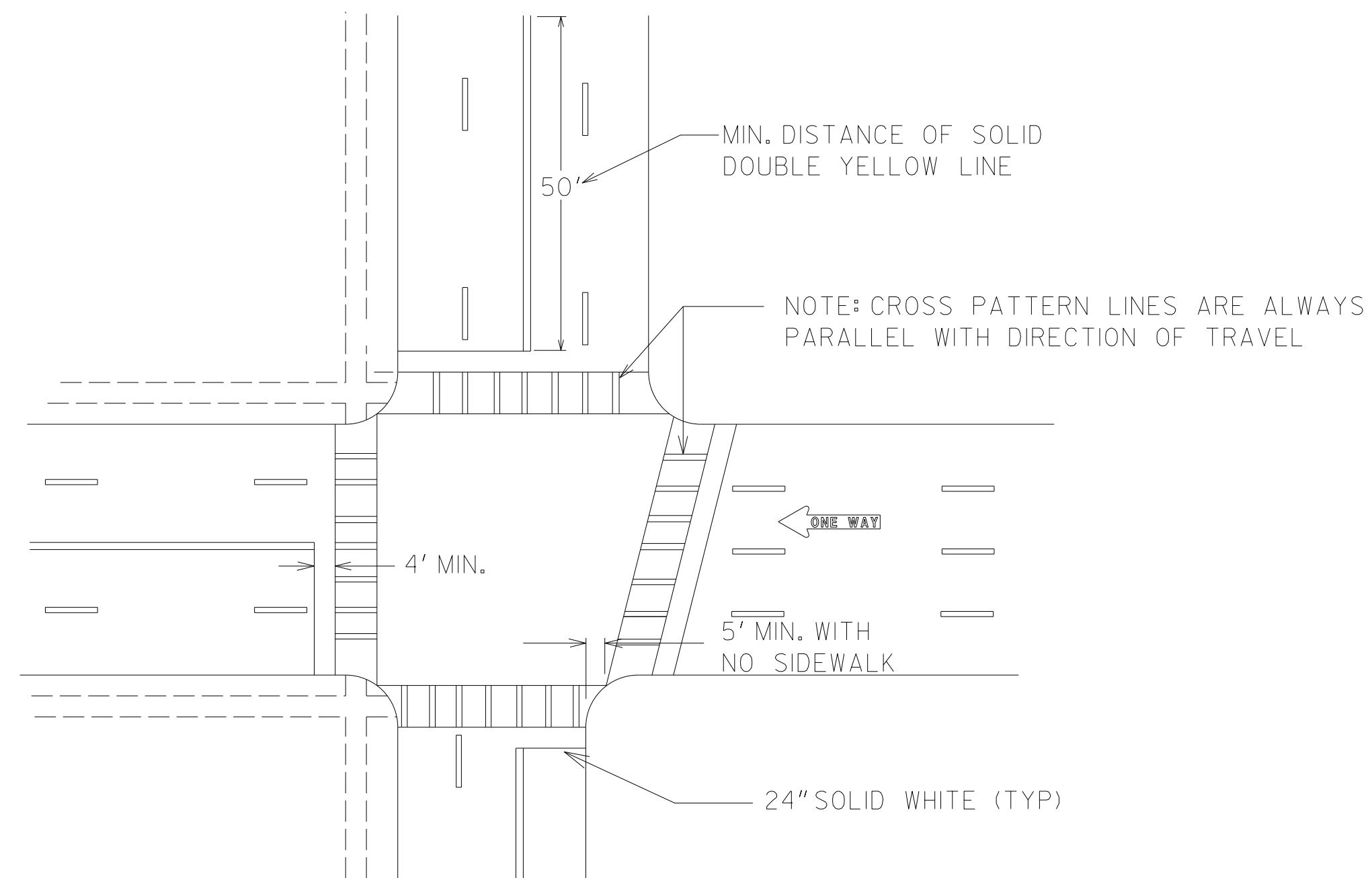
MULTI-LANE, TWO-WAY TRAFFIC WITH SINGLE LANE, TWO-WAY LEFT TURN CHANNELIZATION



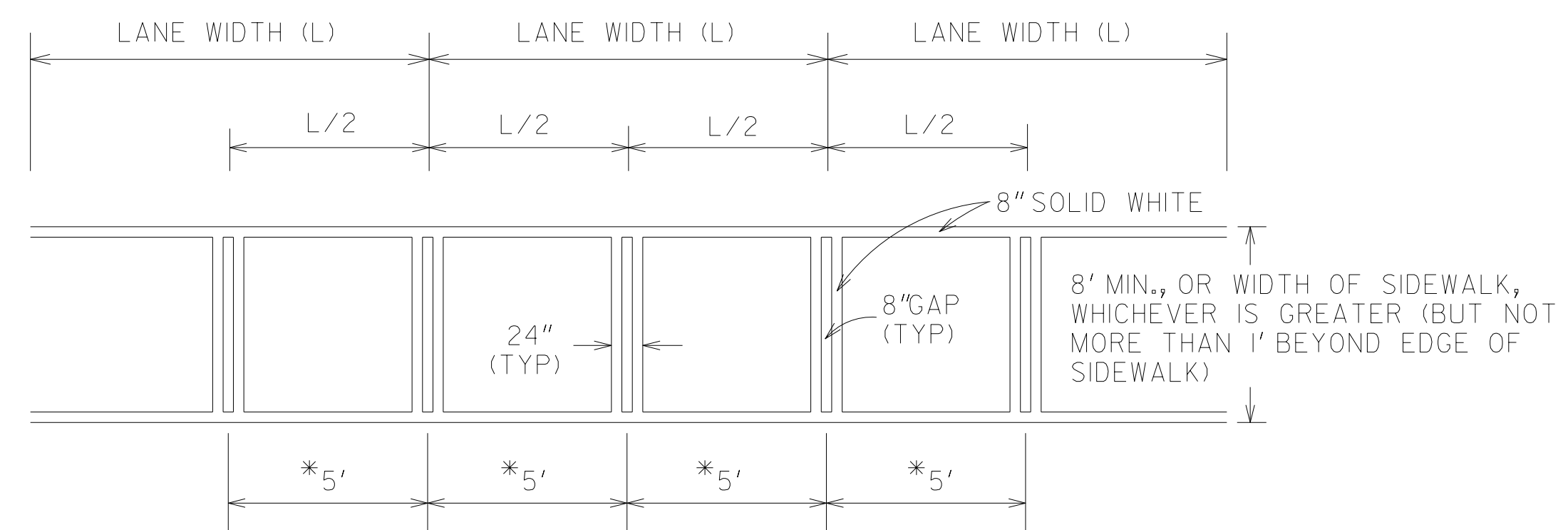
ONE-WAY TRAFFIC WITH ADDED TURN LANES



DIVIDED HIGHWAY WITH RAISED MEDIAN



TYPICAL LOCATION OF CROSSWALKS AND STOP BARS



*USE WHERE THE LANE WIDTH EXCEEDS 12'
OR WHERE LANE LINES HAVE BEEN OMITTED

CROSSWALK DETAIL

GENERAL NOTES:

1. SPACING BETWEEN DOUBLE LINES SHALL BE EQUAL TO THE LINE WIDTH.
2. EDGE LINES SHALL BE PLACED A MINIMUM OF 4 INCHES FROM THE NORMAL EDGE OF PAVEMENT.
3. CONTRAST MARKINGS FOR SKIP STRIPING SHALL BE AS SHOWN IN DETAIL T-IIB.

		9-15-16	DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
		ADDED GENERAL NOTE 3	REVISION	CONSTRUCTION DETAILS PAVEMENT MARKING PLACEMENT NON-LIMITED ACCESS ROADWAY	
				NO SCALE	JANUARY 2000
		CDR	BY	DESIGNED _____ DRAWN _____ TRACED _____ CHECKED _____	NUMBER T-IIA