

CONSTRUCTION PLANS FOR

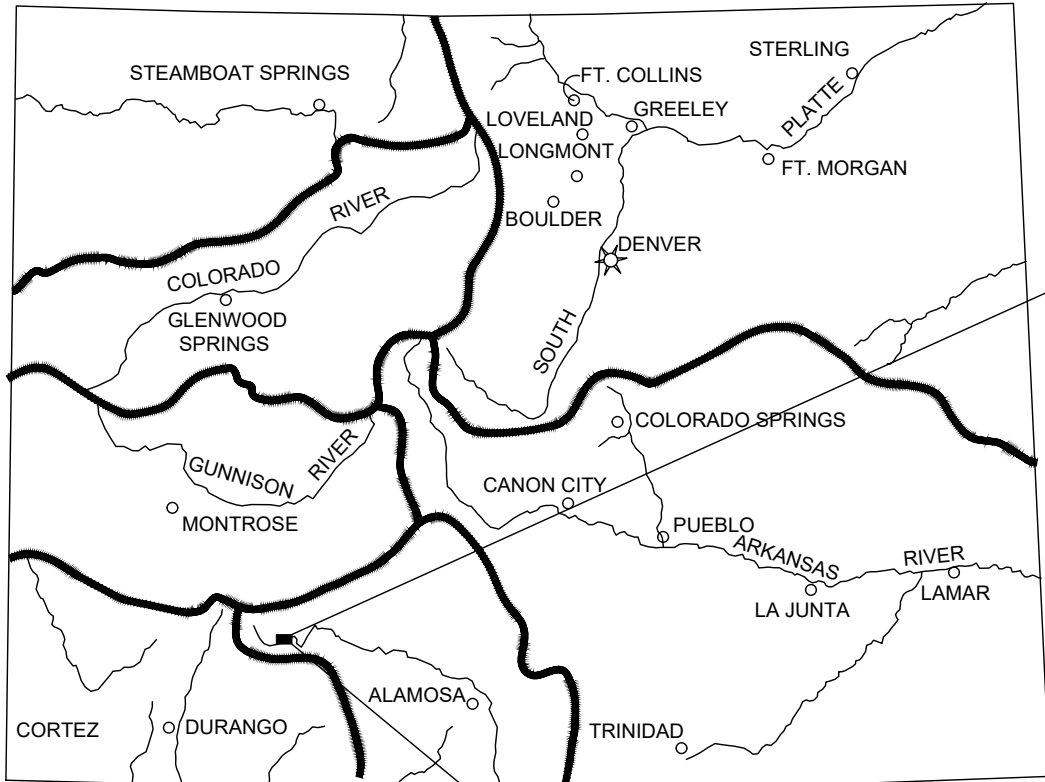
# COMMODORE 5 TUNNEL REHABILITATION SEGMENT 6

MINERAL COUNTY, COLORADO

PREPARED FOR:

TETRA TECH, INC.  
1560 BROADWAY, SUITE 1400  
DENVER, COLORADO 80202

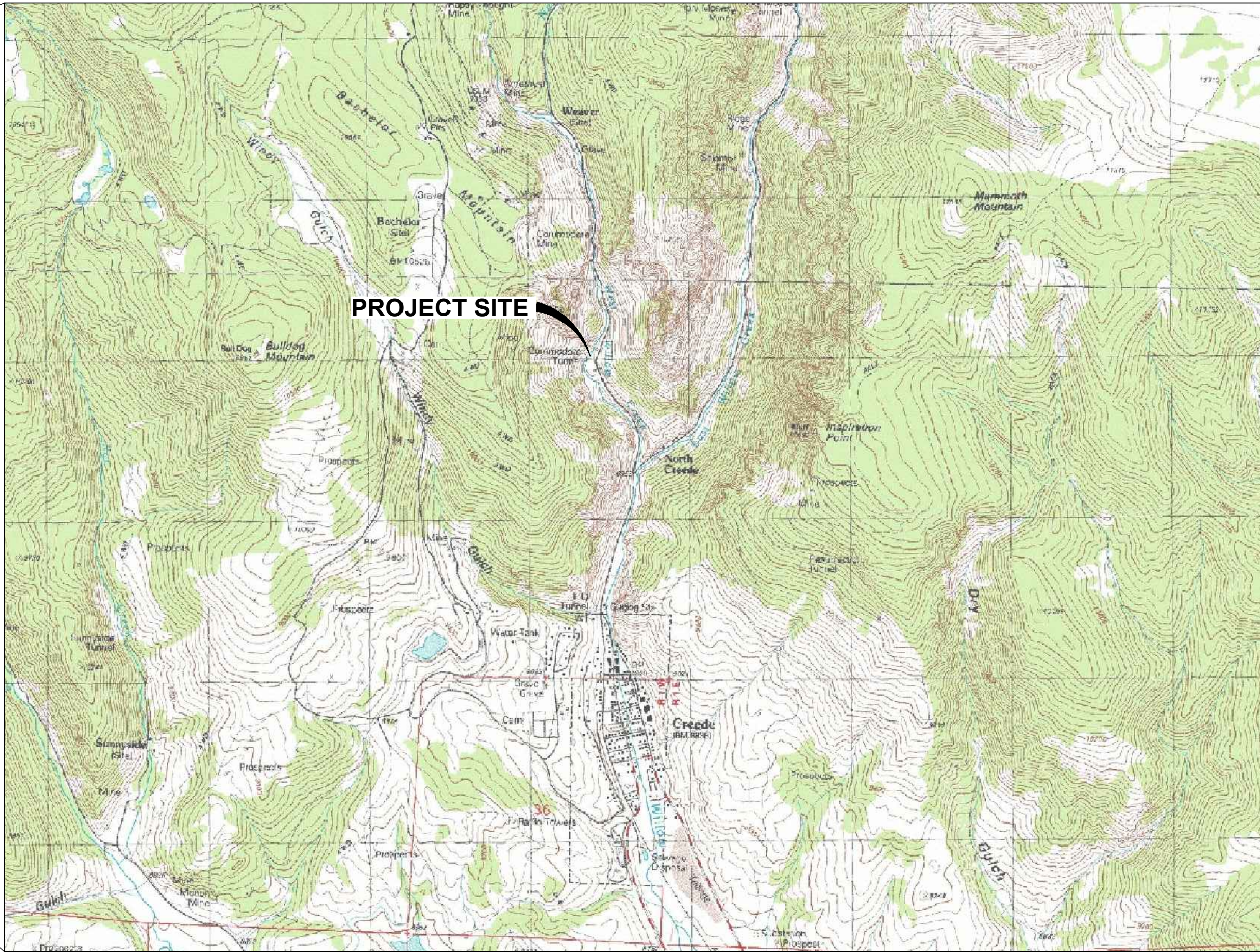
R1W R1E



STATE OF COLORADO  
PROJECT LOCATION MAP

SCALE: NONE

NORTH



PROJECT SITE

T42N

R1W R1E



0 2000' 4000'  
SCALE IN FEET



CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU  
DIG, GRADE, OR EXCAVATE FOR THE MARKING OF  
UNDERGROUND MEMBER UTILITIES.

DEERE & AULT CONSULTANTS, INC. ASSUMES NO  
RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS (HORIZONTAL  
AND VERTICAL). THE EXISTING UTILITIES SHOWN ON THIS  
DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE  
INFORMATION. IT IS, HOWEVER, THE RESPONSIBILITY OF THE  
CONTRACTOR TO FIELD VERIFY THE LOCATION OF ALL UTILITIES  
PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION  
ACTIVITIES.

SHEET INDEX:

- 1 COVER & VICINITY MAP
- 2 PORTAL AREA, EXISTING CONDITIONS AND SURVEY CONTROL
- 3 SEGMENT 6 PLAN VIEW
- 4 SEGMENT 6 PLAN & PROFILE
- 5 SEGMENT 6 PLAN & PROFILE CONTINUED
- 6 SEGMENT 6 STA 52+40 TO 53+90
- 7 SEGMENT 6 STA 53+90 TO 55+40
- 8 SEGMENT 6 STA 55+40 TO 56+90
- 9 SEGMENT 6 STA 56+90 TO 58+40
- 10 SEGMENT 6 STA 58+40 TO 59+90
- 11 SEGMENT 6 STA 59+90 TO 61+40
- 12 SEGMENT 6 STA 61+40 TO 62+90
- 13 SEGMENT 6 STA 62+90 TO 64+40
- 14 SEGMENT 6 STA 64+40 TO 64+90
- 15 SEGMENT 6 STA 64+90 TO 66+40
- 16 SEGMENT 6 STA 66+40 TO 67+90
- 17 SEGMENT 6 STA 67+90 TO 69+40
- 18 SEGMENT 6 STA 69+40 TO 70+90
- 19 SEGMENT 6 STA 70+90 TO 72+40
- 20 SEGMENT 6 STA 72+40 TO 73+90
- 21 SEGMENT 6 STA 73+90 TO 75+40
- 22 SEGMENT 6 STA 75+40 TO 76+90
- 23 SEGMENT 6 STA 76+90 TO 78+40
- 24 ORE CHUTE AREA CROSS SECTIONS
- 25 STRUCTURAL DETAILS
- 26 GENERAL DETAILS
- 27 STEEL SET DETAILS

NOTES:

DEERE AND AULT CONSULTANTS, INC. IS NOT A GUARANTOR OF THE  
PERFORMANCE OF THE WORK.

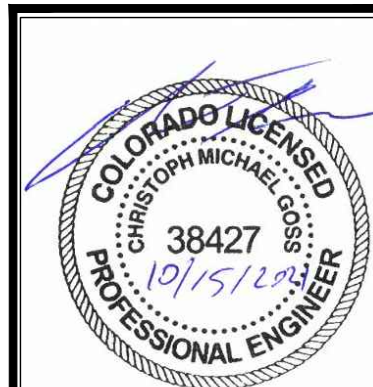
DEERE AND AULT CONSULTANTS, INC. IS NOT RESPONSIBLE FOR SAFETY, IN,  
ON, OR ABOUT THE PROJECT SITE, NOR FOR COMPLIANCE BY THE  
APPROPRIATE PARTY WITH ANY REGULATIONS RELATED THERETO.

DEERE AND AULT CONSULTANTS, INC. EXERCISES NO CONTROL OVER THE  
SAFETY OR ADEQUACY OF ANY EQUIPMENT, BUILDING COMPONENTS,  
FORMS, OR OTHER WORK AIDS USED IN OR ABOUT THE PROJECT, OR OVER  
THE SUPERINTENDING OF THE SAME.

WRITTEN SCALES ON PLAN ARE FOR FULL SIZED 22" x 34" PLANS AND DO  
NOT APPLY TO REDUCED PLAN SETS.

NOTE:

TOWNSHIP & RANGE BASED ON 6TH PRINCIPAL MERIDIAN

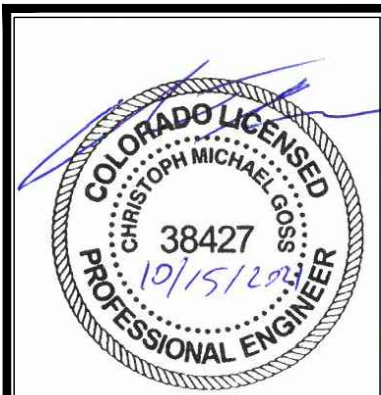
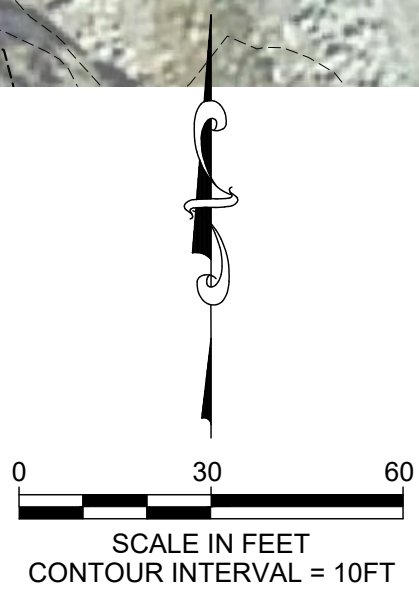


REVISIONS				COMMODORE 5 REHABILITATION SEGMENT 6			
NO.	DESCRIPTION	DATE	BY	COVER & VICINITY MAP			
1	60% PLANS	9/3/21	CMG	<b>DEERE &amp; AULT</b> <small>A SCHNABEL ENGINEERING COMPANY</small>			
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
DESIGNED BY:	CMG	APPROVED BY:	CMG	JOB NO.			
DRAWN BY:	HOG	DATE:	9/30/21	SHEET:			
CHECKED BY:	MWK	SCALE:	AS NOTED	20C26033.04 1 of 27			



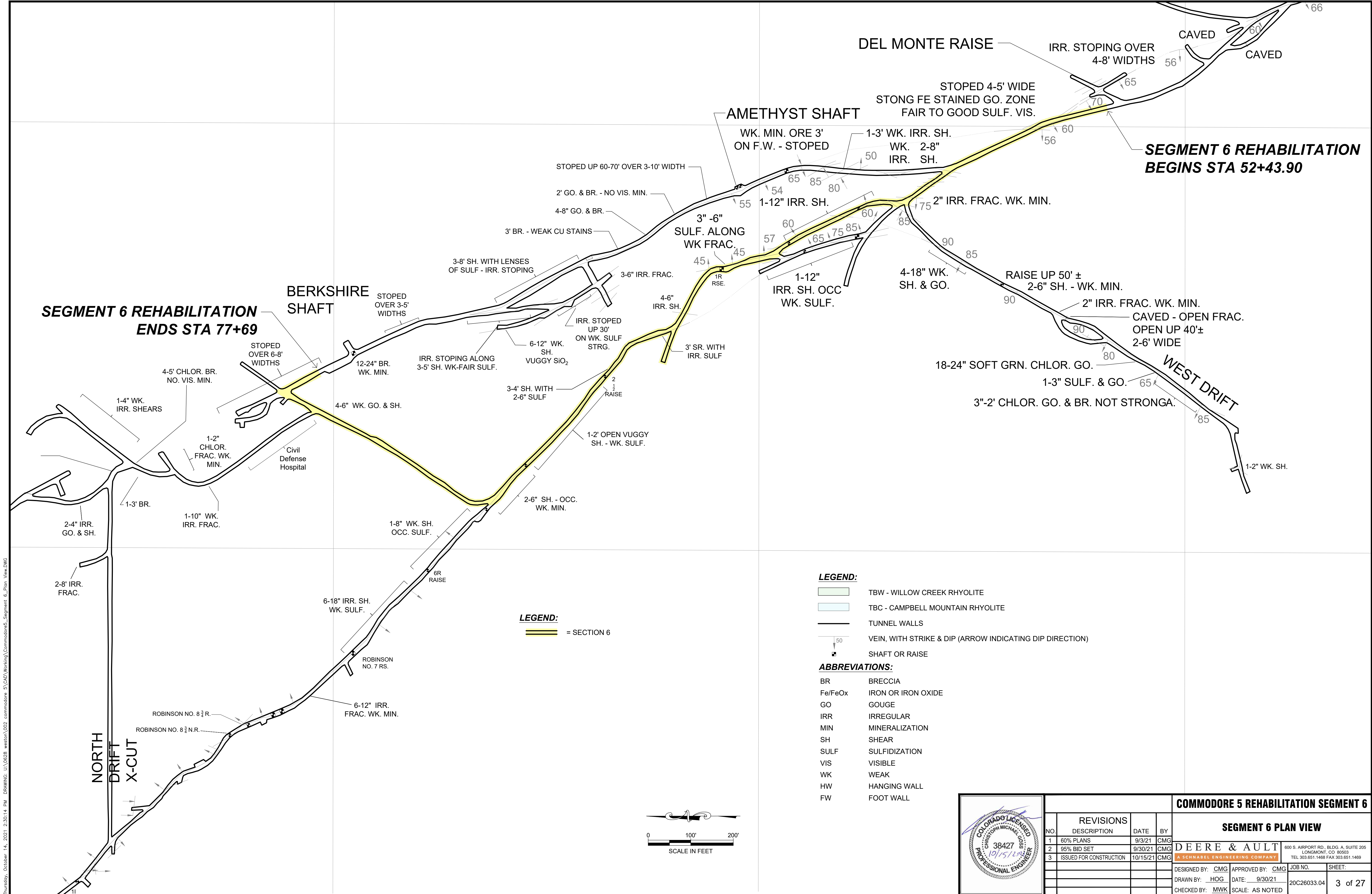


- NOTES:**
1. COMMODORE 5 INVERT (TOP OF RAIL) ELEVATION BY ITC RESOURCES 5/9/2019.
  2. NELSON TUNNEL INVERT ELEVATION BASED ON TOP OF FLUME SURVEYED BY ITC RESOURCES 5/9/2019.
  3. SOURCE OF AERIAL PHOTO: GOOGLE EARTH PRO, IMAGERY DATE 10/13/15
  4. TOPOGRAPHICAL SURVEY MAPPED BY ENVIRONMENTAL RESEARCH, INC. LINDEN, VIRGINIA. DATE OF PHOTOGRAPHY: 5-17-18.
  5. TUNNEL SURVEY POINTS PROVIDED BY ITC RESOURCES, DATED 3-13-19.
  6. HORIZONTAL DATUM IS COLORADO STATE PLANE SOUTH, MODIFIED TO GROUND BY A SCALE FACTOR OF 1.000487327.



REVISIONS				COMMODORE 5 REHABILITATION SEGMENT 6			
NO.	DESCRIPTION	DATE	BY	PORTAL AREA, EXISTING CONDITIONS AND SURVEY CONTROL			
1	60% PLANS	9/3/21	CMG	<div>DEERE &amp; AULT</div> <div>A SCHNABEL ENGINEERING COMPANY</div> <div>DESIGNED BY: CMG    APPROVED BY: CMG</div> <div>DRAWN BY: HOG    DATE: 9/30/21</div> <div>CHECKED BY: MWK    SCALE: AS NOTED</div>			
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
				DESIGNED BY: CMG	APPROVED BY: CMG	JOB NO.	SHEET:
				DRAWN BY: HOG	DATE: 9/30/21	20C26033.04	2 of 27
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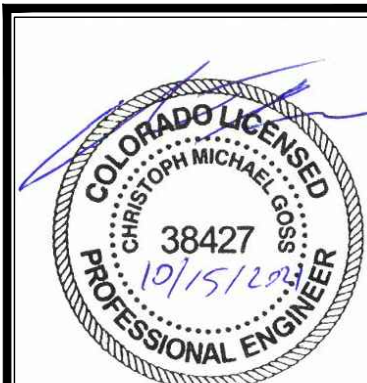
SEGMENT 6 REHABILITATION  
ENDS STA 77+69

SEGMENT 6 REHABILITATION  
BEGINS STA 52+43.90

LEGEND:  
= SECTION 6

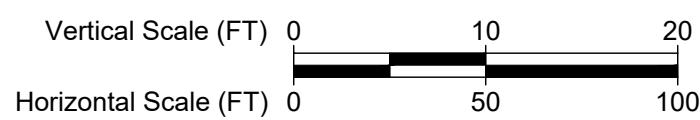
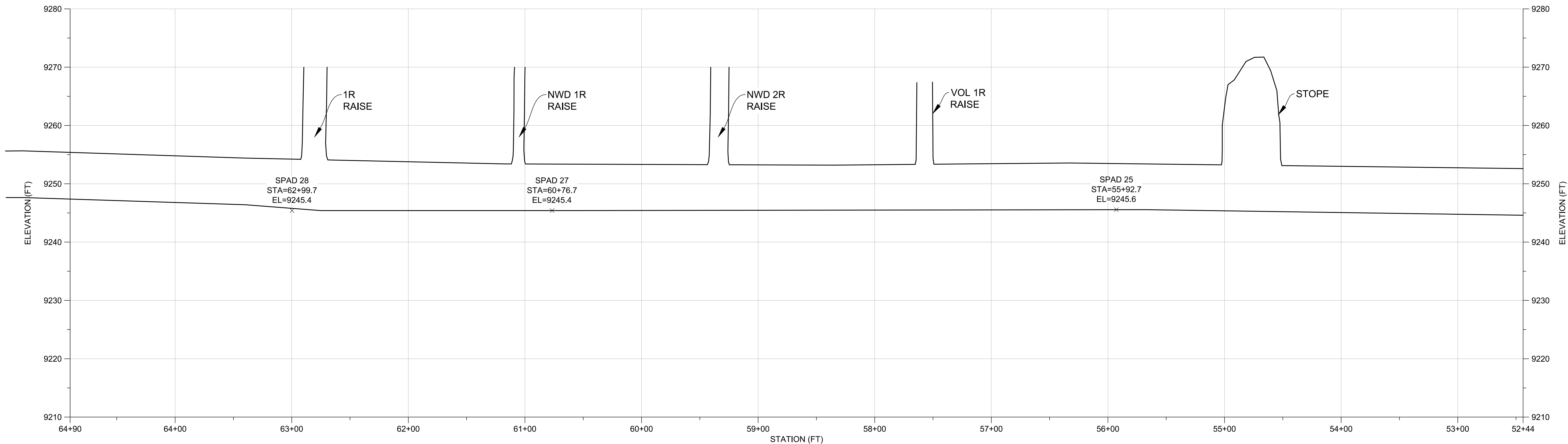
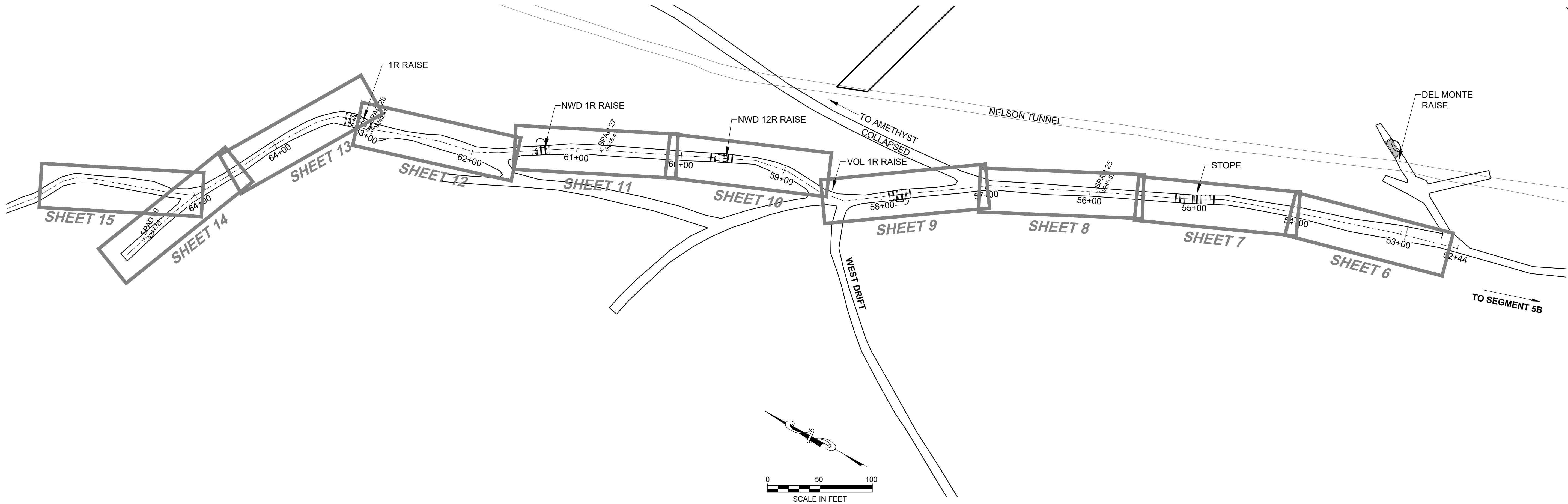
LEGEND:  
TBW - WILLOW CREEK RHYOLITE  
TBC - CAMPBELL MOUNTAIN RHYOLITE  
TUNNEL WALLS  
VEIN, WITH STRIKE & DIP (ARROW INDICATING DIP DIRECTION)  
SHAFT OR RAISE

ABBREVIATIONS:  
BR BRECCIA  
Fe/FeOx IRON OR IRON OXIDE  
GO GOUGE  
IRR IRREGULAR  
MIN MINERALIZATION  
SH SHEAR  
SULF SULFIDIZATION  
VIS VISIBLE  
WK WEAK  
HW HANGING WALL  
FW FOOT WALL

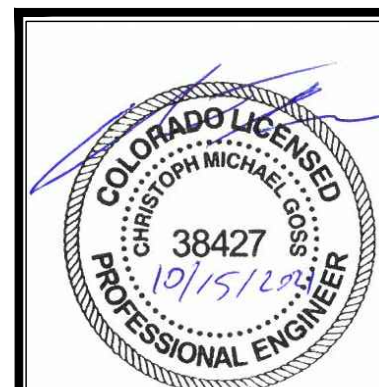


				COMMODORE 5 REHABILITATION SEGMENT 6			
REVISIONS				SEGMENT 6 PLAN VIEW			
NO.	DESCRIPTION	DATE	BY				
1	60% PLANS	9/3/21	CMG				
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
				DEERE & AULT		600 S. AIRPORT RD., BLDG. A, SUITE 205 LONGMONT, CO 80503 TEL. 303.651.1468 FAX 303.651.1469	
				A SCHNABEL ENGINEERING COMPANY			
				DESIGNED BY: CMG	APPROVED BY: CMG	JOB NO.	SHEET:
				DRAWN BY: HOG	DATE: 9/30/21	20C26033.04	3 of 27
				CHECKED BY: MWK	SCALE: AS NOTED		

Thursday, October 14, 2021 2:30:20 PM DRAWING: U:\0628 weston\002 commodore 5\CAD\Working\Commodore5\_Plan\_Segment 6.DWG



- NOTES:**
- HORIZONTAL DATUM IS COLORADO STATE PLANE SOUTH, MODIFIED TO GROUND BY A SCALE FACTOR OF 1.000487327.
  - SPAD ELEVATIONS: DAVIS ENGINEERING 2004 - STATIONS ARE APPROXIMATE.
  - SCALE LOOSE BLOCKS AS NEEDED FOR CONTRACTOR SAFETY.
  - NO BLASTING FOR ENTIRETY OF WORK.



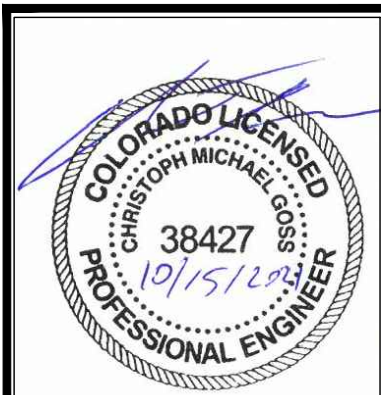
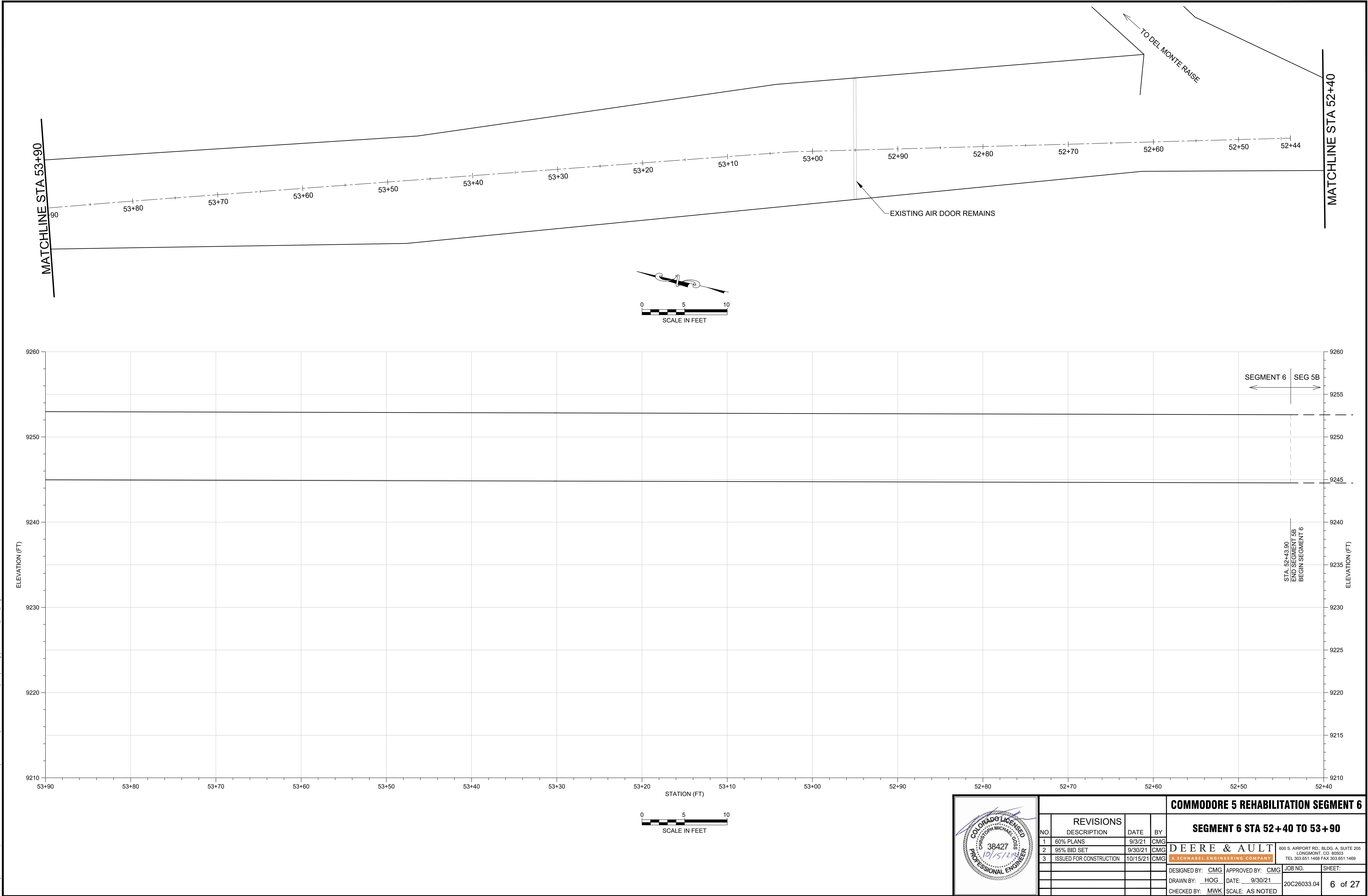
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NO.	DESCRIPTION	DATE	BY	SEGMENT 6 PLAN & PROFILE			
1	60% PLANS	9/3/21	CMG	<b>DEERE &amp; AULT</b> A SCHNABEL ENGINEERING COMPANY			
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
				DESIGNED BY: CMG	APPROVED BY: CMG	JOB NO.	SHEET:
				DRAWN BY: HOG	DATE: 9/30/21	20C26033.04	4 of 27
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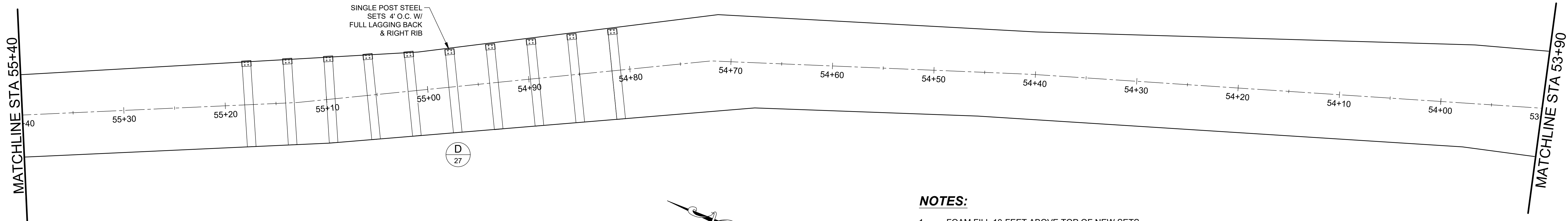
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REVISIONS				COMMODORE 5 REHABILITATION SEGMENT 6			
NO.	DESCRIPTION	DATE	BY	SEGMENT 6 STA 52+40 TO 53+90			
1	60% PLANS	9/3/21	CMG	<b>DEERE &amp; AULT</b> <small>A SCHNABEL ENGINEERING COMPANY</small>			
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
				DESIGNED BY: CMG	APPROVED BY: CMG	JOB NO.	SHEET:
				DRAWN BY: HOG	DATE: 9/30/21	20C26033.04	6 of 27
				CHECKED BY: MWK	SCALE: AS NOTED		

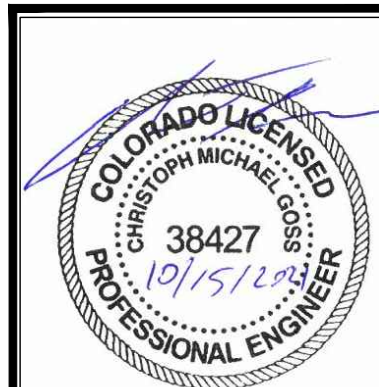
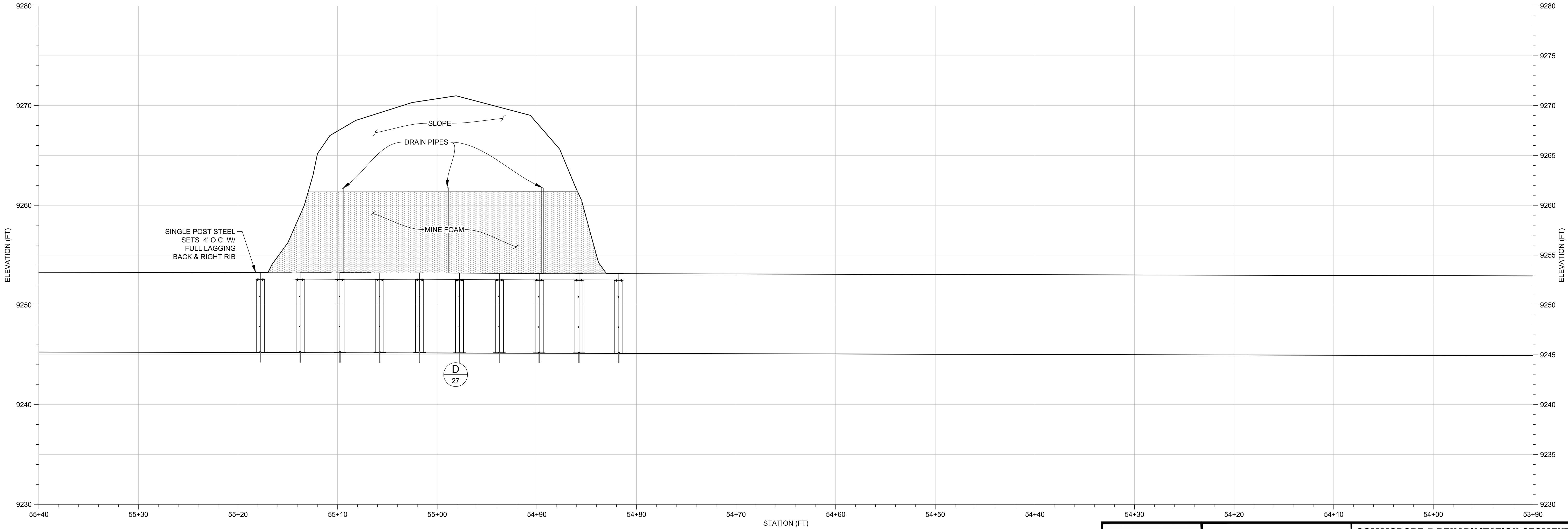
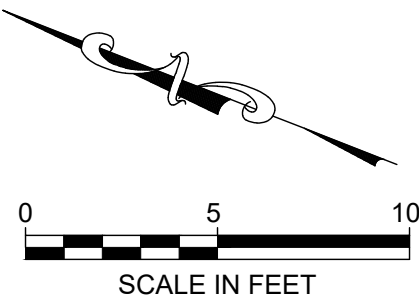


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**NOTES:**

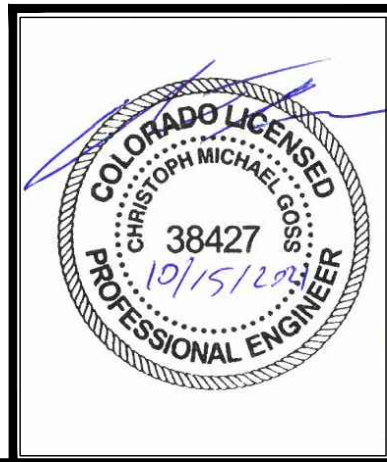
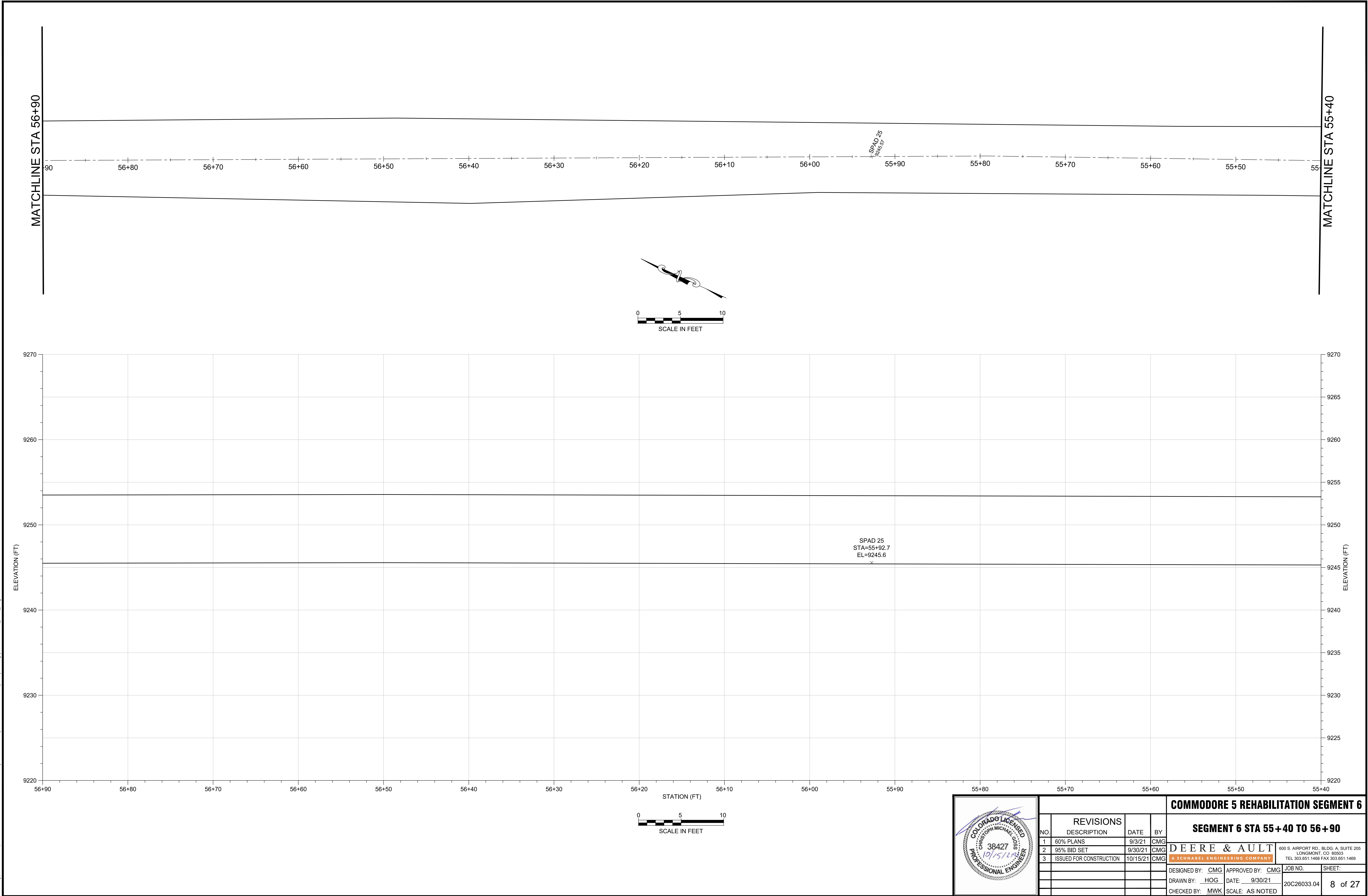
1. FOAM FILL 10-FEET ABOVE TOP OF NEW SETS.



REVISIONS				COMMODORE 5 REHABILITATION SEGMENT 6			
NO.	DESCRIPTION	DATE	BY	SEGMENT 6 STA 53+90 TO 55+40			
1	60% PLANS	9/3/21	CMG	<b>DEERE &amp; AULT</b> <small>600 S. AIRPORT RD, BLDG. A, SUITE 205 LONGMONT, CO 80503 TEL 303.651.1468 FAX 303.651.1469</small>			
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
				DESIGNED BY: CMG	APPROVED BY: CMG	JOB NO.	SHEET:
				DRAWN BY: HOG	DATE: 9/30/21	20C26033.04	7 of 27
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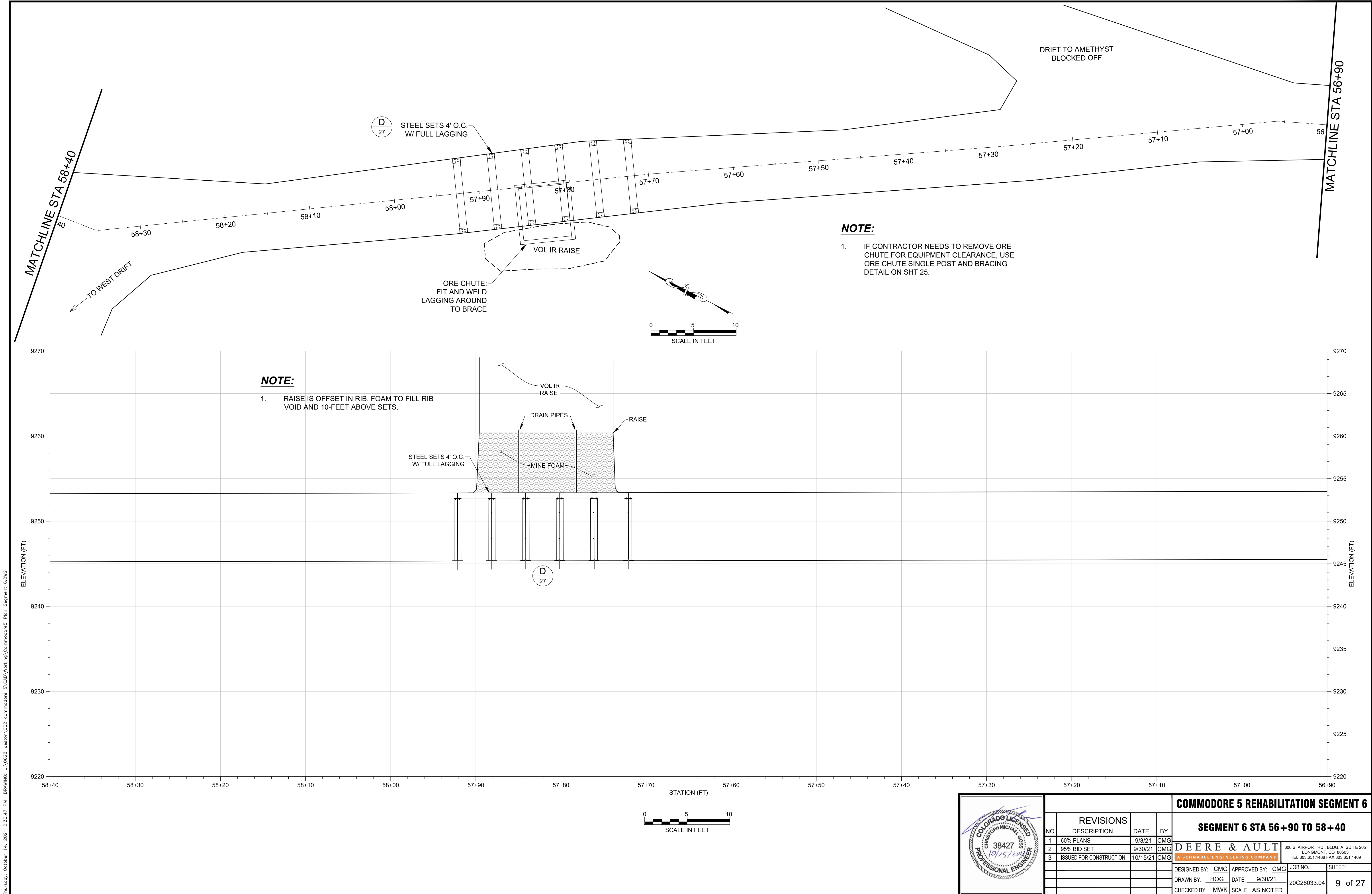


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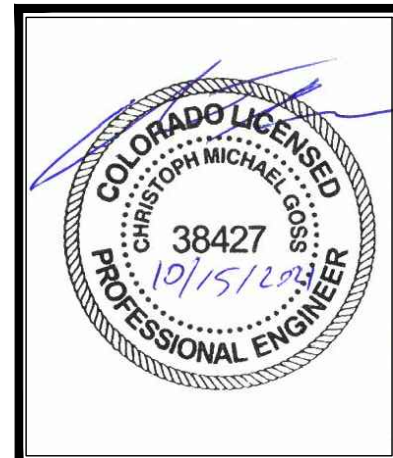
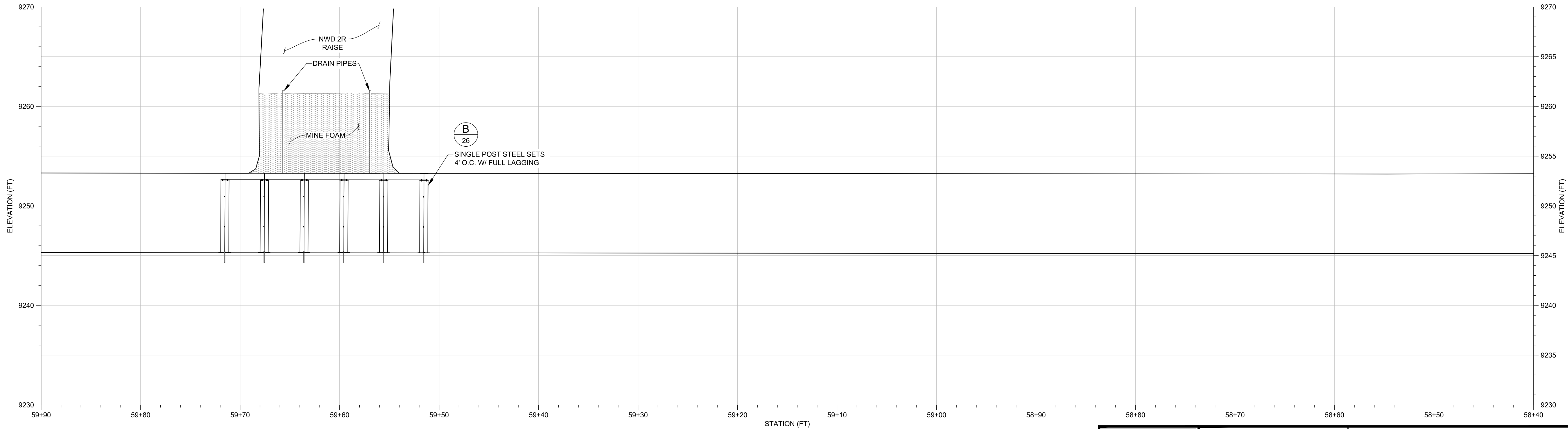
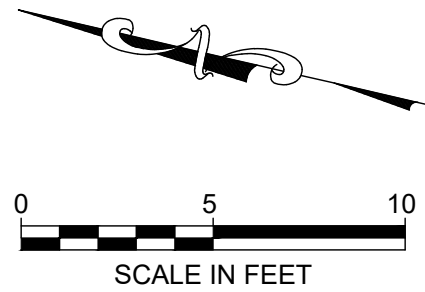
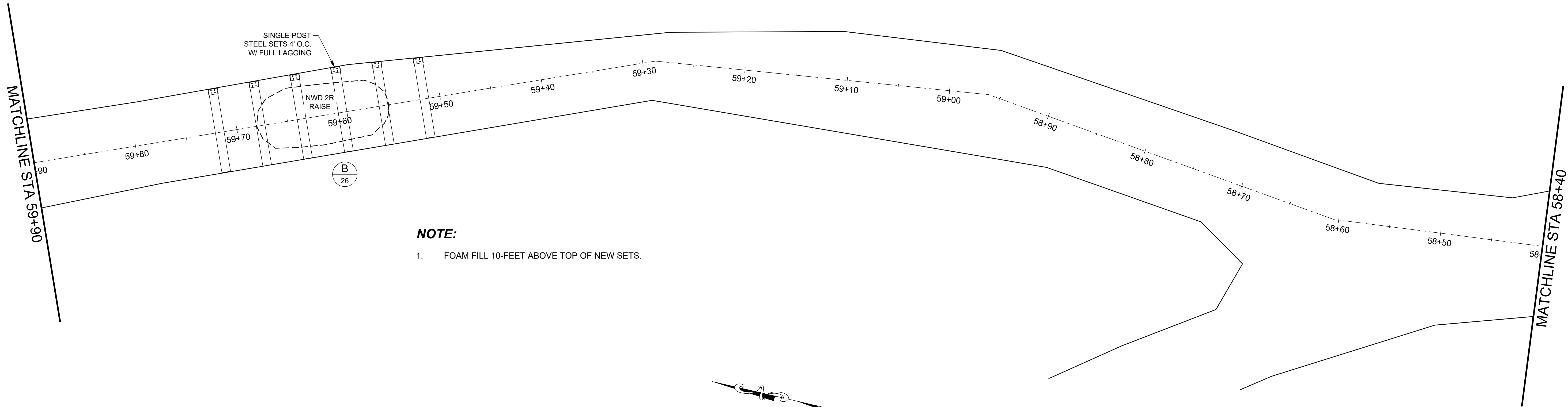
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NO.	DESCRIPTION	DATE	BY	SEGMENT 6 STA 55+40 TO 56+90			
1	60% PLANS	9/3/21	CMG	<b>DEERE &amp; AULT</b> <small>600 S. AIRPORT RD. BLDG. A, SUITE 205 LONGMONT, CO 80503 TEL 303.651.1468 FAX 303.651.1469</small>			
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
				DESIGNED BY: CMG	APPROVED BY: CMG	JOB NO.	SHEET:
				DRAWN BY: HOG	DATE: 9/30/21	20C26033.04	8 of 27
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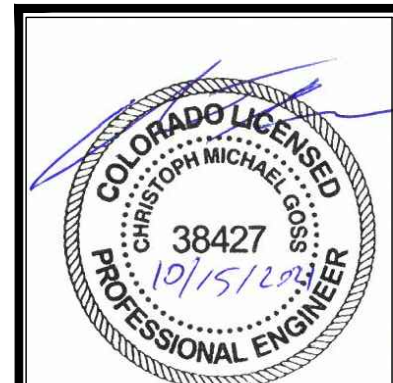
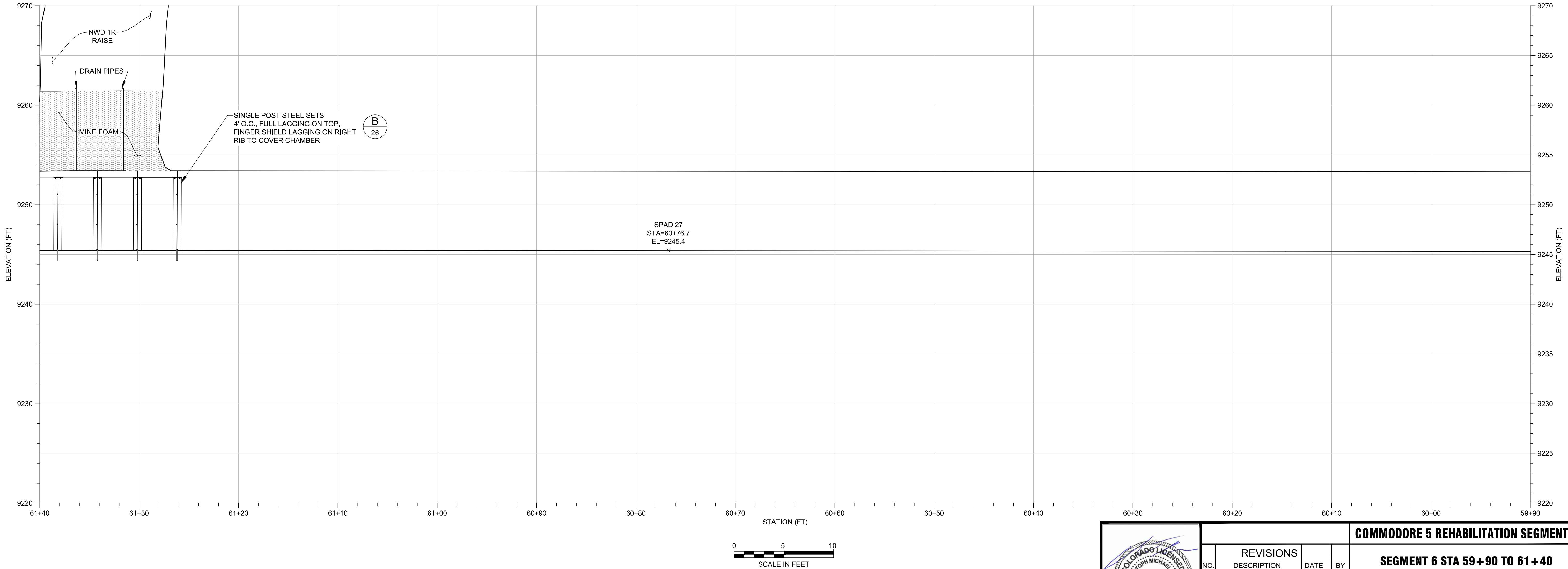
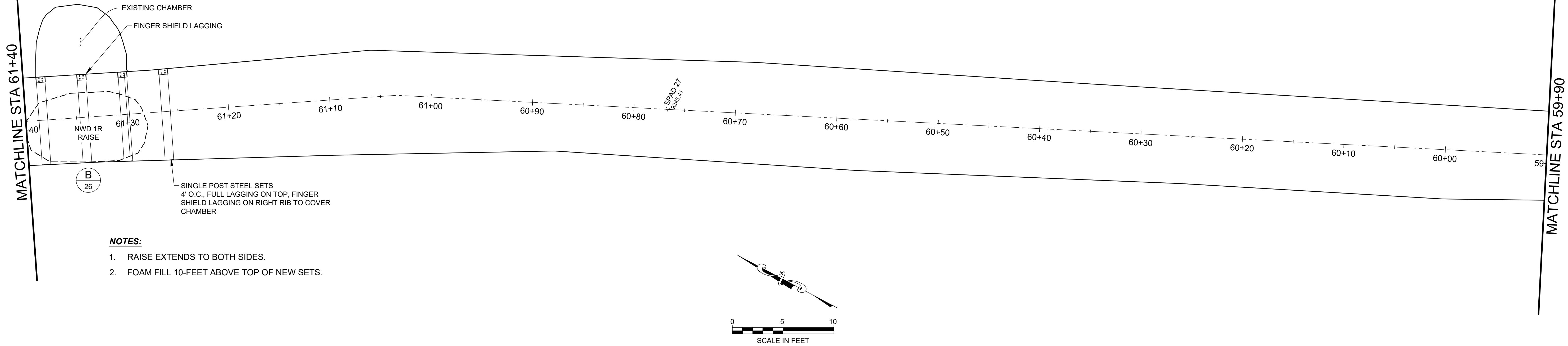
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REVISIONS				COMMODORE 5 REHABILITATION SEGMENT 6			
NO.	DESCRIPTION	DATE	BY	SEGMENT 6 STA 58+40 TO 59+90			
1	60% PLANS	9/3/21	CMG	<b>DEERE &amp; AULT</b> <small>600 S. AIRPORT RD. BLDG. A, SUITE 205 LONGMONT, CO 80503 TEL. 303.651.1468 FAX 303.651.1469</small>			
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
				DESIGNED BY: <u>CMG</u>	APPROVED BY: <u>CMG</u>	JOB NO.	SHEET:
				DRAWN BY: <u>HOG</u>	DATE: <u>9/30/21</u>	20C26033.04	10 of 27
				CHECKED BY: <u>MWK</u>	SCALE: <u>AS NOTED</u>		



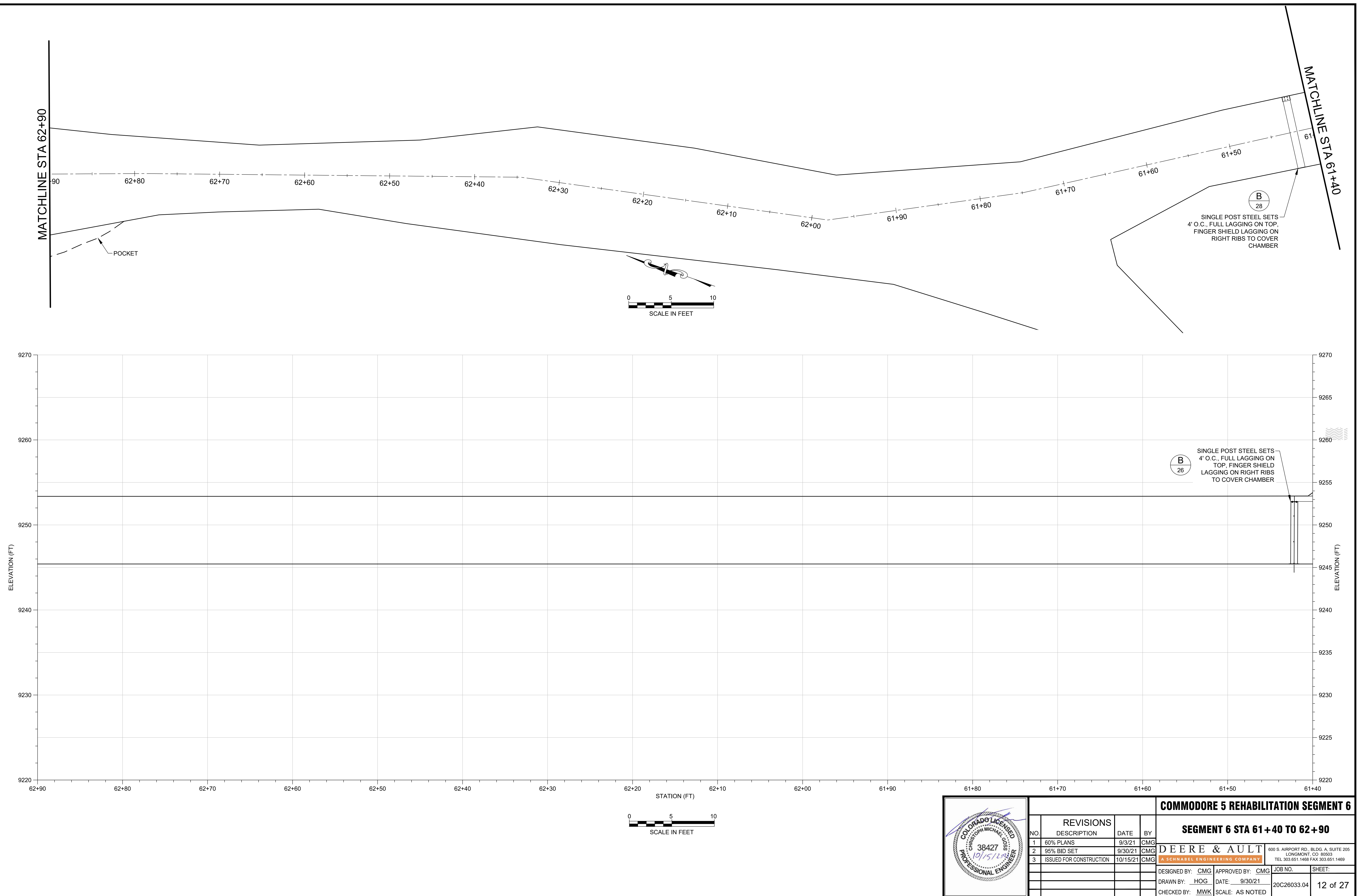
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				COMMODORE 5 REHABILITATION SEGMENT 6			
REVISIONS				SEGMENT 6 STA 59+90 TO 61+40			
NO.	DESCRIPTION	DATE	BY				
1	60% PLANS	9/3/21	CMG	DEERE & AULT A SCHNABEL ENGINEERING COMPANY		600 S. AIRPORT RD., BLDG. A, SUITE 205 LONGMONT, CO 80503 TEL 303.651.1468 FAX 303.651.1469	
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
				DESIGNED BY: CMG	APPROVED BY: CMG	JOB NO.	SHEET:
				DRAWN BY: HOG	DATE: 9/30/21	20C26033.04	11 of 27
				CHECKED BY: MWK	SCALE: AS NOTED		

600 S. AIRPORT RD., BLDG. A, SUITE 205  
LONGMONT, CO 80503  
TEL 303.651.1468 FAX 303.651.1469







Thursday, October 14, 2021 2:31:07 PM D:\0628\_weston\002\_commodore 5\CAD\Working\Commodore5\_Plan\_Segment 6.DWG

MATCHLINE STA 64+40

64+30

64+20

64+10

64+00

63+90

63+80

63+70

63+60

63+50

63+40

63+30

63+20

SINGLE POST STEEL  
SETS 4' O.C. W/ FULL  
LAGGING

IR RAISE

63+10

B  
26

SPAD 28

STA=62+99.7

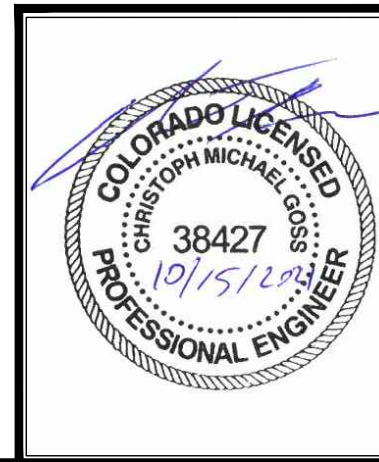
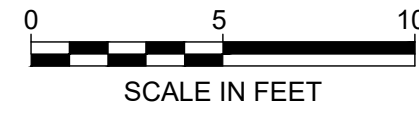
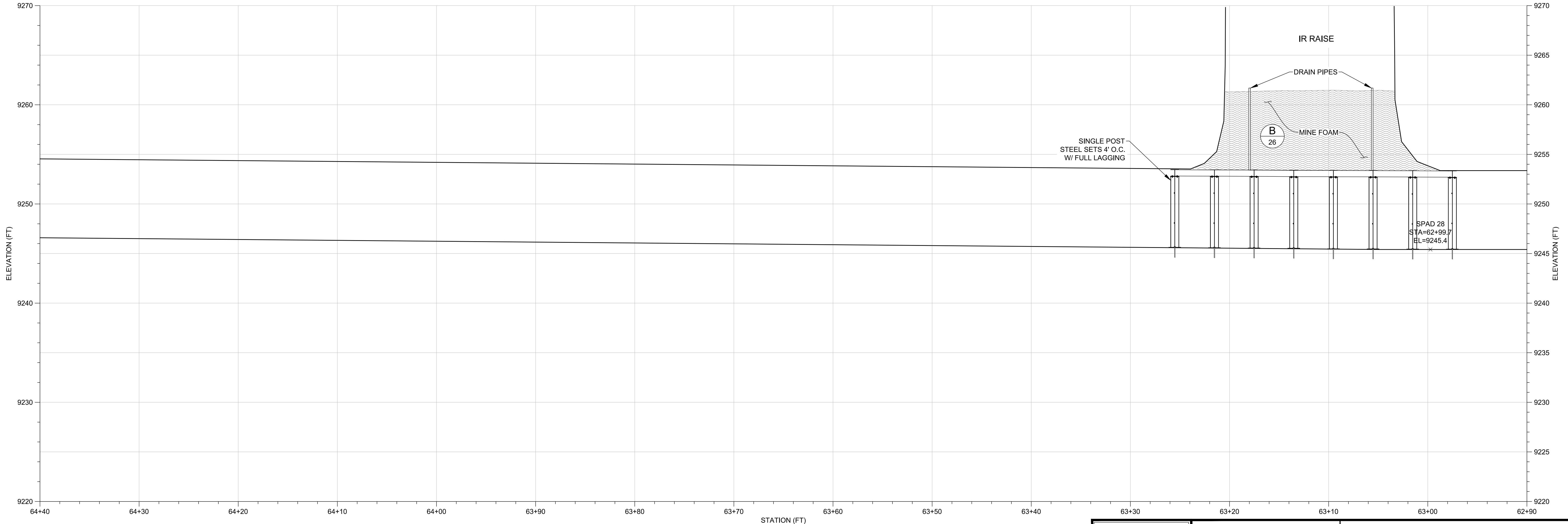
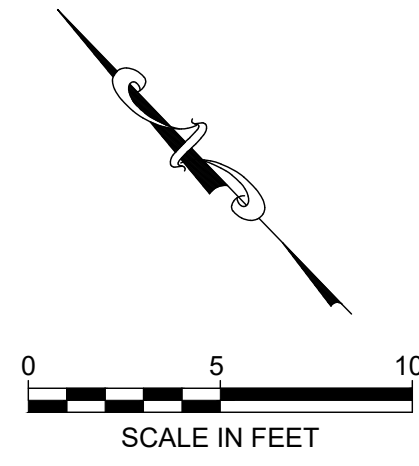
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MATCHLINE STA 62+90

POCKET

**NOTE:**

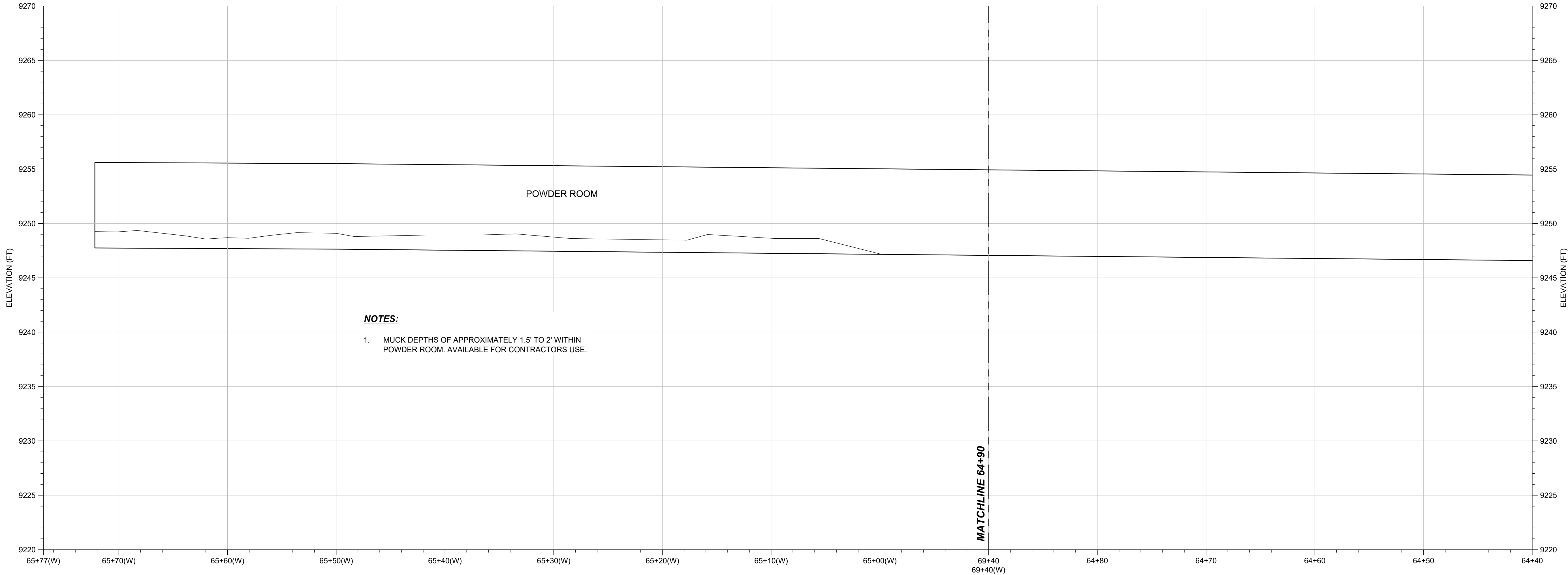
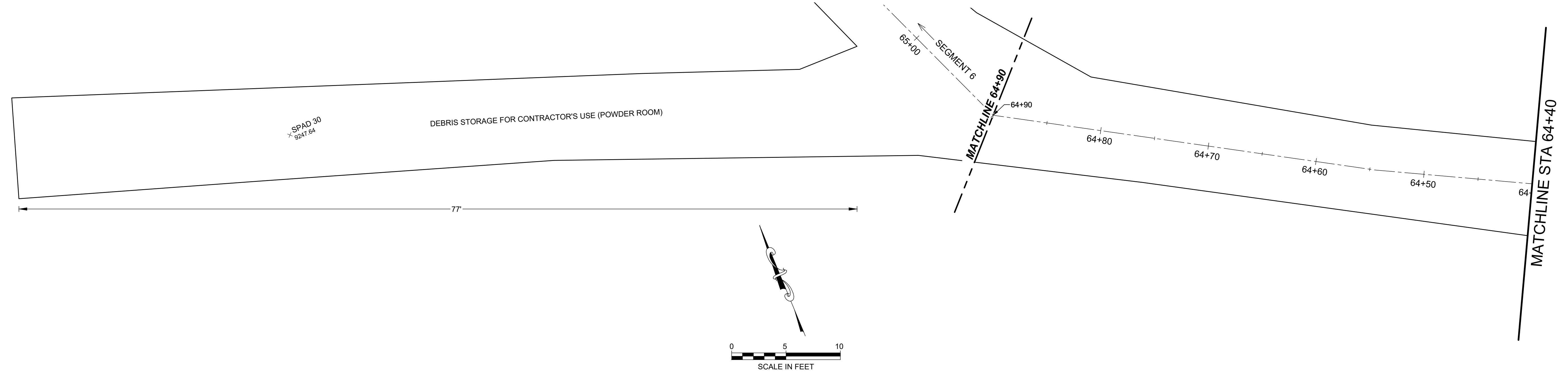
1. FOAM FILL 10-FEET ABOVE TOP OF NEW SETS.



REVISIONS				COMMODORE 5 REHABILITATION SEGMENT 6			
NO.	DESCRIPTION	DATE	BY	SEGMENT 6 STA 62+90 TO 64+40			
1	60% PLANS	9/3/21	CMG	<b>DEERE &amp; AULT</b> A SCHNABEL ENGINEERING COMPANY			
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
DESIGNED BY: CMG				APPROVED BY: CMG		JOB NO.	SHEET:
DRAWN BY: HOG				DATE: 9/30/21		20C26033.04	13 of 27
CHECKED BY: MWK				SCALE: AS NOTED			

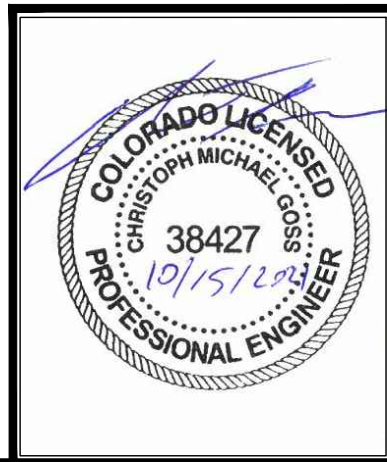


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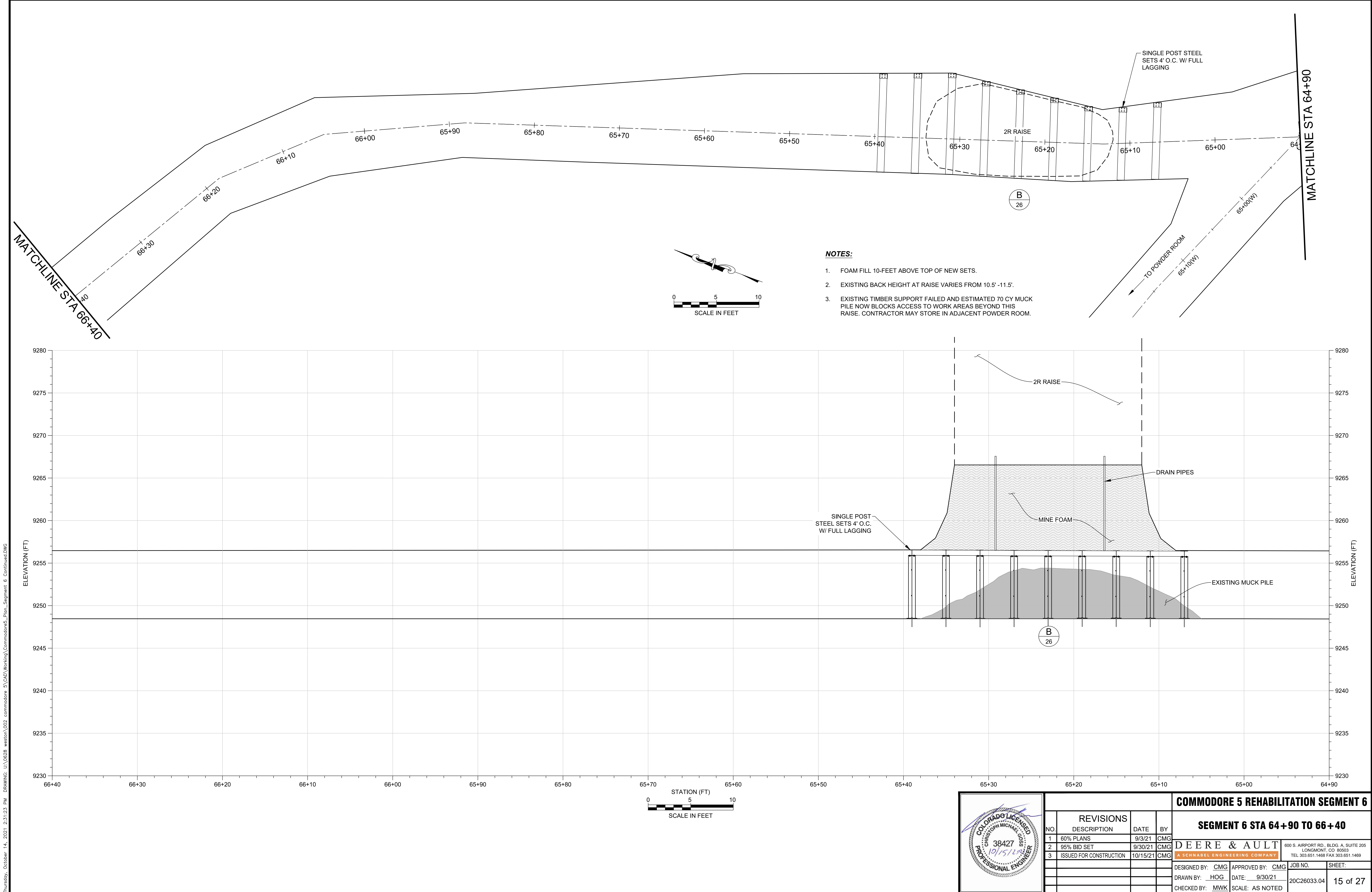
**NOTES:**

1. MUCK DEPTHS OF APPROXIMATELY 1.5' TO 2' WITHIN POWDER ROOM. AVAILABLE FOR CONTRACTORS USE.



REVISIONS				COMMODORE 5 REHABILITATION SEGMENT 6			
NO.	DESCRIPTION	DATE	BY	SEGMENT 6 STA 64+40 TO 64+90			
1	60% PLANS	9/3/21	CMG	<b>DEERE &amp; AULT</b> A SCHNABEL ENGINEERING COMPANY			
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
				DESIGNED BY: CMG	APPROVED BY: CMG	JOB NO.	SHEET:
				DRAWN BY: HOG	DATE: 9/30/21	20C26033.04	14 of 27
				CHECKED BY: MWK	SCALE: AS NOTED		

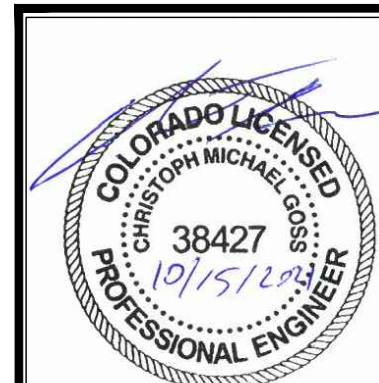
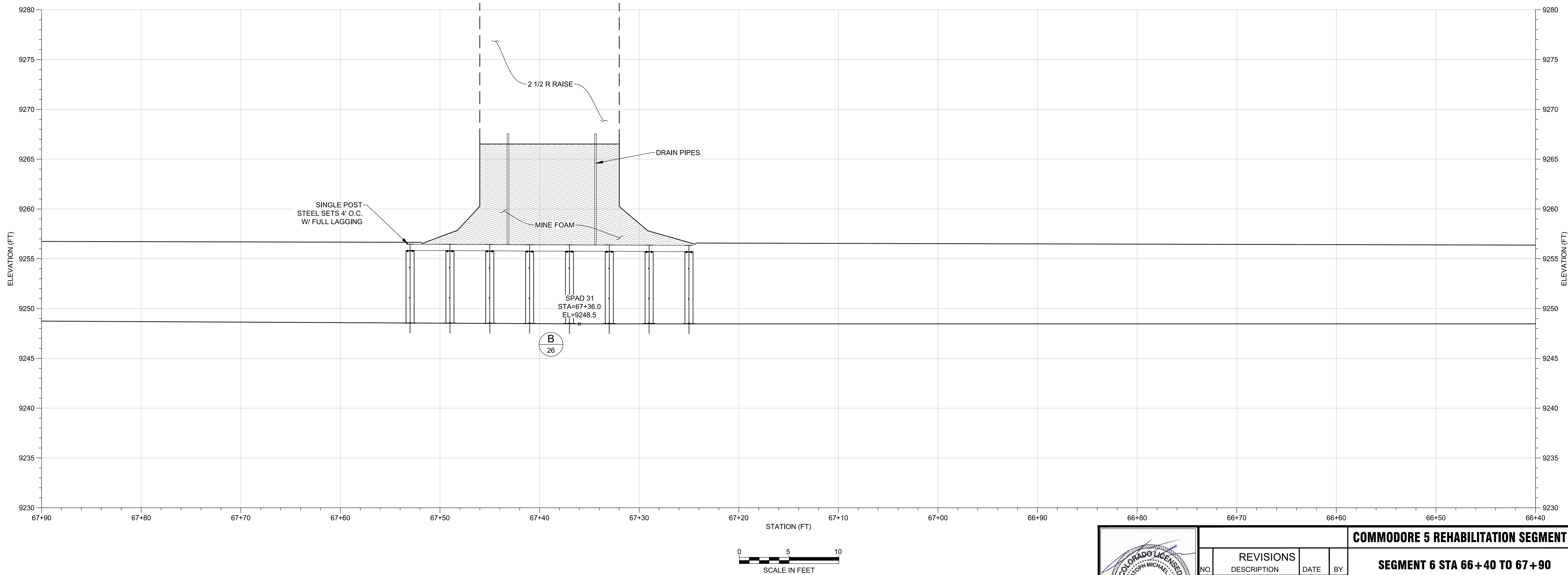
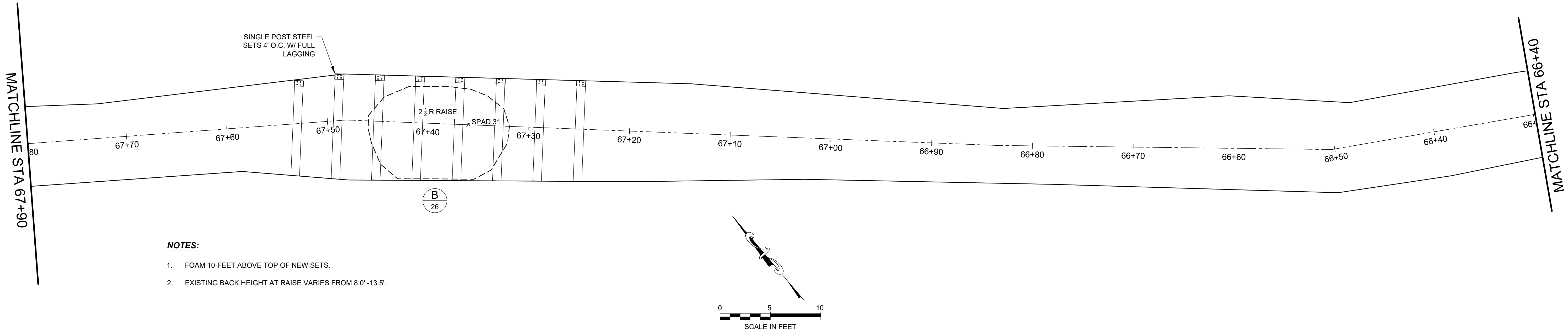




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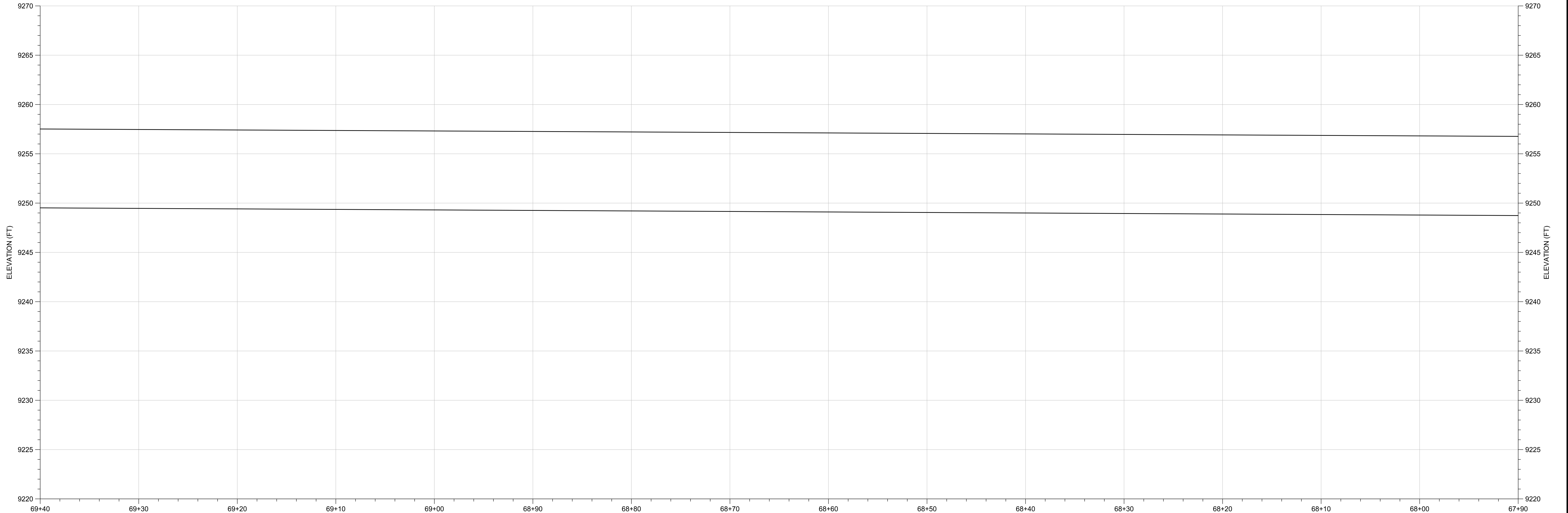
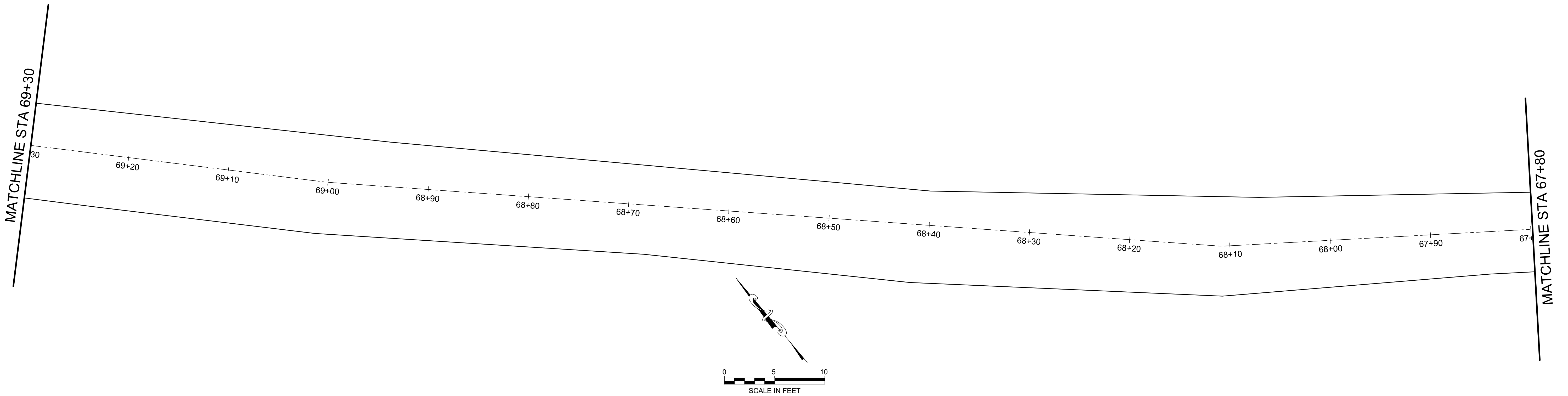
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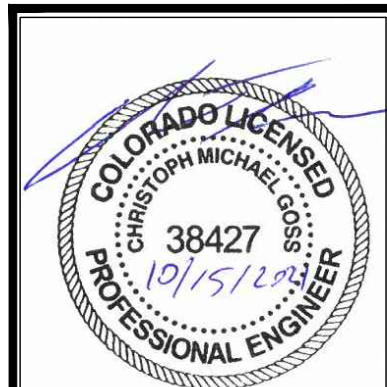
REVISIONS				COMMODORE 5 REHABILITATION SEGMENT 6			
NO.	DESCRIPTION	DATE	BY	SEGMENT 6 STA 66+40 TO 67+90			
1	60% PLANS	9/3/21	CMG	<b>DEERE &amp; AULT</b> A SCHNABEL ENGINEERING COMPANY			
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
DESIGNED BY:	CMG	APPROVED BY:	CMG	DESIGNED BY:	CMG	APPROVED BY:	CMG
DRAWN BY:	HOG	DATE:	9/30/21	DRAWN BY:	HOG	DATE:	9/30/21
CHECKED BY:	MWK	SCALE:	AS NOTED	CHECKED BY:	MWK	SCALE:	AS NOTED
				JOB NO.		SHEET:	
				20C26033.04		16 of 27	



Thursday, October 14, 2021 2:31:34 PM DRAWING: U:\0628\_weston\002\_commodore 5\CAD\Working\Commodore5\_Plan\_Segment 6\_Continued.DWG



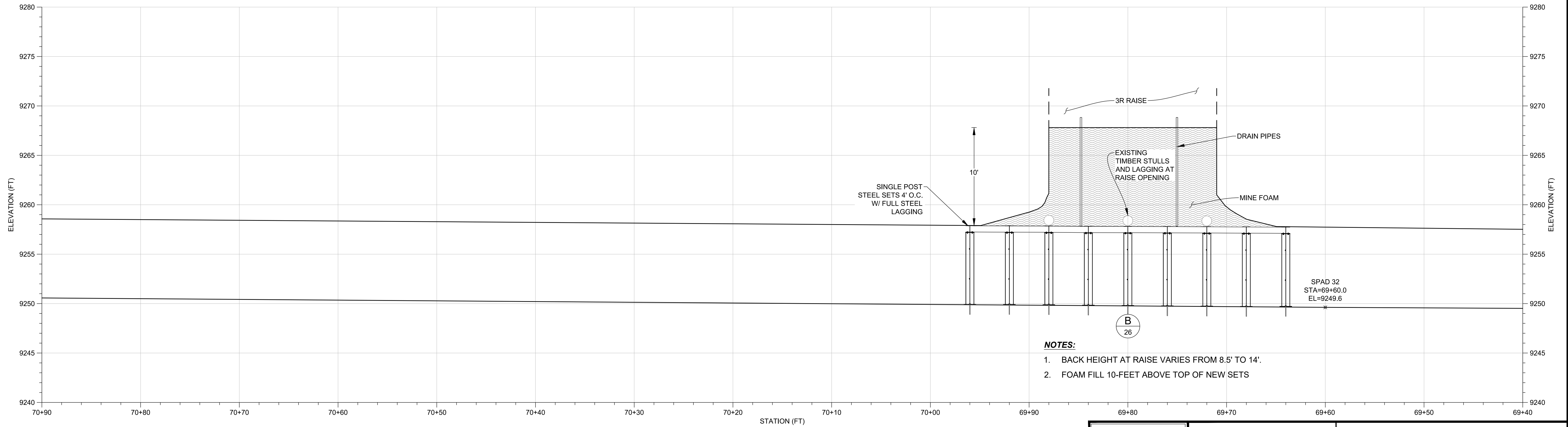
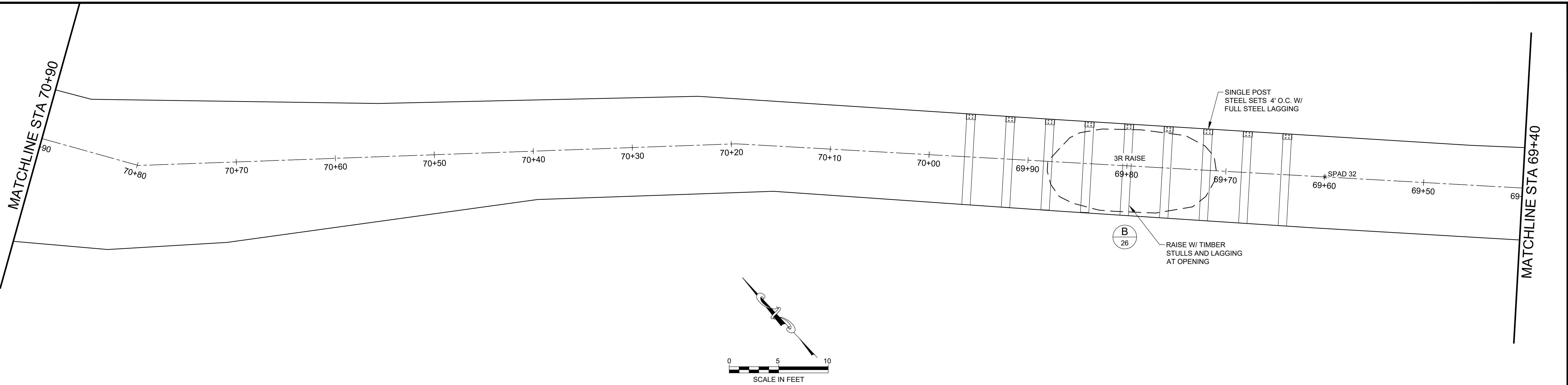
STATION (FT)  
**STA 67+90 TO STA 69+40**  
SCALE IN FEET



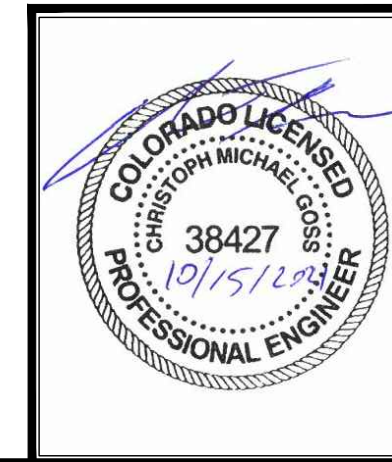
REVISIONS				COMMODORE 5 REHABILITATION SEGMENT 6			
NO.	DESCRIPTION	DATE	BY	SEGMENT 6 STA 67+90 TO 69+40			
1	60% PLANS	9/3/21	CMG	<b>DEERE &amp; AULT</b> <small>A SCHNABEL ENGINEERING COMPANY</small>			
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
				DESIGNED BY: <u>CMG</u>	APPROVED BY: <u>CMG</u>	JOB NO.	SHEET:
				DRAWN BY: <u>HOG</u>	DATE: <u>9/30/21</u>	20C26033.04	17 of 27
				CHECKED BY: <u>MWK</u>	SCALE: AS NOTED		



Thursday, October 14, 2021 2:31:38 PM DRAWING: U:\0628 weston\002 commodore 5\CAD\Working\Commodore5\_Plan\_Segment 6\_Continued.DWG



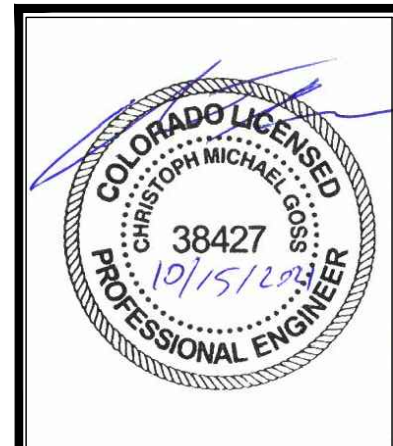
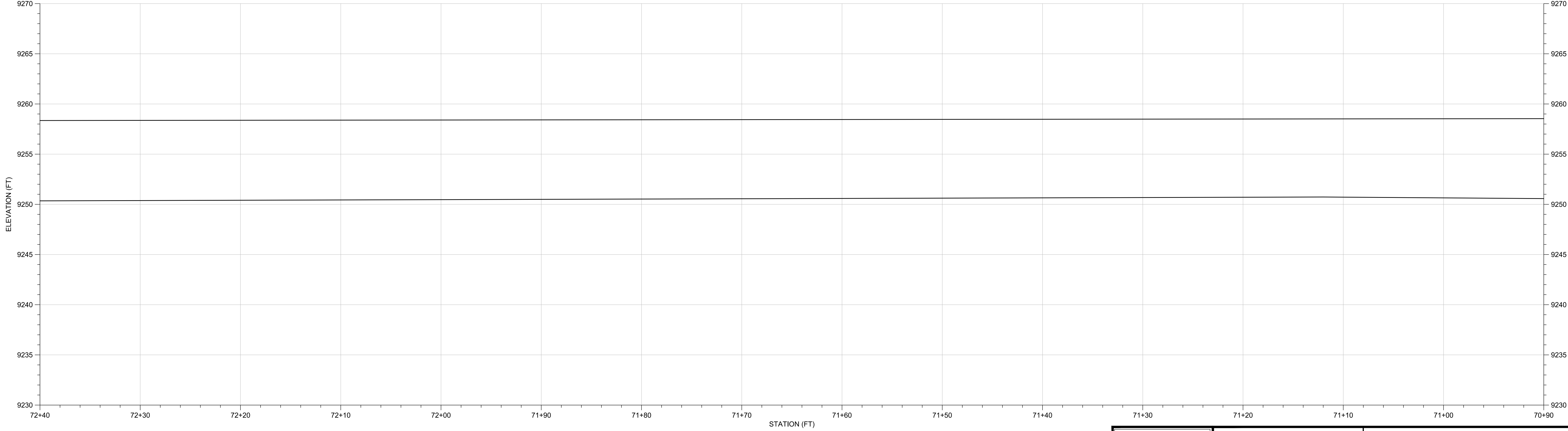
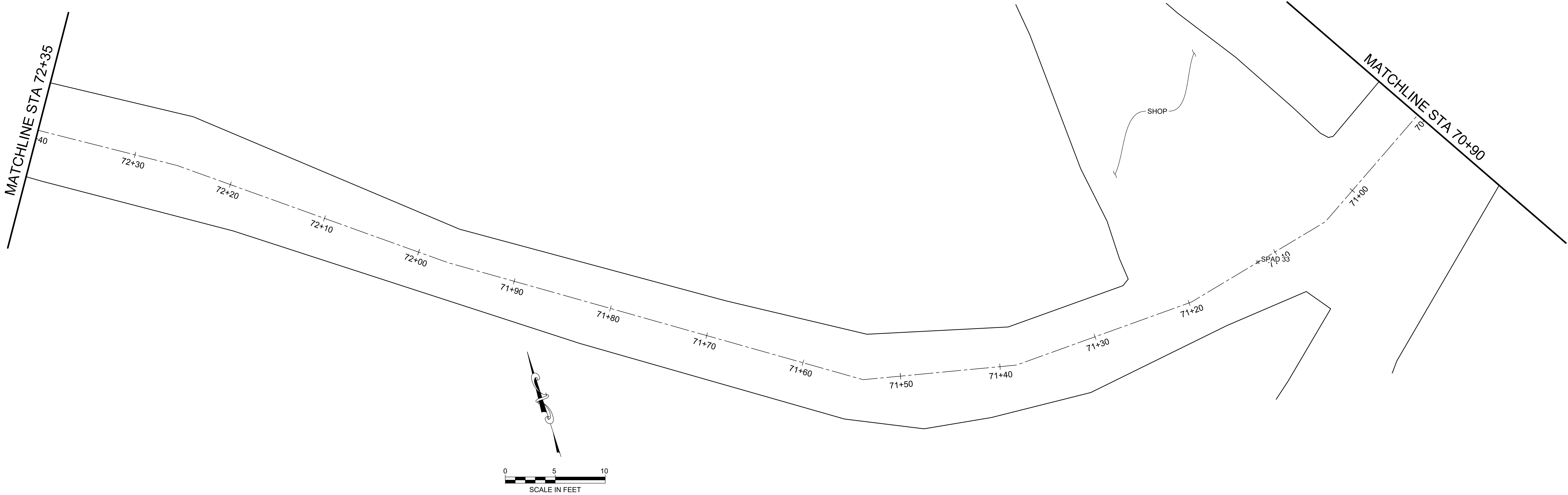
- NOTES:**
- BACK HEIGHT AT RAISE VARIES FROM 8.5' TO 14'.
  - FOAM FILL 10-FEET ABOVE TOP OF NEW SETS



REVISIONS				COMMODORE 5 REHABILITATION SEGMENT 6			
NO.	DESCRIPTION	DATE	BY	SEGMENT 6 STA 69+40 TO 70+90			
1	60% PLANS	9/3/21	CMG	<b>DEERE &amp; AULT</b> A SCHNABEL ENGINEERING COMPANY			
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
				DESIGNED BY: CMG	APPROVED BY: CMG	JOB NO.	SHEET:
				DRAWN BY: HOG	DATE: 9/30/21	20C26033.04	18 of 27
				CHECKED BY: MWK	SCALE: AS NOTED		



Thursday, October 14, 2021 2:31:43 PM DRAWING: U:\0628 weston\002 commodore 5\CAD\Working\Commodore5\_Plan\_Segment 6\_Continued.DWG

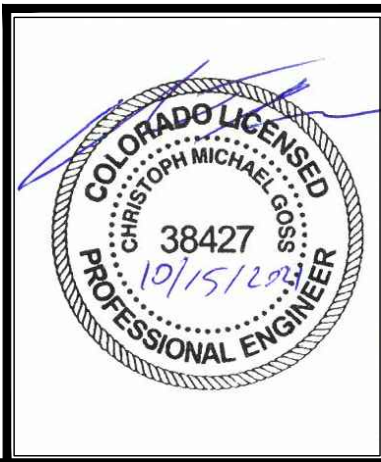
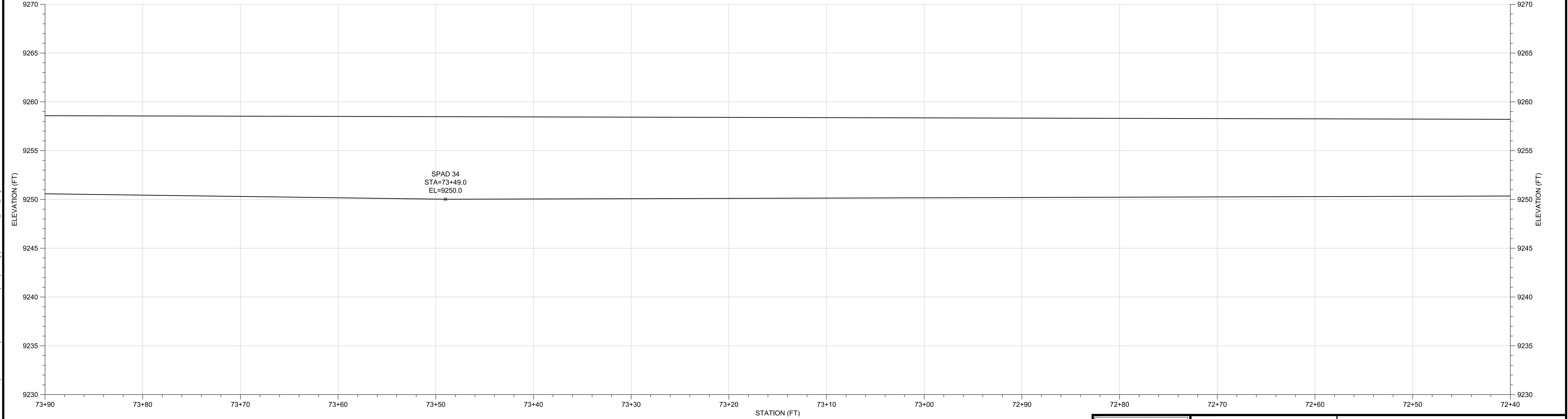
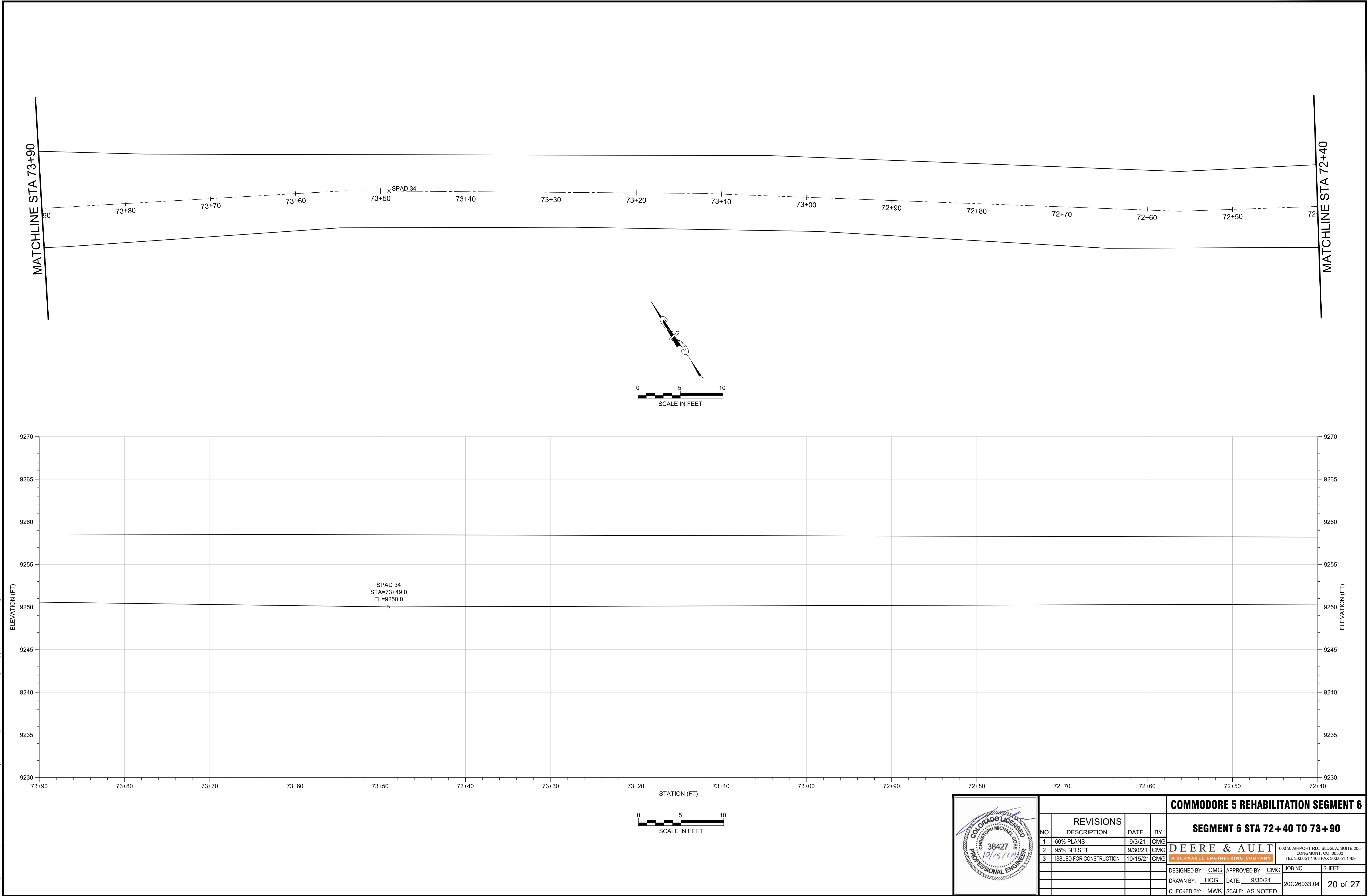


REVISIONS				COMMODORE 5 REHABILITATION SEGMENT 6			
NO.	DESCRIPTION	DATE	BY	SEGMENT 6 STA 70+90 TO 72+40			
1	60% PLANS	9/3/21	CMG	<b>DEERE &amp; AULT</b> <small>A SCHNABEL ENGINEERING COMPANY</small>			
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
				DESIGNED BY: <u>CMG</u>	APPROVED BY: <u>CMG</u>	JOB NO.	SHEET:
				DRAWN BY: <u>HOG</u>	DATE: <u>9/30/21</u>	20C26033.04	19 of 27
				CHECKED BY: <u>MWK</u>	SCALE: AS NOTED		

600 S. AIRPORT RD. BLDG. A, SUITE 205  
LONGMONT, CO 80503  
TEL 303.651.1468 FAX 303.651.1469



Thursday, October 14, 2021 2:31:48 PM DRAWING: U:\0628\_weston\002\_commodore 5\CAD\Working\Commodore5\_Plan\_Segment 6\_Continued.DWG



REVISIONS				COMMODORE 5 REHABILITATION SEGMENT 6			
NO.	DESCRIPTION	DATE	BY	SEGMENT 6 STA 72+40 TO 73+90			
1	60% PLANS	9/3/21	CMG	<b>DEERE &amp; AULT</b> <small>600 S. AIRPORT RD. BLDG. A, SUITE 205 LONGMONT, CO 80503 TEL 303.651.1468 FAX 303.651.1469</small>			
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
				DESIGNED BY: <u>CMG</u>	APPROVED BY: <u>CMG</u>	JOB NO.	SHEET:
				DRAWN BY: <u>HOG</u>	DATE: <u>9/30/21</u>	20C26033.04	20 of 27
				CHECKED BY: <u>MWK</u>	SCALE: AS NOTED		

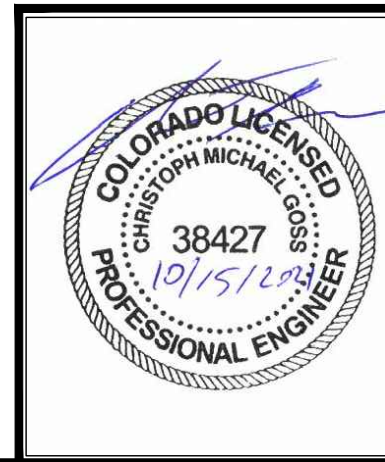
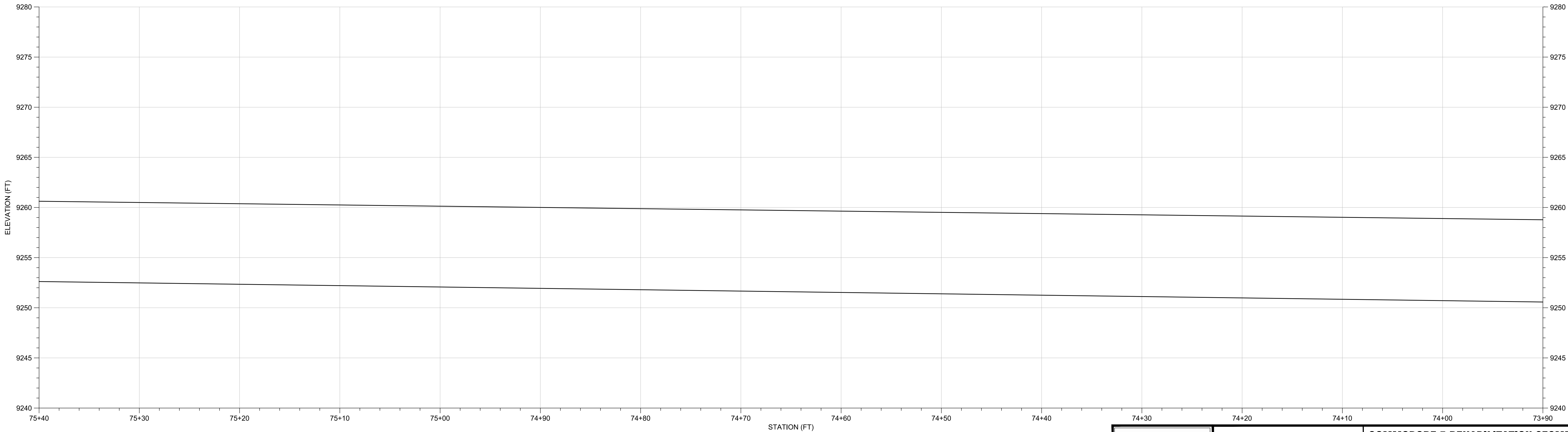


Thursday, October 14, 2021 2:31:53 PM DRAWING: U:\0628\_weston\002\_commodore 5\CAD\Working\Commodore5\_Plan\_Segment 6\_Continued.DWG

MATCHLINE STA 75+40

MATCHLINE STA 73+90

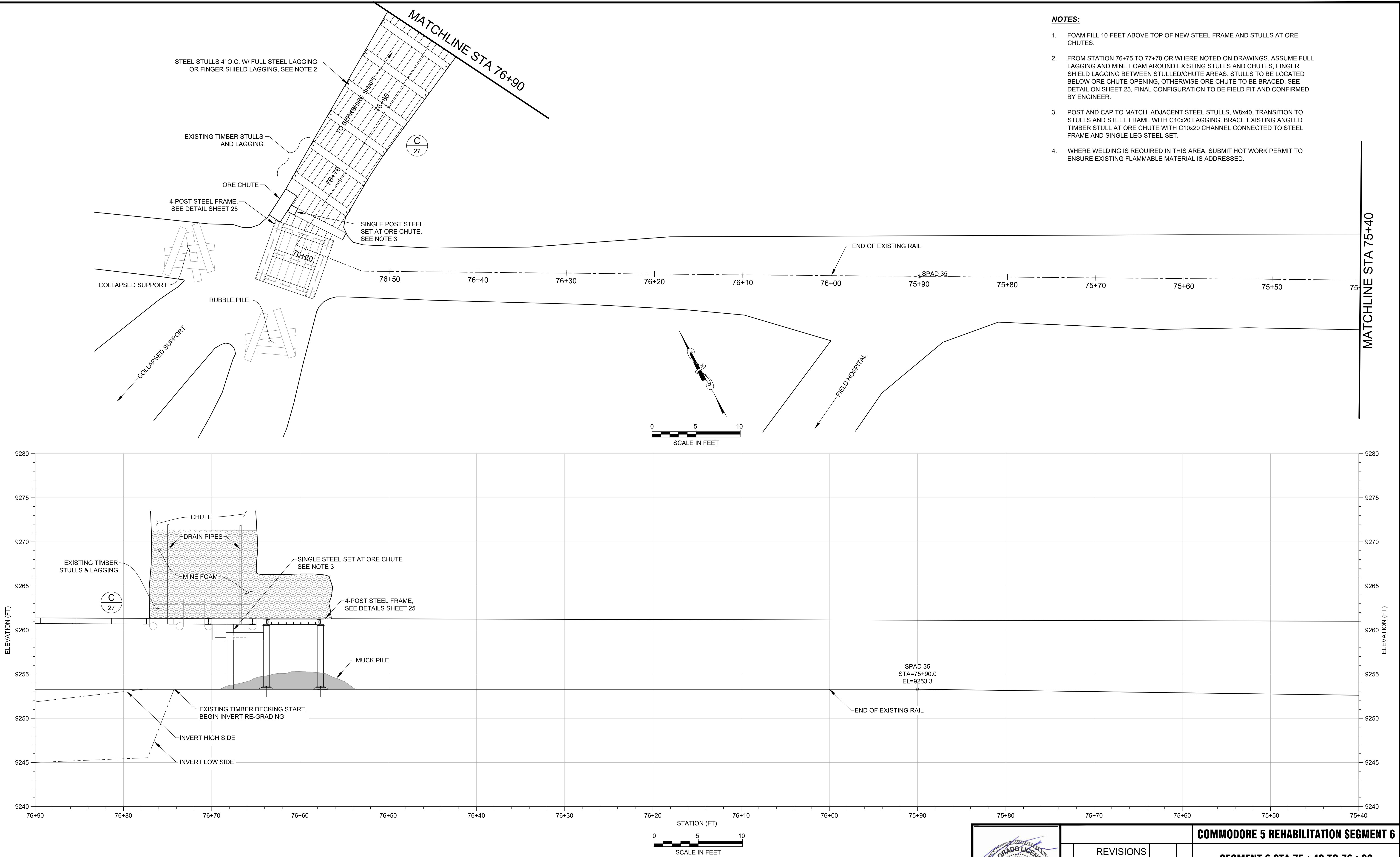
0 5 10  
SCALE IN FEET



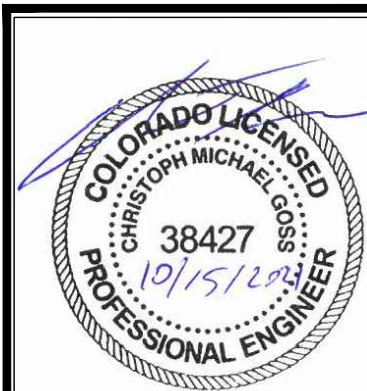
REVISIONS				COMMODORE 5 REHABILITATION SEGMENT 6			
NO.	DESCRIPTION	DATE	BY	SEGMENT 6 STA 73+90 TO 75+40			
1	60% PLANS	9/3/21	CMG	<b>DEERE &amp; AULT</b> A SCHNABEL ENGINEERING COMPANY			
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
				DESIGNED BY: CMG	APPROVED BY: CMG	JOB NO.	SHEET:
				DRAWN BY: HOG	DATE: 9/30/21	20C26033.04	21 of 27
				CHECKED BY: MWK	SCALE: AS NOTED		



Thursday, October 14, 2021 2:31:58 PM DRAWING: U:\0628\_western\002\_commodore 5\CAD\Working\Commodore5\_Plan\_Segment 6\_Continued.DWG

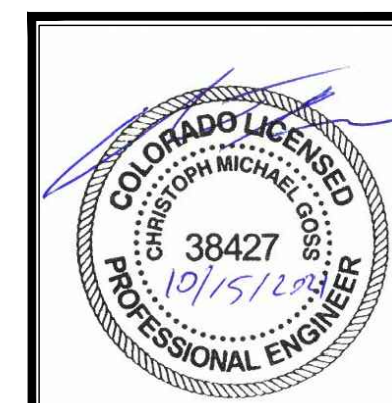
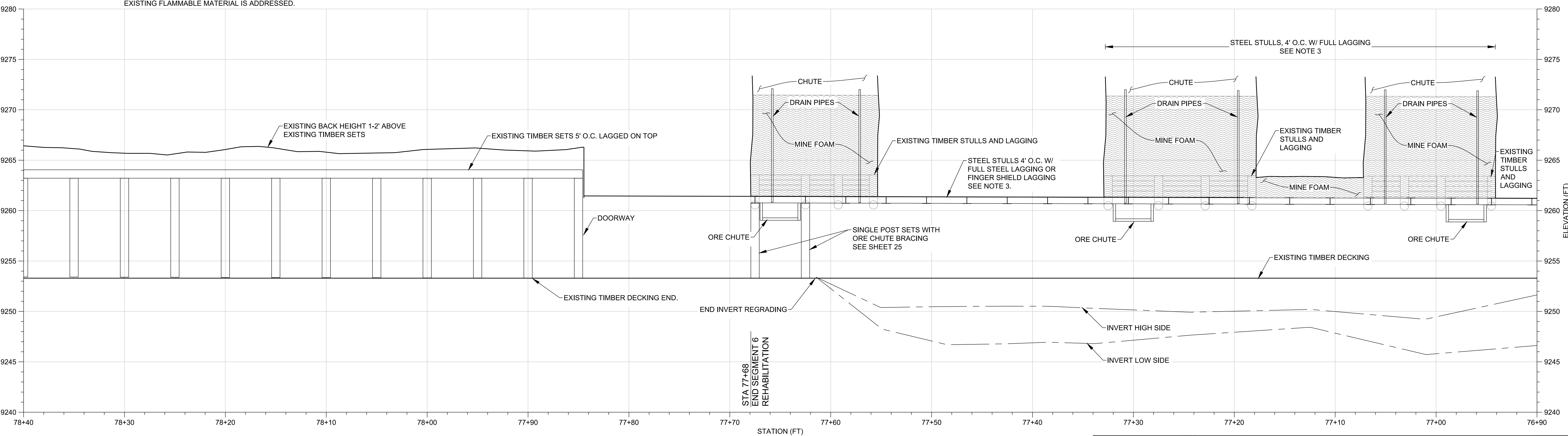


- NOTES:**
1. FOAM FILL 10-FEET ABOVE TOP OF NEW STEEL FRAME AND STULLS AT ORE CHUTES.
  2. FROM STATION 76+75 TO 77+70 OR WHERE NOTED ON DRAWINGS. ASSUME FULL LAGGING AND MINE FOAM AROUND EXISTING STULLS AND CHUTES, FINGER SHIELD LAGGING BETWEEN STULLED/CHUTE AREAS. STULLS TO BE LOCATED BELOW ORE CHUTE OPENING, OTHERWISE ORE CHUTE TO BE BRACED. SEE DETAIL ON SHEET 25, FINAL CONFIGURATION TO BE FIELD FIT AND CONFIRMED BY ENGINEER.
  3. POST AND CAP TO MATCH ADJACENT STEEL STULLS, W8x40. TRANSITION TO STULLS AND STEEL FRAME WITH C10x20 LAGGING. BRACE EXISTING ANGLED TIMBER STULL AT ORE CHUTE WITH C10x20 CHANNEL CONNECTED TO STEEL FRAME AND SINGLE LEG STEEL SET.
  4. WHERE WELDING IS REQUIRED IN THIS AREA, SUBMIT HOT WORK PERMIT TO ENSURE EXISTING FLAMMABLE MATERIAL IS ADDRESSED.



REVISIONS				COMMODORE 5 REHABILITATION SEGMENT 6			
NO.	DESCRIPTION	DATE	BY	SEGMENT 6 STA 75+40 TO 76+90			
1	60% PLANS	9/3/21	CMG	<b>DEERE &amp; AULT</b> A SCHNABEL ENGINEERING COMPANY			
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
DESIGNED BY: CMG				APPROVED BY: CMG		JOB NO.	
DRAWN BY: HOG				DATE: 9/30/21		SHEET:	
CHECKED BY: MWK				SCALE: AS NOTED		20C26033.04	
						22 of 27	

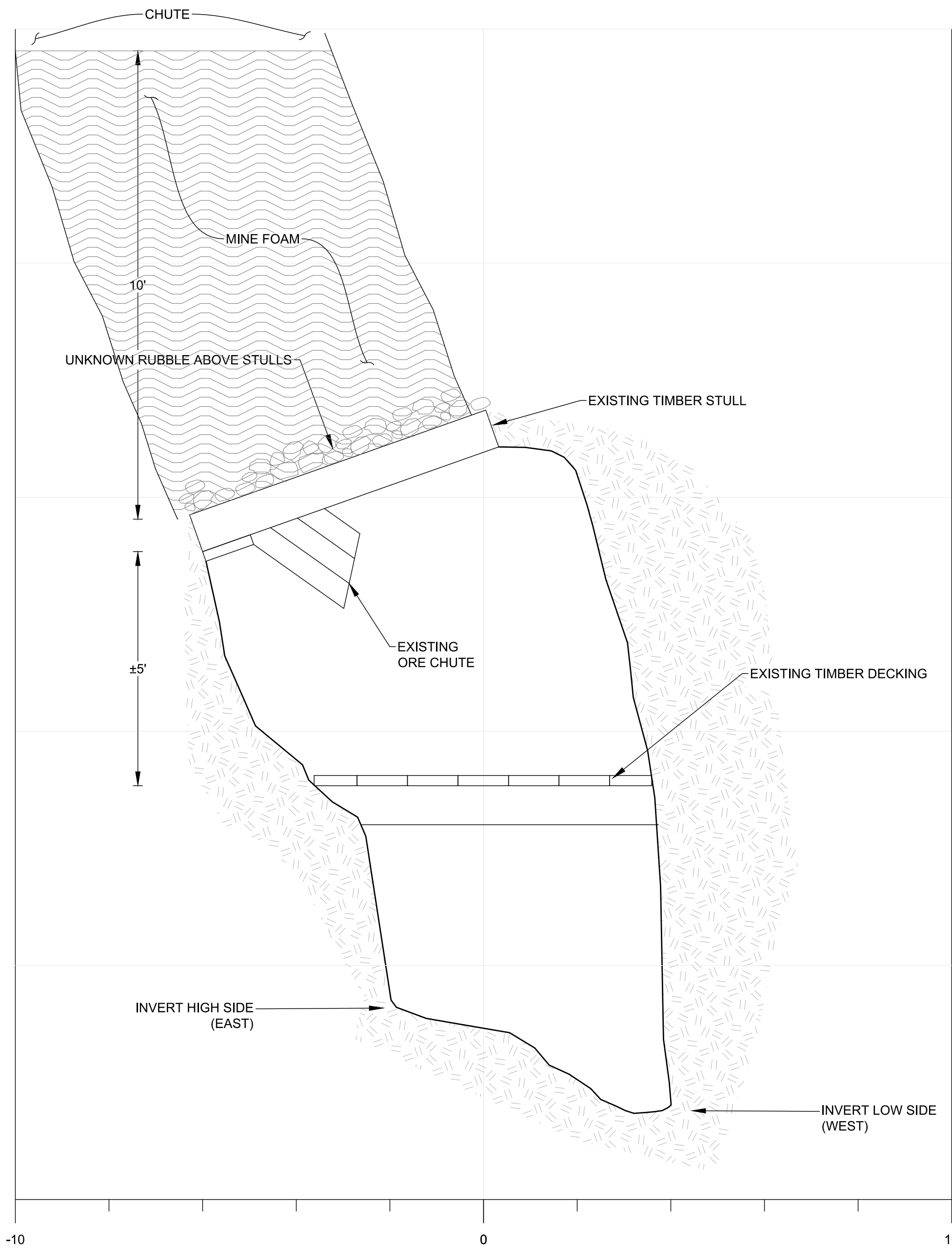




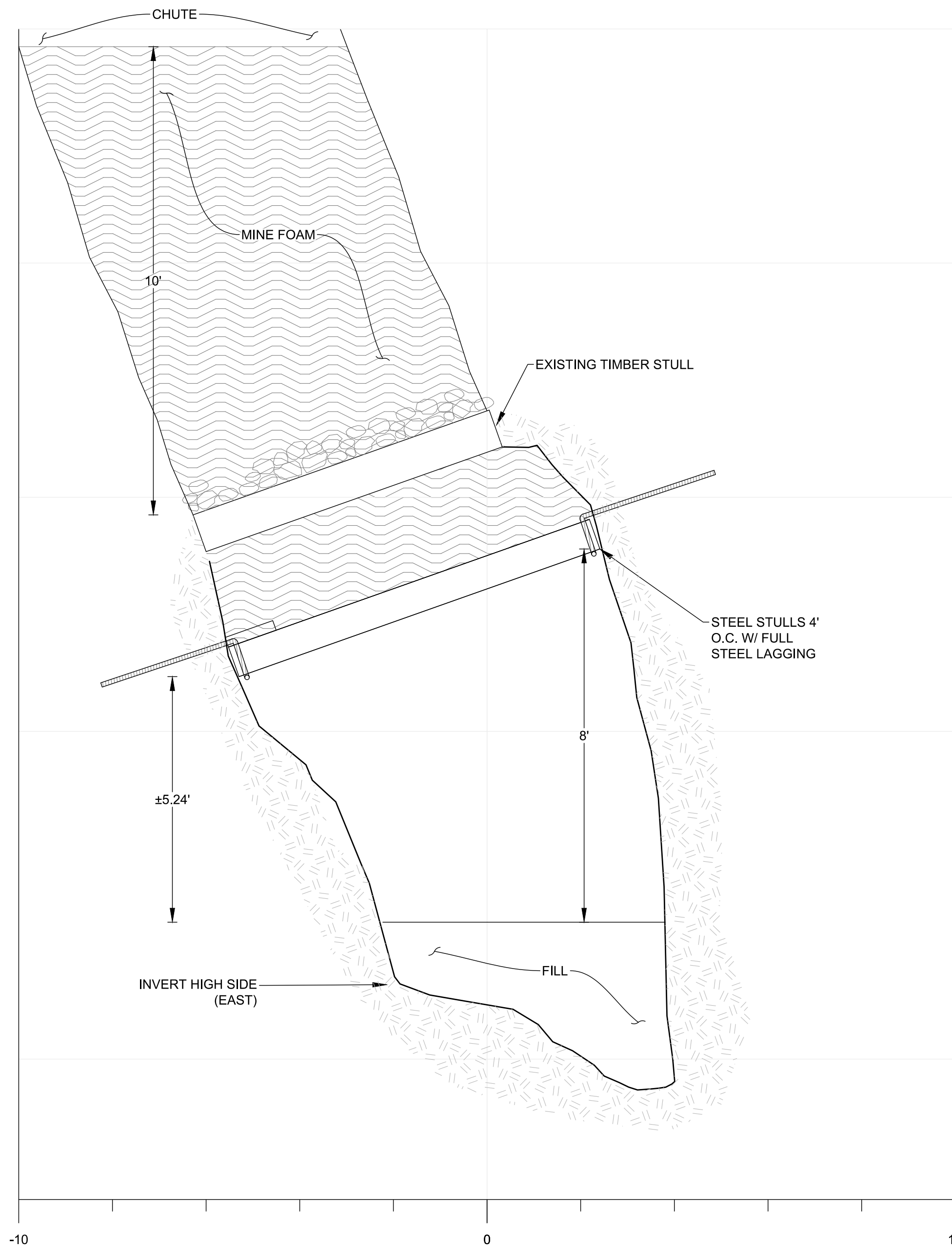
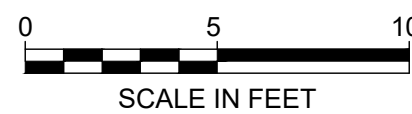
				<b>COMMODORE 5 REHABILITATION SEGMENT 6</b>			
NO.	REVISIONS DESCRIPTION	DATE	BY	<b>SEGMENT 6 STA 76+90 TO 78+40</b>			
1	60% PLANS	9/3/21	CMG	<b>DEERE &amp; AULT</b> A SCHNABEL ENGINEERING COMPANY		600 S. AIRPORT RD., BLDG. A, SUITE 205 LONGMONT, CO 80503 TEL 303.551.1468 FAX 303.551.1469	
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG	DESIGNED BY: CMG		APPROVED BY: CMG	JOB NO.
				DRAWN BY: HOG		DATE: 9/30/21	20C26033.04
				CHECKED BY: MWK		SCALE: AS NOTED	SHEET:
							23 of 27



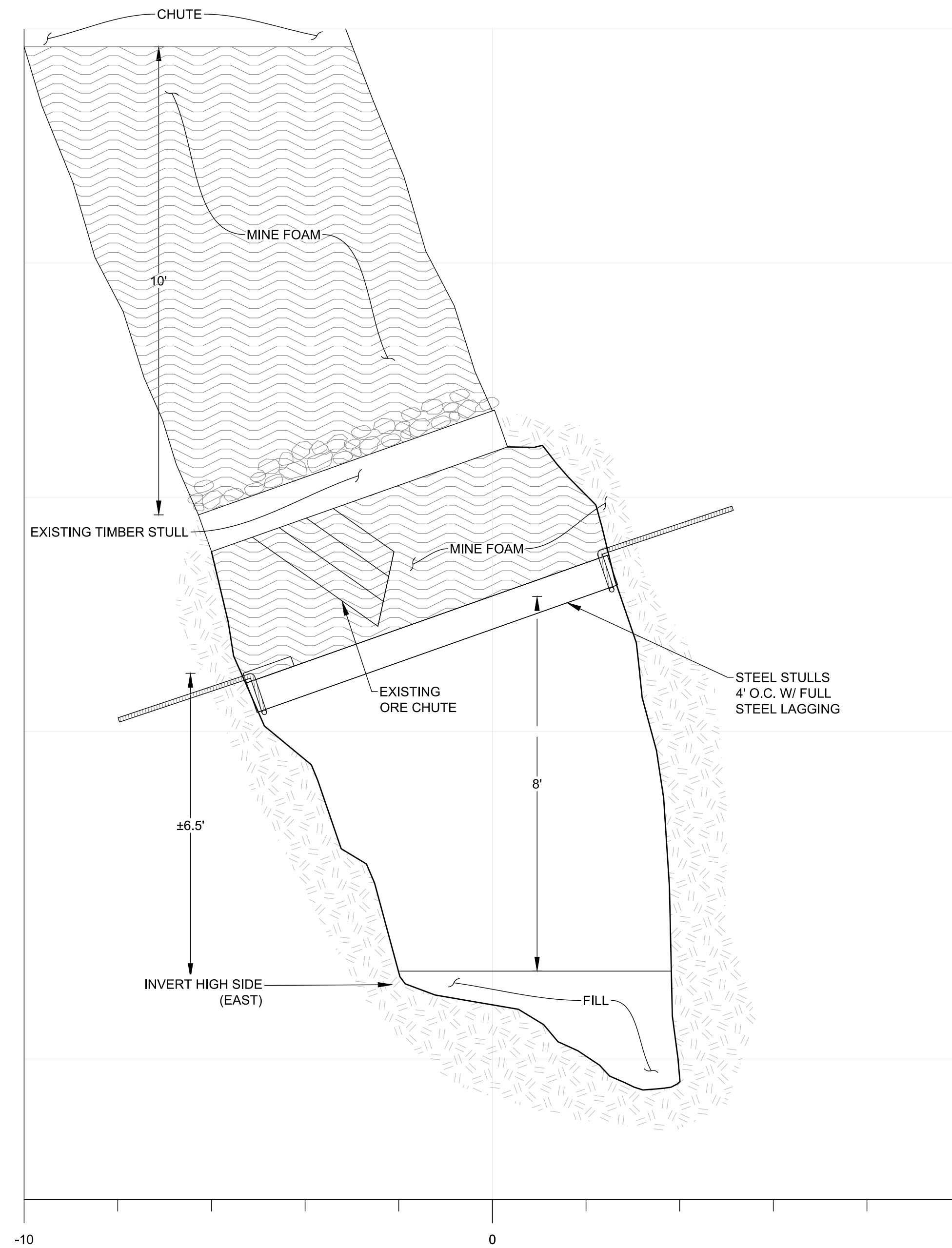
Thursday, October 14, 2021 2:32:08 PM DRAWING: U:\0628 weston\002 commodore 5\CAD\Working\Commodore5\_Plan\_Segment 6\_Continued.DWG



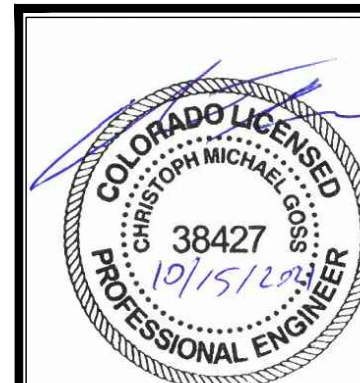
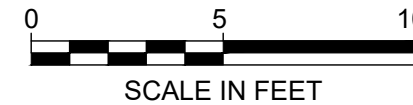
**EXISTING CONDITIONS**  
**TYPICAL CROSS SECTION STA 76+65 - 77+84**



**A** **SECTION A-A' STA 76+95**



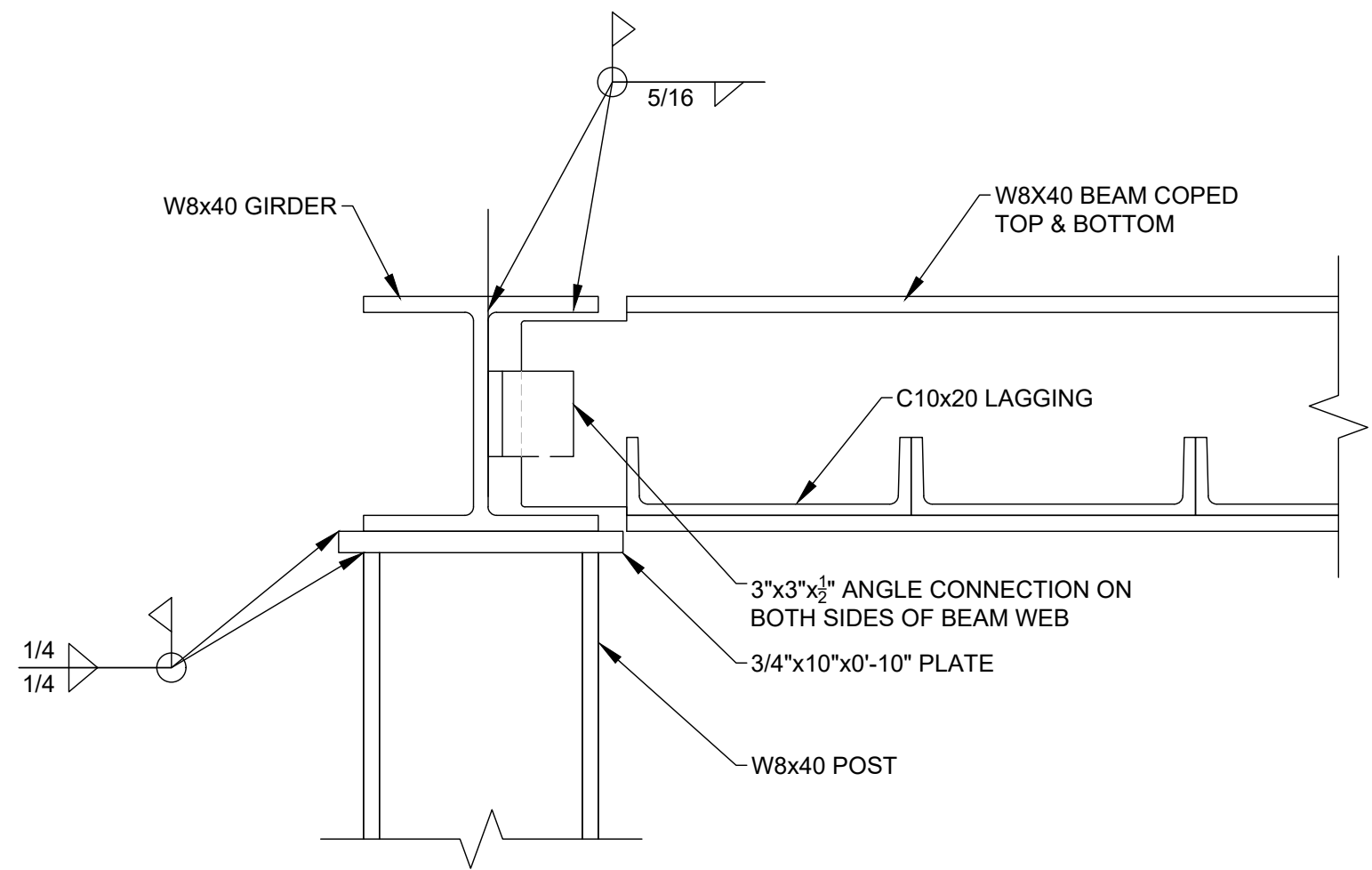
**B** **SECTION B-B' STA 77+05**



REVISIONS				COMMODORE 5 REHABILITATION SEGMENT 6			
NO.	DESCRIPTION	DATE	BY	ORE CHUTE AREA CROSS SECTIONS			
1	60% PLANS	9/3/21	CMG	<b>DEERE &amp; AULT</b> A SCHNABEL ENGINEERING COMPANY			
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
				DESIGNED BY: CMG	APPROVED BY: CMG	JOB NO.	SHEET:
				DRAWN BY: HOG	DATE: 9/30/21	20C26033.04	24 of 27
				CHECKED BY: MWK	SCALE: AS NOTED		

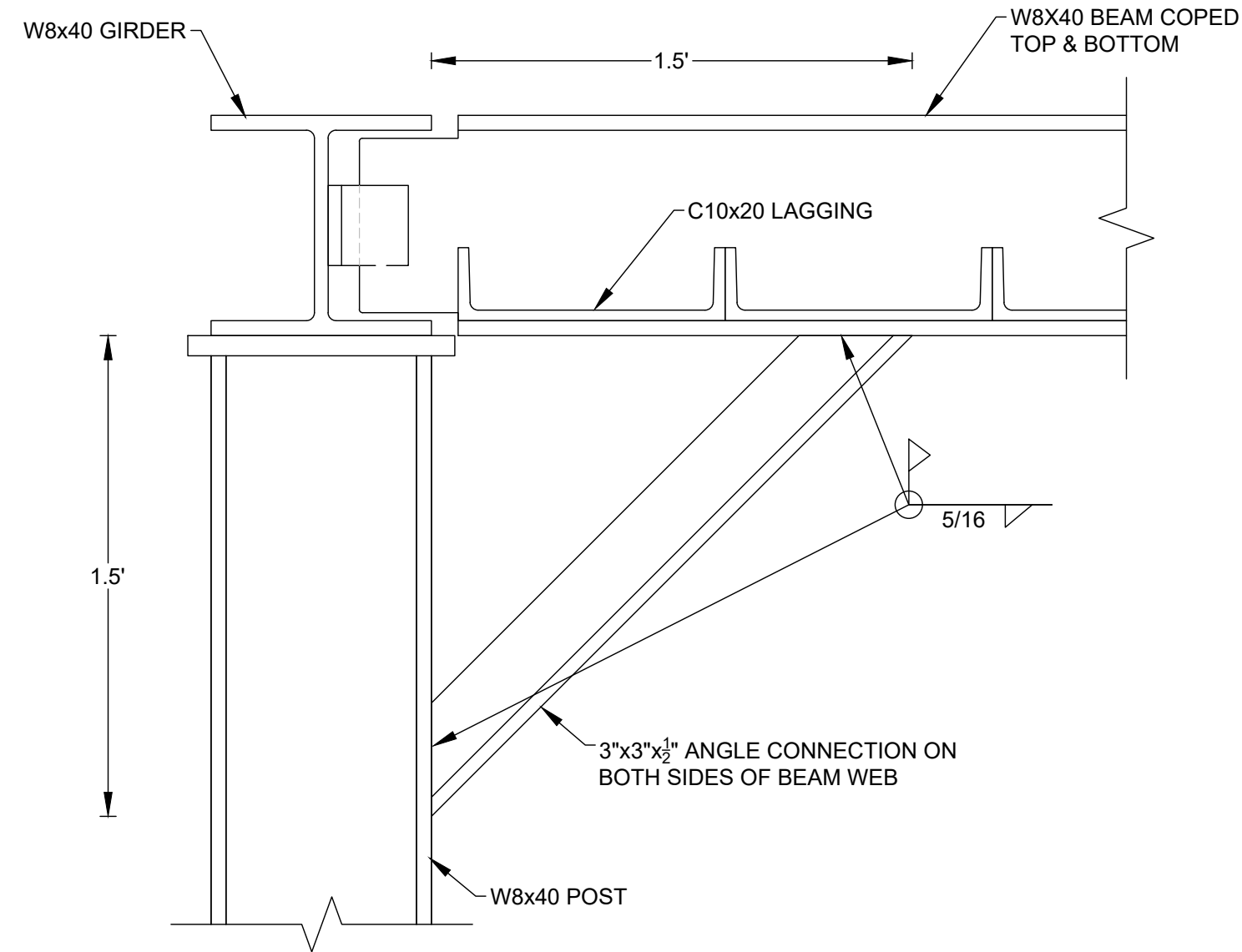


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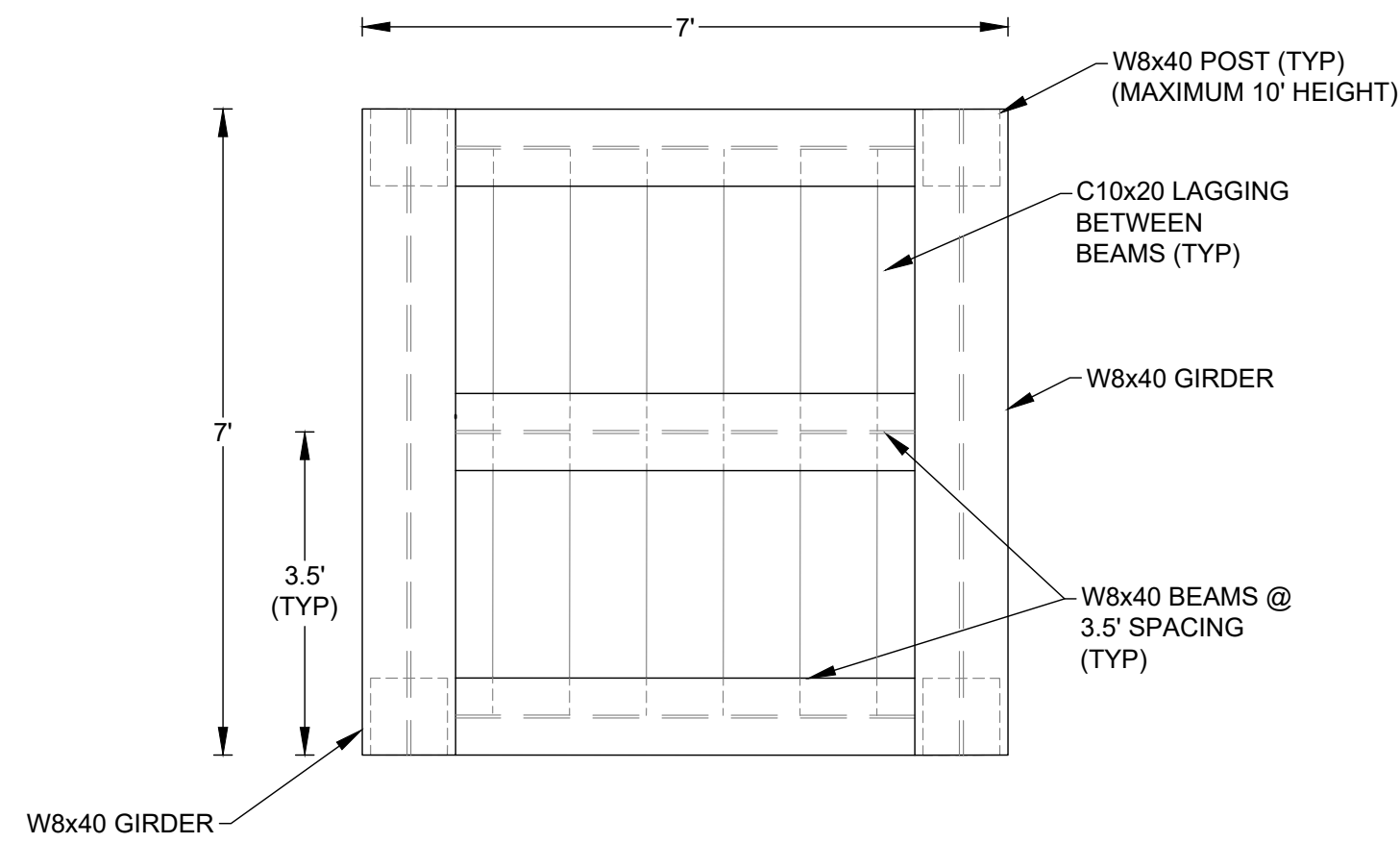
**STEEL FRAME CONNECTION DETAIL**

NTS

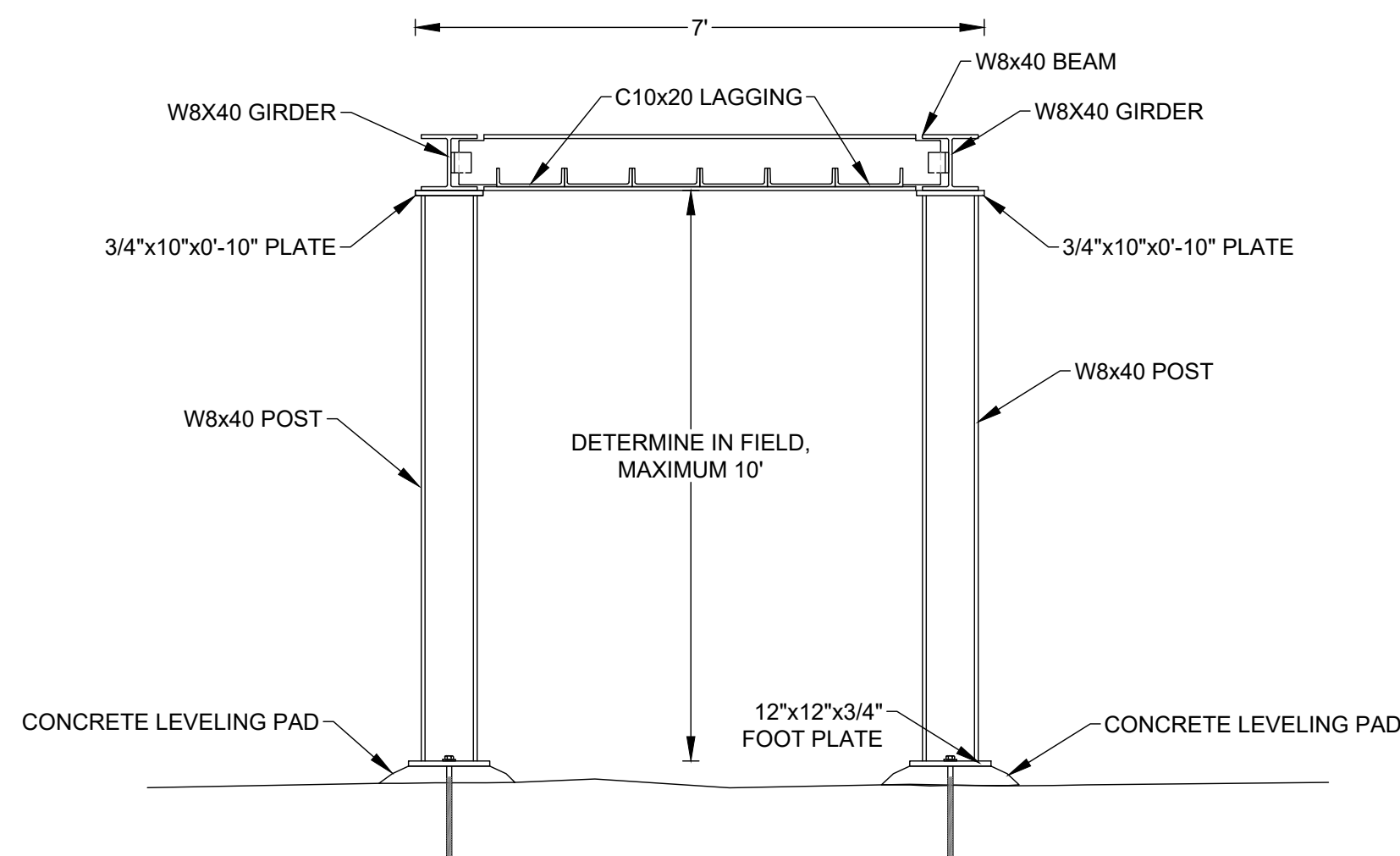
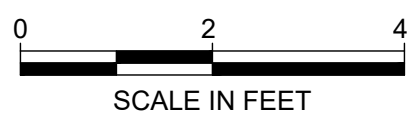


**STEEL FRAME BRACE DETAIL**

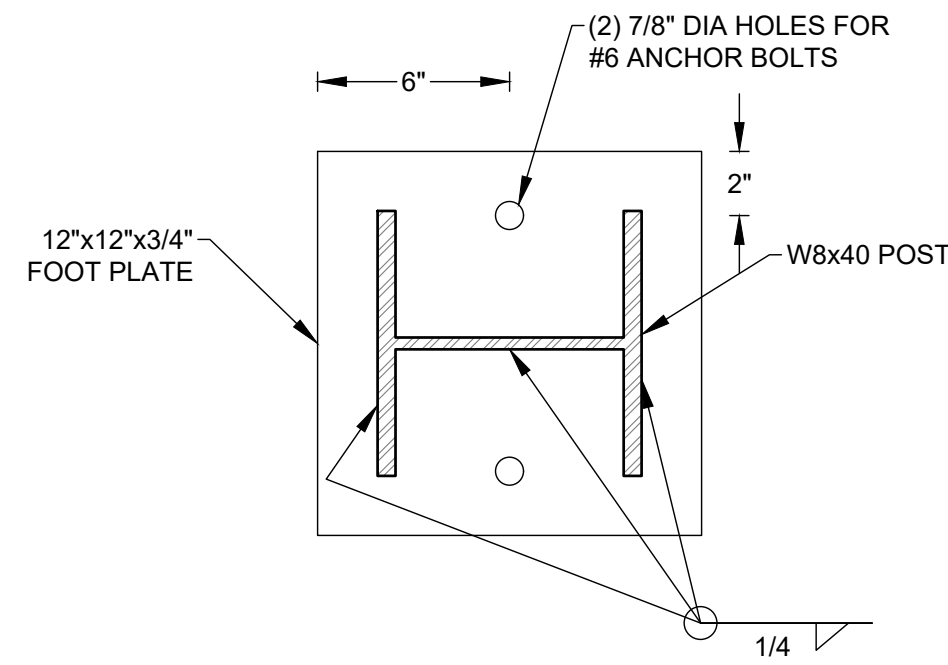
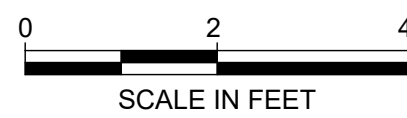
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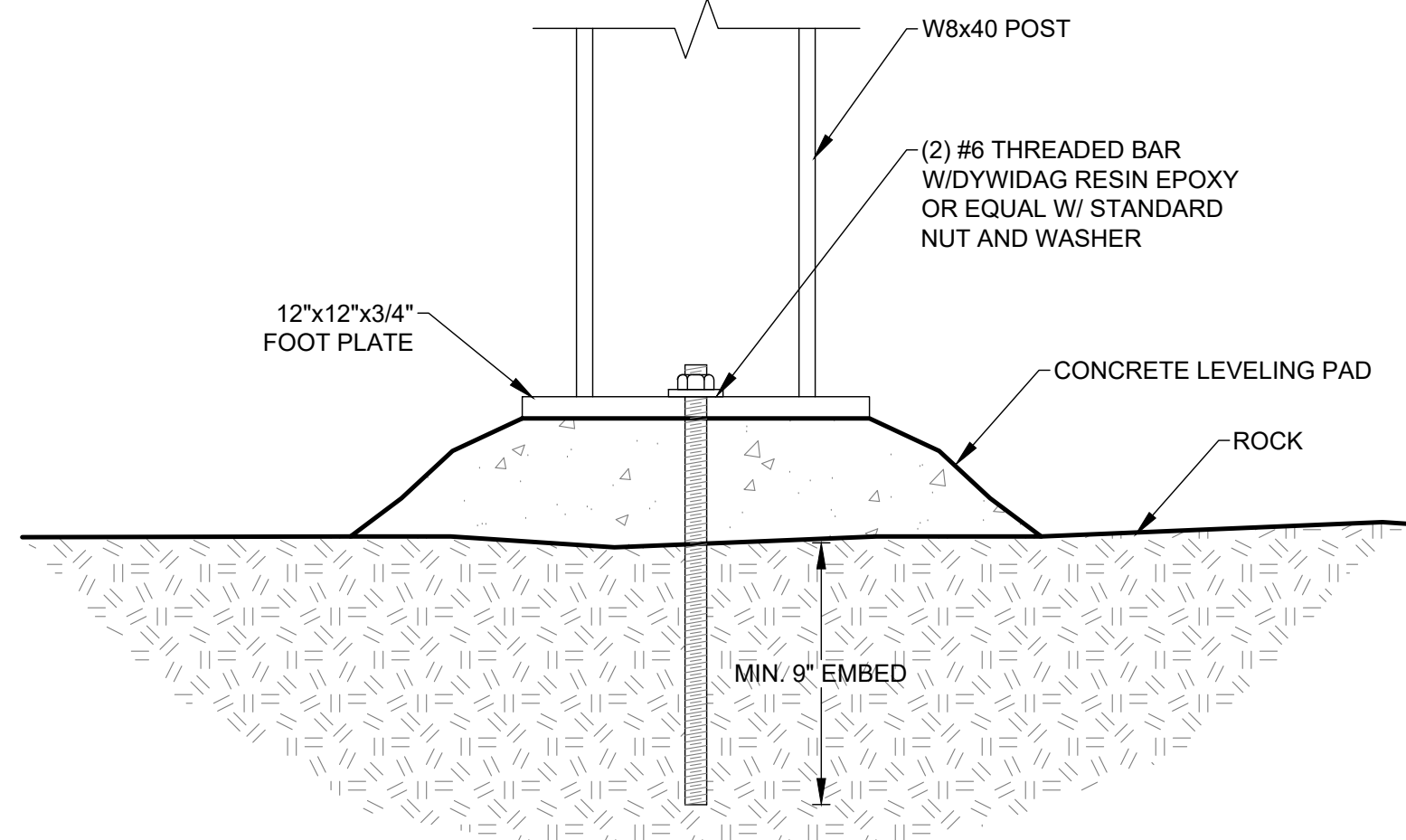
**STEEL FRAME PLAN**



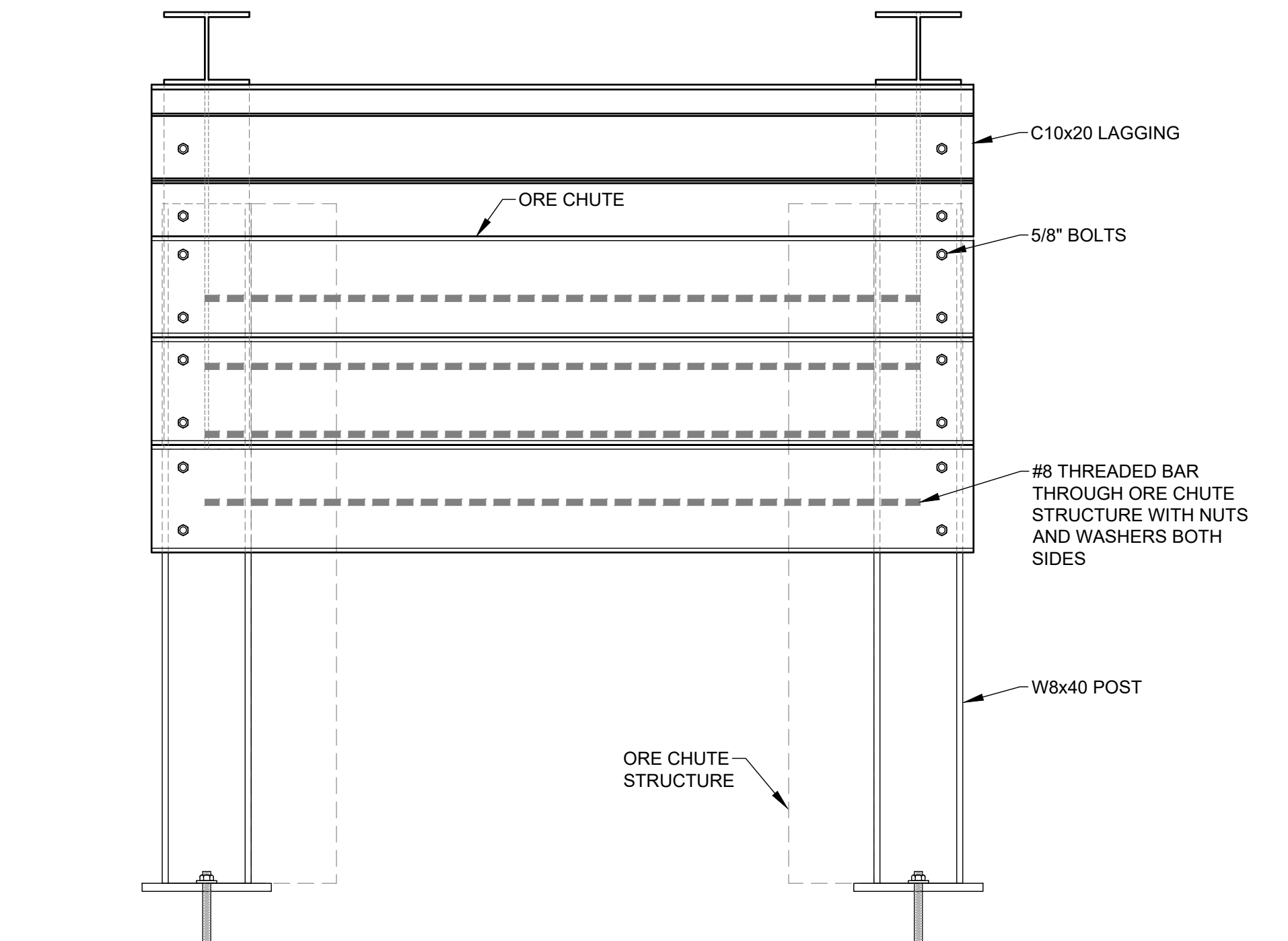
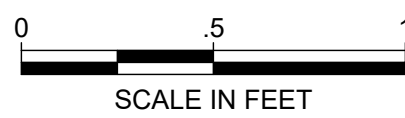
**STEEL FRAME SECTION**



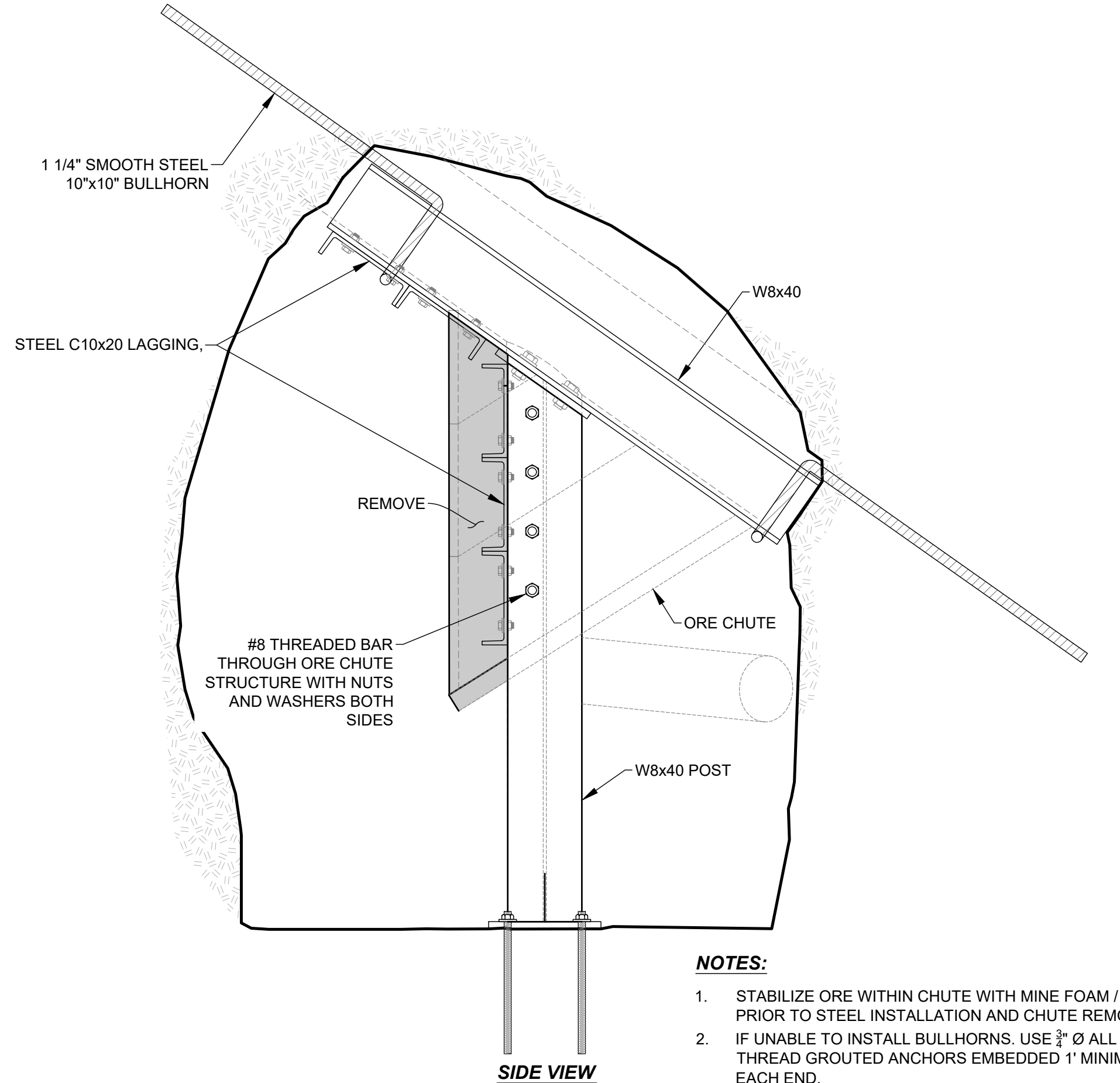
**STEEL FRAME FOOT BRACE DETAIL**



**STEEL FRAME FOOTER DETAIL**

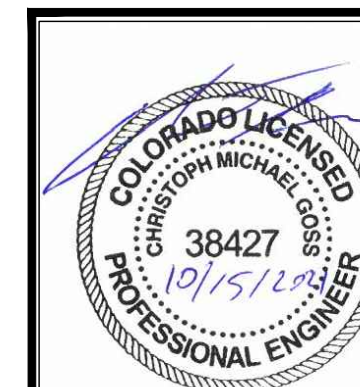
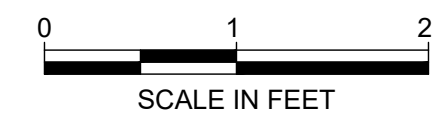


**FRONT VIEW**



**SIDE VIEW**

**ORE CHUTE SINGLE POST AND BRACING DETAIL**



				COMMODORE 5 REHABILITATION SEGMENT 6			
REVISIONS				STRUCTURAL DETAILS			
NO.	DESCRIPTION	DATE	BY	DEERE & AULT A SCHNABEL ENGINEERING COMPANY		600 S. AIRPORT RD., BLDG. 4, SUITE 205 LONGMONT, CO 80503 TEL 303.651.1488 FAX 303.651.1469	
1	60% PLANS	9/3/21	CMG				
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
				DESIGNED BY: CMG	APPROVED BY: CMG	JOB NO.	SHEET:
				DRAWN BY: HOG	DATE: 9/30/21	20C26033.04	25 of 27
				CHECKED BY: MWK	SCALE: AS NOTED		







Thursday, October 14, 2021 2:32:38 PM DRAWING: U:\0628\_western\002\_commodore 5\CAD\Working\Commodore5\_Details\_Segment 7.DWG

FILL GAPS BETWEEN  
STEEL AND ROCK WITH  
TIMBER BLOCKING OR  
WEDGES

W8x40 STEEL  
BEAM STULLS  
ANCHORED  
INTO ROCK

1 1/4" SMOOTH A36  
STEEL 10"x10" BULLHORN

SEE FRONT, TOP & SIDE  
VIEW CONNECTION DETAIL

STEEL C10x20 LAGGING,  
SEE NOTE 1

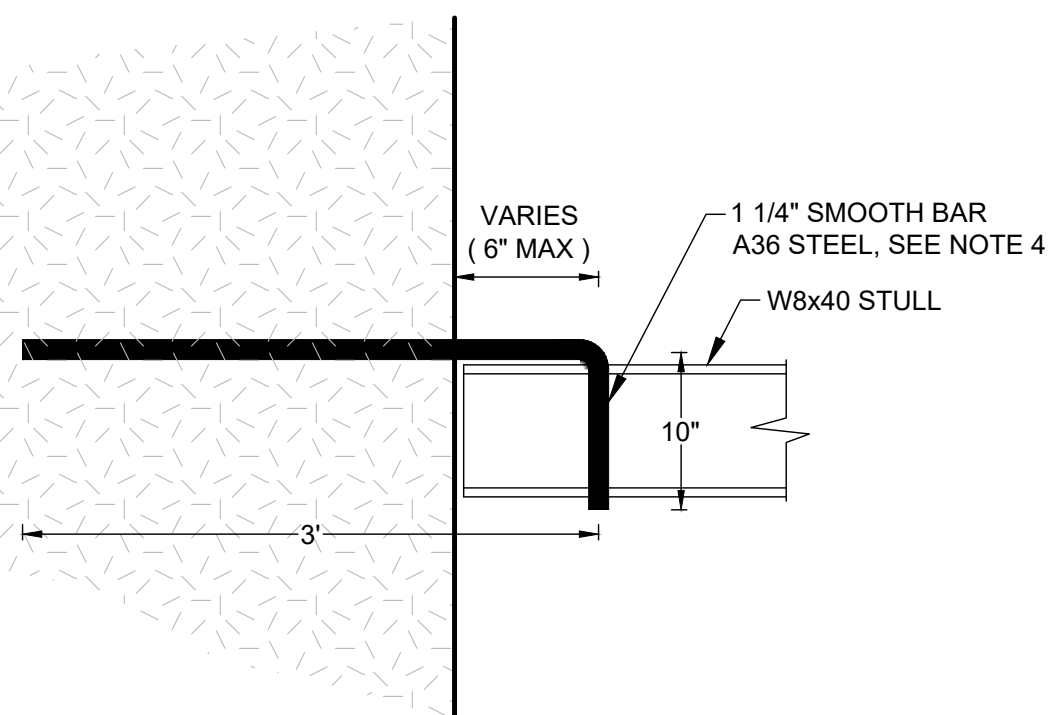
**NOTES:**

1. STEEL STULL LAGGING VARIES, SEE SHEET 22 AND 23.  
FINGER SHIELD LAGGING C10x20, 10" O.C., TIGHT FOR FOAM.
2. FIELD DIMENSIONS VARY
3. CUSTOM FITTING WILL BE REQUIRED.
4. USE 8"x8", 1"Ø BULLHORN FOR W6x25 CAP AT SINGLE POST SETS.

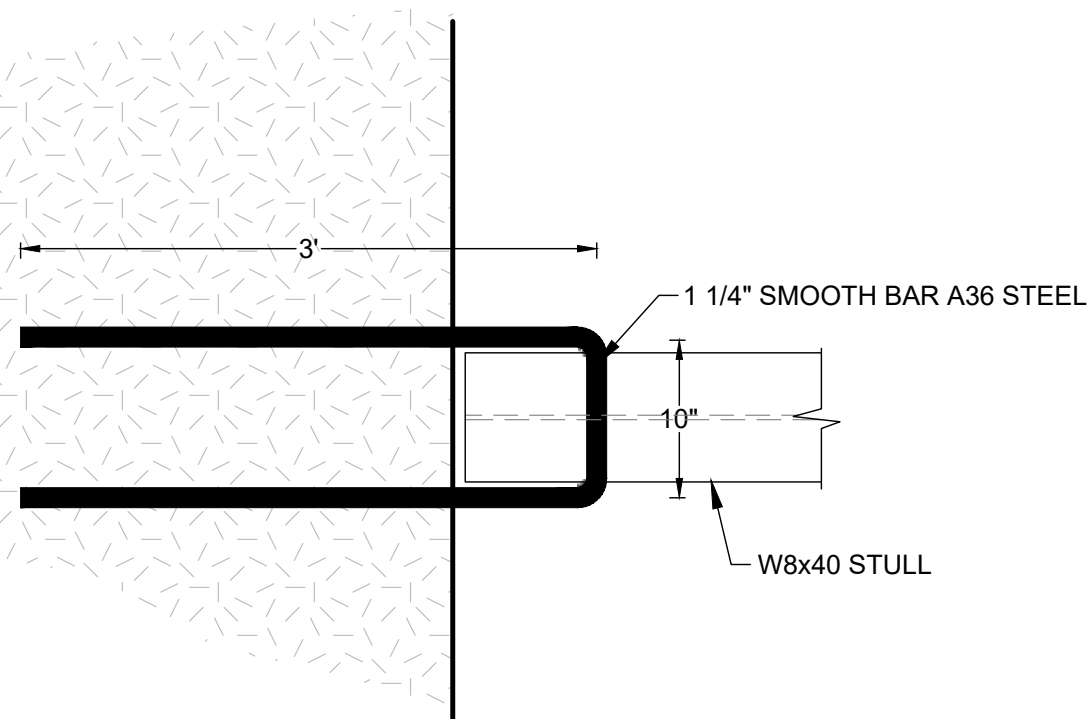
**TYPICAL STEEL STULL SECTION**



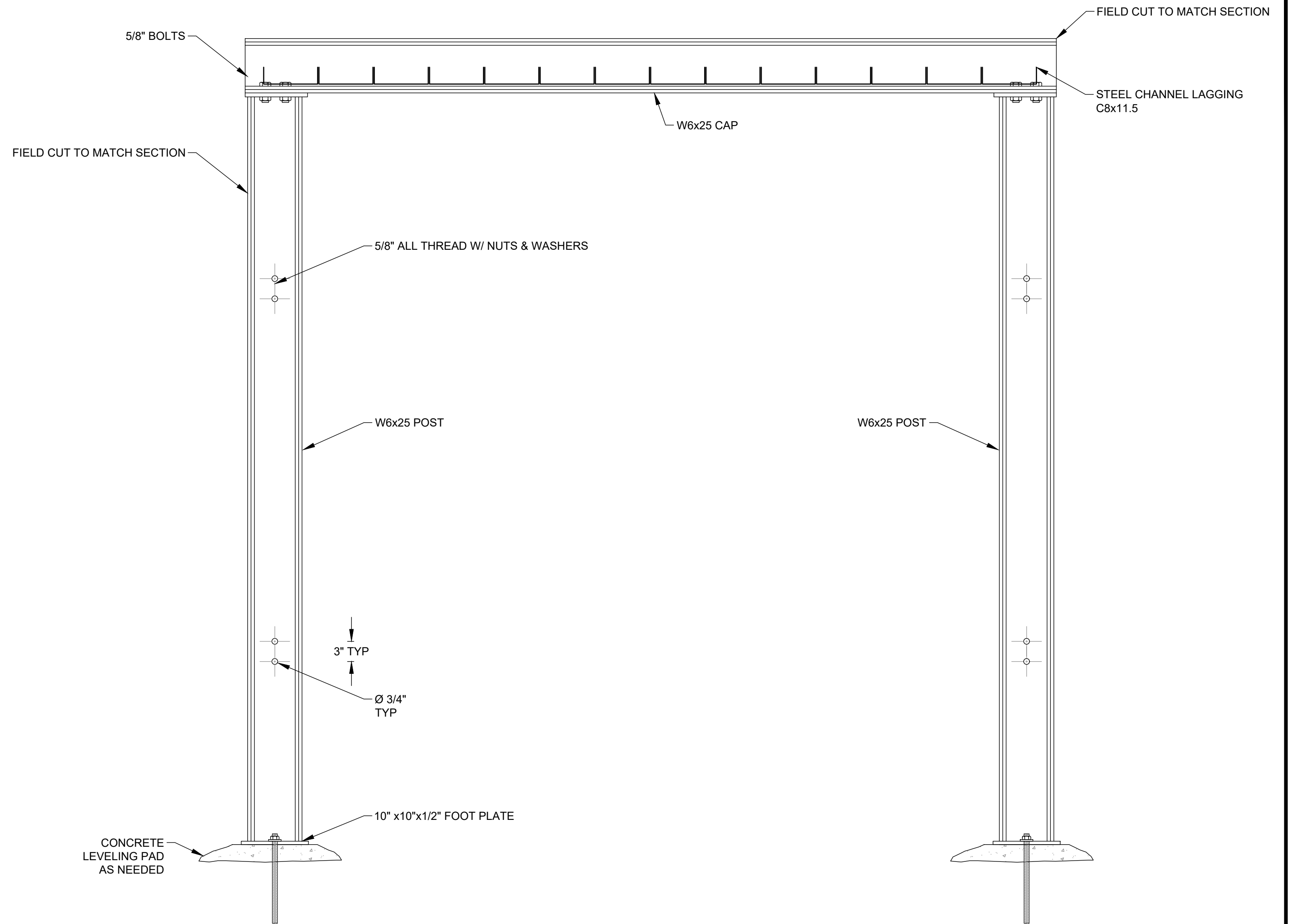
C



**STULL CONNECTION SIDE VIEW**



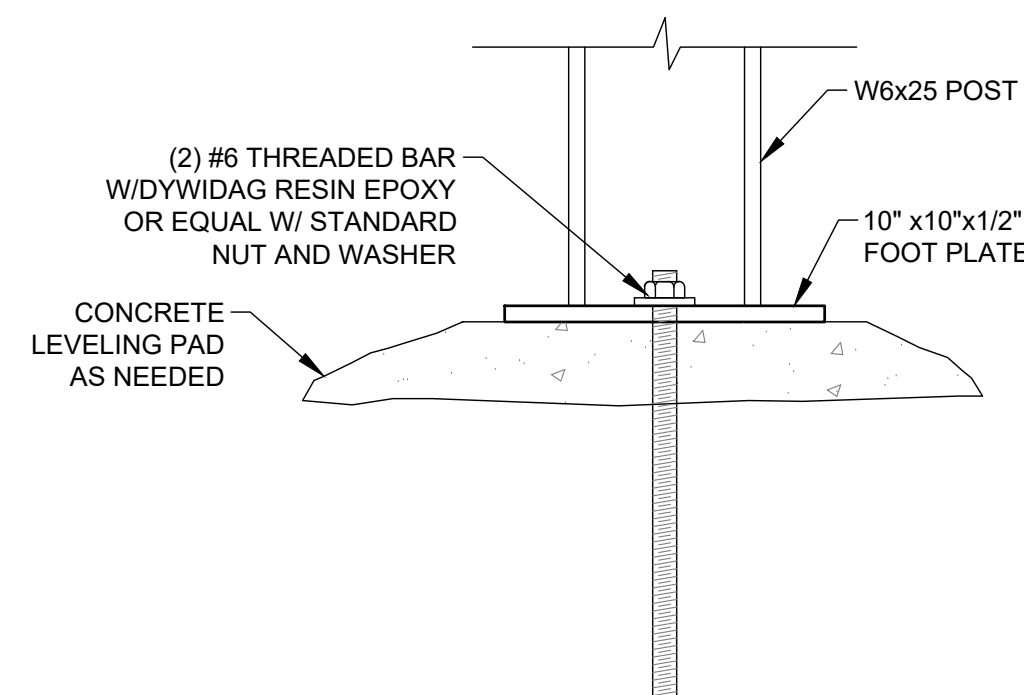
**STULL CONNECTION TOP VIEW**



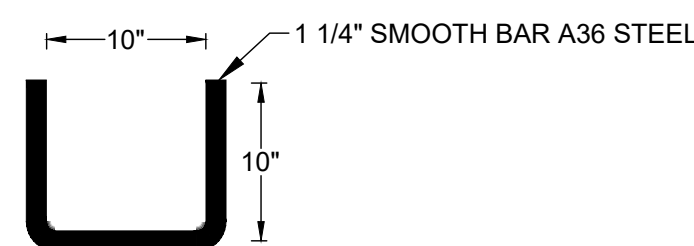
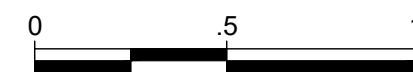
SHOWN @ 10' MAX. WIDTH

**3 PIECE SQUARE SET**

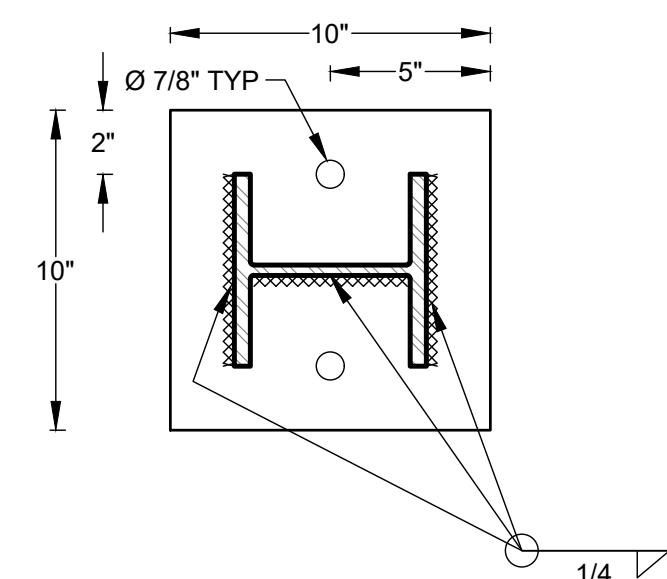
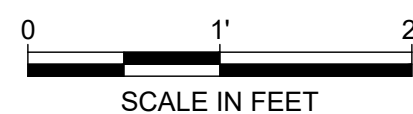
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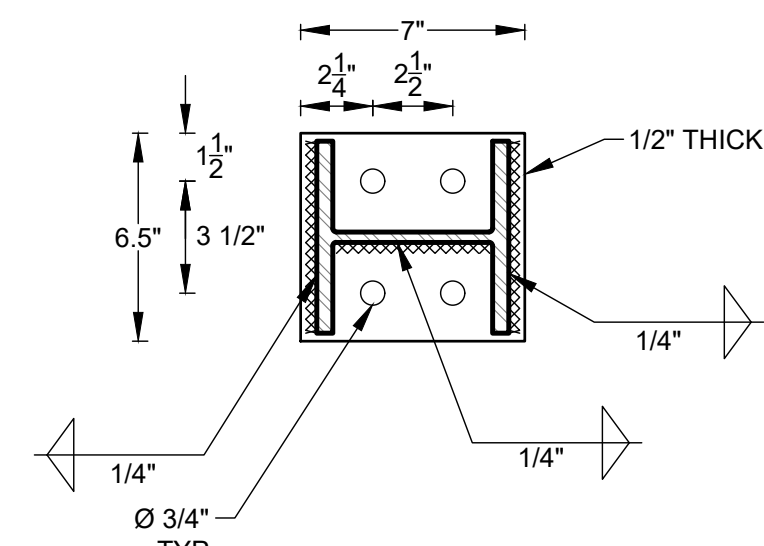
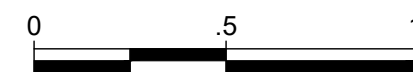
**FOOT PLATE DETAIL**



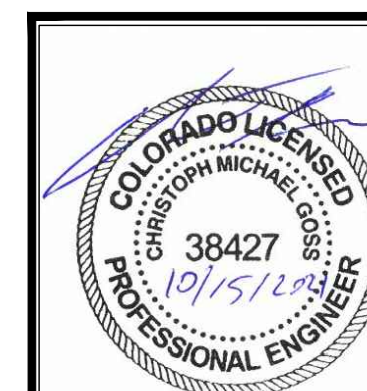
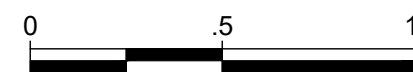
**STULL CONNECTION FRONT VIEW**



**FOOT PLATE DETAIL**



**BUTT PLATE DETAIL**



REVISIONS				COMMODORE 5 REHABILITATION SEGMENT 6			
NO.	DESCRIPTION	DATE	BY	STEEL SET DETAILS			
1	60% PLANS	9/3/21	CMG	<b>DEERE &amp; AULT</b> A SCHNABEL ENGINEERING COMPANY DESIGNED BY: CMG DRAWN BY: HOG CHECKED BY: MWK APPROVED BY: CMG DATE: 9/30/21 SCALE: AS NOTED			
2	95% BID SET	9/30/21	CMG				
3	ISSUED FOR CONSTRUCTION	10/15/21	CMG				
				600 S. AIRPORT RD. BLDG. A, SUITE 205 LONGMONT, CO 80503 TEL. 303.651.1468 FAX 303.651.1469	JOB NO.	20C26033.04	SHEET: 27 of 27