STANDARD EL PASO COUNTY GRADING & EROSION CONTROL PLAN

1. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS.

2. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS. STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.

3. A SEPARATE STORMWATER MANAGEMENT PLAN (SMWP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. MANAGEMENT OF THE SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR. THE SWMP SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.

4. ONCE THE ESQCP IS APPROVED AND A "NOTICE TO PROCEED" HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY

5. CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT COULD CONTRIBUTE POLLUTANTS TO STORMWATER. CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, AND DISTURBED LAND AREAS SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.

6. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES ARE NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN

7. TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.

8. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLANT DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.

9. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.

10. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.

11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).

12. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.

13. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRET WASHOUTS SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT OR WITHIN 50 FEET OF A SURFACE WATER BODY, CREEK OR STREAM.

14. DURING DEWATERING OPERATIONS OF UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEWATERING PERMIT IS IN PLACE.

15. EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.

16. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.

17. WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.

18. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.

19. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL, AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.

20. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.

21. NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ONSITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.

22. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ONSITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR OTHER FACILITIES.

23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.

24. OWNER/DEVELOPER AND THEIR AGENTS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE, DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND OTHER LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, LOCAL, OR COUNTY AGENCIES, THE MOST RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.

25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.

26. PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.

27. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.

28. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY SHALL BE CONSIDERED A PART OF THESE PLANS.

29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1) ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION, THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT WATER QUALITY CONTROL DIVISION WQCD – PERMITS 4300 CHERRY CREEK DRIVE SOUTH DENVER, CO 80246-1530 ATTN: PERMITS UNIT

### ABBREVIATIONS

EL	ELEVATION	ROW	RIGHT-OF-WAY
PC	POINT OF CURVATURE	R	RADIUS
PI	POINT OF INTERSECTION	Т	TANGENT
PT	POINT OF TANGENCY	L	LENGTH
PCR	POINT OF CURVE RETURN	LF	LINEAR FEET
PRC	POINT OF REVERSE CURVATURE	CL	CENTERLINE
PVC	POINT OF VERTICAL CURVATURE	X.XX' R	DIMENSION RIGHT
PVI	POINT OF VERTICAL INTERSECTION	X.XX' L	DIMENSION LEFT OI
PVT	POINT OF VERTICAL TANGENCY	PL	PROPERTY LINE
GB	GRADE BREAK	PVRC	POINT OF VERT REV
CSP	CORRUGATED STEEL PIPE		CURVATURE
RCP	REINFORCED CONCRETE PIPE	VC	VERTICAL CURVE
CBC	CONCRETE BOX CULVERT	AP	ANGLE POINT
TBC	TOP BACK CURB	STA	STATION
TC	TOP OF CURB	INV	INVERT
BT	BEGIN TAPER	RG	RAIN GARDEN
ET	END TAPER	SFB	SAND FILTER BASIN
EC	EDGE OF CONCRETE		

## LEGEND

EXISTING			PROPOSED
			BOUNDARY LINE
ADJACENT BOUNDARY LINE			
			EASEMENT LINE
			CENTER LINE
			INDEX CONTOUR
	— — 6028 — — -		INTERMEDIATE CON
FENCE	O	-0-	SLOPE / GRADE
LIGHT POLE	*		
CULVERT	$\succ$		
RIPRAP			
POLE-ANCHOR	$\overline{\mathbf{\cdot}}$		

### **BMP LEGEND**

MAP SYMBOL	<u>KEY</u>	DESCRIPTION
SF	SF	SILT FENCE
SCL	SCL	sediment contr
	VIC	VEHICLE TRACKIN
SW	SW	STREET SWEEPING
	CIP	CULVERT INLET PR
<b>(</b>	CD	EROSION LOG CH
	(SSA)	STABILIZED STAGIN
PS/MU	PS/MU	SEEDING / MULCH
		"DITCH OUT" TO D DAM
	AITS OF STURBANCE BED	LIMITS OF CONSTR SITE BOUNDARIES
CUT, FILL		LIMITS OF CUT/FILI
9		limits of soil typ

#### GENERAL NOTES

UNDIS

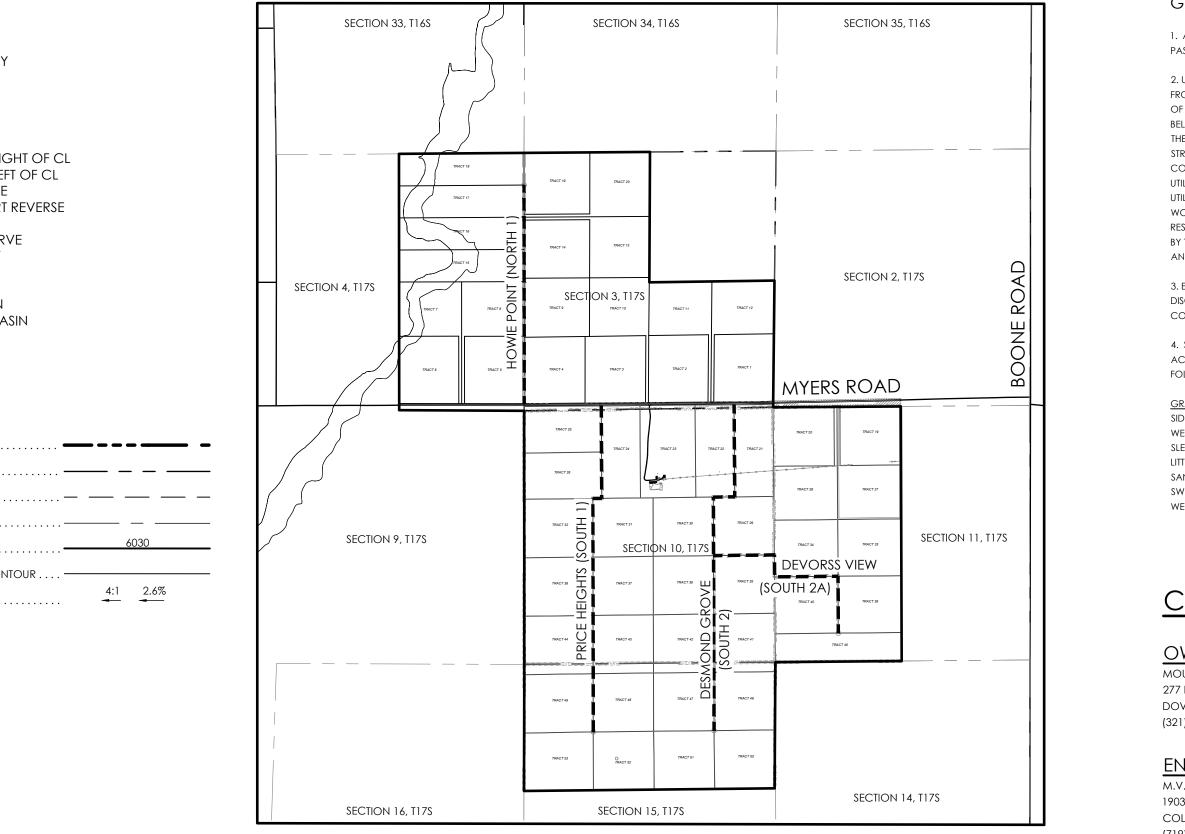
\_. ON \_\_\_\_\_

THERE IS NO SIGNIFICANT VEGETATION IN THE AREA OF DISTURBANCE. ALL DISTURBED AREAS TO BE SEEDED AND MULCHED.

THERE ARE NOT ANY NO-BUILD AREAS INDICATED ON THIS PLAN.

STOCKPILE AND STAGING AREA WILL RELOCATE AS THE PROJECT MOVES FROM INITIAL TO FINAL STAGES. THE LOCATIONS FOR THESE AREAS SHALL BE ANNOTATED ON THIS PLAN BY THE SWMP ADMINISTRATOR.

# GRADING AND EROSION CONTROL PLANS tor MEADOW RANCH II & III PORTIONS OF SECTIONS 3, 4, 10, 11 & 15, TOWNSHIP 17 SOUTH, RANGE 61 WEST OF THE 6TH P.M., EL PASO COUNTY, COLORADO







NG CONTROL

ROTECTION

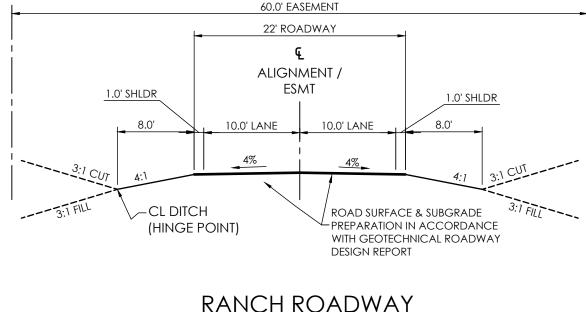
HECK DAM

ING AREA

HING

DAYLIGHT w/ CHECK

RUCTION



SCALE: 1" = 10'

HEET	<u>INDEX</u>

Plan Set <u>Sheet no.</u>	SHEET INDEX	M.V.E. DRAWING NO.
C1.1	COVER SHEET	61209-GEC-CS
C1.2 TO C1.3	GEC PLAN (HOWIE POINT/NORTH 1)	61209-GEC-PP-N1
C1.4 TO C1.6	GEC PLAN (PRICE HEIGHTS/SOUTH 1)	61209-GEC-PP-S1
C1.7 TO C1.9	GEC PLAN (DESMOND GROVE/SOUTH 2)	61209-GEC-PP-S2
C1.10 TO C1.11	GEC PLAN (DEVORSS VIEW/SOUTH 2A)	61209-GEC-PP-S3
C1.12	EROSION CONTROL DETAILS	61201-GEC-ED

1. ALL NEW CONSTRUCTION IS TO CONFORM TO THE SPECIFICATIONS OF EL PASO COUNTY.

2. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN DRAWN FROM AVAILABLE RECORDS AND/OR SURFACE EVIDENCE. THE LOCATION OF ALL UTILITIES MAY NOT BE SHOWN OR MAY NOT HAVE BEEN LOCATED. BELOW GROUND LOCATIONS HAVE NOT BEEN PERFORMED. THEREFORE, THE RELATIONSHIP BETWEEN PROPOSED WORK AND EXISTING FACILITIES. STRUCTURES AND UTILITIES MUST BE CONSIDERED APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL SUBSURFACE UTILITY OWNERS PRIOR TO BEGINNING WORK TO DETERMINE LOCATION OF UTILITY FACILITIES ALL UTILITIES SHALL BE LOCATED PRIOR TO ANY FARTH WORK OR DIGGING (1-800-922-1987) THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED

AND ALL UTILITIES.

CONSTRUCTION. 4. SOIL PREPARATION, SEEDING, AND MULCHING FOR AN ESTIMATED 3.3

GRASS SIDEOATS ( WESTERN SLENDER V LITTLE BLUE SAND DRC SWITCH G WFFPING

OWNER/DEVELOPER MOUNTAIN VIEW RANCHES LLC 277 LOCUST ST, SUITE A DOVER, NH 03820 (321) 213-7496

ENGINEER M.V.E., INC. (719) 635-5736

, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

JOSHUA PALMER, P.E. INTERIM COUNTY ENGINEER / ECM ADMINISTRATOR

#### GENERAL NOTES

BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY 3. EXISTING CONDITIONS SHALL BE VERIFIED BY THE GENERAL CONTRACTOR. DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER PRIOR TO

ACRES WILL BE REQUIRED ON ALL DISTURBED AREAS NOT SURFACED. THE FOLLOWING TYPES AND RATES SHALL BE USED:

	VARIETY	AMOUNT IN P	LS Ibs. PER A
GRAMA	EL RENO		3.0 lbs.
WHEATGRASS	BARTON		2.5 lbs.
WHEAT GRASS	NATIVE		2.0 lbs.
ESTEM	PASTURA		2.0 lbs.
OPSEED	NATIVE		0.5 lbs.
GRASS	NEBRASKA 28		3.0 lbs.
LOVE GRASS	MORPHA		1.0 lbs.
		TOTAL	14.0 lbs.

5. SEEDING APPLICATION: DRILLED TO A DEPTH OF .25" TO .50" INTO SOIL WHERE POSSIBLE, BROADCAST AND RAKED TO COVER ON STEEPER THAN 3:1 SLOPES WHERE ACCESS IS LIMITED OR UNSAFE FOR EQUIPMENT.

6. MULCHING REQUIREMENT AND APPLICATION: 2.0 TONS PER ACRE NATIVE HAY MECHANICALLY CRIMPED INTO SOIL.

7. ALL STORM DRAIN SHALL BE REINFORCED CONCRETE PIPE ALL CULVERTS SHALL BE PLACED COMPLETE WITH FLARED END SECTIONS. ALL STORM DRAIN FITTINGS AND BENDS SHALL BE PRE-CAST. STORM DRAIN PIPE MAY ALSO BE CORRUGATED METAL OR HDPE, PLACED IN ACCORDANCE WITH EL PASO COUNTY **SPECIFICATIONS** 

8. CONTRACTOR WILL BE RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION MEETING HELD PRIOR TO CONSTRUCTION WITH EPC-PCD, ENGINEER, AND CONTRACTOR IN ATTENDANCE.

9. CONTRACTOR IS RESPONSIBLE FOR ALL OF HIS OPERATIONS ON THE SITE. CONTRACTOR SHALL OBSERVE ALL SAFETY AND OSHA REGULATIONS DURING CONSTRUCTION OPERATIONS. TRENCH WIDTHS AND SLOPE ANGLES SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD AND ACCORDING TO SAFETY AND OSHA REGULATIONS.

10. ALL NECESSARY PERMITS, SUCH AS SWMP, FUGITIVE DUST, ACCESS, C.O.E. 404, ESQCP PERMIT, ETC. SHALL BE OBTAINED PRIOR TO CONSTRUCTION

## COMPANIES AND AGENCIES

1903 LELARAY STREET, STE 200 COLORADO SPRINGS, CO 80909

#### EL PASO COUNTY PLANNING

EPC PLANNING AND COMMUNITY DEVELOPMENT 2880 INTERNATIONAL CIRCLE, SUITE 110 COLORADO SPRINGS, CO 80910 (719) 520-6300

STREETS AND RIGHTS-OF-WAY EPC DEPARTMENT OF PUBLIC WORKS 3275 AKERS DRIVE COLORADO SPRINGS, CO 80922 (719) 520-6460

### **OWNERS STATEMENT**

DATE

#### DESIGN ENGINEER'S STATEMENT

THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLAN.

DAVID R. GORMAN, P.E. COLORADO NO. 31672 FOR AND ON BEHALF OF M.V.E., INC.

#### **EL PASO COUNTY**

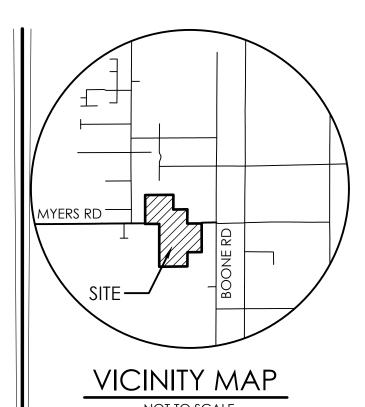
COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTORS DISCRETION.

DATE

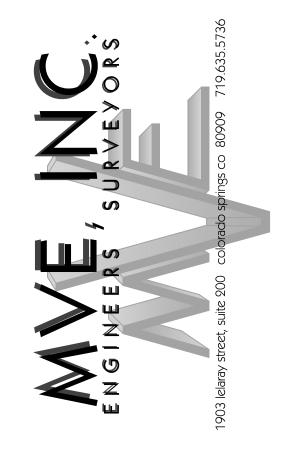
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BENCHMARK HORIZONTAL COORDINATES AND BEARINGS ARE BASED ON THE NORTH LINE OF SECTION 10, T17S, R61W, 6TH P.M., BEARING \$89°11'11'W, 5184.96'

NW COR SEC 10 (N=1,279,610,79', E=3,365,769.45') NE COR SEC 10 (N=1,279,684.41, E=3,370,953.88')

VERTICAL ELEVATIONS ARE NAVD 88 GEOID 12B



REVISIONS

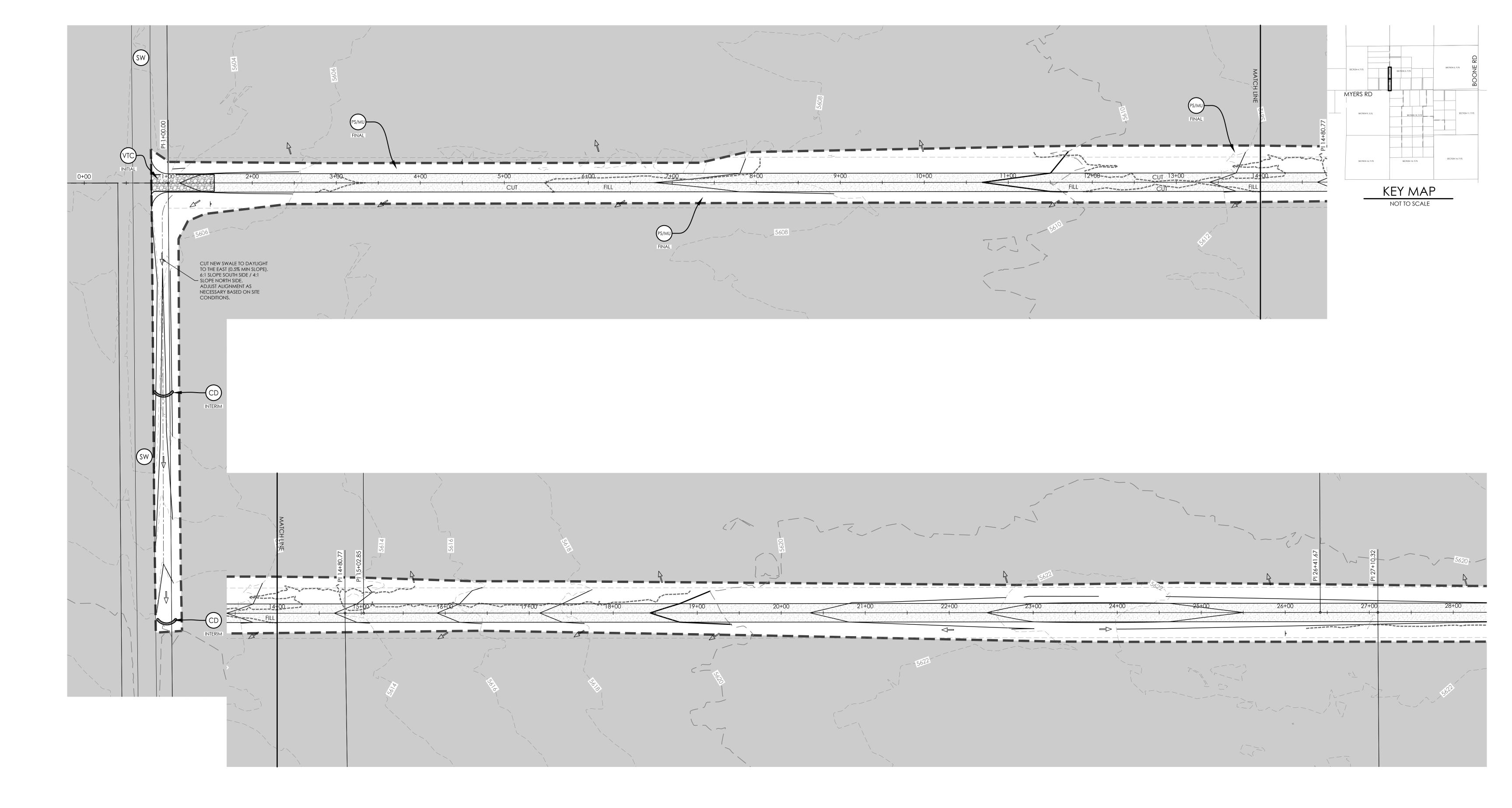
DESIGNED BY DRAWN BY CHECKED BY AS-BUILTS BY CHECKED BY

## MEADOW RANCH II & III





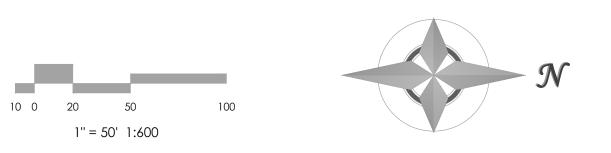
APRIL 17, 2024 SHEET <sup>1</sup> OF <sup>12</sup>

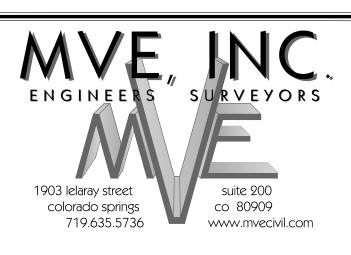


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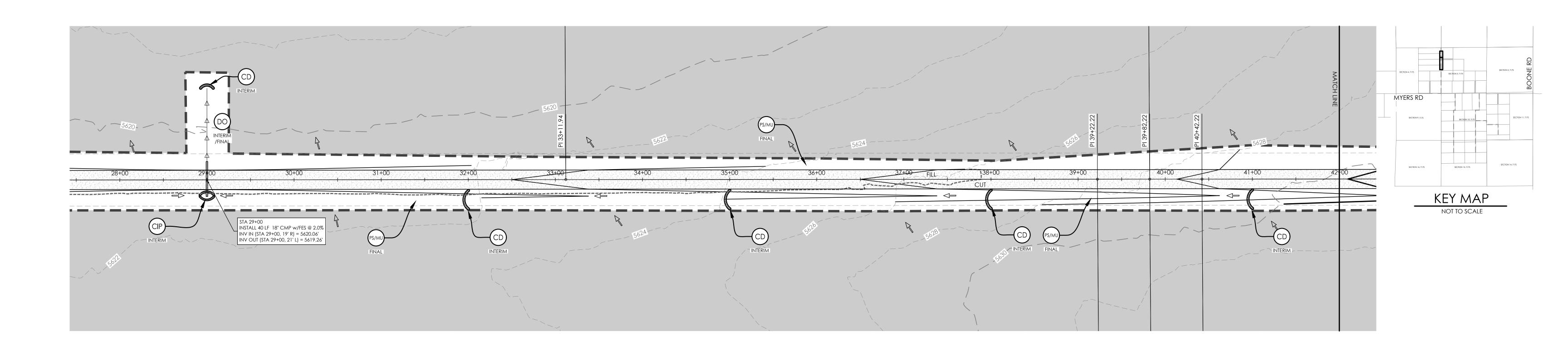
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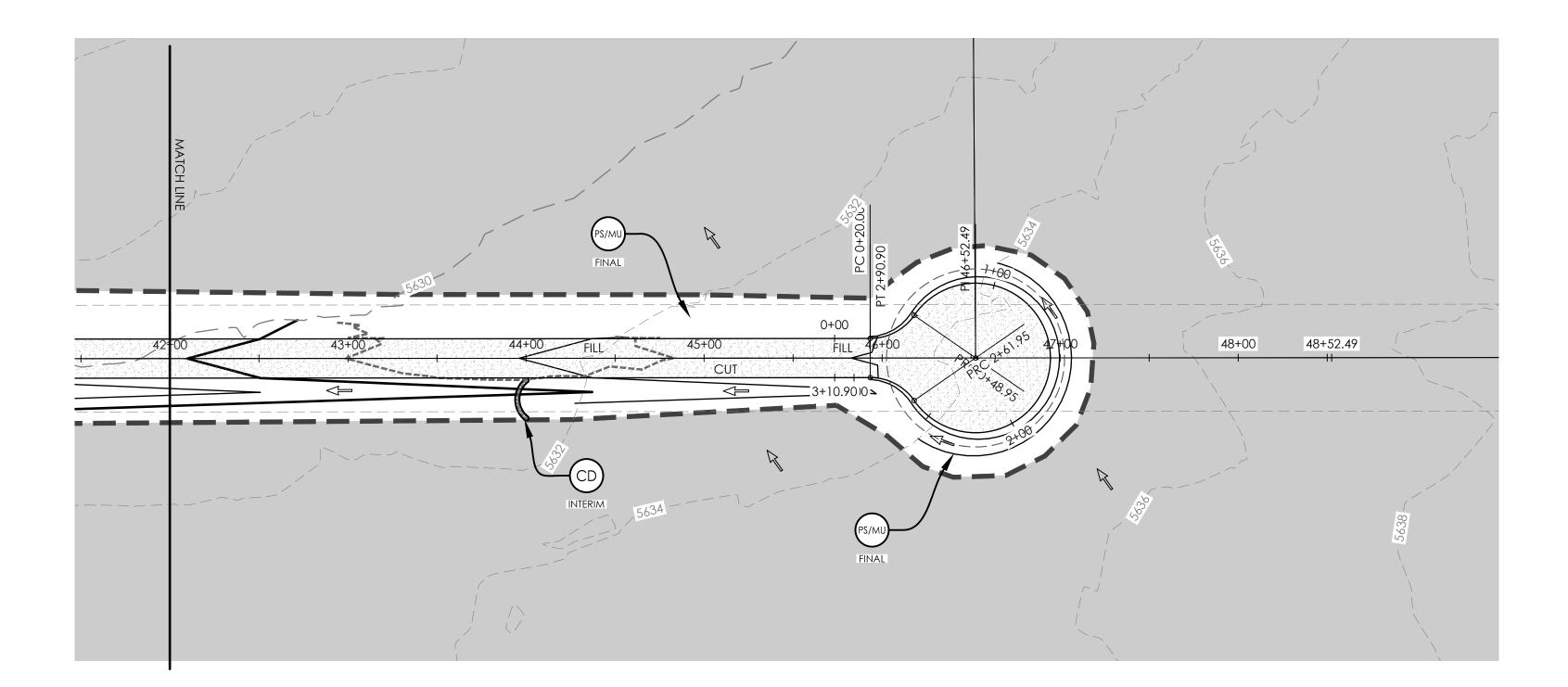
MVE PROJECT MVE DRAM 209-GEC-PP-N1

## APRIL 17, 2024

DESIGNED BY DRAWN BY CHECKED BY \_\_ AS-BUILTS BY \_\_\_\_\_ HOWIE POINT (NORTH 1) FROM STA 0+00.00 to sta 28+00.00

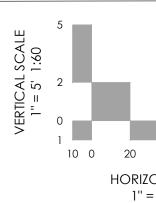


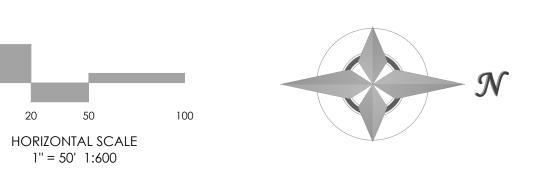


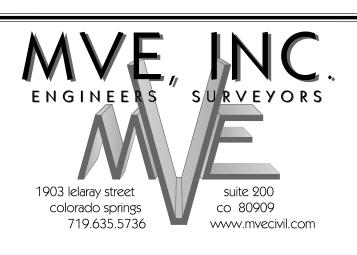


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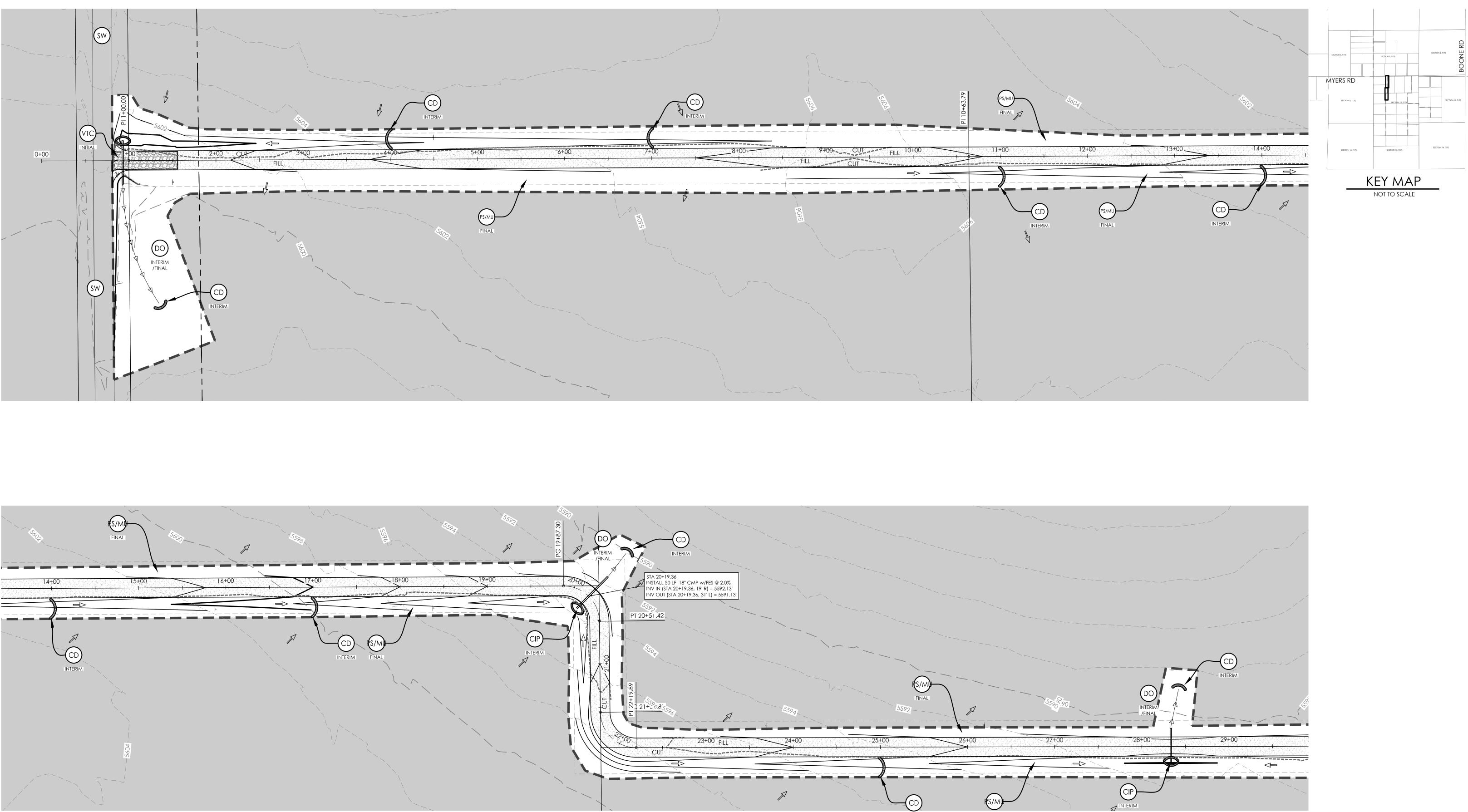
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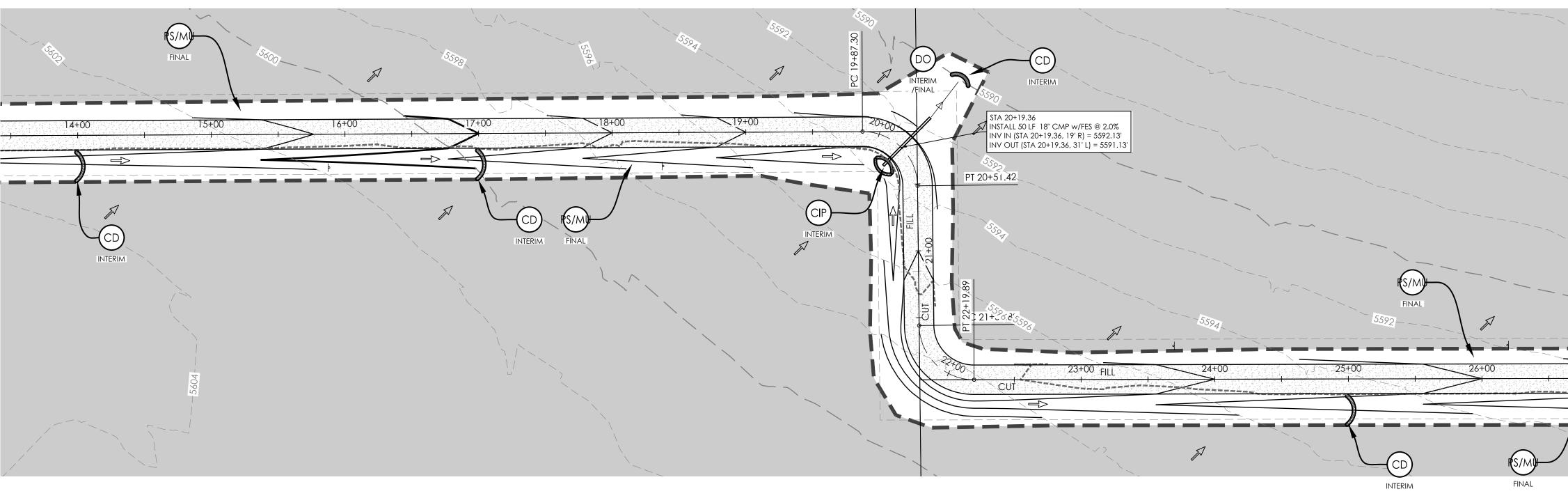
MVE PROJECT MVE DRAM 209-GEC-PP-N1

APRIL 17, 2024

DESIGNED BY DRAWN BY CHECKED BY \_\_ AS-BUILTS BY \_\_\_\_\_ HOWIE POINT (NORTH 1) FROM STA 28+00.00 to end







10 0 20 50

1'' = 50' 1:600

## BENCHMARK:

HORIZONTAL COORDINATES AND BEARINGS ARE BASED ON THE NORTH LINE OF SECTION 10, T17S, R61W, 6TH P.M., BEARING S89°11'11'W, 5184.96'.

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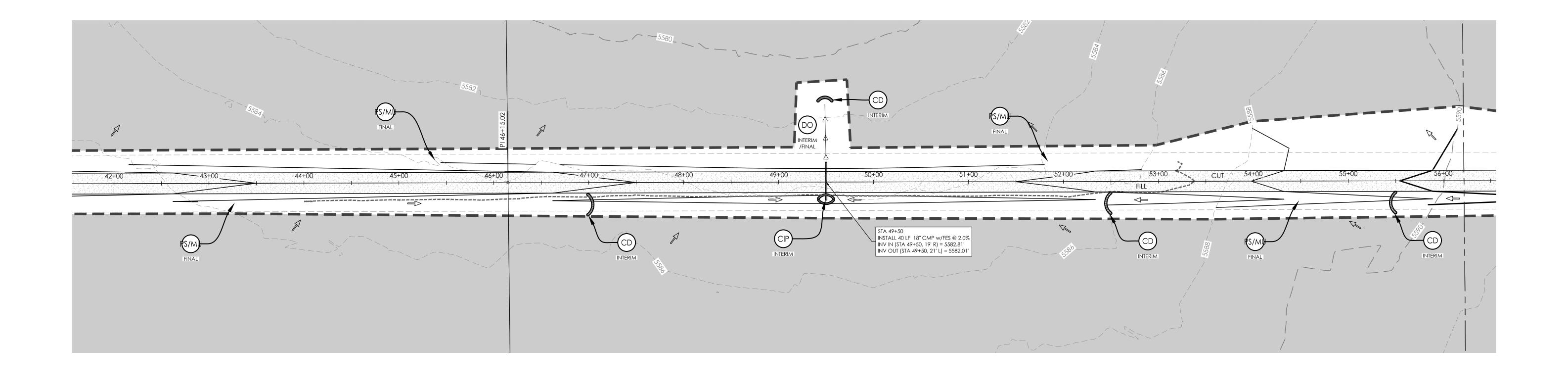
MVE PROJECT MVE DRA 61209-GEC-PP-S1

APRIL 17, 2024

DESIGNED BY DRAWN BY CHECKED BY \_\_ AS-BUILTS BY \_\_\_\_\_ PRICE HEIGHTS (SOUTH 1) FROM STA 0+00.00 to sta 28+00.00



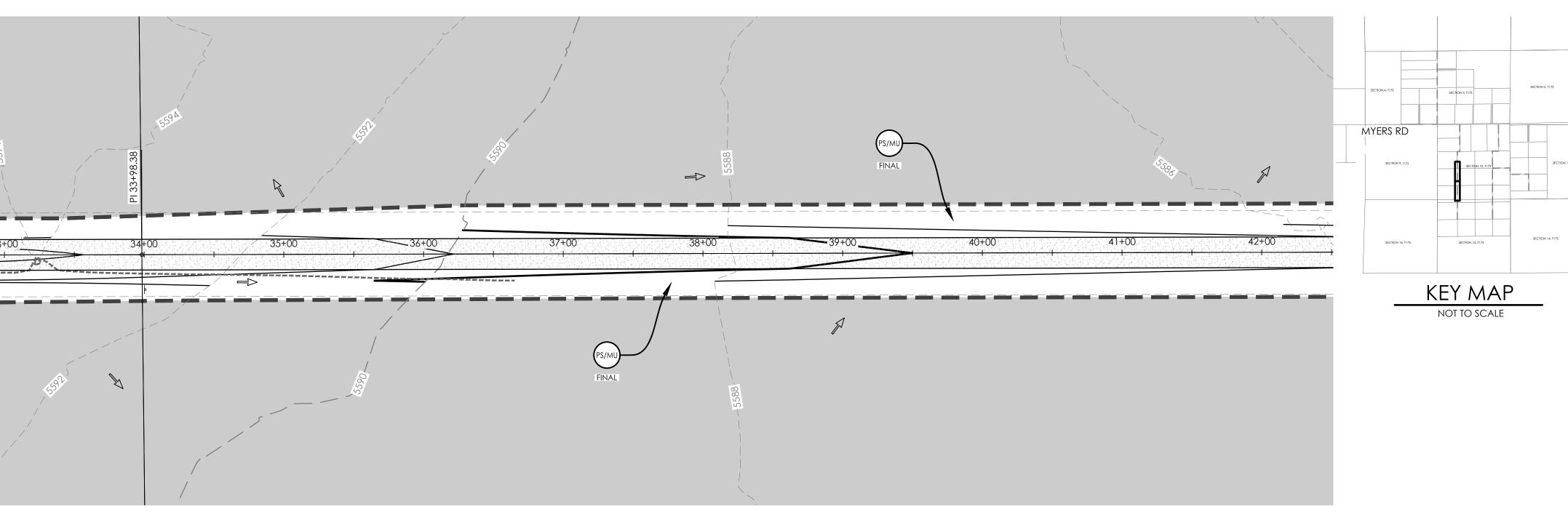
INITERIA STA 28+33.33 INSTALL 40 LF 18" CMP w/FES INV IN (STA 28+33.33, 19' R) = 5589.89' INV OUT (STA 28+33.33, 21' L) = 5589.09' 32+00 31+00-30+00 29+00tana inter man man inter man man man man  $\triangleleft$ 



HORIZONTAL COORDINATES AND BEARINGS ARE BASED ON THE NORTH LINE OF SECTION 10, T17S, R61W, 6TH P.M., BEARING S89°11'11'W, 5184.96'.

NW COR SEC 10 (N=1,279,610,79', E=3,365,769.45') NE COR SEC 10 (N=1,279,684.41, E=3,370,953.88')

VERTICAL ELEVATIONS ARE NAVD 88 GEOID 12B





N

1'' = 50' 1:600

50

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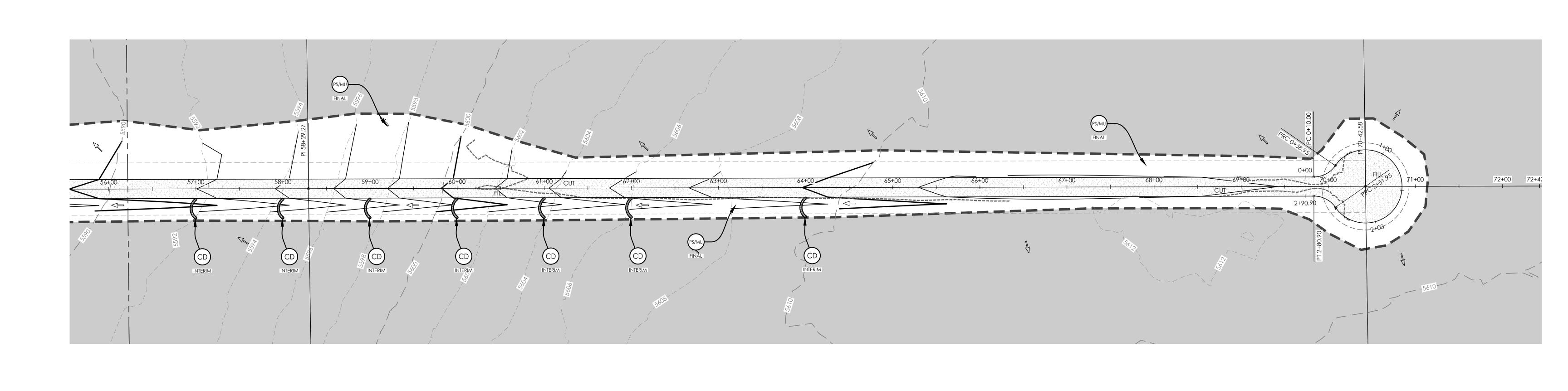
REVISIONS

MVE PROJECT MVE DRA**&1209-GEC-PP-S1** 

## APRIL 17, 2024

DESIGNED BY DRAWN BY CHECKED BY \_\_\_\_\_ AS-BUILTS BY CHECKED BY \_\_\_\_\_ PRICE HEIGHTS (SOUTH 1) FROM STA 28+00.00 TO STA 56+00.00

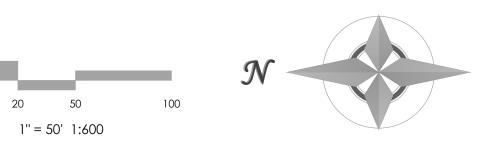




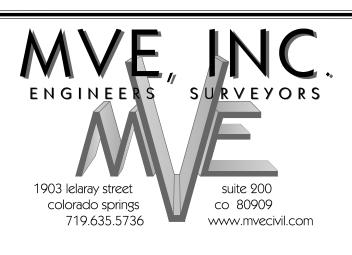
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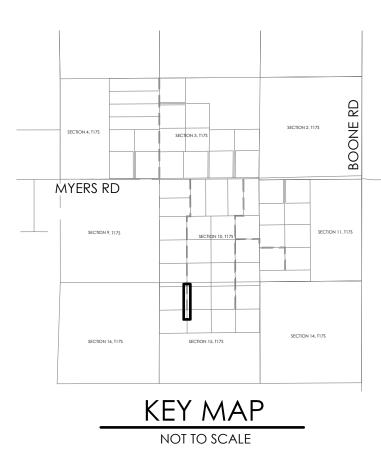
VERTICAL ELEVATIONS ARE NAVD 88 GEOID 12B



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REVISIONS

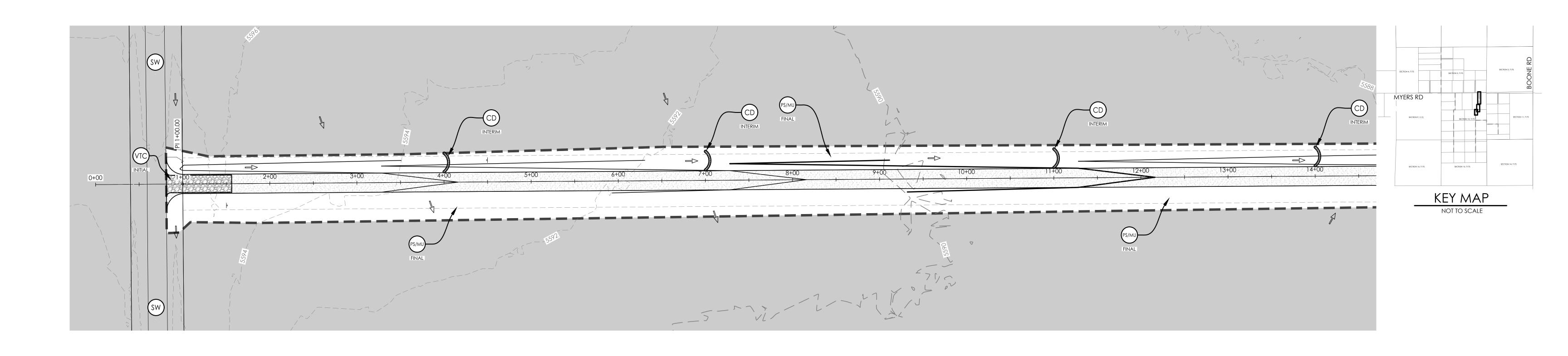


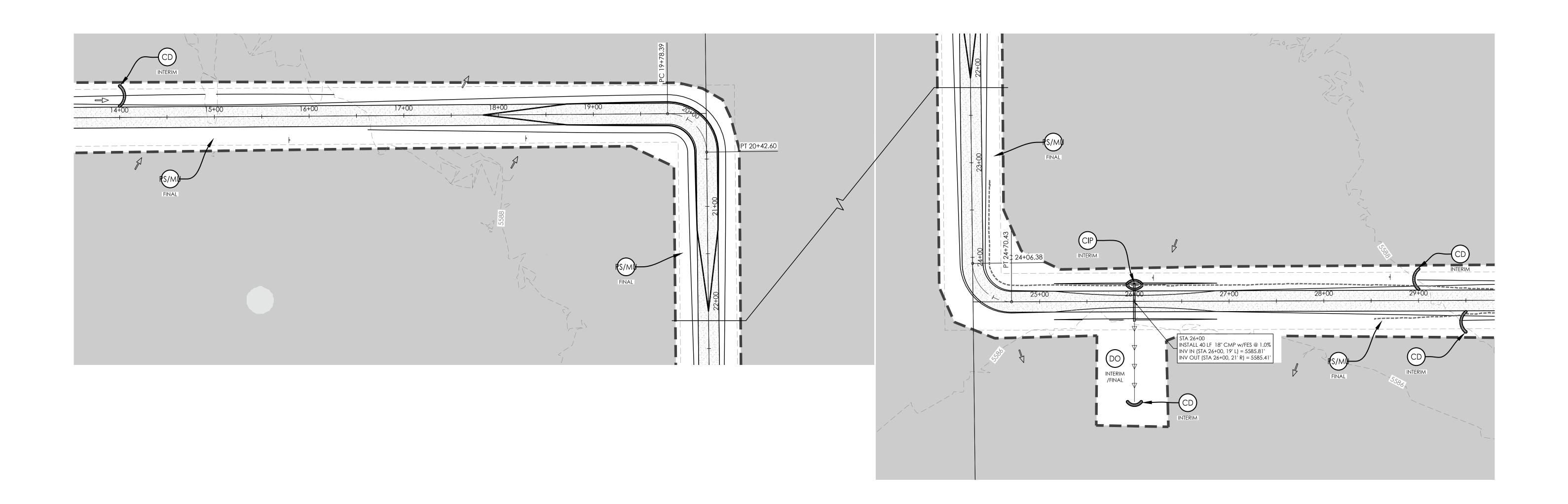
MVE PROJECT MVE DRA 61209-GEC-PP-S1

APRIL 17, 2024

DESIGNED BY DRAWN BY CHECKED BY \_\_ AS-BUILTS BY \_\_\_\_\_ PRICE HEIGHTS (SOUTH 1) FROM STA 56+00.00 to end

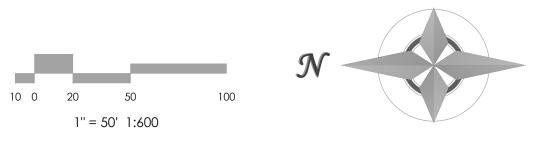






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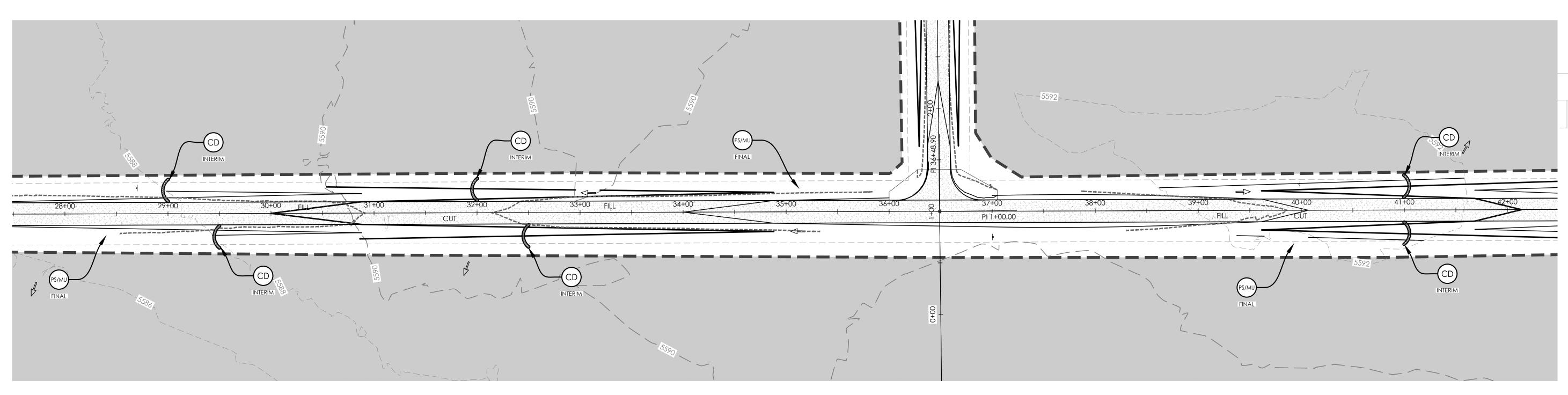
REVISIONS

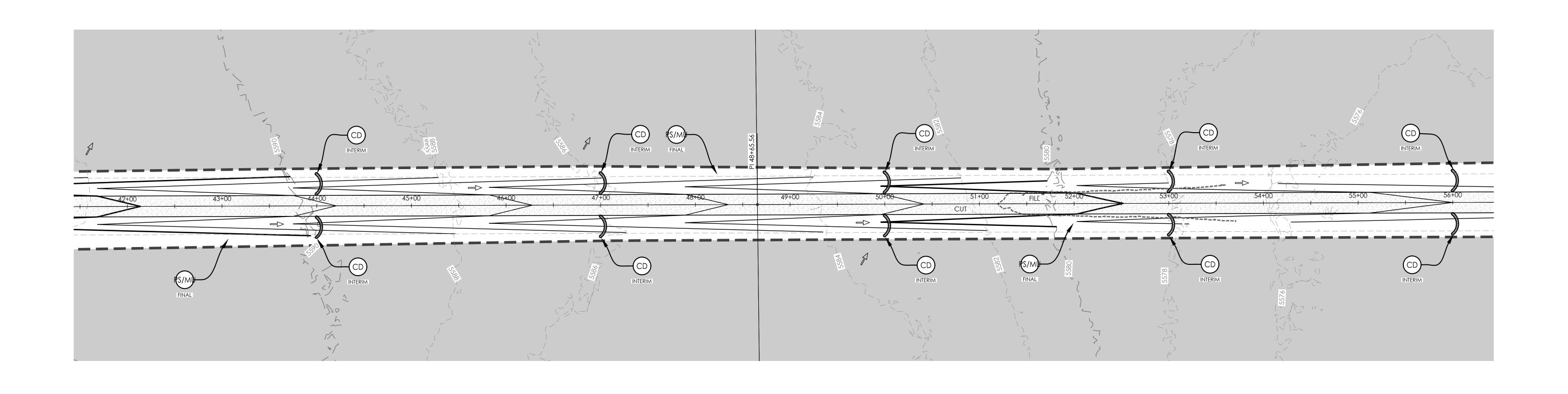
MVE PROJECT MVE DRA 611209-GEC-PP-S2

## APRIL 17, 2024

DESIGNED BY DRAWN BY CHECKED BY \_\_ AS-BUILTS BY \_\_\_\_\_ DESMOND GROVE (SOUTH 2) FROM STA 0+00.00 to sta 28+00.00

> ..7 SHEET 7 OF 12

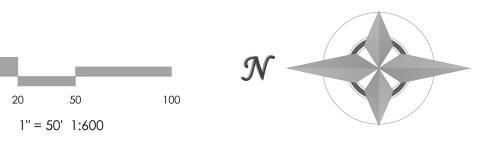




HORIZONTAL COORDINATES AND BEARINGS ARE BASED ON THE NORTH LINE OF SECTION 10, T17S, R61W, 6TH P.M., BEARING S89°11'11'W, 5184.96'.

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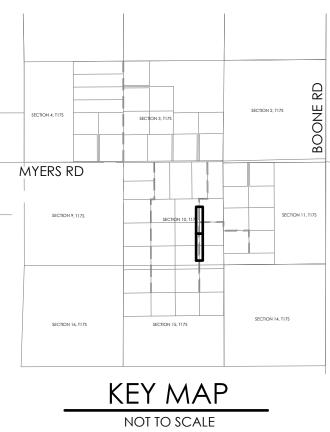
VERTICAL ELEVATIONS ARE NAVD 88 GEOID 12B



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REVISIONS

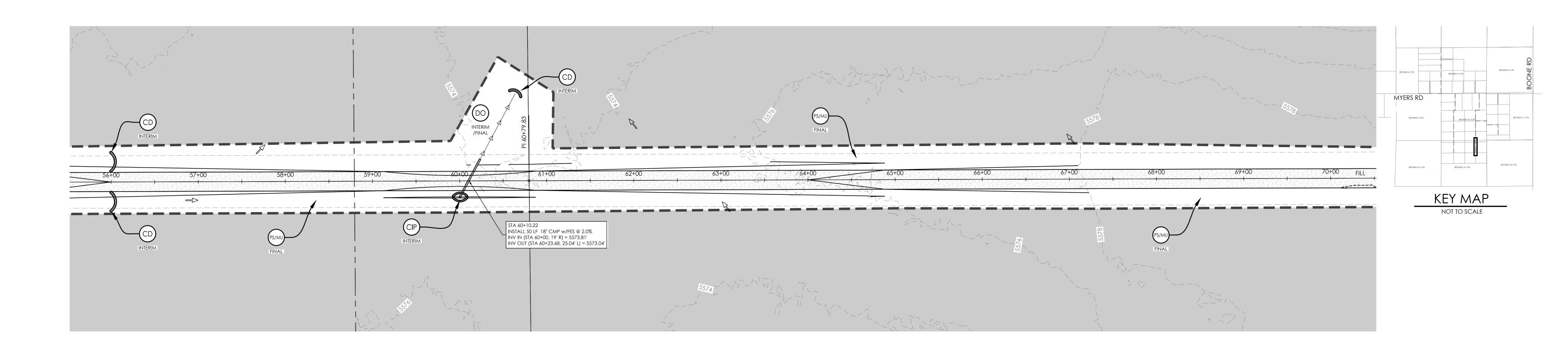


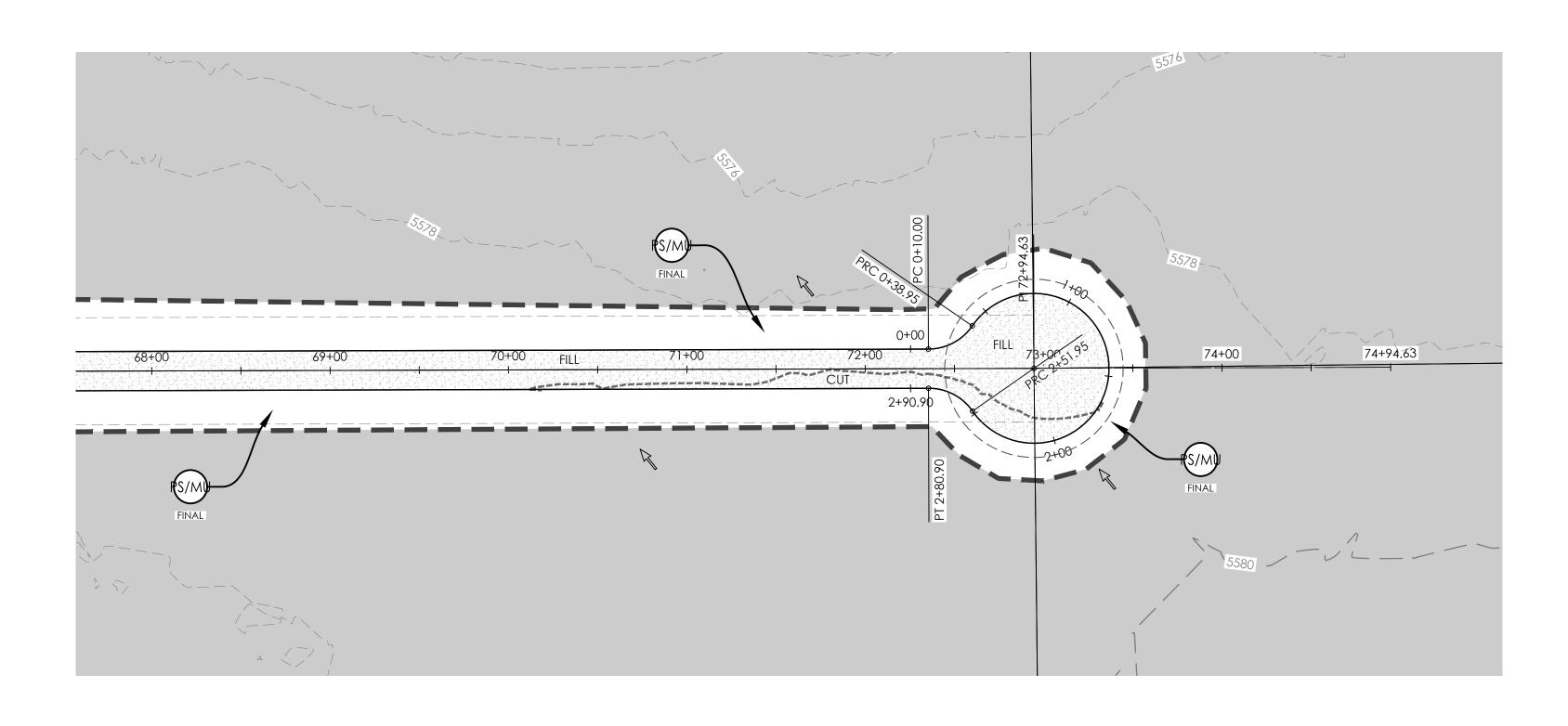
MVE PROJECT MVE DRA 611209-GEC-PP-S2

## APRIL 17, 2024

DESIGNED BY DRAWN BY CHECKED BY \_\_ AS-BUILTS BY \_\_\_\_\_ DESMOND GROVE (SOUTH 2) FROM STA 28+00.00 to sta 56+00.00

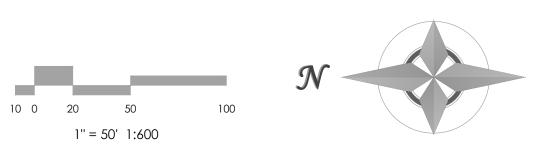


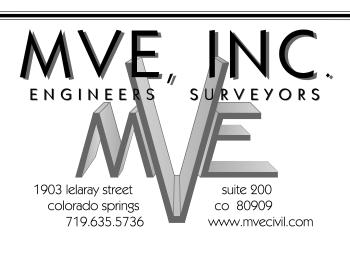




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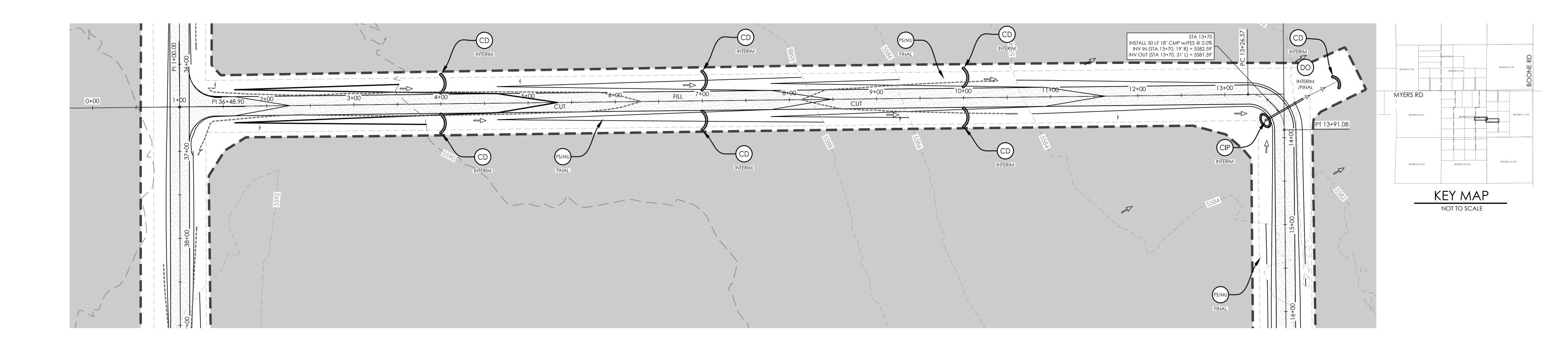
REVISIONS

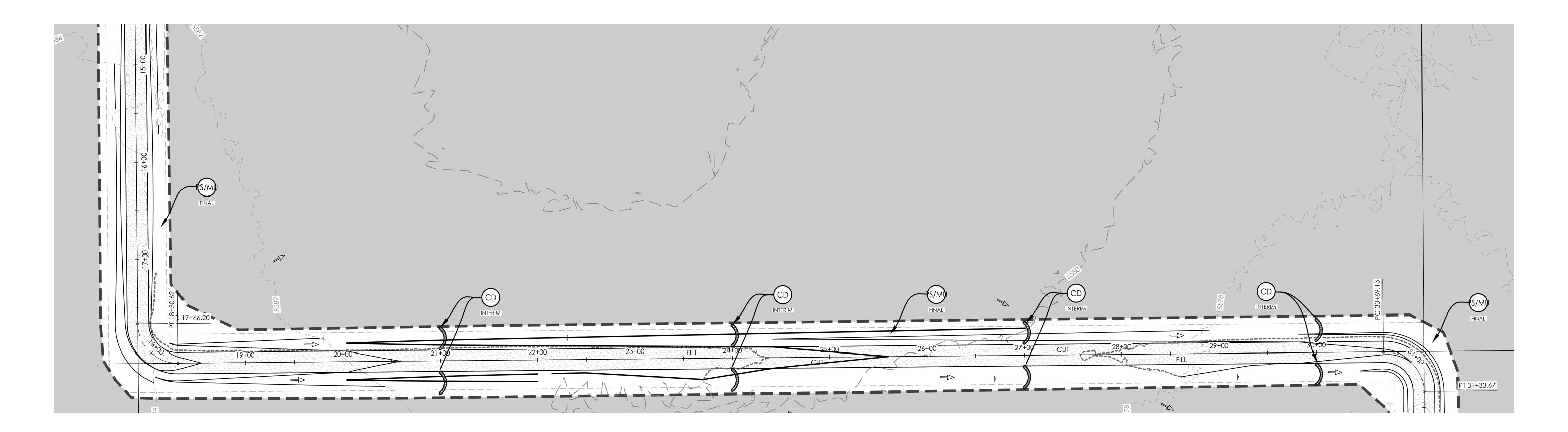
MVE PROJECT MVE DRA 611209-GEC-PP-S2

APRIL 17, 2024

DESIGNED BY DRAWN BY CHECKED BY \_\_ AS-BUILTS BY CHECKED BY \_\_\_\_\_ DESMOND GROVE (SOUTH 2) FROM STA 56+00.00 to end

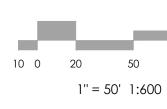
21.9SHEET **9** OF 12

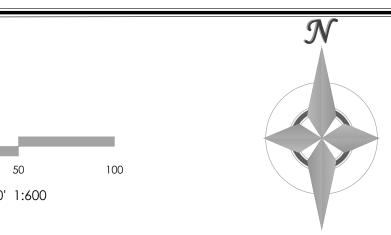




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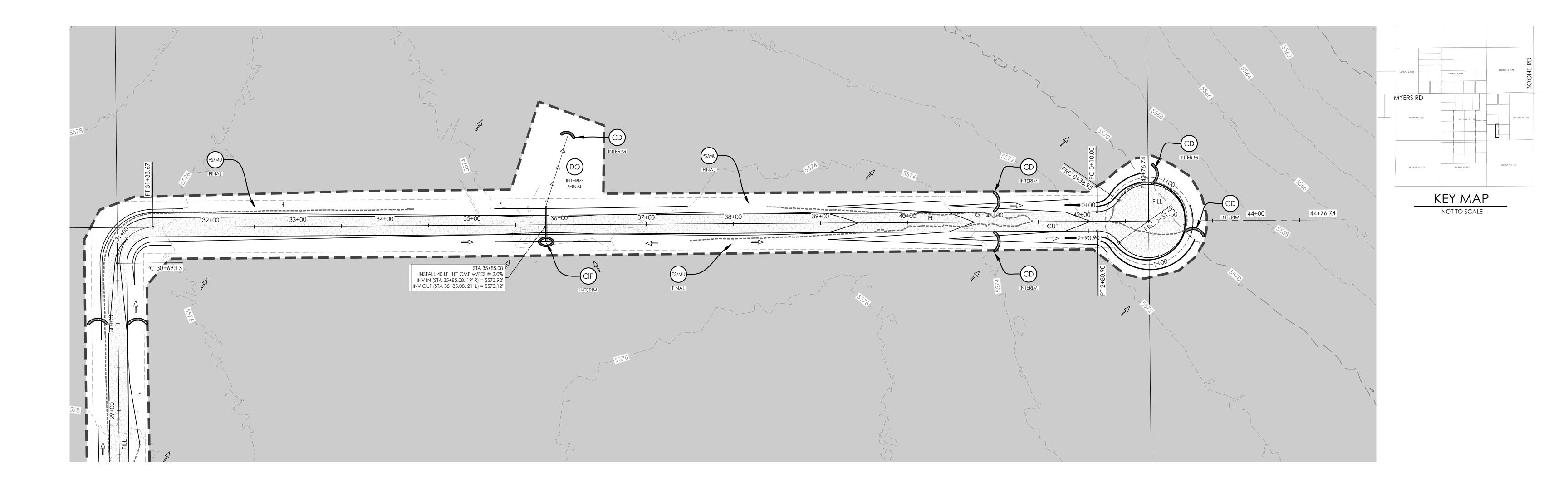
REVISIONS

MVE PROJECT MVE DRG 1209-GEC-PP-S2A

APRIL 17, 2024

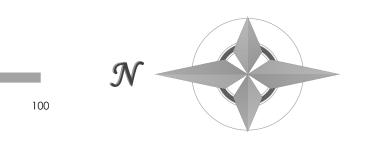
DESIGNED BY DRAWN BY CHECKED BY \_\_ AS-BUILTS BY \_\_\_\_\_ DEVORSS VIEW (SOUTH 2A) FROM STA 0+00.00 to sta 14+00.00

> .10 SHEET 10 OF 12



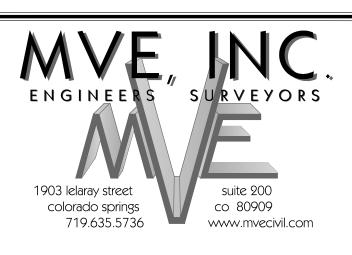
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10 0 20 50

1'' = 50' 1:600



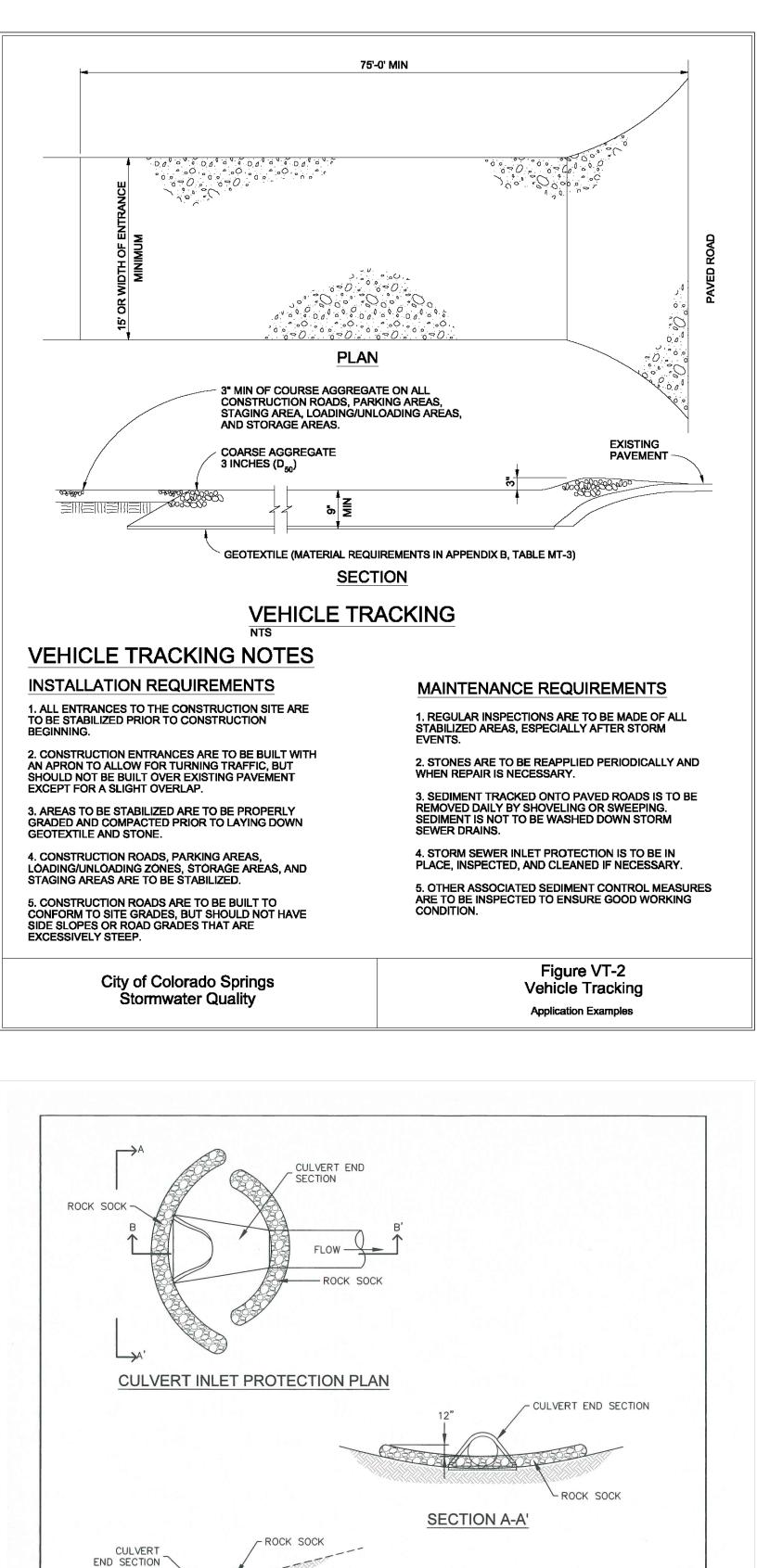
REVISIONS

MVE PROJECT MVE DR& 1209-GEC-PP-S2A

APRIL 17, 2024

DESIGNED BY DRAWN BY CHECKED BY \_\_ AS-BUILTS BY \_\_\_\_\_ DEVORSS VIEW (SOUTH 2A) FROM STA 28+00.00 to end

> SHEET 11 OF 12



6" MIN. -

PIPF

SECTION B-B'

CIP

INSTALLATION NOTES 1. SEE ROCK SOCK DETAIL.

#### MAINTENANCE NOTES 1. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE

STORMWATER

- OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY. 2. ACCUMULATED SEDIMENT UPSTREAM OF THE CULVERT SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS 1/2 HEIGHT OF THE ROCK SOCK.
- CULVERT INLET PROTECTION SHALL REMAIN UNTIL THE UPSTREAM AREA IS PERMANENTLY STABILIZED.

10/7/19

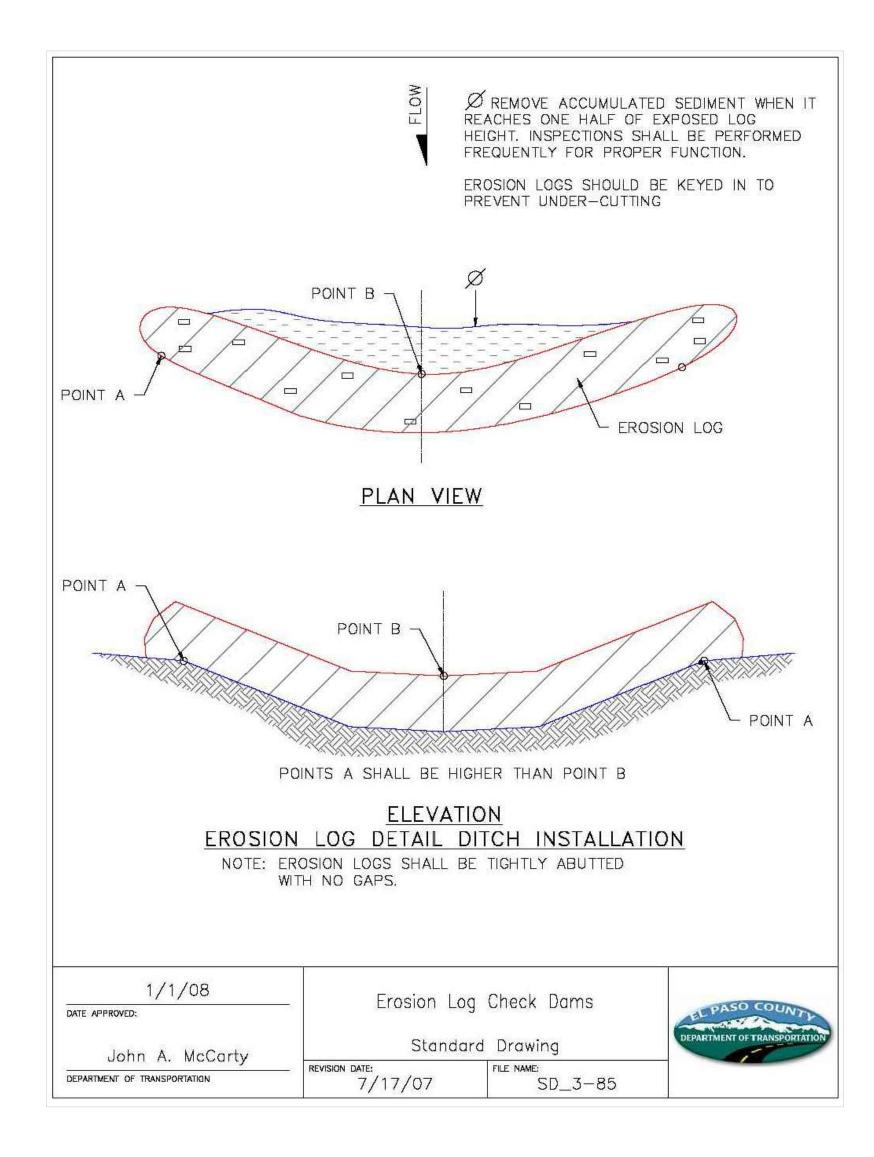
WENT MANAGER

8/19/2020

DRAWING NO.

900-CIP

CULVERT INLET PROTECTION



#### **SEEDING & MULCHING**

ALL SOIL TESTING, SOILS AMENDMENT AND FERTILIZER DOCUMENTATION, AND SEED LOAD AND BAG TICKETS MUST BE ADDED TO THE CSWMP. SOIL PREPARATION

- 1. IN AREAS TO BE SEEDED, THE UPPER 6 INCHES OF THE SOIL MUST NOT BE HEAVILY COMPACTED, AND SHOULD BE IN FRIABLE CONDITION. LESS THAN 85% STANDARD PROCTOR DENSITY IS ACCEPTABLE. AREAS OF COMPACTION OR GENERAL CONSTRUCTION ACTIVITY MUST BE SCARIFIED TO A DEPTH OF 6 TO 12 INCHES PRIOR TO SPREADING TOPSOIL TO BREAK UP COMPACTED LAYERS AND PROVIDE A BLENDING ZONE
- BETWEEN DIFFERENT SOIL LAYERS. 2. AREAS TO BE PLANTED SHALL HAVE AT LEAST 4 INCHES OF TOPSOIL SUITABLE TO SUPPORT PLANT GROWTH.
- 3. THE CITY RECOMMENDS THAT EXISTING AND/OR IMPORTED TOPSOIL BE TESTED TO IDENTIFY SOIL DEFICIENCIES AND ANY SOIL AMENDMENTS NECESSARY TO ADDRESS THESE DEFICIENCIES. SOIL AMENDMENTS AND/OR FERTILIZERS SHOULD BE ADDED TO CORRECT TOPSOIL DEFICIENCIES BASED ON SOIL TESTING
- RESULTS. 4. TOPSOIL SHALL BE PROTECTED DURING THE CONSTRUCTION PERIOD TO RETAIN ITS STRUCTURE AVOID COMPACTION, AND TO PREVENT EROSION AND CONTAMINATION, STRIPPED TOPSOIL MUST BE STORED IN AN AREA AWAY FROM MACHINERY AND CONSTRUCTION OPERATIONS, AND CARE MUST BE TAKEN TO PROTECT THE TOPSOIL AS A VALUABLE COMMODITY. TOPSOIL MUST NOT BE STRIPPED DURING UNDESIRABLE WORKING CONDITIONS (E.G. DURING WET WEATHER OR WHEN SOILS ARE SATURATED). TOPSOIL SHALL NOT BE STORED IN SWALES OR IN AREAS WITH POOR DRAINAGE.

#### <u>SEEDING</u>

- 1. ALLOWABLE SEED MIXES ARE INCLUDED IN THE CITY OF COLORADO SPRINGS STORMWATER CONSTRUCTION MANUAL. ALTERNATIVE SEED MIXES ARE ACCEPTABLE IF INCLUDED IN AN APPROVED LANDSCAPING PLAN. 2. SEED SHOULD BE DRILL-SEEDED WHENEVER POSSIBLE
- •SEED DEPTH MUST BE 浅 TO ½ INCHES WHEN DRILL-SEEDING IS USED 3. BROADCAST SEEDING OR HYDRO-SEEDING WITH TACKIFIER MAY BE SUBSTITUTED ON SLOPES STEEPER THAN 3:1 OR ON OTHER AREAS NOT PRACTICAL TO DRILL SEED. • SEEDING RATES MUST BE DOUBLED FOR BROADCAST SEEDING OR INCREASED BY 50% IF USING A BRILLION DRILL OR HYDRO-SEEDING •BROADCAST SEEDING MUST BE LIGHTLY HAND-RAKED INTO THE SOIL

#### MULCHING

- 1. MULCHING SHOULD BE COMPLETED AS SOON AS PRACTICABLE AFTER SEEDING, HOWEVER PLANTED AREAS MUST BE MULCHED NO LATER THAN 14 DAYS AFTER PLANTING. 2. MULCHING REQUIREMENTS INCLUDE: •HAY OR STRAW MULCH
- ONLY CERTIFIED WEED-FREE AND CERTIFIED SEED-FREE MULCH MAY BE USED. MULCH MUST BE APPLIED AT 2 TONS/ACRE AND ADEQUATELY SECURED BY CRIMPING AND/OR TACKIFIER.
- CRIMPING MUST NOT BE USED ON SLOPES GREATER THAN 3:1 AND MULCH FIBERS MUST BE TUCKED INTO THE SOIL TO A DEPTH OF 3 TO 4 INCHES.
- TACKIFIER MUST BE USED IN PLACE OF CRIMPING ON SLOPES STEEPER THAN 3:1. • HYDRAULIC MULCHING
- HYDRAULIC MULCHING IS AN OPTION ON STEEP SLOPES OR WHERE ACCESS IS LIMITED.
  IF HYDRO-SEEDING IS USED, MULCHING MUST BE APPLIED AS A SEPARATE, SECOND OPERATION. - WOOD CELLULOSE FIBERS MIXED WITH WATER MUST BE APPLIED AT A RATE OF 2,000 TO 2,500
- POUNDS/ACRE, AND TACKIFIER MUST BE APPLIED AT A RATE OF 100 POUNDS/ACRE. • EROSION CONTROL BLANKET
- EROSION CONTROL BLANKET MAY BE USED IN PLACE OF TRADITIONAL MULCHING METHODS.

	STORMWATER	SEEDING & MULCHING		
(SM)	ENTERPRISE	APPROVED:	ANAGER	3
		ISSUED: 10/7/19	REVISED: 8/19/2020	DRAWING NO. 900-SM

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