EPC STORMWATER REVIEW COMMENTS IN ORANGE BOXES WITH BLACK TEXT

STATE OF COLORADO DEPARTMENT OF TRANSPORTATION CITY OF COLORADO SPRINGS

Parks, Recreation and Cultural Services Department

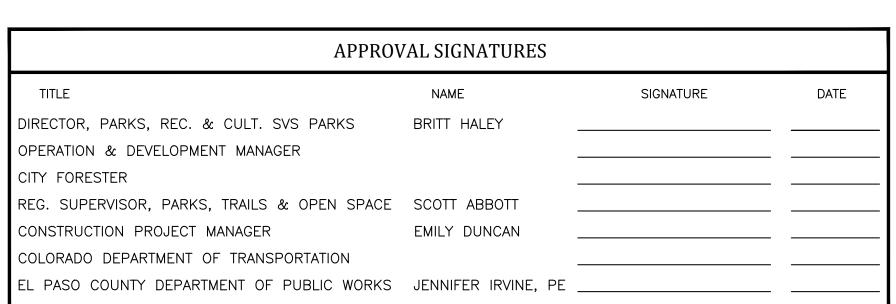
CAPITAL IMPROVEMENT PROJECT TRAIL IMPROVEMENT PROGRAM

COMBINED FEDERAL AID PROJECT No. TAP M240-162, SubAccT. No.20391

GRADING AND EROSION CONTROL

PLAN of the ROCK ISLAND MULTI-USE TRAIL SAND CREEK TO CONSTITUTION AVENUE COLORADO SPRINGS & EL PASO COUNTY, COLORADO

21 JULY 2024



TRAIL DATA DESIGN BEGIN STATION ROCK ISLAND TRAIL END STATION ROCK ISLAND TRAIL 106+15 MAXIMUM GRADE 8.33% MINIMUM HORIZONTAL CURVE MINIMUM WIDTH TYPICAL WIDTH 10' (+ 2' Shoulder) MAXIMUM WIDTH 12' (+ 2' Shoulder) CROSS-SLOPE 2% (towards drainage) LENGTH SAND CREEK TRAIL 10,900 LF 36.8 ACRES SITE AREA AREA OF DISTURBANCE 18.2 ACRES CONSTRUCTION AREA 18.2 ACRES

SHEET INDEX

STANDARD NOTES & DETAILS

STA 08+00 TO STA 17+50

STA 17+50 TO STA 21+50

STA 21+50 TO STA 47+50

STA 75+00 TO STA 102+00

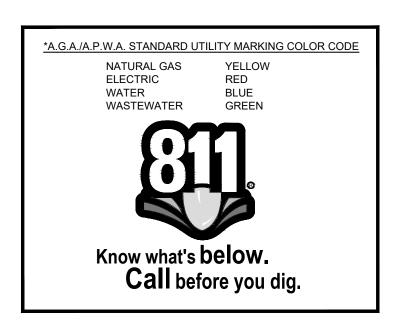
STA 102+00 TO STA 117+50 EROSION CONTROL DETAILS

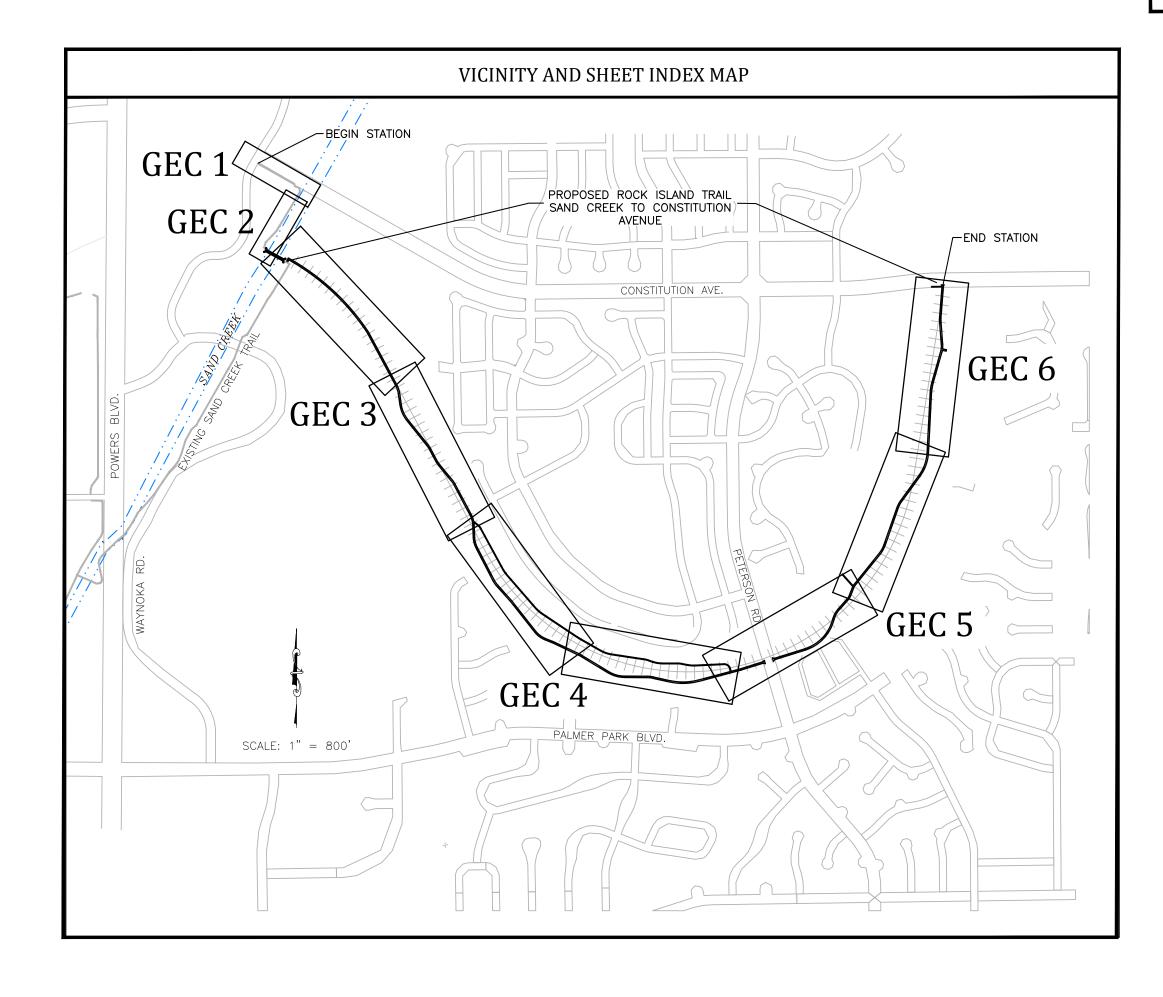
COVER SHEET

GEC 4 STA 47+50 TO STA 75+00

GEC 8 EROSION CONTROL DETAILS

BENCHMARK: FIMS MONUMENT SR10 IS A 2-INCH DIAMETER ALUMINUM CAP STAMPED "CSU FIMS CONTROL SR10" ON TOP OF THE NORTH CURB OF CONSTITUTION AVENUE AT THE NORTHWEST CORNER OF THE BRIDGE OVER SAND CREEK.





ST	CATEMENTS		
Engineer's Statement:			
This Grading and Erosion Control Plan was prepared under my direction and supervision and 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 responsibilit for any liability caused by any negligent acts or omissions on my part in preparing this Plan.			
Engineer of Record signature	Date		
Owner's Statement: I, the owner/developer have read and will	ll comply with the requirements of this Grading and		
Erosion Control Plan.			
Signature	Date		
El Paso County:			
The County is not responsible for the accurely elevations which shall be confirmed at the	eneral conformance with County Design Criteria. aracy and adequacy of the design, dimensions, and/oe job site. The County through the approval of this completeness and/or accuracy of this document.		
	s of the El Paso County Land Development Code, 2, and Engineering Criteria Manual as amended.		
	se construction documents will be valid for the date signed by the El Paso County Engineer. If		
construction has not started withing those	es at the Planning and Community Development		



IN PROGRESS NOT FOR CONSTRUCTION
For and on Behalf of

Celebrating 30 years LOVO Engineering Corporation
1604 South 21st Street Colorado Springs, Colorado 80904 (719) 630-7342

$\overline{}$	Sheet Revisions 90% BID SET No Revisions:	90% BID SET	ROCK ISLAND TRAIL	Kiowa Proj. No. 16028	
		No Revisions:	GRADING AND EROSION CONTROL PLAN COVER SHEET		TAP M240-162
		Revised:	Designer: RNW		SubAcct No. 20391
			Detailer: RNW		
		Void:	Date: 08/06/2024		Sheet Number G1

EL PASO COUNTY STANDARD NOTES FOR GRADING & EROSION CONTROL PLANS

- 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.
- 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
- 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 / CSWMP during construction is the responsibility of the designated Qualified Stormwater Manager or Certified Erosion Control Inspector. The SWMP / CSWMP 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.
- 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 staff.
- 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
- 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
- 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 / CSWMP. No wash water shall be discharged to or allowed to enter state waters, including any surface or subsurface storm drainage system or facilities. Concrete 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, uncontaminated groundwater 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
- 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
- 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 the original manufacturer's labels.

EL PASO COUNTY STANDARD NOTES FOR GRADING & EROSION CONTROL PLANS (cont)

- 21. No chemical(s) having the potential to be released in stormwater are to be stored or used on-site 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 on-site 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
- 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 Kumar & Assoc., 3/29/11 and 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 / CSWMP), 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

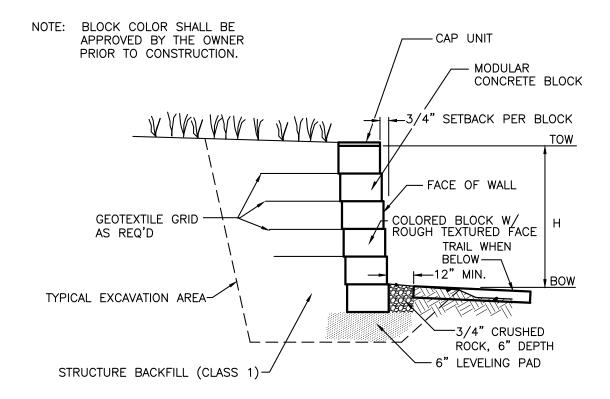
Attn: permits unit

PROJECT SPECIFIC NOTES

- 1. Where El Paso County and Colorado Springs notes contradict, El Paso County notes shall
- 2. The SWMP and CSWMP are the same document, one document.
- 3. ANTICIPATED START 10/01/2024
- 4. ANTICIPATED CONSTRUCTION END 10/31/2025
- 5. ANTICIPATED STABILIZATION 8/01/2025
- 6. RECIEVING WATER SAND CREEK
- 7. SITE IS NATIVE GRASS AND WILL REMAIN NATIVE GRASS
- 8. There are no on site aspahalt or concretee batch plants anticipated.

COLORADO SPRINGS STANDARD GRADING & EROSION CONTROL PLAN NOTES

- 1. No clearing, grading, excavation, or other land disturbing activities shall be allowed (except for work directly related to the installation of Initial Control Measures) until a City GEC Permit has been issued.
- 2. All land disturbing activities must be performed in accordance with and the approved GEC Plan and CSWMP.
- 3. Initial Control Measures shall be installed and inspected prior to any land disturbance activities taking place. An initial site inspection will not be scheduled until a City GEC Permit has been "conditionally approved." Call City Stormwater Inspections, 385-5980, at least 48 hours prior to construction to schedule an initial inspection and obtain full permit
- 4. Individuals shall comply with the "Colorado Water Quality Control Act" (Title 25. Article 8. CRS) and the "Clean Water Act" (33 USC 1344), including regulations promulgated and certifications or permits issued, in addition to the requirements included in the City's MS4 Permit, Stormwater Construction Manual. In the event of conflicts between these requirements and water quality control laws, rules, or regulations of other Federal or
- State agencies, the more restrictive laws, rules, or regulations shall apply. Stormwater discharges from construction sites shall not cause or threaten to cause pollution, contamination, or degradation of State Waters.
- All Construction Control Measures shall be maintained until permanent stabilization measures are implemented. Temporary Construction Control Measures must be removed prior to permit closeout.
- Concrete wash water shall not be discharged to or allowed to runoff to State Waters or any surface or subsurface storm drainage system or facilities.
- 8. Building, construction, excavation, or other 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. Construction Control Measures may be required by the GEC Inspector if deemed necessary based on specific conditions and circumstances (e.g.,
- estimated time of exposure, season of the year, etc.). 9. All wastes composed of building materials must be removed from the construction site for disposal in accordance with local and state regulatory requirements. No building material wastes or unused building materials shall be buried, dumped, or discharged at the site.
- 10. The permittee shall be responsible for the removal of all construction debris, dirt, trash, rock, sediment, and sand that may accumulate in the storm sewer or other drainage
- conveyance system as a result of construction activities. 11. 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. Materials shall not be stored in a location where they may be
- carried by stormwater runoff into the storm sewer system at any time. 12. Spill prevention and containment measures shall be used at all storage, equipment fueling, and equipment servicing areas so as to contain all spills and prevent any spilled material from entering the MS4, including any surface or subsurface storm drainage system or facility. Bulk storage structures for petroleum products and other chemicals shall have secondary containment or equivalent adequate protection. All spills shall be cleaned up immediately after discovery, or contained until appropriate cleanup methods can be employed. Manufacturer's recommended methods for spill cleanup shall be followed, along with proper disposal methods.
- 13. Sediment (mud and dirt) transported onto a public road, regardless of the size of the site, shall be cleaned as soon as possible after discovery.
- 14. No chemicals are to be added to the discharge unless permission for the use of a specific chemical is granted by the State. In granting the use of such chemicals, special conditions and monitoring may be required.
- 15. Control Measures for all slopes, channels, ditches, or any disturbed land area shall be completed within fourteen (14) calendar days after final grading or final land disturbance has been completed. Disturbed areas which are not at final grade but will remain dormant for longer than fourteen (14) days shall be roughened, mulched, tackified, or stabilized with tarps within fourteen (14) days after interim grading. An area that is going to remain in an interim state for more than sixty (60) days shall also be seeded, unless an alternative stabilization measure is accepted at the inspector's discretion. All temporary Construction Control Measures shall be maintained until final stabilization is achieved.
- 16. The GEC Plan will be subject to re-review and re-acceptance by the Stormwater Enterprise should any of the following occur: grading does not commence within twelve (12) months of the City's acceptance of the plan, the construction site is idle for twelve (12) consecutive months, a change in property ownership occurs, the planned development changes, or any other major modifications are proposed as defined in the Stormwater Construction Manual.
- 17. It is not permissible for any person to modify the grade of the earth on any utility easement or utility right-of-way without written approval from the utility owner. City acceptance of the GEC Plan and CSWMP does not satisfy this requirement. The plan shall not increase or divert water towards utility facilities. Any changes to existing utility facilities to accommodate the plan must be approved by the affected utility owner prior to implementing the plan. The cost to relocate or protect existing utilities or to provide interim access shall be at the applicant's expense.
- 18. Applicant represents and warrants that they have the legal authority to grade and/or construct improvements on adjacent property. The City has not reviewed the developer's authority to modify adjacent property. An approved GEC Permit does not provide approval for the Applicant to perform work on adjacent property.



CONCRETE BLOCK FACING MSE WALL CROSS SECTION NOT TO SCALE

WALL NOTES:

- SHOP DRAWINGS DEPICTING THE DESIGN OF BLOCK WALL SHALL BE SUBMITTED TO ENGINEER PRIOR TO CONSTRUCTION PER THE PROJECT SPECIFICATIONS. DESIGN SHALL BE COMPLETED UNDER THE DIRCT SUPERVISION OF A PROPERLY REGISTERED PROFESSIONAL ENGINEER WITH THE STATE OF COLORADO. FINAL CONSTRUCTION DRAWINGS SHALL BEAR HIS/HER SEAL AND SIGNATURE.
- 2. BUILDING PERMITS FOR THE INSTALLATION OF THE MSE WALL MAY BE REQUIRED THROUGH THE PIKES PEAK REGIONAL BUILDING DEPARTMENT.
- 3. CONTRACTOR TO OBTAIN EPC-DPW ROAD CUT WORK PERMIT FOR WORK IN RIGHT-OF-WAY.
- 4. CONTRACTOR TO SUPPLY TO EPC-DPW CONSTRUCTION TRAFFIC CONTROL PLAN FOR REVIEW AND APPROVAL PRIOR TO COMMENCING WITH ANY WORK WITHIN THE PETERSON ROAD RIGHT-OF-WAY.



IN PROGRESS NOT FOR CONSTRUCTION

or and on Behalf of

ngineering Corporation

1604 South 21st Street

Colorado Springs, Colorado 80904 (719) 630-7342

ROCK ISLAND TRAIL Sheet Revisions 90% BID SET GRADING AND EROSION CONTROL PLAN STANDARD NOTES & DETAILS No Revisions: RNW Designer: Revised: RNW Detailer Void:

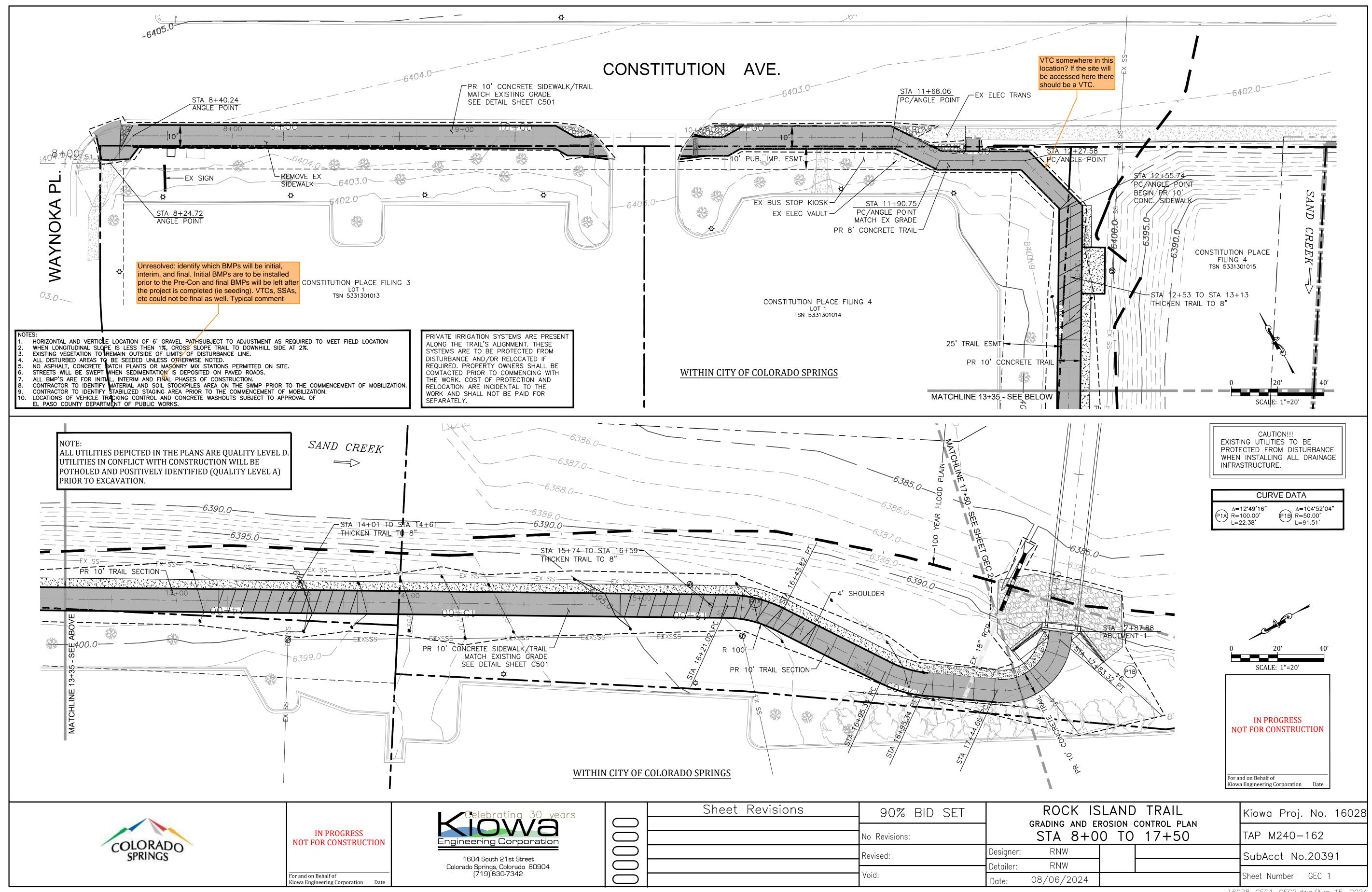
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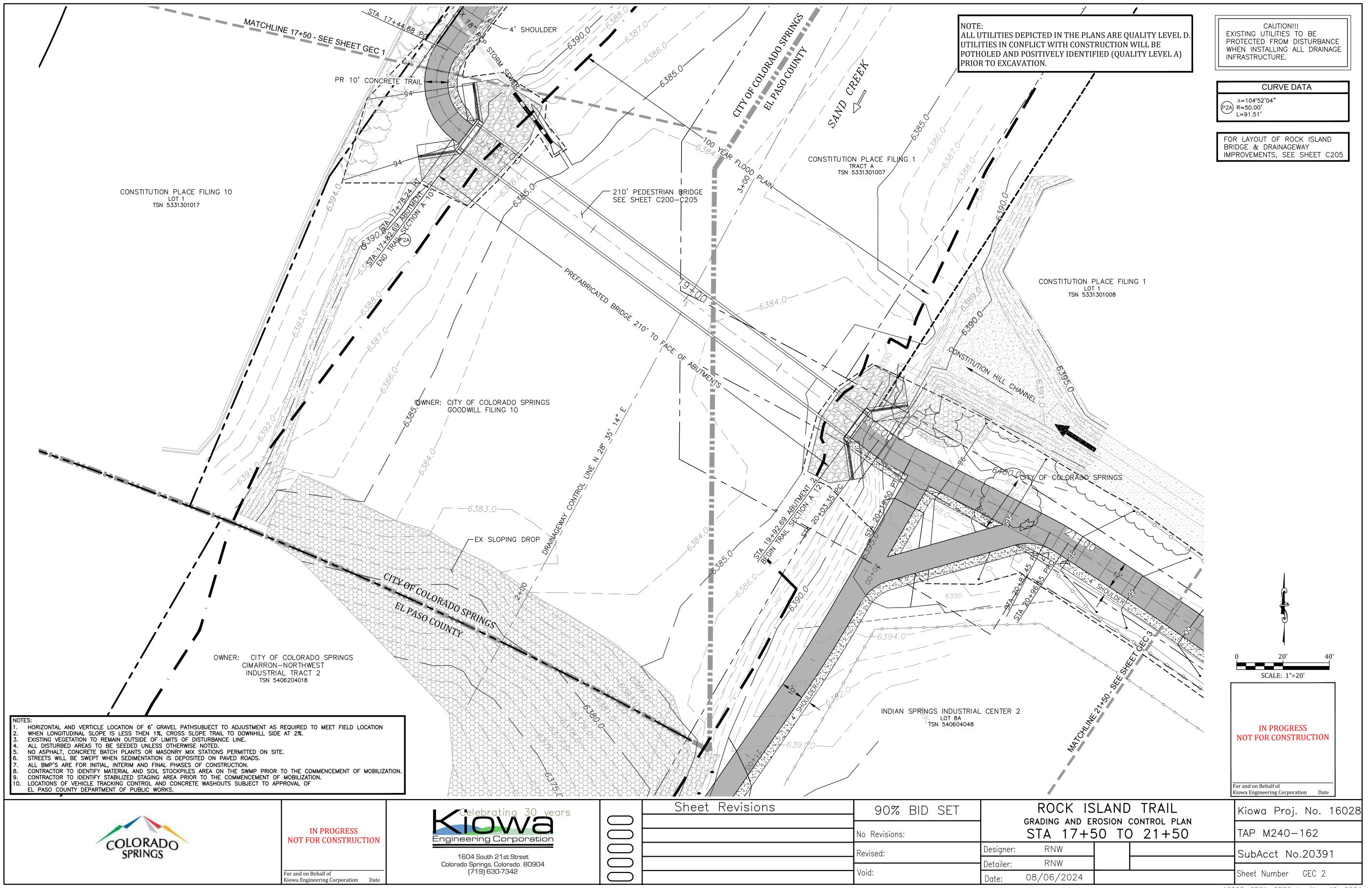
Kiowa Proj. No. 16028

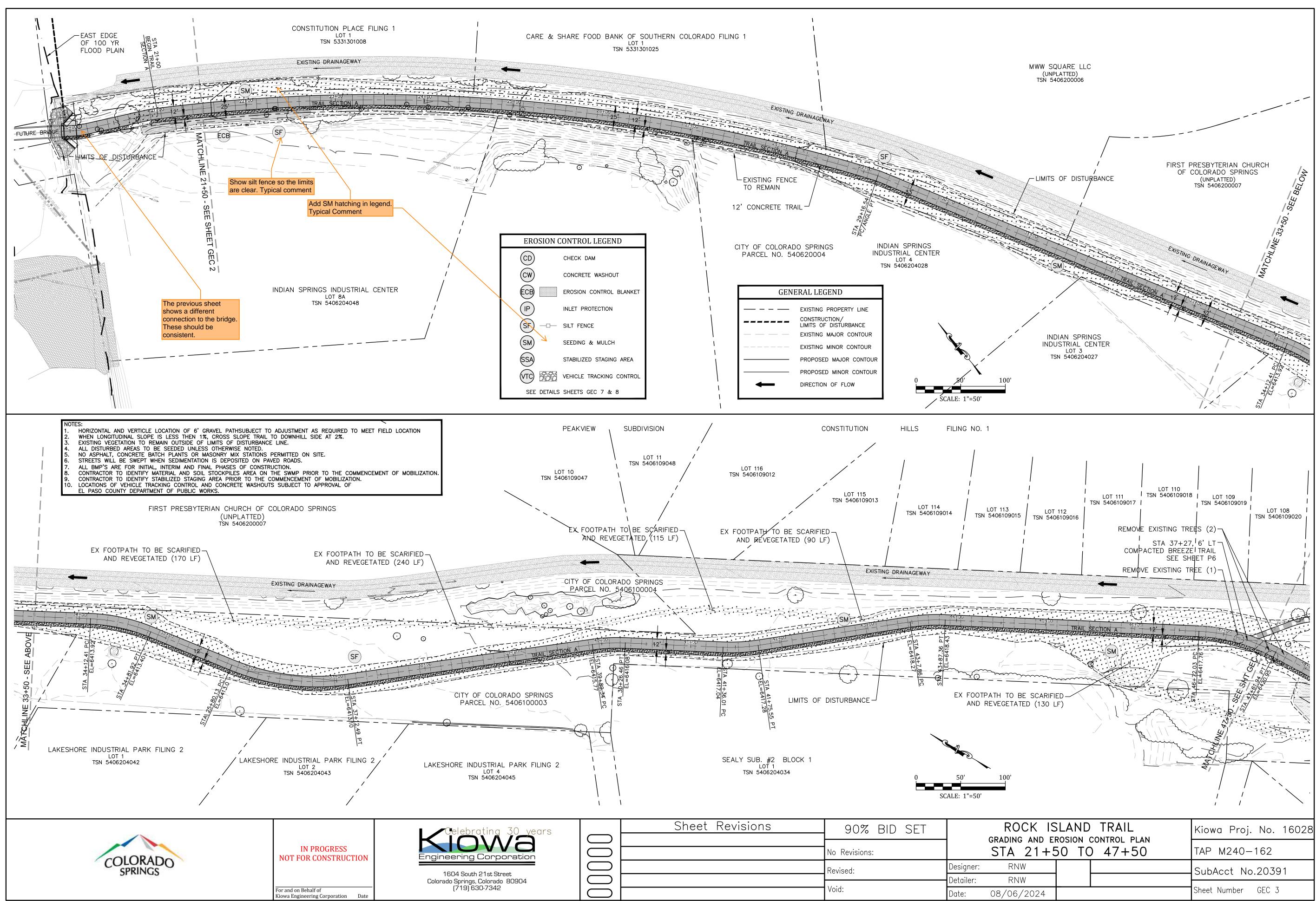
TAP M240-162

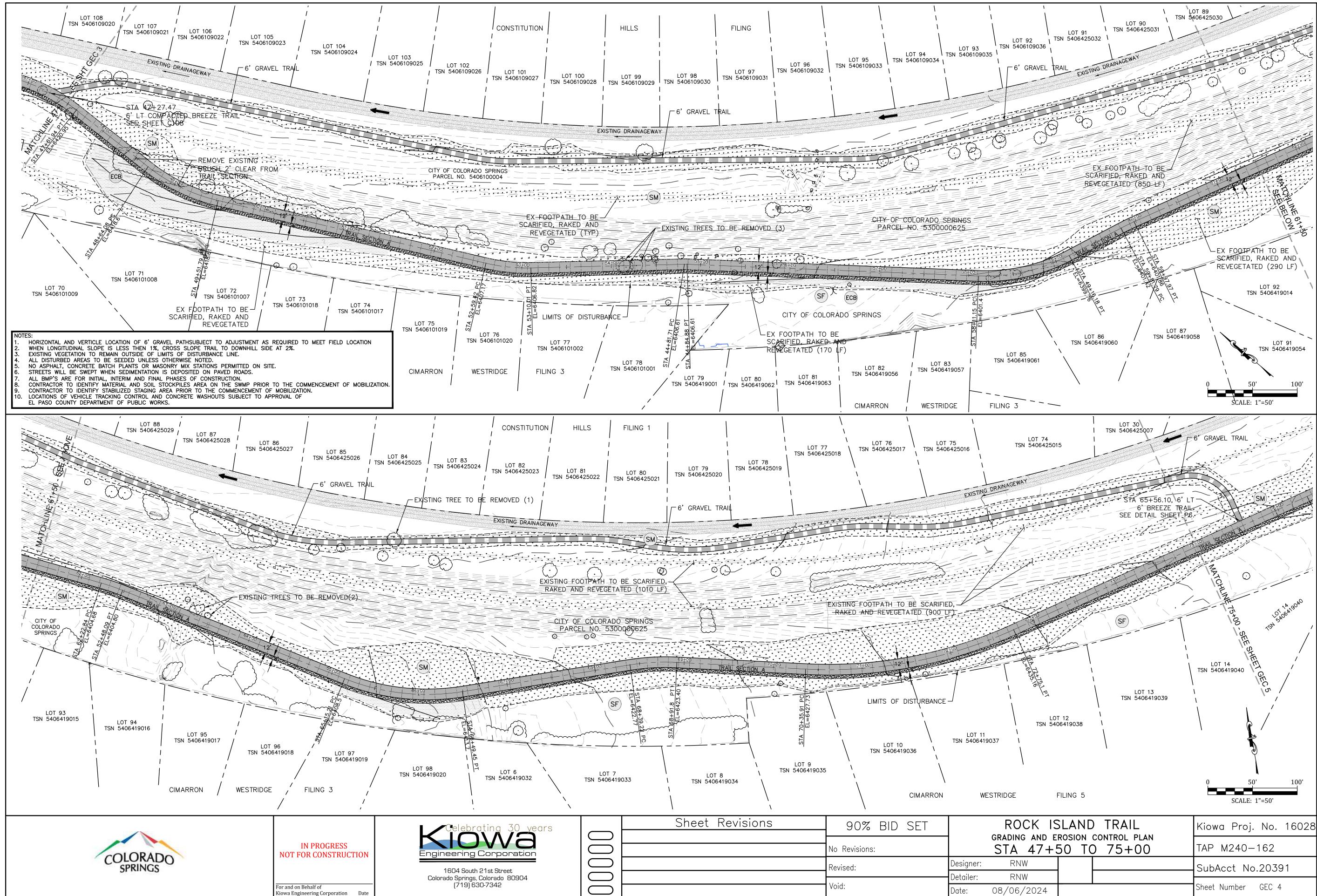
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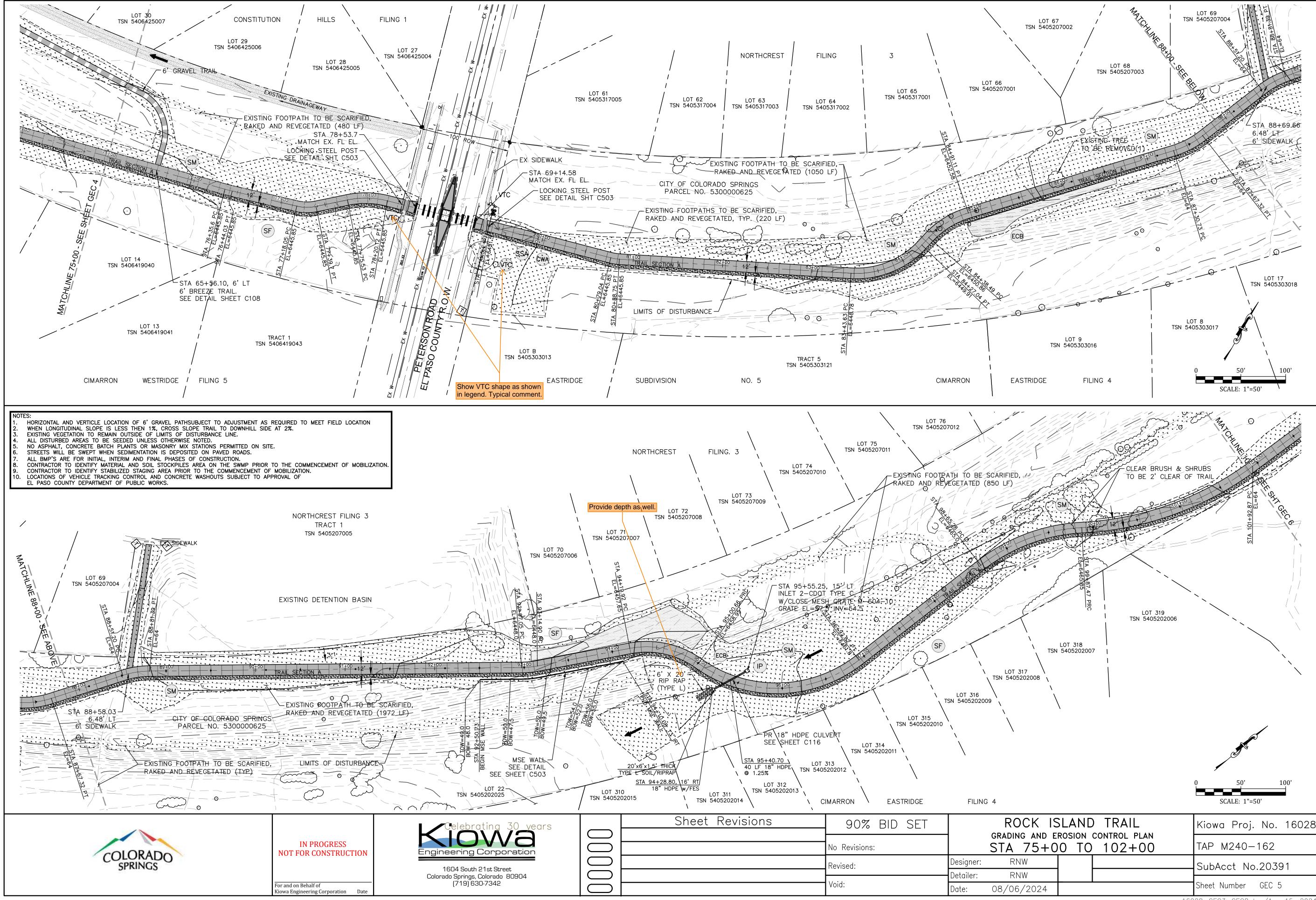
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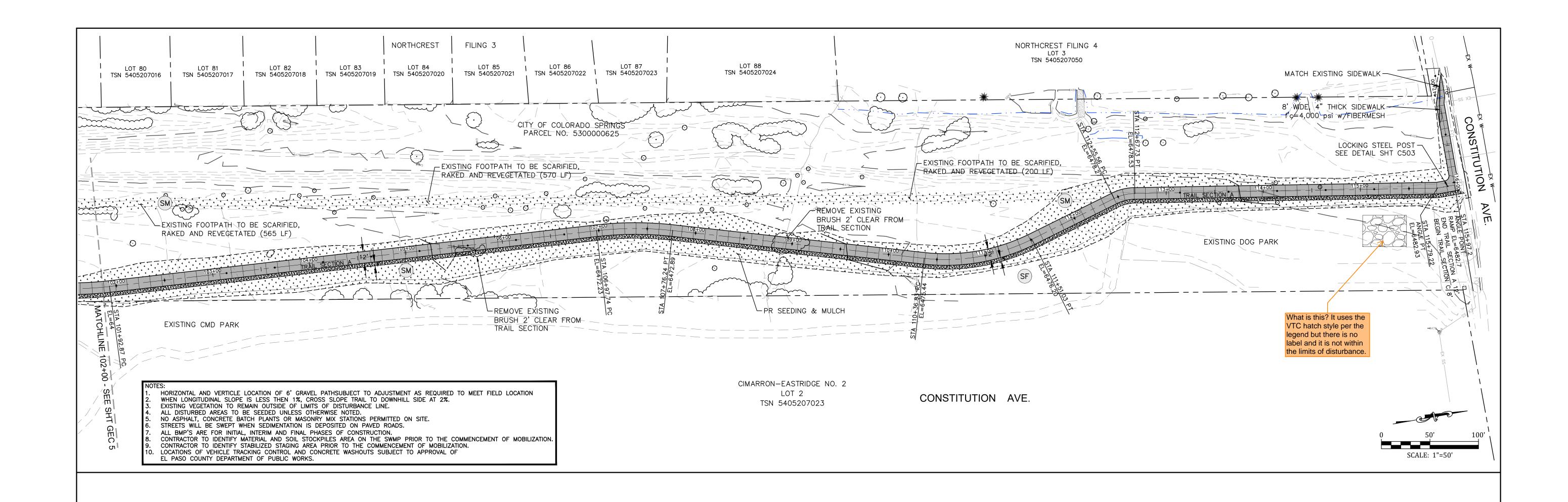














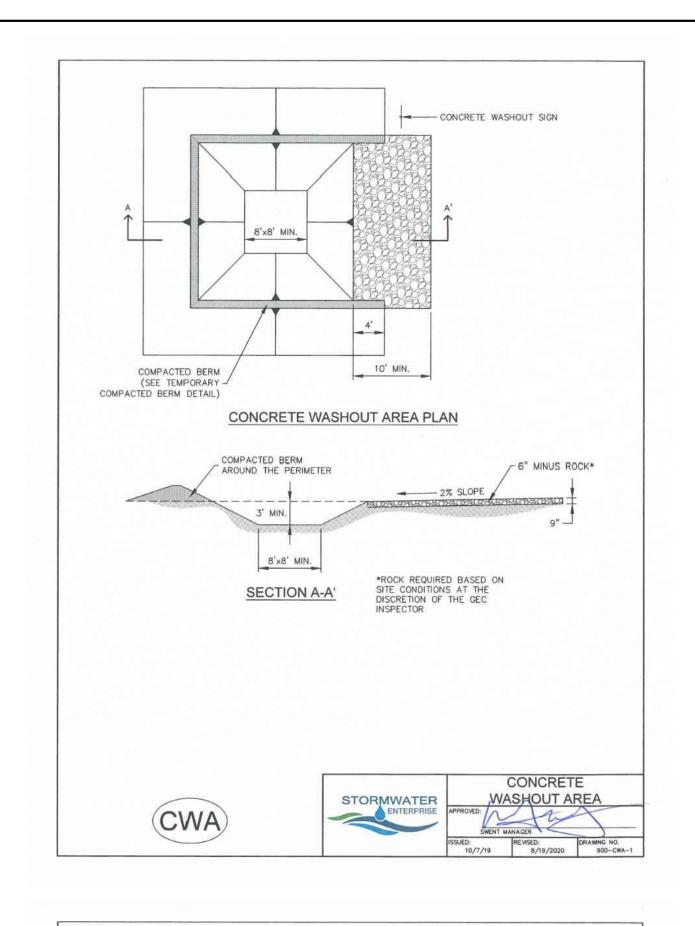
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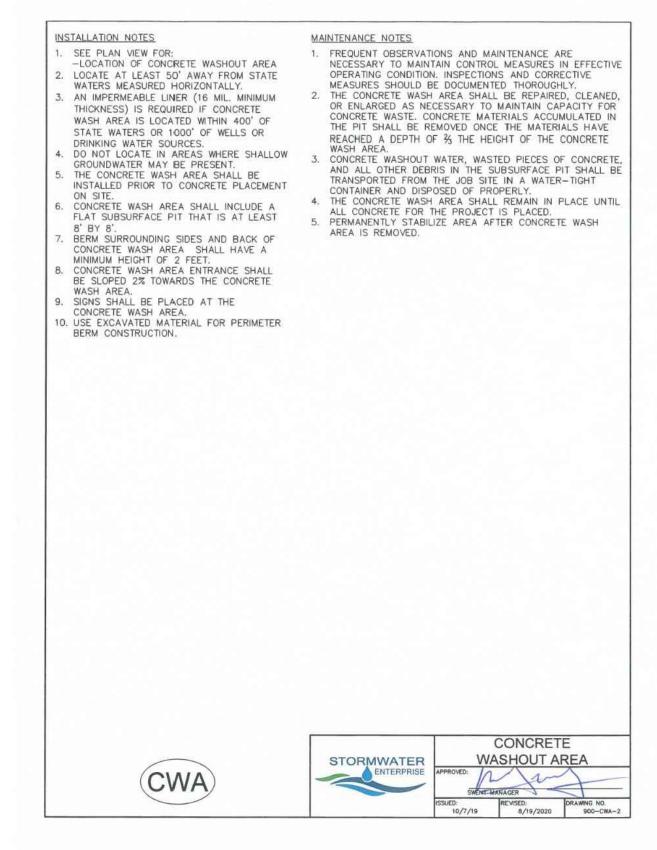
For and on Behalf of Kiowa Engineering Corporation Date Celebrating 30 years

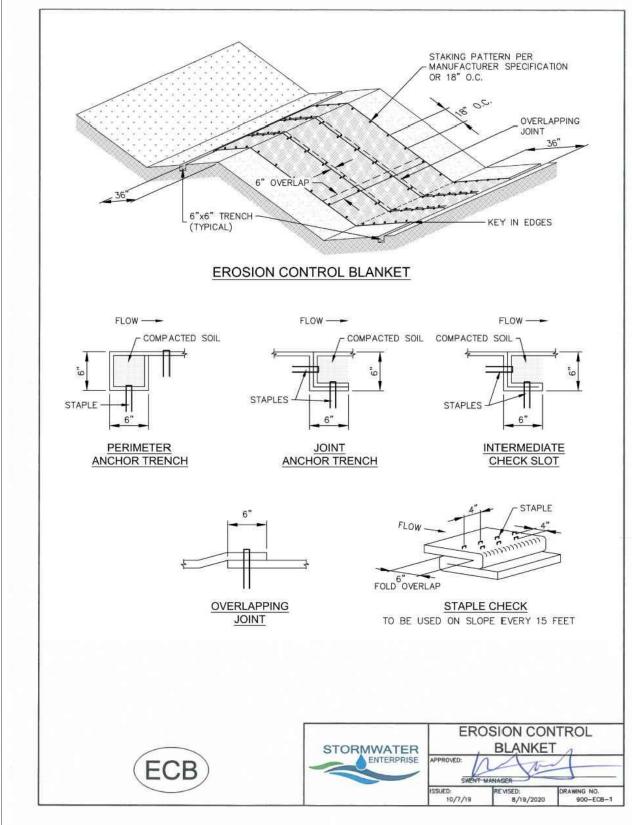
Engineering Corporation

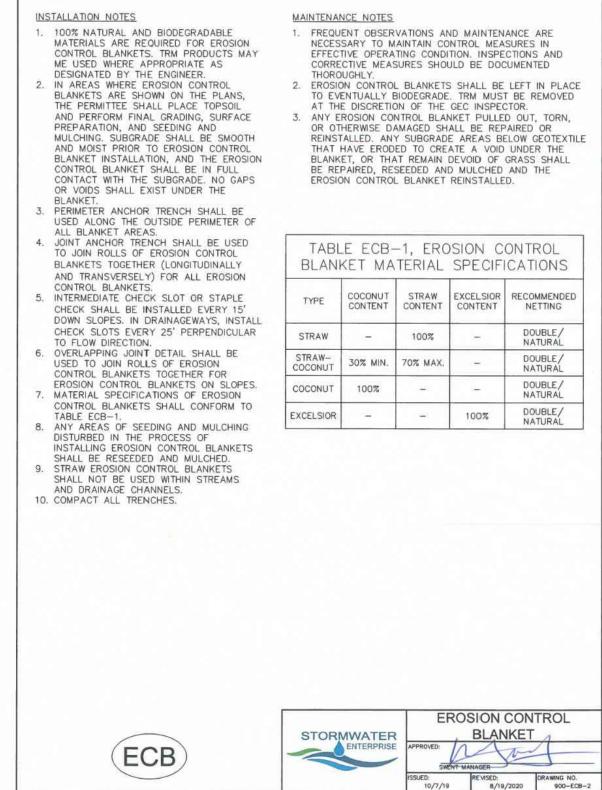
1604 South 21st Street
Colorado Springs, Colorado 80904
(719) 630-7342

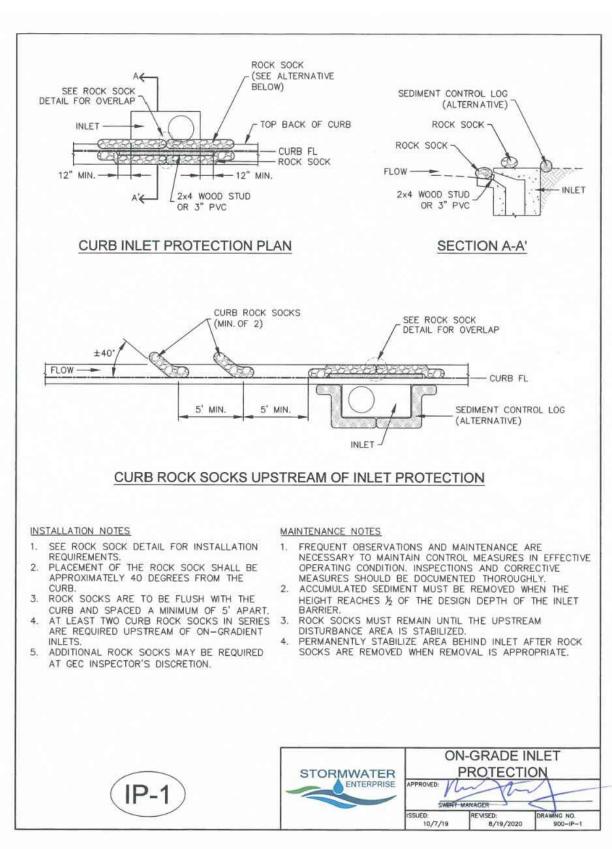
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	No Revisions:	GRADING AND EROSION CONTROL PLAN STA 102+00 TO 117+50	TAP M240-162
	Revised:	Designer: RNW	SubAcct No.20391
	Void:	Detailer: RNW Date: 08/06/2024	Sheet Number GEC 6

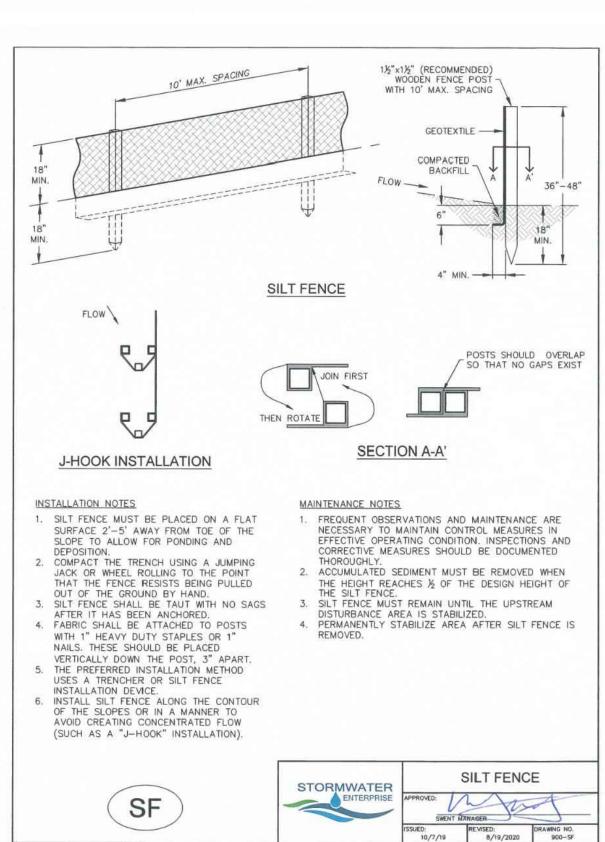














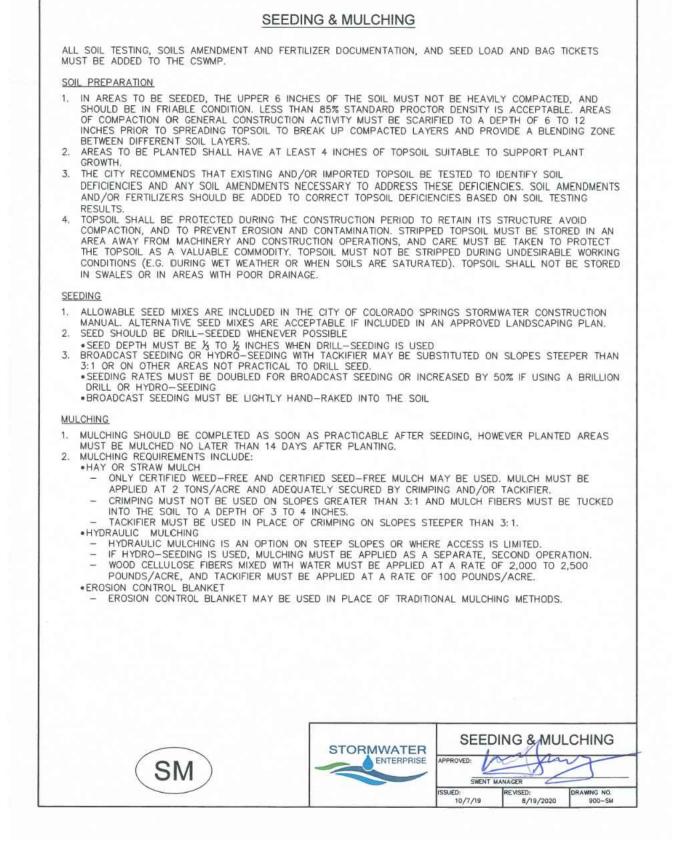
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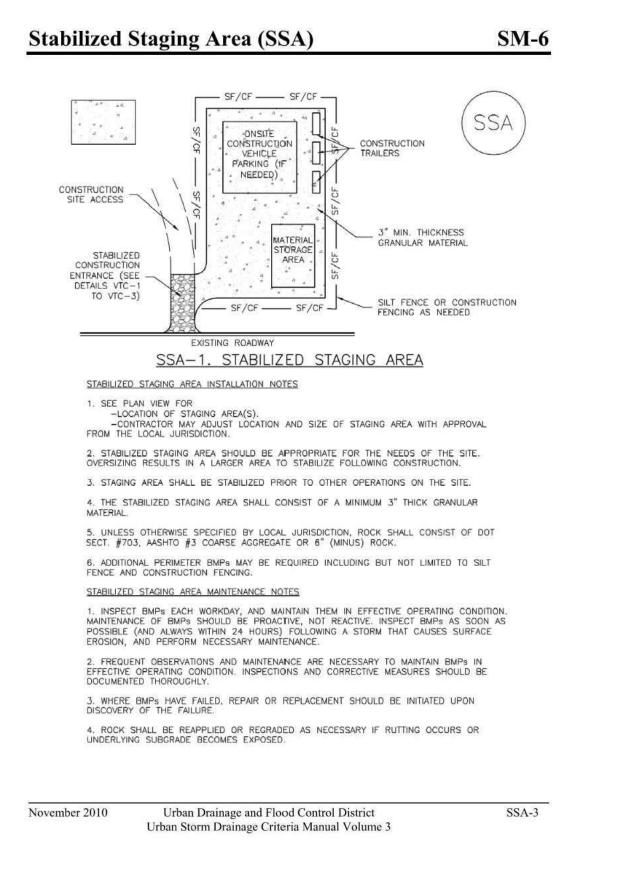
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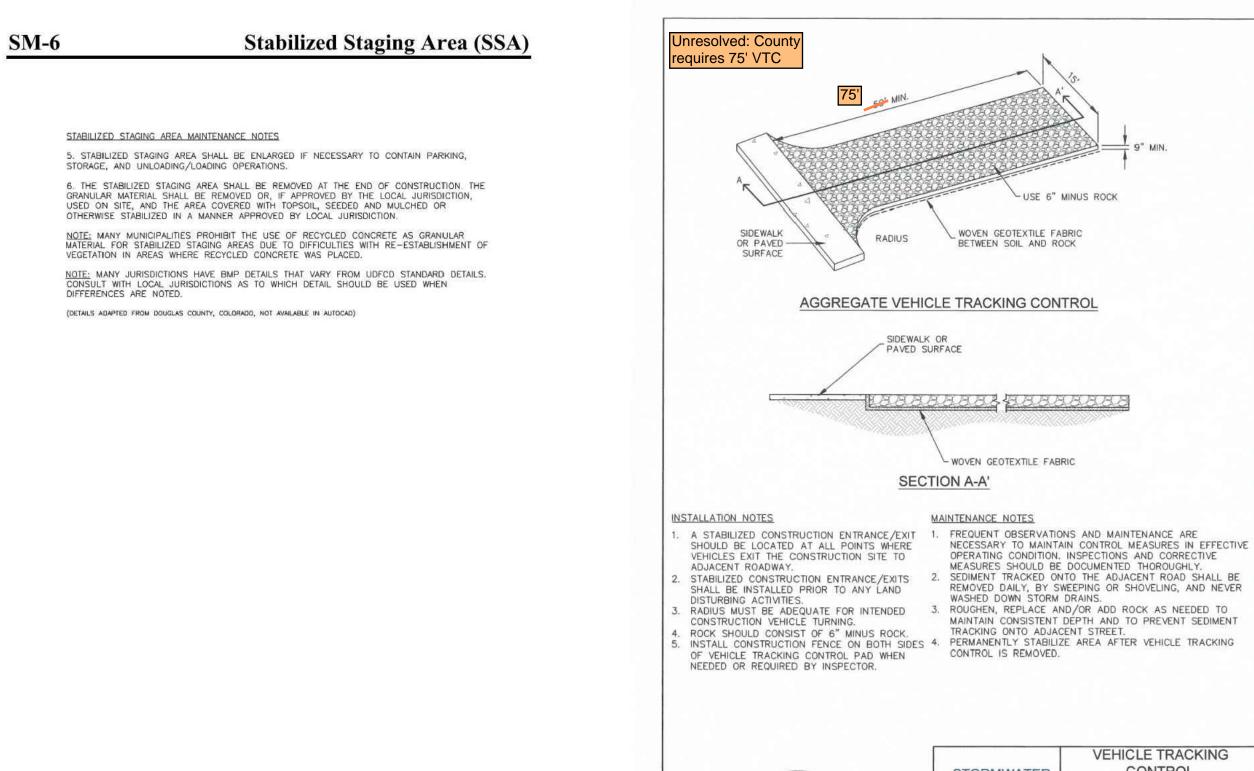
Kiowa Engineering Corporation Date



Sheet Revisions	Revisions 90% BID SET	ROCK ISLAND TRAIL GRADING AND EROSION CONTROL PLAN	Kiowa Proj. No. 16028
	No Revisions:	EROSION CONTROL PLAN EROSION CONTROL DETAILS	TAP M240-162
	Revised:	Designer: RNW	SubAcct No.20391
		Detailer: RNW	
	Void:	Date: 08/06/2024	Sheet Number GEC 7







November 2010

Urban Drainage and Flood Control District

Urban Storm Drainage Criteria Manual Volume 3

(VTC)



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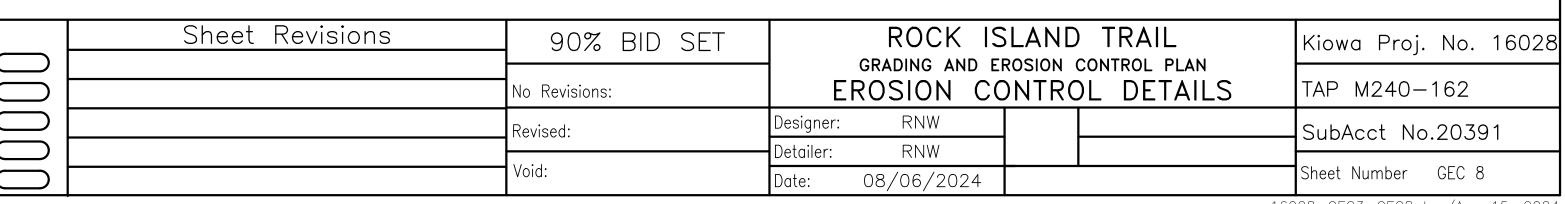
Kiowa Engineering Corporation Date

or and on Behalf of

Engineering Corporation 1604 South 21st Street

Colorado Springs, Colorado 80904

(719) 630-7342



VEHICLE TRACKING