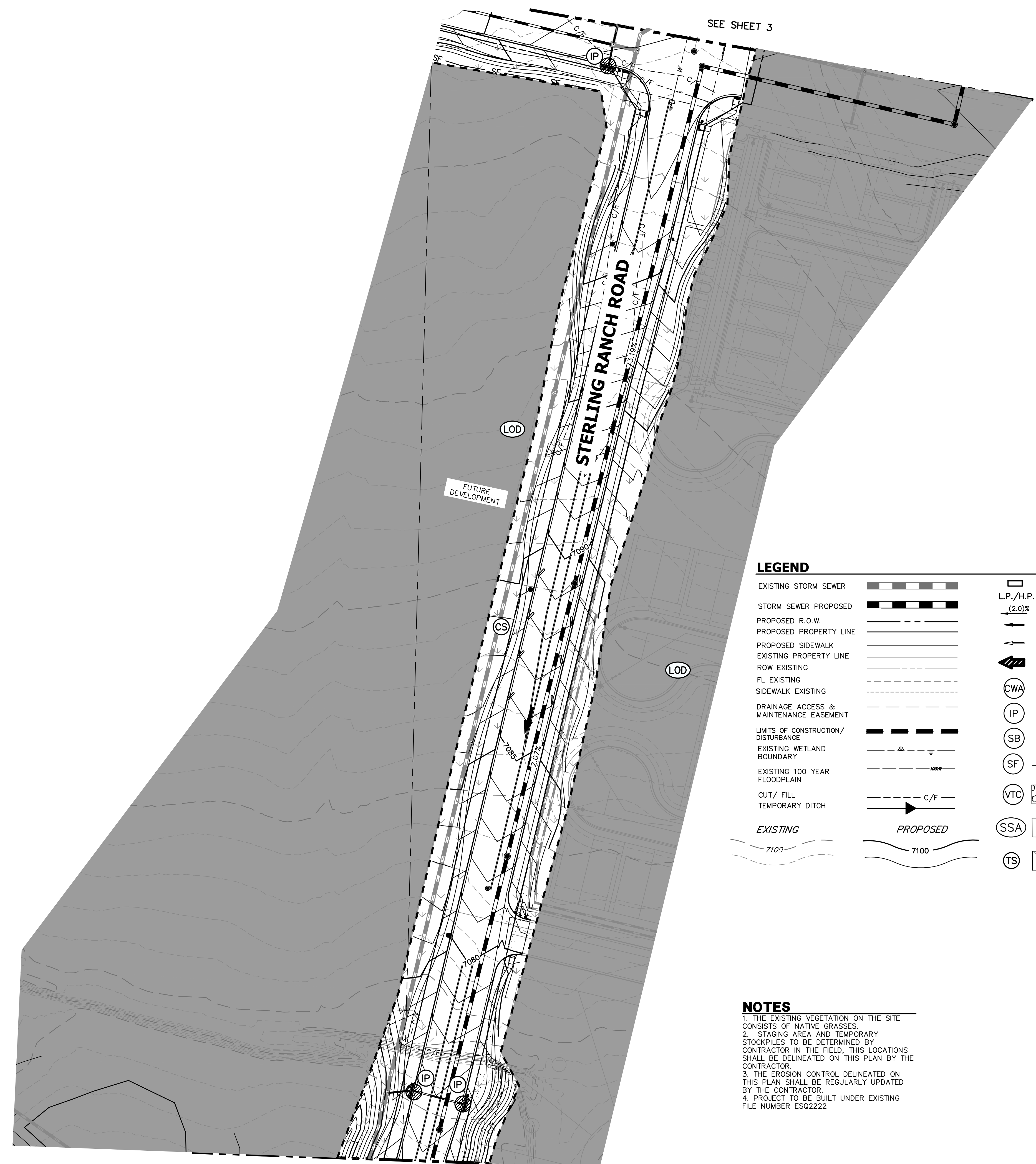


X:\2510000\25118803\Drawings\Sheet\Grading\Sterling Ranch Road and Briargate Parkway\GESC\GR_01_SRRF and BGP.dwg, GESC (2), 5/9/2023 9:11:11 AM, CS



SEE SHEET 3

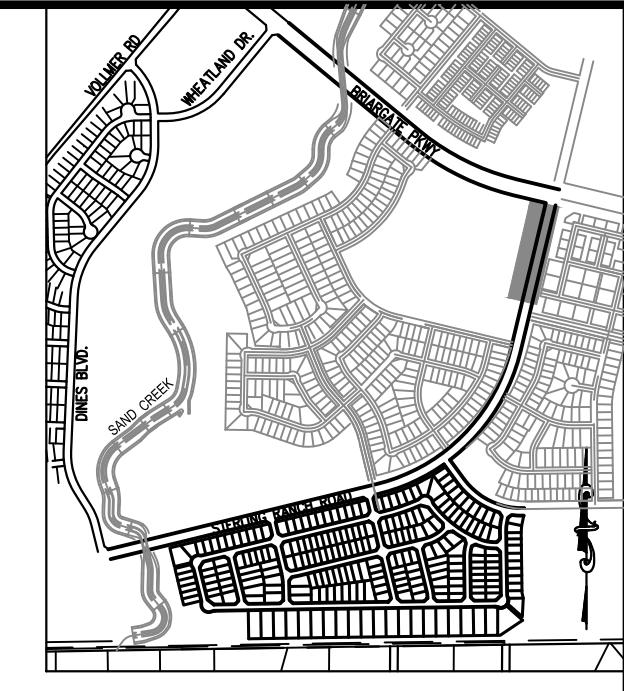
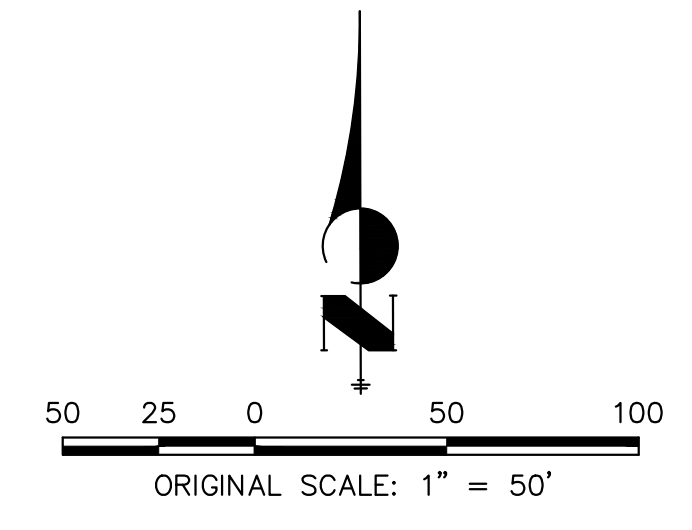
SEE SHEET 5

LEGEND

EXISTING STORM SEWER		L.P./H.P.		INLET		CS		CURB SOCK (INITIAL/ INTERIM)
STORM SEWER PROPOSED		(2.0)%		LOW POINT/HIGH POINT				
PROPOSED R.O.W.				FLOW DIRECTION & SLOPE				
PROPOSED SIDEWALK				FLOW DIRECTION ARROW				
EXISTING PROPERTY LINE				EXISTING FLOW DIRECTION ARROW				
ROW EXISTING				EMERGENCY OVERTFLOW DIRECTION				
FL EXISTING								
SIDEWALK EXISTING				CWA				CONCRETE WASHOUT AREA (INITIAL)
DRAINAGE ACCESS & MAINTENANCE EASEMENT				IP				INLET PROTECTION (INITIAL/ INTERIM)
LIMITS OF CONSTRUCTION/DISTURBANCE				SB				TEMPORARY SEDIMENT BASIN (INTERIM/ FINAL)
EXISTING WETLAND BOUNDARY				SF				SILT FENCE (INITIAL)
EXISTING 100 YEAR FLOODPLAIN				VTC				VEHICLE TRACKING CONTROL (INITIAL)
CUT/ FILL				SSA				STAGE STABILIZED AREA (INITIAL)
TEMPORARY DITCH				TS				SEEDING AND MULCHING (FINAL)
EXISTING								
PROPOSED								

NOTES

1. THE EXISTING VEGETATION ON THE SITE CONSISTS OF NATIVE GRASSES.
2. STAGING AREA AND TEMPORARY STOCKPILES TO BE DETERMINED BY CONTRACTOR IN THE FIELD, THIS LOCATIONS SHALL BE DELINEATED ON THIS PLAN BY THE CONTRACTOR.
3. THE EROSION CONTROL DELINEATED ON THIS PLAN SHALL BE REGULARLY UPDATED BY THE CONTRACTOR.
4. PROJECT TO BE BUILT UNDER EXISTING FILE NUMBER ESQ2222.



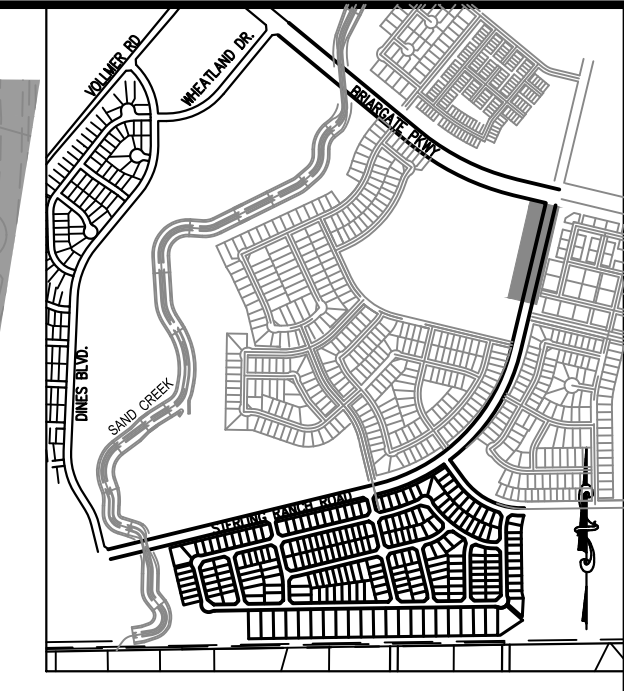
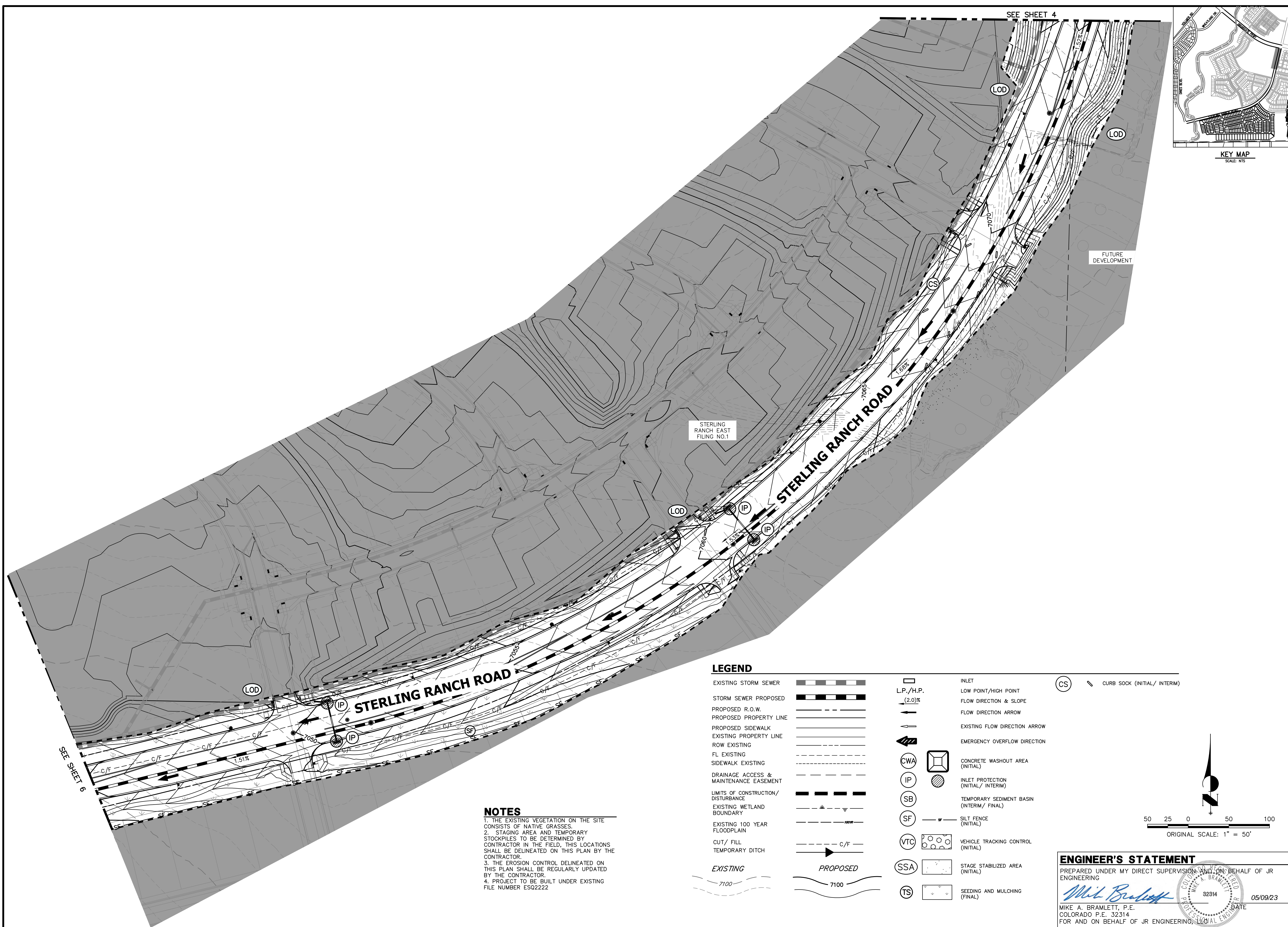
ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

 MIKE A. BRAMLETT, P.E.
 COLORADO P.E. 32314
 FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING ACCEPTS NO LIABILITY ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.	
PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT SUITE 201 COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 471-1742
	 J-R ENGINEERING A Western Company Centennial 303-740-9883 • Colorado Springs 719-589-2588 Fort Collins 970-491-9888 • www.jrengineering.com
BY	DATE
No.	REVISION
H-SCALE 1"=60'	N/A
V-SCALE	DATE 05/09/23
DESIGNED BY	RAB
DRAWN BY	CGV
CHECKED BY	
STERLING RANCH ROAD & BRIARGATE PARKWAY SEGMENT 2 GESC	
GRADING AND EROSION CONTROL PLANS	
SHEET 4	OF 9
JOB NO.	25188.03

X:\2518803\Drawings\Sheet\Drawings\Sheet\Drawings\Sterling Ranch Road and Briargate Parkway GESC.GR_01_SRR and BGP.dwg, GESC (3), 5/9/2023 9:11:35 AM, CS



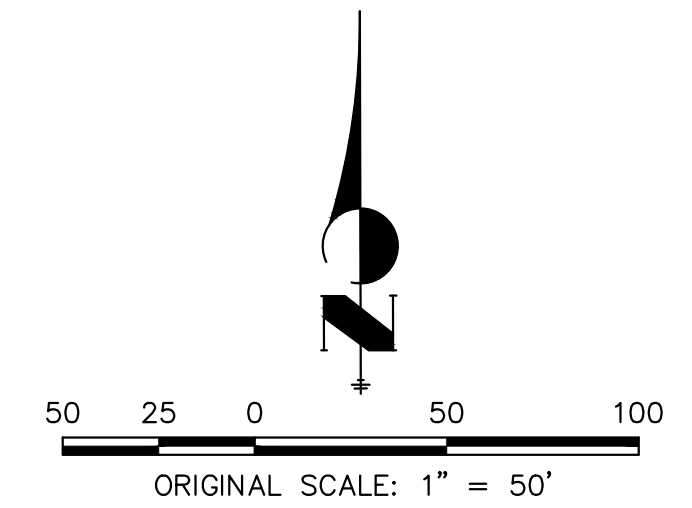
SEE SHEET 6

SEE SHEET 4

NOTES
 1. THE EXISTING VEGETATION ON THE SITE CONSISTS OF NATIVE GRASSES.
 2. STAGING AREA AND TEMPORARY STOCKPILES TO BE DETERMINED BY CONTRACTOR IN THE FIELD, THIS LOCATIONS SHALL BE DELINEATED ON THIS PLAN BY THE CONTRACTOR.
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LEGEND

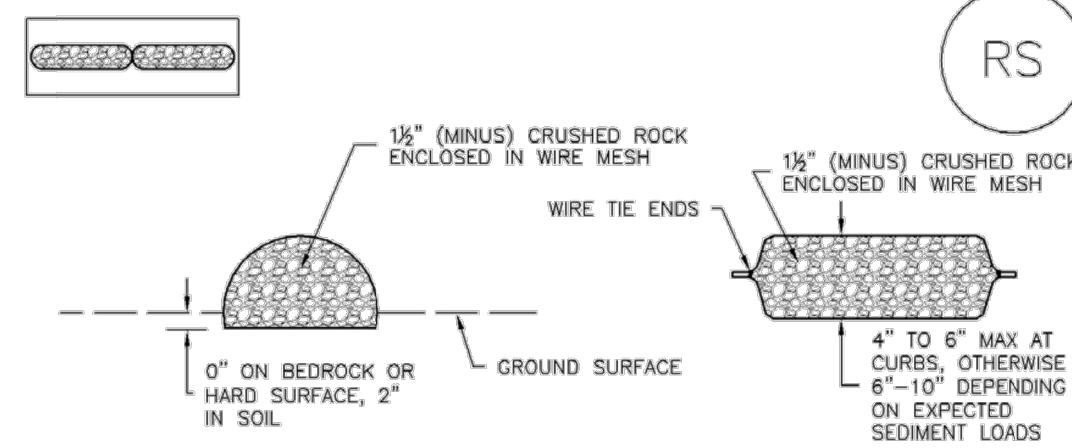
EXISTING STORM SEWER		INLET		CURB SOCK (INITIAL/ INTERIM)	
STORM SEWER PROPOSED		L.P./H.P.			
PROPOSED R.O.W.		(2.0)%			
PROPOSED PROPERTY LINE					
PROPOSED SIDEWALK					
EXISTING PROPERTY LINE					
ROW EXISTING					
FL EXISTING					
SIDEWALK EXISTING		CWA			
DRAINAGE ACCESS & MAINTENANCE EASEMENT		IP			
LIMITS OF CONSTRUCTION/DISTURBANCE		SB			
EXISTING WETLAND BOUNDARY		SF			
EXISTING 100 YEAR FLOODPLAIN		VTC			
CUT/ FILL		SSA			
TEMPORARY DITCH		TS			
EXISTING					
PROPOSED					



ENGINEER'S STATEMENT
 PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

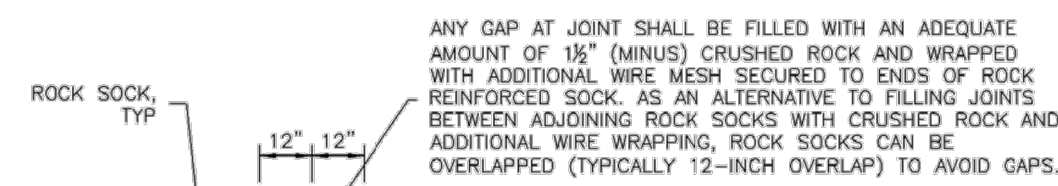
 MIKE A. BRAMLETT, P.E.
 COLORADO P.E. 32314
 FOR AND ON BEHALF OF JR ENGINEERING
 DATE 05/09/23

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PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT SUITE 201 COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 471-1742
	J.R. ENGINEERING A Western Company Centennial 303-740-9883 • Colorado Springs 719-589-2588 Fort Collins 970-491-9888 • www.jrengineering.com
BY	DATE
No.	REVISION
H-SCALE	1"=60'
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DATE	05/09/23
DESIGNED BY	RAB
DRAWN BY	CGV
CHECKED BY	
STERLING RANCH ROAD & BRIARGATE PARKWAY SEGMENT 2 GESC	
GRADING AND EROSION CONTROL PLANS	
SHEET 5	OF 9
JOB NO.	25188.03



ROCK SOCK SECTION

ROCK SOCK PLAN



ROCK SOCK JOINTING

ANY GAP AT JOINT SHALL BE FILLED WITH AN ADEQUATE AMOUNT OF 1/2" (MINUS) CRUSHED ROCK AND WRAPPED WITH ADDITIONAL WIRE MESH SECURED TO ENDS OF ROCK REINFORCED SOCK. AS AN ALTERNATIVE TO FILLING JOINTS BETWEEN ADJOINING ROCK SOCKS WITH CRUSHED ROCK AND ADDITIONAL WIRE WRAPPING, ROCK SOCKS CAN BE OVERLAPPED (TYPICALLY 12-INCH OVERLAP) TO AVOID GAPS.

GRADATION TABLE	
SIEVE SIZE	MASS PERCENT PASSING SQUARE MESH SIEVES
2"	100
1 1/2"	90 - 100
1"	20 - 55
3/4"	0 - 15
3/8"	0 - 5

ROCK SOCK INSTALLATION NOTES

- SEE PLAN VIEW FOR: -LOCATION(S) OF ROCK SOCKS.
- CRUSHED ROCK SHALL BE 1/2" (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET (1/2" MINUS).
- WIRE MESH SHALL BE FABRICATED OF 1/2" GAGE POULTRY MESH, OR EQUIVALENT, WITH A MAXIMUM OPENING OF 1/2", RECOMMENDED MINIMUM ROLL WIDTH OF 48"
- WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6" CENTERS ALONG ALL JOINTS AND AT 2" CENTERS ON ENDS OF SOCKS.
- SOME MUNICIPALITIES MAY ALLOW THE USE OF FILTER FABRIC AS AN ALTERNATIVE TO WIRE MESH FOR THE ROCK ENCLOSURE.

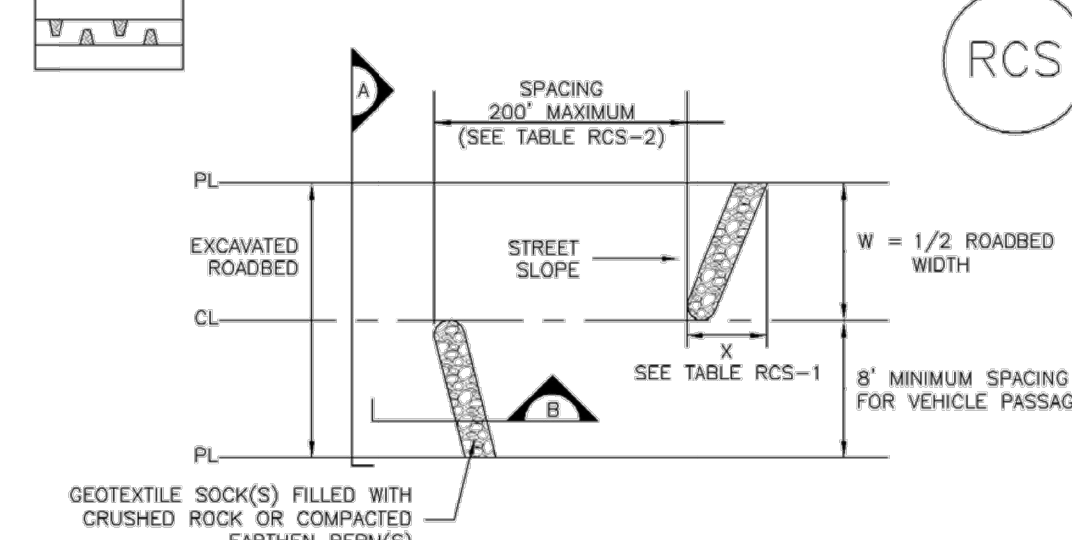
RS-1. ROCK SOCK PERIMETER CONTROL

ROCK SOCK MAINTENANCE NOTES

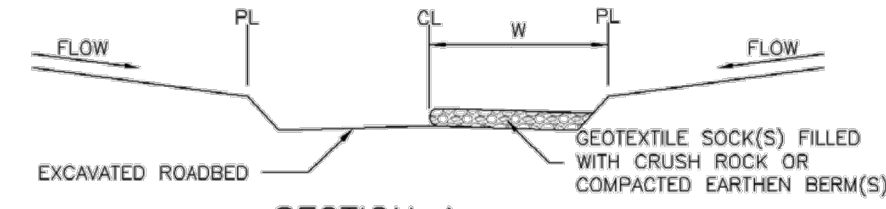
- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- ROCK SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, OR DAMAGED BEYOND REPAIR.
- SEDIMENT ACCUMULATED UPSTREAM OF ROCK SOCKS SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP. TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 1/2 OF THE HEIGHT OF THE ROCK SOCK.
- ROCK SOCKS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
- WHEN ROCK SOCKS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF ROCK SOCK INSTALLATION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY OTHER SIMILAR PROPRIETARY PRODUCTS ON THE MARKET. UDFCD NEITHER ENDORSES NOR DISCOURAGES USE OF PROPRIETARY PROTECTION PRODUCTS; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.



ROUGH CUT STREET CONTROL PLAN



SECTION A



SECTION B

TABLE RCS-1	
W (FT)	X (FT)
20-30	5
31-40	7
41-50	9
51-60	10.5
61-70	12

TABLE RCS-2	
LONGITUDINAL STREET SLOPE (%)	SPACING (FT)
<2	NOT TYPICALLY NEEDED
2	200
3	200
4	150
5	100
6	50
7	25
8	25

RCS-1. ROUGH CUT STREET CONTROL

ROUGH CUT STREET CONTROL INSTALLATION NOTES

- SEE PLAN VIEW FOR: -LOCATION OF ROUGH CUT STREET CONTROL MEASURES.
 - ROUGH CUT STREET CONTROL SHALL BE INSTALLED AFTER A ROAD HAS BEEN CUT IN, AND WILL NOT BE PAVED FOR MORE THAN 14 DAYS OR FOR TEMPORARY CONSTRUCTION ROADS THAT HAVE NOT RECEIVED ROAD BASE.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- (DETAILS ADAPTED FROM AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

ROUGH CUT STREET CONTROL INSPECTION AND MAINTENANCE NOTES

- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE, THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
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JAMES F. MORLEY
(719) 471-1742

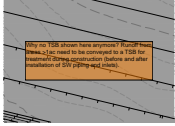
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BY	DATE	No.	REVISION	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				N/A	N/A	05/09/23	N/A	N/A	N/A

STERLING RANCH ROAD & BRIARGATE PARKWAY SEGMENT 2 GESC
DETAIL SHEETS

v5_GEC.pdf Markup Summary

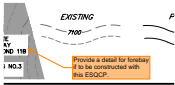
SW - Textbox (1)



Subject: SW - Textbox
Page Label: [2] GR_01 SRR and BGP-GESC (1)
Author: Glenn Reese - EPC Stormwater
Date: 5/31/2023 10:30:34 AM
Status:
Color: ■ JR RESPONSE: "GRAY"
Layer: GRADING AND POND ARE SHOWN FOR FUTURE CONDITION NO BGP
Space: SR RD FLOWS DRAIN TO POND 16

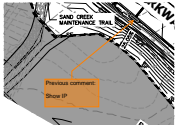
Why no TSB shown here anymore? Runoff from areas >1ac need to be conveyed to a TSB for treatment during construction (before and after installation of SW piping and inlets).

SW - Textbox with Arrow (3)



Subject: SW - Textbox with Arrow
Page Label: [5] GR_01 SRR and BGP-GESC (4)
Author: Glenn Reese - EPC Stormwater
Date: 5/31/2023 10:44:26 AM
Status:
Color: ■ JR RESPONSE: DETAIL ADDED
Layer:
Space:

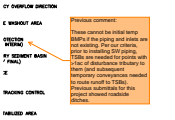
Provide a detail for forebay if to be constructed with this ESQCP.



Subject: SW - Textbox with Arrow
Page Label: [1] GR_01 SRR and BGP-GESC (1a)
Author: Glenn Reese - EPC Stormwater
Date: 5/31/2023 5:15:36 PM
Status:
Color: ■ JR RESPONSE: INLET PROTECTION ADDED
Layer:
Space:

Previous comment:

Show IP

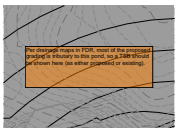


Subject: SW - Textbox with Arrow
Page Label: [1] GR_01 SRR and BGP-GESC (1a)
Author: Glenn Reese - EPC Stormwater
Date: 5/31/2023 5:15:59 PM
Status:
Color: ■ JR RESPONSE: INITIAL REMOVED
Layer:
Space:

Previous comment:

These cannot be initial temp BMPs if the piping and inlets are not existing. Per our criteria, prior to installing SW piping, TSBs are needed for points with >1ac of disturbance tributary to them (and subsequent temporary conveyances needed to route runoff to TSBs). Previous submittals for this project showed roadside ditches.

SW - Textbox (1)



Subject: SW - Textbox
Page Label: [5] GR_01 SRR and BGP-GESC (4)
Author: Glenn Reese - EPC Stormwater
Date: 5/31/2023 5:18:01 PM
Status:
Color: ■ JR RESPONSE: NOTE HAS BEEN ADDED TO PLANS TO CLARIFY SEQUENCE OF CONSTRUCTION
Layer:
Space:

Per drainage maps in FDR, most of the proposed grading is tributary to this pond, so a TSB should be shown here (as either proposed or existing).