CHICK-FIL-A #05190 GRADING, EROSION, AND SEDIMENT CONTROL REPORT

August 2023

Prepared for: Chick-Fil-A, Inc. 105 Progress Irvine, CA. 92618 303-579-7206 Contact: Steve Schwartz

Prepared by:



5970 Greenwood Village Plaza Boulevard Greenwood Village, Colorado 80111 303-751-0741

Contact: Kristofer K. Wiest, P.E.

Merrick Project No. 65121141

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LONE TREE PERMITTEES SIGNATURE PAGE

This Grading, Erosion and Sediment Control (GESC) report included herein has been prepared under my direct supervision in accordance with the requirements of the Grading, Erosion and Sediment Control Criteria Manual, as amended.



Kellan D. Black, P.E.
Colorado Registered Professional
Engineer No. 57201
For and on Behalf of Merrick & Company

Chick-Fil-A, Inc. hereby certifies that the grading, erosion, and sediment control facilities for the Chick-Fil-A #05190 project shall be constructed according to the design presented in this report. I understand that the City of Lone Tree does not and will not assume liability for the grading, erosion and sediment control facilities designed and/or certified by my engineer and that the City of Lone Tree reviews GESC plans; but cannot, on behalf of the Chick-Fil-A #05190 project, guarantee that final review will absolve Chick-Fil-A, Inc. and/or their successors and/or assigns of future liability for improper design.

Chick-Fil-A, Inc.	
Authorized Signature	

Note:

The Grading, Erosion and Sediment Control Plan included herein has been placed in the City of Lone Tree file for this project and appears to fulfill applicable City of Lone Tree Grading, Erosion and Sediment Control criteria, as amended. Additional grading, erosion and sediment control measures may be required of the permittee(s) due to unforeseen erosion problems or if the submitted GESC Plan does not function as intended. The requirements of this GESC Plan shall run with the land and be the obligation of the permittee(s) until such time as the GESC Plan is properly completed, modified, or voided.

PROJECT DESCRIPTION

This project encompasses the construction of the fast-food restaurant Chick-Fil-A #05190 located at the corner of State Highway C-470 and South Yosemite Street (Lot 1, Block 2, Parkway Subdivision Filing No. 3, 3rd Amendment). The property consists of 1.33 acres of land, including Lot 1, Block 2 of the Parkway Subdivision Filing No. 3, 3rd Amendment. Over-lot grading was previously performed, along with commercial buildings, existing parking lot and storm sewer improvements needed to serve the sounding developments.

The site is located within the west half of Section 3, Township 6 South, Range 67 West of the Sixth Principal Meridian, County of Douglas, State of Colorado. The site is bounded on the north by an existing commercial building, to the west by an existing parking lot, to the south by State Highway C-470 and to the east by South Yosemite Street. See Figure 1 – Vicinity Map on page 5.

EXISTING SITE CONDITIONS

The majority of the site is covered is covered in asphalt paving within the existing parking lot to the At-Home – Home Goods store consisting of parking islands, drive isles and landscaping.

Generally, the site slopes from north to south at approximately 2%. There are no known major or minor drainage ways located adjacent to the site. Existing storm infrastructure captures and conveys peak storm runoff to a regional detention pond located northwest of the site, and just west of the existing parking lot.

The site is situated within Zone X, as shown in FIRM Map No 08035C00426 effective January 16, 2023. See Appendix B for Firm Map.

Since more than 1 acre of disturbed land will be associated with this project, a Colorado Stormwater Discharge Permit will be required.

ADJACENT AREAS

Runoff from State Highway C-470 and South Yosemite Street is captured by existing curb & gutter and conveyed to an existing storm infrastructure.

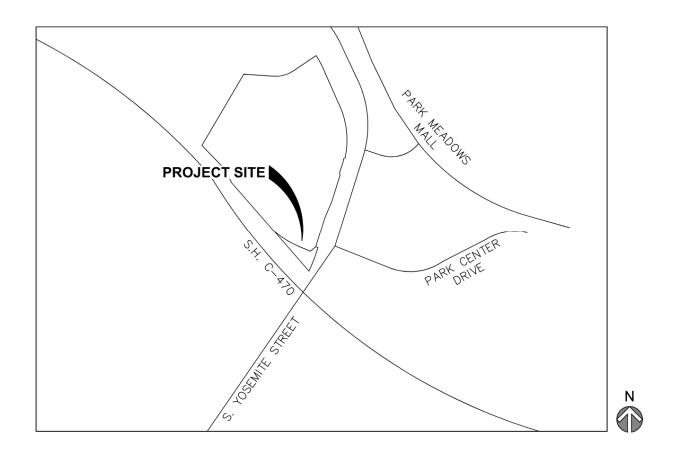


Figure 1 - Vicinity Map

UNDERLYING SOILS

The entire site is covered in "FoD", Fondis clay loam, classified as Hydrologic Soil Group C.

AREAS AND VOLUMES

A total area of 1.33 acres will be disturbed by the proposed grading within the site and within the southeast corner of the Parkway Subdivision Filing No. 3, 3rd Amendment plat. Removal of hardscape improvements across the project area will yield approximately 1,450 cubic yards. The estimated total unadjusted fill volume is 930 cubic yards and the estimated total unadjusted cut volume is 605 cubic yards, resulting in a net of 325 cubic yards of import.

EROSION AND SEDIMENT CONTROL MEASURES

The proposed erosion and sediment control measures can be seen on the Grading, Erosion and Sediment Control Plans (see Appendix D).

During construction activities silt fence (SF) and construction fence (CF) shall be maintained along the boundaries of the project site to define the limits of construction. Inlet protection (IP) will be installed at existing inlets in the vicinity of the site and at any new inlets installed during construction activity. Access to the construction area shall be through the vehicle tracking control (VTC) pad off the existing parking lot. The contractor shall install a concrete washout area (CWA) and a stabilized staging area (SSA); the staging area shall be large enough to fully contain parking, storage, and unloading and loading operations.

During the interim stage of construction, silt fence, inlet protection, and curb socks shall be maintained throughout the entire construction process. Silt fence shall be maintained to prevent runoff from carrying sediment off-site and impacting downstream waters. As proposed inlets are constructed inlet protection shall be placed around them to prevent sediment from entering the existing storm sewer system.

At completion of construction, the VTC, CWA, SSA, and inlet protection shall be removed. Silt fence shall be left in place until seeding has been established and approved by the City of Lone Tree. All disturbed areas where permanent landscaping is not provided shall be reseeded as soon as possible with a permanent seeding and mulching mix.

TIMING/PHASING SCHEDULE

The proposed construction schedule for this project is:

- Install initial BMPs March 2024
- Begin grading and install interim BMPs September 2024
- Complete grading, remove initial and interim BMPs, and install final BMPs November 2024.
- Final stabilization/final landscaping Summer 2025 (weather dependent)

The proposed construction is estimated to take 450-500 days.

PERMANENT STABILIZATION

Upon completion of construction activities, the site will be hardscaped with concrete and asphalt and will not need to be monitored during the final stabilization process. Permanent landscape features will be installed throughout the property and within the disturbed areas in the adjacent Right-of-Ways as shown on the approved landscape construction plans.

STORMWATER MANAGEMENT CONSIDERATIONS

During the initial phase of construction runoff from the site will flow in all directions from the site and will be collected by existing storm sewers. As such, particular care should be taken to make sure sediment from the site does not enter the public roadways or stormwater inlets. During active construction runoff from much of the central portion of the site will be collected by the yet-to-be installed private storm sewer system before entering the municipal storm sewer system.

MAINTENANCE

The construction, erosion, and sediment control measures shall be inspected by the contractor on a weekly basis during construction. Erosion and sediment control measures shall be inspected after every rain event as required by City of Lone Tree regulations. The standard notes and details in the Grading, Erosion, and Sediment Control Plan (See Appendix D) shall be followed.

OPINION OF PROBABLE COST

The estimated cost for the erosion and sediment control measures within City of Lone Tree is \$11,856.50. A detailed cost estimate for erosion and sediment control is provided in Appendix A. Construction costs are not included in the estimate.

CALCULATIONS

No special calculations were needed for the development of this GESC.

REFERENCES

- 1. Federal Emergency Management Agency Flood Insurance Rate Maps, Community-Panel Number 08035C00426, January 23, 2023.
- 2. Grading, Erosion and Sediment Control Manual, Douglas County, Colorado, Department of Public Works, https://www.douglas.co.us/land/drainage-and-erosion-control/grading-erosion-and-sediment-control-manual-gesc-drainage-erosion-and-sediment-control-desc/, March 2004.
- 3. National Cooperative Soil Survey for Castle Rock, Colorado, USDA, Web Soil Survey 1.1 [online], Accessed December 2020.

APPENDIX A

(OPINION OF PROBABLE COSTS)

APPENDIX B

(GESC PLAN AND REPORT CHECKLIST)

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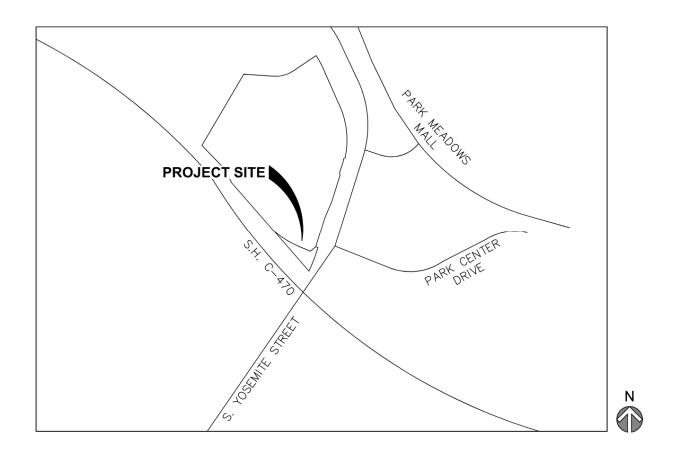


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- 3. National Cooperative Soil Survey for Castle Rock, Colorado, USDA, Web Soil Survey 1.1 [online], Accessed December 2020.

APPENDIX A

(OPINION OF PROBABLE COSTS)



GESC PermitOpinion of Probable Cost

Project: Chick-Fil-A #05190 Date: June 14, 2023

BMP No.	ВМР	ID	Unit		stallation Init Cost	Quantity		Cost		
1	Check Dam	CD	LF	\$	24.00	0	\$	-		
2	Compost Blanket	СВ	SF		\$0.36	0	\$	-		
3	Compost Filter Berm	CFB	LF	\$	2.00	0	\$	-		
4	Concrete Washout Area	CWA	EA	\$	100.00	1	\$	100.00		
5	Construction Fence	CF	LF	\$	2.00	1,230	\$	2,460.00		
6	Construction Markers	CM	LF	\$	0.20	0	\$	-		
7	Curb Sock	CS	LF	\$	8.00	7	\$	56.00		
8	Dewatering	DW	EA	\$	600.00	0	\$	-		
9	Diversion Ditch	DD	LF	\$	1.60	0	\$	-		
10	Erosion Control Blanket	ECB	SY	\$	5.00	0	\$	-		
11	Inlet Protection	IP	LF	\$	20.00	5	\$	100.00		
12	Reinforced Check Dam	RCD	LF	\$	36.00	0	\$	-		
13	Reinforced Rock Berm	RRB	LF	\$	9.00	0	\$	-		
14	RRB for Culvert Protection	RRC	LF	\$	9.00	0	\$	-		
15	Sediment Basin	SB	AC (1)		(2)	0.0	\$	-		
16	Sediment Control Log	SCL	LF	\$	2.00	1,635	\$	3,270.00		
17	Sediment Trap	ST	EA	\$	600.00	0	\$	-		
18A	Seeding and Mulching - Mobilization	SM	EA	\$	1,000.00	1	\$	1,000.00		
18B	Seeding and Mulching - Installation	SM	AC	\$	750.00	0.6	\$	480.00		
19	Silt Fence	SF	LF	\$	2.00	665	\$	1,330.00		
20	Stabilized Staging Area	SSA	SY	\$	2.00	257	\$	514.00		
21	Surface Roughening	SR	AC	\$	600.00	0.0	\$	-		
22	Temporary Slope Drain	TSD	LF	\$	30.00	0	\$	-		
23	Temporary Stream Crossing	TSC	EA	\$	1,000.00	0	\$	-		
24	Terracing	TER	AC	\$	600.00	0.0	\$	-		
25	Vehicle Tracking Control	VTC	EA	\$	1,000.00	1	\$	1,000.00		
26	VTC with Wheel Wash	ww	EA	\$	1,500.00	0	\$	-		
27	Temporary Batch Plant Restoration		AC	\$	5,000.00	0.0	\$			
	(1) Upstream Tributary Acre				SUB-T	OTAL	\$	10,310.00		
	(2) SB Cost = \$1000 +\$200(Upstream Tribu	ıtary Acre	es)		15% CONT	INGENCY	\$	1,546.50		
	GESC SURETY TOTAL (1)									

APPENDIX B

(GESC PLAN AND REPORT CHECKLIST)



Project:	Chick-Fi	I-A #05190)		Date: 1/20/2023
All P	lan She	ets			
Yes	No 🗌	N/A 🗌	1.	Title Block (consistent on all sh	eets)
Yes	No 🗌	N/A 🗌	2.	Legal Name (Subdivision Name	e and Filing Number)
Yes 🗹	No 🗌	N/A 🗌	3.	Sheet Number	
Yes 🗹	— No □	N/A 🗌	4.	Graphic and Written Scale	
Yes 🗹	No 🗌	N/A 🗌	5.	North Arrow	
Yes 🗹	No 🗌	N/A 🗌	6.	Current Date of Plan Preparation	on
Yes 🗹	No 🗌	N/A 🗌	7.	City Acceptance Block (availab	le upon request)
Yes 7	ver She No □		1	Draiget name	
Yes 🗹	No \square	N/A 🗌	1.	Project name	
Yes 🗹	No \square	N/A □ N/A □	2.	Project address Owner (and Applicant's if different	ant) name and address
Yes V	No \square	N/A	3. 4	Owner (and Applicant's if difference of the Control	•
Yes 🗹	No \square	N/A	4. 5.	Design firm's name and address Plan sheet index	5
Yes M	No \square	N/A 🗌	5. 6.		subsequent revisions
Yes Y	No \square	N/A 🗌	7.	Original date of preparation and The following note:	subsequent revisions
				INCLUDED HEREIN HAS LONE TREE FILE FOR T FULFILL APPLICABLE LO SEDIMENT CONTROL C GRADING, EROSION AN MAY BE REQUIRED OF UNFORESEEN EROSIOI PLAN DOES NOT FUNC REQUIREMENTS OF TH AND BE THE OBLIGATIO	EN AND SEDIMENT CONTROL PLAN BEEN PLACED IN THE CITY OF THIS PROJECT AND APPEARS TO ONE TREE GRADING, EROSION AND RITERIA, AS AMENDED. ADDITIONAL ID SEDIMENT CONTROL MEASURES THE PERMITTEES DUE TO N PROBLEMS OR IF THE SUBMITTED TION AS INTENDED. THE IS PLAN SHALL RUN WITH THE LAND ON OF THE PERMITTEES, UNTIL AN IS PROPERLY COMPLETED,
Yes 🗹	No 🗌	N/A 🗌	8.	the following note: THE <i>GRADING, EROSIO</i> INCLUDED HEREIN HAS DIRECT SUPERVISION I REQUIREMENTS OF TH	ON AND SEDIMENT CONTROL PLAN BEEN PREPARED UNDER MY IN ACCORDANCE WITH THE E GRADING, EROSION, AND GESC) CRITERIA MANUAL OF
Yes 🗹	No 🗌	N/A 🗌	9.	 General Location Map (at a reas a. general vicinity of the si b. major roadway names c. north arrow and scale 	· · · · · · · · · · · · · · · · · · ·

CITY OF LONE TREE GESC PLAN AND REPORT CHECKLIST

GESC Drawing Index Sheet (if applicable)

For projects that require multiple plan-view sheets to adequately show the project area (based on the specified scale ranges), a single plan-view sheet shall be provided at a scale appropriate to show the entire site on one sheet. Areas of coverage of the multiple blow-up sheets are to be indicated as rectangles on the index sheet.

Initia	Initial GESC Plan								
Yes 🗹	No 🗌	N/A 🗌	1.	Property Lines					
Yes	No 🗌	N/A 🗌	2.	Existing and proposed easements					
Yes	No 🗌	N/A 🗌	3.	Existing topography at one- or two-foot contour intervals, extending a minimum of 100 feet beyond the property line					
Yes	No 🗌	N/A 🗌	4.	Location of any existing structures or hydrologic features within the mapping limits					
Yes	No 🗌	N/A 🗌	5.	USGS Benchmark used for project					
Yes	No 🗌	N/A 🗌	6.	Limits of construction encompassing all areas of work, including:					
				 Access points, storage and staging areas, borrow areas, stockpiles, and utility tie-in locations in on-site and off-site locations 					
				 Stream corridors and other resource areas to be preserved and all other areas outside the limits of construction shall be lightly shaded to clearly show area not to be disturbed. 					
Yes 🗌	No 🗌	N/A	7.	Location of stockpiles, including topsoil, imported aggregates, and excess material					
Yes	No 🗌	N/A 🗌	8.	Location of storage and staging areas for equipment, fuel, lubricant, chemical (and other materials) and waste storage					
Yes 🗌	No	N/A 🗌	9.	Location of borrow or disposal areas					
Yes 🗌	No 🗌	N/A	10.	Location of temporary roads					
Yes	No 🗌	N/A 🗌	11.	Location, map symbol, and letter callouts of all initial erosion and sediment control BMPs					
Yes	No 🗌	N/A 🗌	12.	Information to be specified for each BMP, such as type and dimensions, as called for in the Standard Notes and Details					
Yes	No 🗌	N/A 🗌	13.	The following note: • SEE COVER SHEET OF LONE TREE STANDARD NOTES AND DETAILS (SHEET 1 OF 3) FOR LEGEND OF BMP NAMES AND SYMBOLS.					
Yes 🗌	No 🗌	N/A 🗹	14.	Other information as may be reasonably required by Lone Tree					

Interir	n GESC	Plan		
Yes 🔽	No 🗌	N/A 🗌	1.	Items 1, 2, and 4 through 10 from the Initial GESC Plan
Yes M	No 🗌	N/A 🗌	2.	Existing topography at one- or two-foot contour intervals extending a minimum of 100 feet beyond the property line, as shown on Initial GESC Plan. These contours shall be screened.
Yes 🗹	No 🗌	N/A 🗌	2.	Location of all existing erosion and sediment control measures on site, as shown on the Initial GESC Plan Sheet. These control measures shall be screened. Dimension information for initial stage BMPs shall not be shown.
Yes 🔽	No 🗌	N/A 🗌	3.	Proposed topography at one- or two-foot contour intervals, showing elevations, dimensions, locations, and slope of all proposed grading
Yes 🗌	No 🔽	N/A 🗌	4.	Outlines of cut and fill areas
Yes M	_	N/A 🗌	5.	Location of all interim erosion and sediment controls, designed in conjunction with the proposed site topography, but also considering the controls designed for the existing topography.
Yes M	No 🗌	N/A 🗌	6.	Locations of all buildings, drainage features and facilities, paved areas, retaining walls, cribbing, water quality facilities, or other permanent features to be constructed in connection with, or as a part of, the proposed work, per approved plat, SIP, RSP, or other improvement plan.
Yes 🗹	No 🗌	N/A 🗌	7.	The following notes:
				 SEE COVER SHEET OF LONE TREE STANDARD NOTES AND DETAILS (SHEET 1 OF 3) FOR LEGEND OF BMP NAMES AND SYMBOLS.
				 SHADED BMPS INSTALLED IN THE INITIAL STAGE SHALL BE LEFT IN PLACE IN THE INTERIM STAGE.
				 ALL INTERIM BMPS, INCLUDING SEEDING AND MULCHING OF DISTURBED AREAS, MUST BE COMPLETED PRIOR TO ISSUANCE OF ANY CURB AND GUTTER PERMITS.
				 SEE CONSTRUCTION PLANS FOR DETAILS OF PERMANENT DRAINAGE FACILITIES SUCH AS DETENTION FACILITIES, CULVERTS, STORM DRAINS, AND INLET AND OUTLET PROTECTION.
Yes	No 🗌	N/A 🗌	8.	Summary of cut and fill volumes
Yes 🗌	No 🗌	N/A 🗹	9.	Other information as may be reasonably required by Lone Tree

Final	Final GESC Plan								
Yes 📉	No 🗌	N/A 🗌	1.	Items 1, 2, and 5 from the Initial GESC Plan					
Yes 🔽	No 🗌	N/A 🗌	2.	Existing topography in areas of proposed contours shall not be shown.					
Yes 🗹	No 🗌	N/A 🗌	3.	Existing Initial and Interim BMPs shall be shown (screened). Dimension information shall not be shown.					
Yes 🗌	No 🗌	N/A 🗹	4.	Directional flow arrows on all drainage features					
Yes 🗹	No 🗌	N/A 🗌	5.	Any Initial or Interim BMPs that are to be removed and any resulting disturbed area to be stabilized					
Yes 🗹	No 🗌	N/A 🗌	6.	Location of all Final erosion and sediment control BMPs (including seeding and mulching of any areas not stabilized in the Interim Plan), permanent landscaping, and measures necessary to minimize the movement of sediment off site until permanent vegetation can be established.					
Yes 🗹	No 🗌	N/A 🗌	7.	Show area of buildings, pavement, sod, and permanent landscaping (define types) per accepted improvement plan.					
Yes 🗹	No 🗌	N/A 🗌	8.	Show seeding and mulching (SM) everywhere except within the limits of buildings and pavement areas.					
Yes	No 🗌	N/A 🗌	9.	Show other BMPs considered by the designer to be appropriate.					
Yes 🗹	No 🗌	N/A 🗌	10.	Show the following BMPs to be removed prior to end of construction:					
				 Indicate dewatering (DW) to be removed. Indicate temporary stream crossings (TSC) to be removed. Indicate stabilized staging area (SSA) to be removed. Indicate street inlet protection (IP) to be removed. Indicate vehicle tracking control (VTC) to be removed. Indicate construction fence (CF) to be removed. 					
Yes 🗹	No 🗌	N/A 🗌	11.	Include the following notes:					
				 SEE COVER SHEET OF LONE TREE STANDARD NOTES AND DETAILS (SHEET 1 OF 3) FOR LEGEND OF BMP NAMES AND SYMBOLS. 					
				 SHADED BMPS INSTALLED IN THE INITIAL AND INTERIM GESC PLANS, UNLESS OTHERWISE INDICATED, SHALL BE LEFT IN PLACE UNTIL REVEGETATION ESTABLISHMENT IS APPROVED BY THE CITY. 					
				 SEE CONSTRUCTION PLANS FOR DETAILS OF PERMANENT DRAINAGE FACILITIES SUCH AS DETENTION FACILITIES, CULVERTS, STORM DRAINS, AND INLET AND OUTLET PROTECTION. 					
Yes 🗌	No 🗌	N/A 🗹	12.	Other information as may be reasonably required by Lone Tree					

GE	SC Rep	ort		
Yes 🗹	No 🗌	N/A 🗌	1.	Name, Address, and Telephone Number of Applicant(s) – The name, address, and telephone number of the Professional Engineer preparing (or supervising the preparation of) the GESC Plan shall also be included, if different from the Applicant's.
Yes 🗹	No 🗌	N/A 🗌	2.	<u>Project Description</u> – A brief description of the nature and purpose of the land-disturbing activity, the total area of the site, the area of disturbance involved, and project location including township, range, section and quarter section, or the latitude and longitude, of the approximate center of the project.
Yes	No 🗌	N/A 🗌	3.	Existing Site Conditions – A description of the existing topography, vegetation, and drainage; a description of any wetlands on the site; and any other unique features of the property.
Yes 🗹	No 🗌	N/A 🗌	4.	Adjacent Areas – A description of neighboring areas such as streams, lakes, residential areas, roads, etc., which might be affected by the land disturbance.
Yes₩	No 🗌	N/A 🗌	5.	<u>Soils</u> – A brief description of the soils on the site including information on soil type and names, mapping unit, erodibility, permeability, hydrologic soil group, depth, texture, and soil structure (this information may be obtained from the soil report for the site, for adjacent sites if acceptable to the County, or the applicable Soil Survey prepared by the Natural Resources Conservation Service).
Yes 🗹	No 🗌	N/A 🗌	6.	<u>Areas and Volumes</u> – An estimate of the quantity (in cubic yards) of excavation and fill involved (indicating a balance onsite), and the surface area (in acres) of the proposed disturbance.
Yes 🗹	No 🗌	N/A 🗌	7.	<u>Erosion and Sediment Control Measures</u> – A description of the methods presented in the GESC Criteria Manual that will be used to control erosion and sediment on the site.
Yes 🗹	No 🗌	N/A 🗌	8.	<u>Timing/Phasing Schedule</u> – A schedule indicating the anticipated starting and completion time periods of the site grading and/or construction sequence, including the installation and removal of erosion and sediment control BMPs. Indicate the anticipated starting and completion time periods of individual project phases.
Yes 🗹	No 🗌	N/A 🗌	9.	<u>Permanent Stabilization</u> – A brief description, including applicable specifications, of how the site will be stabilized after construction is completed.
Yes 🗹	No 🗌	N/A 🗌	10.	<u>Stormwater Management Considerations</u> – Explain how stormwater runoff from and through the site will be handled during construction.
Yes 🗹	No 🗌	N/A 🗌	11.	<u>Maintenance</u> – Any special maintenance requirements over and above what is identified in the standard notes and details.
Yes 🗹	No 🗌	N/A 🗌	12.	Opinion of Probable Cost (City Format) – An opinion of probable costs for erosion and sediment control, including anticipated maintenance during the construction phase, shall be submitted with the GESC Plan. This will be reviewed by City staff and used as a basis for fiscal security. Electronic or paper copies of the spreadsheet to be used for preparing the opinion of probable costs for erosion and sediment control are available upon request. Unit costs used to develop probable erosion and sediment control costs shall be those shown in the spreadsheet.

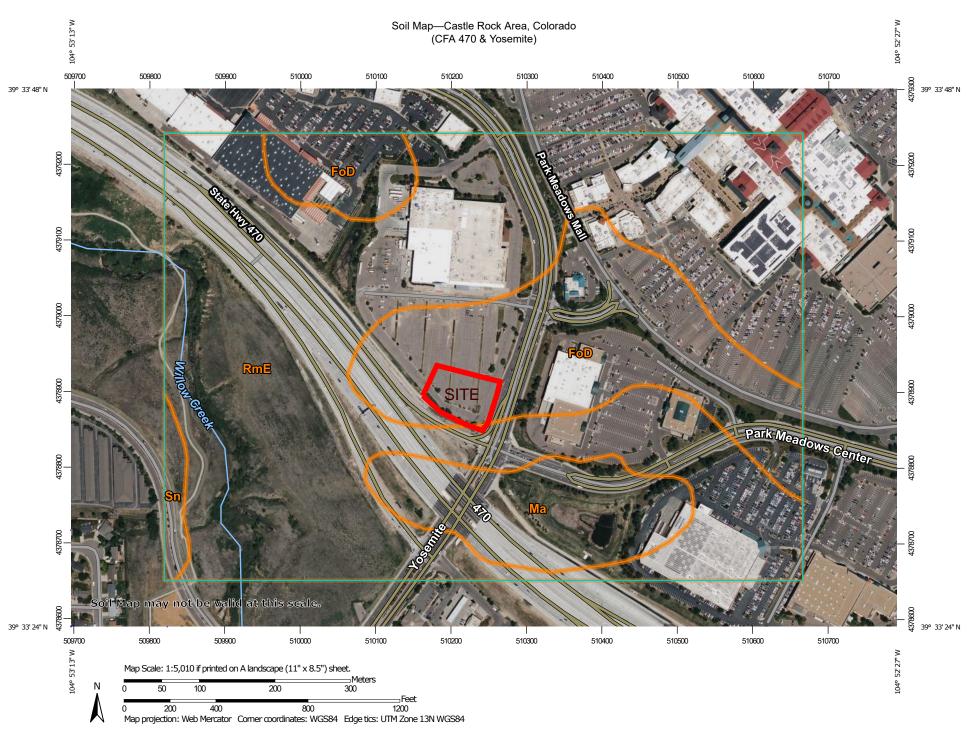


CITY OF CITY OF LONE TREE LONE TREE GESC PLAN AND REF GESC PLAN AND REPORT CHECKLIST

Yes ∐	No 📙	N/A 🗹	13.	<u>Calculations</u> – Any calculations made for the design of such items as sediment basins or erosion control blanket selection.
Yes 🗌	No 🗌	N/A 🗹	14.	Other Information – As may be reasonably required by Lone Tree.
Yes 🗹	No 🗌	N/A 🗌	15.	The Following Note – "This Grading, Erosion and Sediment Control Plan has been placed in the Lone Tree file for this project and appears to fulfill the applicable Douglas County Grading, Erosion and Sediment Control Criteria, as amended. I understand that additional grading, erosion and sediment control measures may be required of the Permittees, due to unforeseen erosion problems or if the submitted plan does not function as intended. The requirements of this plan shall run with the land and be the obligation of the Permittees until such time as the plan is properly completed, modified or voided."
Yes 🗹	No 🗌	N/A 🗌	16.	Signature Page for Permittees - Acknowledging the review and acceptance of responsibility, and a statement by the Professional Engineer acknowledging responsibility for the preparation of the GESC Plan (available upon request).
Preparer's :	Signature			Date

APPENDIX C

(FIRM, Soil Maps)



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Lines



Soil Map Unit Points

Special Point Features

Blowout



Borrow Pit Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot

Spoil Area



Stony Spot



Very Stony Spot



Wet Spot Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20.000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Castle Rock Area, Colorado Survey Area Data: Version 15, Sep 1, 2022

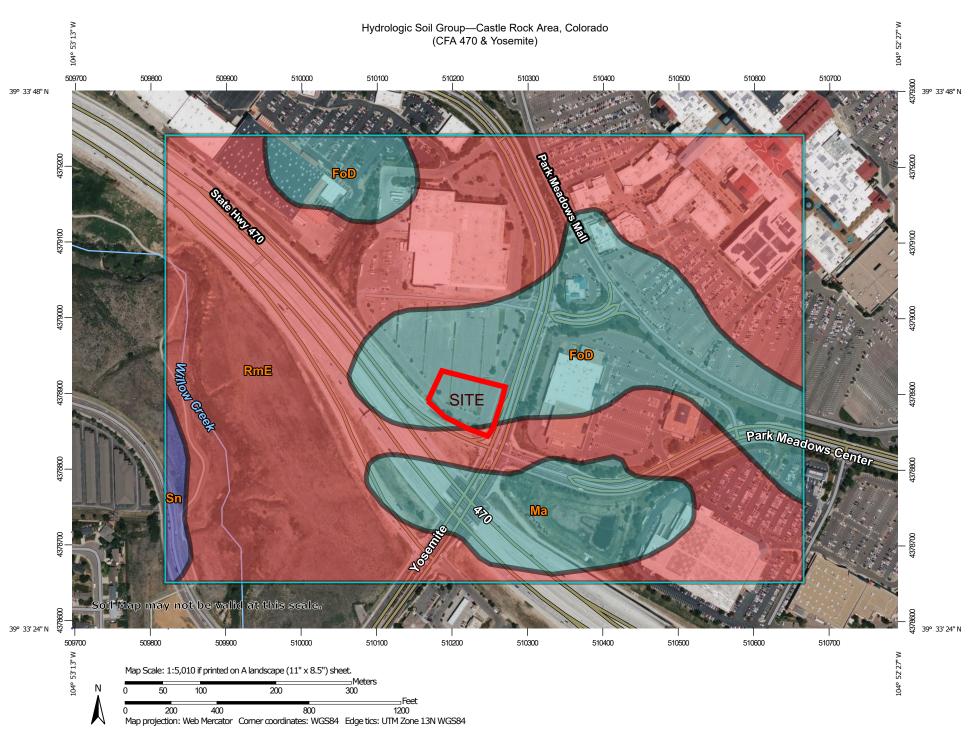
Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: Jun 9, 2021—Jun 12. 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
FoD	Fondis clay loam, 3 to 9 percent slopes	29.3	23.6%
Ма	Manzanola clay loam	11.8	9.5%
RmE	Renohill-Buick complex, 5 to 25 percent slopes	81.4	65.6%
Sn	Satanta loam	1.5	1.2%
Totals for Area of Interest	'	124.1	100.0%



MAP LEGEND MAP INFORMATION The soil surveys that comprise your AOI were mapped at Area of Interest (AOI) С 1:20.000. Area of Interest (AOI) C/D Soils Warning: Soil Map may not be valid at this scale. D Soil Rating Polygons Enlargement of maps beyond the scale of mapping can cause Not rated or not available Α misunderstanding of the detail of mapping and accuracy of soil **Water Features** line placement. The maps do not show the small areas of A/D contrasting soils that could have been shown at a more detailed Streams and Canals Transportation B/D Rails ---Please rely on the bar scale on each map sheet for map measurements. Interstate Highways C/D Source of Map: Natural Resources Conservation Service **US Routes** Web Soil Survey URL: D Major Roads Coordinate System: Web Mercator (EPSG:3857) Not rated or not available -Local Roads Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts Soil Rating Lines Background distance and area. A projection that preserves area, such as the Aerial Photography Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Soil Survey Area: Castle Rock Area, Colorado Survey Area Data: Version 15, Sep 1, 2022 Soil map units are labeled (as space allows) for map scales 1:50.000 or larger. Not rated or not available Date(s) aerial images were photographed: Jun 9, 2021—Jun 12. 2021 **Soil Rating Points** The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background A/D imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident. B/D

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
FoD	Fondis clay loam, 3 to 9 percent slopes	С	29.3	23.6%
Ма	Manzanola clay loam	С	11.8	9.5%
RmE	Renohill-Buick complex, 5 to 25 percent slopes	D	81.4	65.6%
Sn	Satanta loam	В	1.5	1.2%
Totals for Area of Intere	est	124.1	100.0%	

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

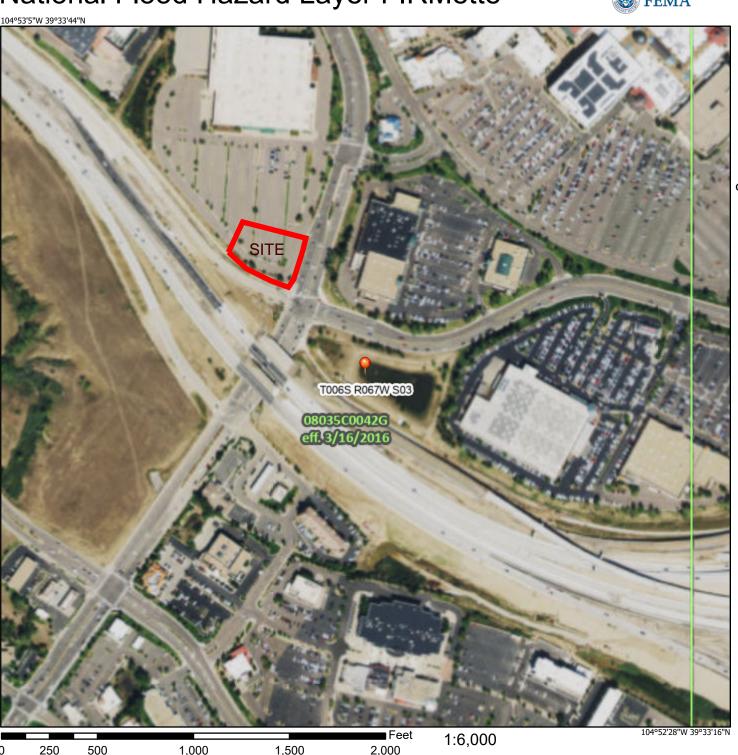
Aggregation Method: Dominant Condition
Component Percent Cutoff: None Specified

Tie-break Rule: Higher

National Flood Hazard Layer FIRMette

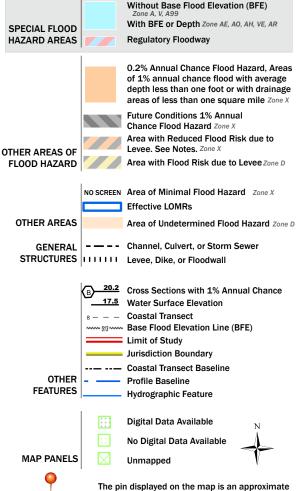


Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap

an authoritative property location.

point selected by the user and does not represent

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/16/2023 at 5:28 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

accuracy standards

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX D

(GESC Plan Drawings)

THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE SUBDIVISION

RESOLUTION OR APPROVED VARIANCES TO THOSE REGULATIONS. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT

CITY OF LONE TREE GENERAL NOTES:

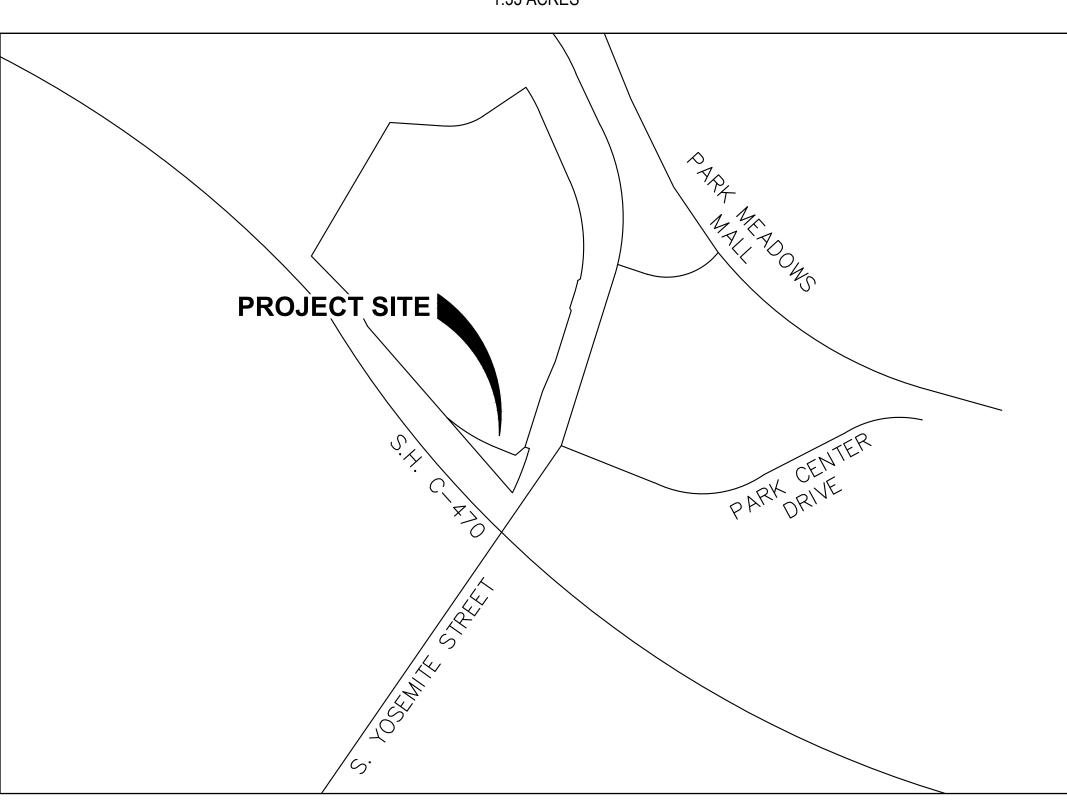
- ALL ROADWAY CONSTRUCTION SHALL CONFORM TO CURRENT DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
- ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
- 4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS, INSPECTION SECTION, (303) 662-8112, A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION, AND/OR BEFORE RESTARTING CONSTRUCTION AFTER A SHUTDOWN OF MORE THAN 10 DAYS.
- LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT (800) 922-1987 OR 811
- 6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY (SIGNED BY BOTH DESIGN ENGINEER AND CITY OF LONE TREE) OF THE CONSTRUCTION PLANS AND GESC REPORT AND PLAN, AND ONE (1) COPY OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AT THE JOB SITE AT ALL TIMES.
- 7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:
- A ROW/CONSTRUCTION PERMIT MUST BE OBTAINED BEFORE ANY WORK WITHIN EXISTING OR PROPOSED PUBLIC ROW. THE PERMIT APPLICATION MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR REVIEW/PROCESSING A MINIMUM OF 7 DAYS PRIOR TO REQUESTED START FOR THE WORK IN THE ROW.
- 9. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR ACCEPTANCE WITH THE PERMIT APPLICATION. AN EXCAVATION OR PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.
- 10. THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF CITY OF LONE TREE ACCEPTANCE/APPROVAL. IF APPLICABLE CONSTRUCTION PERMITS HAVE NOT BEEN OBTAINED, AND CONSTRUCTION STARTED WITHIN THAT TIME, THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.
- 11. CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE ENGINEER INSPECTOR WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY WHICH WILL BE CONVEYED TO THE CITY, URBAN DRAINAGE AND FLOOD CONTROL DISTRICT OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATERS, DETENTION OUTLET STRUCTURES, OR OTHER DRAINAGE INFRASTRUCTURES). FAILURE TO NOTIFY ENGINEERING INSPECTOR TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITIES/INFRASTRUCTURE BY CITY AND/OR URBAN DRAINAGE

GENERAL NOTES:

- BENCHMARK: ELEVATIONS ARE BASED UPON THE NGS BENCHMARK UNBEWUST. A BRASS DISK STAMPED "UNBEWUST 1992" AND SET IN THE NORTHWEST CORNER OF A 24'X16' ROCK OUTCROP. LOCATED 0.2 MILE SOUTHWEST ALONG A PAVED ROAD FROM EXIT 191 OFF INTERSTATE 25 AND 22.5' EAST OF CENTERLINE, 123' NORTH OF THE OUTLET OF A 3' CORRUGATED METAL CULVERT AND APPROXIMATELY 350' WEST OF THE WEST EDGE OF ASPHALT OF SOUTHBOUND INTERSTATE 25. ELEVATION = 6125.32 NAVD88 / DOUGLAS COUNTY DATUM.
- 2. PROJECT COORDINATES ARE MODIFIED COLORADO STATE PLANE CENTRAL ZONE COORDINATES. THE COMBINED FACTOR USED
- 3. SANITARY FACILITIES SHALL BE PROVIDED AND MAINTAINED ON THE SITE AT ALL TIMES BY THE CONTRACTOR.
- 4. THE APPROPRIATE AUTHORITIES SHALL BE CONTACTED FOR ALL NECESSARY INSPECTIONS WITH AT LEAST 48 HOURS
- 5. DUST SHALL BE PROPERLY CONTROLLED BY THE CONTRACTOR AT ALL TIMES.
- 6. THE ENGINEER AND OWNER ASSUME NO RESPONSIBILITY FOR UNDERGROUND UTILITIES, WHETHER SHOWN ON THESE PLANS OR NOT. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION AND PROTECTING THEM DURING CONSTRUCTION.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR ALL PROJECT SAFETY INCLUDING BUT NOT LIMITED TO SAFETY DURING TRENCH EXCAVATION AND SHORING, TRAFFIC CONTROL, AND SECURITY.
- 8. THE CONTRACTOR MUST SECURE ALL REQUIRED PERMITS PRIOR TO THE START OF CONSTRUCTION.
- 9. THE CONTRACT DOCUMENTS AND SPECIFICATIONS THAT ARE SPECIFIC TO THIS PROJECT SHALL CONTROL ALL WORK EXCEPT WHEN STANDARDS AND SPECIFICATIONS OF DOUGLAS COUNTY CONFLICT OR OVERRIDE.

LOT 1A-2, BLOCK 1 PARKWAY SUBDIVISION FILING NO. 3, 4TH AMENDMENT LOCATED IN THE WEST HALF OF SECTION 3 TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE 6TH P.M. CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO.

1.33 ACRES



Sheet List Table

Sheet Descriptio

C10.0

C10.1

C10.2

C10.3

C10.4

C10.5

C10.6

C10.7

Sheet Title

COVER

GENERAL NOTES

INITIAL GESC PLAN

NTERIM GESC PLAN

FINAL GESC PLAN

GESC DETAIL 1

GESC DETAIL 2

GESC DETAIL 3

Sheet Number

02

VICINITY MAP

THE GRADING, EROSION AND SEDIMENT CONTROL PLAN INCLUDED HEREIN HAS BEEN PLACED IN THE CITY OF LONE TREE FILE FOR THIS PROJECT AND APPEARS TO FULFILL APPLICABLE LONE TREE GRADING, EROSION AND SEDIMENT CONTROL CRITERIA. AS AMENDED. ADDITIONAL GRADING, EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED OF THE PERMITTEES, DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT FUNCTION AS INTENDED. THE REQUIREMENTS OF THIS PLAN SHALL RUN WITH THE LAND AND BE THE OBLIGATION OF THE PERMITTEES. UNTIL SUCH TIME AS THE PLAN IS PROPERLY

THE GRADING, EROSION AND SEDIMENT CONTROL PLAN INCLUDED HEREIN HAS BEEN PREPARED UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH THE REQUIREMENTS OF THE GRADING, EROSION AND SEDIMENT CONTROL (GESC) CRITERIA MANUAL OF DOUGLAS COUNTY AS AMENDED.

GESC PLANS PREPARED BY:

MERRICK & COMPANY P.E. NUMBER DATE

PROJECT CONTACTS

SANITARY SEWER SOUTHGATE WATER AND SANITATION 3722 EAST ORCHARD ROAD CENTENNIAL, CO 80121 CONTACT: DAVID KAHLICH PHONE: 432-770-4997 EMAIL: REVIEWS@SOUTHGATEDISTRICTS.ORG

SOUTHGATE WATER AND SANITATION 3722 EAST ORCHARD ROAD CENTENNIAL, CO 80121 CONTACT: DAVID KAHLICH PHONE: 432-770-4997 EMAIL: REVIEWS@SOUTHGATEDISTRICTS.ORG

CITY OF LONE TREE PUBLIC WORKS 9220 KIMMER DR, SUITE 100 LONE TREE, CO 80124 CONTACT: JANET HERMAN PHONE: 303-708-1818 EMAIL: ENGINEERING@DOUGLAS.CO.US

XCEL ENERGY 2655 NORTH 63RD STREET BOULDER, CO 80301 CONTACT: JOHN SEADLER PHONE: 720-610-2509

EMAIL: JOHN.SEADLER@XCELENERGY.COM

XCEL ENERGY

2655 NORTH 63RD STREET BOULDER, CO 80301 CONTACT: JOHN SEADLER PHONE: 720-610-2509 EMAIL: JOHN.SEADLER@XCELENERGY.COM

TELEPHONE / CABLE / FIBER LUMEN (PREVIOUSLY CENTURY LINK) CONTACT: TRAVIS YOUNG PHONE: 303-263-1725 EMAIL: TRAVIS.YOUNG@LUMEN.COM

CONTACT: MIKE PISARIK

CHICK-FIL-A, INC. 5200 BUFFINGTON ROAD ATLANTA, GA 30349-2732 CONTACT: MR. STEVE SCHWARTZ

EMAIL: STEVE.SCHWARTZ@CFACORP.COM

EMAIL: MPISARIK@GILESENGR.COM

CIVIL ENGINEER

PHONE: (303) 519-7206

MERRICK & COMPANY 5970 GREENWOOD PLAZA BLVD. GREENWOOD VILLAGE, CO 80111 CONTACT: MR. KELLAN BLACK PHONE: (303) 353-3590 EMAIL: KELLAN.BLACK@MERRICK.COM

BASIS OF BEARING:

BEARINGS ARE BASED UPON THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN, AS BEARING N02°13'40"W A DISTANCE OF 2699.17 FEET BETWEEN THE WEST QUARTER CORNER OF SAID SECTION 3, BEING A FOUND # 6 REBAR WITH A 3-1/4" ALUMINUM CAP, FLUSH WITH THE SURFACE, STAMPED RLS 16401 AND THE SOUTHWEST CORNER OF SAID SECTION 3 BEING A FOUND 3-1/4" ALUMINUM CAP, IN RANGE BOX DOWN 0.5' BELOW THE SURFACE, STAMPED LS 26298.

ORIGIN BENCHMARK:

PROJECT BENCHMARK IS RIDGEGATE BM 1 A 3.25" DIAMETER BRASS CAP SET ON THE NORTHWEST BRIDGE ABUTMENT OF RIDGEGATE PARKWAY STAMPED "RIDGEGATE BM 1 2021" AND IS APPROXIMATELY 0.7 MILES EAST ON RIDGEGATE PARKWAY FROM THE INTERSECTION OF I-25 AND RIDGEGATE PARKWAY IN LONE TREE, COLORADO. THE BENCHMARK IS 1.0 FEET FROM THE WEST EDGE OF THE ABUTMENT, 3.0 FEET NORTH OF THE BACK OF WALK AND 31 FEET NORTH OF THE WEST BOUND CENTERLINE OF RIDGEGATE PARKWAY. ELEVATION IS 5983.40 U.S. SURVEY FEET, NAVD 88 DOUGLAS COUNTY DATUM.

Local Control Grid Coordinates:

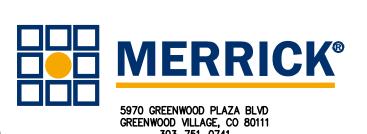
Point #601 N=1629556.03 E=3174717.09 ELEV=5825.14 Set 2" Alum Cap Stamped "Merrick & CO 601" Point #602 N=1629607.89 E=3174208.72 ELEV=5823.87 Set 2" Alum Cap Stamped "Merrick & CO 602" STATE PLANE, NAD83, COLORADO CENTRAL COMBINED FACTOR 0.99967418745

LEGAL DESCRIPTION:

LOT 1A-2, BLOCK 2, PARKWAY SUBDIVISION FILING NO. 3 - 4TH AMENDMENT LOCATED IN THE WEST HALF OF SECTION 3, TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE SIXTH CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO 1.33 ACRES, 2 LOTS SP23-0008 (SITE IMPROVEMENT PLAN)

CITY OF LONE TREE APPROVAL	
NITY OF LONE TREE	Α
CITY OF LONE TREE	
PATE	
THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONE TREE FOR GRADING, EROSION,	
AND SEDIMENT CONTROL IMPROVEMENTS ONLY.	
ENGINEERING DIVISION ACCEPTANCE BLOCK	

5200 Buffington Road



Atlanta, Georgia 30349-

FOR AND AND ON-BEHALF OF

MERRICK AND COMPANY

EX TELEPHONE SERVICE

EX MAJOR CONTOUR *— – 5555 — —* — *- 5555* — — EX MINOR CONTOUR

LEGEND:

WATER METER

IRRIGATION METER

SINGLE CLEANOUT

TRANSFORMER

STORM MANHOLE

PROPOSED TRAFFIC SIGN

PROPOSED MAJOR CONTOUR

PROPOSED MINOR CONTOUR

EX STORM MANHOLE

EX STORM INLET

EX LIGHT POLE

EX GAS SERVICE

EX WATER LINE

EX SANITARY SEWER

EX FIRE HYDRANT

EX TRAFFIC SIGN

EX SANITARY MANHOLE

EX ELECTRIC SERVICE

PAVEMENT STRIPING

PARKING COUNT

STORM SWALE

STORM SEWER

GAS LINE

ELECTRIC SERVICE

STORM INLET

LIGHT POLE

TWO-WAY CLEANOUT

GREASE INTERCEPTOR

EX IRRIGATION VALVE EX WATER VALVE

EX ELECTRIC BOX CONCRETE PAVEMENT

ACCESSIBLE PATH

REVISION SCHEDULE

NO. DATE DESCRIPTION

CONSULTANT PROJECT # 65121141 REVIEW 08/18/23

SHEET NUMBER

Call before you dig.

2. ALL (SANITARY SEWER, STORM SEWER, UNDERDRAIN, WATER LINE, OR STREET) CONSTRUCTION SHALL CONFORM TO THE APPROPRIATE EDITION OF THE GOVERNING JURISDICTION STANDARDS AND SPECIFICATIONS.

3. THE ENGINEER MAKES NO REPRESENTATION OR GUARANTEE REGARDING EARTHWORK QUANTITIES OR THAT THE EARTHWORK FOR THIS PROJECT WILL BALANCE DUE TO VARIOUS FIELD CONDITIONS, CHANGING SOIL TYPES, ALLOWABLE CONSTRUCTION TOLERANCES, AND CONSTRUCTION METHODS THAT ARE BEYOND THE CONTROL OF THE ENGINEER.

4. MERRICK & COMPANY IS NOT RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, SAFETY PRECAUTIONS, OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK. MERRICK WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

5. THE CONTRACTOR SHALL CALL THE NATIONWIDE UTILITY CONTACT NUMBER (811) OR LOCAL UTILITY LOCATE SERVICE, TO REQUEST LOCATES OF ALL UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF ANY LAND DISTURBING ACTIVITY.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES, INCLUDING DEPTH. UTILITY LOCATIONS ARE APPROXIMATE ONLY AND ARE NOT RELIABLE FOR CONSTRUCTION PURPOSES. THE UTILITIES SHOWN ON THE PLANS ARE FROM THE BEST AVAILABLE INFORMATION AND MAY NOT INCLUDE ALL UTILITIES THAT EXIST ON THE PROJECT SITE. THE CONTRACTOR SHALL PARTICIPATE IN THE RESOLUTION OF ANY CONFLICTS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

7. THE CONTRACTOR SHALL VERIFY SITE CONDITIONS, EXISTING TOPOGRAPHIC DATA, AND LOCATIONS OF ALL UTILITIES PRIOR TO INITIATING CONSTRUCTION. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES ON THE PROJECT SITE. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN OR NOT ON THE PROJECT PLANS, SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AND NO ADDITIONAL COST TO THE OWNER. NOTIFY ENGINEER AND OWNER OF ANY DISCREPANCIES FOUND PRIOR TO INITIATING ANY WORK.

8. THE CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY TO COMPLETE THE WORK AND SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS. A COPY OF ALL PERMITS SHALL BE MAINTAINED ON-SITE AT ALL TIMES.

9. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT LISTED BELOW:

10. THE CONTRACTOR IS RESPONSIBLE FOR SAFETY OF ALL PERSONNEL AND EQUIPMENT ON THE PROJECT SITE AT ALL TIMES, AND IS NOT LIMITED TO NORMAL WORKING HOURS. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH

11. TRAFFIC CONTROL STANDARDS FOR THIS PROJECT SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. A TRAFFIC CONTROL PLAN APPROVED BY OWNER FOR ON-SITE ACTIVITY AND/OR THE LOCAL ENTITY EXERCISING JURISDICTION OVER PUBLIC RIGHTS OF WAY SHALL BE OBTAINED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

12. THERE SHALL BE NO WORK PERFORMED ON WEEKENDS OR HOLIDAYS, UNLESS ACCEPTED AND APPROVED IN WRITING AND IN ADVANCE BY THE OWNER, ENGINEER, AND LOCAL JURISDICTION.

13. ALL WASTE MATERIALS SHALL BE PROPERLY DISPOSED OF IN AN APPROVED LANDFILL PERMITTED TO ACCEPT THAT PARTICULAR TYPE OF WASTE.

14. DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN APPROVAL OF THE OWNER OR HIS DESIGNATED REPRESENTATIVE MAY CAUSE THE WORK TO BE DEEMED UNACCEPTABLE.

15. INSTALL INITIAL SEDIMENTATION AND EROSION CONTROL MEASURES PRIOR TO INITIATING ANY WORK ON THE PROJECT SITE. MAINTAIN ALL EROSION CONTROL MEASURES UNTIL FINAL STABILIZATION AND REVEGETATION IS APPROVED BY THE COUNTY AND/OR CITY.

16. THE PROJECT PLANS AND SPECIFICATIONS ARE INTENDED TO PROVIDE THE COMPLETED PROJECT IN A COMPLETE AND OPERABLE CONDITION. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS AND PROVIDE ALL LABOR NECESSARY TO COMPLETE THE PROJECT IN A NEAT AND

WORKMANLIKE MANNER, INCLUDING ALL INCIDENTALS NECESSARY TO COMPLETE THE WORK, WITHOUT ADDITIONAL COST TO THE OWNER.

17. NOTIFY INSPECTORS OF ALL WORK ACTIVITY AT LEAST 24 HOURS IN ADVANCE.

18. ANY INSPECTION BY THE GOVERNING AGENCY OR THE ENGINEER, SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH THE APPLICABLE CODES AND AGENCY REQUIREMENTS.

19. ANY DISRUPTION IN UTILITIES SHALL BE COORDINATED AT LEAST 24 HOURS IN ADVANCE WITH THE UTILITY OWNER, PROJECT OWNER, EMERGENCY PROVIDERS, ALL IMPACTED LOCAL RESIDENTS, AND IMPACTED BUSINESS OWNERS. METHOD OF NOTIFICATION SHALL BE SUBJECT TO APPROVAL OF THE PROJECT OWNER AND AFFECTED UTILITY OWNER.

20. MAINTAIN EMERGENCY VEHICLE ACCESS TO AND THROUGH THE PROJECT SITE AT ALL TIMES.

21. THE CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF EXISTING UTILITIES AND SURFACE CONDITIONS DISTURBED BY CONSTRUCTION ACTIVITIES TO THE SATISFACTION OF THE OWNER, PROPERTY OWNER, AFFECTED UTILITY, OR LOCAL JURISDICTION. ALL SURFACE AND UTILITY RESTORATION SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER. ALL SURFACE RESTORATION SHALL BE REPLACED WITH LIKE KIND, SIZE, AND TYPE OF IMPROVEMENT THAT EXISTED PRIOR TO INITIATING CONSTRUCTION.

22. THE PROJECT PLANS AND SPECIFICATIONS AS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER, FOR AND ON BEHALF OF MERRICK AND COMPANY, REPRESENT THE FINAL CONSTRUCTION DOCUMENTS FOR THIS PROJECT. THE USE OF ANY ELECTRONIC OR OTHER MEDIA PURPORTING TO REPRESENT THE FINAL CONSTRUCTION DOCUMENTS FOR THIS PROJECT SHALL NOT BE RELIED UPON AS FINAL CONSTRUCTION DOCUMENTS. SHOULD THERE BE A CONFLICT BETWEEN SEALED DRAWINGS AND ELECTRONIC OR OTHER MEDIA FILES, THE SEALED DRAWINGS SHALL GOVERN. EACH USER OF ANY ELECTRONIC OR OTHER MEDIA WAIVES AND RELEASES MERRICK FROM ALL ACTIONS, CLAIMS, DAMAGES, ACTIONS, OBLIGATIONS, AND LIABILITIES OF ANY KIND OR NATURE WITH RESPECT TO THE ELECTRONIC OR OTHER MEDIA FILES.

23. NOTHING CONTAINED IN THE CONTRACT DOCUMENTS SHALL CREATE, NOR SHALL BE CONSTRUED TO CREATE, ANY CONTRACTUAL RELATIONSHIP BETWEEN THE ENGINEER AND THE CONTRACTOR OR ANY SUBCONTRACTOR.

24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROMPTLY NOTIFYING THE ENGINEER OF ANY PROBLEMS OR POTENTIAL PROBLEMS IN CONFORMANCE TO THE DESIGN LINE AND GRADE FOR ANY ELEMENT OF THE CONSTRUCTION. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROMPTLY NOTIFYING THE ENGINEER OF SITE CONDITIONS THAT DIFFER FROM THOSE SHOWN ON THE APPROVED PLANS.

25. IN THE EVENT THE CONTRACTOR ALLOWS, AUTHORIZES, APPROVES OR CONSTRUCTS ITEMS THAT DIFFER FROM THE APPROVED PLAN, SPECIFICATIONS, OR OTHER CONTRACT DOCUMENTS, WITHOUT WRITTEN APPROVAL BY THE ENGINEER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY LIABILITY ARISING FROM SUCH CHANGES.

CITY OF LONE TREE GENERAL NOTES

1. THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE SUBDIVISION RESOLUTION OR APPROVED VARIANCES TO THOSE REGULATIONS. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT.

2. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO CURRENT DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.

3. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.

4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS, INSPECTION SECTION, (303) 662-8112, A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION, AND/OR BEFORE RESTARTING CONSTRUCTION AFTER A SHUTDOWN OF MORE THAN TEN

5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT (800) 922-1987 OR 811.

6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY (SIGNED BY BOTH DESIGN ENGINEER AND CITY OF LONE TREE) OF THE CONSTRUCTION PLANS AND GESC REPORT AND PLAN, AND ONE (1) COPY OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AT THE JOB SITE AT

7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:

8. A ROW/CONSTRUCTION PERMIT MUST BE OBTAINED BEFORE ANY WORK WITHIN EXISTING OR PROPOSED PUBLIC ROW. THE PERMIT APPLICATION MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR REVIEW/PROCESSING A MINIMUM OF SEVEN (7) DAYS PRIOR TO REQUESTED START FOR THE WORK IN THE ROW.

9. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR ACCEPTANCE WITH THE PERMIT APPLICATION. AN EXCAVATION OR PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.

10. THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF CITY OF LONE TREE ACCEPTANCE/APPROVAL. IF APPLICABLE CONSTRUCTION PERMITS HAVE NOT BEEN OBTAINED, AND CONSTRUCTION STARTED WITHIN THAT TIME, THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.

11. CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE ENGINEER INSPECTOR WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY WHICH WILL BE CONVEYED TO THE CITY, MILE HIGH FLOOD DISTRICT, OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATERS, DETENTION OUTLET STRUCTURES, OR OTHER DRAINAGE INFRASTRUCTURES). FAILURE TO NOTIFY ENGINEERING INSPECTOR TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITIES/INFRASTRUCTURE BY CITY AND/OR MILE HIGH FLOOD DISTRICT.

EXISTING SUBSURFACE UTILITY NOTES

FACILITIES, AS NECESSARY TO PREVENT DAMAGE THERETO.

1. THE EXISTING SUBSURFACE UTILITIES DEPICTED IN THESE PLANS ARE IN ACCORDANCE WITH THEIR ACHIEVED QUALITY LEVELS AS DEFINED BY THE AMERICAN SOCIETY OF CIVIL ENGINEERS STANDARD 38-02, "STANDARD GUIDELINE FOR COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

2. THE SUBSURFACE UTILITY ENGINEERING NOTIFICATION AND INVESTIGATION WAS PERFORMED BETWEEN ---/--- AND ---/--- AND ---/--- MERRICK WILL NOT BE HELD LIABLE FOR ANY CHANGES IN FIELD CONDITIONS BEYOND THE DATES IN WHICH THE SUBSURFACE UTILITY INVESTIGATION WAS COMPLETED.

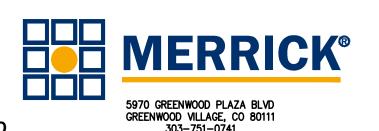
3. THE FOLLOWING UTILITIES WERE NOT INCLUDED AS PART OF THE SUBSURFACE UTILITY ENGINEERING INVESTIGATION: LANDSCAPE IRRIGATION SYSTEMS, UTILITY SERVICES TO RESIDENCES OR BUSINESSES, UNDERGROUND STORAGE TANKS, SEPTIC TANKS, WELLS, AND TRAFFIC DETECTION

4. THE CONTRACTOR SHALL COMPLY WITH ARTICLE 1.5 OF TITLE 9, CRS ("EXCAVATION REQUIREMENTS") WHEN EXCAVATING OR GRADING IS PLANNED IN THE AREA OF UNDERGROUND UTILITY FACILITIES. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITIES AT LEAST TWO (2) BUSINESS DAYS, NOT INCLUDING THE ACTUAL DAY OF NOTICE, PRIOR TO COMMENCING SUCH OPERATIONS. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT PHONE NO. 811, TO HAVE LOCATIONS OF UNCC REGISTERED LINES MARKED BY MEMBER COMPANIES. ALL OTHER UNDERGROUND FACILITIES SHALL BE LOCATED BY CONTACTING THE RESPECTIVE OWNER. UTILITY SERVICE LATERALS SHALL ALSO BE LOCATED PRIOR TO BEGINNING EXCAVATION OR GRADING. THE CONTRACTOR SHALL LOCATE NON-MEMBER UTILITIES, SUCH AS STORM SEWER AND DITCH

5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL LOCATIONS OF EXISTING STRUCTURES AND UTILITIES SHOWN ON THE PLANS AND TO ASCERTAIN WHETHER ANY OTHER STRUCTURES AND UTILITIES MAY EXIST. THE CONTRACTOR ASSUMES RESPONSIBILITY FOR THE PROTECTION OF ALL UTILITIES DURING THE WORK. REPAIR OF DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE

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FOR AND AND ON-BEHALF OF MERRICK AND COMPANY

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REVISION SCHEDULE NO. DATE DESCRIPTION

CONSULTANT PROJECT # 65121141 REVIEW 08/18/23

GENERAL NOTES

SHEET NUMBER

Know what's below. Call before you dig.

ENGINEERING DIVISION ACCEPTANCE BLOCK

CITY OF LONE TREE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONE TREE FOR GRADING, EROSION, AND SEDIMENT CONTROL IMPROVEMENTS ONLY.

CITY OF LONE TREE APPROVAL

EX UTILITY EASEMENT NOTES: INTERIOR SILT FENCE SHOULD BE PLACED BY THE CONTRACTOR TO INTERMITTENTLY INTERCEPT GROUND FLOW. LOCATION TO BE BASED ON SITE CONDITIONS. VTC TO BE FODS OR REFER TO EROSION CONTROL DETAILS (C9.0-C9.3) APPROVED EQUIVALENT OWNER/CONTRACTOR MUST OBTAIN THE CDPS GENERAL PERMIT FROM THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER (SEE NOTE #12) QUALITY CONTROL DIVISION. 4. THE CITY OF LOVELAND'S "STANDARD EROSION AND SEDIMENT CONTROL CONSTRUCTION PLAN NOTES, FEBRUARY 2005" TAKE PRECEDENCE OVER THE "GENERAL EROSION CONTROL NOTES" WHENEVER THERE IS A QUESTION OR CONFLICT IN THE NOTES. 5. THE OWNER/CONTRACTOR MUST ADHERE AND ABIDE TO THE RULES AND REGULATIONS IMPOSED BY THE CITY OF LOVELAND. 6. SLOPE PROTECTION SHOULD BE ADDED TO ALL AREAS OF SLOPES GREATER RULE AND ORDER OF CONDEMNATION TEMPORARY CONST. EASEMENT (CWA THAN 4:1. CONTRACTOR TO USE "TRACKED" VEHICLE, RUN PERPENDICULAR TO SLOPE TO INHIBIT RILL/GULLEY EROSION, CONTRACTOR MAY USE OTHER REC. NO. 2007047663 WINDROW-TYPE METHODS AS APPROVED BY ENGINEER. TYPICAL ALL SLOPES, REPEAT AS NECESSARY UNTIL LANDSCAPING IS INSTALLED. 7. ALL VEHICLE SPEEDS SHALL BE LIMITED TO A MAXIMUM OF 25 MILES PER HOUR. EX DRAINAGE 15' SIDEWALK & SNOW 8. ALL UNPAVED ROADWAYS AND DISTURBED SURFACE AREAS SHALL BE WATERED | EASEMENT RÉMOVAL EASEMENT AS NEEDED TO PREVENT FUGITIVE DUST EMISSIONS. REC. NO. 9645526 9. ALL PORTABLE TOILETS SHALL BE PLACED ON A PERVIOUS SURFACE AND STAKED DOWN ON ALL FOUR SIDE. 10. ALL ADJACENT ROADWAYS AND PAVEMENT SHALL BE KEPT CLEAR OF DIRT AND DEBRIS AND SHALL BE CLEANED USING DRY METHODS ONLY IMMEDIATELY UPON 11. SEE COVER SHEET OF LONE TREE GESC STANDARD NOTES AND DETAILS (SHEET 1) FOR LEGEND OF BMP NAMES AND SYMBOLS. 12. CONTRACTOR TO INSTALL TYPICAL ENTRANCE LAYOUT (2X4) FODS TRACKOUT CONTROL SYSTEM FOR THE VEHICLE TRACKING CONTROL OR AN APPROVED EQUIVALENT. TEMPORARY BMP LEGEND: SF SILT FENCE **CF** CONSTRUCTION FENCE DD DIVERSION DITCH RESOLUTION NO. R-020-116 REC. NO. 2020124977 (RS) ROCK SOCK REC. NO. 2021038374 (CIP) CURB INLET PROTECTION LOC LIMITS OF CONSTRUCTION (SSA) STABILIZED STAGING AREA VTC VEHICLE TRACKING CONTROL (CWA) CONCRETE WASHOUT AREA EX RETAINING WALL (TO REMAIN -PROTECT IN PLACE) RESOLUTION NO. R-020-116 REC. NO. 2020124977 REC. NO. 2021038374 DIP3 DROP INLET WATTLE FILTER SM SEEDING AND MULCHING STM STOCKPILE MANAGEMENT CONTINUATION - SEE THIS SHEET EX 30' UTILITY EASEMENT : / BK 1253, PG 690 C-470/SOUTH YOSEMITE STREET ON-RAMP AGREEMENT BK 1348, PG 937 / STATE HIGHWAY C-470 C-470/SOUTH YOSEMITE STREET ON-RAMP AGREEMENT BK 1348, PG 937 PERMANENT SLOPE ESMT DEED BK 1364, PG 396 \mathbb{S}^{N} EX RETAINING WALL (TO REMAIN — PROTECT IN PLACE) CITY OF LONE TREE APPROVAL CITY OF LONE TREE THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONE TREE FOR GRADING, EROSION, AND SEDIMENT CONTROL IMPROVEMENTS ONLY. Know what's below. Call before you dig.

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ENGINEERING DIVISION ACCEPTANCE BLOCK

REVISION SCHEDULE NO. DATE DESCRIPTION

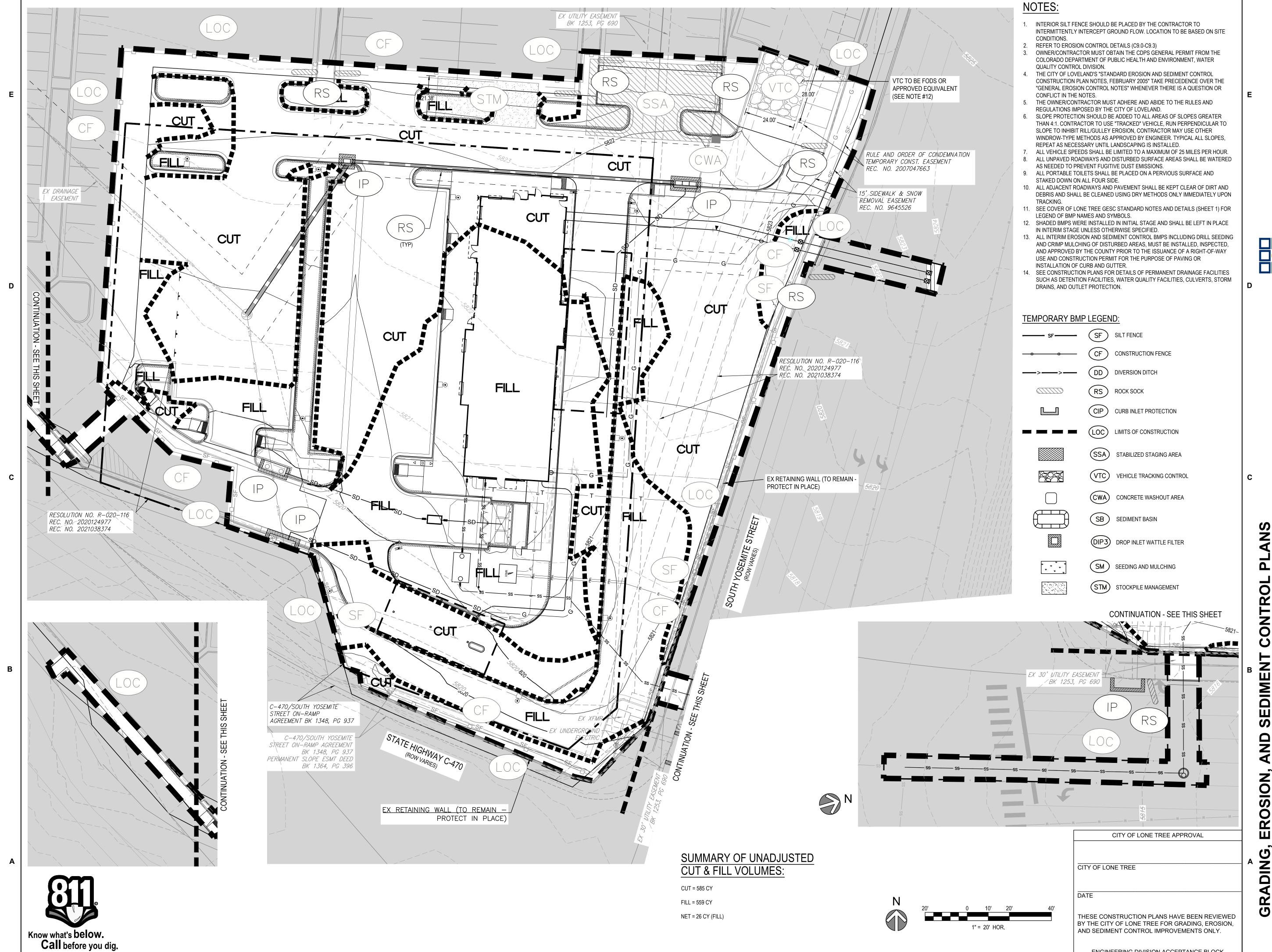
CONSULTANT PROJECT # 65121141 REVIEW 08/18/23

INITIAL GESC PLAN

SHEET NUMBER

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REVISION SCHEDULE NO. DATE DESCRIPTION

CONSULTANT PROJECT # 65121141 REVIEW

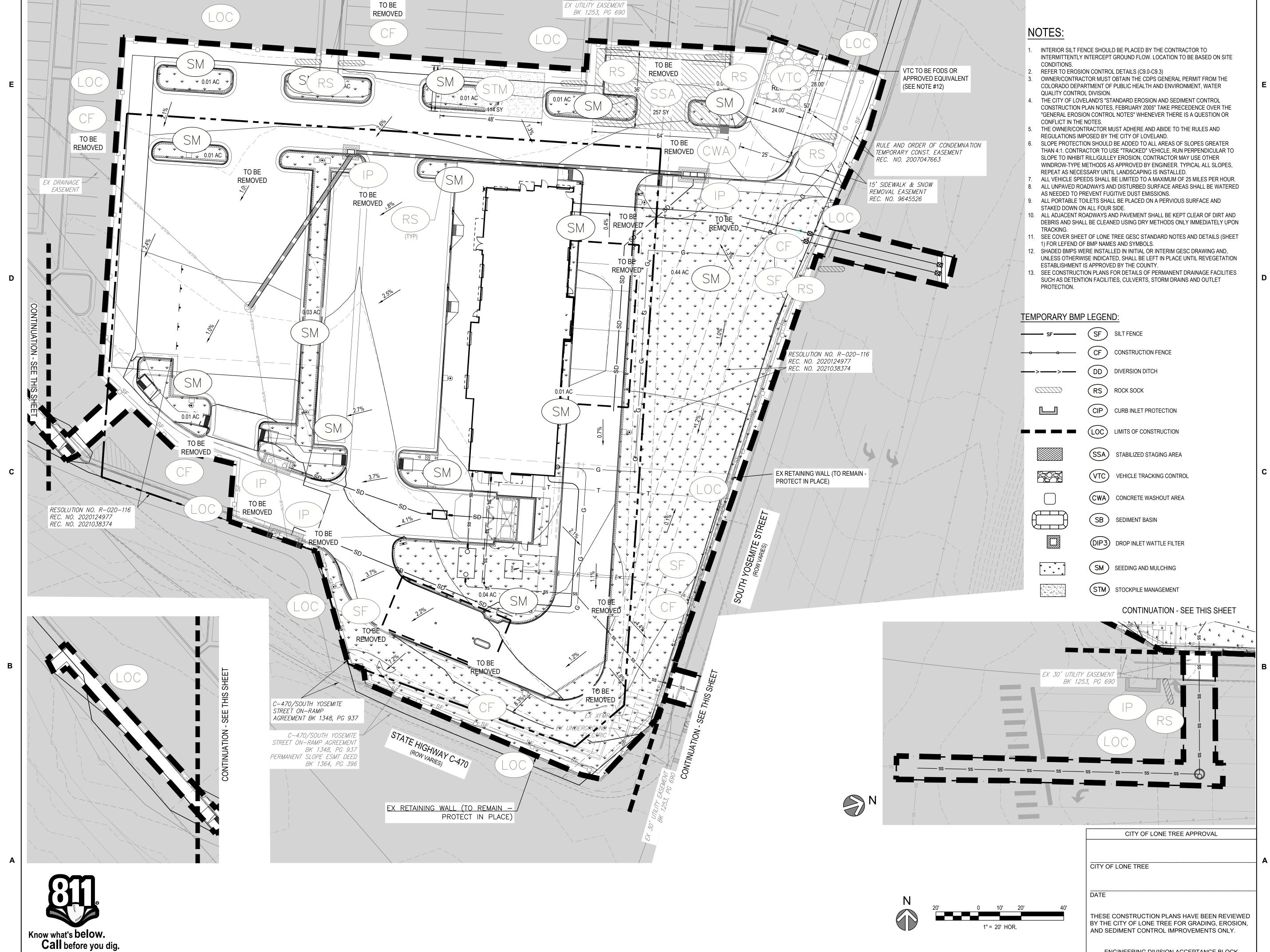
08/18/23

INTERIM GESC PLAN

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ENGINEERING DIVISION ACCEPTANCE BLOCK

C10.3



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ENGINEERING DIVISION ACCEPTANCE BLOCK

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CONSULTANT PROJECT # 65121141 REVIEW 08/18/23

FINAL GESC PLAN

SHEET NUMBER

REVISION SCHEDULE

C10.4

ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY OF LONE TREE RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO THE GESC MANUAL, GESC PLAN OR GESC PERMIT.

THE PLACEMENT OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs) SHALL BE IN ACCORDANCE WITH THE CITY OF LONE TREE — ACCEPTED GESC PLAN AND THE CITY OF LONE TREE GESC MANUAL. ANY VARIATION IN MATERIAL, TYPE OR LOCATION OF EROSION AND SEDIMENT CONTROL BMPs FROM THE CITY OF LONE TREE — ACCEPTED GESC PLAN WILL REQUIRE APPROVAL FROM AN ACCOUNTABLE REPRESENTATIVE OF THE CITY OF LONE TREE ENGINEERING DIVISION.

AFTER THE GESC PLAN HAS BEEN ACCEPTED, THE GESC PERMIT APPLIED FOR, FEES AND FISCAL SECURITY SUBMITTED TO THE CITY, AND THE GESC FIELD MANUAL OBTAINED AND REVIEWED, THE CONTRACTOR MAY INSTALL THE INITIAL—STAGE EROSION AND SEDIMENT CONTROL BMPs INDICATED ON THE ACCEPTED GESC PLAN.

THE FIRST BMP TO BE INSTALLED ON THE SITE SHALL BE CONSTRUCTION FENCE, MARKERS, OR OTHER APPROVED MEANS OF DEFINING THE LIMITS OF CONSTRUCTION, INCLUDING CONSTRUCTION LIMITS ADJACENT TO STREAM CORRIDORS AND OTHER AREAS TO BE PRESERVED. AFTER INSTALLATION OF THE INITIAL-STAGE EROSION AND SEDIMENT CONTROL BMPs, THE PERMITTEE SHALL CALL THE CITY OF LONE TREE CONSTRUCTION INSPECTOR AT (303) 662-8112 TO SCHEDULE A PRECONSTRUCTION MEETING AT THE PROJECT SITE. THE REQUEST SHALL BE MADE A MINIMUM OF THREE BUSINESS DAYS PRIOR TO THE REQUESTED MEETING TIME. NO CONSTRUCTION ACTIVITIES SHALL BE PLANNED WITHIN 24 HOURS AFTER THE PRECONSTRUCTION MEETING.

10. THE OWNER OR OWNER'S REPRESENTATIVE, THE GESC MANAGER, THE GENERAL CONTRACTOR, AND THE GRADING SUBCONTRACTOR, IF DIFFERENT FROM THE GENERAL CONTRACTOR, MUST ATTEND THE PRECONSTRUCTION MEETING. IF ANY OF THE REQUIRED PARTICIPANTS FAIL TO ATTEND THE PRECONSTRUCTION MEETING, OR IF THE GESC FIELD MANUAL IS NOT ON SITE, OR IF THE INSTALLATION OF THE INITIAL BMPs ARE NOT APPROVED BY THE CITY OF LONE TREE GESC INSPECTOR, THE APPLICANT WILL HAVE TO PAY A REINSPECTION FEE, ADDRESS ANY PROBLEMS WITH BMP INSTALLATION, AND CALL TO RESCHEDULE THE MEETING, WITH A CORRESPONDING DELAY IN THE START OF CONSTRUCTION. THE CITY OF LONE TREE STRONGLY ENCOURAGES THE APPLICANT TO HAVE THE ENGINEER OF RECORD AT THE PRECONSTRUCTION MEETING. FAILURE OF THE ENGINEER OF RECORD TO ATTEND MAY RESULT IN A DELAY OF THE START OF CONSTRUCTION.

CONSTRUCTION SHALL NOT BEGIN UNTIL THE CITY OF LONE TREE GESC INSPECTOR APPROVES THE INSTALLATION OF THE INITIAL BMPs AND THE APPROVED GESC PERMIT IS PICKED UP FROM THE CITY AND IS IN-HAND ON THE SITE. THE COMPLETED PERMIT WILL BE AVAILABLE WITHIN 24-HOURS AFTER THE INSTALLATION OF THE INITIAL BMPs ARE

12. THE GESC MANAGER SHALL STRICTLY ADHERE TO THE CITY OF LONE TREE—APPROVED LIMITS OF CONSTRUCTION AT ALL TIMES. THE CITY OF LONE TREE ENGINEERING DIVISION MUST APPROVE ANY CHANGES TO THE LIMITS OF CONSTRUCTION AND, AT THE DISCRETION OF THE ENGINEERING DIVISION, ADDITIONAL EROSION/SEDIMENT CONTROLS MAY BE REQUIRED IN ANY ADDITIONAL AREAS OF CONSTRUCTION.

3. THE MAXIMUM AREA OF CONSTRUCTION SHALL BE LIMITED TO 40 ACRES (70 ACRES IF APPROVED FOR SOIL MITIGATION OPERATIONS) TO REDUCE THE AMOUNT OF LAND DISTURBED AT ANY ONE TIME. LARGER SITES SHALL BE DIVIDED INTO PHASES THAT ARE EACH 40 (OR 70) ACRES OR LESS IN SIZE. THESE PROJECTS SHALL CONDUCT GRADING ACTIVITIES IN ACCORDANCE WITH THE ACCEPTED GESC PLAN. BMP INSTALLATION AND APPROVAL BY THE CITY OF LONE TREE AT THE START AND COMPLETION OF EACH PHASE SHALL BE CONDUCTED IN ACCORDANCE WITH HE PROCEDURES OUTLINED IN THE GESC MANUAL AND/OR GESC FIELD MANUAL. 4. PRIOR TO ACTUAL CONSTRUCTION, THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES, FOR

INFORMATION, CONTACT THE DENVER INTER-UTILITY GROUP AT 1-800-922-1987 OR FAX AT (303) 534-6700.

NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED WHEREVER POSSIBLE. EXPOSURE OF SOIL TO EROSION BY REMOVAL OR DISTURBANCE OF VEGETATION SHALL BE LIMITED TO THE AREA REQUIRED FOR IMMEDIATE CONSTRUCTION OPERATIONS.

16. THE GESC PERMIT SHALL BE VALID FOR A PERIOD OF ONE (1) YEAR, UNLESS EXTENDED. 17. A COPY OF THE GESC PERMIT, ACCEPTED GESC PLANS AND THE GESC FIELD MANUAL SHALL BE ON SITE AT ALL

8'x8' MIN.

8'x8' MIN.

SECTION B SCALE: 1" = 10'-0"

THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE. VEHICLE TRACKING CONTROL (DETAIL 24) IS REQUIRED AT THE ACCESS POINT.

4. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.

EXCAVATED MATERIAL SHALL BE UTILIZED IN PERIMETER BERM CONSTRUCTION.

THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.

AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.

WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

4. INSPECT WEEKLY, DURING AND AFTER ANY STORM EVENT.

CWA CONCRETE WASHOUT AREA 4

CONCRETE WASHOUT AREA INSTALLATION NOTES

CONCRETE WASHOUT AREA MAINTENANCE NOTES

SEE PLAN VIEW FOR:

 LOCATIONS OF CONCRETE WASHOUT AREA.

OR AS REQUIRED TO CONTAIN WASTE CONCRETE

18. THE GESC MANAGER SHALL BE RESPONSIBLE FOR ENSURING THAT THE SITE REMAINS IN COMPLIANCE WITH THE GESC PERMIT AND SHALL BE THE PERMITTEE'S CONTACT PERSON WITH THE CITY FOR ALL MATTERS PERTAINING TO THE GESC PERMIT. THE GESC MANAGER SHALL BE PRESENT AT THE SITE THE MAJORITY OF THE TIME AND SHALL BE AVAILABLE THROUGH A 24-HOUR CONTACT NUMBER. IN THE EVENT THAT THE CONTRACTOR'S GESC MANAGER IS NOT ON SITE AND CANNOT BE REACHED DURING A VIOLATION, THE ALTERNATE GESC MANAGER SHALL BE CONTACTED. IF NEITHER THE GESC MANAGER NOR ALTERNATE GESC MANAGER CAN BE CONTACTED DURING ANY VIOLATION, A STOP WORK ORDER SHALL BE ISSUED.

19. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE THROUGH THE CITY OF LONE TREE—APPROVED ACCESS POINT, A VEHICLE TRACKING CONTROL PAD IS REQUIRED AT ALL ACCESS POINTS ON THE SITE. ADDITIONAL STABILIZED CONSTRUCTION ENTRANCES MAY BE ADDED WITH AUTHORIZATION FROM THE CITY OF LONE TREE

20. THE GESC MANAGER IS RESPONSIBLE FOR CLEANUP OF SEDIMENT OR CONSTRUCTION DEBRIS TRACKED ONTO ADJACENT PAVED AREAS. PAVED AREAS INCLUDING STREETS ARE TO BE KEPT CLEAN THROUGHOUT BUILD—OUT AND SHALL BE CLEANED, WITH A STREET SWEEPER OR SIMILAR DEVICE, AT FIRST NOTICE OF ACCIDENTAL TRACKING OR AT THE DISCRETION OF THE CITY OF LONE TREE GESC INSPECTOR. STREET WASHING IS NOT ALLOWED. THE CITY OF LONE TREE RESERVES THE RIGHT TO REQUIRE ADDITIONAL MEASURES TO ENSURE AREA STREETS ARE KEPT FREE

GROUND SURFACE

|--|12" MIN

APPROVED EROSION AND SEDIMENT CONTROL BMPS SHALL BE MAINTAINED AND KEPT IN GOOD REPAIR FOR THE DURATION OF THIS PROJECT. AT A MINIMUM, THE GESC MANAGER SHALL INSPECT ALL BMPS IN ACCORDANCE WITH THE ACCEPTED GESC PLAN AND GESC MANUAL. ALL NECESSARY MAINTENANCE AND REPAIR ACTIVITIES SHALL BE COMPLETED WITHIN 48 HOURS FOR LEVEL II VIOLATIONS, AND IMMEDIATELY FOR LEVEL II VIOLATIONS, OR AS DIRECTED BY A CITY OF LONE TREE GESC INSPECTOR. ACCUMULATED SEDIMENT AND CONSTRUCTION DEBRIS SHALL BE REMOVED AND PROPERLY DISPOSED. BE REMOVED AND PROPERLY DISPOSED. 22. STRAW BALES ARE NOT A GESC-ACCEPTED SEDIMENT CONTROL BMP.

23. TOPSOIL SHALL BE STRIPPED AND STOCKPILED IN THE LOCATION SHOWN ON THE ACCEPTED GESC PLAN. THE GESC MANAGER SHALL SCHEDULE AN INSPECTION WITH THE CITY OF LONE TREE GESC INSPECTOR AS SOON AS TOPSOIL STRIPPING IS COMPLETED. FAILURE TO SCHEDULE SUCH INSPECTION OR FAILURE TO STOCKPILE TOPSOIL SHALL RESULT IN ISSUANCE OF A STOP WORK ORDER. THE STOP WORK ORDER SHALL REMAIN IN PLACE UNTIL TOPSOIL STOCKPILE TO ALL STATE OF A DEPORTURE SOIL AMEDIAENTS ARE STOCKPILED ON SITE. IS STOCKPILED ON SITE OR APPROPRIATE SOIL AMENDMENTS ARE STOCKPILED ON SITE. 24. THE ACCEPTED GESC PLAN MAY REQUIRE CHANGES OR ALTERATIONS AFTER APPROVAL TO MEET CHANGING SITE OR PROJECT CONDITIONS OR TO ADDRESS INEFFICIENCIES IN DESIGN OR INSTALLATION. THE GESC MANAGER SHALL OBTAIN PRIOR APPROVAL FROM THE DESIGN ENGINEER AND THE CITY OF LONE TREE ENGINEERING FOR ANY

25. LINING OF TEMPORARY SWALES AND DITCHES SHALL BE IN ACCORDANCE WITH THE GESC CRITERIA MANUAL. 26. NO PERMANENT EARTH SLOPES GREATER THAN 3:1 SHALL BE ALLOWED.

27. ANY SETTLEMENT OR SOIL ACCUMULATIONS BEYOND THE LIMITS OF CONSTRUCTION DUE TO GRADING OR EROSION SHALL BE REPAIRED IMMEDIATELY BY THE GESC MANAGER, THE GESC MANAGER SHALL BE HELD RESPONSIBLE FOR OBTAINING ACCESS RIGHTS TO ADJACENT PROPERTY, IF NEEDED, AND REMEDIATING ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, WETLANDS, PROPERTIES, ETC. RESULTING FROM WORK DONE AS PART OF THIS PROJECT.

A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND. 29. SOILS THAT WILL BE STOCKPILED FOR MORE THAN THIRTY (30) DAYS SHALL BE SEEDED AND MULCHED WITHIN FOURTEEN (14) DAYS OF STOCKPILE CONSTRUCTION. NO STOCKPILES SHALL BE PLACED WITHIN ONE HUNDRED

O. ALL CHEMICAL OR HAZARDOUS MATERIAL SPILLS WHICH MAY ENTER WATERS OF THE STATE OF COLORADO, WHICH INCLUDE BUT ARE NOT LIMITED TO, SURFACE WATER, GROUND WATER AND DRY GULLIES OR STORM SEWER LEADING TO SURFACE WATER, SHALL BE IMMEDIATELY REPORTED TO THE CDPHE PER CRS 25-8-601, AND THE CITY OF LONE TREE. RELEASES OF PETROLEUM PRODUCTS AND CERTAIN HAZARDOUS SUBSTANCES LISTED UNDER THE FEDERAL CLEAN WATER ACT (40 CFR PART 116) MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER AS WELL AS THE CDPHE. THE APPLICABLE CONTACT INFORMATION (SEE APPENDIX A, DOUGLAS COUNTY GESC MANUA - SUBJECT TO CHANGE) IS: COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT TOLL-FREE 24-HOUR ENVIRONMENTAL EMERGENCY SPILL REPORTING LINE 1-877-518-5608; NATIONAL RESPONSE CENTER (24-HOUR NATIONAL SPILL RESPONSE) 1-800-424-8802; CITY OF LONE TREE PUBLIC WORKS (303) 662-8112. SPILLS THAT POSE AN IMMEDIATE RISK TO HUMAN LIFE SHALL BE REPORTED TO 911. FAILURE TO REPORT AND CLEAN UP ANY SPILL SHALL RESULT IN ISSUANCE OF A STOP WORK ORDER.

(100) FEET OF A DRAINAGE WAY UNLESS APPROVED BY THE CITY OF LONE TREE ENGINEERING DIVISION.

ALL WORK ON SITE SHALL STAY A MINIMUM OF ONE HUNDRED (100) FEET AWAY FROM ANY DRAINAGE WAY, WETLAND, ETC. UNLESS OTHERWISE NOTED ON AN ACCEPTED CITY OF LONE TREE GESC PLAN.

2. ALL PROJECTS SHALL BALANCE EARTHWORK QUANTITIES ON SITE. IN THE EVENT A VARIANCE IS GRANTED BY THE CITY ENGINEER TO ALLOW IMPORT OR EXPORT OF MATERIAL, THE PERMITEE SHALL HAVE A GESC PERMIT IN HAND FOR THE IMPORT OR EXPORT SITE PRIOR TO ANY TRANSPORTING OF EARTHEN MATERIAL. THE GESC MANAGER SHALL NOTIFY THE CITY OF LONE TREE GESC INSPECTOR OF THE LOCATION AND GESC PERMIT NUMBERS OF BOTH THE EXPORTING AND IMPORTING SITES PRIOR TO ANY IMPORT/EXPORT OPERATIONS.

3. THE USE OF REBAR, STEEL STAKES OR STEEL FENCE POSTS FOR STAKING OR SUPPORT OF ANY EROSION OR SEDIMENT CONTROL BMP IS PROHIBITED (EXCEPT STEEL TEE-POSTS FOR USE IN SUPPORTING CONSTRUCTION FENCE).

THE CLEANING OF CONCRETE DELIVERY TRUCK CHUTES IS RESTRICTED TO APPROVED CONCRETE WASH OUT LOCATIONS ON THE JOB SITE. THE DISCHARGE OF WATER CONTAINING WASTE CONCRETE TO THE STORM SEWER SYSTEM IS PROHIBITED. ALL CONCRETE WASTE SHALL BE PROPERLY CLEANED UP AND DISPOSED AT AN

ALL DEWATERING ON SITE SHALL BE COORDINATED WITH A CITY OF LONE TREE GESC INSPECTOR AND BE FREE OF SEDIMENT IN ACCORDANCE WITH THE GESC CRITERIA MANUAL. ALL PERMANENT INSTALLATIONS OF PIPES FOR STORM SEWERS, SLOPE DRAINS, AND CULVERTS, TOGETHER WITH RIPRAP APRONS OR OTHER INLET AND OUTLET PROTECTION, REQUIRE INSPECTION BY THE CITY OF LONE TREE

ENGINEERING (SEPARATE FROM GESC INSPECTIONS). 7. ALL DISTURBED AREAS SHALL BE DRILL SEEDED AND CRIMP MULCHED IN ACCORDANCE WITH THE DOUGLAS COUNTY GESC MANUAL CRITERIA AND THE CITY OF LONE TREE SEEDING AND MULCHING DETAIL (#17) INCLUDED HEREIN WITHIN THIRTY DAYS OF INITIAL EXPOSURE OR WITHIN SEVEN DAYS OF SUBSTANTIAL COMPLETION (AS DEFINED BY

HYDRAULIC SEEDING AND HYDRAULIC MULCHING ARE NOT AN ACCEPTABLE METHOD OF SEEDING OR MULCHING IN THE CITY OF LONE TREE.

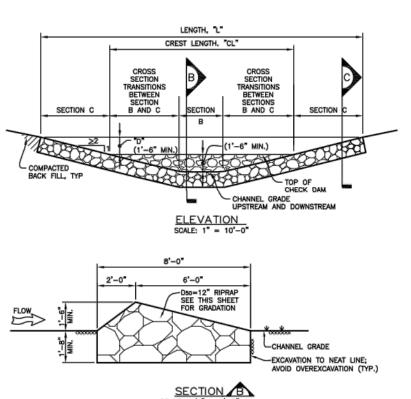
HE CITY OF LONE TREE) OF AN AREA, WHICHEVER IS LESS. THIS MAY REQUIRE MULTIPLE MOBILIZATIONS FOR

39. NO CURB AND GUTTER PERMITS SHALL BE ISSUED UNTIL ALL DISTURBED AREAS ARE DRILL SEEDED AND CRIMP MULCHED. 40. NO PAVING PERMITS SHALL BE ISSUED UNTIL ALL INTERIM INLET PROTECTION IS INSTALLED AND APPROVED BY THE

41. A FINAL GESC INSPECTION SHALL BE CONDUCTED A MINIMUM OF TWO WEEKS PRIOR TO THE ANTICIPATED REQUEST FOR CERTIFICATE OR TEMPORARY CERTIFICATE OF OCCUPANCY OR INITIAL ACCEPTANCE.

DETAIL SHEET BMP LEGEND <u>NO.</u> <u>NO.</u> (CD) CHECK DAM (CB) COMPOST BLANKET (CFB) COMPOST FILTER BERM (CWA) CONCRETE WASHOUT AREA (CF) CONSTRUCTION FENCE ____ (CM) CONSTRUCTION MARKERS (DD) DIVERSION DITCH (ECB) EROSION CONTROL BLANKET 10 (IP) INLET PROTECTION REINFORCED CHECK DAM (RRB) REINFORCED ROCK BERM RRB FOR CULVERT PROTECTION (SB) SEDIMENT BASIN 15 SEDIMENT CONTROL LOG SEDIMENT TRAP **(2000)** 17 • • • (SM) SEEDING AND MULCHING (SF) SILT FENCE STABILIZED STAGING AREA 20 (SR) SURFACE ROUGHENING 20000 (TSD) TEMPORARY SLOPE DRAIN 8050808 22 TEMPORARY STREAM CROSSING 24 VTC) VEHICLE TRACKING CONTROL 25 (WW) VTC WITH WHEEL WASH <u>A</u> 26 CS CURB SOCK ROCK AND RIPRAP GRADATIONS

LOC LIMITS OF CONSTRUCTION



D50=12" RIPRAP SEE THIS SHEET FOR GRADATION CHANNEL GRADE EXCAVATION TO NEAT LINE;
AVOID OVEREXCAVATION (TYP.) SECTION C SCALE: 1/4" = 1'-0" CHECK DAM INSTALLATION NOTES

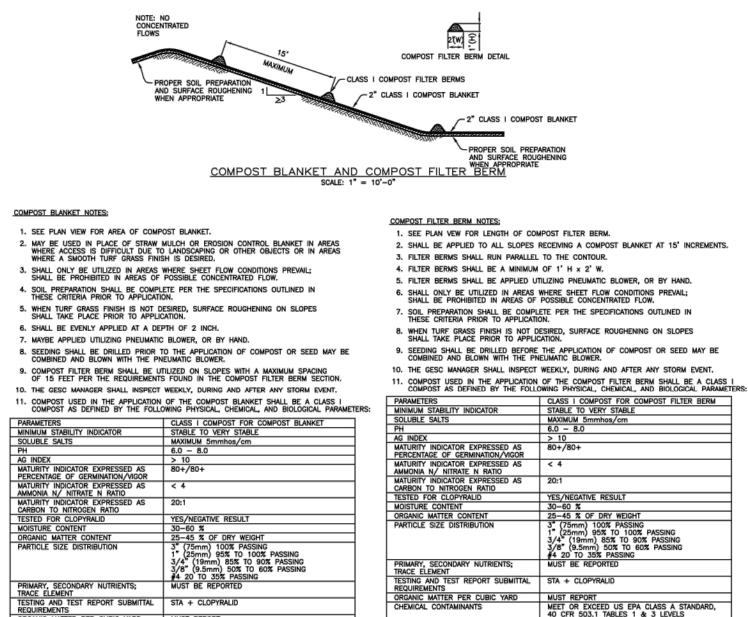
SEE PLAN VIEW FOR:
 LOCATIONS OF CHECK DAMS.
 CHECK DAM TYPE (CHECK DAM OR REINFORCED CHECK DAM).
 LENGTH, "L", CREST LENGTH, "CL", AND DEPTH, "D".

CHECK DAMS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED AFTER CONSTRUCTION FENCE, BUT PRIOR TO ANY UPSTREAM LAND-DISTURBING ACTIVITIES. 3. RIPRAP UTILIZED FOR CHECK DAMS SHALL HAVE A $\rm D_{\rm so}$ MEDIAN STONE SIZE OF 12". 4. RIPRAP PAD SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1'-8".

 THE ENDS OF THE CHECK DAM SHALL BE A MINIMUM OF 1'-6" HIGHER THAN THE CENTER OF THE CHECK DAM. CHECK DAM MAINTENANCE NOTES

 THE GESC MANAGER SHALL INSPECT CHECK DAMS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY. SEDIMENT ACCUMULATED UPSTREAM OF CHECK DAMS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF CHECK DAM IS WITHIN 1/2 OF THE HEIGHT OF THE CREST.

CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED BY THE CITY. CD CHECK DAM 1



CB) COMPOST BLANKET (2)

IOTE: CLOPYRALID IS THE COMMON NAME OF A HERBICIDE THAT KILLS BROAD-LEAVED WEEDS SUCH AS DANDELIONS, CLOVER AND THISTLE.

REQUIREMENTS
ORGANIC MATTER PER CUBIC YARD

MUST REPORT

CHEMICAL CONTAMINANTS

MINIMUM MANUFACTURING/PRODUCTION
REQUIREMENT

OF PUBLIC HEALTH AND ENVIRONMENT, HAZARDOUS
MATERIALS AND WASTE MANAGEMENT DIVISION

LOW

RESUREMENT

LOW

LOW

LOW

MUST REPORT

MEET OR EXCEPT US EPA CLASS A STANDARD,
40 CFR 503.1 TABLES 1 & 3 LEVELS

FULLY PERMITTED UNDER COLORADO DEPARTMENT
OF PUBLIC HEALTH AND ENVIRONMENT, HAZARDOUS
MATERIALS AND WASTE MANAGEMENT DIVISION

LOW

LOW REQUIREMENTS

ORGANIC MATTER PER CUBIC YARD

CHEMICAL CONTAMINANTS

MINIMUM MANUFACTURING/PRODUCTION
REQUIREMENT

RISK FACTOR RELATING TO PLANT
GERMINATION AND HEALTH

MUST REPORT

MEET OR EXCEED US EPA CLASS A STANDARD,
40 CFR 503.1 TABLES 1 & 3 LEVELS

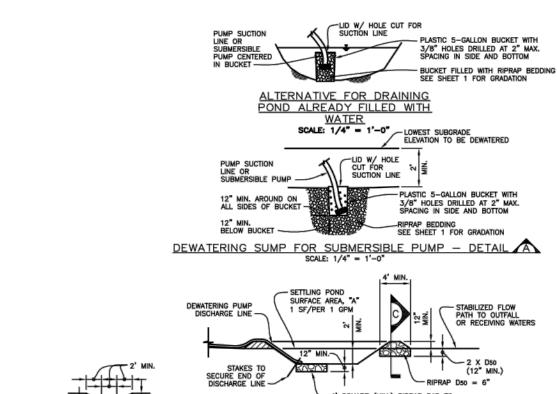
FULLY PERMITTED UNDER COLORADO DEPARTMENT
OF PUBLIC HEALTH AND ENVIRONMENT, HAZARDOUS
MATERIALS AND WASTE MANAGEMENT DIVISION

LOW NOTE: IF A BIOSOLID COMPOST IS TO BE UTILIZED IT SHALL BE PRODUCED BY A FACILITY IN POSSESSION OF A VALID NOTICE OF AUTHORIZATION (NOA) FOR THE UNRESTRICTED USE AND DISTRIBUTION BY THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT. THE NOA SHALL BE PROVIDED UPON REQUEST TO CITY OF LONE TREE. NOTE: A LAB TEST DETAILING THE CHEMICAL, PHYSICAL, AND BIOLOGICAL PARAMETERS SHALL BE PROVIDED UPON REQUEST BY CITY OF LONE TREE.

CFB COMPOST FILTER BERM (3) A

TABLE 1. RIPRAP GRADATIONS

D50 MEDIAN % OF MATERIAL TYPICAL STONE SIZE SMALLER THAN (INCHES) TYPICAL STONE DIAMETER (INCHES)

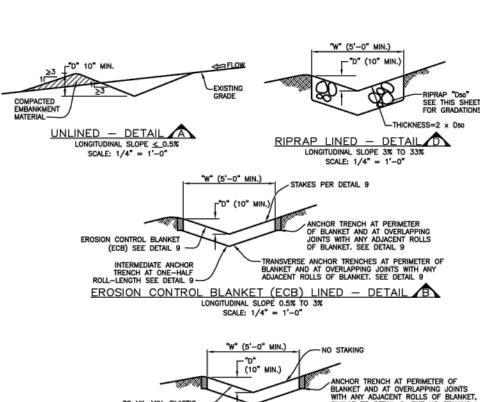


SUMP DISCHARGE
SETTLING BASIN — DETAIL B
SCALE: 1" = 10'-0" BASIN OUTLET - SECTION C
SCALE: 1" = 10'-0"

3. DEWATERING OPERATIONS SHALL USE ONE OR MORE OF THE DEWATERING SUMPS SHOWN ABOVE OR OTHER MEANS APPROVED BY THE CITY TO REDUCE THE PUMPING OF SEDIMENT, AND SHALL PROVIDE A TEMPORARY BASIN FOR SETTLING PUMPED DISCHARGES PRIOR TO RELEASE OFF SITE OR TO A RECEIVING WATER. SEDIMENT BASIN PER DETAIL 14 MAY BE USED IN LIEU OF SUMP DISCHARGE SETTLING BASIN SHOWN ABOVE.

THE DISCHARGE END OF THE LINE SHALL BE STAKED IN PLACES TO PREVENT MOVEMENT OF RIPRAP PAD. THE GESC MANAGER SHALL INSPECT DEWATERING SYSTEMS AND PERFORM ANY NECESSARY REPAIRS OR MAINTENANCE ON A HOURLY BASIS.

1. TEMPORARY SETTLING BASINS SHALL BE REMOVED WHEN NO LONGER NEEDED FOR DEWATERING OPERATIONS. ANY DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISI STABILIZED IN A MANNER APPROVED BY THE CITY. → DW DEWATERING 7 A



RISK FACTOR RELATING TO PLANT GERMINATION AND HEALTH

ANCHOR TRENCH AT PERIMETER OF BLANKET AND AT OVERLAPPING JOINTS WITH ANY ADJACENT ROLLS OF BLANKET SIMILAR TO DETAIL 9, BUT NO STAKING

DIVERSION DITCH INSTALLATION NOTES

1. SEE PLAN VIEW FOR:

- LOCATION OF DIVERSION DITCH.

- TYPE OF DITCH (UNLINED, ECB LINED, PLASTIC LINED OR RIPRAP LINED).

- LENGTH OF EACH TYPE OF DITCH.

- DEPTH, "D", AND WIDTH, "W" DIMENSIONS.

- FOR ECB LINED DITCH, EROSION CONTROL BLANKET TYPE (SEE DETAIL 9).

- FOR RIPRAP LINED DITCH, SIZE OF RIPRAP, "D50".

 DIVERSION DITCHES INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY LAND-DISTURBING ACTIVITIES. FOR ECB LINED DITCHES, INSTALLATION OF EROSION CONTROL BLANKET SHALL CONFORM TO THE REQUIREMENTS OF DETAIL 9.

IN LOCATIONS WHERE CONSTRUCTION TRAFFIC MUST CROSS A DIVERSION DITCH, THE PERMITTEES SHALL INSTALL A TEMPORARY CULVERT WITH A MINIMUM DIAMETER OF 12-INCHES.

THE GESC MANAGER SHALL INSPECT DIVERSION DITCHES WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY. 2. DIVERSION DITCHES ARE TO REMAIN IN PLACE UNTIL THE END OF CONSTRUCTION, OR, IF APPROVED BY THE CITY, LEFT IN PLACE.

IF DIVERSION DITCHES ARE REMOVED, THE DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY. DD DIVERSION DITCH 8 A

TABLE 2. RIPRAP BEDDING MASS PERCENT PASSING SQUARE MESH SIEVES CLASS A 1 1/2" 20 - 90 NO. 4 0 - 20

NO. 200

TABLE 3. 1 1/2" CRUSHED ROCK

MATCHES SPECIFICATIONS FOR CDOT CLASS A FILTER MATERIAL AND UDFCD TYPE 1 BEDDING. ALL ROCK SHALL BE FRACTURED FACE, ALL SIDES.

0 - 3

MASS PERCENT PASSING SQUARE MESH SIEVES NO. 4 1 1/2" 1" 90 - 100 20 - 553/4" 3/8" 0 - 15 0 - 5 MATCHES SPECIFICATIONS FOR NO. 4 COARSE AGGREGATE FOR CONCRETE PER AASHTO M43. ALL ROCK SHALL BE FRACTURED FACE, ALL SIDES.

ROCK AND RIPRAP GRADATIONS

Sheet Revisions			NOTE: SCAL
6/30/05	ADOPTED FROM DOUGLAS COUNTY GESC PLANS	MLP	SHOWN AR FOR 24"x30
5/ /08	EDIT UPDATES 🛕	GAW	SHEETS; ADJ
11/ /08	ADD CURB SOCK DETAIL 🛕 (REF UDFCD, V3 FIGURE C5-23), MISC. NOTE EDITS	GAW	ACCORDING FOR 11"x1"
			SHEETS.

4

DETAIL A SCALE: 1/4" = 1'-0"

-----CF CONSTRUCTION FENCE (5)

CONSTRUCTION FENCE INSTALLATION NOTES

SEE PLAN VIEW FOR:
 TYPE OF CONSTRUCTION LIMIT INDICATOR (FENCE OR MARKERS
 LOCATION AND LENGTH OF FENCE OR LINE OF MARKERS.



CITY OF LONE TREE

SEDIMENT CONTROL

GESC PLAN AND DETAILS

SHEET 1 OF 3



h: Q:\DEN\Projects ISTIAN.SCHILDER

DJUST IGLY :17" DEPARTMENT OF PUBLIC WORKS **Engineering Division**

(ALTERNATIVE TO CONSTRUCTION FENCE) SCALE: 1/4" = 1-0"

CM CONSTRUCTION MARKERS 6

GESC GRADING, EROSION, AND SEDIMENT CONTROL

STANDARD NOTES

REVISION SCHEDULE <u>DATE</u> DESCRIPTION

FSR#05190

BUILDING TYPE / SIZE: P13 LS LRG (MOD)

CONSULTANT PROJECT # 65121141 REVIEW 08/18/23

GESC DETAIL 1

06 OF 08

SHEET NUMBER

C10.5

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ADI

Chick-fil-A

5200 Buffington Road

Atlanta, Georgia 30349-

5970 GREENWOOD PLAZA BLVD

GREENWOOD VILLAGE, CO 80111

303-751-0741

FOR AND AND ON-BEHALF OF

MERRICK AND COMPANY

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3 2

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia 303492998



FOR AND AND ON-BEHALF OF MERRICK AND COMPANY

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CONSULTANT PROJECT # 65121141

PRINTED FOR REVIEW

DATE 08/18/23

DRAWN BY

REVISION SCHEDULE

FSR#05190

<u>DATE</u> <u>DESCRIPTION</u>

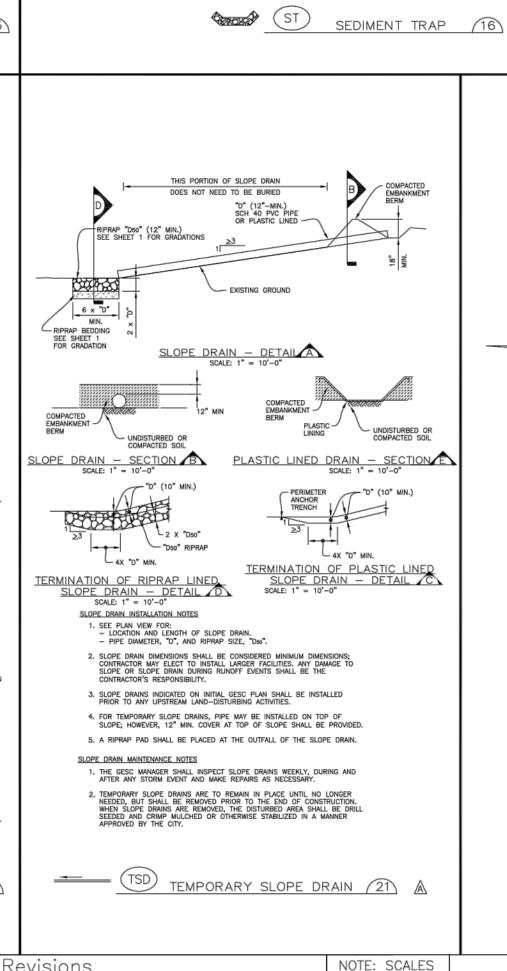
BUILDING TYPE / SIZE: P13 LS LRG (MOD)

SC DETAIL 2

GESC DETAIL 2

C10.6

07 OF 08



GAW

2:1MAX.

2:1MAX.

DETAIL A SCALE: 1" = 10'-0"

SEDIMENT TRAPS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY LAND—DISTURBING ACTIVITIES.

SEDIMENT TRAP BERM SHALL BE CONSTRUCTED FROM MATERIAL FROM EXCAVATION. THE BERM SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.

RIPRAP OUTLET SHALL BE CONSTRUCTED WITH D =12" RIPRAP WITH A MINIMUM OVERFLOW OF 6".

THE TOP OF THE EARTHEN BERM SHALL BE A MINIMUM OF 6" HIGHER THAN THE TOP OF THE RIPRAP OUTLET STRUCTURE.

THE ENDS OF THE RIPRAP OUTLET STRUCTURE SHALL BE MINIMUM OF 6" HIGHER THAN THE CENTER OF THE OUTLET STRUCTURE.

THE GESC MANAGER SHALL INSPECT SEDIMENT TRAPS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.

SEDIMENT ACCUMULATED UPSTREAM OF RIPRAP SHALL BE REMOVED WHEN THE UPSTREAM SEDIMENT DEPTH IS WITHIN ½ THE HEIGHT OF THE RIPRAP OUTLET STRUCTURE.

WHEN SEDIMENT TRAPS ARE REMOVED THE DISTURBED AREA SHALL BE DRILLED SEEDED AND CRIMP MULCHED OR STABILIZED IN A MANNER APPROVED BY THE CITY.

SEDIMENT TRAPS SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVERAGE IS APPROVED BY THE CITY.

2:1MAX.

2:1MAX.

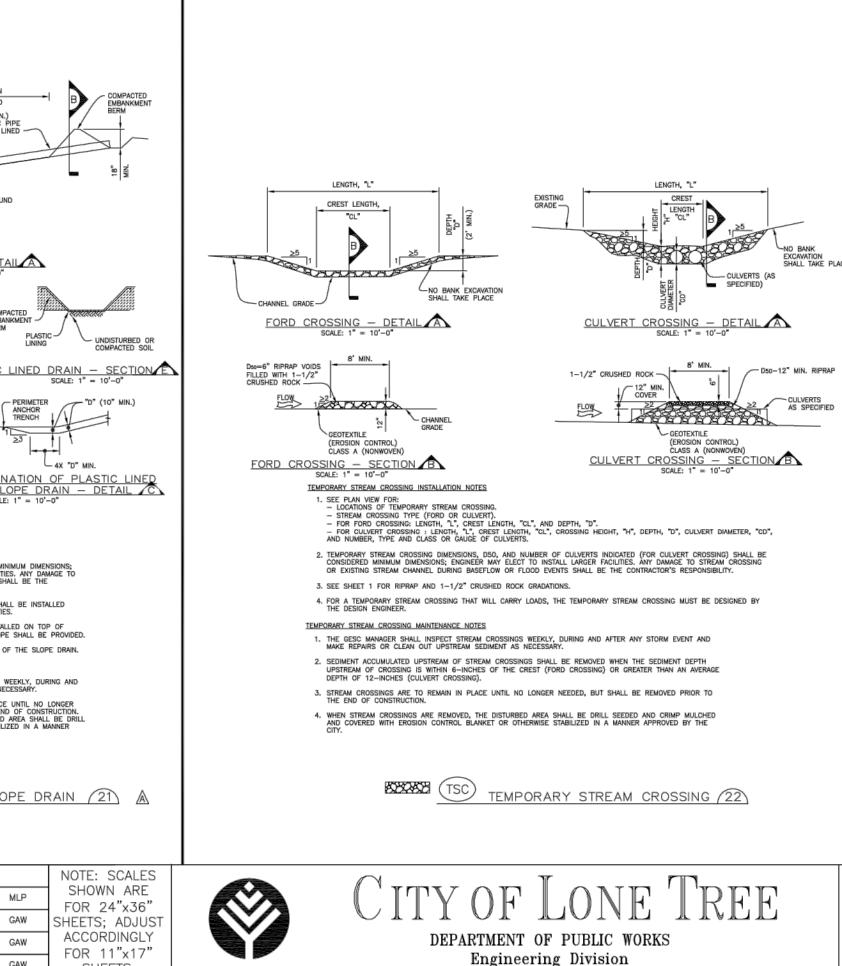
SEDIMENT TRAP INSTALLATION NOTES

SEDIMENT TRAP MAINTENANCE NOTES

SEE PLAN VIEW FOR:

 LOCATION, LENGTH AND WIDTH OF SEDIMENT TRAP.

SECTION B SCALE: 1" = 10'-0"



SEEDING AND MULCHING INSTALLATION NOTES

-EXCAVATION TO NEAT LINE; AVOID OVEREXCAVATION (TYPE

SEE PLAN VIEW FOR:

 AREA OF SEEDING AND MULCHING.
 TYPE OF SEED MIX (PERMANENT, TEMPORARY, OR LOW-GROWTH).

4. DRILL SEEDING MIX SHALL CONFORM TO THE TABLE ON THE RIGHT:

ALL BRANDS FURNISHED SHALL BE FREE FROM SUCH NOXIOUS SEEDS AS RUSSIAN OR CANADIAN THISTLE, COARSE FESCUE, EUROPEAN BINDWEED, JOHNSON GRASS, KNAP WEEL AND LEAFY SPURGE.

3. THE SEEDER SHALL FURNISH TO THE CONTRACTOR A SIGNED STATEMENT CERTIFYING THAT THE SEED FURNISHED IS FROM A LOT THAT HAS BEEN TESTED BY A RECOGNIZED LABORATORY, SEED WHICH HAS BECOME WET, MOLDY, OR OTHERWISE DAMAGED IN TRANSIT OR IN STORAGE WILL NOT BE ACCEPTABLE. SEED TICKETS SHALL BE PROVIDED TO CITY OF LONE TREE UPON REQUEST.

5. IF THE SEED AVAILABLE ON THE MARKET DOES NOT MEET THE MINIMUM PURITY AND GERMINATION PERCENTAGES SPECIFIED, THE SUBCONTRACTOR MUST COMPENSATE FOR A LESSER PERCENTAGE OF PURITY OR GERMINATION BY FURNISHING SUSTPICIENT ADDITIONAL SEED TO EQUAL THE SPECIFIED PROPUCT. THE TAGS FROM THE SEED MIXES MUST BE SUPPLIED TO CONTRACTOR AND FORWARDED TO THE CITY OF LONE TREE GESC INSPECT.

7. PERMANENT SEED MIX SHALL BE USED UNLESS OTHERWISE APPROVED BY THE CITY.

8. ALL AREAS TO BE SEEDED AND MULCHED SHALL HAVE NATIVE TOPSOIL OR APPROVED SOIL AMENDMENTS SPREAD TO A DEPTH OF AT LEAST 6 INCHES (LOOSE DEPTH). HAUL ROADS AND OTHER COMPACTED AREAS SHALL BE LOOSENED TO A DEPTH OF 6 INCHES PRIOR TO SPREADING TOPSOIL.

SOIL IS TO BE THOROUGHLY LOOSENED (TILLED) TO A DEPTH OF AT LEAST 6 INCHES PRIOR TO SEEDING. THE TOP 6 INCHES OF THE SEED BED SHALL BE FREE OF ROCKS GREATER THAN 4 INCHES AND SOIL CLODS GREATER THAN 2 INCHES. SEEDING OVER ANY COMPACTED AREAS THAT HAVEN'T BEEN THOROUGHLY LOOSENED SHALL BE REJECTED.

10. SEED IS TO BE APPLIED USING A MECHANICAL DRILL TO A DEPTH OF 1/4 INCH. ROW SPACING SHALL BE NO MORE THAN 6 INCHES. MATERIAL USED FOR MULCH SHALL CONSIST OF LONG-STEMMED STRAW. AT LEAST 50 PERCENT OF THE MULCH, BY WEIGHT, SHALL BE I INCHES OR MORE IN LENGTH, MULCH SHALL BE APPLIED AND MECHANICALLY ANCHORED TO A DEPTH OF AT LEAST 2 INCHES, MULCH SHALL BE APPLIED AT A RATE OF 4000 LB. OF STRAW PER ACRE.

IF THE PERMITTEE DEMONSTRATES TO THE CITY THAT IT IS NOT POSSIBLE TO DRILL SEED, SEED IS TO BE UNIFORMLY BROADCAST AT TWO TIMES THE DRILLED RATE, THEN LIGHTLY HARROWED TO PROVIDE A SEED DEPTH OF APPROXIMATELY 1/4 INCH, THEN ROLLED TO COMPACT, THEN MULCHED AS SPECIFIED ABOVE.

SEEDING AND MULCHING SHALL BE COMPLETED WITHIN 30 DAYS OF INITIAL EXPOSURE OR 7
DAYS AFER GRADING IS SUBSTANTIALLY COMPLETE IN A GIVEN AREA (AS DEFINED BY THE
CITY). THIS MAY REQUIRE MULTIPLE MOBILIZATIONS FOR SEEDING AND MULCHING.

SEEDED AND MULCHED AREAS SHALL BE INSPECTED FOR REQUIRED COVERAGE MONTHLY
FOR A PERIOD OF TWO YEARS FOLLOWING INITIAL SEEDING. REPAIRS AND RE-SEEDING
AND MULCHING SHALL BE UNDERTAKEN AFTER THE FIRST GROWING SEASON FOR ANY
AREAS FAILING TO MEET THE REQUIRED COVERAGE.

2. NO BARE AREAS LARGER THAN 4 SQUARE FEET (TWO-FEET BY TWO-FEET OR

FREE FROM INFESTATION OF NOXIOUS WEEDS IN ACCORDANCE WITH SECTION 6.4 OF THE GESC CRITERIA MANUAL.

2. NO BARE AREAS LARGER THAN 4 SQUARE FEET (TWO-FEET BY TWO-FEET OR

FREE FROM INFESTATION OF NOXIOUS WEEDS IN ACCORDANCE WITH SECTION 6.4 OF THE GESC CRITERIA MANUAL.

RILL AND GULLY EROSION SHALL BE FILLED WITH TOPSOIL PRIOR TO RESEEDING. THE RESEEDING METHOD SHALL BE APPROVED BY THE CITY.

3. REQUIRED COVERAGE FOR TURF GRASS AREAS SHALL BE DEFINED AS FOLLOWS: 1. AT LEAST 80% VEGETATIVE COVER OF GRASS SPECIES PLANTED.

REQUIRED COVERAGE FOR STANDARD, OPEN SPACE AND LOW GROWTH SEED MIXES SHALL BE DEFINED AS FOLLOWS:

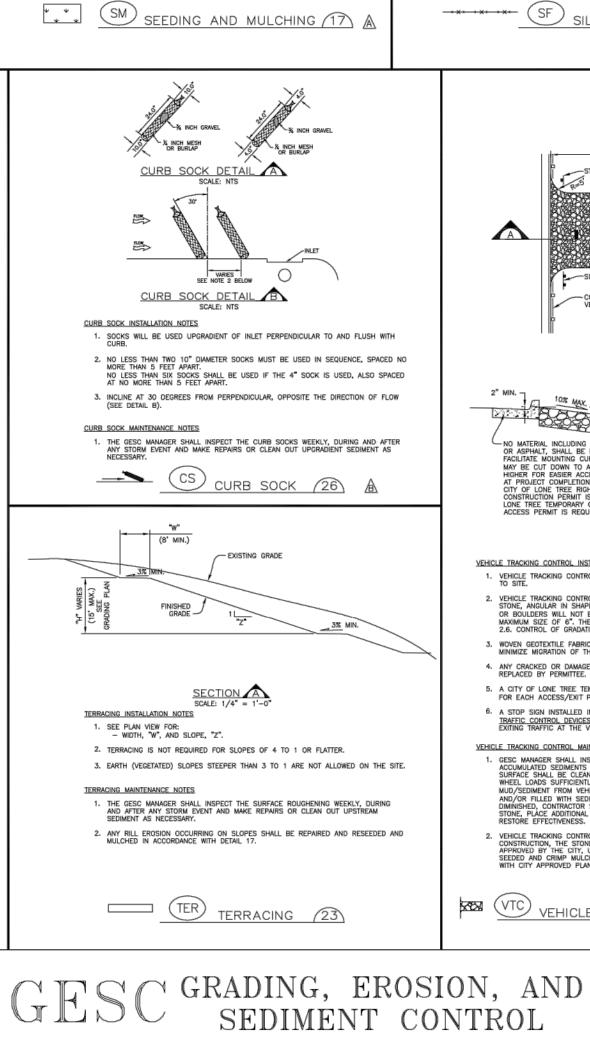
13. MULCH SHALL BE APPLIED WITHIN 24-HOURS OF SEEDING.

SEEDING AND MULCHING MAINTENANCE NOTES

3. FREE OF ERODED AREAS.

3. FREE OF ERODED AREAS.

14. TACKIFIER SHOULD BE UTILIZED TO HELP WITH STRAW DISPLACEMENT.



CITY OF LONE TREE PERMANENT DRILL SEEDING MIX

CHEYENNE

VAUGHN

ARRIBA

CRITANA

GOSHEN

LODORM

PRYOR

SODAR

LUNA

N/A

HACHITA

ARRIBA

CRITANA

SODAR

PNWS

PNWB

PNCS

PNCS

PNWS

PNCB

PNCB

PNCS

PICS

PICS

PNCS

PNCS

CITY OF LONE TREE TEMPORARY DRILL SEEDING MIX

CITY OF LONE TREE LOW-GROWTH DRILL SEEDING MIX

SPECIES

BIG BLUESTEM

YELLOW INDIANGRASS

SIDEOATS GRAMA

PRAIRIE SANDREED

GREEN NEEDLEGRASS

STREAMBANK WHEATGRASS

SPECIES

MOOTH BROMEGRASS

ANNUAL RYEGRASS

BLUE GRAMA

WESTERN WHEATGRASS

SIDEOATS GRAMA

NOTES % IN MIX POUNDS OF PLS PER ACRE.

EXISTING GROUND —

AT LEAST 11" OF SILT FENCE GEOTEXTILE SHALL BE BURIED -----

COMPACTED BACKFILL

POST SHALL BE JOINED AS SHOWN, THEN ROTATED 180' IN DIRECTION SHOWN AND DRIVEN INTO THE CROUND

SILT FENCE INSTALLATION NOTES

SILT FENCE MAINTENANCE NOTES

SEE PLAN VIEW FOR:

 LOCATION AND LENGTH OF FENCE.

JOINTS — SECTION B

ANCHOR TRENCH SHALL BE EXCAVATED WITH TRENCHER, OR WITH SILT FENCE INSTALLATION
MACHINE; NO ROAD GRADERS, BACKHOES, ETC. SHALL BE USED. TRENCH SHALL BE COMPACTED
BY HAND, WITH "JUMPING JACK", OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT
FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.

6-TO 12-GALLONS PER MINUTE PER SQUARE FOOT FLOW CAPACITY.
 90 LB, TENSILE STRENGTH PER ASTM D4622.
 UV DESIGN AT 500 HRS MIN. 70% STRENGTH RETAINED PER ASTM D 4355.

THE GESC MANAGER SHALL INSPECT SILT FENCE DAILY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.

SEDIMENT ACCUMULATED UPSTREAM OF SILT FENCE SHALL BE REMOVED WHEN THE UPSTREAM SEDIMENT REACHES A DEPTH OF 6-INCHES.

STOP SIGN PER MUTCD STANDARDS

SIGN "CONSTRUCTION ENTRANCE

3-6" RIPRAP OVER WOVEN GEOTEXTILE

SILT FENCE INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY LAND-DISTURBING ACTIVITIES.

3. SILT FENCE GEOTEXTILE SHALL MEET THE FOLLOWING REQUIREMENTS:

6" MIN. —

FLOW 😂

PNWS 10 1.1

10

10

10

5

TOTAL 9.2

TOTAL 13.4

20 3.2

TOTAL 11.0

0.6

5

NOTES % IN MIX POUNDS OF PLS
PER ACRE

PICS 30 3.9

30

30

AICB 10 0.8

NOTES % IN MIX POUNDS OF PLS
PER ACRE

PNCS 20 3.2

20

10

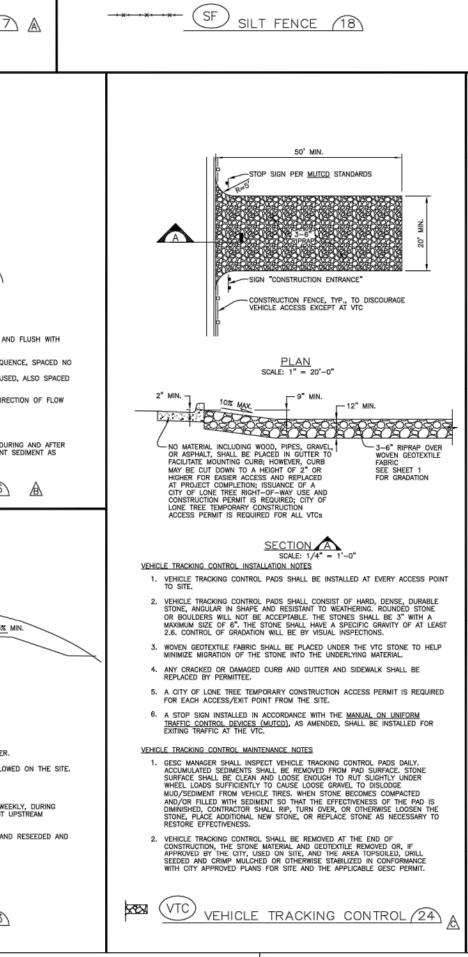
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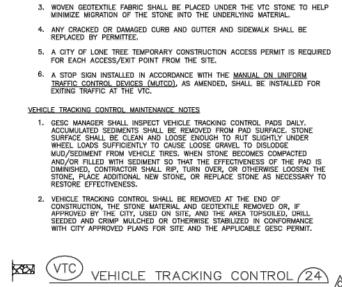
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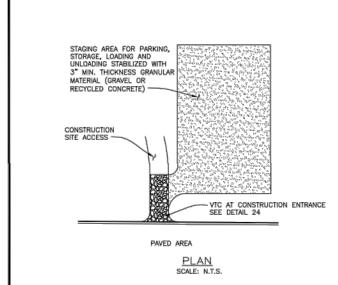






AND DETAILS

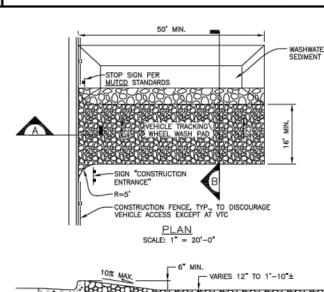
SHEET 3 OF 3

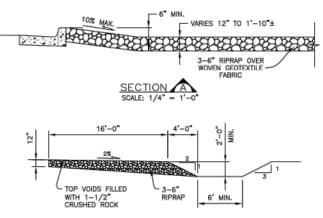


STABILIZED STAGING AREA INSTALLATION NOTES SEE PLAN VIEW FOR GENERAL LOCATION OF STAGING AREA. CONTRACTOR MAY MODIFY LOCATION AND SIZE OF STABILIZED STAGING AREA WITH CITY APPROVAL.

- IF REQUIRED BY THE CITY, SITE ACCESS ROADS SHALL BE STABILIZED IN THE SAME MANNER AS THE STAGING AREA.
- 4. STAGING AREA SHALL BE STABILIZED PRIOR TO ANY OTHER OPERATIONS ON THE SITE. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM OF 3" OF GRANULAR MATERIAL (GRAVEL OR RECYCLED CONCRETE).
- STABILIZED STAGING AREA MAINTENANCE NOTES
- THE GESC MANAGER SHALL INSPECT THE STABILIZED STAGING AREA WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
- GESC MANAGER SHALL PROVIDE ADDITIONAL THICKNESS OF GRANULAR MATERIAL IF ANY RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.
- STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING AND LOADING OPERATIONS.
- 4. ANY ACCUMULATED DIRT OR MUD SHALL BE REMOVED FROM THE SURFACE OF THE STABILIZED STAGING AREA.
- 5. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE CITY, USED ON SITE, AND THE AREA TOPSOILED, DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED.

SSA STABILIZED STAGING AREA (19) A





SECTION B SCALE: 1" = 10'-0"

VEHICLE TRACKING CONTROL WITH WHEEL WASH INSTALLATION NOTES ALTHOUGH NOT NORMALLY USED, THE CITY RESERVES THE RIGHT TO REQUIRE VEHICLE TRACKING CONTROL WITH WHEEL WASH FACILITIES AT SITES WHERE TRACKING ONTO PAVED AREAS BECOMES A SIGNIFICANT PROBLEM.

- IF VEHICLE TRACKING CONTROL WITH WHEEL WASH FACILITIES ARE REQUIRED, ALL WHEELS ON EVERY VEHICLE LEAVING THE SITE SHALL BE CLEANED OF MUD USING A PRESSURE—WASHER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A WATER SOURCE.
- 5. VEHICLE TRACKING CONTROL PADS SHALL CONSIST OF HARD, DENSE, DURABLE STONE, ANGULAR IN SHAPE AND RESISTANT TO WEATHERING. ROUNDED STONE OR BOULDERS WILL NOT BE ACCEPTABLE. THE STONES SHALL BE 3" WITH A MAXIMUM SIZE OF 6". THE STONE SHALL HAVE A SPECIFIC GRAVITY OF AT LEAST 2.6. CONTROL OF GRADATION WILL BE BY VISUAL INSPECTION. WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE VTC STONE TO HELP MINIMIZE MIGRATION OF THE STONE INTO THE UNDERLYING BASE MATERIAL.
- 5. ANY CRACKED OR DAMAGED CURB AND GUTTER AND SIDEWALK SHALL BE REPLACED BY PERMITEE. A CITY OF LONE TREE TEMPORARY CONSTRUCTION ACCESS PERMIT IS REQUIRED FOR EACH
 ACCESS/EXIT POINT FROM THE SITE.
- A STOP SIGN INSTALLED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AS AMENDED, SHALL BE INSTALLED FOR EXITING TRAFFIC AT THE VTC.
- EHICLE TRACKING CONTROL WITH WHEEL WASH MAINTENANCE NOTES . GESC MANAGER SHALL INSPECT VEHICLE TRACKING CONTROL PADS DAILY, ACCUMULATED SEDIMENTS SHALL BE REMOVED FROM PAD SURFACE. STONE SURFACE SHALL BE CLEAN AND LOOSE ENOUGH TO RUT SLIGHTLY UNDER WHEEL LOADS SUFFICIENTLY TO CAUSE LOOSE GRAVEL TO DISLODGE MUD/SEDIMENT FROM VEHICLE TIRES. WHEN STONE BECOMES COMPACTED AND/OR FILLED WITH SEDIMENT SO THAT THE EFFECTIVENESS OF THE PAD IS DIMINISHED, CONTRACTOR SHALL RIP, TURN OVER, OR OTHERWISE LOOSEN THE STONE, PLACE ADDITIONAL NEW STONE, OR REPLACE STONE AS NECESSARY TO RESTORE EFFECTIVENESS.
- ACCUMULATED SEDIMENT IN THE WASHWATER/SEDIMENT TRAP SHALL BE REMOVED WHEN THE SEDIMENT DEPTH REACHES AN AVERAGE OF 12-INCHES.
- VEHICLE TRACKING CONTROL SHALL BE REMOVED AT THE END OF CONSTRUCTION, THE STONE MATERIAL AND GEOTEXTILE REMOVED OR, IF APPROVED BY THE CITY, USED ON SITE, AND THE AREA TOPSOLIED, DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN CONFORMANCE WITH CITY APPROVED PLANS FOR SITE AND THE APPLICABLE GESC PERMIT.

WW VTC WITH WHEEL WASH 25 A

Know what's below. Call before you dig.

Path: Q:\DEN\Projects\ CHRISTIAN.SCHILDER

CONSULTANT PROJECT #

REVISION SCHEDULE

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ADI

REVIEW 08/18/23 KEA

FSR#05190

<u>DATE</u> <u>DESCRIPTION</u>

65121141

BUILDING TYPE / SIZE: P13 LS LRG (MOD)

Chick-fil-A

5200 Buffington Road

Atlanta, Georgia 30349-

2998

5970 GREENWOOD PLAZA BLVD

GREENWOOD VILLAGE, CO 80111 303-751-0741

FOR AND AND ON-BEHALF OF MERRICK AND COMPANY

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GESC DETAIL 3

SHEET NUMBER

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