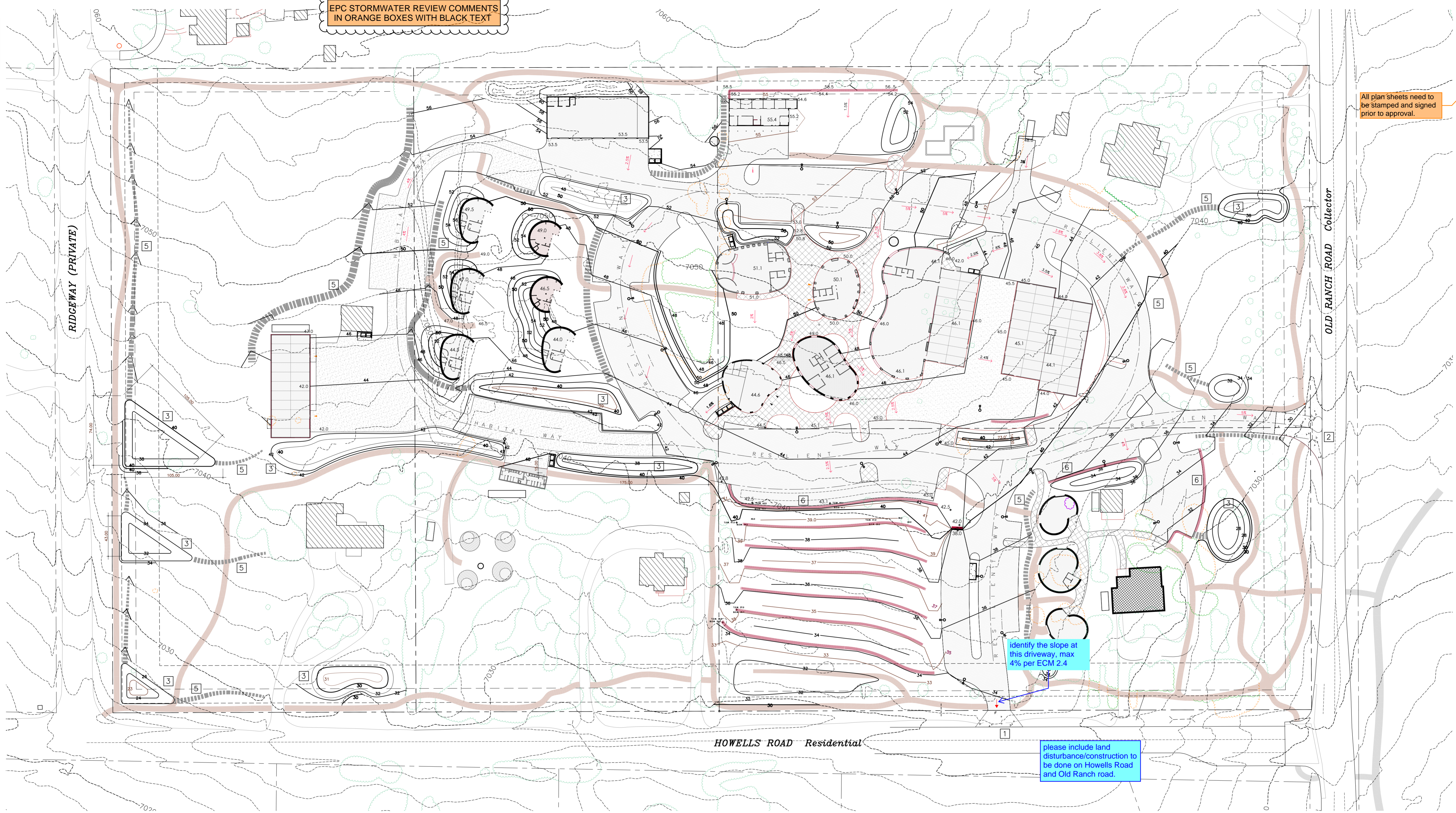


Note that this PDF is 5 pages, but only pages 1, 4 and 5 show up. The PDF is broken and pages two and three are not readable.

EPC STORMWATER REVIEW COMMENTS IN ORANGE BOXES WITH BLACK TEXT

Provide title sheet with vicinity map, signature blocks, and standard notes.

All plan sheets need to be stamped and signed prior to approval.



Identify the slope at this driveway, max 4% per ECM 2.4

please include land disturbance/construction to be done on Howells Road and Old Ranch road.

fisher architecture
palmer lake, co 719 660 4356

The Shire At Old Ranch
Howells & Old Ranch Road
Colorado Springs, CO

GENERAL GRADING NOTES

- UTILITY INFORMATION CONTAINED IN THESE DRAWINGS IS APPROXIMATE. NEW OR EXISTING UTILITIES INCLUDING EXISTING ON-SITE WASTEWATER TREATMENT FACILITIES, SHALL BE PRECISELY LOCATED PRIOR TO COMMENCING ANY EARTH WORK. CONTACT LOCATORS AND/OR UTILITY COMPANIES AND MAY REQUIRE POT-HOLING. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH OCCUR DUE TO CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PROTECT ALL EXISTING UTILITIES.
- VERIFY ALL EXISTING SITE CONDITIONS & REPORT ANY DISCREPANCIES TO ARCHITECT/ENGINEER PRIOR TO COMMENCING CONSTRUCTION.
- REMOVE WEEDS, TRASH, DEBRIS, RUBBLE, BROKEN ASPHALT, AND ORGANIC MATERIAL (EXCLUDING TOPSOIL), AND ANY OTHER MATERIAL. NOT SUITABLE AS FILL OR FOUNDATION BEARING SOIL.
- CONTOUR INTERVALS ARE 2.0 FT. TYPICAL. 1.0' CONTOURS SHOWN AT SOME LOCATIONS.
- GENERAL CONTRACTOR SHALL COORDINATE ALL FINE GRADING TO ASSURE PROPER ALIGNMENT OF ALL FINISHED SURFACES INCLUDING PAVEMENT, CURBS, SIDEWALKS, GRASS, AND OTHER GROUNDCOVERS. COORDINATE WITH LANDSCAPE PLAN.
- MINIMIZE SITE DISTURPTION. EXISTING RESIDENCES AND THEIR YARDS REMAIN. PRESERVE EXISTING WOODED SITE AREAS & GRASSLAND. CONFINE ALL OPERATIONS TO DEVELOPING AREAS.
- FINISH GRADING SHALL INSURE POSITIVE DRAINAGE AWAY FROM FOUNDATIONS AND STRUCTURES IN ACCORDANCE WITH GEOTECH ENGINEERING RECOMMENDATIONS.
- GENERAL CONTRACTOR IS RESPONSIBLE TO ASSURE ALL GRADING IS DONE IN ACCORDANCE WITH THIS GRADING PLAN.
- ALL WORK SHALL BE DONE IN STRICT ACCORD WITH ALL APPLICABLE CODES & REGULATIONS. OBSERVE ALL SAFETY BEST PRACTICES.
- SEE EROSION CONTROL PLAN. PROVIDE ALL NECESSARY MEASURES TO ASSURE SAFETY AND PROTECT EXISTING PROPERTY, DRIVES, ROADS, AND PEOPLE.
- PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE W/ THE EL PASO COUNTY LDM.

GRADING KEYED NOTES

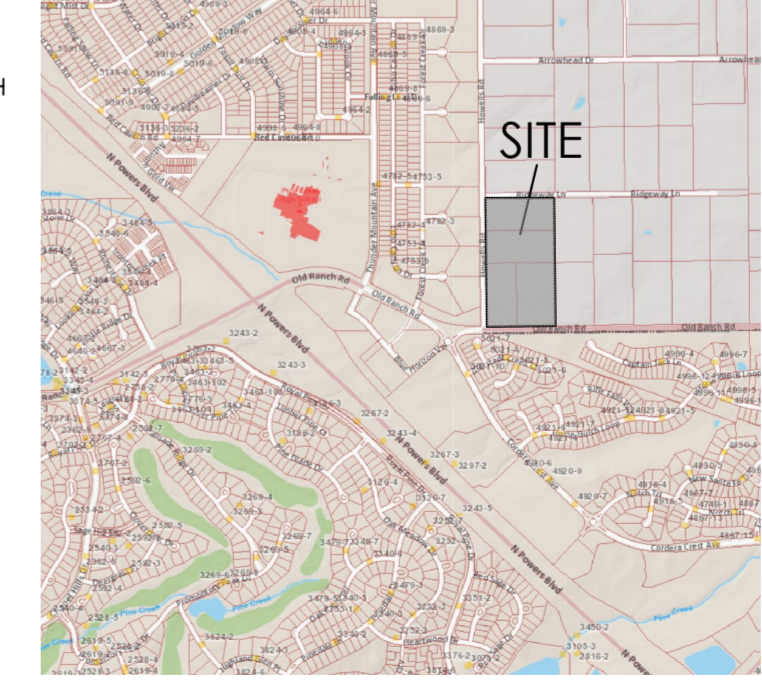
- ELPASO COUNTY STANDARD ENTRY APRON DETAIL NO'S SD2-23, SD2-25,
- RIGHT IN RIGHT OUT W/ "PORK CHOP" ISLAND PER EL PASO COUNTY ECM.
- INFILTRATION PONDS - SEE DRAINAGE REPORT. NOT ALL PONDS ARE DESIGNATED ON THIS PLAN.
- INFILTRATION PONDS - SEE DRAINAGE REPORT. NOT ALL PONDS ARE DESIGNATED ON THIS PLAN.
- DRAINAGE BIOSWALES W/ GRASS AND OTHER LANDSCAPING. SEE LS PLANS AND DRAINAGE REPORT.
- CURB - SEE DRAINAGE STUDY

Contact the City of Colorado Springs regarding their requirements for this access

GRADING PLAN LEGEND

- EXISTING INTERMEDIATE CONTOURS (2' INTERVAL)
- EXISTING INDEX CONTOURS (10' INTERVAL)
- NEW INTERMEDIATE CONTOURS (2' INTERVAL)
- NEW INDEX CONTOURS (10' INTERVAL)
- NEW 5" FULL DEPTH ASPHALT (PER GEOTECH.) PAVED PARKING LOT/DRIVE - STRIPING & ACCESSIBLE SPACES WHERE SHOWN, NUMBER = COUNT, TIMBER PARKING BUMPERS ADJACENT PEDESTRIAN WALKS.
- CONCRETE PAVED OUTDOOR PRODUCT DISPLAY AREA
- NEW HARD SURFACE WALKS (SEE LS PLAN)
- NEW PARKING/DRIVE SURFACE GRAVEL PAVED, NUMBER INDICATES LOCAL AREA SPACE COUNT
- EPCO CURB CUT APRON - SEE SP2 DETAIL
- NEW 4" D. BREEZE PEDESTRIAN PATH
- NEW GABION RETAINING WALLS
- ZONING BUILDING SETBACK LINE
- PROPERTY LINES
- EXISTING VEGETATION - MINIMIZE DISTURBANCE
- EXISTING BUILDINGS TO REMAIN
- EXISTING BUILDINGS TO BE REMOVED
- NEW BUILDINGS & SECONDARY ADDRESSING NO.

VICINITY MAP



SIGNATURES

Ensure all GEC Checklist Items are covered in the Plan.

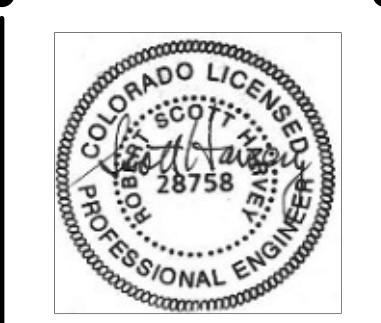
RESUBMITTALS

PROJECT 19.8.1
DATE Feb. 23, 2024
PHASE Final Plan
DRAWN WLF
CHECKED WLF
REV'D

SG
1

GRADING PLAN
1"=50'

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 General Contractor must verify all conditions, dimensions and work or design of any discrepancies or omissions prior to starting work or fabrication. Drawings are intended to be sealed for even multiples of that but... DO NOT SCALE DRAWINGS



The Shire At Old Ranch
 Howells & Old Ranch Road
 Colorado Springs, CO

Art of Engineering, Inc.
 Architectural, Civil and Construction Services
 PO Box 704 Colorado Springs, CO 80901
 Phone: 719-528-1557
 Email: Services@AroEngineering.com

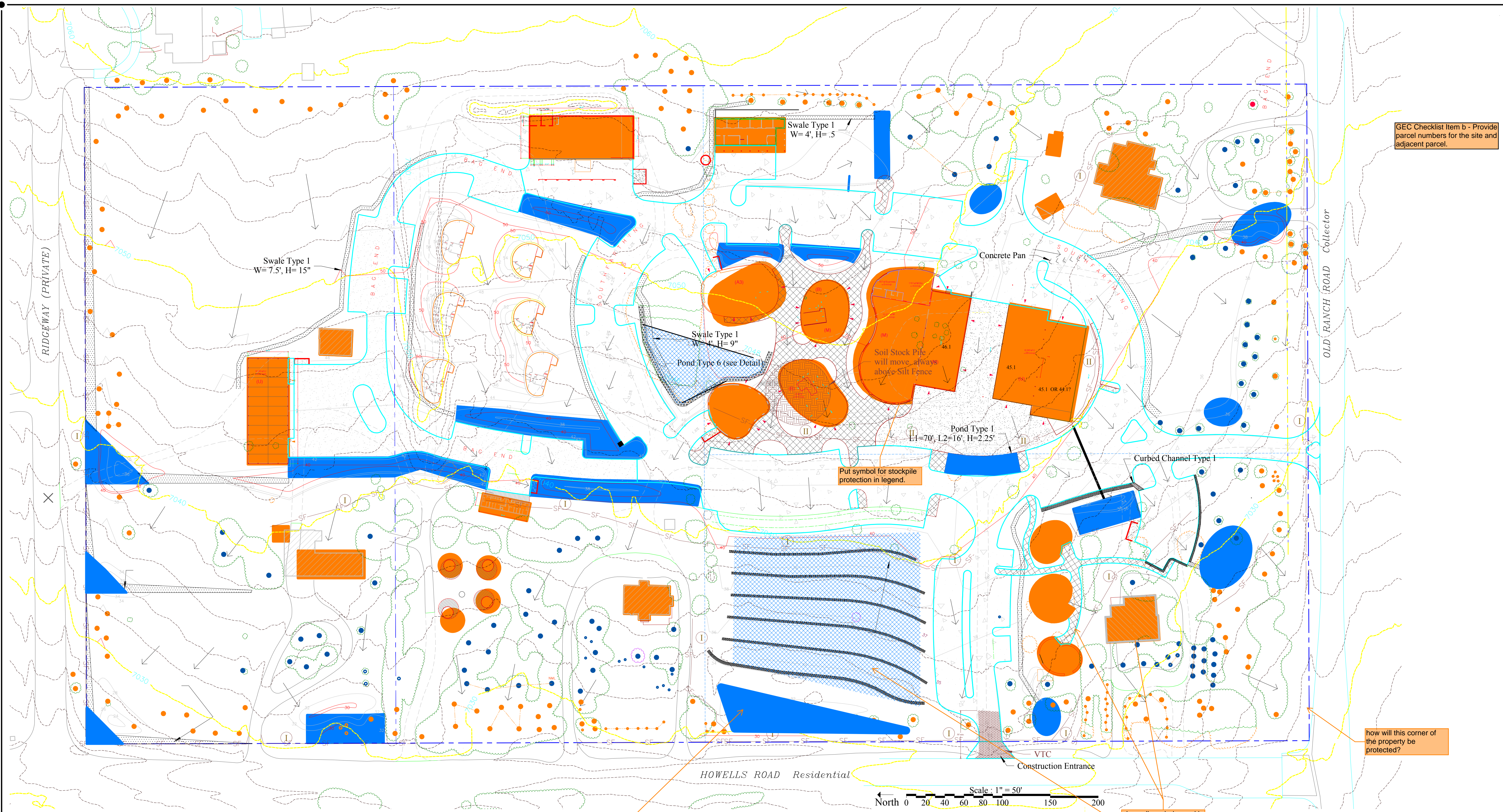
Client Information:
 The Shire at Old Ranch
 3820 Old Ranch Rd.
 Colorado Springs, CO 80908

Mark Phelan 719-243-2678

Number	Date	Revisions	Purpose

Project Number: 14010
 Project Phase: Development Plan
 Drawn by: RSH
 Drawing Date: 20 Feb 2024

EC-1
 Erosion Control Plan



GEC Checklist Item b - Provide parcel numbers for the site and adjacent parcel.

how will this corner of the property be protected?

GEC Checklist Items H and M. Show limits of construction and disturbance. If "limits of disturbance" and "construction boundary" are the same, change to "limits of construction/disturbance" or otherwise show as separate line types for each on the legend and figure.

Provide dimensions for all swales and ponds. There needs to be details with all construction information for those features.

Erosion Control Measures
 The planned sequence of construction is to:
 1. Install all off-site erosion control measures; Silt Fences, Sediment Control Logs, Strawbales and Vehicle Tracking Control along downslope perimeter and protecting interior residential spaces.
 2. Install all utilities that go under roads and to OWTS in the NW.
 3. Grade the interior, generally including the entrance drives, the main loop road (less Bagend, far north loop) and commercial core area. Left ungraded for this phase is everything outside the main loop road except entrance drives.
 4. Build all drainage features as both short and long term stormwater management strategies with intermediate and final erosion control elements. This includes areas along the north, west and south sides. Silt fences would border downhill sides of grass lined swales and ponds. this is our primary erosion control strategy.
 5. Build some of the commercial core buildings (Coop and greenhouses). Buildings would be built sequentially.
 6. Construct roadways
 7. Revegetate disturbed areas. This includes gardens and landscaping.
 8. The three craft studios (SW) the north greenhouse, the six energy independent Hobbit houses, bath house and yurts will follow after the commercial core is functioning.

- I - Initial Erosion Control Measure - generally on the downhill perimeter of the project to prevent erosion off site. Also used uphill from existing residences to prevent erosion into their space. Many of these measures will remain in place until work is complete and vegetation is re-established.
- II - Intermediate Erosion Control Measures - These will be installed on the downhill side of the western roads and remain until paved. Soil stock piles will have silt fences around downslope sides. As item 4 above proceeds, some sediment control logs and silt fence will be utilized.
- III - Final Erosion Control Measures - Silt Fences, Sediment Control Logs and Strawbales will be used until vegetation is established.

Final control measures should list all final measure ie infiltration ponds and seeding/mulching. Put these BMPs in the initial or intermediate section so it is clear when they should be constructed.

Assign a name/number to all PBMPs and then update all submitted text and drawings accordingly with consistent labeling throughout (example: "Pond A" or "Pond 1").

Legend

<p>General</p> <ul style="list-style-type: none"> Existing Building New Building Vegetation, Aerial Identified Vegetation, Human Identified or New Driveway, Concrete Driveway, Gravel Sidewalk Existing/Native Contour Lines New Contour Lines 	<p>Drainage Elements</p> <ul style="list-style-type: none"> Gabion Curb Type 1 Conventional Concrete Curb Grass Lined Swale Berm 0 to ~2 ft tall Rectangular Infiltration Pond, Type 1 Triangular Infiltration Pond, Type 2 Elliptical Infiltration Pond, Type 3 	<p>Erosion Control Elements</p> <ul style="list-style-type: none"> Drainage direction Strawbales SBB Sediment Control Logs SCL Silt Fence SF Initial Erosion Control Measures (I) Intermediate Erosion Control Measures (II) Final Erosion Control Measures (III) 	<p>Utilities Elements</p> <ul style="list-style-type: none"> Sanitary Sewer Water Supply 23a Water System Nodes 23a Yard Hydrant @ Node Electric Lines OH w/ Poles Electric Lines UG Gas
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Legend

There are more than 3 types of ponds.

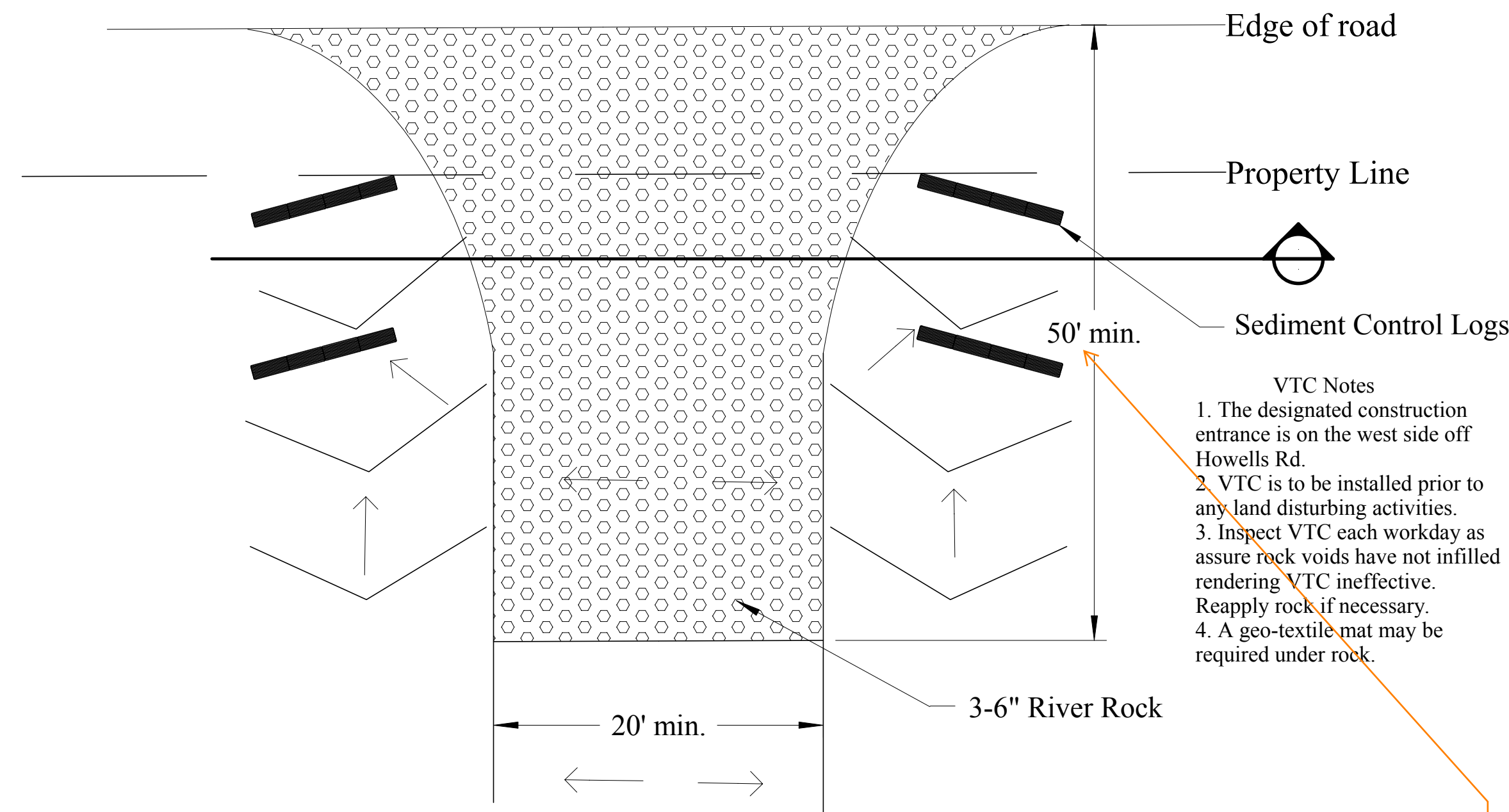
This map has a lot going on, please make the BMPs stand out more so it is clear where the SBB applies and exactly where the SF is proposed.

GEC Checklist Item p - Delineate areas of cut/fill.

show all symbols used in legend

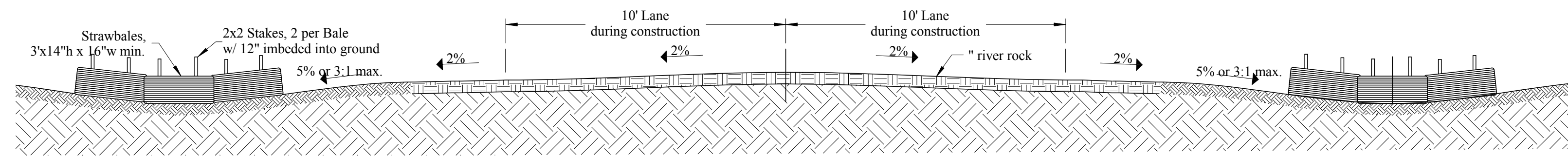
Identify ponds as final measures, and indicate the ponds will act as TSB's prior to full design. If that is the case the ponds should be clearly indicated to be initial or intermediate and final.

Vehicle Tracking Control Pad - VTC

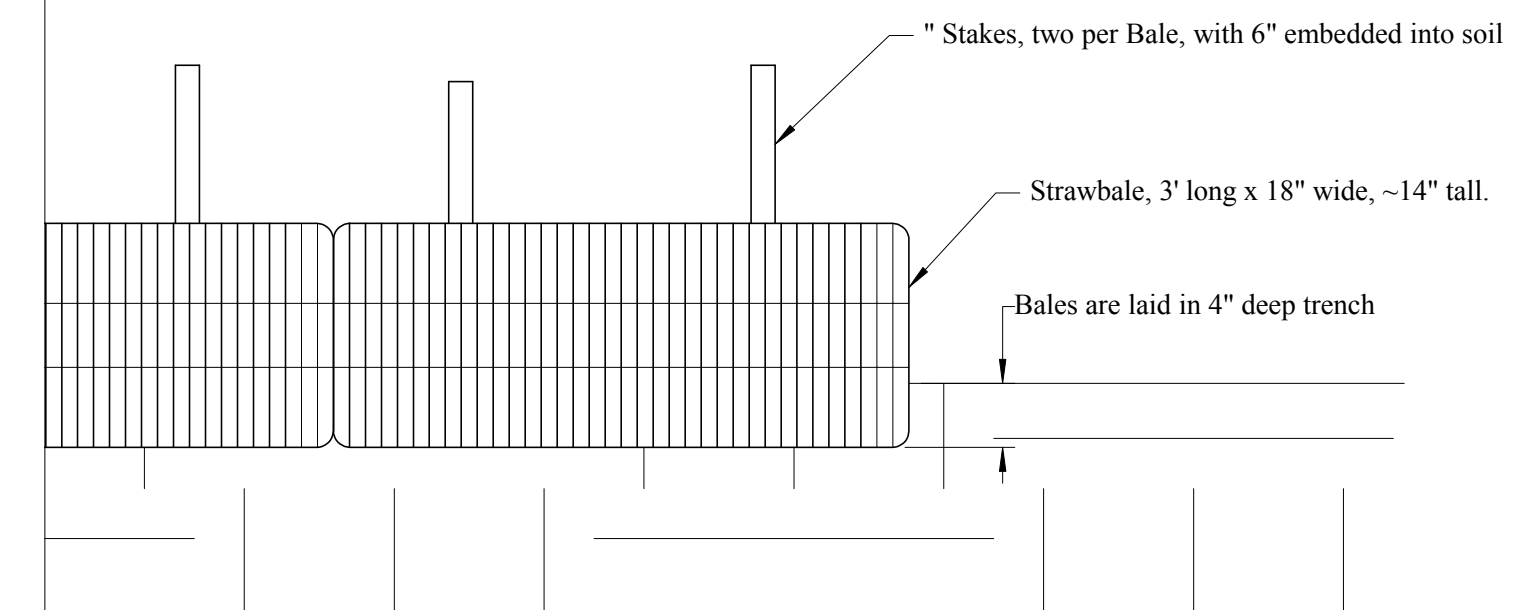


- VTC Notes**
1. The designated construction entrance is on the west side off Howells Rd.
 2. VTC is to be installed prior to any land disturbing activities.
 3. Inspect VTC each workday as assure rock voids have not infilled rendering VTC ineffective. Reapply rock if necessary.
 4. A geo-textile mat may be required under rock.

VTC Detail: Replace with EPC approved VTC detail (VT-1 and VT-2 in DCMV2, Chap 3.3) or revise to be 75ft min length.



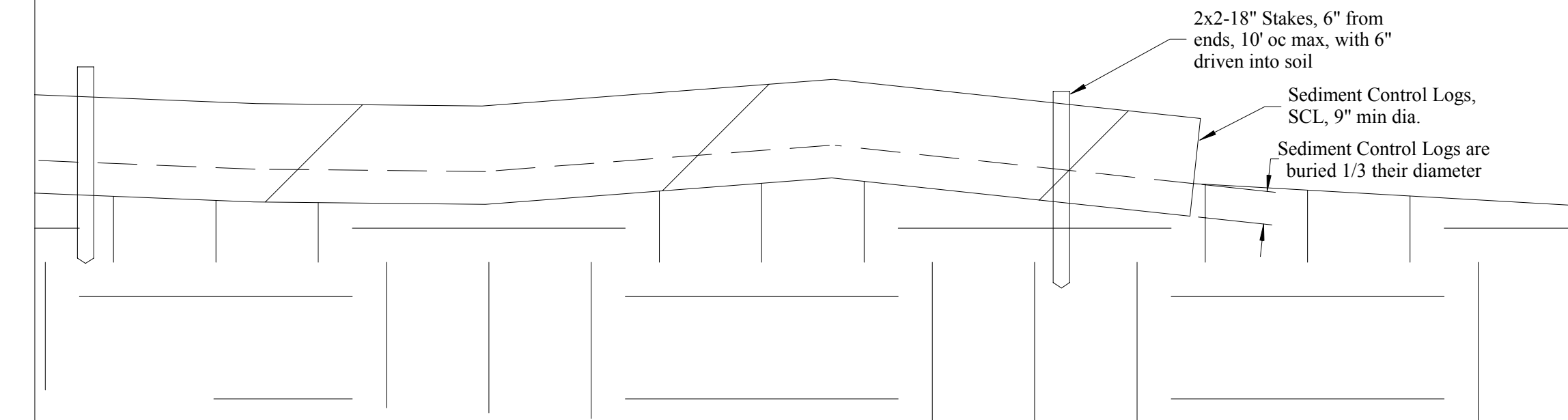
Strawbale Barrier SBB



Strawbale Notes

1. Bales in a series are tight together.
2. Bales are laid in a 4" deep trench.
3. Select bales that are weed free.
4. Bales are set with straw vertical and strings horizontal.

Sediment Control Logs - SCL

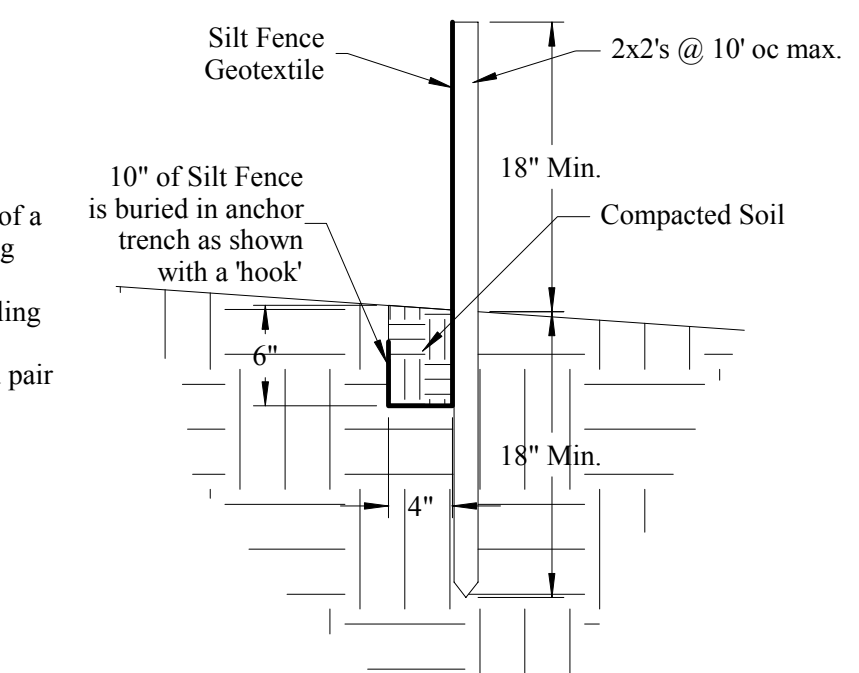


Silt Fence SF

Site Fence Notes

0. Silt Fence is installed prior to land being disturbed.
1. Install generally along contours with a depressed area uphill to allow for ponding.
2. When silt fence is not on contours, a portion at the end of a section shall be turned uphill to avoid waters from flowing along silt fence.
3. An anchor trench is necessary to avoid textile from pulling out. Compact soil in anchor trench.
4. Join end of segments as shown, use ties or wire around pair of posts.

Join Fence segments by lapping at the end posts



Pond Construction Details

Pond Number	Location	Pond Type	Shape	Surface Dimensions, Full			Pond Perimeter Dimensions		
				L1	L2	H	L1	L2	H
11a	S	3	Oval	40	30	2			2.5
40c	SW	1	Rectangular	65	27	2			2.5
54a		3	Oval	20	15	2			2.5
58	NW	1	~ Rectangular	100	30	2.5			3
59	E	~	Rectangular	70	15	2			2.5
60	E	4	~ Rectangular	58	12	2.5			3
61	E	4	~ Rectangular	50	5	2.5			3
62	W		Rectangular	58	12	2			2.5
70a	SW	3	Oval	70	50	2			2.5
71a	W		Series of Ponds						
85	NW	~	Rectangular	175	15	1.25			1.75
86	NW	1	~ Rectangular	200	20	1.75			2.25
87	NW	2	Triangular	74	105	3			3.5
88	Middle	2	Triangular	See Plan					
89	NW	2	Triangular	43	61	3			3.5
91		3	Oval	55	40	3			3.5
93	NE	1	~ Rectangular	113	30	3			3.5
94	NW	1	Rectangular	80	30	2.5			3
95	NW	2	Rectangular	38	54	3			3.5

GEC Checklist Item z - Provide details for stockpile protection, seeding and mulching, infiltration pond details.

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The Shire At Old Ranch

Howells & Old Ranch Road
Colorado Springs, CO

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Client Information:
The Shire at Old Ranch
3820 Old Ranch Rd.
Colorado Springs, CO 80908

Mark Phelan 719-243-2678

REVISIONS

Number	Date	Purpose

Project Number: 14010

Project Phase: Development Plan

Drawn by: RSH

Drawing Date: 20 Feb 2024

EC-2
Erosion Control Details