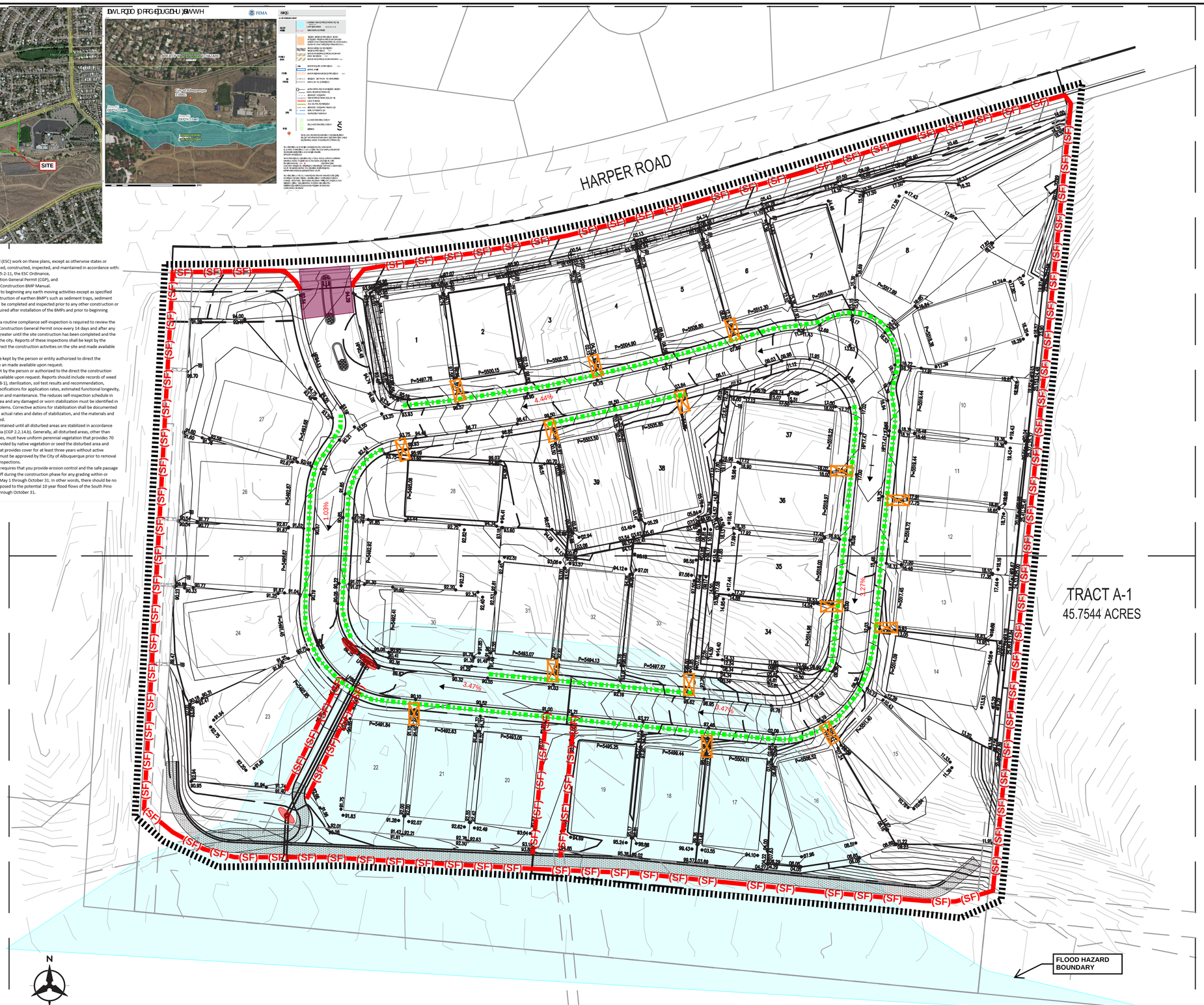
ESC Plan Standard Notes (2021-03-24)

1. All Erosion and Sediment Control (ESC) work on these plans, except as otherwise states or provided hereon shall be permitted, constructed, inspected, and maintained in accordance with:
   a. The City Ordinance § 14-5-2-11, the ESC Ordinance,
   b. The EPA's 2022 Construction General Permit (CGP), and
   c. The City of Albuquerque Construction BMP Manual.
2. All BMP's must be installed prior to beginning any earth moving activities except as specified hereon in the Phasing Plan. Construction of earthen BMP's such as sediment traps, sediment basins, and diversion berms shall be completed and inspected prior to any other construction or earthwork. Self-inspection is required after installation of the BMPs and prior to beginning construction.
3. Self-inspections – At a minimum a routine compliance self-inspection is required to review the project for compliance with the Construction General Permit once every 14 days and after any precipitation event of ¼ inch or greater until the site construction has been completed and the site determined as stabilized by the city. Reports of these inspections shall be kept by the person or entity authorized to direct the construction activities on the site and made available upon request.
4. Corrective action reports must be kept by the person or entity authorized to direct the construction activities on the site an made available upon request.
5. Stabilization reports must be kept by the person or authorized to the direct the construction activities on the site and made available upon request. Reports should include records of weed removal per City Ordinance (§ 9-8-1), sterilization, soil test results and recommendation, materials and manufacturer's specifications for application rates, estimated functional longevity, methods of application, inspection and maintenance. The reduces self-inspection schedule in CGP 4.4.1 applies to stabilized area and any damaged or worn stabilization must be identified in the reports along with weed problems. Corrective actions for stabilization shall be documented in a stabilization report including actual rates and dates of stabilization, and the materials and manufacturer's specifications used.
6. BMPs shall be inspected and maintained until all disturbed areas are stabilized in accordance with the Final Stabilization Criteria (CGP 2.2.14.b). Generally, all disturbed areas, other than structures and impervious surfaces, must have uniform perennial vegetation that provides 70 percent or more of the cover provided by native vegetation or seed the disturbed area and provide non-vegetative mulch that provides cover for at least three years without active maintenance. Final stabilization must be approved by the City of Albuquerque prior to removal of BMPs and discontinuation of inspections.
7. City Ordinance § 14-5-2-12(B)(3) requires that you provide erosion control and the safe passage of the 10-year design storm runoff during the construction phase for any grading within or adjacent to the floodplain from May 1 through October 31. In other words, there should be no loose dirt or tother pollutants exposed to the potential 10 year flood flows of the South Pino Arroyo at any time form May 1 through October 31.



TRACT 1A
ALBUQUERQUE ACADEMY CAMPUS
FILED: 02/20/1997 (BK 97C - PG 56)

TRACT 2
ALBUQUERQUE ACADEMY CAMPUS
FILED: 12/20/1989 (BK C40 - PG 74)

BMP MAP LEGEND

- LIMITS OF DISTURBANCE
- (SF)(SF) PERIMETER BMP (SILT FENCE)
- DIVERSION BERM
- CHECK DAMS
- CUT-BACK CURB
- FLOW DIRECTION
- INLET PROTECTION
- VTC (VEHICLE TRACK-OUT CONTROL
- PORTABLE TOILETS
- WASTE CONTAINER
- CONCRETE WASHOUT

green globe ENVIRONMENTAL

OPERATOR: PULTE HOMES OF NEW MEXICO, INC.

TOTAL SITE AREA: 14.83 ACRES
TOTAL DISTURBED AREA: 14.83 ACRES

RECEIVING WATERS: RIO GRANDE (NON-PUEBLO ALAMEDA BRIDGE TO HWY 550 BRIDGE)

REFER TO THE ESC BMP DETAILS (ESC-3) FOR INSTALLATION, INSPECTION AND MAINTENANCE REQUIREMENTS.

****GRADING PLAN BY OTHERS****

THE ESTATES AT ACADEMY (BUILDING PERMIT)

TEMPORARY EROSION AND SEDIMENT CONTROL PLAN

Drawn By: M. VALLEJOS, CPESC, CISEC	04/14/23

CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL CPESC 4-14-23 MATHEW F. VALLEJOS No. 9108

ESC-1

ESC Plan Standard Notes (2021-03-24)

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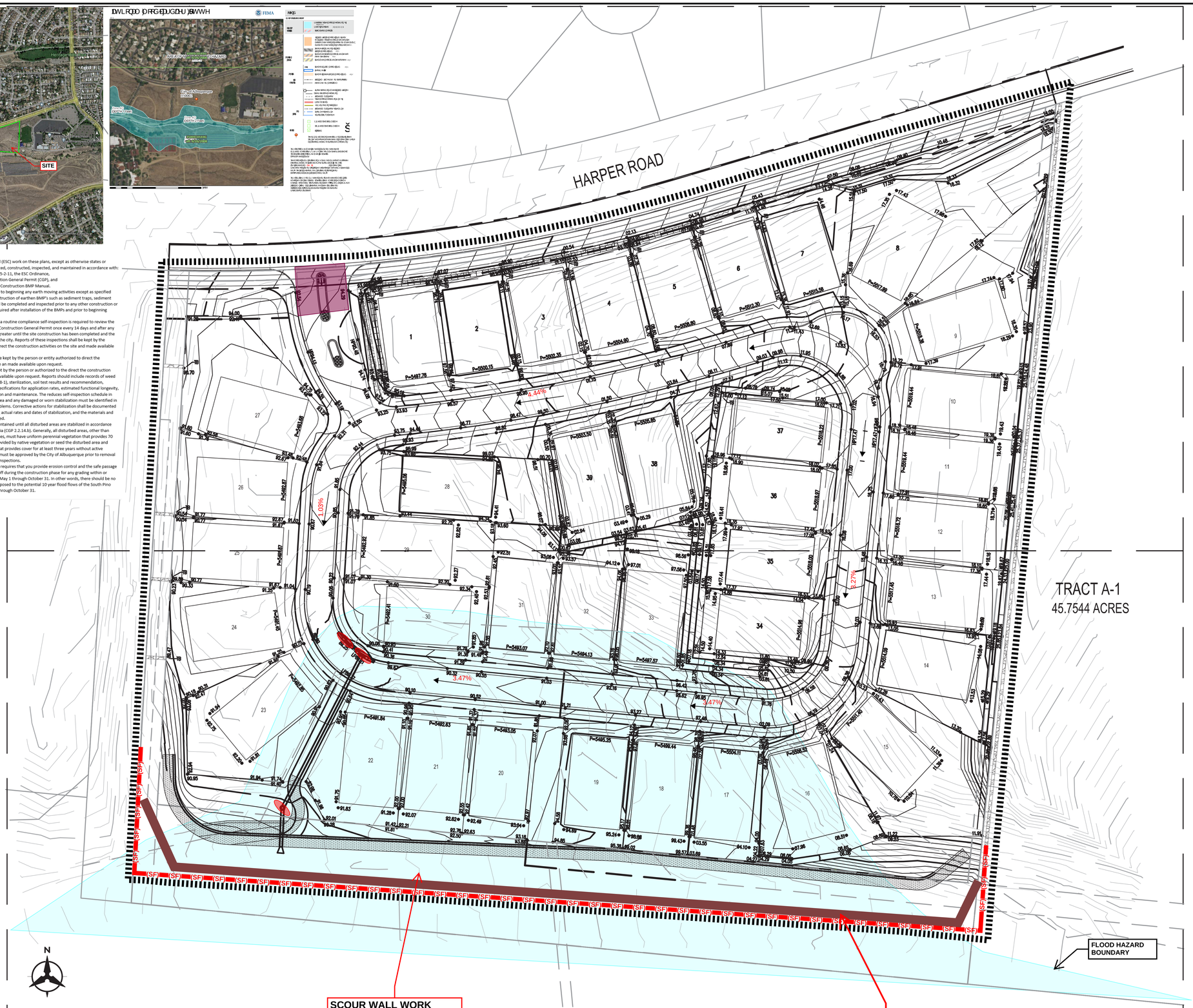


TRACT 1A
ALBUQUERQUE ACADEMY CAMPUS
FILED: 02/20/1997 (BK 97C - PG 56)

SCOUR WALL WORK AREA TO BE STABILIZED WITH COMPACTION AND POLYMER APPLICATION

TRACT 2
ALBUQUERQUE ACADEMY CAMPUS
FILED: 12/20/1989 (BK C40 - PG 74)

SIDE CASTING PILE TO BE INSTALLED TO SUPPORT CONSTRUCTION OF THE PERMANENT EMBANKMENT INFRASTRUCTURE. SIDE CASTING PILE WILL BE COMPACTED TO ACT AS TEMPORARY DIVERSION OF 10 YEAR FLOOD, SEE TYPICAL SECTION-SHOTCRETE BANK PROTECTION.

BMP MAP LEGEND

- LIMITS OF DISTURBANCE
- (SF)(SF) PERIMETER BMP (SILT FENCE)
- DIVERSION BERM
- FLOW DIRECTION
- INLET PROTECTION
- VTC (VEHICLE TRACK-OUT CONTROL
- PORTABLE TOILETS
- WASTE CONTAINER
- CONCRETE WASHOUT

green globe ENVIRONMENTAL

OPERATOR: PULTE HOMES OF NEW MEXICO, INC.

TOTAL SITE AREA: 14.83 ACRES
TOTAL DISTURBED AREA: 14.83 ACRES

RECEIVING WATERS: RIO GRANDE (NON-PUEBLO ALAMEDA BRIDGE TO HWY 550 BRIDGE)

REFER TO THE ESC BMP DETAILS (ESC-3) FOR INSTALLATION, INSPECTION AND MAINTENANCE REQUIREMENTS.

****GRADING PLAN BY OTHERS****

THE ESTATES AT ACADEMY (WORK ORDER)

TEMPORARY EROSION AND SEDIMENT CONTROL PLAN

Drawn By: M. VALLEJOS, CPESC, CISEC	04/14/23

CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL — CPESC — MATHEW F. VALLEJOS No. 9108 — 4-14-23

ESC-2

Silt Fence Detail

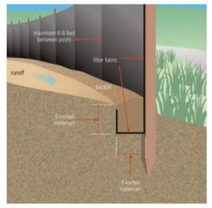
Non-woven Silt Fence
A silt fence is a temporary sediment barrier consisting of a geotextile attached to supporting posts and trenched into the ground. Intended to retain sediment that has been dislodged by stormwater.

Use silt fence as a perimeter control particularly at lower or down slope edge of a disturbed area. Leave space for maintenance between slope and silt fence or roll. Trench in the silt fence on the uphill side (6 in deep by 6 in wide). Install stakes on the downhill side of the fence. Curve silt fence up-gradient to help it contain runoff.

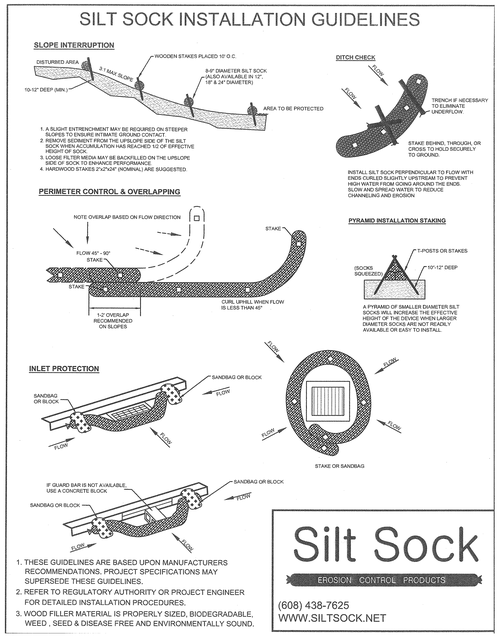
To maintain remove sediment when it reaches one-third of the height of the fence. Replace the silt fence where it is worn, torn, or otherwise damaged. Retrench or replace any silt fence that is not properly anchored to the ground. If the silt fence cannot be toed in properly due to existing hard surface, place mulch filter sock at base to prevent sediment from leaving site.

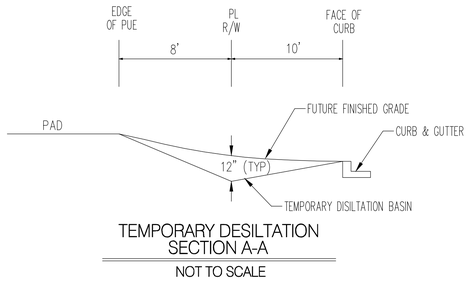
8' max wood stake spacing and 10' max spacing for steel T-post.

Silt Fence Installation

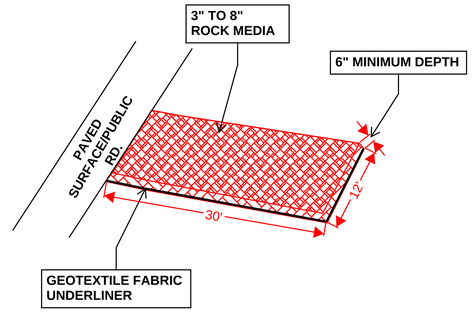


Source: USEPA Guide for Construction Site



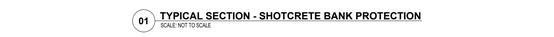


VEHICLE TRACK-OUT CONTROL



NOT TO SCALE

- DIMENSIONS NOTED CAN BE SITE RESTRICTIVE.



01 TYPICAL SECTION - SHOTCRETE BANK PROTECTION
SCALE: NOT TO SCALE

Coir Mat Inlet Protection

UV Resistance (ASTM D 4355 – 500 hour exposure) Tensile Properties (ASTM D 5035/ECTC)
(4 inch wide strip specimen)

Baseline Properties	
MD – Maximum Load (ppi)	14.6
TD – Maximum Load (ppi)	18.7
MD – Elongation @ Max Load (%)	19.3
TD – Elongation @ Max Load (%)	27.7

500 Hour Exposed Properties	
MD – Maximum Load (ppi)	10.2
TD – Maximum Load (ppi)	13.8
MD – Elongation @ Max Load (%)	16.9
TD – Elongation @ Max Load (%)	16.6

Light Penetration (ECTC Guidelines)	
Baseline Reading	125
Reading with sample	10
% Light Penetration	<8

Resiliency (ASTM D 6524)	
Pre-loading thickness (mils)	1943
Post-loading thickness (mils)	326
% change	-83

Swell (ECTC)	
Dry thickness (mils)	1984
Thickness after soak (mils)	2098
% change	6

Mass/Unit Area (ASTM D 6565)	
Mass/unit area (oz/sq. yd)	50.89
Mass/unit area (g/sq. meter)	1725

Water Absorption (ASTM D 1117/ECTC)	
Pre-soak Weight (grams)	69
Post-Soak (grams)	152
Weight change (grams)	82
% Weight Change	119

Smolder Resistance (ECTC)	
Maximum Burn Distance (in)	.29

Sediment Control (ASTM D 5141)	
Test material:	Sand sieved thru No. 10 sieve
Filtering Efficiency (%)	40.8
Flow Rate (liter/minute)	150

TYPICAL CONCRETE WASHOUT-BELOW GRADE

- Install appropriate signage to inform concrete equipment operators of the proper washout location.
- An appropriate stabilized entrance shall be installed where applicable. The length and width of the stabilized entrance may vary based on size and location of the washout.
- Washout facilities must be sized to contain washout water and solids.
- Typical dimensions are 10 feet long by 10 feet wide but may vary upon site limitations.
- Pit shall be delineated with Orange Filter Sock and A-Framed staked.
- The pit shall be lined with 10mil (minimum) polyethylene impermeable liner on the bottom and sides overlapping the top edges completing a leak-proof container.

SWPPP Insert for:
Temporary Soil Stabilization BMP

Definition: EarthGuard® Liquid is a temporary erosion and dust control product that stabilizes soil by maintaining existing soil structure and by settling out any fine sediment or ash that may get dislodged by stormwater or wind.

Function: EarthGuard® Liquid is used to immediately stabilize active and inactive areas including landfill decks, roads, slopes, construction sites, and stockpiles for impending rain or wind events.

Installation Instructions:

Soil preparation is not required and EarthGuard® Liquid can be applied over existing vegetation. Simply add EarthGuard® Liquid to a water truck, hydroseeder or spray rig and apply to disturbed soil for immediate erosion and dust control protection. Make multiple applications if necessary, to avoid over saturation and the creation of run-off. EarthGuard® Liquid is active immediately and will not harm equipment.

EarthGuard® Liquid is specifically designed to work with all soil types to reduce soil movement and turbidity, helping maintain compliance with environmental regulations.

Temporary Erosion and Dust Control – Up to 4" of Rain

Slope	EarthGuard®	Water (gal/ac)*
≤ 4:1	**3** gal/ac	As required to properly cover 1 acre of area: • Spray Rig ≥ 1500 gal/ac • Water Truck ≥ 2000 gal/ac
3:1	**4** gal/ac	
2:1	**5** gal/ac	
1.5:1	**6** gal/ac	
1:1	**8** gal/ac	
Stockpiles	**10** gal/ac	

Extended Erosion and Dust Control on Flat Areas

Time	EarthGuard®†	Water (gal/ac)*
1-2 months	**3-5** gal/ac	As required to properly cover 1 acre of area: • Spray Rig ≥ 1500 gal/ac • Water Truck ≥ 2000 gal/ac
2-3 months	**5-8** gal/ac	
3-6 months	**8-10** gal/ac	
6-12 months	**10-15** gal/ac	

*Minimum dilution 1 gal of EarthGuard® per 800 gallons of water.

†Rates dependent on anticipated precipitation throughout duration of required protection. For extended erosion control on slopes combine with Mesic™ Wood Fiber for improved performance.

green globe ENVIRONMENTAL

OPERATOR: PULTE HOMES OF NEW MEXICO, INC.

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TOTAL DISTURBED AREA: 14.83 ACRES

RECEIVING WATERS: RIO GRANDE (NON-PUEBLO ALAMEDA BRIDGE TO HWY 550 BRIDGE)

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THE ESTATES AT ACADEMY

TEMPORARY EROSION AND SEDIMENT CONTROL PLAN

Drawn By:
M. VALLEJOS, CPESC, CISEC

04/14/23

CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL
CPESC®
MATHEW F. VALLEJOS
No. 9108
4-14-23

ESC-3

2.1 Site Description
Site Location

Project/Site Name: The Estates at Academy Project Street/Location: Harper Rd. NE and Red Sky

City: Albuquerque State: NM ZIP Code: 87111

County or Similar Subdivision: Bernalillo County

Acquired: ☒ Raw Land ☐ Finished Lots

Latitude/Longitude (Use one of three possible formats, and specify method)
Latitude: 35.15470 Longitude: -106.54770

Maximum Area to be Disturbed: 14.07 Acres

Method for determining latitude/longitude: Map

Is the project located in Indian country? ☐Yes ☒No

If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable." Not Applicable

Is this project considered a federal facility? ☐Yes ☒No

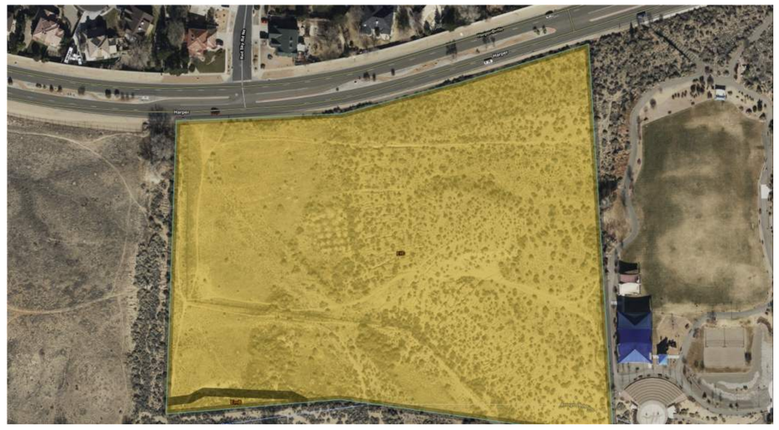
Nature of Construction Activity

This project consists of new land development and residential home construction. This SWPPP covers nearly 14.83 acres of the Estates at Academy Project. Pulte Homes of New Mexico is responsible for land development and home building activities including earthwork, infrastructure, and vertical home building. The activities to occur onsite are consistent with residential home construction. If offsite soil borrow or waste areas are needed during construction, they will be identified in the field and are to be marked on the plan in the SWPPP. Refer to Appendix A for vicinity, site plan and BMP plan.

What is the function of the construction activity? ☒Residential (home building) ☐Commercial ☒Land Development ☐Industrial ☐Road Construction ☐Linear ☐Utility ☐Other (please specify): _____

ROLE	COMPANY	REPRESENTATVIE NAME	PHONE	EMAIL
OWNER	PULTE HOMES OF NEW MEXICO	KEVIN PATTON	505-341-8591	KEVIN.PATTON@PULTEGROUP.COM
OPERATOR	PULTE HOMES OF NEW MEXICO	KEVIN PATTON	505-341-8591	KEVIN.PATTON@PULTEGROUP.COM
BMP MAINTENANCE	SUPERIOR STORMWATER SERVICES, LLC	TIM SLATUNAS	505-353-2558	TIM@SUPERIORSTORMWATER.COM
SWPPP INSPECTIONS	GREEN GLOBE ENVIRONMENTAL	TIM SLATUNAS	505-353-2558	TIM@GREENGLOBENM.COM

Start Date-Finish Date (dates to be marked on site plan by operator)	Construction Activity, BMPs, and location
Initial Phase	Pre-Site Grading 1. Install perimeter BMPs (silt fence, erosion control logs, downstream inlet protection, etc.) 2. Construct VTC. 3. Set up construction trailer, construction barrier, and material storage areas, etc. 4. Install sanitary facilities and dumpster 5. Implement stabilization procedures where work is complete or ceases (per section 2.2.14 of the 2022 EPA CGP)
Interim Phase	Site Grading/ Building Construction 1. Mass grade site 2. Construct utilities, infrastructure 3. Building, pavement construction 4. Implement stabilization procedures where work is complete or ceases (per section 2.2.14 of the 2022 EPA CGP)
Final Phase	Final Stabilization 1. Implement stabilization procedures where work is complete or ceases (per section 2.2.14 of the 2022 EPA CGP) 2. Prepare final seeding and landscaping 3. Monitor stabilized areas until final stabilization is reached 4. Remove temporary control BMPs and stabilize any areas disturbed by the removal



Rio Grande (non-pueblo Alameda Bridge to HWY 550 Bridge)			AU IR CATEGORY	LOCATION DESCRIPTION	
			5/5A	HUC: 13020203 Rio Grande-Albuquerque	
AU ID	**WQS REF**	**WATER TYPE**	**SIZE**	**ASSESSED**	**MONITORING SCHEDULE**
NM-2105.1_00	20.6.4.106	RIVER	12.12 MILES	2020	2025
USE	**ATTAINMENT**	**CAUSE(S)**	**FIRST LISTED**	**TMDL DATE**	**PARAMETER IR CATEGORY**
IRR	Fully Supporting				
LW	Not Supporting	Gross Alpha, Adjusted	2012	2023 (est.)	5/5A
MWWAL	Not Supporting	Polychlorinated Biphenyls (PCBs) Mercury - Fish Consumption Advisory PCBS - Fish Consumption Advisory	2012 2020 2010	2023 (est.)	5/5A 5/5C 5/5C
PC	Not Supporting	E. coli	2020	6/30/2010	4A
PWS	Not Assessed				
WH	Not Supporting	Polychlorinated Biphenyls (PCBs)	2012	2023 (est.)	5/5A

AU Comment: TMDL for E. coli (2010). Fish Consumption Advisory listings are based on NM's current fish consumption advisories for this water body. Per USEPA guidance, these advisories demonstrate non-attainment of CWA goals stating that all waters should be "fishable." Therefore, the impaired designated use is the associated aquatic life even though human consumption of the fish is the actual concern.

Tables — K Factor, Whole Soil — Summary By Map Unit

Summary by Map Unit — Bernalillo County and Parts of Sandoval and Valencia Counties, New Mexico (NM600)

Summary by Map Unit — Bernalillo County and Parts of Sandoval and Valencia Counties, New Mexico (NM600)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
EmB	Embudo gravelly fine sandy loam, 0 to 5 percent slopes	.15	0.1	1.3%
EtC	Embudo-Tijeras complex, 0 to 9 percent slopes	.15	11.2	98.7%
Totals for Area of Interest			**11.4**	**100.0%**

OPERATOR: PULTE HOMES OF NEW MEXICO, INC.

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THE ESTATES AT ACADEMY

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ESC-4