

BMP MAP LEGEND

- LIMITS OF DISTURBANCE
- PERIMETER BMP (SILT FENCE)
- EROSION CONTROL LOG
- INLET PROTECTION
- FLOW DIRECTION
- VTC (VEHICLE TRACK-OUT CONTROL)
- PORTABLE TOILETS (TBD)
- WASTE CONTAINER (TBD)
- CONCRETE WASHOUT (TBD)
- STAGING AREA (TBD)
- TEMPORARY SEDIMENT TRAP



OPERATOR: WEXFORD CONSTRUCTION

TOTAL SITE AREA: 17.4 ACRES
TOTAL DISTURBED AREA: 17.4 ACRES

RECEIVING WATERS: RIO GRANDE RIVER (TIJERAS ARROYO TO ALAMEDA BRIDGE)

REFER TO THE ESC BMP DETAILS (ESC-2) FOR INSTALLATION, INSPECTION AND MAINTENANCE REQUIREMENTS.

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

SONATA GREEN

TEMPORARY EROSION AND SEDIMENT CONTROL PLAN

Drawn By: M. VALLEJOS, CPESC, CISEC 09/14/2020

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EROSION AND SEDIMENT CONTROL

ESC-1

VEHICLE TRACKOUT CONTROL TO BE INSTALLED AT TRANSITION FROM EXISTING PAVED SURFACE ONTO PROJECT/SITE

Non-woven Silt Fence

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.

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

A cross-sectional diagram of a trench drain installation. The diagram shows a concrete curb on the left, a sloped concrete base, and a trench drain assembly. The assembly includes a grate, a filter fabric, a gravel bed, and a drainage pipe. Dimensions are indicated: 'maximum 6-8 feet between joints' for the grate, '6 inches minimum' for the gravel bed, and '6 inches minimum' for the drainage pipe. A blue arrow indicates the flow of water into the drain. A green area with grass is shown on the right side of the drain.

Silt Sock

8" Ultra

Construction	Tubular Knit		
Chemical Reaction	Inert to most soil chemicals including Alkaline, weak acids and salt		
Properties	Fiber Material	Multi-Filament Polypropylene	
	Color	Black	
	Melting Point	166°C	330°F
	UV Protection	Photodegradable/ UV Stabilized	
	UV Resistance ASTM G-155	100% at 1000 hr.	
	Approx. Life Expectancy*	2 – 4 years	
	Mesh Opening	1/8"	
Roll Properties (Approx.)	Roll Weight	11.8 kg	26 lbs.
	Roll Length - Relaxed	174 m	540 ft.
Applied Roll Length (Approx.)	8" Diameter	146 m	475 ft.
Strength Properties	ASTM 6241 & ASTM 5035	222 psi	
Packaging	Package Type	Roll	

SLOPE INTERLUPTION

1. DISTURBED AREA
0-12" DEEP (MIN.)

2. WOODEN STAKES PLACED 10' O.C.

3. 4" MAX. SLOPE

4. 8"Ø DIAMETER SILT SOCK
(ALSO AVAILABLE IN 12", 16" & 24" DIAMETER)

5. AREA TO BE PROTECTED

1. A SLIGHT ENTRENCHMENT MAY BE REQUIRED ON STEEPER SLOPES TO ENSURE INTIMATE GROUND CONTACT.
2. REMOVE SEDIMENT FROM THE UPSLOPE SIDE OF THE SILT SOCK WHEN ACCUMULATION HAS REACHED 12" OF EFFECTIVE HEIGHT OF SOCK.
3. LOOSE FILL THE MEDIA MAY BE BACKFILLED ON THE UPSLOPE SIDE OF SOCK TO ENHANCE PERFORMANCE.
4. HARDWOOD STAKES 2"X36" (MINIMUM) ARE SUGGESTED.

DITCH CHECK

1. TRENCH IF NEEDED TO ELIMINATE UNDERFLOW.

2. STAKE BEHIND, THROUGH, CROSS TO HOLD SECURE TO GROUND.

INSTALL SILT SOCK PERPENDICULAR TO FLOW WITH ENDS CURVED SLIGHTLY UPSTREAM TO PREVENT HIGH WATER FROM GOING AROUND THE ENDS. SLOW AND SPREAD WATER TO REDUCE CHANNELING AND EROSION.

PERIMETER CONTROL & OVERLAPPING

NOTE: OVERLAP BASED ON FLOW DIRECTION

FLOW 45° - 90° STAKE

12" OVERLAP RECOMMENDED ON SLOPES

CURL UPRISE WHEN FLOW IS LESS THAN 45°

PYRAMID INSTALLATION STAKING

1. T-POSTS ON STAKES

2. 10"-12" DEEP

3. (SOCKS) SOLE/FEET

A PYRAMID OF SMALLER DIAMETER SILT SOCKS WILL INCREASE THE EFFECTIVE HEIGHT OF THE DEVICE WHEN LARGER DIAMETER SOCKS ARE NOT READILY AVAILABLE OR EASY TO INSTALL.

INLET PROTECTION

1. SANDBAG OR BLOCK

2. FLOW

3. SANDBAG OR BLOCK

4. FLOW

5. STAKE OR SANDBAG

6. FLOW

7. FLOW

8. FLOW

IF GUARD BAR IS NOT AVAILABLE, USE A CONCRETE BLOCK

1. SANDBAG OR BLOCK

2. FLOW

3. FLOW

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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

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

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

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

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

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

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

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

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

A long, curved orange silt fence is installed in a sandy, eroded area. The fence is made of multiple layers of orange fabric and is secured to the ground with several wooden stakes. The background shows a sandy hillside with some sparse vegetation.

- 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.

EROSION CONTROL / ENVIRONMENTAL PROTECTION / STORM WATER POLLUTION PREVENTION PLAN WATER AND WASTEWATER GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULFILLING ALL NECESSARY NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS INCLUDING, BUT NOT LIMITED TO, OBTAINING AN NPDES PERMIT PRIOR TO CONSTRUCTION, FILLING OUT THE NOTICE OF INTENT (NOI) APPLICATION, AND FILLING OUT THE NOTICE OF TERMINATION (NOT) APPLICATION. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE IMPLEMENTATION OF AND INSPECTION OF THE CONSTRUCTION STAGING AREA (CSA) PLAN (SWPPP). THE CONTRACTOR SHALL SUBMIT THE SWPPP WITH THE PROPOSED CONSTRUCTION STAGING AREA AND TEMPORARY SANITARY FACILITIES CLEARLY SHOWN. ANY CHECK DAMS, SILT FENCES, OR OTHER BEST MANAGEMENT PRACTICES (BMPs) THAT ARE REQUIRED IN THE APPROVED SWPPP SHALL BE INCLUDED IN AND ARE INCIDENTAL TO THE SWPPP BID AMOUNT.
2. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE APPROVED SWPPP ON-SITE AT ALL TIMES, AND SHALL COMPLY WITH THE REQUIREMENTS INDICATED ON THAT PLAN.
3. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL, DUST AND EROSION CONTROL REGULATIONS. THE CONTRACTOR SHALL PREPARE AND OBTAIN ANY NECESSARY DUST OR EROSION CONTROL PERMITS FROM THE REGULATORY AGENCIES.
4. THE CONTRACTOR SHALL EITHER PROMPTLY REMOVE ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY OR INSTALL BMPs IDENTIFIED IN THE APPROVED SWPPP TO PREVENT DISCHARGE OF EXCAVATED MATERIAL WITHIN THE PUBLIC RIGHT-OF-WAY DURING A RAIN OR WIND EVENT.
5. THE CONTRACTOR SHALL IMPLEMENT THE APPROVED SWPPP AND ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
6. THE CONTRACTOR SHALL NOT INSTALL TEMPORARY OR PERMANENT DIRT SWALES BY INSTALLING BMPs IDENTIFIED IN THE APPROVED SWPPP IN THE SWALES PERPENDICULAR TO THE DIRECTION OF FLOW, AND AT INTERVALS AS SPECIFIED IN THE SWPPP.
7. CONSTRUCTION AREAS SHALL BE WATERED FOR DUST CONTROL IN COMPLIANCE WITH GOVERNMENT ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SUPPLYING WATER AS REQUIRED. WATERING, AS REQUIRED FOR CONSTRUCTION AND DUST CONTROL, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO MEASUREMENT OR PAYMENT SHALL BE MADE THEREFOR.
8. THE CONTRACTOR SHALL MAINTAIN ALL AREAS COVERED BY LANDSCAPING OR AN IMPERVIOUS SURFACE SHALL BE REVEGETATED WITH NATIVE GRASS SEEDING, WHEN CONSTRUCTION ACTIVITIES CEASE AND EARTH DISTURBED AREAS WILL NOT RESUME WITHIN 14 DAYS. STABILIZATION MEASURES MUST BE INITIATED, UNLESS INDICATED OTHERWISE ON THESE PLANS OR ON THE LANDSCAPING PLAN, NATIVE GRASS SEEDING SHALL BE SEEDING PER SECTION 1012 OF THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, APWA NM CHARTER, LATEST EDITION.
9. ALL WASTE PRODUCTS FROM THE CONSTRUCTION SITE, INCLUDING ITEMS DESIGNATED FOR REMOVAL, SUCH AS: CONCRETE WASTE, CONSTRUCTION EQUIPMENT WASTE PRODUCTS (OIL, GAS, TIRES, ETC.), GARBAGE, GRUBBING, EXCESS CUT MATERIAL, VEGETATIVE DEBRIS, ETC. SHALL BE APPROPRIATELY DISPOSED OF AT THE ADDITIONAL COST TO THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN PERMITS REQUIRED TO HAUL OR DISPOSE OF WASTE PRODUCTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE WASTE DISPOSAL SITE COMPLIES WITH GOVERNMENT REGULATIONS REGARDING THE ENVIRONMENT, ENDANGERED SPECIES, AND ARCHAEOLOGICAL RESOURCES.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANUP AND REPORTING OF SPILLS OF HAZARDOUS MATERIALS ASSOCIATED WITH THE CONSTRUCTION SITE. HAZARDOUS MATERIALS INCLUDE GASOLINE, DIESEL FUEL, OILS, PAINTS, SOLVENTS, AND OTHER HAZARDOUS MATERIALS. THE CONTRACTOR SHALL REPORT THE DISCOVERY OF PAST OR PRESENT SPILLS TO THE NEW MEXICO ENVIRONMENT DEPARTMENT EMERGENCY RESPONSE TEAM AT 505-827-9329.
11. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING SURFACE AND UNDERGROUND WATER. CONTACT WITH SURFACE WATER BY CONSTRUCTION EQUIPMENT AND PERSONNEL SHALL BE MINIMIZED. EQUIPMENT MAINTENANCE AND REFUELING OPERATIONS SHALL BE PERFORMED IN AN ENVIRONMENTALLY SAFE MANNER IN COMPLIANCE WITH GOVERNMENT REGULATIONS.
12. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING CONSTRUCTION NOISE AND HOURS OF OPERATION.
13. WHERE STORM INLETS ARE SUSCEPTIBLE TO INFLOW OF SILT OR DEBRIS FROM CONSTRUCTION ACTIVITIES, PROTECTION SHALL BE PROVIDED ON THEIR UPSTREAM SIDE UTILIZING BMPs IDENTIFIED IN THE APPROVED SWPPP.

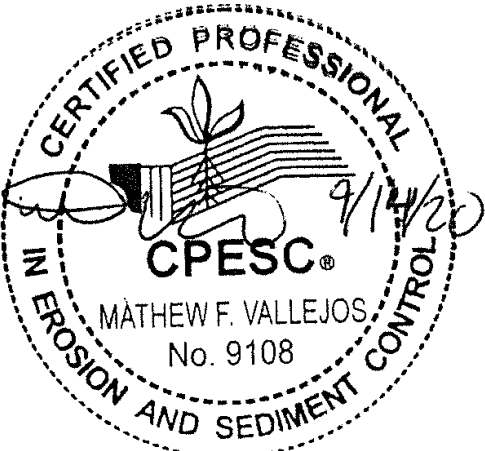
SONATA GREEN

TEMPORARY EROSION AND SEDIMENT CONTROL PLAN

Drawn By:

M. VALLEJOS, CPESC, CISEC

09/14/20



ESC-2