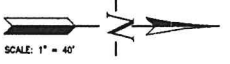


CONTOURS GENERATED FROM 2012 FLOOD STUDY TOPO

AS HIS, PRIOR TO ANY CONSTRUCTION  
THE CONTRACTOR IS TO CALL FOR  
THE LOCATION OF UTILITIES  
**1-800-332-2344**

EXISTING CUT SLOPE #1  
TO BE RE-SLOPED @ 1.5:1  
SEEDED AND MULCHED  
EXISTING CUT SLOPE #1  
ADD ADDITIONAL MATERIAL  
TO CREATE 1.5:1 SLOPE  
SEE ANY MUDCH.



**SISUL ENGINEERING**  
158 E. MAIN STREET  
JOHN DAY, OREGON 97845  
(541) 876-9777  
P&M/C/O. 06-09 PRELIMINARY 30.cpg

SITE PLAN

TAX LOT 10800  
GRADING IMPROVEMENTS  
RUSS YOUNG

01

REVISED



**Erosion and Sediment Control Requirements:**

1. The intent of the requirement is to prevent siltation from reaching storm drain systems and drainage ways. The erosion and sediment control (ESC) facilities shown on this plan are the minimum requirements for anticipated site conditions. During the construction period, these ESC facilities shall be upgraded as needed for unexpected storm events and to ensure that sediment laden water does not leave the site.
2. The following controls and practices are required:
  - a) Each site shall have graded or paved entrances, exits and parking areas prior to beginning any other work. To reduce the tracking of sediment onto public or private roads.
  - b) All unpaved roads located on-site shall be graded. Other effective erosion and sediment control measures either on the road or down gradient may be used in place of grading.
  - c) When trucking saturated soils from the site, either water-tight trucks shall be used or loads shall be drained on-site until dripping has been reduced to minimize spillage on roads.
  - d) Concrete trucks being washed out onsite shall be parked in a location that will prevent all wash residue from entering the storm drain system without proper filtration. Concrete runoffs and residue shall be properly disposed of.
3. Additional controls and practices shall be developed that are appropriate for the site. At a minimum the following shall be considered:
  - a) Whenever practicable, clearing and grading shall be done in a phased manner to prevent exposed inactive areas from becoming a source of erosion.
  - b) In developing vegetative erosion control practices, at a minimum the following shall be considered: temporary seeding, permanent seeding, mulching, sod stabilization, vegetative buffer strips, and protection of trees with protective construction fences.
  - c) The following shall be considered for the protection of exposed areas and the prevention of soil control blankets, and application of soil treatments:
    - 1) Mulching with straw or other vegetation, use of erosion control blankets, and application of soil treatments.
    - 2) Flowing from exposed soil, slope flows to allow flowing vegetation, filter flows or otherwise reduce soil laden runoff; use of silt fences, catch dikes, brush barriers, drainage swales, check dams, subsurface drains, pipe slope drains, rock outlet, protection, sediment traps, and temporary or permanent sedimentation basins. All temporary sediment control practices shall not be removed until permanent vegetation or other cover of exposed areas is established.
    - 3) The following shall be considered to prevent the stockpiles from becoming a source of erosion: diversion of uncontaminated flows around stockpiles, use of cover over stockpiles, and installation of silt fences around stockpiles.
  - d) The following maintenance activities shall be implemented:
    - 1) Significant amounts of sediment that leave the site shall be cleaned up within 24 hours and placed back on the site or properly disposed. Any in-stream clean up of sediment shall be performed according to Oregon Division of State Lands' required timeframe.
    - 2) Under no conditions shall sediment intentionally be washed into storm sewer or drainage way unless it is captured by a BMP before entering receiving waters.
    - 3) For a River fence, the trapped sediment shall be removed when it reaches one third of the above ground fence height.
    - 4) For catch basin protection, cleaning must occur when design capacity has been reduced by fifty percent.
    - 5) For a sediment basin, removal of trapped sediments shall occur when design capacity has been reduced by fifty percent.
  - e) All erosion and sediment controls not in the direct path of work shall be installed before any final disturbance used to establish vegetation, the application rates shall follow manufacturer's guidelines and the application shall be done in such a way to minimize nutrient-laden runoff to receiving waters.
  - f) If construction activities cease for thirty (30) days or more, the entire site must be stabilized, using vegetation to control erosion.
  - g) If use of toxic or other hazardous materials shall include proper storage, application, and disposal.
  - h) The permittee shall manage abandoned hazardous wastes, used oils, contaminated soils or other toxic substances discovered during construction activities in a manner approved by the Department of Environmental Quality.

**Seeding/Mulching:**

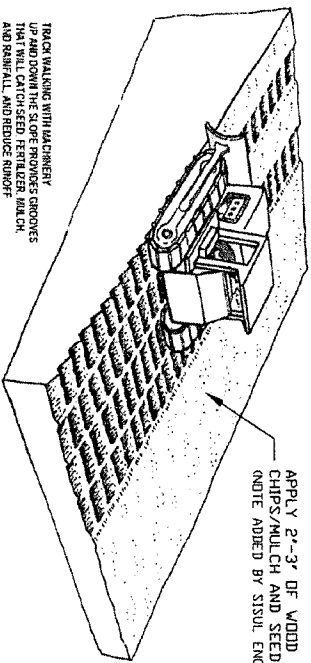
1. All areas disturbed during construction to be graded to drain and compacted after installation of utilities or grading.
2. Recommended Seed Mixture: 80% PR 8820 Dwarf P perennial Ryegrass and 20% Creeping Red Fescue, by weight. Application Rate shall be 100 pounds minimum per acre.
3. Fertilizer Rate shall be 12-16-8 with 50% of the nitrogen derived from UREA FORMALDEHYDE, and applied at a rate of 400 pounds per acre.
4. Mulch at a rate of 2000 lbs/Ac or more and use netting and anchors if needed to stabilize. Mulch shall be a wood cellulose fiber or other material suitable.
5. Temporary or Permanent Hydroseeding or acceptable seeding and mulching must be provided whenever permanent cover cannot be established on sites which will be exposed for 60 days or more.

**Structural Fill Notes:**

1. Structural fill is to be built on lot where noted on the x-sections to the specifications noted below.
2. All miscellaneous materials and the organic layer under the fill area shall be stripped or removed. All stumps in the fill area must be removed in their entirety.
3. General site preparations should include the recalculation of miscellaneous un-documented fills by providing proof of undisturbed ground and replacement to structural fill standards. The approximate extent and locations of un-documented fills are unknown and will need to be excavated to identify.
4. The contractor shall place native material in 8" lifts and compact with vibratory roller until the area can pass a proof roll test with a loaded 10 yd end-dump truck. Depending on conditions moisture may need to be added to reach optimum moisture content of fill material. After each lift, area is to be proof rolled and witnessed by City and/or Engineer, prior to placing next lift.

**Surface Roughening**

Leaving the slopes in a roughened condition after clearing or grading a rough soil surface with horizontal depressions or grooves will help seed and reduce runoff velocity. Roughening can be accomplished by "Truck walking" slopes with tracked equipment, by using a serrated wing blade attached to the side of a bulldozer, or by other agricultural equipment such as spike-tooth harrows.



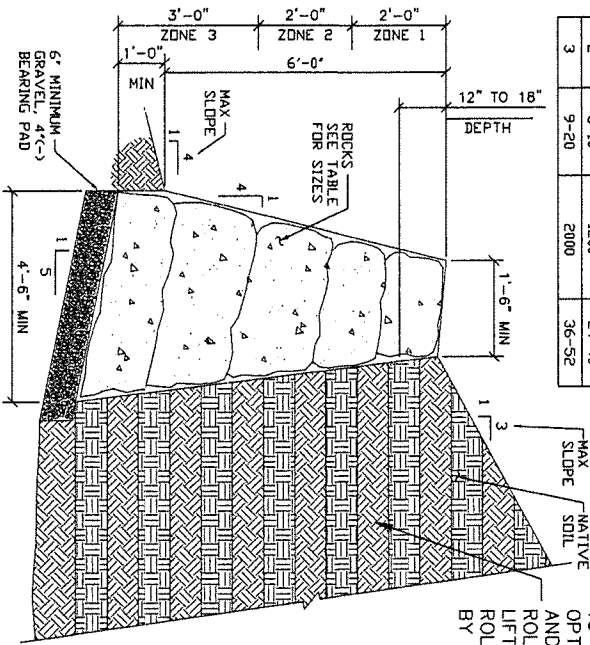
- Applications:**
- All slopes to be seeded.
  - All slopes steeper than 1:3 having a vertical rise of 5 feet or greater.
  - On areas that would otherwise be unfavorable for plant growth.
  - As a temporary stabilization on bare soils exposed by construction activities.

Info from ODOT Erosion Control Field Manual

NO.	DATE	BY

ROCK SIZES PER ZONE AREA			
ZONE	VOLUME (CU. FT.)	WEIGHT (LBS.)	SIZE (IN.)
1	3-7	700	12-28
2	6-10	1200	24-40
3	9-20	2000	36-52

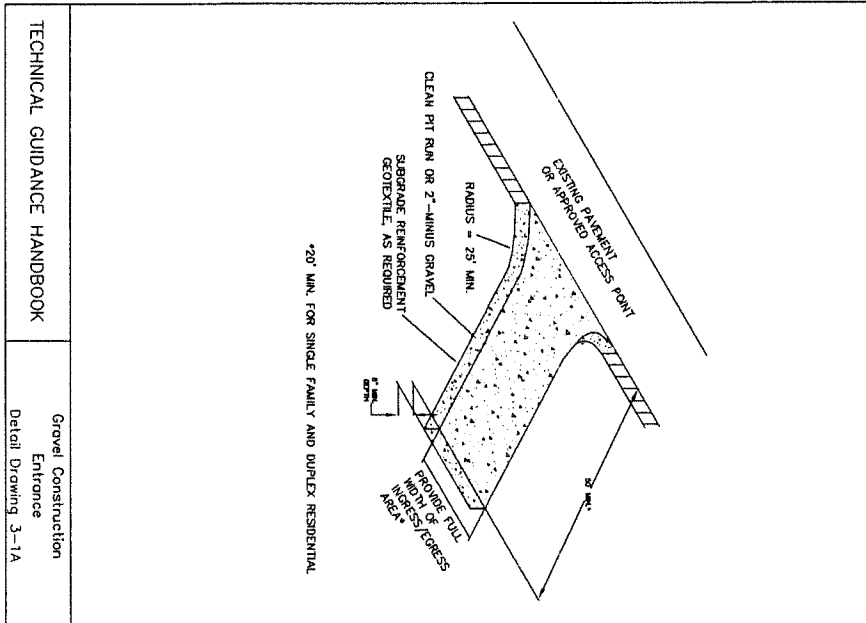
IF 3/4 EMBED BASE ROCK 18"  
IF 2/3 EMBED BASE ROCK 24"



COMPACTED FILL TO BE PLACED WITH OPT. MOISTURE AND VIBRATORY ROLLER. EACH LIFT TO BE PROOF ROLLED AND APPROVED BY CITY & ENGINEER.

# 2'-7' ROCKERY WALL

NTS



TECHNICAL GUIDANCE HANDBOOK  
Gravel Construction  
Entrance  
Detail Drawing 3-1A

SCALE	DATE	BY	CHKD