Appendix B Construction SWPPP Short Form

Projects falling within the thresholds listed below may use this short form instead of preparing a formal Construction Stormwater Pollution Prevention Plan (SWPPP). If your project meets the following thresholds and includes or may impact a critical area, please contact the City to determine if the SWPPP short form may be used.

The short form may be used if any of the following criteria are met:

- Add or replace between 2,000 and 5,000 square feet of impervious surface.
- Clear or disturb between 7,000 square feet and 1 acre of land.
- Grade/fill 50-499 cubic yards.

If project quantities exceed any of the above thresholds, prepare a formal Construction SWPPP as described in Chapter 2 of Volume 2.

City of Tacoma
Construction Stormwater Pollution Prevention Plan
Short Form

Project Name: _____

Address:_____

Contact/Owner: _____ Phone: _____

E-mail: _____

Erosion Control Supervisor: _____

Phone: _____ Cell: _____ Pager: _____

Emergency (After hour) contact: _____ Phone: _____

Permit No: _____

Parcel No.:_____

Date Submitted: _____

Required Submittals

A Construction Stormwater Pollution Prevention Plan consists of both a project narrative and a site plan. The project narrative describes the existing conditions on the site, the proposed conditions, and how construction site runoff will be managed until final site stabilization. Any additional relevant information should be included in the project narrative.

The site plan is a drawing which shows the location of the proposed BMPs. The Site Plan is described in Section 2 below.

The information required in Section 1 below is the project narrative. All Best Management Practices (BMPs) that will be utilized onsite shall be printed (or provided electronically - depending upon permit submittal method) and included as part of the project narrative. If additional best management practices beyond those included in the SWMM will be used, a narrative and appropriate details describing the BMP (its function, installation method, and maintenance activities) will be required.

The City of Tacoma govMe site (*http://www.govme.org*.) may be used to find much of the information needed to complete this form, such as adjacent areas, topography, critical areas, the downstream drainage path, and information concerning onsite features.

1. Project Narrative

NOTE: From October 1 thru April 30, clearing, grading, and other soil disturbing activities shall only be permitted by special authorization from the City of Tacoma Building and Land Use Services (BLUS). (TMC 2.02.370)

A. Project Description (Check all boxes and complete all text fields that apply)

☐ New Structure/Building ☐ Building Addition ☐ Grading/Excavation ☐ Paving
☐ Utilities ☐ Other: _____

1. Total project area_____ (square feet)
2. Total proposed impervious area_____(square feet)
3. Total existing impervious area _____(square feet)
4. Total proposed area to be disturbed _____(square feet)
5. Total volumes of proposed cuts/fill_____(cubic yards)

Additional Project Information: _____

_____

_____

_____

B. Existing Site Conditions (Check all boxes and complete all text fields that apply)

1. Describe the existing conditions on the site. (Check all that apply)

   ☐ Forest ☐ Pasture/prairie grass ☐ Pavement ☐ Landscaping ☐ Brush

   ☐ Trees ☐ Other_____

2. Describe how surface water (stormwater) drainage flows across/from the site. (Check all that apply)

   ☐ Sheet Flow ☐ Gutter ☐ Catch Basin ☐ Ditch/Swale ☐ Storm sewer

   ☐ Stream ☐ Other _____

3. Describe any unusual site condition(s) or other features of note.

   ☐ Steep Grades ☐ Large depression ☐ Underground tanks ☐ Springs

   ☐ Easements ☐ Existing Structures ☐ Existing Utilities

   ☐ Other_____

4. Is the site located within the South Tacoma Groundwater Protection District?

   ☐ Yes ☐ No

C. Adjacent Areas (Check all boxes and complete all text fields that apply)

1. Check any adjacent areas that may be affected by site disturbance and fully describe in item 2 below:

   ☐ Streams* ☐ Lakes* ☐ Wetlands* ☐ Steep Slopes*

   ☐ Residential Areas ☐ Roads ☐ Ditches, pipes, culverts

   ☐ Other _____

   ** If site is on or adjacent to a critical area, the City of Tacoma may require additional information, engineering, and other permits to be submitted prior to permit approval.*

2. Describe how and where surface water enters the site from upstream properties:

   _____

   _____

   _____

   _____

3. Describe the downstream drainage path leading from the site to the receiving body of water. (Minimum distance of ¼-mile (1320 feet)) {E.g. water flows from site, into curb-line to catch basin at intersection of X and Y streets. A 10-inch pipe system conveys water another 1000 feet to a ravine/wetland.} Include information on the condition of the drainage structures.

   _____

   _____

   _____

   _____

   _____

D. Soils Information

If the project is proposing construction on or near slopes 15% or greater or proposing to infiltrate construction site stormwater runoff, the City may require that additional soils information be presented before allowing construction on these sites.

1. Does the project propose construction on or near slopes 15% or greater?.

   ☐ Yes ☐ No

2. Does the project propose to infiltrate construction stormwater?

   ☐ Yes ☐ No

E. 12 Elements of a Construction SWPPP

The following 12 elements are required for each SWPPP. If an element does not apply to the project site describe why the element does not apply. Table 2 - 13 contains a matrix for BMPs that can be used to meet the requirements of the 12 elements. Mark those BMPs that will be used on the matrix and show the location of the proposed BMP on the site plan as applicable. Only those erosion and sediment control techniques most pertinent to small construction sites are included here. More detailed information on construction BMPs can be found in Volume 2 of the City of Tacoma Surface Water Management Manual. The BMP numbers referenced are BMPs located in the City of Tacoma SWMM. Print those BMPs that will be used for the project and include as part of this Construction SWPPP. BMPs that may be used if needed can be noted as being contingent in the event additional erosion control is required. Describe any additional BMPs that will be utilized on the site and add them to the Short Form SWPPP.

For phased construction plans, clearly indicate erosion control methods to be used for each phase of construction.

Element #1 – Preserve Vegetation and Mark Clearing Limits

Retain the duff layer, native topsoil, and natural vegetation in an undisturbed state to the maximum extent practicable. If it is not practicable to retain the duff layer in place, it should be stockpiled onsite, covered to prevent erosion, and replaced immediately upon completion of the ground-disturbing activity.

All construction projects must clearly mark any clearing limits, sensitive areas and their buffers, and any trees that will be preserved prior to beginning any land disturbing activities, including clearing and grading. Clearly mark the limits both in the field and on the plans. Limits shall be marked in such a way that any trees or vegetation to remain will not be harmed.

☐ The BMP(s) being proposed to meet this element are: _____

_____

Or

☐ This element is not required for this project because: _____

_____

_____

_____

Element #2 – Establish Construction Access

All construction projects subject to vehicular traffic shall provide a means of preventing vehicle "tracking" of soil from the site onto City streets or neighboring properties. Limit vehicle ingress and egress to one route if possible. All access points shall be stabilized with a rock pad construction entrance per BMP C105 or other City of Tacoma approved BMP. The applicant should consider placing the entrance in the area for future driveway(s), as it may be possible to

use the rock as a driveway base material. The entrance(s) must be inspected weekly, at a minimum, to ensure no excess sediment buildup or missing rock.

If sediment is tracked offsite, it shall be swept or shoveled from the paved surface immediately. Keep streets clean at all times. Street washing for sediment removal is not allowed as it can transport sediment to downstream water courses and clog the downstream stormwater system.

The proposed construction entrance must be identified on the site plan.

☐ The BMP(s) being proposed to meet this element are: _____

_____

Or

☐ This element is not required for this project because: _____

_____

_____

_____

Element #3 – Control Flow Rates

Protect properties and waterways downstream of the development site from erosion due to increases in volume, velocity, and peak flow of stormwater runoff from the project site.

Permanent infiltration facilities shall not be used for flow control during construction unless specifically approved in writing by Environmental Services. Sediment traps can provide flow control for small sites by allowing water to pool and allowing sediment to settle out of the water.

☐ The BMP(s) being proposed to meet this element are: _____

_____

Or

☐ This element is not required for this project because: _____

_____

_____

_____

Element #4 – Install Sediment Controls

Prior to leaving a construction site or discharging into an infiltration facility, surface water runoff from disturbed areas must pass through an appropriate sediment removal device. Sediment barriers are typically used to slow sheet flow of stormwater and allow the sediment to settle out behind the barrier.

Install/construct the sediment removal BMP before site grading.

☐ The BMP(s) being proposed to meet this element are: _____

_____

Or

☐ This element is not required for this project because: _____

_____

_____

_____

Element #5 – Stabilize Soils

Stabilize exposed and unworked soils by applying BMPs that protect the soils from raindrop impact, flowing water, and wind.

From October 1 through April 30, no soils shall remain exposed or unworked for more than 2 days. From May 1 to September 30, no soils shall remain exposed and unworked for more than 7 days. This applies to all soils on site whether at final grade or not.

☐ The BMP(s) being proposed to meet this element are: _____

_____

Or

☐ This element is not required for this project because: _____

_____

_____

_____

Element #6 – Protect Slopes

Protect slopes by diverting water at the top of the slope. Reduce slope velocities by minimizing the continuous length of the slope, which can be accomplished by terracing and roughening slope sides. Establishing vegetation on slopes will protect them as well.

☐ The BMP(s) being proposed to meet this element are: _____

_____

Or

☐ This element is not required for this project because: _____

_____

_____

_____

Element #7 – Protect Drain Inlets

Protect all storm drain inlets that are operable during construction so that stormwater runoff does not enter the conveyance system without first being filtered or treated to remove sediment. Install catch basin protection on all catch basins within 500 feet downstream of the project. The catch basin inlet protection shown in Figure 2-45 is the only catch basin protection allowed within the City right of way. Once the site is fully stabilized, catch basin protection must be removed.

☐ The BMP(s) being proposed to meet this element are: _____

_____

Or

☐ This element is not required for this project because: _____

_____

_____

_____

Element #8 – Stabilize Channels and Outlets

Stabilize all temporary onsite conveyance channels. Provide stabilization to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches at the outlets of conveyance systems.

☐ The BMP(s) being proposed to meet this element are: _____

_____

Or

☐ This element is not required for this project because: _____

_____

_____

_____

Element #9 – Control Pollutants

Handle and dispose of all pollutants, including demolition debris and other solid wastes in a manner that does not cause contamination of the stormwater. Provide cover and containment for all chemicals, liquid products (including paint), petroleum products, and other materials. Handle all concrete and concrete waste appropriately. All discharges to the City sanitary sewer system require City approval, which may include a Special Approved Discharge (SAD) permit.

☐ The BMP(s) being proposed to meet this element are: _____

_____

Or

☐ This element is not required for this project because: _____

_____

_____

_____

Element #10 – Control Dewatering

Clean, non-turbid dewatering water, such as groundwater, can be discharged to the stormwater system provided the dewatering flow does not cause erosion or flooding of receiving waters. All other water shall be discharged to the City sewer system.

All discharges to the City sewer system require City approval, which may include a Special Approved Discharge (SAD) permit. Dewatering water must be discharged through a stabilized channel to a sediment pond or trap.

☐ The BMP(s) being proposed to meet this element are: _____

_____

Or

☐ This element is not required for this project because: _____

_____

_____

_____

Element #11 – Maintain BMPs

Maintain and repair temporary erosion and sediment control BMPs as needed. Inspect all BMPs at least weekly and after every storm event.

Remove all temporary erosion and sediment control BMPs within 30 days after final site stabilization or if the BMP is no longer needed. Any trapped sediment should be removed or stabilized onsite. No sediment shall be discharged into the storm drainage system or natural conveyance systems.

☐ The BMP(s) being proposed to meet this element are: _____

_____

Or

☐ This element is not required for this project because: _____

_____

_____

_____

Element #12 – Manage the Project

Phase development projects in order to prevent soil erosion and the transport of sediment from the project site during construction.

Coordinate all work before initial construction with subcontractors and other utilities to ensure no areas are prematurely worked.

An Erosion Control Supervisor is required for all construction sites. The Erosion Control Supervisor is the party responsible for ensuring that the proposed erosion and sediment control BMPs are appropriate for the site and are functioning. They are also responsible for updating the SWPPP as necessary as site conditions warrant. They must be available 24 hours a day to ensure compliance.

☐ The BMP(s) being proposed to meet this element are: _____

_____

Or

☐ This element is not required for this project because: _____

_____

_____

_____

Construction Sequencing/Phasing

1. The standard construction sequence is as follows:
   - Mark clearing/grading limits.
   - Call Building Inspector to inspect clearing/grading limits.
   - Install initial erosion control practices (construction entrance, silt fence, catch basin inserts).
   - Contact Building Inspector to inspect initial erosion control practices.
   - Clear, grade, and fill site as outlined in the site plan while implementing and maintaining temporary erosion and sediment control practices at the same time.
   - Install proposed site improvements (impervious surface, landscaping, etc.).
   - Contact Building Inspector for approval of permanent erosion protection and site grades.
   - Remove erosion control methods as permitted by the Building Inspector and repair permanent erosion protection as necessary.
   - Monitor and maintain permanent erosion protection until fully established.

   List any changes from the standard construction sequence outlined above.

_____

_____

_____

_____

_____

2. Construction phasing: If construction is going to occur in separate phases, describe:

_____

_____

_____

_____

_____

Construction Schedule

1. Provide a proposed construction schedule (dates construction starts and ends, and dates for any construction phasing).

   Start Date: _____ End Date: _____

   Interim Phasing Dates: _____

   Wet Season Construction Activities: *Wet season occurs from October 1 to April 30*.

   Describe construction activities that will occur during this time period.

_____

_____

_____

_____

_____

NOTE: Additional erosion control measures beyond those shown may be required to manage site runoff.

Table 2 - 13: BMP Matrix for 12 Elements of SWPPP

Element #1: Preserve Vegetation and Mark Clearing Limits		
BMP C101	Preserving Natural Vegetation	
BMP C102	Buffer Zones	
BMP C103	High Visibility Plastic and Wire Fence	
BMP C104	Stake and Wire Fence (Figure 2 - 38)	
Element #2: Establish Construction Entrance		
BMP C105	Stabilized Construction Entrance (Figure 2 - 37)	
BMP C106	Wheel Wash	
BMP C107	Construction Road/Parking Area Stabilization	
Element #3: Control Flow Rates		
BMP C240	Sediment Trap (Figure 2 - 43 and Figure 2 - 44)	
Element #4: Install Sediment Controls		
BMP C231	Brush Barrier	
BMP C232	Gravel Filter Berm	
BMP C233	Silt Fence (Figure 2 - 39)	
BMP C234	Vegetated Strip	
BMP C235	Straw Wattles (Figure 2 - 40)	
Element #5: Stabilize Soils		
BMP C120	Temporary and Permanent Seeding	
BMP C121	Mulching	
BMP C122	Nets and Blankets (Figure 2 - 46)	
BMP C123	Plastic Covering (Figure 2 - 49)	
BMP C124	Sodding	
BMP C125	Compost	
BMP C126	Topsoiling	
BMP C131	Gradient Terraces	
BMP C130	Surface Roughening	
BMP C140	Dust Control	
Element #6: Protect Slopes		
BMP C200	Interceptor Dike and Swale	
BMP C201	Grass-Lined Channels (Figure 2 - 45)	
BMP C204	Pipe Slope Drains (Figure 2 - 48)	
BMP C207	Check Dams	
Element #7: Protect Drain Inlets		
BMP C220	Storm Drain Inlet Protection (Figure 2 - 41 and Figure 2 - 42)	
Element #8: Stabilize Channels and Outlets		
BMP C202	Channel Lining (Figure 2 - 47)	

Table 2 - 13: BMP Matrix for 12 Elements of SWPPP

Element #9: Control Pollutants		
BMP C150	Materials On Hand	
BMP C151	Concrete Handling	
BMP C152	Sawcutting and Surfacing Pollution Prevention	
BMP C153	Materials, Delivery, Storage and Containment	
BMP C154	Concrete Washout Area	
Element #10: Control Dewatering		
SAD Permit from the City of Tacoma		
Element #11: Maintain BMPs		
Element #12: Manage the Project		
BMP C162	Scheduling	
BMP C180	Small Project Construction Stormwater Pollution Prevention	

2. Site Plan (See Figure 2 - 36 for an Example)

Much of the information needed for developing a site plan is available on the City of Tacoma govMe website at *http://www.govme.org*.

Onsite field verification of actual conditions is required.

A site plan, to scale, shall be included with this checklist that shows the following items:

_____ a. Address, Parcel Number, Permit Number and Street names

_____ b. North Arrow

_____ c. Indicate boundaries of existing vegetation (e.g. tree lines, grassy areas, pasture areas, fields, etc.)

_____ d. Identify any on-site or adjacent critical areas and associated buffers (e.g. wetlands, steep slopes, streams, etc.).

_____ e. Show existing and proposed contours.

_____ f. Delineate areas that are to be cleared and graded.

_____ g. Show all cut and fill slopes, indicating top and bottom of slope catch lines

_____ h. Show locations where upstream runon enters the site and locations where runoff leaves the site.

_____ i. Indicate existing surface water flow direction(s).

_____ j. Label final grade contours and indicate proposed surface water flow direction and surface water conveyance systems (e.g. pipes, catch basins, ditches, etc.).

_____ k. Show grades, dimensions, and direction of flow in all (existing and proposed) ditches, swales, culverts, and pipes.

_____ l. Indicate locations and outlets of any dewatering systems (usually to sediment trap).

_____ m. Identify and locate all erosion control techniques to be used during and after construction.

_____ n. Finish floor elevations of all structures.

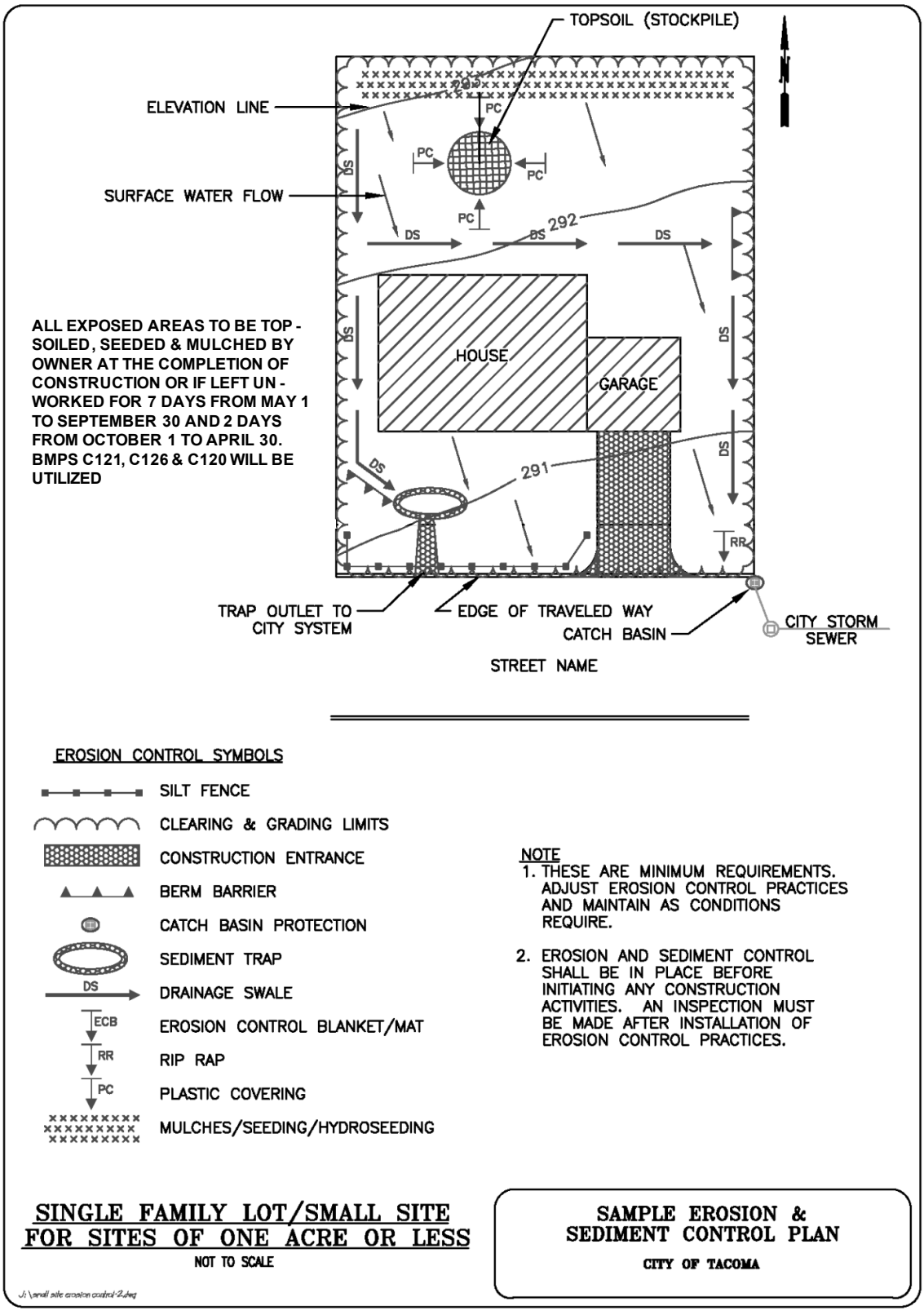


Figure 2 - 36. Sample Erosion and Sediment Control Plan

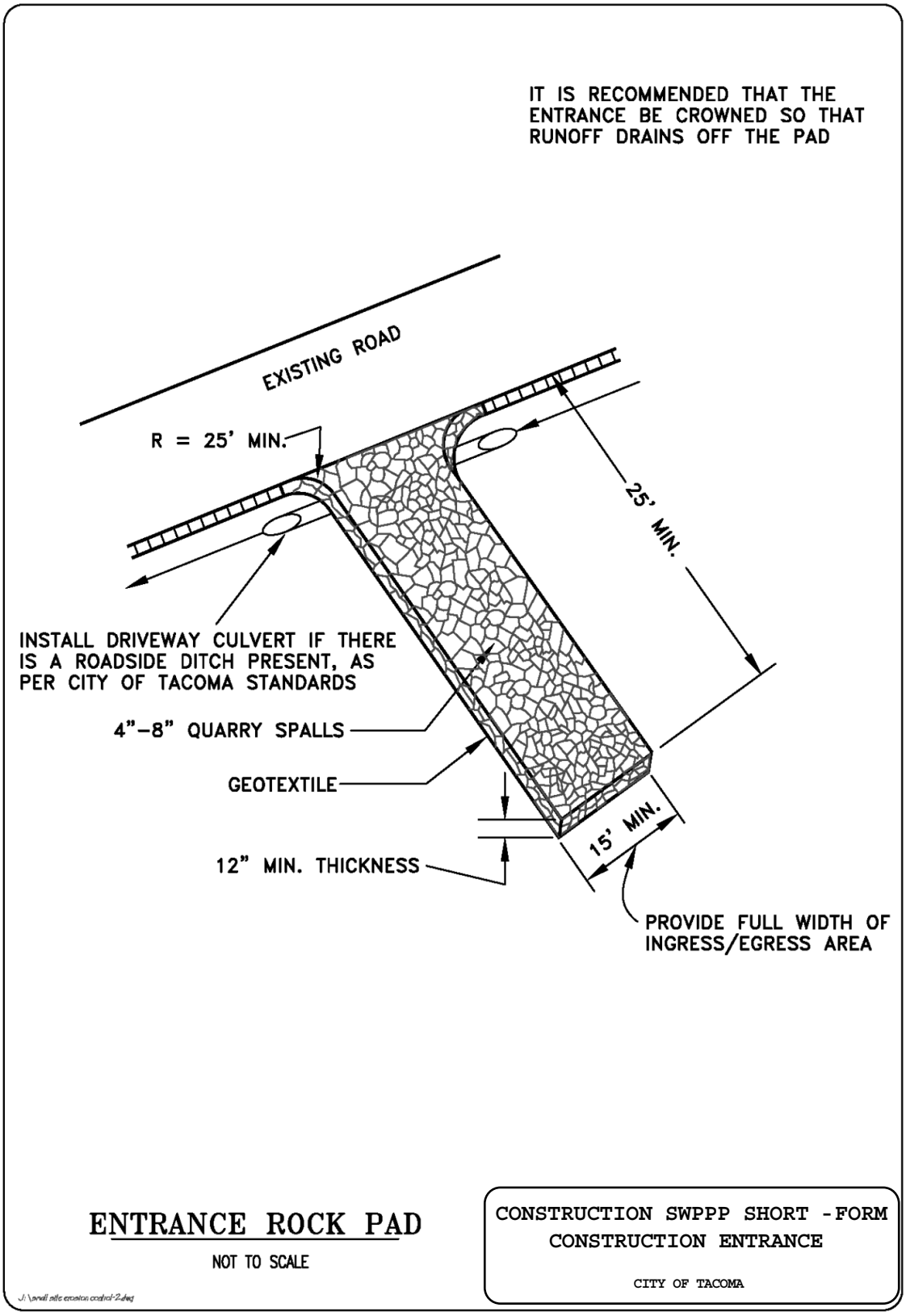


Figure 2 - 37. Construction Entrance

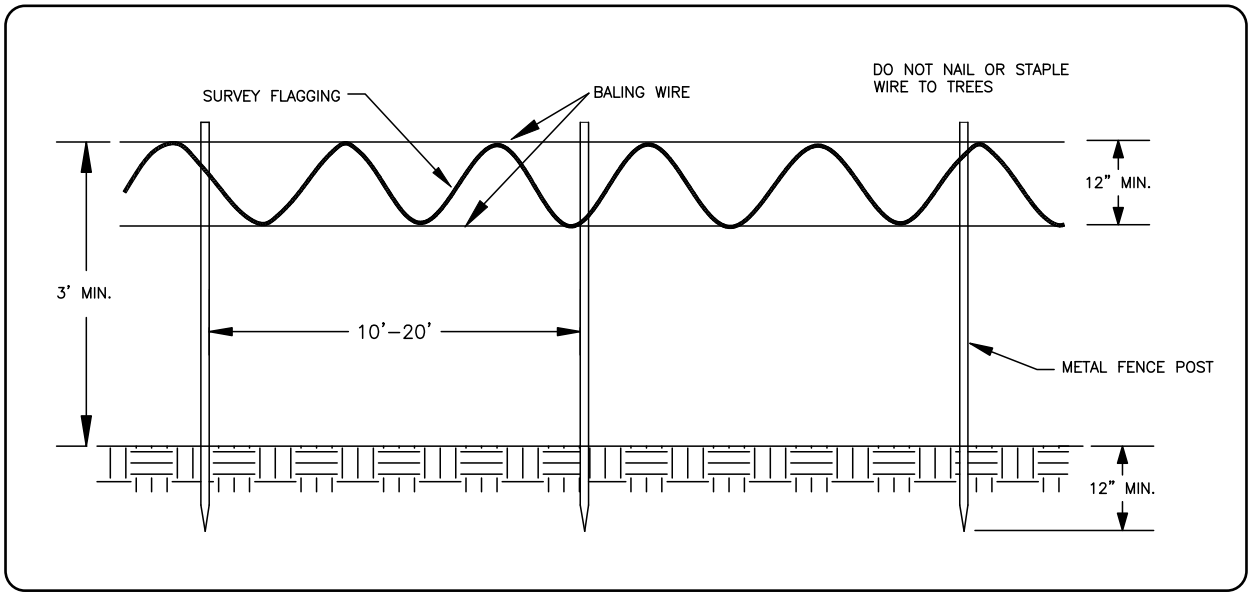


Figure 2 - 38. Stake and Wire Fence

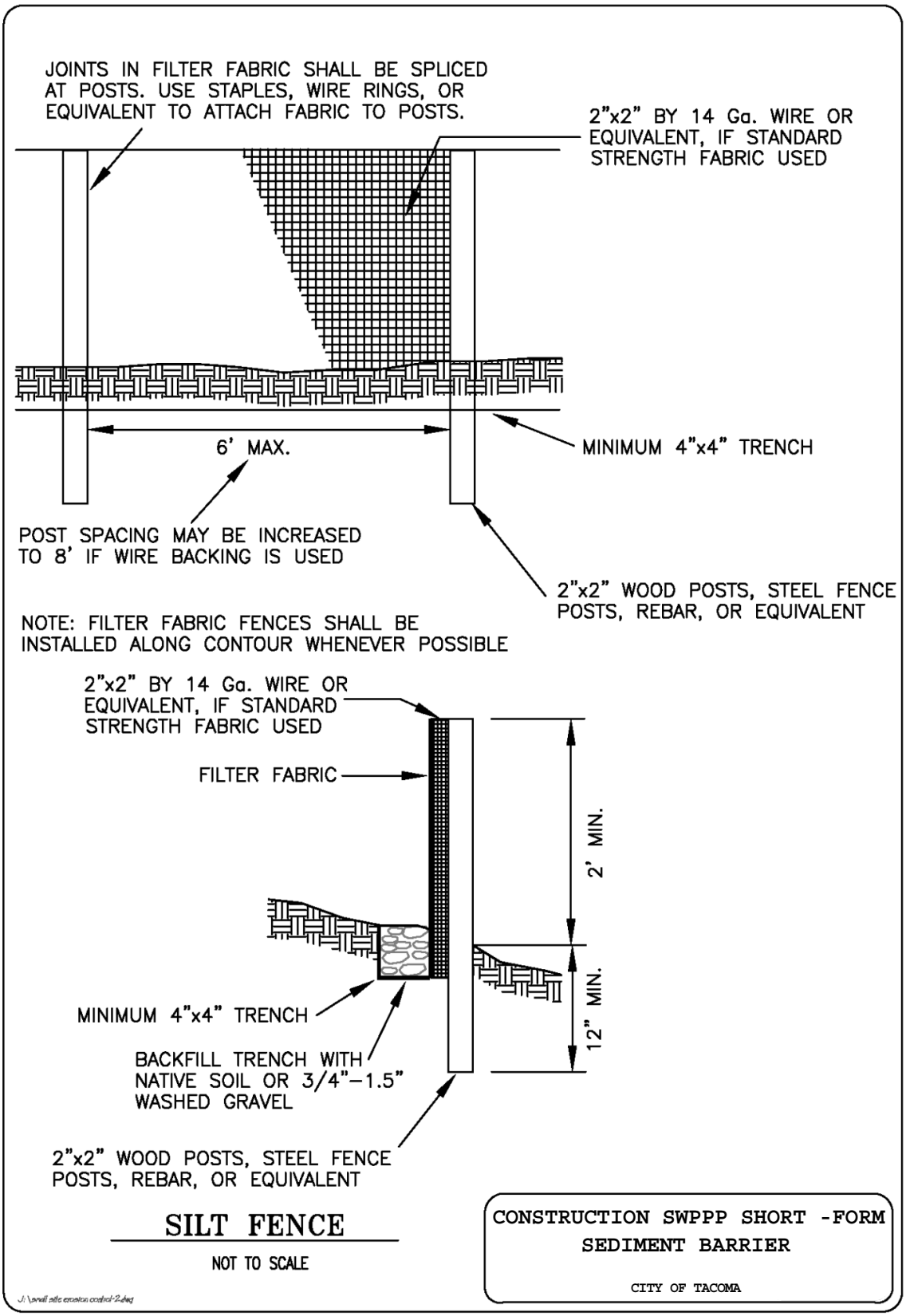


Figure 2 - 39. Sediment Barrier – Silt Fence

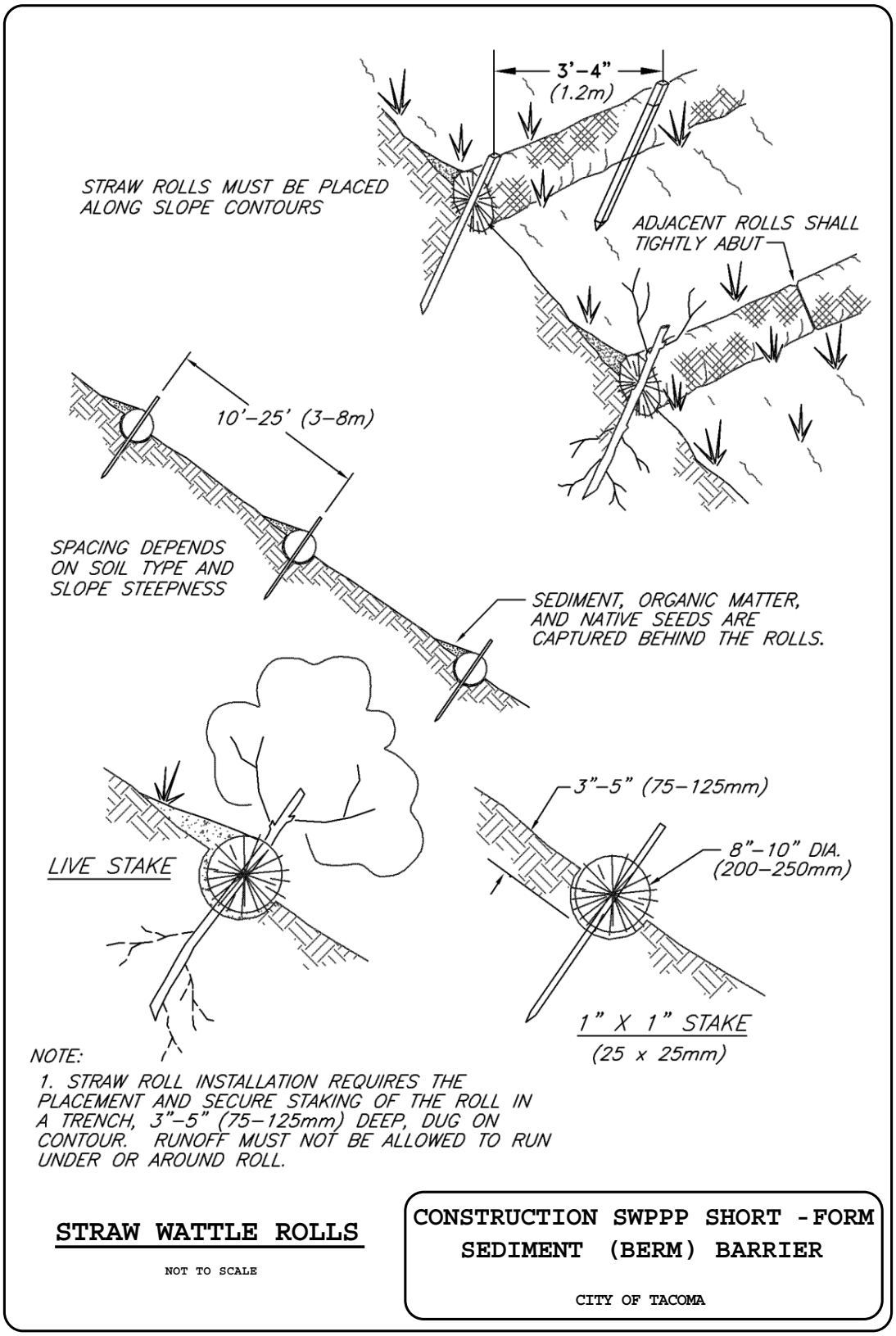
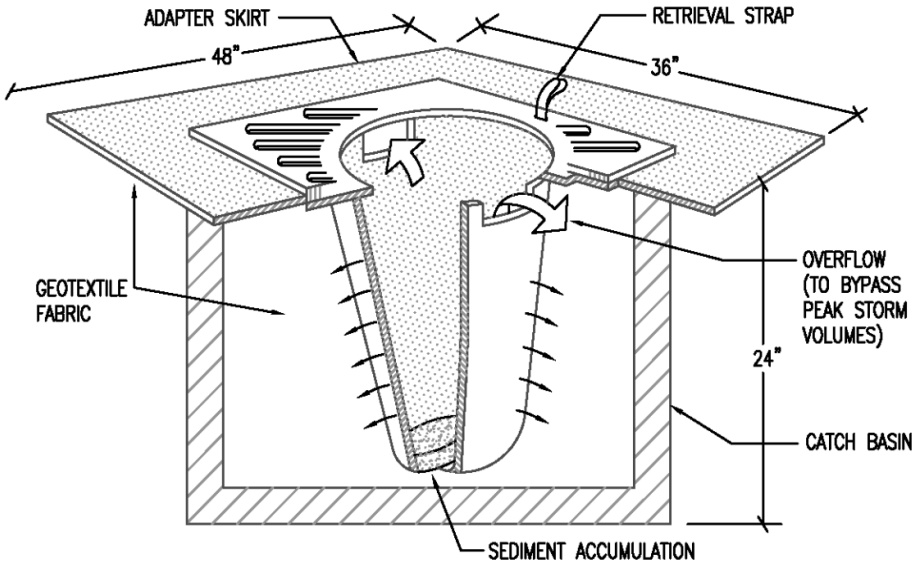


Figure 2 - 40. Sediment (Berm) Barrier – Straw Wattle Rolls



INLET PROTECTION NOTES:

1. FILTERS SHALL BE REMOVED AND CLEANED OR REPLACED AFER EACH STORM EVENT.

BAG FILTER

NOT TO SCALE

CONSTRUCTION SWPPP SHORT -FORM
CATCH BASIN PROTECTION

CITY OF TACOMA

J:\small site erosion control-2.dwg

Figure 2 - 41. Catch Basin Protection – Bag Filter

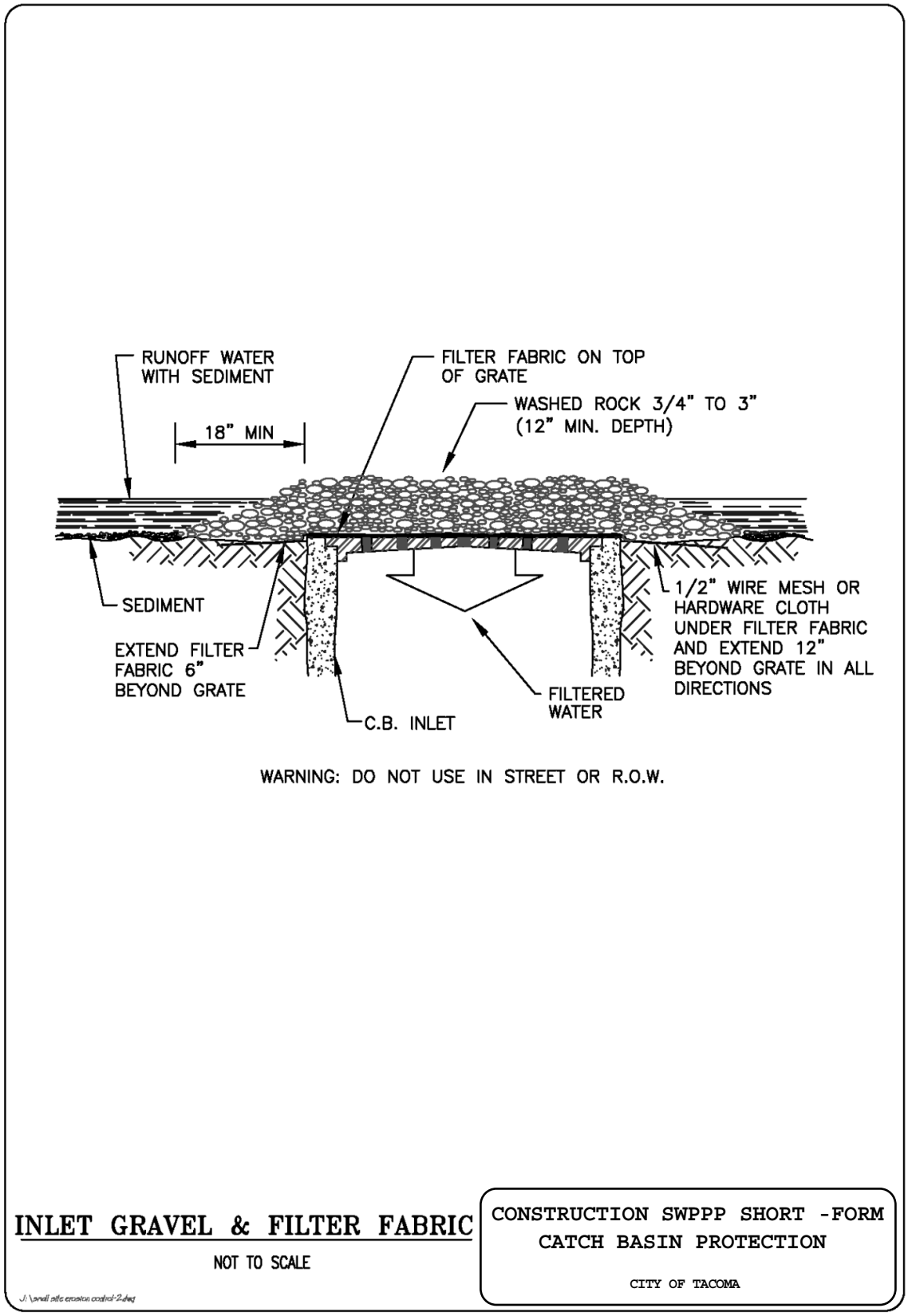


Figure 2 - 42. Catch Basin Protection – Inlet Gravel and Filter Fabric

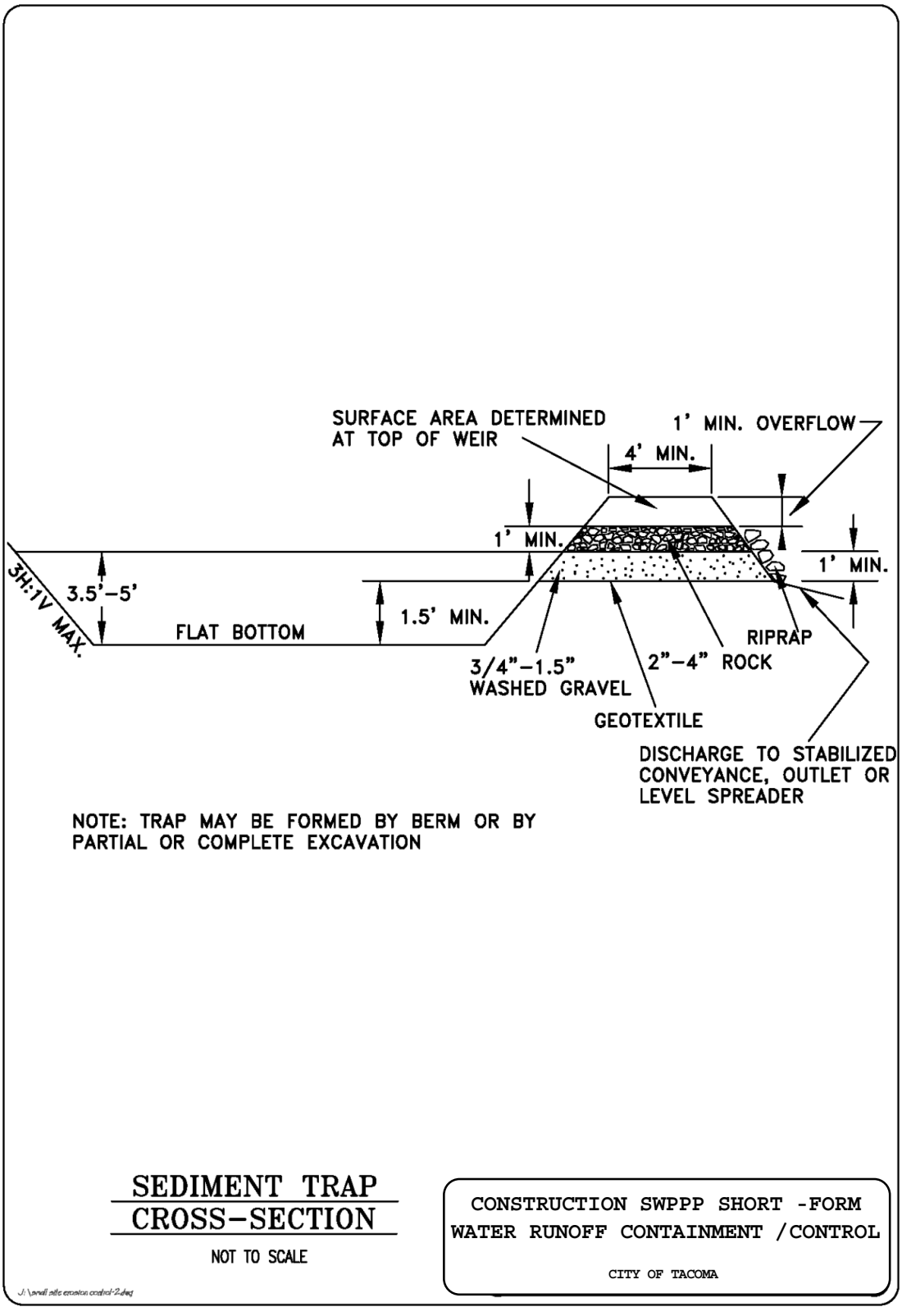


Figure 2 - 43. Water Runoff Containment/Control – Sediment Trap Cross-Section

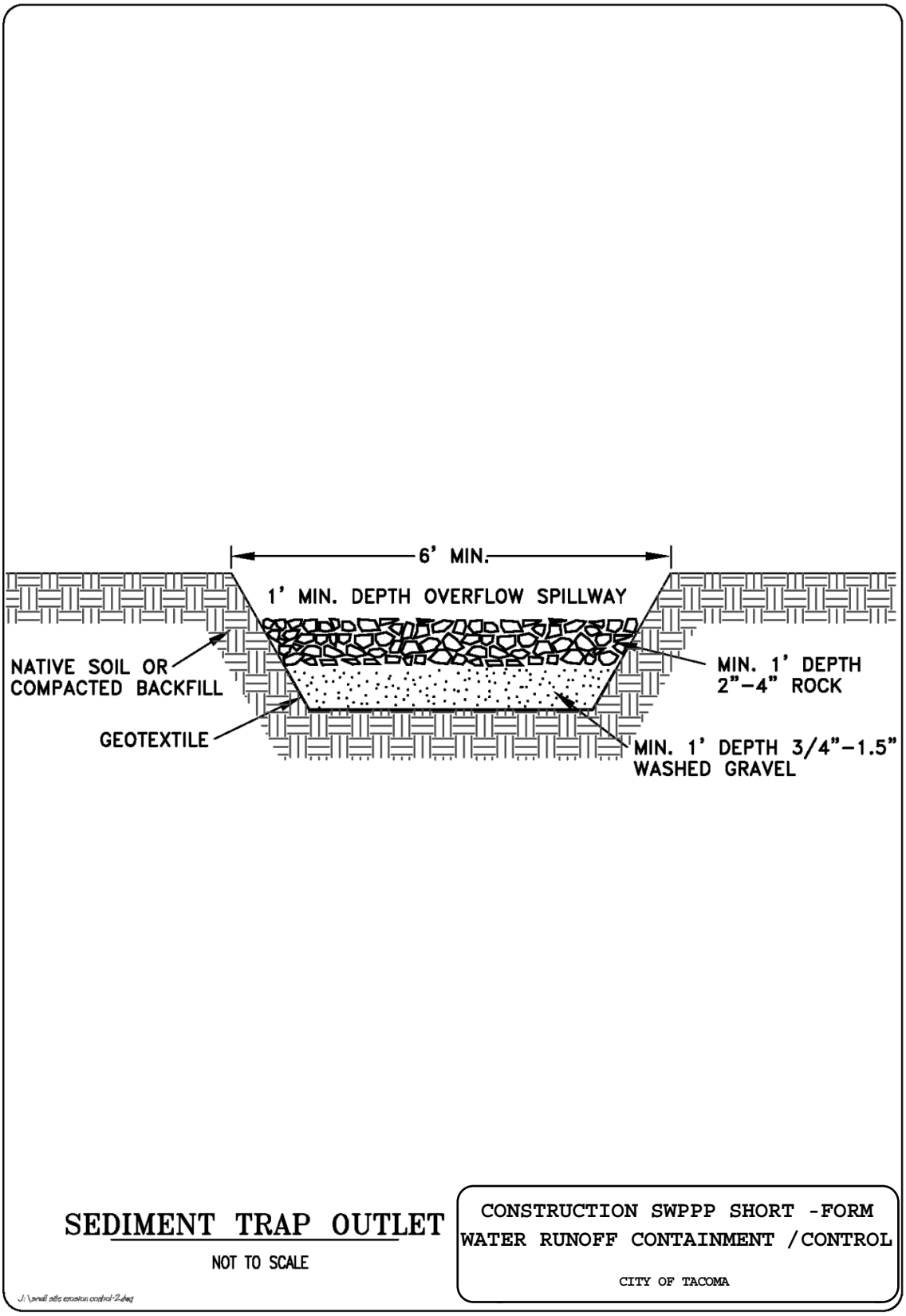


Figure 2 - 44. Water Runoff Containment/Control – Sediment Trap Outlet

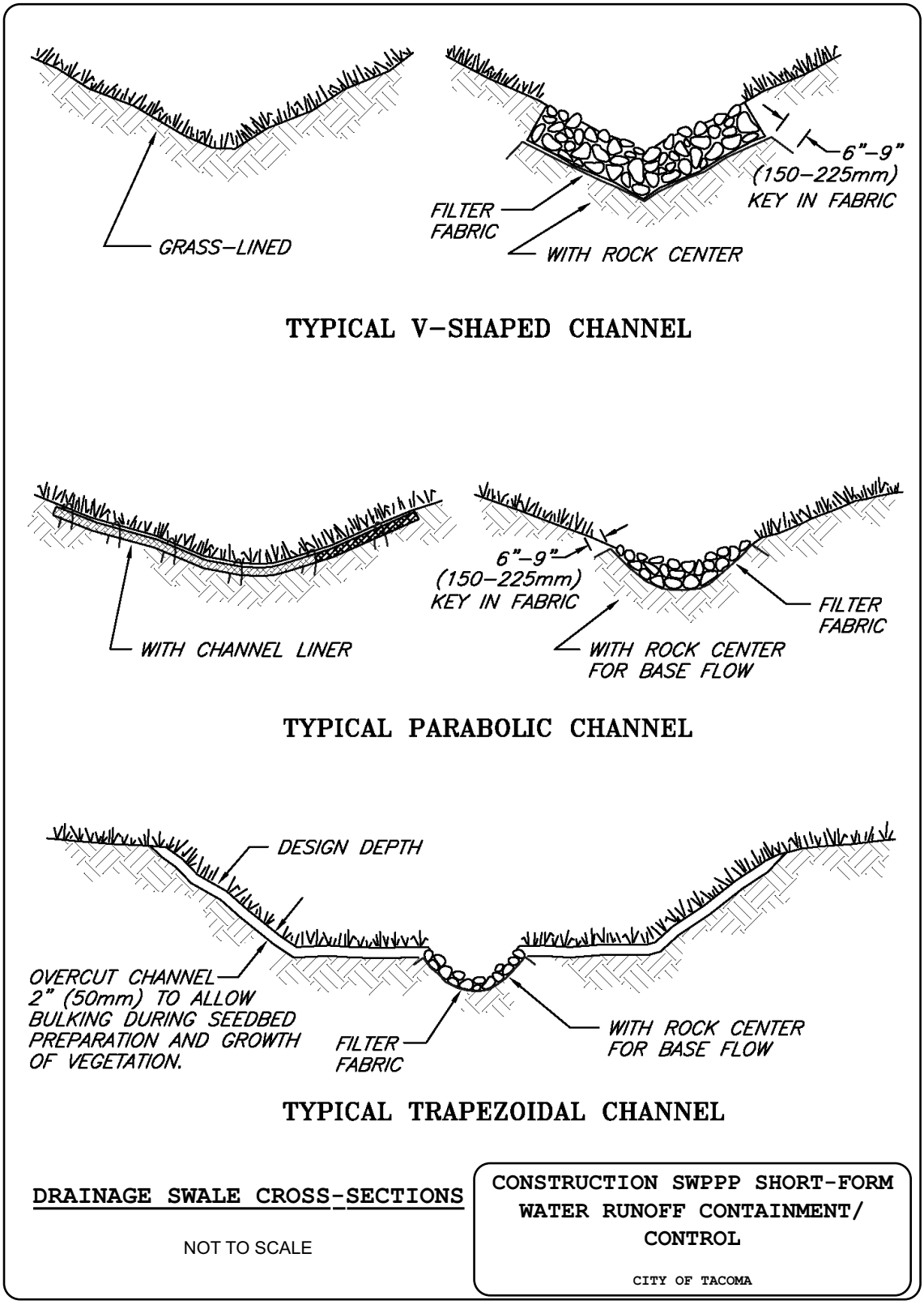


Figure 2 - 45. Water Runoff Containment/Control – Drainage Swale Cross-Sections

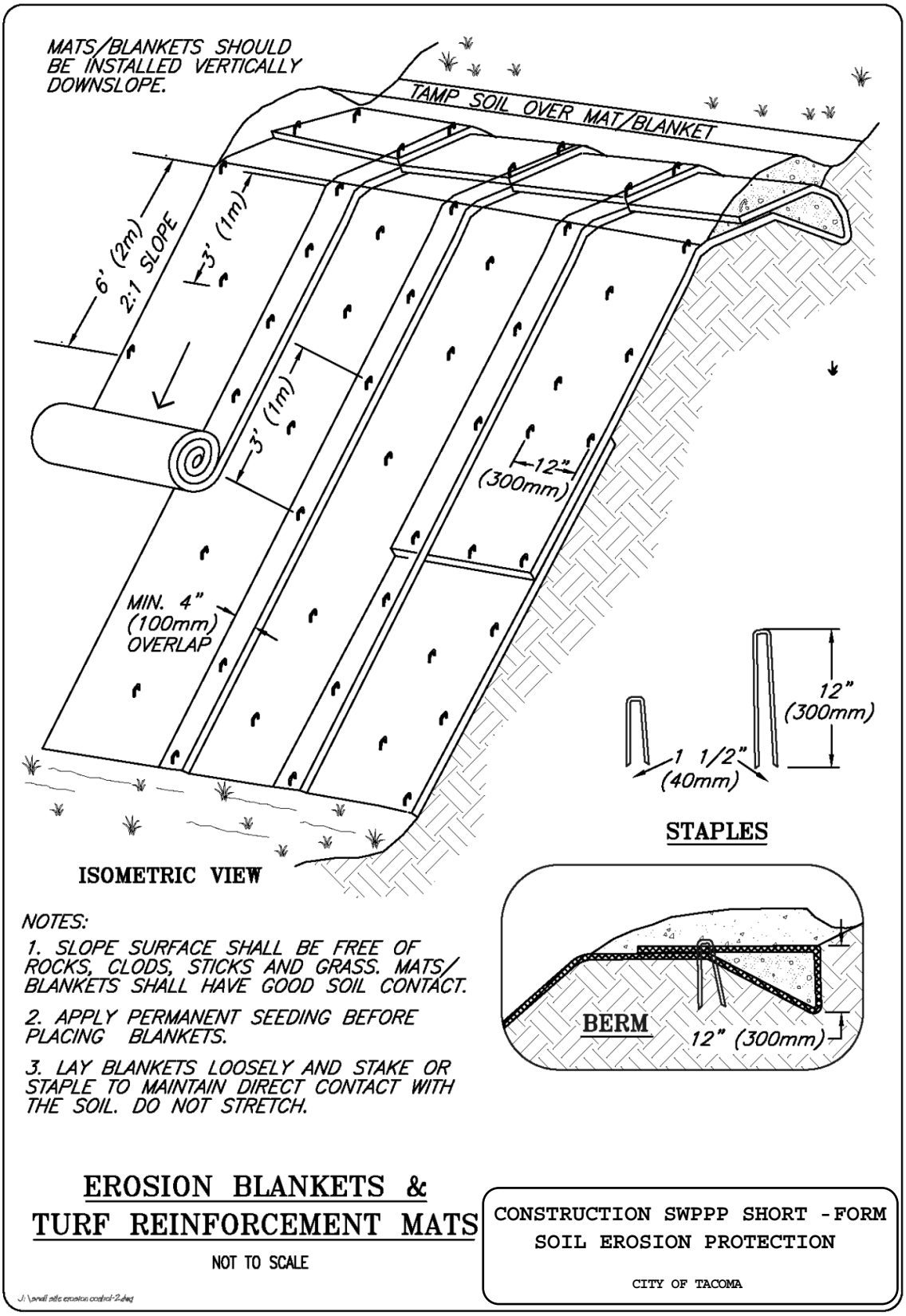


Figure 2 - 46. Soil Erosion Protection – Erosion Blankets and Turf Reinforcement Mats

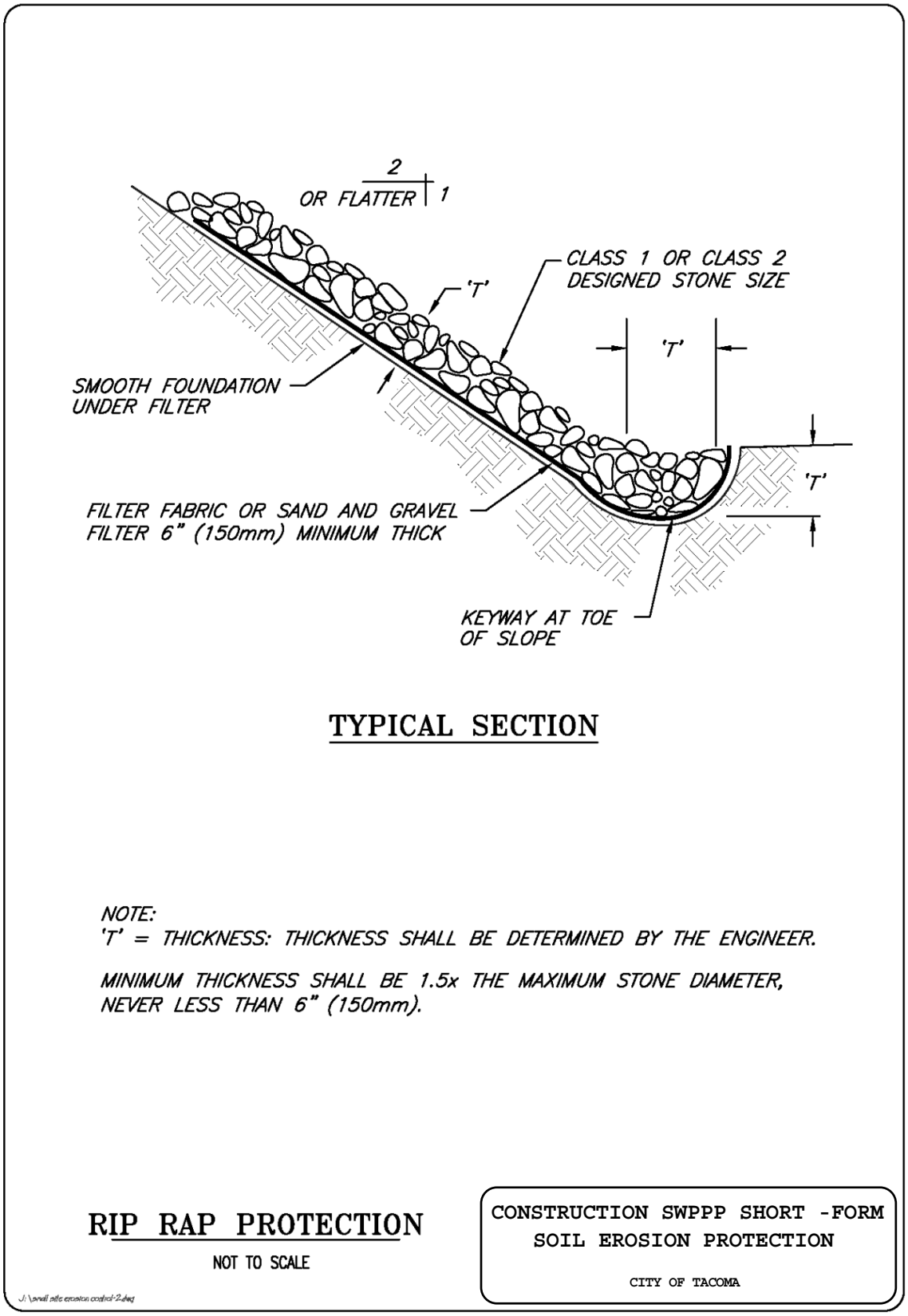


Figure 2 - 47. Soil Erosion Protection – Rip Rap Protection

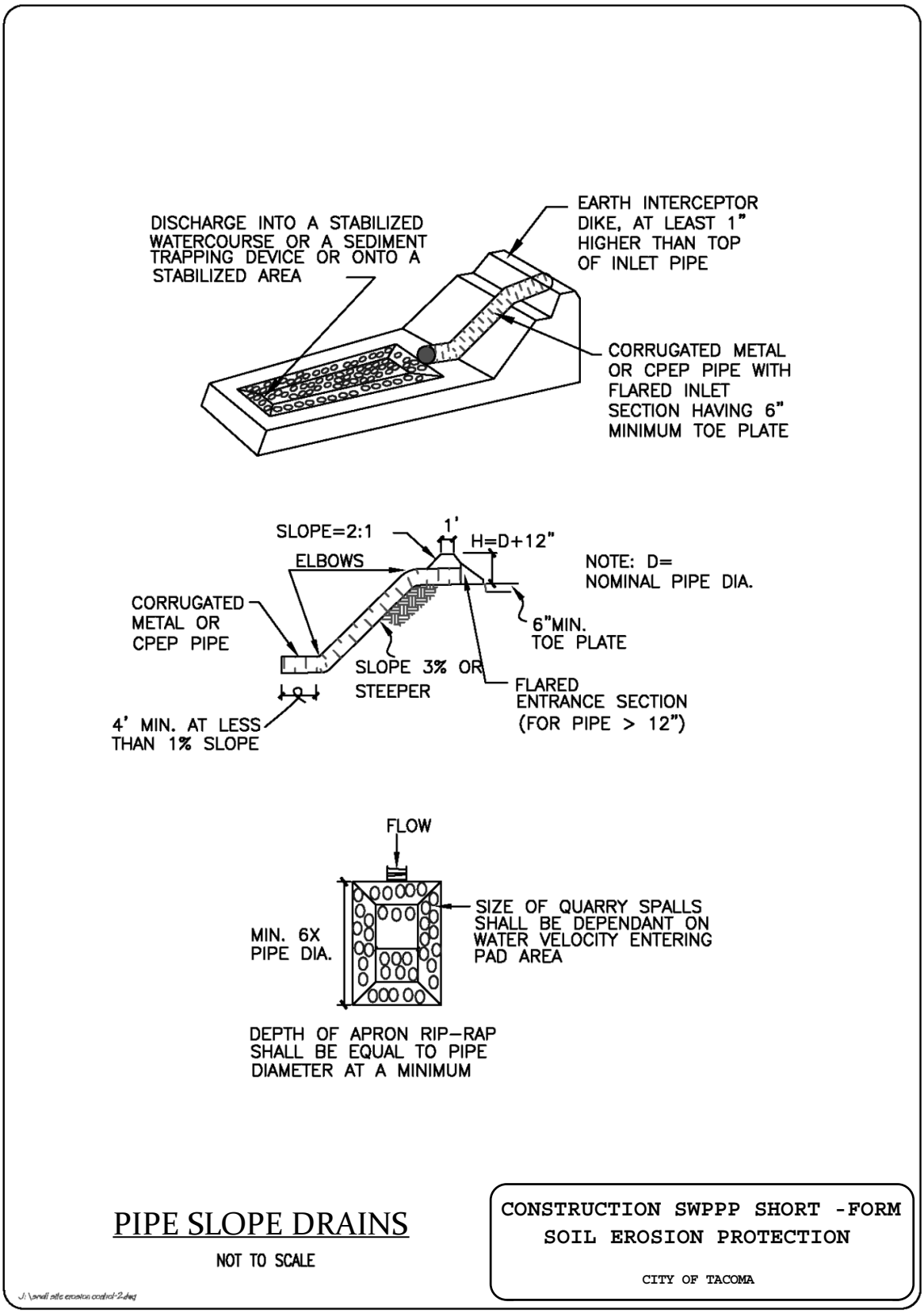


Figure 2 - 48. Soil Erosion Protection – Pipe Slope Drains

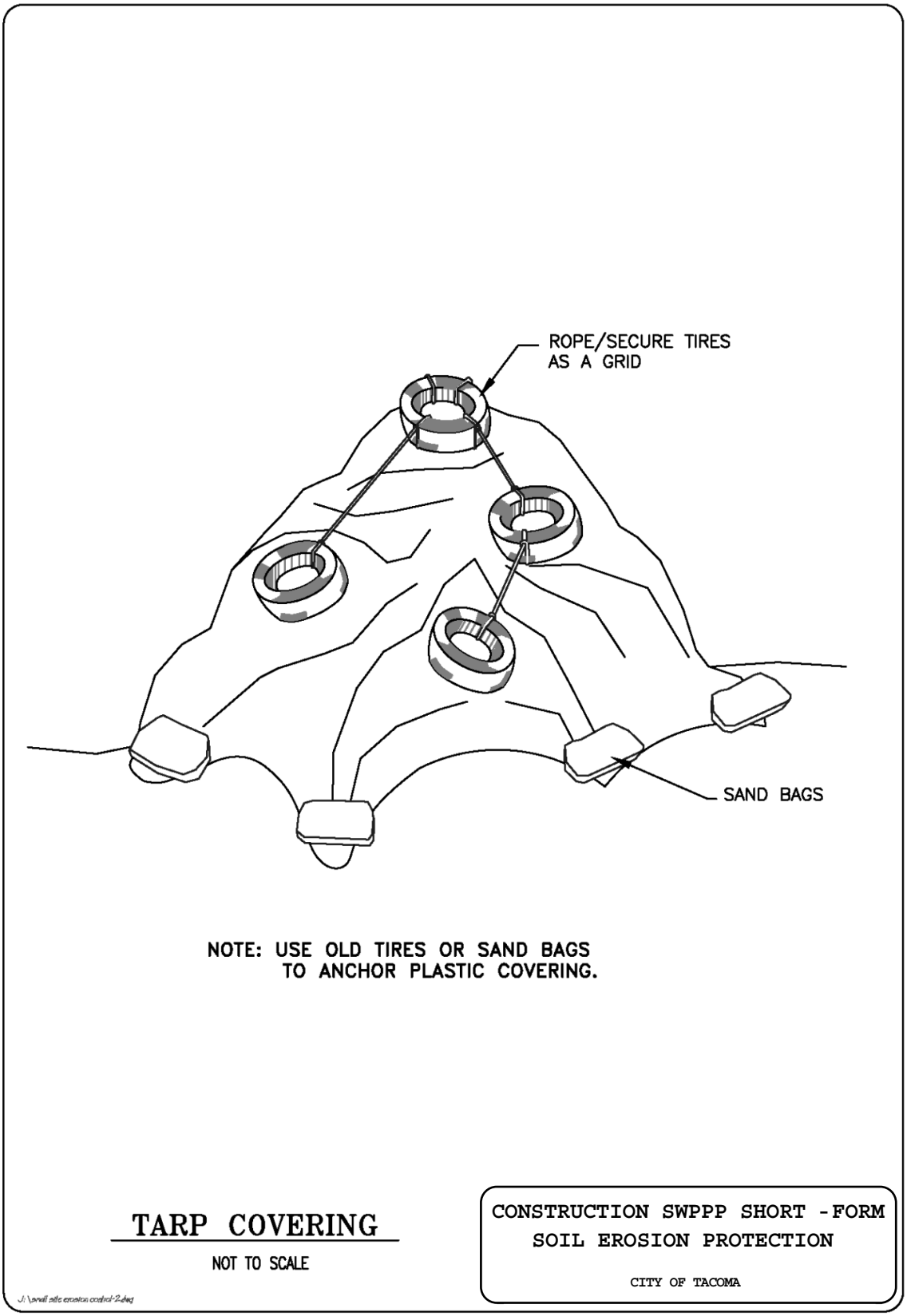


Figure 2 - 49. Soil Erosion Protection – Tarp Covering