

Small Construction Erosion Control Plan City of Kelso

The **Small Construction Erosion Control Plan** is an abbreviated plan for describing how a small construction site will be managed to prevent sediment and pollutants from leaving the site during construction. Sediment and pollutants from construction must be kept out of the City's drainage system, streets, streams, rivers, lakes, and wetlands.

The City-approved **Small Construction Erosion Control Plan** must be located at the construction site during construction and must be made available to a City inspector when requested. The property owner is responsible for implementing and maintaining the measures described in this plan. It is advisable to include the approved plan in the construction contract with the builder.

This plan template is intended for use by property owners and is not a substitute for Kelso Municipal Code. We have substituted some technical language contained in the code and engineering standards with plainer terms.

ELIGIBLE PROJECTS:

The instructions in this plan template apply to new construction and additions/remodels that are eligible to use the **Abbreviated Stormwater Site Plan**.

ELEMENTS OF ABBREVIATED STORMWATER SITE PLAN:

The Small Construction Erosion Control Plan is a required attachment to the Abbreviated Stormwater Site Plan. The plan consists of a narrative and drawing. Use the last page of this form (Erosion Control Site Plan) as a template for drawings.

Attach the completed plan (this form) and drawings to the **Abbreviated Stormwater Site Plan** and the Civil Permit application.

3PP.134.131.1				
PROJECT SITE INFORMATION				
Parcel #: 2408710				
Address/Location: 2408 Talley Way, Kelso, WA 98626				
APPLICANT/PROPERTY OWNER				
Business Name: Ultimate Steel Erection	Contact Name: (Codi Torres		
Mailing/Billing Address: 2621 S Frontage Rd	^{City} Rexburg		State ID	^{Zip} 83440
Phone Number: 208-356-4239	Email: codi@u	ıltimatesteel	erection.com	ı
AUTHORIZED REPRESENTATIVE OR CONTRACTOR (If app	licable)			
Business Name: to be decided by owner	Contact Name:			
Mailing/Billing Address:	City		State	Zip
Phone Number:	Email:			
WA State License # (Not UB#):		Expiration Date:		
City of Kelso Business License #		Expiration Date:		
PROPERTY OWNER OR AUTHORIZED AGENT				
I hereby certify that I have read and examined this application and know the same to be true and correct, and I am				
authorized to apply for this permit.				
Signature:	Printed Name:		Date:	

Erosion Control Inspector

Designate an Erosion Control Inspector who has the skills to assess the site conditions and construction activities that could impact stormwater quality. The inspector must be on-site or on-call at all times. The applicant or construction contractor may act as the Erosion Control Inspector.

The person identified below will be on-site or on-call a Inspector Name: to be decided by owner	t all times.
Phone:	Alternate Phone:
Construction Schedule	

Determine the approximate start and end dates of construction.

Any clearing, grading, or construction from October 1 through April 30 shall only be permitted if shown to the satisfaction of the City that silt-laden runoff will be prevented from leaving the site through proper use of best management practices (BMPs).

Start Date: 12/1	2/2022	End Date: 12/31/2024	
		 -	

Describe any construction activities that will occur between October 1 and April 30:

Construction during better summer weather is preferred, but some construction work may occur between October 1 and April 30. Proper additional erosion control should be observed.

SITE NARRATIVE:

The site narrative describes the site and expected construction activities. The site narrative is contained in Section 1: Site and Project Description of the **Abbreviated Stormwater Site Plan**.

Section 1 of the **Abbreviated Stormwater Site Plan** is attached.

Calculate the project impacts.

	Impact	Impact	
Α	Total land disturbed	4,800 (5	sq. ft.)
В	Total volume of proposed cut and fill	0 (0	cu. ft.)

EROSION CONTROL REQUIREMENTS:

The applicant and contractor must prevent eroded soils from leaving the site during construction.

At least one BMP for each of the 13 requirements below must be selected, unless the element is not applicable.

To select the appropriate BMP, review the applicability and design requirements on the **Erosion Control Site Plan** template or in the Stormwater Management Manual for Western Washington (SWMMWW), Volume II (https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Stormwater-permittee-guidance-resources/Stormwater-manuals).

This form includes the most common erosion control BMPs for small construction sites. The BMPs detailed on the **Erosion Control Site Plan** template are marked with \mathscr{A} . Refer to the SWMMWW for BMPs marked with a \mathbb{A} . Other approved BMPs from the SWMMWW may also be used.

Element #1: Preserve Vegetation and Mark Clearing Limits		
Requirements	Select One or More BMPs	
Prior to clearing and construction, install highly visible fence to show the limits of construction activity and to protect vegetation and soils to be preserved. Use orange construction fence, chain link fence, or high visibility silt fence.	☐ C101 Preserving Natural Vegetation ☐ C103 High Visibility Fence ☐ C233 High Visibility Silt Fence — high visibility silt fence can act as both perimeter marking and sediment control (Element #4) (See WSDOT standard detail I-30.17-00)	
Show selected BMPs on the Erosion Control Site Plan.		

Element #2: Construction Access		
Requirements	Use the Following BMP	
Keep the street outside of the construction site clean by establishing and monitoring a single construction entrance. Restrict all traffic into the site to one entrance. If an existing driveway will be used, sweep and pick up dirt and debris from the driveway at the end of construction each day. Do not sweep into the street or drainage system. For sites without an existing driveway, use a gravel construction entrance.	☐ C105 Stabilized Construction Entrance/Exit ☐ N/A (explain): No driveway disturbed, there is no location to put a construction access	0
Show the BMP on the Erosion Control Site Plan.		

Element #3: Control Flow Rates		
Requirements	Choose One or More BMPs	
Protect slopes, ditches, properties, and waterways downstream of the construction site from erosion due to increases in volume and velocity of stormwater runoff from the site.	☐ C209 Outlet Protection ☐ C235 Wattles (See WSDOT standard detail I-30.30-02) ☐ N/A (explain): No additional flow proposed	
Show selected BMPs on the Erosion Control Site Plan.		

Element #4: Sediment Control		
Requirements	Select One or More BMPs	
Prior to leaving a construction site, runoff from disturbed areas must pass through a sediment removal device.	C103 High Visibility Silt Fence – high visibility silt fence can act as both perimeter marking and	Ø Ø
Sediment barriers are used to slow stormwater and allow the sediment to settle out behind the barrier.	sediment control (Element #4) (See WSDOT standard detail I-30.17-00) C235 Wattles (See WSDOT standard	
Install/construct the sediment control BMP before site grading.	detail I-30.30-02) N/A (explain):	
Show the selected BMP(s) on the Erosion Control Site Plan.		

Element #5: Stabilize Soils		
Requirements	Select One or More BMPs	
Soils without grass or other vegetation can easily erode. Exposed soils must be protected from rain and flowing water. Soils are protected by covering them with various materials, such as grass/sod, tarp, compost, or mulch. Check one or both options below: Construction will take place during the dry season (May 1 to September 30). No soils shall remain exposed and unworked for more than 7 days. Construction will take place during the wet season (October 1 through April 30). No soils shall remain exposed	☐ C121 Mulching ☐ C123 Plastic Covering/Tarp Covering ☑ N/A (explain): No additional flow proposed	
and unworked for more than 2 days. Show the selected BMP(s) on the Erosion Control Site Plan.		

Element #6: Protect Slopes		
Requirements	Use the Following BMP	
Design and construct cut and fill slopes in a way that minimizes the potential for erosion.	C121 Mulching N/A (explain): No steep slopes on site	
Show the selected BMP(s) on the Erosion Control Site Plan	1.	<u>.</u>

Element #7: Protect Drain Inlets		
Requirements	Use the Following BMP	
Protect all storm drain inlets and catch basins in the road near the site during construction. Prevent runoff from the site from entering the inlets without first being filtered to remove sediment.	 ☑ C220 Storm Drain Inlet Protection (See WSDOT standard detail I-40.20-00) ☑ N/A (explain):	B
Install catch basin protection on all catch basins within 500 feet downstream of the project.		
Show the selected BMP(s) on the Erosion Control Site Plan.		

Element #8: Stabilize Channels and Outlets		
Requirements	Select One or More BMPs	
Stabilize all temporary and permanent conveyance channels and their outlets. If a ditch or pipe from the site discharges to a ditch in the street or to a stream, outlet protection must be used.	☐ C207 Check Dams (See WSDOT standard detail I-50.20-01) ☐ C209 Outlet Protection ☑ N/A (explain): No additional channels or outlets proposed	
Show the selected BMP(s) on the Erosion Control Site Plan.	•	•

Element #9: Control Pollutants			
Requirements	Select One or More BMPs		
Handle and dispose of all pollutants, including demolition	☑ C151 Concrete Handling		
debris and other solid wastes, to keep them out of rain and	☑ C152 Sawcutting and Surface Pollution		
flowing water.	Prevention		
Provide cover and containment for all chemicals, liquid	🛚 C153 Materials Delivery, Storage, and		
products (including paint), petroleum products, and other	Containment		
materials. Apply fertilizers and pesticides following	☐ N/A (explain):		
manufacturers' instructions for application rates and			
procedures. Handle all concrete and concrete waste			
appropriately.			
Show location(s) of materials delivery storage, and handling a	reas on Frosion Control Site Plan		

Element #10 – Control Dewatering			
Requirements	BMPs		
Many small sites will not require dewatering.	If dewatering is needed consult the SWMMWW Vol. II, Ch. II, Section 3.3 and list the selected BMPs below:		
	No dewatering proposed		
Show location(s) of selected RMP(s) on the Frosion Co	entrol Site Plan	_	

Refer to the SWMMWW Refer to the Erosion Control Site Plan template

Refer to the Kelso Engineering Design Manual, online at www.kelso.gov/engineering/engineering-documents, for more information or clarification of stormwater requirements within Kelso. You may also contact the City of Kelso's Engineering Department at (360) 423-6590 or at engineering/engineering/engineering-documents, for more information or clarification of stormwater requirements within Kelso. You may also contact the City of Kelso's Engineering Department at (360) 423-6590 or at engineering/

Element #11: Maintain BMPs		
Requirements	Select One or More BMPs	
Maintain and repair BMPs as needed. The designated Erosion Control Inspector (see page 2) should inspect all BMPs at least weekly and after every storm event. Keep an inspection log on site and available for review by the City inspector at all times.	C150 Materials On Hand C160 Certified Erosion and Sediment Control Lead	
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 on the site. No sediment shall be discharged into the street storm drainage system or streams, lakes, rivers, or wetlands.		
Keep a small supply of materials on hand, such as an extra tarp or plastic covering, filled sandbags, wattles, and any materials needed to repair or stabilize any of the BMPs selected for the project.		

Element #12: Manage the Project			
Requirements	Select One or More BMPs		
Coordinate all work before initial construction with subcontractors and other utilities to ensure no areas are prematurely worked. The Erosion Control and Pollution Prevention measures must be installed in the order described in the Scheduling of BMP Installation section, below.	C150 Materials On Hand C160 Certified Erosion and Sediment Control Lead C162 Scheduling (see page 7)		

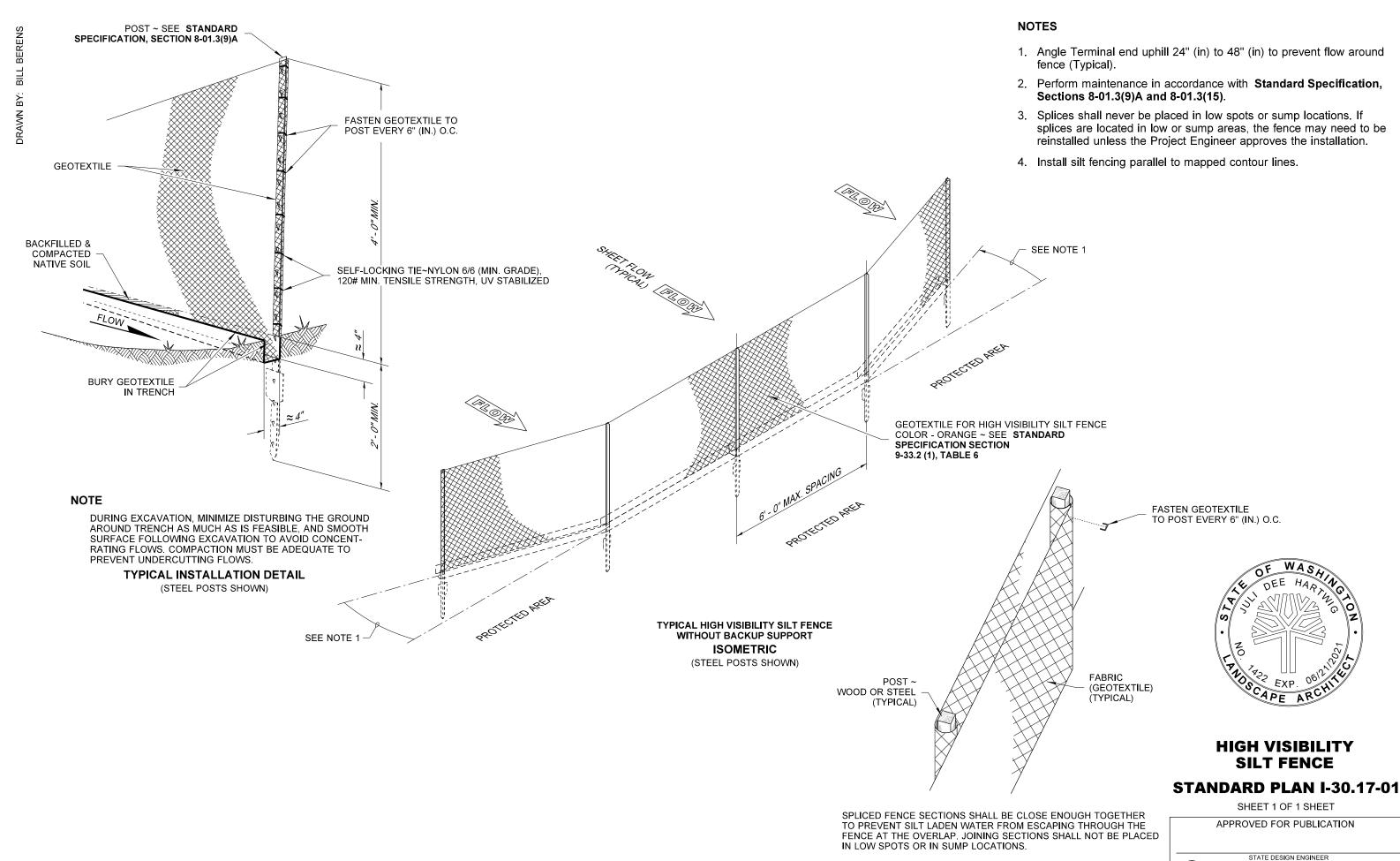
Element #13: Protect Low Impact Development BMPs		
Requirements	Select One or More BMPs	
Protect LID BMPs from compaction, erosion, and sedimentation during construction. LID BMPs include Rain Garden, Dispersion (all kinds), Roof Downspout Full Infiltration, Permeable Pavement, and Perforated Stub-out Connections.	☐ C103 High Visibility Fence ☐ C207 Check Dams (See WSDOT standard detail I-50.20-01) ☐ C233 Silt Fence (See WSDOT standard detail I-30.15-02) ☐ N/A (explain):	
Show location(s) of selected BMP(s) on the Erosion Control Sit	e Plan.	

Refer to the SWMMWW Refer to the Erosion Control Site Plan template

Schedu	lling of BMP Installation	
Prior to	Clearing and Construction	
□ 1. M	ark clearing limits (Element #1)	
🗖 2. Ins	stall or designate stabilized construction entrance (Element #2)	
☐ 3. Ins	stall protection for drainage systems and sediment control (Elements #3, #4, and #7)	
☐ 4. De	esignate staging areas for storage and handling of materials (Element #9)	
With La	and Disturbance, As Areas are Disturbed	
☐ 5. Ins	stall sediment control	
☐ 6. Sta	abilize unworked soils	
🗖 7. Pr	rotect slopes and channels	
□ 8. M	aintain BMPs	
After Co	onstruction	
□ 9. Co	ontinue to maintain BMPs until the site is stabilized with vegetation	
☐ 10. R	Remove BMPs within 30 days after site stabilization	
EROSIO	ON CONTROL SITE PLAN:	
The Ero s	sion Control Site Plan is a drawing which shows the location of the proposed BMPs.	
	the Erosion Control Site Plan on the provided template or on $8\frac{1}{2}$ x 11 or 11 x 17 paper. The site plan ma rawn by hand or drafted electronically.	y be
	sion Control Site Plan must show the location of improvements, grading, filling, and erosion control BM owing listed items on the site plan.	Ps. Show
Applica	nt Use Required Elements	City Use
	Site address and/or parcel number	
	North arrow	
	Legend (if symbols are used)	
	Property boundary and dimensions	
	Adjoining street names	
	Location of highest and lowest elevations and arrows indicating slope (from high to low ground)	
	Areas that are to be cleared and/or graded	
	Cut and fill slopes, indicating top and bottom	
	Locations where upstream water enters the site	
	Existing surface water flow direction(s)	
	Location and direction of flow in all ditches, swales, pipes	
	Identify and locate all areas to be protected or preserved (vegetation protection, LID protection)	
	Identify and locate all BMPs described in the Erosion Control Plan	

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Post-construction soil amendment, if required



Washington State Department of Transportation

SPLICE DETAIL

(WOOD POSTS SHOWN)

- 1. Wattles shall be in accordance with Standard Specification, Section 9-14.5(5). Install Wattles along contours. Installation shall be in accordance with Standard Specification, Section 8-01.3(10).
- 2. Securely knot each end of Wattle. Overlap adjacent Wattle ends 12" (in) behind one another and securely tie together.
- 3. Compact excavated soil and trenches to prevent undercutting. Additional staking may be necessary to prevent undercutting.
- 4. Install Wattle perpendicular to flow along contours.
- 5. Wattles shall be inspected regularly, and immediately after a rainfall produces runoff, to ensure they remain thoroughly entrenched and in contact with the soil.
- 6. Perform maintenance in accordance with **Standard** Specification, Section 8-01.3(15).
- 7. Refer to Standard Specification, Section 8-01.3(16)

WATTLE SPACING TABLE				
TEMPORARY PERMANENT				
8" - 10" OR	10" - 12" DIAM.	10" - 12	2" DIAM.	
SLOPE	MAX. SPACING	SLOPE MAX. SPA		
1H : 1V	5' - 0"	-	-	
2H : 1V	10' - 0''	2H : 1V	5' - 0''	
3H : 1V	15' - 0''	3H : 1V	10' - 0"	
4H : 1V	20' - 0''	4H : 1V	15' - 0"	



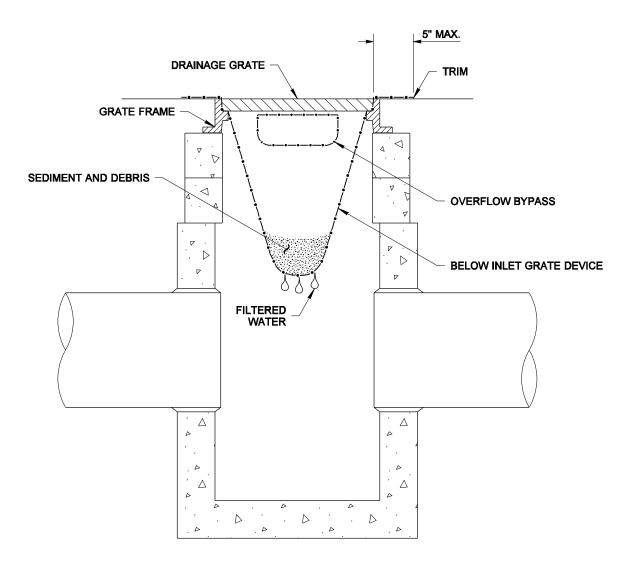
WATTLE INSTALLATION ON SLOPE

STANDARD PLAN I-30.30-02

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

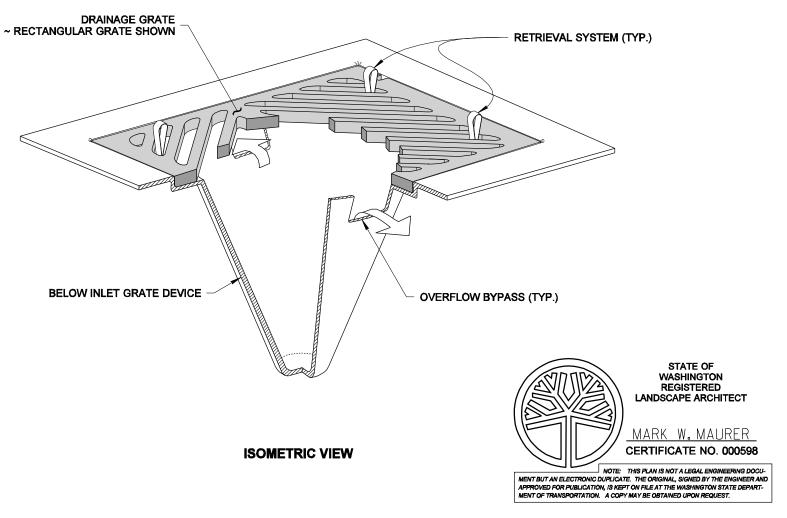
STATE DESIGN ENGINEER



SECTION VIEW NOT TO SCALE

NOTES

- 1. Size the Below Inlet Grate Device (BIGD) for the storm water structure it will service.
- 2. The BIGD shall have a built-in high-flow relief system (overflow bypass).
- 3. The retrieval system must allow removal of the BIGD without spilling the collected material.
- 4. Perform maintenance in accordance with Standard Specification 8-01.3(15).



STORM DRAIN INLET PROTECTION STANDARD PLAN I-40.20-00

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Pasco Bakotich III



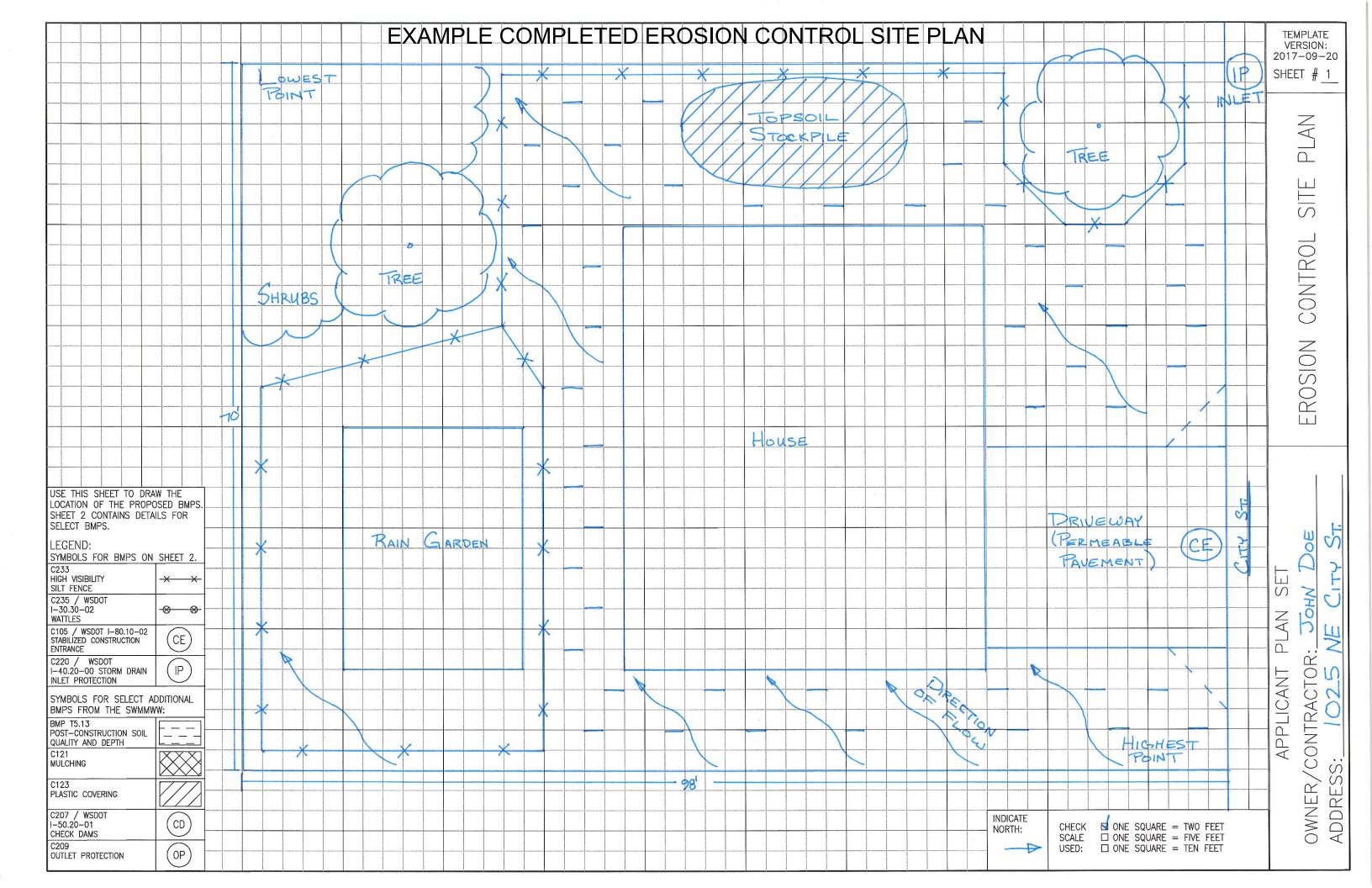


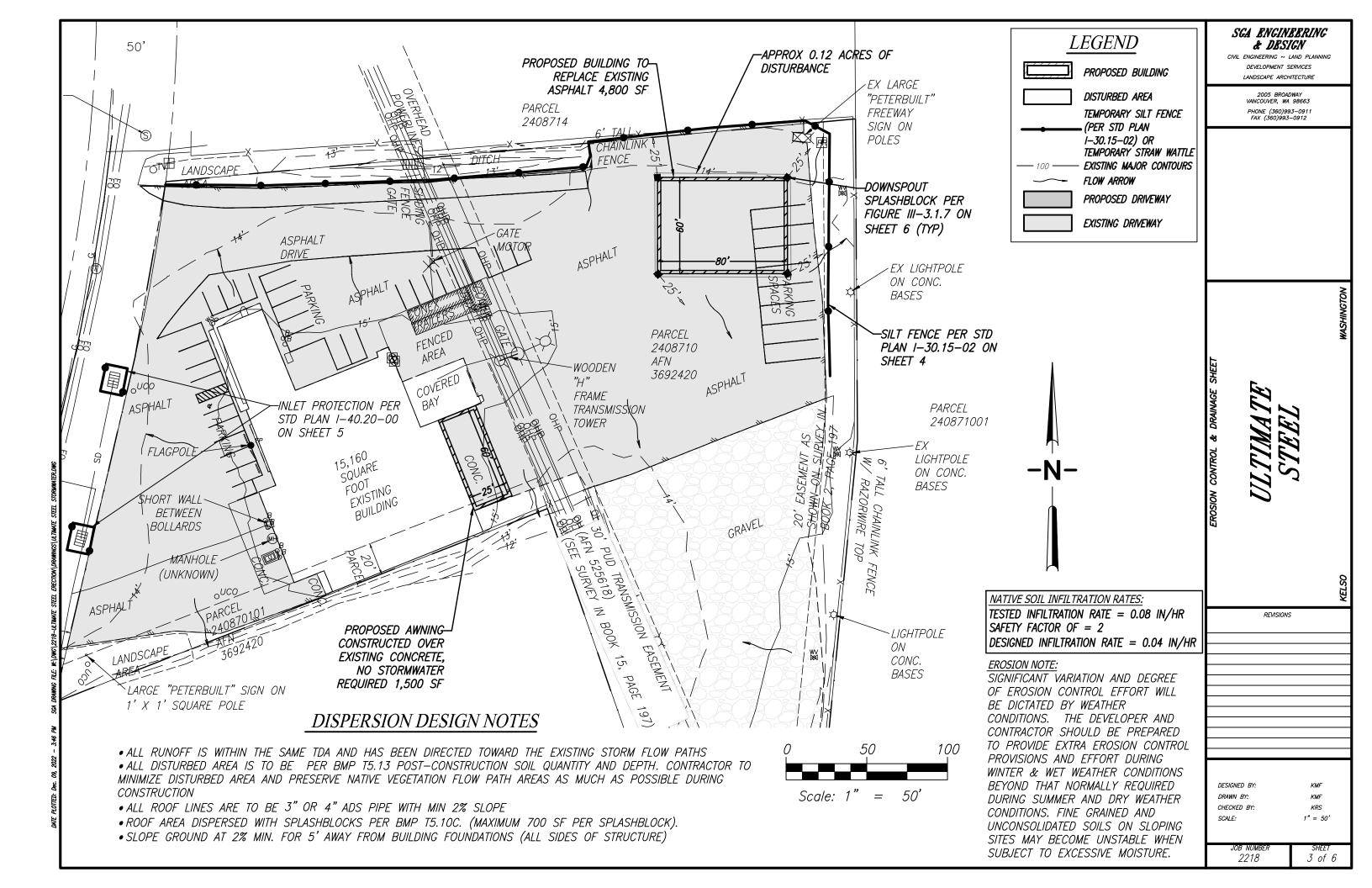
STATE DESIGN ENGINEER

CONTINUOUS LAYER BETWEEN THE GRAVEL/ROCK AND THE NATIVE EARTHEN MATERIAL.

TEMPORARY SEDIMENT TRAP

	TEMPLATE VERSION: 2021-06-03 SHEET # 1
	A PLAN
	S
	CONTROL
	EROSION (
USE THIS SHEET TO DRAW THE LOCATION OF THE PROPOSED BMPS. SHEET 2 CONTAINS DETAILS FOR SELECT BMPS.	
LEGEND: SYMBOLS FOR BMPS ON SHEET 2. C233	
HIGH VISIBILITY SILT FENCE C235 / WSDOT I-30.30-02 WATTLES C105 / WSDOT I-80.10-02 STABILIZED CONSTRUCTION ENTRANCE CE	BLAN SE
C220 / WSDOT I-40.20-00 STORM DRAIN INLET PROTECTION INLET PROTECTION SYMBOLS FOR SELECT ADDITIONAL BMPS FROM THE SWMMWW:	ICANT F
BMP T5.13 POST-CONSTRUCTION SOIL QUALITY AND DEPTH C121 MULCHING	APPLIC,
PLASTIC COVERING C123 PLASTIC COVERING	
C207 / WSDOT I -50.20-01 CD INDICATE NORTH: CHECK ONE SQUARE = C209 OUTLET PROTECTION OP OP	FIVE FEET \





STORM DRAINAGE CONSTRUCTION NOTES

TRACER WIRE SHALL BE INSTALLED ALONG THE TOP OF ALL PIPE. EXTEND THE TRACER WIRE INTO MANHOLES AND ALL OTHER STRUCTURES, THEN UP THE INSIDE WALL OF STRUCTURES AND ATTACH THE WIRE TO THE TOP INSIDE OF THE STRUCTURE. PROVIDE 3 FEET OF COILED TRACER WIRE SLACK ATTACHED TO THE TOP INSIDE OF THE STRUCTURE.

MANHOLES AND TYPE 2 CATCH BASINS SHALL BE ADJUSTED TO GRADE FOLLOWING PAVING. ADJUST TO GRADE USING AN APPROVED FOUR-POINT ADJUSTMENT SYSTEM SUCH AS THE RIMRISER SHIMLESS ADJUSTMENT SYSTEM, OR APPROVED EQUAL.

STORM SEWERS AND APPURTENANCES SHALL BE CLEANED, AIR TESTED AND DEFLECTION TESTED AFTER BACKFILLING. THE LOW PRESSURE AIR TEST METHOD SHALL BE USED. TV INSPECTION SHALL BE PERFORMED AFTER CLEANING, TESTING AND CORRECTIONS ARE COMPLETE. CLEANING, AIR TESTING, INFILTRATION TESTING, DEFLECTION TESTING, AND TV INSPECTION SHALL BE COMPLETED PRIOR TO PAVEMENT RESTORATION OF THE TRENCH. AN ELECTRONIC COPY OF THE TV INSPECTION VIDEO AND THE TV INSPECTION REPORT SHALL BE PROVIDED TO THE INSPECTOR. TOP LIFT OF PAVING SHALL NOT BE PLACED UNTIL THE INSPECTOR HAS APPROVED THE TV INSPECTION.

ALL MANHOLES SHALL BE WATERTIGHT. FOLLOWING BACKFILL AND PRIOR TO FINAL PAVING, PERFORM VACUUM TESTING ON MANHOLES PER THE REQUIREMENTS OF THE SUPPLEMENT TO STANDARD PLAN B-15.20-01.

AS-BUILT DRAWINGS AND TV REPORTS SHALL BE PROVIDED PRIOR TO FINAL ACCEPTANCE.

SECTIONS SHALL BE CLOSE ENOUGH PREVENT SILT LADEN WATER FROM OUGH THE FENCE AT THE OVERLAP. SPLICE DETAIL (WOOD POSTS SHOWN) POST MOOD OR STEEL (TYPICAL) POST ~ SEE STD. SPEC. 8-01.3(9)A

CITY OF KELSO

DEPARTMENT OF
COMMUNITY DEVELOPMENT
& ENGINEERING

STORM DRAIN GENERAL NOTES

CITY ENGINEER APPROVAL: Michael Kardas, P.E. DATE:

KSD-000-21

STANDARD PLAN NO.

MAY 2021

SGA ENGINEERING & DESIGN

CIVIL ENGINEERING ~ LAND PLANNING DEVELOPMENT SERVICES

> 2005 BROADWAY VANCOUVER, WA 98663 PHONE (360)993-0911 FAX (360)993-0912

DESIGNED BY CHECKED BY: SCALE:

2218

4 of 6

KRS

N/A

