Site Improvement Bond Quantity Worksheet

King County

Department of Permitting & Environmental Review
35030 SE Douglas Street, Suite 210
Snoqualmie, Washington 98065-9266
206-296-6600 TTY Relay 711

For alternate formats, call 206-296-6600.

Project Name: _____ **Date:** _____

Location: _____ **Project No.:** _____

Activity No.: _____

Clearing greater than or equal to 5,000 board feet of timber?

_____ yes _____ no

If yes,

Forest Practice Permit Number: _____

(RCW 76.09)

Note: All prices include labor, equipment, materials, overhead and profit. Prices are from RS Means data adjusted for the Seattle area or from local sources if not included in the RS Means database.

Unit prices updated: 02/12/02
Version: 11/26/2008
Report Date: 09/09/2013

Site Improvement Bond Quantity Worksheet

		Reference #	Unit Price	Unit	Quantity	# of Applications	Cost
EROSION/SEDIMENT CONTROL	**Number**						
Backfill & compaction-embankment	**ESC-1**		$ 5.62	CY			
Check dams, 4" minus rock	**ESC-2**	SWDM 5.4.6.3	$ 67.51	Each			
Crushed surfacing 1 1/4" minus	**ESC-3**	WSDOT 9-03.9(3)	$ 85.45	CY			
Ditching	**ESC-4**		$ 8.08	CY			
Excavation-bulk	**ESC-5**		$ 1.50	CY			
Fence, silt	**ESC-6**	SWDM 5.4.3.1	$ 1.38	LF			
Fence, Temporary (NGPE)	**ESC-7**		$ 1.38	LF			
Hydroseeding	**ESC-8**	SWDM 5.4.2.4	$ 0.59	SY			
Jute Mesh	**ESC-9**	SWDM 5.4.2.2	$ 1.45	SY			
Mulch, by hand, straw, 3" deep	**ESC-10**	SWDM 5.4.2.1	$ 2.01	SY			
Mulch, by machine, straw, 2" deep	**ESC-11**	SWDM 5.4.2.1	$ 0.53	SY			
Piping, temporary, CPP, 6"	**ESC-12**		$ 10.70	LF			
Piping, temporary, CPP, 8"	**ESC-13**		$ 16.10	LF			
Piping, temporary, CPP, 12"	**ESC-14**		$ 20.70	LF			
Plastic covering, 6mm thick, sandbagged	**ESC-15**	SWDM 5.4.2.3	$ 2.30	SY			
Rip Rap, machine placed; slopes	**ESC-16**	WSDOT 9-13.1(2)	$ 39.08	CY			
Rock Construction Entrance, 50'x15'x1'	**ESC-17**	SWDM 5.4.4.1	$ 1,464.34	Each			
Rock Construction Entrance, 100'x15'x1'	**ESC-18**	SWDM 5.4.4.1	$ 2,928.68	Each			
Sediment pond riser assembly	**ESC-19**	SWDM 5.4.5.2	$ 1,949.38	Each			
Sediment trap, 5' high berm	**ESC-20**	SWDM 5.4.5.1	$ 17.91	LF			
Sed. trap, 5' high, riprapped spillway berm section	**ESC-21**	SWDM 5.4.5.1	$ 68.54	LF			
Seeding, by hand	**ESC-22**	SWDM 5.4.2.4	$ 0.51	SY			
Sodding, 1" deep, level ground	**ESC-23**	SWDM 5.4.2.5	$ 6.03	SY			
Sodding, 1" deep, sloped ground	**ESC-24**	SWDM 5.4.2.5	$ 7.45	SY			
TESC Supervisor	**ESC-25**		$ 74.75	HR			
Water truck, dust control	**ESC-26**	SWDM 5.4.7	$ 97.75	HR			
WRITE-IN-ITEMS ** (see page 9)**							
				Each			

ESC SUBTOTAL:	$ -
30% CONTINGENCY & MOBILIZATION:	$ -
ESC TOTAL:	$ -
COLUMN:	A

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Site Improvement Bond Quantity Worksheet

				Existing Right-of-Way		Future Public Right of Way & Drainage Facilities		Private Improvements		Quantity Completed (Bond Reduction)*	
		Unit Price	Unit	Quant.	Cost	Quant.	Cost	Quant.	Cost	Quant. Complete	Cost
GENERAL ITEMS	**No.**										
Backfill & Compaction- embankment	GI - 1	$ 5.62	CY								
Backfill & Compaction- trench	GI - 2	$ 8.53	CY								
Clear/Remove Brush, by hand	GI - 3	$ 0.36	SY								
Clearing/Grubbing/Tree Removal	GI - 4	$ 8,876.16	Acre								
Excavation - bulk	GI - 5	$ 1.50	CY								
Excavation - Trench	GI - 6	$ 4.06	CY								
Fencing, cedar, 6' high	GI - 7	$ 18.55	LF								
Fencing, chain link, vinyl coated, 6' high	GI - 8	$ 13.44	LF								
Fencing, chain link, gate, vinyl coated, 2	GI - 9	$ 1,271.81	Each								
Fencing, split rail, 3' high	GI - 10	$ 12.12	LF								
Fill & compact - common barrow	GI - 11	$ 22.57	CY								
Fill & compact - gravel base	GI - 12	$ 25.48	CY								
Fill & compact - screened topsoil	GI - 13	$ 37.85	CY								
Gabion, 12" deep, stone filled mesh	GI - 14	$ 54.31	SY								
Gabion, 18" deep, stone filled mesh	GI - 15	$ 74.85	SY								
Gabion, 36" deep, stone filled mesh	GI - 16	$ 132.48	SY								
Grading, fine, by hand	GI - 17	$ 2.02	SY								
Grading, fine, with grader	GI - 18	$ 0.95	SY								
Monuments, 3' long	GI - 19	$ 135.13	Each								
Sensitive Areas Sign	GI - 20	$ 2.88	Each								
Sodding, 1" deep, sloped ground	GI - 21	$ 7.46	SY								
Surveying, line & grade	GI - 22	$ 788.26	Day								
Surveying, lot location/lines	GI - 23	$ 1,556.64	Acre								
Traffic control crew (2 flaggers)	GI - 24	$ 85.18	HR								
Trail, 4" chipped wood	GI - 25	$ 7.59	SY								
Trail, 4" crushed cinder	GI - 26	$ 8.33	SY								
Trail, 4" top course	GI - 27	$ 8.19	SY								
Wall, retaining, concrete	GI - 28	$ 44.16	SF								
Wall, rockery	GI - 29	$ 9.49	SF								
			SUBTOTAL								

*KCC 27A authorizes only one bond reduction.

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				Existing Right-of-way		Future Public Right of Way & Drainage Facilities		Private Improvements		Bond Reduction*	
		Unit Price	Unit	Quant.	Cost	Quant.	Cost	Quant.	Cost	Quant. Complete	Cost
ROAD IMPROVEMENT	**No.**										
AC Grinding, 4' wide machine < 1000sy	RI - 1	$ 28.00	SY								
AC Grinding, 4' wide machine 1000-2000	RI - 2	$ 15.00	SY								
AC Grinding, 4' wide machine > 2000sy	RI - 3	$ 7.00	SY								
AC Removal/Disposal/Repair	RI - 4	$ 67.50	SY								
Barricade, type I	RI - 5	$ 30.03	LF								
Barricade, type III (Permanent)	RI - 6	$ 45.05	LF								
Curb & Gutter, rolled	RI - 7	$ 17.00	LF								
Curb & Gutter, vertical	RI - 8	$ 12.50	LF								
Curb and Gutter, demolition and disposa	RI - 9	$ 18.00	LF								
Curb, extruded asphalt	RI - 10	$ 5.50	LF								
Curb, extruded concrete	RI - 11	$ 7.00	LF								
Sawcut, asphalt, 3" depth	RI - 12	$ 1.85	LF								
Sawcut, concrete, per 1" depth	RI - 13	$ 1.69	LF								
Sealant, asphalt	RI - 14	$ 1.25	LF								
Shoulder, AC, (see AC road unit price)	RI - 15	$ -	SY								
Shoulder, gravel, 4" thick	RI - 16	$ 15.00	SY								
Sidewalk, 4" thick	RI - 17	$ 35.00	SY								
Sidewalk, 4" thick, demolition and dispos	RI - 18	$ 29.50	SY								
Sidewalk, 5" thick	RI - 19	$ 38.50	SY								
Sidewalk, 5" thick, demolition and dispos	RI - 20	$ 37.50	SY								
Sign, handicap	RI - 21	$ 85.28	Each								
Striping, per stall	RI - 22	$ 5.82	Each								
Striping, thermoplastic, (for crosswalk)	RI - 23	$ 2.38	SF								
Striping, 4" reflectorized line	RI - 24	$ 0.25	LF								

SUBTOTAL _____ _____ _____ _____

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Site Improvement Bond Quantity Worksheet

				Existing Right-of-way		Future Public Right of Way & Drainage Facilities		Private Improvements		Bond Reduction*	
		Unit Price	Unit	Quant.	Cost	Quant.	Cost	Quant.	Cost	Quant. Complete	Cost
ROAD SURFACING (4" Rock = 2.5 base & 1.5" top course) For '93 KCRS (6.5" Rock= 5" base & 1.5" top course)											
For KCRS '93, (additional 2.5" base) add	RS - 1	$ 3.60	SY								
AC Overlay, 1.5" AC	RS - 2	$ 11.25	SY								
AC Overlay, 2" AC	RS - 3	$ 15.00	SY								
AC Road, 2", 4" rock, First 2500 SY	RS - 4	$ 21.00	SY								
AC Road, 2", 4" rock, Qty. over 2500SY	RS - 5	$ 19.00	SY								
AC Road, 3", 4" rock, First 2500 SY	RS - 6	$ 23.30	SY								
AC Road, 3", 4" rock, Qty. over 2500 SY	RS - 7	$ 21.00	SY								
AC Road, 5", First 2500 SY	RS - 8	$ 27.60	SY								
AC Road, 5", Qty. Over 2500 SY	RS - 9	$ 25.00	SY								
AC Road, 6", First 2500 SY	RS - 10	$ 33.10	SY								
AC Road, 6", Qty. Over 2500 SY	RS - 11	$ 30.00	SY								
Asphalt Treated Base, 4" thick	RS - 12	$ 20.00	SY								
Gravel Road, 4" rock, First 2500 SY	RS - 13	$ 15.00	SY								
Gravel Road, 4" rock, Qty. over 2500 SY	RS - 14	$ 8.50	SY								
PCC Road, 5", no base, over 2500 SY	RS - 15	$ 27.00	SY								
PCC Road, 6", no base, over 2500 SY	RS - 16	$ 25.50	SY								
Thickened Edge	RS - 17	$ 8.60	LF								
			SUBTOTAL								

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Site Improvement Bond Quantity Worksheet

Web date: 12/02/2008

				Existing Right-of-way		Future Public Right of Way & Drainage Facilities		Private Improvements		Bond Reduction*	
		Unit Price	Unit	Quant.	Cost	Quant.	Cost	Quant.	Cost	Quant. Complete	Cost
DRAINAGE (CPP = Corrugated Plastic Pipe, N12 or Equivalent)						For Culvert prices, Average of 4' cover was assumed. Assume perforated PVC is same price as solid pipe.					
Access Road, R/D	D - 1	$ 21.00	SY								
Bollards - fixed	D - 2	$ 240.74	Each								
Bollards - removable	D - 3	$ 452.34	Each								
* (CBs include frame and lid)											
CB Type I	D - 4	$ 1,257.64	Each								
CB Type IL	D - 5	$ 1,433.59	Each								
CB Type II, 48" diameter	D - 6	$ 2,033.57	Each								
for additional depth over 4'	D - 7	$ 436.52	FT								
CB Type II, 54" diameter	D - 8	$ 2,192.54	Each								
for additional depth over 4'	D - 9	$ 486.53	FT								
CB Type II, 60" diameter	D - 10	$ 2,351.52	Each								
for additional depth over 4'	D - 11	$ 536.54	FT								
CB Type II, 72" diameter	D - 12	$ 3,212.64	Each								
for additional depth over 4'	D - 13	$ 692.21	FT								
Through-curb Inlet Framework (Add)	D - 14	$ 366.09	Each								
Cleanout, PVC, 4"	D - 15	$ 130.55	Each								
Cleanout, PVC, 6"	D - 16	$ 174.90	Each								
Cleanout, PVC, 8"	D - 17	$ 224.19	Each								
Culvert, PVC, 4"	D - 18	$ 8.64	LF								
Culvert, PVC, 6"	D - 19	$ 12.60	LF								
Culvert, PVC, 8"	D - 20	$ 13.33	LF								
Culvert, PVC, 12"	D - 21	$ 21.77	LF								
Culvert, CMP, 8"	D - 22	$ 17.25	LF								
Culvert, CMP, 12"	D - 23	$ 26.45	LF								
Culvert, CMP, 15"	D - 24	$ 32.73	LF								
Culvert, CMP, 18"	D - 25	$ 37.74	LF								
Culvert, CMP, 24"	D - 26	$ 53.33	LF								
Culvert, CMP, 30"	D - 27	$ 71.45	LF								
Culvert, CMP, 36"	D - 28	$ 112.11	LF								
Culvert, CMP, 48"	D - 29	$ 140.83	LF								
Culvert, CMP, 60"	D - 30	$ 235.45	LF								
Culvert, CMP, 72"	D - 31	$ 302.58	LF								

SUBTOTAL _____ _____ _____ _____

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DRAINAGE CONTINUED	No.	Unit Price	Unit	Existing Right-of-way Quant.	Existing Right-of-way Cost	Future Public Right of Way & Drainage Facilities Quant.	Future Public Right of Way & Drainage Facilities Cost	Private Improvements Quant.	Private Improvements Cost	Bond Reduction* Quant. Complete	Bond Reduction* Cost
Culvert, Concrete, 8"	D - 32	$ 21.02	LF								
Culvert, Concrete, 12"	D - 33	$ 30.05	LF								
Culvert, Concrete, 15"	D - 34	$ 37.34	LF								
Culvert, Concrete, 18"	D - 35	$ 44.51	LF								
Culvert, Concrete, 24"	D - 36	$ 61.07	LF								
Culvert, Concrete, 30"	D - 37	$ 104.18	LF								
Culvert, Concrete, 36"	D - 38	$ 137.63	LF								
Culvert, Concrete, 42"	D - 39	$ 158.42	LF								
Culvert, Concrete, 48"	D - 40	$ 175.94	LF								
Culvert, CPP, 6"	D - 41	$ 10.70	LF								
Culvert, CPP, 8"	D - 42	$ 16.10	LF								
Culvert, CPP, 12"	D - 43	$ 20.70	LF								
Culvert, CPP, 15"	D - 44	$ 23.00	LF								
Culvert, CPP, 18"	D - 45	$ 27.60	LF								
Culvert, CPP, 24"	D - 46	$ 36.80	LF								
Culvert, CPP, 30"	D - 47	$ 48.30	LF								
Culvert, CPP, 36"	D - 48	$ 55.20	LF								
Ditching	D - 49	$ 8.08	CY								
Flow Dispersal Trench (1,436 base+)	D - 50	$ 25.99	LF								
French Drain (3' depth)	D - 51	$ 22.60	LF								
Geotextile, laid in trench, polypropylene	D - 52	$ 2.40	SY								
Infiltration pond testing	D - 53	$ 74.75	HR								
Mid-tank Access Riser, 48" dia, 6' deep	D - 54	$ 1,605.40	Each								
Pond Overflow Spillway	D - 55	$ 14.01	SY								
Restrictor/Oil Separator, 12"	D - 56	$ 1,045.19	Each								
Restrictor/Oil Separator, 15"	D - 57	$ 1,095.56	Each								
Restrictor/Oil Separator, 18"	D - 58	$ 1,146.16	Each								
Riprap, placed	D - 59	$ 39.08	CY								
Tank End Reducer (36" diameter)	D - 60	$ 1,000.50	Each								
Trash Rack, 12"	D - 61	$ 211.97	Each								
Trash Rack, 15"	D - 62	$ 237.27	Each								
Trash Rack, 18"	D - 63	$ 268.89	Each								
Trash Rack, 21"	D - 64	$ 306.84	Each								

SUBTOTAL _____ _____ _____ _____

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		Unit Price	Unit	Quant.	Price	Quant.	Cost	Quant.	Cost	Quant. Complete	Cost
PARKING LOT SURFACING											
	No.										
2" AC, 2" top course rock & 4" borrow	PL - 1	$ 21.00	SY								
2" AC, 1.5" top course & 2.5" base cour	PL - 2	$ 28.00	SY								
4" select borrow	PL - 3	$ 4.55	SY								
1.5" top course rock & 2.5" base course	PL - 4	$ 11.41	SY								
UTILITY POLES & STREET LIGHTING	Utility pole relocation costs must be accompanied by **Franchise Utility's Cost Statement**										
Utility Pole(s) Relocation	UP-1	Lump Sum									
Street Light Poles w/Luminaires	UP-2		Each								
WRITE-IN-ITEMS											
(Such as detention/water quality vaults.)	No.										
	WI - 1		Each								
	WI - 2		SY								
	WI - 3		CY								
	WI - 4		LF								
	WI - 5		FT								
	WI - 6										
	WI - 7										
	WI - 8										
	WI - 9										
	WI - 10										

SUBTOTAL				
SUBTOTAL (SUM ALL PAGES):				
30% CONTINGENCY & MOBILIZATION:				
GRANDTOTAL:				
COLUMN:	B	C	D	E

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Site Improvement Bond Quantity Worksheet

Web date: 12/02/2008

Original bond computations prepared by:

Name: _____ **Date:** _____

PE Registration Number: _____ **Tel. #:** _____

Firm Name: _____

Address: _____ **Project No:** _____

ROAD IMPROVEMENTS & DRAINAGE FACILITIES FINANCIAL GUARANTEE REQUIREMENTS

		PERFORMANCE BOND* AMOUNT	BOND* AMOUNT REQUIRED AT RECORDING OR TEMPORARY OCCUPANCY ***	PUBLIC ROAD & DRAINAGE MAINTENANCE/DEFECT BOND*
Stabilization/Erosion Sediment Control (ESC)	(A)	$ -		
Existing Right-of-Way Improvements	(B)	$ -		
Future Public Right of Way & Drainage Facilities	(C)	$ -		
Private Improvements	(D)	$ -		
Calculated Quantity Completed			(E) $ -	
Total Right-of Way and/or Site Restoration Bond*/** (First $7,500 of bond* shall be cash.)	(A+B)	$ -		
Performance Bond* Amount (A+B+C+D) = TOTAL	(T)	$ - Minimum bond* amount is $2000.	T x 0.30 $ - OR	
Reduced Performance Bond* Total ***			(T-E) $ - Use larger of Tx30% or (T-E)	
Maintenance/Defect Bond* Total				(B+C) x 0.25 = $ -

NAME OF PERSON PREPARING BOND* REDUCTION: _____ Date: _____

* **NOTE:** The word "bond" as used in this document means a financial guarantee acceptable to King County.

** **NOTE:** KCC 27A authorizes right of way and site restoration bonds to be combined when both are required. The restoration requirement shall include the total cost for all TESC as a minimum, not a maximum. In addition, corrective work, both on- and off-site needs to be included. Quantities shall reflect worse case scenarios not just minimum requirements. For example, if a salmonid stream may be damaged, some estimated costs for restoration needs to be reflected in this amount. The 30% contingency and mobilization costs are computed in this quantity.

*** **NOTE:** Per KCC 27A, total bond amounts remaining after reduction shall not be less than 30% of the original amount (T) or as revised by major design changes.

REQUIRED BOND* AMOUNTS ARE SUBJECT TO REVIEW AND MODIFICATION BY DDES

Check out the DDES Web site at www.kingcounty.gov/permits