

MEMORANDUM

TO: Board of Managers
FROM: Scott Sobiech, PE, District Engineer
DATE: May 27, 2022
RE: Permit 2022-005: Cunningham Second Request for Reduced Financial assurance

Proposed Board Action

Manager _____ moved and Manager _____ seconded adoption of the following resolutions based on the information that follows and the presentation of the matter at the June 1, 2022 meeting of the managers:

Resolved that the financial assurance for application for Permit 2022-005 be reduce from \$186,897 as approved at the May 4, 2022 meeting of the managers to \$107,649.

Upon vote, the resolutions were adopted, _____ [VOTE TALLY].

At the May 4, 2022 meeting, the Board of Managers conditionally approved permit 2022-005 for the Cunningham Second Addition. The applicant is proposing a lot split subdividing an existing single residential lot into two lots with construction of a new home on each lot. Two biofiltration basins with elevated underdrain to promote infiltration are proposed to provide stormwater quantity, volume and quality control. The following table present a compliance summary of the applicable regulatory requirements.

Applicable Rule Conformance Summary from May 4, 2022 Permit Report

Rule	Issue	Conforms to RBPCWD Rules?	Comments
C	Erosion Control Plan	Yes	
D	Wetland and Creek Buffers	See comment.	See rule-specific permit condition D1 and D1 related to prevention of aquatic invasive species transfer and recordation of buffer maintenance declaration.
J	Stormwater Management	Rate	Yes.
		Volume	See comment.
		Water Quality	Yes.

Rule	Issue	Conforms to RBPCWD Rules?	Comments
	Low Floor Elev.	See comment.	See rule-specific permit condition J2 related to adequate separation to groundwater for existing habitable structures.
	Maintenance	See comment.	See rule-specific permit condition J3 related to recordation of stormwater facility maintenance declaration.
	Chloride Management	Yes.	
	Wetland Protection	Yes.	
L	Permit Fee	Yes.	\$3,000 received February 8, 2022. The applicant must replenish the permit fee deposit to the original amount due before the permit will be issued. As of April 28, 2022 the amount due is \$4,165.80.
M	Financial Assurance	See comment.	The financial assurance is calculated at \$186,897

Since the Board's conditional approval, the applicant has been working with RPBCWD to fulfill the conditions of approval (infiltration testing, low floor analysis for adjacent structure, a maintenance declaration' financial assurance). On May 24, 2022, the applicant submitted a written request asking the Board of Managers to reconsider the financial assurance amount for this project as follows:

- Adjust the financial assurance computation based on the revised engineer's opinion of probable cost (OPC) of the stormwater management facilities.

Rule M: Financial Assurance:

Rule M indicates that the District may require a permit bond, letter of credit or other financial assurance in a form approved by the District for an activity regulated under these rules. The originally submitted OPC was revised by changes to the unit price of materials used in the development of the revised OPC. The most significant change in unit prices was a reduction in the cost of riprap used on the project. Both versions of the engineer's OPC are attached for reference. The RPBCWD engineer concurs with the applicant's revised engineer's OPC for the two biofiltration basin.

	Unit	Unit Cost	# of Units	May 4, 2022 Approved Financial Assurance	Recommended Adjusted Financial Assurance
Rules C: Silt fence:	LF	\$2.50	1,800	\$4,500	\$4,500
Inlet protection	EA	\$100	0	0	0
Rock Entrance	EA	\$250	1	\$250	\$250
Restoration	Ac	\$2,500	1.9	\$4,750	\$4,750
Rules D: Wetland and Creek Buffer	LS	\$5,000	1	\$5,000	\$5,000

	Unit	Unit Cost	# of Units	May 4, 2022 Approved Financial Assurance	Recommended Adjusted Financial Assurance
Rules J: Stormwater Management Two biofiltration basins with elevated underdrain to promote infiltration: 125% of engineer's opinion of cost	EA	125% OPC	1	\$155,406	\$83,363
Contingency (10%)		10%		\$16,991	\$9,786
Total Financial Assurance				\$186,897	\$107,649

Shared Road

ITEM NO.	DESCRIPTION	UNIT	ESTIM. QTY.	ENGINEER ESTIMATE	
				UNIT PRICE	AMNT. (\$)
CIVIL					
C1	CLEARING/GRUBBING VEGETATION	SY	320	\$5.00	\$1,600.00
C2	EXISTING PAVEMENT REMOVAL	SF	200	\$6.00	\$1,200.00
C3	COMMON EXCAVATION	CY	180	\$3.50	\$630.00
C4	SUBGRADE/FINE GRADING	SY	170	\$1.00	\$170.00
C5	24" AGGREGATE BASE	SY	170	\$17.00	\$2,890.00
C6	BITUMINOUS ASPHALT @ 3.5"	SY	500	\$15.00	\$7,500.00
TOTAL ENGINEER ESTIMATE					\$11,190.00

Utilities, Hydrant, & Services

ITEM NO.	DESCRIPTION	UNIT	ESTIM. QTY.	ENGINEER ESTIMATE	
				UNIT PRICE	AMNT. (\$)
CIVIL					
C1	COMMON EXCAVATION	CY	2100	\$3.50	\$7,350.00
C4	6" SDR-26 PVC SANITARY W/ BEDDING	LF	360	\$25.00	\$9,000.00
C5	SANITARY CLEANOUT	EA	4	\$200.00	\$800.00
C6	1" DIP WATER SERVICE W/ BEDDING	LF	360	\$20.00	\$7,200.00
C7	CURB STOP & BOX	EA	2	\$500.00	\$1,000.00
C8	6" HYDRANT PVC	LF	35	\$45.00	\$1,575.00
C9	HYDRANT, VALVE BOX, GATE VALVE, ETC.	EA	1	\$5,000.00	\$5,000.00
C10	CONN. TO SAN	EA	2	\$2,500.00	\$5,000.00
C11	CONN. TO WATER	EA	3	\$2,500.00	\$7,500.00
C12	STREET REPAIR	SF	100	\$10.00	\$1,000.00
TOTAL ENGINEER ESTIMATE					\$45,425.00

CIVIL ENGINEERS ESTIMATE (Road & Utilities) \$56,615.00

Biofiltration Basin Lot 1

ITEM NO.	DESCRIPTION	UNIT	ESTIM. QTY.	ENGINEER ESTIMATE	
				UNIT PRICE	AMNT. (\$)
STORMWATER					
SW1	COMMON EXCAVATION	CY	3500	\$3.50	\$12,250.00
SW2	TURF REINFORCEMENT MAT	SF	800	\$3.50	\$2,800.00
SW3	MN MEDIA MIX C BIOFILTER MIX - 24" COARSE FILTER AGGREGATE, 7.2" DEPTH, 1-1.5" WASHED ROCK, SEE PLAN	CY	88	\$35.00	\$3,080.00
SW4	6" PVC SCH 40 DRAIN PIPE PERFORATED	CY	27	\$20.00	\$540.00
SW5	6" PVC SCH 40 DRAIN PIPE PERFORATED	LF	100	\$25.00	\$2,500.00
SW6	6" PVC SCH 40 DRAIN PIPE SOLID	LF	5	\$25.00	\$125.00
SW7	6" CLEANOUT	EA	6	\$30.00	\$180.00
SW8	12" HDPE	LF	30	\$50.00	\$1,500.00
SW9	12" HDPE PERFORATED	LF	30	\$50.00	\$1,500.00
SW10	CLASS 3 RIPRAP	CY	6.5	\$250.00	\$1,625.00
SW11	4' MANHOLE	EA	2	\$3,500.00	\$7,000.00
TOTAL ENGINEER ESTIMATE					\$33,100.00

Biofiltration Basin Lot 2

ITEM NO.	DESCRIPTION	UNIT	ESTIM. QTY.	ENGINEER ESTIMATE	
				UNIT PRICE	AMNT. (\$)
STORMWATER					
SW1	COMMON EXCAVATION	CY	4000	\$3.50	\$14,000.00
SW2	TURF REINFORCEMENT MAT	SF	800	\$3.50	\$2,800.00
SW3	MN MEDIA MIX C BIOFILTER MIX - 24" COARSE FILTER AGGREGATE, 7.2" DEPTH, 1-1.5" WASHED ROCK, SEE PLAN	CY	69	\$35.00	\$2,415.00
SW4	6" PVC SCH 40 DRAIN PIPE PERFORATED	CY	21	\$20.00	\$420.00
SW5	6" PVC SCH 40 DRAIN PIPE PERFORATED	LF	85	\$25.00	\$2,125.00
SW6	6" PVC SCH 40 DRAIN PIPE SOLID	LF	15	\$25.00	\$375.00
SW7	6" CLEANOUT	EA	6	\$30.00	\$180.00
SW8	12" HDPE	LF	23	\$50.00	\$1,150.00
SW9	12" HDPE PERFORATED	LF	30	\$50.00	\$1,500.00
SW10	CLASS 3 RIPRAP	CY	6.5	\$250.00	\$1,625.00
SW11	4' MANHOLE	EA	2	\$3,500.00	\$7,000.00
TOTAL ENGINEER ESTIMATE					\$33,590.00

STORMWATER ENGINEERS ESTIMATE (Biofilters 1 and 2) \$66,690.00

TOTAL ENGINEERS ESTIMATE (ALL COMPONENTS LISTED) \$123,305.00

BIOFILTRATION BASIN LOT 1

ITEM NO.	DESCRIPTION	UNIT	ESTIM.	ENGINEER ESTIMATE	
			QTY.	UNIT PRICE	AMNT. (\$)
	STORMWATER				
SW1	COMMON EXCAVATION	CY	3500	\$3.00	\$10,500.00
SW2	TURF REINFORCEMENT MAT	SF	800	\$3.50	\$2,800.00
SW3	MN MEDIA MIX C BIOFILTER MIX - 24"	CY	88	\$35.00	\$3,080.00
SW4	COARSE FILTER AGGREGATE, 7.2" DEPTH, 1-1.5" WASHED ROCK, SEE PLAN	CY	27	\$80.00	\$2,160.00
SW5	6" PVC SCH 40 DRAIN PIPE PERFORATED	LF	100	\$20.00	\$2,000.00
SW6	6" PVC SCH 40 DRAIN PIPE SOLID	LF	5	\$20.00	\$100.00
SW7	6" CLEANOUT	EA	6	\$130.00	\$780.00
SW8	12" HDPE	LF	30	\$250.00	\$7,500.00
SW9	12" HDPE PERFORATED	LF	30	\$100.00	\$3,000.00
SW10	CLASS 3 RIPRAP	CY	6.5	\$3,500.00	\$22,750.00
SW11	4' MANHOLE	EA	2	\$3,500.00	\$7,000.00
	TOTAL ENGINEER ESTIMATE				\$61,670.00

BIOFILTRATION BASIN LOT 2

ITEM NO.	DESCRIPTION	UNIT	ESTIM.	ENGINEER ESTIMATE	
			QTY.	UNIT PRICE	AMNT. (\$)
	STORMWATER				
SW1	COMMON EXCAVATION	CY	4000	\$3.00	\$12,000.00
SW2	TURF REINFORCEMENT MAT	SF	800	\$3.50	\$2,800.00
SW3	MN MEDIA MIX C BIOFILTER MIX - 24"	CY	69	\$35.00	\$2,415.00
SW4	COARSE FILTER AGGREGATE, 7.2" DEPTH, 1-1.5" WASHED ROCK, SEE PLAN	CY	21	\$85.00	\$1,785.00
SW5	6" PVC SCH 40 DRAIN PIPE PERFORATED	LF	85	\$80.00	\$6,800.00
SW6	6" PVC SCH 40 DRAIN PIPE SOLID	LF	15	\$20.00	\$300.00
SW7	6" CLEANOUT	EA	6	\$20.00	\$120.00
SW8	12" HDPE	LF	23	\$70.00	\$1,610.00
SW9	12" HDPE PERFORATED	LF	30	\$1,100.00	\$33,000.00
SW10	CLASS 3 RIPRAP	CY	6.5	\$250.00	\$1,625.00
SW11	4' MANHOLE	EA	2	\$100.00	\$200.00
	TOTAL ENGINEER ESTIMATE				\$62,655.00

TOTAL ENGINEERS ESTIMATE (ALL BMPS) \$124,325.00