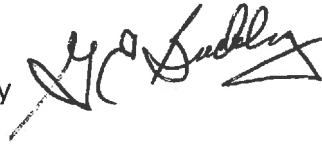


## MEMORANDUM

**To:** City Council

**From:** Gregory E. Buckley  
City Manager



**Date:** July 26, 2024

**Subject:** Sandy Bay Subdivision Phase 3

Bids were opened on July 10 for Phase 3 infrastructure construction at the Sandy Bay Highlands residential subdivision.

As was reported by City Engineer Matt Heckenlaible at the July 15 Council meeting, seven bids were received, with the low bid from Advance Construction of Green Bay. That bid came in well below the engineer's cost estimate.

Copies of the bid tabulation and Matt's memo from the July 15 meeting are attached.

The project as bid includes:

- Installation of water, sanitary and storm sewer mains
- Laterals to each lot for each of these utilities
- Construction of stormwater management features
- Grading and graveling of the streets

Additional costs to be incurred, not included in this contract, include:

- Installation of underground electric, by the City's utility crews and contractors
- installation of gas mains and services, by WPS
- Telecom facilities, by the telecom companies
- Completion of the storm water features, including plantings, to be bid in 2025
- installation of low profile concrete curbing and the first layer of asphalt paving (base Course, like is in place in Phase 2), to be bid separately for installation in 2025 or 2026

The bids opened on July 15 were for a "base bid" that encompasses an area that will include 11 new lots, and for an "add alternate" that would expand the project scope to create 15 additional lots for a total of 26 new lots.

The City Engineer and I are recommending award to the low bidder, Advance Construction, of a contract for the "base bid plus add alternate," for a few reasons:

1. Development activity at the subdivision is proceeding at a rapid clip; at the current pace, 11 more lots would be about a 2-year supply. (NOTE: there is currently only one lot still available in Phases 1 and 2.)
2. All permitting is in place, and the design work is done. The regulatory environment two or three years from now might require additional permitting and redesign—more time, more costs.
3. Including more lots under this contract results in an average cost per lot (with all costs taken into account) that is about **\$8,500 lower** than under the base bid alone.

\$1 million was budgeted for this project in the City's 2024 capital budget; \$650,000 in borrowing for water, sanitary sewer and street work, \$350,000 in cash from the storm water utility. That will be enough to cover the contract that is in front of City Council, with about \$54,000 left over to apply to engineering and contingency. But, clearly, completion of all of the infrastructure work for the "base bid plus add alternate" will require the commitment of more resources in the 2025 budget: about \$700,000, based on current bid prices plus estimates for future work. That is why we are also asking that the Council vote on a resolution indicating the intent to do the additional borrowing needed to complete the larger-scale project.

Development of new single family housing and the resulting tax base, population growth/retention and disposable income it brings to the community is a high priority for the City. While we have struggled of late in pursuing new multi-family housing development, new single family housing at this City-developed subdivision has been a bright spot—we have momentum, and we need to keep that momentum going. Thus, the recommendation to award the base bid plus the add alternate.

If this next phase of the subdivision is going to be handled like Phases 1 and 2, the Council will deed the platted lots to the Community Development Authority, which will enter into a realtor listing agreement, set prices for individual lots and oversee lot sales.

Due to construction costs, lot prices will need to be substantially higher in this new phase of the subdivision. Taking all costs into account, average cost per lot under the recommended alternative will be just over \$65,000.

I recommend reducing that cost somewhat by having the stormwater utility be reimbursed from lot sales only for the cost of "pipes in the ground"—the storm sewer mains and laterals. That's \$272,656, or \$300,000 after adding 10 percent for engineering and contingency. I recommend that the stormwater utility not be repaid for the cost of the "added stormwater

management costs” required to comply with current stormwater regs—the biofilters and swales that will manage site runoff for this new development. Those costs total \$198,000 (about \$220,000 with engineering and contingency)—not charging them against the project shaves about \$8,500 off the cost of the average lot, bringing it to \$56,806.

Rationale: this neighborhood will be built to current stormwater standards and will not require “retrofitting” with stormwater measures like those the stormwater utility is paying for in other, already developed areas of the city. Yet, residents in this “new neighborhood” will pay the same storm water charges in support of those measures as everyone else in the city.

Taking the cost of stormwater management features out of the equation, we should be able to sell “plain vanilla” lots in this new phase for \$50,000 to \$55,000, a price that I am told is workable for developers who have built spec homes in the subdivision. In fact, if the City/CDA is willing to continue the incentive of selling lots for spec homes for \$1 down, with the balance due on sale of the house (or within 2 years, if no sale), I have reason to believe we could “pre-sell” several lots in Phase 3.

As for realtor commissions, which are a necessary cost for those lots that are sold to individuals, versus spec home builders, I recommend that the City allocate some of the money from economic development revenue sources, like industrial park lot sales and building rentals, to offset the cost of those commissions. Such revenues have been used in recent years to support our Community Development budget, but it is time that some portion of that budget be funded through the General Fund.

The Council could also consider incurring those commissions as a project cost, reducing the reimbursement to the City from each lot sale, in consideration of the new property taxes that the City realizes from each new home at the subdivision. The City’s share of those new property taxes averages \$2,500 per home, based on the values of homes constructed to date at Sandy Bay Highlands.

I look forward to our discussion on Monday night, and to seeing this project continue to move forward.



**TWO  
RIVERS**  
WISCONSIN

**PUBLIC WORKS**  
**Engineering Division**

1717 E. Park Street  
P.O. BOX 87  
Two Rivers, WI 54241-0087



## Memorandum

*Department of Public Works*

Date: July 15, 2024

To: City Council  
Greg Buckley, City Manager

From: Matthew R Heckenlaible, PE, Public Works Director / City Engineer

Re: Award of Contract 3-2024  
Sandy Bay Highlands Phase III - Construction

The bid summary for the above-mentioned contract was included within the Council packet for the July 15<sup>th</sup>, 2024 meeting.

**Contract 3-2024: Sandy Bay Highlands Phase III Construction** is for underground utilities (sanitary sewer, watermain, storm sewer, extending sanitary, water and storm services into the lots, road grading and graveling along with the excavation of the required stormwater management features. Finalizing the roadways with curb and gutter, the first lift of asphalt and the restoration of the stormwater features is anticipated to be done under separate contracts in 2025.

Contract 3-2024 was bid as two parts. The primary component was to complete the underground utilities, grading and graveling, a appropriate stormwater management work of approximately 400 feet of Orchard Lane and Rawley Court, with this work being completed by Thanksgiving.

The Alternative Add item was to complete the remaining underground utility work, grading and graveling, and appropriate stormwater management work for the remainder of Orchard Lane and approximately 650 feet of Sandy Ridge Drive west of Orchard Lane with this work being completed by June 3, 2025.

Seven qualified bids were received and opened as part of the bid opening process with the low responsive Base bid and Alternative Add bid coming from Advance Construction, Inc. in the amounts of \$463,895.50 and \$481,834.50 for a total bid of \$945,730.00.

The engineering estimate for the contract was \$533,000.00 and \$591,000.00 for the Alternative Add bid for a total engineering estimate of \$1,124,000.00.





**TWO  
RIVERS**  
WISCONSIN

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During the preparation of the 2024 budget, \$1,000,000 was set aside for construction in this phase of the development. It was intended to cover the costs of the Base bid, and in this case, the Alternative Add bid as well.

Additional costs will be incurred to make the lots buildable that include the future curb and gutter, first lift of asphalt, the finalization of the stormwater management features, installation of electric, gas and tele/com utilities along with engineering and contingences.

The base bid would yield 11 sellable lots at an estimated final cost of \$811,200, while the base bid and alternative addition bid would yield 26 sellable lots at an estimated final cost of \$1,695,000. Work is to be completed by November 15, 2024, for the Base Bid and June 30, 2025, for the remaining Alternate Bid items.

The recommendation would be to award the Base Bid plus Alternate Add Bid to Advance Construction in the amount of \$945,730.00.





**SUMMARY OF BIDS CONTRACT 3-2024  
SANDY BAY HIGHLANDS PHASE 3 UTILITY AND STREET GRADING  
BIDS OPENED July 10, 2024 10:00am**

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNITS	Advance Construction, Inc 21441 Wooddale Ave Green Bay, WI 54913			Alfonso Excavation PO Box 117 Valders, WI 54245			Dorner, Inc E506 Luxembourg Rd, PO Box 129 Luxemburg, WI 54217			Kruzek Construction Incorporated 3636 Kewaunee Road Green Bay, WI 54911			Mammoth Construction 1616 Wollmer Street Manitowish, WI 54220			PTS Contractors, Inc. 4075 Eaton Road Green Bay, WI 54911-9340			Vinton Construction Company 1322 33rd Street; PO 137 Two Rivers, WI 54241		
				BID PRICE	EXTENDED AMOUNT	BID PRICE	EXTENDED AMOUNT	BID PRICE	EXTENDED AMOUNT	BID PRICE	EXTENDED AMOUNT	BID PRICE	EXTENDED AMOUNT	BID PRICE	EXTENDED AMOUNT	BID PRICE	EXTENDED AMOUNT	BID PRICE	EXTENDED AMOUNT	BID PRICE	EXTENDED AMOUNT	BID PRICE	EXTENDED AMOUNT	
201.0120	Clearing	5	STA	1,000.00	5,000.00	650.00	3,250.00	1,742.00	8,710.00	1,020.00	5,100.00	1,000.00	5,500.00	1,025.00	5,125.00	1,000.00	5,000.00							
201.0220	Grubbing	5	STA	800.00	4,000.00	450.00	2,250.00	1,531.00	7,655.00	1,020.00	5,100.00	1,100.00	5,500.00	1,025.00	5,125.00	1,000.00	5,000.00							
205.0100	Excavation Common	900	CY	8.00	7,200.00	8.50	7,650.00	27.20	24,480.00	26.40	23,760.00	26.00	23,400.00	26.00	23,400.00	26.00	23,400.00							
305.0110	Base Aggregate Dense 3/4-Inch	1730	TON	15.60	26,988.00	17.25	29,842.50	18.70	32,351.00	18.30	31,659.00	17.95	31,053.50	18.00	31,140.00	17.75	30,707.50							
305.0111	Base Aggregate Dense 3/8-Inch	340	TON	15.60	5,304.00	20.00	6,800.00	21.90	7,446.00	21.25	7,225.00	20.95	7,123.00	21.00	7,140.00	20.75	7,055.00							
311.0110	Breaker Run	865	TON	15.60	13,494.00	17.25	14,921.25	19.80	17,127.00	19.00	16,435.00	18.95	16,391.75	19.00	16,435.00	18.75	16,218.00							
608.0308	Storm Sewer Pipe PVC 8-Inch	400	LF	43.00	17,200.00	41.25	16,500.00	42.00	17,160.00	39.00	15,600.00	62.00	24,800.00	47.00	18,800.00	57.00	22,800.00							
608.0310	Storm Sewer Pipe 10-Inch	42	LF	47.50	1,995.00	52.75	2,215.50	59.00	2,478.00	50.50	2,121.00	65.00	2,730.00	80.00	3,360.00	69.00	2,898.00							
608.0312	Storm Sewer Pipe 12-Inch	200	LF	55.00	11,000.00	58.00	11,600.00	55.00	11,000.00	56.50	11,300.00	67.00	13,400.00	64.00	12,800.00	74.00	14,800.00							
608.0313	Storm Sewer Pipe 12-Inch, Direct, Bored	465	LF	90.00	41,850.00	170.00	79,050.00	33.00	24,645.00	30.00	17,025.00	155.00	72,075.00	150.00	69,750.00	150.00	69,750.00							
608.0315	Storm Sewer Pipe 15-Inch	152	LF	59.00	8,968.00	62.00	9,424.00	55.00	8,360.00	67.25	10,222.00	75.00	11,400.00	67.00	10,184.00	77.00	11,704.00							
608.0318	Storm Sewer Pipe 18-Inch	140	LF	60.00	8,400.00	63.50	8,890.00	54.00	7,560.00	69.50	9,730.00	79.00	11,060.00	68.00	9,520.00	85.00	11,900.00							
608.6006	Storm Sewer Lateral PVC 4-Inch	330	LF	35.00	11,550.00	45.00	14,850.00	35.00	11,550.00	28.75	9,487.50	45.00	14,850.00	38.00	12,540.00	64.00	21,120.00							
611.1230	Catch Basin 2x3-FT	4	EACH	2,775.00	11,100.00	2,500.00	10,000.00	2,144.00	8,536.00	2,230.00	9,000.00	2,600.00	7,800.00	1,880.00	5,640.00	2,100.00	8,400.00							
611.2003	Manholes 4-FT Diameter	3	EACH	2,000.00	6,000.00	3,000.00	9,000.00	3,118.00	9,354.00	3,000.00	9,000.00	2,600.00	7,800.00	2,335.00	7,005.00	2,000.00	6,000.00							
611.2004	Manholes 4-FT Diameter	6	EACH	3,200.00	19,200.00	3,500.00	21,000.00	3,105.00	18,630.00	3,000.00	9,000.00	3,000.00	9,000.00	4,000.00	12,000.00	2,937.00	17,622.00							
522.1018	Endwall, 18" RCCP	1	EACH	1,200.00	1,200.00	1,400.00	1,400.00	2,322.00	2,322.00	2,866.66	2,866.66	3,750.00	3,750.00	1,100.00	1,100.00	2,000.00	2,000.00							
625.0500	Savaged Topsoil	2110	SY	2.00	4,220.00	2.00	4,220.00	5.40	11,394.00	5.10	10,761.00	5.25	11,077.50	5.20	10,972.00	5.09	10,739.00							
630.0140	Seeding, Fertilizer, and Mulching	2110	SY	1.75	3,692.50	4.00	8,400.00	2.60	5,486.00	4.00	8,400.00	8.00	16,800.00	1.80	3,798.00	1.30	2,743.00							
628.1504	Silt Fence	1800	LF	1.90	3,420.00	3.00	5,400.00	2.50	4,500.00	2.00	3,600.00	2.00	3,600.00	2.30	4,140.00	2.25	4,050.00							
628.1105	Ditch Checks	5	EACH	60.00	300.00	95.00	475.00	121.00	605.00	90.00	450.00	45.00	225.00	112.00	560.00	150.00	750.00							
628.7005	Inlet Protection Type A	4	EACH	110.00	440.00	120.00	480.00	90.00	360.00	360.00	1,080.00	400.00	1,600.00	153.00	612.00	150.00	600.00							
628.7560	Tracking Pads	1	EACH	1,200.00	1,200.00	3,000.00	3,000.00	2,112.00	2,112.00	2,000.00	2,000.00	2,000.00	2,000.00	2,045.00	2,045.00	2,000.00	2,000.00							
700.0010	Sanitary Sewer Laterals, 4-Inch PVC	330	LF	43.00	14,190.00	120.00	39,600.00	47.00	15,510.00	65.00	57,850.00	59.00	52,510.00	78.00	69,420.00	58.00	51,620.00							
700.0080	Sanitary Sewer, 8-Inch PVC	890	LF	98.00	87,240.00	116.00	103,240.00	65.00	57,850.00	67.00	57,850.00	126.51	1,391.61	220.00	2,420.00	105.00	1,025.00							
700.0180	Sanitary Sewer Lateral, W/ve	11	EACH	86.00	946.00	100.00	1,000.00	149.00	1,639.00	297.00	2,967.00	655.00	1,965.00	930.00	2,790.00	348.00	1,500.00							
700.0200	Sanitary Sewer Manhole, 1-1/2' Diameter	3	EACH	600.00	1,800.00	100.00	300.00	300.00	900.00	391.00	1,173.00	391.00	1,173.00	470.00	1,410.00	530.00	1,590.00							
800.0304	Sanitary Sewer Manhole, 4-FT Diameter	42	VF	575.00	24,150.00	850.00	35,700.00	447.00	18,774.00	22.00	7,260.00	22.00	7,260.00	45.00	1,575.00	29.00	1,117.50							
800.0010	Water Service, 1-Inch	330	LF	15.00	4,950.00	53.00	17,490.00	42.00	13,860.00	41.00	16,400.00	37.50	15,000.00	65.00	26,900.00	50.00	20,000.00							
800.0060	Water Main, 6-Inch PVC	400	LF	47.00	18,800.00	55.00	22,000.00	41.00	16,400.00	41.00	16,400.00	37.50	15,000.00	80.00	40,000.00	64.00	32,000.00							
800.0080	Water Main, 8-Inch PVC	500	LF	59.00	29,500.00	66.00	33,000.00	55.00	27,500.00	55.00	25,875.00	51.75	25,875.00	80.00	40,000.00	64.00	32,000.00							
800.0100	Water Hydrant and Lead	2	EACH	8,344.00	16,688.00	8,200.00	16,400.00	8,693.00	17,386.00	6,860.00	13,720.00	8,975.00	17,950.00	3,245.00	6,490.00	4,158.00	8,316.00							
800.0201	Valve and Box, 1-Inch	11	EACH	390.00	4,290.00	400.00	4,400.00	416.00	4,576.00	336.00	3,696.00	295.00	3,245.00	378.00	4,158.00	490.00	5,390.00							
800.0206	Valve and Box, 6-Inch	2	EACH	1,670.00	3,340.00	2,000.00	4,000.00	1,970.00	3,940.00	1,940.00	3,880.00	2,350.00	4,700.00	3,440.00	6,880.00	3,440.00	6,880.00							
800.0208	Valve and Box, 8-Inch	2	EACH	2,450.00	4,900.00	2,750.00	5,500.00	2,805.00	5,610.00	2,800.00	5,600.00	3,425.00	6,850.00	3,440.00	6,880.00	3,440.00	6,880.00							
800.0301	Tan and Coporation, 1-Inch	11	EACH	400.00	4,400.00	575.00	6,325.00	428.00	4,708.00	350.00	3,850.00	475.00	5,225.00	390.00	4,290.00	1,071.00	11,781.00							
900.0010	Biofilter 1	1	LS	11,300.00	11,300.00	23,000.00	23,000.00	17,191.00	17,191.00	14,000.00	14,000.00	19,000.00	31,500.00	19,000.00	19,000.00	14,530.00	14,530.00							
900.0020	Biofilter 2	1	LS	9,200.00	9,200.00	18,000.00	18,000.00	17,191.00	17,191.00	14,000.00	14,000.00	21,350.00	21,350.00	12,700.00	12,700.00	10,050.00	10,050.00							
900.0060	Dry Pond South	1	LS	14,500.00	14,500.00	55,000.00	55,000.00	51,370.00	51,370.00	44,000.00	44,000.00	44,000.00	40,000.00	40,000.00	40,900.00	40,900.00	55,500.00							
<b>TOTAL BASE BID AMOUNT</b>					<b>463,895.50</b>		<b>655,713.25</b>		<b>523,711.00</b>		<b>529,564.27</b>		<b>643,900.75</b>		<b>532,417.00</b>									



**SUMMARY OF BIDS CONTRACT 3-2024  
SANDY BAY HIGHLANDS PHASE 3 UTILITY AND STREET GRADING  
BIDS OPENED July 10, 2024 10:00am**

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNITS	Advance Construction, Inc 2141 Woodale Ave Green Bay, WI 54313		Alison Excavation PO Box 117 Valders, WI 54245		Dorner, Inc E506 Luxemburg Rd, PO Box 129 Luxemburg, WI 54117		Kruzek Construction Incorporated 3636 Kewaunee Road Green Bay, WI 54311		Mammoth Construction 1616 Wallmer Street Manitowish, WI 54220		PTS Contractors, Inc. 4075 Eaton Road Green Bay, WI 54311-9340		Vintao Construction Company 1322 33rd Street; PO 137 Two Rivers, WI 54241	
				BID PRICE	EXTENDED AMOUNT	BID PRICE	EXTENDED AMOUNT	BID PRICE	EXTENDED AMOUNT	BID PRICE	EXTENDED AMOUNT	BID PRICE	EXTENDED AMOUNT	BID PRICE	EXTENDED AMOUNT	BID PRICE	EXTENDED AMOUNT
	<b>BID ALTERNATE A BID ITEMS</b>																
201.0120A	Clearing	5	STA	1,000.00	5,000.00	650.00	3,250.00	1,742.00	8,710.00	1,000.00	5,000.00	1,100.00	5,500.00	1,025.00	5,125.00	1,000.00	5,000.00
201.0220A	Grubbing	5	STA	800.00	4,000.00	450.00	2,250.00	1,531.00	7,655.00	1,000.00	5,000.00	1,100.00	5,500.00	1,025.00	5,125.00	1,000.00	5,000.00
205.010A	Excavation Common	960	CY	8.00	7,680.00	8.50	8,160.00	26.20	25,152.00	25.50	24,480.00	25.00	24,000.00	25.00	24,000.00	24.79	23,798.00
305.0110A	Base Aggregate Dense 3/4-Inch	1940	TON	15.60	30,264.00	17.25	33,465.00	18.70	36,278.00	18.25	35,405.00	17.95	34,823.00	18.00	34,920.00	17.75	34,435.00
305.0111A	Base Aggregate Dense 3/8-Inch	290	TON	15.60	4,524.00	20.00	5,800.00	21.90	6,351.00	21.25	6,162.50	20.95	6,075.50	21.00	6,090.00	20.75	6,017.00
311.0110A	Breaker Run	970	TON	15.60	15,132.00	17.25	16,732.50	19.80	19,206.00	19.00	18,430.00	18.95	18,381.50	19.00	18,430.00	18.75	18,187.00
608.0308A	Storm Sewer Pipe PVC 8-Inch	701	LF	42.00	29,442.00	41.00	28,741.00	42.00	29,442.00	39.00	27,339.00	62.00	43,462.00	43.00	30,143.00	57.00	39,957.00
608.0312A	Storm Sewer Pipe 12-Inch	75	LF	55.00	4,125.00	58.00	4,350.00	61.00	4,575.00	54.00	4,050.00	67.00	5,025.00	72.00	5,400.00	78.00	5,850.00
608.0315A	Storm Sewer Pipe 15-Inch	50	LF	59.00	2,950.00	62.00	3,100.00	63.00	3,150.00	71.00	3,550.00	75.00	3,750.00	75.00	3,750.00	79.00	3,950.00
608.0318A	Storm Sewer Pipe 18-Inch	250	LF	60.00	15,000.00	63.00	15,750.00	66.00	16,500.00	70.00	17,500.00	79.00	19,750.00	67.00	16,750.00	77.00	19,250.00
608.6006A	Storm Sewer Lateral PVC 4-Inch	450	LF	35.00	15,750.00	44.00	19,800.00	35.00	15,750.00	28.75	12,937.50	45.00	20,250.00	30.00	13,500.00	64.00	28,800.00
611.2003A	Manholes 3-FT Diameter	3	EACH	2,000.00	6,000.00	2,750.00	8,250.00	3,172.00	9,516.00	2,200.00	6,600.00	3,900.00	11,700.00	1,850.00	5,550.00	3,200.00	9,600.00
611.2004A	Manholes 4-FT Diameter	6	EACH	3,200.00	19,200.00	3,500.00	21,000.00	3,290.00	19,740.00	3,000.00	18,000.00	4,000.00	24,000.00	2,600.00	15,600.00	2,937.00	17,622.00
522.1012A	Endwall, 12" RCCP	1	EACH	1,050.00	1,050.00	1,250.00	1,250.00	1,871.00	1,871.00	1,800.00	1,800.00	325.00	325.00	970.00	970.00	1,895.00	1,895.00
522.1018A	Endwall, 18" RCCP	1	EACH	1,200.00	1,200.00	1,400.00	1,400.00	2,322.00	2,322.00	2,208.00	2,208.00	375.00	375.00	1,150.00	1,150.00	2,000.00	2,000.00
625.0500A	Salvaged Topsoil	2370	SY	2.00	4,740.00	2.00	4,740.00	3.70	8,769.00	3.50	8,295.00	3.95	9,361.50	3.60	8,532.00	3.50	8,295.00
630.0140A	Seeding, Fertilizer, and Mulching	2370	SY	1.75	4,147.50	4.00	9,480.00	2.60	6,162.00	4.00	9,480.00	8.00	19,960.00	1.80	4,266.00	1.30	3,081.00
628.1504A	Silt Fence	700	LF	1.90	1,330.00	3.00	2,100.00	2.50	1,750.00	2.00	1,400.00	2.00	1,400.00	2.30	1,610.00	2.25	1,575.00
628.1105A	Ditch Checks	15	EACH	60.00	900.00	95.00	1,425.00	121.00	1,815.00	90.00	1,350.00	45.00	675.00	112.00	1,680.00	150.00	2,250.00
700.0010A	Sanitary Sewer Laterals, 4-Inch PVC	450	LF	43.00	19,350.00	123.00	55,350.00	47.00	21,150.00	33.50	15,075.00	52.00	23,400.00	45.00	20,250.00	75.00	32,850.00
700.0080A	Sanitary Sewer, 8-Inch PVC	1110	LF	86.00	95,460.00	118.00	130,980.00	60.00	66,600.00	50.00	55,500.00	78.00	86,580.00	56.00	62,160.00	92.00	102,120.00
700.0180A	Sanitary Sewer Lateral W/ve	15	EACH	86.00	1,290.00	100.00	1,500.00	149.00	2,235.00	126.50	1,897.50	220.00	3,300.00	105.00	1,575.00	160.00	2,400.00
700.0200A	Sanitary Manhole Castings	4	EACH	600.00	2,400.00	400.00	1,600.00	92.00	368.00	368.00	1,472.00	930.00	3,720.00	115.00	4,620.00	150.00	600.00
700.0304A	Sanitary Sewer Manhole, 4-FT Diameter	47	VF	550.00	25,850.00	875.00	41,125.00	756.00	35,532.00	412.00	19,364.00	470.00	22,090.00	593.00	27,871.00	465.00	21,855.00
800.0010A	Water Service, 1-Inch	450	LF	15.00	6,750.00	53.00	23,850.00	42.00	18,900.00	22.00	9,900.00	45.00	20,250.00	30.00	13,500.00	53.00	23,850.00
800.0060A	Water Main, 6-Inch PVC	650	LF	49.60	32,240.00	55.00	35,750.00	44.00	28,600.00	41.00	26,650.00	65.00	42,250.00	54.00	35,100.00	58.00	37,700.00
800.0080A	Water Main, 8-Inch PVC	400	LF	58.00	23,200.00	65.00	26,000.00	54.00	21,600.00	51.00	20,400.00	80.00	32,000.00	63.00	25,200.00	79.00	31,600.00
800.010A	Water Hydrant and Lead	4	EACH	8,280.00	33,120.00	8,200.00	32,800.00	8,623.00	34,492.00	6,860.00	27,440.00	8,975.00	35,900.00	8,335.00	33,340.00	8,335.00	33,340.00
800.0201A	Valve and Box, 1-Inch	15	EACH	390.00	5,850.00	400.00	6,000.00	416.00	6,240.00	336.00	5,040.00	295.00	4,425.00	378.00	5,670.00	490.00	7,350.00
800.0206A	Valve and Box, 6-Inch	2	EACH	1,670.00	3,340.00	2,000.00	4,000.00	1,933.00	3,866.00	1,940.00	3,880.00	2,350.00	4,700.00	1,720.00	3,440.00	1,843.00	3,686.00
800.0208A	Valve and Box, 8-Inch	1	EACH	2,450.00	2,450.00	2,750.00	2,750.00	2,813.00	2,813.00	2,800.00	2,800.00	3,425.00	2,500.00	2,500.00	2,800.00	2,800.00	2,800.00
800.0301A	Tan and Corporation, 1-Inch	15	EACH	400.00	6,000.00	575.00	6,625.00	428.00	6,420.00	350.00	5,250.00	475.00	7,125.00	390.00	5,850.00	1,071.00	16,065.00
900.0030A	Biofilter 3	1	LS	11,100.00	11,100.00	17,500.00	17,500.00	15,820.00	15,820.00	14,000.00	14,000.00	18,000.00	18,000.00	11,500.00	11,500.00	8,200.00	8,200.00
900.0040A	Biofilter 4	1	LS	11,000.00	11,000.00	16,500.00	16,500.00	15,292.00	15,292.00	13,500.00	13,500.00	16,500.00	16,500.00	11,500.00	11,500.00	8,200.00	8,200.00
900.0050A	Biofilter 5	1	LS	12,000.00	12,000.00	28,000.00	28,000.00	23,470.00	23,470.00	21,000.00	21,000.00	38,700.00	38,700.00	20,300.00	20,300.00	15,200.00	15,200.00
900.0070A	Dry Pond North	1	LS	18,000.00	18,000.00	51,000.00	51,000.00	28,505.00	28,505.00	24,500.00	24,500.00	25,000.00	25,000.00	27,000.00	27,000.00	31,900.00	31,900.00
	<b>TOTAL BID ALTERNATE A BID AMOUNT</b>				481,834.50		673,173.50		554,117.00		478,053.50		640,678.50		510,577.00		616,779.40
	<b>TOTAL BASE BID + BID ALTERNATE A AMOUNT</b>				945,730.00		1,328,886.75		1,077,828.00		1,007,617.77		1,284,579.25		1,042,994.00		1,217,177.00



City of Two Rivers  
 Sandy Bay Highlands Phase 3  
 Comparison of Bid Alternates, Future Costs

**INCLUDING ADDED STORMWATER MGT. COSTS**

	Alt 1	Alt 2	Alt 3 (Entire Development)
<b>Bid Costs</b>	Base Bid	Base Bid+Alt A	Base+BidAlt+Future
Roadway	75,258.50	152,976.00	152,976.00
Water	86,868.00	199,818.00	199,818.00
Sanitary Sewer	128,306.00	272,656.00	272,656.00
Storm Sewer	138,463.00	233,180.00	233,180.00
Storm Water Quality Mgt	35,000.00	87,100.00	87,100.00
<b>Total Bid</b>	<b>463,895.50</b>	<b>945,730.00</b>	<b>945,730.00</b>
<i>Future Bid (Util + Roadway)</i>			269,425.00
<i>Future C&amp;G &amp; Asphalt Binder</i>	97,160.00	206,860.00	257,045.00
<i>Future Completion of Biofilters</i>	25,430.55	110,848.25	151,589.25
<i>Electric</i>	100,000.00	163,402.61	218,598.69
<i>Gas</i>	40,000.00	80,000.00	120,000.00
<i>Telecom</i>			
<b>Total Future Work</b>	<b>262,590.55</b>	<b>561,110.86</b>	<b>1,016,657.94</b>
<b>Total Estimated Construction Cost</b>	<b>\$ 726,486.05</b>	<b>\$ 1,506,840.86</b>	<b>\$ 1,962,387.94</b>
<b>Const Cost less Elect &amp; Gas Costs</b>	<b>\$ 586,486.05</b>	<b>\$ 1,263,438.25</b>	<b>\$ 1,623,789.25</b>
<b>City Engineering/Contingency (10%)</b>	<b>\$ 58,650.00</b>	<b>\$ 126,340.00</b>	<b>\$ 162,380.00</b>
<b>Total Construction with Eng/Cont</b>	<b>\$ 785,136.05</b>	<b>\$ 1,633,180.86</b>	<b>\$ 2,124,767.94</b>
<b>Consultant Design</b>	<b>\$ 26,020.00</b>	<b>\$ 61,510.00</b>	<b>\$ 75,700.00</b>
<b>Total Project Cost</b>	<b>\$ 811,156</b>	<b>\$ 1,694,691</b>	<b>\$ 2,200,468</b>
<b>Number of Lots</b>	<b>11</b>	<b>26</b>	<b>32</b>
<b>Cost per Lot</b>	<b>\$ 73,741</b>	<b>\$ 65,180</b>	<b>\$ 68,765</b>
<b>Number of Lots with 4 build sites within PUD Lot #17</b>	<b>No Change</b>	<b>No Change</b>	<b>\$ 35</b>
<b>Cost per Lot w/ Stormwater Mgt.</b>	<b>\$ 73,741</b>	<b>\$ 65,180</b>	<b>\$ 62,871</b>

By increasing the number of build sites by 4, decreases the ALL in cost, including stormwater management, per lot by \$5,8947,641 / site (lot)

**Alternate 1 - Orchard Ln, from Lake Breeze Way to Rawley Ct, and Rawley Court**

**Alternate 2 - Orchard Ln from Lake Breeze Way to N. P/I; Rawley Ct; & Sandy**

**Alternate 3 - Orchard Ln, Rawley Ct, and Sandy Ridge Dr in the entirety**

City of Two Rivers  
 Sandy Bay Highlands Phase 3  
 Comparison of Bid Alternates, Future Costs

**EXCLUDING ADDED STORMWATER MGT. COSTS**

	Alt 1	Alt 2	Alt 3 (Entire Development)
<b>Bid Costs</b>	Base Bid	Base Bid+Alt A	Base+BidAlt+Future
Roadway	75,258.50	152,976.00	152,976.00
Water	86,868.00	199,818.00	199,818.00
Sanitary Sewer	128,306.00	272,656.00	272,656.00
Storm Sewer	138,463.00	233,180.00	233,180.00
Storm Water Quality Mgt	35,000.00	87,100.00	87,100.00
<b>Total Bid</b>	<b>463,895.50</b>	<b>945,730.00</b>	<b>945,730.00</b>
<i>Future Bid (Util + Roadway)</i>			269,425.00
<i>Future C&amp;G &amp; Asphalt Binder</i>	97,160.00	206,860.00	257,045.00
<i>Future Completion of Biofilters</i>	25,430.55	110,848.25	151,589.25
<i>Electric</i>	100,000.00	163,402.61	218,598.69
<i>Gas</i>	40,000.00	80,000.00	120,000.00
<i>Telecom</i>			
<b>Total Future Work</b>	<b>262,590.55</b>	<b>561,110.86</b>	<b>1,016,657.94</b>
<b>Total Estimated Construction Cost Less Stormwater Mgt</b>	<b>\$ 666,055.50</b>	<b>\$ 1,308,892.61</b>	<b>\$ 1,723,698.69</b>
<b>Const Cost less Elect &amp; Gas Costs</b>	<b>\$ 526,055.50</b>	<b>\$ 1,065,490.00</b>	<b>\$ 1,385,100.00</b>
<b>City Engineering/Contingency (10%)</b>	<b>\$ 52,610.00</b>	<b>\$ 106,550.00</b>	<b>\$ 138,510.00</b>
<b>Total Construction with Eng/Cont</b>	<b>\$ 718,665.50</b>	<b>\$ 1,415,442.61</b>	<b>\$ 1,862,208.69</b>
<b>Consultant Design</b>	<b>\$ 26,020.00</b>	<b>\$ 61,510.00</b>	<b>\$ 75,700.00</b>
<b>Total Project Cost</b>	<b>\$ 744,686</b>	<b>\$ 1,476,953</b>	<b>\$ 1,937,909</b>
<b>Number of Lots</b>	<b>11</b>	<b>26</b>	<b>32</b>
<b>Cost per Lot</b>	<b>\$ 67,699</b>	<b>\$ 56,806</b>	<b>\$ 60,560</b>
<b>Number of Lots with 4 build sites within PUD Lot #17</b>	<b>No Change</b>	<b>No Change</b>	<b>\$ 35</b>
<b>Cost per Lot w/o Stormwater Mgt.</b>	<b>\$ 67,699</b>	<b>\$ 56,806</b>	<b>\$ 55,369</b>

*By increasing the number of build sites by 4, decreases the ALL in cost, including stormwater management, per lot by \$5.191 / site (lot)*

- Alternate 1 - Orchard Ln, from Lake Breeze Way to Rawley Ct, and Rawley Court**
- Alternate 2 - Orchard Ln from Lake Breeze Way to N. P/I; Rawley Ct; & Sandy**
- Alternate 3 - Orchard Ln, Rawley Ct, and Sandy Ridge Dr in the entirety**