

Memorandum

To: Programs, Projects and Operations Subcommittee

Subject: Lake Dredging Program – Westin Hills SID Request

Date: April 28, 2010

From: Gerry Bowen

The District received an application (see attached) for assistance under the Lake Dredging Program from Westin Hills (SID #415). The “lake” in question is Papillion Creek P.L. 566 Structure D-18. The District maintains the structure, but the pool area is the responsibility of the SID.

The SID proposes to excavate approximately 19.8 acre-feet of sediment from the pool area. The total estimated cost of the project is \$270,138, of which \$171,700 are the excavation costs. The SID is requesting 50% of the excavation costs, or \$85,850. The remainder of the costs will be borne by Westin Hills.

As noted in the attached narrative, the pool was last excavated in 2000. The SID is now fully developed which will greatly reduce future sedimentation in the pool.

The current guidelines (attached) for the program require Board approval of all applications.

- **It is recommended that the Subcommittee recommend to the Board that the application from SID #415 (Westin Hills) be approved under the Lake Dredging Program in the amount of \$85,850, subject to funds being included in the FY 2011 Budget.**

17.42 LAKE DREDGING PROGRAM

The Lake Dredging Program is an authorized program of the District to provide technical and financial assistance to units of government (sponsors) to dredge retained sediments in permanent water quality basins and lakes within the sponsor's boundaries and extraterritorial jurisdiction.

Criteria for Eligible Projects:

1. The Sponsor must be a unit of government (city, county, sanitary & improvement district).
2. Only public access lakes and permanent water quality basins are eligible for assistance.
3. Dredging shall be limited to the capacity of the conservation pool of the water quality basin or lake.
4. An individual lake or basin shall be eligible for assistance if the following specific criteria are met:
 - a. The water body has not been dredged in the immediately preceding ten (10) years.
 - b. Verification that 75% of the original capacity has been lost to sedimentation.
 - c. Verification of impaired water quality that will be improved by dredging project, including calculation of benefits.
5. The Sponsor must have a watershed management plan to control erosion and reduce sedimentation from the drainage area.

District Responsibilities:

1. Provide 50% of the local costs (after applying any state or federal cost share assistance) of the project up to a maximum NRD cost share of \$100,000 per project.

Eligible costs include:

 - a. Actual dredging costs
 - b. Professional engineering services for design, calculation of dredging amount and water quality benefits.

Ineligible costs include:

 - a. Costs associated with land rights acquisition.
 - b. Costs associated with the acquisition of necessary permits for the project.
 - c. Costs associated with relocation of utilities.
 - d. Sponsor's "in-house" labor and equipment costs.
2. All projects will require the approval of the Board of Directors.
3. Review and approve all dredging plans prior to Sponsor's bidding of the project.

Sponsor Responsibilities:

1. Complete District's LDP Application Form, Form 17.42A, Manual of Standard Forms (Appendix E).

The following items should accompany the application:

 - a. Copy of the original construction plans for the lake or water quality basin. If original plans are not available, an engineering study will be necessary to calculate the original capacity.
 - b. Location map of the project.
 - c. Location map of the proposed disposal site(s) and site restoration plan.
 - d. Detailed project cost estimate.
2. Execute and fulfill an agreement outlining these guidelines (Form 17.42B, Manual of Standard Forms, Appendix E)
3. Provide all matching funds.
4. Provide all permits required for the project at no cost to the District.
5. Provide all necessary land rights at no cost to the District.
6. Contract for the dredging of the lake or water quality basin of the approved project.
7. Complete dredging operation within one year of approval.

(May 14, 2009)



LAKE DREDGING PROGRAM
APPLICATION FORM

1. DATE: 4-27-10
2. PROJECT NAME: D-18 Clean-out (SID 415, Westin Hills)
3. PROJECT SPONSOR: SID 415, Douglas County
(Address)
4. CONTACT PERSON: Mark Westergard TITLE: Engineer for SID 415
5. DAYTIME TELEPHONE: 402-895-4700
6. E-MAIL ADDRESS: mwestergard@eacg.com
7. PROJECT LOCATION¹: 150th & Fort St.
8. DESCRIPTION OF PROJECT²: Remove accumulated silt
from D-18, see attached narrative
9. ORIGINAL CAPACITY OF LAKE/BASIN³: 81.4 Ac.ft.
10. PROPOSED EXCAVATION AMOUNT: 19.8 Ac.ft.
11. TOTAL ESTIMATED COST⁴: \$ \$270,138
12. COST SHARE REQUEST: \$ \$85,850
13. SIGNATURE/TITLE: Mark Westergard

¹ Attach location map of lake/basin and disposal area.

² Attach additional sheets as necessary.

³ Attach copy of original construction plans.

⁴ Attach detailed cost estimate.



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PROPOSED D-18 CLEAN-OUT NARRATIVE

Overview

SID 415(Westin Hills) desires to clean out Water Quality Basin D-18, a permanent detention facility located just upstream from Standing Bear Lake. Many areas of the basin are now full of accumulated silt with some areas having silt levels equal to the normal pool elevation. The project was previously dredged in 2000 using conventional dredging methods. Because the Westin Hills subdivision is now nearly fully developed, this project will need to be completed by draining the facility, excavating the accumulated silt and hauling the material off-site via trucks.

Cost Estimate and Allocation

See Attached Detailed Sheet. Generally, 50% participation is requested for the bid items related specifically to removal of silt. SID 415 is proposed to pay 100% for costs related to placement of material off-site and all engineering and construction management costs.

Schedule

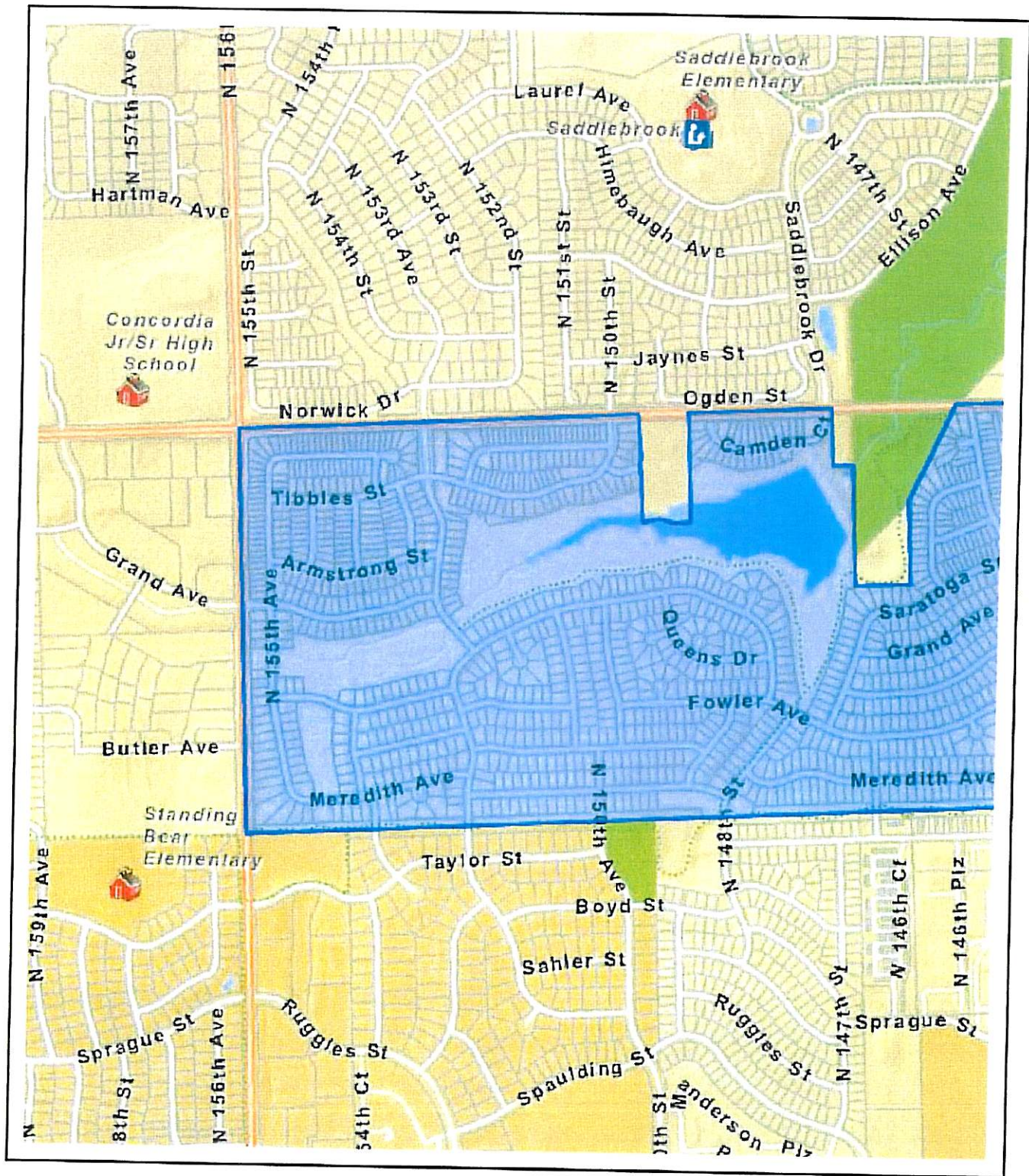
P-MRNRD opened the drain of the lake at SID 415's request in the early spring of 2010. Intent is to let the project in May and commence work as soon as basin material has dried significantly enough to allow loading and hauling.

Attachments

Original Plans
Proposed Plans
Cost Estimate and Allocation of Costs
Letter from COE Confirming no 404 Permit Required

		File No.	P1996.029.000			
		Sheet:	1 of 1			
		Date:	4/26/2010			
Engineer's Estimate & Allocation of Costs						
E&A Consulting Group, Inc.						
Westlin Hills, SID 415		Douglas	County, Nebraska			
Project: D-18 CLEANOUT - 2010						
Item No.	Description	Quantity	Unit	Unit Price	Amount	%
1	MOBILIZATION	1	LS	\$2,500.00	\$2,500	50%
2	CONSTRUCT POOL PUMPING BASIN	1	LS	\$1,500.00	\$1,500	50%
3	PUMP DOWN POOL PUMPING BASIN	6	OCC.	\$1,000.00	\$6,000	50%
4	FURNISH AND PLACE CRUSHED ROCK FOR HAUL ROAD	300	TON	\$19.00	\$5,700	50%
5	EXCAVATE, LOAD & TRANSPORT EARTH TO 140TH & MILITARY LOCATION	8,000	CY	\$4.50	\$36,000	50%
6	EXCAVATE, LOAD & TRANSPORT EARTH TO 138TH & STATE LOCATION	24,000	CY	\$5.00	\$120,000	50%
7	STRIP & STOCKPILE TOPSOIL	1,500	CY	\$1.10	\$1,650	100%
8	DRY, SPREAD AND COMPACT EARTH	32,000	CY	\$0.50	\$16,000	100%
9	BARRICADES(PER PLAN)	60	B. DAY	\$75.00	\$4,500	100%
10	STREET CLEANING	60	DAY	\$100.00	\$6,000	100%
11	RESPREAD TOPSOIL	1,400	CY	\$0.90	\$1,260	100%
12	REMOVE & REPLACE 7" P.C. CONCRETE PAVEMENT	250	SY	\$60.00	\$15,000	100%
Total Construction Cost					\$216,110	
Plus Engineering & Legal						
					25%	100%
					\$54,028	\$54,028
Total Project Cost					\$270,138	\$184,288
						\$85,850
						\$0
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SID 415 P-MRNRD



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