



**EXHIBIT A
FEE PROPOSAL
CITY OF NOVI**

**ENGINEERING SERVICES FOR
2008 SANITARY LIFT STATION UPGRADES**

We the undersigned propose to furnish to the City of Novi services consistent with the Request for Qualifications dated January 11, 2007 and Request for Proposals dated February 6, 2008, respectively. Design fees will be paid on an hourly basis for actual work performed to a maximum as proposed. A separate fee schedule is being provided should the City request additional work on an hourly basis.

Project	Phase	Total Fee
2008 Sanitary Lift Station Upgrades – Bellagio and Napier	Design Phase (not-to-exceed fee)	\$ 14,400
	Construction Phase Construction Cost Estimate (by engineer for fee determination): \$ <u>190,000</u>	
	<u>8.8</u> % of Construction Cost (from estimate above)	\$ 16,700
	TOTAL ESTIMATED* FEE	\$ 31,100

*Total Estimated Fee consists of a not-to-exceed design phase fee (which includes geotechnical costs if applicable) and a fixed percentage construction phase fee which is used to estimate an approximate fee amount based on the cost estimate above. The actual construction phase fee will be established when the project is awarded to a contractor by multiplying the fixed percentage provided and the bid price of the successful bidder.

PLEASE TYPE:

Company Name: Orchard, Hiltz & McCliment, Inc.

Address: 34000 Plymouth Road, Livonia, MI 48150

Agent's Name: John J. Hiltz, P.E.

Agent's Title: Vice President

Agent's Signature: 

Telephone Number: 734-522-6711 Fax Number: 734-522-6427

E-mail Address: john.hiltz@ohm-advisors.com Date: February 21, 2008

Construction Cost Estimate



Project: 2008 Sanitary Lift Station Upgrades - Bellagio and Napier
City of Novi Michigan
 Work: Improvements at Bellagio and Napier Sanitary Lift Stations
Conceptual Estimate

Date: 2/18/2008
 Project No. RFP
 Current ENR: 8094.28
 Reviewer: S. Wright

	Pay Item	Quantity	Units	Unit \$	Total
Bellagio Pump Station Improvements					
1	General Conditions (7% Construction Cost)	1	LS	\$6,933.50	\$6,933.50
2	Mobilization	1	LS	\$5,000.00	\$5,000.00
3	Bypass Pumping	1	LS	\$5,000.00	\$5,000.00
4	Wetwell Cleaning	1	LS	\$3,000.00	\$3,000.00
5	Submersible Pumps, Guide Rails, Lifting Chains and Brackets*	2	EA	\$13,000.00	\$26,000.00
6	Multitrode Level Sensor*	1	EA	\$1,500.00	\$1,500.00
7	MultiSmart Controller*	1	EA	\$6,500.00	\$6,500.00
8	Valve Chamber Hatch with Fall Protection*	1	EA	\$5,000.00	\$5,000.00
9	Panel Enclosure (upsized for SCADA)*	1	EA	\$6,000.00	\$6,000.00
10	Pump Guide Rails, Lift Chain, Bracket, Installation	3	EA	\$5,000.00	\$15,000.00
11	Controller Installation	1	LS	\$4,200.00	\$4,200.00
12	Natural Gas Generator	1	Ea	\$19,000.00	\$19,000.00
13	Generator Installation	1	LS	\$2,850.00	\$2,850.00
14	Electrical Improvements	1	LS	\$13,000.00	\$13,000.00
15	Upgrade to 480 Volt Electrical Service	1	LS	\$6,000.00	\$6,000.00
16	Access Drive Improvements for Vector Truck	1	LS	\$3,000.00	\$3,000.00
17	Landscaping Replacement	1	LS	\$500.00	\$500.00
18	Natural Gas Service Allowance	1	LS	\$2,000.00	\$2,000.00
	Subtotal Bellagio Pump Station Improvements				\$130,483.50
	Contingencies (15%)				\$19,572.53
	Total Construction Budget Bellagio Pump Station Improvements				\$150,056.03
Napier Road Pump Station Improvements					
1	General Conditions (7% Construction Cost)	1	LS	\$2,264.50	\$2,264.50
2	Mobilization	1	LS	\$5,000.00	\$5,000.00
3	Natural Gas Generator	1	Ea	\$19,000.00	\$19,000.00
4	Generator Installation - Equipment Pad	1	LS	\$2,850.00	\$2,850.00
5	Electrical - Installation	1	LS	\$3,500.00	\$3,500.00
6	Natural Gas Service Allowance	1	LS	\$2,000.00	\$2,000.00
	Subtotal Napier Road Pump Station Improvements				\$34,614.50
	Contingencies (15%)				\$5,192.18
	Total Construction Budget Napier Pump Station Improvements				\$39,806.68
	Subtotal Both Project Improvements				\$165,098.00
	Contingency (15%)				\$24,764.70
	TOTAL CONSTRUCTION COST				\$189,862.70

* Items Part of Kennedy Industries, Inc. Quotation 2/19/2008

KENNEDY INDUSTRIES, INC.

P. O. BOX 809 - 4975 TECHNICAL DRIVE
MILFORD, MICHIGAN 48381

TRANSMITTAL SHEET

TO: SHERRI WRIGHT FROM: STEVE SADLER
COMPANY: OHM DATE: 2/20/2008
RE: NOVI - BELLAGIO P.S., NAPIER

URGENT FOR REVIEW PLEASE COMMENT PLEASE REPLY PLEASE RECYCLE

Sherr,

Following is our selection and budget pricing for the above project:

BELLAGIO P.S.

- Two (2) FLYGT explosion proof submersible sewage pumps, Model NP-3127, 4" discharge, 10 HP, three phase, 460 volts with 100' of motor and sensor cable.
- Two (2) Guide rail bases with 4" discharge elbows, stainless steel guide rails and ss lift chain.
- One (1) Aluminum hatch - wet well - with Flygt "Safe-Hatch".
- One (1) Aluminum hatch - valve chamber.
- One (1) Low profile, freestanding, intrinsically safe duplex pump control panel in Nema 3R aluminum, dead front enclosure. Panel includes Sq. D. Nema rated starters, circuit breakers, Multitrode Multismart pump controller with motor protection, CT's, intrinsically safe back-up float circuit, 5 KVA transformer, panel heater, alarm dialer and panel mounted alarm and power on lights. Space provided for future SCADA equipment.
- One (1) Alarm dialer - mounted in above enclosure.
- One (1) Multitrode submersible level probe.
- Two (2) Non-mercury type float switch with 100' of cable and support bracket.
- One (1) Start-up assistance.

NET BUDGET PRICE INCL. FRT, NO TAX: \$ 45,000.00

KENNEDY INDUSTRIES, INC.

GENERATOR

- One (1) CUMMINS/ONAN 29 KW permanent, on site, natural gas stand by generator in weatherproof housing, residential muffler, block heater, controls, battery and charger.
- One (1) Automatic transfer switch, 125 Amp , in Nema 3R enclosure.
- One (1) Start up assistance.

NET BUDGET PRICE INCL. FRT, NO TAX: \$ 19,000.00

The pumps at the Napier Road station are 10 HP. Generator sizing and prices are the same for both stations.

Above pricing does not include concrete, site work or installation, piping or valves. If you have any questions or need additional data, please call.

Thanks,

Steve Sadler



PERFORMANCE CURVE

PRODUCT
NP3127.180

TYPE
HT

DATE
2002-02-04

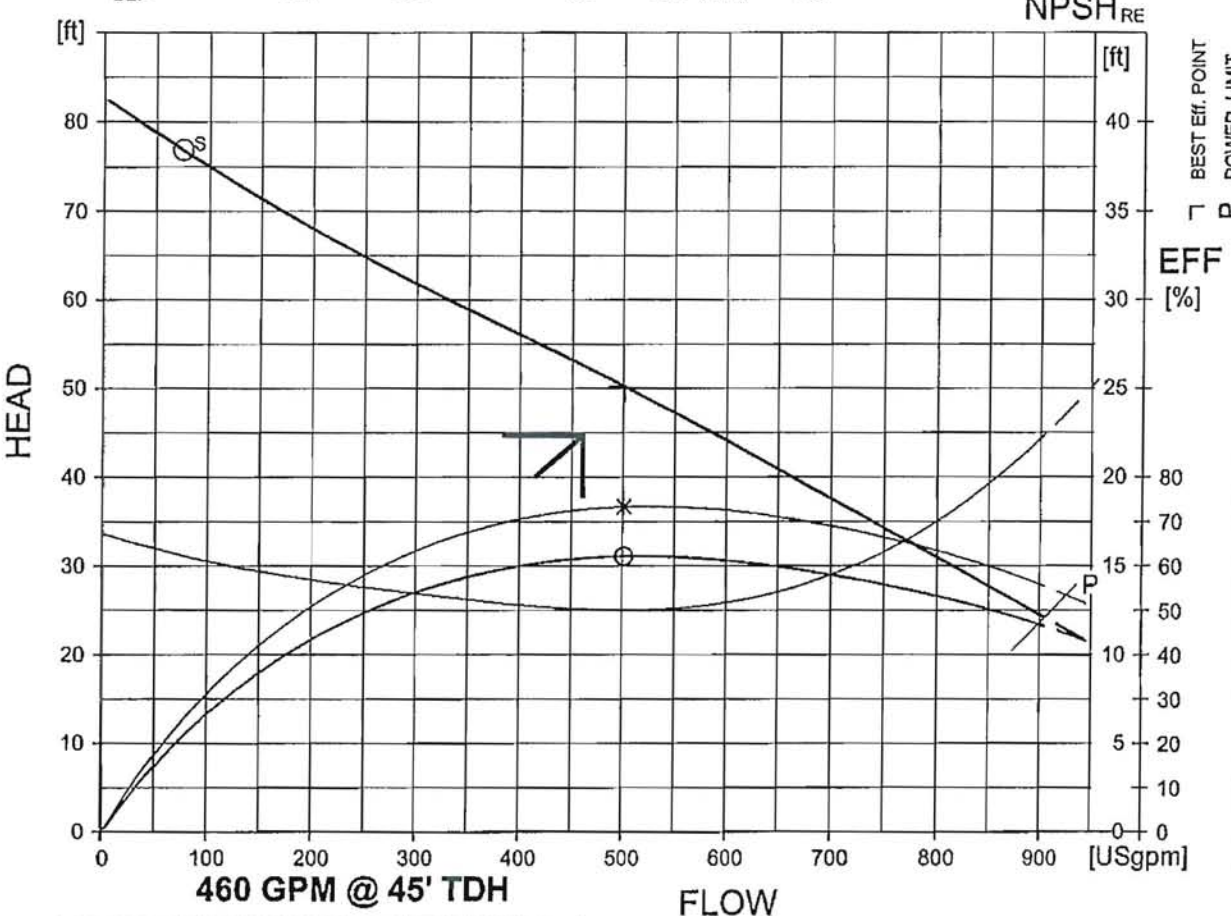
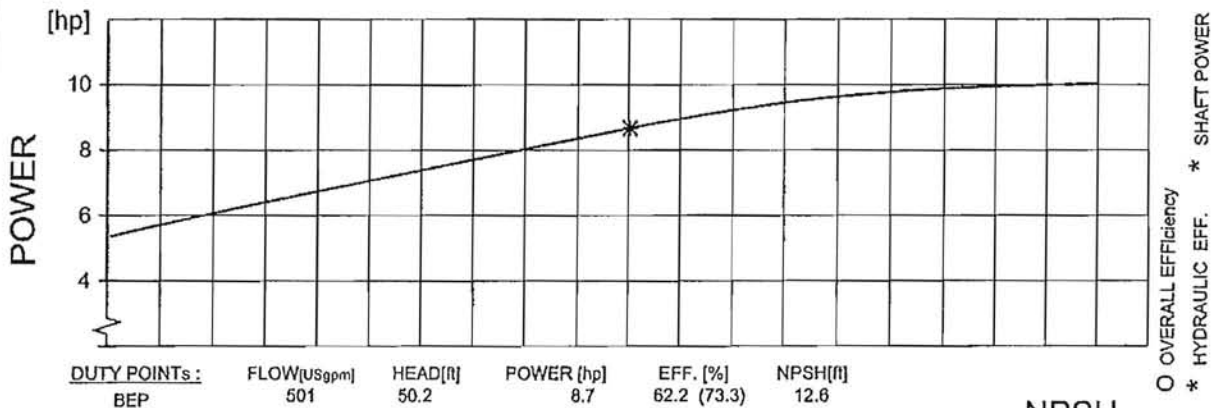
PROJECT

CURVE NO
63-488-00-3755

ISSUE
1

	1/1-LOAD	3/4-LOAD	1/2-LOAD	MOTOR SHAFT POWER	10	hp
MOTOR COS PHI	0.89	0.87	0.81	STARTING CURRENT ...	64	A
MOTOR EFFICIENCY	83.5 %	85.0 %	84.5 %	RATED CURRENT ...	13	A
GEAR EFFICIENCY	---	---	---	RATED SPEED	1735	rpm
COMMENTS	INLET/OUTLET			TOT. MOM. OF INERTIA ...	0.054	kgm2
	- /100 mm			NO. OF BLADES	2	

IMPELLER DIAMETER 215 mm			
MOTORTYPE	STATOR	REV	
21-12-4AL	12YSER	10	
FREQ.	PHASES	VOLTAGE	POLES
60 Hz	3	460 V	4
GEARTYPE		RATIO	
---		---	



S: RISK OF SEDIMENTATION AT VELOCITY BELOW 0.6 m/s
(Point (S) show risk in a 100 mm pipe)

CURVES SHOW PERFORMANCE WITH CLEAR COLD WATER



CURVE

N-3127

Section 3



Impeller/Motor/Nominal Sizes

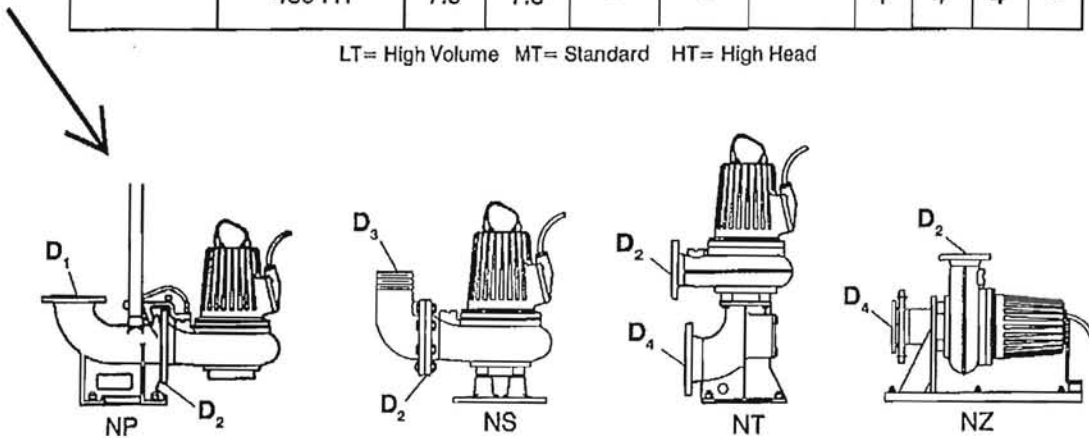
Issued: 5/02

Supersedes: 8/00

PUMP MODEL	IMPELLER CODE	HP RATING				VAC	D1	D2	D3	D4
		NP	NS	NT	NZ					
3127 3Ø →	421 LT	10.0	10.0	--	--	200 230/460 575	8"	6"	8"	--
	422 LT	7.5,10	7.5,10	7.4	7.4		8"	6"	8"	8"
	438 MT	10.0	10.0	--	--		4,6,8	4,6"	4,6"	6"
	439 MT	7.5,10	7.5,10	7.4	7.4		4,6,8	4,6"	4,6"	6"
	487 HT	10	10	--	--		4"	4"	4"	--
	488 HT	10	10	--	--		4"	4"	4"	--
	489 HT	7.5,10	7.5,10	7.4	7.4		4"	4"	4"	4"

PUMP MODEL	IMPELLER CODE	HP RATING				VAC	D1	D2	D3	D4
		NP	NS	NT	NZ					
3127 1Ø	422 LT	7.5	7.5	--	--	230	8"	6"	8"	--
	439 MT	7.5	7.5	--	--		4,6,8	4,6"	4,6"	--
	489 HT	7.5	7.5	--	--		4"	4"	4"	--

LT= High Volume MT= Standard HT= High Head



CP/NP-3127

Section 4

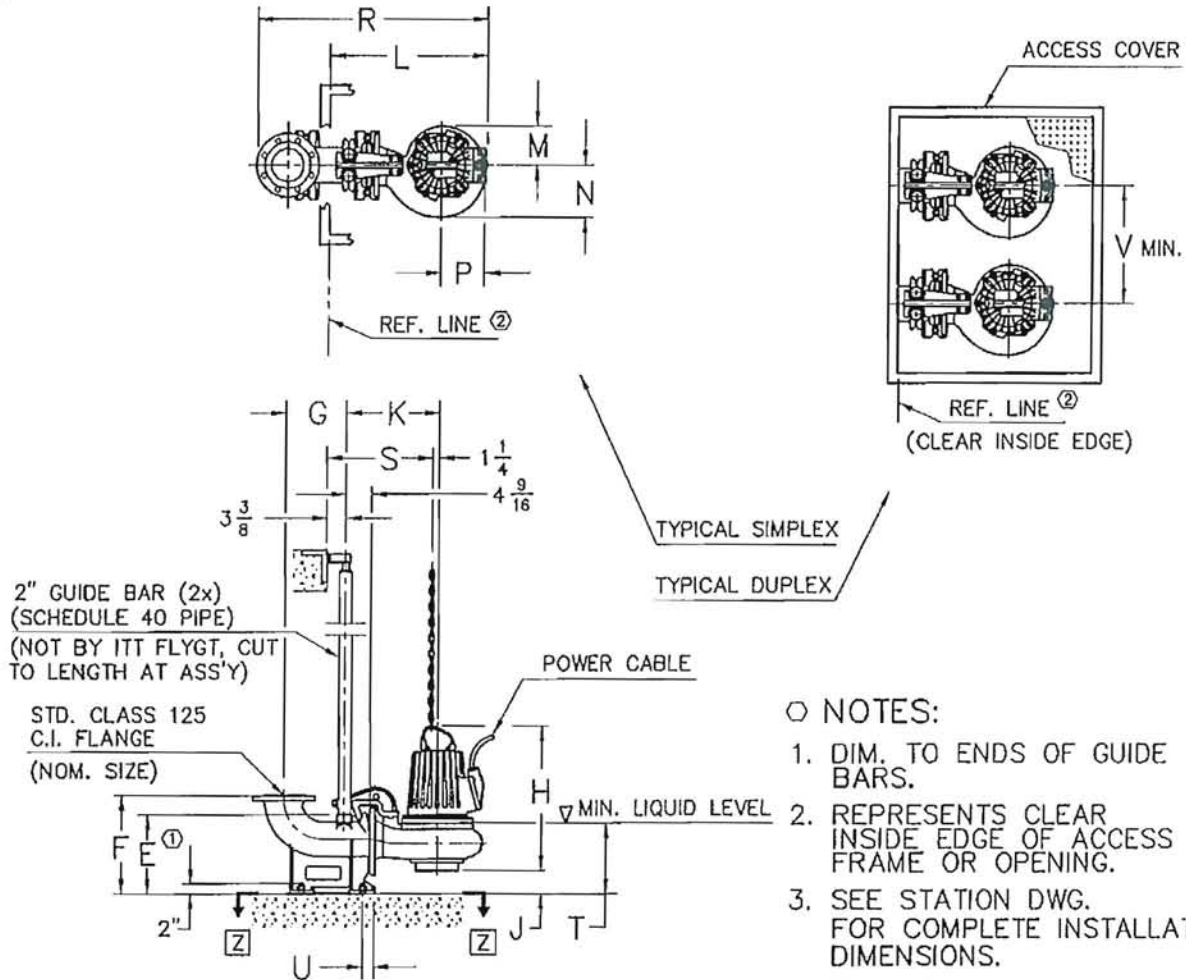


Outline Dimensions

Issued: 8/02

Supersedes: 11/00

00235



○ NOTES:

1. DIM. TO ENDS OF GUIDE BARS.
2. REPRESENTS CLEAR INSIDE EDGE OF ACCESS FRAME OR OPENING.
3. SEE STATION DWG. FOR COMPLETE INSTALLATION DIMENSIONS.

NOM. SIZE	TYPE	VERSION	WEIGHT(LBS)	
			PUMP	DISCH
3"	CP	SH	325	80
4"	CP/NP	HT	325	80
4"	CP/NP	MT	340	80
* 6"	CP/NP	MT	340	120
** 6"	CP/NP	MT	340	120
8"	CP/NP	LT	325	145
8"	CP/NP	MT	315	145

* WITH 4" DIA. INLET
 ** WITH 6" DIA. INLET

ALL DIMENSIONS IN INCHES

TYPE	NOM. SIZE	VERSION	DIMENSIONAL CHART																		
			A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V
CP	3"	SH	2 1/2	10	8	4	10 3/4	15 3/4	9 1/2	24 1/2	3 1/2	16 3/4	28 1/2	6 1/2	7 1/2	8 1/2	38 1/2	19	11	2 3/4	17
CP/NP	4"	HT	2 3/4	10	8	4	10 1/2	15 3/4	10	25	3 1/2	16 3/4	28 1/2	7 3/4	9 1/4	8 1/2	39 1/2	19	11	2 3/4	20
CP/NP	4"	MT	2 3/4	10	8	4	10 1/2	15 3/4	10	26	3	16 3/4	28 1/2	7 1/2	8 1/2	8 1/2	39 1/2	19	12	2 3/4	20
* CP/NP	6"	MT	4 1/2	11	10	5	14 1/2	17 3/4	11	26	5 3/4	16 3/4	28 1/2	8 1/2	8 1/2	8	41 3/4	19	15	2 1/2	22
** CP/NP	6"	MT	4 1/2	11	10	5	14 1/2	17 3/4	11	26	4 1/2	16 3/4	28 1/2	7 1/2	8 1/2	8 1/2	41 3/4	19	13	2 1/2	22
CP/NP	8"	LT	5 1/2	11	10	5	15	17 3/4	12 1/2	26 3/4	4 1/2	18 1/2	30 1/4	7 1/2	10	8 1/2	45 3/4	20 1/2	14	2 1/2	22
CP/NP	8"	MT	5 1/2	11	10	5	15	17 3/4	12 1/2	26	4 1/2	16 3/4	28 1/2	7 1/2	8 1/2	8 1/2	44	19	13	2 1/2	22

C/N-3127

Section 6



Electrical Data

Issued: 8/02

Supersedes: 7/02

Motor Data

RATED OUTPUT POWER HP (kW)	Ø	VOLTS NOM.	FULL LOAD AMPS	LOCKED ROTOR AMPS	LOCKED ROTOR KVA	LOCKED ROTOR CODE LETTER KVA/HP	RATED INPUT POWER kW	POLES/RPM
11.0 (8.2)	3	200 230 460 575	30.0 26.0 13.0 11.0	258 192 96 85	89 76 76 85	K H H J	9.8	2/3495

PUMP MOTOR HP	EFFICIENCY			POWER FACTOR		
	100% LOAD	75% LOAD	50% LOAD	100% LOAD	75% LOAD	50% LOAD
→ 10.0	84.0	85.0	84.0	0.87	0.85	0.77
11.0	83.5	84.0	82.5	0.93	0.92	0.88

Cable Data

HP	VOLTS	MAX. LENGTH FT.	CABLE SIZE/ NOMINAL DIA.	CONDUCTORS (IN ONE CABLE)	PART NUMBER
10.0	200	165	8/3-2-1-GC 28.2mm (1.11")	(3) 8 AWG (PWR) (2) 10 AWG (CTRL) (1) 8 AWG (GND) (1) 10 AWG (GC)	94 21 08
→ 10.0	230 460 575	135 535 870	10/3-2-1-GC 21.3mm (0.84")	(3) 10 AWG (PWR) (2) 12 AWG (CTRL) (1) 10 AWG (GND) (1) 12 AWG (GC)	94 21 06
11.0	200 230 460 575	150 200 795 1,175	8/3-2-1-GC 28.2mm (1.11")	(3) 8 AWG (PWR) (2) 10 AWG (CTRL) (1) 8 AWG (GND) (1) 10 AWG (GC)	94 21 08