

Honeywell

**Phase II-
Additional Proposal Options
Derry School District**

July 12, 2016

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Honeywell Energy Services



Options Considered/Changes From June 7th Meeting

- Evaluated 7 project options considering:
 - Payback, capital upgrades and buildings included

- Met with buildings and grounds committee on July 11th to review 3 updated project options

- Took advantage of current market conditions to reduce financing interest rate from 2.6% to 2.49%
 - Updated rate good for 30 days

Updated Project Options

Option I: \$10.3 Million Comprehensive Project Presented to School Board on 6/7-

- *Includes all capital improvement projects plus all energy savings projects excluding Barka solar PV.*
- *Utilizes matured debt in FY21 from Derry Village & SRS as a partial funding source.*
- *Project option guarantees a reduction in baseline energy costs by 37% or \$452,220 per year.*

Option II: \$9.3 Million Project

- *Includes all capital improvement projects for Barka, East Derry, Hood, WRMS & Grinnell plus energy saving projects and temperature control improvements at remaining schools.*
- *Utilizes matured debt in FY21 from Derry Village & SRS as a partial funding source.*
- *Project option guarantees a reduction in baseline energy costs by 38% or \$460,111 per year.*
- *Excludes boiler replacements and HVAC upgrades at DVS & SRS.*

Option III: \$8.4 Million Project

- *Includes all capital improvement projects for Barka, East Derry, Hood & WRMS plus energy saving projects and temperature control improvements at remaining schools.*
- *Does not utilize matured debt in FY21 from Derry Village & SRS as a partial funding source.*
- *Project option guarantees a reduction in baseline energy costs by 38% or \$459,952 per year.*
- *Excludes boiler replacements and HVAC upgrades at DVS, GRS & SRS.*

Option IV: \$6.3 Million Project

- *Includes all capital improvement and energy savings projects for Barka, East Derry, Hood & WRMS excluding Barka solar PV.*
- *Utilizes matured debt in FY21 from Derry Village & SRS as a partial funding source.*
- *Project option guarantees a reduction in baseline energy costs by 25% or \$300,791 per year.*
- *Excludes all work at DVS, GRS & SRS.*

Option II- 20 Year Project Financing Term

Project Cost Phase II:	\$9,338,555
Phase I Project Refinance Amount	\$846,925
Utility Rebate	\$150,000
Net Financed Amount	\$10,035,480
Interest Rate:	2.49%
Financing Term:	20 Years
Energy & Operational Cost Avoidance Annual Escalation	3.0%

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2036	TOTAL
Year #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Totals
Project Revenues:																					
Energy Cost Avoidance	\$460,111	\$473,914	\$488,132	\$502,776	\$517,859	\$533,395	\$549,397	\$565,878	\$582,855	\$600,340	\$618,351	\$636,901	\$656,008	\$675,689	\$695,959	\$716,838	\$738,343	\$760,493	\$783,308	\$806,807	\$12,363,355
Operational Cost Avoidance	\$16,950	\$17,459	\$17,982	\$18,522	\$19,077	\$19,650	\$20,239	\$20,846	\$21,472	\$22,116	\$22,779	\$23,463	\$24,167	\$24,892	\$25,638	\$26,408	\$27,200	\$28,016	\$28,856	\$29,722	\$455,453
Matured Debt				\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$4,425,525
TOTAL	\$477,061	\$491,373	\$506,114	\$781,622	\$797,261	\$813,369	\$829,961	\$847,050	\$864,652	\$882,781	\$901,455	\$920,689	\$940,500	\$960,905	\$981,923	\$1,003,570	\$1,025,868	\$1,048,834	\$1,072,489	\$1,096,854	\$17,244,333
																					\$0
Project Costs:																					
Lease Purchase Payment	\$454,561	\$468,228	\$482,305	\$682,342	\$682,342	\$682,342	\$682,342	\$682,342	\$682,342	\$682,342	\$682,342	\$682,342	\$682,342	\$682,342	\$682,342	\$682,342	\$682,342	\$682,342	\$682,342	\$682,342	\$13,004,908
Ongoing Support Service	\$17,500	\$18,025	\$18,566	\$19,123	\$19,696	\$20,287	\$20,896	\$21,523	\$22,168	\$22,834	\$23,519	\$24,224	\$24,951	\$25,699	\$26,470	\$27,264	\$28,082	\$28,925	\$29,793	\$30,686	\$470,232
TOTAL	\$472,061	\$486,253	\$500,871	\$701,465	\$702,038	\$702,629	\$703,238	\$703,865	\$704,510	\$705,176	\$705,861	\$706,566	\$707,293	\$708,041	\$708,812	\$709,606	\$710,424	\$711,267	\$712,135	\$713,028	\$13,475,140
Annual Cash Flow	\$5,000	\$5,120	\$5,243	\$80,158	\$95,223	\$110,740	\$126,723	\$143,185	\$160,141	\$177,606	\$195,595	\$214,123	\$233,207	\$252,864	\$273,110	\$293,964	\$315,443	\$337,567	\$360,355	\$383,826	\$3,769,193
Cumulative Cash Flow	\$5,000	\$10,120	\$15,363	\$95,521	\$190,744	\$301,484	\$428,207	\$571,392	\$731,533	\$909,139	\$1,104,733	\$1,318,856	\$1,552,063	\$1,804,927	\$2,078,037	\$2,372,002	\$2,687,445	\$3,025,012	\$3,385,367	\$3,769,193	\$3,769,193

Option II- 16 Year Project Financing Term

Project Cost Phase II:		\$9,338,555																			
Phase I Project Refinance Amount		\$846,925																			
Utility Rebate		\$150,000																			
Net Financed Amount		\$10,035,480																			
Interest Rate:		2.42%																			
Financing Term:		16 Years																			
Energy & Operational Cost Avoidance Annual Escalation		3.0%																			
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2036	TOTAL
Year #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Totals
Project Revenues:																					
Energy Cost Avoidance	\$460,111	\$473,914	\$488,132	\$502,776	\$517,859	\$533,395	\$549,397	\$565,878	\$582,855	\$600,340	\$618,351	\$636,901	\$656,008	\$675,689	\$695,959	\$716,838	\$738,343	\$760,493	\$783,308	\$806,807	\$12,363,355
Operational Cost Avoidance	\$16,950	\$17,459	\$17,982	\$18,522	\$19,077	\$19,650	\$20,239	\$20,846	\$21,472	\$22,116	\$22,779	\$23,463	\$24,167	\$24,892	\$25,638	\$26,408	\$27,200	\$28,016	\$28,856	\$29,722	\$455,453
Matured Debt				\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$260,325	\$0	\$0	\$0	\$0	\$3,384,225
TOTAL	\$477,061	\$491,373	\$506,114	\$781,622	\$797,261	\$813,369	\$829,961	\$847,050	\$864,652	\$882,781	\$901,455	\$920,689	\$940,500	\$960,905	\$981,923	\$1,003,570	\$765,543	\$788,509	\$812,164	\$836,529	\$16,203,033
																					\$0
Project Costs:																					
Lease Purchase Payment	\$454,561	\$468,228	\$482,305	\$757,129	\$772,063	\$787,445	\$803,288	\$819,608	\$836,416	\$853,728	\$871,561	\$889,928	\$908,846	\$928,332	\$948,402	\$890,336	\$0	\$0	\$0	\$0	\$12,472,176
Ongoing Support Service	\$17,500	\$18,025	\$18,566	\$19,123	\$19,696	\$20,287	\$20,896	\$21,523	\$22,168	\$22,834	\$23,519	\$24,224	\$24,951	\$25,699	\$26,470	\$27,264	\$0	\$0	\$0	\$0	\$352,745
TOTAL	\$472,061	\$486,253	\$500,871	\$776,252	\$791,759	\$807,732	\$824,184	\$841,131	\$858,584	\$876,562	\$895,080	\$914,152	\$933,797	\$954,031	\$974,872	\$917,600	\$0	\$0	\$0	\$0	\$12,824,921
Annual Cash Flow	\$5,000	\$5,120	\$5,243	\$5,371	\$5,502	\$5,637	\$5,777	\$5,919	\$6,067	\$6,220	\$6,376	\$6,537	\$6,703	\$6,874	\$7,050	\$85,970	\$765,543	\$788,509	\$812,164	\$836,529	\$3,378,111
Cumulative Cash Flow	\$5,000	\$10,120	\$15,363	\$20,734	\$26,236	\$31,873	\$37,650	\$43,569	\$49,636	\$55,856	\$62,231	\$68,768	\$75,471	\$82,345	\$89,395	\$175,366	\$940,908	\$1,729,418	\$2,541,582	\$3,378,111	\$3,378,111