#### Fire Stations 1-5

Presentation to City Council

September 28, 2015

#### Fire Station Project Overview

July 21, 2014: Public Safety and Infrastructure Technical Review Committee Recommendation:

- Renovations for Fire Stations 1, 2, 3, 5
- New Building for Fire Station 4
- Preliminary Budget Estimate: \$6,800,000

September 8, 2014: City Council Approval of Architect CHMP

**\$420,000** Based on \$5,600,000 Construction Costs

December 16, 2014: City Council Approval of Site Plans Fire Stations 2, 3, 4, 5

April 2015: Construction Manager Hired for Pre-Construction Phase of Projects

June 2015: Construction Manager's Estimate Substantially Higher at \$10,400,000

#### Fire Station Project Overview

June-July 2015: Value Engineer and Line by Line Review

August 2015: Bids come in Higher than Expected

**September 2015**: Construction Manager Provides Guaranteed Maximum Price (GMP)

Fire Stations # 1, 2, 3, 5: \$5,915,118
Fire Station # 4: \$4,563,951
\$10,479,069

### Additional Cost Paid by City

1.	Hazardous Material Survey for Buildings 1-5	\$	19,200
2.	Special Inspections During Construction		30,000
3.	Equipment/Furnishings		250,000
4.	Architecture Fees		785,930
5.	Underground Storage Tank Removal Fire Station #2	_	50,000
	Total Additional Costs	\$1	,135,130
	GMP	\$ 10	0,479,069
	+ Additional Costs		1,135,130
	Total Cost for Fire Stations 1-5	\$ 1	1,614,199

# Comparison of Architects Preliminary Budget Estimate & Bids

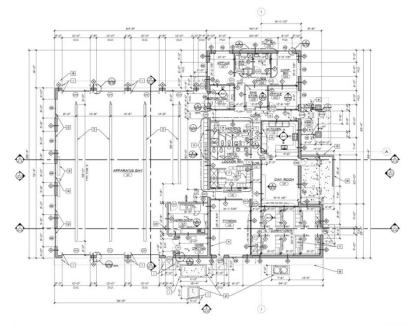
	<u>Estimate</u>	<u>Bids</u>
Station #1	\$ 382,142	\$ 404,345
Station #2	1,783,390	2,152,593
Station #3	1,082,310	1,598,118
Station #4	2,262,047	4,563,951
Station #5	<u>1,132,165</u>	<u>1,760,062</u>
	\$6,642,054	\$10,479,069
Additional Costs		
Paid by City	+ 1,135,130	1,135,130
Tot	tal \$7,777,184	\$11,614,199

## What Happened?

Preliminary Budget Estimate from CHMP	\$ 6,800,000
Scope of Changes  Station 1  Station 2  Station 3  Station 4  Station 5	792,000
Construction Manager Fee	1,298,819
Architects Fee Increase Based on 7.5%	365,930
Contingency Increased	354,000 \$ 9,611,249
Construction Cost Increases over 1 year?	
Total Cost for Fire Stations 1–5	\$ 11,614,199

### Fire Station #4 Options



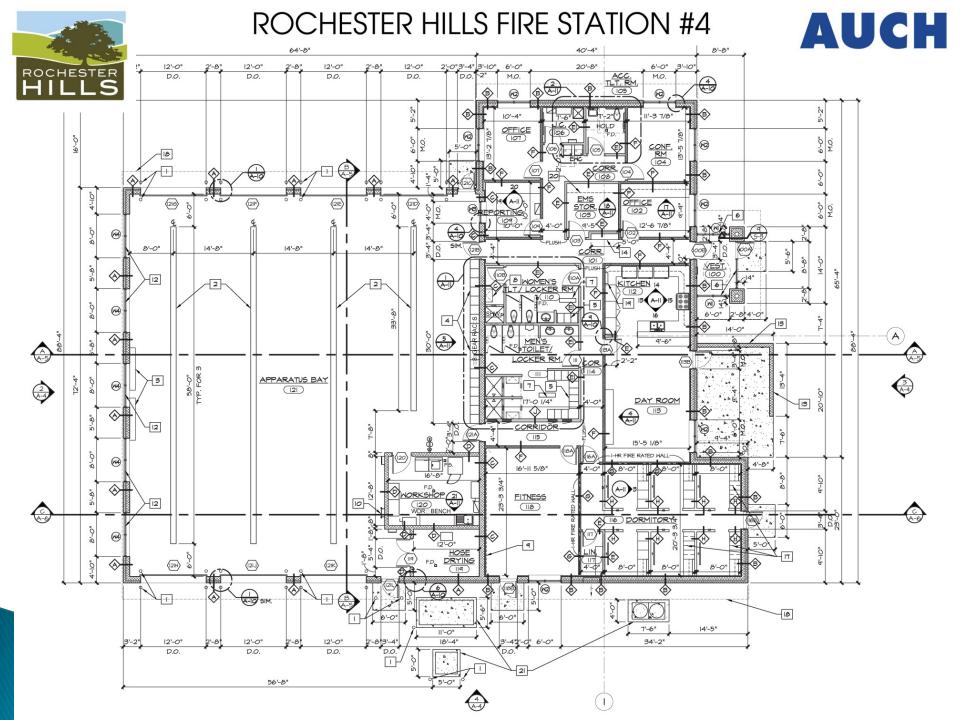




#### ROCHESTER HILLS FIRE STATION NO. 4 CONCEPTUAL ESTIMATE FOR OPTIONS USING EXISTING SITE 09-28-15

	OPTION #1	OPTION #2	<b>OPTION #3</b>	<b>OPTION #4</b>
	<b>BID RESULTS</b>	NEW	<b>ADDITION TO</b>	ADDITION TO
	08/07/2015 &	BUILDING AT	EXISTING	EXISTING
	08/19/2015	CURRENT	BUILDING	BUILDING
		BUILDING	RENOVATE	RENOVATE
		LOCATION	<b>APPARATUS</b>	<b>APPARATUS</b>
			BAYS - FOUR	BAYS - THREE
			APPARATUS	APPARATUS
			<b>BAYS TOTAL</b>	<b>BAYS TOTAL</b>
BUILDING AREA	8,835 SF	8,835 SF	8,835 SF	7,967 SF
TRADE COST (WITHOUT BONDS)	\$3,608,041.72	\$3,608,041.72	\$3,608,041.72	\$3,608,041.72
DELETE TRAFFIC SIGNALS	\$0.00	(\$116,063)	(\$116,063)	(\$116,063)
DELETE ACCESS ROAD TO CELL TOWER	\$0.00	(\$14,448)	(\$14,448)	(\$14,448)
DELETE UNDERGROUND DETENTION-ADD POND	\$0.00	(\$106,312.50)	(\$106,313)	(\$106,313)
DELETE RETAINING WALLS AT EAST PROPERTY LINE	\$0.00	(\$123,100)	(\$123,100)	(\$123,100)
REDUCE LANDSCAPE PLANTINGS	\$0.00	(\$29,250)	(\$29,250)	(\$29,250)
REDUCE EARTHWORK-EAST SIDE	\$0.00	(\$50,000)	(\$50,000)	(\$50,000)
FILL SOUTH OF NEW BUILDING LOCATION	\$0.00	\$18,000	\$18,000	\$18,000
RETAINING WALL SOUTH OF NEW BUILDING LOCATIO		\$46,800	\$46,800	\$46,800
QUANTITY CHANGE TO HIGH BAY DRIVEWAY		**********		
(SAVING PORTION OF EXISITNG DRIVE)	\$0.00	(\$35,000)	(\$35,000)	(\$44,200)
REDUCE EXTERIOR MASONRY WALLS	\$0.00	\$0	(\$66,595)	(\$70,520)
REDUCE FOUNDATIONS	\$0.00	\$0	(\$16,547)	(\$19,467)
REDUCE SLAB ON GRADE & BOLLARDS	\$0.00	\$0	(\$27,046)	(\$39,153)
REDUCE BUILDING DEMOLITION	\$0.00	\$0	(\$9,623)	(\$9,623)
DELETE OVERHEAD DOORS	\$0.00	\$0	\$0	(\$13,660)
DELETE TRENCH DRAINS	\$0.00	\$0	(\$15,660)	(\$23,490)
DOOR OPENING MODIFICATIONS @ EXISTING BAYS	\$0.00	\$0	\$45,000	\$45,000
REDUCE ROOF STRUCTURE AND FINISHES-ONE BAY	\$0.00	\$0	\$0	(\$34,718)
REDUCE MECH/ELEC/FIRE PROT - ONE BAY	\$0.00	\$0	\$0	(\$21,699)
TEMPORARY TRAILER	\$0.00	TBD	TBD	TBD
TEMPORARY EQUIPMENT STORAGE	\$0.00	TBD	TBD	TBD
GENERAL CONDITIONS	\$283,742.00	\$283,742.00	\$283,742.00	\$283,742.00
WINTER CONDITIONS - CONCRETE & MASONRY?				
(ASSUMING SPRING START THUS LIMITING WINTER				
CONDITIONS).	\$0.00	\$0.00	\$0.00	\$0.00
ESTIMATING CONTINGENCY - 5%	\$0.00	\$174,120.51	\$169,596.94	\$164,293.96
PROJECT CONTINGENCY - 10%	\$389,178.37	\$365,653.07	\$356,153.56	\$345,017.32
TESTING (BY OWNER)	\$0.00	\$0.00	\$0.00	\$0.00
CRH BUILDING PERMITS	\$39,322.00	\$36,199.65	\$35,259.20	\$34,156.71
CRH ENGINEERING PLAN REVIEW FEES	\$14,673.75	\$11,698.75	\$11,698.75	\$11,698.75
CRH ENGINEERING INSPECTION FEES	\$41,925.00	\$33,425.00	\$33,425.00	\$33,425.00
CM FEE 2.4%	\$105,045.19	\$98,484.17	\$95,953.73	\$92,987.30
GL INSURANCE	\$22,409.64	\$21,009.96	\$20,470.13	\$19,837.29
PERFORMANCE BOND	\$45,043.38	\$42,230.01	\$41,144.96	\$39,872.96
BUILDERS RISK	\$6,824.07	\$6,397.85	\$6,233.46	\$6,040.75
OWNER'S PROTECTIVE LIABILITY	\$7,745.55	\$7,261.77	\$7,075.19	\$6,856.46
SUB-TOTAL	\$4,563,951	\$4,278,891	\$4,168,950	\$4,040,066
ARCHITECTURAL ENGINEERING FEES 7.5%	\$342,296.30	\$320,916.82	\$312,671.22	\$303,004.93
EQUIPMENT FURNISHINGS	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00
CONSTRUCTION COSTS	\$4,956,246.97	\$4,649,808	\$4,531,621	\$4,393,071

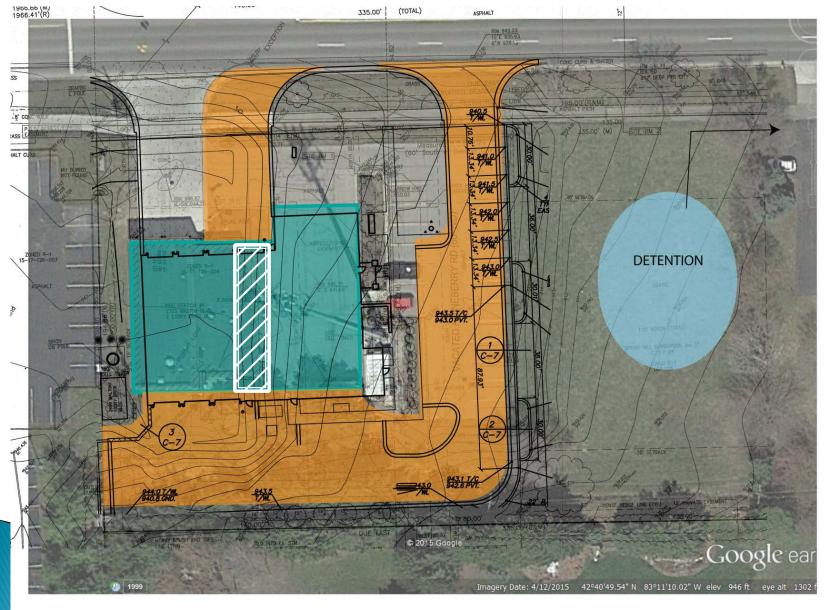
<sup>\*\*\*</sup> GENERAL CONDITIONS ASSUMES START OF CONSTRUCTION MAY 1 2016





#### ROCHESTER HILLS FIRE STATION #4





#### ROCHESTER HILLS FIRE STATION NO. 4 CONCEPTUAL ESTIMATE FOR OPTIONS USING EXISTING SITE 09-28-15

	OPTION #1 BID RESULTS 08/07/2015 & 08/19/2015	OPTION #2  NEW BUILDING AT CURRENT BUILDING LOCATION	OPTION #3 ADDITION TO EXISTING BUILDING RENOVATE APPARATUS BAYS - FOUR APPARATUS	OPTION #4 ADDITION TO EXISTING BUILDING RENOVATE APPARATUS BAYS - THREE APPARATUS
BUILDING AREA	8,835 SF	8,835 SF	BAYS TOTAL 8,835 SF	BAYS TOTAL 7,967 SF
	A		•	
TRADE COST (WITHOUT BONDS)	\$3,608,041.72	\$3,608,041.72	\$3,608,041.72	\$3,608,041.72
DELETE TRAFFIC SIGNALS	\$0.00	(\$116,063)	(\$116,063)	(\$116,063)
DELETE ACCESS ROAD TO CELL TOWER	\$0.00	(\$14,448)	(\$14,448)	(\$14,448)
DELETE UNDERGROUND DETENTION-ADD POND	\$0.00	(\$106,312.50)	(\$106,313)	(\$106,313)
DELETE RETAINING WALLS AT EAST PROPERTY LINE	\$0.00	(\$123,100)	(\$123,100)	(\$123,100)
REDUCE LANDSCAPE PLANTINGS	\$0.00	(\$29,250)	(\$29,250)	(\$29,250)
REDUCE EARTHWORK-EAST SIDE	\$0.00	(\$50,000)	(\$50,000)	(\$50,000)
FILL SOUTH OF NEW BUILDING LOCATION	\$0.00	\$18,000	\$18,000	\$18,000
RETAINING WALL SOUTH OF NEW BUILDING LOCATIO QUANTITY CHANGE TO HIGH BAY DRIVEWAY	N \$0.00	\$46,800	\$46,800	\$46,800
(SAVING PORTION OF EXISITING DRIVE)	\$0.00	(\$35,000)	(\$35,000)	(\$44,200)
REDUCE EXTERIOR MASONRY WALLS	\$0.00	\$0	(\$66,595)	(\$70,520)
REDUCE FOUNDATIONS	\$0.00	\$0	(\$16,547)	(\$19,467)
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DELETE OVERHEAD DOORS	\$0.00	\$0	\$0	(\$13,660)
DELETE TRENCH DRAINS	\$0.00	\$0	(\$15,660)	(\$23,490)
DOOR OPENING MODIFICATIONS @ EXISTING BAYS	\$0.00	\$0	\$45,000	\$45,000
REDUCE ROOF STRUCTURE AND FINISHES-ONE BAY	\$0.00	\$0	\$0	(\$34,718)
REDUCE MECH/ELEC/FIRE PROT - ONE BAY	\$0.00	\$0	\$0	(\$21,699)
TEMPORARY TRAILER	\$0.00	TBD	TBD	TBD
TEMPORARY EQUIPMENT STORAGE	\$0.00	TBD	TBD	TBD
GENERAL CONDITIONS	\$283,742.00	\$283,742.00	\$283,742.00	\$283,742.00
WINTER CONDITIONS - CONCRETE & MASONRY?	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , , , , , , , , , , , , , , , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
(ASSUMING SPRING START THUS LIMITING WINTER				
CONDITIONS).	\$0.00	\$0.00	\$0.00	\$0.00
ESTIMATING CONTINGENCY - 5%	\$0.00	\$174,120.51	\$169,596.94	\$164,293.96
PROJECT CONTINGENCY - 10%	\$389,178.37	\$365,653.07	\$356,153.56	\$345,017.32
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CONSTRUCTION COSTS	\$4,956,246.97	\$4,649,808	\$4,531,621	\$4,393,071

<sup>\*\*\*</sup> GENERAL CONDITIONS ASSUMES START OF CONSTRUCTION MAY 1 2016

## Questions?