

THOMASBROWN ARCHITECTS



PRELIMINARY REPORT

PROPOSED CENTRAL YORK FIRE SERVICES HEADQUARTERS STATION 4-5

NOVEMBER 15, 2016



PROPOSED CENTRAL YORK FIRE SERVICES HEADQUARTERS STATION 4-5

Thomas Brown Architects Inc. were engaged by the Town of Aurora and Central York Fire Services in the Summer of 2015 to advise on the feasibility of locating a Headquarters Station including Fire Training facilities on 3 selected sites – each approximately 2 Acres in size. Based on our preliminary studies, we were able to determine that each of the sites would accommodate a Headquarters Station complete with Fire Training Offices and Classrooms but without the land area to accommodate Training Props and Training Exercises. Following an informal presentation to the Joint Councils of Aurora and Newmarket, it was agreed to secure the 2 sites which are adjacent to each other on Isaacson Crescent at Earl Stewart Drive to provide a 4 Acre site for the development of a Headquarters Station and Fire Training Facilities including exterior Training Exercises.

Once the properties were secured, we were asked to provide preliminary information as to the probable size of the Headquarters Station, how it might be located on the site and what might be the extent of the Training Facilities which could be incorporated within the balance of the site. In conjunction with this investigation, we were asked to provide a Preliminary Cost Estimate for the project as envisioned.

Thomas Brown Architects have gained an unusual expertise in the Design and Construction Administration of Fire Stations over the past 40 years having completed over 100 such projects. We have attached for reference a copy of our complete experience in Fire and EMS projects and we have attached copies of Fact

Sheets for Fire Stations recently completed in Aurora, Markham, Richmond Hill, Whitchurch-Stouffville and our most recent Station in Oshawa. Our approach to the Proposed Headquarters Station in Aurora is based on a facility which would be comparable in quality to these examples.

We have also included for reference our history of Costs for Fire Station Projects which we have been tracking since 1995. We have highlighted 6 particular projects which we feel would be representative of the costs which would be anticipated for this Project. We have also used this information for a determination of the probable escalation in costs for the Aurora Headquarters in 2017-2018.

We have worked with Central York Fire Services to determine a Programme for the Headquarters Station. The main elements of the Station will be:

- Headquarters Administration Offices
- Fire Suppression Facilities
- Equipment Spaces
- Apparatus Bays & Service Spaces
- Training & Classroom Spaces

These elements are broken down into room sizes in the Preliminary Programme attached to this report.

Using the Programme, we have developed a Cost Estimate based on the projected overall Station size and the historical costs for projects of similar quality. Based on our experience with similar facilities, we have also included projected costs for the development of the Training Facilities.

The Preliminary Cost Estimate attached to this Report is broken down to indicate the costs for each of the main elements located in the Headquarters Station. We have then added projected costs for the Training Area assuming that it would be developed at the same time as the Headquarters Station.

The balance of the Cost Estimate incorporates additional budget items including Escalation, Consulting and In-House fees, Permit Costs, an Allowance for Poor Soils and a Contingency Allowance.

In order to provide a sense of reality to this Report, we have developed a Site Layout Drawing P1 incorporating the Headquarters Station, proper driveways and turning radii for the Fire Vehicles, adequate parking spaces for Staff, Visitors and Training requirements, Exterior Training areas for Training Props, Hose Exercises and Driver Training.

While the Headquarters Station is not specifically planned, we have allocated the required space to the shape which we have shown on the Site Plan. The allocation of the various elements are illustrated on Drawing P2 – Floor Plan & Massing. The Plan Areas are based on the Preliminary Programme.

Drawing P3 provides an overall Aerial View of the Site with the Building shape and size and the Exterior Training Facilities illustrated.

Finally, we have prepared an "Artists Sketch" of the Headquarters Station as seen from the corner of Isaacson Crescent and Earl Stewart Drive.

We trust that you will find the information contained in this Report to be of assistance in understanding and evaluating this important proposed development. We are readily available to assist further with responses to any questions arising or to provide further information and/or opinions.

Respectfully,



Paul McIntosh
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Toronto, ON M5T 2C8
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C: 416-998-2810
pem@tbrownarch.com

Preliminary CYFS Headquarters Station 4-5 Programme November 2016

Administration Area

FRONT VESTIBULE	80 sq ft	
REAR VESTIBULE	50 sq ft	
MALE B/F WASHROOM	100 sq ft	
FEMALE B/F WASHROOM	100 sq ft	
HERITAGE ROOM	600 sq ft	
CHIEF'S OFFICE	250 sq ft	
DEPUTY'S OFFICE 1	225 sq ft	
DEPUTY'S OFFICE 2	225 sq ft	
HR OFFICE	150 sq ft	
BOARD ROOM	300 sq ft	
ADMINISTRATIVE ASSISTANTS (4)	480 sq ft	
COPIER/ADMIN FILES/STORAGE	240 sq ft	
	2,800 sq ft	

Suppression Staff Space

PLATOON CHIEF	240 sq ft	
CAPTAINS OFFICE (2)	480 sq ft	
DAYROOM	360 sq ft	
KITCHEN / DINING ROOM	450 sq ft	
MENS WASHROOM & SHOWERS	240 sq ft	
MENS LOCKER ROOM	320 sq ft	
WOMENS WASHROOM & SHOWERS	90 sq ft	
WOMENS LOCKER ROOM	100 sq ft	
DORMITORIES	640 sq ft	
EXERCISE ROOM	600 sq ft	
	3,520 sq ft	

Equipment Space

SCBA/CLEAN ROOM	300 sq ft	
MEDICAL STORAGE	100 sq ft	
GEAR ROOM (60 GEAR STORAGE UNITS)	500 sq ft	
GENERAL STORAGE	400 sq ft	
WORKSHOP	150 sq ft	
PARTS STORAGE	150 sq ft	
HOSE STORAGE / DRYING	100 sq	
	1,700 sq ft	

Apparatus Bays/Service Space

APPARATUS BAYS (4 DRIVE THROUGH)	7,200 sq ft	
MECHANICAL	300 sq ft	
ELECTRICAL	200 sq ft	
	7,700 sq ft	

Training/Classroom Space

OFFICES (4)	600 sq ft	
CLASSROOMS (2)	1,500 sq ft	
TRAINING SPACES (INTERIOR)	2,000 sq ft	
	4,100 sq ft	

TOTAL AREAS	19,820 sq ft	
CIRCULATION & WALLS @ 25%	4,955 sq ft	
TOTAL PROJECT SIZE	24,775 sq ft	

Preliminary CYFS Headquarters Station 4-5 Cost Estimate

November 2016

HEADQUARTERS OFFICES

ADMINISTRATION AREA	2,800 sq ft @ \$315/sq ft	\$ 882,000
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SUPPRESSION STAFF SPACE

CREW QUARTERS	3,520 sq ft @ \$315/sq ft	\$1,108,800
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EQUIPMENT SPACE

LOCATED ADJACENT TO BAYS	1,700 sq ft @ \$315/sq ft	\$ 535,500
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APPARATUS BAYS/SERVICE SPACE

FOUR DRIVE-THROUGH BAYS	7,700 sq ft @ \$315/sq ft	\$ 2,425,500
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TRAINING/CLASSROOM SPACE

OFFICES, CLASSROOMS & TRAINING	4,100 sq ft @ \$315/sq ft	\$ 1,291,500
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CIRCULATION & WALLS

ALLOWANCES	4,955 sq ft @ \$315/sq ft	\$ 1,560,825
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SUBTOTAL	24,775 sq ft	\$ 7,804,125
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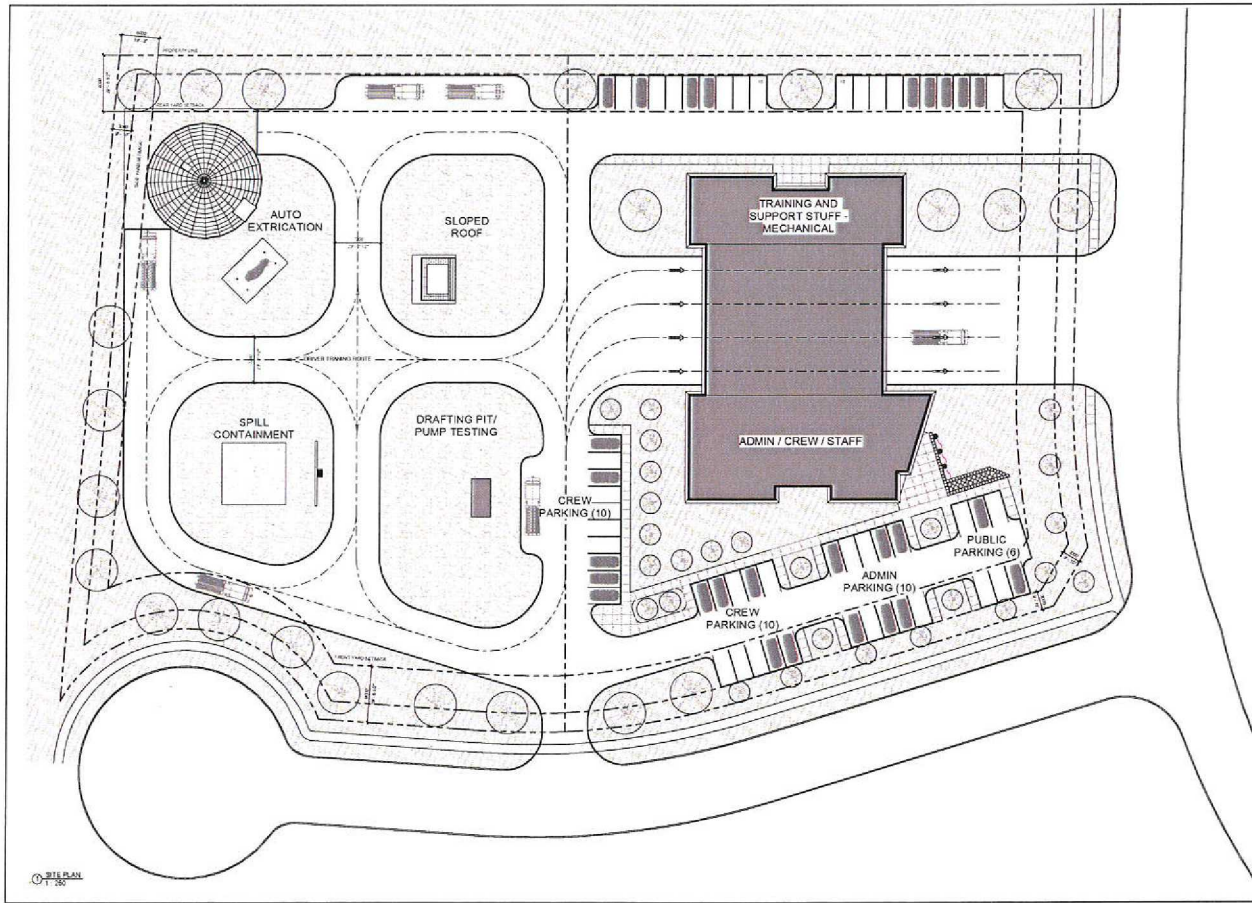
TRAINING AREA

SITE SERVICING & PREP	Allowance	\$ 185,000
ASPHALT PAVING	2,300 sq m @ \$50/sq m	\$ 115,000
SALT DOME	2,800 sq ft @ \$125/sq ft	\$ 350,000
ALLOWANCE FOR PROPS	4 @ \$25,000	\$ 100,000

SUBTOTAL	\$ 8,554,125
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ESCALATION FOR 2018 @ 3.0%	\$ 240,915
PROJECT MANAGEMENT (Internal)	\$ 300,000
CONSULTANTS FEES @ 7%	\$ 600,000
PERMITS	\$ 50,000
ADVERSE SOILS (Allowance)	\$ 200,000

SUBTOTAL	\$ 9,945,040
CONTINGENCY ALLOWANCE @10%	<u>\$ 994,504</u>
TOTAL	\$10,939,544



<p>The Contractor shall verify all dimensions prior to construction of the work and shall be responsible for the accuracy of the drawings and shall be responsible for the accuracy of the work.</p>	
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④ CONCEPT MAPPING

⑤ CONCEPT MASSING

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PROPOSED
CENTRAL YORK FIRE SERVICES
HEADQUARTERS STATION 4-5

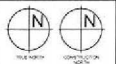
AURORA, ONTARIO

THOMASBROWN
ARCHITECTS

117 Seaside Avenue, Suite 200 • 415-394-5750 ext 101
Tampa, FL 33606 • t.brown@thomasbrownarch.com

DESIGN: 100% • 100%

FLOOR PLAN & MASSING



DATE	OCT 31 2016
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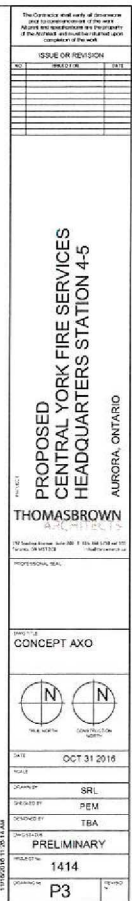
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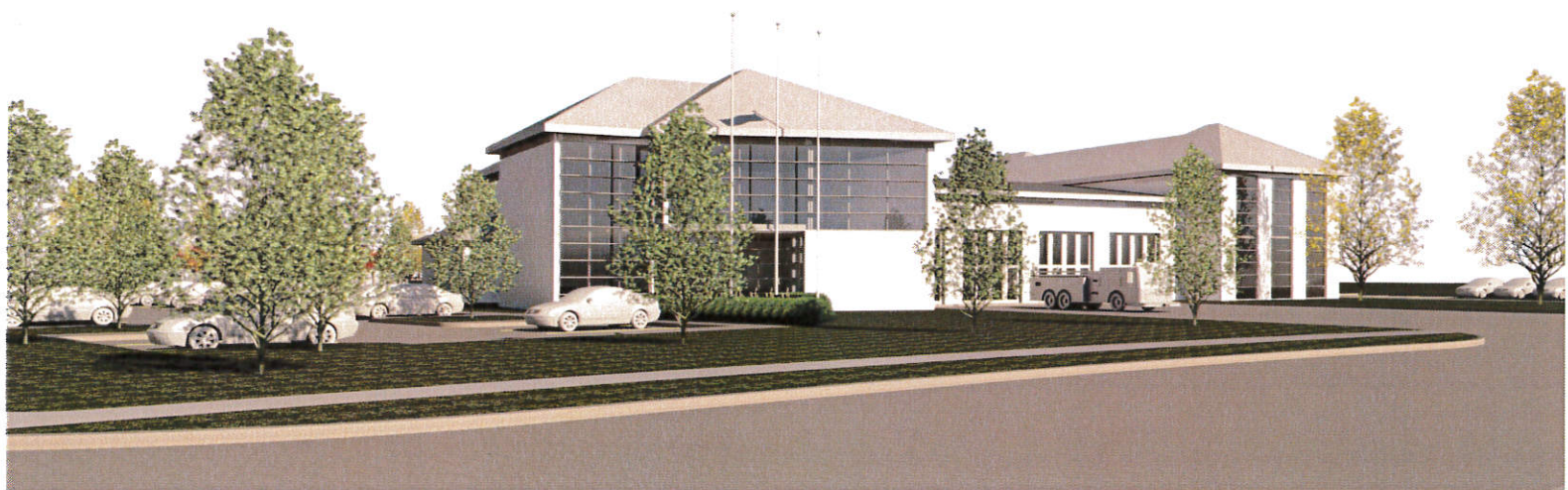
PROJ. CODE No. **1414**

1414	
Observations	Remarks

Starting No. **P2**

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Project	Year	Total Size (sq.ft.)	Total Cost (\$)	Cost \$/sq.ft.
Kincardine Fire Headquarters	1995	9,500	799,054.00	84.11
Whitby Fire Headquarters	1995	24,000	2,228,386.93	92.85
Stoney Creek Fire Stations 2 & 4	1995	14,100	1,299,880.00	92.81
Mississauga Fire Station 118	1996	7,700	766,747.10	99.58
Markham Fire Station 96	1996	9,000	1,080,040.18	120.00
Scarborough Fire Station 08	1998	7,100	697,436.00	98.23
Scarborough Fire Station 01	1998	9,100	1,136,999.46	125.15
Mississauga Fire Station 119	1998/1999	7,850	895,000.00	114.01
Mississauga Fire Station 117	1998/1999	7,500	811,125.00	108.11
Richmond Hill Fire Station 04	1999	6,650	817,500.00	123.12
Richmond Hill Fire Station 05	Mar 2000	9,750	1,302,750.32	133.62
Township of King Fire Station 34	Aug 2000	7,500	1,090,037.30	144.76
Toronto Fire Station/Sheppard	Nov 2000	17,000	3,130,000.00	184.00
Whitby Fire Station 06	Mar 2001	8,400	1,285,710.28	153.06
Holland Landing Fire Station 34	Feb 2002	8,885	1,380,224.00	155.34
Markham Fire Station 92	Apr 2003	15,400	2,909,351.55	189.00
Whitby Fire Station 03	Jun 2003	8,400	1,586,000.00	189.00
Courtice Fire Station	May 2004	9,950	1,975,000.00	198.50
Markham Fire Station 98	Sept 2004	10,000	2,497,000.00	249.70
Guelph East End Fire Station	Dec 2004	9,050	1,968,430.00	218.00
West Brant Fire Ambulance Station	Mar 2005	10,370	2,033,000.00	196.05
Aurora Fire Station 44	July 2005	8,167	1,800,000.00	220.40
Whitby Fire Station 01 - Brooklin	Sept 2005	8,400	1,986,500.00	236.49
Oshawa Fire Station No.05	Sept 2005	17,170	4,448,370.00	259.00
City of Toronto Fire Station 116	Mar 2006	11,770	2,873,000.00	244.10
Georgetown Fire/EMS Station*	Mar 2008	16,000	4,261,600.00	*266.35
Georgetown Fire Headquarters *	Mar 2008	13,600	3,931,300.00	*289.07
Whitchurch -Stouffville Fire/EMS	Sept 2008	18,800	5,508,400.00	293.00
Markham Fire Station 93*	April 2009	10,000	2,998,000.00	*299.80
Brampton Station 205 (add'ns &alt's)	May 2009	4,935	1,320,290.00	267.54
Guelph Fire/Police/EMS Station*	May 2009	36,000	9,092,229.00	*252.56
Brampton Station 212*	Aug 2009	11,040	3,253,572.00	*294.70
Mississauga Fire/Peel Region EMS	Oct 2009	37,750	10,200,000.00	270.20
Brampton Live Fire Training Structure	Jun 2010	6,277	2,194,300.00	342.41
Markham Fire Station 99*	Nov 2010	10,839	3,278,000.00	*302.43
Richmond Hill Station 8-6*	July 2011	8,934	2,773,910.00	*310.49
City of Toronto Fire Station 141	Aug 2011	11,535	4,350,000.00	377.11
City of Toronto Fire Station 221	July 2012	11,915	4,474,200.00	375.51
City of Toronto Fire Station 135	Oct 2013	15,000	5,741,500.00	382.77

*Leed Designed

Project	Year	Total Size (sq.ft.)	Total Cost (\$)	Cost \$/sq.ft.
Canfield Fire Station	Nov 2013	5,200	1,200,000.00	230.77
Queensville Fire Station 2-8	Jan 2014	9,880	2,588,680.00	262.00
Mount Albert Fire Station 2-6	May 2014	8,180	2,265,265.00	277.00
Oshawa Fire Station 6	Jun 2015	10,800	3,376,000.00	312.60
Vaughan Fire 7-3 / York EMS Station	Aug 2015	13,880	5,896,696.00	*424.83
Cambridge Fire Station No. 6	Jun 2016	9,150	3,627,000.00	396.39

*Leed Designed

Project

DESCRIPTION: 8,060 SQ.FT. FIRE STATION



Client + Consulting Team

OWNER TOWN OF AURORA
OCCUPANT CENTRAL YORK FIRE SERVICES
CONTRACTOR BWK CONSTRUCTION COMPANY LTD.
STRUCTURAL STEPHENSON ENGINEERING LTD.
MECHANICAL/ELECTRICAL ABLE ENGINEERING INC.
SITE SERVICES CONSULT LIMITED
LANDSCAPE ARCHITECTS HARRINGTON & HOYLE LANDSCAPE ARCHITECTS

Cost

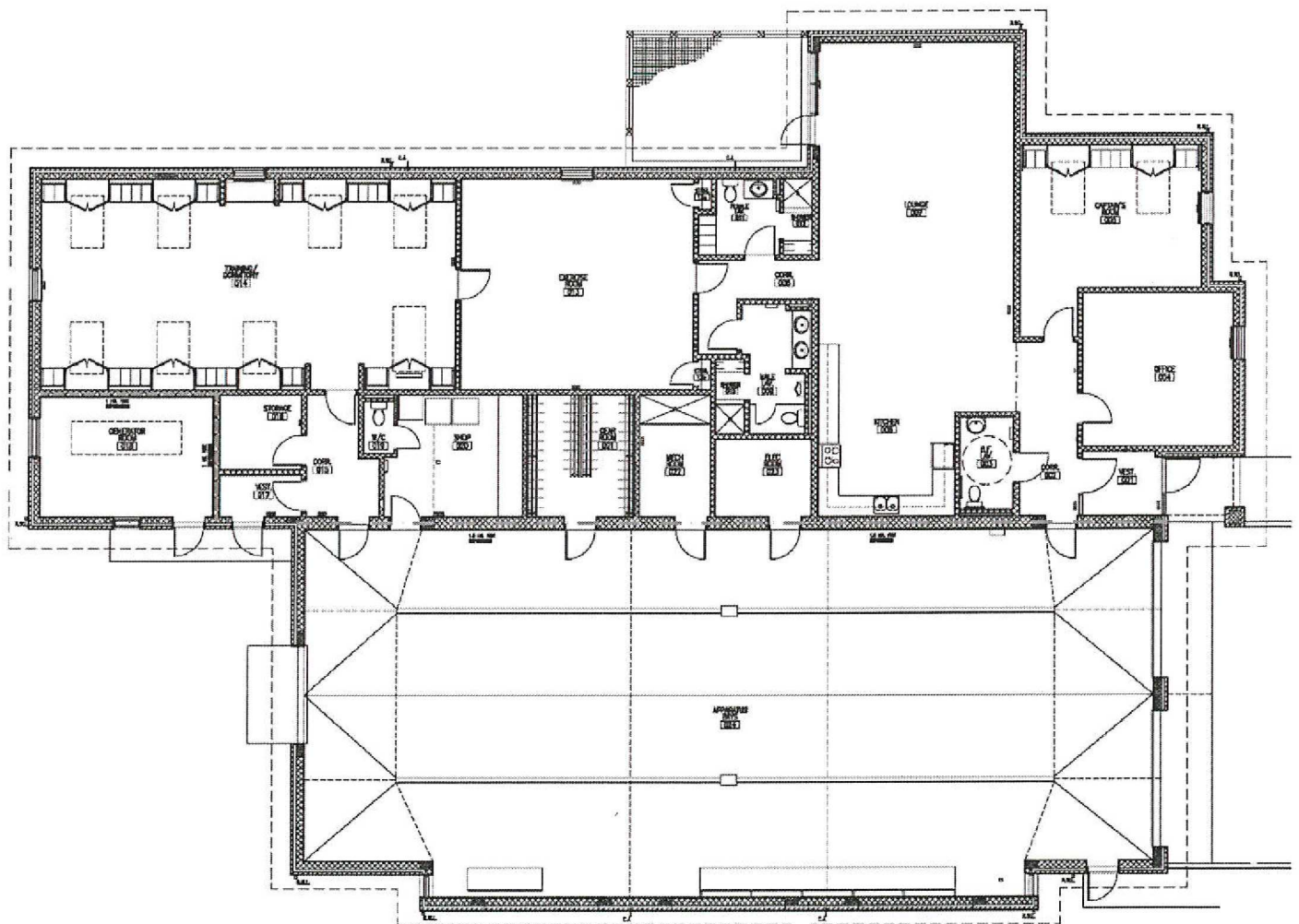
COMPLETION FEBRUARY 2006
SCHEDULE 30 WEEKS
TENDER \$1,800,000.00
CONSTRUCTION \$1,777,000.00

Program

2 DOUBLE-DEPTH DRIVE-THROUGH VEHICLE BAYS, GENERATOR ROOM, WORKSHOP, MECH/ELEC ROOMS, DORMITORY / TRAINING ROOM FOR 8, EXERCISE ROOM, MALE + FEMALE WASHROOMS, CAPTAIN'S DORM + OFFICE FOR 2, KITCHEN, DINING, LOUNGE, BARRIER-FREE WASHROOM.

References

THE TOWN OF AURORA ALLAN DOWNEY, DIRECTOR, LEISURE SERVICES (905) 726-4752
AARON KARMAZYN, MANAGER, FACILITIES + PROPERTY (905) 727-3123 X4323
CENTRAL YORK FIRE SERVICES JOHN MOLYNEAUX, FIRE CHIEF (905) 895-9222



Project

DESCRIPTION: 10,000 SQ.FT. FIRE STATION INCORPORATING FIRE PREVENTION OFFICES, FACILITIES FOR WOMEN FIRE FIGHTERS, GROUND SOURCE HEATING & COOLING, RAIN WATER HARVESTING FOR TRUCK FILL AND TRUCK WASH. TARGETING LEED™ GOLD CERTIFICATION.



Program

FIRE: 2 DOUBLE-DEPTH DRIVE-THROUGH VEHICLE BAYS & 1 BACK-IN BAY, GENERATOR ROOM, WORKSHOP, AIR FILL RM, LAUNDRY, GEAR ROOM, MECH/ELEC ROOMS, DORMITORY/TRAINING ROOM FOR 10, EXERCISE ROOM, MALE + FEMALE WASHROOMS, CAPTAIN'S OFFICE, DISTRICT CHIEF OFFICE, FIRE PREVENTION OFFICE FOR 4, KITCHEN/DINING/LOUNGE, BARRIER-FREE LAV.

Cost

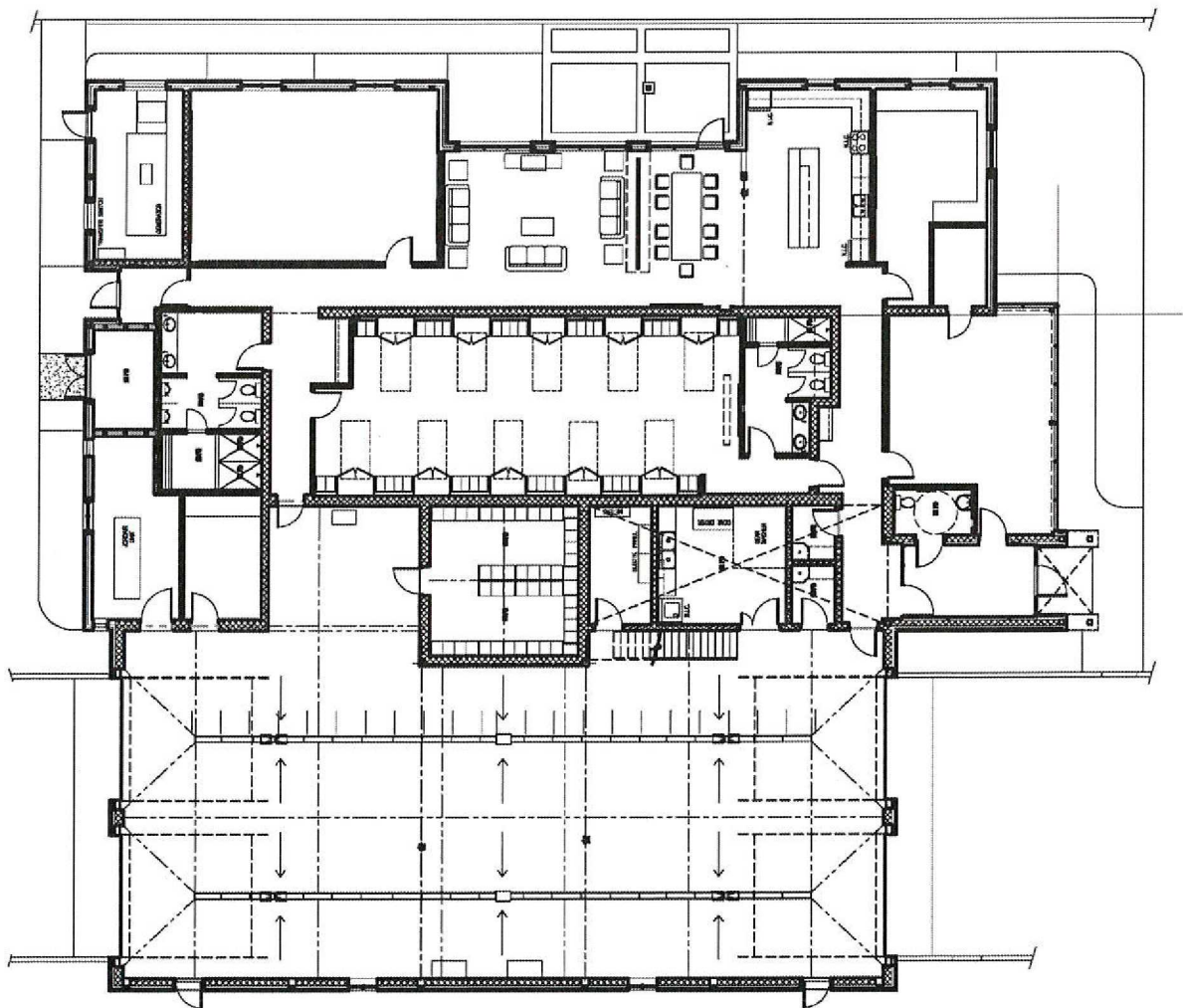
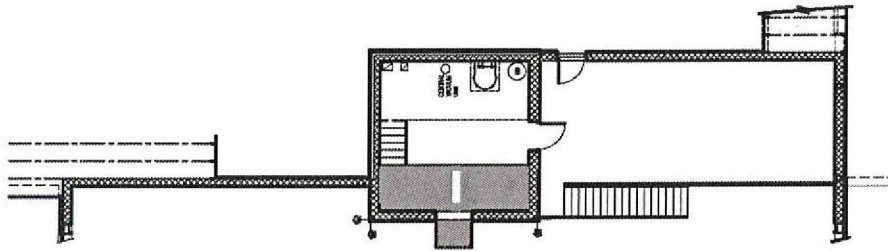
COMPLETION SUMMER 2010
SCHEDULE 12 MONTHS
ESTIMATED COST \$3,700,000.00
TENDER PRICE: \$2,998,000.00
CONTRACT PRICE \$2,982,051.16

Client + Consulting Team

OWNER TOWN OF MARKHAM
OCCUPANT MARKHAM FIRE DEPARTMENT
CONTRACTOR TBA
STRUCTURAL STEPHENSON ENGINEERING LTD.
MECHANICAL/ ELECTRICAL COBALT ENGINEERING
SITE SERVICES EAGLEBROOKE ENGINEERING
LANDSCAPE ARCHITECTS HARRINGTON & HOYLE LANDSCAPE ARCHITECTS

References

THE TOWN OF MARKHAM MAX STANFORD (905) 477-7000 X 2710
MARKHAM FIRE DEPARTMENT DEPUTY CHIEF PHIL ALEXANDER (905) 477-5960



Project

DESCRIPTION: 10,000 SQ.FT. FIRE STATION INCORPORATING FIRE PREVENTION OFFICES, FACILITIES FOR WOMEN FIRE FIGHTERS, BAS, SOLAR PV AND RAIN WATER HARVESTING FOR TRUCK FILL AND TRUCK WASH. TARGETING LEED™ SILVER CERTIFICATION.



Program

FIRE: 2 DOUBLE-DEPTH DRIVE-THROUGH VEHICLE BAYS & 1 BACK-IN BAY, GENERATOR ROOM, WORKSHOP, AIR FILL RM, LAUNDRY, GEAR ROOM, MECH/ELEC ROOMS, DORMITORY/TRAINING ROOM FOR 10, EXERCISE ROOM, MALE + FEMALE WASHROOMS, CAPTAIN'S OFFICE, DISTRICT CHIEF OFFICE, FIRE PREVENTION OFFICE FOR 4, KITCHEN/DINING/LOUNGE, BARRIER-FREE LAV.

Cost

COMPLETION MAY 2012
SCHEDULE 56 WEEKS
TENDER AMOUNT \$3,278,000.00
FINAL CONSTRUCTION \$3,547,600.00

Client + Consulting Team

OWNER TOWN OF MARKHAM
OCCUPANT MARKHAM FIRE DEPARTMENT
CONTRACTOR TBA
ARCHITECTURAL TEAM LEADERS – PAUL MCINTOSH, JANET STEWART
STRUCTURAL STEPHENSON ENGINEERING LTD.- ARON MCCALLUM, ERIC JOHNSON
MECHANICAL/ ELECTRICAL JAIN & ASSOC – EZZAT MITRI, ANISH JAIN
SITE SERVICES MGM CONSULTING LTD. – JOHN BISHOP, MATT STAIRS
LANDSCAPE ARCHITECTS HARRINGTON MCAVAN LANDSCAPE ARCHITECTS – RICH MCAVAN

References

THE TOWN OF MARKHAM MAX STANFORD (905) 477-7000 EXT 2710
MARKHAM FIRE DEPARTMENT DEPUTY CHIEF PHIL ALEXANDER (905) 477-5960

Project

DESCRIPTION: SINGLE STOREY 8390 SQ.FT. FIRE STATION ON A 1.084 ACRE SITE INCORPORATING INDIVIDUAL DORMS FOR 6, RAINWATER HARVESTING FOR TRUCK WASHING. TARGETING LEED SILVER CERTIFICATION.



Client / Consulting Team

OWNER TOWN OF RICHMOND HILL
OCCUPANT RICHMOND HILL FIRE & EMERGENCY SERVICES
CONTRACTOR BECC CONSTRUCTION GROUP LTD.
STRUCTURAL STEPHENSON ENGINEERING LTD.
MECHANICAL/ELECTRICAL JAIN & ASSOCIATES
CIVIL MGM CONSULTING
LANDSCAPING HARRINGTON MCAVAN

Cost

COMPLETION AUGUST 2012
SCHEDULE 47 WEEKS
TENDERS \$ 2,773,910.00
CONTRACT PRICE \$ 2,814,968.00

Program

FIRE: SINGLE STOREY 8390 SQ.FT. INCORPORATING 2 DOUBLE-DEPTH DRIVE-THROUGH APPARATUS BAYS, SCBA EQUIPMENT, STAND-BY GENERATOR, GEAR WASHER & DRYER, GEAR ROOM, WORK ROOM AND CREW QUARTERS CONSISTING OF KITCHEN, DINING, LOUNGE, CAPTAIN'S OFFICE, EXERCISE ROOM, TRAINING ROOM, MALE & FEMALE WASHROOMS & SHOWERS AND INDIVIDUAL DORMS FOR 6.

References

TOWN OF RICHMOND HILL: STEVE MORGAN, PROJECT MANAGER (905) 771-2518
RICHMOND HILL FIRE & EMERGENCY SERVICES: CHIEF STEVE KRAFT (905) 780-2898 EXT. 223

2010 GOLD AWARD WINNER

PROJECT

DESCRIPTION: 18,800 SQ.FT. FIRE DEPARTMENT HEADQUARTERS AND EMS STATION INCORPORATING ADMINISTRATION AND TRAINING FACILITIES, TRAINING TOWER, BELL TOWER AND HERITAGE LOBBY, AND QUARTERS FOR FIRE AND EMS CREWS.



TEAM

OWNER TOWN OF WHITCHURCH-STOUFFVILLE
OCCUPANT WHITCHURCH-STOUFFVILLE FIRE DEPARTMENT, YORK REGION EMS
CONTRACTOR NORLON BUILDERS LONDON LTD.
STRUCTURAL HALCROW YOLLES LTD.
MECHANICAL SMITH & ANDERSEN CONSULTING ENGINEERS
ELECTRICAL MULVAY & BANANI INTERNATIONAL
SITE SERVICES MARSHALL, MACKLIN, MONAGHAN

COST

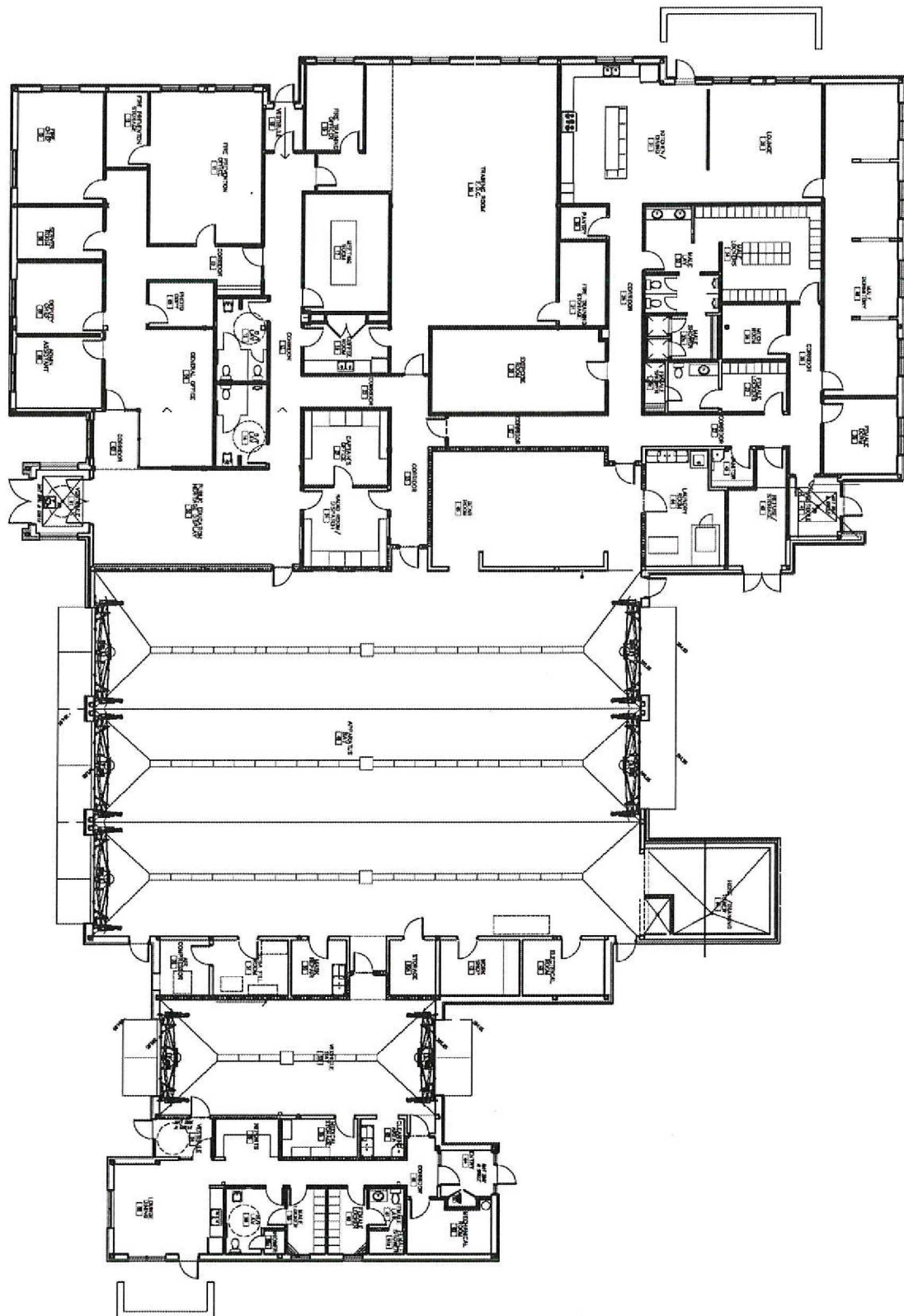
COMPLETION JANUARY 2010
SCHEDULE 44 WEEKS
TENDER PRICE \$5,508,400.00
CONTRACT PRICE \$5,508,400.00

PROGRAM

FIRE: 3 DOUBLE-DEPTH DRIVE-THROUGH VEHICLE BAYS, HOSE / TRAINING TOWER, GENERATOR ROOM, AIR FILL, LAUNDRY, MECH/ELEC ROOM, CAPTAIN'S OFFICE AND DORM, ADMINISTRATIVE OFFICES, MUSEUM LOBBY, DORMITORY, EXERCISE ROOM, MALE AND FEMALE WASHROOM FACILITIES, FIRE PREVENTION OFFICES, TRAINING ROOM, DAYROOM, DINING + KITCHEN FACILITIES, BARRIER-FREE ACCESS AND WASHROOM FACILITIES.
EMS: SINGLE DRIVE-THROUGH VEHICLE BAY, KITCHEN/LOUNGE, MALE & FEMALE FACILITIES, REPORTS OFFICE, MED AND OXYGEN STORAGE, CLEAN ROOM.

REFERENCES

WHITCHURCH-STOUFFVILLE FIRE: ROB MCKENZIE, CHIEF (905) 640-9595 X 225
REGION OF YORK: STEVE HORVAT, PROJECT MANAGER (905) 830-4444 X 1710



Project

DESCRIPTION: 10,674 SQ.FT. FIRE STATION INCORPORATING MECHANICS' BAYS, FIRE PREVENTION AND PUBLIC EDUCATION FACILITIES.



Client + Consulting Team

OWNER CITY OF OSHAWA
OCCUPANT OSHAWA FIRE DEPARTMENT
CONTRACTOR GAY COMPANY LIMITED
STRUCTURAL STEPHENSON ENGINEERING LTD.
MECHANICAL/ELECTRICAL REGAL ENGINEERING INC.
SITE SERVICES MMM GROUP
LANDSCAPE ARCHITECTS HARRINGTON & MCCAVAN LANDSCAPE ARCHITECTS

Cost

COMPLETION SCHEDULED FOR JULY 2016
SCHEDULE 47 WEEKS
TENDER PRICE \$3,214,000
CONSTRUCTION \$TBD

Program

FIRE: 2 DOUBLE-DEPTH DRIVE-THROUGH VEHICLE BAYS + 2 DOUBLE-DEPTH DRIVE-THROUGH MECHANICS BAYS WITH 2 HOISTS, AIRMATION AIR FILTRATION UNITS, GENERATOR ROOM, AIR FILL, TRAINING TOWER, LAUNDRY, MECH/ELEC ROOM, CAPTAIN'S OFFICE AND DORM, TRAINING ROOM / DORMITORY, EXERCISE ROOM, MALE AND FEMALE WASHROOM FACILITIES, FIRE PREVENTION OFFICES, TRAINING ROOM, DAYROOM, DINING + KITCHEN FACILITIES, BARRIER-FREE ACCESS AND WASHROOM FACILITIES.

References

THE CITY OF OSHAWA: TOM HODGINS, DIRECTOR SPECIAL OPERATIONS (905) 436-5636 X2361
PETER PATON, MANAGER CONSTRUCTION COORDINATION (905) 436-5636 X2420
OSHAWA FIRE DEPARTMENT STEVE MERRINGER, FIRE CHIEF (905) 436-3899

THOMASBROWN ARCHITECTS

PROJECT EXPERIENCE 1974 - 2016

Ambulance Stations

2011	Toronto EMS - Turnbury
2009	Halton Region EMS – South Oakville
2006	Halton Region EMS - Burlington
2002	Halton Region EMS Station – Oakville York Region EMS – Cane Parkway Renovations to Toronto EMS Station 34 Toronto EMS North East Hub Toronto EMS Station 19
2001	Halton Region EMS Station - Milton Halton Region EMS Station - Acton York Region EMS Station – Unionville (addition to Markham Fire Station 95) York Region EMS Station – Markham (part of the new Markham Fire Station 92) Regional Municipality of Halton EMS Ambulance Response Stations Prototype Sheppard Avenue East Emergency Services Station, Toronto
2000	Region of York EMS Ambulance Response Station Prototype Halton Hills Ambulance Station, Preliminary Site Evaluation & Schematic Design
1989	New Metro Ambulance Station/ Paramedic Centre, City of York
1983	New Metro Ambulance Station, City of North York
1981	New Metro Ambulance Station, City of Scarborough

Fire Department Headquarters

2009	Whitchurch-Stouffville Fire Headquarters
2008	Georgetown Fire Department HQ
1995	Kincardine Fire Department HQ
1994	Clarington Fire Department HQ – Coordination of Design-Build
1993	East York Fire Department HQ
1992	York Fire Department Communications Centre
1991	Whitby Fire Department HQ
1989	York Fire Department HQ
1978	Richmond Hill Fire Department HQ*
1974	Mississauga Fire Department HQ*

Municipal Emergency Operation / Comm Centres

2012	Markham Communications Centre
2006	Toronto Heavy Urban Search and Rescue Facility
2003	Toronto 911 Call Centre Renovations
2000	Town of Richmond Hill EOC
1997	Clarington Municipal Operations Centre Town of Whitby EOC

Fire Training Facilities

2012	Kingston Fire Training Props
2011	Brampton Training Tower
2009	City of Barrie Fire Training Facilities
2008	Richmond Hill Fire Training Facilities
2002	Toronto Fire Academy Addition and Alterations
2001	Waterloo Region Emergency Services Training and Research Complex: Fire Training Structure Administration Building Fire Research Facility for University Waterloo
1995	Oakville Fire Training Centre Planning Study
1994	Mississauga Fire Training Centre Addition and Upgrade
1991	Whitby Fire Department Teaching Facility (in the Fire Department Headquarters)

1990	Markham Fire Training Centre Planning Study
1989	Training Tower for York Fire Department Headquarters
1986	North York Smoke Training Centre and Subway Disaster Training Centre
1984	Scarborough Fire Training Centre and Training Fire Station
1983	North York Fire Training Centre
1978	Mississauga Fire Training Centre*

Fire/EMS Stations

2009	Whitchurch-Stouffville Fire/EMS Station
2008	Georgetown Central Fire/EMS Station
2008	Mississauga Fire/EMS Station
2005	West Brant Fire Ambulance Station #4
2004	Markham Fire/York Region EMS Station 92
2003	Sheppard Avenue East Emergency Services Station, City of Toronto

Fire/Police/EMS Stations

2008	Guelph South End Emergency Services Station
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Fire/Police Stations

2003	Courtice Fire Station/Durham Region Police Offices
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Fire Stations

2016	City of Oshawa Fire Station 6
2015	Town of East Gwillimburg Queensville Fire Station
2015	Town of East Gwillimburg Mt. Albert Fire Station
2015	Guelph Fire Station 3 Renovation
2012	Guelph Fire Station 2 Renovation
2012	Markham Fire Station 99
2012	Richmond Hill Firestation 86
2011	Toronto Fire – Eglinton
2011	Toronto Fire-Chaplin
2009	Markham Fire Station 93
2009	Toronto Fire York University
2009	Brampton Fire Stations 205 & 212
2007	Toronto Old Leslie Street Fire Station
2006	Oshawa Fire Station 5 Enniskillen Fire Station Addition, Clarington Aurora Fire Station 44 Whitby Fire Station 01, Brooklin East End Fire Station, Guelph Markham Fire Station 98
2001	Fire Station Number 03, Town of Whitby Holland Landing Fire Station 24, East Gwillimbury Whitby Fire Station Number 06
2000	Township of King Fire Hall 34 (including the Offices of the Fire Chief) Richmond Hill Fire Station Number 05 (including the Offices of Fire Prevention)
1999	Mississauga Fire Station Number 119 (Replacement), Pearson International Airport Mississauga Fire Station Number 117 Richmond Hill "Russell Curly Lynette" Fire Station Number 04
1998	Scarborough Fire Station Number 08 Addition and Renovation CFB Borden Fire Station Addition and Retrofit – Design-Build Scarborough Fire Station Number 01

THOMASBROWN ARCHITECTS

1997	Mississauga Fire Station Number 104 Renovations	2002	Ontario Fire College Expansion and Renovation Feasibility Study, Office of the Fire Marshall
1996	East York Fire Station Number 03 Mississauga Fire Station Number 118 Sheffield Fire Hall, Tamworth		
Fire Stations cont'd			
1995	Stoney Creek Fire Station Numbers 2 & 4 Design-Build Mississauga Fire Station Number 119, Pearson International Airport Markham Fire Station Number 96	2002	Clarington Municipal Operations Centre Expansion Feasibility Study, Municipality of Clarington Carleton University / NRC Fire Research Facility
1995	East York Fire Station Number 2 Renovations	2001	Turnberry Avenue EMS Station Feasibility Study, City of Toronto Chaplin Crescent Emergency Services Station Feasibility Study, City of Toronto
1994	Mississauga Fire Station Number 115 Renovations Scarborough Fire Station Number 07 Oakville Fire Station Number 6		Royal York Road Fire Station Expansion Feasibility Study, City of Toronto Communications Centre Addition to Fire Station 95, Assessment Study, Markham Fire Department
1993	Halton Hills Churchill Road Fire Station		Royal York Rd. Emergency Services Station Feasibility Study, City of Toronto
1992	Mississauga Fire Station Number 114	2000	Toronto Fire Services Training Facilities, Current Usage and Future Needs Analysis Markham Combined Emergency Services Communications Centre Proposal
1989	Oakville Fire Station Number 05 Oakville Fire Station Number 01 Oakville Fire Station Number 02		Mississauga Fire Training Centre Burn House Life Expectancy Assessment Toronto East Fire/Ambulance Station Potential Site Assessment
1988	North York Fire Station Number 18 Mississauga Fire Station Number 3		Mississauga Fire Station 121 Potential Site Assessment
1984	North York Fire Station Number 15 North York Fire Station Number 7 Scarborough Fire Station Number 02	1999	Markham Back-Up Emergency Operations Centre Feasibility Study
1983	Mississauga Fire Station Number 10 Scarborough Fire Station Number 15 Mississauga Fire Station Number 6 Addition	1996	Oakville Fire Training Centre Planning Study Scarborough Fire Stations – Feasibility Study on Upgrading
1982	Erindale Fire Station, Mississauga*	1994	Scarborough Fire Stations Relocation Feasibility Study
1981	Mississauga Fire Station Number 9*		
1980	Oakridges Fire Station, Richmond Hill*		
1977	Mississauga Fire Station Number 7*		
1976	Mississauga Fire Station Number 6*		
1975			
1971			
Studies			
2006	Oshawa Fire Station 6 Markham Cathedral Fire Station Markham Cornell Fire Station Bradford West Gwillimbury Addition to HQ	*	completed by Tom Brown while a partner with Allen Brown and Sherriff Architects
2005	Belleville Fire Department HQ Programme		



Whitby Fire Department Headquarters, Whitby ON, 1992