

Town of Seekonk
South End Fire Station
Building Committee

Committee Members Attendance:

James Tusino (Chairman) Michael Bourque (Vice Chairman) Nicholas Rondeau (Clerk)
 David Sullivan (Member) Oscar Elmasian (Member)

Other Attendees: Dir. Of Comms. Dir. Wunschel | TGAS: P. Carissimi (Virtual) | TGAS: T. Galante (Virtual) | CGA: D. Tavares (Virtual) | CGA: M. Carney |

Meeting Date: 12/15/2022

Time: 7:09 PM

In person meeting.

Anyone audio or visually recording the meeting?

No one audio or visually recording

Open meeting:

Motion to call the Meeting to Order at 7:09pm, made by: Mr. Bourque,

All in favor:

1.) Consider the Approval of Bills and Invoices.

- a. CGA – SFS-010 Motion to table the invoice to the next meeting and when the Town Administrator has the ability to review it. Motion made by Mr. Elmasian, Seconded by Mr. Sullivan. All In favor: Mr. Rondeau, Mr. Sullivan, Mr. Bourque, Mr. Elmasian.

2.) Community: None

3.) General: None

4.) Updates CGA

- a. See Addendum I : Seekonk South End Fire Station Building Committee 12/15/22
 - i. Updates, Discussions, and Action Items:
 - ii. Building Commissioning:
 - iii. Cost Estimates:
 - iv. Geotech Report:
 - v. Perc Tests: Mr. Sullivan asked if the test did meet title 5. Mr. Tavares said it did meet the title 5 status.
 - vi. Permitting Costs:
 - vii. Design Development Status:
 - viii. Presentation to Board of Selectmen:
 - ix. Purchasing of Dispatch Equipment:

5.) Updates TGAS

- a. Computer presentation Addendum II: Presentation for 12/15/22.

- i. Alternates:

1. Use and prioritization

Town of Seekonk
South End Fire Station
Building Committee

2. Four-fold doors – by-fold doors for the Fire apparatus.
3. Pre-action fire suppression system = Mr. Sullivan made the motion to make “Pre-action fire suppression system” to be moved to the base price, Seconded by: Mr. Bourque. All in favor of: Mr. Sullivan, Mr. Elmasian, Mr. Bourque, Mr. Rondeau.
4. Additional HVAC zones – in the Fire Bunk rooms. = Remove
5. Apparatus bay radiant floor = remove
6. Apparatus bay fan = remove
7. Epoxy floors = add to base cost. Mr. Sullivan made a motion to move the Epoxy floors to the base price of the building and removed from the Alternates list. Seconded by, Mr. Bourque. All in favor: No. All those against: Yes; Mr. Sullivan, Mr. Bourque, Mr. Rondeau, Mr. Elmasian.

Current Alternate list is:

- a.) Epoxy Floors.
- b.) Four-fold doors – by-fold doors for the Fire apparatus.

ii.

6.) Approval of Minutes:

- a. None at this time.

7.) Discuss next steps and next meeting date.

Next meeting will be a full board meeting with the Board of Selectmen on Wednesday December 21st, 2022 at 6:00pm. Will have to post on Monday December 19th, 2022 before 12:00pm.

Next meeting after Board of Selectmen meeting, would be January 19, 2022, Thursday, at Possibly virtual. Will confirm January 12th.

Next meeting will be on:

Motion to adjourn, Member Bourque, Seconded by Member Sullivan. All in favor. Member Bourque, Member Sullivan, Member Rondeau, Member Elmasian at 9:01pm.



CGA Project Management, LLC
P.O. Box 3147
Fall River, MA 02722

INVOICE

Town of Seekonk
100 Peck Street
Seekonk, MA 02771

Project: Seekonk South End Fire Station
Invoice #: SFS-010
Invoice Date: 11/30/2022
Original Contract Amount: \$ -
Amended Contract Amount: \$ -
Total Contract Amount: \$ -

Description	Contract Amount	Previously Billed	Total Earned	% Complete	Current Billing
Designer Procurement	\$ 4,000.00	\$ 4,000.00	\$ 4,000.00	100%	\$ -
Preconstruction Phases	\$ 60,000.00	\$ 30,000.00	\$ 35,000.00	58%	\$ 5,000.00
Abatement/Demolition	\$ 2,000.00	\$ -	\$ -	0%	\$ -
Construction Phase	\$ 168,000.00	\$ -	\$ -	0%	\$ -
Project Closeout	\$ 6,000.00	\$ -	\$ -	0%	\$ -
Summary	\$ 240,000.00	\$ 34,000.00	\$ 39,000.00	16%	\$ 5,000.00

TOTAL DUE: \$ 5,000.00

Please remit payment to:

CGA Project Management, LLC
P.O. Box 3147
Fall River, MA 02722

Payment Terms: Thirty (30) days



OPM Progress Report

Seekonk South End Fire Station Building Committee

12.15.2022

➤ UPDATES, DISCUSSIONS, and ACTION ITEMS:

- Abatement and Demolition of Existing Building: Request update from S. Cadime on the final permit for the stairs and scheduling the abatement then demolition.
- Building Commissioning: IES provided review comments on the Design Development documents, which the design team reviewed and acknowledged.
- Cost Estimates: CGA, S. Cadime and TGAS met to review the 100% Design Development Cost Estimates to confirm scope and identify several Value Engineering (VE) options. Galante updated drawings and their Cost Estimate to reflect the suggested options, which reduced the cost by approximately \$400,000. Building Committee to review the VE Items. Reference attached list.
 - Reduction of the building/ceiling height of the single-story building. TGAS extended the height reduction to the apparatus bay.
 - Reduction of epoxy flooring. Limited to just decontamination room and lavatory.
 - Reduction of skylights/solar tubes
 - Removal of Walk-off mats from project. Purchased through Owner/FF&E
- Geotech Report: The Geotech firm issued their findings from the borings taken on November 22, 2022. Organic soils and fill were found along the top of the site which will need to be removed and structural fill brought in for the area of the building foundation. Updated costs were included in the revised Cost Estimate. They recommended that additional geotechnical observation and site visits be made during construction activities.
- Perc Tests: Perc Tests were completed on December 1, 2022. They were witnessed by the Board of Health.
- Permitting Costs: A meeting was held today with S.Cadime, CGA, TGAS, and their civil engineer Samiotes to discuss permitting requirements and associated design costs. There is a misunderstanding of services assumed to be owned in the contract versus additional services. This matter is not resolved and could possibly delay the project.
- Design Development Status: Building Interior discussion meeting need to be scheduled for January 2023.
- Presentation to Board of Selectman: A presentation will be made to the Board of Selectman at the December 21, 2022, meeting.
- Purchasing of Dispatch Equipment: Will existing equipment be brought to the new building? Purchasing one new console was mentioned at the Security Meeting, will that be part of the project budget?

➤ PROJECT SCHEDULE (subject to change):

- **06/06/22 – 08/12/22: Schematic Design (Completed)**
- **08/15/22 – 11/07/22: Design Development**
 - **09/01/22: Building Committee Meeting: Building Exterior Material (In-Person)**
 - **09/15/22: Building Committee Meeting: Building Systems (Virtual)**



OPM Progress Report

- 09/26/22: 50% Design Development Package for Review
- 09/29/22: Technical Review Meeting with Town
- 09/29/22: Building Committee Meeting: Furniture and Equipment (Virtual)
- 09/30/22: Complete 50% Design Development Package for Review
- 10/17/22: 50% Design Development Owner review comments due
- 10/20/22: Building Committee Meeting
- 11/03/22: Building Committee Meeting: Int./Ext. Finishes (In-Person)
- 11/07/22: 100% Design Development Package to Cost Estimator/Owner
- 11/11/22: 100% DD Owner review comments due
- 11/14/22: Cost Estimates Received
- 11/17/22: BC Meeting: Approve Notice to Proceed to move into CD Phase
- **11/17/22 – 03/10/23: Construction Documents**
 - 11/17/22: Commence Construction Document Phase
 - **12/15/22: Building Committee Meeting**
 - 12/19/22: 50% CD Package for Review
 - **12/21/22: Board of Selectman Meeting?**
 - 01/02/23: 50% CD Owner review comments due
 - **01/19/23: Building Committee Meeting**
 - 02/06/23: 90% CD Package for Review and to Cost Estimator
 - 02/20/22: 90% CD Cost Estimates due— Meeting needed to review
 - **02/23/23: Building Committee Meeting**
 - 02/24/23: 90% CD Owner review comments due
 - 03/10/23: Complete 100% Construction Documents
- **03/09/23 – 04/26/23: Contractor Bidding**
 - 03/09/23: Submit Central Register and legal advertisement
 - 03/15/23: Construction Bid Documents Available
 - 03/16/23: Building Committee Meeting
 - 04/05/23: Filed Subcontractor Bids (FSB) Due
 - 04/13/23: Building Committee Meeting (Approve FSB Bids)
 - 04/26/23: General Contractor Bids Due
 - 04/27/23: Building Committee Meeting (Approve GC Bids)
- **03/??/23: Board of Selectmen Meeting (Approve TM Warrant Article/Ballot)**
- **05/08/23: TOWN MEETING**
- **06/26/23: BALLOT REFERENDUM VOTE**
- 06/12/23: Award General Contractor Bid (6/7/23: 30 days; 6/28/23: 45 days)
- 06/13/23: General Contractor's Notice to Proceed/Start Construction
- 07/31/24: Substantial Completion
- 09/30/24: Complete Closeout Activities/FF&E Installations/Training
- 10/01/24: Owner Move into Building

➤ **INVOICES:**

- CGA Invoice #10: \$5,000. ***ACTION ITEM***



OPM Progress Report

➤ **PRECONSTRUCTION PROJECT BUDGET:**

Project Budget	Budget	Committed	Billed to Date	Balance
OPM (SD-BID)	\$ 66,000	\$ 66,000	\$ 39,000	\$ 27,000
A&E (SD-BID)	\$ 306,577	\$ 306,577	\$ 153,288	\$ 153,289
<i>Other</i>				\$ -
<i>Other</i>				\$ -
Budget Subtotal	\$ 372,577	\$ 372,577	\$ 192,288	\$ 180,289

➤ **PRELIMINARY TOTAL PROJECT BUDGET (See attached)**

➤ **PROPOSED BUILDING COMMITTEE MEETING DATES (subject to change):**

- 01/19/23 – 7PM

DD COST ESTIMATE REVIEW and VE OPPORTUNITIES

Seekonk Fire Station

Seekonk, MA

DIVISION	ITEM	COMMENTS	VALUE
3	Column Footings	Math doesn't add up. CY unit price seems very high.	\$ (143)
3	Continuous Footings	Math doesn't add up. CY unit price seems very high.	\$ 237
3	Foundation Walls	Math doesn't add up. CY unit price seems very high.	\$ 486
4	Masonry	Eliminate double brick wall on front elevation (-1,174SF)	\$ (58,700)
4	Masonry	Reduce Exterior Wall Height by 2' -Apparatus Bay (-220SF)	\$ (11,000)
5	Structural Steel	Cost/unit price seems high. Steel pricing has dropped	
8	Metal Windows	Specs call for all windows to be storefront. Change to metal windows?	
8	Metal Windows	reduce length and number of clerestory windows and reduce length of a single glass with divisions (-80SF)	\$ (9,200)
8	Metal Windows	Eliminate any curtainwall on the project	
8	Hollow Metal Doors	Door Type 1: Steel or Aluminum?	
8	Hollow Metal Doors	Is HM Sliding Frameless Door needed?	\$ (425)
8	Aluminum Entrances	Remove transom windows above exterior doors	
8	Aluminum Entrances	Eliminate canopy over secondary entrances	
8	Aluminum Entrances	Remove frameless glass entry	\$ (55,200)
8	Tubular Skylights	Delete tubular daylighting devices	\$ (35,000)
8	Framed Skylight	Delete framed skylight at entrance	\$ (26,000)
9	Finishes in Vestibules	change floor finish to rubber ILO epoxy. Change ceiling to ACT ILO painted metal deck. Reduce painting by lowering ceiling height to 10'	
9	Ceiling Heights (Gen)	reduce all ceiling heights to 9' or 10' in occupied spaces.	
9	Ceramic Tile	Change floor tile to epoxy?	
9	Painting	Reduce wall and ceiling heights in ancillary spaces off Apparatus Bay?	
9	Resinous Flooring	Delete epoxy flooring in Apparatus (Add Alternate?)	\$ (86,000)
10	Traffic Signage	Duplicate under Division 32 - Misc Site Signs and Markings?	\$ (2,500)
10	Flagpoles	Integral light at top of pole in lieu of ground lights?	
12	Entrance Floor Mats	drawings do not indicate recessed mat at main entrance. Calls for rubber flooring. Walk off mats by owner?	\$ (4,830)
21	Fire Protection	Scope appears to be light without details. Ensure all equipment, connections, scope and services are included in the estimate	
22	Plumbing	Verify all equipment with Owner	
23	HVAC	(3) Infrared Radiant Heaters shown on M-100 dwg	\$ 19,740
26	Security Access Control	Missing Security systems specifications	
26	Electrical Site Lighting	Alternative less expensive way to light walkway?	
31	Building Demolition	Remove. To be done by Owner	\$ (34,588)
31	Earthwork	Need to discuss cut to fill analysis and unsuitables	
31	Retaining Walls	Type? Missing specifications?	
31	Dumpster & Pad Base	\$33,228 seems excessively high for a 150 SF pad	
32	Landscape Plantings	\$31,330 seems high for the limited amount of lawn area	
32	Site Signs	Duplicate under Division 10 - Traffic Signage?	
			TOTAL \$ (303,123)

PRELIMINARY TOTAL PROJECT BUDGET

Seekonk South End Fire Station

Seekonk, MA

12/15/2022

DRAFT

DESCRIPTION	BUDGET	COMMITTED	PAID TO DATE	BALANCE TO BE PAID	UNCOMMITTED FUNDS
1.0 CONSTRUCTION COSTS / CONSTRUCTION CONTINGENCY					
1.1 Original Construction Contract Sum	\$ 7,200,000.00			\$ -	\$ 7,200,000.00
1.2 Construction Contingency	\$ 750,000.00			\$ -	\$ 750,000.00
1.5 CONSTRUCTION COSTS & CONTINGENCY	\$ 7,950,000.00	\$ -	\$ -	\$ -	\$ 7,950,000.00
2.0 SOFT COSTS / PROFESSIONAL SERVICES					
2.1 PHASE 1 - ARCHITECTURAL & ENGINEERING BASIC SERVICES					
2.2 SD-DD-CD-BID (Basic)	\$ 306,577.00	\$ 306,577.00	\$ 153,288.00	\$ 153,289.00	\$ -
2.3 PHASE 1 - Architectural & Engineering Fees (Subtotal)	\$ 306,577.00	\$ 306,577.00	\$ 153,288.00	\$ 153,289.00	\$ -
2.4 PHASE 2 - ARCHITECTURAL & ENGINEERING BASIC SERVICES					
2.5 PH 2: CA/Closeout (Basic)	\$ 131,390.00	\$ -	\$ -	\$ -	\$ 131,390.00
2.7 PH 2: Architect/Engineering Basic Services Subtotal	\$ 131,390.00	\$ -	\$ -	\$ -	\$ 131,390.00
2.8 TOTAL A&E FEES (BASIC SERVICES)	\$ 437,967.00	\$ 306,577.00	\$ 153,288.00	\$ 153,289.00	\$ 131,390.00
2.9 PHASE 1 & 2 - EXTRA & REIMBURSABLE SERVICES					
2.10 PH 1: Geotech Preconstruction (Contract Amendment #1)	\$ 12,290.00	\$ 12,290.00	\$ -	\$ -	\$ 12,290.00
2.11 PH 2: Geotech Const. Admin. (Contract Amendment #1)	\$ 1,500.00	\$ -	\$ -	\$ -	\$ 1,500.00
2.12 PH 1: Security/Tech/Tower (Contract Amendment #2)	\$ 11,700.00	\$ 11,700.00			
2.13 PH 2: Security/Tech/Tower CA (Contract Amendment #2)	\$ 5,000.00				
2.14 PH 2: Allowance for Reimbursable Expenses	\$ -	\$ -	\$ -	\$ -	\$ -
2.15 TOTAL A&E FEES (EXTRA & REIMBURSABLE SERVICES)	\$ 30,490.00	\$ 23,990.00	\$ -	\$ -	\$ 6,500.00
3.0 OWNER'S PROJECT MANAGER SERVICES					
3.1 Schematic Design through Bid	\$ 64,000.00	\$ 64,000.00	\$ 34,000.00	\$ 30,000.00	\$ -
3.2 Construction Administration-Closeout	\$ 174,000.00	\$ -			
3.3 Demolition Allowance	\$ 2,000.00	\$ -	\$ -	\$ -	\$ -
3.4 OWNER'S PROJECT MANAGER SERVICES	\$ 240,000.00	\$ 64,000.00	\$ 34,000.00	\$ 30,000.00	\$ 176,000.00
4.0 OTHER OWNER AND PROJECT SOFT COSTS					
4.01 Reimbursable Expenses	\$ 25,000.00	\$ -	\$ -	\$ -	\$ 25,000.00
4.02 Commissioning Agent	\$ 30,000.00	\$ 27,700.00		\$ 27,700.00	\$ 2,300.00
4.03 HAZMAT Abatement & Demolition Monitoring*	\$ 50,000.00			\$ -	\$ 50,000.00
4.04 On-Site Geotechnical Services*	\$ 25,000.00			\$ -	\$ 25,000.00
4.05 Project Permitting and Approvals	\$ 25,000.00			\$ -	\$ 25,000.00
4.06 Third Party QC Testing and Special Inspections*	\$ 75,000.00			\$ -	\$ 75,000.00
4.07 Utility Company Fees and Backcharges (Allowance)	\$ 25,000.00			\$ -	\$ 25,000.00
4.08 Move Management (Needed?)	\$ -			\$ -	\$ -
4.09 Moving Costs (Allowance)	\$ 25,000.00			\$ -	\$ 25,000.00
4.10 E-Bidding, Printing and Advertising (Allowance)	\$ 25,000.00			\$ -	\$ 25,000.00
4.11 Bonding Costs & Related Legal Fees (?)	\$ -			\$ -	\$ -
4.12 Builder's Risk Insurance (by GC)	\$ -			\$ -	\$ -
4.13 Building Permit Fee (Waived)	\$ -			\$ -	\$ -
4.14 Other Project Administrative Costs & Legal Fees	\$ 45,000.00			\$ -	\$ 45,000.00
4.15 OTHER OWNER AND PROJECT SOFT COSTS	\$ 350,000.00	\$ 27,700.00	\$ -	\$ 27,700.00	\$ 322,300.00
5.0 OWNER CONTINGENCY					
5.1 OWNER CONTINGENCY (10% soft costs)	\$ 100,000.00	\$ -	\$ -	\$ -	\$ 100,000.00
6.0 FURNITURE, FIXTURES, EQUIPMENT & TECHNOLOGY					
6.1 Furniture, Fixtures & Equipment (Allowance)	\$ 400,000.00			\$ -	\$ 400,000.00
6.2 Technology (Allowance)	\$ 100,000.00			\$ -	\$ 100,000.00
6.3 FF&E/Technology Allowance Subtotal	\$ 500,000.00	\$ -	\$ -	\$ -	\$ 500,000.00
7.0 MISCELLANEOUS					
7.1	\$ -				
8.0 TOTAL PROJECT BUDGET	\$ 9,608,457.00	\$ 422,267.00	\$ 187,288.00	\$ 210,989.00	\$ 9,186,190.00
APPROVED PRECONSTRUCTION BUDGET	\$ -	\$ 425,000.00			
BALANCE REMAINING	\$ -	\$ 2,733.00			

MEETING AGENDA

Project: **Seekonk South End Fire Station**

Project #: 2208

Date: 12.15.22

Initiated by: TGAS

0.0 Building design

- 0.1 Lowered elevation
- 0.2 Canopy at pedestrian entrance
- 0.3 Windows/Doors changes
- 0.4 Fixed windows Vs. Operable windows
- 0.5 Interior heights at apparatus bay
- 0.6 Interior heights at admin/living area

1.0 Cost Estimate

- 1.1 Adjustments discussed with CGA
- 1.2 Updated cost
- 1.3 Next cost estimate

2.0 Alternates

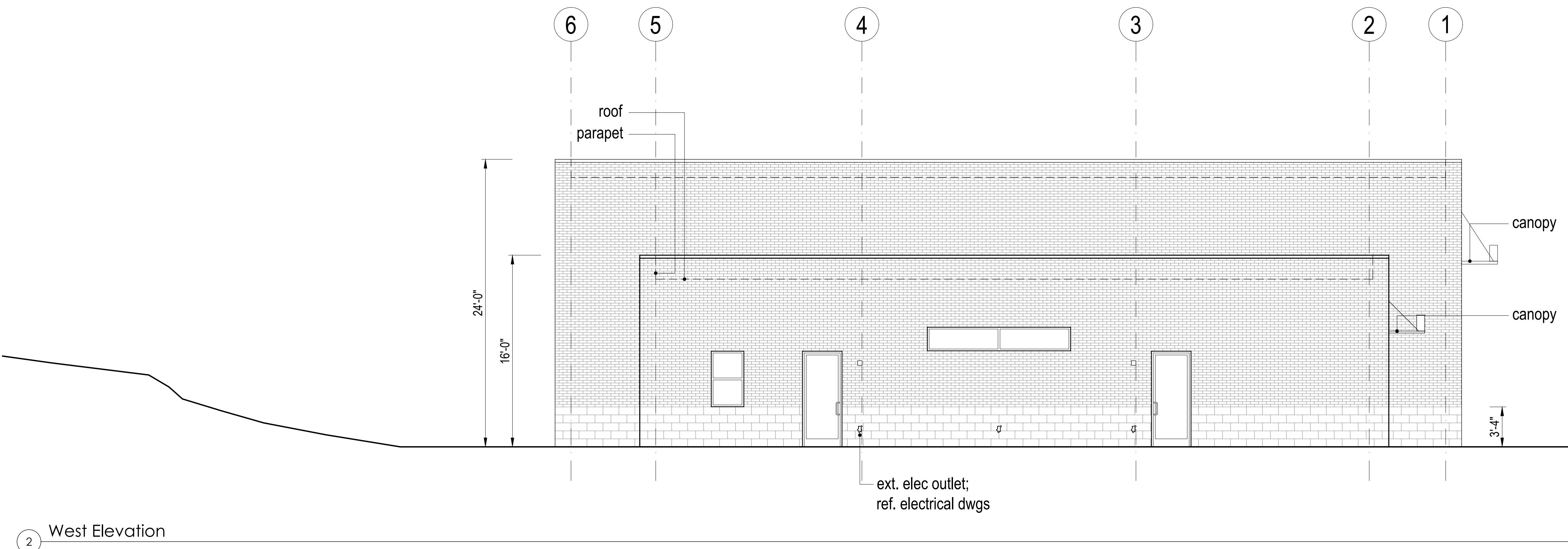
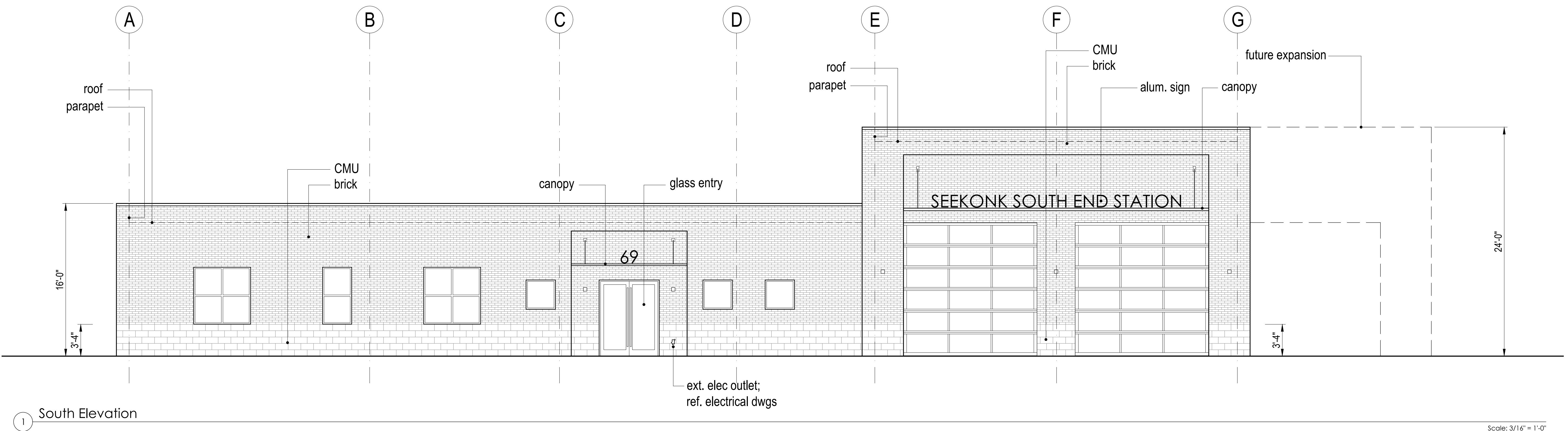
- 2.1 Use and prioritization
- 2.2 Four-fold doors
- 2.3 Pre-action fire suppression system
- 2.4 Additional HVAC zones
- 2.5 Apparatus bay radiant floor
- 2.6 Apparatus bay fan
- 2.7 Epoxy floors

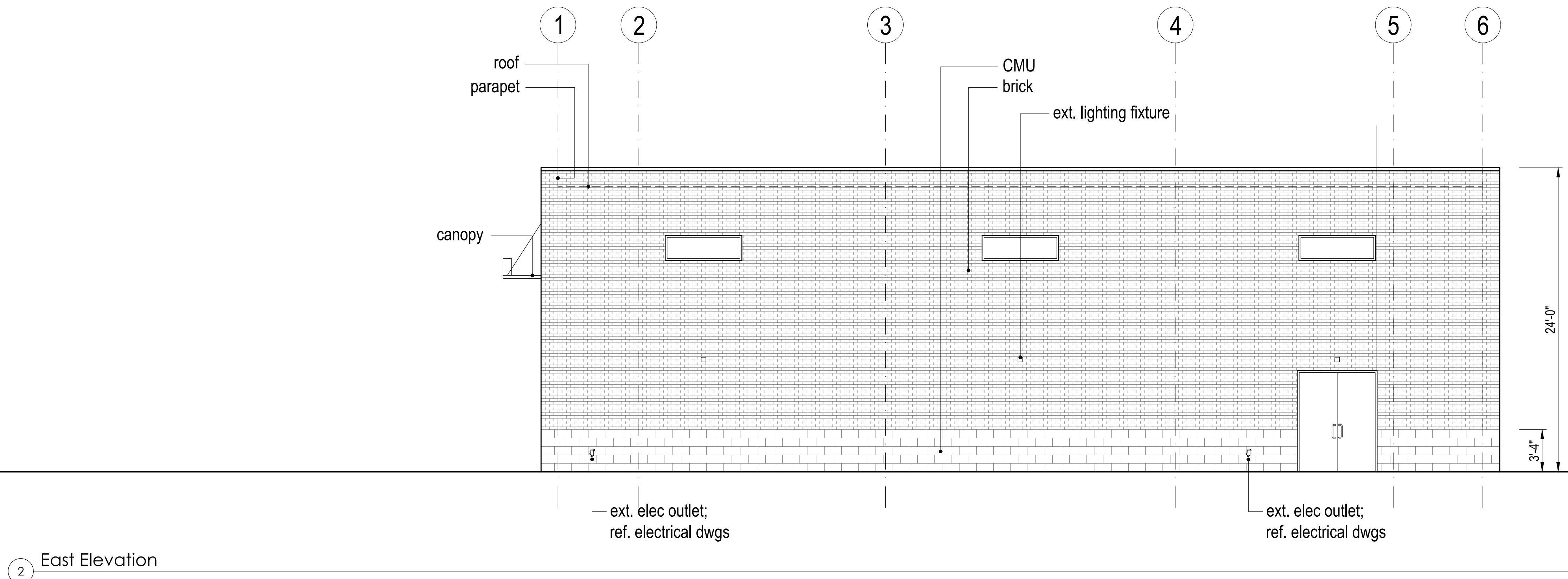
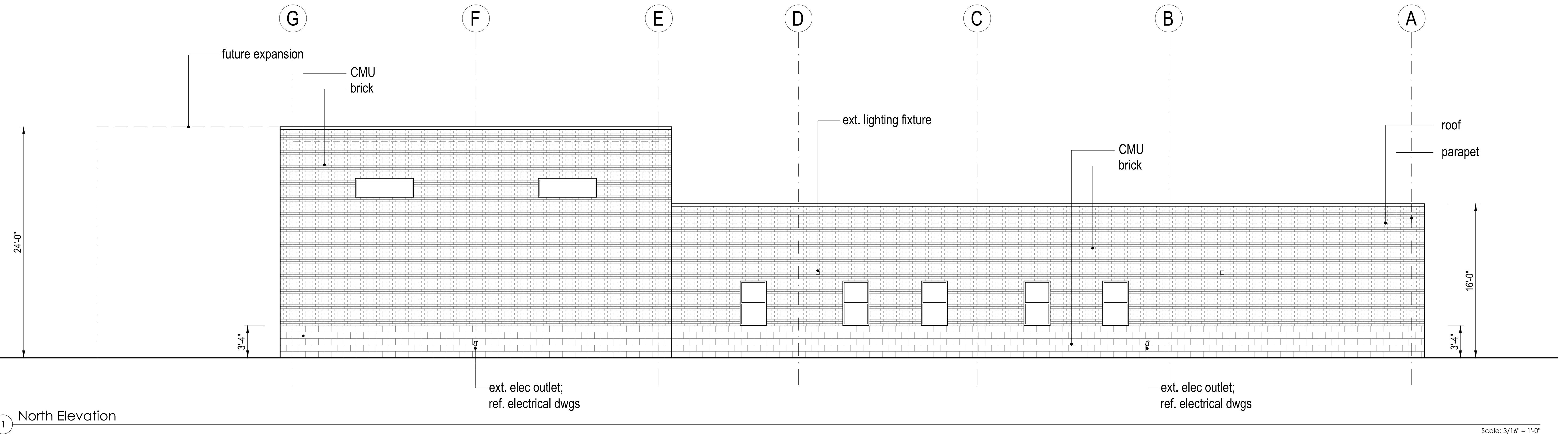
3.0 Schedule

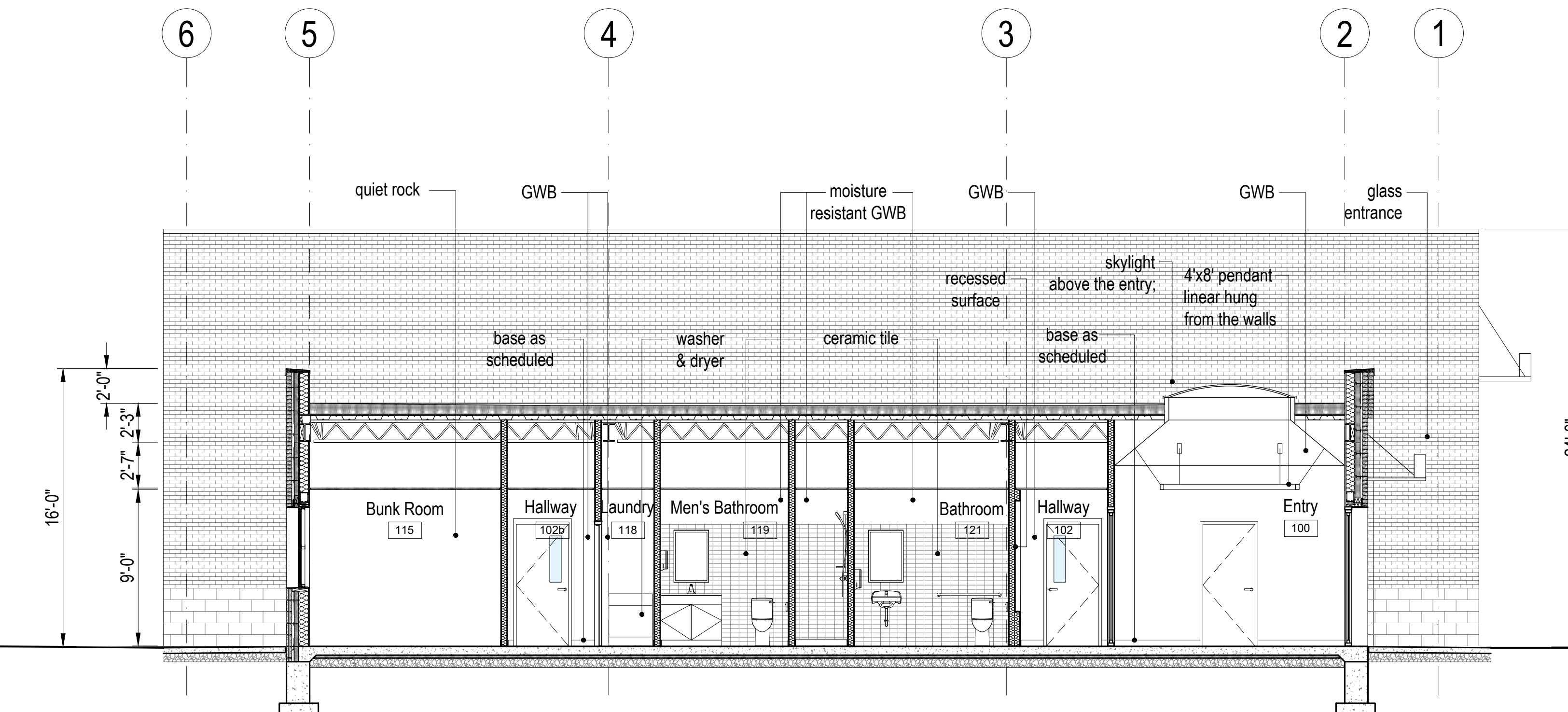
- 3.1 Updated schedule
- 3.2 Next delivery

4.0 Additional services fee

- 4.1 Civil permitting fee

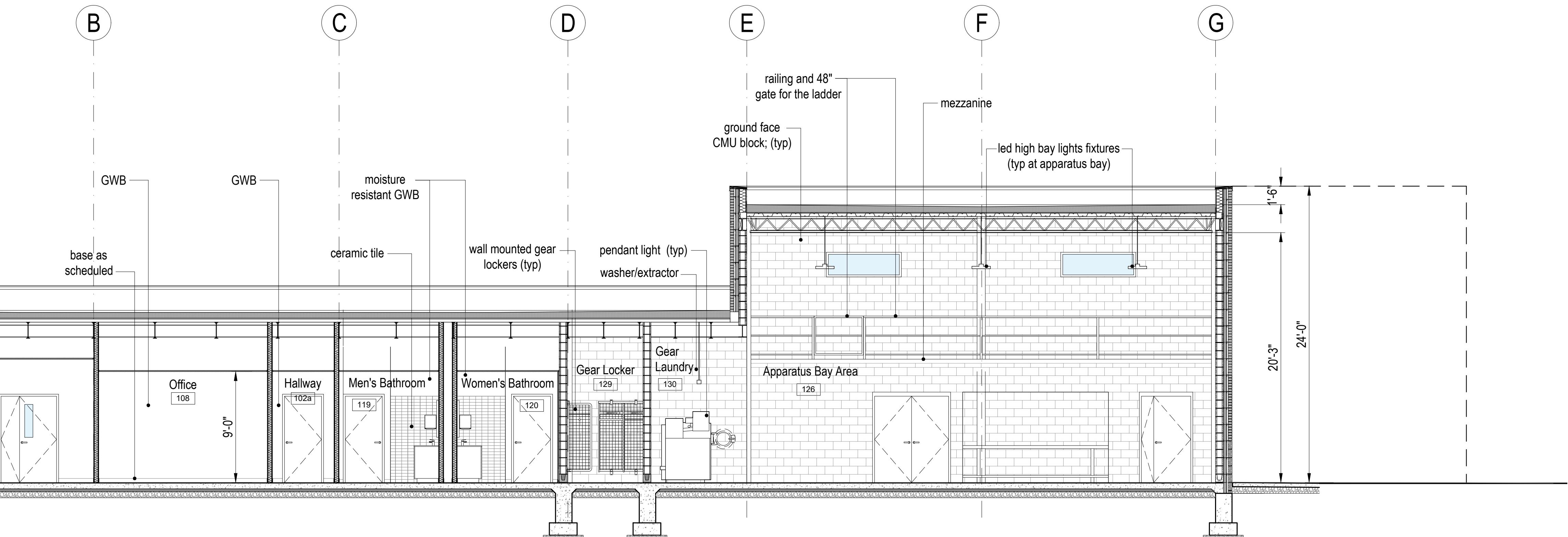






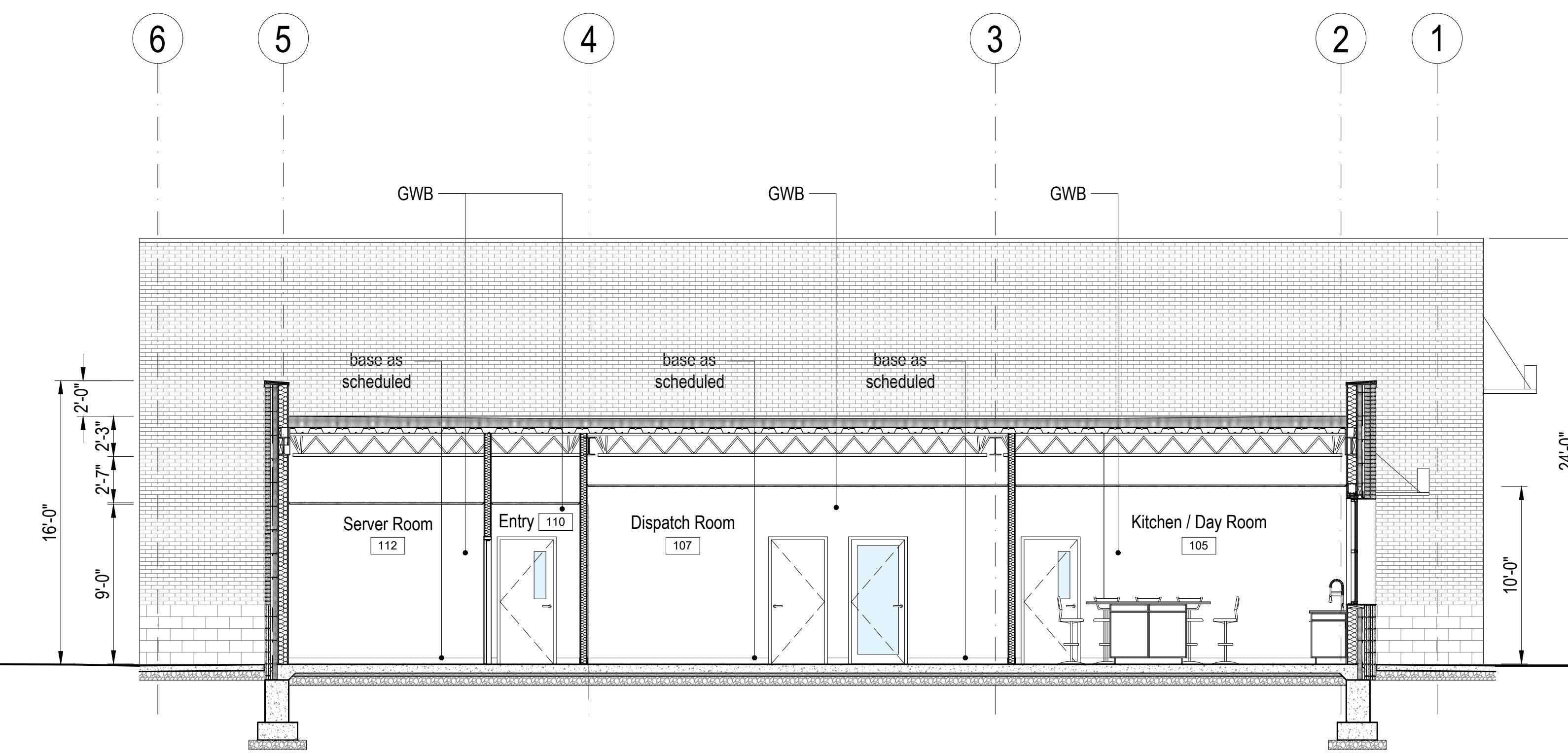
Building Section

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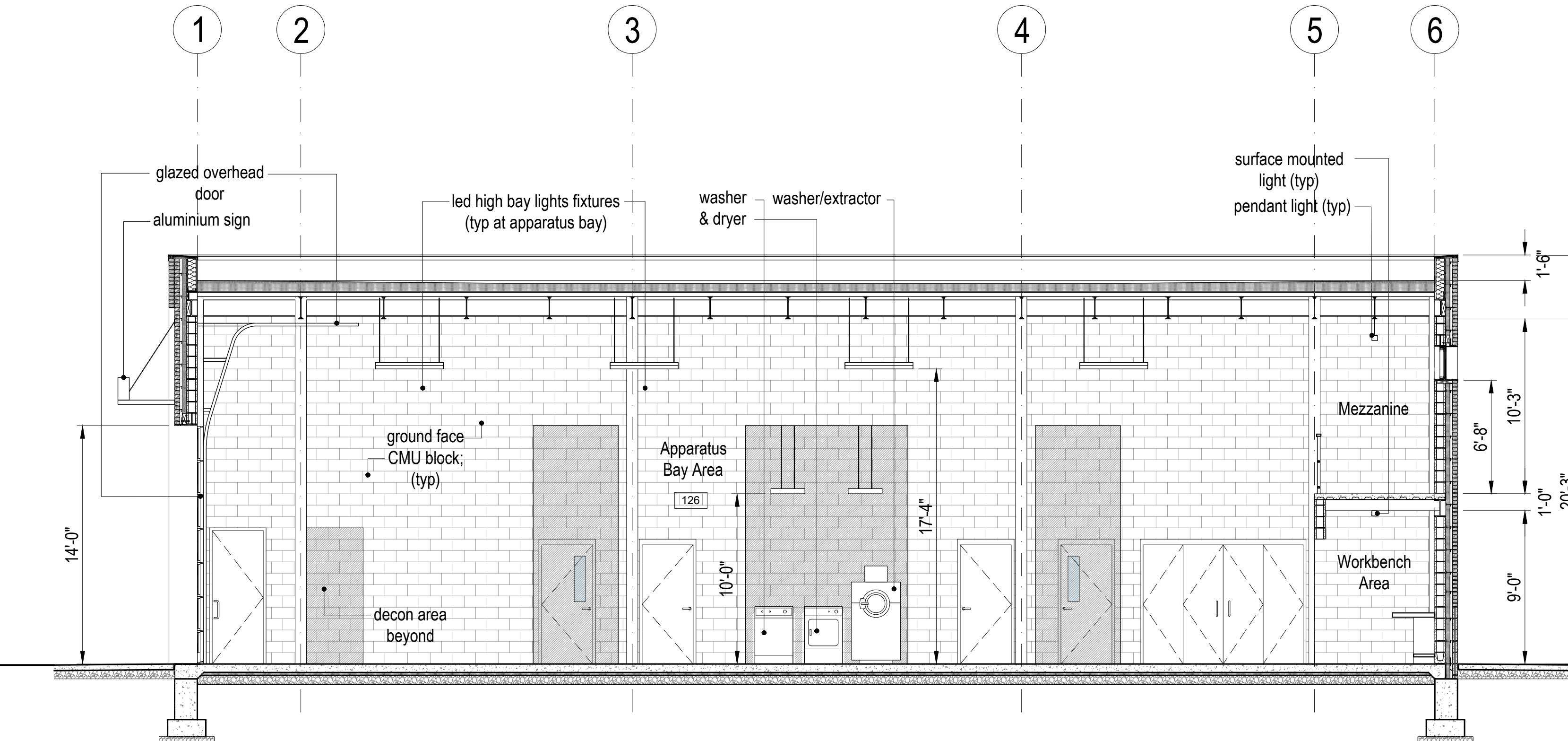
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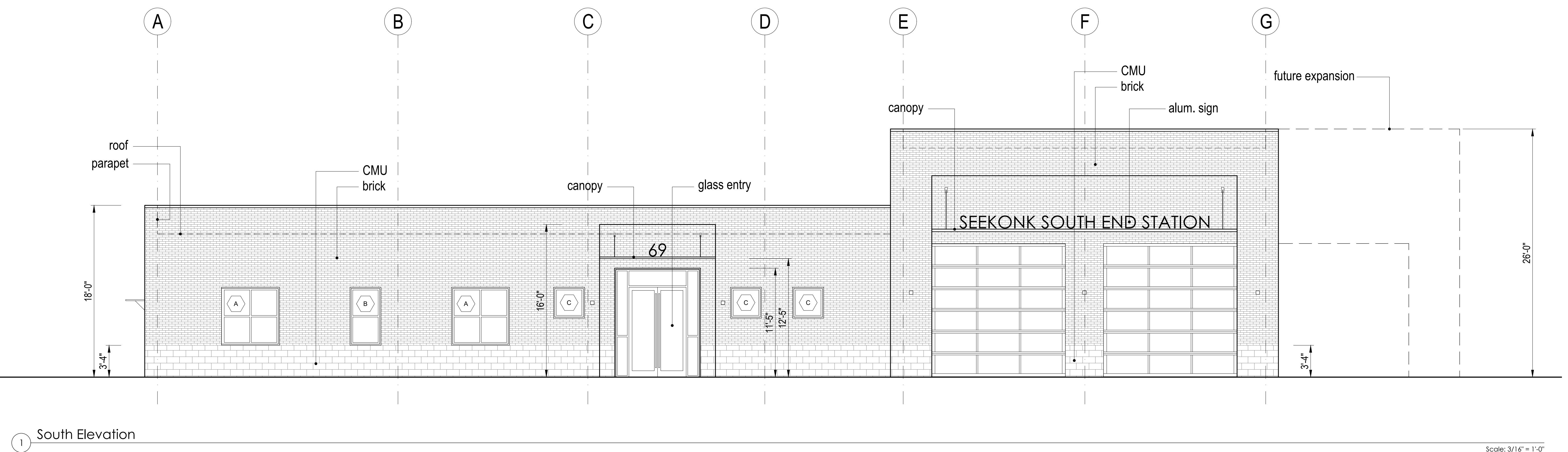
Building Section

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Building Section

Scale: 3/16" = 1'-0"



TGAS
THE GALANTE
ARCHITECTURE
STUDIO INC
146 MT AUBURN ST CAMBRIDGE, MA 02138
6 1 7 5 7 6 2 5 0 0
WWW.GALANTEARCHITECTURE.COM
Project Number
2208
Project Title
Seekonk South End
Fire Station

69 School St,
Seekonk, MA 02771

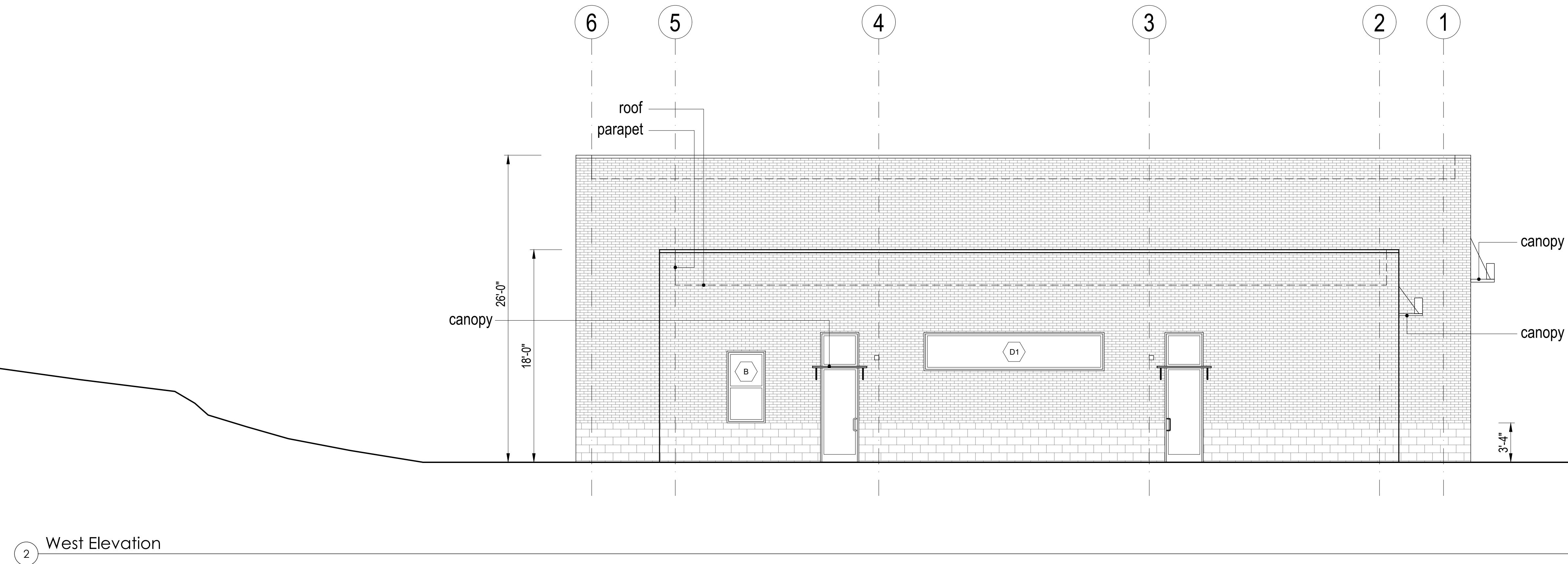
Drawing Title
Building Elevations
South & West
Elevations

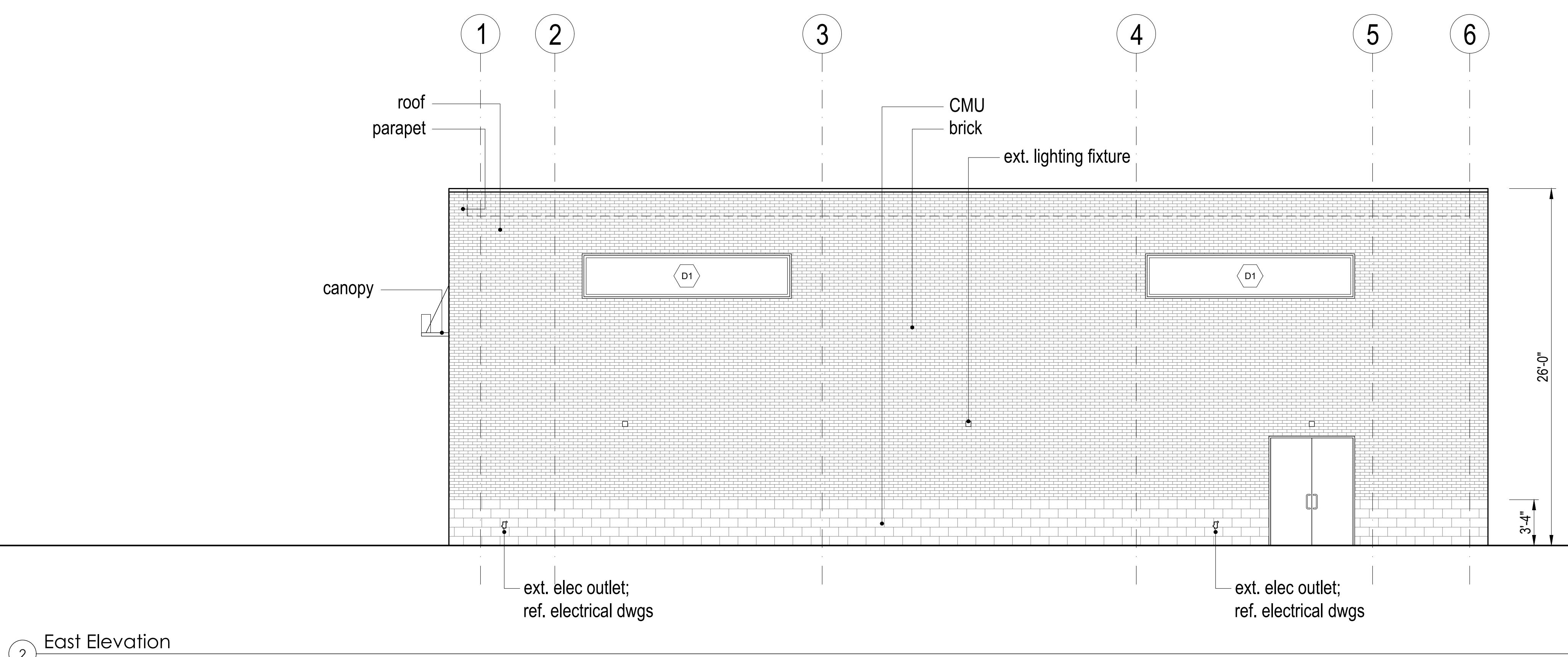
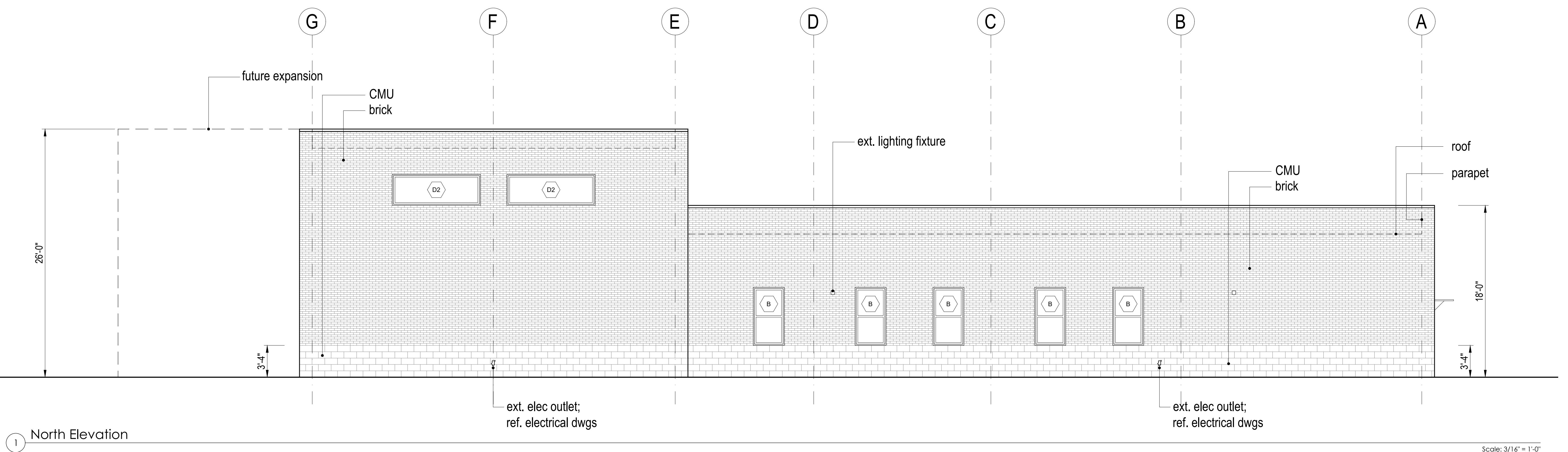
Date/Issued For
11.30.22
100% Design Development

**NOT FOR
CONSTRUCTION**

TGAS
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Scale
3/16" = 1'-0"

Drawn By
TGAS
Drawing Number
A-201





TGAS

THE GALANTE
ARCHITECTURE
STUDIO INC

146 MT AUBURN ST CAMBRIDGE, MA 02138

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Project Number
2208
Project Title
Seekonk South End
Fire Station

69 School St,
Seekonk, MA 02771

Drawing Title
Building Elevations
South & West
Elevations

Date/Issued For
11.30.22

100% Design Development

**NOT FOR
CONSTRUCTION**

TGAS

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Scale
3/16" = 1'-0"

Drawn By
TGAS

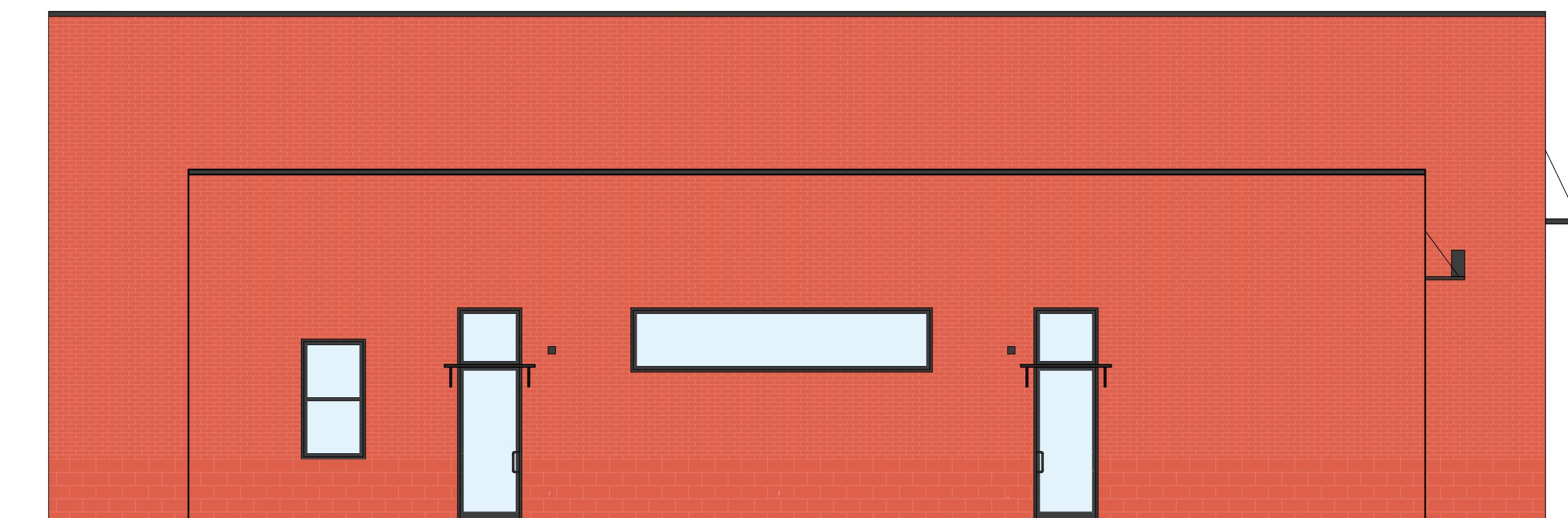
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A-201a



1 South Elevation

Scale: 3/16" = 1'-0"



2 West Elevation

Scale: 3/16" = 1'-0"

TGAS

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ARCHITECTURE
STUDIO INC

146 MT AUBURN ST CAMBRIDGE, MA 02138

6 1 7 5 7 6 2 5 0 0

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Project Number
2208
Project Title
Seekonk South End
Fire Station

69 School St,
Seekonk, MA 02771

Drawing Title
Building Elevations
North & East
Elevations

Date/Issued For
11.30.22

100% Design Development

**NOT FOR
CONSTRUCTION**

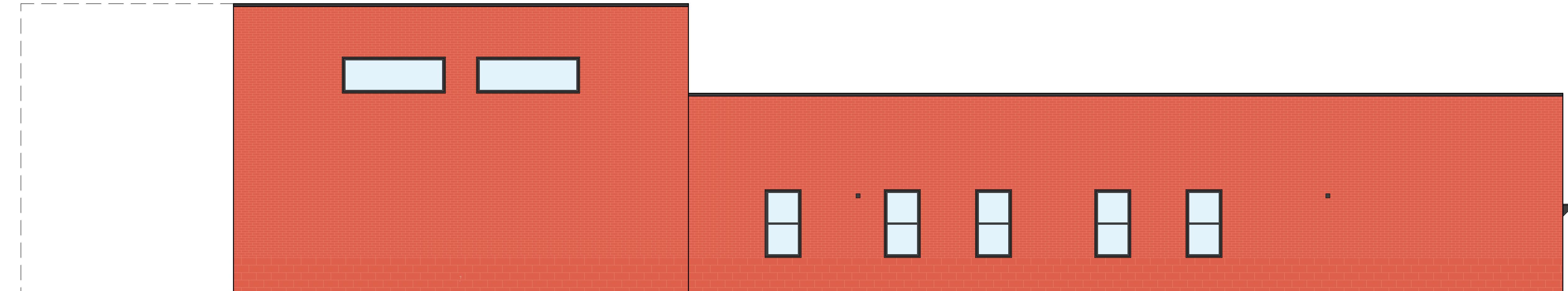
TGAS

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Scale
3/16" = 1'-0"

Drawn By
TGAS

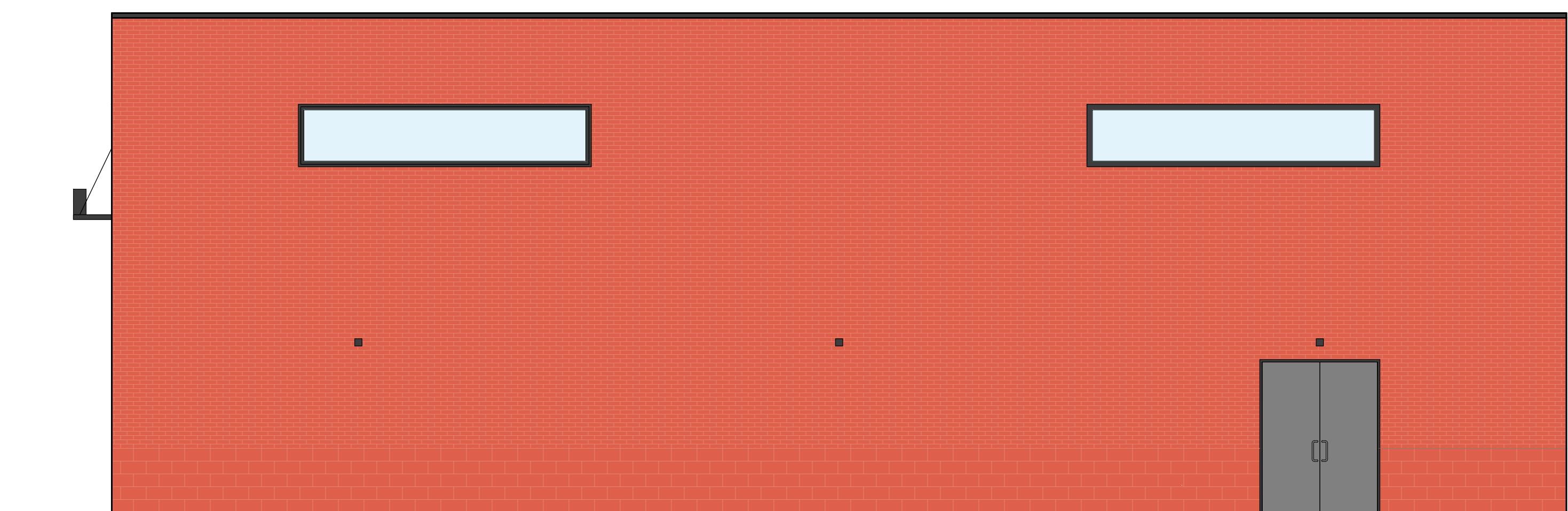
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1 North Elevation

Scale: 3/16" = 1'-0"



2 East Elevation

Scale: 3/16" = 1'-0"

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

SUMMARY	8,305 GSF	
DIV.2 EXISTING CONDITIONS / SITE DEMOLITION		No Work
DIV.3 CONCRETE	\$24.32 /GSF	\$202,000
DIV.4 MASONRY - Filed Sub-Bid	\$67.91 /GSF	\$564,000
DIV.5 METALS	\$53.70 /GSF	\$446,000
05 00 01 -Miscellaneous and Ornamental Iron - Filed Sub-Bid		\$98,398
DIV.6 WOOD, PLASTICS AND COMPOSITES	\$15.05 /GSF	\$125,000
DIV.7 THERMAL AND MOISTURE PROTECTION	\$50.45 /GSF	\$419,000
07 00 01 - Roofing and Flashing - Filed Sub-Bid		\$284,138
07 00 02 - Waterproofing, Damp-Proofing and Caulking - Filed Sub-Bid		\$52,191
DIV.8 DOORS AND WINDOWS	\$22.76 /GSF	\$189,000
08 00 01 - Glass and Glazing - Filed Sub-Bid		\$0
08 00 02 - Metal Windows - Filed Sub-Bid		\$30,514
DIV.9 FINISHES	\$49.13 /GSF	\$408,000
09 00 01 - Acoustical Tile - Filed Sub-Bid		\$30,160
09 00 02 - Resilient Floors - Filed Sub-Bid		\$100,575
09 00 03 - Tile - Filed Sub-Bid		\$31,530
09 00 04 - Painting - Filed Sub-Bid		\$33,375
DIV.10 SPECIALTIES	\$13.61 /GSF	\$113,000
DIV.11 EQUIPMENT	\$4.46 /GSF	\$37,000
DIV.12 FURNISHINGS	\$0.12 /GSF	\$1,000
DIV.13 SPECIAL CONSTRUCTION	\$0.00 /GSF	No Work
DIV.21 FIRE SUPPRESSION - Filed Sub-Bid	\$8.07 /GSF	\$67,000
DIV.22 PLUMBING - Filed Sub-Bid	\$50.57 /GSF	\$420,000
DIV.23 HVAC - Filed Sub-Bid	\$55.51 /GSF	\$461,000
DIV.26 ELECTRICAL - Filed Sub-Bid	\$131.49 /GSF	\$1,092,000
DIV.31 EARTHWORK	\$59.96 /GSF	\$498,000
DIV.32 SITE IMPROVEMENTS	\$23.72 /GSF	\$197,000
DIV.33 SITE UTILITIES	\$20.83 /GSF	\$173,000
 SUBTOTAL, Rounded	\$651.66 /GSF	\$5,412,000
GENERAL CONDITIONS AND OH & P	\$117.28 /GSF	18% <u>\$974,000</u>
 SUBTOTAL DESIGN CONTINGENCY	\$768.93 /GSF	\$6,386,000
	\$38.41 /GSF	5% <u>\$319,000</u>
 SUBTOTAL CONSTRUCTION/OWNER CONTINGENCY	\$807.34 /GSF	\$6,705,000
	\$0.00 /GSF	By Owner
 SUBTOTAL - TODAY'S DOLLARS	\$807.34 /GSF	\$6,705,000
ESCALATION TO MIDPOINT OF CONSTRUCTION - ROUGHLY JAN. 2024	\$61.89 /GSF	7.7% <u>\$514,000</u>
		\$7,219,000
	\$866.95 /GSF	SAY \$7,200,000

PROBABLE CONSTRUCTION COST RANGE BETWEEN

\$6,500,000 AND \$7,900,000
\$783 \$951
\$/GSF \$\$/GSF

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

AREAS

Floor Area

First Floor	7,965	GSF
- Entry	0	GSF
- Mezzanine	340	GSF
	8,305	GSF

Exterior Wall Area

- Brick	6,192	sf
- CMU	1,175	sf
- Glass Entry	0	sf
- Windows	407	sf
- Overhead Doors	392	sf
	8,166	sf

Roofing Area

<i>Flat Roof Area</i>	7,965	sf
<i>Roofing at Parapet Back-Up</i>	812	sf
	8,777	sf

Site Area

<i>Site Area within Property Line</i>	42,070	sf
<i>Site Area between Property Line and Street</i>	5,020	sf
	47,090	sf

1.08 Acre

Breakdown by Coverage

<i>Building Footprint</i>	7,965	sf
<i>Parking and Training Area Paving</i>	8,110	sf
<i>Apparatus Area Paving</i>	2,510	sf
<i>Sidewalks along the Street in Front of the Property</i>	1,240	sf
<i>Radio Tower Pad</i>	320	sf
<i>Generator Pad</i>	220	sf
<i>Paving under Flagpole and Sign</i>	140	sf
<i>Walkways</i>	2,310	sf
<i>Loam and Seed Disturbed Areas</i>	24,275	sf
	47,090	sf

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 2 - EXISTING CONDITIONS

02 41 13 - UTILITY LINE REMOVALS

Utility Line Removals

Included with Sitework

	\$0	\$0
	\$0	\$0

DIVISION 3 - CONCRETE

\$202,000

03 30 00 - CAST-IN-PLACE CONCRETE

Foundations :-

Column Footings

35 cy \$690 \$24,150

Continuous Footings

20 cy \$720 \$14,400

Foundation Walls

69 cy \$1,080 \$74,520

Pilasters / Column Bases

Included Above

Step Footings / Walls [according to grade changes]

Not Required

Slab On Grade

- 4" thick

60 cy \$560 \$33,600

- Sunken Floor at Server Room and Dispatch

102 lf \$25 \$2,550

- 6" thick

57 cy \$530 \$30,210

- Control Joints

1,000 lf \$10 \$10,000

- Smooth Trowel Finish [per finish schedule]

3,080 sf \$1.60 \$4,928

- Install Trench Drain (Provided by Others)

56 lf \$15 \$840

Vapor Barrier

9,160 sf See Div. 7

Set Anchor Bolts

30 sets \$55 \$1,650

Grout Base Plates

30 ea \$45 \$1,350

Miscellaneous Embedded Items

1 ls \$2,500 \$2,500

Wheel Guards

Not Included

Structure

Misc. Equipment Pads

1 ls \$1,000 \$1,000

Hardeners

Not Included

\$201,698 \$201,698

\$201,698 \$201,698

DIVISION 4 - MASONRY

\$564,000

04 00 01 - MASONRY WORK - Filed Sub-Bid

04 05 13 - MASONRY MORTARS [Part of Section 04 00 01]

04 22 00 - UNIT MASONRY [Part of Section 04 00 01]

Exterior:

Face Brick

6,192 sf \$50 \$309,600

3 5/8" Ground Face CMU at Exterior Wall, as Exterior Finish

1,175 sf \$30 \$35,265

3 5/8" Ground Face CMU at Exterior Wall, as Back-Up

2,986 sf \$32 \$95,552

Interior:

- 8" CMU at Wall Types1, 1A, 1B, 1C, and 1D as 8" Ground Face (1 side only) CMU

3,630 sf \$34 \$123,420

\$563,837 \$563,837

\$563,837 \$563,837

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

7-Dec-22

TGAS - Design Development Cost Estimate

DIVISION 5 - METALS						\$446,000
05 00 01 - MISCELLANEOUS and ORNAMENTAL IRON - Filed Sub-Bid						
05 50 00 - METAL FABRICATIONS [Part of 05 00 01]						
Miscellaneous Metals [Interior]			8,305	sf	\$5	\$41,525
- Miscellaneous Lintels						Included Above
- Embedded Galv Angles at OHD Sills						Included Above
- Toilet Partition Supports						Included Above
- Anchor Bolts						Included Above
3/8" Steel Frame around Window Openings			362	lf	\$25	\$9,050
3/8" Steel Frame around Overhead Door Openings and Area Above			130	lf	\$25	\$3,250
Aluminum Canopy at OH Doors, Custom			96	sf	\$100	\$9,600
Aluminum Canopies at Entries with Transoms						Included with Div. 8
Angle / Seismic Bracing at CMU Partitions (Only)			163	lf	\$110	\$17,930
Bollards at Overhead Doors			4	ea	\$1,100	\$4,400
Overhead Door Frames			2	ea	\$2,000	\$4,000
Mezzanine						
- 36" High Pipe Guardrail incl. Gate			38	lf	\$120	\$4,560
- Mezzanine Stairs / Ladder						None Shown
Miscellaneous Metals [Exterior Wall]			8,166	sf	\$0.50	\$4,083
						\$98,398
						\$98,398
05 12 00 - STRUCTURAL STEEL FRAMING						
Structural Steel			34	ton	\$5,500	\$187,000
Allowances For Additional Steel			6.4	ton	\$5,500	\$35,200
- Connections [10% additional steel]			3.4	ton		Included Above
- Framing at Openings			1	ton		Included Above
- Misc. Dunnage and Equipment Support			2	ton		Included Above
						\$222,200
						\$222,200
05 21 00 - STEEL JOIST FRAMING						
Bar Joist			7	ton	\$3,500	\$24,500
						\$24,500
						\$24,500
05 30 00 - METAL DECKING						
1 1/2" x 22ga Galv Steel Deck			7,965	sf	\$12	\$95,580
						\$95,580
						\$95,580
05 40 00 - COLD-FORMED METAL FRAMING						
Metal Studs at Exterior Wall Back-Up and Interior Partitions						Included within Div. 9
						\$0
						\$0
05 51 33 - METAL LADDERS						
- Galvanized Steel Roof Ladder w/Cage			1	ls	\$5,000	\$5,000
- Ships ladder at Roof Elevation Change						None Shown
						\$5,000
						\$445,678
						\$445,678

DIVISION 6 - WOOD, PLASTICS and COMPOSITES						\$125,000
06 10 00 - ROUGH CARPENTRY						
Plywood Decking at Mezzanine						
8 inch Light Ga. Joists at Mezzanine			340	sf	\$6	\$2,040
Interior Blocking			340	sf	\$10	\$3,400
			8,305	sf	\$2	\$16,610
Roof Blocking						
- Parapet Blocking			450	lf	\$10	\$4,500
- Cant Strip			510	lf	\$6	\$3,060
- Miscellaneous Blocking			1	ls	\$1,000	\$1,000.00
Unload and Distribute Doors and Frames			20	hrs	\$100	\$2,000
Install Doors / Frames and Hardware						
- Exterior			21	hrs	\$100	\$2,100
- Interior			204	hrs	\$100	\$20,400
Install Toilet Accessories			24	hrs	\$100	\$2,400
						\$57,510
						\$57,510
06 16 00 - SHEATHING						
Roof Sheathing			7,965	sf	\$4	\$31,860
						\$31,860
						\$31,860
06 20 00 - FINISH CARPENTRY						
Running Trim [window sills]			1	Allowance	\$2,000	\$2,000
Report Room						Assumed to be Furniture
Break Room						
- Base and Wall Cabinetry			11	lf	\$600	\$6,600
- Solid Surface Counter Top			11	lf	\$150	\$1,650
Kitchen						
- Base and Wall Cabinetry			26	lf	\$600	\$15,600
- Solid Surface Counter Top			22	lf	\$150	\$3,300
- Solid Surface Counter Top - Island			25	sf	\$100	\$2,500
Restrooms						
- Vanity and Counter [3'-6"]			2	ea	\$1,750	\$3,500
						\$35,150
						\$35,150
06 41 16 - PLASTIC-LAMINATE CLAD ARCHITECTURAL MILLWORK						
						Incl. with Section 06 20 00
06 61 40 - SOLID SURFACE FABRICATIONS						
						Incl. with Section 06 20 00
						\$124,520
						\$124,520

NEW FIRESTATION
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DIVISION 7 - THERMAL and MOISTURE PROTECTION					\$419,000
07 00 01 - ROOFING and FLASHING - Filed Sub-Bid					
07 54 23 - THERMOPLASTIC-POLYOLEFIN ROOFING [Part of 07 00 01]					
- Membrane Roof incl. Insulation	7,965	sf	\$34	\$270,810	
- Membrane Turn-up at Parapet	812	sf	\$12	\$9,744	
Walkway Pads - say 5% of Area	398	sf	\$9	\$3,584	
				\$284,138	\$284,138
07 00 02 - WATERPROOFING, DAMPROOFING and CAULKING - Filed Sub-Bid					
07 27 26 - FLUID-APPLIED NON-PERMEABLE MEMBRANE AIR BARRIERS [Part of 07 00 02]					
07 27 27 - FLUID-APPLIED MEMBRANE AIR BARRIERS [Part of 07 00 02]					
07 92 00 - JOINT SEALANTS [Part of 07 00 02]					
Damproofing at Foundation Wall	1,950	sf	\$2.50	\$4,875	
Vapor Barrier at slab on grade	9,160	sf	\$0.60	\$5,496	
Fluid-Applied Membrane Air Barrier					
- Exterior Wall	7,367	sf	\$5	\$36,837	
- Soffits				None Shown	
Caulking and Sealants	8,305	sf	\$0.60	\$4,983	
				\$52,191	\$52,191
07 21 00 - THERMAL INSULATION					
Rigid Insulation at Exterior Wall					
- Exterior Wall	7,367	sf	\$4	\$29,470	
- Soffits				None Shown	
Perimeter Insulation [assumed 4'-0"]	1,560	sf	\$4	\$6,240	
Batt Insulation at Exterior Wall				Included w/Division 9	
Miscellaneous Insulation	1	ls	\$5,000	\$5,000	
				\$40,710	\$40,710
07 42 13 - FORMED METAL WALL PANELS					
Mechanical Screen at Roof					
- Structural System				None Shown	
- Metal Panels				None Shown	
				\$0	\$0
07 42 16 - ZINC ALLOY METAL WALL PANELS					
- Metal Panels					
				None Shown	
				\$0	\$0
07 62 00 - SHEET METAL FLASHING and TRIM					
Parapet Caps, as Aluminum Coping					
Counter Flashing					
- Parapets	453	lf	\$65	\$29,445	
- Building To Roof	436	lf	\$15	\$6,540	
	60	lf	\$15	\$900	
Scuppers / Rainwater Management				None Shown - Roof Drains incl. Overflow Drains	
Miscellaneous Flashings [Roof Top Curbs]	1	ls	\$2,500	\$2,500	
				\$39,385	\$39,385
07 84 00 - FIRESTOPPING PENETRATIONS, JOINTS AND PERIMETER FIRE CONTAINMENT					
Fire Stop Systems					
	8,305	sf	\$0.30	\$2,492	
				\$2,492	\$2,492
				\$418,916	\$418,916

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 8 - OPENINGS					\$189,000
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08 00 01 - GLASS and GLAZING - Filed Sub-Bid
08 41 26 - ALL GLASS ENTRANCES [Part of 08 00 01]
08 88 00 - GLASS and GLAZING [Part of 08 00 01]

08 00 02 - METAL WINDOWS - Filed Sub-Bid

Exterior Windows	407	sf	\$75	\$30,514	
				\$30,514	\$30,514

08 11 13 - HOLLOW METAL DOORS and FRAMES

Door Type

1	Glazed Double Door - Steel	6-0 x 8-0 - 100A including Frame Type 1B Transom and sidelights - 1 location	94	sf	\$130	\$12,220
		6-0 x 8-0 - 100B including Frame Type 1B Transom and sidelights - 1 location	94	sf	\$130	\$12,220
2	HM Door	3-0 x 7-0	3	lvs	\$400	\$1,200
3	HM Sliding Door - Frameless	3-4 x 8-0	1	lvs	\$425	\$425
5	Hollow Metal Double Door - Bifold	12-0 x 7-0	1	loc	\$1,200	\$1,200
		9-5 x 7-0	1	loc	\$1,000	\$1,000
7	HM Door - Glazed	3-0 x 8-0	2	lvs	\$4,500	\$9,000
10	Hollow Metal Double Door	4-0 x 7-0	1	pr	\$700	\$700
		6-0 x 7-0	1	pr	\$800	\$800
11	Hollow Metal Double Door	6-0 x 7-10	1	pr	\$800	\$800
12	Hollow Metal Door	3-0 x 7-10	1	lvs	\$425	\$425

Frame Type

1B	HM Frame				
2	HM Frame				Incl. with Door Above
	3-0 x 7-10	1	ea	\$180	\$180
	6-0 x 7-10	1	ea	\$350	\$350
3	HM Frame				
	3-0 x 7-0	7	ea	\$180	\$1,260
	4-0 x 7-0	1	ea	\$200	\$200
	6-0 x 7-0	1	ea	\$350	\$350
	9-4 7/8 x 7-0	1	ea	\$400	\$400
4	HM Frame				Incl. with Door Above
					\$42,730
					\$42,730

08 14 00 - WOOD DOORS

Door Type:

2	Wood Door	3-0 x 7-0	13	lvs	\$400	\$5,200
5	Wood Double Door - Bifold	8-0 x 7-0	1	loc	\$800	\$800
6	Wood Door with Vision Lite	3-0 x 7-0	3	lvs	\$750	\$2,250
7	Wood Door - Glazed	3-0 x 7-0	2	lvs	\$1,000	\$2,000
8	Wood Double Door with Vision Lite - Uneven Pr	4-6 x 7-0	1	pr	\$1,500	\$1,500
9	Not Used					

Frame Type:

2	Wood Frame	3-0 x 7-0	18	ea	\$200	\$3,600
		4-6 x 7-0	1	ea	\$250	\$250
		8-0 x 7-0	1	ea	\$400	\$400
		12-0 x 7-0	1	ea	\$500	\$500
						\$16,500
						\$16,500

08 31 00 - ACCESS DOORS and FRAMES

Access Doors and Frames	1	Allowance	\$1,000	\$1,000	
				\$1,000	\$1,000

08 36 13 - SECTIONAL OVERHEAD DOORS

OH Door Aluminum Overhead Doors - 14'-0"x 14'-0"	2	ea	\$16,000	\$32,000	
				\$32,000	\$32,000

NEW FIRESTATION
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TGAS - Design Development Cost Estimate

DIVISION 8 - OPENINGS

08 41 13 - ALUMINUM FRAMED ENTRANCES and STOREFRONTS

Door Type

Frameless Glass Entry	0	sf	\$175	\$0
1A - Xc Doors 100A	0	pr	\$9,000	\$0
4 Glazed Door with Sidelight - Frameless				
5-0 x 7-0	35	sf	\$200	\$7,000
7-11 x 7-0	56	sf	\$200	\$11,200
				\$18,200
				\$18,200
08 62 23 - TUBULAR DAYLIGHTING DEVICES				
Pre Manufactured Tubular Skylights say 21" x 21"	3	ea	\$3,000	\$9,000
				\$9,000
				\$9,000
08 63 00 - METAL FRAMED SKYLIGHTS				
Entry Area Skylight - 8' x 13'	1	Allowance	\$10,000	\$10,000
				\$10,000
				\$10,000
08 71 00 - DOOR HARDWARE				
Hardware	45	lvs	\$650	\$29,250
				\$29,250
				\$29,250
08 87 00 - GLAZING SURFACE FILMS				
None Shown				\$0
				\$0
				\$0
				\$189,194
				\$189,194

NEW FIRESTATION
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SEEKONK, MA

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TGAS - Design Development Cost Estimate

DIVISION 9 - FINISHES					\$408,000
09 00 01 - ACOUSTICAL TILE - Filed Sub-Bid					
09 51 00 - ACOUSTICAL CEILINGS [Part of Section 09 00 01]					
- ACT Ceilings	3,770	sf	\$8	\$30,160	\$30,160
09 00 02 - RESILIENT FLOORS - Filed Sub-Bid					
09 65 13 - RESILIENT WALL BASE [Part of Section 09 00 02]					
09 65 16 - RESILIENT SHEET FLOORING [Part of Section 09 00 02]					
09 65 19 - RESILIENT TILE FLOORING [Part of Section 09 00 02]					
- Rubber	6,535	sf	\$10	\$65,350	
- Rubber Mats - Fitness Room Floor	150	sf	\$18	\$2,700	
- Carpet Tile	575	sf	\$5	\$2,875	
- Raised Floor at Dispatch and Server Room incl. Portion of Corridor Linking Rooms	880	sf	\$30	\$26,400	
- Rubber Base	1,300	lf	\$2.50	\$3,250	
				\$100,575	\$100,575
09 00 03 - TILE - Filed Sub-Bid					
09 30 13 - CERAMIC TILE [Part of Section 09 00 03]					
- Ceramic Tile Flooring	385	sf	\$23	\$8,855	
- Ceramic Tile Base - 3" x 6"	175	lf	\$21	\$3,675	
- Ceramic Tile Wall Finish - 7'-0 high	950	sf	\$20.00	\$19,000	
				\$31,530	\$31,530
09 00 04 - PAINTING - Filed Sub-Bid					
09 90 00 - PAINTING and COATING [Part of Section 09 00 04]					
Paint CMU	5,730	sf	\$2.50	\$14,325	
Paint GWB	6,750	sf	\$1.50	\$10,125	
Paint Doors and Frames					
- HM and Wood Frames	33	ea	\$100	\$3,300	
- HM Doors	45	lvs	\$125	\$5,625	
				\$33,375	\$33,375
09 21 00 - GYPSUM BOARD ASSEMBLIES					
Exterior Wall Backup [incl parapets]					
- 5/8" GWB	3,945	sf	\$22	\$86,801	
- 6" Metal Stud				Included Above	
- Vapor Barrier [Interior]				Included Above	
- Batt Insulation				Included Above	
- Plywood Sheathing				Included Above	
- Added wall Thickness at Front of Apparatus Bay	0	sf	\$5.00	\$0	
GWB Soffit at Skylight/Entry Area	1	ls	\$3,500	\$3,500	
GWB Fascia/Soffit at Skylight				Included Above	
Interior Partitions					
- Finishes Applied to CMU Partition Type 1A	224	sf	\$15.00	\$3,360	
- Finishes Applied to CMU Partition Type 1B	126	sf	\$13.50	\$1,701	
- Finishes Applied to CMU Partition Type 1C	364	sf	\$6.50	\$2,366	
- Finishes Applied to CMU Partition Type 1D	294	sf	\$6.65	\$1,955	
Interior Partitions, Complete					
- Partition Type 3	1,204	sf	\$18.00	\$21,672	
- Partition Type 3A	154	sf	\$16.50	\$2,541	
- Partition Type 4	3,094	sf	\$15.00	\$46,410	
- Partition Type 5	700	sf	\$15.30	\$10,710	
- Partition Type 6	1,316	sf	\$15.15	\$19,937	
- Partition Type 7	42	sf	\$19.15	\$804	
- Partition Type 7 as Plumbing Wall	280	sf	\$19.55	\$5,474	
- Xc Cement Board At CT on Walls	950	sf	\$2.00	\$1,900	
				\$209,132	\$209,132
09 67 23 - RESINOUS FLOORING					
- Epoxy	165	sf	\$22	\$3,630	
- Epoxy - Mezzanine	0	sf	\$22	\$0	
				\$3,630	\$3,630
Miscellaneous Items					
Ceilings					
- Exposed Structure at Apparatus Bay, Etc.	7,965	sf			
- Exposed Structure at Entry/Skylight	4,035	sf		Exposed Structure	
	160	sf		Exposed Structure	
				\$0	\$0
				\$408,402	\$408,402

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
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TGAS - Design Development Cost Estimate

DIVISION 10 - SPECIALTIES					\$113,000
10 11 00 - MAGNETIC GLASS MARKERBOARDS					
Magnetic Glass Markerboards	1	Allowance	\$5,000	\$5,000	\$5,000
				\$5,000	
10 11 23 - TACKBOARDS					
Tackboards	1	Allowance	\$2,500	\$2,500	\$2,500
				\$2,500	
10 14 19 - CUT METAL LETTERS					
Cut Metal Letters - 16" Tall	22	ea	\$425	\$9,350	\$9,350
				\$9,350	
10 14 21 - ARCHITECTURAL DOOR SIGNS					
ADA and MAAB Compliant Interior Signage and Graphics	1	ls	\$5,000	\$5,000	\$5,000
				\$5,000	
10 14 53 - TRAFFIC SIGNAGE					
Traffic Signage	1	ls	<u>Included with Sitework</u>		
					\$0
10 28 00 - TOILET ACCESSORIES					
Accessible Restrooms - 130 and 131					
- 42" Grab Bars	5	sets	\$60	\$300	
- Soap Dispenser - Bobrick: B-4112	5	ea	\$90	\$450	
- Toilet Paper Holder - Bobrick: B-2888	5	ea	\$86	\$430	
- Framed Mirror 2'x3'	5	ea	\$235	\$1,175	
- Waste Receptacle - Bobrick: B-220816	5	ea	\$296	\$1,480	
- Sanitary Napkin Disposal - Bobrick: B-270	5	ea	\$42	\$210	
- Shower Curtain Rod - Bobrick: B-6047 x 36	3	ea	\$36	\$108	
- Shower Curtain Ring - Bobrick: (7x) 204-1	21	ea	\$2	\$32	
- Shower Curtain - Bobrick: 204-2	3	ea	\$42	\$126	
- Mop and Broom Holder	1	ea	\$0	\$0	
Install Toilet Accessories					See Division 6
					\$4,311
10 28 13 - ELECTRIC HAND DRYERS					
Electric Hand Dryers					
				None Shown	
				\$0	\$0
10 44 16 - FIRE EXTINGUISHERS AND CABINETS					
Portable fire extinguishers	3	ea	\$100	\$300	
Fire extinguisher cabinets-semi recessed	3	ea	\$300	\$900	
				\$1,200	\$1,200
10 51 00 - GEAR RACK STORAGE COMPONENTS					
24" Wide Turnout Gear Lockers	17	ea	\$2,500	\$42,500	\$42,500
				\$42,500	
10 51 01 - PHENOLIC LOCKERS					
Bunk Room Lockers - 24 x 84 Phenolic Lockers	20	ea	\$1,900	\$38,000	\$38,000
				\$38,000	
10 75 00 - FLAGPOLES					
Aluminum Flagpole to Withstand 100MPH min	1	ea	\$5,000	\$5,000	
3'x5' American Flag (CFCI)	1	ea	\$200	\$200	
				\$5,200	\$5,200
					\$113,061
					\$113,061

DIVISION 11 - EQUIPMENT					\$37,000
11 23 00 - LAUNDRY SERVICE EQUIPMENT					
Top Load Washer	2	ea	\$2,500	\$5,000	
Single Load Dryer	2	ea	\$2,300	\$4,600	
				\$9,600	\$9,600
11 23 26 - COMMERCIAL WASHERS AND EXTRACTORS					
Extractor 65 lb Capacity	1	ea	\$16,000	\$16,000	
Stainless Steel Sink at Decon Area				<u>Included w/Plumbing</u>	
				\$16,000	\$16,000
11 40 00 - FOOD SERVICE EQUIPMENT					
Refrigerator 27.80 cu ft	1	ea	\$2,200	\$2,200	
Dishwasher	1	ea	\$1,000	\$1,000	
Microwave 2.20 cu ft	1	ea	\$800	\$800	
Range - 4 Burner	1	ea	\$3,000	\$3,000	
Range Hood				None Shown	
Disposal				None Shown	
					\$7,000
11 90 00 - OTHER EQUIPMENT and ACCESSORIES					
Pot Racks				None Shown	
Shelving Units	156	lf	\$25	\$3,900	
Vertical File Cabinets	4	ea		By Others	
Fitness Equipment	5	ea		By Others	
					\$3,900
					\$36,500
					\$36,500

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 12 - FURNISHINGS				\$1,000
12 24 00 - WINDOW SHADES				
Manually Operated Blinds	263	sf	\$5	\$1,314 \$1,314
12 48 13 ENTRANCE FLOOR MATS				
Recessed Floor Mat at Entry	0	sf	\$75	\$0
Walk Off Mats at Secondary Entries	0	ea	\$110	By Owner
				\$0
				\$1,314 \$1,314
DIVISION 21 - FIRE PROTECTION				\$67,000
Equipment				
Double Check Valve Backflow Preventor Assembly - 8"	1	ea	\$9,424	\$9,424
Fire Protection Specialties	1	ls	\$6,223	\$6,223
Wet Sprinkler Building Coverage - Mezzanine	275	sf	\$5.00	\$1,375
Wet Sprinkler Building Coverage - Apparatus Bay	2,825	sf	\$5.00	\$14,125
Wet Sprinkler Building Coverage - Office	4,800	sf	\$5.50	\$26,400
				\$57,547
Trade Requirements				
Coordination	32	hrs	\$135	\$4,320
Project Supervision	40	hrs	\$135	\$5,400
				\$9,720
				\$9,720
				\$67,267
				\$67,267

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 22 - PLUMBING				\$420,000
Equipment				
Water Meter	1	ea	\$2,546	\$2,546
Backflow Preventor Assembly - 2"	1	ea	\$3,040	\$3,040
Gas Fired Water Heater	1	ea	\$11,020	\$11,020
Recirc Pump	1	ea	\$1,046	\$1,046
Expansion Tank	1	ea	\$2,770	\$2,770
Thermostatic Mixing Valve	1	ea	\$3,665	\$3,665
Oil/Water Separator			Included with Sitework	
Air Compressor and Dryer	1	ea	\$15,040	\$15,040
Trap Primers	10	ea	\$408	\$4,080
Make Up Water Station	1	ea	\$1,244	\$1,244
Plumbing Specialties	1	ls	\$6,563	\$6,563
Plumbing Equipment Connections	18	ea	\$645	\$11,610
				\$62,624
Fixtures				
Water Closets	5	ea	\$1,349	\$6,745
Lavatories	5	ea	\$1,234	\$6,170
Urinals	2	ea	\$1,208	\$2,416
Showers	3	ea	\$1,943	\$5,829
Sinks - 1 Bay	2	ea	\$1,270	\$2,540
Sink - 2 Bay	1	ea	\$1,655	\$1,655
Garbage Disposal	1	ea	\$416	\$416
Sink - Mop	1	ea	\$1,234	\$1,234
Emergency Shower w/ Mixing Valve	1	ea	\$4,073	\$4,073
Bottle Fill	1	ea	\$2,756	\$2,756
Hose Stations - CW/HW	2	ea	\$446	\$892
Hose Reel - Air	5	ea	\$709	\$3,545
Ice Machine Box	1	ea	\$184	\$184
Washer Boxes	2	ea	\$404	\$808
Dishwasher Connections	2	ea	\$404	\$808
Wall Hydrants	6	ea	\$341	\$2,046
Hose Bibbs	2	ea	\$247	\$494
Floor Drains	5	ea	\$625	\$3,125
Trench Drains	52	lf	\$159	\$8,268
Roof Drain Combos	7	ea	\$895	\$6,265
Clean Outs	24	ea	\$263	\$6,312
Vent thru Roof	6	ea	\$235	\$1,410
Fixture Rough Ins	29	ea	\$520	\$15,080
				\$83,071
Piping				
Water	1,480	lf	\$45.90	\$67,932
Waste	240	lf	\$85.30	\$20,472
Vent	150	lf	\$82.70	\$12,405
Oil Waste	130	lf	\$91.70	\$11,921
Oil Vent	120	lf	\$87.70	\$10,524
Storm	430	lf	\$132	\$56,760
Gas	470	lf	\$52.50	\$24,675
Compressed Air	200	lf	\$60.40	\$12,080
Insulation	1,480	lf	\$11.80	\$17,464
				\$234,233
Trade Requirements				
Coordination	80	hrs	\$135	\$10,800
Project Supervision	120	hrs	\$135	\$16,200
Excavation and Backfill	217	cuyd	\$48	\$10,400
Rigging	1	ls	\$3,098	\$3,098
				\$40,498
				\$40,498
				\$420,426
				\$420,426

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 23 - HVAC					\$461,000
Equipment					
Packaged Gas Fired Rooftop Unit - RTU 1A	2	tns	\$2,950	\$5,900	
Packaged Gas Fired Rooftop Unit - RTU 1B	2	tns	\$2,950	\$5,900	
Packaged Gas Fired Rooftop Unit - RTU 2A	3	tns	\$2,950	\$8,850	
Packaged Gas Fired Rooftop Unit - RTU 2B	3	tns	\$2,950	\$8,850	
Packaged Gas Fired Rooftop Unit - RTU 3	2	tns	\$2,950	\$5,900	
Packaged Gas Fired Rooftop Unit - RTU 4	3	tns	\$2,950	\$8,850	
Packaged Gas Fired Rooftop Unit - RTU 5	3.5	tns	\$2,950	\$10,325	
Packaged Gas Fired Rooftop Unit - RTU 6	2	tns	\$2,950	\$5,900	
Gas Fired Rooftop Make Up Air Unit - MAU 1	2,500	cfm	\$6.70	\$16,750	
Energy Recovery Unit - ERU 1	800	cfm	\$8.90	\$7,120	
Exhaust Fan - EF 1	1	ea	\$2,344	\$2,344	
Exhaust Fan - EF 2	1	ea	\$4,938	\$4,938	
Exhaust Fan - EF 3	1	ea	\$2,344	\$2,344	
Plymovent Fans - VEF 1	1	ea	\$3,375	\$3,375	
Plymovent Hose Reels	4	ea	\$788	\$3,152	
Electric Unit Heaters	2	ea	\$1,286	\$2,572	
Electric Wall Heaters	2	ea	\$1,499	\$2,998	
(2) Infrared Radiant Heaters	120	lf	\$329	\$39,480	
RGDs	45	ea	\$263	\$11,835	
				\$157,383	\$157,383
Sheet Metal					
Galvanized	7,200	lbs	\$15.30	\$110,160	
Gas Water Heater Vent	1	ea	\$4,188	\$4,188	
Gas Fired Radiant Heater Vent	2	ea	\$1,917	\$3,834	
Sheet Metal Specialties	1	ls	\$5,490	\$5,490	
Equipment Connections	1	ls	\$15,750	\$15,750	
				\$139,422	\$139,422
Internal Lining					
Sheet Metal - Galvi	4,896	sf	\$5.00	\$24,480	
				\$24,480	\$24,480
Controls					
Packaged Rooftops	8	ea	\$3,580	\$28,640	
Gas Fired Make Up Air Unit	1	ea	\$3,580	\$3,580	
Energy Recovery Unit	1	ea	\$3,580	\$3,580	
Exhaust Fans	3	ea	\$2,060	\$6,180	
Vehicle Exhaust Fan	1	ea	\$2,580	\$2,580	
Electric Unit Heaters	2	ea	\$1,083	\$2,166	
Electric Wall Heaters	2	ea	\$1,083	\$2,166	
Infrared Radiant Heaters	2	ea	\$2,455	\$4,910	
BMS Network	1	ls	\$14,890	\$14,890	
				\$68,692	\$68,692
Commissioning					
Start Up	80	hrs	\$135	\$10,800	
Testing, Adjusting, and Balancing	80	hrs	\$125	\$10,000	
3rd Party Cx Assist	40	hrs	\$135	\$5,400	
				\$26,200	\$26,200
Trade Requirements					
Coordination	80	hrs	\$135	\$10,800	
Project Supervision	120	hrs	\$135	\$16,200	
Crane	1	ls	\$9,850	\$9,850	
Rigging	64	hrs	\$125	\$8,000	
				\$44,850	\$44,850
				\$461,027	\$461,027

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 26 - ELECTRICAL - FILED SUB-BID

DIVISION 26 - BUILDING ELECTRICAL	\$782,000
DIVISION 27 - COMMUNICATIONS	\$84,000
DIVISION 28 - FIRE DETECTION AND ALARMS	\$98,000
DIVISION 26 - ELECTRICAL SITE UTILITIES	\$128,000
	<hr/>
	\$1,092,000

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 26 - BUILDING ELECTRICAL				\$782,000
Normal Power and Distribution				
SE Rated 600A 208v Main Breaker CT cabinet	1	ea	\$8,596	\$8,596
Dist. Panel MDP 600A MCB 120/208v	1	ea	\$17,670	\$17,670
600A Feeder PVC Copper	25	lf	\$343	\$8,575
600A Feeder EMT Copper	55	lf	\$490	\$26,950
100A Feeder EMT Copper	20	lf	\$158	\$3,160
Secondary Service Grounding System	1	ls	\$6,690	\$6,690
				<u>\$71,641</u>
				\$71,641
Machine and Equipment Power				
AC-1 7.5HP 30A 3P 208v Connection	1	ea	\$1,242	\$1,242
ACD-1 20A 120v Connection	1	ea	\$387	\$387
EF-1 20A 120v Connection	1	ea	\$487	\$487
EF-2 20A 120v Connection	1	ea	\$487	\$487
EF-3 20A 120v Connection	1	ea	\$487	\$487
ERU-1 30A 3P 208v Connection	1	ea	\$1,099	\$1,099
EUH-1 30A 2P 208v Connection	2	ea	\$476	\$952
EWH-1 30A 3P 208v Connection	2	ea	\$476	\$952
MUA-1 30A 3P 208v Connection	1	ea	\$1,099	\$1,099
RH-1 20A 120v 208v Connection	3	ea	\$388	\$1,164
RP-1 20A 120v Connection	1	ea	\$387	\$387
RTU-1A 30A 2p 208v Connection	1	ea	\$1,021	\$1,021
RTU-1B 30A 2p 208v Connection	1	ea	\$1,021	\$1,021
RTU-2A 30A 208v Connection	1	ea	\$1,162	\$1,162
RTU-2B 30A 208v Connection	1	ea	\$1,162	\$1,162
RTU-3 30A 2p 208v Connection	1	ea	\$1,021	\$1,021
RTU-4 30A 208v Connection	1	ea	\$1,115	\$1,115
RTU-5 40A 2p 208v Connection	1	ea	\$1,486	\$1,486
RTU-6 40A 2p 208v Connection	1	ea	\$1,486	\$1,486
VEF-1 7.5HP 30A 3P 208v Connection	1	ea	\$1,416	\$1,416
WH-1 20A 120v Connection	1	ea	\$387	\$387
3/4" - EMT 3#12	500	lf	\$15.60	\$7,800
3/4" - EMT 3#10	500	lf	\$17.50	\$8,750
3/4" - EMT 4#10	350	lf	\$18.80	\$6,580
3/4" EMT - 3 # 8	150	lf	\$21.80	\$3,270
				<u>\$46,420</u>
				\$46,420
Lighting and Branch				
Type K1 LED 4"x4" Linear Pendant	1	ea	\$670	\$670
Type LT1 LED 2x2 Recessed Troffer	47	ea	\$311	\$14,617
Type LT2 LED 4' Vapor Proof Linear Strip	12	ea	\$607	\$7,284
Type LT5 LED 4' Vapor Proof Linear Strip	9	ea	\$607	\$5,463
Type LT6 LED 8' Low Profile Wrap Around	7	ea	\$708	\$4,956
Type LT6A LED 4' Low Profile Wrap Around	2	ea	\$498	\$996
Type R1 LED 4"x4" Recessed Floor Light	4	ea	\$694	\$2,776
Type SL2 LED Wall Mount Wet Location	4	ea	\$1,158	\$4,632
Type SL3 LED Wall Mount Wet Location	5	ea	\$1,158	\$5,790
Type SL4 LED Wall Mount 17" Arch Sconce	3	ea	\$1,039	\$3,117
Type X1 LED Exit Nema 4X	1	ea	\$607	\$607
Type X2 LED Exit Alum Housing Battery Back Up	10	ea	\$415	\$4,150
3/4" - EMT 3#12	300	lf	\$15.60	\$4,680
3/4" - EMT 7#12	150	lf	\$16.80	\$2,520
3/4" - EMT 3#10	650	lf	\$17.50	\$11,375
Luminary Cable MC 12/2 and 14/2 1-10VDC	1,600	lf	\$4.00	\$6,400
Lighting Control Panels , Relays and Programming	1	ls	\$10,000	\$10,000
[LKP] Wall Lighting Control Panel	3	ea	\$756	\$2,268
[PP] Lighting Control Power Pack	26	ea	\$85	\$2,210
[OS] Ceiling Occupancy sensor	24	ea	\$192	\$4,608
(VS) Ceiling Vacancy Sensor	7	ea	\$170	\$1,190
[OS*] Wall Occupancy Sensor	5	ea	\$170	\$850
[SLD] Wall Mount Dimming Controller	8	ea	\$256	\$2,048
[Svs] Wall Mount Vacancy Controller	3	ea	\$256	\$768
[VSD] Wall Mount Dimming Vacancy Controller1	2	ea	\$256	\$512
SKD Wall Key Switch Dimming Lighting Control	7	ea	\$152	\$1,064
SL Lv Wall Lighting Control	16	ea	\$152	\$2,432
25' CAT 6 Lighting Control Cable	101	ea	\$53.50	\$5,404
Lighting Control Wall Box and Sleeve	54	ea	\$150	\$8,100
				<u>\$121,487</u>
				\$121,487

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 26 - ELECTRICAL continued: \$0

General Power

15A 125V Clock Receptacle	1	ea	\$118	\$118
20A 125V Duplex Receptacle, Box and Plate	83	ea	\$115	\$9,545
20A 125V Duplex GFCI Receptacle, Box and Plate	33	ea	\$129	\$4,257
20A 125V Duplex GFCI Receptacle, Box and WP plate	13	ea	\$135	\$1,755
20A 125V Duplex Receptacle w/USB , Box and Plate	5	ea	\$119	\$595
(2) 20A 125V Duplex Receptacle, Box and Plate	5	ea	\$178	\$890
(2) 20A 125V Duplex GFCI Receptacle, Box and Plate	1	ea	\$208	\$208
20A Cord Reel w/ 25' Cable	6	ea	\$1,363	\$8,178
Washing Machine 20A 125V Duplex Receptacle, Box and Plate	2	ea	\$115	\$230
Dryer 30A 250V 4W 1PH Receptacle le Box and Plate	2	ea	\$214	\$428
Range 50A 250V 4W Receptacle, Box and Plate	1	ea	\$277	\$277
Single Gang Power Floor Box and Raceways	7	ea	\$685	\$4,795
Office Furniture Floor Box w/ Branch and Telcom Raceways	4	ea	\$1,978	\$7,912
[CFC] Ceiling Fan Controller	1	ea	\$213	\$213
Auto Flush/Faucet Valve Connection	4	ea	\$206	\$824
By-Fold Apparatus Door Wiring and Connections	2	ea	\$5,224	\$10,448
Control Panel Connection	6	ea	\$204	\$1,224
Dish Washer Connection	1	ea	\$458	\$458
FAM Fire Alerting Monitor Location	2	ea	\$134	\$268
Garage Door Operator Controls	2	ea	\$261	\$522
Garage Door Operator motor Connection	2	ea	\$204	\$408
Garage Door Operators	2	ea	\$147	\$294
Garbage Disposal Connection	2	ea	\$402	\$804
Gas Detection shut off Control Wiring	1	ea	\$3,786	\$3,786
In Grade Detection Loop	2	ea	\$3,390	\$6,780
Microwave 20A 125V Single Receptacle, Box and Plate	2	ea	\$112	\$224
Range Hood Connection	1	ea	\$228	\$228
SM Security Monitor Location	2	ea	\$134	\$268
[NG] Natural Gas detector (FBO)	1	ea	\$147	\$147
[UC] Natural Gas Utility Control Panel (FBO)	1	ea	\$261	\$261
3/4" - EMT 3#10	200	lf	\$12.40	\$2,480
3/4" EMT 3 #12	2,300	lf	\$15.60	\$35,880
3/4" EMT 4 #12	150	lf	\$16.00	\$2,400
3/4" EMT 5 #12	710	lf	\$16.40	\$11,644
3/4" EMT 7 #12	1,600	lf	\$16.80	\$26,880
3/4" EMT 3 #10	150	lf	\$17.50	\$2,625
3/4" EMT -3 # 8	150	lf	\$21.80	\$3,270
				\$151,524
				\$151,524

Emergency Power and Distribution

150KW Diesel Generator w/Exterior weather enclosure	1	ea	\$85,000	\$85,000
ATS-C 100A 4p 250v Transfer Switch	1	ea	\$7,769	\$7,769
ATS-E 100A 4p 250v Transfer Switch	1	ea	\$7,769	\$7,769
ATS-OS 600A 3p 250v Transfer Switch	1	ea	\$20,790	\$20,790
IP-C 100A Roll up Generator Connection Panel	1	ea	\$10,970	\$10,970
IP-E 100A Roll up Generator Connection Panel	1	ea	\$10,970	\$10,970
Dist. Panel OSDP 600A MCB 120/208v	1	ea	\$17,400	\$17,400
Panel CP-1 100A MCB 120/208v 42p w/SPD	1	ea	\$5,307	\$5,307
Panel CP-2 100A MCB 120/208v 42p w/SPD	1	ea	\$5,307	\$5,307
Panel EP-1 100A MCB 120/208v 42p w/SPD	1	ea	\$5,307	\$5,307
Panel PP-1 200A MCB 120/208v 42p w/SPD	1	ea	\$8,067	\$8,067
Panel PP-2 200A MCB 120/208v 42p w/SPD	1	ea	\$8,067	\$8,067
Panel PP-3 200A MCB 120/208v 42p w/SPD	1	ea	\$8,067	\$8,067
600A Nipple Set and Cable (2) 4"x12"	1	ea	\$2,650	\$2,650
200A Feeder EMT Copper	150	ea	\$142	\$21,300
100A Feeder MI Cable	150	ea	\$430	\$64,500
				\$289,240
				\$289,240

Lightning and Power Specialties

Lightning Protection	1	ls	\$15,000	\$15,000
				\$15,000

Miscellaneous Systems

Temporary Service Power and Lights	1	ls	\$25,000	\$25,000
Subcontractor Site Office and Storage	1	ls	\$30,000	\$30,000
Subcontractor Lifts and Scaffolding	1	ls	\$10,000	\$10,000
BIM Coordination	1	ls	\$12,000	\$12,000
Bond Excluded			Not In Contract	
			\$77,000	\$77,000

Testing and Commissioning

Testing	1	ls	\$10,000	\$10,000
				\$10,000
				\$10,000

\$782,312

\$782,312

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 27 - COMMUNICATIONS \$84,000

Telephone and Communications Systems

Telecomm Wall Box and 1" Sleeve	20	ea	\$178	\$3,560
12" Wx 4" D Wire Basket Cable Tray	115	ea	\$54.80	\$6,302
4-CAT 6A Cables , Termination and Testing	11	ea	\$1,264	\$13,904
2-CAT 6A Cables , Termination and Testing	3	ea	\$632	\$1,896
2-CAT 6A Cables , Termination and Testing WAP	3	ea	\$871	\$2,613
1-CAT 6A Cables , Termination and Testing	2	ea	\$316	\$632
TV -1-RG6 Cables , Termination and Testing	5	ea	\$353	\$1,765
IDF Closet Fit Up	1	ea	\$12,000	\$12,000
IT Switch and Electronics by Owner				\$42,672
				\$42,672

Fire House Alerting System

FHA Box and 1" Wall Sleeve	48	ea	\$178	\$8,544
FHA System Wiring allowance	1	allow	\$8,000	\$8,000
FHA System Device Installation and Termination	1	allow	\$24,000	\$24,000
				\$40,544

Public Address Systems

12" Surface Wireless Clock	3	ea	\$410	\$1,230
				\$1,230

				\$84,446
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DIVISION 28 - FIRE DETECTION AND ALARMS \$98,000

Security Access Control and CCTV

Control Panels , Access and CCTV Programming and Commissioning	1	ls	\$10,000	\$10,000
Security Door Rough-in Raceways and Boxes	6	ea	\$405	\$2,430
[CR] Car Reader Raceway, Device and wire	4	ea	\$636	\$2,544
[DC] Door Contact	8	ea	\$107	\$856
[DJ] 8x8x4 Door Security junction Box	6	ea	\$103	\$618
[EH] Door Transfer Hinge	8	ea	\$213	\$1,704
[EL/R] Electrified Lock and Circuit	4	ea	\$391	\$1,564
[PB] Door Release Panic Hardware	4	ea	\$300	\$1,200
[REX] Request to Exit Device, Raceway and Cable	4	ea	\$226	\$904
Exterior wall Mounted Camera and Cable	5	ea	\$2,760	\$13,800
Interior Dome Camera and Cable	13	ea	\$1,380	\$17,940
				\$53,560
				\$53,560

Fire Alarm System

Equipment ,Devices and Programming	1	ls	\$20,000	\$20,000
F/A Main Fire Alarm Control Panel	1	ea	\$3,640	\$3,640
F/A Remote Annunciator	1	ea	\$228	\$228
F/A Radio Master Box	1	ea	\$455	\$455
F/A Pull Station Installed w/Back Box	4	ea	\$230	\$920
F/A Smoke Detector Installed w/Back Box	6	ea	\$375	\$2,250
F/A Smoke/ CO Detector Installed w/Back Box	3	ea	\$170	\$510
F/A Smoke/CO Detector Installed w/Sounder Relay Base and Back Box	5	ea	\$375	\$1,875
F/A Speaker/strobe wall Mount Installed w/Back Box	14	ea	\$235	\$3,290
F/A Control Module Relay Fan Shutdown	1	ea	\$292	\$292
F/A Door Holder Installed w/Back Box	1	ea	\$442	\$442
F/A SLC/NAC 3/4" EMT and Loop Circuits	400	lf	\$12.50	\$5,000
F/A 14/4 FPLP/MC Cable	720	lf	\$4.40	\$3,168
F/A 16/2 FPLP/MC Cable	600	lf	\$3.30	\$1,980
				\$44,050
				\$44,050
				\$97,610
				\$97,610

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 26 - ELECTRICAL SITE UTILITIES				\$128,000
Electrical Site Distribution				
Primary Service 2x 5" PVC Duct bank	15	If	\$102	\$1,530
Primary Service Pole Riser 5" GRC	1	ea	\$5,508	\$5,508
Transformer pad Grounding	1	ea	\$1,805	\$1,805
Secondary Service 600A (2) 4" PVC	95	If	\$212	\$20,140
4" capped Raceway for future EV charging	1	ea	\$1,439	\$1,439
4" capped Raceway for future PV System	1	ea	\$1,439	\$1,439
1-1/4" PVC for future EV chargers	180	If	\$13.60	\$2,448
Generator pad Grounding	1	ea	\$2,730	\$2,730
Generator Feeder 600A (2) 4" PVC	65	If	\$248	\$16,120
Generator Feeder 100A 1-1/2" PVC	65	If	\$49.20	\$3,198
Generator Feeder 100A 1-1/2" PVC	65	If	\$49.20	\$3,198
Generator annunciator circuits 2" PVC	60	If	\$21.80	\$1,308
Generator start circuits 2" PVC	60	If	\$16.80	\$1,008
Generator aux Power circuits 2" PVC	60	If	\$24.30	\$1,458
Excavation and Concrete encasement	1	ls	\$6,500	\$6,500
				\$69,829
				\$69,829
Electrical Site Lighting				
Type SL1 LED Parking Area Light Pole	3	ea	\$3,212	\$9,636
Type SL7 LED Bollard	7	ea	\$1,364	\$9,548
1" PVC 3 #8	400	If	\$15.00	\$6,000
Site Pole Precast Pole Base	3	ea	\$959	\$2,877
Site Bollard Precast Pole Base	7	ea	\$375	\$2,625
QZT Site Lighting Hand Hole	4	ea	\$1,075.00	\$4,300
Excavation	1	ls	\$5,000.00	\$5,000
				\$39,986
				\$39,986
Site Communications				
Raceway to Radio Tower 2x 4" PVC	45	If	\$110	\$4,950
Telecomm Service 2x4" PVC Duct Bank	110	If	\$55.80	\$6,138
Telecomm Service Pole Riser (1) 4" GRC	1	ea	\$3,500	\$3,500
Excavation	1	ls	\$3,500	\$3,500
				\$18,088
				\$18,088
				\$127,903
				\$127,903

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

SITWORK AREAS

See Page 2 for Sitework Areas

DIVISION 31 - EARTHWORK

\$498,000

Erosion Controls

Straw Wattles and Silt fence	383	lf	\$8.50	\$3,256
Stone Entry Aprons	1,317	sf	\$2.30	\$3,029
Dust Control w/H2O Truck	20,000	ga	\$0.20	\$4,000
Catch Basin Silt Sacks	5	ea	\$139	\$695
Concrete Washout Basin	1	ea	\$2,200	\$2,200
				\$13,180
				\$13,180

Clear, Grub, and Strip Topsoil

Site Clearing and Stump Grinding	1	ac	\$8,018	\$8,018
Grub, Stump and Stockpile small area	1	ac	\$2,395	\$2,395
Strip and Stockpile Topsoil	1,138	cy	\$5.60	\$6,373
Export Excess Loam	730	cy	\$6.40	\$4,672
				\$21,458
				\$21,458

Demolition and Removals

Chain Link Fence Removal	141	lf	\$13.40	\$1,889
Retaining Wall Removal	75	sf	\$25.10	\$1,883
Water Line Removal	76	lf	\$74.60	\$5,670
Sewer Line Removal	95	lf	\$21.00	\$1,995
Septic Distribution Line Removal	234	lf	\$12.10	\$2,831
Pavement Sawcutting	465	lf	\$7.80	\$3,627
D Box Structure Removal	1	ea	\$130	\$130
Flag Pole Base Removal	1	ea	\$412	\$412
Asphalt Disposal	874	sy	\$14.40	\$12,586
Asphalt S.W Pavement Removal	60	sy	\$12.80	\$768
Concrete Sidewalk and Stair Removal	19	sy	\$50.20	\$954
Building Demolition				By Owner
Pump Septic Tank	1	ea	\$941	\$941
Septic Tank Demolition / Disposal	1	ea	\$709	\$709
				\$34,394
				\$34,394

Earthwork

Cut to Fill w/ 330 Exc	621	cy	\$7.50	\$4,658
Imported Structural Borrow - D5	470	cy	\$44.90	\$21,103
Unsuitable Export	768	cy	\$23.40	\$17,971
				\$43,732
				\$43,732

Retaining Wall Work

Sm. Retaining Wall E&B	44	lf	\$25.40	\$1,118
Stone Strong Wall-MBO	244	sf	\$60.80	\$14,835
				\$15,953
				\$15,953

Building Earthwork

Mid Sized Foundation Wall Exc.	701	lf	\$38.10	\$26,708
FS Slab Gravel w/ Finegrading	253	cy	\$61.70	\$15,610
Oil Interceptor Valve Pit E&B	10	cy	\$125	\$1,250
Interior Haunch Shaping (24"+)	150	lf	\$12.80	\$1,920
Interior Piers Exc/Back	28	ea	\$561	\$15,708
Interior Electric E/B w/M305	200	lf	\$13.30	\$2,660
Interior Plumbing E/B	575	lf	\$32.70	\$18,803
Interior Trench Drain E/B	54	lf	\$30.00	\$1,620
				\$84,279
				\$84,279

Drainage Systems

6" ADS w/Fittings	112	lf	\$43.70	\$4,894
6" ADS Foundation Drain w/Fittings	395	lf	\$43.80	\$17,301
12" ADS Drain 2	486	lf	\$56.60	\$27,508
12" ADS Manifolds for Infiltration System	122	lf	\$134	\$16,348
15" ADS Line	66	lf	\$54.40	\$3,590
18" ADS Line	4	lf	\$74.70	\$299
4' Deep DMH (4' Dia)	2	ea	\$1,881	\$3,762
5' Deep DMH (4' Dia)	2	ea	\$2,004	\$4,008
6' Deep DMH (4' Dia)	1	ea	\$2,289	\$2,289
7" Deep CB(4' Dia) 4' Sump	3	ea	\$2,766	\$8,298
6' Deep Leach Pit (6' Dia)	1	ea	\$4,248	\$4,248
Stormtech MC 740 Infiltration System	72	ea	\$1,677	\$120,744
Trench Drain - Precast	54	lf	\$263	\$14,202
Area Drains	3	ea	\$2,583	\$7,749
				\$235,240
				\$235,240

Grading and Gravelling for walks, pads, drives, and roads

Conc Walk Subgrade	351	sy	\$9.90	\$3,475
Concrete Walk Aggregate Base	73	cy	\$107	\$7,811
Dumpster and Gen Pad Subgrade	32	sy	\$14.80	\$474
Dumpster and Gen Pad Stone Base	126	cy	\$108	\$13,608
Heavy Duty Asphalt and Parking Pavement Base Material Placement	364	cy	\$53.90	\$19,620
Driveway / Parking Subgrade	1,222	sy	\$3.60	\$4,399
				\$49,386
				\$49,386
				\$497,621
				\$497,621

NEW FIRESTATION
TOWN OF SEEKONK
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DIVISION 32- SITE IMPROVEMENTS \$197,000

Pavements and Curbs

Place Vertical Concrete Curb	275	If	\$39.00	\$10,725	
Asphalt Curb - Berm	460	If	\$6.30	\$2,898	
4" Bituminous Pavement	931	sy	\$36.30	\$33,795	
4.5" Bituminous H D Pavement	292	sy	\$46.40	\$13,549	
Utility Trench Patch	57	sy	\$224	\$12,768	
F & I Dumpster and Gen Pad	280	sf	\$37.70	\$10,556	
5" Concrete Walk w/Wire Mesh	351	sy	\$133	\$46,683	
					\$130,974
					\$130,974

Topsoil Placement and Seeding

Hydroseeding for Erosion Control	19,880	sf	\$0.20	\$3,976	
Screen and Respread Topsoil	460	cy	\$18.10	\$8,326	
Landscape Area Subgrading (318)	2,210	sy	\$2.50	\$5,525	
F&I Jute for Slope Stabilization	380	sf	\$0.50	\$190	
Landscape Plantings	1	Allowance	\$15,000	\$15,000	
					\$33,017
					\$33,017

Miscellaneous Site Furnishings and Cleanup

F&I Bollards	10	ea	\$1,194	\$11,940	
Site Signs and Markings	1	ls	\$6,264	\$6,264	
Flagpole Base Preparation and Installation	1	ea	\$7,379	\$7,379	
Dumpster Enclosure w/Fencing	50	If	\$157	\$7,850	
				\$33,433	\$33,433
				\$197,424	\$197,424

DIVISION 33 - UTILITIES \$173,000

Sewer Systems

E & B For ZURN Sand / Oil Collection Tank	1	ea	\$2,735	\$2,735	
4" Building Sewer, Short Runs	45	If	\$57.30	\$2,579	
4" Plumber C I Trench Line E&B	25	If	\$20.30	\$508	
6" SDR 35 Cleanout	1	ea	\$1,047	\$1,047	
6" SDR 35 Sewer Service	32	If	\$60.80	\$1,946	
Exc. Trench and Install Leaching Pipe	200	If	\$25.30	\$5,060	
Leach Field Cover w/One Machine	110	cy	\$9.90	\$1,089	
Leach Field Stone Installation	55	tn	\$50.80	\$2,794	
Septic Bed Excavation	151	cy	\$10.60	\$1,601	
7 Hole Distribution Box	1	ea	\$1,752	\$1,752	
Inspection Port	3	ea	\$502	\$1,506	
1,500 Gal Septic Tank	1	ea	\$6,237	\$6,237	
3,500 Tight Tank E & B	2	ea	\$4,233	\$8,466	
				\$37,318	\$37,318

Water Systems

2" Water Service - Poly	296	If	\$59.30	\$17,553	
Hydrant Installation	1	ea	\$8,953	\$8,953	
Basic 8" Water	320	If	\$119	\$38,080	
Cut in 8" Valves and Tees	1	ea	\$34,040	\$34,040	
				\$98,626	\$98,626

Electrical Systems

Elec/Tele/Catv Duct Bank Exc/Back	12	If	\$35.60	\$427	
Light Bases F & I	3	ea	\$1,250	\$3,750	
Site Lighting Exc/Back	385	If	\$15.40	\$5,929	
Furnish and Install Precast Transformer Pad	1	ea	\$1,898	\$1,898	
Secondary Electric Trenching(Generator, ev charging, Radio Twr Stub)	154	If	\$77.60	\$11,950	
Light Bollard Bases Exc/Back	7	ea	\$173	\$1,211	
Fiber Optic / DATA Exc/Back	25	If	\$15.10	\$378	
				\$25,543	\$25,543

Fuel and Miscellaneous Utility Systems (12)

Gas Line Exc/Back	210	If	\$54.00	\$11,340	
				\$11,340	\$11,340
				\$172,827	\$172,827

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

SUMMARY	8,305 GSF	
DIV.2 EXISTING CONDITIONS / SITE DEMOLITION		No Work
DIV.3 CONCRETE	\$24.32 /GSF	\$202,000
DIV.4 MASONRY - Filed Sub-Bid	\$67.91 /GSF	\$564,000
DIV.5 METALS	\$53.70 /GSF	\$446,000
05 00 01 -Miscellaneous and Ornamental Iron - Filed Sub-Bid		\$98,398
DIV.6 WOOD, PLASTICS AND COMPOSITES	\$15.05 /GSF	\$125,000
DIV.7 THERMAL AND MOISTURE PROTECTION	\$50.45 /GSF	\$419,000
07 00 01 - Roofing and Flashing - Filed Sub-Bid		\$284,138
07 00 02 - Waterproofing, Damp-Proofing and Caulking - Filed Sub-Bid		\$52,191
DIV.8 DOORS AND WINDOWS	\$22.76 /GSF	\$189,000
08 00 01 - Glass and Glazing - Filed Sub-Bid		\$0
08 00 02 - Metal Windows - Filed Sub-Bid		\$30,514
DIV.9 FINISHES	\$49.13 /GSF	\$408,000
09 00 01 - Acoustical Tile - Filed Sub-Bid		\$30,160
09 00 02 - Resilient Floors - Filed Sub-Bid		\$100,575
09 00 03 - Tile - Filed Sub-Bid		\$31,530
09 00 04 - Painting - Filed Sub-Bid		\$33,375
DIV.10 SPECIALTIES	\$13.61 /GSF	\$113,000
DIV.11 EQUIPMENT	\$4.46 /GSF	\$37,000
DIV.12 FURNISHINGS	\$0.12 /GSF	\$1,000
DIV.13 SPECIAL CONSTRUCTION	\$0.00 /GSF	No Work
DIV.21 FIRE SUPPRESSION - Filed Sub-Bid	\$8.07 /GSF	\$67,000
DIV.22 PLUMBING - Filed Sub-Bid	\$50.57 /GSF	\$420,000
DIV.23 HVAC - Filed Sub-Bid	\$55.51 /GSF	\$461,000
DIV.26 ELECTRICAL - Filed Sub-Bid	\$131.49 /GSF	\$1,092,000
DIV.31 EARTHWORK	\$59.96 /GSF	\$498,000
DIV.32 SITE IMPROVEMENTS	\$23.72 /GSF	\$197,000
DIV.33 SITE UTILITIES	\$20.83 /GSF	\$173,000
 SUBTOTAL, Rounded	\$651.66 /GSF	\$5,412,000
GENERAL CONDITIONS AND OH & P	\$117.28 /GSF	18% <u>\$974,000</u>
 SUBTOTAL DESIGN CONTINGENCY	\$768.93 /GSF	\$6,386,000
	\$38.41 /GSF	5% <u>\$319,000</u>
 SUBTOTAL CONSTRUCTION/OWNER CONTINGENCY	\$807.34 /GSF	\$6,705,000
	\$0.00 /GSF	By Owner
 SUBTOTAL - TODAY'S DOLLARS	\$807.34 /GSF	\$6,705,000
ESCALATION TO MIDPOINT OF CONSTRUCTION - ROUGHLY JAN. 2024	\$61.89 /GSF	7.7% <u>\$514,000</u>
		\$7,219,000
	\$866.95 /GSF	SAY \$7,200,000

PROBABLE CONSTRUCTION COST RANGE BETWEEN

\$6,500,000 AND \$7,900,000
\$783 \$951
\$/GSF \$\$/GSF

NEW FIRESTATION
TOWN OF SEEKONK
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SEEKONK, MA

TGAS - Design Development Cost Estimate

AREAS

Floor Area

First Floor	7,965	GSF
- Entry	0	GSF
- Mezzanine	340	GSF
	8,305	GSF

Exterior Wall Area

- Brick	6,192	sf
- CMU	1,175	sf
- Glass Entry	0	sf
- Windows	407	sf
- Overhead Doors	392	sf
	8,166	sf

Roofing Area

<i>Flat Roof Area</i>	7,965	sf
<i>Roofing at Parapet Back-Up</i>	812	sf
	8,777	sf

Site Area

<i>Site Area within Property Line</i>	42,070	sf
<i>Site Area between Property Line and Street</i>	5,020	sf
	47,090	sf

1.08 Acre

Breakdown by Coverage

<i>Building Footprint</i>	7,965	sf
<i>Parking and Training Area Paving</i>	8,110	sf
<i>Apparatus Area Paving</i>	2,510	sf
<i>Sidewalks along the Street in Front of the Property</i>	1,240	sf
<i>Radio Tower Pad</i>	320	sf
<i>Generator Pad</i>	220	sf
<i>Paving under Flagpole and Sign</i>	140	sf
<i>Walkways</i>	2,310	sf
<i>Loam and Seed Disturbed Areas</i>	24,275	sf
	47,090	sf

NEW FIRESTATION
TOWN OF SEEKONK
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SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 2 - EXISTING CONDITIONS

02 41 13 - UTILITY LINE REMOVALS

Utility Line Removals

Included with Sitework

\$0	\$0
\$0	\$0

DIVISION 3 - CONCRETE

\$202,000

03 30 00 - CAST-IN-PLACE CONCRETE

Foundations :-

Column Footings	35	cy	\$690	\$24,150
Continuous Footings	20	cy	\$720	\$14,400
Foundation Walls	69	cy	\$1,080	\$74,520

Included Above
Not Required

Slab On Grade

- 4" thick	60	cy	\$560	\$33,600
- Sunken Floor at Server Room and Dispatch	102	lf	\$25	\$2,550
- 6" thick	57	cy	\$530	\$30,210
- Control Joints	1,000	lf	\$10	\$10,000
- Smooth Trowel Finish [per finish schedule]	3,080	sf	\$1.60	\$4,928
- Install Trench Drain (Provided by Others)	56	lf	\$15	\$840

See Div. 7

Vapor Barrier

Set Anchor Bolts	30	sets	\$55	\$1,650
Grout Base Plates	30	ea	\$45	\$1,350

Miscellaneous Embedded Items

Wheel Guards	1	ls	\$2,500	\$2,500
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Not Included

Structure

Misc. Equipment Pads	1	ls	\$1,000	\$1,000
Hardeners			Not Included	

\$201,698	\$201,698
\$201,698	\$201,698

DIVISION 4 - MASONRY

\$564,000

04 00 01 - MASONRY WORK - Filed Sub-Bid

04 05 13 - MASONRY MORTARS [Part of Section 04 00 01]

04 22 00 - UNIT MASONRY [Part of Section 04 00 01]

Exterior:

Face Brick	6,192	sf	\$50	\$309,600
3 5/8" Ground Face CMU at Exterior Wall, as Exterior Finish	1,175	sf	\$30	\$35,265
3 5/8" Ground Face CMU at Exterior Wall, as Back-Up	2,986	sf	\$32	\$95,552

Interior:

- 8" CMU at Wall Types1, 1A, 1B, 1C, and 1D as 8" Ground Face (1 side only) CMU	3,630	sf	\$34	\$123,420
			\$563,837	\$563,837
			\$563,837	\$563,837

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

7-Dec-22

TGAS - Design Development Cost Estimate

DIVISION 5 - METALS						\$446,000
05 00 01 - MISCELLANEOUS and ORNAMENTAL IRON - Filed Sub-Bid						
05 50 00 - METAL FABRICATIONS [Part of 05 00 01]						
Miscellaneous Metals [Interior]			8,305	sf	\$5	\$41,525
- Miscellaneous Lintels						Included Above
- Embedded Galv Angles at OHD Sills						Included Above
- Toilet Partition Supports						Included Above
- Anchor Bolts						Included Above
3/8" Steel Frame around Window Openings			362	lf	\$25	\$9,050
3/8" Steel Frame around Overhead Door Openings and Area Above			130	lf	\$25	\$3,250
Aluminum Canopy at OH Doors, Custom			96	sf	\$100	\$9,600
Aluminum Canopies at Entries with Transoms						Included with Div. 8
Angle / Seismic Bracing at CMU Partitions (Only)			163	lf	\$110	\$17,930
Bollards at Overhead Doors			4	ea	\$1,100	\$4,400
Overhead Door Frames			2	ea	\$2,000	\$4,000
Mezzanine						
- 36" High Pipe Guardrail incl. Gate			38	lf	\$120	\$4,560
- Mezzanine Stairs / Ladder						None Shown
Miscellaneous Metals [Exterior Wall]			8,166	sf	\$0.50	\$4,083
						\$98,398
						\$98,398
05 12 00 - STRUCTURAL STEEL FRAMING						
Structural Steel			34	ton	\$5,500	\$187,000
Allowances For Additional Steel			6.4	ton	\$5,500	\$35,200
- Connections [10% additional steel]			3.4	ton		Included Above
- Framing at Openings			1	ton		Included Above
- Misc. Dunnage and Equipment Support			2	ton		Included Above
						\$222,200
						\$222,200
05 21 00 - STEEL JOIST FRAMING						
Bar Joist			7	ton	\$3,500	\$24,500
						\$24,500
						\$24,500
05 30 00 - METAL DECKING						
1 1/2" x 22ga Galv Steel Deck			7,965	sf	\$12	\$95,580
						\$95,580
						\$95,580
05 40 00 - COLD-FORMED METAL FRAMING						
Metal Studs at Exterior Wall Back-Up and Interior Partitions						Included within Div. 9
						\$0
						\$0
05 51 33 - METAL LADDERS						
- Galvanized Steel Roof Ladder w/Cage			1	ls	\$5,000	\$5,000
- Ships ladder at Roof Elevation Change						None Shown
						\$5,000
						\$445,678
						\$445,678

DIVISION 6 - WOOD, PLASTICS and COMPOSITES						\$125,000
06 10 00 - ROUGH CARPENTRY						
Plywood Decking at Mezzanine						
			340	sf	\$6	\$2,040
8 inch Light Ga. Joists at Mezzanine						
			340	sf	\$10	\$3,400
Interior Blocking						
			8,305	sf	\$2	\$16,610
Roof Blocking						
- Parapet Blocking			450	lf	\$10	\$4,500
- Cant Strip			510	lf	\$6	\$3,060
- Miscellaneous Blocking			1	ls	\$1,000	\$1,000.00
Unload and Distribute Doors and Frames						
			20	hrs	\$100	\$2,000
Install Doors / Frames and Hardware						
- Exterior			21	hrs	\$100	\$2,100
- Interior			204	hrs	\$100	\$20,400
Install Toilet Accessories						
			24	hrs	\$100	\$2,400
						\$57,510
						\$57,510
06 16 00 - SHEATHING						
Roof Sheathing			7,965	sf	\$4	\$31,860
						\$31,860
						\$31,860
06 20 00 - FINISH CARPENTRY						
Running Trim [window sills]						
			1	Allowance	\$2,000	\$2,000
Report Room						
						Assumed to be Furniture
Break Room						
- Base and Wall Cabinetry			11	lf	\$600	\$6,600
- Solid Surface Counter Top			11	lf	\$150	\$1,650
Kitchen						
- Base and Wall Cabinetry			26	lf	\$600	\$15,600
- Solid Surface Counter Top			22	lf	\$150	\$3,300
- Solid Surface Counter Top - Island			25	sf	\$100	\$2,500
Restrooms						
- Vanity and Counter [3'-6"]			2	ea	\$1,750	\$3,500
						\$35,150
						\$35,150
06 41 16 - PLASTIC-LAMINATE CLAD ARCHITECTURAL MILLWORK						
						Incl. with Section 06 20 00
06 61 40 - SOLID SURFACE FABRICATIONS						
						Incl. with Section 06 20 00
						\$124,520
						\$124,520

NEW FIRESTATION
TOWN OF SEEKONK
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TGAS - Design Development Cost Estimate

DIVISION 7 - THERMAL and MOISTURE PROTECTION					\$419,000
07 00 01 - ROOFING and FLASHING - Filed Sub-Bid					
07 54 23 - THERMOPLASTIC-POLYOLEFIN ROOFING [Part of 07 00 01]					
- Membrane Roof incl. Insulation	7,965	sf	\$34	\$270,810	
- Membrane Turn-up at Parapet	812	sf	\$12	\$9,744	
Walkway Pads - say 5% of Area	398	sf	\$9	\$3,584	
				\$284,138	\$284,138
07 00 02 - WATERPROOFING, DAMPROOFING and CAULKING - Filed Sub-Bid					
07 27 26 - FLUID-APPLIED NON-PERMEABLE MEMBRANE AIR BARRIERS [Part of 07 00 02]					
07 27 27 - FLUID-APPLIED MEMBRANE AIR BARRIERS [Part of 07 00 02]					
07 92 00 - JOINT SEALANTS [Part of 07 00 02]					
Damproofing at Foundation Wall	1,950	sf	\$2.50	\$4,875	
Vapor Barrier at slab on grade	9,160	sf	\$0.60	\$5,496	
Fluid-Applied Membrane Air Barrier					
- Exterior Wall	7,367	sf	\$5	\$36,837	
- Soffits				None Shown	
Caulking and Sealants	8,305	sf	\$0.60	\$4,983	
				\$52,191	\$52,191
07 21 00 - THERMAL INSULATION					
Rigid Insulation at Exterior Wall					
- Exterior Wall	7,367	sf	\$4	\$29,470	
- Soffits				None Shown	
Perimeter Insulation [assumed 4'-0"]	1,560	sf	\$4	\$6,240	
Batt Insulation at Exterior Wall				Included w/Division 9	
Miscellaneous Insulation	1	ls	\$5,000	\$5,000	
				\$40,710	\$40,710
07 42 13 - FORMED METAL WALL PANELS					
Mechanical Screen at Roof					
- Structural System				None Shown	
- Metal Panels				None Shown	
				\$0	\$0
07 42 16 - ZINC ALLOY METAL WALL PANELS					
- Metal Panels				None Shown	
				\$0	\$0
07 62 00 - SHEET METAL FLASHING and TRIM					
Parapet Caps, as Aluminum Coping	453	lf	\$65	\$29,445	
Counter Flashing					
- Parapets	436	lf	\$15	\$6,540	
- Building To Roof	60	lf	\$15	\$900	
Scuppers / Rainwater Management				None Shown - Roof Drains incl. Overflow Drains	
Miscellaneous Flashings [Roof Top Curbs]	1	ls	\$2,500	\$2,500	
				\$39,385	\$39,385
07 84 00 - FIRESTOPPING PENETRATIONS, JOINTS AND PERIMETER FIRE CONTAINMENT					
Fire Stop Systems	8,305	sf	\$0.30	\$2,492	
				\$2,492	\$2,492
				\$418,916	\$418,916

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 8 - OPENINGS						\$189,000
08 00 01 - GLASS and GLAZING - Filed Sub-Bid						
08 41 26 - ALL GLASS ENTRANCES [Part of 08 00 01]						
08 88 00 - GLASS and GLAZING [Part of 08 00 01]						
08 00 02 - METAL WINDOWS - Filed Sub-Bid						
Exterior Windows	407	sf	\$75	\$30,514		
				\$30,514		\$30,514
08 11 13 - HOLLOW METAL DOORS and FRAMES						
Door Type						
1 Glazed Double Door - Steel						
6-0 x 8-0 - 100A including Frame Type 1B Transom and sidelights - 1 location	94	sf	\$130	\$12,220		
6-0 x 8-0 - 100B including Frame Type 1B Transom and sidelights - 1 location	94	sf	\$130	\$12,220		
2 HM Door						
3-0 x 7-0	3	lvs	\$400	\$1,200		
3 HM Sliding Door - Frameless						
3-4 x 8-0	1	lvs	\$425	\$425		
5 Hollow Metal Double Door - Bifold						
12-0 x 7-0	1	loc	\$1,200	\$1,200		
9-5 x 7-0	1	loc	\$1,000	\$1,000		
7 HM Door - Glazed						
3-0 x 8-0	2	lvs	\$4,500	\$9,000		
10 Hollow Metal Double Door						
4-0 x 7-0	1	pr	\$700	\$700		
6-0 x 7-0	1	pr	\$800	\$800		
11 Hollow Metal Double Door						
6-0 x 7-10	1	pr	\$800	\$800		
12 Hollow Metal Door						
3-0 x 7-10	1	lvs	\$425	\$425		
Frame Type						
1B HM Frame						
2 HM Frame						
3-0 x 7-10	1	ea	\$180	\$180		
6-0 x 7-10	1	ea	\$350	\$350		
3 HM Frame						
3-0 x 7-0	7	ea	\$180	\$1,260		
4-0 x 7-0	1	ea	\$200	\$200		
6-0 x 7-0	1	ea	\$350	\$350		
9-4 7/8 x 7-0	1	ea	\$400	\$400		
4 HM Frame						
						Incl. with Door Above
						\$42,730
08 14 00 - WOOD DOORS						
Door Type:						
2 Wood Door						
3-0 x 7-0	13	lvs	\$400	\$5,200		
5 Wood Double Door - Bifold						
8-0 x 7-0	1	loc	\$800	\$800		
6 Wood Door with Vision Lite						
3-0 x 7-0	3	lvs	\$750	\$2,250		
7 Wood Door - Glazed						
3-0 x 7-0	2	lvs	\$1,000	\$2,000		
8 Wood Double Door with Vision Lite - Uneven Pr						
4-6 x 7-0	1	pr	\$1,500	\$1,500		
9 Not Used						
Frame Type:						
2 Wood Frame						
3-0 x 7-0	18	ea	\$200	\$3,600		
4-6 x 7-0	1	ea	\$250	\$250		
8-0 x 7-0	1	ea	\$400	\$400		
12-0 x 7-0	1	ea	\$500	\$500		
						\$16,500
						\$16,500
08 31 00 - ACCESS DOORS and FRAMES						
Access Doors and Frames	1	Allowance	\$1,000	\$1,000		
						\$1,000
						\$1,000
08 36 13 - SECTIONAL OVERHEAD DOORS						
OH Door Aluminum Overhead Doors	2	ea	\$16,000	\$32,000		
- 14'-0" x 14'-0"						\$32,000
						\$32,000

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

7-Dec-22

TGAS - Design Development Cost Estimate

DIVISION 8 - OPENINGS

08 41 13 - ALUMINUM FRAMED ENTRANCES and STOREFRONTS

Door Type

Frameless Glass Entry	0	sf	\$175	\$0
1A - Xc Doors 100A	0	pr	\$9,000	\$0
4 Glazed Door with Sidelight - Frameless				
5-0 x 7-0	35	sf	\$200	\$7,000
7-11 x 7-0	56	sf	\$200	\$11,200
				\$18,200
				\$18,200
08 62 23 - TUBULAR DAYLIGHTING DEVICES				
Pre Manufactured Tubular Skylights say 21" x 21"	3	ea	\$3,000	\$9,000
				\$9,000
				\$9,000
08 63 00 - METAL FRAMED SKYLIGHTS				
Entry Area Skylight - 8' x 13'	1	Allowance	\$10,000	\$10,000
				\$10,000
				\$10,000
08 71 00 - DOOR HARDWARE				
Hardware	45	lvs	\$650	\$29,250
				\$29,250
				\$29,250
08 87 00 - GLAZING SURFACE FILMS				
None Shown				\$0
				\$0
				\$0
				\$189,194
				\$189,194

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 9 - FINISHES						\$408,000
09 00 01 - ACOUSTICAL TILE - Filed Sub-Bid						
09 51 00 - ACOUSTICAL CEILINGS [Part of Section 09 00 01]						
- ACT Ceilings	3,770	sf	\$8	\$30,160		\$30,160
				\$30,160		\$30,160
09 00 02 - RESILIENT FLOORS - Filed Sub-Bid						
09 65 13 - RESILIENT WALL BASE [Part of Section 09 00 02]						
- Rubber	6,535	sf	\$10	\$65,350		
- Rubber Mats - Fitness Room Floor	150	sf	\$18	\$2,700		
- Carpet Tile	575	sf	\$5	\$2,875		
- Raised Floor at Dispatch and Server Room incl. Portion of Corridor Linking Rooms	880	sf	\$30	\$26,400		
- Rubber Base	1,300	lf	\$2.50	\$3,250		
				\$3,250		
				\$100,575		\$100,575
09 00 03 - TILE - Filed Sub-Bid						
09 30 13 - CERAMIC TILE [Part of Section 09 00 03]						
- Ceramic Tile Flooring	385	sf	\$23	\$8,855		
- Ceramic Tile Base - 3" x 6"	175	lf	\$21	\$3,675		
- Ceramic Tile Wall Finish - 7'-0 high	950	sf	\$20.00	\$19,000		
				\$19,000		
				\$31,530		\$31,530
09 00 04 - PAINTING - Filed Sub-Bid						
09 90 00 - PAINTING and COATING [Part of Section 09 00 04]						
Paint CMU	5,730	sf	\$2.50	\$14,325		
Paint GWB	6,750	sf	\$1.50	\$10,125		
Paint Doors and Frames						
- HM and Wood Frames	33	ea	\$100	\$3,300		
- HM Doors	45	lvs	\$125	\$5,625		
				\$5,625		
				\$33,375		\$33,375
09 21 00 - GYPSUM BOARD ASSEMBLIES						
Exterior Wall Backup [incl parapets]						
- 5/8" GWB	3,945	sf	\$22	\$86,801		
- 6" Metal Stud				Included Above		
- Vapor Barrier [Interior]				Included Above		
- Batt Insulation				Included Above		
- Plywood Sheathing				Included Above		
- Added wall Thickness at Front of Apparatus Bay	0	sf	\$5.00	\$0		
GWB Soffit at Skylight/Entry Area	1	ls	\$3,500	\$3,500		
GWB Fascia/Soffit at Skylight				Included Above		
Interior Partitions						
- Finishes Applied to CMU Partition Type 1A	224	sf	\$15.00	\$3,360		
- Finishes Applied to CMU Partition Type 1B	126	sf	\$13.50	\$1,701		
- Finishes Applied to CMU Partition Type 1C	364	sf	\$6.50	\$2,366		
- Finishes Applied to CMU Partition Type 1D	294	sf	\$6.65	\$1,955		
Interior Partitions, Complete						
- Partition Type 3	1,204	sf	\$18.00	\$21,672		
- Partition Type 3A	154	sf	\$16.50	\$2,541		
- Partition Type 4	3,094	sf	\$15.00	\$46,410		
- Partition Type 5	700	sf	\$15.30	\$10,710		
- Partition Type 6	1,316	sf	\$15.15	\$19,937		
- Partition Type 7	42	sf	\$19.15	\$804		
- Partition Type 7 as Plumbing Wall	280	sf	\$19.55	\$5,474		
- Xc Cement Board At CT on Walls	950	sf	\$2.00	\$1,900		
				\$1,900		
				\$209,132		\$209,132
09 67 23 - RESINOUS FLOORING						
- Epoxy						
- Epoxy - Mezzanine	165	sf	\$22	\$3,630		
	0	sf	\$22	\$0		
				\$3,630		\$3,630
Miscellaneous Items						
Ceilings						
- Exposed Structure at Apparatus Bay, Etc.	7,965	sf				
- Exposed Structure at Entry/Skylight	4,035	sf		Exposed Structure		
	160	sf		Exposed Structure		
				\$0		\$0
				\$408,402		\$408,402

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 10 - SPECIALTIES					\$113,000
10 11 00 - MAGNETIC GLASS MARKERBOARDS					
Magnetic Glass Markerboards		1	Allowance	\$5,000	\$5,000
				\$5,000	\$5,000
10 11 23 - TACKBOARDS					
Tackboards		1	Allowance	\$2,500	\$2,500
				\$2,500	\$2,500
10 14 19 - CUT METAL LETTERS					
Cut Metal Letters - 16" Tall		22	ea	\$425	\$9,350
				\$9,350	\$9,350
10 14 21 - ARCHITECTURAL DOOR SIGNS					
ADA and MAAB Compliant Interior Signage and Graphics		1	ls	\$5,000	\$5,000
				\$5,000	\$5,000
10 14 53 - TRAFFIC SIGNAGE					
Traffic Signage		1	ls	<u>Included with Sitework</u>	
				\$0	\$0
10 28 00 - TOILET ACCESSORIES					
Accessible Restrooms - 130 and 131					
- 42" Grab Bars		5	sets	\$60	\$300
- Soap Dispenser - Bobrick: B-4112		5	ea	\$90	\$450
- Toilet Paper Holder - Bobrick: B-2888		5	ea	\$86	\$430
- Framed Mirror 2'x3'		5	ea	\$235	\$1,175
- Waste Receptacle - Bobrick: B-220816		5	ea	\$296	\$1,480
- Sanitary Napkin Disposal - Bobrick: B-270		5	ea	\$42	\$210
- Shower Curtain Rod - Bobrick: B-6047 x 36		3	ea	\$36	\$108
- Shower Curtain Ring - Bobrick: (7x) 204-1		21	ea	\$2	\$32
- Shower Curtain - Bobrick: 204-2		3	ea	\$42	\$126
- Mop and Broom Holder		1	ea	\$0	\$0
Install Toilet Accessories				<u>See Division 6</u>	
				\$4,311	\$4,311
10 28 13 - ELECTRIC HAND DRYERS					
Electric Hand Dryers				None Shown	
				\$0	\$0
10 44 16 - FIRE EXTINGUISHERS AND CABINETS					
Portable fire extinguishers		3	ea	\$100	\$300
Fire extinguisher cabinets-semi recessed		3	ea	\$300	\$900
				\$1,200	\$1,200
10 51 00 - GEAR RACK STORAGE COMPONENTS					
24" Wide Turnout Gear Lockers		17	ea	\$2,500	\$42,500
				\$42,500	\$42,500
10 51 01 - PHENOLIC LOCKERS					
Bunk Room Lockers - 24 x 84 Phenolic Lockers		20	ea	\$1,900	\$38,000
				\$38,000	\$38,000
10 75 00 - FLAGPOLES					
Aluminum Flagpole to Withstand 100MPH min		1	ea	\$5,000	\$5,000
3'x5' American Flag (CFCI)		1	ea	\$200	\$200
				\$5,200	\$5,200
				\$113,061	\$113,061

DIVISION 11 - EQUIPMENT					\$37,000
11 23 00 - LAUNDRY SERVICE EQUIPMENT					
Top Load Washer		2	ea	\$2,500	\$5,000
Single Load Dryer		2	ea	\$2,300	\$4,600
				\$9,600	\$9,600
11 23 26 - COMMERCIAL WASHERS AND EXTRACTORS					
Extractor 65 lb Capacity		1	ea	\$16,000	\$16,000
Stainless Steel Sink at Decon Area				<u>Included w/Plumbing</u>	
				\$16,000	\$16,000
11 40 00 - FOOD SERVICE EQUIPMENT					
Refrigerator 27.80 cu ft		1	ea	\$2,200	\$2,200
Dishwasher		1	ea	\$1,000	\$1,000
Microwave 2.20 cu ft		1	ea	\$800	\$800
Range - 4 Burner		1	ea	\$3,000	\$3,000
Range Hood				None Shown	
Disposal				None Shown	
				\$7,000	\$7,000
11 90 00 - OTHER EQUIPMENT and ACCESSORIES					
Pot Racks				None Shown	
Shelving Units		156	lf	\$3,900	
Vertical File Cabinets		4	ea	By Others	
Fitness Equipment		5	ea	By Others	
				\$3,900	\$3,900
				\$36,500	\$36,500

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 12 - FURNISHINGS				\$1,000
12 24 00 - WINDOW SHADES				
Manually Operated Blinds	263	sf	\$5	\$1,314 \$1,314
12 48 13 ENTRANCE FLOOR MATS				
Recessed Floor Mat at Entry	0	sf	\$75	\$0
Walk Off Mats at Secondary Entries	0	ea	\$110	By Owner
				\$0
				\$1,314 \$1,314
DIVISION 21 - FIRE PROTECTION				\$67,000
Equipment				
Double Check Valve Backflow Preventor Assembly - 8"	1	ea	\$9,424	\$9,424
Fire Protection Specialties	1	ls	\$6,223	\$6,223
Wet Sprinkler Building Coverage - Mezzanine	275	sf	\$5.00	\$1,375
Wet Sprinkler Building Coverage - Apparatus Bay	2,825	sf	\$5.00	\$14,125
Wet Sprinkler Building Coverage - Office	4,800	sf	\$5.50	\$26,400
				\$57,547
Trade Requirements				
Coordination	32	hrs	\$135	\$4,320
Project Supervision	40	hrs	\$135	\$5,400
				\$9,720
				\$9,720
				\$67,267
				\$67,267

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 22 - PLUMBING				\$420,000
Equipment				
Water Meter	1	ea	\$2,546	\$2,546
Backflow Preventor Assembly - 2"	1	ea	\$3,040	\$3,040
Gas Fired Water Heater	1	ea	\$11,020	\$11,020
Recirc Pump	1	ea	\$1,046	\$1,046
Expansion Tank	1	ea	\$2,770	\$2,770
Thermostatic Mixing Valve	1	ea	\$3,665	\$3,665
Oil/Water Separator			Included with Sitework	
Air Compressor and Dryer	1	ea	\$15,040	\$15,040
Trap Primers	10	ea	\$408	\$4,080
Make Up Water Station	1	ea	\$1,244	\$1,244
Plumbing Specialties	1	ls	\$6,563	\$6,563
Plumbing Equipment Connections	18	ea	\$645	\$11,610
				\$62,624
Fixtures				
Water Closets	5	ea	\$1,349	\$6,745
Lavatories	5	ea	\$1,234	\$6,170
Urinals	2	ea	\$1,208	\$2,416
Showers	3	ea	\$1,943	\$5,829
Sinks - 1 Bay	2	ea	\$1,270	\$2,540
Sink - 2 Bay	1	ea	\$1,655	\$1,655
Garbage Disposal	1	ea	\$416	\$416
Sink - Mop	1	ea	\$1,234	\$1,234
Emergency Shower w/ Mixing Valve	1	ea	\$4,073	\$4,073
Bottle Fill	1	ea	\$2,756	\$2,756
Hose Stations - CW/HW	2	ea	\$446	\$892
Hose Reel - Air	5	ea	\$709	\$3,545
Ice Machine Box	1	ea	\$184	\$184
Washer Boxes	2	ea	\$404	\$808
Dishwasher Connections	2	ea	\$404	\$808
Wall Hydrants	6	ea	\$341	\$2,046
Hose Bibbs	2	ea	\$247	\$494
Floor Drains	5	ea	\$625	\$3,125
Trench Drains	52	lf	\$159	\$8,268
Roof Drain Combos	7	ea	\$895	\$6,265
Clean Outs	24	ea	\$263	\$6,312
Vent thru Roof	6	ea	\$235	\$1,410
Fixture Rough Ins	29	ea	\$520	\$15,080
				\$83,071
Piping				
Water	1,480	lf	\$45.90	\$67,932
Waste	240	lf	\$85.30	\$20,472
Vent	150	lf	\$82.70	\$12,405
Oil Waste	130	lf	\$91.70	\$11,921
Oil Vent	120	lf	\$87.70	\$10,524
Storm	430	lf	\$132	\$56,760
Gas	470	lf	\$52.50	\$24,675
Compressed Air	200	lf	\$60.40	\$12,080
Insulation	1,480	lf	\$11.80	\$17,464
				\$234,233
Trade Requirements				
Coordination	80	hrs	\$135	\$10,800
Project Supervision	120	hrs	\$135	\$16,200
Excavation and Backfill	217	cuyd	\$48	\$10,400
Rigging	1	ls	\$3,098	\$3,098
				\$40,498
				\$40,498
				\$420,426
				\$420,426

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 23 - HVAC					\$461,000
Equipment					
Packaged Gas Fired Rooftop Unit - RTU 1A	2	tns	\$2,950	\$5,900	
Packaged Gas Fired Rooftop Unit - RTU 1B	2	tns	\$2,950	\$5,900	
Packaged Gas Fired Rooftop Unit - RTU 2A	3	tns	\$2,950	\$8,850	
Packaged Gas Fired Rooftop Unit - RTU 2B	3	tns	\$2,950	\$8,850	
Packaged Gas Fired Rooftop Unit - RTU 3	2	tns	\$2,950	\$5,900	
Packaged Gas Fired Rooftop Unit - RTU 4	3	tns	\$2,950	\$8,850	
Packaged Gas Fired Rooftop Unit - RTU 5	3.5	tns	\$2,950	\$10,325	
Packaged Gas Fired Rooftop Unit - RTU 6	2	tns	\$2,950	\$5,900	
Gas Fired Rooftop Make Up Air Unit - MAU 1	2,500	cfm	\$6.70	\$16,750	
Energy Recovery Unit - ERU 1	800	cfm	\$8.90	\$7,120	
Exhaust Fan - EF 1	1	ea	\$2,344	\$2,344	
Exhaust Fan - EF 2	1	ea	\$4,938	\$4,938	
Exhaust Fan - EF 3	1	ea	\$2,344	\$2,344	
Plymovent Fans - VEF 1	1	ea	\$3,375	\$3,375	
Plymovent Hose Reels	4	ea	\$788	\$3,152	
Electric Unit Heaters	2	ea	\$1,286	\$2,572	
Electric Wall Heaters	2	ea	\$1,499	\$2,998	
(2) Infrared Radiant Heaters	120	lf	\$329	\$39,480	
RGDs	45	ea	\$263	\$11,835	
				\$157,383	\$157,383
Sheet Metal					
Galvanized	7,200	lbs	\$15.30	\$110,160	
Gas Water Heater Vent	1	ea	\$4,188	\$4,188	
Gas Fired Radiant Heater Vent	2	ea	\$1,917	\$3,834	
Sheet Metal Specialties	1	ls	\$5,490	\$5,490	
Equipment Connections	1	ls	\$15,750	\$15,750	
				\$139,422	\$139,422
Internal Lining					
Sheet Metal - Galvi	4,896	sf	\$5.00	\$24,480	
				\$24,480	\$24,480
Controls					
Packaged Rooftops	8	ea	\$3,580	\$28,640	
Gas Fired Make Up Air Unit	1	ea	\$3,580	\$3,580	
Energy Recovery Unit	1	ea	\$3,580	\$3,580	
Exhaust Fans	3	ea	\$2,060	\$6,180	
Vehicle Exhaust Fan	1	ea	\$2,580	\$2,580	
Electric Unit Heaters	2	ea	\$1,083	\$2,166	
Electric Wall Heaters	2	ea	\$1,083	\$2,166	
Infrared Radiant Heaters	2	ea	\$2,455	\$4,910	
BMS Network	1	ls	\$14,890	\$14,890	
				\$68,692	\$68,692
Commissioning					
Start Up	80	hrs	\$135	\$10,800	
Testing, Adjusting, and Balancing	80	hrs	\$125	\$10,000	
3rd Party Cx Assist	40	hrs	\$135	\$5,400	
				\$26,200	\$26,200
Trade Requirements					
Coordination	80	hrs	\$135	\$10,800	
Project Supervision	120	hrs	\$135	\$16,200	
Crane	1	ls	\$9,850	\$9,850	
Rigging	64	hrs	\$125	\$8,000	
				\$44,850	\$44,850
				\$461,027	\$461,027

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 26 - ELECTRICAL - FILED SUB-BID

DIVISION 26 - BUILDING ELECTRICAL	\$782,000
DIVISION 27 - COMMUNICATIONS	\$84,000
DIVISION 28 - FIRE DETECTION AND ALARMS	\$98,000
DIVISION 26 - ELECTRICAL SITE UTILITIES	\$128,000
	<hr/>
	\$1,092,000

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 26 - BUILDING ELECTRICAL				\$782,000
Normal Power and Distribution				
SE Rated 600A 208v Main Breaker CT cabinet	1	ea	\$8,596	\$8,596
Dist. Panel MDP 600A MCB 120/208v	1	ea	\$17,670	\$17,670
600A Feeder PVC Copper	25	lf	\$343	\$8,575
600A Feeder EMT Copper	55	lf	\$490	\$26,950
100A Feeder EMT Copper	20	lf	\$158	\$3,160
Secondary Service Grounding System	1	ls	\$6,690	\$6,690
				<u>\$71,641</u>
				\$71,641
Machine and Equipment Power				
AC-1 7.5HP 30A 3P 208v Connection	1	ea	\$1,242	\$1,242
ACD-1 20A 120v Connection	1	ea	\$387	\$387
EF-1 20A 120v Connection	1	ea	\$487	\$487
EF-2 20A 120v Connection	1	ea	\$487	\$487
EF-3 20A 120v Connection	1	ea	\$487	\$487
ERU-1 30A 3P 208v Connection	1	ea	\$1,099	\$1,099
EUH-1 30A 2P 208v Connection	2	ea	\$476	\$952
EWH-1 30A 3P 208v Connection	2	ea	\$476	\$952
MUA-1 30A 3P 208v Connection	1	ea	\$1,099	\$1,099
RH-1 20A 120v 208v Connection	3	ea	\$388	\$1,164
RP-1 20A 120v Connection	1	ea	\$387	\$387
RTU-1A 30A 2p 208v Connection	1	ea	\$1,021	\$1,021
RTU-1B 30A 2p 208v Connection	1	ea	\$1,021	\$1,021
RTU-2A 30A 208v Connection	1	ea	\$1,162	\$1,162
RTU-2B 30A 208v Connection	1	ea	\$1,162	\$1,162
RTU-3 30A 2p 208v Connection	1	ea	\$1,021	\$1,021
RTU-4 30A 208v Connection	1	ea	\$1,115	\$1,115
RTU-5 40A 2p 208v Connection	1	ea	\$1,486	\$1,486
RTU-6 40A 2p 208v Connection	1	ea	\$1,486	\$1,486
VEF-1 7.5HP 30A 3P 208v Connection	1	ea	\$1,416	\$1,416
WH-1 20A 120v Connection	1	ea	\$387	\$387
3/4" - EMT 3#12	500	lf	\$15.60	\$7,800
3/4" - EMT 3#10	500	lf	\$17.50	\$8,750
3/4" - EMT 4#10	350	lf	\$18.80	\$6,580
3/4" EMT - 3 # 8	150	lf	\$21.80	\$3,270
				<u>\$46,420</u>
				\$46,420
Lighting and Branch				
Type K1 LED 4"x4" Linear Pendant	1	ea	\$670	\$670
Type LT1 LED 2x2 Recessed Troffer	47	ea	\$311	\$14,617
Type LT2 LED 4' Vapor Proof Linear Strip	12	ea	\$607	\$7,284
Type LT5 LED 4' Vapor Proof Linear Strip	9	ea	\$607	\$5,463
Type LT6 LED 8' Low Profile Wrap Around	7	ea	\$708	\$4,956
Type LT6A LED 4' Low Profile Wrap Around	2	ea	\$498	\$996
Type R1 LED 4"x4" Recessed Floor Light	4	ea	\$694	\$2,776
Type SL2 LED Wall Mount Wet Location	4	ea	\$1,158	\$4,632
Type SL3 LED Wall Mount Wet Location	5	ea	\$1,158	\$5,790
Type SL4 LED Wall Mount 17" Arch Sconce	3	ea	\$1,039	\$3,117
Type X1 LED Exit Nema 4X	1	ea	\$607	\$607
Type X2 LED Exit Alum Housing Battery Back Up	10	ea	\$415	\$4,150
3/4" - EMT 3#12	300	lf	\$15.60	\$4,680
3/4" - EMT 7#12	150	lf	\$16.80	\$2,520
3/4" - EMT 3#10	650	lf	\$17.50	\$11,375
Luminary Cable MC 12/2 and 14/2 1-10VDC	1,600	lf	\$4.00	\$6,400
Lighting Control Panels , Relays and Programming	1	ls	\$10,000	\$10,000
[LKP] Wall Lighting Control Panel	3	ea	\$756	\$2,268
[PP] Lighting Control Power Pack	26	ea	\$85	\$2,210
[OS] Ceiling Occupancy sensor	24	ea	\$192	\$4,608
(VS) Ceiling Vacancy Sensor	7	ea	\$170	\$1,190
[OS*] Wall Occupancy Sensor	5	ea	\$170	\$850
[SLD] Wall Mount Dimming Controller	8	ea	\$256	\$2,048
[Svs] Wall Mount Vacancy Controller	3	ea	\$256	\$768
[VSD] Wall Mount Dimming Vacancy Controller1	2	ea	\$256	\$512
SKD Wall Key Switch Dimming Lighting Control	7	ea	\$152	\$1,064
SL Lv Wall Lighting Control	16	ea	\$152	\$2,432
25' CAT 6 Lighting Control Cable	101	ea	\$53.50	\$5,404
Lighting Control Wall Box and Sleeve	54	ea	\$150	\$8,100
				<u>\$121,487</u>
				\$121,487

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 26 - ELECTRICAL continued: \$0

General Power

15A 125V Clock Receptacle	1	ea	\$118	\$118
20A 125V Duplex Receptacle, Box and Plate	83	ea	\$115	\$9,545
20A 125V Duplex GFCI Receptacle, Box and Plate	33	ea	\$129	\$4,257
20A 125V Duplex GFCI Receptacle, Box and WP plate	13	ea	\$135	\$1,755
20A 125V Duplex Receptacle w/USB , Box and Plate	5	ea	\$119	\$595
(2) 20A 125V Duplex Receptacle, Box and Plate	5	ea	\$178	\$890
(2) 20A 125V Duplex GFCI Receptacle, Box and Plate	1	ea	\$208	\$208
20A Cord Reel w/ 25' Cable	6	ea	\$1,363	\$8,178
Washing Machine 20A 125V Duplex Receptacle, Box and Plate	2	ea	\$115	\$230
Dryer 30A 250V 4W 1PH Receptacle le Box and Plate	2	ea	\$214	\$428
Range 50A 250V 4W Receptacle, Box and Plate	1	ea	\$277	\$277
Single Gang Power Floor Box and Raceways	7	ea	\$685	\$4,795
Office Furniture Floor Box w/ Branch and Telcom Raceways	4	ea	\$1,978	\$7,912
[CFC] Ceiling Fan Controller	1	ea	\$213	\$213
Auto Flush/Faucet Valve Connection	4	ea	\$206	\$824
By-Fold Apparatus Door Wiring and Connections	2	ea	\$5,224	\$10,448
Control Panel Connection	6	ea	\$204	\$1,224
Dish Washer Connection	1	ea	\$458	\$458
FAM Fire Alerting Monitor Location	2	ea	\$134	\$268
Garage Door Operator Controls	2	ea	\$261	\$522
Garage Door Operator motor Connection	2	ea	\$204	\$408
Garage Door Operators	2	ea	\$147	\$294
Garbage Disposal Connection	2	ea	\$402	\$804
Gas Detection shut off Control Wiring	1	ea	\$3,786	\$3,786
In Grade Detection Loop	2	ea	\$3,390	\$6,780
Microwave 20A 125V Single Receptacle, Box and Plate	2	ea	\$112	\$224
Range Hood Connection	1	ea	\$228	\$228
SM Security Monitor Location	2	ea	\$134	\$268
[NG] Natural Gas detector (FBO)	1	ea	\$147	\$147
[UC] Natural Gas Utility Control Panel (FBO)	1	ea	\$261	\$261
3/4" - EMT 3#10	200	lf	\$12.40	\$2,480
3/4" EMT 3 #12	2,300	lf	\$15.60	\$35,880
3/4" EMT 4 #12	150	lf	\$16.00	\$2,400
3/4" EMT 5 #12	710	lf	\$16.40	\$11,644
3/4" EMT 7 #12	1,600	lf	\$16.80	\$26,880
3/4" EMT 3 #10	150	lf	\$17.50	\$2,625
3/4" EMT -3 # 8	150	lf	\$21.80	\$3,270
				\$151,524
				\$151,524

Emergency Power and Distribution

150KW Diesel Generator w/Exterior weather enclosure	1	ea	\$85,000	\$85,000
ATS-C 100A 4p 250v Transfer Switch	1	ea	\$7,769	\$7,769
ATS-E 100A 4p 250v Transfer Switch	1	ea	\$7,769	\$7,769
ATS-OS 600A 3p 250v Transfer Switch	1	ea	\$20,790	\$20,790
IP-C 100A Roll up Generator Connection Panel	1	ea	\$10,970	\$10,970
IP-E 100A Roll up Generator Connection Panel	1	ea	\$10,970	\$10,970
Dist. Panel OSDP 600A MCB 120/208v	1	ea	\$17,400	\$17,400
Panel CP-1 100A MCB 120/208v 42p w/SPD	1	ea	\$5,307	\$5,307
Panel CP-2 100A MCB 120/208v 42p w/SPD	1	ea	\$5,307	\$5,307
Panel EP-1 100A MCB 120/208v 42p w/SPD	1	ea	\$5,307	\$5,307
Panel PP-1 200A MCB 120/208v 42p w/SPD	1	ea	\$8,067	\$8,067
Panel PP-2 200A MCB 120/208v 42p w/SPD	1	ea	\$8,067	\$8,067
Panel PP-3 200A MCB 120/208v 42p w/SPD	1	ea	\$8,067	\$8,067
600A Nipple Set and Cable (2) 4"x12"	1	ea	\$2,650	\$2,650
200A Feeder EMT Copper	150	ea	\$142	\$21,300
100A Feeder MI Cable	150	ea	\$430	\$64,500
				\$289,240
				\$289,240

Lightning and Power Specialties

Lightning Protection	1	ls	\$15,000	\$15,000
				\$15,000

Miscellaneous Systems

Temporary Service Power and Lights	1	ls	\$25,000	\$25,000
Subcontractor Site Office and Storage	1	ls	\$30,000	\$30,000
Subcontractor Lifts and Scaffolding	1	ls	\$10,000	\$10,000
BIM Coordination	1	ls	\$12,000	\$12,000
Bond Excluded			Not In Contract	
			\$77,000	\$77,000

Testing and Commissioning

Testing	1	ls	\$10,000	\$10,000
				\$10,000
				\$10,000

\$782,312 **\$782,312**

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 27 - COMMUNICATIONS \$84,000

Telephone and Communications Systems

Telecomm Wall Box and 1" Sleeve	20	ea	\$178	\$3,560
12" Wx 4" D Wire Basket Cable Tray	115	ea	\$54.80	\$6,302
4-CAT 6A Cables , Termination and Testing	11	ea	\$1,264	\$13,904
2-CAT 6A Cables , Termination and Testing	3	ea	\$632	\$1,896
2-CAT 6A Cables , Termination and Testing WAP	3	ea	\$871	\$2,613
1-CAT 6A Cables , Termination and Testing	2	ea	\$316	\$632
TV -1-RG6 Cables , Termination and Testing	5	ea	\$353	\$1,765
IDF Closet Fit Up	1	ea	\$12,000	\$12,000
IT Switch and Electronics by Owner				\$42,672
				\$42,672

Fire House Alerting System

FHA Box and 1" Wall Sleeve	48	ea	\$178	\$8,544
FHA System Wiring allowance	1	allow	\$8,000	\$8,000
FHA System Device Installation and Termination	1	allow	\$24,000	\$24,000
				\$40,544

Public Address Systems

12" Surface Wireless Clock	3	ea	\$410	\$1,230
				\$1,230

				\$84,446
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DIVISION 28 - FIRE DETECTION AND ALARMS \$98,000

Security Access Control and CCTV

Control Panels , Access and CCTV Programming and Commissioning	1	ls	\$10,000	\$10,000
Security Door Rough-in Raceways and Boxes	6	ea	\$405	\$2,430
[CR] Car Reader Raceway, Device and wire	4	ea	\$636	\$2,544
[DC] Door Contact	8	ea	\$107	\$856
[DJ] 8x8x4 Door Security junction Box	6	ea	\$103	\$618
[EH] Door Transfer Hinge	8	ea	\$213	\$1,704
[EL/R] Electrified Lock and Circuit	4	ea	\$391	\$1,564
[PB] Door Release Panic Hardware	4	ea	\$300	\$1,200
[REX] Request to Exit Device, Raceway and Cable	4	ea	\$226	\$904
Exterior wall Mounted Camera and Cable	5	ea	\$2,760	\$13,800
Interior Dome Camera and Cable	13	ea	\$1,380	\$17,940
				\$53,560
				\$53,560

Fire Alarm System

Equipment ,Devices and Programming	1	ls	\$20,000	\$20,000
F/A Main Fire Alarm Control Panel	1	ea	\$3,640	\$3,640
F/A Remote Annunciator	1	ea	\$228	\$228
F/A Radio Master Box	1	ea	\$455	\$455
F/A Pull Station Installed w/Back Box	4	ea	\$230	\$920
F/A Smoke Detector Installed w/Back Box	6	ea	\$375	\$2,250
F/A Smoke/ CO Detector Installed w/Back Box	3	ea	\$170	\$510
F/A Smoke/CO Detector Installed w/Sounder Relay Base and Back Box	5	ea	\$375	\$1,875
F/A Speaker/strobe wall Mount Installed w/Back Box	14	ea	\$235	\$3,290
F/A Control Module Relay Fan Shutdown	1	ea	\$292	\$292
F/A Door Holder Installed w/Back Box	1	ea	\$442	\$442
F/A SLC/NAC 3/4" EMT and Loop Circuits	400	lf	\$12.50	\$5,000
F/A 14/4 FPLP/MC Cable	720	lf	\$4.40	\$3,168
F/A 16/2 FPLP/MC Cable	600	lf	\$3.30	\$1,980
				\$44,050
				\$44,050
				\$97,610
				\$97,610

NEW FIRESTATION
TOWN OF SEEKONK
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SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 26 - ELECTRICAL SITE UTILITIES				\$128,000
Electrical Site Distribution				
Primary Service 2x 5" PVC Duct bank	15	If	\$102	\$1,530
Primary Service Pole Riser 5" GRC	1	ea	\$5,508	\$5,508
Transformer pad Grounding	1	ea	\$1,805	\$1,805
Secondary Service 600A (2) 4" PVC	95	If	\$212	\$20,140
4" capped Raceway for future EV charging	1	ea	\$1,439	\$1,439
4" capped Raceway for future PV System	1	ea	\$1,439	\$1,439
1-1/4" PVC for future EV chargers	180	If	\$13.60	\$2,448
Generator pad Grounding	1	ea	\$2,730	\$2,730
Generator Feeder 600A (2) 4" PVC	65	If	\$248	\$16,120
Generator Feeder 100A 1-1/2" PVC	65	If	\$49.20	\$3,198
Generator Feeder 100A 1-1/2" PVC	65	If	\$49.20	\$3,198
Generator annunciator circuits 2" PVC	60	If	\$21.80	\$1,308
Generator start circuits 2" PVC	60	If	\$16.80	\$1,008
Generator aux Power circuits 2" PVC	60	If	\$24.30	\$1,458
Excavation and Concrete encasement	1	ls	\$6,500	\$6,500
				\$69,829
				\$69,829
Electrical Site Lighting				
Type SL1 LED Parking Area Light Pole	3	ea	\$3,212	\$9,636
Type SL7 LED Bollard	7	ea	\$1,364	\$9,548
1" PVC 3 #8	400	If	\$15.00	\$6,000
Site Pole Precast Pole Base	3	ea	\$959	\$2,877
Site Bollard Precast Pole Base	7	ea	\$375	\$2,625
QZT Site Lighting Hand Hole	4	ea	\$1,075.00	\$4,300
Excavation	1	ls	\$5,000.00	\$5,000
				\$39,986
				\$39,986
Site Communications				
Raceway to Radio Tower 2x 4" PVC	45	If	\$110	\$4,950
Telecomm Service 2x4" PVC Duct Bank	110	If	\$55.80	\$6,138
Telecomm Service Pole Riser (1) 4" GRC	1	ea	\$3,500	\$3,500
Excavation	1	ls	\$3,500	\$3,500
				\$18,088
				\$18,088
				\$127,903
				\$127,903

NEW FIRESTATION
TOWN OF SEEKONK
SCHOOL STREET
SEEKONK, MA

TGAS - Design Development Cost Estimate

SITWORK AREAS		See Page 2 for Sitework Areas			
DIVISION 31 - EARTHWORK					
Erosion Controls					
Straw Wattles and Silt fence	383	If	\$8.50	\$3,256	
Stone Entry Aprons	1,317	Sf	\$2.30	\$3,029	
Dust Control w/H2O Truck	20,000	Ga	\$0.20	\$4,000	
Catch Basin Silt Sacks	5	Ea	\$139	\$695	
Concrete Washout Basin	1	Ea	\$2,200	\$2,200	
				\$13,180	\$13,180
Clear, Grub, and Strip Topsoil					
Site Clearing and Stump Grinding	1	Ac	\$8,018	\$8,018	
Grub, Stump and Stockpile small area	1	Ac	\$2,395	\$2,395	
Strip and Stockpile Topsoil	1,138	Cy	\$5.60	\$6,373	
Export Excess Loam	730	Cy	\$6.40	\$4,672	
				\$21,458	\$21,458
Demolition and Removals					
Chain Link Fence Removal	141	If	\$13.40	\$1,889	
Retaining Wall Removal	75	Sf	\$25.10	\$1,883	
Water Line Removal	76	If	\$74.60	\$5,670	
Sewer Line Removal	95	If	\$21.00	\$1,995	
Septic Distribution Line Removal	234	If	\$12.10	\$2,831	
Pavement Sawcutting	465	If	\$7.80	\$3,627	
D Box Structure Removal	1	Ea	\$130	\$130	
Flag Pole Base Removal	1	Ea	\$412	\$412	
Asphalt Disposal	874	Sy	\$14.40	\$12,586	
Asphalt S.W Pavement Removal	60	Sy	\$12.80	\$768	
Concrete Sidewalk and Stair Removal	19	Sy	\$50.20	\$954	
Building Demolition					By Owner
Pump Septic Tank	1	Ea	\$941	\$941	
Septic Tank Demolition / Disposal	1	Ea	\$709	\$709	
				\$34,394	\$34,394
Earthwork					
Cut to Fill w/ 330 Exc	621	Cy	\$7.50	\$4,658	
Imported Structural Borrow - D5	470	Cy	\$44.90	\$21,103	
Unsuitable Export	768	Cy	\$23.40	\$17,971	
				\$43,732	\$43,732
Retaining Wall Work					
Sm. Retaining Wall E&B	44	If	\$25.40	\$1,118	
Stone Strong Wall-MBO	244	Sf	\$60.80	\$14,835	
				\$15,953	\$15,953
Building Earthwork					
Mid Sized Foundation Wall Exc.	701	If	\$38.10	\$26,708	
FS Slab Gravel w/ Finegrading	253	Cy	\$61.70	\$15,610	
Oil Interceptor Valve Pit E&B	10	Cy	\$125	\$1,250	
Interior Haunch Shaping (24"+)	150	If	\$12.80	\$1,920	
Interior Piers Exc/Back	28	Ea	\$561	\$15,708	
Interior Electric E/B w/M305	200	If	\$13.30	\$2,660	
Interior Plumbing E/B	575	If	\$32.70	\$18,803	
Interior Trench Drain E/B	54	If	\$30.00	\$1,620	
				\$84,279	\$84,279
Drainage Systems					
6" ADS w/Fittings	112	If	\$43.70	\$4,894	
6" ADS Foundation Drain w/Fittings	395	If	\$43.80	\$17,301	
12" ADS Drain 2	486	If	\$56.60	\$27,508	
12" ADS Manifolds for Infiltration System	122	If	\$134	\$16,348	
15" ADS Line	66	If	\$54.40	\$3,590	
18" ADS Line	4	If	\$74.70	\$299	
4' Deep DMH (4' Dia)	2	Ea	\$1,881	\$3,762	
5' Deep DMH (4' Dia)	2	Ea	\$2,004	\$4,008	
6' Deep DMH (4' Dia)	1	Ea	\$2,289	\$2,289	
7" Deep CB(4' Dia) 4' Sump	3	Ea	\$2,766	\$8,298	
6' Deep Leach Pit (6' Dia)	1	Ea	\$4,248	\$4,248	
Stormtech MC 740 Infiltration System	72	Ea	\$1,677	\$120,744	
Trench Drain - Precast	54	If	\$263	\$14,202	
Area Drains	3	Ea	\$2,583	\$7,749	
				\$235,240	\$235,240
Grading and Gravelling for walks, pads, drives, and roads					
Conc Walk Subgrade	351	Sy	\$9.90	\$3,475	
Concrete Walk Aggregate Base	73	Cy	\$107	\$7,811	
Dumpster and Gen Pad Subgrade	32	Sy	\$14.80	\$474	
Dumpster and Gen Pad Stone Base	126	Cy	\$108	\$13,608	
Heavy Duty Asphalt and Parking Pavement Base Material Placement	364	Cy	\$53.90	\$19,620	
Driveway / Parking Subgrade	1,222	Sy	\$3.60	\$4,399	
				\$49,386	\$49,386
				\$497,621	\$497,621

NEW FIRESTATION
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SEEKONK, MA

TGAS - Design Development Cost Estimate

DIVISION 32- SITE IMPROVEMENTS \$197,000

Pavements and Curbs

Place Vertical Concrete Curb	275	If	\$39.00	\$10,725	
Asphalt Curb - Berm	460	If	\$6.30	\$2,898	
4" Bituminous Pavement	931	sy	\$36.30	\$33,795	
4.5" Bituminous H D Pavement	292	sy	\$46.40	\$13,549	
Utility Trench Patch	57	sy	\$224	\$12,768	
F & I Dumpster and Gen Pad	280	sf	\$37.70	\$10,556	
5" Concrete Walk w/Wire Mesh	351	sy	\$133	\$46,683	
					\$130,974
					\$130,974

Topsoil Placement and Seeding

Hydroseeding for Erosion Control	19,880	sf	\$0.20	\$3,976	
Screen and Respread Topsoil	460	cy	\$18.10	\$8,326	
Landscape Area Subgrading (318)	2,210	sy	\$2.50	\$5,525	
F&I Jute for Slope Stabilization	380	sf	\$0.50	\$190	
Landscape Plantings	1	Allowance	\$15,000	\$15,000	
					\$33,017
					\$33,017

Miscellaneous Site Furnishings and Cleanup

F&I Bollards	10	ea	\$1,194	\$11,940	
Site Signs and Markings	1	ls	\$6,264	\$6,264	
Flagpole Base Preparation and Installation	1	ea	\$7,379	\$7,379	
Dumpster Enclosure w/Fencing	50	If	\$157	\$7,850	
				\$33,433	\$33,433
				\$197,424	\$197,424

DIVISION 33 - UTILITIES \$173,000

Sewer Systems

E & B For ZURN Sand / Oil Collection Tank	1	ea	\$2,735	\$2,735	
4" Building Sewer, Short Runs	45	If	\$57.30	\$2,579	
4" Plumber C I Trench Line E&B	25	If	\$20.30	\$508	
6" SDR 35 Cleanout	1	ea	\$1,047	\$1,047	
6" SDR 35 Sewer Service	32	If	\$60.80	\$1,946	
Exc. Trench and Install Leaching Pipe	200	If	\$25.30	\$5,060	
Leach Field Cover w/One Machine	110	cy	\$9.90	\$1,089	
Leach Field Stone Installation	55	tn	\$50.80	\$2,794	
Septic Bed Excavation	151	cy	\$10.60	\$1,601	
7 Hole Distribution Box	1	ea	\$1,752	\$1,752	
Inspection Port	3	ea	\$502	\$1,506	
1,500 Gal Septic Tank	1	ea	\$6,237	\$6,237	
3,500 Tight Tank E & B	2	ea	\$4,233	\$8,466	
				\$37,318	\$37,318

Water Systems

2" Water Service - Poly	296	If	\$59.30	\$17,553	
Hydrant Installation	1	ea	\$8,953	\$8,953	
Basic 8" Water	320	If	\$119	\$38,080	
Cut in 8" Valves and Tees	1	ea	\$34,040	\$34,040	
				\$98,626	\$98,626

Electrical Systems

Elec/Tele/Catv Duct Bank Exc/Back	12	If	\$35.60	\$427	
Light Bases F & I	3	ea	\$1,250	\$3,750	
Site Lighting Exc/Back	385	If	\$15.40	\$5,929	
Furnish and Install Precast Transformer Pad	1	ea	\$1,898	\$1,898	
Secondary Electric Trenching(Generator, ev charging, Radio Twr Stub)	154	If	\$77.60	\$11,950	
Light Bollard Bases Exc/Back	7	ea	\$173	\$1,211	
Fiber Optic / DATA Exc/Back	25	If	\$15.10	\$378	
				\$25,543	\$25,543

Fuel and Miscellaneous Utility Systems (12)

Gas Line Exc/Back	210	If	\$54.00	\$11,340	
				\$11,340	\$11,340
				\$172,827	\$172,827