SWBR

ROCHESTER OFFICE
387 East Main St
Rochester NY 14604
585 232 8300
rochester@swbr.com

Architecture
Graphic Design
Interior Design
Landscape Architecture
Structural Engineering

February 28, 2018

Ms. Jill Wiedrick
City of Rochester
Senior City Planner
Bureau of Buildings and Zoning
City Hall, Room 125 B
30 Church Street
Rochester, NY 14614

Re: Rochester Management
Cobbs Hill Village
645 Norris Drive
SWBR Project No. 15915.00

Dear Ms. Wiedrick:

In response to the letter we received from you dated January 19, 2018, which outlines the additional information requested by the City Planning Commission so they might render a decision on our application, we offer the attached and below described revisions to our project design. The information below is organized to relate to the seven specific points that were outlined in the letter, followed with some additional considerations that are more general in nature.

1. **The buildings need more articulation and design character to break up the long, linear feel along Norris Drive, including variability in rooflines and building heights, and more variability and fenestration in windows and entryways; more emphasis on doors facing the street; a darker, more rich color pallet and use of more natural materials; and colors and materials similar to those found within the nearby residential neighborhood.**

   We have looked at both the Armory and at nearby residential structures for inspiration to come up with a revised exterior aesthetic. We are using a flat roof design, with variations of parapet height and projection depth, to both reduce the overall height of the building and to break up the roof line. We are varying the width and depth of projections and recesses along each wing.

   We are using brick and wood features as a referential nod to the armory. We have also selected darker and richer colors of siding. Variable points of transition between the materials help provide a more varied appearance along the façade without creating a completely disordered mess of colors and materials.

2. **The buildings toward the front of the property should address Norris Drive rather than face the internal parking lot, which only serves to place emphasis on that parking lot. Walkways, doors, porches and other elements should relate to the street more in the manner of an urban neighborhood, instead of the present suburban-type appearance and lay-out.**

   We have reconfigured the front buildings to face the primary entrances and outdoor gathering areas towards Norris Drive. A secondary entrance with outdoor gathering area, facing the interior of the site, provides residents options of spending time enjoying views of Cobbs Hill or of Lake Riley.

   Ground level porches have direct connections to a new sidewalk along the front of the project. This new sidewalk travels through the shady tree canopy and provides access both to the park and to Norris Drive.

   The community building has been redesigned to be oriented toward and be near the grade level of Norris Drive. A second entrance is being provided on the uphill side of the site, designed to be as open and glassy as possible to minimize obstructions to view. A generous outdoor gathering area in front of the community building connects this community to Norris Drive and the park, useful as a meeting point for resident hiking or biking groups, or for simply enjoying the life of the park.

3. **There should be an opportunity to see or look between the front buildings toward the rear of the property, which can be accomplished either by re-orienting the building position or breaking them up into smaller buildings.**

   The front buildings have been shifted farther apart to create more space for the community building and for views through the site. The connections from the apartment buildings to the community building have been moved from the first floor (parking lot level) down to the ground floor (Norris Drive level) to further eliminate view obstructions. These two moves, together with lowering the community building down to the Norris Drive level, allow for a generous view between the front buildings while travelling along Norris Drive.

   Breaking the front buildings into smaller pieces is not possible, as it would create the need for additional elevators to provide proper accessibility to the multiple levels. The existing building designs are already in the shorter range of typical apartment buildings, with only four apartments on each side of the hall in each wing.

   We are reconfiguring the three garden apartment buildings into four smaller buildings. These buildings have a more playful orientation on the site in response to their more wooded immediate setting (as compared to the front buildings oriented to the street). These smaller buildings have improved views between and around the front buildings, and enhanced short range views due to the tree lawns described below.

4. **Better pedestrian connectivity is necessary on and around the site with an emphasis on connections to the park and Norris Drive, along with improved crosswalk markings or design changes to make the parking lot easier to traverse.**

   In addition to the front sidewalk noted in item 2 above, we are enhancing the sidewalks and walking trails on the interior of the site. These interior walkways will be connected to the existing park access road, Norris Drive, and the existing paths along Cobbs Hill.

   A grand staircase is being provided along the side of the community building, allowing direct travel from the Norris Drive level up to the interior level of the site, and the park access trail beyond. This stair allows the garden apartment residents convenient and direct access to Norris Drive, and further improves connectivity through the site.

   We are also breaking the parking lot into smaller blocks of parking with enhanced crossings at between parking areas. The edges of the parking areas are provided with tree lawns to separate the pedestrian walkways from cars. These blocks are oriented in a zig-zag fashion to further slow vehicles and limit long views of one large parking lot. These modifications have reduced the overall parking count from 98 spaces down to 80, which is still in the range of the parking demand analysis, and results in a site that is more pedestrian focused and less car focused.

5. **More outdoor amenities for the residents that complement and relate to the surrounding park, such as bike racks, benches, outdoor gathering spaces, and covered walkways.**

   In addition to the pedestrian enhancements and gathering areas noted above, we are creating plazas outside the community building both on the interior parking (high) level and the Norris Drive (low) level. These gathering areas are available for outdoor yoga or balance classes, meeting points for residents heading into the park, or simply for relaxing in the sun. The grand stair linking these gathering areas serves to better connect the interior of the site and garden apartment occupants directly to Norris Drive.

   We are proposing a more informal gathering area at the rear of the garden apartments with more space for recreation or repose. We are locating a few benches along the front sidewalk, and at points along the connecting trails from the project to the walking trails on Cobbs Hill.

   Each apartment includes bulk storage area that can be used to store bikes, but we are also providing bike racks at each primary apartment building and scattered in other locations on the site.

6. **Elimination of the condensing units and transformer from the front and side yards, respectively.**

   Utility companies restrict our flexibility in placing the transformer, dictating a location within 10’ of a road or other drivable surface, typically near the public street. We will work with RG&E to locate the transformer between the first apartment building and the

parking lot. If RG&E will not accept that solution, we will minimize the impact of the transformer on the site, through screening, planting materials, etc.

A flat roof design lets us place all condensing units on the roof behind parapets, completely out of view from the street and immediate park area. While the top of the roof will technically be visible through the tree trunks at the top of Cobbs Hill in the winter months, the project remains non-impactful of the important overlook view from Reservoir Drive towards downtown, and any direct view through the tree trunks is a highly specific use case that is not indicative of typical activity along Reservoir Drive.

7. **Consideration of accessibility features both inside and outside of the buildings.**

Accessibility has been and continues to be a key focus of the project design. The apartment buildings are designed to be senior friendly, with accessibility enhancements above and beyond what is required by code. Primary circulation includes elevator access and corridors with carpeting and handrails for improved safety. Trash and recycling collection and laundry are centrally accessible, and the buildings include fully accessible activity and enrichment spaces.

Each apartment is designed with minimum maneuvering clearances and reach ranges, is equipped with all grab bars pre-installed in bathrooms, and can be upgraded to full accessibility as the need arises. In addition, five units in each apartment building are fully accessible from the start. All units are provided with an emergency nurse call system for any health emergency.

The garden apartments are specifically designed to acknowledge the range of mobility capabilities in the 55 and older population. These units allow more active residents a living option different than the apartments and, as they age and their mobility capabilities change, they have an opportunity to stay in their neighborhood by moving over to the apartment buildings where fully accessible dwellings are available. This enhances the concept of “aging in place” to include the entire community rather than just an individual dwelling.

Additional considerations:

Commissioner Watson asked whether the taller buildings could be placed to the rear of the site and the shorter buildings placed closer to Norris Drive. In our analysis, it is infeasible to locate the taller buildings to the rear of the site for two reasons: building the smaller buildings in front would not allow us to phase the project to provide new housing for residents before their existing buildings are replaced, and there is not enough space at the rear of the site to build the larger buildings without significant removal of trees and soil.

There was also some concern about having a dumpster only on one end of the site. Property staff transfers waste from the central collection areas in the main buildings to the dumpster, so this is not an issue for residents of the main buildings. We have proposed two alternatives to improve refuse disposal for residents of the garden apartments. One option is to add a second dumpster enclosure on the far west end of

the site. The second option is to create enclosures on the ends of the garden apartment buildings to store individual totes for each garden apartment.

All of the revisions outlined above and indicated in the enclosed drawings, outline specifications, and renderings have added substantial cost to the project. In order to generate additional revenue to offset that cost, and also in consideration of the desire for additional lower cost apartments, the unit mix of the two main buildings has been revised. One two-bedroom unit has been removed from each building, and four studio units have been added to each building. This brings the total number of units in each main apartment building to 40 (up from 37 in the initial application), and the total number of units in the project to 104 (up from 98). This revised unit total is within the maximum unit allowance from the deed restriction and is well below the number of units allowed by zoning. If there are any questions or concerns with any of the submitted information, please feel free to contact us.

Sincerely,

Dan Glading
Senior Associate | Senior Project Architect

DG/kf

CC: Zina Lagonegro, City of Rochester
Thomas Kicior, City of Rochester
Peggy Hill, Rochester Management, Inc.
Scott Procious, Rochester Management, Inc.
Betsy Brugg, Woods Oviatt Gillman, LLP
Joe Gibbons, SWBR

J:\2015\15915.00 ROCHESTER MGMT COBBS HILL VILLAGE\8-RECORD COPIES\8.02_SUBMISSION SETS\02_DD\2018-02-28 PLANNING COMMISSION RESUBMISSION\WRITTEN\2018-0228 CHV RESPONSE LETTER - KF.DOCX

ROCHESTER MANAGEMENT, INC.
249 NORTON VILLAGE LANE • ROCHESTER, NEW YORK 14609
(585) 467-2442 FAX: (585) 544-0243
WWW.ROCHESTERMANAGEMENT.COM

February 28, 2018

Ms. Jill Wiedrick
Senior City Planner
City of Rochester
Bureau of Buildings and Zoning
City Hall Room 125B
30 Church Street
Rochester, NY 14614

Dear Jill:

Supplemental Information from Sponsor for Response to Planning Commission:

Rochester Management, Inc., (RMI) is a nonprofit provider of affordable housing in Rochester, Syracuse and Canandaigua. RMI has undertaken the redevelopment of Cobbs Hill Village in an effort to better serve seniors in Rochester, New York. There are no developer fees or other financial payments earned by RMI as a result of this project. The current units pose a hardship for seniors living there and managing daily activities while trying to remain healthy and independent. The existing buildings have aged mechanicals, are isolated and too small to improve accessibility features.

RMI is committed to providing up to date apartments which will allow seniors to thrive in their community as they age. Modernized units will not only enhance safety, accessibility and security, but will enable new senior programs to be offered to seniors living at the community – positively impacting the overall health of the residents. Avoiding isolation is a key factor in keeping seniors healthy. Educational and cultural offerings, as well as empowerment and balance/fitness classes, can be accommodated once the space exists for these programs. Indoor and outdoor spaces have been designed for these opportunities.

RMI has committed a total in excess of $2 million to ensure that: 1. All 60 current residents are protected from any increase in rents for as long as they live at the community, 2. All residents are supported throughout the move from existing unit to new unit (moving assistance and coordination), and 3. Helping to provide a portion of gap financing. No financial assistance has been requested from the City of Rochester. Architectural changes requested by neighborhood groups ($2.5 million) and the Planning Commission ($2.7 million) have added significantly to the cost of this affordable housing project. The commitment noted above is a significant contribution

from any developer, let alone a nonprofit with limited resources. RMI is committed to making a difference for the residents and the community at large while addressing the significant shortage of affordable housing options for seniors.

As reviewed by New York State Homes and Community Renewal, New York State Housing Finance Agency and the City of Rochester Neighborhood and Business Development, all rents are affordable well within the state and city definition of affordable housing. The income restrictions become tied to Area Median Income, which is more stringent than today's maximum income calculation and the age restriction remains the same at age 55 and above. With 71% of the units at or below 50-60% AMI, rents are comparable, or below, all recent senior affordable developments created in Rochester in within the past several years.

Should any additional information be required, please let us know.

Thank you for your time and review.

Sincerely,

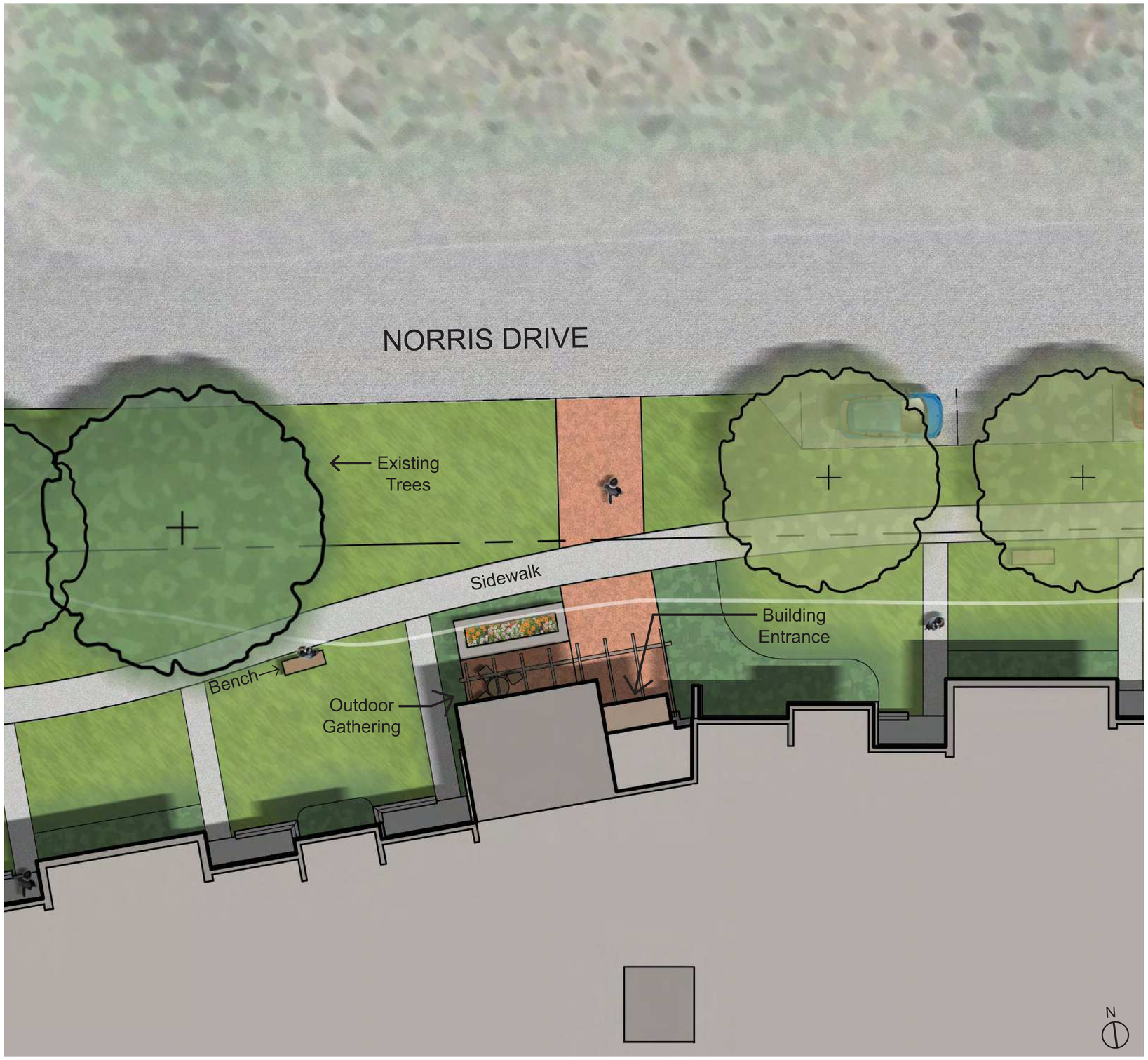
Peggy Hill

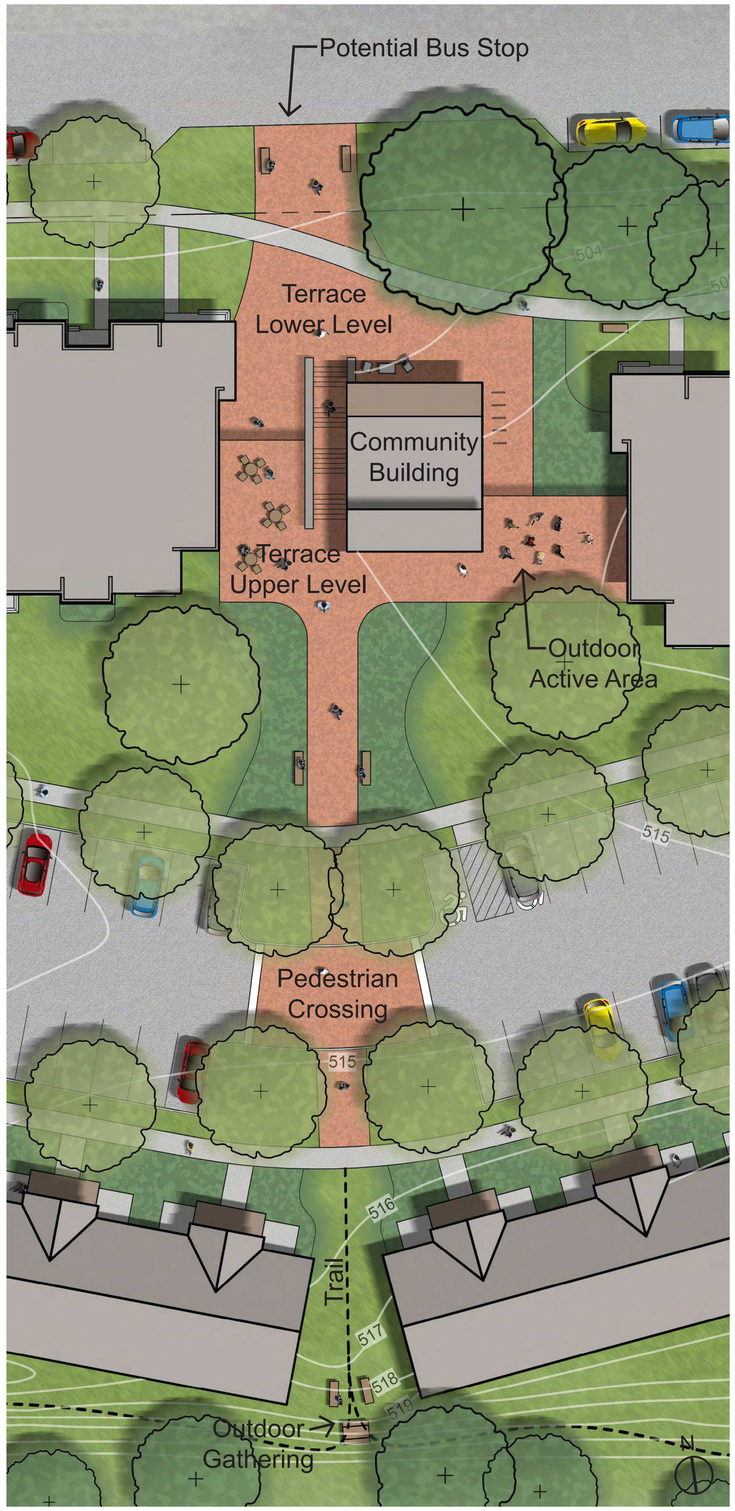
President & CEO

Cobbs Hill Village - Site Plan

Rochester Management, Inc.

ROCHESTER MANAGEMENT SWBR





Cobbs Hill Village - Site Enlargement Plans

Rochester Management, Inc.

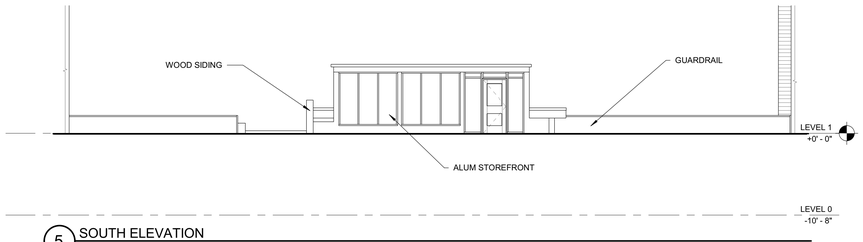
ROCHESTER MANAGEMENT SWBR

Cobbs Hill Village - Comparative Site Plan

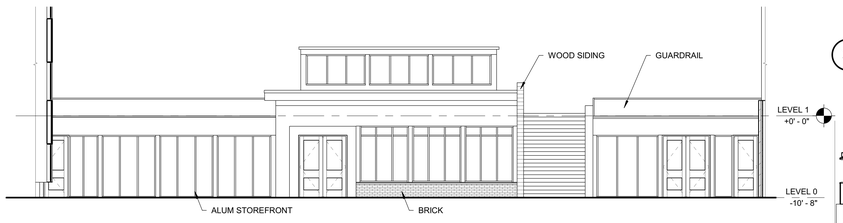
Rochester Management, Inc.

ROCHESTER MANAGEMENT SWBR

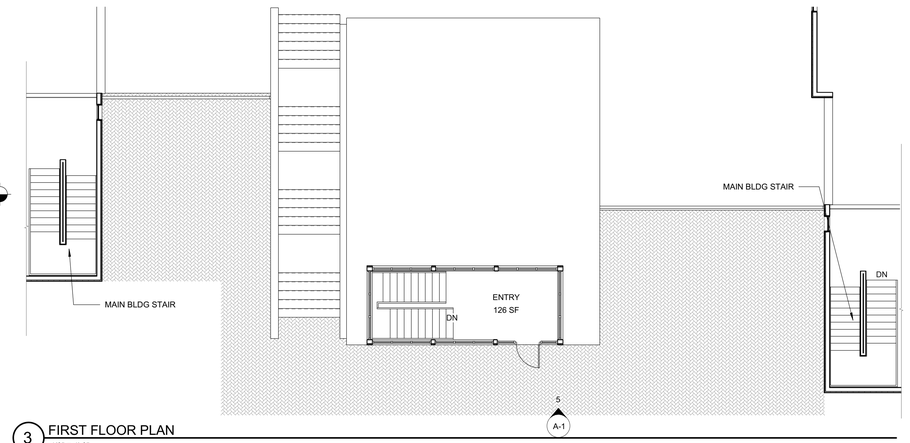
2/28/2018 11:06:13 AM



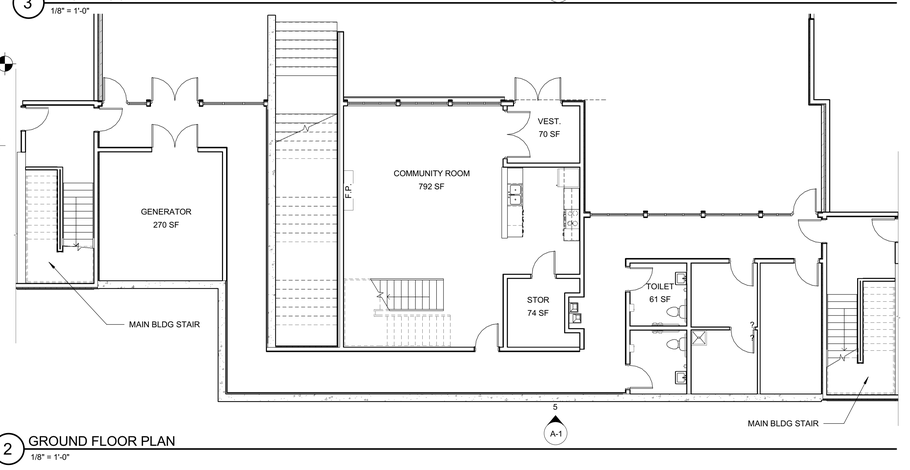
5 SOUTH ELEVATION
1/8" = 1'-0"



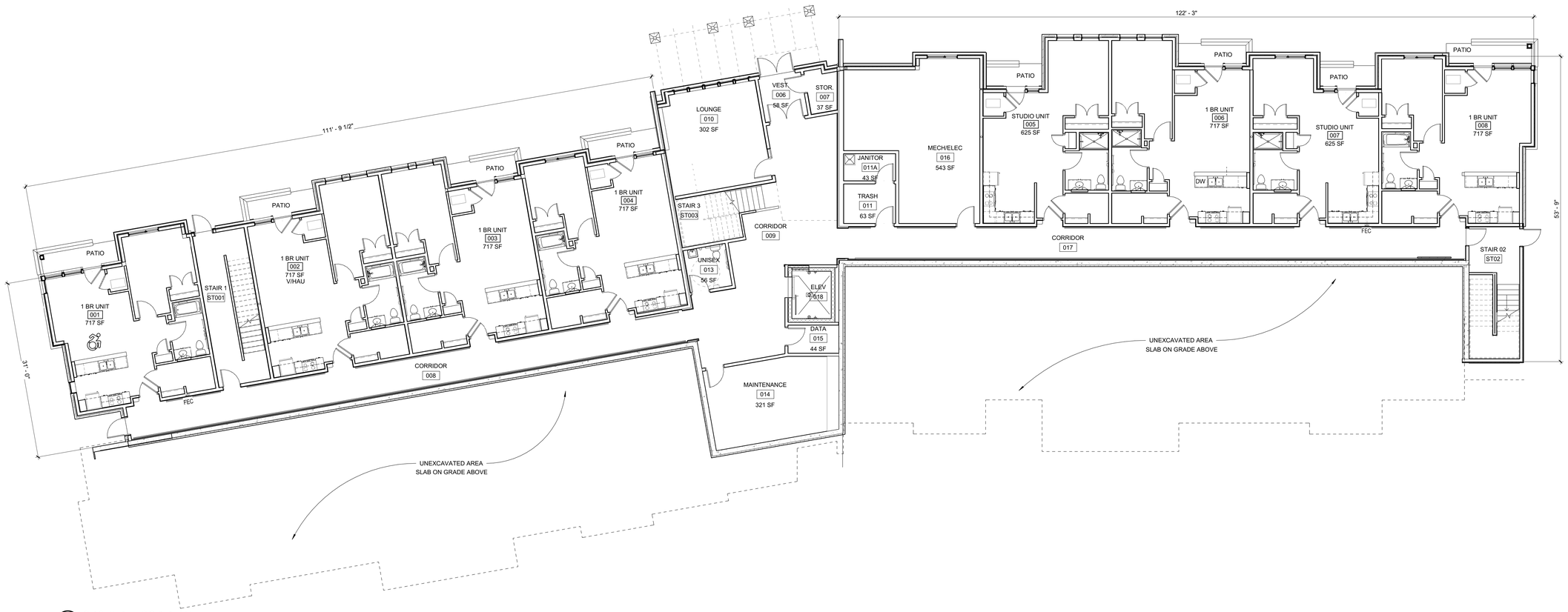
4 NORTH ELEVATION
1/8" = 1'-0"



3 FIRST FLOOR PLAN
1/8" = 1'-0"



2 GROUND FLOOR PLAN
1/8" = 1'-0"



1 GROUND FLOOR PLAN
1/8" = 1'-0"

APARTMENT BUILDING (EACH)					
	SQUARE FOOTAGE	STUDIO	1 BR	2 BR	TOTAL
GROUND	9,688	1	7	0	8
FIRST	15,866	3	10	2	15
SECOND	15,715	3	12	2	17
TOTAL	41,269	7	29	4	40

GARDEN APARTMENTS (COMBINED)				
	SQUARE FOOTAGE	1 BR	2 BR	TOTAL
FIRST	15,358	4	2 STORY	4
SECOND	12,370	0	20	20
TOTAL	27,728	4	20	24

TOTAL UNITS	
STUDIO	14
1 BR	62
2 BR	28
TOTAL	104

SWBR
309 South Franklin Street Syracuse NY
315 488 5635 | syracuse@swbr.com

Drawn By:	JAW
Checked By:	DG
Project Manager:	DG

Revisions

COBBS HILL VILLAGE
645 Norris Drive
Rochester, NY 14610
SWBR Project Number 15915.00

ROCHESTER MGMT, INC.
249 NORTON VILLAGE LANE
ROCHESTER, NY 14609

A-1

MAIN BLDG & COMM. BLDG FLOOR PLANS AND ELEVATIONS

02.28.2018

PLANNING COMMISSION

FILE PATH: C:\1-Local Revit Models 2017\15915_Cobbs Hill Village_Central_Multi Unit_jwade@swbr.com.rvt

1 SECOND FLOOR PLAN
1/8" = 1'-0"

2 FIRST FLOOR PLAN
1/8" = 1'-0"

SWBR
309 South Franklin Street Syracuse NY
315 488 5635 | syracuse@swbr.com

Drawn By:	JAW
Checked By:	DG
Project Manager:	DG

Revisions

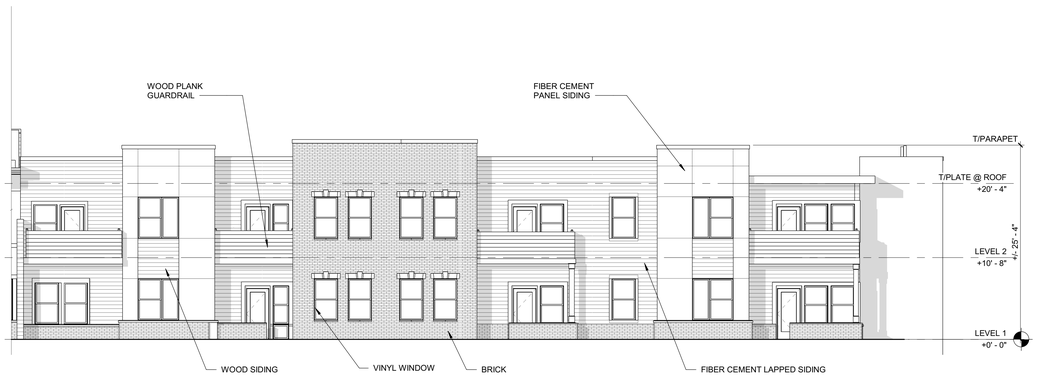
COBBS HILL VILLAGE
645 Norris Drive
Rochester, NY 14610
SWBR Project Number 15915.00

ROCHESTER MGMT, INC.
249 NORTON VILLAGE LANE
ROCHESTER, NY 14609

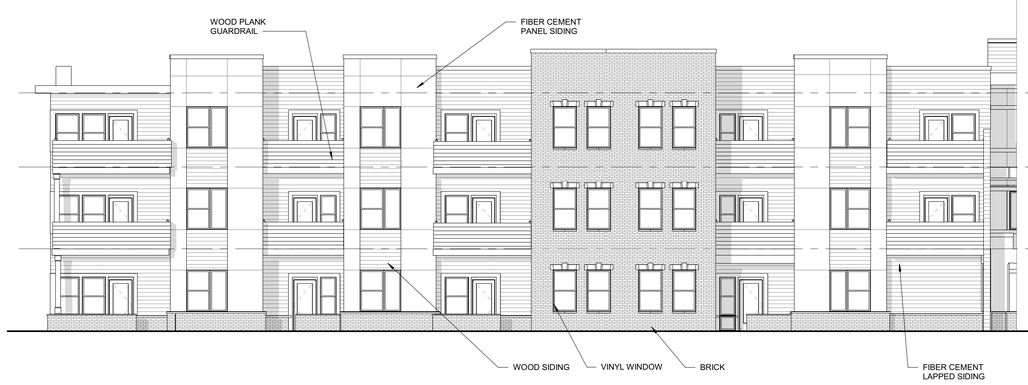
A-2
MAIN BLDG FLOOR PLAN

02.28.2018
PLANNING COMMISSION

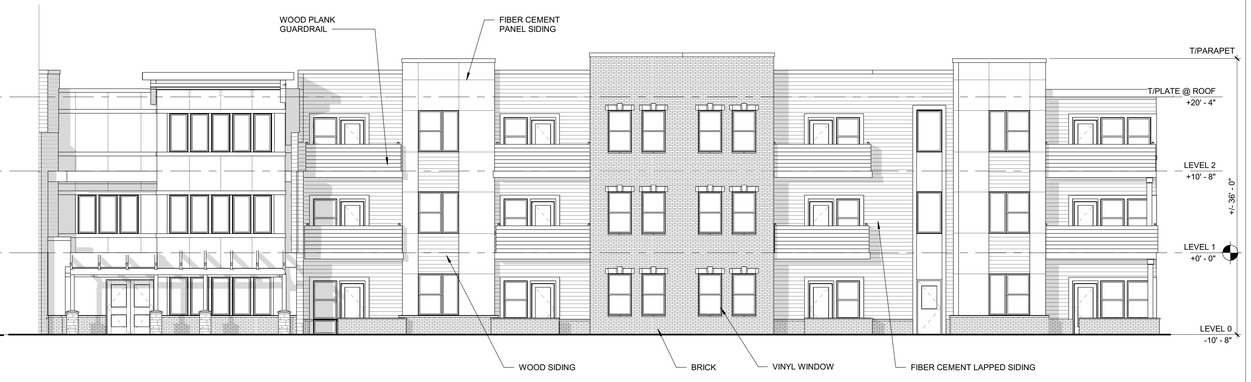
6 SOUTH ELEVATION
1/8" = 1'-0"



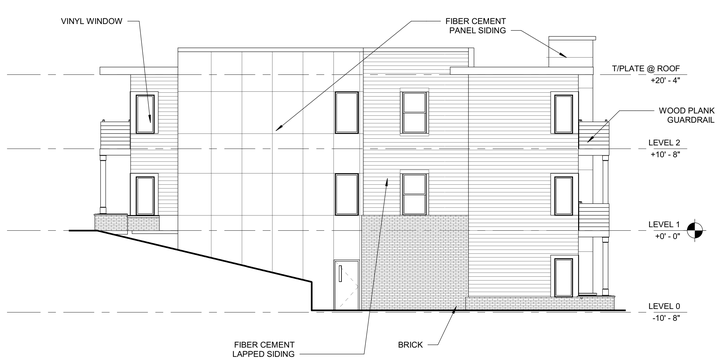
5 SOUTH ELEVATION
1/8" = 1'-0"



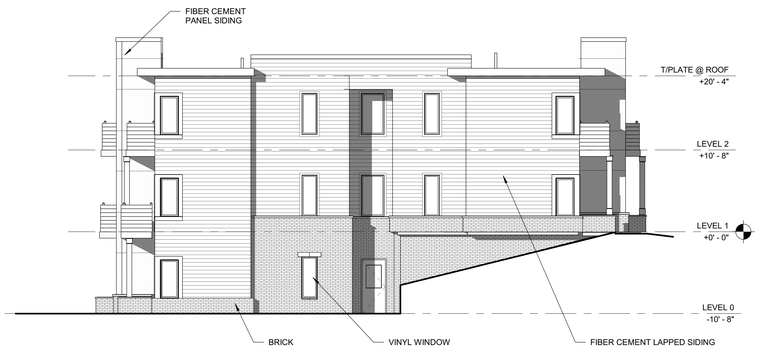
4 NORTH ELEVATION
1/8" = 1'-0"



3 NORTH ELEVATION
1/8" = 1'-0"



2 EAST ELEVATION
1/8" = 1'-0"



1 WEST ELEVATION
1/8" = 1'-0"

SWBR
309 South Franklin Street Syracuse NY
315 488 5035 | syracuse@swbr.com

Drawn By:	JAW
Checked By:	DG
Project Manager:	DG

Revisions

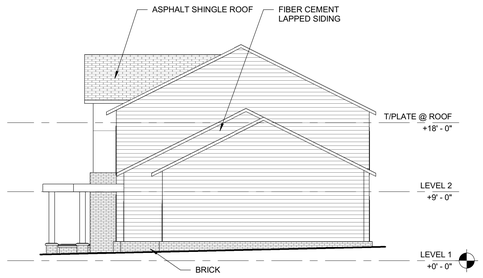
COBBS HILL VILLAGE
645 Norris Drive
Rochester, NY 14610
SWBR Project Number 15915.00

ROCHESTER MGMT, INC.
249 NORTON VILLAGE LANE
ROCHESTER, NY 14609

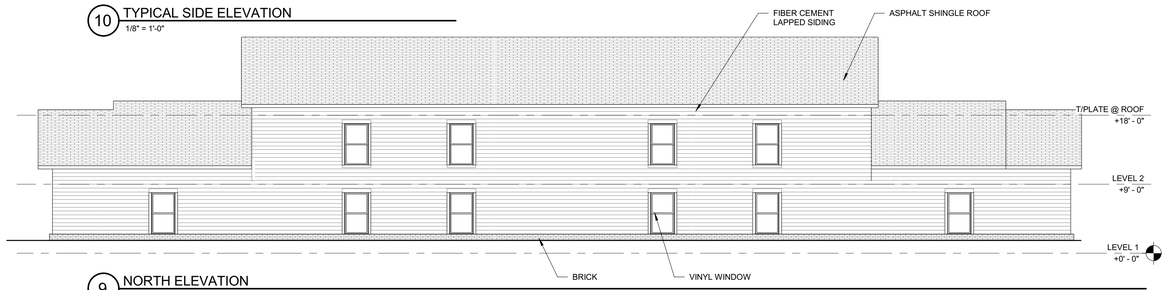
A-3
MAIN BLDG
ELEVATIONS

02.28.2018
PLANNING COMMISSION

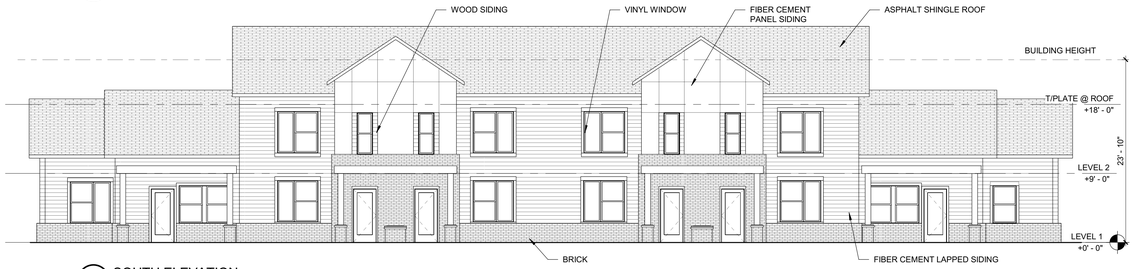
2/28/2018 8:20:31 AM



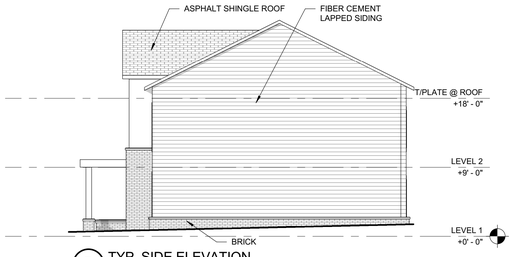
10 TYPICAL SIDE ELEVATION
1/8" = 1'-0"



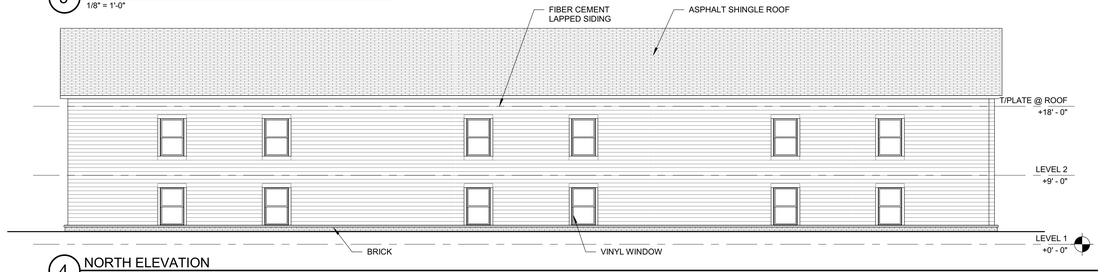
9 NORTH ELEVATION
1/8" = 1'-0"



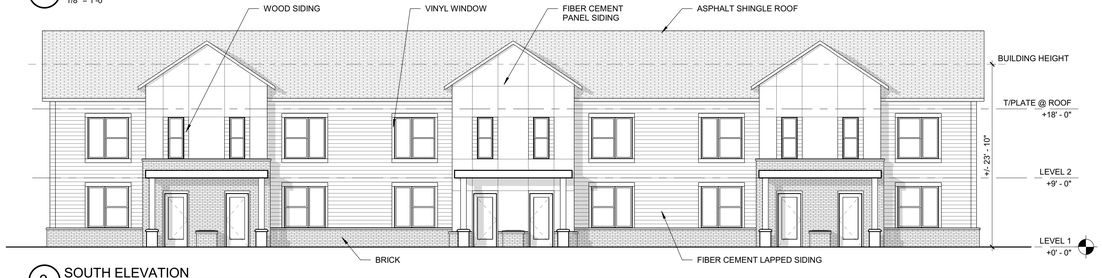
8 SOUTH ELEVATION
1/8" = 1'-0"



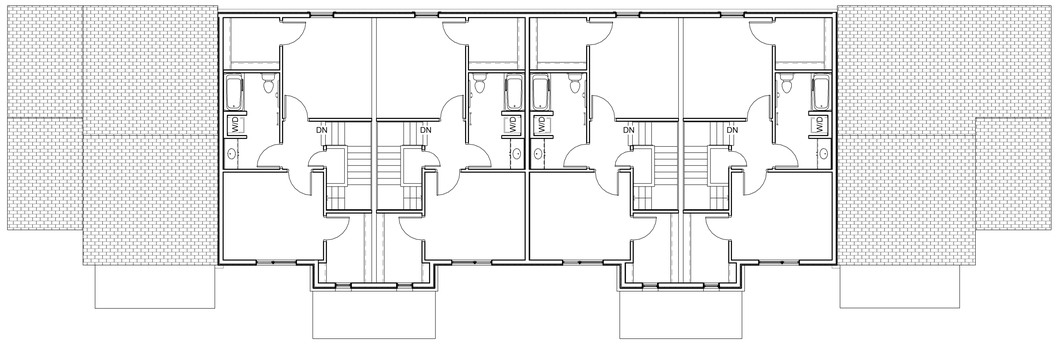
5 TYP. SIDE ELEVATION
1/8" = 1'-0"



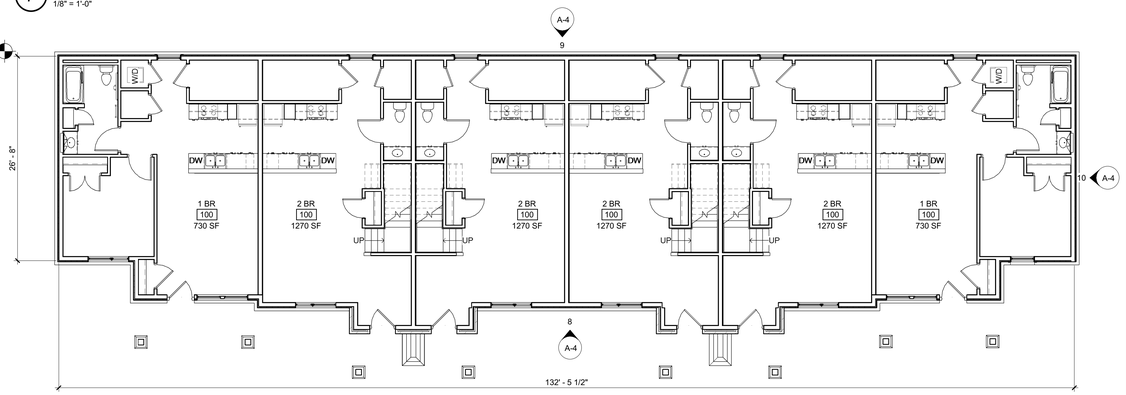
4 NORTH ELEVATION
1/8" = 1'-0"



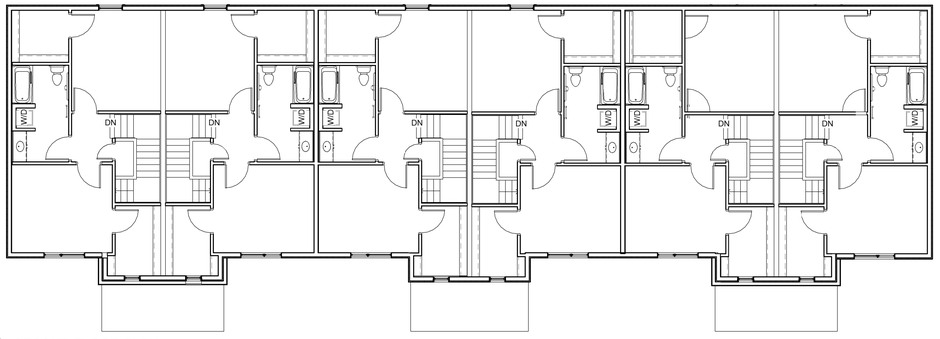
3 SOUTH ELEVATION
1/8" = 1'-0"



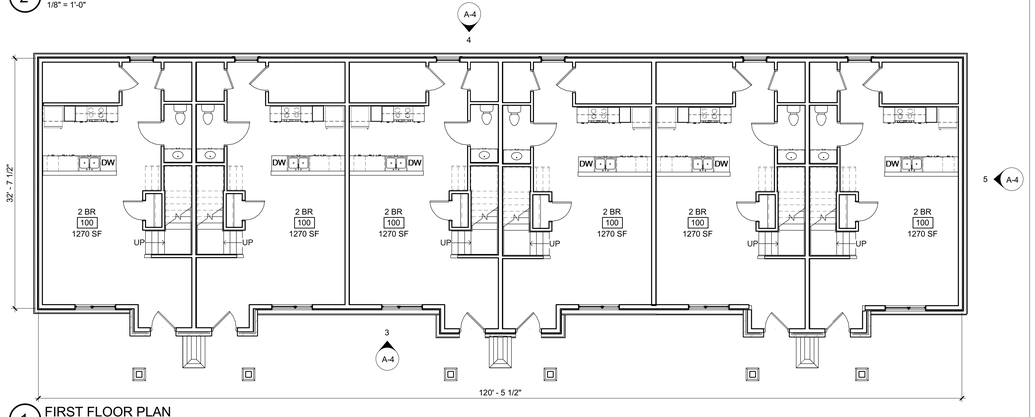
7 SECOND FLOOR PLAN
1/8" = 1'-0"



6 FIRST FLOOR PLAN
1/8" = 1'-0"



2 SECOND FLOOR PLAN
1/8" = 1'-0"



1 FIRST FLOOR PLAN
1/8" = 1'-0"

SWBR
309 South Franklin Street Syracuse NY
315 488 5635 | syracuse@swbr.com

Drawn By:	JAW
Checked By:	DG
Project Manager:	DG

Revisions

COBBS HILL VILLAGE
645 NORRIS DRIVE
ROCHESTER,NY 14610

Enter address here

SWBR Project Number 15915.00

ROCHESTER MGMT, INC.
249 NORTON VILLAGE LANE
ROCHESTER, NY 14609

A-4

GARDEN APARTMENTS PLANS AND ELEVATIONS

02.28.2017

PLANNING COMMISSION

FILE PATH: C:\1-Local Revit Models 2017\15915_Cobbs Hill Village_Central_Townhouse_jwade@swbr.com.rvt

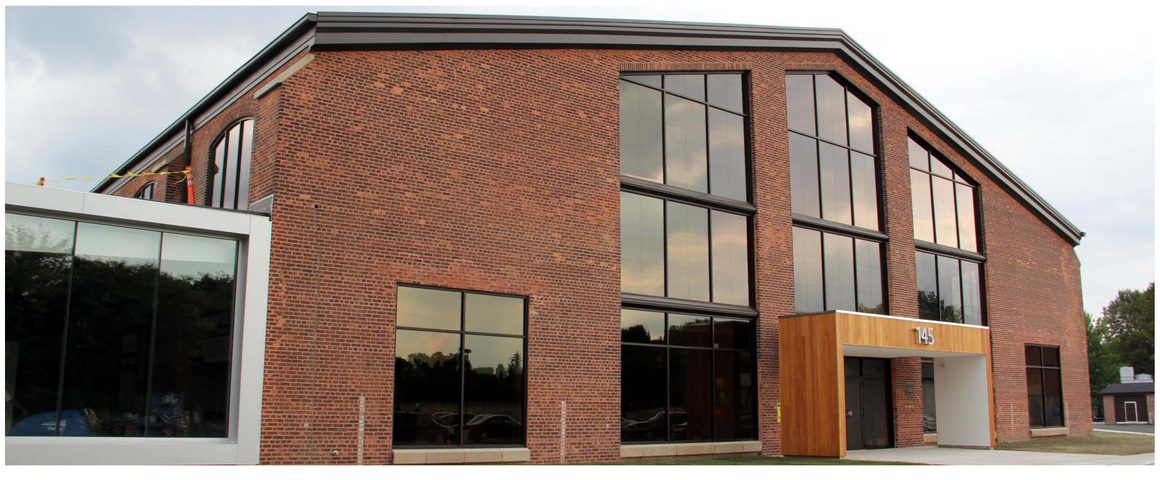
Stacked Balconies, Ganged Windows, Individual Entrances

Brick Cladding, Simple Window Details, Wood Features

Stacked Balconies, Ganged Windows, Individual Entrances

Brick Cladding, Simple Window Details, Wood Features

Stacked Balconies, Individual Entrances



Brick Cladding, Wood Entrance Highlight

Cobbs Hill Village - Local Context

Rochester Management, Inc.

ROCHESTER MANAGEMENT SWBR

Cobbs Hill Village - Norris Drive Approach
Rochester Management, Inc.

ROCHESTER MANAGEMENT SWBR

Cobbs Hill Village - Entrance
Rochester Management, Inc.

ROCHESTER MANAGEMENT SWBR

Cobbs Hill Village - Community Building
Rochester Management, Inc.

ROCHESTER MANAGEMENT SWBR

Cobbs Hill Village - Front Sidewalk
Rochester Management, Inc.

ROCHESTER MANAGEMENT SWBR

Cobbs Hill Village - Community
Rochester Management, Inc.

ROCHESTER MANAGEMENT SWBR

Cobbs Hill Village - Aerial
Rochester Management, Inc.

ROCHESTER MANAGEMENT SWBR

Site Section 1 - Through Central Plaza

Site Section 2 - Through Buildings

Cobbs Hill Village - Site Sections

Rochester Management, Inc.

ROCHESTER MANAGEMENT SWBR

OUTLINE SPECIFICATIONS

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 00 01 10 - TABLE OF CONTENTS

SECTION 00 21 13 - A.I.A. A701, INSTRUCTIONS TO BIDDERS

Requires visit to site.
Allows requirement of A 305 Contractors qualification form.
Requires list of manufacturers and subcontractors.
States form of contract will be A.I.A. 101.
Requires Bid Bonds, Performance & Payment Bonds.

SECTION 00 31 32 - GEOTECHNICAL DATA

Refer to geotechnical information provided by Foundation Design, P.C., dated February 17, 2016, see attached.

SECTION 00 72 10 - A.I.A. A201, GENERAL CONDITIONS - 2007 EDITION

Defines role of Owner.
Defines role of Contractor.
Sets rule for administration of contract.
Defines role of subcontractors.
Allows Owner to do work on site or to hire separate contractors for additional work on site.
Sets rule for changes in the work.
Sets Guidelines for payment.
Sets Guidelines for Insurance and Bonds.
Provide Guidelines for correction of defective work.
Allows for termination of contract.

[Owner to Verify Insurance Requirements]

SCHEDULE OF INSURANCE AND BONDS

Type of Policy	**Minimum Limits**
General Liability Insurance, Comprehensive, Occurrence Based, including:	
Commercial General Liability (including specified indemnification provisions for Contractor's obligation specified under paragraph 3.18)	
General Aggregate	
Property Damage, Broad form, Each Occurrence	
Premises Operations, including X, C and U coverages: General Aggregate Each Occurrence	
Products-Completed Operations (Aggregate)	
Personal and Advertising Injury (Employment Exclusion deleted)	
Damage to Rented Premises (Each Occurrence)	
Medical Expense (Any One Person)	
Property Damage, Broad Form including Completed Operations Contractual, including specified indemnification provisions for Contractor's obligation specified under paragraph 3.18: General Aggregate Each Occurrence	

Owner/Contractor's Protective Liability (OCP): General Aggregate Each Occurrence	
Automobile Liability, Any Vehicle, Owned and Non-owned: Combined Single Limit	
Umbrella / Excess Liability (limits over primary coverage): Each Occurrence Aggregate Pollution Coverage, Each Occurrence *	
Worker's Compensation: Each Accident Disease (Each Employee) Disease (Policy Limit)	As Required By Statute

Policy Endorsements: The following endorsements shall be added to the ACORD form and the insurance policies:

a. The Owner, Owner's Representative and Architect (including their consultants, representatives and employees) shall be named as "Additional Insureds" on a primary and non-contributory basis on General Liability, Umbrella / Excess Liability and Automobile Liability policies.
b. The General Liability Aggregate applies to this project and this project only, and to each location of this project.
c. Products-Completed Operations to be effective for a minimum of 2 years after final payment.
d. Evidence of such endorsement shall be confirmed by signed endorsement to the policy, such endorsement shall be submitted to the Owner with the applicable Certificate of Insurance.
e. The Insurance Certificate/Accord Form shall be endorsed to indicate that the General Liability Policy Aggregate limit applies to this project only and to each location of this project.

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 21 00 - ALLOWANCES

Provisions for allowances.

Types of allowances include the following: Lump-sum allowances.

Allowance No. 1 - Site Monument Sign: $<**Insert Dollar Value Here**>.

SECTION 01 22 00 - UNIT PRICES

Administrative and procedural requirements for unit prices.

Schedule of Unit Prices: To Be Determined.

SECTION 01 23 00 - ALTERNATES

Provisions for alternates.

Schedule of Alternates: To Be Determined.

SECTION 01 25 00 - SUBSTITUTION PROCEDURES

Procedural requirements for requests for substitutions during construction.

SECTION 01 26 00 - CONTRACT MODIFICATION PROCEDURES

Administrative and procedural requirements for handling and processing Contract modifications.

SECTION 01 29 00 - PAYMENT PROCEDURES

Administrative and procedural requirements necessary to prepare and process Applications for Payment.

SECTION 01 32 00 - CONSTRUCTION PROGRESS DOCUMENTATION

Administrative and procedural requirements for Contractor's Construction Schedule, Submittals Schedule, and reports.

SECTION 01 33 00 - SUBMITTAL PROCEDURES

Administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other miscellaneous submittals.

Definitions:

Action Submittals: Written and graphic information that requires Architect's responsive action.

Informational Submittals: Written information that does not require Architect's approval. Submittals may be rejected for not complying with requirements.

SECTION 01 40 00 - QUALITY REQUIREMENTS

Quality-assurance and quality-control requirements.
Statement of Special Inspections.

SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS

Temporary utilities and facilities for support, security, and protection.

Temporary utilities include, but are not limited to, the following:
- Sewers and drainage.
- Water service and distribution.
- Sanitary facilities, including toilets, wash facilities, and drinking-water facilities.
- Heating and cooling facilities.
- Ventilation.
- Electric power service.
- Lighting.
- Telephone service.

Support facilities include, but are not limited to, the following:
- Temporary roads.
- Dewatering facilities and drains.
- Project identification and temporary signs.
- Waste disposal facilities.
- Field offices.
- Storage and fabrication sheds.
- Lifts and hoists.
- Construction aids and miscellaneous services and facilities.

Security and protection facilities include, but are not limited to, the following:
- Environmental protection.
- Stormwater control.
- Pest control.
- Site enclosure fence.
- Security enclosure and lockup.
- Barricades, warning signs, and lights.
- Temporary enclosures.
- Fire protection.

SECTION 01 60 00 - PRODUCT REQUIREMENTS

Administrative and procedural requirements: Selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.

SECTION 01 73 00 - EXECUTION

General procedural requirements governing execution of the Work including, but not limited to, the following:

- Construction layout.
- Field engineering and surveying.
- General installation of products.
- Coordination of Owner-installed products.
- Progress cleaning.
- Starting and adjusting.
- Protection of installed construction.
- Correction of the Work.

Cutting And Patching:

- Procedural requirements for cutting and patching.
- Cutting: Removal of existing construction necessary to permit installation or performance of other Work.
- Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other Work.

SECTION 01 74 19 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

Salvaging, recycling and disposing of non-hazardous demolition and construction waste.

SECTION 01 77 00 - CLOSEOUT PROCEDURES

Administrative and procedural requirements for contract closeout, including, but not limited to, the following:

- Inspection procedures.
- Project Record Documents.
- Operation and maintenance manuals.
- Warranties.
- Instruction of Owner's personnel.
- Final cleaning.

SECTION 01 78 23 - OPERATION AND MAINTENANCE DATA

This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:

- Operation and maintenance documentation directory.
- Emergency manuals.
- Operation manuals for systems, subsystems, and equipment.
- Maintenance manuals for the care and maintenance of products, materials, and finishes, and systems and equipment.

SECTION 01 78 39 - PROJECT RECORD DOCUMENTS

This Section includes administrative and procedural requirements for Project Record Documents, including the following:

- Record Drawings.
- Record Product Data.

SECTION 01 79 00 - DEMONSTRATION AND TRAINING

This Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:

Demonstration of operation of systems, subsystems, and equipment.
Training in operation and maintenance of systems, subsystems, and equipment.

SECTION 01 81 00 - PROJECT ENERGY AND SUSTAINABILITY REQUIREMENTS

LEED of Homes.
NYSERDA.
ENERGY STAR.

DIVISION 02 - EXISTING CONDITIONS

02 41 16 – STRUCTURE DEMOLITION

Building and Site Demolition:

Demolition of building structures.
Demolition of site improvements including paving, curbing, site walls, and utility structures.
Demolition of below-grade foundations and site improvements to depth to avoid conflict with new construction or site work.
Protection of site work and adjacent structures.
Disconnection, capping, and removal of utilities.
Pollution control during building demolition.
Removal and legal disposal of materials.

DIVISION 03 - CONCRETE

SECTION 03 30 00 - CAST-IN-PLACE CONCRETE

Testing: Independent testing laboratory. Paid for by Owner.

Exterior slabs, interior slabs on grade, foundations and footing, and slab on metal deck (at elevator cap).

Floor Flatness and Levelness Tolerances:
Subfloors Under Materials Such As Vinyl Tile, Paint, and Carpet: ACI 302.1R and ASTM E 1155, floor flatness (Ff) of 20, floor levelness (F1) of 17.

Concrete Design Mixes, ASTM C 94, 28 Day Compressive Strength:
Columns, Beams, Walls, Foundations, and Footings: 3000 psi.
Slabs on Grade: 3000 psi.
Exterior Site Concrete and Pads Exposed to Weather: 4000 psi.
Air entrainment 5 to 6%.

Formwork: Plywood or metal panel formwork sufficient for structural and visual requirements.
Special forms for textured finish concrete.
Metal, plastic or paper tubes for cylindrical columns and supports.

Reinforcing Materials:
Reinforcing Bars: ASTM A 615, Grade 60, deformed.
Steel Wire: ASTM A 82.
Steel Wire Fabric: ASTM A 185, welded - flat sheets only.

Concrete Materials: ASTM C 150, Type I, Portland cement; potable water.
Normal weight aggregates, ASTM C 33.
Fly Ash: ASTM C 618, Type F.

Concrete Admixtures: Containing less than 0.1 percent chloride ions.
Air-Entraining Admixture: ASTM C 260, for exterior exposed concrete and foundations exposed to freeze-thaw.

Auxiliary Materials:
Sheet Vapor Retarder: ASTM E 1745, Class A. Include manufacturer's recommended adhesive or pressure-sensitive tape.

Concrete Finishes For Formed Surfaces:
Surfaces Not Exposed To View: As-cast form finish.
Surfaces Exposed To View: Smooth form finish.

Concrete Finishes for Monolithic Slabs:
Trowel finish for surfaces to be exposed to view or covered with resilient flooring, carpet, tile, or other thin finish system.
Nonslip broom finish for exterior concrete platforms, steps, and ramps.
Chemical hardener finish: Apply to all exposed interior concrete and to concrete under carpet.

SECTION 03 54 13 - GYPSUM CEMENT UNDERLAYMENT

Gypsum-based, polymer-modified, self-leveling underlayment for interior finish flooring.

Fire-Resistance Ratings: Where indicated, provide gypsum-cement underlayment systems identical to those of assemblies tested for fire resistance per ASTM E 119 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

Indicate design designations from UL's "Fire Resistance Directory" or from the listings of another qualified testing agency.

Sound Transmission Characteristics: Provide gypsum-cement underlayment systems identical to those of assemblies tested for STC and IIC ratings per ASTM E 90 and ASTM E 492 by a qualified testing agency.

Underlayment:

Maxxon Corp.; Gyp-Crete Floor Underlayment (2.1 Mix Design). 2.1 cubic feet of sand per 80 lb. bag attains typical compressive strengths ranging from 2500 psi.

Sound Mat:

Maxxon Corp,; Acousti-Mat.

DIVISION 04 - MASONRY

SECTION 04 22 00 – CONCRETE UNIT MASONRY

Unit Masonry Construction:
Concrete masonry units. Foundation walls and elevator shaft.

Testing: Independent testing laboratory.

Concrete Masonry Units:
Concrete Masonry Units: ASTM C 90, normal weight.
Size: Face dimension of 7-5/8 inches high by 15-5/8 inches long by width required for application.
Bond Pattern: Running Bond.

Mortar and Grout:
Mortar Mix: ASTM C 270, Type S, for reinforced masonry, masonry below grade and masonry in contact with earth and ASTM C 270, Type N, for above-grade loadbearing and nonloadbearing walls and parapet walls and for interior loadbearing and nonloadbearing partitions.
Mortar Materials: Portland cement, ASTM C 150, Type I or II.
Mortar Aggregate: Natural color, ASTM C 144 - Mason Sand.
Grout Aggregate: ASTM C 404 (fine or coarse).
Hydrated Lime: ASTM C 207, Type S.
Color: Colored pigmented mortar.
Grout: Low lift application.

Reinforcing Steel:
Reinforcing Bars: ASTM A 615, Grade 60.

Joint Reinforcing: Welded wire with deformed side rods.
Cross Rods Steel Wire: 0.1875 inch.
Side Rods Steel Wire: 0.1875 inch.
Type: Ladder or truss type.

Masonry Accessories:
Nonmetallic expansion joint strips.
Preformed control joint gaskets.
Bond breaker strips.
Weeps: Full head joint, cell vents by Dur-O-Wall, color as selected or custom color.

SECTION 04 26 13 - MASONRY VENEER

Clay Face Brick:
Color and Texture: Red color to match existing buildings.

Ties and Anchors: Galvanized steel.
Adjustable Masonry-Veneer Anchors: Screw attached.

Embedded Flashing:
Partially Exposed Flashing: Stainless steel.
Concealed (Flexible) Flashing: Copper laminated.
Used with stainless steel.

Weep/Vent Holes: cellular plastic.

Cavity drainage material.

Mortar:
Portland cement-lime mortar unless otherwise indicated.
Pigmented mortar for exposed mortar joints.

SECTION 04 72 00 - CAST STONE MASONRY

Cast Stone: Pier caps, and miscellaneous trim pieces
Where replace existing deteriorated units, match color, texture, configuration and size.
Provide new units where indicated in configuration and size shown and with texture and color to be selected by Architect.

Cast Stone Materials
General: Comply with ASTM C 1364 and the following:
Portland Cement: ASTM C 150, Type I, containing not more than 0.60 percent total alkali when tested according to ASTM C 114.
Coarse Aggregates: Granite, quartz, or limestone complying with ASTM C 33; gradation as needed to produce required textures.
Fine Aggregates: Manufactured or natural sands complying with ASTM C 33, gradation as needed to produce required textures.
Air-Entraining Admixture: ASTM C 260, certified by the manufacturer to be compatible with other admixtures used.
Add to mixes for units exposed to the exterior at manufacturer's prescribed rate to result in an air content of 5 to 7 percent.

Reinforcement: Deformed steel bars complying with ASTM A 615/A 615M.

SECTION 04 73 10 - MANUFACTURED STONE VENEER

Veneer Units: Precast veneer units consisting of portland cement, sand, lightweight aggregates, and mineral oxide pigments.

Product/Manufacturer: Refer to Exterior Elevation Drawings.

Provide manufacturer’s standard trim units.

Rainscreen Drainage Mat: WaterWay 11mm; Stuc-O-Flex International,Inc.

Reinforcing: ASTM C 847 galvanized expanded metal lath.

Mortar:
Cement: Complying with ASTM C 270.
Lime: ASTM C 207.
Sand: ASTM C 144, natural or manufactured sand.
Pigment: ASTM C 979, mineral oxide pigments.
Water: Potable.

Bonding Agent.

Sealer: Water based silane or siloxane masonry sealer, clear finish.

Mortar Mixes

Standard Installation (Grouted Joints):

Mix mortar in accordance with ASTM C 270, Type N or S.

Add color pigment in grout joint mortar in accordance with pigment manufacturer's instructions.

DIVISION 05 - METALS

SECTION 05 31 00 – METAL DECK

Metal floor deck at elevator roof.

Steel Floor and Roof Deck Units:
- Composite steel floor deck.
- Galvanized steel roof deck.

Steel Materials and Finish:
- Type: Steel for galvanized metal deck, ASTM A 446, Grade A, G 90 coating.
- Shear Connectors: Headed stud type, ASTM A 108.
- Sheet Metal Accessories: ASTM A 446, G 60, commercial quality, galvanized.
- Galvanizing Repair: ASTM A 780.

Auxiliary Materials:
- Metal cover plates.
- Metal closure strips.
- Flexible closure strips.
- Roof sump pans.

SECTION 05 50 00 - METAL FABRICATIONS

Rough hardware.
Ladders with safety rungs non-slip.
Pipe bollards.

Ferrous Materials:
- Steel Plates, Shapes and Bars: ASTM A 36.
- Rolled Steel Floor Plates: ASTM A 786.
- Steel Tubing: ASTM A 500 or A 501.
- Galvanized Steel Sheet, Structural Quality: ASTM A 446, Grade A, G90.
- Steel Pipe, Black Finish: ASTM A 53.
- Steel Pipe, Galvanized Finish: ASTM A 53.
- Brackets, Flanges, and Anchors: Cast or formed metal.
- Concrete Inserts: Threaded or wedge type.
- Welding Rods and Bare Electrodes: AWS specifications.
- Zinc-Coating: Hot-dip galvanized coating for materials in exterior assemblies or exterior walls.

Auxiliary Materials:
- Nonshrink Nonmetallic Grout: CE CRD-C621.
- Shop Primer: Alkyd primer, FS TT-P-645.
- Galvanizing Repair Paint: SSPC - Paint 20.

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

SECTION 06 10 00 - ROUGH CARPENTRY

Framing with dimension lumber.
Framing with engineered wood products.
Wood grounds, nailers, and blocking.
Exterior deck framing and deck boards, preservative treated.

Lumber Standards and Grade Stamps: PS 20, American Softwood Lumber Standard and inspection agency grade stamps.

Construction Panel Standards: PS 1, U.S. Product Standard for Construction and Industrial Plywood; APA PRP-108.

Preservative Treatment: AWPA C2 for lumber and AWPA C9 for plywood; waterborne pressure treatment.

Fire-Retardant Treatment: AWPA C20 for lumber and AWPA C27 for plywood; noncorrosive type.

Dimension Lumber:
Framing: Hem-Fir, Select structural No. 2.

Engineered Wood Products:
Laminated Veneer Lumber (LVL): Laminated wood veneers with exterior type adhesive.
"Microllam"; Trus Joist MacMillian.
Parallel Strand Lumber (PSL): Laminated paralles strands of wood bonded together in a microwave process.
"Parallam"; Trus Joist MacMillian.
Laminated Strand Lumber (LSL): Laminated strands of wood used for headers.
"TimberStrand"; Trus Joist MacMillian.

Auxiliary Materials:
Sill Sealer Gaskets: Glass fiber strip resilient insulation.
Framing Anchors and Fasteners: Non-corrosive, suitable for load and exposure.

SECTION 06 16 00 - SHEATHING

Construction Panel Standards: PS 1, U.S. Product Standard for Construction and Industrial Plywood; APA PRP-108.

Wall Sheathing: APA Sheathing, Exposure 1.
Plywood or Oriented Strand Board.

Roof Sheathing:
Sloped Roof Areas: Plywood, 24/16 span rating, APA Sheathing, Exposure 1.
Flat Roof Areas: Plywood, ¾ inch tongue and groove 48/24 span rating, APA Sheathing, Exposure 1.

Composite Nailbase Insulated Sheathing:
Oriented-Strand-Board-Surfaced, Polyisocyanurate-Foam Sheathing: ASTM C 1289, Type V with DOC PS 2, Exposure 1 oriented strand board on one face.

Subflooring:
Advantech Flooring; Huber Engineered Woods.
Exposure 1, Structural 1, APA rated single-floor panels or sheathing.
Span Rating: Not less than 48/24.
Nominal Thickness: Not less than ¾ inch.
Edge Detail: Tongue and groove.

SECTION 06 17 53 – SHOP FABRICATED WOOD TRUSSES

Prefabricated Metal-Plate-Connected Wood Trusses:
Wood roof and floor trusses.

Standards: TPI, Design Specification for Metal Plate Connected Wood Trusses; TPI, Design Specification for Metal Plate Connected Parallel Chord Wood Trusses.

Design Engineering: Shop drawings shall be sealed by a professional engineer registered in the state in which the project is located.
Wood Trusses:
Lumber Standard: PS 20 American Softwood Lumber Standard.
Species: Manufacturer's option.
Dressing: Dressed four sides.
Moisture Content: Seasoned, 15 percent maximum.

Connectors, Fasteners, and Metal Framing Anchors.

SECTION 06 20 13 – EXTERIOR FINISH CARPENTRY

Exterior Trellis:
Lumber: DOC PS 20 and applicable rules of grading agencies indicated.
Species and Grade: Western red cedar, Grade A; NLGA, WCLIB, or WWPA.

Exterior Standing and Running Trim:
Lumber Trim for Clear Finish: Vertical grain Douglass-fir.

Lumber Siding:
Species: Vertical grain Douglass-fir.
Pattern: Bevel and ship-lap.

Cellular PVC Trim: Extruded, expanded PVC with a small-cell microstructure, recommended by manufacturer for exterior use, made from UV- and heat-stabilized, rigid material.
Product/Manufacturer:
CertainTeed Restoration Millwork; CertainTeed Corporation.
Azek; AZEK Building Products, Inc.

Fasteners: Stainless steel unless otherwise indicated.

Horizontal Joint Flashing for Siding: Preformed aluminum; Z-shaped.

Finish for Lumber Siding and Trim:
Prothane, Exterior urethane Clear Wood Finish; Rudd Company, Inc.

SECTION 06 20 23 – INTERIOR FINISH CARPENTRY

Interior Standing and Running Trim and Rails:
Paint Grade Species and Grade: Clear dry, any closed-grain hardwood, defect-free.
Fasteners: Concealed and countersunk fasteners.
Finish: Paint.

Stain and Varnish Grade Species and Grade: Clear dry white maple, defect-free.
Fasteners: Concealed and countersunk fasteners.
Finish: Semi-transparent stain.

SECTION 06 40 23 - INTERIOR ARCHITECTURAL WOODWORK

Interior Architectural Woodwork:
Casework.
Ornamental items.

Standards: Architectural Woodwork Institute (AWI) "Architectural Woodwork Quality Standards."

Interior Plastic Laminate Clad Casework:
Laminate: High pressure decorative laminate, NEMA LD-3.
Grade: Custom.
Face Style: Flush overlay.
Frame Fabrication: Frameless.
Semi-concealed surfaces: Low pressure decorative laminates.
Edge banding: Hot-melt PVC edge banding.

Casework Hardware and Auxiliary Materials:
Hardware Standard: ANSI/BHMA A156.9
Hardware Finish and Base Metal: [Satin stainless steel] [Satin chromium plated steel] [Satin chromium plated brass or bronze] [Dark oxidized satin bronze].

SECTION 06 43 00 - WOOD STAIRS AND RAILINGS

Interior Stairwork and Rails:
Species for Transparent Finish: Plain sawn hard maple - Railing.
Species for Opaque Finish: Any closed-grain hardwood.
Grade: Custom.
Wedges-Oak.

Exterior Wood Railings:
Lumber for Clear Finish: Vertical grain Douglass-fir.
Finish:
Prothane, Exterior urethane Clear Wood Finish; Rudd Company, Inc.

Fabrication: Stairs shall be nailed, glued and have required wedge block glued in place.

Decorative wood railings as indicated on Drawings.

SECTION 06 63 00 - PLASTIC RAILINGS

Polyvinyl chloride (PVC) railing systems, reinforced internally with extruded aluminum shapes.

Performance Requirements:

Top Rail of Guardrail Systems: Capable of withstanding the following loads applied as indicated:

Concentrated load of 200 lbs. applied at any point and in any direction.
Uniform load of 50 lbs. per linear ft. applied horizontally and concurrently with a uniform load of 100 lbs. per linear ft. applied vertically downward.
Concentrated and uniform loads shall not be applied simultaneously.

Handrails Not Serving as Top Rails: Capable of withstanding the following loads applied as indicated:

Concentrated load of 200 lbs. applied at any point and in any direction.
Uniform load of 50 lbs. per linear ft. applied in any direction.
Concentrated and uniform loads shall not be applied simultaneously.

Infill Area of Guardrail Systems: Capable of withstanding a horizontal concentrated load of 200 lbs. applied to a one sq. ft. area at any point in the system including panels, intermediate rails, balusters, or other elements composing the infill area.

Above load need not be assumed to act concurrently with loads on top rails of railing systems in determining stress on guard.

Manufacturers:

EverNew by CertainTeed Corporation.
Fairway Building Products.
Finyl Rail by Railing Dynamics, Inc.

SECTION 06 64 00 – PLASTIC PANELING

FRP panels, and moldings.

Product: Refer to Room Finish Schedule and Color/Finish Legend.

Materials:

FRP Panels: Class A Flame Spread of less than 25, Smoke Developed of less than 450 per ASTM E-84.
Moldings and Trim: All panel edges, inside and outside corners shall be finished with appropriate to for purpose.
Adhesives: As recommended by manufacturer for the materials and substrates to be joined.

DIVISION 07 - THERMAL & MOISTURE PROTECTION

SECTION 07 13 26 - SELF-ADHERING SHEET WATERPROOFING

Sheet Membrane Waterproofing Systems:
Foundation walls and footings at elevator pit.

Testing: Flood testing of horizontal applications.

Rubberized Asphalt Sheet Waterproofing: Self-adhering rubberized asphalt and polyethylene sheet membrane, 60 mils thick, tensile strength 250 psi
Bituthene; W.R. Grace & CO.

Flashing Materials and Protection Board: Compatible with membrane waterproofing.

SECTION 07 21 00 - THERMAL INSULATION

Building Insulation and Vapor Retarders:
Under slabs-on-grade, board type.
Foundation walls, board type.
Thermal insulation in exterior walls, blanket type.
Thermal insulation at underside of roofs, over heated spaces and over soffits, blanket type.
Thermal insulation over unheated areas, blanket type.
Sheet vapor retarders.

Air Sealing Sealant
Product/Manufacturer: ECOSEAL; Knauf Insulation.
Water-based elastomeric sealant.
Sealant materials shall comply with VOC limits of authorities having jurisdiction.
Maximum flame-spread and smoke-developed indexes of 25 and 50, respectively, per ASTM E 84.

Board Insulation:
Type: Extruded polystyrene, rigid, ASTM C 578.
Foundation Wall: Type VI, 40 psi.
Horizontal under concrete slabs: Type VI, 40 psi or VII, 60 psi.

Blanket/Batt Insulation:
Type: Glass fiber or mineral slag fiber, ASTM C 665, Type I (unfaced).
Type: Glass fiber or mineral slag fiber, ASTM C 665, Type III (foil-scrim-kraft vapor-retarder membrane).

Loose Fill Insulation:
Type: Loose glass fiber insulation, ASTM C 764.

Vapor Retarder (Not Integral with Insulation):
Ceiling: Polyethylene, ASTM D 4397, 6 mils, 0.13 perm vapor transmission rating.
Wall: MemBrain Smart Vapor Retarder; CertainTeed Corporation.

Accessories:
Eave ventilation troughs.
Adhesives and mechanical anchors.
Crack sealers and tapes.

SECTION 07 25 00 – WEATHER BARRIERS

Building paper and building wrap weather-resistive barriers and flexible flashing.

Product/Manufacturer:
Spunbonded polyolefin, non-woven, non-perforated, weather barrier is based upon DuPont Tyvek CommercialWrap D and related assembly components.

SECTION 07 31 00 - SHINGLES

Manufacturer's Material Warranty:
40 years from date of Substantial Completion, prorated, with first 20 years nonprorated.
Wind-Speed Warranty Period: Asphalt shingles will resist blow-off or damage caused by wind speeds up to 110 mph for 10 years from date of Substantial Completion.
Algae-Discoloration Warranty Period: Asphalt shingles will not discolor 10 years from date of Substantial Completion.

Laminated-Strip Asphalt Shingles: ASTM D 3462, laminated, multi-ply overlay construction, glass-fiber reinforced, mineral-granule surfaced, and self-sealing.
Product: Timberline HD Shingle; GAF Materials Corporation.

Self-Adhering Sheet Underlayment, Polyethylene Faced (Ice Protection Underlayment): ASTM D 1970, minimum of 40-mil- thick
Product: Grace Ice and Water Shield; Grace, W. R. & Co. - Conn.
No substitutions.

Accessories: Hip and ridge shingles; felt, ASTM D 226; rubberized asphalt underlayment; metal flashing and drip edge.

Felt: ASTM D 4869, Type II, asphalt-saturated organic felts, nonperforated.

Ridge Vents:
Type: Baffled ridge vent.
Materials: Aluminum.
Materials: High density polypropylene.

SECTION 07 42 16 - METAL SOFFIT PANELS

V-Groove-Profile Metal Soffit Panels: Perforated panels formed with vertical panel edges and a flat pan between panel edges; with a V-groove joint between panels.
Aluminum Sheet: Coil-coated sheet, ASTM B 209, alloy as standard with manufacturer, with temper as required to suit forming operations and structural performance required.
Thickness: 0.024 inch.
Surface: Smooth, flat finish.
Exterior Finish: Siliconized polyester.
Color: As selected by Architect from manufacturer's full range.
Panel Coverage: 12 inches.
Panel Height: 0.50 inch.

SECTION 07 46 13 - FIBER CEMENT SIDING

Fiber cement siding shall comply with ASTM C1186, Standard Specification for Grade II, Type A, Non-Asbestos Fiber Cement Flat Sheets.

Fiber cement siding shall be classified as noncombustible when tested in accordance with ASTM E136; with a flame-spread index of 25 or less when tested according to ASTM E 84.

Product/Manufacturer: Allura of Plycem.
Factory Finish: Factory applied ColorMax Finishing System by Allura with 100 percent acrylic solid color.

Prefinished smooth fiber cement plank and panel siding.
Colors: As indicated on the Exterior Elevation Drawings.

Aluminum Trim: Easy Trim reveals, prefinished.
Color to match siding.

SECTION 07 53 23 - EPDM MEMBRANE ROOFING

Single-ply membrane roofing and roof insulation.

Roofing System Design: Uplift pressures calculated according to ASCE/SEI 7.

Listing: UL Class A external fire exposure, and Class 90 wind uplift.

Membrane Roofing Warranty: Manufacturer's 20 year warranty.

Membrane Roofing Installation:
Type: Totally adhered.

EPDM Membrane Roofing: Non-reinforced, 60 mils thick, black.

Auxiliary Materials:
Substrate Board: Glass-mat, water-resistant gypsum (Dens Deck Prime; Georgia-Pacific Corporation).
Thickness: 1/2 inch thick.
Cover Board: Glass-mat, water-resistant gypsum (Dens Deck Prime; Georgia-Pacific Corporation).
Thickness: 1/2 inch thick.
Insulation: Polyisocyanurate board.
Tapered Boards: 1/4 inch per 12 inches.
Sheet Metal Accessories: SMACNA and NRCA recommendations.
Walkway Protection Board: Compatible with membrane.

SECTION 07 62 00 - SHEET METAL FLASHING AND TRIM

Flashing and Sheet Metal:
Metal counterflashing and base flashing.
Gutters and downspouts.
Exposed metal trim and fascia units.
Sheet metal accessories.

Sheet Metal Flashing and Trim:
Sheet Aluminum: ASTM B 209, alloy 3003, Fluoropolymer, Kynar 500 coated .050.
Fabricated Units:

Compliance with SMACNA Architectural Sheet Metal Manual.

Auxiliary Materials:
Epoxy seam sealer.
Reglets and metal accessories.

SECTION 07 72 00 - ROOF ACCESSORIES

Roof Hatches:
Lid: Insulated metal lid.
Framing: Zinc-coated steel.
Curb Type: Insulated double wall curb.

SECTION 07 84 13 - PENETRATION FIRESTOPPING

Through-penetration firestop systems for penetrations through the following fire-resistance-rated assemblies, including both empty openings and openings containing penetrating items:
Walls and partitions.
Smoke barriers.
Construction enclosing compartmentalized areas.

SECTION 07 84 46 - FIRE-RESISTIVE JOINT SYSTEMS

Fire-resistive joint systems for the following:
Head-of-wall joints.

SECTION 07 92 00 - JOINT SEALANTS

Joint sealers at interior and exterior vertical and horizontal joints.

Urethane Elastomeric Joint Sealants:
Type and Application: One-part nonsag urethane sealant, ASTM C 920, for vertical and horizontal joints, exterior and interior use.
Type and Application: One-part pourable urethane sealant, ASTM C 920, for horizontal joints, exterior and interior use.

Silicone Elastomeric Joint Sealants:
Type and Application: One-part nonacid-curing silicone sealant, ASTM C 920, for vertical joints, modulus as required for application, exterior use.
Type and Application: One-part acid-curing silicone sealant, ASTM C 920, for vertical joints, exterior use.
Type and Application: One-part mildew-resistant silicone sealant, ASTM C 920, for sanitary applications, interior use.

Latex Joint Sealants:
Type: Acrylic-emulsion, ASTM C 834.
Application: Interior joints in vertical and overhead surfaces with limited movement.

Auxiliary Materials: Plastic foam joint fillers; Elastomeric tubing backer rods; Bond breaker tape.

DIVISION 08 - OPENINGS

SECTION 08 11 13 – HOLLOW METAL DOORS AND FRAMES

Interior steel doors and frames.
Exterior steel doors and frames.

Standards: ANSI-A250/SDI-100, Recommended Specifications for Standard Steel Doors and Frames.

Performance Standards:
Fire-Rated Assemblies: NFPA 80, and acceptable testing agency listing.
Thermal-Rated Assemblies at Exterior: ASTM C 236 or ASTM C 976.

Steel Doors:
Door Type: Standard steel doors with hollow or composite construction.
Interior Doors: ANSI-A250/SDI-100, Level 2 and Physical Performance Level B (Heavy Duty), Model 2 (Seamless). Minimum 20 gage (.032 inch) cold-rolled steel, 1-3/4 inches thick.
Exterior Doors: ANSI-a250/SDI-100, Level 3 and Physical Performance Level A (Extra Heavy Duty), Model 2 (Seamless). Minimum 16 gage (.0598 inch) galvanized sheet steel, 1-3/4 inches thick.
Accessories: Sightproof stationary louvers and glazing stops.
Finish: Factory primed and field painted.

Steel Frames:
Interior Frames: Knockdown type, 16 gage (.0598 inch) sheet steel, mitered or coped corners.
Exterior Frames: Welded type, 14 gage (.0625 inch) galvanized sheet steel, mitered or coped corners.
Accessories: Door silencers and plaster guards.
Finish: Factory primed and field painted.

SECTION 08 14 16 - FLUSH WOOD DOORS

Quality Standards: AWI Architectural Quality Standards.
Fire Rated Wood Doors: Meeting ASTM E 152 requirements.

Interior Solid Core Flush Doors with Maple Veneer:
Grade: Custom grade.
Construction: 5-ply construction with particleboard core.
Finish: Transparent finish on slip-matched plain-sliced select white maple faces.

Interior Solid Core Flush Doors with Painted Finish:
Grade: Custom grade.
Construction: 5-ply construction with particleboard core.
Finish: Opaque finish on medium density overlay faces.

Interior Hollow Core Doors with Embossed Face:
Grade: Custom grade.
Construction: Standard hollow core.
Finish: Opaque finish on hardboard embossed faces.

Fitting and Finish:
Fitting: Factory-prefit and premachine doors.
Factory Finish: Transparent factory finish, catalyzed lacquer.
Site Finish: Shop prime and site finish.

SECTION 08 16 13 – FIBERGLASS DOORS

Apartment Entry Door:
Fiberglass 20 minute fire resistant rated doors.
Product/Manufacturer: Classic Craft 20-Minute Fire-Rated Door; Therma-Tru Corp.

Patio Door:
Fiberglass hinged patio door with smooth painted surface.
Product/Manufacturer: Classic Craft Canvas; Therma-Tru Corp.

SECTION 08 31 13 – ACCESS DOORS AND FRAMES

Access doors for walls and ceilings.

Access Doors:
Frames: 16 gage (.0598 inch) sheet steel with flange suitable for adjacent material.
Doors: 14 gage (.0625 inch) sheet steel.
Door Type: Flush panel.
Locking Devices: Cylinder locks.
Fire Rating: NFPA 80.

Fire Rated Attic Access Doors:
Product: WB FR 850 Series Upward Swinging Access Door; Williams Bros. Corporation of America.
Insulated, Flush Access Doors and Frames with Exposed Trim: Fabricated from metallic-coated steel sheet.
Hot Smoke Seal Gasket: all 4 sides.

SECTION 08 41 13 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

Exterior entrance doors.
Vestibule doors matching entrance doors.
Frames for entrances.

Aluminum Entrances and Storefront:
Door Style: Wide stile and rail doors.
Aluminum Members: ASTM B 221, B 209 and B 211.
Construction: Thermal-break type.
Steel Reinforcement: ASTM A 36, ASTM A 611, and ASTM A 570.
Glass and Glazing: Insulating and fully tempered glazing.
Glazing Color: Clear glass.
Door Hanging Devices: Ball-bearing butts.
Closers: Surface mounted.
Closer Operation: Single acting closers.

Aluminum Finish: Fluoropolymer, Kynar 500, 2-coat system.
Color shall match aluminum clad wood window specified in Section 08 52 00.

Auxiliary Materials: Weatherstripping and thresholds.

SECTION 08 53 13 – VINYL WINDOWS

Single hung and fixed windows.

Product/Manufacturer: Basis of design.
EcoShield 280; EcoSheild Window System; Kasson and Keller Inc..

Wood Windows:
Window Type: Vinyl windows.
Window Operation: Single-hung and fixed windows.
AAMA/NWWDA Performance Requirements: Provide wood windows of the performance class and grade indicated that comply with AAMA/NWWDA 101/I.S.2.
Design Pressure Rating: 50.

Glazing:
ST Energy Star Glazing Package: U-value of 0.29; SHGC of 0.29 and VLT of 0.55.
Insulated glass of clear float glass, complying with ASTM C 1036, Type I, Quality q3.

Glazing Color: Clear glass.

Anchors, Clips, and Window Accessories: Aluminum, nonmagnetic stainless steel, or galvanized steel.

Auxiliary Materials:
Ventilator opening limit device.
Operating hardware.
Insect screening.

SECTION 08 71 00 - DOOR HARDWARE

Hardware for Fire-Rated Openings: NFPA 80, and local requirements.
Handicapped Accessibility: ANSI A117.1, AADAG, and local requirements.
Materials and Application: ANSI A156 series standards.

Refer to Section 087100 – Door Hardware, attached to the end of this Outline Specification.

SECTION 08 71 13 - AUTOMATIC DOOR OPERATORS

Door operators for power-assisted doors.
Power Units: One-way swing door type.
Operator: [Electromechanical] [Hydraulic] [Pneumatic] operator.
Manual Door Control: Rail-supported switch.

Auxiliary Materials: Wall push-plate switch.

SECTION 08 80 00 - GLAZING

Exterior entrances and storefront.
Interior windows and glazed openings.
Doors.

Glass:

Primary Glass Products: Clear float glass, ASTM C 1036.
Heat-Treated Glass Products: Fully tempered glass, ASTM C 1048.
Laminated Glass Units: Polyvinyl butyryl interlayer.
Sealed Insulating Glass Units: ASTM E 774, Class A.
High-Performance Coatings: Low e (low emissivity) type.
Pattern Glass: Custom patterns.

Glazing:

Elastomeric glazing sealants.
Preformed glazing tapes.
Glazing gaskets.
Setting blocks, spacers, and compressible filler rods.

DIVISION 09 - FINISHES

SECTION 09 21 16.23 GYPSUM BOARD SHAFT-WALL ASSEMBLIES

Shaft enclosures.
Horizontal fire rated assemblies.

Cavity Shaft Wall Assemblies:
Shaftwall Board Thickness: Not less than 1 inch.
Studs: H studs or clips, not less than 0.0329 inch.

Gypsum Board Shaft Wall Materials:
Steel Framing: ASTM C 645.
Gypsum Shaftwall Board: ASTM C 442, Type X.
Gypsum Wallboard: ASTM C 36, Type X.
Gypsum Wallboard Joint Treatment Materials: ASTM C 475 and ASTM C 840.

Auxiliary Materials:
Cornerbeads, edge trim, and control joints.
Laminating adhesive.
Gypsum board screws, ASTM C 1002.
Concealed acoustical sealant.

SECTION 09 22 16 – NON-STRUCTURAL METAL FRAMING

Steel framing systems to receive gypsum board.

Steel Framing for Soffits:
Steel Studs and Runners: ASTM C 645, 20 gage (.0329 inch) steel studs.
Installation Standard: ASTM C 754.

Steel Framing for Suspended and Furred Ceilings:
Furring Channels: ASTM C 645, 25 gage (.0179 inch) resilient channels.
Accessories: Hangers and inserts.
Installation Standard: ASTM C 754.

Resilient sound isolation clips installed with acoustical sealant and drywall furring channels for support of gypsum board for noise control (de-coupling) in walls and ceilings.
Product/Manufacturer: GenieClip RST; Pliteq Inc.

SECTION 09 29 00 - GYPSUM BOARD

Gypsum Board Assemblies:
Interior walls, partitions, and ceilings for tape and joint compound finish.
Cementitious backer units for application of tile.

Gypsum Board Attachment:
Gypsum board screw-attached to steel framing and furring.
Gypsum board nail-attached to wood framing and furring.

Gypsum Board:
Gypsum Wallboard: ASTM C 36, regular, and fire-rated types, 5/8 inch typical thickness.
Gypsum Board, Type X: ASTM C 1396/C 1396M.
Gypsum Board, Type C: ASTM C 1396/C 1396M.
Water-Resistant Gypsum Backing Board: ASTM C 630, fire-rated types, 5/8 inch thickness.

Joint Treatment: ASTM C 475 and ASTM C 840, 3-coat system.

Installation Standard: ASTM C 840.

Cementitious Backer Units:
Type: ANSI A 118.9, cement-coated portland cement panels.
Thickness: 5/8 inch nominal.

Trim Accessories:
Material: Metal trim.
Types: Cornerbead, edge trim, and control joints.

Auxiliary Materials:
Gypsum board screws, ASTM C 1002.
Gypsum board nails, ASTM C 514.
Fastening adhesive.
Concealed acoustical sealant.
Mineral fiber sound attenuation blankets.

SECTION 09 30 00 - TILING

Interior Tile:
Wall tile over tile backer board at wet areas.
Floor tile over concrete slab.

Tile Materials: ANSI 118 series standard specifications.

Tile Installation: ANSI 108 series standard specifications and Tile Council of America, Handbook for Ceramic Tile Installation.

Extra Materials: At time of completing installation, deliver stock of maintenance materials to the Owner. 3 percent of each variety installed.

Tile Products: Refer to Room Finish Schedule and Color/Finish Legend.

Setting Materials: Latex-portland cement mortar, ANSI A118.4.

Grout: TruColor Grout; Bostik, Inc.

Setting Accessories:
Cementitious tile backer board.

SECTION 09 51 13 - ACOUSTICAL PANEL CEILINGS

Acoustical lay-in panel ceilings, trim, and exposed metal suspension system.

Extra Materials: At time of completing installation, deliver stock of maintenance materials to the Owner. 3 percent of each variety installed.

Acoustical Ceiling Panels: Refer to Room Finish Schedule and Color/Finish Legend.

Direct-Hung Suspension Systems, Non-Fire-Resistance Rated:
Type: 9/16 inch narrow-face, capped double-web steel, intermediate duty classification, ASTM C 635.
Suspension System Accessories: Attachment devices and hangers, ASTM C 635.

Auxiliary Materials:
Edge molding and trim.
Hold-down clips and impact clips.
Concealed acoustical sealant.

SECTION 09 65 00 - RESILIENT FLOORING

Extra Materials: At time of completing installation, deliver stock of maintenance materials to the Owner. 3 percent of each variety installed.

Products: Refer to Room Finish Schedule and Color/Finish Legend.

Vinyl Composition Tile: ASTM F 1066, Composition 1, nonasbestos formulated, Class 2, 12 by 12 inches by 1/8 inch thick.

Solid Vinyl Tile (Vinyl Plank): ASTM F 1700, Class III, printed film vinyl tile, Type B, embossed surface.

Sheet Vinyl With Backing: ASTM F 1303 Commercial grade.
Wearing Surface: Smooth.
Seams: Heat welded.

Auxiliary Materials: Edge strips and terminations.

SECTION 09 65 13 - RESILIENT BASE AND ACCESSORIES

Resilient wall base, resilient stair accessories, resilient flooring accessories, resilient carpet accessories.

Products: Refer to Room Finish Schedule and Color/Finish Legend.

Resilient Wall Base:
Rubber Wall Base: ASTM F 1861, Type TS (rubber, vulcanized thermoset), Group I (solid, homogeneous).

Resilient Accessories:
Stair tread covers.

Concrete Slab Primer: Nonstaining type.
Adhesives: Water-resistant type.

SECTION 09 68 13 – TILE CARPETING

Carpet tile and floor preparation.

Extra Materials: At time of completing installation, deliver stock of maintenance materials to the Owner. 3 percent of each variety installed.

Product: Refer to Room Finish Schedule and Color/Finish Legend.

Auxiliary Materials:
Adhesives, cements and fasteners.

Carpet Tile Installation Method: Glue-down installation.

SECTION 09 68 16 – SHEET CARPETING

Broadloom carpet and floor preparation.

Extra Materials: At time of completing installation, deliver stock of maintenance materials to the Owner. 3 percent of each variety installed.

Product: Refer to Room Finish Schedule and Color/Finish Legend.

Auxiliary Materials:
Adhesives, cements and fasteners.

Broadloom Carpet Installation Method: Glue-down installation.

SECTION 09 84 33 - SOUND-ABSORBING WALL UNITS

Sound-absorbing wall panels, shop-fabricated, fabric-wrapped panel units tested for acoustical performance.

Product/Manufacturer: Xorel Artform Acoustical Panels, Quiet-Core; Carnegie Xorel.

Sound-Absorbing Wall Panel: Manufacturer's panel construction consisting of facing material laminated to front face, edges, and back edge border of core.
Mounting: Back mounted with manufacturer's standard hook-and-loop strips, secured to substrate.
Core: Manufacturer’s standard 1 inch formaldehyde free material.
Facing Material: As indicated on Drawings.
Color and Pattern: As selected by Architect from manufacturer's full range.
Panel Shapes and Sizes: As indicated on Drawings

SECTION 09 91 00 - PAINTING

Painting and surface preparation for interior unfinished surfaces as scheduled.
Painting and surface preparation for exterior unfinished surfaces as scheduled.
Field-painting and surface preparation of exposed mechanical and electrical piping, conduit, ductwork, and equipment.

First-line commercial-quality products for all coating systems.
One coat primer and two finish coats.

Refer to Room Finish Schedule and Color/Finish Legend.

EXTERIOR PAINT SCHEDULE
Ferrous Metal to Receive Semi-Gloss Finish.
Zinc-Coated Metal to Receive Semi-Gloss Finish.

INTERIOR PAINT SCHEDULE
Gypsum Drywall to Receive Lusterless Finish (Ceilings).
Gypsum Drywall to Receive Satin Finish (Walls).
Gypsum Drywall to Receive Semigloss Finish (Walls).
Woodwork and Hardboard to Receive Semigloss Finish.
Stained Woodwork to Receive Stained-Varnish Rubbed Finish.
Natural Finish Woodwork to Receive Rubbed Varnish Finish.
Ferrous Metal to Receive Semigloss Finish.
Zinc Coated Metal to Receive Semigloss Finish.

DIVISION 10 - SPECIALTIES

SECTION 10 14 00 - SIGNS

Building Signage:
Panel signs.
Dimensional letters and numbers.

Panel Signs:
Type: Framed.
Material: Plastic.
Copy: Engraved lettering.
Copy: Raised lettering.

Dimensional Letters and Numbers:
Type: Fabricated.
Material: Aluminum.

Metal Finishes:
Aluminum: Baked enamel.

SECTION 10 28 00 – TOILET, BATH AND LAUNDRY ACCESSORIES

Toilet Accessories:
Toilet tissue dispensers, single roll.
Grab bars.
Shower curtain rods.
Shower curtains (weighted) and hooks.
Towel bars.
Folding shower seats.
Medicine cabinets.
Robe hooks.
Paper towel dispensers.
Combination towel dispenser/waste receptacle units.
Sanitary napkin disposal units.
Soap dispensers, wall mounted.
Mop and broom holders.

Mirrors and Frames:
Glazing: Mirror glass, 1/4 inch thick (6 mm), ASTM C 1036.
Frames: Stainless steel and wood frames.
Type: Standard wall unit.

Materials and Finishes:
Stainless Steel: AISI Type 302 or 304, No. 4 polished finish.
Chromium Plated Brass or Steel: ASTM B 456, Type SC 2.
Phenolic Faces: High-pressure melamine.
Baked Enamel on Steel: Factory-applied gloss white.

SECTION 10 44 13 - FIRE EXTINGUISHER CABINETS

Fire Extinguisher Cabinets.

Cabinets:
Mounting: Recessed.
Mounting: Semirecessed.
Trim: Exposed.
Doors: Enameled steel, baked enamel finish.
Door Style: Duo-panel.

SECTION 10 44 16 - FIRE EXTINGUISHERS

Fire Extinguishers:
Fire extinguishers.
Fire extinguisher mounting brackets.

Fire Extinguishers:
Type: Multipurpose dry chemical type.
Rating: Sized for project requirements.
Public Area Mounting: Cabinet mounted.
Service Area Mounting: Metal brackets.

SECTION 10 55 00 - POSTAL SPECIALTIES

Horizontal Mail Boxes:
Loading: Front loading type.
Materials: Aluminum, powder coated paint finish.

SECTION 10 57 23 - WIRE CLOSET SHELVING

Vinyl-coated ventilated shelving, mounting hardware and accessories.

Storage and Bedroom Closet (Standard Unit):
Product/Manufacturer: FreeSlide shelf with Direct Mount; Rubbermaid Home Products.
Shelf Depth: As indicated on Drawings.

Accessible Apartment Unit, Storage and Bedroom Closet:
Product/Manufacturer: FreeSlide shelf with FastTrack adjustable mounting hardware; Rubbermaid Home Products.
Shelf Depth: As indicated on Drawings.

Linen Closet:
Product/Manufacturer: Linen shelf with FastTrack adjustable mounting hardware; Rubbermaid Home Products.
Shelf Depth: As indicated on Drawings.

DIVISION 11 - EQUIPMENT

SECTION 11 31 00 - RESIDENTIAL APPLIANCES

Kitchen Appliances:
- Refrigerator/freezers.
- Electric Range: Slide-in, and drop-in types.
- Range Hood
- Dishwasher in Community Room.

Laundry Appliances:
- Clothes washers.
- Clothes dryers, electric.

SECTION 11 23 26 – LAUNDRY EQUIPMENT

Laundry Appliances:
- Clothes washers.
- Clothes dryers, gas.

Clothes Washer:
- Product/Manufacturer:
  - Electronic Commercial Front Load Washer, Model LFNE5BSP113TW01; Speed Queen.
- Type: Freestanding, front loading, electric unit.
- Dimensions:
  - Width: 26-7/8 inches.
  - Depth: 27-3/4 inches.
  - Height: 40-7/16 inches.
- Motor size: 0.9 hp.

Gas Clothes Dryer:
- Product/Manufacturer:
  - Commercial Dryer, Model No. Gas LDGE5BGS113TW01; Speed Queen.
- Type: Freestanding single load dryer, gas unit.
- Dimensions:
  - Width: 26-7/8 inches.
  - Depth: 28 inches.
  - Height: 78-3/16 inches.
- Capacity: 7.0 cubic feet.
- Motor size: 1/3 hp.

DIVISION 12 - FURNISHINGS

SECTION 12 21 13 - HORIZONTAL LOUVER BLINDS

Horizontal louver blinds with polymer slats.
Flame-Resistance Rating: Complying with NFPA 701.
Slat Width: 1 inches.
Operating Mechanisms: Manual.
Valance.
Mounting: Overhead.

SECTION 12 35 30 - KITCHEN CASEWORK

Prefabricated modular kitchen casework.

Refer to Room Finish Schedule and Color/Finish Legend.

Casework:
Materials: Solid wood, white maple veneer.
Face Style: Flush overlay.
Frame Fabrication: Face frame.
Finish: Stain, sealer coat, and resin topcoat.
Finish Application: Factory-finished.

SECTION 12 36 23 - PLASTIC-LAMINATE-CLAD COUNTERTOPS

Location: Countertops in Apartment Units.

High-Pressure Decorative Laminate: NEMA LD 3, Grade HGP.
Backer Sheet: Provide plastic-laminate backer sheet, NEMA LD 3, Grade BKL, on underside of countertop substrate.
Core Material at Sinks: Exterior-grade plywood.
Build up countertop thickness to 1-1/2 inches at front, back, and ends with additional layers of core material laminated to top.

SECTION 12 36 61.13 - CULTURED MARBLE COUNTERTOPS

Cultured Marble: Gel-coated solid fabrication of filled plastic resin complying with CSA B45.5/IAPMO Z124.

Colors and Patterns: As selected by Architect from manufacturer's full range.

Configuration: One-piece units with integral sink bowls and backsplashes unless otherwise indicated, not less than 1/2 inch thick.
Front: Waterfall edge.
Backsplash: Straight, with 3/8-inch radius cove and slightly eased at top.
Endsplash: Matching backsplash.

Fabrication: Fabricate tops in one piece with integral sink bowls and backsplashes unless otherwise indicated.
Provide sink with rear discharge overflow drain.

SECTION 12 48 13 – ENTRANCE FLOOR MATS AND FRAMES

Floor Mats:
Type: Carpet-type mats.

Refer to Room Finish Schedule and Color/Finish Legend.

DIVISION 13 - SPECIAL CONSTRUCTION

Not Used.

DIVISION 14 - CONVEYING EQUIPMENT

SECTION 14 24 00 - HYDRAULIC ELEVATORS

Pre-engineered hydraulic elevators:
Passenger elevators.

Safety Code: ASME/ANSI A17.1, local regulations and handicapped requirements.

Product/Manufacturer: Basis of design.
Endura MRL; ThyssenKrupp Elevator.

Features and Components:
Type: Holeless hydraulic unit.
Control Systems: Single elevator controls.
Cab Finishes: Plastic laminate and vinyl tile.
Door Panels: Stainless steel, AISI No. 4 satin finish.
Hoistway Entrances: Stainless steel, AISI No. 4 satin finish.

Auxiliary Operations and Controls:
Key controlled car light switch and fan switch.
Alarm/emergency stop button.
Car position and direction indicators.
Audible signals.
Automatic 2-way leveling.
Key switches to lockout individual floors.
Door nudging device.
Liner blanket hooks and blankets.
Emergency power operation.

SCHEDULE
Hydraulic Elevator Schedule:
Capacity: 3500 pounds.
Speed: 150 feet per minute.
Car Size: 6'-8" wide by 5'-5" deep by 8'-0" high.
Landings Served: First and Second floors.
Travel Distance: As indicated on Drawings.
Entrance Size: 3'-6" by 7'-0".
Entrance Door Operation: Center opening.
Power Supply: [208] [480] volt, 3 phase, 60 Hz.

M/E ENGINEERING TO PROVIDE

DIVISION 21 – FIRE SUPPRESSION

By Consulting Engineering, see attached.

DIVISION 22 - PLUMBING

By Consulting Engineering, see attached.

DIVISION 23 – HEATING VENTILATING AND AIR CONDITIONING (HVAC)

By Consulting Engineering, see attached.

DIVISION 26 - ELECTRICAL

By Consulting Engineering, see attached.

DIVISION 27 – COMMUNICATIONS

By Consulting Engineering, see attached.

DIVISION 28 – ELECTRONIC SAFETY AND SECURITY

By Consulting Engineering, see attached.

DIVISION 31 – EARTHWORK

By Consulting Engineering, unless included below.

SECTION 31 20 10 – EARTH MOVING FOR BUILDINGS

Coordinate with the requirements of the Geotechnical Engineer's report.

Excavation, filling, compaction, and grading for building earthwork.
Materials for subbase, drainage fill, and backfill for building slabs and foundation.
Rock excavation without blasting unless authorized.
Supply of additional materials from offsite if required.
Removal and legal disposal of excavated materials: Off site.

The Owner will secure the services of a testing laboratory to perform compaction test and special inspections.

Compaction:
Under structures, building slabs, steps, 95 percent maximum density, ASTM D 1557.

Subbase Material:
Graded mixture of natural or crushed gravel, crushed stone or slag, and natural or crushed sand.

Drainage Fill (Capillary Water Barrier):
A crushed stone material complying with the gradation requirements of NYSDOT Item 304.12.

Backfill and Fill Materials:
Satisfactory soil materials free of clay, rock or gravel larger than 2 inches in any dimension, debris, waste, frozen materials, vegetation, and other unsuitable materials.

Structural Fill: Imported granular material complying with New York State Department of Transportation, Items 203.7 (Select Granular Fill).

Granular Fill: Granular material (non-recycled) complying with New York State Department of Transportation, Item 304.12 (Crusher-Run Stone).

SECTION 31 23 15 – PASSIVE RADON MITIGATION SYSTEM

Passive sub-slab depressurization system includes solid wall and perforated pipe and fittings.

Perforated-Wall Pipes and Fittings:
Perforated PVC Sewer Pipe and Fittings: ASTM D 2729, bell-and-spigot ends, for loose joints.

Solid-Wall Pipes and Fittings:
PVC Sewer Pipe and Fittings: ASTM D 3034, SCH 40 pipe and fittings for solvent welds.

DIVISION 32 – EXTERIOR IMPROVEMENTS

By Consulting Engineering, unless included below.

SECTION 32 33 00 - SITE FURNISHINGS

Refer to Landscape Drawings for the following items:
- Table and Seating Units
- Trash receptacle.

SECTION 32 90 00 - PLANTING

Landscape Work:
- Trees, shrubs, plants, and ground cover.
- Finish grading and lawns.
- Topsoil and soil amendments.
- Initial maintenance of landscape materials.
- Pruning and relocation of existing plant materials.
- Reconditioning existing lawns.

Plant Materials:
- Deciduous trees.
- Deciduous shrubs.
- Coniferous and broad leafed evergreen trees and shrubs.
- Ground cover.
- Plants.

Landscape Materials:
- Gravel: Water-worn gravel.
- Anti-Erosion Mulch: Seed-free salt hay or threshed straw.
- Anti-Desiccant: Emulsion type, film-forming.
- Plastic Sheet: Black polyethylene, 8 mils.
- Weed control mat: Water permeable fiberglass or polypropylene fabric.
- Wrapping: Tree-wrap tape.
- Stakes and Guys: New hardwood, treated softwood, or redwood.
- Metal Edging: Commercial steel edging.
- Wood Headers and Edging: All heart redwood or pressure treated southern yellow pine.

SECTION 32 92 00 – TURF AND GRASSES

Lawns: Hydroseed

Lawn seed for grassed areas: fresh, clean, new crop, delivered in original packages, unopened, bearing guaranteed analysis.

Topsoil: Fertile, friable topsoil from offsite.

Topsoil: From site stockpile with additional fertile, friable topsoil from local source.

Soil Amendments.

DIVISION 33 – UTILITIES

By Consulting Engineering

END OF OUTLINE SPECIFICATION