TOWNSHIP OF FAIRFIELD
CUMBERLAND COUNTY, NEW JERSEY

Contract Documents
and Specifications for the

IMPROVEMENTS
FOR
FAIRFIELD TOWNSHIP
SENIOR CENTER
INTERIOR RENOVATIONS
MAY 2024

Marvin Pierce Jr., MAYOR

TOWNSHIP COUNCIL

MIKE PETERSON ..... DEPUTY MAYOR

MIKE BURDEN..... TOWNSHIP ADMINISTRATOR
LINDA M. GONZALES.....MUNICIPAL CLERK
STEPHEN BATEMAN.....COMMITTEEMAN
JULIA BURRUS..... COMMITTEEWOMEN
BENJAMIN BYRD, Sr. .....COMMITTEEMAN

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CME File: V

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SPECIFICATIONS

DIVISION 1 - GENERAL REQUIREMENTS

1-2.07 POGRESS SCHEDULE - Supplement to General Conditions Article F 2.07

Within ten (10) days after the award of the Contract, the Contractor shall submit in writing a proposed program of operation, showing clearly how he proposes to conduct the work so as to bring about the completion of his work within the time limit specified. This program shall outline the proposed sequence of operations, the rates of progress and the dates when each part of his work will be completed. The work under this Contract shall, in general, be so scheduled that the work will be coordinated with work by others on adjacent contracts, if any.

The Contractor shall accompany this schedule with a list of delivery dates for materials and equipment.

This plan of operation may be adjusted and revised as the work progresses, but such changes must have at all times the approval of the Engineer.

In any event it shall be the purpose of the progress schedule to guide the course of the work, and strict adherence to it will be demanded by the Engineer.

If all or part of the work of the Contract will be substantially delayed by the extremes of winter weather, the Contractor shall anticipate such delays, shall prepare his progress schedule in a manner that will minimize the overall effect of such anticipated weather delays, and shall periodically update said schedule in accordance with actual weather delays experienced to that date and anticipated for any subsequent period.

1-4.01 BOUNDARIES OF THE WORK - Supplement to General Conditions Article F 4.01

The Contractor shall obtain from the Owner all information regarding the areas that may be available for his operations and to what extent and for what period of time he may occupy them.

He shall also obtain from the Municipality, County and/or NJDOT required provisions to provide and maintain traffic along Municipal or County Roads and/or State or Federal Highways approaching or within the site or sites of his work, and he shall comply with the requirements of these public agencies.

1-6.03.01 WORK IN BAD WEATHER - Supplement to General Conditions Article F 6.03

During freezing, stormy or inclement weather, the Contractor shall provide heat, shelter, and other facilities as directed and necessary to maintain the progress schedule and all work shall be done in a manner to secure first class construction throughout.

1-6.03.03 WATER AND ELECTRICITY - Supplement to General Conditions Article F 6.03

The Contractor shall unless specified, provide the necessary water supply at his own expense and shall pay for all water used.

The Contractor shall unless otherwise specified, provide, at his own expense, adequate temporary lighting and electrical power facilities if required for the proper prosecution and inspection of the work. If, in the opinion of the Engineer, these facilities are inadequate, the Contractor shall provide facilities which are satisfactory to the Engineer.

1-6.03.05 TRAFFIC PROTECTION AND PARKING OF CARS - Supplement to General Conditions Article F 6.03

The Contractor shall protect all traffic and parked cars, when lawfully parked, and shall see to it that the cars belonging to his workmen are parked in areas permitted by the municipal authorities.

He shall take particular care to provide access to adjacent property, both for ordinary traffic and emergency vehicles. Access to fire hydrants shall be kept clear at all times.

Unless expressly authorized in advance and in writing, the Contractor shall maintain a minimum of one lane of traffic through the project area controlled by competent Flagmen as necessary. IMMEDIATE clearance through the project area shall be furnished for Fire/Rescue/Police Vehicles and School Buses. If necessary, work shall be temporarily suspended to permit the immediate passage of Fire/Rescue/Police or other emergency vehicles and/or school buses.

Local and through traffic shall be maintained at all times unless the Owner approves a detour route for a duration of time. Whenever it is necessary to maintain only a single line of traffic, the Contractor shall furnish and employ sufficient competent traffic directors during the day and night to adequately guide and protect traffic.

The Contractor will be required to prevent the formation and flying of dust to the satisfaction of the Engineer. The use of chemicals, calcium chloride or other petroleum products is prohibited as per N.J.A.C. 7:22-10.11(m), a copy of which is included in these specifications.

The Contractor shall erect and maintain barricades, danger signals and warning signs at working sites, closed roads, intersections and other places of danger to traffic or to the completed work as directed and approved by the Engineer. Each barricade shall be provided with red flashing lights battery operated not more than five feet apart and not less than three lights shall be used.

Where specific detour routes or traffic protection signs and equipment are specified or required by the plans, the Contractor will provide same along with all other signage equipment and flagmen necessary to satisfactorily protect and safely coordinate traffic.

Vehicular and pedestrian traffic on streets shall be maintained and protected at all times, and all operations in or adjacent to streets, sidewalks, and walkways shall be conducted and controlled accordingly.

The Contractor shall, for the protection of the traveling public and his personnel, familiarize himself and adhere strictly to the requirements of these Specifications and to the requirements of Title 39, the Motor Vehicle Code of the State of New Jersey, wherever it shall pertain to necessary and required precautionary measures regarding the type of work being done.

The cost of protection of traffic as above described shall be included in the prices bid for the various items scheduled in the Proposal.

1-6.03.08 DOMESTIC MATERIAL - Supplement to General Conditions Article F 6.03

The Contractor during the course of this Contract agrees to use, supply or deliver only such manufactured articles, materials and supplies as have been manufactured in the United States substantially from articles, materials and supplies mined, produce or manufactured in the United States, wherever available.

1-6.11 FINAL CLEANING - Supplement to General Conditions Article F 6.11

At the conclusion of the work, all erection plant, tools, temporary structures, and materials belonging to the Contractor shall be promptly taken away, and he shall remove and promptly dispose of

all water, dirt, rubbish, or any other foreign substances.

The Contractor shall thoroughly clean all equipment and materials installed by him/her and shall deliver over such materials and equipment undamaged in a bright, clean, polished, and new appearing condition.

1-6.13.01 PROTECTION OF WORK UNTIL COMPLETION - Supplement to General Conditions Article F 6.13

During performance and up to the date of final acceptance, the Contractor shall be under an absolute obligation to protect the finished and unfinished work against any damage, loss or injury. The Contractor shall take proper precautions to protect the finished work from loss or damage, pending completion and the acceptance of all the work included in the entire Contract, provided that such precaution shall not relieve the Contractor from any and all liability and responsibility for loss or damage to the work occurring before acceptance by the Owner. Such loss or damage shall be at the risk of and borne by the Contractor, whether arising from acts or omissions of the Contractor or others, or from floods, storms, high tides or otherwise. In the event of any such loss or damage, the Contractor shall forthwith repair, replace and make good the work without additional compensation or extension of time therefore, except as may be otherwise provided herein.

These provisions shall not be deemed to create any new right of action in favor of third parties against the Contractor or Owner.

The Contractor shall provide for the removal of all dirt spilled from the trucks on existing pavements over which it is hauled, or which is washed or otherwise deposited thereon by reason of his work, whenever, in the opinion of the Engineer, the accumulation is sufficient to cause the formation of mud, interfere with drainage or to create a traffic hazard.

Costs incidental to the maintenance of existing roadways as herein described, shall not be paid for under any specific item but shall be included in the unit prices bid for other items scheduled in the Proposal. In the event that the Contractor fails to maintain safe traffic conditions and job conditions, the Municipality may after failure of the Contractor to provide safe traffic conditions, hire guards or take such precautions to safeguard traffic, and the cost of same shall be deducted from payment due the Contractor.

1-6.13.02 CARE OF PUBLIC AND PRIVATE PROPERTY - Supplement to General Conditions Article F 6.13

The Contractor shall preserve from damage all property along the line of the work, or which is in the vicinity of or is in any way affected by the work, the removal or destruction of which is not called for by the Plans. This applies to the public utilities, railroads, trees, monuments, fences, pipe and underground structures, public streets (except natural wear and tear of streets resulting from legitimate use thereof by the Contractor), and wherever such property is damaged due to the activities of the Contractor, it shall be immediately restored to a first class condition by the Contractor and at his own expense.

In case of failure on the part of the Contractor to restore such property, or make good such damage or injury, the Owner may, upon forty-eight hours notice, proceed to repair, rebuild, or otherwise restore such property as may be deemed necessary, and the cost thereof will be deducted from any moneys due or which may become due the Contractor under this Contract.

Nothing in this clause shall prevent the Contractor from receiving proper compensation for his/her costs incurred because of the removal or replacement of any public or private property, when this is made necessary by alteration of grade or alignment, or any such work authorized by the Owner, provided that such property has not been damaged through fault of the Contractor, his/her employees, or agents.

1-6.13.04 ACCIDENT PREVENTION AND FIRST AID - Supplement to General Condition F 6.13

Precautions shall be exercised at all times for the protection of persons and property. The safety provisions and applicable laws, building and construction codes shall be observed. Machinery and equipment shall be guarded and all hazards eliminated in accordance with safety provisions of Construction Industry OSHA Safety and Health Standards (29CFR 1926/1910), including amendments and supplements to date, published by the U.S. Department of Labor, Occupational Safety and Health Administration, to the extent that such provisions are not in contravention of applicable law. The Contractor shall provide suitable barricades, red lights, "Danger" or "Caution" signs and watchmen at all places where the work constitutes in any way a hazard to the public, or workers.

The Contractor shall keep upon the site, at each location where work is in progress, a completely equipped first-aid kit and shall provide ready access thereto at all times when people are employed on the work.

1-6.13.06 WATCHMEN & FLAGMEN - Supplement to General Conditions Article F 6.13

Watchmen and/or Flagmen shall be furnished and shall be on duty appropriate to carry out the Contractor's responsibility for safety and protection.

1-6.17 WORKING DRAWINGS - Addition to General Conditions Article F 6.17

The Contractor shall promptly prepare and submit layout, detail, and shop drawings for such parts of the work as specified hereafter under the specifications for materials, workmanship and Contract Items. These drawings will be known as "Working Drawings".

The drawings shall be numbered to coincide with the Division and article of the specifications related to same, and consecutively numbered for all individual drawings for a particular item or items related to the particular division and article and shall accurately and distinctly present the following:

a. All work and erection dimensions.

b. Arrangement and sectional views.

c. Necessary details, including complete information for making connections between work under this Contract and work under other Contracts.

d. Kinds of materials and finishes.

e. Parts list and description thereof.

Each drawing shall be dated and shall contain the name of the project, contract number, Contract Item and paragraph number, names of equipment or materials, and the locations at which the equipment or materials are to be installed in the work. The Engineer may decline to consider any working drawing that does not contain complete data on the work and full information on related matters.

If the working drawings show departures from the Contract requirements, the Contractor shall make specific mention thereof in his letter of submittal and on the subject drawing or drawings. Otherwise, approval of such submittals shall not constitute approval of the departures. Approval of the drawings shall constitute approval of the subject matter thereof only and not of any structure, material equipment or apparatus shown or indicated. The approval of drawings will be general and shall not relieve the Contractor of responsibility for the accuracy of such drawings, nor for the proper fitting and construction of the work, nor for the furnishing of materials or work required by the Contract and not indicated on the drawings. No work called for by working drawings shall be done until the said

drawings have been approved by the Engineer.

The procedure in seeking approval of working drawings shall be as follows:

a. The Contractor shall submit for approval two prints and one reproducible sepia copy, or six prints in the case of manufacturer's catalogue "cuts" and similar items, of each of the drawings to the Engineer. The submission of drawings shall be accomplished by letter of transmittal in duplicate, containing the name of the project, the name of the Contractor, the number of drawings, titles, and other requirements.

b. When a drawing is satisfactory to the Engineer, it will be stamped "NO EXCEPTIONS TAKEN", be dated, and two copies thereof will be returned to the Contractor by letter.

c. Should a drawing be unsatisfactory to the Engineer, he will stamp thereon "REVISE AND RE-SUBMIT", or "REJECTED", and will return one copy thereof to the contractor with the necessary corrections and changes indicated. The Contractor must make such corrections and changes and again submit two prints and one reproducible sepia copy of the drawing for approval, within five (5) working days of the date of rejection.

The Contractor shall revise and resubmit the working drawings as required by the Engineer, until "NO EXCEPTIONS TAKEN" thereof is obtained.

1-13.02 INSPECTION - Supplement to General Conditions Article F 13.02

During the progress of the work and up to the date of final acceptance, the Contractor shall, at all times afford the representatives of the Owner every reasonable, safe and proper facility for inspecting the work done or being done at the site. The inspection of any work shall not relieve the Contractor of any of his/her obligations to perform proper and satisfactory work as herein specified. Finished or unfinished work found not to be in strict accordance with the Contract shall be replaced as directed by the Engineer, even though such work may have been previously approved and payment made therefore.

Failure or neglect on the part of the Engineer to condemn or reject bad or inferior work or materials shall not be construed to imply an acceptance of such work or materials, if it becomes evident at any time prior to the final acceptance of the work by the Owner, neither shall it be construed as barring the Owner at any subsequent time, from the recovery of damages or of such a sum of money as may be needed to build anew any portion of the work in which fraud was practiced or improper materials hidden, or used, wherever found.

In addition to the above requirements, the owner's representative will ensure that the requirements of the specification relating to environmental and cultural resource protection and restoration are carried out in accordance with N.J.A.C. 7:22-10.12(a).

1-13.03 NOTICE OF INSPECTION TO BE GIVEN BY THE CONTRACTOR - Supplement to General Conditions Article F 13.03

Certain items in the work will require special inspection by the Engineer and/or his inspectors. The Engineer will so specify these items to the Contractor during the course of the work; whereupon the Contractor, before proceeding with such specified items, shall give two working days written notice in advance to the Engineer, for the purpose of scheduling and providing such inspection service.

1-13.05 STOPPING WORK - Supplement to General Conditions Article F 13.05

The Engineer, acting as the Owner's representative, may stop, by written order, or a verbal order confirmed in writing within twenty-four hours, any work or any part of the work under the Contract if in his opinion the methods or materials employed are unsafe, improper or defective. When work is so

stopped, it shall not be resumed until the methods or conditions are revised to the satisfaction of the Engineer, which must be signified in writing. Work may also be stopped by the Engineer or required to be postponed for an adequate period of time if the work interferes with, or unduly interrupts the operation of existing utilities. The Contractor is required to fully inform him/herself as to the nature and location of existing utilities within the project area, all locations of actual or potential interference, and coordinate the activities of affected utilities regarding any necessary temporary or permanent relocations to minimize possible or actual delay to planned progress.

1-18.1 PROJECT PHOTOGRAPHS

AS REQUIRED BY THE TERMS OF THE PROPOSAL and Contract Agreement, the Contractor shall provide three (3) CDs of acceptable, un-retouched TIFF or JPG format digital photographs. Digital photos shall be a minimum of 1.0 megapixel. Each of the photos shall be identified as pre-construction, progress, and final construction comprising not less than the total number of individual prints stipulated in the proposal, with the cost of same included in the various prices bid. Special attention shall be given to environmentally critical areas and areas outside of the public right-of-way. Photographs shall be labeled by station so that upon completion of the construction, or during construction, if necessary, subsequent photographs can be taken from the same control points.

1-19.1 ABBREVIATIONS

Where any of the following abbreviations are used in the Specifications they shall have the meaning set forth opposite each.

ACI	American Concrete Institute
ASTM	American Society for Testing Materials
ASCE	American Society of Civil Engineers
AWWA	American Water Works Association
ASME	American Society of Mechanical Engineers
NBS	National Bureau of Standards
AIEE	American Institute of Electrical Engineers
AASHO	American Association of State Highway Officials
NEMA	National Electrical Manufacturers Association
NEC	National Electric Code, latest edition
AISC	American Institute of Steel Construction
ASA	American Standards Association
AWS	American Welding Standards

FEDERAL SPECIFICATIONS

Federal Specifications issued by Federal Supply Service of the General Services Administration, Washington, D.C.

125 LB. AMERICAN STANDARD

American Standard (ASA B16.1-1948) for Cast Iron Pipe Flanges and Flanged Fittings, Class 125

USS GAGE	United States Standard Gage
N.J.S.H.D.S.S.	New Jersey State Highway Department Specifications, 1983 (as amended)
GPD	Gallons per day
MGD	Million gallons per day
GPM	Gallons per minute
CFS	Cubic feet per second

SPECIFICATION ABBREVIATIONS

Omission in wording. For brevity, some sentences are incomplete and such words and phrases as "the contractor shall", "in conformity there-with", "shall be", "as noted on drawing", "according to the

drawings", "a", "an", "the" and "all" which clutter up most specifications are sometimes omitted. They shall be supplied by the reader.

The contractor shall provide all items, articles, materials, operating methods listed, mentioned or scheduled on drawings or in specifications, including all labor, materials, equipment, incidentals necessary and required for their completion.

Approvals, etc., wherever the words "approved", "satisfactory", "direct", "submitted", "inspected" or similar words or phrases are used, it shall be assumed that the word "Engineer" or one of their representatives follows the verb as the object of the clause, such as "approved by the Engineer" and "submitted to the Engineer".

References to the Standard Specifications or manufacturer's installation directions shall mean to the latest edition thereof, as published prior to the date of the agreement unless otherwise indicated.

Terminology: Words which have well known technical or trade meanings are used herein in accordance with such recognized meanings.

1. "Acceptable", "equal to", "proper", and other qualifying terms imply the judgment by the Architect/Engineer.

2. "Approved" or "Approval" means any equipment, item or material approved by the Architect/Engineer.

3. "Or equal" means any equipment, item or material approved by the Architect/Engineer as equivalent to the specified equipment, item or material.

4. "Concealed" means work which is not exposed to view when the project is complete.

5. "Exposed" means work which remains exposed to view when the project is complete.

6. "Delivery" means unloading and storing at the site.

7. "Furnish" means to supply and deliver to the job.

8. "Governmental" means all Municipal, State and Federal government agencies.

9. "Install" means complete erection and connection of work.

10. "Piping" includes piping and all fittings, valves, hangers and other accessories related to piping.

11. "Provide" means "furnish" and "install" as defined above.

12. Words in singular form shall include as many such devices as are required to complete the work.

1-20.1 MATERIALS AND EQUIPMENT

In order to establish standards of quality, the Engineer, in the detailed Specifications, may have referred to certain products by name and/or catalog number. This procedure is not to be construed as eliminating from completion other products of equivalent or better quality by other suppliers or manufacturers where fully suitable in design and manufacture. For any named manufactured item in the specification or on the drawing, it shall be understood that these items shall be followed by the term "or equal," which will allow for substitute items of equal or better quality. Anywhere the term "or approved equal" is used, it shall be understood to mean "or equal".

The Contractor's bid must be based upon the materials and equipment named in the Specifications, or materials and equipment of equivalent quality and effectiveness. The first named supplier shall be considered as the standard or reference, for the Engineer's design and for the equivalency determination to be made by the Engineer.

1-21 EXISTING UTILITIES

Prior to the start of any excavation work, the contractor shall contact the following in order to obtain firsthand information of underground piping and conduits:

ATLANTIC CITY ELECTRIC – PLEASANTVILLE OPERATIONS
Attn: Robert Wolcott/David Darcy/ Ken Mosca
2542 Fire Road
Egg Harbor Township, New Jersey 08234

ATLANTIC COUNTY UTILITIES AUTHORITY
Attn: Tom Ganard, PE
6700 Delilah Road
Egg Harbor Township, NJ 08234
Telephone 609-272-6950

VERIZON COMMUNICATIONS
Attn: Jennifer P. Young/ Gerard Cruz
24 Curtis Avenue, Second Floor
Woodbury, NJ 08096

COMCAST CABLE
Attn: Bob Mayeux, Construction Supervisor
901 West Leeds Avenue
Absecon, New Jersey

SOUTH JERSEY GAS COMPANY
Attn: Johnathan Oliva
One South Jersey Place
Atlantic City, New Jersey, 08701

NEW JERSEY AMERICAN WATER
Attn: Tim Green
3215 First Road
Egg Harbor Township, NJ 08234
Telephone 609-667-4640

FAIRFIELD TOWNSHIP ADMINISTRATION
Attn: Mike Burden Administrator
70 Fairton-Gouldtown Rd.
Fairton, NJ
Telephone 856 4519284

FAIRFIELD TOWNSHIP PUBLIC WORKS DEPARTMENT

CUMBERLAND COUNTY DEPARTMENT OF REGIONAL PLANNING AND DEVELOPMENT – ENGINEERING DIVISION

NEW JERSEY ONE CALL SYSTEM
800-272-1000
or
811

SECTION 01 11 00
SUMMARY OF WORK

PART ONE: GENERAL

1.1 Summary

1.1.1 The conditions of the separate contract with owner and applicable requirements of Division 01 govern this section.

1.1.2 Perform Work of Contract under separate contract with Owner in accordance with the Conditions of the Contract, and as modified by Supplementary Conditions of the Contract.

1.1.3 This Section includes administrative and procedural requirements for the following:

1.1.3.1 Work Covered by Contract

The proposed project shall include but not limited to the following:

- Renovate existing basement level with new partitions, finishes, doors frame and hardware, electrical, plumbing, HVAC units and ductwork.
- Install new toilet room, toilet fixtures, toilet accessories finishes.
- Provide and install new Inclined Platform Lift between upper and lower levels.
- Install new VCT floor in kitchen.
- Install new rubber stair treads on existing interior stair.
- Provide and install new Modernfold Soundmaster Accordion movable wall system.
- Provide rigid insulation on walls receiving gyp board finish. All gyp board walls to be made ready for paint by others.
- Rearrange existing freezers in pantry and freezers in basement to first floor.

1.2 Use of Premises

1.2.1 Contractor shall have use of premises for construction operations as indicated on drawings by the contract limits.

1.2.2 Use of Existing Building: Maintain existing building in a weather-tight condition throughout construction period. Repair damage caused by construction operations. Protect building and its occupants during construction period. The building is an occupied building for employees and the public during construction.

1.3 Work Phases

1.3.1 The Work shall commence on Notice to Proceed and the duration of Work shall be based on the estimated schedule.

1.3.2 Refer to the Standard Form of Agreement between Owner and the General Conditions of the Contract for additional scheduling details.

1.4 Owner Occupancy

1.4.1 Partial Owner Occupancy: The Owner reserves the right to place and install equipment in completed areas of the building, prior to Substantial Completion provided that such occupancy does not interfere with completion of the Work. Such placing of equipment and partial occupancy shall not constitute acceptance of the total Work. Contractor shall be aware that the building is an active building and work around areas that are occupied. Owner will cooperate with the Contractor when such work will interfere with work in progress.

1.4.2 A Certificate of Substantial Completion will be executed in accordance with conditions of the Contract.

1.4.3 Contractor shall obtain a Certificate of Occupancy from local building officials prior to Owner occupancy.

1.4.4 Prior to partial Owner occupancy, mechanical and electrical systems shall be fully operational. Required inspections and tests shall have been successfully completed. Upon occupancy the Owner will be provided operation and maintenance of mechanical and electrical systems in occupied portions of the building.

1.4.5 Prior to partial Owner occupancy, emergency and life safety systems shall be fully operational. Emergency and life safety systems include, but are not limited to, fire alarm systems, and emergency egress devices. For emergency exiting purposes, the path of travel shall be clearly delineated and functional. If required, temporary barricades shall separate on-going construction from occupied spaces as allowed by the governing agency holding jurisdiction over the Project. Required inspections and tests shall have been successfully completed. Upon occupancy the Owner will be provided operation and maintenance of emergency and life safety systems in occupied portions of the building.

1.5 Work Restrictions

1.5.1 On-Site Work Hours: The construction hours 7:00am to 3:30 PM 5 days of week. Work at the Site are as agreed upon per Consultant and Owner on

contract agreement. If evening or weekend work is required prior approval shall be obtained from the Owner.

1.5.2 Contractor shall cooperate and coordinate with Construction Manager to minimize the impact of construction when construction is in an existing operational building.

1.5.3 For existing operational buildings, do not perform the following types of work until written agreement as to allowable times has been obtained from Owner:

1. Work involving utility shutdowns.
2. Core drilling or other noisy activity.

1.5.4 For operational buildings, Construction Notifications shall be given as follows. Contractor shall not proceed with the work or with shutdowns or interruptions until authorized by the Owner in writing:

1. For electrical power shutdowns anticipated to be less than 1 hour, provide written notice to the Owner a minimum of three (3) work days in advance.
2. For electrical power shutdowns anticipated to be in excess of 1 hour, provide written notice to the Owner a minimum of fourteen (14) work days in advance.
3. For domestic water and gas shut-offs, provide written notice to the Owner a minimum of three (3) work days in advance.
4. For interruptions of low voltage systems such as fire alarm, communication, clock, signal, data and energy management systems, provide written notice to the Owner a minimum of three (3) work days in advance.
5. For high impact activities including but not limited to crane operations, concrete pours, large special deliveries; traffic and road impacts, provide written notice to the Owner a minimum of three (3) work days in advance.

1.6 Contract time :100 work days

1.7 Liquidated Damages: $500 per calendar day

1.8 Owner: Fairfield Township
70 Fairton-Gouldtown Rd.
Bridgeton, NJ 08320

1.9 Owners Representative:

CME Associates
849 West Bay Ave.
Suite 16
Barnegat, NJ 08005

1.10 Bid Opening:
Date: June 11, 2024
Time 10:00 AM
Location: 70 Fairton-Gouldtown Rd.
Bridgeton, NJ 08320

1.11 Cost of Bid Package $50.00 non-refundable

1.12 Pre-Bid Conference: None

1.13 Site Visits: Site Visits are by appointment only. Please contact CME Associates to make an appointment at 732 410 2650

1.14 Deadline for questions: All questions (RFI) must be made in writing to the Owner's representative prior to this date. No questions will be answered after This date. Questions must be submitted no later than 2 weeks prior to bid date.

PART TWO: PRODUCTS (NOT USED)

PART THREE: EXECUTION (NOT USED)

END OF SECTION

1.2.4 Do not proceed with work until relevant submissions are reviewed by Owner's Represent ative.

1.2.5 Present shop drawings, product data, samples and mock-ups in units matching construction documents.

1.2.6 Contractor must notify Design Consultant of discrepancies between actual site conditions and/or dimensions and the information provided in construction documents.

.2.4 Review submittals prior to submission to Owner/Owner's Representative. his review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and coordinated with requirements of Work and Contract Documents. Submittals not stamped, signed, dated and identified as to specific project will be returned without being examined and shall be considered rejected.

1.2.7 Notify Owner/Owner's Representative, in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.

1.2.8 Verify field measurements and affected adjacent Work are coordinated.

1.2.9 Contractor's responsibility for errors and omissions in submission is not relieved by Owner/Owner's Representative's review of submittals.

1.2.10 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Owner/Owner's Representative review of submission, unless Owner/Owner's Representative gives written acceptance of specific deviations.

1.2.11 Make any changes in submissions which Owner/Owner's Representative may require consistent with Contract Documents and resubmit as directed by Owner/ Owner's Representative. When resubmitting, notify Owner/Owner's Representative in writing of revisions other than those requested.

1.2.12 Notify Owner/Owner's Representative, in writing, when resubmitting, of any revisions other than those requested by Owner/Owner's Representative.

PART TWO: GENERAL

2.1 Submittals

2.1.1 The term "shop drawings" means drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are to be provided by Contractor to illustrate details of a portion of Work.

2.1.2 Coordinate each submission with requirements of work and Contract Documents. Individual submissions will not be reviewed until all related information is available.

2.1.3 Indicate materials, methods of construction and attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of Work. Where articles or equipment attach or connect to other articles or equipment, indicate that such items have been coordinated, regardless of Section under which adjacent items will be supplied and installed. Indicate cross references to design drawings and specifications.

2.1.4 Allow ten (10) working days for Owner/Owner's Representative review of each submission.

2.1.5 Identify all shop drawings, seaming diagrams and other drawings with name of Project, description of materials, equipment, classified item numbers and installation locations. Reference drawing sheet numbers and/or specification item numbers and room numbers as shown on Contract Documents wherever possible. Shop drawing sheet size shall be no smaller than 8-1/2" x11" (210 x 297 mm, A4)

2.1.6 Minimum scale for reference drawings is 1:50 (1/4" =1'-0"). All details must be minimum 1:5 (3" = l'-O"). Scale must be noted on all documentation. Any drawings which have been reduced must be sonoted.

2.1.7 In submitting seaming diagrams, flooring or wall patterns or other similar submittals Interior Contractor/Vendor must indicate centering or start point showing how the patterns will layout within the space/room/area. Borders, corners, outfit and field must be shown.

2.1.8 Adjustments made on shop drawings by Owner/ Owner's Representative are not intended to change contract price. If adjustments affect value of Work, state such in writing to Owner/Owner's Representative immediately after receipt of approval of shop drawings. If value of work is to change a change order must be issued prior to proceeding with work.

2.1.9 Structural Attachments:

2.1.9.1 Make changes in shop drawings as Owner's Representative may require, consistent with Contract Documents. When resubmitting, notify Owner's Representative in writing of revisions other than those requested.

2.1.10 Accompany submissions with transmittal letter, containing:

2.1.10.1 Date, Project title and number, Contractor's name and address, Identification and quantity of each shop drawing, product data and sample, Other pertinent data,

2.1.11 Submissions shall include:

Date and revision dates, Project title and number,

Name and address of:

Subcontractor, Supplier, Manufacturer.

2.1.11. Contractor's stamp, signed by Contractor's authorized Representative certifying approval of submissions, verification of field measurements and compliance with Contract Documents.

2.1.11.2 Details of appropriate portions of Work as applicable:

Fabrication, Layout, showing dimensions, including identified field dimensions, and clearances, Setting or erection details, Capacities, Performance characteristics, Standards, operating weight, Wiring diagrams, Single line and schematic diagrams, Relationship to adjacent work.

2.1.12 Submit 3 electronic copies in scaled PDF format of shop drawings for each requirement requested in specification Sections and as Owner/Owner's Representative may reasonably request.

2.2 Product Data

2.2.1 Submit electronic copy in PDF format of product data sheets orbrochures for requirements requested in Specification Sections and as requested by Owner/Owner's Representative where shop drawings will not be prepared due to standardized manufacture of product.

2.2.2 Delete information not applicable to project.

2.2.3 Supplement standard information to provide details applicable to project.

2.2.4 Cross-reference product data information to applicable portions of Contract Documents.

2.2.5 If upon review by Owner's Representative, no errors or omissions are discovered or if only minor corrections are made, copies will be returned and fabrication and installation of work may proceed. If shop drawings are rejected, noted copy will be returned and resubmission of corrected shop drawings, through same procedure indicated above, must be performed before fabrication and installation of work may proceed.

2.3 Samples

2.3.1 Where color, pattern or texture is criterion, submit full range of samples.

2.3.2 Submit samples of sufficient size and quantity to clearly illustrate functional characteristics and full range of colors and patterns. Where sample size has not been specified under individual section submittal instructions, sample size shall be **8" x** 11" (200 mm x 280 mm) (A4). For

items which have standard units and/or sizes (such as tile, etc.) provide three individual units minimum per color or pattern. Where variations may occur in color or finish, provide number of units/sizes of sample to show full range.

2.3.3 Where submitted sample is to match sample provided to Interior Contractor/Vendor, said sample is to be returned with submitted sample for review by Consultant.

2.3.4 Adjustments made on samples by Owner's Representative are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to Owner's Representative prior to proceeding with Work.

2.3.5 Make changes in samples, which Owner's Representative may require, consistent with Contract Documents.

2.3.6 Reviewed and accepted samples will become standard of workmanship and material against which installed Work will be verified.

2.3.7 Submit drawings stamped and signed by Professional Engineer registered or licensed in the state of New Jersey.

2.4 Mock-Up

2.4.1 Not required.

2.5 Progress Photographs

2.5.1 Not required.

2.6 Shop DrawingReview

2.6.1 The review of shop drawings by owner/Owner's Representative is for the sole purpose of ascertaining conformance with the general concept. This review shall not mean that Owner/Owner's Representative approves the detail design inherent in the shop drawings, responsibility for which shall remain with the Contractor submitting same, and such review shall not relieve the Contractor of responsibility for errors or omissions in the shop drawings or of responsibility for meeting all requirements of the construction and contract documents. Without restricting the generality of the foregoing, the Contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains to fabrication processes or to techniques of construction and installation and for co-ordination of the work of all sub-trades.

PART THREE: EXECUTION

3.1 Architect/Owner's Action

3.1.1 Except for submittals for record, information or similar purposes, where action and return is required or requested, the Architect/Owner will review each submittal, mark to indicate action taken, and return promptly. Compliance with specified characteristics is the Contractor's responsibility as indicated in Agreement Form.

3.1.2 Approval by the Architect/Owner does not relieve Contractor of responsibility to comply with Contractor requirements.

END OF SECTION

SECTION 01 50 00
TEMPORARY FACILITIES AND CONTROLS

PART ONE: GENERAL

1.1 Related Documents

1.1.1 Construction Documents and general provisions of the Agreement Between Owner and Contractor, including Division 00 General Conditions of the Contract for Construction and Supplementary Conditions and other Division 01 Specification Sections, applicable to this Section.

1.2 Summary

1.2.1 This Section includes temporary facilities and controls for which the Owner/ General Contractor are responsible, as may be required.

1.2.2 All work which is within an existing facility must be performed such that the existing facility may remain functioning with little or no interruption. Take all necessary precautions and plan all work so that there will be a minimum of interruptions to the operations of the Owner.

1.2.3 Temporary utilities include, but are not limited to, the following:

- **1.2.2.1** Temporary water service and distribution
- **1.2.2.2** Temporary electric power and lighting services
- **1.2.2.3** Temporary heating, cooling and ventilation
- **1.2.2.4** Temporary telephone service and data
- **1.2.2.5** Temporary sanitary facilities including drinking water

1.2.4 Support Facilities include, but not limited to the following:

- **1.2.4.1** Field offices - as required by Contractor.
- **1.2.4.2** Storage and fabrication sheds location coordinated with the Owner
- **1.2.4.3** Temporary enclosures.
- **1.2.4.4** Temporary lifts, hoists and elevator use.
- **1.2.4.5** Temporary project identification signs.
- **1.2.4.6** Temporary exterior lighting.
- **1.2.4.7** Collection and disposal of waste and cleaning.
- **1.2.4.8** Stairs.

1.2.5 Security and protection facilities include, but are not limited to, the following:

- **1.2.5.1** Temporary fire protection.
- **1.2.5.2** Permanent fire protection.

1.2.5.3 Security for site and Agency.
1.2.5.4 Barricades, warning signs, and light s.
1.2.5.5 Enclosure fence.
1.2.5.6 Security enclosure and lockup.
1.2.5.7 Protection.
1.2.5.8 Traffic ways.
1.2.5.9 Identification badges for Construction Manager's personnel & parking stickers.

1.3 Quality Assurance

1.3.1 Regulations: Comply with industry standards and applicable laws and regulations of authorities having jurisdiction including, but not limited to, the following:

1.3.1.1 Building and fire code requirements.
1.3.1.2 Health and safety regulations.
1.3.1.3 Utility company regulations.
1.3.1.4 Police, fire department, and rescue squad rules.
1.3.1.5 Environmental protection regulations.
1.3.1.6 Americans with Disabilities Act.

1.3.2 Standards: OSHA. Comply with NFPA 241 "Standard for Safeguarding Construction, Alteration, and Demolition Operations," ANSI AIO Series standards for "Safety Requirements for Construction and Demolition," and NECA 200 "Recommended Practice for Installing and Maintaining Temporary Electric Power at Construction Sites."

1.4 Project Conditions

1.4.1 Temporary Utilities: Prepare a schedule indicating dates for implementation and termination of each temporary utility. At the earliest feasible time, when acceptable to the Owner.

1.4.2 Conditions of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Relocate temporary services and facilities as the Work progre sses. Do not overload facilities or permit them to interfere with progress. Take necessary fire-prevention measures. Do not allow hazardous, dangerous, or unsanitary conditions, or public nuisances to develop or persist on-site.

PART TWO: PRODUCTS

2.1 Materials

2.1.1 General: Provide new materials. If acceptable to the Engineer & Owner may use undamaged, previously used materials in serviceable condition. Provide materials suitable for use intended.

2.2 Equipment

2.2.1 General: Provide new equipment. If acceptable to the Engineer & Owner may use undamaged, previously used equipment in serviceable condition. Provide equipment suitable for use intended.

1.2.1.1 The Contractor shall furnish tools, apparatus and appliances, hoists and/or cranes and power for same, scaffolding, runways, ladders, temporary supports and bracing and similar work or material necessary to insure convenience and safety in the execution of the Contract except where this is otherwise specified in any Specification Section. All such items shall meet the approval of the Owner but responsibility for design, strength and safety shall remain with the Contractor. All such items shall comply with Federal OSHA regulations and applicable codes, statutes, rules and regulations, including compliance with the requirements of the current edition of the "Manual of Accident Prevention in Construction" published by the Associated General Contractors (AGC) and the standards of the State Labor Department.

1.2.1.2 Staging, exterior and interior, required for the execution of this Contract, shall be furnished, erected, relocated if necessary and removed by the Contractor. Staging shall be maintained in a safe condition without charge to and for the use of all trades as needed.

PART THREE: EXECUTION

3.1 Temporary Utility Installation

3.1.1 Water Service: Available within the building. Exercise measures to conserve water.

3.1.2 Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.

3.1.2.1 Provide adequate number of facilities for use by all persons and trades employed on Work during construction period.

3.1.2.2 Maintain daily in clean and sanitary condition.

3.1.2.3 Toilets: Use of Owner's existing toilet facilities will not be permitted.

3.1.3 Electric Power Service: Connect to Owner's existing electric power service. Maintain equipment in a condition acceptable to Owner.

3.1.3.1 Provide power outlets for construction operations, with branch wiring and distribution boxes located as needed. Provide flexible power cords as required.

3.1.3.2 Power connection and consumption shall not disrupt Owner's need for continuous service. Verify location of power source, existing capacity, Owner's current and future needs during construction. Provide temporary power sufficient to meet Owner's operational requirements in the case of unavoidable interruption of power.

3.1.3.3 All shut downs or interruptions to electrical services shall be scheduled with and approved by Owner forty-eight (48) hours in advance.

3.2 Support Facilities Installation

3.2.1 Vehicular Access and Parking: Conduct the Work so as to ensure the least possible obstruction to vehicular traffic and inconvenience to the general public and the residents in the vicinity of the Work and to ensure the protection of persons, property and natural resources. No road or street shall be closed to the public except with the permission of the Owner and the proper governmental authority.

3.3 Security and Protection Facilities Installation

3.3.1 Progress Cleaning: Comply with requirements specified in Section 01 70 00 - Execution.

3.3.2 Security: Provide security and facilities to protect Work, existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft to a degree approved by the Owner.

3.3.3 Temporary Exterior Enclosures: Provide temporary insulated weather-tight closure of exterior .openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks. All enclosures shall meet exiting requirements as may be required by jurisdictions having authority over the project.

3.3.4 Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner from fumes and noise and to prevent damage to existing materials and equipment.

3.3.5 Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.

3.3.5.1 Prohibit smoking on Owner's property.

3.3.5.2 Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.

3.3.5.3 Take all precautions to prevent possibility of fire resulting from construction operations. Particularly avoid hazardous accumulations of rubbish and unsecured, flammable materials.

3.3.5.4 Provide emergency fire extinguishing equipment of adequat type and quantity, readily available and properly maintained.

3.3.6 Temporary First Aid Facilities: Provide adequate first aid facilities for construction personnel.

END OF SECTION

SECTION 01 74 00
CLEANING AND WASTE MANAGEMENT

PART ONE: GENERAL

1.1 Summary

1.1.1 Contractor shall at all time keep premises free from accumulation of waste materials or rubbish caused by him or his subcontractors' operations. Throughout the construction period, maintain the buildings and site in a standard of cleanliness as described in this Section and various other Sections of these Specifications.

1.1.2 If Contractor fails to clean up as herein specified, the Owner may do so and cost thereof shall be charged to Interior Contractor/Vendor.

1.1.3 This Section includes administrative and procedural requirements for the following:

1.1.3.1 Recycling nonhazardous construction waste.

1.1.3.2 Disposing of nonhazardous construction waste.

1.1.4 Maintaining clean, orderly Worksite and adjacent public ways, free of recognizable hazards, and performing final cleaning.

1.2 Related Documents

1.2.1 Drawings and general provisions of Contract, including the Agreement, General Conditions, and Supplementary Conditions if incorporated, specified Exhibits and References, other Division 1, and Technical Specification Sections, apply to this Section.

1.2.2 Comply with the requirements of the various specifications and standards referred to in the contract Plans and Specifications, except where they conflict with the specific requirements of these contract Plans and Specifications. Such reference specifications and standards.

1.2.3 Related Sections Include:

1.2.3.1 Section General Conditions of the Contract for Construction

1.2.3.2 Section Supplementary General Conditions

1.2.3.3 General Requirements

1.3 Definitions

1.3.1 Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.

1.3.2 Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.

1.3.3 Disposal: Removal of off-site demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.

1.3.4 Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.

1.3.5 Clean: for the purposes of this section shall be interpreted as meaning the level of cleanliness generally provided by skilled cleaners using commercial quality building maintenance equipment and materials.

1.4 Quality Assurance

1.4.1 Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.

1.5 Worksite Conditions

1.5.1 Safety Requirements:

1.5.1.1 Maintain Worksite and adjacent public ways in neat, clean, and orderly manner, free of recognizable hazards.

1.5.1.2 Keep catwalks, underground structures, Worksite walks, public sidewalks, roadways and streets, along with public and private walkways adjacent to Worksite, free from scrap, trash, debris and hazards.

1.5.1.3 Dispose of materials in accordance with Section 01 74 19 – Waste Management and Disposal.

1.5.2 Hazards Control:

1.5.2.1 Store, control and dispose of hazardous and toxic products, wastes and containers in accordance with local requirements and Section 01 57 19 – Temporary Environmental Control or as dictated by local and federal regulations.

1.5.2.2 Store volatile wastes in covered metal containers, and remove wastes from Worksite daily.

1.5.2.3 Do not accumulate wastes which create hazardous conditions.

1.5.2.3 If volatile and noxious cleaning substances are being used in spaces not adequately ventilated.

1.5.2.4 Comply with Section 01 35 23 Worksite Safety Requirements.

PART TWO: PRODUCTS

2.1 Cleaning Materials

2.1.1 Provide all required personnel, equipment, and materials needed to maintain the specified standards of cleanliness.

2.1.2 Use type of cleaning materials recommended by manufacturer of products for surfaces and for types and floorings are to be cleaned.

PART THREE: EXECUTION

3.1 Progress Cleaning

3.1.1 Clean Worksite and adjacent areas once each Workday or more often if directed by Owner or its designee during the span construction of activities.

3.1.1.1 Maintain structures, grounds and other areas of Worksite, including public and private properties immediately adjacent to Worksite, free from accumulations of waste materials including trash and litter not generated by Contractor.

3.1.1.2 Place waste materials in separate metal containers for recyclable products and waste materials.

3.1.1.3 Maintain construction area in broom-clean condition. Remove soil accumulations and mud resulting from construction activities from adjacent street surfaces and sidewalks.

3.1.2 Remove or secure loose material on open decks and on other exposed surfaces at end of each Workday, or more often, in manner which will maintain Worksite hazard-free.

3.1.2.1 Secure material in manner which will prevent dislodgement by wind and other forces.

3.1.3 Promptly empty waste containers when full, and legally dispose of contents at dumping areas away from jobsite.

3.1.4 Control handling of waste materials. Do not permit materials to be dropped or thrown from structures. Use good housekeeping practices in accordance with the requirements of the site SWPPP and associated BMP's.

3.1.5 Remove spillage of construction-related material from haul routes in accordance with Section 01 57 19 – Temporary Environmental Control or in accordance with local and federal regulations.

3.1.6 As required preparatory to installation of succeeding materials, clean the structures or pertinent portions thereof to the degree of cleanliness recommended by the manufacturer of the succeeding material.

3.2 Plan Implementation

3.2.1 A. General: Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.

3.2.1 Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work occurring at Project site.

3.2.1.1 Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.

3.2.2 Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

3.2.2.1 Designate and label specific areas on Project site necessary for separating salvaged, recycled, reused, donated, and sold materials.

3.2.2.2 Control dust and dirt, and provide environmental protection, and noise control.

3.2.2.3 Remove waste materials from on-site containers and legally dispose of off site, at least once a week and more often if same interferes with the Work under any contract or presents a fire or safety hazard.

3.2.2.4 Lower waste materials from building in a controlled manner. Do not drop or throw materials from heights.

3.2.2.5 Clean all debris from closed in spaces.

3.2.2.6 Keep dirt, mud, stone and other construction debris off site access roadways. Contractor is to maintain roadways daily, throughout construction period.

3.3 Recycling Construction Waste

3.3.1 General: Recycling and disposal of construction waste, if required by contract, local and federal regulations, is to follow but not limited to instructions contained herein.

3.3.2 Recycling Incentives: Revenues, savings, rebates, and other incentives received for recycling waste materials shall accrue to Contractor.

3.3.3 Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical.

3.3.4 Provide appropriately marked containers or bins for controlling recyclable waste until removal from the Project site. Include list of acceptable and unacceptable materials at each container and bin.

3.4 Disposal of Waste

3.4.1 General: Except for items or materials salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.

3.4.1.1 Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.

3.4.1.2 Burning: Do not burn waste materials.

3.4.1.3 Disposal: Transport waste materials off site to property and legally dispose of them.

3.5 Final Cleaning

3.5.1 Inspect interior and exterior surfaces, including concealed spaces, in preparation for substantial completion and occupancy.

3.5.1.1 Remove dirt, dust, litter, corrosion, solvents, discursive paint, stains, and extraneous markings.

3.5.1.2 Wash and polish glass, metal, ceramic and plastic surfaces.

3.5.1.2.1 Protect Work that has been cleaned, and do not allow cleaning operations to damage or soil previously cleaned Work.

3.5.1.3 Remove surplus materials, except materials intended for maintenance.

3.5.1.4 Remove tools and equipment used in construction, but not property of job site or its designee.

3.5.1.5 Remove detachable labels and tags.

3.5.1.5.1 File with manufacturer's specifications for specific material for Owner's records.

3.5.1.6 Repairs damaged materials to specified finish, or remove and replace them.

3.5.1.7 Remove calcification and repair damage from calcification and other chemicals.

3.5.2 Upon completion of construction, leave Worksite in clean, neat condition, satisfactory to Owner or its designee.

END OF SECTION

SECTION 01 77 00

CLOSEOUT PROCEDURES

PART 1- GENERAL

1.1 SECTION INCLUDES

A. Requirements preparatory to final inspection.

B. Final inspection.

C. Acceptance of the Work and final payment.

1.2 MEASUREMENT AND PAYMENT

A. Separate measurement or payment will not be made for work required under this Section. All costs in connection with the work specified herein will be considered to be included with the related item of work in the Bid Schedule of the Bid Form, or incidental to the Work.

1.3 REQUIREMENTS PREPARATORY TO FINAL INSPECTION

A. The Contractor shall request a preliminary final inspection to determine the state of completion of the Work.

B. The request shall be made in writing, addressed to the Engineer, at least seven days in advance of the requested date of the preliminary inspection.

C. The Engineer will perform the preliminary inspection within three days of the requested date.

D. Prior to the requested date of the preliminary inspection, the Contractor shall perform or provide the following, as applicable:

1. Temporary facilities, except as may be required for punch list work, shall be removed from the site.

2. The site and all applicable appurtenances and improvements shall be cleaned as specified in Section 01 74 00 – Cleaning and Waste Management.

3. Record drawings, as built and specifications shall be completed, signed, and submitted to the Engineer.

4. Operating instructions for equipment shall be properly mounted and posted.

5. Guaranties and warranties shall be submitted to the Engineer, as specified in the General Conditions and various sections of the Specifications, alongwith required operations and maintenance manuals.

E. The Contractor shall be represented by its principal superintendent and such Subcontractors and Suppliers as may be necessary to answer the questions of the Engineer's inspection team.

F. Certain elements of the Work, such as mechanical and electrical work, may be scheduled separately at appointed times in order to keep the preliminary inspection more focused and the number of persons in the Engineer's inspection team to a minimum.

G. From the information gathered from this inspection, the Engineer will prepare a punch list of work to be performed, corrected, orcompleted.

H. All work on the punch list shall be completed by the Contractor prior to requesting the final inspection.

1.4 FINAL INSPECTION

A. When all requirements of the above prepared punch list have been completed, the Contractor shall request the final inspection to determine eligibility for issuance of the Certificate of Substantial Completion.

B. The request shall be made in writing, addressed to the Engineer, at least seven days in advance of the requested date of the final inspection.

C. The Contractor shall be represented by its principal superintendent and such Subcontractors and Suppliers as may be necessary to verify the completion of the Work including punch list items.

D. Depending on the extensiveness of the punch list items, certain elements of the Work may be scheduled separately for final inspection at appointed times.

E. If the Work has been substantially completed in accordance with the Contract Documents, and only minor corrective measures are required, the Engineer will recommend that the Township issue a Certificate of Substantial Completion, based upon the Contractor's assurance that remaining corrective measures will be completed within the shortest practicable time period. The Engineer will attach a corresponding punch list to the Certificate of Substantial Completion. A fixed schedule for such corrective measures shall be submitted to the Engineer, for approval.

F. If the Work has not been substantially completed in accordance with the Contract Documents, and corrective measures are still required, a new punch list will be prepared

by the Engineer, based on the information gathered from the final inspection, and the Contractor will be required to complete this work and then call for another final inspection, following the procedure outlined above.

G. The date of the Certificate of Substantial Completion will establish the completion date of the Work, or portions thereof as specifically referenced in the Certificate, for determining liquidated damages.

1.5 ACCEPTANCE OF THE WORK AND FINAL PAYMENT

A. Upon completion of the Substantial Completion punch list items, the Engineer will recommend that the Township formally accept the Work.

B. Acceptance of the Work will be made in accordance with Article GC5.14 of the General Conditions. Final payment will be made in accordance with Article GC9.8 of the General Conditions.

PART 2 - PRODUCTS

Not Used

PART 3 -EXECUTION

Not Used

END OF SECTION 01 77 00

SECTION 02411
SELECTIVE DEMOLITION

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Selective Site Demolition:
1. Installation of new flooring in existing spaces
2. Demolition of below-grade construction as it relates to new construction.
3. Removal of hollow items or items which could collapse.
4. Salvage of designated items.
5. Protection of site work and adjacent structures.
6. Disconnection, capping, and removal of utilities.
7. Pollution control during building demolition, including noise control.
8. Removal and legal disposal of materials.
9. Designated site improvements and adjacent construction.

B. Selective Building Demolition:
1. Selective demolition of interior partitions, systems, and building components designated to be removed.
2. Selective demolition of structures, and components designated to be removed.
3. Protection of portions of building adjacent to or affected by selective demolition.
4. Removal of abandoned utilities and wiring systems.
5. Notification to Owner of schedule of shut-off of utilities which serve occupied spaces.
6. Pollution control during selective demolition, including noise control.
7. Removal and legal disposal of materials.
8. Protection of designated site improvements and adjacent construction.
9. Salvage of designated items.
10. Interruption, capping or removal of utilities as applicable.

C. Hazardous Materials:
1. Removed as a part of this contract, if required, there are no hazardous material we are aware of.

1.2 SUBMITTALS:

A. Submit under provisions of Section - Administrative Requirements.

B. Schedule: Submit for approval selective demolition schedule, including schedule and methods for capping utilities to be abandoned and maintaining existing utility service.

1.3 QUALITY ASSURANCE

A. Codes and Regulations: Comply with governing codes and regulations. Use experienced workers.

1.4 PRE-INSTALLATION MEETINGS

A. Convene minimum two weeks prior to starting work of this section.

1.5 SEQUENCING

A. Immediate areas of work will not be occupied during selective demolition. The public may be present at times.

B. No responsibility for buildings and structures to be demolished will be assumed by the Owner.

C. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

PART 2 PRODUCTS - Not applicable to this Section.

PART 3 EXECUTION

3.1 SELECTIVE DEMOLITION

A. Demolition Operations: Do not damage building elements and improvements indicated to remain. Items of salvage value, not included on schedule of salvage items to be returned to Owner, shall be removed from structure. Storage or sale of items at project site is prohibited.

B. Utilities: Locate, identify, disconnect, and seal or cap off utilities in buildings to be demolished.

C. Shoring and Bracing: Provide and maintain interior and exterior shoring and bracing.

D. Occupied Spaces: Do not close or obstruct streets, walks, drives or other occupied or used spaces or facilities without the written permission of the Owner and the authorities having jurisdiction. Do not interrupt utilities serving occupied or used facilities without the written permission of the Owner and authorities having jurisdiction. If necessary, provide temporary utilities.

E. Operations: Cease operations if public safety or remaining structures are endangered. Perform temporary corrective measures until operations can be continued properly.

F. Security: Provide adequate protection against accidental trespassing. Secure project after work hours.

G. Restoration: Restore finishes of patched areas.

3.2 SCHEDULE

A. Items for Protection During Demolition and Construction: (The following are samples only)
   1. [Adjacent construction.]

B. Items to be Salvaged for Reinstallation:
   1. Not Applicable

C. Items to be Salvaged for Delivery to Owner:
   1. Not Applicable

D. Utilities Requiring Interruption, Capping, or Removal:
   1. [Electric.]
   2. [Cable television.]

END OF SECTION

SECTION 06100

ROUGH CARPENTRY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and General Provisions of contract, including General Conditions and Division One, Specification Sections, apply to the work of this Section.

1.2 REFERENCE STANDARDS

A. FS TT-W-571 - Wood Preservation: Treating Practices.

B. APA - American Plywood Association.

C. ASTM A 153 – Standard Specification for Zinc Coating (Hot Dip) on Iron and Steel Hardware.

D. International Code Council (ICC); International Building Code.

1.3 RELATED WORK

A. Temporary, rough framed exterior weather enclosure for doors, windows and other openings as required

B. Bolts and other fasteners: see Section 05500, Metal Fabrication.

C. Architectural Woodwork: Section 06400.

1.4 GRADING RULES

A. Grading of lumber of various species in accordance with American Softwood Lumber Standard PS 20-15, U.S. Department of Commerce (National Grading Rule).

B. Each piece of yard, structural lumber shall bear official grade mark of appropriate inspection bureau or association.

PART 2 - PRODUCTS

2.1 WOOD

A. Exterior blocking: No. 2 dimension Southern Yellow Pine, preservative treated.
B. Interior wood floor framing hem-fir min 1400psi. Structural #1, header L/240, floor L/360,

C. Interior grounds, nailers, furring and blocking: No. 2 dimension Southern Yellow Pine, fire-retardant treated.

D. Interior Plywood: 5/8" &3/4" thick APA INT BC fire retardant as shown on the Drawings and for use under walk-off mat. Panels shall be 8'-0" tall.

E. Exterior Plywood sheathing: ½" thick exposure CD fire treated unless noted otherwise.

2.2 LUMBER SIZE AND MOISTURE CONTENT

A. Lumber: Surfaced 4 sides (S4S).

B. Board, dimension lumber: Either air or kiln dried with moisture content in accordance with National Grading Rule, but not exceeding 19 percent for dimension lumber and board lumber 8 inch or less in width.

2.3 PRESERVATIVE TREATMENT

A. Lumber in contact with masonry, concrete, earth or roof cants: Preservative treated.

B. Preservative treat by pressure method; Alkaline Copper Quaternary (ACQ). Preservative treatments containing arsenic or chromium shall not be acceptable. "Nature wood" by Osmose, Inc. or other products meeting the requirements of the ICC shall be acceptable.

1. Certain metal products may corrode when in direct contact with ACQ. Use only hot dipped galvanized or other fasteners recommended by the hardware manufacturers for direct contact with ACQ. Hot dipped galvanized fasteners shall comply with ASTM A153.

C. Season treat lumber after preservative treatment to moisture content specified for nontreated lumber.

D. Label treated lumber except furring and grounds with name of treater and type of preservative used.

E. Complete fabrication of treated items prior to treatment, where possible. If cut after treatment, coat cut surfaces with heavy brush coat of same chemical used for treatment. Inspect each piece of lumber after drying and discard damaged or defective pieces.

2.4 FIRE-RETARDANT TREATMENT

Fire-retardant treated lumber or plywood: AWPA standards for pressure impregnation with fire-retardant chemicals to achieve flame spread rating of not more than 25; UL Test 723, ASTM E84 or NFPA Test 355.

F. Provide UL label on each piece of fire-retardant treated item.

G. Season treat items after fire retardant treatment to moisture content specified for non-treated items.

2.4 MISCELLANEOUS MATERIALS

A. Provide fasteners and anchorages of size and type as indicated and recommended by applicable standards, complying with federal specifications for nails, screws, staples, bolts, nuts, washers and anchoring devices.

PART 3 - EXECUTION

3.1 INSTALLATION GENERAL

A. Frame, fit closely, set framing accurately to required lines levels. Secure rigidly in place. Size blocking to provide a true surface for finishing. Provide special blocking for construction not indicated or specified but required to complete work.

B. Provide wood grounds nailers, blocking, as indicated for screeding or attachment of other work. Form to shapes indicated and cut as required to maintain tolerances specified for work to be attached. Coordinate location with adjoining work. Secure to substrate as required to support applied loading. Counter-sink bolts and nuts flush with surface.

3.2 PLYWOOD

A. Install fire retardant treated plywood panels on surfaces as required or indicated.

END OF SECTION

SECTION 06400

ARCHITECTURAL WOODWORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and General Provisions of Contract, including General Conditions and Division-1 Specification Sections, apply to the Work of this Section.

1.2 **WORK INCLUDED**

A. Subject to scope of work indicated on the drawings, the following items are part of this section:

1. Buffet Cabinet
2. Other miscellaneous millwork indicated on drawings

1.3 RELATED WORK

A. Samples: Section 01332 Submittal Procedures

B. Rough Carpentry: Section 06100

C. Wood Doors: Section 08140

D. Woodwork Finish: See Section 09900, Painting, pre-finished doors

1.4 QUALITY ASSURANCE

A. The "Quality Standards" of the Architectural Woodwork Institute, apply to work specified in this Section. Reference to Premium, Custom or Economy in this Section shall be as defined in AWi "Quality Standards."

1. Any item not given a specific quality grade shall be Custom Grade.

1.5 SUBMITTAL$

A. Submit detailed shop drawings covering all items of architectural woodwork.

B. Submit manufacturer's descriptive literature of specialty items not manufactured by the architectural woodworker.

C. Samples:

1. Submit samples of wood veneers, plastic laminate and other finishes as indicated.

2. Submit finished samples of each shop applied finish.

1.6 PRODUCT HANDLING

A. Do not deliver woodwork to site until building and storage areas are sufficiently dry to prevent damage to woodwork caused by excessive changes in moisture content. Store materials in a secure area, safe from damage by work of other trades or unauthorized access.

PART 2 - PRODUCTS

2.1 Miscellaneous shelving

A. AWi quality grade: Custom grade for transparent finish.
B. Plastic laminate buffet top

2.2 MOUNTING BLOCKS

A. General

1. Type: Plain sawn red oak, AWi Custom grade for transparent finish. All edges shall be chamfered and sanded prior to finishing.

2. Provide and install mounting blocks in locations and in quantities shown on the drawings.

3. As part of the work of this Section, contractor shall be responsible for the following

2.4 SPECIALTY ITEMS

A. Refer to Drawings for other special fabrications not listed in this Section.

PART 3 - EXECUTION

3.1 JOB CONDITIONS

A Examine the drawings carefully to assure that large shop fabricated items can physically pass through openings. Where necessary, manufacture the units in parts for final field assembly.

B. Prior to fabrication, examine the work areas and verify that field conditions will allow the work to be performed in accordance with the Contract Documents. Notify the Architect and Owner's Representative of any observed deficiencies or discrepancies that would interfere with the proper installation of the work. Do not proceed until these conditions have been corrected.

C. Coordinate installation of the work of this section with the work of other trades, and verify that adjoining work is complete to the point where this installation may properly commence.

3.2 INSTALLATION

A General:

1. Architectural woodwork shall produce joints true, tight and well nailed with members assembled in accordance with quality grade specified or as indicated.

2. Discard units of material with defects that might impair the quality of work and units too small to fabricate the work with minimum joints or the optimum joint arrangement.

B. Jointing:

1. Make joints to conceal shrinkage; miter exterior corner; cope interior corners, miter or scarf end-to-end joints.

C. Repair:
1. Repair or replace damaged work to Architect's and Owner's satisfaction.

D. Cleaning and Protection:
1. Clean installed millwork.

2. Remove paint, stain, adhesives and other substances from finished products.

END OF SECTION

SECTION 08100 - HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general prov1s1ons of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes hollow metal doors hollow metal doors rated and wood doors, wood doors rated.

B. Related Requirements:
1. Section 08700 Finish hardware

1.3 DEFINITIONS

A. Minimum Thickness: of base metal without coatings according to NAAMM-HMMA 803 or SDI A250.8.

1.4 COORDINATION

A. Coordinate anchorage installation for hollow-metal frames. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors. Deliver such items to Project site in time for installation.

1.5 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at project site. As required.

1.6 ACTION SUBMITIALS

A. Product Data: For each type of product.

1. Include construction details, material descriptions, core descriptions, fire resistant rating.

B. LEED Submittals (Projects authorized for LEED certification only):

1. Product Data for Credit MR 4: For products having recycled content, documentation indicating percentages by weight of postconsumer and pre-consumer recycled content. Include statement indicating cost for each product having recycled content.

C. Shop Drawings: Include the following:

1. Elevations of each door type.
2. Details of doors, including vertical- and horizontal-edge details and metal thicknesses.
3. Frame details for each frame type, including dimensioned profiles and metal thicknesses.
4. Locations of reinforcement and preparations for hardware.
5. Details of each different wall opening condition.
6. Details of anchorages, joints, field splices, and connections.
7. Details of accessories.
8. Details of moldings, removable stops, and glazing.
9. Details of conduit and preparations for power, signal, and control systems.

D. Samples for Initial Selection: For units with fact ory-applied color finishes.

E. Samples for Verification:

1. For each type of exposed finish required, prepared on Samples of not less than 3 by 5 inches.
2. For "Doors" and "Frames" subparagraphs below, prepare Samples approximately **[8 by 10 inches] to** demonstrate compliance with requirements for quality of materials and construction:

a. Doors: Show vertical-edge, top, and bottom construction; core construction; and hinge and other applied hardware reinforcement. Include separate section showing glazing if applicable.
b. Frames: Show profile, corner joint, floor and wall anchors, and silencers. Include separate section showing fixed hollow-metal panels and glazing if applicable.

F. Schedule: Provide a schedule of hollow-metal work prepared by or under the supervision of supplier, using same reference numbers for details and openings as those on Drawings. Coordinate with final Door Hardware Schedule.

1.7 INFORMATIONAL SUBMITTALS

A. Product Test Reports: For each type of hollow-metal door and frame assembly, for tests performed by a qualified testing agency.

B. Oversize Construction Certification: For assemblies required to be fire rated and exceeding limitations of labeled assemblies.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Deliver hollow-metal work palletized, packaged, or crated to provide protection during transit and Project-site storage. Do not use no vented plastic.

1. Provide additional protection to prevent damage to factory-finished units.

B. Deliver welded frames with two removable spreader bars across bottom of frames, tack welded to jambs and mullions.

C. tore hollow-metal work vertically under cover at Project site with head up. Place on minimum 4-inch- high wood blocking. Provide minimum 1/4-inch space between each stacked door to permit air circulation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements,

1. JELD-WEN
2. TRUDOOR
3. CDF Commercial Hollow Metal Doors and Frames

B Source Limitations: Obtain hollow-metal work from single source from single manufacture.

2.2 REGULATORY REQUIREMENTS

A. Fire-Rated Assemblies: Complying with NFPA 80 and listed and labeled by a qualified testing agency acceptable to authorities having jurisdiction for fire-protection ratings indicated, based on testing at positive pressure according to NFPA 252 or UL 10C.

1. Smoke- and Draft-Control Assemblies: Provide an assembly with gaskets listed and labeled for smoke and draft control by a qualified testing agency acceptable to authorities having jurisdiction, based on testing according to UL 1784 and installed in compliance with NFPA 105.

B. Fire-Rated, Borrowed-Light Assemblies: Complying with NFPA 80 and listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction for fire-protection ratings indicated, based on testing according to NFPA 257 or UL 9.

2.3 INTERIOR DOORS AND FRAMES

A. Construct interior doors and frames to comply with the standards indicated for materials, fabrication, hardware locations, hardware reinforcement, tolerances, and clearances, and as specified. Door frames and doors shall be galvanized in wet locations and as directed by Facilities Maintenance. Minimum thickness of face sheet gage is prior to galvanizing, where galvanizing is indicated.

B. Standard-Duty Doors and Frames: SDI A250.8, Level 1. At locations indicated in the Door and Frame Schedule.

1. Physical Performance: Level C according to SDI A250.4.
2. Doors:

   a. Type: As indicated in the Door and Frame Schedule.
   b. Thickness: 1-3/4 inches.
   c. Face: Uncoated, cold-rolled steel sheet, minimum thickness of 0.032-inch (D.8-mm) thick, 20-gage.
   d. Edge Construction: Model 2, Seamless.
   e. Core: Manufacturer's standard kraft-paper honeycomb, polystyrene, polyurethane, polyisocyanurate, mineral-board, or vertical steel-stiffener core at manufacturer's discretion.

3. Frames:

   a. Materials: Uncoated, cold-rolled steel sheet, minimum thickness of 0.042 inch.
   b. Construction: : Knock Down Frame

2.4 EXTERIOR HOLLOW-METAL DOORS AND FRAMES (If shown on drawings)

A. Construct exterior doors and frames to comply with the standards indicated for materials, fabrication, hardware locations, hardware reinforcement, tolerances, and clearances, and as specified. Exterior doors and frames shall be galvanized. Minimum thickness of face sheet gage is prior to galvanizing.

8. Heavy-Duty Doors and Frames: SDI A250.8, Level 2. At locations indicated in the Door and Frame Schedule.

1. Physical Performance: Level B according to SDI A250.4.
2. Doors:

   a. Type: As indicated in the Door and Frame Schedule.
   b. Thickness: 1-3/4 inches
   c. Face: Metallic-coated steel sheet, minimum thickness of 0.042 inch, 18-gage face sheets, with minimum A40 coating.
   d. Edge Construction : Model 2, Seamless.
   e. Core: Manufacturer's standard kraft-paper honeycomb, polystyrene, polyurethane, polyisocyanurate, mineral-board, or vertical steel-stiffener core at manufacturer's discretion.

3. Frames::

   a. Materials: Metallic-coated steel sheet, minimum thickness of 0.053 inch, with minimum A40 coating.
   b. Construction: Full profile welded.
4. Exposed finish: Prime

2.5 FRAME ANCHORS

A. Jamb Anchors:

1. Masonry Type: Adjustable st ra p-and-st irru p or T-shaped anchors to suit frame size, not less than 0.042 inch thick, with corrugated or perforated straps not less than 2 inches wide by 10 inches long; or wire anchors not less than 0.177 inch thick.
2. Stud-Wall Type: Designed to engage stud, welded to back of frames; not less than 0.042 inch thick.
3. Compression Type for Drywall Slip-on Frames: Adjustable compression anchors.
4. Post installed Expansion Type for In-Place Concrete or Masonry: Minimum 3/8" inch diameter bolts with expansion shields or inserts. Provide pipe spacer from frame to wall, with throat reinforcement plate, welded to frame at each anchor location.

B. Floor Anchors: Formed from same material as frames, minimum thickness of 0.042 inch, and as follows:

1. Monolithic Concrete Slabs: Clip-type anchors, with two holes to receive fasteners.
2. Separate Topping Concrete Slabs: Adjustable-type anchors with extension clips, allowing not less than 2-inch height adjustment. Terminate bottom of frames at finish floor surface.

2.6 MATERIALS

A. Recycled Content of Steel Products: Postconsumer recycled content plus one-half of pre consumer recycled content not less than 23 percent.

B. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B; suitable for exposed a p p l i c a t i o n s .

C. Hot-Rolled Steel Sheet: ASTM A 1011/A 1011M, Commercial Steel (CS), Type B; free of scale, pitting, or surface defects; pickled and o i l e d .

D. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS), Type B.

E. Frame Anchors: ASTM A 879/A 879M, Commercial Steel (CS), 04Z coating designation; mill phosphatized.

1. For anchors built into exterior walls, steel sheet complying with ASTM A 1008/A 1008M or ASTM A 1011/A 1011M, hot-dip galvanized according to ASTM A 153/A 153M, Class B.

F. Inserts, Bolts, and Fasteners: Hot-dip galvanized according to ASTM A 153/A 153M.

G. Power-Actuated Fasteners in Concrete: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with clips or other accessory devices for attaching hollow-metal frames of type indicated.

H. Grout: ASTM C 476, except with a maximum slump of 4 inches, as measured according to ASTM C 143/C 143M.

I. Mineral-fiber insulation: ASTM C 665, Type I (blankets without membrane facing); consisting of fibers manufactured from slag or rock wool; with maximum flame-spread and smoke- developed indexes of 25 and 50, respectively; passing ASTM E 136 for combustion characteristics.

J. Glazing: Comply with requirements in Section 08 80 00 "Glazing."

K. Bituminous Coating: Cold-applied asphalt mastic, compounded for 15-mil dry film thickness per coat. Provide inert-type noncorrosive compound free of asbestos fibers, sulfur components, and other deleterious impurities.

2.7 FABRICATION

A. Fabricate hollow -metal work to be rigid and free of defects, warp, or buckle . Accurately form metal to required sizes and profiles, with minimum radius for metal thickness. Where practical, fit and assemble units in manufacturer's plant. To ensure proper assembly at Project site, clearly identify work that cannot be permanently factory assembled before shi pment .

B. Hollow-Metal Doors:

1. Steel-Stiffened Door Cores: Provide minimum thickness 0.026 inch, steel vertical stiffeners of same material as face sheets extending full-door height, with vertical webs spaced not more than 6 inches apart. Spot weld to face sheets no more than 5 inches o.c. Fill spaces between stiffeners with glass- or mineral -fiber insulation on.
2. Fire Door Cor es: As required to provide fire-protection ratings indicated.
3. Vertical Edges for Single-Acting Doors: **Provide beveled or square edges at manufacturer's discretion.**
4. Top Edge Closures: Close top edges of doors with **[inverted closures, except provide flush closures at exterior doors]** of same material as face sheet s.
5. Bottom Edge Closures: Close bottom edges of doors[**where required for attachment of weather stripping]** with end closures or channels of same material as face sheets.
6. Exterior Doors: Provide weep-hole openings in bottoms of exterior doors to permit moisture to escape. Seal joints in top edges of doors against water penetrat ion .
7. Astragals: Provide overlapping astragal on one leaf of pairs of doors where required by NFPA 80 for fire-performance rating or where indicat ed. Extend minimum 3/4 inch beyond edge of door on which astragal is components, and other deleterious impurities.

C. Hollow -Metal Frames: Where frames are fabricated in sections due to shipping or handling limitations, provide alignment plates or angles at each joint, fabricated of same thickness metal as frames.

1. **[Sidelight] [and] [Transom Bar]** Frames: Provide closed tubular members with no visible face seams or joints, fabricated from same material as door frame. Fasten members at crossings and to jambs by butt welding. Where shown on drawings.
2. Provide countersunk, fl at - or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated.
3. Grout Guar ds: Weld guards to frame at back of hardware mortises in frames to be grouted.
4. Floor Anchors : Weld anchors to bottoms of jambs with at least four spot welds per anchor; however, for slip-on drywall frames, provide anchor clips or countersunk holes at bottoms of jam bs.
5. Jamb Anchors : Provide number and spacing of anchors as follows:

    a. Masonry Type: Locate anchors not more than 16 inches from top and bottom of frame . Space anchors not more than 32 inches o.c., to match coursing, and as follows :

        1) Two anchors per jamb up to 60 inches high.
        2) Three anchors per jamb from 60 to 90 inches high.
        3) Four anchors per jamb from 90 to 120 inches high.
        4) Four anchors per jamb plus one additional anchor per jamb for each 24 inches or fraction thereof above 120 inches high.

    b. Stud-Wall Type: Locate anchors not more than 18 inches from top and bottom of fram e. Space anchors not more than 32 inches o.c. and as follows:

        1) Three anchors per jamb up to 60 inches high.
        2) Four anchors per jamb from 60 to 90 inches high.
        3) Five anchors per jamb from 90 to 96 inches high.
        4) Five anchors per jamb plus one additional anchor per jamb for each 24 inches or fraction thereof above 96 inches high.

    c. Compression Type: Not less than two anchors in each frame .
    d. Post installed Expansion Type: Locate anchors not more than 6 inches from top and bottom of frame. Space anchors not more than 26 inches o.c.

6. Head Anchors : Two anchors per head for frames more than 42 inches wide and mounted in metal-stud partitions.
7. Door Silencers: Except on weather-stripped frames, drill stops to receive door silencers as fo llows . Keep holes clear during construction.

    a. Single-Door Frames: Drill stop in strike jamb to receive three door silencers.
    b. Double-Door Frames: Drill stop in head jamb to receive two door silencers.

8. Terminated Stops: Terminate stops **(6 inches]** above finish floor with a [90]-degree angle cut, and close open end of stop with steel sheet closure. Cover opening in extension of frame with welded-st eel filler plate, with welds ground smooth and flush with frame .

D. Fabricate concealed stiffeners and edge channels from either cold- or hot-rolled steel sheet.

E. Hardware Preparation: Factory prepare hollow-metal work to receive templated hardware; include cutouts, reinforcement,, drilling, and tapping according to SDI A250.6, the Door Hardware Schedule, and templates.

1. Reinforce doors and frames to receive no templated, mortised, and surface-mounted door hardware.
2. Comply with applicable requirements in SDI A250.6 and BHMA A156.115 for preparation of hollow-metal work for hardware.

F. Stops and Moldings: Provide stops and moldings around glazed lites and louvers where indicated. Form corners of stops and moldings with **[mitered]** hairline joints.

1. Single Glazed Lites: Provide fixed stops and moldings welded on secure side of hollow-metal work.
2. Multiple Glazed Lites: Provide fixed and removable stops and moldings so that each glazed lite is capable of being removed independently.
3. Provide fixed frame moldings on outside of exterior and on secure side of interior doors and frames.
4. Provide loose stops and moldings on inside of hollow-met al work.
5. Coordinate rabbet width between fixed and removable stops with glazing and installation types indicated.

2.8 STEEL FINISHES

A. Prime Finish: Clean, pretreat, and apply manufacturer's standard primer.

1. Shop Primer: Manufacturer's standard fast-curing, lead- and chromate -fr ee primer complying with SDI A250 .10; recommended by primer manufacturer for substrate; compatible with substrate and field-applied coatings despite prolonged exposure.

B. Factory Finish: Clean, pretreat, and apply manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat, complying with SDI A250 .3.

1. Color and Gloss: doors and frames under painting.

2.9 ACCESSORIES

A. Louvers: Provide louvers for interior doors, where indicated, which comply with SDI IIIC, with blades or baffles formed of 0.020-inch- thick, cold-rolled steel sheet set into 0.032-inch- thick steel frame.

1. Sight proof Louver: Stationary louvers constructed with inverted-V or inverted-Y blades.
2. Lightproof Louver: Stationary louvers constructed with baffles to prevent light from passing from one side to the other.
3. Fire-Rated Automatic Louvers: Louvers constructed with movable blades closed by actuating fusible link, and listed and labeled for use in fire-rated door assemblies of type and fire-resistance rating indicated by same qualified testing and inspecting agency that established fire-resistance rating of door assembly.

B. Mullions and Transom Bars: Join to adjacent members by welding or rigid mechanical anchors.

C. Grout Guards: Formed from same material as frames, not less than 0.016 inch thick.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Examine roughing-in for embedded and built-in anchors to verify actual locations before frame installation.

C. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.

D. Proceed with installation only after unsatisfactory conditions have been corrected .

3.2 PREPARATION

A. Remove welded-in shipping spreaders installed at factory. Restore exposed finish by grinding, filling, and dressing, as required to make repaired area smooth, flush, and invisible on exposed faces.

B. Drill and tap doors and frames to receive non-templated, mortised, and surface-mounted door hardware.

3.3 INSTALLATION

A. General: Install hollow-metal work plumb, rigid, properly aligned, and securely fastened in place. Comply with Drawings and manufacturer's written instructions.

B. Hollow -Metal Frames: Install hollow-metal frames of size and profile indicated. Comply with SDI A250.11 or NAAMM-HMMA 840 as required by standards specified.

1. Set frames accurately in position; plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces, leaving surfaces smooth and undamaged.

    a. At fire-rated openings, install frames according to NFPA 80.
    b. Where frames are fabricated in sections because of shipping or handling limitations, field splice at approved locations by welding face joint continuously; grind, fill, dress, and make splice smooth, flush, and invisible on exposed faces.
    c. Install frames with removable stops located on secure side of opening.
    d. Install door silencers in frames before grouting.
    e. Remove temporary braces necessary for installation only after frames have been properly set and secured.

f. Check plumb, square, and twist of frames as walls are constructed. Shim as necessary to comply with installation tolerances.
g. Field apply bituminous coating to backs of frames that will be filled with grout containing anti-freezing agents.

2. Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor, and secure with post installed expansion anchors.

a. Floor anchors may be set with power-actuated fasteners instead of post installed expansion anchors if so indicated and approved on Shop Drawings.

3. Metal-Stud Partitions: Solidly pack mineral-fiber insulation inside frames.
4. Masonry Walls: Coordinate installation of frames to allow for solidly filling space between frames and masonry with grout.
5. Concrete Walls: Solidly fill space between frames and concrete with mineral-fiber insulation.
6. In-Place Concrete or Masonry Construction: Secure frames in place with post installed expansion anchors. Countersink anchors, and fill and make smooth, flush, and invisible on exposed faces.
7. In-Place Metal or Wood-Stud Partitions: Secure slip-on drywall frames in place according to manufacturer's written instructions.
8. Installation Tolerances: Adjust hollow-metal door frames for squareness, alignment, twist, and plumb to the following tolerances:

a. Squareness: Plus or minus 1/16 inch, measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
b. Alignment: Plus or minus 1/16 inch, measured at jambs on a horizontal line parallel to plane of wall.
c. Twist: Plus or minus 1/16 inch, measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
d. Plumbness: Plus or minus 1/16 inch, measured at jambs at floor.

C. Hollow-Metal Doors: Fit hollow-metal doors accurately in frames, within clearances specified below. Shim as necessary.

1. Non-Fire-Rated Steel Doors:

a. Between Door and Frame Jambs and Head: 1/8 inch plus or minus 1/32 inch.
b. Between Edges of Pairs of Doors: 1/8 inch to 1/4 inch plus or minus 1/32 inch.
c. At Bottom of Door: **[3/4 inch]** plus or minus 1/32 inch.
d. Between Door Face and Stop: 1/16 inch to 1/8 inch plus or minus 1/32 inch.

2. Fire-Rated Doors: Install doors with clearances according to NFPA 80.
3. Smoke-Control Doors: Install doors and gaskets according to NFPA 105.

D. Glazing: Comply with installation requirements in Section 08 80 00 "Glazing" and with hollow-metal manufacturer's written instructions.

l. Secure stops with countersunk flat- or oval-head machine screws spaced uniformly not more than 9 inches o.c. and not more than 2 inches o.c. from each corner.

3.4 ADJUSTING AND CLEANING

A. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including hollow-metal work that is warped, bowed, or otherwise unacceptable.

B. Remove grout and other bonding material from hollow-metal work immediately after installation.

C. Prime-Coat Touchup : Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying, rust-inhibitive primer.

D. Metallic-Coated Surface Touchup: Clean abraded areas and repair with galvanizing repair paint according to manufacturer's written instructions.

E. Factory-Finish Touchup: Clean abraded areas and repair with same material used for factory finish according to manufacturer's written instructions.

F. Touchup Painting: Cleaning and touchup painting of abraded areas of paint are specified in painting Sections.

END OF SECTION

SECTION 08140

WOOD DOORS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. This Section specifies flush wood doors of the following types:

1. Interior solid or hollow wood doors.

B. Related Work: The following items are not included in this Section and are specified under the designated Sections.

1. Section 061000 - Rough Carpentry: For rough opening and blocking.
2. Section 087100 - Door Hardware: For operating and locking hardware.
3. Section 081400 – Metal frames for interior wood doors.

1.2 SUBMITTALS

A. Product Data: Submit manufacturer's product data for each type of stile-and-rail wood door including elevations and details of construction.

B. Shop Drawings: Submit shop drawings of wood doors including door type, door design number, door size, fire rating if applicable, hardware types and locations, hardware blocking requirements and location, panel layout, molding and sticking profile, vision panel, louver cutout or lite opening sizes and locations, and finishing.

C. Verification Samples: Submit two corner samples, minimum 6 inches by 6 inches representing actual products and materials specified indicating visual characteristics and finish. Include range samples if variation of appearance is anticipated.

D. Warranty: Submit manufacturer's standard warranty.

1.3 QUALITY ASSURANCE

A. Manufacturer's Qualifications: Company specializing in manufacturing doors with a minimum of five years documented experience.

B. Single Source Requirements: To the greatest extent practical, wood doors shall be supplied from a single manufacturer.

C. Sustainable Construction: Paneled door construction shall limit use of formaldehyde products during fabrication. Paneled door shall bear the Four Star rating from the Japanese Ministry of Land, Infrastructure, Transportation and be compliant with California's CARB Phase II program.

D. Project Conditions: Maintain environmental conditions (temperature, humidity and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store and handle materials and products in strict compliance with manufacturer's

instructions, recommendations and industry standards.

B. Store materials in manufacturer's original labeled packaging until ready for installation and in accordance with manufacturer's instructions. Protect from damage.

1.5 WARRANTY

A. Manufacturer's Warranty: Provide manufacturer's standard limited warranty that each panel door bearing the manufacturer's brand and identification mark complies with Industry Standard WDMA I.S.6A and all revisions in effect as of the date of manufacture, and that each such door, at the time of the shipment, is of good material and workmanship and free from defects that would render such door unserviceable or unfit for the ordinary, recommended use. This limited warranty applies to new doors.

1. Warranty Period: Interior Doors – 10 years.

PART 2 PRODUCTS

2.1 MANUFACTURER

A. Acceptable Manufacturer: Simpson Door Company; 400 Simpson Ave.; McCleary, WA 98557. Toll Free Tel: 800 SIMPSON (746-7766). Email: SimpsonCustomerService@brandner.com. Web: www.simpsondoor.com.

1. Wood Species: white oak
2. Thickness: 1-3/4"
3. Flush wood door

INTERIOR WOOD DOORS

A. Interior Wood Doors: Doors as manufactured by Simpson Door Company.

1. Construction Solid Wood Flush Door
2. Wood species: white oak
3. Thickness:1-3/4"
4. Pre-finished
5. Glass light 6" x 12"

B. Fire-Rated Doors as manufactured by Simpson Door Company.

1. Construction – 20 - 30 Minute Fire Ratings
   a. Doors shall comply with NFPA 252 (2003), UBC 7-2 (1994 and 1997), UL 10(c) (1998)

PART 3 EXECUTION

3.1 EXAMINATION AND PREPARATION

A. Examine and prepare openings and substrates using the methods recommended by manufacturer.

3.2 INSTALLATION

A. Install in accordance with manufacturer's instructions and in proper relationship with adjacent construction. Operate doors and adjust installation to provide proper operation of opening.

B. Touch-up, repair or replace damaged products before Substantial Completion.

2.1 DOOR HARDWARE

Door Manufacturer shall provide their standard type hardware set including: Schlage ND50PD cylindrical office function lockset (coordinated with owner key system), Falcon SC70 series closer, frame.

Part 3

3.1 INSTALLATION

In accordance with manufacturer's instructions.

3.2 PROTECTION

It shall be the responsibility of the contractor to see that any scratches or damage caused in shipping or handling of the products are properly cleaned and touched up. Store the products in a dry, heated location, covered and ventilated to protect them from damage. Repair damaged units prior to completion and acceptance of the project or replace with new, as directed.

3.3 CLEANING

Upon completion, clean units thoroughly.

END OF SECTION

Section 08 35 13 Accordion Folding Doors

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:
   1- Furnish and install accordion partitions as indicated in drawings.

B. Related Sections include the following•
   1- Division 03 Sections for concrete tolerances required.
   2- Division 05 Sections for primary structural support, including pre-punching of support members by structural steel supplier per partition supplier's template.
   3- Division 06 Sections for wood framing and supports, and all blocking at head and jambs as required
   4- Division 09 Sections for wall and ceiling framing at head and jambs.

1.3 QUALITY ASSURANCE

A- Installer Qualifications: An experienced installer who is certified in writing by the partition manufacturer, as qualified to install the manufacturer's partition systems for work similar in material, design, and extent to that indicated for this Project.

B. Preparation of the opening shall conform to the dimensions specified, plumb, level, and in accordance to building practices.

C. Acoustical Performance: Test partitions in an independent acoustical laboratory in accordance with ASTM E90 test procedure and classified in accordance with ASTM E413 to attain no less than the STC rating specified. Provide a complete and unedited written test report by the testing laboratory upon request.

D. The folding partition must be manufactured by a certified ISO-9001-2015 company or an equivalent quality control system.

1.4 REFERENCE STANDARDS

A. ASTM International
   1. ASTM E557 Standard Practice for Architectural Application and Installation of Operable Partitions.
   2. ASTM E90 - Standard Test Method for Laboratory Measurement of Airbome Sound Transmission Loss of Building Partitions and Elements.
   3. ASTM E84 - Surface Buming Characteristics of Building Materials.
   4. ASTM E413 - Classification for Rating Sound Insulation

B. International Standards Organization
   1. ISO 14021 - Environmental Labels and Declarations - Self-Declared Environmental Claims (Type II Environmental Labeling).
   2. ISO 140252011-10, Environmental Labels and Declarations - Type III Environmental Declarations - Principles and Procedures.

3. ISO 14040:2009-11 , Environmental Management - Life Cycle Assessment - Principles and Framework.
4. ISO 14044:2006-10, Environmental Management - Life Cycle Assessment - Requirements and Guidelines.
5. ISO 21930 — Sustainability in Buildings and Civil Engineering Works — Core Rules for Environmental Product Declarations of Construction Products and Services.

1.5 SUBMITTALS

A. Product Data: Material descriptions, construction details, finishes, installation details, and operating instructions for each type of partition, component, and accessory specified.

B. Shop Drawings: Show location and extent of partitions. Include plans, elevations, sections, details, attachments to other construction, and accessories. Indicate dimensions, weights, conditions at openings, and at storage areas, and required installation, storage, and operating clearances. Indicate location and installation requirements for hardware and track, including floor tolerances required and direction of travel. Indicate blocking to be provided by others.

C. Setting Drawings: Show imbedded items and cutouts required in other work, including support beam punching template.

D. Samples: Color samples demonstrating full range of finishes available for architect. Verification samples will be available in same thickness and material indicated for the work. E. Furnish materials that generate the least amount of pollution.

1. Furnish products and materials that have third party verified environmental product declarations (EPD's). Consider products and materials that have optimized environmental performance (reduced life cycle impacts). Products without an EPD or other disclosure documentation are not acceptable.

F. Buy American: Folding door to be manufactured in the United States in compliance with applicable U.S. Federal Trade Commission (FTC) and U.S. Customs Service and Border Protections regulations and be labeled "Made in America".

1.6 DELIVERY, STORAGE, AND HANDLING

A. Clearly mark packages and partitions with numbering systems used on Shop Drawings. Do not use permanent markings on partitions.

B. Protect partitions during delivery, storage, and handling to comply with manufacturer's direction and as required to prevent damage.

1.7 WARRANTY

A. Provide written warranty by manufacturer of partitions agreeing to repair or replace any components with manufacturing defects. B. Warranty period: Two (2) years.

PART 2 - PRODUCTS

2.1 MANUFACTURERS, PRODUCTS, AND OPERATION

A. Manufacturers: Subject to compliance with requirements, provide product by the following:
1, Modernfold, Inc.

B- Doors to be manufactured in the U.S.A.

C. Products: Subject to compliance with the requirements, provide the following product:

1. Soundmaster #8 Accordion Folding Partition

2.2 OPERATION

A. Soundmaster #8: Manually operated, top supported, accordion folding.

2.3 CONSTRUCTION

A. Construction:

1. Shall consist of steel hinge plates welded to 3/16-inch (5mm) diameter vertical steel rods, with a single row of plates at the bottom and top with intermediate rows at approximately 42inch (1067mm) on center. Partitions 10'-0" (3048mm) high or over have a double row of hinge plates at the top, A high tensile alloy steel trolley yoke, functioning as a hinge pin at required intervals, supports the frame assembly.

B. Sound Transmission Class. Laboratory acoustical performance of the folding partition shall have been tested in an independent acoustical laboratory, in accordance with ASTM E90 test procedure, classified in accordance with ASTM E413 and shall have attained an STC rating of no less than:

1. . SM8-39 STC

2.4 PARTITION FINISHES

A. Finish: Face finish shall be:

1. Reinforced heavy-duty vinyl with woven backing weighing not less than 30 ounces per lineal yard.

B. Partition Trim: Exposed sweep strips of one consistent color.

2.5 SOUND SEALS

A. Shall be pairs of three-layer flexible sweep strips at top and bottom. Vertical female sound channel shall be polyurethane foam lined.

B. Sound Insulation: 24-gage, V-grooved steel panels and heavy duty flame resistant acoustical membrane. Each panel attaches to the frame with steel leaf fasteners.

C. Pairs of Flexible Sweep Strips: Shall be provided at top and bottom of the partition. Air release for air trapped within the folding partition shall be accomplished during operation by a series of 3/8-inch (9.5mm) diameter holes through the lead post molding.

A. Shall be pairs of three-layer flexible sweep strips at top and bottom. Vertical female sound channel shall be polyurethane foam lined.

B. Sound Insulation: 24-gage, V-grooved steel panels and heavy duty flame resistant acoustical membrane. Each panel attaches to the frame with steel leaf fasteners.

C. Pairs of Flexible Sweep Strips: Shall be provided at top and bottom of the partition. Air release for air trapped within the folding partition shall be accomplished during operation by a series of 3/8-inch (9.5mm) diameter holes through the lead post molding.

2.6 HARDWARE

A. Grip type hand pulls shall be die cast zinc: satin chrome finish. Extruded aluminum or plastic hand pulls will not be accepted.

2.7 SUSPENSION SYSTEM

A. #5 Suspension System, track and trolley sizes matched to the size of the partition.

1. Suspension Tracks: Shall be of a continuous "C" channel shaped track, connected to the structural support.
2. Carriers: The accordion folding partition shall be suspended from the track by two-wheel intermediate and four-wheel lead trolley assemblies.

PART 3 - EXECUTION

3.1 INSTALLATION

A- General: Comply with partition manufacturers written installation instructions, Drawings, and approved Shop Drawings.

B. Install partitions and accessories after other finishing operations, including painting have been completed.

C. Defective partitions are not acceptable.

3.2 CLEANING AND PROTECTION

A. Clean partition surfaces upon completing installation of partitions to remove dust, dirt, adhesives, and other foreign materials according to manufacturer's written instructions.

B. Provide final protection and maintain conditions in a manner acceptable to the manufacturer and installer that ensure operable partitions are without damage or deterioration at time of Substantial Completion

3.3 ADJUSTING

A. Adjust partitions to operate smoothly, easily, and quietly throughout entire operational range. Lubricate hardware and other moving parts.

3.4 EXAMINATION

A. Examine flooring, structural support, and opening, with Installer present for compliance with requirements for installation tolerances and other conditions affecting performance of partitions. Proceed with installation only after unsatisfactory conditions have been corrected.

3.5 DEMONSTRATION

A. Demonstrate proper operation and maintenance procedures to Owner's representative.

B. Provide Operation and Maintenance Manual to Owner's representative.

END OF SECTION

SECTION 08700 -FINISH HARDWARE

PART 1.00 - GENERAL

1.1 GENERAL REQUIREMENTS

A. Work of this Section, as shown or specified, shall be in accordance with the Contract Documents.

1.2 WORK INCLUDED

A. Work of this Section includes all labor, materials, equipment and services necessary to furnish all the finish hardware as shown on the drawings and specified herein.

1.3 RELATED WORK

A Wood doors and frames - Section 081400

B. Hollow Metal Doors and Frames – Section 08100

1.4 QUALITY ASSURANCE

A. Hardware shall be suitable and adapted for its required use and shall fit its designated location. Should any hardware as shown, specified or required fail to meet the intended requirements or require modification to suit or fit the designated location, determine the correction or modification necessary and notify the Architect in ample time to avoid delay in the manufacture and delivery of hardware.

B. For fire rated openings provide hardware complying with NFPA Standard No. 80 requirements of authorities having jurisdiction.

C. Barrier Free Requirements: Comply with all standards of ADA/CABO/ANSI 117.1, latest addition.

D. Hardware Supplier Qualifications: The Hardware Supplier shall have been regularly engaged in the sale and distribution of Finish Hardware for projects of comparable scope and size for a minimum of five (5) years. The Hardware Supplier shall have an AHC of the Door and Hardware Institute on staff who will be responsible for overseeing the scheduling, detailing, ordering, and coordinating of Finish Hardware, and shall be available for consultation with the Architect, at no additional cost to the Owner, during progress of construction.

1.5 SUBMITTALS

A. Before any finish hardware is ordered or purchased, submit catalog cuts and a complete Hardware Schedule of Finish Hardware. Each item listed in the Hardware Schedule shall be identifiable with respect to manufacture, brand, catalog number, material, and finish.

B. Where submission differs from Schedule given herein, use different color or other means of identification to bring change to the attention of the Architect.

C. Hardware Supplier shall provide all product information, wiring diagrams, and electrical data to the Electrical Contractor.

D. Samples: Submit samples only if requested by the Architect. Do not proceed with installation until samples have been approved. Approved samples shall be installed in the work.

1.6 PRODUCT HANDLING

A. Pack finish hardware in approved manufacturer's containers, complete with trimmings, bolts, screws, washers, etc., as required for application and securement. Each container shall bear a suitable label which shall state the quantity and kind of contents of said container, as well as identifying marks relating to the approved Hardware Schedule and its location in the project.

B. Lever handles, pulls and other items of finish hardware with easily damaged finishes shall be individually wrapped before placing in containers and with sufficient sheet cloth or cotton-backed paper which shall be adequately tied with heavy strings; all as necessary to protect the finishes.

C. Finish hardware shall be delivered, as directed, to the building site or the factories of the various fabricators of metal work to which such hardware is to be applied. Deliver hardware in the order required and in ample time to permit application at the building, or fabricators' shops, within the time required for the completion.

1.7 JOB CONDITIONS

A. Field Service: The hardware supplier shall assign a representative to assist in "checking in" these shipments. In addition, such representative shall be available for immediate call when required.

B. Templates: Promptly following approval of the Hardware Schedule by the Architect, furnish and deliver template information, to the fabricators, of items to which finish hardware is to be applied.

1. Such deliveries shall be made in ample time to avoid delays in such work of said fabricators. Provide drawings, schedules and detailed information to other trades as necessary for them to accommodate and prepare their work to receive the finish hardware.

C. Cooperation and Coordination

1. Cooperate and coordinate work with that of other trades supplying materials or performing work in contact with, connecting to, underlying, or overlaying the work of this Section.

2. Provide complete data of requirements for work of this Section to those other trades whose work is affected by or dependent upon the work of this Section.

3. Furnish all items to be built into other work in ample time to avoid delaying the progress of such work.

4. Examine all drawings covering the work of this Section and refer to all other drawings, including mechanical and electrical drawings, which may affect the work of this Section or require coordination by this trade.

D. Existing Conditions: Hardware Supplier shall verify all existing conditions in the field to ensure compatibility with hardware specified in the Hardware Sets herein. Any discrepancies between the existing field conditions and hardware specified shall be brought to the attention of the Architect immediately. Hardware Supplier shall not order any hardware until all discrepancies are rectified and written approval is granted by the Architect.

PART 2.00 - PRODUCTS

2.1 GENERAL

A. Requirements for design, grade, function, finish, size and other distinctive qualities of each type of finish hardware are indicated herein. Products are identified by using appropriate hardware designation numbers.

B. Manufacturers are listed for each hardware type required. Provide either the product designated, or approved equal.

C. Barrier Free Requirements: Comply with all standards of ADA/CABO/ANSI 117.1, latest addition.

D. Notwithstanding anything to the contrary in this specification or the drawings, the finish hardware shall conform to the requirements of governmental authorities having jurisdiction and such requirements shall be followed as if specifically set forth in this specification.

E. Finish hardware shall conform to the applicable requirements of the American Insurance Association, and the National Board of Fire Underwriters' Laboratories, Inc., and other local authorities having jurisdiction, and each such item shall bear a label or mark of the Underwriters' Laboratories, Inc., indicating its conformity with such requirements for use in connection with its specified location.

F. Finish hardware shall be uniform in color and finish and free from imperfections affecting its appearance, function, operation and serviceability. Such hardware shall be suited and adapted to its required use and shall fit its respective location.

G. Where the finished shape or size of members receiving finish hardware are such as to prevent or render unsuitable the use of the specific types or sizes of such hardware, suitable types or sizes shall be furnished, having as nearly as practicable the same function, operation and quality as the specified hardware.

H. Bolts, screws and other fastenings required for the application of the finished hardware shall be of size and type to fit requirements and shall be of the same material and finish as the exposed parts of such hardware which they adjoin. Exposed screws and bolts shall have countersunk oval heads and bolts shall be provided with cap nuts. Countersunk part of screw and bolt holes shall be finished smoothly without sharp edges and form a firm seal for such screw and bolt heads. Full threaded wood screws shall be furnished for all wood applications. No thru bolts will be allowed. Sex-nuts and bolts shall be provided on push/pulls, exit devices, closers, etc. when being attached to mineral core or particle core wood fire doors.

2.2 PRODUCTS AND MANUFACTURERS

A. The following are acceptable manufacturers, unless specifically indicated in the Hardware Sets. Underlined manufacturers are those whose products are indicated in the hardware sets.

HINGES & SPRING HINGES: Bommer, McKinney, Stanley, Hager, Ives

CONTINUOUS HINGES: Select Products, Markar, Bommer

FLUSH BOLTS & DUSTPROOF STRIKES: Burns, BBW,

Quality, Ives

PUSH/PULLS: Burns, BBW, Quality, Hager, Ives

LOCKSETS, PASSAGE SETS, PRIVACY SETS & DEADLOCKS: Schlage, Yale

EXIT DEVICES: Detex, Precision, Von Duprin

DOOR CLOSERS: PDQ, LCN

PROTECTION PLATES: Burns, BBW, Quality.

STOPS: Burns, BBW, Quality. Hager

OVERHEAD STOPS: Rixson, Glynn Johnson, Burns

SILENCERS: Burns, BBW, Quality, Hager

SADDLES & GASKETING: National Guard, Reese, Zero.

2.3 SPECIFIC ITEMS

A. Hinges

1. Minimum of three (3) hinges per door leaf up to 7'-6" high. Provide one additional hinge per 2'-6" or fraction thereof.
2. Hinges shall be of types, sizes and materials as required to suit door weights thickness and fire ratings.
3. Unless otherwise specified hinges shall be standard weight, 26D finish. Doors 3'-4" in width shall receive 5 x 4½ .146-gauge hinges. Doors over 3'-4" in width shall receive 5 x 4½ .190-gauge hinges.
4. Hinge sizes shall be detailed so that the least amount of projection shall be visible from the frame.
5. Unless otherwise specified hinges shall have concealed ball bearings (combination anti-friction or oil impregnated) and five (5) knuckles.
   a. Standard doors shall have non-rising pins.
   b. Doors exposed to the public, and other secure areas, as determined by the Owner, shall have non-removable pins.

B. Door Closers

1. Unless otherwise indicated, closers shall not be visible on the public side of doors. Closers opening into public spaces shall be provided with parallel arms and brackets to suit.
2. Closers shall be sized in accordance with the accepted manufacturer's standards to suit height, width, weight of door and draft conditions.
3. Provide a top pivot for each floor closer.
4. Provide weather sealing compound for each exterior floor closer.
5. Unless specified otherwise in the Hardware Sets, all floor closers shall have a built in dead stop.

C. Locking and Latching Devices
   1. Mechanical: Provide types, functions, as specified. Coordinate with Owners keying requirements.
      a. Unless otherwise specified in the Hardware Sets, tubular style locksets or latch sets will not be accepted in lieu of cylindrical style sets specified.
      b. Unless otherwise specified in the Hardware Sets, ANSI Grade 3 deadlocks will not be accepted.
      c. Mortise locksets shall conform to ANSI A156.13, Series 1000, Grade 1 – latest edition.
      d. Heavy Duty Cylindrical Lever Locksets shall conform to ANSI A156.2, Series 4000, Grade 1 – latest edition.
      e. Lock trim shall be through bolted through the lock case to assure correct alignment and proper operation.
      f. All locksets with ½" throw latch bolt shall be listed by Underwriters Laboratories for "A" label and lesser class single doors.

D. Keys and Keying

   1. During construction, all locksets shall be provided with temporary construction cores. Upon installation of permanent cores, the temporary cores shall be turned over to the Hardware Supplier.

E. Stops: Provide stops to limit the degree of opening, helping to prevent damage to adjacent walls, columns, equipment, the door or its hardware.
   1. Overhead Stops
      a. Size overhead stops to suit door width, height, weight and draft condition.
      b. Overhead stops shall have extruded architectural bronze tracks with a built-in shock absorber. The arm shall be hard-drawn brass.
   2. Floor Stops: All stops to be fastened to concrete shall use expansion shields and machine screws.

F. Pushes and Pulls: Provide concealed fasteners where practical. Where exposed fasteners are required provide flush type finished to match push or pull.

G. Silencers: Provide silencers for all non-gasketed and non-weather-stripped frames. Provide three (3) for each single swing door and two (2) for each pair of doors.

H. Kick and Mop Plates: Provide type and gauge as scheduled. Size shall be as indicated in the hardware schedule.

I. Remainder of Hardware: Provide type, style and function as indicated in the Hardware Sets, Section 3.02. Should substitutions be acceptable per Section 2.02, acceptable material shall meet or exceed product standards as detailed in the Hardware Sets.

2.4 FINISHES

A. Provide finish hardware with the following finishes unless otherwise shown:

1. Hinges:
   a. Interior doors:
      1. Wood Doors x Hollow Metal Frames: 626 (Satin Chrome).
   b. Exterior doors: 630 (Satin Stainless Steel).
2. Pivots: 626 (Satin Chrome).
3. Surface Closers: 689
4. Floor Closers: 626
5. Locksets and Exit Devices: 626/630
6. Stops: 630
7. Push Plates, Pulls, Kick and Mop Plates: 630
8. Flush Bolts, Dust Proof Strikes: 626
9. Remainder of Hardware: 626

PART 3.00 - EXECUTION

3.1 GENERAL

A. Make periodic checks during construction in order to ascertain that the finish hardware furnished has been installed correctly. After completion of all construction work, adjust finish hardware to work properly; test all keys and adjust as required for smooth, free operation

HARDWARE SETS

HARDWARE SET #1

Existing Doors That Receive New Hardware (that are not ADA Compliant)

Doors 3' x 6'8" Flush WD x HMF
Office Lock Set Schlage ND ATH 50PD 6 pin

HARDWARE SET #2

New Doors 3'x6'8" Flush WD x HMF
Office Lock Set Schlage ND ATH 50PD 6 pin
Hinge – 1 ½ pair Ives 4 ½" x 4 ½" commercial series 626 finish
Closer – Falcon SC70 series HD
Stops – Ives WS406/407 CVX wall stop
Door Silencers - Ives SR64 GRY 3 per jamb

HARDWARE SET #3

New Doors 3'x6'8" flush WD x HMF
Privacy set Schlage
Satin Stainless-Steel Single Cylinder Deadbolt 6 pin Schlage
Closer Falcon SC70 series HD
Kick Plate (2) 6' high ¾" in from each door side
Wall Stop Ives WS406/407 CVX
Door Silencers Ives SR64 GRY3 per jamb
Door Saddle stainless steel 6570A or to suite Zero Int.

HARDWARE SET #4

New Doors 3' x 6'-8" Flush HM x HMF
Mechanical, Storage Room, Laundry Room
Office Lock Set Schlage ND ATH 50PD 6Pin
Hing- 1 ½ pair Ives 4 ½" x 4 ½" commercial series 626 finish
Closer- Falcon SC70 series HD
Stops- Ives WS406/407 CVX wall stop
Door Silencers – Ives SR 64 GRY 3 per jamb

HARDWARE SET #5

New Doors 6'-0"x 6'-8" Flush HM x HMF
Storage Room,
Office Lock Set Schlage ND ATH 50PD 6Pin
Hing- 1 ½ pair Ives 4 ½" x 4 ½" commercial series 626 finish
Flush Bolts - Ives
Closer- Falcon SC70 series HD cordinator
Stops- Ives WS406/407 CVX wall stop
Door Silencers – Ives SR 64 GRY 3 per jamb

SECTION 09260 - GYPSUM BOARD ASSEMBLIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Interior gypsum wallboard.

2. Non-load-bearing steel framing.

B. Related Sections include the following:

1. 06100 Rough Carpentry for blocking, plywood
2. 09900 Painting

1.3 DEFINITIONS

A. Gypsum Board Terminology: Refer to ASTM C 11 for definitions of terms for gypsum board assemblies not defined in this Section or in other referenced standards.

1.4 SUBMITTALS

A. Submit under provisions of Section 01332Submittal Procedures

B. Product Data: For each type of product indicated. Including preparation instructions and recommendations, storage and handling requirements and recommendations and installation methods.

C. Shop Drawings: Manufacturers shop drawings for material information and testing information.

D. Samples: for each finish product specified, two samples, representing actual product and finish.

1.5 QUALITY ASSURANCE

A. Manufactures Qualifications: Minimum 10 years' experience manufacturing similiar products.

B. Installer Qualifications: Minimum 5 years' experience installing similar products.

C. Fire-Test-Response Characteristics: For gypsum board assemblies with fire-resistance ratings, provide materials and construction identical to those tested in assembly indicated according to ASTM E 119 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.

1. Fire-Resistance-Rated Assemblies: Indicated by design designations from **[UL's "Fire Resistance Directory."]**.

D. Sound Transmission Characteristics: For gypsum board assemblies with STC ratings, provide materials and construction identical to those tested in assembly indicated according to ASTM E 90 and classified according to ASTM E 413 by a qualified independent testing agency.

DELIVERY, STORAGE, AND HANDLING

E. Deliver materials in original packages, containers, or bundles bearing brand name and identification of manufacturer or supplier.

F. Store materials inside under cover and keep them dry and protected against damage from weather, direct sunlight, surface contamination, corrosion, construction traffic, and other causes. Stack gypsum panels flat to prevent sagging.

1.6 PROJECT CONDITIONS

A. Environmental Limitations: Comply with ASTM C 840 requirements or gypsum board manufacturer's written recommendations, whichever are more stringent.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

B. Manufacturers: Subject to compliance with requirements, provide products of the following:

1. Steel Framing and Furring:
   a. National Gypsum Company

2. Gypsum Board and Related Products:
   a. G-P Gypsum Corp.
   b. USG Unites States Gypsum Co.
   c. National Gypsum Company.

2.2 STEEL PARTITION AND SOFFIT FRAMING

A. Components, General: As follows:

1. Comply with ASTM C 754 for conditions indicated.
2. Steel Sheet Components: Complying with ASTM C 645 requirements for metal and with **[manufacturer's standard corrosion-resistant]** zinc coating.

B. Steel Studs and Runners: ASTM C 645.

1. Minimum Base Metal Thickness: 20 ga.
2. Depth: 3 5/8"

2.3 INTERIOR GYPSUM WALLBOARD

A. Panel Size: Provide in maximum lengths and widths available that will minimize joints in each area and correspond with support system indicated.

B. Gypsum Wallboard: ASTM C 36.

1. Regular Type:

a. Thickness: 5/8", unless otherwise indicated
b. Long Edges: Tapered for prefilling.
c. Location: Vertical surfaces, unless otherwise indicated.

2. Type X:

a. Thickness:5/8".
b. Long Edges: Tapered for prefilling.
c. Location: Where required for fire-resistance-rated assembly Vertical surfaces, unless otherwise indicated.

3. Shaft - Wall: (at elevator)

a. Thickness: 2 – ½" firecode X
2 ½" USG C-H 25 gauge studs 24"oc
1" USG Liner panel
b. Reinforce walls for elevator track support

C. Cementitious Backer Units: ANSI A118.9.

1. Thickness: As indicated

D. Moisture resistant (green board) in all restroom areas.
   1. Thickness: 5/8"

2.4 TRIM ACCESSORIES

A. Interior Trim: ASTM C 1047.

   1. Material: Galvanized or aluminum-coated steel sheet, plastic.
   2. Shapes:

      a. Cornerbead: Use at outside corners, unless otherwise indicated.
      b. Bullnose Bead: Use at outside corners where indicated.
      c. LC-Bead: J-shaped; exposed long flange receives joint compound; use at exposed panel edges.
      d. L-Bead: L-shaped; exposed long leg receives joint compound; use where indicated.
      e. U-Bead: J-shaped; exposed short flange does not receive joint compound; use at exposed panel edges where indicated.

B. Exterior Trim: ASTM C 1047.

   1. Material: Hot-dip galvanized steel sheet or rolled zinc.
   2. Shapes:

      a. Cornerbead: Use at outside corners.
      b. LC-Bead: J-shaped; exposed long flange receives joint compound; use at exposed panel edges.
      c. Expansion (Control) Joint: One-piece, rolled zinc with V-shaped slot and removable strip covering slot opening. Use where indicated.

2.5 JOINT TREATMENT MATERIALS

C. General: Comply with ASTM C 475.

D. Joint Tape:

   1. Interior Gypsum Wallboard: Paper

E. Joint Compound for Interior Gypsum Wallboard: For each coat use formulation that is compatible with other compounds applied on previous or for successive coats.

   1. Prefilling: At open joints, rounded or beveled panel edges, and damaged surface areas, use setting-type taping compound.
   2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use all-purpose compound.

   3. Fill Coat: For second coat, use setting-type, sandable topping compound.
   4. Finish Coat: For third coat, use setting-type, sandable topping compound.

5. Skim Coat: For final coat of Level 5 finish, use setting-type, sandable topping compound.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and substrates, with Installer present, and including welded hollow-metal frames, cast-in anchors, and structural framing, for compliance with requirements and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLING STEEL PARTITION AND SOFFIT FRAMING

A. Install tracks (runners) at floors, ceilings, and structural walls and columns where gypsum board assemblies abut other construction.

1. Where studs are installed directly against exterior walls, install foam-gasket isolation strip between studs and wall.

B. Installation Tolerance: Install each steel framing and furring member so fastening surfaces vary not more than 1/8 inch from the plane formed by the faces of adjacent framing.

C. Extend partition framing full height to structural supports or substrates above suspended ceilings, except where partitions are indicated to terminate at suspended ceilings. Continue framing over frames for doors and openings and frame around ducts penetrating partitions above ceiling to provide support for gypsum board.

1. Cut studs 1/2 inch short of full height to provide perimeter relief.
2. For fire-resistance-rated and STC-rated partitions that extend to the underside of floor/roof slabs and decks or other continuous solid-structure surfaces to obtain ratings, install framing around structural and other members extending below floor/roof slabs and decks, as needed to support gypsum board closures and to make partitions continuous from floor to underside of solid structure.

    a. Terminate partition framing at suspended ceilings where indicated.

D. Install steel studs and furring at the following spacings:

1. Single-Layer Construction: 16 inches o.c., unless otherwise indicated.
2. Multilayer Construction: 16 inches o.c., unless otherwise indicated.

E. Install steel studs so flanges point in the same direction and leading edge or end of each panel can be attached to open (unsupported) edges of stud flanges first.

F. Frame door openings to comply with GA-600 and with gypsum board manufacturer's applicable written recommendations, unless otherwise indicated. Screw vertical studs at jambs to jamb anchor clips on door frames; install runner track section (for cripple studs) at head and secure to jamb studs.

1. Install two studs at each jamb, unless otherwise indicated.
2. Install cripple studs at head adjacent to each jamb stud, with a minimum 1/2-inch clearance from jamb stud to allow for installation of control joint.
3. Extend jamb studs through suspended ceilings and attach to underside of floor or roof structure above.

G. Frame openings other than door openings the same as required for door openings, unless otherwise indicated. Install framing below sills of openings to match framing required above door heads.

3.3 INSTALLING TRIM ACCESSORIES

A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.

B. Control Joints: Install control joints at locations indicated on Drawings.

3.4 FINISHING GYPSUM BOARD ASSEMBLIES

A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.

B. Prefill open joints damaged surface areas.

C. Apply joint tape over gypsum board joints, except those with trim having flanges not intended for tape.

D. Gypsum Board Finish Levels: Finish panels to levels indicated below, according to ASTM C 840, for locations indicated:

1. Level 4: Embed tape and apply separate first, fill, and finish coats of joint compound to tape, fasteners, and trim flanges at panel surfaces that will be exposed to view, unless otherwise indicated.

END OF SECTION 09260

SECTION 09511 - SUSPENDED ACOUSTICAL CEILINGS

PART 1 - GENERAL

1.1 Work Included

A. Suspended metal grid ceiling system as required for installation and replacement of existing tile.

B. Acoustic Ceiling tile (for humid areas).

1.2 Related Work

A. Light fixtures
1. Allow for alarms, motion detectors, diffuser, wood trim, etc.

1.3 References

A. ASTM C635 - Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings.

B. ASTM C636 - Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels.

C. UL - Underwriter's Laboratories System Ratings.

1.4 Quality Assurance

A. Manufacturer: Company specializing in the manufacture of ceiling suspension system and ceiling tile panels, three years minimum experience.

B. Installer: Company shall have experience installing the approved manufacturer.

1.5 Regulatory Requirements

A. Conform to applicable code for fire rated assembly where required.

1.6 Submittals

A. Submit shop drawings and product data for review.

B. Indicate on shop drawings, grid layout and existing ceiling tile to be replaced with new.

C. Provide product data on metal grid system components, and acoustic units.

D. Submit samples to Owner and Architect for review.

E. Submit manufacturer's installation instruction.

1.7 Environmental Requirements

A. Maintain uniform temperature of minimum 60-degree F (16 degrees C), and humidity of 20 to 40 percent prior to, during, and after installation.

1.8 Sequencing/Scheduling

A. Do not install acoustical ceilings until building is enclosed, sufficient heat is provided, dust generating activities have terminated and overhead work is completed, tested, and approved.

B. Schedule installation of acoustic units after interior work is dry.

1.9 Extra Stock

A. Provide one carton [of each type used] extra tile panels to Owner.

PART 2 - PRODUCTS

2.1 Manufacturer - Suspension System

A. Suspension system shall be from the same manufacturer as acoustic units.

2.2 Suspension System

A. Armstrong "15/16" Prelude ML" exposed tee system for square lay-in units.

B. Grid Finish: White

C. Support Channels and Hangers: Size and type to suit application, to rigidly secure acoustic ceiling system including integral mechanical electrical components with maximum deflection of 1/360.

2.3 Acoustic Units

A. USG Acoustic Ceiling Tile or equal.

.

Specifications:

1. Tile..... Mars
2. Sound Absorption.....0.70-0.75 NCR
3. Sound Attenuation.....35 CAC
4. Light Reflectance:.....0.90
5. White
6. 2' x 2', 2' x 4'
5. Classification: ..... ASTM E1264, Type III, Form 2, Pattern CE.
6. Fire Resistance: ..... Class A

PART 3 - EXECUTION

3.1 Inspection

A. Verify that existing conditions are ready to receive work.

B. Verify that layout of hangers will not interfere with other work.

C. Beginning of installation means acceptance of existing conditions.

3.2 Installation

A. Install system in accordance with ASTM C636 manufacturer's instructions and as supplemented in this Section.

B. Install system capable of supporting imposed loads to a deflection of 1/360 maximum.

C. Install after major above ceiling work is complete. Coordinate the location of hangers with other work.

D. Supply hangers or inserts for installation of mechanical and electrical if metal deck is not supplied with hanger tabs, coordinate the installation of hanger clips during steel deck erection. Provide additional hangers and inserts as required.

E. Hang system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.

F. Where ducts are other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers (and related carrying channels) to span the extra distance.

G. Center system on room axis leaving equal border units, unless otherwise directed by reflected ceiling plan.

H. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability.

I. Do not eccentrically load systems, or produce rotation of runners.

J. Install edge molding at intersection of ceiling and vertical surfaces, using longest practical lengths. Miter corners. Provide edge moldings at junctions with other interruptions.

K. Form expansion joints as required.

L. Fit acoustic units in place, free from damaged edges or other defects detrimental to appearance and function.

M. Install acoustic units' level, in uniform plane, and free from twist, warp and dents.

N. Install varying ceiling heights to allow for new and existing duct work, provide all trim pieces required.

3.3 Tolerances

A. Variation from flat and level surface: 1/8 inch in 10 ft.

3.4 EXTRA MATERIALS:
Furnish extra maintenance materials.
Furnish not less than one box for 50 boxes or fraction thereof.

End of Section

SECTION 096519 – RESILIENT TILE FLOORING

Part 1 – General

RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to work of this section.

DESCRIPTION OF WORK:

Extent of Vinyl Composition Tile (VCT) flooring and accessories is shown on drawings and in Material and Room Finish Schedules.

QUALITY ASSURANCE:

Manufacturer: Provide each type of VCT and accessories as produced by a single manufacturer, including recommended primers, adhesives, sealants and leveling compounds. Product shall have a 20-year commercial wear warranty.

Fire Test Performance: Provide luxury vinyl tile flooring which complies with the flooring fire test performance criteria as determined by an independent testing laboratory acceptable to authorities having jurisdiction.

Flame Spread:	> 0.45 watts/cm2 Class I – ASTM E-648
Smoke Density:	< 450 per ASTM E 662

SUBMITTALS:

Product Data: Submit manufacturer's technical data for each type of vinyl tile and accessory.

Samples for initial Selection Purposes: Submit manufacturer's standard color charts in form of actual sections of vinyl tile, including accessories, showing full range of colors and patterns available, for each type of vinyl tile required.

Samples for Verification Purposes: Submit the following samples of each type, color and pattern of vinyl tile required, showing full range of color and pattern variations.

Full size tile samples.
6" long samples of resilient bases, including preformed corners.
6" long samples of resilient edge strips.
2 ½" long samples of vinyl tile accessories.
Other materials, such as stair tread units, etc., as required.

Bond and Moisture Tests: Submit location diagrams and results. It is essential that moisture tests be taken on all concrete floors regardless of the age or grade level. Check moisture content does not exceed 2.5% by weight (calcium carbide test method) or moisture emissions do not exceed 5 lbs. Water/24 hours/1000 sq. ft. (calcium chloride test method) by conducting moisture tests, around the perimeter of the room, at columns and where moisture may be evident. Calcium chloride tests and/or calcium carbide tests must be done in accordance with ASTM F-1869 and to instructions. It is the responsibility of the owner or his agent to provide adequate moisture testing by an independent agency acceptable to the floor covering manufacturer for products specified within this document

Maintenance Instruction: Submit two copies of manufacturer recommended maintenance practices for each type of luxury vinyl tile flooring and accessory required.

PROJECT CONDITIONS:

Maintain minimum temperature as instructed by material manufacturers but not less than 65 ° F (18 ° C) in spaces to receive luxury vinyl tile for at least 48 hours prior to installation, during installation and for not less than 48 hours after installation. Store vinyl tile materials in spaces where they will be installed for at least 48 hours before beginning installation. Subsequently, maintain minimum temperature of 55 °F (13 ° C) in areas where work is completed.

Install vinyl tile and accessories after other finishing operations, including painting, have been completed. Do not install vinyl tile over concrete slabs until the latter have been cured and are sufficiently dry to achieve bond with adhesive as determined by the luxury vinyl tile manufacturer's recommended bond and moisture test. Do not take tests later than ten days prior to scheduled installation. Notify Architect immediately of unsatisfactory conditions.

PART 2 – PRODUCTS

REPRESENTATIVE:

Armstrong

Mannington

Tarkett

VINYL COMPOSITION TILE COLORS AND PATTERNS:

Provide color and patterns as indicated, or if not indicated in Materials Schedule and/or drawings as selected by Architect from manufacturer's standards.

SIZE:

TILE .....12" x 12"

GAUGE:.....1/8 in/0.125in (3.2mm)

WEAR WARRANTY.....20-year commercial wear warranty

RUBBER STAIR TREAD

Provide rubber stair treads for existing interior stair down to lower level.

Square tread Rubber Stair Treads
Size: existing stair width x 12" deep w/nosing, 5/16" thick at nose taper back to edge, 1 1/8" square nose.
Meets Fed. Spec. RR-T-650E & ZZ-T-001237
Flame Spread 75 or less using ASTM E-84 test.
Install with adhesive.
Epoxy Nose Caulk as part of installation.

Repair worn and uneven edges, foil any gap between tread and existing tread with epoxy nose caulk.
Worn or dished-out steps, cracks, holes, depressions or any other irregularities on the step should be repaired by filling or sealing and smooth with underlayment compound.

PART 3 – EXECUTION

INSPECTION:

Require installer to inspect subfloor surfaces to determine that they are satisfactory. A satisfactory subfloor surface is defined as one that is smooth and free from cracks, holes, ridges, or coatings preventing adhesive bond and other defects impairing performance or appearance.

Concrete subfloors: Verify that concrete slabs comply with ASTM F710 and the following:

Slab substrates are dry and free of curing compounds, sealers, hardeners and other materials that may interfere with adhesive bond. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by flooring manufacturer.

Do not allow vinyl tile work to proceed until subfloor surfaces are satisfactory.

PREPARATION:

Prepare subfloor surface as follows:

Inspection of existing sub—floor: A solid, dry, clean sub-floor is required for the installation of all materials. All wax and finishes shall be removed prior installation of material.

Use cementitious leveling and patching compounds as recommended by vinyl tile manufacturer for filling small cracks, holes and depressions and leveling subfloors. This contractor shall be responsible for leveling new or existing floors whose surface varies up to 5/16". Notify Owner, Architect and General Contractor in writing where substrate varies more than above before proceeding with the work. **Gypsum based leveling compounds will not be accepted, Synthetic based gypsum such as Schonox is an acceptable product.**

Use cementitious leveling and patching compounds as recommended by luxury vinyl tile manufacturer for filling small cracks, holes and depression in subfloors. All loose and cracked existing tile shall be removed and filled smooth with leveling compound.

Remove coatings from subfloor surfaces that would prevent adhesive bond, including curing compounds incompatible with luxury vinyl tile adhesives, paints, oils, waxes and sealers. Floors shall be rinsed at least twice and allowed to dry for a minimum of 48 hours.

Broom clean or vacuum surfaces to be covered, and inspect subfloor.

INSTALLATION

INSTALLATION,

GENERAL:

Installer verification: All materials should be installed by a professional flooring mechanic, preferably one who has attended an installation clinic or a Master Mechanic Training Seminar.

Field verification:

Field verify, prior to installation, exact layout dimensions of all seams, floor patterns, grain directions and insets with Architect. Start of work without Architect approval of field verification is not permitted and unauthorized installations shall be replaced at Contractors expense.

Where moveable partitions are shown, install vinyl tile before partitions are erected.

Install flooring using method indicated in strict compliance with manufacturer's printed instructions. Extend flooring into toe spaces, door reveals and into closets and similar openings.

Scribe, cut and fit vinyl tile to permanent fixtures built in furniture and cabinets, pipes, outlets and permanent columns, walls and partitions.

Maintain reference markers, holes or openings that are in place or plainly marked for future cutting by repeating on finish flooring as marked on subfloor. Use chalk or other non-permanent marking device.

Install flooring on covers for telephone and electrical ducts, and other such items as occur within finished floor areas. Maintain overall continuity of color and pattern with pieces of flooring installed on these covers. Tightly cement edges to perimeter of floor around covers and to covers.

Tightly adhere flooring to subbase without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks or other surface imperfections. Hand roll flooring at perimeter of each covered area to assure adhesion.

INSTALLATION OF TILE FLOORS:

Lay tile from center marks established with principal walls, discounting minor offsets, so that tile at opposite edges of room are of equal width. Adjust as necessary to avoid use of cut widths less than 1/2 tile at room perimeters. Lay tile square to room axis, unless otherwise shown. Confirm with Custom direction of tile prior to installation.

Match tiles for color and pattern by using tile from cartons in same sequence as manufactured and packaged if so numbered. Cut tile neatly around all fixtures. Broken, cracked, chipped or deformed tiles are not acceptable.

Lay tile with grain running in one direction unless shown or directed otherwise. Verify grain directions with Architect prior to installation.

Adhere tile flooring to substrates using full spread of adhesive applied in compliance with flooring manufacturer's directions.

On all floor penetrations cutouts and edge conditions, such as door frames, fill voids between tile floor and other surfaces with sealant recommended by tile manufacturer.

Transition section at paving junction:: Place resilient edge strips tightly butted to flooring, and, secure with adhesive rec0mmended by the edge strip manufacturer. Install edge strips at edges of flooring that would otherwise be exposed.
Apply butt-type overlap metal edge strips where shown or required after flooring installation. Secure units to substrate, complying with the edge strip manufacturer's recommendations.

INSTALLATION OF ACCESSORIES:

Apply wall base to walls, columns, pilasters, casework and other permanent fixtures in rooms or areas where base is required. Install base in lengths as long as practicable, with preformed corner units. Tightly bond base to substrate throughout length of each piece, with continuous contact at horizontal and vertical surfaces.

On masonry surfaces, or other similar irregular substrates, fill voids along top edge of resilient wall base with manufacturer's recommended adhesive filler material.

Place resilient edge strips tightly butted to flooring and secure with adhesive. Install edging strips at edges of flooring which would otherwise be exposed. Apply resilient accessories to stairs in strict accordance with manufacturer's installation instructions.

CLEANING AND PROTECTION:

Perform following operations immediately upon completion of luxury vinyl tile:

Sweep or vacuum floor thoroughly.

Do not wash floor until time period recommended by luxury vinyl tile manufacturer has elapsed to allow luxury vinyl tile to become well adhered.

Spray budding using a white or lamb's wool pad is also a very effective and economical method of maintaining a high standard of appearance.

Damp mop floor being careful to remove black marks and excessive soil.

Remove any excess adhesive or other surface blemishes, using appropriate cleaner recommended by flooring manufacturers.

Protect flooring against damage during construction period to comply with luxury vinyl tile manufacturer's directions.

If required by owner, apply protective floor polish to luxury vinyl tile surfaces free from soil, excess adhesive or surface blemishes. Use commercially available metal cross-linked acrylic product acceptable to luxury vinyl tile manufacturer.

Protect flooring against damage from rolling loads for initial period following installation by covering with plywood or hardboard. Use dollies to move stationary equipment or furnishings across floors.

Cover luxury vinyl tile with undyed, untreated building paper until inspection for Substantial Completion.

Clean luxury vinyl tile not more than four days prior to date scheduled for inspections intended to establish date of Substantial Completion in each area of project. Clean resilient flooring by method recommended by luxury vinyl tile manufacturer.

EXTRA MATERIALS:

Furnish extra maintenance materials to Owner. Furnish extra materials from same manufactured lot as materials installed. Deliver to Owner enclosed in protective packaging with appropriate identifying labels.

Tile Flooring: Furnish not less than one box for 50 boxes or fraction thereof, for each type, color, pattern and size installed.

Resilient Accessories: Furnish not less than ten linear feet for each 500 linear feet or fraction thereof, of each type, size, color and pattern installed.

END OF SECTION 09650

Section 09900 – Painting
(BY OTHERS)

1. General.

1.1 Summary

A. This section addresses all supervision, labor, materials and equipment in the work for furnishing and installing painting as specified or shown in accordance with best accepted practice.

B. Related Sections
09260 Gypsum Board assemblies

06200 Rough and Finish Carpentry

08100 Hollow Metal Doors & Frames

081400 Wood Doors

1.2 Submittals

A. Submit shop drawings and manufacturer's data in accordance with the provisions of Division I, General Provisions, and Section 01600 – Materials and Equipment

1) Data: Paint. The names, quantity represented, and intended use for the proprietary brands of materials proposed to be substituted for the specified materials.

2) Instructions: Application. Manufacturer's current printed product description, and technical data sheets for each coating system. Detailed mixing, thinning and application instructions, minimum and maximum application temperature, and curing and drying times between coats for epoxy, moisture-curing polyurethane, and liquid glaze coatings.

3) Certificates: Lead. Mildewcide and Insecticide. Volatile Organic Compound (VOC) Content. Certificate stating that paints for interior use contain non-mercurial mildewcide or insecticide. Certificate stating that paints proposed for use contain no more than 0.06 percent lead by weight of the total nonvolatile. Certificate stating that paints proposed for use meet Federal VOC regulations.

1.3 References

A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only. The only referenced publications shall be the current effective edition.

B. American Conference of Governmental Industrial Hygienist (ACGIH)

1) Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices

C. ASTM International (ASTM)

1) ASTM D 4258 Standard Practice for Surface Cleaning Concrete for Coating

D. Master Painters Institute (MPI)

1) Referenced painting systems and materials.

E. Steel Structures Painting Council (SSPC)

1) SSPC SP1 – Solvent Cleaning

2) SSPC SP 7/NACE WAB-4 - Brush-Off Blast Cleaning

3) SSPC SP 10/NACE No. 2 - Near-White Blast Cleaning

1.4 Packaging, Labeling, and Storing

A. Paints shall be in sealed containers that legibly show the designated name, formula or specification number, batch number, color, quantity, date of manufacture, manufacturer's formulation number, manufacturer's directions including any warnings and special precautions, and name of manufacturer. Pigmented paints shall be furnished in containers not larger than 5 gallons. Paints thinner shall be stored in accordance with the manufacturer's written directions and as a minimum stored off the ground, under cover, with sufficient ventilation to prevent the buildup of flammable vapors and at temperatures between 40- and 95-degrees F. Paints shall be stored on the project site or segregated at the source of supply sufficiently in advance of need to allow 30 days for testing.

1.5 Approval of Materials

A. When samples are tested, approval of materials will be based on tests of the samples; otherwise, materials will be approved based on test reports furnished with them. If materials are approved based on test reports furnished, samples will be retained by the OWNER for testing should the materials appear defective during or after application. In addition to any other remedies under the contract the cost of retesting defective materials will be at the CONTRACTOR'S expense.

1.6 Environmental Conditions

A. Unless otherwise recommended by the paint manufacturer the ambient temperature shall be between 50- and 95-degrees F. Do not apply coatings when the relative humidity exceeds 85 percent; at temperatures less than 5 degrees above the dew point; or to wet or damp surfaces. Do not apply exterior coatings in snow, rain, fog or mist.

1.7 Safety and Health

A. Work shall comply with applicable Federal, State, and local laws and regulations.

B. Worker Exposures: Exposure of workers to hazardous chemical substances shall not exceed limits established by ACGIH, or as required by a more stringent applicable regulation.

C. Toxic Compounds: Toxic products having ineffective physiological warning properties, such as no or low odor or irritation levels, shall not be used unless approved by the OWNER.

D. Training: Workers having access to an affected work area shall be informed of the contents of the applicable material safety data sheets (MSDS) and shall be informed of potential health and safety hazard and protective controls associated with materials used on the project. An affected work area is on which may receive mists and odors from the painting operations. Workers involved in preparation, painting and clean up shall be trained in the safe handling and application, and the exposure limit, for each material which the worker will use in the project. Personnel having a need to use respirators and masks shall be instructed in the use and maintenance of such equipment.

E. Coordination: Work shall be coordinated to minimize exposure of building occupants, other CONTRACTOR personnel, and visitors to mists and odors from preparation, painting and clean-up operations.

2. Products.

2.1 Paint

A. Only materials listed in the latest edition of the MPI Approved Product List (APL) are acceptable.

B. The term "paint" as used herein includes emulsions, enamels, paints, stains, varnishes, sealers, cement-emulsion filler, and other coatings, whether used as prime, intermediate, or finish coat. Paint shall conform to the following requirements:

1) Colors and Tints: Colors shall be as selected from manufacturer's standard colors, and indicated. Manufacturer's standard color is for identification of color only. Tinting of epoxy and urethane paints shall be done by the manufacturer.

2) Lead: Paints containing lead in excess of 0.06 percent by weight of the total nonvolatile content (calculated as lead metal) shall not be used.

3) Chromium: Paints containing zinc chromate or strontium chromate pigments shall not be used.

4) Volatile Organic Compound (VOC) Content: Paints shall comply with applicable federal, state and local laws enacted to insure compliance with Federal Clean Air Standards.

5) Mildewcide and Insecticide: Mercurial mildewcide shall not be used in interior paint. Insecticide shall not be used in paint.

2.2 Materials

A. MPI # 11: Latex, Exterior Semi-Gloss (MPI Gloss Level 5); A pigmented, water based, emulsion type, semi-gloss paint.

B. MPI #141 Latex, Interior Semi-Gloss; a pigmented, water base, emulsion type

C. MPI # 69: Primer, Bonding, Solvent Based; A solvent based, pigmented primer, used on various types of problematic surfaces to promote adhesion of subsequent coatings.

D. MPI # 72: Polyurethane, Two-Component, Pigmented, Gloss (MPI Gloss Level 6-7); A solvent based, two component polyurethane, pigmented coating with a gloss finish for interior or exterior brick, block, concrete, plaster, wood and metal surfaces, where abrasion, weathering, chemical and solvent resistance is required.

E. MPI # 77: Epoxy, Gloss; A solvent based, gloss, two component, epoxy coating for wall and floor surfaces in moderate to heavy traffic commercial and moderate industrial environments. Resistant to incidental splash and spillage of dilute (5%) sulfuric acid, (15%) hydrochloric acid, (20%) sodium hydroxide, gasoline and heavy duty cleaners and detergents. Used as a self-priming material on smooth, low porosity concrete, masonry and wood surfaces.

F. MPI #80: Primer, Vinyl Wash; A two component, vinyl butyral/phosphoric acid wash primer used over cleaned metal surfaces and zinc rich primers, as a tie coat for subsequent priming with anti-corrosive primers or finish coatings.

G. MPI #82: Epoxy Deck Coating (Slip-Resistant); A solvent based, two component epoxy, non-slip coating for interior and exterior decks. Resistant to abrasion, solvents, fuel and oils. Application by trowel, roller and spray, and may be touched up by brush.

H. MPI #101: Primer, Epoxy, Anti-Corrosive, for Metal; A solvent based, two component, epoxy, anti-corrosive primer for exterior and interior, ferrous and galvanized metal surfaces. Specified for use over new, cleaned metals and as a spot primer or full coat over previous epoxy coatings that have been properly prepared with hand, power tool or abrasive blasting cleaning methods.

I. MPI #108: Epoxy, High Build, Low Gloss; A two component epoxy, high solids, low gloss coating for use on interior or exterior concrete, masonry and primed metal surfaces.

J. MPI #116: Block Filler, Epoxy; A solvent based, two component, epoxy, high solids coating for unfilled, interior and exterior block surfaces that are to be coated with a chemically resistant finish. Resistant to water, alkalis, chemicals and solvents.

3. Execution.

3.1 Protection

A. Items not to be painted, which are in contact with or adjacent to painted surfaces, shall be removed or protected prior to surface preparation and painting operations. Items

removed prior to painting shall be replaced when painting has been completed. Following completion of painting, workmen skilled in trades involved shall reinstall removed items. Surfaces contaminated by coating materials shall be repaired or replaced to original condition as directed by the OWNER.

B. Protect machinery, electrical panels and motors, couplings and other equipment that may be damaged by paint operations. Clean off paint spots and splashes on areas not designated to receive paint as work proceeds.

C. Ensure hardware and accessories, plates, fixtures, finished work, and similar items are removed or protected.

D. Provide "wet paint" signs.

E. Remove temporary protective wrappings, provided by others for protection of their work, after completion of painting operations.

3.2 Preparation / Application

A. The surfaces to be painted shall be thoroughly cleaned, smooth, free of foreign material and dry before application of any paint. Oil and grease shall be removed prior to mechanical cleaning. Cleaning shall be programmed so that dust and other contaminants will not fall on wet, newly painted surfaces. Exposed ferrous metals such as nail heads, on or in contact with surfaces to be painted with water-thinned paints, shall be spot- primed with a suitable corrosion-inhibitive primer capable of preventing flash rusting and compatible with the coating specified for the adjacent areas. Sufficient time shall elapse between coats to allow the paint to become completely dry and hard. Elapsed time between coats shall not be less than 24 hours, and shall be longer if required. No painting shall be done in rainy or excessively damp weather, or when the temperature is below 45 degrees F. The paint shall be applied by experienced painters, in full body, without runs, sags, or excessive brush marks. Thinning will be permitted only as allowed by the manufacturer's directions.

B. Concrete and Masonry Surfaces: Concrete and masonry surfaces shall be allowed to dry at least 30 days before painting, except concrete slab on grade which shall be allowed to cure 90 days before painting. Surfaces shall be cleaned in accordance with ASTM D 4258. Glaze, efflorescence, laitance, dirt, grease, oil, asphalt, surface deposits of free iron and other foreign matter shall be removed prior to painting. Surfaces to receive polyurethane or epoxy coatings shall be acid-etched or mechanically abraded as specified by the coating manufacturer's recommended conditioner prior to application of the first coat.

C. Ferrous Surfaces

1) New Items: Ferrous surfaces, including those that have been shop-coated, shall be solvent-cleaned or detergent-washed in accordance with SSPC SP 1. Surfaces that contain loose rust, loose mill scale, and other foreign substances shall be cleaned mechanically with hand tools according to SSPC SP2, power tools according to SSPC SP3 or by sandblasting according to SSPC SP 7/NACE WAB-4. Shop-coated ferrous surfaces shall be protected from corrosion by treating and touching up corroded areas immediately upon detection.

2) Existing to Remain Items: All existing ferrous surfaces shown to remain shall be cleaned according to SSPC SP 10/NACE No.2, Near-White Blast Cleaning. All existing paint, rust and other debris/coatings shall be removed before painting/coating. The surfaces shall be protected at all times from further corrosion.

D. Nonferrous Metallic Surfaces: Galvanized, aluminum and aluminum-alloy, lead, copper, and other nonferrous metal surfaces shall be solvent-cleaned or detergent-washed in accordance with SSPC SP 1.

E. Mastic-Type Surfaces: Mastic-type surfaces shall be prepared by removing foreign material.

F. Wood Surfaces: Wood surfaces shall be cleaned of foreign matter. Moisture content of the wood shall not exceed 15 percent as measured by a moisture meter, unless otherwise authorized. Wood surfaces adjacent to surfaces to receive water-thinned paints shall be primed and/or touched up before applying water-thinned paints. Small, dry seasoned knots shall be scraped, cleaned, and given a thin coat of commercial knot sealer, before application of the priming coat. Pitch on large, open, unseasoned knots and all other beads or streaks of pitch shall be scraped off, or, if it is still soft, removed with mineral spirits or turpentine, and the resinous area shall be thinly coated with knot sealer. Finishing nails shall be set, and all holes and surface imperfections shall be primed. After priming, holes and imperfections in finish surfaces shall be filled with putty or plastic wood filler, colored to match the finish coat. If natural finish is required, allowed to dry, and sanded smooth. Putty or wood filler shall be compatible with subsequent coatings.

3.3 Mixing and Thinning

A. When thinning is approved as necessary to suit surface, temperature, weather conditions, or application methods, paints may be thinned in accordance with the manufacturer's directions. When thinning is allowed, paints shall be thinned immediately prior to application with not more than 1 pint of suitable thinner per gallon. The use of thinner shall not relieve the CONTRACTOR from obtaining complete hiding, full film thickness, or required gloss. Thinning shall not cause the paint to exceed limits on volatile organic compounds. Paints of different manufacturers shall not be mixed.

3.4 Application

A. Unless otherwise specified or recommended by the paint manufacturer, paint may be applied by brush, roller, or spray. At the time of application, paint shall show no signs of deterioration. Uniform suspension of pigments shall be maintained during application. Each coat of paint shall be applied so dry film will be of uniform thickness and free from runs, drops, ridges, waves, pinholes or other voids, laps, brush marks, and variations in color, texture, and finish. Hiding shall be complete. Rollers for applying paints and enamels shall be of a type designated for the coating to be applied and the surface to be coated. Special attention shall be given to insuring that all edges, corners, crevices, welds, and rivets receive a film thickness equal to that of adjacent painted surfaces. Paints, except water-thinned types, shall be applied only to

surfaces that are completely free of moisture as determined by sight or touch.

B. Ventilation: Affected areas shall be ventilated during paint application so that workers' exposure to chemical substances will not exceed limits as established by ACGIH, or as required by a more stringent applicable regulation. Interior work zones having a volume of 10,000 cubic feet or less shall be ventilated at a minimum of 2 air exchanges per hour. Solvent vapors shall be exhausted outdoors, away from air intakes and workers. Return air inlets in the work zone shall be temporarily sealed before start of work until the coatings have dried.

C. Respirators: Operators and personnel in the vicinity of operating paint sprayers shall wear respirators.

D. First Coat: The first coat shall include repeated touching up of suction spots or overall application of primer or sealer to produce uniform color and gloss. Excess sealer shall be wiped off aftereach application.

E. Timing: Surfaces that have been cleaned, pretreated, and otherwise prepared for painting shall be given a coat of the specified first coat as soon as practical after such pretreatment has been completed, but prior to any deterioration of the prepared surface. Sufficient time shall elapse between successive coats to permit proper drying. This period shall be modified as necessary to suit weather conditions. Oil- based or oleo resinous solvent-type paints shall be considered dry for recoating when the paint feels firm, does not deform or feel sticky under moderate pressure of the thumb, and the application of another coat of paint does not cause the undercoat to lift or lose adhesion. Manufacturer's instructions for application, curing and drying time between coats of two-component systems shall be followed.

F. Fillers: Concrete and masonry surface voids shall be filled; however, surface irregularities need not be completely filled. The dried filler shall be uniform and free of pinholes. Filler shall not be applied over caulking compound.

G. Cement-Emulsion Filler: Immediately before filler application, surfaces shall be dampened uniformly and thoroughly, with no free surface water visible, by several applications of potable water with a fog spray, allowing time between the sprayings for water to be absorbed. Cement-emulsion filler shall be scrubbed into the surface vigorously with a stiff-bristled brush having tampico or palmyra bristles not longer than 2-1/2 inches. At least 24 hours shall elapse before applying exterior emulsion paint over cement-emulsion filler. Surfaces shall be dampened lightly with a spray of potable water immediately prior to application of the subsequent paint coat.

H. Latex Filler: Latex filler, CID A-A-1500, shall be applied according to the manufacturer's instructions. Surface voids shall be filled and excess filler shall be removed from the surface with a rubber squeegee. The filler shall be allowed to dry, the length of time specified by the manufacturer, prior to applying successive coats of paint.

I. Ferrous-Metal Primer: Primer for ferrous-metal shall be applied to ferrous surfaces to receive paint other than bituminous coatings prior to deterioration of the prepared surface. The semitransparent film applied to some pipes and tubing at the mill is not to be considered a shop coat, but shall be overcoated with the specified ferrous-metal

primer prior to application of finish coats.

3.5 Cleaning

A. Cloths, cotton waste and other debris that might constitute a fire hazard shall be placed in closed metal containers and removed at the end of each day. Upon completion of the work, staging, scaffolding, and containers shall be removed from the site. Paint and other deposits on adjacent surfaces shall be removed and the entire job left clean and acceptable.

3.6 Paint Schedule

A. Basement Level all new finished drywall walls to be painted
B. All existing block walls to be dampproof/waterproof (see section 071900)
C. Exposed concrete floors shall receive dustproofing
D. All new gyp. bd shall be prepared for painting
E. Refer to finish schedule on drawings

END OF SECTION

SECTION 10 14 67
ADA TACTILE SIGNAGE

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Interior Tactile ADA and Wayfinding Signage
   1. Room Identification
   2. Stairs
   3. Exit
   4. Means of Egress
   5. Restroom (ADA and Pictogram)
   6. Inclined Platform Lift
   7. Informational Signage
   8. Directory Signage

1.2 RELATED SECTIONS

A. Section 09900 Painting
B. Section 09260 Gypsum Board Assemblies

1.3 REFERENCES

A. 2010 ADA Standards for Accessible Design.
B. ICC/ANSI A117.1 Accessible and Usable Buildings and Facilities.
C. FSC-STD-40-004 Chain of Custody Certification.
D. USGBC LEED v4.1 Materials and Resources.
E. ASTM International {ASTM)
   1. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
   2. Underwriters Laboratories {UL) UL 723 - Standard for Test for Surface Burning Characteristics of Building Materials.

1.4 SUBMITTALS

A. Manufacturers must submit proof of 3 or more years of experience.
B. Submit manufacturer's product data sheets with technical details for each sign type required.
C. Submit shop drawings with sign design, content and construction details of each sign type.
D. As needed, submit one full size sample sign of each type including method of attachment.
E. At time of bid architect, GC or installer is to submit a sign schedule including:
   1. Content and design elements for each sign type.
   2. Quantity for each sign type.
   3. Desired installation method, based on wall surface, for each sign.
   4. Other project specific details as relevant.

1.5 SIGNAGE DESCRIPTION

A. Signage shall meet all requirements of the 2010 ADA (Americans with Disabilities Act) Standards for Accessible Design Accessibility Guidelines and the ANSI 117.1- 2017 for Buildings and Facilities.
B. As applicable, signage shall meet state and/or local government accessibility and signage regulations that apply in project jurisdiction.

1.6 DELIVERY & **HANDLING**

A. Inspect products at delivery to verify there are no defects or damage.
B. Store products in manufacturer's original packaging until ready for installation.
C. Handle products carefully to avoid damage.
D. Install products in an interior climate-controlled environment, unless exterior rated.

1.7 WARRANTY

A. Manufacturer must provide a minimum five-year warranty against defects in materials and workmanship.
B. There is no warranty against defects due to improper installation, abuse, or failure to exercise normal maintenance.

PART 2 PRODUCTS

2.1 MANUFACTURER

A. Green Dot Sign, Inc. 324 Stonebridge Blvd. Saint Paul, MN 55105 PHONE: (651)447-3046 EMAIL: Info@greendotsign.comWEB:www.greendotsign.com.
B. MyDoorSign Co. 300 Cadman Plaza West, Brooklyn, NY 11201, Suite 1303 - 800 952 1457
C. Associated Building Specialties- Mohawk Sign Systems, Inc. Architectural Graphics, P.O. Box 966, Schenectady, NY 12301- 516 842 5303.
A. Interior Signage
    1. Tactile characters to be direct bonded to sign substrate using 3D printing, no machining allowed.
    2. No adhesives allowed for tactile elements or pictograms.
    3. Sign must be phthalate free to IOOOppm.
    4. Decorative flat CMYK printing on sign substrate allowed.

2.2 DESIGN

A. Manufacturer product data sheets shall provide guidance on design size, thickness, edge profile and similar features.
B. Sign content, including text, pictograms, symbols, and design elements per manufacturer drawings shall include.
    1. Content style & placement per drawings.
    2. Content size & color(s) per drawings, colors to be CMYK or PMS.
    3. Text case, spacing & font per drawings.

2.3 ADA COMPLIANCE

A. Manufacturer shall review drawings to verify ADA compliance for sign content and design. Architect, GC or installer are responsible for ADA sign location compliance including if a sign is required or not.
    1. Characters shall meet all requirements including case, style, proportion, height, stroke thickness, character spacing, and line spacing components.
    2. Raised, tactile characters shall be at least 1/32 inch above sign base.
    3. When required braille shall be Grade 2 and placed directly below the last line of text.
        a. For building projects in jurisdictions with additional braille requirements, braille standards of that jurisdiction shall be used.
    4. Pictograms shall be used when required. International Symbols of Accessibility must be used to identify accessible facilities.
    5. Text and pictogram symbols shall have high color contrast with their background.
        a. Dark colored content with a light background or light-colored content with a dark background.
    6. Signs shall have a non-glare finish.
    7. Tactile characters shall be raised 1/32" inches from sign face.
    8. Required spacing for all content will be met.
    9. Manufacturer will adjust design as needed to achieve ADA compliance or have express written consent for non-compliant details.

2.4 ACCESSORIES

A. Products shall be prepared with 4 peg or foam tape installation methods as directed by architect, GC or installer.
    1. Contact manufacturer for installation methods others then 4 peg or foam tape.

PART 3 EXECUTION

3.1 EXAMINATION

A. Do not begin installation until confirming the wall surface is free and clear of obstacles and cleaned of any excess dirt, dust, grease or debris.
B. Commencement of installation constitutes acceptance of conditions.

3.2 PREPARATION

A. For installation to painted walls insure paint has fully cured per paint manufacturer directions.
B. Verify mounting locations comply with ADA requirements.

3.3 INSTALLATION

A. Mount signs level using manufacturer's standard foam tape or wood pegs. Installer assumes responsibility for suitable sign installation.
B. Ensure an appropriate method of installation is used for each site's wall. Consider surface texture, curve, etc.

3.4 CLEANING

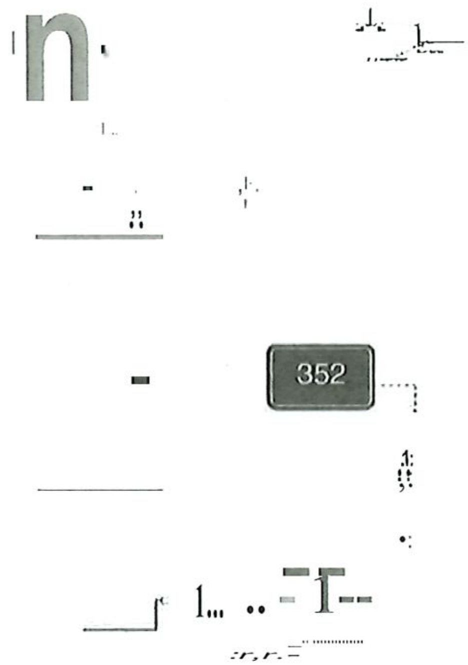
A. Clean soiled sign surface as needed according to product data sheets.
B. Protect signs from damage until acceptance by owner.
C. Remove all packing materials and installation equipment.

END OF SECTION

1. Surface Prep. Ensure that all wall or ceiling treatments, such as wallpapering or painting, are fully completed and dry befo,e installing ADA signs Then, using a lint free cloth or towel, begin by wiping down the watl or ceiling surface, ensuring it is free of al ly dust or dirt

2.. Determine Where lo Install the ADA Sign or Visual Sign. Here are the most common installation situations. See one of our downloadable guides for.ca/.(O f/ 8 M ... i9n is'i WWauo e q!!LC DC g1 1.il1i.tilLilllilD.andM:.fA...51.ilLIY@Y. Hentification sig :

- ADA Bfanl• Slgns - Wall InstaDatlon. In order to properly install braille signs, they must be installed at an ADA-compliant height for ADA tadile signs, the ADA requires that the baseline of the lowest raised character be a minimum of <48 above lhe finished Roar, and lhe baseline of lhe highest raised charactêr be a maJCimum of 60" above U,e finished Ooor. We recommend installing our ADA signs at 54 from the center of the sign to your hotel's floor. For ADA wall signs located near a door, the ADA r uires braille signs to be installed on the latch side of the door, When there is no wall space on the latch side of a single door, ADA braille signs should be installed on the nearest adjacent wall



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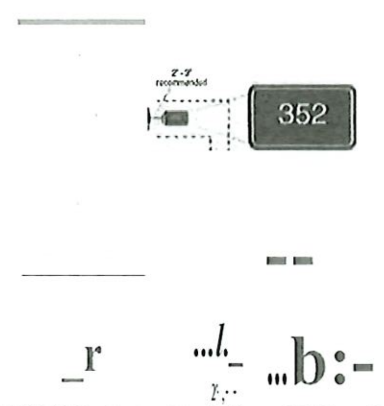
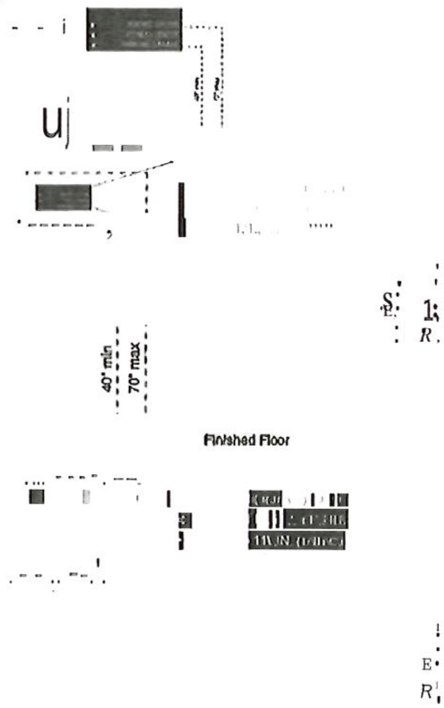


ADA lhallle Signs. Door Installallan, Can I hang an ADA Sign on a Door? In some cases, you may Install your ADA tactile signs directly on the door, but only in certain circumstances All three conditions listed below must be met in order to install ADA tactile signs directly on a door.

- o The ADA sign is mounted on lhe push side or the door.
- o lhe door has an automatic closer that is ADA-compliant
- o The door does not have a hold open device.

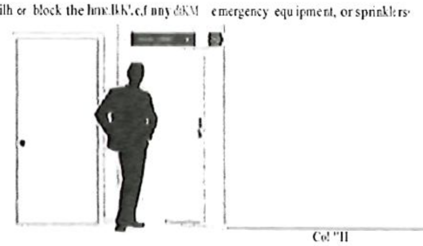
Th!:! ADA requires that the baseline of the lowest raised character be a minimum of 48" above the finished floor, and the baseline of the highest raised character be a ma,cimum of 60" above the finished floor. We recommend installing our ADA braille signs at 54" from the center of the sign to the floor.

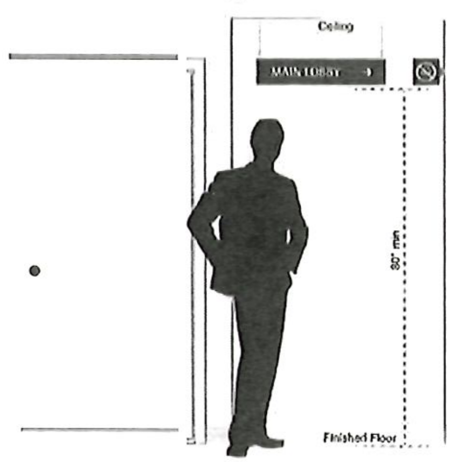


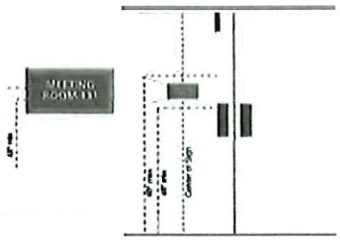
Anl&hed Floor

Perpendicular & C•lllng Sign,. The ADA requires signs that project frolTl the wall (perpendicular signs) or ceiling (overhead signs) to have a clearance of 80" from lhe finished floor to the bottom of the sign Signs should not interfere

wilh or block the hm:BK'.c,f nny dKM emergency equipment, or sprinklers·







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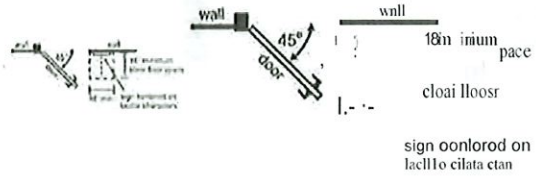
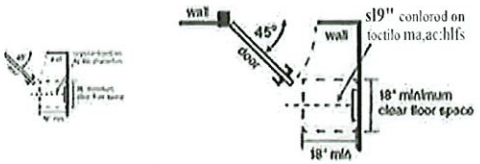
- Floor Clearance. In Lhe case Of outward swinging doors, ADA braille signs must be insla Oed on lhe wall outside of the arc of the door swing. The ADA sign must be c tered on the letters in a dear floor space of 18" minimum by 18N minimum , lf there is no room on the latch side of the door, the ADA sign must be installed on the n arest adjacent wall with the 18" minimum clear floorspace.





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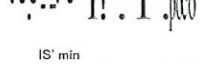
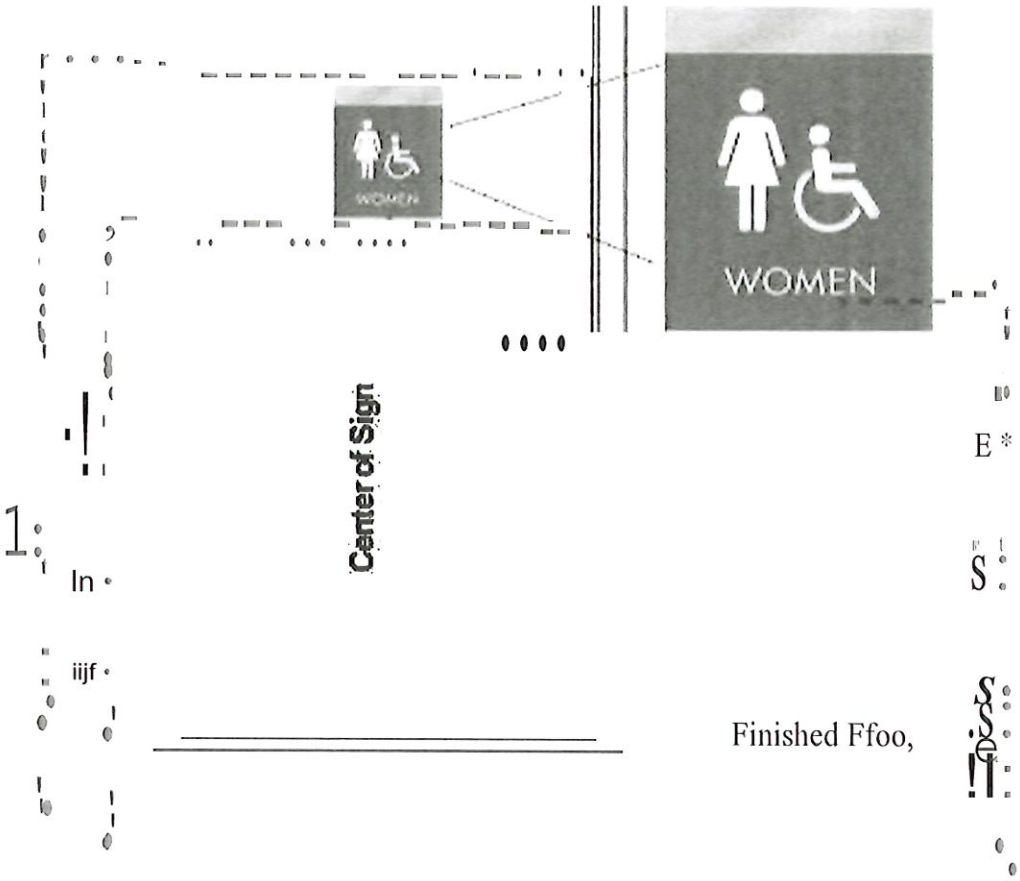
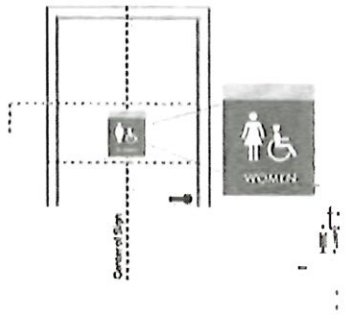


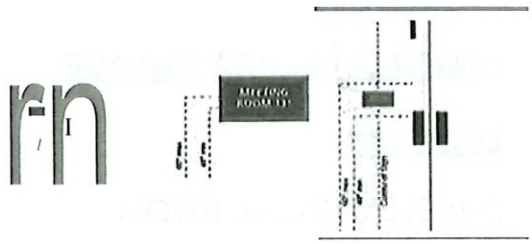
IS' min

- Visual Character Signs. Visual character signs or non-lactile signs do not have as strict ADA installation requirements as braille sign installation requirements. The only visual character sign requirement is that visual signs with text 2• and under in heights should be Installed wilh the baseline of the lowest visual character a minimum of 40• above the finished floor, and th(! bottom of th<! highest visual character a maximum of 70" above the finished Hoar. In order lo achieve a visually appealing and cohesive look, we recommend installing our hotel signs at 54" from the center of the sign to the noor.





• Double-Door InrtaHatlori, Install the tactile sign centered on the inactive (locked) leaf of" double.·door. Uthe double-door contains two actlv• leafs (neither door Is locked In place), the ADA sign should be mounted on the wall to the rtght of the double.-doors.


MEETING
ROOM 1

LOWER LEVEL ADA SIGNAGE

LOCATION

200 ELECTRICAL ROOM

201 STORAGE 1

202 MECHANICAL ROOM

203 STORAGE 2

204 CORRIDOR/LOBBY

205 ROOM 1

206 ROOM 2

207 ROOM 3

208 UNISEX TOILET (ADA GRAPHIC)

209 LAUNDRY

210 ELEVATOR MACHINE ROOM

STAIRS UP

STAIR UP TO GRADE

ELEVATOR

UPPER LEVEL ADA SIGNAGE

100 JANITOR CLOSET

101 MEN'S RESTROOM (ADA GRAPHIC)

102 WOMEN'S RESTROOM (ADA GRAPHIC)

103 PANTRY

104 KITCHEN

105 STAIRS DOWN

106 OFFICE

ELEVATOR

10800 TOILET ROOM ACCESSORIES

PART 1 GENERAL

1.1 SUMMARY:
Provide all toilet accessories as listed in the schedule on drawings and specifications.

A. Related Sections:

1. 06100 -Carpentry.
2. 10170 - Toilet Partition.

1.2 SUBMITTAL$

A. Product Data: Submit manufacturer's technical data and installation instructions for each toilet accessory before starting work.

B. Samples:

1. Submit full-size samples of units for review of design and operation.
2. Acceptable samples will be returned and will be used in work.

C. Setting Drawings: Provide setting drawings, templates, instructions, and directions for installation of anchorage devices.

1.3 QUALITY ASSURANCE

A. Coordination:

1. Inserts and Anchorages: Furnish inserts and anchoring devices as required to install accessories. Coordinate delivery with other work to avoid delay.
2. Accessory Locations: Coordinate accessory locations with other work to avoid interference and to assure proper operation and servicing of accessory units. B. Source Quality Control:

1. Products: Provide products of same manufacturer for each type of accessory unit and for units exposed in same areas.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A Toilet Room Accessories:

1. Bradley
2. Bobrick.

2.1 MANUFACTURED UNITS

A Toilet Paper Dispenser:

1. Surface mounted multi-roll, stainless steel with theft resistant spindles and tumbler lock keyed like other bathroom accessories.
2. Manufacturers:
    a. Bradley: Model 5402
    b. Bobrick: Model B-2888 .

Grab Bars:

1. Lengths and configurations as indicated on Construction Documents and as specified in this section.
2. Heavy duty with peened non-slip gripping surface, 1-1/2" diameter, stainless steel, with 1-1/2" wall clearance and with theft-proof concealed fasteners with snap flange cover. 18", 36", 42"
3. Manufacturers:
    a. Bradley 001-18, 001-36, 001-42
    b. Bobrick: B-5806 Series

C. Paper Towel Dispensers:

1. Surface mounted, lever operated roll-type paper towel dispenser.
2. Manufacturers:
    a. Kimberly-Clark H-9608
    b. Bobrick: Model B-72860
    c. Bradley 2495 surface mounted lever operated roll-type black

D. Mirrors: (ADA compliant)

1. Size: 18" W x 36" H. Tilt
2. One-piece roll formed frame of stainless-steel angle with corners heliarc welded, ground and polished smooth, complete with minimum 20 gage galvanized steel back.
3. Tempered glass mirror electrolytically copper plated, No.1 quality, guaranteed against silver spoilage for a minimum 15 years.
4. Mirrors shall be mounted with concealed theft-proof fasteners and appropriate wall backing according to manufacturer's requirements.
5. Manufacturers:

   a. Bradley: Model 782- 18x36
   b. Bobrick: Model B-294-18x36.

E. Soap Dispensers, surface-mounted liquid tank type vertical.

1. Heavy Duty stainless steel with exposed surfaces model 6562.
2. Manufacturers:
   a. Bradley: 6562
   b. Bobrick: B-2111

F. Toilet Seat Cover

1. Unit: 22-gauge stainless steel with exposed surfaces in architectural satin finish. Welded construction with burr- free edges.
2. 250 standard single-fold or half-fold toilet seat covers.
3. Manufacturers:

   a. Bradley: 5831

   b. Bobrick: B-221

G. Trash can:

   a. Bradley: 356-35 commercial restroom waste receptacle.
   b. Bobrick: B-368-60 Interchangeable Receptacle.

PART 3 EXECUTION

3.1 INSPECTION

A. Do not proceed with the work of this section until conditions detrimental to the proper and timely completion of the work have been corrected in an acceptable manner.

3.2 INSTALLATION

A. Install toilet room accessories at locations shown on the Construction Documents, according to manufacturers' printed installation instructions.

B. Secure toilet room accessories to supporting substrate with fasteners and anchors of types necessary for rigid anchorage to substrate construction.

C. Install toilet room accessories plumb and true with horizontal lines level.

1. Conceal evidence of drilling or fitting in adjacent surfaces.

D. Special Tools or Keys:

1. Deliver properly identified special tools or keys of each type required for the theftproof fasteners and for refilling dispensers or emptying receptacles.

E. Cleaning:

1. After installation, clean toilet room accessories in a manner not to damage finish and leave in conditions satisfactory to A/E.

END OF SECTION

SECTION 14 42 13 - Incline Wheelchair Lifts
INCLINE WHEELCHAIR LIFTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Commercial inclined platform lift for straight stairways. (Delta).
This project stair has an intermediate landing mid-way on straight stair.

1.2 RELATED SECTIONS

A. Section 06 10 00 - Rough Carpentry.

B. Section 26 0501 - Electrical: Electrical power service and wiring connections.

1.3 REFERENCES

A. ASME A17.5 - Elevator and Escalator Electrical Equipment.

B. ASME A18.1 - Safety Standard for Platform Lifts and Stairway Chairlifts

C. CSA B355 - Lifts for Persons with Physical Disabilities.

D. ICC/ANSI A117.1 - Accessible and Usable Buildings and Facilities.

E. ADDAG - American with Disabilities Act & Architectural Barriers Act.

F. NFPA 70 - National Electric Code.

1.4 SUBMITTALS

A. Submit under provisions of Section 01332 – Submittal Procedures

B. Product Data: Manufacturer's data sheets on each product to be used, including:
1. Submit manufacturer's installation instructions, including preparation, storage and handling requirements.
2. Include complete description of performance and operating characteristics.
3. Show maximum and average power demands.

C. Shop Drawings:
1. Show typical details of assembly, erection and anchorage.
2. Include wiring diagrams for power, control, and signal systems.
3. Show complete layout and location of equipment, including required clearances.

D. Selection Samples: For each finished product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.

E. Verification Samples: For each finished product specified, two samples, representing actual product, color, and patterns.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Firm with minimum 5 years documented experience in manufacturing of inclined wheelchair platform lifts.

B. Installer Qualifications: Firm licensed to install equipment of this scope, with evidence of experience with specified equipment. Installer shall maintain an adequate stock of replacement parts and have qualified people available to ensure timely maintenance and call back service at the project site.

1.6 REGULATORY REQUIREMENTS

A. Provide platform lifts in compliance with:
   1. ASME A18.1 - Safety Standard for Platform Lifts and Stairway Chairlifts.
   2. ASME A17.5 - Elevator and Escalator Electrical Equipment.
   3. NFPA 70 - National Electric Code.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

B. Store components off the ground in a dry covered area, protected from adverse weather conditions.

1.8 PROJECT CONDITIONS

A. Do not use wheelchair lift for hoisting materials or personnel during construction period. Project has straight stair with mid-way landing.

1.9 WARRANTY

A. Warranty: Provide a three-year limited warranty covering replacement of defective parts and excluding labor. Preventive maintenance agreement required.

1.10 MAINTENANCE SERVICE

A. Furnish service and maintenance for elevator system and components for the following period from Date of Substantial Completion.
   1. Five years.

B. Include systematic examination, adjustment, and lubrication of elevator equipment. Repair or replace parts whenever required. Use parts produced by manufacturer of original equipment. Replace wire ropes when necessary to maintain required factor of safety.

C. Provide emergency call back service for this maintenance period.

D. Perform maintenance work using competent and qualified personnel approved by elevator manufacturer or original installer.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Savaria, which is located at: 2 Walker Dr.; Brampton, ON, Canada L6T 5E1; Toll Free Tel: 800-661-5112; Tel: 905-791-5555; Fax: 905-791-2222; Email:request info (info@savaria.com); Web:https://www.savaria.com

B. Substitutions: permitted.

C. Requests for substitutions will be considered.

2.2 COMMERCIAL INCLINED PLATFORM LIFT FOR STRAIGHT STAIRWAYS

A. Inclined Platform Lift: Savaria Stair-Lift, Model Delta inclined platform lift for straight stairways. Lift consists of a universal tubular guide rail system, a power folding platform that is moved along the guide rails by a rack and pinion drive system, overspeed safety system and call stations at each landing. Conform to the following design requirements:

1. Application: Indoor.
2. Platform Load Rating: 550 lb (250 kg), with minimum safety factor of 5.
3. Platform Load Rating: 660 lb (300 kg) (Optional in USA only).
4. Travel Distance (nose to floor): _10'-6".
5. Travel Speed: 20 fpm (0.1 m/s) nominal
6. Platform Deck: Surface shall be slip resistant
7. Platform Size: (ADA Compliant): 30.50 inches (775 mm) wide by 49.20 inches (1250 mm) long.
8. Platform Configuration: Straight through platform.
9. Platform Configuration: 90-degree platform (three sided).
10. Platform Operation:
    a. Automatic Fold: Power folded and unfolded electrically from the call station.
    b. Emergency Manual Fold: When unit is left in the open position, platform may be manually folded in any location and retained in closed position.
11. Under Platform Obstruction Sensing:
    a. Provide an under platform sensing device to stop the platform from traveling in the downward direction when encountering 15 lb (70 N) of pressure.
    b. Platform is permitted to travel in the opposite direction of obstruction to allow clearing.
12. Passenger Restraining Arms:
    a. Platform equipped with foldable passenger restraining arms in compliance with ASME A18.1a.
    b. Arms stop moving when an obstruction is encountered.
    c. Provide with means to manually unlock and open the restraining arms for passenger emergency evacuation.
    d. Arms are power folded and unfolded electrically from the call stations or platform controls.
    e. Arms mounted 39 inches (990 mm) above the platform deck. When in guarding position the arms are located above the perimeter of the platform.
    f. The gaps between ends of arms shall not exceed 4 inches (102 mm).
    g. When platform folds, passenger restraining arms shall fold down and be covered by the folded platform.
13. Boarding Ramps:
    a. Provide boarding sides of platform with retractable ramps positioned for travel at a height of 6 inches (152 mm) measured vertically above the platform deck.
    b. Lock ramps in their guarding positions during travel. When the platform is at the landing, only the retractable ramp servicing the landing shall be operable.
    c. Ramps shall be power folded and unfolded mechanically.
    d. Retractable ramps, in the guarded position, shall withstand a force of 125 lb (556 N) applied on any 4 inches (102 mm) by 4 inches (100 mm) area. This force shall not cause the height of the ramp, at any point in its length, to be less than 6 inches (152 mm) measured vertically above the platform deck.
    e. Provide a means to manually unlock the ramps for emergency evacuation when platform is located at a landing.
    f. Provide with a directional obstruction sensitive device on the travel direction side end of the platform to stop lift when an obstacle of 15 lbf (70 N) is encountered. Platform is permitted to travel in the opposite direction of obstruction to allow clearing.

14. Platform Side Wall: Provide non-boarding and non-guide-rail side of the platform with a sidewall of not less than 6 inches (152 mm) in height, measured vertically from the platform deck.
15. Hand Grips: Equip platform with one handgrip centered on the platform at 36.50 inches (925 mm) and 17 inches (432 mm) long.
16. Clearance Dimensions:
    a. When folded platform shall not protrude more than 17.50 inches (445 mm) from mounting surface (Measurement based on a wall mounted unit).
    b. When unfolded and in use straight platform shall not protrude more than 39.75 inches (1010 mm) from wall from mounting surface. (Measurement based on a wall mounted unit).
    c. When unfolded and in use 90-degree platform shall not protrude more than 44 inches (1120 mm) from wall from mounting surface. (Measurement based on a wall mounted unit.
17. Controls:
    a. Platform Controls: 24 V Low Voltage type.
    b. Platform equipped with emergency stop switch located within reach of the passenger 43 inches (1090 mm) above platform deck. When activated emergency stop button shall cause electric power to be removed from the drive system stopping lift immediately.
    c. Operating controls shall be two separate constant pressure buttons with directional arrows on a removable hand pendant device with emergency stop button.
    d. When platform arrives at landing the user keeps pressing the directional button and the passenger restraining arms and boarding ramp shall unfold automatically allowing passenger to disembark.
    e. Platform shall be equipped for:
        1) Keyed operation.
18. Passenger Seat: Fold-down type with safety belt. Minimum rated load of 250 lb (115 kg). The seat will fold up automatically when platform is being folded from call station.
19. Side Loading Platform: Provide with automatic folding ramps at boarding sides of platform.
20. Attendant Hand-Held Pendant Control: Provide with plug-in socket on platform control panel.
21. Carriage Mounted Audio-Visual Alert: Provide audio-visual alert that sound while the lift is in operation and are visible by pedestrian traffic from all flights and landings.
22. Platform On Board Emergency Alarm: Provide platform with on board alarm that sounds when emergency stop button is pushed.
23. Under Carriage Sensing: Provide bottom of platform hanger with a sensing plate to stop the platform from traveling in the downward direction when encountered with 15 lb (70 N) of pressure. It shall be possible to drive the platform away from the obstruction.
24. Side of Carriage Obstruction Device: Provide a sensor that detects obstructions in the path of the side of the hanger. Lift shall stop immediately and not travel until the obstruction is removed. It shall be possible to drive the platform away from the obstruction

B. Drive and Guide Rail System:
1. Operation:
    a. Motor: 0.67 hp (0.50 kW) 24VDC electric motor with an integrated brake.
    b. Required power for battery charger: 100-240 VAC, single phase, 50/60 hz on a dedicated 15-amp circuit.
    c. Power Transmission: Worm gear reduction to a pinion moving on a fixed gear rack.
    d. Locate drive and associated control devices within the platform conveyance.
    e. Provide an upper final limit switch to stop the lift in the event of a failure of the

normal limit switch.

2. Guide Rail System:
   a. Universal guide rail system consisting of:
      1) Upper Rail: Hollow circular tube 1.625 inches (41 mm) diameter with 5/32 inches (4 mm) thickness.
      2) Lower Rail: Solid circular tube 1.625 inches (41 mm) diameter with integrally machined gear rack.
   b. Rail Mounting: To be determined by installer, design will be based on direct wall mount.
      1) Rails directly mounted to the stairway wall.
      2) Mount rails to steel support posts secured to the lower landing floor and stair treads. Support posts shall be 3 inches (76 mm) by 2 inches (50 mm) hollow structural steel.
   c. Provide a mechanical stop at the upper landing to prevent over-travel of the drive carriage in the event of a switch failure.
3. Provide overspeed governor and brake on carriage drive, containing mechanical overspeed sensor and lock, with electrical drive cut-out protection.
4. Equip drive with an emergency manual lowering system with safety switch when emergency manual lowering system is engaged.
5. Battery Operation: Provide a battery system for normal up/down lift operation during a power failure for a minimum of 5 trips with rated load.

C. Call Stations:
1. Provide wireless surface mounted call stations at both landings.
2. Call station operating voltage 3 V.
3. Call stations low voltage with four control buttons: platform fold, platform unfold and two directional call and send buttons.
4. Call stations shall be equipped for:
   a. Keyed operation.

D. Finish:
1. Design and fabricate lift to manufacturer's standard design for indoor locations.
   a. Steel components shall be painted with electrostatically applied and baked powder coat as follows:
      1) Fine Light Grey (RAL 7035).
   b. Electrical printed circuit boards and control transformers to be treated with a conformal coating for resistance to ambient moisture.

2.3 INCLINED PLATFORM LIFT FOR STRAIGHT STAIRWAYS (NOT USED)

A. Inclined Platform Lift: Savaria Stair-Lift, Model Delta inclined platform lift for straight stairways. Lift consists of a universal tubular guide rail system, a folding platform that is moved along the guide rails by a rack and pinion drive system, overspeed safety system and call stations at each landing. Conform to the following design requirements:
1. Application: Indoor.
2. Platform Load Rating: 550 lb (250 kg), with minimum safety factor of 5.
3. Platform Load Rating: 660 lb (300 kg), (Optional in USA only).
4. Travel Distance (nose to floor): _10'-6"
5. Travel Speed: 20 fpm (0.1 m/s) nominal.
6. Platform Deck: Surface shall be slip resistant.
7. Platform Size: Platform Size A: 27.00 inches (685 mm) wide by 36.00 inches (915 mm) long.
8. Platform Size: Platform Size B: 28.35 inches (720 mm) wide by 35.30 inches (900 mm) long.
9. Platform Size: Platform Size C: 28.50 inches (724 mm) wide by 44.00 inches (1118

mm) long.

10. Platform Size: Platform Size D: 30.50 inches (775 mm) wide by 49.25 inches (1250 mm) long.
11. Platform Configuration: Straight through platform.
12. Platform Configuration: 90-degree platform (three sided).
13. Platform Operation:
    a. Manual Fold: Platform will be equipped with a platform that will be opened and closed manually.
    b. Automatic Fold: Folded and unfolded electrically from the call station using a constant pressure push button.
    c. Emergency Manual Fold: When unit is left in the open position, platform may be manually folded and retained in closed position.
14. Under Platform Obstruction Sensing:
    a. Provide an under platform sensing device to stop the platform from traveling in the downward direction when encountering 15 lb (70 N) of pressure.
    b. Platform is permitted to travel in the opposite direction of obstruction to allow clearing.
15. Passenger Restraining Arms:
    a. Manually Operated Arms:
        1) Platform equipped with foldable passenger restraining arms in compliance with ASME A18.1.
        2) Arms are folded and unfolded manually by the user
        3) Arms mounted 39 inches (990 mm) above the platform deck. When in guarding position the arms are located above the perimeter of the platform.
        4) The gaps between ends of arms shall not exceed 4 inches (102 mm).
        5) When platform folds, passenger restraining arms shall fold down and be covered by the folded platform.
    b. Automatic Operated Arms:
        1) Platform equipped with retractable passenger restraining arms in compliance with ASME A18.1.
        2) Arms stop moving when an obstruction is encountered.
        3) Provide with means to manually unlock and open the restraining arms for passenger emergency evacuation.
        4) Arms are folded and unfolded electrically from the call stations or platform controls.
        5) Arms mounted 39 inches (990 mm) above the platform deck. When in guarding position the arms are located above the perimeter of the platform.
        6) The gaps between ends of arms shall not exceed 4 inches (102 mm).
        7) When platform folds, passenger restraining arms shall fold down and be covered by the folded platform.
16. Boarding Ramps:
    a. Provide boarding sides of platform with retractable ramps positioned for travel at a height of 6 inches (152 mm) measured vertically above the platform deck.
    b. Lock ramps in their guarding positions during travel. When the platform is at the landing, only the retractable ramp servicing the landing shall be operable.
    c. Ramps shall be folded and unfolded electrically.
    d. Retractable ramps, in the guarded position, shall withstand a force of 125 lb (556 N) applied on any 4 inches (102 mm) by 4 inches (102 mm) area. This force shall not cause the height of the ramp, at any point in its length, to be less than 6 inches (152 mm) measured vertically above the platform deck.
    e. Provide a means to manually unlock the ramps for emergency evacuation when platform is located at a landing.
    f. Provide with a directional obstruction sensitive device on the travel direction side end of the platform to stop lift when an obstacle of 15 lbf (70 N) is

encountered. Platform is permitted to travel in the opposite direction of obstruction to allow clearing.

17. Platform Side Wall:
    a. Provide non-boarding and non-guide-rail side of the platform with a sidewall of not less than 6 inches (152 mm) inches height, measured vertically from the platform deck.
18. Hand Grips:
    a. Equip platform with one handgrip centered on the platform at 36.50 inches (925mm) and 17 inches (432 mm) long.
19. Clearance Dimensions:
    a. When folded platform shall not protrude more than 17.50 inches (445 mm) from mounting surface. (Measurement based on a wall mounted unit)
    b. When unfolded and in use platform shall not protrude more than 39.75 inches (1010 mm) from wall from mounting surface. (Measurement based on a wall mounted unit).
    c. When unfolded and in use platform shall not protrude more than 44 inches (1120 mm) from wall from mounting surface. (Measurement based on a wall mounted unit).
20. Controls:
    a. Platform Controls: 24 V Low Voltage type.
    b. Platform equipped with emergency stop switch located within reach of the passenger 43 inches (1090 mm) above platform deck. When activated emergency stop button shall cause electric power to be removed from the drive system stopping lift immediately.
    c. Operating controls shall be two separate constant pressure buttons with directional arrows on a removable hand pendant device with emergency stop button.
    d. When platform arrives at landing the user keeps pressing the directional button and the passenger restraining arms and boarding ramp shall unfold automatically allowing passenger to disembark.
    e. Platform shall be equipped for:
        1) Keyed operation
21. Passenger Seat (optional): Fold-down type with safety belt. Minimum rated load of 250 lb (115 kg). The seat will fold up automatically when platform is being folded from call station.
22. Side Loading Platform: Provide with automatic folding ramps and kickplates at boarding sides of platform.
23. Attendant Hand Held Pendant Control: Provide with plug-in socket on platform control panel.
24. Under Carriage Sensing: Provide bottom of platform hanger with a sensing plate to stop the platform from traveling in the downward direction when encountered with 15 lb (70 N) of pressure. It shall be possible to drive the platform away from the obstruction.
25. Side of Carriage Obstruction Device: Provide a sensor that detects obstructions in the path of the side of the hanger. Lift shall stop immediately and not travel until the obstruction is removed. It shall be possible to drive the platform away from the obstruction

B. Drive and Guide Rail System:
1. Operation:
    a. Motor: 0.67 hp (0.50 kW) 24VDC electric motor with an integrated brake.
    b. Required power for battery charger: 100-240 VAC single phase 50/60 hz on a dedicated 15 amp circuit.
    c. Power Transmission: Worm gear reduction to a pinion moving on a fixed gear rack.
    d. Locate drive and associated control devices within the platform conveyance.

e. Provide an upper final limit switch to stop the lift in the event of a failure of the normal limit switch.

2. Guide Rail System:
   a. Universal guide rail system consisting of:
      1) Upper Rail: Hollow circular tube 1.625 inches (41 mm) diameter with 5/32 inch (4 mm) thickness.
      2) Lower Rail: Solid circular tube 1.625 inches (41 mm) diameter with integrally machined gear rack.
   b. Rail Mounting:
      1) Rails directly mounted to the stairway wall.
      2) Mount rails to steel support posts secured to the lower landing floor and stair treads. Support posts shall be 3 inches (75 mm) by 2 inches (50 mm) hollow structural steel.
   c. Provide a mechanical stop at the upper landing to prevent over-travel of the drive carriage in the event of a switch failure.
3. Provide overspeed governor and brake on carriage drive, containing mechanical overspeed sensor and lock, with electrical drive cut-out protection.
4. Equip drive with an emergency manual lowering system with safety switch when emergency manual lowering system is engaged.
5. Battery Operation:
   a. Provide a battery back-up system for normal up/down lift operation during a power failure for a minimum of five (5) trips with rated load.

C. Call Stations:
1. Provide wireless surface mounted call stations at both landings.
2. Call station operating voltage 3V.
3. Call stations low voltage with four control buttons: platform fold, platform unfold and two directional call and send buttons.
4. Call stations shall be equipped for:
   a. Keyed operation.

D. Finish:
1. Design and fabricate lift to manufacturer's standard design for indoor locations.
   a. Steel components shall be painted with electrostatically applied and baked powder coat as follows:
      1) Fine Textured Light Grey (RAL 7035).
   b. Electrical printed circuit boards and control transformers to be treated with a conformal coating for resistance to ambient moisture.

2.4 INCLINED PLATFORM LIFT FOR STRAIGHT OR TURNING STAIRWAYS (NOT USED)

A. Inclined Platform Lift: Savaria Stair-Lift, Model Omega inclined platform lift for straight and turning stairways. Lift consists of a tubular guide rail system, a folding platform that is moved along the guide rails by a rope sprocket drive system, overspeed safety system and call stations at each landing. Conform to the following design requirements:
1. Application: Indoor.
2. Application: Outdoor.
3. Platform Load Rating: 550 lb (250 kg) with minimum safety factor of 5.
4. Platform Load Rating: 660 lb (300 kg) (capacity in USA).
5. Travel Speed: 14 fpm (0.07 m/s) nominal.
6. Platform Deck: 16-gauge (1.6 mm) sheet metal coated with electrostatically applied and baked anti-skid paint.
7. Platform Size: (ADA Compliant): 30.50 inches (775 mm) wide by 49.20 inches (1250 mm) long.
8. Platform Configuration: Straight through platform.
9. Platform Configuration: 90-degree platform (three sided).

10. Platform Operation:
    a. Automatic Fold: Power folded and unfolded electrically from the call station.
    b. Emergency Manual Fold: When unit is left in the open position, platform may be manually folded and retained in closed position.
11. Under Platform Obstruction Sensing:
    a. Provide an under platform sensing device to stop the platform from traveling in the downward direction when encountering 15 lb (70 N) of pressure.
    b. Platform is permitted to travel in the opposite direction of obstruction to allow clearing.
12. Passenger Restraining Arms:
    a. Platform equipped with retractable passenger restraining arms in compliance with ASME A18.1.
    b. Arms stop moving when an obstruction is encountered.
    c. Provide with means to manually unlock and open the restraining arms for passenger emergency evacuation.
    d. Arms are folded and unfolded electrically from the call stations or platform controls.
    e. Arms mounted 39 inches (990 mm) above the platform deck. When in guarding position the arms are located above the perimeter of the platform.
    f. The gaps between ends of arms shall not exceed 4 inches (102 mm).
    g. When platform folds, passenger restraining arms shall fold down and be covered by the folded platform.
13. Boarding Ramps:
    a. Provide boarding sides of platform with retractable ramps positioned for travel at a height of 6 inches (152 mm) measured vertically above the platform deck.
    b. Lock ramps in their guarding positions during travel. When the platform is at the landing, only the retractable ramp servicing the landing shall be operable.
    c. Ramps shall be folded and unfolded electrically.
    d. Retractable ramps, in the guarded position, shall withstand a force of 125 lb (556 N) applied on any 4 inches (102 mm) by 4 inches (102 mm) area. This force shall not cause the height of the ramp, at any point in its length, to be less than 6 inches (152 mm) measured vertically above the platform deck.
    e. Provide a means to manually unlock the ramps for emergency evacuation when platform is located at a landing.
    f. Provide with a directional obstruction sensitive device on the travel direction side end of the platform to stop lift when an obstacle of 15 lbf (70 N) is encountered. Platform is permitted to travel in the opposite direction of obstruction to allow clearing.
14. Platform Side Wall:
    a. Provide non-boarding and non-guide-rail side of the platform with a sidewall of not less than 6 inches (152 mm) in height, measured vertically from the platform deck.
15. Hand Grips:
    a. Equip platform with one handgrip centered on the platform at 36.50 inches (925mm) and 17 inches (432 mm) long
16. Clearance Dimensions:
    a. When folded platform shall not protrude more than 17.50 inches (445 mm) from mounting surface (Measurement based on a wall mounted unit).
    b. When unfolded and in use platform shall not protrude more than 39.25 inches (1000 mm) from wall from mounting surface. (Measurement based on a wall mounted unit).
    c. When unfolded and in use platform shall not protrude more than 46.75 inches (1188 mm) from wall from mounting surface. (Measurement based on a wall mounted unit.
17. Controls:
    a. Platform Controls: 24 V Low Voltage type.

b. Platform equipped with emergency stop switch located within reach of the passenger 43 inches (1090 mm) above platform deck. When activated emergency stop button shall cause electric power to be removed from the drive system stopping lift immediately.
c. Operating controls shall be two separate constant pressure buttons with directional arrows on a removable hand pendant device with emergency stop button.
d. When platform arrives at landing the user keeps pressing the directional button and the passenger restraining arms and boarding ramp shall unfold automatically allowing passenger to disembark.
e. Platform shall be equipped for:
1) Keyed operation.

18. Passenger Seat: Fold-down type with safety belt. Minimum rated load of 250 lb (115 kg). The seat will fold up automatically when platform is being folded from call station.
19. Side Loading Platform: Provide with automatic folding ramps at boarding sides of platform.
20. Attendant Hand-Held Pendant Control: Provide with plug-in socket on platform control panel.
21. Audio Visual Alerts: Wall Mounted audio-visual alerts will be provided to indicate when platform is in motion and traveling on stairway. The alert will be visible by pedestrian traffic from all flights and landings.
22. Platform On Board Emergency Alarm: Provide platform with on board alarm that sounds when emergency stop button is pushed.
23. Side of Carriage Obstruction Device: Provide a sensor that detects obstructions in the path of the side of the carriage. Lift shall stop immediately and not travel until the obstruction is removed. It shall be possible to drive the platform away from the obstruction.

B. Drive and Guide Rail System:
1. Operation:
a. Motor: 1.0 hp (0.75kW) electric motor with an integrated brake (Up to 3.0 hp (2.2 kW) over 100 ft (30m) of travel).
b. Required power: 208-240 VAC, single phase, 60 hz. on a dedicated 20 amp circuit. Rated current shall be up to 9 amps (for 2.2kW motor) for operation with rated load.
c. Locate roped sprocket drive system consisting of a motor, gearbox and controller (variable frequency drive) at the upper end of the tubes.
d. Equip drive with an emergency manual lowering system with kill switch when emergency manual lowering system is engaged.
2. Compact Drive Cabinet with Separate Control Box:
a. Compact drive cabinet will house all mechanical drive system components and shall be located at the end of the tube system at or near the top landing.
b. Controller box will contain all the electrical components of the drive system and be located up to 50 feet (15 m) linear away from the compact drive. Control box dimensions are 20 inches (510 mm) wide by 20 inches (510 mm) high by 11.50 inches (290 mm) deep.
c. Provide an integrated lockable main disconnect and breaker in the compact drive control box.
3. Guide Rail:
a. Constructed of two 2 inches (51 mm) diameter steel tubes spaced approximately 22 inches (560 mm) apart vertically at right angle from rail. Tubes will run parallel to the stairs and horizontal to landings throughout the length of travel.
b. When negotiating a horizontal landing a third 2 inches (51 mm) diameter steel tube shall be added to the tube system to guide and stabilize platform.
c. Tube system shall not protrude more than 7.50 inches (190 mm) from the wall

with support posts.

d. Suspension means contained in the tubes shall be a 3/8 inch (9 mm) diameter galvanized steel core rope sprocket/chain with a minimum breaking strength of 12 540 lb (5700 kg).

e. Locate overspeed safety at the bottom of the tube assembly and shall consist of a mechanical overspeed sensor and brake with electrical drive cut-out protection.

f. Provide a final limit switch at the upper and lower end of the tubes to stop the platform if it travels past the normal terminal stopping device.

4. Auxiliary Power (Optional): Provide battery back-up system (UPS) for normal up / down lift operation during power failure for a minimum of five (5) trips with rated load.

5. Platform Storage Beyond Upper/Lower Landings:

a. Platform shall travel in the folded position beyond the upper landing at the top stair nose to a remote parking position away from the stairs.

b. Platform shall travel in the folded position beyond the lower landing to a remote parking position. Provide with a ramp extension for this configuration.

6. Rail Mounting:

a. Direct Mount Solid Walls: Rails directly mounted to the stairway wall.

C. Pedestrian Handrail Integrated with Guide Rail:

1. A third rail acting as a handrail shall be added where existing handrails are either removed or blocked by the lifting equipment (when possible).

2. The handrail gripping surface shall have a smooth gripping surface 1.50 inches (38 mm) inches diameter.

3. Handrails shall be mounted to the tube assembly.

D. Call Stations:

1. Provide a call station at each serviced landing.

2. Call stations, 24 V low voltage with four control buttons: power platform fold, power platform unfold and two directional call and send buttons.

3. Call stations shall be equipped for:

a. Keyed operation.

E. Finish Environment Requirements:

1. Design and fabricate lift to manufacturer's standard design for indoor location.

2. Stainless Steel Components (for both indoor and outdoor locations): Design and fabricate lift using the following:

a. Guide rails shall be supplied in stainless steel.

b. Handrails shall be supplied in stainless steel.

c. Support towers shall be supplied in stainless steel.

d. Drive box shall be supplied in stainless steel.

e. Wall mounted visuals shall be supplied in stainless steel.

f. Platform sensing plate shall be supplied in stainless steel.

g. Fasteners for rail assembly and anchoring shall be supplied in stainless steel.

3. Painting: Painted components shall be painted with electrostatically applied and baked powder coat as follows:

a. Color: Fine Light Grey (RAL 7035).

PART 3 EXECUTION

3.1 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. Verify required supports are correct.

C. Verify electrical rough-in is at correct locations.

D. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

A. Install units in accordance with in compliance with regulatory requirements specified and the manufacturer's instructions.

B. Install system components and connect to building utilities.

C. Accommodate equipment in space indicated.

D. Startup equipment in accordance with manufacturer's instructions.

E. Adjust for smooth operation.

3.4 FIELD QUALITY CONTROL

A. Perform tests in compliance with regulatory requirements specified and as required by authorities having jurisdiction.

B. Schedule tests with agencies and Architect, Owner, and Contractor present.

3.5 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

SECTION [5100
PLUMBING FIXTURES

Plumbing Specifications
Fairfield Township Building

SPECIFICATIONS

DI'/ISION 15. MECHANICAL

15000 — General - Contractor shall review construction documents and provide labor and materials pertaining to the mechanical systems as required in said documents and as specified herein, while complying with all applicable building codes.

15100 — Plumbing - Plumbing shall be a fully operational system of hot and cold water. Provide and install all piping, vents, drains, sewage removal and water supply systems and connect with existing water supply and sewage systems. Provide and install appropriate insulation around piping. All permits and inspections are to be obtained by contractor as required by local building codes and the Uniform Plumbing Code.

Sewer and Waste Piping — Supply and install drainage system made of Schedule 40 PVC pipe throughout for renovated restrooms. This will include all of the necessary drainage piping required for level I men's and women's restrooms.

ALI connections shall have PVC cement or appropriate joint compound and be assembled tight for no leakage. Valves shall be Milwaukee Brand or equal. Connection to public sewer system shall comply with all local requirements. Caulk joints or provide neoprene gaskets for all sewer lines. Pitch shall be a minimum 1/8" per foot for soil lines larger than 3" diameter and a minimum of 1/4" per foot for soil lines 3" diameter or less.

Waste Drainage - Install sewage clean-out at the end of each horizontal drainage run. Vents shall be installed throughout plumbing connections and connected with the vertical stacks and vented through the roof. Check with local building code officials for specific venting requirements.

Water Pipes

"Ihe existing water service, which now provides water to the building, witl remain and not be altered, repaired or replaced.

All of the new water piping will extend from the existing water service to all of the fixtures described in the Plumbing Fixtures spread sheet. Use 1/2" and 3/4" minimum lines from supply lines to each plumbing fixture as required.

Provide shut-off valves at sinks, toilets, urinals and other fixtures as required. Test all pipes under 100 lbs pressure per building code requirements.

15410 — Plumbing Fixtures - Provide necessary piping, water and drains and install plumbing fixtures as shown on the construction documents and listed herein below.

FAIRFIELD TOWNSHIP SENIOR CENTER INTERIOR RENOVATIONS
PLUMBING FIXTURE SCHEDULE

No.	FIXTURE	QUANTITY	MANUF.	MODEL	CARRIER SUPPORT	COLOR	NOTES
WC-1	TOILET	1	AMER. ST.	MADERA	FLR.	WHITE	AUTO FLUSH BATTERY
WC-1F	AUTO FLUSH	1	AMER. ST.	6065			BATTERY
WC-1alt	TOILET	1	AMER. ST.	H2OPTION	FLR.	WHITE	PENDING WATER PRESSURE
WC-1S	SEAT	1	AMER. ST.	5901.1		WHITE	
L-1	SINK	1	AMER. ST	DECLYN	WALL	WHITE	WALL MOUNTED
F-1	FAUCET	1	AMER. ST.	7025	DECK		BATTERY

MADERA* FloWise[e] 16-112" HEIGHT ELONGATED FLUSHOMETER TOILET

VITREOUS CHINA LESS EVERCLEAN'

BARRER FREE

MADERA'" FloWise[e] 16-1/2" HEIGHT ELONGATED LESS EVERCLEAN[Ø]

- Floor mount flushometer valve toilet
- Vitreous china
- High Efficiency, Low Consumption. Operates in the range of 1.1 gptto 1.6 gpf (4.2 Lpfto 6.0 Lpf)
- Meets definition ot HET (High Efficiency Toilet) when used with a high efficiency flush valve (1.28 gpf or 1.6 / 1.1 gpf dual flush)
- Fully glazed 2-1/8[A] trapway
- Elongated bowl

' 10" or 12" roughing-in

- 16-1/2' rim height for accessible application
- Condensation channel
- Powerful direct-fed siphon jet action
- 10" x 12 [11] water surface area
- 1-1/2" inlet spud
- 2 bott caps
- 100% factory flush tested

3043.001 Elongated bowl only, top spud a
3248.001 Elongated bowl only, top spud with slotted rim for bedpan holding (White only) Q
3249.001 Elongated bowl only, back spud

System MaP* Score:

- 1,000 grams of miso @ 1.1 gpf, 1.28 gpf or 1.6 gpf when used with an American Standard flush valve
- Maximum Performance (MaP) testing performed by IAPMO R&T Lab. Map neporl conducted by Verltec Consulting, Inc. and Koollor end Contpany.

Component Parts:

a 047007-0070A Inlet spud (furnished with bowl)
Q 481310-100 Bolt caps with retainers (furnished with bowl)

Nominal Dimensions:

718 x 356 x 419mm
(28-1/4" x 14" x 16-1/2")

Fixture only, less seat and flush valve
Recommended working pressure—between 25 psi at valve when flushing and 80 psi static

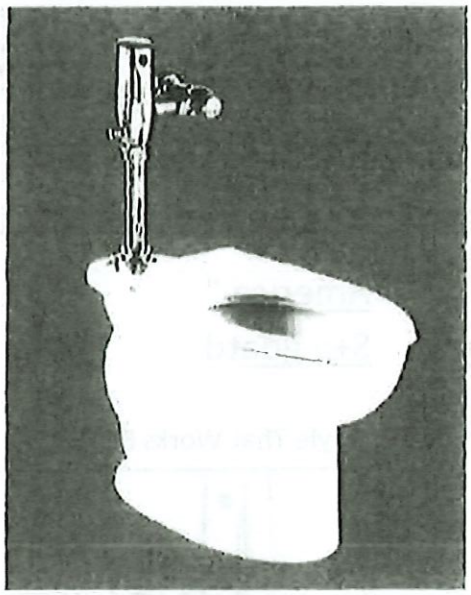
Compliance Certlflcations -

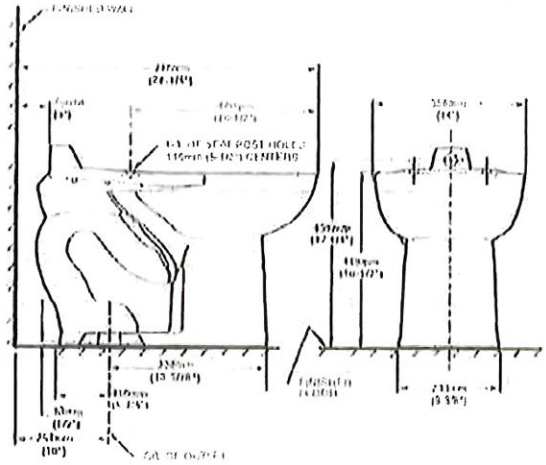
Meets or Exceeds the Following Specifications:

- ASME Alt2.t9.2-2008 / CSA B45.1-08 for Vitreous China Fixtures

MEETS AMERICANS WITH DISABIUT"ES GUIDELINES AND ANSI Alit.' REQUIREMENTS FOR ACCESSELE AND USABLE OUILOtNG FACIUTIES- CHECK LOCAL CODES.

2014





NOTES:
PRODUCT 3043 SHOWN, 3248 SAME EXCEPT WITH SLOTTED RIM FOR SEAT HOLDING.
TO COMPLY WITH AREA CODE GOVERNING THE HEIGHT OF VACUUM BREAKER ON THE FLUSHOMETER VALVE, THE PLUMBER MUST VARIFY DIMENSIONS SHOWN FOR SUPPLY ROUGHING.
THISTOILET DESIGNED TO ROUGH-INAT A MINIMUM DIMENSION OF 264MM 00') ANOA MAXIMUM O'MENSION OF 305MM FINISHED TO OF OUTLET.
FI.USHOMETER VALVE NOT INCLUDED FIXTURE AND MUST BE ont)EftE0 SEPARATELY. FLUSHOMETEft VALVE REQUIREMENTS Fon ROUGI SWEAT EXTENSION NIPPI.E IS REQUIRED, REFEn '10 VALVE AND CODES.

IMPORTANT: ()itnnngionq of nominal may varywithin tho range ot tolcrances by ANSI Ali2.t9.?, arg sublnct to citanoo or canc.cl'ation. No refiponoibi(lty Is for of or voidf%j

M108

2014 Inc. Rev. 2/14

America,"
S+a,gdatd

SELECTRONIC™ TOILET FLUSH VALVE

BATTERY POWERED, SENSOR OPERATED, 1.6 GPF

Style That Works Better

Exposed, Battery Powered, Sensor Operated Selectronic™ Water Closet Flush Valve for floor-mounted or wall-hung 1-1/2" top spud bowls.

Inlet includes 1" I.P.S. angle stop with back-flow protection, vandal-resistant cap, sweat solder kit, cover tube and wall flange.

Outlet includes 1-1/2" vacuum breaker with adjustable tailpiece, spud coupling and flange.

PRODUCT FEATURES:

- Electronic flush valve with Selectronic™ proximity system for "Hands Free" operation

GENERAL DESCRIPTION:

- Self-Cloaning Piston operation helps prevent clogging and reduces maintenance
- Positive seal ensures (oak-free performance
- Fully mechanical Manual Override Button can flush toilet during a power outage
- Range can bo adjusted manually or by remote control
- Sensor & electronic controls are fully enclosed

ACCESSORIES:

- Cast wall flanges (3/4", 1" & 1-1/2')
- Solid ring pipe supports (2-1/2" & 6 [11] C-E)
- Split ring pipe supports (2-1/2" & 6" C-E)

TYPICAL WATER CLOSET INSTALLATION:
AFWALL™ TOILET SHOWN

- Safety timer helps prevent vandalism by turning off the valve if sensor is covered for more than I minute
- 3-second Flush Delay
- Low Battery indicator
- Battery can be changed without tuming off the water
- Factory-installed GV lithium battery included
- Can be installed left or right-handed
- ADA compliant

RECOMMENDED SPECIFICATION:

Electronic proximity infrared sensor activated toilet flush valve shall feature self-cleaning piston valve. Includes a fully mechanical manual over-ride that can provide a complete flush without battery powerv Includes cast brass valve body and metal cover with chromo tlnish, vandal resistant stop cap end lithium battery. Angle stop with back-flow protection and vacuum breaker Included. 1.6 gpf 16.0 Lpf. Flush valve shall be American Standard Model # 6065.16_.002.

and water resistant

- Automatically flushes after 24 hours of non-use to maintain trap seal

MODEL NUMBER:

6065.161.002 Flush Valve for 11-1/2" Supply C\L to top of bowl, 1.6 gpf

Q 6065.162-002 Flush valve for 27" supply to top of bowl, 1.6 gpf

❑ 6065.565.002 Retrofit for Existing Flush Valves, 1.6 gpf. Replaces industry standard manual and electronic valves. Does not include the vacuum breaker assembly, angle stop or sweat solder kit.

OPERATING PRESSURE:

Overall Range: 20-125 psi**
Recommended: 25 psi (flowing)-80 psi (static)

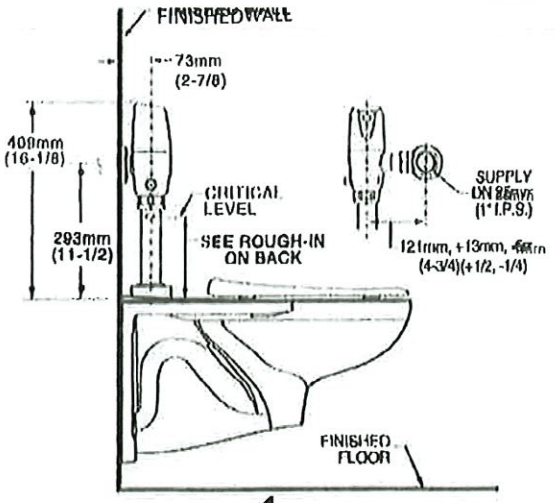
FLOW REQUIREMENT:

25gpm (94.6 L/min.)

" Water pressure over 80 psi is not recommended for most plumbing fixtures.

BATTERY LIFE:

Up to 4-year life (approx. 200,000 cycles)



American Standard

Style That Works Better

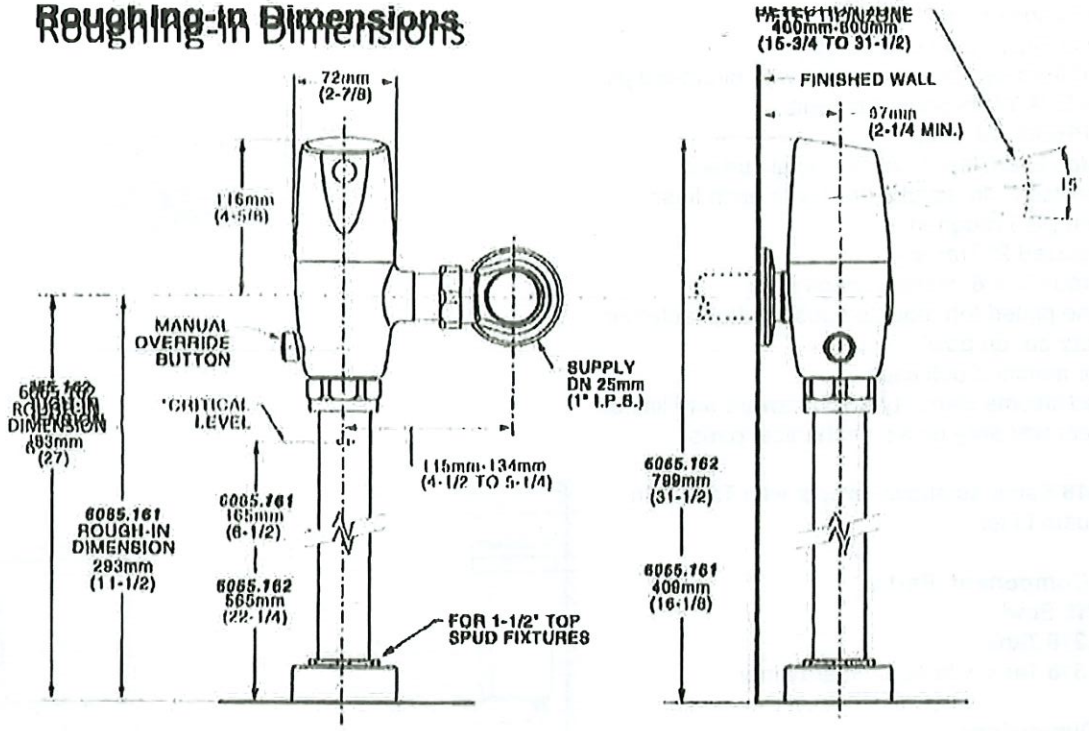
SELECTRONIC™ TOILET FLUSH VALVE

BATTERY POWERED, SENSOR OPERATED, 1.6 GPF

LISTINGS:

- ASSE 1037 •ANSI/ASME A112.19.2
- ADA Compliant

Roughing-in Dimensions



*Note: The Critical Line (-C-L-) on Vacuum Breaker must typically be 6" (152mm) above fixture. Consult Codes for details.

Right or Left Hand Installation

WC-1 ALT

NOTE: Alternate toilet if water pressure & flow does not meet tankless toilet requirements. Delete auto flush.

American Standard

H2OPTION® SIPHONIC DUAL FLUSH ROUND FRONT TOILET

VITREOUS CHINA

H2OPTION® SIPHONIC DUAL FLUSH ROUND FRONT TOILET

❑ **2889.218**
- Vitreous china
- Ultra high efficiency toilet (UHET)
  - Full Flush (4.8 Lpf/1.28 gpf)
  - Partial Flush (3.4 Lpf/0.92 gpf)
- Round front siphon action bowl with direct-fed jet
- Meets EPA WaterSense® criteria
- MaP PREMIUM listed
- Includes EverClean® antimicrobial surface
- PowerWash® rim scrubs bowl with each flush
- 305mm (12") rough-in
- Fully glazed 2" Trapway
- Generous 9" x 8" water surface area
- Chrome plated top mounted push button actuator
- Sanitary bar on bowl
- 2 color matched bolt caps
- Limited lifetime warranty on chinaware and limited five year warranty on all mechanical parts

❑ **2889.518** Same as above, except with Tank with AquaGuard Liner

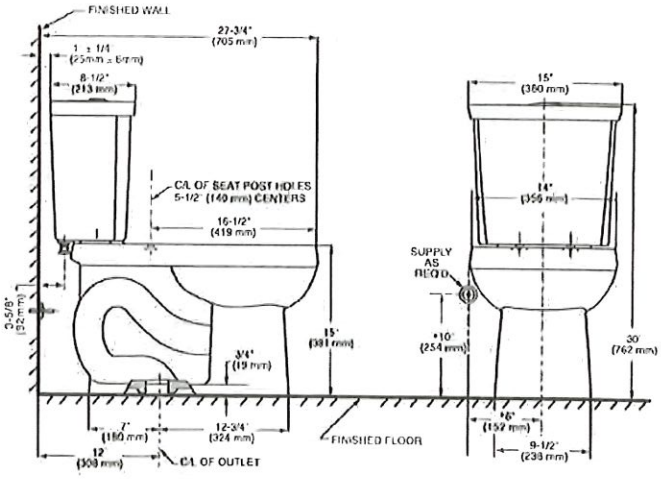
Separate Component Parts:
❑ **3708.216** Bowl
❑ **4133A.218** Tank
❑ **4133A.518** Tank with AquaGuard Liner

Nominal Dimensions:
705 x 380 x 762mm
(27-3/4" x 15" x 30")

Fixture only, seat and supply by others

Compliance Certifications -
Meets or Exceeds the Following Specifications:
- ASME A112.19.2-2008/CSA B45.1-08 for Vitreous China Fixtures
- CALGreen and California Energy Commission (CEC) Compliant
- US EPA WaterSense® criteria for UHETs

To Be Specified:
❑ Color: ❑ White ❑ Bone ❑ Linen
❑ Seat: American Standard #5259B.65C Easy Lift and Clean Round Front Seat with Cover and Slow Close hinges
❑ Alternate Seat:
❑ Supply with stop:



NOTES:
THIS COMBINATION IS DESIGNED TO ROUGH-IN AT A MINIMUM DIMENSION OF 305MM (12") FROM FINISHED WALL TO C/L OF OUTLET.
* DIMENSION SHOWN FOR LOCATION OF SUPPLY IS SUGGESTED. SUPPLY NOT INCLUDED WITH FIXTURE AND MUST BE ORDERED SEPARATELY.

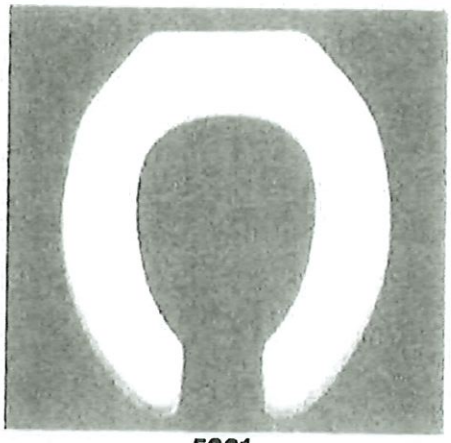
IMPORTANT: Dimensions of fixtures are nominal and may vary within the range of tolerance established by ANSI Standard A112.19.2
These measurements are subject to change or cancellation. No responsibility is assumed for use of superseded or voided pages.

American Standard
Style That Works Better

COMMERCIAL TOILET SEATS

COMMERCIAL TOILET SEATS

- Open front toilet seat less cover
- Injection molded solid polypropylene
- Fits elongated bowl
- Features large molded-in bumpers
- External check hinge with 304 Series stainless steel hinge posts stops seat 11° beyond vertical
- Our new EverClean® surface inhibits the growth of stain- and odor-causing bacteria, mold, and mildew on the surface. EverClean® surface does not protect against disease causing bacteria, viruses, germs or other disease causing organisms.



5901

☐ **5901.100** Elongated Heavy Duty bowl open front seat less cover

☐ **5901.110** Same as 5901.100 with EverClean® Surface

5905

☐ **5905.100** Elongated Extra Heavy Duty bowl open front seat less cover

☐ **5905.110** Same as 5905.100 with EverClean® Surface

To Be Specified:
☐ Color: ☐ White

5910

☐ **5910.100** Elongated Extra Heavy Duty Plus bowl open front seat less cover

☐ **5910.110** Same as 5910.100 with EverClean® Surface

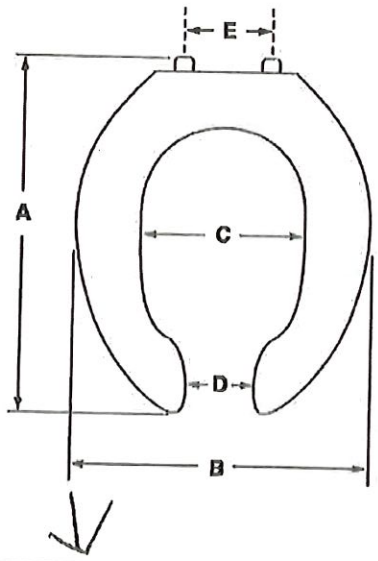
To Be Specified:
☐ Color: ☐ White ☐ Linen ☐ Bone ☐ Silver
☐ Fawn Beige ☐ Black

SEE REVERSE FOR ROUGHING-IN DIMENSIONS

Revised 2/08

American Standard
Style That Works Better

COMMERCIAL TOILET SEATS



Model #	5901	5905	5910
A	18-9/16" (471mm)	18-9/16" (471mm)	18-3/16" (462mm)
B	14-3/8" (365mm)	14-3/16" (360mm)	14-3/16" (360mm)
C	7-7/8" (200mm)	7-5/8" (194mm)	7-7/8" (200mm)
D	3-1/2" (89mm)	3" (76mm)	3-1/2" (89mm)
E	5-1/2" (140mm)	5-1/2" (140mm)	5-1/2" (140mm)
Ring Thickness	7/8" (22mm)	1" (25mm)	1" (25mm)
Ring Thickness with Bumper	1" (25mm)	1-1/8" (29mm)	1-1/8" (29mm)

Revised 2/08

American Standard

Declyn™ Wall-Hung Lavatory

VITREOUS CHINA

Declyn™ Wall-Hung Lavatory

- Wall-hung sink
- Vitreous china
- Rear overflow
- Soap depression
- Faucet ledge

Shown with 2000.101 Ceramix faucet (not included)

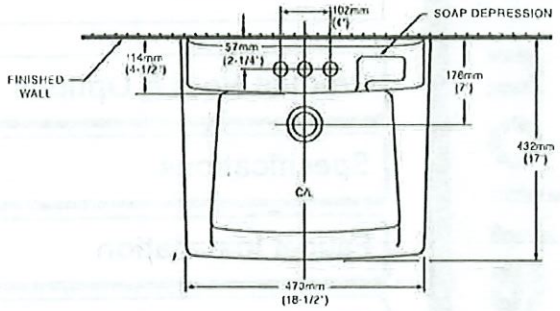
❑ **0321.026** With wall hanger (Illustrated)
Faucet holes on 102mm (4") centers

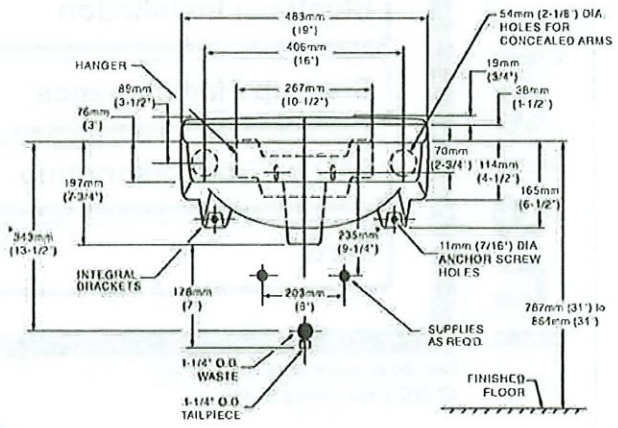
❑ **0321.075** For concealed arms support
Faucet holes on 102mm (4") centers

Nominal Dimensions:
470 x 432mm
(18-1/2" x 17")

Bowl sizes:
362mm (14-1/4") wide
273mm (10-3/4") front to back
152mm (6") deep

Compliance Certifications -
Meets or Exceeds the Following Specifications:
• ASME A112.19.2/CSA 45.1





To Be Specified:
❑ Color: ❑ White
❑ Faucet*:
❑ Faucet Finish:
❑ Supplies:
❑ 1-1/4" Trap:
❑ Nipple:
❑ Concealed Arms Support (by others):

* See faucet section for additional models available

NOTES:
* DIMENSIONS SHOWN FOR LOCATION OF SUPPLIES AND "P" TRAP ARE SUGGESTED.
PROVIDE SUITABLE REINFORCEMENT FOR ALL WALL SUPPORTS. FITTINGS NOT INCLUDED AND MUST BE ORDERED SEPARATELY.

IMPORTANT: Dimensions of fixtures are nominal and may vary within the range of tolerances established by ANSI Standard A112.19.2. These measurements are subject to change or cancellation. No responsibility is assumed for use of superseded or voided pages.

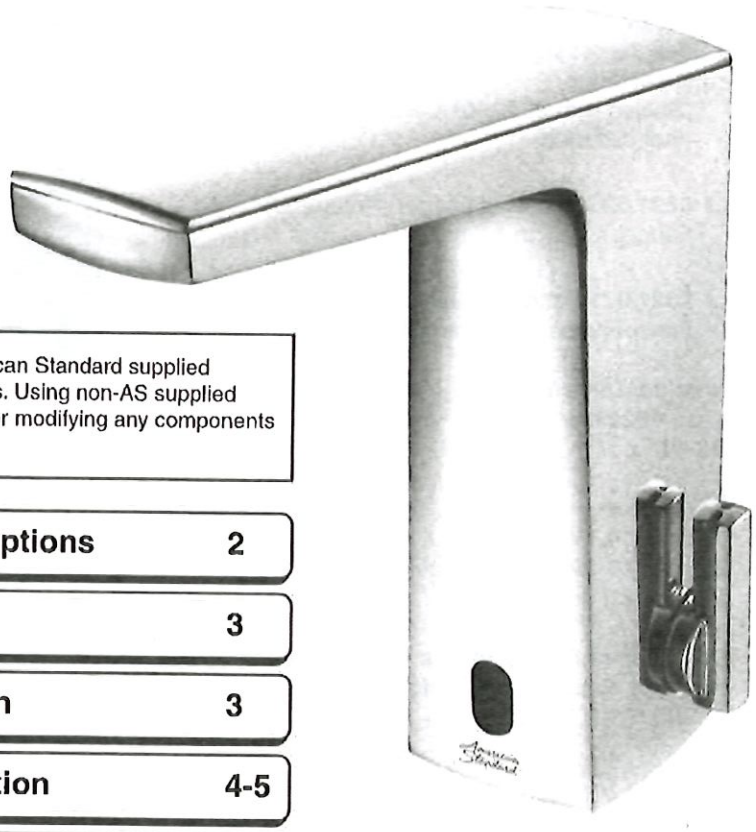
F-1

Use auto for Upper and Lower Level toilets, battery operated

Installation Instructions

Paradigm™ Selectronic® Integrated Faucet with Optional Above-Deck Mixing & SmarTherm®

MODEL NUMBERS	
7025.1xx	702B.1xx
7025.2xx	702B.2xx
7025.3xx	702B.3xx



CAUTION: Use only American Standard supplied transformers and cable sets. Using non-AS supplied cables, or cutting, splicing or modifying any components will void the warranty.

Certified to comply with ASME A112.18.1

American Standard

NOTE TO INSTALLER: Please give this manual to the customer after installation.

To learn more about American Standard Selectronic® Products visit our website at: **www.americanstandard-us.com** or e-mail us at: **sensor@lixil.com**

For Parts, Service, Warranty or other Assistance, please call (844) CRT-TEAM / (844) 278-8326 (In Canada: 1-800-387-0369)
(In Toronto Area only: 1-905-306-1093)

American Standard CRT Certified Response Technician

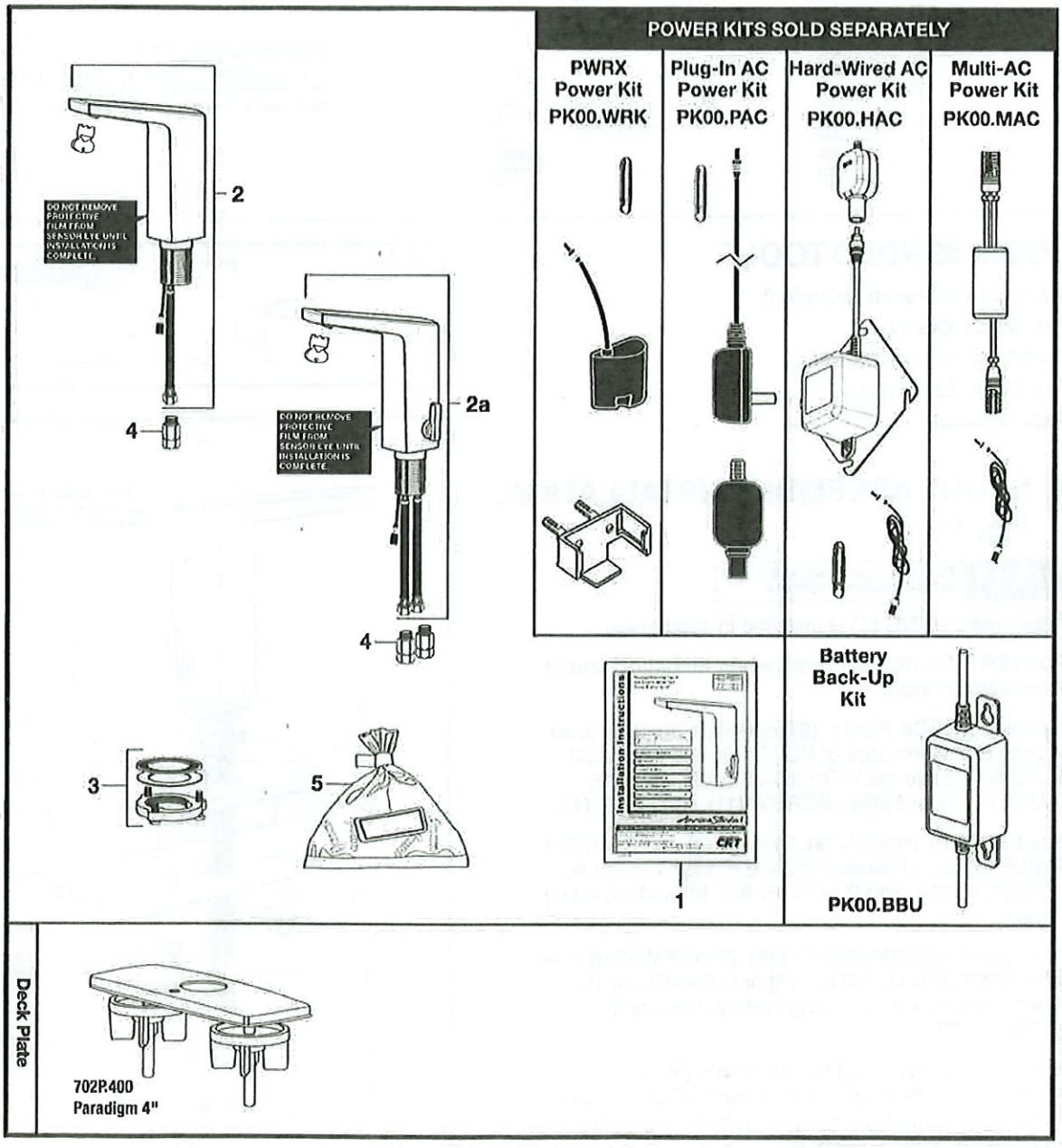
Thank you for selecting American-Standard...the benchmark of fine quality for over 100 years. To ensure that your installation proceeds smoothly--please read these instructions carefully before you begin.

UNPACKING

All American Standard Products Are Water Tested At Our Factory. Some Residual Water May Remain In The Valve During Shipping.

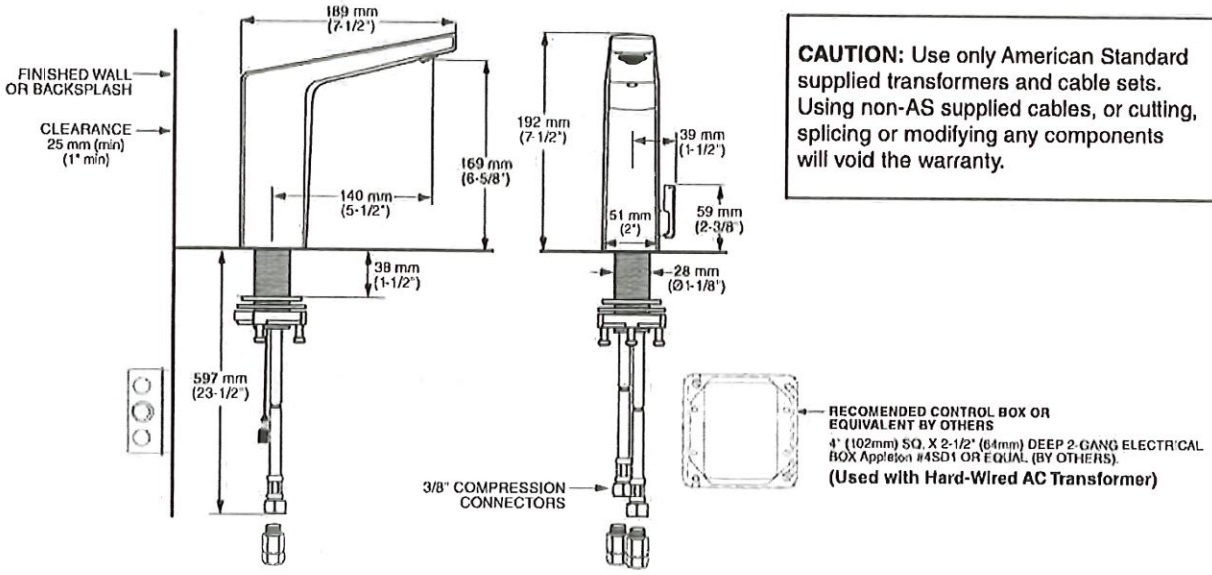
Remove the fitting and loose items from the carton. The illustration below shows all the fittings and loose items after they have been removed from the carton. Some items may be packaged partially assembled to other items.

1. Installation Instructions
2. Paradigm Spout Assembly (less mixing)
2a. Paradigm Spout Assembly (mixing)
3. Mounting Kit
4. Inline Filter/Check Valve Assembly
5. Assembly Parts



Paradigm
Roughing-in Dimensions

Note: All plumbing and electrical wiring must be installed in accordance with applicable codes, regulations and standards.

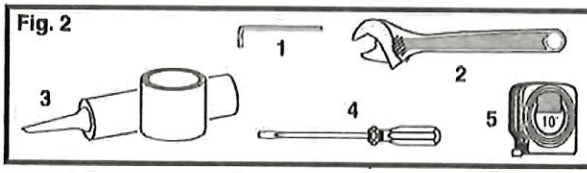


CAUTION: Use only American Standard supplied transformers and cable sets. Using non-AS supplied cables, or cutting, splicing or modifying any components will void the warranty.

RECOMMENDED TOOLS

1. 2.5 mm Hex Wrench (Included)
2. Adjustable Wrench
3. Plumbers' Putty or Caulking
4. Flat Blade Screwdriver
5. Tape Measure

Fig. 2



1 SPOUT ASSEMBLY INSTALLATION; Fig. 1

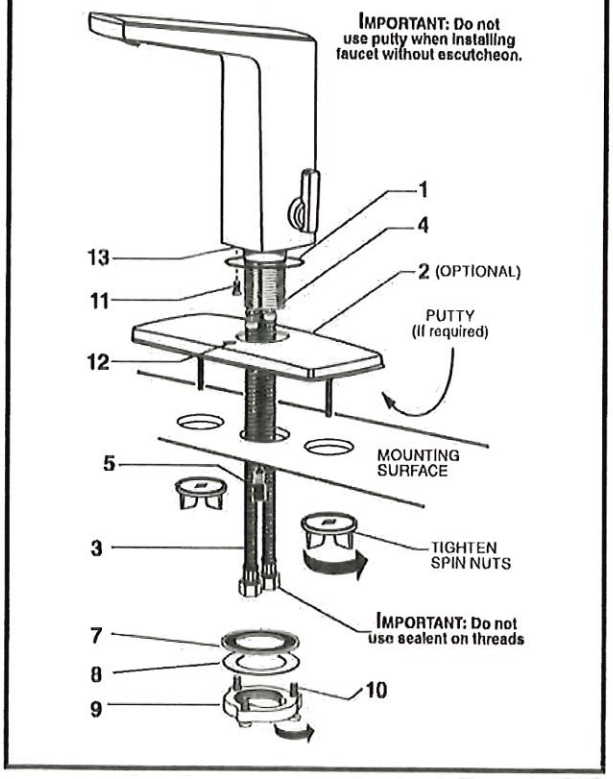
CAUTION Turn off hot and cold water supplies before beginning

1. Make sure O-RING **(1)** is installed in spout base.

IMPORTANT: Do not use putty when installing faucet without escutcheon.

2. If installing DECK PLATE **(2)** (optional): Apply a bead of putty to bottom edge of PUTTY PLATE **(2)**. Install SCREW **(11)** into the MOUNTING BASE OF THE FAUCET **(13)** and allign SCREW **(11)** with HOLE **(12)**.
3. Insert SUPPLY HOSES **(3)**, SHANK **(4)** and SENSOR CABLE **(5)** (only included in base model) through hole in DECK PLATE with PUTTY PLATE **(2)** and mounting surface.
4. Assemble RUBBER WASHER **(7)**, BRASS WASHER **(8)** and THREADED LOCKNUT **(9)** onto SHANK **(4)** from underside of sink or mounting surface. Hand tighten LOCKNUT **(9)**.
5. Use a screwdriver to tighten SCREWS **(10)** on LOCKNUT **(9)**. Work your way around LOCKNUT **(9)**, tightening the screws slightly each time until all are snug to ensure even pressure.

Fig. 1



M965985 Rev. 1.3 (9/21)

ELECTRICAL INSTALLATION

Product	Page
PWRX Power Kit (PK00.WRK)	4
Plug-In AC Power Kit (PK00.PAC)	5
Hard-Wired AC Power Kit (PK00.HAC)	5
Multi-AC Power Kit (PK00.MAC)	5

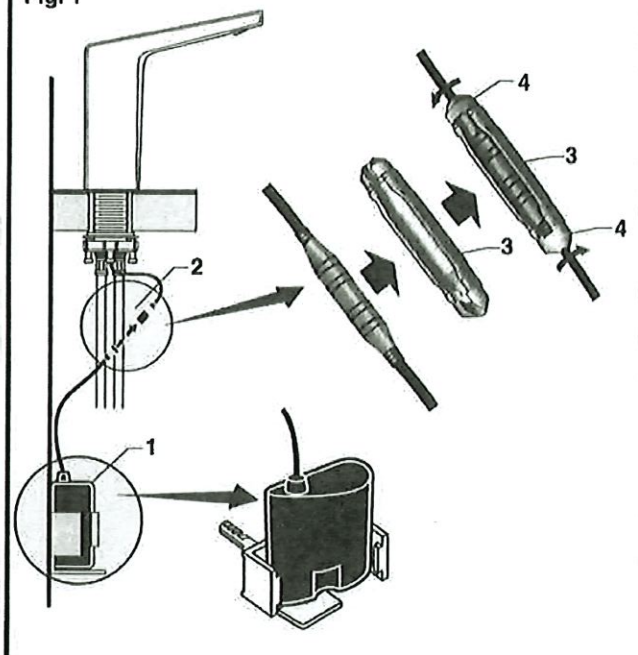
Important: All 7025 faucets with the standard CR-P2 battery come preaseambled from the factory. No further action necessary.

A PWRX 10 YEAR BATTERY SYSTEM; Fig. 1

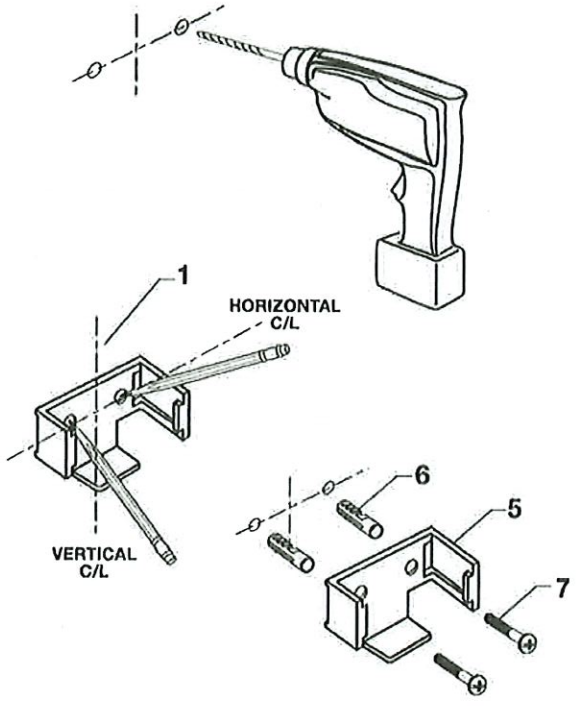
PWRK™ VERSION;

1. Connect PWRX BATTERY PACK **(1)** to SENSOR CABLE **(2)**.
2. Secure the connections by installing into CONNECTOR LOCKING DEVICE **(3)** as shown. Rotate the END CAPS **(4)** to secure the connection within the CONNECTOR LOCKING DEVICE **(3)**.
3. Determine the mounting location of the PWRX BATTERY PACK **(1)** by marking center lines as shown.
4. Place the BRACKET **(5)** on the horizontal center line and mark the location of the mounting holes to be drilled.
5. Using 1/4" diameter drill bit, drill two mounting holes aproximately 1" deep.
6. Install the two ANCHORS **(6)** provided into the mounting holes.
7. Place the BRACKET **(5)** over the ANCHORS **(6)** and secure with the SCREWS **(7)** provided. Do not overtighten.
8. Insert PWRX BATTERY PACK **(1)** into BRACKET **(5)**.

Fig. 1



BRACKET INSTALLATION



APPENDIX A

CONTRACT MODIFICATION PROPOSAL AND ACCEPTANCE FORM

CONTRACT MODIFICATION PROPOSAL AND ACCEPTANCE

1. ISSUING OFFICE	2. PROJECT NO.	3. CONTRACT NO.	4. MODIFICATION NO.
5. TO (CONTRACTOR)		6. PROJECT LOCATION AND DESCRIPTION	

7. A proposal is required for making the hereinafter described change in accordance with specification and drawing revisions cited herein or listed in attachment hereto. Submit your proposal in space indicated on page 2, attach detailed breakdown of prime and sub-contract costs (See the clause of this contract entitled, "Changes". DO NOT start work under this proposed change until you receive a copy signed by the Contracting Officer or a directive to proceed).

Date	Type Name and Title	Signature

8. DESCRIPTION OF CHANGE: *Pursuant to the clause of this contract covering changes, the contractor shall furnish all labor and material, and all work necessary to accomplish the following described work:*

As a result of the above, the contract price is revised as follows:

ITEM NO.	ITEM DESCRIPTION	UNIT PRICE	ESTIMATED QUANTITY	TOTAL COST

TOTAL COST OF THIS MODIFICATION $ _____

The contract time is hereby: *increase* ☐ *decrease* ☐ or *remains the same* ☐ by _____ calendar days as a result of this modification.

The foregoing modification is hereby accepted:

CONTRACTOR	OWNER	(NJPE SEAL) ENGINEER
BY: _____	BY: _____	BY: _____
DATE: _____	DATE: _____	DATE: _____

APPROVAL:

STATE OF NEW JERSEY	DATE

CONTRACT MODIFICATION PROPOSAL AND ACCEPTANCE

9. ISSUING OFFICE	10. PROJECT NO.	11. CONTRACT NO.	12. MODIFICATION NO.

13. CONTRACTOR'S PROPOSAL – CHANGE IN CONTRACT PRICE
(Detailed breakdown, attach additional sheets as necessary)

(Proposed)

NET INCREASE	NET DECREASE	CALENDER DAYS INCREASE
$ _____	$ _____	_____ DAYS

DATE:	TYPE NAME AND TITLE:	SIGNATURE:

CONTRACT MODIFICATION PROPOSAL AND ACCEPTANCE

14. ISSUING OFFICE & PROJECT NO.	15. CONTRACT NO.	16. MODIFICATION NO.

17. ORIGINAL CONTRACT BID PRICE ..... $ _____
TOTAL OF PREVIOUS CHANGE ORDERS ..... $ _____
TOTAL CONTRACT COST INCLUDING CHANGE ORDERS ... $ _____

18. NECESSITY FOR CHANGE AND REASON FOR OMISSION FROM PLANS AND SPECIFICATIONS:

19. OTHER IMPACTS RESULTANT OF THIS CHANGE:

20. RESUME OF NEGOTIATIONS OR RECOMMENDATIONS (Loanee's Representative) :

DATE:	TYPE NAME AND TITLE OF LOANEE'S REPRESENTATIVE:	SIGNATURE:

Use of the Change Order Form entitled "Contract Modification Proposal and Acceptance"

- When the Loanee wishes to issue a change to the contract, the attached "Contract Modification Proposal and Acceptance" form should be used as a request for proposal. Upon final settlement of the change, this same form is then completed and serves as the contract modification.
- The Loanee in requesting a proposal for a change would execute items 1 thru 8 (exclusive of the revised contract price and duration data) and 9 thru 12. Pages 1 and 2 of this form are then forwarded to the contractor, specifying scope of work and requesting the contractor's proposal.
- The contractor should execute page 2 of the form. He then submits pages 1 and 2 of the form as his proposal, attaching additional sheets as necessary to provide his detailed breakdown of costs.
- Upon negotiation of a final settlement, the Loanee completes page 1 of the form, and all concerned parties (Contractor, Engineer, Owner) sign this document as the contract modification.
- Page 3 of the form is executed by the Loanee for documentation of the change, and to provide the necessary details for review by the Regulatory Agencies.
- Submit a minimum of one original with raised engineer's seal and one copy. It is suggested that one original be kept for your records.

Detailed Instructions for Executing "Contract Modification Proposal and Acceptance" Form

Item 1. Enter the name of the Loanee.

Item 2. Enter State Project number.

Item 3. Enter the contract number or designation.

Item 4. Enter the number identifying this modification.

Item 5. Enter the name of the Contractor.

Item 6. Enter the project title and location.

Item 7. Requests a proposal for the specified change order work, but does not direct contractor to proceed. The owner or his authorized representative must execute this statement by signature with date and title blocks entered.

Item 8. Provide a clear description of the scope of work for this change. Upon final settlement of the modification costs, enter cost data by line item for unit priced items or by sum; and state total cost of this modification – net increase, decrease or no change in contract price. Enter appropriate information for any change in contract time, including number of calendar days involved. The modification is executed when all appropriate signatures are included.

Items 9 – 12. Same as items 1 – 4.

Item 13. Executed by the contractor, stating net effect of change in appropriate box for money and time. A detailed breakdown must be provided in this item; and appropriate signature of authorized representative of contractor included.

Item 14. Enter the Loanee's name and State Project number.

Item 15. Enter the contract number or designation.

Item 16. Enter number identifying this modification.

Item 17. Enter appropriate financial data.

Item 18 Explain and justify the reasons for this change order

Item 19. Explain all other impacts resulting from this change with estimate of costs involved. This should include impact on other contractors and the Consulting Engineers.

Item 20. Document that negotiations were held as required by the regulations and explain the events leading to the final settlement in price and time. This statement should include, at a minimum, date and location of negotiations, persons attending, summary of negotiations leading to final price and time settlements, and a statement that the agreed-to price is "fair and reasonable".

APPENDIX B

NEW JERSEY LOCAL PUBLIC CONTRACTS LAW
N.J.S.A. 40A:11-23 & N.J.S.A. 40A:11-34

40A:11-23. Advertisements for bids; bids; general requirements

a. All advertisements for bids shall be published in an official newspaper of the contracting unit sufficiently in advance of the date fixed for receiving the bids to promote competitive bidding, but in no event less than 10 days prior to such date; except that all advertisements for bids on contracts for the collection and disposal of municipal solid waste shall be published in an official newspaper of the contracting unit circulating in the county or municipality, and in at least one newspaper of general circulation published in the State, sufficiently in advance of the date fixed for receiving the bids to promote competitive bidding, but not less than 60 days prior to that date. For all contracts, the date fixed for receiving the bids shall not fall on a Monday, or any day directly following a State or federal holiday.

b. The advertisement shall designate the manner of submitting and the method of receiving the bids and the time and place at which the bids will be received. If the published specifications provide for receipt of bids by mail, those bids which are mailed to the contracting unit shall be sealed and shall only be opened for examination at such time and place as all bids received are unsealed and announced. At such time and place the contracting agent of the contracting unit shall publicly receive the bids, and thereupon immediately proceed to unseal them and publicly announce the contents, which announcement shall be made in the presence of any parties bidding or their agents, who are then and there present, and shall also make proper record of the prices and terms, upon the minutes of the governing body, if the award is to be made by the governing body of the contracting unit, or in a book kept for that purpose, if the award is to be made by other than the governing body, and in such latter case it shall be reported to the governing body of the contracting unit for its action thereon, when such action thereon is required. No bids shall be received after the time designated in the advertisement.

c. Notice of revisions or addenda to advertisements or bid documents shall be provided as follows:

1) For all contracts except those for construction work and municipal solid waste collection and disposal service, notice shall be published no later than seven days, Saturdays, Sundays, and holidays excepted, prior to the date for acceptance of bids, in an official newspaper of the contracting unit and be provided to any person who has submitted a bid or who has received a bid package, in one of the following ways: i) in writing by certified mail or ii) by certified facsimile transmission, meaning that the sender's facsimile machine produces a receipt showing date and time of transmission and that the transmission was successful or iii) by a delivery service that provides certification of delivery to the sender.

2) For all contracts for construction work, notice shall be provided no later than seven days, Saturdays, Sundays, or holidays excepted, prior to the date for acceptance of bids, to any person who has submitted a bid or who has received a bid package in any of the following ways: i) in writing by certified mail or ii) by certified facsimile transmission, meaning that the sender's facsimile machine produces a receipt showing date and time of transmission and that the transmission was successful or iii) by a delivery service that provides certification of delivery to the sender.

3) For municipal solid waste collection and disposal contracts, notice shall be published in an official newspaper of the contracting unit and in at least one newspaper of general circulation published in the State no later than seven days, Saturdays, Sundays, and holidays excepted, prior to the date for acceptance of bids.

d. Failure of the contracting unit to advertise for the receipt of bids or to provide proper notification of revisions or addenda to advertisements or bid documents related to bids as prescribed by this section shall prevent the contracting unit from accepting the bids and require the readvertisement for bids pursuant to subsection a. of this section. Failure to obtain a receipt when good faith notice is sent or delivered to the address or telephone facsimile number on file with the contracting unit shall not be considered failure by the contracting unit to provide notice.

L.1971, c. 198, s. 23; amended 1975, c. 353, s. 13; 1983, c. 174; 1985, c. 429; 1991, c. 381, s. 50; 1997, c. 243. 1999, c. 440, s. 31; 2005, c. 191, s. 5; 2007, c. 4, s. 1.

40A:11-23.1. Plans, specifications, bid proposal documents; required contents

All plans, specifications and bid proposal documents for the erection, alteration, or repair of a building, structure, facility or other improvement to real property, the total price of which exceeds the amount set forth in, or the amount calculated by the Governor pursuant to, section 3 of P.L.1971, c.198 (C.40A:11-3), shall include:

a. a document for the bidder to acknowledge the bidder's receipt of any notice or revisions or addenda to the advertisement or bid documents; and

b. a form listing those documentary and informational forms, certifications, and other documents that the contracting agent requires each bidder to submit with the bid. The form shall list each of the items to be submitted with the bid proposal and a place for the bidder to indicate, by initialing each entry, that the bidder has included those required items with the completed bid proposal. Each bidder shall complete this form and submit it with the bid proposal in addition to those documentary and informational forms, certifications, and other documents that are listed on the form; and

c. a statement indicating whether uniformed law enforcement officers will be required for the project. The statement shall include a line item allowance, which shall be a good faith effort on the part of the contracting unit, to reasonably estimate the total cost of traffic control personnel, vehicles, equipment, administrative, or any other costs associated with additional traffic control requirements required by the contracting unit, or any other public entity affected by the project, above and beyond the bidder's traffic control personnel, vehicles, equipment, and administrative costs. The individuals responsible for the assignment of uniformed law enforcement officers for any municipalities affected by a project shall be required to determine where traffic safety control is needed for a project, and calculate the number and placement of all necessary personnel, equipment, and the costs associated with these, including hourly rates, and submit this information to the contracting unit.

The contracting unit shall not be responsible for additional traffic control costs beyond the number of working days specified in the construction contract in

accordance with section 17 of P.L.1971, c.198 (C.40A:11-17), when such a delay is caused by the contractor and liquidated damages have been assessed.

The statement prescribed under this subsection shall not be required if the contracting unit will provide for the direct payment of uniformed law enforcement officers and any additional costs directly associated with the provision of those officers; and

d. at the option of the contracting unit, specified alternate proposals in addition to a base specification. When the contracting unit specifies alternate proposals, the determination of which bidder's response to a request for bids offers the lowest price shall be made on the basis of the price of: (i) the base specification plus the price of any selected specified alternate proposals; or (ii) a choice of specified alternative proposals within the limit of funds that may be made available for a project. If a contracting unit provides for more than one specified alternate proposal, the contracting unit shall specify in the bid specification the criteria or ranked order by which specified alternate proposals shall be selected and included in the award of the contract by the governing body, provided that this requirement shall only apply to a project with a total estimated cost, including specified alternate proposals, of greater than $500,000. The aggregate dollar value of accepted specified alternative proposals shall not exceed 50 percent of the base bid. If a contracting unit is found in a court of law to have chosen specific alternative proposals in a manner intended to award a contract to a specific vendor, the bids shall be voided, the contracting unit shall rebid the project, and a plaintiff who prevails in any proceeding shall be entitled to a reasonable attorney's fee.

For the purposes of this subsection:

"Specified alternate proposal" means a requirement of the bid specification for bidders to submit prices for reduced, modified or supplemental work in addition to the base proposal which may include, but not be limited to, a change in project scope or the use of alternative materials or methods of construction;

"Base specification" means the plans and specifications for the erection, alteration or repair of the building, structure, facility or other improvement to real property that are required to be met by all bidders without exception.

L.1999, c. 39, s. 1; amended 2006, c. 9.

40A:11-23.2. Required mandatory items for bid plans, specification

When required by the bid plans and specifications, the following requirements shall be considered mandatory items to be submitted at the time specified by the contracting unit for the receipt of the bids; the failure to submit any one of the mandatory items shall be deemed a fatal defect that shall render the bid proposal unresponsive and that cannot be cured by the governing body:

a. A guarantee to accompany the bid pursuant to section 21 of P.L.1971, c.198 (C.40A:11-21);

b. A certificate from a surety company pursuant to section 22 of P.L.1971, c.198 (C.40A:11-22);

c. A statement of corporate ownership pursuant to section 1 of P.L.1977, c.33 (C.52:25-24.2);

d. A listing of subcontractors pursuant to section 16 of P.L.1971, c.198 (C.40A:11-16);

e. A document provided by the contracting agent in the bid plans, specifications, or bid proposal documents for the bidder to acknowledge the bidder's receipt of any notice or revisions or addenda to the advertisement or bid documents; and

f. (Deleted by amendment, P.L.2009, c. .)

L.1999, c. 39, s. 2; amended 2004, c. 57, s. 1.

40A:11-23. Advertisements for bids; bids; general requirements

a. All advertisements for bids shall be published in an official newspaper of the contracting unit sufficiently in advance of the date fixed for receiving the bids to promote competitive bidding, but in no event less than 10 days prior to such date; except that all advertisements for bids on contracts for the collection and disposal of municipal solid waste shall be published in an official newspaper of the contracting unit circulating in the county or municipality, and in at least one newspaper of general circulation published in the State, sufficiently in advance of the date fixed for receiving the bids to promote competitive bidding, but not less than 60 days prior to that date. For all contracts, the date fixed for receiving the bids shall not fall on a Monday, or any day directly following a State or federal holiday.

b. The advertisement shall designate the manner of submitting and the method of receiving the bids and the time and place at which the bids will be received. If the published specifications provide for receipt of bids by mail, those bids which are mailed to the contracting unit shall be sealed and shall only be opened for examination at such time and place as all bids received are unsealed and announced. At such time and place the contracting agent of the contracting unit shall publicly receive the bids, and thereupon immediately proceed to unseal them and publicly announce the contents, which announcement shall be made in the presence of any parties bidding or their agents, who are then and there present, and shall also make proper record of the prices and terms, upon the minutes of the governing body, if the award is to be made by the governing body of the contracting unit, or in a book kept for that purpose, if the award is to be made by other than the governing body, and in such latter case it shall be reported to the governing body of the contracting unit for its action thereon, when such action thereon is required. No bids shall be received after the time designated in the advertisement.

c. Notice of revisions or addenda to advertisements or bid documents shall be provided as follows:

1) For all contracts except those for construction work and municipal solid waste collection and disposal service, notice shall be published no later than seven days, Saturdays, Sundays, and holidays excepted, prior to the date for acceptance of bids, in an official newspaper of the contracting unit and be provided to any person who has submitted a bid or who has received a bid package, in one of the following ways: i) in writing by certified mail or ii) by certified facsimile transmission, meaning that the sender's facsimile machine produces a receipt showing date and time of transmission and that the transmission was successful or iii) by a delivery service that provides certification of delivery to the sender.

2) For all contracts for construction work, notice shall be provided no later than seven days, Saturdays, Sundays, or holidays excepted, prior to the date for acceptance of bids, to any person who has submitted a bid or who has received a bid package in any of the following ways: i) in writing by certified mail or ii) by certified facsimile transmission, meaning that the sender's facsimile machine produces a receipt showing date and time of transmission and that the transmission was successful or iii) by a delivery service that provides certification of delivery to the sender.

3) For municipal solid waste collection and disposal contracts, notice shall be published in an official newspaper of the contracting unit and in at least one newspaper of general circulation published in the State no later than seven days, Saturdays, Sundays, and holidays excepted, prior to the date for acceptance of bids.

d. Failure of the contracting unit to advertise for the receipt of bids or to provide proper notification of revisions or addenda to advertisements or bid documents related to bids as prescribed by this section shall prevent the contracting unit from accepting the bids and require the readvertisement for bids pursuant to subsection a. of this section. Failure to obtain a receipt when good faith notice is sent or delivered to the address or telephone facsimile number on file with the contracting unit shall not be considered failure by the contracting unit to provide notice.

L.1971, c. 198, s. 23; amended 1975, c. 353, s. 13; 1983, c. 174; 1985, c. 429; 1991, c. 381, s. 50; 1997, c. 243. 1999, c. 440, s. 31; 2005, c. 191, s. 5; 2007, c. 4, s. 1.

40A:11-23.2. Required mandatory items for bid plans, specification

When required by the bid plans and specifications, the following requirements shall be considered mandatory items to be submitted at the time specified by the contracting unit for the receipt of the bids; the failure to submit any one of the mandatory items shall be deemed a fatal defect that shall render the bid proposal unresponsive and that cannot be cured by the governing body:

a. A guarantee to accompany the bid pursuant to section 21 of P.L.1971, c.198 (C.40A:11-21);

b. A certificate from a surety company pursuant to section 22 of P.L.1971, c.198 (C.40A:11-22);

c. A statement of corporate ownership pursuant to section 1 of P.L.1977, c.33 (C.52:25-24.2);

e. A document provided by the contracting agent in the bid plans, specifications, or bid proposal documents for the bidder to acknowledge the bidder's receipt of any notice or revisions or addenda to the advertisement or bid documents; and

f. (Deleted by amendment, P.L.2009, c. .)

L.1999, c. 39, s. 2; amended 2004, c. 57, s. 1.

APPENDIX C

N.J.A.C. 7.22-4.23
ACCESS TO RECORDS

N.J.A.C. 7:22-4.23 Access

(a) The recipient and its contractor and subcontractors shall provide to Trust personnel and any authorized representative of the Trust access to the facilities, premises and records related to the project.
(b) The recipient shall submit to the Trust such documents and information as requested by the Trust.
(c) The recipient, and all contractors and subcontractors which contract directly with the recipient or
receive a portion of Trust moneys, may be subject to a financial audit.
(d) Records shall be retained and available to the Trust until the final Trust loan repayment has been
made by the recipient.