



Date: November 28, 2018
Project #: 308818.002

Addendum: 001

Owner Name: Borough of Fleetwood

Prepared and Submitted by: Mike Eversole, Project Manager

RE: CONCESSION STAND MODIFICATIONS AND NEW TOILET ROOM BUILDING

TO: Prospective Bidders

This Addendum shall be incorporated into the Contract Documents and shall take precedence over any instructions that conflict therein. All items contained herein shall be considered in preparation of your proposal for the subject project. Acknowledge receipt of this Addendum in the space provided on the RFI Form. Failure to do so may subject Bidder to disqualification.

This Addendum consists of three pages, plus attachments as noted.

GENERAL:

- 1.1. The contractor shall assume the same utility pole that serves the existing concession stand building will be used for the new toilet room building electrical service. Should the utility company determine a different utility pole is to be used, the contractor shall notify the Engineer and the Borough, so the associated cost of the changes can be discussed and agreed upon prior to the work being completed. Refer to General Note #10 on drawing E0.0.

CHANGES TO THERMAL AND MOISTURE PROTECTION (DIVISION 07):

Section 07 21 00 – Thermal Insulation

- 1.2. This specification section has been added.

Section 07 25 00 – Weather Barrier

- 1.3. This specification section has been added.

Section 07 26 00 – Vapor Retarders

- 1.4. This specification section has been added.

Section 07 46 33 – Plastic Siding

- 1.5. §1.11 has been revised. See attachments.

CHANGES TO OPENINGS (DIVISION 08):

Section 08 33 13 – Coiling Counter Doors

- 1.6. This specification section has been deleted.

Addendum

Section 08 36 13 – Sectional Doors

1.7. This specification section has been deleted.

CHANGES TO PLUMBING (DIVISION 22):**Section 22 13 23 – Sanitary Waste Interceptors**

1.8. §2.1 has been revised. See attachments.

CHANGES TO DRAWINGS:

1.9. The “ADD ALTERNATE #1 & 2...” note on Drawing C-D1.0 shall be changed to read:

“The existing sectional counter doors and associated tracks shall remain. If required, tracks shall be removed and reinstalled to facilitate completion of interior modifications.”

ANSWERS TO QUESTIONS SUBMITTED:

- 1.10. Q: C-A1.0 has a note ADD ALTERNATE #1 #2. This does not match up with the bid form.
A: See 1.6, 1.7 and 1.9 above.
- 1.11. Q: On the drawings call for a 300-gallon grease interceptor but the specifications call for a 1000-gallon tank
A: See 1.8 above.
- 1.12. Q: S3.3 detail references air and vapor barrier none listed in spec. Are there any of these products required?
A: See 1.3 and 1.4 above.
- 1.13. Q: The roof and vinyl siding specifications list a 50-year warranty for the labor and material in one location and 2 year in another section.
A: See 1.5 above.
- 1.14. Q: The concession plan indicate alt #1 and #2 to demo counter doors and counters to remain. This conflicts with alt. 1 and 2 in the specifications.
A: See 1.6, 1.7 and 1.9 above.
- 1.15. Q: There is reference on the electrical spec sheet Section 1.1 c indicating fire alarm system, security, phone and data wiring to be included. Nothing is indicated on the drawing for these items? Are any of these items listed above in the scope of this project.
A: Refer to notes on drawings C-D1.0 and C-E0.5 for the relocation of existing telecom equipment. Refer to mechanical drawings for fire alarm requirements for the new kitchen hood.
- 1.16. Q: Is the fire alarm referenced on sheet E4.0 only required for new exhaust fan alternate?
A: Yes. See 1.15 above.
- 1.17. Q: On drawing C-D1.0, there is a note calling out for Alternates #1 and #2 referring to the counter doors. Is this from the old bid? However, alternates #1 and #2 in the specs are for plumbing fixtures, and Entrance Screen Walls. Please advise
A: See 1.6, 1.7 and 1.9 above.
- 1.18. Q: Where is the UE coming from to feed the new electric service?
A: See 1.1 above.

ATTACHMENTS:

- 11/20/18 Pre-Bid Sign-In Sheet
- Specifications:
 - 07 21 00 Thermal Insulation
 - 07 25 00 Weather Barriers
 - 07 26 00 Vapor Retarders
 - 07 46 33 Plastic Siding
 - 22 13 23 Sanitary Waste Interceptors
- Drawings:
 - None

Contractor shall acknowledge receipt of this Addendum on the RFI Form.

End of Addendum #001 (3 pages)

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Please Print

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SECTION 07 21 00 - THERMAL INSULATION

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. Section Includes:
 - 1. Polyisocyanurate foam-plastic board.
 - 2. Glass-fiber blanket.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

1.4 INFORMATIONAL SUBMITTALS

- A. Product Test Reports: For each product, for tests performed by a qualified testing agency.
- B. Evaluation Reports: For foam-plastic insulation, from ICC-ES.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Protect insulation materials from physical damage and from deterioration due to moisture, soiling, and other sources. Store inside and in a dry location. Comply with manufacturer's written instructions for handling, storing, and protecting during installation.
- B. Protect foam-plastic board insulation as follows:
 - 1. Do not expose to sunlight except to necessary extent for period of installation and concealment.
 - 2. Protect against ignition at all times. Do not deliver foam-plastic board materials to Project site until just before installation time.
 - 3. Quickly complete installation and concealment of foam-plastic board insulation in each area of construction.

PART 2 - PRODUCTS

2.1 POLYISOCYANURATE FOAM-PLASTIC BOARD

- A. Polyisocyanurate Board, Glass-Fiber-Mat Faced: ASTM C1289, glass-fiber-mat faced, Type II, Class 2.
 - 1. Fire Propagation Characteristics: Passes NFPA 285 testing as part of an approved assembly.

2.2 GLASS-FIBER BLANKET

- A. Glass-Fiber Blanket, Kraft Faced: ASTM C665, Type II (nonreflective faced), Class C (faced surface not rated for flame propagation); Category 1 (membrane is a vapor barrier).

2.3 INSULATION FASTENERS

- A. Insulation-Retaining Washers: Self-locking washers formed from 0.016-inch-thick galvanized-steel sheet, with beveled edge for increased stiffness, sized as required to hold insulation securely in place, but not less than 1-1/2 inches square or in diameter.
 - 1. Protect ends with capped self-locking washers incorporating a spring steel insert to ensure permanent retention of cap in the following locations:
 - a. Ceiling plenums.
 - b. Attic spaces.
- B. Anchor Adhesive: Product with demonstrated capability to bond insulation anchors securely to substrates without damaging insulation, fasteners, or substrates.

2.4 ACCESSORIES

- A. Insulation for Miscellaneous Voids:
 - 1. Glass-Fiber Insulation: ASTM C764, Type II, loose fill; with maximum flame-spread and smoke-developed indexes of 5, per ASTM E84.
 - 2. Spray Polyurethane Foam Insulation: ASTM C1029, Type II, closed cell, with maximum flame-spread and smoke-developed indexes of 75 and 450, respectively, per ASTM E84.
- B. Eave Ventilation Troughs: Preformed, rigid fiberboard or plastic sheets designed and sized to fit between roof framing members and to provide ventilation between insulated attic spaces and vented eaves.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Clean substrates of substances that are harmful to insulation, including removing projections capable of puncturing insulation or vapor retarders, or that interfere with insulation attachment.

3.2 INSTALLATION, GENERAL

- A. Comply with insulation manufacturer's written instructions applicable to products and applications.
- B. Install insulation that is undamaged, dry, and unsoiled and that has not been left exposed to ice, rain, or snow at any time.
- C. Extend insulation to envelop entire area to be insulated. Fit tightly around obstructions and fill voids with insulation. Remove projections that interfere with placement.
- D. Provide sizes to fit applications and selected from manufacturer's standard thicknesses, widths, and lengths. Apply single layer of insulation units unless multiple layers are otherwise shown or required to make up total thickness or to achieve R-value.

3.3 INSTALLATION OF SLAB INSULATION

- A. On vertical slab edge and foundation surfaces, set insulation units using manufacturer's recommended adhesive according to manufacturer's written instructions.
 - 1. If not otherwise indicated, extend insulation a minimum of 36 inches below exterior grade line.
- B. On horizontal surfaces, loosely lay insulation units according to manufacturer's written instructions. Stagger end joints and tightly abut insulation units.
 - 1. If not otherwise indicated, extend insulation a minimum of 30 inches in from exterior walls.

3.4 INSTALLATION OF FOUNDATION WALL INSULATION

- A. Butt panels together for tight fit.
- B. Adhesive Installation: Install with adhesive or press into tacky waterproofing or dampproofing according to manufacturer's written instructions.

3.5 INSTALLATION OF INSULATION IN FRAMED CONSTRUCTION

- A. Blanket Insulation: Install in cavities formed by framing members according to the following requirements:

1. Use insulation widths and lengths that fill the cavities formed by framing members. If more than one length is required to fill the cavities, provide lengths that will produce a snug fit between ends.
 2. Place insulation in cavities formed by framing members to produce a friction fit between edges of insulation and adjoining framing members.
 3. Maintain 3-inch clearance of insulation around recessed lighting fixtures not rated for or protected from contact with insulation.
 4. Attics: Install eave ventilation troughs between roof framing members in insulated attic spaces at vented eaves.
 5. For metal-framed wall cavities where cavity heights exceed 96 inches, support unfaced blankets mechanically and support faced blankets by taping flanges of insulation to flanges of metal studs.
 6. For wood-framed construction, install blankets according to ASTM C1320 and as follows:
 - a. With faced blankets having stapling flanges, lap blanket flange over flange of adjacent blanket to maintain continuity of vapor retarder once finish material is installed over it.
 7. Vapor-Retarder-Faced Blankets: Tape joints and ruptures in vapor-retarder facings, and seal each continuous area of insulation to ensure airtight installation.
 - a. Exterior Walls: Set units with facing placed toward interior of construction.
 - b. Interior Walls: Set units with facing placed toward areas of high humidity.
- B. Miscellaneous Voids: Install insulation in miscellaneous voids and cavity spaces where required to prevent gaps in insulation using the following materials:
1. Glass-Fiber Insulation: Compact to approximately 40 percent of normal maximum volume equaling a density of approximately 2.5 lb/cu. ft.
 2. Spray Polyurethane Insulation: Apply according to manufacturer's written instructions.

3.6 PROTECTION

- A. Protect installed insulation from damage due to harmful weather exposures, physical abuse, and other causes. Provide temporary coverings or enclosures where insulation is subject to abuse and cannot be concealed and protected by permanent construction immediately after installation.

END OF SECTION 07 21 00

SECTION 07 25 00 - WEATHER BARRIERS

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. Section Includes:
 - 1. Building wrap.
 - 2. Flexible flashing.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. For building wrap, include data on air and water-vapor permeance based on testing according to referenced standards.
- B. Shop Drawings: Show details of building wrap at terminations, openings, and penetrations. Show details of flexible flashing applications.

1.4 INFORMATIONAL SUBMITTALS

- A. Evaluation Reports: For water-resistive barrier and flexible flashing, from ICC-ES.

PART 2 - PRODUCTS

2.1 WATER-RESISTIVE BARRIER

- A. Building Wrap: ASTM E1677, Type I air barrier; with flame-spread and smoke-developed indexes of less than 25 and 450, respectively, when tested according to ASTM E84; UV stabilized; and acceptable to authorities having jurisdiction.
 - 1. DuPont Tyvek CommercialWrap
 - 2. Water-Vapor Permeance: Not less than 28 perms per ASTM E96/E96M, Desiccant Method (Procedure A).
 - 3. Air Permeance: Not more than 0.001 cfm/sq. ft. at 75 Pa when tested according to ASTM E2178.
 - 4. Allowable UV Exposure Time: Not less than three months.

5. Surface Burning Characteristics: Class A, when tested in accordance with ASTM E84. Flame Spread: 10, Smoke Developed: 10.
- B. Building-Wrap Tape: Pressure-sensitive plastic tape recommended by building-wrap manufacturer for sealing joints and penetrations in building wrap.

2.2 FLEXIBLE FLASHING

- A. Rubberized-Asphalt Flashing: Composite, self-adhesive, flashing product consisting of a pliable, rubberized-asphalt compound, bonded to a high-density polyethylene film, aluminum foil, or spunbonded polyolefin to produce an overall thickness of not less than 0.040 inch.
1. Flame Propagation Test: Materials and construction shall be as tested according to NFPA 285.
- B. Primer for Flexible Flashing: Product recommended in writing by flexible flashing manufacturer for substrate.
- C. Nails and Staples: Product recommended in writing by flexible flashing manufacturer and complying with ASTM F1667.

PART 3 - EXECUTION

3.1 WATER-RESISTIVE BARRIER INSTALLATION

- A. Cover exposed exterior surface of sheathing with water-resistive barrier securely fastened to framing immediately after sheathing is installed.
- B. Cover sheathing with water-resistive barrier as follows:
1. Cut back barrier 1/2 inch on each side of the break in supporting members at expansion- or control-joint locations.
 2. Apply barrier to cover vertical flashing with a minimum 4-inch overlap unless otherwise indicated.
- C. Building Wrap: Comply with manufacturer's written instructions and warranty requirements.
1. Seal seams, edges, fasteners, and penetrations with tape.
 2. Extend into jambs of openings and seal corners with tape.

3.2 FLEXIBLE FLASHING INSTALLATION

- A. Apply flexible flashing where indicated to comply with manufacturer's written instructions.
1. Prime substrates as recommended by flashing manufacturer.
 2. Lap seams and junctures with other materials at least 4 inches except that at flashing flanges of other construction, laps need not exceed flange width.
 3. Lap flashing over water-resistive barrier at bottom and sides of openings.

4. Lap water-resistive barrier over flashing at heads of openings.
5. After flashing has been applied, roll surfaces with a hard rubber or metal roller to ensure that flashing is completely adhered to substrates.

3.3 DRAINAGE MATERIAL INSTALLATION

- A. Install drainage material over building wrap and flashing to comply with manufacturer's written instructions.

END OF SECTION 07 25 00

SECTION 07 26 00 - VAPOR RETARDERS

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. Section Includes:

- 1. Polyethylene vapor retarders.

- B. Related Requirements:

- 1. Section 07 21 00 "Thermal Insulation" for vapor retarders integral with insulation products.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

1.4 INFORMATIONAL SUBMITTALS

- A. Product Test Reports: For each product, for tests performed by a qualified testing agency.

PART 2 - PRODUCTS

2.1 POLYETHYLENE VAPOR RETARDERS

- A. Polyethylene Vapor Retarders: Maintain permeance of less than 0.01 Perms as tested in accordance with mandatory conditioning tests per ASTM E1745 Section 7.1, 15-mil-thick sheet.

- 1. Location: Underslabs.

2.2 POLYETHYLENE VAPOR RETARDERS

- A. Polyethylene Vapor Retarders: ASTM D4397, 10-mil-thick sheet, with maximum permeance rating of 0.1 perm.

- 1. Locations: Interior walls, ceiling plenums and attic spaces.

2.3 ACCESSORIES

- A. Vapor-Retarder Tape: Pressure-sensitive tape of type recommended by vapor-retarder manufacturer for sealing joints and penetrations in vapor retarder.
- B. Adhesive for Vapor Retarders: Product recommended by vapor-retarder manufacturer and has demonstrated capability to bond vapor retarders securely to substrates indicated.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Clean substrates of substances that are harmful to vapor retarders, including removing projections capable of puncturing vapor retarders.

3.2 INSTALLATION OF VAPOR RETARDERS ON FRAMING

- A. Place vapor retarders on side of construction indicated on Drawings.
- B. Extend vapor retarders to extremities of areas to protect from vapor transmission. Secure vapor retarders in place with adhesives, vapor retarder fasteners, or other anchorage system as recommended by manufacturer. Extend vapor retarders to cover miscellaneous voids in insulated substrates, including those filled with loose-fiber insulation.
- C. Seal vertical joints in vapor retarders over framing by lapping no fewer than two studs and sealing with vapor-retarder tape according to vapor-retarder manufacturer's written instructions. Locate all joints over framing members or other solid substrates.
- D. Seal joints caused by pipes, conduits, electrical boxes, and similar items penetrating vapor retarders with vapor-retarder tape to create an airtight seal between penetrating objects and vapor retarders.
- E. Repair tears or punctures in vapor retarders immediately before concealment by other work. Cover with vapor-retarder tape or another layer of vapor retarders.

3.3 INSTALLATION OF VAPOR RETARDERS IN CRAWL SPACES

- A. Install vapor retarders over prepared grade. Lap joints a minimum of 12 inches and seal with manufacturer's recommended tape. Install second layer over pathways to equipment.
- B. Extend vapor retarder over footings and seal to foundation wall with manufacturer's recommended tape.
 - 1. Extend vapor retarder vertically minimum 24 inches above top of footing.
- C. Seal around penetrations such as utilities and columns in order to create a monolithic, airtight membrane at grade surface, perimeter, and all vertical penetrations.

3.4 PROTECTION

- A. Protect vapor retarders from damage until concealed by permanent construction.

END OF SECTION 07 26 00

SECTION 07 46 33 - PLASTIC SIDING

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. Section includes vinyl siding and soffit.

1.3 COORDINATION

- A. Coordinate siding installation with flashings and other adjoining construction to ensure proper sequencing.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at the project site.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
 - 1. For vinyl siding, include VSI's official certification logo printed on Product Data.
- B. Samples for Initial Selection: For vinyl siding including related accessories.
- C. Samples for Verification: For each type, color, texture, and pattern required.
 - 1. 24-inch-wide-by-36-inch-high Sample panel of siding assembled on plywood backing.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For vinyl siding Installer.
- B. Product Certificates: For each type of vinyl siding and soffit.
- C. Research/Evaluation Reports: For each type of vinyl siding required, from ICC-ES.
- D. Sample Warranty: For special warranty.

1.7 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For each type of product, including related accessories, to include in maintenance manuals.

1.8 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Furnish full lengths of vinyl siding and soffit including related accessories, in a quantity equal to 2 percent of amount installed.

1.9 QUALITY ASSURANCE

- A. Vinyl Siding Installer Qualifications: A qualified installer who employs a VSI-certified Installer on Project.
- B. Mockups: Build mockups to verify selections made under Sample submittals and to demonstrate aesthetic effects and to set quality standards for fabrication and installation.
 - 1. Build mockup of typical wall area as shown on Drawings.
 - 2. Build mockups for vinyl siding and soffit including accessories.
 - a. Size: 48 inches long by 60 inches high.
 - b. Include outside corner on one end of mockup and inside corner on other end.
 - 3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 - 4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store packaged materials in original containers with labels intact until time of use.
- B. Store materials under cover.

1.11 WARRANTY

- A. Manufacturer's Warranty: Manufacturer agrees to repair or replace products that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Structural failures including cracking, fading, and deforming.
 - b. Deterioration of materials beyond normal weathering.

2. Fading is defined as loss of color, after cleaning with product recommended by manufacturer, of more than 5 Hunter color-difference units as measured according to ASTM D2244.
 3. Warranty Period: 50 years from date of Substantial Completion.
- B. Installer's Warranty: Installer agrees to repair or replace components of vinyl siding that fail in workmanship within specified warranty period.
1. Warranty Period: Two years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis-of-Design Product: The Contract Documents indicate the size, profile, texture, color, dimensional, and other requirements of plastic siding system and are based on the specific types, models and colors manufacturer by the Certainteed Corporation. Plastic siding by the available manufacturers indicted below may be considered, provided there are no deviation in quality, texture, dimensions, sizes, colors, profiles and other requirements here, implied or inherent in the basis of design product as judges solely by the Engineer. The burden of proof of equality is on the proposer. Engineer's approval does not relieve an available manufacturer from their responsibility of meeting the standards and requirements set forth in the specifications and by the basis of design product.
- B. Available Manufacturers: Subject to compliance with requirements, manufacturers whose products may be considered to be incorporated into the Work include, but are not limited to, the following:
1. Certainteed Corporation
 2. Owens Corning.
 3. James Hardie Industries
- C. Source Limitations: Obtain products, including related accessories, from single source from single manufacturer.

2.2 VINYL SIDING

- A. Vinyl Siding: Integrally colored product complying with ASTM D3679.
1. Monogram 46
- B. Vinyl Siding Certification Program: Provide products that are listed in VSI's list of certified products.
- C. Horizontal Pattern: Double 5-inch exposure in Dutch-lap.
- D. Texture: Wood grain.
- E. Nominal Thickness: 0.046 inch.

- F. Minimum Profile Depth (Butt Thickness): 3/4 inch.
- G. Nailing Hem: Double thickness.
- H. Finish: Wood-grain print with clear protective coating containing not less than 70 percent PVDF.
 - 1. Colors: As selected by Engineer from Manufacturer's standard color options.

2.3 VINYL SOFFIT

- A. Vinyl Soffit: Integrally colored product complying with ASTM D4477.
- B. Vinyl Siding Certification Program: Provide products that are listed in VSI's list of certified products.
- C. Pattern: 6-inch exposure in V-grooved, single-board style.
- D. Texture: Smooth.
- E. Ventilation: Provide perforated soffit.
- F. Nominal Thickness: 0.044 inch.
- G. Minimum Profile Depth: 3/4 inch.
- H. Colors: As selected by Architect from manufacturer's full range of colors.

2.4 ACCESSORIES

- A. Siding Accessories, General: Provide starter strips, edge trim, outside and inside corner caps, and other items as recommended by siding manufacturer for building configuration.
 - 1. Provide accessories matching color and texture of adjacent siding unless otherwise indicated.
- B. Vinyl Accessories: Integrally colored vinyl accessories complying with ASTM D3679 except for wind-load resistance.
 - 1. Texture: Smooth.
- C. Fasteners:
 - 1. For fastening to wood, use siding nails of sufficient length to penetrate a minimum of 1 inch into substrate.
 - 2. For fastening to metal, use ribbed bugle-head screws of sufficient length to penetrate a minimum of 1/4 inch, or three screw-threads, into substrate.
 - 3. For fastening vinyl, use stainless-steel fasteners. Where fasteners are exposed to view, use prefinished aluminum fasteners in color to match item being fastened.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance of vinyl siding and soffit and related accessories.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean substrates of projections and substances detrimental to application.

3.3 INSTALLATION

- A. General: Comply with manufacturer's written installation instructions applicable to products and applications indicated unless more stringent requirements apply.
 - 1. Center nails in elongated nailing slots without binding siding to allow for thermal movement.
- B. Install vinyl siding and soffit and related accessories according to ASTM D4756.
 - 1. Install fasteners for horizontal vinyl siding no more than 16 inches o.c.
 - 2. Install fasteners for vertical vinyl siding no more than 12 inches o.c.
- C. Install joint sealants to produce a weathertight installation.

3.4 ADJUSTING AND CLEANING

- A. Remove damaged, improperly installed, or otherwise defective materials and replace with new materials complying with specified requirements.
- B. Clean finished surfaces according to manufacturer's written instructions and maintain in a clean condition during construction.

END OF SECTION 07 46 33

SECTION 22 13 23 - SANITARY WASTE INTERCEPTORS

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. Section Includes:

- 1. Grease interceptors.

1.3 DEFINITIONS

- A. FRP: Fiberglass-reinforced plastic.
- B. PP: Polypropylene plastic.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of metal and plastic interceptor. Include materials of fabrication, dimensions, rated capacities, retention capacities, operating characteristics, size and location of each pipe connection, furnished specialties, and accessories.
- B. Shop Drawings: For each type and size of precast concrete interceptor indicated.
 - 1. Include materials of construction, dimensions, rated capacities, retention capacities, location and size of each pipe connection, furnished specialties, and accessories.

1.5 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Interceptors, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:
 - 1. Piping connections. Include size, location, and elevation of each.
 - 2. Interface with underground structures and utility services.

1.6 FIELD CONDITIONS

- A. Interruption of Existing Sewer Services: Do not interrupt services to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary sewer services according to requirements indicated:

1. Notify Owner no fewer than seven days in advance of proposed interruption of service.
2. Do not proceed with interruption of sewer services without Owner's written permission.

PART 2 - PRODUCTS

2.1 GREASE INTERCEPTORS

A. Precast Concrete Grease Interceptors: Comply with **ASTM C913**.

1. Include rubber-gasketed joints, manholes, baffles, and piping or openings to retain grease and to permit wastewater flow.
2. Structural Design Loads:
 - a. Heavy-Traffic Load: Comply with ASTM C890, A-16.
3. Resilient Pipe Connectors: ASTM C923, cast or fitted into interceptor walls, for each pipe connection.
4. Steps: Individual FRP steps, FRP ladder, or ASTM A615/A615M, deformed, 1/2-inch steel reinforcing rods encased in ASTM D4101, PP, wide enough to allow worker to place both feet on one step and designed to prevent lateral slippage off step. Cast or anchor steps into sidewalls at 12- to 16-inch intervals.
5. Grade Rings: Reinforced-concrete rings, 6- to 9-inch total thickness, to match diameter of manhole frame and cover.
6. Manhole Frames and Covers: Ferrous; 24-inch ID by 7- to 9-inch riser with 4-inch-minimum width flange and 26-inch-diameter cover.
 - a. Ductile Iron: ASTM A536, Grade 60-40-18, unless otherwise indicated.
 - b. Include indented top design with lettering cast into cover, using wording equivalent to "**GREASE INTERCEPTOR**."

B. Capacities and Characteristics:

1. Length by Width by Depth: 4'-0" diameter x 6'-0" depth.
2. Number of Compartments: One.
3. Retention Capacity: 300 gal.
4. Inlet and Outlet Pipe Size: 4-inch.
 - a. Centerline of Inlet to Floor: 47-inches.
 - b. Centerline of Outlet to Floor: 44-inches.
5. End Connections: Hub.
6. Cleanout: Integral.
7. Trapped Outlet Required: No.
8. Mounting: Recessed, flush with grade.
9. Flow-Control Fitting: Not required.
10. Operation: Manual cleaning.

PART 3 - EXECUTION

3.1 EARTHWORK

- A. Excavating, trenching, and backfilling are specified in Division 31 Section "Earth Moving."

3.2 INSTALLATION

- A. Equipment Mounting:
 - 1. Install grease interceptors on cast-in-place concrete equipment base(s).
- B. Install precast concrete interceptors according to ASTM C891.
- C. Install manhole risers from top of underground concrete interceptors to manholes at finished grade.
- D. Set tops of manhole frames and covers flush with finished surface in pavements.
 - 1. Set tops 3 inches above finish surface elsewhere unless otherwise indicated.
- E. Install grease interceptors, including trapping, venting, and flow-control fitting, according to authorities having jurisdiction and with clear space for servicing.
 - 1. Flush with Floor Installation: Set unit and extension, if required, with cover flush with finished grade.
 - 2. Install cleanout immediately downstream from interceptors not having integral cleanout on outlet.

3.3 CONNECTIONS

- A. Piping installation requirements are specified in Division 22 Section "Sanitary Waste and Vent Piping." Drawings indicate general arrangement of piping, fittings, and specialties.
- B. Make piping connections between interceptors and piping systems.

3.4 IDENTIFICATION

- A. Identification materials and installation are specified in Division 31 Section "Earth Moving."
 - 1. Arrange for installation of green warning tapes directly over piping and at outside edges of underground interceptors.
 - 2. Use detectable warning tape over nonferrous piping and over edges of underground structures.
- B. Equipment Nameplates and Signs: Install engraved plastic-laminate equipment nameplate or sign on or near each of the following:
 - 1. Grease interceptors.

3.5 PROTECTION

- A. Protect sanitary waste interceptors from damage during construction period.
- B. Repair damage to adjacent materials caused by sanitary waste interceptor installation.

END OF SECTION 22 13 23