



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

January 10, 2022

SUBJECT: FAP Route 301 (US 20)
Project COVD-IH44(562)
Section 29R-1
Jo Daviess County
Contract No. 64880
Item No. 153, January 21, 2022 Letting
Addendum B

NOTICE TO PROSPECTIVE BIDDERS:

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

1. Revised the Schedule of Prices.
2. Revised pages 49-55 of the Special Provisions.
3. Revised sheets 3, 27, 28, and 36 of the Plans.

Prime contractors must utilize the enclosed material when preparing their bid and must include any changes to the Schedule of Prices in their bid.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Jack A. Elston'.

Jack A. Elston, P.E.
Bureau Chief, Design and Environment

SANITARY MANHOLE AND PIPE CONNECTION

This work shall be constructed per the requirements of Section 32 of the Standard Specifications for Water and Sewer Construction in Illinois, the manufacturer's recommendations, and the temporary sanitary sewer connection details shown in the plan.

This work shall consist of furnishing and installing a temporary 4' sanitary sewer manhole and temporary 10" sanitary sewer pipe necessary to connect the existing sanitary sewer at Sta. 1219+77 into the proposed sanitary sewer between Stages IE and IIA.

This work shall also include the removal of both the temporary manhole and temporary sanitary sewer in Stage IIA.

This work shall be paid for at the contract unit price per LUMP SUM for SANITARY MANHOLE AND PIPE CONNECTION, which price shall include all labor, materials, and equipment necessary to complete the work.

FILLING INLETS, TEMPORARY

DESCRIPTION. This work consists of filling inlets, as designated on the plans or as directed by the Engineer, with Controlled Low Strength Material (CLSM) meeting the requirements of Articles 593.02, 593.03, and 593.04 and Section 1019 of the Standard Specifications. Existing storm sewer end sections and associated pipe runners and grates at the end of the storm sewer to be filled should be removed unless otherwise indicated, and pipe ends shall be securely sealed as described in section 605.03.

Existing Inlets that have had outlet pipes removed will be filled, temporarily in Stage IIB and then permanently removed in Stage IIC.

MATERIALS. The CLSM shall meet the requirements of Section 1019 of the Standard Specifications.

BASIS OF PAYMENT. This work will be measured and paid for at the contract unit price per each for FILLING INLETS, TEMPORARY at locations shown in the plans, as specified herein, and as directed by the Engineer.

FORM LINER TEXTURED SURFACE, SPECIAL STAINING CONCRETE STRUCTURES

Description. This work shall consist of designing, developing, furnishing and installing form liners and forming concrete using reusable, high-strength urethane form liners to achieve the various concrete treatments as shown in the plans. This work also consists of providing and applying a concrete stain to the textured surface to replicate actual stone. Form lined surfaces shall include areas of cast-in-place concrete wall facings, where shown in the plans. The form liner pattern used at each location shall be as specified herein.

Revised January 10, 2022

This work shall also be performed in accordance with applicable portions of Section 503 of the Standard Specifications.

Form liners shall be installed 12" below the proposed ground line at front face of wall, up to the top of concrete facing, as indicated on the plans. The form liner shall match the exact size of concrete units and adhere to the provisions listed herein and in the Plans. The form liner stone module is to be integrated into the specified surfaces such that there are no joints crossing the stone modules.

Fabricator Requirements. The form liner patterns included herein have been pre-approved by the State Historic Preservation Office (SHPO) for the specified locations. Other manufacturer's products will be considered, provided sufficient information is submitted to Mark Nardini, IDOT District 2 Environmental Studies Manager (815-284-5460) 30-days prior to use to secure the required approval from the Illinois Historic Preservation Agency. All manufacturers of form liners shall adhere to the provisions listed herein and in the Plans.

Shop Drawings. Shop drawings of the concrete facing patterns shall be submitted for each area of textured concrete. Shop drawing submittals shall include:

- (a) Individual form liner pattern descriptions, dimensions, and sequencing of form liner sections. Include details showing typical cross sections, joints, corners, steps in the concrete facing, stone relief, stone size, pitch/working line, mortar joint and bed depths, joint locations, edge treatments, and any other special conditions.
- (b) Elevation views of the form liner panel layouts for the texture showing the full length and height of the structures with each form liner panel outlined. The arrangement of the form liner panels shall provide a continuous pattern of desired textures and colors with no interruption of the pattern made at the panel joints.
- (c) Color samples for stain color selection by the Engineer.

To minimize the possibility of preparing an unsatisfactory Cast Concrete Mockup as described herein, the Contractor may elect to provide shop drawings for the Mockups.

Materials. Form liners shall be high quality, highly reusable and capable of withstanding anticipated concrete pour pressures without causing leakage or causing physical defects. Form liners shall attach easily to pour-in-place forms and be removable without causing concrete surface damage or weakness in the substrate. Liners used for the texture shall be made from high-strength elastomeric urethane material which shall not compress more than 0.02 feet when poured at a rate of 10 vertical feet per hour. Form release agents shall be non-staining, non-residual, non-reactive and shall not contribute to the degradation of the form liner material. Forms for smooth faced surfaces shall be plastic coated or metal to provide a smooth surface free of any impression or pattern. If the contractor elects to use form ties for concrete forming, only fiberglass form ties will be permitted. Use of removable metallic form ties will not be allowed.

Store concrete stain materials in an area where temperatures will not be less than 50°F (10°C) or more than 100°F (38°C) and in accordance with OSHA and local Fire Code Requirements.

Revised January 10, 2022

Deliver materials in original and sealed containers, clearly marked with the manufacturer's name, brand name, type of material, batch number, and date of manufacture.

Form Liner Mockup. The Contractor shall provide a cast concrete mockup containing the form liner surface. The form liner manufacturer's technical representative shall be on-site for technical supervision during the installation and removal operations.

Purpose of the mockup is to select and verify the pattern and concrete stain color to be used.

- (a) Locate mockup on site as directed by the Engineer.
- (b) The cast-in-place mockup shall be a minimum 3 ft x 3 ft x 6 in. thick. Size shall be varied as required to demonstrate patterning.
- (c) Using the same substrate and application techniques that will occur in the final structure, apply the concrete stain to the front face of the mock-up wall located on the jobsite. Stain shall be of type and color which will be used on actual walls. Application procedures and absorption rates shall be as hereinafter specified, unless otherwise recommended by the manufacturer in writing to achieve color uniformity.
 - (1) Acceptance by the Engineer shall serve as a standard of comparison with respect to color and overall appearance.
 - (2) General application to actual surfaces on the retaining wall shall not proceed until jobsite mockup has been approved in writing by the Engineer.
- (d) Include examples of each condition required for construction i.e., liner joints, construction joints, expansion joints, steps, corners, and special conditions due to topography or man-made elements, etc.
- (e) Upon receipt of comments from inspection of the mockup, adjustments or corrections shall be made to the molds where imperfections are found. If required, additional mockups shall be prepared when the initial mockup is found to be unsatisfactory.
- (f) After concrete work on mockup is completed and cured and after surface is determined to be acceptable for coloring, apply color stain system.
- (g) After coloring is determined to be acceptable by the Engineer, construction of project may proceed, using mockup as quality standard.

Qualifications of Contractor. The concrete stain applicator shall have a minimum of five (5) years demonstrated experience in applying stains to simulate rock. The Contractor shall submit evidence of appropriate experience, job listings, and project photographs from previous work.

Cast-in-Place Concrete. The following form liner manufacturers have been pre-approved to provide the listed pattern for the limestone surface form liner for use with the cast-in-place concrete units.

Location	Manufacturer	Pattern
S.N. 043-7009	Fitzgerald Formliners 1500 East Chestnut Ave. Santa Ana, CA 92701 Phone: (800) 547-7760	17007 Random Field Stone Graylastic https://formliners.com/17007-2/
S.N. 043-7010	Custom Rock Formliner 2020 West 7th Street St. Paul, MN 55116 Phone: (800) 637-2447	1206 Royalite Stone https://customrock.com/pattern/1206-royalite/
S.N. 043-7011	Fast Formliners Co. 1005 Miller Drive St. Clair, MO 63077 Phone: (714) 429-9500	15067 https://www.fastformliners.com/patterns/15067.html

Other manufacturer's products will be considered, provided sufficient information is submitted to Mark Nardini, IDOT District 2 Environmental Studies Manager (815-284-5460) 30-days prior to use to secure the required approval from the Illinois Historic Preservation Agency.

The concrete facing panel thicknesses shown on the plans provide a minimum 12" structural concrete thickness, and have been increased to allow for the maximum relief anticipated based on the pre-approved patterns specified in the table above. The submittal of other manufacturer's products for consideration shall illustrate that a minimum 12" structural concrete thickness has been maintained, and shall specify the proposed overall concrete panel thickness.

All manufacturers of form liners shall fabricate form liners to match the provisions listed herein and in the Plans. The form liner stone module is to be integrated into the face panel such that there are no joints crossing the stone modules.

Concrete Stain. Special penetrating stain mix as provided by manufacturer, shall achieve color variations present in the natural limestone being simulated for this project, as required by the Engineer. Submit manufacturer's literature, certificates and color samples to the Engineer. The stain color shall be selected by the Engineer from the stain manufacturer's standard colors after viewing the mock-up.

Stain shall create a surface finish that is breathable (allowing water vapor transmission), and that resists deterioration from water, acid, alkali, fungi, sunlight or weathering. Stain mix shall be a water borne, low V.O.C. material, less than 1.5 lbs./gal, and shall meet requirements for weathering resistance of 2000 hours accelerated exposure.

Installation. Form liners shall be installed in accordance with the manufacturer's recommendations to achieve the highest quality concrete appearance possible. Form liners shall withstand concrete placement pressures without leakage causing physical or visual defects. A form release agent shall be applied to all surfaces of the liner which will come in

contact with concrete as per the manufacturer's recommendations. After each use, liners shall be cleaned and made free of build-up prior to the next placement, and visually inspected for blemishes or tears. If necessary, the form liners shall be repaired in accordance with the manufacturer's recommendations. All form liner panels that will not perform as intended or are no longer repairable shall be replaced at no additional cost to the Department. An on-site inventory of each panel type shall be established based on the approved form liner shop drawings and anticipated useful life for each form liner type.

The liner shall be securely attached to the forms according to the manufacturer's recommendations. Liners shall be attached to each other with flush seams and seams filled as necessary to eliminate visible evidence of seams in cast concrete. Liner butt joints shall be blended into the pattern so as to create no visible vertical or horizontal seams or conspicuous form butt joint marks. Liner joints must fall within pattern joints. Finished textures shall be continuous without visual disruption and properly aligned over adjacent and multiple liner panels. Continuous or single liner panels shall be used where liner joints may interrupt the intended pattern. Panel remnants shall not be pieced together.

The Contractor shall coordinate concrete pours to prevent visible differences between individual pours or batches. Concrete pours shall be continuous between construction or expansion joints. Cold joints shall not occur within continuous form liner pattern fields. Wall ties shall be coordinated with the liner and form to achieve the least visible result. Liners shall be stripped between 12 and 24 hours as recommended by the manufacturer. Curing methods shall be compatible with the desired aesthetic result. Use of curing compounds will not be allowed. Concrete slump requirements shall meet the form liner manufacturer's recommendations for optimizing the concrete finish, as well as the Department's material specifications and special provisions.

With the use of standard Portland cement concrete mixtures, the Contractor shall employ proper consolidation methods to ensure the highest quality finish. Internal vibration shall be achieved with a vibrator of appropriate size, the highest frequency and low to moderate amplitude. Concrete placement shall be in lifts not to exceed 1.5 feet. Internal vibrator operation shall be at appropriate intervals and depths and withdrawn slowly enough to assure a minimal amount of surface air voids and the best possible finish without causing segregation. External form vibrators may be required to assure the proper results. Any use of external form vibrators must be approved by the form liner manufacturer and the Engineer. The use of internal or external vibratory action shall not be allowed with the use of self-consolidating concrete mixtures. It is the intention of this specification that no rubbing of flat areas or other repairs shall be required after form removal. The finished exposed formed concrete surfaces shall be free of visible vertical seams, horizontal seams, and butt joint marks. Grinding and chipping of finished formed surfaces shall be avoided.

Applying Color Stain. Clean surface prior to application of stain materials to assure that surface is free of latency, dirt, dust, grease, efflorescence, paint, or other foreign material, following manufacturer's instructions for surface preparation. Do not sandblast. Preferred method to remove latency is pressure washing with water, minimum 3000 psi (a rate of three to four gallons per minute), using fan nozzle perpendicular to and at a distance of one or two feet from surface. Completed surface shall be free of blemishes, discoloration, surface voids and unnatural form marks.

Revised January 10, 2022

Surfaces to receive stain shall be structurally sound, clean, dry, fully cured, and free from dust, curing agents or form release agents, efflorescence, scale, or other foreign materials. Methods and materials used for cleaning of substrate shall be as recommended by the manufacturer of the water-repellent stain. Concrete shall be at least 30 days old prior to concrete stain application. Curing agents must be removed a minimum of 14 days prior to coating to allow the concrete to dry out.

The stain shall be thoroughly mixed in accordance with the manufacturer's directions using an air driven or other explosion-proof power mixer. Mix all containers thoroughly prior to application. Do not thin the material.

Materials shall be applied at the rate as recommended by the manufacturer. Absorption rates could be increased or decreased depending upon surface texture and porosity of the substrate so as to achieve even staining.

Temperature and relative humidity conditions during time of concrete stain application shall be per manufacturer's application instructions. Do not apply materials under rainy conditions or within three (3) days after surfaces become wet from rainfall or other moisture. Do not apply when weather is foggy or overcast. Take precaution to ensure that workmen and work areas are adequately protected from fire and health hazards resulting from handling, mixing and application of materials. Furnish all the necessary equipment to complete the work. Provide drop cloths and other forms of protection necessary to protect all adjoining work and surfaces to render them completely free of overspray and splash from the concrete stain work. Any surfaces, which have been damaged or splattered, shall be cleaned, restored, or replaced to the satisfaction of the Engineer.

Avoid staining the "mortar joints" by providing suitable protection over the joints during the staining process.

Sequencing: Schedule color stain application with earthwork and back-filling of any wall areas making sure that all simulated stone texture is colored to the minimum distance below grade. Delay adjacent plantings until color application is completed. Coordinate work to permit coloring applications without interference from other trades.

Where exposed soil or pavement is adjacent which may spatter dirt or soil from rainfall, or where surface may be subject to over-spray from other processes, provide temporary cover of completed work.

Guidelines for Use of Form Liners. Form liners are being used on this project to achieve very specific architectural results. The Contractor shall not deviate from the guidelines contained herein unless authorized by the Engineer in writing.

Method of Measurement. Form Liner Textured Surface, Special and Staining Concrete Structures will be measured from the top of the cast-in-place concrete facing to 1'-0" below the proposed ground line at front face of wall as shown on the plans.

Cast concrete form liner mockups with finished stain surfaces will not be measured for payment.

Revised January 10, 2022

Basis of Payment. Form lined surfaces will be paid for at the contract unit price per square foot for FORM LINER TEXTURED SURFACE, SPECIAL. The contract unit price for FORM LINER TEXTURED SURFACE, SPECIAL shall include all labor and materials required for designing, developing, furnishing, installing, and disposal of form liners and forming concrete to achieve the various concrete treatments as shown in the plans; and all materials and labor required to provide a form liner mockup for each different pattern used.

The staining of the form lined surfaces will be paid for at the contract unit price per square foot for STAINING CONCRETE STRUCTURES. The contract unit price for STAINING CONCRETE STRUCTURES shall include all materials and labor required to apply a concrete stain to the textured surface to replicate actual stone; and all materials and labor required to stain the form liner mockup for each different pattern used.

Required adjustments or corrections needed to address mockup comments and the cost of additional mockups, if required, will not be paid for separately, but shall be included in the cost of these items.

Protective coat will be paid for according to Section 503 of the Standard Specifications.

RETAINING WALL REMOVAL

Description. This work shall consist of removing a mortared natural stone or mortared concrete masonry unit wall within the limits specified on the plans.

General. The Contractor shall remove the existing wall in a manner that will not damage or disturb nearby structures or adjacent sections of the wall to remain in place, in accordance with Section 501 of the Standard Specifications.

All-natural stone is considered to be of historic significance, and shall be salvaged for reuse. The stone wall shall be carefully deconstructed into stable, transportable sections. The following precautions shall be taken in order to minimize aesthetic surficial damage to the stone.

- (a) Store and handle stone to prevent damage due to moisture, contaminants, breakage, chipping or other causes.
- (b) Lift with wide belt-type slings where possible; do not lift with wire ropes.
- (c) Do not use pinch bars or wrecking bars to handle stone. Do not use equipment that contains substances that might stain.
- (d) Store stone on wood skids or pallets, covered with non-staining, waterproof membrane.
- (e) Protect stored stone from weather with waterproof non-staining covers or enclosures.

Revised January 10, 2022