This Addendum forms part of the original document marked: Route 1 South Utility Project.

This document, as well as the new sheets will be emailed to the Pre Bid Meeting list of attendees.

1). BIDDER QUESTIONS

Bidder questions received by Stantec have been included, with responses, attached to this Addendum.

2). ADD SPECIFICATIONS

The following specifications have added to the contract:

- SECTION 502     Concrete for Concrete Encased Conduit
- SECTION 652     Traffic Control
- SECTION 659     Mobilization

The following specification have been revised to revised handhole specifications and handhole details for each service. All other items in each section are unchanged.

- SECTION 670            120/240V, 1-PHASE – 120/208V 3-phase Service Connects
- SECTION 681     Telephone Service
- SECTION 682      CCTV Service Reconnects
- SECTION 683  Communications Service Reconnects

3). REPLACE DETAIL SHEET 6A and 6B (attached)

The handhole detail on Sheet 6A has been deleted. The handhole details are included in the specifications attached to this addendum.

Detail Sheet 6B has been revised to show the specific details for the conduit encased conduit arrangements needed for the project

4). REPLACE BID SCHEDULE (attached):

The bid tab has been revised to include the following new items:

- 502.5651     Concrete for Concrete Encased Conduit (new item)
• 652.361  Traffic Control  *(new item)*
• 659.100  Mobilization  *(new item)*
• Item 670.177  24”x36”x18” Handhole  *(sized changed from 24” to 36”)*

Replace the bid tab in the contract documents in its entirety, with the attached.

All else remains unchanged from original bid document.

Please acknowledge receipt of this addendum within your proposal. Failure to do so may subject a bidder to disqualification.

**Bidder Questions:**

1. In looking at this project, can a mobilization bid item be added to the bid items? We would like to put our fixed costs into an item and not have to spread it out into the conduits, in case some of them over run. The town shouldn’t have to pay more if an item over runs on the project because we have all of our general conditions added into the conduit numbers.

   *A mobilization item in addition to items for traffic control and concrete for concrete encased conduit have been added to the contract.*

2. Would you consider adding more items to the project? Mobilization, flagger, concrete, coring, loam, seed and test pit.

   *A mobilization item in addition to items for traffic control and concrete for concrete encased conduit have been added to the contract. Coring, loam and seed will remain as incidental to the conduit items. Test pits are incidental to the handhole items.*

3. Is there more quantities on the bid items then there is on the plan set?

   *For clarity, in some cases the conduits shown on the plans are a general representation of their actual layout. The quantities were estimated based on the plan layout and experience gained during the administration of the original Route 1 project.*

4. Is it your intent to place all conduit in same trench and pay each item separately? For example, on Sheet #2 the 7 conduits in the duct bank service going to “A Perfect Smile” would be paid at:

   Item No. 416.020 Hot Bituminous Pavement Restoration- 35SY
   Item No. 670.197 2-1/2” PVC Sch. 40 Conduit- 276LF
   Item No. 681.196 UGT 2” PVC Sch. 40 Conduit- 292LF
   Item No. 682.196 CCTV 2” PVC Sch. 40 Conduit- 296LF
   Item No. 683.196 Comm. 2” PVC Sch. 40 Conduit- 136LF
All wiring items
All concrete pad items
Incidentals: Loam, Seed, Concrete, Test Pit, Core

Yes, it is the intent to place all conduit in the same trench and pay each conduit item separately.

5. Could you create a 7 conduit ductbank item that we would get paid for by the LF? Instead of the getting paid for each ductbank (excavated trench) with 4 conduit items and 3-4 wiring items that all require incidentals to be added.

A ductbank item that includes conduit for all the utilities cannot be created.

6. Who is the electrical contractor that was used on the existing conduits we are connecting to?

Moulison Heavy Electrical was the contractor.

ATTACHMENTS

1. Revised Bid Form Pages D-7 and D-8
2. Revised Bid Detail Sheet 6A and 6B
3. Specifications as noted

End of Addendum #3
### SCHEDULE OF PRICES

Note: This proposal shall be filled in by the Bidders, with the Unit Prices written in words and numerals and the extensions shall be made by him. For complete information concerning these items, see the Specifications.

<table>
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<tr>
<th>Item No.</th>
<th>Quantity</th>
<th>Description and Unit Price</th>
<th>Unit</th>
<th>Amount</th>
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<td>CCTV 24&quot;x24&quot;x18&quot; Handhole</td>
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**TOTAL AMOUNT OF BASE BID:**

(Amount in Words)

The Owner reserves the right to reject any or all bids, negotiate with the successful bidder for a reduced scope of work, to waive any irregularities in the bidding process and award the contract to the lowest responsible bidder on the basis of the Base Bid Schedule with or without consideration of any Bid Alternates.
Electrical Duct Bank Details

NOTE:
- Concrete around conduits
- 4/0 Copper Neutral

Conduit Spacers

Concrete Encased Duct Bank

NOTE:
- Conduit in driveways and parking lots to be concrete encased.
SUPPLEMENTAL SPECIFICATION
SECTION 502
CONCRETE FOR CONCRETE ENCASED DUCT BANK

The provisions of Section 502 of the Standard Specifications shall apply with the following additions and modifications:

502.01 DESCRIPTION:
Under this item, the Contractor shall place concrete around conduits located under paved parking lots and paved driveways at locations shown on the plans.

502.02 MATERIALS:
The concrete shall conform to Concrete Fill as specified in Section 502 of the standard specifications.

502.19 BASIS OF PAYMENT:
The accepted quantities of Concrete for Concrete Encased Duct Bank will be paid for at the contract unity price per linear feet concrete, including conduit spacers, complete in place. Pay limits for concrete shall be as shown on the plans.

Payment will be made under:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>502.5651</td>
<td>Concrete for Concrete Encased Duct Bank</td>
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</table>
The provisions of Section 652 of the Standard Specifications shall apply with the following additions and modifications:

652.1 DESCRIPTION:
Traffic control shall include preparation of traffic control plan and furnishing, installing, maintaining, and removing traffic control devices necessary to provide reasonable protection for motorists, pedestrians and construction workers in accordance with Section 652. In addition, the work of this section shall also include supplying all flaggers and traffic control officers to maintain and control traffic through the work areas. The Contractor may elect to use uniform police officers in support of this effort; however, the Town is not requiring uniform officers for any portion of this work.

652.3.1 RESPONSIBILITY OF THE DEPARTMENT:
The Contractor shall be required to maintain traffic in accordance with paragraph 24 of the Instructions to Bidders. All traffic control measures, traffic control officers/flaggers, and implementation/maintenance of traffic control measures shall be in accordance with the requirements of MaineDOT and the MUTCD.

652.7 METHOD OF MEASUREMENT:
Traffic control shall have a single lump sum measurement.

652.8 BASIS OF PAYMENT:

<table>
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<td>652.361</td>
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SUPPLEMENTAL SPECIFICATION
SECTION 659
MOBILIZATION

The provisions of Section 659 of the Standard Specifications shall apply with the following additions and modifications:

659.01 DESCRIPTION:
Mobilization costs shall be for preparatory work and operations including, but not limited to those necessary to the movement of personnel, equipment, supplies and incidentals to the project site; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various items on the project site. Mobilization costs shall not exceed five (5) percent of the total amount of the Bid.

659.2 BASIS OF PAYMENT:
Payment for mobilization shall be at the lump sum price in the Bid Form and shall be payable in two equal payments: 1) when the Contractor is operational at the project site; 2) at 50% work complete. For the purposes of this item, "operational" shall be construed to mean substantial commencement of work at the site.

Payment will be made under:

<table>
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<th>Pay Unit</th>
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<tbody>
<tr>
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<td>Mobilization</td>
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</table>
ITEM 670.197 2-1/2” PVC SCHEDULE 40 CONDUIT  LF

GENERAL

The work under these Items shall conform to the relevant provisions Section 600 and 700 of the Standard Specification and the following:

MATERIALS

PVC Conduit shall be concrete encased under roadway, direct buried elsewhere, and meet the requirements specified in section 715-03 of the standard specifications.

INSTALLATION

Conduit shall be installed as specified in section 626-033 of the standard specifications.

Where noted on Sheet 3 of the plans, a hole shall be created under the parking lot retaining wall large enough to accommodate the conduit by jacking, drilling or pushing a conduit under the retaining wall. The conduit shall be extended through the opening and connected to the conduit in the open area.

The contractor shall place the push pit without disturbance to the adjacent sidewalk. The push pit shall be backfilled and compacted.

MEASUREMENT AND PAYMENT

Payment will be made at the unit price per linear foot, which price shall constitute full compensation for all labor, tools, and equipment, required for furnishing and installing PVC Schedule 40 conduit, fittings, expansion fittings used at bridge expansion bearings, bends, clamps, couplings, condulets, supports, inclusive of conduit supports, trench excavation (except rock and sidewalk), jacking, drilling or pushing conduit and backfilling (except where Engineer requires gravel borrow backfill), joint encasement, de-watering, pull ropes, penetrations into new and existing handholes, connection to existing conduits, warning tape and surface restoration. Surface restoration shall include, but is not limited to, restoration of sidewalk surface and grass areas, and all incidental costs required for the proper completion of the work specified herewith, as shown on the plans, or as required by the Engineer, complete in place.
ITEM 670.156  2-1/2” RISER DROP  EA

GENERAL

The work under these Items shall conform to the relevant provisions Section 600 and 700 of the Standard Specification and the following:

MATERIALS

Riser poles shall consist of a rigid galvanized steel sweep and shall be 2-1/2" rigid galvanized steel prior to exiting the ground to 10’ above finished grade. 10’ above finished grade shall be 2-1/2” schedule 40 PVC.

INSTALLATION

PVC Conduit shall be installed as specified in section 626-033 of the standard specifications. Rigid Galvanized Steel conduit shall be installed as specified in section 626.032 of the standard specifications

MEASUREMENT AND PAYMENT

Measurement shall be made per each unit complete in place, tested, and accepted by the Engineer. Payment shall be at the contract unit bid price for each unit, complete in place, which price shall include all labor, tools, equipment, materials, all wiring and connections, and all incidental costs required to complete the work.

ITEM 670.177  24”x36”x18” HANDBOLE  EA

GENERAL

The Contractor shall furnish and install polymer concrete handholes as is shown below, or equal. The work under these Items shall conform to the relevant provisions Section 600 and 700 of the Standard Specification and the following:

MATERIALS

These enclosures, meet and exceed ANSI tier 22 test provisions. Enclosures and covers shall be concrete gray color and rated for no less than 22,500 lbs. over a 10”x10” area and be designed and tested to temperatures of –50 degrees F. Covers shall have a minimum coefficient of friction of .5.

INSTALLATION

All handholes must be installed as shown on the Drawings to the approved grade, except as approved deviations may be required to meet field conditions. The top of the handhole
and cover shall be set flush with the finished grade.

MEASUREMENT AND PAYMENT

Measurement shall be made per each unit complete in place, tested, and accepted by the Engineer.

Payment shall be at the contract unit bid price for each unit, complete in place, which price shall include all labor, tools, equipment, materials, all wiring and connections, test pits and all incidental costs required to complete the work.
**Oldcastle Enclosure Solutions**

**2436**

**COVER:**
- Style: Flush Solid
- Material: Polymer Concrete
- Weight: Tier 15: 150 lbs, Tier 22: 204 lbs
- Std. Fasteners: 1/2-13 Stainless Steel Hex Head Bolt, Washer and Floating Nut
- Options: Logos and Special Markings
- Surface: Slip Resistant & Marked*

**BODY:**
- Material: Polymer Concrete
- Size: 24" x 36" (L x W)
- Weight: 18" Depth: 142 lbs, 24" Depth: 175 lbs, 36" Depth: 242 lbs
- Wall Type: Straight
- Performance: Tier 22, WUC Category 3, ASTM C657 A-16

**EXTENSION:**
- Material: Polymer Concrete
- Size: 24" x 36" (L x W)
- Weight: 9" Depth: 80 lbs

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* Surface demonstrates a coefficient of friction, both wet and dry, > 0.6 when tested by ASTM C1028.

Cover comes standard with permanent markings for manufacturer, load rating, model size and manufacturing location.

Contact your Oldcastle Precast Enclosure Solutions Distribution Center for specific information and additional options.

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**oldcastleprecast.com/enclosuresolutions**

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**Heavy Duty:**
- Incidental, Non-deliberate Traffic
- For use in non-vehicular traffic situations only.

Actual load rating is determined by the box and cover combination.

Weights and dimensions may vary slightly.
Options:

Available Polymer Covers:
- Flush Solid (Standard)
- Flush (2 Piece) Uni-Half
- Pedestal/Cabinet Provisions

Available Steel Covers:
- One Piece

Fastener Options for Polymer Covers:
- Penta Head Bolt
- Oldcastle Enclosures Vandal Proof Bolt
- Penta Coil Thread Bolt
- Captive Bolt Retainer

Custom Options for Polymer Covers:
- 4" x 8" Plate with Custom Markings
- EMS Markers

Custom Options for H-Series Bodies:
- Ground Bus
- Cable Rack
- Mouseholes/Knockouts
- Pulling Eye
- Universal Mounting Plate
- Dividers
- Solid Bottom
- Bodies are Stackable (with tallest body on bottom)

Raw Material Specifications:

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<tr>
<th>Standard Test Method</th>
<th>Properties of Raw Material</th>
<th>ASTM Designation</th>
<th>Test Results</th>
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<td>Compressive Strength</td>
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<td>Flexural Properties of Plastic Materials</td>
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<td>Resistance of Plastics to Chemical Reagents</td>
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ASTM Specifications shall be the current revision

Test Reports available on request

Note:

Actual load rating is determined by the box and cover combination. Weights and dimensions may vary slightly

All information contained on this sheet is current at the time of printing. Because of Oldcastle Precast, Inc.'s policy of ongoing research and development, the Company reserves the right to discontinue or update product information without notice.
ITEM 670.802 100A METER SOCKET EA
ITEM 670.803 200A METER SOCKET EA

GENERAL

The work under this Item shall conform to the relevant provisions as indicated in Attachment 1 - Central Maine Power “Handbook of Requirements for Electrical Service and Meter Installations” dated January 1st 2009 appended to Section 680.

MATERIALS

Meter sockets shall meet the requirements specified in section VIII as indicated in Attachment 1 - Central Maine Power “Handbook of Requirements for Electrical Service and Meter Installations” dated January 1st 2009 appended to Section 680.

INSTALLATION

Meter sockets shall be installed as specified in Section VIII as indicated in Attachment 1 - Central Maine Power "Handbook of Requirements for Electrical Service and Meter Installations" dated January 1st 2009 appended to Section 680.

MEASUREMENT AND PAYMENT

Measurement shall be made per each unit complete in place, tested, and accepted by the Engineer.

Payment shall be at the contract unit bid price for each unit, complete in place, which price shall include all labor, tools, equipment, materials, all wiring and connections, and all incidental costs required to complete the work.

ITEM 670.316 #250 KCMIL COPPER WIRE LF
ITEM 670.317 #3/0 AWG COPPER WIRE LF
ITEM 670.318 #2/0 AWG COPPER WIRE LF
ITEM 670.319 #2 AWG COPPER WIRE LF
ITEM 670.320 #4 AWG COPPER WIRE LF

GENERAL

All work performed under these Items shall be in accordance with the relevant provisions of Section 634 of the Standard Specifications. The Contractor shall be required to furnish and install all materials, equipment and labor necessary to completely wire and operate the street lighting system. All materials and wiring procedures shall conform to the specifications contained herein and to the requirements and standard practices of the Section 634 and the following:
All wire and connectors shall conform to the standards of the National Electrical Manufacturers Association or the Underwriters' Laboratories, Inc., whichever is applicable. All materials and workmanship shall conform to the requirements of the National Electrical Code, Standards of the American Society for Testing and Materials, and any local ordinances that may apply.

Wherever any reference is made to the standards mentioned above, the reference should be construed to mean the standard that is in effect on the day the Notice to Proceed to the Contractor for the work is dated.

Wire sizes shall be based on American Wire Gage (AWG), as applied to copper conductors.

**MATERIALS**

The cable shall be UL listed and listed as THW and conform to section 715.07 of the standard specifications.

Wire and cable furnished and used shall be new and shall have the size, grade of insulation, voltage and manufacturer's name permanently marked on the outer covering at regular intervals. Wire and cable shall be delivered to the site in complete coils or reels with identifying size, type and insulation tags. Wire and cable shall be protected from weather and damage during storage and handling.

Splicing Materials:

Shall be in accordance with Section 715.07 of the standard specifications. Splice kits shall be submersible rated and shall be suitable for connecting copper to aluminum conductors.

**CONSTRUCTION METHODS**

No wire shall be drawn in to any conduit until all work that may cause damage to the wire is complete.

All wire shall be continuous from handhole to handhole without running splices in conduits. All wires shall extend 2 feet above the handhole, connected at ends and rolled back into the handhole.

All wire terminals, taps and splices shall be made secure with connectors, splicing materials and methods as hereinafter specified.

Grounding:

Coatings and rust on conduits shall be removed at the location where the ground fittings are to be installed.

The bare copper conductor shall be connected to the continuous insulated bonding lead, which shall be identified with green plastic marking tape as noted in the specifications.
Bonding leads for lighting fixtures on poles shall be an insulated #10 AWG, marked green, which shall be extended to the nearest handhole and interconnected to the bare copper ground wire in the handhole of gauge shown on the contract drawings and the pig tail conductor shall be connected to the ground rod.

A conductor with the same insulation of the power leads shall be installed in all conduits as a continuous bond wire. All bonding leads from fixtures, pole, control boxes, fittings and ground rods shall be connected to the continuous insulated bonding lead which shall be identified with green plastic marking tape as noted in the specifications.

All grounding shall conform to the applicable provisions of the National Electrical Code and section 634.081 of the standard specifications.

Field Tests:

All conductors shall be tested in accordance with section 634.09 of the standard specifications.

All tests and any necessary repairs or replacements that are indicated by the Engineer to produce a fault-free system will be performed at the Contractor's expense.

NOTE: The Contractor shall be completely responsible for all maintenance, repairs and replacement of damaged equipment during the functional test and throughout the performance warranty period.

If, within 48 hours after notification by the Engineer of a malfunction, and the Contractor fails to make such repairs as necessary, the Engineer will undertake repairs of which all costs are to be borne by the Contractor. The cost of any maintenance necessary, except electrical energy, shall be at the Contractor's expense and will be considered as included in the price paid for the Contract item involved and no additional compensation will be allowed therefore.

MEASUREMENT AND PAYMENT

Payment will be made at the respective unit price and be measured by the foot along the center line of the conduit in which the conductor is placed, complete-in-place, which price shall constitute full compensation for furnishing, installing and connecting the street lighting cables, the grounding of the system, testing the lighting circuit wiring, grounding wire testing, and for furnishing any equipment and/or materials required.

No allowance will be made for the necessary lengths of slacked cable laid around the sides of manholes, handholes, junction boxes, pull boxes, or extending from foundations for making splices, taps in cable, and connecting the internal components of control cabinets. No allowance will be made for cable in controllers, light poles or other items other than conduit.

The cost of any maintenance necessary to include testing, replacement of lamps, luminaires, wiring splices, grounding, and all appurtenances, except electrical energy, shall
be at the Contractor’s expense and will be considered as included in the price paid for the contract item.

SERVICE RECONNECTS

The electrical contractor shall be responsible for coordination of the following to perform service reconnects:

1. Coordinate access to the property to open/close the main circuit breaker with the property owner.
2. The shutdowns will be performed during off hours unless otherwise approved by the property owner.
3. Coordinate with Central Maine Power as to the date, time and duration of the shutdown.
4. Coordinate with the property owner as to the number of hours for the shutdown and the need for temporary power during the shutdown.
SPECIAL PROVISION
SECTION 681
TELEPHONE SERVICE

ITEM 681.196 UGT 2” PVC SCHEDULE 40 CONDUIT LF

GENERAL

The work under these Items shall conform to the relevant provisions Section 600 and 700 of the Standard Specification and the following:

MATERIALS

2” PVC Conduit shall be concrete encased under paved areas, direct buried elsewhere, and shall meet the requirements specified in Section 715-03 of the standard specification.

INSTALLATION

2” PVC Conduit shall be installed as specified in Section 626-033 of the standard specifications. The conduit shall run from the telephone pedestal to the building. At the building the conduit shall be changed over to rigid galvanized steel conduit, shall stub 6” out of the ground, be capped, and have a nylon pull string installed.

Where noted on Sheet 3 of the plans, a hole shall be created under the parking lot retaining wall large enough to accommodate the conduit by jacking, drilling or pushing a conduit under the retaining wall. The conduit shall be extended through the opening and connected to the conduit in the open area. The contractor shall place the push pit without disturbance to the adjacent sidewalk. The push pit shall be backfilled and compacted.

MEASUREMENT AND PAYMENT

Payment will be made at the unit price per linear foot, which price shall constitute full compensation for all labor, tools, and equipment, required for furnishing and installing PVC Conduit Schedule 40, fittings, expansion fittings, bends, clamps, couplings, condulets, supports, inclusive of conduit supports, trench excavation (except rock and sidewalk), jacking, drilling or pushing conduit and backfilling (except where Engineer requires gravel borrow backfill), joint encasement, de-watering, pull ropes, penetrations into new and existing handholes, connection to existing conduits, warning tape and surface restoration. Surface restoration shall include, but is not limited to, restoration of sidewalk surface and grass areas, and all incidental costs required for the proper completion of the work specified herewith, as shown on the plans, or as required by the Engineer, complete in place.
ITEM 681.156  UGT 2” RISER DROP  EA

GENERAL

The work under these Items shall conform to the relevant provisions Section 600 and 700 of the Standard Specification and the following:

MATERIALS

Riser poles shall consist of a rigid galvanized steel sweep and shall be 2” rigid galvanized steel prior to exiting the ground to 10’ above finished grade. 10’ above finished grade shall be 2” schedule 40 PVC.

INSTALLATION

PVC Conduit shall be installed as specified in Section 626-033 of the standard specifications. Rigid Galvanized Steel conduit shall be installed as specified in Section 626.032 of the standard specifications

MEASUREMENT AND PAYMENT

Measurement shall be made per each unit complete in place, tested, and accepted by the Engineer.

Payment shall be at the contract unit bid price for each unit, complete in place, which price shall include all labor, tools, equipment, materials, all wiring and connections, and all incidental costs required to complete the work.

ITEM 681.177  UGT 24”x24”x18” HANDBOHE  EA

GENERAL

The Contractor shall furnish and install polymer concrete handholes as is shown below, or equal. The work under these Items shall conform to the relevant provisions Section 600 and 700 of the Standard Specification and the following:

MATERIALS

These enclosures, meet and exceed ANSI tier 22 test provisions. Enclosures and covers shall be concrete gray color and rated for no less than 22,500 lbs. over a 10”x10” area and be designed and tested to temperatures of –50 degrees F. Covers shall have a minimum coefficient of friction of .5.

INSTALLATION

All handholes must be installed as shown on the Drawings to the approved grade, except as approved deviations may be required to meet field conditions. The top of the handhole
and cover shall be set flush with the finished grade.

MEASUREMENT AND PAYMENT

Measurement shall be made per each unit complete in place, tested, and accepted by the Engineer.

Payment shall be at the contract unit bid price for each unit, complete in place, which price shall include all labor, tools, equipment, materials, test pits, all wiring and connections, and all incidental costs required to complete the work.
**Cover:**
- Style: Flush Solid
- Material: Polymer Concrete
- Weight: Tier 15: 89 lbs
- Std. Fasteners: 1/2-13 Stainless Steel Hex Head Bolt, Washer and Floating Nut
- Options: Logos and Spacial Markings
- Surface: Slip Resistant & Marked**

**Body:**
- Material: Polymer Concrete
- Size: 24" x 24" (L x W)
- Weight: 24" Depth: 156 lbs
- 36" Depth: 219 lbs
- Wall Type: Straight
- Performance: Tier 22, WUC Category 3, ASTM C857 A-16

Contact your Oldcastle Precast Enclosure Solutions Distribution Center for specific information and additional options.
Options:

Available Polymer Covers:
- Flush Solid (Standard)

Fastener Options for Polymer Covers:
- Penta Head Bolt
- Oldcastle Enclosures Vandal Proof Bolt
- Penta Coil Thread Bolt
- Captive Bolt Retainer

Custom Options for Polymer Covers:
- 4" x 6" Plate with Custom Markings
- EMS Markers

Custom Options for H-Series Bodies:
- Ground Bus
- Cable Rack
- Mouseholes/Knockouts
- Pulling Eye
- Universal Mounting Plate
- Dividers
- Solid Bottom

Bodies are Stackable (with tallest body on bottom)

Raw Material Specifications:

<table>
<thead>
<tr>
<th>Test Method</th>
<th>Properties of Raw Material</th>
<th>ASTM Designation</th>
<th>Test Results</th>
</tr>
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<tbody>
<tr>
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<td>C 579</td>
<td>&gt; 11,000 psi</td>
</tr>
<tr>
<td>Flexural Properties of Plastic Materials</td>
<td>Flexural Strength</td>
<td>D 790</td>
<td>&gt; 3,000 psi</td>
</tr>
<tr>
<td>Resistance of Plastics to Chemical Reagents</td>
<td>Chemical Resistance</td>
<td>D 543</td>
<td>Retain &gt; 75% of original strength</td>
</tr>
<tr>
<td>Impact Resistance by Means of a Falling Weight</td>
<td>Impact Resistance</td>
<td>D 2444</td>
<td>&gt; 70 ft-lb</td>
</tr>
<tr>
<td>Static Coefficient of Friction</td>
<td>Friction Coefficient</td>
<td>C 1528</td>
<td>&gt; 0.6</td>
</tr>
</tbody>
</table>

ASTM Specifications shall be the current revision.
Test Reports are available on request.

Product Load Rating:
- Heavy Duty: Non-deliberate Traffic
  - For use in non-vehicular traffic situations only

Note:
- Actual load rating is determined by the box and cover combination. Weights and dimensions may vary slightly.
- All information contained on this sheet is current at the time of printing. Because of Oldcastle Precast, Inc.'s policy of ongoing research and development, the Company reserves the right to discontinue or update product information without notice.
SUPPLEMENTAL SPECIFICATION
SECTION 682
CCTV SERVICE RECONNECTS

ITEM 682.196  2” PVC SCHEDULE 40  LF

GENERAL

The work under these Items shall conform to the relevant provisions Section 600 and 700 of the Standard Specification and the following:

MATERIALS

2” PVC Conduit shall be concrete encased under paved areas, direct buried elsewhere, and shall meet the requirements specified in section 715-03 of the standard specification.

INSTALLATION

2” PVC Conduit shall be installed as specified in section 626-033 of the standard specifications. The conduit shall run from the CCTV junction box to the building. At the building the conduit shall be changed over to rigid galvanized steel conduit, shall stub 6” out of the ground, be capped, and have a nylon pull string installed.

Where noted on Sheet 3 of the plans, a hole shall be created under the parking lot retaining wall large enough to accommodate the conduit by jacking, drilling or pushing a conduit under the retaining wall. The conduit shall be extended through the opening and connected to the conduit in the open area. The contractor shall place the push pit without disturbance to the adjacent sidewalk. The push pit shall be backfilled and compacted.

MEASUREMENT AND PAYMENT

Payment will be made at the unit price per linear foot, which price shall constitute full compensation for all labor, tools, and equipment, required for furnishing and installing PVC Conduit Schedule 40, fittings, expansion fittings, bends, clamps, couplings, condulets, supports, inclusive of conduit supports, trench excavation (except rock and sidewalk), jacking, drilling or pushing conduit and backfilling (except where Engineer requires gravel borrow backfill), joint encasement, de-watering, pull ropes, penetrations into new and existing handholes, connection to existing conduits, warning tape and surface restoration. Surface restoration shall include, but is not limited to, restoration of sidewalk surface and grass areas, and all incidental costs required for the proper completion of the work specified herewith, as shown on the plans, or as required by the Engineer, complete in place.
ITEM 682.156 CCTV 2” RISER DROP EA

GENERAL

The work under these Items shall conform to the relevant provisions Section 600 and 700 of the Standard Specification and the following:

MATERIALS

Riser poles shall consist of a rigid galvanized steel sweep and shall be 2” rigid galvanized steel prior to exiting the ground to 10’ above finished grade. 10’ above finished grade shall be 2” schedule 40 PVC.

INSTALLATION

PVC Conduit shall be installed as specified in section 626-033 of the standard specifications. Rigid Galvanized Steel conduit shall be installed as specified in section 626.032 of the standard specifications

MEASUREMENT AND PAYMENT

Measurement shall be made per each unit complete in place, tested, and accepted by the Engineer.

Payment shall be at the contract unit bid price for each unit, complete in place, which price shall include all labor, tools, equipment, materials, all wiring and connections, and all incidental costs required to complete the work.

ITEM 682.177 CCTV 24”x 24”x18” HANDHOLE EA

GENERAL

The Contractor shall furnish and install polymer concrete handholes as is shown below, or equal. The work under these Items shall conform to the relevant provisions Section 600 and 700 of the Standard Specification and the following:

MATERIALS

These enclosures, meet and exceed ANSI tier 22 test provisions. Enclosures and covers shall be concrete gray color and rated for no less than 22,500 lbs. over a 10”x10” area and be designed and tested to temperatures of –50 degrees F. Covers shall have a minimum coefficient of friction of .5.

INSTALLATION

All handholes must be installed as shown on the Drawings to the approved grade, except as approved deviations may be required to meet field conditions. The top of the handhole and cover shall be set flush with the finished grade.
MEASUREMENT AND PAYMENT

Measurement shall be made per each unit complete in place, tested, and accepted by the Engineer.

Payment shall be at the contract unit bid price for each unit, complete in place, which price shall include all labor, tools, equipment, materials, all wiring and connections, test pits and all incidental costs required to complete the work.
Bolt Down Detail

**COVER:**
- Style: Flush Solid
- Material: Polymer Concrete
- Weight: Tier 15: 89 lbs
- Std. Fasteners: 1/2-13 Stainless Steel Hex Head Bolt, Washer and Floating Nut
- Options: Logos and Spacial Markings
- Surface: Slip Resistant & Marked

**BODY:**
- Material: Polymer Concrete
- Size: 24" x 24" (L x W)
- Weight:
  - 24" Depth: 156 lbs
  - 36" Depth: 219 lbs
- Wall Type: Straight
- Performance: Tier 22, W1C Category 3, ASTM C857 A-16

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
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<td>25 7/8&quot;</td>
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<tr>
<td>2424-36</td>
<td>36&quot;</td>
<td>25 1/4&quot;</td>
</tr>
</tbody>
</table>

* Surface demonstrates a coefficient of friction, both wet and dry, > 0.6 when tested by ASTM C1028.

Cover comes standard with permanent markings for manufacturer, load rating, model size and manufacturing location.

Contact your Oldcastle Precast Enclosure Solutions Distribution Center for specific information and additional options.
Options:

Available Polymer Covers:
- Flush Solid (Standard)

Fastener Options for Polymer Covers:
- Penta Head Bolt
- Oldcastle Enclosures Vandal Proof Bolt
- Penta Coil Thread Bolt
- Captive Bolt Retainer

Custom Options for Polymer Covers:
- 4" x 8" Plate with Custom Markings
- EMS Markers

Custom Options for H-Series Bodies:
- Ground Bus
- Cable Rack
- Mouseholes/Knockouts
- Pulling Eye
- Universal Mounting Plate
- Dividers
- Solid Bottom
Bodies are Stackable (with tallest body on bottom)

Raw Material Specifications:

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<td>Flexural Strength</td>
<td>D 790</td>
<td>&gt; 3,000 psi</td>
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<tr>
<td>Resistance of Plastics to Chemical Reagents</td>
<td>Chemical Resistance</td>
<td>D 543</td>
<td>Retain &gt; 75% of original strength</td>
</tr>
<tr>
<td>Impact Resistance by Means of a Falling Weight</td>
<td>Impact Resistance</td>
<td>D 2444</td>
<td>&gt; 70 ft-lb</td>
</tr>
<tr>
<td>Static Coefficient of Friction</td>
<td>Friction Coefficient</td>
<td>C 1328</td>
<td>&gt; 0.6</td>
</tr>
</tbody>
</table>

ASTM Specifications shall be the current revision.
Test Reports available on request.

The Rural Utility Service (RUS) is a department of the US Department of Agriculture organized to facilitate rural developments. You will find Oldcastle Enclosure Solutions brand enclosures listed by the RUS. All Oldcastle Enclosure Solutions brand enclosures conform to the RUS "Rampart Resistant" fastener design for buried pedestals.

Product Load Rating:
- Heavy Duty: Non-deliberate Traffic
  For use in non-vehicular traffic situations only

Note:
- Actual load rating is determined by the box and cover combination. Weights and dimensions may vary slightly.
- All information contained on this sheet is current at the time of printing. Due to Oldcastle Precast, Inc.'s policy of ongoing research and development, the Company reserves the right to discontinue or update product information without notice.

oldcastleprecast.com/enclosuresolutions 800-735-5566
SPECIAL PROVISION  
SECTION 683  
COMMUNICATIONS SERVICE RECONNECTS  

ITEM 683.196  
COMM. 2” PVC SCHEDULE 40 CONDUIT  

GENERAL  
The work under these Items shall conform to the relevant provisions Section 600 and 700 of the Standard Specification and the following:  

MATERIALS  
2” PVC Conduit shall be concrete encased under paved areas, direct buried elsewhere, and shall meet the requirements specified in Section 715-03 of the standard specification.  

INSTALLATION  
2” PVC Conduit shall be installed as specified in Section 626-033 of the standard specifications.  

Where noted on Sheet 3 of the plans, a hole shall be created under the parking lot retaining wall large enough to accommodate the conduit by jacking, drilling or pushing a conduit under the retaining wall. The conduit shall be extended through the opening and connected to the conduit in the open area. The contractor shall place the push pit without disturbance to the adjacent sidewalk. The push pit shall be backfilled and compacted.  

MEASUREMENT AND PAYMENT  
Payment will be made at the unit price per linear foot, which price shall constitute full compensation for all labor, tools, and equipment, required for furnishing and installing PVC Conduit Schedule 40, fittings, expansion fittings, bends, clamps, couplings, condulets, supports, inclusive of conduit supports, trench excavation (except rock and sidewalk), jacking, drilling or pushing conduit and backfilling (except where Engineer requires gravel borrow backfill), joint encasement, de-watering, pull ropes, penetrations into new and existing handholes, connection to existing conduits, warning tape and surface restoration. Surface restoration shall include, but is not limited to, restoration of sidewalk surface and grass areas, and all incidental costs required for the proper completion of the work specified herewith, as shown on the plans, or as required by the Engineer, complete in place.  

ITEM 683.156  
COMM. 2” RISER DROP  

GENERAL  
The work under these Items shall conform to the relevant provisions Section 600 and 700 of the Standard Specification and the following:  

MATERIALS
Riser poles shall consist of a rigid galvanized steel sweep and shall be 2” rigid galvanized steel prior to exiting the ground to 10’ above finished grade. 10’ above finished grade shall be 2” schedule 40 PVC.

INSTALLATION

PVC Conduit shall be installed as specified in Section 626-033 of the standard specifications. Rigid Galvanized Steel conduit shall be installed as specified in Section 626.032 of the standard specifications.

MEASUREMENT AND PAYMENT

Measurement shall be made per each unit complete in place, tested, and accepted by the Engineer. Payment shall be at the contract unit bid price for each unit, complete in place, which price shall include all labor, tools, equipment, materials, all wiring and connections, and all incidental costs required to complete the work.

ITEM 683.177 COMM. 24”x24”x18” HANDHOLE EA

GENERAL

The Contractor shall furnish and install polymer concrete handholes as is shown below, or equal. The work under these Items shall conform to the relevant provisions Section 600 and 700 of the Standard Specification and the following:

MATERIALS

These enclosures, meet and exceed ANSI tier 22 test provisions. Enclosures and covers shall be concrete gray color and rated for no less than 22,500 lbs. over a 10”x10” area and be designed and tested to temperatures of –50 degrees F. Covers shall have a minimum coefficient of friction of .5.

INSTALLATION

All handholes must be installed as shown on the Drawings to the approved grade, except as approved deviations may be required to meet field conditions. The top of the handhole and cover shall be set flush with the finished grade.

MEASUREMENT AND PAYMENT

Measurement shall be made per each unit complete in place, tested, and accepted by the Engineer. Payment shall be at the contract unit bid price for each unit, complete in place, which price shall include all labor, tools, equipment, materials, all wiring and connections, test pits and all incidental costs required to complete the work.
Cover:
- Style: Flush Solid
- Material: Polymer Concrete
- Weight: Tier 15: 89 lbs
- Std. Fasteners: 1/2-13 Stainless Steel Hex Head Bolt, Washer and Floating Nut
- Options: Logos and Spacial Markings
- Surface: Slip Resistant & Marked*

Body:
- Material: Polymer Concrete
- Size: 24" x 24" (L x W)
- Weight: 24" Depth: 156 lbs
- Wall Type: Straight
- Performance: Tier 22, WIC Category 3,
- ASTM C857 A-16

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<tr>
<td>2424-36</td>
<td>36&quot;</td>
<td>25(\frac{3}{4})&quot;</td>
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* Surface demonstrates a coefficient of friction, both wet and dry, > 0.6 when tested by ASTM C1028.

Contact your Oldcastle Precast Enclosure Solutions Distribution Center for specific information and additional options.
Options:

Available Polymer Covers:
- Flush Solid (Standard)

Fastener Options for Polymer Covers:
- Penta Head Bolt
- Oldcastle Enclosures Vandal Proof Bolt
- Penta Coil Thread Bolt
- Captive Bolt Retainer

Custom Options for Polymer Covers:
- 4" x 6" Plate with Custom Markings
- EMS Markers

Custom Options for H-Series Bodies:
- Ground Bus
- Cable Rack
- Mouseholes/Knockouts
- Pulling Eye
- Universal Mounting Plate
- Dividers
- Solid Bottom
- Bodies are Stackable (with tallest body on bottom)

Raw Material Specifications:

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ASTM Specifications shall be the current revision.
Test Reports available on request.

The Rural Utility Service (RUS) is a department of the US Department of Agriculture organized to facilitate rural development. You will find Oldcastle Enclosure Solutions brand enclosures listed by the RUS. All Oldcastle Enclosure Solutions brand enclosures conform to the RUS “Fireproof” test method for buried cabinets...

Product Load Rating:
- Heavy Duty: Non-deliberate Traffic
  - For use in non-vehicular traffic situations only

Note:

- Actual load rating is determined by the box and cover combination. Weights and dimensions may vary slightly.
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