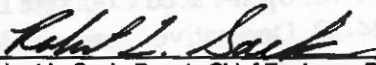


|                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                                                             |                                                                                               |                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------|
| To: <b>SUPERSEDED BY</b> <b>MODIFIED BY</b><br><u>EB 06-057</u> <b>EB 05-042</b><br><b>EFFECTIVE</b> <u>5/3/07</u> <b>EFFECTIVE</b> <u>8/22/05</u>                                                                                                                                                                                     |  |                                                                                           | New York State<br>Department of<br>Transportation<br><b>ENGINEERING</b><br><b>INSTRUCTION</b> | <b>EI</b><br><b>05-028</b> |
| Title: <b>SECTION 700 MATERIALS SPECIFICATIONS – REVISED TO COMPLY WITH NEW QUALITY ASSURANCE PROCEDURES</b>                                                                                                                                                                                                                           |  |                                                                                                                                                                             |                                                                                               |                            |
| Distribution:<br><input checked="" type="checkbox"/> Manufacturers (18) <input type="checkbox"/> Surveyors (33)<br><input checked="" type="checkbox"/> Local Govt. (31) <input checked="" type="checkbox"/> Consultants (34)<br><input checked="" type="checkbox"/> Agencies (32) <input checked="" type="checkbox"/> Contractors (39) |  | Approved:<br><br>Robert L. Sack, Deputy Chief Engineer, Research <u>11 AUG 05</u><br>Date |                                                                                               |                            |

#### ADMINISTRATIVE INFORMATION:

- This Engineering Instruction (EI) is effective beginning with projects submitted for the letting of January 12, 2006.
- No EIs or Engineering bulletins are superseded by this EI.
- The specification revisions transmitted with this EI will be incorporated into a future version of the Standard Specifications.

**PURPOSE:** To issue revisions to several Section 700 Materials Specifications.

#### TECHNICAL INFORMATION:

- The issuance of the new Materials Procedure 05-02 (MP 05-02) "*Quality Assurance Procedure For Standard Specifications, Construction and Materials Section 700 – Materials and Manufacturing*" – August 2005, is announced concurrently by EB 05-041.
- Specification sections pertaining to sampling, testing, and basis of acceptance have been revised to agree with material quality assurance requirements contained in MP 05-02.
- Additional revisions made to Section 704 masonry specifications include reference to appropriate AASHTO and ASTM specifications and the addition of a freeze/thaw requirement for §704-04 Concrete Block (Slope Paving). This freeze/thaw requirement is being moved from §620-2.01 and updated to reference the appropriate ASTM specification.
- The revised Section 704 masonry specifications replace, in their entirety, the specifications contained in the Standard Specifications of January 2002, except for the §704-13 and §704-23 concrete paver specifications which replace the specifications issued by EI 04-019.
- The revised §709-14 reinforcing steel specification replaces, in its entirety, the specification issued by EI 03-030.
- No cost increases are anticipated as a result of these revisions with the exception of item 620.09 "Concrete Block Paving" which may increase slightly due to the change in material requirements in §704-04.
- Main Office Design Quality Assurance Bureau will insert the standard specification shelf notes beginning with projects submitted for the letting of January 12, 2006.

#### IMPLEMENTATION:

- Beginning on January 12, 2006, the revised specifications may be used on ongoing contracts, on the condition that there is no change to the unit bid prices for the affected items. Engineers-in-Charge of these contracts should file a copy of this EI in the contract records as documentation of the change in accordance with the Contract Administration Manual (CAM) §104-03.

- The following standard specifications are revised by this EI:
  - 620-2.01, Soundness Approval.
  - 704-01, Common Brick.
  - 704-02, Concrete Brick.
  - 704-04, Concrete Block (Slope Paving).
  - 704-07, Segmental Retaining Wall Blocks.
  - 704-08, Brick Sidewalk and Driveway Pavers.
  - 704-10, Split-Faced Concrete Brick.
  - 704-12, Decorative Concrete Block.
  - 704-13, Precast Concrete Driveway and Sidewalk Pavers.
  - 704-23, Precast Concrete Street Pavers.
  - 705-09, Preformed Elastic Bridge Joint Sealer.
  - 705-10, Preformed Elastic Longitudinal Joint Sealer.
  - 705-11, Polyvinyl Chloride Extruded Shapes and Sheet Material.
  - 705-12, Preformed Elastic Transverse Contraction Expansion Joint Sealers.
  - 706-12, Smooth Interior Corrugated Polyethylene Pipe.
  - 706-13, Perforated Corrugated Polyethylene Underdrain Tubing.
  - 706-14, Corrugated Interior Polyethylene Pipe.
  - 709-01, Bar Reinforcement, Grade 420.
  - 709-02, Welded Wire Fabric for Concrete Reinforcement.
  - 709-04, Epoxy-Coated Bar Reinforcement, Grade 420.
  - 709-06, Low-Relaxation Prestressing Steel.
  - 709-08, Epoxy-Coated Wire Fabric Reinforcement.
  - 709-14, Bar Reinforcement, Grade 520.
  - 710-01, Aluminum Fence Fabric.
  - 710-02, Galvanized Steel Fence Fabric.
  - 710-03, Vinyl-Coated Steel Fence Fabric.
  - 710-04, Aluminum-Coated Steel Fence Fabric.
  - 710-05, Coated Steel Fence Fabric.
  - 710-10, Steel and Iron Posts, Rails, Braces, and Fittings for Chain Link Fence.
  - 710-11, Aluminum Posts, Rails, Braces, and Fittings for Chain Link Fence.
  - 710-12, Plastic-Coated Posts, Rails, Braces, and Fittings for Chain Link Fence.
  - 710-13, Wood and Timber Posts and Timber Blockouts.
  - 710-14, Galvanized Steel Barrier Posts.
  - 710-30, Right-Of-Way Fencing.
  - 711-02, Quilted Covers (For Curing).
  - 727-01, White and Yellow Thermoplastic Reflectorized Pavement Markings.
  - 727-03, White and Yellow Epoxy Reflectorized Pavement Markings.

**TRANSMITTED MATERIALS:** Due to the number of revisions, shelf notes for the Section 700 materials specifications and 620-2.01 are not attached to this EI. The full text of the revisions can be found on the Department website at [www.dot.state.ny.us](http://www.dot.state.ny.us). Select Site Index > E > Engineering Directives, Instructions, Bulletins and the EIB Program > Engineering Instructions > Issued in 2005 > EI 05-028.

**BACKGROUND:** Section 700 material specifications typically identify the physical properties a material or product must meet. The Materials Bureau establishes quality assurance procedures to evaluate and verify a manufacturer's ability to consistently produce material meeting these specification requirements. In the development of quality assurance procedures, specification requirements for sampling, testing, and basis of acceptance are established. In order to implement recent revisions to Materials Bureau quality assurance procedures, revisions to the corresponding Section 700 materials specifications are required. Reference EB 05-041 for background information on revisions to Materials Bureau quality assurance procedures.

**CONTACT:** Direct questions regarding this issuance to Kurt Matias of the Materials Bureau via e-mail at [kmatias@dot.state.ny.us](mailto:kmatias@dot.state.ny.us) or at (518) 457-4586.

Make the following changes to the **Standard Specifications of January 2, 2002.**

**Delete** Page 6-110, Lines 24 -29, under §620-2.01 and **replace** it with the following:

"Where the State elects to conduct soundness tests, stone filling or rip-rap will be rejected if it exceeds 10% loss, by weight, after 10 cycles of the magnesium sulfate soundness test."

**Delete** Page 7-27, Line 17 to Page 7-29, Line 11. (§704-01 through §704-02) and **replace** it with the following:

#### **"704-01 COMMON BRICK**

**SCOPE.** This specification covers the material and quality requirements for common brick, made from clay or shale, used in the construction of drainage structures and manholes.

**MATERIAL REQUIREMENTS.** Brick shall conform to the requirements of ASTM C32, Grade MS, including the requirement for saturation coefficient. Common brick may be furnished in any of the designated standard sizes that will produce the required dimensions in the completed structure, and the bricks shall be solid.

**SAMPLING AND TESTING.** Samples, when requested by the Department, shall be randomly selected from production-run material. A minimum of 10 full-size bricks of the same size and style will be required. Samples will be tested for the physical properties identified in ASTM C32. Tests will be performed in accordance with ASTM 67.

**BASIS OF ACCEPTANCE.** Common brick will be accepted on the basis of a material certification that specifies the product conforms to this specification.

#### **704-02 CONCRETE BRICK**

**SCOPE.** This specification covers the material and quality requirements for concrete brick used in brick masonry construction.

**MATERIAL REQUIREMENTS.** Concrete brick shall conform to the requirements of ASTM C55 Grade N, except as noted herein. Materials used in the manufacture of concrete brick shall meet the requirements of the following subsections:

|                                       |        |
|---------------------------------------|--------|
| Portland Cement                       | 701-01 |
| Coarse Aggregate                      | 703-02 |
| Mortar Sand                           | 703-03 |
| Grout Sand                            | 703-04 |
| Concrete Sand                         | 703-07 |
| Fly Ash                               | 711-10 |
| Ground, Granulated Blast-Furnace Slag | 711-12 |
| Water                                 | 712-01 |

Fly ash or ground, granulated blast-furnace slag may be substituted up to a maximum of 20% by weight of the total amount of cement plus pozzolan in the mix. Pigments used for integral coloring shall meet the requirements of ASTM C979. Other materials may be used in the manufacture as

approved by the Director, Materials Bureau.

The nominal dimensions of the brick shall be 205 mm long, 100 mm wide, and 70 mm in height.

**SAMPLING AND TESTING.** Samples, when requested by the Department, shall be randomly selected from production-run material. A total of 10 full-size bricks of the same size and style will be required. Five samples will be tested for compressive strength and five for absorption, in accordance with ASTM C140.

The manufacturer shall be responsible for having brick tested for linear drying shrinkage in accordance with ASTM C55. A copy of the test report shall be included with the samples submitted to the Department for compression and absorption testing.

**BASIS OF ACCEPTANCE.** Concrete brick will be accepted on the basis of the manufacturer's name and location appearing on the Department's Approved List and a material certification that specifies the product conforms to this specification."

**Delete** Page 7-34, Lines 5-43. (§704-04) and **replace** it with the following:

**"704-04 CONCRETE BLOCK (SLOPE PAVING)**

**SCOPE.** This specification covers the material and quality requirements for solid concrete block for use in concrete block slope paving.

**MATERIAL REQUIREMENTS.** Materials used in the manufacture of concrete block shall meet the requirements of the following subsections:

|                                       |        |
|---------------------------------------|--------|
| Portland Cement                       | 701-01 |
| Coarse Aggregate                      | 703-02 |
| Mortar Sand                           | 703-03 |
| Grout Sand                            | 703-04 |
| Concrete Sand                         | 703-07 |
| Fly Ash                               | 711-10 |
| Ground, Granulated Blast-Furnace Slag | 711-12 |
| Water                                 | 712-01 |

Fly ash or ground granulated blast furnace slag may be substituted for up to a maximum of 20% by weight of the total amount of cement plus pozzolan in the mix. Pigments used for integral coloring shall meet the requirements of ASTM C979. Other materials may be used in the manufacture as approved by the Director, Materials Bureau.

**Physical Properties.** The average compressive strength of five full-size blocks shall be not less than 20 MPa, with no individual block less than 15 MPa. The average freeze/thaw loss of five block samples, subjected to 42 freeze/thaw cycles in a 3% NaCl solution, shall not exceed 1.0%, with no individual sample exceeding 1.5%.

Block dimensions shall be as required in the contract documents. Dimensions shall not vary by more than 5 mm from those specified. Blocks shall be sound and free from cracks or other defects that would interfere with their proper placement or performance.

**SAMPLING AND TESTING.** Samples, when requested by the Department, shall be randomly selected from production-run material. A minimum of 5 full-size blocks of the same size and style

will be required for compression testing. A minimum of five samples, prepared by the manufacturer in accordance with ASTM C1262, will be required for freeze/thaw testing.

Samples will be tested for compressive strength in accordance with ASTM C140. Samples will be tested for freeze/thaw durability in accordance with ASTM C1262.

**BASIS OF ACCEPTANCE.** Concrete block will be accepted on the basis of the manufacturer's name and location appearing on the Department's Approved List and a material certification that specifies the product conforms to this specification."

**Delete** Page 7-38, Line 1 to Page 7-39, Line 18. (§704-07 through §704-08) and **replace** it with the following:

**"704-07 SEGMENTAL RETAINING WALL BLOCKS**

**SCOPE.** This specification covers the material details and quality requirements for segmental retaining wall blocks.

**MATERIAL REQUIREMENTS.** Provide segmental retaining wall block meeting the style and color requirements in the contract documents. Use materials, meeting the following requirements, in the manufacture of segmental retaining wall blocks:

|                                       |        |
|---------------------------------------|--------|
| Portland Cement                       | 701-01 |
| Coarse Aggregate                      | 703-02 |
| Mortar Sand                           | 703-03 |
| Grout Sand                            | 703-04 |
| Concrete Sand                         | 703-07 |
| Fly Ash                               | 711-10 |
| Ground, Granulated Blast-Furnace Slag | 711-12 |
| Water                                 | 712-01 |

Fly ash or ground, granulated blast-furnace slag may be substituted for up to a maximum of 20% by weight of the total amount of cement plus pozzolan in the mix. Use integral coloring pigments, when required, meeting the requirements of ASTM C979. Other materials may be used in the manufacture as approved by the Director, Materials Bureau.

**Physical Properties.** The minimum acceptable average compressive strength of five-block samples is 28 MPa, with no individual block sample less than 24 MPa. The maximum acceptable average freeze/thaw loss of five-block samples, subjected to 42 freeze/thaw cycles in a 3% NaCl solution, is 1.0%, with no individual sample exceeding 1.5%.

The formed dimensions of concrete retaining wall block units will not differ more than 5 mm from the nominal dimensions shown on the approved Materials Detail Drawing. Provide sound blocks, free from cracks or other defects that would interfere with the proper placing, performance, or appearance of the blocks.

**Materials Details.** At the time of application to the Approved List, submit Materials Details Drawings to the Director, Materials Bureau for approval. Prepare and submit drawings in accordance with Departmental procedural directives. Submit a unique drawing(s) for each block style under consideration.

**SAMPLING AND TESTING.** When samples are requested by the Department, randomly select

them from production-run material. A minimum of 5 samples, prepared by the manufacturer in accordance with ASTM C140, will be required for compression testing. A minimum of five samples, prepared by the manufacturer in accordance with ASTM C1262, will be required for freeze/thaw testing.

Samples will be tested for compressive strength in accordance with ASTM C140. Samples will be tested for freeze/thaw durability in accordance with ASTM C1262.

**BASIS OF ACCEPTANCE.** Segmental retaining wall blocks will be accepted on the basis of the manufacturer's name and block style appearing on the Department's Approved List, a material certification that specifies the product conforms to this specification, and conformance to the approved materials detail drawing(s).

#### **704-08 BRICK SIDEWALK AND DRIVEWAY PAVERS**

**SCOPE.** This specification covers the material and quality requirements for brick pavers made from extruded fire clay or shale for use in brick paving.

**MATERIAL REQUIREMENTS.** Brick pavers shall conform to the requirements of ASTM C902, Class SX, Type I. Brick pavers shall be the shape, size, and color shown in the contract documents.

**SAMPLING AND TESTING.** Samples, when requested by the Department, shall be randomly selected from production-run material. A minimum of 10 full-size bricks of the same size and style will be required. Samples will be tested for the physical properties identified in ASTM C902. Tests will be performed in accordance with ASTM C67.

**BASIS OF ACCEPTANCE.** Brick sidewalk and driveway pavers will be accepted on the basis of a material certification that specifies the product conforms to this specification. "

**Delete** Page 7-39, Line 34 to Page 7-41, Line 21. (§704-10) and **replace** it with the following:

#### **"704-10 SPLIT-FACED CONCRETE BRICK**

**SCOPE.** This specification covers the material and quality requirements for split-faced concrete brick for use in facing structural walls.

**MATERIAL REQUIREMENTS.** Split-faced concrete brick shall conform to the requirements of ASTM C55, Grade N, except as noted herein. The shape, size, and color of split-faced concrete brick shall be as shown in the contract documents. The splitting operation shall leave relatively sharp, straight, and parallel edges. Materials used in the manufacture of split-faced concrete brick shall meet the requirements of the following subsections:

|                                       |        |
|---------------------------------------|--------|
| Portland Cement                       | 701-01 |
| Coarse Aggregate                      | 703-02 |
| Mortar Sand                           | 703-03 |
| Grout Sand                            | 703-04 |
| Concrete Sand                         | 703-07 |
| Fly Ash                               | 711-10 |
| Ground, Granulated Blast-Furnace Slag | 711-12 |
| Water                                 | 712-01 |

Fly ash or ground, granulated blast-furnace slag may be substituted for up to a maximum of 20% by weight of the total amount of cement plus pozzolan in the mix. Pigments used for integral coloring shall meet the requirements of ASTM C979. Other materials may be used in the manufacture as approved by the Director, Materials Bureau.

**SAMPLING AND TESTING.** Samples, when requested by the Department, shall be randomly selected from production-run material. A minimum of 10 full-size, split-faced bricks of the same size and style will be required. Five samples will be tested for compressive strength and five for absorption, in accordance with ASTM C140.

The manufacturer shall be responsible for having brick tested for linear drying shrinkage in accordance with ASTM C55. A copy of the test report shall be included with the samples submitted to the Department for compression and absorption testing.

**BASIS OF ACCEPTANCE.** Split-faced concrete brick will be accepted on the basis of a material certification that specifies the product conforms to this specification."

**Delete** Page 7-42, Line 31 to Page 7-44, Line 45. (§704-12 through §704-13) and **replace** it with the following:

#### **"704-12 DECORATIVE CONCRETE BLOCK**

**SCOPE.** This specification covers the material and quality requirements for decorative concrete block for use in facing structural walls.

**MATERIAL REQUIREMENTS.** Decorative concrete block shall conform to the requirements of ASTM C90 except as noted herein. The shape, size, and color of decorative concrete block shall be as shown in the contract documents. Materials used in the manufacture of decorative concrete block shall meet the requirements of the following subsections:

|                                       |        |
|---------------------------------------|--------|
| Portland Cement                       | 701-01 |
| Coarse Aggregate                      | 703-02 |
| Mortar Sand                           | 703-03 |
| Grout Sand                            | 703-04 |
| Concrete Sand                         | 703-07 |
| Fly Ash                               | 711-10 |
| Ground, Granulated Blast-Furnace Slag | 711-12 |
| Water                                 | 712-01 |

Fly ash or ground, granulated blast-furnace slag may be substituted for up to a maximum of 20% by weight of the total amount of cement plus pozzolan in the mix. Pigments used for integral coloring shall meet the requirements of ASTM C979. Other materials may be used in the manufacture as approved by the Director, Materials Bureau.

**SAMPLING AND TESTING.** Samples, when requested by the Department, shall be randomly selected from production-run material. A minimum of 10 full-size decorative concrete blocks of the same size and style will be required. Five samples will be tested for compressive strength and five for absorption, in accordance with ASTM C140.

The manufacturer shall be responsible for having block tested for linear drying shrinkage in accordance with ASTM C90. A copy of the test report shall be included with the samples submitted

to the Department for compression and absorption testing.

**BASIS OF ACCEPTANCE.** Decorative concrete block will be accepted on the basis of a material certification that specifies the product conforms to this specification."

### 704-13 PRECAST CONCRETE DRIVEWAY AND SIDEWALK PAVERS

**SCOPE.** This specification covers the material and quality requirements for precast concrete pavers used for driveway and sidewalk paving.

**MATERIAL REQUIREMENTS.** Precast concrete pavers shall meet the requirements of ASTM C936 except as noted herein. The shape, size, and color of precast concrete pavers shall be as shown in the contract documents. Materials used in the manufacture of precast concrete pavers shall meet the requirements of the following subsections:

|                                       |        |
|---------------------------------------|--------|
| Portland Cement                       | 701-01 |
| Coarse Aggregate                      | 703-02 |
| Mortar Sand                           | 703-03 |
| Grout Sand                            | 703-04 |
| Concrete Sand                         | 703-07 |
| Fly Ash                               | 711-10 |
| Ground, Granulated Blast-Furnace Slag | 711-12 |
| Water                                 | 712-01 |

Fly ash or ground, granulated blast-furnace slag may be substituted for up to a maximum of 20% by weight of the total amount of cement plus pozzolan in the mix. Pigments used for integral coloring shall meet the requirements of ASTM C979. Other materials may be used in the manufacture as approved by the Director, Materials Bureau.

**Physical Properties.** Precast concrete pavers shall meet the compressive strength and absorption requirements in ASTM C936. In addition, the maximum acceptable average freeze/thaw loss of five paver samples, subjected to 25 freeze/thaw cycles in a 10% NaCl solution, is 1.0%, with no individual sample exceeding 1.5%.

**SAMPLING AND TESTING.** Samples, when requested by the Department, shall be randomly selected from production-run material. A total of 15 precast concrete pavers of the same size and style will be required. Five samples will be tested for compressive strength and five for absorption, in accordance with ASTM C140. Five samples will be tested for freeze/thaw durability in accordance with NYSDOT test methods.

**BASIS OF ACCEPTANCE.** Precast concrete driveway and sidewalk pavers will be accepted on the basis of the manufacturer's name and location appearing on the Department's Approved List and a material certification that specifies the product conforms to this specification."

Page 7-48

Lines 33-36, under §705-09 ~~delete~~ **SAMPLING** in its entirety.

Page 7-49

Lines 5-11, under §705-09 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Preformed elastic bridge joint sealer will be accepted on the basis of the manufacturer's name and location appearing on the Department's Approved List and a material certification that specifies the product conforms to this specification."

Lines 33-34, under §705-10 **delete SAMPLING** in its entirety.

Lines 35-36, under §705-10 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Preformed elastic longitudinal joint sealer will be accepted on the basis of a material certification that specifies the product conforms to this specification."

**Page 7-50**

Lines 39-42, under §705-11 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Polyvinyl chloride extruded shapes and sheet material will be accepted on the basis of the manufacturer's name and location appearing on the Department's Approved List and a material certification that specifies the product conforms to this specification."

**Page 7-52**

**Delete** Lines 5-8, under §705-12 and **replace** with the following:

**"BASIS OF ACCEPTANCE.** Preformed elastic transverse contraction expansion joint sealers will be accepted on the basis of a material certification that specifies the product conforms to this specification."

**Page 7-72**

**Delete** Lines 12-18, under §706-12 and **replace** it with the following:

**"BASIS OF ACCEPTANCE.** Smooth interior, corrugated polyethylene pipe will be accepted on the basis of the manufacturer's name and location appearing on the Department's Approved List and a material certification that specifies the product conforms to this specification."

Lines 31-33, under §706-13 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Perforated corrugated polyethylene underdrain tubing will be accepted on the basis of the manufacturer's name and location appearing on the Department's Approved List and a material certification that specifies the product conforms to this specification."

Lines 39-41, under §706-14 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Corrugated interior polyethylene pipe will be accepted on the basis of the manufacturer's name and location appearing on the Department's Approved List and a material certification that specifies the product conforms to this specification."

**Page 7-95**

Line 14, under §709-01 **delete** "**C. Samples and Tests.** Sampling and testing will be conducted as directed by the Materials Bureau."

Lines 15-21, under §709-01 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Bar reinforcement and spirals will be accepted on the basis of the manufacturer's name and location appearing on the Department's Approved List and a material certification that specifies the product conforms to this specification. *Buy America requirements apply.*"

Lines 29-34, under §709-02 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Welded wire fabric for concrete reinforcement will be accepted on the basis of the manufacturer's name and location appearing on the Department's Approved List and a material certification that specifies the product conforms to this specification. *Buy America requirements apply.*"

**Page 7-99**

Lines 10-12, under §709-04 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Epoxy-coated bar reinforcement, grade 420 or grade 520, will be accepted on the basis of the names and locations of the reinforcing bar manufacturer and the epoxy reinforcing bar applicator appearing on the Department's Approved List and a material certification from the epoxy reinforcing bar applicator that specifies the product conforms to this specification. In addition, fabricated, epoxy-coated bar reinforcement will be supplied by a fabricator appearing on the Department's Approved List, Fabricators for Epoxy-Coated Steel Reinforcing Bars. *Buy America requirements apply.*"

Lines 32-36, under §709-06 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Low-relaxation prestressing steel will be accepted on the basis of the manufacturer's name and location appearing on the Department's Approved List and a material certification that specifies the product conforms to this specification. *Buy America requirements apply.*"

**Page 7-102**

Lines 12-14, under §709-08 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Epoxy-coated wire fabric will be accepted on the basis of the names and locations of the welded wire fabric manufacturer and the epoxy applicator appearing on the Department's Approved List and a material certification from the epoxy applicator that specifies the product conforms to this specification. *Buy America requirements apply.*"

**Page 7-104**

Lines 19-20, under §710-01 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Aluminum fence fabric will be accepted on the basis of a material certification that specifies the product conforms to this specification."

Lines 32-33, under §710-02 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Galvanized steel fence fabric will be accepted on the basis of a material certification that specifies the product conforms to this specification. *Buy America requirements apply.*"

**Page 7-105**

Lines 17-18, under §710-03 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Vinyl-coated steel fence fabric will be accepted on the basis of a material certification that specifies the product conforms to this specification. *Buy America requirements apply.*"

Lines 27-28, under §710-04 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Aluminum-coated steel fence fabric will be accepted on the basis of a material certification that specifies the product conforms to this specification. *Buy America requirements apply.*"

**Page 7-106**

Lines 4-5, under §710-05 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Coated steel fence fabric will be accepted on the basis of a material certification that specifies the product conforms to this specification. *Buy America requirements apply.*"

**Page 7-108**

Lines 5-7, under §710-10 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Steel and iron posts, rails, braces, and fittings for chain link fence will be accepted on the basis of a material certification that specifies the product conforms to this specification. *Buy America requirements apply.*"

Lines 14-15, under §710-11 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Aluminum posts, rails, braces and fittings for chain link fence will be accepted on the basis of a material certification that specifies the product conforms to this specification."

**Page 7-109**

Lines 14-15, under §710-12 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Plastic-coated posts, rails, braces, and fittings for chain link fence will be accepted on the basis of a material certification that specifies the product conforms to this specification. *Buy America requirements apply.*"

Lines 32-33, under §710-13 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Wood and timber posts and timber blockouts will be accepted on the basis of a material certification that specifies the product conforms to this specification."

**Page 7-110**

Lines 12-13, under §710-14 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Galvanized steel barrier posts will be accepted on the basis of a material certification that specifies the product conforms to this specification. *Buy America requirements apply.*"

**Page 7-121**

Lines 1-5, under §710-30 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Right-of-way fencing will be accepted on the basis of a material certification that specifies the product conforms to this specification. *Buy America requirements apply.*"

**Page 7-122**

Lines 22-24, under §711-02 **replace BASIS OF ACCEPTANCE** with the following:

**"BASIS OF ACCEPTANCE.** Quilted covers (for curing) will be accepted on the basis of a material certification that specifies the product conforms to this specification."

**Page 7-258**

**Delete** Lines 34-39, under §727-01 and **replace** it with the following:

**"BASIS OF ACCEPTANCE.** White and yellow, thermoplastic, reflectorized pavement markings will be accepted on the basis of the manufacturer's name and location appearing on the Department's Approved List and a material certification that specifies the product conforms to this specification."

**Page 7-263**

**Delete** Lines 28-36, under §727-03 and **replace** it with the following:

**"BASIS OF ACCEPTANCE.** White and yellow, epoxy, reflectorized pavement markings will be accepted on the basis of the manufacturer's name and location appearing on the Department's Approved List and a material certification that specifies the product conforms to this specification."

Make the following changes to EI 03-030.

**Replace** §709-14 Bar Reinforcement, Grade 520, page 9 of 9, with the following:

### **"709-14 BAR REINFORCEMENT, GRADE 520**

**SCOPE.** This specification covers the material requirements for deformed billet steel reinforcing bars used in portland cement concrete. Plain and deformed steel for the fabrication of spirals is included.

### **MATERIAL REQUIREMENTS**

**Deformed Bar Reinforcement.** Steel reinforcing bars shall be deformed billet steel bars meeting the requirements of ASTM A615, Grade 520.

**BASIS OF ACCEPTANCE.** Bar Reinforcement and spirals will be accepted on the basis of the manufacturer's name and location appearing on the Department's Approved List and a material certification that specifies the product conforms to this specification. *Buy America requirements apply.*

Make the following changes to EI 04-019.

**Replace** §704-23 Precast Concrete Street Pavers, pages 1 of 2 through 2 of 2, with the following:

### 704-23 PRECAST CONCRETE STREET PAVERS

**SCOPE.** This specification covers the material and quality requirements for precast concrete pavers used for street paving.

**MATERIAL REQUIREMENTS.** Precast concrete pavers shall meet the requirements of ASTM C936 except as noted herein. The shape, size, and color of precast concrete pavers shall be as shown in the contract documents. Materials used in the manufacture of precast concrete pavers shall meet the requirements of the following subsections:

|                                       |        |
|---------------------------------------|--------|
| Portland Cement                       | 701-01 |
| Coarse Aggregate*                     | 703-02 |
| Mortar Sand*                          | 703-03 |
| Grout Sand*                           | 703-04 |
| Concrete Sand*                        | 703-07 |
| Fly Ash                               | 711-10 |
| Ground, Granulated Blast-Furnace Slag | 711-12 |
| Water                                 | 712-01 |

\*Aggregates used in precast concrete street pavers shall meet the friction requirements of §501-2.02 B. 2.

Fly ash or ground, granulated blast-furnace slag may be substituted up to a maximum of 20% by weight of the total amount of cement plus pozzolan in the mix. Pigments used for integral coloring shall meet the requirements of ASTM C979. Other materials may be used in the manufacture as approved by the Director, Materials Bureau.

**Physical Properties.** Precast concrete pavers shall meet the compressive strength and absorption requirements in ASTM C936. In addition, the maximum acceptable average freeze/thaw loss of five paver samples, subjected to 25 freeze/thaw cycles in a 10% NaCl solution, is 1.0%, with no individual sample exceeding 1.5%.

**SAMPLING AND TESTING.** Samples, when requested by the Department, shall be randomly selected from production-run material. A total of 15 precast concrete pavers of the same size and style will be required. Five samples will be tested for compressive strength and five for absorption, in accordance with ASTM C140. Five samples will be tested for freeze/thaw durability in accordance with NYSDOT test methods.

**BASIS OF ACCEPTANCE.** Precast Concrete Street pavers will be accepted on the basis of the manufacturer's name and location appearing on the Department's Approved List and a material certification that specifies the product conforms to this specification."