

# **DIVISION 100 – GENERAL PROVISIONS**

#### **SECTION 101 – GENERAL INFORMATION**

#### 101.03 TERMS

#### THE FOLLOWING TERMS ARE ADDED:

**Full Traffic Access.** All work is complete to allow safe unencumbered use of the final paved portion of roadway throughout the project including but not limited to striping, RPMs, rumble strips, highway lighting, and traffic signals as determined by the RE.

**Parcel.** Property to be acquired for transportation purposes, described by metes and bounds.

#### REVISE THE FOLLOWING TERM:

actual cost: The computed cost using calculations of direct labor, labor fringe benefits, indirect labor costs, insurance, materials, extraordinary expenses, equipment, profit, overhead, and subcontractors.

#### **SECTION 105 – CONTROL OF WORK**

#### 105.01 AUTHORITY OF THE DEPARTMENT

#### 105.01.01 RE

#### **REVISE THE SECOND PARAGRAPH TO:**

Unless otherwise specified, send correspondence with the Department to the RE. Where correspondence is specified to be directed to persons other than the RE, send a copy to the RE. Ensure that correspondence complies with the following:

- 1. Assign every correspondence sent to the Department a unique correspondence serial number in the subject line, numbered sequentially beginning with Contractor Correspondence No. 1.
- 2. If the correspondence includes a request for information or asks for an interpretation of the Contract, also assign a unique RFI serial number in the subject line numbered sequentially beginning with RFI-1.
- 3. If the correspondence constitutes a notice of change, assign a unique change notice serial number in the subject line numbered sequentially beginning with Change Notice No. 1. For subsequent correspondence referring to a change notice or to the events that are the subject of a previous change notice, refer in the subject line to the original change notice number.

#### 105.02 RESPONSIBILITIES OF THE CONTRACTOR

#### 105.02.05.1

#### REVISE THE FOLLOWING SECTION TO:

Job No.: 22-319 Page **1** of **11** 

Federal Aid projects. This section intentionally left blank.

#### 105.03 CONFORMITY WITH THE CONTRACT

#### REVISE THE FIRST SENTENCE OF THE SECOND PARAGRAPH TO:

In the event the Contractor discovers a discrepancy, error, omission, or ambiguity in the Contract, or if the Contractor has any doubt or question as to the intent or meaning of the Contract, the Contractor must immediately notify the RE.

REVISE THE FOURTH SENTENCE OF THE SIXTH PARAGRAPH TO: If the Department loses funding for the nonconforming work, on the basis of permitting nonconforming work to remain, the Department will not pay for the work permitted to remain in place.

#### 105.07 COOPERATION WITH UTILITIES

#### 105.07.01 Working in the Vicinity of Utilities

THE FOLLOWING IS ADDED BEFORE THE FIRST PARAGRAPH:

The corporations, companies, agencies, or municipalities owning or controlling the utilities, and the name, title, address, and telephone number of their local representative are as listed in Appendix A.

#### **SECTION 106 – CONTROL OF MATERIAL**

THE SECTION IS CHANGED TO:

#### SECTION 106 - CONTROL OF MATERIAL AND EQUIPMENT

#### 106.01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS

THE FIRST PARAGRAPH IS CHANGED TO:

Ensure that materials furnished for the Project are new, unless otherwise specified in the Contract. Comply with 2 CFR 200.323 - Procurement of recovered materials, ensuring that materials furnished for the Project contain, "the highest percentage of recovered materials practicable," where the purchase price of the covered item listed exceeds \$10,000. Use materials that conform to the requirements of the Contract. When required by the Contract, use only products and suppliers listed on the QPL. Use sources of materials that have been approved by the Department on a Materials Questionnaire as specified in 106.04.

#### 106.03 FOREIGN MATERIALS

THE SUBSECTION HEADING IS CHANGED TO:

Job No.: 22-319 Page **2** of **11** 

#### 106.03 FOREIGN MATERIALS AND EQUIPMENT

REMOVE SECTION 106.03.2 Federal Aid Projects

THE FOLLOWING IS ADDED TO THE END OF THE SUBSECTION:

Comply with 2 CFR 200.216 Prohibition on Certain Telecommunication and Video Surveillance Services or Equipment.

Do not provide Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities). Do not provide video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hanghzou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities). Do not provide Telecommunications or video surveillance services provided by such entities or using such equipment.

Do not provide Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Do not provide any equipment assembled by others that has an integral component that was manufactured and supplied by the aforementioned companies.

#### 106.07.02 Certification for Iron and Steel

THE HEADING AND THE ENTIRE SUBPART IS CHANGED TO:

#### 106.07.02 Certification for Iron and Steel, and Construction Materials

- A. Precast Concrete Steel and Concrete Pipe Certification of Compliance. For precast concrete and concrete pipe items, a Buy America Compliance Plan is required to confirm that the material meets the Buy America requirements and the Infrastructure Investment and Jobs Act ("IIJA"), Pub. L. No. 117-58, which includes the Build America, Buy America Act ("the Act"). Pub. L. No. 117-58, §§ 70901-52 as specified in 106.03. The ME will periodically audit compliance with the program at the precast plant. If the precast concrete item is not inspected by ME, submit a Certification of Compliance for the precast concrete item as required in 106.07.01. When a Certification of Compliance is submitted, ensure that the Certification of Compliance contains a statement that the reinforcing steel used in the precast concrete item complies with the Buy America requirements and the Infrastructure Investment and Jobs Act ("IIJA"), Pub. L. No. 117-58, which includes the Build America, Buy America Act ("the Act"). Pub. L. No. 117-58, §§ 70901-52 as specified in 106.03.
- B. Certification for Construction Materials. For construction materials, a Buy America Compliance Plan is required to confirm that the material meets the Infrastructure Investment and Jobs Act ("IIJA"), Pub. L. No. 117-58, which includes the Build America, Buy America Act ("the Act"). Pub. L. No. 117-58, §§ 70901-52 as specified in 106.03. When a Certification of Compliance is submitted, ensure that the Certification of Compliance contains a statement that the construction materials used complies with the Infrastructure

Job No.: 22-319 Page **3** of **11** 

Investment and Jobs Act ("IIJA"), Pub. L. No. 117-58, which includes the Build America, Buy America Act ("the Act"). Pub. L. No. 117-58, §§ 70901-52 as specified in 106.03.

C. Step Certification of Compliance. For products that contain steel or iron components and are not covered in 106.07.02.A, step Certification of Compliance is required to confirm that the item meets the Buy America requirements and the Infrastructure Investment and Jobs Act ("IIJA"), Pub. L. No. 117-58, which includes the Build America, Buy America Act ("the Act"). Pub. L. No. 117-58, §§ 70901-52 as specified in 106.03. A step certification is a process under which each handler (e.g., supplier, fabricator, manufacturer, processor, coating facility) of the iron and steel components certifies that the steel and iron components were of domestic origin, and that their step in the process was domestically performed.

Every step in the process from melting to coating must be performed in the United States in order for the steel or iron component to be considered domestic and must be documented by step certification. If a domestic source for a steel or iron component cannot be found, submit a request for waiver to the Department. Do not purchase non-domestic steel or iron components without the express written consent of the Department.

Ensure that 3 copies of the Contractor's Certification of Compliance (Form DC-17) and the step Certifications of Compliance are provided for items containing steel or iron. Retain 1 copy and submit 2 copies to the RE. The Contractor may submit the DC-17 and the step certifications electronically in a scanned document.

Ensure that step Certifications of Compliance contain the following information:

- 1. Name of the Company supplying the material.
- 2. Name and location of the Company the material was shipped to.
- 3. Material description.
- 4. Quantity of material represented by the Certification.
- 5. Means of identifying the consignment, such as label marking or seal number.
- 6. Date and method of shipment.
- 7. A statement that the material conforms to the Contract material requirements and to the Buy America requirements in 106.03 and the Infrastructure Investment and Jobs Act ("IIJA"), Pub. L. No. 117-58, which includes the Build America, Buy America Act ("the Act"). Pub. L. No. 117-58, §§ 70901-52.
- 8. A statement that all steel or iron components in the material or assembly were "melted and manufactured in the US", unless there is non-domestic steel or iron in the material or assembly.
- 9. If there is non-domestic steel or iron in the assembly, describe in detail the non-domestic steel or iron material and the quantity. Attach a copy of the Department's approval for the use of non-domestic steel or iron components.
- 10. Signature of a person having legal authority to bind the supplier.
- 11. Typed or printed name of the person who signed the certification.

The Department will not make payment for work containing steel or iron materials until the RE has received the required DC-17 and step Certifications of Compliance, has inspected and accepted the material or assembly.

Job No.: 22-319 Page **4** of **11** 

# 106.10 USE OF UNITED STATES FLAG VESSELS

THE ENTIRE TEXT IS CHANGED TO: This section intentionally left blank.

#### **SECTION 109 - MEASUREMENT AND PAYMENT**

THE SECTION HEADINGS, SUBPARTS AND ENTIRE TEXT IS CHANGED TO:

#### **109.01 PAYMENT**

The Contractor shall be responsible for furnishing all materials and labor necessary to produce an acceptable final product as described in the Contract Documents and to the satisfaction of the Owner, Engineer and Architect. All costs shall be included in the lump sum bid price for the project, unless otherwise indicated in the Contract Documents.

Job No.: 22-319 Page **5** of **11** 

#### **DIVISION 150 - CONTRACT REQUIREMENTS**

#### **SECTION 153 – PROGRESS SCHEDULE**

# 153.03.03 BAR CHART PROGRESS SCHEDULE UPDATE

REVISE THE THIRD PARAGRAPH TO:

Approval of the schedule by the RE does not modify the Contract or constitute Acceptance of the feasibility of the Contractor's logic, activity durations, or assumptions used in creating the schedule. The progress schedule does not constitute notice and does not satisfy the notice requirements. Provide 3 color paper copies of a bar chart progress schedule or similar type that is acceptable to the RE for approval as follows:

#### **SECTION 155 – CONSTRUCTION FIELD OFFICE**

REPLACE THIS SECTION WITH THE FOLLOWING:

This section intentionally left blank.

#### SECTION 156 - MATERIALS FIELD LABORATORY AND CURING FACILITY

REPLACE THIS SECTION WITH THE FOLLOWING:

This section intentionally left blank.

Job No.: 22-319 Page **6** of **11** 

# DIVISION 500 – BRIDGES AND STRUCTURES SECTION 507 – CONCRETE BRIDGE DECK AND APPROACHES

THE FOLLOWING SECTIONS ARE ADDED:

#### **SECTION 555 – CONCRETE REPAIRS**

#### 555.01 DESCRIPTION

This Section describes the requirements for removing and restoring deteriorated concrete with repair mortar.

#### 555.02 MATERIALS

#### 555.02.01 Materials

Provide materials as specified:

Fine Aggregate	901.06.02
Cement	903.01
Curing Materials	903.10
Reinforcement Steel	905.01
Water	919.08

## **555.02.02 Equipment**

Submit technical data sheets for the proposed pneumatic hammers to the RE for approval.

#### 555.03 CONSTRUCTION

#### 555.03.01 Concrete Repair

- A. Limits of Repair. The RE will examine the structure to verify the repair limits shown on the Plans. Submit written notice to the RE at least 15 days before the work site is available for examination. The RE may increase or decrease the limits of repair based on the examination. The RE will schedule surveys during daylight hours unless the working time is restricted in the Contract.
- **B. Preparing and Cleaning.** Remove deteriorated concrete to a sound surface and at least 1 inch beyond the first mat of reinforcement steel. Do not use pneumatic hammers heavier than nominal 30-pound class (33 pounds maximum) to remove the concrete. For abutment, pier seat, or column repairs, do not extend removal under the bearing seats without approval of the RE. Clean and replace reinforcement steel as specified in 551.03.01.C.

Chip concrete encasement cavities so their sides are perpendicular to the exposed surface for at least 1/2 inch in depth. Remove loose particles from the areas receiving

Job No.: 22-319 Page **7** of **11** 

mortar by flushing or scouring with compressed air jets. Immediately before the application of the repair mortar power wash areas to receive mortar.

C. Applying Mortar. Protect pedestrian, vehicular, and other traffic upon, underneath, or adjacent to the structure, and all portions of the structure against damage or disfigurement by spatters and splashes. If RE determines that the Contractor's method is deficient, cease applying mortar and submit working drawings for approval detailing new method.

Apply mortar according to the manufacturer's recommendations. If multiple lifts are required, ensure that successive layers fully bond to the previous layer during application. Blend the edges of the repair area to meet the existing surface.

Immediately remove mortar dropped or splattered on adjacent surfaces, the superstructure, and the substructure.

**D. Curing.** After applying the final layer of mortar, apply 2 coats of curing compound each at a rate of 1 gallon per 200 square feet of surface in a continuous, uniform film with power-operated pressure spraying equipment. Apply the second coat between 15 and 30 minutes of applying the first coat. If the method of applying the curing compound produces a nonuniform film, discontinue application and correct procedure.

#### **SECTION 556 – CRACK REPAIR**

#### 556.01 DESCRIPTION

This Section describes the requirements for repairing cracks in concrete.

#### 555.02 MATERIALS

#### 555.02.01 Materials

Provide materials as specified:

#### 556.03 CONSTRUCTION

#### 556.03.01 Crack Sealing

- A. Crack Repair Survey. The RE will examine the structure to verify the repair limits shown on the Plans. At least 15 days before the start of crack repair, notify the RE in writing and make the work site available for this examination. The RE may increase or decrease the limits of repair based on the examination. The RE will schedule surveys during daylight hours unless the working time is restricted in the Contract.
- **B.** Preparing for Repair. Remove deteriorated, damaged, and loose concrete from the crack area. If crack width is less than 1/8", saw cut crack to 1/8" width and ½" depth. Perform additional surface preparation requirements according to the epoxy manufacturer's recommendations.

Job No.: 22-319 Page 8 of 11

- **C. Sealing Surface Cracks.** Seal the surface of the crack with an epoxy crack sealant. Work sealant into the prepared substrate, filling the cavity. Strike off excess material level.
- **D. Finishing the Surface.** When the crack has been filled and the epoxy resin adhesive has cured, grind smooth the surface of the crack repair area to match the surrounding concrete.

Job No.: 22-319 Page **9** of **11** 

# DIVISION 600 – MISCELLANOUS CONSTRUCTION SECTION 605 – FENCE

#### 605.03 CONSTRUCTION

THE FOLLOWING IS ADDED:

# 605.03.05 Fence Panel Repair

Fence panel shall be repaired in accordance with section 605.03.03

THE FOLLOWING SECTION IS ADDED:

#### **SECTION 613 – SITE AMENITIES**

#### 613.01 DESCRIPTION

This work shall consist of the furnishing, assembly, and installation of various site amenities where shown on the plans or as directed by the Engineer.

#### 613.02 MATERIALS

Provide materials as specified:

Non-Shrink Grout	903.08.02.A
Anchor Bolts	908.01.03
Structural Steel Paint	912.01.01
Epoxy Grout Material	919.15

#### 613.03 CONSTRUCTION

Carefully remove existing damaged bollards so that the bollards can be reused. Remove all grout from the concrete deck and the bollard base plate.

Install bollard with new anchor bolts on a grouted leveling pad.

Paint the full length of the bollard and rounded concrete top with two (2) coats of rust-inhibiting paint.

Job No.: 22-319 Page **10** of **11** 

### **DIVISION 900 - MATERIALS**

#### **SECTION 903 – CONCRETE**

#### 903.01 CEMENT

THE ENTIRE SUBSECTION TEXT IS CHANGED TO:

Use cement, listed on the QPL, that is either portland cement or blended hydraulic cement and conforms to the following:

Only use Type III portland cement for Class V concrete, prestressed Items, and precast Items.

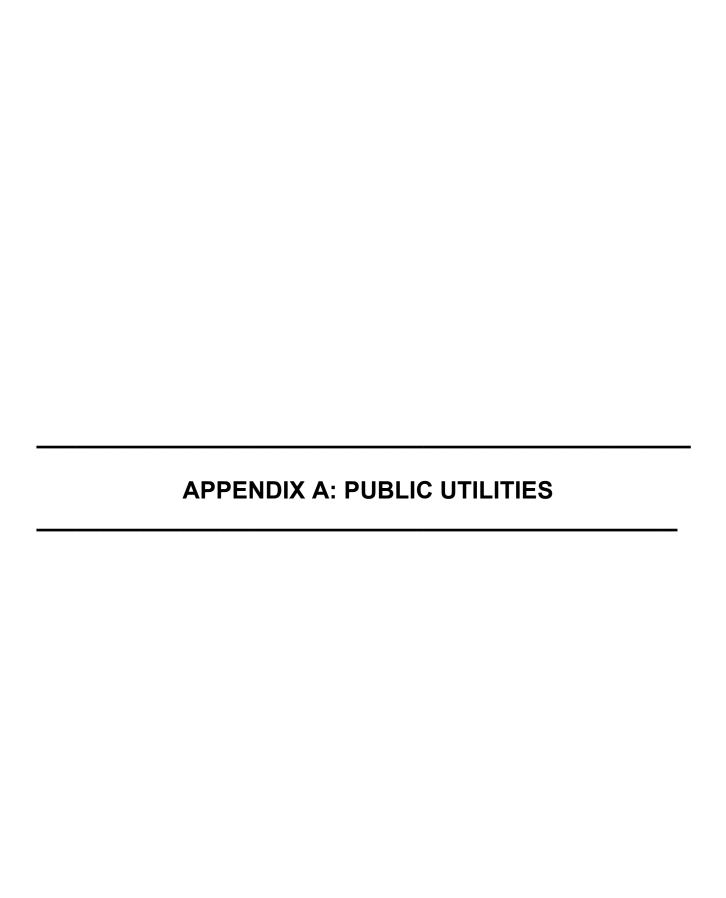
Use portland cement pre-blended with a maximum of 25 percent fly ash, by weight, or a maximum of 5 percent silica fume by weight, or with a maximum of 50 percent slag by weight for blended hydraulic cement Type IS or IP. Use portland cement pre-blended with a minimum of 5 percent limestone content and a maximum of 15 percent limestone content by weight for blended hydraulic cement Type IL. Ensure that a scaling test according to ASTM C 672 is completed on the mix design if more than 30 percent slag is used and that the concrete has a visual rating less than 3 after 50 cycles.

Do not add additional mineral admixtures to blended hydraulic cements Type IS or IP at the concrete plant unless approved by the ME. The use of additional mineral admixtures in blended hydraulic cement Type IL at the concrete plant is permitted if the mineral admixture is listed on the QPL

Do not mix different brands of cement, the same brand of cement from different mills, or different types of cement.

Provide suitable means for storing and protecting the cement against dampness. The ME will reject cement that has become partially set or that contains lumps of caked cement. Ensure that the temperature of the cement at the time of delivery to the mixer does not exceed 160 °F.

Job No.: 22-319 Page **11** of **11** 



# TOWNSHIP OF MONTCLAIR PUBLIC UTILITIES

The following is a list of all corporations, companies, agencies, or municipalities owning or controlling the utilities in the vicinity of the project site, and the name, address and telephone number of their local representatives:

#### WATER

Montclair Water Department 54 Watchung Avenue Montclair, New Jersey 07042 Attn: Gary Obszarny, Director

Tel: (973) 744-4600

#### GAS

Public Service Electric and <u>Gas</u> Company 40 Rock Avenue Plainfield, NJ 07063 Attn: James Cavanagh Tel: (908) 668-3840

#### **ELECTRIC**

Public Service <u>Electric</u> and Gas Company 150 Circle Avenue Clifton, New Jersey 07011 Attn: Henry Gregerson Tel: (973) 365-2990

#### **SEWERS**

Montclair Sewer Department 54 Watchung Avenue Montclair, New Jersey 07042 Attn: Gary Obszarny, Director Tel: (973) 744-4600

# CABLE

Comcast 800 Rahway Avenue Union, NJ 07083 Attn: Bob Knoepfel Tel: (732) 602-7444

#### **TELEPHONE**

Verizon 6000 Hadley Rd South Plainfield, New Jersey 07080 Attn: Charles C. Comeau

Tel: 973-422-5151

Email: charles.comeau@verizon.com

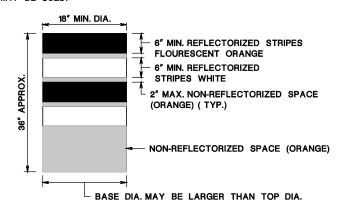
Notification of major utilities for markout may be accomplished by calling Garden State Underground Location Service at 1-800-272-1000.



ENSURE DRUMS ARE MADE OF ORANGE PLASTIC WITH A MINIMUM OF FOUR ALTERNATE FLUORESCENT ORANGE AND WHITE RETROREFLECTIVE STRIPES. IF THERE ARE NON-REFLECTORIZED SPACES BETWEEN THE STRIPES, THEY ARE TO BE NO MORE THAN 2" WIDE. ENSURE RETROREFLECTIVE SHEETING FOR STRIPES CONFORMS WITH ASTM D4956 TYPE VII OR VIII WITH S2 REQUIREMENTS.

ENSURE THE TOP OF THE DRUM IS NOT OPEN. CONSTRUCT DRUMS TO INHIBIT ROLLING IF KNOCKED OVER.

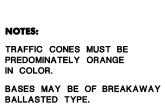
ENSURE THE REFLECTORIZED AREA OF DRUMS IS ROUND EXCEPT OTHER SHAPES, WHICH PROVIDE THE SAME VISIBILITY AS AN 18 INCH DIAMETER ROUND DRUM REGARDLESS OF ORIENTATION, MAY BE USED.



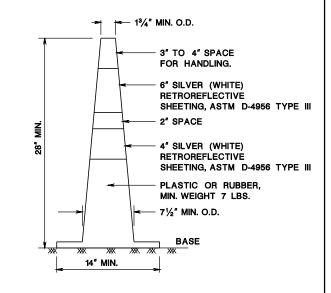
WHEN BALLAST IS REQUIRED BY THE RE, USE SAND. THE MAXIMUM WEIGHT OF THE BALLAST IS 50 LBS. AND IS TO BE LOCATED APPROXIMATELY AT GROUND LEVEL. ALTERNATE TYPES OF BALLAST MUST BE APPROVED BY THE RE.

#### **DRUMS**

CD-159-1.1

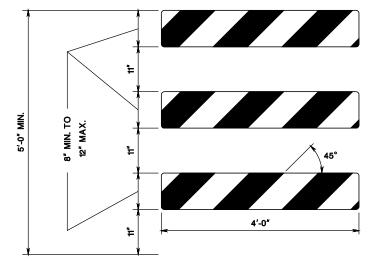


MINOR MANUFACTURER'S VARIATIONS MAY BE ACCEPTABLE UPON APPROVAL OF THE RE.



**TRAFFIC CONES** 

CD-159-1.2



#### TYPE III BARRICADE - FRONT VIEW

#### NOTES:

- ENSURE THE 8" MIN. x 48", TO 12" MAX. x 48" BARRICADE RAILS TO BE ATTACHED ACCORDING TO THE MANUFACTURER'S RECOMMENDATION.
- 2. ENSURE ORANGE AND SILVER (WHITE) STRIPES TO BE RETROREFLECTIVE SHEETING, ASTM D4956 TYPE III. ALTERNATE ORANGE AND SILVER (WHITE) STRIPES 6" WIDE SLOPING DOWNWARD AT AN ANGLE OF 45 DEGREES IN THE DIRECTION TRAFFIC IS TO PASS.
- THE FRAMING, RAILS, AND BALLAST FOR BREAKAWAY BARRICADE TO BE NCHRP-350 CRASHED TESTED AND FHWA APPROVED.
- 4. IF NECESSARY, FABRICATE THE BALLAST AND PLACE ACCORDING TO THE MANUFACTURER'S RECOMMENDATION.

#### **BREAKAWAY BARRICADES**

CD-159-1.3

# TRAFFIC CONTROL DEVICES N.T.S.

.

NEW JERSEY DEPARTMENT OF TRANSPORTATION

**CONSTRUCTION DETAILS** 

13

CD-159-1



#### SECTION 061000- REMOVING BIOLOGICAL GROWTH FROM EXTERIOR MASONRY AND STUCCO

#### PART 1---GENERAL

#### 1.01 SUMMARY

- A. This procedure includes guidance on removing biological growth such as lichens, algae, mold and mildew from masonry and stucco.
- B. Biological growths such as lichens, algae, moss and fungi growing on walls is usually an indication that there is excess moisture in or around the masonry. These growths should be removed, as they attract moisture to the masonry surface and hold it there, which can lead to more serious problems.
- C. These guidelines cover the following sections:
  - 1. Safety Precautions
  - 3. Submittals
  - 4. Quality Assurance
  - 5. Delivery, Storage and Handling
  - 6. Project/Site Conditions
  - 7. Sequencing and Scheduling
  - 8. General Protection (Surface and Surrounding)

#### PART 2---PRODUCTS

#### 2.01 MANUFACTURERS

A. ProSoCo, Inc. http://www.prosoco.com/

#### 2.02 MATERIALS

A. For Removing Mold and Mildew:

#### 2.03 EQUIPMENT

- A. Garden hose and nozzle
- B. Rubber or polyethylene bucket (DO NOT USE A METAL BUCKET AS IT MAY REACT WITH THE CHEMICAL CLEANER AND PRODUCE

#### TOXIC FUMES)

- C. Glass or ceramic mixing bowl
- D. Knife blade
- E. Stiff, natural bristle brushes (non-metallic)
- F. Tampico brush, roller or low pressure (50 psi maximum) spray such as pneumatic garden sprayer
- G. Rubber gloves
- H. Safety glasses

#### PART 3---EXECUTION

#### 3.01 EXAMINATION

B. Determine the type of stain, i.e. algae and lichens, or mold and mildew.

#### 3.02 PREPARATION

#### A. Protection:

- 1. Provide adequate wash solutions (i.e. water, soap and towels) before starting the job.
- 2. Do not spray in the immediate vicinity of unprotected people and animals.
  - 3. Consult manufactures instructions and protect existing construction that may adversely affected by any cleaning solution.

#### 3.03 ERECTION, INSTALLATION, APPLICATION

NOTE: DO NOT TRY MORE THAN ONE TREATMENT ON A GIVEN AREA UNLESS THE CHEMICALS USED FROM PRIOR TREATMENT HAVE BEEN WASHED AWAY.

- A. Removing Lichens and Algae (ONLY):
  - Remove as much plant growth as possible using a knife blade and stiff bristle brush.
  - 2. Water rinse the surface to remove most of the plant material.
    - a. If the substrate is sound and dense, use low to medium water pressure (100-400 psi).

- b. If the masonry is softer, use standard water pressure from the spigot.
- 3. Allow water to soak plant growth for approximately 30 minutes.
- 4. Gently scrub the surface with a stiff, natural bristle brush.
- 5. Thoroughly rinse the surface again with clean, clear water at low pressure from a garden hose.
- B. Removing Mold and Mildew (ONLY):
- C. For treating any of the above (lichens, algae, mold or mildew), use a proprietary cleaner such as

Enviro Klean® 2010 All Surface Cleaner or Enviro Klean® EIFS Clean 'N Prep Cleaning (ProSoCo, Inc.), or approved equal. Mocks of each cleaner shall be performed to determine best product for cleaning stone and stucco. Mockups shall be performed on each different building material.

- 1. Follow manuf. instruction for proper dilution and test on small areas to determine proper ratio.
  - 2. Apply a flood coat of this mixture to the masonry using a low pressure spray (approximately 50 psi).

CAUTION: DO NOT USE A HIGH PRESSURE SPRAY WHEN APPLYING THIS SOLUTION AS THIS MAY CAUSE THE SOLUTION TO BE DRIVEN DEEPER INTO THE PORES OF THE MASONRY, MAKING REMOVAL OF THE SOLUTION DIFFICULT.

- a. Begin spraying at the top of the vertical surface and move across horizontally. Allow 100mm rundown.
- b. Continue the next horizontal pass across the previous run down.
- c. Allow the solution to remain on the surface approximately 5-30 minutes depending upon the thickness of the growth and manuf. instructions.
- d. Gently scrub the surface with a stiff, natural bristle brush.
- e. Thoroughly rinse the treated area using pressure-applied water (approximately 400 to 1500 psi) with a 40-60 degree fan spray or garden hose with nozzle adjusted to a tight stream. Rinse from the bottom of the treated area to the top.

f. Allow the surface to dry a minimum of 24 hours.

**END OF SECTION** 

#### All SURFACE CLEANER SECTION 061510

### **Masonry and Stucco Cleaner**

Enviro Klean® 2010 All Surface Cleaner Cleaning Specification

#### **Test Area**

Test a minimum 4 ft. by 4 ft. area on each type of masonry. Use manufacturer's application instructions. Let the test panel dry 3 to 7 days before inspection. Keep test panels available for comparison throughout the cleaning project.

Manufacturer: PROSOCO, Inc., 3741 Greenway Circle, Lawrence, KS 66046. Phone: (800)

255-4255; Fax: (785) 830-9797. E-mail: CustomerCare@prosoco.com

#### **Product Description**

Enviro Klean® 2010 All Surface Cleaner is a mildly alkaline product for cleaning and degreasing light-to-heavily soiled stone, tile, and masonry. It contains no harsh acids, caustics or solvents. It's concentrated for the toughest industrial cleaning jobs on concrete, metal and many other plant and warehouse surfaces but dilutable for home-use on windows, bathroom tub and tile, countertops and more.

#### **Technical Data**

FORM: Clear Green liquid TOTAL SOLIDS: N/A SPECIFIC GRAVITY: 1.070

pH: 10.5 Typical Rinse water 7.8 - 8.2

WT./GAL.: 8.90 lbs.

FLASH POINT: > 200 degrees F (> 93 degrees C) ASTM D 3278

FREEZE POINT: 32 degrees F (0 degrees C)

#### Limitation

 Repeated use may dull polished carbonate surfaces, including but not limited to limestone, marble and travertine.

#### **Application**

Before applying, read "Preparation" and "Safety Information" sections in the Manufacturer's Product Data Sheet for 2010 All Surface Cleaner. Use in concentrate or dilute 2010 All Surface Cleaner concentrate with 1-10 parts water. Refer to Product Data Sheet for recommended dilution for intended use.

- 1. Working from bottom to top, prewet the surface with clean water.
- Apply the diluted cleaning solution to the masonry surface using a brush or lowpressure spray.
- 3. Let the cleaner stay on the surface 1-10 minutes, based on testing. Gently scrub heavily soiled areas.
- 4. Working from bottom to top, rinse the surface thoroughly with clean water. The best combination of rinsing pressure and water volume is provided by masonry washing equipment generating 400-1000 psi with a water flow rate of 6-8 gallons per minute delivered through a 15-45 degree fan spray tip. Equipment should be adjustable to reduce water flow rate and rinsing pressure as required for controlled cleaning of more sensitive surfaces. See also "Equipment" section of the Product Data Sheet.
- 5. Repeat steps 1 through 4 if necessary.

Note: Do not let cleaning solution dry on the surface. If drying occurs, lightly wet surfaces with fresh water and reapply the cleaner in a gentle scrubbing manner.

#### **SECTION 060513**

#### **Masonry and Stucco Cleaner**

Enviro Klean® EIFS Clean 'N Prep Cleaning Specification

#### **Test Area**

Test a minimum 4 ft. by 4 ft. area on each type of masonry. Use manufacturer's application instructions. Let the test panel dry 3 to 7 days before inspection. Keep test panels available for comparison throughout the cleaning project.

Manufacturer: PROSOCO, Inc., 3741 Greenway Circle, Lawrence, KS 66046. Phone: (800)

255-4255; Fax: (785) 830-9797. E-mail: CustomerCare@prosoco.com

#### **Product Description**

Enviro Klean® EİFS Clean 'N Prep is a nonacidic, phosphate- and solvent-free cleaner for general maintenance and recoat-prep cleaning of exterior insulated finish systems. It removes residues of mud, algae, grease, oil and food staining from exterior insulated finish systems, but can also be used on concrete, brick, natural stone, ceramic tile, most metal, wood, plastic and most painted surfaces. Used properly, EIFS Clean 'N Prep will clean and help restore the original appearance of EIFS structures.

#### **Technical Data**

FORM: Clear light blue liquid SPECIFIC GRAVITY: 1.01 pH: 12.0 - 12.4 (concentrate) WEIGHT/GALLON: 8.34 pounds ACTIVE CONTENT: not applicable TOTAL SOLIDS: not applicable VOC CONTENT: not applicable FLASH POINT: not applicable

FREEZE POINT: 32 degrees F (0 degrees C)

SHELF LIFE: 3 years in tightly sealed, unopened container

**BULK DENSITY: 8.4 pounds** 

#### **Application**

Before applying, read "Preparation" and "Safety Information" sections in the Manufacturer's Product Data Sheet for EIFS Clean 'N Prep. Refer to Product Data Sheet for recommended dilution for intended use.

- 1. Pre-wet surface with clean water. Keep lower areas wet to avoid streaks.
- Brush or spray (low pressure only) EIFS Clean 'N Prep directly on the surface.
- 3. Let cleaner dwell for 5 to 10 minutes. Keep people away from the surface being cleaned.
- 4. Thoroughly rinse surface with fresh water.
- 5. Reapply if necessary, depending on severity and type of stain.

NOTE: The best combination of rinsing pressure and water volume is provided by masonry washing equipment generating 400 to 1000 psi with a water flow rate of 6 to 8 gallons per minute delivered through a 15 to 45 degree fan spray tip. Equipment should be adjustable to reduce water flow rate and rinsing pressure as required for controlled cleaning of more sensitive surfaces. See also "Equipment" section of the Product Data Sheet. If pressure rinsing isn't practical, rinse and brush surface.

NOTE: Excessive pressure may damage construction materials. Refer to test area results for appropriate rinsing pressure.

Cleanup: clean tools and equipment using fresh water.