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SECTION 10 14 00

IDENTIFYING DEVICES

PART 1 – GENERAL

1.01 REFERENCES

- A. The following is a list of standards that may be referenced in this Section:
1. American National Standards Institute (ANSI):
 - a. A13.1, Schemes for the Identification of Piping Systems.
 - b. A117.1, Buildings and Facilities—Accessibility and Usability for Physically Handicapped People.
 - c. D6.1, Manual on Uniform Traffic Control Devices for Streets and Highways.
 2. American Society for Testing and Materials (ASTM): A53, Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless.
 3. The Chlorine Institute, Inc.: WC-1, Wall Chart: Handling Chlorine Cylinders and Ton Containers.
 4. Federal Specifications (FS): L-P-387 A(1), Plastic Sheet, Laminated, Thermosetting (for Designation Plates).
 5. International Conference of Building Officials (ICBO): Uniform Fire Code (UFC).
 6. National Fire Protection Association (NFPA):
 - a. 49, Hazardous Chemicals Data.
 - b. 704, Standard System for the Identification of the Fire Hazards of Materials.
 7. Occupational Safety and Health Act (OSHA).

1.02 SUBMITTALS

- A. Shop Drawings:
1. Drawings showing layouts, actual letter sizes and styles, and project-specific mounting details for every sign type.
 2. Manufacturer's literature showing letter sizes and styles, sign materials, and standard mounting details.
- B. Samples: One full size for each type of nameplate, sign, and label specified.

- C. Quality Control Submittals: Manufacturer's installation instructions.

PART 2 – PRODUCTS

2.01 DOOR NAMEPLATES (TYPE A)

- A. Material: Three-ply laminated fiberglass, minimum 1/8-inch thick, with contrasting color core message layer between two clear weather-resistant surface layers.
- B. Manufacturers:
 - 1. Brady Signmark
 - 2. Seton Name Plate Corp.
 - 3. Approved Equal
- C. Finish: Non-directional matte.
- D. Size: See Sign Schedule (attached)
- E. Letters:
 - 1. Size: 1-inch high unless noted otherwise in schedule.
 - 2. Color: See Sign Schedule (attached).
 - 3. Style: See Sign Schedule (attached).
 - 4. Message Text: See Sign Schedule (attached).

2.02 PICTORIAL SYMBOLS (TYPE G)

- A. Material: Three-ply laminated fiberglass, minimum 1/8-inch thick, with contrasting color core message layer between two clear weather-resistant surface layers. Use international handicapped unisex toilet symbol.
- B. Manufacturers:
 - 1. Brady Signmark
 - 2. Seton Name Plate Corp.
 - 3. Approved Equal
- C. Size: See Sign Schedule (attached).
- D. Manufacture: ANSI A117.1, Section 4.30.

2.03 METAL SIGNS (TYPE B):

- A. Material: Baked enamel finished 20-gauge (minimum) steel or 18-gauge (minimum) aluminum signs.

- B. Manufacturers:
 - 1. Seton Name Plate Corp.
 - 2. Nutheme Illustrated Safety Co.
 - 3. Approved Equal

2.04 HAZARDOUS MATERIAL SIGNS (TYPE H):

- A. Conform to NFPA 704, 49 and NFPA HAZ-01.
- B. Material: Fiberglass 1/8-inch-thick or Reflective sheeting applied to 0.040-inch thick aluminum.
- C. Background, Letters, and Numbers: Die-cut vinyl with pressure sensitive adhesive.
- D. Manufacturers:
 - 1. Brady Signmark.
 - 2. Seton Name Plate Corp.
 - 3. Approved Equal

2.05 CUSTOM SIGN (TYPE Q):

- A. Provide a facility plaque made by Impact Signs of LaGrange, IL or approved equal.
- B. Size: 16" high x 18" long
- C. Material: Cast Bronze
- D. Finish: Light Oxidized
- E. Background Texture: Stipple, Black
- F. Border: Single
- G. Attachment: Rosette #4
- H. Text: Copperplate, Capital Letters
- I. Message: See attached mock-up of plaque

2.06 IDENTIFICATION LABELS

- A. PVC Pipe Labels and Flow Direction Arrows:
 - 1. Lettering and Arrows: Black print.
 - 2. Background: OSHA safety yellow.
 - 3. Material: Manufacture from or encase in outdoor grade plastic or vinyl that will resist damage or fading from wash-down, sunlight, mildly corrosive

atmosphere, dirt, grease, and abrasion.

4. Label, Lettering Size, and Color: ANSI A13.1.
5. Message: See Piping Schedule.
6. Labels:
 - a. Snap-Around Type: Size for finished outside diameter of pipe and insulation.
 - b. For 6 Inches and Over Diameter Pipe: May furnish strap-on type fastened without use of tools with plastic or stainless-steel straps.
 - c. Firmly grip pipe so labels remain fixed in vertical pipe runs.
7. Manufacturers and Products:
 - a. T & B/Westline, Raritan, NJ; Model WSS Snap-Around.
 - b. Seton Name Plate Corp., New Haven, CT; Setmark Series.
8. Note: All other pipes shall have painted labels; see Section 09 90 00, Painting and Protective Coating.

B. Equipment Labels:

1. Applies to equipment with assigned tag numbers wherever specified on Drawings.
2. Lettering: Black bold face, 3/4-inch minimum high.
3. Background: OSHA safety yellow.
4. Materials: Either of the following:
 - a. Aluminum or stainless-steel base with a baked-on finish that is suitable for use on wet, oily, exposed, abrasive, and corrosive areas.
 - b. Fiberglass with fiberglass-encased lettering.
5. Furnish 1-inch margin on each end of label for mounting. On fiberglass labels furnish grommets at each end for mounting.
5. Size:
 - a. Two inches minimum and 3 inches maximum high by 14 inches minimum and 18 inches maximum long.
 - b. Furnish same size base dimensions for all labels.
7. Message: Equipment names and tag numbers as used in sections where equipment is specified.
8. Manufacturers and Products:

- a. T & B/Westline Co., Rariton, NJ; Type KQ.
- b. Seton Name Plate Corp., New Haven, CT; Style EB.
- c. W. H. Brady Co., Milwaukee, WI; Fiber-Shield.

2.07 ANCILLARY MATERIALS

- A. Fasteners: Stainless steel screws or bolts of appropriate sizes.
- B. Pipe Posts: 2-1/2-inch 304 Stainless steel pipe meeting ASTM A53, Type S, Grade B.
- C. Chain: Type 304 stainless steel, No. 16 single jack chain or No.2 double loop coil chain.

2.08 VALVE TAGGING

All exposed valves regardless of size shall be tagged with an Aluminum engraved letters

PART 3 – EXECUTION

3.01 INSTALLATION –GENERAL

- A. In accordance with manufacturer's recommendations.
- B. Mount securely, plumb, and level.

3.02 DOOR NAMEPLATES AND PICTORIAL SYMBOLS

- A. Attach to doors or walls adjacent to doors with self-sticking permanent removable adhesive. See Door Schedule for locations and messages.
- B. Mount with bottom of nameplate at 5 feet 6 inches above floor.

3.03 SIGNS

- A. Fasten to walls or posts or hang as scheduled. Anchor in place for easy removal and reinstallation with ordinary hand tools.
- B. Information, Exit, and Safety Signs:
 - 1. Install facing traffic. Locate for high visibility with minimum restriction of working area around walkways and equipment.
 - 2. Removable with ordinary hand tools without leaving scars on structure or equipment.
- C. Hazardous Material Signs:
 - 1. Install where required by NFPA No. 704 and UFC, Chapter 79.

2. Install at entrances to spaces where hazardous materials are stored, dispensed, used, or handled and on sides of stationary tanks.
3. Specific Materials:

Hazardous Materials					
Mark	Material	Health Hazard (Blue)	Flammability Hazard (Red)	Instability Hazard (Yellow)	Special Hazard (White)
See Schedule	Emulsion Polymer	1	1	0	
See Schedule	Citric Acid	2	1	0	
See Schedule	Ferric Chloride (35 – 40% solution)	3	0	0	
See Schedule	Sodium Hydroxide (10 – 30% solution)	2	0	0	
See Schedule	Sodium Hypochlorite (12 – 15% solution)	2	0	0	
See Schedule	No 2 Diesel Fuel	0	2	0	
See Schedule	Potable Water	0	0	0	4
See Schedule	Non-Potable Water (effluent)	7	0	0	0

3.04 IDENTIFICATION LABELS

A. PVC Pipe Labels and Flow Indication Arrows:

1. Locate at all connections to equipment, valves, or branching fittings at wall boundaries.
2. At intervals along piping not greater than 18 feet on center with at least one label applied to each exposed horizontal and vertical run of pipe.
3. At exposed piping not normally in view, such as above suspended ceilings and in closets and cabinets.
4. Supplementary Labels: Provide to Owner those listed on Piping Schedule that do not receive arrows.
5. Application: To pipe only after painting in vicinity is complete or as approved by Engineer.
6. Installation: In accordance with manufacturer's instructions.

B. Equipment Labels:

1. Locate and Install: On equipment or concrete equipment base.

2. Anchor to equipment or base for easy removal and replacement with ordinary hand tools.

3.05 SIGN SCHEDULE

- A. Sign Schedule following "END OF SECTION" is a tabulation of sign characteristics and mounting information for each sign shown by its "Mark" on Drawings and is a part of this Specification.
- B. Provide signs as scheduled.
- C. Meet requirements of Federal Occupational Health Act (OSHA).
 1. Close valve on truck hose.

3.06 SUPPLEMENTS

- A. The supplements listed below, following "END OF SECTION," are part of this Specification.
 1. 3 Sign Schedules.
 2. 1 Mock-Up Plaque. Plaque Shall be minimum 18"X24" and made of brass with black lettering (provide shop drawing for owner approval)

END OF SECTION

SIGN SCHEDULE - EQUIPMENT / OPERATIONS BUILDING & BASINS

SIGN				MOUNTING				LETTERING					OTHER REQUIREMENTS		
Location	Qty	Type	Format	Maximum Size		Color	Location	Method	Height to Centerline	Height	Style	Color	Message	Faces	OTHER REQUIREMENTS
				Width	Height										
Upper Level Bldg	1	A	As specified	12"	6"	Gray	Door	Tape	Below Window	1"	Helvetica	Black	Control Room	1	Install on Door
Upper Level Bldg	1	A	As specified	12"	6"	Gray	Door	Tape	Below Window	1"	Helvetica	Black	Mechanical Room	1	Install on Door
Upper Level Bldg	1	G	As specified	6"	6"	Gray	Door	Tape	5' 0"	Symbol	Helvetica	Black	Unisex	1	Install on Door
Lower Level Bldg	2	A	As specified	12"	6"	Gray	Door	Tape	Below Window	1"	Helvetica	Black	Electrical / MCC Room	1	Install on 2 Doors
Lower Level Bldg	1	A	As specified	12"	6"	Red/White	Wall	Bolts	5' 6"	1"	Helvetica	Black	Danger High Voltage	1	As directed by Engineer
Lower Level Bldg	1	A	As specified	12"	6"	Gray	Door	Tape	Below Window	1"	Helvetica	Black	Support Room	1	Install on West Personnel Door (Ext)
Lower Level Bldg	1	A	As specified	12"	6"	Gray	Door	Tape	Below Window	1"	Helvetica	Black	Chemical Room	1	Install on West Personnel Door (Ext)
Lower Level Bldg	2	A	As specified	12"	6"	Gray	Door	Tape	Below Window	1"	Helvetica	Black	Equipment Room	1	Install on 2 Personnel Doors (Int & Ext South)
Lower Level Bldg	1	H	Standard Hazmat	14"	10"	Red/White	Wall	Tape	5' 6"	n/a	n/a	Black	Danger Sodium Hypochlorite	1	Install on Ext. of Chemical Room Door
Lower Level Bldg	1	H	Standard Hazmat	6"	6"	Standard Hazmat	Door	Tape	Below Window	n/a	n/a	Standard Hazmat	Corrosion Hazmat Symbol	1	As directed by Engineer
Various	10	B	Standard	20"	14"	Red/White	Chain	Hanging	Various	1"	Helvetica	Black	Non-potable Not for Drinking	1	As directed by Engineer
Lower Level Bldg	1	H	Standard Hazmat	14"	10"	Red/White	Wall	Tape	5' 6"	n/a	n/a	Black	Danger Sodium Hydroxide	1	As directed by Engineer
Lower Level Bldg	1	Q	See Spec	18"	16"	Cast Bronze, see Spec	Wall	Rosette Screw	5'-6"		See Spec	Light Oxidized	See Spec	1	See Spec for details
Various	3	B	Standard	12"	6"	Blue/White	Wall		Various	1"	Helvetica	Black	Potable Water	1	As directed by Engineer

SIGN SCHEDULE – DEWATERING BUILDING

Location	Qty	Type	Format	Maximum Size		Color	MOUNTING				LETTERING					OTHER REQUIREMENTS
				Width	Height		Location	Method	Height to Centerline	Height	Style	Color	Message	Faces		
															Location	
Dewatering Building Exterior	1	A	As specified	12"	6"	Gray	Door	Tape	Below Window	1"	Helvetica	Black	Dewatering Building	1	Install on Personnel Door	
Dewatering Building Interior Wall at Polymer Storage	1	H	Standard Hazmat	6"	6"	Standard Hazmat	Door	Tape	Below Window	n/a	n/a	Standard Hazmat	Corrosion Hazmat Symbol	1	As directed by Engineer	
Dewatering Building Interior Wall at Polymer Storage	2	H	Standard Hazmat	14"	10"	Red/White	Wall	Tape	5'-6"	n/a	n/a	Black	Danger Polymer Storage	1	As directed by Engineer	
Various	2	B	Standard	12"	6"	Blue/White	Wall	Hang	Various	1"	Helvetica	Black	Potable Water	1	As directed by Engineer	
Dewatering Bldg Interior	1	n/a	Standard	10"	7"	Red/Black White	on wall to right of man door	Bolt	5'-6"	Std	Standard	White / Black	DANGER FLAMMABLE	1	Standard Plastic Danger Sign	
Dewatering Bldg Interior	1	n/a	Standard	10"	7"	Yellow / Black	on wall to right of man door	Bolt	5'-6"	Std	Standard	Yellow / Black	CAUTION HIGH NOISE LEVEL AREA	1	Ear Protection Fiberglass Sign	
MCC Room	1	B	Standard	10"	7"	Blue/White	Wall	Hang	Various	1"	Helvetica	Black	MCC Room High Voltage	1	As directed by Engineer	
Various	2	B	Standard	12"	6"	Blue/White	Wall	Hang	Various	1"	Helvetica	Black	DANGER Lime/Alum Storage	1	As directed by Engineer	
D.O System	10	B	Standard	12"	6"	Blue/White	Wall	Hang	Various	1"	Helvetica	Black	D.O System	1	As directed by Engineer	
UV System	1	B	Standard	12"	6"	Blue/White	Wall	Hang	Various	1"	Helvetica	Black	Disinfection UV System	1	As directed by Engineer	

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SIGN SCHEDULE – OTHER PLANT AREAS

10 14 00 – 10

SIGN				MOUNTING				LETTERING				OTHER REQUIREMENTS		
Location	Qty	Type	Format	Maximum Size		Location	Method	Height to Centerline	Height	Style	Color		Message	Faces
				Width	Height									
Plant Entrance Gates	2	A	As Specified	44"	24"	On chain link fence gate, as directed	Plastic ties on 4 corners	5'-6"	2"	Helvetica	Black	TRAVIS FIELD WATER RECLAMATION FACILITY IN CASE OF EMERGENCY CALL 912-XXX-XXXX	1	Provide hole in each corner for attachment. Phone number to be provided upon ordering.



Travis Field
**WATER RECLAMATION
FACILITY**

4.0 MGD MEMBRANE BIOREACTOR
(date of commissioning)

Mayor **Eddie Deloach**

Alderman

Carolyn Bell **John Hall**
Brain Foster **Julian Miller**
Van R. Johnson **Dr. Estella Edwards Shabazz**
Bill Durance **Toney Thomas**

City Manager **Rob Hernandez**
Water Resource Director **John Sawyer**

CONSULTING ENGINEER
Thomas & Hutton Engineering Co.

GENERAL CONTRACTOR
(to be determined)

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SECTION 10 71 14
EXTERIOR SHUTTERS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes exterior shutters.

1.3 SUBMITTALS

- A. Product Data for each type of shutter system required, including construction details, dimensions of components, profiles, and finishes.
 - 1. Include schedule identifying each opening by number.
- B. Shop Drawings for each type of shutter system required showing fully dimensioned plans, elevations, sections, and details. Show anchors and inserts for items attached to permanent construction. Include information not fully detailed in Product Data.
 - 1. Include Setting Drawings, templates, and installation instructions for anchorages.
- C. Samples for verification of the following:
 - 1. Shutter material, 8 by 10 inches.
 - 2. Fastener system components, one of each component.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced Installer who has completed installation of shutter system similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.
- B. Single-Source Responsibility: Provide each type of shutter system as a complete unit produced by a single manufacturer, including necessary mounting accessories, fittings, and fastenings.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Do not deliver shutter systems until construction is ready for their installation. Protect units from damage during delivery, storage, handling, and installation.

1.6 PROJECT CONDITIONS

- A. Field Measurements: Where components are indicated to be fitted to other construction, verify dimensions of other construction by field measurements before fabrication and show recorded measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

PART 2 - PRODUCTS**2.1 EXTERIOR SHUTTERS**

- A. Manufacturers: Subject to compliance with requirements, provide shutters as manufactured by one of the following:
 - 1. Custom Shutter Co.
 - 2. MetalTech.
 - 3. Willard Shutter Company.
- B. Material: Extruded aluminum.
- C. Hardware: Manufacturer's standard hinges and tilt arm components.
- D. High-Performance Organic Finish: Two-coat fluoropolymer finish complying with AAMA 2604 and containing not less than 50 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
 - 1. Color and Gloss: As selected by Architect from manufacturer's full range.
- E. Style: Removable storm shutter for all exterior windows
- F. Grill shutters style for the sludge dewatering canopy as indicated on the drawing.

PART 3 - EXECUTION**3.1 INSTALLATION**

- A. Install shutter system components level, plumb, and at indicated alignment with adjacent work.
- B. Protect metal surfaces from corrosion or galvanic action by applying a heavy coating of bituminous paint on surfaces that will be in contact with concrete, masonry, or dissimilar metals.

END OF SECTION

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SECTION 10 80 00 – MISCELLANEOUS SPECIALTIES

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SECTION 10 80 00**MISCELLANEOUS SPECIALTIES****PART 1 - GENERAL****1.01 SUMMARY**

- A. Section includes:
1. Toilet and Bath Accessories.
 2. Lockers.
 3. Benches.
 4. Portable Fire Extinguishers.

1.02 REFERENCES

- A. The following is a list of standards which may be referenced in this section:
1. Factory Mutual (FM).
 2. National Fire Protection Association (NFPA): No. 10, Standard for Portable Fire Extinguishers.
 3. Occupational Safety and Health Act (OSHA).
 4. Underwriters Laboratories Inc. (UL): Fire Protection Equipment List.
 5. ASTM International:
 - a. A591, Standard Specification for Steel Sheet, Electrolytic Zinc-Coated, for Light Coating Weight [Mass] Applications.
 - b. E84, Standard Test Method for Surface Burning Characteristics of Building Materials.

1.03 SUBMITTALS

- A. Action Submittals:
1. Shop Drawings:
 - a. Manufacturer's literature for toilet and bath accessories clearly indicating:
 - 1) Engineer's identification mark, size, and description of Components.
 - 2) Base material with surface finish inside and out.
 - 3) Hardware and locks and attachment devices.
 - 4) Description of rough-in framing.
 - 5) Details of blocking and anchorage required.
- B. Informational Submittals:

1. Manufacturers' descriptions, installation data, color charts and cleaning and service instructions for all items proposed for use. Clearly identify each item.
2. Distributor's List: List of local distributors for all supplies required for the accessories installed.

PART 2 - PRODUCTS

2.01 TOILET AND BATH ACCESSORIES

A. Manufacturers:

1. Materials and products specified in this section shall be products of Bradley Corp.
2. Other Manufacturers:
 - a. Bobrick Washroom Equipment, Inc.
 - b. Accessory Specialties, Inc.

B. Finishes:

1. Stainless steel.
2. Manufacturer's or brand name on face of units is not acceptable.

C. Furnish accessory items listed where indicated by mark or note on Drawings.

Item	Mark	Bradley
Surf Mounted Double Roll Toilet Paper Dispense	TPD	No. 5123
Horizontal Wall Mounted Liquid Soap Dispenser	SD - 11	NO. 6542
Mirror, Size on Dwgs	MIR	No. 782
Surf. Mounted Paper Towel Dispenser	PTD - 1	No. 950 - 15
Waste Receptacle	WR - 1	No. 377 - 38
Surf. Mounted Napkin Disposal	ND	No. 4781 - 15
Mop and Broom Holder (44")	M&BH	No. 9954
Robe Hook	RH	No. 912
Grab Bars 42"	GB - 1	No. 812 - 001
Grab Bars 36"	GB - 2	No. 812 - 001
Towel Bar	TB	No. 907
Shower Curtain w/Hooks 60"	SC - 2	No. 9537

- D. See Plumbing Specifications for prefabricated shower enclosure with built-in grab bars, soap dish, folding seat and curtain rod.
- E. Anchors: Furnish anchors, fasteners, or other devices necessary for a complete, secure installation.

- F. Fasteners: Tamper-proof screws or bolts.
- G. Supplies: Furnish fill supplies, such as paper goods, soap, and napkins, as recommended by accessory manufacturer.

2.02 LOCKERS

- A. Solid plastic lockers to be manufactured by Scranton Products (Santana/Comtec/Capitol), 801 Corey Street, Moosic, PA 18507 or approved equal. These specifications will be regarded as minimum.
- B. Locker doors and door frames shall be made from high impact, high density polyethylene (HDPE) formed under high pressure into solid plastic components 1/2 inch thick with homogeneous color throughout.
- C. Sides, tops, bottoms, backs, and shelves shall be made from high impact, high density, polyethylene (HDPE) formed under pressure into solid plastic components 3/8 inch thick with homogenous natural color throughout. Components shall have machined edges to accept assembly brackets. Outside, insides, tops, bottoms, backs, dividers and shelves shall be natural in color.
- D. Material Testing: All solid plastic components shall resist deterioration and discoloration when subjected to any of the following:

Acetic Acid 80%	Acetone
Ammonia Liquid	Ammonium Phosphate
Bleach 12%	Borax
Brine	Caustic Soda
Chlorine Water	Citric Acid
Copper Chloride	Core Oils
Hydrochloric Acid 40%	Hydrogen Peroxide 30%
Isopropyl Alcohol	Lactic Acid 25%
Lime Sulfur	Nicotine
Potassium Bromide	Soaps
Sodium Bicarbonate	Trisodium Phosphate
Urea and Urine	Vinegar
Testing in accordance with corrosion testing procedure established by the Unite State Plastic Corporation.	

- E. Continuous latch shall be made from high impact HDPE plastic and capable of accepting various locking mechanisms. Latch shall be securely fastened to the entire length of the door, providing a continuous latch.
- F. Door hinge shall be made from heavy duty extruded aluminum with a powder coating to match the locker door and frame. Door hinge shall be full length assembled onto the door and front.

- G. Assembly profile shall be full depth, width and height of the lockers. Profile shall be made from PVC plastic and snap fit assembled onto locker outsides, insides, backs, tops and bottoms. The snap-fit design offers a continuous connection between components.
- H. Coat hooks shall be two-prong and made from high impact plastic. Hooks shall be mounted to the bottom of the shelf or divider -one each per door opening (Standard on Single, Double & Triple tier lockers only).
- I. All HDPE components shall have a smooth "orange peel" finish. Locker doors and door frames shall be of the same color and selected from the standard full color line.
- J. Locker components shall be fabricated square and rigid with a finish free of scratches and chips.
- K. Solid plastic locker components shall snap together for easy assembly and shall provide a solid and secure construction. Adjacent lockers shall share a common side panel. Locker units shall be manufactured for assembly in a group of no more than five adjacent lockers.
- L. Lockers will have a warranty for a period of 15 years. The HOPE plastic doors, panels, dividers, and shelves shall be warranted against corrosion, rust, delamination and breakage under normal use.

2.03 PLASTIC HDPE BENCHES

- A. Locker room benches and pedestals to be supplied by Scranton Products (Santana/Comtec/Capitol), Moosic, P A, or approved equal.
- B. Locker room bench tops shall be 1-1/2 inch thick with homogeneous color throughout, constructed from High Density Polyethylene (HDPE) resins. Locker bench tops shall be fabricated from polymer resins compounded under high pressure, forming a single component which is waterproof, nonabsorbent and has a self-lubricating surface that resists marks from pens, pencils, markers and other writing instruments. All plastic components shall be covered with a protective plastic masking.
- C. Color of bench to be as shown on finish schedule or as selected by the Engineer.
- D. Locker room bench tops shall be 1-1/2-inch thick with all edges rounded to a 1/4-inch radius. Standard bench top size is 24 inches wide by 48 inches for a single piece.
- E. Aluminum pedestals shall be 16 inches high, and secured to the bench tops with stainless steel, #14 Phillips head screws and secured to the floor using lead expansion shields and stainless steel, Phillips head screws.

- F. Bench to have warranty against breakage, corrosion, and delamination under normal conditions for 15 years from the date of receipt by the customer. If materials are found to be defective during that period for reasons listed above, the materials will be replaced free of charge (Labor not included in warranty)

2.04 PORTABLE FIRE EXTINGUISHERS

- A. General:
1. Conform to NFPA 10 for fire extinguishers.
 2. Furnish fire extinguishers and cabinets from one manufacturer.
 3. All Extinguishers: UL listed, charged and ready for service.
- B. Multipurpose Hand Extinguisher (F. Ext-I):
1. DuPont FE-36 Clean Agent extinguishing agent. Pressurized, red enameled steel shell cylinder.
 2. Activated by top squeeze handle.
 3. Agent propelled through hose or opening at top of unit.
 4. For use on A, B, and C class fires.
 5. Minimum UL Rating: I-A: 10-B:C, 9.5-pound capacity.
- C. Manufacturers: Ansul CLEANGUARD.

PART 3 - EXECUTION

3.01 INSTALLATION OF SPECIALTIES

- A. Follow manufacturer's recommendations and printed instructions. Consult with Engineer so that minor adjustments in the locations can be decided if necessary.
1. Install materials plumb or level as applicable and attach securely to adjacent materials with suitable fasteners.
 2. Prevent scratching or damaging adjacent materials during installation.
- B. Installation of Toilet and Bath Accessories:
1. Preparation: Coordinate support framing and backing as necessary for the proper installation of all accessories.
 2. Installation:
 - a. Locate where mark is shown on Drawings at height as indicated on Drawings or required by code.
 - b. Follow manufacturer's instruction and recommendations.
 - c. Install and securely anchor all accessories in their proper locations, plumb and level and without distortion.
 - d. Remove all protective masking and clean surfaces, leaving them

- free of soil and imperfections.
- e. Fill all units with necessary supplies within 10 days before Substantial Completion.
- f. Deliver to Owner all keys and devices required to fill and service units.

C. Lockers and Benches:

1. Examine areas to receive the locker room benches for anchorage blocking that may affect installation of benches or lockers. Report any discrepancies to the engineer.
2. Take complete and accurate measurements of locations to receive locker room benches.
3. Install locker room benches and lockers in a rigid, straight, plumb, and level manor, with plastic laid out as shown on shop drawings and manufacturer's installation instructions.
4. No evidence of cutting, drilling, and/or patching shall be visible on the finished work.
5. Finished surfaces shall be cleaned after installation and be left free of all imperfections.
6. Install lockers at the location shown in accordance with the manufacturer's instructions for plumb, level, rigid, and flush installations.
7. Anchor the units to wall studs through the locker back and to the floor using 1-1/2-inch pan head screws. Furring must be installed between lockers and wall of installation.
8. Lockers can be either floor-mounted or installed on a 4-inch high base. Hardware and instructions for either method shall be provided by the manufacturer.
9. Number plates shall be available for field mounting.

D. Fire Extinguishers:

1. Fasteners: Furnish necessary screws, bolts, brackets, and other fastenings of suitable type and size to secure items of fire and safety equipment in position.
 - a. Metal expansion shields for machine screws at concrete and masonry.
 - b. Interior: Rust-resistant.
 - c. Exterior: Stainless steel.
 - d. Brackets: For all hand extinguishers not located in cabinets, furnish heavy-duty brackets with clip-together strap for wall mounting.
 - e. Provide adequate backing for mounting surfaces.
 - f. Install top of Extinguisher: No more than 54 inches above floor.

END OF SECTION