SECTION 22 42 16
LAVATORY DECKS AND FAUCETS

PART 1 - GENERAL

1.1   SECTION INCLUDES

A.   Solid surface material commercial lavatory units.

B.   Lavatory faucets.

C.   Soap dispensers.

1.2   RELATED SECTIONS

A.   Division 10 Section "Toilet, Bath and Laundry Accessories" for matching design soap dispensers.

1.3   RELATED SECTIONS

A.   Division 10 Section "Toilet, Bath and Laundry Accessories" for matching design soap dispensers.

B.   Division 22 Section "Domestic Water Piping Specialties" for thermostatic mixing valves.

C.   Division 22 Section "Commercial Lavatories and Faucets" for quartz and solid surface wash basins.

D.   Division 22 Section "Commercial Lavatories and Faucets" for single- and multiple- station lavatory systems.

E.   Division 22 Section "Commercial Lavatories" for commercial lavatory units with modular integrated accessories.

F.   Division 22 Section "Commercial Lavatory Decks and Faucets" for single- and multiple- station lavatory decks.

G.   Division 22 Section "Healthcare Plumbing Fixtures" for healthcare lavatories.

H.   Division 22 Section "Emergency Plumbing Fixtures" for emergency fixtures.

I.   Division 22 Section "Security Plumbing Fixtures" for security lavatories.

1.4   REFERENCES:

A.   American Society of Sanitary Engineering (ASSE):
        1.   ASSE 1070 - Water Temperature Limiting Devices.

B.   American Society of Mechanical Engineers (ASME):
        1.   ASME A112.18.1 Plumbing Supply Fittings.

C.   ASTM International (ASTM):
        1.   ASTM C 170 - Standard Test Method for Compressive Strength of Dimension Stone.
        2.   ASTM D 570 - Standard Test Method for Water Absorption of Plastics.
        3.   ASTM D 785 - Standard Test Method for Rockwell Hardness of Plastics and Electrical Insulating Materials.
        4.   ASTM D 790 - Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
        5.   ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

D.   Canadian Standards Association (CSA):
        1.   CSA B125 - (See ASME A112.18.1 - Plumbing Fixture Fittings).

E.	GREENGUARD Environmental Institute (GEI):
	1.	GREENGUARD listed and certified low emitting products.

F.	International Association of Plumbing and Mechanical Officials (IAPMO):
	1.	Universal Plumbing Code (cUPC both U.S. and Canada).

G.	International Code Council (ICC):
	1.	ICC/ANSI A117.1 – Accessible and Usable Buildings and Facilities.

H.	National Fire Protection Association (NFPA):
	1.	NFPA 70 – National Electrical Code.

I.	State of Texas:
	1.	Texas Accessibility Standards (TAS).

J.	Underwriters Laboratories, Inc. (UL):
	1.	UL 723 - Test For Surface Burning Characteristics of Building Materials.
	2.	UL 1951 - Electric Plumbing Accessories.

K.	United States Green Building Council (USGBC):
	1.	LEED Green Building Rating System (LEED).

L.	US Federal Government:
	1.	Public Law 102-486 - Energy Policy Act. 1992 (EPACT).
	2.	U.S. Architectural & Transportation Barriers Compliance Board. Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities (ADAAG).

1.5	ACTION SUBMITTALS

A.	Product Data: For each product:
	1.	Manufacturer's data sheets indicating operating characteristics, materials and finishes.
	2.	Include details of electrical and mechanical operating parts.
	3.	Provide mounting requirements and rough-in dimensions.
	4.	Mark each sheet with product drawing designation.

B.	Product Test Reports: Indicating compliance of products with requirements, from a qualified independent testing agency, when requested by Architect.

C.	Shop Drawings: Prepared by manufacturer. Include mounting and rough-in requirements and power, signal, and control wiring diagrams. Include details of electrical and mechanical operating parts.

1.6	LEED Submittals:
	1.	Product Data for [Credit WE 2][and][Credit WE 3]: Documentation indicating compliance with requirements.
	2.	Product data for Credit MR 4: Indicate percentages by weight of postconsumer and preconsumer recycled content, and product cost.

1.7	INFORMATION SUBMITTALS

A.	Sample warranty.

B.	Manufacturer's Certificates.

C.	Indoor environmental quality certificates.

1.8	MAINTENANCE SUBMITTALS

A.	Furnish indicated spare parts that are packaged with identifying labels listing associated products.

B.   Operation, care and cleaning instructions.

1.9   QUALITY ASSURANCE

A.   Manufacturer Qualifications: Approved manufacturer listed in this section, with minimum [5] years experience in the manufacture of plumbing fixtures. Manufacturers seeking approval must submit the following:
   1.   Product data, including test data from qualified independent testing agency indicating compliance with requirements.
   2.   Samples of each component of product specified.
   3.   List of successful installations of similar products available for evaluation by Architect.
   4.   Submit substitution request not less than 15 days prior to bid date.

B.   Source Limitations: Obtain each type of plumbing fixture and compatible accessories through one source from a single approved manufacturer.

C.   Laminar-Flow, Faucet-Spout Outlets:
   1.   NSF Standard: Comply with NSF 372 for faucet-spout outlet materials that will be in contact with potable water.
   2.   Product shall meet a weighted average of not more than 0.25 percent lead as required by the U.S. Safe Drinking Water Act.
   3.   Description: Chrome-plated-brass, faucet-spout outlet that produces non-aerating, laminar stream. Include external or internal thread that mates with faucet outlet for attachment to faucets where indicated and flow-rate range that includes flow of faucet.

D.   Accessibility Requirements: Comply with requirements of ADA \ ANSI 117.1 and with requirements of authorities having jurisdiction.
   1.   306 Knee and Toe Clearance.
   2.   308 Reach Range.
   3.   606.5 Exposed Pipes & Surfaces with access panels.
   4.   309.4 Operation.
   5.   606.4 Faucets.

E.   Water Flow and Consumption Requirements: Comply with EPACT.

F.   Drinking Water Standard: Comply with NSF/ANSI 372.

G.   Electrical Components: Listed and labeled per NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction.

H.   Comply with Public Law 102-486, Energy Policy Act.

I.   Indoor Environmental Quality Certification: Provide certificate indicated that lavatory deck materials have been certified under the following programs, or a comparable certification acceptable to Owner:
   1.   GREENGUARD Indoor Air Quality Certified.
   2.   GREENGUARD Certified for Children and Schools.

1.10   COORDINATION

A.   Field Measurements: Verify locations of lavatory decks and adjacent walls prior to fabrication.

1.11   WARRANTY

A.   Special Manufacturer's Warranty: Provide manufacturer's standard form in which manufacturer agrees to repair or replace commercial lavatory decks that fail in materials or workmanship.
   1.   Solid surface material: 10 years.
   2.   Faucets: 1 year.
   3.   Soap Dispenser: Three years.

4.   Faucets: Three years.
5.   WashBar: 1 year (applies to Models LD-5010, LD-3010-WB-TR1 only)

PART 2 - PRODUCTS

2.1   MANUFACTURERS

A.   Basis-of-Design Product: Subject to compliance with requirements, provide commercial lavatory decks and faucets manufactured by Bradley Corporation, Menomonee Falls, WI 53051, (800)272-3539, fax (262)251-5817; Email info@BradleyCorp.com; Website www.bradleycorp.com.
1.   Submit comparable products of one of the following for approval by Architect:
a.   [Specifier: Insert name of manufacturer of comparable product.]
2.   Submit requests for substitution in accordance with Instructions to Bidders and Division 01 General Requirements.
3.   Provide specified product; Owner will not consider substitution requests.

2.2   MATERIALS

A.   Solid Surface Material: Where indicated as constructed of solid surface material, fabricate plumbing fixtures from thermoset modified bio-based resin certified by approved independent testing agency as complying with the requirements of CSA B45.5/IAPMO Z124, [with minimum 25 percent preconsumer recycled content and]with the following minimum properties:
1.   Basis of Design Product: Bradley, [Terreon][TerreonRE].
2.   Thickness: 1/2 inch (13 mm), minimum.

2.3   LAVATORY DECKS, SINGLE STATION

A.   ADA/ABA Compliant Wall-Mounted, Single-Station Lavatory Fixture [LAV#___]: With integral bowl, water overflow and ledged back, drain, strainer, and tailpiece.
1.   Basis of Design Manufacturer/Model: Bradley, OmniDeck Model LD-3010-1 Terreon.
2.   Material: Solid surface material.
3.   Deck Edge Accessories: [Solid surface integral coved backsplash][Side splashes][Front apron][Side aprons].
4.   Deck Nosing: [3/8 inch (9.5 mm) radiused][Eased].
5.   Access Panel: [Stainless steel][None].
6.   Access Panel: [Swing down.][Swing down w/ enclosed bottom.][Swing down matte black powder coated stainless steel.][Swing down matte black powder coated stainless steel with enclosed bottom.][None].
7.   Mounting: [Stainless steel mounting brackets][In-wall carriers specified in another section][Wall cleats specified in another section][Casework specified in another section].
8.   Overall Unit Size: 30 by 22 inches (762 by 559 mm).
9.   Deck Colors: As selected by Architect from manufacturer's full line.
10.   Integral Molded Lavatory Bowl for Solid Surface Decks:
a.   Bowl Material and Size: [HS-TO1 solid surface material, oval 22 by 14 inches (558 by 355 mm)][HS-TS1 solid surface material, square, 14 by 14 inches (355 by 355 mm)][HS-TR1 solid surface material, rectangular, 22 by 16 inches (558 by 406 mm)][SL-TO1 solid surface material, oval, 16 by 13 inches (406 by 330 mm)][SL-TR1 solid surface material, rectangular, 17 by 14 inch (432 by 356 mm)][WB-TR1 solid surface material, rectangular, 21-5/8 by 11-1/2 inches (575 by 292 mm)].
b.   Color: As selected by Architect from manufacturer's full line of solid surface colors.
11.   WashBar: [Insert WashBar type].
12.   Faucet: [Insert faucet type].
13.   Soap Dispenser: [Insert dispenser type].

14. Water Supply: **[**Single tempered line**][**Thermostatic mixing valve assembly**]**, with single point rough-in for unit.
15. Waste Hookup: Single point rough-in for unit.

B. ADA/ABA Compliant Wall-Mounted, Single-Station Lavatory Fixture **[LAV#____]**: ledged back, integral angled bowl and stainless steel drain cap to conceal trench drain. Basin and drain designed to work in harmony with WashBar technology to evacuate water and dissipate airflow to prevent splashing on the user or floor. Unit includes waste and assembly connections to wall with stops and heavy gauge stainless steel mounting brackets.
1. Basis of Design Manufacturer/Model: Bradley, OmniDeck Model LD-5010-1 Terreon.
2. Material: **[**Solid surface material**]**.
3. Deck Edge Accessories: **[**Solid surface integral coved backsplash**][**Side splashes**][**Front apron**][**Side aprons**]**.
4. Deck Nosing: **[**3/8 inch (9.5 mm) radiused**][**Eased**]**.
5. Access Panel: **[**Swing down.**][**Swing down w/ enclosed bottom.**][**Swing down matte black powder coated stainless steel.**][**Swing down matte black powder coated stainless steel with enclosed bottom.**][**None**]**.
6. Mounting: **[**Stainless steel mounting brackets**][**In-wall carriers specified in another section**][**Wall cleats specified in another section**][**Casework specified in another section**]**.
7. Overall Unit Size: 30 by 20-1/2 inches (762 by 521 mm).
8. Deck Colors: As selected by Architect from manufacturer's full line.
9. Integral Molded Lavatory Bowl for Solid Surface Decks:
   a. Bowl Material and Size: WB-TR1 solid surface material, rectangular, 21-5/8 by 11-1/2 inches (575 by 292 mm)**.**
   b. Color: As selected by Architect from manufacturer's full line of solid surface colors.
10. WashBar: [Insert WashBar type].
11. Water Supply: **[**Single tempered line**][**Thermostatic mixing valve assembly**]**, with single point rough-in for unit.
12. Waste Hookup: Single point rough-in for unit.

2.4   LAVATORY DECKS, MULTIPLE STATION

A. ADA/ABA Compliant Wall-Mounted, Multiple-Station Lavatory Fixture **[LAV#____]**: With integral bowls, drain, strainer, and tailpiece.
1. Basis of Design Manufacturer/Model: Bradley, OmniDeck Model LD-3010 Terreon.
2. Material: Solid surface material.
3. Configuration: **[**1**][**2**][**3**][**4**]** station deck**[**, with extended deck as indicated**]**.
4. Deck Edge Accessories: **[**Solid surface integral coved backsplash**][**Side splashes**][**Front apron**][**Side aprons**]**.
5. Deck Nosing: **[**3/8 inch (9.5 mm) radiused**][**Eased**]**.
6. Access Panel: **[**Stainless steel**][**None**]**.
7. Access Panel: **[**Swing down.**][**Swing down w/ enclosed bottom.**][**Swing down matte black powder coated stainless steel.**][**Swing down matte black powder coated stainless steel with enclosed bottom.**][**None**]**.
8. Mounting: **[**Stainless steel mounting brackets**][**In-wall carriers specified in another section**][**Wall cleats specified in another section**][**Casework specified in another section**]**.
9. Overall Unit Size: **[**60 by 24 inches (1524 by 610 mm) with 2 bowls**][**90 by 24 inches (2286 by 610 mm) with 3 bowls**][**120 by 24 inches (3048 by 610 mm) with 4 bowls**][**As indicated**]**.
10. Deck Colors: As selected by Architect from manufacturer's full line.
11. Integral Molded Lavatory Bowl for Solid Surface Decks:
   a. Bowl Material and Size: **[**HS-TO1 solid surface material, oval 22 by 14 inches (558 by 355 mm)**][**HS-TS1 solid surface material, square, 14 by 14 inches (355 by 355 mm)**][**HS-TR1 solid surface material, rectangular, 22 by 16 inches (558 by 406

mm)][SL-TO1 solid surface material, oval, 16 by 13 inches (406 by 330 mm)][SL-TR1 solid surface material, rectangular, 17 by 14 inches (432 by 356 mm)][WB-TR1 solid surface material, rectangular, 21-5/8 by 11-1/2 inches (575 by 292 mm)].

      b.   Color: As selected by Architect from manufacturer's full line of solid surface colors.

12. WashBar: [Insert WashBar type].
13. Faucet: [Insert faucet type].
14. Soap Dispenser: [Insert dispenser type].
15. Water Supply: [Single tempered line][Thermostatic mixing valve assembly], with single point rough-in for unit.
16. Waste Hookup: Single point rough-in for unit.

B. ADA/ABA Compliant Wall-Mounted, Multiple-Station Lavatory Fixture [LAV#____]: With ledged back, integral angled bowls and stainless steel drain caps to conceal trench drains. Basin and drain designed to work in harmony with WashBar technology to evacuate water and dissipate airflow to prevent splashing on the user or floor. Unit includes individual waste and assembly connections to wall with stops and heavy gauge stainless steel mounting brackets.
1. Basis of Design Manufacturer/Model: Bradley, OmniDeck Model LD-5010 Terreon.
2. Material: Solid surface material.
3. Configuration: [1][2][3][4] station deck.
4. Deck Edge Accessories: [Solid surface integral coved backsplash][Side splashes][Front apron][Side aprons].
5. Deck Nosing: [3/8 inch (9.5 mm) radiused roundover][Eased].
6. Access Panel: [Swing down.][Swing down w/ enclosed bottom.][Swing down matte black powder coated stainless steel.][Swing down matte black powder coated stainless steel with enclosed bottom.][None].
7. Mounting: [Stainless steel mounting brackets][In-wall carriers specified in another section][Wall cleats specified in another section][Casework specified in another section].
8. Overall Unit Size: [30 by 20-1/2 inches (762 by 521 mm) with 1 bowl][60 by 20-1/2 inches (1524 by 521 mm) with 2 bowls][90 by 20-1/2 inches (2286 by 521 mm) with 3 bowls][120 by 20-1/2 inches (3048 by 521 mm) with 4 bowls][As indicated].
9. Deck Colors: As selected by Architect from manufacturer's full line.
10. Integral Molded Lavatory Bowl for Solid Surface Decks:
      a.   Bowl Material and Size: WB-TR1 solid surface material, rectangular, with stainless steel drain cap, 21-5/8 by 11-1/2 inches (575 by 292 mm).
      b.   Color: As selected by Architect from manufacturer's full line of solid surface colors.
11. WashBar: [Insert WashBar type].
12. Water Supply: [Single tempered line] [Thermostatic mixing valve assembly], with single point rough-in for unit.

2.5   SENSOR-OPERATED WASHBAR

A. Sleek single Casting WashBar with integral soap, faucet and single nozzle hand dryer with heated air and adjustable speeds, infrared control, smart technology with adjustable LED lighting and easy to identify icons and external tempering control FCT#____:
1. Basis of Design Manufacturer/Model: **Bradley WB1**.
2. Function: Blue LED lights help guide the user, indicating the functions. The LED light will change from blue to green to signify that the function is in use. Each function is easily identified by the corresponding icon on the WashBar top surface. Each sensor includes a turn-off delay of 1-2 seconds to aid in a smooth, controlled hand-washing
3. Body: Polished chrome plated stainless steel. Load tested to 500 pounds, WashBar is secured to the basin with two anti-rotational shanks.
4. Chrome Finish: "PC" Polished Chrome.
5. Physical Vapor Deposition (PVD) Finish: "BB" Brushed Black Stainless.

6. Physical Vapor Deposition (PVD) Finish: "BS" Brushed Stainless.
7. Physical Vapor Deposition (PVD) Finish: "BZ" Brushed Bronze.
8. Physical Vapor Deposition (PVD) Finish: "BR" Brushed Brass.
9. Physical Vapor Deposition (PVD) Finish: "BN" Brushed Nickel.
10. Tempered Water Supply: [Single tempered line][Single thermostatic mixing valve].
11. Flow Control: [0.35 gpm (1.33 Lpm) PCA Silicone Tip, Non-Aerated.][0.50 gpm (1.9 Lpm) PCA Silicone Tip, Non-Aerated.][None.]
12. Soap Type: [Foam Soap Dispenser][Liquid Soap Dispenser]. Soap system accommodates up to a 1 gallon container.
13. Hand Dryer: DC Motor 120v/60hz, 20 Amp.
14. Sensor Module: Water-conserving, durable sensor unit with adjustable timing turn-off delay and stationary object automatic timed cutoff, with diagnostic signal light.
    a. Sensing Distance: 5 inches (127mm).
15. Power Supply: 120V 2A 12V DC adapter that plugs directly into the electrical outlet.
16. Thermostatic Mixing Valve: Thermostatic mixing valve, ASSE 1070 listed, with stop/strainer/check valves, and flexible stainless steel connectors.

B. Sleek single Casting WashBar with integral soap and faucet, infrared control, smart technology with adjustable LED lighting and easy to identify icons and external tempering control FCT#____:
1. Basis of Design Manufacturer/Model: **Bradley WBD1**.
2. Function: Blue LED lights help guide the user, indicating the functions. The LED light will change from blue to green to signify that the function is in use. Each function is easily identified by the corresponding icon on the WashBar top surface. Each sensor includes a turn-off delay of 1-2 seconds to aid in a smooth, controlled hand-washing
3. Body: Polished chrome plated stainless steel. Load tested to 500 pounds, WashBar is secured to the basin with two anti-rotational shanks.
4. Chrome Finish: "PC" Polished Chrome.
5. Physical Vapor Deposition (PVD) Finish: "BB" Brushed Black Stainless.
6. Physical Vapor Deposition (PVD) Finish: "BS" Brushed Stainless.
7. Physical Vapor Deposition (PVD) Finish: "BZ" Brushed Bronze.
8. Physical Vapor Deposition (PVD) Finish: "BR" Brushed Brass.
9. Physical Vapor Deposition (PVD) Finish: "BN" Brushed Nickel.
10. Tempered Water Supply: [Single tempered line][Single thermostatic mixing valve].
11. Flow Control: [0.35 gpm (1.33 Lpm) PCA Rubber Tip Aerator.][0.50 gpm (1.9 Lpm) PCA Rubber Tip Aerator.][None.]
12. Soap Type: [Foam Soap Dispenser][Liquid Soap Dispenser]. Soap system accommodates up to a 1 gallon container.
13. Sensor Module: Water-conserving, durable sensor unit with adjustable timing turn-off delay and stationary object automatic timed cutoff, with diagnostic signal light.
    a. Sensing Distance: 5 inches (127mm).
14. Power Supply: 120V 2A 12V DC adapter that plugs directly into the electrical outlet.
15. Thermostatic Mixing Valve: Thermostatic mixing valve, ASSE 1070 listed, with stop/strainer/check valves, and flexible stainless steel connectors.

C. Sleek single Casting WashBar with integral soap, faucet and single nozzle hand dryer with heated air and adjustable speeds, infrared control, smart technology with adjustable LED lighting and easy to identify icons and external tempering control FCT#____:
1. Basis of Design Manufacturer/Model: **Bradley WB2**.
2. Function: Blue LED lights help guide the user, indicating the functions. The LED light will change from blue to green to signify that the function is in use. Each function is easily identified by the corresponding icon on the WashBar top surface. Each sensor includes a turn-off delay of 1-2 seconds to aid in a smooth, controlled hand-washing

3. Body: Polished chrome plated stainless steel. Load tested to 500 pounds, WashBar is secured to the basin with one anti-rotational shank.
4. Chrome Finish: "PC" Polished Chrome.
5. Physical Vapor Deposition (PVD) Finish: "BB" Brushed Black Stainless.
6. Physical Vapor Deposition (PVD) Finish: "BS" Brushed Stainless.
7. Physical Vapor Deposition (PVD) Finish: "BZ" Brushed Bronze.
8. Physical Vapor Deposition (PVD) Finish: "BR" Brushed Brass.
9. Physical Vapor Deposition (PVD) Finish: "BN" Brushed Nickel.
10. Tempered Water Supply: [Single tempered line][Single thermostatic mixing valve].
11. Flow Control: [0.35 gpm (1.33 Lpm) PCA Rubber Tip Aerator.][0.50 gpm (1.9 Lpm) PCA Rubber Tip Aerator.][None.]
12. Soap Type: [Foam Soap Dispenser][Liquid Soap Dispenser]. Soap system accommodates up to a 1 gallon container.
13. Hand Dryer: DC Motor 120v/60hz, 20 Amp.
14. Sensor Module: Water-conserving, durable sensor unit with adjustable timing turn-off delay and stationary object automatic timed cutoff, with diagnostic signal light.
    a. Sensing Distance: 5 inches (127mm).
15. Power Supply: 120V 2A 12V DC adapter that plugs directly into the electrical outlet.
16. Thermostatic Mixing Valve: Thermostatic mixing valve, ASSE 1070 listed, with stop/strainer/check valves, and flexible stainless steel connectors.

2.6   MATCHED FAUCETS

A.   Deck Mounted Faucet – General:
1. Basis of Design Manufacturer/Model: **Bradley Verge**
2. Touch free dual sensor activation.
3. Compliance and Certifications:
    a. ADA ANSI/ICC A117.1, Citation 609.3.
    b. ASME A112.18.1/CSA B125.1.
    c. NSF/ANSI 372 – Lead Free.
    d. NSF/ANSI 61.
    e. cUPC.
    f. CE electrical components.
4. Vandal-resistant construction shall include concealed sensor package, durable finish, and anti-rotational gasket/washer.
5. In-line filter supplied with either mixing assembly or tempered line assembly to trap debris.
6. Operation: Dual sensors utilizing time of flight and diffuse reflective sensors.
    a. Operating Water Pressure Range: 20 to 125 psi.
    b. Faucet activates water flow only when user's hands enter the infrared detection zone.
    c. Faucet turns off after user's hands are removed from the lavatory bowl area.
    d. Eleven (11) second run time (with or without hands under sensor). Manually set run time using control module (4s, 11s, 15s, 30s, 60s, 180s with or without auto system rinse).
    e. Sixty (60) second auto system rinse every 24 hours. Option for sanitary manual flush.
7. Chrome Finish: "PC" Polished Chrome.
8. Physical Vapor Deposition (PVD) Finish: "BB" Brushed Black Stainless.
9. Physical Vapor Deposition (PVD) Finish: "BS" Brushed Stainless.
10. Physical Vapor Deposition (PVD) Finish: "BZ" Brushed Bronze.
11. Physical Vapor Deposition (PVD) Finish: "BR" Brushed Brass.
12. Physical Vapor Deposition (PVD) Finish: "BN" Brushed Nickel.

B. Electronic Lavatory Faucets:
1. Sensor-Operated, High-Arc Profile Metering Faucet with Infrared Control **FCT#____**: Vandal- resistant accessible faucet meeting ASME A112.18.1/CSA B125. ADA/ANSI A117.1 compliant.
    a. Basis of Design Manufacturer/Model: Bradley Verge, Crestt Series, Model S53-3100.
    b. Body: Commercial solid cast brass.
    c. Water Supply: **[**Tempered Line Assembly (Supply Hose and Shut-Off Included)**][**Navigator Thermostatic Mixing Assembly (Supply Hose and Shut-Off Included)**]**.
    d. Flow Type: **[**0.35 gpm (1.3 Lpm) Silicone Tip, multiple individual laminar flow streams**][**0.5 gpm (1.9 Lpm) Silicone Tip, multiple individual laminar flow streams**]**.
    e. Drain Strainer: Finish to match.
    f. Sensor Module: Water-conserving, vandal-resistant dual sensors utilizing time of flight and diffuse reflective sensors with timing turn-off delay and stationary object automatic timed cutoff.
    g. Power Supply: Battery (standard).
    h. Power Supply: 120VAC/6VDC, 50/60Hz plug-in transformer adapter with battery back-up. 4x AA batteries (included). Low battery indicator on spout.
    i. Power Supply: Provide power supply "splitter' for 2, 3 or 4 faucets as required. Provide 14 feet (4.3 m) extension power cable as required.

C. Electronic Lavatory Faucets:
1. Sensor-Operated, Tubular Design Metering Faucet with Infrared Control **FCT#____**: Vandal- resistant accessible faucet meeting ASME A112.18.1/CSA B125. ADA/ANSI A117.1 compliant.
    a. Basis of Design Manufacturer/Model: Bradley Verge, Metro Series, Model S53-3300.
    b. Body: Commercial solid cast brass.
    c. Water Supply: **[**Tempered Line Assembly (Supply Hose and Shut-Off Included)**][** Navigator Thermostatic Mixing Assembly (Supply Hose and Shut-Off Included)**]**.
    d. Flow Type: **[**0.35 gpm (1.3 Lpm) Silicone Tip, multiple individual laminar flow streams**][**0.5 gpm (1.9 Lpm) Silicone Tip, multiple individual laminar flow streams**]**.
    e. Drain Strainer: Finish to match.
    f. Sensor Module: Water-conserving, vandal-resistant dual sensors utilizing time of flight and diffuse reflective sensors with timing turn-off delay and stationary object automatic timed cutoff.
    g. Power Supply: Battery (standard).
    h. Power Supply: 120VAC/6VDC, 50/60Hz plug-in transformer adapter with battery back-up. 4x AA batteries (included). Low battery indicator on spout.
    i. Power Supply: Provide power supply "splitter' for 2, 3 or 4 faucets as required. Provide 14 feet (4.3 m) extension power cable as required.

D. Electronic Lavatory Faucets:
1. Sensor-Operated, Tubular Design Metering Faucet with Infrared Control **FCT#____**: Vandal- resistant accessible faucet meeting ASME A112.18.1/CSA B125. ADA/ANSI A117.1 compliant.
    a. Basis of Design Manufacturer/Model: Bradley Verge, Linea Series, Model S53-3500.
    b. Body: Commercial solid cast brass.
    c. Water Supply: **[**Tempered Line Assembly (Supply Hose and Shut-Off Included)**][** Navigator Thermostatic Mixing Assembly (Supply Hose and Shut-Off Included)**]**.

d. Flow Type: **[**0.35 gpm (1.3 Lpm) Silicone Tip, multiple individual laminar flow streams**][**0.5 gpm (1.9 Lpm) Silicone Tip, multiple individual laminar flow streams**]**.

e. Drain Strainer: Finish to match.

f. Sensor Module: Water-conserving, vandal-resistant dual sensors utilizing time of flight and diffuse reflective sensors with timing turn-off delay and stationary object automatic timed cutoff.

g. Power Supply: Battery (standard).

h. Power Supply: 120VAC/6VDC, 50/60Hz plug-in transformer adapter with battery back-up. 4x AA batteries (included). Low battery indicator on spout.

i. Power Supply: Provide power supply "splitter' for 2, 3 or 4 faucets as required. Provide 14 feet (4.3 m) extension power cable as required.

E. Electronic Lavatory Faucets:

1. Sensor-Operated, Tubular Design Metering Faucet with Infrared Control **FCT#___**: Vandal- resistant accessible faucet meeting ASME A112.18.1/CSA B125. ADA/ANSI A117.1 compliant.

a. Basis of Design Manufacturer/Model: Bradley Verge, Zen Series, Model S53-3700.

b. Body: Commercial solid cast brass.

c. Water Supply: **[**Tempered Line Assembly (Supply Hose and Shut-Off Included)**][** Navigator Thermostatic Mixing Assembly (Supply Hose and Shut-Off Included)**]**.

d. Flow Type: **[**0.35 gpm (1.3 Lpm) Silicone Tip, multiple individual laminar flow streams**][**0.5 gpm (1.9 Lpm) Silicone Tip, multiple individual laminar flow streams**]**.

e. Drain Strainer: Finish to match.

f. Sensor Module: Water-conserving, vandal-resistant dual sensors utilizing time of flight and diffuse reflective sensors with timing turn-off delay and stationary object automatic timed cutoff.

g. Power Supply: Battery (standard).

h. Power Supply: 120VAC/6VDC, 50/60Hz plug-in transformer adapter with battery back-up. 4x AA batteries (included). Low battery indicator on spout.

i. Power Supply: Provide power supply "splitter' for 2, 3 or 4 faucets as required. Provide 14 feet (4.3 m) extension power cable as required.

2.7 MATCHED SOAP DISPENSERS

A. Deck Mounted Soap Dispensers – General:

1. Touch free infrared sensor-operated.

2. Multi-station system shall supply up to six soap dispensers.

3. Compliance and Certifications:

a. ADA / ICC ANSI A117.1, Citation 609.4.

b. UL electrical components.

c. CE electrical components.

4. Vandal-resistant construction shall include concealed sensor package, durable finish, and anti-rotational gasket/washer.

5. Chrome Finish: "PC" Polished Chrome.

6. Physical Vapor Deposition (PVD) Finish: "BB" Brushed Black Stainless.

7. Physical Vapor Deposition (PVD) Finish: "BS" Brushed Stainless.

8. Physical Vapor Deposition (PVD) Finish: "BZ" Brushed Bronze.

9. Physical Vapor Deposition (PVD) Finish: "BR" Brushed Brass.

10. Physical Vapor Deposition (PVD) Finish: "BN" Brushed Nickel.

B. Sensored Soap Dispenser **SD#___**: Deck-mounted, sensor-operated, cast brass, with LED battery and soap level indicators, **[**with battery box and batteries. 70.5 oz (2080 mL) capacity bot-

tle.**][**with single dispenser 120VAC powerpack. 70.5 oz (2080 mL) capacity bottle.**][**with maximum of 6 dispenser 120VAC powerpack. Multi-feed Tank: 166.5 oz (5026 ml).**]**

   1.   Basis of Design Manufacturer/Model: Bradley Verge Deck-Mounted Soap Dispenser, Crestt Series, Model 6-3100.

C.   Sensored Soap Dispenser **SD#___**: Deck-mounted, sensor-operated, cast brass, with LED battery and soap level indicators, **[**with battery box and batteries. 70.5 oz (2080 mL) capacity bottle.**][**with single dispenser 120VAC powerpack. 70.5 oz (2080 mL) capacity bottle.**][**with maximum of 6 dispenser 120VAC powerpack. Multi-feed Tank: 166.5 oz (5026 ml).**]**

   1.   Basis of Design Manufacturer/Model: Bradley Verge Deck-Mounted Soap Dispenser, Metro Series, Model 6-3300.

D.   Sensored Soap Dispenser **SD#___**: Deck-mounted, sensor-operated, cast brass, with LED battery and soap level indicators, **[**with battery box and batteries. 70.5 oz (2080 mL) capacity bottle.**][**with single dispenser 120VAC powerpack. 70.5 oz (2080 mL) capacity bottle.**][**with maximum of 6 dispenser 120VAC powerpack. Multi-feed Tank: 166.5 oz (5026 ml).**]**

   1.   Basis of Design Manufacturer/Model: Bradley Verge Deck-mounted Soap Dispenser, Linea Series, Model 6-3500.

E.   Sensored Soap Dispenser **SD#___**: Deck-mounted, sensor-operated, cast bronze, with LED battery and soap level indicators, **[**with battery box and batteries. 70.5 oz (2080 mL) capacity bottle.**][**with single dispenser 120VAC powerpack. 70.5 oz (2080 mL) capacity bottle.**][**with maximum of 6 dispenser 120VAC powerpack. Multi-feed Tank: 166.5 oz (5026 ml).**]**

   1.   Basis of Design Manufacturer/Model: Bradley Verge Deck-Mounted Soap Dispenser, Zen Series, Model 6-3700.

2.8   SENSORED SOAP DISPENSER

A.   Deck-mounted, sensor-operated **SD#___:** Chrome-plated plastic, with LED battery and soap level indicators, **[**with battery box and batteries**][**with single dispenser 120VAC powerpack**][**with 4 dispenser 120VAC powerpack**]**, **[**27 oz (798 mL) capacity bottle**][**1000 shot soap**]**.
   1. Basis of Design Manufacturer/Model: **Bradley, Model 6315-KT0000**.
   1.   MANUAL SOAP DISPENSER

B.   Deck-mounted **SD#___:** **[**16 oz. (473 mL) plastic**][**32 oz. (946 mL) plastic**]** globe, with 4 inch (102 mm) spout.
   1.   Basis of Design Manufacturer/Model: **Bradley, Model 6324**.

C.   Deck-mounted **SD#___:** 16 oz. (473 mL) plastic globe, with 3-1/2 inches (88.90 mm) spout.
   1.   Basis of Design Manufacturer/Model: **Bradley, Model 6334.**

PART 3 - EXECUTION

3.1   EXAMINATION

A.   Examine conditions and verify opening measurements prior to commencing installation. Proceed with installation once conditions meet requirements.

3.2   INSTALLATION

A.   Assemble fixtures and associated fittings and trim in accordance with manufacturer's instructions.

B.   At time of Substantial Completion:
   1.   Clean unit surfaces per manufacturer's care instructions, test fixtures and leave in ready-to-use condition.
   2.   Install new batteries in battery operated devices.
   3.   Fill soap dispensers.

4.   Turn over keys, tools, maintenance instructions and maintenance stock to Owner.

C.   Install Single-Point Connections:
1.   Install water supply piping to unit. Provide stop on each supply in readily-serviced location. Fasten supply piping to supports or substrate.
2.   Install trap and waste piping to unit.

D.   Install escutcheons at exposed piping penetrations in finished locations and within cabinets.

E.   Seal joints between fixtures and walls, floors, and countertops with joint sealant specified in Division 07 Section "Joint Sealants."

F.   Mount soap dispenser in 1-3/8 inches (35 mm) diameter hole in lavatory or countertop 1-1/2 inches (38 mm) from edge of sink. Shank will accommodate a maximum counter thickness of 1-1/2 inches (38 mm).

3.3   CLEANING AND PROTECTION

A.   Repair or replace defective work, including damaged fixtures and components.

B.   Clean unit surfaces, test fixtures, and leave in ready-to-use condition.

C.   Install new batteries in battery-operated devices at time of Substantial Completion.

D.   Turn over keys, tools, maintenance instructions, and maintenance stock to Owner.

E.   Protect units with water-resistant temporary covering. Do not allow temporary use of plumbing fixtures unless approved in writing by Architect. Remove protection at Substantial Completion and dispose.

3.4   TESTING AND ADJUSTING

A.   Set field-adjustable temperature set points of temperature-actuated water mixing valves. Adjust set point within allowable temperature range.

B.   Test and adjust installation.

C.   Remove and replace malfunctioning thermostatic mixing valves and retest.

END OF SECTION